IX.4.2B-PDBDLYn   PREPROCESSOR DATA BASE FILE PDBDLYn

Purpose

Files PDBDLYn contain the data for daily data types (PP24, TM24, etc.).

The data for each data type is preceded by records containing the pointers needed by the Preprocessor. The pointers and data are stored in Variable Length Records (VLR). There is one VLR for the pointers and then one VLR for each day of data. The number of physical records in a VLR depends on the maximum number of stations, the number of data values and the number of pointer values.

The maximum number of days of data for each data type is set when the files are created. The dates of the data must be continuous except for forecast temperatures. The last day of data must be the same for all data types, except forecast temperature, but the beginning date can be different.

All pointer and data values are stored as I*2 words.

The RRS Free Pool Records are stored in one of the Daily Data Files. See the description of file PDBRRS for the format of these records.

Description

ATTRIBUTES: fixed length 64 byte binary records

RECORD STRUCTURE:

  Daily Data Record

  Pointer Record (if needed)
  Data Record 1
     .
     .
     .
  Data Record N

  All pointer values for a station are stored together.

  Each data record contains one day of data.

  24-Hour Precipitation Pointer Record and Data Record

  The pointer record contains the following values for each station:

     o record number of PCPN parameters in the Preprocessor Parametric
       Data Base
     o location in characteristics array returned from routine RPPCHR
     o array location for less than 24-hour precipitation pointer or
       record number of station GENL parameters in the Preprocessor
       Parametric Data Base if not <24-hour station

o precipitation correction factors
o MDR Box number

The data records contain 1 value per station in hundredths of an inch.

Less than 24-hour Precipitation Pointer and Data Record

The pointer record contains the following values for each station:

o record number of GENL parameters in the Preprocessor Parametric Data Base
o array location of pointer information for 24-hour precipitation
o data time interval (TIMINT)
o array location of data

The data records contain 24/TIMINT values per station in hundredths of an inch.

24-Hour Maximum/Minimum Temperature Pointer and Data Record

The pointer record contains the following values for each station:

o record number of TEMP parameters in the Preprocessor Parametric Data Base
o location of maximum/minimum temperatures returned from routine RPPMT
o array location for less than 24-hour temperature pointers
o correction factor for maximum temperatures
o correction factor for minimum temperatures

The data records have 2 values per station in tenths of degrees Fahrenheit.

Less than 24-Hour Temperature Pointer and Data Record

The pointer contains the following with all values for each station together:

o array location of 24-hour maximum/minimum pointers
o data time interval (TIMINT)
o array location for less than 24-hour data

The data records contain 24/TIMINT values per station stored in tenths of degrees Fahrenheit.

Forecast Maximum/minimum Temperature Pointer and Data Record

The pointer record contains the following with values for each station together:

o array location of pointers for regular maximum/minimum data for this station

Immediately following the pointer record is a special record

containing the dates of forecast temperature data (dates do not have
to be continuous). These are in I*4 words and the first word is the
number of dates. Following are two words for each date that contain
the Julian day and record number of the data for that date.

The data records contain 2 values in tenths of degrees Fahrenheit.

Potential Evaporation Pointer and Data Record

The pointer record contains the following:

   o record number of station PE parameters in the Preprocessor
     Parametric Data Base

The data records contain 6 24-hour values per station:

   o air temperature (tenths of degrees Fahrenheit)
   o dewpoint temperature (tenths of degrees Fahrenheit)
   o wind (tenths of miles per hour)
   o percent sunshine
   o solar radiation (langleys)
   o sky cover

6 Hour MDR Sums Data Record

No pointer record is needed for MDR sums. The data records contain
6-hour MDR sums of each box in the user area for each 6-hour period.
These data start with all MDR boxes for the period ending at 18Z
followed by all the MDR box sums for the other periods.

Stranger Station Precipitation Statistics and Data Record

The statistics record contains the following stranger station
reporting statistics (all values stored as I*2 words):

Word Position	Description
1-12	Number of new reports entered during each of the last 12 months (January is in location 1 and December is in location 12)
13	Month indicating which of the above 12 values was most recently updated
14	Year corresponding to month in position 13
15-16	Julian date statistics begin
17-18	Julian date of most recent report
19	Largest date of most recent report
20-12	Julian date of largest value reported
22-23	Coordinates of largest value reported
24	Second largest value reported (stored as value*100)
25-26	Julian date of second largest value reported
27-28	Coordinates of second largest value reported

The number of stations reporting each day is stored in the first
word of the data record.

There are three entries for each station in the data record: the Y
and X Polar Stereographic coordinates and a value. The coordinates
are stored in tenths (I*2 words). The data value is in hundredths
of an inch.