

2.11 Monthly Regional Radiative Fluxes and Clouds (AVG)

The monthly Regional Radiative Fluxes and Clouds (AVG) product contains monthly and monthly 3-hourly averages of the Synoptic Radiative Fluxes and Clouds (SYN) product. This product is the CERES equivalent of the monthly regional averages in the ERBE ES-4 product of the CERES untuned and tuned radiative transfer modeled fluxes. This product is written in HDF_EOS and contains meta data as well as gridded science data.

The AVG contains the following apriori and observed input:

- Regional data
- Cloud category properties for four (low, lower middle, upper middle and high) cloud layers
- Observed CERES TOA clear-sky and all-sky fluxes
- MODIS based spectral aerosol optical depths

The AVG contains the following constrained (tuned) vertical flux profiles for both clear-sky and total-sky conditions evaluated at the TOA, 70mb, 200mb, 500mb, and surface:

- Longwave, Shortwave, and Window channels upward and downward.

The constrained (tuned) and initial (untuned) profiles for the following are included for pristine (clear-sky no-aerosol), clear-sky, total-sky-no-aerosol, and total-sky conditions:

- Longwave upward at the surface and TOA.
- Longwave downward at the surface.
- Shortwave upward at the surface and TOA.
- Shortwave downward at the surface.
- Window channel upward at the surface and TOA.
- Window channel downward at the surface.

The adjustments to the radiative transfer model input parameters between the initial and the constrained (adjusted) passes are also contained on the AVG. These parameters include:

- Surface albedo and skin temperature
- Total column precipitable water, upper tropospheric relative humidity, and column ozone
- Aerosol optical depth
- Cloud optical depth, fractional area, and effective temperature

The AVG contains the direct and diffuse shortwave surface fluxes for total-sky, clear-sky, pristine and actinic conditions. The AVG also contains surface UVA and UVB downwelling and direct diffuse ratios for total-sky, clear-sky, pristine, and total-sky-no-aerosol conditions.

A complete listing of metadata and science parameters for this data product can be found in [Table 2.11-1](#) and [Table 2.11-3](#).

Level: 3

Frequency: 1/Month

Portion of Atmosphere Covered: Surface to TOA

Time Interval Covered:

File: 1 Month

Record: 1 Month

Portion of Globe Covered:

File: Entire Global

Record: 1.0-Deg Regions

Product Version:

TRMM: N/A

Terra: Beta5, Beta6, Edition2C, Edition2F

Aqua: Beta6, Edition2B, Edition2C

AVG Metadata

The types of AVG metadata are summarized in [Table 2.11-1](#) and contain information which need only be recorded once per product. The CERES metadata are listed in [Appendix B](#).

Table 2.11-1. AVG Metadata Summary

HDF Name	Description Table	Records	Number of Fields
CERES Baseline Header Metadata	Table B-1	1	36
CERES_metadata gridded data	Table B-2	1	14

Table 2.11-2. List of the Vgroups contained in 1.0 Degree Regional Vgroups

Vgroup Number	Vgroup Name	Monthly 3-Hourly Averages / Monthly (Hour) Averages
1	Monthly Hourly Averages	See Table 2.11-3
2	Monthly Averages	See Table 2.11-3

Table 2.11-3. List of the Vgroups contained in the Monthly 3-Hourly Averages and Monthly Averages Vgroups in AVG

Vgroup Number	Vgroup Name	Monthly 3-Hourly Averages / Monthly (Hour) Averages
1	Time and Position	See Table 2.11-5(a) & (b)
2	Observed TOA Fluxes	See Table 2.11-6(a) & (b)
3	Cloud Layer - High	See Table 2.11-7(a) & (b)
4	Cloud Layer - UpperMid	See Table 2.11-7(a) & (b)
5	Cloud Layer - LowerMid	See Table 2.11-7(a) & (b)
6	Cloud Layer - Low	See Table 2.11-7(a) & (b)
7	Stowe-Ignatov Aerosol Optical Depth	See Table 2.11-8(a) & (b)
8	MODIS Aerosol Optical Depth	See Table 2.11-9(a) & (b)
9	Tuned Pristine Fluxes	See Table 2.11-10(a) & (b)
10	Tuned ClearSky Flux Profiles	See Table 2.11-11(a) & (b)
11	Tuned TotalSky-NoAerosol Fluxes	See Table 2.11-12(a) & (b)
12	Tuned TotalSky Flux Profiles	See Table 2.11-13(a) & (b)
13	Untuned Pristine Fluxes	See Table 2.11-14(a) & (b)
14	Untuned ClearSky Fluxes	See Table 2.11-15(a) & (b)
15	Untuned TotalSky-NoAerosol Fluxes	See Table 2.11-16(a) & (b)

Table 2.11-3. List of the Vgroups contained in the Monthly 3-Hourly Averages and Monthly Averages Vgroups in AVG

Vgroup Number	Vgroup Name	Monthly 3-Hourly Averages / Monthly (Hour) Averages
16	Untuned TotalSky Fluxes	See Table 2.11-17(a) & (b)
17	Satellite Emulated WN TOA Fluxes	See Table 2.11-18(a) & (b)
18	TOA Flux Error	See Table 2.11-19(a) & (b)
19	Number of Hourboxes	See Table 2.11-20(a) & (b)
20	Constraintment Adjustments	See Table 2.11-21(a) & (b)
21	Surface SW Direct/Diffuse Fluxes	See Table 2.11-22(a) & (b)
22	UVA - UVB Fluxes	See Table 2.11-23(a) & (b)
23	PAR Fluxes	See Table 2.11-24(a) & (b)
24	Pristine-Sky SW MultiStream Correction	See Table 2.11-25(a) & (b)

AVG Science Data

The Scientific Data Sets (SDS) are divided into tables which map to Vgroups of the same name. All of the AVG science data are organized into the HDF-EOS Grid data type, which is shown in [Table 2.11-5\(a\)](#) and (b) below. All parameter (a) tables contain a list of the gridded parameters, which includes the field number, the field name, the data type, the units, the range, and the number of elements within each field. The No. of Elements or Dimensions are defined in the first set of tables. All parameter (b) tables contain the list of SDS indices, which are grouped into regional monthly 3-hourly and regional monthly means. The first 2 dimensions Nlat and Nlon corresponds to the CERES region index, the next dimension is Ngmt and refers to the time index, the last dimension is Ns and contains the mean and the standard deviation (temporal). On a few parameters, the last dimension is Nlev and defines the atmospheric profile levels. This ordering is used by the C programming language and most HDF viewers, such as IDL. In FORTRAN, the dimensions are reversed such that the number of regions becomes the last dimension and the first dimension is the number of parameters in the SDS.

Table 2.11-4(a). Nlat, Nlon dimensions that define the CERES equal angle 1° latitude by longitude grid

Dimension	No on indices	Definition
Nlat	180	Index #1 is defined at 89.5°N and #180 is at 89.5°S
Nlon	360	Index #1 is defined at 179.5°W and #360 is at 179.5°E

Table 2.11-4(b). Ngmt dimension that defines the 8 Monthly 3-hourly GMT time increments.
 For the Monthly Ngmt only has one index

Ngmt index	Monthly 3-hourly	Monthly
1	00-03 GMT	00-24 GMT Monthly
2	03-06 GMT	-
3	06-09 GMT	-
4	09-12 GMT	-
5	12-15 GMT	-
6	15-18 GMT	-
7	18-21 GMT	-
8	21-24 GMT	-

Table 2.11-4(c). Ns dimension that define the parameter statistics for individual grid cell

Ns	Statistic
1	Mean
2	Standard deviation

Table 2.11-4(d). Nlev dimension that define the atmospheric profile levels

Nlev	Atmospheric level
1	TOA (30 km)
2	70mb
3	200mb
4	500mb
5	Surface

Table 2.11-4(e). IGBP Surface types used in Table 2.11-5. For a geographical distribution of the scene types see http://snowdog.larc.nasa.gov/surf/pages/sce_type.html

Nsfc	Surface Type
1	Evergreen Needle Forest
2	Evergreen Broadleaf Forest
3	Deciduous Needle Forest
4	Deciduous Broadleaf Forest
5	Mixed Forest
6	Closed Shrubs
7	Open Shrubs
8	Woody Savannas
9	Savannas
10	Grassland
11	Wetlands
12	Crops
13	Urban
14	Crop/Mosaic
15	Permanent Snow/Ice
16	Barren Desert
17	Water
18	Tundra
19	Land Snow
20	Sea Ice

Table 2.11-5(a). Table of Time and Position. Nsfc dimension is defined in [Table 2.11-4\(e\)](#)

SDS Name	Data Type	Units	Range	No. Of Elements
Region Number	32-bit real	N/A	1 .. 64800	Nlon*Nlat
Colatitude	32-bit real	Degree	0 .. 180	Nlon*Nlat
Longitude	32-bit real	Degree	0 .. 360	Nlon*Nlat
Surface altitude above sea level	32-bit real	m	-1000 .. 10000	Nlon*Nlat
Surface type percent coverage	32-bit real	Percent	0 .. 100	Nlon*Nlat*Nsfc

Table 2.11-5(b). SDS Index of Time and Position

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Region Number	0	223
Colatitude	1	224
Longitude	2	225
Surface altitude above sea level	3	226
Surface type percent coverage	4	227

Table 2.11-6(a). Table of Observed TOA Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
SW TOA Total-Sky	32-bit real	$W m^{-2}$	0 .. 1400	$Nlon * Nlat * Ngmt * Ns$
LW TOA Total-Sky	32-bit real	$W m^{-2}$	0 .. 500	$Nlon * Nlat * Ngmt * Ns$
WN TOA Total-Sky	32-bit real	$W m^{-2} \mu m^{-1}$	2 .. 50	$Nlon * Nlat * Ngmt * Ns$
SW TOA Clear-Sky	32-bit real	$W m^{-2}$	0 .. 1400	$Nlon * Nlat * Ngmt * Ns$
LW TOA Clear-Sky	32-bit real	$W m^{-2}$	0 .. 500	$Nlon * Nlat * Ngmt * Ns$
WN TOA Clear-Sky	32-bit real	$W m^{-2} \mu m^{-1}$	2 .. 50	$Nlon * Nlat * Ngmt * Ns$

Table 2.11-6(b). SDS Index of Observed TOA Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
SW TOA Total-Sky	5	228
LW TOA Total-Sky	6	229
WN TOA Total-Sky	7	230
SW TOA Clear-Sky	8	231
LW TOA Clear-Sky	9	232
WN TOA Clear-Sky	10	233

Table 2.11-7(a). Observed Cloud Properties for Four Cloud Layers

SDS Name	Data Type	Units	Range	No. Of Elements
Area Fraction Percentage	32-bit real	Percent	0 .. 100	Nlon*Nlat*Ngmt*Ns
Vis. Opt. Depth (linear)	32-bit real	N/A	0 .. 400	Nlon*Nlat*Ngmt*Ns
Vis. Opt. Depth (log)	32-bit real	N/A	-6 .. 6	Nlon*Nlat*Ngmt*Ns
Infrared Emissivity	32-bit real	N/A	0 .. 1	Nlon*Nlat*Ngmt*Ns
Liquid Water Path	32-bit real	g m ⁻²	0 .. 10000	Nlon*Nlat*Ngmt*Ns
Ice Water Path	32-bit real	g m ⁻²	0 .. 10000	Nlon*Nlat*Ngmt*Ns
Top Pressure	32-bit real	hPa	0 .. 1100	Nlon*Nlat*Ngmt*Ns
Effective Pressure	32-bit real	hPa	0 .. 1100	Nlon*Nlat*Ngmt*Ns
Effective Temperature	32-bit real	K	100 .. 350	Nlon*Nlat*Ngmt*Ns
Effective Height	32-bit real	km	0 .. 20	Nlon*Nlat*Ngmt*Ns
Bottom Pressure	32-bit real	hPa	0 .. 1100	Nlon*Nlat*Ngmt*Ns
Liquid Particle Radius	32-bit real	μm	0 .. 40	Nlon*Nlat*Ngmt*Ns
Ice Particle Diameter	32-bit real	μm	0 .. 300	Nlon*Nlat*Ngmt*Ns
Particle Phase	32-bit real	N/A	1 .. 2	Nlon*Nlat*Ngmt*Ns
Vertical Aspect Ratio	32-bit real	N/A	0 .. 20	Nlon*Nlat*Ngmt*Ns

Table 2.11-7(b). SDS Index Observed Cloud Properties for four layers. [Table 2.11-7\(a\)](#) defines the 4 cloud layers

SDS Name	Regional Monthly 3-Hourly				Regional Monthly			
Area Fraction Percentage	11	26	41	56	234	249	264	279
Vis. Opt. Depth (linear)	12	27	42	57	235	250	265	280
Vis. Opt. Depth (log)	13	28	43	58	236	251	266	281
Infrared Emissivity	14	29	44	59	237	252	267	282
Liquid Water Path	15	30	45	60	238	253	268	283
Ice Water Path	16	31	46	61	239	254	269	284
Top Pressure	17	32	47	62	240	255	270	285
Effective Pressure	18	33	48	63	241	256	271	286
Effective Temperature	19	34	49	64	242	257	272	287
Effective Height	20	35	50	65	243	258	273	288
Bottom Pressure	21	36	51	66	244	259	274	289
Liquid Particle Radius	22	37	52	67	245	260	275	290
Ice Particle Diameter	23	38	53	68	246	261	276	291
Particle Phase	24	39	54	69	247	262	277	292
Vertical Aspect Ratio	25	40	55	70	248	263	278	293

Color Red - High Cloud
 Color Green - Uppermid Cloud
 Color Blue - Lowermid Cloud
 Color Black - Low Cloud

Table 2.11-7(c). Table of Cloud Layers

Cloud Layer Index	Cloud Layer	Pressure level (mb)
1	High	50-300
2	Upper Mid	300-500
3	Lower Mid	500-700
4	Low	700-Surface

Table 2.11-8(a). Stowe-Ignatov Aerosol Optical Depth

SDS Name	Data Type	Units	Range	No. Of Elements
Aerosol visible optical depth - 0.63 μm	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol visible optical depth - 1.6 μm	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns

Table 2.11-8(b). SDS Index of Stowe-Ignatov Aerosol Optical Depth

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Aerosol visible optical depth - 0.63 μm	71	294
Aerosol visible optical depth - 1.6 μm	72	295

Table 2.11-9(a). MODIS Aerosol Optical Depth

SDS Name	Data Type	Units	Range	No. Of Elements
Initial Aerosol Optical Depth	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.47 μm in Land	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.55 μm in Land	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.66 μm in Land	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.47 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.55 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.66 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 0.87 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 1.24 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 1.64 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol Opt. Depth at 2.13 μm in Ocean	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns

Table 2.11-9(b). SDS Index of MODIS Aerosol Optical Depth

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Initial Aerosol Optical Depth	73	296
Aerosol Opt. Depth at 0.47 μm in Land	74	297
Aerosol Opt. Depth at 0.55 μm in Land	75	298
Aerosol Opt. Depth at 0.66 μm in Land	76	299
Aerosol Opt. Depth at 0.47 μm in Ocean	77	300
Aerosol Opt. Depth at 0.55 μm in Ocean	78	301
Aerosol Opt. Depth at 0.66 μm in Ocean	79	302
Aerosol Opt. Depth at 0.87 μm in Ocean	80	303
Aerosol Opt. Depth at 1.24 μm in Ocean	81	304
Aerosol Opt. Depth at 1.64 μm in Ocean	82	305
Aerosol Opt. Depth at 2.13 μm in Ocean	83	306

Table 2.11-10(a). Tuned Pristine Fluxes

SDS Name	DataType	Units	Range	No. Of Elements
Tuned Pristine SW Surface Up	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine SW Surface Down	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine SW TOA Up	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine LW Surface Up	32-bit real	W m^{-2}	0 .. 850	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine LW Surface Down	32-bit real	W m^{-2}	0 .. 700	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine LW TOA Up	32-bit real	W m^{-2}	0 .. 850	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine WN Surface Up	32-bit real	W m^{-2}	0 .. 370	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine WN Surface Down	32-bit real	W m^{-2}	0 .. 370	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Tuned Pristine WN TOA Up	32-bit real	W m^{-2}	0 .. 370	$N_{lon} * N_{lat} * N_{gmt} * N_s$

Table 2.11-10(b). SDS Index of Tuned Pristine Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Tuned Pristine SW Surface Up	84	307
Tuned Pristine SW Surface Down	85	308
Tuned Pristine SW TOA Up	86	309
Tuned Pristine LW Surface Up	87	310
Tuned Pristine LW Surface Down	88	311
Tuned Pristine LW TOA Up	89	312
Tuned Pristine WN Surface Up	90	313
Tuned Pristine WN Surface Down	91	314
Tuned Pristine WN TOA Up	92	315

Table 2.11-11(a). Tuned ClearSky Flux Profiles, [Table 2.11-4\(d\)](#) defines Nlev

SDS Name	DataType	Units	Range	No. Of Elements
Tuned Clear-Sky SW Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Clear-Sky SW Down	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Clear-Sky LW Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Clear-Sky LW Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Clear-Sky WN Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Clear-Sky WN Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns*Nlev

Table 2.11-11(b). SDS Index of Tuned ClearSky Flux Profiles

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Tuned Clear-Sky SW Up	93	316
Tuned Clear-Sky SW Down	94	317
Tuned Clear-Sky LW Up	95	318
Tuned Clear-Sky LW Down	96	319
Tuned Clear-Sky WN Up	97	320
Tuned Clear-Sky WN Down	98	321

Table 2.11-12(a). Tuned TotalSky-NoAerosol Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Tuned Total-Sky-NoAerosol SW Surface Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol SW Surface Down	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol SW TOA Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol LW Surface Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol LW Surface Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol LW TOA Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol WN Surface Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol WN Surface Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Tuned Total-Sky-NoAerosol WN TOA Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns

Table 2.11-12(b). SDS Index of Tuned TotalSky-NoAerosol Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Tuned Total-Sky-NoAerosol SW Surface Up	99	322
Tuned Total-Sky-NoAerosol SW Surface Down	100	323
Tuned Total-Sky-NoAerosol SW TOA Up	101	324
Tuned Total-Sky-NoAerosol LW Surface Up	102	325
Tuned Total-Sky-NoAerosol LW Surface Down	103	326
Tuned Total-Sky-NoAerosol LW TOA Up	104	327
Tuned Total-Sky-NoAerosol WN Surface Up	105	328
Tuned Total-Sky-NoAerosol WN Surface Down	106	329
Tuned Total-Sky-NoAerosol WN TOA Up	107	330

Table 2.11-13(a). Tuned TotalSky Flux Profiles, [Table 2.11-4\(d\)](#) defines Nlev

SDS Name	Data Type	Units	Range	No. Of Elements
Tuned Total-Sky SW Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Total-Sky SW Down	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Total-Sky LW Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Total-Sky LW Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Total-Sky WN Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns*Nlev
Tuned Total-Sky WN Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns*Nlev

Table 2.11-13(b). SDS Index of Tuned TotalSky Flux Profiles

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Tuned Total-Sky SW Up	108	331
Tuned Total-Sky SW Down	109	332
Tuned Total-Sky LW Up	110	333
Tuned Total-Sky LW Down	111	334
Tuned Total-Sky WN Up	112	335
Tuned Total-Sky WN Down	113	336

Table 2.11-14(a). Untuned Pristine Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Untuned Pristine SW Surface Up	32-bit real	W m ⁻²	0 .. 1500	Nlon*Nlat*Ngmt*Ns
Untuned Pristine SW Surface Down	32-bit real	W m ⁻²	0 .. 1500	Nlon*Nlat*Ngmt*Ns
Untuned Pristine SW TOA Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Pristine LW Surface Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Pristine LW Surface Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns
Untuned Pristine LW TOA Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Pristine WN Surface Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Pristine WN Surface Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Pristine WN TOA Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns

Table 2.11-14(b). SDS Index of Untuned Pristine Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Untuned Pristine SW Surface Up	114	337
Untuned Pristine SW Surface Down	115	338
Untuned Pristine SW TOA Up	116	339
Untuned Pristine LW Surface Up	117	340
Untuned Pristine LW Surface Down	118	341
Untuned Pristine LW TOA Up	119	342
Untuned Pristine WN Surface Up	120	343
Untuned Pristine WN Surface Down	121	344
Untuned Pristine WN TOA Up	122	345

Table 2.11-15(a). Untuned ClearSky Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Untuned Clear-Sky SW Surface Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky SW Surface Down	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky SW TOA Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky LW Surface Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky LW Surface Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky LW TOA Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky WN Surface Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky WN Surface Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Clear-Sky WN TOA Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns

Table 2.11-15(b). SDS Index of Untuned ClearSky Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Untuned Clear-Sky SW Surface Up	123	346
Untuned Clear-Sky SW Surface Down	124	347
Untuned Clear-Sky SW TOA Up	125	348
Untuned Clear-Sky LW Surface Up	126	349
Untuned Clear-Sky LW Surface Down	127	350
Untuned Clear-Sky LW TOA Up	128	351
Untuned Clear-Sky WN Surface Up	129	352
Untuned Clear-Sky WN Surface Down	130	353
Untuned Clear-Sky WN TOA Up	131	354

Table 2.11-16(a). Untuned TotalSky-NoAerosol Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Untuned Total-Sky-NoAerosol SW Surface Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol SW Surface Down	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol SW TOA Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol LW Surface Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol LW Surface Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol LW TOA Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol WN Surface Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky-NoAerosol WN Surface Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns

Table 2.11-16(a). Untuned TotalSky-NoAerosol Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Untuned Total-Sky-NoAerosol WN TOA Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns

Table 2.11-16(b). SDS Index of Untuned TotalSky-NoAerosol Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Untuned Total-Sky-NoAerosol SW Surface Up	132	355
Untuned Total-Sky-NoAerosol SW Surface Down	133	356
Untuned Total-Sky-NoAerosol SW TOA Up	134	357
Untuned Total-Sky-NoAerosol LW Surface Up	135	358
Untuned Total-Sky-NoAerosol LW Surface Down	136	359
Untuned Total-Sky-NoAerosol LW TOA Up	137	360
Untuned Total-Sky-NoAerosol WN Surface Up	138	361
Untuned Total-Sky-NoAerosol WN Surface Down	139	362
Untuned Total-Sky-NoAerosol WN TOA Up	140	363

Table 2.11-17(a). Untuned TotalSky Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Untuned Total-Sky SW Surface Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky SW Surface Down	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky SW TOA Up	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky LW Surface Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky LW Surface Down	32-bit real	W m ⁻²	0 .. 700	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky LW TOA Up	32-bit real	W m ⁻²	0 .. 850	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky WN Surface Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky WN Surface Down	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns
Untuned Total-Sky WN TOA Up	32-bit real	W m ⁻²	0 .. 370	Nlon*Nlat*Ngmt*Ns

Table 2.11-17(b). SDS Index of Untuned TotalSky Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Untuned Total-Sky SW Surface Up	141	364
Untuned Total-Sky SW Surface Down	142	365
Untuned Total-Sky SW TOA Up	143	366
Untuned Total-Sky LW Surface Up	144	367
Untuned Total-Sky LW Surface Down	145	368
Untuned Total-Sky LW TOA Up	146	369
Untuned Total-Sky WN Surface Up	147	370
Untuned Total-Sky WN Surface Down	148	371
Untuned Total-Sky WN TOA Up	149	372

Table 2.11-18(a). Satellite Emulated WN TOA Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Untuned Satellite Emulated WN TOA	32-bit real	W m ⁻²	-1400 .. 1400	Nlon*Nlat*Ngmt*Ns
Tuned Satellite Emulated WN TOA	32-bit real	W m ⁻²	-1400 .. 1400	Nlon*Nlat*Ngmt*Ns

Table 2.11-18(b). SDS Index of Satellite Emulated WN TOA Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Untuned Satellite Emulated WN TOA	150	373
Tuned Satellite Emulated WN TOA	151	374

Table 2.11-19(a). TOA Fluxes Error

SDS Name	Data Type	Units	Range	No. Of Elements
Tuned Minus Observed SW TOA	32-bit real	W m ⁻²	-1400 .. 1400	Nlon*Nlat*Ngmt*Ns
Untuned Minus Observed SW TOA	32-bit real	W m ⁻²	-1400 .. 1400	Nlon*Nlat*Ngmt*Ns
Tuned Minus Observed LW TOA	32-bit real	W m ⁻²	-600 .. 600	Nlon*Nlat*Ngmt*Ns
Untuned Minus Observed LW TOA	32-bit real	W m ⁻²	-600 .. 600	Nlon*Nlat*Ngmt*Ns

Table 2.11-19(b). SDS Index of TOA Fluxes Error

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Tuned Minus Observed SW TOA	152	375
Untuned Minus Observed SW TOA	153	376
Tuned Minus Observed LW TOA	154	377
Untuned Minus Observed LW TOA	155	378

Table 2.11-20(a). Number of Hourboxes

SDS Name	Data Type	Units	Range	No. Of Elements
Number of Observed SW	32-bit real	N/A	0 .. 744	Nlon*Nlat*Ngmt
Number of Untuned SW	32-bit real	N/A	0 .. 744	Nlon*Nlat*Ngmt
Number of Tuned SW	32-bit real	N/A	0 .. 744	Nlon*Nlat*Ngmt
Number of Observed LW	32-bit real	N/A	0 .. 744	Nlon*Nlat*Ngmt
Number of Untuned LW	32-bit real	N/A	0 .. 744	Nlon*Nlat*Ngmt
Number of Tuned LW	32-bit real	N/A	0 .. 744	Nlon*Nlat*Ngmt

Table 2.11-20(b). SDS Index of Number of Hourboxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Number of Observed SW	156	379
Number of Untuned SW	157	380
Number of Tuned SW	158	381
Number of Observed LW	159	382
Number of Untuned LW	160	383
Number of Tuned LW	161	384

Table 2.11-21(a). Constraint Adjustments, [Table 2.11-4\(d\)](#) defines Nlev

SDS Name	Data Type	Units	Range	No. Of Elements
Total column precipitable water - initial	32-bit real	cm	0 .. 10	Nlon*Nlat*Ngmt*Ns
Total column precipitable water - adjusted	32-bit real	cm	-10 .. 10	Nlon*Nlat*Ngmt*Ns
Upper tropospheric precipitable water - initial	32-bit real	cm	0 .. 10	Nlon*Nlat*Ngmt*Ns
Upper tropospheric precipitable water - adjusted	32-bit real	cm	0 .. 10	Nlon*Nlat*Ngmt*Ns
Upper tropospheric humidity - initial	32-bit real	N/A	0.0 .. 100.0	Nlon*Nlat*Ngmt*Ns

Table 2.11-21(a). Constraint Adjustments, [Table 2.11-4\(d\)](#) defines Nlev

SDS Name	Data Type	Units	Range	No. Of Elements
Upper tropospheric humidity - adjusted	32-bit real	N/A	0.0 .. 100.0	Nlon*Nlat*Ngmt*Ns
Aerosol optical depth - initial	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Aerosol optical depth - adjusted	32-bit real	N/A	0 .. 5	Nlon*Nlat*Ngmt*Ns
Skin temperature - initial	32-bit real	K	175 .. 375	Nlon*Nlat*Ngmt*Ns
Skin temperature - adjusted	32-bit real	K	175 .. 375	Nlon*Nlat*Ngmt*Ns
Surface pressure	32-bit real	hPa	0 .. 800	Nlon*Nlat*Ngmt*Ns
Column ozone - initial	32-bit real	du	0 .. 800	Nlon*Nlat*Ngmt*Ns
Mean visible optical depth- adjusted	32-bit real	N/A	0 .. 400	Nlon*Nlat*Ngmt*Ns*Nlev
Mean cloud fractional area - adjusted	32-bit real	%	0 .. 100	Nlon*Nlat*Ngmt*Ns*Nlev
Mean cloud effective temperature - adjusted	32-bit real	K	175 .. 375	Nlon*Nlat*Ngmt*Ns*Nlev

Table 2.11-21(b). SDS Index of Constraint Adjustments

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Total column precipitable water - initial	162	385
Total column precipitable water - adjusted	163	386
Upper tropospheric precipitable water - initial	164	387
Upper tropospheric precipitable water - adjusted	165	388
Upper tropospheric humidity - initial	166	389
Upper tropospheric humidity - adjusted	167	390
Aerosol optical depth - initial	168	391
Aerosol optical depth - adjusted	169	392
Skin temperature - initial	170	393
Skin temperature - adjusted	171	394
Surface pressure	172	395
Column ozone - initial	173	396
Mean visible optical depth- adjusted	174	397
Mean cloud fractional area - adjusted	175	398
Mean cloud effective temperature - adjusted	176	399

Table 2.11-22(a). Surface SW Direct/Diffuse Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Total-Sky SW flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Clear-sky SW flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Pristine-Sky SW flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Actinic-Sky SW flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky SW flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Clear-sky SW flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Pristine-Sky SW flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Actinic-Sky SW flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns

Table 2.11-22(b). SDS Index of Surface SW Direct/Diffuse Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Total-Sky SW flux - Diffuse	177	400
Clear-sky SW flux - Diffuse	178	401
Pristine-Sky SW flux - Diffuse	179	402
Actinic-Sky SW flux - Diffuse	180	403
Total-Sky SW flux - Direct	181	404
Clear-sky SW flux - Direct	182	405
Pristine-Sky SW flux - Direct	183	406
Actinic-Sky SW flux - Direct	184	407

Table 2.11-23(a). UVA - UVB Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
TOA Downwelling UVB Flux	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
TOA Downwelling UVA Flux	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Pristine UVB Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Pristine UVB Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Pristine UVA Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Pristine UVA Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Clear-Sky UVB Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Clear-Sky UVB Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns

Table 2.11-23(a). UVA - UVB Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
Clear-Sky UVA Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Clear-Sky UVA Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky-NoAerosol UVB Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky-NoAerosol UVB Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky-NoAerosol UVA Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky-NoAerosol UVA Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky UVB Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky UVB Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky UVA Surface flux - Direct	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky UVA Surface flux - Diffuse	32-bit real	W m ⁻²	0 .. 1400	Nlon*Nlat*Ngmt*Ns
Total-Sky Surface UV Index	32-bit real	N/A	0 .. 30	Nlon*Nlat*Ngmt*Ns
Clear-Sky Surface UV Index	32-bit real	N/A	0 .. 30	Nlon*Nlat*Ngmt*Ns
Pristine Surface UV Index	32-bit real	N/A	0 .. 30	Nlon*Nlat*Ngmt*Ns
Total-Sky-NoAerosol Surface UV- Index	32-bit real	N/A	0 .. 30	Nlon*Nlat*Ngmt*Ns
Total-Sky UVB Surface Up	32-bit real	W m ⁻²	0 .. 5	Nlon*Nlat*Ngmt*Ns
Snow Grain Size	32-bit real	μm	50 .. 2000	Nlon*Nlat*Ngmt*Ns
Match Total Aerosol Optical Depth at 0.55 μm	32-bit real	N/A	0 .. 10	Nlon*Nlat*Ngmt*Ns

Table 2.11-23(b). SDS Index of UVA - UVB Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
TOA Downwelling UVB Flux	185	408
TOA Downwelling UVA Flux	186	409
Pristine UVB Surface flux - Direct	187	410
Pristine UVB Surface flux - Diffuse	188	411
Pristine UVA Surface flux - Direct	189	412
Pristine UVA Surface flux - Diffuse	190	413
Clear-Sky UVB Surface flux - Direct	191	414
Clear-Sky UVB Surface flux - Diffuse	192	415
Clear-Sky UVA Surface flux - Direct	193	416
Clear-Sky UVA Surface flux - Diffuse	194	417
Total-Sky-NoAerosol UVB Surface flux - Direct	195	418
Total-Sky-NoAerosol UVB Surface flux - Diffuse	196	419
Total-Sky-NoAerosol UVA Surface flux - Direct	197	420

Table 2.11-23(b). SDS Index of UVA - UVB Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
Total-Sky-NoAerosol UVA Surface flux - Diffuse	198	421
Total-Sky UVB Surface flux - Direct	199	422
Total-Sky UVB Surface flux - Diffuse	200	423
Total-Sky UVA Surface flux - Direct	201	424
Total-Sky UVA Surface flux - Diffuse	202	425
Total-Sky Surface UV Index	203	426
Clear-Sky Surface UV Index	204	427
Pristine Surface UV Index	205	428
Total-Sky-NoAerosol Surface UV- Index	206	429
Total-Sky UVB Surface Up	207	430
Snow Grain Size	208	431
Match Total Aerosol Optical Depth at 0.55 μm	209	432

Table 2.11-24(a). PAR Fluxes

SDS Name	Data Type	Units	Range	No. Of Elements
TOA Downwelling PAR Flux	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Total-Sky PAR Surface flux - Direct	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Total-Sky PAR Surface flux - Diffuse	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Total-Sky PAR PURV Surface flux - Direct	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Total-Sky PAR PURV Surface flux - Diffuse	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Total-Sky PAR ChlorA Surface flux - Direct	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Total-Sky PAR ChlorA Surface flux - Diffuse	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Clear-Sky PAR Surface flux - Direct	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Clear-Sky PAR Surface Surface flux - Diffuse	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Pristine PAR Surface flux - Direct	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$
Pristine PAR Surface flux - Diffuse	32-bit real	W m^{-2}	0 .. 1400	$N_{lon} * N_{lat} * N_{gmt} * N_s$

Table 2.11-24(b). SDS Index of PAR Fluxes

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
TOA Downwelling PAR Flux	210	433
Total-Sky PAR Surface flux - Direct	211	434
Total-Sky PAR Surface flux - Diffuse	212	435
Total-Sky PAR PURV Surface flux - Direct	213	436
Total-Sky PAR PURV Surface flux - Diffuse	214	437
Total-Sky PAR ChlorA Surface flux - Direct	215	438
Total-Sky PAR ChlorA Surface flux - Diffuse	216	439
Clear-Sky PAR Surface flux - Direct	217	440
Clear-Sky PAR Surface Surface flux - Diffuse	218	441
Pristine PAR Surface flux - Direct	219	442
Pristine PAR Surface flux - Diffuse	220	443

Table 2.11-25(a). Pristine-Sky SW MultiStream Correction

SDS Name	Data Type	Units	Range	No. Of Elements
SW TOA Flux - Up - Pristine-Sky - Corrected	32-bit real	W m ⁻²	0 .. 1000	Nlon*Nlat*Ngmt*Ns
SW Surface Flux - Down- Pristine-Sky - Corrected	32-bit real	W m ⁻²	0 .. 1000	Nlon*Nlat*Ngmt*Ns

Table 2.11-25(b). SDS Index of Pristine-Sky SW MultiStream Correction

SDS Name	Regional Monthly 3-Hourly	Regional Monthly
SW TOA Flux - Up - Pristine-Sky - Corrected	221	444
SW Surface Flux - Down- Pristine-Sky - Corrected	222	445

Total Bits / Record: 151488
Total Bytes / Record: 18936
Total Records / File: 64800
Total Bytes / File: 1,227,052,800
Total MBytes/File: 1227 MB

AVG Revision Record

The product Revision Record contains information pertaining to approved section changes. The table lists the date the Software Configuration Change Request (SCCR) was approved, the Release and Version Number, the SCCR number, a short description of the revision, and the revised sections. The authors are listed on the document cover.

AVG Revision Record

SCCR Approval Date	Release/Version Number	SCCR Number	Description of Revision	Section(s) Affected
N/A	R3V1	N/A	<ul style="list-style-type: none"> • Updated format to comply with standards. 	All
11/15/06	R3V2	639	<ul style="list-style-type: none"> • Updated to change all tables and added SDS Index tables. • The EOSDIS Product Code line was removed from the document. (6/17/2008) 	All Sec. 2.10
02/08/08	R3V3	667	<ul style="list-style-type: none"> • Updated to add three parameters. (08/20/2008) • Changed all of the SDS Index tables. (08/20/2008) • Section numbering was changed due to insertion of the ISCCP D2-like DPC. (09/23/2008) 	Table 2.10-22(a) Tables 2.10-4(b) to 2.10-24(b) All
11/12/08	R5V1	689	<ul style="list-style-type: none"> • Updated "Product Version" category. • Removed Beta3 from "Product Version" category. (11/17/2008) • Corrected the Terra and Aqua product versions. (12/08/2008) • Corrected the Terra and Aqua product versions. (12/16/2008) • Reorganized tables for clarity. (02/07/2009) 	Sec. 2.11 Sec. 2.11 Sec. 2.11 Sec. 2.11 All