Changes and Enhancements

Table of Contents

OVERVIEW ...................................... 3
THE OUTPUT DELIVERY SYSTEM ................. 3
THE SASEFAME ENGINE .......................... 3
THE ARIMA PROCEDURE .......................... 3
THE DATASOURCE PROCEDURE ..................... 4
THE MODEL PROCEDURE ........................... 4
PROC SPECTRA ENHANCEMENTS .................. 4
THE TIME SERIES FORECASTING SYSTEM ........ 4
Changes and Enhancements
Changes and Enhancements

Overview

This chapter summarizes the enhancements to SAS/ETS software made since the publication of SAS/ETS Software: Changes and Enhancements for Release 6.12. All of these changes and enhancements are incorporated into the individual procedure chapters and are described in greater detail.

Version 7 of SAS/ETS software contains enhancements to several procedures, a new data access engine for FAME databases, and incorporation of the new Output Delivery System for all procedures. Additionally, the OUTEST data sets in iterative SAS/ETS procedures now contain the variable _STATUS_ to report on the convergence status of the estimation.

The Output Delivery System

All procedures now incorporate the Output Delivery System (ODS). This is a system for managing the results of a procedure. By default, the results for a procedure are directed to the SAS listing file as in previous releases, but with ODS you can create HTML or RTF files, create SAS output data sets of any table in the output, select or exclude pieces of output from a procedure, or modify the organization and style of that output. Refer to Chapter 6, “Using the Output Delivery System,” or The Complete Guide to the SAS Output Delivery System for more information.

The SASEFAME Engine

A new data access engine (SASEFAME) has been added to provide seamless access to FAME databases.

The ARIMA Procedure

The following option was added to the FORECAST statement.

SIGSQ=

specifies the variance term used in the formula for computing forecast standard errors and confidence limits. The default value is the variance estimate computed by the preceding ESTIMATE statement. This option is useful when you wish to generate forecast standard errors and confidence limits based on a published model. It would often be used in conjunction with the NOEST option in the preceding ESTIMATE
Changes and Enhancements

statement.

The following observations were added to the where variable _STAT_ in the OUT-STAT= Data Set.

  _STAT_=NITER Number of iterations
  _STAT_=CONV Convergence Status

The DATASOURCE Procedure

The DATASOURCE procedure supports more data files, including the 1996 CRSP binary data, CRSP ACESS 97 CDROM data, and the DRI data files.

The MODEL Procedure

The MODEL procedure now allows you to model a nonconstant error variance, permitting the specification of ARCH- and GARCH-type regression models.

PROC SPECTRA Enhancements

With the advent of long variable names in Version 7, the variable names created by the SPECTRA procedure for the output data set have been made more readable. Instead of using the index of the variable in the VAR list as a suffix, the actual variable name is used as a suffix. The new format for the output variables can be selected with the LONGNAME option on the command line.

The Time Series Forecasting System

The Time Series Forecasting System has an improved graphical interface including enhancements to all windows and tool bars. The Produce Forecasts and Automatic Model Fitting Results windows have been expanded to make it easier to customize forecasts and to explore automatically selected models. Confidence limits have been added to autocorrelations plots. Through improved command line support, users can create their own customized interfaces to the system or run large batches of unattended forecasts. The command line and graphical interfaces can be used interchangeably to create and update forecasting projects.