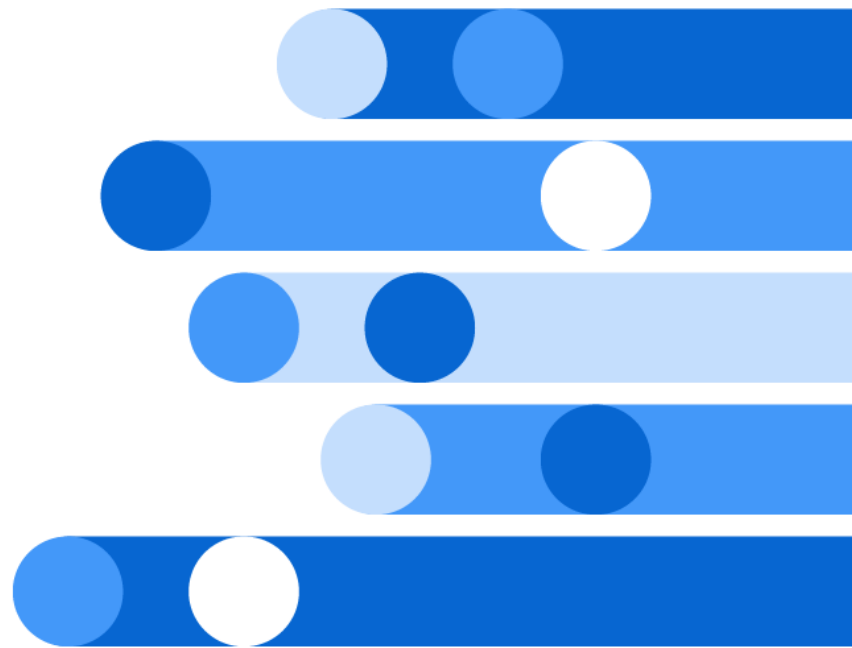




SAS/ETS® 15.3

User's Guide

The X12 Procedure



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Chapter 45

The X12 Procedure

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Overview: X12 Procedure

The X12 procedure is an adaptation of the US Bureau of the Census X-12-ARIMA seasonal adjustment program (US Bureau of the Census 2010). The X-12-ARIMA program was developed by the Time Series Staff of the Statistical Research Division, US Census Bureau. The X-12-ARIMA seasonal adjustment program contains components developed from Statistics Canada's X-11-ARIMA program. The X-12-ARIMA automatic modeling method is based on the work of Gómez and Maravall (1997a, b).

The Time Series Staff of the Statistical Research Division, US Census Bureau, has recently developed a new program, X-13ARIMA-SEATS (US Bureau of the Census 2013). This program incorporates the X-12-ARIMA functionality along with the SEATS functionality that was developed by Gómez and Maravall (1997a, b). The X12 procedure includes improvements on X-12-ARIMA methods that are incorporated into the X-13ARIMA-SEATS program.

Because the US Census Bureau has focused its new development on the X-13ARIMA-SEATS program, a new X13 procedure has been developed to incorporate the X-13ARIMA-SEATS method.

NOTE: The functionality previously available in the X12 procedure is included in the new X13 procedure. You can specify either of the following with the same results:

```
proc x12 ...
```

```
proc x13 ...
```

For documentation of the PROC X12 syntax and a description of its details, see Chapter 46, “The X13 Procedure.”

References

- Gómez, V., and Maravall, A. (1997a). *Guide for Using the Programs TRAMO and SEATS, Beta Version*. Madrid: Banco de España.
- Gómez, V., and Maravall, A. (1997b). *Programs TRAMO and SEATS: Instructions for the User, Beta Version*. Madrid: Banco de España.

US Bureau of the Census (2010). *X-12-ARIMA Seasonal Adjustment Program, Version 0.3*. US Bureau of the Census, Washington, DC.

US Bureau of the Census (2013). *X-13ARIMA-SEATS Reference Manual, Version 1.1*. US Bureau of the Census, Washington, DC. <https://www2.census.gov/software/x-13arima-seats/x13as/unix-linux/documentation/docx13ashtml.pdf>.