SUBROUTINE XMDRAL

Description

Computes the array location in an MDR subset array of a given national MDR box number.

Calling Sequence

CALL XMDRAL (MDRBOX,LOC,ISTAT)

Argument List

Variable	Input/ Output	Type	Dim.	Description
MDRBOX	I	I*4	1	National MDR box number. 1/
LOC	O	I*4	1	Location in MDR subset array. 2/
ISTAT	O	I*4	1	Status code = 0, OK = 1, national MDR box falls outside of subset.

NOTES:

1/ The national MDR box number is a single number, which is used internally within NWSRFS, defining the MDR box on the national MDR grid. Usually, MDR boxes are specified by the column and row on the national grid. The national grid is 113 columns times 89 rows. Box 1,1 is located in the southwest corner of the grid. To compute the national MDR box number, N, from the column, C, and row, R, numbers, use:

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N = (R-1) * 113 + C
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To compute the row and column from the national box number, use:

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R = ((N-1)/113) + 1
C = N - (R-1) * 113
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2/ The array location within an MDR subset can be determined by knowing the definition of the subset and the row and column number of the MDR box on the national grid. The subset is defined by the westernmost national grid column in the subset, C_W; the number of columns, N_C; the southernmost national grid row in the subset, R_S; and the number of rows, N_R. The subset array location, L, is:

$$L = (R-R_S) * N_C + C - C_W + 1$$