

National Climatic Data Center

DATA DOCUMENTATION

FOR

DATASET 3710 (DSI-3710)

Upper Air Merged Monthly
1985-1989

February 11, 2004

National Climatic Data Center
151 Patton Ave.
Asheville, NC 28801-5001 USA

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1. **Abstract:** The Merged Monthly Dataset is a 360 tape database of the 00Z and 12Z ECMWF (European Center for Medium Range Weather Forecasting). Upper Air Analysis tapes from Jan. 1980 to Dec. 1989 for levels surface to 10mb are included. The data is arranged into files containing one latitude "band" for each month-year. These bands are:

Latitude Band #	Latitude Range
1	North Pole (90.0N to 57.5N)
2	North Mid-lat (55.0N to 20.0N)
3	Tropical
4	South Mid-lat (20.0S to 55.0S)
5	South Pole (57.5S to 90.0S)

The 5 latitude data bands are stored as separate data on 3 tapes with:

Lat-Ban 1 and lat-Ban 2 on one tape
 Lat-Ban 3 and Lat-Ban 4 on one tape
 Lat-Ban 5 on one tape

2. **Element Names and Definitions:**

Tape attributes are: 6250bpi, Binary

The blocks within each file are arranged in level-latitude strip-element order. A block contains the hourly data for a latitude "strip" 2.5 degrees wide around the globe for one level/element/month. The data are in full word binary representation and begin a 0 degrees longitude and proceed east. Block order example:

Lat-Ban4 (South Mid-lat):

Block #	Level	Lat-Strip	Element
1	SFC	-20.0S	151
2	SFC	-20.0S	167
3	SFC	-20.0S	165
4	SFC	-20.0S	166
5	SFC	-20.0S	134
6	SFC	-20.0S	168
7	SFC	-20.5S	151
:	:	:	:
13	SFC	-25.0S	151
:	:	:	:
90	SFC	-55.0S	168
91	1000	-20.0S	129
92	SFC	-20.0S	130
93	SFC	-20.0S	131
94	SFC	-20.0S	132
95	SFC	-20.0S	135
96	SFC	-20.0S	157
97	1000	-22.5S	129
:	:	:	:
2790	300	-55.0S	133
Above 300 mb there is no more water vapor - element 133 or 157			

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2791	250	-20.0S	129
5480	10	-55.0S	135

Merged Monthly Record Format

Variable	Format	Description
CSRC	Character	Identifies the source of the data "GRIB" - ECMWF Global Analysis
IYR	Integer	Year (80-89)
IMTH	Integer	Month (1-12)
LEVEL	Integer	Height of surface (0(sfc) - 10mb)
IELEM	Integer	Element code as defined by source for "GRIB" data: Surface 151: Mean sea level pressure (mb) 167: Temp at 2m (K) 165: U wind at 10m (m/s) 166: V wind at 10m (m/s) 134: Sfc pressure 168: DEWPT at 2m above sfc (K) 129: Geopotential (mm/ss) 130: Temperature (K) 131: U wind +from the west (m/s) 132: V wind +from the south (m/s) 133: Humidity mixing ratio (Kg/Kg) 135: Vertical velocity (Pa/s) 157: Relative humidity (%)
LAT1	Real	Beginning latitude (+90 to -90 by 2.5)
LON1	Real	Beginning longitude (0 to 270 by 90)
DATA (62,144)	Real	Data values of the elements for 90 degrees of longitude in 2.5 degree increments with 2 hours/day up to 31 days/month.

3. Start Date: 1980

4. Stop Date: 1989

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5. **Coverage:**

- a. Southernmost Latitude: -90.0S
- b. Northernmost Latitude: 90.0N
- c. Westernmost Longitude: -180.0W
- d. Easternmost Longitude: 180.0E

6. **How to Order Data:**

Ask NCDC's Climate Services about the cost of obtaining this data set.
Phone: 828-271-4800
FAX: 828-271-4876
E-mail: NCDC.Orders@noaa.gov

7. **Archiving Data Center:**

Archive Branch
National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

8. **Technical Contact:**

National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

9. **Known Uncorrected Problems:** None.

10. **Quality Statement:** A limited quality control of this dataset had been performed; where data values exceed a certain criteria were made missing. There was no surface and 10mb data for the years 1980-1984.

11. **Essential Companion Datasets:**

12. **References:**

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