## Description

Subroutine RPDRRS reads river, reservoir or snow (RRS) data from the Preprocessor Data Base for one station for a specified data type and time period.

## Calling Sequence

CALL RPDRRS (STAID,IDTYPE,DTYPE,NVLPOB,FHOUR,LHOUR,LOBS,OBS,NUMOBS,
            LMIN,MIN,LWBUFF,WBUFF,LSTHR,ISTAT)

## Argument List

| Argument | Input/<br>Output | Type | Dimension | Description |
|---|---|---|---|---|
| STAID | Input | A8<br>or | 1 | Station identifier |
|  |  | I*4 | 1 | Station number |
| IDTYPE | Input | I*4 | 1 | Station identifier/number indicator:<br>    0 = STAID is identifier<br>    1 = STAID is number |
| DTYPE | Input | A4 | 1 | Data type code 1/ |
| NVLPOB | Output | I*4 | 1 | The number of values per observation for this data type (either 2 or 3) |
| FHOUR | Both | I*4 | 1 | Julian hour in Z time of first hour of data requested/returned |
| LHOUR | Both | I*4 | 1 | Julian hour in Z time of last hour of data requested/returned |
| LOBS | Input | I*4 | 1 | Length of array OBS |
| OBS | Output | R*4 | LOBS | Array containing the following values for each observation: 2/ 3/<br>    o  observation time; Julian hours since 0Z on January 1, 1900<br>    o  observation value<br>    o  time period of observation if mean data; units of HR |
| NUMOBS | Output | I*4 | 1 | Number of observations returned |

|            | Input/      |        |             |                                                    |
| Argument   | Output      | Type   | Dimension   | Description                                        |
|------------|-------------|--------|-------------|----------------------------------------------------|
|            |             |        |             | in ARRAY                                           |
| LMIN       | Input       | I*4    | 1           | Length of array MIN                                |
| MIN        | Output      | I*4    | LMIN        | Array containing the minutes associated with each observation for an instantaneous data type 4/ |
| LWBUFF     | Input       | I*4    | 1           | Length of array WBUFF                              |
| WBUFF      | Input       | I*4 or R*4 | LWBUFF   | Work array                                         |
| LSTHR      | Output      | I*4    | 1           | Julian hour of the last observed data value on file for this station and data type |
| ISTAT      | Output      | I*4    | 1           | Status code:                                       |

ISTAT status codes:

    0 = okay
    1 = OBS too small to hold all
        available observations in
        requested period; LOBS
        values filled
    2 = STAID not found
    3 = data type not found
    4 = no observations found
        within the period FHOUR to
        LHOUR requested
    5 = WBUFF too small; no data
        read
    6 = LSTHR too small; no data
        read
    7 = file read/write error

Notes:

1/ Valid types are given in VI.3.3B-DEFINE-STATION [Hyperlink].

2/ Data are returned in chronological order based on observation time.
   If there is more than one observation for mean data for a given
   time then the data for that observation time are ordered from the
   largest to the smallest time period.

3/ Observation time and time period are stored as integer bytes.

4/ Values in array MIN range from 0 through 59 for an instantaneous
   RRS data type.  This array is undefined for a period average RRS
   data type.  Values of MIN indicate the following:

| Value | Indicates |
|-------|-----------|
| 0 | observation was made exactly on the hour |
| 1-30 | observation was made after the hour |
| 31-59 | observation was made before the hour |