

Statistical Graphics! Who needs Visual Analytics?

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Data visualization seems to be everybody's darling; not based on a formal discipline but used by almost every scientist who wants to display qualitative or quantitative information graphically. Looking at the data visualization literature we find a broad range of aspects that can be touched upon.

As statisticians, we should be more targeted and basically can distinguish between two uses of graphics in statistics: exploration and diagnostics. Only at first sight these two applications of graphics are disjunctive, and further exploration is often the result of the investigation of a model via diagnostic plots.

This talk looks into why R became so popular for creating statistical graphs of all kinds despite the not state-of-the-art graphics core. It further focuses on what needs to be done, in order to use R for exploratory data analysis which is centered around data visualization and supports traditional statistical reasoning in many ways.