

**SUMMARY****PURPOSE**

Carries out a summary analysis.

**DESCRIPTION**

A summary analysis is a data analysis technique for computing and tabulating a variety of summary statistics for a data set. This includes measures of location (e.g., the mean), of dispersion (e.g., the standard deviation), of randomness (the autocorrelation), and of the distribution (e.g., the skewness).

**SYNTAX**

SUMMARY <y1> <SUBSET/EXCEPT/FOR qualification>

where <y1> is a response variable;

and where the <SUBSET/EXCEPT/FOR qualification> is optional.

**EXAMPLES**

SUMMARY Y

SUMMARY Y2

**NOTE**

Most of the statistics computed by SUMMARY can also be computed individually as LET subcommands.

**DEFAULT**

None

**SYNONYMS**

None

**RELATED COMMANDS**

LET	=	Compute various statistics and transformations.
4-PLOT	=	Generate a sequence plot, a lag plot, a histogram and a normal probability plot on the same page.

**APPLICATIONS**

Data analysis

**IMPLEMENTATION DATE**

Pre-1987

## PROGRAM

```
SKIP 25
READ MARSHAK.DAT Y
.
SUMMARY Y
```

The following output is generated.

```

                                SUMMARY

                                NUMBER OF OBSERVATIONS =          211

*****
*          LOCATION MEASURES          *          DISPERSION MEASURES          *
*****
*  MIDRANGE      =  0.2236850E+05  *  RANGE          =  0.8390000E+03  *
*  MEAN          =  0.2238015E+05  *  STAND. DEV.    =  0.1543979E+03  *
*  MIDMEAN      =  0.2238110E+05  *  AV. AB. DEV.   =  0.1221611E+03  *
*  MEDIAN        =  0.2238000E+05  *  MINIMUM        =  0.2194900E+05  *
*                =                  *  LOWER QUART.   =  0.2229200E+05  *
*                =                  *  LOWER HINGE    =  0.2229200E+05  *
*                =                  *  UPPER HINGE    =  0.2248700E+05  *
*                =                  *  UPPER QUART.  =  0.2248800E+05  *
*                =                  *  MAXIMUM        =  0.2278800E+05  *
*****
*          RANDOMNESS MEASURES        *          DISTRIBUTIONAL MEASURES        *
*****
*  AUTO COEF    = -0.5054735E-01  *  ST. 3RD MOM.   = -0.1358314E+00  *
*                =  0.0000000E+00  *  ST. 4TH MOM.   =  0.3023729E+01  *
*                =  0.0000000E+00  *  ST. WILK-SHA  =  0.8213547E+01  *
*                =                  *  UNIFORM PPCC  =  0.9741324E+00  *
*                =                  *  NORMAL PPCC   =  0.9980268E+00  *
*                =                  *  TUK -.5 PPCC =  0.8833071E+00  *
*                =                  *  CAUCHY PPCC   =  0.6132092E+00  *
*****
```