

VI.6.3 PREPROCESSOR DATA BASE UTILITY PROGRAM (PPDUTIL)

Introduction

The Preprocessor Data Base Utility Program (PPDUTIL) is used to manage and display data in the Preprocessor Data Base (PPDB).

The PPDB holds input data for the Operational Forecast System program FCST Preprocessor Functions. The Preprocessor Functions can be categorized into those that produce areal average time series on a daily basis (MAP, MAT, MAPE and FMAP) and the River, Reservoir and Snow (RRS) preprocessor which takes odd interval observed data and produces time series. To accommodate the needs of the two types of Preprocessor Functions, data in the PPDB are stored in one of two forms:

- o fixed intervals on a daily basis
- o with an observation time associated with each value

The first form is called the daily data structure and the second is called the RRS data structure.

Commands

The following commands are available:

<u>Command</u>	<u>Purpose</u>	
@CHECKRRS	Check RRS data observations times	[Hyperlink]
@DELRRS	Delete RRS data	[Hyperlink]
@DUMPOBS	Print observed data	[Hyperlink]
@DUMPPP24	Print summaries for 24 hour precipitation station data	[Hyperlink]
@DUMPSHEF	Output data in Standard Hydrologic Exchange Format (SHEF)	[Hyperlink]
@DUMPSTAT	Print statistics for 24 hour precipitation, RRS and stranger station data	[Hyperlink]
@EDITDLY	Edit daily data	[Hyperlink]
@EDITRRS	Edit RRS data	[Hyperlink]
@PAGESIZE	Set number of lines printed per page with DUMPOBS command	[Hyperlink]
@RLSEFREE	Release all free pool records	[Hyperlink]
@RSETSTAT	Reset PP24 and RRS statistics	[Hyperlink]

<u>Command</u>	<u>Purpose</u>	
@RRSFREE	Print RRS Free Pool information	[Hyperlink]
@SETTODAY	Set the date to be used as today's date	[Hyperlink]
@STATION	Specify whether stations will be referenced by station identifier or station number	[Hyperlink]
@STATUS	Print Preprocessor Data Base status	[Hyperlink]
@STOP	Stops program execution	[Hyperlink]
@UNITS	Set units for input and display of data	[Hyperlink]
@UNSDFREE	Mark the last RRS free pool record in a chain in use	[Hyperlink]

The '@' in the command name is optional.

A description of each command and the input needed is on the following pages.

All input is free format (blanks are used to separate fields).

Only columns 1 through 72 can be used for input.

A '\$' in the first field of a card indicates the whole card is a comment.

Program Execution Information

See Chapter I.2 [\[Hyperlink\]](#) for information about how to execute the program.

Data Type Codes/Data Categories

The following tables describe all the valid Data Type Codes for the PPDB and to which Data Category each data type code has been assigned. The codes listed in the Data Category column are used when data types are defined or when data are being read. The codes in the Data Type Code column are used when data are written. Table 5 summarizes which data type codes and data categories may be defined, written to or read from the PPDB.

Table 1. Data types for the MAP Preprocessor

<u>Data Type</u>	<u>Description</u>	<u>Data Category</u>	<u>Method for Retrieval</u>
PP24	24 hour precipitation	PP24	by day for all stations
PP06	6 hour precipitation	PPVR	by day for all stations with less than 24 hours precipitation data
PP03	3 hour precipitation	PPVR	
PP01	1 hour precipitation	PPVR	
MDR6	6 hour MDR values	MDR6	by day for all MDR boxes in subset of national MDR grid which falls in user area
PPSR	Precipitation Stranger	PPSR	by day for all stranger reports for user area

Table 2. Data types for MAT Preprocessor

<u>Data Type</u>	<u>Description</u>	<u>Data Category</u>	<u>Method for Retrieval</u>
TM24	24 hour maximum/minimum	TM24	by day for all stations temperature
TN24	24 hour minimum temperature	TM24	
TA06	6 hour instantaneous	TAVR	by day for all stations temperature with less than 24 hour temperature data
TA03	3 hour instantaneous temperature	TAVR	
TA01	1 hour instantaneous	TAVR	by day for all stations temperature with forecast temperature data
TF24	forecast maximum/minimum	TF24	by day for all stations temperature with forecast temperature data
TFMN	forecast minimum temperature	TF24	

<u>Data Type</u>	<u>Description</u>	<u>Data Category</u>	<u>Method for Retrieval</u>
TFMX	forecast maximum temperature	TF24	

Table 3. Data types for the MAPE Preprocessor

<u>Data Type</u>	<u>Description</u>	<u>Data Category</u>	<u>Method for Retrieval</u>
TA24	24 hour instantaneous	EA24	by day for all stations temperature
TD24	24 hour dew point temperature	EA24	
US24	wind	EA24	
RC24	sky cover	EA24	
RP24	percent sunshine	EA24	
RI24	solar radiation	EA24	

Table 4. Data types for the RRS Preprocessor

See Section VI.3.3B-DEFINE-STATION [[Hyperlink](#)].

Table 5. Allowable operations for each data type code

<u>Data Type/ Data Category</u>	<u>Define on PPDB</u>	<u>Read from PPDB</u>	<u>Write to PPDB</u>
PP24	yes	yes	yes
PPVR	yes	yes	yes
PP06	no	no	yes
PP03	no	no	yes
PP01	no	no	yes
MDR6	yes	yes	yes
PPSR	yes	yes	yes
TM24	yes	yes	yes
TN24	no	no	yes
TAVR	yes	yes	no
TA06	no	no	yes
TA03	no	no	yes
TA01	no	no	yes
TF24	yes	yes	yes
TFMN	no	no	yes
TFMX	no	no	yes

<u>Data Type/ Data Category</u>	<u>Define on PPDB</u>	<u>Read from PPDB</u>	<u>Write to PPDB</u>
EA24	yes	yes	no
TA24	no	no	yes
TD24	no	no	yes
US24	no	no	yes
RC24	no	no	yes
RP24	no	no	yes
RI24	no	no	yes