

**PRED****PURPOSE**

This is a very important internal DATAPLOT variable into which the predicted values (i.e., “fitted values”) are automatically placed whenever the FIT, PRE-FIT, SPLINE FIT, EXACT RATIONAL FIT, LOWESS, SMOOTH, ANOVA, and MEDIAN POLISH commands are executed.

**DESCRIPTION**

PRED can be used by the analyst in whatever fashion desired. A very common post-fit operation is to superimpose the predicted values atop the raw data as a visual check of model adequacy. This is usually done via

```
CHARACTERS X BLANK
LINES BLANK SOLID
PLOT Y PRED VERSUS X
```

**SYNTAX**

None

**EXAMPLES**

```
WRITE X Y PRED RES
PLOT Y PRED VERSUS X
WRITE CALIB. X Y PRED RES
LET PREDNEW = PRED
```

**NOTE**

The PRED variable is updated whenever one of the commands specified above is executed. That is, it contains the predicted values from the most recent fit or smooth. If you want to save the predicted values from a particular analysis, enter a command like

```
LET PRED2 = PRED.
```

The variable PRED2 will not be erased by subsequent analysis commands.

**DEFAULT**

None

**SYNONYMS**

None

**RELATED COMMANDS**

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.
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.
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

```

.ALASKA PIPELINE RADIOGRAPHIC DEFECT BIAS CURVE
.PERFORM A LINEAR REGRESSION
SKIP 25
READ BERGER1.DAT MEAS TRUE
FIT MEAS TRUE
TITLE AUTOMATIC
X1LABEL TRUE DEPTH (IN .001 INCH)
Y1LABEL MEASURED DEPTH
CHARACTERS X
LINES BLANK
PLOT MEAS PRED VS TRUE
    
```

