

# Spatio-Temporal Statistical Modeling

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## Abstract

In this talk, spatio-temporal statistical modeling will be looked at through the prism of hierarchical modeling, and the role of dynamical temporal models of spatial fields will be emphasized. A global remote-sensing dataset of aerosol optical depth from the MISR instrument on the Terra satellite will be analyzed, resulting in optimally interpolated and filtered statistical predictions. This leads naturally to a discussion of data/model/computing compromises.