

The impact of quantitative satellite data on numerical weather prediction

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Quantitative satellite data first became available for assimilation into numerical models in the early 1970's. As a result of extensive research by NASA and NOAA and their partners, the first significant beneficial impacts of satellite temperature soundings were demonstrated during the Data Systems Tests that preceded the Global Weather Experiment. Since that time and due in large part to NASA's Earth System Science Program, the amount of satellite observations that are utilized to improve forecasting has increased exponentially. In this talk, the speaker will illustrate the application of different kinds of satellite data to the weather prediction problem and discuss some of the major advances that are possible in the near future.