

Generalized ordered logit/partial proportional odds models for ordinal dependent variables

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Abstract. This article describes the `gologit2` program for generalized ordered logit models. `gologit2` is inspired by Vincent Fu's `gologit` routine (*Stata Technical Bulletin Reprints* 8: 160–164) and is backward compatible with it but offers several additional powerful options. A major strength of `gologit2` is that it can fit three special cases of the generalized model: the proportional odds/parallel-lines model, the partial proportional odds model, and the logistic regression model. Hence, `gologit2` can fit models that are less restrictive than the parallel-lines models fitted by `ologit` (whose assumptions are often violated) but more parsimonious and interpretable than those fitted by a nonordinal method, such as multinomial logistic regression (i.e., `mlogit`). Other key advantages of `gologit2` include support for linear constraints, survey data estimation, and the computation of estimated probabilities via the `predict` command.

Keywords: `st0097`, `gologit2`, `gologit`, logistic regression, ordinal regression, proportional odds, partial proportional odds, generalized ordered logit model, parallel-lines model