

# The Place of Depth in Nonparametric Statistics

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## Abstract

Although halfspace depth was originally proposed in the context of sign test for bivariate data, and also as a possible multivariate ranking device, the subsequent, and relatively recent development of its generalizations to various data-analytic situations somehow did not emphasize the connection to classical methods. We would like to offer some views on the possible use of halfspace depth in statistical analyses performed in a nonparametric way and point out some specific virtues and problems of this type of approach. A special focus will be on data coming from controlled experiments that are typically analyzed via linear model techniques.