

# Model selection and stability plots in R: mplot-0.1.5 package vignette

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## Abstract

The `mplot` package provides a set of functions that allow the user to investigate model selection and stability issues for data sets of moderate dimensions (roughly less than 50 variables).

The functions of the `mplot` package implement model selection via the adaptive fence procedure (Jiang et. al., 2009) and model stability curves as described in Müller and Welsh (2010).

The default output of many `mplot` functions is an interactive plot built using the `googleVis` package.

This document should evolve over time to a level such that it can be published in a statistical software type journal.

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# **1 Introduction**

## **1.1 Motivation**

This package provides a...

Computation issues: multicore functionality and leaps along with sensible defaults

Innovative graphics: googleVis style plots. googleVis makes use of the internal R HTTP server to display the output locally. A modern browser with an internet connection is required and for some charts Flash. Can be seamlessly included with markdown.

## **1.2 Getting started**

# **2 Model selection**

## **2.1 Adaptive fence**

## **2.2 Sensible defaults**

# **3 Model stability**