

Predicting the Future: Using Radar Data for Analyzing Weather

**July 16-20, 2018
Walker Building
University Park, PA 16802**

Presented by:

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Predicting weather, especially dangerous storms, relies on the understanding of numerous scientific theories, as well as merging data from diverse observational platforms. One tool that meteorologists use routinely is weather radar. Radar provides unparalleled information on precipitation location and amount, and information on storm structure. Weather radar is the foundation of severe weather warnings, and also provides information on wind fields under clear air conditions.

In this workshop, teachers will engage in activities that illustrate how radar data are used to better understand atmospheric circulations near the Earth's surface that can influence severe weather. The activities will include a series of practical exercises with readily accessible data sets that will reveal how physics, earth science, math, and computer science complement each other in weather forecasting. With support from the meteorologists and CSATS, teachers will develop classroom lessons that are tied directly to their curriculum and appropriate for their students.



Target Audience: Teachers of Middle and High School Students

- This workshop is FREE to all educators and ACT 48 is available.
- Continental breakfast, and lunch is provided for all participating teachers
- Free lodging is available and reimbursement of up to \$300 for travel expenses
- Participants receive a \$250 stipend
- This workshop is aligned to the PA Science and Technology standards, Engineering Education Standards, and Next Generation Science Standards.
- Enrollment is limited to 10 teachers. Use the link below to apply <http://csats.psu.edu/overview-of-csats-programs/summer-workshops>
- For more information email Matt Johnson at mjohnson@psu.edu or call 814-863-6607.

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