The ginteffplot User's Manual

ginteffplot – graph results from ginteff[1]

Description

ginteffplot graphs the results of the immediately preceding ginteff command.[2]

Syntax

ginteffplot [, *options*]

options	Description
Main	
aiepoint([#clockposstyle] ["*text for label*"] [, *marker_label_options marker_options*])	customize marker for the point estimate of the average interaction effect
aierange([*line_options*] [msize(*markersizestyle*)])	customize the range plot of the average interaction effect using capped spikes
obseff[(*obseff_options*)]	plot observation-level interaction effects
output(#)	identify a specific ginteff output to be graphed; default is output(1)
save(*newfilename.suffix* [, *export_options*])	export current graph
xcommon([*numlist*] [*])	give *x* axes common scale
zeroline[(*linearg*)]	add a vertical line at the 0 value
X and Y axes	
xlabel(*rule_or_values*)	customize ticks and labels for *x* axis
xscale(*axis_suboptions*)	customize how *x* axis looks
xtitle(*axis_title*)	customize *x* axis title
ylabel(*rule_or_values*)	specify ticks and labels for *y* axis
yscale(*axis_suboptions*)	specify how *y* axis looks
ytitle(*axis_title*)	specify *y* axis title
Plot and graph areas	
aspectratio(# [, *pos_option*])	plot region aspect ratio
graphregion(*suboptions*)	customize attributes of *graph region*

(continued on next page)

[1] The ginteffplot program and its associated manual come "as is" without warranty of any kind, either expressed or implied, including, but not limited to, the suitability and fitness for a particular purpose. Improvements and/or changes in the product and the program described in this manual may be made at any time and without notice.

[2] The description of the syntax and that of various options borrow heavily, or reproduce excerpts ad litteram, from various Stata graphics manuals. Instead of referencing those manuals repeatedly, this helps make the ginteffplot manual self-contained.

options	Description
plotregion(*suboptions*)	customize attributes of *plot region*
scheme(*schemename*)	customize the graphics scheme
xsize(#)	change width of graph
ysize(#)	change height of graph
Titles, legend, and notes	
legend([*contents*] [*location*])	standard legend, contents and location
note(*tinfo*)	note about graph
subtitle(*tinfo*)	subtitle of the graph
title(*tinfo*)	overall title

Note: Syntax elements within square brackets [ ] are optional. Underlining indicates minimal abbreviation.

Options:

Main

aiepoint([#$_{\text{clockposstyle}}$] ["*text for label*"] [, *marker_label_options marker_options*]) customizes the marker for the point estimate of the average interaction effect. The default is aiepoint((12) "AIE", msymbol(S) mcolor(black) mlabsize(medsmall) mlabcolor(black) mlabgap(*5)). *clockposstyle* cutomizes the location of the label relative to the point; see **[G-4]** *clockposstyle* **– Choices for location: Direction from central point** for more information on specifying *clockposstyle* (https://www.stata.com/manuals/g-4clockposstyle.pdf). *marker_label_options* customize the overall look and color of the marker, the size and color of the label text, and the space between the marker and the label; see **[G-3]** *marker_label_options* **– Options for specifying marker labels** for a description of marker labels and the options that control them (https://www.stata.com/manuals/g-3marker_label_options.pdf). *marker_ options* customize the shape, color, and size of the marker; see **[G-3]** *marker_options* **– Options for specifying markers** for a description of markers and the options that specify them (https://www.stata.com/manuals/g-3marker_options.pdf).

aierange([*line_options*] [msize(*markersizestyle*)]) customizes the range plot of the average interaction effect, using capped spikes (I-beams) to connect the upper and lower confidence limits. The significance level (typically 95%), is set by ginteff's level() option. The default is aierange(lpattern(solid) lcolor(black) lwidth(medthick) msize(medium)). *line_options* customize the look of the line used to draw the spikes and caps, including pattern, width, and color; see **[G-3]** *line_options* **– Options for determining the look of lines** (https://www.stata.com/manuals/g-3line_options.pdf). msize(*markersizestyle*) changes the width of the cap; see **[G-4]** *markersizestyle* **– Choices for the size of markers** for a list of size choices (https://www.stata.com/manuals/g-4markersizestyle.pdf).

obseff[(*obseff_options*)] plots the observation-level interaction effects, for each case in the sample data.

`obseff` is ignored if the preceding `ginteff` command was specified without the `obseff(`*stub*`)` option. `ginteffplot` only graphs estimated parameters; if the individual interaction effects were not computed via `ginteff`, there is nothing to plot. For more information, see the section **Syntax of** `obseff[()]` below.

`output(#)` identifies the `ginteff` output to be graphed and is relevant only when there is more than one set of results. Multiple results occur when you previously fit a multi-equation model, or specified more than one `at()` scenario. For instance, `output(1)` would plot the results displayed in the first row of the `ginteff` output, `output(2)` would mean the second row, and so on. If you do not specify `output()`, results are the same as if you specified `output(1)`.

`save(`*newfilename.suffix* [`,` *export_options*]`)` exports to a file the graph displayed in a Graph window. For more information, see the section **Syntax of** `save()` below.

`xcommon(`[*numlist*] [∗]`)` specifies that the graph be put on a common *x* axis scale with the graphs corresponding to the `ginteff` outputs listed in the suboption of `xcommon()`. You can specify one other output, #, a subset of outputs, *numlist*, or all outputs, ∗.

`zeroline`[`(`*line_options*`)`] adds a vertical line at the 0 value. This is typically used when the confidence interval of the interaction effect contains zero, to graphically indicate that the effect is statistically insignificant at the specified significance level. The default is `zeroline(lpattern(shortdash) lwidth(medthin) lcolor(red))`. These settings are employed if `zeroline` is used without suboptions. If zero falls within the equally spaced values on the *x* axis (see option `xlabel()`), its label will be displayed under the major *x* axis values using a tick 3.5 times as long as the default, `tlength(*3.5)`. *line_options* customize the look of the line, including pattern, width, and color; see **[G-3]** *line_options* **– Options for determining the look of lines** (`https://www.stata.com/manuals/g-3line_options.pdf`).

X and Y axes

`xtitle(`*axis_title*`)` and `ytitle(`*axis_title*`)` specify or customize the title to appear on the *x* and *y* axes. For the *x* axis, the default is `xtitle("Change in {it:` *depvar*`}", size(4))`, where *depvar* is the dependent variable's label or, if it does not have a label, its name. Specifying {it:} displays the name in italics. `xtitle()` customizes the title text and font size. The *y* axis is not titled, and specifying `ytitle()` adds a title. For more information on option `{x|y}title()` and its various suboptions, see **[G-3]** *axis_title_options* **– Options for specifying axis titles** (`https://www.stata.com/manuals13/g-3axis_title_options.pdf`).

`xlabel(`*rule_or_values*`)` and `ylabel(`*rule_or_values*`)` specify or customize the major values to be labeled and ticked along the *x* and *y* axes. The default is `ylabel(none)` and `xlabel(`*xmin*`(`=(*xmax-xmin*)/5')*xmax*`)`. The *xmin*`(`=(*xmax-xmin*)/5')*xmax* rule specifies that the minimum and maximum values, along with four equally spaced intermediate values, are to be labeled and ticked along the *x* axis. The *xmin* and *xmax* values are retrieved automatically from the `ginteff` output. For more infor-

mation on option {x|y}label() and its various suboptions, see **[G-3]** *axis_label_options* **– Options for specifying axis labels** (https://www.stata.com/manuals/g-3axis_label_options.pdf).

xscale(*axis_suboptions*) and yscale(*axis_suboptions*) customize the look of the *x* and *y* axes. The default is xscale("titlegap(4)") and yscale(titlegap(0) range(0 2)). For more information on option {x|y} scale() and its various suboptions, see Stata's manual **[G-3]** *axis_scale_options* **– Options for specifying axis scale, range, and look** (https://www.stata.com/manuals13/g-3axis_scale_options.pdf).

Plot and graph areas

aspectratio(# [, *pos_option*]) specifies the aspect ratio and, optionally, the placement of the plot region. For example, when # = 1, the height and width will be equal (their ratio is 1), and the plot region will be square; if it is 2, the plot region is twice as tall as it is wide; and, if it is .5, the plot region is twice as wide as it is tall. For more information on option aspectratio() and its various suboptions, see **[G-3]** *aspect_option* **– Option for controlling the aspect ratio of the plot region** (https://www.stata.com/manuals/g-3aspect_option.pdf).

graphregion(*suboptions*) customizes attributes for the *graph region*. The default is graphregion(fcolor(white)). For more information on option graphregion() and its various suboptions, see **[G-3]** *region_options* **– Options for shading and outlining regions and controlling graph size** (https://www.stata.com/manuals/g-3region_options.pdf).

plotregion(*suboptions*) customizes attributes for the *plot region*. The default is plotregion(margin(sides)). For more information on option plotregion() and its various suboptions, see **[G-3]** *region_options* **– Options for shading and outlining regions and controlling graph size** (https: //www.stata.com/manuals/g-3region_options.pdf).

scheme(*schemename*) customizes the graphics scheme to be used. The default is scheme(s2mono); see **[G-3]** *scheme_option* **– Option for specifying scheme** (https://www.stata.com/manuals/g-3scheme_option.pdf).

ysize(*graphsize*) and xsize(*graphsize*) specify the height and width of the available area. graphsize is a numeric value followed by units in, pt, or cm. For example, 1in = 72pt = 2.54cm. When units are not specified, in is assumed. The defaults are usually ysize(4) and xsize(5.5), but this, of course, is controlled by the scheme. The minimum *graphsize* is 1in. The maximum *graphsize* is 100in. For more information, see **[G-3]** *region_options* **– Options for shading and outlining regions and controlling graph size** (https://www.stata.com/manuals/g-3region_options.pdf).

Titles, legend, and notes

title(*tinfo*) and subtitle(*tinfo*) specify the overall title and subtitle of the graph. The default is title("") and subtitle(""), which means no title or subtitle. For more information on option {sub}title() and its various suboptions, see **[G-3]** *title_options* **– Options for specifying titles** (https://www.stata.com/manuals13/g-3title_options.pdf).

`legend(`[*contents*] [*location*]`)` defines the contents of the standard legend, along with how it is to look, and whether and where it is to be displayed. The default is `legend(off)`. For more information on option `legend()` and its various suboptions, see **[G-3]** *legend_options* **– Options for specifying legends** (`https://www.stata.com/manuals13/g-3legend_options.pdf`).

`note(`*tinfo*`)` specifies notes to be displayed with the graph. The default is `note("")`, which means no notes. For more information on option `note()` and its various suboptions, see **[G-3]** *title_options* **– Options for specifying titles** (`https://www.stata.com/manuals13/g-3title_options.pdf`).

Syntax of option `obseff[()]`

`obseff` [`(`*obseff_options*`)`]

obseff_options	Description
`marker(`*marker_options*`)`	customize markers
`median[(`[#clockposstyle] ["*text for label*"] [, *marker_label_options marker_options*]`)]`	add marker label for the median
`pctile[(`*altdef*`)]`	plot only 101 representative values

Note: Syntax elements within square brackets [ ] are optional. Underlining indicates minimal abbreviation.

Suboptions of `obseff()`:

`marker(`*marker_options*`)` customizes the shape, color, and size of markers indicating the observation-level interaction effects. The default is `marker(msymbol(O) mcolor(black) msize(vtiny))`. See **[G-3]** *marker_options* **– Options for specifying markers** for a description of markers and the options that specify them (`https://www.stata.com/manuals/g-3marker_options.pdf`).

`median[(`[#clockposstyle] ["*text for label*"] [, *marker_label_options marker_options*]`)]` adds and customizes the marker for the median value of the variable containing the observation-level interaction effects. The default is `median((6) "(median)", msymbol(Oh) mcolor(black) mlabsize(medsmall) mlabcolor(black) mlabgap(*5))`. These settings are employed if `median` is used without suboptions. *clockposstyle* cutomizes the location of the label relative to the point; see **[G-4]** *clockposstyle* **– Choices for location: Direction from central point** for more information on specifying *clockposstyle* (`https://www.stata.com/manuals/g-4clockposstyle.pdf`). *marker_label_options* customize the overall look and color of the marker, the size and color of the label text, and the space between the marker and the label; see **[G-3]** *marker_label_options* **– Options for specifying marker labels** for a description of marker labels and the options that control them (`https://www.stata.com/manuals/g-3marker_label_options.pdf`). *marker_options* customize the shape, color, and size of the marker; see **[G-3]** *marker_ options* **– Options for specifying markers** for a description of markers and the options specifying them (`https://www.stata.com/manuals/g-3marker_options.pdf`).

`pctile[(`*altdef*`)]` plots only the 1st, 2nd, . . . , 99th percentiles, as well as the minimum and maximum values of the variable containing the observation-level interaction effects (101 values in total). The

specific variable is created using `ginteff`'s `obseff(`*stub*`)` option. For large datasets, with thousands of obervations (or more), plotting the effect for each observation can overload the graph and significantly increase the file-size of the figure. If there are fewer than 99 observations, option `pctile` is ignored. The default method for calculating percentiles is to invert the empirical distribution function by using averages, $(x_i + x_{i+1})/2$, where the function is flat. When the suboption `altdef` is specified, an alternative formula that uses an interpolation method is employed. For more information on the formulas used to compute percentiles (with or without the `altdef` suboption), see **[D] pctile – Create variable containing percentiles** (`https://www.stata.com/manuals/dpctile.pdf`).

Syntax of option `save()`

`save(`*newfilename.suffix* [, *export_options*]`)`

export_options	Description
`name(`*windowname*`)`	name of Graph window to export
`as(`*fileformat*`)`	desired format of output
`replace`	*newfilename* may already exist
override_options	override defaults in conversion

If `as()` is not specified, the output format is determined by the suffix of *newfilename.suffix*:

suffix	Implied option	Output format
`ps`	`as(ps)`	PS (PostScript)
`eps`	`as(eps)`	EPS (Encapsulated PostScript)
`svg`	`as(svg)`	SVG (Scalable Vector Graphics)
`emf`	`as(emf)`	EMF (Enhanced Metafile)
`pdf`	`as(pdf)`	PDF (Portable Document Format)
`png`	`as(png)`	PNG (Portable Network Graphics)
`tif`	`as(tif)`	TIFF (Tagged Image File Format)
`gif`	`as(gif)`	GIF (Graphics Interchange Format)
`jpg`	`as(jpg)`	JPEG (Joint Photographic Experts Group)
other	*other*	must specify `as()`

`tif` is not available for Stata(console); `emf` is available only for Stata for Windows; and, `gif` is available only for Stata for Mac.

override_options	Description
ps_options	when exporting to `ps`
eps_options	when exporting to `eps`
svg_options	when exporting to `svg`
png_options	when exporting to `png`

(continued on next page)

override_options	Description
tif_options	when exporting to `tif`
gif_options	when exporting to `gif`
jpg_options	when exporting to `jpg`

There are no *override_options* for the `pdf` format.

Suboptions of `save()`:

`name(`*windowname*`)` specifies which window to export from when exporting a graph. Omitting the `name()` option exports the topmost graph. The name for a window is displayed inside parentheses in the window title. For example, if the title for a Graph window is **Graph (MyGraph)**, the name for the window is **MyGraph**. If a graph is an **asis** or **graph7** graph where there is no name in the window title, specify " " for it windowname.

`as(`*fileformat*`)` specifies the file format to which the graph is to be exported. By default, the format is determined from the suffix of the file being created.

`replace` specifies that it is okay to replace *filename.suffix* if it already exists.

override_options modify how the graph is converted. See also **[G-3]** *ps_options* **– Options for exporting or printing to PostScript** (`https://www.stata.com/manuals/g-3ps_options.pdf`), **[G-3]** *eps_options* **– Options for exporting to Encapsulated PostScript** (`https://www.stata.com/manuals/g-3eps_options.pdf`), **[G-3]** *svg_options* **– Options for exporting to Scalable Vector Graphics** (`https://www.stata.com/manuals/g-3svg_options.pdf`), **[G-3]** *png_options* **– Options for exporting to portable network graphics (PNG) format** (`https://www.stata.com/manuals/g-3png_options.pdf`), **[G-3]** *tif_options* **– Options for exporting to tagged image file format (TIFF)** (`https://www.stata.com/manuals/g-3tif_options.pdf`), **[G-3]** *jpg_options* **– Options for exporting to Joint Photographic Experts Group (JPEG) format** (`https://www.stata.com/manuals/g-3jpg_options.pdf`), **[G-3]** *gif_options* **– Options for exporting to Graphics Interchange Format (GIF)** (`https://www.stata.com/manuals/g-3gif_options.pdf`).

For more information about exporting graphs, see **[G-2] graph export – Export current graph** (`https://www.stata.com/manuals/g-2graphexport.pdf`).

Remarks and examples

The upcoming examples use the data from the Second National Health and Nutrition Examination Survey, available from the StataCorp website (`nhanes2f.dta`). The dependent variable is a simplified version of *health*, a five-level ordinal variable (i.e., poor, fair, average, good, and excellent). Specifically, we generate a three-level indicator of health, *health_3l* (1 = poor, 2 = average, and 3 = excellent), by collapsing the poor and fair levels into one category, keeping the average category unchanged, and also collapsing the good and excellent levels into another category. There are three independent variables. The interacted variables,

female and *race*, are factor variables. *female* is coded 0 for males, and 1 for females. *race* is a three category variable, where 1 = white, 2 = black, and 3 = other. The control variable, *age*, is continuous.

Given the nature of the dependent variable, first we estimate an ordered logit model. Next we issue the `ginteff` command. All in all, there are six sets of results. More specifically, we have three distinct health outcomes, and for each of them there are two interaction effects – one for each contrast of *race* (whites are the base category). If we were to issue the `ginteffplot` command with no options, the first set of the `ginteff` results would be plotted (i.e., the interaction effect between *race* (black vs. white) and *female* on the probability of being in poor health). Option `output()` allows us to choose a different set of results. In this example we focus on the third output, which the effect of the simultaneous change in *race* (from white to black) and *female* (from male to female) on the probability of being of average health.

```
. webuse nhanes2f, clear

. keep health race female age

. clonevar health_3l = health // three-level health
(2 missing values generated)

. recode health_3l (2=1) (3=2) (4/5=3)
(health_3l: 9606 changes made)

. ologit health_3l i.race##i.female age, nolog level(90)

Ordered logistic regression                     Number of obs     =     10,335
                                                LR chi2(6)        =    1645.32
                                                Prob > chi2       =     0.0000
Log likelihood = -10007.515                     Pseudo R2         =     0.0760

------------------------------------------------------------------------------
   health_3l |      Coef.   Std. Err.      z    P>|z|     [90% Conf. Interval]
-------------+----------------------------------------------------------------
        race |
      Black  |  -.7802284   .0904631    -8.62   0.000     -.929027   -.6314298
      Other  |  -.3585295   .1870633    -1.92   0.055    -.6662212   -.0508378
             |
    1.female |  -.0848304   .0413361    -2.05   0.040    -.1528223   -.0168386
             |
 race#female |
   Black#1   |  -.2698946   .1224673    -2.20   0.028    -.4713354   -.0684538
   Other#1   |   .1785221   .2693293     0.66   0.507    -.2644853    .6215294
             |
         age |  -.0437226   .0011899   -36.75   0.000    -.0456798   -.0417654
-------------+----------------------------------------------------------------
       /cut1 |  -3.570566   .0714685                     -3.688121    -3.45301
       /cut2 |  -2.137158   .0653756                     -2.244691   -2.029625
------------------------------------------------------------------------------

. ginteff, dydxs(female race) obseff(obs_ol2w) level(90)

Interaction Effects
    Statistic        :          Average interaction effect
    Standard error   :          Delta-method
    Δ(i.x1)          :          dy/dx w.r.t. x1; x1 : b0.i(1).female
    Δ(i.x2)          :          dy/dx w.r.t. x2; x2 : b1.i(2.3).race
    Number of obs    =          10,335

    1._pr            :          Pr(health_3l==1), predict(pr outcome(1))
```

```
    2._pr            :          Pr(health_3l==2), predict(pr outcome(2))
    3._pr            :          Pr(health_3l==3), predict(pr outcome(3))
```

	Statistic	Std. Err.	[90% Conf.	Interval]
1._pr#Δ(1.x1)#Δ(2.x2)	.06109026	.02486272	.02019472	.1019858
1._pr#Δ(1.x1)#Δ(3.x2)	-.02962508	.04701208	-.10695308	.04770292
2._pr#Δ(1.x1)#Δ(2.x2)	-.01203469	.00379538	-.01827754	-.00579185
2._pr#Δ(1.x1)#Δ(3.x2)	-.00924215	.01140145	-.02799587	.00951157
3._pr#Δ(1.x1)#Δ(2.x2)	-.04905557	.02384525	-.08827751	-.00983362
3._pr#Δ(1.x1)#Δ(3.x2)	.03886723	.05830807	-.05704102	.13477547

```
Note: dy/dx for factor levels is the discrete change from the base level.
```

Example 1: Plot the average interaction effect

```
. ginteffplot, output(3)
```

This command line produces the plot in Figure 1a1, which is just the average interaction effect (the solid square mark) and its 90% confidence interval (CI) (the solid horizontal line). The specific significance level of the CI was set via the `ginteff` command.

Example 2: Customized average interaction effect plot

```
. ginteffplot, output(3) aierange(lpattern(dash) lcolor(maroon)) graphregion(fcolor(ltbluishgray))
>     aiepoint("Avg. Int. Eff.", msymbol(Oh) mcolor(maroon)) ///
```

This command line produces the plot in Figure 1b1. It reproduces Figure 1a1 while changing the background color to match Stata's factory settings. Using option `aierange()`, we also change the color (from black to maroon) and pattern (from solid to dash) of the line connecting the upper and lower bounds of the 90% CI. We also adjust the shape, color and label text of the point estimate marker via option `aiepoint()`.

Example 3: Plot the average and individual interaction effects

```
. label variable health_3l "Health"
. ginteffplot, output(3) obseff
```

This command line produces the plot in Figure 1a2. Compared to Figure 1a1, there are several changes. First, we replace the elaborate variable label of *health_3l* with a more succinct text, which simply says *Health*. This is the label `ginteffplot` will use from now on to describe the dependent variable in the *x* axis title (unless modified by the `xtitle()` option). Second, the graph shows the average interaction effect *and* the individual, observation-level effects. To request the latter, we simply specify the `obseff` option. Note that the *x* axis is automatically adjusted to accommodate the wider range.

Example 4: Customized average and individual interaction effects plot

```
. ginteffplot, output(3) obseff(marker(msymbol(+) msize(small) mcolor(gray))) ///
>     note(Note: Std. Err. computed using Delta method) title(Estimated Effect) subtitle(" ") ///
>     xtitle("AIE: Average Marginal Effect", size(4))
```

This command line produces the plot in Figure 1b2. It reproduces Figure 1a2, while customizing several things. First, we add a two-line graph title. The title line spells out the name, *Estimated Effect*, whereas the `subtitle()` option is empty and used to insert whitespace between the title and plot region. By default the text appears near the edge of the plot region, as illustrated by the new *x* axis title, *AIE: Average Interaction*

Effect. If we wanted to insert whitespace between the *x* axis title and plot region, we could use option `xscale(titlegap(`*relativesize*`))`. Third, we change the color (form black to gray) and symbol (from · to +) of the markers identifying the observation-level effects. Lastly, we add a note about the method used to compute the standard error of the estimate.

Example 5: Plot the average and individual interaction effects, and more

```
. ginteffplot, output(3) obseff(median) zeroline
```

This command line produces the plot in Figure 1a3. Besides the average and individual interaction effects, we now also insert a vertical line at the 0 value. Since the higher CI bound does not cross the zero line, we can conclude that the interaction effect is statistically significant. Because we specified suboption `median`, the median value of the observation-level effects is superimposed.

Example 6: Customized average and individual interaction effects plot, and more

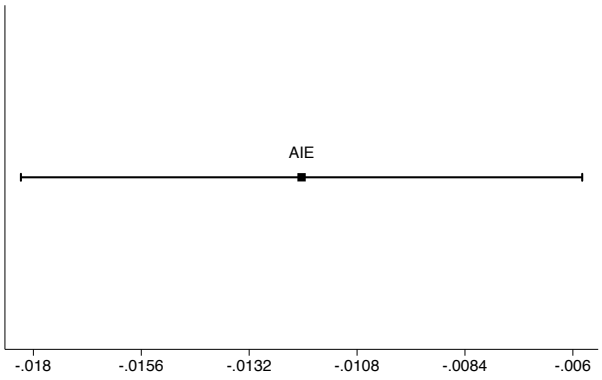
```
. ginteffplot, output(3) obseff(median((5) "50th pctile", msymbol(Sh) mcolor(black) ///
>     mlabsize(medsmall))) zeroline(lpattern(longdash_dot) lwidth(medthick) lcolor(green)) ///
>     xtitle("Change in the predicted probability of it:Health", size(4)) aspectratio(1) scheme(s1mono)
```

This command line produces the plot in Figure 1b3. It reproduces Figure 1a3, while changing the plot region from a rectangular to a square via option `aspectratio(1)`, that is, setting the ratio between the height and width to 1. By using `scheme(s1mono)` we also create a visible border around the graph. Moreover, we increase the width, and change the color (from red to green) and the pattern (from shortdash to longdash–dot) of the zero line. We also change the shape (from a circle to a square), the label (to "50th percentile"), and the clock position of the median marker (from 6 to 5). Lastly, we adjust the *x* title to indicate the outcome metric for the interpretation of the interaction effect, namely, the predicted probability of *Heath*.

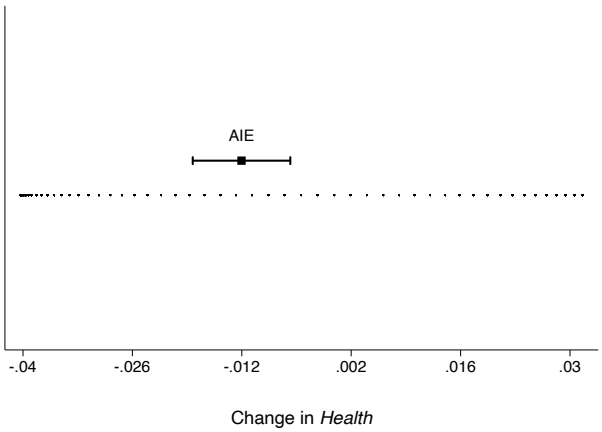
Figure 1: `ginteffplot` graphs

(a) Default settings

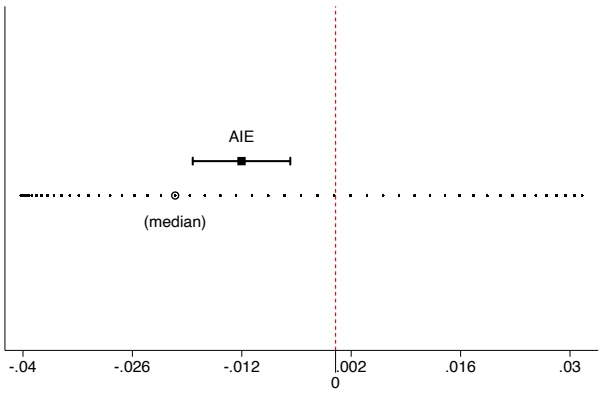
(a1) Average interaction effect



(a2) Average and individual interaction effects

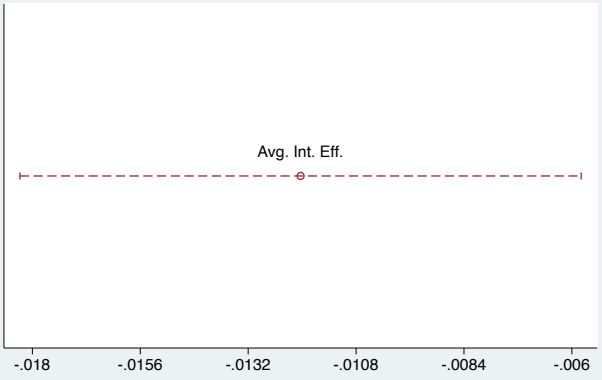


(a3) Average and individual interaction effects, and more

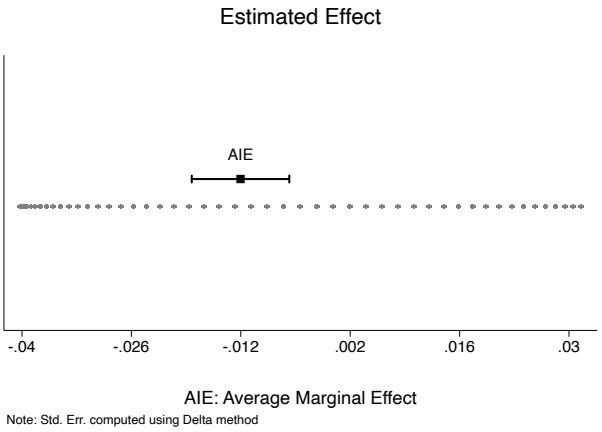


(b) Customized plots

(b1) Average interaction effect



(b2) Average and individual interaction effects



(b3) Average and individual interaction effects, and more