

Federation of Earth Science Information Partners Partnership Application

Please complete all sections to the fullest extent possible and forward completed application to: Carol Meyer, carol.meyer@earthsciencefoundation.org. If you have any questions, please contact her at 877.870.3747.

I. CONTACT INFORMATION

A. Primary Contact/Principal Investigator

Name: Michael Lindemuth
Address: 140 7th Avenue South MSL 243G, St. Petersburg, FL 33701-5016
Phone: +001-727-553-3934
Cell: +001-727-492-4771
Fax: +001-727-553-1189
Email: mlindemu@usf.edu

B. Designated Assembly Representative (could be same as above)

Name: Same
Address:
Phone:
Fax:
Email:

C. Other Contacts

Name: Robert Weisberg
Address: 140 7th Avenue South MSL 205, St. Petersburg, FL 33701-5016
Phone: +001-727-553-1568
Fax: +001-727-553-1189
Email: weisberg@marine.usf.edu

Name: Jeff Donovan
Address: 140 7th Avenue South MSL 136B, St. Petersburg, FL 33701-5016
Phone: +001-727-553-1116
Fax: +001-727-553-1189
Email: jdonovan@marine.usf.edu

Name: Mark Luther
Address: 140 7th Avenue South MSL 202, St. Petersburg, FL 33701-5016
Phone: +001-727-553-1528
Fax: +001-727-553-1189
Email: luther@marine.usf.edu

Name: Jeff Scudder
Address: 140 7th Avenue South MSL 159B, St. Petersburg, FL 33701-5016
Phone: +001-727-553-1528

Fax: +001-727-553-1189
Email: luther@marine.usf.edu

II. ABOUT YOUR ORGANIZATION

A. ORGANIZATION/DIVISION/PROJECT NAME: University of South Florida College of Marine Science

B. OVERVIEW OF YOUR PRIMARY ACTIVITIES in regards to the Earth Sciences Community (200 words or less)

The USF College of Marine Science owns and operates buoys, coastal stations, Slocum gliders, and other custom instruments which generate various datasets. Currently we store these datasets onsite in a variety of database engines (primarily Postgres, MySQL, and SQLite). The buoy and coastal station datasets are available as CSV, NetCDF, and SensorML. We are beginning to work on making more datasets available via these interoperable standards.

C. Please list and briefly describe the primary product(s) or service(s) that your organization provides (will provide) to the Earth Sciences community.

The buoy and coastal stations have been deployed in and around Tampa Bay for the past 5 years. Depending on the station, they provide water temperature, salinity, precipitation, average nitrate concentration, nitrate standard deviation, dissolved oxygen, dissolved oxygen % saturation, pH, chlorophyll, turbidity, blue green algae, wind speed, wind gusts, wind direction, visibility, wave height, wave period, wave direction, and ADCP current profiles.

Over the last 3 years we have deployed a fleet of Slocum gliders 54 times. They have provided similar data to the buoy stations minus the wave and ADCP data. In addition, a few of the Slocum gliders are outfitted with acoustic recorders which record for 25 seconds every 5 minutes during a two to four week offshore deployment.

D. Please give a main website address for the proposed Partnership:

Web Address: <http://comps.marine.usf.edu/>

III. HOW YOUR ORGANIZATION WILL BENEFIT FROM/CONTRIBUTE TO THE EARTH SCIENCE INFORMATION PARTNERS (ESIP) FEDERATION

A. Describe current or anticipated users of your products and services and how you think the Federation can help you better serve this population. (200 words or less)

USF CMS wants to keep an open channel of communication to the data management community. We believe ESIP will assist us in keeping abreast to the latest developments. We are already members of SECOORA and GCOOS.

B. Describe any Earth science technologies that you have developed and are willing to bring to the Federation's efforts to provide best-practices. (200 words or less)

We have developed a couple web based tools to view current and past data. We are also investigating using NoSQL databases for glider data along with MOTE Marine Laboratory.

C. Describe how your proposed membership would contribute to the efforts and the mission of one or more standing committees, working groups and/or clusters. See Page 3 for descriptions of the different activities of the various standing committees, working groups, and clusters. (200 words or less)

I believe we would best be able to contribute to the Information Technology and Interoperability and the Products and Services standing committees. You can cluster us under web service or semantic web.

D. Describe your own use of Earth science information and data and how you would see this use enhanced by your partnership in the Federation. (200 words or less)

Most of our data is used within the college and by outside colleagues to build physical and biological models and to ground truth remote sensing observations.

IV. YOUR CHOICE OF MEMBERSHIP TYPE. PLEASE PICK ONE.

ESIP-I (primarily a data center/archive)

ESIP-II (primarily a research center)

ESIP-III (primarily applications and education)

ESIP-IV (primarily a sponsoring member)

V. Any other comments about your proposed membership and its relation to the Federation that you wish to provide.

We are in the process of developing a web-based glider data viewer which uses the Google Earth and Charts APIs. A live example of this viewer can be seen here:

http://ooma.marine.usf.edu/CROW/index.php?glider=bass&sensor=sci_oxy3835_oxygen

This latest 4-week deployment, Mission 54, was through a *Karenia brevis* (red tide) bloom that was monitored in collaboration with MOTE Marine Laboratory.

We plan to change the comps.marine.usf.edu site to also use these APIs in the near future. All glider data is available in CSV form at a separate site here:

<http://cotprojects.marine.usf.edu/data/plots.html>

Thank you for your application for partnership in the ESIP Federation.

List of Federation Committees and Clusters

Administrative Committees

Executive Committee: Comprised of all standing and administrative committee chairs, ESIP Type Representatives, the President and Vice President of the Federation. Oversight body for most day-to-day activities of the Federation, acts on behalf of the Assembly between meetings.

Constitution and Bylaws: Provides counsel on matters related to the constitution and bylaws and other related issues (e.g. amendments to government documents)

Finance and Appropriations: Oversees financial resources of the Federation, including the annual budgeting process.

Partnership: Reviews and processes all applications for membership before making applications available for review by members of the Federation. Deals with other membership-related issues.

Standing Committees:

Commercial Development: Promotes a forum wherein commercial development of Earth science information can be fostered. (inactive)

Community Engagement: Provides a forum for the Federation to promote partner products and to engage new users for data products and services. (inactive)

Education: Provides a forum to make accessible to educators and learners at all levels in both formal and informal educational contexts the Earth science data, information, tools, and curricula available within the ESIP Federation.

Information Technology and Interoperability: Provides a forum for discussing information technology and interoperability issues of the Earth science community and serves as a central point for activities in this realm.

Products and Services: Provides a forum for defining best practices and defining requirements for earth science products and services. Currently is involved in developing an inventory of partner products and services.

Clusters (presently active, April 2009):

Web Services
Semantic Web
Data Preservation and Stewardship
Decisions
Air Quality
Federated Search
Water