
MMM **SEMINAR** *NCAR*

***Severe Thunderstorms: What Observations,
Environments and Climate Interactions Can Tell Us***

John Allen

*International Research Institute for Climate and Society
Columbia University*

How can we gain a greater understanding of the year-to-year variability in severe thunderstorms and derive the capability for seasonal prediction? In this presentation, I will illustrate the limitations of observed occurrences of hail, and how hail and tornado 'proxy' indices for the probability of occurrence as a function of convective parameters are used, along with carefully controlled observations, to identify robust linkages between El Niño Southern Oscillation (ENSO) and springtime hail and tornado frequency. Leveraging this relationship, I will demonstrate how this technique allowed development of a simple probabilistic seasonal forecast for severe thunderstorm activity in the spring of 2015 based on the ENSO state of the prior winter. Finally, I will discuss how this forecast performed, the potential contributions of other sources of variability, and outline future directions that will move us towards a better understanding of natural variability in severe thunderstorms.

This seminar will be webcast live at:

<http://www.fln.ucar.edu/it/mms/fl2-live.htm>

Recorded seminar link can be viewed here:

<https://www.mmm.ucar.edu/events/seminars>

Friday, 23 October 2015, 1 PM

Refreshments 12:45 PM

NCAR-Foothills Laboratory

3450 Mitchell Lane

Bldg. FL 2, Small Auditorium, Room 1001

MMM SEMINAR COORDINATOR

Morris Weisman, 303.497.8901, weisman@ucar.edu

<http://www.mmm.ucar.edu/events/seminars>