COMMON BLOCK GOPT

Purpose

Contains various run-time options for the Ft. Worth MARO function.

Listing

```
COMMON /GOPT/ IGTYPE, GNAME(2), IESTPX, ICONVC, CNVDIS, CVDISW,
              NOEST6, DUR, PPUSER(2), IMOSUM, IMOWTR, IWTEST,
              IADJQP, REC, NWLAG, RECDEF, RECOFF, RECMIN, RECMAX,
              FACTOR, NDRSET, NRCSET, PCEXP, TPEXP, PEEXP,
              APIMNR, APIDEC, APIMIN, APIMAX, IPTCHK, KQPFRN, KQPFD(4)
```

Size

37 words.

Variable Listing

Variable	Type	Dim.	Word Pos.	Description
IGTYPE	I	1	1	Type of MARO run. 1 = Area run. Process each MARO area. (This is the only option currently programmed for).
GNAME	A	2	2	Name of group being run. (Currently filled with 'MARO').
IESTPX	I	1	4	Not currently used.
ICONVC	I	1	5	Convective precipitation option. 0 = Do not use convective option. 1 = Use convective option.
CNVDIS	R	1	6	Convective distance maximum, in miles. When the convective option is on, do not let precipitation estimation extend beyond this distance. (Default = 50).
CVDISW	R	1	7	Convective distance in terms of station weight. (Default = 1/2500).
NOEST6	I	1	8	Estimation option for 6-hr precipitation. (Not presently programmed)

Variable	Type	Dim.	Word Pos.	Description
				0 = Estimate 6 hour reports from surrounding stations. 1 = Do not estimate - use only observed 6-hr values. (Default = 1).
DUR	R	1	9	Precipitation duration option (in hours) used in rainfall/ runoff computations. (Default is a cosine function that varies with the month, and ranges in value from 1 to 6).
PPUSER	A	2	10	User name. (Currently filled with 'WGRFC').
IMOSUM	I	1	12	Initial month of summer (5).
IMOWTR	I	1	13	Initial month of winter (12).
IWTEST	I	1	14	Not currently used.
IADJQP	I	1	15	Adjacent quadrant procedure flag. If observed precip available in only two quadrants for estimation, depending on the value of IADJQP, do not divide by the sum of the weights. This flag is tested if there is observed precipitation in two quadrants only. 0 = Divide by the sum of the weights, even if there is observed precipitation in only two quadrants. 1 = Divide by the sum of the weights, unless the two quadrants are adjacent. Then do not divide by the sum of the weights. 2 = Do NOT divide by the sum of the weights, whether the two quadrants are adjacent, or not.
REC	R	1	16	API recession constant. Multiply yesterday's API by the recession constant to get today's API (Default = RECDEF + RECOFF).

Variable	Type	Dim.	Word Pos.	Description
NWLAG	I	1	17	Week number of slowest API recession. (Default = 4).
RECDEF	R	1	18	Default value of API recession. (0.90)
RECOFF	R	1	19	A positive, negative, or zero value to add to the value of RECDEF. (Default = 0.04).
RECMIN	R	1	20	Minimum value of API recession factor allowed (0.75).
RECMAX	R	1	21	Maximum value of API recession factor allowed (0.98).
FACTOR	R	1	22	A positive, negative, or zero factor by which RECOFF can be multiplied by prior to its addition to RECDEF. (Default is a cosine function that varies between +1.0 in week NWLAG, and -1.0 in week NWLAG + 26).
NDRSET	I	1	23	Flag to note if duration was set by the user. 0 = No duration value set by the user. Use default value of duration. 1 = Duration value set by user.
NRCSET	I	1	24	Flag to note if API recession constant was set by the user. 0 = No recession constant was set by the user. Use default. 1 = Recession value set by user.
PCEXP	R	1	25	Exponent for precipitation estimation. (Default = 2.0).
PEEXP	R	1	26	Exponent for PE estimation. (Default = 0.8, but WGRFC does not currently estimate PE).
TPEXP	R	1	27	Exponent for temperature estimation. (Default = 1.0, but WGRFC does not currently estimate temperature).

Variable	Type	Dim.	Word Pos.	Description
APIMNR	R	1	28	Minimum value of API for which the standard recession is applied. For example, if the API is greater than or equal to APIMNR, then tomorrow's API = today's API multiplied the recession constant, REC. If the API is less than APIMNR, then tomorrow's API = today's API minus the API subtraction constant, APIDEC. (Default = 0.30 in)
APIDEC	R	1	29	API subtraction constant. (Default = 0.01 in).
APIMIN	R	1	30	Minimum value of grid point API allowed in MARO. No API value will be allowed to go below APIMIN. (Default = -1.00 in)
APIMAX	R	1	31	Maximum value of grid point API allowed in MARO. No API value will be allowed to exceed APIMAX. (Default = 5.00 in).
IPTCHK	I	1	32	Precipitation check flag to treat partial day accumulations as if they are full day totals. 0 = Do not check the precip. Treat all precip. as a full day total. 1 = Check precip. and use only full day totals.
KQPFRN	I	1	33	QPF Run Flag. 0 = No QPF run. Only observed precipitation/distribution will be used. 1 = QPF run in force. There may be no observed precipitation present. (QPF precipitation is entered with a runtime MOD). Six-hourly distributions are determined from the KQPFD array.
KQPFD	I	4	34	Six-hourly distribution factors for the QPF run. Up to 4 of these factors may be entered.