



Forecast System Improvement with Rapid Input of Surface Observations

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ENcast is a statistical forecast system utilizing a comprehensive suite of short range and medium range models and ensembles developed by Earth Networks in cooperation with NCAR. The ensemble system utilizes a variety of statistical weighting schemes along with rapid input of surface weather observations, lightning detection data and thunderstorm severity indices to produce three types of hourly 15 day forecast outlooks. A 6 day hourly update cycle is also produced. Verification analysis has shown very good performance of the system relative to widely adopted numerical weather models. Presenters will provide an overview of the ensemble methods and data inputs. The assimilation of lightning data and thunderstorm severity indices will be discussed in detail. Finally, the latest performance criteria measurements will be presented.