

Description

`estat sd` displays the random-effects and within-group error parameter estimates as standard deviations and correlations.

Menu for estat

Statistics > Postestimation

Syntax

```
estat sd [ , variance verbose post coeflegend ]
```

`collect` is allowed; see [U] [11.1.10 Prefix commands](#).

Options

`variance` specifies that `estat sd` display the random-effects and within-group error parameter estimates as variances and covariances. If the `post` option is specified, the estimated variances and covariances and their respective standard errors are posted to `e()`. `variance` is allowed only after `mixed` and `menl`.

`verbose` specifies that the full estimation table be displayed. By default, only the random-effects and within-group error parameters are displayed. This option is implied when `post` is specified.

`post` causes `estat sd` to behave like a Stata estimation (e-class) command. `estat sd` posts the vector of calculated standard deviation and correlation parameters along with the corresponding variance–covariance matrix to `e()`, so that you can treat the estimated parameters just as you would results from any other estimation command. For example, you could use `test` to perform simultaneous tests of hypotheses on the parameters, or you could use `lincom` to create linear combinations.

The following option is not shown in the dialog box:

`coeflegend` specifies that the legend of the coefficients and how to specify them in an expression be displayed rather than displaying the statistics for the coefficients. This option is allowed only if `post` is also specified.

Remarks and examples

See [example 1](#) in [ME] [mixed postestimation](#) and [example 16](#) in [ME] [menl](#).

Stored results

estat sd stores the following in `r()`:

Matrices

<code>r(b)</code>	coefficient vector
<code>r(V)</code>	variance–covariance matrix of the estimators
<code>r(table)</code>	table of results

If `post` is specified, estat sd stores the following in `e()`:

Macros

<code>e(cmd)</code>	estat sd
<code>e(properties)</code>	b V

Matrices

<code>e(b)</code>	coefficient vector
<code>e(V)</code>	variance–covariance matrix of the estimators

Also see

[ME] [mecloglog](#) — Multilevel mixed-effects complementary log–log regression

[ME] [meglm](#) — Multilevel mixed-effects generalized linear models

[ME] [meintreg](#) — Multilevel mixed-effects interval regression

[ME] [melogit](#) — Multilevel mixed-effects logistic regression

[ME] [menbreg](#) — Multilevel mixed-effects negative binomial regression

[ME] [menl](#) — Nonlinear mixed-effects regression

[ME] [meologit](#) — Multilevel mixed-effects ordered logistic regression

[ME] [meoprobit](#) — Multilevel mixed-effects ordered probit regression

[ME] [mepoisson](#) — Multilevel mixed-effects Poisson regression

[ME] [meprobit](#) — Multilevel mixed-effects probit regression

[ME] [mestreg](#) — Multilevel mixed-effects parametric survival models

[ME] [metobit](#) — Multilevel mixed-effects tobit regression

[ME] [mixed](#) — Multilevel mixed-effects linear regression

[U] [20 Estimation and postestimation commands](#)

Stata, Stata Press, and Mata are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow and NetCourseNow are trademarks of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2025 StataCorp LLC, College Station, TX, USA. All rights reserved.

For suggested citations, see the FAQ on [citing Stata documentation](#).

