

**st\_tempname()** — Temporary Stata names

Description Diagnostics	Syntax Also see	Remarks and examples	Conformability
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## Description

`st_tempname()` returns a Stata temporary name, the same as would be returned by Stata's `tempvar` and `tempname` commands; see [P] [macro](#).

`st_tempname(n)` returns *n* temporary Stata names,  $n \geq 0$ .

`st_tempfilename()` returns a Stata temporary filename, the same as would be returned by Stata's `tempfile` command; see [P] [macro](#).

`st_tempfilename(n)` returns *n* temporary filenames,  $n \geq 0$ .

## Syntax

<i>string scalar</i>	<code>st_tempname()</code>
<i>string rowvector</i>	<code>st_tempname(<i>real scalar n</i>)</code>
<i>string scalar</i>	<code>st_tempfilename()</code>
<i>string rowvector</i>	<code>st_tempfilename(<i>real scalar n</i>)</code>

## Remarks and examples

Remarks are presented under the following headings:

*Creating temporary objects*  
*When temporary objects will be eliminated*

### Creating temporary objects

`st_tempname()`s can be used to name Stata's variables, matrices, and scalars. Although in Stata a distinction is drawn between `tempvars` and `tempnames`, there is no real distinction, and so `st_tempname()` handles both in Mata. For instance, one can create a temporary variable by coding

```
idx = st_addvar("double", st_tempname())
```

See [M-5] [st\\_addvar\(\)](#).

One creates a temporary file by coding

```
fh = fopen(st_tempfilename(), "w")
```

See [M-5] [fopen\(\)](#).

## When temporary objects will be eliminated

Temporary objects do not vanish when the Mata function ends, nor when Mata itself ends. They are removed when the ado-file (or do-file) calling Mata terminates.

Forget Mata for a minute. Stata eliminates temporary variables and files when the program that created them ends. That same rule applies to Mata: Stata eliminates them, not Mata, and that means that the ado-file or do-file that called Mata will eliminate them when that ado-file or do-file ends. Temporary variables and files are not eliminated by Mata when the Mata function ends. Thus Mata functions can create temporary objects for use by their ado-file callers, should that prove useful.

## Conformability

`st_tempname()`, `st_tempfilename()`:

*result*:  $1 \times 1$

`st_tempname(n)`, `st_tempfilename(n)`:

*n*:  $1 \times 1$

*result*:  $1 \times n$

## Diagnostics

`st_tempname(n)` and `st_tempfilename(n)` abort with error if  $n < 0$  and return `J(1,0,"")` if  $n = 0$ .

## Also see

[M-5] `st_addvar()` — Add variable to current Stata dataset

[M-4] `stata` — Stata interface functions