

REPDF**PURPOSE**

An internal DATAPLOT parameter into which the replication degrees of freedom is automatically placed, if replication exists, whenever the FIT, SPLINE FIT, EXACT RATIONAL FIT, LOWESS, ANOVA, SMOOTH, YATES ANALYSIS, PRE-FIT, and MEDIAN POLISH commands are executed.

DESCRIPTION

In general, the replication degrees of freedom is computable only when replication exists in the data. The formula is:

$$\text{REPDF} = \text{total number of observations} - \text{number of subsets}$$

REPDF 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.
REPSD	=	A parameter where the replication standard deviation 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
```