Postestimation commands

The following command is of special interest after `rocfit`:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>rocplot</strong></td>
<td>plot the fitted ROC curve and simultaneous confidence bands</td>
</tr>
</tbody>
</table>

The following standard postestimation commands are also available:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>estat ic</strong></td>
<td>Akaike’s and Schwarz’s Bayesian information criteria (AIC and BIC)</td>
</tr>
<tr>
<td><strong>estat summarize</strong></td>
<td>summary statistics for the estimation sample</td>
</tr>
<tr>
<td><strong>estat vce</strong></td>
<td>variance–covariance matrix of the estimators (VCE)</td>
</tr>
<tr>
<td><strong>estimates</strong></td>
<td>cataloging estimation results</td>
</tr>
<tr>
<td><strong>etable</strong></td>
<td>table of estimation results</td>
</tr>
<tr>
<td>* <strong>lincom</strong></td>
<td>point estimates, standard errors, testing, and inference for linear combinations of coefficients</td>
</tr>
<tr>
<td>* <strong>test</strong></td>
<td>Wald tests of simple and composite linear hypotheses</td>
</tr>
</tbody>
</table>

*See Using lincom and test below.*
rocplot

Description for rocplot

rocplot plots the fitted ROC curve and simultaneous confidence bands.

Menu for rocplot

Statistics > Epidemiology and related > ROC analysis > ROC curves after rocfit

Syntax for rocplot

\texttt{rocplot [ , rocplot\_options]}

<table>
<thead>
<tr>
<th>rocplot_options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{confband}</td>
<td>display confidence bands</td>
</tr>
<tr>
<td>\texttt{norefone}</td>
<td>suppress plotting the reference line</td>
</tr>
<tr>
<td>\texttt{level(#)}</td>
<td>set confidence level; default is level(95)</td>
</tr>
</tbody>
</table>

Plot

\texttt{plotopts(plot\_options)} affect rendition of the ROC points

Fit line

\texttt{lineopts(cline\_options)} affect rendition of the fitted ROC line

CI plot

\texttt{ciopts(area\_options)} affect rendition of the confidence bands

Reference line

\texttt{rlopts(cline\_options)} affect rendition of the reference line

Add plots

\texttt{addplot(plot)} add other plots to the generated graph

Y axis, X axis, Titles, Legend, Overall

\texttt{twoway\_options} any options other than by() documented in \texttt{[G-3 twoway\_options]}

<table>
<thead>
<tr>
<th>plot_options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{marker_options}</td>
<td>change look of markers (color, size, etc.)</td>
</tr>
<tr>
<td>\texttt{marker_label_options}</td>
<td>add marker labels; change look or position</td>
</tr>
<tr>
<td>\texttt{cline_options}</td>
<td>change look of the line</td>
</tr>
</tbody>
</table>
Options for rocplot

Main

confband specifies that simultaneous confidence bands be plotted around the ROC curve.
norefline suppresses plotting the 45-degree reference line from the graphical output of the ROC curve.
level(#) specifies the confidence level, as a percentage, for the confidence bands. The default is level(95) or as set by set level; see [R] level.

Plot

plotopts(plot_options) affects the rendition of the plotted ROC points, including the size and color of markers, whether and how the markers are labeled, and whether and how the points are connected. For the full list of available plot_options, see [G-3] marker_options, [G-3] marker_label_options, and [G-3] cline_options.

Fit line

lineopts(cline_options) affects the rendition of the fitted ROC line; see [G-3] cline_options.

CI plot

ciopts(area_options) affects the rendition of the confidence bands; see [G-3] area_options.

Reference line

rlopts(cline_options) affects the rendition of the reference line; see [G-3] cline_options.

Add plots

addplot(plot) provides a way to add other plots to the generated graph. See [G-3] addplot_option.

Y axis, X axis, Titles, Legend, Overall

twoway_options are any of the options documented in [G-3] twoway_options, excluding by(). These include options for titling the graph (see [G-3] title_options) and for saving the graph to disk (see [G-3] saving_option).

Remarks and examples

Remarks are presented under the following headings:

Using lincom and test

Using rocplot

Using lincom and test

intercept, slope, and /cut#, shown in example 1 of [R] rocfit, are equation names and not variable names, so they need to be referenced as described in Special syntaxes after multiple-equation estimation of [R] test. For example, instead of typing

```
  . test intercept
  intercept not found
  r(111);
```
you should type

```
    . test [intercept]_cons
       ( 1) [intercept]_cons = 0
           chi2( 1) = 28.48
           Prob > chi2 = 0.0000
```

**Using rocplot**

➤ **Example 1**

In example 1 of [R] rocfit, we fit a ROC curve by typing `rocfit disease rating`.

In the output table for our model, we are testing whether the variances of the two latent populations are equal by testing that the slope = 1.

We plot the fitted ROC curve.

```
    . rocplot, confband
```

![ROC Curve](image)

**Area under curve = 0.9113  se(area) = 0.0295**

**Also see**

[R] rocfit — Parametric ROC models

[U] 20 Estimation and postestimation commands