

## ACTFIT

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ACTFIT *actual seriesname predicted seriesname* ;

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### Function:

ACTFIT computes and prints a variety of goodness-of-fit statistics for the actual and predicted values of a series. Theil (references below) suggests using these statistics for evaluating an estimated time series equation or forecast.

### Usage:

After ACTFIT, give the name of the actual data series followed by the name of the fitted or predicted series.

### Example:

ACTFIT R RS ;

### Output:

ACTFIT prints a title, the names of the series being compared, the time period (sample) over which they are compared, and then a variety of computed statistics on the comparison. These include the correlation of the two series, the mean square error, the mean absolute error, Theil's inequality coefficient (U), and a decomposition of the source of the discrepancies between the two series: differences in the mean, or differences in the variance. Note: U is defined differently in the 1961 and 1966 references. The 1966 definition is used in TSP Versions 4.0 and 4.1; under this definition U can be greater than one. In TSP Version 4.2 and above, both versions of U are printed. This output is followed by a time series residual plot of the two series if the PLOTS option is on (see the OPTIONS command). If the RESID option is on, the residual series will be stored under the name @RES, whether or not the PLOTS option is on.

### References:

Theil, Henri, **Applied Economic Forecasting**, North Holland Publishing Company, 1966, pp. 27-33.

Theil, Henri, **Economic Forecasts and Policy**, North Holland Publishing Company, 1961.