

## NOAA Awards \$5.7 million in Grants and Cooperative Agreements to Advance Hazardous and Extreme Weather Forecasts

October 9, 2015

Project Count	Program Name	Project Title	Institutions	State	Funding (\$)
1	VORTEX-SE	Tornado warning response in the Southeast: Advancing knowledge for action in Tennessee	University of Tennessee	TN	\$248,217
2	VORTEX-SE	Improving Understanding and Predictability of Tornadic Storms in the Southeastern U.S. Using Intensive Observations and High-Resolution Modeling	Texas Tech University	TX	\$249,942
3	VORTEX-SE	Addressing Interconnections between the Built and Natural Environments through Post-Event Damage Surveys	Univ. of North Carolina Asheville; Rensselaer Polytechnic Institute; Univ. of Georgia	NC NY GA	\$143,222
4	VORTEX-SE	Polarimetric Radar-based Field Campaign Activities and Storm Scale Studies	University of Alabama Huntsville	AL	\$226,382
5	VORTEX-SE	Improved Understanding of Tornado Development and Risk using Models and Observations from VORTEX-SE	Purdue University; Univ. of Massachusetts	IN MA	\$250,711
6	VORTEX-SE	Multi-disciplinary investigation of concurrent tornadoes and flash floods in the Southeastern U.S.	Colorado State Univ.;	CO	\$143,197
7	VORTEX-SE	Understanding the Variability and Predictability of Southeastern Severe Storm Environments using Mobile Soundings during VORTEX-SE	Mississippi State Univ.; North Carolina State University; Univ. of Louisiana Monroe	MS NC LA	\$227,038
8	VORTEX-SE	Complacency and False Alarms in Tornado Affected Communities	Univ. of Maryland	MD	\$199,570
9	VORTEX-SE	Resolution Dependence of Simulated Convective Storms in the Southeast United States	University Corporation for Atmospheric Research	CO	\$206,685
				<b>TOTAL</b>	<b>\$1,894,964</b>

10	Joint Hurricane Testbed (JHT)	Probabilistic prediction of tropical cyclone rapid intensification using satellite passive microwave imagery	Univ. of Wisconsin; NOAA/OAR/AOML	WI	\$180,800
11	JHT	Improvements in Operational Statistical Tropical Cyclone Forecast Models	Colorado State Univ.	CO	\$168,380
12	JHT	Improved Eyewall Replacement Cycle Forecasting Using a Modified Microwave-Based Algorithm	Univ. of Wisconsin; NOAA/NESDIS/NCEI	WI NC	\$80,299
13	JHT	Improvement and Implementation of the Probability-based Microwave Ring Rapid Intensification Index for NHC/JTWC Forecast Basins	Florida International Univ.; Colorado State Univ.	FL CO	\$187,494
14	JHT	Guidance on Observational Undersampling over the Tropical Cyclone Lifecycle	Univ. of Miami; NOAA/OAR/AOML	FL	\$136,791
15	JHT	Passive Microwave Data Use via the Naval Research Laboratory Tropical Cyclone Webpage	Naval Research Laboratory	CA	\$180,144
16	JHT	Improvement to the Tropical Cyclone Genesis Index	Univ. of Miami; Colorado State Univ.; Naval Research Laboratory; NOAA/OAR/AOML	FL CO CA	\$217,785
17	JHT	Transition of the Coastal and Estuarine Storm Tide Model to an Operational Model for Forecasting Storm Surges	Florida International Univ.	FL	\$268,399
				<b>TOTAL</b>	<b>\$1,420,092</b>
18	Hydrometeorology Testbed (HMT)	Assessment of Gridded Hydrological Modeling for NWS Flash Flood Operations	Colorado State Univ; Riverside Technology Inc.	CO	\$249,682
19	HMT	Demonstration of Advanced Ensemble Prediction Services for NWS Hydrometeorological Forecast Operations	University Corporation for Atmospheric Research; NOAA/OAR/ESRL	CO	\$249,999
20	HMT	Multi-Radar/Multi-Sensor HMT-Hydro Experiment	University of Oklahoma; NOAA/OAR/NSSL; NOAA/OAR/ESRL	OK CO	\$247,750
21	HMT	Storm-Scale Ensemble Prediction Optimized for Heavy Precipitation Forecasting in Support of the Hydrometeorology	University of Oklahoma	OK	\$239,700

		Testbed			
22	HMT	Validation and Improvement of Model of Microphysical Phenomena (such as raindrops) for Better Orographic Precipitation Forecasts	University of Colorado	CO	\$249,702
				<b>TOTAL</b>	<b>\$1,236,833</b>
23	Hazardous Weather Testbed (HWT)	Convection-Permitting Ensemble Forecast System for Prediction of Extreme Weather	University Corporation for Atmospheric Research; University of Oklahoma	CO OK	\$247,208
24	HWT	Developing and Evaluating Data Assimilation for NOAA National Center for Environmental Prediction North American Mesoscale Model Rapid Refresh to Improve Convection-Allowing Hazardous Weather Forecast	University of Oklahoma	OK	\$247,445
25	HWT	Improving Initial Conditions and their Perturbations through Ensemble-Based Data Assimilation for Optimized Storm-Scale Ensemble Prediction in Support of HWT Severe Weather Forecasting	University of Oklahoma	OK	\$249,705
26	HWT	Information Extraction and Verification of Convection-Allowing Models for Severe Hail Forecasting	University of Oklahoma	OK	\$209,065
27	HWT	Integration and Evaluation of an Algorithm within the Probabilistic Hazard Information Tool in the Hazardous Weather Testbed	University of Oklahoma; University of Wisconsin; NOAA/OAR/NSSL; NOAA/NESDIS/STAR	OK WI MD	\$226,829
				<b>TOTAL</b>	<b>\$1,180,252</b>
				<b>TOTAL</b>	<b>\$5,732,141</b>