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**gllamm** — Generalized linear and latent mixed models

Description Remarks and examples References Also see

## Description

GLLAMM stands for generalized linear latent and mixed models, and gllamm is a Stata command for fitting such models written by Sophia Rabe-Hesketh (University of California-Berkeley) as part of joint work with Anders Skrondal (Norwegian Institute of Public Health) and Andrew Pickles (King's College London).

# Remarks and examples

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Generalized linear latent and mixed models are a class of multilevel latent variable models, where a latent variable is a factor or a random effect (intercept or coefficient), or a disturbance (residual). The gllamm command for fitting such models is not an official command of Stata; it has been independently developed by highly regarded authors and is itself highly regarded. You can learn more about gllamm by visiting http://www.gllamm.org.

gllamm is available from the Statistical Software Components (SSC) Archive. To install, type

- . ssc describe gllamm
- . ssc install gllamm

If you later wish to uninstall gllamm, type ado uninstall gllamm.

#### References

Miranda, A., and S. Rabe-Hesketh. 2006. Maximum likelihood estimation of endogenous switching and sample selection models for binary, ordinal, and count variables. *Stata Journal* 6: 285–308.

Rabe-Hesketh, S., A. Pickles, and C. Taylor. 2000. sg129: Generalized linear latent and mixed models. *Stata Technical Bulletin* 53: 47–57. Reprinted in *Stata Technical Bulletin Reprints*, vol. 9, pp. 293–307. College Station, TX: Stata Press.

Rabe-Hesketh, S., and A. Skrondal. 2022. *Multilevel and Longitudinal Modeling Using Stata*. 4th ed. College Station, TX: Stata Press.

Rabe-Hesketh, S., A. Skrondal, and A. Pickles. 2002. Reliable estimation of generalized linear mixed models using adaptive quadrature. *Stata Journal* 2: 1–21.

— 2003. Maximum likelihood estimation of generalized linear models with covariate measurement error. *Stata Journal* 3: 386–411.

Skrondal, A., and S. Rabe-Hesketh. 2004. Generalized Latent Variable Modeling: Multilevel, Longitudinal, and Structural Equation Models. Boca Raton, FL: Chapman and Hall/CRC.

Zheng, X., and S. Rabe-Hesketh. 2007. Estimating parameters of dichotomous and ordinal item response models with gllamm. *Stata Journal* 7: 313–333.

The references above are restricted to works by the primary authors of gllamm. There are many other books and articles that use or discuss gllamm; see http://www.gllamm.org/pub.html for a list.

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### Also see

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[ME] meglm — Multilevel mixed-effects generalized linear models
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[ME] mixed — Multilevel mixed-effects linear regression

[SEM] Intro 2 — Learning the language: Path diagrams and command language

[SEM] Intro 5 — Tour of models

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