



# FEDERAL

THE WEATHER SPHERE BRINGS UNIVERSITY, FEDERAL, STATE AND PRIVATE INDUSTRY TOGETHER.

## NOAA National Severe Storms Laboratory

Severe weather and the tools to forecast and monitor it are the focus of researchers at the NOAA National Severe Storms Laboratory (NSSL). As the only federal laboratory focused on severe weather research, NSSL leads the way in investigations of all aspects of severe and hazardous weather. The people of NSSL are dedicated to improving the lead time and accuracy of severe weather warnings and forecasts in order to save lives and reduce property damage.

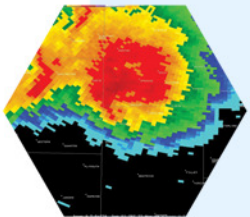
Established in 1964, NSSL does research in three areas -- weather radar, forecast and warning improvements and hydrometeorology. NSSL scientists are exploring new ways to improve our understanding of the causes of severe weather and ways to use weather information to assist National Weather Service forecasters, as well as federal, university and private sector partners.

From the original WSR-57 research project to the development of NEXRAD to now mobile SMART Radars, NSSL continues to push the weather research community to the edge of technology. Looking to the future, NSSL researchers are working on an electronically-steered radar, called phased array, which is much quicker than rotating systems like the NEXRAD. Phased array radar's unique flat antenna makes it capable of monitoring weather and aircraft simultaneously, with the promise of significant cost savings.



"NSSL has a cadre of people working on the necessary research to improve the National Weather Service's warnings and forecasts. Our scientists have a history of cooperation and collaboration within the NSSL Laboratory and with other organizations."

James Kimpel  
Director



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[www.nssl.noaa.gov](http://www.nssl.noaa.gov)  
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NOAA is supportive of collaboration throughout the environmental information enterprise, as described in the NOAA Policy on Partnerships in the Provision of Environmental Information, and in this context, NOAA is supportive of the collaborative framework established in the National Weather Center facility and across the University Research Campus in Norman, Oklahoma. However, NOAA supports collaborative relationships with all members of the nation's environmental information enterprise – NOAA's collocation with the University of Oklahoma Weather and Climate programs and other participants in "The Weather Sphere" should not be taken as implying a special relationship with these participants.

