

REPSD**PURPOSE**

An internal DATAPLOT parameter into which the replication standard deviation is automatically placed, if replication exists, whenever the FIT, PRE-FIT, SPLINE FIT, YATES ANALYSIS, LOWESS, ANOVA, and MEDIAN POLISH commands are executed.

DESCRIPTION

The replication standard deviation is a model-free estimate of the population standard deviation and is computable only when replication exists in the data. REPSD may be used by the analyst in whatever fashion desired.

SYNTAX

None

EXAMPLES

```
WRITE RESDF REPSD RESDF RESSD LOGCDF
LET SSQD = RESDF*(REPSD**2)
WRITE CALIB. RESDF REPSD RESDF RESSD LOGCDF
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

PRED	=	A variable where predicted values are stored.
RES	=	A variable where residuals are stored.
RESSD	=	A parameter where the residual standard deviation is stored.
RESDF	=	A parameter where the residual degrees of freedom is stored.
REPDF	=	A parameter where the replication degrees of freedom is stored.
LOFCDF	=	A parameter where the lack of fit cdf is stored.
FIT	=	Carries out a least squares linear or non-linear fit.
EXACT RATIONAL FIT	=	Carries out an exact rational fit.
PRE-FIT	=	Carries out a least squares pre-fit.
SPLINE FIT	=	Carries out a spline fit.
YATES ANALYSIS	=	Carries out an analysis of a Yates design.
LOWESS	=	Carries out a locally weighted least squares fit.
SMOOTH	=	Carries out a smoothing.
ANOVA	=	Carries out an ANOVA.
MEDIAN POLISH	=	Carries out a median polish.
PLOT	=	Generates a data/function plot.

APPLICATIONS

Fitting

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
SKIP 25
READ BERGER1.DAT Y X
LINEAR FIT Y X
PRINT REPSD REPDF LOFCDF
```