COMMON BLOCK NAME: OPSAVE

Purpose

Holds arrays containing intermediate values of parameters and other information associated with the current trial, as well as information needed to perform the necessary checks.

Listing

COMMON/OPSAVE/LES, BA, B, ICLOSL, ICLOSE, AT, IOUT, NIN, DELTA, ISTOP, LC, IT, ICOUN, LDELT, NSTART, NSAVE, NUM1, BEST, BESTA, NSIGN, CRITER, YX, YY, LL

Size

24 words

Variable Descriptions

Variable	Type	Dimension	Word Position	Description

LES	I*4	16	1	Array containing a flag for each parameter indicating whether (+) Delta (I) or (-) Delta (I) local excursion will be performed on that parameter.
				    0 = (+) Delta
				    1 = (-) Delta
				Array LES is filled with the values from array NSIGN under pattern move routine.

BA	R*4	16	2	Array containing values of parameters after present local excursion.
B	R*4	16	3	Array containing values of parameters after previous local excursion.

ICLOSL	I*4	16	4	Array containing a flag for each parameter, indicating whether parameter is within its lower boundary for the present local excursion
				    0 = within lower boundary
				    1 = at lower boundary

ICLOSE	I*4	16	5	Array containing a flag for each parameter, indicating whether parameter is within its upper boundary for the present local excursion
				    0 = within upper boundary
				    1 = at upper boundary

AT	R*4	3,16	6	Array containing parameter values after the current local excursion, as well as parameter values from the previous two runs.

IOUT	I*4	2,16	7	Array containing a flag for each parameter, indicating whether parameter will be active or inactive (based on past three trials)
				    0 = active
				    1 = inactive

NIN	I*4	16	8	Array containing a counter for each parameter. If a parameter is made inactive, this counter will act as a switch making it active after three inactive trials. Three trials must pass before parameter can be made active again.
DELTA	R*4	16	9	Array containing increments added or subtracted to A(I) during a local excursion.
ISTOP	I*4	1	10	A switch that will terminate the program if all parameters are removed from optimization.

Variable	Type	Dimension	Word Position	Description
LC	I*4	1	11	A counter used in an arithmetic 'IF' statement for pattern destruction.
IT	I*4	1	12	Number of the current active parameter being optimized. This counter is used by the LES array.
ICOUN	I*4	1	13	Number of the current trial.
LDELT	I*4	1	14	Current number of resolution.
NSTART	I*4	1	15	Not referenced.
NSAVE	I*4	1	16	Flag indicating if the current pattern move was successful.
NUM1	I*4	1	17	Used to control printing of parameter names and values. At present only eight parameters fit on a line.
BEST	R*4	1	18	The lowest generated value of the criterion
BESTA	R*4	16	19	Value of parameter I for run with the lowest criteria value.

NSIGN	I*4	16	20	Array containing flags for each parameter indicating whether a positive or negative delta will be applied first.
				    0 = positive delta applied first
				    1 = negative delta applied first

CRITER	R*4	10	21	Array containing the current value of the criterion as well as a maximum of the nine most previous criterion values.
YX	R*4	1	22	Current value of criterion during local excursions and before pattern move. A comparison of YX with YY is used to determine if local excursions reduced criterion value.
YY	R*4	1	23	Value of criterion before current local excursions.
LL	I*4	1	24	A decision control variable that passes control based on the number of times a parameter is rerun with a changed coefficient during a local excursion.