## Expanding R for consistent exploration of missing data

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## Abstract

Missing values are ubiquitous in data and need to be explored and handled in the initial stages of analysis. This paper describes a package, naniar, for exploring missing data dependencies with minimal deviation from the common workflows of ggplot and tidy data. Typically, ggplot2 throws an warning about missings but then omits them for plotting. This extension builds data structures and functions that ensure missings are plotted easily and enables imputations to be examined.