Description

Subroutine WPDCR creates a station in the Preprocessor Data Base.

Calling Sequence

CALL WPDCR (ISTAID,NUMSTA,NDLYTP,IDLYTP,IPPGEN,IPPPTR,IPPCHR,MDRBOX,
            IPCPCR,IPPMMT,TMPCOR,NRRSTP,IRRSTP,NVLPOB,NUMOBS,MNDAYS,
            IPNTRS,ISTAT)

Argument List

Argument	Input/ Output	Type	Dimension	Description
ISTAID	Input	A8	1	Station identifier
NUMSTA	Input	I*4	1	Station number: 0 = not defined
NDLYTP	Input	I*4	1	Number of daily data types
IDLYTP	Input	A4	NDLYTP	Daily data type codes 1/
IPPGEN	Input	I*4	1	Pointer to station general parameters in the Preprocessor Parametric Data Base (PPPDB)
IPPPTR	Input	I*4	3	Pointer to precipitation, temperature and PE parameters in the PPPDB: 0 = not defined
IPPCHR	Input	I*4	1	Pointer to precipitation station characteristics in the PPPDB: 0 = if not a precipitation station or not using characteristics
MDRBOX	Input	I*4	1	MDR box number (defined only for a station with precipitation data)
IPCPCR	Input	I*4	1	Precipitation correction factors and processing code (undefined if not a precipitation station) 4/
IPPMMT	Input	I*4	1	Pointer to monthly maximum/minimum temperature data in the PPPDB:

Argument	Input/ Output	Type	Dimension	Description
				0 = not a temperature station
TMPCOR	Input	R*4	2	Maximum and minimum temperature correction factors in units of DEGF
NRRSTP	Input	I*4	1	Number of RRS data types
IRRSTP	Input	A4	NRRSTP	RRS data type codes 2/
NVLPOB	Input	I*4	NRRSTP	Number of values per observation 2/
NUMOBS	Input	I*4	NRRSTP	Typical number of observations to be held in the PPDB
MNDAYS	Input	I*4	NRRSTP	Minimum days of data to be held in the PPDB

IPNTRS	Output	I*4	NDLYTP
			+
			NRRSTP
				Array locations of the beginning of pointer information in the PPDB for the data types defined for the station:
				  0 = not enough room in data file or invalid combination of data types
				  -2 = an invalid daily data type code was entered in IDLYTP
				  -1 = valid RRS data types
				  -2 = invalid RRS data type codes entered in IRRSTP

ISTAT	Output	I*4	1	Status code:
				  0 = okay
				  1 = ISTAID already exists
				  2 = NUMSTA already exists
				  3 = one or more data types invalid - station is defined for all valid data types - station not defined if all data types are invalid
				  4 = cannot define all data types because files are full - those that can fit are defined
				  5 = cannot define any data types because files are full - station not created
				  6 = invalid combinations of

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          Input/
Argument  Output  Type  Dimension  Description

                                   data types asked to be
                                   defined - station is
                                   defined for all valid
                                   combinations 3/
                               7 = no valid combinations of
                                   data types - station not
                                   created
                               8 = size of SIF array too
                                   small
                               9 = combination of statuses 3
                                   and 4
                              10 = combination of statuses 3
                                   and 6
                              11 = combination of statuses 4
                                   and 6
                              12 = combination of statuses
                                   3, 4 and 6
                              13 = system error accessing
                                   file
                              14 = not enough room for SIF
                                   records
                              15 = INTEGER*4 value cannot be
                                   stored as an INTEGER*2
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Notes:

1. Daily data types that can be created for a station in the PPDB are:

        Type   Data
        PP24   24 hour precipitation
        PP06   6 hour precipitation
        PP03   3 hour precipitation
        PP01   1 hour precipitation
        TM24   24 hour maximum/minimum temperature
        TA06   6 hour instantaneous temperature
        TA03   3 hour instantaneous temperature
        TA01   1 hour instantaneous temperature
        TF24   forecast maximum/minimum temperature
        EA24   potential evaporation data

2. A list of the RRS data types that can be created in the PPDB can be
   found in Section VI.3.3B-DEFINE-STATION. Instantaneous data types
   have two values per observation. Period average data types have
   three values per observation.

3. The following rules which must be followed when defining data types
   in the PPDB:

        o if PP06, PP03 or PP01 is defined then PP24 must also be
           defined
        o if TA06, TA03, TA01 or TF24 is defined then TM24 must also be

defined

- o if PP01, PP03, PP06, TA01, TA03, TA06 or TF24 will not be
  defined if they are incorrectly requested

4. Two precipitation correction factors and whether the value for the
   station is treated as zero if missing are encoded into this integer
   variable. The winter or all season correction factor is stored in
   the hundreds and thousands places. The summer correction factor is
   stored in the units and tens places. The valid range for
   correction factors is from 0.05 to 4.95 in increments of 0.05.
   These correction factors are multiplied by 20 to produce whole
   numbers from 1 to 99. The winter and summer correction factors are
   then stored in the proper pairs of decimal places. If the summer
   correction factor is undefined then it is stored as 00 and the
   other correction factor is interpreted as the all season factor.
   The winter or all season correction factor cannot be zero. If
   missing precipitation data for this station are to be treated as
   zero precipitation then the integer code is multiplied by -1.