Title: Investigating Severe Weather Across the Solar System...and Beyond.

Abstract: Evidence of extreme weather and changing climates exist in both our past and on other planets. Studying the atmospheres of other planets can force science to confront the fundamental understanding of some of the processes that exist on Earth, particularly those that we sometimes trick ourselves into thinking we understand more deeply than we do.

While planets exhibit weather patterns similar to our own, they tend to be more extreme. Jupiter has a faster rotation rate, and belts that are similar to our jet stream. Mars has planet encompassing sandstorms and dust devils. Venus has sulfuric acid clouds and rain. Jupiter’s Great Red Spot shows similarities to our own hurricanes. And Saturn’s moon Titan has an atmosphere of predominantly nitrogen like Earth’s, but with rain consisting of methane.

This lecture will highlight many of the methods and processes used that allow us to characterize planetary atmospheres. We will take a look at various extreme weather phenomena that exists across our solar system, and at the relatively new field of exoplanetary atmospheres. Some of the most recent mission observations will be discussed, as well as what we can expect for future missions.
MEGAN WISE

On-air Meteorologist at WWBT NBC12 in Richmond, Virginia

ABSTRACT

- Lights, Camera, Action: The Glamorous vs Not So Glamorous Life of TV
- Tips to succeed in the “Biz”: Facts and myths, with an emphasis on myths
- Television and Social Media: Are you following me?
- Mic Drop: What you can be doing now to jump start your career

BIO

Megan Wise is a ’09 graduate from Millersville University earning a BS in meteorology. She is currently working at WWBT NBC12 in Richmond, Virginia as the weekend morning meteorologist. Before moving to Richmond, she worked at WDEF-TV in Chattanooga, Tennessee as the weekend meteorologist and weekend anchor/producer. She was also the host of ‘Megan Wise Goes Outside’ where she went on weekly adventures like hang gliding, caving and white water rafting that showcased the Tennessee Valley. She started her career at KTVO-TV in Kirksville, Missouri as the morning meteorologist and was an intern at WTAE-TV in Pittsburgh.