

UCAR
COMMUNITY
PROGRAMS



Cooperative Program for Operational Meteorology, Education and Training
(COMET)

NWS Partner's Program

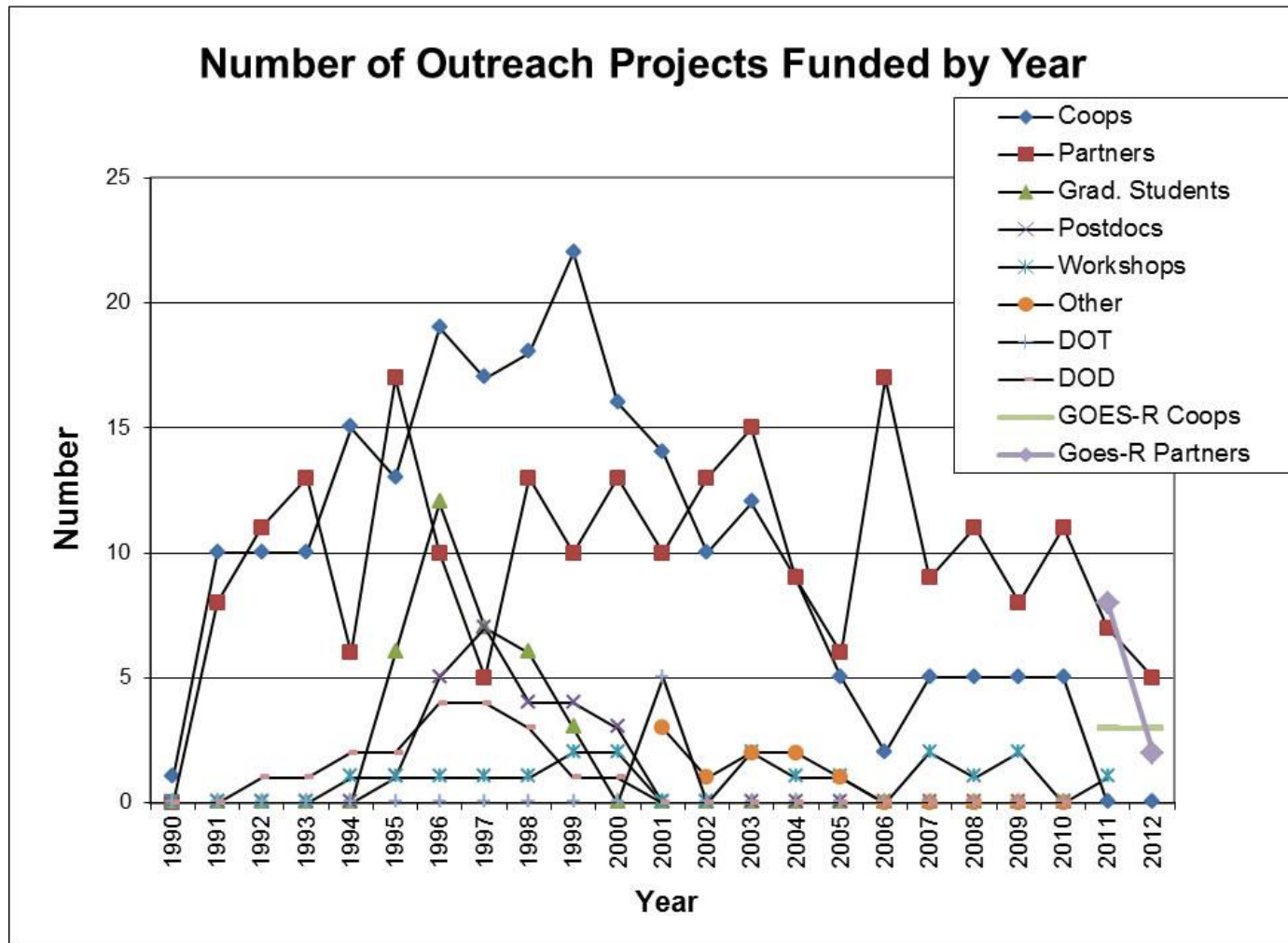
History and Mission of COMET

- Created in 1989 within University Corporation for Atmospheric Research (UCAR)
- Divided into Residence Learning, Distance Learning and Outreach
- Mission: Develop a modernized education and training program designed to:
 - Help the nation's weather services more fully exploit information gained from new technologies (1990s...ASOS, NEXRAD, etc; 2019....UAS, GOES 16/17, etc)
 - Promote rapid integration of new theories and research results (R2O)

COMET Outreach

- Objectives:
 - Facilitate transfer of research results to operational forecasting
 - Provide mechanism for participation of operational forecasters, research scientists and academic scholars in advancing weather services
 - Stimulate the further advancement of basic and applied research in the science of forecasting and nowcasting techniques
- Divided into two major programs
 - Cooperative: Mainly with National Water Center. 1-2 year projects funded at \$45K each. Broadens Office of Water Prediction and NWS water resource programmatic activities via engagement with hydrologic SMEs in academia to advance water-related research and decision support services.
 - Partner's: Mainly NWS-centric. Joint effort between individual forecaster and university researcher. Focus on case study or analysis problem. Normally 1 year, funded at \$15K.

Outreach Projects by Year



- Partners projects averaged about 10 per year
- Funding ceased in FY13
- Funding reintroduced in FY19
- Thus far, 11 projects approved Jan 2019 to present

Suggested Collaboration Subjects

- Activities that facilitate or improve the use of observing systems
- Activities to improve understanding of local mesoscale forecasting problem
- Activities to assist operational forecasters in enhancing their educational backgrounds and staying abreast of developments in research
- Activities to increase the university research community's awareness of operational problems and needs
- Activities that will create case studies or new data analysis techniques with wide application and usefulness in teaching, research, or operational forecasting
- Activities that bring together students, operational forecasters, educators, and regional or local experts in forums designed to share information

Process for Partner's Submission/Approval

- Proposal (5-10 pages in length) is developed in collaboration between two PIs, academic researcher and NWSFO forecaster
- Proposal submitted to NWS Region SSD for internal review, then signed off by NWS Region Director and sent to NWS STI
- STI will select reviewer from region outside of submitting region that would have interest in subject matter of proposal
- Upon acceptance, proposal is approved for funding

Snapshot of Partners Projects for FY19

Number	Title of Proposal	PI (Academia)	PI Affiliation	PI (NWS)	NWS Office	NWS Region	Review NWSR	Date Submitted
1	Understanding the Interaction between Short-Wave Troughs and Lake Effect Snow Events	Nicholas Metz	Hobart and William Smith College	Jared Klein	NWSFO Binghamton NY	Eastern	Central	Feb-19
2	High Resolution Experimental Forecasts over the Hawaiian Islands and Hindcast of Historical Tropical Cyclones	Yi-Leng Chen	Univ of Hawaii	Robert Ballard	NWSFO Honolulu HI	Pacific	Southern	Mar-19
3	Preliminary investigation to Begin Defining the Role of the Marine Boundary Layer with Regard to Cold Season Tornadoogenesis along the North Central Gulf Coast	John Lanicci	Univ of South Alabama	Jonathan Howell	NWSFO Mobile AL	Southern	Western	Apr-19
4	A Case Study of the Midwest Elevated Convective Wind Event of 13 April 2018	Patrick Market	Univ of Missouri	Greg Mann	NWSFO Detroit/Pontiac MI	Central	Eastern	Nov-18
5	Assessing the Accuracy of Multi-Radar/Multi-Sensor (MRMS) Precipitation Estimates in the Phoenix Metropolitan Area to Support Flash Flood Warning Operations	Giuseppe Mascaro	Arizona State Univ	Larry Hopper	NWSFO Phoenix AZ	Western	Central	Jun-19
6	Development of Operational Products from the New York State Mesonet to Aid Forecasts of High Impact Weather Events by National Weather Service Offices	Nick Bassill	State Univ of New York at Albany	Mike Evans	NWSFO Albany NY	Eastern	Southern	May-19
7	Application of a Tropical Cyclone Initialization Scheme to Improve Intensity Forecasts	Yi-Leng Chen	Univ of Hawaii	Robert Ballard	NWSFO Honolulu HI	Pacific	Eastern	May-19
8	Establishing a Relationship between Mixing Height and Wildfire Growth:An Observational Study	Dauren Clabo	South Dakota School of Mines and Technology	Patrick Marsh	Storm Prediction Center	SPC	Western	Jun-19

Questions or Comments?



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