

COMMON BLOCK GMDR

Purpose

Contains MDR related control variables for the MARO function. Note that this common block is patterned closely after the XMDR common block in the MAP function.

Listing

COMMON /GMDR/ MDRSTA, ISMALL, MDRST6, ICMDR, NCMR, IRMDR, NRMDR,
NMDR, MDR, MDRUST, IUSTBL, NTABLE, MDRDSZ

Size

13 words

Variable Description

| <u>Variable</u> | <u>Type</u> | <u>Dim.</u> | <u>Word Pos.</u> | <u>Description</u> |
|-----------------|-------------|-------------|----------------------|---|
| MDRSTA | I | 1 | 1 | Level of MDR usage desired. (Valid only if MDR = 1). 0 = Do not use MDR at all. 1 = Use MDR to estimate zero amounts. 2 = Use MDR to estimate up to a specified criteria. 3 = Use MDR to estimate any amount. |
| ISMALL | I | 1 | 2 | Criteria precip amount used when estimating missing 24-hr amounts from MDR (hundredths of an inch). Valid only if MDRSTA = 2. If the precipitation estimation based on MDR exceeds ISMALL, the estimation will not be used. |
| MDRST6 | I | 1 | 3 | Control for using MDR to estimate six hour distributions at six hourly grid points. 0 = Do not use MDR. 1 = Use MDR. |
| ICMDR | I | 1 | 4 | Westernmost column in MDR subset for RFC. |

| <u>Variable</u> | <u>Type</u> | <u>Dim.</u> | <u>Word Pos.</u> | <u>Description</u> |
|-----------------|-------------|-------------|----------------------|---|
| NCMDR | I | 1 | 5 | No. of columns in MDR subset for RFC. |
| IRMDR | I | 1 | 6 | Southernmost row in MDR subset for RFC. |
| NRMDR | I | 1 | 7 | No. of rows in MDR subset for RFC. |
| NMDR | I | 1 | 8 | No. of MDR boxes in the subset of the national grid for the RFC. NMDR = NCMDR*NRMDR |
| MDR | I | 1 | 9 | Switch indicating if MDR data is to be used, and is available. 0 = Data not available or not to be used. 1 = Data to be used. |
| MDRUST | I | 1 | 10 | Switch indicating if the user has specified an MDR-to-precipitation conversion table to use for this run of MARO. 0 = User specified no MDR-to-precipitation conversion table. Use table determined by calibration. 1 = User specified an MDR-to-precipitation conversion table. Use table number given by IUSTBL. |
| IUSTBL | I | 1 | 11 | User-specified MDR table number to use. 30 = Use 30% probability table. 50 = Use 50% probability table. 70 = Use 70% probability table. |
| NTABLE | I | 1 | 12 | MDR table number to use in the MARO run. If user specified a table number in IUSTBL, use that number. If no table number was given, attempt to determine the table by calibration of first order station precipitation. If calibration is impossible, use the default. The default table is 50%. 30 = Use 30% probability table. 50 = Use 50% probability table. 70 = Use 70% probability table. |

| <u>Variable</u> | <u>Type</u> | <u>Dim.</u> | <u>Word Pos.</u> | <u>Description</u> |
|-----------------|-------------|-------------|----------------------|---|
| MDRDSZ | I | 1 | 13 | The number of MDR data values, including missing values, returned in a 6 hr time period from RPDDL (1200). |