SSIO 2015 Internship Opportunity Position

Internship Information

Project title: Intercomparison of methods used to measure precipitation over the Great Lakes (for EPP CSC Graduate or PhD students)

NOAA mission goal: Science and Technology Enterprise

Hypothesis or objectives: Compare and analyze measurements and simulations of over-lake precipitation over Lake Erie and Lake Michigan using NOAA/NWS MPE gridded data, MRMS model data from NOAA’s National Severe Storms Laboratory, and model estimates from NOAA’s Great Lakes Environmental Research Laboratory. Provide recommended modifications to NWS’s existing operational protocols that specifically address pressing Great Lakes regional needs.

Academic status: Graduate

Area(s) of discipline: Atmospheric Science, Civil Engineering, Climate Change, Computer And Information Sciences, Computer Science, Earth Science, Environmental Engineering, Meteorology, Oceanography, Physical Sciences, Physics, Spatial Analysis

Internship location: Ann Arbor, MI

Duties and responsibilities: Intern will work with large data sets including both measured and modeled over-lake precipitation from different sources. This collaborative research project led by NOAA’s Great Lakes Environmental Research Laboratory will involve working with personnel from NOAA’s National Weather Service River Forecast Centers and NOAA’s National Severe Storms Laboratory. Intern should be capable of independent work. Optimally, intern will be continuously in-residence at NOAA site for more than 3 the minimum months. The project will require some 'spin up' time as the student familiarizes him/herself with the data sets and models involved. Internship to start summer 2015 and continue for up to a year. Some travel to NOAA-NSSL in Norman, OK may be required.

This opportunity is for one (1) successful CSC-supported graduate student.

Special skills/training required: Excellent programming skills are required. Familiarity with computer languages such as R, C, and IDL is important. Experience writing scripts and working in a Linux environment is also important. Experience with geospatial interpolation would be a plus. Understanding of land-lake-atmosphere processes and meteorology is preferred.

Expected outcomes: This work will lead to the formal establishment of an operational NOAA product for estimating precipitation over Earth's largest lake system. We expect this work to be summarized in publications in well established journals.

Guidance and supervision: Drew Gronewold, NOAA-GLERL Hydrologist and Bob Rabin, NOAA-NSSL Meteorologist as well as other personnel from GLERL, NWS, and NSSL.

READ CAREFULLY - Documents Needed: The application for this internship requires (i) Resume/Curriculum Vitae; (ii) Letters of reference (2) from academic or research advisors (include contact info); (iii) Unofficial transcript/list of undergrad/grad courses relevant to this project; and, (iv) Brief letter of interest (1
page, single-spaced) outlining why you are interested in this project.

COMPLETE Application Package must be submitted by the CSC Center Director to oed.epp10@noaa.gov on or before close of business – 5:00 PM (EASTERN).

Application Submission Deadline: No later than March 16, 2015

Posted or modified date/time: Tuesday, February 17, 2015 - 6:28:00 PM

Internship Travel Information

Purpose (student’s role): ---
Mode of transportation: ---
Date(s): ---
Destination: ---
Estimated cost: ---
Source of funding: ---

Mentors Contact Information

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