Bulletin No. 1 (2012–2013)

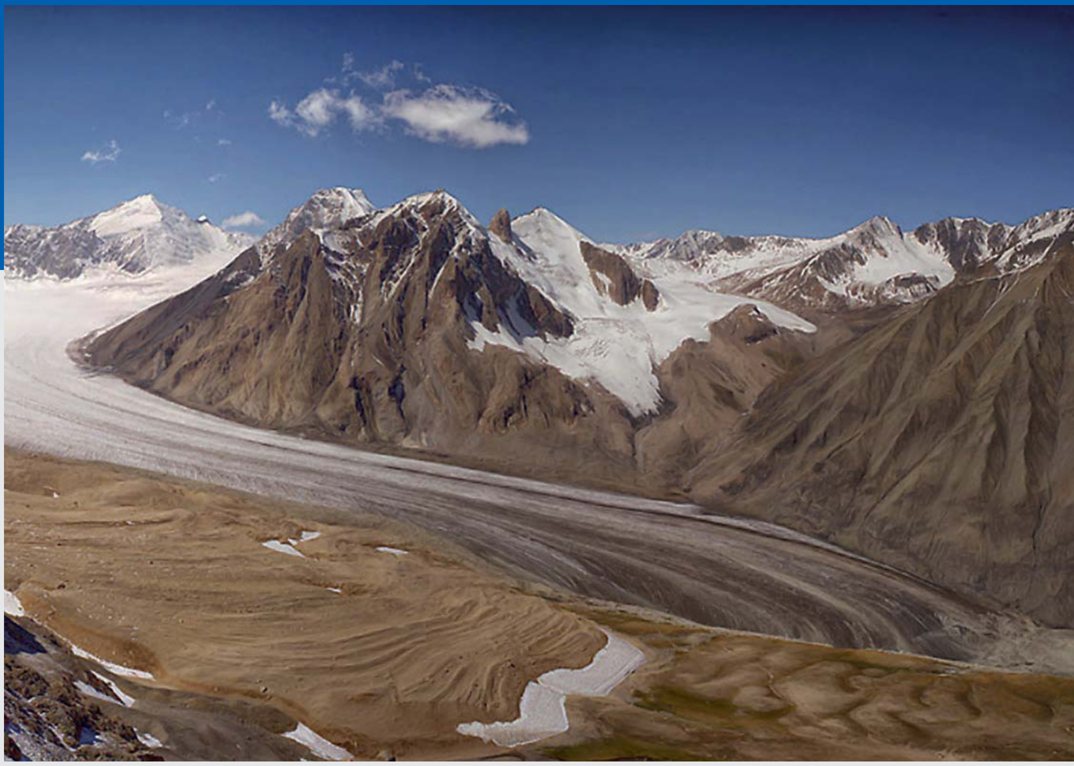
Global Glacier Change Bulletin

A contribution to

the Global Terrestrial Network for Glaciers (GTN-G) as part of the Global Climate Observing System (GCOS) and its Terrestrial Observation Panel for Climate (TOPC),

the Division of Early Warning and Assessment and the Global Environment Outlook as part of the United Nations Environment Programme (DEWA and GEO, UNEP)

and the International Hydrological Programme (IHP, UNESCO)



Compiled by
the World Glacier Monitoring Service (WGMS)

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Cover page

Panoramic view of Abramov Glacier (Kyrgyzstan/Tien Shan). Photo taken by H. Machguth on 31.8.2011.

Preface by GCOS

The Global Climate Observing System (GCOS) was founded in 1992, and co-sponsored by WMO, UNESCO, UNEP, and ICSU, following a recommendation from the Second World Climate Conference. While there were already some basic climate records in place at the time, the GCOS was established to respond to the need to improve the understanding of the climate system by ensuring standardized, systematic and sustained climate observations.

Through GCOS' strong partnerships with users and providers of climate-related observations, a list of internationally agreed-upon GCOS Essential Climate Variables (ECVs) was compiled and today serves as a guideline for operators of climate observation systems. These ECVs include glaciers and a number of other cryospheric variables, such as snow cover, permafrost, ice caps, and ice sheets. The terrestrial observations needed for a climate observation system are discussed at the GCOS Terrestrial Observation Panel for Climate (TOPC), where the WGMS is an active participant. The Global Terrestrial Network for Glaciers (GTN-G) provides the framework for the internationally coordinated monitoring of glaciers and ice caps under the GCOS and is jointly run by the World Glacier Monitoring Service (WGMS), the U.S. National Snow and Ice Data Center (NSIDC), and the Global Land Ice Measurements from Space initiative (GLIMS).

Global climate observations have improved dramatically since GCOS was established in 1992, both for new and continuing networks and in the recovery of data from past measurement campaigns. These long observational records of multiple variables have enabled the Intergovernmental Panel on Climate Change (IPCC) to supply clear information on the occurrence of global warming and its causes. One of the variables assessed by the IPCC was the glacier ECV.

As part of its task to ensure that the global climate observing system continues to deliver the information needed at global, regional and local scales, the GCOS regularly provides the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) with information relating to observing systems for climate. GCOS has just released its report on the Status of the Global Observing System for Climate which has been submitted to the UNFCCC. The report reviews the state of climate observations, gaps and the progress made on actions identified in the 2010 GCOS Implementation Plan in order to guide planning for the required improvements. It will be one unit of input in the development of a new GCOS implementation plan in 2016.

While GCOS provides global overviews, it always stresses that the responsibility for the operation of the global observing systems for climate that form the GCOS remains with those making the observations, which may refer to national efforts or international collaborations. The World Glacier Monitoring Service (WGMS) is a renowned international centre that provides highly regarded climate information to a broad user community, and is one example of a nationally funded activity that benefits many. The GCOS secretariat appreciates the efforts the WGMS staff puts into providing these services and the sustained support of the Swiss government for this unique undertaking. We look forward to continuing our fruitful and excellent cooperation.

Carolin Richter, Dr
Director, GCOS Secretariat

Preface by IACS (IUGG)

The International Association of Cryospheric Sciences (IACS) was established in 2007 as the eighth Association under the auspices of the International Union of Geodesy and Geophysics (IUGG). Glacier monitoring is an important activity of IACS, dating back to the Comission Internationale des Glaciers (CIG), which spawnd both the IACS and the World Glacier Monitoring Service (WGMS). Nowadays, the IACS is at the head of the Advisory Board for the Global Terrestrial Network for Glaciers (GTN-G), of which WGMS is an important member.

Since 1986, WGMS has collected and published standardized information about ongoing glacier fluctuations and events, i.e., changes in glacier length, area, volume, and mass. In response to calls-for-data, observations are submitted through an international scientific collaboration network, which consists of WGMS National Correspondents and Principal Investigators in over 30 countries worldwide. The contributed data are converted into standardized formats and uploaded into the Fluctuations of Glaciers database. Each version of the database is given a digital object identifier and is made available to the public. The WGMS datasets have been cited in all five assessment reports by Working Group I of the Intergovernmental Panel on Climate Change (IPCC). They have been and will certainly continue to be used in numerous scientific publications.

The latest evaluation of GTN-G suggested that the WGMS publication series Fluctuations of Glaciers and the Glacier Mass Balance Bulletin be merged into a single biennial report. This first issue of the Global Glacier Change Bulletin is the result of this merging and presents a wealth of glacier data. The data collected either in situ or via remote sensing is the result of much hard work and the joint effort of members of the glaciological community. IACS is thus greatly obliged to all the investigators who have collected, analyzed and submitted data to the WGMS database to be shared with the international community.

IACS also extends thank to the World Glacier Monitoring Service for its thoroughness and continuous efforts in collecting and standardizing the data, for publishing this first issue of the Global Glacier Change Bulletin, and for making the data available in digital format.

Liss M. Andreassen, Dr
Head, Division of Glaciers and Ice Sheets, IACS

Charles Fierz, Dr
President, IACS

Foreword by the WGMS Director

Glaciers around the globe continue to melt at rapid rates. In the time period covered by the present bulletin, the glaciers observed lost more than 0.7 m w.e. (water equivalent) per year, thus continuing the historically unprecedented ice loss observed since the turn of the century and amounting to double the ice loss rates of the 1990s. The record ice loss of the 20th century, observed in 1998, was exceeded in 2003, 2006, 2011, 2013, and probably again in 2014 (based on the 'reference' glacier sample). Glaciers are indeed key indicators and unique demonstration objects of ongoing climate change. Their rapid decline alters the visual landscape not only of mountain and polar regions, it also has a very real impact on local hazard situations, regional water cycles, and global sea levels.

For more than a century, glacier monitoring has been coordinated internationally by the WGMS and its predecessor organizations through a collaboration network of National Correspondents from countries active in glacier research. The initial focus on glacier front variations and Ice Age theories, has developed into a comprehensive monitoring strategy for assessing global glacier distribution and changes in length, area, volume, and mass related to climate change. Glaciers are recognized as Essential Climate Variables and their monitoring has been internationally coordinated in recent years within the framework of the Global Terrestrial Network for Glaciers (GTN-G, http://www.gtn-g.org) under the Global Climate Observing System (GCOS) in support of the United Nations Framework Convention on Climate Change (UNFCCC).

The present Global Glacier Change Bulletin is the first issue of a new publication series merging the former Fluctuations of Glaciers (Vol. I–X) and Glacier Mass Balance Bulletin (No. 1–12) series. Based on discussions during the last evaluation of GTN-G (Denby et al. 2014), it is designed with the aim of providing an integrative assessment of worldwide and regional glacier changes and will be published every two years. The primary focus is glaciological mass balance observations which are complemented by geodetic volume changes and front variation series. It will serve as an authoritative source of illustrated and commentated information on global glacier changes based on the latest observations from the scientific collaboration network of the WGMS. The Global Glacier Change Bulletin No. 1 reports the observations from balance years 2011/12 and 2012/13 as well as preliminary results from the 'reference' glaciers (with more than 30 years of continuous observations) for 2013/14. In order to guarantee a seamless reporting following on the Fluctuations of Glaciers 2005–2010 (Vol. X), the Appendix includes additional data for 2010/11. Overall, this report presents more than 6,000 lines of database entries from 673 glaciers measured by more than 340 Principal Investigators in 29 countries.

The compilation and dissemination of standardized data and information on glacier distribution and changes is the core task of the WGMS. In addition, it is worth noting the recent key achievements related to the present bulletin. Two papers were published in a joint effort with colleagues from the WGMS collaboration network: the first one proposing a framework for reanalyzing glacier mass balance series that includes conceptual and statistical toolsets for the assessment of random and systematic errors, as well as for the validation and calibration (if necessary) of the glaciological with the geodetic balance results (Zemp et al. 2013); the second one provides observational evidence that global glacier decline in the early 21st century is without precedence on a global scale, at least for the time period observed and probably also for recorded history, as indicated also in reconstructions from written and illustrated documents (Zemp et al. 2015). With the backing from the Swiss Agency for Development and Cooperation, it was possible to support the continuation of glaciological mass balance programmes at Antizana 15 Alpha (Ecuador) and Conejeras (Colombia), and resume disrupted long-term programmes at Golubin and Abramov (Kyrgyzstan).

Sincere thanks are extended to WGMS co-workers, National Correspondents, and Principal Investigators around the world and their sponsoring agencies at national and international levels for their long-term commitment to building up an unrivaled database which, despite its limitations, nevertheless remains an indispensable treasury of international snow and ice research, readily available to the scientific community as well as to a wide public.

Michael Zemp, PD Dr
Director World Glacier Monitoring Service

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Please note:
In the print version, the main part of the Bulletin and the Appendix are provided separately. Hardcopies including both parts are distributed to more than 150 libraries worldwide. The electronic version includes both parts in one file.

1 INTRODUCTION

Internationally coordinated glacier monitoring began in 1894, with the periodic publication of compiled information on glacier fluctuations starting one year later (Forel, 1895). In the beginning, glacier monitoring focused mainly on observations of glacier front variations and after the late 1940s on glacier-wide mass balance measurements (Haeberli, 1998). Beginning with the introduction of the Fluctuations of Glaciers series in the late 1960s (PSFG, 1967; WGMS, 2012, and volumes in between), standardized data on changes in glacier length, area, volume and mass have been published at pentadal intervals. At the beginning of the 1990s, the Glacier Mass Balance Bulletin series (WGMS, 1991; WGMS, 2013, and issues in between) was designed in order to speed up access to information on glacier mass balance at two-year intervals. Since the late 1980s, glacier fluctuation data have been organized in a relational database (Hoelzle and Trindler, 1998) and are available in electronic form through websites of the WGMS (http://www.wgms.ch) and GTN-G (http://www.gtn-g.org). At the end of 2015, a Glacier App was launched for mobile devices in order to increase the visibility of global glacier changes, its observers, and the internationally coordinated glacier monitoring network.

In the 1990s, an international glacier monitoring strategy was drawn up for providing quantitative, comprehensive, and easily understandable information relating to questions about process understanding, change detection, model validation and environmental impacts with an interdisciplinary knowledge transfer to the scientific community as well as to policymakers, the media and the public (Haeberli et al., 2000; Haeberli, 1998). This strategy has five tiers:

1. organizing glacier monitoring as a multi-component system across environmental gradients, thereby integrating glacier-wide observations at the following levels;
2. extensive glacier mass balance and flow studies within major climatic zones for improved process understanding and calibration of numerical models;
3. determination of glacier mass balance using cost-saving methodologies within major mountain systems to assess the regional variability;
4. long-term observations of glacier length changes and remotely sensed volume changes for large glacier samples within major mountain ranges for assessing the representativeness of mass balance measurement series; and
5. glacier inventories repeated at time intervals of a few decades by using remotely sensed data.

Based on this strategy, the monitoring of glaciers has been internationally coordinated within the framework of GTN-G under the Global Climate Observing System (GCOS) in support of the United Nations Framework Convention on Climate Change (UNFCCC). GTN-G is run by the WGMS in close collaboration with the U.S. National Snow and Ice Data Center (NSIDC) and the Global Land Ice Measurements from Space (GLIMS) initiative. The WGMS is a permanent service of the International Association for the Cryospheric Sciences of the International Union of Geodesy and Geophysics (IACS/IUGG) and of the World Data System within the International Council of Science (WDS/ICSU) and operates under the auspices of the United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), and the World Meteorological Organization (WMO).

To further document the evolution and to clarify the physical processes and relationship involved in global glacier changes, the WGMS collects standardized information on glacier changes in length, area, volume, and mass through annual calls-for-data. In accordance with an agreement between the international organizations and the countries involved, a one-year retention period is granted to allow investigators time to properly analyze, document, and publish their observations before making them available. In 2014, a near-time reporting was introduced for the official 'reference' glaciers (with more than 30 years of continued mass balance observations) in agreement with the responsible Principal Investigators. This allows the WGMS to report preliminary mass balance estimates as soon as a few months after the end of the corresponding observation period. All submitted data are considered public domain for non-commercial use and are made available in print and digital form through the WGMS at no cost.

The new Global Glacier Change Bulletin series merges the former Fluctuations of Glaciers (Vol. I–X) and Glacier Mass Balance Bulletin (No. 1–12) series. It aims to provide an integrative assessment of global glacier changes every two years. In this process, the main focus is on mass balance measurements based on the glaciological method (cf., Cogley et al., 2011). This method provides quantitative results at high temporal resolution, which are essential for understanding climate-glacier processes and for allowing the spatial and temporal variability of the glacier mass balance to be captured, even with only a small sample of observation points. The glaciological observations are complemented by results from the geodetic method (cf., Cogley et al., 2011) in order to extend the balance sample in space and time. The geodetic method provides overall glacier volume changes over a longer time period by repeat mapping from ground, air- or space-borne surveys and subsequent differencing of glacier surface elevations. It is recommended to periodically validate and calibrate annual glaciological mass balance series with decadal geodetic balances in order to detect and remove systematic biases (Zemp et al., 2013). In addition, glacier front variation series are reported for the documentation of clearly visibly glacier reactions to mass changes and for extending observations of glacier fluctuations back in time.

The Global Glacier Change Bulletin No. 1 is organized in three main sections: global summary, regional summaries, and detailed information for selected glaciers. The global summary provides an overview of reported data and of glaciological balance results for the observation periods 2011/12 and 2012/13, including preliminary values for the 'reference glaciers' based on the near-time reporting for 2013/14. This first section contains a global map of available glacier fluctuation data, tables with key statistics on reported data and glaciological balance results as well as a set of global figures summarizing reported data and results of glacier changes in mass, volume and length. The second section consists of standardized facts and figures on glacier changes for all glacierized regions of the world, each supplemented with mass balance and front variation series of selected glaciers. The third section contains detailed information for selected glaciers in order to provide an insight into the results of the glaciological method. In addition, a list is included of all Principal Investigators and their sponsoring agencies for the observation periods of the current bulletin as well as of all National Correspondents as of 2015. Data tables with the results for the observation periods of the current bulletin, as well as for 2010/11, are given in the Appendix. The full report including the data appendix is made available in digital format on the WGMS website as well as being printed and shipped to about 130 libraries around the world as a long-term guarantee for data availability. Full access to the latest and earlier versions of the database, including addenda from earlier years, can be accessed through a data browser on the WGMS website (http://www.wgms.ch).

2 GLOBAL SUMMARY

Pioneer surveys of accumulation and ablation of snow, firn and ice at isolated points date back to the end of the 19th century and the beginning of the 20th century (e.g., Mercanton, 1916). In the 1920s and 1930s, short-term observations (up to one year) were carried out at various glaciers in the Nordic countries. Continuous, modern series of annual/seasonal measurements of glacier-wide mass balance were started in the late 1940s in Sweden, Norway, and in western North America, followed by a growing number of glaciers in the European Alps, North America and other glacierized regions. In the meantime, more than 5,500 glaciological mass balance observations from 413 glaciers have been collected and made available by the WGMS.

For the observation periods 2011/12 and 2012/13, 285 annual mass balance observations were compiled based on 151 glaciers worldwide. Of these observations, 63, 48, and 33% were reported including seasonal balance, balance distribution with elevation, and point measurement, respectively. In addition, 18 geodetic thickness changes and 1366 front variations were collected from 13 and 610 glaciers, respectively, extending the observation period of the last Fluctuations of Glaciers Vol. X (2005–10). A global overview of available glacier change data is shown in Figure 2.1. Reported data for the observation periods covered by the present bulletin are given in Table 2.1. In addition, preliminary balance estimates for 2013/14 are given as reported for the 'reference' glaciers.

Table 2.1: Overview table mass balances. Abbreviations and units: PU = political unit; B12, B13, B14 in mm w.e.; * = preliminary values for 'reference' glaciers (highlighted in grey) for 2013/14; BwBs = winter and summer balances available; FV = front variation; TC = thickness change (geodetic).

PU	Glacier name	1st/last/nr years	B12	B13	B14*	BwBs	ELA-AAR	B elevation	B point	FV	TC (past decade)
AQ	Bahía del Diablo	2000/2013/14	-20	100		o	x	x	x	x	o
AQ	Hurd	2002/2013/12	-190	210		x	x	o	o	o	o
AQ	Johnsons	2002/2013/12	400	390		x	x	o	o	o	o
AR	Brown Superior	2008/2014/07	-1537	-823		x	x	o	x	o	o
AR	Conconta Norte	2008/2014/07	-1544	-742		x	x	o	x	o	o
AR	Los Amarillos	2008/2014/07	-750	-477		o	x	o	x	o	o
AR	Martial Este	2001/2013/13	-320	150		x	x	x	x	o	o
AT	Goldbergkees	1989/2014/26	-1563	-530		x	x	x	o	x	o
AT	Hallstätter Gletscher	2007/2013/07	-1228	-351		x	x	x	o	x	o
AT	Hintereisferner	1953/2014/62	-1561	-510	-122	x	x	x	x	x	x
AT	Jamtalferner	1989/2014/26	-1149	-532		x	x	x	x	x	x
AT	Kleinfleisskees	1999/2014/16	-1220	-195		x	x	x	o	x	o
AT	Obersulzbachkees	2013/2013/01		-368		x	x	x	o	x	o
AT	Pasterze	1980/2013/27	-1298	-600		o	x	x	o	x	o
AT	Stubacher Sonnblickkees	1946/2014/69	-1369	60	274	o	x	o	o	x	o
AT	Vernagtferner	1965/2014/50	-1155	-425	-250	x	x	x	x	x	x
AT	Wurtenkees	1983/2013/31	-1816	-721		o	x	x	o	x	o
AT	Zettalunitz/ Mullwitzkees	2007/2013/07	-1276	-218		x	x	x	o	x	o
BO	Charquini Sur	2003/2013/11	-39	18		o	x	x	x	x	x
BO	Zongo	1992/2013/22	-823	58		o	x	x	x	x	x
CA	Devon Ice Cap NW	1961/2013/53	-503	24		x	x	o	o	o	o

PU	Glacier name	1st/last/nr years	B12	B13	B14*	BwBs	ELA-AAR	B elevation	B point	FV	TC (past decade)
CA	Helm	1975/2013/38	650	-2950		o	x	o	o	o	o
CA	Meighen Ice Cap	1960/2013/54	-1117	160		x	x	o	o	o	o
CA	Melville South Ice Cap	1963/2013/51	-1556	-172		x	x	o	o	o	o
CA	Peyto	1966/2013/47	-360	-910		o	x	o	o	o	o
CA	Place	1965/2013/49	120	-2300		o	x	o	o	o	x
CA	White	1960/2013/51	-951	45		o	x	o	x	o	o
CH	Adler	2012/2013/02	-808	114		x	x	x	x	o	x
CH	Basòdino	1992/2014/23	-1369	82		x	x	x	o	o	o
CH	Findelen	2005/2013/09	-673	-3		x	x	x	x	o	x
CH	Gries	1962/2014/52	-2042	-542	-610	x	x	x	o	x	x
CH	Murtèl	2013/2013/01		-3		x	x	x	x	o	o
CH	Pizol	2007/2013/07	-1276	-593		x	x	x	x	x	o
CH	Plaine Morte	2010/2013/04	-910	-1287		x	x	x	x	o	o
CH	Rhone	1885/2014/31	-1008	-160		x	x	x	o	x	o
CH	Sankt Anna	2012/2013/02	-690	-290		x	x	x	x	x	o
CH	Schwarzbach	2013/2013/01		276		x	x	x	x	o	o
CH	Sex Rouge	2012/2013/02	-1285	-706		x	x	x	x	x	o
CH	Silvretta	1960/2014/54	-1415	-246	-950	x	x	x	o	x	x
CH	Tsanfleuron	2010/2013/04	-1784	-323		x	x	x	x	x	o
CL	Amarillo	2008/2014/07	-550	-905		o	x	o	x	o	o
CL	Echaurren Norte	1976/2014/39	-2380	-1030	-940	x	x	o	o	o	o
CL	Guanaco	2004/2014/11	-710	-510		x	o	o	o	x	o
CN	Parlung No. 94	2006/2014/09	-1478	-1049		o	x	x	x	x	o
CN	Urumqi Glacier No. 1	1959/2014/56	-713	-536	-186	x	x	x	o	x	o
CN	Urumqi Glacier No. 1 E-Branch	1988/2013/26	-810	-658		x	x	x	x	x	o
CN	Urumqi Glacier No. 1 W-Branch	1988/2013/26	-544	-324		x	x	x	x	x	o
CO	Conejeras	2006/2013/08	-2149	-3802		o	x	o	x	x	x
EC	Antizana 15 Alpha	1995/2013/19	-420	-450		o	x	o	o	x	o
ES	Maladeta	1992/2014/23	-2471	390		o	x	o	x	x	x
FR	Argentière	1976/2013/38	-1680	-360		o	o	o	o	x	o
FR	Bionnassay	2010/2013/04	-910	-208		o	o	o	o	x	o
FR	Gebroulaz	1995/2013/19	-1500	-350		o	o	o	o	o	o
FR	Ossoue	2002/2013/12	-3410	240		x	x	o	o	x	o
FR	Saint Sorlin	1957/2013/57	-2130	-956		o	o	o	o	o	o
FR	Sarennes	1949/2014/66	-2690	-1370	-1907	x	o	o	o	o	o
GL	Freya	2008/2014/07	-197	-1394		x	x	x	x	o	o
GL	Mittivakkat	1996/2013/18	-1630	-700		x	x	x	o	x	o
IN	Chhota Shigri	1987/2014/14	-470	-790		o	o	o	o	o	x
IS	Brúarjökull	1994/2013/20	-759	-70		x	x	o	o	o	o
IS	Dyngjujökull	1994/2013/13	-975	-230		x	x	o	o	o	o
IS	Eyjabakkajökull	1994/2013/19	-954	-500		x	x	o	o	o	o
IS	Hofsjökull E	1989/2014/26	-410	-440		x	x	o	o	o	o
IS	Hofsjökull N	1988/2014/27	-460	-360		x	x	o	o	o	o
IS	Hofsjökull SW	1990/2014/25	40	60		x	x	o	o	o	o
IS	Köldukvíslarjökull	1995/2013/19	-289	-560		x	x	o	o	o	o
IS	Langjökull Ice Cap	1997/2013/17	-542	-851		x	x	o	o	o	o

PU	Glacier name	1st/last/nr years	B12	B13	B14*	BwBs	ELA-AAR	B elevation	B point	FV	TC (past decade)
IS	Tungnárjökull	1994/2013/18	-1294	-810		x	x	o	o	x	o
IT	Calderone	1995/2013/19	-2024	487		x	x	o	x	x	x
IT	Campo settentrionale	2010/2013/04	-2140	-582		o	x	o	x	o	x
IT	Caresèr	1967/2014/48	-2460	-1039	-131	x	x	x	x	o	o
IT	Ciardoney	1992/2013/21	-2160	-610		x	x	x	o	x	o
IT	Fontana Bianca/ Weissbrunnferner	1984/2013/29	-1931	-47		x	x	x	x	x	o
IT	Grand Etret	2000/2013/10	-1158	-270		x	x	o	o	x	o
IT	Lunga/Langenferner	2004/2013/10	-1532	-221		x	x	x	x	x	o
IT	Lupo	2010/2013/04	-1522	346		x	x	o	x	o	x
IT	Malavalle/ Übeltalferner	2002/2013/12	-1416	-346		x	x	x	x	x	o
IT	Pendente/ Hangender Ferner.	1996/2013/18	-1938	-790		x	x	x	x	x	o
IT	Vedretta occ. di Ries/ Westlicher Rieserferner	2009/2013/05	-1748	175		x	x	x	x	x	o
IT	Suretta meridionale	2010/2013/04	-1389	-531		x	x	o	x	x	x
IT	Timorion	2001/2014/14	-1166	-199		o	o	o	o	o	o
JP	Hamaguri Yuki	1967/2012/46	Bw only			x	o	o	o	o	o
KE	Lewis	1979/2014/22	-961	-1397		o	x	x	x	o	x
KG	Abramov	1968/2014/33	-601	-249		x	x	x	x	o	o
KG	Glacier No. 354 (Akshiyrak)	2011/2013/03	-524	-533		o	x	x	x	o	o
KG	Golubin	1969/2013/29	-94	77		o	x	x	x	o	x
KG	Suek/Suyok Zapadniy	1971/2013/08	-496	-304		o	x	x	x	o	o
KZ	Ts. Tuyuksuyskiy	1957/2014/58	-1023	-340	-1088	x	x	x	x	x	o
NO	Ålfotbreen	1963/2014/52	1361	-904	-1653	x	x	x	o	o	o
NO	Austdalsbreen	1987/2013/27	1155	-985		x	x	x	o	o	o
NO	Blomstølskardsbreen	2007/2013/07	1585	-234		x	x	x	o	x	o
NO	Breidablikkbrea	1963/2013/17	1145	-1112		x	x	x	o	o	o
NO	Engabreen	1970/2014/45	1144	-1779	-890	x	x	x	o	x	o
NO	Gråfjellsbrea	1964/2012/17	1209	-1151		o	x	o	o	x	o
NO	Gråsubreen	1962/2014/53	-262	-800	-1130	x	o	x	o	o	o
NO	Hansebreen	1986/2013/25	822	-1687		x	x	x	o	o	o
NO	Hellstugubreen	1962/2014/53	-18	-779	-1210	x	x	x	o	x	o
NO	Langfjordjøkelen	1989/2013/25	-760	-2614		x	x	x	o	x	o
NO	Nigardsbreen	1962/2014/53	1274	-232	-343	x	x	x	o	x	o
NO	Rembesdalskåka	1963/2014/52	908	-1294	-1294	x	x	x	o	x	o
NO	Rundvassbreen	2002/2013/06	636	-2432		x	x	x	o	x	o
NO	Storbreen	1949/2014/66	-229	-1175	-1180	x	x	x	o	x	o
NO	Svelgjabreen	2007/2013/07	560	-728		x	x	x	o	x	o
NP	Mera	2008/2012/05	-670	450		o	x	o	x	o	o
NP	Pokalde	2010/2012/03	-1120	-70		o	x	o	o	o	o
NP	Rikha Samba	1999/2013/03	-621	-80		o	x	o	o	x	x
NP	Yala	2012/2014/03	-1174	-247		o	x	o	o	x	x
NZ	Brewster	2005/2013/09	-200	106		x	x	o	o	x	o
NZ	Rolleston	2011/2014/04	-429	740		x	x	o	x	x	o
PE	Artesonraju	2005/2013/09	-353	-448		o	x	x	o	x	o
PE	Yanamarey	1978/2013/19	-1261	-1246		o	x	x	o	x	o

PU	Glacier name	1st/last/nr years	B12	B13	B14*	BwBs	ELA-AAR	B elevation	B point	FV	TC (past decade)
RU	Djankuat	1968/2014/47	-1630	-450	-1370	x	o	o	o	o	o
RU	Garabashi	1984/2013/30	-989	-272		x	x	x	o	o	o
RU	Leviy Aktru	1977/2012/36	-1020			o	x	o	o	o	o
RU	Maliy Aktru	1962/2012/51	-1100			o	x	x	o	o	o
RU	Vodopadniy (No. 125)	1977/2012/36	-950			o	x	o	o	o	o
SE	Mårmaglaciären	1990/2012/23	-90			x	x	x	o	o	o
SE	Rabots glaciär	1946/2012/31	20			x	x	x	o	o	o
SE	Riukojietna	1986/2012/26	-90			x	x	x	o	o	o
SE	Storglaciären	1946/2014/68	680	-1410	-890	x	x	x	o	x	o
SE	Tarfalaglaciären	1986/2012/19	830			x	x	x	o	o	o
SJ	Austre Brøggerbreen	1967/2014/48	-175	-1090	11	x	x	o	o	o	o
SJ	Austre Lovénbreen	2008/2014/07	-241	-1010		x	x	o	o	x	o
SJ	Hansbreen	1989/2013/23	-151	143		x	x	x	o	x	x
SJ	Irenebreen	2002/2013/12	-851	-1881		o	x	o	o	o	o
SJ	Kongsvegen	1987/2014/28	208	-690		x	x	o	o	o	x
SJ	Kronebreen	2003/2014/06		-420		x	x	o	o	o	x
SJ	Midtre Lovénbreen	1968/2014/47	-260	-937	51	x	x	o	o	o	x
SJ	Waldemarbreen	1995/2013/19	-885	-1637		o	x	x	x	o	o
SJ	Werenskioldbreen	1980/2013/04	-400	-1430		x	x	x	o	o	o
US	Columbia (2057)	1984/2014/31	380	-780	-500	o	x	x	o	x	o
US	Daniels	1984/2013/30	750	-150		o	x	o	o	o	o
US	Easton	1990/2013/24	-160	-1580		o	x	o	o	x	o
US	Emmons	2003/2013/09	610	-1390		x	o	o	x	o	o
US	Foss	1984/2013/30	250	-400		o	x	o	o	o	o
US	Gulkana	1966/2014/49	-790	-1300	-100	x	x	o	x	o	o
US	Ice Worm	1984/2013/30	150	-700		o	x	o	o	o	o
US	Lemon Creek	1953/2014/62	450	-753	-1825	o	x	x	o	o	o
US	Lower Curtis	1984/2013/30	-380	-850		o	x	o	o	x	o
US	Lynch	1984/2013/30	510	-400		o	x	o	o	o	o
US	Nisqually	2003/2013/09	850	-1410		x	o	o	x	o	o
US	Noisy Creek	1993/2013/21	620	-850		x	o	o	x	o	o
US	North Klawatti	1993/2013/21	280	-910		x	o	o	x	o	o
US	Rainbow	1984/2013/30	420	-1850		o	x	o	o	o	o
US	Sandalee	1994/2013/20	570	-290		x	o	o	x	o	o
US	Sholes	1990/2013/24	340	-1700		o	x	o	o	o	o
US	Silver	1993/2013/21	380	-360		x	o	o	x	o	o
US	South Cascade	1953/2012/59	190			x	o	o	o	o	o
US	Taku	1946/2013/68	1040	-180		o	x	o	o	o	o
US	Wolverine	1966/2014/49	510	-2300	-2600	x	x	o	x	o	o
US	Yawning	1984/2013/30	-120	-1150		o	x	o	o	o	o

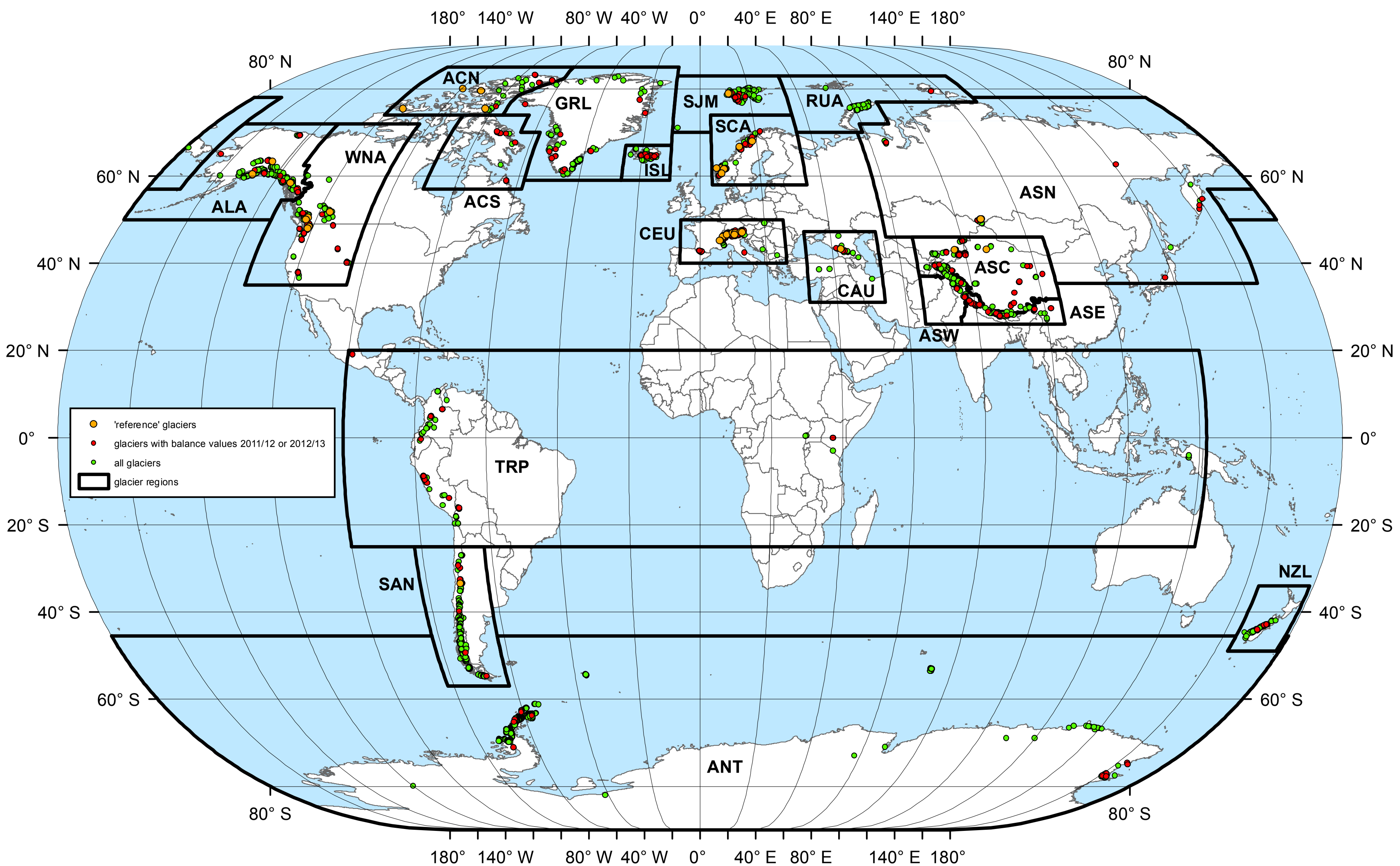


Figure 2.1: Location of the 3735 glaciers for which data is available from the WGMS. This overview includes 151 glaciers with reported mass balance data for the observation periods 2011/12 and 2012/13, and 40 ‘reference‘ glaciers with well-documented and independently calibrated, long-term mass balance programmes based on the glaciological method.

Climate (change) related trend analysis is, in the ideal case, based on long-term measurement series. Continuous glaciological mass balance records for more than 30 continued observation years are now available for a set of 40 'reference' glaciers. These glaciers have well-documented and long-term mass balance programmes based on the direct glaciological method (cf., Østrem & Brugman, 1991; Cogley et al., 2011) and are not dominated by non-climatic drivers such as calving or surge dynamics. Furthermore, it is recommended that these glaciological results be validated and, if necessary, calibrated with independent results from the geodetic method (cf. Zemp et al., 2013). Corresponding results from this sample of glaciers in North and South America and Eurasia are summarized in Table 2.2.

Table 2.2: Summarized mass balance data. A statistical overview of the mass balance results of 40 'reference' glaciers is given for the three recent reporting periods 2012, 2013 and 2014* (upper table) in comparison with corresponding values averaged for the decades 1981–1990, 1991–2000 and 2001–2010 (lower table; up to 40 glaciers). All balance values in mm w.e. per year; * = preliminary values

	2011/12	2012/13	2013/14*
mean specific (annual) mass balance	-659 mm	-858 mm	-833 mm
standard deviation	1086 mm	696 mm	716 mm
minimum value	-2690 mm	-2950 mm	-2600 mm
maximum value	+1361 mm	+160 mm	+274 mm
nr of positive/reported balances	11/39	4/35	3/25
mean AAR	33 %	29 %	35 %

decadal averages of:	1981–1990	1991–2000	2001–2010
mean specific (annual) mass balance	-244 mm	-414 mm	-740 mm
standard deviation	784 mm	849 mm	868 mm
minimum	-1939 mm	-2502 mm	-2832 mm
maximum	+1973 mm	+1598 mm	+994 mm
avg nr of positive/reported balances	13/39	10/40	7/40
mean AAR	48 %	45 %	36 %

Taking the two years of this reporting period and preliminary results for 2013/14 (from the near-time reporting) together, the mean mass balance was -750 mm w.e. per year. This is as negative as the mean mass balance for the first decade of the 21st century (2001–2010: -740 mm w.e. per year) which has been without precedent on a global scale, at least for the time period with available observations (Zemp et al., 2015). Since the turn of the century, the maximum mass loss of the 1980–2000 time period (observed in 1998) has been exceeded five times: in 2003, 2006, 2011, 2013, and probably again in 2014. The percentage of positive glacier mass balances decreased from 33% in the 1980s to below 20% (2011/12–2013/14), and there have been no more years with a positive mean balance for almost three decades. The melt rate and cumulative loss in glacier thickness continues to be extraordinary. Furthermore, the analysis of mean AAR values show that the glaciers are in strong and increasing imbalance with the climate and, hence will continue to lose mass even if climate remains stable (Mernild et al., 2013; Zemp et al., 2015).

The mean of the 40 'reference' glaciers included in the analysis is based on a small sample and influenced by the large proportion of Alpine and Scandinavian glaciers. Therefore, mean values are also calculated for (i) all mass balances available, independent of record length, and (ii) using only one single value (averaged) for each of the 19 regions. Figure 2.2 shows the number of reported observation series as well as annual and cumulative results for all three means. In their general trend and magnitude, all three averages relate quite closely to each other and are in good agreement with the results from a moving-sample averaging of all available data (cf., Kaser et al., 2006; Zemp et al., 2009; Zemp et al., 2015). The global average

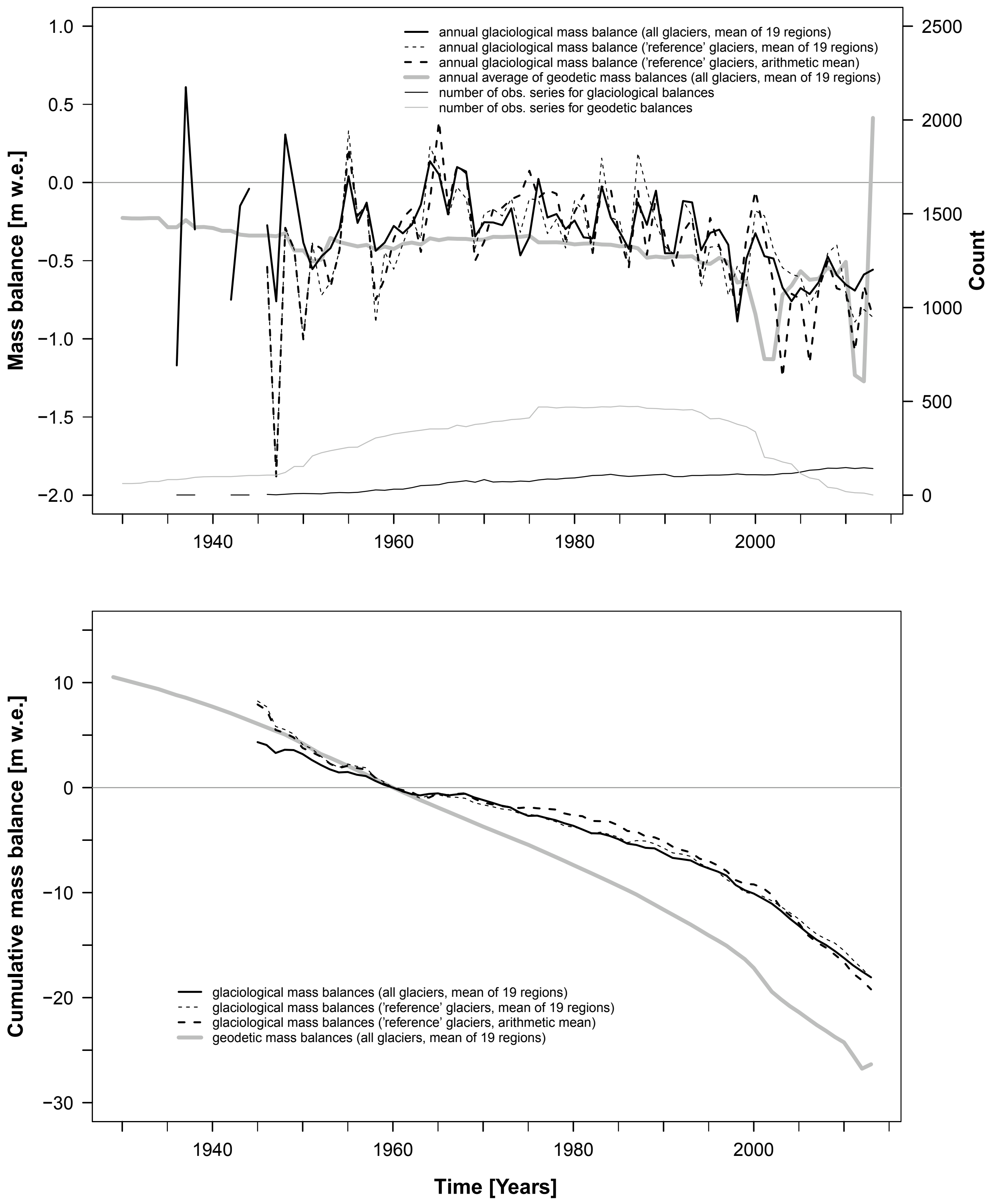


Figure 2.2: Global averages of observed mass balances from 1930 to 2013. Annual averages of geodetic and glaciological balances are shown together with the corresponding number of observed glaciers (above). Cumulative annual averages relative to 1960 (below).

cumulative mass balance indicates a strong mass loss in the first decade after the start of measurements in 1946 (though based on few observation series only), slowing down in the second decade (1956–1965; based on observations above 30° N only), followed by a moderate ice loss between 1966 and 1985 (with data from the Southern Hemisphere only since 1976) and a subsequent acceleration of mass loss until the present (2014).

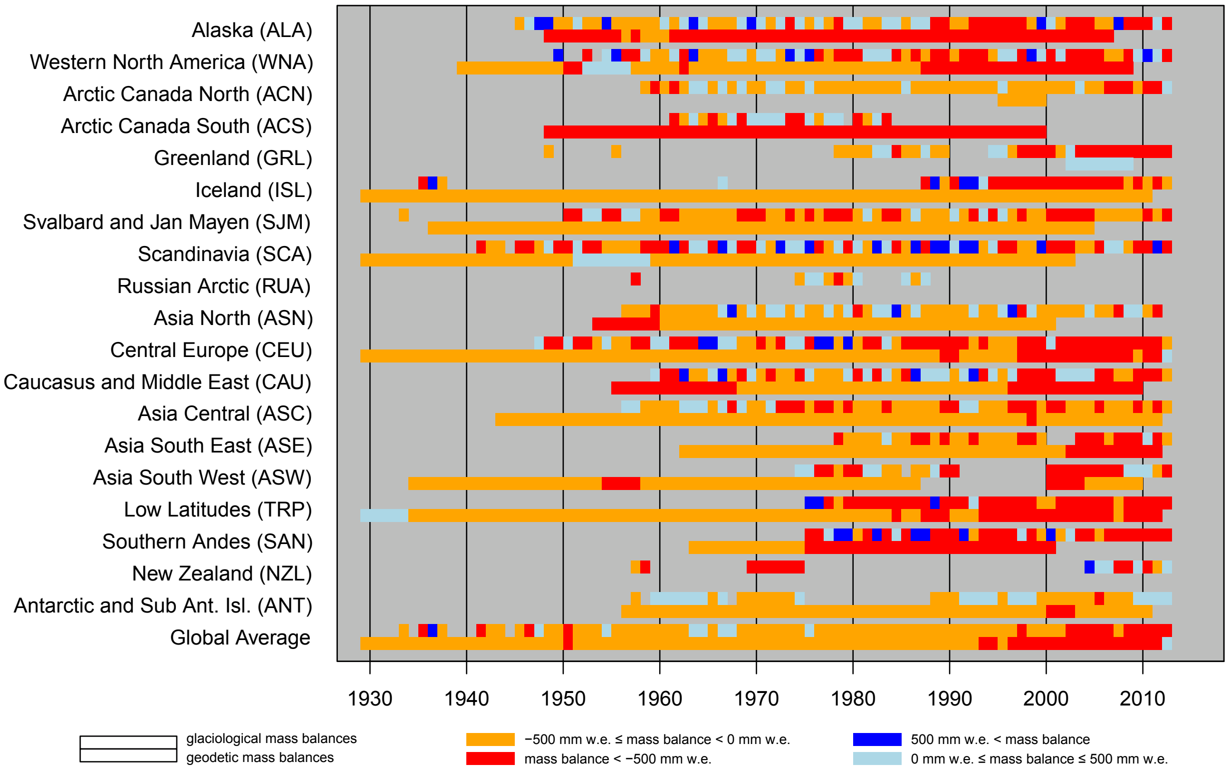


Figure 2.3: Regional mass balances 1930-2013.

The geodetic method (cf. Cogley et al., 2011) provides overall glacier volume changes over a longer time period by repeat mapping from ground, air- or spaceborne surveys and subsequent differencing of glacier surface elevations. The geodetic results allow extending the glaciological sample both in space and time (Figure 2.2, 2.3). The difference in survey periods between the glaciological and the geodetic data becomes manifest in the variability of the two graphs: a smooth line with step changes towards more negative balances for the geodetic sample and a strong variability with a negative trend for the glaciological observations. Overall, the results from both methods match regarding the increased ice loss towards the early 21st century.

Direct observations of glacier front positions extend back into the 19th century. This data sample has been extended in space based on remotely sensed length change observations and continued back in time by front variations reconstructed from clearly dated historical documents. Overall, the database contains more than 42, 000 observations which allow the front variations of about 2, 000 glaciers to be illustrated and quantified back into the 19th century. Additional reconstruction series from about 30 glaciers in the European Alps, Scandinavia and the Southern Andes extend as far back as the Little Ice Age (LIA) period, i.e., to the 16th century. The global compilation of front variation data, as qualitatively summarized in Figure 2.4, shows that glacier retreat has been dominant for the past two centuries, with LIA maximum extents reached (in some regions several times) between the mid-16th and the late 19th centuries. The qualitative summary of cumulative mean annual front variations (Fig. 2.4) reveals a distinct trend toward global centennial glacier retreat, with the early 21st century marking the historical minimum extent in all regions (except NZL and ANT, where few observations are available) at least for the time period of documented front variations. Intermittent periods of glacier re-advance, such as those in the Alps around the 1920s and 1970s or in Scandinavia in the 1990s, are hardly visible in Figure 2.4a because they do not even come close to achieving LIA maximum extents. Figure 2.4b provides a better overview of these re-advance periods by highlighting the years with a larger ratio of advancing glaciers. A qualitative overview of regional changes from both the glaciological and the geodetic method is given in Figure 2.3 and discussed in more detail in Section 3 on regional summaries.

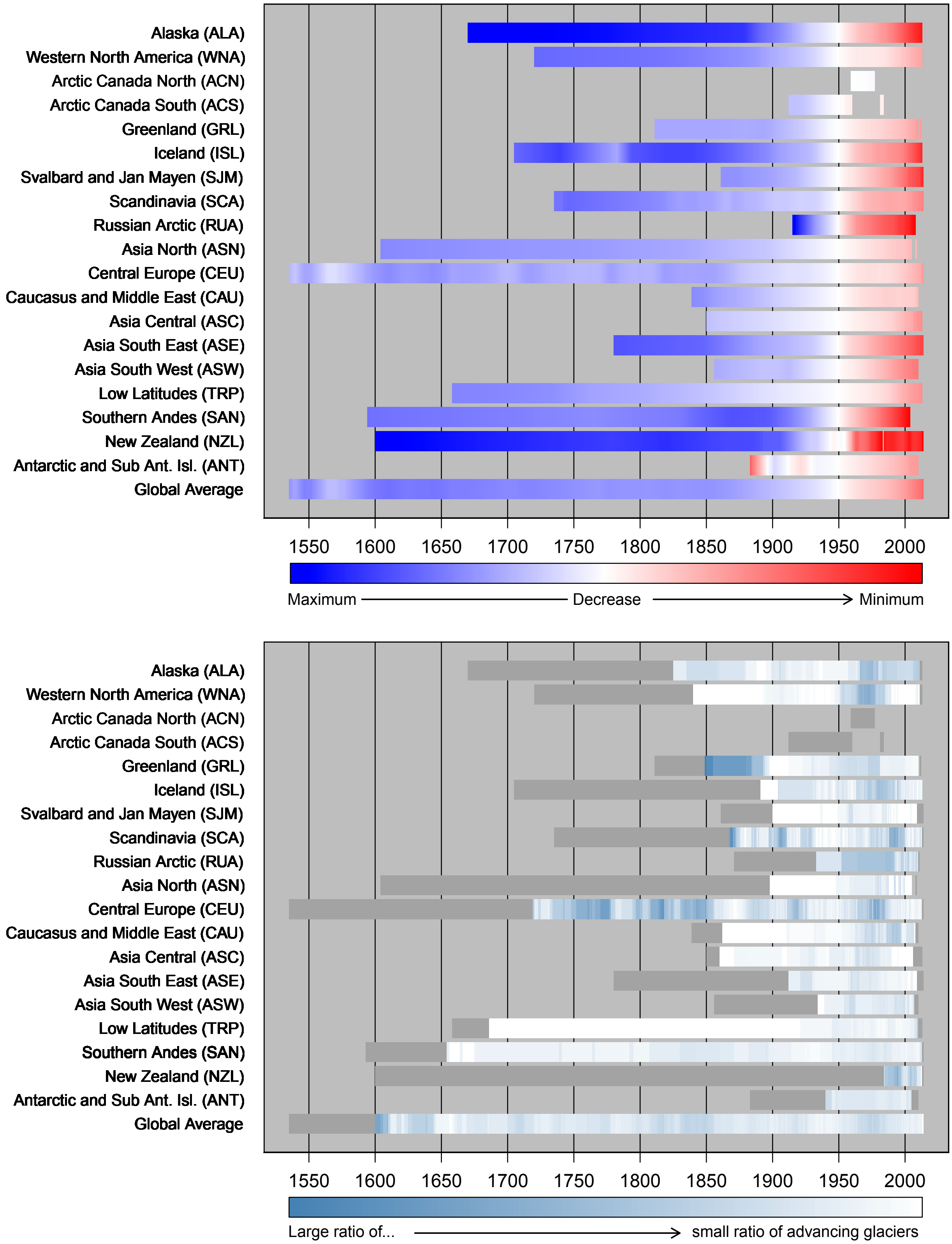


Figure 2.4: Global front variation observations from 1535 to 2013. (a) Qualitative summary of cumulative mean annual front variations. The colours range from dark blue for maximum extents (+2.5 km) to dark red for minumum extents (-1.6 km) relative to the extent in 1950 as a common reference (i.e. 0 km in white). (b) Qualitative summary of the ratio of advancing glaciers. The colours range from white for years with no reported advances to dark blue for years with a large ratio of advancing glaciers. Periods with very small data samples (n < 6) are masked in dark grey. The figure is based on all available front variation observations and reconstructions, excluding absolute annual front variations larger than 210 m a^{-1} to reduce effects of calving and surging glaciers.

Table 2.3: Database statistics and increase from current observation periods.

Dataset	Number of Glaciers	Number of Observations	Increments since WGMS (2013)
Front variations (from observations)	2451	43555	+483/+2469
Front variations (from reconstructions)	36	1818	+0/+0
Mass balance (glaciological method)	413	5543	+144/+1125
Volume/thickness change (geodetic method)	461	1150	+16/+45
Special events	314	549	+20/+131
Glacier maps	75	125	+3/+9

A global and regional overview of the observational datasets is given in Figures 2.3–2.7. Overall, the Fluctuations of Glaciers database contains around 52,000 observations from 3,700 glaciers. This includes 45,370 front variations from 2,450 glaciers. From glaciological measurements, 5,543 annual balances are available from 413 glaciers. Geodetic results have been reported for 1,150 (multi-year) periods from 461 glaciers. A look at all the data samples reveals that the glaciological sample has been increasing whereas the geodetic and the two front variation samples have been decreasing over the past 25 years. The increase found in the glaciological sample reflects the successful efforts of the observers to continue and extend their monitoring programmes as well as of the WGMS to compile these results through its collaboration network. The decline in the geodetic sample has to do with the normal post-processing character of geodetic surveys. Another reason is the stronger reluctance found here to share data; it appears that the cost to the relevant research community in terms of the extra effort required to submit data (beyond a journal publication of the main results) is considerable compared with the benefit gained from increased visibility through data sharing. As a consequence, the recent increase in the dataset (pale blue, Figure 2.4) mainly derives from an extensive literature search. In the case of the observational front variation sample, the decrease is reported to be caused mainly by the abandonment of in situ programmes without remote-sensing compensation.

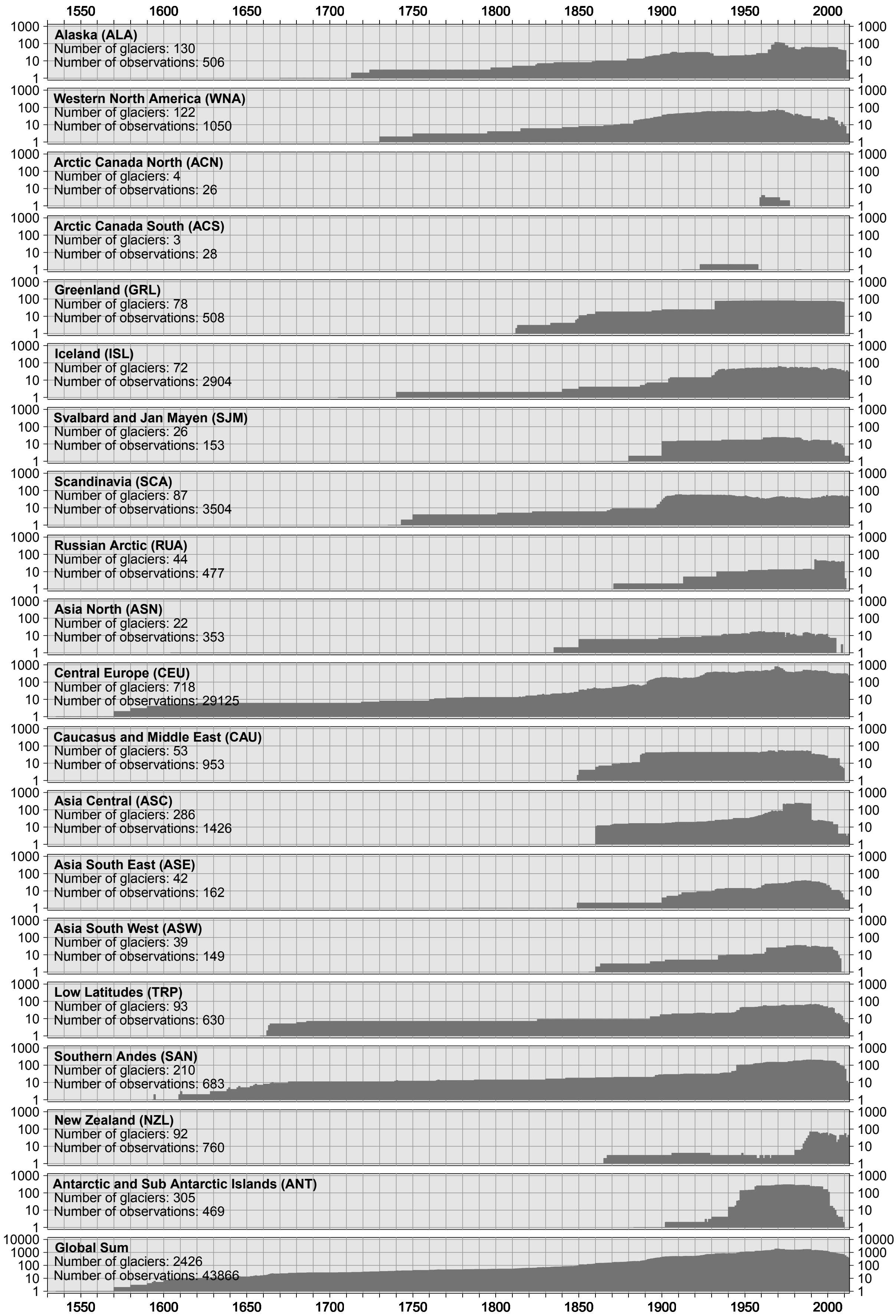


Figure 2.5: Number of regional and global glacier fluctuation records over time: front variation data.

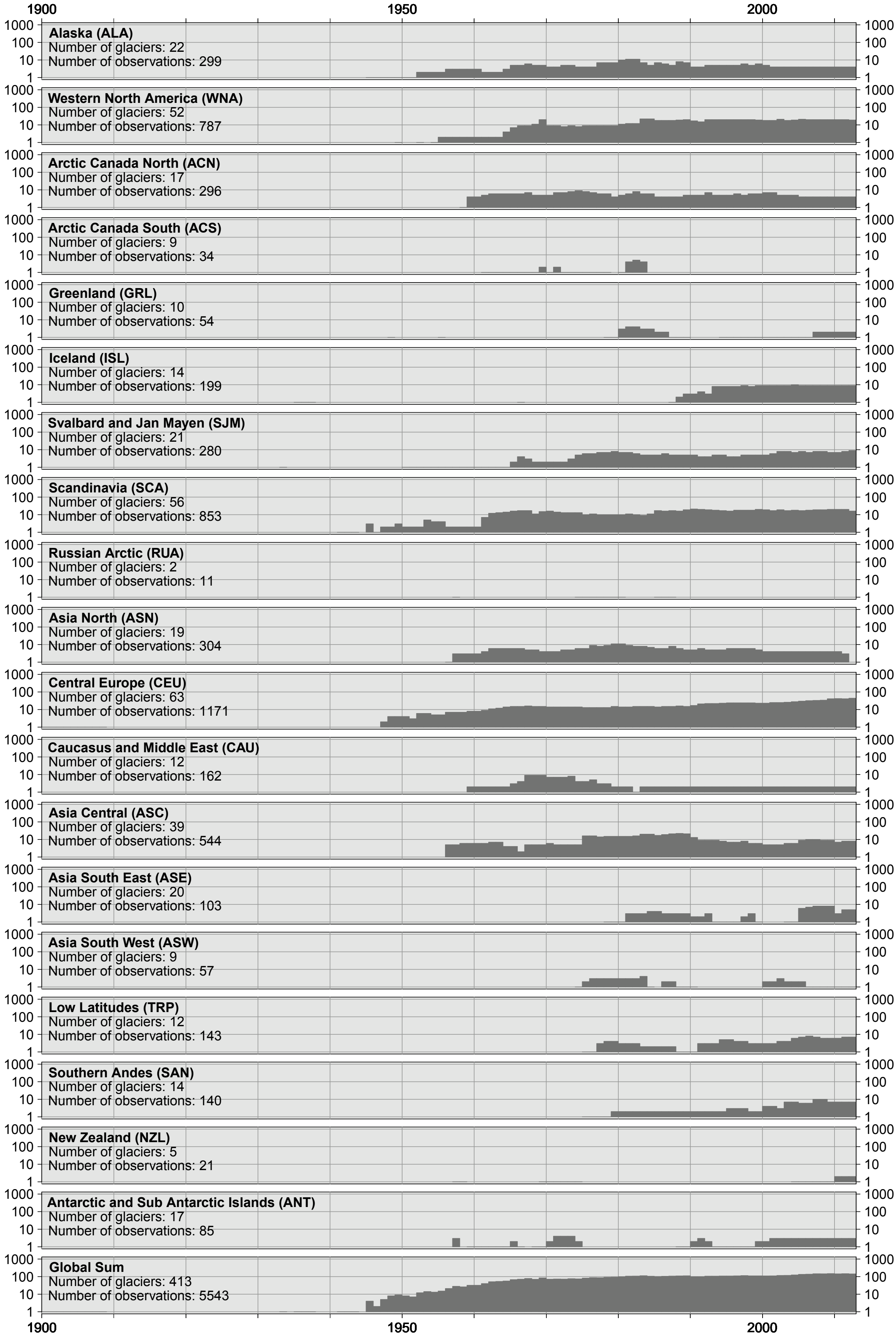


Figure 2.6: Number of regional and global glacier fluctuation records over time: glaciological mass balance data.

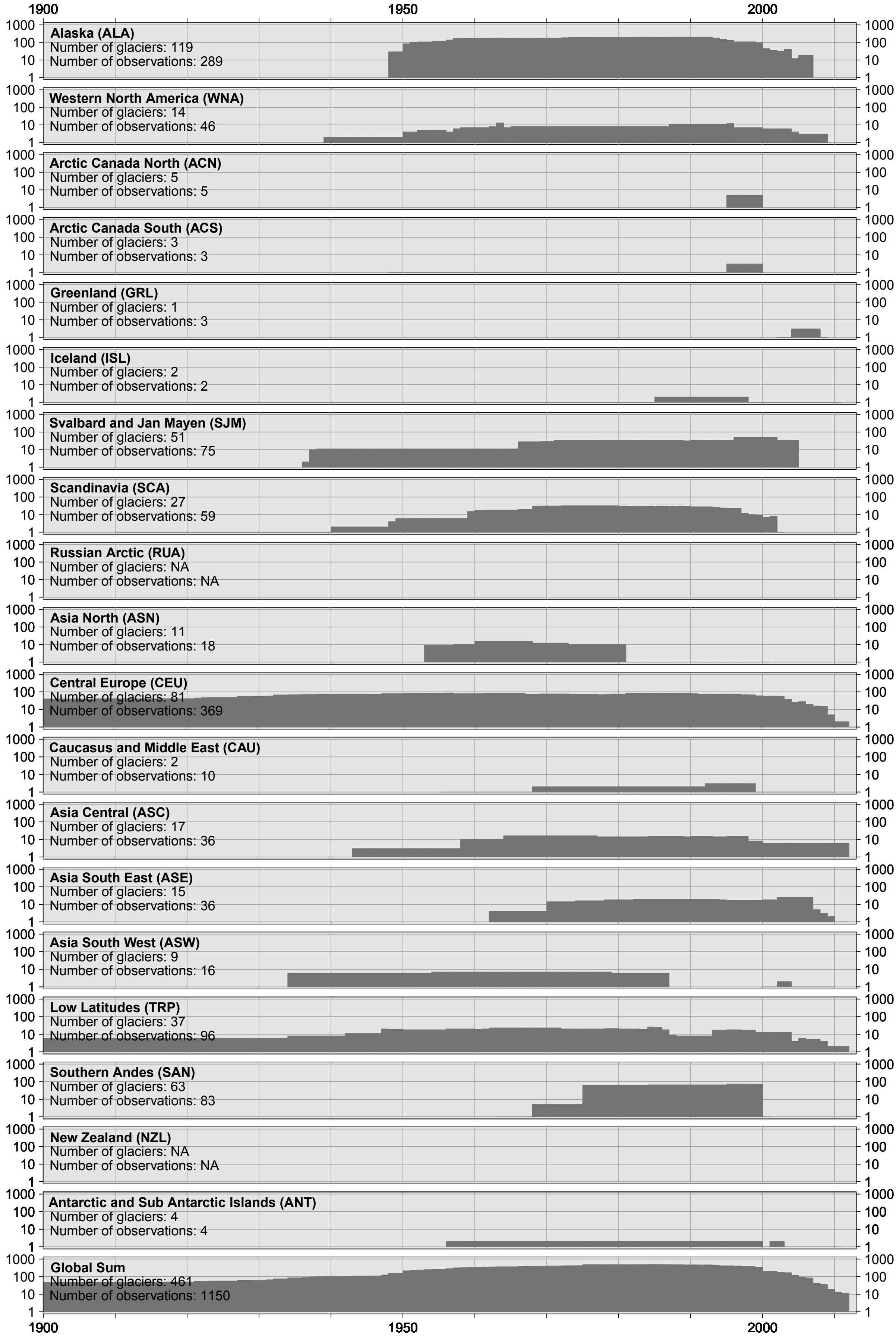


Figure 2.7: Number of regional and global glacier fluctuation records over time: geodetic mass balance data.

3 REGIONAL INFORMATION

Fluctuations of glaciers (not influenced by surge or calving dynamics) are recognized as high-confidence climate indicators and as an important element in early detection strategies within the international climate monitoring programmes (GCOS 2010; GTOS 2009). Their fluctuations can be analyzed on global and regional scales, but also on the local scale, where topographic effects may lead to different reactions of two adjacent glaciers. The glacier sensitivity to a climatic change is strongly related to the climate regime in which the ice resides. The mass balance of temperate glaciers in the mid-latitudes is mainly dependent on winter precipitation, summer temperature and summer snowfalls (temporally reducing the melt due to the increased albedo; Kuhn et al., 1999). In contrast, the glaciers in low latitudes, where ablation occurs throughout the year and multiple accumulation seasons exist, are strongly influenced by variations in atmospheric moisture content which affects incoming solar radiation, precipitation and albedo, atmospheric longwave emission, and sublimation (Wagnon et al., 2001; Kaser & Osmaston, 2002). In the Himalaya, which is influenced by the monsoon, most of the accumulation and ablation occurs during the summer (Ageta & Fujita, 1996; Fujita & Ageta, 2000). Glaciers at high altitudes and in polar regions can receive accumulation in any season (Chinn, 1985).

For regional analysis and comparison of glacier fluctuation data, it is convenient to group glaciers by proximity. We refer to the glacier regions as defined by Radić & Hock (2010, slightly adjusted) and used in some other recent studies (e.g., Pfeffer et al., 2014). For global studies of mass balance, these glacier regions seem to be appropriate because of their manageable number and their geographical extent, which is close to the spatial correlation distance of glacier mass balance variability in most regions (several hundred kilometres; cf. Letreguilly & Reynaud, 1990; Cogley & Adams, 1998). Per region, all data records are aggregated at the annual time resolution in order to give consideration to the corresponding observational peculiarities, i.e., for multiannual survey periods, the annual change rate is calculated and assigned to each year of the survey period. For quantitative comparisons over time and between regions, decadal arithmetic mean mass balances are calculated in order to reduce the influence of meteorological extremes and of density conversion issues (cf. Huss, 2013; Zemp et al., 2013). Global values are calculated as arithmetic means of the regional averages to avoid a bias in favour of regions with large observation densities (e.g. in Central Europe, Scandinavia, or Svalbard). This approach is suitable for assessing the temporal variability of glacier mass balance (Zemp et al., 2015).

This chapter provides regional overviews including a figure showing regional averages of glaciological and geodetic mass balances, given together with the corresponding number of observations, key statistics on regional glacier distribution and available fluctuation series, and graphs of cumulative front variation and mass balance from selected glaciers with long-term observation series. The regions are roughly ordered from West to East and from North to South. Regional estimates of total glacier area, rounded to 500 km^2, are from Pfeffer et al. (2014).

3.1 ALASKA

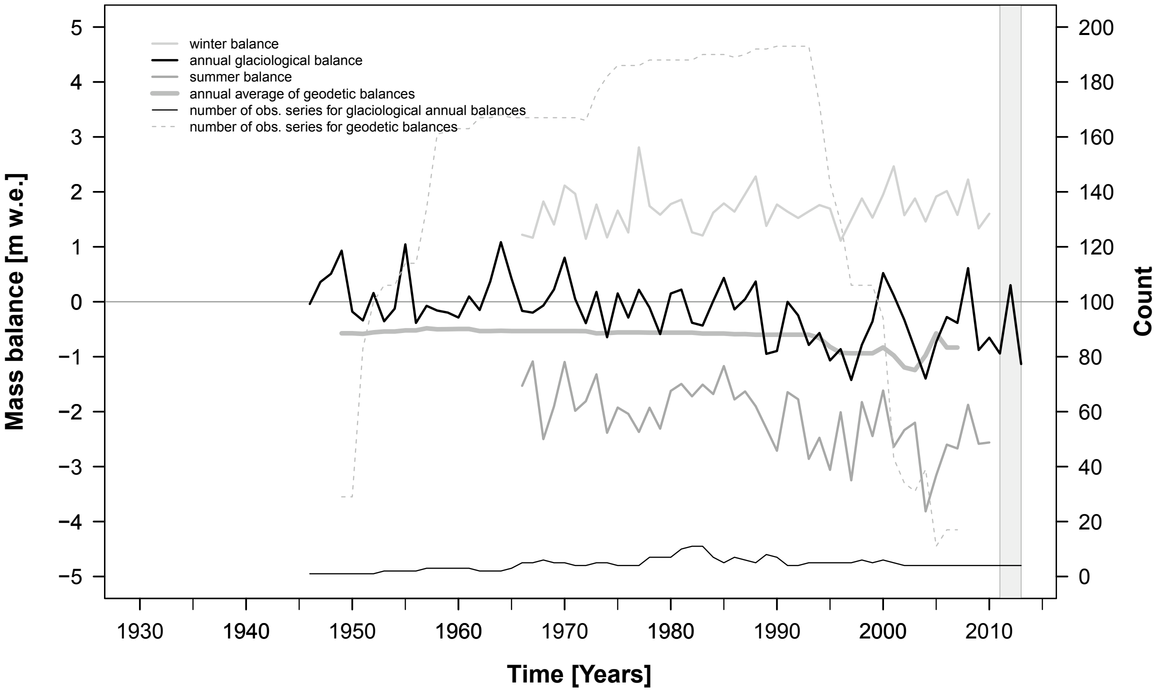


Figure 3.1.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The glaciers and icefields of Alaska are located in the Brooks Range, the Alaska Range, where Mount McKinley/Denali (the highest peak of the continent) is located, and in the Coast Mountains along the Gulf of Alaska coastline. Together these glaciers cover an area of about 86,500 km². Climate conditions in this region range from very maritime conditions in the Coast Mountains to continental conditions in the Alaska Range. In Alaska, the vast majority of the front variation series were discontinued at the end of the 20th century. Long-term mass balance measurements have been reported from Gulkana and Wolverine in the Alaska Range as well as from the Juneau Icefield's Taku and Lemon Creek glaciers located in southeast Alaska.

In Alaska, glaciers reached their Little Ice Age (LIA) maxima at various times; for the northeast Brooks Range it was the late 15th century, and for the Kenai Mountains, the mid-17th century (Grove, 2004). However, most of the glaciers attained the LIA maximum extent between the early 18th and late 19th centuries (Molnia, 2007). Reported front variation observations show a general glacier retreat from the LIA extents. Exceptions to this general trend are large tidewater glaciers with impressive frontal retreat (e.g. Columbia No 627) and advance (e.g. Taku) cycles, mainly driven by calving dynamics. The former tidewater glacier Muir, located in the Saint Elias Mountains, became a land-terminating glacier after its last retreat phase. Observed mass balance glaciers lost about half a metre w.e. per year during the 1990s and 2000s, with three years of positive mean balances in 1999/00, 2000/01, and 2007/08. Seasonal balance observations show the large mass turnover of the maritime glaciers. In 2011/12 the reported balance was again positive with 300 mm w.e. a^{-1} followed by a very negative balance of -1130 mm w.e. a^{-1} in 2012/13. The glaciological measurements are supported by results from geodetic surveys from a few hundred glaciers between the 1950s and late 1990s. Regional glacier change assessments were recently published by Larsen et al. (2015), McNabb & Hock (2014), and Pelto et al. (2013).

Estimated total glacier area (km²):	86500
Front variations	
- # of series*:	131/3
- # of stationary or advancing obs.*:	213/0
- # of retreating observations*:	381/3
Glaciological balances	
- # of series*:	22/4
- # of observations*:	299/8
Geodetic balances	
- # of series°:	119/39
- # of observations°:	289/46

* (total/>2011), ° (total/>2003)

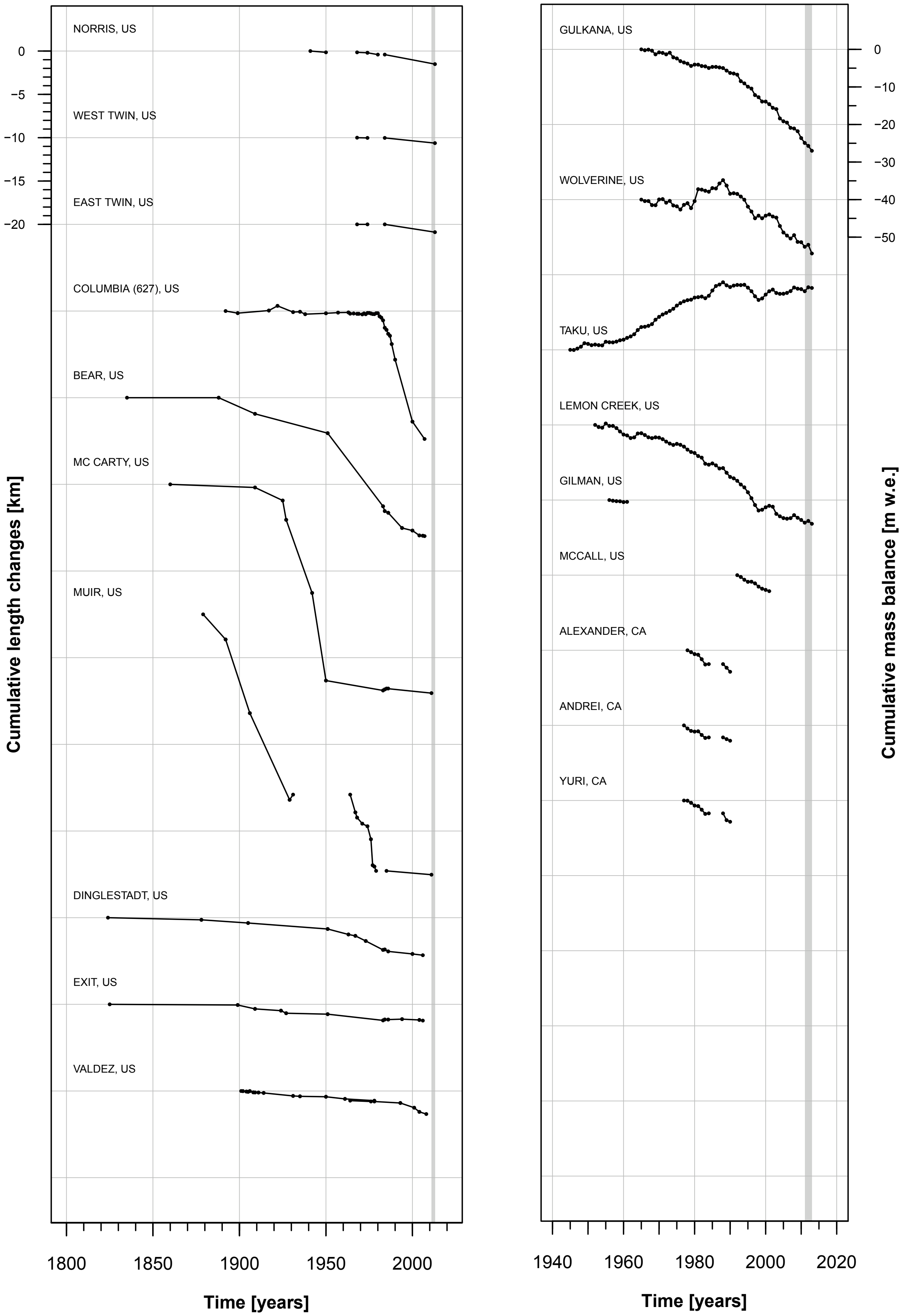


Figure 3.1.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Alaska over the entire observation period.

3.2 WESTERN NORTH AMERICA

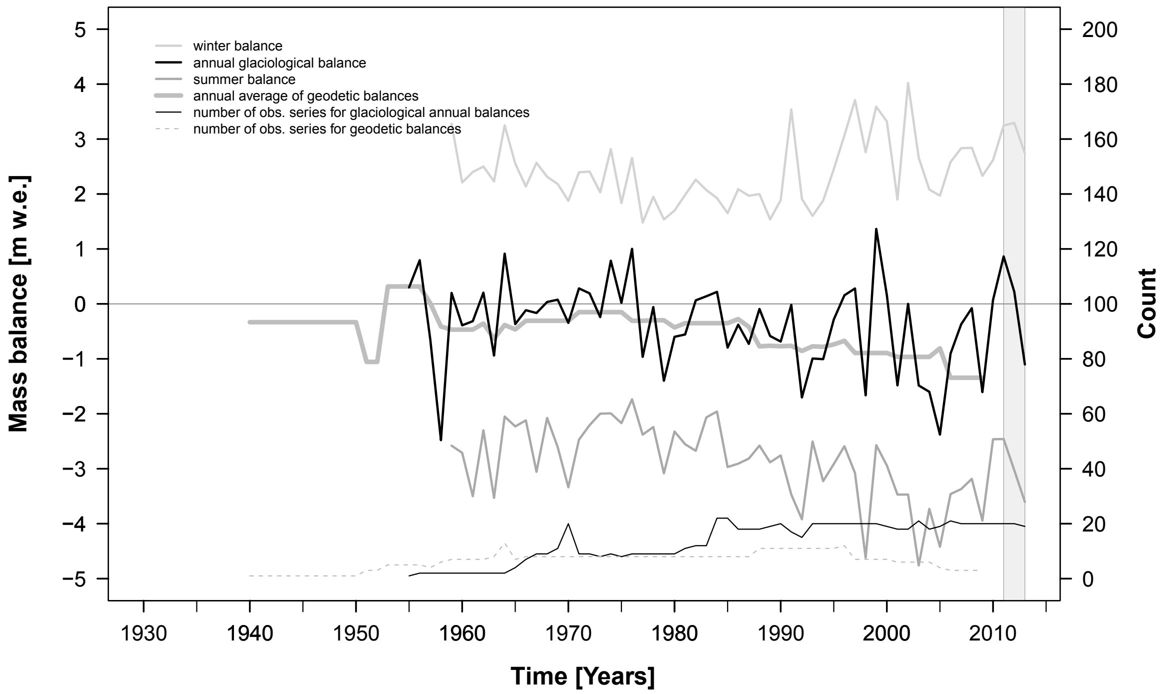


Figure 3.2.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The glaciers in western North America are located in the Pacific Coast Mountains, the Rocky Mountains, the Cascade Range, and in the Sierre Nevada. Together, the glacier area covers a total of aprox. 14,500 km². In general, the climate of the mountain ranges shows strong variations depending on latitude, altitude and proximity to the sea. Therefore, glaciers in the south are much smaller and occur at higher elevations than in the higher latitudes, where some glaciers extend down to the coast.

From Western North America more than 50 mass balance and more than 120 front variation series are available but only half of them have been continued into the 21st century. South Cascade Glacier in the Cascade Range has the longest mass balance record followed by Place and Helm glaciers in the Coast Mountains and Peyto Glacier in the Rocky Mountains. In conterminous USA and Canada, glaciers reached their LIA maximum extent in the mid to late 19th century (Kaufmann et al., 2004). Reported front variation observations show a general glacier retreat from the LIA extents with intermittent periods of glacier re-advances in the early 20th century and from the 1970s to 1980s. Since the 1990s glacier retreat has been continued.

Decadal average annual balances of the observed glaciers were between 400 and 450 mm w.e. a^{-1} in the 1980s and 1990s, and almost -1000 mm w.e. a^{-1} in the 2000s. Seasonal balance observations show the large mass turnover of the maritime glaciers. As in Alaska, the reported mean balance of 2011/12 was positive with 220 mm w.e. a^{-1} followed by a very negative balance of -1100 mm w.e. a^{-1} in 2012/13. The glaciological observations are well supported by results from the few geodetic surveys.

Regional glacier change assessments were recently published by Pelto & Brown (2012), Shea et al. (2013), Tennant & Menounos (2013), Tennant et al. (2012).

Estimated total glacier area (km²):	14500
Front variations	
- # of series*:	122/3
- # of stationary or advancing obs.*:	284/0
- # of retreating observations*:	769/5
Glaciological balances	
- # of series*:	52/20
- # of observations*:	787/39
Geodetic balances	
- # of series°:	14/5
- # of observations°:	46/6

* (total/>2011), ° (total/>2003)

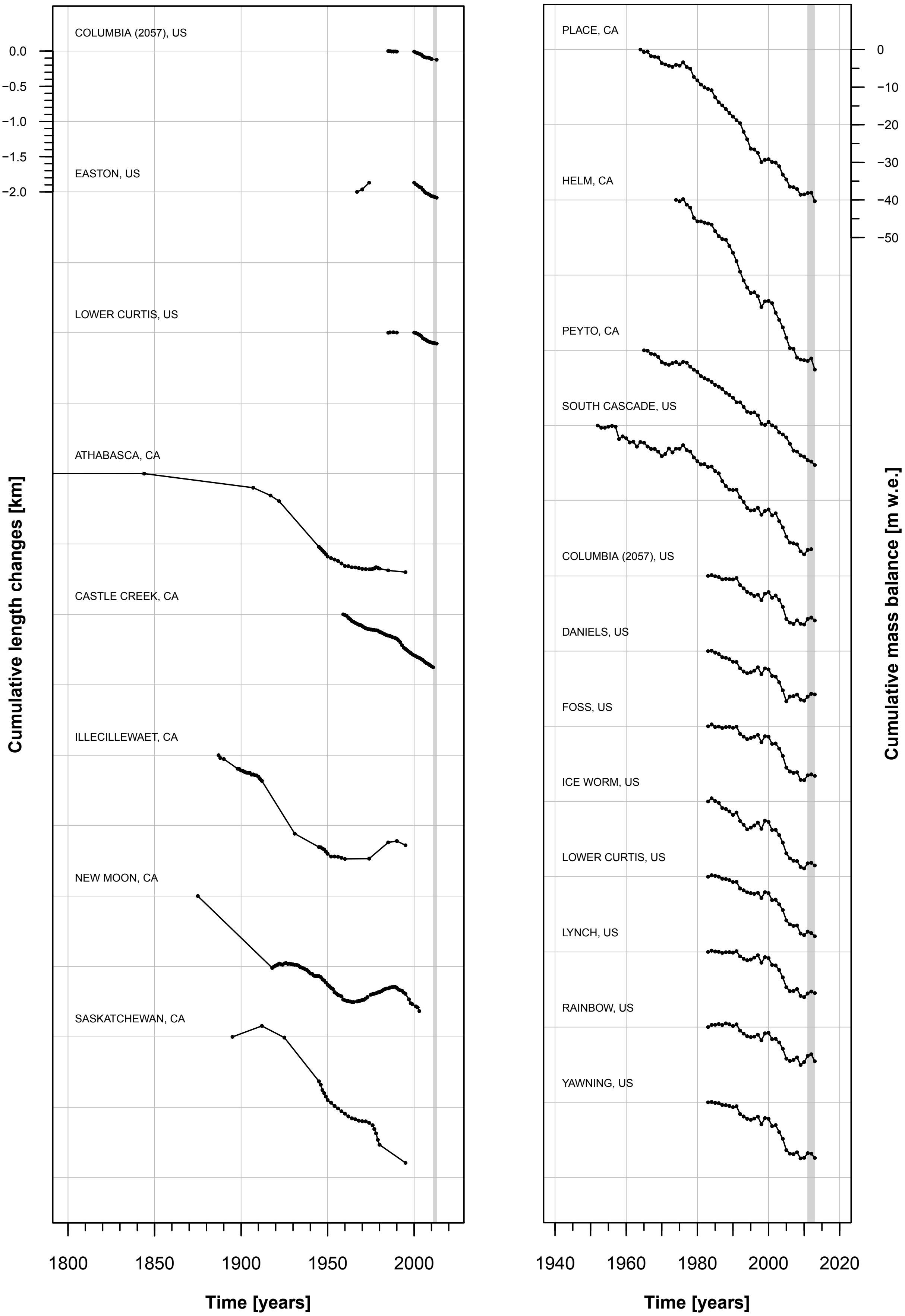


Figure 3.2.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Western North America over the entire observation period.

3.3 ARCTIC CANADA NORTH & SOUTH

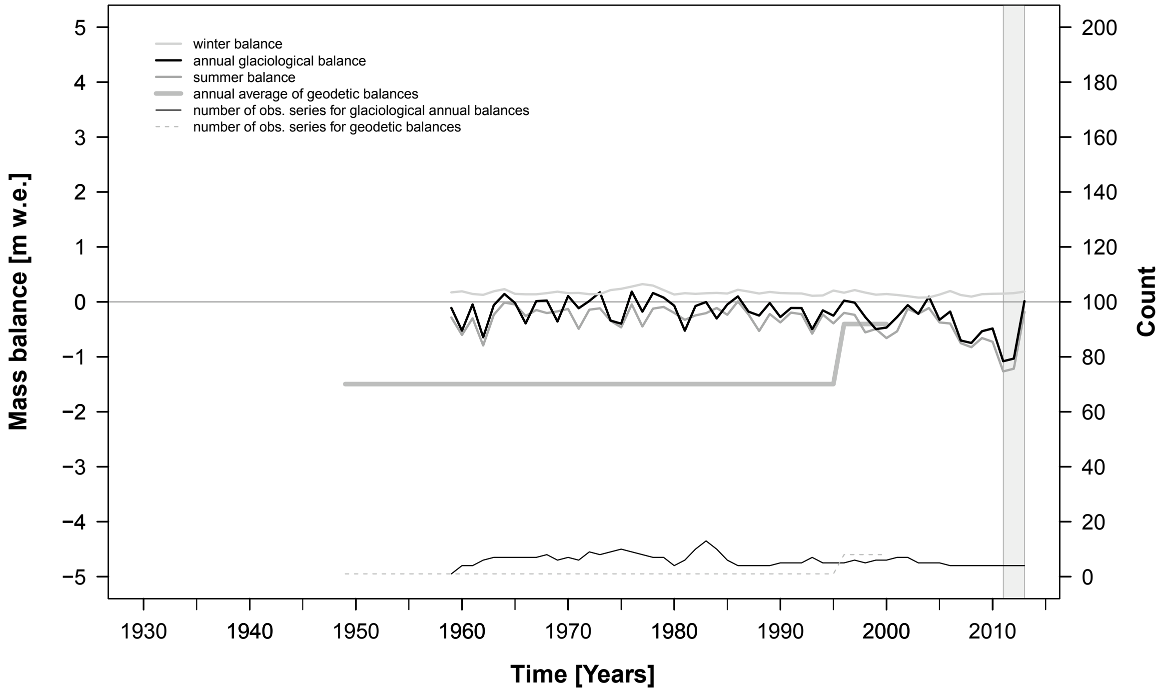


Figure 3.3.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The Canadian Arctic Archipelago is a group of more than 36,000 islands and hosts a total of about 146,000 km² of glaciers, icefields and ice caps. The largest islands with glaciers are Baffin, Ellesmere, Devon, Axel Heiberg, and Melville. The glaciers in this high-latitude region are much influenced by the extent and distribution of sea ice which in turn depends on ocean currents and on the Arctic and North Atlantic Oscillations.

Information on glacier changes mainly comes from a few dozen mass balance series. The longest continued measurements are reported from Meighen, Devon and Melville ice caps and from White Glacier.

The timing of the LIA maximum extent of glaciers in the Canadian Artic Archipelago is estimated to the end of the 19th century (Grove, 2004). The subsequent glacier retreat is clearly visible in remotely sensed images thanks to glacier moraines and trimlines. However, detailed front variation observations are not available for this region.

The few reported mass balance measurements indicate slightly negative balances of less than 100 mm w.e. a^{-1} between the 1960s and the 1980s and an increased mass loss between -200 and -300 mm w.e. a^{-1} in the 1990s and 2000s. Seasonal balances show the small mass turnover of the Arctic ice caps.

In Arctic Canada North, the reported mean balance of 2011/12 was negative with -1030 mm w.e. a^{-1} followed by a slightly positive mean balance of 10 mm w.e. a^{-1} in 2012/13.

The few results from geodetic surveys are available also indicating negative balances over the second half of the 20th century but from a different glacier sample.

Estimated total glacier area (km²):	146000
Front variations	
- # of series*:	7/0
- # of stationary or advancing obs.*:	17/0
- # of retreating observations*:	37/0
Glaciological balances	
- # of series*:	26/4
- # of observations*:	330/8
Geodetic balances	
- # of series°:	8/0
- # of observations°:	8/0

* (total/>2011), ° (total/>2003)

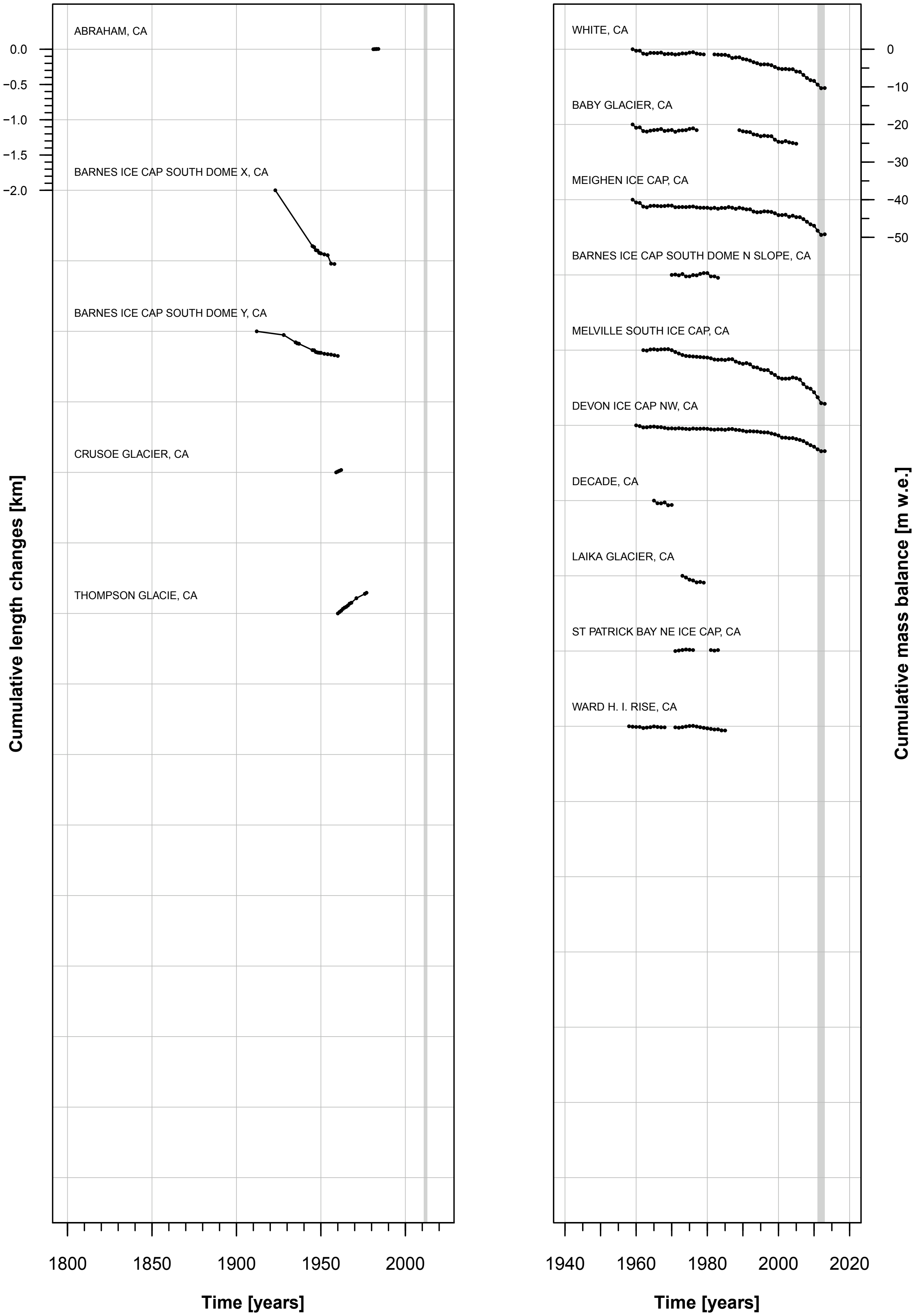


Figure 3.3.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Arctic Canada over the entire observation period.

3.4 GREENLAND

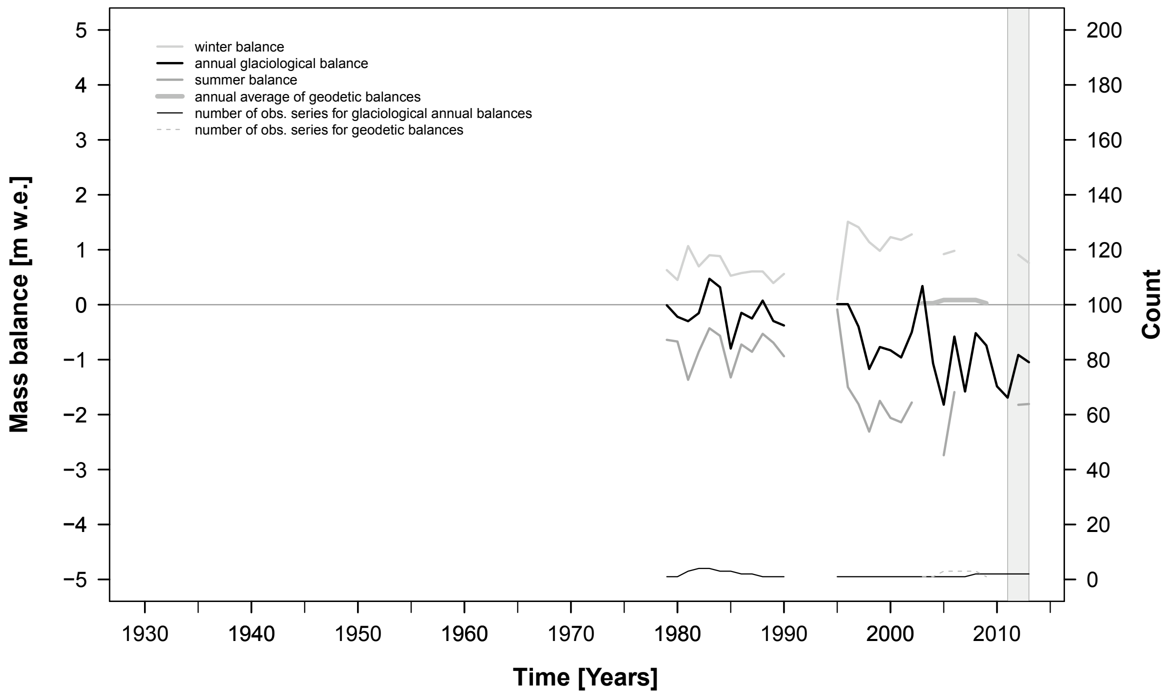


Figure 3.4.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The world's largest non-continental island is covered to about 80% by the Greenland Ice Sheet. In addition, about 20,300 local glaciers cover an area between 90,000 km^2 and 130,000 km^2, depending on the counting of different connectivity levels between local glaciers and the ice sheet. These glaciers range from sea level to 3,694 m a.s.l. at Gunnbjørn Fjeld – Greenland's highest mountain located in the Watkins Range on the east coast.

There exist a large variety of glacier types, from icefields and ice caps with numerous outlet glaciers, to valley and mountain glaciers. The island acts as a centre of cooling resulting in a polar to subpolar climate regime. Due to the large north-south extent, different thermal regimes can be expected, ranging from mostly cold in the north to polythermal in the central part to temperate in the south. About 80 front variation series are available from the southern part. Mass balance measurements are available from fewer than ten glaciers. Recent measurements are reported from Mittivakkat Glacier in the Ammassalik Region and Freya Glacier on Clavering Island, both located on the east coast. The few investigations from Greenland indicate that many glaciers and ice caps (e.g. on Disko Island) reached their maximum extents before the 19th century. The subsequent glacier retreat is documented at about decadal intervals for approx. 80 glaciers in the southern part of Greenland. However, observations made after 2010 have only been reported from Mittivakkat Glacier.

Mass balance measurements from Mittivakat and Freya glaciers indicate that the ice loss increased from 630 mm w.e. a^{-1} in the 1990s to 890 mm w.e. a^{-1} in the 2000s. The two balances averaged to -910 and -1050 mm w.e. a^{-1} in 2011/12 and 2012/13, respectively. Thus the mass balance from Mittivakkat was more negative in the first and the one from Freya was more negative in the second observation period.

Regional glacier change assessments were recently published by Bjørk et al. (2012), and Bolch et al. (2013).

Estimated total glacier area (km^2):	90000
Front variations	
- # of series*:	78/1
- # of stationary or advancing obs.*:	116/0
- # of retreating observations*:	383/1
Glaciological balances	
- # of series*:	10/2
- # of observations*:	54/4
Geodetic balances	
- # of series°:	1/1
- # of observations°:	3/3

* (total/>2011), ° (total/>2003)

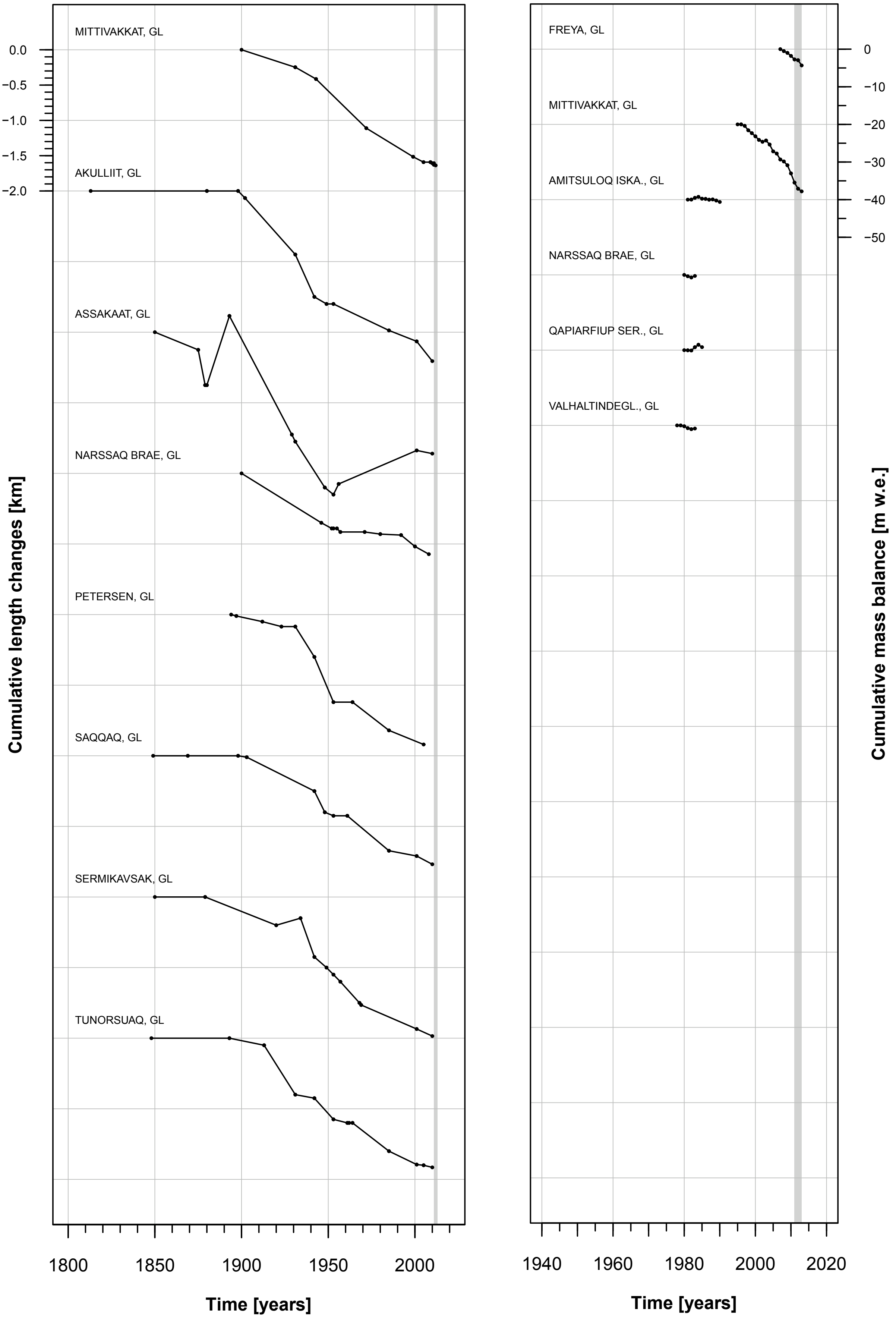


Figure 3.4.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Greenland over the entire observation period.

3.5 ICELAND

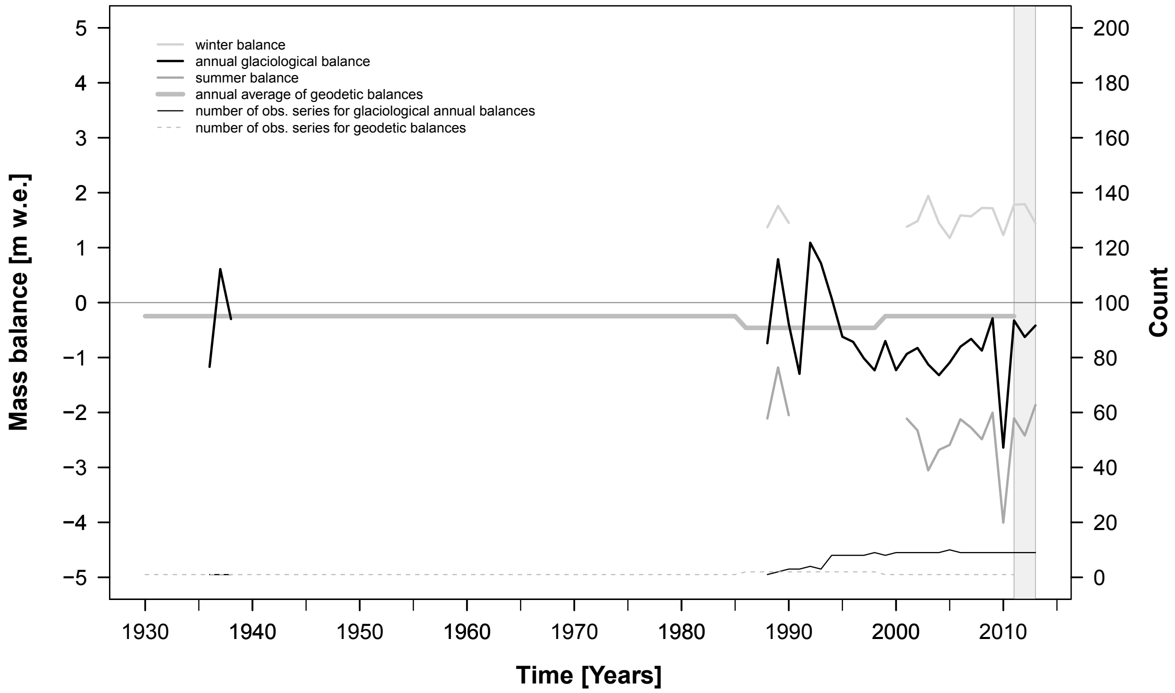


Figure 3.5.1 Regional mass balances: annual averages of geodetic and glaciological balances.

Iceland is located on the Mid-Atlantic Ridge, the boundary of the European and the American plates, with its ice cover dominated by six large ice caps, with Vatnajökull as the largest followed by Langjökull, Hofsjökull, Mýrdalsjökull, Drangajökull, and Eyjafjallajökull. The entire glacier cover is estimated to total 11,000 km^2.

The glaciers in Iceland are subject to subpolar oceanic climate. The warm North Atlantic Current ensures generally higher temperatures than in most places of similar latitude. Many ice caps and glaciers are influenced by volcanic activities, periodically resulting in glacier lake outburst floods, known in Icelandic as Jökulhlaup.

Mass balance measurements are available from a dozen glaciers. The longest series starting in the 1990s have been reported from outlet glaciers of Hofsjökull, Vatnajökull, and Langjökull. Detailed front variation series are available from over 70 glacier tongues reaching back to the 1930s, with sporadic information derived from historical sources back to the 18th century and in a few cases even further back in time.

The timing of the LIA maximum extent of glaciers and ice caps in Iceland is estimated to the mid-18th century (Grove, 2004). Detailed front variation observations document the general retreat from the LIA maximum extent up to 1970, with a period of intermittent re-advances between 1970 and 1990 and continued retreat from 1995 to the present time. Abrupt re-advances, such as the ones of Kaldalongsjökull and of Hagafellsjökull are due to surges.

The mass loss of observed glaciers has increased from about -500 mm w.e. a^{-1} in the 1990s to -1060 mm w.e. a^{-1} in the 2000s. Seasonal balances show a large mass turnover and document a major mass loss in the summer of 2010. The average mass balances of the observation periods 2011/12 and 2012/13 were -630 and -420 mm w.e. a^{-1}, respectively. Regional glacier change assessments were recently published by Bjørnsson et al. (2013).

Estimated total glacier area (km^2):	11000
Front variations	
- # of series*:	72/36
- # of stationary or advancing obs.*:	760/4
- # of retreating observations*:	2200/57
Glaciological balances	
- # of series*:	14/9
- # of observations*:	199/18
Geodetic balances	
- # of series°:	2/1
- # of observations°:	2/1

* (total/>2011), ° (total/>2003)

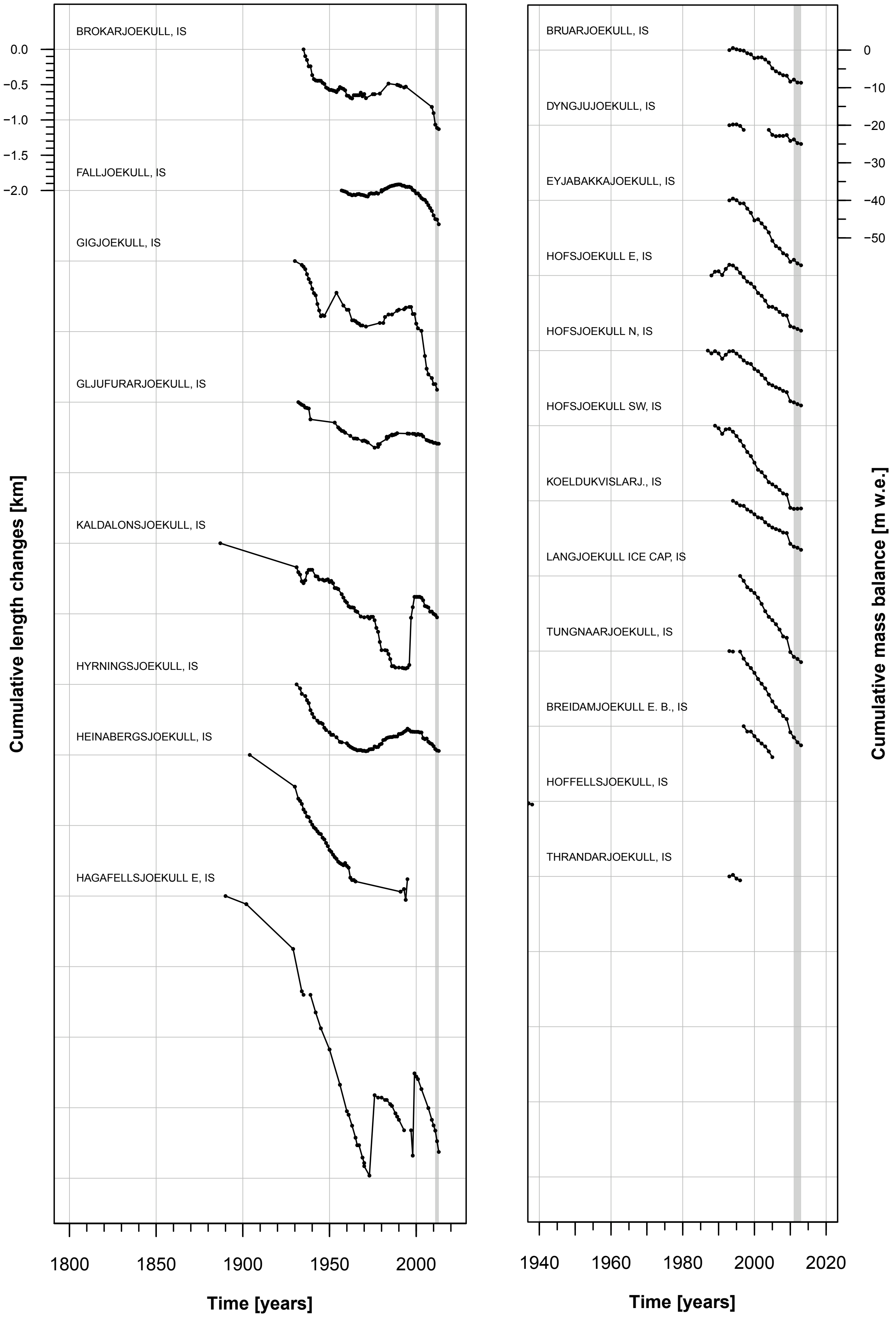


Figure 3.5.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Iceland over the entire observation period.

3.6 SVALBARD & JAN MAYEN

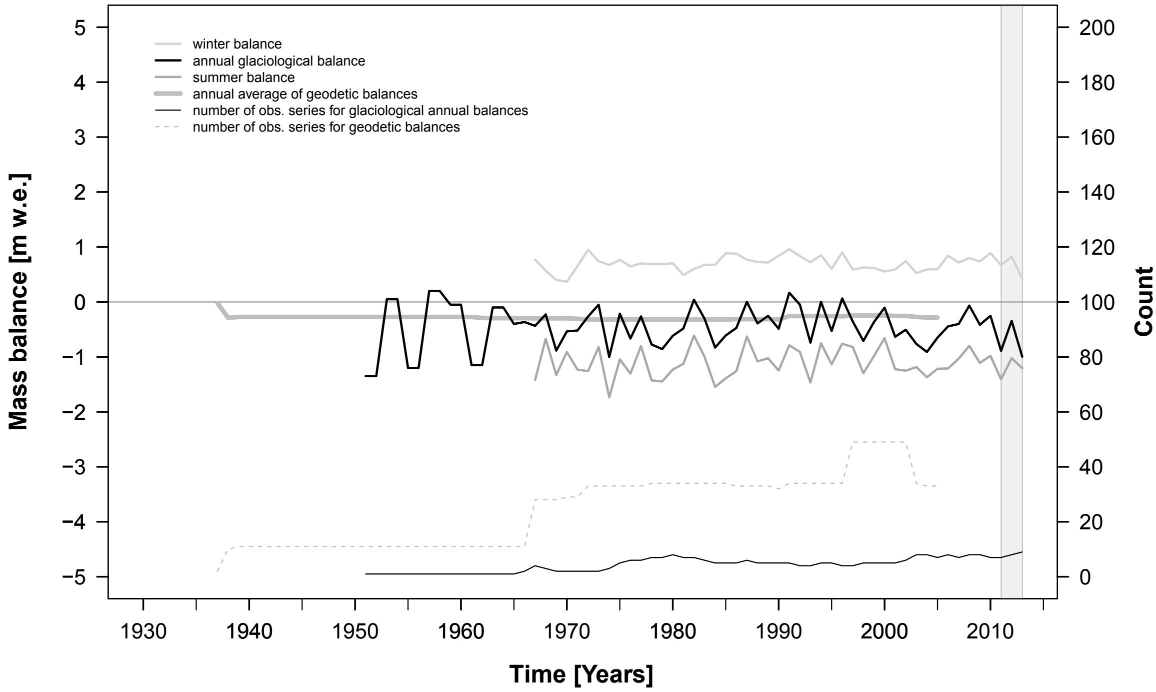


Figure 3.6.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The Svalbard Archipelago is situated in the Arctic Ocean north of mainland Europe. The largest island is Spitsbergen, followed by Nordaustlandet and Edgeøya. Its topography is more than half covered by ice, and is characterized by plateau mountains and fjords.

The entire glacier area total about 34,000 km^2. Jan Mayen is a volcanic island in the Arctic Ocean and – as Svalbard – a part of the Kingdom of Norway. It is partly covered by glaciers, with an area of about 100 km^2, around the Beerenberg Volcano. Svalbard and Jan Mayen both display an arctic climate, although with much higher temperatures than other areas at the same latitude.

Over 20 continuous mass balance series are reported from Svalbard, the longest ones being from Austre Brøggerbreen, Midtre Lovenbreen, Kongsvegen, Hansbreen, and Waldemarbreen. Front variations are available from roughly 30 glaciers, covering the 20th century. From Jan Mayen, front variations are reported from Sorbreen.

During the LIA, the glaciers in Svalbard were close to their late Holocene maximum extent and remained there until the onset of the 20th century (Svendsen & Magerud, 1997). The reported front variation series show a general trend of retreat without a common period of marked re-advances. On Jan Mayen, Sorbreen shows a retreat starting in the late 19th century with a re-advance period in the mid 20th century.

Glaciological mass balance measurements indicate a continued ice loss at a rate of a few hundred mm w.e. per year over the second half of the 20th century, well supported by results from geodetic survey of few dozen glaciers. Mass loss increased to -490 mm w.e. a^{-1} in the 2000s. Seasonal balances show a relatively low mass turnover. The average mass balance of 2011/12 was -340 mm w.e. a^{-1} and -1000 mm w.e. a^{-1} in 2012/13. Regional glacier change assessments were recently published by Sobota (2013).

Estimated total glacier area (km^2):	34000
Front variations	
- # of series*:	26/2
- # of stationary or advancing obs.*:	27/0
- # of retreating observations*:	132/4
Glaciological balances	
- # of series*:	21/9
- # of observations*:	280/17
Geodetic balances	
- # of series°:	51/31
- # of observations°:	75/33

* (total/>2011), ° (total/>2003)

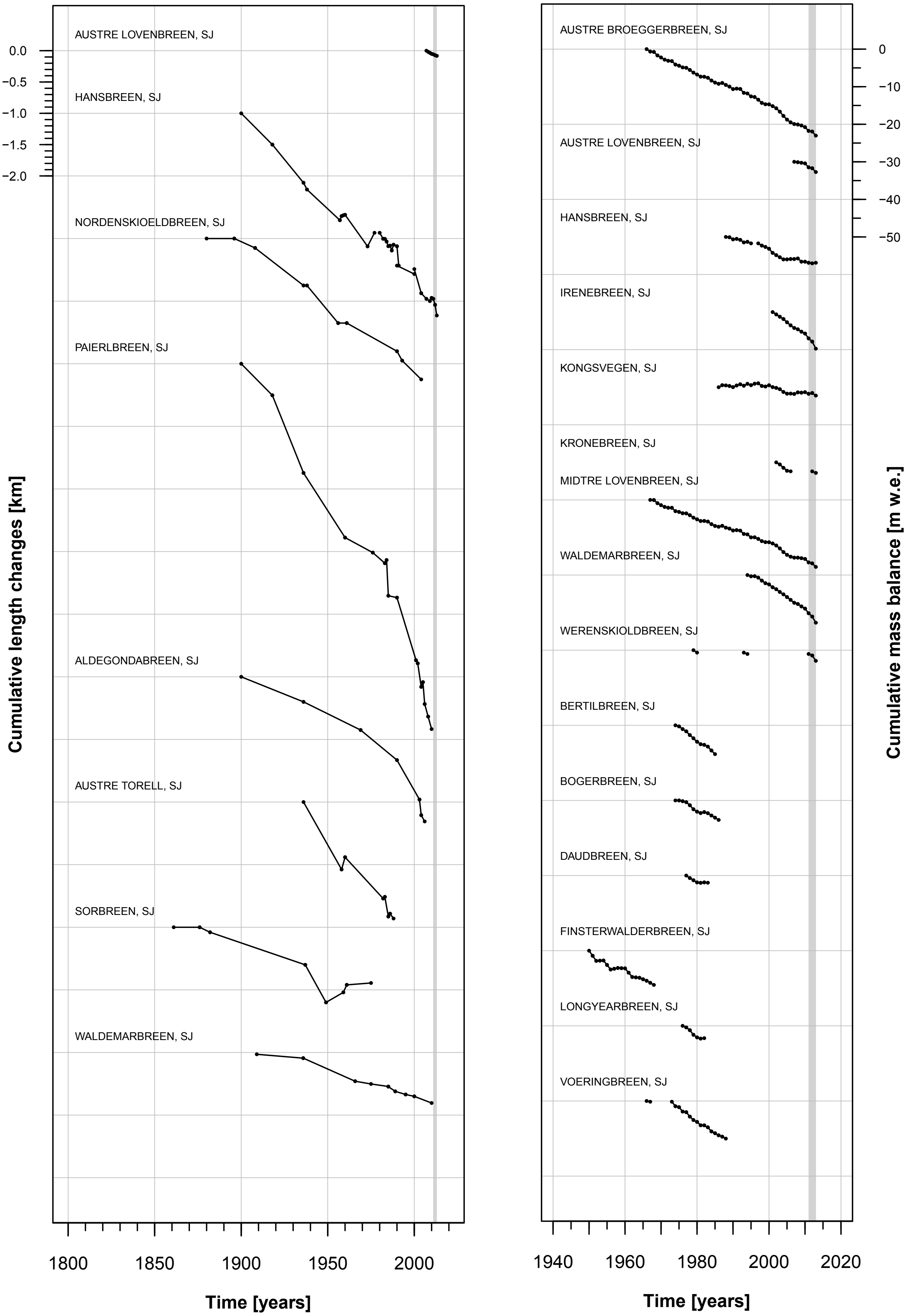


Figure 3.6.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Svalbard and Jan Mayen over the entire observation period.

3.7 SCANDINAVIA

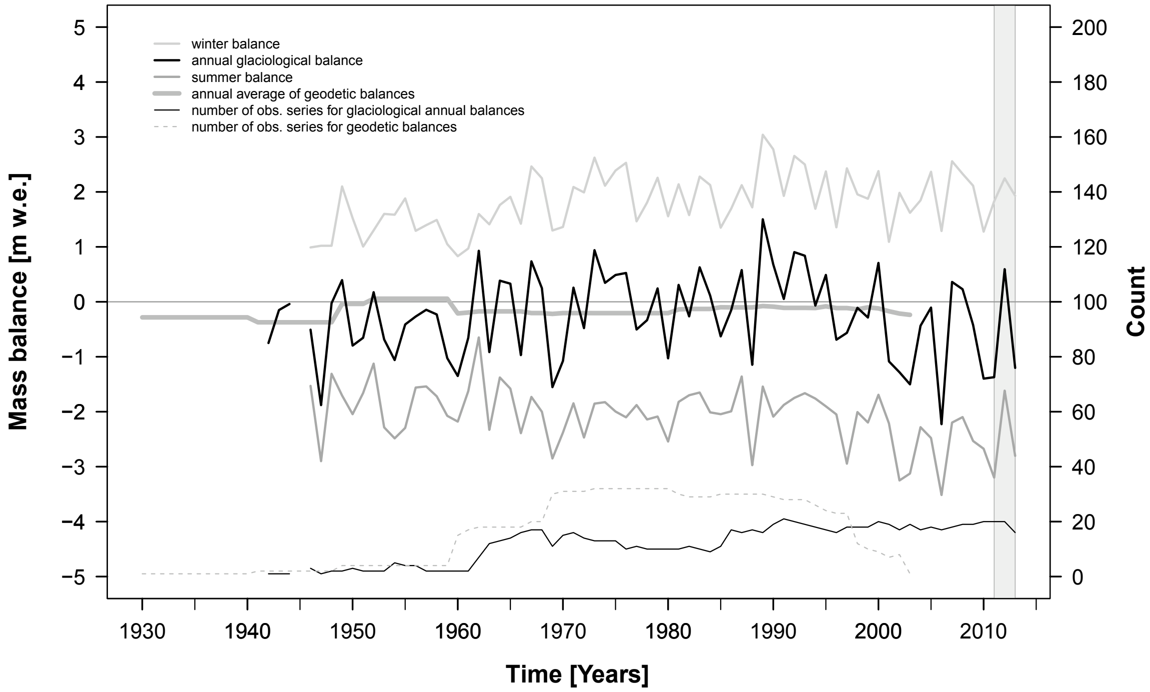


Figure 3.7.1 Regional mass balances: annual averages of geodetic and glaciological balances.

In Scandinavia, the greater part of the ice cover is concentrated in southern Norway, namely in Folgefonna, Hardangerjøkulen, Breheimen, Jotunheimen, and Jostedalsbreen, which is the largest ice cap of mainland Europe. In northern Norway there are the Okstindan and Svartisen ice caps, glaciers in Lyngen and Skjomen as well as in the adjacent Kebnekaise region in Sweden. Together, these glaciers cover about 3,000 km^2. Glaciers are subject to variable climate types, ranging from a maritime climate along the Norwegian west coast, a humid continental climate in the central part, to a subarctic climate further north.

Scandinavia is one of the regions with the most and longest reported observation series. From the approx. 60 mass balance series, eight have continuously reported series since 1970. Front variations series are available from almost 90 glaciers extending to the 19th century, with some reconstructions even back to the 17th century.

After having disappeared most likely during the early/mid Holocene (Nesje et al., 2008), most of the Scandinavian glaciers reached their LIA maximum extent in the mid 18th century (Grove, 2004). Following a minor retreat trend with small frontal oscillations up until the late 19th century, the glaciers experienced a general recession during the 20th century with intermittent periods of re-advances around 1910 and 1930, in the 1970s, and around 1990; the last advance stopped at the beginning of the 21st century.

On average, the observed mass balances were slightly positive from the 1970s to the 1990s. This was because coastal glaciers were able to gain mass while the glaciers further inland continued to lose mass. Geodetic results are well centred within the variability of the glaciological results with slightly negative average balances. After 2000, glaciers in both regions lost mass resulting in an average balance of -790 mm w.e. a^{-1}. Seasonal balances show a large mass turn over. The regional average of reported balances was positive (590 mm w.e. a^{-1}) in 2011/12 and negative (-1200 m w.e. a^{-1}) in 2012/13.

Regional glacier change assessments were recently published by NVE (2011, and earlier issues).

Estimated total glacier area (km^2):	3000
Front variations	
- # of series*:	87/46
- # of stationary or advancing obs.*:	718/15
- # of retreating observations*:	2294/59
Glaciological balances	
- # of series*:	57/21
- # of observations*:	855/37
Geodetic balances	
- # of series°:	27/0
- # of observations°:	59/0

* (total/>2011), ° (total/>2003)

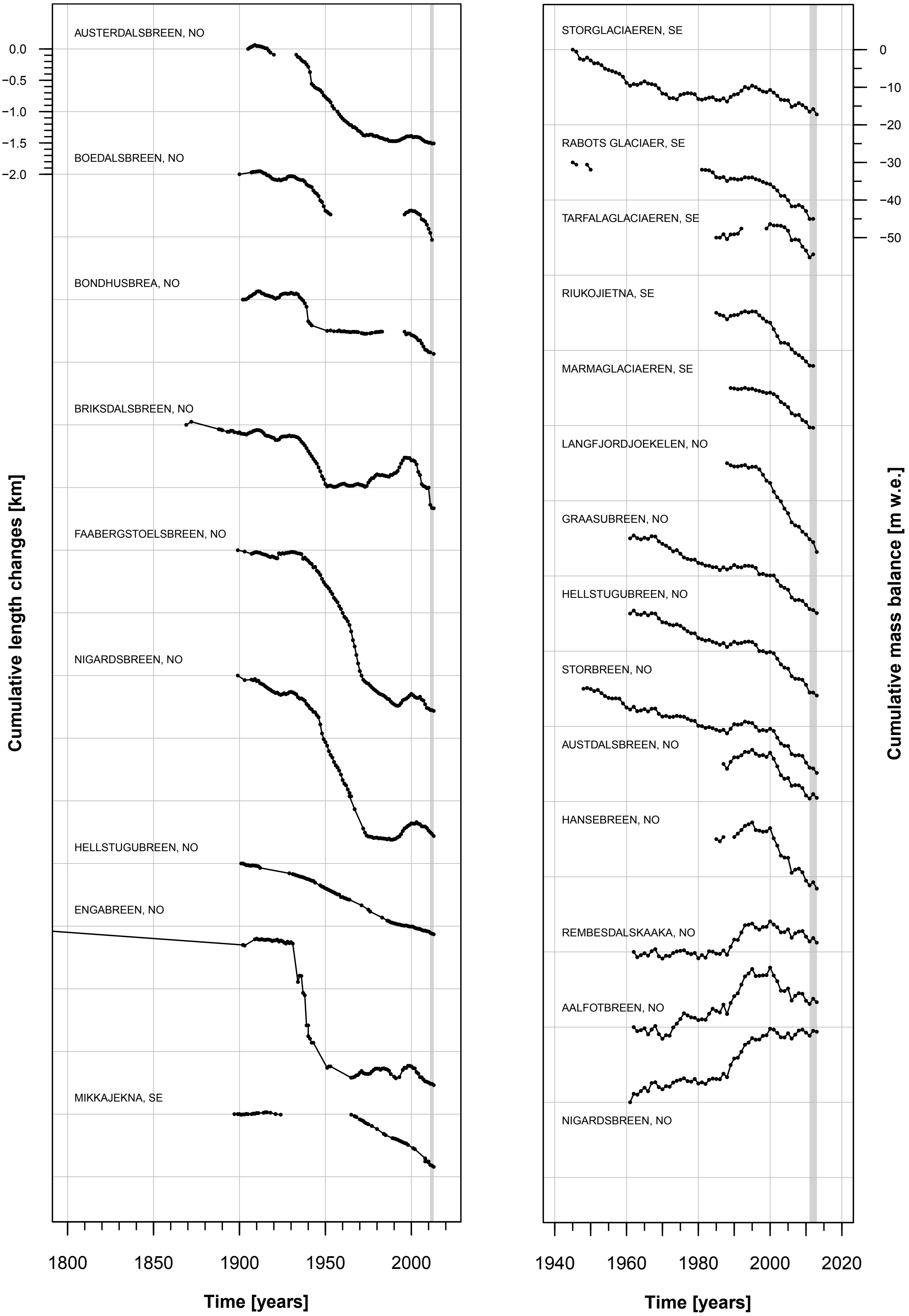


Figure 3.7.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Scandinavia over the entire observation period.

3.8 CENTRAL EUROPE

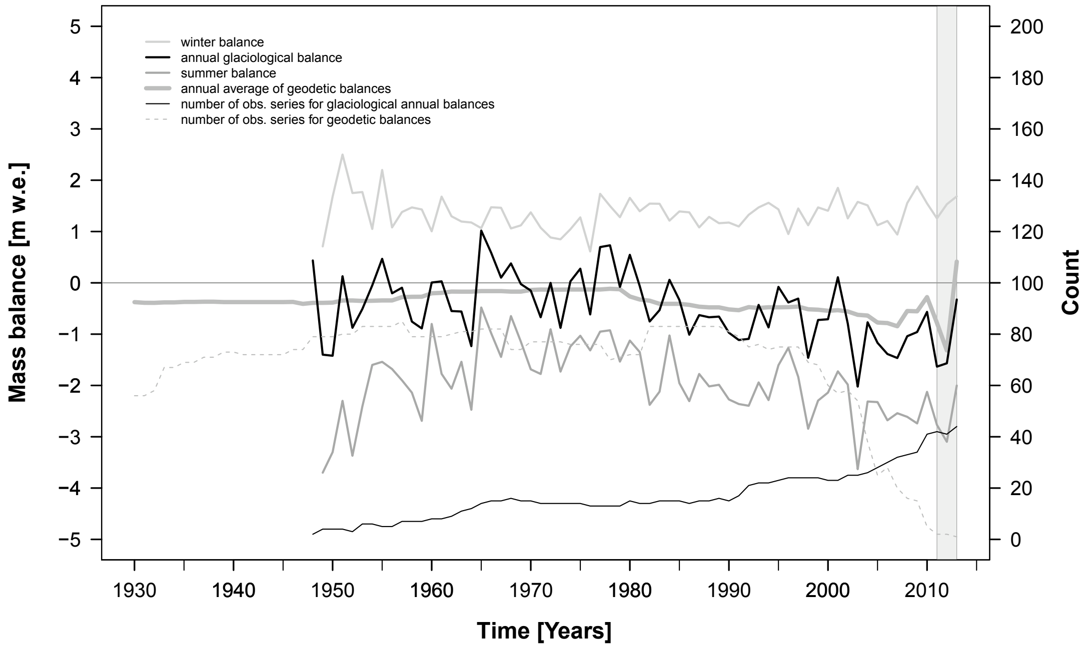


Figure 3.8.1 Regional mass balances: annual averages of geodetic and glaciological balances.

Central Europe contains about 2,000 km² of glacier ice. The majority of it is located in the Alps with Aletschgletscher as its largest valley glacier. The Alps represent the 'water tower' of Europe and form the watershed of the Mediterranean Sea, the North Sea/North Atlantic Ocean, and the Black Sea. Some smaller glaciers are found in the Pyrenees – a mountain range in southwest Europe which extends from the Bay of Biscay to the Mediterranean Sea. The glaciers are situated in the Maladeta massif in Spain and around the Vignemale peak in France. A few more perennial icefields exist e.g., in the Apennine, Italy, as well as in Slovenia and Poland.

Central Europe has the greatest number of available front variation and mass balance measurements, with many long-term series. From the over 60 mass balance series, ten have been maintained for more than 30 years. Over 700 front variation series cover the entire Alps, many with more than 100 observation years. In addition, reconstructed front variations are available for a dozen glaciers extending back to the 16th century. From the Pyrenees, about three dozen front variation series are available, some of them reaching back to the 19th century. Mass balance measurements have been carried out at Maladeta (ES) and Ossoue (FR) glaciers. In the Apennine, long-term measurements are available from Calderone.

Front variation observations give good documentation of the subsequent retreat with intermittent periods of re-advances in the 1890s, 1920s, and 1970-80s.

Glacier mass loss accelerated from close to zero balances in the 1960s and 1970s, to -560/-720/-1030 mm w.e. a^{-1} in the 1980s/90s/2000s. Glaciological results are well supported by results from geodetic surveys. Seasonal balances show a relatively large mass turnover and a tendency towards more negative summer balances over the past decades. Regional mean balances were strongly negative (-1570 mm w.e. a^{-1}) in 2011/12 but only slightly negative (-330 mm w.e. a^{-1}) in 2012/13. Regional glacier change assessments were recently published by Fischer (2015, and earlier issues), Huss et al. (2015), and SCNAT (2015, and earlier issues).

Estimated total glacier area (km²):	2000
Front variations	
- # of series*:	731/284
- # of stationary or advancing obs.*:	6778/40
- # of retreating observations*:	21506/387
Glaciological balances	
- # of series*:	64/45
- # of observations*:	1168/83
Geodetic balances	
- # of series°:	81/35
- # of observations°:	369/66

* (total/>2011), ° (total/>2003)

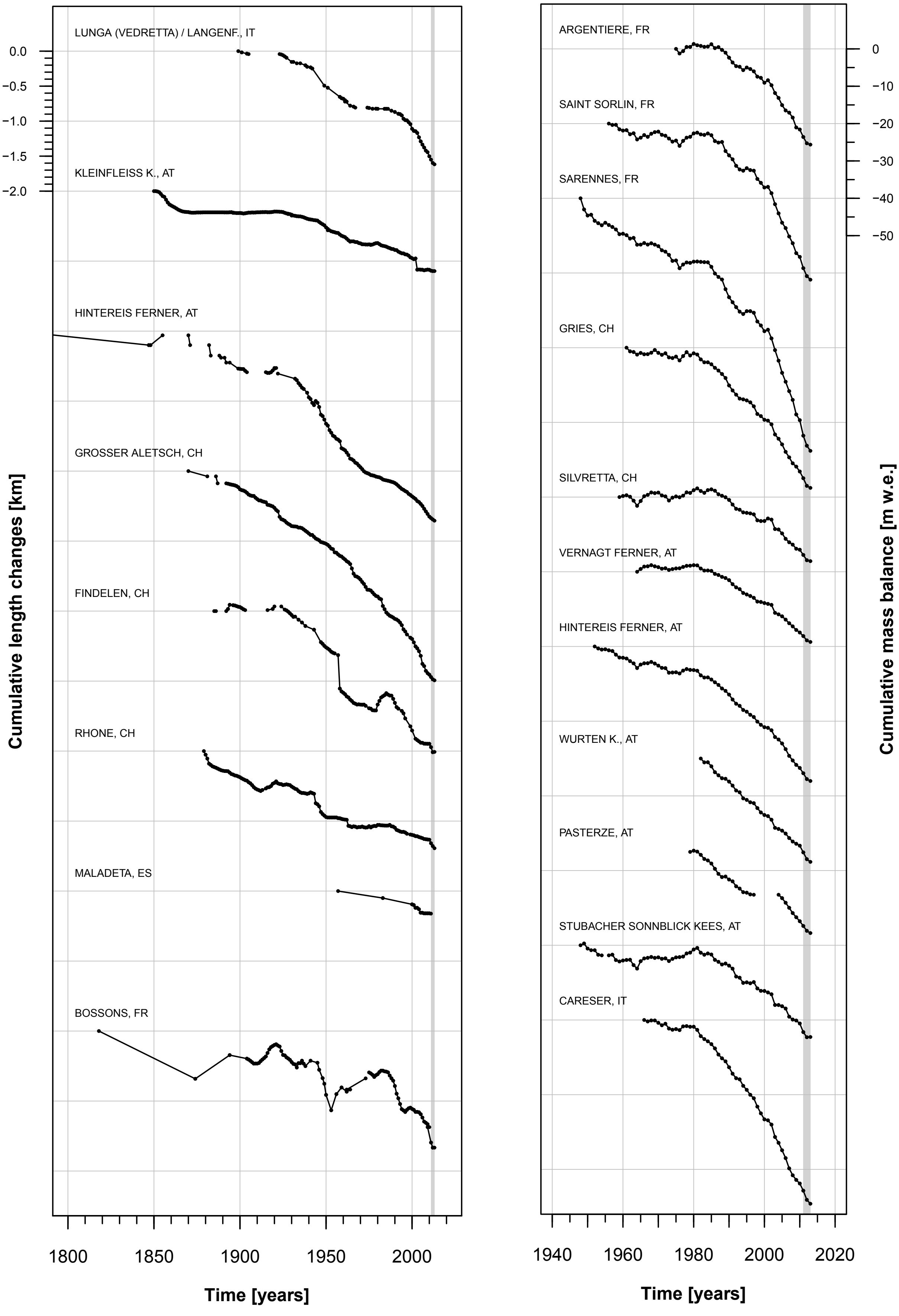


Figure 3.8.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Central Europe over the entire observation period.

3.9 CAUCASUS & MIDDLE EAST

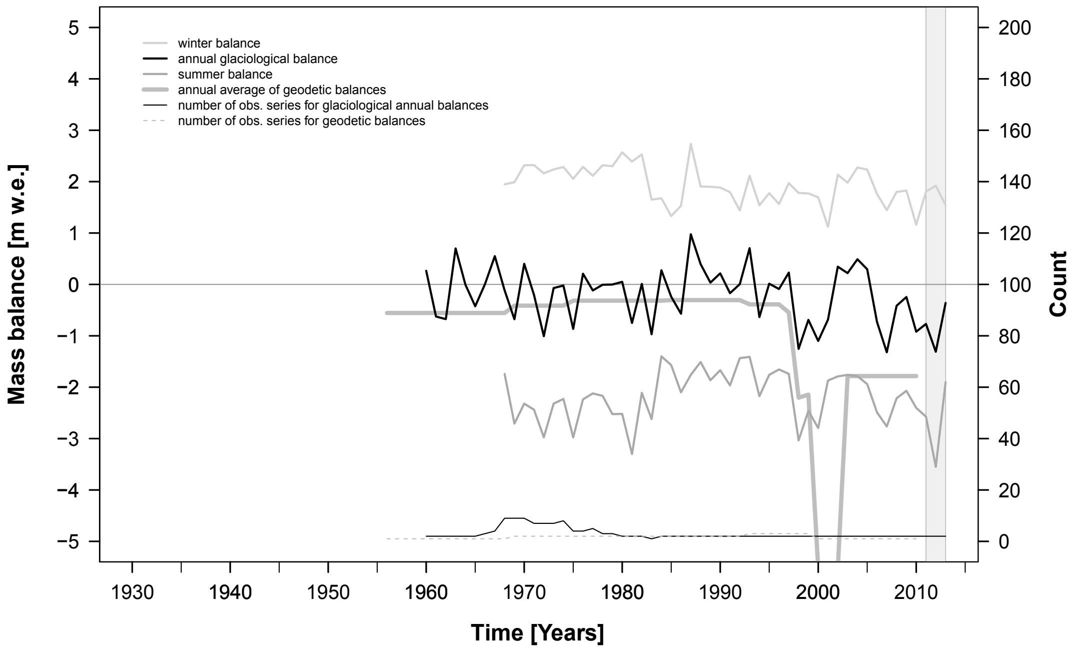


Figure 3.9.1 Regional mass balances: annual averages of geodetic and glaciological balances.

About 1,000 km² of land surface ice is found in the Caucasus Mountains which are situated between the Black Sea and the Caspian Sea. Most of these glaciers are located in the northern part known as the Ciscaucasus with Mount Elbrus (5,642 m a.s.l.) considered as the highest peak in Europe. The climate of the Caucasus varies with elevation and latitude. The northern slopes are a few degrees colder than the southern slopes and precipitation increases from east to west in most areas. In the Middle East, small glaciers are found on Mount Erciyes in Central Anatolia, Turkey, as well as in the higher elevations of the Sabalan, Takhte-Soleiman, Damavand, Oshtorankuh, and Zardkuh regions in Iran.

Mass balance measurements are reported from a dozen glaciers located in the Caucasus with ongoing long-term series at Djankuat and Garabashi. Frontal variations of glaciers in the Caucasus as well as of Erciyes Glacier (TR) are well documented over the 20th century. Geodetic measurements are available for only Djankuat and Alamkouh glaciers located in the Russian Caucasus and in the Takhte–Soleiman of Iran, respectively. In the Caucasus, glaciers reached their LIA maximum extents around 1850 (Grove, 2004). Glacier front variations show a general trend of glacier retreat with intermittent re-advances around the 1980s. No further length change measurements have been reported since 2010.

The few mass balance measurement series indicate negative mean balances around -250 mm w.e. a^{-1} over the past decades, with a relatively large mass turnover. The poor fit between glaciological and geodetic results in the last two decades is caused by the very small geodetic sample size, and an unfortunate mixture of the moderately negative values from the Caucasus glaciers with the strongly negative values from Alamkouh Glacier, Iran. The mean balances of Djankuat and Garabashi glaciers were -1310 and -360 mm w.e. a^{-1} in 2011/12 and 2012/13, respectively.

Estimated total glacier area (km²):	1000
Front variations	
- # of series*:	53/0
- # of stationary or advancing obs.*:	243/0
- # of retreating observations*:	711/0
Glaciological balances	
- # of series*:	12/2
- # of observations*:	162/4
Geodetic balances	
- # of series°:	2/1
- # of observations°:	10/1

* (total/>2011), ° (total/>2003)

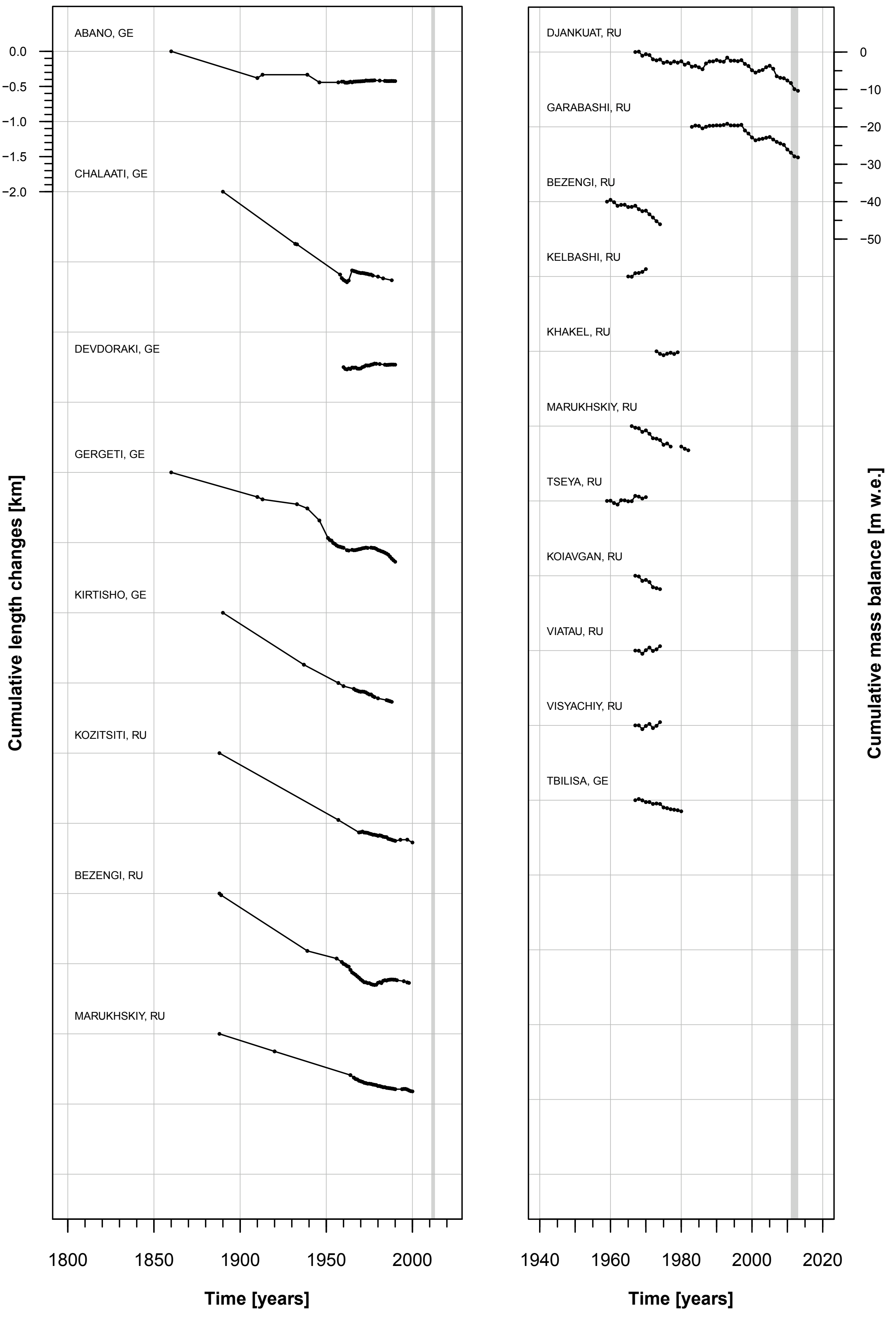


Figure 3.9.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Caucasus and Middle East over the entire observation period.

3.10 RUSSIAN ARCTIC

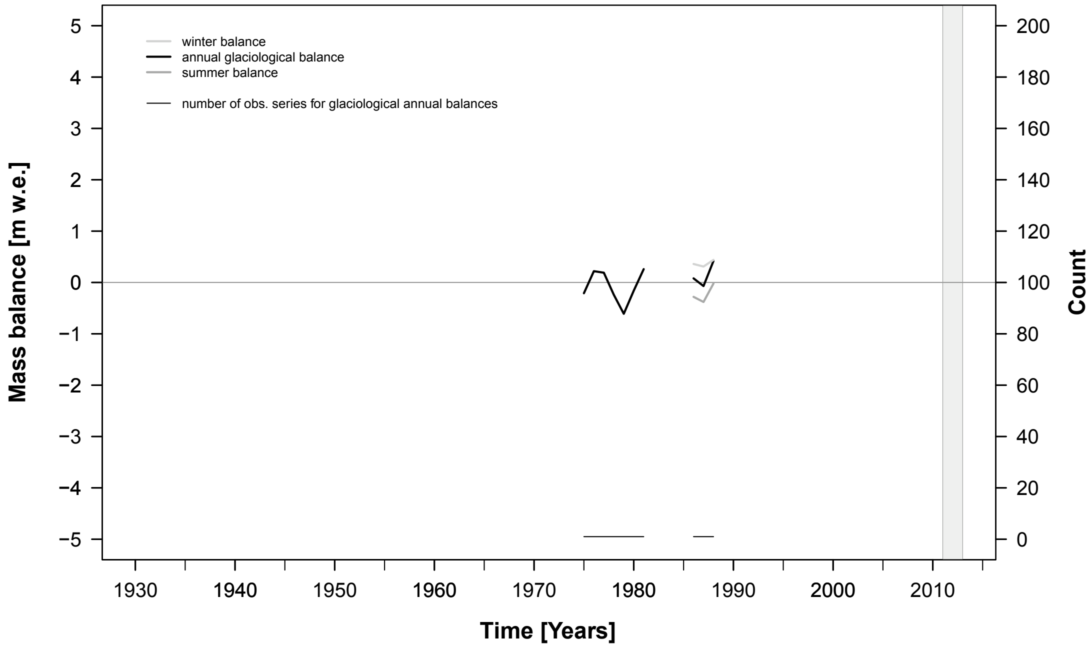


Figure 3.10.1 Regional mass balances: annual averages of geodetic and glaciological balances.

Large ice caps are located on the Russian high Arctic archipelagos such as Novaya Zemlya, Severnaya Zemlya and Franz Josef Land totalling to an area of 51,500 km^2. These glaciers are very much influenced by the North Atlantic Oscillations and sea ice conditions in the Barents and Kara Seas.

The glaciers in this region are not well investigated due to the remote location. Front variations have been reported from about 40 outlet glaciers on Novaya Zemlya based on expedition and topographic maps and remote sensing data (e.g., Carr et al., 2014).

Mass balance measurements are limited to a few observation years from Sedov Glacier on Hooker Island, Franz Josef Land, and Glacier No. 104 which is part of Vavilov Ice Cap on October Revolution Island, Severnaya Zemlya.

Dated moraines suggest LIA maxima around or after 1300 for some glaciers, and the late 19th century for others on Novaya Zemlya (Zeeberg & Forman, 2001). In the Russian Arctic islands a slight reduction in the glacierized area by little more than one per cent over the past 50 years was found (Kotlyakov et al., 2006). Front variation observations document a rapid retreat of tidewater glaciers on Novaya Zemlya over the 20th century, with a more stable period during the 1950s and 1960s.

The small number of glaciological and geodetic observations do not allow for a sound estimate of glacier mass balance.

Regional glacier change assessments were recently published by Carr et al. (2014).

Estimated total glacier area (km^2):	51500
Front variations	
- # of series*:	44/0
- # of stationary or advancing obs.*:	151/0
- # of retreating observations*:	382/0
Glaciological balances	
- # of series*:	2/0
- # of observations*:	11/0
Geodetic balances	
- # of series°:	0/0
- # of observations°:	0/0

* (total/>2011), ° (total/>2003)

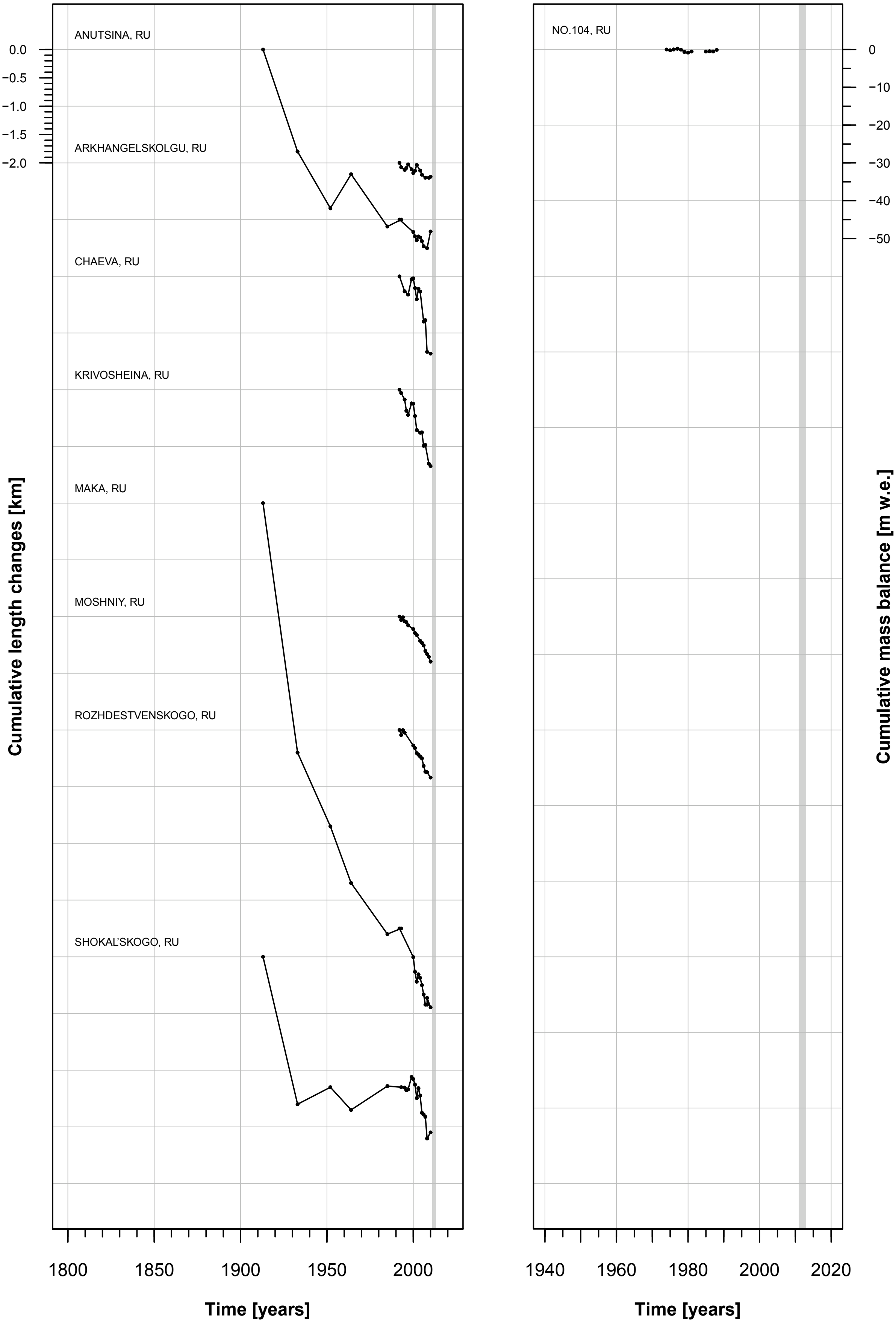


Figure 3.10.2 Cumulative length changes (left) and cumulative mass balances (right) of of selected glaciers in the Russian Arctic over the entire observation period.

3.11 ASIA NORTH

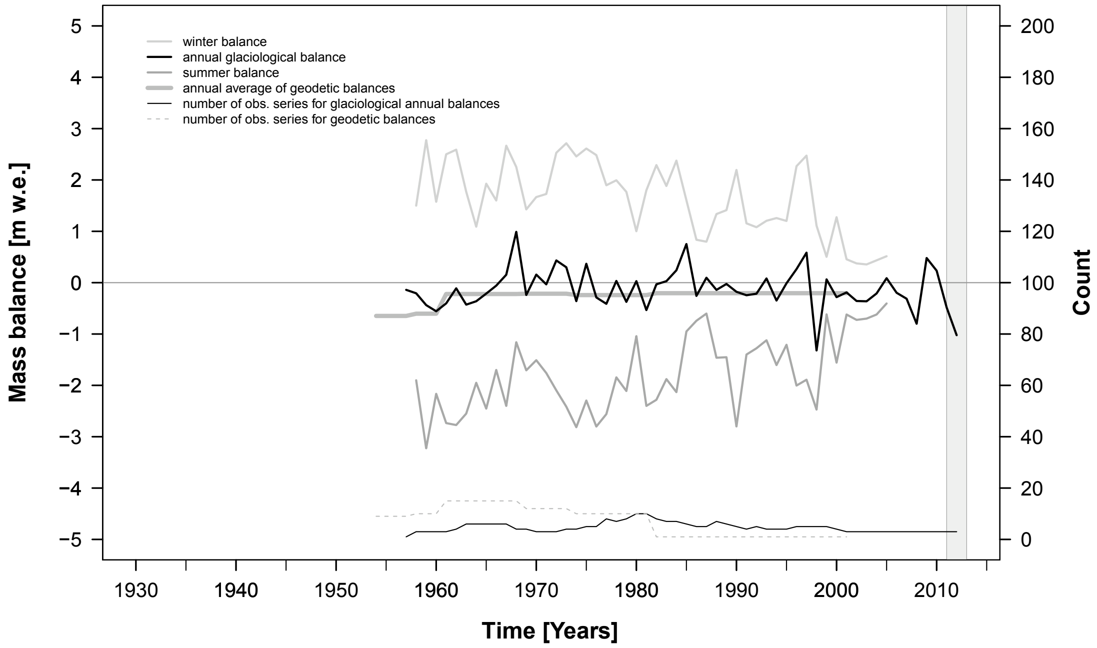


Figure 3.11.1 Regional mass balances: annual averages of geodetic and glaciological balances.

In Northern Asia, glaciers with a total area of about 3,500 km^2 are located in the mountain ranges from the Ural to the Altai, in the east Siberian Mountains, and Kamchatka. The Ural Mountains forms a north-south running mountain chain that extends about 2,500 km. Its mountain peaks reach 900 to 1,400 m a.s.l. hosting about 140 small glaciers in a continental climate. The Altai extends over about 2,100 km from Kazakhstan, China, and Russia to Mongolia, and hosts the biggest part of glaciers in this region. The east Siberian Mountains such as Cherskiy Range, Suntar-Khayata, and Kodar Mountains, show only small amounts of glacier ice. The topography of Kamchatka is characterized by numerous volcanoes with heights up to 5,000 m a.s.l. Here, many glaciers are strongly influenced by volcanic activities.

The available data series are sparse and most of them discontinued in the latter decades of the 20th century. The few ongoing mass balance programmes are reported from Maliy Aktru, Leviy Aktru, and Vodopadniy (No. 125) glaciers in the Russian Altai. In Japan, long-term observations are carried out on Hamagury Yuki, a perennial snow patch which is located in the northern Alps of Central Japan.

Until some years ago, investigations in the Altay failed to disclose evidence of early LIA advances (Kotlyakov et al., 1991). New studies based on lichenometry indicate extended glacier states in the late 14th and mid 19th century (Solomina, 2000). In the Cherskiy Range, the LIA maxima extents have been dated as 1550–1850 (Gurney et al., 2008). On Kamchatka, the maximum stage of the LIA was reached in the 19th century (Grove, 2004), with advances of similar magnitude in the 17th and 18th centuries (Solomina, 2000). The few front variation series show a centennial retreat with no marked re-advance periods. Kozelskiy Glacier on Kamchaka advanced during the 1950s to the mid-1980s.

Available mass balance measurements show slightly negative balances since the 1960s. Mass balances for this region averaged -1020 mm w.e. a^{-1} in 2011/12 - the second most negative value. For 2012/13 no results have been reported.

Estimated total glacier area (km^2):	3500
Front variations	
- # of series*:	23/0
- # of stationary or advancing obs.*:	43/0
- # of retreating observations*:	321/0
Glaciological balances	
- # of series*:	19/3
- # of observations*:	263/3
Geodetic balances	
- # of series°:	11/0
- # of observations°:	18/0

* (total/>2011), ° (total/>2003)

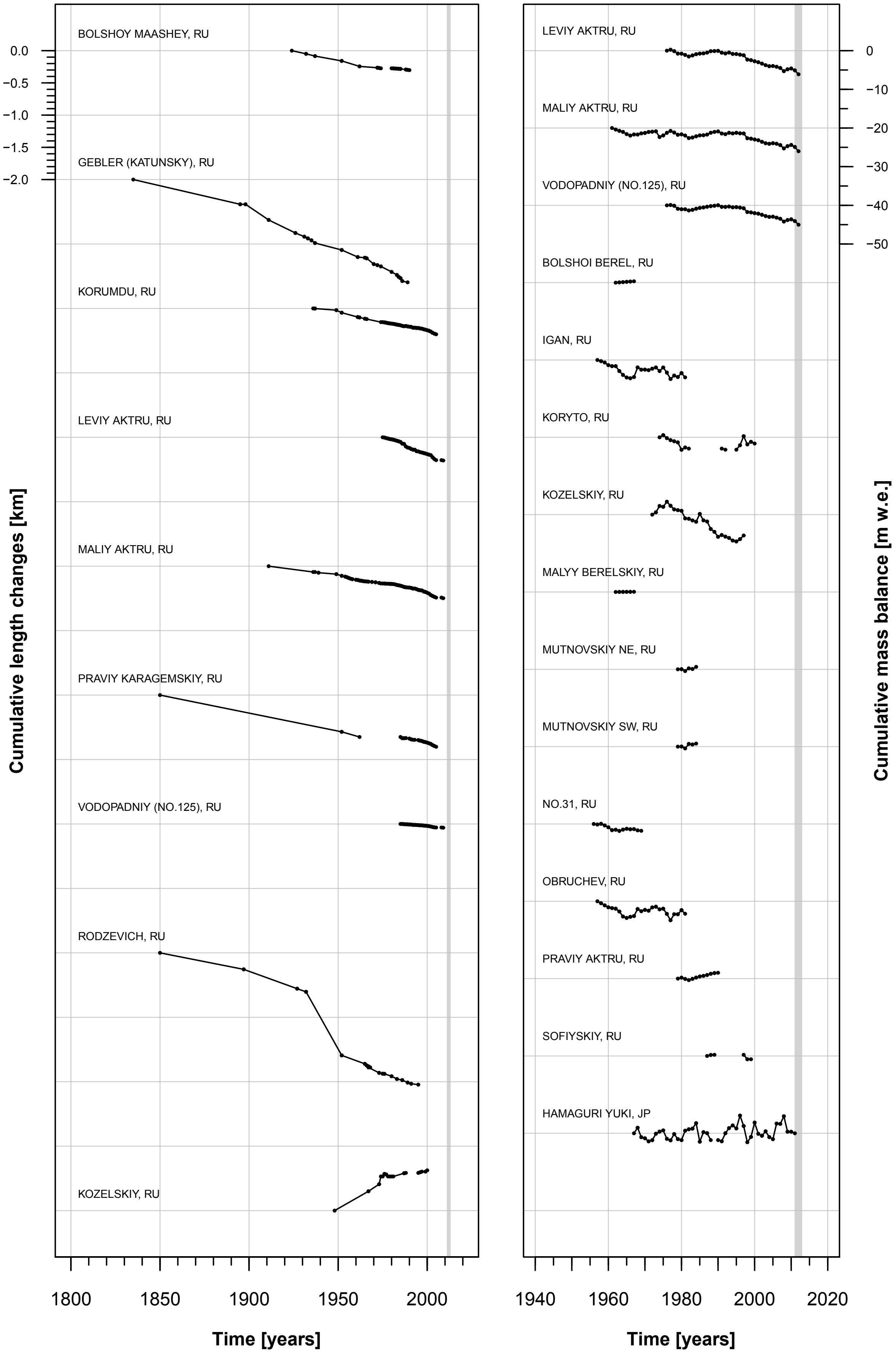


Figure 3.11.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Asia North over the entire observation period.

3.12 ASIA CENTRAL

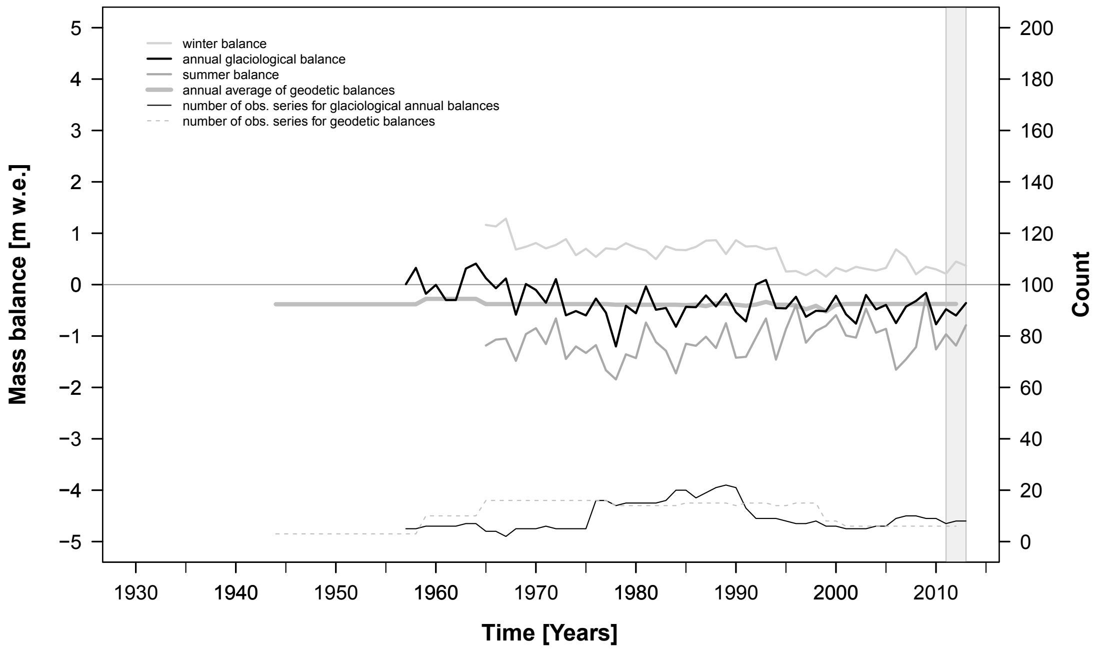


Figure 3.12.1 Regional mass balances: annual averages of geodetic and glaciological balances.

Central Asia stretches from the Caspian Sea in the west to China in the east and from Russia in the north to Afghanistan in the south. It is a continental climate region due to the lack of a large water body. Glaciers cover a total of about 62,500 km² and are located in the Hissar Alay, Pamir, Tien Shan, Kunlun, and Qilian Mountains.

There is a large number of glacier fluctuation series available, well distributed over the region. However, continuous long-term measurements are sparse. The vast majority of observation series were discontinued after the end of the Soviet Union. Only two of the long-term mass balance programmes have been continued: Ts. Tuyuksuyskiy and Urumqi Glacier No. 1 in the Kazakh and Chinese Tien Shan, respectively. In recent years, interrupted long-term mass balance measurements have been resumed at Abramov, Golubin, Glacier No. 354 (Akshiyrak), and Suyok Zapadniy in Kyrgyzstan.

The LIA is considered to have lasted until the mid or late 19th century in most regions (Grove, 2004) with glacier maximum extents occurring between the 17th and mid-19th centuries (Solomina, 1996; Su & Shi, 2002; Kutuzov, 2005). Front variation observations show a general retreat over the 20th century with some re-advances around the 1970s.

The available mass balance measurements indicate slightly negative balances in the 1950s and 1960s with increased ice loss of about -500 mm w.e. a^{-1} between the 1970s and 2000s. Seasonal balances show a relatively small mass turnover. The glaciological results are supported by the available geodetic surveys. Regional average balances for 2011/12 and 2012/13 were -600 and -360 mm w.e. a^{-1}, respectively.

Regional glacier change assessments were recently published by Sorg et al. (2012).

Estimated total glacier area (km²):	62500
Front variations	
- # of series*:	286/4
- # of stationary or advancing obs.*:	363/2
- # of retreating observations*:	1082/5
Glaciological balances	
- # of series*:	39/8
- # of observations*:	544/16
Geodetic balances	
- # of series°:	17/6
- # of observations°:	36/6

* (total/>2011), ° (total/>2003)

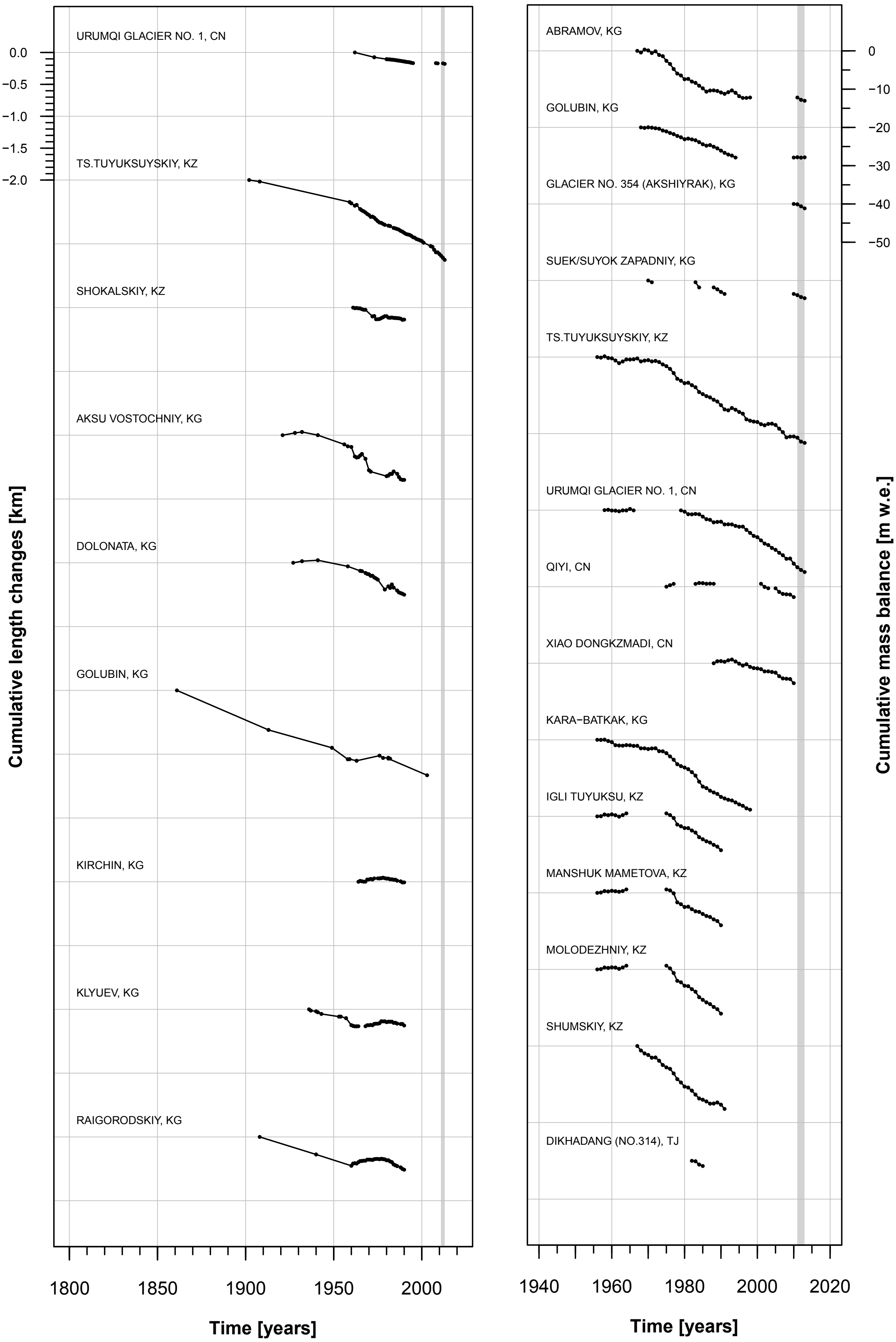


Figure 3.12.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Asia Central over the entire observation period.

3.13 ASIA SOUTH WEST & SOUTH EAST

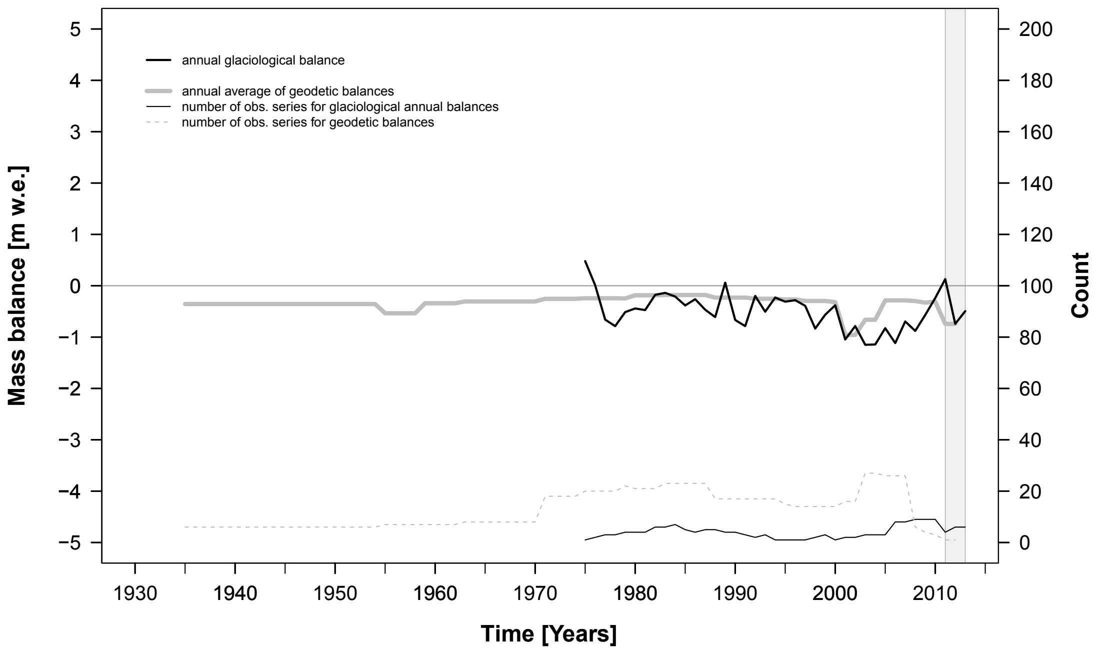


Figure 3.13.1 Regional mass balances: annual averages of geodetic and glaciological balances.

Adjacent to Central Asia, the regions Asia South West and Asia South East comprise the Karakoram, Hindu Kush, Himalaya, and Hengduan Shan mountain ranges. The Himalaya is the largest mountain range of the world and extends from the Nanga Parbat (8,126 m a.s.l.) in the NW over 2,500 km to the Mancha Barwa (7,782 m a.s.l.) in the SE. The climate, and the precipitation in particular, is characterized by the influence of the South Asian monsoon in summer and the mid-latitude westerlies in winter. The glacier area in this region totals about 56,000 km^2.

The data coverage of Asia South West is very sparse. The only reported mass balance series of more than 10 years is from Chhota Shigri located in the Himachal Pradesh, India. Also Asia South West lacks long-term glacier observation series. Recent mass balance results are reported from Parlung Glacier No. 94, located in the south-eastern Tibetan Plateau, and from Yala, Rikha Samba, Pokalde and Mera glaciers in Nepal.

The LIA is considered to have lasted until the mid or late 19th century in most regions (Grove, 2004) with glacier maximum extents occurring between the 17th and mid 19th century (Solomina, 1996; Su & Shi, 2002; Kutuzov, 2005). Front variation observations show a general retreat over the 20th century with no marked period of glacier re-advances.

Glaciological and geodetic surveys reported from a variable glacier sample indicate an ice loss at the rate of a few hundred millimetres w.e. a^{-1} over the past decades. For 2011/12 and 2012/13, reported balances were -1010 and -200 mm w.e. a^{-1}, respectively, in Asia South East and -470 and -790 mm w.e. a^{-1}, respectively, for Chhota Shigri (Asia South West). From the Karakoram, information about positive mass balances and re-advances of (mainly surge-type) glaciers has been reported for the beginning of the 21st century. However, the corresponding data has not (yet) been made available.

Regional glacier change assessments were recently published by Gardelle et al. (2013), and Rankl et al. (2014).

Estimated total glacier area (km^2):	56000
Front variations	
- # of series*:	84/3
- # of stationary or advancing obs.*:	64/0
- # of retreating observations*:	261/4
Glaciological balances	
- # of series*:	29/1
- # of observations*:	158/10
Geodetic balances	
- # of series°:	24/16
- # of observations°:	52/27

* (total/>2011), ° (total/>2003)

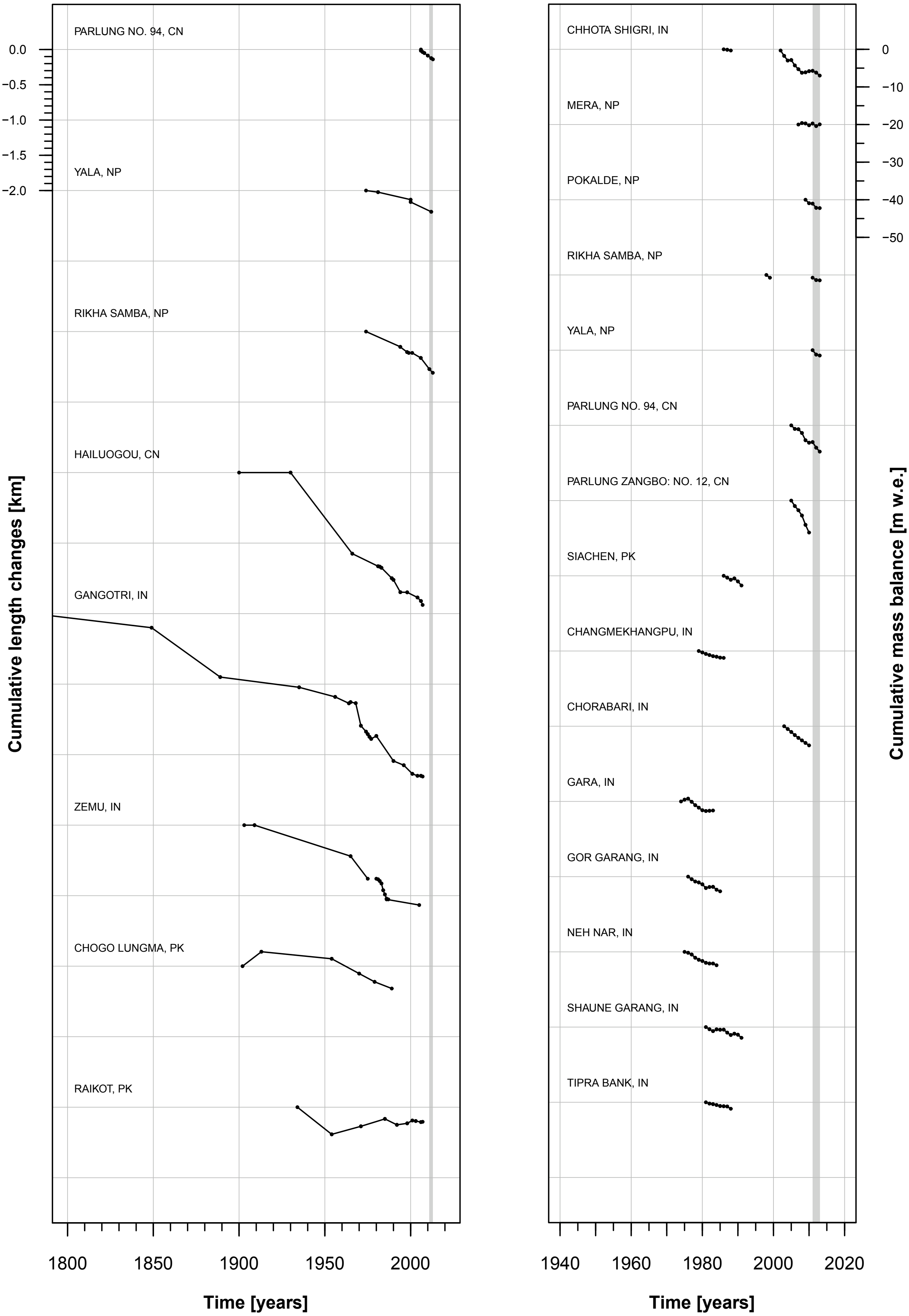


Figure 3.13.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Asia South East and South West over the entire observation period.

3.14 LOW LATITUDES (incl. Africa & New Guinea)

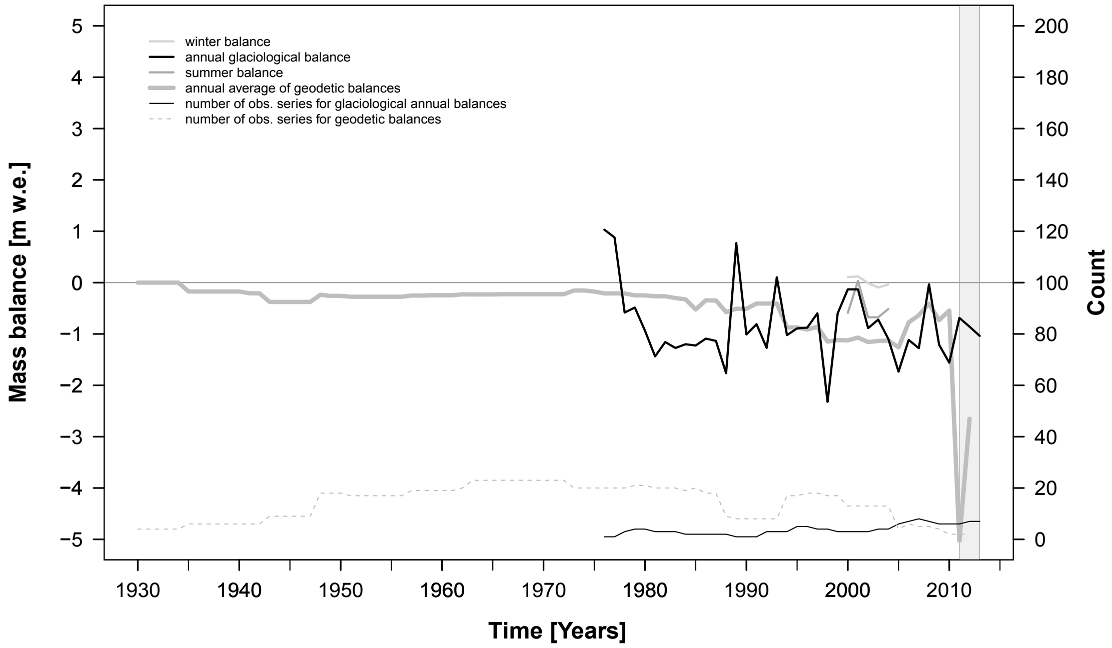


Figure 3.14.1 Regional mass balances: annual averages of geodetic and glaciological balances.

Glaciers in the low latitudes are situated on the highest mountain peaks of Mexico and in the tropical Andes. In addition, a few ice bodies are located in East Africa on Ruwenzori, Mount Kenya and Kilimanjaro, as well as in Papua (formerly Irian Jaya, Indonesia) and Papua New Guinea. The glacier area of the Low Latitudes totals about 2,500 km^2 of which the largest parts are located in Peru and Bolivia. In the tropical Andes, long-term monthly mass balance measurements are carried out at Zongo and Charquini Sur glaciers (BO), Antizanan 15 Alpha (EC), and Conejeras (CO). Several dozen front variation series document glacier retreat over the past half-century. Front variations of glaciers in Africa and New Guinea are well documented with a few observation series back to the 19th century. From Lewis Glacier on Mount Kenya, mass balance measurements have been reported between 1978/79 and 1995/96 and again since 2010/11.

In the tropical Andes, glaciers reached their latest LIA maximum extensions between the mid-17th and early 18th centuries (Rabatel et al., 2013). Glaciers in Peru and Ecuador were in advanced positions until the 1860s, followed by a rapid retreat (Grove, 2004). Front variation observations document a general retreat over the 20th century, with increase retreat rates since the late 1970s. In Africa, glaciers reached their LIA maximum extents towards the late 19th century (Hastenrath, 2001) followed by a continuous retreat until present. In New Guinea, glaciers reached their LIA maxima in the mid-19th century. Here the glacier changes have been traced from information on glacier extents derived from historical records, dated cairns erected during several expeditions, and remote sensing data. All ice masses except some on Punkcak Java seem to have now disappeared.

The regional mass balance shows a strong interannual variability with an average mass balance around -800 mm w.e. a^{-1} since between the 1970s and the 2000s. The reported balances for 2011/12 and 2012/13 were -860 and -1040 mm w.e. a^{-1}, respectively. Regional glacier change assessments were recently published by Prinz et al. (2011), and Rabatel et al. (2013).

Estimated total glacier area (km^2):	2500
Front variations	
- # of series*:	88/6
- # of stationary or advancing obs.*:	42/2
- # of retreating observations*:	494/9
Glaciological balances	
- # of series*:	12/7
- # of observations*:	143/14
Geodetic balances	
- # of series°:	37/14
- # of observations°:	107/42

* (total/>2011), ° (total/>2003)

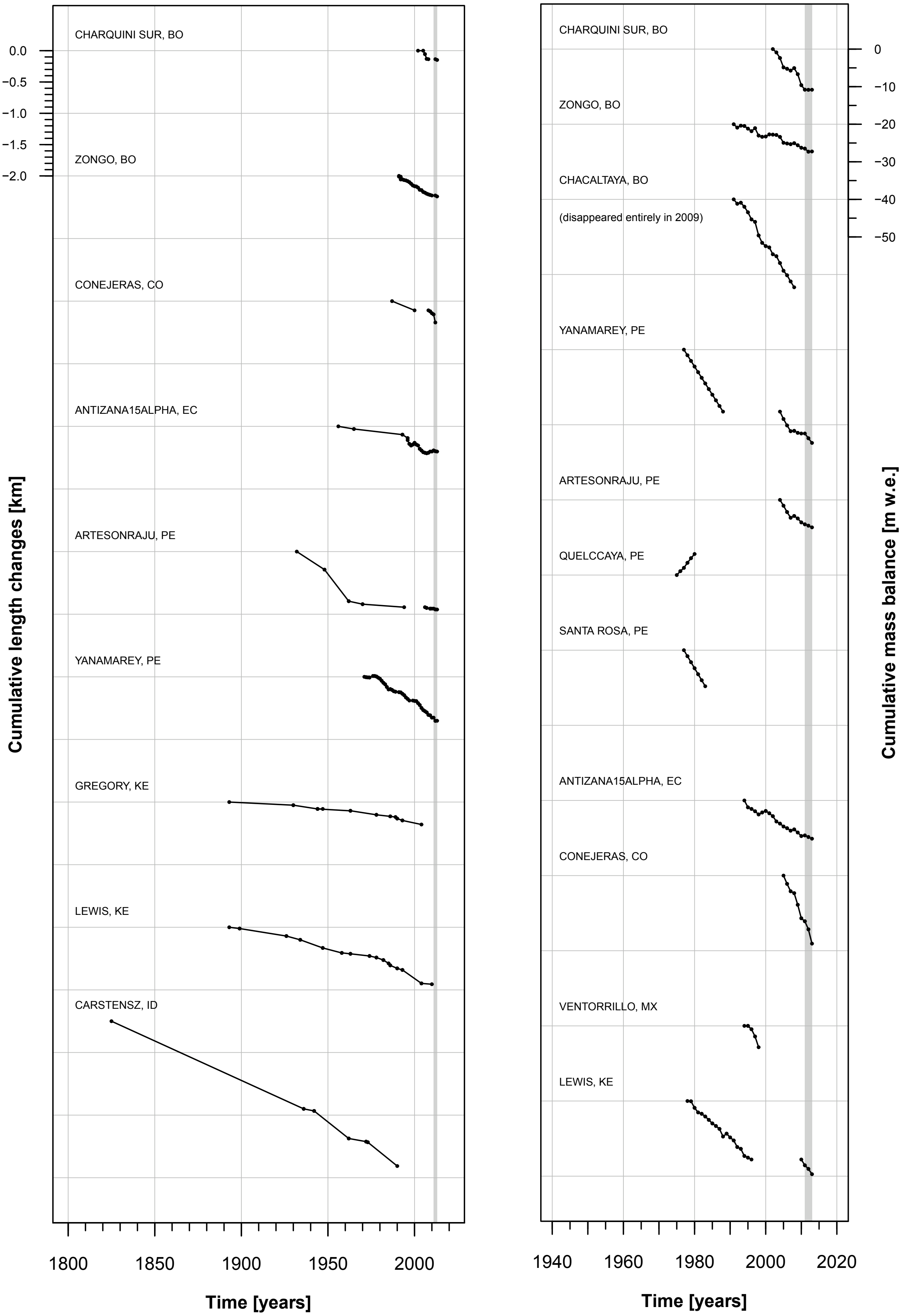


Figure 3.14.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in the Low Latitudes over the entire observation period.

3.15 SOUTHERN ANDES

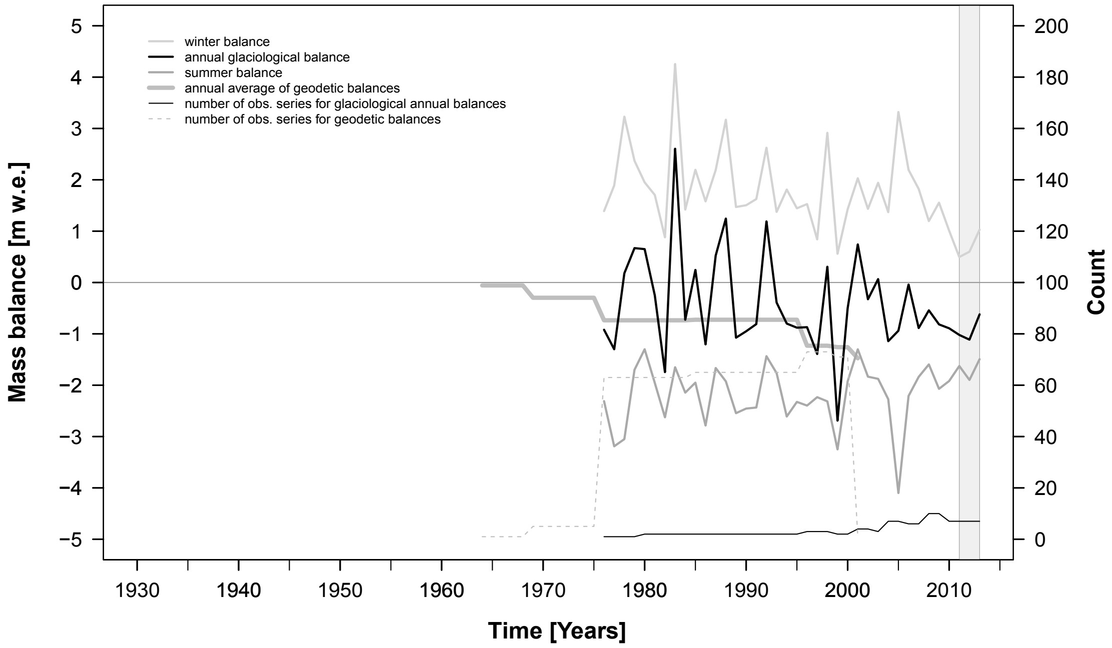


Figure 3.15.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The Southern Andes contain the glaciers of Argentina and Chile. The entire glacier area totals about 29,000 km², of which the majority is located in the Northern and Southern Patagonian Icefields as well as in the Cordillera Darwin Icefield in Tierra del Fuego. The climate and topography varies along the Andes creating different types of glaciers. The longest mass balance series of the entire Andes is reported from Echaurren Norte (CL) with continuous measurements since 1975/76. Besides this, observations series of more than ten years are available only from Martial Este (AR), Guanaco (CL), and Piloto Este (AR). From the Patagonian Ice Fields, geodetic thickness change estimates and front variation measurements are available for most outlet glaciers. The available observations cover the second half of the 20th century but are usually not continued into the 21st century.

In the Southern Andes, most glaciers reached their LIA maximum between the late 17th and early 19th century (Masiokas et al., 2009). Most front variation measurements document a general retreat since the LIA maximum extent with some readvances in the 1980s and an enhanced retreat trend in recent decades. There have been a few well studied cases of surging glaciers, the most recent being Horcones Inferior and Nevado del Plomo in Argentina.

The available mass balance measurements indicate a strong interannual variability with decadal mean balances slightly negative in the 1970s, 1980s, and 2000s; and -680 mm w.e. a^{-1} in the 1990s. The reported balances for 2011/12 and 2012/13 were -1110 and -620 mm w.e. a^{-1}, respectively.

Based on geodetic surveys, the Patagonian Ice Fields show a general thinning trend towards the end of the 20th and early 21st centuries. Most of the major outlet glaciers feature a strong centennial retreat. Exceptions in the Southern Patagonian Ice Field are Pio XI (Brüggen) with the maximum observed advance and Perito Moreno, almost stationary. Garibaldi in Tierra del Fuego also displays an advance phase of its calving dynamics. Regional glacier change assessments were recently published by e.g., Masiokas et al. (2015), and White & Copland (2015).

Estimated total glacier area (km²):	29000
Front variations	
- # of series*:	196/5
- # of stationary or advancing obs.*:	139/0
- # of retreating observations*:	424/6
Glaciological balances	
- # of series*:	14/7
- # of observations*:	140/14
Geodetic balances	
- # of series°:	63/0
- # of observations°:	83/0

* (total/>2011), ° (total/>2003)

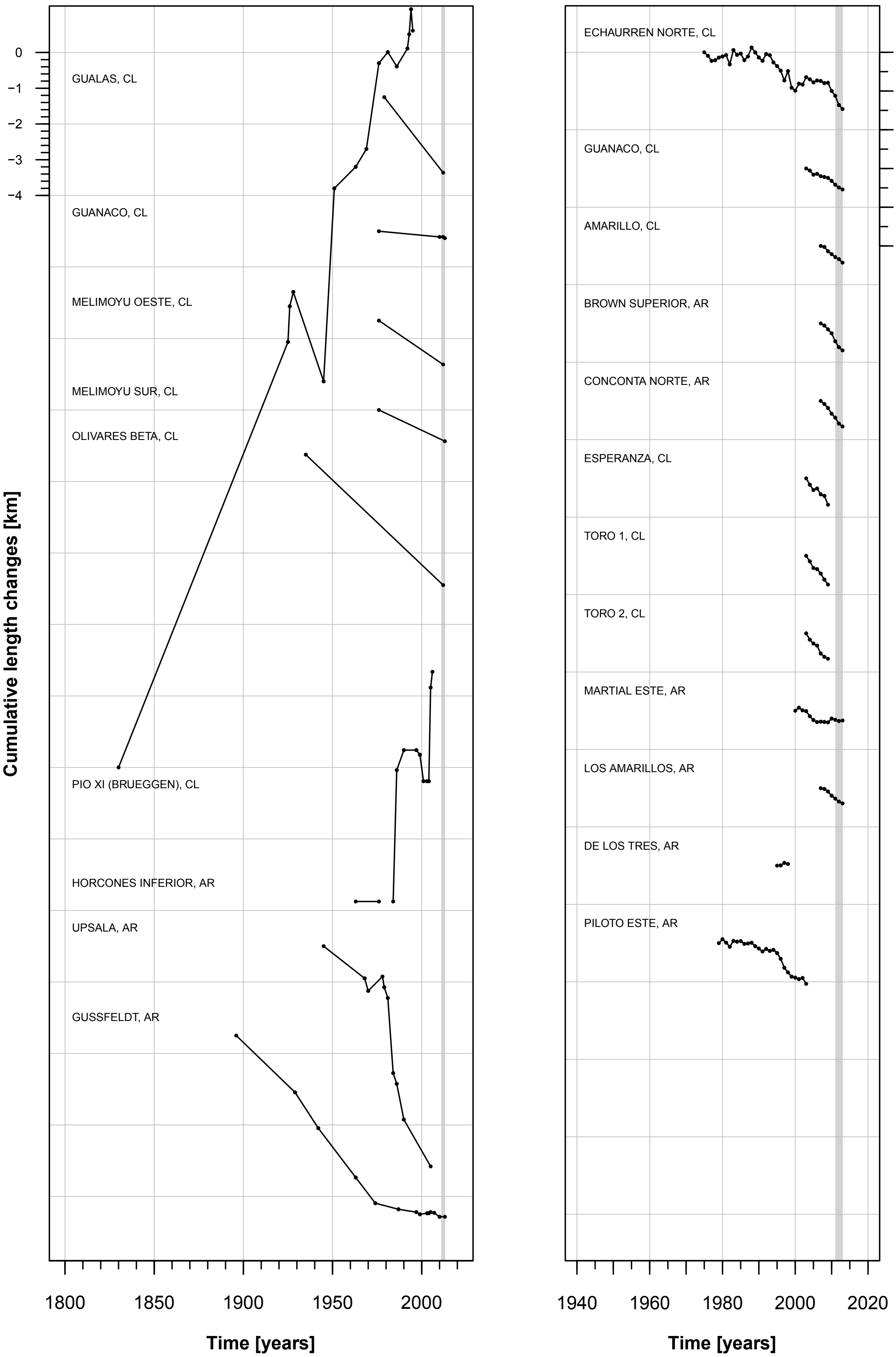


Figure 3.15.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in the Southern Andes over the entire observation period.

3.16 NEW ZEALAND

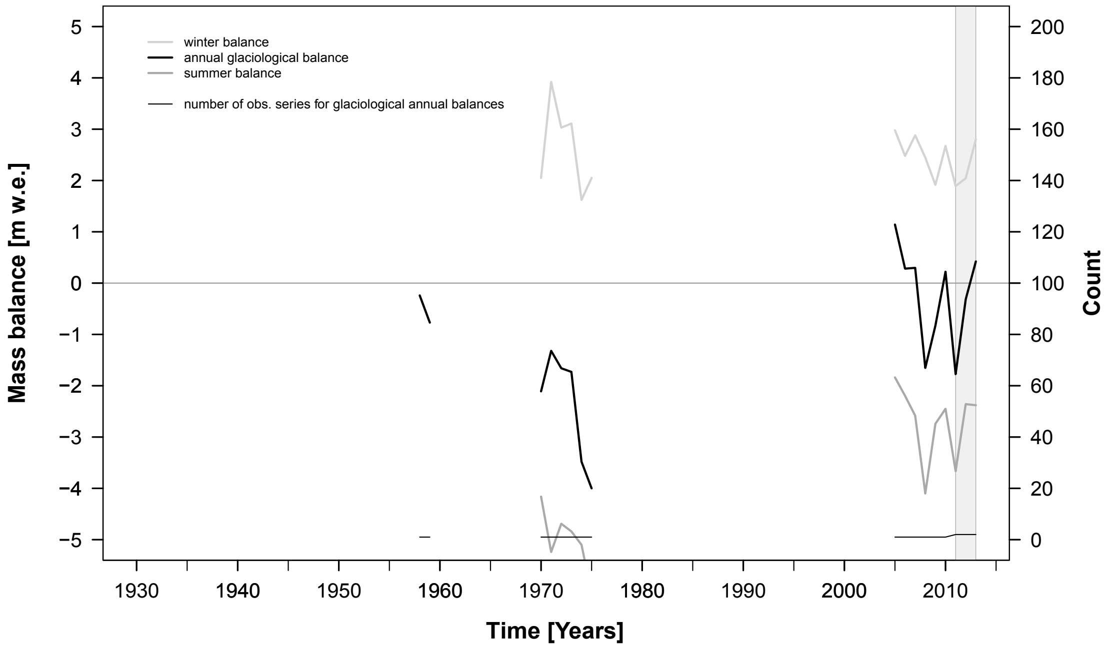


Figure 3.16.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The majority of glaciers in New Zealand are located along the Southern Alps spanning the length of the South Island between 42° and 46° south. Their climatic regime is characterized by high precipitation with extreme gradients. Annual average values amount to 4500 mm on the west side (Whataroa) of the Alps and maximum values of up to 15 000 mm (cf., WGMS 2008).

Mount Cook is the highest peak at 3754 m asl. The Tasman Glacier, the largest glacier in New Zealand, is located below its flank. In total, the inventory of 1978 reported 3,144 glaciers covering an area of about 1,000 km^2 with an estimated total ice volume of about 53 km^3 at that time (Chinn, 2001).

New Zealand has a long history of glacier observation; however, the majority of available front variation series are of qualitative character, i.e., indicating whether glacier fronts are advancing, retreating or stationary. Long-term quantitative front variation series are reported from Franz Josef, Fox, and Stocking. Mass balance observations are available for only a few glaciers; Brewster and Rolleston having recent measurements reported.

The few mass balance measurements indicate a large interannual variability with an average mean balance of a few hundred millimetre w.e. per year. Seasonal balances indicate very large mass turnover. Average annual balances (of Rolleston and Brewster) were -310 and 420 mm w.e. a^{-1} in 2011/12 and 2012/13, respectively.

Estimated total glacier area (km^2):	1000
Front variations	
- # of series*:	103/70
- # of stationary or advancing obs.*:	429/41
- # of retreating observations*:	515/60
Glaciological balances	
- # of series*:	5/2
- # of observations*:	21/4
Geodetic balances	
- # of series°:	0/0
- # of observations°:	0/0

* (total/>2011), ° (total/>2003)

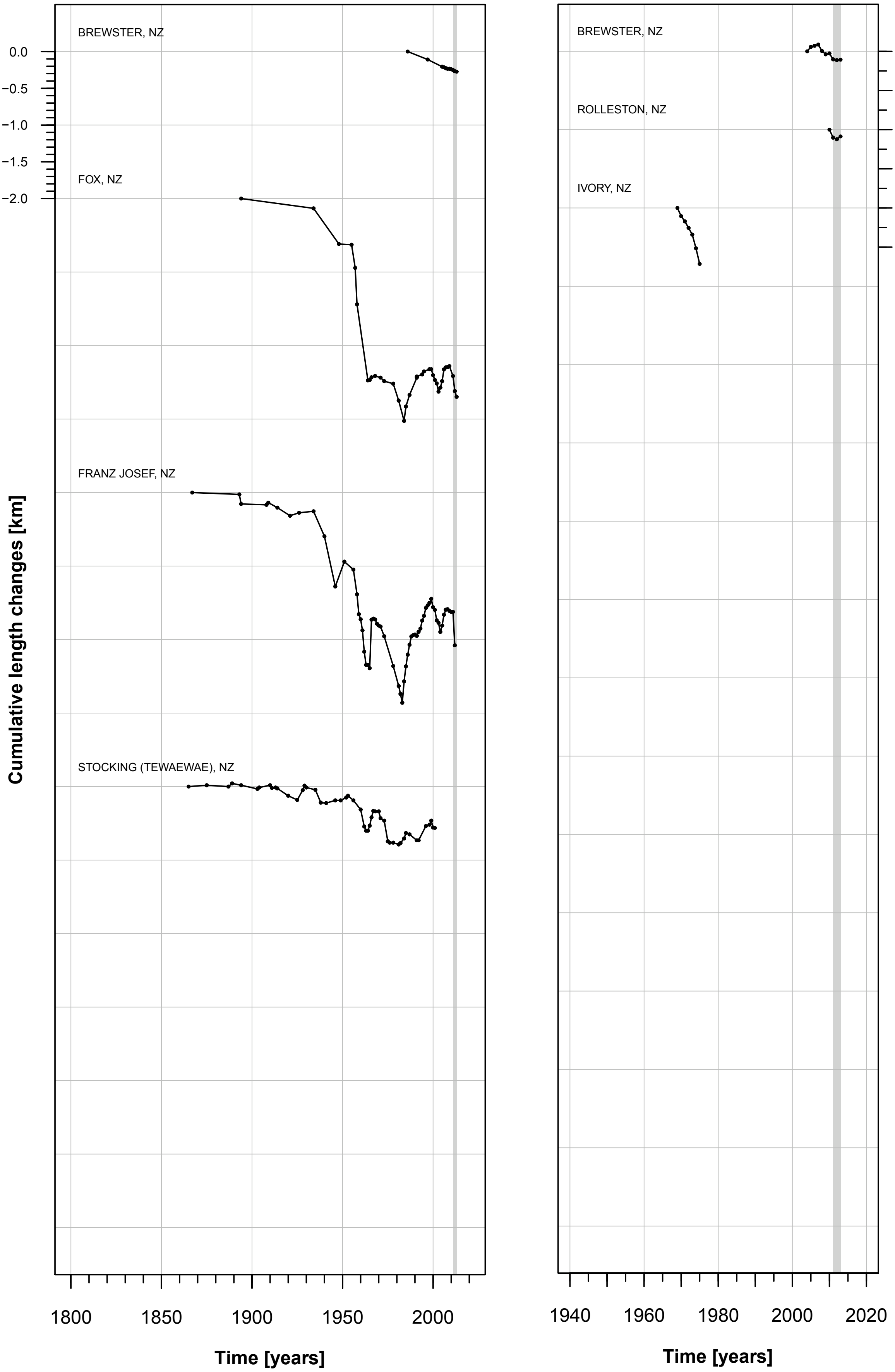


Figure 3.16.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in New Zealand over the entire observation period.

3.17 ANTARCTICA & SUBANTARCTIC ISLANDS

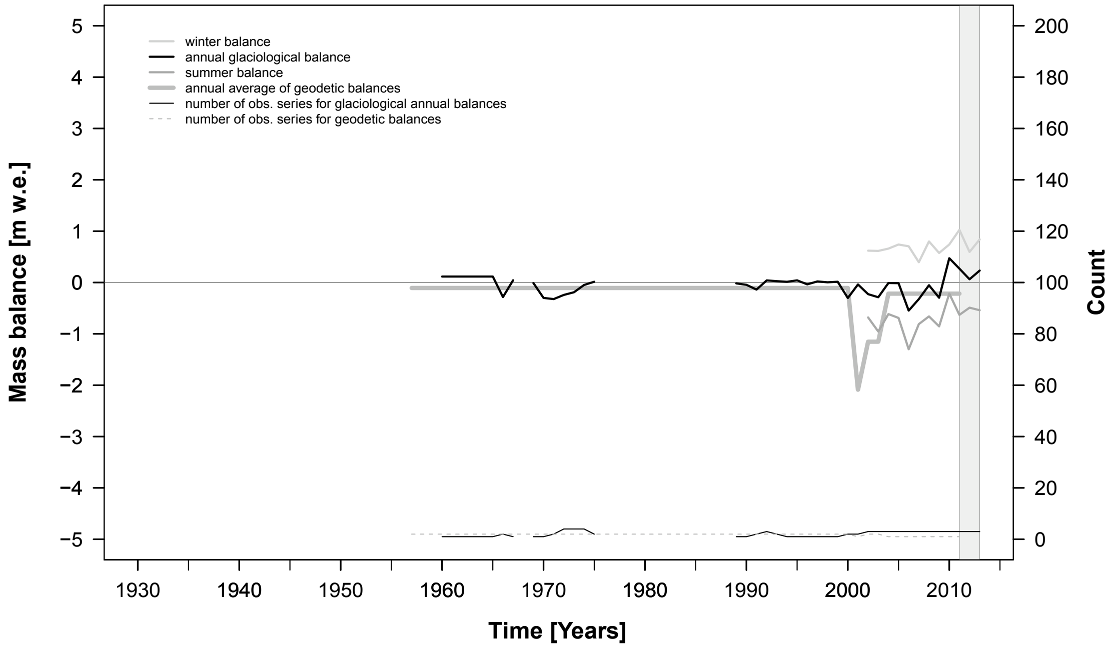


Figure 3.17.1 Regional mass balances: annual averages of geodetic and glaciological balances.

The total area of local glaciers in and around Antarctica is estimated to be about 130,000 km². Mainly due to the remoteness and the immense size of the ice masses, little is known about these glaciers. There are three categories of local glaciers outside the ice sheet: coastal glaciers, ices streams which are discrete dynamic units attached to the ice sheet, and isolated ice caps. In addition, glaciers are situated on Subantarctic Islands such as the South Shetland Islands, South Georgia, Heard Islands, and Kerguelen with a total estimated ice cover of roughly 7,000 km². Mass balance measurements are available from only a dozens of glaciers. Series of more than ten years are reported from Bahia del Diablo on Vega Island as well as from Hurd and Johnsons glaciers on Livingston Island located east and west of the northern tip of the Antarctic Peninsula.

Evidence of the timing of LIA glacier maxima south of the Antarctic Circle (66° 30' S) is sparse due to the lack of organic material for dating (Grove, 2004). For South Georgia, located about 1,400 km east-southeast of the Falkland/Malvinas Islands, LIA maximum extends are reported for the 18th, 19th, and 20th centuries (Clapperton et al., 1989a, b).

Front variations, derived from aerial photographs and satellite images, of glaciers on the Antarctic Peninsula show a vast majority of glaciers retreating over the past six decades. Glaciers on South Georgia receded overall by varying amounts from their more advanced positions in the 19th century, with large tidewater glaciers showing a more variable behaviour and remaining in relatively advanced positions until the 1980s. According to expedition records, little or no change occurred on glaciers at Heard Island during the first decades of the 20th century (Grove, 2004). However, in the second half, glacier recession has been widespread, interrupted by a period of some re-advancing glaciers in the 1960s. The very few glaciological and geodetic surveys indicate slightly negative mass balances since the 1960s and some positive years recently. Reported balance for 2011/12 and 2012/13 averaged at 60 and 230 mm w.e. a^{-1}, respectively.

Estimated total glacier area (km²):	130000
Front variations	
- # of series*:	308/3
- # of stationary or advancing obs.*:	135/2
- # of retreating observations*:	364/0
Glaciological balances	
- # of series*:	17/3
- # of observations*:	85/6
Geodetic balances	
- # of series°:	3/0
- # of observations°:	3/0

* (total/>2011), ° (total/>2003)

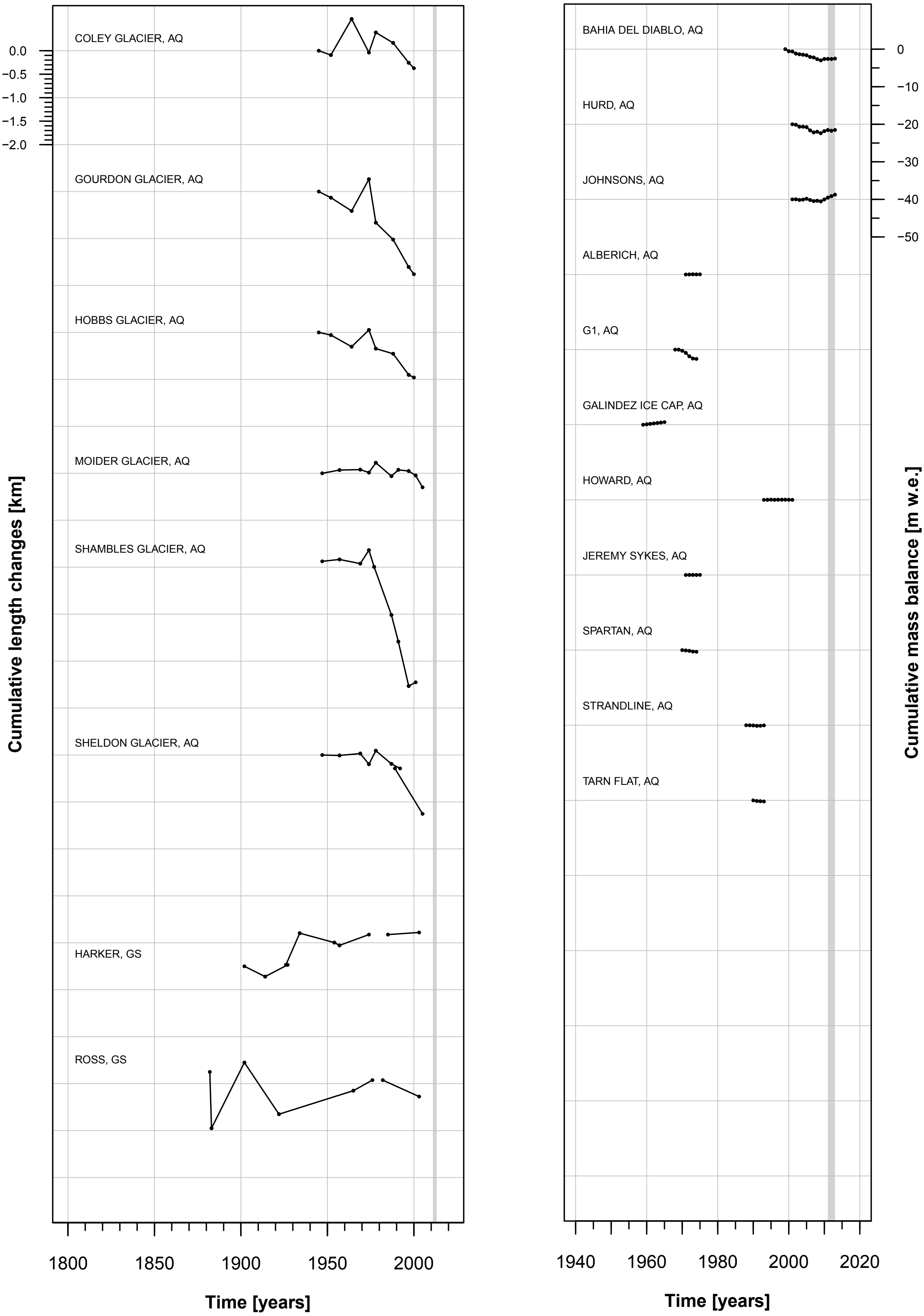


Figure 3.17.2 Cumulative length changes (left) and cumulative mass balances (right) of of selected glaciers in Antarctica and the Subantarctic Islands over the entire observation period.

4 DETAILED INFORMATION

Detailed information on selected glaciers (sorted by political unit and glacier name) with ongoing direct glaciological mass balance measurements in various mountain ranges is presented here, in addition to the global and regional information contained in the previous chapters. In order to facilitate comparison between the individual glaciers, the submitted material (text, maps, graphs and tables) was standardized.

The text provides general information on the glacier followed by characteristics of the two reported balance years. General information concerns basic geographic, geometric, climatic and glaciological characteristics of the observed glacier which may help with the interpretation of climate/glacier relationships. A recent photograph showing the glacier is included.

Three maps are presented for each glacier: the first one, a topographic map, shows the stakes, snow pits and snow probing network. This network is basically the same from one year to the next on most glaciers. In cases of differences between the two reported years, the second was chosen, i.e., the network from the year 2012/13. The second and third maps are mass balance maps from the reported years, illustrating the pattern of ablation and accumulation. The accuracy of such mass balance maps depends on the density of the observation network, the complexity of the mass balance distribution, the applied technique for spatial extrapolation, and the experience of the local investigators.

A graph of glacier mass balance versus altitude is given for both reported years, overlaid with the corresponding glacier hypsography and point measurements (if available). The relationship between mass balance and altitude – the mass balance gradient – is an important parameter in climate/glacier relationships and represents the climatic sensitivity of a glacier. It constitutes the main forcing function of glacier flow over long time intervals. Therefore, the mass balance gradient near the equilibrium line is often called the 'activity index' of a glacier. The glacier hypsography reveals the glacier elevation bands that are most influential for the specific mass balance, and indicates how the specific mass balance might change with a shift in the ELA. An additional graph compares the mean annual glaciological and the geodetic balances (if available) for the whole observation period. For the comparison, the geodetic values were converted with a density factor of 850 kg m^3.

The last two graphs show the relationship between the specific mass balance and the accumulation area ratio (AAR) and the equilibrium line altitude (ELA) for the whole observation period. The linear regression equation is given at the top of both diagrams. The AAR regression equation is calculated using integer values only (in percent). AAR values of 0 or 100 % as well as corresponding ELA values outside the altitude range of the observed glaciers were excluded from the regression analysis. The regressions were used to determine the AAR_0 and ELA_0 values for each glacier. The points from the two reported balance years (2011/12 and 2012/13) are marked in black. Minimum sample size for regression was defined as 6 ELA or AAR values.

4.1 BAHÍA DEL DIABLO (ANTARCTICA/A. PENINSULA)

COORDINATES: 63.82° S / 57.43° W

Photo taken by S. Marinsek, 13 March 2013.

This polythermal-type outlet glacier is located on Vega Island, on the northeastern side of the Antarctic Peninsula. The glacier is exposed to the northeast, covers an area of ~12.9 km², and extends from an altitude of 630 m to 50 m a.s.l. The mean annual air temperature at the equilibrium line around the 400 m a.s.l. ranges between -7 and -8 °C. The glacier snout overrides an ice-cored moraine over a periglacial plain of continuous permafrost. The mass balance measurements on this glacier began in austral summer 1999/2000, using a simplified version of the combined stratigraphic annual mass balance method because the glacier can be visited only once a year.

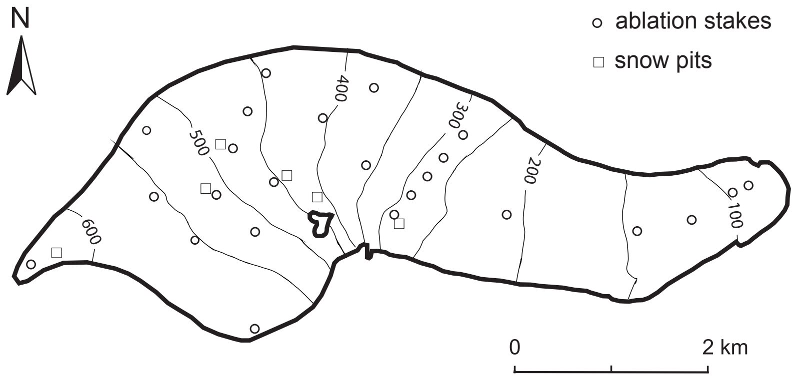
The mass balance for the year 2011/2012 was -20 mm w.e. a^{-1}, due to the relative positive mean summer air temperature recorded near the glacier of +0.6 ºC. Due to a cold mean summer air temperature of -0.5 ºC the mass balance for the year 2012/2013 was +102 mm w.e. a^{-1}. Mean annual precipitation for the period was between the mean of 250 to 290 mm at the periglacial plain and 440 to 490 mm at the glacier highest elevation, 80% of which is, on average, deposited during the accumulation season. This data added to the series confirm and enhance the existing strong correlation between the annual mass balance and mean summer air temperature.

Derived from mass balance versus elevation, the ELA was at 370 and 295 m a.s.l. in 2011/12 and 2012/13, respectively. Corresponding AAR values were 52 and 58%.

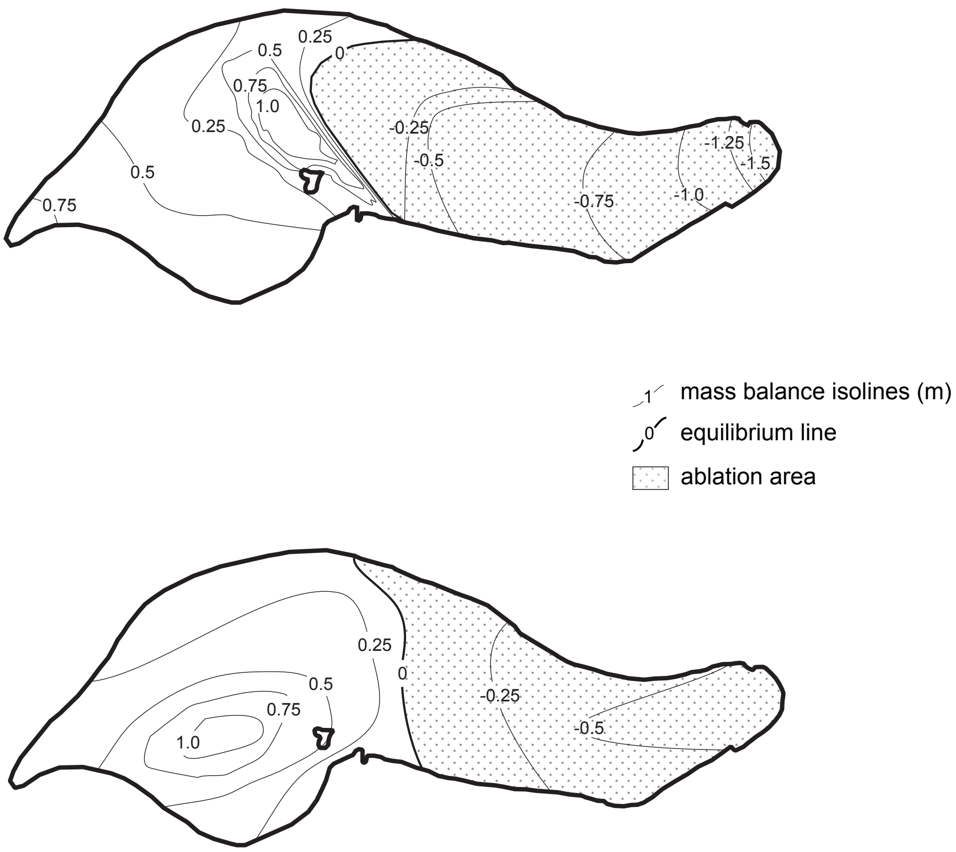
Recently, the glaciological mass balance series was homogenized and validated using data from geodetic surveys in 2001 and 2011 (Marinsek and Ermolin, 2015). The results attained by the two methods agree well.

Figure 4.1.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.

Topography and observational network



Mass balance maps 2011/12 and 2012/13



Bahía del Diablo (ANTARCTICA)

Figure 4.1.2 Mass balance versus altitude (2011/12 and 2012/13).

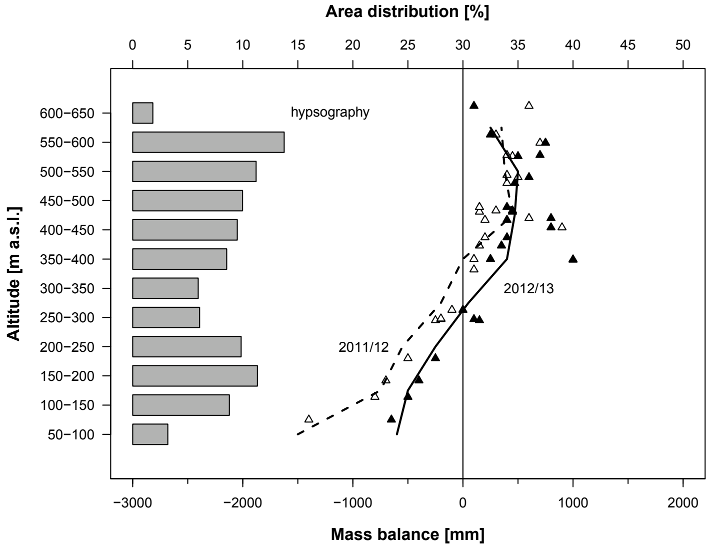


Figure 4.1.3 Glaciological balance versus geodetic balance for the whole observation period (2011/12 and 2012/13).

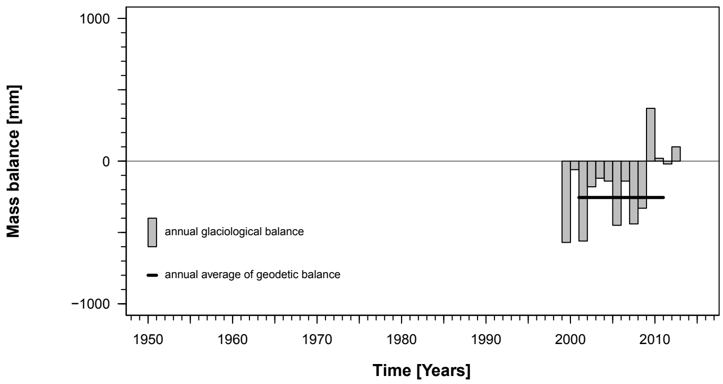
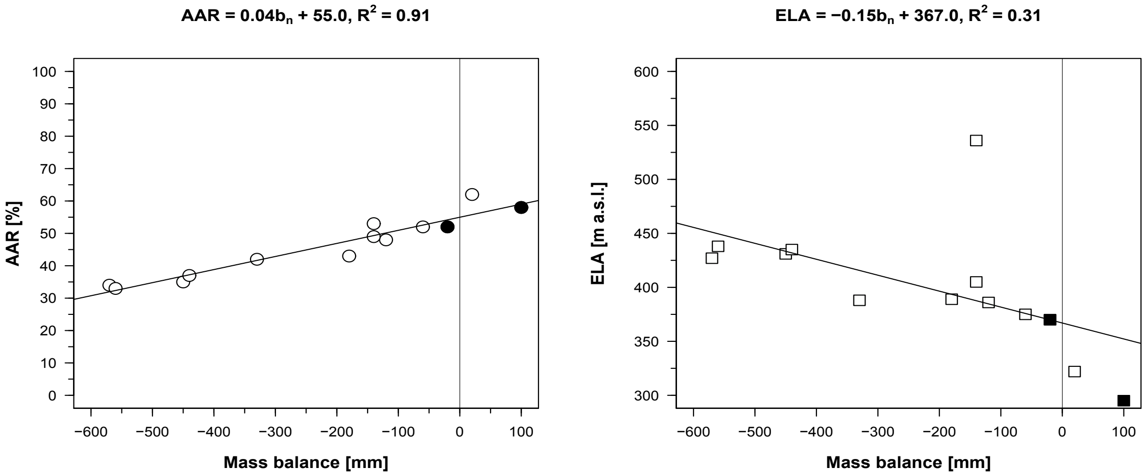


Figure 4.1.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Bahía del Diablo (ANTARCTICA)

4.2 MARTIAL ESTE (ARGENTINA/ANDES FUEGUINOS)

COORDINATES: 54.78° S / 68.40° W

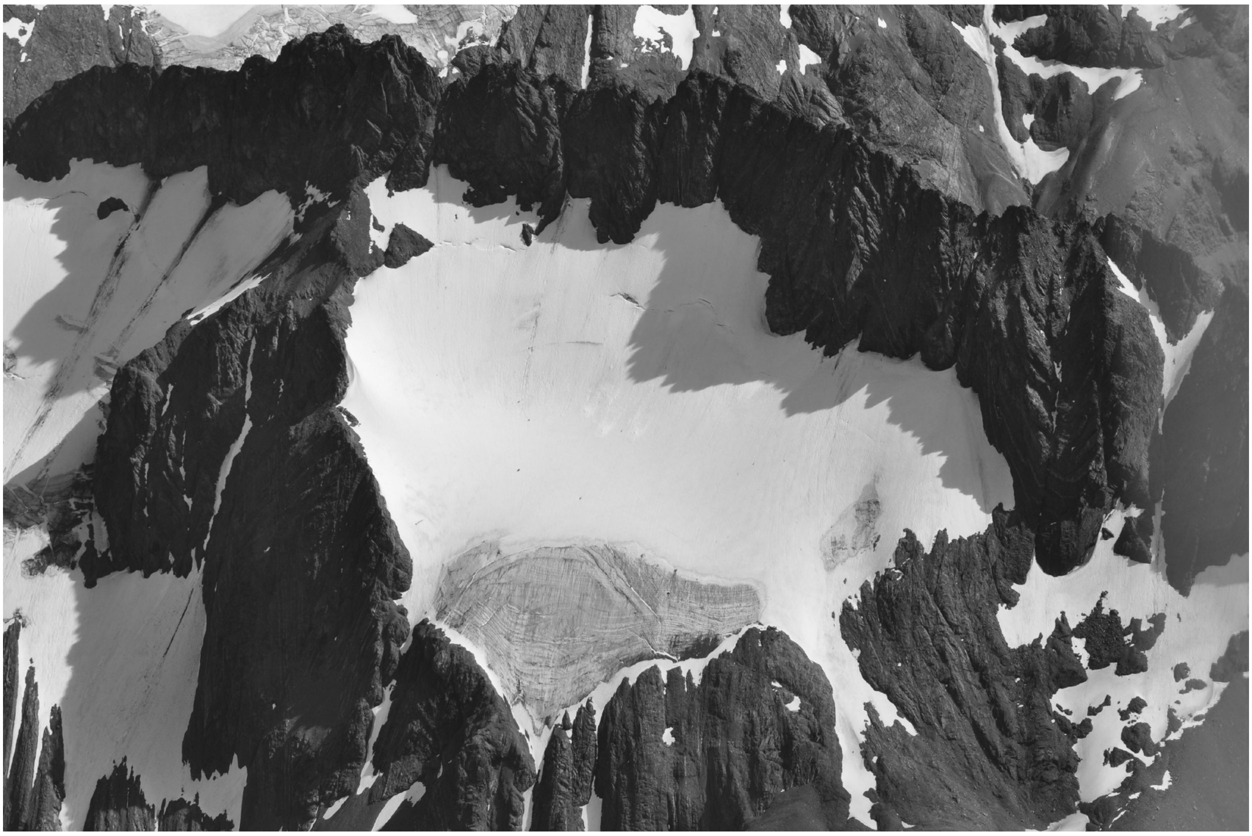


Photo of Martial Este Glacier by R. Iturraspe, 2 March 2013.

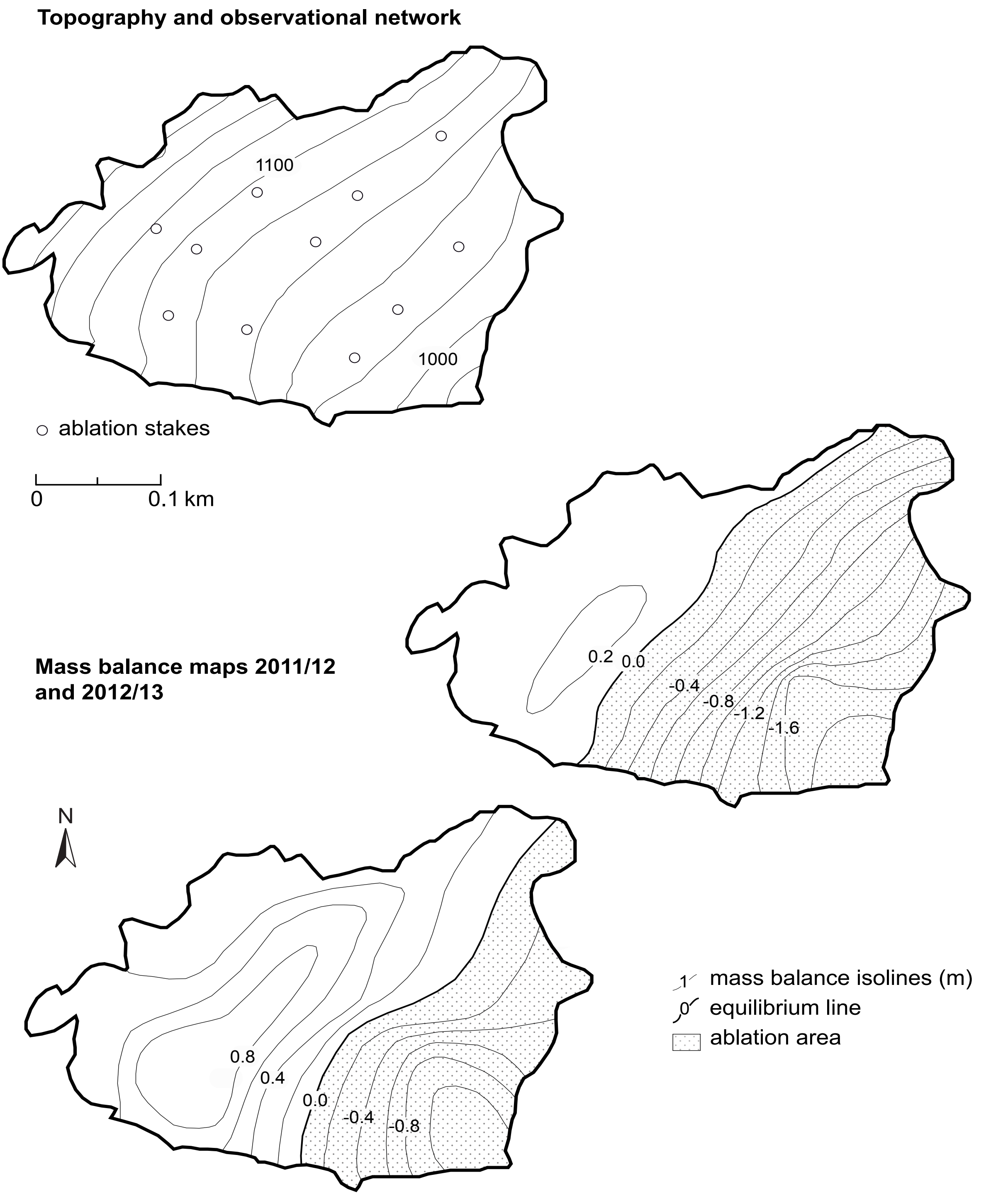
The Martial Este Glacier is a set of small cirque glaciers located in the Cordón Martial (1319 m a.s.l.), very close to Ushuaia city, in the southern shore of Tierra del Fuego Island. The glacier is one of the tourist attractions of Ushuaia city and contributes to the Buena Esperanza river, which is used as water source for the local population. The Martial Este, one of the main ice bodies, is a temperate glacier specially favored by the relief which protects it from wind and solar radiation. Since the LIA these glaciers have lost 75% of their total area. According to topographic surveys, the annual rate of vertical thinning at Martial Este Glacier from 1984 to 1998 was 0.5 m a^{-1} (450 mm w.e. a^{-1}). This rate persisted until 2005 but since 2006 it has been stable.

A weather station located at 1000 m a.s.l., very close to the glacier, collects climate data. Mean annual air temperature at the ELA level (1075 m a.s.l.) is -1.5 °C and the average precipitation, distributed over the whole year without a dry season, amounts to 1300 mm. This amount, compared to the precipitation at the sea level in Ushuaia (530 mm) indicates a significant orographic gradient.

The hydrological cycle starts in April and the maximum accumulation on the glacier ends usually in November. The systematic monitoring of this glacier is done jointly by the Water Agency of Tierra del Fuego and the National University of Tierra del Fuego.

The mass balance 2011/12 was -320 mm w.e. a^{-1} with an ELA at 1089 m a.s.l. and an AAR of 38%. In 2012/13, a positive mass balance was observed with 150 mm w.e. a^{-1}. Corresponding ELA and AAR values were 1060 m a.s.l. and 66%, respectively.

Figure 4.2.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.



Martial Este (ARGENTINA)

Figure 4.2.2 Mass balance versus altitude (2011/12 and 2012/13).

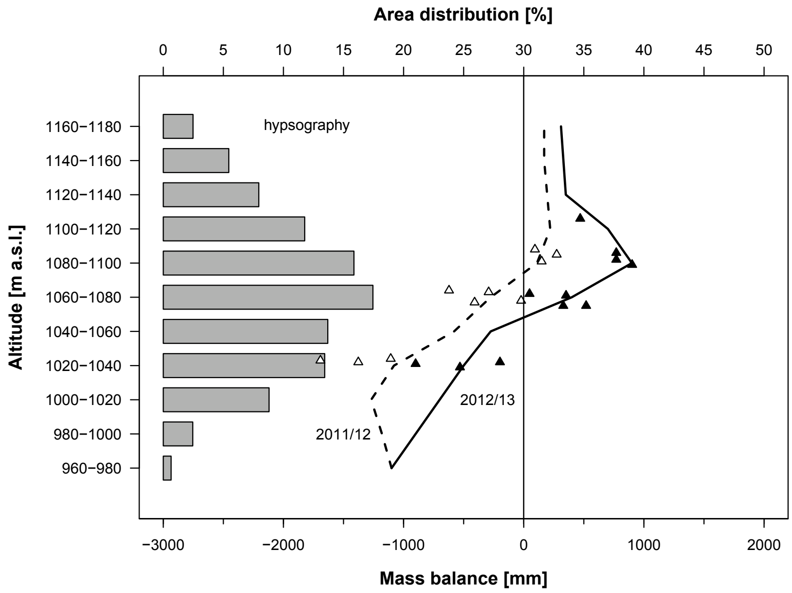


Figure 4.2.3 Glaciological balance versus geodetic balance for the whole observation period.

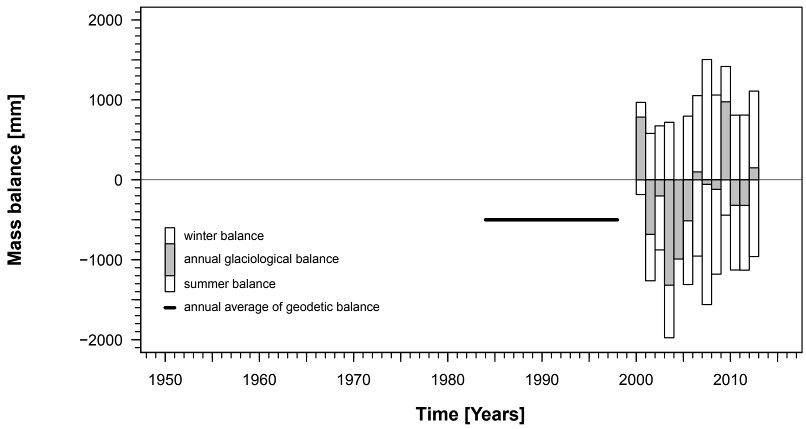
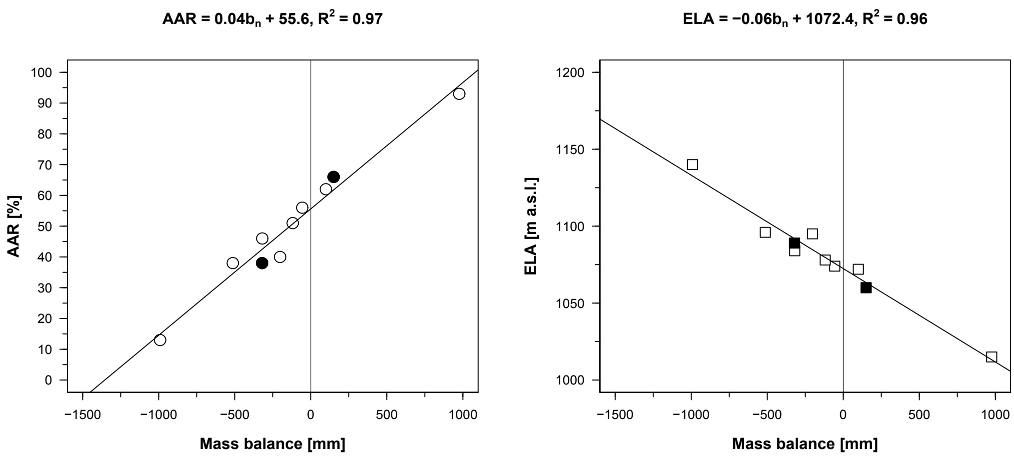


Figure 4.2.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Martial Este (ARGENTINA)

4.3 PASTERZE (AUSTRIA/ALPS)

COORDINATES: 47.10° N / 12.70° E

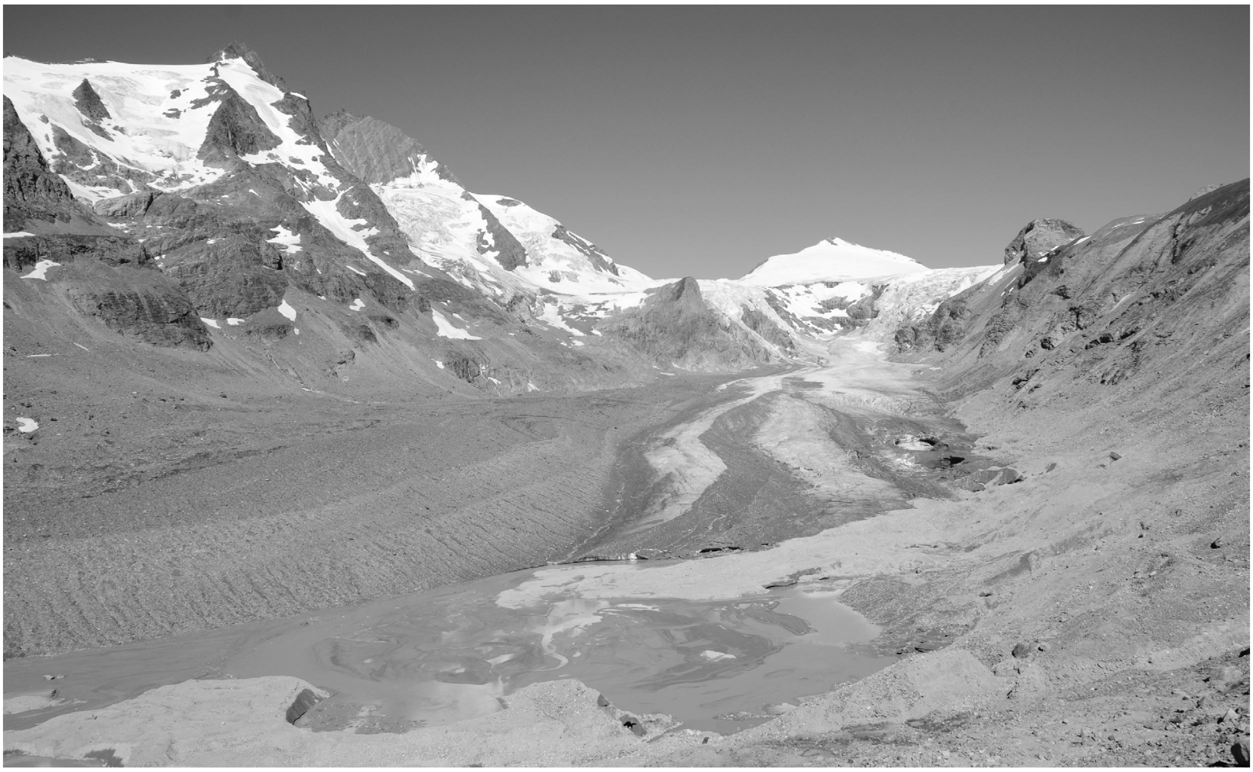


Photo taken by G. Weyss, 1 August 2013.

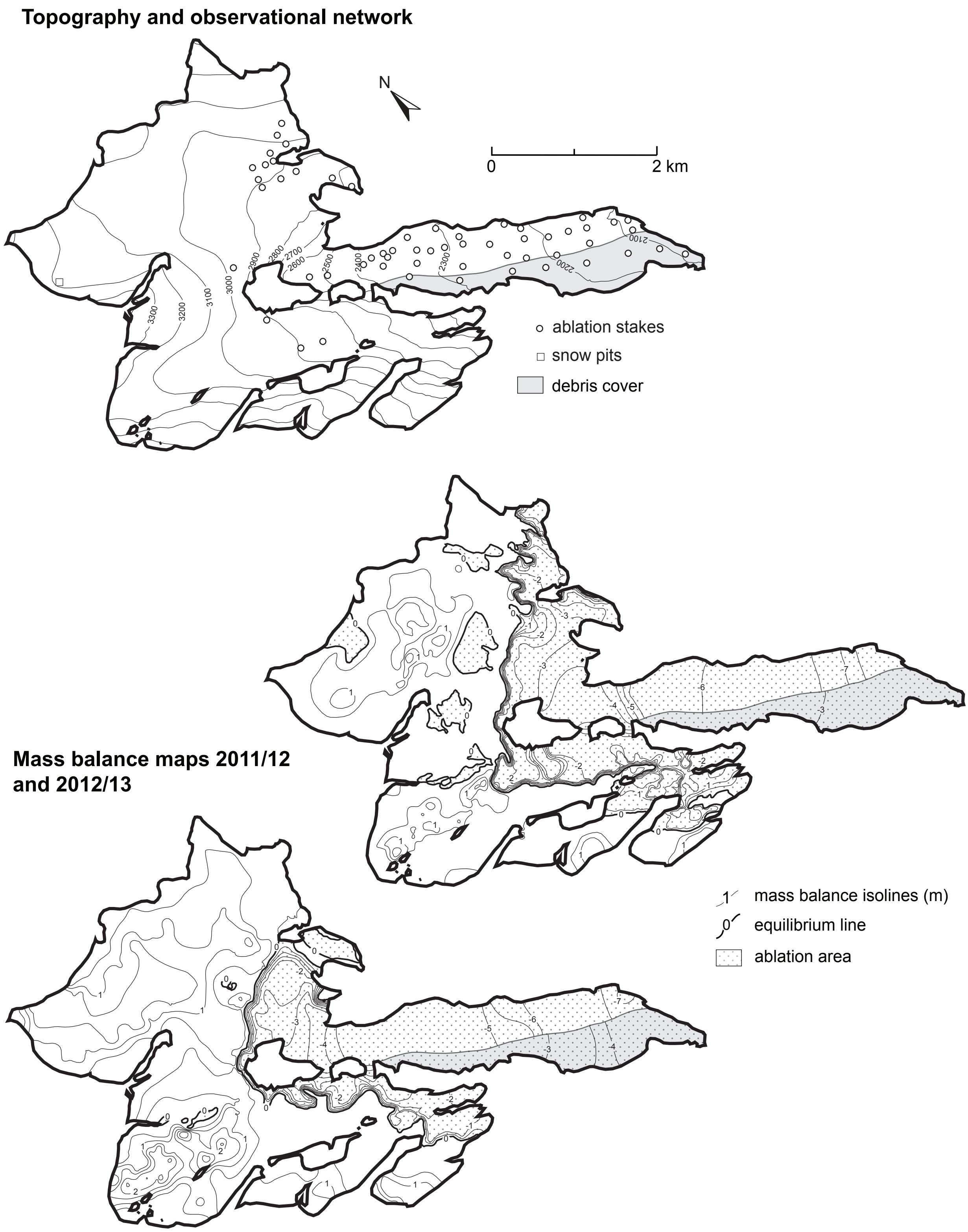
Pasterze is the largest part of a combined mountain glacier system in the Austrian Alps (Hohe Tauern) with several accumulation basins and valley glaciers. The total area of Pasterze Glacier is 16.3 km² (2012) and has an altitudinal range from 2100 to 3500 m a.s.l. The 5 km long distinctive glacier tongue is partly coverd by a 5-20 cm thick debris layer, exposed to SE and draining into the Möll river. Geophysical surveys in 1998 revealed a maxium ice thickness of 320 m and a mean ice thickness of 64 m.

Mass balance measurements were carried out between 1979/80 and 1996/97 and resumed in 2004/05.

The annual surface mass balances in 2011/12 and 2012/13 were both negative. In 2011/12, the mass balance was -1298 mm w.e. a^{-1}, with an ELA at 2950 m a.s.l. and an AAR of 50 %. In 2012/13, the mass balance was -600 mm w.e. a^{-1}, with an ELA at 2875 m a.s.l. and an AAR of 68 %.

Geodetic mass balances show a mean mass loss of 560 mm w.e. a^{-1} between 1969 and 1998 and 1210 mm w.e. a^{-1} between 1998 and 2012. Mean values (1981–2010) of annual temperature and precipitation at the nearby station at Sonnblick (3105 m a.s.l.) are -5.0 °C and 2114 mm.

Figure 4.3.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.



Pasterze (AUSTRIA)

Figure 4.3.2 Mass balance versus altitude 2011/12 and 2012/13.

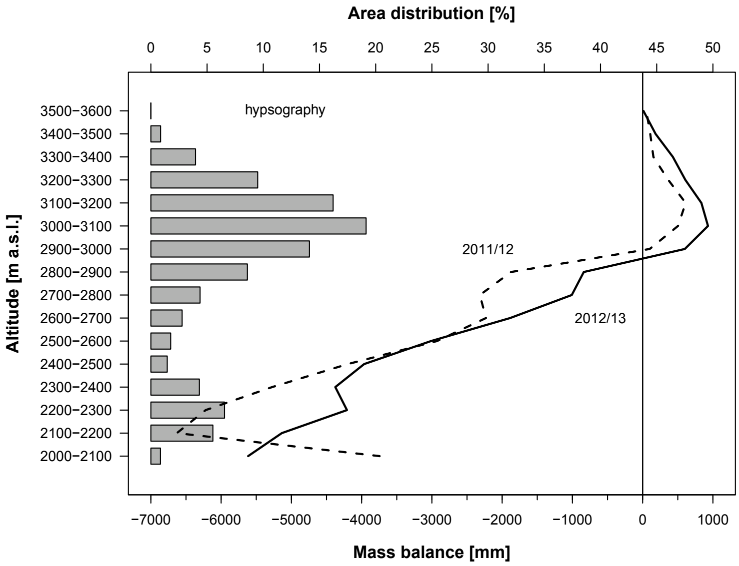


Figure 4.3.3 Glaciological balance versus geodetic balance for the whole observation period.

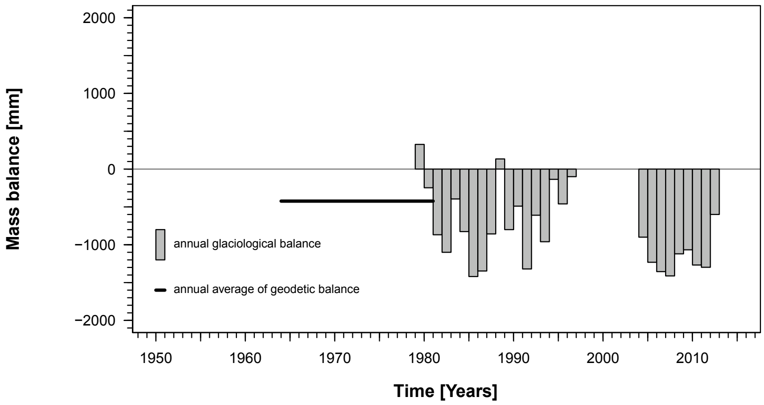
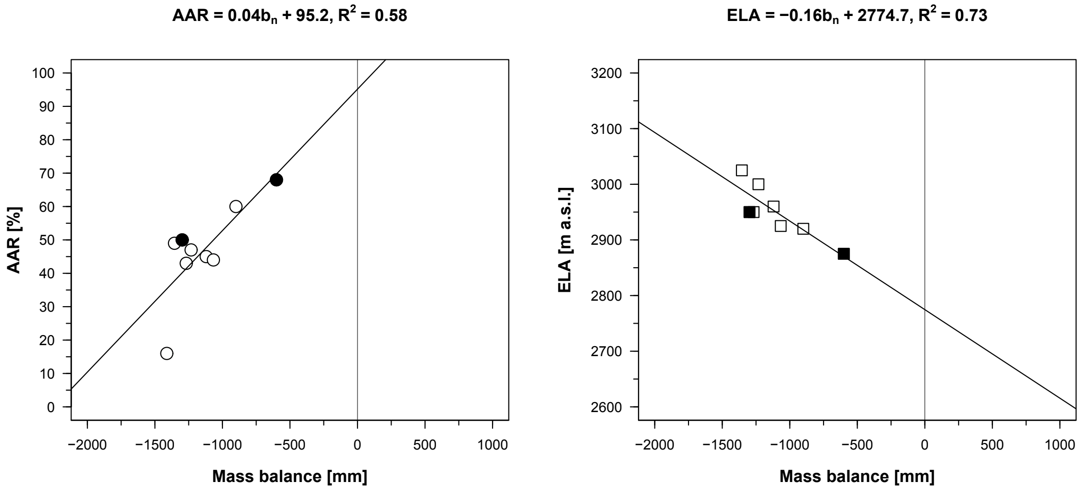


Figure 4.3.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Pasterze (AUSTRIA)

4.4 VERNAGTFERNER (AUSTRIA/ALPS)

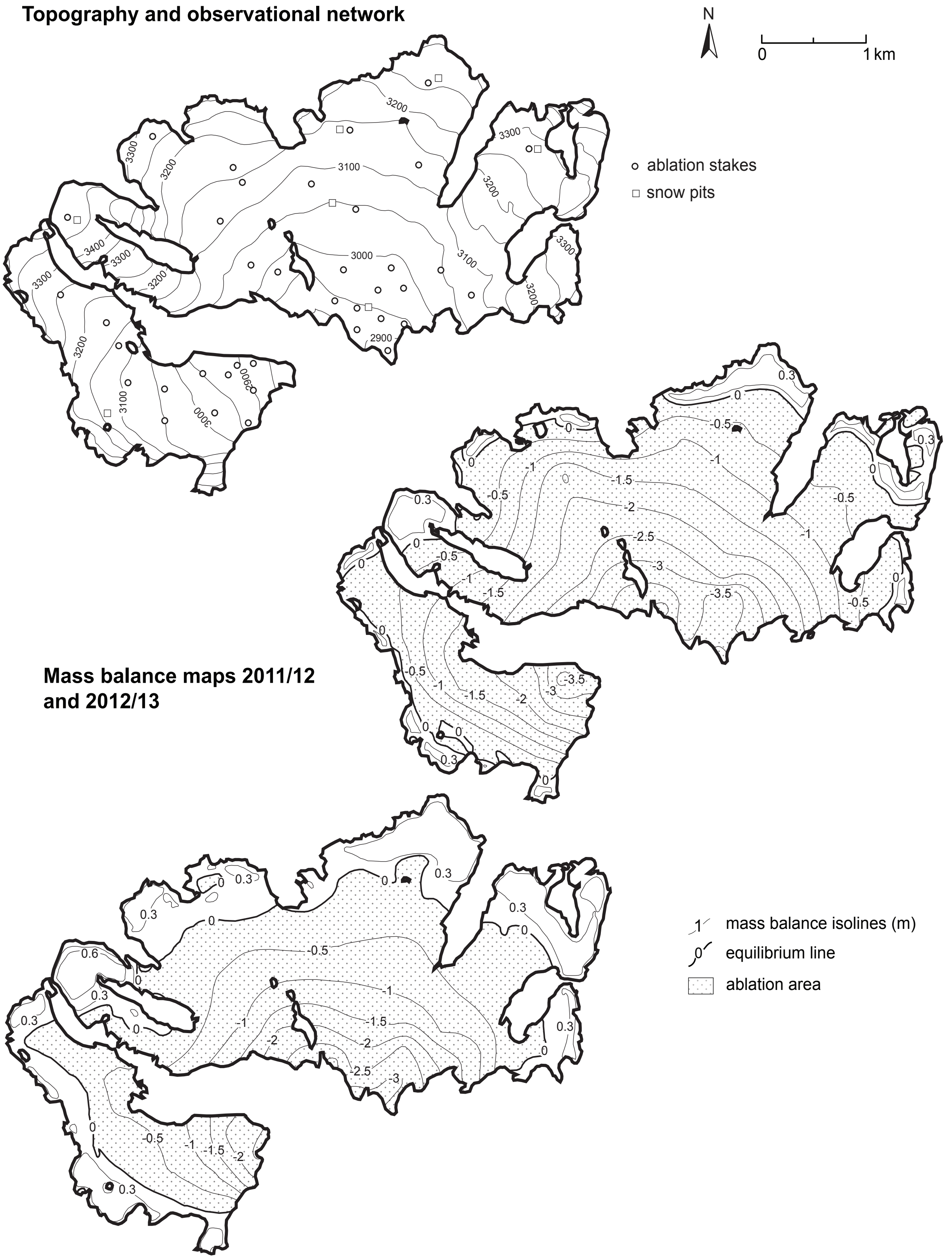
COORDINATES: 46.52° N / 10.49° E

Photo taken by J. Abermann, 9 September 2008. Vernagtferner Glacier: From the Glacier Photograph Collection. Boulder, Colorado USA: National Snow and Ice Data Center. Digital media.

The rather flat temperate plateau glacier is located in the southern part of the Ötztal Alps (Austria) near the main Alpine ridge. The present surface area of 7.9 km^2 (in 2010) is unevenly distributed between 2800 and 3600 m a.s.l., with a mean elevation of 3150 m a.s.l., and 70 % of the total area lying between 3000 and 3300 m a.s.l. The mean annual air temperature at the equilibrium line altitude (for balanced years at 3065 m a.s.l.) lies between –3.5 and –4.5 °C, based on records at the Vernagt gauging station at 2640 m a.s.l. and the Schwarzkögele climate station at 3050 m a.s.l. The mean annual precipitation for the Vernagt drainage basin (11.4 km^2) amounts to 1550 mm, 60 % of which are, on average, deposited during the accumulation season. The glacier has been volumetrically monitored since 1889, direct glaciological measurements related to the fixed-date system have been conducted since 1965, and discharge measurements date back to 1974. Detailed glacier mass balance data are available on the homepage of the Commission for Glaciology (www.glaziologie.de), additionally there are topographic maps at the 1:10,000 scale based on photogrammetric surveys for 1889, 1969, 1979, 1982, 1990, 1999 and 2006.

The year 2011/12 brought a strongly negative mass balance (-1155 mm w.e. a^{-1}). The year 2012/13 showed a less strong mass loss (-425 mm w.e. a^{-1}). A comprehensive summary of glaciological monitoring and research at Vernagtferner was published as a thematic special issue of the Zeitschrift für Gletscherkunde and Glazialgeologie (Braun and Escher-Vetter, 2013).

Figure 4.4.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.



Vernagtferner (AUSTRIA)

Figure 4.4.2 Mass balance versus altitude (2011/12 and 2012/13).

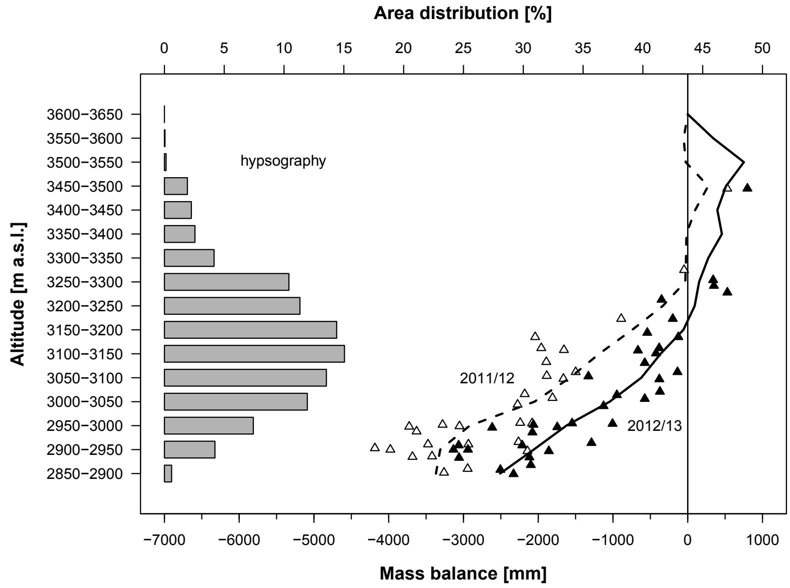


Figure 4.4.3 Glaciological balance versus geodetic balance for the whole observation period.

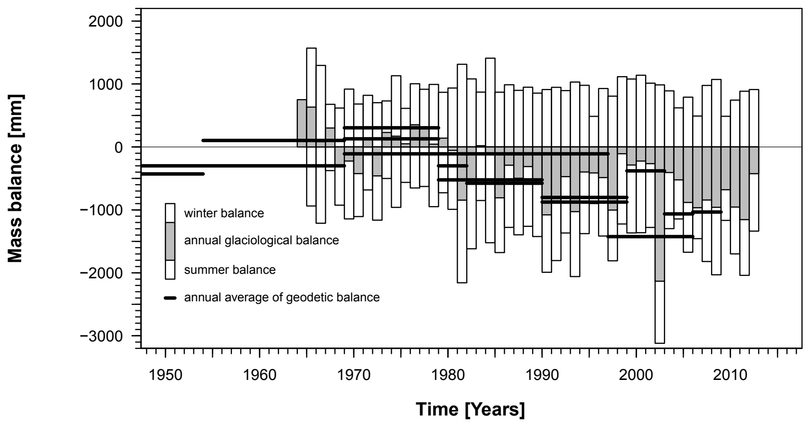
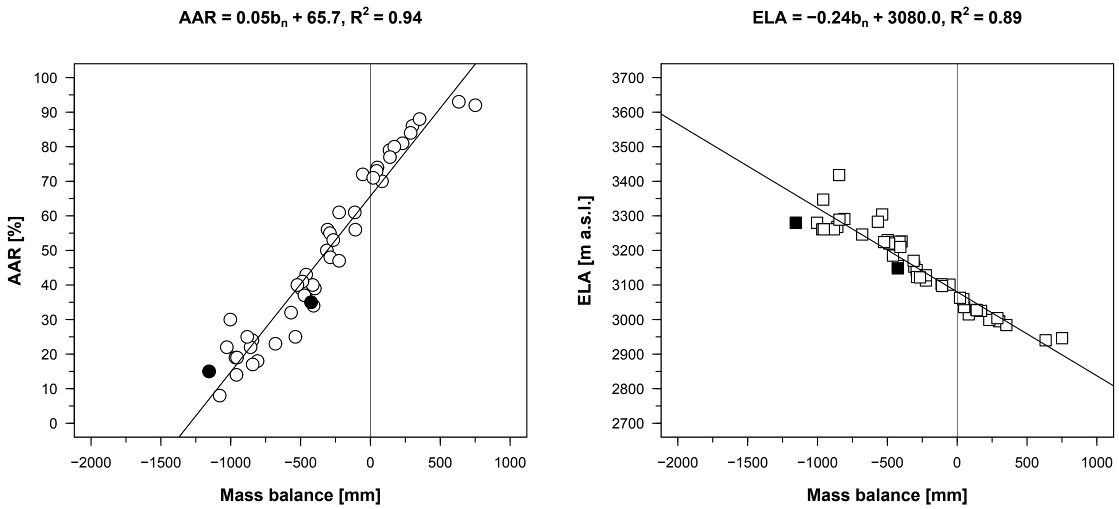


Figure 4.4.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



4.5 ZONGO (BOLIVIA/TROPICAL ANDES)

COORDINATES: 16.25° S / 68.17° W

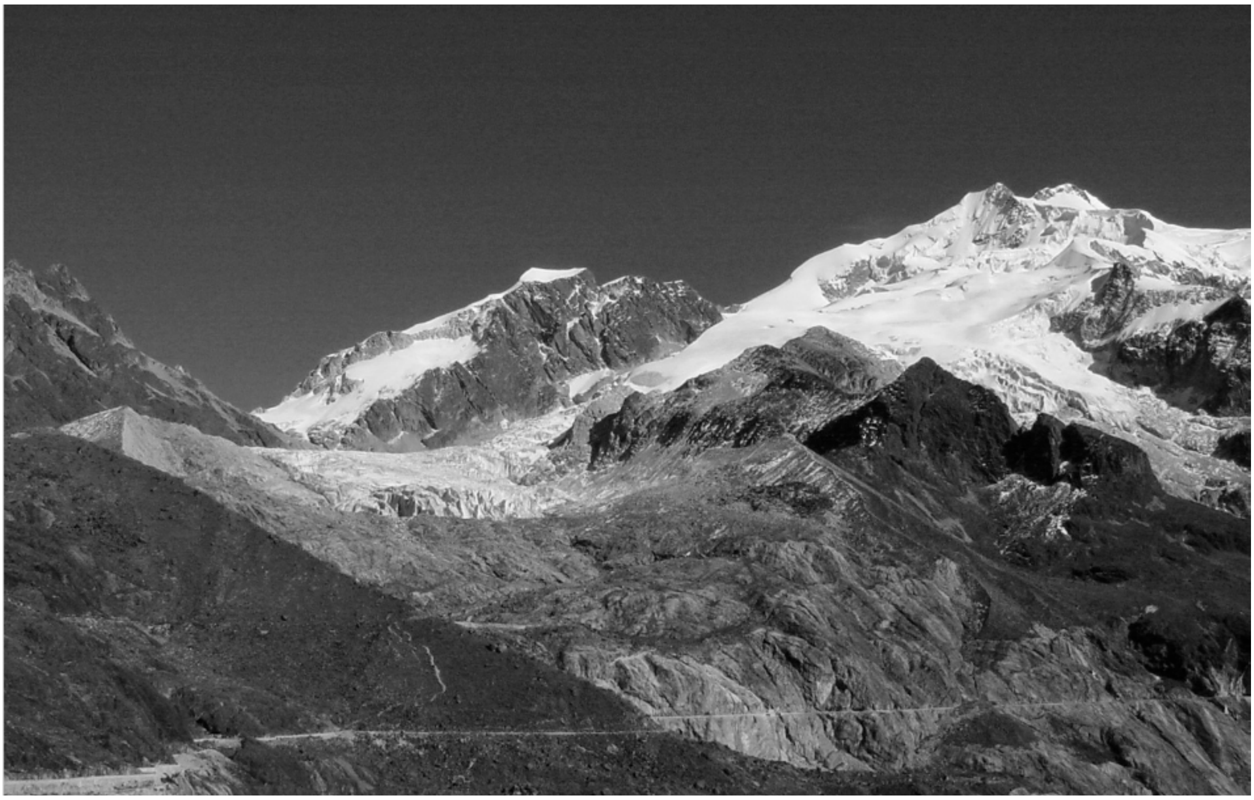


Photo provided by A. Soruco, 4 July 2014.

The Zongo Glacier is a temperate glacier covering an area of 1.893 km^2 (in 2013) over a catchment area of 3.3 km^2. Its length is around 3km and its width around 0.75 km, flowing from 6100 to 4900 m a.s.l., the average ice flow velocity is 15 m a^{-1} between 5200 and 4900 m a.s.l. Zongo glacier is located in the Huayna Potosi region (Cordillera Real – Bolivia, 16°S – 68°W), 30 km north of La Paz city. This area is characterized by outer tropics meteorological conditions (strong seasonality in precipitation, low seasonality in temperature). Zongo glacier is located between the dry Altiplano plateau in the northwest and the wet Amazonian basin in the southeast.

The mass balance in 2011/12 was negative with -823 mm w.e. a^{-1}, an ELA at 5365 m a.s.l. and an AAR of 59%. The 2012/13 period was characterized by a positive mass balance of 58 mm w.e. a^{-1} with an ELA at 5331 m a.s.l. and an AAR of 68%. In this latter year, melting processes take place mainly during January and March concomitant with the austral summer (highest rates in temperature and precipitation). The MEI index (Multivariate ENSO Index) for 2012–2013 cycle show a transition from negative conditions (La Niña) to positive conditions (El Niño). However, the MEI variation was close to one standard deviation.

Glaciological and geodetic measurements of Zongo and other tropical glaciers were recently analyzed by Rabatel et al. (2013).

Figure 4.5.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.

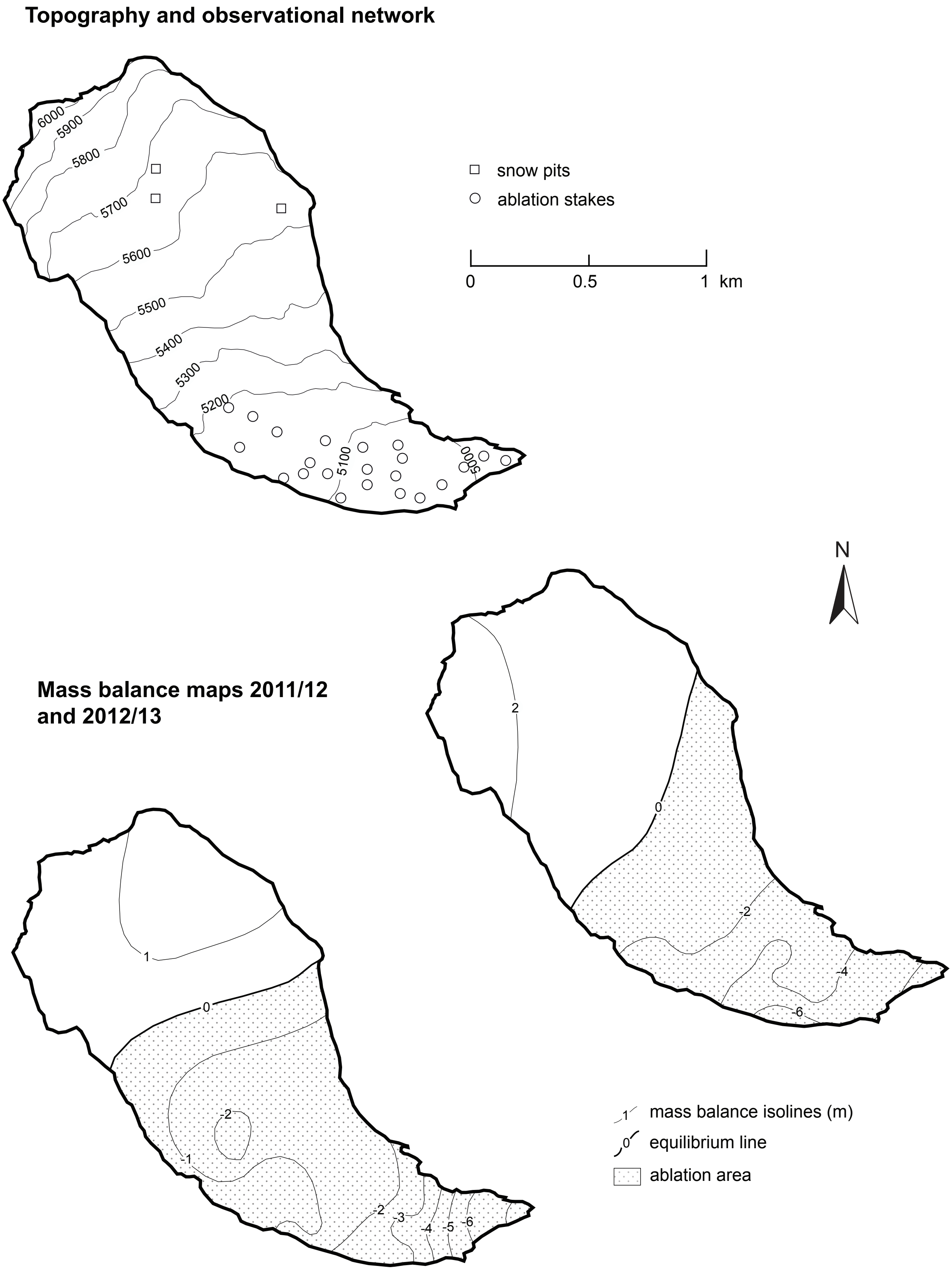


Figure 4.5.2 Mass balance versus altitude (2011/12 and 2012/13).

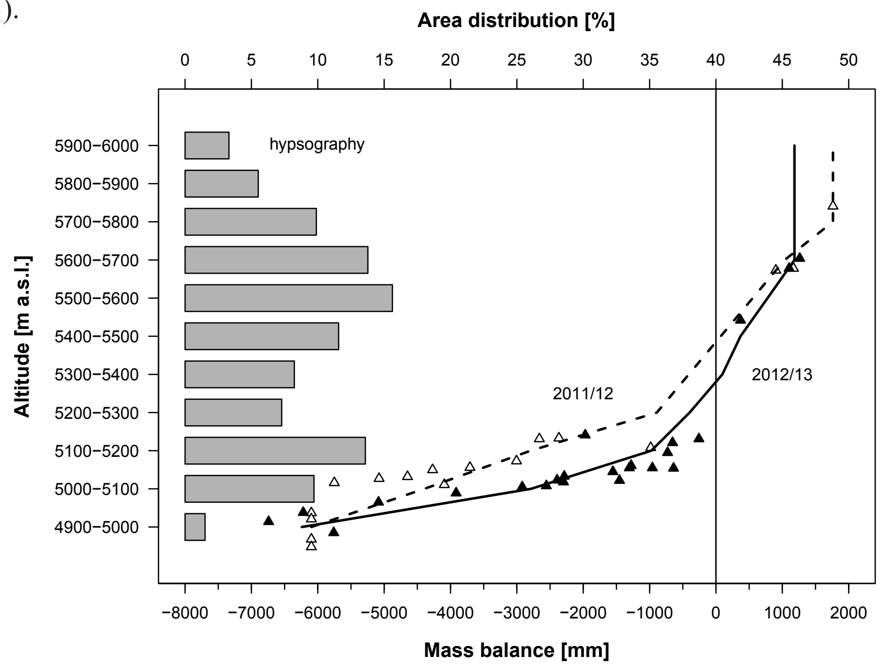


Figure 4.5.3 Glaciological balance versus geodetic balance for the whole observation period.

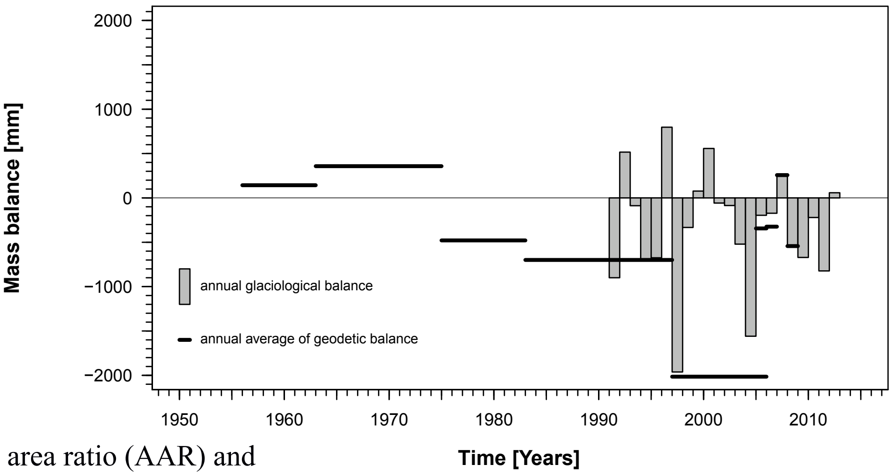
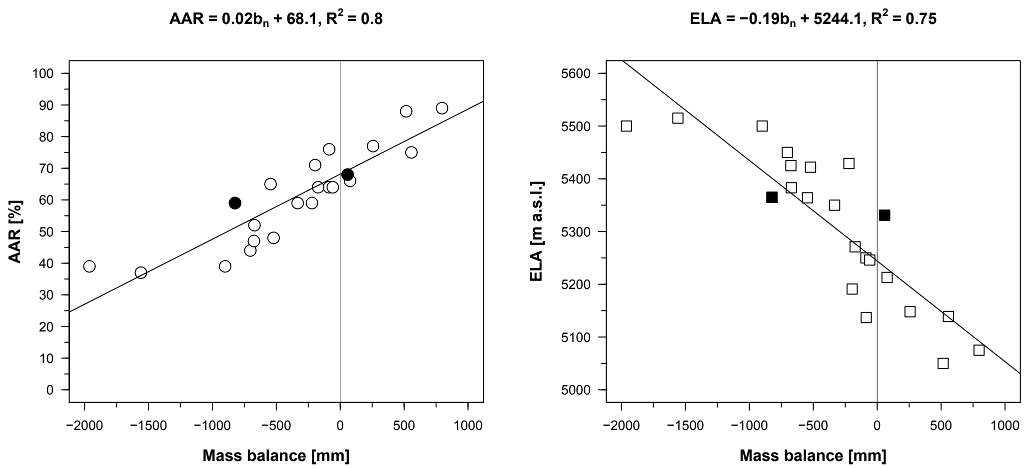


Figure 4.5.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Zongo (BOLIVIA)

4.6 FINDELEN (SWITZERLAND/ALPS)

COORDINATES: 46.00° N / 7.87° E

Photo taken by the webcam University of Fribourg, 26 August 2010.

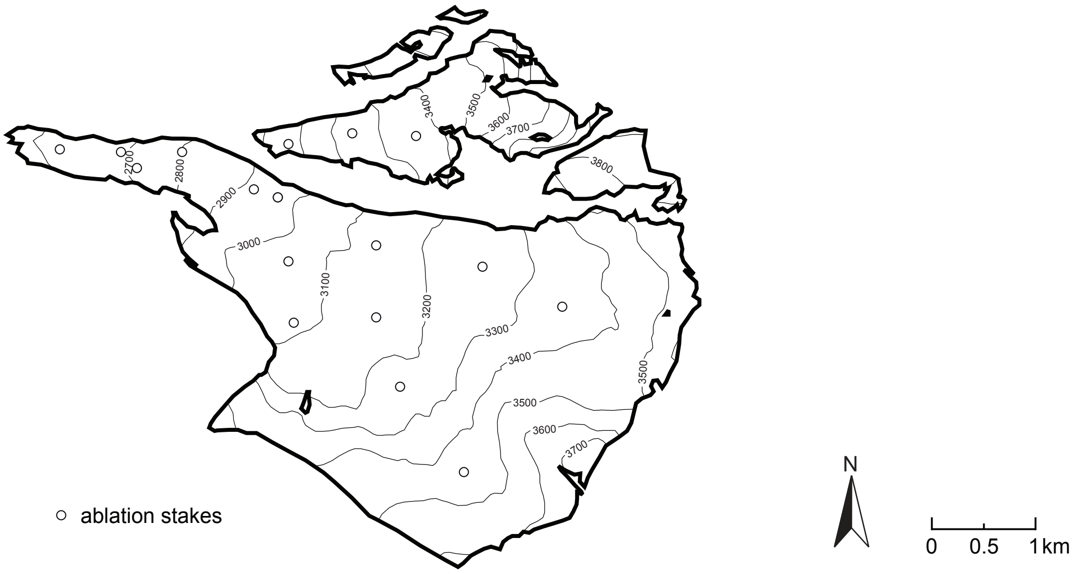
Mass balance observations on Findelengletscher were started in 2004. At that time, the main objective in conducting the measurements was the generation of reference data for the validation and calibration of a mass balance model, rather than for the purpose of a long-term mass balance programme. In 2009, the Universities of Fribourg and of Zurich decided to jointly start a long-term mass balance monitoring programme on Findelengletscher (and the nearby Adlergletscher), because of its ideal setting. Findelengletscher is a relatively large (about 13 km^2) temperate valley glacier in Switzerland, which is easily accessible and has an almost debris-free surface.

Since 2009, summer and winter mass balance have been measured each year using state-of-the-art in-situ methods. In addition, high-resolution digital elevation models are available for the years 2005, 2009, 2010 and 2012. Moreover, a number of other studies are underway related to glacier monitoring, such as an improved representation of winter snow accumulation distribution by means of helicopter-borne ground penetrating radar and the remote determination of firn layer thickness. Recently, the glaciological mass balance series was homogenized and validated with the results from geodetic surveys (Sold et al. subm.).

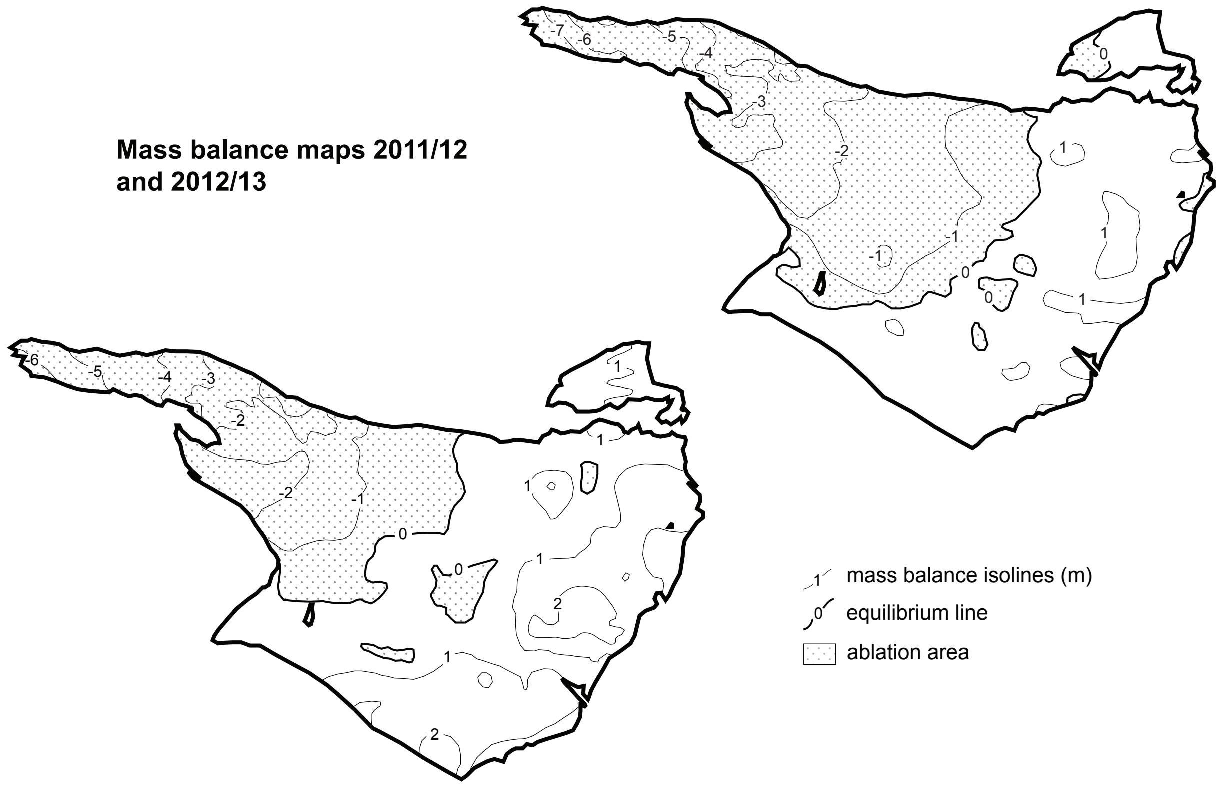
In 2011/12, glacier mass balance was negative at -673 mm w.e. a^{-1} with an ELA at 3325 m a.s.l. and an AAR of 51%. In 2012/13, the glacier had a nearly zero balance with an ELA at 3225 m a.s.l. and a corresponding AAR of 65%.

Figure 4.6.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.

Topography and observational network



Mass balance maps 2011/12 and 2012/13



Findelen (SWITZERLAND)

Figure 4.6.2 Mass balance versus altitude (2011/12 and 2012/13).

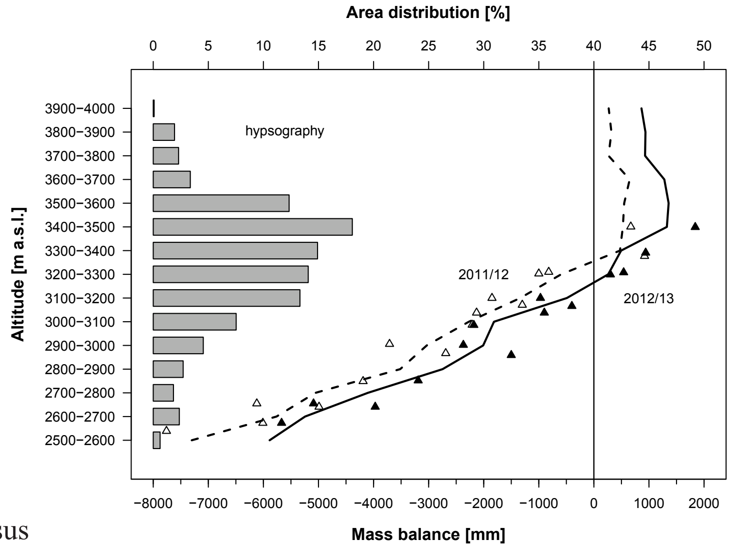


Figure 4.6.3 Glaciological balance versus geodetic balance for the whole observation period.

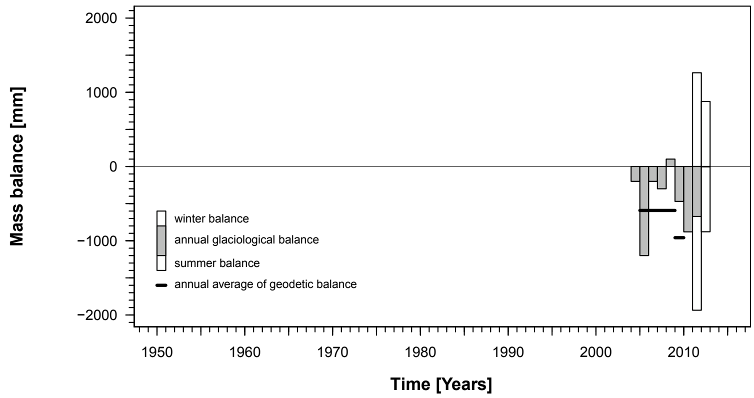
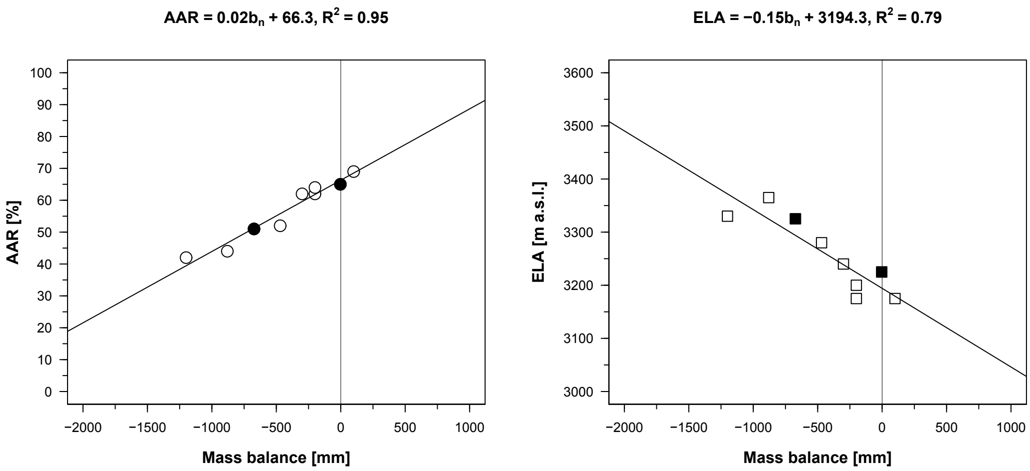


Figure 4.6.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Findelen (SWITZERLAND)

4.7 PARLUNG NO. 94 (CHINA/SOUTHEAST TIBETAN PLATEAU)

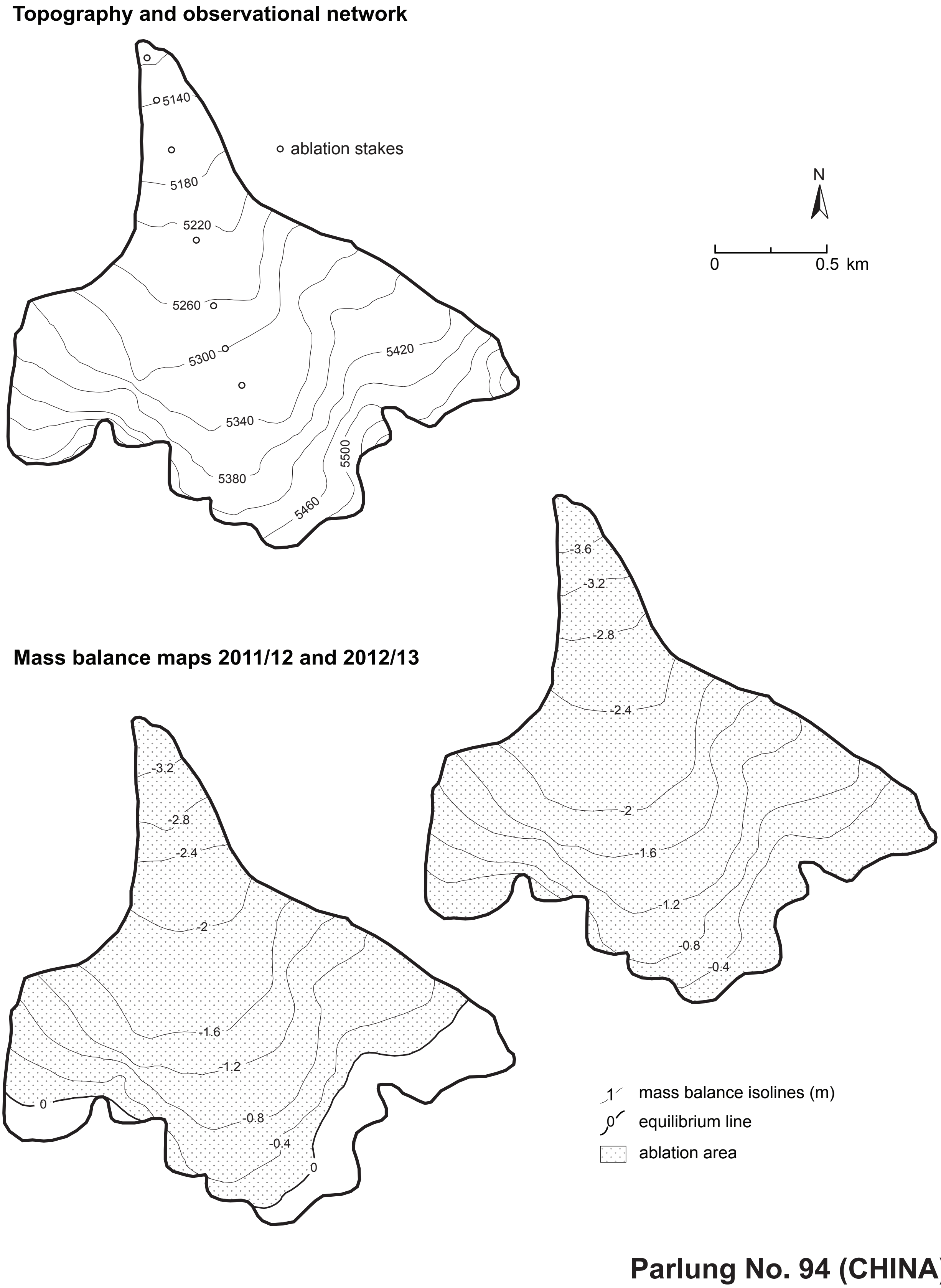
COORDINATES: 29.23° N / 96.59° E

Photo taken by Li S. H., in July 2011.

Parlung No.94 Glacier is located within the headwaters of the Parlung Zangbo River, a tributary of the Brahmaputra River in southeastern Tibetan Plateau. It is a typical valley glacier with an area of 2.4 km^2 and an axis length of nearly 2.9 km. It flows northwestward from an elevation of 5635 to 5075 m a.s.l. at its front position. Mean annual air temperature is about -2 to -1 °C and annual precipitation is generally 196 to 381 mm based on the past four years AWS (Automatic Weather Station) and rainfall observation. The AWS is 8.6 km away from the centre of the glacier at an altitude of 4600 m a.s.l. Glaciers in this region have the largest glacier mass loss over the Tibetian Plateau. According to the latest research, the maritime glaciers here were more vulnerable to ongoing climate warming than to potential changes in the amount of precipitation and the recent glacier shrinkage in this region was related to the increasing air temperature. Both the mass balance observations and simulations reveal that these glaciers are the "spring accumulation" type.

The mass balance has been measured with the glaciological method since 2005/2006. The cumulative mass balance of Parlung No.94 from 2005/06 to 2012/13 was -7462 mm w.e. Mean annual ELA was 5407 m a.s.l. The mass balance in 2011/12 was negative (-1478 mm w.e. a^{-1}) with an ELA exceeding the top of the glacier. In 2012/13, the mass balance was negative (-1049 mm w.e. a^{-1}) with an ELA of 5457 m a.s.l. and AAR of 14%.

Figure 4.7.1 Topography and observation network and mass balance maps 2011/12 and 2012/13.



Parlung No. 94 (CHINA)

Figure 4.7.2 Mass balance versus altitude (2011/12 and 2012/13).

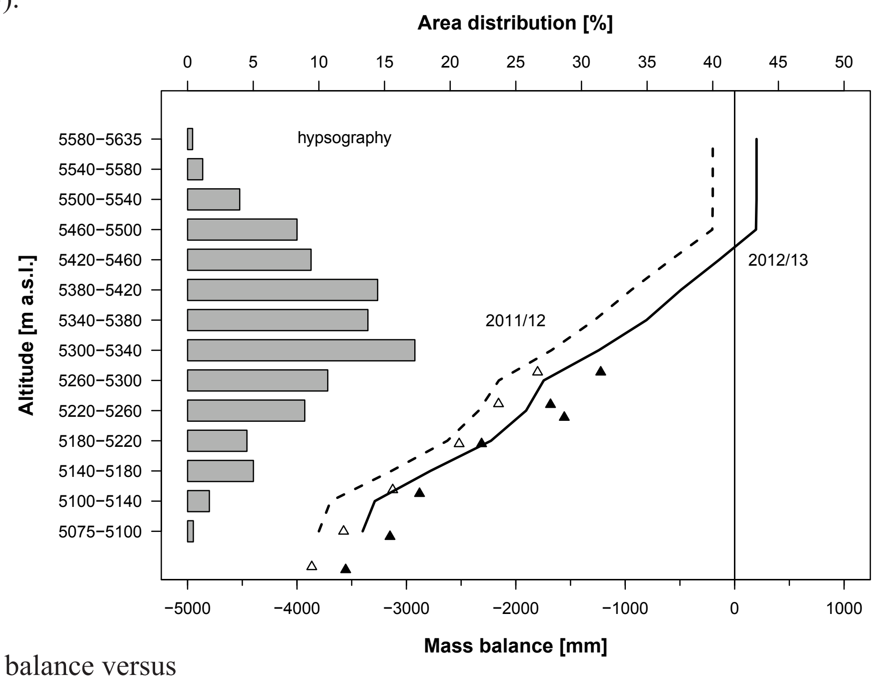


Figure 4.7.3 Glaciological balance versus geodetic balance for the whole observation period.

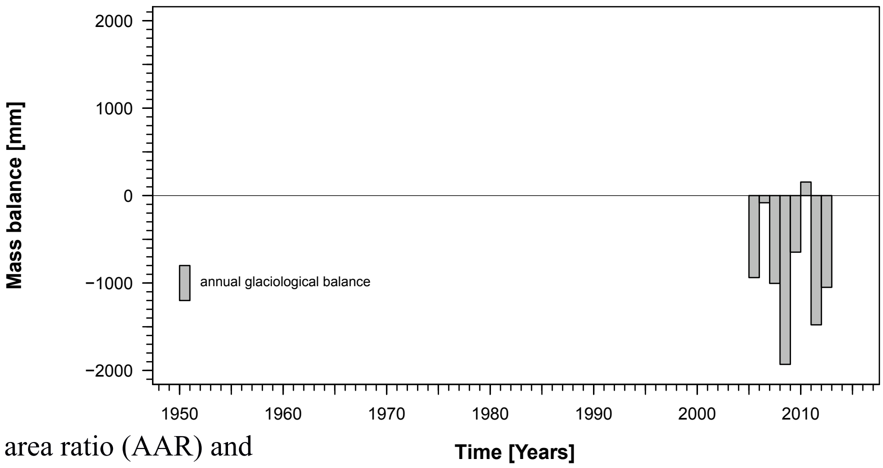
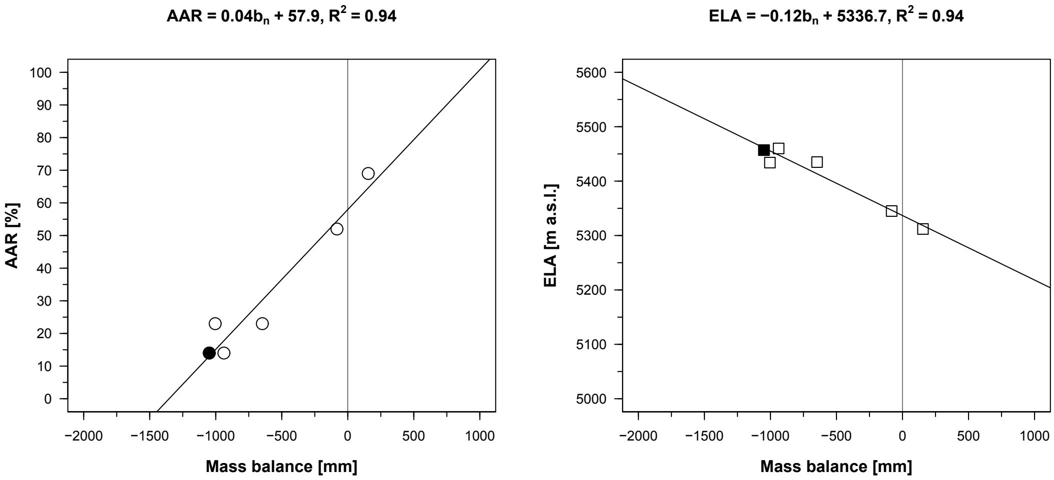


Figure 4.7.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Parlung No. 94 (CHINA)

4.8 CONEJERAS (COLOMBIA/CORDILLERA CENTRAL)

COORDINATES: 4.82° N / 75.37° W

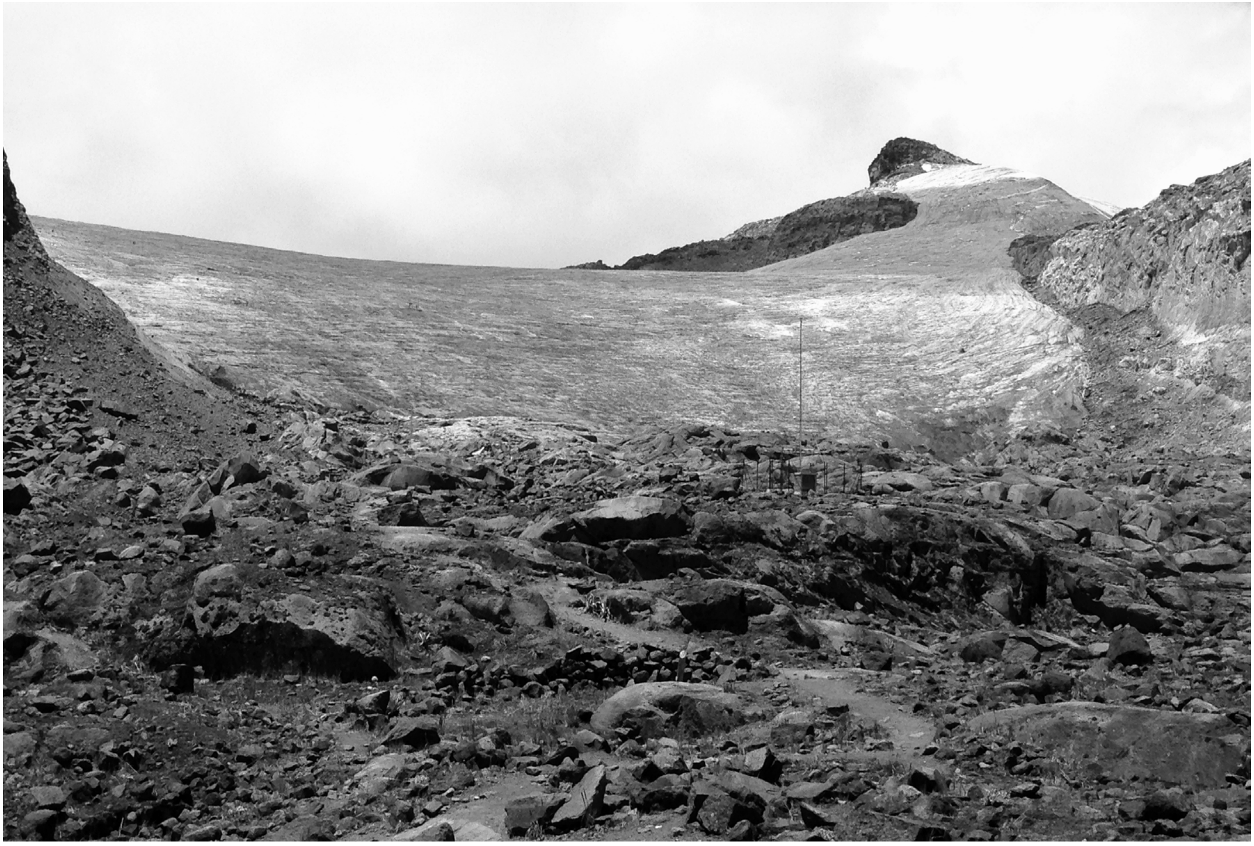


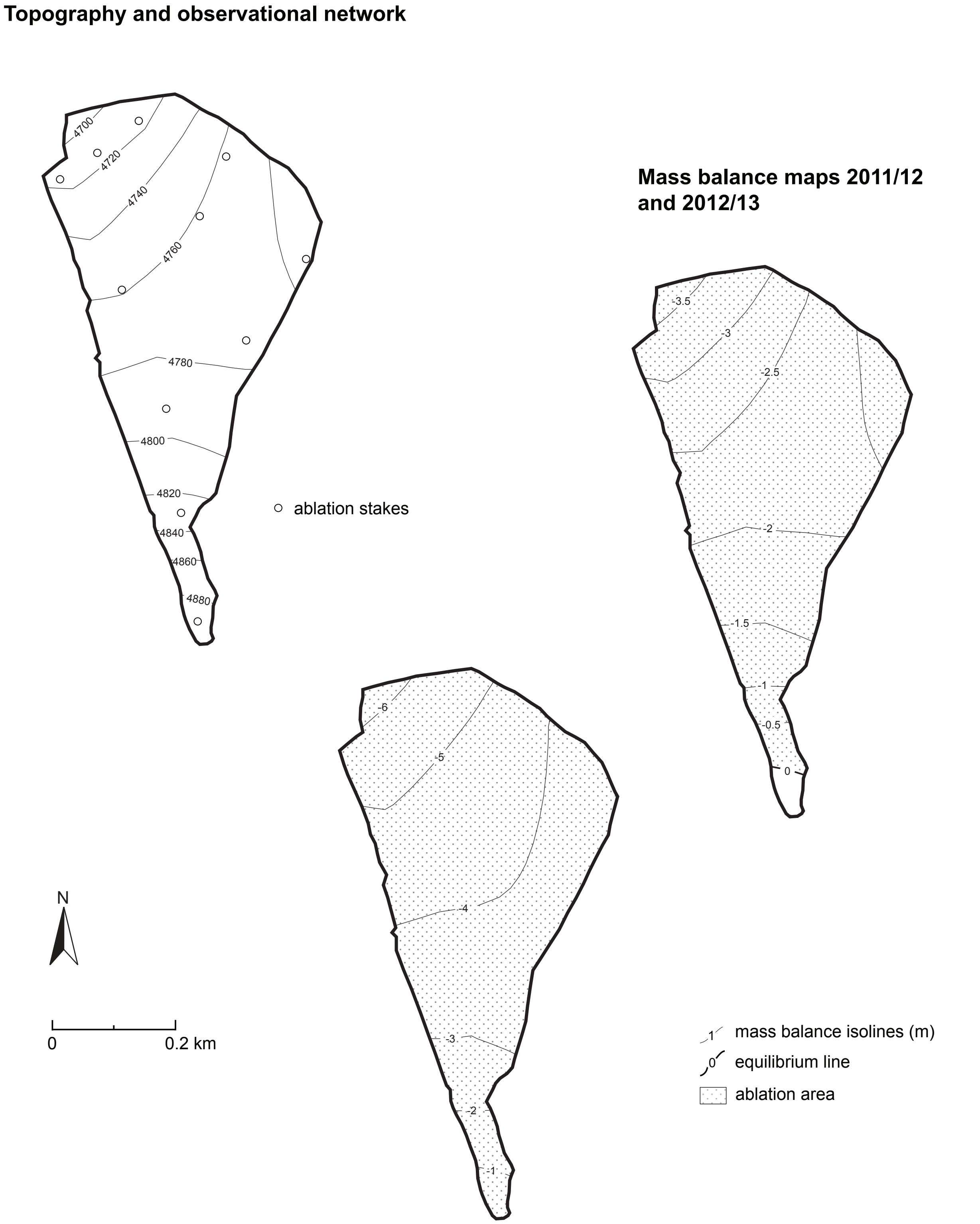
Photo taken by J.L. Ceballos on 13 April 2014.

Conejeras Glacier is a small glacier (1.8 km², 2010) and part of the ice cap on top of Santa Isabel volcano in the northern Andes. Along with the glacierized volcanos Nevado del Ruiz and Nevado del Tolima, it is surrounded by the "Paramo" ecosystem and Andean forests. Conejeras (0.2 km²) which has a minimum elevation of 4700 m a.s.l and maximum of 4900 m a.s.l is located at Santa Isabel´s northwest side. Conejeras mass balance has been calculated monthly with the direct glaciological method since April 2006 (field measurements using 14 stakes distributed along the glacier every 50 m of altitude; three of them located at the lower glacier, could no longer be monitored due to glacier retreat). That mass balance calculation has been also supplemented by ten meteorological and hydrological stations, extending downvalley to 2700 m a.s.l to support research on high mountain systems.

Since 2006, Conejeras Glacier has shown a permanent negative mass balance (cumulative mass balance 2006 –2013: -18 m w.e). In 2012 the mass balance was -2149 mm w.e. a^{-1} and -3802 mm w.e. a^{-1} in 2013. The ELA was located at 4888 m. a.s.l (AAR = < 1 %) in 2012 and at 4907 m a.s.l. (AAR = < 1 %) in 2013.

The glacier reacts fast to atmospheric changes and its dynamics are strongly influenced by climatic variability generated by the Intertropical Convergence Zone (ITCZ) and the El Niño-Southern Oscillation (ENSO). Weather patterns in these mountains (2010–2013) lead to an annual average precipitation of 1400 mm, relative humidity is 94 % on average and the mean temperature ranges between 0.5 ºC and +2 ºC. Recent calculation shows a maximum ice thickness of 52 m and 22 m on average. New monitoring techniques like geodetic survey using a terrestrial laser scanner have been implemented recently in order to compare these results to direct method calculations.

Figure 4.8.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Conejeras (COLOMBIA)

Figure 4.8.2 Mass balance versus altitude (2011/12 and 2012/13).

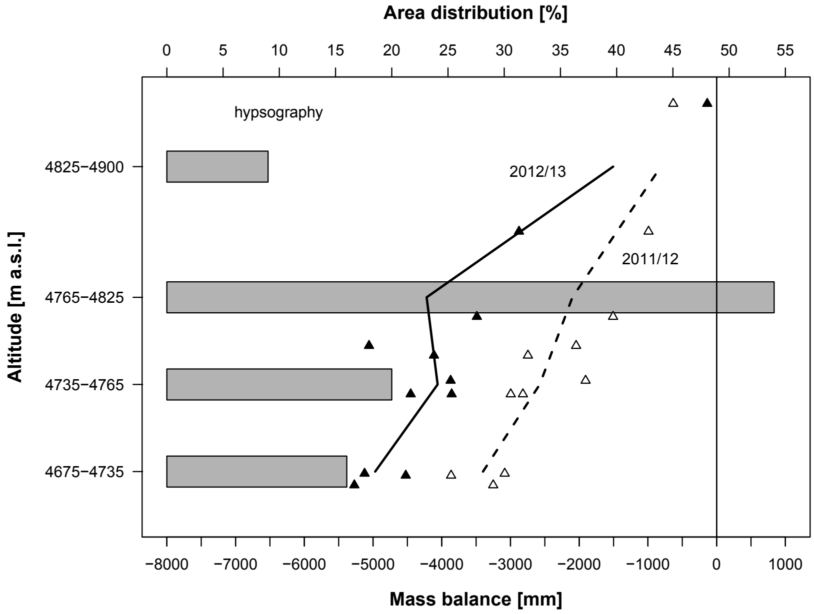


Figure 4.8.3 Glaciological balance versus geodetic balance for the whole observation period.

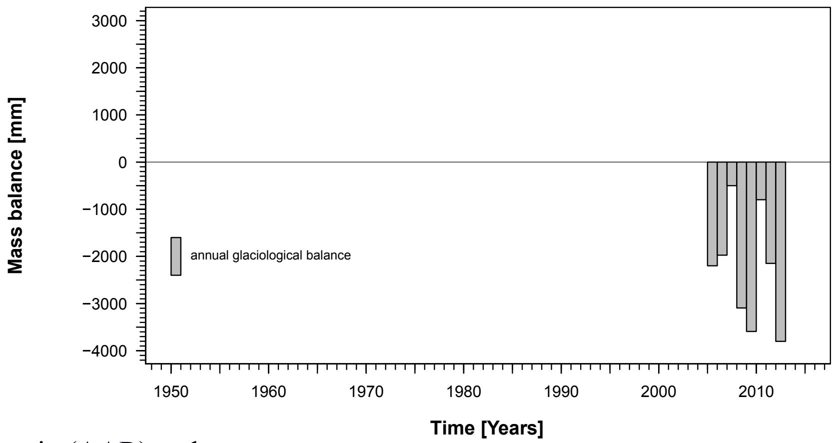
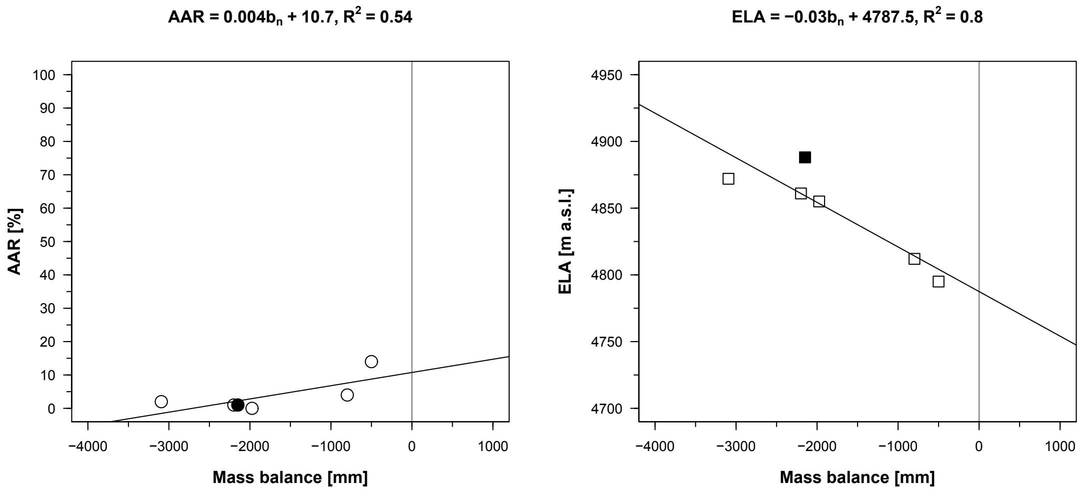


Figure 4.8.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Conejeras (COLOMBIA)

4.9 MALADETA (SPAIN/PYRENEES)

COORDINATES: 42.65° N / 0.63° E

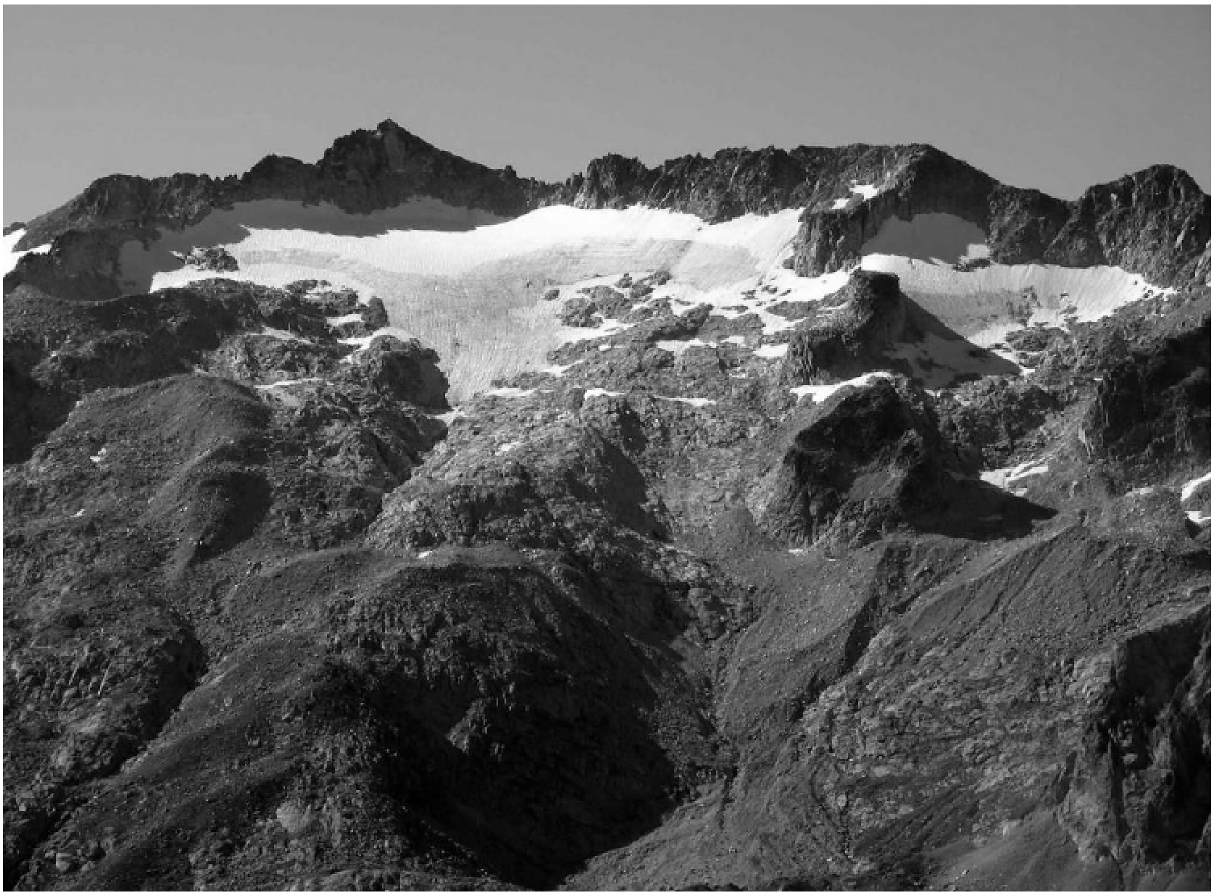


Photo taken by Pierre René, 23 September 2013.

Maladeta Glacier is located in Spain in the mountain massif with the highest peaks in the Pyrenees. In 1992 the glacier diminished to such an extent that the two branches (eastern and the smaller western) were no longer connected. Both branches are north-orientated, resting on the peak La Maladeta (3308 m a.s.l) slopes.

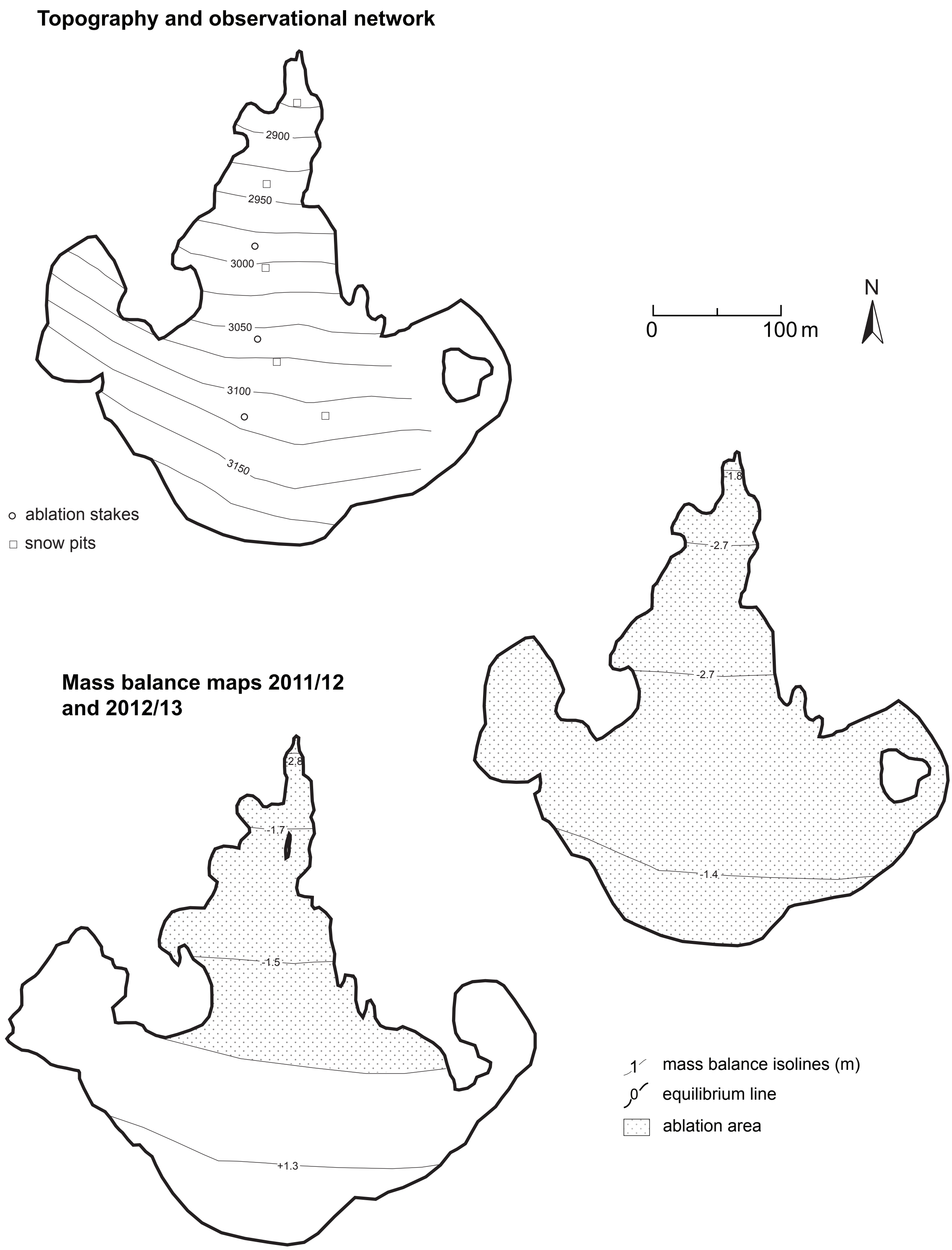
The mass balance of Maladeta was measured using the direct glaciological method following the first installation of ablation stakes in 1991 and then using the geodetic ground survey method after 2001. Maladeta Glacier lost more than 80% of its area from 1850 to 2013, shrinking from about 1.5 km^2 to 0.25 km^2 which is now the main branch (Maladeta East) . The Maladeta West's surface is estimated at only 0.05 km^2 (2012).

The lowest point of Maladeta East was 2790 m in 1994, and 2870 m in 2013. The elevation losses between these years exceed 34 m on the lowest parts of the East glacier branch and decrease to a mean of 16 m in the firn area. The glacier has retreated in length by 150 m since 1994.

Specific mass balance was -2471 mm w.e. a^{-1} in 2011/12 and +390 mm w.e. a^{-1} in 2012/13. While surpassing the highest limit of the glacier in 2011/12, the ELA was located at 3060 m a.s.l. with an AAR of 58% in 2012/13.

The methods and the results of the mass balance measurements are published regularly thanks to the glacier's inclusion in a Spanish government monitoring programme.

Figure 4.9.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Maladeta (SPAIN)

Figure 4.9.2 Mass balance versus altitude (2011/12 and 2012/13).

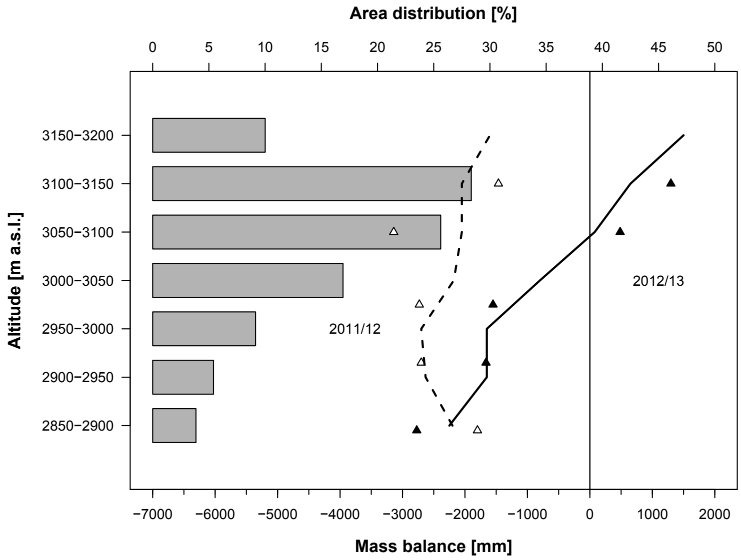


Figure 4.9.3 Glaciological balance versus geodetic balance for the whole observation period.

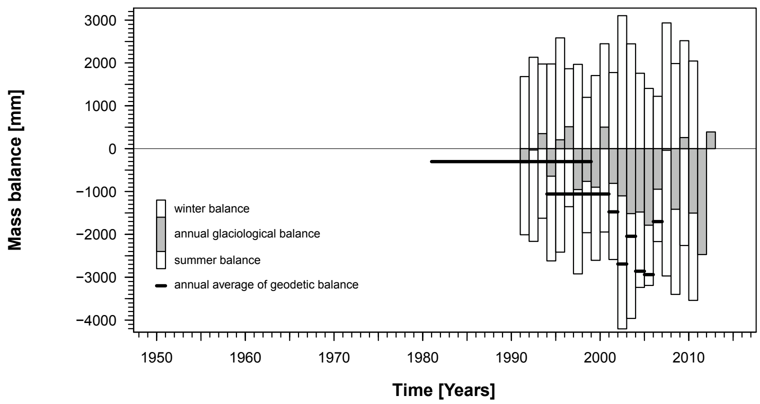
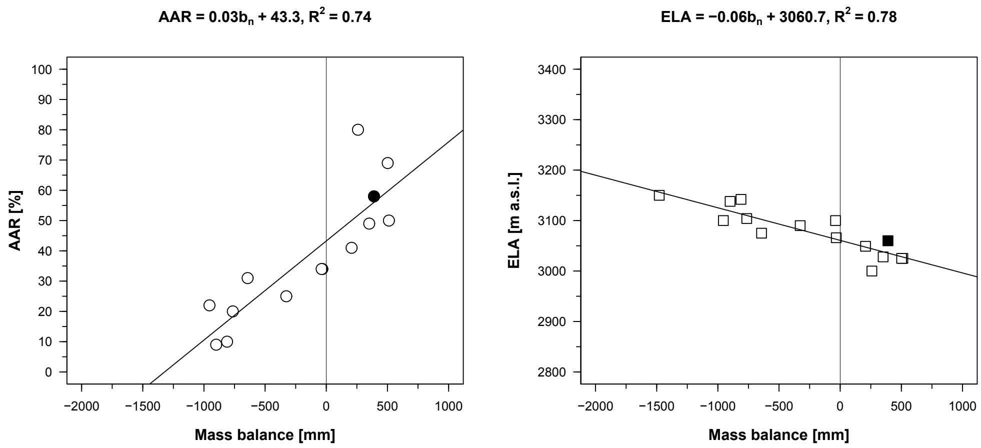


Figure 4.9.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Maladeta (SPAIN)

4.10 FREYA (GREENLAND/NORTHEAST GREENLAND)

COORDINATES: 74.39° N / 20.83° W

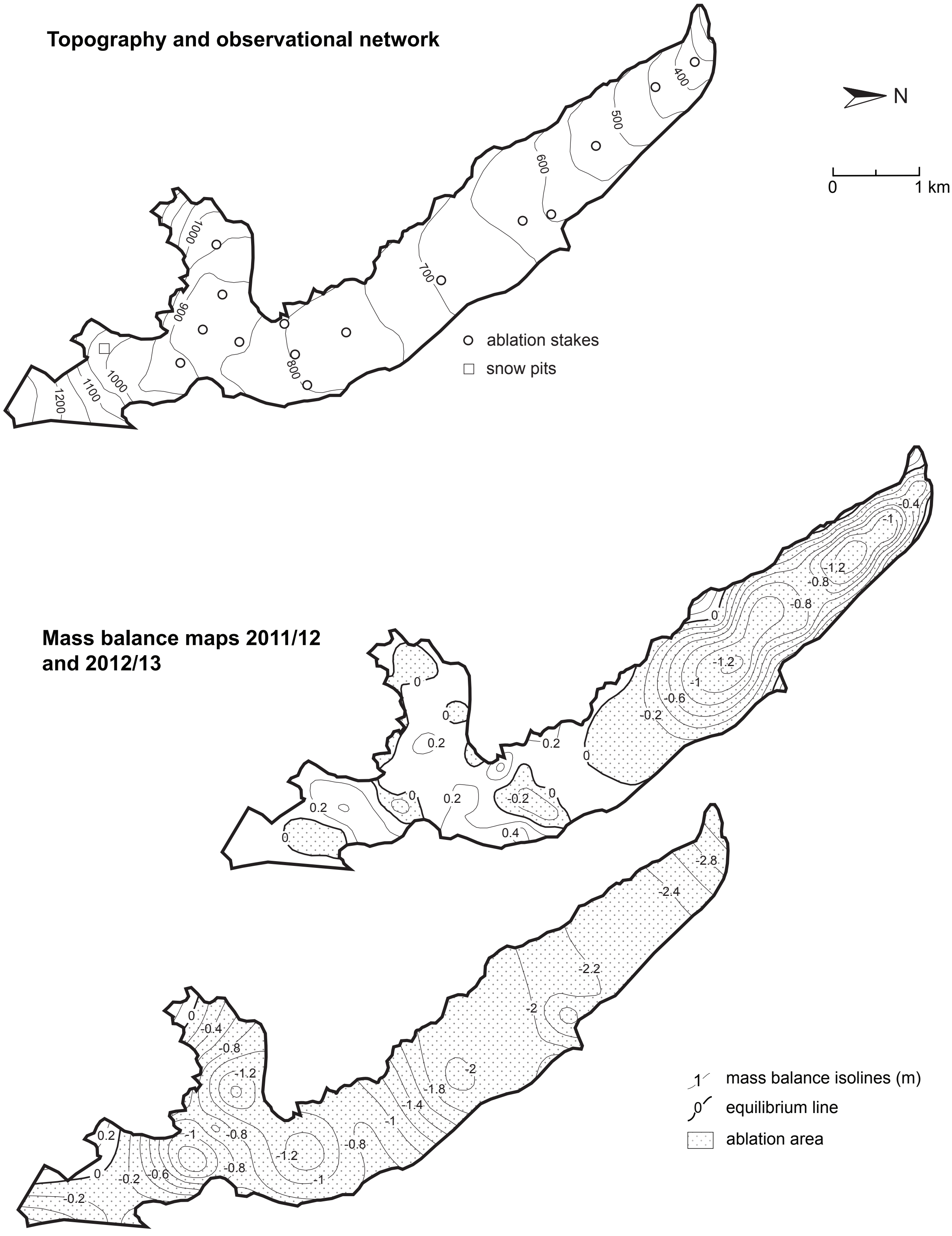
Photo taken by Bernhard Hynek, 12 August 2013.

Freya Glacier is a 6 km long, polythermal valley glacier situated on Clavering Island 10 km southeast of the Zackenberg research station at the northeastern coast of Greenland. Its surface area is 5.3 km² (2013), extending from 1305 m to 273 m a.s.l. and mainly oriented to the NW with two separate accumulation areas oriented NE and NW. The thickest ice found during a GPR survey in May 2008 is 200 m, located at the confluence of the two accumulation areas. Mean values (1996–2005) of annual temperture and precipitation at Zackenberg (38 m a.s.l.) are -9.2 °C and 230 mm.

A terrestrial photogrammetric survey of the whole glacier in August 2013 using structure from motion photogrammetry delivered a new high-resolution DEM of the glacier, an orthophoto and a new glacier outline (Hynek et al. 2014). All existing mass balance measurements have been re-evaluated using the topographic data of 2013.

In 2011/12 a very high winter mass balance of 916 mm w.e. (26.4.2012) was followed by the lowest annual mass balance of -197 mm w.e. a^{-1} (14.8.2012) within the six-year time series. In 2012/13 the situation was the reverse: A persistent snow drought over Northeast Greenland in winter 2012/2013 led to a minimum winter balance of 192 mm w.e. (5.5.2013) and to a very negative corresponding annual mass balance of -1394 mm w.e. a^{-1} (14.8.2013). The ELA in 2011/12 was at 750 m a.s.l., while in 2012/13 it was above the uppermost part of the glacier (>1300 m a.s.l.).

Figure 4.10.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Freya (GREENLAND)

Figure 4.10.2 Mass balance versus altitude (2011/12 and 2012/13).

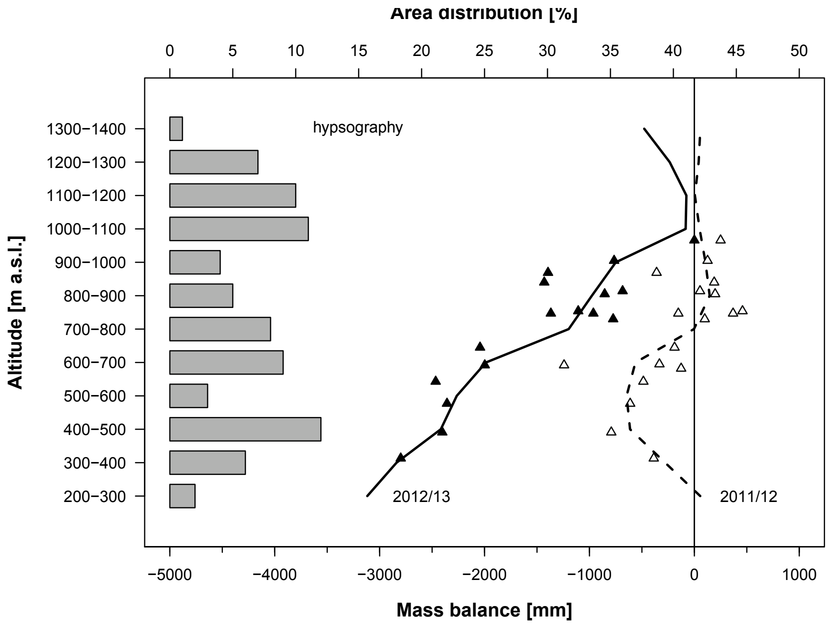


Figure 4.10.3 Glaciological balance versus geodetic balance for the whole observation period.

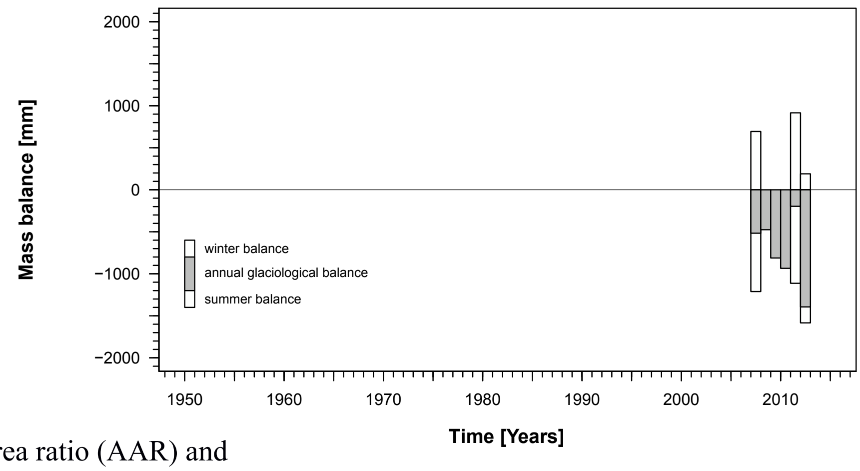
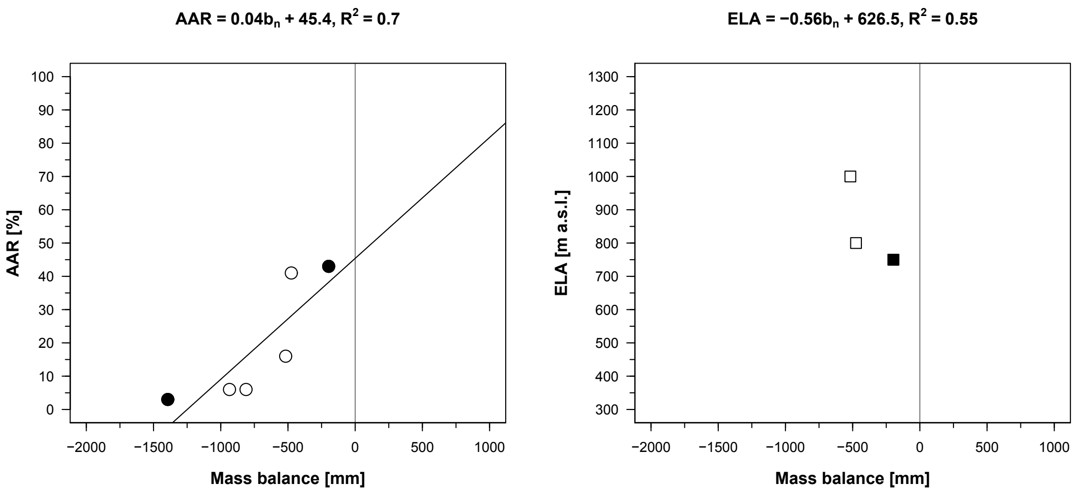


Figure 4.10.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Freya (GREENLAND)

4.11 CARESÈR (ITALY/ALPS)

COORDINATES: 46.45° N / 10.70° E

View of Caresèr glacier taken on 28 August 2012. Photo by L. Carturan.

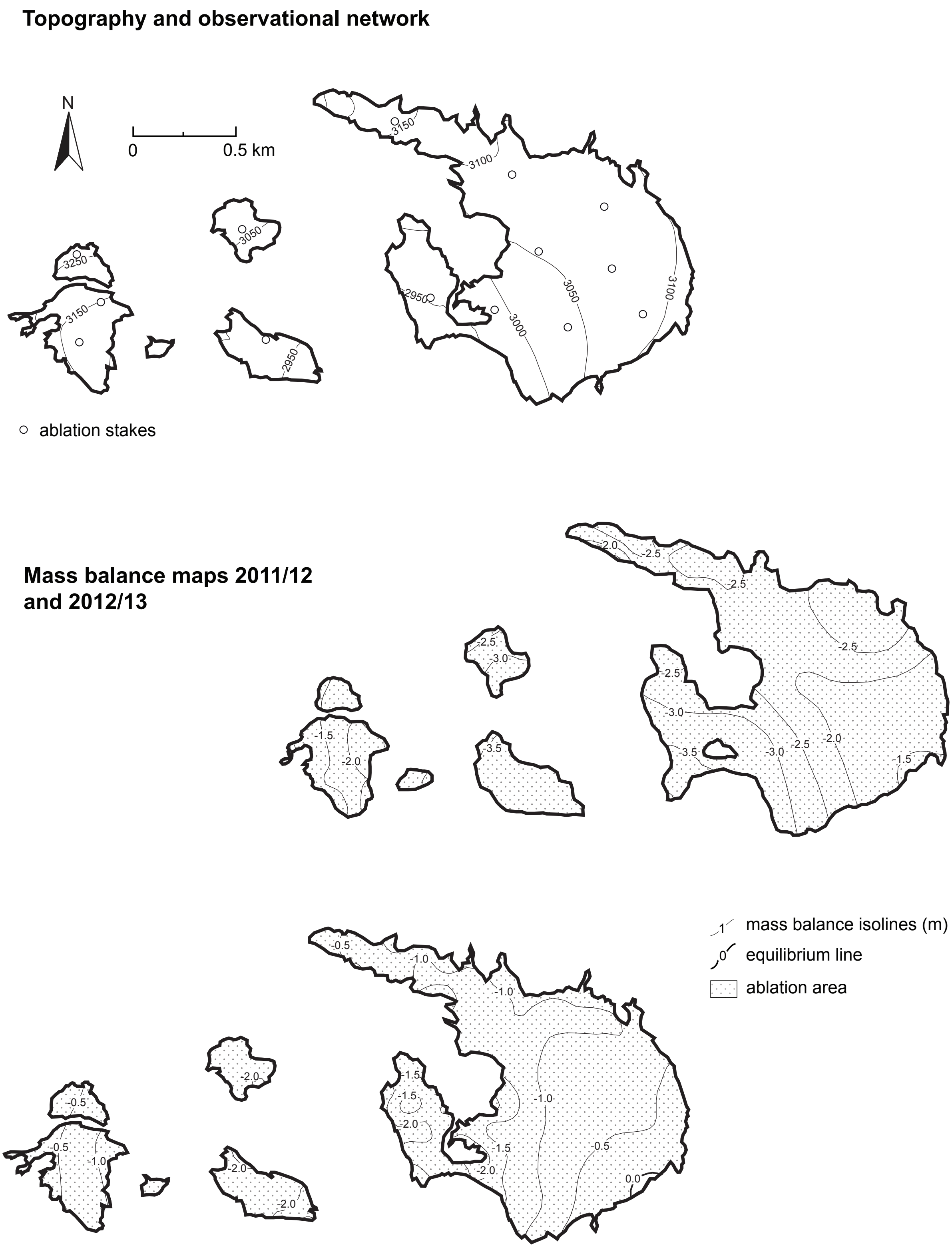
Caresèr Glacier is located in the Ortles-Cevedale group (Eastern European Alps, Italy). It occupies an area of 1.58 km^2 and its elevation ranges from 2900 to 3283 m a.s.l. The glacier is exposed mainly to the south and is rather flat. The 77% of the glacier area lies between 2900 and 3100 m a.s.l. and the median altitude is 3073 m a.s.l. The mean annual air temperature at this elevation is about -3 to -4°C and precipitation averages 1450 mm.

Direct mass balance investigations on Caresèr Glacier started in 1967 and until 1980 the mass balance was close to equilibrium. Imbalanced conditions and steadily negative mass balances followed, and in the last three decades the ELA was mostly above the maximum altitude of the glacier. The mean value of the annual mass balance was -1195 mm w.e. a^{-1} from 1981 to 2001, and decreased to -1862 mm w.e. a^{-1} from 2002 to 2013. Widespread bedrock emersion was observed in the last decade, which is causing the disintegration of the parent glacier.

In the hydrological year 2011/12 the mass balance of Caresèr glacier was -2460 mm w.e. a^{-1}, due to the additional effects of low winter accumulation (19% below the long-term mean) and high summer ablation. The high snow accumulation in the following winter (51% above the long-term mean) was not enough to counterbalance the ablation of summer 2013, and therefore the 2012/13 mass balance was once again negative (-1039 mm w.e. a^{-1}). In both years the ELA was above the highest glacier point.

A recent assessment of mass balance series of Caresèr and other glaciers in the Italian Alps is under review for The Cryosphere (Carturan et al., 2015).

Figure 4.11.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Caresèr (ITALY)

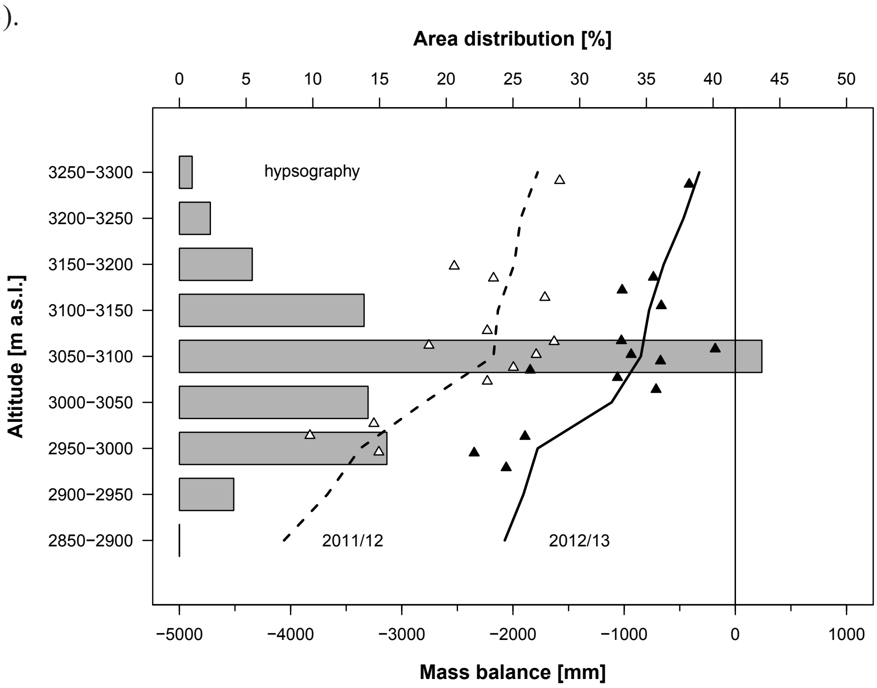


Figure 4.11.2 Mass balance versus altitude (2011/12 and 2012/13).

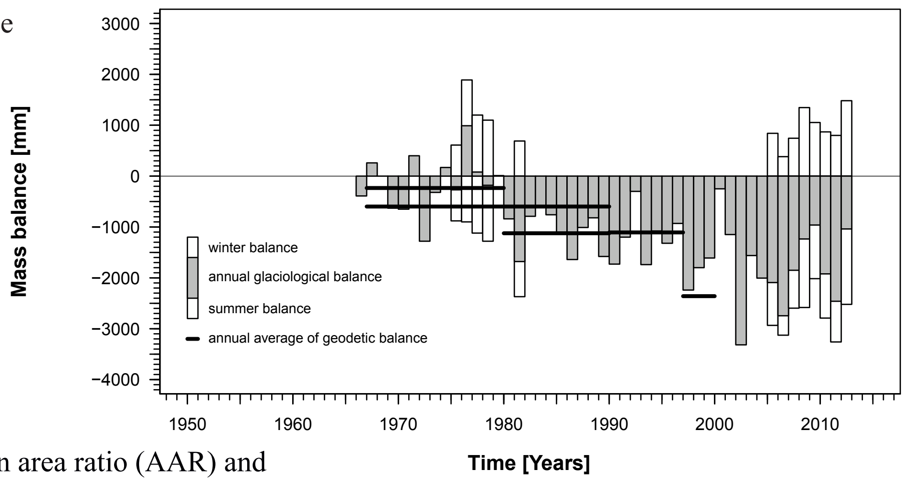


Figure 4.11.3 Glaciological balance versus geodetic balance for the whole observation period.

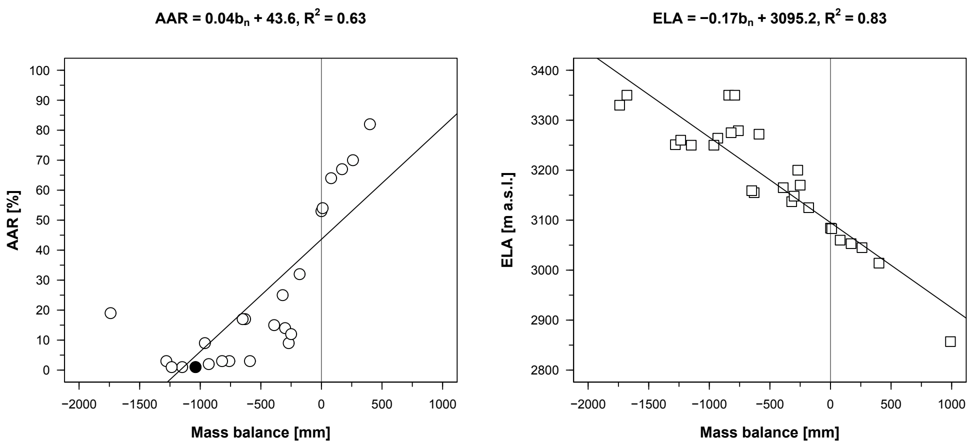
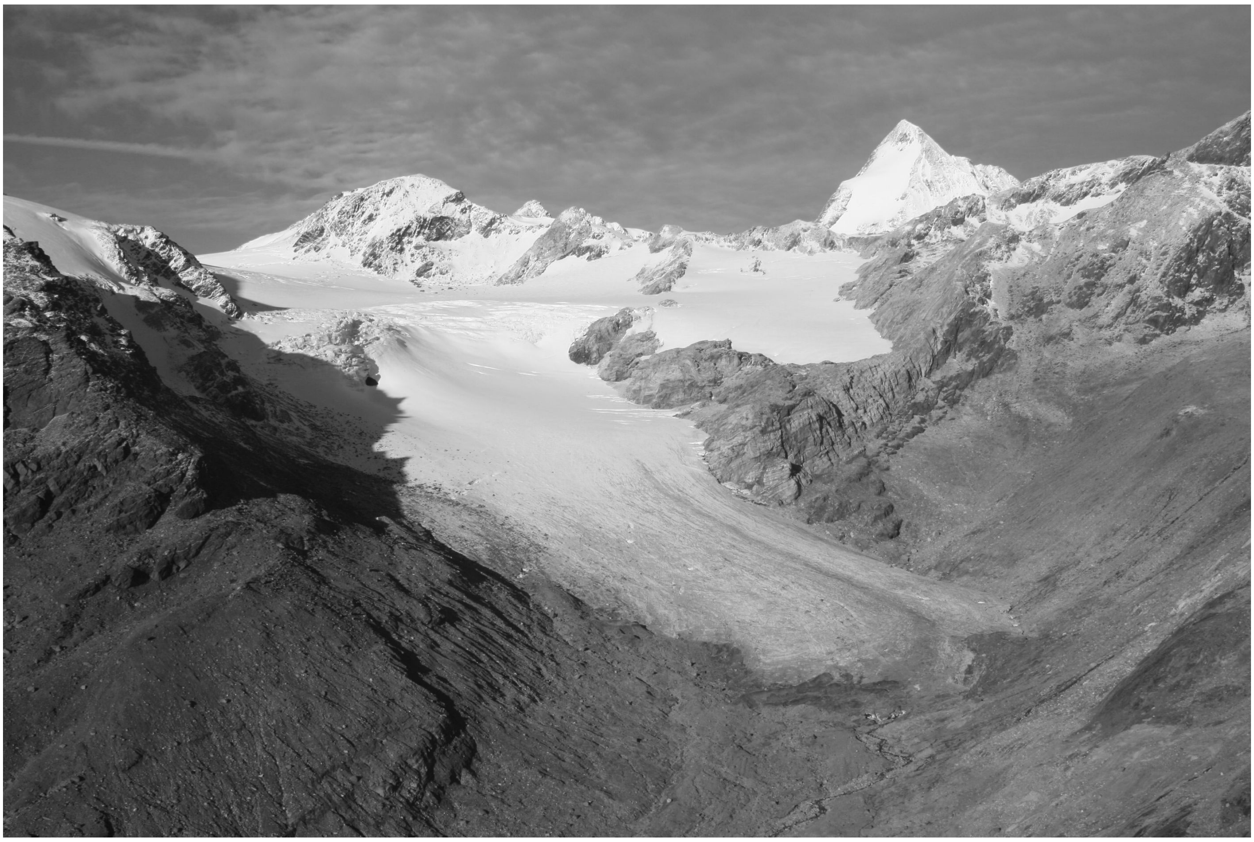


Figure 4.11.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.

Caresèr (ITALY)

4.12 LANGENFERNER (ITALY/ALPS)

COORDINATES: 46.47° N / 10.61° E



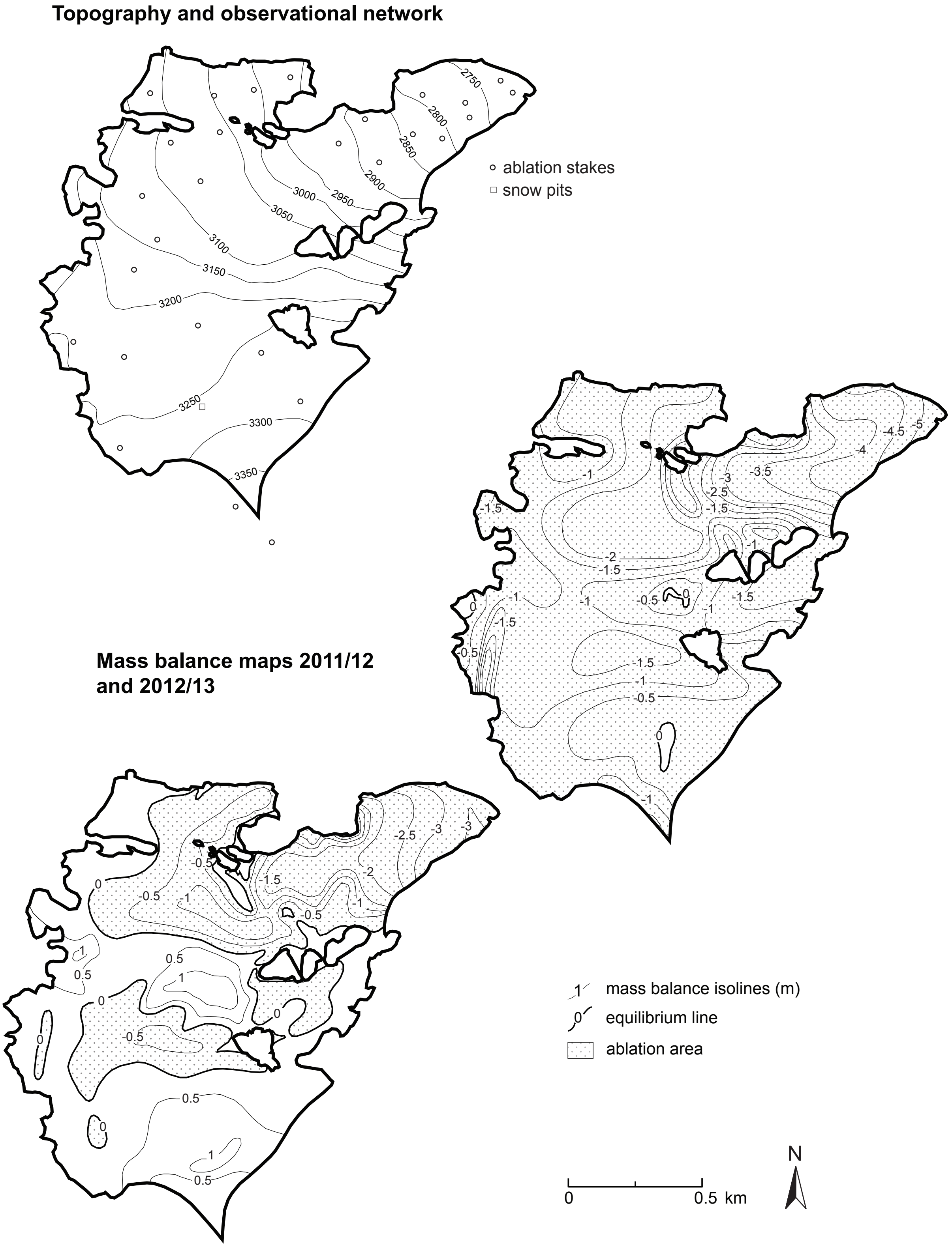
Aerial view of Langenferner on 8 October 2012, photo by S. P. Galos.

Langenferner (Vedretta Lunga) is a small valley glacier located in the Ortles-Cevedale Group, Northern Italy, descending from 3375 m down to about 2710 m in 2011, with a surface area of 1.65 km² in the same year. The upper glacier part has a predominantly northerly aspect, while the tongue of the glacier is facing east. Since the hydrological year 2003/04 the mass balance of Langenferner has been measured using the direct glaciological method. Measurements are commissioned by the Hydrological Office of the Autonomous Province Bozen/ South Tyrol and carried out by members of the Institute of Atmospheric and Cryospheric Sciences – University of Innsbruck. During the observation period (2004 to 2013) the annual mean air temperature at the Sulden-Madritsch station (located some 2.5 km north of the glacier at an altitude of 2825 m) was -2.2°C with the warmest month being July (+6.0°C) and the coldest being February (-10.5°C).

Since the start of the monitoring program three airborne laser-scanning campaigns were carried out in the years 2005, 2011 and 2013 which allow for a periodical adjustment of the glacier surface topography used in the balance analyses and also for a comparison between the glaciological and the geodetic method, yielding minor differences between the two approaches at Langenferner.

Significantly different meteorological summer conditions in the balance years 2011/12 (2012/13) resulted in annual balances of -1532 and -221 mm w.e. a^{-1} respectively. The latter being the least negative observed so far. Winter balance values of 995 (1255) mm w.e. were around (above) average in the two years. The ELA was located above the highest point of the glacier in 2011/12 (AAR = 0.01) and at 3085 m a.s.l. in 2012/13 (AAR = 0.53).

Figure 4.12.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Langenferner (ITALY)

Figure 4.12.2 Mass balance versus altitude (2011/12) and (2012/2013).

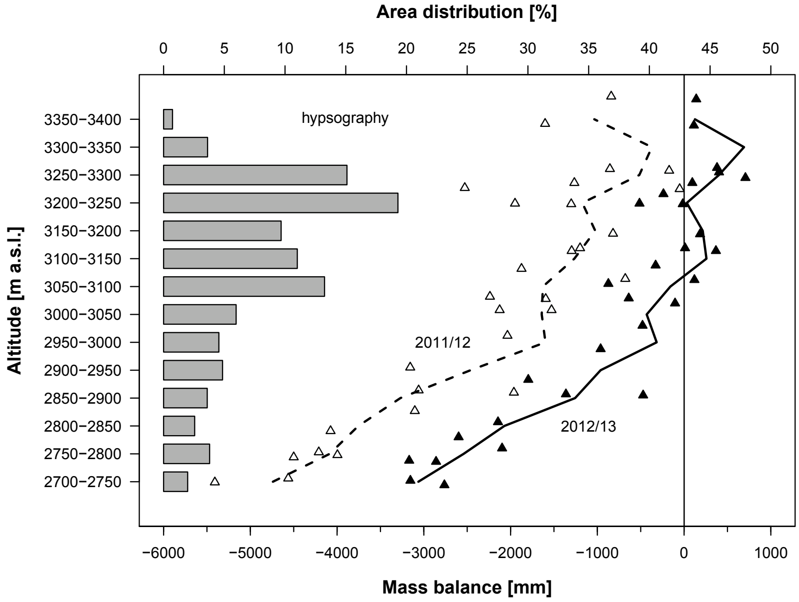


Figure 4.12.3 Glaciological balance versus geodetic balance for the whole observation period.

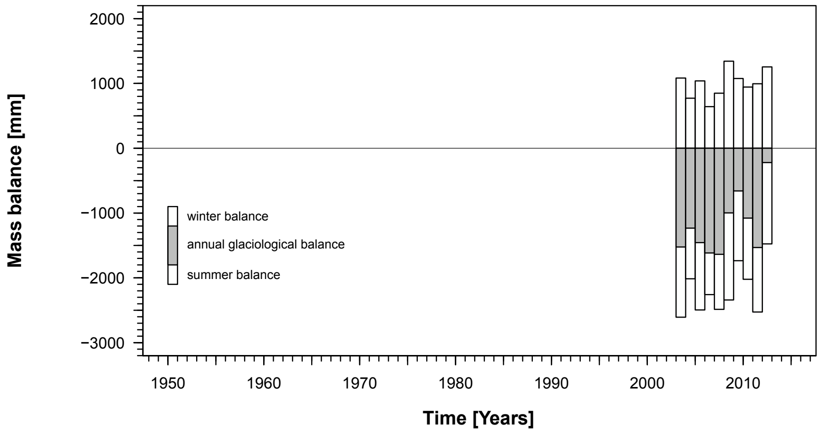
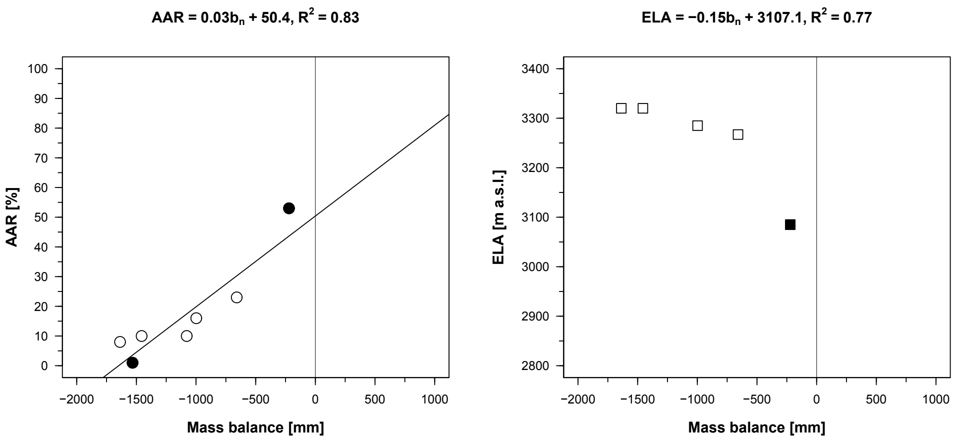


Figure 4.12.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Langenferner (ITALY)

4.13 LEWIS (KENYA/MT. KENYA)

COORDINATES: 0.15° S / 37.30° E

Lewis glacier on 23 February 2012 (Photo: R. Prinz)

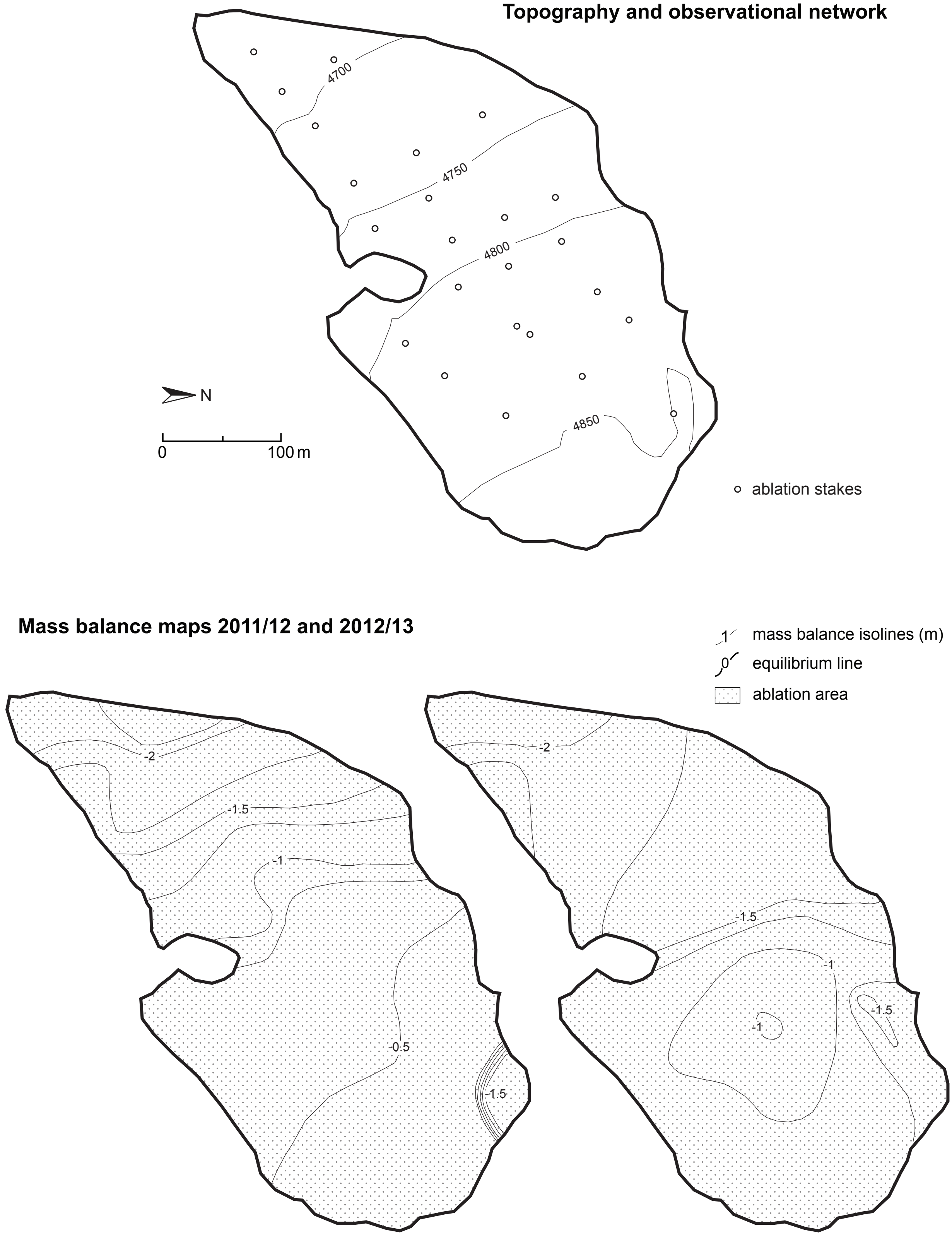
Lewis Glacier is the largest glacier on Mt Kenya and has been mapped frequently since 1934. The mass balance measurements applying the direct glaciological method were initiated in 1978/79 (0.295 km²), halted in 1996 and restarted in 2010, when the glacier area was 0.107 km². Lewis Glacier is orientated to southwest and spans from 4871 m a.s.l. to 4651 m a.s.l. Major glacier changes on Mt Kenya are evident from historical maps, e.g., the decrease in Lewis Glacier volume of 90% since 1934 and the vanishing of eight smaller glaciers during the last century, including Gregory Glacier, connected to Lewis Glacier to the north, and which disappeared in 2011.

The two mass balance years 2011/12 and 2012/13 (defined from March to March) yielded values of -961 mm w.e. a^{-1} and -1397 mm w.e. a^{-1}, respectively. As there were no accumulation areas at the end of either mass balance year, ELA and AAR remain undefined. Mean air temperature from Sep 2009 to Feb 2012 was -0.9°C at 4830 m a.s.l.

Persistent negative mass balances caused the emergence of rock outcrops that divided the glacier into an upper and a lower part in 2014, heralding the ultimate end of the longest mass balance series in the Tropics during the balance year 2013/14.

Results of the recent monitoring efforts at Lewis Glacier are summarized in Prinz et al. (2011; 2012).

Figure 4.13.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Lewis (KENYA)

Figure 4.13.2 Mass balance versus altitude (2011/12 and 2012/13).

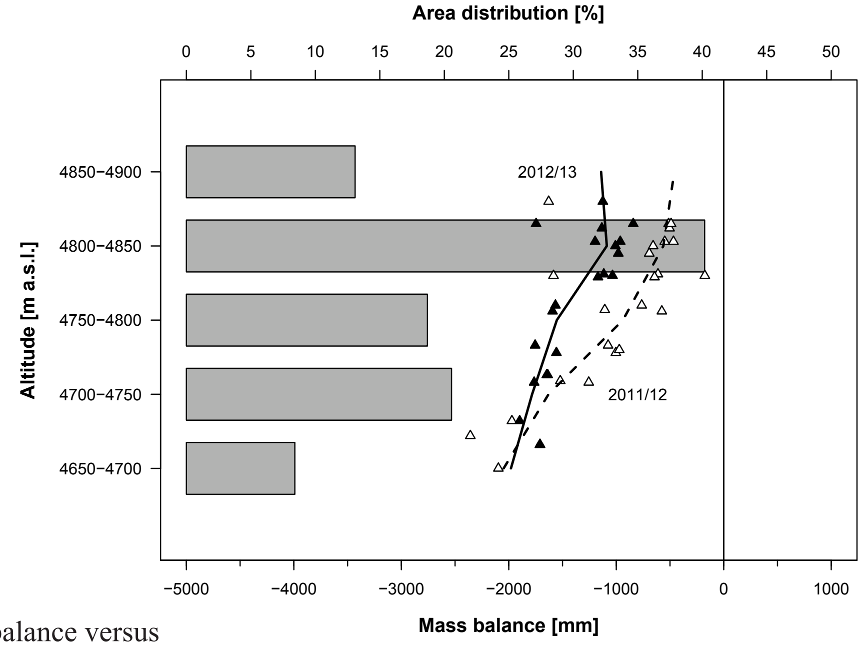


Figure 4.13.3 Glaciological balance versus geodetic balance for the whole observation period.

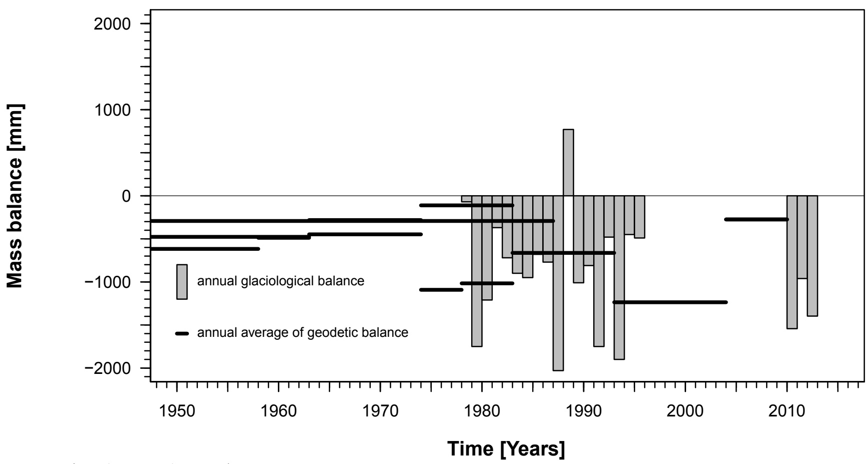
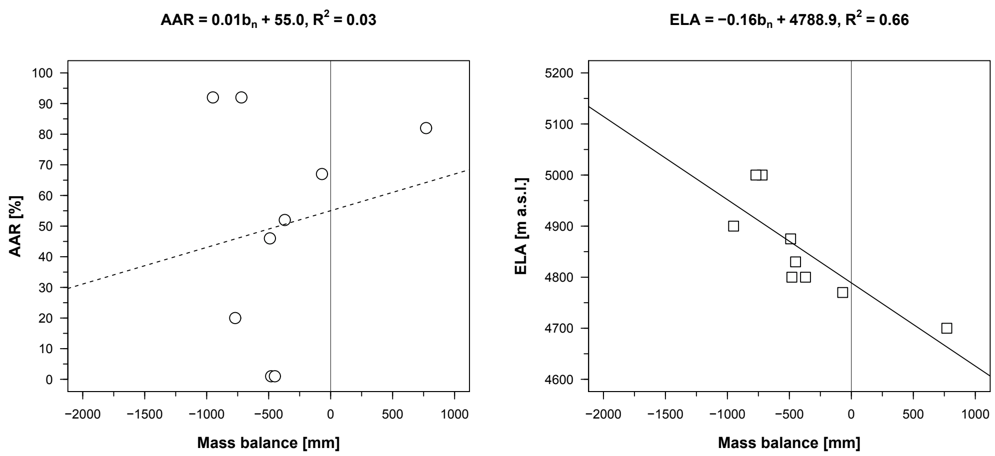


Figure 4.13.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Lewis (KENYA)

4.14 ABRAMOV (KYRGYZSTAN/TIEN SHAN)

COORDINATES: 39.63° N / 71.60° E

Photograph taken by M. Barandun in the summer of 2013.

Abramov Glacier is situated in the Koksu Valley in the northwestern Pamir. Today the glacier covers an area of around 24 km^2 and spans an altitudinal range between 3650 and almost 5000 m a.s.l. The glacier, which can be classified as continental type, has a northwest orientation. At the equilibrium line altitude (around 4260 m a.s.l.), the annual precipitation is 1000 mm and the mean annual air temperature ranges from -6 to -8°C. Abramov Glacier drains into the Koksu River with a bi-modal seasonal runoff distribution and ultimately flows into the Amu Daria river system.

Intensive glaciological investigations started in the late 1960s with the installation of a glaciological station next to the glacier. A detailed and intense programme to monitor the glacier mass change was launched in 1968 and continued until 1998, resulting in a mean mass balance which was predominantly negative (-470 mm w.e. a^{-1}). Due to political instability the mass balance programme was stopped abruptly in the late 1990s, terminating a mass balance series after 31 years of investigation. Eleven years after the interruption of all observations the mass balance monitoring was re-established in 2011 thanks to the joint efforts of the Central Asian Institute of Applied Geosciences (CAIAG), the Geoforschungszentrum Potsdam (GFZ) and the University of Fribourg (UNIFR) as part of the Central Asian Water (CAWa) and Capacity Building and Twinning of Climate Observation Systems (CATCOS) projects. The new programme includes an automatic weather station, two terrestrial cameras monitoring snowline elevations on the glacier and direct glaciological measurements. In connection with the re-established measurement programme, additional efforts were invested in the homogenization of the long-term series by re-analyzing the old direct measurements (Barandun et al., in press). The re-analyzed mass balance series for Abramov Glacier is available in the database of the WGMS. The mass balance for 2011/12 was -600 mm w.e. a^{-1} and for 2012/13 a mass balance of -250 mm w.e. a^{-1} was measured.

Figure 4.14.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.

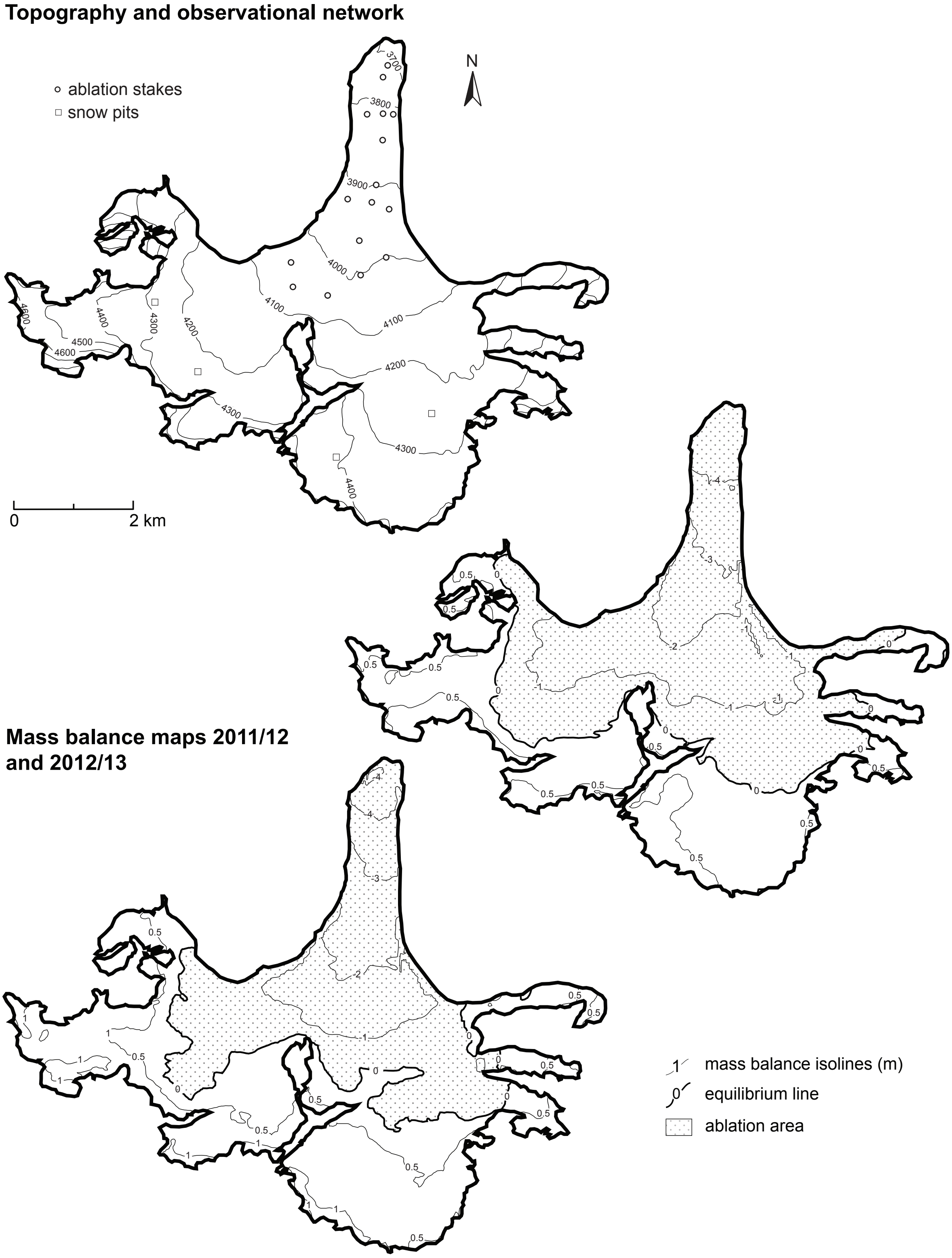


Figure 4.14.2 Mass balance versus altitude (2011/12 and 2012/13).

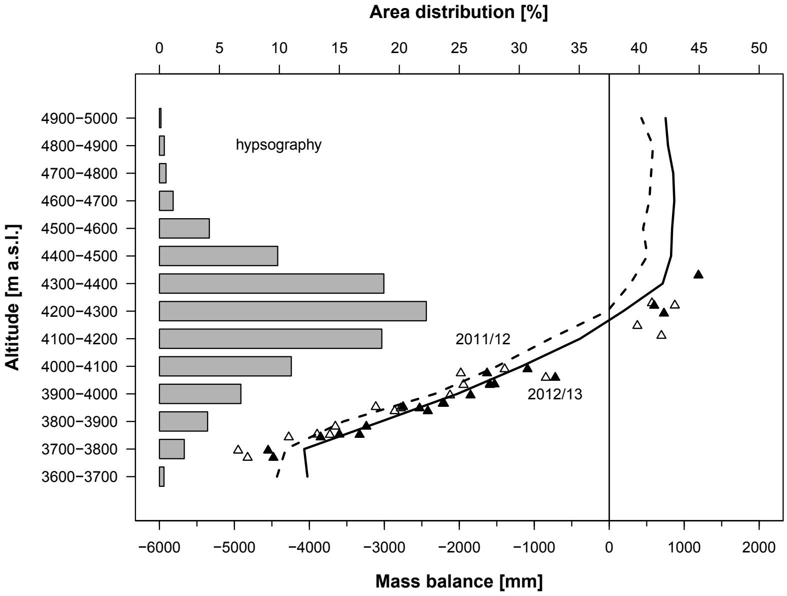


Figure 4.14.3 Glaciological balance versus geodetic balance for the whole observation period.

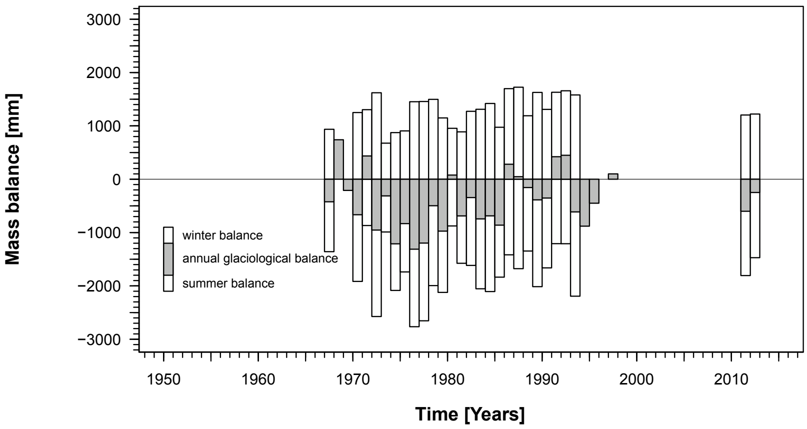
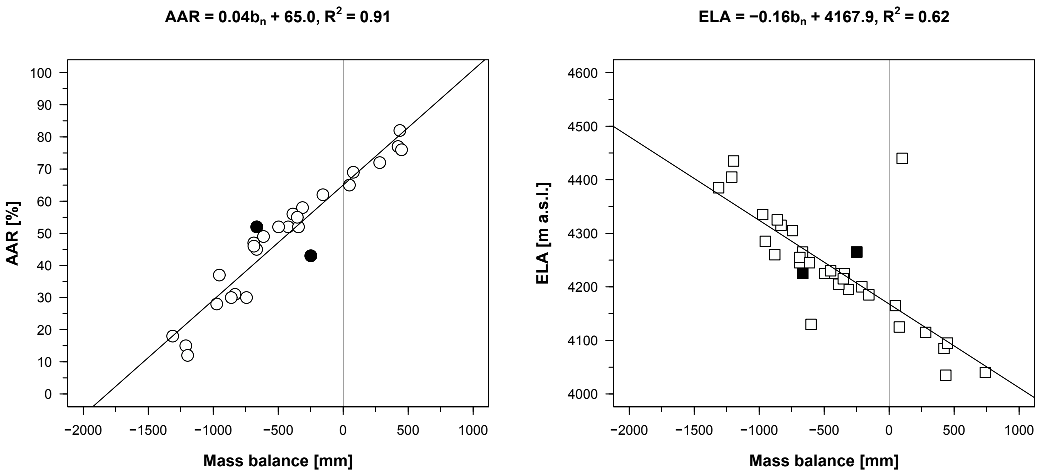


Figure 4.14.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Abramov (KYRGYZSTAN)

4.15 TSENTRALNIY TUYUKSUYSKIY (KAZAKHSTAN/TIEN SHAN)

COORDINATES: 43.05° N / 77.08° E

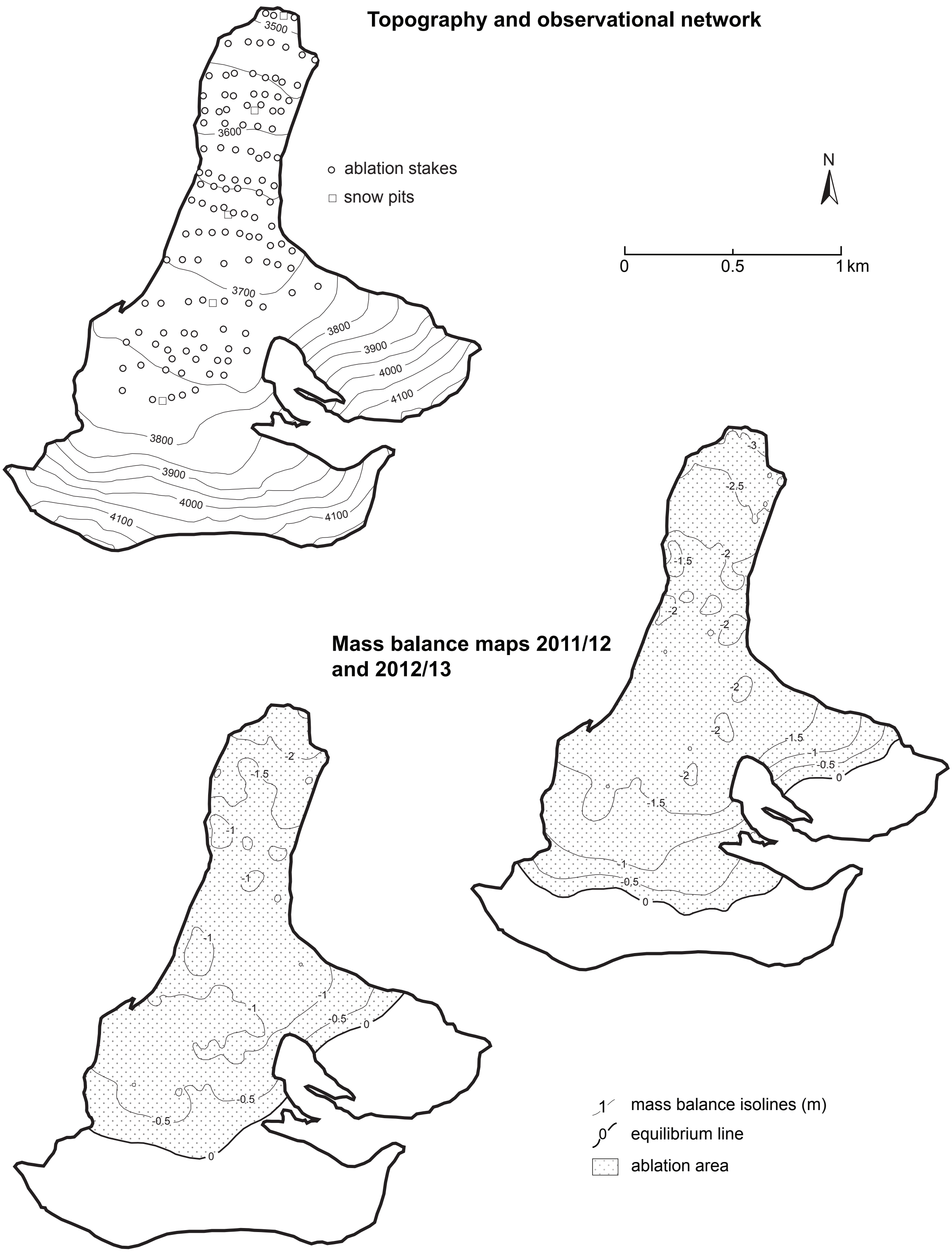
Photograph from 22 August 2012 (photographer unknown)

This valley glacier in the Zailiyskiy Alatau Range of Kazakh Tien Shan is also called the Tuyuksu Glacier. It extends from 4219 m to 3478 m a.s.l., has a length of 2.6 km and a surface area of 2.3 km^2 (2013) with exposure to the north. Mean annual air temperature at the equilibrium line of the glacier in 2010 (around 3762 m a.s.l.) was -6 °C for balanced conditions, and -5 to -6 °C in 2011 (ELA around 3800 m a.s.l.). Average annual precipitation as measured using 13 precipitation gauges for the balance year 2009/10 was equal to 1437 mm. For the balance year 2010/11, it amounted to 995 mm (14 precipitation gauges). The summer precipitation equaled 47 % of the annual sum in 2010/11. The glacier is considered to be cold to polythermal and surrounded by continuous permafrost.

Annual precipitation at the Tuyuksu meteorological station (3450 m a.s.l.) equaled 1342 mm (of which 768 mm winter precipitation, and 574 mm summer precipitation) in 2009/10, which is 366 mm more than the mean for the period 1972–2010; air temperatures from June to August (June to September) 2010 were 0.2 °C (0.3 °C) higher. The summer air temperature (June to August) in 2011 was 0.6 °C higher than the average for the 1972–2011 period, while precipitation was 34 mm lower. The glacier mass balance in 2011/12 was -1023 mm w.e. a^{-1} with an ELA at 3900 m a.s.l. and an AAR of 31%. In 2012/13, the glacier mass balance was -340 mm w.e. a^{-1} with an ELA at 3825 m a.s.l. and an AAR of 41%.

A comparison of different approaches showed relatively good agreement between the glaciological and the geodetic methods for the period 1958–1998 (Hagg et al., 2004).

Figure 4.15.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Tsentralniy Tuyuksuyskiy (KAZAKHSTAN)

Figure 4.15.2 Mass balance versus altitude (2011/12 and 2012/13).

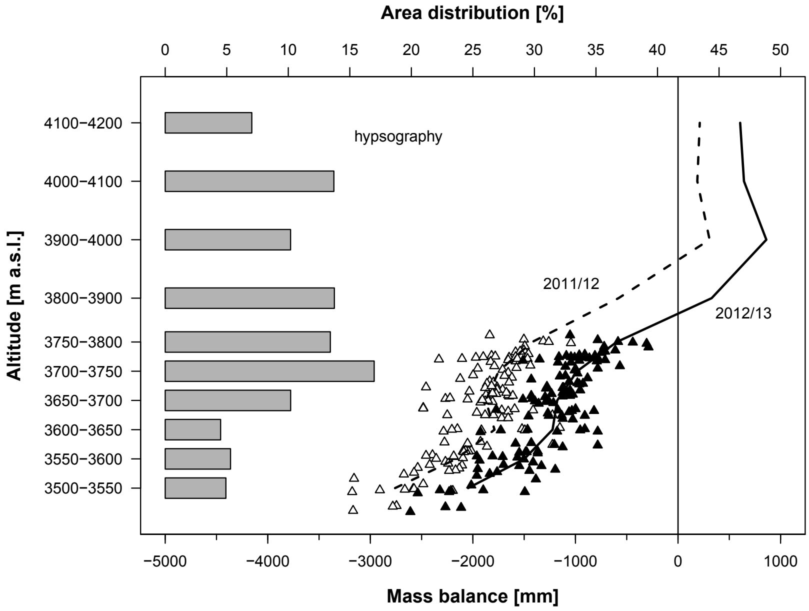


Figure 4.15.3 Glaciological balance versus geodetic balance for the whole observation period.

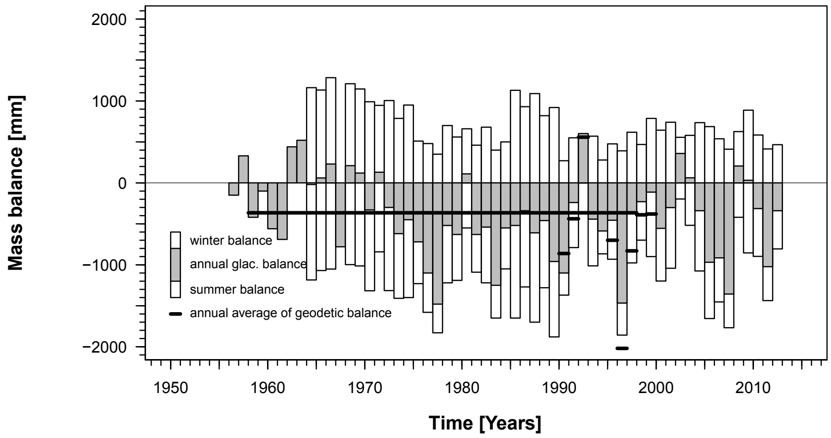
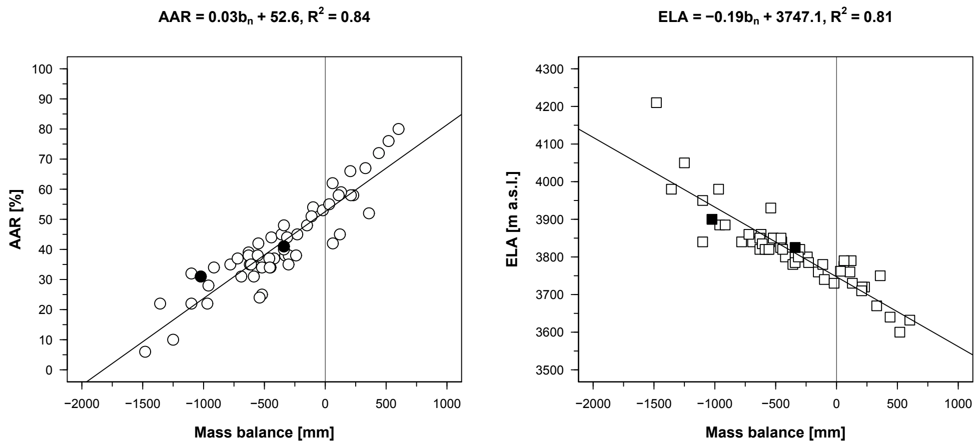


Figure 4.15.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Tsentralniy Tuyuksuyskiy (KAZAKHSTAN)

4.16 WALDEMARBREEN (NORWAY/SPITSBERGEN)

COORDINATES: 78.67° N / 12.00° E

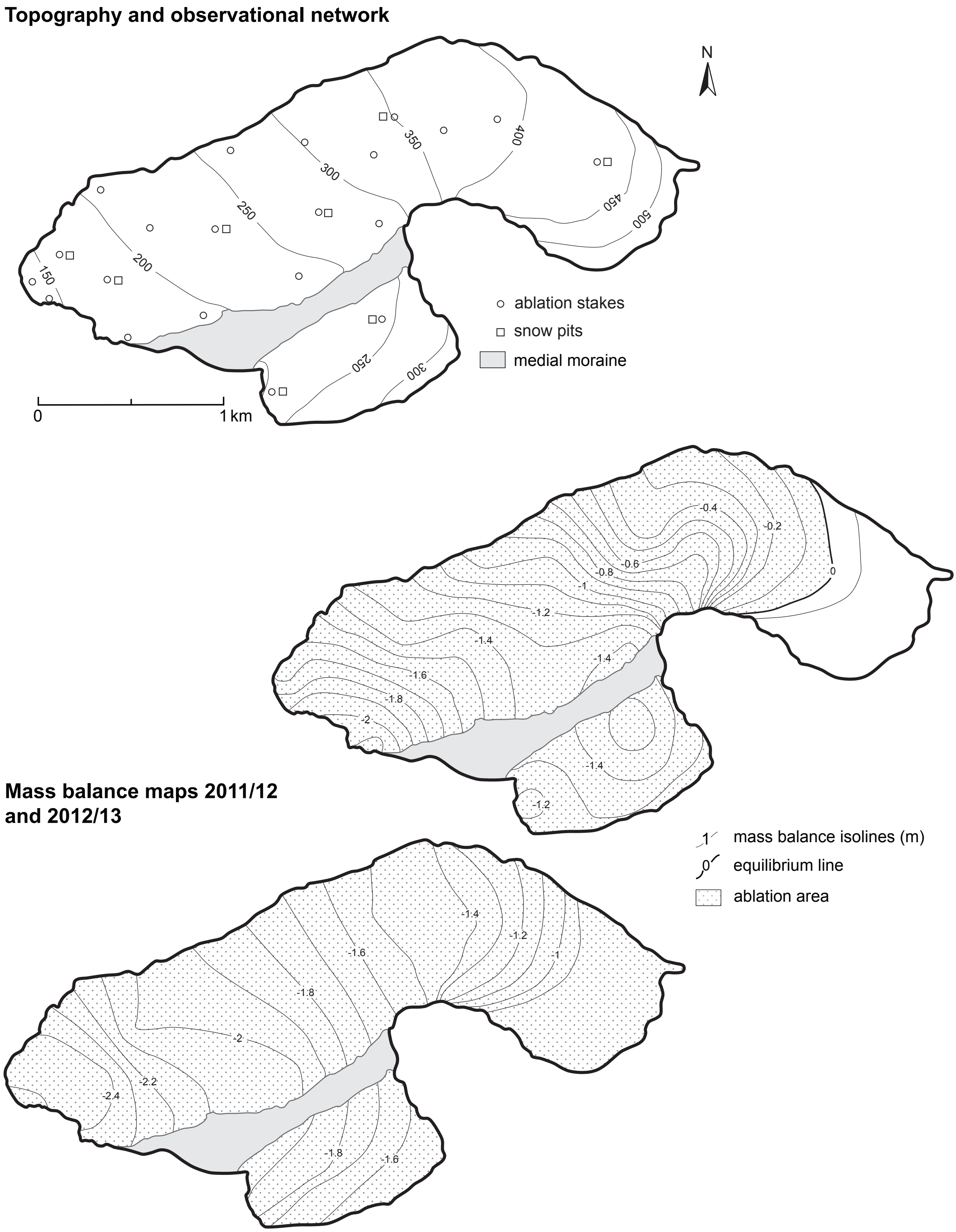
Photograph taken by I. Sobota in the summer of 2013.

Waldemarbreen is located in the northern part of the Oscar II Land, northwestern Spitsbergen, and flows downvalley to the Kaffiøyra plane. Kaffiøyra is a coastal lowland situated on the Forlandsundet. The glacier is composed of two parts separated by a 1600 m long medial moraine. It occupies an area of about 2.5 km^2 and extends from 500 m to 150 m a.s.l. with a general exposure to the west. Mean annual air temperature in this area is about -4 to -5 °C and annual precipitation is generally 300–400 mm. Since the 19th century the surface area of the Kaffiøyra region glaciers has decreased by more than 40 %. Recently Waldemarbreen has been in retreat. Mass balance investigations have been underway since 1995.

The balance in 2011/12 showed a mass loss of -885 mm w.e. a^{-1}. The corresponding ELA was 424 m a.s.l., with an AAR of 13%. In 2012/13 the mass balance was -1637 mm w.e. a^{-1}. The ELA was 591 m a.s.l., with an AAR of 0%. The mean value of the mass balance for the period 1995–2013 was -686 mm w.e. a^{-1}.

An overview of the glaciological investigations at Waldemarbreen and of the influence of glacier changes on runoff was published recently by Sobota (2013, 2014).

Figure 4.16.1 Topography and observation network and mass balance maps of 2011/12 and 2012/13.



Waldemarbreen (NORWAY)

Figure 4.16.2 Mass balance versus altitude (2011/12 and 2012/13).

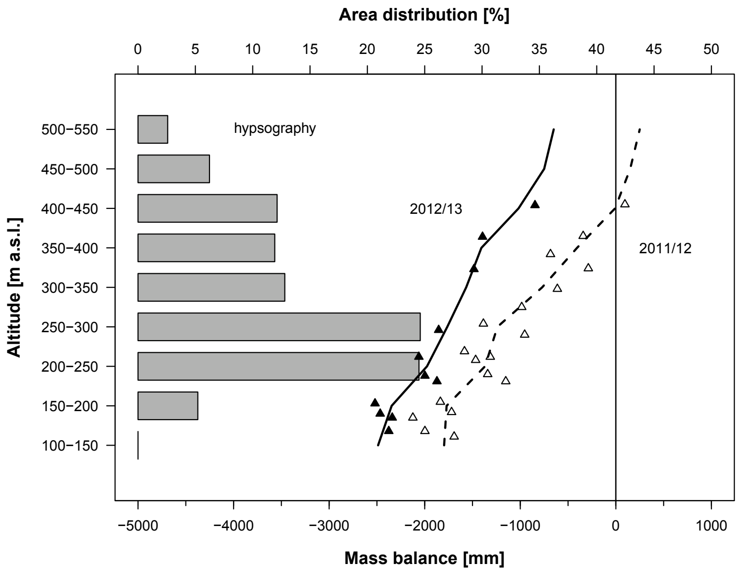


Figure 4.16.3 Glaciological balance versus geodetic balance for the whole observation period.

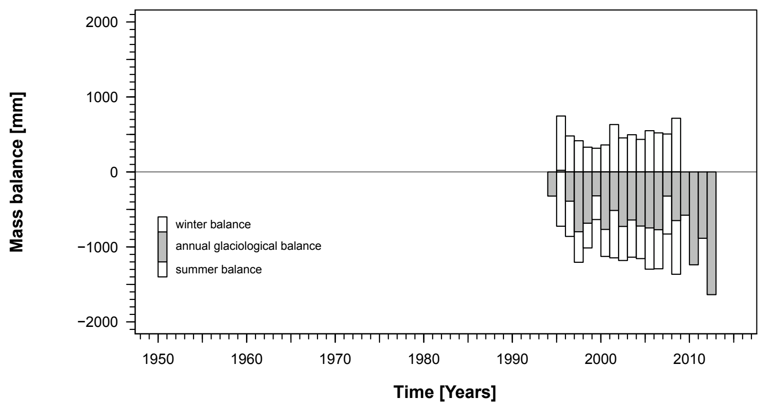
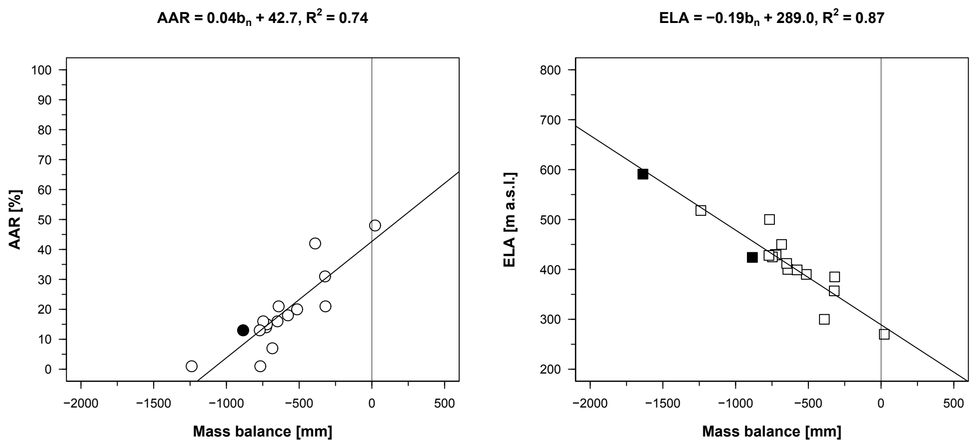


Figure 4.16.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Waldemarbreen (NORWAY)

5 CONCLUDING REMARKS

Glacier monitoring has been coordinated internationally since 1894. This long-term effort has resulted in the compilation of an unprecedented dataset of changes in glacier length, area, volume, and mass. The dataset has been made freely available by the WGMS and its predecessor organizations and widely used in scientific studies and assessment reports. The worldwide retreat of glaciers has become one of the most prominent icons of global climate change. Moreover, glacier decline has impacts on the local hazard situation, regional water availability, and global sea level rise.

The retreat of glaciers from their Little Ice Age (LIA) moraines and trimlines can be observed in the field as well as on aerial and satellite images for tens of thousands of glaciers around the world. Large collections of historical and modern photographs (e.g., NSIDC, 2009, updated 2015) document this change in a qualitative manner. The dataset presented here allows these changes to be quantified at samples ranging from a few hundred to a few thousand glaciers with observation series. There is a global trend to centennial glacier retreat from LIA maximum positions, with typical cumulative values of several hundred to a few thousand metres.

In various mountain ranges, glaciers with decadal response times have shown intermittent re-advances which, however, were short and thus much less extensive when compared to the overall frontal retreat. The most recent re-advance phases were reported from Scandinavia and New Zealand in the 1990s or from (mainly surge-type glaciers in) the Karakoram at the beginning of the 21st century. Early (geodetic) mass-balance measurements indicate moderate decadal ice losses of a few dm w.e. a^{-1} in the second half of the 19th and at the beginning of the 20th century, followed by increased ice losses around 0.4 m w.e. a^{-1} in the 1940s and 1950s. Larger data samples (from both glaciological and geodetic methods) with better global coverage adequately document the period of moderate ice loss which followed between the mid-1960s and mid-1980s, as well as the subsequent acceleration in ice loss to > 0.5 m w.e. a^{-1} in the first decade of the 21st century.

In the time period covered by the present bulletin, glaciers observed by the glaciological method lost more than 0.7 m w.e. per year. This continues the historically unprecedented ice loss observed since the turn of the century and is double the ice loss rates of the 1990s.

With their dynamic response to changes in climatic conditions – growth/reduction in area mainly through the advance/retreat of glacier tongues – glaciers re-adjust their extent to equilibrium conditions of ice geometry with a zero mass balance. Recorded mass balances document the degree of imbalance between glaciers and climate due to the delay in dynamic response caused by the characteristics of ice flow (deformation and sliding); over longer time intervals they depend on the rate of climatic forcing. With constant climatic conditions (no forcing), balances would tend towards and finally become zero. Long-term non-zero balances are, therefore, an expression of ongoing climate change and sustained forcing. Trends towards increasing non-zero balances are triggered by accelerated forcing. In the same way, comparison between present-day and past values of mass balance must take the changes in glacier area into account (Elsberg et al., 2001). Many of the relatively small glaciers, measured within the framework of the present mass balance observation network, have lost large percentages of their area during the past decades. The recent increase in the rates of ice loss over diminishing glacier surface areas, as compared with earlier losses related to larger surface areas, becomes even more pronounced and leaves no doubt about the accelerating change in climatic conditions, even if a part of the observed acceleration trend is likely to be caused by positive feedback processes.

Rising snowlines and cumulative mass losses lead to changes in the average albedo and to a continued surface lowering. Such effects cause pronounced positive feedbacks with respect to radiative and sensible heat fluxes. Albedo changes are especially effective in enhancing melt rates and can also be caused by the input of dust (Oerlemans et al., 2009). The cumulative length change of glaciers is the result of all effects combined, and constitutes the key to a global intercomparison of decadal with secular mass losses. Surface lowering, thickness loss and the resulting reduction in driving stress and flow, however, increasingly replace processes of tongue retreat with processes of downwasting, disintegration or even collapse of entire glaciers. Moreover, the thickness of most glaciers regularly observed for their mass balance is measured in (a few) tens of metres. From the measured mass losses and thickness reductions, it is evident that several network glaciers with important long-term observations may not survive for many more decades. A special challenge therefore consists in developing a strategy for ensuring the continuity of adequate mass balance observations under such extreme conditions.

Key tasks for the future of glacier mass balance monitoring include the continuation of (long-term) measurement series, the extension of the presently available dataset, especially in under-represented regions, the quantitative assessment of uncertainties relating to available measurements (cf. Zemp et al., 2013), and their representativeness for changes in corresponding mountain ranges. The latter requires a well-considered integration of in-situ measurements, remotely sensed observations (e.g., Gardner et al., 2013), and numerical modelling (e.g., Huss, 2012) taking into account the related spatial and temporal scales.

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7 PRINCIPAL INVESTIGATORS

7.1 PRINCIPAL INVESTIGATORS MASS BALANCE

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7.2 PRINCIPAL INVESTIGATORS FRONT VARIATION
(for observation periods 2010/11, 2011/12, and 2012/13)

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AT	GOLDBERG K.: Binder D. (OEAV), Binder D. (ZAMG), Neureiter T. (ZAMG), Reisenhofer S. (OEAV); KLEINFLEISS K.: Binder D. (OEAV), Binder D. (ZAMG), Neureiter T. (ZAMG), Reisenhofer S. (OEAV); WURTEN K.: Binder D. (OEAV), Binder D. (ZAMG), Jenner W. (ZAMG), Naringbauer A. (ZAMG), Reisenhofer S. (OEAV)
BO	CHARQUINI SUR: Condom T. (IRD), Ginot P. (IRD), Rabatel A. (LGGE), Sicart J. (IRD), Soruco A. (UMSA); ZONGO: Condom T. (IRD), Ginot P. (IRD), Rabatel A. (LGGE), Sicart J. (IRD), Soruco A. (UMSA)
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CO	CONEJERAS: Ceballos Lievano J. (IDEAM)
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IS	BLAGNIPUJOEKULL: Haraldsson E. (IGS-IMO); BROKARJOEKULL: Pálsson B. (IGS-IMO); FALLJOEKULL: Þorláksdóttir S. (IGS-IMO); FLAAJOEKULL: Guðmundsson E. (IGS-IMO); FLAAJOEKULL E 148: Pálsson B. (IGS-IMO); GEITLANDSJOEKULL: Kristinsson B. (IGS-IMO); GIGJOEKULL: Theodórsson T. (IGS-IMO); GLJUFURARJOEKULL: Hjartarson K. (IGS-IMO); HAGAFELLSJOEKULL E: Sigurðsson E. (IGS-IMO); HEINABERGSJOEKULL: Guðmundsson E. (IGS-IMO); HYRNINGSJOEKULL: Haraldsson H. (IGS-IMO); JOEKULHALS: Haraldsson H. (IGS-IMO); JOEKULKROKUR: EyÞórsdóttir K. (IGS-IMO); KALDALONSJOEKULL: Aðalsteinsson I. (IGS-IMO); KIRKJUJOEKULL: Haraldsson E. (IGS-IMO); KOETLUJOEKULL: Sigurðsson O. (IGS-IMO); KVIARJOEKULL: Björnsson H. (IGS-IMO); LAMBAHRAUNSJOEKULL: Skúlason B. (IGS-IMO); LEIRUFJARDARJOEKULL: Sólbergsson Á. (IGS-IMO); MORSARJOEKULL: Kristjánsson R. (IGS-IMO); MULAJOEKULL S: Jónsson L. (IGS-IMO); MULAJOEKULL W: Jónsson L. (IGS-IMO); NAUTHAGAJOEKULL: Jónsson L. (IGS-IMO); REYKJAFJARDARJOEKULL: Jóhannesson Þ. (IGS-IMO); RJUPNABREKKUJOEKULL: Sigurðsson S. (IGS-IMO); SKAFTAFELLSJOEKULL: Kristjánsson R. (IGS-IMO); SKALAFELLSJOEKULL: Hreinsdóttir S. (IGS-IMO); SKEIDARARJOEKULL E1: Kristjánsson R. (IGS-IMO); SKEIDARARJOEKULL E2: Kristjánsson R. (IGS-IMO); SKEIDARARJOEKULL E3: Kristjánsson R. (IGS-IMO); SKEIDARARJOEKULL W: Jónsson H. (IGS-IMO); SLETTJOEKULL: Kaldal I. (IGS-IMO); SOLHEIMAJOEKULL W: Gunnlaugsson E. (IGS-IMO); SVINAFELLSJOEKULL: Þorláksdóttir S. (IGS-IMO); TUNGNAARJOEKULL: Hilmarsson S. (IGS-IMO)
IT	ALTA (VEDRETTA) / HOHENF.: Perini G. (CGI); AMOLA: Piffer A. (SAT); ANTELAO INFERIORE (OCC.): Perini G. (CGI); ANTELAO SUP.: Perini G. (CGI); AOUILLE: Nicolino M. (CGI); ARGUEREY MER.: Viotti A. (CGI); ARGUEREY SETT.: Viotti A. (CGI); BARBADORSO DI DENTRO / BAERENBARTF. INNERER: Scaltriti A. (SGAA); BASEI: Fornengo F. (CGI); BERTA: Rogliardo F. (CGI); BESSANESE: Rogliardo F. (CGI); BREUIL SETT.: Viotti A. (CGI); BROGLIO: Caminada C. (CGI); CALDERONE: Pecci M. (CGI), Pecci M. (ITAC); CAPRA: Bertoglio V. (CGI); CARRO OCCIDENT.: Bertoglio V. (CGI); CASPOGGIO: Alberti S. (SGL), Zanolin G. (SGL); CASSANDRA OR.: De Zaiacomo M. (SGL); CEDEC: Colombarolli D. (SGL); CEVEDALE FORCOLA / FUERKELEF.: Perini G. (CGI); CEVEDALE PRINCIPALE / ZUFALLF.: Perini G. (CGI); CIAMARELLA: Rogliardo F. (CGI); CIARDONEY: Mercalli L. (SMI); COLLERIN D'ARNAS: Rogliardo F. (CGI); CORNISELLO MER.: Marchetti F. (SAT); COUPE DE MONEY: Bertoglio V. (CGI), Borre P. (CGI); DISGRAZIA: Neri G. (SGL), Proh A. (SGL); DOSEGU: Borghi A. (SGL); DZASSET: Bertoglio V. (CGI), Borre P. (CGI); ENTRELOR SETT.: Rossotto A. (CGI); FOND OCCID.: Borney S. (CGI), Pollicini F. (CGI); FOND OR.: Borney S. (CGI), Pollicini F. (CGI); FONTANA BIANCA / WEISSBRUNNF.: Polato A. (SGAA); FORNI: Cola G. (SGL); FRANE (VEDR. DELLE) / STEINSCHLAGF.: Polato A. (SGAA); GLIAIRETTA VAUDET: Pollicini F. (CGI); GOLETTA: Pollicini F. (CGI); GRAMES ORIENT. + CENTR. / GRAMSENF. OESTL. + ZENTR.: Bruschi P. (SGAA); GRAN PARADISO: Bertoglio V. (CGI); GRAN PILASTRO (GHIAC. DEL) / GLIEDERF.: Franchi G. (CGI), Sartori G. (SGAA); GRAN VEDRETTA OCC. / HOCHF.: Sartori S. (SGAA); GRAN VEDRETTA OR. / GRIESSF.: Sartori S. (SGAA); GRAN ZEBRU (CENTRALE): Colombarolli D. (SGL), Fioletti M. (SGL); GRAN ZEBRU (OCCID.): Colombarolli D. (SGL), Fioletti M. (SGL); GRAND CROUX CENTR.: Bertoglio V. (CGI), Borre P. (CGI); GRAND ETRET: Bertoglio V. (CGI); GRUETTA ORIENT.: Gadin G. (CGI); INDREN OCC.: Piccini P. (CGI), Squinobal E. (CGI);

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KZ	TS.TUYUKSUYSKIY: Kasatkin N. (IGNANKaz)
NO	AUSTERDALSBREEN: Elvehøy H. (NVE); AUSTRE OKSTINDBREEN: Elvehøy H. (NVE); BLOMS-TOELSKARDSBREEN: Elvehøy H. (NVE); BOEDALSBREEN: Elvehøy H. (NVE); BOEVERBREEN: Elvehøy H. (NVE); BOEYABREEN: Kjelland P. (NVE); BONDHUSBREA: Elvehøy H. (NVE); BOT-NABREA: Elvehøy H. (NVE); BRENNDALSBREEN: Elvehøy H. (NVE); BRIKSDALSBREEN: Nesje A. (NVE); BUERBREEN: Elvehøy H. (NVE); CORNELIUSSENBREEN: Elvehøy H. (NVE); ENGA-BREEN: Elvehøy H. (NVE); FAABERGSTOELSBREEN: Elvehøy H. (NVE); GRAAFJELLSBREA: Elvehøy H. (NVE); HELLSTUGUBREEN: Andreassen L. (NVE); JUVFONNE: Andreassen L. (NVE); KOPPANGSBREEN: Elvehøy H. (NVE); LANGFJORDJOEKELEN: Elvehøy H. (NVE); LEIRBREEN: Elvehøy H. (NVE); MIDTDALSBREEN: Nesje A. (NVE); NIGARDSBREEN: Elvehøy H. (NVE); REM-BESDALSKAAKA: Elvehøy H. (NVE); RUNDVASSBREEN: Elvehøy H. (NVE); STEGHOLTBREEN: Elvehøy H. (NVE); STEINDALSBREEN: Elvehøy H. (NVE); STORBREEN: Andreassen L. (NVE); STORE SUPPHELLEBREEN: Kjelland P. (NVE); STORJUVBREEN: Elvehøy H. (NVE); STORSTEINS-FJELLBREEN: Elvehøy H. (NVE); STYGGEBREAN: Elvehøy H. (NVE); STYGGEDALSBREEN: Elvehøy H. (NVE); SVELGJABREEN: Elvehøy H. (NVE); SYDBREEN: Elvehøy H. (NVE); TROLL-BERGDALSBREEN: Elvehøy H. (NVE); TROLLKYRKJEBREEN: Elvehøy H. (NVE); TUFTEBREEN: Elvehøy H. (NVE); VETLE SUPPHELLEBREEN: Kjelland P. (NVE)
NP	RIKHA SAMBA: Joshi S. (ICIMOD), Stumm D. (ICIMOD); YALA: Joshi S. (ICIMOD), Stumm D. (ICI-MOD)
NZ	ADAMS: Chinn T. (NIWA); ALMER/SALISBURY: Chinn T. (NIWA); ANDY: Chinn T. (NIWA); BREW-STER: Anderson B. (ARC); FOX: Anderson B. (ARC), Chinn T. (ARC), Owens A. (LHIC), Purdie H. (UCant/DG); FRANZ JOSEF: Anderson B. (ARC), Chinn T. (ARC), Owens A. (LHIC), Purdie H. (UCant/DG); ROLLESTON: Kerr T. (NIWA)

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SE	HYLLGLACIAEREN: Holmlund P. (INK); MIKKAJEKNA: Holmlund P. (INK); PARTEJEKNA: Holmlund P. (INK), Mercer A. (INK); PASSUSJIETNA E.: Mercer A. (INK); RUOPSOKJEKNA: Holmlund P. (INK); RUOTESJEKNA: Holmlund P. (INK); SALAJEKNA: Holmlund P. (INK); STORGLACIAEREN: Mercer A. (INK); VARTASJEKNA: Holmlund P. (INK)
SJ	AUSTRE LOVENBREEN: Bernard E. (CNRS), Friedt J. (CNRS), Griselin M. (CNRS), Tolle F. (CNRS); HANSBREEN: Blaszczyk M. (US/FES), Ignatiuk D. (US/FES); WERENSKIOLDBREEN: Ignatiuk D. (US/FES)
US	AIALIK: McNabb R. (UAF/GI); BARRY: McNabb R. (UAF/GI); BELOIT: McNabb R. (UAF/GI); BLACKSTONE: McNabb R. (UAF/GI); BRYN MAWR: McNabb R. (UAF/GI); CASCADE: McNabb R. (UAF/GI); CHENEGA: McNabb R. (UAF/GI); COLUMBIA (2057): Pelto M. (NCGCP); COXE: McNabb R. (UAF/GI); DAWES: McNabb R. (UAF/GI); EAST TWIN: Pelto M. (JIRP); EASTON: Pelto M. (NCGCP); GILMAN: McNabb R. (UAF/GI); GUYOT NORTH BRANCH: McNabb R. (UAF/GI); HARRIMAN: McNabb R. (UAF/GI); HARVARD: McNabb R. (UAF/GI); HOLGATE: McNabb R. (UAF/GI); HOONAH: McNabb R. (UAF/GI); JOHNS HOPKINS: McNabb R. (UAF/GI); KASHOTO: McNabb R. (UAF/GI); LAMPLUGH: McNabb R. (UAF/GI); LECONTE: McNabb R. (UAF/GI); LITUYA: McNabb R. (UAF/GI); LOWER CURTIS: Pelto M. (NCGCP); LYMAN: Pelto M. (NCGCP); MARGERIE: McNabb R. (UAF/GI); MCBRIDE: McNabb R. (UAF/GI); MCCARTY: McNabb R. (UAF/GI); MEARES: McNabb R. (UAF/GI); MUIR: McNabb R. (UAF/GI); NELLIE JUAN: McNabb R. (UAF/GI); NORRIS: Pelto M. (JIRP); NORTH CRILLON: McNabb R. (UAF/GI); NORTHWESTERN: McNabb R. (UAF/GI); REID: McNabb R. (UAF/GI); RIGGS: McNabb R. (UAF/GI); SAWYER: McNabb R. (UAF/GI); SHOUP: McNabb R. (UAF/GI); SOUTH SAWYER: McNabb R. (UAF/GI); SURPRISE: McNabb R. (UAF/GI); TYNDALL: McNabb R. (UAF/GI); WELLESLEY: McNabb R. (UAF/GI); WEST TWIN: Pelto M. (JIRP); YALE: McNabb R. (UAF/GI)

8 SPONSORING AGENCIES

Abbreviation	Sponsoring Agency
AM:	Association Moraine (FR)
ARC:	Antarctic Research Centre, Victoria University of Wellington (NZ)
ARPA:	Agenzia Regionale per la Protezione dell’Ambiente della Valle d’Aosta (IT)
BE-Forest:	Forestry Service of Canton Bern (CH)
CAIAG:	Central Asian Institute of Applied Geosciences (KG)
CAREERI:	Cold and Arid Regions Environment and Engineering Research Institute, Chinese Academy of Sciences (CN)
CAS/ITPR:	Institute of Tibetan Plateau Research, Chinese Academy of Sciences (CN)
CECS:	Glaciology Laboratory, Centro de Estudios Científicos (CL)
CGGBAS:	Commission for Geodesy and Glaciology, Bavarian Academy of Sciences (DE)
CGI:	Comitato Glaciologico Italiano (IT)
CGI-Torino:	Comitato Glaciologico Italiano Torino (IT)
CGI-Venezia:	Comitato Glaciologico Italiano Venezia (IT)
CGI-Verona:	Comitato Glaciologico Italiano Verona (IT)
CNRS TheMA:	Laboratoire ThéMA, CNRS & Université de Franche-Comté et de Bourgogne (FR)
CNRS:	Centre national de la recherche scientifique (FR)
DESA:	Department of Earth Science, Aarhus University (DK)
DGA:	Dirección General de Aguas, Ministerio de Obras Públicas, Gobierno de Chile (CL)
DGGS:	Department of Geography and Geology, University of Salzburg (AT)
DGUF:	Department of Geosciences, University of Fribourg (CH)
DGUO-NZ:	Department of Geography/Te Ihowhenua, University of Otago (NZ)
DHAS:	Department of Hydrospheric-Athmospheric Sciences, Graduate School of Environmental Studies, Nagoya University (JP)
DNA-UNC:	Departamento de Geología Básica, Facultad de Ciencias Exactas Físicas y Naturales, Universidad Nacional de Córdoba (AR)
ETNA:	Érosion Torrentielle, Neige et Avalanches, Institut national de recherche en sciences et technologies pour l’environnement et l’agriculture (IRSTEA) (FR)
FES NCU:	Faculty of Earth Sciences, Nicolaus Copernicus University in Toruń (PL)
FGUA:	Federal Government of Upper Austria (AT)
GEUS Geology:	Department of Quaternary Geology, The Geological Survey of Denmark and Greenland (DK)
GFZ Potsdam:	Helmholtz-Zentrum Potsdam, Deutsches GeoForschungsZentrum (DE)
GIUZ:	Department of Geography, University of Zurich (CH)
GLACIOLAB:	GLACIOLAB (FR)
GL-Forest:	Forestry Service of Canton Glarus (CH)
GR-Forest:	Forestry Service of Canton Graubünden (CH)
GSC:	Natural Resources Canada, Geological Survey of Canada (CA)
HD/LT:	Hydrologischer Dienst, Land Tirol (AT)
HD/SB:	Hydrografischer Dienst, Land Salzburg (AT)
I75SA:	Ingeniería 75, S.A. (ES)
IAA-DG:	Departamento de Glaciología, Instituto Antártico Argentino (AR)

Abbreviation	Sponsoring Agency
IAA-DNA:	Instituto Antártico Argentino - Dirección Nacional del Antártico (AR)
IANIGLA:	Instituto Argentino de Nivología, Glaciología y Ciencias Ambientales, CCT CONICET Mendoza (AR)
ICIMOD:	International Centre for Integrated Mountain Development (NP)
IDEAM:	Instituto de Hidrología, Meteorología y Estudios Ambientales, Subdirección de Ecosistemas e Información Ambiental (CO)
IES:	Institute of Earth Sciences, University of Iceland (IS)
IG RAS:	Institute of Geography, Russian Academy of Sciences (RU)
IGF:	Institut für interdisziplinäre Gebirgsforschung, Österreichische Akademie der Wissenschaften (AT)
IGNANKaz:	Institute of Geography, National Academy of Sciences of the Kazakh Republic (KZ)
IGRAN:	Institute of Geography of the Siberian Branch, Russian Academy of Science (RU)
IGS-IMO:	Iceland Glaciological Society, Icelandic Met Office (IS)
IMGI:	Institute of Meteorology and Geophysics, University of Innsbruck (AT)
IMO:	Icelandic Meteorological Office (IS)
INAMHI:	Programa Glaciares Ecuador, Instituto Nacional de Meteorología e Hidrología (EC)
INK:	Department of Physical Geography and Quaternary Geology, University of Stockholm (SE)
IRD:	Institut de recherche pour le développement (FR)
IRSTEA:	Institut national de recherche en sciences et technologies pour l'environnement et l'agriculture (FR)
ITAC:	Italian Alpine Club (CH)
JIRP:	Juneau Icefield Research Project, Nicols College (US)
JNU/SES:	School of Environmental Sciences, Jawaharlal Nehru University (IN)
LGGE:	Laboratoire de Glaciologie et Géophysique de l'Environnement, CNRS & Université Joseph Fourier Grenoble (FR)
LHIC:	Lake Hawea Inst. Cryodynamics (NZ)
MGU:	Geographical Faculty, Moscow State University (RU)
NCGCP:	North Cascade Glacier Climate Project, Nichols College (US)
NCNP:	Sandalee Marblemount Ranger Station, North Cascades National Park (US)
NIWA:	National Institute of Water and Atmospheric Research (NZ)
NPC:	National Power Company (IS)
NPI:	Norwegian Polar Institute, Polar Environmental Centre (NO)
NVE:	Norwegian Water Resources and Energy Directorate (NO)
OEAV:	Österreichischer Alpenverein (AT)
PAS:	Institute of Geophysics, Polish Academy of Sciences (PL)
PJPS:	Pope John Paul II State School o Higher Education in Biala Podlaska (PL)
PNGP:	Parco Nazionale Gran Paradiso (IT)
SAT:	Comitato Glaciologico Trentino, Società degli Alpinisti Tridentini (IT)
SGAA:	Servizio Glaciologico Alto Adige (IT)
SGEES:	School of Geography, Environment and Earth Science, Victoria University of Wellington (NZ)
SG-Forest:	Forestry Service of Canton St. Gallen (CH)
SGL:	Servizio Glaciologico Lombardo (IT)
SMI:	Società Meteorologica Italiana (IT)

Abbreviation	Sponsoring Agency
SPESA:	Servicios y Proyectos del Ebro SA (ES)
SU/DG:	Department of Geography, University of Sheffield (GB)
TGU:	Laboratory of Glacioclimatology, Tomsk State University (RU)
TshMRC:	The Tien-Shan High Mountain Research Center Power, Institute of Water Problems and Hydro Power (KG)
TU/G:	Department of Geography, Trent University (CA)
UAF/GI:	Geophysical Institute, University of Alaska (US)
UC/NHM:	Natural History Museum of Denmark, University of Copenhagen (DK)
UCant/DG:	Dept. Of Geography, University of Canterbury (NZ)
UGRH/ANA:	Unidad de Glaciología y Recursos Hídricos, Autoridad National del Agua (PE)
UGRH/INRENA:	Unidad de Glaciología y Recursos Hídricos, Instituto nacional de recursos naturales (PE)
UI/HA:	Ufficio Idrografico / Hydrographisches Amt, Provincia autonoma di Bolzano - Alto Adige / Autonome Provinz Bozen - Südtirol (IT)
UMSA:	Instituto de Investigaciones Geológicas y del Medio Ambiente, Universidad Mayor de San Andres (BO)
UNTDF:	Universidad Nacional de Tierra del Fuego (AR)
Uottawa/DG:	Department of Geography, University of Ottawa (CA)
UP/TeSAF:	Dept. of Land, Environment, Agriculture and Forestry, University of Padua (IT)
UPM/ETSIT:	ETSI Telecomunicación, Universidad Politécnica de Madrid (ES)
UPV:	Departamento de Ingeniería del Terreno, Universidad Politécnica de Valencia (ES)
UR-Forest:	Forestry Service of Canton Uri (CH)
US/FES:	University of Silesia, Faculty of Earth Sciences (PL)
USGS-F:	Alaska Science Center, Glaciology, U.S. Geological Survey (US)
USGS-T:	Washington Water Science Center, U.S. Geological Survey (US)
UT/DST:	Dipartimento Scienze della Tera, Università di Torino (IT)
UW:	University of Warsaw
VAW:	Laboratory of Hydraulics, Hydrology and Glaciology, ETH Zurich (CH)
VD-Forest:	Forestry Service of Canton Vaud (CH)
VS-Forest:	Forestry Service of Canton Valais (CH)
ZAMG:	Zentralanstalt für Meteorologie und Geodynamik (AT)

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APPENDIX

The appendix includes the data reported for the observation periods covered by the current bulletin (i.e. 2011/12 and 2012/13) and addenda for the period 2010/11 in order to ensure seamless data reporting from FoG Vol. X (2005-2010) and GMBB No. 12 (2010-2011).

The Appendix starts with explanatory notes on the completion of the Excel-based data submission forms, as sent out with the corresponding calls-for-data:

NOTES ON THE COMPLETION OF THE DATA SHEETS

- Notes on the completion of the data sheet "A GENERAL INFORMATION"
- Notes on the completion of the data sheet "B STATE"
- Notes on the completion of the data sheet "C FRONT VARIATION"
- Notes on the completion of the data sheet "D CHANGE"
- Notes on the completion of the data sheet "E MASS BALANCE OVERVIEW"
- Notes on the completion of the data sheet "EE MASS BALANCE"
- Notes on the completion of the data sheet "EEE MASS BALANCE POINT"
- Notes on the completion of the data sheet "F SPECIAL EVENT"

The notes on the completion of the data sheets A–F describe all attributes compiled during the call-for-data, whereas the Tables 1 to 6 in this Volume provide a summary of the collected data. Full details, including all attributes are stored in, and available from, the *Fluctuations of Glaciers* database.

The WGMS website provides access to information on available data, to procedures for data order and data submission as well as to the addresses of national correspondents. Website and database can be accessed via:

http://www.wgms.ch

A - GENERAL INFORMATION

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in cases of new glacier entries related to available fluctuation data*; for glaciers already existing in the FoG database, POLITICAL UNIT (A1), GLACIER NAME (A2) AND WGMS ID (A3) are to be used in data sheets B to F.

A1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (for 2 digit abbreviations, see ISO 3166 country code, available at www.iso.org).
Political unit is part of WGI key (positions 1 and 2).
Political unit is part of FoG and MBB key (positions 1 and 2).

A2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters.
Format: max. 60 column positions.
If necessary, the name can be abbreviated; in this case, please give the full name under “A16 - REMARKS”.

A3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS data base.
For new glacier entries, this key is assigned by the WGMS.

A4 - HYDROLOGICAL CATCHMENT AREA [alpha-numeric code; 5 digits]
Part of WGI key: Position 3 denotes the continent. Positions 4 to 7 denote the drainage basin; cf. Müller (1978).

A5 - FREE POSITION [alpha-numeric code; 2 digits]
Part of WGI number: Positons 8 and 9 are freely chosen identification numbers; cf. Müller (1978).

A6 - LOCAL CODE [alpha-numeric code; 3 digits]
Part of WGI number: Positions 10 to 12; cf. Müller (1978).

A7 - LOCAL PSFG [alpha-numeric code; 5 digits]
The local PSFG number is part of FoG and MBB key (positions 3 to 7).
It consists of 4 or, as an exception, 5 numerical digits. Empty spaces should be filled with the digit 0.
The PSFG key is to be assigned by the National Correspondents of the WGMS according to existing national glacier inventories or similar glacier numerations.

A8 - GEOGRAPHICAL LOCATION (GENERAL) [alpha-numeric code; up to 30 digits]
Refers to a large geographical entity (e.g. a large mountain range or large politcal subdivision) which gives a rough idea of the location of the glacier, without requiring the use of a map or an atlas.
Examples: Western Alps, Southern Norway, Polar Ural, Tien Shan, Himalayas.

A9 - GEOGRAPHICAL LOCATION (SPECIFIC) [alpha-numeric code; up to 30 digits]
Refers to a more specific geographical location (e.g. mountain group, drainage basin), which can be found easily on a small scale map of the country concerned.
Examples: Rhone Basin, Jotunheimen

A10 - LATITUDE [decimal degree North or South; up to 6 digits]
The geographical coordinates should refer to a point in the upper ablation area; for small glaciers, this point may lie outside the glacier.
Latitude should be given in decimal degrees, positive values indicating the northern hemisphere and negative values indicating the southern hemisphere.
Latitude should be given to a maximum precision of 4 decimal places.

*For new glacier entries, you may check the World Glacier Inventory for existing information:
http://nsidc.org/data/glacier_inventory/index.html

A11 - LONGITUDE [decimal degree East or West; up to 7 digits]
The geographical coordinates should refer to a point in the upper ablation area; for small glaciers, this point may lie outside the glacier.
Longitude should be given in decimal degrees, positive values indicating east of zero meridian and negative values indicating west of zero meridian.
Longitude should be given to a maximum precision of 4 decimal places.

A12 - CODE [numeric code; 3 digits]
Classification should be given in coded form, according to “Perennial Ice and Snow Masses” (Technical papers in hydrology, UNESCO/IAHS, 1970). The following information should be given:

• Primary Classification	Digit 1
• Form	Digit 2
• Frontal Characteristics	Digit 3

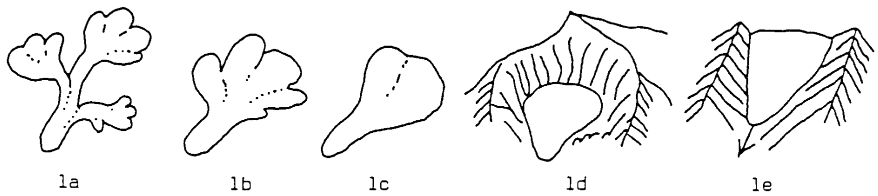
A12a - PRIMARY CLASSIFICATION - Digit 1

0	Miscellaneous	Any type not listed below (please explain)
1	Continental ice sheet	Inundates areas of continental size
2	Icefield	Ice masses of sheet or blanket type of a thickness insufficient to obscure the subsurface topography
3	Ice cap	Dome-shaped ice masses with radial flow
4	Outlet glacier	Drains an ice sheet, icefield or ice cap, usually of valley glacier form; the catchment area may not be easily defined
5	Valley glacier	Flows down a valley; the catchment area is well defined
6	Mountain glacier	Cirque, niche or crater type, hanging glacier; includes ice aprons and groups of small units
7	Glacieret and snowfield	Small ice masses of indefinite shape in hollows, river beds and on protected slopes, which has developed from snow drifting, avalanhcing, and/or particularly heavy accumulation in certain years; usually no marked flow pattern is visible; in existence for at least two consecutive years.
8	Ice shelf	Floating ice sheet of considerable thickness attached to a coast nourished by a glacier(s); snow accumulation on its surface or bottom freezing
9	Rock glacier	Lava-stream-like debris mass containing ice in several possible forms and moving slowly downslope

Note: The parent glacier concept (cf. A15 - PARENT GLACIER) can be used for the classification of complex glacier systems (e.g., ice cap or icefield with outlet glaciers) or of disintegrating/coalescing glaciers over time.

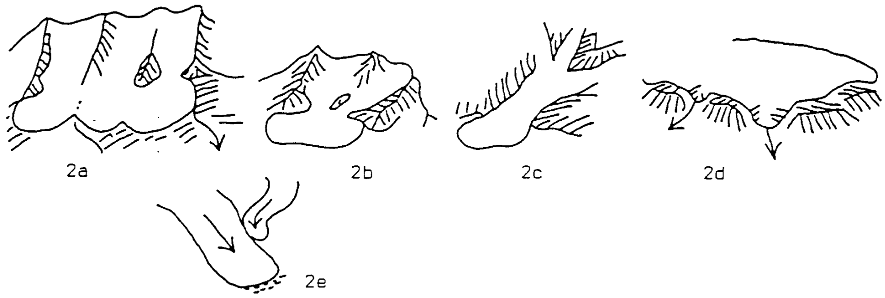
A12b - FORM – Digit 2

0	Miscellaneous	Any type not listed below (please explain)
1	Compound basins	Two or more individual valley glaciers issuing from tributary valleys and coalescing (Fig. 1a)
2	Compound basin	Two or more individual accumulation basins feeding one glacier system (Fig. 1b)
3	Simple basin	Single accumulation area (Fig. 1c)
4	Cirque	Occupies a separate, rounded , steep-walled recess which it has formed on a mountain side (Fig. 1d)
5	Niche	Small glacier in a V-shaped gulley or depression on a mountain slope (Fig. 1e); generally more common than genetically further-developed cirque glacier.
6	Crater	Occurring in extinct or dormant volcanic craters
7	Ice apron	Irregular, usually thin ice mass which adheres to mountain slope or ridge
8	Group	A number of similar ice masses in close proximity and too small to be assessed individually
9	Remnant	Inactive, usually small ice masses left by a receding glacier



A12c - FRONTAL CHARACTERISTICS – Digit 3

0	Miscellaneous	Any type not listed below (please explain)
1	Piedmont	Icefield formed on a lowland area by lateral expansion of one or coalescence of several glaciers (Fig. 2a, 2b)
2	Expanded foot	Lobe or fan formed where the lower portion of the glacier leaves the confining wall of a valley amd extends on to a less restricted and more level surface (Fig. 2c)
3	Lobed	Part of an ice sheet or ice cap, disqualified as an outlet glacier (Fig. 2d)
4	Calving	Terminus of a glacier sufficiently extending into sea or lake water to produce icebergs; includes- for this inventory- dry land ice calving which would be recognisable from the "lowest glacier elevation"
5	Coalescing, non-contributing (Fig. 2e)	
6	Irregular, mainly clean ice (mountain or valley glaciers)	
7	Irregular, debris-covered (mountain or valley glaciers)	
8	Single lobe, mainly clean ice (mountain or valley glaciers)	
9	Single lobe, debris-covered (mountain or valley glaciers)	



A13 - EXPOSITION OF ACCUMULATION AREA [cardinal point; up to 2 digits]
The main orientation of the accumulation area using the 8 cardinal points (8-point compass).

A14 - EXPOSITION OF ABLATION AREA [cardinal point; up to 2 digits]
The main orientation of the accumulation area using the 8 cardinal points (8-point compass).

A15 - PARENT GLACIER [numeric code; 5 digits]
Links separated glacier parts with (former) parent glacier, using WGMS ID (see "A2 WGMS ID").

A16 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here. Comments about the accuracy of the numerical data may be made, including quantative comments. Only significant decimals should be given.

B - STATE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report length, area and elevation range of glaciers with available fluctuation data.

B1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

B2 - GLACIER NAME [alpha-numeric code; up to 30 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

B3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS data base (cf. "A3 - WGMS ID").

B4 - YEAR [year]
Year of present survey.

B5 - MAXIMUM ELEVATION OF GLACIER [m a.s.l.]
Altitude of the highest point of the glacier.

B6 - MEDIAN ELEVATION OF GLACIER [m a.s.l.]
Altitude of the contour line which halves the area of the glacier.

B7 - MINIMUM ELEVATION OF GLACIER [m a.s.l.]
Altitude of the lowest point of the glacier.

B8 - ELEVATION ACCURACY [m]
Estimated maximum error of reported elevations.

B9 - LENGTH [km]
Maximum length of glacier measured along the most important flowline (in horizontal projection).

B10 - LENGTH ACCURACY [km]
Estimated maximum error, in length.

B11 - AREA [km2]
Glacier area (in horizontal projection) in the survey YEAR.

B12 - AREA ACCURACY [km2]
Estimated maximum error for area.

B13 - SURVEY DATE [numeric; 8 digits]
Date of present survey.
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "B16 - REMARKS"

B14 - SURVEY PLATFORM & METHOD [alphabetic code; 2 digits]
The survey platform and method should be given using the following alphabetic code:

Platform (first digit, lower case)	Method (second digit, upper case)
t: terrestrial	R: reconstructed (e.g., from landforms)
a: airborne	M: derived from maps
s: spaceborne	G: ground survey (e.g., GPS, tachymetry, tape)
c: combined	P: photogrammetry
x: unknown	L: laser altimetry or scanning
	Z: radar altimetry or interferometry
	C: combined (explain under B16 REMARKS)
	X: other (explain under B16 REMARKS)

B15 - INVESTIGATOR [alpha-numeric; 255 digits]
Name(s) of the person(s) or agency doing the field work and/or the name(s) of the person(s) or agency processing the data.

B16 - SPONSORING AGENCY [alpha-numeric; 255 digits]
Full name, abbreviation and address of the agency where the data are held.

B17 - REFERENCE [alpha-numeric; 255 digits]
Reference to publication related to above data and methods.
Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

B18 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here as well as short references to related publications. Comments about the accuracy of the numerical data may be made, including quantative comments. Only significant decimals should be given.

C - FRONT VARIATION

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report glacier length change records mainly from in-situ and remote sensing measurements.*

C1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

C2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

C3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS data base (cf. "A3 - WGMS ID").

C4 - YEAR [year]
Year of present survey.

C5 - FRONT VARIATION [m]
Variation in the position of the glacier front (in horizontal projection) between the previous and present survey.

Positive values: advance
Negative values: retreat

C6 - FRONT VARIATION ACCURACY [m]
Estimated maximum error for front variation.

C7 - QUALITATIVE VARIATION [alphabetic code; 2 digits]
If no quantitative data are available for a particular year, but qualitative data are available, then the front variation should be denoted using the following symbols. They should be positioned in the far left of the data field.

+X : Glacier in advance
-X : Glacier in retreat
ST : Glacier stationary
SN : Glacier front covered by snow making survey impossible.

Qualitative variations will be understood with reference to the previous survey data, whether this data is qualitative or quantitative.

C8 - SURVEY DATE [numeric; 8 digits]
Date of present survey.
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "C14 - REMARKS"

C9 - SURVEY PLATFORM & METHOD [alphabetic code; 2 digits]
The survey platform and method should be given using the following alphabetic code:

Platform (first digit, lower case)	Method (second digit, upper case)
t: terrestrial	R: reconstructed (e.g., historical sources, geomorphological evidence, dating of moraines)
a: airborne	M: derived from maps
s: spaceborne	G: ground survey (e.g., GPS, tachymetry, tape)
c: combined	P: photogrammetry
x: unknown	L: laser altimetry or scanning
	Z: radar altimetry or interferometry
	C: combined (explain under C14 REMARKS)
	X: other (explain under C14 REMARKS)

C10 - REFERENCE DATE [numeric, 8 digits]
Date of previous survey
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "C14 - REMARKS"

C11 - INVESTIGATOR [alpha-numeric; 255 digits]
Name(s) of the person(s) or agency doing the fieldwork and/or the name(s) of the person(s) or agency processing the data.

C12 - SPONSORING AGENCY [alpha-numeric; 255 digits]
Full name, abbreviation and address of the agency where the data are held.

C13 - REFERENCE [alpha-numeric; 255 digits]
Reference to publication related to above data and methods.
Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

C14 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here as well as short references to related publications. Comments about the accuracy of the numerical data may be made, including quantative comments. Only significant decimals should be given.

D - CHANGE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report changes in thickness, area and volume from geodetic surveys and/or area data of glaciers with available fluctuation data.

D1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

D2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

D3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS data base (cf. "A3 - WGMS ID").

D4 - YEAR [year]
Year of present survey.

D5 - LOWER BOUNDARY [m a.s.l.]
Lower boundary of altitude interval.
If refers to entire glacier, then lower bound = 9999.

D6 - UPPER BOUNDARY [m a.s.l.]
Upper boundary of altitude interval
If refers to entire glacier, then upper bound = 9999.

D7 - AREA SURVEY YEAR[km2]
Glacier area of each altitude interval (in horizontal projection) in the survey YEAR.

D8 - AREA CHANGE [1000 m2]
Area change for each altitude interval.

D9 - AREA CHANGE ACCURACY [1000 m2]
Estimated maximum error for area change.

D10 - THICKNESS CHANGE [mm]
Specific ice thickness change for each altitude interval.

D11 - THICKNESS CHANGE ACCURACY [mm]
Esitmated maximum error for thickness change.

D12 - VOLUME CHANGE [1000 m3]
Ice volume change for each altitude interval.

D13 - VOLUME CHANGE ACCURACY [1000 m3]
Esitmated maximum error for volume change.

D14 - SURVEY DATE [numeric; 8 digits]
Date of present survey.
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "D21 - REMARKS"

D15 - SURVEY DATE PLATFORM & METHOD [alphabetic code; 2 digits]
The survey platform and method applied at the survey date should be given using the following alphabetic code:

Platform (first digit, lower case)	Method (second digit, upper case)
t: terrestrial	R: reconstructed (e.g., from landforms)
a: airborne	M: derived from maps
s: spaceborne	G: ground survey (e.g., GPS, tachymetry, tape)
c: combined	P: photogrammetry
x: unknown	L: laser altimetry or scanning
	Z: radar altimetry or interferometry
	C: combined (explain under D21 REMARKS)
	X: other (explain under D21 REMARKS)

D16 - REFERENCE DATE [numeric; 8 digits]
Date of previous survey.
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put “99” in the corresponding position(s) and make a note under “D21 - REMARKS”

D17 - REFERENCE DATE PLATFORM & METHOD [alphabetic code; 2 digits]
The survey platform and method applied at the reference date should be given using the alphabetic code given under D15.

D18 - INVESTIGATOR [alpha-numeric; 255 digits]
Name(s) of the person(s) or agency doing the fieldwork and/or the name(s) of the person(s) or agency processing the data.

D19 - SPONSORING AGENCY [alpha-numeric; 255 digits]
Full name, abbreviation and address of the agency where the data are held.

D20 - REFERENCE [alpha-numeric; 255 digits]
Reference to publication related to above data and methods.
Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

D21 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here as well as short references to related publications. Comments about the accuracy of the numerical data may be made, including quantative comments. Only significant decimals should be given.

E - MASS BALANCE OVERVIEW

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report glacier mass balance data measured by the direct glaciological method.

E1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. “A1 - POLITICAL UNIT”).

E2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in “A2 - GLACIER NAME”.

E3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS database (cf. “A3 - WGMS ID”).

E4 - YEAR [year]
Year of present survey.

E5 - TIME MEASUREMENT SYSTEM [alphabetic code; 3 digits]
The time measurement system should be given using the following 3 digit alphabetic code:

FLO = floating-date system
FXD = fixed-data system
STR = stratigraphic system
COM = combined system; usually of STR and FXD according Mayo et al. (1972)
OTH = other

Please give floating survey dates in E6-E8 for all time systems and explain methodological details (e.g., fixed calendar dates and correction methods) under “E23 - REMARKS”.

Note that FLO was newly introduced in 2011 in order to reduce earlier ambiguities. Before that, mass balance results based on the floating-date system were (at least theoretically) reported as OTH. For definitions of the above time measurement systems and more details see Cogley et al. (2011).

E6 - BEGINNING OF SURVEY PERIOD [numeric; 8 digits]
Date on which survey period began.
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put “99” in the corresponding position(s) and make a note under “E23 - REMARKS”

E7 - END OF WINTER SEASON [numeric; 8 digits]
Date of end of winter season.
If known, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put “99” in the corresponding position(s) and make a note under “E23 - REMARKS”

E8 - END OF SURVEY PERIOD [numeric; 8 digits]
Date on which survey period ended.
For each survey, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put “99” in the corresponding position(s) and make a note under “E23 - REMARKS”

E9a - ELA PREFIX [alphabetic code, 1 digit]
Prefix denoting if the equilibrium line was below (“<”) or above (“>”) the minimum or maximum elevation of the glacier, respectively. Leave this field empty if the mean altitude of the equilibrium line was within the glacier elevation range.

E9b - EQUILIBRIUM LINE ALTITUDE [m a.s.l.]
Mean alititude (averaged over the glacier) of the end-of-mass-balance-year equilibrium line (ELA). Give glacier minimum or maximum elevation if the ELA was below or above the elevation range of the glacier, respectively.

E10 - ELA ACCURACY [m]
Estimated maximum error of ELA.

E11 - MINIMUM NUMBER OF MEAS. SITES USED IN ACCUMULATION AREA [numeric]
The minimum number of different sites at which measurements were taken in the accumulation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once.

E12 - MAXIMUM NUMBER OF MEAS. SITES USED IN ACCUMULATION AREA [numeric]
The maximum number of different sites at which measurements were taken in the accumulation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once.

E13 - MINIMUM NUMBER OF MEAS. SITES USED IN ABLATION AREA [numeric]
The minimum number of different sites at which measurements were taken in the ablation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once.

E14 - MAXIMUM NUMBER OF MEAS. SITES USED IN ABLATION AREA [numeric]
The maximum number of different sites at which measurements were taken in the ablation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once.

E15 - ACCUMULATION AREA [km2]
Accumulation area in horizontal projection.

E16 - ACCUMULATION AREA ACCURACY [km2]
Estimated maximum error for accumulation area.

E17 - ABLATION AREA [km2]
Ablation area in horizontal projection.

E18 - ABLATION AREA ACCURACY [km2]
Estimated maximum error for ablation area.

E19 - ACCUMULATION AREA RATIO [%]
Accumulation area divided by the total area, multiplied by 100. Given in percent.

E20 - INVESTIGATOR [alpha-numeric; 255 digits]
Name(s) of the person(s) or agency doing the fieldwork and/or the name(s) of the person(s) or agency processing the data.

E21 - SPONSORING AGENCY [alpha-numeric; 255 digits]
Full name, abbreviation and address of the agency where the data are held.

E22 - REFERENCE [alpha-numeric; 255 digits]
Reference to publication related to above data and methods.
Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

E23 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here as well as short references to related publications. Comments about the accuracy of the numerical data may be made, including quantative comments. Only significant decimals should be given.

EE - MASS BALANCE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report glacier mass balance data with values related to the data given in data sheet E.

EE1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

EE2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

EE3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS database (cf. "A3 - WGMS ID").

EE4 - YEAR [year]
Year of present survey.

EE5 - LOWER BOUNDARY OF ALTITUDE INTERVAL [m a.s.l.]
If refers to entire glacier, then lower bound = 9999.

EE6 - UPPER BOUNDARY OF ALTITUDE INTERVAL [m a.s.l.]
If refers to entire glacier, then lower bound = 9999.

EE7 - ALTITUDE INTERVAL AREA [km2]
Area of each altitude interval (in horizontal projection).

EE8 - SPECIFIC WINTER BALANCE [mm w.e.]
Specific means the total value divided by the total glacier area under investigation.
Specific winter balance equals the net winter balance divided by the total area of the glacier.

EE9 - SPECIFIC WINTER BALANCE ACCURACY [mm w.e.]
Estimated maximum error for specific winter balance.

EE10 - SPECIFIC SUMMER BALANCE [mm w.e.]
Specific means the total value divided by the total glacier area, in this case, it is the net summer balance divided by the total area of the glacier.

EE11 - SPECIFIC SUMMER BALANCE ACCURACY [mm w.e.]
Estimated maximum error for specific winter balance.

EE12 - SPECIFIC ANNUAL BALANCE [mm w.e.]
Annual mass balance of glacier divided by the area of the glacier.

EE13 - SPECIFIC ANNUAL BALANCE ACCURACY [mm w.e.]
Estimated maximum error for specific annual balance.

EE14 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here. Comments about the accuracy of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

EEE - MASS BALANCE POINT

NOTES ON THE COMPLETION OF THE DATA SHEET

EEE1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

EEE2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

EEE3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS database (cf. "A3 - WGMS ID").

EEE4 - YEAR [year]
Year of present survey.

EEE5 - POINT ID [alpha-numeric; 4 digits]
4 digit key indentifying the stake or pit.

EEE6 - POINT LATITUDE [decimal degree North or South; up to 6 digits]
Latitude of stake or pit given in decimal degrees, positive values indicating the northern hemisphere and negative values indicating the southern hemisphere.
Latitude should be given to a maximum precision of 4 decimal places.

EEE7 - POINT LONGITUDE [decimal degree East or West; up to 7 digits]
Longitude of stake or pit given in decimal degrees, positive values indicating east of zero meridian and negative values indicating west of zero meridian.
Longitude should be given to a maximum precision of 4 decimal places.

EEE8 - POINT ELEVATION [m a.s.l.]
Elevation above sea level of stake or pit.

EEE9 - POINT WINTER BALANCE [mm w.e.]
Winter mass balance at stake or pit.

EEE10 - POINT SUMMER BALANCE [mm w.e.]
Summer mass balance at stake or pit.

EEE11 - POINT ANNUAL BALANCE [mm w.e.]
Annual mass balance at stake or pit.

EEE12 - REMARKS [alpha-numeric]
Any important information or comments not included above, such as measured or estimated density of snow/firn/ice, may be given here.

F - SPECIAL EVENT

NOTES ON COMPLETION OF THE DATA SHEET

This data sheet should be completed in cases of extraordinary events, especially concerning glacier hazards and dramatic changes in glaciers.

F1 - POLITCAL UNIT [alphabetic code; 2 digits]
Name of country or territory in which glacier is located (cf. “A1 - POLITICAL UNIT”).

F2 - GLACIER NAME [alpha-numeric code; up to 60 digits]
The name of the glacier, written in CAPITAL letters. Use the same spelling as in “A2 - GLACIER NAME”.

F3 - WGMS ID [numeric code; 5 digits]
5 digit key identifying glacier in the WGMS database (cf. “A3 - WGMS ID”).

F4 - EVENT DATE [numeric; 8 digits]
Date of event. For each event, please indicate the complete date in numeric format (YYYYMMDD).
Missing data: For unknown day or month, put “99” in the corresponding position(s) and make a note under “F6 - EVENT DESCRIPTION”. For events lasting for several days, please indicate the date of the main event, and describe the sequence of the event under “F6 - EVENT DESCRIPTION”.

F5 - EVENT TYPE [binary code; 6 digits]
Indicate the involved event type(s) using 1 = event type involved and 0 = event type not involved for the following event types:

F5a - GLACIER SURGE
F5b - CALVING INSTABILITY
F5c - GLACIER FLOOD (including debris flow, mudflow)
F5d - ICE AVALANCHE
F5e - TECTONIC EVENT (earthquake, volcanic eruption)
F5f - OTHER

F6 - EVENT DESCRIPTION [alpha-numeric]
Please give quantitative information wherever possible, for example:
- Glacier surge: Date and location of onset, duration, flow or advance velocities, discharge anomalies and periodicity;
- Calving instability: Rate of retreat, iceberg discharge, ice flow velocity and water depth at calving front;
- Glacier flood (including debris flow, mudflow): Outburst volume, outburst mechanism, peak discharge, sediment load, sediment load, reach and propagation velocity of flood wave or front of debris flow / mudflow;
- Ice avalanche: Volume released, runout distance, overall slope (ratio of vertical drop height to horizontal travel distance) of avalanche path;
- Tectonic event: Volumes, runout distances and overall slopes (ratio of vertical drop height to horizontal travel distance) of rockslides on glacier surfaces, amount of geothermal melting in craters, etc.

F7 - DATA SOURCE [alpha-numeric]
Please indicate at least one reference or source which could help the reader to locate more detailed information, or give the name(s) of contact person(s) who would be able to supply additional information.

F8 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here. Comments about the accuracy of the numerical data may be made, including quantative comments. Only significant decimals should be given.
The amount and/or kind of possible destruction, particular technical measures taken against glacier hazards, or special studies carried out in connection with the event may be given.

APPENDIX - Table 1

GENERAL INFORMATION ON THE OBSERVED GLACIERS 2011–2013

GLACIER NAME	Name of the glacier in capital letters, up to 30 alpha-numeric digits
WGMS ID	Key identifier of the glacier in the Fluctuations of Glaciers database, assigned by the WGMS, up to 5 numeric digits
PSFG NR	Identifier of the glacier in line with existing national inventories, assinged by the National Correspondents, up to 5 numeric digits with 2 alphabetic digits prefix denoting country (cf. www.iso.org)
REGION	Code for geographical location of the glacier in of 19 macro-scale regions, 3 alphabetic digits
LAT	Latitude in decimal degrees north (positive) or south (negative)
LON	Longitude in decimal degrees east (positive) or west (negative)
CODE	3 digits giving primary classification, form, and frontal characteristics of the glacier (cf. Notes on the Completion of the Data Sheets)
EXP ACC	Exposition of the accumulation area (cardinal point)
EXP ABL	Exposition of the ablation area (cardinal point)
ELEV MAX	Maximum elevation of the glacier in m a.s.l.*
ELEV MED	Median elevation of the glacier in m a.s.l.*
ELEV MIN	Mininum elevation of the glacier in m a.s.l.*
AREA	Total area of the glacier in km^2*
LENGTH	Total lenght of the glacier in km*
TYPE OF DATA	2 = Variations in the positions of glacier fronts reported for 2010/11, 2011/12, and 2012/13
	3 = Mass balance summary data reported for 2010/11, 2011/12, and 2012/13
	4 = Mass balance versus elevation data reported for 2010/11, 2011/12, and 2012/13
	5 = Mass balance point data reported for 2010/11, 2011/12, 2012/13
	6 = Changes in area, volume and thickness from geodetic surveys in 2010/11, 2011/12, and 2012/13

* these are the last reported values which may not correspond to the same survey year

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
Antarctica - AQ														
BAHIA DEL DIABLO	2665	AQ	ANT	-63.82	-57.43	4-3-8	NE	E	638	390	50	13.8	7.6	23456
HURD	3367	AQ	ANT	-62.688	-60.402	4-3-3	W	W	334		4	4		-3---
JOHNSONS	3366	AQ	ANT	-62.669	-60.354	4-2-4	NW	NW	356		0	5.4		-3---
Argentina - AR														
AGUA NEGRA	4532	AR		-30.165	-69.809	6-3-8	SE	SE	5220	5015	4765	1.1	2.127	2----
BROWN SUPERIOR	3903	AR	SAN	-29.983	-69.642	6-3-8	E	E	5180		4930	0.2		-3-5-
CANITO	4529	AR		-29.367	-70.009	6-2-8	SE	SE	5155	5039	4865	0.8	1.618	2----
CONCONTA NORTE	3902	AR	SAN	-29.976	-69.645	6-3-8	E	E	5150		4920	0.1		-3-5-
GUSSFELDT	2848	AR	SAN	-32.61	-70.03	5-2-6	E	E	5570	4979	4310	13.7	6.38	2----
LOS AMARILLOS	3904	AR	SAN	-29.296	-69.995	6-3-8	SE	SE	5550		4930	0.9	1.622	23-5-
MARTIAL ESTE	2000	AR	SAN	-54.78	-68.4	6-4-6	SE	SE	1180	1074	960	0.1	0.35	2345-
POTRERILLOS	4530	AR		-29.390	-70.010	6-3-8	SE	SE	5365	5270	5165	0.2	0.506	2----
TORTOLAS	4531	AR		-29.937	-69.886	6-3-8	E	E	6055	5710	5300	2.2	1.652	2----
VACAS	2849	AR	SAN	-32.55	-69.99	5-2-6	E	E	5456	4787	3730	18.1	5.29	2----
Austria - AT														
ALPEINER F.	497	AT055	CEU	47.05	11.13	5-2-8	N	NE	3340	2930	2310	3.9	4.6	2----
BACHFALLEN F.	500	AT012	CEU	47.08	11.08	6-0-8	N	N	3150	2850	2580	2.4	2.9	2----
BAERENKOPF K.	567	AT071	CEU	47.13	12.72	6-2-4	N	N	3400	3030	2270	2.5	3.1	2----
BERGLAS F.	496	AT058	CEU	47.07	11.12	6-0-8	E	NE	3290	2990	2620	1.2	2.5	2----
BIELTAL F.	481	AT028	CEU	46.88	10.13	6-0-6	NW	NW	3000	2740	2544	0.7	1.1	2----
BRENNKOGL K.	528	AT043	CEU	47.1	12.8	6-4-6	N	N	2960	2670	2430	0.6	1.2	2----
DAUNKOGEL F.	604	ATA36	CEU	47	11.1	6-0-8	NE	NE	3260	2880	2550	2.4	2.9	2----
DIEM F.	513	AT100	CEU	46.811	10.945	6-0-8	NW	NW	3540	3060	2710	3.2	3.4	2----
EISKAR G.	1632	AT	CEU	46.62	12.9	6-4-6	N	N	2390	2250	2160	0.2	0.4	2----
FERNAU F.	601	AT034	CEU	46.98	11.13	6-4-8	NW	N	3310	2850	2590	2	2.5	2----
FIRMISAN F.	4337	AT	CEU	46.827	10.95	X-X-X	W	W				0.8		2----
FREIWAND K.	564	AT030	CEU	47.1	12.75	6-4-8	SE	SE	3130	2890	2690	0.3	1.1	2----
FROSNITZ K.	579	AT066	CEU	47.08	12.4	6-3-6	E	E	3330	2780	2400	3.6	4.4	2----
FURTSCHAGL K.	585	AT086	CEU	47	11.77	6-0-8	NW	NW	3480	2928	2624	0.9	1.6	2----
GAISKAR F.	530	AT039	CEU	46.97	11.12	6-4-8	SE	SE	3190	3070	2890	0.8	1.1	2----
GAISSBERG F.	508	AT060	CEU	46.83	11.07	5-2-8	NW	NW	3390	2850	2460	1.4	3.3	2----
GEPATSCH F.	522	AT022	CEU	46.85	10.77	5-2-8	NE	N	3536	3057	2060	17.9	8.2	2----
GOESSNITZ K.	532	AT011	CEU	46.97	12.75	6-4-7	NW	NW	3060	2690	2520	0.9	1.5	2----
GOLDBERG K.	1305	AT	CEU	47.04	12.97	6-4-8	SE	NE	3100	2680	2350	1.4	2.8	234--
GR. GOSAU G.	536	AT004	CEU	47.48	13.6	6-4-6	NW	NW	2850	2520	2250	1.5	2.2	2----
GROSSELEND K.	542	AT014	CEU	47.03	13.32	6-3-6	NW	NW	3160	2720	2410	2.8	2.4	2----
GRUENAU F.	599	AT030	CEU	46.98	11.2	6-4-8	N	N	3420	2958	2388	1.8	2.24	2----
GURGLER F.	511	AT074	CEU	46.8	10.98	5-2-8	NW	N	3420	2990	2270	11.9	8	2----
GUSLAR F.	490	AT132	CEU	46.85	10.8	6-4-8	E	SE	3500	3120	2780	3.4	2.5	2----
HALLSTAETTER G.	535	AT002	CEU	47.48	13.62	6-0-8	NE	NE	2910	2560	2150	3	2.3	234--
HINTEREIS FERNER	491	AT125	CEU	46.8	10.77	5-2-8	E	NE	3715	3064	2453	6.66	6.56	2345-
HOCHALM K.	538	AT011	CEU	47.02	13.33	6-3-6	E	E	3350	2880	2540	3.2	2.4	2----
HOCHJOCH F.	492	AT121	CEU	46.78	10.82	5-2-6	N	NW	3500	3030	2580	7.1	3.8	2----
HORN K.(SCHOB.)	531	AT010	CEU	46.97	12.77	6-4-8	N	NW	3010	2780	2600	0.5	1.1	2----
HORN K.(ZILLER)	589	AT075	CEU	47	11.82	5-3-8	N	N	3217	2819	2119	3.7	3	2----
INN.PIRCHLKAR	505	AT163	CEU	47	10.92	6-5-6	E	NE	3340	2990	2720	0.6	1.8	2----
JAMTAL F.	480	AT019	CEU	46.858	10.156	5-2-8	N	N	3200		2400	3.5	2.8	234--
KAELBERSPITZ K.	540	AT015	CEU	47.03	13.28	6-0-8	N	N	2890	2690	2450	0.8	2.2	2----
KALSER BAERENKOPF K.	2676	AT	CEU	47.11	13.6	X-X-X								2----
KARLINGER K.	568	AT073	CEU	47.13	12.7	6-2-4	NE	N	3340	2800	2060	4	3.6	2----
KESSELWAND FERNER	507	AT129	CEU	46.838	10.793	6-3-8	SE	E	3493	3190	2851	3.61	3.58	234--
KLEINEISER K.	555	AT089	CEU	47.15	12.67	6-4-6	NW	NW	2880	2730	2620	0.2	0.7	2----
KLEINELEND K.	541	AT022	CEU	47.07	13.25	6-3-4	NE	NE	3200	2750	2180	3	2.7	2----
KLEINFLEISS K.	547	AT036	CEU	47.05	12.95	6-0-6	W	W	3100	2840	2700	0.9	2.3	234--
KLOSTERTALER M	485	AT014	CEU	46.87	10.07	6-0-8	W	W	3220	2940	2640	0.5	1.6	2----
KRIMMLER K.	584	AT141	CEU	47.08	12.25	6-2-6	NW	NW	3490	2550	1910	6.4	3.5	2----
LANDECK K.	569	AT105	CEU	47.13	12.58	6-4-6	N	N	2940	2600	2430	0.4	0.9	2----
LANGTALER F.	510	AT072	CEU	46.789	11.019	5-3-8	N	NW	3420	2910	2450	3.5	5.1	2----
LATSCH F.	4338	AT	CEU	46.855	10.962	X-X-X	NW	NW				1.7		2----
LITZNERGL.	607	AT021	CEU	46.882	10.048	6-4-7	N	N	3000	2630	2441	0.7	1.2	2----
MARZELL F.	515	AT110	CEU	46.78	10.88	5-2-8	NW	N	3620	3160	2450	5.1	4.4	2----
MAURER K.(GLO.)	558	AT083	CEU	47.18	12.68	6-4-6	W	W	2890	2730	2610	0.5	1.4	2----
MITTERKAR F.	487	AT135	CEU	46.88	10.87	6-4-6	SE	SE	3580	3230	2960	1.1	2.1	2----
MUTMAL F.	506	AT108	CEU	46.78	10.92	6-4-8	N	NW	3522	3080	2720	0.8	1.5	2----
NIEDERJOCH F.	516	AT111	CEU	46.78	10.87	5-2-8	N	N	3600	3100	2690	2.9	3	2----
OBERSULZBACH K.	583	AT129	CEU	47.111	12.293	5-1-8	NW	NW	3600	2730	2400	2.1	5.7	234--
OCHSENTALERGL.	483	AT008	CEU	46.85	10.1	5-2-8	N	N	3200		2400	2.6	2.8	2----
OEDENWINKEL K.	559	AT094	CEU	47.110	12.645	5-3-9	NW	NW	3180	2590	2130	2.2	3.8	2----
PASTERZE	566	AT027	CEU	47.1	12.7	5-2-8	SE	SE	3700		2000	17.5	9.4	234--
PFAFFEN F.	591	AT040	CEU	46.965	11.135	6-4-8	W	W	3470	3060	2770	1.2	1.8	2----
RETTENBACH F.	488	AT150	CEU	46.93	10.93	6-4-6	N	N	3350	2920	2610	1.8	2.5	2----
ROFENKAR F.	518	AT136	CEU	46.88	10.88	6-4-4	SE	SE	3750	3290	2820	1.3	2.2	2----
ROTER KNOPF K.	3297	AT	CEU	46.97	12.75	X-X-X								2----
ROTMOOS F.	509	AT063	CEU	46.82	11.05	6-2-8	N	N	3410	2960	2370	3.2	3.3	2----
SCHALF F.	514	AT107	CEU	46.78	10.93	5-2-8	NW	NW	3500	3130	2500	8.5	5.6	2----
SCHLADMINGER G.	534	AT001	CEU	47.47	13.63	6-4-6	NE	NE	2700	2600	2420	0.8	0.9	2----
SCHLATEN K.	580	AT077	CEU	47.112	12.384	5-1-8	NE	NE	3670	2810	1940	10.3	6.3	2----
SCHLEGEIS K.	586	AT087	CEU	46.98	11.77	6-0-4	NW	NW	3510	2858	2485	5.1	1.7	2----
SCHMIEDINGER K.	548	AT081	CEU	47.18	12.68	6-0-6	NE	NE	3160	2750	2410	1.8	2	2----
SCHNEEGLOCKEN	525	AT009	CEU	46.87	10.1	6-4-6	NE	NE	3060	2770	2570	0.7	1.2	2----
SCHNEELOCH G.	533	AT003	CEU	47.5	13.6	6-4-8	NW	NW	2530	2300	2190	0.2	0.8	2----
SCHWARZENBERG F.	501	AT017	CEU	47.05	11.12	6-3-8	SE	SW	3497	3030	2590	1.7	2.9	2----
SCHWARZKARL K.	556	AT088	CEU	47.17	12.67	6-4-6	NW	NW	2970	2750	2560	0.5	1.2	2----
SCHWEIKERT F.	4336	AT	CEU	47.028	10.81	X-X-X	NW	NW				0.8		2----
SEXEGERTEN F.	520	AT016	CEU	46.9	10.8	6-2-8	N	NE	3490	2950	2560	2.7	2.9	2----
SIMILAUN F.	3296	AT	CEU	46.78	10.88	X-X-X								2----
SIMONY K.	575	AT045	CEU	47.07	12.27	6-0-9	SE	SE	3490	2810	2230	3.5	3.5	2----
SPIEGEL F.	512	AT097	CEU	46.83	10.95	6-4-8	NW	NW	3430	3080	2780	1.1	1.7	2----
STUBACHER SONNBLICK KEES	573	AT097	CEU	47.13	12.6	6-0-6	NE	E	3050		2500	1.6	1.5	23---
SULZENAU F.	600	AT032	CEU	46.98	11.15	5-1-8	N	N	3510	3161	2402	4.3	3.64	2----
SULZTAL F.	503	AT022	CEU	47	11.08	5-2-8	N	N	3350	2860	2290	4.3	4.1	2----
TASCHACH F.	519	AT014	CEU	46.902	10.849	5-2-8	N	NW	3767	3130	2240	7.4	5.6	2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
TOTENFELD	524	AT021	CEU	46.88	10.15	6-4-8	NE	NE	3040	2790	2550	0.7	1.5	2----
TOTENKOPF K.	2680	AT	CEU	47.13	12.66	X-X-X								2----
TRIEBENKARLAS F.	592	AT041	CEU	46.956	11.15	6-4-8	W	W	3460	3040	2760	1.8	2	2----
UMBAL K.	574	AT040	CEU	47.05	12.25	5-3-8	SW	SW	3440	2850	2230	6.2	5	2----
UNT. RIFFL KEES	605	ATB91	CEU	47.13	12.67	6-4-9	N	NW	2910	2530	2290	1	2	2----
UNTERSULZBACH K.	582	AT123	CEU	47.13	12.35	5-2-8	N	NW	3670	2720	2070	5.1	6.3	2----
VERBORGENBERG F.	593	AT056	CEU	47.07	11.12	6-4-6	E	E	3260	3000	2780	0.9	1.3	2----
VERMUNTGL.	482	AT007	CEU	46.85	10.13	6-2-8	NW	NW	3200		2500	2.2	2.8	2----
VERNAGT FERNER	489	AT133	CEU	46.88	10.82	6-2-6	S	SE	3650	3143	2850	9	2.6	2345-
VILTRAGEN K.	581	AT078	CEU	47.13	12.37	5-2-8	NE	E	3480	2660	2190	3.7	4.5	2----
W.TRIPP K.	539	AT007	CEU	47.02	13.32	6-4-6	SE	S	3230	2880	2780	0.6	1.5	2----
WASSERFALLWINKL	565	AT028	CEU	47.12	12.72	6-3-8	SE	S	3150	2870	2610	1.9	2.5	2----
WAXEGG K.	590	AT076	CEU	47	11.8	6-3-6	NE	N	3380	2848	2424	3.8	1.97	2----
WEISSEE F.	523	AT023	CEU	46.85	10.72	6-0-8	N	N	3530	2970	2540	3.2	3.4	2----
WILDGERLOS	587	AT003	CEU	47.151	12.106	6-0-8	N	N	3260	2650	2110	3	2.8	2----
WINKL K.	537	AT043	CEU	47.02	13.32	6-4-8	W	W	3220	2710	2390	0.7	1.5	2----
WURTEN K.	545	AT038	CEU	47.039	13.005	6-2-8	SW	S	3150		2500	1	3	234--
ZETTALUNITZ/MULLWITZ K.	578	AT054	CEU	47.08	12.38	6-3-8	SW	SW	3470	2980	2650	3	4.5	234--
Bolivia - BO														
CHARQUINI SUR	2667	BO	TRP	-16.17	-68.09	X-X-X	S	S	5400	5143	5030	0.3	0.448	23456
ZONGO	1503	BO001	TRP	-16.25	-68.17	5-3-8	S	E	6050	5420	4844	2	2.735	23456
Canada - CA														
CASTLE CREEK	3349	CA	WNA	53.039	-120.457	5-3-8	N	N	2825	2425	1810		5.85	2----
DEVON ICE CAP NW	39	CA 1	ACN	75.42	-83.25	3-0-3	NW	NW	1890		0	1680.1	50	-3---
HELM	45	CA 2	WNA	49.958	-122.987	6-2-6	NW	NW	2200	1900	1700	1.9	2.4	-3---
MEIGHEN ICE CAP	16	CA 1	ACN	79.95	-99.13	3-0-3			1267		90	83.1	56	-3---
MELVILLE SOUTH ICE CAP	3690	CA	ACN	75.4	-115	3-0-0			715		526	51		-3---
PEYTO	57	CA 2	WNA	51.660	-116.564	5-3-8	NE	NE	3200		2100	13	5.3	-3---
PLACE	41	CA 2	WNA	50.43	-122.6	5-3-8	NE	NW	2610	2089	1800	3.7	4.2	-3---
WHITE	0	CA 15	ACN	79.45	-90.695	5-1-5	SE	SE	1800	1160	85	39.7	15.4	-345-
Switzerland - CH														
ADLER	3801	CH3	CEU	46.01	7.87	6-2-8	W	W	4200	3465	2900	2.2	3.06	-345-
ALBIGNA	1674	CH	CEU	46.302	9.644	X-X-X	N	N	3140		2060	5.2	6.15	2----
ALLALIN	394	CH 29	CEU	46.05	7.93	6-2-6	N	E	4190		2207	9.9	6.5	2----
ALPETLI(KANDER)	439	CHB13	CEU	46.48	7.8	5-3-6	NW	SW	3270		2250	14	6.8	2----
AMMERTEN	435	CHF 1	CEU	46.42	7.53	6-0-7	NW	NW	3243		2345	1.9	2.8	2----
AROLLA (BAS)	377	CH 14	CEU	45.98	7.5	5-1-9	N	N	3720		2140	6.3	5	2----
BASODINO	463	CH 10	CEU	46.42	8.48	6-3-6	NE	NE	3230		2520	2.3	1.6	234--
BIFERTEN	422	CHI12	CEU	46.82	8.95	5-3-8	E	NE	3610		1921	2.9	4.2	2----
BLUEMLISALP	436	CHB 2	CEU	46.5	7.77	6-1-6	NW	NW	3660		2240	3	2.9	2----
BOVEYRE	459	CH 4	CEU	45.972	7.256	5-2-9	NW	NW	3660		2595	2	2.5	2----
BRENEY	368	CH 19	CEU	45.97	7.42	5-1-7	S	SW	3830		2575	9.8	6.3	2----
BRESCIANA	465	CH 2	CEU	46.5	9.03	6-3-6	W	W	3400		2710	0.9	1.6	2----
BRUNEGG	384	CH A9	CEU	46.15	7.7	5-3-0	NW	NW	4130		2451	6.1	4.9	2----
CALDERAS	403	CH 17	CEU	46.530	9.707	6-1-7	N	NE	3360		2734	1.2	2	2----
CAMBRENA	399	CH 9	CEU	46.393	9.994	6-1-4	NE	NE	3500		2520	1.7	2.5	2----
CAVAGNOLI	464	CH 17	CEU	46.45	8.48	6-2-8	NE	E			2560	1.3	2.3	2----
CHEILLON	375	CH 8	CEU	46	7.42	5-1-7	N	N	3830		2689	4.7	4	2----
CORBASSIERE	366	CH 3	CEU	45.98	7.3	5-1-9	N	N	4310		2190	16	9.8	2----
CORNO	468	CH 1	CEU	46.45	8.38	6-5-6	N	N	2880		2500	0.3	0.7	2----
CROSLINA	1681	CH002	CEU	46.43	8.73	X-X-X	NE	NE	3060		2670	0.4	0.8	2----
DAMMA	429	CHF10	CEU	46.63	8.45	6-1-6	E	NE	3520		2080	6.3	3.3	2----
DUNGEL	1678	CH001	CEU	46.37	7.37	6-0-0	NE	N	3200		2460	1.2	1.8	2----
EIGER	442	CHM 3	CEU	46.57	7.98	6-1-6	W	NW	4100		2152	2.3	2.6	2----
FEE NORTH	392	CH 4	CEU	46.08	7.88	6-0-6	NE	NE	4360		1930	16.7	5.1	2----
FERPECLE	379	CH 11	CEU	46.02	7.58	5-3-8	NW	N	3680		2110	9.8	6	2----
FIESCHER	471	CH 7	CEU	46.5	8.15	5-1-9	SE	S	4180		1660	33.1	16	2----
FINDELEN	389	CH 3	CEU	46	7.87	5-1-6	NW	W	4190	3322	2500	14.3	6.86	2345-
FIRNALPELI	424	CHH13	CEU	46.78	8.47	6-0-6	NW	N	2920		2160	1.2	1.1	2----
FORNO	396	CH 12	CEU	46.3	9.7	5-1-9	N	N	3360		2210	8.8	6.8	2----
GAMCHI	440	CHA 4	CEU	46.512	7.794	6-1-9	N	N	2840		1990	1.7	2.7	2----
GAULI	449	CHI 5	CEU	46.62	8.18	5-1-6	E	E	3630		2140	13.7	6.8	2----
GIETRO	367	CH 14	CEU	46	7.38	6-3-4	NW	W	3830		2480	5.5	5.4	2----
GLAERNISCH	418	CHK 4	CEU	47	8.98	6-2-6	W	W	2910		2294	2.1	2.3	2----
GORNER	391	CH 7	CEU	45.97	7.8	5-1-9	N	NW	4610		2078	38.2	14.1	2----
GRAND DESERT	373	CH 6	CEU	46.070	7.342	6-3-6	NW	N	3340		2755	1.9	2.3	2----
GRAND PLAN NEVE	455	CH 3	CEU	46.25	7.15	6-4-7	N	N	2560	2460	2350	0.2	0.4	2----
GRIES	359	CH 4	CEU	46.445	8.340	5-3-4	NE	NE	3400		2384	5.9	6.2	234--
GRIESS(KLAUSEN)	425	CHC 2	CEU	46.83	8.83	6-1-7	N	NW	3080		2180	2.5	1.3	2----
GRIESSEN(OBWA.)	423	CHH 2	CEU	46.85	8.5	6-2-6	W	NW	2890		2460	1.3	1.3	2----
GROSSER ALETSCH	360	CH 26	CEU	46.5	8.03	5-1-9	SE	S	4160		1559	90.9	24.7	2----
HOHLAUB	3332	CH	CEU	46.059	7.918	X-X-X								2----
KALTWASSER	363	CH 4	CEU	46.25	8.08	6-0-6	NW	W	3370		1980	1.9	1.6	2----
KEHLEN	431	CHF15	CEU	46.68	8.42	5-1-8	SE	SE	3418		2080	3.2	3.3	2----
KESSJEN	393	CH 33	CEU	46.065	7.928	6-5-6	NE	NE	3240		2868	0.5	0.9	2----
LAEMMERN (WILDSTRUBEL)	437	CHC13	CEU	46.4	7.55	6-1-6	E	E	3240		2500	3.3	2.5	2----
LANG	386	CH 4	CEU	46.459	7.928	5-1-9	SW	SW	3900		2034	10	7.7	2----
LAVAZ	416	CHF15	CEU	46.63	8.93	6-1-8	NE	N	3020		2260	1.8	2.6	2----
LENTA	414	CHD17	CEU	46.513	9.038	5-2-7	N	N	3400		2290	1.4	2.6	2----
LIMMERN	421	CHI 6	CEU	46.82	8.98	6-2-7	NE	NE	3420		2260	2.6	2.9	2----
LISCHANA	400	CH 6	CEU	46.77	10.35	6-5-9	NW	NW	3030		2787	0.2	0.6	2----
MOIRY	380	CH 2	CEU	46.08	7.6	5-1-8	N	N	3850		2330	6.1	5.6	2----
MOMING	381	CH 10	CEU	46.08	7.67	6-0-9	N	NW	4070		2395	5.8	3.8	2----
MONT DURAND	369	CH 36	CEU	45.92	7.33	5-1-9	E	NE	4280		2340	7.6	6	2----
MONT FORT (ZINAL)	372	CH 12	CEU	46.08	7.32	6-3-6	NW	N	3330		2780	1.1	2	2----
MONT MINE	378	CH 15	CEU	46.02	7.55	5-1-9	NW	N	3720		1960	10.9	8.1	2----
MORTERATSCH	1673	CH	CEU	46.4	9.93	5-1-9	N	N	4020		2000	17.1	7	2----
MURTEL	4339	CH	CEU	46.408	9.824	X-X-X	E	E	3300	3167	3000	0.3	0.976	-345-
MUTT	472	CH 3	CEU	46.55	8.42	6-5-6	NW	NW	3000		2580	0.6	1.1	2----
OB.GRINDELWALD	444	CHL 4	CEU	46.62	8.1	5-1-8	NW	NW	3740		1230	10.1	5.5	2----
OBERAAR	451	CHG 3	CEU	46.53	8.22	5-2-4	NE	NE	3460		2300	5.2	5.2	2----
OTEMMA	370	CH 7	CEU	45.95	7.45	5-1-7	SW	SW	3800		2460	16.5	8.5	2----
PALUE	398	CH 4	CEU	46.37	9.98	6-2-9	E	E	3870		2330	6.6	4	2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
PANEYROSSE	456	CH 2	CEU	46.27	7.17	6-4-6	N	N	2760	2560	2380	0.4	0.7	2----
PARADIES	412	CHN 6	CEU	46.5	9.07	6-0-6	N	NE	3400		2387	4.6	3.6	2----
PARADISINO (CAMPO)	397	CH 1	CEU	46.421	10.109	6-3-9	NW	W	3250		2825	0.6	1	2----
PIZOL	417	CHD1	CEU	46.97	9.4	6-5-6	N	N	2800	2683	2600	0.1	0.39	2345-
PLAINE MORTE	4246	CH003	CEU	46.38	7.49	0-X-6	N	N	3000	2468	2400	7.9	3.2	-345-
PLATTALVA	420	CHI 7	CEU	46.83	8.98	6-5-6	E	E	3100		2565	0.8	1.1	2----
PORCHABELLA	410	CHE 4	CEU	46.63	9.88	6-1-6	N	N	3390		2639	2.6	2.5	2----
PRAPIO	453	CH 3	CEU	46.32	7.2	6-5-7	NW	NW	3020		2525	0.4	0.9	2----
PUNTEGLIAS	415	CHM 9	CEU	46.791	8.949	6-1-7	SE	S	3010		2350	0.9	2	2----
RHONE	473	CH 3	CEU	46.62	8.4	5-1-4	S	S	3629		2125	16.6	10.2	234--
RIED	387	CH 3	CEU	46.13	7.85	5-3-9	NW	NW	4280		2067	8.3	6.3	2----
ROSEG	406	CH 11	CEU	46.378	9.839	5-1-7	N	N	3650		2175	8.7	5.2	2----
ROTFIRN NORD	430	CHF13	CEU	46.662	8.424	6-1-9	E	NE	3525		2031	1.2	2.3	2----
SALEINA	458	CH 16	CEU	45.98	7.07	5-1-8	E	NE	3900		1706	5	6.4	2----
SANKT ANNA	432	CHE12	CEU	46.6	8.6	6-3-6	N	N	3000	2720	2600	0.2	0.675	2345-
SARDONA	407	CHB 5	CEU	46.92	9.27	6-4-6	E	E	2790		2400	0.4	0.7	2----
SCALETTA	1680	CH002	CEU	46.7	9.95	6-5-0	N	N	3100		2580	0.7	1.1	2----
SCHWARZ	438	CHC 5	CEU	46.42	7.67	5-1-9	SW	NW	3670		2210	1.6	3.9	2----
SCHWARZBACH	4340	CH	CEU	46.597	8.612	X-X-X	NE	NE	2850	2754	2700	0.1	0.337	-345-
SCHWARZBERG	395	CH 24	CEU	46.02	7.93	6-2-6	NE	NE	3650		2660	6.2	4.3	2----
SEEWJINEN	3333	CH	CEU	46.002	7.950	X-X-X								2----
SESVENNA	401	CH 4	CEU	46.713	10.411	6-5-6	NE	N	3150		2745	0.7	1.2	2----
SEX ROUGE	454	CH 1	CEU	46.329	7.211	6-5-6	N	NW	2900	2808	2700	0.3	0.642	2345-
SILVRETTA	408	CHG 5	CEU	46.85	10.08	6-2-6	NW	W	3160		2429	3	3.5	234--
STEIN	448	CHE12	CEU	46.7	8.43	5-2-8	N	N	3490	3000	1930	5.6	5.5	2----
STEINLIMMI	447	CHE13	CEU	46.7	8.4	5-1-7	N	N	3300		2092	2.2	2.7	2----
SULZ	419	CHI 2	CEU	46.88	9.05	6-5-8	N	N	2480		1790	0.2	0.5	2----
SURETTA	411	CHI 2	CEU	46.52	9.38	6-1-7	NE	NE	3010		2212	0.9	1.6	23---
TIATSCHA	402	CH 7	CEU	46.833	10.087	6-3-4	S	S	3130		2500	2.1	2.2	2----
TIEFEN	433	CHE37	CEU	46.62	8.43	5-1-9	SE	SE	3530		2500	3.2	3.4	2----
TRIENT	457	CH 2	CEU	46	7.03	5-3-8	N	N	3490		1764	6.6	5	2----
TRIFT (GADMEN)	446	CHE24	CEU	46.67	8.37	5-1-8	N	N	3505		1648	15.3	7.1	2----
TSANFLEURON	371	CH 1	CEU	46.32	7.23	6-5-6	E	E	3020	2769	2500	2.7	3.12	2345-
TSCHIERVA	405	CH 6	CEU	46.4	9.88	5-1-8	NW	NW	4000		2140	6.8	5	2----
TSCHINGEL	441	CHM 3	CEU	46.5	7.85	6-2-7	N	E	3510		2265	6.2	3.8	2----
TSEUDET	364	CH 17	CEU	45.9	7.25	6-1-7	N	N	3730		2441	1.7	3	2----
TSIDJIORE NOUVE	376	CH 16	CEU	46	7.45	5-2-8	N	NE	3800		2270	3.1	5	2----
TURTMANN (WEST)	385	CH B9	CEU	46.13	7.68	5-2-8	NW	N	4190	3270	2265	11.3	6	2----
UNT.GRINDELWALD	443	CHL19	CEU	46.577	8.095	5-1-9	N	N	4100		1240	20.6	9	2----
UNTERAAR	450	CHG11	CEU	46.57	8.22	5-1-7	E	E	4090		1914	22.7	13.5	2----
VAL TORTA	466	CH 4	CEU	46.47	8.53	6-4-9	N	N	2740		2400	0.2	0.6	2----
VALLEGGIA	467	CH 8	CEU	46.472	8.506	6-4-8	NE	NE	2820		2420	0.6	1.2	2----
VALSOREY	365	CH 15	CEU	45.9	7.27	5-1-8	NE	NW	3730		2395	2.3	4.1	2----
VERSTANKLA	409	CHG 8	CEU	46.843	10.068	6-1-7	NW	NW	3100		2390	1	2	2----
VORAB	413	CHP 1	CEU	46.88	9.17	6-0-6	E	SE	2980	2720	2560	2.5	2	2----
WALLENBUR	428	CHF24	CEU	46.707	8.470	6-1-9	E	SE	3280		2250	1.7	2.2	2----
ZINAL	382	CH 5	CEU	46.07	7.63	5-1-9	N	N	4260		2040	16.2	8	2----
Chile - CL														
ALPEHUE	4412	CL	SAN	-38.97	-71.52	X-X-X						15.5		2----
AMARILLO	3905	CL	SAN	-29.303	-70.001	6-3-8	S	S	5305		5050	0.2		-3-5-
ANIHUE	4431	CL	SAN	-44.07	-72.86	X-X-X								2----
ANTUCO	4405	CL	SAN	-37.41	-71.34	X-X-X						2.6		2----
BALMACEDA	1657	CL60	SAN	-51.38	-73.3	4-2-4	E	E				36	12	2----
CALLAQUI	4407	CL	SAN	-37.86	-71.17	X-X-X						10.4		2----
CASA PANGUE	2010	CL	SAN	-41.13	-71.87	X-X-X	N	N			558	6.4		2----
CAY (LENGUA NORTE)	4437	CL	SAN	-45.06	-72.99	X-X-X						7.4		2----
CERRO VOLCAN	4382	CL	SAN	-30.48	-70.28	X-X-X						0.4		2----
COLONIA	1027	CL 20	SAN	-47.25	-73.23	4-2-8	SE	SE	3365		140	370.3	42.4	2----
CORRENTOSO	4430	CL	SAN	-44.07	-72.86	X-X-X								2----
CORTADERAL	4398	CL	SAN	-34.62	-70.32	X-X-X								2----
ECHAURREN	4388	CL	SAN	-33.83	-69.91	X-X-X								2----
ECHAURREN NORTE	1344	CL015	SAN	-33.578	-70.131	6-4-3	SW	SW	3900	3750	3650	0.4	1.2	-3---
EL AZUFRE	4403	CL	SAN	-35.3	-70.57	X-X-X						7		2----
ERASMO	4440	CL	SAN	-46.1	-73.19	X-X-X						47.5		2----
GL 01	4424	CL	SAN	-42.75	-72.42	X-X-X								2----
GL 04	4427	CL	SAN	-42.83	-72.43	X-X-X								2----
GL 05 (AMARILLO)	4426	CL	SAN	-42.82	-72.45	X-X-X								2----
GL 08	4425	CL	SAN	-42.78	-72.5	X-X-X						88.9		2----
GUALAS	3583	CL	SAN	-46.62	-73.6	X-X-X								2----
GUANACO	3983	CL71	SAN	-29.348	-70.016	6-3-6	SE	SE	5350	5168	4985	1.7	2.353	23---
HPS9	1639	CL42	SAN	-49.05	-73.8	4-2-4	W	W	3380		0	57	19	2----
HUEMULES	4439	CL	SAN	-45.85	-72.92	X-X-X						80.3		2----
INEXPLORADO 1	4421	CL	SAN	-41.9	-72.2	X-X-X						12		2----
INEXPLORADO 2	4422	CL	SAN	-41.93	-72.2	X-X-X						16.1		2----
INEXPLORADO 3	4423	CL	SAN	-42	-72.2	X-X-X						15.1		2----
JORGE MONTT	1016	CL 30	SAN	-48.33	-73.5	4-2-8	N	N					57	2----
JUNCAL NORTE	2001	CL	SAN	-33.03	-70.1	5-3-0	N	N			2953	7.3		2----
JUNCAL SUR	2002	CL33	SAN	-33.08	-70.1	5-1-0	S	S	5860		2608	27	14.6	2----
MACA (LENGUA ESTE)	4438	CL	SAN	-45.11	-73.14	X-X-X						36.4		2----
MARINELLI	4444	CL	SAN	-54.5	-69.57	X-X-X						153.2		2----
MELIMOYU OESTE	4432	CL	SAN	-44.07	-72.86	X-X-X						62.6		2----
MELIMOYU SUR	4433	CL	SAN	-44.07	-72.86	X-X-X								2----
MENTOLAT (LENGUA SUR)	4436	CL	SAN	-44.69	-73.07	X-X-X						4.5		2----
MOCHO CHOSHUENCO SE	3972	CL	SAN	-39.92	-72.03	X-X-X			2422		1603	4.8		2----
NEVADO DE QUEULAT (LENGUA PRINCIPAL)	4435	CL	SAN	-44.39	-72.43	X-X-X						96.6		2----
OLIVARES ALFA	4384	CL	SAN	-33.19	-70.22	X-X-X						7.5		2----
OLIVARES BETA	2004	CL28	SAN	-33.13	-70.18	5-1-0	SW	SW	4900		3850	9.5	6.6	2----
OLIVARES GAMA	2003	CL29	SAN	-33.13	-70.17	5-1-0	S	S	5020		3710	13.6	7.9	2----
OSORNO	4416	CL	SAN	-41.1	-72.49	X-X-X						9		2----
PETEROA 1	4399	CL	SAN	-35.24	-70.58	X-X-X								2----
PETEROA 2	4400	CL	SAN	-35.25	-70.59	X-X-X								2----
PETEROA 3	4401	CL	SAN	-35.26	-70.6	X-X-X								2----
PETEROA 4	4402	CL	SAN	-35.28	-70.59	X-X-X								2----
PICHILLANCAHUE	3446	CL	SAN	-39.45	-71.92	X-X-X								2----
PIRAMIDE	4389	CL	SAN	-33.59	-69.89	X-X-X								2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
PUYEHUE	4414	CL	SAN	-40.58	-72.11	X-X-X						2.9		2----
REICHER	3582	CL	SAN	-46.55	-73.47	X-X-X						87.5		2----
SAN RAFAEL	1042	CL 5	SAN	-46.68	-73.85	4-2-4	W	NW	3910		0	773.4	46.4	2----
SIERRA VELLUDA	4406	CL	SAN	-37.46	-71.42	X-X-X						15.2		2----
TURBIO	4413	CL	SAN	-39.42	-71.88	X-X-X						34.2		2----
YATES 2	4420	CL	SAN	-41.8	-72.37	X-X-X								2----
China - CN														
PARLUNG NO. 94	3987	CN10	ASE	29.386	96.976	5-2-8	NW	NW	5635	5358	5075	2.4	2.9	2345-
URUMQI GLACIER NO. 1	853	CN 10	ASC	43.118	86.811	6-2-2	NE	NE	4486	4045	3752	1.8	2.075	234--
URUMQI GLACIER NO. 1 E-BRANCH	1511	CN10	ASC	43.118	86.811	6-2-8	NE	NE	4269	3999	3752	1.1	2.075	2345-
URUMQI GLACIER NO. 1 W-BRANCH	1512	CN10	ASC	43.118	86.811	6-2-8	NE	NE	4486	4126	3848	0.6	1.816	2345-
Columbia - CO														
CONEJERAS	2721	CO	TRP	4.815	-75.373	6-3-6	NW	NW	4900	4839	4675	0.2	0.951	2345-
Ecuador - EC														
ANTIZANA15ALPHA	1624	EC15	TRP	-0.47	-78.15	4-7-8	NW	NW	5760	5309	4816	0.3	1.864	23---
Spain - ES														
MALADETA	942	ES 8	CEU	42.652	0.638	6-4-8	NE	NE	3213		2845	0.4	0.76	2345-
France - FR														
ARGENTIERE	354	FRA08	CEU	45.954	6.985	5-1-9	NW	NW	3500	2600	1500	15.6	9	23---
BIONNASSAY	1313	FR	CEU	45.847	6.813	5-2-9	N	N	4300		1700	4.8	5	23---
BLANC	351	FRB21	CEU	44.944	6.387	5-2-8	E	S	4000	3000	2500	7.7	7	2----
BOSSONS	355	FRD03	CEU	45.880	6.865	5-2-8	N	N	4800	3200	1190	10.5	7.2	2----
GEBROULAZ	352	FRE06	CEU	45.298	6.629	5-2-9	N	N	3580	3000	2600	2.8	3	-3---
MER DE GLACE	353	FRA01	CEU	45.88	6.93	5-1-9	N	N	3600	3000	1480	33	12	2----
OSSOUE	2867	FR	CEU	42.771	-0.143	5-2-9	E	E	3210		2650	0.5	1.4	23---
SAINT SORLIN	356	FRB09	CEU	45.165	6.153	5-2-9	N	N	3463	2900	2650	3	3	-3---
SARENNES	357	FRA02	CEU	45.116	6.129	5-4-8	S	S	3190	2905	2850	0.5	0.6	-3---
TRE LA TETE	1314	FR	CEU	45.794	6.789	5-1-8	S	S				0.8		2----
Greenland - GL														
FREYA	3350	GL	GRL	74.38	-20.82	5-2-8	N	NW	1400		200	5.3	6	-345-
MITTIVAKKAT	1629	GL	GRL	65.67	-37.83	2-2-3	SW	SW	970		180	17.5	7.5	2345-
India - IN														
CHHOTA SHIGRI	2921	IN	ASW	32.235	77.516	5-1-9	N	N	6263	5020	4050	16.9	9	-3---
Iceland - IS														
BLAGNIPUJOEKULL	3130	IS	ISL	64.72	-19.13	4-X-3	SW	SW	1700		740	51.5	11	2----
BREIDAMJOEKULL W. C.	3065	IS25C	ISL	64.17	-16.47	4-2-3	SE	SE	1730		999	755	30	2----
BROKARJOEKULL	3066	IS	ISL	64.25	-16.12	4-3-3	S	SE	1200		200	5	3	2----
BRUARJOEKULL	3067	IS400	ISL	64.67	-16.17	4-3-3	N	N	1900		590	1630.4	54	-3---
DYNGJUJOEKULL	3068	IS	ISL	64.67	-17	4-2-3	N	N	2000		720	1050.8	46	-3---
EYJABAKKAJOEKULL	3069	IS300	ISL	64.65	-15.58	4-2-3	N	NE	1570		690	114.2	15	-3---
FALLJOEKULL	3071	IS21	ISL	63.98	-16.75	4-3-3	W	W	2119		140	8	8	2----
FJALLSJOEKULL BY GAMLASEL	3074	IS24G	ISL	64.01	-16.42	4-3-4	SE	E	2040		20	48	15	2----
FLAAJOEKULL	3078	IS	ISL	64.33	-15.13	4-3-2	SE	SE	1520		50	213.3	29	2----
FLAAJOEKULL E 148	3076	IS	ISL	64.34	-15.54	X-X-X	SE	SE	1520		50	180	29	2----
GEITLANDSJOEKULL	3128	IS	ISL	64.67	-20.53	4-X-3	W	W	1420		800		8	2----
GIGJOEKULL	3079	IS112	ISL	63.67	-19.62	4-3-4	N	N	1666		190	7.5	7.5	2----
GLJUFURARJOEKULL	3080	IS103	ISL	65.72	-18.65	5-4-8	N	N	1350		580	3.2	2.5	2----
HAGAFELLSJOEKULL E	3081	IS306	ISL	64.49	-20.26	4-3-3	SW	SW	1420		440	92.5	19	2----
HAGAFELLSJOEKULL W	3082	IS204	ISL	64.49	-20.41	4-3-3	SW	SW	1420		450	133.3	18	2----
HEINABERGSJOEKULL	3135	IS	ISL	64.29	-15.67	4-X-4	SE	E	1520		60	85	25	2----
HOFSJOEKULL E	3088	IS510	ISL	64.8	-18.58	4-3-3	E	E	1800	1185	640	238	19	-3---
HOFSJOEKULL N	3089	IS510	ISL	64.95	-18.92	4-3-3	N	N	1800	1250	860	85.2	19.9	-3---
HOFSJOEKULL SW	3090	IS510	ISL	64.72	-19.05	4-3-3	SW	SW	1750	1205	750	51.4	13	-3---
HYRNINGSJOEKULL	3092	IS100	ISL	64.81	-23.73	4-3-3	E	E	1445		700	1.5	2	2----
JOEKULHALS	3093	IS201	ISL	64.82	-23.75	4-3-3	E	E	1450	1000	820	6.5	3	2----
JOEKULKROKUR	3094	IS7	ISL	64.81	-19.81	4-3-3	NE	NE	1450		740	55	11	2----
KALDALONSJOEKULL	3095	IS102	ISL	66.12	-22.29	4-3-3	SW	SW	900		140	37.5	6	2----
KIRKJUJOEKULL	3129	IS	ISL	64.73	-19.85	4-X-3	SE	E	1450		700	30	8	2----
KOELDUKVISLARJ.	3096	IS	ISL	64.58	-17.83	4-3-3	NW	NW	2010	1420	870	311.1	27	-3---
KOETLUJOEKULL	3132	IS	ISL	63.55	-18.82	4-X-3	SE	SE	1500		200	133	23	2----
KOTARJOEKULL	3906	IS	ISL	63.96	-16.7	4-0-0	SE	SE	1800		175	11.5	6	2---6
KVIARJOEKULL	3098	IS822	ISL	63.97	-16.57	4-3-3	SE	SE	2100		40	22	13	2----
KVISLAJOEKULL	3131	IS	ISL	64.85	-19.16	4-X-3	W	W	1700		820	66	15	2----
LAMBAHRAUNSJOEKULL	3099	IS	ISL	64.97	-18.86	X-X-X								2----
LANGJOEKULL ICE CAP	3660	IS	ISL	64.67	-20.1	3-0-0						907.9		-3---
LEIRUFJARDARJOEKULL	3102	IS200	ISL	66.19	-22.44	4-3-3	NW	NW	925		100	27	6	2----
MORSARJOEKULL	3104	IS318	ISL	64.09	-16.94	4-3-3	SW	SW	1430		180	35.3	10	2----
MULAJOEKULL S	3105	IS11B	ISL	64.67	-18.66	4-3-2	SE	SE	1800		610	85	20	2----
MULAJOEKULL W	3106	IS11A	ISL	64.67	-18.72	4-3-1	S	SE	1800		600	100	19	2----
NAUTHAGAJOEKULL	3107	IS210	ISL	64.65	-18.76	4-3-3	S	S	1780		630	117.5	18	2----
REYKJAFJARDARJOEKULL	3109	IS300	ISL	66.2	-22.18	4-3-3	NE	NE	925		150	24	7	2----
RJUPNABREKKUJOEKULL	3136	IS	ISL	64.72	-17.56	4-X-3	NW	NW	1940		1060		7	2----
SATUJOEKULL	3110	IS	ISL	64.92	-18.83	4-3-3	N	N	1800		860	90.5	20	2----
SKAFTAFELLSJOEKULL	3113	IS19M	ISL	64.02	-16.9	4-2-3	SW	SW	1920		90	84	18	2----
SKALAFELLSJOEKULL	3115	IS	ISL	64.27	-15.67	4-3-3	SE	E	1480		60	180	25	2----
SKEIDARARJOEKULL E1	3116	IS17A	ISL	64.03	-17.09	4-3-2	S	S	1725		100	850	50	2----
SKEIDARARJOEKULL E2	3117	IS17B	ISL	64.01	-17.11	4-3-2	S	S	1725		100	850	50	2----
SKEIDARARJOEKULL E3	3118	IS17C	ISL	64.01	-17.14	4-3-2	S	S	1725		100	850	50	2----
SKEIDARARJOEKULL W	3119	IS116	ISL	64.01	-17.37	4-3-2	S	S	1740		100	1080	45	2----
SLETTJOEKULL	3133	IS	ISL	63.77	-19.2	4-X-3	NW	NW	1380		640	100	11	2----
SOLHEIMAJOEKULL W	3122	IS13W	ISL	63.53	-19.37	4-3-3	SW	SW	1500		110	61	15	2----
SVINAFELLSJOEKULL	3124	IS20M	ISL	63.99	-16.88	4-2-3	W	SW	2120		120	28.3	12	2----
TUNGNAARJOEKULL	3126	IS214	ISL	64.32	-18.07	4-3-3	SW	W	1720		680	353.6	39	23---
Italy - IT														
ALTA (VEDRETTA) / HOHENF.	632	IT122	CEU	46.458	10.68	5-3-8	NE	N	3350		2685	1.8	2	2----
AMOLA	638	IT028	CEU	46.198	10.720	6-3-0	E	E	3120		2490	1	1.8	2----
ANTELAO INFERIORE (OCC.)	642	IT003	CEU	46.45	12.27	6-4-0	N	N	2800		2320	0.2	0.85	2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
ANTELAO SUP.	643	IT002	CEU	46.45	12.27	6-3-0	N	NE	3130		2510	0.4	1.3	2----
AOUILLE	1239	IT015	CEU	45.525	7.151	6-4-X			3350		3080	0.2	0.8	2----
ARGUEREY MER.	1253	IT024	CEU	45.703	6.842	X-X-X			2850		2700	0.2	0.6	2----
ARGUEREY SETT.	1254	IT025	CEU	45.705	6.834	6-5-X			2900		2580	0.5	0.9	2----
BARBADORSO DI DENTRO / BAERENBARTF. INNERER	658	IT908	CEU	46.808	10.716	5-3-8	N	N	3560		2580	1.9	2.1	2----
BASEI	611	IT013	CEU	45.477	7.117	6-0-0	NE	NE	3320		2950	0.3	0.8	2----
BERTA	1295	IT007	CEU	45.232	7.139	X-X-X			3200		2950	0.6	0.2	2----
BESSANESE	1297	IT004	CEU	45.3	7.12	5-3-2	SE	SE	3210		2580	1.2	2.55	2----
BREUIL SETT.	1256	IT028	CEU	45.725	6.816	X-X-X			3000		2900	0.6	0.8	2----
BROGLIO	2375	IT011	CEU	45.484	7.227	X-X-X								2----
CALDERONE	1107	IT	CEU	42.471	13.567	6-4-0	NE	NE	2870	2730	2680	0	0.3	23-56
CAMPO SETT.	1106	IT6	CEU	46.431	10.108	6-4-6	W	W	3200	3000	2845	0.3	0.8	-3-5-
CAPRA	1304	IT010	CEU	45.447	7.118	6-4-X			2790		2480	0.2	0.9	2----
CARESER	635	IT519	CEU	46.45	10.7	6-3-8	S	S	3283	3073	2900	1.58	1	-345-
CARESER CENTRALE	3659	IT	CEU	46.45	10.69	6-9-8	SE	SE	3150	3005	2900	0.2	1.13	-345-
CARESER OCCIDENTALE	3346	IT	CEU	46.45	10.69	6-4-8	SE	SE	3300	3149	3050	0.2	0.67	-345-
CARESER ORIENTALE	3345	IT	CEU	46.45	10.7	6-3-8	S	S	3283	3079	2900	1.6	1	-345-
CARRO OCCIDENT.	2358	IT009	CEU	45.433	7.117	X-X-X								2----
CASPOGGIO	628	IT004	CEU	46.338	9.914	6-4-8	NW	NW	2985		2625	0.8	1.1	2----
CASSANDRA OR.	1185	IT003	CEU	46.262	9.756	5-2-X			3100		2915	0.4	1.8	2----
CEDEC	1165	IT18	CEU	46.449	10.603	5-2-X			3780		2710	2.5	3	2----
CEVEDALE FORCOLA / FUERKELEF.	663	IT125	CEU	46.45	10.652	5-3-8	E	NE	3760		2630	2.3	3.5	2----
CEVEDALE PRINCIPALE / ZUFALLF.	662	IT126	CEU	46.458	10.627	5-3-8	E	E	3700		2635	3.3	3.7	2----
CIAMARELLA	1298	IT007	CEU	45.326	7.133	6-4-X			3400		3095	0.7	0.9	2----
CIARDONEY	1264	IT003	CEU	45.518	7.396	6-3-9	NE	E	3160		2850	0.8	1.7	234--
COLLERIN D'ARNAS	2349	IT006	CEU	45.320	7.119	X-X-X			3400		2950			2----
CORNISELLO MER.	1151	IT031	CEU	46.221	10.677	X-6-4	NE	NE	3130		2670	0.4	1.4	2----
COUPE DE MONEY	1271	IT019	CEU	45.53	7.38	6-4-X			3600		2650	1.5	2	2----
DISGRAZIA	2503	IT012	CEU	46.283	9.744	X-X-X			3000		2620			2----
DOSEGU	668	IT31	CEU	46.374	10.548	5-2-6	SW	SW	3670		2800	2.7	2.8	2----
DZASSET	2372	IT023	CEU	45.538	7.274	X-X-X			3750		2950			2----
ENTRELOR SETT.	2377	IT002	CEU	45.532	7.152	X-X-X								2----
FOND OCCID.	2380	IT009	CEU	45.476	7.074	X-X-X			3000		2710			2----
FOND OR.	1243	IT008	CEU	45.472	7.083	X-X-X			3300		2720	1.1	2.1	2----
FONTANA BIANCA / WEISSBRUNNF.	1507	IT103	CEU	46.48	10.77	6-4-0	E	E	3440	3160	2850	0.6	1.151	2345-
FORNI	670	IT24	CEU	46.400	10.586	5-2-9	N	NW	3680		2420	16.6	5	2----
FRANE (VEDR. DELLE) / STEINSCHLAGF.	2624	IT110	CEU	46.779	10.740	X-X-X								2----
GLIAIRETTA VAUDET	1248	IT021	CEU	45.507	7.019	5-X-X			3300		2700	3.6	3.6	2----
GOLETTA	683	IT012	CEU	45.497	7.055	5-2-0	N	N	3290		2699	3	2.4	2----
GRAMES ORIENT. + CENTR. / GRAMSENF. OESTL. + ZENTR.	2599	IT117	CEU	46.469	10.716	X-X-X								2----
GRAN PARADISO	1235	IT008	CEU	45.515	7.254	5-3-X			3980		2970	0.7	1.9	2----
GRAN PILASTRO (GHIAC. DEL) / GLIEDERF.	652	IT113	CEU	46.973	11.717	5-3-8	SW	W	3370		2460	2.6	3.7	2----
GRAN VEDRETTA OCC. / HOCHF.	2634	IT303	CEU	46.978	11.711	X-X-X								2----
GRAN VEDRETTA OR. / GRIESSF.	2633	IT302	CEU	46.981	11.719	X-X-X								2----
GRAN ZEBRU (CENTRALE)	1164	IT16	CEU	46.470	10.571	X-X-X			3400		2930	1	1.8	2----
GRAN ZEBRU (OCCID.)	4527	IT16	CEU	46.470	10.569	X-X-X								2----
GRAND CROUX CENTR.	1273	IT021	CEU	45.519	7.309	X-X-X			3300		2300	2	2.1	2----
GRAND ETRET	1238	IT012	CEU	45.476	7.219	5-2-X			3100		2700	0.6	1.3	23---
GRUETTA ORIENT.	2418	IT025	CEU	45.897	7.027	X-X-X								2----
INDREN OCC.	1209	IT003	CEU	45.895	7.856	5-3-X			4100		3050	1.7	2.5	2----
JUMEAUX	2441	IT011	CEU	45.939	7.600	X-X-X			2850		2680			2----
LA MARE (VEDRETTA DE)	636	IT517	CEU	46.435	10.632	5-2-5	E	E	3769		2585	3.6	3.5	2----
LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	IT223	CEU	47.068	12.212	5-2-9	NW	NW	3480		2240	1.7	2.9	2----
LARES	1149	IT008	CEU	46.129	10.603	6-7-6	E	NE	3460		2600	4.1	3.7	2----
LAUSON	1275	IT027	CEU	45.559	7.279	6-4-0	N	N	3370		2980	0.5	1.05	2----
LAVACCIU	1285	IT007	CEU	45.521	7.254	5-2-X			3770		2810	1.8	2.6	2----
LAVASSEY	1242	IT008	CEU	45.478	7.106	6-4-X			3130		2700	1.5	1.9	2----
LOBBIA	1150	IT012	CEU	46.160	10.581	5-3-0	N	N	3380		2480	5.8	1.8	2----
LUNGA (VEDRETTA) / LANGENF.	661	IT128	CEU	46.468	10.619	5-2-9	NE	E	3450	3143	2700	1.8	2.425	2345-
LUPO	1138	IT016	CEU	46.076	9.99	6-4-6	N	NW	2800	2565	2435	0.2	0.7	-3-5-
LYS	620	IT002	CEU	45.9	7.83	5-1-5	SW	SW	4530		2355	11.8	5.6	2----
MADACCIO (VEDR. DEL) / MADATSCHF.	1129	IT429	CEU	46.508	10.48	5-2-X			3450		2280	3.2	2.2	2----
MALAVALLE (VEDR. DI) / UEBELTALF.	672	IT108	CEU	46.95	11.12	5-1-5	E	E	3540	3007	2520	6.7	4.02	2345-
MANDRONE	664	IT015	CEU	46.173	10.553	5-2-0	NE	NE	3440		2470	12.2	5.38	2----
MARMOLADA CENTR.	676	IT101	CEU	46.437	11.867	6-0-6	N	N	3340		2545	2.4	1.5	2----
MARTELOT	1301	IT011	CEU	45.379	7.171	6-5-X			2860		2450	0.2	0.8	2----
MONCIAIR	1237	IT010	CEU	45.492	7.236	6-5-X			3230		2850	0.5	0.7	2----
MONCORVE	1236	IT009	CEU	45.5	7.25	6-2-2	NW	NW	3642		2880	2.2	1.5	2----
MONEY	1272	IT020	CEU	45.525	7.336	5-2-X			3600		2450	1.9	2.6	2----
MONTANDEYNE	1284	IT006	CEU	45.537	7.260	6-4-X			3400		3100	1.2	1.3	2----
MORION OR.	1250	IT038	CEU	45.629	7.027	5-3-X			3250		2720	0.9	2.1	2----
NEL CENTRALE	1303	IT005	CEU	45.419	7.167	6-5-X			3200		2600	1.1	1.5	2----
NISCLI	677	IT006	CEU	46.113	10.608	6-3-0	E	E	3150		2590	0.7	1.5	2----
NOASCHETTA OCCID.	2359	IT024	CEU	45.504	7.278	X-X-X								2----
PALON DELLA MARE LOBO CENTR.	2533	IT23	CEU	46.411	10.603	X-X-X								2----
PALON DELLA MARE LOBO OR.	2534	IT23	CEU	46.411	10.603	X-X-X								2----
PENDENTE (VEDR.) / HANGENDERF.	675	IT110	CEU	46.96	11.23	5-2-0	S	S	3150	2750	2610	1	1.35	2345-
PERA CIAVAL	1296	IT008	CEU	45.227	7.094	6-5-X			3200		3050	0.2	0.3	2----
PIODE	619	IT007	CEU	45.908	7.878	5-2-0	SE	SE	4436		2500	2.1	2.65	2----
PISGANA OCC.	666	IT006	CEU	46.192	10.522	5-3-7	N	NE	3320		2530	3.4	2.8	2----
PIZZO FERRE	1181	IT003	CEU	46.466	9.280	5-3-X			2990		2490	0.9	1.8	2----
PIZZO SCALINO	1187	IT015	CEU	46.28	9.98	6-3-6	N	N	3200		2585	2.8	2.1	2----
PLANOL (VEDR. DI) / PLANAILF.	2619	IT603	CEU	46.792	10.669	X-X-X								2----
PLATTES DES CHAMOIS	1249	IT025	CEU	45.535	7.000	X-X-X			3560		2700	0.7	1.3	2----
PRE DE BAR	681	IT028	CEU	45.908	7.044	5-2-0	SE	SE	3750		2070	3.5	3.93	2----
PREDAROSSA	1182	IT034	CEU	46.256	9.740	5-3-X			3400		2560	0.9	2.5	2----
QUAIRA BIANCA (VEDR. DELLA) / WEISSKARF.	686	IT109	CEU	46.547	10.859	5-2-0	SW	SW	3510		2570	1.4	2.8	2----
RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	IT312	CEU	46.903	12.096	6-3-6	N	N	3300	3000	2650	1.9	2.1	2345-
ROCCIA VIVA	2364	IT033	CEU	45.514	7.333	X-X-X								2----
ROSIM (VEDR. DI) / ROSIMF.	610	IT408	CEU	46.525	10.640	6-3-0	NW	W	3405		2870	0.8	1.5	2----
ROSSO DESTRO	648	IT235	CEU	47.03	12.2	5-3-6	W	W	3285		2460	0.9	1.7	2----
RUTOR	612	IT012	CEU	45.5	7.002	5-2-0	N	NW	3460		2480	9.5	4.8	2----
SALDURA MER. (VEDR. DI) / SALURNF. SUEDL.	1131	IT513	CEU	46.735	10.735	6-4-X			3350		2850	0.4	1.3	2----
SCERSCEN INFERIORE	1186	IT001	CEU	46.355	9.852	5-2-X			3400		2430	7	4.5	2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
SEA	1299	IT003	CEU	45.336	7.141	5-3-X			3020		2710	0.6	1.9	2----
SERANA (VEDR.) / SCHRANF.	634	IT120	CEU	46.467	10.701	6-4-6	N	N	3335		2805	1.2	1.6	2----
SFORZELLINA	667	IT36	CEU	46.350	10.514	6-4-8	NW	NW	3120		2780	0.4	0.7	2----
SISSONE	2506	IT015	CEU	46.297	9.719	X-X-X			3100		2625			2----
SOCHES TSANTELEINA	1244	IT011	CEU	45.485	7.068	6-4-X			3450		2720	3.4	3.5	2----
SOLDA (VEDRETTA DI) / SULDENF.	660	IT417	CEU	46.494	10.566	5-2-7	NE	NE	3900		2375	6.2	4.2	2----
SURETTA MERID.	2488	IT007	CEU	46.506	9.361	6-4-7	S	S	2925	2770	2688	0.2	0.7	23-56
TIMORION	1282	IT003	CEU	45.554	7.271	6-4-X			3500		3070	0.6	1.2	-3---
TORRENT	2384	IT022	CEU	45.579	7.089	X-X-X			3100		2660			2----
TOULES	614	IT013	CEU	45.83	6.93	6-4-0	SE	SE	3500		2620	0.9	1.65	2----
TRAFOI (VEDR. DI) / TRAFOIER F.	2617	IT427	CEU	46.503	10.497	X-X-X								2----
TRIBOLAZIONE	1274	IT022	CEU	45.521	7.284	6-4-X			3870		2680	5.8	2.1	2----
ULTIMA (VEDR.) / ULTENMARKTF.	633	IT121	CEU	46.465	10.690	6-4-8	N	N	3370		2775	0.4	1.2	2----
VAL VIOLA OCC.	1156	IT015	CEU	46.390	10.169	6-5-X			3260		2770	0.2	1.1	2----
VALLE DEL VENTO	649	IT233	CEU	47.039	12.202	5-3-8	NW	NW	3050		2460	0.4	1.2	2----
VALLELUNGA (VEDR. DI) / LANGTAUFERERF.	659	IT907	CEU	46.817	10.731	5-1-8	NW	NW	3730		2410	6.2	3.9	2----
VALTOURNANCHE	621	IT024	CEU	45.930	7.704	4-2-2	W	W	3695		2990	1.7	2	2----
VAUDALETTA	2379	IT005	CEU	45.518	7.135	X-X-X								2----
VENEROCOLO	665	IT011	CEU	46.164	10.506	5-3-9	NW	N	3280		2530	1.3	2.2	2----
VENTINA	629	IT009	CEU	46.27	9.77	5-3-6	NE	N	3500		2165	2.2	3.7	2----
VERRA (GRANDE DI)	1206	IT004	CEU	45.915	7.751	5-2-X			4000		2614	6.1	5.2	2----
Japan - JP														
HAMAGURI YUKI	897	JP001	ASN	36.6	137.62	7-3-0	NE	NE	2770		2690	0	0.07	-3---
Kenya - KE														
LEWIS	695	KE 1	TRP	-0.15	37.3	5-3-3	SW	SW	5000	4804	4650	0.2	0.58	-345-
Kyrgyzstan - KG														
ABRAMOV	732	KG 40	ASC	39.62	71.56	5-2-8	N	N	5000	4227	3619	24.9	7.8	-345-
AK-SAY	4520	KG	ASC	42.5	74.567	X-X-X						4.5		6
AYDGYNE	4517	KG	ASC	42.483	74.417	X-X-X						3		6
GLACIER NO. 354 (AKSHIYRAK)	3889	KG	ASC	41.799	78.151	5-2-8	NW	NW	4700	4168	3746	6.4	4.4	-345-
GOLUBIN	753	KG250	ASC	42.46	74.495	5-3-8	NW	NW	4437	3924	3325	5.9	4.9	-3456
SUEK/SUYOK ZAPADNIY	781	KG 82	ASC	41.79	77.75	5-3-8	N	N	4500	4199	3950	1.2	2.5	-345-
TOPKARAGAY	4519	KG	ASC	42.483	74.55	X-X-X						3.3		6
TUYUK	4518	KG	ASC	42.45	74.533	X-X-X						5		6
UCHITEL	4521	KG	ASC	42.517	74.55	X-X-X						2		6
Kazakhstan - KZ														
TS.TUYUKSUYSKIY	817	KZ107	ASC	43.05	77.08	5-3-6	N	N	4220	3819	3500	2.8	2.646	2345-
Norway - NO														
AALFOTBREEN	317	NO1	SCA	61.75	5.65	4-3-6	NE	NE	1400		890	4.6	2.9	-34--
AUSTDALSBREEN	321	NO23	SCA	61.815	7.352	4-2-4	SE	SE	1757		1200	11.6	5.7	-34--
AUSTERDALSBREEN	288	NO20	SCA	61.62	6.93	4-3-8	SE	SE	1920		390	27.4	8.5	2----
AUSTRE OKSTINDBREEN	3342	NO2	SCA	66.019	14.294	X-X-X	N	E	1710		750		6	2----
BLOMSTOELSKARDSBREEN	3339	NO9	SCA	59.949	6.332	X-X-X	SW	SW	1650		1012	22.6		234--
BOEDALSBREEN	2291	NO19	SCA	61.77	7.12	4-3-8	NW	N						2----
BOEVERBREEN	2298	NO	SCA	61.550	8.088	X-X-X								2----
BOEYABREEN	2297	NO14	SCA	61.525	6.756	X-X-X	S	S						2----
BONDHUSBREA	318	NO2	SCA	60.03	6.33	4-3-8	NW	NW	1660	1450	480	17.6	7.8	2----
BOTNABREA	2292	NO15	SCA	60.192	6.427	4-3-8	W	W						2----
BREIDABLIKKBREA	2671	NO1	SCA	60.071	6.365	X-X-X	NW	NW	1659		1234	3.5		-34--
BRENNDALSBREEN	2293	NO9	SCA	61.685	6.933	4-3-8	W	W						2----
BRIKSDALSBREEN	314	NO10	SCA	61.665	6.932	4-3-8	W	W	1910		350	15.2	6	2----
BUERBREEN	315	NO8	SCA	60.033	6.402	4-3-8	E	NE	1640		620	14.9	7.5	2----
CORNELIUSSENBREEN	3341	NO19	SCA	66.003	14.37	5-3-8	NE	E	1620		1080		2.3	2----
ENGABREEN	298	NO11	SCA	66.65	13.85	4-3-8	N	NW	1600		89	38.3	11.5	234--
FAABERGSTOELSBREEN	289	NO15	SCA	61.72	7.23	4-3-8	E	E	1810		760	16.2	7	2----
GRAAFJELLSBREA	1320	NO10	SCA	60.083	6.399	4-3-8	NW	NW	1700		1049	8.7	5	234--
GRAASUBREEN	299	NO47	SCA	61.657	8.6	6-7-6	NE	E	2300		1833	2.3	2.3	-34--
HANSEBREEN	322	NO1A	SCA	61.75	5.68	X-X-X	NE	N	1350		927	3.1	2.5	-34--
HELLSTUGUBREEN	300	NO11	SCA	61.56	8.44	5-1-8	N	N	2229		1482	3	3.4	2345-
JUVFONNE	3661	NO	SCA	61.677	8.351	X-X-X			1998		1840	0.2		2----
KOPPANGSBREEN	2309	NO	SCA	69.689	20.147	X-X-X								2----
LANGFJORDJOEKELEN	323	NO8	SCA	70.128	21.735	4-3-8	SE	E	1065		302	3.8	4.2	234--
LEIRBREEN	301	NO47	SCA	61.57	8.1	X-X-X	NW	NW	2070		1530	4.9	3.8	2----
MIDTDALSBREEN	2295	NO2	SCA	60.57	7.47	4-3-8	NE	NE	1862		1380	7.1		2----
NIGARDSBREEN	290	NO14	SCA	61.72	7.13	4-3-8	SE	SE	2000		330	47.2	9.6	234--
REMBESDALSKAAKA	2296	NO1	SCA	60.539	7.368	4-3-8	W	W	1900		1066	17.3	8.1	234--
RUNDVASSBREEN	2670	NO22	SCA	67.299	16.057	4-X-X	NE	N	1537		836	11.3		234--
STEGHOLTBREEN	313	NO21	SCA	61.801	7.314	4-3-8	S	S	1900		880	16	7.7	2----
STEINDALSBREEN	2310	NO53	SCA	69.393	19.902	X-X-X	E	E						2----
STORBREEN	302	NO41	SCA	61.57	8.13	5-2-6	NE	NE	2102		1400	5.3	2.93	234--
STORE SUPPHELLEBREEN	287	NO15	SCA	61.52	6.8	4-0-8	S	S	1730		730	12	7	2----
STORJUVBREEN	2308	NO27	SCA	61.647	8.292	X-X-X	N	N						2----
STORSTEINSFJELLBREEN	1329	NO11	SCA	68.22	17.92	5-2-8	E	SE	1850		970	6.1	5.3	2----
STYGGEBREAN	4504	NO	SCA	61.645	8.341	5-1-X			2415	2034	1665	4.9	4	2----
STYGGEDALSBREEN	303	NO20	SCA	61.473	7.885	5-2-6	N	N	2240		1270	2.4	3.2	2----
SVELGJABREEN	3343	NO8	SCA	59.945	6.283	X-X-X	SW	SW	1650		832	22.4		234--
SYDBREEN	3351	NO	SCA	69.45	19.91	5-2-8	NE	E						2----
TROLLBERGDALSBREEN	316	NO7	SCA	66.716	14.441	5-3-8	SE	SE	1370	1050	900	1.6	2.1	2----
TROLLKYRKJEBREEN	3606	NO22	SCA	62.288	7.459	X-X-X	NE	NE						2----
TUFTEBREEN	3352	NO	SCA	61.67	7.14	4-3-8	E	SE						2----
VETLE SUPPHELLEBREEN	3607	NO16	SCA	61.522	6.836	X-X-X	SE	S						2----
Nepal - NP														
MERA	3996	NP	ASE	27.7	86.9	5-0-6	NE	N	6420	5615	4940	5.1	4.55	-3-5-
POKALDE	3997	NP	ASE	27.9	86.8	5-4-8	N	N	5690	5580	5430	0.1	0.47	-3---
RIKHA SAMBA	1516	NP	ASE	28.82	83.49	5-3-8	S	SE	6515	5826	5293	5.4	5.4	23---
YALA	912	NP 4	ASE	28.25	85.62	6-3-6	SW	SW	5749	5372	5090	1.6	1.4	23--6
New Zealand - NZ														
ADAMS	2923	NZ	NZL	-43.32	170.72	5-1-8	W	N	2470	1880	1295	10	6.6	2----
ALMER/SALISBURY	1548	NZ	NZL	-43.47	170.22	5-1-8	W	SW	2390	1865	1340	3.1	2.98	2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
ANDY	1590	NZ	NZL	-44.43	168.37	4-1-8	N	N	2190	1750	840	10.5	7.1	2----
ASHBURTON	1570	NZ	NZL	-43.37	170.97	5-3-9	S	S	2590		1575	1.7	2.5	2----
AXIUS	2283	NZ	NZL	-44.17	168.98	6-4-8	W	W	2285	1920	1555	0.6	1.3	2----
BALFOUR	1604	NZ	NZL	-43.55	170.12	5-3-9	W	W	3305	1525	730	7	9.9	2----
BARLOW	1608	NZ	NZL	-43.3	170.63	6-2-9	W	W	2440	1705	1220	2.6	3.8	2----
BARRIER	2281	NZ	NZL	-44.42	168.36	6-2-8	S	W	2285	1860	1370	1.9	2.85	2----
BLAIR	1551	NZ	NZL	-43.95	169.72	6-7-8	SE	SE	2240	2015	1790	0.4	0.63	2----
BONAR	1587	NZ	NZL	-44.4	168.72	6-2-4	SW	W	3025	2090	1160	15.4	7.9	2----
BREWSTER	1597	NZ	NZL	-44.07	169.43	6-3-8	SW	SW	2500		1676	2.5	2.69	23---
BURTON	1606	NZ	NZL	-43.45	170.32	5-2-9	N	NW	3115	2120	1130	6.7	6.35	2----
BUTLER	1544	NZ	NZL	-43.25	170.93	6-2-6	E	SE	2040	1860	1680	0.8	0.66	2----
CAMERON	1565	NZ	NZL	-43.33	171	6-2-9	SW	SE	2470	1980	1380	2	3.1	2----
CROW	1564	NZ	NZL	-42.92	171.5	6-3-6	SE	S	2210	1940	1675	0.5	1.2	2----
DAINTY	2287	NZ	NZL	-43.23	170.89	6-4-8	W	W	2330	2040	1750	0.6	1.45	2----
DART	898	NZ	NZL	-44.45	168.6	5-3-9	SW	SW	2470		1070	9.9	7.6	2----
DISPUTE	2286	NZ	NZL	-44.14	168.96	6-4-8	E	E	1720	1660	1600	0.3	0.85	2----
DONALD	2284	NZ	NZL	-44.24	168.87	6-2-8	SW	NW	2440	1980	1525	3.6	2.85	2----
DONNE	1585	NZ	NZL	-44.58	168.02	6-3-8	E	SE	2745	1615	1220	3.5	3.6	2----
DOUGLAS (KAR.)	1601	NZ	NZL	-43.68	170	5-2-4	SW	W	3160	1980	960	11.8	7.4	2----
EVANS	1611	NZ	NZL	-43.2	170.92	5-2-9	SW	W	2455	1860	1250	2.8	2.9	2----
FITZGERALD (GOD)	2278	NZ	NZL	-43.47	170.57	6-3-8	W	SW	2530	2165	1660	1.1	1.8	2----
FORGOTTEN COL	2282	NZ	NZL	-44.44	168.36	5-2-9	S	W	2225	1800	1675	0.6	1.25	2----
FOX	1536	NZ	NZL	-43.53	170.15	5-2-8	NW	W	3500		305	34.7	12.58	2----
FRANZ JOSEF	899	NZ	NZL	-43.5	170.22	5-2-8	NW	NW	2955		310	32.6	10.469	2----
FRESHFIELD	2966	NZ	NZL	-43.58	170.19	5-2-9	E	E	2285	2010	1525	0.6	1.2	2----
GLENMARY	1550	NZ	NZL	-44	169.88	6-4-8	S	S	2350	2180	2010	0.7	1.19	2----
GODLEY	1581	NZ	NZL	-43.43	170.57	5-2-4	S	SW	2440	1785	1130	15.9	8.6	2----
GUNN	1560	NZ	NZL	-44.76	168.09	6-3-8	SE	E	1860	1615	1495	0.8	1.25	2----
HORACE WALKER	1600	NZ	NZL	-43.67	169.97	5-3-8	W	SW	2455	2075	945	6	6.6	2----
IVORY	900	NZ	NZL	-43.13	170.92	6-4-4	S	S	1730		1390	0.9	1.35	2----
KAHUTEA	1569	NZ	NZL	-43.02	171.38	6-3-8	S	SW	2300	2025	1740	0.8	1.6	2----
KEA	1545	NZ	NZL	-43.18	170.8	6-4-8	S	S	2030	1840	1650	1	0.95	2----
LA PEROUSE	1605	NZ	NZL	-43.57	170.12	5-3-9	NW	W	3320	1980	855	9.5	11.15	2----
LAMBERT	1612	NZ	NZL	-43.3	170.75	2-2-4	E	NW	2425	1810	1190	9.3	5.15	2----
LAWRENCE	2275	NZ	NZL	-43.32	171	5-2-9	W	E	2375	1860	1480	1.5	2.25	2----
LEEB-LORNTY	2288	NZ	NZL	-43.22	170.9	6-2-8	W	W	2635	2135	1190	3.5	3.3	2----
LYELL	1567	NZ	NZL	-43.28	170.83	5-2-9	S	E	2440	1720	1005	10.8	6.2	2----
MACAULAY	2280	NZ	NZL	-43.490	170.604	6-2-8	SE	E	2375	2040	1650	0.9	1.45	2----
MARION	1591	NZ	NZL	-44.47	168.48	6-2-8	W	N	2470	1905	1340	7	5.1	2----
MARMADUKE DIXON	1541	NZ	NZL	-42.98	171.38	6-4-8	E	SE	2100	1858	1615	0.8	1.7	2----
MATHAIAS	2997	NZ	NZL	-43.18	171.03	6-4-8	E	E	1740	1526	1340		1	2----
MC COY	1572	NZ	NZL	-43.32	170.8	5-3-9	SW	SE	2135	1800	1250	1	2.6	2----
METALILLE	2998	NZ	NZL	-43.75	170.06	6-3-8	N	N	2375	2180	1800		2.3	2----
MUELLER	1575	NZ	NZL	-43.75	170.02	5-2-4	SE	SE	2895	1330	760	18.5	13.65	2----
MURCHISON	1578	NZ	NZL	-43.52	170.4	5-2-9	E	SW	3155	2080	1005	36.6	16.45	2----
PARK PASS	1559	NZ	NZL	-44.58	168.23	6-3-8	S	S	2200	1850	1500	3	2.63	2----
RAMSAY	1568	NZ	NZL	-43.22	170.93	5-3-4	SW	S	2315	1650	990	9.2	8.6	2----
REISCHEK	1566	NZ	NZL	-43.32	171	6-3-8	SW	SW	2440	2075	1615	1.7	2.65	2----
RICHARDSON	1574	NZ	NZL	-43.8	169.95	5-3-9	W	SW	2225	1525	1080	3.9	5.8	2----
ROLLESTON	1538	NZ	NZL	-42.89	171.53	6-4-6	SE	SE	1900		1727	0.1	0.36	23-5-
SALE	1614	NZ	NZL	-43.22	170.95	6-3-8	E	SE	2134	1753	1372	0.9	1.8	2----
SEPARATION	2279	NZ	NZL	-43.48	170.58	5-2-9	S	SW	2560	2025	1495	1.5	2.65	2----
SIEGE	1616	NZ	NZL	-43.27	170.53	5-3-8	SE	SE	2130		1370	1.2	3.19	2----
SLADDEN	3611	NZ	NZL	-43.758	170.02	X-X-X								2----
SNOW WHITE	1588	NZ	NZL	-44.45	168.58	5-3-8	N	E	2425	1950	1220	5.5	5.5	2----
SNOWBALL	1589	NZ	NZL	-44.45	168.52	6-3-8	NW	W	2345	1905	1465	3.3	2.7	2----
SOUTH CAMERON	3019	NZ	NZL	-43.35	170.99	6-3-8	NE	NE	2620	2285	1980		1.2	2----
SPENCER	1607	NZ	NZL	-43.5	170.28	5-2-9	W	N	3045	1900	760	10.1	7.75	2----
ST. JAMES	2274	NZ	NZL	-43.28	170.89	6-2-9	NE	E	2377	1645	1035	1	2.8	2----
STOCKING (TEWAEWAE)	3023	NZ	NZL	-43.68	170.07	6-3-8	SE	SE						2----
STRAUCHON	1599	NZ	NZL	-43.62	170.08	5-3-4	W	SW	2530	1745	960	3.6	5.8	2----
TASMAN	1074	NZ	NZL	-43.52	170.32	5-2-4	S	S	3690	2210	730	99.6	28.5	2----
THURNEYSON	1554	NZ	NZL	-44.17	169.6	6-2-6	S	S	2425	2085	1720	1.8	1.23	2----
VERTEBRAE 20	3033	NZ	NZL	-43.33	170.59	4-3-8	S	S	1645	1450	1160		1.8	2----
VICTORIA	3034	NZ	NZL	-43.5	170.17	5-3-9	W	W	2560	1890	1065	4.5	6.5	2----
WHATAROA	2285	NZ	NZL	-43.4	170.53	6-3-8	W	SW	2180	1590	1005	3	3.35	2----
WHITBOURNE	1583	NZ	NZL	-44.47	168.57	5-3-9	W	S	2575	1830	1080	9.5	6.7	2----
WHITE	3037	NZ	NZL	-43	171.38	6-3-8	NE	NE	2320	2015	1710	0.6	1.8	2----
WHYMPER	1609	NZ	NZL	-43.48	170.37	5-3-9	NW	NE	2775	1780	790	6.6	7.2	2----
WILKINSON	1615	NZ	NZL	-43.2	170.93	6-2-4	NE	NE	2286	1615	945	4	3.8	2----
ZORA	1593	NZ	NZL	-43.75	169.83	6-2-8	S	S	2455	1920	1095	4.4	3.25	2----
Peru - PE														
ARTESONRAJU	3292	PEH01	TRP	-8.95	-77.62	5-3-4	W	W	6050	5332	4685	3.3	3.54	234--
YANAMAREY	226	PEAC2	TRP	-9.65	-77.27	5-2-0	SW	SW	5200	4961	4722	0.3	1.33	234--
Poland - PL														
POD BULA	1617	PL	CEU	49.185	20.08	7-5-6	NW	NW	1700		1610	0		2----
Russia - RU														
BUNGE	4315	RU	RUA	76.8	66.78	X-X-X			583		0	387.2	40.41	2----
DJANKUAT	726	RU 62	CAU	43.2	42.77	5-2-9	N	NW	4000	3250	2700	3	4.2	-3---
GARABASHI	761	RU 11	CAU	43.3	42.47	0-0-8	SE	S	5000		3300	4.5	5.8	-34--
LEVIY AKTRU	794	RU128	ASN	50.08	87.72	5-3-6	SE	SE	4043		2559	6.1	5.84	-3---
MALIY AKTRU	795	RU126	ASN	50.049	87.749	5-3-8	E	N	3800		2200	3.1	4.22	-34--
PAVLOV	4320	RU	RUA	76.58	66.1	X-X-X			777		0	133	21.59	2----
PETERSEN (NOVZEM)	4321	RU	RUA	76.87	67	X-X-X			562		0	110	20.31	2----
VERA	4325	RU	RUA	76.68	66.37	X-X-X			832		0	231.1	38.14	2----
VODOPADNIY (NO.125)	780	RU105	ASN	50.1	87.7	3-0-3	N	N	3600		3000	0.8	1.38	-3---
Sweden - SE														
HYLLGLACIAEREN	344	SE 6	SCA	67.58	17.47	5-3-8	N	N	1820		1360	1.3	2.1	2----
MARMAGLACIAEREN	1461	SE001	SCA	68.83	18.67	5-2-1	E	E	1800		1340	3.7	3.3	-34--
MIKKAJEKNA	338	SE 46	SCA	67.4	17.7	5-1-8	S	S	1825		1000	7.2	3.7	2----
PARTEJEKNA	327	SE 2	SCA	67.17	17.67	5-2-8	E	E	1860		1090	10.4	4.8	2----
PASSUSJIETNA E.	331	SE 11	SCA	68.05	18.43	5-3-8	NE	NW	1660		1270	1.5	1.5	2----

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LENGTH	TypeOfData
RABOTS GLACIAER	334	SE 16	SCA	67.91	18.5	5-2-8	NW	W	1950		1070	3.9	3.7	-34--
RIUKOJIETNA	342	SE 65	SCA	68.08	18.08	3-0-3	E	E	1460		1130	3.6	2.3	-34--
RUOPSOKJEKNA	340	SE 9	SCA	67.33	17.98	5-3-6	NE	N	1760		1075	3.4	3.4	2----
RUOTESJEKNA	337	SE 40	SCA	67.42	17.47	5-3-8	NE	N	1600		1000	5.1	3.9	2----
SALAJEKNA	341	SE 2	SCA	67.12	16.38	5-2-8	SE	S	1680		880	25.2	8.6	2----
STORGLACIAEREN	332	SE 5	SCA	67.9	18.57	5-2-8	E	E	1860		1135	3.1	3.4	234--
SUOTTASJEKNA	336	SE 4	SCA	67.47	17.58	5-2-8	NE	N	1840		1110	7.8	3.7	2----
TARFALAGLACIAEREN	326	SE 11	SCA	67.93	18.65	6-7-0	E	E	1800		1390	0.9	0.7	-34--
VARTASJEKNA	339	SE 28	SCA	67.45	17.67	5-3-8	NE	NE	1800		1300	3.8	3.3	2----
Svalbard (Norway) - SJ														
AUSTRE BROEGGERBREEN	292	SJ 6	SJM	78.88	11.83	5-2-9	NW	N	650	260	50	6.1	6	-3---
AUSTRE LOVENBREEN	3812	SJ	SJM	78.871	12.154	5-2-2	N	N	550	355	97	4.5	3.702	23---
HANSBREEN	306	SJ 19	SJM	77.08	15.67	4-2-4	S	S	600		0	56.8	15.674	234--
IRENEBREEN	2669	SJ	SJM	78.65	12.1	X-X-X	NW	SW	650		125	4.2	3.86	-3---
KONGSVEGEN	1456	SJ510	SJM	78.8	12.98	4-2-4	NW	NW	1050	500	0	101.9	27	-3---
KRONEBREEN	3504	SJ511	SJM	78.967	13.183	4-2-4	S	W	1361		0	370		-3---
MIDTRE LOVENBREEN	291	SJ7	SJM	78.88	12.07	5-2-9	NE	N	650	330	50	5.5	4.8	-3---
WALDEMARBREEN	2307	SJ	SJM	78.67	12	5-3-8	NW	SW	570		100	2.6	3.3	-345-
WERENSKIOLDBREEN	305	SJ551	SJM	77.067	15.367	5-2-8	S	SW	810		0	27.1	8.75	-34--
USA - US														
AIALIK	3373	US	ALA	59.994	-149.897	X-X-X								2----
BARRY	168	US 29	ALA	61.17	-148.1	5-2-4	SW	SW	2650		0		24	2----
BELOIT	97	US 11	ALA	60.63	-148.68	4-3-4	N	NE	1740		0		9	2----
BLACKSTONE	98	US 12	ALA	60.65	-148.72	4-3-4	NE	NE	1590		0		11	2----
BOULDER	1364	US	WNA	48.770	-121.796	5-3-8	SE	E	3280	2230	1250		3.58	2----
BRYN MAWR	162	US 33	ALA	61.23	-147.82	5-2-4	SE	SE	2290		0		8	2----
CASCADE	169	US 28	ALA	61.15	-148.18	5-3-4	S	S	2100		0		9	2----
CHENEGA	180	US233	ALA	60.28	-148.48	4-3-4	E	E			0	370	22	2----
COLUMBIA (2057)	76	US 4	WNA	47.964	-121.349	6-4-8	S	S	1800		1450	0.9	1.53	234--
COXE	167	US 30	ALA	61.13	-148.08	5-3-4	SW	SW	1680		0		11	2----
DANIELS	83	US 4	WNA	47.57	-121.17	6-3-6	NE	NE	2385		1980	0.5	0.55	-3---
DAWES	3419	US	ALA	57.5	-132.78	X-X-X								2----
DEMING	1368	US	WNA	48.766	-121.830	X-X-0	SW	SW	3260	2250	1340		5.17	2----
EAST TWIN	1361	US	ALA	58.58	-133.88	4-3-4	SE	S	1660		10		10	2----
EASTON	1367	US	WNA	48.759	-121.825	5-3-8	SW	S	3260		1700	2.9	3.97	23---
EMMONS	203	US127	WNA	46.85	-121.72	5-3-9	NE	NE	4330		1480	11.6	2.8	-3-5-
FOSS	84	US 5	WNA	47.55	-121.2	6-3-8	NE	NE	2225		1840	0.5	0.54	-3---
GILMAN	138	US 63	ALA	58.82	-137.07	5-2-4	NW	NW	1870		0	480	13	2----
GULKANA	90	US 2	ALA	63.287	-145.409	5-2-9	S	SW	2470		1201	17.7	7.5	-345-
GUYOT NORTH BRANCH	3552	US	ALA	60.2	-141.4	X-X-X								2----
HARRIMAN	172	US 22	ALA	60.95	-148.5	5-2-4	NW	NE	1590		0		13	2----
HARVARD	160	US 35	ALA	61.4	-147.4	5-2-4	SW	SW	4020		0	437.4	39	2----
HOLGATE	3390	US	ALA	59.896	-149.984	X-X-X								2----
HOONAH	139	US 62	ALA	58.83	-137.05	4-3-6	N	NW	1900		20		11	2----
ICE WORM	82	US 1	WNA	47.55	-121.17	6-4-8	E	E	2120		1900	0.2	0.46	-3---
JOHNS HOPKINS	137	US 65	ALA	58.8	-137.17	5-2-4	NE	E	3320		0		26	2----
KASHOTO	140	US904	ALA	58.95	-137.02	5-3-8	NE	NW	1450		0		4.2	2----
LAMPLUGH	114	US 59	ALA	58.768	-136.879	4-2-4	N	N	2170		0		21	2----
LECONTE	206	US001	ALA	56.921	-132.326	X-X-X	SW	SW			0	373.9	35	2----
LEMON CREEK	3334	US	ALA	58.387	-134.346	X-X-X	N	NW	1400		750	11.6	5.94	-345-
LITUYA	149	US927	ALA	58.8	-137.52	5-2-4	SW	SE	2520		0	36.7	19	2----
LOWER CURTIS	77	US 4	WNA	48.83	-121.62	6-4-8	W	W	1850		1475	0.8	0.72	23---
LYMAN	3340	US	WNA	48.17	-120.89	6-4-4	N	N	2100	1950	1830	0.5	0.51	2----
LYNCH	81	US 2	WNA	47.57	-121.18	6-5-4	N	N	2390		1980	0.7	0.99	23---
MARGERIE	133	US 68	ALA	59	-137.17	5-1-4	NE	NE	4130		0		39	2----
MC CARTY	3396	US	ALA	59.78	-150.22	X-X-X			1934		0	118.8	15.96	2----
MCBRIDE	208	US 81	ALA	59.08	-136.07	5-2-8	S	SW	2010		0		26	2----
MEARES	158	US 38	ALA	61.18	-147.47	5-2-4	SW	S	2590		0		25	2----
MUIR	129	US908	ALA	59.1	-136.38	5-2-4	SE	SE	1890		0		20	2----
NELLIE JUAN	179	US312	ALA	60.45	-148.4	4-3-4	NE	NE	1070		0	38	9	2----
NISQUALLY	201	US129	WNA	46.82	-121.74	5-2-9	S	S	4380		1455	5.6	2.9	-3-5-
NOISY CREEK	1666	US	WNA	48.67	-121.53	6-4-8	N	N	1920		1680	0.6	1.14	-3-5-
NORRIS	123	US 98	ALA	58.45	-134.18	4-2-6	SE	SE	1680	760	20	165.5	24	2----
NORTH CRILLON	148	US933	ALA	58.63	-137.38	5-1-4	SW	N			0	52	19	2----
NORTH KLAWATTI	1664	US	WNA	48.575	-121.104	5-5-X	SE	SE	2409		1726	1.5	2.77	-3-5-
NORTHWESTERN	3793	US	ALA	59.872	-150.036	X-X-X			1923		0	161.5	29.651	2----
RAINBOW	79	US 8	WNA	48.8	-121.77	6-3-8	E	E	2470		1340	1.6	1.92	-3---
REID	141	US 58	ALA	58.756	-136.810	4-3-4	N	N	910		0		21	2----
RIGGS	128	US 80	ALA	59.1	-136.17	5-2-4	SE	SE	1590		0		27	2----
SANDALEE	1667	US	WNA	48.42	-120.8	6-4-5	N	N	2310		1965	0.2	0.79	-3-5-
SAWYER	3576	US	ALA	57.936	-132.965	X-X-X								2----
SHOLES	3295	US	WNA	48.814	-121.770	X-X-X	NE	NE	1960		1690	0.9	0.94	-3---
SHOUP	155	US 40	ALA	61.2	-146.53	5-2-4	SW	SW	2580		0		30	2----
SILVER	1665	US	WNA	48.98	-121.25	6-4-8	N	NE	2710		2100	0.4	0.925	-3-5-
SOUTH CASCADE	205	US121	WNA	48.350	-121.055	5-3-8	N	N	2275	1920	1631	2.2	2	-3---
SOUTH SAWYER	3578	US	ALA	57.792	-132.917	X-X-X								2----
SURPRISE	171	US 25	ALA	61.03	-148.48	5-2-4	NE	NE	1950		0		13	2----
TAKU	124	US 99	ALA	58.55	-134.13	4-2-2	SE	S	2160		0	786.5	58.1	-3---
TYNDALL	3562	US	ALA	60.205	-141.12	X-X-X								2----
WELLESLEY	164	US 31	ALA	61.2	-147.92	5-3-4	E	E	2010		0		6	2----
WEST TWIN	126	US101	ALA	58.58	-133.97	4-3-4	NE	SE	1520		10		8	2----
WOLVERINE	94	US 6	ALA	60.417	-148.904	5-3-8	S	S	1700		423	16.9	8	-3-5-
YALE	159	US 37	ALA	61.27	-147.52	5-2-4	SW	SW	3660		0		35	2----
YAWNING	75	US 7	WNA	48.45	-121.03	6-5-8	NE	NE	2100		1880	0.3	0.65	-3---

APPENDIX - Table 2

VARIATIONS IN GLACIER FRONT POSITIONS 2011–2013

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)	
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1	
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1	
FROM	Reference date of the survey, in the format YYYYMMDD*	
TO	Survey date, in the format YYYYMMDD*	
METHOD	Survey platform and method given by alphabetic 2 digit code	
	Platform (1st digit, lower case):	Method (2nd digit, upper case):
	t: terrestrial	R: reconstructed (e.g. historical sources)
	a: airborne	M: derived from maps
	s: spaceborne	G: ground survey (e.g., GPS, tachymetry, tape)
	c: combined	P: photogrammetry
	x: unknown	L: laser altimetry or scanning
		Z: radar altimetry or scanning
		C: combined
		X: other
FV	Variation in the position of the glacier front in horizontal projection between reference and survey date	
	Qualitative variations are expressed by the following symbols:	
	+X: glacier in advance	
	-X: glacier in retreat	
	ST: glacier stationary	
	SN: glacier front covered by snow	
INVESTIGATORS (SPONS_AGENCY)	Names of the investigators and their sponsoring agencies (cf. Section 9)	

*Unknown month or day are each replaced by „99“

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
AQ	BAHIA DEL DIABLO	2665	20119999	20129999	cG	ST	Skvarca P. (IAA-DG), Ermolin E. (IAA-DG), Marinsek S. (IAA-DG), Seco J. (IAA-DG)
AQ	BAHIA DEL DIABLO	2665	20129999	20139999	cG	ST	Skvarca P. (IAA-DG), Ermolin E. (IAA-DG), Marinsek S. (IAA-DG), Seco J. (IAA-DG)
AR	AGUA NEGRA	4532	20100414	20130412	sP	-60	
AR	CANITO	4529	20100427	20130411		-16	
AR	GUSSFELDT	2848	20100319	20130421	sP	0	
AR	LOS AMARILLOS	3904	20100427	20130411	sP	-56	
AR	MARTIAL ESTE	2000	20100409	20110331	tG	5	Iturraspe R. (DGRH), Strelin J. (DGRH)
AR	POTRERILLOS	4530	20100427	20130411	sP	-38	
AR	TORTOLAS	4531	20100414	20130412	sP	0	
AR	VACAS	2849	20100319	20130421	sP	-60	
AT	ALPEINER F.	497		20110924		-32	
AT	ALPEINER F.	497		20121024		-19	
AT	ALPEINER F.	497		20131008		-20	
AT	BACHFALLEN F.	500		20110909		-7	
AT	BACHFALLEN F.	500		20120909		-24	
AT	BACHFALLEN F.	500		20130902		-8	
AT	BAERENKOPF K.	567		20110831		-9	
AT	BAERENKOPF K.	567		20120907		-15	
AT	BAERENKOPF K.	567		20130902		-6	
AT	BERGLAS F.	496		20110923		-9	
AT	BERGLAS F.	496		20121024		-7	
AT	BERGLAS F.	496		20131008		-5	
AT	BIELTAL F.	481		20110903		-9	
AT	BIELTAL F.	481		20120908		-9	
AT	BIELTAL F.	481		20130904		-3	
AT	BRENNKOGL K.	528		20110826		-7	
AT	BRENNKOGL K.	528		20120910		-16	
AT	BRENNKOGL K.	528		20130830		-2	
AT	DAUNKOGEL F.	604		20111007		-17	
AT	DAUNKOGEL F.	604		20120927		-7	
AT	DAUNKOGEL F.	604		20130919		-12	
AT	DIEM F.	513		20110910		-39	
AT	DIEM F.	513		20120923		-33	
AT	DIEM F.	513		20130922		-12	
AT	EISKAR G.	1632		20110906		-1	
AT	EISKAR G.	1632		20120909		-1	
AT	EISKAR G.	1632		20130906		0	
AT	FERNAU F.	601		20111007		-4	
AT	FERNAU F.	601		20120927		-14	
AT	FERNAU F.	601		20130919		-14	
AT	FIRMISAN F.	4337		20130907		-6	
AT	FREIWAND K.	564		20110913		-4	
AT	FREIWAND K.	564		20120910		-6	
AT	FREIWAND K.	564		20130909		-2	
AT	FROSNITZ K.	579		20110910		-18	
AT	FROSNITZ K.	579		20120917		-18	
AT	FROSNITZ K.	579		20130924		-18	
AT	FURTSCHAGL K.	585		20111008		ST	
AT	GAISKAR F.	530		20110910		-18	
AT	GAISKAR F.	530		20120908		-8	
AT	GAISKAR F.	530		20130905		-12	
AT	GAISSBERG F.	508		20110927		-25	
AT	GAISSBERG F.	508		20120918		-11	
AT	GAISSBERG F.	508		20131002		-16	
AT	GEPATSCH F.	522		20110917		-38	
AT	GEPATSCH F.	522		20121004		-73	
AT	GEPATSCH F.	522		20130922		-114	
AT	GOESSNITZ K.	532		20110923		-18	
AT	GOESSNITZ K.	532		20120815		-5	
AT	GOESSNITZ K.	532		20130903		-2	
AT	GOLDBERG K.	1305	20101006	20110926	tG	-16	Binder D. (ZAMG), Unger R. (ZAMG)
AT	GOLDBERG K.	1305	20110926	20120918		-12	Binder D. (ZAMG), Neureiter T. (ZAMG)
AT	GOLDBERG K.	1305		20131007		-7	Reisenhofer S. (OEAV), Binder D. (OEAV)
AT	GR. GOSAU G.	536		20110924		-11	
AT	GR. GOSAU G.	536		20120924		-4	
AT	GR. GOSAU G.	536		20130925		-7	
AT	GROSSELEND K.	542		20110823		-26	
AT	GROSSELEND K.	542		20130828		-37	
AT	GRUENAU F.	599		20111008		-1	
AT	GRUENAU F.	599		20120928		-31	
AT	GURGLER F.	511		20110928		-9	
AT	GURGLER F.	511		20120917		-6	
AT	GURGLER F.	511		20131002		-5	
AT	GUSLAR F.	490		20110822		-23	
AT	GUSLAR F.	490		20120822		-42	
AT	GUSLAR F.	490		20130821		-20	
AT	HALLSTAETTER G.	535		20110904		-5	
AT	HALLSTAETTER G.	535		20120902		-22	
AT	HALLSTAETTER G.	535		20130908		-15	
AT	HINTEREIS FERNER	491		20110823		-22	
AT	HINTEREIS FERNER	491		20120823		-20	
AT	HINTEREIS FERNER	491		20130820		-17	
AT	HOCHALM K.	538		20110822		-3	
AT	HOCHALM K.	538		20120827		-27	
AT	HOCHJOCH F.	492		20110825		-31	
AT	HOCHJOCH F.	492		20120825		-43	
AT	HOCHJOCH F.	492		20130819		-20	
AT	HORN K.(SCHOB.)	531		20110911		-19	
AT	HORN K.(SCHOB.)	531		20120814		-5	
AT	HORN K.(SCHOB.)	531		20130903		-3	
AT	HORN K.(ZILLER)	589		20110923		-7	
AT	HORN K.(ZILLER)	589		20120910		-43	
AT	HORN K.(ZILLER)	589		20130906		-26	
AT	INN.PIRCHLKAR	505		20111005		-12	
AT	INN.PIRCHLKAR	505		20130831		-15	
AT	JAMTAL F.	480		20110910		-17	

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
AT	JAMTAL F.	480		20120918		-11	
AT	JAMTAL F.	480		20130924		-11	
AT	KAELBERSPITZ K.	540		20110824		-18	
AT	KAELBERSPITZ K.	540		20120827		-10	
AT	KAELBERSPITZ K.	540		20130828		-8	
AT	KALSER BAERENKOPF K.	2676		20110909		-10	
AT	KALSER BAERENKOPF K.	2676		20120908		-1	
AT	KALSER BAERENKOPF K.	2676		20130904		3	
AT	KARLINGER K.	568		20120904		-16	
AT	KARLINGER K.	568		20130902		-2	
AT	KESSELWAND FERNER	507		20110824		-44	
AT	KLEINEISER K.	555		20130903		-1	
AT	KLEINELEND K.	541		20110824		-3	
AT	KLEINELEND K.	541		20120828		-6	
AT	KLEINELEND K.	541		20130827		2	
AT	KLEINFLEISS K.	547	20101014	20110927	tG	-13	
AT	KLEINFLEISS K.	547	20110927	20120917		-5	Binder D. (ZAMG), Neureiter T. (ZAMG)
AT	KLEINFLEISS K.	547		20131009		0	Binder D. (OEAV), Reisenhofer S. (OEAV)
AT	KLOSTERTALER M	485		20110913		-9	
AT	KLOSTERTALER M	485		20120908		-7	
AT	KLOSTERTALER M	485		20130904		-4	
AT	KRIMMLER K.	584		20110828		-12	
AT	KRIMMLER K.	584		20120909		-21	
AT	KRIMMLER K.	584		20130831		1	
AT	LANDECK K.	569		20110904		-17	
AT	LANDECK K.	569		20120907		-7	
AT	LANDECK K.	569		20130905		SN	
AT	LANGTALER F.	510		20110928		-3	
AT	LANGTALER F.	510		20120917		-7	
AT	LANGTALER F.	510		20131001		-22	
AT	LATSCH F.	4338		20130907		-46	
AT	LITZNERGL.	607		20110913		-20	
AT	LITZNERGL.	607		20120908		-4	
AT	MARZELL F.	515		20110916		-20	
AT	MARZELL F.	515		20120909		-24	
AT	MARZELL F.	515		20130908		-7	
AT	MAURER K.(GLO.)	558		20110908		-8	
AT	MAURER K.(GLO.)	558		20120908		-11	
AT	MAURER K.(GLO.)	558		20130903		-2	
AT	MITTERKAR F.	487		20110911		-14	
AT	MITTERKAR F.	487		20120916		-8	
AT	MITTERKAR F.	487		20130902		-3	
AT	MUTMAL F.	506		20110916		-18	
AT	MUTMAL F.	506		20120910		-18	
AT	MUTMAL F.	506		20130908		SN	
AT	NIEDERJOCH F.	516		20110928		-21	
AT	NIEDERJOCH F.	516		20120909		-18	
AT	NIEDERJOCH F.	516		20130907		-48	
AT	OBERSULZBACH K.	583		20110930		-50	
AT	OBERSULZBACH K.	583		20120909		-36	
AT	OBERSULZBACH K.	583		20130821		-76	
AT	OCHSENTALERGL.	483		20110903		-29	
AT	OCHSENTALERGL.	483		20120908		-20	
AT	OCHSENTALERGL.	483		20130904		-15	
AT	OEDENWINKEL K.	559		20110902		-11	
AT	OEDENWINKEL K.	559		20120907		-5	
AT	OEDENWINKEL K.	559		20130831		-7	
AT	PASTERZE	566		20110912		-40	
AT	PASTERZE	566		20120909		-97	
AT	PASTERZE	566		20130907		-41	
AT	PFAFFEN F.	591		20110910		-5	
AT	PFAFFEN F.	591		20120908		-17	
AT	PFAFFEN F.	591		20130906		-6	
AT	RETTENBACH F.	488		20111006		-24	
AT	RETTENBACH F.	488		20121006		-26	
AT	RETTENBACH F.	488		20130928		-19	
AT	ROFENKAR F.	518		20110911		-12	
AT	ROFENKAR F.	518		20120916		-14	
AT	ROFENKAR F.	518		20130902		-4	
AT	ROTER KNOPF K.	3297		20110923		0	
AT	ROTER KNOPF K.	3297		20120814		0	
AT	ROTER KNOPF K.	3297		20130904		0	
AT	ROTMOOS F.	509		20110927		-4	
AT	ROTMOOS F.	509		20120918		-6	
AT	ROTMOOS F.	509		20131002		-4	
AT	SCHALF F.	514		20110916		-19	
AT	SCHALF F.	514		20120910		-30	
AT	SCHALF F.	514		20130908		-173	
AT	SCHLADMINGER G.	534		20110903		-4	
AT	SCHLADMINGER G.	534		20120909		-1	
AT	SCHLADMINGER G.	534		20130908		-1	
AT	SCHLATEN K.	580		20110910		-31	
AT	SCHLATEN K.	580		20120907		-18	
AT	SCHLATEN K.	580		20130821		-17	
AT	SCHLEGEIS K.	586		20111006		-X	
AT	SCHMIEDINGER K.	548		20110916		-17	
AT	SCHMIEDINGER K.	548		20120905		-17	
AT	SCHMIEDINGER K.	548		20130831		-44	
AT	SCHNEEGLOCKEN	525		20110903		-7	
AT	SCHNEEGLOCKEN	525		20120908		-20	
AT	SCHNEEGLOCKEN	525		20130903		-7	
AT	SCHNEELOCH G.	533		20110923		-4	
AT	SCHNEELOCH G.	533		20120925		-2	
AT	SCHNEELOCH G.	533		20130928		-6	
AT	SCHWARZENBERG F.	501		20110917		-11	
AT	SCHWARZENBERG F.	501		20120916		-11	

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
AT	SCHWARZENBERG F.	501		20130904		-2	
AT	SCHWARZKARL K.	556		20110910		-9	
AT	SCHWARZKARL K.	556		20120908		-10	
AT	SCHWARZKARL K.	556		20130903		-3	
AT	SCHWEIKERT F.	4336		20130914		-15	
AT	SEXEGERTEN F.	520		20111004		-23	
AT	SEXEGERTEN F.	520		20121006		-20	
AT	SEXEGERTEN F.	520		20130920		-10	
AT	SIMILAUN F.	3296		20110928		-17	
AT	SIMILAUN F.	3296		20120909		-14	
AT	SIMILAUN F.	3296		20130907		-7	
AT	SIMONY K.	575		20110911		-56	
AT	SIMONY K.	575		20120907		-4	
AT	SIMONY K.	575		20130925		-2	
AT	SPIEGEL F.	512		20110910		-6	
AT	SPIEGEL F.	512		20120923		-5	
AT	SPIEGEL F.	512		20130922		-8	
AT	STUBACHER SONNBLICK KEES	573		20110903		-13	
AT	STUBACHER SONNBLICK KEES	573		20120829		-4	
AT	STUBACHER SONNBLICK KEES	573		20130905		-6	
AT	SULZENAU F.	600		20111007		-19	
AT	SULZTAL F.	503		20110918		-11	
AT	SULZTAL F.	503		20120915		-27	
AT	SULZTAL F.	503		20130903		-7	
AT	TASCHACH F.	519		20111004		-33	
AT	TASCHACH F.	519		20121006		-28	
AT	TASCHACH F.	519		20130920		-19	
AT	TOTENFELD	524		20110910		-15	
AT	TOTENFELD	524		20120918		-8	
AT	TOTENFELD	524		20130924		-11	
AT	TOTENKOPF K.	2680		20110909		-6	
AT	TOTENKOPF K.	2680		20120907		-15	
AT	TOTENKOPF K.	2680		20130904		-2	
AT	TRIEBENKARLAS F.	592		20110910		-24	
AT	TRIEBENKARLAS F.	592		20120908		-34	
AT	TRIEBENKARLAS F.	592		20130906		-11	
AT	UMBAL K.	574		20110913		-31	
AT	UMBAL K.	574		20120918		-22	
AT	UMBAL K.	574		20130924		-22	
AT	UNT. RIFFL KEES	605		20110904		-8	
AT	UNT. RIFFL KEES	605		20120908		-5	
AT	UNT. RIFFL KEES	605		20130905		-5	
AT	UNTERSULZBACH K.	582		20110916		-40	
AT	UNTERSULZBACH K.	582		20120916		-12	
AT	UNTERSULZBACH K.	582		20130831		-39	
AT	VERBORGENBERG F.	593		20110924		-5	
AT	VERBORGENBERG F.	593		20121024		-3	
AT	VERBORGENBERG F.	593		20131008		-3	
AT	VERMUNTGL.	482		20110903		-10	
AT	VERMUNTGL.	482		20120908		-16	
AT	VERMUNTGL.	482		20130904		-5	
AT	VERNAGT FERNER	489		20110822		-47	
AT	VERNAGT FERNER	489		20120822		-46	
AT	VERNAGT FERNER	489		20130821		-23	
AT	VILTRAGEN K.	581		20110910		-54	
AT	VILTRAGEN K.	581		20120907		-47	
AT	VILTRAGEN K.	581		20130821		-30	
AT	W.TRIPP K.	539		20110825		-17	
AT	W.TRIPP K.	539		20120830		-14	
AT	WASSERFALLWINKL	565		20110913		-14	
AT	WASSERFALLWINKL	565		20120910		-13	
AT	WASSERFALLWINKL	565		20130908		-2	
AT	WAXEGG K.	590		20110909		-29	
AT	WAXEGG K.	590		20120909		-52	
AT	WAXEGG K.	590		20130905		-35	
AT	WEISSEE F.	523		20110917		-14	
AT	WEISSEE F.	523		20121004		-22	
AT	WEISSEE F.	523		20130922		-13	
AT	WILDGERLOS	587		20110907		-15	
AT	WILDGERLOS	587		20120829		-13	
AT	WILDGERLOS	587		20130907		-20	
AT	WINKL K.	537		20110825		-1	
AT	WINKL K.	537		20120829		-5	
AT	WURTEN K.	545	20101005	20110929		-17	
AT	WURTEN K.	545	20110929	20121006		-13	Binder D. (ZAMG), Naringbauer A. (ZAMG), Jenner W. (ZAMG)
AT	WURTEN K.	545		20131008		-7	Binder D. (OEAV), Reisenhofer S. (OEAV)
AT	ZETTALUNITZ/MULLWITZ K.	578		20110911		-26	
AT	ZETTALUNITZ/MULLWITZ K.	578		20120918		-27	
AT	ZETTALUNITZ/MULLWITZ K.	578		20130925		-16	
BO	CHARQUINI SUR	2667	20020901	20120920	tG	0	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	CHARQUINI SUR	2667	20120920	20130924	tG	-12	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	ZONGO	1503	19910901	20120920	tG	-45	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	ZONGO	1503	20120920	20130918	tG	-15	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
CA	CASTLE CREEK	3349	20100501	20110501	xX	-15	
CH	ALBIGNA	1674	20100820	20110830		-17	Mengelt C. (GR-Forest)
CH	ALBIGNA	1674	20110830	20120911		-17	Mengelt C. (GR-Forest)
CH	ALBIGNA	1674	20120911	20130927		-16	Mengelt C. (GR-Forest)
CH	ALLALIN	394	20100920	20110915		-13	Bauder A. (VAW)
CH	ALLALIN	394	20110915	20120920		-13	Bauder A. (VAW)
CH	ALLALIN	394	20120920	20130904		-4	Bauder A. (VAW)
CH	ALPETLI(KANDER)	439	20100911	20110910		-33	Fuhrer U. (KAWA/BE)
CH	ALPETLI(KANDER)	439	20110910	20120915		-37	Fuhrer U. (KAWA/BE)
CH	ALPETLI(KANDER)	439	20120915	20130921		-53	Fuhrer U. (KAWA/BE)
CH	AMMERTEN	435	20101003	20110903		-4	Hodel W. (private)
CH	AMMERTEN	435	20110903	20120909		0	Hodel W. (private)
CH	AMMERTEN	435	20120909	20130922		-1	Hodel W. (private)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CH	AROLLA (BAS)	377	20101001	20110000		-38	F. Pralong (VS-Forest)
CH	AROLLA (BAS)	377	20110929	20120920		-14	F. Pralong (VS-Forest)
CH	AROLLA (BAS)	377	20120920	20131028		-4	Fellay F. (VS-Forest)
CH	BASODINO	463	20100913	20110922		-19	Valeggia C. (TI-Forest)
CH	BASODINO	463	20110922	20120911		-11	Valeggia C. (TI-Forest)
CH	BIFERTEN	422	20100911	20110903		-11	Klauser H. (private)
CH	BIFERTEN	422	20110903	20130824		-13	Klauser H. (private)
CH	BLUEMLISALP	436	20100921	20110916		-25	Fuhrer U. (BE-Forest)
CH	BLUEMLISALP	436	20110916	20120918		-30	Fuhrer U. (BE-Forest)
CH	BLUEMLISALP	436	20120918	20130923		-38	Fuhrer U. (BE-Forest)
CH	BOVEYRE	459	20100731	20110908		-38	Medico J. (VS-Forest)
CH	BOVEYRE	459	20110908	20121011		-35	Medico J. (VS-Forest)
CH	BRENEY	368	20100905	20110910		-49	Chabloz J. (private)
CH	BRENEY	368	20110910	20120828		-43	Chabloz J. (private)
CH	BRENEY	368	20120828	20130921		-69	Chabloz J. (private)
CH	BRESCIANA	465	20100922	20110912		-13	Valeggia C. (TI-Forest)
CH	BRESCIANA	465	20110912	20120906		0	Valeggia C. (TI-Forest)
CH	BRUNEGG	384	20100916	20110929		-77	Brigger A. (VS-Forest)
CH	BRUNEGG	384	20110929	20131003		-2	Brigger A. (VS-Forest)
CH	CALDERAS	403	20100817	20110728		-18	Bott G. (GR-Forest)
CH	CALDERAS	403	20110728	20120823		-17	Bott G. (GR-Forest)
CH	CALDERAS	403	20120823	20130815		-3	Bott G. (GR-Forest)
CH	CAMBRENA	399	20081007	20111021		-42	Berchier G. (GR-Forest)
CH	CAMBRENA	399	20111021	20120920		-18	Berchier G. (GR-Forest)
CH	CAMBRENA	399	20120920	20130926		-6	Berchier G. (GR-Forest)
CH	CAVAGNOLI	464	20100914	20110921		-24	Valeggia C. (TI-Forest)
CH	CAVAGNOLI	464	20110921	20120910		-11	Valeggia C. (TI-Forest)
CH	CHEILLON	375	20101012	20110927		-4	Bourdin O. (VS-Forest)
CH	CHEILLON	375	20110927	20121025		-15	Bourdin O. (VS-Forest)
CH	CHEILLON	375	20121025	20131008		-12	Bourdin O. (VS-Forest)
CH	CORBASSIERE	366	20100922	20110915		-64	Bauder A. (VAW)
CH	CORBASSIERE	366	20110915	20120820		-146	Bauder A. (VAW)
CH	CORBASSIERE	366	20120820	20130813		-22	Bauder A. (VAW)
CH	CORNO	468	20100826	20110829		-3	Valeggia C. (TI-Forest)
CH	CORNO	468	20110829	20120907		-4	Valeggia C. (TI-Forest)
CH	CORNO	468	20120907	20131002		-35	Valeggia C. (TI-Forest)
CH	CROSLINA	1681	20100902	20110914		-4	
CH	CROSLINA	1681	20110914	20120914		-5	
CH	DAMMA	429	20060912	20110923		-41	Planzer M. (UR-Forest)
CH	DAMMA	429	20110923	20120921		-22	Planzer M. (UR-Forest)
CH	DAMMA	429	20120921	20130906		-8	Planzer M. (UR-Forest)
CH	DUNGEL	1678	20110915	20120918		-4	
CH	EIGER	442	20101006	20110915		-19	Zumstein R. (BE-Forest)
CH	EIGER	442	20110915	20120914		-8	Zumstein R. (BE-Forest)
CH	EIGER	442	20120914	20130920		-8	Zumstein R. (BE-Forest)
CH	FEE NORTH	392	20101011	20111006		-24	Andenmatten U. (VS-Forest)
CH	FEE NORTH	392	20111006	20121002		-20	Andenmatten U. (VS-Forest)
CH	FEE NORTH	392	20121002	20130926		5	Andenmatten U. (VS-Forest)
CH	FERPECLE	379	20101007	20110000		-12	Fellay F. (VS-Forest)
CH	FERPECLE	379	20110929	20120927		-39	Fellay F. (VS-Forest)
CH	FERPECLE	379	20120927	20131025		-26	Fellay F. (VS-Forest)
CH	FIESCHER	471	20101029	20111109		-42	Aschilier P. (VS-Forest)
CH	FIESCHER	471	20111109	20121109		-57	Aschilier P. (VS-Forest)
CH	FINDELEN	389	20100920	20110922		-48	Bauder A. (VAW)
CH	FINDELEN	389	20110922	20120914		-72	Bauder A. (VAW)
CH	FINDELEN	389	20120914	20130820		4	Bauder A. (VAW)
CH	FIRNALPELI	424	20100923	20111002		-12	Rüedliner C. (OW-Forest)
CH	FIRNALPELI	424	20111002	20120925		-7	Meier M. (OW-Forest)
CH	FIRNALPELI	424	20120925	20130904		0	Meier M. (OW-Forest)
CH	FORNO	396	20100823	20110819		-26	Mengelt C. (GR-Forest)
CH	FORNO	396	20110819	20120913		-25	Mengelt C. (GR-Forest)
CH	FORNO	396	20120913	20130909		-21	Mengelt C. (GR-Forest)
CH	GAMCHI	440	20101009	20110930		-19	Descloux R. (BE-Forest)
CH	GAMCHI	440	20110930	20120930		-11	Descloux R. (BE-Forest)
CH	GAMCHI	440	20120930	20130928		-96	Descloux R. (BE-Forest)
CH	GAULI	449	20100915	20110906		-135	Straub R. (private)
CH	GAULI	449	20110906	20120917		-91	Straub R. (private)
CH	GAULI	449	20120917	20130921		-1	Crest S. (BE-Forest)
CH	GIETRO	367	20100922	20110915		-25	Bauder A. (VAW)
CH	GIETRO	367	20110915	20120920		-94	Bauder A. (VAW)
CH	GIETRO	367	20120920	20130904		-12	Bauder A. (VAW)
CH	GLAERNISCH	418	20100912	20110924		-8	Klauser H. (private)
CH	GLAERNISCH	418	20110924	20121117		-18	Klauser H. (private)
CH	GLAERNISCH	418	20121117	20130817		4	Klauser H. (private)
CH	GORNER	391	20101015	20110917		-20	Walther S. (VS-Forest)
CH	GORNER	391	20110917	20120928		-30	Walther S. (VS-Forest)
CH	GORNER	391	20120928	20131021		-30	Walther S. (VS-Forest)
CH	GRAND DESERT	373	20100919	20110922		-23	Vouillamoz F. (VS-Forest)
CH	GRAND DESERT	373	20110922	20120915		-13	Vouillamoz F. (VS-Forest)
CH	GRAND DESERT	373	20120915	20130922		-6	Vouillamoz F. (VS-Forest)
CH	GRAND PLAN NEVE	455	20100923	20110915		-8	Marlètaz J. (VD-Forest)
CH	GRAND PLAN NEVE	455	20110915	20120911		-5	Marlètaz J. (VD-Forest)
CH	GRAND PLAN NEVE	455	20120911	20130927		2	Marlètaz J. (VD-Forest)
CH	GRIES	359	20100921	20110922		-32	Bauder A. (VAW)
CH	GRIES	359	20110922	20120827		-28	Bauder A. (VAW)
CH	GRIES	359	20120827	20130821		-19	Bauder A. (VAW)
CH	GRIESS(KLAUSEN)	425	20100922	20110915		-9	Annen B. (UR-Forest)
CH	GRIESS(KLAUSEN)	425	20110915	20121005		-9	Annen B. (UR-Forest)
CH	GRIESSEN(OBWA.)	423	20101014	20111003		-11	Rüedlinger C. (OW-Forest)
CH	GRIESSEN(OBWA.)	423	20111003	20120923		-14	Meier M. (OW-Forest)
CH	GROSSER ALETSCH	360	20100922	20110928		-34	Bauder A. (VAW)
CH	GROSSER ALETSCH	360	20110928	20120827		-33	Bauder A. (VAW)
CH	GROSSER ALETSCH	360	20120827	20130821		-14	Bauder A. (VAW)
CH	HOHLAUB	3332	20100920	20110915		-5	Bauder A. (VAW)
CH	HOHLAUB	3332	20110915	20120920		-12	Bauder A. (VAW)
CH	HOHLAUB	3332	20120920	20130904		-2	Bauder A. (VAW)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CH	KALTWASSER	363	20101001	20110915		-37	Schmidhalter M. (VS-Forest)
CH	KALTWASSER	363	20110915	20120918		-2	Schmidhalter M. (VS-Forest)
CH	KALTWASSER	363	20120918	20130926		6	Schmidhalter M. (VS-Forest)
CH	KEHLEN	431	20100920	20110922		-28	Planzer M. (UR-Forest)
CH	KEHLEN	431	20110922	20120920		-58	Planzer M. (UR-Forest)
CH	KEHLEN	431	20120920	20130905		-50	Planzer M. (UR-Forest)
CH	KESSJEN	393	20100920	20110915		-3	Bauder A. (VAW)
CH	KESSJEN	393	20110915	20120920		-4	Bauder A. (VAW)
CH	KESSJEN	393	20120920	20130904		0	Bauder A. (VAW)
CH	LAEMMERN (WILDSTRUBEL)	437	20100922	20110910		-20	von Grünigen C. (BE-Forest)
CH	LAEMMERN (WILDSTRUBEL)	437	20110910	20121011		-13	von Grünigen C. (BE-Forest)
CH	LAEMMERN (WILDSTRUBEL)	437	20121011	20130914		-12	von Grünigen C. (BE-Forest)
CH	LANG	386	20101015	20111020		-22	Henzen H. (VS-Forest)
CH	LANG	386	20111020	20121018		-12	Henzen H. (VS-Forest)
CH	LANG	386	20121018	20131009		-19	Henzen H. (VS-Forest)
CH	LAVAZ	416	20100823	20110913		-25	Lutz R. (GR-Forest)
CH	LAVAZ	416	20110913	20120809		2	Lutz R. (GR-Forest)
CH	LAVAZ	416	20120809	20130830		-15	Lutz R. (GR-Forest)
CH	LENTA	414	20100903	20110906		-33	Riedi B. (GR-Forest)
CH	LENTA	414	20110906	20120907		-34	Riedi B. (GR-Forest)
CH	LENTA	414	20120907	20130830		-28	Riedi B. (GR-Forest)
CH	LIMMERN	421	20101009	20110813		-3	Steinegger U. (private)
CH	LIMMERN	421	20110813	20121020		-11	Steinegger U. (private)
CH	LIMMERN	421	20121020	20130925		-2	Steinegger U. (private)
CH	LISCHANA	400	20090828	20110812		-8	Feuerstein G. (GR-Forest)
CH	LISCHANA	400	20110812	20120809		-9	Feuerstein G. (GR-Forest)
CH	LISCHANA	400	20120809	20130815		2	Feuerstein G. (GR-Forest)
CH	MOIRY	380	20101003	20111012		-18	Barmaz M. (private)
CH	MOIRY	380	20111012	20120905		-14	Stoebener P. (VS-Forest)
CH	MOIRY	380	20120905	20131025		-17	Fellay F. (VS-Forest)
CH	MOMING	381	20100930	20110930		-3	Stoebener P. (VS-Forest)
CH	MOMING	381	20110930	20120916		-4	Stoebener P. (VS-Forest)
CH	MOMING	381	20120916	20131025		-7	Fellay F. (VS-Forest)
CH	MONT DURAND	369	20100903	20110906		23	Chabloz J. (private)
CH	MONT DURAND	369	20110906	20120827		-37	Chabloz J. (private)
CH	MONT DURAND	369	20120827	20130913		-85	Chabloz J. (private)
CH	MONT FORT (ZINAL)	372	20100920	20110924		-23	
CH	MONT FORT (ZINAL)	372	20110924	20120916		-14	
CH	MONT FORT (ZINAL)	372	20120916	20131009		3	Vouillamoz F. (VS-Forest)
CH	MONT MINE	378	20101007	20110000		-58	Pralong F. (VS-Forest)
CH	MONT MINE	378	20110929	20120927		-36	Pralong F. (VS-Forest)
CH	MONT MINE	378	20120927	20131025		-29	Fellay F. (VS-Forest)
CH	MORTERATSCH	1673	20101013	20110913		-45	Bott G. (GR-Forest)
CH	MORTERATSCH	1673	20110913	20121001		-82	Bott G. (GR-Forest)
CH	MORTERATSCH	1673	20121001	20131003		-22	Bott G. (GR-Forest)
CH	MUTT	472	20091004	20110820		-17	Wittdorf U. (private)
CH	MUTT	472	20110820	20120907		-23	Wittdorf U. (private)
CH	OB.GRINDELWALD	444	20090908	20120827		-275	Bauder A. (VAW)
CH	OB.GRINDELWALD	444	20120827	20130923		-1850	Bauder A. (VAW)
CH	OBERAAR	451	20090819	20120917		-48	Flotron AG (KWO)
CH	OBERAAR	451	20120917	20130904		-9	Flotron AG (KWO)
CH	OTEMMA	370	20100904	20110909		-15	Chabloz J. (private)
CH	OTEMMA	370	20110909	20120903		-10	Chabloz J. (private)
CH	OTEMMA	370	20120903	20130920		-18	Chabloz J. (private)
CH	PALUE	398	20101007	20110929		-13	Berchier G. (GR-Forest)
CH	PALUE	398	20110929	20120921		-22	Berchier G. (GR-Forest)
CH	PALUE	398	20120921	20130925		-18	Berchier G. (GR-Forest)
CH	PANEYROSSE	456	20100923	20110914		-8	Marlètaz J. (VD-Forest)
CH	PANEYROSSE	456	20110914	20120911		-3	Marlètaz J. (VD-Forest)
CH	PANEYROSSE	456	20120911	20130928		2	Marlètaz J. (VD-Forest)
CH	PARADIES	412	20100916	20110916		-19	Fisler C. (GR-Forest)
CH	PARADIES	412	20110916	20120911		-11	Fisler C. (GR-Forest)
CH	PARADIES	412	20120911	20130911		1	Fisler C. (GR-Forest)
CH	PARADISINO (CAMPO)	397	20111030	20120920		-12	
CH	PARADISINO (CAMPO)	397	20120920	20130926		-9	Berchier G. (GR-Forest)
CH	PIZOL	417	20100922	20110926		-29	Brandes T. (SG-Forest)
CH	PIZOL	417	20110926	20120917		-6	Brandes T. (SG-Forest)
CH	PIZOL	417	20120917	20131009		-1	Brandes T. (SG-Forest)
CH	PLATTALVA	420	20101010	20110812		-19	Steinegger U. (private)
CH	PLATTALVA	420	20110812	20121021		-47	Steinegger U. (private)
CH	PLATTALVA	420	20121021	20130924		-3	Steinegger U. (private)
CH	PORCHABELLA	410	20101007	20111003		-19	Barandun C. (GR-Forest)
CH	PORCHABELLA	410	20111003	20121002		-22	Barandun C. (GR-Forest)
CH	PORCHABELLA	410	20121002	20130911		-13	Barandun C. (GR-Forest)
CH	PRAPIO	453	20100920	20111001		-13	Binggeli J. (VD-Forest)
CH	PRAPIO	453	20111001	20120808		0	Binggeli J. (VD-Forest)
CH	PRAPIO	453	20111001	20130927		1	Binggeli J. (VD-Forest)
CH	PUNTEGLIAS	415	20101012	20110824		-28	Buchli C. (GR-Forest)
CH	PUNTEGLIAS	415	20110824	20120918		-12	Buchli C. (GR-Forest)
CH	PUNTEGLIAS	415	20120918	20130920		5	Buchli C. (GR-Forest)
CH	RHONE	473	20100920	20110922		-51	Bauder A. (VAW)
CH	RHONE	473	20110922	20120827		-40	Bauder A. (VAW)
CH	RHONE	473	20120827	20130923		-31	Bauder A. (VAW)
CH	RIED	387	20100831	20111002		-6	Rovina P. (VS-Forest)
CH	RIED	387	20111002	20121007		-11	Rovina P. (VS-Forest)
CH	RIED	387	20121007	20131020		-82	Rovina P. (VS-Forest)
CH	ROSEG	406	20101013	20111125		-1305	Bott G. (GR-Forest)
CH	ROSEG	406	20111125	20120827		-65	Bott G. (GR-Forest)
CH	ROSEG	406	20120827	20130910		-31	Bott G. (GR-Forest)
CH	ROTFIRN NORD	430	20100920	20110922		-19	Planzer M. (UR-Forest)
CH	ROTFIRN NORD	430	20110922	20120920		-34	Planzer M. (UR-Forest)
CH	ROTFIRN NORD	430	20120920	20130905		-4	Planzer M. (UR-Forest)
CH	SALEINA	458	20101014	20111018		-40	Medico J. (VS-Forest)
CH	SALEINA	458	20111018	20121011		-33	Medico J. (VS-Forest)
CH	SALEINA	458	20121011	20131016		-33	Medico J. (VS-Forest)
CH	SANKT ANNA	432	20100911	20111001		-9	Marx J. (UR-Forest)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CH	SANKT ANNA	432	20111001	20121005		-13	Marx J. (UR-Forest)
CH	SANKT ANNA	432	20121005	20130906		-8	Marx J. (UR-Forest)
CH	SARDONA	407	20100924	20110927		-15	Brandes T. (SG-Forest)
CH	SARDONA	407	20110927	20120926		-1	Brandes T. (SG-Forest)
CH	SARDONA	407	20120926	20130925		-20	Brandes T. (SG-Forest)
CH	SCALETTA	1680	20100826	20110823		-6	Teufen B. (private)
CH	SCALETTA	1680	20110823	20120828		-3	Teufen B. (private)
CH	SCALETTA	1680	20120828	20130907		0	Teufen B. (private)
CH	SCHWARZ	438	20100904	20110903		-6	Brantschen E. C. (BE-Forest)
CH	SCHWARZ	438	20110903	20120928		-8	Brantschen E. C. (BE-Forest)
CH	SCHWARZBERG	395	20100920	20110915		-6	Bauder A. (VAW)
CH	SCHWARZBERG	395	20110915	20120920		-51	Bauder A. (VAW)
CH	SCHWARZBERG	395	20120920	20130904		-26	Bauder A. (VAW)
CH	SEEWJINEN	3333	20100920	20110915		-7	Bauder A. (VAW)
CH	SEEWJINEN	3333	20110915	20120920		-11	Bauder A. (VAW)
CH	SEEWJINEN	3333	20120920	20130904		2	Bauder A. (VAW)
CH	SESVENNA	401	20100826	20110823		-8	Feuerstein G. (GR-Forest)
CH	SESVENNA	401	20110823	20120828		-11	Feuerstein G. (GR-Forest)
CH	SESVENNA	401	20120828	20130821		-7	Feuerstein G. (GR-Forest)
CH	SEX ROUGE	454	20090910	20111005		0	Binggeli J. (VD-Forest)
CH	SEX ROUGE	454	20111005	20120917		-3	Binggeli J. (VD-Forest)
CH	SEX ROUGE	454	20120917	20130904		1	Binggeli J. (VD-Forest)
CH	SILVRETTA	408	20100922	20110916		-12	Bauder A. (VAW)
CH	SILVRETTA	408	20110916	20120820		-8	Bauder A. (VAW)
CH	SILVRETTA	408	20120820	20130822		-24	Bauder A. (VAW)
CH	STEIN	448	20100921	20111001		-155	Straub R. (private)
CH	STEIN	448	20111001	20120916		-72	Straub R. (private)
CH	STEIN	448	20120916	20130922		-54	Crest S. (BE-Forest)
CH	STEINLIMMI	447	20100921	20111001		-28	Straub R. (private)
CH	STEINLIMMI	447	20111001	20120916		-842	Straub R. (private)
CH	SULZ	419	20100831	20110929		-3	Schaller M. (GL-Forest)
CH	SULZ	419	20110929	20120920		-2	Schaller M. (GL-Forest)
CH	SULZ	419	20120920	20131002		3	Schaller M. (GL-Forest)
CH	SURETTA	411	20100923	20110916		-2	Fisler C. (GR-Forest)
CH	SURETTA	411	20110916	20120918		-18	Fisler C. (GR-Forest)
CH	SURETTA	411	20120918	20130920		11	Fisler C. (GR-Forest)
CH	TIATSCHA	402	20100827	20110819		-2	Bott G. (GR-Forest)
CH	TIATSCHA	402	20110819	20120822		-11	Bott G. (GR-Forest)
CH	TIATSCHA	402	20120822	20130823		-43	Bott G. (GR-Forest)
CH	TIEFEN	433	20100919	20110910		-27	Marx J. (UR-Forest)
CH	TIEFEN	433	20110910	20120910		-42	Marx J. (UR-Forest)
CH	TIEFEN	433	20120910	20130922		-29	Marx J. (UR-Forest)
CH	TRIENT	457	20101002	20111001		0	Ehinger J. (private)
CH	TRIENT	457	20111001	20120925		-18	Ehinger J. (private)
CH	TRIENT	457	20120925	20130922		-17	Ehinger J. (private)
CH	TRIFT (GADMEN)	446	20100920	20110922		-25	Bauder A. (VAW)
CH	TRIFT (GADMEN)	446	20110922	20120827		-24	Bauder A. (VAW)
CH	TRIFT (GADMEN)	446	20120827	20130822		-971	Bauder A. (VAW)
CH	TSANFLEURON	371	20101004	20110924		-8	Stoebener P. (VS-Forest)
CH	TSANFLEURON	371	20110924	20120826		-8	Stoebener P. (VS-Forest)
CH	TSANFLEURON	371	20120826	20131022		-15	Fellay F. (VS-Forest)
CH	TSCHIERVA	405	20101013	20110913		-29	Bott G. (GR-Forest)
CH	TSCHIERVA	405	20110913	20120827		-31	Bott G. (GR-Forest)
CH	TSCHIERVA	405	20120827	20130910		-95	Bott G. (GR-Forest)
CH	TSCHINGEL	441	20100914	20110916		-21	Zumstein R. (BE-Forest)
CH	TSCHINGEL	441	20110916	20120921		-37	Zumstein R. (BE-Forest)
CH	TSCHINGEL	441	20120921	20130926		-17	Zumstein R. (BE-Forest)
CH	TSEUDET	364	20101015	20110811		-7	Medico J. (VS-Forest)
CH	TSEUDET	364	20110811	20121011		-7	Medico J. (VS-Forest)
CH	TSEUDET	364	20121011	20131017		-14	Medico J. (VS-Forest)
CH	TSIDJIORE NOUVE	376	20101001	20110000		-9	Pralong F. (VS-Forest)
CH	TSIDJIORE NOUVE	376	20110929	20120920		-13	Pralong F. (VS-Forest)
CH	TSIDJIORE NOUVE	376	20120920	20131028		-9	Fellay F. (VS-Forest)
CH	TURTMANN (WEST)	385	20050925	20110929		-23	Brigger A. (VS-Forest)
CH	TURTMANN (WEST)	385	20121012	20131003		-30	Brigger A. (VS-Forest)
CH	UNT.GRINDELWALD	443	20070912	20130923		-1005	Bauder A. (VAW)
CH	UNTERAAR	450	20090819	20120917		-62	Flotron AG (KWO)
CH	UNTERAAR	450	20120917	20130904		-16	Flotron AG (KWO)
CH	VAL TORTA	466	20090923	20110906		-44	Valeggia C. (TI-Forest)
CH	VALLEGGIA	467	20100915	20110907		-4	Valeggia C. (TI-Forest)
CH	VALLEGGIA	467	20110907	20120918		-6	Valeggia C. (TI-Forest)
CH	VALSOREY	365	20101015	20110811		-18	Medico J. (VS-Forest)
CH	VALSOREY	365	20110811	20121011		-21	Medico J. (VS-Forest)
CH	VALSOREY	365	20121011	20131017		-20	Medico J. (VS-Forest)
CH	VERSTANKLA	409	20100916	20110906		-20	Maikoff (GR-Forest)
CH	VERSTANKLA	409	20110906	20120829		-17	Maikoff (GR-Forest)
CH	VERSTANKLA	409	20120829	20130830		-13	Aust I. (GR-Forest)
CH	VORAB	413	20100917	20110929		-23	Brunold J. (GR-Forest)
CH	VORAB	413	20110929	20130920		-24	Kalberer M. (GR-Forest)
CH	WALLENBUR	428	20101007	20111004		-18	Kläger P. (UR-Forest)
CH	WALLENBUR	428	20111004	20121021		-15	Kläger P. (UR-Forest)
CH	WALLENBUR	428	20121021	20131008		-13	Kläger P. (UR-Forest)
CH	ZINAL	382	20101016	20111022		-16	Barmaz M. (private)
CH	ZINAL	382	20111022	20120916		-14	Stoebener P. (VS-Forest)
CH	ZINAL	382	20120916	20131025		-42	Fellay F. (VS-Forest)
CL	ALPEHUE	4412	19619999	20119999	sP	-1350	
CL	ANIHUE	4431	19769999	20119999	sP	-1514	
CL	ANTUCO	4405	19859999	20119999	sP	-329	
CL	BALMACEDA	1657	19869999	20119999	sP	-1625	
CL	CALLAQUI	4407	19759999	20119999	sP	-386	
CL	CASA PANGUE	2010	19879999	20119999	sP	-1288	
CL	CAY (LENGUA NORTE)	4437	19799999	20119999	sP	-970	
CL	CERRO VOLCAN	4382	19909999	20119999	sP	-890	
CL	COLONIA	1027	19449999	20119999	sP	-4958	
CL	CORRENTOSO	4430	19769999	20119999	sP	-954	
CL	CORTADERAL	4398	19769999	20119999	sP	-612	

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CL	ECHAURREN	4388	19869999	20119999	sP	-450	
CL	EL AZUFRE	4403	19859999	20119999	sP	-832	
CL	ERASMO	4440	19799999	20119999	sP	-1216	
CL	GL 01	4424	19799999	20119999	sP	-736	
CL	GL 04	4427	19799999	20119999	sP	-512	
CL	GL 05 (AMARILLO)	4426	19799999	20119999	sP	-1984	
CL	GL 08	4425	19799999	20119999	sP	-896	
CL	GUALAS	3583	19799999	20129999	sP	-2112	
CL	GUANACO	3983	20129999	20120211	sC	-33	Rivera A. (CECS)
CL	GUANACO	3983	20139999	20130301	sC	-15	Rivera A. (CECS)
CL	HPS9	1639	19459999	20119999	sP	-1320	
CL	HUEMULES	4439	19799999	20119999	sP	-1600	
CL	INEXPLORADO 1	4421	19879999	20119999	sP	-1152	
CL	INEXPLORADO 2	4422	19879999	20119999	sP	-3552	
CL	INEXPLORADO 3	4423	19879999	20119999	sP	-2376	
CL	JORGE MONTT	1016	18989999	20119999	sP	-17854	
CL	JUNCAL NORTE	2001	19899999	20119999	sP	-308	
CL	JUNCAL SUR	2002	19479999	20119999	sP	-5056	
CL	MACA (LENGUA ESTE)	4438	19799999	20119999	sP	-799	
CL	MARINELLI	4444	19139999	20119999	sP	-15000	
CL	MELIMOYU OESTE	4432	19769999	20129999	sP	-1228	
CL	MELIMOYU SUR	4433	19769999	20139999	sP	-875	
CL	MENTOLAT (LENGUA SUR)	4436	19799999	20119999	sP	-462	
CL	MOCHO CHOSHUENCO SE	3972	19769999	20119999	sP	-687	
CL	NEVADO DE QUEULAT (LENGUA PRINCIPAL)	4435	19869999	20119999	sP	-1642	
CL	OLIVARES ALFA	4384	19869999	20119999	sP	-850	
CL	OLIVARES BETA	2004	19359999	20129999	sP	-3648	
CL	OLIVARES GAMA	2003	19359999	20119999	sP	-2660	
CL	OSORNO	4416	19619999	20119999	sP	-467	
CL	PETEROA 1	4399	19859999	20119999	sP	-1144	
CL	PETEROA 2	4400	19859999	20119999	sP	-1092	
CL	PETEROA 3	4401	19859999	20119999	sP	-962	
CL	PETEROA 4	4402	19859999	20119999	sP	-624	
CL	PICHILLANCAHUE	3446	19619999	20119999	sP	-1500	
CL	PIRAMIDE	4389	19869999	20119999	sP	-175	
CL	PUYEHUE	4414	19859999	20119999	sP	-223	
CL	REICHER	3582	19799999	20119999	sP	-5632	
CL	SAN RAFAEL	1042	18719999	20119999	sP	-10360	
CL	SIERRA VELLUDA	4406	19859999	20119999	sP	-450	
CL	TURBIO	4413	19769999	20119999	sP	-560	
CL	YATES 2	4420	19879999	20119999	sP	-339	
CN	PARLUNG NO. 94	3987	20100704	20120803	tG	-37	Li S. (CAS/ITPR)
CN	PARLUNG NO. 94	3987	20120803	20131005	tG	-16	Li S. (CAS/ITPR), Yang W. (CAS/ITPR)
CN	URUMQI GLACIER NO. 1	853	20100911	20110906	tG	-X	
CN	URUMQI GLACIER NO. 1	853	20120820	20130829	tG	-8	Li H. (CAREERI), Wang W. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20100911	20110906	tG	-X	
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20110914	20120820	tG	8	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20120820	20130829	tG	-8	Li H. (CAREERI), Wang W. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20100911	20110906	tG	-X	
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20110914	20120820	tG	4	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20120820	20130829	tG	-4	Li H. (CAREERI), Wang W. (CAREERI), Li Z. (CAREERI)
CO	CONEJERAS	2721	20101210	20111203	tG	-19	
CO	CONEJERAS	2721	20111203	20121215		-129	Ceballos Lievano J. (IDEAM)
EC	ANTIZANA15ALPHA	1624		20111228	cC	17	
EC	ANTIZANA15ALPHA	1624		20121229	cC	-12	Cáceres Correa B. (INAMHI)
EC	ANTIZANA15ALPHA	1624		20140105	cC	-5	Cáceres Correa B. (INAMHI)
ES	MALADETA	942	20101002	20110928	tG	-4	
ES	MALADETA	942	19949999	20129999		-150	
FR	ARGENTIERE	354	20080902	20110907	tG	-62	
FR	ARGENTIERE	354	20110907	20120905	tG	-25	Vincent C. (CNRS), Six D. (CNRS)
FR	ARGENTIERE	354	20120905	20130913	tG	-14	Vincent C. (CNRS), Six D. (CNRS)
FR	BIONNASSAY	1313	20109999	20119999		-15	
FR	BIONNASSAY	1313	20119999	20129999		-7	Moreau L. (GLACIOLAB)
FR	BIONNASSAY	1313	20129999	20131099		-13	Moreau L. (GLACIOLAB)
FR	BLANC	351	20101001	20111003		-76	
FR	BLANC	351	20111003	20120919		-101	Thibert E. (IRSTEA)
FR	BOSSONS	355	20090905	20110910	tG	-220	
FR	BOSSONS	355	20110910	20120907	tG	-73	Vincent C. (CNRS), Six D. (CNRS)
FR	BOSSONS	355	20120907	20130915		0	Vincent C. (CNRS), Six D. (CNRS)
FR	MER DE GLACE	353	20100910	20111215		-71	
FR	MER DE GLACE	353	20111215	20120906		-29	Vincent C. (CNRS), Six D. (CNRS)
FR	MER DE GLACE	353	20120906	20130914		0	Vincent C. (CNRS), Six D. (CNRS)
FR	OSSOUE	2867	20101009	20111009	tG	-4	
FR	OSSOUE	2867	20111009	20121014	tG	-29	René P. (AM)
FR	OSSOUE	2867	20121014	20131006		0	René P. (AM)
FR	TRE LA TETE	1314	20109999	20119999		-2	
FR	TRE LA TETE	1314	20119999	20129999		-31	Moreau L. (GLACIOLAB)
GL	MITTIVAKKAT	1629	20119999	20109999		-22	
GL	MITTIVAKKAT	1629	20119999	20129999	tG	-9	Knudsen N., Hasholt B. (DESA), Mernild S. (CECS), Hanna E. (SU/DG), Bjoerk A. (UC/NHM)
IS	BLAGNIPUJOEKULL	3130	20101023	20121014	aP	-36	Haraldsson E. (IGS-IMO)
IS	BLAGNIPUJOEKULL	3130	20121014	20131019	aP	-79	Haraldsson E. (IGS-IMO)
IS	BREIDAMJOEKULL W. C.	3065	20102109	20112709	aP	-70	
IS	BROKARJOEKULL	3066	20102310	20112110	tG	-164	
IS	BROKARJOEKULL	3066	20111021	20121020	tG	-46	Pálsson B. (IGS-IMO)
IS	BROKARJOEKULL	3066	20121020	20131019	tG	-17	Pálsson B. (IGS-IMO)
IS	FALLJOEKULL	3071	20102609	20112210	aP	-52	
IS	FALLJOEKULL	3071	20111022	20121020	aP	-7	Þorláksdóttir S. (IGS-IMO)
IS	FALLJOEKULL	3071	20121020	20131020	aP	-67	Þorláksdóttir S. (IGS-IMO)
IS	FJALLSJOEKULL BY GAMLASEL	3074	20102410	20112609	aP	-50	
IS	FLAAJOEKULL	3078	20111024	20121019	aP	-13	Guðmundsson E. (IGS-IMO)
IS	FLAAJOEKULL	3078	20121019	20131018	aP	-78	Guðmundsson E. (IGS-IMO)
IS	FLAAJOEKULL E 148	3076	20102410	20112410		-63	Pálsson B. (IGS-IMO)
IS	GEITLANDSJOEKULL	3128	20100509	20111709	aP	-16	
IS	GEITLANDSJOEKULL	3128	20110917	20120915	aP	-26	Kristinsson B. (IGS-IMO)
IS	GEITLANDSJOEKULL	3128	20120915	20130928	aP	-22	Kristinsson B. (IGS-IMO)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
IS	GIGJOEKULL	3079	20110312	20130320	aP	-80	Theodórsson T. (IGS-IMO)
IS	GLJUFURARJOEKULL	3080	20110910	20120908	aP	-11	Hjartarson K. (IGS-IMO)
IS	GLJUFURARJOEKULL	3080	20120908	20130907	aP	-1	Hjartarson K. (IGS-IMO)
IS	HAGAFELLSJOEKULL E	3081	20101710	20112310	aP	-74	
IS	HAGAFELLSJOEKULL E	3081	20110910	20121021	aP	-150	Sigurðsson E. (IGS-IMO)
IS	HAGAFELLSJOEKULL E	3081	20121021	20131013	aP	-152	Sigurðsson E. (IGS-IMO)
IS	HAGAFELLSJOEKULL W	3082	20120916	20130928	aP	-54	
IS	HEINABERGSJOEKULL	3135	20100211	20112810	aP	1	
IS	HEINABERGSJOEKULL	3135	20111028	20121024	aP	9	Guðmundsson E. (IGS-IMO)
IS	HEINABERGSJOEKULL	3135	20121024	20131114	aP	28	Guðmundsson E. (IGS-IMO)
IS	HYRNINGSJOEKULL	3092	20100609	20110409		-41	
IS	HYRNINGSJOEKULL	3092	20110904	20120902		-20	Haraldsson H. (IGS-IMO)
IS	HYRNINGSJOEKULL	3092	20120902	20130904		-6	Haraldsson H. (IGS-IMO)
IS	JOEKULHALS	3093	20110904	20120902		SN	Haraldsson H. (IGS-IMO)
IS	JOEKULHALS	3093	20120902	20130904		SN	Haraldsson H. (IGS-IMO)
IS	JOEKULKROKUR	3094	20090906	20120825	aP	-71	EyÞórsdóttir K. (IGS-IMO)
IS	KALDALONSJOEKULL	3095	20100309	20110809	aP	-15	
IS	KALDALONSJOEKULL	3095	20110908	20120905	aP	-35	Aðalsteinsson I. (IGS-IMO)
IS	KALDALONSJOEKULL	3095	20120905	20130906	aP	SN	Aðalsteinsson I. (IGS-IMO)
IS	KIRKJUJOEKULL	3129	20101023	20121014	aP	-66	Haraldsson E. (IGS-IMO)
IS	KIRKJUJOEKULL	3129	20121014	20131019	aP	-35	Haraldsson E. (IGS-IMO)
IS	KOETLUJOEKULL	3132	20091510	20111211	aP	-8	
IS	KOETLUJOEKULL	3132	20111113	20130316	aP	-X	Sigurðsson O. (IGS-IMO)
IS	KOETLUJOEKULL	3132	20111113	20131008	aP	-54	Sigurðsson O. (IGS-IMO)
IS	KOTARJOEKULL	3906	18919999	20119999	xX	-1300	
IS	KVIARJOEKULL	3098		20121007	aP	-X	Björnsson H. (IGS-IMO)
IS	KVISLAJOEKULL	3131	20102210	20111910	aP	-19	
IS	LAMBAHRAUNSJOEKULL	3099	20110922	20120929		-25	Skúlason B. (IGS-IMO)
IS	LAMBAHRAUNSJOEKULL	3099	20120929	20130928		-25	Skúlason B. (IGS-IMO)
IS	LEIRUFJARDARJOEKULL	3102	20110924	20120920	aP	-145	Sólbergsson Á. (IMO)
IS	LEIRUFJARDARJOEKULL	3102	20120920	20130927	aP	-3	Sólbergsson Á. (IMO)
IS	MORSARJOEKULL	3104	20102310	20110711	aP	-23	
IS	MORSARJOEKULL	3104	20111107	20121005	aP	-53	Kristjánsson R. (IGS-IMO)
IS	MORSARJOEKULL	3104	20121005	20130928	aP	-126	Kristjánsson R. (IGS-IMO)
IS	MULAJOEKULL S	3105	20102509	20111609	aP	-24	
IS	MULAJOEKULL S	3105	20110916	20120929	aP	-53	Jónsson L. (IGS-IMO)
IS	MULAJOEKULL S	3105	20120929	20131012	aP	-62	Jónsson L. (IGS-IMO)
IS	MULAJOEKULL W	3106	20110916	20120928		-33	Jónsson L. (IGS-IMO)
IS	MULAJOEKULL W	3106	20120928	20130920		-33	Jónsson L. (IGS-IMO)
IS	NAUTHAGAJOEKULL	3107	20102509	20111609	aP	0	
IS	NAUTHAGAJOEKULL	3107	20110916	20120928	aP	-16	Jónsson L. (IGS-IMO)
IS	NAUTHAGAJOEKULL	3107	20120928	20130920	aP	-10	Jónsson L. (IGS-IMO)
IS	REYKJAFJARDARJOEKULL	3109	20100908	20111008	aP	0	
IS	REYKJAFJARDARJOEKULL	3109	20110810	20120814	aP	-10	Jóhannesson Þ. (IGS-IMO)
IS	REYKJAFJARDARJOEKULL	3109	20120814	20130818	aP	0	Jóhannesson Þ. (IGS-IMO)
IS	RJUPNABREKKUJOEKULL	3136	20090906	20100913	aP	SN	Sigurðsson S. (IGS-IMO)
IS	SATUJOEKULL	3110	20101010	20112209	aP	-40	
IS	SATUJOEKULL	3110	20110922	20120919	aP	-60	
IS	SATUJOEKULL	3110	20120929	20130928	aP	-70	
IS	SKAFTAFELLSJOEKULL	3113	20102310	20110511		-55	
IS	SKAFTAFELLSJOEKULL	3113	20111105	20121006		-X	Kristjánsson R. (IGS-IMO)
IS	SKAFTAFELLSJOEKULL	3113	20111105	20130929		-65	Kristjánsson R. (IGS-IMO)
IS	SKALAFELLSJOEKULL	3115	20100910	20112410	aP	-3	
IS	SKALAFELLSJOEKULL	3115	20101009	20121024	aP	-3	Hreinsdóttir S. (IGS-IMO)
IS	SKALAFELLSJOEKULL	3115	20071013	20131005	aP	-12	Hreinsdóttir S. (IGS-IMO)
IS	SKEIDARARJOEKULL E1	3116	20102310	20110511	aP	-23	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL E1	3116	20111105	20121006	aP	SN	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL E1	3116	20111105	20130928	aP	-243	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL E2	3117	20102310	20110511	aP	-116	
IS	SKEIDARARJOEKULL E2	3117	20111105	20121006	aP	SN	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL E2	3117	20111105	20130928	aP	-210	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL E3	3118	20111105	20121006	aP	-3	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL E3	3118	20121006	20130928	aP	-69	Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOEKULL W	3119	20111203	20121125	aP	-190	Jónsson H. (IGS-IMO)
IS	SKEIDARARJOEKULL W	3119	20121125	20131124	aP	-10	Jónsson H. (IGS-IMO)
IS	SLETTJOEKULL	3133	20101010	20120918	aP	-168	Kaldal I. (IGS-IMO)
IS	SLETTJOEKULL	3133	20120918	20131013	aP	-49	Kaldal I. (IGS-IMO)
IS	SOLHEIMAJOEKULL W	3122	20111022	20121020	aP	-48	Gunnlaugsson E. (IGS-IMO)
IS	SOLHEIMAJOEKULL W	3122	20121020	20131012	aP	-55	Gunnlaugsson E. (IGS-IMO)
IS	SVINAFELLSJOEKULL	3124	20102609	20112310	aP	-46	
IS	SVINAFELLSJOEKULL	3124	20111023	20121020	aP	1	Þorláksdóttir S. (IGS-IMO)
IS	SVINAFELLSJOEKULL	3124	20121020	20131022	aP	-2	Þorláksdóttir S. (IGS-IMO)
IS	TUNGNAARJOEKULL	3126	20100611	20113010	aP	-62	
IS	TUNGNAARJOEKULL	3126	20111030	20120929	aP	-99	Hilmarsson S. (IGS-IMO)
IS	TUNGNAARJOEKULL	3126	20120929	20131026	aP	-74	Hilmarsson S. (IGS-IMO)
IT	ALTA (VEDRETTA) / HOHENF.	632	20100826	20110823	tG	-10	
IT	ALTA (VEDRETTA) / HOHENF.	632	20110823	20120829	tG	-15	Perini G. (CGI)
IT	ALTA (VEDRETTA) / HOHENF.	632	20120829	20131003	tG	-239	Perini G. (CGI)
IT	AMOLA	638	20100828	20121014	tG	-29	Piffer A. (SAT)
IT	ANTELAO INFERIORE (OCC.)	642	20090820	20110820	tG	8	
IT	ANTELAO INFERIORE (OCC.)	642	20110820	20120928	tG	-33	Perini G. (CGI)
IT	ANTELAO SUP.	643	20100821	20110820	tG	0	
IT	ANTELAO SUP.	643	20110820	20120823	tG	-26	Perini G. (CGI)
IT	ANTELAO SUP.	643	20120823	20130822	tG	-4	Perini G. (CGI)
IT	AOUILLE	1239	20100923	20110825	tG	6	Nicolino M. (CGI)
IT	AOUILLE	1239	20110825	20120829	tG	-90	Nicolino M. (CGI)
IT	AOUILLE	1239	20120829	20130906	tG	-1	Nicolino M. (CGI)
IT	ARGUEREY MER.	1253	20090909	20110927	tG	-5	Viotti A. (CGI)
IT	ARGUEREY SETT.	1254	20090909	20110927	tG	-37	Viotti A. (CGI)
IT	BARBADORSO DI DENTRO / BAEREN-BARTF. INNERER	658	20100905	20110917	tG	-31	
IT	BARBADORSO DI DENTRO / BAEREN-BARTF. INNERER	658	20110917	20121018	tG	-12	Scaltriti A. (SGAA)
IT	BASEI	611	20100904	20110903	tG	-3	
IT	BASEI	611	20110903	20120909	tG	-8	Fornengo F. (CGI)
IT	BASEI	611	20120909	20130901	tG	0	Fornengo F. (CGI)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
IT	BERTA	1295	20100825	20110823	tG	0	
IT	BERTA	1295	20110823	20120828	tG	-6	Rogliardo F. (CGI)
IT	BESSANESE	1297	20100901	20110831	tG	3	
IT	BESSANESE	1297	20110831	20120907	tG	-13	Rogliardo F. (CGI)
IT	BESSANESE	1297	20120907	20130905	tG	-38	Rogliardo F. (CGI)
IT	BREUIL SETT.	1256	20100912	20110926	tG	-4	
IT	BREUIL SETT.	1256	20110926	20120828	tG	-19	Viotti A. (CGI)
IT	BROGLIO	2375	20081001	20110925	tG	-53	
IT	BROGLIO	2375	20110925	20121001	tG	-19	Caminada C. (CGI)
IT	CALDERONE	1107	20100918	20110922	xX	-9	
IT	CALDERONE	1107	20110922	20120922	tR	ST	Pecci M. (CGI), Pecci M. (ITAC)
IT	CALDERONE	1107	20120922	20130914	tR	ST	Pecci M. (CGI), Pecci M. (ITAC)
IT	CAPRA	1304	20100811	20110812	tG	-3	Bertoglio V. (CGI)
IT	CARRO OCCIDENT.	2358	20100911	20110927	tG	-2	
IT	CARRO OCCIDENT.	2358	20110927	20120921	tG	-7	Bertoglio V. (CGI)
IT	CASPOGGIO	628	20100911	20110910	tG	-13	
IT	CASPOGGIO	628	20110910	20120908	tG	-5	Alberti S. (SGL)
IT	CASPOGGIO	628	20120908	20130914	tG	-14	Zanolin G. (SGL)
IT	CASSANDRA OR.	1185	20100901	20110925	tG	-5	
IT	CASSANDRA OR.	1185	20110925	20120925	tG	-4	De Zaiacomo M. (SGL)
IT	CASSANDRA OR.	1185	20120925	20130920	tG	0	De Zaiacomo M. (SGL)
IT	CEDEC	1165	20100926	20110916	tG	-7	
IT	CEDEC	1165	20110916	20121004	tG	-20	Colombarolli D. (SGL)
IT	CEDEC	1165	20121004	20130906	tG	-17	Colombarolli D. (SGL)
IT	CEVEDALE FORCOLA / FUERKELEF.	663	20100826	20110823	tG	-29	
IT	CEVEDALE FORCOLA / FUERKELEF.	663	20110823	20120829	tG	-44	Perini G. (CGI)
IT	CEVEDALE FORCOLA / FUERKELEF.	663	20120829	20130901	tG	-23	Perini G. (CGI)
IT	CEVEDALE PRINCIPALE / ZUFALLF.	662	20100826	20110823	tG	-46	
IT	CEVEDALE PRINCIPALE / ZUFALLF.	662	20110823	20120829	tG	-40	Perini G. (CGI)
IT	CEVEDALE PRINCIPALE / ZUFALLF.	662	20120829	20130901	tG	-16	Perini G. (CGI)
IT	CIAMARELLA	1298	20090906	20110902	tG	-1	
IT	CIAMARELLA	1298	20110902	20120909	tG	-8	Rogliardo F. (CGI)
IT	CIAMARELLA	1298	20120909	20130904	tG	0	Rogliardo F. (CGI)
IT	CIARDONEY	1264	20100906	20110906	tG	-22	
IT	CIARDONEY	1264	20110906	20120907	tG	-21	Mercalli L. (SMI)
IT	CIARDONEY	1264	20120907	20130913	tG	-2	Mercalli L. (SMI)
IT	COLLERIN D'ARNAS	2349	20100904	20110906	tG	-1	
IT	COLLERIN D'ARNAS	2349	20110906	20120911	tG	-5	Rogliardo F. (CGI)
IT	CORNISELLO MER.	1151	20060924	20110823	tG	-35	Marchetti F. (SAT)
IT	COUPE DE MONEY	1271	20100911	20110923	tG	-11	
IT	COUPE DE MONEY	1271	20110923	20120912	tG	-9	Bertoglio V. (CGI)
IT	COUPE DE MONEY	1271	20120912	20130913	tG	-9	Bertoglio V. (CGI), Borre P. (CGI)
IT	DISGRAZIA	2503	20100905	20110910	tG	-90	Proh A. (SGL)
IT	DISGRAZIA	2503	20110910	20120923	tG	-30	Proh A. (SGL)
IT	DISGRAZIA	2503	20120923	20130914	tG	-2	Neri G. (SGL)
IT	DOSEGU	668	20100922	20110828	tG	-19	Borghi A. (SGL)
IT	DOSEGU	668	20110828	20120823	tG	-52	Borghi A. (SGL)
IT	DOSEGU	668	20120823	20130830	tG	-15	Borghi A. (SGL)
IT	DZASSET	2372	20100912	20110917	tG	-22	
IT	DZASSET	2372	20110917	20120909	tG	-5	Bertoglio V. (CGI)
IT	DZASSET	2372	20120909	20130914	tG	-3	Bertoglio V. (CGI), Borre P. (CGI)
IT	ENTRELOR SETT.	2377	20100912	20110915	tG	-2	
IT	ENTRELOR SETT.	2377	20110915	20120915	tG	-5	Rossotto A. (CGI)
IT	FOND OCCID.	2380	20100826	20110909	tG	-29	
IT	FOND OCCID.	2380	20110909	20120908	tG	-1	Pollicini F. (CGI), Borney S. (CGI)
IT	FOND OCCID.	2380	20120908	20130914	tG	-8	Pollicini F. (CGI), Borney S. (CGI)
IT	FOND OR.	1243	20100826	20110909	tG	-17	
IT	FOND OR.	1243	20110909	20120908	tG	-7	Pollicini F. (CGI), Borney S. (CGI)
IT	FOND OR.	1243	20120908	20130914	tG	-2	Pollicini F. (CGI), Borney S. (CGI)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20100826	20110829	tG	-6	
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20110829	20120825	tG	-14	Polato A. (SGAA)
IT	FORNI	670	20100910	20111001	tG	-22	
IT	FORNI	670	20111001	20121002	tG	-16	Cola G. (SGL)
IT	FORNI	670	20121002	20130908	tG	-3	Cola G. (SGL)
IT	FRANE (VEDR. DELLE) / STEINSCHLAGF.	2624	20100819	20110824	tG	-8	
IT	FRANE (VEDR. DELLE) / STEINSCHLAGF.	2624	20110824	20120821	tG	-40	Polato A. (SGAA)
IT	GLIAIRETTA VAUDET	1248	20100822	20110825	tG	-8	
IT	GLIAIRETTA VAUDET	1248	20110825	20120826	tG	-22	Pollicini F. (CGI)
IT	GLIAIRETTA VAUDET	1248	20120826	20130910	tG	-12	Pollicini F. (CGI)
IT	GOLETTA	683	20100901	20110830	tG	-34	
IT	GOLETTA	683	20110830	20120915	tG	-50	Pollicini F. (CGI)
IT	GRAMES ORIENT. + CENTR. / GRAMSENF. OESTL. + ZENTR.	2599	20100823	20110731	tG	-8	Bruschi P. (SGAA)
IT	GRAMES ORIENT. + CENTR. / GRAMSENF. OESTL. + ZENTR.	2599	20110731	20120828	tG	-18	Bruschi P. (SGAA)
IT	GRAN PARADISO	1235	20100906	20110907	tG	-3	
IT	GRAN PARADISO	1235	20110907	20120915	tG	-6	Bertoglio V. (CGI)
IT	GRAN PILASTRO (GHIAC. DEL) / GLIEDERF.	652	20100922	20110917	tG	-23	
IT	GRAN PILASTRO (GHIAC. DEL) / GLIEDERF.	652	20110917	20121006	tG	-48	Franchi G. (CGI)
IT	GRAN PILASTRO (GHIAC. DEL) / GLIEDERF.	652	20121006	20130928	tG	-14	Sartori G. (SGAA)
IT	GRAN VEDRETTA OCC. / HOCHF.	2634	20100828	20110910	tG	-55	
IT	GRAN VEDRETTA OCC. / HOCHF.	2634	20110910	20120908	tG	-83	Sartori S. (SGAA)
IT	GRAN VEDRETTA OR. / GRIESSF.	2633	20100828	20110910	tG	-15	
IT	GRAN VEDRETTA OR. / GRIESSF.	2633	20110910	20120907	tG	7	Sartori S. (SGAA)
IT	GRAN VEDRETTA OR. / GRIESSF.	2633	20120907	20130824	tG	-4	Sartori S. (SGAA)
IT	GRAN ZEBRU (CENTRALE)	1164	20090926	20110916	tG	-26	Fioletti M. (SGL)
IT	GRAN ZEBRU (CENTRALE)	1164	20110916	20121014	tG	-119	Fioletti M. (SGL), Colombarolli D. (SGL)
IT	GRAN ZEBRU (CENTRALE)	1164	20121014	20130906	tG	-3	Colombarolli D. (SGL), Fioletti M. (SGL)
IT	GRAN ZEBRU (OCCID.)	4527	20090926	20110916	tG	-6	
IT	GRAN ZEBRU (OCCID.)	4527	20110916	20121014	tG	-5	Fioletti M. (SGL), Colombarolli D. (SGL)
IT	GRAND CROUX CENTR.	1273	20100913	20110929	tG	-11	
IT	GRAND CROUX CENTR.	1273	20110929	20130914	tG	-7	Bertoglio V. (CGI), Borre P. (CGI)
IT	GRAND ETRET	1238	20080916	20110910	tG	-2	
IT	GRAND ETRET	1238	20110910	20120916	tG	0	Bertoglio V. (CGI)
IT	GRUETTA ORIENT.	2418	20100919	20111002	tG	5	
IT	GRUETTA ORIENT.	2418	20111002	20120916	tG	-29	Gadin G. (CGI)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
IT	INDREN OCC.	1209	20100829	20110828	tG	-7	Piccini P. (CGI)
IT	INDREN OCC.	1209	20110828	20120820	tG	-21	Piccini P. (CGI)
IT	INDREN OCC.	1209	20120820	20130905	tG	-3	Piccini P. (CGI), Squinobal E. (CGI)
IT	JUMEAUX	2441	20100927	20111005	tG	-24	
IT	LA MARE (VEDRETTA DE)	636	20100904	20110818	tG	-32	
IT	LA MARE (VEDRETTA DE)	636	20110818	20120907	tG	-29	Carturan L. (CGI)
IT	LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	20100908	20110908	tG	6	
IT	LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	20110908	20120930	tG	-29	Benetton S. (CGI)
IT	LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	20120930	20130829	tG	47	Degli Esposti P. (CGI)
IT	LARES	1149	20090920	20110911	tG	-25	Marchetti F. (SAT)
IT	LARES	1149	20110911	20120909	tG	-42	Flemi Z. (SAT)
IT	LAUSON	1275	20100911	20110914	tG	-3	Bracotto G. (CGI)
IT	LAUSON	1275	20110914	20120914	tG	-10	Bracotto G. (CGI)
IT	LAUSON	1275	20120914	20130910	tG	-16	Grosa M. (CGI)
IT	LAVACCIU	1285	20100906	20110905	tG	-13	
IT	LAVACCIU	1285	20110905	20120909	tG	-8	Nicolussi S. (CGI)
IT	LAVACCIU	1285	20120909	20130826	tG	-8	Nicolussi S. (CGI)
IT	LAVASSEY	1242	20100826	20110909	tG	-22	
IT	LAVASSEY	1242	20110909	20120908	tG	-26	Pollicini F. (CGI), Borney S. (CGI)
IT	LAVASSEY	1242	20120908	20130914	tG	-54	Pollicini F. (CGI), Borney S. (CGI)
IT	LOBBIA	1150	20090827	20110821	tG	-4	
IT	LUNGA (VEDRETTA) / LANGENF.	661	20100825	20110822	tG	-48	
IT	LUNGA (VEDRETTA) / LANGENF.	661	20110822	20120828	tG	-48	Perini G. (CGI)
IT	LUNGA (VEDRETTA) / LANGENF.	661	20120828	20130831	tG	-19	Perini G. (CGI)
IT	LYS	620	20100928	20111012	tG	-20	
IT	LYS	620	20111012	20121009	tG	-10	Monterin W. (CGI)
IT	LYS	620	20121009	20130927	tG	-2	Freppaz M. (CGI), Dublanc L. (CGI)
IT	MADACCIO (VEDR. DEL) / MADATSCHF.	1129	20100922	20110917	tG	-14	
IT	MADACCIO (VEDR. DEL) / MADATSCHF.	1129	20110917	20120818	tG	-7	Barison G. (SGAA)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20100911	20110916	tG	-32	
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20110916	20121005	tG	-14	Franchi G. (CGI)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20121005	20130924	tG	-1	Franchi G. (CGI)
IT	MANDRONE	664	20100918	20110820	tG	-5	
IT	MANDRONE	664	20110820	20120825	tG	-20	Marchetti F. (SAT), Flemi Z. (SAT)
IT	MARMOLADA CENTR.	676	20100905	20110903	tG	-90	
IT	MARMOLADA CENTR.	676	20110903	20120910	tG	-5	Varotto M. (CGI), Ferrarese F. (CGI)
IT	MARMOLADA CENTR.	676	20120910	20130921	tG	0	Varotto M. (CGI), Zangrando D. (CGI)
IT	MARTELOT	1301	20100817	20110911	tG	-3	
IT	MARTELOT	1301	20110911	20120820	tG	2	Rogliardo F. (CGI)
IT	MARTELOT	1301	20120820	20130824	tG	1	Rogliardo F. (CGI)
IT	MONCIAIR	1237	20100906	20110828	tG	-47	Cerise S. (CGI)
IT	MONCIAIR	1237	20110828	20120911	tG	-30	Massoni D. (CGI)
IT	MONCIAIR	1237	20120911	20130909	tG	-16	Massoni D. (CGI)
IT	MONCORVE	1236	20100906	20110909	tG	-7	
IT	MONCORVE	1236	20110909	20120915	tG	-14	Bertoglio V. (CGI)
IT	MONCORVE	1236	20120915	20130920	tG	-8	Bertoglio V. (CGI)
IT	MONEY	1272	20100911	20110923	tG	-6	
IT	MONEY	1272	20110923	20120909	tG	-4	Bertoglio V. (CGI)
IT	MONEY	1272	20120909	20130913	tG	-3	Bertoglio V. (CGI)
IT	MONTANDEYNE	1284	20100905	20110905	tG	-13	
IT	MONTANDEYNE	1284	20110905	20120908	tG	-4	Nicolussi S. (CGI)
IT	MONTANDEYNE	1284	20120908	20130825	tG	-4	Nicolussi S. (CGI)
IT	MORION OR.	1250	20100904	20110917	tG	-3	
IT	MORION OR.	1250	20110917	20120923	tG	-34	Bettio M. (CGI)
IT	MORION OR.	1250	20120923	20130914	tG	-3	Bettio M. (CGI)
IT	NEL CENTRALE	1303	20100912	20110912	tG	-2	
IT	NEL CENTRALE	1303	20110912	20120821	tG	-3	Miravalle R. (CGI)
IT	NISCLI	677	20100912	20110911	tG	-4	
IT	NISCLI	677	20110911	20120909	tG	-7	Flemi Z. (SAT)
IT	NOASCHETTA OCCID.	2359	20100923	20110903	tG	-3	Miravalle R. (CGI)
IT	NOASCHETTA OCCID.	2359	20110903	20120829	tG	-1	Miravalle R. (CGI)
IT	PALON DELLA MARE LOBO CENTR.	2533	20100911	20110918	tG	-13	
IT	PALON DELLA MARE LOBO CENTR.	2533	20110918	20130913	tG	-4	Cola G. (SGL)
IT	PALON DELLA MARE LOBO OR.	2534	20100911	20110918	tG	-16	
IT	PALON DELLA MARE LOBO OR.	2534	20110918	20121002	tG	-22	Cola G. (SGL)
IT	PALON DELLA MARE LOBO OR.	2534	20121002	20130913	tG	-2	Cola G. (SGL)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20100912	20110917	tG	-15	
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20110917	20121005	tG	-8	Franchi G. (CGI)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20121005	20130924	tG	-7	Franchi G. (CGI)
IT	PERA CIAVAL	1296	20100828	20110824	tG	-6	
IT	PERA CIAVAL	1296	20110824	20120829	tG	0	Rogliardo F. (CGI)
IT	PIODE	619	20101007	20111006	tG	-11	Mortara G. (CGI)
IT	PIODE	619	20111006	20120921	tG	-7	Piccini P. (CGI), Antonietti O. (CGI)
IT	PIODE	619	20120921	20131031	tG	-8	Piccini P. (CGI), Antonietti O. (CGI)
IT	PISGANA OCC.	666	20100902	20111009	tG	-X	
IT	PISGANA OCC.	666	20100902	20120829	tG	-X	Roveda F. (SGL)
IT	PIZZO FERRE	1181	20100829	20110821	tG	-12	
IT	PIZZO FERRE	1181	20110821	20120819	tG	-9	Congiu E. (SGL)
IT	PIZZO FERRE	1181	20120819	20130919	tG	-4	Congiu E. (SGL)
IT	PIZZO SCALINO	1187	20100921	20110914	tG	-8	
IT	PIZZO SCALINO	1187	20110914	20120920	tG	-14	Butti M. (SGL)
IT	PIZZO SCALINO	1187	20120920	20130913	tG	-10	Butti M. (SGL)
IT	PLANOL (VEDR. DI) / PLANAILF.	2619	20100823	20110914	tG	-29	
IT	PLANOL (VEDR. DI) / PLANAILF.	2619	20110914	20121003	tG	-10	Bruschi P. (SGAA)
IT	PLATTES DES CHAMOIS	1249	20100822	20110825	tG	-12	Pollicini F. (CGI)
IT	PRE DE BAR	681	20100817	20110828	tG	-33	
IT	PRE DE BAR	681	20110828	20120826	tG	-42	Fusinaz A. (CGI)
IT	PREDAROSSA	1182	20100904	20110903	tG	2	
IT	PREDAROSSA	1182	20110903	20120908	tG	-11	Urso M. (SGL)
IT	PREDAROSSA	1182	20120908	20130831	tG	-5	Urso M. (SGL)
IT	QUAIRA BIANCA (VEDR. DELLA) / WEISSKARF.	686	20100922	20121006	tG	-111	Franchi G. (CGI)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
IT	QUAIRA BIANCA (VEDR. DELLA) / WEISSKARF.	686	20121006	20130908	tG	-19	Sartori G. (SGAA)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20101002	20110917	tG	-147	
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20110917	20120916	tG	-19	Cibin G. (CGI)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20120916	20130907	tG	-9	Cibin G. (CGI)
IT	ROCCIA VIVA	2364	20100916	20110928	tG	-26	Miravalle R. (CGI)
IT	ROCCIA VIVA	2364	20110928	20120928	tG	-14	Miravalle R. (CGI)
IT	ROSIM (VEDR. DI) / ROSIMF.	610	20100810	20110813	tG	-11	Barison G. (SGAA), Cassina A. (SGAA)
IT	ROSIM (VEDR. DI) / ROSIMF.	610	20110813	20120728	tG	-20	Barison G. (SGAA), Cassina A. (SGAA)
IT	ROSIM (VEDR. DI) / ROSIMF.	610	20120728	20130829	tG	-7	Barison G. (SGAA), Cassina A. (SGAA)
IT	ROSSO DESTRO	648	20100909	20110906	tG	16	
IT	RUTOR	612	20100912	20110918	tG	-4	
IT	RUTOR	612	20110918	20120901	tG	-3	Garino R. (CGI)
IT	RUTOR	612	20120901	20130906	tG	-69	Garino R. (CGI)
IT	SALDURA MER. (VEDR. DI) / SALURNF. SUEDL.	1131	20100923	20111004	tG	-40	
IT	SALDURA MER. (VEDR. DI) / SALURNF. SUEDL.	1131	20111004	20120824	tG	-40	Greco G. (SGAA)
IT	SCERSCEN INFERIORE	1186	20091001	20110922	tG	-22	Salvetti A. (SGL)
IT	SCERSCEN INFERIORE	1186	20110922	20120908	tG	-14	Salvetti A. (SGL)
IT	SEA	1299	20100920	20110915	tG	-42	
IT	SEA	1299	20110915	20120921	tG	-12	Rogliardo F. (CGI)
IT	SEA	1299	20120921	20130921	tG	-25	Rogliardo F. (CGI)
IT	SERANA (VEDR.) / SCHRANF.	634	20100924	20110812	tG	-18	
IT	SERANA (VEDR.) / SCHRANF.	634	20110812	20120907	tG	-15	Bruschi P. (SGAA)
IT	SFORZELLINA	667	20100912	20110924	tG	-28	
IT	SFORZELLINA	667	20110924	20120922	tG	-10	Smiraglia C. (CGI), Scotti R. (CGI)
IT	SFORZELLINA	667	20120922	20130928	tG	-4	Scotti R. (CGI), Smiraglia C. (CGI)
IT	SISSONE	2506	20100821	20110823	tG	-19	
IT	SISSONE	2506	20110823	20120909	tG	-X	Almasio A. (SGL)
IT	SISSONE	2506	20120909	20130922	tG	-2	Almasio A. (SGL)
IT	SOCHES TSANTELEINA	1244	20100826	20110909	tG	-30	
IT	SOCHES TSANTELEINA	1244	20110909	20120908	tG	-18	Pollicini F. (CGI), Borney S. (CGI)
IT	SOCHES TSANTELEINA	1244	20120908	20130914	tG	-9	Pollicini F. (CGI), Borney S. (CGI)
IT	SOLDA (VEDRETTA DI) / SULDENF.	660	20090912	20110903	tG	-18	
IT	SOLDA (VEDRETTA DI) / SULDENF.	660	20110903	20120903	tG	-14	Sinibaldi R. (SGAA)
IT	SURETTA MERID.	2488	20100829	20111001	tG	0	Villa F. (SGL)
IT	SURETTA MERID.	2488	20111001	20120922	tG	-12	Villa F. (SGL)
IT	SURETTA MERID.	2488	20120922	20130921	tG	-5	Villa F. (SGL)
IT	TORRENT	2384	20100821	20110824	tG	-8	
IT	TORRENT	2384	20110824	20120817	tG	12	Pollicini F. (CGI)
IT	TORRENT	2384	20120817	20130901	tG	-31	Pollicini F. (CGI)
IT	TOULES	614	20100809	20130831	tG	-77	Fusinaz A. (CGI), Fusinaz A. (CGI)
IT	TRAFOI (VEDR. DI) / TRAFOIER F.	2617	20100822	20110817	tG	-8	
IT	TRAFOI (VEDR. DI) / TRAFOIER F.	2617	20110817	20120808	tG	-7	Barison G. (SGAA)
IT	TRIBOLAZIONE	1274	20100912	20110930	tG	-34	
IT	TRIBOLAZIONE	1274	20110930	20120909	tG	-28	Bertoglio V. (CGI)
IT	ULTIMA (VEDR.) / ULTENMARKTF.	633	20100924	20110812	tG	-5	
IT	ULTIMA (VEDR.) / ULTENMARKTF.	633	20110812	20120907	tG	-8	Bruschi P. (SGAA)
IT	VAL VIOLA OCC.	1156	20080831	20120908	tG	-14	Ratti S. (SGL)
IT	VALLE DEL VENTO	649	20100910	20110908	tG	15	
IT	VALLELUNGA (VEDR. DI) / LANGTAU-FERERF.	659	20100905	20110917	tG	-29	
IT	VALLELUNGA (VEDR. DI) / LANGTAU-FERERF.	659	20110917	20121008	tG	-34	Scaltriti A. (SGAA)
IT	VALTOURNANCHE	621	20100821	20110821	tG	-2	
IT	VALTOURNANCHE	621	20110821	20120803	tG	-9	Giorcelli A. (CGI), Giorcelli M. (CGI)
IT	VAUDALETTA	2379	20100901	20110828	tG	0	
IT	VAUDALETTA	2379	20110828	20120914	tG	0	Rossotto A. (CGI)
IT	VAUDALETTA	2379	20120914	20130921	tG	0	Rossotto A. (CGI)
IT	VENEROCOLO	665	20100829	20110907	tG	-14	Toffaletti A. (SGL)
IT	VENEROCOLO	665	20110907	20120922	tG	-9	De Felice D. (SGL), Lorenzetti L. (SGL)
IT	VENEROCOLO	665	20120922	20130831	tG	-23	Toffaletti A. (SGL)
IT	VENTINA	629	20100912	20110827	tG	-35	
IT	VENTINA	629	20110827	20120909	tG	-22	Colombo N. (SGL), Gussoni M. (SGL)
IT	VENTINA	629	20120909	20130917	tG	-24	Colombo N. (SGL), Gussoni M. (SGL)
IT	VERRA (GRANDE DI)	1206	20101022	20111016	tG	-22	
IT	VERRA (GRANDE DI)	1206	20111016	20121010	tG	-19	Palomba M. (CGI)
IT	VERRA (GRANDE DI)	1206	20121010	20131019	tG	-20	Palomba M. (CGI), Giuliano M. (CGI)
KZ	TS.TUYUKSUYSKIY	817	20100822	20110825	tG	-29	
KZ	TS.TUYUKSUYSKIY	817	20110825	20120822	tG	-31	Kasatkin N. (IGNANKaz)
KZ	TS.TUYUKSUYSKIY	817	20120822	20130822	tG	-31	Kasatkin N. (IGNANKaz)
NO	AUSTERDALSBREEN	288	20100729	20110814	tG	0	Elvehøy H. (NVE)
NO	AUSTERDALSBREEN	288	20110814	20120729	tG	-12	Elvehøy H. (NVE)
NO	AUSTERDALSBREEN	288	20120729	20130812	tG	0	Elvehøy H. (NVE)
NO	AUSTRE OKSTINDBREEN	3342	20100918	20110917	tG	-40	Elvehøy H. (NVE)
NO	AUSTRE OKSTINDBREEN	3342	20110917	20120918	tG	-6	Elvehøy H. (NVE)
NO	AUSTRE OKSTINDBREEN	3342	20120918	20130928	tG	-40	Elvehøy H. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	20100927	20111001	tG	-4	Elvehøy H. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	20111001	20130920	tG	2	Elvehøy H. (NVE)
NO	BOEDALSBREEN	2291	20101008	20110918	tG	-67	Elvehøy H. (NVE)
NO	BOEDALSBREEN	2291	20110918	20121020	tG	-110	Elvehøy H. (NVE)
NO	BOEVERBREEN	2298	20100824	20110907	tG	-23	Elvehøy H. (NVE)
NO	BOEVERBREEN	2298	20110907	20120924	tG	-4	Elvehøy H. (NVE)
NO	BOEVERBREEN	2298	20120924	20131010	tG	-1	Elvehøy H. (NVE)
NO	BOEYABREEN	2297	20100929	20111008	tG	30	Kjelland P. (NVE)
NO	BOEYABREEN	2297	20111008	20121004	tG	26	Kjelland P. (NVE)
NO	BOEYABREEN	2297	20121004	20131001	tG	5	Kjelland P. (NVE)
NO	BONDHUSBREA	318	20101001	20110930	tG	-5	Elvehøy H. (NVE)
NO	BONDHUSBREA	318	20110930	20130926	tG	-25	Elvehøy H. (NVE)
NO	BOTNABREA	2292	20100926	20130928	tG	-6	Elvehøy H. (NVE)
NO	BRENNDALSBREEN	2293	20100627	20110914	tG	-60	Elvehøy H. (NVE)
NO	BRENNDALSBREEN	2293	20110914	20121110	tG	-65	Elvehøy H. (NVE)
NO	BRIKSDALSBREEN	314	20101002	20111002	tG	-275	Nesje A. (NVE)
NO	BRIKSDALSBREEN	314	20111002	20121006	tG	-50	Nesje A. (NVE)
NO	BRIKSDALSBREEN	314	20121006	20131109	tG	-5	Nesje A. (NVE)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
NO	BUERBREEN	315	20101021	20111022	tG	-26	Elvehøy H. (NVE)
NO	BUERBREEN	315	20111022	20121015	tG	-4	Elvehøy H. (NVE)
NO	BUERBREEN	315	20121015	20130724	tG	-9	Elvehøy H. (NVE)
NO	CORNELIUSSENBREEN	3341	20100918	20120918	tG	-29	Elvehøy H. (NVE)
NO	CORNELIUSSENBREEN	3341	20120918	20130928	tG	-22	Elvehøy H. (NVE)
NO	ENGABREEN	298	20100928	20111027	tG	-20	Elvehøy H. (NVE)
NO	ENGABREEN	298	20111027	20120905	tG	-2	Elvehøy H. (NVE)
NO	ENGABREEN	298	20120905	20131021	tG	-20	Elvehøy H. (NVE)
NO	FAABERGSTOELSBREEN	289	20100906	20110916	tG	-21	Elvehøy H. (NVE)
NO	FAABERGSTOELSBREEN	289	20110916	20120921	tG	-5	Elvehøy H. (NVE)
NO	FAABERGSTOELSBREEN	289	20120921	20130925	tG	-11	Elvehøy H. (NVE)
NO	GRAAFJELLSBREA	1320	20091013	20111001	tG	-42	Elvehøy H. (NVE)
NO	GRAAFJELLSBREA	1320	20111001	20130926	tG	-60	
NO	HELLSTUGUBREEN	300	20100804	20110914	tG	-21	Andreassen L. (NVE)
NO	HELLSTUGUBREEN	300	20110914	20120920	tG	-13	Andreassen L. (NVE)
NO	HELLSTUGUBREEN	300	20120920	20130913	tG	-10	Andreassen L. (NVE)
NO	JUVFONNE	3661	20110816	20130911	tG	-6	Andreassen L. (NVE)
NO	KOPPANGSBREEN	2309	20100826	20110825	tG	0	Elvehøy H. (NVE)
NO	KOPPANGSBREEN	2309	20110825	20130930	tG	-35	Elvehøy H. (NVE)
NO	LANGFJORDJOEKELEN	323	20100806	20110920	tG	-10	Elvehøy H. (NVE)
NO	LANGFJORDJOEKELEN	323	20110920	20120925	tG	-20	Elvehøy H. (NVE)
NO	LANGFJORDJOEKELEN	323	20120925	20130807	tG	-10	Elvehøy H. (NVE)
NO	LEIRBREEN	301	20100824	20110907	tG	-9	Elvehøy H. (NVE)
NO	LEIRBREEN	301	20110907	20120924	tG	-15	Elvehøy H. (NVE)
NO	LEIRBREEN	301	20120924	20131010	tG	-11	Elvehøy H. (NVE)
NO	MIDTDALSBREEN	2295	20100825	20110830	tG	-11	Nesje A. (NVE)
NO	MIDTDALSBREEN	2295	20110830	20120829	tG	-1	Nesje A. (NVE)
NO	MIDTDALSBREEN	2295	20120829	20130827	tG	-10	Nesje A. (NVE)
NO	NIGARDSBREEN	290	20101014	20111014	tG	-28	Elvehøy H. (NVE)
NO	NIGARDSBREEN	290	20111014	20121011	tG	-27	Elvehøy H. (NVE)
NO	NIGARDSBREEN	290	20121011	20131010	tG	-33	Elvehøy H. (NVE)
NO	REMBESDALSKAAKA	2296	20101008	20111108	tG	-6	Elvehøy H. (NVE)
NO	REMBESDALSKAAKA	2296	20111108	20121005	tG	0	Elvehøy H. (NVE)
NO	REMBESDALSKAAKA	2296	20121005	20130926	tG	-5	Elvehøy H. (NVE)
NO	RUNDVASSBREEN	2670	20111026	20120925	tG	4	Elvehøy H. (NVE)
NO	RUNDVASSBREEN	2670	20120925	20130927	tG	-37	Elvehøy H. (NVE)
NO	STEGHOLTBREEN	313	20101009	20111013	tG	-19	Elvehøy H. (NVE)
NO	STEGHOLTBREEN	313	20111013	20121011	tG	-3	Elvehøy H. (NVE)
NO	STEGHOLTBREEN	313	20121011	20130925	tG	-36	Elvehøy H. (NVE)
NO	STEINDALSBREEN	2310	20100826	20110815	tG	2	Elvehøy H. (NVE)
NO	STEINDALSBREEN	2310	20110815	20130913	tG	-13	Elvehøy H. (NVE)
NO	STORBREEN	302	20100824	20110912	tG	-5	Andreassen L. (NVE)
NO	STORBREEN	302	20110912	20130912	tG	-17	Andreassen L. (NVE)
NO	STORE SUPPHELLEBREEN	287	20100929	20111013	tG	-19	Kjelland P. (NVE)
NO	STORE SUPPHELLEBREEN	287	20111013	20121004	tG	-15	Kjelland P. (NVE)
NO	STORE SUPPHELLEBREEN	287	20121004	20131001	tG	5	Kjelland P. (NVE)
NO	STORJUVBREEN	2308	20100823	20110906	tG	-12	Elvehøy H. (NVE)
NO	STORJUVBREEN	2308	20110906	20121014	tG	-1	Elvehøy H. (NVE)
NO	STORJUVBREEN	2308	20121014	20130920	tG	-10	Elvehøy H. (NVE)
NO	STORSTEINSFJELLBREEN	1329	20100913	20110828	tG	-49	Elvehøy H. (NVE)
NO	STORSTEINSFJELLBREEN	1329	20110828	20120916	tG	-69	Elvehøy H. (NVE)
NO	STORSTEINSFJELLBREEN	1329	20120916	20130907	tG	-10	Elvehøy H. (NVE)
NO	STYGGEBREAN	4504	20110930	20131015	tG	-14	Elvehøy H. (NVE)
NO	STYGGEDALSBREEN	303	20100908	20110915	tG	-25	Elvehøy H. (NVE)
NO	STYGGEDALSBREEN	303	20110915	20120921	tG	11	Elvehøy H. (NVE)
NO	STYGGEDALSBREEN	303	20120921	20131010	tG	-19	Elvehøy H. (NVE)
NO	SVELGJABREEN	3343	20100927	20111001	tG	-1	Elvehøy H. (NVE)
NO	SVELGJABREEN	3343	20111001	20130920	tG	0	Elvehøy H. (NVE)
NO	SYDBREEN	3351	20100729	20110720	tG	-5	Elvehøy H. (NVE)
NO	SYDBREEN	3351	20110720	20120709	tG	-11	Elvehøy H. (NVE)
NO	SYDBREEN	3351	20120709	20130712	tG	-9	Elvehøy H. (NVE)
NO	TROLLBERGDALSBREEN	316	20100925	20110827	tG	-2	Elvehøy H. (NVE)
NO	TROLLBERGDALSBREEN	316	20110827	20120908	tG	-23	Elvehøy H. (NVE)
NO	TROLLKYRKJEBREEN	3606	20100818	20110822	tG	-8	Elvehøy H. (NVE)
NO	TUFTEBREEN	3352	20101008	20111024	tG	-19	Elvehøy H. (NVE)
NO	TUFTEBREEN	3352	20111024	20120922	tG	-20	Elvehøy H. (NVE)
NO	TUFTEBREEN	3352	20120922	20130927	tG	-15	Elvehøy H. (NVE)
NO	VETLE SUPPHELLEBREEN	3607	20111001	20121021	tG	13	Kjelland P. (NVE)
NO	VETLE SUPPHELLEBREEN	3607	20121021	20131015	tG	-4	Kjelland P. (NVE)
NP	RIKHA SAMBA	1516	20060207	20110205	sP	-159	
NP	RIKHA SAMBA	1516	20110205	20130930	tG	-52	Joshi S. (ICIMOD), Stumm D. (ICIMOD)
NP	YALA	912	20000299	20120508	tG	-138	Joshi S. (ICIMOD), Stumm D. (ICIMOD)
NZ	ADAMS	2923	20080313	20110312		-17	
NZ	ADAMS	2923	20110312	20120304		ST	Chinn T. (NIWA)
NZ	ADAMS	2923	20120304	20130312		ST	Chinn T. (NIWA)
NZ	ALMER/SALISBURY	1548	20100305	20110312		-15	
NZ	ALMER/SALISBURY	1548	20110312	20120304		-X	Chinn T. (NIWA)
NZ	ALMER/SALISBURY	1548	20120304	20130312		ST	Chinn T. (NIWA)
NZ	ANDY	1590	20100305	20110312		-6	
NZ	ANDY	1590	20110312	20120320		-X	Chinn T. (NIWA)
NZ	ASHBURTON	1570	201003	20120320		ST	
NZ	ASHBURTON	1570	20120304	20130312		ST	
NZ	AXIUS	2283	201003	20120320		S	
NZ	AXIUS	2283	20120304	20130312		-X	
NZ	BALFOUR	1604	20100305	20110312		-5	
NZ	BALFOUR	1604	20110312	20120304		+X	
NZ	BALFOUR	1604	20120304	20130312		-X	
NZ	BARLOW	1608	20100305	20110312		-65	
NZ	BARLOW	1608	20120304	20130312		-X	
NZ	BARRIER	2281	20100305	20110312		-93	
NZ	BARRIER	2281	20110312	20120320		ST	
NZ	BLAIR	1551	20120304	20130312		ST	
NZ	BONAR	1587	20100305	20110312		-1	
NZ	BONAR	1587	20110312	20120304		ST	
NZ	BREWSTER	1597	20100328	20110312		-10	
NZ	BREWSTER	1597	20110312	20120321		-16	Anderson B. (ARC)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
NZ	BREWSTER	1597	20120321	20130321		-7	Anderson B. (ARC)
NZ	BURTON	1606	20100305	20110312		0	
NZ	BURTON	1606	20110312	20120304		-X	
NZ	BUTLER	1544	20110312	20120320		ST	
NZ	BUTLER	1544	20120304	20130312		U	
NZ	CAMERON	1565	20110312	20120320		ST	
NZ	CAMERON	1565	20120304	20130312		U	
NZ	CROW	1564	20100305	20110312		-29	
NZ	CROW	1564	20110312	20120320		S	
NZ	CROW	1564	20120304	20130312		ST	
NZ	DAINTY	2287	20110312	20120304		ST	
NZ	DAINTY	2287	20120304	20130312		U	
NZ	DART	898	20100305	20110312		-32	
NZ	DART	898	20110312	20120320		S	
NZ	DART	898	20120304	20130312		-X	
NZ	DISPUTE	2286	201003	20120320		-X	
NZ	DISPUTE	2286	20120304	20130312		-X	
NZ	DONALD	2284	20120304	20130312		-X	
NZ	DONNE	1585	201003	20120320		-X	
NZ	DOUGLAS (KAR.)	1601	20100305	20110312		-14	
NZ	DOUGLAS (KAR.)	1601	20110312	20120304		-X	
NZ	DOUGLAS (KAR.)	1601	20120304	20130312		-X	
NZ	EVANS	1611	20080313	20110312		-15	
NZ	EVANS	1611	20110312	20120304		ST	
NZ	EVANS	1611	20120304	20130312		-X	
NZ	FITZGERALD (GOD)	2278	20100305	20110312		-8	
NZ	FITZGERALD (GOD)	2278	20110312	20120320		ST	
NZ	FITZGERALD (GOD)	2278	20120304	20130312		-X	
NZ	FORGOTTEN COL	2282	20100305	20110312		-48	
NZ	FOX	1536	20090321	20110823		-134	Purdie H. (UCant/DG), Anderson B. (ARC), Chinn T. (ARC)
NZ	FOX	1536	20110823	20120419		-205	Purdie H. (UCant/DG), Anderson B. (ARC), Owens A. (LHIC), Chinn T. (ARC)
NZ	FOX	1536	20120419	20130821		-79	Purdie H. (UCant/DG), Anderson B. (ARC), Owens A. (LHIC), Chinn T. (ARC)
NZ	FRANZ JOSEF	899	20100326	20111114		1	
NZ	FRANZ JOSEF	899	20111114	20121014		-456	Purdie H. (UCant/DG), Anderson B. (ARC), Chinn T. (ARC), Owens A. (LHIC)
NZ	FRESHFIELD	2966	20120304	20130312		-X	
NZ	GLENMARY	1550	20100305	20110312		-70	
NZ	GLENMARY	1550	20120304	20130312		ST	
NZ	GODLEY	1581	20090304	20110312		-164	
NZ	GODLEY	1581	20120304	20130312		-X	
NZ	GUNN	1560	20100305	20110312		-52	
NZ	GUNN	1560	20110312	20120320		ST	
NZ	HORACE WALKER	1600	20100305	20110312		-50	
NZ	HORACE WALKER	1600	20110312	20120304		-X	
NZ	HORACE WALKER	1600	20120304	20130312		-X	
NZ	IVORY	900	20100305	20110312		-63	
NZ	IVORY	900	20110312	20120304		-X	
NZ	IVORY	900	20120304	20130312		-X	
NZ	KAHUTEA	1569	20100305	20110312		-16	
NZ	KAHUTEA	1569	20110312	20120320		-X	
NZ	KAHUTEA	1569	20120304	20130312		-X	
NZ	KEA	1545	20110312	20120304		-X	
NZ	KEA	1545	20120304	20130312		ST	
NZ	LA PEROUSE	1605	20100305	20110312		-74	
NZ	LA PEROUSE	1605	20110312	20120304		-X	
NZ	LA PEROUSE	1605	20120304	20130312		-X	
NZ	LAMBERT	1612	20100305	20110312		1	
NZ	LAMBERT	1612	20110312	20120304		ST	
NZ	LAWRENCE	2275	20110312	20120320		+X	
NZ	LAWRENCE	2275	20120304	20130312		U	
NZ	LEEB-LORNTY	2288	20110312	20120304		ST	
NZ	LEEB-LORNTY	2288	20120304	20130312		-X	
NZ	LYELL	1567	20100305	20110312		-41	
NZ	LYELL	1567	20110312	20120320		-X	
NZ	LYELL	1567	20120304	20130312		-S	
NZ	MACAULAY	2280	20100305	20110312		-15	
NZ	MARION	1591	20100305	20110312		-8	
NZ	MARION	1591	20110312	20120320		-X	
NZ	MARION	1591	20120304	20130312		-X	
NZ	MARMADUKE DIXON	1541	20100305	20110312		-19	
NZ	MARMADUKE DIXON	1541	20110312	20120320		-X	
NZ	MARMADUKE DIXON	1541	20120304	20130312		-X	
NZ	MATHAIAS	2997	20100305	20110312		-23	
NZ	MATHAIAS	2997	20110312	20120320		ST	
NZ	MATHAIAS	2997	20120304	20130312		ST	
NZ	MC COY	1572	20110312	20120320		+X	
NZ	MC COY	1572	20120304	20130312		ST	
NZ	METALILLE	2998	20100305	20110312		-24	
NZ	METALILLE	2998	20110312	20120320		ST	
NZ	METALILLE	2998	20120304	20130312		ST	
NZ	MUELLER	1575	20100305	20110312		0	
NZ	MUELLER	1575	20110312	20120320		-X	
NZ	MUELLER	1575	20120304	20130312		-X	
NZ	MURCHISON	1578	20090304	20110312		0	
NZ	MURCHISON	1578	20120304	20130312		-X	
NZ	PARK PASS	1559	20100305	20110312		-40	
NZ	PARK PASS	1559	20110312	20120320		-X	
NZ	RAMSAY	1568	20120304	20130312		-X	
NZ	REISCHEK	1566	20120304	20130312		-X	
NZ	RICHARDSON	1574	20100305	20110312		-55	
NZ	RICHARDSON	1574	20120304	20130312		-X	
NZ	ROLLESTON	1538	20100305	20110325	tG	4	
NZ	ROLLESTON	1538	20110325	20129999	tG	4	Kerr T. (NIWA)
NZ	SALE	1614	20070399	20120304		-X	
NZ	SALE	1614	20120304	20130312		-X	
NZ	SEPARATION	2279	20100305	20110312		-23	
NZ	SEPARATION	2279	20120304	20130312		-X	

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
NZ	SIEGE	1616	20100305	20110312		-116	
NZ	SIEGE	1616	20110312	20120304		ST	
NZ	SIEGE	1616	20120304	20130312		-X	
NZ	SLADDEN	3611	20100305	20110312		-46	
NZ	SLADDEN	3611	20120304	20130312		-X	
NZ	SNOW WHITE	1588	20100305	20110312		-62	
NZ	SNOW WHITE	1588	20110312	20120320		-X	
NZ	SNOW WHITE	1588	20120304	20130312		-X	
NZ	SNOWBALL	1589	20100305	20110312		-X	
NZ	SNOWBALL	1589	20110312	20120320		S	
NZ	SNOWBALL	1589	20120304	20130312		ST	
NZ	SOUTH CAMERON	3019	20100305	20110312		-X	
NZ	SOUTH CAMERON	3019	20120304	20130312		-X	
NZ	SPENCER	1607	20100305	20110312		-X	
NZ	SPENCER	1607	20110312	20120304		ST	
NZ	SPENCER	1607	20120304	20130312		-X	
NZ	ST. JAMES	2274	20100305	20110312		+X	
NZ	STOCKING (TEWAEWAE)	3023	20100305	20110312		-X	
NZ	STOCKING (TEWAEWAE)	3023	20110312	20120320		ST	
NZ	STOCKING (TEWAEWAE)	3023	20120304	20130312		ST	
NZ	STRAUCHON	1599	20100305	20110312		ST	
NZ	STRAUCHON	1599	20110312	20120304		ST	
NZ	STRAUCHON	1599	20120304	20130312		U	
NZ	TASMAN	1074	20100305	20110312		-X	
NZ	TASMAN	1074	20110312	20120320		-X	
NZ	TASMAN	1074	20120304	20130312		-X	
NZ	THURNEYSON	1554	20110312	20120320		+X	
NZ	THURNEYSON	1554	20120304	20130312		ST	
NZ	VERTEBRAE 20	3033	20120304	20130312		U	
NZ	VICTORIA	3034	20100305	20110312		ST	
NZ	VICTORIA	3034	20120304	20130312		ST	
NZ	WHATAROA	2285	20100305	20110312		-X	
NZ	WHATAROA	2285	20110312	20120304		ST	
NZ	WHITBOURNE	1583	20100305	20110312		+X	
NZ	WHITBOURNE	1583	20110312	20120320		U	
NZ	WHITBOURNE	1583	20120304	20130312		-X	
NZ	WHITE	3037	20100305	20110312		-X	
NZ	WHITE	3037	20110312	20129999		ST	
NZ	WHITE	3037	20120304	20130312		ST	
NZ	WHYMPER	1609	20100305	20110312		-X	
NZ	WHYMPER	1609	20110312	20120304		ST	
NZ	WHYMPER	1609	20120304	20130312		-X	
NZ	WILKINSON	1615	20110312	20120304		-X	
NZ	ZORA	1593	20100305	20110312		-X	
NZ	ZORA	1593	20110312	20120304		-X	
NZ	ZORA	1593	20120304	20130312		-X	
PE	ARTESONRAJU	3292	20100921	20111026		-X	
PE	ARTESONRAJU	3292	20111026	20120927	tG	-12	Dávila Roller L. (UGRH/ANA)
PE	ARTESONRAJU	3292	20120927	20130927	tG	-2	Dávila Roller L. (UGRH/ANA)
PE	YANAMAREY	226	20100927	20111020		-X	
PE	YANAMAREY	226	20111020	20121003	tG	-51	Dávila Roller L. (UGRH/ANA)
PE	YANAMAREY	226	20121003	20130806	tG	1	Dávila Roller L. (UGRH/ANA)
PL	POD BULA	1617	20101003	20110930	tG	-22	
PL	POD BULA	1617	20120929	20131005	tG	65	Nitychoruk J. (PJPS)
RU	BUNGE	4315	20069999	20119999		-580	
RU	PAVLOV	4320	20069999	20119999		-580	
RU	PETERSEN (NOVZEM)	4321	20069999	20119999		-460	
RU	VERA	4325	20069999	20119999		-550	
SE	HYLLGLACIAEREN	344	20080817	20110813		-19	
SE	HYLLGLACIAEREN	344	20110813	20120810		0	Holmlund P. (INK)
SE	MIKKAJEKNA	338	20080811	20110813		-55	
SE	MIKKAJEKNA	338	20110811	20120813		-12	Holmlund P. (INK)
SE	MIKKAJEKNA	338	20120813	20130805		-19	Holmlund P. (INK)
SE	PARTEJEKNA	327	20080814	20110815		-53	
SE	PARTEJEKNA	327	20110815	20120813		0	Holmlund P. (INK)
SE	PARTEJEKNA	327	20120813	20130811		-20	Mercer A. (INK)
SE	PASSUSJIETNA E.	331	20100806	20130809		-10	Mercer A. (INK)
SE	RUOPSOKJEKNA	340	20080815	20130811		-45	Holmlund P. (INK)
SE	RUOTESJEKNA	337	20080817	20110813		-49	
SE	RUOTESJEKNA	337	20110813	20120813		0	Holmlund P. (INK)
SE	SALAJEKNA	341	20080816	20120813		-52	Holmlund P. (INK)
SE	SALAJEKNA	341	20120813	20130818		-28	Holmlund P. (INK)
SE	STORGLACIAEREN	332	20100725	20120815		-18	Mercer A. (INK)
SE	SUOTTASJEKNA	336	20080815	20110813		-38	
SE	VARTASJEKNA	339	20100812	20110813		-10	
SE	VARTASJEKNA	339	20110813	20120813		0	Holmlund P. (INK)
SJ	AUSTRE LOVENBREEN	3812	20101001	20110930	tC	-8	
SJ	AUSTRE LOVENBREEN	3812	20110929	20120930	tC	-14	Bernard E. (CNRS), Griselin M. (CNRS), Tolle F. (CNRS), Friedt J. (CNRS)
SJ	AUSTRE LOVENBREEN	3812	20120927	20130930	tC	-10	Bernard E. (CNRS), Griselin M. (CNRS), Tolle F. (CNRS), Friedt J. (CNRS)
SJ	HANSBREEN	306	20100910	20110913	tG	-15	
SJ	HANSBREEN	306	20110913	20120826	tG	-96	Blaszczyk M. (US/FES)
SJ	HANSBREEN	306	20120826	20130824	sC	-170	Blaszczyk M. (US/FES), Ignatiuk D. (US/FES)
US	AIALIK	3373	19859999	20119999	sM	-180	McNabb R. (UAF/GI)
US	BARRY	168	19859999	20119999	sM	-1820	McNabb R. (UAF/GI)
US	BELOIT	97	19859999	20119999	sM	80	McNabb R. (UAF/GI)
US	BLACKSTONE	98	19859999	20119999	sM	70	McNabb R. (UAF/GI)
US	BOULDER	1364	20060808	20110927	tG	-65	Pelto M. (NCGCP)
US	BRYN MAWR	162	19859999	20119999	sM	-340	McNabb R. (UAF/GI)
US	CASCADE	169	19859999	20119999	sM	-390	McNabb R. (UAF/GI)
US	CHENEGA	180	19859999	20119999	sM	30	McNabb R. (UAF/GI)
US	COLUMBIA (2057)	76	20100801	20130801		-11	Pelto M. (NCGCP)
US	COXE	167	19859999	20119999	sM	-10	McNabb R. (UAF/GI)
US	DAWES	3419	19859999	20119999	sM	-1340	McNabb R. (UAF/GI)
US	DEMING	1368	20060508	20110811	tG	-93	Pelto M. (NCGCP)
US	EAST TWIN	1361	19849999	20139999	sM	-900	Pelto M. (JIRP)
US	EASTON	1367	20100804	20110810	tG	-6	

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
US	EASTON	1367	20110810	20120809	tG	-10	Pelto M. (NCGCP)
US	EASTON	1367	20120809	20130811	tG	-8	Pelto M. (NCGCP)
US	GILMAN	138	19859999	20119999	sM	50	McNabb R. (UAF/GI)
US	GUYOT NORTH BRANCH	3552	19859999	20119999	sM	-3280	McNabb R. (UAF/GI)
US	HARRIMAN	172	19859999	20119999	sM	230	McNabb R. (UAF/GI)
US	HARVARD	160	19859999	20119999	sM	620	McNabb R. (UAF/GI)
US	HOLGATE	3390	19859999	20119999	sM	-170	McNabb R. (UAF/GI)
US	HOONAH	139	19859999	20119999	sM	30	McNabb R. (UAF/GI)
US	JOHNS HOPKINS	137	19859999	20119999	sM	510	McNabb R. (UAF/GI)
US	KASHOTO	140	19859999	20119999	sM	10	McNabb R. (UAF/GI)
US	LAMPLUGH	114	19859999	20119999	sM	80	McNabb R. (UAF/GI)
US	LECONTE	206	19859999	20119999	sM	-1320	McNabb R. (UAF/GI)
US	LITUYA	149	19859999	20119999	sM	80	McNabb R. (UAF/GI)
US	LOWER CURTIS	77	20100807	20110807	tG	-5	
US	LOWER CURTIS	77	20110807	20120804	tG	-6	Pelto M. (NCGCP)
US	LOWER CURTIS	77	20120806	20130804	tG	-5	Pelto M. (NCGCP)
US	LYMAN	3340	20070809	20110812	tG	-17	Pelto M. (NCGCP)
US	LYNCH	81	20090815	20110815	tG	-15	
US	MARGERIE	133	19859999	20119999	sM	30	McNabb R. (UAF/GI)
US	MC CARTY	3396	19859999	20119999	sM	-530	McNabb R. (UAF/GI)
US	MCBRIDE	208	19859999	20119999	sM	-2440	McNabb R. (UAF/GI)
US	MEARES	158	19859999	20119999	sM	300	McNabb R. (UAF/GI)
US	MUIR	129	19859999	20119999	sM	-440	McNabb R. (UAF/GI)
US	NELLIE JUAN	179	19859999	20119999	sM	-1360	McNabb R. (UAF/GI)
US	NORRIS	123	19849999	20139999	sM	-1100	Pelto M. (JIRP)
US	NORTH CRILLON	148	19859999	20119999	sM	430	McNabb R. (UAF/GI)
US	NORTHWESTERN	3793	19859999	20119999	sM	-1310	McNabb R. (UAF/GI)
US	REID	141	19859999	20119999	sM	130	McNabb R. (UAF/GI)
US	RIGGS	128	19859999	20119999	sM	-140	McNabb R. (UAF/GI)
US	SAWYER	3576	19859999	20119999	sM	-2810	McNabb R. (UAF/GI)
US	SHOUP	155	19859999	20119999	sM	-1720	McNabb R. (UAF/GI)
US	SOUTH SAWYER	3578	19859999	20119999	sM	-1250	McNabb R. (UAF/GI)
US	SURPRISE	171	19859999	20119999	sM	180	McNabb R. (UAF/GI)
US	TYNDALL	3562	19859999	20119999	sM	-3280	McNabb R. (UAF/GI)
US	WELLESLEY	164	19859999	20119999	sM	-140	McNabb R. (UAF/GI)
US	WEST TWIN	126	19849999	20139999	sM	-600	Pelto M. (JIRP)
US	YALE	159	19859999	20119999	sM	-630	McNabb R. (UAF/GI)

APPENDIX - Table 3

MASS BALANCE SUMMARY DATA 2011–2013

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
SYS	System of glaciological measurement (cf. Cogley et al. 2011)
	FLO: floating-date system
	FXD: fixed-date system
	STR: stratigraphic system
	COM: combined system; usually of STR and FXD according to Mayo et al. (1972)
	OTH: other system
FROM	Starting date of balance year, in the format YYYYMMDD*
TO	Ending date of balance year, in the format YYYYMMDD*
AREA	Glacier area (in km^2) used for calculation of specific balances
BW	Specific winter balance in mm water equivalent
BS	Specific summer balance in mm water equivalent
BA	Specific annual balance in mm water equivalent
ELA	Equilibrium line altitude in meters above sea level
AAR	Ratio of accumulation area to total area of the glacier in percent
INVESTIGATORS (SPONS_AGENCY)	Names of the investigators and their sponsoring agencies (cf. Section 9)

*Unknown month or day are each replaced by „99“

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
AQ	BAHIA DEL DIABLO	2665	COM	20100301	20110228	12.9			20	322	62	Skvarca P. (IAA-DNA), Ermolin E. (IAA-DNA), Marinsek S. (IAA-DNA)
AQ	BAHIA DEL DIABLO	2665	COM	20110301	20120228	12.9			-20	370	52	Marinsek S. (IAA-DG)
AQ	BAHIA DEL DIABLO	2665	COM	20120301	20130228	12.9			100	295	58	Skvarca P. (IAA-DG), Ermolin E. (IAA-DG), Marinsek S. (IAA-DG)
AQ	HURD	3367	COM	20100226	20110226	4.03	900	-610	290	130	76	Navarro F. (UPM/ETSIT)
AQ	HURD	3367	COM	20110226	20120215	4.03	520	-710	-190	225	43	Navarro F. (UPM/ETSIT)
AQ	HURD	3367	COM	20120215	20130218	4.03	780	-570	210	95	83	Navarro F. (UPM/ETSIT)
AQ	JOHNSONS	3366	COM	20100228	20110302	5.36	1150	-650	500	135	90	Navarro F. (UPM/ETSIT)
AQ	JOHNSONS	3366	COM	20110301	20120217	5.36	670	-270	400	150	80	Navarro F. (UPM/ETSIT)
AQ	JOHNSONS	3366	COM	20120217	20130218	5.36	900	-510	390	130	89	Navarro F. (UPM/ETSIT)
AR	BROWN SUPERIOR	3903		2010	2011	0.2	317	-2362	-2045	>5180	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	BROWN SUPERIOR	3903		2011	2012	0.19	575	-2112	-1537	>5180	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	BROWN SUPERIOR	3903		2012	2013				-823	>5180	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	CONCONTA NORTE	3902		2010	2011	0.1	294	-1312	-1018	>5150	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	CONCONTA NORTE	3902		2011	2012	0.09	596	-2140	-1544	>5150	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	CONCONTA NORTE	3902		2012	2013				-742	>5150	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	LOS AMARILLOS	3904		2010	2011	0.99			-756	>5550	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	LOS AMARILLOS	3904		2011	2012	0.95			-750	>5550	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	LOS AMARILLOS	3904		2012	2013				-477	>5550	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	MARTIAL ESTE	2000	COM	20100409	20110331	0.09	809	-1128	-319	1084	46	Iturraspe R. (UNTDF), Strelin J. (DNA-UNC)
AR	MARTIAL ESTE	2000	COM	20110331	20120331	0.09	810	-1130	-320	1089	38	Iturraspe R. (UNTDF), Strelin J. (DNA-UNC)
AR	MARTIAL ESTE	2000	COM	20120331	20130331	0.09	1110	-960	150	1060	66	Iturraspe R. (UNTDF), Strelin J. (DNA-UNC)
AT	GOLDBERG K.	1305	COM	20100829	20110918	1.23	1303	-3181	-1878	>3100	1	Hynek B., Springer C., Reisenhofer S., Unger R., Böhm R., Schöner W. (ZAMG)
AT	GOLDBERG K.	1305	COM	20110919	20121004	1.23			-1563	>3100	6	Hynek B. (ZAMG), Schöner W. (ZAMG), Reisenhofer S. (ZAMG), Unger R. (ZAMG)
AT	GOLDBERG K.	1305	COM	20121004	20130927	1.1	1715		-530	2970	32	Hynek B. (ZAMG)
AT	HALLSTAETTER G.	535		2010	2011	3.02	1486	-3497	-2011	2822	5	
AT	HALLSTAETTER G.	535		2011	2012	3.02	2725	-3953	-1228	2664	32	Stocker-Waldhuber M. (IGF), Fischer A. (IGF), Reingruber K. (IGF), Helfricht K. (IGF)
AT	HALLSTAETTER G.	535	FXD	20121001	20130930	3.02	1677	-2028	-351	2584	46	Hartl L. (FGUA)
AT	HINTEREIS FERNER	491	FXD	20101001	20110930	6.86	980	-2398	-1419	3285	25	Fischer A. (IMGI), Markl G. (IMGI), Kuhn M. (IMGI)
AT	HINTEREIS FERNER	491	FXD	20111001	20120930	6.88			-1561	3380	11	Prinz R. (IMGI)
AT	HINTEREIS FERNER	491	FXD	20121001	20310930	6.88	1331	-1841	-510	3047	48	Prinz R. (IMGI)
AT	JAMTAL F.	480	FXD	20101001	20110930	3.17	914	-2375	-1434	>3200	9	Fischer A. (IMGI), Markl G. (IMGI), Kuhn M. (IMGI)
AT	JAMTAL F.	480	FXD	20111001	20120930	3.11	1188	-2337	-1149	>3200	7	Fischer A. (HD/LT)
AT	JAMTAL F.	480	FXD	20121001	20130930	3.1	1188	-1720	-532	3096	29	Fischer A. (HD/LT)
AT	KESSELWAND FERNER	507	FXD	20101001	20110930	3.66			-670	3266	26	Fischer A. (IMGI), Markl G. (IMGI), Kuhn M. (IMGI)
AT	KLEINFLEISS K.	547	COM	20110829	20120918	0.82	1170	-2706	-1536	>3100	0	Hynek B., Springer C., Reisenhofer S., Unger R., Böhm R., Schöner W. (ZAMG)
AT	KLEINFLEISS K.	547	COM	20110919	20121004	0.78			-1220	>3100	6	Hynek B. (ZAMG), Schöner W. (ZAMG), Reisenhofer S. (ZAMG), Unger R. (ZAMG)
AT	KLEINFLEISS K.	547	COM	20121004	20130927	0.78	1416		-195	2840	54	Hynek B. (ZAMG)
AT	OBERSULZBACH K.	583	FXD	20121001	20130930	2.06	1310	-1678	-368	2929	47	Seiser B. (HD/SB)
AT	PASTERZE	566	COM	20101015	20111006	17.7			-1268	2950	43	Hynek B., Springer C., Reisenhofer S., Unger R., Böhm R., Schöner W. (ZAMG)
AT	PASTERZE	566	COM	20111006	20121012	17.71			-1298	2950	50	Springer C. (ZAMG)
AT	PASTERZE	566	COM	20121012	20130925	16.28			-600	2875	68	Hynek B. (ZAMG), Neureiter A. (ZAMG)
AT	STUBACHER SONNBLICK KEES	573	STR	20100830	20110918	1.11			-2311	2995	2	Slupetzky H. (DGGS)
AT	STUBACHER SONNBLICK KEES	573	STR	20110919	20120913	1			-1369	2970	9	Slupetzky H. (HD/SB)
AT	STUBACHER SONNBLICK KEES	573		20120914	20130909	1			60	2770	65	Slupetzky H. (HD/SB)
AT	VERNAGT FERNER	489	FXD	20101001	20110930	7.92	744	-1699	-955	3261	19	Braun L. (CGGBAS), Mayer C. (CGGBAS)
AT	VERNAGT FERNER	489	FXD	20111001	20120930	7.55	885	-2040	-1155	3280	15	Braun L. (CGGBAS), Mayer C. (CGGBAS)
AT	VERNAGT FERNER	489		2012	2013	7.55	912	-1337	-425	3148	35	Braun L. (CGGBAS)
AT	WURTEN K.	545	COM	20101005	20110929	0.34	1171	-2971	-1800	>3100	0	Hynek B. (ZAMG), Springer C. (ZAMG), Reisenhofer S. (ZAMG), Unger R. (ZAMG)
AT	WURTEN K.	545	COM	20110929	20121006	0.32			-1816	>2800	3	Reisenhofer S. (ZAMG), Hynek B. (ZAMG), Schöner W. (ZAMG), Unger R. (ZAMG)
AT	WURTEN K.	545	COM	20121006	20131008	0.32			-721	2670	24	Hynek B. (ZAMG), Reisenhofer S. (ZAMG)
AT	ZETTALUNITZ/MULLWITZ K.	578		2010	2011	2.93	824	-2127	-1303		15	
AT	ZETTALUNITZ/MULLWITZ K.	578		2011	2012	2.93	1496	-2772	-1276		11	Stocker-Waldhuber M. (IMGI), Fischer A. (IMGI), Kuhn M. (IMGI)
AT	ZETTALUNITZ/MULLWITZ K.	578	FXD	20121001	20130930	3.02	1677	-1677	-218		12	Stocker-Waldhuber M. (HD/LT)
BO	CHARQUINI SUR	2667	FXD	20100901	20110831	0.06			-1204	5219	18	Perroy E. (IRD), Soruco A. (UMSA), Francou B. (LGGE)
BO	CHARQUINI SUR	2667	FXD	20110901	20120831	0.31			-39	5224	16	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	CHARQUINI SUR	2667	FXD	20120920	20130831	0.31			18	5182	17	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	ZONGO	1503	FXD	20100901	20110831	1.9			-221	5429	59	Perroy E. (IRD), Soruco A. (UMSA), Francou B. (LGGE)
BO	ZONGO	1503	FXD	20110901	20120831	1.9			-823	5365	59	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	ZONGO	1503	FXD	20120921	20130831	1.9			58	5331	68	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
CA	DEVON ICE CAP NW	39	STR	20100425	20110512	1667.6	81	-767	-683	1465		Burgess D. (GSC)
CA	DEVON ICE CAP NW	39	STR	20120501	20130512	1667.6	158	-658	-503	1605	11	Burgess D. (GSC)
CA	DEVON ICE CAP NW	39	STR	20120512	20140510	1668	177	-153	24	875	78	Burgess D. (GSC)
CA	HELM	45		2010	2011				-195	1980	27	Demuth M. (GSC)
CA	HELM	45		2011	2012				650	1930	57	Demuth M. (GSC)
CA	HELM	45		2012	2013				-2950	>	0	Demuth M. (GSC)
CA	MEIGHEN ICE CAP	16	STR	20100415	20110414	75	173	-1484	-1310			Burgess D. (GSC)
CA	MEIGHEN ICE CAP	16	STR	20120419	20130418	75	162	-1280	-1117	>267	0	Burgess D. (GSC)
CA	MEIGHEN ICE CAP	16	STR	20130418	20140417	60	184	-24	160	<90	100	Burgess D. (GSC)
CA	MELVILLE SOUTH ICE CAP	3690	STR	2010	2011	51	196	-1544	-1339			Burgess D. (GSC)
CA	MELVILLE SOUTH ICE CAP	3690	STR	20120417	20130427	51	156	-1709	-1556	>715	0	Burgess D. (GSC)
CA	MELVILLE SOUTH ICE CAP	3690	STR	20130427	20140424	51	199	-371	-172	>715	0	Burgess D. (GSC)
CA	PEYTO	57		2010	2011				-950	2760	22	Demuth M. (GSC)
CA	PEYTO	57		2011	2012				-360	2680	43	Demuth M. (GSC)
CA	PEYTO	57		2012	2013				-910	2730	21	Demuth M. (GSC)
CA	PLACE	41		2010	2011				355	2010	58	Demuth M. (GSC)
CA	PLACE	41		2011	2012				120	2053	50	Demuth M. (GSC)
CA	PLACE	41		2012	2013				-2300	>	0	Demuth M. (GSC)
CA	WHITE	0		2010	2011	39.38			-987	1428	13	Cogley J. (TU/G), Ecclestone M. (TU/G)
CA	WHITE	0	STR	2011	2012	39.38			-951	1442	10	Cogley J. (TU/G), Ecclestone M. (TU/G), Copland L. (Uottawa/DG), Thomson L. (Uottawa/DG)
CA	WHITE	0		2012	2013				45	858	80	Cogley J. (TU/G), Ecclestone M. (TU/G), Thomson L. (Uottawa/DG)
CH	ADLER	3801	FLO	20110929	20121002	2.23	946	-1754	-808	3625	30	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger G. (GIUZ)
CH	ADLER	3801	FLO	20121002	20130927	2.23	703	-589	114	3385	64	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger G. (GIUZ)
CH	BASODINO	463		20100911	20110906	1.84	1080	-2068	-988	>3135	0	Kappenberger G. (private), Casartelli G. (private)
CH	BASODINO	463	OTH	20110906	20120907	1.84	1620	-2989	-1369	3125	1	Kappenberger G. (private)
CH	BASODINO	463	OTH	20120907	20130913	1.84	1883	-1801	82	2885	52	Kappenberger G. (private)
CH	FINDELEN	389	COM	20100929	20111029	13.1			-880	3365	44	Machguth H. (GIUZ), Linsbauer A. (GIUZ), Salzmann N. (GIUZ)
CH	FINDELEN	389	FLO	20110929	20121002	13.04	1263	-1936	-673	3325	51	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger G. (GIUZ)
CH	FINDELEN	389	FLO	20121002	20130927	13.04	876	-879	-3	3225	65	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger G. (GIUZ)
CH	GRIES	359		20100904	20110909	4.83	958	-2760	-1802	3175	2	Funk M. (VAW), Bauder A. (VAW)
CH	GRIES	359	OTH	20110909	20120910	4.83	1722	-3762	-2040	>3265	0	Funk M. (VAW), Bauder A. (VAW)
CH	GRIES	359	OTH	20120910	20130929	4.83	1390	-1932	-542	2965	45	Funk M. (VAW), Bauder A. (VAW)
CH	MURTEL	4339	FLO	20120928	20130901	0.3	827	-830	-3	3187	56	Fischer M. (DGUF)

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
CH	PIZOL	417	FLO	20100922	20110924	0.08	1063	-3087	-2024	>	0	Huss M. (DGUF)
CH	PIZOL	417	FLO	20120921	20130923	0.08	2001	-3277	-1276	2712	28	Huss M. (DGUF)
CH	PIZOL	417	FLO	2012	2013	0.07	1515	-2108	-593			
CH	PLAINE MORTE	4246	FLO	20100912	20111002	7.88	975	-3246	-2271	2925	0	Huss M. (DGUF)
CH	PLAINE MORTE	4246	FLO	20111002	20120902	7.88	1390	-2300	-910	2815	2	Huss M. (DGUF)
CH	PLAINE MORTE	4246	FLO	20120902	20131002	7.88	1630	-2917	-1287	2815	2	Huss M. (DGUF)
CH	RHONE	473		20100905	20110915	15.81	1135	-2680	-1545	3095	32	
CH	RHONE	473		20110915	20120911	15.81	1529	-2537	-1008	3035	40	
CH	RHONE	473	OTH	20120911	20130923	15.81	1721	-1881	-160	2855	65	Bauder A. (VAW)
CH	SANKT ANNA	432	FLO	20111001	20121003	0.2	1303	-1994	-690	2832	18	Fischer M. (DGUF), Huss M. (DGUF)
CH	SANKT ANNA	432	FLO	20121003	20131002	0.22	1394	-1685	-290	2772	41	Fischer M. (DGUF)
CH	SCHWARZBACH	4340	FLO	20121003	20130907	0.06	1923	-1647	276	2757	75	Fischer M. (DGUF)
CH	SEX ROUGE	454	FLO	20110926	20120925	0.3	1358	-2643	-1285	2867	1	Fischer M. (DGUF), Huss M. (DGUF)
CH	SEX ROUGE	454	FLO	20120925	20130914	0.3	1530	-2236	-706	2857	3	Fischer M. (DGUF)
CH	SILVRETTA	408		20100911	20110911	2.74	1030	-2422	-1392	>3025	1	Funk M. (VAW), Bauder A. (VAW)
CH	SILVRETTA	408	OTH	20110911	20120923	2.74	1559	-2974	-1415	>3025	2	Funk M. (VAW), Bauder A. (VAW)
CH	SILVRETTA	408	OTH	20120923	20130922	2.74	1271	-1517	-246	2785	50	Funk M. (VAW), Bauder A. (VAW)
CH	SURETTA	411		20109999	20119999				-1706			
CH	TSANFLEURON	371	FLO	20100921	20110926	2.75	1175	-3511	-2336	>2945	0	Huss M. (DGUF)
CH	TSANFLEURON	371	FLO	20110926	20120925	2.75	1348	-3132	-1784	>2945	0	Huss M. (DGUF)
CH	TSANFLEURON	371	FLO	20120925	20130913	2.65	1552	-1875	-323	2792	40	Huss M. (DGUF)
CL	AMARILLO	3905		2010	2011	0.24			-737	>5300	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
CL	AMARILLO	3905		2011	2012	0.24			-550	>5300	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
CL	AMARILLO	3905		2012	2013				-905	>5300	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
CL	ECHAURREN NORTE	1344		20100401	20110331		1090	-2360	-1270			Barcaza G. (DGA)
CL	ECHAURREN NORTE	1344		2011	2012		950	-3330	-2380		0	Barcaza G. (DGA)
CL	ECHAURREN NORTE	1344		2012	2013		1180	-2210	-1030		0	Barcaza G. (DGA)
CL	GUANACO	3983	COM	20100401	20110331	1.78	-30	-970	-1000			Rivera A. (CECS)
CL	GUANACO	3983	COM	20110401	20120331	1.68	70	-780	-710			Rivera A. (CECS)
CL	GUANACO	3983	COM	20120401	20130331	1.7	800	-1310	-510			Rivera A. (CECS)
CN	PARLUNG NO. 94	3987	FLO	20100901	20110902	2.35			155	5312	69	Li S. (CAS/ITPR)
CN	PARLUNG NO. 94	3987	FLO	20120803	20121128	2.36			-1478		0	Li S. (CAS/ITPR)
CN	PARLUNG NO. 94	3987	FLO	20121128	20131005	2.36			-1049	5457	14	Li S. (CAS/ITPR), Yang W. (CAS/ITPR)
CN	URUMQI GLACIER NO. 1	853	FXD	20100911	20110906	1.65	88	-1033	-945	4230	10	Li H. (CAREERI), Wang W. (CAREERI)
CN	URUMQI GLACIER NO. 1	853	FXD	20110913	20120902	1.62	203	-916	-713	4160	22	Li H. (CAREERI), Wang W. (CAREERI)
CN	URUMQI GLACIER NO. 1	853	FXD	20120902	20130829	1.62	47	-583	-536	4240	19	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	FXD	20100911	20110906	1.07	88	-1191	-1103	>4267	0	
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	FXD	20110913	20120901	1.03	178	-988	-810	4135	16	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	FXD	20120901	20130829	1.03	32	-690	-658	4230	10	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	FXD	20100911	20110906	0.58	87	-740	-653	4190	28	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	FXD	20110913	20120902	0.59	246	-790	-544	4185	33	Li H. (CAREERI), Li Z. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	FXD	20120902	20130829	0.59	72	-396	-324	4250	34	Li H. (CAREERI), Li Z. (CAREERI)
CO	CONEJERAS	2721	FXD	20110103	20111203	0.22			-798	4812	4	Ceballos Lievano J. (IDEAM)
CO	CONEJERAS	2721	FXD	20120103	20121203	0.22			-2149	4888	1	Ceballos Lievano J. (IDEAM)
CO	CONEJERAS	2721	FXD	20130103	20131203	0.22			-3802	>4900	0	Ceballos Lievano J. (IDEAM)
EC	ANTIZANA15ALPHA	1624	FXD	20101231	20111231				163	5150	63	Cáceres Correa B. (INAMHI), Francou B. (LGGE), Francou B. (CNRS)
EC	ANTIZANA15ALPHA	1624		2011	2012				-420	5060	69	Cáceres Correa B. (INAMHI)
EC	ANTIZANA15ALPHA	1624		2012	2013				-450	5085	72	Cáceres Correa B. (INAMHI)
ES	MALADETA	942	FXD	20101002	20110928	0.25	2045	-3541	-1504	>3200	0	Cobos G. (UPV), Lastrada E. (SPESA), Conejo J. (I75SA), Pedrero A. (I75SA)
ES	MALADETA	942		2011	2012	0.25			-2471	>3200	0	Cobos G. (UPV), Pedrero A. (I75SA), Lastrada E. (SPESA), Conejo J. (I75SA)
ES	MALADETA	942		2012	2013	0.25			390	3060	58	Cobos G. (UPV), Pedrero A. (I75SA), Lastrada E. (SPESA), Conejo J. (I75SA)
FR	ARGENTIERE	354	STR	20101006	20111005				-2010			Vincent C. (CNRS), Six D. (CNRS)
FR	ARGENTIERE	354	STR	20111005	20121013				-1680			Vincent C. (CNRS), Six D. (CNRS)
FR	ARGENTIERE	354	STR	20121013	20131017				-360			Vincent C. (CNRS), Six D. (CNRS)
FR	BIONNASSAY	1313		2010	2011				-1410			Moreau L. (GLACIOLAB)
FR	BIONNASSAY	1313		2011	2012				-910			Moreau L. (GLACIOLAB)
FR	BIONNASSAY	1313		2012	2013				-208			Moreau L. (GLACIOLAB)
FR	GEBROULAZ	352	STR	20101006	20111005				-1400			Vincent C. (CNRS), Six D. (CNRS)
FR	GEBROULAZ	352	STR	20111005	20121003				-1500			Vincent C. (CNRS), Six D. (CNRS)
FR	GEBROULAZ	352	STR	20121003	20131009				-350			Vincent C. (CNRS), Six D. (CNRS)
FR	OSSOUE	2867	STR	20101009	20111009		2120	-4580	-2460	>3200		René P. (AM)
FR	OSSOUE	2867	STR	20111009	20121014		2360	-5770	-3410	>3200	0	René P. (AM)
FR	OSSOUE	2867		20121014	20131006		3790	-3550	240	3000	91	René P. (AM)
FR	SAINT SORLIN	356	STR	20101001	20111014				-3020			Vincent C. (LGGE), Six D. (LGGE)
FR	SAINT SORLIN	356	STR	20111014	20121008				-2130			Vincent C. (CNRS), Six D. (CNRS)
FR	SAINT SORLIN	356	STR	20121008	20131004				-956			Vincent C. (CNRS), Six D. (CNRS)
FR	SARENNES	357	STR	20101023	20111008		1076	-5229	-4153			Thibert E. (ETNA), Richard D. (ETNA)
FR	SARENNES	357	STR	20111008	20121025		1650	-4340	-2690			Thibert E. (IRSTEA)
FR	SARENNES	357	STR	20121025	20131018		1980	-3350	-1370			Thibert E. (IRSTEA)
GL	FREYA	3350	FLO	20100821	20110823	5.3			-935	>1300	6	Hynek B. (ZAMG)
GL	FREYA	3350	FLO	20110823	20120814	5.3	916	-1113	-197	750	43	Hynek B. (ZAMG)
GL	FREYA	3350	FLO	20120814	20130814	5.3	190	-1584	-1394	>1300	3	Hynek B. (ZAMG)
GL	MITTIVAKKAT	1629		2010	2011	17.6			-2450	>930	0	Knudsen N. (DESA), Mernild S. (CECS)
GL	MITTIVAKKAT	1629		20119999	20120899	17.6	900	-2530	-1630	>930	0	Knudsen N. (DESA), Mernild S. (CECS), Hanna E. (SU/DG), Bjoerk A. (UC/NHM), Hasholt B. (DESA)
GL	MITTIVAKKAT	1629		2012	2013	15.94	1330	-2030	-700	700	18	Knudsen N. (DESA), Mernild S. (CECS), Markussen T. (GEUS Geology), Andersen M. (GEUS Geology)
IN	CHHOTA SHIGRI	2921		20109999	20119999				90			Ramanathan A. (JNU/SES)
IN	CHHOTA SHIGRI	2921		2011	2012				-470	5025	52	Ramanathan A. (JNU/SES)
IN	CHHOTA SHIGRI	2921		2012	2013				-790	5090	36	Ramanathan A. (JNU/SES)
IS	BRUARJOEKULL	3067		2010	2011	1539	1790	-1275	515	1105	73	Pálsson F. (IES), Björnsson H. (IES), Haraldsson H. (NPC)
IS	BRUARJOEKULL	3067		2011	2012	1526	1540	-2299	-759	1322	45	Pálsson F. (IES), Björnsson H. (IES), Gunnarsson A. (NPC)
IS	BRUARJOEKULL	3067		2012	2013	1525	1740	-1810	-70	1230	61	Pálsson F. (IES)
IS	DYNGJUJOEKULL	3068		2010	2011	1053	1771	-1394	377	1324	65	Pálsson F. (IES), Björnsson H. (IES), Haraldsson H. (NPC)
IS	DYNGJUJOEKULL	3068		2011	2012	1063	1483	-2458	-975	1500	47	Pálsson F. (IES), Björnsson H. (IES), Gunnarsson A. (NPC)
IS	DYNGJUJOEKULL	3068		2012	2013	1060	1380	-1610	-230	1345	63	Pálsson F. (IES)
IS	EYJABAKKAJOEKULL	3069		2010	2011	113	1993	-1468	525	1050	64	Pálsson F. (IES), Björnsson H. (IES), Haraldsson H. (NPC)
IS	EYJABAKKAJOEKULL	3069		2011	2012	112	1801	-2755	-954	1195	35	Pálsson F. (IES), Björnsson H. (IES), Gunnarsson A. (NPC)
IS	EYJABAKKAJOEKULL	3069		2012	2013	112	2210	-2710	-500	1120	49	Pálsson F. (IES)
IS	HOFSJOEKULL E	3088	FLO	20101006	20110927	236	1750	-2080	-330	1175	53	Þorsteinsson Þ. (IMO)

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
IS	HOFSJOEKULL E	3088	FLO	20110927	20120920	236	1960	-2370	-410	1190	48	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL E	3088	FLO	20120920	20131008	236	1350	-1790	-440	1185	49	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL N	3089	FLO	20101007	20110928	81.6	1540	-1860	-320	1305	45	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL N	3089	FLO	20110928	20120918	81.6	1630	-2090	-460	1305	45	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL N	3089	FLO	20120918	20131009	81.6	1250	-1610	-360	1300	46	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL SW	3090	FLO	20101007	20110928	51.5	1630	-1910	-280	1280	56	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL SW	3090	FLO	20110928	20120919	51.5	2110	-2070	40	1235	60	Þorsteinsson Þ. (IMO)
IS	HOFSJOEKULL SW	3090	FLO	20120919	20131009	51.5	1370	-1310	60	1255	58	Þorsteinsson Þ. (IMO)
IS	KOELDUKVISLARJ.	3096		2010	2011	303	1865	-2619	-754	1615	39	Pálsson F. (IES), Björnsson H. (IES), Haraldsson H. (NPC)
IS	KOELDUKVISLARJ.	3096		2011	2012	301	1638	-1927	-289	1433	51	Pálsson F. (IES), Björnsson H. (IES), Gunnarsson A. (NPC)
IS	KOELDUKVISLARJ.	3096		2012	2013	300	1190	-1750	-560	1450	48	Pálsson F. (IES)
IS	LANGJOEKULL ICE CAP	3660		2010	2011	907	1731	-3010	-1279		23	
IS	LANGJOEKULL ICE CAP	3660		2011	2012	875	2334	-2872	-542		44	Pálsson F. (IES), Gunnarsson A. (NPC)
IS	LANGJOEKULL ICE CAP	3660		2012	2013	880	1334	-2185	-851		37	Pálsson F. (IES), Gunnarsson A. (NPC)
IS	TUNGNAARJOEKULL	3126		2010	2011	360	1959	-3339	-1380	1345	33	Pálsson F. (IES), Björnsson H. (IES), Haraldsson H. (NPC)
IS	TUNGNAARJOEKULL	3126		2011	2012	345	1634	-2928	-1294	1420	21	Pálsson F. (IES), Björnsson H. (IES), Gunnarsson A. (NPC)
IS	TUNGNAARJOEKULL	3126		2012	2013	345	1180	-1990	-810	1210	49	Pálsson F. (IES)
IT	CALDERONE	1107	COM	20100918	20110922	0.04	3063	-4245	-1182		84	Pecci M. (CGI-Torino), Cappelletti D. (CGI-Torino), Grilli A. (CGI-Torino), d'Aquila P. (CGI-Torino), Barbolla A. (CGI-Torino), Salvatori R. (CGI-Torino), Armiento F. (CGI-Torino)
IT	CALDERONE	1107	COM	20110922	20120922	0.04	2516	-4540	-2024		84	Pecci M. (CGI-Torino)
IT	CALDERONE	1107	COM	20120922	20130914	0.04	3225	-2768	487	2650	84	Pecci M. (CGI-Torino)
IT	CAMPO SETT.	1106	FLO	20100920	20111002	0.32			-1588	>3180	0	Scotti R. (SGL), Villa F. (SGL), Colombarolli D. (SGL), Ruvo L. (SGL)
IT	CAMPO SETT.	1106	FLO	20111002	20120922	0.32			-2140	3070	18	Colombarolli D. (SGL), Scotti R. (SGL)
IT	CAMPO SETT.	1106	FLO	20120922	20131006	0.3			-582	3080	21	Colombarolli D. (SGL), Scotti R. (SGL)
IT	CARESER	635	FLO	20100915	20110928	1.89	869	-2791	-1922	>3278	0	Carturan L. (SAT)
IT	CARESER	635	FLO	20110928	20120922	1.63	800	-3260	-2460	>3285	0	Carturan L. (UP/TeSAF)
IT	CARESER	635	FLO	20120922	20130928	1.58	1482	-2521	-1039	>3283	1	Carturan L. (UP/TeSAF)
IT	CARESER CENTRALE	3659	FLO	20100915	20110928	0.24	701	-3312	-2610	>3112	0	
IT	CARESER OCCIDENTALE	3346	FLO	20100915	20110928	0.19	931	-2313	-1382	>3278	0	
IT	CARESER ORIENTALE	3345	FLO	20100915	20110928	1.43	888	-2762	-1873	>3267	0	
IT	CIARDONEY	1264	COM	20100906	20110904	0.57	580	2290	-1710	>3150	0	Mercalli L. (SMI), Cat Berro D. (SMI), Fornengo F. (SMI)
IT	CIARDONEY	1264	COM	20110914	20120907	0.57	730	-2900	-2160	>3150	0	Mercalli L. (SMI), Cat Berro D. (SMI), Fornengo F. (SMI)
IT	CIARDONEY	1264	COM	20120907	20130913	0.57	1590	-2200	-610	3100	15	Mercalli L. (SMI), Cat Berro D. (SMI), Fornengo F. (SMI)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	FXD	20100922	20110930	0.03	1294	-2436	-1142	>3355	0	Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	FXD	20110930	20121008	0.4	1011	-2942	-1931	>3350	0	Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	FXD	20121008	20130925	0.4	1515	-1562	-47	3150	59	Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	GRAND ETRET	1238		2011	2012				-1158			
IT	GRAND ETRET	1238	FLO	20129999	20130914	0.53	1901	-2171	-270	2860		Bertoglio V. (CGI), Cerise S. (PNGP), Motta L. (UT/DST)
IT	LUNGA (VEDRETTA) / LANGENF.	661	FXD	20101001	20110930	1.69	944	-2022	-1078	>3390	10	Galos S. (IMGI), Prinz R. (IMGI), Dinale R. (UI/HA)
IT	LUNGA (VEDRETTA) / LANGENF.	661	FXD	20110930	20121008	1.66	995	-2527	-1532	>3390	1	Galos S. (UI/HA), Dinale R. (UI/HA)
IT	LUNGA (VEDRETTA) / LANGENF.	661	FXD	20121001	20130930	1.66	1255	-1476	-221	3085	53	Galos S. (UI/HA)
IT	LUPO	1138	FLO	20100922	20110927	0.2	3837	-4260	-423	>2760	11	Scotti R. (SGL), Villa F. (SGL), Ruvo L. (SGL)
IT	LUPO	1138	FLO	20110927	20121014	0.2	3254	-4776	-1522	>2760	2	Scotti R. (SGL), Villa F. (SGL)
IT	LUPO	1138	FLO	20121014	20130928	0.2	3799	-3453	346	2580	60	Scotti R. (SGL), Villa F. (SGL), Hagg W. (SGL)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	FLO	20100911	20110916	6.16	1197	-2395	-1198	3279	5	Franchi G. (CGI-Verona), Rossi G. (CGI-Venezia)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	FLO	20110916	20121005	6.03	1166	-2582	-1416	>3450		Franchi G. (UI/HA), Rossi G. (UI/HA)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	FLO	20121005	20130924	6.03	1556	-1902	-346	3078	30	Franchi G. (UI/HA)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	FLO	20100912	20110917	0.85	1292	-3092	-1800	3002	0	Franchi G. (CGI-Verona), Rossi G. (CGI-Venezia)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	FLO	20110917	20121005	0.85	1442	-3378	-1938	>2950		Franchi G. (UI/HA), Rossi G. (UI/HA)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	FLO	20121005	20130924	0.85	1520	-2310	-790	3101	0	Franchi G. (UI/HA)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	FXD	20101007	20111004	1.97	860	-1676	-816	3150	10	Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	FXD	20111004	20121004	1.82	847	-2596	-1748	>3220	0	Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	FXD	20121004	20130924	1.82	1431	-1256	175	2950	64	Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	SURETTA MERID.	2488	FLO	20100929	20111001	0.18			-1474	>2925	0	Scotti R. (SGL), Villa F. (SGL), Ruvo L. (SGL)
IT	SURETTA MERID.	2488	FLO	20111001	20120922	0.18	2255	-3644	-1389	>2925	0	Villa F. (SGL), Ruvo L. (SGL), Scotti R. (SGL)
IT	SURETTA MERID.	2488	FLO	20120922	20131009	0.16	2820	-3351	-531	2775	33	Villa F. (SGL), Ruvo L. (SGL), Scotti R. (SGL)
IT	TIMORION	1282		2010	2011				-920			
IT	TIMORION	1282		2011	2012				-1166			Morra di Cella U. (ARPA)
IT	TIMORION	1282		2012	2013				-199			Morra di Cella U. (ARPA)
JP	HAMAGURI YUKI	897		20101006	20111006		8845	-9251	-406			Fujita K. (DHAS), Fukui K. (DHAS)
JP	HAMAGURI YUKI	897		20111006	20121005		9088					Fujita K. (DHAS), Fukui K. (DHAS)
KE	LEWIS	695	FLO	20100301	20110302	0.11			-1543	>4871	0	Prinz R. (IMGI)
KE	LEWIS	695	FLO	20110203	20120225	0.11			-961	>4871	0	Prinz R. (IMGI)
KE	LEWIS	695	FLO	20120225	20130308	0.11			-1397	>4871	0	Prinz R. (IMGI)
KG	ABRAMOV	732	FLO	20110826	20120822	24.06	1204	-1806	-601	4265	43	Barandun M. (DGUF)
KG	ABRAMOV	732	FLO	20120823	20130815	24.01	1222	-1471	-249	4225	52	Barandun M. (DGUF)
KG	GLACIER NO. 354 (AK-SHIYRAK)	3889	FLO	20100999	20110817	6.47			-95	4155	54	Kronenberg M. (DGUF), Barandun M. (DGUF), Gafurov A. (GFZ Potsdam), Kriegel D. (GFZ Potsdam), Azizov E. (CAIAG)
KG	GLACIER NO. 354 (AK-SHIYRAK)	3889	FLO	20110817	20120829	6.44			-524	4185	46	Kronenberg M. (DGUF), Barandun M. (DGUF), Gafurov A. (GFZ Potsdam), Kriegel D. (GFZ Potsdam), Azizov E. (CAIAG)
KG	GLACIER NO. 354 (AK-SHIYRAK)	3889	FLO	20120829	20130825	6.42			-533	4215	40	Kronenberg M. (DGUF), Barandun M. (DGUF), Gafurov A. (GFZ Potsdam), Kriegel D. (GFZ Potsdam), Azizov E. (CAIAG)
KG	GOLUBIN	753	FLO	20100999	20110817	5.52			70	3850	65	Azizov E. (CAIAG), Usubaliev R. (CAIAG), Kriegel D. (GFZ Potsdam), Gafurov A. (GFZ Potsdam), Barandun C. (DGUF)
KG	GOLUBIN	753	FLO	20110817	20120814	5.52			-94	3810	72	Kronenberg M. (DGUF), Barandun M. (DGUF), Azizov E. (CAIAG), Gafurov A. (GFZ Potsdam)
KG	GOLUBIN	753	FLO	20120814	20120723	5.5			77	3700	78	Kronenberg M. (DGUF), Barandun M. (DGUF), Azizov E. (CAIAG), Gafurov A. (GFZ Potsdam)
KG	SUEK/SUYOK ZAPADNIY	781	FLO	20100999	20110820	1.12			-314	4220	63	Azizov E. (CAIAG), Usubaliev R. (CAIAG), Kriegel D. (GFZ Potsdam), Gafurov A. (GFZ Potsdam), Barandun C. (DGUF)

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
KG	SUEK/SUYOK ZAPADNIY	781	FLO	20110820	20120827	1.13			-496	4270	25	Azizov E. (CAIAG), Kronenberg M. (DGUF), Barandun M. (DGUF), Gafurov A. (GFZ Potsdam)
KG	SUEK/SUYOK ZAPADNIY	781		2012	2013	1.02			-304	4237	47	Usubaliev R. (CAIAG), Azizov E. (CAIAG)
KZ	TS.TUYUKSUYSKIY	817	STR	20101002	20110921	2.31	584	-897	-314	3800	44	Kasatkin N. (IGNANKaz), Makarevich K. (IGNANKaz)
KZ	TS.TUYUKSUYSKIY	817	STR	20110921	20120920	2.3	414	-1437	-1023	3900	31	Kasatkin N. (IGNANKaz), Makarevich K. (IGNANKaz)
KZ	TS.TUYUKSUYSKIY	817	STR	20120920	20131010	2.29	466	-806	-340	3825	41	Kasatkin N. (IGNANKaz)
NO	AALFOTBREEN	317	STR	20100928	20111013	3.98	3530	-4376	-845	>1367	0	Kjøllmoen B. (NVE)
NO	AALFOTBREEN	317	STR	20111013	20121016	3.98	3868	-2507	1361	1020	96	Kjøllmoen B. (NVE)
NO	AALFOTBREEN	317	STR	20121016	20130925	3.98	3151	-4055	-904	>1367	0	Kjøllmoen B. (NVE)
NO	AUSTDALSBREEN	321	STR	20101009	20111013	10.63	1833	-2619	-786	>1747	0	Elvehøy H. (NVE)
NO	AUSTDALSBREEN	321	STR	20111013	20121011	10.63	2695	-1540	1155	1370	83	Elvehøy H. (NVE)
NO	AUSTDALSBREEN	321	STR	20121011	20130925	10.63	1613	-2598	-985	>1747	0	Elvehøy H. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	STR	20100928	20111001	22.4	2523	-3437	-914	1600	5	Kjøllmoen B. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	STR	20111001	20121012	22.4	3502	-1916	1585	1255	86	Kjøllmoen B. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	STR	20121012	20130924	22.4	2930	-3165	-234	1470	58	Kjøllmoen B. (NVE)
NO	BREIDABLIKKBREA	2671	STR	20100928	20111001	3.37	1873	-4159	-2286	>1648	0	Kjøllmoen B. (NVE)
NO	BREIDABLIKKBREA	2671	STR	20111001	20121012	3.37	3210	-2065	1145	1290	90	Kjøllmoen B. (NVE)
NO	BREIDABLIKKBREA	2671	STR	20121012	20130924	3.37			-1112	>1648	0	Kjøllmoen B. (NVE)
NO	ENGABREEN	298	STR	20100928	20111104	38.74	2852	-3761	-908	1270	41	Elvehøy H. (NVE)
NO	ENGABREEN	298	STR	20111104	20120925	38.74	3231	-2087	1144	1050	82	Elvehøy H. (NVE)
NO	ENGABREEN	298	STR	20120925	20131021	38.74	2305	-4084	-1779	1430	3	Elvehøy H. (NVE)
NO	GRAAFJELLSBREA	1320	STR	20100928	20111001	8.41	1872	-4111	-2238	>1647	0	Kjøllmoen B. (NVE)
NO	GRAAFJELLSBREA	1320	STR	20111001	20121012	8.41	2968	-1741	1209	1280	90	Kjøllmoen B. (NVE)
NO	GRAAFJELLSBREA	1320	STR	20121012	20130924	8.41			-1151	>1647	0	Kjøllmoen B. (NVE)
NO	GRAASUBREEN	299	STR	20100927	20110908	2.12	668	-1794	-1126	2275	1	Andreassen L. (NVE)
NO	GRAASUBREEN	299	STR	20110908	41165	2.12	595	-857	-262			Andreassen L. (NVE)
NO	GRAASUBREEN	299	STR	20120913	20130913	2.12	670	-1470	-800			Andreassen L. (NVE)
NO	HANSEBREEN	322	STR	20100928	20111013	2.75	3426	-4679	-1252	>1309	0	Kjøllmoen B. (NVE)
NO	HANSEBREEN	322	STR	20111013	20121016	2.75	3613	-2790	822	1085	76	Kjøllmoen B. (NVE)
NO	HANSEBREEN	322	STR	20121016	20130925	2.75	2840	-4528	-1687	>1309	0	Kjøllmoen B. (NVE)
NO	HELLSTUGUBREEN	300		2010	2011	2.9	826	-2870	-2041	>2230	0	Andreassen L. (NVE)
NO	HELLSTUGUBREEN	300	STR	20110914	20120920	2.9	1208	-1216	-18	1875	59	Andreassen L. (NVE)
NO	HELLSTUGUBREEN	300	STR	20120920	20130911	2.9	1050	-1830	-779	1960	26	Andreassen L. (NVE)
NO	LANGFJORDJOEKELEN	323	STR	20100923	20110920	3.22	2295	-3552	-1256	>1050	0	Kjøllmoen B. (NVE)
NO	LANGFJORDJOEKELEN	323	STR	20110920	20120925	3.22	1365	-2126	-760	950	27	Kjøllmoen B. (NVE)
NO	LANGFJORDJOEKELEN	323	STR	20120925	20131107	3.22	2075	-4690	-2614	>1050	0	Kjøllmoen B. (NVE)
NO	NIGARDSBREEN	290	STR	20100929	20111013	47.93	1860	-2666	-805	1700	29	Kjøllmoen B. (NVE)
NO	NIGARDSBREEN	290	STR	20111013	20121011	47.93	2920	-1682	1274	1310	91	Kjøllmoen B. (NVE)
NO	NIGARDSBREEN	290	STR	20121011	20130925	46.61	2458	-2690	-232	1590	59	Kjøllmoen B. (NVE)
NO	REMBESDALSKAAKA	2296	STR	20101008	20111110	17.26	2124	-3405	-1281	>1854	0	Elvehøy H. (NVE)
NO	REMBESDALSKAAKA	2296	STR	20111110	20121005	17.26	2649	-1741	908	1590	85	Elvehøy H. (NVE)
NO	REMBESDALSKAAKA	2296	STR	20121005	20130926	17.26	1610	-2835	-1224	>1854	0	Elvehøy H. (NVE)
NO	RUNDVASSBREEN	2670	STR	20110511	20111026	10.94	1743	-3321	-1577	1405	3	Kjøllmoen B. (NVE)
NO	RUNDVASSBREEN	2670	STR	20111026	20120925	10.94	2038	-1402	636	1180	65	Kjøllmoen B. (NVE)
NO	RUNDVASSBREEN	2670	STR	20120925	20130927	10.94	1467	-3900	-2432	>1525	0	Kjøllmoen B. (NVE)
NO	STORBREEN	302	STR	20100928	40799	5.14	986	-2335	-1349	2005	3	Andreassen L. (NVE)
NO	STORBREEN	302	STR	20110913	20121016	5.14	1634	-1864	-229	1900	14	Andreassen L. (NVE)
NO	STORBREEN	302	STR	20121016	20130912	5.14	1309	-2463	-1175	1860	21	Andreassen L. (NVE)
NO	SVELGJABREEN	3343	STR	20100928	20111001	22.35	2581	-3844	-1262	1525	20	Kjøllmoen B. (NVE)
NO	SVELGJABREEN	3343	STR	20111001	20121012	22.35	3375	-2083	560	1190	80	Kjøllmoen B. (NVE)
NO	SVELGJABREEN	3343	STR	20121012	20130924	22.35	2584	-3313	-728	1485	29	Kjøllmoen B. (NVE)
NP	MERA	3996		20101111	20111110	5.05			460	5335	89	
NP	MERA	3996		20111110	20121123	5.05			-670	5800	29	Wagnon P. (IRD)
NP	MERA	3996		2012	2013	5.05			450			
NP	POKALDE	3997		20101026	20121212	0.09			-110			Wagnon P. (IRD)
NP	POKALDE	3997		20111020	20121212	0.09			-1120	>5660	0	Wagnon P. (IRD)
NP	POKALDE	3997		2012	2013	0.09			-70			
NP	RIKHA SAMBA	1516	FLO	20110910	20121003	5.7			-621	5806	54	Stumm D. (ICIMOD), Joshi S. (ICIMOD)
NP	RIKHA SAMBA	1516	FLO	20121003	20131002	5.7			-80	5703	78	Stumm D. (ICIMOD), Joshi S. (ICIMOD)
NP	YALA	912	FLO	20111111	20121104	1.61			-1174	5480	20	Stumm D. (ICIMOD), Joshi S. (ICIMOD)
NP	YALA	912	FLO	20121104	20131117	1.61			-247	5402	42	Stumm D. (ICIMOD), Joshi S. (ICIMOD)
NZ	BREWSTER	1597	COM	20100328	20110312		1972	-3481	-1509	2285	1	Anderson B. (ARC), Cullen N. (DGUO-NZ)
NZ	BREWSTER	1597	COM	20110312	20120321		1586	-1786	-200	2270	3	Anderson B. (ARC), Cullen N. (DGUO-NZ), Fitzsimons S. (DGUO-NZ), Stumm D. (ICIMOD), Mackintosh A. (SGEES)
NZ	BREWSTER	1597	COM	20120321	20130321		2489	-2383	106	1918	54	Anderson B. (ARC), Cullen N. (DGUO-NZ)
NZ	ROLLESTON	1538	FLO	20100305	20110325	0.11	1810	-3849	-2039	1818	5	Kerr T. (NIWA)
NZ	ROLLESTON	1538	FLO	20110325	20120328	0.11	2501	-2930	-429	1834	28	Kerr T. (NIWA)
NZ	ROLLESTON	1538	FLO	20120328	20130314	0.11	3117	-2377	740	1783	76	Kerr T. (NIWA)
PE	ARTESONRAJU	3292		2010	2011	4.17			-517			Gómez J. (UGRH/INRENA), Dávila Roller L. (UGRH/INRENA)
PE	ARTESONRAJU	3292	FXD	20111026	20120926	2.47			-353	5050	44	Dávila Roller L. (UGRH/ANA)
PE	ARTESONRAJU	3292	FXD	20120927	20130927	3.43			-448	>4937	68	Dávila Roller L. (UGRH/ANA)
PE	YANAMAREY	226	FXD	20111012	20121002	0.26			-1261	4915	43	Dávila Roller L. (UGRH/ANA)
PE	YANAMAREY	226	FXD	20121002	20130711	0.27			-1246	>4953	27	Dávila Roller L. (UGRH/ANA)
RU	DJANKUAT	726	COM	20101002	20110929	2.69	2530	-3210	-680			Popovnin V. (MGU)
RU	DJANKUAT	726		2011	2012		1920	-3550	-1630			Popovnin V. (MGU)
RU	DJANKUAT	726		2012	2013		1970	-2420	-450			Popovnin V. (MGU)
RU	GARABASHI	761	STR	2010	2011	4.42	1081	-1938	-858	3980	36	Rototayeva O. (IG RAS), Khmelevskoy I. (IG RAS)
RU	GARABASHI	761		2011	2012				-989			Rototayeva O. (IGRAN)
RU	GARABASHI	761		2012	2013		1116	-1388	-272	3850	54	Rototayeva O. (IGRAN)
RU	LEVIY AKTRU	794		2010	2011				-480	3280	52	
RU	LEVIY AKTRU	794		2011	2012				-1020	3360	44	Narozhniy Y. (TGU)
RU	MALIY AKTRU	795		2010	2011				-520	3320	37	Narozhniy Y. (TGU)
RU	MALIY AKTRU	795		2011	2012				-1100	3390	27	Narozhniy Y. (TGU)
RU	VODOPADNIY (NO.125)	780		2010	2011				-450	3370	10	Narozhniy Y. (TGU)
RU	VODOPADNIY (NO.125)	780		2011	2012				-950		0	Narozhniy Y. (TGU)
SE	MARMAGLACIAEREN	1461		2010	2011	3.96	970	-2410	-1450	1660	9	Holmlund P. (INK), Jansson P. (INK)
SE	MARMAGLACIAEREN	1461		2011	2012	3.96	1020	-1110	-90	1575	37	Holmlund P. (INK), Jansson P. (INK)
SE	RABOTS GLACIAER	334		2010	2011	3.95	500	-2610	-2110	>1930	0	Holmlund P. (INK), Jansson P. (INK)
SE	RABOTS GLACIAER	334		2011	2012	3.94	1000	-980	20	1380	44	Holmlund P. (INK), Jansson P. (INK)
SE	RIUKOJIETNA	342		2010	2011	4.65	1690	-2770	-1080	>1365	0	Holmlund P. (INK), Jansson P. (INK)
SE	RIUKOJIETNA	342		2011	2012	4.65	870	-970	-90	1375	42	Holmlund P. (INK), Jansson P. (INK)
SE	STORGLACIAEREN	332		2010	2011	3.21	1320	-2370	-1060	1585	25	Holmlund P. (INK), Jansson P. (INK)
SE	STORGLACIAEREN	332		2011	2012	2.9	1250	-570	680	1405	57	Holmlund P. (INK), Jansson P. (INK)
SE	STORGLACIAEREN	332		2012	2013	2.9	950	2360	-1410	1590	20	
SE	TARFALAGLACIAEREN	326		2010	2011	1.01	1080	-2900	-1820	>1390	0	Holmlund P. (INK), Jansson P. (INK)
SE	TARFALAGLACIAEREN	326		2011	2012	1.01	1930	-1100	830	1435	86	Holmlund P. (INK), Jansson P. (INK)

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
SJ	AUSTRE BROEGGERBREEN	292		2010	2011	6.12	569	-1573	-1004	525		Kohler J. (NPI)
SJ	AUSTRE BROEGGERBREEN	292		2011	2012	6.12	678	-853	-175	363	20	Kohler J. (NPI)
SJ	AUSTRE BROEGGERBREEN	292		2012	2013		356	-1446	-1090	623	0	Kohler J. (NPI)
SJ	AUSTRE LOVENBREEN	3812	COM	20101001	20111002		531	-1584	-1053	>550	0	Bernard E., Griselin M. , Tolle F. , Friedt J. (CNRS TheMA)
SJ	AUSTRE LOVENBREEN	3812	COM	20111002	20121005		890	-1131	-241	390	39	Bernard E., Griselin M. , Tolle F. , Friedt J. (CNRS TheMA)
SJ	AUSTRE LOVENBREEN	3812	COM	20121005	20131002		408	-1418	-1010	>550	0	Bernard E., Griselin M. , Tolle F. , Friedt J. (CNRS TheMA)
SJ	HANSBREEN	306	FXD	20100922	20111001	56.74	1120	-1400	-280	330	54	Puczko D. (PAS), Glowacki P. (PAS)
SJ	HANSBREEN	306	STR	20111004	20120927	56.74	985	-1364	-151	316	54	Glowacki P. (PAS), Luks B. (PAS)
SJ	HANSBREEN	306	STR	20120927	20131005	56.74	667	-524	143	360	54	Glowacki P. (PAS), Luks B. (PAS)
SJ	IRENEBREEN	2669		2010	2011				-1293	609	1	Sobota I. (FES NCU)
SJ	IRENEBREEN	2669		2011	2012				-851	531	9	Sobota I. (FES NCU)
SJ	IRENEBREEN	2669		2012	2013				-1881	674	0	Sobota I. (FES NCU)
SJ	KONGSVEGEN	1456		2010	2011	101.9	528	-962	-434	607	26	Kohler J. (NPI)
SJ	KONGSVEGEN	1456		2011	2012	101.9	693	-486	208	496	55	Kohler J. (NPI)
SJ	KONGSVEGEN	1456		2012	2013		318	-1008	-690	682	8	Kohler J. (NPI)
SJ	KRONEBREEN	3504		2012	2013		290	-710	-420	793	25	Kohler J. (NPI)
SJ	MIDTRE LOVENBREEN	291		2010	2011	5.45	600	-1520	-920	524	1	Kohler J. (NPI)
SJ	MIDTRE LOVENBREEN	291		2011	2012				-260	374	26	Kohler J. (NPI)
SJ	MIDTRE LOVENBREEN	291		2012	2013		388	-1324	-937	546	0	Kohler J. (NPI)
SJ	WALDEMARBREEN	2307		2010	2011				-1239	518	1	Sobota I. (FES NCU)
SJ	WALDEMARBREEN	2307		2011	2012				-885	424	13	Sobota I. (FES NCU)
SJ	WALDEMARBREEN	2307		2012	2013				-1637	591	0	Sobota I. (FES NCU)
SJ	WERENSKIOLDBREEN	305	FXD	20110830	20121008	27.11	880	-1280	-400	468	16	Ignatiuk D. (US/FES)
SJ	WERENSKIOLDBREEN	305	FXD	20121008	20140415	27.11	572	-2002	-1430	803	0	Ignatiuk D. (US/FES)
US	COLUMBIA (2057)	76	FXD	20100927	20110930				1470		100	Pelto M. (NCGCP)
US	COLUMBIA (2057)	76	FXD	20110930	20120929				380	1560	80	Pelto M. (NCGCP)
US	COLUMBIA (2057)	76	FXD	20120929	20130928	0.84			-780	1620	45	Pelto M. (NCGCP)
US	DANIELS	83	FXD	20100930	20110930				1060		98	Pelto M. (NCGCP)
US	DANIELS	83	FXD	20110930	20120930				750		78	Pelto M. (NCGCP)
US	DANIELS	83	FXD	20120930	20130922				-150		65	Pelto M. (NCGCP)
US	EASTON	1367	FXD	20101004	20111007				1150	1880	89	Pelto M. (NCGCP)
US	EASTON	1367	FXD	20111007	20121001				-160	2000	66	Pelto M. (NCGCP)
US	EASTON	1367	FXD	20121001	20130929				-1580	2100	46	Pelto M. (NCGCP)
US	EMMONS	203	COM	20101007	20111003		2350	-2370	-20	2640	46	Riedel J. (NCNP), Larrabee M. (NCNP)
US	EMMONS	203		2011	2012		2360	-2860	-500			Riedel J. (NCNP), Larrabee M. (NCNP)
US	EMMONS	203		2012	2013		2080	-3470	-1390			Riedel J. (NCNP), Larrabee M. (NCNP)
US	FOSS	84	FXD	20101001	20111008				1300		92	Pelto M. (NCGCP)
US	FOSS	84	FXD	20111008	20120929				250		74	Pelto M. (NCGCP)
US	FOSS	84	FXD	20120929	20130922				-400		55	Pelto M. (NCGCP)
US	GULKANA	90		2010	2011				-1290	1995	26	O'Neel S., March R. (USGS-F), O'Neel S., March R. (USGS WRD)
US	GULKANA	90	FLO	2011	2012	16.65			-790	1810		O'Neel S. (USGS-F)
US	GULKANA	90	FLO	20120825	20130819	16.5	1300	-2600	-1300			O'Neel S. (USGS-F)
US	ICE WORM	82	FXD	20100930	20110930				1340		100	Pelto M. (NCGCP)
US	ICE WORM	82	FXD	20110930	20120930				150		68	Pelto M. (NCGCP)
US	ICE WORM	82	FXD	20120930	20130922				-700		45	Pelto M. (NCGCP)
US	LEMON CREEK	3334	COM	20100920	20110915				-720	1100	47	Pelto M. (JIRP)
US	LEMON CREEK	3334	COM	20110915	20120921				450	980	82	Pelto M. (JIRP)
US	LEMON CREEK	3334	COM	20120921	20130925	11.6			-753	1110	38	Pelto M. (JIRP)
US	LOWER CURTIS	77	FXD	20101004	20111008				940	1580	76	Pelto M. (NCGCP)
US	LOWER CURTIS	77	FXD	20111008	20120928				-380	1640	62	Pelto M. (NCGCP)
US	LOWER CURTIS	77	FXD	20120928	20130929				-850	1650	44	Pelto M. (NCGCP)
US	LYNCH	81	FXD	20100930	20110930				980		88	Pelto M. (NCGCP)
US	LYNCH	81	FXD	20110930	20120930				510		78	Pelto M. (NCGCP)
US	LYNCH	81	FXD	20120930	20130922				-400		55	Pelto M. (NCGCP)
US	NISQUALLY	201	COM	20101006	20110929		3260	-2840	420	2675	53	Riedel J. (NCNP), Larrabee M. (NCNP)
US	NISQUALLY	201		2011	2012		2880	-3080	-200			Riedel J. (NCNP), Larrabee M. (NCNP)
US	NISQUALLY	201		2012	2013		2720	-4130	-1410			Riedel J. (NCNP), Larrabee M. (NCNP)
US	NOISY CREEK	1666	COM	20100921	20110919		4090	-2820	1280	1595	100	Riedel J. (NCNP), Larrabee M. (NCNP)
US	NOISY CREEK	1666		2011	2012		4040	-3420	620			Riedel J. (NCNP), Larrabee M. (NCNP)
US	NOISY CREEK	1666		2012	2013		3000	-3850	-850			Riedel J. (NCNP), Larrabee M. (NCNP)
US	NORTH KLAWATTI	1664	COM	20100921	20110920		3580	-2820	750	1998	79	Riedel J. (NCNP), Larrabee M. (NCNP)
US	NORTH KLAWATTI	1664		2011	2012		3980	-3340	640			Riedel J. (NCNP), Larrabee M. (NCNP)
US	NORTH KLAWATTI	1664		2012	2013		2910	-3820	-910			Riedel J. (NCNP), Larrabee M. (NCNP)
US	RAINBOW	79	FXD	20100927	20110929				1640	1480	92	Pelto M. (NCGCP)
US	RAINBOW	79	FXD	20110929	20120930				420	1660	76	Pelto M. (NCGCP)
US	RAINBOW	79	FXD	20120930	20130921				-1850	1775	38	Pelto M. (NCGCP)
US	SANDALEE	1667	COM	20100921	20110920		3230	-2090	1150	2010	90	Riedel J. (NCNP), Larrabee M. (NCNP)
US	SANDALEE	1667		2011	2012		3300	-2600	700			Riedel J. (NCNP), Larrabee M. (NCNP)
US	SANDALEE	1667		2012	2013		2860	-3100	-290			Riedel J. (NCNP), Larrabee M. (NCNP)
US	SHOLES	3295	FXD	20100927	20111008				1450		84	Pelto M. (NCGCP)
US	SHOLES	3295	FXD	20111008	20120930				340		69	Pelto M. (NCGCP)
US	SHOLES	3295	FXD	20120930	20130921				-1700		30	Pelto M. (NCGCP)
US	SILVER	1665	COM	20100921	20110919		2400	-1680	730	2030	100	Riedel J. (NCNP), Larrabee M. (NCNP)
US	SILVER	1665		2011	2012		2930	-2500	420			Riedel J. (NCNP), Larrabee M. (NCNP)
US	SILVER	1665		2012	2013		2890	-3250	-360			Riedel J. (NCNP), Larrabee M. (NCNP)
US	SOUTH CASCADE	205	COM	20101023	20111003	1.72	3810	-2600	1210	1760		Bidlake W. (USGS-T)
US	SOUTH CASCADE	205		2011	2012		3570	-3380	190			Bachmann M. (USGS-T)
US	TAKU	124	COM	20100920	20110915				-550	1025		Pelto M. (JIRP)
US	TAKU	124	COM	20110915	20120921				1040	860		Pelto M. (JIRP)
US	TAKU	124	COM	20120921	20130925				-180	1000		Pelto M. (JIRP)
US	WOLVERINE	94		2010	2011				-1210	1283		O'Neel S., March R. (USGS WRD), O'Neel S., March R. (USGS-F)
US	WOLVERINE	94	FLO	2011	2012	16.04			510	1110		O'Neel S. (USGS-F)
US	WOLVERINE	94	FLO	20120922	20130917	16	1900	-4200	-2300			O'Neel S. (USGS-F)
US	YAWNING	75	FXD	20100930	20111001				1220		90	Pelto M. (NCGCP)
US	YAWNING	75	FXD	20111001	20120928				-120		68	Pelto M. (NCGCP)
US	YAWNING	75	FXD	20120928	20130928				-1150		37	Pelto M. (NCGCP)

APPENDIX - Table 4

MASS BALANCE VERSUS ELEVATION DATA 2011–2013

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
YEAR	Balance year
ELEV FROM	Lower boundary of elevation interval in metre above sea level
ELEV TO	Upper boundary of elevation interval in metre above sea level
AREA	Area of elevation interval in square kilometre
BW	Specific winter balance of elevation interval in mm water equivalent
BS	Specific summer balance of elevation interval in mm water equivalent
BA	Specific annual balance of elevation interval in mm water equivalent

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AQ	BAHIA DEL DIABLO	2665	2011	562	630				200
AQ	BAHIA DEL DIABLO	2665	2011	488	562				700
AQ	BAHIA DEL DIABLO	2665	2011	412	488				430
AQ	BAHIA DEL DIABLO	2665	2011	338	412				240
AQ	BAHIA DEL DIABLO	2665	2011	262	338				-100
AQ	BAHIA DEL DIABLO	2665	2011	188	262				-300
AQ	BAHIA DEL DIABLO	2665	2011	112	188				-700
AQ	BAHIA DEL DIABLO	2665	2011	38	112				-1300
AQ	BAHIA DEL DIABLO	2665	2012	562	630				350
AQ	BAHIA DEL DIABLO	2665	2012	488	562				380
AQ	BAHIA DEL DIABLO	2665	2012	412	488				450
AQ	BAHIA DEL DIABLO	2665	2012	338	412				0
AQ	BAHIA DEL DIABLO	2665	2012	262	338				-200
AQ	BAHIA DEL DIABLO	2665	2012	188	262				-550
AQ	BAHIA DEL DIABLO	2665	2012	112	188				-750
AQ	BAHIA DEL DIABLO	2665	2012	38	112				-1500
AQ	BAHIA DEL DIABLO	2665	2013	562	630				250
AQ	BAHIA DEL DIABLO	2665	2013	488	562				500
AQ	BAHIA DEL DIABLO	2665	2013	412	488				470
AQ	BAHIA DEL DIABLO	2665	2013	338	412				400
AQ	BAHIA DEL DIABLO	2665	2013	262	338				50
AQ	BAHIA DEL DIABLO	2665	2013	188	262				-250
AQ	BAHIA DEL DIABLO	2665	2013	112	188				-500
AQ	BAHIA DEL DIABLO	2665	2013	38	112				-600
AR	MARTIAL ESTE	2000	2011	1160	1180	0.002	800	-630	170
AR	MARTIAL ESTE	2000	2011	1140	1160	0.005	900	-730	170
AR	MARTIAL ESTE	2000	2011	1120	1140	0.008	940	-745	195
AR	MARTIAL ESTE	2000	2011	1100	1120	0.012	940	-720	220
AR	MARTIAL ESTE	2000	2011	1080	1100	0.015	920	-810	110
AR	MARTIAL ESTE	2000	2011	1060	1080	0.016	780	-1055	-275
AR	MARTIAL ESTE	2000	2011	1040	1060	0.014	740	-1320	-580
AR	MARTIAL ESTE	2000	2011	1020	1040	0.011	700	-1780	-1080
AR	MARTIAL ESTE	2000	2011	1000	1020	0.008	620	-1890	-1270
AR	MARTIAL ESTE	2000	2011	980	1000	0.002	570	-1750	-1180
AR	MARTIAL ESTE	2000	2011	960	980	0.001	560	-1660	-1100
AR	MARTIAL ESTE	2000	2012	1160	1180	0.002	800	-630	170
AR	MARTIAL ESTE	2000	2012	1140	1160	0.005	900	-730	170
AR	MARTIAL ESTE	2000	2012	1120	1140	0.008	940	-745	195
AR	MARTIAL ESTE	2000	2012	1100	1120	0.012	940	-720	220
AR	MARTIAL ESTE	2000	2012	1080	1100	0.015	920	-810	110
AR	MARTIAL ESTE	2000	2012	1060	1080	0.016	780	-1055	-275
AR	MARTIAL ESTE	2000	2012	1040	1060	0.014	740	-1320	-580
AR	MARTIAL ESTE	2000	2012	1020	1040	0.011	700	-1780	-1080
AR	MARTIAL ESTE	2000	2012	1000	1020	0.008	620	-1890	-1270
AR	MARTIAL ESTE	2000	2012	980	1000	0.002	570	-1750	-1180
AR	MARTIAL ESTE	2000	2012	960	980	0.001	560	-1660	-1100
AR	MARTIAL ESTE	2000	2013	1160	1180	0.002	960	-650	310
AR	MARTIAL ESTE	2000	2013	1140	1160	0.005	960	-630	330
AR	MARTIAL ESTE	2000	2013	1120	1140	0.007	960	-610	350
AR	MARTIAL ESTE	2000	2013	1100	1120	0.011	960	-260	700
AR	MARTIAL ESTE	2000	2013	1080	1100	0.015	1500	-600	900
AR	MARTIAL ESTE	2000	2013	1060	1080	0.016	1150	-750	400
AR	MARTIAL ESTE	2000	2013	1040	1060	0.013	1095	-1370	-275
AR	MARTIAL ESTE	2000	2013	1020	1040	0.013	1040	-1540	-500
AR	MARTIAL ESTE	2000	2013	1000	1020	0.008	990	-1690	-700
AR	MARTIAL ESTE	2000	2013	980	1000	0.002	940	-1840	-900
AR	MARTIAL ESTE	2000	2013	960	980	0.001	890	-1990	-1100
AT	GOLDBERG K.	1305	2011	3050	3100	0.007	981	-2605	-1624
AT	GOLDBERG K.	1305	2011	3000	3050	0.045	1273	-2475	-1202
AT	GOLDBERG K.	1305	2011	2950	3000	0.086	1408	-2712	-1304
AT	GOLDBERG K.	1305	2011	2900	2950	0.101	1186	-2759	-1573
AT	GOLDBERG K.	1305	2011	2850	2900	0.053	1103	-3192	-2089
AT	GOLDBERG K.	1305	2011	2800	2850	0.012	1291	-3958	-2667
AT	GOLDBERG K.	1305	2011	2750	2800	0.005	1398	-2231	-833
AT	GOLDBERG K.	1305	2011	2700	2750	0.089	1405	-2035	-630
AT	GOLDBERG K.	1305	2011	2650	2700	0.342	1286	-3022	-1736
AT	GOLDBERG K.	1305	2011	2600	2650	0.285	1131	-3536	-2405
AT	GOLDBERG K.	1305	2011	2550	2600	0.029	1212	-3923	-2711
AT	GOLDBERG K.	1305	2011	2500	2550	0.012	1399	-4040	-2641
AT	GOLDBERG K.	1305	2011	2450	2500	0.042	1865	-3403	-1538
AT	GOLDBERG K.	1305	2011	2400	2450	0.091	1692	-4124	-2432
AT	GOLDBERG K.	1305	2011	2350	2400	0.032	1446	-4453	-3007
AT	GOLDBERG K.	1305	2012	3050	3100	0.004			-122
AT	GOLDBERG K.	1305	2012	3000	3050	0.036			-247
AT	GOLDBERG K.	1305	2012	2950	3000	0.083			-545
AT	GOLDBERG K.	1305	2012	2900	2950	0.092			-1690
AT	GOLDBERG K.	1305	2012	2850	2900	0.045			-2818
AT	GOLDBERG K.	1305	2012	2800	2850	0.006			-3214
AT	GOLDBERG K.	1305	2012	2750	2800	0.002			-131
AT	GOLDBERG K.	1305	2012	2700	2750	0.075			-281
AT	GOLDBERG K.	1305	2012	2650	2700	0.302			-1414
AT	GOLDBERG K.	1305	2012	2600	2650	0.282			-2167
AT	GOLDBERG K.	1305	2012	2550	2600	0.028			-2306
AT	GOLDBERG K.	1305	2012	2500	2550	0.002			-1532
AT	GOLDBERG K.	1305	2012	2450	2500	0.031			-847
AT	GOLDBERG K.	1305	2012	2400	2450	0.082			-1719
AT	GOLDBERG K.	1305	2012	2350	2400	0.029			-2367
AT	GOLDBERG K.	1305	2013	3050	3100	0.004	1310		57
AT	GOLDBERG K.	1305	2013	3000	3050	0.036	1554		121
AT	GOLDBERG K.	1305	2013	2950	3000	0.083	1549		8
AT	GOLDBERG K.	1305	2013	2900	2950	0.092	1630		-535
AT	GOLDBERG K.	1305	2013	2850	2900	0.045	1579		-1212
AT	GOLDBERG K.	1305	2013	2800	2850	0.006	1499		-1302
AT	GOLDBERG K.	1305	2013	2750	2800	0.002	1793		23
AT	GOLDBERG K.	1305	2013	2700	2750	0.075	2084		305
AT	GOLDBERG K.	1305	2013	2650	2700	0.302	1784		-238

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	GOLDBERG K.	1305	2013	2600	2650	0.282	1587		-1091
AT	GOLDBERG K.	1305	2013	2550	2600	0.028	1394		-975
AT	GOLDBERG K.	1305	2013	2500	2550	0.002	1884		-605
AT	GOLDBERG K.	1305	2013	2450	2500	0.031	2311		114
AT	GOLDBERG K.	1305	2013	2400	2450	0.082	1880		-553
AT	GOLDBERG K.	1305	2013	2350	2400	0.029	1753		-1735
AT	HALLSTAETTER G.	535	2011	2850	2900	0.01	2300	-2175	125
AT	HALLSTAETTER G.	535	2011	2800	2850	0.027	2300	-2271	29
AT	HALLSTAETTER G.	535	2011	2750	2800	0.036	2136	-2589	-453
AT	HALLSTAETTER G.	535	2011	2700	2750	0.168	1834	-2644	-810
AT	HALLSTAETTER G.	535	2011	2650	2700	0.327	1783	-2901	-1118
AT	HALLSTAETTER G.	535	2011	2600	2650	0.582	1723	-3219	-1496
AT	HALLSTAETTER G.	535	2011	2550	2600	0.494	1454	-3796	-2342
AT	HALLSTAETTER G.	535	2011	2500	2550	0.376	1463	-3513	-2050
AT	HALLSTAETTER G.	535	2011	2450	2500	0.364	1352	-3457	-2105
AT	HALLSTAETTER G.	535	2011	2400	2450	0.252	1197	-3638	-2441
AT	HALLSTAETTER G.	535	2011	2350	2400	0.198	1025	-4125	-3100
AT	HALLSTAETTER G.	535	2011	2300	2350	0.115	916	-4717	-3801
AT	HALLSTAETTER G.	535	2011	2250	2300	0.048	876	-5535	-4659
AT	HALLSTAETTER G.	535	2011	2200	2250	0.018	700	-5950	-5250
AT	HALLSTAETTER G.	535	2011	2150	2200	0	700	-5950	-5250
AT	HALLSTAETTER G.	535	2012	2850	2900	0.01	3504	-3126	378
AT	HALLSTAETTER G.	535	2012	2800	2850	0.027	3368	-3030	338
AT	HALLSTAETTER G.	535	2012	2750	2800	0.036	3221	-3150	71
AT	HALLSTAETTER G.	535	2012	2700	2750	0.168	3352	-3327	25
AT	HALLSTAETTER G.	535	2012	2650	2700	0.327	3099	-3038	61
AT	HALLSTAETTER G.	535	2012	2600	2650	0.582	2935	-3167	-232
AT	HALLSTAETTER G.	535	2012	2550	2600	0.494	2715	-3452	-737
AT	HALLSTAETTER G.	535	2012	2500	2550	0.376	2812	-4286	-1474
AT	HALLSTAETTER G.	535	2012	2450	2500	0.364	2601	-4370	-1769
AT	HALLSTAETTER G.	535	2012	2400	2450	0.252	2335	-5117	-2782
AT	HALLSTAETTER G.	535	2012	2350	2400	0.198	2191	-5169	-2978
AT	HALLSTAETTER G.	535	2012	2300	2350	0.115	1890	-5755	-3865
AT	HALLSTAETTER G.	535	2012	2250	2300	0.048	1673	-6096	-4423
AT	HALLSTAETTER G.	535	2012	2200	2250	0.018	1362	-6793	-5431
AT	HALLSTAETTER G.	535	2012	2150	2200	0	1300	-7050	-5750
AT	HALLSTAETTER G.	535	2013	2850	2900	0.01	2696	-850	1846
AT	HALLSTAETTER G.	535	2013	2800	2850	0.027	2526	-1317	1209
AT	HALLSTAETTER G.	535	2013	2750	2800	0.036	2282	-1658	624
AT	HALLSTAETTER G.	535	2013	2700	2750	0.168	1964	-629	1335
AT	HALLSTAETTER G.	535	2013	2650	2700	0.327	1859	-1026	833
AT	HALLSTAETTER G.	535	2013	2600	2650	0.582	1932	-1292	640
AT	HALLSTAETTER G.	535	2013	2550	2600	0.494	1750	-1813	-63
AT	HALLSTAETTER G.	535	2013	2500	2550	0.376	1648	-2150	-502
AT	HALLSTAETTER G.	535	2013	2450	2500	0.364	1507	-2551	-1044
AT	HALLSTAETTER G.	535	2013	2400	2450	0.252	1420	-2939	-1519
AT	HALLSTAETTER G.	535	2013	2350	2400	0.198	1260	-3352	-2092
AT	HALLSTAETTER G.	535	2013	2300	2350	0.115	1076	-4058	-2982
AT	HALLSTAETTER G.	535	2013	2250	2300	0.048	886	-4721	-3835
AT	HALLSTAETTER G.	535	2013	2200	2250	0.018	622	-4872	-4250
AT	HALLSTAETTER G.	535	2013	2150	2200	0	500	-4750	-4250
AT	HINTEREIS FERNER	491	2011	3700	3715	0.005	1087	-1337	-250
AT	HINTEREIS FERNER	491	2011	3650	3700	0.023	1087	-1186	-99
AT	HINTEREIS FERNER	491	2011	3600	3650	0.028	1443	-1370	73
AT	HINTEREIS FERNER	491	2011	3550	3600	0.019	1173	-1048	125
AT	HINTEREIS FERNER	491	2011	3500	3550	0.021	858	-760	98
AT	HINTEREIS FERNER	491	2011	3450	3500	0.081	813	-802	11
AT	HINTEREIS FERNER	491	2011	3400	3450	0.129	1066	-1037	29
AT	HINTEREIS FERNER	491	2011	3350	3400	0.254	1346	-1229	117
AT	HINTEREIS FERNER	491	2011	3300	3350	0.383	1472	-1289	183
AT	HINTEREIS FERNER	491	2011	3250	3300	0.417	1465	-1515	-50
AT	HINTEREIS FERNER	491	2011	3200	3250	0.46	1290	-1562	-272
AT	HINTEREIS FERNER	491	2011	3150	3200	0.574	1157	-1491	-334
AT	HINTEREIS FERNER	491	2011	3100	3150	0.675	1129	-1638	-509
AT	HINTEREIS FERNER	491	2011	3050	3100	0.652	1052	-1887	-835
AT	HINTEREIS FERNER	491	2011	3000	3050	0.496	946	-2158	-1212
AT	HINTEREIS FERNER	491	2011	2950	3000	0.445	907	-2418	-1511
AT	HINTEREIS FERNER	491	2011	2900	2950	0.447	883	-2868	-1985
AT	HINTEREIS FERNER	491	2011	2850	2900	0.416	833	-3383	-2550
AT	HINTEREIS FERNER	491	2011	2800	2850	0.223	734	-3508	-2774
AT	HINTEREIS FERNER	491	2011	2750	2800	0.378	593	-3778	-3185
AT	HINTEREIS FERNER	491	2011	2700	2750	0.257	407	-4425	-4018
AT	HINTEREIS FERNER	491	2011	2650	2700	0.199	226	-5089	-4863
AT	HINTEREIS FERNER	491	2011	2600	2650	0.169	174	-5503	-5329
AT	HINTEREIS FERNER	491	2011	2550	2600	0.087	0	-6136	-6136
AT	HINTEREIS FERNER	491	2011	2500	2550	0.02	0	-6670	-6670
AT	HINTEREIS FERNER	491	2012	3700	3715	0.004			250
AT	HINTEREIS FERNER	491	2012	3650	3700	0.021			250
AT	HINTEREIS FERNER	491	2012	3600	3650	0.027			250
AT	HINTEREIS FERNER	491	2012	3550	3600	0.020			163
AT	HINTEREIS FERNER	491	2012	3500	3550	0.019			41
AT	HINTEREIS FERNER	491	2012	3450	3500	0.071			221
AT	HINTEREIS FERNER	491	2012	3400	3450	0.089			142
AT	HINTEREIS FERNER	491	2012	3350	3400	0.267			-92
AT	HINTEREIS FERNER	491	2012	3300	3350	0.382			-129
AT	HINTEREIS FERNER	491	2012	3250	3300	0.409			-315
AT	HINTEREIS FERNER	491	2012	3200	3250	0.454			-365
AT	HINTEREIS FERNER	491	2012	3150	3200	0.566			-550
AT	HINTEREIS FERNER	491	2012	3100	3150	0.665			-698
AT	HINTEREIS FERNER	491	2012	3050	3100	0.651			-967
AT	HINTEREIS FERNER	491	2012	3000	3050	0.524			-1304
AT	HINTEREIS FERNER	491	2012	2950	3000	0.441			-1531
AT	HINTEREIS FERNER	491	2012	2900	2950	0.457			-2022
AT	HINTEREIS FERNER	491	2012	2850	2900	0.395			-2633
AT	HINTEREIS FERNER	491	2012	2800	2850	0.254			-3030
AT	HINTEREIS FERNER	491	2012	2750	2800	0.320			-2949

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	HINTEREIS FERNER	491	2012	2700	2750	0.295			-3484
AT	HINTEREIS FERNER	491	2012	2650	2700	0.203			-4464
AT	HINTEREIS FERNER	491	2012	2600	2650	0.173			-5521
AT	HINTEREIS FERNER	491	2012	2550	2600	0.123			-6094
AT	HINTEREIS FERNER	491	2012	2500	2550	0.045			-7021
AT	HINTEREIS FERNER	491	2012	2450	2500	0.003			-7250
AT	HINTEREIS FERNER	491	2013	3700	3715	0.005	975	-1002	-27
AT	HINTEREIS FERNER	491	2013	3650	3700	0.022	975	-992	-17
AT	HINTEREIS FERNER	491	2013	3600	3650	0.028	975	-754	221
AT	HINTEREIS FERNER	491	2013	3550	3600	0.019	975	-627	348
AT	HINTEREIS FERNER	491	2013	3500	3550	0.02	979	-604	375
AT	HINTEREIS FERNER	491	2013	3450	3500	0.074	1080	-772	307
AT	HINTEREIS FERNER	491	2013	3400	3450	0.128	1316	-1075	241
AT	HINTEREIS FERNER	491	2013	3350	3400	0.255	1493	-942	551
AT	HINTEREIS FERNER	491	2013	3300	3350	0.386	1780	-1015	765
AT	HINTEREIS FERNER	491	2013	3250	3300	0.41	1761	-1168	593
AT	HINTEREIS FERNER	491	2013	3200	3250	0.442	1663	-1335	328
AT	HINTEREIS FERNER	491	2013	3150	3200	0.562	1567	-1225	342
AT	HINTEREIS FERNER	491	2013	3100	3150	0.659	1461	-1116	345
AT	HINTEREIS FERNER	491	2013	3050	3100	0.632	1435	-1279	155
AT	HINTEREIS FERNER	491	2013	3000	3050	0.513	1410	-1531	-121
AT	HINTEREIS FERNER	491	2013	2950	3000	0.433	1301	-1666	-365
AT	HINTEREIS FERNER	491	2013	2900	2950	0.453	1261	-1783	-522
AT	HINTEREIS FERNER	491	2013	2850	2900	0.372	1240	-2043	-802
AT	HINTEREIS FERNER	491	2013	2800	2850	0.277	1123	-2388	-1265
AT	HINTEREIS FERNER	491	2013	2750	2800	0.279	985	-2850	-1865
AT	HINTEREIS FERNER	491	2013	2700	2750	0.311	905	-3395	-2490
AT	HINTEREIS FERNER	491	2013	2650	2700	0.197	768	-4055	-3287
AT	HINTEREIS FERNER	491	2013	2600	2650	0.167	645	-4858	-4212
AT	HINTEREIS FERNER	491	2013	2550	2600	0.143	479	-5085	-4606
AT	HINTEREIS FERNER	491	2013	2500	2550	0.075	287	-5697	-5411
AT	HINTEREIS FERNER	491	2013	2453	2500	0.019	261	-6305	-6044
AT	JAMTAL F.	480	2011	3100	3200	0.004	796	-1075	-279
AT	JAMTAL F.	480	2011	3000	3100	0.223	948	-1476	-529
AT	JAMTAL F.	480	2011	2900	3000	0.705	974	-1641	-667
AT	JAMTAL F.	480	2011	2800	2900	0.677	853	-1908	-1055
AT	JAMTAL F.	480	2011	2700	2800	0.666	980	-2378	-1398
AT	JAMTAL F.	480	2011	2600	2700	0.531	961	-3086	-2125
AT	JAMTAL F.	480	2011	2500	2600	0.302	938	-4128	-3190
AT	JAMTAL F.	480	2011	2400	2500	0.063	912	-4430	-3518
AT	JAMTAL F.	480	2012	3100	3200	0.004	1193	-1443	-250
AT	JAMTAL F.	480	2012	3000	3100	0.223	1193	-1678	-485
AT	JAMTAL F.	480	2012	2900	3000	0.702	1204	-1701	-497
AT	JAMTAL F.	480	2012	2800	2900	0.671	1165	-2051	-886
AT	JAMTAL F.	480	2012	2700	2800	0.66	1233	-2347	-1114
AT	JAMTAL F.	480	2012	2600	2700	0.497	1176	-2971	-1795
AT	JAMTAL F.	480	2012	2500	2600	0.287	1174	-3537	-2363
AT	JAMTAL F.	480	2012	2400	2500	0.062	916	-4306	-3390
AT	JAMTAL F.	480	2013	3100	3200	0.004	872	-756	116
AT	JAMTAL F.	480	2013	3000	3100	0.223	1193	-1292	-99
AT	JAMTAL F.	480	2013	2900	3000	0.702	1204	-1211	-7
AT	JAMTAL F.	480	2013	2800	2900	0.671	1165	-1415	-250
AT	JAMTAL F.	480	2013	2700	2800	0.66	1233	-1749	-516
AT	JAMTAL F.	480	2013	2600	2700	0.496	1176	-2029	-853
AT	JAMTAL F.	480	2013	2500	2600	0.28	1174	-3085	-1911
AT	JAMTAL F.	480	2013	2400	2500	0.061	916	-3439	-2523
AT	KESSELWAND FERNER	507	2011	3450	3500	0.021			-250
AT	KESSELWAND FERNER	507	2011	3400	3450	0.026			-250
AT	KESSELWAND FERNER	507	2011	3350	3400	0.044			-124
AT	KESSELWAND FERNER	507	2011	3300	3350	0.256			17
AT	KESSELWAND FERNER	507	2011	3250	3300	0.599			21
AT	KESSELWAND FERNER	507	2011	3200	3250	0.827			-183
AT	KESSELWAND FERNER	507	2011	3150	3200	0.7			-601
AT	KESSELWAND FERNER	507	2011	3100	3150	0.515			-917
AT	KESSELWAND FERNER	507	2011	3050	3100	0.397			-1204
AT	KESSELWAND FERNER	507	2011	3000	3050	0.133			-2214
AT	KESSELWAND FERNER	507	2011	2950	3000	0.077			-3796
AT	KESSELWAND FERNER	507	2011	2900	2950	0.033			-5005
AT	KESSELWAND FERNER	507	2011	2850	2900	0.008			-5749
AT	KESSELWAND FERNER	507	2011	2800	2850	0.023			-5750
AT	KLEINFLEISS K.	547	2011	3050	3100	0.000	1357	-2164	-807
AT	KLEINFLEISS K.	547	2011	3000	3050	0.032	1443	-2152	-710
AT	KLEINFLEISS K.	547	2011	2950	3000	0.086	1323	-2393	-1069
AT	KLEINFLEISS K.	547	2011	2900	2950	0.111	1309	-2469	-1160
AT	KLEINFLEISS K.	547	2011	2850	2900	0.207	1310	-2145	-835
AT	KLEINFLEISS K.	547	2011	2800	2850	0.244	1144	-2866	-1722
AT	KLEINFLEISS K.	547	2011	2750	2800	0.122	767	-3717	-2950
AT	KLEINFLEISS K.	547	2011	2700	2750	0.020	629	-3963	-3334
AT	KLEINFLEISS K.	547	2011	2650	2700	0			
AT	KLEINFLEISS K.	547	2011	2600	2650	0			
AT	KLEINFLEISS K.	547	2011	2550	2600	0			
AT	KLEINFLEISS K.	547	2012	3000	3050	0.029			-139
AT	KLEINFLEISS K.	547	2012	2950	3000	0.080			-724
AT	KLEINFLEISS K.	547	2012	2900	2950	0.101			-867
AT	KLEINFLEISS K.	547	2012	2850	2900	0.193			-292
AT	KLEINFLEISS K.	547	2012	2800	2850	0.242			-1523
AT	KLEINFLEISS K.	547	2012	2750	2800	0.119			-2706
AT	KLEINFLEISS K.	547	2012	2700	2750	0.016			-3444
AT	KLEINFLEISS K.	547	2013	3000	3050	0.029	1378		15
AT	KLEINFLEISS K.	547	2013	2950	3000	0.080	1260		26
AT	KLEINFLEISS K.	547	2013	2900	2950	0.101	1503		134
AT	KLEINFLEISS K.	547	2013	2850	2900	0.193	1657		466
AT	KLEINFLEISS K.	547	2013	2800	2850	0.242	1426		-125
AT	KLEINFLEISS K.	547	2013	2750	2800	0.119	1124		-1598
AT	KLEINFLEISS K.	547	2013	2700	2750	0.016	826		-2323
AT	OBERSULZBACH K.	583	2013	3350	3400	0.02	1700	-124	1576

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	OBERSULZBACH K.	583	2013	3300	3350	0.069	1700	-121	1579
AT	OBERSULZBACH K.	583	2013	3250	3300	0.062	1700	-144	1556
AT	OBERSULZBACH K.	583	2013	3200	3250	0.085	2032	-676	1356
AT	OBERSULZBACH K.	583	2013	3150	3200	0.171	1402	-294	1108
AT	OBERSULZBACH K.	583	2013	3100	3150	0.156	1573	-943	630
AT	OBERSULZBACH K.	583	2013	3050	3100	0.089	1700	-1348	352
AT	OBERSULZBACH K.	583	2013	3000	3050	0.084	1654	-1358	296
AT	OBERSULZBACH K.	583	2013	2950	3000	0.124	1567	-1336	231
AT	OBERSULZBACH K.	583	2013	2900	2950	0.225	1458	-1479	-21
AT	OBERSULZBACH K.	583	2013	2850	2900	0.301	1366	-1604	-238
AT	OBERSULZBACH K.	583	2013	2800	2850	0.133	1151	-1654	-503
AT	OBERSULZBACH K.	583	2013	2750	2800	0.155	1074	-2575	-1501
AT	OBERSULZBACH K.	583	2013	2700	2750	0.094	1041	-3223	-2182
AT	OBERSULZBACH K.	583	2013	2650	2700	0.045	987	-3237	-2250
AT	OBERSULZBACH K.	583	2013	2600	2650	0.083	1046	-3296	-2250
AT	OBERSULZBACH K.	583	2013	2550	2600	0.141	789	-3270	-2481
AT	OBERSULZBACH K.	583	2013	2500	2550	0.073	435	-3213	-2778
AT	OBERSULZBACH K.	583	2013	2450	2500	0.032	300	-3522	-3222
AT	OBERSULZBACH K.	583	2013	2400	2450	0.002	300	-3550	-3250
AT	PASTERZE	566	2011	3500	3600	0.003			50
AT	PASTERZE	566	2011	3400	3500	0.191			99
AT	PASTERZE	566	2011	3300	3400	0.704			150
AT	PASTERZE	566	2011	3200	3300	1.679			312
AT	PASTERZE	566	2011	3100	3200	2.868			379
AT	PASTERZE	566	2011	3000	3100	3.089			411
AT	PASTERZE	566	2011	2900	3000	2.383			-124
AT	PASTERZE	566	2011	2800	2900	1.372			-1281
AT	PASTERZE	566	2011	2700	2800	0.853			-1968
AT	PASTERZE	566	2011	2600	2700	0.583			-2322
AT	PASTERZE	566	2011	2500	2600	0.434			-3048
AT	PASTERZE	566	2011	2400	2500	0.543			-4571
AT	PASTERZE	566	2011	2300	2400	1.139			-5116
AT	PASTERZE	566	2011	2200	2300	1.242			-5576
AT	PASTERZE	566	2011	2100	2200	0.620			-6218
AT	PASTERZE	566	2011	2000	2100	0.007			-4049
AT	PASTERZE	566	2012	3500	3600	0.003			52
AT	PASTERZE	566	2012	3400	3500	0.191			108
AT	PASTERZE	566	2012	3300	3400	0.704			153
AT	PASTERZE	566	2012	3200	3300	1.679			365
AT	PASTERZE	566	2012	3100	3200	2.868			612
AT	PASTERZE	566	2012	3000	3100	3.089			503
AT	PASTERZE	566	2012	2900	3000	2.383			100
AT	PASTERZE	566	2012	2800	2900	1.372			-1873
AT	PASTERZE	566	2012	2700	2800	0.853			-2317
AT	PASTERZE	566	2012	2600	2700	0.583			-2230
AT	PASTERZE	566	2012	2500	2600	0.434			-2927
AT	PASTERZE	566	2012	2400	2500	0.543			-4197
AT	PASTERZE	566	2012	2300	2400	1.138			-5274
AT	PASTERZE	566	2012	2200	2300	1.242			-6220
AT	PASTERZE	566	2012	2100	2200	0.62			-6630
AT	PASTERZE	566	2012	2000	2100	0.007			-3744
AT	PASTERZE	566	2013	3500	3600	0.000			11
AT	PASTERZE	566	2013	3400	3500	0.141			184
AT	PASTERZE	566	2013	3300	3400	0.647			430
AT	PASTERZE	566	2013	3200	3300	1.547			608
AT	PASTERZE	566	2013	3100	3200	2.640			836
AT	PASTERZE	566	2013	3000	3100	3.118			930
AT	PASTERZE	566	2013	2900	3000	2.297			600
AT	PASTERZE	566	2013	2800	2900	1.398			-838
AT	PASTERZE	566	2013	2700	2800	0.713			-1009
AT	PASTERZE	566	2013	2600	2700	0.453			-1886
AT	PASTERZE	566	2013	2500	2600	0.287			-3012
AT	PASTERZE	566	2013	2400	2500	0.237			-3964
AT	PASTERZE	566	2013	2300	2400	0.703			-4375
AT	PASTERZE	566	2013	2200	2300	1.067			-4209
AT	PASTERZE	566	2013	2100	2200	0.899			-5136
AT	PASTERZE	566	2013	2000	2100	0.139			-5616
AT	VERNAGT FERNER	489	2011	3550	3600	0.004	858	-882	-24
AT	VERNAGT FERNER	489	2011	3500	3550	0.011	858	-859	-1
AT	VERNAGT FERNER	489	2011	3450	3500	0.148	858	-571	287
AT	VERNAGT FERNER	489	2011	3400	3450	0.174	858	-771	87
AT	VERNAGT FERNER	489	2011	3350	3400	0.207	854	-838	16
AT	VERNAGT FERNER	489	2011	3300	3350	0.341	844	-800	44
AT	VERNAGT FERNER	489	2011	3250	3300	0.814	829	-769	60
AT	VERNAGT FERNER	489	2011	3200	3250	0.892	808	-957	-149
AT	VERNAGT FERNER	489	2011	3150	3200	1.111	782	-1214	-432
AT	VERNAGT FERNER	489	2011	3100	3150	1.159	750	-1500	-750
AT	VERNAGT FERNER	489	2011	3050	3100	1.033	713	-1937	-1224
AT	VERNAGT FERNER	489	2011	3000	3050	0.911	671	-2416	-1745
AT	VERNAGT FERNER	489	2011	2950	3000	0.571	624	-3189	-2565
AT	VERNAGT FERNER	489	2011	2900	2950	0.389	571	-3948	-3377
AT	VERNAGT FERNER	489	2011	2850	2900	0.118	512	-4223	-3711
AT	VERNAGT FERNER	489	2011	2800	2850	0.035	448	-4319	-3871
AT	VERNAGT FERNER	489	2011	2750	2800	0.000	448	-4251	-3803
AT	VERNAGT FERNER	489	2012	3600	3650	0	959	-849	0
AT	VERNAGT FERNER	489	2012	3550	3600	0.004	959	-903	-54
AT	VERNAGT FERNER	489	2012	3500	3550	0.011	959	-876	-27
AT	VERNAGT FERNER	489	2012	3450	3500	0.145	959	-576	273
AT	VERNAGT FERNER	489	2012	3400	3450	0.17	968	-779	99
AT	VERNAGT FERNER	489	2012	3350	3400	0.193	973	-918	-18
AT	VERNAGT FERNER	489	2012	3300	3350	0.313	973	-938	-23
AT	VERNAGT FERNER	489	2012	3250	3300	0.786	968	-955	-33
AT	VERNAGT FERNER	489	2012	3200	3250	0.856	958	-1255	-333
AT	VERNAGT FERNER	489	2012	3150	3200	1.087	944	-1659	-743
AT	VERNAGT FERNER	489	2012	3100	3150	1.137	925	-2085	-1184
AT	VERNAGT FERNER	489	2012	3050	3100	1.022	901	-2455	-1575

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	VERNAGT FERNER	489	2012	3000	3050	0.902	873	-2901	-2050
AT	VERNAGT FERNER	489	2012	2950	3000	0.561	840	-3731	-2915
AT	VERNAGT FERNER	489	2012	2900	2950	0.319	802	-4083	-3311
AT	VERNAGT FERNER	489	2012	2850	2900	0.045	759	-4090	-3368
AT	VERNAGT FERNER	489	2013	3600	3650	0			0
AT	VERNAGT FERNER	489	2013	3550	3600	0.004			340
AT	VERNAGT FERNER	489	2013	3500	3550	0.011			751
AT	VERNAGT FERNER	489	2013	3450	3500	0.145			512
AT	VERNAGT FERNER	489	2013	3400	3450	0.17			396
AT	VERNAGT FERNER	489	2013	3350	3400	0.193			457
AT	VERNAGT FERNER	489	2013	3300	3350	0.313			275
AT	VERNAGT FERNER	489	2013	3250	3300	0.786			152
AT	VERNAGT FERNER	489	2013	3200	3250	0.856			93
AT	VERNAGT FERNER	489	2013	3150	3200	1.087			-58
AT	VERNAGT FERNER	489	2013	3100	3150	1.137			-363
AT	VERNAGT FERNER	489	2013	3050	3100	1.022			-621
AT	VERNAGT FERNER	489	2013	3000	3050	0.902			-1044
AT	VERNAGT FERNER	489	2013	2950	3000	0.561			-1624
AT	VERNAGT FERNER	489	2013	2900	2950	0.319			-2060
AT	VERNAGT FERNER	489	2013	2850	2900	0.045			-2510
AT	WURTEN K.	545	2011	3100	3150				
AT	WURTEN K.	545	2011	3050	3100				
AT	WURTEN K.	545	2011	3000	3050				
AT	WURTEN K.	545	2011	2950	3000				
AT	WURTEN K.	545	2011	2900	2950				
AT	WURTEN K.	545	2011	2850	2900				
AT	WURTEN K.	545	2011	2800	2850				
AT	WURTEN K.	545	2011	2750	2800	0.001	1400	-1349	51
AT	WURTEN K.	545	2011	2700	2750	0.016	1400	-1466	-65
AT	WURTEN K.	545	2011	2650	2700	0.129	1356	-2241	-885
AT	WURTEN K.	545	2011	2600	2650	0.122	1063	-3389	-2326
AT	WURTEN K.	545	2011	2550	2600	0.066	985	-3832	-2847
AT	WURTEN K.	545	2011	2500	2550	0.007	1287	-4615	-3328
AT	WURTEN K.	545	2012	2700	2750	0.002			16
AT	WURTEN K.	545	2012	2650	2700	0.098			-280
AT	WURTEN K.	545	2012	2600	2650	0.123			-2019
AT	WURTEN K.	545	2012	2550	2600	0.082			-3190
AT	WURTEN K.	545	2012	2500	2550	0.011			-3295
AT	WURTEN K.	545	2013	2700	2750	0.002			357
AT	WURTEN K.	545	2013	2650	2700	0.098			78
AT	WURTEN K.	545	2013	2600	2650	0.123			-704
AT	WURTEN K.	545	2013	2550	2600	0.082			-1558
AT	WURTEN K.	545	2013	2500	2550	0.011			-1951
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3400	3450	0.024	370	-1120	-750
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3350	3400	0.118	749	-933	-184
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3300	3350	0.199	679	-704	-25
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3250	3300	0.293	788	-944	-156
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3200	3250	0.364	1159	-1181	-22
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3150	3200	0.281	1062	-1382	-320
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3100	3150	0.238	1006	-1795	-789
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3050	3100	0.243	854	-2283	-1429
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	3000	3050	0.271	692	-2774	-2082
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2950	3000	0.248	669	-3095	-2426
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2900	2950	0.266	650	-3315	-2665
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2850	2900	0.179	668	-3301	-2633
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2800	2850	0.104	748	-3937	-3189
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2750	2800	0.065	643	-4258	-3615
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2700	2750	0.038	500	-5217	-4717
AT	ZETTALUNITZ/MULLWITZ K.	578	2011	2650	2700	0	500	-5250	-4750
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3400	3450	0.024	500	-1750	-1250
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3350	3400	0.118	761	-1611	-850
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3300	3350	0.199	1501	-1955	-454
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3250	3300	0.293	1731	-2036	-305
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3200	3250	0.364	1973	-2212	-239
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3150	3200	0.281	1967	-2349	-382
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3100	3150	0.238	1737	-2527	-790
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3050	3100	0.243	1507	-2771	-1264
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	3000	3050	0.271	1316	-3213	-1897
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2950	3000	0.248	1353	-3640	-2287
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2900	2950	0.266	1258	-3632	-2374
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2850	2900	0.179	1144	-3526	-2382
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2800	2850	0.104	1187	-3249	-2062
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2750	2800	0.065	806	-3952	-3146
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2700	2750	0.038	500	-5247	-4747
AT	ZETTALUNITZ/MULLWITZ K.	578	2012	2650	2700	0	500	-5250	-4750
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3400	3450	0.024	900	-1150	-250
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3350	3400	0.118	954	-909	45
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3300	3350	0.199	1096	-662	434
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3250	3300	0.293	1299	-1302	-3
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3200	3250	0.364	1701	-1191	510
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3150	3200	0.281	1769	-1351	418
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3100	3150	0.238	1711	-1679	32
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3050	3100	0.243	1620	-1840	-220
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	3000	3050	0.271	1463	-1886	-423
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2950	3000	0.248	1372	-1936	-564
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2900	2950	0.266	1357	-2330	-973
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2850	2900	0.179	1340	-2269	-929
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2800	2850	0.104	1378	-2268	-890
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2750	2800	0.065	1088	-2802	-1714
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2700	2750	0.038	956	-3464	-2508
AT	ZETTALUNITZ/MULLWITZ K.	578	2013	2650	2700	0	1100	-3850	-2750
BO	CHARQUINI SUR	2667	2011	5200	5250	0.057			14
BO	CHARQUINI SUR	2667	2011	5150	5200	0.072			-223
BO	CHARQUINI SUR	2667	2011	5100	5150	0.111			-239
BO	CHARQUINI SUR	2667	2011	5050	5100	0.056			-281
BO	CHARQUINI SUR	2667	2011	4950	5050	0.023			-487

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
BO	CHARQUINI SUR	2667	2012	5350	5400	0.002			1960
BO	CHARQUINI SUR	2667	2012	5300	5350	0.011			1960
BO	CHARQUINI SUR	2667	2012	5250	5300	0.037			978
BO	CHARQUINI SUR	2667	2012	5200	5250	0.048			4
BO	CHARQUINI SUR	2667	2012	5150	5200	0.093			-332
BO	CHARQUINI SUR	2667	2012	5100	5150	0.088			-436
BO	CHARQUINI SUR	2667	2012	5050	5100	0.027			-809
BO	CHARQUINI SUR	2667	2012	5000	5050	0.005			-1929
BO	CHARQUINI SUR	2667	2013	5350	5400	0.002			870
BO	CHARQUINI SUR	2667	2013	5300	5350	0.011			870
BO	CHARQUINI SUR	2667	2013	5250	5300	0.037			870
BO	CHARQUINI SUR	2667	2013	5200	5250	0.048			1010
BO	CHARQUINI SUR	2667	2013	5150	5200	0.093			-142
BO	CHARQUINI SUR	2667	2013	5100	5150	0.087			-421
BO	CHARQUINI SUR	2667	2013	5050	5100	0.026			-568
BO	CHARQUINI SUR	2667	2013	5000	5050	0.005			-1968
BO	ZONGO	1503	2011	5900	6000	0.063			918
BO	ZONGO	1503	2011	5800	5900	0.105			918
BO	ZONGO	1503	2011	5700	5800	0.187			918
BO	ZONGO	1503	2011	5600	5700	0.261			762
BO	ZONGO	1503	2011	5500	5600	0.296			605
BO	ZONGO	1503	2011	5400	5500	0.219			105
BO	ZONGO	1503	2011	5300	5400	0.156			-396
BO	ZONGO	1503	2011	5200	5300	0.138			-896
BO	ZONGO	1503	2011	5100	5200	0.259			-1396
BO	ZONGO	1503	2011	5000	5100	0.188			-2514
BO	ZONGO	1503	2011	4900	5000	0.032			-4052
BO	ZONGO	1503	2012	5900	6000	0.063			1763
BO	ZONGO	1503	2012	5800	5900	0.105			1763
BO	ZONGO	1503	2012	5700	5800	0.188			1763
BO	ZONGO	1503	2012	5600	5700	0.261			1035
BO	ZONGO	1503	2012	5500	5600	0.296			554
BO	ZONGO	1503	2012	5400	5500	0.219			72
BO	ZONGO	1503	2012	5300	5400	0.156			-409
BO	ZONGO	1503	2012	5200	5300	0.138			-891
BO	ZONGO	1503	2012	5100	5200	0.258			-2791
BO	ZONGO	1503	2012	5000	5100	0.185			-4395
BO	ZONGO	1503	2012	4900	5000	0.029			-6097
BO	ZONGO	1503	2013	5900	6000	0.063			1183
BO	ZONGO	1503	2013	5800	5900	0.105			1183
BO	ZONGO	1503	2013	5700	5800	0.188			1183
BO	ZONGO	1503	2013	5600	5700	0.261			1183
BO	ZONGO	1503	2013	5500	5600	0.296			777
BO	ZONGO	1503	2013	5400	5500	0.219			370
BO	ZONGO	1503	2013	5300	5400	0.156			96
BO	ZONGO	1503	2013	5200	5300	0.138			-397
BO	ZONGO	1503	2013	5100	5200	0.258			-974
BO	ZONGO	1503	2013	5000	5100	0.184			-2787
BO	ZONGO	1503	2013	4900	5000	0.029			-6240
CA	WHITE	0	2011	1700	1782	0.15			451
CA	WHITE	0	2011	1600	1700	0.46			451
CA	WHITE	0	2011	1500	1600	1.76			441
CA	WHITE	0	2011	1400	1500	4.25			101
CA	WHITE	0	2011	1300	1400	6.25			-332
CA	WHITE	0	2011	1200	1300	5.85			-691
CA	WHITE	0	2011	1100	1200	5.16			-989
CA	WHITE	0	2011	1000	1100	3.59			-1240
CA	WHITE	0	2011	900	1000	2.66			-1455
CA	WHITE	0	2011	800	900	2.02			-1648
CA	WHITE	0	2011	700	800	1.41			-1831
CA	WHITE	0	2011	600	700	1.49			-2018
CA	WHITE	0	2011	500	600	0.98			-2222
CA	WHITE	0	2011	400	500	0.8			-2454
CA	WHITE	0	2011	300	400	1.1			-2728
CA	WHITE	0	2011	200	300	0.92			-3057
CA	WHITE	0	2011	100	200	0.52			-3452
CA	WHITE	0	2011	85	100	0.02			-3613
CH	ADLER	3801	2012	4100	4200	0.004	508	-156	352
CH	ADLER	3801	2012	4000	4100	0.019	589	-181	408
CH	ADLER	3801	2012	3900	4000	0.069	759	-179	580
CH	ADLER	3801	2012	3800	3900	0.111	866	-214	652
CH	ADLER	3801	2012	3700	3800	0.239	960	-416	544
CH	ADLER	3801	2012	3600	3700	0.298	870	-820	50
CH	ADLER	3801	2012	3500	3600	0.278	932	-1112	-180
CH	ADLER	3801	2012	3400	3500	0.319	954	-1738	-784
CH	ADLER	3801	2012	3300	3400	0.42	1010	-2532	-1522
CH	ADLER	3801	2012	3200	3300	0.253	1012	-3212	-2200
CH	ADLER	3801	2012	3100	3200	0.121	1012	-3342	-2330
CH	ADLER	3801	2012	3000	3100	0.09	931	-3825	-2894
CH	ADLER	3801	2012	2900	3000	0.008	871	-4745	-3874
CH	ADLER	3801	2013	4100	4200	0.004	455	289	744
CH	ADLER	3801	2013	4000	4100	0.019	506	307	813
CH	ADLER	3801	2013	3900	4000	0.069	551	301	852
CH	ADLER	3801	2013	3800	3900	0.111	583	265	848
CH	ADLER	3801	2013	3700	3800	0.239	662	181	843
CH	ADLER	3801	2013	3600	3700	0.298	664	-44	620
CH	ADLER	3801	2013	3500	3600	0.278	760	-178	582
CH	ADLER	3801	2013	3400	3500	0.319	840	-428	412
CH	ADLER	3801	2013	3300	3400	0.42	709	-965	-256
CH	ADLER	3801	2013	3200	3300	0.253	708	-1414	-706
CH	ADLER	3801	2013	3100	3200	0.121	674	-1765	-1091
CH	ADLER	3801	2013	3000	3100	0.09	615	-2353	-1738
CH	ADLER	3801	2013	2900	3000	0.008	490	-3290	-2800
CH	BASODINO	463	2012	3000	3100	0.48	1750		-1040
CH	BASODINO	463	2012	2900	3000	0.56	1900		-1520
CH	BASODINO	463	2012	2800	2900	0.55	2050		-1760

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CH	BASODINO	463	2012	2700	2800	0.45	2000		-2500
CH	BASODINO	463	2012	2600	2700	0.24	2250		-2700
CH	BASODINO	463	2013	3100	3200	0.059	1631		317
CH	BASODINO	463	2013	3000	3100	0.314	1949		462
CH	BASODINO	463	2013	2900	3000	0.528	2052		464
CH	BASODINO	463	2013	2800	2900	0.429	1888		-185
CH	BASODINO	463	2013	2700	2800	0.36	1715		-316
CH	BASODINO	463	2013	2600	2700	0.141	1643		-405
CH	BASODINO	463	2013	2500	2600	0.01	1661		-618
CH	FINDELEN	389	2012	3900	4000	0.011	617	-348	269
CH	FINDELEN	389	2012	3800	3900	0.252	763	-445	318
CH	FINDELEN	389	2012	3700	3800	0.3	811	-545	266
CH	FINDELEN	389	2012	3600	3700	0.439	1235	-585	650
CH	FINDELEN	389	2012	3500	3600	1.609	1351	-801	550
CH	FINDELEN	389	2012	3400	3500	2.357	1522	-996	526
CH	FINDELEN	389	2012	3300	3400	1.945	1445	-971	474
CH	FINDELEN	389	2012	3200	3300	1.835	1301	-1895	-594
CH	FINDELEN	389	2012	3100	3200	1.737	1295	-2632	-1337
CH	FINDELEN	389	2012	3000	3100	0.982	1026	-3296	-2270
CH	FINDELEN	389	2012	2900	3000	0.593	924	-3958	-3034
CH	FINDELEN	389	2012	2800	2900	0.354	862	-4379	-3517
CH	FINDELEN	389	2012	2700	2800	0.239	672	-5728	-5056
CH	FINDELEN	389	2012	2600	2700	0.309	700	-6463	-5763
CH	FINDELEN	389	2012	2500	2600	0.081	496	-7797	-7301
CH	FINDELEN	389	2013	3900	4000	0.011	532	332	864
CH	FINDELEN	389	2013	3800	3900	0.252	623	313	936
CH	FINDELEN	389	2013	3700	3800	0.3	673	256	929
CH	FINDELEN	389	2013	3600	3700	0.439	922	357	1279
CH	FINDELEN	389	2013	3500	3600	1.609	1039	318	1357
CH	FINDELEN	389	2013	3400	3500	2.357	1089	236	1325
CH	FINDELEN	389	2013	3300	3400	1.945	1033	-539	494
CH	FINDELEN	389	2013	3200	3300	1.835	858	-598	260
CH	FINDELEN	389	2013	3100	3200	1.737	808	-1299	-491
CH	FINDELEN	389	2013	3000	3100	0.982	716	-2530	-1814
CH	FINDELEN	389	2013	2900	3000	0.593	605	-2615	-2010
CH	FINDELEN	389	2013	2800	2900	0.354	470	-3217	-2747
CH	FINDELEN	389	2013	2700	2800	0.239	356	-4460	-4104
CH	FINDELEN	389	2013	2600	2700	0.309	315	-5559	-5244
CH	FINDELEN	389	2013	2500	2600	0.081	266	-6153	-5887
CH	GRIES	359	2012	3300	3400	0.001	1731		-1433
CH	GRIES	359	2012	3200	3300	0.076	1787		-1452
CH	GRIES	359	2012	3100	3200	0.242	1812		-1468
CH	GRIES	359	2012	3000	3100	1.484	1806		-1709
CH	GRIES	359	2012	2900	3000	0.957	1769		-2119
CH	GRIES	359	2012	2800	2900	0.612	1701		-2260
CH	GRIES	359	2012	2700	2800	0.351	1602		-2566
CH	GRIES	359	2012	2600	2700	0.316	1471		-3184
CH	GRIES	359	2012	2500	2600	0.767	1309		-3903
CH	GRIES	359	2012	2400	2500	0.167	1116		-4354
CH	GRIES	359	2013	3300	3400	0.001	754		523
CH	GRIES	359	2013	3200	3300	0.071	1172		754
CH	GRIES	359	2013	3100	3200	0.206	1656		1113
CH	GRIES	359	2013	3000	3100	1.421	1607		524
CH	GRIES	359	2013	2900	3000	1.005	1491		-82
CH	GRIES	359	2013	2800	2900	0.636	1406		-487
CH	GRIES	359	2013	2700	2800	0.363	1332		-776
CH	GRIES	359	2013	2600	2700	0.237	1233		-1626
CH	GRIES	359	2013	2500	2600	0.731	947		-2776
CH	GRIES	359	2013	2400	2500	0.164	918		-3446
CH	MURTEL	4339	2013	3250	3300	0.011	1197	-260	937
CH	MURTEL	4339	2013	3200	3250	0.106	1013	-496	517
CH	MURTEL	4339	2013	3150	3200	0.114	727	-985	-258
CH	MURTEL	4339	2013	3100	3150	0.051	671	-1102	-431
CH	MURTEL	4339	2013	3050	3100	0.019	597	-1349	-751
CH	MURTEL	4339	2013	3000	3050	0.001	634	-1313	-679
CH	PIZOL	417	2011	2750	2800	0.005	1273	-2568	-1295
CH	PIZOL	417	2011	2700	2750	0.021	1224	-2790	-1566
CH	PIZOL	417	2011	2650	2700	0.034	1006	-3244	-2238
CH	PIZOL	417	2011	2600	2650	0.020	936	-3266	-2330
CH	PIZOL	417	2012	2750	2800	0.005	2149	-3120	-971
CH	PIZOL	417	2012	2700	2750	0.021	2303	-2908	-605
CH	PIZOL	417	2012	2650	2700	0.034	1911	-3267	-1356
CH	PIZOL	417	2012	2600	2650	0.020	1794	-3733	-1939
CH	PIZOL	417	2013	2750	2800	0.005	1616	-1683	-67
CH	PIZOL	417	2013	2700	2750	0.018	1749	-1670	79
CH	PIZOL	417	2013	2650	2700	0.032	1469	-2280	-811
CH	PIZOL	417	2013	2600	2650	0.013	1261	-2464	-1203
CH	PLAINE MORTE	4246	2011	2900	3000	0.029	731	-1371	-640
CH	PLAINE MORTE	4246	2011	2800	2900	0.223	933	-2248	-1315
CH	PLAINE MORTE	4246	2011	2700	2800	5.634	959	-3215	-2256
CH	PLAINE MORTE	4246	2011	2600	2700	1.831	1023	-3458	-2435
CH	PLAINE MORTE	4246	2011	2500	2600	0.152	1082	-3643	-2561
CH	PLAINE MORTE	4246	2011	2400	2500	0.009	1245	-3305	-2060
CH	PLAINE MORTE	4246	2012	2900	3000	0.029	1171	-1088	83
CH	PLAINE MORTE	4246	2012	2800	2900	0.223	1395	-1628	-233
CH	PLAINE MORTE	4246	2012	2700	2800	5.634	1383	-2300	-917
CH	PLAINE MORTE	4246	2012	2600	2700	1.831	1412	-2382	-970
CH	PLAINE MORTE	4246	2012	2500	2600	0.152	1445	-2515	-1070
CH	PLAINE MORTE	4246	2012	2400	2500	0.009	1574	-2331	-757
CH	PLAINE MORTE	4246	2013	2900	3000	0.029	1393	-1246	147
CH	PLAINE MORTE	4246	2013	2800	2900	0.223	1653	-2031	-378
CH	PLAINE MORTE	4246	2013	2700	2800	5.634	1623	-2890	-1267
CH	PLAINE MORTE	4246	2013	2600	2700	1.831	1647	-3112	-1465
CH	PLAINE MORTE	4246	2013	2500	2600	0.152	1672	-3225	-1553
CH	PLAINE MORTE	4246	2013	2400	2500	0.009	1808	-2895	-1087
CH	RHONE	473	2013	3500	3600	0.334	1651		1442

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CH	RHONE	473	2013	3400	3500	0.795	2068		1915
CH	RHONE	473	2013	3300	3400	0.951	2231		1916
CH	RHONE	473	2013	3200	3300	1.456	2175		1575
CH	RHONE	473	2013	3100	3200	1.534	2040		1117
CH	RHONE	473	2013	3000	3100	1.878	1984		795
CH	RHONE	473	2013	2900	3000	2.171	1998		531
CH	RHONE	473	2013	2800	2900	2.154	1786		55
CH	RHONE	473	2013	2700	2800	1.069	1482		-1013
CH	RHONE	473	2013	2600	2700	0.936	1161		-2443
CH	RHONE	473	2013	2500	2600	1.139	933		-3289
CH	RHONE	473	2013	2400	2500	0.639	785		-3848
CH	RHONE	473	2013	2300	2400	0.484	636		-4369
CH	RHONE	473	2013	2200	2300	0.268	501		-5426
CH	SANKT ANNA	432	2012	2950	3000	0	-9999	0	-9999
CH	SANKT ANNA	432	2012	2900	2950	0.001	863	-814	49
CH	SANKT ANNA	432	2012	2850	2900	0.017	1403	-1372	31
CH	SANKT ANNA	432	2012	2800	2850	0.032	1499	-1457	41
CH	SANKT ANNA	432	2012	2750	2800	0.040	1435	-1983	-548
CH	SANKT ANNA	432	2012	2700	2750	0.048	1269	-1824	-555
CH	SANKT ANNA	432	2012	2650	2700	0.041	1159	-2443	-1284
CH	SANKT ANNA	432	2012	2600	2650	0.018	997	-3097	-2100
CH	SANKT ANNA	432	2013	2900	2950	0.001	866	-1485	-619
CH	SANKT ANNA	432	2013	2850	2900	0.017	1434	-1409	24
CH	SANKT ANNA	432	2013	2800	2850	0.047	1666	-1364	301
CH	SANKT ANNA	432	2013	2750	2800	0.045	1671	-1519	152
CH	SANKT ANNA	432	2013	2700	2750	0.048	1282	-1721	-438
CH	SANKT ANNA	432	2013	2650	2700	0.041	1061	-2091	-1029
CH	SANKT ANNA	432	2013	2600	2650	0.018	1020	-2214	-1194
CH	SCHWARZBACH	4340	2013	2800	2850	0.013	2094	-1426	667
CH	SCHWARZBACH	4340	2013	2750	2800	0.033	1893	-1651	241
CH	SCHWARZBACH	4340	2013	2700	2750	0.013	1834	-1853	-19
CH	SEX ROUGE	454	2012	2850	2900	0.013	1530	-1721	-191
CH	SEX ROUGE	454	2012	2800	2850	0.186	1399	-2657	-1258
CH	SEX ROUGE	454	2012	2750	2800	0.094	1277	-2720	-1443
CH	SEX ROUGE	454	2012	2700	2750	0.009	1122	-2860	-1738
CH	SEX ROUGE	454	2013	2850	2900	0.013	1968	-1911	57
CH	SEX ROUGE	454	2013	2800	2850	0.186	1578	-2260	-682
CH	SEX ROUGE	454	2013	2750	2800	0.094	1387	-2240	-852
CH	SEX ROUGE	454	2013	2700	2750	0.009	1414	-2173	-759
CH	SILVRETTA	408	2012	3000	3100	0.135	1421		-422
CH	SILVRETTA	408	2012	2900	3000	0.584	1470		-467
CH	SILVRETTA	408	2012	2800	2900	0.588	1507		-597
CH	SILVRETTA	408	2012	2700	2800	0.69	1569		-1443
CH	SILVRETTA	408	2012	2600	2700	0.41	1493		-2090
CH	SILVRETTA	408	2012	2500	2600	0.36	1410		-2734
CH	SILVRETTA	408	2012	2400	2500	0.018	1154		-2944
CH	SILVRETTA	408	2013	3000	3100	0.117	1333		451
CH	SILVRETTA	408	2013	2900	3000	0.583	1458		500
CH	SILVRETTA	408	2013	2800	2900	0.576	1403		452
CH	SILVRETTA	408	2013	2700	2800	0.676	1281		-292
CH	SILVRETTA	408	2013	2600	2700	0.404	1120		-870
CH	SILVRETTA	408	2013	2500	2600	0.362	915		-1860
CH	SILVRETTA	408	2013	2400	2500	0.023	898		-2448
CH	TSANFLEURON	371	2011	2900	3000	0.05	1068	-2297	-1229
CH	TSANFLEURON	371	2011	2800	2900	0.964	1186	-2852	-1666
CH	TSANFLEURON	371	2011	2700	2800	1.143	1219	-3544	-2325
CH	TSANFLEURON	371	2011	2600	2700	0.498	1107	-4462	-3355
CH	TSANFLEURON	371	2011	2500	2600	0.098	975	-5332	-4357
CH	TSANFLEURON	371	2012	2900	3000	0.05	1192	-2429	-1237
CH	TSANFLEURON	371	2012	2800	2900	0.964	1339	-2892	-1553
CH	TSANFLEURON	371	2012	2700	2800	1.143	1399	-3161	-1762
CH	TSANFLEURON	371	2012	2600	2700	0.498	1297	-3472	-2175
CH	TSANFLEURON	371	2012	2500	2600	0.098	1168	-3793	-2625
CH	TSANFLEURON	371	2013	2900	3000	0.058	1552	-1076	476
CH	TSANFLEURON	371	2013	2800	2900	0.863	1588	-1454	134
CH	TSANFLEURON	371	2013	2700	2800	1.143	1568	-1812	-244
CH	TSANFLEURON	371	2013	2600	2700	0.51	1475	-2659	-1184
CH	TSANFLEURON	371	2013	2500	2600	0.073	1413	-3000	-1587
CN	PARLUNG NO. 94	3987	2011	5580	5635	0.009			1000
CN	PARLUNG NO. 94	3987	2011	5540	5580	0.027			1000
CN	PARLUNG NO. 94	3987	2011	5500	5540	0.094			1000
CN	PARLUNG NO. 94	3987	2011	5460	5500	0.195			1000
CN	PARLUNG NO. 94	3987	2011	5420	5460	0.222			1000
CN	PARLUNG NO. 94	3987	2011	5380	5420	0.341			744
CN	PARLUNG NO. 94	3987	2011	5340	5380	0.324			527
CN	PARLUNG NO. 94	3987	2011	5300	5340	0.408			117
CN	PARLUNG NO. 94	3987	2011	5260	5300	0.252			-446
CN	PARLUNG NO. 94	3987	2011	5220	5260	0.210			-682
CN	PARLUNG NO. 94	3987	2011	5180	5220	0.107			-1038
CN	PARLUNG NO. 94	3987	2011	5140	5180	0.118			-1538
CN	PARLUNG NO. 94	3987	2011	5100	5140	0.039			-2106
CN	PARLUNG NO. 94	3987	2011	5075	5100	0.010			-2200
CN	PARLUNG NO. 94	3987	2012	5580	5635	0.009			-200
CN	PARLUNG NO. 94	3987	2012	5540	5580	0.027			-200
CN	PARLUNG NO. 94	3987	2012	5500	5540	0.094			-200
CN	PARLUNG NO. 94	3987	2012	5460	5500	0.196			-204
CN	PARLUNG NO. 94	3987	2012	5420	5460	0.222			-581
CN	PARLUNG NO. 94	3987	2012	5380	5420	0.341			-944
CN	PARLUNG NO. 94	3987	2012	5340	5380	0.324			-1281
CN	PARLUNG NO. 94	3987	2012	5300	5340	0.408			-1675
CN	PARLUNG NO. 94	3987	2012	5260	5300	0.252			-2155
CN	PARLUNG NO. 94	3987	2012	5220	5260	0.210			-2339
CN	PARLUNG NO. 94	3987	2012	5180	5220	0.107			-2626
CN	PARLUNG NO. 94	3987	2012	5140	5180	0.118			-3137
CN	PARLUNG NO. 94	3987	2012	5100	5140	0.039			-3693
CN	PARLUNG NO. 94	3987	2012	5075	5100	0.010			-3800

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CN	PARLUNG NO. 94	3987	2013	5580	5635	0.009			200
CN	PARLUNG NO. 94	3987	2013	5540	5580	0.027			200
CN	PARLUNG NO. 94	3987	2013	5500	5540	0.094			200
CN	PARLUNG NO. 94	3987	2013	5460	5500	0.196			195
CN	PARLUNG NO. 94	3987	2013	5420	5460	0.222			-141
CN	PARLUNG NO. 94	3987	2013	5380	5420	0.341			-491
CN	PARLUNG NO. 94	3987	2013	5340	5380	0.324			-806
CN	PARLUNG NO. 94	3987	2013	5300	5340	0.408			-1242
CN	PARLUNG NO. 94	3987	2013	5260	5300	0.252			-1745
CN	PARLUNG NO. 94	3987	2013	5220	5260	0.210			-1906
CN	PARLUNG NO. 94	3987	2013	5180	5220	0.107			-2227
CN	PARLUNG NO. 94	3987	2013	5140	5180	0.118			-2781
CN	PARLUNG NO. 94	3987	2013	5100	5140	0.039			-3289
CN	PARLUNG NO. 94	3987	2013	5075	5100	0.010			-3400
CN	URUMQI GLACIER NO. 1	853	2011	4400	4484	0.007	109	53	162
CN	URUMQI GLACIER NO. 1	853	2011	4350	4400	0.024	121	38	159
CN	URUMQI GLACIER NO. 1	853	2011	4300	4350	0.046	136	13	148
CN	URUMQI GLACIER NO. 1	853	2011	4250	4300	0.040	151	-18	133
CN	URUMQI GLACIER NO. 1	853	2011	4200	4250	0.052	165	-207	-42
CN	URUMQI GLACIER NO. 1	853	2011	4150	4200	0.120	162	-417	-254
CN	URUMQI GLACIER NO. 1	853	2011	4100	4150	0.199	162	-581	-419
CN	URUMQI GLACIER NO. 1	853	2011	4050	4100	0.244	153	-901	-748
CN	URUMQI GLACIER NO. 1	853	2011	4000	4050	0.243	127	-1000	-873
CN	URUMQI GLACIER NO. 1	853	2011	3950	4000	0.193	104	-1124	-1020
CN	URUMQI GLACIER NO. 1	853	2011	3900	3950	0.207	45	-1461	-1416
CN	URUMQI GLACIER NO. 1	853	2011	3850	3900	0.161	-25	-1723	-1748
CN	URUMQI GLACIER NO. 1	853	2011	3800	3850	0.078	-168	-2416	-2584
CN	URUMQI GLACIER NO. 1	853	2011	3743	3800	0.032	-445	-2846	-3291
CN	URUMQI GLACIER NO. 1	853	2012	4400	4445	0.022	266	-203	63
CN	URUMQI GLACIER NO. 1	853	2012	4350	4400	0.033	272	-189	83
CN	URUMQI GLACIER NO. 1	853	2012	4300	4350	0.045	288	-188	100
CN	URUMQI GLACIER NO. 1	853	2012	4250	4300	0.04	317	-198	119
CN	URUMQI GLACIER NO. 1	853	2012	4200	4250	0.056	301	-136	165
CN	URUMQI GLACIER NO. 1	853	2012	4150	4200	0.148	292	-231	61
CN	URUMQI GLACIER NO. 1	853	2012	4100	4150	0.186	297	-407	-110
CN	URUMQI GLACIER NO. 1	853	2012	4050	4100	0.217	287	-635	-348
CN	URUMQI GLACIER NO. 1	853	2012	4000	4050	0.237	215	-866	-651
CN	URUMQI GLACIER NO. 1	853	2012	3950	4000	0.193	135	-1059	-924
CN	URUMQI GLACIER NO. 1	853	2012	3900	3950	0.193	94	-1497	-1403
CN	URUMQI GLACIER NO. 1	853	2012	3850	3900	0.143	94	-1847	-1753
CN	URUMQI GLACIER NO. 1	853	2012	3800	3850	0.079	53	-2192	-2139
CN	URUMQI GLACIER NO. 1	853	2012	3752	3800	0.027	-43	-2498	-2541
CN	URUMQI GLACIER NO. 1	853	2013	4400	4445	0.023	161	652	813
CN	URUMQI GLACIER NO. 1	853	2013	4350	4400	0.031	155	553	708
CN	URUMQI GLACIER NO. 1	853	2013	4300	4350	0.043	146	449	595
CN	URUMQI GLACIER NO. 1	853	2013	4250	4300	0.036	124	342	466
CN	URUMQI GLACIER NO. 1	853	2013	4200	4250	0.044	103	177	280
CN	URUMQI GLACIER NO. 1	853	2013	4150	4200	0.123	100	-4	96
CN	URUMQI GLACIER NO. 1	853	2013	4100	4150	0.189	84	-230	-146
CN	URUMQI GLACIER NO. 1	853	2013	4050	4100	0.249	68	-420	-352
CN	URUMQI GLACIER NO. 1	853	2013	4000	4050	0.237	39	-566	-527
CN	URUMQI GLACIER NO. 1	853	2013	3950	4000	0.186	25	-691	-666
CN	URUMQI GLACIER NO. 1	853	2013	3900	3950	0.187	8	-1001	-993
CN	URUMQI GLACIER NO. 1	853	2013	3850	3900	0.166	-10	-1275	-1285
CN	URUMQI GLACIER NO. 1	853	2013	3800	3850	0.077	-57	-1794	-1851
CN	URUMQI GLACIER NO. 1	853	2013	3752	3800	0.027	-128	-2440	-2568
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	4200	4267	0.02	162	-432	-270
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	4150	4200	0.079	158	-513	-355
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	4100	4150	0.125	159	-648	-489
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	4050	4100	0.132	165	-981	-816
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	4000	4050	0.143	153	-920	-767
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	3950	4000	0.139	166	-1040	-874
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	3900	3950	0.171	99	-1311	-1212
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	3850	3900	0.149	3	-1637	-1634
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	3800	3850	0.078	-168	-2416	-2584
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	3743	3800	0.032	-445	-2846	-3291
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	4200	4225	0.02	239	-2	237
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	4150	4200	0.106	272	-179	93
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	4100	4150	0.124	276	-321	-45
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	4050	4100	0.117	255	-498	-243
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	4000	4050	0.137	211	-679	-468
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	3950	4000	0.128	169	-836	-667
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	3900	3950	0.164	116	-1415	-1299
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	3850	3900	0.127	112	-1800	-1688
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	3800	3850	0.079	53	-2192	-2139
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	3752	3800	0.027	-43	-2498	-2541
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	4200	4225	0.011	120	149	269
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	4150	4200	0.079	106	21	127
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	4100	4150	0.117	79	-157	-78
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	4050	4100	0.137	53	-316	-263
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	4000	4050	0.139	40	-418	-378
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	3950	4000	0.136	37	-546	-509
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	3900	3950	0.154	24	-860	-836
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	3850	3900	0.154	0	-1190	-1190
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	3800	3850	0.077	-57	-1794	-1851
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	3752	3800	0.027	-128	-2440	-2568
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4400	4484	0.007	109	53	162
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4350	4400	0.024	121	38	159
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4300	4350	0.046	136	13	148
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4250	4300	0.040	151	-18	133
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4200	4250	0.032	167	-64	103
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4150	4200	0.041	171	-230	-60
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4100	4150	0.074	166	-468	-301
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4050	4100	0.112	139	-808	-668
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	4000	4050	0.100	89	-1113	-1025
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	3950	4000	0.054	-56	-1340	-1396

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	3900	3950	0.036	-212	-2178	-2390
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	3845	3900	0.012	-369	-2782	-3151
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4400	4445	0.022	266	-203	63
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4350	4400	0.033	272	-189	83
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4300	4350	0.045	288	-188	100
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4250	4300	0.04	317	-198	119
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4200	4250	0.036	336	-211	125
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4150	4200	0.042	341	-362	-21
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4100	4150	0.062	339	-580	-241
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4050	4100	0.1	324	-794	-470
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	4000	4050	0.1	220	-1122	-902
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	3950	4000	0.065	69	-1499	-1430
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	3900	3950	0.029	-33	-1955	-1988
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	3848	3900	0.015	-56	-2247	-2303
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4400	4445	0.023	161	652	813
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4350	4400	0.031	155	553	708
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4300	4350	0.043	146	449	595
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4250	4300	0.036	124	342	466
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4200	4250	0.034	97	186	283
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4150	4200	0.044	90	-48	42
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4100	4150	0.072	93	-349	-256
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4050	4100	0.112	86	-547	-461
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	4000	4050	0.099	38	-775	-737
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	3950	4000	0.050	-6	-1083	-1089
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	3900	3950	0.033	-65	-1659	-1724
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	3848	3900	0.013	-129	-2317	-2446
CO	CONEJERAS	2721	2012	4825	4900	0.020			-811
CO	CONEJERAS	2721	2012	4765	4825	0.117			-2099
CO	CONEJERAS	2721	2012	4735	4765	0.044			-2574
CO	CONEJERAS	2721	2012	4675	4735	0.035			-3400
CO	CONEJERAS	2721	2013	4825	4900	0.020			-1506
CO	CONEJERAS	2721	2013	4765	4825	0.117			-4220
CO	CONEJERAS	2721	2013	4735	4765	0.044			-4060
CO	CONEJERAS	2721	2013	4675	4735	0.035			-4969
CO	LOS RITACUBAS	2763	2011	4830	5150	0.22			34
ES	MALADETA	942	2011	3188	3212	0.003	2159	-3623	-1464
ES	MALADETA	942	2011	3162	3188	0.017	2111	-3575	-1464
ES	MALADETA	942	2011	3138	3162	0.041	2063	-3479	-1464
ES	MALADETA	942	2011	3112	3138	0.037	2015	-3283	-1316
ES	MALADETA	942	2011	3088	3112	0.033	1967	-3087	-1168
ES	MALADETA	942	2011	3062	3088	0.03	1919	-3335	-1321
ES	MALADETA	942	2011	3038	3062	0.03	2132	-3582	-1474
ES	MALADETA	942	2011	3012	3038	0.015	2215	-3829	-1626
ES	MALADETA	942	2011	2988	3012	0.012	2298	-4076	-1779
ES	MALADETA	942	2011	2962	2988	0.010	2052	-4144	-1969
ES	MALADETA	942	2011	2938	2962	0.008	1807	-4212	-2160
ES	MALADETA	942	2011	2912	2938	0.006	1997	-4280	-2350
ES	MALADETA	942	2011	2888	2912	0.007	1969	-4347	-2540
ES	MALADETA	942	2011	2862	2888	0.003	1941	-3563	-1689
ES	MALADETA	942	2011	2838	2862	0.002	1913	-2778	-837
GL	FREYA	3350	2011	1300	1400	0.001			-41
GL	FREYA	3350	2011	1200	1300	0.155			-75
GL	FREYA	3350	2011	1100	1200	0.190			-81
GL	FREYA	3350	2011	1000	1100	0.278			-51
GL	FREYA	3350	2011	900	1000	0.633			-275
GL	FREYA	3350	2011	800	900	0.804			-516
GL	FREYA	3350	2011	700	800	1.064			-753
GL	FREYA	3350	2011	600	700	1.073			-1429
GL	FREYA	3350	2011	500	600	0.586			-1698
GL	FREYA	3350	2011	400	500	0.370			-1768
GL	FREYA	3350	2011	300	400	0.136			-2268
GL	FREYA	3350	2011	200	300	0.014			-2638
GL	FREYA	3350	2012	1300	1400	0.001	295		57
GL	FREYA	3350	2012	1200	1300	0.155	285		41
GL	FREYA	3350	2012	1100	1200	0.190	383		5
GL	FREYA	3350	2012	1000	1100	0.278	694		50
GL	FREYA	3350	2012	900	1000	0.633	1046		106
GL	FREYA	3350	2012	800	900	0.804	995		146
GL	FREYA	3350	2012	700	800	1.064	994		-4
GL	FREYA	3350	2012	600	700	1.073	962		-562
GL	FREYA	3350	2012	500	600	0.586	824		-646
GL	FREYA	3350	2012	400	500	0.370	910		-613
GL	FREYA	3350	2012	300	400	0.136	1158		-279
GL	FREYA	3350	2012	200	300	0.014	1260		56
GL	FREYA	3350	2013	1300	1400	0.001	9		-478
GL	FREYA	3350	2013	1200	1300	0.155	52		-235
GL	FREYA	3350	2013	1100	1200	0.190	118		-76
GL	FREYA	3350	2013	1000	1100	0.278	182		-83
GL	FREYA	3350	2013	900	1000	0.633	246		-749
GL	FREYA	3350	2013	800	900	0.804	258		-977
GL	FREYA	3350	2013	700	800	1.064	227		-1198
GL	FREYA	3350	2013	600	700	1.073	189		-1987
GL	FREYA	3350	2013	500	600	0.586	129		-2265
GL	FREYA	3350	2013	400	500	0.370	86		-2417
GL	FREYA	3350	2013	300	400	0.136	88		-2839
GL	FREYA	3350	2013	200	300	0.014	88		-3118
GL	MITTIVAKKAT	1629	2011	800	880	0.771			-1711
GL	MITTIVAKKAT	1629	2011	700	800	2.647			-1900
GL	MITTIVAKKAT	1629	2011	600	700	3.994			-2106
GL	MITTIVAKKAT	1629	2011	500	600	2.702			-2290
GL	MITTIVAKKAT	1629	2011	400	500	3.16			-2453
GL	MITTIVAKKAT	1629	2011	300	400	2.351			-2648
GL	MITTIVAKKAT	1629	2011	200	300	1.439			-3056
GL	MITTIVAKKAT	1629	2011	130	200	0.536			-3125
GL	MITTIVAKKAT	1629	2012	800	880	0.771	950	-1360	-410
GL	MITTIVAKKAT	1629	2012	700	800	2.647	1000	-1800	-800

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
GL	MITTIVAKKAT	1629	2012	600	700	3.994	1000	-2190	-1190
GL	MITTIVAKKAT	1629	2012	500	600	2.702	1050	-2630	-1580
GL	MITTIVAKKAT	1629	2012	400	500	3.16	850	-2820	-1970
GL	MITTIVAKKAT	1629	2012	300	400	2.351	800	-3160	-2360
GL	MITTIVAKKAT	1629	2012	200	300	1.439	560	-3310	-2760
GL	MITTIVAKKAT	1629	2012	160	200	0.536	500	-3450	-2960
GL	MITTIVAKKAT	1629	2013	800	880	0.67	1300	-900	400
GL	MITTIVAKKAT	1629	2013	700	800	2.21	1350	-1250	100
GL	MITTIVAKKAT	1629	2013	600	700	3.91	1400	-1550	-150
GL	MITTIVAKKAT	1629	2013	500	600	2.95	1350	-1900	-550
GL	MITTIVAKKAT	1629	2013	400	500	3.02	1300	-2350	-1050
GL	MITTIVAKKAT	1629	2013	300	400	1.94	1300	-2950	-1650
GL	MITTIVAKKAT	1629	2013	200	300	1.03	1150	-3550	-2400
GL	MITTIVAKKAT	1629	2013	180	200	0.21	1300	-4300	-3000
IT	CARESER	635	2011	3250	3300	0.016	1362	-2085	-723
IT	CARESER	635	2011	3200	3250	0.031	1003	-2280	-1277
IT	CARESER	635	2011	3150	3200	0.120	948	-2237	-1289
IT	CARESER	635	2011	3100	3150	0.353	920	-2328	-1408
IT	CARESER	635	2011	3050	3100	0.721	933	-2547	-1614
IT	CARESER	635	2011	3000	3050	0.299	788	-3223	-2435
IT	CARESER	635	2011	2950	3000	0.274	710	-3506	-2796
IT	CARESER	635	2011	2900	2950	0.059	658	-4143	-3485
IT	CARESER	635	2011	2850	2900	0.014	459	-4649	-4191
IT	CARESER	635	2012	3250	3300	0.018	1061	-2839	-1778
IT	CARESER	635	2012	3200	3250	0.033	976	-2906	-1930
IT	CARESER	635	2012	3150	3200	0.108	865	-2855	-1989
IT	CARESER	635	2012	3100	3150	0.254	769	-2904	-2135
IT	CARESER	635	2012	3050	3100	0.682	847	-3023	-2175
IT	CARESER	635	2012	3000	3050	0.247	797	-3595	-2798
IT	CARESER	635	2012	2950	3000	0.252	672	-4045	-3373
IT	CARESER	635	2012	2900	2950	0.036	549	-4218	-3669
IT	CARESER	635	2012	2850	2900	0.000	289	-4348	-4059
IT	CARESER	635	2013	3250	3300	0.015	1898	-2222	-324
IT	CARESER	635	2013	3200	3250	0.037	1769	-2236	-466
IT	CARESER	635	2013	3150	3200	0.086	1559	-2203	-644
IT	CARESER	635	2013	3100	3150	0.219	1493	-2269	-776
IT	CARESER	635	2013	3050	3100	0.689	1530	-2380	-850
IT	CARESER	635	2013	3000	3050	0.223	1463	-2576	-1113
IT	CARESER	635	2013	2950	3000	0.246	1293	-3071	-1778
IT	CARESER	635	2013	2900	2950	0.064	1360	-3266	-1906
IT	CARESER	635	2013	2850	2900	0.000	1151	-3225	-2074
IT	CARESER CENTRALE	3659	2011	3100	3150	0.006	785	-2706	-1921
IT	CARESER CENTRALE	3659	2011	3050	3100	0.050	735	-2825	-2090
IT	CARESER CENTRALE	3659	2011	3000	3050	0.074	641	-3188	-2546
IT	CARESER CENTRALE	3659	2011	2950	3000	0.097	718	-3595	-2877
IT	CARESER CENTRALE	3659	2011	2900	2950	0.013	750	-4101	-3351
IT	CARESER OCCIDENTALE	3346	2011	3250	3300	0.013	1292	-2012	-720
IT	CARESER OCCIDENTALE	3346	2011	3200	3250	0.017	573	-2150	-1577
IT	CARESER OCCIDENTALE	3346	2011	3150	3200	0.062	888	-2044	-1155
IT	CARESER OCCIDENTALE	3346	2011	3100	3150	0.099	972	-2527	-1556
IT	CARESER OCCIDENTALE	3346	2011	3050	3100	0.002	922	-3167	-2245
IT	CARESER ORIENTALE	3345	2011	3250	3300	0.003	1683	-2418	-735
IT	CARESER ORIENTALE	3345	2011	3200	3250	0.014	1519	-2435	-916
IT	CARESER ORIENTALE	3345	2011	3150	3200	0.057	1013	-2448	-1435
IT	CARESER ORIENTALE	3345	2011	3100	3150	0.247	903	-2239	-1336
IT	CARESER ORIENTALE	3345	2011	3050	3100	0.648	951	-2504	-1553
IT	CARESER ORIENTALE	3345	2011	3000	3050	0.225	836	-3234	-2398
IT	CARESER ORIENTALE	3345	2011	2950	3000	0.177	705	-3457	-2752
IT	CARESER ORIENTALE	3345	2011	2900	2950	0.046	632	-4155	-3523
IT	CARESER ORIENTALE	3345	2011	2850	2900	0.014	459	-4649	-4191
IT	CIARDONEY	1264	2011	3120	3160	0.055	735	914	-179
IT	CIARDONEY	1264	2011	3080	3120	0.168	643	1610	-967
IT	CIARDONEY	1264	2011	3020	3080	0.154	604	1366	-762
IT	CIARDONEY	1264	2011	2910	3020	0.09	465	2323	-1858
IT	CIARDONEY	1264	2011	2850	2910	0.101	465	2262	-1797
IT	CIARDONEY	1264	2012	3120	3160	0.055	1379	-2597	-1218
IT	CIARDONEY	1264	2012	3080	3120	0.168	920	-2530	-1610
IT	CIARDONEY	1264	2012	3020	3080	0.154	685	-2708	-2023
IT	CIARDONEY	1264	2012	2910	3020	0.09	424	-3208	-2784
IT	CIARDONEY	1264	2012	2850	2910	0.101	424	-3687	-3263
IT	CIARDONEY	1264	2013	3120	3160	0.055	2897	-2497	400
IT	CIARDONEY	1264	2013	3080	3120	0.168	1592	-1827	-235
IT	CIARDONEY	1264	2013	3020	3080	0.154	1513	-2022	-509
IT	CIARDONEY	1264	2013	2910	3020	0.09	1153	-2301	-1148
IT	CIARDONEY	1264	2013	2850	2910	0.101	1368	-2804	-1436
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3300	3350	0.003	1300	-1900	-600
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3250	3300	0.003	1323	-1767	-445
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3200	3250	0.003	1336	-1984	-648
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3150	3200	0.003	1201	-1871	-670
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3100	3150	0.003	997	-2283	-1286
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3050	3100	0.003	1084	-2585	-1501
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	3000	3050	0.003	1177	-2945	-1768
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	2950	3000	0.003	1362	-3471	-2108
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	2900	2950	0.003	1600	-2974	-1374
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	2850	2900	0.003	1600	-2800	-1200
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3300	3350	0.011	1156	-2956	-1800
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3250	3300	0.027	1131	-2936	-1806
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3200	3250	0.080	1092	-3093	-2001
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3150	3200	0.118	950	-2765	-1815
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3100	3150	0.084	789	-2691	-1902
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3050	3100	0.044	1095	-2956	-1861
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	3000	3050	0.028	1265	-3787	-2522
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	2950	3000	0.005	1411	-3677	-2266
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	2900	2950	0.002	1900	-4000	-2100
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	2850	2900	0	1900	-4000	-2100
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3300	3350	0.011	1700	-1500	200

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3250	3300	0.027	1670	-1456	214
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3200	3250	0.080	1652	-1594	58
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3150	3200	0.118	1529	-1509	20
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3100	3150	0.084	1392	-1585	-192
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3050	3100	0.044	1347	-1557	-211
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	3000	3050	0.028	1444	-1721	-278
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	2950	3000	0.005	1679	-1729	-50
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	2900	2950	0.002	1600	-1650	-50
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	2850	2900	0	1600	-1650	-50
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3350	3400	0.013	739	-1038	-299
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3300	3350	0.064	1017	-1091	-74
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3250	3300	0.262	912	-1130	-218
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3200	3250	0.310	700	-1518	-818
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3150	3200	0.162	958	-1397	-439
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3100	3150	0.188	1108	-1723	-615
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3050	3100	0.223	977	-2135	-1159
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	3000	3050	0.104	970	-2336	-1366
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	2950	3000	0.080	1129	-2657	-1528
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	2900	2950	0.081	993	-2920	-1928
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	2850	2900	0.058	1054	-3518	-2464
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	2800	2850	0.055	985	-4041	-3056
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	2750	2800	0.082	1074	-4461	-3388
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	2700	2750	0.011	1000	-5679	-4679
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3350	3400	0.012	823	-1858	-1035
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3300	3350	0.06	922	-1293	-371
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3250	3300	0.25	1083	-1599	-516
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3200	3250	0.320	989	-2162	-1173
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3150	3200	0.160	926	-1949	-1024
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3100	3150	0.182	979	-2244	-1265
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3050	3100	0.220	948	-2576	-1628
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	3000	3050	0.099	1064	-2705	-1641
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	2950	3000	0.075	1040	-2637	-1598
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	2900	2950	0.080	918	-3380	-2461
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	2850	2900	0.060	906	-4176	-3270
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	2800	2850	0.042	1011	-4767	-3755
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	2750	2800	0.063	1090	-5175	-4085
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	2700	2750	0.033	1156	-5896	-4740
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3350	3400	0.012	901	-776	125
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3300	3350	0.06	941	-250	691
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3250	3300	0.25	1240	-838	402
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3200	3250	0.320	1129	-1098	31
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3150	3200	0.160	1225	-1010	215
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3100	3150	0.182	1454	-1197	258
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3050	3100	0.220	1276	-1434	-158
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	3000	3050	0.099	1244	-1675	-431
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	2950	3000	0.075	1401	-1717	-316
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	2900	2950	0.080	1356	-2317	-962
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	2850	2900	0.060	1381	-2637	-1256
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	2800	2850	0.042	1349	-3419	-2072
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	2750	2800	0.063	1283	-3823	-2541
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	2700	2750	0.033	1225	-4287	-3063
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3400	3450	0.08	950	-1428	-478
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3350	3400	0.1	990	-1587	-474
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3300	3350	0.154	1127	-1654	-588
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3250	3300	0.197	1370	-1507	-516
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3200	3250	0.253	1518	-1211	-125
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3150	3200	0.597	1445	-1148	321
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3100	3150	0.538	1327	-1794	274
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3050	3100	0.548	1450	-2491	-544
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	3000	3050	0.63	1254	-2467	-1027
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2950	3000	0.473	1152	-2613	-1202
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2900	2950	0.575	1202	-2873	-1451
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2850	2900	0.764	1200	-2829	-1619
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2800	2850	0.437	1059	-2889	-1820
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2750	2800	0.333	970	-2992	-2014
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2700	2750	0.152	913	-3316	-2394
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2650	2700	0.222	466	-3640	-3170
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2600	2650	0.063	325	-3907	-3579
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	2550	2600	0.048	325	-4045	-3717
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3400	3450	0.001	1000	-1593	-593
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3350	3400	0.079	1007	-1772	-765
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3300	3350	0.1	1246	-2073	-827
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3250	3300	0.154	1460	-2258	-1181
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3200	3250	0.197	1324	-2240	-1068
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3150	3200	0.249	1126	-2061	-686
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3100	3150	0.596	1163	-2334	-954
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3050	3100	0.537	1142	-2365	-1226
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	3000	3050	0.548	1219	-2144	-1081
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2950	3000	0.63	1260	-2400	-1179
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2900	2950	0.471	1211	-2646	-1459
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2850	2900	0.573	1189	-2687	-1474
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2800	2850	0.761	1221	-2717	-1454
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2750	2800	0.428	1140	-2792	-1656
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2700	2750	0.327	996	-3274	-2278
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2650	2700	0.145	862	-3732	-2870
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2600	2650	0.203	751	-3902	-3151
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	2528	2600	0.028	594	-3893	-3298
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3400	3470	0.081	1953	-1425	528
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3350	3400	0.14	2048	-1308	740
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3300	3350	0.162	1803	-1304	499
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3250	3300	0.13	1843	-1233	610
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3200	3250	0.251	1676	-1130	546
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3150	3200	0.612	1647	-903	744
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3100	3150	0.568	1457	-1603	-146
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3050	3100	0.567	1689	-1515	174
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	3000	3050	0.608	1730	-2014	-284

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2950	3000	0.579	1609	-2192	-583
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2900	2950	0.429	1687	-2336	-649
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2850	2900	0.765	1629	-2302	-673
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2800	2850	0.429	1554	-2345	-791
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2750	2800	0.327	1334	-2555	-1221
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2700	2750	0.145	1080	-2889	-1809
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2650	2700	0.205	483	-2868	-2385
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	2560	2650	0.029	483	-2868	-2385
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2950	3000	0.004	1075	-1444	-283
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2900	2950	0.048	1351	-2056	-613
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2850	2900	0.172	1475	-2755	-1236
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2800	2850	0.134	1396	-3155	-1790
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2750	2800	0.189	1366	-3470	-2126
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2700	2750	0.214	1153	-3053	-1914
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2650	2700	0.086	963	-3509	-2561
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	2600	2650	0.006	801	-4277	-3430
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2950	3000	0.004	2223	-2879	-656
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2900	2950	0.048	1908	-2937	-1029
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2850	2900	0.172	1674	-3096	-1422
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2800	2850	0.134	1422	-3214	-1792
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2750	2800	0.189	1428	-3707	-2279
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2700	2750	0.214	1402	-3414	-2012
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2650	2700	0.086	910	-3602	-2692
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	2600	2650	0.006	480	-4139	-3659
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2950	2980	0.004	1612	-2006	-394
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2900	2950	0.05	1549	-2229	-680
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2850	2900	0.166	1477	-2278	-801
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2800	2850	0.137	1742	-2284	-542
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2750	2800	0.188	1561	-2395	-834
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2700	2750	0.212	1462	-2264	-802
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2650	2700	0.088	1315	-2388	-1073
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	2625	2650	0.006	1185	-2490	-1305
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	3200	3250	0.016	1052	-1002	50
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	3150	3200	0.178	1021	-971	50
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	3100	3150	0.216	854	-996	-142
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	3050	3100	0.257	877	-1138	-262
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	3000	3050	0.263	974	-1613	-638
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2950	3000	0.244	904	-1608	-704
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2900	2950	0.252	794	-1825	-1031
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2850	2900	0.201	805	-2170	-1365
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2800	2850	0.172	727	-2396	-1668
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2750	2800	0.076	713	-2570	-1857
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2700	2750	0.042	782	-2708	-1927
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2650	2700	0.036	700	-3081	-2380
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2600	2650	0.020	650	-3050	-2400
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	2550	2600	0.003	650	-3050	-2400
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	3200	3250	0.016	1090	-2422	-1331
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	3150	3200	0.178	1094	-2298	-1204
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	3100	3150	0.216	827	-1962	-1134
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	3050	3100	0.257	900	-2741	-1841
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	3000	3050	0.263	856	-2457	-1601
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2950	3000	0.244	777	-2391	-1614
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2900	2950	0.25	750	-2685	-1935
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2850	2900	0.198	816	-3055	-2240
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2800	2850	0.141	837	-3260	-2423
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2750	2800	0.031	498	-3174	-2675
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2700	2750	0.021	823	-2834	-2011
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	2650	2700	0.011	983	-3677	-2694
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	3200	3250	0.016	1687	-1081	606
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	3150	3200	0.178	1607	-1020	587
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	3100	3150	0.216	1522	-1134	389
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	3050	3100	0.257	1601	-1099	502
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	3000	3050	0.263	1636	-1249	387
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2950	3000	0.244	1497	-1302	195
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2900	2950	0.25	1284	-1493	-209
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2850	2900	0.198	1202	-1518	-315
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2800	2850	0.141	1020	-1256	-237
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2750	2800	0.031	948	-1117	-169
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2700	2750	0.021	1000	-1100	-100
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	2650	2700	0.011	1000	-1143	-143
KE	LEWIS	695	2011	4850	4900	0.014			-1225
KE	LEWIS	695	2011	4800	4850	0.043			-1255
KE	LEWIS	695	2011	4750	4800	0.02			-1657
KE	LEWIS	695	2011	4700	4750	0.022			-1954
KE	LEWIS	695	2011	4650	4700	0.009			-2153
KE	LEWIS	695	2012	4850	4900	0.014			-460
KE	LEWIS	695	2012	4800	4850	0.043			-562
KE	LEWIS	695	2012	4750	4800	0.02			-938
KE	LEWIS	695	2012	4700	4750	0.022			-1630
KE	LEWIS	695	2012	4650	4700	0.009			-2048
KE	LEWIS	695	2013	4850	4900	0.014			-1141
KE	LEWIS	695	2013	4800	4850	0.043			-1088
KE	LEWIS	695	2013	4750	4800	0.02			-1553
KE	LEWIS	695	2013	4700	4750	0.022			-1783
KE	LEWIS	695	2013	4650	4700	0.009			-1980
KG	ABRAMOV	732	2012	4900	5000	0.026	701	-272	429
KG	ABRAMOV	732	2012	4800	4900	0.095	734	-149	584
KG	ABRAMOV	732	2012	4700	4800	0.130	810	-250	559
KG	ABRAMOV	732	2012	4600	4700	0.268	914	-378	535
KG	ABRAMOV	732	2012	4500	4600	1.010	1116	-663	452
KG	ABRAMOV	732	2012	4400	4500	2.391	1424	-916	508
KG	ABRAMOV	732	2012	4300	4400	4.475	1485	-1202	283
KG	ABRAMOV	732	2012	4200	4300	5.318	1445	-1469	-24
KG	ABRAMOV	732	2012	4100	4200	4.436	1271	-2060	-788
KG	ABRAMOV	732	2012	4000	4100	2.648	998	-2495	-1497
KG	ABRAMOV	732	2012	3900	4000	1.628	642	-2970	-2327

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
KG	ABRAMOV	732	2012	3800	3900	0.992	296	-3842	-3546
KG	ABRAMOV	732	2012	3700	3800	0.530	105	-4420	-4315
KG	ABRAMOV	732	2012	3600	3700	0.115	7	-4439	-4432
KG	ABRAMOV	732	2013	4900	5000	0.030	746	5	752
KG	ABRAMOV	732	2013	4800	4900	0.097	744	39	784
KG	ABRAMOV	732	2013	4700	4800	0.132	858	-3	854
KG	ABRAMOV	732	2013	4600	4700	0.275	959	-90	868
KG	ABRAMOV	732	2013	4500	4600	0.999	1155	-315	839
KG	ABRAMOV	732	2013	4400	4500	2.367	1364	-539	825
KG	ABRAMOV	732	2013	4300	4400	4.492	1436	-723	713
KG	ABRAMOV	732	2013	4200	4300	5.342	1434	-1246	187
KG	ABRAMOV	732	2013	4100	4200	4.451	1270	-1660	-389
KG	ABRAMOV	732	2013	4000	4100	2.640	1017	-2186	-1168
KG	ABRAMOV	732	2013	3900	4000	1.63	775	-2801	-2026
KG	ABRAMOV	732	2013	3800	3900	0.964	552	-3595	-3042
KG	ABRAMOV	732	2013	3700	3800	0.497	397	-4467	-4069
KG	ABRAMOV	732	2013	3600	3700	0.091	356	-4382	-4026
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4600	4700	0.040			746
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4500	4600	0.164			763
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4400	4500	0.373			719
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4300	4400	0.698			612
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4200	4300	1.432			523
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4100	4200	1.576			11
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	4000	4100	1.126			-627
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	3900	4000	0.654			-1128
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	3800	3900	0.346			-1832
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	3700	3800	0.063			-2487
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4600	4700	0.040			827
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4500	4600	0.164			819
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4400	4500	0.373			721
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4300	4400	0.698			538
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4200	4300	1.432			238
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4100	4200	1.576			-451
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	4000	4100	1.126			-1331
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	3900	4000	0.641			-1986
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	3800	3900	0.333			-2576
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	3700	3800	0.054			-3519
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4600	4700	0.040			695
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4500	4600	0.164			690
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4400	4500	0.373			605
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4300	4400	0.698			446
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4200	4300	1.432			59
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4100	4200	1.576			-501
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	4000	4100	1.126			-1253
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	3900	4000	0.641			-1690
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	3800	3900	0.329			-2327
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	3700	3800	0.044			-3225
KG	GOLUBIN	753	2011	4325	4350	0.012			1203
KG	GOLUBIN	753	2011	4225	4300	0.241			1215
KG	GOLUBIN	753	2011	4125	4200	0.564			1172
KG	GOLUBIN	753	2011	4025	4100	1.100			919
KG	GOLUBIN	753	2011	3925	4000	1.127			505
KG	GOLUBIN	753	2011	3825	3900	0.933			66
KG	GOLUBIN	753	2011	3725	3800	0.366			-597
KG	GOLUBIN	753	2011	3625	3700	0.512			-1296
KG	GOLUBIN	753	2011	3525	3600	0.355			-1735
KG	GOLUBIN	753	2011	3425	3500	0.245			-2147
KG	GOLUBIN	753	2011	3325	3400	0.065			-3125
KG	GOLUBIN	753	2012	4300	4319	0.012			900
KG	GOLUBIN	753	2012	4200	4300	0.241			888
KG	GOLUBIN	753	2012	4100	4200	0.564			879
KG	GOLUBIN	753	2012	4000	4100	1.100			704
KG	GOLUBIN	753	2012	3900	4000	1.127			349
KG	GOLUBIN	753	2012	3800	3900	0.933			113
KG	GOLUBIN	753	2012	3700	3800	0.366			-237
KG	GOLUBIN	753	2012	3600	3700	0.512			-1065
KG	GOLUBIN	753	2012	3500	3600	0.355			-2191
KG	GOLUBIN	753	2012	3400	3500	0.245			-3373
KG	GOLUBIN	753	2012	3342	3400	0.065			-4261
KG	GOLUBIN	753	2013	4300	4400	0.01			5
KG	GOLUBIN	753	2013	4200	4300	0.231			174
KG	GOLUBIN	753	2013	4100	4200	0.525			388
KG	GOLUBIN	753	2013	4000	4100	1.105			610
KG	GOLUBIN	753	2013	3900	4000	1.098			507
KG	GOLUBIN	753	2013	3800	3900	0.987			397
KG	GOLUBIN	753	2013	3700	3800	0.338			238
KG	GOLUBIN	753	2013	3600	3700	0.552			-271
KG	GOLUBIN	753	2013	3500	3600	0.358			-1759
KG	GOLUBIN	753	2013	3400	3500	0.226			-2388
KG	GOLUBIN	753	2013	3300	3400	0.072			-2851
KG	SUEK/SUYOK ZAPADNIY	781	2011	4400	4450	0.069			286
KG	SUEK/SUYOK ZAPADNIY	781	2011	4300	4400	0.171			183
KG	SUEK/SUYOK ZAPADNIY	781	2011	4200	4300	0.323			57
KG	SUEK/SUYOK ZAPADNIY	781	2011	4100	4200	0.282			-355
KG	SUEK/SUYOK ZAPADNIY	781	2011	4000	4100	0.196			-978
KG	SUEK/SUYOK ZAPADNIY	781	2011	3910	4000	0.079			-1628
KG	SUEK/SUYOK ZAPADNIY	781	2012	4400	4460	0.075			109
KG	SUEK/SUYOK ZAPADNIY	781	2012	4300	4400	0.209			171
KG	SUEK/SUYOK ZAPADNIY	781	2012	4200	4300	0.328			-103
KG	SUEK/SUYOK ZAPADNIY	781	2012	4100	4200	0.297			-794
KG	SUEK/SUYOK ZAPADNIY	781	2012	4000	4100	0.173			-1452
KG	SUEK/SUYOK ZAPADNIY	781	2012	3930	4000	0.044			-1867
KG	SUEK/SUYOK ZAPADNIY	781	2013	4450	4500	0.007			290
KG	SUEK/SUYOK ZAPADNIY	781	2013	4400	4450	0.058			286
KG	SUEK/SUYOK ZAPADNIY	781	2013	4350	4400	0.086			283
KG	SUEK/SUYOK ZAPADNIY	781	2013	4300	4350	0.107			279

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
KG	SUEK/SUYOK ZAPADNIY	781	2013	4250	4300	0.157			275
KG	SUEK/SUYOK ZAPADNIY	781	2013	4200	4250	0.158			-112
KG	SUEK/SUYOK ZAPADNIY	781	2013	4150	4200	0.143			-600
KG	SUEK/SUYOK ZAPADNIY	781	2013	4100	4150	0.124			-850
KG	SUEK/SUYOK ZAPADNIY	781	2013	4050	4100	0.083			-1039
KG	SUEK/SUYOK ZAPADNIY	781	2013	4000	4050	0.062			-1287
KG	SUEK/SUYOK ZAPADNIY	781	2013	3950	4000	0.035			-1323
KZ	TS.TUYUKSUYSKIY	817	2011	4100	4200	0.161	272	231	503
KZ	TS.TUYUKSUYSKIY	817	2011	4000	4100	0.314	502	33	535
KZ	TS.TUYUKSUYSKIY	817	2011	3900	4000	0.233	631	83	714
KZ	TS.TUYUKSUYSKIY	817	2011	3800	3900	0.301	754	-399	355
KZ	TS.TUYUKSUYSKIY	817	2011	3750	3800	0.336	745	-1122	-377
KZ	TS.TUYUKSUYSKIY	817	2011	3700	3750	0.377	620	-1447	-827
KZ	TS.TUYUKSUYSKIY	817	2011	3650	3700	0.236	514	-1552	-1038
KZ	TS.TUYUKSUYSKIY	817	2011	3600	3650	0.104	484	-1563	-1079
KZ	TS.TUYUKSUYSKIY	817	2011	3550	3600	0.122	486	-1958	-1472
KZ	TS.TUYUKSUYSKIY	817	2011	3500	3550	0.129	463	-2582	-2119
KZ	TS.TUYUKSUYSKIY	817	2012	4100	4200	0.161	204	8	212
KZ	TS.TUYUKSUYSKIY	817	2012	4000	4100	0.314	352	-163	188
KZ	TS.TUYUKSUYSKIY	817	2012	3900	4000	0.233	442	-134	308
KZ	TS.TUYUKSUYSKIY	817	2012	3800	3900	0.315	522	-1102	-580
KZ	TS.TUYUKSUYSKIY	817	2012	3750	3800	0.307	508	-1930	-1422
KZ	TS.TUYUKSUYSKIY	817	2012	3700	3750	0.389	450	-2199	-1749
KZ	TS.TUYUKSUYSKIY	817	2012	3650	3700	0.233	381	-2256	-1875
KZ	TS.TUYUKSUYSKIY	817	2012	3600	3650	0.103	358	-2147	-1789
KZ	TS.TUYUKSUYSKIY	817	2012	3550	3600	0.122	350	-2511	-2161
KZ	TS.TUYUKSUYSKIY	817	2012	3500	3550	0.120	341	-3100	-2759
KZ	TS.TUYUKSUYSKIY	817	2013	4100	4200	0.161	213	393	606
KZ	TS.TUYUKSUYSKIY	817	2013	4000	4100	0.314	394	248	643
KZ	TS.TUYUKSUYSKIY	817	2013	3900	4000	0.233	496	365	861
KZ	TS.TUYUKSUYSKIY	817	2013	3800	3900	0.315	592	-264	328
KZ	TS.TUYUKSUYSKIY	817	2013	3750	3800	0.307	554	-1152	-598
KZ	TS.TUYUKSUYSKIY	817	2013	3700	3750	0.389	517	-1501	-984
KZ	TS.TUYUKSUYSKIY	817	2013	3650	3700	0.233	403	-1581	-1178
KZ	TS.TUYUKSUYSKIY	817	2013	3600	3650	0.103	411	-1634	-1223
KZ	TS.TUYUKSUYSKIY	817	2013	3550	3600	0.122	428	-1925	-1498
KZ	TS.TUYUKSUYSKIY	817	2013	3500	3550	0.113	427	-2474	-2047
NO	AALFOTBREEN	317	2011	1300	1368	0.902	3725	-3850	-125
NO	AALFOTBREEN	317	2011	1250	1300	0.782	3700	-4050	-350
NO	AALFOTBREEN	317	2011	1200	1250	0.7	3575	-4250	-675
NO	AALFOTBREEN	317	2011	1150	1200	0.577	3450	-4500	-1050
NO	AALFOTBREEN	317	2011	1100	1150	0.448	3375	-4800	-1425
NO	AALFOTBREEN	317	2011	1050	1100	0.295	3250	-5125	-1875
NO	AALFOTBREEN	317	2011	1000	1050	0.183	3075	-5475	-2400
NO	AALFOTBREEN	317	2011	950	1000	0.075	2925	-5825	-2900
NO	AALFOTBREEN	317	2011	890	950	0.014	2800	-6225	-3425
NO	AALFOTBREEN	317	2012	1300	1368	0.902	4025	-2000	2025
NO	AALFOTBREEN	317	2012	1250	1300	0.782	4075	-2225	1850
NO	AALFOTBREEN	317	2012	1200	1250	0.7	3950	-2450	1500
NO	AALFOTBREEN	317	2012	1150	1200	0.577	3775	-2675	1100
NO	AALFOTBREEN	317	2012	1100	1150	0.448	3700	-2900	800
NO	AALFOTBREEN	317	2012	1050	1100	0.295	3575	-3125	450
NO	AALFOTBREEN	317	2012	1000	1050	0.183	3400	-3375	25
NO	AALFOTBREEN	317	2012	950	1000	0.075	3250	-3625	-375
NO	AALFOTBREEN	317	2012	890	950	0.014	3075	-3925	-850
NO	AALFOTBREEN	317	2013	1300	1368	0.902	3150	-3250	-100
NO	AALFOTBREEN	317	2013	1250	1300	0.782	3375	-3675	-300
NO	AALFOTBREEN	317	2013	1200	1250	0.7	3450	-4025	-575
NO	AALFOTBREEN	317	2013	1150	1200	0.577	3200	-4350	-1150
NO	AALFOTBREEN	317	2013	1100	1150	0.448	3025	-4675	-1650
NO	AALFOTBREEN	317	2013	1050	1100	0.295	2800	-4950	-2150
NO	AALFOTBREEN	317	2013	1000	1050	0.183	2275	-5200	-2925
NO	AALFOTBREEN	317	2013	950	1000	0.075	2150	-5425	-3275
NO	AALFOTBREEN	317	2013	890	950	0.014	2000	-5650	-3650
NO	AUSTDALSBREEN	321	2011	1700	1747	0.143	1500	-2900	-1400
NO	AUSTDALSBREEN	321	2011	1650	1700	0.125	1750	-2700	-950
NO	AUSTDALSBREEN	321	2011	1600	1650	0.201	1950	-2500	-550
NO	AUSTDALSBREEN	321	2011	1550	1600	2.307	2150	-2450	-300
NO	AUSTDALSBREEN	321	2011	1500	1550	2.372	2100	-2500	-400
NO	AUSTDALSBREEN	321	2011	1450	1500	1.692	1950	-2700	-750
NO	AUSTDALSBREEN	321	2011	1400	1450	1.377	1650	-3100	-1450
NO	AUSTDALSBREEN	321	2011	1350	1400	0.94	1400	-3500	-2100
NO	AUSTDALSBREEN	321	2011	1300	1350	0.728	1300	-3800	-2500
NO	AUSTDALSBREEN	321	2011	1250	1300	0.548	1200	-4100	-2900
NO	AUSTDALSBREEN	321	2011	1200	1250	0.196	1150	-4400	-3250
NO	AUSTDALSBREEN	321	2012	1700	1747	0.143	1900	-1400	500
NO	AUSTDALSBREEN	321	2012	1650	1700	0.125	2350	-1400	950
NO	AUSTDALSBREEN	321	2012	1600	1650	0.201	2800	-1400	1400
NO	AUSTDALSBREEN	321	2012	1550	1600	2.307	3200	-1400	1800
NO	AUSTDALSBREEN	321	2012	1500	1550	2.372	3150	-1400	1750
NO	AUSTDALSBREEN	321	2012	1450	1500	1.692	2750	-1500	1250
NO	AUSTDALSBREEN	321	2012	1400	1450	1.377	2450	-1800	650
NO	AUSTDALSBREEN	321	2012	1350	1400	0.94	2200	-2100	100
NO	AUSTDALSBREEN	321	2012	1300	1350	0.728	1900	-2500	-600
NO	AUSTDALSBREEN	321	2012	1250	1300	0.548	1600	-2900	-1300
NO	AUSTDALSBREEN	321	2012	1200	1250	0.196	1600	-3400	-1800
NO	AUSTDALSBREEN	321	2013	1700	1747	0.143	1700	-2250	-550
NO	AUSTDALSBREEN	321	2013	1650	1700	0.125	1800	-2300	-500
NO	AUSTDALSBREEN	321	2013	1600	1650	0.201	1800	-2350	-550
NO	AUSTDALSBREEN	321	2013	1550	1600	2.307	1800	-2400	-600
NO	AUSTDALSBREEN	321	2013	1500	1550	2.372	1800	-2500	-700
NO	AUSTDALSBREEN	321	2013	1450	1500	1.692	1700	-2750	-1050
NO	AUSTDALSBREEN	321	2013	1400	1450	1.377	1650	-3100	-1450
NO	AUSTDALSBREEN	321	2013	1350	1400	0.94	1450	-3500	-2050
NO	AUSTDALSBREEN	321	2013	1300	1350	0.728	1200	-3900	-2700
NO	AUSTDALSBREEN	321	2013	1250	1300	0.548	750	-4300	-3550

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	AUSTDALSBREEN	321	2013	1200	1250	0.196	500	-4900	-4400
NO	BLOMSTOELSKARDSBREEN	3339	2011	1600	1632	1.166	2850	-2800	50
NO	BLOMSTOELSKARDSBREEN	3339	2011	1550	1600	6.335	2775	-2850	-75
NO	BLOMSTOELSKARDSBREEN	3339	2011	1500	1550	4.131	2700	-2925	-225
NO	BLOMSTOELSKARDSBREEN	3339	2011	1450	1500	2.192	2625	-3100	-475
NO	BLOMSTOELSKARDSBREEN	3339	2011	1400	1450	1.556	2550	-3375	-825
NO	BLOMSTOELSKARDSBREEN	3339	2011	1350	1400	1.755	2425	-3700	-1275
NO	BLOMSTOELSKARDSBREEN	3339	2011	1300	1350	1.458	2275	-4050	-1775
NO	BLOMSTOELSKARDSBREEN	3339	2011	1250	1300	0.781	2175	-4400	-2225
NO	BLOMSTOELSKARDSBREEN	3339	2011	1200	1250	1.278	2075	-4800	-2725
NO	BLOMSTOELSKARDSBREEN	3339	2011	1150	1200	1.003	1900	-5200	-3300
NO	BLOMSTOELSKARDSBREEN	3339	2011	1100	1150	0.445	1550	-5625	-4075
NO	BLOMSTOELSKARDSBREEN	3339	2011	1012	1100	0.304	800	-6200	-5400
NO	BLOMSTOELSKARDSBREEN	3339	2012	1600	1632	1.166	4200	-1325	2875
NO	BLOMSTOELSKARDSBREEN	3339	2012	1550	1600	6.335	3950	-1425	2525
NO	BLOMSTOELSKARDSBREEN	3339	2012	1500	1550	4.131	3750	-1575	2175
NO	BLOMSTOELSKARDSBREEN	3339	2012	1450	1500	2.192	3625	-1750	1875
NO	BLOMSTOELSKARDSBREEN	3339	2012	1400	1450	1.556	3600	-1950	1650
NO	BLOMSTOELSKARDSBREEN	3339	2012	1350	1400	1.755	3300	-2175	1125
NO	BLOMSTOELSKARDSBREEN	3339	2012	1300	1350	1.458	3025	-2425	600
NO	BLOMSTOELSKARDSBREEN	3339	2012	1250	1300	0.781	2875	-2675	200
NO	BLOMSTOELSKARDSBREEN	3339	2012	1200	1250	1.278	2600	-2925	-325
NO	BLOMSTOELSKARDSBREEN	3339	2012	1150	1200	1.003	2300	-3150	-850
NO	BLOMSTOELSKARDSBREEN	3339	2012	1100	1150	0.445	2050	-3400	-1350
NO	BLOMSTOELSKARDSBREEN	3339	2012	1012	1100	0.304	1725	-3750	-2025
NO	BLOMSTOELSKARDSBREEN	3339	2013	1600	1632	1.166	3225	-2625	600
NO	BLOMSTOELSKARDSBREEN	3339	2013	1550	1600	6.335	3250	-2725	525
NO	BLOMSTOELSKARDSBREEN	3339	2013	1500	1550	4.131	3325	-2850	475
NO	BLOMSTOELSKARDSBREEN	3339	2013	1450	1500	2.192	3050	-3025	25
NO	BLOMSTOELSKARDSBREEN	3339	2013	1400	1450	1.556	2900	-3250	-350
NO	BLOMSTOELSKARDSBREEN	3339	2013	1350	1400	1.755	2775	-3475	-700
NO	BLOMSTOELSKARDSBREEN	3339	2013	1300	1350	1.458	2525	-3700	-1175
NO	BLOMSTOELSKARDSBREEN	3339	2013	1250	1300	0.781	2350	-3900	-1550
NO	BLOMSTOELSKARDSBREEN	3339	2013	1200	1250	1.278	2225	-4050	-1825
NO	BLOMSTOELSKARDSBREEN	3339	2013	1150	1200	1.003	2100	-4175	-2075
NO	BLOMSTOELSKARDSBREEN	3339	2013	1100	1150	0.445	1900	-4275	-2375
NO	BLOMSTOELSKARDSBREEN	3339	2013	1012	1100	0.304	650	-4400	-3750
NO	BREIDABLIKKBREA	2671	2011	1600	1651	0.627	2050	-3400	-1350
NO	BREIDABLIKKBREA	2671	2011	1550	1600	0.581	2050	-3625	-1575
NO	BREIDABLIKKBREA	2671	2011	1500	1550	0.433	1900	-3850	-1950
NO	BREIDABLIKKBREA	2671	2011	1450	1500	0.378	1725	-4100	-2375
NO	BREIDABLIKKBREA	2671	2011	1400	1450	0.276	1675	-4375	-2700
NO	BREIDABLIKKBREA	2671	2011	1350	1400	0.359	1700	-4650	-2950
NO	BREIDABLIKKBREA	2671	2011	1300	1350	0.337	1775	-4950	-3175
NO	BREIDABLIKKBREA	2671	2011	1234	1300	0.379	1825	-5325	-3500
NO	BREIDABLIKKBREA	2671	2012	1600	1651	0.627	3300	-1375	1925
NO	BREIDABLIKKBREA	2671	2012	1550	1600	0.581	3450	-1550	1900
NO	BREIDABLIKKBREA	2671	2012	1500	1550	0.433	3150	-1775	1375
NO	BREIDABLIKKBREA	2671	2012	1450	1500	0.378	3200	-2025	1175
NO	BREIDABLIKKBREA	2671	2012	1400	1450	0.276	3275	-2275	1000
NO	BREIDABLIKKBREA	2671	2012	1350	1400	0.359	3250	-2525	725
NO	BREIDABLIKKBREA	2671	2012	1300	1350	0.337	3175	-2800	375
NO	BREIDABLIKKBREA	2671	2012	1234	1300	0.379	2725	-3125	-400
NO	BREIDABLIKKBREA	2671	2013	1600	1651	0.627			-700
NO	BREIDABLIKKBREA	2671	2013	1550	1600	0.581			-800
NO	BREIDABLIKKBREA	2671	2013	1500	1550	0.433			-925
NO	BREIDABLIKKBREA	2671	2013	1450	1500	0.378			-1050
NO	BREIDABLIKKBREA	2671	2013	1400	1450	0.276			-1200
NO	BREIDABLIKKBREA	2671	2013	1350	1400	0.359			-1375
NO	BREIDABLIKKBREA	2671	2013	1300	1350	0.337			-1575
NO	BREIDABLIKKBREA	2671	2013	1234	1300	0.379			-1825
NO	ENGABREEN	298	2011	1500	1574	0.104	3000	-1700	1300
NO	ENGABREEN	298	2011	1400	1500	2.65	3400	-2100	1300
NO	ENGABREEN	298	2011	1300	1400	10.488	3400	-2500	900
NO	ENGABREEN	298	2011	1200	1300	8.458	3100	-3300	-200
NO	ENGABREEN	298	2011	1100	1200	7.56	2800	-4100	-1300
NO	ENGABREEN	298	2011	1000	1100	4.567	2400	-4800	-2400
NO	ENGABREEN	298	2011	900	1000	2.384	2100	-5600	-3500
NO	ENGABREEN	298	2011	800	900	0.838	1700	-6300	-4600
NO	ENGABREEN	298	2011	700	800	0.507	1300	-7000	-5700
NO	ENGABREEN	298	2011	600	700	0.353	900	-7700	-6800
NO	ENGABREEN	298	2011	500	600	0.262	400	-8400	-8000
NO	ENGABREEN	298	2011	400	500	0.173	0	-9200	-9200
NO	ENGABREEN	298	2011	300	400	0.126	-400	-10000	-10400
NO	ENGABREEN	298	2011	200	300	0.18	-900	-10800	-11700
NO	ENGABREEN	298	2011	100	200	0.086	-1400	-11700	-13100
NO	ENGABREEN	298	2011	89	100	0.001	-1700	-12200	-13900
NO	ENGABREEN	298	2012	1500	1574	0.104	3600	-1600	2000
NO	ENGABREEN	298	2012	1400	1500	2.65	4100	-1600	2500
NO	ENGABREEN	298	2012	1300	1400	10.488	4100	-1650	2450
NO	ENGABREEN	298	2012	1200	1300	8.458	3600	-1750	1850
NO	ENGABREEN	298	2012	1100	1200	7.56	3000	-2000	1000
NO	ENGABREEN	298	2012	1000	1100	4.567	2500	-2500	0
NO	ENGABREEN	298	2012	900	1000	2.384	1900	-3000	-1100
NO	ENGABREEN	298	2012	800	900	0.838	1500	-3400	-1900
NO	ENGABREEN	298	2012	700	800	0.507	1100	-3800	-2700
NO	ENGABREEN	298	2012	600	700	0.353	750	-4200	-3450
NO	ENGABREEN	298	2012	500	600	0.262	350	-4600	-4250
NO	ENGABREEN	298	2012	400	500	0.173	0	-5000	-5000
NO	ENGABREEN	298	2012	300	400	0.126	-400	-5500	-5900
NO	ENGABREEN	298	2012	200	300	0.18	-800	-6000	-6800
NO	ENGABREEN	298	2012	100	200	0.086	-1200	-6500	-7700
NO	ENGABREEN	298	2012	89	100	0.001	-1500	-6800	-8300
NO	ENGABREEN	298	2013	1500	1574	0.104	2500	-2800	-300
NO	ENGABREEN	298	2013	1400	1500	2.65	2900	-2800	100
NO	ENGABREEN	298	2013	1300	1400	10.488	2800	-3200	-400

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	ENGABREEN	298	2013	1200	1300	8.458	2500	-3700	-1200
NO	ENGABREEN	298	2013	1100	1200	7.56	2250	-4300	-2050
NO	ENGABREEN	298	2013	1000	1100	4.567	2000	-4900	-2900
NO	ENGABREEN	298	2013	900	1000	2.384	1600	-5500	-3900
NO	ENGABREEN	298	2013	800	900	0.838	1200	-6000	-4800
NO	ENGABREEN	298	2013	700	800	0.507	800	-6500	-5700
NO	ENGABREEN	298	2013	600	700	0.353	400	-7000	-6600
NO	ENGABREEN	298	2013	500	600	0.262	0	-7500	-7500
NO	ENGABREEN	298	2013	400	500	0.173	-500	-8000	-8500
NO	ENGABREEN	298	2013	300	400	0.126	-1000	-8500	-9500
NO	ENGABREEN	298	2013	200	300	0.18	-1500	-9000	-10500
NO	ENGABREEN	298	2013	100	200	0.086	-2000	-9500	-11500
NO	ENGABREEN	298	2013	89	100	0.001	-2300	-9800	-12100
NO	GRAAFJELLSBREA	1320	2011	1600	1651	0.497	2150	-3375	-1225
NO	GRAAFJELLSBREA	1320	2011	1550	1600	1.725	2075	-3550	-1475
NO	GRAAFJELLSBREA	1320	2011	1500	1550	2.13	1975	-3750	-1775
NO	GRAAFJELLSBREA	1320	2011	1450	1500	1.493	1900	-4000	-2100
NO	GRAAFJELLSBREA	1320	2011	1400	1450	0.814	1825	-4325	-2500
NO	GRAAFJELLSBREA	1320	2011	1350	1400	0.49	1750	-4700	-2950
NO	GRAAFJELLSBREA	1320	2011	1300	1350	0.409	1650	-5050	-3400
NO	GRAAFJELLSBREA	1320	2011	1250	1300	0.342	1550	-5350	-3800
NO	GRAAFJELLSBREA	1320	2011	1200	1250	0.148	1400	-5650	-4250
NO	GRAAFJELLSBREA	1320	2011	1150	1200	0.076	1200	-5925	-4725
NO	GRAAFJELLSBREA	1320	2011	1100	1150	0.124	925	-6175	-5250
NO	GRAAFJELLSBREA	1320	2011	1049	1100	0.163	600	-6425	-5825
NO	GRAAFJELLSBREA	1320	2012	1600	1651	0.497	3500	-1350	2150
NO	GRAAFJELLSBREA	1320	2012	1550	1600	1.725	3350	-1450	1900
NO	GRAAFJELLSBREA	1320	2012	1500	1550	2.13	3200	-1575	1625
NO	GRAAFJELLSBREA	1320	2012	1450	1500	1.493	3050	-1700	1350
NO	GRAAFJELLSBREA	1320	2012	1400	1450	0.814	2800	-1850	950
NO	GRAAFJELLSBREA	1320	2012	1350	1400	0.49	2550	-2000	550
NO	GRAAFJELLSBREA	1320	2012	1300	1350	0.409	2325	-2150	175
NO	GRAAFJELLSBREA	1320	2012	1250	1300	0.342	2125	-2325	-200
NO	GRAAFJELLSBREA	1320	2012	1200	1250	0.148	1950	-2500	-550
NO	GRAAFJELLSBREA	1320	2012	1150	1200	0.076	1800	-2675	-875
NO	GRAAFJELLSBREA	1320	2012	1100	1150	0.124	1650	-2850	-1200
NO	GRAAFJELLSBREA	1320	2012	1049	1100	0.163	1500	-3025	-1525
NO	GRAAFJELLSBREA	1320	2013	1600	1651	0.497			-700
NO	GRAAFJELLSBREA	1320	2013	1550	1600	1.725			-800
NO	GRAAFJELLSBREA	1320	2013	1500	1550	2.13			-950
NO	GRAAFJELLSBREA	1320	2013	1450	1500	1.493			-1100
NO	GRAAFJELLSBREA	1320	2013	1400	1450	0.814			-1275
NO	GRAAFJELLSBREA	1320	2013	1350	1400	0.49			-1475
NO	GRAAFJELLSBREA	1320	2013	1300	1350	0.409			-1700
NO	GRAAFJELLSBREA	1320	2013	1250	1300	0.342			-1925
NO	GRAAFJELLSBREA	1320	2013	1200	1250	0.148			-2150
NO	GRAAFJELLSBREA	1320	2013	1150	1200	0.076			-2400
NO	GRAAFJELLSBREA	1320	2013	1100	1150	0.124			-2650
NO	GRAAFJELLSBREA	1320	2013	1049	1100	0.163			-2925
NO	GRAASUBREEN	299	2011	2250	2283	0.031	970	-950	20
NO	GRAASUBREEN	299	2011	2200	2250	0.153	870	-1150	-280
NO	GRAASUBREEN	299	2011	2150	2200	0.255	940	-1460	-520
NO	GRAASUBREEN	299	2011	2100	2150	0.353	500	-1690	-1190
NO	GRAASUBREEN	299	2011	2050	2100	0.362	580	-1810	-1230
NO	GRAASUBREEN	299	2011	2000	2050	0.405	570	-1920	-1350
NO	GRAASUBREEN	299	2011	1950	2000	0.32	610	-2040	-1430
NO	GRAASUBREEN	299	2011	1900	1950	0.127	940	-2170	-1230
NO	GRAASUBREEN	299	2011	1833	1900	0.113	720	-2360	-1640
NO	GRAASUBREEN	299	2012	2250	2283	0.031	1000	-560	440
NO	GRAASUBREEN	299	2012	2200	2250	0.153	580	-620	-40
NO	GRAASUBREEN	299	2012	2150	2200	0.255	540	-690	-150
NO	GRAASUBREEN	299	2012	2100	2150	0.353	360	-770	-410
NO	GRAASUBREEN	299	2012	2050	2100	0.362	380	-850	-470
NO	GRAASUBREEN	299	2012	2000	2050	0.405	650	-930	-280
NO	GRAASUBREEN	299	2012	1950	2000	0.32	780	-980	-200
NO	GRAASUBREEN	299	2012	1900	1950	0.127	810	-1050	-240
NO	GRAASUBREEN	299	2012	1833	1900	0.113	1090	-1120	-30
NO	GRAASUBREEN	299	2013	2250	2283	0.031	900	-500	400
NO	GRAASUBREEN	299	2013	2200	2250	0.153	350	-700	-350
NO	GRAASUBREEN	299	2013	2150	2200	0.255	550	-950	150
NO	GRAASUBREEN	299	2013	2100	2150	0.353	650	-1250	-600
NO	GRAASUBREEN	299	2013	2050	2100	0.362	700	-1550	-1140
NO	GRAASUBREEN	299	2013	2000	2050	0.405	650	-1790	-1140
NO	GRAASUBREEN	299	2013	1950	2000	0.32	670	-1830	-1160
NO	GRAASUBREEN	299	2013	1900	1950	0.127	780	-1800	-1020
NO	GRAASUBREEN	299	2013	1833	1900	0.113	1200	-1750	-550
NO	HANSEBREEN	322	2011	1250	1310	0.496	3625	-4250	-625
NO	HANSEBREEN	322	2011	1200	1250	0.418	3850	-4425	-575
NO	HANSEBREEN	322	2011	1150	1200	0.474	3750	-4600	-850
NO	HANSEBREEN	322	2011	1100	1150	0.543	3400	-4775	-1375
NO	HANSEBREEN	322	2011	1050	1100	0.495	2925	-4950	-2025
NO	HANSEBREEN	322	2011	1000	1050	0.206	2850	-5125	-2275
NO	HANSEBREEN	322	2011	950	1000	0.098	3000	-5325	-2325
NO	HANSEBREEN	322	2011	927	950	0.02	3150	-5475	-2325
NO	HANSEBREEN	322	2012	1250	1310	0.496	3875	-2350	1525
NO	HANSEBREEN	322	2012	1200	1250	0.418	4025	-2525	1500
NO	HANSEBREEN	322	2012	1150	1200	0.474	3975	-2700	1275
NO	HANSEBREEN	322	2012	1100	1150	0.543	3600	-2900	700
NO	HANSEBREEN	322	2012	1050	1100	0.495	2975	-3075	-100
NO	HANSEBREEN	322	2012	1000	1050	0.206	3025	-3250	-225
NO	HANSEBREEN	322	2012	950	1000	0.098	3325	-3425	-100
NO	HANSEBREEN	322	2012	927	950	0.02	3600	-3550	50
NO	HANSEBREEN	322	2013	1250	1310	0.496	3100	-3975	-875
NO	HANSEBREEN	322	2013	1200	1250	0.418	3450	-4150	-700
NO	HANSEBREEN	322	2013	1150	1200	0.474	3225	-4375	-1150
NO	HANSEBREEN	322	2013	1100	1150	0.543	2725	-4650	-1925

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	HANSEBREEN	322	2013	1050	1100	0.495	2225	-4925	-2700
NO	HANSEBREEN	322	2013	1000	1050	0.206	2175	-5175	-3000
NO	HANSEBREEN	322	2013	950	1000	0.098	2300	-5425	-3125
NO	HANSEBREEN	322	2013	927	950	0.02	2425	-5600	-3175
NO	HELLSTUGUBREEN	300	2011	2150	2229	0.02	1120	-1150	-30
NO	HELLSTUGUBREEN	300	2011	2100	2150	0.08	1070	-1320	-250
NO	HELLSTUGUBREEN	300	2011	2050	2100	0.291	1080	-1530	-450
NO	HELLSTUGUBREEN	300	2011	2000	2050	0.181	900	-1770	-870
NO	HELLSTUGUBREEN	300	2011	1950	2000	0.307	940	-2000	-1060
NO	HELLSTUGUBREEN	300	2011	1900	1950	0.603	850	-2350	-1500
NO	HELLSTUGUBREEN	300	2011	1850	1900	0.373	780	-2750	-1970
NO	HELLSTUGUBREEN	300	2011	1800	1850	0.332	880	-3150	-2270
NO	HELLSTUGUBREEN	300	2011	1750	1800	0.157	540	-3600	-3060
NO	HELLSTUGUBREEN	300	2011	1700	1750	0.088	700	-4100	-3400
NO	HELLSTUGUBREEN	300	2011	1650	1700	0.139	830	-4550	-3670
NO	HELLSTUGUBREEN	300	2011	1600	1650	0.114	700	-5000	-4300
NO	HELLSTUGUBREEN	300	2011	1550	1600	0.124	450	-5400	-4950
NO	HELLSTUGUBREEN	300	2011	1500	1550	0.083	360	-5700	-5340
NO	HELLSTUGUBREEN	300	2012	2150	2229	0.02	1500	-500	1000
NO	HELLSTUGUBREEN	300	2012	2100	2150	0.08	1600	-550	1050
NO	HELLSTUGUBREEN	300	2012	2050	2100	0.291	1546	-600	950
NO	HELLSTUGUBREEN	300	2012	2000	2050	0.181	1880	-700	1180
NO	HELLSTUGUBREEN	300	2012	1950	2000	0.307	1540	-800	740
NO	HELLSTUGUBREEN	300	2012	1900	1950	0.603	1200	-920	280
NO	HELLSTUGUBREEN	300	2012	1850	1900	0.373	1100	-1100	-90
NO	HELLSTUGUBREEN	300	2012	1800	1850	0.332	1250	-1350	-100
NO	HELLSTUGUBREEN	300	2012	1750	1800	0.157	1196	-1650	-450
NO	HELLSTUGUBREEN	300	2012	1700	1750	0.088	793	-1850	-1060
NO	HELLSTUGUBREEN	300	2012	1650	1700	0.139	896	-2050	-1150
NO	HELLSTUGUBREEN	300	2012	1600	1650	0.114	750	-2250	-1500
NO	HELLSTUGUBREEN	300	2012	1550	1600	0.124	436	-2450	-2010
NO	HELLSTUGUBREEN	300	2012	1500	1550	0.083	183	-2650	-2470
NO	HELLSTUGUBREEN	300	2012	1482	1500	0.011	220	-2800	-2580
NO	HELLSTUGUBREEN	300	2013	2150	2229	0.02	1600	-450	1150
NO	HELLSTUGUBREEN	300	2013	2100	2150	0.08	1570	-700	870
NO	HELLSTUGUBREEN	300	2013	2050	2100	0.291	1380	-800	580
NO	HELLSTUGUBREEN	300	2013	2000	2050	0.181	1340	-1100	240
NO	HELLSTUGUBREEN	300	2013	1950	2000	0.307	1170	-1300	-130
NO	HELLSTUGUBREEN	300	2013	1900	1950	0.603	1060	-1600	-540
NO	HELLSTUGUBREEN	300	2013	1850	1900	0.373	1080	-1850	-770
NO	HELLSTUGUBREEN	300	2013	1800	1850	0.332	960	-2100	-1140
NO	HELLSTUGUBREEN	300	2013	1750	1800	0.157	920	-2350	-1430
NO	HELLSTUGUBREEN	300	2013	1700	1750	0.088	870	-2580	-1710
NO	HELLSTUGUBREEN	300	2013	1650	1700	0.139	730	-2820	-2090
NO	HELLSTUGUBREEN	300	2013	1600	1650	0.114	710	-3050	-2340
NO	HELLSTUGUBREEN	300	2013	1550	1600	0.124	670	-3250	-2580
NO	HELLSTUGUBREEN	300	2013	1500	1550	0.083	440	-3450	-3010
NO	HELLSTUGUBREEN	300	2013	1482	1500	0.011	400	-3600	-3200
NO	LANGFJORDJOEKELEN	323	2011	1000	1050	0.417	2425	-3075	-650
NO	LANGFJORDJOEKELEN	323	2011	950	1000	0.467	2550	-3150	-600
NO	LANGFJORDJOEKELEN	323	2011	900	950	0.376	2550	-3225	-675
NO	LANGFJORDJOEKELEN	323	2011	850	900	0.362	2450	-3300	-850
NO	LANGFJORDJOEKELEN	323	2011	800	850	0.232	2325	-3400	-1075
NO	LANGFJORDJOEKELEN	323	2011	750	800	0.217	2250	-3500	-1250
NO	LANGFJORDJOEKELEN	323	2011	700	750	0.267	2225	-3625	-1400
NO	LANGFJORDJOEKELEN	323	2011	650	700	0.203	2200	-3775	-1575
NO	LANGFJORDJOEKELEN	323	2011	600	650	0.168	2125	-3950	-1825
NO	LANGFJORDJOEKELEN	323	2011	550	600	0.128	2000	-4125	-2125
NO	LANGFJORDJOEKELEN	323	2011	500	550	0.121	1800	-4350	-2550
NO	LANGFJORDJOEKELEN	323	2011	450	500	0.095	1700	-4600	-2900
NO	LANGFJORDJOEKELEN	323	2011	400	450	0.096	1700	-4900	-3200
NO	LANGFJORDJOEKELEN	323	2011	350	400	0.049	1675	-5225	-3550
NO	LANGFJORDJOEKELEN	323	2011	302	350	0.018	1650	-5625	-3975
NO	LANGFJORDJOEKELEN	323	2012	1000	1050	0.417	1450	-1300	150
NO	LANGFJORDJOEKELEN	323	2012	950	1000	0.467	1575	-1500	75
NO	LANGFJORDJOEKELEN	323	2012	900	950	0.376	1600	-1700	-100
NO	LANGFJORDJOEKELEN	323	2012	850	900	0.362	1625	-1900	-275
NO	LANGFJORDJOEKELEN	323	2012	800	850	0.232	1650	-2075	-425
NO	LANGFJORDJOEKELEN	323	2012	750	800	0.217	1550	-2250	-700
NO	LANGFJORDJOEKELEN	323	2012	700	750	0.267	1350	-2425	-1075
NO	LANGFJORDJOEKELEN	323	2012	650	700	0.203	1100	-2600	-1500
NO	LANGFJORDJOEKELEN	323	2012	600	650	0.168	950	-2775	-1825
NO	LANGFJORDJOEKELEN	323	2012	550	600	0.128	850	-2950	-2100
NO	LANGFJORDJOEKELEN	323	2012	500	550	0.121	800	-3125	-2325
NO	LANGFJORDJOEKELEN	323	2012	450	500	0.095	775	-3300	-2525
NO	LANGFJORDJOEKELEN	323	2012	400	450	0.096	750	-3500	-2750
NO	LANGFJORDJOEKELEN	323	2012	350	400	0.049	725	-3700	-2975
NO	LANGFJORDJOEKELEN	323	2012	302	350	0.018	700	-3900	-3200
NO	LANGFJORDJOEKELEN	323	2013	1000	1050	0.417	2150	-3825	-1675
NO	LANGFJORDJOEKELEN	323	2013	950	1000	0.467	2225	-4000	-1775
NO	LANGFJORDJOEKELEN	323	2013	900	950	0.376	2325	-4175	-1850
NO	LANGFJORDJOEKELEN	323	2013	850	900	0.362	2300	-4375	-2075
NO	LANGFJORDJOEKELEN	323	2013	800	850	0.232	2275	-4550	-2275
NO	LANGFJORDJOEKELEN	323	2013	750	800	0.217	2300	-4750	-2450
NO	LANGFJORDJOEKELEN	323	2013	700	750	0.267	2000	-4950	-2950
NO	LANGFJORDJOEKELEN	323	2013	650	700	0.203	1775	-5175	-3400
NO	LANGFJORDJOEKELEN	323	2013	600	650	0.168	1700	-5400	-3700
NO	LANGFJORDJOEKELEN	323	2013	550	600	0.128	1675	-5650	-3975
NO	LANGFJORDJOEKELEN	323	2013	500	550	0.121	1650	-5925	-4275
NO	LANGFJORDJOEKELEN	323	2013	450	500	0.095	1625	-6175	-4550
NO	LANGFJORDJOEKELEN	323	2013	400	450	0.096	1600	-6450	-4850
NO	LANGFJORDJOEKELEN	323	2013	350	400	0.049	1575	-6750	-5175
NO	LANGFJORDJOEKELEN	323	2013	302	350	0.018	1550	-7050	-5500
NO	NIGARDSBREEN	290	2011	1900	1957	0.33	2300	-1450	850
NO	NIGARDSBREEN	290	2011	1800	1900	4.805	2375	-1650	725
NO	NIGARDSBREEN	290	2011	1700	1800	9.194	2125	-1900	225

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	NIGARDSBREEN	290	2011	1600	1700	12.736	1950	-2200	-250
NO	NIGARDSBREEN	290	2011	1500	1600	8.939	1775	-2575	-800
NO	NIGARDSBREEN	290	2011	1400	1500	5.92	1700	-3025	-1325
NO	NIGARDSBREEN	290	2011	1300	1400	2.082	1575	-3625	-2050
NO	NIGARDSBREEN	290	2011	1200	1300	0.788	1400	-4275	-2875
NO	NIGARDSBREEN	290	2011	1100	1200	0.389	1200	-4975	-3775
NO	NIGARDSBREEN	290	2011	1000	1100	0.58	1025	-5650	-4625
NO	NIGARDSBREEN	290	2011	900	1000	0.456	875	-6325	-5450
NO	NIGARDSBREEN	290	2011	800	900	0.472	725	-7000	-6275
NO	NIGARDSBREEN	290	2011	700	800	0.321	600	-7675	-7075
NO	NIGARDSBREEN	290	2011	600	700	0.406	475	-8325	-7850
NO	NIGARDSBREEN	290	2011	500	600	0.261	350	-9000	-8650
NO	NIGARDSBREEN	290	2011	400	500	0.157	225	-9700	-9475
NO	NIGARDSBREEN	290	2011	315	400	0.091	125	-10325	-10200
NO	NIGARDSBREEN	290	2012	1900	1957	0.33	2975	-775	2200
NO	NIGARDSBREEN	290	2012	1800	1900	4.805	3175	-925	2250
NO	NIGARDSBREEN	290	2012	1700	1800	9.194	3250	-1125	2125
NO	NIGARDSBREEN	290	2012	1600	1700	12.736	3100	-1350	1750
NO	NIGARDSBREEN	290	2012	1500	1600	8.939	2925	-1650	1275
NO	NIGARDSBREEN	290	2012	1400	1500	5.92	2875	-1975	900
NO	NIGARDSBREEN	290	2012	1300	1400	2.082	2700	-2325	375
NO	NIGARDSBREEN	290	2012	1200	1300	0.788	2400	-2700	-300
NO	NIGARDSBREEN	290	2012	1100	1200	0.389	2025	-3125	-1100
NO	NIGARDSBREEN	290	2012	1000	1100	0.58	1675	-3575	-1900
NO	NIGARDSBREEN	290	2012	900	1000	0.456	1350	-4050	1125
NO	NIGARDSBREEN	290	2012	800	900	0.472	1125	-4600	-3475
NO	NIGARDSBREEN	290	2012	700	800	0.321	925	-5225	-4300
NO	NIGARDSBREEN	290	2012	600	700	0.406	725	-5875	-5150
NO	NIGARDSBREEN	290	2012	500	600	0.261	525	-6600	-6075
NO	NIGARDSBREEN	290	2012	400	500	0.157	325	-7350	-7025
NO	NIGARDSBREEN	290	2012	315	400	0.091	150	-8100	-7950
NO	NIGARDSBREEN	290	2013	1900	1952	0.277	2850	-1625	1225
NO	NIGARDSBREEN	290	2013	1800	1900	4.579	2875	-1850	1025
NO	NIGARDSBREEN	290	2013	1700	1800	9.051	2775	-2100	675
NO	NIGARDSBREEN	290	2013	1600	1700	12.722	2600	-2325	275
NO	NIGARDSBREEN	290	2013	1500	1600	8.724	2400	-2600	-200
NO	NIGARDSBREEN	290	2013	1400	1500	5.612	2350	-2925	-575
NO	NIGARDSBREEN	290	2013	1300	1400	2.015	2300	-3425	-1125
NO	NIGARDSBREEN	290	2013	1200	1300	0.751	2100	-4025	-1925
NO	NIGARDSBREEN	290	2013	1100	1200	0.354	1725	-4675	-2950
NO	NIGARDSBREEN	290	2013	1000	1100	0.495	1325	-5325	-4000
NO	NIGARDSBREEN	290	2013	900	1000	0.424	950	-6000	-5050
NO	NIGARDSBREEN	290	2013	800	900	0.482	650	-6600	-5950
NO	NIGARDSBREEN	290	2013	700	800	0.294	400	-7175	-6775
NO	NIGARDSBREEN	290	2013	600	700	0.385	150	-7725	-7575
NO	NIGARDSBREEN	290	2013	500	600	0.268	-50	-8250	-8300
NO	NIGARDSBREEN	290	2013	400	500	0.123	-250	-8700	-8950
NO	NIGARDSBREEN	290	2013	330	400	0.055	-450	-9100	-9550
NO	REMBESDALSKAAKA	2296	2011	1850	1854	0.029	2300	-2950	-650
NO	REMBESDALSKAAKA	2296	2011	1800	1850	3.213	2450	-2950	-500
NO	REMBESDALSKAAKA	2296	2011	1750	1800	3.992	2550	-3100	-550
NO	REMBESDALSKAAKA	2296	2011	1700	1750	4.048	2350	-3200	-850
NO	REMBESDALSKAAKA	2296	2011	1650	1700	2.281	2200	-3350	-1150
NO	REMBESDALSKAAKA	2296	2011	1600	1650	0.957	1600	-3600	-2000
NO	REMBESDALSKAAKA	2296	2011	1550	1600	0.545	1400	-4000	-2600
NO	REMBESDALSKAAKA	2296	2011	1500	1550	0.535	1200	-4300	-3100
NO	REMBESDALSKAAKA	2296	2011	1450	1500	0.336	1050	-4450	-3400
NO	REMBESDALSKAAKA	2296	2011	1400	1450	0.197	900	-4600	-3700
NO	REMBESDALSKAAKA	2296	2011	1350	1400	0.108	850	-4750	-3900
NO	REMBESDALSKAAKA	2296	2011	1300	1350	0.074	800	-4900	-4100
NO	REMBESDALSKAAKA	2296	2011	1250	1300	0.199	750	-5000	-4250
NO	REMBESDALSKAAKA	2296	2011	1200	1250	0.262	600	-5200	-4600
NO	REMBESDALSKAAKA	2296	2011	1150	1200	0.333	300	-5400	-5100
NO	REMBESDALSKAAKA	2296	2011	1100	1150	0.143	0	-5750	-5750
NO	REMBESDALSKAAKA	2296	2011	1066	1100	0.012	-200	-6200	-6400
NO	REMBESDALSKAAKA	2296	2012	1850	1854	0.029	2750	-1100	1650
NO	REMBESDALSKAAKA	2296	2012	1800	1850	3.213	2810	-1140	1670
NO	REMBESDALSKAAKA	2296	2012	1750	1800	3.992	2910	-1210	1700
NO	REMBESDALSKAAKA	2296	2012	1700	1750	4.048	2820	-1440	1380
NO	REMBESDALSKAAKA	2296	2012	1650	1700	2.281	2790	-1740	1050
NO	REMBESDALSKAAKA	2296	2012	1600	1650	0.957	2590	-2150	440
NO	REMBESDALSKAAKA	2296	2012	1550	1600	0.545	2470	-2640	-170
NO	REMBESDALSKAAKA	2296	2012	1500	1550	0.535	2200	-3140	-940
NO	REMBESDALSKAAKA	2296	2012	1450	1500	0.336	2000	-3400	-1400
NO	REMBESDALSKAAKA	2296	2012	1400	1450	0.197	1820	-3560	-1740
NO	REMBESDALSKAAKA	2296	2012	1350	1400	0.108	1630	-3710	-2080
NO	REMBESDALSKAAKA	2296	2012	1300	1350	0.074	1440	-3870	-2430
NO	REMBESDALSKAAKA	2296	2012	1250	1300	0.199	1260	-4020	-2760
NO	REMBESDALSKAAKA	2296	2012	1200	1250	0.262	1070	-4180	-3110
NO	REMBESDALSKAAKA	2296	2012	1150	1200	0.333	880	-4330	-3450
NO	REMBESDALSKAAKA	2296	2012	1100	1150	0.143	690	-4490	-3800
NO	REMBESDALSKAAKA	2296	2012	1066	1100	0.012	530	-4620	-4090
NO	REMBESDALSKAAKA	2296	2013	1850	1854	0.029	1700	-2150	-450
NO	REMBESDALSKAAKA	2296	2013	1800	1850	3.213	1850	-2200	-350
NO	REMBESDALSKAAKA	2296	2013	1750	1800	3.992	1800	-2250	-450
NO	REMBESDALSKAAKA	2296	2013	1700	1750	4.048	1700	-2450	-750
NO	REMBESDALSKAAKA	2296	2013	1650	1700	2.281	1750	-2750	-1000
NO	REMBESDALSKAAKA	2296	2013	1600	1650	0.957	1500	-3100	-1600
NO	REMBESDALSKAAKA	2296	2013	1550	1600	0.545	1400	-3600	-2200
NO	REMBESDALSKAAKA	2296	2013	1500	1550	0.535	1300	-4100	-2800
NO	REMBESDALSKAAKA	2296	2013	1450	1500	0.336	900	-4500	-3600
NO	REMBESDALSKAAKA	2296	2013	1400	1450	0.197	700	-4850	-4150
NO	REMBESDALSKAAKA	2296	2013	1350	1400	0.108	550	-5200	-4650
NO	REMBESDALSKAAKA	2296	2013	1300	1350	0.074	500	-5550	-5050
NO	REMBESDALSKAAKA	2296	2013	1250	1300	0.199	450	-5900	-5450
NO	REMBESDALSKAAKA	2296	2013	1200	1250	0.262	400	-6250	-5850

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	REMBESDALSKAAKA	2296	2013	1150	1200	0.333	300	-6600	-6300
NO	REMBESDALSKAAKA	2296	2013	1100	1150	0.143	200	-6950	-6750
NO	REMBESDALSKAAKA	2296	2013	1066	1100	0.012	100	-7200	-7100
NO	RUNDVASSBREEN	2670	2011	1450	1525	0.167	2850	-2475	375
NO	RUNDVASSBREEN	2670	2011	1400	1450	0.188	2750	-2575	175
NO	RUNDVASSBREEN	2670	2011	1350	1400	1.922	2350	-2675	-325
NO	RUNDVASSBREEN	2670	2011	1300	1350	1.793	2000	-2775	-775
NO	RUNDVASSBREEN	2670	2011	1250	1300	1.943	1725	-2950	-1225
NO	RUNDVASSBREEN	2670	2011	1200	1250	0.782	1500	-3200	-1700
NO	RUNDVASSBREEN	2670	2011	1150	1200	0.837	1350	-3550	-2200
NO	RUNDVASSBREEN	2670	2011	1100	1150	1.752	1300	-3975	-2675
NO	RUNDVASSBREEN	2670	2011	1050	1100	1.326	1300	-4450	-3150
NO	RUNDVASSBREEN	2670	2011	1000	1050	0.105	1350	-4950	-3600
NO	RUNDVASSBREEN	2670	2011	950	1000	0.057	1400	-5500	-4100
NO	RUNDVASSBREEN	2670	2011	900	950	0.04	1450	-6025	-4575
NO	RUNDVASSBREEN	2670	2011	836	900	0.024	1500	-6650	-5150
NO	RUNDVASSBREEN	2670	2012	1450	1525	0.167	2950	-550	2400
NO	RUNDVASSBREEN	2670	2012	1400	1450	0.188	2975	-675	2300
NO	RUNDVASSBREEN	2670	2012	1350	1400	1.922	2825	-800	2025
NO	RUNDVASSBREEN	2670	2012	1300	1350	1.793	2550	-975	1575
NO	RUNDVASSBREEN	2670	2012	1250	1300	1.943	2250	-1200	1050
NO	RUNDVASSBREEN	2670	2012	1200	1250	0.782	1950	-1450	500
NO	RUNDVASSBREEN	2670	2012	1150	1200	0.837	1650	-1700	-50
NO	RUNDVASSBREEN	2670	2012	1100	1150	1.752	1350	-1950	-600
NO	RUNDVASSBREEN	2670	2012	1050	1100	1.326	1100	-2200	-1100
NO	RUNDVASSBREEN	2670	2012	1000	1050	0.105	850	-2450	-1600
NO	RUNDVASSBREEN	2670	2012	950	1000	0.057	600	-2700	-2100
NO	RUNDVASSBREEN	2670	2012	900	950	0.04	350	-2950	-2600
NO	RUNDVASSBREEN	2670	2012	836	900	0.024	100	-3250	-3150
NO	RUNDVASSBREEN	2670	2013	1450	1525	0.167	2275	-2525	-250
NO	RUNDVASSBREEN	2670	2013	1400	1450	0.188	2150	-2850	-700
NO	RUNDVASSBREEN	2670	2013	1350	1400	1.922	1950	-3125	-1175
NO	RUNDVASSBREEN	2670	2013	1300	1350	1.793	1725	-3400	-1675
NO	RUNDVASSBREEN	2670	2013	1250	1300	1.943	1550	-3700	-2150
NO	RUNDVASSBREEN	2670	2013	1200	1250	0.782	1425	-3975	-2550
NO	RUNDVASSBREEN	2670	2013	1150	1200	0.837	1275	-4250	-2975
NO	RUNDVASSBREEN	2670	2013	1100	1150	1.752	1100	-4550	-3450
NO	RUNDVASSBREEN	2670	2013	1050	1100	1.326	900	-4900	-4000
NO	RUNDVASSBREEN	2670	2013	1000	1050	0.105	700	-5275	-4575
NO	RUNDVASSBREEN	2670	2013	950	1000	0.057	500	-5650	-5150
NO	RUNDVASSBREEN	2670	2013	900	950	0.04	275	-6050	-5775
NO	RUNDVASSBREEN	2670	2013	836	900	0.024	50	-6550	-6500
NO	STORBREEN	302	2011	2050	2102	0.004	1300	-1000	300
NO	STORBREEN	302	2011	2000	2050	0.095	1200	-1100	100
NO	STORBREEN	302	2011	1950	2000	0.179	1100	-1250	-150
NO	STORBREEN	302	2011	1900	1950	0.29	1050	-1440	-390
NO	STORBREEN	302	2011	1850	1900	0.345	980	-1680	-700
NO	STORBREEN	302	2011	1800	1850	0.753	900	-1880	-980
NO	STORBREEN	302	2011	1750	1800	0.866	1110	-2100	-990
NO	STORBREEN	302	2011	1700	1750	0.681	1000	-2320	-1320
NO	STORBREEN	302	2011	1650	1700	0.548	1100	-2580	-1480
NO	STORBREEN	302	2011	1600	1650	0.312	1000	-2830	-1830
NO	STORBREEN	302	2011	1550	1600	0.495	900	-3110	-2210
NO	STORBREEN	302	2011	1500	1550	0.263	800	-3350	-2550
NO	STORBREEN	302	2011	1450	1500	0.176	720	-3600	-2880
NO	STORBREEN	302	2011	1400	1450	0.135	700	-3830	-3130
NO	STORBREEN	302	2012	2050	2102	0.004	2300	-400	1900
NO	STORBREEN	302	2012	2000	2050	0.095	2200	-500	1700
NO	STORBREEN	302	2012	1950	2000	0.179	2100	-700	1400
NO	STORBREEN	302	2012	1900	1950	0.29	1870	-850	1020
NO	STORBREEN	302	2012	1850	1900	0.345	2060	-1000	1060
NO	STORBREEN	302	2012	1800	1850	0.753	1370	-1200	170
NO	STORBREEN	302	2012	1750	1800	0.866	1690	-1450	240
NO	STORBREEN	302	2012	1700	1750	0.681	1780	-1800	-20
NO	STORBREEN	302	2012	1650	1700	0.548	1570	-2100	-530
NO	STORBREEN	302	2012	1600	1650	0.312	1630	-2400	-770
NO	STORBREEN	302	2012	1550	1600	0.495	1480	-2800	-1320
NO	STORBREEN	302	2012	1500	1550	0.263	1440	-3300	-1860
NO	STORBREEN	302	2012	1450	1500	0.176	1180	-3900	-2720
NO	STORBREEN	302	2012	1400	1450	0.135	1190	-4400	-3210
NO	STORBREEN	302	2013	2050	2102	0.004	1800	-650	1150
NO	STORBREEN	302	2013	2000	2050	0.095	1700	-800	900
NO	STORBREEN	302	2013	1950	2000	0.179	1594	-1000	590
NO	STORBREEN	302	2013	1900	1950	0.29	1508	-1190	320
NO	STORBREEN	302	2013	1850	1900	0.345	1481	-1750	-270
NO	STORBREEN	302	2013	1800	1850	0.753	1245	-2050	-800
NO	STORBREEN	302	2013	1750	1800	0.866	1339	-2400	-1060
NO	STORBREEN	302	2013	1700	1750	0.681	1171	-2650	-1480
NO	STORBREEN	302	2013	1650	1700	0.548	1383	-2750	-1570
NO	STORBREEN	302	2013	1600	1650	0.312	1397	-2950	-1550
NO	STORBREEN	302	2013	1550	1600	0.495	1271	-3150	-1880
NO	STORBREEN	302	2013	1500	1550	0.263	1132	-3400	-2270
NO	STORBREEN	302	2013	1450	1500	0.176	955	-3650	-2700
NO	STORBREEN	302	2013	1400	1450	0.135	1106	-3800	-2690
NO	SVELGJABREEN	3343	2011	1600	1632	1.157	2925	-2850	75
NO	SVELGJABREEN	3343	2011	1550	1600	1.847	3000	-2900	100
NO	SVELGJABREEN	3343	2011	1500	1550	2.868	3000	-3000	0
NO	SVELGJABREEN	3343	2011	1450	1500	2.084	2950	-3175	-225
NO	SVELGJABREEN	3343	2011	1400	1450	1.821	2900	-3375	-475
NO	SVELGJABREEN	3343	2011	1350	1400	2.702	2775	-3625	-850
NO	SVELGJABREEN	3343	2011	1300	1350	1.986	2625	-3875	-1250
NO	SVELGJABREEN	3343	2011	1250	1300	1.554	2450	-4150	-1700
NO	SVELGJABREEN	3343	2011	1200	1250	1.527	2275	-4450	-2175
NO	SVELGJABREEN	3343	2011	1150	1200	1.478	2100	-4750	-2650
NO	SVELGJABREEN	3343	2011	1100	1150	0.933	1950	-5050	-3100
NO	SVELGJABREEN	3343	2011	1050	1100	1.197	1775	-5350	-3575

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	SVELGJABREEN	3343	2011	1000	1050	0.639	1575	-5650	-4075
NO	SVELGJABREEN	3343	2011	950	1000	0.34	1375	-5975	-4600
NO	SVELGJABREEN	3343	2011	900	950	0.142	1125	-6300	-5175
NO	SVELGJABREEN	3343	2011	829	900	0.071	850	-6700	-5850
NO	SVELGJABREEN	3343	2012	1600	1632	1.157	4175	-1275	2900
NO	SVELGJABREEN	3343	2012	1550	1600	1.847	4200	-1375	2825
NO	SVELGJABREEN	3343	2012	1500	1550	2.868	4000	-1500	2500
NO	SVELGJABREEN	3343	2012	1450	1500	2.084	3925	-1650	-5575
NO	SVELGJABREEN	3343	2012	1400	1450	1.821	3850	-1800	2050
NO	SVELGJABREEN	3343	2012	1350	1400	2.702	3600	-1950	1650
NO	SVELGJABREEN	3343	2012	1300	1350	1.986	3300	-2100	1200
NO	SVELGJABREEN	3343	2012	1250	1300	1.554	3000	-2275	725
NO	SVELGJABREEN	3343	2012	1200	1250	1.527	2775	-2475	300
NO	SVELGJABREEN	3343	2012	1150	1200	1.478	2575	-2675	-100
NO	SVELGJABREEN	3343	2012	1100	1150	0.933	2400	-2900	-500
NO	SVELGJABREEN	3343	2012	1050	1100	1.197	2250	-3150	-900
NO	SVELGJABREEN	3343	2012	1000	1050	0.639	2050	-3425	-1375
NO	SVELGJABREEN	3343	2012	950	1000	0.34	1850	-3725	-1875
NO	SVELGJABREEN	3343	2012	900	950	0.142	1625	-4025	-2400
NO	SVELGJABREEN	3343	2012	829	900	0.071	1350	-4400	-3050
NO	SVELGJABREEN	3343	2013	1600	1632	1.157	3375	-2625	750
NO	SVELGJABREEN	3343	2013	1550	1600	1.847	3400	-2675	725
NO	SVELGJABREEN	3343	2013	1500	1550	2.868	3125	-2750	375
NO	SVELGJABREEN	3343	2013	1450	1500	2.084	2800	-2875	-75
NO	SVELGJABREEN	3343	2013	1400	1450	1.821	2725	-3000	-275
NO	SVELGJABREEN	3343	2013	1350	1400	2.702	2800	-3150	-350
NO	SVELGJABREEN	3343	2013	1300	1350	1.986	2725	-3325	-600
NO	SVELGJABREEN	3343	2013	1250	1300	1.554	2525	-3525	-1000
NO	SVELGJABREEN	3343	2013	1200	1250	1.527	2225	-3725	-1500
NO	SVELGJABREEN	3343	2013	1150	1200	1.478	1900	-3925	-2025
NO	SVELGJABREEN	3343	2013	1100	1150	0.933	1650	-4125	-2475
NO	SVELGJABREEN	3343	2013	1050	1100	1.197	1475	-4325	-2850
NO	SVELGJABREEN	3343	2013	1000	1050	0.639	1350	-4550	-3200
NO	SVELGJABREEN	3343	2013	950	1000	0.34	1125	-4775	-3650
NO	SVELGJABREEN	3343	2013	900	950	0.142	850	-5000	-4150
NO	SVELGJABREEN	3343	2013	829	900	0.071	500	-5275	-4775
PE	ARTESONRAJU	3292	2011	5300	5350	0.319			105
PE	ARTESONRAJU	3292	2011	5250	5300	0.446			151
PE	ARTESONRAJU	3292	2011	5200	5250	0.493			149
PE	ARTESONRAJU	3292	2011	5150	5200	0.374			99
PE	ARTESONRAJU	3292	2011	5100	5150	0.161			2
PE	ARTESONRAJU	3292	2011	5050	5100	0.368			36
PE	ARTESONRAJU	3292	2011	5000	5050	0.264			-53
PE	ARTESONRAJU	3292	2011	4950	5000	0.304			-79
PE	ARTESONRAJU	3292	2011	4900	4950	0.339			-78
PE	ARTESONRAJU	3292	2011	4850	4900	0.576			-187
PE	ARTESONRAJU	3292	2011	4800	4850	0.230			-171
PE	ARTESONRAJU	3292	2011	4750	4800	0.166			-225
PE	ARTESONRAJU	3292	2011	4710	4750	0.130			-266
PE	ARTESONRAJU	3292	2012	5275	5600	0.213			2351
PE	ARTESONRAJU	3292	2012	5225	5275	0.233			2251
PE	ARTESONRAJU	3292	2012	5175	5225	0.218			2148
PE	ARTESONRAJU	3292	2012	5125	5175	0.213			1979
PE	ARTESONRAJU	3292	2012	5075	5125	0.220			2092
PE	ARTESONRAJU	3292	2012	5025	5075	0.182			559
PE	ARTESONRAJU	3292	2012	4975	5025	0.286			1455
PE	ARTESONRAJU	3292	2012	4925	4975	0.206			-571
PE	ARTESONRAJU	3292	2012	4875	4925	0.139			-2056
PE	ARTESONRAJU	3292	2012	4825	4875	0.216			-3824
PE	ARTESONRAJU	3292	2012	4775	4825	0.219			-6249
PE	ARTESONRAJU	3292	2012	4740	4775	0.070			-8592
PE	ARTESONRAJU	3292	2012	4720	4740	0.056			-9969
PE	ARTESONRAJU	3292	2013	5400	5600	0.469			1175
PE	ARTESONRAJU	3292	2013	5300	5400	0.479			1143
PE	ARTESONRAJU	3292	2013	5200	5300	0.472			1150
PE	ARTESONRAJU	3292	2013	5100	5200	0.26			1006
PE	ARTESONRAJU	3292	2013	5050	5100	0.233			792
PE	ARTESONRAJU	3292	2013	5000	5050	0.233			872
PE	ARTESONRAJU	3292	2013	4950	5000	0.182			169
PE	ARTESONRAJU	3292	2013	4900	4950	0.286			-931
PE	ARTESONRAJU	3292	2013	4840	4900	0.204			-2275
PE	ARTESONRAJU	3292	2013	4820	4840	0.202			-3671
PE	ARTESONRAJU	3292	2013	4790	4820	0.128			-4361
PE	ARTESONRAJU	3292	2013	4760	4790	0.117			-5490
PE	ARTESONRAJU	3292	2013	4730	4760	0.099			-6156
PE	ARTESONRAJU	3292	2013	4700	4730	0.068			-8439
PE	YANAMAREY	226	2012	4960	4980	0.058			3325
PE	YANAMAREY	226	2012	4930	4960	0.028			1813
PE	YANAMAREY	226	2012	4900	4930	0.026			679
PE	YANAMAREY	226	2012	4870	4900	0.024			-736
PE	YANAMAREY	226	2012	4840	4870	0.027			-2224
PE	YANAMAREY	226	2012	4810	4840	0.028			-4031
PE	YANAMAREY	226	2012	4780	4810	0.032			-4753
PE	YANAMAREY	226	2012	4750	4780	0.015			-5886
PE	YANAMAREY	226	2012	4720	4750	0.012			-7584
PE	YANAMAREY	226	2012	4690	4720	0.008			-8000
PE	YANAMAREY	226	2013	4930	4980	0.072			1000
PE	YANAMAREY	226	2013	4880	4930	0.042			235
PE	YANAMAREY	226	2013	4830	4880	0.061			-1730
PE	YANAMAREY	226	2013	4780	4830	0.055			-2820
PE	YANAMAREY	226	2013	4730	4780	0.024			-3688
PE	YANAMAREY	226	2013	4680	4730	0.016			-4389
RU	GARABASHI	761	2011	4600	5000		196	-56	140
RU	GARABASHI	761	2011	4500	4600		299	-156	143
RU	GARABASHI	761	2011	4400	4500		384	-246	138
RU	GARABASHI	761	2011	4300	4400		425	-321	104

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
RU	GARABASHI	761	2011	4200	4300		541	-369	172
RU	GARABASHI	761	2011	4100	4200		743	-446	297
RU	GARABASHI	761	2011	4000	4100		1119	-592	527
RU	GARABASHI	761	2011	3900	4000		1648	-1244	404
RU	GARABASHI	761	2011	3800	3900		1164	-2310	-1146
RU	GARABASHI	761	2011	3700	3800		1124	-2830	-1706
RU	GARABASHI	761	2011	3600	3700		1251	-3402	-2151
RU	GARABASHI	761	2011	3500	3600		1491	-3780	-2289
RU	GARABASHI	761	2011	3400	3500		1393	-4308	-2915
RU	GARABASHI	761	2011	3300	3400		1148	-4671	-3523
RU	GARABASHI	761	2013	4600	5000		293	-50	243
RU	GARABASHI	761	2013	4500	4600		364	-121	243
RU	GARABASHI	761	2013	4400	4500		375	-177	198
RU	GARABASHI	761	2013	4300	4400		377	-224	153
RU	GARABASHI	761	2013	4200	4300		556	-257	299
RU	GARABASHI	761	2013	4100	4200		814	-324	490
RU	GARABASHI	761	2013	4000	4100		1423	-404	1019
RU	GARABASHI	761	2013	3900	4000		1600	-836	764
RU	GARABASHI	761	2013	3800	3900		1341	-1587	-246
RU	GARABASHI	761	2013	3700	3800		1194	-1981	-787
RU	GARABASHI	761	2013	3600	3700		1136	-2447	-1311
RU	GARABASHI	761	2013	3500	3600		1269	-2804	-1535
RU	GARABASHI	761	2013	3400	3500		1216	-3222	-2006
RU	GARABASHI	761	2013	3300	3400		1146	-3515	-2369
RU	MALIY AKTRU	795	2011	3600	3700				280
RU	MALIY AKTRU	795	2011	3500	3600				400
RU	MALIY AKTRU	795	2011	3400	3500				510
RU	MALIY AKTRU	795	2011	3300	3400				300
RU	MALIY AKTRU	795	2011	3200	3300				-520
RU	MALIY AKTRU	795	2011	3100	3200				-930
RU	MALIY AKTRU	795	2011	3000	3100				-1420
RU	MALIY AKTRU	795	2011	2900	3000				-1880
RU	MALIY AKTRU	795	2011	2800	2900				-2410
RU	MALIY AKTRU	795	2011	2700	2800				-2870
RU	MALIY AKTRU	795	2011	2600	2700				-3060
RU	MALIY AKTRU	795	2011	2500	2600				-3410
RU	MALIY AKTRU	795	2011	2400	2500				-3920
RU	MALIY AKTRU	795	2011	2300	2400				-4400
RU	MALIY AKTRU	795	2011	2200	2300				-4780
RU	MALIY AKTRU	795	2012	3600	3700				230
RU	MALIY AKTRU	795	2012	3500	3600				360
RU	MALIY AKTRU	795	2012	3400	3500				450
RU	MALIY AKTRU	795	2012	3300	3400				-380
RU	MALIY AKTRU	795	2012	3200	3300				-1040
RU	MALIY AKTRU	795	2012	3100	3200				-1620
RU	MALIY AKTRU	795	2012	3000	3100				-2010
RU	MALIY AKTRU	795	2012	2900	3000				-2480
RU	MALIY AKTRU	795	2012	2800	2900				-3060
RU	MALIY AKTRU	795	2012	2700	2800				-3480
RU	MALIY AKTRU	795	2012	2600	2700				-3760
RU	MALIY AKTRU	795	2012	2500	2600				-4020
RU	MALIY AKTRU	795	2012	2400	2500				-4550
RU	MALIY AKTRU	795	2012	2300	2400				-4980
RU	MALIY AKTRU	795	2012	2200	2300				-5400
SE	MARMAGLACIAEREN	1461	2011	1780	1800	0.000	2070	-1270	790
SE	MARMAGLACIAEREN	1461	2011	1760	1780	0.004	2000	-1340	660
SE	MARMAGLACIAEREN	1461	2011	1740	1760	0.018	2280	-1420	860
SE	MARMAGLACIAEREN	1461	2011	1720	1740	0.030	2350	-1510	840
SE	MARMAGLACIAEREN	1461	2011	1700	1720	0.042	2220	-1610	610
SE	MARMAGLACIAEREN	1461	2011	1680	1700	0.104	1970	-1710	260
SE	MARMAGLACIAEREN	1461	2011	1660	1680	0.206	1940	-1800	140
SE	MARMAGLACIAEREN	1461	2011	1640	1660	0.192	1570	-1890	-320
SE	MARMAGLACIAEREN	1461	2011	1620	1640	0.315	970	-1980	-1010
SE	MARMAGLACIAEREN	1461	2011	1600	1620	0.322	660	-2070	-1400
SE	MARMAGLACIAEREN	1461	2011	1580	1600	0.191	760	-2160	-1400
SE	MARMAGLACIAEREN	1461	2011	1560	1580	0.229	800	-2260	-1460
SE	MARMAGLACIAEREN	1461	2011	1540	1560	0.345	890	-2350	-1460
SE	MARMAGLACIAEREN	1461	2011	1520	1540	0.365	880	-2430	-1560
SE	MARMAGLACIAEREN	1461	2011	1500	1520	0.186	770	-2530	-1760
SE	MARMAGLACIAEREN	1461	2011	1480	1500	0.198	700	-2630	-1930
SE	MARMAGLACIAEREN	1461	2011	1460	1480	0.252	590	-2720	-2130
SE	MARMAGLACIAEREN	1461	2011	1440	1460	0.218	620	-2810	-2190
SE	MARMAGLACIAEREN	1461	2011	1420	1440	0.16	680	-2910	-2230
SE	MARMAGLACIAEREN	1461	2011	1400	1420	0.150	770	-3000	-2230
SE	MARMAGLACIAEREN	1461	2011	1380	1400	0.147	910	-3090	-2180
SE	MARMAGLACIAEREN	1461	2011	1360	1380	0.144	1070	-3180	-2110
SE	MARMAGLACIAEREN	1461	2011	1340	1360	0.097	1150	-3270	-2120
SE	MARMAGLACIAEREN	1461	2011	1320	1340	0.051	1190	-3350	-2160
SE	MARMAGLACIAEREN	1461	2012	1780	1800	0.000	1430	-100	1340
SE	MARMAGLACIAEREN	1461	2012	1760	1780	0.004	1530	-150	1380
SE	MARMAGLACIAEREN	1461	2012	1740	1760	0.018	1550	-230	1320
SE	MARMAGLACIAEREN	1461	2012	1720	1740	0.030	1550	-310	1240
SE	MARMAGLACIAEREN	1461	2012	1700	1720	0.042	1550	-390	1160
SE	MARMAGLACIAEREN	1461	2012	1680	1700	0.104	1560	-480	1080
SE	MARMAGLACIAEREN	1461	2012	1660	1680	0.206	1560	-560	1000
SE	MARMAGLACIAEREN	1461	2012	1640	1660	0.192	1410	-640	770
SE	MARMAGLACIAEREN	1461	2012	1620	1640	0.315	1100	-720	370
SE	MARMAGLACIAEREN	1461	2012	1600	1620	0.322	880	-800	80
SE	MARMAGLACIAEREN	1461	2012	1580	1600	0.191	920	-880	40
SE	MARMAGLACIAEREN	1461	2012	1560	1580	0.229	960	-970	-10
SE	MARMAGLACIAEREN	1461	2012	1540	1560	0.345	1000	-1050	-50
SE	MARMAGLACIAEREN	1461	2012	1520	1540	0.365	920	-1120	-200
SE	MARMAGLACIAEREN	1461	2012	1500	1520	0.186	940	-1210	-260
SE	MARMAGLACIAEREN	1461	2012	1480	1500	0.198	890	-1290	-400
SE	MARMAGLACIAEREN	1461	2012	1460	1480	0.252	800	-1380	-580
SE	MARMAGLACIAEREN	1461	2012	1440	1460	0.218	850	-1450	-600

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SE	MARMAGLACIAEREN	1461	2012	1420	1440	0.16	940	-1540	-600
SE	MARMAGLACIAEREN	1461	2012	1400	1420	0.150	970	-1620	-650
SE	MARMAGLACIAEREN	1461	2012	1380	1400	0.147	1030	-1700	-680
SE	MARMAGLACIAEREN	1461	2012	1360	1380	0.144	970	-1780	-820
SE	MARMAGLACIAEREN	1461	2012	1340	1360	0.097	710	-1860	-1160
SE	MARMAGLACIAEREN	1461	2012	1320	1340	0.051	690	-1930	-1230
SE	RABOTS GLACIAER	334	2011	1920	1940	0.000	1190	-1320	-130
SE	RABOTS GLACIAER	334	2011	1900	1920	0.005	1180	-1310	-130
SE	RABOTS GLACIAER	334	2011	1880	1900	0.005	1180	-1310	-130
SE	RABOTS GLACIAER	334	2011	1860	1880	0.006	1210	-1350	-140
SE	RABOTS GLACIAER	334	2011	1840	1860	0.005	1220	-1360	-140
SE	RABOTS GLACIAER	334	2011	1820	1840	0.004	1230	-1370	-150
SE	RABOTS GLACIAER	334	2011	1800	1820	0.004	1170	-1400	-230
SE	RABOTS GLACIAER	334	2011	1780	1800	0.005	1010	-1380	-370
SE	RABOTS GLACIAER	334	2011	1760	1780	0.011	920	-1380	-460
SE	RABOTS GLACIAER	334	2011	1740	1760	0.015	960	-1440	-480
SE	RABOTS GLACIAER	334	2011	1720	1740	0.018	950	-1470	-510
SE	RABOTS GLACIAER	334	2011	1700	1720	0.02	940	-1510	-570
SE	RABOTS GLACIAER	334	2011	1680	1700	0.023	920	-1590	-660
SE	RABOTS GLACIAER	334	2011	1660	1680	0.027	920	-1720	-800
SE	RABOTS GLACIAER	334	2011	1640	1660	0.037	900	-1790	-890
SE	RABOTS GLACIAER	334	2011	1620	1640	0.046	870	-1810	-950
SE	RABOTS GLACIAER	334	2011	1600	1620	0.058	850	-1890	-1050
SE	RABOTS GLACIAER	334	2011	1580	1600	0.069	790	-1980	-1190
SE	RABOTS GLACIAER	334	2011	1560	1580	0.084	780	-2040	-1260
SE	RABOTS GLACIAER	334	2011	1540	1560	0.100	750	-2120	-1370
SE	RABOTS GLACIAER	334	2011	1520	1540	0.156	750	-2220	-1470
SE	RABOTS GLACIAER	334	2011	1500	1520	0.216	710	-2280	-1570
SE	RABOTS GLACIAER	334	2011	1480	1500	0.189	640	-2370	-1740
SE	RABOTS GLACIAER	334	2011	1460	1480	0.150	570	-2470	-1900
SE	RABOTS GLACIAER	334	2011	1440	1460	0.127	510	-2550	-2030
SE	RABOTS GLACIAER	334	2011	1420	1440	0.115	480	-2610	-2140
SE	RABOTS GLACIAER	334	2011	1400	1420	0.102	440	-2670	-2230
SE	RABOTS GLACIAER	334	2011	1380	1400	0.227	430	-2710	-2280
SE	RABOTS GLACIAER	334	2011	1360	1380	0.272	410	-2790	-2380
SE	RABOTS GLACIAER	334	2011	1340	1360	0.243	430	-2810	-2380
SE	RABOTS GLACIAER	334	2011	1320	1340	0.142	390	-2850	-2450
SE	RABOTS GLACIAER	334	2011	1300	1320	0.131	360	-2900	-2530
SE	RABOTS GLACIAER	334	2011	1280	1300	0.219	350	-2920	-2570
SE	RABOTS GLACIAER	334	2011	1260	1280	0.227	350	-2930	-2580
SE	RABOTS GLACIAER	334	2011	1240	1260	0.198	370	-2910	-2540
SE	RABOTS GLACIAER	334	2011	1220	1240	0.170	380	-2930	-2550
SE	RABOTS GLACIAER	334	2011	1200	1220	0.129	370	-2950	-2590
SE	RABOTS GLACIAER	334	2011	1180	1200	0.092	340	-2950	-2600
SE	RABOTS GLACIAER	334	2011	1160	1180	0.091	320	-2950	-2620
SE	RABOTS GLACIAER	334	2011	1140	1160	0.067	300	-2940	-2640
SE	RABOTS GLACIAER	334	2011	1120	1140	0.053	290	-2920	-2630
SE	RABOTS GLACIAER	334	2011	1100	1120	0.045	280	-2920	-2630
SE	RABOTS GLACIAER	334	2011	1080	1100	0.034	280	-2920	-2640
SE	RABOTS GLACIAER	334	2011	1060	1080	0.010	270	-2920	-2640
SE	RABOTS GLACIAER	334	2012	1920	1940	0.000	1260	1550	2800
SE	RABOTS GLACIAER	334	2012	1900	1920	0.005	1240	1490	2730
SE	RABOTS GLACIAER	334	2012	1880	1900	0.005	1220	1400	2620
SE	RABOTS GLACIAER	334	2012	1860	1880	0.006	1210	1310	2520
SE	RABOTS GLACIAER	334	2012	1840	1860	0.005	1190	1210	2410
SE	RABOTS GLACIAER	334	2012	1820	1840	0.004	1170	1120	2290
SE	RABOTS GLACIAER	334	2012	1800	1820	0.004	1170	1030	2200
SE	RABOTS GLACIAER	334	2012	1780	1800	0.005	1200	930	2130
SE	RABOTS GLACIAER	334	2012	1760	1780	0.011	1230	840	2070
SE	RABOTS GLACIAER	334	2012	1740	1760	0.015	1290	740	2030
SE	RABOTS GLACIAER	334	2012	1720	1740	0.018	1310	650	1960
SE	RABOTS GLACIAER	334	2012	1700	1720	0.02	1350	560	1910
SE	RABOTS GLACIAER	334	2012	1680	1700	0.023	1440	470	1900
SE	RABOTS GLACIAER	334	2012	1660	1680	0.027	1620	370	1990
SE	RABOTS GLACIAER	334	2012	1640	1660	0.037	1710	280	1990
SE	RABOTS GLACIAER	334	2012	1620	1640	0.046	1670	180	1850
SE	RABOTS GLACIAER	334	2012	1600	1620	0.058	1710	90	1800
SE	RABOTS GLACIAER	334	2012	1580	1600	0.069	1590	0	1590
SE	RABOTS GLACIAER	334	2012	1560	1580	0.084	1700	-100	1600
SE	RABOTS GLACIAER	334	2012	1540	1560	0.100	1730	-190	1540
SE	RABOTS GLACIAER	334	2012	1520	1540	0.156	1930	-290	1640
SE	RABOTS GLACIAER	334	2012	1500	1520	0.215	1940	-380	1560
SE	RABOTS GLACIAER	334	2012	1480	1500	0.189	1830	-470	1360
SE	RABOTS GLACIAER	334	2012	1460	1480	0.150	1650	-560	1080
SE	RABOTS GLACIAER	334	2012	1440	1460	0.127	1380	-660	720
SE	RABOTS GLACIAER	334	2012	1420	1440	0.115	1190	-750	450
SE	RABOTS GLACIAER	334	2012	1400	1420	0.102	1060	-850	210
SE	RABOTS GLACIAER	334	2012	1380	1400	0.226	1010	-940	70
SE	RABOTS GLACIAER	334	2012	1360	1380	0.272	950	-1030	-80
SE	RABOTS GLACIAER	334	2012	1340	1360	0.243	730	-1120	-390
SE	RABOTS GLACIAER	334	2012	1320	1340	0.142	540	-1220	-680
SE	RABOTS GLACIAER	334	2012	1300	1320	0.130	460	-1310	-860
SE	RABOTS GLACIAER	334	2012	1280	1300	0.219	450	-1410	-960
SE	RABOTS GLACIAER	334	2012	1260	1280	0.226	480	-1500	-1020
SE	RABOTS GLACIAER	334	2012	1240	1260	0.198	450	-1590	-1140
SE	RABOTS GLACIAER	334	2012	1220	1240	0.170	410	-1680	-1280
SE	RABOTS GLACIAER	334	2012	1200	1220	0.129	380	-1780	-1390
SE	RABOTS GLACIAER	334	2012	1180	1200	0.092	360	-1870	-1510
SE	RABOTS GLACIAER	334	2012	1160	1180	0.091	360	-1960	-1610
SE	RABOTS GLACIAER	334	2012	1140	1160	0.067	340	-2060	-1720
SE	RABOTS GLACIAER	334	2012	1120	1140	0.053	320	-2150	-1830
SE	RABOTS GLACIAER	334	2012	1100	1120	0.045	310	-2240	-1930
SE	RABOTS GLACIAER	334	2012	1080	1100	0.034	300	-2340	-2030
SE	RABOTS GLACIAER	334	2012	1060	1080	0.010	300	-2410	-2110
SE	RIUKOJIETNA	342	2011	1440	1460	0.516	1440	-2770	-1320
SE	RIUKOJIETNA	342	2011	1420	1440	0.675	1480	-2770	-1290

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SE	RIUKOJIETNA	342	2011	1400	1420	0.383	1740	-2770	-1020
SE	RIUKOJIETNA	342	2011	1380	1400	0.41	1800	-2770	-970
SE	RIUKOJIETNA	342	2011	1360	1380	0.433	1860	-2770	-910
SE	RIUKOJIETNA	342	2011	1340	1360	0.428	1830	-2770	-940
SE	RIUKOJIETNA	342	2011	1320	1340	0.510	1810	-2770	-960
SE	RIUKOJIETNA	342	2011	1300	1320	0.393	1810	-2770	-960
SE	RIUKOJIETNA	342	2011	1280	1300	0.264	1770	-2770	-1000
SE	RIUKOJIETNA	342	2011	1260	1280	0.189	1730	-2770	-1040
SE	RIUKOJIETNA	342	2011	1240	1260	0.130	1700	-2770	-1080
SE	RIUKOJIETNA	342	2011	1220	1240	0.098	1670	-2780	-1110
SE	RIUKOJIETNA	342	2011	1200	1220	0.064	1510	-2780	-1270
SE	RIUKOJIETNA	342	2011	1180	1200	0.060	1490	-2780	-1290
SE	RIUKOJIETNA	342	2011	1160	1180	0.054	1480	-2780	-1300
SE	RIUKOJIETNA	342	2011	1140	1160	0.029	1480	-2780	-1300
SE	RIUKOJIETNA	342	2011	1120	1140	0.016	1470	-2780	-1310
SE	RIUKOJIETNA	342	2012	1440	1460	0.516	840	-700	140
SE	RIUKOJIETNA	342	2012	1420	1440	0.675	920	-750	170
SE	RIUKOJIETNA	342	2012	1400	1420	0.383	890	-810	70
SE	RIUKOJIETNA	342	2012	1380	1400	0.410	900	-870	30
SE	RIUKOJIETNA	342	2012	1360	1380	0.433	910	-930	-20
SE	RIUKOJIETNA	342	2012	1340	1360	0.428	910	-990	-80
SE	RIUKOJIETNA	342	2012	1320	1340	0.510	900	-1050	-150
SE	RIUKOJIETNA	342	2012	1300	1320	0.393	840	-1110	-270
SE	RIUKOJIETNA	342	2012	1280	1300	0.264	800	-1160	-370
SE	RIUKOJIETNA	342	2012	1260	1280	0.189	780	-1220	-440
SE	RIUKOJIETNA	342	2012	1240	1260	0.129	780	-1280	-510
SE	RIUKOJIETNA	342	2012	1220	1240	0.098	780	-1340	-560
SE	RIUKOJIETNA	342	2012	1200	1220	0.064	840	-1400	-560
SE	RIUKOJIETNA	342	2012	1180	1200	0.060	850	-1460	-610
SE	RIUKOJIETNA	342	2012	1160	1180	0.054	860	-1520	-660
SE	RIUKOJIETNA	342	2012	1140	1160	0.029	860	-1580	-720
SE	RIUKOJIETNA	342	2012	1120	1140	0.016	860	-1630	-760
SE	STORGLACIAEREN	332	2011	1720	1740	0.007	3860	-1040	2820
SE	STORGLACIAEREN	332	2011	1700	1720	0.039	3120	-1190	1940
SE	STORGLACIAEREN	332	2011	1680	1700	0.070	2910	-1180	1730
SE	STORGLACIAEREN	332	2011	1660	1680	0.102	2840	-1260	1580
SE	STORGLACIAEREN	332	2011	1640	1660	0.149	2750	-1230	1510
SE	STORGLACIAEREN	332	2011	1620	1640	0.156	2260	-1320	930
SE	STORGLACIAEREN	332	2011	1600	1620	0.123	1970	-1500	470
SE	STORGLACIAEREN	332	2011	1580	1600	0.125	1880	-1790	100
SE	STORGLACIAEREN	332	2011	1560	1580	0.080	1600	-1870	-270
SE	STORGLACIAEREN	332	2011	1540	1560	0.096	1520	-1950	-430
SE	STORGLACIAEREN	332	2011	1520	1540	0.107	1640	-1920	-280
SE	STORGLACIAEREN	332	2011	1500	1520	0.225	1610	-1930	-320
SE	STORGLACIAEREN	332	2011	1480	1500	0.152	1130	-2230	-1100
SE	STORGLACIAEREN	332	2011	1460	1480	0.084	950	-2400	-1450
SE	STORGLACIAEREN	332	2011	1440	1460	0.068	1080	-2470	-1390
SE	STORGLACIAEREN	332	2011	1420	1440	0.072	1090	-2540	-1450
SE	STORGLACIAEREN	332	2011	1400	1420	0.120	990	-2670	-1680
SE	STORGLACIAEREN	332	2011	1380	1400	0.252	800	-2810	-2010
SE	STORGLACIAEREN	332	2011	1360	1380	0.324	710	-2790	-2080
SE	STORGLACIAEREN	332	2011	1340	1360	0.268	620	-2870	-2250
SE	STORGLACIAEREN	332	2011	1320	1340	0.151	610	-3070	-2470
SE	STORGLACIAEREN	332	2011	1300	1320	0.096	880	-3230	-2350
SE	STORGLACIAEREN	332	2011	1280	1300	0.081	850	-3380	-2530
SE	STORGLACIAEREN	332	2011	1260	1280	0.083	590	-3360	-2760
SE	STORGLACIAEREN	332	2011	1240	1260	0.064	740	-3450	-2720
SE	STORGLACIAEREN	332	2011	1220	1240	0.053	750	-3680	-2920
SE	STORGLACIAEREN	332	2011	1200	1220	0.037	630	-3850	-3220
SE	STORGLACIAEREN	332	2011	1180	1200	0.017	590	-3940	-3360
SE	STORGLACIAEREN	332	2011	1160	1180	0.008	690	-3970	-3270
SE	STORGLACIAEREN	332	2011	1140	1160	0.003	860	-3930	-3070
SE	STORGLACIAEREN	332	2012	1840	1860	0.001	3690	1390	5080
SE	STORGLACIAEREN	332	2012	1820	1840	0.001	3630	1390	5020
SE	STORGLACIAEREN	332	2012	1800	1820	0.003	3940	1220	5160
SE	STORGLACIAEREN	332	2012	1780	1800	0.006	3950	1190	5150
SE	STORGLACIAEREN	332	2012	1760	1780	0.007	3830	1190	5020
SE	STORGLACIAEREN	332	2012	1740	1760	0.008	3830	1180	5010
SE	STORGLACIAEREN	332	2012	1720	1740	0.011	3790	1180	4970
SE	STORGLACIAEREN	332	2012	1700	1720	0.031	3080	960	4040
SE	STORGLACIAEREN	332	2012	1680	1700	0.052	2940	860	3800
SE	STORGLACIAEREN	332	2012	1660	1680	0.070	2950	780	3730
SE	STORGLACIAEREN	332	2012	1640	1660	0.100	2910	760	3670
SE	STORGLACIAEREN	332	2012	1620	1640	0.147	2550	770	3320
SE	STORGLACIAEREN	332	2012	1600	1620	0.128	2070	670	2740
SE	STORGLACIAEREN	332	2012	1580	1600	0.114	1690	350	2040
SE	STORGLACIAEREN	332	2012	1560	1580	0.118	1770	50	1810
SE	STORGLACIAEREN	332	2012	1540	1560	0.094	1470	-10	1460
SE	STORGLACIAEREN	332	2012	1520	1540	0.089	1460	-50	1420
SE	STORGLACIAEREN	332	2012	1500	1520	0.170	1450	10	1460
SE	STORGLACIAEREN	332	2012	1480	1500	0.181	1050	-350	700
SE	STORGLACIAEREN	332	2012	1460	1480	0.097	730	-570	160
SE	STORGLACIAEREN	332	2012	1440	1460	0.057	820	-630	190
SE	STORGLACIAEREN	332	2012	1420	1440	0.051	950	-680	270
SE	STORGLACIAEREN	332	2012	1400	1420	0.096	890	-790	110
SE	STORGLACIAEREN	332	2012	1380	1400	0.168	740	-970	-220
SE	STORGLACIAEREN	332	2012	1360	1380	0.284	620	-1140	-530
SE	STORGLACIAEREN	332	2012	1340	1360	0.277	510	-1400	-880
SE	STORGLACIAEREN	332	2012	1320	1340	0.143	510	-1540	-1030
SE	STORGLACIAEREN	332	2012	1300	1320	0.086	620	-1690	-1080
SE	STORGLACIAEREN	332	2012	1280	1300	0.073	590	-1870	-1280
SE	STORGLACIAEREN	332	2012	1260	1280	0.074	400	-2110	-1700
SE	STORGLACIAEREN	332	2012	1240	1260	0.060	530	-2110	-1580
SE	STORGLACIAEREN	332	2012	1220	1240	0.046	670	-1980	-1310
SE	STORGLACIAEREN	332	2012	1200	1220	0.033	650	-2010	-1360
SE	STORGLACIAEREN	332	2012	1180	1200	0.017	700	-2030	-1330

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SE	STORGLACIAEREN	332	2012	1160	1180	0.008	700	-2040	-1340
SE	STORGLACIAEREN	332	2012	1140	1160	0.004	930	-2010	-1080
SE	STORGLACIAEREN	332	2013	1840	1860	0.001	2750	-530	3290
SE	STORGLACIAEREN	332	2013	1820	1840	0.001	2750	-420	3170
SE	STORGLACIAEREN	332	2013	1800	1820	0.003	2540	-250	2780
SE	STORGLACIAEREN	332	2013	1780	1800	0.006	2490	-110	2600
SE	STORGLACIAEREN	332	2013	1760	1780	0.007	2470	40	2430
SE	STORGLACIAEREN	332	2013	1740	1760	0.008	2480	190	2290
SE	STORGLACIAEREN	332	2013	1720	1740	0.011	2500	340	2150
SE	STORGLACIAEREN	332	2013	1700	1720	0.031	1760	500	1260
SE	STORGLACIAEREN	332	2013	1680	1700	0.052	1680	640	1050
SE	STORGLACIAEREN	332	2013	1660	1680	0.070	1730	780	940
SE	STORGLACIAEREN	332	2013	1640	1660	0.100	1780	930	850
SE	STORGLACIAEREN	332	2013	1620	1640	0.147	1770	1080	690
SE	STORGLACIAEREN	332	2013	1600	1620	0.128	1470	1220	250
SE	STORGLACIAEREN	332	2013	1580	1600	0.114	1360	1380	-20
SE	STORGLACIAEREN	332	2013	1560	1580	0.118	1200	1520	-320
SE	STORGLACIAEREN	332	2013	1540	1560	0.094	1010	1670	-670
SE	STORGLACIAEREN	332	2013	1520	1540	0.089	1060	1830	-770
SE	STORGLACIAEREN	332	2013	1500	1520	0.170	1110	1980	-870
SE	STORGLACIAEREN	332	2013	1480	1500	0.181	980	2110	-1130
SE	STORGLACIAEREN	332	2013	1460	1480	0.097	860	2270	-1410
SE	STORGLACIAEREN	332	2013	1440	1460	0.057	830	2410	-1590
SE	STORGLACIAEREN	332	2013	1420	1440	0.051	880	2570	-1690
SE	STORGLACIAEREN	332	2013	1400	1420	0.096	800	2720	-1920
SE	STORGLACIAEREN	332	2013	1380	1400	0.168	650	2870	-2220
SE	STORGLACIAEREN	332	2013	1360	1380	0.284	540	3010	-2470
SE	STORGLACIAEREN	332	2013	1340	1360	0.277	420	3160	-2730
SE	STORGLACIAEREN	332	2013	1320	1340	0.143	320	3300	-2980
SE	STORGLACIAEREN	332	2013	1300	1320	0.086	570	3460	-2880
SE	STORGLACIAEREN	332	2013	1280	1300	0.073	700	3610	-2910
SE	STORGLACIAEREN	332	2013	1260	1280	0.074	440	3750	-3310
SE	STORGLACIAEREN	332	2013	1240	1260	0.060	630	3900	-3280
SE	STORGLACIAEREN	332	2013	1220	1240	0.046	750	4050	-3300
SE	STORGLACIAEREN	332	2013	1200	1220	0.033	710	4200	-3490
SE	STORGLACIAEREN	332	2013	1180	1200	0.017	880	4340	-3460
SE	STORGLACIAEREN	332	2013	1160	1180	0.008	1010	4490	-3490
SE	STORGLACIAEREN	332	2013	1140	1160	0.004	1330	4650	-3310
SE	TARFALAGLACIAEREN	326	2011	1780	1800	0.001	1950	-4330	-2380
SE	TARFALAGLACIAEREN	326	2011	1760	1780	0.007	1940	-4260	-2320
SE	TARFALAGLACIAEREN	326	2011	1740	1760	0.005	1900	-4140	-2240
SE	TARFALAGLACIAEREN	326	2011	1720	1740	0.017	1810	-4020	-2220
SE	TARFALAGLACIAEREN	326	2011	1700	1720	0.026	1780	-3910	-2130
SE	TARFALAGLACIAEREN	326	2011	1680	1700	0.028	1770	-3790	-2020
SE	TARFALAGLACIAEREN	326	2011	1660	1680	0.031	1720	-3680	-1960
SE	TARFALAGLACIAEREN	326	2011	1640	1660	0.036	1680	-3560	-1880
SE	TARFALAGLACIAEREN	326	2011	1620	1640	0.045	1630	-3440	-1810
SE	TARFALAGLACIAEREN	326	2011	1600	1620	0.060	1550	-3330	-1770
SE	TARFALAGLACIAEREN	326	2011	1580	1600	0.060	1430	-3210	-1780
SE	TARFALAGLACIAEREN	326	2011	1560	1580	0.063	1290	-3100	-1810
SE	TARFALAGLACIAEREN	326	2011	1540	1560	0.068	1130	-2970	-1850
SE	TARFALAGLACIAEREN	326	2011	1520	1540	0.070	970	-2860	-1880
SE	TARFALAGLACIAEREN	326	2011	1500	1520	0.082	890	-2740	-1850
SE	TARFALAGLACIAEREN	326	2011	1480	1500	0.083	790	-2620	-1830
SE	TARFALAGLACIAEREN	326	2011	1460	1480	0.087	690	-2510	-1810
SE	TARFALAGLACIAEREN	326	2011	1440	1460	0.083	620	-2390	-1770
SE	TARFALAGLACIAEREN	326	2011	1420	1440	0.080	570	-2270	-1700
SE	TARFALAGLACIAEREN	326	2011	1400	1420	0.065	560	-2170	-1610
SE	TARFALAGLACIAEREN	326	2011	1380	1400	0.009	670	-2080	-1410
SE	TARFALAGLACIAEREN	326	2012	1780	1800	0.001	2820	-260	2560
SE	TARFALAGLACIAEREN	326	2012	1760	1780	0.007	2820	-310	2510
SE	TARFALAGLACIAEREN	326	2012	1740	1760	0.005	2820	-380	2450
SE	TARFALAGLACIAEREN	326	2012	1720	1740	0.017	2830	-440	2380
SE	TARFALAGLACIAEREN	326	2012	1700	1720	0.026	2810	-510	2290
SE	TARFALAGLACIAEREN	326	2012	1680	1700	0.028	2790	-580	2210
SE	TARFALAGLACIAEREN	326	2012	1660	1680	0.031	2760	-650	2110
SE	TARFALAGLACIAEREN	326	2012	1640	1660	0.036	2710	-720	1990
SE	TARFALAGLACIAEREN	326	2012	1620	1640	0.045	2580	-780	1790
SE	TARFALAGLACIAEREN	326	2012	1600	1620	0.060	2400	-850	1550
SE	TARFALAGLACIAEREN	326	2012	1580	1600	0.060	2270	-920	1350
SE	TARFALAGLACIAEREN	326	2012	1560	1580	0.063	2160	-990	1170
SE	TARFALAGLACIAEREN	326	2012	1540	1560	0.068	1950	-1060	890
SE	TARFALAGLACIAEREN	326	2012	1520	1540	0.070	1790	-1130	670
SE	TARFALAGLACIAEREN	326	2012	1500	1520	0.082	1670	-1190	480
SE	TARFALAGLACIAEREN	326	2012	1480	1500	0.083	1540	-1260	280
SE	TARFALAGLACIAEREN	326	2012	1460	1480	0.087	1460	-1330	130
SE	TARFALAGLACIAEREN	326	2012	1440	1460	0.083	1450	-1400	50
SE	TARFALAGLACIAEREN	326	2012	1420	1440	0.080	1450	-1460	-10
SE	TARFALAGLACIAEREN	326	2012	1400	1420	0.065	1470	-1530	-60
SE	TARFALAGLACIAEREN	326	2012	1380	1400	0.009	1560	-1580	-20
SJ	HANSBREEN	306	2011	450	500	6.71	1710	-660	1050
SJ	HANSBREEN	306	2011	400	450	7.39	1700	-990	710
SJ	HANSBREEN	306	2011	350	400	8.103	1280	-740	540
SJ	HANSBREEN	306	2011	300	350	8.555	1250	-1140	110
SJ	HANSBREEN	306	2011	250	300	8.25	700	-1820	-1120
SJ	HANSBREEN	306	2011	200	250	6.578	760	-1900	-1140
SJ	HANSBREEN	306	2011	150	200	5.125	820	-2320	-1500
SJ	HANSBREEN	306	2011	100	150	3.817	660	-2050	-1390
SJ	HANSBREEN	306	2011	0	100	2.215	440	-2140	-1700
SJ	HANSBREEN	306	2012	450	500	6.71	1486	-466	1020
SJ	HANSBREEN	306	2012	400	450	7.39	1568	-623	945
SJ	HANSBREEN	306	2012	350	400	8.103	1312	-1102	210
SJ	HANSBREEN	306	2012	300	350	8.555	968	-1103	-135
SJ	HANSBREEN	306	2012	250	300	8.25	692	-1781	-1089
SJ	HANSBREEN	306	2012	200	250	6.578	728	-1628	-900
SJ	HANSBREEN	306	2012	150	200	5.125	540	-2268	-1728

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SJ	HANSBREEN	306	2012	100	150	3.817	424	-2116	-1692
SJ	HANSBREEN	306	2012	0	100	2.215	244	-2809	-2565
SJ	HANSBREEN	306	2013	450	500	6.71	7327	-966	6361
SJ	HANSBREEN	306	2013	400	450	7.39	7050	-67	6984
SJ	HANSBREEN	306	2013	350	400	8.103	5996	-2897	3099
SJ	HANSBREEN	306	2013	300	350	8.555	5509	-3392	2117
SJ	HANSBREEN	306	2013	250	300	8.25	4818	-8085	-3267
SJ	HANSBREEN	306	2013	200	250	6.578	4709	-3526	1184
SJ	HANSBREEN	306	2013	150	200	5.125	349	-7221	-6873
SJ	HANSBREEN	306	2013	100	150	3.817	1496	-3557	-2061
SJ	HANSBREEN	306	2013	0	100	2.215	611	-3183	-2572
SJ	WALDEMARBREEN	2307	2011	500	550				13
SJ	WALDEMARBREEN	2307	2011	450	500				-89
SJ	WALDEMARBREEN	2307	2011	400	450				-402
SJ	WALDEMARBREEN	2307	2011	350	400				-1011
SJ	WALDEMARBREEN	2307	2011	300	350				-1351
SJ	WALDEMARBREEN	2307	2011	250	300				-1553
SJ	WALDEMARBREEN	2307	2011	200	250				-1692
SJ	WALDEMARBREEN	2307	2011	150	200				-2033
SJ	WALDEMARBREEN	2307	2012	500	550				250
SJ	WALDEMARBREEN	2307	2012	450	500				150
SJ	WALDEMARBREEN	2307	2012	400	450				-8
SJ	WALDEMARBREEN	2307	2012	350	400				-406
SJ	WALDEMARBREEN	2307	2012	300	350				-771
SJ	WALDEMARBREEN	2307	2012	250	300				-1239
SJ	WALDEMARBREEN	2307	2012	200	250				-1369
SJ	WALDEMARBREEN	2307	2012	150	200				-1771
SJ	WALDEMARBREEN	2307	2012	100	150				-1797
SJ	WALDEMARBREEN	2307	2013	500	550				-650
SJ	WALDEMARBREEN	2307	2013	450	500				-750
SJ	WALDEMARBREEN	2307	2013	400	450				-1018
SJ	WALDEMARBREEN	2307	2013	350	400				-1407
SJ	WALDEMARBREEN	2307	2013	300	350				-1566
SJ	WALDEMARBREEN	2307	2013	250	300				-1764
SJ	WALDEMARBREEN	2307	2013	200	250				-1976
SJ	WALDEMARBREEN	2307	2013	150	200				-2346
SJ	WALDEMARBREEN	2307	2013	100	150				-2488
SJ	WERENSKIOLDBREEN	305	2012	600	750	0.757	1470	-770	700
SJ	WERENSKIOLDBREEN	305	2012	500	600	3.564	1260	-950	310
SJ	WERENSKIOLDBREEN	305	2012	400	500	7.385	1050	-1130	-80
SJ	WERENSKIOLDBREEN	305	2012	300	400	7.658	840	-1310	-470
SJ	WERENSKIOLDBREEN	305	2012	200	300	4.243	630	-1490	-860
SJ	WERENSKIOLDBREEN	305	2012	100	200	2.610	420	-1670	-1250
SJ	WERENSKIOLDBREEN	305	2012	0	100	0.895	200	-1850	-1650
SJ	WERENSKIOLDBREEN	305	2013	600	750	0.757	996	-1498	-502
SJ	WERENSKIOLDBREEN	305	2013	500	600	3.564	846	-1676	-830
SJ	WERENSKIOLDBREEN	305	2013	400	500	7.385	696	-1854	-1158
SJ	WERENSKIOLDBREEN	305	2013	300	400	7.658	546	-2032	-1486
SJ	WERENSKIOLDBREEN	305	2013	200	300	4.243	396	-2210	-1814
SJ	WERENSKIOLDBREEN	305	2013	100	200	2.610	246	-2388	-2142
SJ	WERENSKIOLDBREEN	305	2013	0	100	0.895	96	-2566	-2470
US	COLUMBIA (2057)	76	2013	1700	1800	0.05			1000
US	COLUMBIA (2057)	76	2013	1650	1700	0.13			600
US	COLUMBIA (2057)	76	2013	1600	1650	0.28			100
US	COLUMBIA (2057)	76	2013	1550	1600	0.19			-1400
US	COLUMBIA (2057)	76	2013	1500	1550	0.13			-2300
US	COLUMBIA (2057)	76	2013	1450	1500	0.06			-4100
US	GULKANA	90	2011	2300	2400	0.193			744
US	GULKANA	90	2011	2200	2300	0.817			692
US	GULKANA	90	2011	2100	2200	1.313			737
US	GULKANA	90	2011	2000	2100	2.119			243
US	GULKANA	90	2011	1900	2000	2.562			-391
US	GULKANA	90	2011	1800	1900	2.743			-982
US	GULKANA	90	2011	1700	1800	1.956			-1701
US	GULKANA	90	2011	1600	1700	1.506			-2459
US	GULKANA	90	2011	1500	1600	1.053			-3085
US	GULKANA	90	2011	1400	1500	1.120			-3862
US	GULKANA	90	2011	1300	1400	0.804			-4542
US	GULKANA	90	2011	1200	1300	0.489			-5280
US	LEMON CREEK	3334	2011	1200	1250	2.087			600
US	LEMON CREEK	3334	2011	1150	1200	2.304			550
US	LEMON CREEK	3334	2011	1100	1150	1.174			250
US	LEMON CREEK	3334	2011	1050	1100	1.565			-350
US	LEMON CREEK	3334	2011	1000	1050	1.174			-1000
US	LEMON CREEK	3334	2011	950	1000	0.696			-2000
US	LEMON CREEK	3334	2011	900	950	0.783			-2500
US	LEMON CREEK	3334	2011	850	900	1			-3300
US	LEMON CREEK	3334	2011	800	850	0.696			-3800
US	LEMON CREEK	3334	2013	1200	1250	2.1			600
US	LEMON CREEK	3334	2013	1150	1200	2.3			500
US	LEMON CREEK	3334	2013	1100	1150	1.2			200
US	LEMON CREEK	3334	2013	1050	1100	1.6			-300
US	LEMON CREEK	3334	2013	1000	1050	1.2			-1000
US	LEMON CREEK	3334	2013	950	1000	0.7			-2000
US	LEMON CREEK	3334	2013	900	950	0.8			-2500
US	LEMON CREEK	3334	2013	850	900	1			-3500
US	LEMON CREEK	3334	2013	750	850	0.7			-4000

APPENDIX - Table 5

MASS BALANCE POINT DATA 2011–2013

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
YEAR	Balance year
POINT_ID	Key identifier of the measurement point
LAT	Latitude of measurement point in decimal degrees north (positive) or south (negative)
LON	Longitude of measurement point in decimal degrees east (positive) or west (negative)
ELEV	Elevation of the measurement point in metre above sea level
BW	Winter balance in mm water equivalent
BS	Summer balance in mm water equivalent
BA	Annual balance in mm water equivalent

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
AQ	BAHIA DEL DIABLO	2665	2011	23			637			200
AQ	BAHIA DEL DIABLO	2665	2011	21			588			100
AQ	BAHIA DEL DIABLO	2665	2011	27			574			800
AQ	BAHIA DEL DIABLO	2665	2011	22			553			800
AQ	BAHIA DEL DIABLO	2665	2011	20			551			530
AQ	BAHIA DEL DIABLO	2665	2011	24			519			600
AQ	BAHIA DEL DIABLO	2665	2011	19			515			550
AQ	BAHIA DEL DIABLO	2665	2011	18			505			500
AQ	BAHIA DEL DIABLO	2665	2011	16			464			200
AQ	BAHIA DEL DIABLO	2665	2011	15			458			400
AQ	BAHIA DEL DIABLO	2665	2011	14			456			200
AQ	BAHIA DEL DIABLO	2665	2011	17			445			750
AQ	BAHIA DEL DIABLO	2665	2011	13			442			300
AQ	BAHIA DEL DIABLO	2665	2011	25			429			1100
AQ	BAHIA DEL DIABLO	2665	2011	28			412			300
AQ	BAHIA DEL DIABLO	2665	2011	11			398			200
AQ	BAHIA DEL DIABLO	2665	2011	10			375			100
AQ	BAHIA DEL DIABLO	2665	2011	26			374			1100
AQ	BAHIA DEL DIABLO	2665	2011	12			357			300
AQ	BAHIA DEL DIABLO	2665	2011	9			288			300
AQ	BAHIA DEL DIABLO	2665	2011	8			273			400
AQ	BAHIA DEL DIABLO	2665	2011	7			272			-200
AQ	BAHIA DEL DIABLO	2665	2011	6			272			0
AQ	BAHIA DEL DIABLO	2665	2011	5			270			-200
AQ	BAHIA DEL DIABLO	2665	2011	4			205			-400
AQ	BAHIA DEL DIABLO	2665	2011	3			167			-600
AQ	BAHIA DEL DIABLO	2665	2011	2			139			-1300
AQ	BAHIA DEL DIABLO	2665	2011	1			100			-1400
AQ	BAHIA DEL DIABLO	2665	2012	22			637			600
AQ	BAHIA DEL DIABLO	2665	2012	20			588			300
AQ	BAHIA DEL DIABLO	2665	2012	26			574			700
AQ	BAHIA DEL DIABLO	2665	2012	21			553			400
AQ	BAHIA DEL DIABLO	2665	2012	19			551			450
AQ	BAHIA DEL DIABLO	2665	2012	23			519			400
AQ	BAHIA DEL DIABLO	2665	2012	18			515			500
AQ	BAHIA DEL DIABLO	2665	2012	17			505			400
AQ	BAHIA DEL DIABLO	2665	2012	15			464			150
AQ	BAHIA DEL DIABLO	2665	2012	14			458			300
AQ	BAHIA DEL DIABLO	2665	2012	13			456			150
AQ	BAHIA DEL DIABLO	2665	2012	16			445			600
AQ	BAHIA DEL DIABLO	2665	2012	12			442			200
AQ	BAHIA DEL DIABLO	2665	2012	24			429			900
AQ	BAHIA DEL DIABLO	2665	2012	27			412			200
AQ	BAHIA DEL DIABLO	2665	2012	10			398			150
AQ	BAHIA DEL DIABLO	2665	2012	9			375			100
AQ	BAHIA DEL DIABLO	2665	2012	25			374			1000
AQ	BAHIA DEL DIABLO	2665	2012	11			357			100
AQ	BAHIA DEL DIABLO	2665	2012	8			288			-100
AQ	BAHIA DEL DIABLO	2665	2012	7			273			-200
AQ	BAHIA DEL DIABLO	2665	2012	6			272			-200
AQ	BAHIA DEL DIABLO	2665	2012	5			270			-250
AQ	BAHIA DEL DIABLO	2665	2012	4			205			-500
AQ	BAHIA DEL DIABLO	2665	2012	3			167			-700
AQ	BAHIA DEL DIABLO	2665	2012	2			139			-800
AQ	BAHIA DEL DIABLO	2665	2012	1			100			-1400
AQ	BAHIA DEL DIABLO	2665	2013	20			637			100
AQ	BAHIA DEL DIABLO	2665	2013	18			588			250
AQ	BAHIA DEL DIABLO	2665	2013	23			574			750
AQ	BAHIA DEL DIABLO	2665	2013	19			553			700
AQ	BAHIA DEL DIABLO	2665	2013	17			551			500
AQ	BAHIA DEL DIABLO	2665	2013	16			515			600
AQ	BAHIA DEL DIABLO	2665	2013	15			505			470
AQ	BAHIA DEL DIABLO	2665	2013	13			464			400
AQ	BAHIA DEL DIABLO	2665	2013	12			458			450
AQ	BAHIA DEL DIABLO	2665	2013	11			456			450
AQ	BAHIA DEL DIABLO	2665	2013	14			445			800
AQ	BAHIA DEL DIABLO	2665	2013	10			442			400
AQ	BAHIA DEL DIABLO	2665	2013	21			429			800
AQ	BAHIA DEL DIABLO	2665	2013	24			412			400
AQ	BAHIA DEL DIABLO	2665	2013	9			398			350
AQ	BAHIA DEL DIABLO	2665	2013	8			375			250
AQ	BAHIA DEL DIABLO	2665	2013	22			374			1000
AQ	BAHIA DEL DIABLO	2665	2013	7			288			0
AQ	BAHIA DEL DIABLO	2665	2013	6			272			100
AQ	BAHIA DEL DIABLO	2665	2013	5			270			150
AQ	BAHIA DEL DIABLO	2665	2013	4			205			-250
AQ	BAHIA DEL DIABLO	2665	2013	3			167			-400
AQ	BAHIA DEL DIABLO	2665	2013	2			139			-500
AQ	BAHIA DEL DIABLO	2665	2013	1			100			-650
AR	BROWN SUPERIOR	3903	2011	S2-10			5016			-2045
AR	BROWN SUPERIOR	3903	2012	S4-11			5116			-1368
AR	BROWN SUPERIOR	3903	2012	S5-11			5077			-1960
AR	BROWN SUPERIOR	3903	2012	S1-11			5058			-1780
AR	BROWN SUPERIOR	3903	2012	S2-11			5014			-1360
AR	BROWN SUPERIOR	3903	2013	S4-I-12			5118			-625
AR	BROWN SUPERIOR	3903	2013	S6-12			5092			-459
AR	BROWN SUPERIOR	3903	2013	S5-12			5068			-778
AR	BROWN SUPERIOR	3903	2013	S8-12			5059			-785
AR	BROWN SUPERIOR	3903	2013	S1-11			5050			-1003
AR	BROWN SUPERIOR	3903	2013	S9-12			5016			-1068
AR	BROWN SUPERIOR	3903	2013	S2-11			5010			-1020
AR	CONCONTA NORTE	3902	2011	N2-10			4965			-1018
AR	CONCONTA NORTE	3902	2012	N5-11			5068			-1534
AR	CONCONTA NORTE	3902	2012	N1-11			5047			-2164
AR	CONCONTA NORTE	3902	2012	N2-11			4976			-942
AR	CONCONTA NORTE	3902	2013	N6-12			5072			-594

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
AR	CONCONTA NORTE	3902	2013	N7-12			5065			-537
AR	CONCONTA NORTE	3902	2013	N5-11			5062			-629
AR	CONCONTA NORTE	3902	2013	N8-12			5052			-752
AR	CONCONTA NORTE	3902	2013	N1-11			5038			-833
AR	CONCONTA NORTE	3902	2013	N9-12			5014			-1161
AR	CONCONTA NORTE	3902	2013	N4-12			4958			-1430
AR	LOS AMARILLOS	3904	2011	L2-07			5369			-676
AR	LOS AMARILLOS	3904	2011	L1-07			5359			-485
AR	LOS AMARILLOS	3904	2011	L3-07			5254			-554
AR	LOS AMARILLOS	3904	2011	L4-07			5244			-515
AR	LOS AMARILLOS	3904	2011	L5-07			5132			-1064
AR	LOS AMARILLOS	3904	2013	L13-12			5443			-385
AR	LOS AMARILLOS	3904	2013	L2-10			5360			-365
AR	LOS AMARILLOS	3904	2013	L1-12			5352			-345
AR	LOS AMARILLOS	3904	2013	L10-12			5309			-135
AR	LOS AMARILLOS	3904	2013	L9-12			5278			-358
AR	LOS AMARILLOS	3904	2013	L8-12			5278			-338
AR	LOS AMARILLOS	3904	2013	L3-09			5250			-374
AR	LOS AMARILLOS	3904	2013	L4-II-12			5238			-828
AR	LOS AMARILLOS	3904	2013	L7-12			5208			-808
AR	LOS AMARILLOS	3904	2013	L6-12			5198			-368
AR	LOS AMARILLOS	3904	2013	L5-I-12			5122			-795
AR	MARTIAL ESTE	2000	2011	Zona07	-54.7810	-68.4042	1097	966	-726	240
AR	MARTIAL ESTE	2000	2011	Zona06	-54.7820	-68.4047	1095	865	-680	185
AR	MARTIAL ESTE	2000	2011	Zona05	-54.7820	-68.4053	1094	898	-712	186
AR	MARTIAL ESTE	2000	2011	Zona09	-54.7808	-68.4027	1086	846	-922	-76
AR	MARTIAL ESTE	2000	2011	Zona08	-54.7813	-68.4037	1075	941	-914	27
AR	MARTIAL ESTE	2000	2011	Zona10	-54.7805	-68.4017	1073	743	-984	-241
AR	MARTIAL ESTE	2000	2011	Zona04	-54.7821	-68.4041	1060	739	-1201	-462
AR	MARTIAL ESTE	2000	2011	Zona01	-54.7814	-68.4017	1038	750	-1451	-701
AR	MARTIAL ESTE	2000	2011	Zona02	-54.7818	-68.4025	1036	582	-1460	-878
AR	MARTIAL ESTE	2000	2011	Zona03	-54.7822	-68.4030	1032	592	-1650	-1058
AR	MARTIAL ESTE	2000	2012	7	-54.7810	-68.4042	1098	969	-1005	93
AR	MARTIAL ESTE	2000	2012	6	-54.7814	-68.4050	1095	1107	-821	274
AR	MARTIAL ESTE	2000	2012	5	-54.7819	-68.4053	1091	987	-942	149
AR	MARTIAL ESTE	2000	2012	10	-54.7805	-68.4019	1074	655	-1696	-622
AR	MARTIAL ESTE	2000	2012	9	-54.7810	-68.4029	1073	636	-1365	-292
AR	MARTIAL ESTE	2000	2012	8	-54.7813	-68.4035	1068	875	-1090	-22
AR	MARTIAL ESTE	2000	2012	4	-54.7820	-68.4043	1067	675	-1476	-409
AR	MARTIAL ESTE	2000	2012	1	-54.7814	-68.4016	1034	682	-2141	-1107
AR	MARTIAL ESTE	2000	2012	2	-54.7819	-68.4024	1033	420	-2725	-1692
AR	MARTIAL ESTE	2000	2012	3	-54.7822	-68.4030	1032	429	-2409	-1377
AR	MARTIAL ESTE	2000	2013	11	-54.7813	-68.4053	1116	887	-417	470
AR	MARTIAL ESTE	2000	2013	7	-54.7810	-68.4042	1096	1395	-625	770
AR	MARTIAL ESTE	2000	2013	6	-54.7814	-68.4049	1092	1474	-704	770
AR	MARTIAL ESTE	2000	2013	5	-54.7819	-68.4053	1089	1545	-643	902
AR	MARTIAL ESTE	2000	2013	10	-54.7805	-68.4019	1072	1040	-992	48
AR	MARTIAL ESTE	2000	2013	9	-54.7810	-68.4029	1071	1184	-832	352
AR	MARTIAL ESTE	2000	2013	8	-54.7814	-68.4034	1065	1096	-577	519
AR	MARTIAL ESTE	2000	2013	4	-54.7820	-68.4043	1065	1152	-823	329
AR	MARTIAL ESTE	2000	2013	1	-54.7814	-68.4016	1032	1240	-1438	-198
AR	MARTIAL ESTE	2000	2013	2	-54.7819	-68.4024	1031	805	-1705	-900
AR	MARTIAL ESTE	2000	2013	3	-54.7823	-68.4029	1029	910	-1441	-531
AT	HINTEREIS FERNER	491	2012	HJ	46.7919	10.7345	3323			649
AT	HINTEREIS FERNER	491	2012	SSJ	46.7874	10.7400	3230			448
AT	HINTEREIS FERNER	491	2012	93	46.7927	10.7550	2950			-1467
AT	HINTEREIS FERNER	491	2012	94	46.7922	10.7563	2938			-1746
AT	HINTEREIS FERNER	491	2012	73	46.7948	10.7602	2904			-2601
AT	HINTEREIS FERNER	491	2012	95	46.7923	10.7620	2899			-1818
AT	HINTEREIS FERNER	491	2012	96	46.7925	10.7639	2886			-1962
AT	HINTEREIS FERNER	491	2012	79	46.7951	10.7641	2876			-3249
AT	HINTEREIS FERNER	491	2012	72	46.7975	10.7664	2836			-3141
AT	HINTEREIS FERNER	491	2012	L509	46.7981	10.7695	2820			-2952
AT	HINTEREIS FERNER	491	2012	70	46.7986	10.7719	2799			-3303
AT	HINTEREIS FERNER	491	2012	71	46.7995	10.7674	2785			-2475
AT	HINTEREIS FERNER	491	2012	61	46.8024	10.7693	2757			-2358
AT	HINTEREIS FERNER	491	2012	L607	46.8032	10.7727	2743			-3996
AT	HINTEREIS FERNER	491	2012	74	46.8039	10.7704	2741			-2052
AT	HINTEREIS FERNER	491	2012	66	46.8040	10.7744	2731			-3339
AT	HINTEREIS FERNER	491	2012	46	46.8091	10.7758	2674			-3699
AT	HINTEREIS FERNER	491	2012	42	46.8115	10.7803	2625			-4617
AT	HINTEREIS FERNER	491	2012	38	46.8131	10.7843	2583			-5886
AT	HINTEREIS FERNER	491	2012	34	46.8125	10.7890	2555			-5184
AT	HINTEREIS FERNER	491	2012	30	46.8141	10.7875	2551			-5913
AT	HINTEREIS FERNER	491	2012	27	46.8144	10.7915	2525			-7191
AT	HINTEREIS FERNER	491	2012	22	46.8154	10.7908	2524			-6849
AT	HINTEREIS FERNER	491	2012	L1007	46.8152	10.7926	2507			-4230
AT	HINTEREIS FERNER	491	2012	19	46.8164	10.7939	2478			-6858
AT	HINTEREIS FERNER	491	2013	WJ	46.7972	10.7419	3170	1320	-235	1085
AT	HINTEREIS FERNER	491	2013	TE12	46.7914	10.7499	3025			-123
AT	HINTEREIS FERNER	491	2013	101	46.7938	10.7524	2989			-269
AT	HINTEREIS FERNER	491	2013	93	46.7926	10.7556	2950			-492
AT	HINTEREIS FERNER	491	2013	94	46.7915	10.7576	2938			-510
AT	HINTEREIS FERNER	491	2013	98	46.794	10.7572	2937			-659
AT	HINTEREIS FERNER	491	2013	L309	46.7928	10.757	2934			-442
AT	HINTEREIS FERNER	491	2013	73	46.7948	10.7602	2904			-644
AT	HINTEREIS FERNER	491	2013	89	46.7932	10.7621	2897			-894
AT	HINTEREIS FERNER	491	2013	95	46.7924	10.7624	2892			-983
AT	HINTEREIS FERNER	491	2013	96	46.7925	10.7639	2886			-878
AT	HINTEREIS FERNER	491	2013	L413	46.794	10.7643	2878			-1054
AT	HINTEREIS FERNER	491	2013	88	46.7954	10.767	2853			-1129
AT	HINTEREIS FERNER	491	2013	97	46.7947	10.7688	2848			-586
AT	HINTEREIS FERNER	491	2013	L513	46.7981	10.7696	2819			-1355
AT	HINTEREIS FERNER	491	2013	70	46.7989	10.7719	2799			-1854
AT	HINTEREIS FERNER	491	2013	71	46.7995	10.7674	2785			-1336
AT	HINTEREIS FERNER	491	2013	69	46.8005	10.7724	2780			-2124

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
AT	HINTEREIS FERNER	491	2013	61	46.8024	10.7693	2757			-2189
AT	HINTEREIS FERNER	491	2013	L613	46.8032	10.7728	2740			-2187
AT	HINTEREIS FERNER	491	2013	51	46.8063	10.7723	2711			-2485
AT	HINTEREIS FERNER	491	2013	64	46.8055	10.7771	2707			-2916
AT	HINTEREIS FERNER	491	2013	87	46.8064	10.7753	2703			-2277
AT	HINTEREIS FERNER	491	2013	46	46.8091	10.7758	2674			-2741
AT	HINTEREIS FERNER	491	2013	L713	46.8081	10.778	2671			-2988
AT	HINTEREIS FERNER	491	2013	50	46.8081	10.7811	2654			-4698
AT	HINTEREIS FERNER	491	2013	L813	46.8102	10.7819	2626			-4149
AT	HINTEREIS FERNER	491	2013	42	46.8115	10.7803	2625			-3555
AT	HINTEREIS FERNER	491	2013	41	46.8106	10.7855	2591			-4788
AT	HINTEREIS FERNER	491	2013	38	46.812	10.7837	2589			-4248
AT	HINTEREIS FERNER	491	2013	L913	46.8128	10.7874	2570			-4518
AT	HINTEREIS FERNER	491	2013	22	46.8153	10.7908	2532			-5022
AT	HINTEREIS FERNER	491	2013	27	46.8143	10.7911	2530			-5760
AT	HINTEREIS FERNER	491	2013	L1013	46.8155	10.7923	2502			-5742
AT	VERNAGT FERNER	489	2012	2012-31	10.7950	46.8781	3471	762		
AT	VERNAGT FERNER	489	2012	PHV	10.7942	46.8786	3470	509		528
AT	VERNAGT FERNER	489	2012	2012-32	10.7962	46.8772	3447	885		
AT	VERNAGT FERNER	489	2012	2012-33	10.7975	46.8765	3417	788		
AT	VERNAGT FERNER	489	2012	2012-34	10.7983	46.8761	3378	1164		
AT	VERNAGT FERNER	489	2012	2012-35	10.7995	46.8758	3340	967		
AT	VERNAGT FERNER	489	2012	2012-63	10.8465	46.8761	3314	1110		
AT	VERNAGT FERNER	489	2012	2012-36	10.8009	46.8753	3301	1114		
AT	VERNAGT FERNER	489	2012	THJ	10.8322	46.8874	3300	964		-49
AT	VERNAGT FERNER	489	2012	2012-64	10.8459	46.8755	3291	899		
AT	VERNAGT FERNER	489	2012	BRK	10.8427	46.8827	3290	877		
AT	VERNAGT FERNER	489	2012	2012-95	10.8427	46.8827	3290	1033		
AT	VERNAGT FERNER	489	2012	2012-50	10.8026	46.8846	3271	1342		
AT	VERNAGT FERNER	489	2012	2012-65	10.8451	46.8744	3268	825		
AT	VERNAGT FERNER	489	2012	2012-18	10.8328	46.8880	3267	1160		
AT	VERNAGT FERNER	489	2012	2012-37	10.8024	46.8748	3266	1026		
AT	VERNAGT FERNER	489	2012	2012-96	10.8412	46.8820	3260	990		
AT	VERNAGT FERNER	489	2012	2012-1	10.8311	46.8875	3258	1120		
AT	VERNAGT FERNER	489	2012	2012-51	10.8038	46.8836	3257	1164		
AT	VERNAGT FERNER	489	2012	2012-52	10.8051	46.8825	3247	1003		
AT	VERNAGT FERNER	489	2012	2012-66	10.8440	46.8734	3240	902		
AT	VERNAGT FERNER	489	2012	2012-97	10.8389	46.8814	3240	875		
AT	VERNAGT FERNER	489	2012	2012-2	10.8287	46.8869	3237	847		
AT	VERNAGT FERNER	489	2012	2012-19	10.8339	46.8858	3234	1037		
AT	VERNAGT FERNER	489	2012	2012-53	10.8065	46.8814	3231	938		
AT	VERNAGT FERNER	489	2012	2012-38	10.8034	46.8743	3226	925		
AT	VERNAGT FERNER	489	2012	2012-3	10.8272	46.8867	3213	1123		
AT	VERNAGT FERNER	489	2012	2012-67	10.8429	46.8727	3209	1038		
AT	VERNAGT FERNER	489	2012	2012-98	10.8379	46.8806	3205	571		
AT	VERNAGT FERNER	489	2012	2012-20	10.8329	46.8846	3205	1215		
AT	VERNAGT FERNER	489	2012	TAJ	10.8243	46.8849	3198	1060		-890
AT	VERNAGT FERNER	489	2012	2012-39	10.8043	46.8741	3196	1094		
AT	VERNAGT FERNER	489	2012	2012-4	10.8263	46.8865	3187	1053		
AT	VERNAGT FERNER	489	2012	2012-68	10.8413	46.8721	3183	781		
AT	VERNAGT FERNER	489	2012	2012-54	10.8079	46.8802	3183	935		
AT	VERNAGT FERNER	489	2012	2012-80	10.7971	46.8712	3180	698		
AT	VERNAGT FERNER	489	2012	2012-5	10.8244	46.8860	3176	1106		
AT	VERNAGT FERNER	489	2012	2012-99	10.8364	46.8798	3170	640		
AT	VERNAGT FERNER	489	2012	2012-21	10.8312	46.8836	3168	1031		
AT	VERNAGT FERNER	489	2012	281	10.8116	46.8818	3160			-2041
AT	VERNAGT FERNER	489	2012	2012-81	10.7979	46.8701	3160	775		
AT	VERNAGT FERNER	489	2012	2012-40	10.8057	46.8739	3156	813		
AT	VERNAGT FERNER	489	2012	2012-6	10.8235	46.8850	3152	963		
AT	VERNAGT FERNER	489	2012	2012-69	10.8398	46.8724	3151	550		
AT	VERNAGT FERNER	489	2012	2012-22	10.8301	46.883	3144	961		
AT	VERNAGT FERNER	489	2012	2012-8	10.8238	46.8842	3144	1008		
AT	VERNAGT FERNER	489	2012	2012-7	10.8227	46.8843	3144	1033		
AT	VERNAGT FERNER	489	2012	2012-55	10.8094	46.8789	3140	865		
AT	VERNAGT FERNER	489	2012	280	10.8126	46.8808	3137			-1959
AT	VERNAGT FERNER	489	2012	2012-9	10.823	46.8835	3136	992		
AT	VERNAGT FERNER	489	2012	165	10.7992	46.8696	3133			-1656
AT	VERNAGT FERNER	489	2012	2012-82	10.7986	46.8688	3130	752		
AT	VERNAGT FERNER	489	2012	2012-100	10.8350	46.8785	3120	803		
AT	VERNAGT FERNER	489	2012	2012-10	10.8237	46.8824	3118	921		
AT	VERNAGT FERNER	489	2012	2012-41	10.8072	46.8739	3118	1011		
AT	VERNAGT FERNER	489	2012	2012-23	10.8297	46.8810	3115	1043		
AT	VERNAGT FERNER	489	2012	2012-56	10.8106	46.8780	3114	878		
AT	VERNAGT FERNER	489	2012	2012-70	10.8382	46.8728	3112	636		
AT	VERNAGT FERNER	489	2012	283	10.8101	46.8781	3108			-1892
AT	VERNAGT FERNER	489	2012	2012-83	10.7986	46.8668	3100	1019		
AT	VERNAGT FERNER	489	2012	SCHW	10.7986	46.8668	3100	1060		
AT	VERNAGT FERNER	489	2012	2012-11	10.8245	46.8815	3099	1026		
AT	VERNAGT FERNER	489	2012	2012-84	10.7996	46.8672	3095	957		
AT	VERNAGT FERNER	489	2012	2012-71	10.8371	46.8732	3095	949		
AT	VERNAGT FERNER	489	2012	2012-101	10.8334	46.8784	3090	736		
AT	VERNAGT FERNER	489	2012	2012-42	10.8085	46.8738	3087	987		
AT	VERNAGT FERNER	489	2012	161	10.8001	46.8670	3087			-1499
AT	VERNAGT FERNER	489	2012	2012-24	10.8291	46.8789	3085	943		
AT	VERNAGT FERNER	489	2012	2012-57	10.8121	46.8771	3081	801		
AT	VERNAGT FERNER	489	2012	278	10.8362	46.8726	3079			-1886
AT	VERNAGT FERNER	489	2012	2012-72	10.8354	46.8734	3078	656		
AT	VERNAGT FERNER	489	2012	2012-12	10.8240	46.8803	3077	949		
AT	VERNAGT FERNER	489	2012	273	10.8197	46.8806	3073			-1663
AT	VERNAGT FERNER	489	2012	2012-85	10.8012	46.8661	3070	965		
AT	VERNAGT FERNER	489	2012	2012-102	10.8316	46.8776	3060	1135		
AT	VERNAGT FERNER	489	2012	2012-13	10.8243	46.8791	3058	924		
AT	VERNAGT FERNER	489	2012	2012-73	10.8338	46.8733	3056	970		
AT	VERNAGT FERNER	489	2012	2012-43	10.8103	46.8740	3055	821		
AT	VERNAGT FERNER	489	2012	2012-58	10.8136	46.8764	3053	794		
AT	VERNAGT FERNER	489	2012	2012-86	10.8027	46.8658	3050	938		

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
AT	VERNAGT FERNER	489	2012	2012-25	10.8287	46.8778	3049	926		
AT	VERNAGT FERNER	489	2012	274	10.8331	46.8742	3041			-2181
AT	VERNAGT FERNER	489	2012	LYS	10.8244	46.8778	3040	710		
AT	VERNAGT FERNER	489	2012	2012-105	10.8244	46.8778	3040	938		
AT	VERNAGT FERNER	489	2012	2012-44	10.8120	46.8743	3037	892		
AT	VERNAGT FERNER	489	2012	2012-74	10.8321	46.8734	3034	775		
AT	VERNAGT FERNER	489	2012	2012-14	10.8256	46.8779	3033	1038		
AT	VERNAGT FERNER	489	2012	160	10.8040	46.8665	3033			-1809
AT	VERNAGT FERNER	489	2012	2012-59	10.8149	46.8758	3027	1011		
AT	VERNAGT FERNER	489	2012	2012-26	10.8285	46.8766	3025	801		
AT	VERNAGT FERNER	489	2012	2012-103	10.8302	46.8765	3025	897		
AT	VERNAGT FERNER	489	2012	2012-106	10.8235	46.8770	3020	819		
AT	VERNAGT FERNER	489	2012	2012-87	10.8046	46.8653	3020	1006		
AT	VERNAGT FERNER	489	2012	275	10.8133	46.8749	3019			-2276
AT	VERNAGT FERNER	489	2012	2012-45	10.8137	46.8744	3016	872		
AT	VERNAGT FERNER	489	2012	2012-75	10.8308	46.8733	3013	911		
AT	VERNAGT FERNER	489	2012	2012-15	10.8269	46.8755	3007	813		
AT	VERNAGT FERNER	489	2012	2012-104	10.8286	46.8752	3000	1017		
AT	VERNAGT FERNER	489	2012	2012-107	10.8220	46.8759	3000	861		
AT	VERNAGT FERNER	489	2012	2012-60	10.8162	46.8749	2998	807		
AT	VERNAGT FERNER	489	2012	2012-16	10.8263	46.8743	2995	819		
AT	VERNAGT FERNER	489	2012	2012-46	10.8153	46.8743	2994	767		
AT	VERNAGT FERNER	489	2012	2012-27	10.8275	46.8741	2994	988		
AT	VERNAGT FERNER	489	2012	2012-88	10.8066	46.8655	2990	930		
AT	VERNAGT FERNER	489	2012	2012-76	10.8291	46.8729	2986	629		
AT	VERNAGT FERNER	489	2012	272	10.8280	46.8746	2981			-2241
AT	VERNAGT FERNER	489	2012	164	10.8090	46.8647	2980			-2082
AT	VERNAGT FERNER	489	2012	2012-108	10.8208	46.8746	2980	675		
AT	VERNAGT FERNER	489	2012	2012-77	10.8278	46.8727	2978	826		
AT	VERNAGT FERNER	489	2012	282	10.8160	46.8744	2977			-3279
AT	VERNAGT FERNER	489	2012	266	10.8229	46.8746	2974			-3053
AT	VERNAGT FERNER	489	2012	2012-17	10.8252	46.873	2974	747		
AT	VERNAGT FERNER	489	2012	265	10.8291	46.8731	2973			-3726
AT	VERNAGT FERNER	489	2012	2012-78	10.8264	46.8724	2972	904		
AT	VERNAGT FERNER	489	2012	2012-47	10.8167	46.8737	2965	910		
AT	VERNAGT FERNER	489	2012	258	10.8264	46.8730	2963			-3627
AT	VERNAGT FERNER	489	2012	2012-28	10.8268	46.872	2963	757		
AT	VERNAGT FERNER	489	2012	2012-61	10.8171	46.8741	2963	920		
AT	VERNAGT FERNER	489	2012	2012-89	10.8087	46.8657	2960	976		
AT	VERNAGT FERNER	489	2012	2012-109	10.8202	46.8740	2950	672		
AT	VERNAGT FERNER	489	2012	SBH	10.8242	46.8710	2945	743		
AT	VERNAGT FERNER	489	2012	2012-79	10.8242	46.8713	2945	820		
AT	VERNAGT FERNER	489	2012	158	10.8079	46.8675	2941			-2264
AT	VERNAGT FERNER	489	2012	2012-48	10.8173	46.8729	2940	884		
AT	VERNAGT FERNER	489	2012	252	10.8292	46.8708	2936			-3474
AT	VERNAGT FERNER	489	2012	257	10.8242	46.8718	2936			-2934
AT	VERNAGT FERNER	489	2012	2012-29	10.8265	46.8708	2933	933		
AT	VERNAGT FERNER	489	2012	2012-90	10.8105	46.8661	2930	711		
AT	VERNAGT FERNER	489	2012	2012-49	10.8186	46.8727	2928	752		
AT	VERNAGT FERNER	489	2012	254	10.8218	46.8723	2928			-4185
AT	VERNAGT FERNER	489	2012	2012-62	10.8185	46.8732	2926	772		
AT	VERNAGT FERNER	489	2012	251	10.8268	46.871	2925			-3978
AT	VERNAGT FERNER	489	2012	159	10.8126	46.8640	2922			-2144
AT	VERNAGT FERNER	489	2012	2012-110	10.8201	46.8726	2920	520		
AT	VERNAGT FERNER	489	2012	204	10.8243	46.8703	2911			-3420
AT	VERNAGT FERNER	489	2012	156	10.8106	46.8674	2910			-3682
AT	VERNAGT FERNER	489	2012	2012-30	10.8263	46.8693	2903	629		
AT	VERNAGT FERNER	489	2012	2012-91	10.8119	46.8666	2900	772		
AT	VERNAGT FERNER	489	2012	141	10.8132	46.8663	2885			-2944
AT	VERNAGT FERNER	489	2012	2012-111	10.8204	46.8711	2880	674		
AT	VERNAGT FERNER	489	2012	140	10.8129	46.8675	2877			-3260
AT	VERNAGT FERNER	489	2012	2012-92	10.8132	46.8671	2870	775		
AT	VERNAGT FERNER	489	2012	2012-112	10.8208	46.8698	2860	636		
AT	VERNAGT FERNER	489	2012	2012-93	10.8146	46.8674	2845	862		
AT	VERNAGT FERNER	489	2012	2012-94	10.816	46.8678	2820	1134		
AT	VERNAGT FERNER	489	2013	2013-98	10.7933	46.8785	3476	828		
AT	VERNAGT FERNER	489	2013	2013-99	10.7942	46.8786	3473	925		
AT	VERNAGT FERNER	489	2013	PHVP	10.7942	46.8786	3470			798
AT	VERNAGT FERNER	489	2013	2013-100	10.7946	46.8785	3466	1022		
AT	VERNAGT FERNER	489	2013	2013-101	10.7955	46.8782	3462	1113		
AT	VERNAGT FERNER	489	2013	PHV	10.7942	46.8786	3450	820		
AT	VERNAGT FERNER	489	2013	2013-102	10.7968	46.8776	3442	1207		
AT	VERNAGT FERNER	489	2013	2013-103	10.7981	46.8771	3436	904		
AT	VERNAGT FERNER	489	2013	2013-104	10.7992	46.8769	3433	1363		
AT	VERNAGT FERNER	489	2013	2013-105	10.7999	46.8765	3421	1301		
AT	VERNAGT FERNER	489	2013	2013-106	10.8016	46.8757	3420	1321		
AT	VERNAGT FERNER	489	2013	2013-107	10.8025	46.8746	3416	791		
AT	VERNAGT FERNER	489	2013	2013-97	10.7902	46.8770	3376	1348		
AT	VERNAGT FERNER	489	2013	2013-95	10.7906	46.8760	3355	1150		
AT	VERNAGT FERNER	489	2013	2013-96	10.7899	46.8766	3351	1124		
AT	VERNAGT FERNER	489	2013	2013-94	10.7912	46.8756	3334	1081		
AT	VERNAGT FERNER	489	2013	2013-18	10.8405	46.8841	3314	923		
AT	VERNAGT FERNER	489	2013	2013-93	10.7918	46.8749	3307	984		
AT	VERNAGT FERNER	489	2013	2013-17	10.8397	46.8835	3305	984		
AT	VERNAGT FERNER	489	2013	BRK	10.8426	46.8829	3279	684		340
AT	VERNAGT FERNER	489	2013	2013-92	10.7922	46.8743	3271	822		
AT	VERNAGT FERNER	489	2013	GG1	10.8029	46.8841	3267			350
AT	VERNAGT FERNER	489	2013	2013-59	10.8321	46.8873	3263	990		
AT	VERNAGT FERNER	489	2013	2013-16	10.8392	46.8826	3262	840		
AT	VERNAGT FERNER	489	2013	2013-60	10.8291	46.8873	3259	1078		
AT	VERNAGT FERNER	489	2013	THJ	10.8322	46.8874	3253	981		530
AT	VERNAGT FERNER	489	2013	2013-108	10.8026	46.8739	3242	703		
AT	VERNAGT FERNER	489	2013	2013-58	10.8335	46.8861	3241	1007		
AT	VERNAGT FERNER	489	2013	2013-91	10.7930	46.8733	3239	669		
AT	VERNAGT FERNER	489	2013	168	10.7932	46.8732	3238			-350
AT	VERNAGT FERNER	489	2013	2013-89	10.7936	46.8727	3234	1000		

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
AT	VERNAGT FERNER	489	2013	2013-90	10.7934	46.8729	3234	989		
AT	VERNAGT FERNER	489	2013	2013-15	10.8393	46.8811	3226	841		
AT	VERNAGT FERNER	489	2013	2013-61	10.8276	46.8868	3212	996		
AT	VERNAGT FERNER	489	2013	2013-109	10.8044	46.8738	3209	976		
AT	VERNAGT FERNER	489	2013	TJ	10.8243	46.8849	3198			-200
AT	VERNAGT FERNER	489	2013	2013-14	10.8384	46.8799	3196	861		
AT	VERNAGT FERNER	489	2013	2013-62	10.8259	46.8863	3188	1017		
AT	VERNAGT FERNER	489	2013	2013-57	10.8328	46.8835	3183	911		
AT	VERNAGT FERNER	489	2013	2013-63	10.8249	46.8856	3173	1039		
AT	VERNAGT FERNER	489	2013	2013-42	10.8100	46.8820	3172	869		
AT	VERNAGT FERNER	489	2013	2013-13	10.8365	46.8792	3170	815		
AT	VERNAGT FERNER	489	2013	2013-110	10.8064	46.8741	3169	843		
AT	VERNAGT FERNER	489	2013	163	10.7978	46.8713	3169			-541
AT	VERNAGT FERNER	489	2013	2013-41	10.8108	46.8812	3163	827		
AT	VERNAGT FERNER	489	2013	2013-64	10.8242	46.8848	3163	1026		
AT	VERNAGT FERNER	489	2013	281	10.8116	46.8818	3160			-126
AT	VERNAGT FERNER	489	2013	2013-43	10.8091	46.8810	3159	930		
AT	VERNAGT FERNER	489	2013	2013-65	10.8238	46.8843	3153	1024		
AT	VERNAGT FERNER	489	2013	2013-44	10.8086	46.8796	3148	941		
AT	VERNAGT FERNER	489	2013	2013-40	10.8116	46.8806	3148	827		
AT	VERNAGT FERNER	489	2013	2013-111	10.8077	46.8744	3145	1099		
AT	VERNAGT FERNER	489	2013	2013-56	10.8318	46.8819	3142	817		
AT	VERNAGT FERNER	489	2013	2013-12	10.8357	46.8784	3141	676		
AT	VERNAGT FERNER	489	2013	280	10.8126	46.8808	3137			-382
AT	VERNAGT FERNER	489	2013	2013-66	10.8223	46.8832	3134	975		
AT	VERNAGT FERNER	489	2013	2013-39	10.8122	46.8798	3134	823		
AT	VERNAGT FERNER	489	2013	2013-45	10.8086	46.8782	3134	954		
AT	VERNAGT FERNER	489	2013	165	10.7992	46.8696	3132			-666
AT	VERNAGT FERNER	489	2013	288	10.8310	46.8817	3126			-425
AT	VERNAGT FERNER	489	2013	TAJ	10.8243	46.8849	3119	1013		
AT	VERNAGT FERNER	489	2013	2013-11	10.8346	46.8788	3115	610		
AT	VERNAGT FERNER	489	2013	2013-38	10.8129	46.8792	3113	889		
AT	VERNAGT FERNER	489	2013	SCHW	10.7982	46.8660	3110	1415		
AT	VERNAGT FERNER	489	2013	2013-74	10.7982	46.8660	3110	1252		
AT	VERNAGT FERNER	489	2013	2013-67	10.8215	46.8816	3109	788		
AT	VERNAGT FERNER	489	2013	2013-55	10.8317	46.8803	3108	883		
AT	VERNAGT FERNER	489	2013	283	10.8102	46.8781	3106			-575
AT	VERNAGT FERNER	489	2013	2013-46	10.8098	46.8773	3106	887		
AT	VERNAGT FERNER	489	2013	2013-19	10.8347	46.8770	3104	839		
AT	VERNAGT FERNER	489	2013	2013-75	10.7995	46.8657	3100	1254		
AT	VERNAGT FERNER	489	2013	2013-10	10.8338	46.8784	3095	930		
AT	VERNAGT FERNER	489	2013	2013-76	10.8004	46.8653	3090	1152		
AT	VERNAGT FERNER	489	2013	2013-112	10.8091	46.8758	3089	882		
AT	VERNAGT FERNER	489	2013	2013-37	10.8141	46.8788	3088	919		
AT	VERNAGT FERNER	489	2013	161	10.8001	46.8670	3087			-137
AT	VERNAGT FERNER	489	2013	2013-54	10.8314	46.8791	3085	848		
AT	VERNAGT FERNER	489	2013	2013-113	10.8116	46.8772	3083	832		
AT	VERNAGT FERNER	489	2013	LYS	10.8217	46.8792	3083	854		
AT	VERNAGT FERNER	489	2013	2013-20	10.8343	46.8753	3078	591		
AT	VERNAGT FERNER	489	2013	278	10.8362	46.8725	3078			-1329
AT	VERNAGT FERNER	489	2013	2013-77	10.8018	46.8643	3075	1256		
AT	VERNAGT FERNER	489	2013	273	10.8197	46.8806	3072			-380
AT	VERNAGT FERNER	489	2013	2013-47	10.8112	46.8764	3071	889		
AT	VERNAGT FERNER	489	2013	2013-36	10.8153	46.8782	3069	870		
AT	VERNAGT FERNER	489	2013	2013-78	10.8030	46.8638	3067	1215		
AT	VERNAGT FERNER	489	2013	2013-9	10.8323	46.8781	3065	874		
AT	VERNAGT FERNER	489	2013	2013-35	10.8162	46.8781	3063	770		
AT	VERNAGT FERNER	489	2013	2013-68	10.8222	46.88	3061	919		
AT	VERNAGT FERNER	489	2013	2013-114	10.8129	46.8766	3059	857		
AT	VERNAGT FERNER	489	2013	2013-21	10.8331	46.8751	3051	766		
AT	VERNAGT FERNER	489	2013	2013-8	10.8304	46.8774	3050	827		
AT	VERNAGT FERNER	489	2013	167	10.8039	46.8642	3046			-372
AT	VERNAGT FERNER	489	2013	2013-69	10.8228	46.8786	3045	831		
AT	VERNAGT FERNER	489	2013	2013-53	10.8306	46.8774	3045	719		
AT	VERNAGT FERNER	489	2013	274	10.8330	46.8742	3039			-948
AT	VERNAGT FERNER	489	2013	2013-115	10.8148	46.8764	3037	793		
AT	VERNAGT FERNER	489	2013	2013-48	10.8129	46.8754	3035	815		
AT	VERNAGT FERNER	489	2013	2013-34	10.8183	46.8776	3033	747		
AT	VERNAGT FERNER	489	2013	2013-79	10.8048	46.8632	3033	1185		
AT	VERNAGT FERNER	489	2013	160	10.8041	46.8665	3031			-575
AT	VERNAGT FERNER	489	2013	2013-70	10.8231	46.8774	3031	809		
AT	VERNAGT FERNER	489	2013	2013-22	10.8312	46.8752	3030	810		
AT	VERNAGT FERNER	489	2013	2013-80	10.8059	46.864	3028	1007		
AT	VERNAGT FERNER	489	2013	2013-7	10.8291	46.8766	3021	703		
AT	VERNAGT FERNER	489	2013	2013-23	10.8300	46.8748	3016	746		
AT	VERNAGT FERNER	489	2013	275	10.8133	46.8749	3016			-1126
AT	VERNAGT FERNER	489	2013	2013-71	10.8235	46.8761	3016	796		
AT	VERNAGT FERNER	489	2013	2013-33	10.8197	46.8764	3014	721		
AT	VERNAGT FERNER	489	2013	2013-116	10.8166	46.8761	3010	817		
AT	VERNAGT FERNER	489	2013	2013-49	10.8144	46.8747	3008	801		
AT	VERNAGT FERNER	489	2013	2013-6	10.8281	46.8759	3007	875		
AT	VERNAGT FERNER	489	2013	2013-81	10.8078	46.8644	3003	955		
AT	VERNAGT FERNER	489	2013	2013-32	10.8208	46.8752	2998	656		
AT	VERNAGT FERNER	489	2013	2013-72	10.8239	46.8748	2992	721		
AT	VERNAGT FERNER	489	2013	2013-24	10.8286	46.8744	2991	768		
AT	VERNAGT FERNER	489	2013	2013-5	10.8271	46.8743	2990	798		
AT	VERNAGT FERNER	489	2013	2013-25	10.8276	46.8740	2990	785		
AT	VERNAGT FERNER	489	2013	2013-82	10.8094	46.8651	2985	844		
AT	VERNAGT FERNER	489	2013	2013-31	10.8221	46.8743	2981	798		
AT	VERNAGT FERNER	489	2013	272	10.8279	46.8746	2980			-1547
AT	VERNAGT FERNER	489	2013	2013-26	10.8267	46.8733	2980	740		
AT	VERNAGT FERNER	489	2013	164	10.8091	46.8647	2979			-1006
AT	VERNAGT FERNER	489	2013	282	10.8160	46.8744	2977			-2064
AT	VERNAGT FERNER	489	2013	2013-4	10.8261	46.8735	2976	707		
AT	VERNAGT FERNER	489	2013	2013-50	10.8160	46.8738	2975	719		
AT	VERNAGT FERNER	489	2013	2013-73	10.8241	46.8734	2975	743		

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
AT	VERNAGT FERNER	489	2013	266	10.8229	46.8746	2972			-1745
AT	VERNAGT FERNER	489	2013	265	10.8291	46.8731	2971			-2616
AT	VERNAGT FERNER	489	2013	2013-117	10.8170	46.8742	2969	764		
AT	VERNAGT FERNER	489	2013	2013-30	10.8228	46.8735	2966	779		
AT	VERNAGT FERNER	489	2013	2013-27	10.8257	46.8726	2965	689		
AT	VERNAGT FERNER	489	2013	258	10.8264	46.8730	2961			-2078
AT	VERNAGT FERNER	489	2013	2013-29	10.8234	46.8729	2956	653		
AT	VERNAGT FERNER	489	2013	2013-3	10.8247	46.8725	2954	678		
AT	VERNAGT FERNER	489	2013	2013-28	10.8242	46.8719	2950	648		
AT	VERNAGT FERNER	489	2013	2013-118	10.8182	46.8733	2947	760		
AT	VERNAGT FERNER	489	2013	SBH	10.8242	46.8710	2945	751		
AT	VERNAGT FERNER	489	2013	2013-2	10.8237	46.8719	2941	664		
AT	VERNAGT FERNER	489	2013	158	10.8079	46.8675	2939			-1288
AT	VERNAGT FERNER	489	2013	2013-51	10.8174	46.8730	2939	719		
AT	VERNAGT FERNER	489	2013	2013-84	10.8115	46.8660	2937	797		
AT	VERNAGT FERNER	489	2013	2013-1	10.8227	46.8719	2936	631		
AT	VERNAGT FERNER	489	2013	252	10.8286	46.8709	2934			-3064
AT	VERNAGT FERNER	489	2013	257	10.8242	46.8718	2934			-2214
AT	VERNAGT FERNER	489	2013	251	10.8268	46.871	2925			-2940
AT	VERNAGT FERNER	489	2013	254	10.8218	46.8723	2925			-3134
AT	VERNAGT FERNER	489	2013	159	10.8126	46.8640	2922			-1858
AT	VERNAGT FERNER	489	2013	2013-52	10.8187	46.8725	2922	644		
AT	VERNAGT FERNER	489	2013	156	10.8106	46.8674	2909			-2118
AT	VERNAGT FERNER	489	2013	204	10.8243	46.8703	2908			-3059
AT	VERNAGT FERNER	489	2013	2013-85	10.8124	46.8667	2899	821		
AT	VERNAGT FERNER	489	2013	153	10.8115	46.868	2893			-2099
AT	VERNAGT FERNER	489	2013	141	10.8131	46.8664	2883			-2506
AT	VERNAGT FERNER	489	2013	2013-86	10.8146	46.8671	2879	762		
AT	VERNAGT FERNER	489	2013	140	10.8129	46.8675	2874			-2330
AT	VERNAGT FERNER	489	2013	2013-87	10.8159	46.8672	2844	213		
AT	VERNAGT FERNER	489	2013	2013-88	10.8255	46.8609	2692	174		
AT	VERNAGT FERNER	489	2013	2013-83	10.8107	46.8652	296	874		
BO	CHARQUINI SUR	2667	2011	PIT1			5250			540
BO	CHARQUINI SUR	2667	2011	1H			5193			-2118
BO	CHARQUINI SUR	2667	2011	5F			5179			-456
BO	CHARQUINI SUR	2667	2011	S/N 3			5170			-1663
BO	CHARQUINI SUR	2667	2011	2J			5163			-759
BO	CHARQUINI SUR	2667	2011	6D			5149			-1339
BO	CHARQUINI SUR	2667	2011	14G			5092			-893
BO	CHARQUINI SUR	2667	2011	20 J			5088			-1691
BO	CHARQUINI SUR	2667	2011	10J			5056			-2139
BO	CHARQUINI SUR	2667	2011	16J			5014			-2562
BO	CHARQUINI SUR	2667	2011	18J			5000			-2880
BO	CHARQUINI SUR	2667	2012	PIT2			5246			1052
BO	CHARQUINI SUR	2667	2012	PIT3			5236			924
BO	CHARQUINI SUR	2667	2012	PIT4			5231			957
BO	CHARQUINI SUR	2667	2012	5F			5174			101
BO	CHARQUINI SUR	2667	2012	7K			5170			136
BO	CHARQUINI SUR	2667	2012	2J			5158			137
BO	CHARQUINI SUR	2667	2012	2H			5155			-360
BO	CHARQUINI SUR	2667	2012	S/N3			5145			-327
BO	CHARQUINI SUR	2667	2012	6D			5144			-252
BO	CHARQUINI SUR	2667	2012	3H			5134			-544
BO	CHARQUINI SUR	2667	2012	8K			5132			-206
BO	CHARQUINI SUR	2667	2012	PIT1			5127			1960
BO	CHARQUINI SUR	2667	2012	20 J			5081			-436
BO	CHARQUINI SUR	2667	2012	17J			5004			-809
BO	CHARQUINI SUR	2667	2012	18J			4992			-1671
BO	CHARQUINI SUR	2667	2012	6K			4950			-2188
BO	CHARQUINI SUR	2667	2013	PIT1			5283			870
BO	CHARQUINI SUR	2667	2013	PIT2			5245			1338
BO	CHARQUINI SUR	2667	2013	PIT3			5222			682
BO	CHARQUINI SUR	2667	2013	5F			5173			-142
BO	CHARQUINI SUR	2667	2013	2J			5157			-81
BO	CHARQUINI SUR	2667	2013	2H			5154			-203
BO	CHARQUINI SUR	2667	2013	6D			5143			-289
BO	CHARQUINI SUR	2667	2013	3H			5132			-552
BO	CHARQUINI SUR	2667	2013	15J			5061			-568
BO	CHARQUINI SUR	2667	2013	10J			5046			-1789
BO	CHARQUINI SUR	2667	2013	17J			5001			-1740
BO	CHARQUINI SUR	2667	2013	18J			4989			-2375
BO	ZONGO	1503	2011	Pit1	-68.1510	-16.2667	5791			918
BO	ZONGO	1503	2011	16W	-68.1462	-16.2786	5184			-1752
BO	ZONGO	1503	2011	15T	-68.1456	-16.2782	5183			-1480
BO	ZONGO	1503	2011	17T	-68.1454	-16.2789	5177			-1679
BO	ZONGO	1503	2011	22W	-68.1442	-16.2780	5154			-674
BO	ZONGO	1503	2011	21W	-68.1423	-16.2783	5120			-1469
BO	ZONGO	1503	2011	21S	-68.1418	-16.2785	5109			-2401
BO	ZONGO	1503	2011	18T	-68.1428	-16.2792	5107			-2227
BO	ZONGO	1503	2011	2W	-68.1431	-16.2797	5105			-2272
BO	ZONGO	1503	2011	1S	-68.1432	-16.2798	5104			-1832
BO	ZONGO	1503	2011	2S	-68.1428	-16.2801	5099			-2091
BO	ZONGO	1503	2011	20T	-68.1422	-16.2797	5099			-2480
BO	ZONGO	1503	2011	3T	-68.1408	-16.2787	5079			-3007
BO	ZONGO	1503	2011	4W	-68.1407	-16.2801	5076			-3116
BO	ZONGO	1503	2011	5W	-68.1399	-16.2809	5064			-3251
BO	ZONGO	1503	2011	7T	-68.1392	-16.2806	5058			-3506
BO	ZONGO	1503	2011	8T	-68.1384	-16.2809	5044			-3777
BO	ZONGO	1503	2011	9T	-68.1380	-16.2809	5034			-4327
BO	ZONGO	1503	2012	PIT1			5791			1763
BO	ZONGO	1503	2012	PIT2			5628			1168
BO	ZONGO	1503	2012	PIT3			5623			902
BO	ZONGO	1503	2012	15T			5183			-2366
BO	ZONGO	1503	2012	17T			5181			-2661
BO	ZONGO	1503	2012	22W			5158			-983
BO	ZONGO	1503	2012	21W			5123			-3006

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
BO	ZONGO	1503	2012	2W			5106			-3707
BO	ZONGO	1503	2012	20T			5100			-4270
BO	ZONGO	1503	2012	3T			5082			-4648
BO	ZONGO	1503	2012	4W			5077			-5076
BO	ZONGO	1503	2012	5W			5066			-5751
BO	ZONGO	1503	2012	7T			5061			-4093
BO	ZONGO	1503	2012	10W			4987			-6097
BO	ZONGO	1503	2012	11W			4971			-6097
BO	ZONGO	1503	2012	13W			4918			-6097
BO	ZONGO	1503	2012	14W			4898			-6097
BO	ZONGO	1503	2012	XXV						-6097
BO	ZONGO	1503	2012	XXIII						-6097
BO	ZONGO	1503	2012	8U						-3625
BO	ZONGO	1503	2012	6W						-3302
BO	ZONGO	1503	2012	5U						-3043
BO	ZONGO	1503	2012	1W						-3296
BO	ZONGO	1503	2012	XX2						-2799
BO	ZONGO	1503	2012	7U						-3261
BO	ZONGO	1503	2012	X4						-923
BO	ZONGO	1503	2012	X5						-858
BO	ZONGO	1503	2012	XXIV						-6097
BO	ZONGO	1503	2013	PIT1			5654			1262
BO	ZONGO	1503	2013	PIT2			5628			1103
BO	ZONGO	1503	2013	PIT3			5492			370
BO	ZONGO	1503	2013	X1			5191			-1970
BO	ZONGO	1503	2013	17T			5181			-257
BO	ZONGO	1503	2013	3U			5171			-654
BO	ZONGO	1503	2013	22W			5145			-729
BO	ZONGO	1503	2013	21W			5111			-1278
BO	ZONGO	1503	2013	5U			5105			-1305
BO	ZONGO	1503	2013	18T			5105			-958
BO	ZONGO	1503	2013	2W			5104			-639
BO	ZONGO	1503	2013	20T			5095			-1553
BO	ZONGO	1503	2013	6U			5083			-2286
BO	ZONGO	1503	2013	7U			5073			-2313
BO	ZONGO	1503	2013	4W			5073			-2394
BO	ZONGO	1503	2013	3T			5072			-1454
BO	ZONGO	1503	2013	6W			5068			-2298
BO	ZONGO	1503	2013	8U			5058			-2556
BO	ZONGO	1503	2013	7T			5055			-2919
BO	ZONGO	1503	2013	VIII			5039			-3915
BO	ZONGO	1503	2013	XXII			5015			-5085
BO	ZONGO	1503	2013	XXIII			4988			-6219
BO	ZONGO	1503	2013	XXIV			4964			-6741
BO	ZONGO	1503	2013	XXV			4935			-5760
BO	ZONGO	1503	2013	XIX						-3879
CA	WHITE	0	2011	JGC1	79.5378	-90.9902	1520			293
CA	WHITE	0	2011	CJA1	79.5339	-91.0287	1497			243
CA	WHITE	0	2011	LP2	79.5324	-91.0201	1459			248
CA	WHITE	0	2011	WPA1	79.5362	-90.9318	1447			165
CA	WHITE	0	2011	DCP1	79.5300	-91.1012	1411			343
CA	WHITE	0	2011	WPA2	79.5331	-90.9357	1410			-160
CA	WHITE	0	2011	LP4	79.5277	-90.9811	1376			261
CA	WHITE	0	2011	WPA3	79.5289	-90.9451	1341			156
CA	WHITE	0	2011	EXTRA	79.5255	-90.9693	1324			-446
CA	WHITE	0	2011	JGC2	79.5236	-90.9594	1285			-590
CA	WHITE	0	2011	WPA4	79.5218	-90.9477	1265			-417
CA	WHITE	0	2011	WPA5	79.5190	-90.9608	1261			-933
CA	WHITE	0	2011	L1	79.5199	-90.9301	1238			-936
CA	WHITE	0	2011	QMARK	79.517	-90.9029	1228			-1248
CA	WHITE	0	2011	BLUE	79.5128	-90.8872	1144			-819
CA	WHITE	0	2011	L16Z			1043			-603
CA	WHITE	0	2011	L18A	79.4988	-90.8278	859			-1998
CA	WHITE	0	2011	L17	79.5019	-90.8399	848			-1791
CA	WHITE	0	2011	L20	79.529	-90.8016	836			-2002
CA	WHITE	0	2011	LP5	79.4840	-90.7835	680			-2430
CA	WHITE	0	2011	CWGT	79.4785	-90.7672	679			-2412
CA	WHITE	0	2011	LP6A	79.4673	-90.7464	457			-2196
CA	WHITE	0	2011	WG6	79.454	-90.7036	382			-2259
CA	WHITE	0	2011	LP9A	79.4512	-90.6937	298			-2808
CA	WHITE	0	2012	JGC1	79.5378	-90.9902	1520			199
CA	WHITE	0	2012	CJA1	79.5339	-91.0287	1497			213
CA	WHITE	0	2012	LP2	79.5324	-91.0201	1459			148
CA	WHITE	0	2012	WPA1	79.5362	-90.9318	1447			-63
CA	WHITE	0	2012	DCP1	79.5300	-91.1012	1411			-135
CA	WHITE	0	2012	WPA2	79.5331	-90.9357	1410			-162
CA	WHITE	0	2012	LP4	79.5277	-90.9811	1376			-549
CA	WHITE	0	2012	WPA3	79.5289	-90.9451	1341			99
CA	WHITE	0	2012	EXTRA	79.5255	-90.9693	1324			-171
CA	WHITE	0	2012	JGC2	79.5236	-90.9594	1285			-432
CA	WHITE	0	2012	WPA4	79.5218	-90.9477	1265			-704
CA	WHITE	0	2012	WPA5	79.5190	-90.9608	1261			-387
CA	WHITE	0	2012	L1	79.5199	-90.9301	1238			-778
CA	WHITE	0	2012	QMARK	79.517	-90.9029	1228			-387
CA	WHITE	0	2012	BLUE	79.5128	-90.8872	1144			-837
CA	WHITE	0	2012	L16Z			1043			-1363
CA	WHITE	0	2012	L16A	79.5059	-90.8520	1043			-1278
CA	WHITE	0	2012	L19	79.4966	-90.8207	872			-1800
CA	WHITE	0	2012	L18A	79.4988	-90.8278	859			-1701
CA	WHITE	0	2012	L17	79.5019	-90.8399	848			-1476
CA	WHITE	0	2012	L21	79.5296	-90.8047	842			-1944
CA	WHITE	0	2012	L20	79.529	-90.8016	836			-1746
CA	WHITE	0	2012	WG9	79.4878	-90.7900	770			-2034
CA	WHITE	0	2012	WG8	79.4809	-90.7727	680			-1782
CA	WHITE	0	2012	LP5	79.4840	-90.7835	680			-2025
CA	WHITE	0	2012	CWGT	79.4785	-90.7672	679			-1755

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
CA	WHITE	0	2012	CWGX	79.4750	-90.7504	621			-1989
CA	WHITE	0	2012	WG7	79.4699	-90.7558	575			-1971
CA	WHITE	0	2012	LP8	79.4590	-90.7153	456			-2403
CA	WHITE	0	2012	WG6	79.454	-90.7036	382			-2412
CA	WHITE	0	2012	LP9	79.4512	-90.6937	368			-2331
CA	WHITE	0	2012	ST6	79.4456	-90.6704	293			-2673
CH	ADLER	3801	2012	ag-600	46.0113	7.8717	3336	1060	-2830	-1770
CH	ADLER	3801	2012	ag-300	46.0106	7.8607	3131	1050	-3810	-2760
CH	ADLER	3801	2012	ag-200	46.0105	7.8585	3082	1060	-3470	-2410
CH	ADLER	3801	2012	ag-100	46.0105	7.8558	3025	730	-4580	-3850
CH	ADLER	3801	2013	Ag-600	46.0106	7.8717	3332	720	-1190	-470
CH	ADLER	3801	2013	Ag-300	46.0106	7.8607	3131	750	-2160	-1410
CH	ADLER	3801	2013	Ag-200	46.0103	7.8583	3076	730	-2150	-1420
CH	ADLER	3801	2013	Ag-100	46.0104	7.8562	3033	630	-3050	-2420
CH	FINDELEN	389	2012	fi-1020	45.9815	7.8792	3451	1560	-890	670
CH	FINDELEN	389	2012	fi-1010	45.9973	7.8904	3327	1810	-890	920
CH	FINDELEN	389	2012	fi-930	45.9995	7.8828	3260	1330	-2150	-820
CH	FINDELEN	389	2012	fi-940	45.9886	7.8723	3253	960	-1960	-1000
CH	FINDELEN	389	2012	fi-810	46.0015	7.8691	3150	1210	-3060	-1850
CH	FINDELEN	389	2012	fi-800	45.9954	7.8684	3121	1260	-2560	-1300
CH	FINDELEN	389	2012	fi-820	45.9946	7.8585	3088	930	-3060	-2130
CH	FINDELEN	389	2012	fi-700	46.0000	7.8581	3037	1040	-3250	-2210
CH	FINDELEN	389	2012	fi-610	46.0058	7.8567	2956	1010	-4720	-3710
CH	FINDELEN	389	2012	fi-500	46.0064	7.8537	2917	900	-3590	-2690
CH	FINDELEN	389	2012	fi-400	46.0092	7.8451	2799	890	-5080	-4190
CH	FINDELEN	389	2012	fi-320	46.0083	7.8386	2705	510	-6630	-6120
CH	FINDELEN	389	2012	fi-310	46.0097	7.8373	2691	800	-5790	-4990
CH	FINDELEN	389	2012	fi-200	46.0099	7.8300	2623	650	-6660	-6010
CH	FINDELEN	389	2012	fi-100	46.0104	7.8259	2589	510	-8270	-7760
CH	FINDELEN	389	2013	Fi-1020	45.9817	7.8792	3449	1540	300	1840
CH	FINDELEN	389	2013	Fi-1010	45.9961	7.8913	3341	1590	-650	940
CH	FINDELEN	389	2013	Fi-910	45.9996	7.8823	3258	1060	-520	540
CH	FINDELEN	389	2013	Fi-940	45.9889	7.8719	3249	960	-660	300
CH	FINDELEN	389	2013	Fi-810	46.0015	7.8691	3150	820	-1790	-970
CH	FINDELEN	389	2013	Fi-800	45.9957	7.8677	3116	920	-1320	-400
CH	FINDELEN	389	2013	Fi-820	45.9944	7.8588	3088	790	-1690	-900
CH	FINDELEN	389	2013	Fi-700	46.0002	7.8578	3036	790	-2970	-2180
CH	FINDELEN	389	2013	Fi-610	46.006	7.8564	2952	560	-2930	-2370
CH	FINDELEN	389	2013	Fi-500	46.0068	7.8532	2909	740	-2240	-1500
CH	FINDELEN	389	2013	Fi-400	46.0092	7.8452	2802	650	-3840	-3190
CH	FINDELEN	389	2013	Fi-320	46.0082	7.8387	2705	490	-5580	-5090
CH	FINDELEN	389	2013	Fi-310	46.0097	7.8373	2691	540	-4510	-3970
CH	FINDELEN	389	2013	Fi-200	46.0099	7.8300	2623	470	-6140	-5670
CH	MURTEL	4339	2013	MUR412	46.4073	9.8220	3211	890	-650	240
CH	MURTEL	4339	2013	MUR613	46.4066	9.8229	3201	890	-560	330
CH	MURTEL	4339	2013	MUR713	46.4085	9.8226	3197	920	-640	280
CH	MURTEL	4339	2013	MUR312	46.4088	9.8245	3178	880	-1060	-180
CH	MURTEL	4339	2013	MUR212	46.4094	9.8263	3142	930	-1260	-330
CH	MURTEL	4339	2013	MUR112	46.4108	9.8283	3100	770	-1510	-740
CH	PIZOL	417	2011	310	46.9584	9.3877	2776	1470	-2890	-1420
CH	PIZOL	417	2011	710	46.9586	9.3881	2755	1170	-3060	-1890
CH	PIZOL	417	2011	610	46.9586	9.3905	2710	1310	-2540	-1230
CH	PIZOL	417	2011	207	46.9595	9.3890	2698	1230	-2360	-1130
CH	PIZOL	417	2011	510	46.9605	9.3884	2676	1190	-3360	-2170
CH	PIZOL	417	2011	810	46.9596	9.3903	2673	970	-3000	-2030
CH	PIZOL	417	2011	410	46.9607	9.3891	2656	1170	-4280	-3110
CH	PIZOL	417	2011	110	46.9606	9.3901	2634	1030	-3510	-2480
CH	PIZOL	417	2012	311	46.9583	9.3877	2780	2610	-3240	-630
CH	PIZOL	417	2012	711	46.9588	9.3884	2740	1720	-3260	-1540
CH	PIZOL	417	2012	211	46.9596	9.3890	2696	2930	-3240	-310
CH	PIZOL	417	2012	sp1	46.9599	9.3884	2694	3100	-2770	330
CH	PIZOL	417	2012	511	46.9604	9.3884	2678	1920	-2670	-750
CH	PIZOL	417	2012	811	46.9596	9.3902	2677	1400	-3100	-1700
CH	PIZOL	417	2012	411	46.9606	9.3889	2662	1920	-4480	-2560
CH	PIZOL	417	2012	111	46.9606	9.3901	2635	1380	-3860	-2480
CH	PIZOL	417	2013	312	46.9583	9.3877	2776	1870	-2090	-220
CH	PIZOL	417	2013	712	46.9585	9.3884	2751	1870	-2730	-860
CH	PIZOL	417	2013	912	46.9588	9.3896	2713	1660	-1710	-50
CH	PIZOL	417	2013	sp1	46.9597	9.3883	2694	2310	-1660	650
CH	PIZOL	417	2013	211	46.9596	9.3890	2691	1660	-1430	230
CH	PIZOL	417	2013	511	46.9604	9.3885	2675	1320	-2400	-1080
CH	PIZOL	417	2013	812	46.9596	9.3902	2671	1260	-2300	-1040
CH	PIZOL	417	2013	412	46.9607	9.3890	2653	1200	-3130	-1930
CH	PIZOL	417	2013	112	46.9605	9.3902	2629	1240	-2280	-1040
CH	PLAINE MORTE	4246	2011	plm4-10	46.3845	7.5299	2776	960	-1370	-2330
CH	PLAINE MORTE	4246	2011	plm2-09	46.3815	7.4861	2738	1030	-1350	-2380
CH	PLAINE MORTE	4246	2011	plm3-10	46.3803	7.5104	2735	1030	-1460	-2490
CH	PLAINE MORTE	4246	2011	plm1-09	46.3781	7.4883	2734	990	-2390	-3380
CH	PLAINE MORTE	4246	2011	plm3-11	46.3804	7.5105	2724	1240	-2040	-800
CH	PLAINE MORTE	4246	2011	plm1-11	46.3781	7.4883	2709	1430	-2940	-1510
CH	PLAINE MORTE	4246	2011	plm6-11	46.3811	7.4960	2694	1260	-2490	-1230
CH	PLAINE MORTE	4246	2011	plm5-11	46.3862	7.5037	2674	1440	-1890	-450
CH	PLAINE MORTE	4246	2013	plm3-11	46.3804	7.5105	2724	1700	-2710	-1010
CH	PLAINE MORTE	4246	2013	plm1-11	46.3781	7.4883	2709	1550	-3270	-1720
CH	PLAINE MORTE	4246	2013	plm6-11	46.3811	7.4960	2694	1610	-3120	-1510
CH	PLAINE MORTE	4246	2013	plm5-11	46.3862	7.5037	2674	1630	-3000	-1370
CH	SANKT ANNA	432	2012	STA 112	46.5967	8.6013	2791	1200	-1970	-770
CH	SANKT ANNA	432	2012	STA 212	46.5982	8.6017	2735	1520	-1820	-300
CH	SANKT ANNA	432	2012	STA 312	46.5993	8.6015	2704	1260	-2350	-1090
CH	SANKT ANNA	432	2012	STA 412	46.6002	8.6017	2672	1200	-2550	-1350
CH	SANKT ANNA	432	2013	Akk4	46.5965	8.6027	2804	1460	-960	500
CH	SANKT ANNA	432	2013	Akk3	46.5965	8.6011	2803	1290	-790	500
CH	SANKT ANNA	432	2013	STA112	46.5968	8.6013	2790	1310	-1290	20
CH	SANKT ANNA	432	2013	Akk5	46.5972	8.6025	2772	1230	-1230	0
CH	SANKT ANNA	432	2013	Akk1	46.5976	8.6006	2758	1310	-1020	290
CH	SANKT ANNA	432	2013	STA212	46.5982	8.6017	2735	1270	-1310	-40

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
CH	SANKT ANNA	432	2013	STA612	46.5992	8.6031	2709	1070	-1810	-740
CH	SANKT ANNA	432	2013	STA312	46.5994	8.6015	2701	1130	-1800	-670
CH	SANKT ANNA	432	2013	STA712	46.5997	8.6003	2681	1150	-2110	-960
CH	SANKT ANNA	432	2013	STA412	46.6002	8.6017	2666	940	-2300	-1360
CH	SCHWARZBACH	4340	2013	SWZ212	46.5964	8.6102	2759	1670	-1350	320
CH	SCHWARZBACH	4340	2013	SWZ112	46.5967	8.6121	2723	1580	-1930	-350
CH	SEX ROUGE	454	2012	sr1-11	46.3268	7.2140	2807	1610	-2810	-1200
CH	SEX ROUGE	454	2013	SER612	46.3275	7.2162	2835	1940	-2170	-230
CH	SEX ROUGE	454	2013	SER312	46.3285	7.2157	2806	1730	-2220	-490
CH	SEX ROUGE	454	2013	SER212	46.3271	7.2140	2804	1120	-2050	-930
CH	SEX ROUGE	454	2013	SER512	46.3279	7.2125	2785	1240	-1980	-740
CH	SEX ROUGE	454	2013	SER412	46.3296	7.2153	2777	1380	-2460	-1080
CH	TSANFLEURON	371	2011	ts4-10	46.3242	7.2306	2726	1200	-3790	-2590
CH	TSANFLEURON	371	2011	ts5-10	46.3217	7.2345	2684	1200	-4240	-3040
CH	TSANFLEURON	371	2011	ts6-10	46.3243	7.2405	2603	1120	-4840	-3720
CH	TSANFLEURON	371	2012	ts2-11	46.3177	7.2169	2853	1330	-2950	-1620
CH	TSANFLEURON	371	2012	ts3-11	46.3151	7.2234	2811	1460	-2830	-1370
CH	TSANFLEURON	371	2012	ts4-11	46.3243	7.2304	2726	1440	-3100	-1660
CH	TSANFLEURON	371	2012	ts5-11	46.3216	7.2342	2688	1260	-3470	-2210
CH	TSANFLEURON	371	2012	ts6-10	46.3243	7.2405	2603	1140	-3660	-2520
CH	TSANFLEURON	371	2013	ts2-12	46.3171	7.2168	2850	1470	-1210	260
CH	TSANFLEURON	371	2013	ts3-12	46.3151	7.2233	2804	1570	-1710	-140
CH	TSANFLEURON	371	2013	ts-s2	46.3243	7.2180	2802	1670	-1370	300
CH	TSANFLEURON	371	2013	ts4-12	46.3242	7.2306	2718	1580	-1870	-290
CH	TSANFLEURON	371	2013	ts5-12	46.3217	7.2343	2688	1390	-2620	-1230
CH	TSANFLEURON	371	2013	ts6-12	46.3243	7.2405	2603	1320	-2940	-1620
CL	AMARILLO	3905	2011	A1-07			5247			-803
CL	AMARILLO	3905	2011	A2-07			5197			-238
CL	AMARILLO	3905	2011	A2-I-08			5190			-506
CL	AMARILLO	3905	2011	A4-10			5173			-910
CL	AMARILLO	3905	2011	A3-I-09			5134			-1000
CL	AMARILLO	3905	2013	A1-09			5242			-578
CL	AMARILLO	3905	2013	A7-12			5230			-348
CL	AMARILLO	3905	2013	A6-12			5212			-1105
CL	AMARILLO	3905	2013	A2-I-09			5183			-961
CL	AMARILLO	3905	2013	A8-12			5180			-595
CL	AMARILLO	3905	2013	A4-10			5169			-1114
CL	AMARILLO	3905	2013	A5-12			5153			-1103
CN	PARLUNG NO. 94	3987	2011	32	29.3798	96.9791	5413			1210
CN	PARLUNG NO. 94	3987	2011	31	29.3797	96.9784	5392			1064
CN	PARLUNG NO. 94	3987	2011	30	29.3804	96.9780	5372			979
CN	PARLUNG NO. 94	3987	2011	29	29.3812	96.9789	5370			963
CN	PARLUNG NO. 94	3987	2011	28	29.3825	96.9783	5333			555
CN	PARLUNG NO. 94	3987	2011	27	29.3815	96.9764	5332			601
CN	PARLUNG NO. 94	3987	2011	26	29.3819	96.9777	5326			674
CN	PARLUNG NO. 94	3987	2011	22	29.3852	96.9793	5291			352
CN	PARLUNG NO. 94	3987	2011	25	29.3841	96.9786	5291			457
CN	PARLUNG NO. 94	3987	2011	23	29.3839	96.9749	5291			232
CN	PARLUNG NO. 94	3987	2011	24	29.3842	96.9767	5291			374
CN	PARLUNG NO. 94	3987	2011	21	29.3855	96.9745	5251			45
CN	PARLUNG NO. 94	3987	2011	20	29.3867	96.9780	5250			141
CN	PARLUNG NO. 94	3987	2011	19	29.3858	96.9763	5250			143
CN	PARLUNG NO. 94	3987	2011	17	29.3869	96.9759	5230			-158
CN	PARLUNG NO. 94	3987	2011	16	29.386	96.9744	5230			-264
CN	PARLUNG NO. 94	3987	2011	18	29.3876	96.9774	5230			-209
CN	PARLUNG NO. 94	3987	2011	15	29.3885	96.9719	5212			-372
CN	PARLUNG NO. 94	3987	2011	14	29.3889	96.9774	5211			-490
CN	PARLUNG NO. 94	3987	2011	13	29.3875	96.9736	5211			-453
CN	PARLUNG NO. 94	3987	2011	11	29.3898	96.9715	5210			-425
CN	PARLUNG NO. 94	3987	2011	12	29.3885	96.9754	5210			-617
CN	PARLUNG NO. 94	3987	2011	10	29.3916	96.9764	5172			-617
CN	PARLUNG NO. 94	3987	2011	9	29.3912	96.9746	5171			-819
CN	PARLUNG NO. 94	3987	2011	8	29.3913	96.9717	5170			-1078
CN	PARLUNG NO. 94	3987	2011	7	29.3913	96.9731	5170			-971
CN	PARLUNG NO. 94	3987	2011	6	29.3941	96.9736	5131			-1280
CN	PARLUNG NO. 94	3987	2011	4	29.3945	96.9752	5131			-1313
CN	PARLUNG NO. 94	3987	2011	5	29.3938	96.9723	5131			-1279
CN	PARLUNG NO. 94	3987	2011	3	29.3959	96.9731	5090			-1620
CN	PARLUNG NO. 94	3987	2011	2	29.3970	96.9727	5051			-1991
CN	PARLUNG NO. 94	3987	2011	1	29.3987	96.9722	5010			-2336
CN	PARLUNG NO. 94	3987	2012	6	29.3854	96.9767	5291			-1801
CN	PARLUNG NO. 94	3987	2012	5	29.3869	96.9759	5249			-2158
CN	PARLUNG NO. 94	3987	2012	4	29.3914	96.9745	5196			-2518
CN	PARLUNG NO. 94	3987	2012	3	29.3950	96.9733	5135			-3125
CN	PARLUNG NO. 94	3987	2012	2	29.3970	96.9727	5080			-3574
CN	PARLUNG NO. 94	3987	2012	1	29.3988	96.9721	5033			-3865
CN	PARLUNG NO. 94	3987	2013	7	29.3854	96.9767	5291			-1224
CN	PARLUNG NO. 94	3987	2013	6	29.3869	96.9759	5248			-1683
CN	PARLUNG NO. 94	3987	2013	5	29.3887	96.9754	5231			-1557
CN	PARLUNG NO. 94	3987	2013	4	29.3914	96.9745	5196			-2313
CN	PARLUNG NO. 94	3987	2013	3	29.3950	96.9733	5130			-2880
CN	PARLUNG NO. 94	3987	2013	2	29.3970	96.9727	5073			-3150
CN	PARLUNG NO. 94	3987	2013	1	29.3988	96.9721	5029			-3555
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	H3			4055	-180	-112	-292
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	I			4055	360	-1248	-888
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	H2			4046	78	-773	-695
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	H1			4046	-115	-1318	-1433
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	G3			4007	433	-858	-425
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	F3			4004	336	-1330	-994
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	G1			3996	-121	-952	-1073
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	G2			3996	312	-1370	-1058
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	F2			3977	-38	-917	-955
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	F1			3976	-229	-851	-1080
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	E3			3960	170	-1355	-1185
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	D3			3956	89	-1326	-1237
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	E2			3954	43	-1342	-1299

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	E1			3950	-45	-1242	-1287
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	D2			3936	-23	-1915	-1938
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	D1			3925	-265	-1442	-1706
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	C3			3900	-78	-1862	-1940
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	C1			3888	-578	-1922	-2500
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	C2			3886	-117	-2483	-2600
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	B2			3838	-374	-2592	-2966
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	B3			3832	-331	-3169	-3500
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	B1			3828	-527	-3166	-3693
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2011	A			3796	-345	-3293	-3638
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	I			4100	350	-105	245
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	H1			4045	682	-1226	-544
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	H3			4041	298	-361	-63
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	H2			4028	168	-1012	-844
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	G3			3990	386	-924	-538
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	G2			3987	200	-982	-782
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	G1			3978	104	69	173
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	F3			3960	5	-1036	-1031
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	F2			3952	116	-1231	-1115
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	F1			3948	112	-1219	-1107
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	E3			3926	107	-1379	-1272
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	E2			3924	83	-1403	-1320
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	E1			3922	233	-1619	-1386
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	D2			3877	-59	-1675	-1734
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	D3			3877	269	-2056	-1787
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	D1			3875	90	-1885	-1795
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	C2			3832	214	-2363	-2149
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	C3			3829	102	-1867	-1765
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	B1			3800	61	-2797	-2736
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	C1			3789	-229	-2816	-3045
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	B2			3785	67	-2494	-2427
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	B3			3782	-14	-3163	-3177
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2012	A			3770	24	-3174	-3150
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	H3	43.1053	86.8091	4066	59	-64	-4
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	I	43.1049	86.8068	4056	30	-329	-299
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	H1	43.1058	86.8054	4049	-52	-708	-761
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	H2	43.1053	86.8068	4048	53	-354	-302
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	G3	43.1070	86.8096	4007	93	-240	-147
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	G1	43.1078	86.8070	4006	36	-607	-572
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	G2	43.1075	86.8080	3999	14	-736	-722
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	F3	43.1086	86.8107	3975	76	-269	-193
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	F1	43.1093	86.8077	3967	-13	-714	-728
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	F2	43.1090	86.809	3962	32	-492	-460
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	E3	43.1102	86.8109	3933	-10	-818	-828
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	E1	43.1108	86.8081	3932	45	-860	-815
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	E2	43.1104	86.8093	3932	-48	-1009	-1058
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	D1	43.1139	86.8100	3886	-31	-1216	-1247
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	D2	43.1141	86.8118	3876	-57	-1350	-1406
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	D3	43.1137	86.8135	3863	33	-1593	-1560
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	C2	43.1157	86.8126	3843	3	-1092	-1089
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	C3	43.1154	86.8148	3805	29	-1521	-1492
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	B1	43.1162	86.8144	3804	-153	-2549	-2701
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	B3	43.1148	86.8160	3799	-192	-2454	-2646
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	B2	43.1153	86.8156	3793	-88	-2501	-2589
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	A	43.1157	86.8162	3771	-121	-2480	-2601
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	J				70	-202	-132
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2013	C1				0	-2202	-2202
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	I			4070	398	-738	-340
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	H3			4054	1389	-1904	-515
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	H2			4052	-802	136	-666
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	H1			4050	-112	-559	-670
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	G3			4044	89	-865	-776
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	G2			4026	610	-1509	-899
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	G1			4026	-156	-1154	-1310
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	F3			4019	-189	-529	-718
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	F2			4000	186	-625	-439
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	F1			4000	802	-1681	-879
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	E3			3980	-576	-1259	-1835
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	E2			3966	-409	-451	-860
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	E1			3964	-267	-1702	-1969
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	D3			3953	-207	-2646	-2852
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	D2			3953	-307	-2546	-2852
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	BC			3900	-228	-2649	-2877
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2011	A			3854	-446	-2831	-3278
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	I			4104	293	-445	-152
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	H1			4081	360	-1006	-646
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	H2			4075	132	-921	-789
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	H3			4074	319	-166	153
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	G2			4050	444	-1336	-892
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	G1			4043	0	-1333	-1333
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	G3			4025	300	-952	-652
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	F3			3988	212	-1371	-1159
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	F1			3980	47	-1395	-1348
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	E3			3954	-53	-1952	-2005
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	E2			3953	-231	-2389	-2620
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	E1			3937	-161	-1974	-2135
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	D2			3913	72	-2023	-1951
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	D1			3913	0	-2322	-2322
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	D3			3910	-41	-2234	-2275
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	BC			3895	69	-2292	-2223
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2012	A			3881	9	-2628	-2619
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	I	43.1164	86.8012	4115	211	-856	-645
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	H1	43.1178	86.8009	4088	-14	-720	-734
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	H2	43.1168	86.8023	4084	105	-752	-648
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	H3	43.1166	86.8027	4083	112	-465	-353
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	G1	43.1187	86.8035	4055	-59	-984	-1043

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	G3	43.1167	86.8055	4045	129	-222	-93
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	G2	43.1175	86.8047	4039	83	-708	-626
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	F3	43.1168	86.8070	4023	0	-902	-902
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	F1	43.1191	86.8054	4017	-50	-877	-927
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	F2	43.1179	86.8065	4015	-28	-931	-959
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	E1	43.1195	86.8082	3968	-75	-1425	-1500
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	E2	43.1188	86.8085	3959	133	-1878	-1745
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	E3	43.1178	86.8088	3954	-78	-1451	-1529
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	D2	43.1186	86.8104	3917	-44	-1579	-1622
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	D3	43.1183	86.8105	3912	-70	-2243	-2313
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	C2	43.1185	86.8110	3904	-79	-1876	-1955
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	C1	43.1188	86.8110	3902	-73	-1720	-1793
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	B1	43.1187	86.8113	3895	-51	-1812	-1863
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	B2	43.1184	86.8114	3886	-284	-2200	-2484
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	A	43.1186	86.8117	3875	-300	-1711	-2011
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	J				100	-13	87
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	K				150	-97	53
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2013	D1				-60	-1436	-1496
CO	CONEJERAS	2721	2011	14	4.8159	-75.3734	4920			411
CO	CONEJERAS	2721	2011	13	4.8162	-75.3732	4857			380
CO	CONEJERAS	2721	2011	12	4.8132	-75.3698	4823			-1083
CO	CONEJERAS	2721	2011	11	4.8079	-75.3714	4817			-650
CO	CONEJERAS	2721	2011	10	4.8095	-75.3716	4810			-89
CO	CONEJERAS	2721	2011	9	4.8120	-75.3707	4799			-600
CO	CONEJERAS	2721	2011	8	4.8110	-75.3719	4792			-902
CO	CONEJERAS	2721	2011	7	4.8128	-75.3725	4789			-1003
CO	CONEJERAS	2721	2011	6	4.8152	-75.3723	4757			-1650
CO	CONEJERAS	2721	2011	5	4.8148	-75.3709	4755			-918
CO	CONEJERAS	2721	2011	4	4.8139	-75.3714	4754			-1837
CO	CONEJERAS	2721	2011	3	4.8155	-75.3737	4721			-2370
CO	CONEJERAS	2721	2011	2	4.8148	-75.3729	4717			-1976
CO	CONEJERAS	2721	2011	1	4.8144	-75.3734	4716			-1163
CO	CONEJERAS	2721	2012	14			4895			-632
CO	CONEJERAS	2721	2012	13			4829			-991
CO	CONEJERAS	2721	2012	10			4785			-1507
CO	CONEJERAS	2721	2012	12			4770			-2045
CO	CONEJERAS	2721	2012	11			4765			-2746
CO	CONEJERAS	2721	2012	9			4752			-1907
CO	CONEJERAS	2721	2012	8			4745			-2819
CO	CONEJERAS	2721	2012	7			4745			-2996
CO	CONEJERAS	2721	2012	4			4704			-3084
CO	CONEJERAS	2721	2012	6			4703			-3864
CO	CONEJERAS	2721	2012	5			4698			-3251
CO	CONEJERAS	2721	2013	14			4895			-137
CO	CONEJERAS	2721	2013	13			4829			-2876
CO	CONEJERAS	2721	2013	10			4785			-3489
CO	CONEJERAS	2721	2013	12			4770			-5058
CO	CONEJERAS	2721	2013	11			4765			-4113
CO	CONEJERAS	2721	2013	9			4752			-3871
CO	CONEJERAS	2721	2013	7			4745			-4452
CO	CONEJERAS	2721	2013	8			4745			-3856
CO	CONEJERAS	2721	2013	4			4704			-5123
CO	CONEJERAS	2721	2013	6			4703			-4524
CO	CONEJERAS	2721	2013	5			4698			-5272
ES	MALADETA	942	2012	5			3125			-1464
ES	MALADETA	942	2012	4			3075			-3141
ES	MALADETA	942	2012	3			3000			-2731
ES	MALADETA	942	2012	2			2940			-2700
ES	MALADETA	942	2012	1			2870			-1800
ES	MALADETA	942	2013	5			3125			1297
ES	MALADETA	942	2013	4			3075			484
ES	MALADETA	942	2013	3			3000			-1551
ES	MALADETA	942	2013	2			2940			-1663
ES	MALADETA	942	2013	1			2870			-2772
GL	FREYA	3350	2011	pr-2	74.3606	-20.8133	1047			85
GL	FREYA	3350	2011	pr-3	74.3604	-20.8109	1045			15
GL	FREYA	3350	2011	pr-8	74.3609	-20.8106	1026			390
GL	FREYA	3350	2011	pr-5	74.3609	-20.8074	1022			15
GL	FREYA	3350	2011	Sp-2	74.3614	-20.8115	1016			250
GL	FREYA	3350	2011	pr-13	74.3616	-20.8056	999			200
GL	FREYA	3350	2011	pr-14	74.3618	-20.8085	996			585
GL	FREYA	3350	2011	pr-17	74.3623	-20.8087	988			360
GL	FREYA	3350	2011	pr-21	74.3627	-20.8080	979			435
GL	FREYA	3350	2011	pr-20	74.3626	-20.8052	978			390
GL	FREYA	3350	2011	pr-25	74.3633	-20.8049	966			100
GL	FREYA	3350	2011	pr-24	74.3637	-20.8077	966			225
GL	FREYA	3350	2011	pr-26	74.3636	-20.8043	960			250
GL	FREYA	3350	2011	st-12	74.3699	-20.8402	955			-846
GL	FREYA	3350	2011	pr-28	74.3657	-20.7989	953			590
GL	FREYA	3350	2011	pr-27	74.3641	-20.8026	950			835
GL	FREYA	3350	2011	pr-29	74.3648	-20.8037	948			560
GL	FREYA	3350	2011	pr-30	74.365	-20.8050	946			150
GL	FREYA	3350	2011	st-10	74.3672	-20.8074	919			-1332
GL	FREYA	3350	2011	st-11	74.3703	-20.8261	890			-891
GL	FREYA	3350	2011	st-13	74.3687	-20.8167	864			-612
GL	FREYA	3350	2011	st-9	74.3716	-20.8129	855			-27
GL	FREYA	3350	2011	st-14	74.3748	-20.8177	804			-864
GL	FREYA	3350	2011	st-8a	74.3757	-20.8095	797			-936
GL	FREYA	3350	2011	st-15	74.3765	-20.8011	797			-396
GL	FREYA	3350	2011	st-8	74.3795	-20.8158	780			-639
GL	FREYA	3350	2011	st-7	74.3867	-20.8296	695			-1251
GL	FREYA	3350	2011	st-6	74.3944	-20.8393	645			-342
GL	FREYA	3350	2011	st-5	74.3928	-20.8466	642			-1980
GL	FREYA	3350	2011	st-4	74.3915	-20.8585	632			-1107
GL	FREYA	3350	2011	st-3	74.3982	-20.8672	527			-1791
GL	FREYA	3350	2011	st-2a	74.4026	-20.8835	441			-1836

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
GL	FREYA	3350	2011	st-1a	74.4057	-20.8904	363			-2259
GL	FREYA	3350	2012	S2	74.3614	-20.8115	1016			250
GL	FREYA	3350	2012	12	74.3699	-20.8402	955			126
GL	FREYA	3350	2012	10	74.3672	-20.8074	919			-360
GL	FREYA	3350	2012	11	74.3703	-20.8261	890			189
GL	FREYA	3350	2012	13	74.3687	-20.8167	864			54
GL	FREYA	3350	2012	9	74.3716	-20.8129	855			198
GL	FREYA	3350	2012	14	74.3748	-20.8177	804			459
GL	FREYA	3350	2012	15	74.3765	-20.8011	797			369
GL	FREYA	3350	2012	8a	74.3757	-20.8095	797			-153
GL	FREYA	3350	2012	8	74.3795	-20.8158	780			99
GL	FREYA	3350	2012	7	74.3867	-20.8296	695			-189
GL	FREYA	3350	2012	6	74.3944	-20.8393	645			-333
GL	FREYA	3350	2012	5	74.3928	-20.8466	642			-1242
GL	FREYA	3350	2012	4	74.3915	-20.8585	632			-126
GL	FREYA	3350	2012	6a	74.3950	-20.8481	593			-486
GL	FREYA	3350	2012	3	74.3982	-20.8672	527			-612
GL	FREYA	3350	2012	2a	74.4026	-20.8835	441			-792
GL	FREYA	3350	2012	1a	74.4057	-20.8904	363			-387
GL	FREYA	3350	2013	S2	74.3614	-20.8115	1016			0
GL	FREYA	3350	2013	12	74.3699	-20.8402	955			-765
GL	FREYA	3350	2013	10	74.3672	-20.8074	919			-1395
GL	FREYA	3350	2013	11	74.3703	-20.8261	890			-1431
GL	FREYA	3350	2013	13	74.3687	-20.8167	864			-684
GL	FREYA	3350	2013	9	74.3716	-20.8129	855			-855
GL	FREYA	3350	2013	14	74.3748	-20.8177	804			-1107
GL	FREYA	3350	2013	15	74.3765	-20.8011	797			-963
GL	FREYA	3350	2013	8a	74.3757	-20.8095	797			-1368
GL	FREYA	3350	2013	8	74.3795	-20.8158	780			-774
GL	FREYA	3350	2013	7	74.3867	-20.8296	695			-2043
GL	FREYA	3350	2013	5	74.3928	-20.8466	642			-1998
GL	FREYA	3350	2013	6a	74.3950	-20.8481	593			-2466
GL	FREYA	3350	2013	3	74.3982	-20.8672	527			-2358
GL	FREYA	3350	2013	2a	74.4026	-20.8835	441			-2403
GL	FREYA	3350	2013	1a	74.4057	-20.8904	363			-2799
GL	MITTIVAKKAT	1629	2011	140			703			-2080
GL	MITTIVAKKAT	1629	2011	130			659			-2070
GL	MITTIVAKKAT	1629	2011	120			635			-2200
GL	MITTIVAKKAT	1629	2011	110			594			-2420
GL	MITTIVAKKAT	1629	2011	102			492			-2570
GL	MITTIVAKKAT	1629	2011	103			492			-2500
GL	MITTIVAKKAT	1629	2011	101			473			-1980
GL	MITTIVAKKAT	1629	2011	82			410			-2550
GL	MITTIVAKKAT	1629	2011	80			407			-2600
GL	MITTIVAKKAT	1629	2011	85			389			-3000
GL	MITTIVAKKAT	1629	2011	81			387			-2770
GL	MITTIVAKKAT	1629	2011	83			384			-2750
GL	MITTIVAKKAT	1629	2011	70			350			-2900
GL	MITTIVAKKAT	1629	2011	61			308			-2830
GL	MITTIVAKKAT	1629	2011	62			305			-3270
GL	MITTIVAKKAT	1629	2011	60			304			-2780
GL	MITTIVAKKAT	1629	2011	50			276			-3110
GL	MITTIVAKKAT	1629	2011	41			199			-3410
GL	MITTIVAKKAT	1629	2011	40			199			-2570
GL	MITTIVAKKAT	1629	2011	42			187			-3400
IT	CALDERONE	1107	2012	2	42.4720	13.5665	2798	816	-1156	-340
IT	CALDERONE	1107	2012	1	42.4737	13.5683	2658	1700	-3384	-1684
IT	CALDERONE	1107	2013	2	42.4720	13.5665	2798	819	-658	161
IT	CALDERONE	1107	2013	1	42.4737	13.5683	2658	2436	-2110	326
IT	CAMPO SETT.	1106	2013	1	46.4286	10.116	3080			1380
IT	CAMPO SETT.	1106	2013	33	46.4295	10.1111	2970	1164	-2244	-1080
IT	CAMPO SETT.	1106	2013	3	46.43	10.1111	2968			-1230
IT	CAMPO SETT.	1106	2013	4	46.4304	10.1078	2900			-770
IT	CAMPO SETT.	1106	2013	5	46.4311	10.1075	2895			-1620
IT	CARESER	635	2012	10C	46.4523	10.6877	3266	1092	-2672	-1580
IT	CARESER	635	2012	5B	46.4579	10.708	3173	594	-3123	-2528
IT	CARESER	635	2012	10A	46.4503	10.6892	3160	865	-3040	-2175
IT	CARESER	635	2012	9C	46.4486	10.6878	3139	873	-2586	-1713
IT	CARESER	635	2012	4L	46.4479	10.6901	3107	909		
IT	CARESER	635	2012	5L	46.4554	10.7154	3103	670	-2901	-2231
IT	CARESER	635	2012	7B	46.4493	10.7233	3091	905	-2535	-1630
IT	CARESER	635	2012	6A	46.4539	10.7211	3087	656	-3412	-2756
IT	CARESER	635	2012	6L	46.4513	10.7214	3077	819	-2610	-1791
IT	CARESER	635	2012	13B	46.4533	10.6981	3074	794		
IT	CARESER	635	2012	3B	46.452	10.7169	3063	956	-2952	-1996
IT	CARESER	635	2012	7A	46.4487	10.7186	3048	848	-3079	-2231
IT	CARESER	635	2012	8D	46.4496	10.714	3002	748	-3999	-3251
IT	CARESER	635	2012	9B	46.4486	10.6995	2989	672	-4499	-3826
IT	CARESER	635	2012	2C	46.4502	10.7099	2971	613	-3820	-3206
IT	CARESER	635	2012	8M	46.4469	10.7091	2898	341		
IT	CARESER	635	2013	10C	46.4523	10.6877	3262	1817	-2232	-415
IT	CARESER	635	2013	5B	46.4579	10.708	3161	1524	-2261	-737
IT	CARESER	635	2013	10A	46.4503	10.6892	3147	1349	-2367	-1018
IT	CARESER	635	2013	9C	46.4486	10.6878	3130	1378	-2045	-666
IT	CARESER	635	2013	5L	46.4555	10.7154	3092	1524	-2549	-1025
IT	CARESER	635	2013	7B	46.4493	10.7233	3083	1844	-2025	-181
IT	CARESER	635	2013	6A	46.4539	10.7211	3077	1524	-2461	-937
IT	CARESER	635	2013	6L	46.4513	10.7215	3070	1524	-2197	-673
IT	CARESER	635	2013	13B	46.4533	10.6981	3060	1284	-3129	-1845
IT	CARESER	635	2013	3B	46.452	10.7169	3052	1402	-2462	-1060
IT	CARESER	635	2013	7A	46.4487	10.7186	3039	1524	-2237	-713
IT	CARESER	635	2013	8D	46.4496	10.7140	2988	1227	-3119	-1892
IT	CARESER	635	2013	9B	46.4486	10.6996	2970	1059	-3408	-2349
IT	CARESER	635	2013	2C	46.4502	10.7100	2954	1059	-3120	-2061
IT	CARESER CENTRALE	3659	2011	13B	46.4533	10.6981	3074	742	-2833	-2091
IT	CARESER CENTRALE	3659	2011	9B	46.4486	10.6996	2989	788	-3406	-2618

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
IT	CARESER CENTRALE	3659	2011	1C	46.4467	10.7038	2931	836		
IT	CARESER OCCIDENTALE	3346	2011	10C	46.4523	10.6877	3266	1498		
IT	CARESER OCCIDENTALE	3346	2011	10A	46.4503	10.6892	3160	891	-2494	-1603
IT	CARESER OCCIDENTALE	3346	2011	9C	46.4486	10.6878	3139	1075	-1960	-885
IT	CARESER OCCIDENTALE	3346	2011	4L	46.4479	10.6901	3107	884	-3042	-2158
IT	CARESER ORIENTALE	3345	2011	5B	46.4579	10.708	3173	915	-2460	-1545
IT	CARESER ORIENTALE	3345	2011	5L	46.4555	10.7154	3103	870	-2399	-1529
IT	CARESER ORIENTALE	3345	2011	7B	46.4493	10.7233	3091	1059	-2239	-1181
IT	CARESER ORIENTALE	3345	2011	6A	46.4539	10.7211	3087	857	-2344	-1487
IT	CARESER ORIENTALE	3345	2011	6L	46.4513	10.7215	3077	976	-2454	-1478
IT	CARESER ORIENTALE	3345	2011	3B	46.452	10.7169	3063	913		
IT	CARESER ORIENTALE	3345	2011	7A	46.4487	10.7186	3048	976	-3193	-2217
IT	CARESER ORIENTALE	3345	2011	8D	46.4496	10.7140	3002	696	-3228	-2531
IT	CARESER ORIENTALE	3345	2011	2C	46.4502	10.7100	2971	724	-3456	-2733
IT	CARESER ORIENTALE	3345	2011	8M	46.4469	10.7091	2898	454	-4558	-4104
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42186	46.4829	10.7696	3222	1300	-1387	-87
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42188	46.4881	10.7685	3212	1200	-3379	-2179
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42187	46.4858	10.7686	3199	1200	-1767	-567
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42201	46.4846	10.7706	3161	1200	-2095	-895
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42163	46.4829	10.7720	3160	1200	-1776	-576
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42206	46.4815	10.7736	3125	700	-2017	-1317
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42254	46.4844	10.7728	3120	1000	-2246	-1246
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42286	46.4856	10.7718	3116	1000	-2200	-1200
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42253	46.4820	10.7746	3085	700	-2618	-1918
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42257	46.4857	10.7739	3067	1100	-2345	-1245
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42168	46.4850	10.7755	3037	1100	-2907	-1807
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42205	46.4819	10.7763	3027	900	-3142	-2242
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42299	46.4853	10.7754	3025	1100	-2403	-1303
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42228	46.4857	10.7761	3019	1300	-2270	-970
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42196	46.4821	10.7769	3009	1200	-3436	-2236
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42199	46.4823	10.7785	2948	1600	-3941	-2341
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2011	42170	46.4825	10.7802	2907	1600	-2797	-1197
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42186	46.4829	10.7696	3222	1000	-2746	-1746
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42188	46.4881	10.7685	3212	1000	-4114	-3114
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42187	46.4858	10.7686	3199	1000	-2890	-1890
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42285	46.4829	10.7715	3168	1000	-2782	-1782
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42201	46.4846	10.7706	3161	800	-2555	-1755
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42206	46.4815	10.7736	3125	900	-2835	-1935
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42254	46.4844	10.7728	3120	600	-2634	-2034
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42286	46.4856	10.7718	3109	800	-2636	-1836
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42253	46.4820	10.7746	3085	1050	-3012	-1962
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42257	46.4857	10.7739	3067	1100	-2936	-1836
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42331	46.4855	10.7746	3047	1150	-2815	-1665
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42299	46.4853	10.7754	3030	1200	-3837	-2637
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42205	46.4819	10.7763	3027	1300	-4009	-2709
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42228	46.4857	10.7761	3019	1200	-2649	-1449
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42288	46.4821	10.7770	2996	1300	-4045	-2745
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42199	46.4823	10.7785	2948	1650	-3738	-2088
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2012	42170	46.4825	10.7802	2907	1900	-2431	-531
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42186	46.4829	10.7696	3222	1600	-1381	219
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42188	46.4881	10.7685	3212	1800	-1818	-18
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42187	46.4858	10.7686	3199	1650	-1727	-77
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42285	46.4829	10.7715	3168	1500	-1320	180
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42201	46.4846	10.7706	3161	1450	-1486	-36
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42206	46.4815	10.7736	3125	1500	-2184	-684
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42254	46.4844	10.7728	3120	1400	-1814	-414
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42286	46.4856	10.7718	3109	1400	-1535	-135
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42253	46.4820	10.7746	3085	1500	-2109	-609
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42257	46.4857	10.7739	3067	1300	-1930	-630
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42331	46.4855	10.7746	3047	1300	-1606	-306
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42299	46.4853	10.7754	3030	1400	-1022	378
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42205	46.4819	10.7763	3027	1200	-1569	-369
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42228	46.4857	10.7761	3019	1400	-1113	287
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42288	46.4821	10.7770	2996	1450	-1810	-360
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42199	46.4823	10.7785	2948	1600	-1600	0
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2013	42170	46.4825	10.7802	2907	1600	-1127	473
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P25	46.4590	10.6101	3367	440	-1425	-985
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P31	46.4610	10.6045	3286	1000	-1119	-119
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P23	46.4625	10.6134	3283	1100	-1120	-20
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P30	46.4641	10.6115	3261	550	-1358	-808
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P32	46.4648	10.6024	3252	700	-2080	-1380
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P21	46.4651	10.6085	3224	250	-1714	-1464
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P22	46.4641	10.6048	3223	850	-1904	-1054
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P20	46.4669	10.6054	3170	1200	-1911	-711
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P33	46.473	10.6063	3144	1300	-2401	-1101
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P29	46.4695	10.6058	3107	930	-1764	-834
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P18	46.4714	10.6073	3089	1050	-1846	-796
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P16	46.4727	10.6092	3057	1200	-2618	-1418
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P13	46.4716	10.6096	3053	980	-3160	-2180
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P15	46.4727	10.6116	3033	1100	-2235	-1135
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P27	46.4727	10.6116	3033	1150	-3298	-2148
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P14	46.4734	10.6136	2987	960	-3504	-2544
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P12	46.4712	10.6154	2930	900	-3500	-2600
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P11	46.4701	10.6173	2889	1050	-3108	-2058
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P28	46.4721	10.6168	2885	1050	-2952	-1902
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P9	46.4714	10.6189	2852	1180	-3902	-2722
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P8	46.4712	10.6204	2816	1000	-4668	-3668
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P10	46.4730	10.6197	2778	1200	-3517	-2317
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P7	46.4724	10.6219	2773	1050	-4194	-3144
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P6	46.4732	10.6233	2731	1150	-5006	-3856
IT	LUNGA (VEDRETTA) / LANGENF.	661	2011	P4	46.4727	10.6239	2721	870	-5553	-4683
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P26	46.4578	10.6118	3416	800	-1640	-840
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P25	46.459	10.6101	3367	900	-2502	-1602
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P31	46.4610	10.6045	3286	1100	-1955	-855
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P23	46.4625	10.6133	3283	1300	-1472	-172
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P30	46.4642	10.6115	3261	900	-2165	-1265

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P32	46.4647	10.6023	3252	1200	-3728	-2528
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P24	46.4624	10.6085	3250	1350	-1401	-51
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P21	46.4651	10.6084	3224	700	-2649	-1949
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P22	46.4641	10.6048	3223	1000	-2301	-1301
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P20	46.4671	10.6054	3170	1250	-2069	-819
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P33	46.4730	10.6063	3144	1350	-2549	-1199
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P34	46.4681	10.6065	3139	1150	-2446	-1296
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P29	46.4695	10.6058	3107	1050	-2924	-1874
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P18	46.4713	10.6073	3089	1350	-2028	-678
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P16	46.4700	10.6087	3057	1000	-3238	-2238
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P13a	46.4716	10.6097	3053	1250	-2845	-1595
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P27	46.4730	10.6114	3033	1250	-3376	-2126
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P15	46.4729	10.6094	3033	1150	-2678	-1528
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P14	46.4734	10.6132	2987	1100	-3136	-2036
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P12	46.4712	10.6155	2930	750	-3907	-3157
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P11	46.4705	10.6174	2889	1050	-4110	-3060
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P28	46.4719	10.6168	2885	1200	-3162	-1962
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P9	46.4714	10.6191	2852	900	-4004	-3104
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P8	46.4713	10.6205	2816	1250	-5325	-4075
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P10	46.4727	10.6196	2778	1200	-5411	-4211
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P7	46.4725	10.6217	2773	1000	-4996	-3996
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P5a	46.4719	10.6219	2769	1300	-5800	-4500
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P6	46.4732	10.6234	2731	1200	-5763	-4563
IT	LUNGA (VEDRETTA) / LANGENF.	661	2012	P4a	46.4728	10.6240	2724	1300	-6709	-5409
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	26	46.4578	10.6118	3411	1050	-911	140
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	25	46.459	10.6101	3364	1200	-1088	113
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	23	46.4625	10.6133	3288	1100	-720	380
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	31	46.461	10.6045	3280	1200	-797	403
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	24	46.4624	10.6085	3270	1450	-743	707
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	30	46.4642	10.6115	3261	1180	-1086	95
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	32	46.4647	10.6023	3241	1300	-1538	-238
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	21	46.4651	10.6084	3224	970	-1484	-514
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	22	46.4641	10.6048	3223	1100	-1115	-15
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	20	46.4671	10.6054	3169	1450	-1266	184
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	33	46.473	10.6063	3144	1600	-1590	11
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	34	46.4681	10.6065	3139	1350	-983	367
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	29	46.4695	10.6058	3113	1300	-1628	-328
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	18	46.4713	10.6073	3087	1600	-1481	119
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	16	46.47	10.6087	3080	1050	-1923	-873
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	13a	46.4716	10.6097	3054	1100	-1738	-638
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	15	46.4728	10.6094	3045	1450	-1554	-104
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	27	46.473	10.6114	3005	1400	-1879	-479
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	14	46.4734	10.6132	2963	1250	-2212	-962
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	12	46.4712	10.6155	2908	1120	-2916	-1796
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	28	46.4719	10.6168	2882	1100	-2462	-1362
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	11	46.4705	10.6174	2880	1500	-1972	-472
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	9	46.4714	10.6191	2832	1400	-3545	-2145
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	8	46.4713	10.6205	2805	1450	-4049	-2599
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	10	46.4727	10.6196	2785	1200	-3298	-2098
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	5a	46.4719	10.6219	2763	1350	-4519	-3169
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	7	46.4725	10.6217	2761	1100	-3959	-2859
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	6	46.4732	10.6234	2727	1000	-4155	-3155
IT	LUNGA (VEDRETTA) / LANGENF.	661	2013	4a	46.4728	10.624	2719	1500	-4263	-2763
IT	LUPO	1138	2013	4	46.0739	9.9923	2605	4124	-3574	550
IT	LUPO	1138	2013	64	46.0741	9.9892	2600	4694	-2764	1930
IT	LUPO	1138	2013	68	46.074	9.9916	2594	3643	-3473	170
IT	LUPO	1138	2013	66	46.0739	9.9899	2593	4457	-3737	720
IT	LUPO	1138	2013	60	46.0745	9.9888	2587	4450	-3620	830
IT	LUPO	1138	2013	63	46.0747	9.9882	2586	4508	-3628	880
IT	LUPO	1138	2013	65	46.0742	9.9898	2583	4219	-3719	500
IT	LUPO	1138	2013	67	46.0742	9.9905	2582	3606	-3306	300
IT	LUPO	1138	2013	62	46.0751	9.9874	2580	4712	-3502	1210
IT	LUPO	1138	2013	61	46.0755	9.9872	2576	4806	-3706	1100
IT	LUPO	1138	2013	5	46.0744	9.99	2575	3408	-2988	420
IT	LUPO	1138	2013	1	46.075	9.9912	2555	3426	-3566	-140
IT	LUPO	1138	2013	2	46.0754	9.9908	2543	3227	-3777	-550
IT	LUPO	1138	2013	3	46.0766	9.9902	2499	2984	-3904	-920
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST20	46.9535	11.1658	3411			-834
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST21	46.9516	11.1657	3367			-460
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST16	46.9672	11.1878	3252			14
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST15	46.9649	11.1853	3195			-738
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST22	46.9574	11.1717	3170			377
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST24	46.9624	11.1752	3155			-330
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST14	46.9631	11.1873	3142			-466
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST10	46.9629	11.1778	3141			-470
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST23	46.9541	11.1754	3134			-267
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST09	46.9592	11.1814	3068			-29
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST08	46.9584	11.1825	3036			-448
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST07	46.9568	11.1838	3006			-1670
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST19	46.9396	11.1834	2997			-481
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST18	46.942	11.1832	2948			-1220
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST06	46.9519	11.1841	2927			-2042
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST17	46.9447	11.1829	2891			-1490
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST05	46.9502	11.1848	2874			-1257
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST13	46.937	11.1919	2873			-985
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST12	46.9401	11.1936	2833			-1859
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST04	46.9488	11.1881	2827			-1877
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST03	46.9463	11.1933	2784			-2338
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST11	46.9434	11.195	2775			-1931
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST02	46.9468	11.1985	2729			-2376
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2011	ST01	46.9503	11.2023	2675			-3177
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST20	46.9535	11.1658	3411	959	-1945	-986
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST21	46.9516	11.1657	3367	1010	-2150	-1140
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST16	46.9672	11.1878	3252	1051	-1857	-806
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST15	46.9649	11.1853	3195	1074	-2433	-1359
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST22	46.9574	11.1717	3170	1303	-1594	-291

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST24	46.9624	11.1752	3155	896	-1355	-459
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST14	46.9631	11.1873	3142	1333	-2953	-1620
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST10	46.9629	11.1778	3141	644	-2779	-2135
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST25			3140	712	-3574	-2862
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST23	46.9541	11.1754	3134	1507	-2224	-717
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST09	46.9592	11.1814	3068	1280	-2165	-885
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST08	46.9584	11.1825	3036	1094	-2903	-1809
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST07	46.9568	11.1838	3006	905	-2678	-1773
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST19	46.9396	11.1834	2997	1082	-2037	-955
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST18	46.942	11.1832	2948	1298	-2720	-1422
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST06	46.9519	11.1841	2927	661	-2587	-1926
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST17	46.9447	11.1829	2891	1322	-2798	-1476
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST05	46.9502	11.1848	2874	984	-2451	-1467
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST13	46.937	11.1919	2873	1301	-2626	-1325
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST12	46.9401	11.1936	2833	1321	-2860	-1539
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST04	46.9488	11.1881	2827	1140	-2904	-1764
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST03	46.9463	11.1933	2784	1212	-3714	-2502
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST11	46.9434	11.195	2775	1005	-3985	-2980
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST02	46.9468	11.1985	2729	809	-3500	-2691
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2012	ST01	46.9503	11.2023	2675	489	-3774	-3285
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P20	46.5713	11.0958	3403	1953	-1437	516
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P21	46.5705	11.0957	3357	1813	-1384	429
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P16	46.5801	11.1115	3240	1697	-687	1010
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P15	46.5752	11.1106	3174	1651	-1037	614
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P22	46.5726	11.1018	3158	2000	-870	1130
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P24	46.5744	11.1031	3149	1255	-586	669
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P14	46.5747	11.1114	3131	1401	-1343	58
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P25	46.5737	11.1025	3131	1072	-1541	-469
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P23	46.5714	11.1031	3122	1720	-1512	208
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P10	46.574	11.1054	3045	1395	-1093	302
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P09	46.5731	11.1054	3030	1860	-839	1021
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P08	46.5728	11.1057	3009	1627	-1657	-30
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P07	46.5723	11.1101	2987	965	-2029	-1065
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P19	46.5622	11.11	2985	2046	-2121	-75
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P18	46.5631	11.1059	2935	1720	-2128	-408
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P06	46.5705	11.1103	2892	1637	-2555	-919
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P17	46.5641	11.1058	2877	1401	-2195	-794
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P13	46.5613	11.113	2877	1906	-2188	-282
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P05	46.5659	11.1106	2850	1358	-2519	-1162
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P12	46.5624	11.1136	2826	1587	-2345	-758
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P11	46.5636	11.1142	2768	1401	-2285	-884
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P03	46.5646	11.1137	2760	1266	-2788	-1522
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P02	46.5649	11.1155	2710	1080	-2889	-1809
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P01	46.5657	11.1208	2660	483	-2868	-2385
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2013	P04	46.5655	11.1118	1812	1534	-2345	-811
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST84	46.964	11.2159	2877			-401
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST49	46.9651	11.2176	2860			-785
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST86	46.966	11.2338	2841			-1067
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST48	46.9659	11.219	2828			-445
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST76	46.9654	11.2325	2813			-960
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST85	46.9665	11.2295	2775			-992
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST82	46.9606	11.2223	2749			-929
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST81	46.9667	11.2249	2735			-1021
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST80	46.9647	11.2248	2714			-1440
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2011	ST79	46.963	11.2247	2690			-1863
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST84	46.964	11.2159	2877	1632	-2820	-1188
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST49	46.9651	11.2176	2860	1681	-2617	-936
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST48	46.9659	11.219	2828	1739	-3494	-1755
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST76	46.9654	11.2325	2813	1311	-3489	-2178
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST85	46.9665	11.2295	2775	1220	-3623	-2403
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST82	46.966	11.2223	2749	1640	-1505	135
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST81	46.9667	11.2248	2735	1448	-3032	-1584
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST80	46.9647	11.2248	2714	1060	-3481	-2421
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2012	ST79	46.963	11.2247	2690	762	-3822	-3060
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P84	46.964	11.2159	2865	1551	-2376	-828
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P49	46.9651	11.2176	2850	1773	-2043	-270
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P86	46.966	11.238	2826	1270	-2188	-918
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P48	46.9659	11.219	2815	1818	-2088	-270
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P76	46.9654	11.2325	2797	1750	-2434	-684
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P50	46.966	11.2223	2770	1503	-2997	-1494
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P85	46.9665	11.2295	2754	1360	-2260	-900
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P81	46.9667	11.2248	2718	1680	-2103	-423
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P80	46.9647	11.2248	2689	1472	-2228	-756
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2013	P79	46.963	11.2247	2660	1266	-2436	-1170
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42274	46.9004	12.0991	3162	1050	-972	78
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42229	46.9017	12.0912	3150	800	-734	66
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42273	46.9021	12.0943	3117	800	-997	-197
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42259	46.9026	12.0995	3107	900	-994	-94
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42257	46.9033	12.1031	3096	1050	-1174	-124
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42254	46.9043	12.1008	3093	1050	-1699	-649
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42256	46.9041	12.0967	3071	900	-983	-83
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42231	46.9048	12.0888	3065	800	-645	155
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42230	46.9042	12.0932	3060	800	-689	111
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42232	46.9059	12.0916	3043	1100	-1718	-618
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42233	46.9073	12.0959	3032	1000	-1513	-513
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42252	46.9055	12.1028	3031	1050	-1452	-402
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42255	46.9051	12.1052	3030	800	-1353	-553
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42235	46.9078	12.0919	2985	1100	-2079	-979
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42258	46.9064	12.1062	2978	800	-1931	-1131
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42271	46.9090	12.0922	2969	700	-1929	-1229
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42251	46.9074	12.1029	2954	800	-1820	-1020
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42270	46.9104	12.0937	2928	700	-2442	-1742
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42272	46.9122	12.0921	2905	700	-2473	-1773
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42250	46.9092	12.1015	2890	800	-2088	-1288
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42234	46.9096	12.0968	2875	950	-1665	-715
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42236	46.9130	12.0955	2868	700	-2622	-1922

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IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42298	46.9147	12.0963	2817	900	-3128	-2228
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42279	46.9109	12.1020	2752	800	-2733	-1933
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42278	46.9128	12.1015	2677	800	-3198	-2398
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2011	42299	46.9115	12.0967	2284	700	-2554	-1854
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42274	46.9004	12.0991	3162	800	-1961	-1161
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42229	46.9017	12.0912	3150	950	-2597	-1647
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42273	46.9021	12.0943	3117	700	-1807	-1107
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42228	46.9026	12.0995	3107	950	-2039	-1089
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42226	46.9033	12.1031	3096	900	-2205	-1305
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42223	46.9043	12.1008	3093	900	-2358	-1458
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42225	46.9041	12.0967	3071	900	-3843	-2943
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42230	46.9042	12.0932	3060	900	-2457	-1557
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42232	46.9059	12.0916	3043	750	-2721	-1971
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42233	46.9073	12.0959	3032	800	-2411	-1611
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42221	46.9055	12.1028	3031	700	-2212	-1512
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42224	46.9051	12.1052	3030	700	-1987	-1287
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42235	46.9078	12.0919	2985	750	-2424	-1674
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42227	46.9064	12.1062	2978	700	-3238	-2538
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42271	46.9090	12.0922	2969	650	-2675	-2025
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42220	46.9074	12.1029	2954	800	-2591	-1791
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42270	46.9104	12.0937	2928	600	-3066	-2466
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42272	46.9122	12.0921	2905	800	-3356	-2556
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42219	46.9092	12.1015	2890	850	-3352	-2502
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42234	46.9096	12.0968	2875	800	-2357	-1557
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42297	46.9130	12.0955	2868	800	-3365	-2565
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42298	46.9147	12.0963	2817	300	-3360	-3060
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42279	46.9109	12.1020	2752	1000	-3007	-2007
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42278	46.9128	12.1015	2677	1000	-3763	-2763
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2012	42299	46.9115	12.0967	2284	800	-3140	-2340
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42274	46.9004	12.0991	3162	1800	-1086	714
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42229	46.9017	12.0912	3150	1500	-1208	292
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42273	46.9021	12.0943	3117	1400	-924	476
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42228	46.9026	12.0995	3107	1500	-1067	433
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42226	46.9033	12.1031	3096	1700	-1250	450
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42223	46.9043	12.1008	3093	1700	-1161	539
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42225	46.9041	12.0967	3071	1500	-995	505
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42230	46.9042	12.0932	3060	1500	-916	584
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42232	46.9059	12.0916	3043	1500	-1367	133
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42233	46.9073	12.0959	3032	1300	-1141	159
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42221	46.9055	12.1028	3031	1500	-1072	428
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42224	46.9051	12.1052	3030	1500	-1291	209
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42235	46.9078	12.0919	2985	1300	-1336	-36
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42227	46.9064	12.1062	2978	1500	-1367	133
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42271	46.9090	12.0922	2969	1100	-1792	-692
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42220	46.9074	12.1029	2954	1300	-1394	-94
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42361	46.9105	12.0937	2928	1150	-2112	-962
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42219	46.9092	12.1015	2890	1100	-1845	-745
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42234	46.9096	12.0968	2875	1100	-984	116
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42297	46.9130	12.0955	2868	900	-1978	-1078
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42298	46.9147	12.0963	2817	900	-2896	-1996
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42279	46.9109	12.1020	2752	1000	-2096	-1096
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	42339	46.9127	12.1015	2677	1000	-2460	-1460
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2013	22/13	46.9116	12.0967	2284	1050	-1975	-925
IT	SURETTA MERID.	2488	2013	4	46.5074	9.3639	2830	3595	-3188	407
IT	SURETTA MERID.	2488	2013	2	46.5052	9.364	2775	2570	-3389	-819
IT	SURETTA MERID.	2488	2013	3	46.5052	9.3629	2770	2431	-3727	-1296
IT	SURETTA MERID.	2488	2013	1	46.5044	9.3644	2760	2630	-4160	-1530
KE	LEWIS	695	2011	2	-0.1555	37.3152	4840			-1256
KE	LEWIS	695	2011	3	-0.1551	37.3148	4840			-1238
KE	LEWIS	695	2011	7	-0.1561	37.3155	4837			-1156
KE	LEWIS	695	2011	5	-0.1559	37.3149	4828			-1326
KE	LEWIS	695	2011	4	-0.1554	37.3146	4828			-1247
KE	LEWIS	695	2011	6	-0.1560	37.3148	4825			-1218
KE	LEWIS	695	2011	8	-0.1566	37.3152	4820			-1324
KE	LEWIS	695	2011	9	-0.1569	37.3150	4806			-1302
KE	LEWIS	695	2011	12	-0.1557	37.3142	4805			-926
KE	LEWIS	695	2011	11	-0.1561	37.3144	4805			-1342
KE	LEWIS	695	2011	10	-0.1564	37.3145	4804			-1377
KE	LEWIS	695	2011	13	-0.1557	37.3139	4785			-1426
KE	LEWIS	695	2011	14	-0.1561	37.3140	4781			-1681
KE	LEWIS	695	2011	16	-0.1571	37.3141	4758			-2102
KE	LEWIS	695	2011	18	-0.1562	37.3136	4755			-1784
KE	LEWIS	695	2011	20	-0.1568	37.3135	4733			-1720
KE	LEWIS	695	2011	23	-0.1570	37.3129	4710			-1910
KE	LEWIS	695	2011	22	-0.1575	37.3133	4707			-2005
KE	LEWIS	695	2011	24	-0.1574	37.3128	4697			-2097
KE	LEWIS	695	2012	1	-0.1548	37.3155	4855			-1629
KE	LEWIS	695	2012	2	-0.1555	37.3152	4840			-513
KE	LEWIS	695	2012	3	-0.1551	37.3148	4840			-490
KE	LEWIS	695	2012	7	-0.1561	37.3155	4837			-504
KE	LEWIS	695	2012	4	-0.1554	37.3146	4828			-468
KE	LEWIS	695	2012	5	-0.1559	37.3149	4828			-549
KE	LEWIS	695	2012	6	-0.1560	37.3148	4825			-657
KE	LEWIS	695	2012	8	-0.1566	37.3152	4820			-693
KE	LEWIS	695	2012	9	-0.1569	37.3150	4806			-612
KE	LEWIS	695	2012	12	-0.1557	37.3142	4805			-1584
KE	LEWIS	695	2012	11	-0.1561	37.3144	4805			-176
KE	LEWIS	695	2012	10	-0.1564	37.3145	4804			-644
KE	LEWIS	695	2012	13	-0.1557	37.3139	4785			-763
KE	LEWIS	695	2012	15	-0.1565	37.3142	4782			-1107
KE	LEWIS	695	2012	14	-0.1561	37.3140	4781			-576
KE	LEWIS	695	2012	16	-0.1571	37.3141	4758			-1076
KE	LEWIS	695	2012	18	-0.1562	37.3136	4755			-972
KE	LEWIS	695	2012	17	-0.1567	37.3139	4753			-1004
KE	LEWIS	695	2012	19	-0.1563	37.3132	4738			-1638
KE	LEWIS	695	2012	21	-0.1573	37.3137	4734			-1521

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KE	LEWIS	695	2012	20	-0.1568	37.3135	4733			-1256
KE	LEWIS	695	2012	22	-0.1575	37.3133	4707			-1971
KE	LEWIS	695	2012	24	-0.1574	37.3128	4697			-2358
KE	LEWIS	695	2012	25	-0.1578	37.3130	4691			-1710
KE	LEWIS	695	2012	26	-0.1580	37.3127	4675			-2097
KE	LEWIS	695	2013	1	-0.1548	37.3155	4855			-1125
KE	LEWIS	695	2013	2	-0.1555	37.3152	4840			-842
KE	LEWIS	695	2013	3	-0.1551	37.3148	4840			-1746
KE	LEWIS	695	2013	7	-0.1561	37.3155	4837			-1134
KE	LEWIS	695	2013	5	-0.1559	37.3149	4828			-1197
KE	LEWIS	695	2013	4	-0.1554	37.3146	4828			-963
KE	LEWIS	695	2013	6	-0.156	37.3148	4825			-1008
KE	LEWIS	695	2013	8	-0.1566	37.3152	4820			-981
KE	LEWIS	695	2013	9	-0.1569	37.3150	4806			-1116
KE	LEWIS	695	2013	11	-0.1561	37.3144	4805			-1035
KE	LEWIS	695	2013	10	-0.1565	37.3145	4804			-1170
KE	LEWIS	695	2013	13	-0.1557	37.3139	4785			-1566
KE	LEWIS	695	2013	14	-0.1561	37.3140	4781			-1593
KE	LEWIS	695	2013	16	-0.1571	37.3141	4758			-1755
KE	LEWIS	695	2013	17	-0.1567	37.3139	4753			-1557
KE	LEWIS	695	2013	19	-0.1563	37.3132	4738			-1647
KE	LEWIS	695	2013	20	-0.1568	37.3135	4733			-1764
KE	LEWIS	695	2013	22	-0.1576	37.3133	4707			-1899
KE	LEWIS	695	2013	25	-0.1578	37.3130	4691			-1710
KG	ABRAMOV	732	2012	ABRAC04	39.5985	71.5685	4279			570
KG	ABRAMOV	732	2012	ABRAC04	39.5985	71.5685	4279			570
KG	ABRAMOV	732	2012	ABRAC01	39.6561	71.6183	4271			875
KG	ABRAMOV	732	2012	ABRAC01	39.6561	71.6183	4271			875
KG	ABRAMOV	732	2012	ABRAC02	39.7958	71.7167	4197			375
KG	ABRAMOV	732	2012	ABRAC02	39.7958	71.7167	4197			375
KG	ABRAMOV	732	2012	ABRAC03	39.6101	71.5622	4161			696
KG	ABRAMOV	732	2012	ABRAC03	39.6101	71.5622	4161			696
KG	ABRAMOV	732	2012	ABR13	39.6209	71.5482	4040			-1395
KG	ABRAMOV	732	2012	ABR13	39.6209	71.5482	4040			-1395
KG	ABRAMOV	732	2012	ABR12	39.6243	71.5479	4025			-1980
KG	ABRAMOV	732	2012	ABR12	39.6243	71.5479	4025			-1980
KG	ABRAMOV	732	2012	ABR14	39.6194	71.5543	4009			-846
KG	ABRAMOV	732	2012	ABR14	39.6194	71.5543	4009			-846
KG	ABRAMOV	732	2012	ABR15	39.6223	71.5602	3985			-1593
KG	ABRAMOV	732	2012	ABR15	39.6223	71.5602	3985			-1593
KG	ABRAMOV	732	2012	ABR16	39.6246	71.5647	3983			-1944
KG	ABRAMOV	732	2012	ABR16	39.6246	71.5647	3983			-1944
KG	ABRAMOV	732	2012	ABR11	39.6268	71.5602	3945			-2124
KG	ABRAMOV	732	2012	ABR11	39.6268	71.5602	3945			-2124
KG	ABRAMOV	732	2012	ABR09	39.6325	71.5580	3915			-2205
KG	ABRAMOV	732	2012	ABR09	39.6325	71.5580	3915			-2205
KG	ABRAMOV	732	2012	ABR10	39.6311	71.5656	3903			-3114
KG	ABRAMOV	732	2012	ABR10	39.6311	71.5656	3903			-3114
KG	ABRAMOV	732	2012	ABR08	39.6326	71.5581	3898			-2781
KG	ABRAMOV	732	2012	ABR08	39.6326	71.5581	3898			-2781
KG	ABRAMOV	732	2012	ABR07	39.6345	71.5633	3888			-2862
KG	ABRAMOV	732	2012	ABR07	39.6345	71.5633	3888			-2862
KG	ABRAMOV	732	2012	ABR06	39.6406	71.5646	3832			-3654
KG	ABRAMOV	732	2012	ABR06	39.6406	71.5646	3832			-3654
KG	ABRAMOV	732	2012	ABR03	39.644	71.5648	3803			-3897
KG	ABRAMOV	732	2012	ABR03	39.644	71.5648	3803			-3897
KG	ABRAMOV	732	2012	ABR04	39.6439	71.5666	3802			-3726
KG	ABRAMOV	732	2012	ABR04	39.6439	71.5666	3802			-3726
KG	ABRAMOV	732	2012	ABR02	39.644	71.5620	3793			-4275
KG	ABRAMOV	732	2012	ABR02	39.644	71.5620	3793			-4275
KG	ABRAMOV	732	2012	ABR05	39.6489	71.5651	3745			-4950
KG	ABRAMOV	732	2012	ABR05	39.6489	71.5651	3745			-4950
KG	ABRAMOV	732	2012	ABR01	39.6506	71.5660	3719			-4824
KG	ABRAMOV	732	2012	ABR01	39.6506	71.5660	3719			-4824
KG	ABRAMOV	732	2013	ABRAC02	39.5963	71.5558	4380			1190
KG	ABRAMOV	732	2013	ABRAC02	39.5963	71.5558	4380			1190
KG	ABRAMOV	732	2013	ABRAC03	39.6194	71.5229	4270			600
KG	ABRAMOV	732	2013	ABRAC03	39.6194	71.5229	4270			600
KG	ABRAMOV	732	2013	ABRAC01	39.6031	71.5719	4242			730
KG	ABRAMOV	732	2013	ABRAC01	39.6031	71.5719	4242			730
KG	ABRAMOV	732	2013	ABR13	39.6209	71.5482	4040			-1090
KG	ABRAMOV	732	2013	ABR13	39.6209	71.5482	4040			-1090
KG	ABRAMOV	732	2013	ABR12	39.6243	71.5479	4025			-1630
KG	ABRAMOV	732	2013	ABR12	39.6243	71.5479	4025			-1630
KG	ABRAMOV	732	2013	ABR14	39.6194	71.5543	4009			-720
KG	ABRAMOV	732	2013	ABR14	39.6194	71.5543	4009			-720
KG	ABRAMOV	732	2013	ABR15	39.6223	71.5602	3985			-1530
KG	ABRAMOV	732	2013	ABR15	39.6223	71.5602	3985			-1530
KG	ABRAMOV	732	2013	ABR16	39.6246	71.5647	3983			-1590
KG	ABRAMOV	732	2013	ABR16	39.6246	71.5647	3983			-1590
KG	ABRAMOV	732	2013	ABR11	39.6268	71.5602	3945			-1850
KG	ABRAMOV	732	2013	ABR11	39.6268	71.5602	3945			-1850
KG	ABRAMOV	732	2013	ABR09	39.6325	71.5580	3915			-2220
KG	ABRAMOV	732	2013	ABR09	39.6325	71.5580	3915			-2220
KG	ABRAMOV	732	2013	ABR10	39.6311	71.5656	3903			-2750
KG	ABRAMOV	732	2013	ABR10	39.6311	71.5656	3903			-2750
KG	ABRAMOV	732	2013	ABR08	39.6326	71.5581	3898			-2530
KG	ABRAMOV	732	2013	ABR08	39.6326	71.5581	3898			-2530
KG	ABRAMOV	732	2013	ABR07	39.6345	71.5633	3888			-2420
KG	ABRAMOV	732	2013	ABR07	39.6345	71.5633	3888			-2420
KG	ABRAMOV	732	2013	ABR06	39.6406	71.5646	3832			-3240
KG	ABRAMOV	732	2013	ABR06	39.6406	71.5646	3832			-3240
KG	ABRAMOV	732	2013	ABR03	39.644	71.5648	3803			-3600
KG	ABRAMOV	732	2013	ABR03	39.644	71.5648	3803			-3600
KG	ABRAMOV	732	2013	ABR04	39.6439	71.5666	3802			-3330
KG	ABRAMOV	732	2013	ABR04	39.6439	71.5666	3802			-3330

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
KG	ABRAMOV	732	2013	ABR02	39.644	71.5620	3793			-3850
KG	ABRAMOV	732	2013	ABR02	39.644	71.5620	3793			-3850
KG	ABRAMOV	732	2013	ABR05	39.6489	71.5651	3745			-4550
KG	ABRAMOV	732	2013	ABR05	39.6489	71.5651	3745			-4550
KG	ABRAMOV	732	2013	ABR01	39.6506	71.5660	3719			-4480
KG	ABRAMOV	732	2013	ABR01	39.6506	71.5660	3719			-4480
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AKAC02	41.7975	78.1758	4215			310
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AKAC01	41.7860	78.1520	4176			225
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK05	41.7992	78.1506	3970			-1161
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK04	41.8021	78.1474	3921			-1224
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK06	41.8030	78.1446	3891			-1332
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK07	41.8045	78.1462	3887			-1566
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK03	41.8050	78.1444	3871			-1647
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK10	41.8076	78.1431	3826			-2992
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK02	41.8075	78.1417	3820			-855
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK11	41.8085	78.1429	3795			-2061
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2011	AK01	41.8135	78.1353	3759			-2925
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AKAC01	41.7953	78.1737	4253			199
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK05	41.7993	78.1506	3968			-2038
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK04	41.8022	78.1474	3921			-2214
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK03	41.8049	78.1446	3873			-2430
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK09	41.8057	78.1409	3841			-2682
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK11	41.8076	78.1431	3828			-2493
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK02	41.8074	78.1418	3819			-3582
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK08	41.8079	78.1442	3818			-3182
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK10	41.8085	78.1429	3795			-2898
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2012	AK01	41.8091	78.1399	3759			-3843
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	ac01	41.7995	78.1847	4826			260
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK05	41.7993	78.1507	3968			-1580
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK04	41.8022	78.1474	3921			-1750
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK07	41.8037	78.1489	3909			-2090
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK06	41.803	78.1446	3891			-2180
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK03	41.8049	78.1446	3873			-2150
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK08	41.8064	78.1461	3853			-2910
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK09	41.8057	78.1409	3840			-2390
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK11	41.8076	78.1431	3826			-2640
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK02	41.8074	78.1418	3819			-2300
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK10	41.8085	78.1431	3795			-2690
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2013	AK01	41.8089	78.1402	3769			-4000
KG	GOLUBIN	753	2011	GOLAC01	42.4523	74.5036	4168			408
KG	GOLUBIN	753	2011	GOL03	42.4671	74.4891	3512			-1305
KG	GOLUBIN	753	2011	GOL04	42.4684	74.4891	3493			-1782
KG	GOLUBIN	753	2011	GOL05	42.4698	74.4889	3468			-1944
KG	GOLUBIN	753	2011	GOL07	42.4714	74.4880	3438			-2664
KG	GOLUBIN	753	2011	GOL01	42.4722	74.4876	3429			-2529
KG	GOLUBIN	753	2011	GOL02	42.4717	74.4868	3425			-2182
KG	GOLUBIN	753	2011	GOL09	42.4740	74.4844	3372			-1890
KG	GOLUBIN	753	2012	GOLAC02	42.4440	74.5060	4055			797
KG	GOLUBIN	753	2012	GOLAC03	42.448	74.5060	3967			360
KG	GOLUBIN	753	2012	GOLAC01	42.4522	74.5038	3941			230
KG	GOLUBIN	753	2012	GOL03	42.4672	74.4892	3512			-1863
KG	GOLUBIN	753	2012	GOL04	42.4683	74.4892	3493			-2655
KG	GOLUBIN	753	2012	GOL01	42.4723	74.4876	3429			-3078
KG	GOLUBIN	753	2012	GOL08	42.4733	74.4853	3393			-3348
KG	GOLUBIN	753	2012	GOL09	42.4742	74.4844	3372			-4194
KG	GOLUBIN	753	2013	GOP2	42.448	74.5060	3969			238
KG	GOLUBIN	753	2013	GOP1	42.4522	74.5038	3940			448
KG	GOLUBIN	753	2013	GO10	42.4655	74.4915	3594			-1449
KG	GOLUBIN	753	2013	GO03	42.4671	74.4891	3546			-1800
KG	GOLUBIN	753	2013	GO05	42.4698	74.4888	3508			-2043
KG	GOLUBIN	753	2013	GO06	42.4706	74.4890	3503			-3033
KG	GOLUBIN	753	2013	GO02	42.4717	74.4869	3475			-2034
KG	GOLUBIN	753	2013	GO01	42.4722	74.4877	3468			-2601
KG	GOLUBIN	753	2013	GO08	42.4732	74.4854	3434			-2232
KG	GOLUBIN	753	2013	GO09	42.474	74.4845	3412			-2691
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZAC01	41.7818	77.7525	4250			69
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZAC02	41.7830	77.7512	4240			40
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ04	41.7909	77.7496	4067			819
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ05	41.7919	77.7479	4046			1035
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ07	41.7936	77.7501	4006			1242
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ01	41.7943	77.7490	3994			1017
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ02	41.7960	77.7496	3954			1215
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ06	41.7969	77.7489	3931			972
KG	SUEK/SUYOK ZAPADNIY	781	2011	SZ03	41.7966	77.7502	3928			1872
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe27	41.7784	77.7500	4456			163
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZPIT1	41.7783	77.7503	4453			171
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe29	41.7783	77.7494	4436			0
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe30	41.7783	77.7490	4428			4
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe31	41.7784	77.7487	4419			163
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe33	41.7788	77.7481	4411			133
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe34	41.7792	77.7474	4395			0
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe35	41.7799	77.7472	4388			38
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe36	41.7814	77.7491	4291			159
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZPIT2	41.7812	77.7497	4286			166
KG	SUEK/SUYOK ZAPADNIY	781	2012	Sprobe38	41.7821	77.7509	4258			0
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZ04	41.7908	77.7498	4103			-1269
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZ05	41.7918	77.7479	4086			-1296
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZ07	41.7933	77.7501	4046			-1629
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZ01	41.7942	77.7490	4030			-1485
KG	SUEK/SUYOK ZAPADNIY	781	2012	SZ02	41.7959	77.7496	3999			-1683
KZ	TS.TUYUKSUYSKIY	817	2011	1	43.0401	77.0748	3777	885	-1353	-468
KZ	TS.TUYUKSUYSKIY	817	2011	11	43.0409	77.0748	3770	859	-1471	-612
KZ	TS.TUYUKSUYSKIY	817	2011	2	43.0396	77.0765	3767	906	-1113	-207
KZ	TS.TUYUKSUYSKIY	817	2011	3	43.0397	77.0775	3766	1015	-1330	-315
KZ	TS.TUYUKSUYSKIY	817	2011	4	43.0397	77.0781	3765	992	-1037	-45
KZ	TS.TUYUKSUYSKIY	817	2011	12	43.0411	77.0758	3760	926	-1592	-666

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
KZ	TS.TUYUKSUYSKIY	817	2011	13	43.0409	77.0772	3752	1016	-1340	-324
KZ	TS.TUYUKSUYSKIY	817	2011	21	43.0421	77.0749	3751	1018	-1522	-504
KZ	TS.TUYUKSUYSKIY	817	2011	14	43.0407	77.0782	3749	1012	-1732	-720
KZ	TS.TUYUKSUYSKIY	817	2011	23	43.0413	77.0776	3746	946	-1369	-423
KZ	TS.TUYUKSUYSKIY	817	2011	24	43.0413	77.0789	3743	842	-1958	-1116
KZ	TS.TUYUKSUYSKIY	817	2011	34	43.0417	77.0793	3742	887	-2075	-1188
KZ	TS.TUYUKSUYSKIY	817	2011	33	43.0417	77.0784	3742	956	-1685	-729
KZ	TS.TUYUKSUYSKIY	817	2011	32	43.0418	77.0773	3741	1042	-1519	-477
KZ	TS.TUYUKSUYSKIY	817	2011	25	43.0412	77.0801	3740	1055	-2018	-963
KZ	TS.TUYUKSUYSKIY	817	2011	22	43.0420	77.0766	3740	943	-1537	-594
KZ	TS.TUYUKSUYSKIY	817	2011	31	43.0425	77.0757	3739	1083	-1587	-504
KZ	TS.TUYUKSUYSKIY	817	2011	26	43.0412	77.0808	3738	841	-2209	-1368
KZ	TS.TUYUKSUYSKIY	817	2011	43	43.0423	77.0789	3738	1056	-1677	-621
KZ	TS.TUYUKSUYSKIY	817	2011	35	43.0417	77.0807	3738	880	-2176	-1296
KZ	TS.TUYUKSUYSKIY	817	2011	42	43.0424	77.0783	3737	949	-1696	-747
KZ	TS.TUYUKSUYSKIY	817	2011	41	43.0424	77.0771	3735	946	-1387	-441
KZ	TS.TUYUKSUYSKIY	817	2011	36	43.0417	77.0818	3734	830	-2009	-1179
KZ	TS.TUYUKSUYSKIY	817	2011	44	43.0426	77.0805	3728	1047	-1560	-513
KZ	TS.TUYUKSUYSKIY	817	2011	51	43.0437	77.0761	3726	950	-1967	-1017
KZ	TS.TUYUKSUYSKIY	817	2011	45	43.0424	77.0817	3724	943	-1807	-864
KZ	TS.TUYUKSUYSKIY	817	2011	52	43.0437	77.0769	3723	897	-1815	-918
KZ	TS.TUYUKSUYSKIY	817	2011	53	43.0437	77.0786	3721	960	-1671	-711
KZ	TS.TUYUKSUYSKIY	817	2011	54	43.0437	77.0794	3716	954	-1710	-756
KZ	TS.TUYUKSUYSKIY	817	2011	56	43.0436	77.0820	3712	930	-1902	-972
KZ	TS.TUYUKSUYSKIY	817	2011	58	43.0441	77.0846	3710	884	-1694	-810
KZ	TS.TUYUKSUYSKIY	817	2011	55	43.0437	77.0805	3708	1032	-1770	-738
KZ	TS.TUYUKSUYSKIY	817	2011	57	43.0435	77.0828	3706	822	-2100	-1278
KZ	TS.TUYUKSUYSKIY	817	2011	61	43.0455	77.0774	3702	1001	-1883	-882
KZ	TS.TUYUKSUYSKIY	817	2011	62	43.0455	77.0782	3699	987	-1887	-900
KZ	TS.TUYUKSUYSKIY	817	2011	69	43.0451	77.0846	3699	943	-1870	-927
KZ	TS.TUYUKSUYSKIY	817	2011	63	43.0454	77.0791	3698	934	-1681	-747
KZ	TS.TUYUKSUYSKIY	817	2011	710	43.0458	77.0846	3694	962	-1970	-1008
KZ	TS.TUYUKSUYSKIY	817	2011	65	43.0454	77.0821	3692	958	-1768	-810
KZ	TS.TUYUKSUYSKIY	817	2011	64	43.0453	77.0806	3691	974	-2036	-1062
KZ	TS.TUYUKSUYSKIY	817	2011	68	43.0453	77.0837	3691	973	-2008	-1035
KZ	TS.TUYUKSUYSKIY	817	2011	71	43.0465	77.0784	3688	937	-1837	-900
KZ	TS.TUYUKSUYSKIY	817	2011	67	43.0454	77.0831	3687	947	-2090	-1143
KZ	TS.TUYUKSUYSKIY	817	2011	72	43.0466	77.0791	3685	927	-1881	-954
KZ	TS.TUYUKSUYSKIY	817	2011	79	43.0461	77.0840	3683	1066	-2047	-981
KZ	TS.TUYUKSUYSKIY	817	2011	78	43.0460	77.0833	3682	818	-1790	-972
KZ	TS.TUYUKSUYSKIY	817	2011	73	43.0466	77.0798	3681	921	-1848	-927
KZ	TS.TUYUKSUYSKIY	817	2011	76	43.0464	77.0820	3679	864	-1944	-1080
KZ	TS.TUYUKSUYSKIY	817	2011	75	43.0465	77.0814	3679	1033	-1744	-711
KZ	TS.TUYUKSUYSKIY	817	2011	77	43.0464	77.0826	3678	694	-1756	-1062
KZ	TS.TUYUKSUYSKIY	817	2011	74	43.0466	77.0807	3677	999	-1971	-972
KZ	TS.TUYUKSUYSKIY	817	2011	87	43.0472	77.0824	3674	657	-1989	-1332
KZ	TS.TUYUKSUYSKIY	817	2011	86	43.0473	77.0818	3673	628	-1942	-1314
KZ	TS.TUYUKSUYSKIY	817	2011	81	43.0479	77.0787	3672	1000	-2134	-1134
KZ	TS.TUYUKSUYSKIY	817	2011	88	43.0469	77.0835	3671	775	-1837	-1062
KZ	TS.TUYUKSUYSKIY	817	2011	85	43.0474	77.0811	3670	943	-1969	-1026
KZ	TS.TUYUKSUYSKIY	817	2011	82	43.0478	77.0793	3669	973	-2044	-1071
KZ	TS.TUYUKSUYSKIY	817	2011	83	43.0476	77.0800	3668	938	-2036	-1098
KZ	TS.TUYUKSUYSKIY	817	2011	84	43.0475	77.0806	3667	908	-2204	-1296
KZ	TS.TUYUKSUYSKIY	817	2011	91	43.0486	77.0792	3658	958	-2218	-1260
KZ	TS.TUYUKSUYSKIY	817	2011	96	43.0479	77.0832	3658	1025	-2600	-1575
KZ	TS.TUYUKSUYSKIY	817	2011	95	43.0482	77.0825	3657	834	-1923	-1089
KZ	TS.TUYUKSUYSKIY	817	2011	94	43.0484	77.0813	3655	988	-1654	-666
KZ	TS.TUYUKSUYSKIY	817	2011	92	43.0485	77.0800	3654	1042	-2068	-1026
KZ	TS.TUYUKSUYSKIY	817	2011	93	43.0484	77.0808	3653	1017	-1854	-837
KZ	TS.TUYUKSUYSKIY	817	2011	101	43.0491	77.0791	3651	1264	-2497	-1233
KZ	TS.TUYUKSUYSKIY	817	2011	105	43.0487	77.0819	3647	1017	-1827	-810
KZ	TS.TUYUKSUYSKIY	817	2011	102	43.0490	77.0797	3646	914	-2192	-1278
KZ	TS.TUYUKSUYSKIY	817	2011	104	43.0488	77.0812	3646	918	-1881	-963
KZ	TS.TUYUKSUYSKIY	817	2011	103	43.0489	77.0804	3646	836	-2042	-1206
KZ	TS.TUYUKSUYSKIY	817	2011	106	43.0487	77.0826	3644	1050	-1824	-774
KZ	TS.TUYUKSUYSKIY	817	2011	107	43.0485	77.0835	3642	1237	-2191	-954
KZ	TS.TUYUKSUYSKIY	817	2011	111	43.0501	77.0794	3625	1752	-2490	-738
KZ	TS.TUYUKSUYSKIY	817	2011	112	43.0500	77.0804	3624	1175	-2138	-963
KZ	TS.TUYUKSUYSKIY	817	2011	115	43.0496	77.0826	3624	679	-1966	-1287
KZ	TS.TUYUKSUYSKIY	817	2011	117	43.0497	77.0836	3622	1033	-2392	-1359
KZ	TS.TUYUKSUYSKIY	817	2011	113	43.05	77.0812	3621	1090	-2044	-954
KZ	TS.TUYUKSUYSKIY	817	2011	114	43.0499	77.0822	3621	1002	-2208	-1206
KZ	TS.TUYUKSUYSKIY	817	2011	116	43.0498	77.0831	3620	915	-2454	-1539
KZ	TS.TUYUKSUYSKIY	817	2011	124	43.0510	77.0824	3603	1063	-2341	-1278
KZ	TS.TUYUKSUYSKIY	817	2011	125	43.0509	77.0832	3602	1072	-2431	-1359
KZ	TS.TUYUKSUYSKIY	817	2011	123	43.0511	77.0816	3599	1094	-2282	-1188
KZ	TS.TUYUKSUYSKIY	817	2011	121	43.0512	77.0794	3596	1317	-1992	-675
KZ	TS.TUYUKSUYSKIY	817	2011	122	43.0511	77.0807	3594	1113	-2130	-1017
KZ	TS.TUYUKSUYSKIY	817	2011	134	43.0518	77.0820	3588	923	-2255	-1332
KZ	TS.TUYUKSUYSKIY	817	2011	132	43.0516	77.0804	3587	1023	-2400	-1377
KZ	TS.TUYUKSUYSKIY	817	2011	131	43.0517	77.0795	3587	1000	-2170	-1170
KZ	TS.TUYUKSUYSKIY	817	2011	133	43.0517	77.0807	3586	1050	-2436	-1386
KZ	TS.TUYUKSUYSKIY	817	2011	135	43.0518	77.0827	3586	1000	-2134	-1134
KZ	TS.TUYUKSUYSKIY	817	2011	136	43.0517	77.0833	3581	909	-2970	-2061
KZ	TS.TUYUKSUYSKIY	817	2011	143	43.0523	77.0811	3580	809	-2672	-1863
KZ	TS.TUYUKSUYSKIY	817	2011	142	43.0523	77.0806	3578	1191	-2829	-1638
KZ	TS.TUYUKSUYSKIY	817	2011	141	43.0523	77.0795	3577	1136	-2648	-1512
KZ	TS.TUYUKSUYSKIY	817	2011	137	43.0516	77.0840	3575	745	-2644	-1899
KZ	TS.TUYUKSUYSKIY	817	2011	144	43.0524	77.0822	3575	963	-2430	-1467
KZ	TS.TUYUKSUYSKIY	817	2011	145	43.0523	77.0829	3570	954	-2493	-1539
KZ	TS.TUYUKSUYSKIY	817	2011	152	43.0532	77.0807	3566	1090	-2701	-1611
KZ	TS.TUYUKSUYSKIY	817	2011	146	43.0522	77.0836	3565	1108	-2692	-1584
KZ	TS.TUYUKSUYSKIY	817	2011	151	43.0532	77.0798	3563	1194	-2715	-1521
KZ	TS.TUYUKSUYSKIY	817	2011	147	43.0520	77.0843	3559	885	-2865	-1980
KZ	TS.TUYUKSUYSKIY	817	2011	153	43.0533	77.0813	3558	1049	-2390	-1341
KZ	TS.TUYUKSUYSKIY	817	2011	154	43.0532	77.0822	3556	994	-2389	-1395

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
KZ	TS.TUYUKSUYSKIY	817	2011	155	43.0531	77.0829	3554	1008	-2736	-1728
KZ	TS.TUYUKSUYSKIY	817	2011	156	43.0530	77.0835	3551	1016	-2753	-1737
KZ	TS.TUYUKSUYSKIY	817	2011	157	43.0529	77.0839	3549	921	-2802	-1881
KZ	TS.TUYUKSUYSKIY	817	2011	158	43.0527	77.0849	3542	451	-2494	-2043
KZ	TS.TUYUKSUYSKIY	817	2011	161	43.0545	77.0809	3533	961	-3013	-2052
KZ	TS.TUYUKSUYSKIY	817	2011	162	43.0545	77.0820	3524	933	-2805	-1872
KZ	TS.TUYUKSUYSKIY	817	2011	163	43.0545	77.0826	3524	892	-2746	-1854
KZ	TS.TUYUKSUYSKIY	817	2011	164	43.0545	77.0833	3524	698	-2705	-2007
KZ	TS.TUYUKSUYSKIY	817	2011	165	43.0543	77.0842	3523	729	-2925	-2196
KZ	TS.TUYUKSUYSKIY	817	2011	167	43.0538	77.0859	3521	951	-2634	-1683
KZ	TS.TUYUKSUYSKIY	817	2011	166	43.0541	77.0851	3520	897	-3318	-2421
KZ	TS.TUYUKSUYSKIY	817	2011	171	43.0557	77.0831	3497	859	-3289	-2430
KZ	TS.TUYUKSUYSKIY	817	2011	172	43.0557	77.0835	3496	805	-3073	-2268
KZ	TS.TUYUKSUYSKIY	817	2011	174	43.0556	77.0847	3490	773	-3491	-2718
KZ	TS.TUYUKSUYSKIY	817	2011	175	43.0554	77.0853	3489	936	-3523	-2587
KZ	TS.TUYUKSUYSKIY	817	2012	1	43.0401	77.0748	3776	885	-2721	-1836
KZ	TS.TUYUKSUYSKIY	817	2012	11	43.0410	77.0748	3769	859	-2362	-1503
KZ	TS.TUYUKSUYSKIY	817	2012	2	43.0397	77.0765	3766	906	-2220	-1314
KZ	TS.TUYUKSUYSKIY	817	2012	3	43.0397	77.0775	3765	1015	-2275	-1260
KZ	TS.TUYUKSUYSKIY	817	2012	4	43.0398	77.0781	3763	992	-2036	-1044
KZ	TS.TUYUKSUYSKIY	817	2012	12	43.0411	77.0758	3758	926	-2420	-1494
KZ	TS.TUYUKSUYSKIY	817	2012	13	43.0409	77.0772	3751	1016	-2519	-1503
KZ	TS.TUYUKSUYSKIY	817	2012	21	43.0421	77.0749	3749	1018	-2557	-1539
KZ	TS.TUYUKSUYSKIY	817	2012	14	43.0408	77.0782	3748	1012	-2596	-1584
KZ	TS.TUYUKSUYSKIY	817	2012	23	43.0413	77.0776	3745	946	-2404	-1458
KZ	TS.TUYUKSUYSKIY	817	2012	24	43.0413	77.0789	3742	842	-2660	-1818
KZ	TS.TUYUKSUYSKIY	817	2012	33	43.0418	77.0784	3741	956	-2738	-1782
KZ	TS.TUYUKSUYSKIY	817	2012	34	43.0418	77.0794	3740	887	-2786	-1899
KZ	TS.TUYUKSUYSKIY	817	2012	32	43.0418	77.0773	3740	1042	-2626	-1584
KZ	TS.TUYUKSUYSKIY	817	2012	22	43.0420	77.0767	3739	943	-2590	-1647
KZ	TS.TUYUKSUYSKIY	817	2012	25	43.0413	77.0801	3739	1055	-3026	-1971
KZ	TS.TUYUKSUYSKIY	817	2012	43	43.0424	77.0789	3737	1056	-2622	-1566
KZ	TS.TUYUKSUYSKIY	817	2012	31	43.0425	77.0757	3737	1083	-2550	-1467
KZ	TS.TUYUKSUYSKIY	817	2012	26	43.0413	77.0808	3737	841	-2947	-2106
KZ	TS.TUYUKSUYSKIY	817	2012	35	43.0418	77.0807	3736	880	-3211	-2331
KZ	TS.TUYUKSUYSKIY	817	2012	42	43.0424	77.0783	3735	949	-2605	-1656
KZ	TS.TUYUKSUYSKIY	817	2012	41	43.0424	77.0771	3733	946	-2530	-1584
KZ	TS.TUYUKSUYSKIY	817	2012	36	43.0417	77.0818	3732	830	-2657	-1827
KZ	TS.TUYUKSUYSKIY	817	2012	44	43.0426	77.0805	3726	1047	-2487	-1440
KZ	TS.TUYUKSUYSKIY	817	2012	51	43.0437	77.0761	3725	950	-2741	-1791
KZ	TS.TUYUKSUYSKIY	817	2012	45	43.0424	77.0818	3722	943	-2518	-1575
KZ	TS.TUYUKSUYSKIY	817	2012	52	43.0437	77.0769	3721	897	-2850	-1953
KZ	TS.TUYUKSUYSKIY	817	2012	53	43.0437	77.0786	3719	960	-2670	-1710
KZ	TS.TUYUKSUYSKIY	817	2012	54	43.0438	77.0794	3714	954	-2610	-1656
KZ	TS.TUYUKSUYSKIY	817	2012	56	43.0436	77.0820	3710	930	-2928	-1998
KZ	TS.TUYUKSUYSKIY	817	2012	58	43.0441	77.0846	3709	884	-2576	-1692
KZ	TS.TUYUKSUYSKIY	817	2012	55	43.0437	77.0805	3706	1032	-2652	-1620
KZ	TS.TUYUKSUYSKIY	817	2012	57	43.0435	77.0828	3704	822	-2946	-2124
KZ	TS.TUYUKSUYSKIY	817	2012	61	43.0455	77.0774	3700	1001	-2837	-1836
KZ	TS.TUYUKSUYSKIY	817	2012	69	43.0451	77.0845	3698	943	-2590	-1647
KZ	TS.TUYUKSUYSKIY	817	2012	62	43.0455	77.0782	3698	987	-2787	-1800
KZ	TS.TUYUKSUYSKIY	817	2012	63	43.0455	77.0791	3696	934	-2797	-1863
KZ	TS.TUYUKSUYSKIY	817	2012	710	43.0459	77.0846	3692	962	-2780	-1818
KZ	TS.TUYUKSUYSKIY	817	2012	68	43.0453	77.0837	3690	973	-3430	-2457
KZ	TS.TUYUKSUYSKIY	817	2012	65	43.0455	77.0821	3690	958	-2722	-1764
KZ	TS.TUYUKSUYSKIY	817	2012	64	43.0454	77.0806	3689	974	-2855	-1881
KZ	TS.TUYUKSUYSKIY	817	2012	67	43.0454	77.0830	3686	947	-2657	-1710
KZ	TS.TUYUKSUYSKIY	817	2012	71	43.0466	77.0784	3686	937	-2701	-1764
KZ	TS.TUYUKSUYSKIY	817	2012	72	43.0467	77.0792	3683	927	-2961	-2034
KZ	TS.TUYUKSUYSKIY	817	2012	79	43.0461	77.0840	3681	1066	-2740	-1674
KZ	TS.TUYUKSUYSKIY	817	2012	78	43.0460	77.0833	3680	818	-2627	-1809
KZ	TS.TUYUKSUYSKIY	817	2012	73	43.0467	77.0799	3679	921	-2694	-1773
KZ	TS.TUYUKSUYSKIY	817	2012	76	43.0465	77.0820	3677	864	-2736	-1872
KZ	TS.TUYUKSUYSKIY	817	2012	75	43.0466	77.0815	3677	1033	-2689	-1656
KZ	TS.TUYUKSUYSKIY	817	2012	77	43.0464	77.0826	3676	694	-2305	-1611
KZ	TS.TUYUKSUYSKIY	817	2012	74	43.0466	77.0807	3675	999	-2646	-1647
KZ	TS.TUYUKSUYSKIY	817	2012	87	43.0472	77.0824	3672	657	-2880	-2223
KZ	TS.TUYUKSUYSKIY	817	2012	86	43.0474	77.0818	3671	628	-2896	-2268
KZ	TS.TUYUKSUYSKIY	817	2012	81	43.0480	77.0787	3670	1000	-3052	-2052
KZ	TS.TUYUKSUYSKIY	817	2012	88	43.0469	77.0835	3669	775	-2683	-1908
KZ	TS.TUYUKSUYSKIY	817	2012	85	43.0474	77.0811	3668	943	-2797	-1854
KZ	TS.TUYUKSUYSKIY	817	2012	82	43.0478	77.0793	3667	973	-2854	-1881
KZ	TS.TUYUKSUYSKIY	817	2012	83	43.0477	77.0800	3666	938	-2747	-1809
KZ	TS.TUYUKSUYSKIY	817	2012	84	43.0476	77.0806	3665	908	-2834	-1926
KZ	TS.TUYUKSUYSKIY	817	2012	91	43.0486	77.0793	3656	958	-3442	-2484
KZ	TS.TUYUKSUYSKIY	817	2012	96	43.0479	77.0832	3655	1025	-3509	-2484
KZ	TS.TUYUKSUYSKIY	817	2012	95	43.0483	77.0825	3654	834	-2427	-1593
KZ	TS.TUYUKSUYSKIY	817	2012	92	43.0485	77.0800	3652	1042	-2761	-1719
KZ	TS.TUYUKSUYSKIY	817	2012	94	43.0484	77.0813	3652	988	-2401	-1413
KZ	TS.TUYUKSUYSKIY	817	2012	93	43.0485	77.0808	3650	1017	-2673	-1656
KZ	TS.TUYUKSUYSKIY	817	2012	101	43.0491	77.0791	3648	1264	-3226	-1962
KZ	TS.TUYUKSUYSKIY	817	2012	105	43.0488	77.0819	3644	1017	-2241	-1224
KZ	TS.TUYUKSUYSKIY	817	2012	102	43.0491	77.0797	3644	914	-2795	-1881
KZ	TS.TUYUKSUYSKIY	817	2012	103	43.0489	77.0804	3644	836	-3086	-2250
KZ	TS.TUYUKSUYSKIY	817	2012	104	43.0488	77.0812	3644	918	-2718	-1800
KZ	TS.TUYUKSUYSKIY	817	2012	107	43.0486	77.0835	3639	1237	-2893	-1656
KZ	TS.TUYUKSUYSKIY	817	2012	106	43.0488	77.0827	3639	1050	-2769	-1719
KZ	TS.TUYUKSUYSKIY	817	2012	111	43.0501	77.0795	3623	1752	-2904	-1152
KZ	TS.TUYUKSUYSKIY	817	2012	112	43.0501	77.0804	3621	1175	-2696	-1521
KZ	TS.TUYUKSUYSKIY	817	2012	115	43.0497	77.0826	3621	679	-2830	-2151
KZ	TS.TUYUKSUYSKIY	817	2012	117	43.0498	77.0836	3620	1033	-3238	-2205
KZ	TS.TUYUKSUYSKIY	817	2012	113	43.0501	77.0812	3619	1090	-2584	-1494
KZ	TS.TUYUKSUYSKIY	817	2012	114	43.0500	77.0822	3619	1002	-2919	-1917
KZ	TS.TUYUKSUYSKIY	817	2012	116	43.0499	77.0831	3617	915	-3201	-2286
KZ	TS.TUYUKSUYSKIY	817	2012	124	43.0510	77.0824	3600	1063	-2989	-1926
KZ	TS.TUYUKSUYSKIY	817	2012	125	43.0509	77.0832	3599	1072	-3349	-2277

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
KZ	TS.TUYUKSUYSKIY	817	2012	123	43.0511	77.0816	3597	1094	-3146	-2052
KZ	TS.TUYUKSUYSKIY	817	2012	121	43.0512	77.0794	3595	1317	-2541	-1224
KZ	TS.TUYUKSUYSKIY	817	2012	122	43.0512	77.0807	3592	1113	-2976	-1863
KZ	TS.TUYUKSUYSKIY	817	2012	134	43.0518	77.0820	3585	923	-2993	-2070
KZ	TS.TUYUKSUYSKIY	817	2012	131	43.0517	77.0795	3585	1000	-3016	-2016
KZ	TS.TUYUKSUYSKIY	817	2012	133	43.0518	77.0808	3584	1050	-3093	-2043
KZ	TS.TUYUKSUYSKIY	817	2012	132	43.0516	77.0804	3584	1023	-3120	-2097
KZ	TS.TUYUKSUYSKIY	817	2012	135	43.0518	77.0827	3583	1000	-3088	-2088
KZ	TS.TUYUKSUYSKIY	817	2012	136	43.0517	77.0833	3578	909	-3303	-2394
KZ	TS.TUYUKSUYSKIY	817	2012	143	43.0524	77.0811	3577	809	-3266	-2457
KZ	TS.TUYUKSUYSKIY	817	2012	142	43.0523	77.0807	3576	1191	-3378	-2187
KZ	TS.TUYUKSUYSKIY	817	2012	141	43.0523	77.0795	3575	1136	-3323	-2187
KZ	TS.TUYUKSUYSKIY	817	2012	144	43.0524	77.0822	3573	963	-3060	-2097
KZ	TS.TUYUKSUYSKIY	817	2012	137	43.0516	77.0840	3572	745	-3103	-2358
KZ	TS.TUYUKSUYSKIY	817	2012	145	43.0524	77.0830	3567	954	-3222	-2268
KZ	TS.TUYUKSUYSKIY	817	2012	152	43.0532	77.0807	3564	1090	-3331	-2241
KZ	TS.TUYUKSUYSKIY	817	2012	146	43.0523	77.0836	3562	1108	-3529	-2421
KZ	TS.TUYUKSUYSKIY	817	2012	151	43.0532	77.0798	3561	1194	-3300	-2106
KZ	TS.TUYUKSUYSKIY	817	2012	147	43.0521	77.0843	3557	885	-3423	-2538
KZ	TS.TUYUKSUYSKIY	817	2012	153	43.0533	77.0813	3556	1049	-3182	-2133
KZ	TS.TUYUKSUYSKIY	817	2012	154	43.0532	77.0822	3553	994	-3163	-2169
KZ	TS.TUYUKSUYSKIY	817	2012	155	43.0531	77.0829	3552	1008	-3240	-2232
KZ	TS.TUYUKSUYSKIY	817	2012	156	43.0530	77.0835	3549	1016	-3590	-2574
KZ	TS.TUYUKSUYSKIY	817	2012	157	43.0529	77.0840	3546	921	-3594	-2673
KZ	TS.TUYUKSUYSKIY	817	2012	158	43.0527	77.0849	3539	396	-3555	-3159
KZ	TS.TUYUKSUYSKIY	817	2012	161	43.0545	77.0809	3530	961	-3445	-2484
KZ	TS.TUYUKSUYSKIY	817	2012	163	43.0545	77.0826	3522	892	-3466	-2574
KZ	TS.TUYUKSUYSKIY	817	2012	162	43.0545	77.0820	3522	933	-3516	-2583
KZ	TS.TUYUKSUYSKIY	817	2012	164	43.0545	77.0833	3521	698	-3362	-2664
KZ	TS.TUYUKSUYSKIY	817	2012	165	43.0543	77.0842	3520	729	-3636	-2907
KZ	TS.TUYUKSUYSKIY	817	2012	167	43.0538	77.0859	3519	951	-3147	-2196
KZ	TS.TUYUKSUYSKIY	817	2012	166	43.0541	77.0851	3517	897	-4074	-3177
KZ	TS.TUYUKSUYSKIY	817	2012	171	43.0557	77.0831	3494	859	-3604	-2745
KZ	TS.TUYUKSUYSKIY	817	2012	172	43.0557	77.0835	3493	805	-3586	-2781
KZ	TS.TUYUKSUYSKIY	817	2012	174	43.0556	77.0847	3486	773	-3941	-3168
KZ	TS.TUYUKSUYSKIY	817	2013	1	43.0401	77.0748	3776	472	-1525	-1053
KZ	TS.TUYUKSUYSKIY	817	2013	11	43.0410	77.0749	3768	502	-1285	-783
KZ	TS.TUYUKSUYSKIY	817	2013	2	43.0397	77.0765	3765	654	-1239	-585
KZ	TS.TUYUKSUYSKIY	817	2013	3	43.0398	77.0775	3764	668	-1109	-441
KZ	TS.TUYUKSUYSKIY	817	2013	4	43.0399	77.0782	3762	660	-966	-306
KZ	TS.TUYUKSUYSKIY	817	2013	12	43.0411	77.0758	3757	534	-1254	-720
KZ	TS.TUYUKSUYSKIY	817	2013	5	43.0401	77.0789	3756	668	-956	-288
KZ	TS.TUYUKSUYSKIY	817	2013	13	43.0410	77.0772	3751	524	-1136	-612
KZ	TS.TUYUKSUYSKIY	817	2013	21	43.0421	77.0750	3749	606	-1317	-711
KZ	TS.TUYUKSUYSKIY	817	2013	14	43.0409	77.0782	3747	558	-1305	-747
KZ	TS.TUYUKSUYSKIY	817	2013	23	43.0414	77.0776	3744	586	-1495	-909
KZ	TS.TUYUKSUYSKIY	817	2013	16	43.0407	77.0805	3743	551	-1514	-963
KZ	TS.TUYUKSUYSKIY	817	2013	24	43.0414	77.0789	3742	425	-1514	-1089
KZ	TS.TUYUKSUYSKIY	817	2013	15	43.0408	77.0798	3742	565	-1375	-810
KZ	TS.TUYUKSUYSKIY	817	2013	33	43.0418	77.0784	3740	521	-1565	-1044
KZ	TS.TUYUKSUYSKIY	817	2013	34	43.0419	77.0794	3740	412	-1573	-1161
KZ	TS.TUYUKSUYSKIY	817	2013	32	43.0419	77.0773	3739	553	-1471	-918
KZ	TS.TUYUKSUYSKIY	817	2013	25	43.0414	77.0801	3739	572	-1580	-1008
KZ	TS.TUYUKSUYSKIY	817	2013	22	43.0420	77.0767	3738	612	-1476	-864
KZ	TS.TUYUKSUYSKIY	817	2013	31	43.0425	77.0757	3736	627	-1401	-774
KZ	TS.TUYUKSUYSKIY	817	2013	26	43.0413	77.0808	3736	395	-1745	-1350
KZ	TS.TUYUKSUYSKIY	817	2013	43	43.0425	77.0789	3735	532	-1243	-711
KZ	TS.TUYUKSUYSKIY	817	2013	42	43.0425	77.0783	3734	510	-1473	-963
KZ	TS.TUYUKSUYSKIY	817	2013	35	43.0418	77.0808	3734	264	-1776	-1512
KZ	TS.TUYUKSUYSKIY	817	2013	41	43.0425	77.0772	3733	511	-1303	-792
KZ	TS.TUYUKSUYSKIY	817	2013	59	43.0444	77.086	3731	486	-1530	-1044
KZ	TS.TUYUKSUYSKIY	817	2013	36	43.0418	77.0818	3731	452	-1622	-1170
KZ	TS.TUYUKSUYSKIY	817	2013	44	43.0427	77.0805	3725	684	-1251	-567
KZ	TS.TUYUKSUYSKIY	817	2013	51	43.0437	77.0761	3724	552	-1650	-1098
KZ	TS.TUYUKSUYSKIY	817	2013	45	43.0425	77.0818	3721	590	-1373	-783
KZ	TS.TUYUKSUYSKIY	817	2013	52	43.0438	77.0770	3720	540	-1539	-999
KZ	TS.TUYUKSUYSKIY	817	2013	53	43.0438	77.0786	3718	508	-1516	-1008
KZ	TS.TUYUKSUYSKIY	817	2013	54	43.0438	77.0794	3713	497	-1478	-981
KZ	TS.TUYUKSUYSKIY	817	2013	56	43.0437	77.0820	3709	459	-1557	-1098
KZ	TS.TUYUKSUYSKIY	817	2013	58	43.0441	77.0845	3708	404	-1556	-1152
KZ	TS.TUYUKSUYSKIY	817	2013	55	43.0438	77.0805	3705	511	-1393	-882
KZ	TS.TUYUKSUYSKIY	817	2013	57	43.0436	77.0828	3703	303	-1734	-1431
KZ	TS.TUYUKSUYSKIY	817	2013	61	43.0455	77.0774	3699	524	-1586	-1062
KZ	TS.TUYUKSUYSKIY	817	2013	69	43.0452	77.0844	3697	460	-1441	-981
KZ	TS.TUYUKSUYSKIY	817	2013	62	43.0456	77.0782	3696	452	-1379	-927
KZ	TS.TUYUKSUYSKIY	817	2013	63	43.0455	77.0791	3695	492	-1455	-963
KZ	TS.TUYUKSUYSKIY	817	2013	710	43.0459	77.0845	3691	310	-1588	-1278
KZ	TS.TUYUKSUYSKIY	817	2013	68	43.0454	77.0837	3689	313	-1438	-1125
KZ	TS.TUYUKSUYSKIY	817	2013	65	43.0455	77.0821	3689	403	-1519	-1116
KZ	TS.TUYUKSUYSKIY	817	2013	64	43.0454	77.0806	3688	467	-1754	-1287
KZ	TS.TUYUKSUYSKIY	817	2013	71	43.0466	77.0784	3685	405	-1359	-954
KZ	TS.TUYUKSUYSKIY	817	2013	67	43.0454	77.0830	3685	510	-1563	-1053
KZ	TS.TUYUKSUYSKIY	817	2013	79	43.0462	77.0840	3681	515	-1640	-1125
KZ	TS.TUYUKSUYSKIY	817	2013	72	43.0467	77.0792	3681	435	-1515	-1080
KZ	TS.TUYUKSUYSKIY	817	2013	78	43.0461	77.0833	3679	401	-1634	-1233
KZ	TS.TUYUKSUYSKIY	817	2013	73	43.0467	77.0799	3678	445	-1471	-1026
KZ	TS.TUYUKSUYSKIY	817	2013	76	43.0465	77.0820	3676	176	-1607	-1431
KZ	TS.TUYUKSUYSKIY	817	2013	75	43.0466	77.0815	3676	520	-1573	-1053
KZ	TS.TUYUKSUYSKIY	817	2013	77	43.0465	77.0826	3675	479	-1604	-1125
KZ	TS.TUYUKSUYSKIY	817	2013	74	43.0467	77.0807	3674	419	-1715	-1296
KZ	TS.TUYUKSUYSKIY	817	2013	87	43.0473	77.0824	3671	146	-1568	-1422
KZ	TS.TUYUKSUYSKIY	817	2013	86	43.0474	77.0818	3670	270	-1782	-1512
KZ	TS.TUYUKSUYSKIY	817	2013	81	43.0480	77.0787	3669	456	-1734	-1278
KZ	TS.TUYUKSUYSKIY	817	2013	85	43.0475	77.0811	3667	530	-1790	-1260
KZ	TS.TUYUKSUYSKIY	817	2013	88	43.0470	77.0835	3667	291	-1686	-1395
KZ	TS.TUYUKSUYSKIY	817	2013	82	43.0479	77.0793	3666	402	-1689	-1287

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
KZ	TS.TUYUKSUYSKIY	817	2013	83	43.0477	77.0800	3664	366	-1581	-1215
KZ	TS.TUYUKSUYSKIY	817	2013	84	43.0476	77.0806	3663	417	-1776	-1359
KZ	TS.TUYUKSUYSKIY	817	2013	91	43.0487	77.0793	3654	483	-1482	-999
KZ	TS.TUYUKSUYSKIY	817	2013	96	43.0480	77.0831	3653	127	-1900	-1773
KZ	TS.TUYUKSUYSKIY	817	2013	95	43.0483	77.0825	3652	171	-1341	-1170
KZ	TS.TUYUKSUYSKIY	817	2013	94	43.0485	77.0813	3651	592	-1411	-819
KZ	TS.TUYUKSUYSKIY	817	2013	92	43.0486	77.0800	3651	465	-1500	-1035
KZ	TS.TUYUKSUYSKIY	817	2013	93	43.0485	77.0807	3649	569	-1631	-1062
KZ	TS.TUYUKSUYSKIY	817	2013	101	43.0492	77.0791	3647	604	-1873	-1269
KZ	TS.TUYUKSUYSKIY	817	2013	102	43.0491	77.0797	3643	358	-1618	-1260
KZ	TS.TUYUKSUYSKIY	817	2013	104	43.0489	77.0812	3643	415	-1549	-1134
KZ	TS.TUYUKSUYSKIY	817	2013	105	43.0489	77.0819	3643	498	-1407	-909
KZ	TS.TUYUKSUYSKIY	817	2013	103	43.0490	77.0805	3642	288	-1746	-1458
KZ	TS.TUYUKSUYSKIY	817	2013	107	43.0486	77.0835	3638	519	-1644	-1125
KZ	TS.TUYUKSUYSKIY	817	2013	106	43.0489	77.0827	3637	431	-1457	-1026
KZ	TS.TUYUKSUYSKIY	817	2013	111	43.0501	77.0795	3621	640	-1549	-909
KZ	TS.TUYUKSUYSKIY	817	2013	115	43.0497	77.0826	3620	169	-1636	-1467
KZ	TS.TUYUKSUYSKIY	817	2013	112	43.0502	77.0804	3619	605	-1559	-954
KZ	TS.TUYUKSUYSKIY	817	2013	117	43.0498	77.0836	3619	212	-1940	-1728
KZ	TS.TUYUKSUYSKIY	817	2013	113	43.0501	77.0812	3617	600	-1383	-783
KZ	TS.TUYUKSUYSKIY	817	2013	114	43.0500	77.0822	3617	238	-1417	-1179
KZ	TS.TUYUKSUYSKIY	817	2013	116	43.0499	77.0831	3616	177	-2103	-1926
KZ	TS.TUYUKSUYSKIY	817	2013	124	43.0511	77.0824	3598	407	-1838	-1431
KZ	TS.TUYUKSUYSKIY	817	2013	125	43.0509	77.0832	3597	390	-1974	-1584
KZ	TS.TUYUKSUYSKIY	817	2013	123	43.0512	77.0817	3595	459	-1665	-1206
KZ	TS.TUYUKSUYSKIY	817	2013	121	43.0512	77.0794	3594	684	-1467	-783
KZ	TS.TUYUKSUYSKIY	817	2013	122	43.0512	77.0807	3591	686	-1811	-1125
KZ	TS.TUYUKSUYSKIY	817	2013	131	43.0517	77.0795	3584	599	-1967	-1368
KZ	TS.TUYUKSUYSKIY	817	2013	132	43.0517	77.0804	3583	387	-1872	-1485
KZ	TS.TUYUKSUYSKIY	817	2013	134	43.0519	77.0820	3583	299	-1775	-1476
KZ	TS.TUYUKSUYSKIY	817	2013	133	43.0518	77.0808	3582	268	-1816	-1548
KZ	TS.TUYUKSUYSKIY	817	2013	135	43.0519	77.0828	3581	402	-1770	-1368
KZ	TS.TUYUKSUYSKIY	817	2013	143	43.0524	77.0811	3576	255	-2217	-1962
KZ	TS.TUYUKSUYSKIY	817	2013	136	43.0518	77.0834	3576	487	-2296	-1809
KZ	TS.TUYUKSUYSKIY	817	2013	142	43.0524	77.0807	3575	302	-2012	-1710
KZ	TS.TUYUKSUYSKIY	817	2013	141	43.0524	77.0795	3574	512	-2078	-1566
KZ	TS.TUYUKSUYSKIY	817	2013	144	43.0524	77.0822	3571	373	-1876	-1503
KZ	TS.TUYUKSUYSKIY	817	2013	137	43.0517	77.0840	3569	234	-2169	-1935
KZ	TS.TUYUKSUYSKIY	817	2013	145	43.0524	77.0830	3566	413	-1826	-1413
KZ	TS.TUYUKSUYSKIY	817	2013	152	43.0532	77.0807	3562	377	-2078	-1701
KZ	TS.TUYUKSUYSKIY	817	2013	146	43.0523	77.0836	3560	448	-1996	-1548
KZ	TS.TUYUKSUYSKIY	817	2013	151	43.0532	77.0798	3560	709	-2041	-1332
KZ	TS.TUYUKSUYSKIY	817	2013	147	43.0521	77.0843	3555	285	-2238	-1953
KZ	TS.TUYUKSUYSKIY	817	2013	153	43.0533	77.0813	3554	618	-1815	-1197
KZ	TS.TUYUKSUYSKIY	817	2013	154	43.0532	77.0823	3552	429	-1878	-1449
KZ	TS.TUYUKSUYSKIY	817	2013	155	43.0532	77.0829	3550	239	-2003	-1764
KZ	TS.TUYUKSUYSKIY	817	2013	156	43.0530	77.0835	3547	254	-2090	-1836
KZ	TS.TUYUKSUYSKIY	817	2013	157	43.0529	77.0840	3544	384	-2346	-1962
KZ	TS.TUYUKSUYSKIY	817	2013	158	43.0528	77.0849	3538	682	-2068	-1386
KZ	TS.TUYUKSUYSKIY	817	2013	161	43.0545	77.0809	3528	629	-2645	-2016
KZ	TS.TUYUKSUYSKIY	817	2013	162	43.0545	77.0820	3520	467	-2789	-2322
KZ	TS.TUYUKSUYSKIY	817	2013	163	43.0545	77.0826	3520	448	-2347	-1899
KZ	TS.TUYUKSUYSKIY	817	2013	164	43.0545	77.0833	3519	222	-2436	-2214
KZ	TS.TUYUKSUYSKIY	817	2013	165	43.0543	77.0842	3517	173	-2405	-2232
KZ	TS.TUYUKSUYSKIY	817	2013	167	43.0538	77.0859	3517	642	-2136	-1494
KZ	TS.TUYUKSUYSKIY	817	2013	166	43.0541	77.0851	3515	336	-2874	-2538
KZ	TS.TUYUKSUYSKIY	817	2013	171	43.0557	77.0831	3492	496	-2764	-2268
KZ	TS.TUYUKSUYSKIY	817	2013	172	43.0557	77.0835	3491	486	-2601	-2115
KZ	TS.TUYUKSUYSKIY	817	2013	174	43.0556	77.0847	3484	331	-2941	-2610
NO	HELLSTUGUBREEN	300	2011	46	61.5504	8.4507	1953	1027	-2131	-1104
NO	HELLSTUGUBREEN	300	2011	26	61.5671	8.4465	1702	672	-4317	-3645
NO	HELLSTUGUBREEN	300	2011	13	61.5733	8.4438	1583	335	-5348	-5013
NP	MERA	3996	2011	A4_10			6331			976
NP	MERA	3996	2011	A31_10			5788			781
NP	MERA	3996	2011	A3_10			5788			690
NP	MERA	3996	2011	A32-10			5767			701
NP	MERA	3996	2011	A2_10			5673			576
NP	MERA	3996	2011	XXIV-2007			5421			18
NP	MERA	3996	2011	24_09			5409			261
NP	MERA	3996	2011	AWS			5364			-617
NP	MERA	3996	2011	34_10			5361			-467
NP	MERA	3996	2011	XIV-2008			5355			531
NP	MERA	3996	2011	33_10			5353			-437
NP	MERA	3996	2011	32_09			5345			90
NP	MERA	3996	2011	XVII-2007			5342			19
NP	MERA	3996	2011	XVIII-2007			5322			171
NP	MERA	3996	2011	32_10			5309			-475
NP	MERA	3996	2011	31_10			5276			-655
NP	MERA	3996	2011	XI_10			5242			-567
NP	MERA	3996	2011	XX-2007			5204			-435
NP	MERA	3996	2011	X_10			5116			-1482
NP	MERA	3996	2011	X-2007			5098			-1488
NP	MERA	3996	2011	22_09			5081			-1666
NP	MERA	3996	2011	IX_10			5006			-1853
NP	MERA	3996	2012	A4-11			6331			377
NP	MERA	3996	2012	A31-11			5788			-198
NP	MERA	3996	2012	A2-11			5668			-740
NP	MERA	3996	2012	24_09			5409			-1254
NP	MERA	3996	2012	XXXIV-2007			5364			-2249
NP	MERA	3996	2012	34_10			5361			-2316
NP	MERA	3996	2012	43_08			5359			-2321
NP	MERA	3996	2012	33_10			5353			-2167
NP	MERA	3996	2012	32_09			5345			-1196
NP	MERA	3996	2012	XVII-2007			5342			-1144
NP	MERA	3996	2012	XVIII-2007			5322			-1287
NP	MERA	3996	2012	32_10			5309			-2355

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
NP	MERA	3996	2012	XXXII-2007			5304			-2178
NP	MERA	3996	2012	31_10			5276			-3246
NP	MERA	3996	2012	XX-2007			5204			-1615
NP	MERA	3996	2012	X_10			5116			-2436
NP	MERA	3996	2012	IX_10			5006			-3045
NZ	ROLLESTON	1538	2011	PIT	-42.89	171.527	1836	2899	-2781	118
NZ	ROLLESTON	1538	2011	TL	-42.889	171.527	1835	3505	-3655	-150
NZ	ROLLESTON	1538	2011	TR	-42.891	171.525	1833	2571	-4164	-1593
NZ	ROLLESTON	1538	2011	TM	-42.89	171.526	1828	2899	-3790	-891
NZ	ROLLESTON	1538	2011	B	-42.891	171.527	1798	1987	-5141	-3154
NZ	ROLLESTON	1538	2012	top	-42.8882	171.5269	1838	3172	-2809	363
NZ	ROLLESTON	1538	2012	mid-top	-42.8889	171.527	1820	2858	-2932	-74
NZ	ROLLESTON	1538	2012	mid-bottom	-42.8895	171.5275	1802	1801	-3920	-2119
NZ	ROLLESTON	1538	2012	bottom	-42.8896	171.5286	1769	785	-4756	-3971
NZ	ROLLESTON	1538	2013	top	-42.8887	171.5267	1842	3238	-2306	932
NZ	ROLLESTON	1538	2013	mid-top	-42.8895	171.527	1804	2920	-2727	193
NZ	ROLLESTON	1538	2013	mid-bottom	-42.8899	171.5273	1793	2425	-3718	-1293
NZ	ROLLESTON	1538	2013	bottom	-42.8901	171.5275	1777	2313	-3954	-1641
SJ	WALDEMARBREEN	2307	2011	18			435			-245
SJ	WALDEMARBREEN	2307	2011	17			396			-767
SJ	WALDEMARBREEN	2307	2011	16			372			-1284
SJ	WALDEMARBREEN	2307	2011	15			359			-1071
SJ	WALDEMARBREEN	2307	2011	14			328			-1200
SJ	WALDEMARBREEN	2307	2011	13			305			-1383
SJ	WALDEMARBREEN	2307	2011	12			280			-1918
SJ	WALDEMARBREEN	2307	2011	11			279			-1449
SJ	WALDEMARBREEN	2307	2011	10			269			-1638
SJ	WALDEMARBREEN	2307	2011	9			255			-1584
SJ	WALDEMARBREEN	2307	2011	8			245			-2052
SJ	WALDEMARBREEN	2307	2011	7			236			-1332
SJ	WALDEMARBREEN	2307	2011	6			222			-1683
SJ	WALDEMARBREEN	2307	2011	5			213			-1152
SJ	WALDEMARBREEN	2307	2011	4			174			-2016
SJ	WALDEMARBREEN	2307	2011	3			172			-2214
SJ	WALDEMARBREEN	2307	2011	2			152			-1989
SJ	WALDEMARBREEN	2307	2011	1			146			-1890
SJ	WALDEMARBREEN	2307	2012	18			430			95
SJ	WALDEMARBREEN	2307	2012	17			390			-342
SJ	WALDEMARBREEN	2307	2012	16			367			-684
SJ	WALDEMARBREEN	2307	2012	15			349			-288
SJ	WALDEMARBREEN	2307	2012	14			323			-612
SJ	WALDEMARBREEN	2307	2012	13			300			-985
SJ	WALDEMARBREEN	2307	2012	12			279			-1386
SJ	WALDEMARBREEN	2307	2012	11			265			-954
SJ	WALDEMARBREEN	2307	2012	10			244			-1584
SJ	WALDEMARBREEN	2307	2012	9			237			-1314
SJ	WALDEMARBREEN	2307	2012	8			233			-1467
SJ	WALDEMARBREEN	2307	2012	7			215			-1341
SJ	WALDEMARBREEN	2307	2012	6			206			-1152
SJ	WALDEMARBREEN	2307	2012	5			180			-1836
SJ	WALDEMARBREEN	2307	2012	4			167			-1719
SJ	WALDEMARBREEN	2307	2012	3			160			-2124
SJ	WALDEMARBREEN	2307	2012	2			143			-1998
SJ	WALDEMARBREEN	2307	2012	1			136			-1692
SJ	WALDEMARBREEN	2307	2013	11			429			-846
SJ	WALDEMARBREEN	2307	2013	10			389			-1395
SJ	WALDEMARBREEN	2307	2013	9			348			-1485
SJ	WALDEMARBREEN	2307	2013	8			271			-1854
SJ	WALDEMARBREEN	2307	2013	7			237			-2061
SJ	WALDEMARBREEN	2307	2013	6			213			-1998
SJ	WALDEMARBREEN	2307	2013	5			206			-1872
SJ	WALDEMARBREEN	2307	2013	4			178			-2520
SJ	WALDEMARBREEN	2307	2013	3			165			-2466
SJ	WALDEMARBREEN	2307	2013	2			160			-2340
SJ	WALDEMARBREEN	2307	2013	1			143			-2376
US	EMMONS	203	2011	1			3118	3100	-1580	1510
US	EMMONS	203	2011	2			3110	3020	-2250	780
US	EMMONS	203	2011	1X			2810	3170	-1390	1790
US	EMMONS	203	2011	3			1970	2320	-4830	-2510
US	EMMONS	203	2011	4A			1705	790	-2350	-1570
US	EMMONS	203	2011	4			1700	1190	-5750	-4560
US	EMMONS	203	2011	5			1580	850	-2260	-1400
US	EMMONS	203	2012	1			3118	2240	-1920	310
US	EMMONS	203	2012	2			2810	2760	-2180	590
US	EMMONS	203	2012	3			1970	2200	-6160	-3950
US	EMMONS	203	2012	4A			1705	680	-1480	-800
US	EMMONS	203	2012	4			1700	1560	-7980	-6420
US	EMMONS	203	2012	5			1580	1490	-2730	-1250
US	EMMONS	203	2013	1			3118	2640	-2910	-270
US	EMMONS	203	2013	2			2810	2680	-3980	-1290
US	EMMONS	203	2013	3			1970	1860	-4390	-2530
US	EMMONS	203	2013	4A			1705	980	-3160	-2180
US	EMMONS	203	2013	4			1700	1390	-6220	-4830
US	EMMONS	203	2013	5			1580	1440	-4040	-2600
US	GULKANA	90	2011	400	63.2857	-145.4799	2025			80
US	GULKANA	90	2011	300	63.2849	-145.385	1833			-370
US	GULKANA	90	2011	200	63.2855	-145.4103	1672			-2050
US	GULKANA	90	2011	150	63.2711	-145.4168	1538			-3700
US	GULKANA	90	2011	100	63.2591	-145.4286	1319			-4840
US	GULKANA	90	2012	D	63.2849	-145.385	1827	1160	-1010	150
US	GULKANA	90	2012	B	63.2855	-145.4103	1672	970	-1990	-1020
US	GULKANA	90	2012	A	63.2591	-145.4286	1337	500	-4370	-3870
US	GULKANA	90	2013	D	63.2849	-145.385	1854	1330	-1200	130
US	GULKANA	90	2013	B	63.2855	-145.4103	1693	1030	-2820	-1790
US	GULKANA	90	2013	A	63.2591	-145.4286	1351	380	-6280	-5900
US	LEMON CREEK	3334	2011	5			1225			600

PU	GLACIER_NAME	WGMS_ID	YEAR	POINT_ID	LAT	LON	ELEV	BW	BS	BA
US	LEMON CREEK	3334	2011	4			1200			600
US	LEMON CREEK	3334	2011	3			1175			500
US	LEMON CREEK	3334	2011	2			1100			0
US	NISQUALLY	201	2011	1			3382	3480	-1950	1530
US	NISQUALLY	201	2011	2			2960	3040	-2660	380
US	NISQUALLY	201	2011	3			2175	3550	-4710	-1160
US	NISQUALLY	201	2011	4			1890	3760	-4570	-800
US	NISQUALLY	201	2011	4A			1870	4010	-3640	370
US	NISQUALLY	201	2011	5			1778	2640	-4540	-1890
US	NISQUALLY	201	2012	1			3382	2640	-2300	340
US	NISQUALLY	201	2012	2			2960	2920	-2860	60
US	NISQUALLY	201	2012	3			2175	3430	-4520	-1100
US	NISQUALLY	201	2012	4			1890	3310	-6190	-2890
US	NISQUALLY	201	2012	4A			1870	2880	-2990	-110
US	NISQUALLY	201	2012	5			1778	2140	-3360	-1220
US	NISQUALLY	201	2013	1			3382	2490	-3340	-850
US	NISQUALLY	201	2013	2			2960	3130	-4430	-1300
US	NISQUALLY	201	2013	3			2175	3210	-6090	-2880
US	NISQUALLY	201	2013	4			1890	3370	-7510	-4140
US	NISQUALLY	201	2013	4A			1870	4350	-3700	640
US	NISQUALLY	201	2013	5			1778	2350	-4070	-1720
US	NOISY CREEK	1666	2011	2			1830	4780	-3210	1570
US	NOISY CREEK	1666	2011	1			1813	4550	-3080	1480
US	NOISY CREEK	1666	2011	4			1732	3390	-2710	680
US	NOISY CREEK	1666	2011	3			1722	3620	-2610	1020
US	NOISY CREEK	1666	2011	5			1690	3480	-2850	640
US	NOISY CREEK	1666	2012	1			1808	4060	-3680	380
US	NOISY CREEK	1666	2012	2			1806	4400	-3480	920
US	NOISY CREEK	1666	2012	3			1772	4010	-3220	800
US	NOISY CREEK	1666	2012	4			1740	3940	-3410	530
US	NOISY CREEK	1666	2012	5			1704	3880	-3590	290
US	NOISY CREEK	1666	2013	2			1820	3630	-3940	-310
US	NOISY CREEK	1666	2013	1			1818	3100	-3860	-760
US	NOISY CREEK	1666	2013	3			1772	2910	-3930	-1020
US	NOISY CREEK	1666	2013	4			1740	2830	-3880	-1050
US	NOISY CREEK	1666	2013	5			1704	2790	-3570	-770
US	NORTH KLAWATTI	1664	2011	1			2313	3690	-2430	1270
US	NORTH KLAWATTI	1664	2011	2			2196	3770	-2700	1070
US	NORTH KLAWATTI	1664	2011	3			2080	4030	-2780	1250
US	NORTH KLAWATTI	1664	2011	4			1916	2960	-3180	-230
US	NORTH KLAWATTI	1664	2011	5			1826	2520	-4120	-1590
US	NORTH KLAWATTI	1664	2012	1			2312	4120	-2740	1380
US	NORTH KLAWATTI	1664	2012	2			2196	4090	-3030	1060
US	NORTH KLAWATTI	1664	2012	3			2080	4400	-3080	1320
US	NORTH KLAWATTI	1664	2012	4			1916	3310	-5370	-2060
US	NORTH KLAWATTI	1664	2012	5			1828	3090	-5750	-2660
US	NORTH KLAWATTI	1664	2013	1			2312	3120	-1920	1200
US	NORTH KLAWATTI	1664	2013	2			2196	3030	-2150	890
US	NORTH KLAWATTI	1664	2013	3			2080	3130	-2510	620
US	NORTH KLAWATTI	1664	2013	4			1916	2530	-5580	-3050
US	NORTH KLAWATTI	1664	2013	5			1826	1910	-6850	-4940
US	SANDALEE	1667	2011	1			2254	3130	-2360	850
US	SANDALEE	1667	2011	2			2178	3060	-2420	1270
US	SANDALEE	1667	2011	3			2084	2800	-3130	190
US	SANDALEE	1667	2011	4			1996	4300	-3100	2260
US	SANDALEE	1667	2012	1			2254	3130	-2360	770
US	SANDALEE	1667	2012	2			2178	3060	-2420	640
US	SANDALEE	1667	2012	3			2066	2800	-3130	-330
US	SANDALEE	1667	2012	4			1996	4300	-3100	1200
US	SANDALEE	1667	2013	1			2254	2640	-2830	-190
US	SANDALEE	1667	2013	2			2178	2920	-2930	-10
US	SANDALEE	1667	2013	3			2066	2750	-3540	-790
US	SANDALEE	1667	2013	4			1966	3360	-3770	-410
US	SILVER	1665	2011	1			2538	2470	-1390	1070
US	SILVER	1665	2011	2			2422	2680	-1810	870
US	SILVER	1665	2011	3			2288	2280	-1740	530
US	SILVER	1665	2011	4			2198	2090	-1690	410
US	SILVER	1665	2012	1			2538	3150	-1870	1280
US	SILVER	1665	2012	2			2422	2720	-2300	420
US	SILVER	1665	2012	3			2288	3980	-2400	1580
US	SILVER	1665	2012	4			2198	1860	-3220	-1360
US	SILVER	1665	2013	1			2538	3710	-2480	1230
US	SILVER	1665	2013	2			2402	2800	-3090	-280
US	SILVER	1665	2013	3			2288	3240	-2900	340
US	SILVER	1665	2013	4			2198	1890	-4560	-2660
US	WOLVERINE	94	2011	400	60.4250	-148.9371	1367			960
US	WOLVERINE	94	2011	300	60.4197	-148.9207	1283			0
US	WOLVERINE	94	2011	200	60.4042	-148.9067	1053			-2090
US	WOLVERINE	94	2011	100	60.3805	-148.9183	623			-6310
US	WOLVERINE	94	2012	C	60.4197	-148.9207	1301	3950	-1210	2740
US	WOLVERINE	94	2012	B	60.4042	-148.9067	1070	1840	-1800	40
US	WOLVERINE	94	2012	AU	60.3805	-148.9183	636	1170	-5360	-4190
US	WOLVERINE	94	2013	C	60.4197	-148.9207	1286	2790	-2580	210
US	WOLVERINE	94	2013	B	60.4042	-148.9067	1056	1340	-3730	-2390
US	WOLVERINE	94	2013	AU	60.3805	-148.9183	623	-70	-5910	-5980

APPENDIX - Table 6

CHANGES IN AREA, VOLUME AND THICKNESS FROM GEODETIC SURVEYS 2011–2013

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
FROM	Date of the first geodetic survey, in the format YYYYMMDD*
TO	Date of the second geodetic survey, in the format YYYYMMDD*
AREA	Glacier area (in km^2) at the data of the second geodetic survey
AREA CHG	Change in area between the surveys in 1,000 square metres
THICKNESS CHG	Change in thickness between the surveys in millimetres
VOLUME CHG	Change in volume between the surveys in 1,000 cubic metres
INVESTIGATORS (SPONS_AGENCY)	Names of the investigators and their sponsoring agencies (cf. Section 9)

PU	NAME	WGMS_ID	FROM	TO	AREA	AREA_CHG	THICKNESS_CHG	VOLUME_CHG	Investigators_(SPONS_AGENCY)
AQ	BAHIA DEL DIABLO	2665	20010399	20110399	12.9000		-2550		Marinsek S. (IAA-DG), Ermolin E. (IAA-DG)
BO	CHARQUINI SUR	2667	20100901	20110910	0.3359	0	-6802		GREATICE Team
BO	CHARQUINI SUR	2667	20110910	20120920	0.3097	0	1396		GREATICE Team
BO	ZONGO	1503	20100901	20110910	1.9038	0	-5028		GREATICE Team
BO	ZONGO	1503	20110910	20120921	1.8976	0	-7633		GREATICE Team
IS	KOTARJOEKULL	3906	18919999	20119999	11.5			-400000	Guðmundsson S. (IES), Hannesdóttir (IES), Björnsson H. (IES)
IT	CALDERONE	1107	20100918	20110922	3.60E-2	0		-30	Pecci M. (CGI), Barbolla A. (IAC), Armiento F. (IAC), D'Aquila P. (CNSAS), Cappelletti D. (IAC), Grilli A. (CNSAS)
IT	CALDERONE	1107	20110922	20120922	3.60E-2	0	-1563	-50	
IT	CALDERONE	1107	20120922	20130914	3.60E-2	0	486	6	Pecci M. (CGI), Pecci M. (IAC), D'Aquila P. (CNSAS)
IT	SURETTA MERID.	2488	20090920	20111001			-2017		Villa F. (SGL), Ruvo L. (SGL), Scotti R. (SGL)
IT	SURETTA MERID.	2488	20111001	20120922			-1538		Villa F. (SGL), Ruvo L. (SGL), Scotti R. (SGL)
KG	AK-SAY	4520	19999999	20129999			-3300		Bolch T. (GIUZ)
KG	AYDGYNE	4517	19999999	20129999			-8000		Bolch T. (GIUZ)
KG	GOLUBIN	753	19999999	20129999			-2300		Bolch T. (GIUZ)
KG	TOPKARAGAY	4519	19999999	20129999			-7200		Bolch T. (GIUZ)
KG	TUYUK	4518	19999999	20129999			-5500		Bolch T. (GIUZ)
KG	UCHITEL	4521	19999999	20129999			-8200		Bolch T. (GIUZ)
NP	YALA	912	20000299	20120115	1.6100	-17	-10490		Joshi S. (ICIMOD)