

# Package ‘BayesXsrc’

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**Version** 3.0-5

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**Title** Distribution of the 'BayesX' C++ Sources

**Description** 'BayesX' performs Bayesian inference in structured additive regression (STAR) models.  
The R package BayesXsrc provides the 'BayesX' command line tool for easy installation.  
A convenient R interface is provided in package R2BayesX.

**Depends** R (>= 2.8.0)

**Suggests** R2BayesX

**SystemRequirements** GNU make, C++14

**License** GPL-2 | GPL-3

**URL** <https://www.uni-goettingen.de/de/bayesx/550513.html>

**NeedsCompilation** yes

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`run.bayesx`*Run BayesX*

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### Description

Run BayesX program files from R.

### Usage

```
run.bayesx(prg = NULL, verbose = TRUE, ...)
```

### Arguments

<code>prg</code>	a file path to a <b>BayesX</b> program file. If set to <code>NULL</code> , <b>BayesX</b> will start in batch mode.
<code>verbose</code>	should output be printed to the R console during runtime of <b>BayesX</b> .
<code>...</code>	further arguments to be passed to <a href="#">system</a> .

### Details

Function uses [system](#) to run **BayesX** within an R session.

### Value

If a `prg` file is provided, the function returns a list containing information if **BayesX** was successfully launched and how long the process was running.

### Author(s)

Daniel Adler, Thomas Kneib, Stefan Lang, Nikolaus Umlauf, Achim Zeileis.

### Examples

```
## Not run:
## create a temporary directory for this example
dir <- tempdir()
prg <- file.path(dir, "demo.prg")

## generate some data
set.seed(111)
n <- 200

## regressor
dat <- data.frame(x = runif(n, -3, 3))

## response
dat$y <- with(dat, 1.5 + sin(x) + rnorm(n, sd = 0.6))
```

```
## write data to dir
write.table(dat, file.path(dir, "data.raw"),
  quote = FALSE, row.names = FALSE)

## create the .prg file
writeLines("
bayesreg b
dataset d
d.infile using data.raw
b.outfile = mcmc
b.regress y = x(psplinerw2,nrknots=20,degree=3), family=gaussian predict using d
b.getsample", prg)

## run the .prg file from R
run.bayesx(prg)

## End(Not run)
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\* **regression**

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