Reception and Colloquium

Distinguished Alumni Award

Prof. Steve Ackerman

CSU ATS Alumni M.S. 1979 and Ph.D. 1987 Professor, University of Wisconsin-Madison

Monday, August 11, 2014 in room ATS 101

Refreshments starting at 11:00 a.m. in the Weather Lab Presentation and Colloquium starting at 11:30 a.m. in ATS 101

Award presentation by Jeff Collett Colloquium by Steve Ackerman

Satellites and Clouds

For over 30 years observations from satellite platforms have been routinely used to locate and track clouds and infer their properties. In this presentation we will explore the methodologies and improvements in extracting cloud information from satellite observations. Including cloud detection, physical (such as cloud altitude boundaries) and the microphysical properties of clouds.

Recent satellite observed cloud data records have greatly improved our confidence in global cloud observations. Improved discrimination of cloud from various surface background using passive observations with broad spectral coverage, along with active sensors has resulted in a comprehensive view of the global cloud field. However, even with the improved remote sensing capabilities, there remain large uncertainties in various retrieved cloud properties. This talk will look at recent achievements in satellite measurements of clouds and explore methods of defining the uncertainty in retrieved cloud properties.

