

Interactive comment on "New insights into atmospherically relevant reaction systems using direct analysis in real time-mass spectrometry (DART-MS)" by Yue Zhao et al.

Anonymous Referee #1

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The manuscript entitled, "New Insights into Atmospherically Relevant Reaction Systems using Direct Analysis in Real Time Mass Spectrometry (DART-MS)", by Zhao et al., describes a series of measurements examining the uptake of amines onto diacid aerosols and chemical composition measurements of cedrene SOA. The detection of amine reactions or composition by DART-MS enabled the authors to quantify, quite elegantly, differences between odd and even numbered diacids. The differences between these diacids are quite dramatic and the authors have done an excellent job of quantifying this and explaining the mechanism. The manuscript is well written and the data robust with good quantitative analysis. The authors have done an extensive job in evaluating potential artifacts in DART and interferences as reported in the main text

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and supplementary information. I recommend publication of the manuscript.

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