

SUBROUTINE SFADRV

Description

Driver routine for the computation of station weights for the MAP, MAT and MAPE areas.

Calling Sequence

CALL SFADRV (AREAID, ARRAY, LARRAY, IPARM, ITYPE, POWER, STMNWT, NSEGS, LFACTR, IY, IXB, IXE, XC, YC, MSTAS, NSTAS, STAID, STAWT, IPT, STACC, ISTAT)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
AREAID	I	A8	1	Area identifier
ARRAY	I	R*4	LARRAY	Work array
LARRAY	I	I*4	1	Dimension of array ARRAY
IPARM	I	I*4	1	Indicator for type of weight: 1 = MAP timing 2 or -2 = MAP station 3 = MAT 4 = maximum/minimum temperature 5 = instantaneous temperature 6 = future temperature 7 = MAPE
ITYPE	I	I*4	1	Indicator for weighting scheme: 1 = grid point 2 = Thiessen 3 = 1/d**power 4 = 1/d**2
POWER	I	R*4	1	Exponent in 1/d**power
STMNWT	I	R*4	1	Minimum weight of stations to be kept when doing station weighting
NSEGS	I	I*4	1	Number of NWSRFS/HRAP grid segments used to define the basin
LFACTR	I	I*4	1	Density factor for the grid point definition
IY	I	I*4	NSEGS	Array of rows of grid points within defined basin

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
IXB	I	I*4	NSEGS	Array of columns of leftmost grid points within defined basin
IXE	I	I*4	NSEGS	Array of columns of rightmost grid points within defined basin
XC	I	R*4	1	X coordinate of the area centroid
YC	I	R*4	1	Y coordinate of the area centroid
MSTAS	I	I*4	1	Maximum number of stations with computed weights
NSTAS	O	I*4	1	Number of stations with computed weights
STCID	O	A8	MSTAS	Identifiers of weighted stations
STAWT	O	R*4	MSTAS	Computed station weights
IPT	O	I*4	MSTAS	Array of pointers to weighted stations in common block SNTWKX
STACC	O	R*4	(2,MSTAS)	Array of coordinates for weighted stations
ISTAT	O	I*4	1	Status code: 0 = successful weighting 1 = error