

R Graphics: Supercharged - Recent Advances in Visualization and Analysis of Large Data in R

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The R graphics has has been available relatively unchanged for many years, but the increasing size of data analyzed in R today demands new approaches. Since the first step in any data analysis is to explore the data mostly using visualization R has to keep up with the data not only computationally but also in being able to display data effectively.

In the first part of this talk I will discuss new features in the R graphics engine introduced recently to support new data types and allow for more sophisticated applications and optimizations. In the second part I will discuss high-performance graphics backends available in R, illustrating their use on the visualization of large data. Finally, I will show how the availability of such modern graphics systems allows us to provide interactive graphics for exploratory data analysis even for very large data sets. All parts will be accompanied with practical use cases.