

Community Engagement: External Grant Programs and Funding Opportunities

Christopher Hedge

NWS/STI Federal Program Officer

January 31 2018

Currently Funded Projects

- NWS/STI supports collaborative research with the external/academic community through these programs
 - NGGPS: Next Generation Global Prediction System
 - S2S: Seasonal to Sub-seasonal (Weeks 3-4) forecasting improvements
 - HFIP: Hurricane Forecast Improvement Project
 - CSTAR: Collaborative Science, Technology, and Applied Research
 - Full list of STI grants (<http://www.weather.gov/sti/stigrants>) and also in the NOAA VLab CSTAR community
- Total funding in FY17: ~ \$5.4M for 35 projects

Currently Published Funding Opportunities

- **2 companion Federal Funding Opportunities (FFO)**
- First FFO is two separate competitions: **NGGPS and HFIP**
 - NGGPS: Collaborative projects with EMC or CPC researchers, including S2S projects
 - HFIP: Collaborative projects with EMC, AOML and/or NHC researchers
- Open to non-federal applications in the academic community (no funding for feds or contractors)
- Estimated number of awards: 16 - NGGPS, 6 - HFIP
- 2-year projects, maximum funding \$200K/year
- LOIs were due December 8, 2017...NOT required
- Full applications due: February 7, 2018
- Expected project start date: September 1, 2018

NGGPS Priorities

- Data Assimilation
- Prediction
- Ensemble Development
- Post-processing
- Verification
- Weeks 3-4 (S2S) Products

HFIP Priorities

- Data assimilation
- Advances in the prediction sub-system
- Ensemble development
- Post-processing techniques

NWS Funding Opportunities

NOAA Testbeds

- The second FFO has 1 competition: **NOAA Testbeds**
- These are NGGPS modeling projects which have a collaborative partnership with 1 or more NOAA Testbeds
- Open to federal and non-federal applications
- Estimated number of awards: 6
- 2-year projects, maximum funding \$200K/year
- LOIs: **required** and were due December 13, 2017
- Full applications due: February 7, 2018
- Expected project start date: September 1, 2018

NGGPS-Testbed FFO Priorities

This companion FFO includes priorities for testing service impacts of proposed model advances for prediction of high-impact weather over several key time frames for decision support:

- **Forecasting for days 6-10**
 - Evaluate NGGPS guidance in this range with a focus on high-impact events
 - May leverage testing of HMT, Arctic TB, or JHT
- **Forecasts for weeks 3-4**
 - Investigate research gaps to improve forecasts in this time frame
 - Collaborate with the CTB
- **High-Impact weather: days 0-3**
 - Advances in storm-scale, fire weather and convective/severe weather prediction
 - May leverage testing capabilities of HWT or AWT

JTTI Funding Opportunity

- OAR – Joint Technology Transfer Initiative
- Approx. \$2M/year --- 10 projects
- Projects are 2 years; up to \$300K/year
- LOI's: due February 19, 2018
- Full proposals: due April 9, 2018
- Start date: October 1, 2018

Community Engagement: External Grant Programs and Funding Opportunities

- POC: Christopher Hedge
 - christopher.hedge@noaa.gov
 - 301-427-9242

Backup slides

R2O of recent and current CSTAR Projects

- Webinars with NWS Forecasters: **NC State**
- Training Modules: **SUNY Albany**
- Publications: **University of Washington**
- Research cited in AFD's: **SUNY Stony Brook--
Ensemble Sensitivity**
- Assessment of 1-2 week Severe Weather Probability
Guidance: **St. Louis University**
- Development and assessment of **Texas Tech**
ensemble assimilation/forecast system