

**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.
REPDI	=	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 REPDI LOFCDF
```