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)
NeedsCompilation no
Repository CRAN
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R topics documented:

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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 Jaggers 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

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**glmdm**

*Generalized Linear Mixed Dirichlet Model*

Description
R code for simulation of GLMDM

Usage
glmdm(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
Examples

## Not run:

```r
data(scotvote)
glmmd.linear.out <- glmmd(PerYesPar1 ~ PrivateHousingStarts + CouncilTax + PercentageSto15 + PrimaryPTRatio + PerBirthsOut + PerClaimantFemale, data=scotvote, num.reps=5000)

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

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

## End(Not run)

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### scotvote

**Description**

scotvote data.

**Usage**

data(scotvote)

---

### ssas

**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 an-
          other 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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