

IX.3.4B-WPD1SF SUBROUTINE WPD1SF

Description

Subroutine WPD1SF writes forecast non-RRS data types to the Preprocessor Data Base and updates the station statistics for one station at a time for a specified period.

Calling Sequence

CALL WPD1SF (ISTAID, IDTYPE, NTYPES, IDATYP, IUNITS, IFHOUR, LHOURL, LDATA, DATA, LENDAT, IDATES, IWRITE, IREV, ISTAT)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
ISTAID	Input	A8 or I*4	1	Station identifier Station number
IDTYPE	Input	I*4	1	Station identifier/number indicator: 0 = ISTAID is identifier 1 = ISTAID is number
NTYPES	Input	I*4	1	Number of data types to be written
IDATYP	Input	A4	NTYPES	Data type codes to be written <u>1/</u> <u>2/</u>
IUNITS	Input	A4	NTYPES	Units code for each data type to be written <u>4/</u>
IFHOUR	Input	I*4	NTYPES	Hours since 0Z on January 1, 1900 of the first period of data to be written <u>3/</u> <u>5/</u>
LHOURL	Input	I*4	NTYPES	Hours since 0z on January 1, 1900 of the last period of data to be written <u>5/</u>
LDATA	Input	I*4	1	Length of array DATA
DATA	Input	R*4	LDATA	Array containing data from IFHOUR to LHOURL for each data type (data for each day will be organized as shown in note 3 for subroutine RPDDL Y for each type that has more than one value per day)

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
				(missing values = -999.0)
LENDAT	Input	I*4	1	Length of array IDATES (see routine RPDLFT to determine length needed)
IDATES	Input	I*4 or R*4	LENDAT	Work array
IWRITE	Output	I*4	NTYPES	Array indicating whether data type was written: 0 = data were written 1 = data type not found for station 2 = period being written was not consistent with the data on file and the observed data 3 = invalid units 4 = invalid revision indicator 5 = invalid value
IREV	Input	I*4	1	Revision indicator: 6/ 0 = a non-revision write 1 = a revision write
ISTAT	Output	I*4	1	Status code: 0 = no errors 1 = ISTAID not found 2 = one or more data types not found or invalid units - valid data types and units are written 3 = period to be written is not within allowed period for one or more of the data types - those data types were not written 4 = invalid units 5 = combination of statuses 2 and 3 6 = combination of statuses 2 and 4 7 = combination of statuses 3 and 4 8 = combination of statuses 2, 3 and 4 9 = not valid data type 10 = file read/write error 11 = not enough data in period specified

20+ = invalid revision indicator
30+ = invalid value

Notes:

1/ Valid data types for this subroutine are:

- o TF24
- o TFMN
- o TFMX

2/ This routine contains the same rules for writing accumulated and instantaneous data as subroutine WPD1S even though the currently valid data types do not fall into these categories.

3/ A new day of future data will be written to the PPDB only if:

- o it is on or after the last observed data day for data type TM24
and
- o it is not more than a specified number of days after the last observed data day (set when the files are created)
or
it is immediately after a future day currently in the file
and
- o it is less than the maximum number of days for the future data type after the last observed data day

4/ Data will be converted to the proper units if needed.

5/ The hour entered for instantaneous data is the hour of the observation. The hour entered for mean or accumulated data is the last hour of the period.

6/ When the revision indicator is set to one:

- o existing values on the PPDB can be changed and missing values can be overwritten
- o a new day of data can be created if it meets rules note 3

When the revision indicator is set to zero:

- o write data only if they follow rules in note 3
- o when legitimate values are written, any values after the last value being written is set to missing