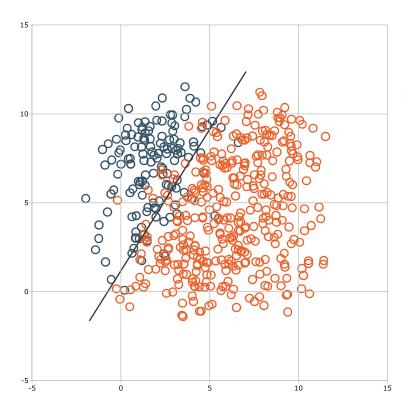


## Discrete Choice Analysis Tools v2.0

#### **New Features!**

- > Fast and efficient handling of large data sets
- > Large scale data classification
- > Publication quality formatted results tables with optional exportation
- > Updated implementation for simple data input, parameter control, and estimation
- > New logistic regression modelling for large scale classification including L2/L1 regularized classifiers and L2/L1-loss linear SVM with cross-validation and prediction



Discrete Choice Analysis Tools v2.0 expands our suite of analysis tools to include prewritten, customizable GAUSS programs for cutting-edge, large-scale data management, classification, and regression analysis.

Discrete Choice provides an adaptable, efficient, and user-friendly environment for linear data classification. It's designed with a full suite of tools built to accommodate individual model specificity, including adjustable parameter bounds, linear or nonlinear constraints, and default or user specified starting values. Newly incorporated data and parameter input procedures make model set-up and implementation intuitive.



### **Technical Details**

#### SUPPORTED MODELS: Encompasses a large variety of linear classification models

- > Adjacent categories multinomial logit
- > Logit and probit regression
- > Conditional logit
- > Multinomial logit
- > Nested binomial regression
- > Ordered logit and probit regression
- > Poisson regression
- > Stereotype multinomial logit
- > Large scale data classification: LR and SVM

#### OUTPUTS: Easy to access, store, and export

- > Parameter estimates
- > Variance-covariance matrix for coefficient estimates and marginal effects
- > Percentages of dependent variables by category (where applicable)
- > Complete data description of all independent variables
- > Marginal effects of independent variables (by category of dependent variable, when applicable)
- > Predicted counts and residuals

# REPORTING: Performs and reports a number of goodness of fit tests including for model performance analysis

- > Full model and restricted model log-likelihoods
- > Chi-square statistic
- > Agresti's G-squared statistic
- > Likelihood ratio statistics and accompanying probability values
- > McFadden's Psuedo R-squared
- > McKelvey and Zovcina's Psuedo R-Squared
- > Cragg and Uhler's normed likelihood ratios
- > Count R-Squared
- > Adjusted count R-Squared
- > Akaike and Bayesian information criterions



Requirements: GAUSS/GAUSS Engine/GAUSS Light v14 or higher

