sttoct — Convert survival-time data to count-time data

Description

sttoct converts survival-time (st) data to count-time (ct) data; see [ST] ct.

At present, there is absolutely no reason that you would want to do this.

Quick start

Convert survival-time data to count-time data using stset data

sttoct

As above, and specify that counts are recorded for groups identified by v1

sttoct, by(v1)

Syntax

sttoct newfailvar newcensvar [newentvar] [ , options ]

options Description

by(varlist) reflect counts by group, where groups are defined by observations

replace proceed with transformation, even if current data are not saved

noshow do not show st setting information

You must stset your data before using sttoct; see [ST] stset.
fweights, iweights, and pweights may be specified using stset; see [ST] stset.
There is no dialog-box interface for sttoct.

Options

by(varlist) specifies that counts reflect counts by group where the groups are defined by observations

replace specifies that it is okay to proceed with the transformation, even though the current dataset

has not been saved on disk.

noshow prevents sttoct from showing the key st variables. This option is seldom used because

most people type stset, show or stset, noshow to set whether they want to see these variables

mentioned at the top of every st command; see [ST] stset.
sttoct is a never-used command that is included only for completeness. The definition of ct data is found in [ST] ct. In the current version of Stata, all you can do with ct data is convert the data to st data (which thus provides access to Stata’s survival analysis capabilities to those with ct data), so there is little point in converting st data to ct data.

The converted dataset will contain

- `varlist` from `by(varlist)`, if specified
- `t` the exit-time variable previously `stset`
- `newfailvar` number of failures at `t`
- `newcensvar` number of censored at `t` (after failures)
- `newentvar` if specified, number of entries at `t` (after censorings)

The resulting dataset will be `ctset` automatically.

There are two forms of the `sttoct` command:

1. `sttoct failvar censvar, ...`
2. `sttoct failvar censvar entvar, ...`

That is, specifying `entvar` makes a difference.

**Case 1: entvar not specified**

This is possible only if

- a. the risk is not recurring;
- b. the original st data are single-record data, or if the data are multiple-record data, all subjects enter at time 0 and have no gaps thereafter; and
- c. if `by(varlist)` is specified, subjects do not have changing values of the variables in `varlist` over their histories.

If you do not specify `entvar`, `sttoct` verifies that (a), (b), and (c) are true. If the assumptions are true, `sttoct` converts your data and counts each subject only once. That is, in multiple-record data, all thrashing (censoring followed by immediate reenter with different covariates) is removed.

**Case 2: entvar specified**

Any kind of survival-time data can be converted to count-time data with an entry variable. You can convert your data in this way whether assumptions (a), (b), and (c) are true or not.

When you specify a third variable, thrashing is not removed, even if it could be—even if assumptions (a), (b), and (c) are true.

**Also see**

- [ST] ct — Count-time data
- [ST] st_is — Survival analysis subroutines for programmers
- [ST] stset — Declare data to be survival-time data
- [ST] sttocc — Convert survival-time data to case–control data