

## 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)
```

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

`bayesirf` can be used after `bayes: var`, `bayes: dsge` or `bayes: dsge1`; see [BAYES] **bayes: var**, [BAYES] **bayes: dsge**, or [BAYES] **bayes: dsge1**.

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

## Remarks and examples

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: dsge1** — Bayesian nonlinear dynamic stochastic general equilibrium models

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

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