

Title

intro — Introduction to time-series manual

Description

This entry describes this manual and what has changed since Stata 9.

Remarks

This manual documents Stata's time-series commands and is referred to as [TS] in references.

After this entry, [TS] **time series** provides an overview of the `ts` commands. The other parts of this manual are arranged alphabetically. If you are new to Stata's time-series features, we recommend that you read the following sections first:

[TS] time series	Introduction to time-series commands
[TS] tsset	Declare a dataset to be time-series data

Stata is continually being updated, and Stata users are always writing new commands. To ensure that you have the latest features, you should install the most recent official update; see [R] **update**.

What's new

1. All time-series analysis commands now support data with frequencies as high as 1 millisecond (ms), corresponding to Stata's new date/time variables. Since your data are probably not recorded at the millisecond level, existing command `tsset` has new option `delta()` that allows you to specify the frequency of your data. Previously, time was recorded as $t_0, t_0 + 1, t_0 + 2, \dots$, and if time = t in some observation, then the corresponding lagged observation was the observation for which time = $t - 1$. That is still the default. When you specify `delta()`, time is assumed to be recorded as $t_0, t_0 + \delta, t_0 + 2\delta$, and if time = t in some observation, then the corresponding lagged observation is the observation for which time = $t - \delta$. Say that you are analyzing hourly data and time is recorded using Stata's new `%tc` values. One hour corresponds to 3,600,000 ms, and you would want to specify `tsset t, delta(3600000)`. Option `delta()` is smart; you can specify `tsset t, delta(1 hour)`. See [TS] **tsset**.
2. `tsset` now reports whether panels are balanced when an optional panel variable is specified.
3. Many `ts` estimation commands now accept option `vce(vcetype)`. As mentioned in [U] **1.3.3 What's new in statistics (general)**, `vce(robust)` and `vce(cluster varname)` are the right ways to specify the old `robust` and `cluster()` options, and option `vce()` allows other VCE calculations as well.
4. Options `vce(hc2)` and `vce(hc3)` are now the preferred way to request alternative bias corrections for the robust variance calculation for existing estimation command `prais`. See [TS] **prais**.
5. Existing estimation commands `arch` and `arima` have new option `collinear` that specifies that the estimation command not remove collinear variables. Typically, you do not want to specify this option. It is for use when you specify constraints on the coefficients such that, even though the variables are collinear, the model is fully identified. See [TS] **estimation options**.

6. Existing command `irf` now estimates and reports dynamic-multiplier functions and cumulative dynamic-multiplier functions, as well as their standard errors. See [TS] **irf**.
7. The [TS] manual has an expanded glossary.

For a list of all the new features in Stata 10, see [U] **1.3 What's new**.

Also See

[U] **1.3 What's new**

[R] **intro** — Introduction to base reference manual