

FGGE NEWS

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FGGE BUILD-UP YEAR COMPLETED

The complete Main Level II-b data set for the FGGE <u>Build-up Year</u> (1 January 1978 - 26 November 1978) is now at the World Data Center-A for Meteorology (WDC-A; Federal Building, Asheville, North Carolina, 28801). The number of tapes (9 track, 800 bpi) associated with the Build-up Year Main Level II-b data set is 132. This data set is also available on 9 track, 1600 bpi tapes.

U.S. RESTRUCTURED FGGE LEVEL II-B DATA SUBSETS COMPLETED

The nature of the U.S. restructured FGGE Level II-b Data Subsets were discussed in FGGE NEWS Nos. 14 through 16. The processing of this data set is now completed. However, in the processing of this data set the original estimates of the total number of tapes and the number of days per tape for each subset needed to be revised (see FGGE NEWS Nos. 15 or 16) as shown on page 2.

STATUS OF LEVEL III-B DATA SETS

In June, ECMWF indicated that it had completed processing of its Level III-b data set. WDC-A has received 60 ECMWF Level III-b Operational Year tapes (1600 bpi) through 26 July 1979.

GFDL has completed processing its III-b analyses through 18 February 1979 and will forward the January and February (through the 20th), 00 and 12Z, 1979 analyses to WDC-A this month. Plans are unchanged with respect to completing the processing of this data set by August 1982.

Table 1. Restructured FGGE Level II-b Data Subsets^{1,2}

SUBSET		TOTAL NO. TAPES	NO. DAYS PER TAPE
	All Data Types Except Satellite Radiances and Soundings	93 (61)	4 (6)
1	Upper Air Profiles (RAOB, PIBAL, Aircraft Dropwindsonde, TWOS, LIMS Soundings) ³	45 (19)	8 (20)
2	Flight Level Data (AIREPS, AIDS, ASDAR, Constant Level Balloons, Satellite Winds)	13 (7)	30 (60)
3	Land Surface Data (SYNOP)	25 (25)	15 (15)
4	Marine Data (SHIP, BATHY, TESAC, Drifting Buoy, Satellite Sea Surface Temperature	22 (13)	20 (30)

Numbers in parenthesis are original estimates. Restructured data tape density is on 1600 bpi, 9 track tape.

FGGE LEVEL II-C DATA SET

The purpose of the Level II-c Data Set is to assist the research community in pursuing the second objective of GARP, namely:

- to investigate, within the limitations of a one-year period of observations, the physical mechanisms underlying the fluctuations of climate in the time range of a few weeks to a few years and develop and test appropriate climate models.

The various components of the Level II-c data set are expected to be available at the World Data Center-A by the spring of 1982, with the exception of the Scanning Multichannel Microwave Radiometer (SMMR) sea ice concentration data set from Nimbus-7 which is expected in early 1983.

The Level II-c data types, frequency of observations and data format are listed in Table 2. Additional information concerning this data set can be obtained from Mr. Thomas Kaneshige, c/o address on masthead or 301-443-8415.

 $^{^2}$ Data for the period 27 November 1978 00Z to 1 December 1979 18Z.

³ Upper air profiles also available on 6250 bpi, 9 track tape. Total number of such tapes are 16.

DATA SETS (COUNTRY OF ORIGIN)

DATA TYPES

- 1. Surface Based Ozone Data (Canada)
- 1. Station Network - Dobson Spectrophotometers
- 2. Surface Based Radiation Data (USSR)
- 1. Actinometric Data (radiation balance, total radiation, solar radiance totals)
- 3. Oceanographic Data (USA)
- 1. Temperature and Salinity Fields
- 2. Ocean Currents
- 3. Chemical Tracers
- 4. Sea-Level Atmospheric Data
- 4. Experimental Satellite Data (USA) 1. Solar Backscatter
 - Ultraviolet (SBUV)
- 1. Ozone Content and Profile

- 2. Scanning Multichannel Microwave Radiometer (SMMR)
- 2. Sea-Ice Concentration
- 3. Earth Radiation Budget (ERB)
- 3. Radiation Budget Parameters, Zonally Averaged Insolation and Solar Irradiance

LEVEL II-C DATA

FREQUENCY OF OBSERVATIONS (COVERAGE)

DATA FORMAT

Weekly (Global)

Magnetic Tape (M.T)
 tape/2 yr

- Monthly (Global)
- 1. Publication

- Variable frequency (Global)
- Magnetic Tape (International GF3 Format)

1. Magnetic Tape (9 track,

1600 bpi, EBCDIC - approx.

- 3 days/l day off duty cycle (horizontal resolution
 - 200 km, vertical -2
- 2. l day on/l day off duty cycle (horizontal resolution 60 km)

km from 28 to 55 km)

- .y) –
- 3. 3 days on/1 day off
- 2. ibid (approx. 108 tapes/yr)

40 tapes/yr)

3. Magnetic Tape (9 track, 1600/800 bpi, EBCDIC)

TABLE 2 (CONT)

DATA SETS (COUNTRY OF ORIGIN)	DATA TYPES	FREQUENCY OF OBSERVATIONS (COVERAGE)	DATA FORMAT
5. Surface Based Precipita- tion and Snow Data (USA)	 Precipitation Rates Max. and Min. Temperature 	1 . 24 hr totals (Global)	1. Magnetic Tape (9 track, 800 bpi, EBCDIC)
6. Extent of Snow Cover (USA)	 Snow Depth (mm) Snow Age (days) 	 Twice Daily (00+12 GMT) (Resolution 25.5 - 51 km/ Global) 	 Magnetic Tape (9 track, 1600 bpi, EBCDIC, 2 tapes/ month)
7. Cloudiness Data (USA)	 Maximum Cloud Tops Total Cloud Coverage 	 8 analyses per day (Resolution 25.5 - 51 km/Global) 	 Magnetic Tape (9 track, 1600 bpi, binary, 7-10 tapes/mo)
8. Surface Water Runoff Data (FRG)	1. Outflow of Major Rivers (accuracy - 25%)	1. Monthly	1. Magnetic Tapes

FGGE DATA CATALOG

Supplement 7 of the FGGE Data Catalog was issued in July 1981. Parties interested in obtaining the FGGE Catalog or any of the supplements are directed to contact Mr. Robert Williams; WDC-A (address as previously listed or 704-258-2850, ext. 381).

PROPOSAL SUBMISSIONS

Proposals for FGGE research for FY 1982 are being accepted by the National Science Foundation (NSF) and by the National Oceanic and Atmospheric Administration (NOAA). A lead time of at least four (4) months is needed to review all proposals. Interested scientists should send their proposals to Ms. Pamela Stephens, NSF, 1800 G Street N.W., Washington, D.C. 20550 (202-357-9887) or to the U.S. GARP Office (NOAA) (address on masthead) c/o Dr. Wayne McGovern (301-443-8415).

NASA plans to participate in the research and evaluation phase of the Global Weather Experiment (GWE) through the support of research utilizing the accumulated data and emphasizing the application of space-derived measurements to mid-range weather forecasting. An Application Notice (AN) was released in June announcing the opportunity to participate in this program. Approximately five to ten awards are anticipated for the first year of this effort.

At the Goddard Space Flight Center's Laboratory for Atmospheric Sciences (GLAS), there has been an intense effort to develop a new analysis scheme and forecasting model system to be used in analyzing the GWE data sets. Although the research supported under the AN may be conducted entirely external to NASA, there will also be an opportunity to perform cooperative external collaborative research with NASA in further model development and in the use of the model for diagnostic studies of the global atmosphere and impact assessments. The GLAS general circulation model and NASA computer facilities will be made available for these purposes. In selected cases, investigators can be provided with a remote terminal that will enable direct access to the data in the archive system and will enable the investigator to utilize general purpose data access, comparison, and manipulation routines developed at GLAS.

SCIENTIFIC MEETINGS

The following scientific meetings on the Experiment are scheduled.

- "Preliminary Scientific Results of FGGE", a symposium organized by the International Commission on Dynamic Meteorology (ICDM) as part of the IAMAP Assembly, Hamburg, Germany, August 1981.
- "International Conference on Scientific Results of the MONEX Experiment", organized by ICSU/WMO Joint Scientific Committee for GARP and WCRP; 26-30 October 1981, Denpasar, Bali, Indonesia.