# Graphical Comparison of Multivariate Nonparametric Location Tests for Restricted Alternatives

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## Abstract

There have been several proposals of nonparametric tests for restricted (or "one-sided") multivariate location alternatives. The selection of a suitable test for a specific problem is an open question. We discuss the most common types of hypotheses and present a graphical means of assessing the adequacy of a test for the different types of hypotheses. This leads to a classification of the test procedures. In contrast to a graphical representation using rejection regions (which is frequently used in the parametric context), our approach is suitable for the comparison of tests based on entirely different statistics.