

bayesirf — Bayesian IRFs, dynamic-multiplier functions, and FEVDs

[Description](#)

[Quick start](#)

[Syntax](#)

[Remarks and examples](#)

[Also see](#)

Description

`bayesirf` creates and manipulates Bayesian impulse–response function (IRF) files that contain estimates of the IRFs, dynamic-multiplier functions, and forecast-error variance decompositions (FEVDs) created after estimation by `bayes: var`; see [\[BAYES\] bayes: var](#).

`bayesirf` creates and manipulates Bayesian IRF files that contain estimates of the IRFs created after estimation by `bayes: dsge` or `bayes: dsge1`; see [\[BAYES\] bayes: dsge](#) or [\[BAYES\] bayes: dsge1](#).

IRFs and FEVDs are described in [\[TS\] irf](#).

Quick start

Fit a Bayesian vector autoregression (VAR) model

```
bayes, saving(bvarmcmc): var y1 y2 y3
```

Create IRF `myirf` and IRF file `bayesirfs.irf`

```
bayesirf create myirf, set(bayesirfs)
```

Graph orthogonalized IRF for dependent variables `y1` and `y2` given a shock to `y1`

```
bayesirf graph oirf, impulse(y1) response(y1 y2)
```

As above, but present results in a table

```
bayesirf table oirf, impulse(y1) response(y1 y2)
```

See other `bayesirf` subcommands for additional Quick starts.

Syntax

```
bayesirf subcommand ... [, ... ]
```

<i>subcommand</i>	Description
create	create IRF file containing IRFs, dynamic-multiplier functions, and FEVDs; [BAYES] bayesirf create
set	set the active IRF file; [TS] irf set
graph	graph results from active file; [BAYES] bayesirf graph
cgraph	combine graphs of IRFs, dynamic-multiplier functions, and FEVDs; [BAYES] bayesirf cgraph
ograph	graph overlaid IRFs, dynamic-multiplier functions, and FEVDs; [BAYES] bayesirf ograph
table	create tables of IRFs, dynamic-multiplier functions, and FEVDs from active file; [BAYES] bayesirf table
ctable	combine tables of IRFs, dynamic-multiplier functions, and FEVDs; [BAYES] bayesirf ctable
describe	describe contents of active file; [TS] irf describe
add	add results from an IRF file to the active IRF file; [TS] irf add
drop	drop IRF results from active file; [TS] irf drop
rename	rename IRF results within a file; [TS] irf rename

bayesirf can be used after **bayes: var**, **bayes: dsge** or **bayes: dsgenl**; see [BAYES] **bayes: var**, [BAYES] **bayes: dsge**, or [BAYES] **bayes: dsgenl**.

bayesirf set, **describe**, **add**, **drop**, and **rename** have the same syntax as their respective **irf** commands.

Remarks and examples

[stata.com](http://www.stata.com)

For examples and details about IRFs and other functions, see *Remarks and examples* in [BAYES] **bayesirf create**. Also see example 8 in [BAYES] **bayes: var**.

Also see

[TS] **irf** — Create and analyze IRFs, dynamic-multiplier functions, and FEVDs

[BAYES] **bayes: dsge** — Bayesian linear dynamic stochastic general equilibrium models

[BAYES] **bayes: dsgenl** — Bayesian nonlinear dynamic stochastic general equilibrium models

[BAYES] **bayes: var** — Bayesian vector autoregressive models