SENSORS: Collaborative Research: ALOHA Mooring Sensor Network and Adaptive Sampling

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Project Participants

Senior Personnel

Name: Boss, Emmanuel

Worked for more than 160 Hours: Yes

Contribution to Project:
The PI E. Boss received a total of one month of salary from this grant. Boss roles in this collaborative proposal were:
1. Provide advice on optical sensors to deploy on the mooring and their relation to in-water biogeochemical properties.
2. Assist in technical question associated with optical sensors (e.g. calibration, deployment location on platform, anti-biofouling strategies).
3. Assist in the analysis and interpretation of optical data collected in-situ.
4. Assist with development of adaptive sampling technique and strategy.

To date the mooring has not been deployed. Optical sensors have been purchased in consultation with Boss. Boss has had many (>100) email exchange and phone conversation with PI's Howe and Lukas. We met in person twice during the proposal period (in HI once in Seattle) to discuss the details associated with the mooring. Boss visited the APL facility in Seattle, has seen the mooring components and provided advice on optimal location for sensors, data integration, and biofouling strategies. Boss has advised a graduate student (Wang) who as partially funded by this project to develop a method for uncertainty estimation in inverted in-water properties. The method developed will assist in providing uncertainty estimates to biogeochemical variables derived from the optical measurements once the mooring will be deployed.

Post-doc

Graduate Student

Name: Wang, Peng

Worked for more than 160 Hours: Yes

Contribution to Project:
Peng Wang has been payed 7 months on this grant. Peng worked on the development of an algorithm to invert ocean color to in-water ocean optical properties. A large part of his effort was directed towards obtaining uncertainties in the inverted product. This part of his research is directly applicable to this proposal as it relates to the method by which uncertainties in biogeochemical in-water variable can be computed when inverting the optical measurements done by sensors deployed on the profiler. In addition, the method developed through Peng's work will assist in the adaptive sampling strategies, chosen such as to minimize resulting uncertainties.

Name: Russo, Clemantina

Worked for more than 160 Hours: No

Contribution to Project:

Undergraduate Student

Technician, Programmer

Name: Loftin, James

Worked for more than 160 Hours: No

Contribution to Project:
Boss laboratory and computers are supported by Jim Loftin.
Other Participant

Research Experience for Undergraduates

Organizational Partners

Other Collaborators or Contacts
None other the collaborative PIs on the proposal (Howe at APL, U Washington, and Lukas and U Hawaii).

Activities and Findings

Journal Publications

Books or Other One-time Publications

Web/Internet Site

Other Specific Products

Contributions

Categories for which nothing is reported:

Organizational Partners
Activities and Findings: Any Research and Education Activities
Activities and Findings: Any Findings
Activities and Findings: Any Training and Development
Activities and Findings: Any Outreach Activities
Any Journal
Any Book
Any Web/Internet Site
Any Product
Any Contribution