

Package ‘glmdm’

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Type Package
Title R Code for Simulation of GLMDM
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Description This package contains functions to perform generalized linear mixed Dirichlet models using posterior simulation.
License GPL
Depends R (>= 2.10.0)
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Repository CRAN
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asia	<i>asia</i>
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Description

Asia data.

Usage

```
data(asia)
```

Format

Asia data set

ATT the dichotomous outcome of interest indicating whether or not there was at least one violent terrorist act in a country/year pair.

DEM the Polity IV 21-point democracy scale ranging from -10 indicating a hereditary monarchy to +10 indicating a fully consolidated democracy. (Gurr, Marshall, and Jagers 2003).

FED is assigned zero if sub-national governments do not have substantial taxing, spending, and regulatory authority, and one otherwise.

SYS coded as: (0) for direct presidential elections, (1) for strong president elected by assembly, and (2) dominant parliamentary government.

AUT a dichotomous variable indicating whether or not there are autonomous regions not directly controlled by central government.

References

Koch, M. T. Cranmer, S. (2007). "Terrorism than Governments of the Right? Testing the 'Dick Cheney' Hypothesis: Do Governments of the Left Attract More than Governments of the Right?" *Conflict Management and Peace Science* 24, 311-326.

 glmldm

Generalized Linear Mixed Dirichlet Model

Description

R code for simulation of GLMDM

Usage

```
glmldm(formula, family=gaussian, data, num.reps=1000, a1=3, b1=2,
        d=0.25, MM=15, VV=30, ...)
```

Arguments

formula	a symbolic description of the model to be fit.
family	a description of the error distribution and link function to be used in the model.
data	an optional data frame, list or environment containing the variables in the model.
num.reps	num.reps
a1	a1
b1	b1

d	d
MM	MM
VV	VV
...	..

Examples

```
## Not run:

data(scotvote)
glmdm.linear.out <- glmdm(PerYesParl ~ PrivateHousingStarts + CouncilTax
+ Percentage5to15 + PrimaryPTRatio + PerBirthsOut + PerClaimantFemale,
data=scotvote, num.reps=5000)

data(ssas)
glmdm.probit.ssas <- glmdm(scotpar2 ~ househld + rsex + rage + relgsums + ptyallgs
+ idlosem + marrmus + ukintnat + natinnat + voiceuk3 + nhssat, data=ssas,
family=binomial(link="probit"), num.reps=10000, log=TRUE)

data(asia)
glmdm.probit.asia <- glmdm(ATT ~ DEM + FED + SYS + AUT, data=asia,
family=binomial(link="probit"), num.reps=10000, log=TRUE)

## End(Not run)
```

scotvote	<i>scotvote</i>
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Description

scotvote data.

Usage

```
data(scotvote)
```

ssas	<i>ssas</i>
------	-------------

Description

Scottish Social Attitudes Survey, 2006 (UK Data Archive Study Number 5840).

Usage

```
data(ssas)
```

Format

- scotpar2** the dichotomous outcome indicating whether not respondents favored full independence.
- hedqual2** the respondent's education level.
- hincdif2** the degree to which the respondent is living comfortably on current income or not.
- househld** the number of people living in the respondent's household.
- idlosem** a dichotomous variable indicating whether or not the respondent agreed with the statement that increased numbers of Muslims in Scotland would erode the national identity.
- marrmus** a dichotomous variable indicating whether or not the respondent would be unhappy or very unhappy if a family member married a Muslim.
- natinnat** agreement that the Scottish Executive works in Scotland's long-term interests.
- nhssat** a dichotomous variable indicating the respondent's satisfaction (1) or dissatisfaction (0) with the National Health Service.
- ptyallgs** party allegiance with the ordering of parties given from more conservative to more liberal.
- rage** the age of the respondent.
- relgsums** a dichotomous variable indicating identification with the Church of Scotland versus another or no religion.
- rsex** the gender of the respondent.
- ukintnat** agreement that the UK government works in Scotland's long-term interests.
- unionsa** a dichotomous variable indicating the respondent's union membership at work.
- voiceuk3** the respondent's belief that the Scottish Parliament gives Scotland a greater voice in the UK.
- whrbrn** a dichotomous variable indicating birth in Scotland or not.

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