FILTER WIDTH

PURPOSE
Specifies the number (this number must be odd) of equally-spaced points to be considered as a moving set in subsequent SMOOTH commands.

SYNTAX
FILTER WIDTH <value>
where <value> is an odd integer number or parameter in the range 1 to N, where N is the sample size, that specifies the desired filter width.

EXAMPLES
FILTER WIDTH 7
FILTER WIDTH 3
FILTER WIDTH 11
FILTER WIDTH W

DEFAULT
The default filter width is 3.

SYNONYMS
None

RELATED COMMANDS
SMOOTH = Carries out a smoothing.
FIT = Carries out a least squares fit.
POLYNOMIAL DEGREE = Sets the polynomial degree for smoothing and fitting.

APPLICATIONS
Smoothing

IMPLEMENTATION DATE
Pre-1987
PROGRAM
SKIP 25
READ MAVRO.DAT Y
LET N = SIZE Y
LET X = SEQUENCE 1 1 N
.
MULTIPLYOT 2 2; MULTIPLYOT CORNER COORDINATES 0 0 100 100
CHARACTER CIRCLE BLANK
LINES BLANK SOLID
CHARACTER SIZE 1.5
SMOOTH Y
TITLE DEFAULT SMOOTH
PLOT Y PRED VS X
TITLE FILTER WIDTH 5
FILTER WIDTH 5
SMOOTH Y
PLOT Y PRED VS X
TITLE FILTER WIDTH 7
FILTER WIDTH 7
SMOOTH Y
PLOT Y PRED VS X
TITLE FILTER WIDTH 9
FILTER WIDTH 9
SMOOTH Y
PLOT Y PRED VS X
END OF MULTIPLYOT