Description

Subroutine RPRDD reads data for a regular or mixed time series from
the Processed Data Base.

If there are fewer than the requested number of time periods of
observed data then future data is concatenated for data types with
separate future data type.

Subroutine RPRDDF reads future time series data from the Processed
Data Base for data types defined with a separate future data type.

Calling Sequence

CALL RPRDD (ITSID,ITYPE,JHOUR,ITMINT,NUMPER,IUNITS,RMISS,
            LTSDAT,TSDAT,IFPTR,LIWORK,IWORK,ISTAT)

CALL RPRDDF (ITSID,ITYPE,JHOUR,ITMINT,NUMPER,IUNITS,RMISS,
             LTSDAT,TSDAT,LIWORK,IWORK,ISTAT)

Argument List

Argument	Input/Output	Type	Dimension	Description
ITSID	Input	A8	1	Time series identifier
ITYPE	Input	A4	1	Data type code
JHOUR	Input	I*4	1	Julian hour of first time period with data
ITMINT	Input	I*4	1	Data time interval in which data is to be returned 1/
NUMPD	Input	I*4	1	Number of time periods of data to be returned
IUNITS	Input	A4	1	Units in which data is to be returned 2/
RMISS	Input	R*4	1	Value to be used to check for missing data values 3/
LTSDAT	Input	I*4	1	Dimension of array TSDAT
TSDAT	Output	R*4	LTSDAT	Time series data array
IFPTR	Both	I*4	1	Input - for MAP time series only: 0 = make transition from regular MAP to future MAP

				after last regular MAP value
				>0 = first Julian hour of future MAP data 4/
				Output - If time series has future data, Julian hour of first time period with future data is returned otherwise is returned.
LIWORK	Input	I*4	1	Dimension of array IWORK 5/
IWORK	Both	I*4	LIWORK	Work array
ISTAT	Output	I*4	1	Status code: 0 = no errors 1 = time series not found 2 = time period not found or not enough data - array filled with missing data values 6/ 3 = invalid time interval 4 = invalid units conversion requested 5 = read error 6 = array IWORK too small 7 = invalid hour 8 = array TSDAT too small

Notes:

1/ If the user specified time interval different from the time series then it must be an exact whole number multiple of the stored time interval. If it is not then an error code is returned. If it is then the routine will create data for the time interval according to the time interval type for the data type:

Time Interval Type	Action
INST (instantaneous)	pick off values
ACCM (accumulated)	sum values
MEAN (mean)	average

2/ The read routine will perform any conversion necessary to return the time series in the specified units.

3/ Values in the time series data array are set to the value of variable RMISS if they are equal to -999.0.

4/ The input value of IFPTR is only used for MAP time series and only if there is an overlap between the regular and future time series. If IFPTR is equal to zero the transition from regular to future data occurs at the end of the regular time series. If IFPTR is

greater than zero the transition occurs at the specified hour (Note that if IFPTR is not an even multiple of a stored data interval it should be truncated to the previous data interval multiple). If the specified hour does not fall within the overlap period the transition should occur at the end of the regular data.

5/ A description of how to size the work array can be found in Section IX.3.5A.

6/ Variable ZAPR in common block PDATAS is used to fill in the returned time series if there are fewer than NUMPD values from the specified date and there is not enough or no future data.