Call for Proposals:

*Earth Observations in Decision Support*

Joint Effort of GEO Capacity Building Committee and User Interface Committee

Lawrence Friedl, USA/NASA

*User Interface Committee & UIC Co-Chair Meetings*

Sydney, Australia • 6-8 April 2011
Overview

CFP supporting projects to apply Earth observations to improve policy decisions and management decisions.

CFP supports projects to enable practical applications of Earth obs.

Strong focus on Developing Countries and supporting end-users

Showcase the value and benefits of Earth obs. and GEOSS through successful applications examples.

Topics & GEO Tasks

Focus on 4 SBAs:
- Agriculture (*including Forests*)
- Energy
- Health (*including Air Quality*)
- Water

CFP supports GEO Tasks:
- CB-09-01 (Mobilising Resources)
- US-09-01b (Communities of Practice)
Call for Proposals – Three Types of Projects

**Type I: New Applications Projects**
For organizations with limited experience, capacity, resources in applying Earth observations to decision making. *These projects are primarily focused at supporting developing countries.*

**Type II: Applications Improvements**
For organizations with some experience applying Earth observations to decision making; For those needing assistance with new types of Earth observations.

**Type III: Applications Examples**
For organizations that have successfully applied Earth observations to their decision making. Want to demonstrate their application and help other organizations adopt the application. *Encourage these orgs. to record their application in GEO registries.*
Summary of Project Information

**Brief Summaries**
Purpose is to provide basic information for people to identify projects they may want to support or become an advisor for

**Posting**
Information would be on GEO Website for people to read

Key aspect is to convey what skills, support, etc. the project needs
For example:
- Earth observations in a particular area
- Data processing
- Project management
- Training and capacity building
- Modeling
GEO will broker connections to match Type 1 Projects with Advisors

**Type I Project**

- Project
- Needs support from one expert in Project Management, one expert in training, and one expert in applying Earth observations for water

**Project Advisors**

- Expert 1 in Earth observations data in water
- Expert 2 in Project Management
- Expert 3 in Decision Support
- Expert 4 in Training/Capacity Building
- Expert 5 in Earth observations for agriculture
- Expert 6 in Earth observations for health
<table>
<thead>
<tr>
<th>Information</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>The project title or brief summary of the title</td>
</tr>
<tr>
<td>Project Number</td>
<td>The assigned GEO project number</td>
</tr>
<tr>
<td>Proposal Type</td>
<td>The type of project, denoted as New Applications, Application Improvements, or Application Examples</td>
</tr>
<tr>
<td>Proposal Category</td>
<td>The category (e.g., health, water, agricultural, etc.) assigned to the proposal</td>
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<tr>
<td>Proposed Location</td>
<td>The specific location where the project takes place</td>
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<tr>
<td>Proposed Region</td>
<td>The general region (i.e., continent, sub-continent) where the project takes place</td>
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<tr>
<td>Proposed Duration</td>
<td>How long the project is expected to last</td>
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<tr>
<td>Proposed Cost</td>
<td>The expected cost of the project (NOTE: may be sensitive information)</td>
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<tr>
<td>Project Lead</td>
<td>The local, in-country lead that will implement and receive benefits from the project</td>
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<tr>
<td>Lead Advisor</td>
<td>The technical project lead for this proposed work</td>
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Examples of Project Summaries – Two Options

**Honduras Air Quality – Option A**

**Benefits**
- More information for air quality decision makers (i.e., government policy setters)
- Decreased health risks due to better pollution controls
- Reduced disease in Honduran children and elderly

**Project Summary**
This project addresses the need for better air quality information in support of decision-making in Honduras. The project will help implement the collection and sharing of air quality data, build an operational air quality information system, and build capacity for using Earth observing data in decision-making. The project will leverage multiple data sources, including OMI NO2 and SO2 products, MISR and MODIS AOD products, MODIS true color imagery, and Hazard Mapping System fire products (from NOAA, Mexico Meteorological Service, and SERMA-Central America). Deliverables for this effort include full documentation on the equipment, processes for implementation, and how to interpret the data.

**Potential Project Needs**
- Unique nature of satellite data may require a subject-matter expert to facilitate analysis
- A larger number of end users may necessitate contingency planning for training a wider audience than originally estimated
- Analyzing a wider area (regional, rather than national) may enhance ability to quantify and evaluate the health benefits
- Other nations or regions may want to implement a template for similar implementations after seeing results.

**Project Number:** GEO CFP 106
**Proposal Type:** New Application Project
**Proposal Category:** Health
**Proposal Location:** Honduras
**Proposal Region:** Central America
**Proposal Duration:** 2 years
**Proposal Cost:** $350,000 – $425,000

**Project Lead:** Dr. Victor M. Mancosu, SERMA

**Lead Advisor:** Marta C. Mejia, PhD, Arizona State University

**Proposed Partners**
- Instituto de Desarrollo Social (IDUS)
- Commission of the Environment (COMA)
- INFOTES (Nicaragua)
- LR Associates (Mexico)

**Project Team Expertise**
- Project Management
- Air Quality

Want to help?
Our proposals are looking for input and participation from qualified individuals. Please contact the Project Lead [here].

**Honduras Air Quality – Option B**

**Benefits**
- More information for air quality decision makers (i.e., government policy setters)
- Decreased health risks due to better pollution controls
- Reduced disease in Honduran children and elderly

**Project Summary**
This project addresses the need for better air quality information in support of decision-making in Honduras. The project will help implement the collection and sharing of air quality data, build an operational air quality information system, and build capacity for using Earth observing data in decision-making. The project will leverage multiple data sources, including OMI NO2 and SO2 products, MISR and MODIS AOD products, MODIS true color imagery, and Hazard Mapping System fire products (from NOAA, Mexico Meteorological Service, and SERMA-Central America). Deliverables for this effort include full documentation on the equipment, processes for implementation, and how to interpret the data.

**Potential Project Needs**
- Unique nature of satellite data may require a subject-matter expert to facilitate analysis
- A larger number of end users may necessitate contingency planning for training a wider audience than originally estimated
- Analyzing a wider area (regional, rather than national) may enhance ability to quantify and evaluate the health benefits
- Other nations or regions may want to implement a template for similar implementations after seeing results.

**Project Number:** GEO CFP 108
**Proposal Type:** New Application Project
**Proposal Category:** Health
**Proposal Location:** Honduras
**Proposal Region:** Central America
**Proposal Duration:** 2 years
**Proposal Cost:** $375,000 – $425,000

**Project Lead:** Dr. Victor M. Mancosu, SERMA

**Lead Advisor:** Marta C. Mejia, PhD, Arizona State University

**Proposed Partners**
- Instituto de Desarrollo Social (IDUS)
- Commission of the Environment (COMA)
- INFOTES (Nicaragua)
- LR Associates (Mexico)

**Project Team Expertise**
- Project Management
- Air Quality

Tell us what you think!
Leave an opinion on this project! Want to learn more or share those thoughts with us? Join our Honduran Air Quality proposal community now.
Additional topics for discussion:

- **Project costs**: Include or not in a profile.
  - Information may be sensitive; suitable for potential funders or all to see?

- **PI Contact information**: include direct contact info or not
  - Will GEO serve as intermediary to balance interest across projects

- **Level of Information/Tools to include**
  - Should additional information about the specific sources of information (i.e., ICEsat) and/or tools (GIS software) be included in the profile?

- **Searchability**: Search for specific items across project summaries
  - Requires work on GEO website to support. Can GEO Sec support this?

- **Discussion forum for each/specific proposals**
  - To create a community for a project, a discussion forum or space would allow one-on-one or group interactions regarding specific proposals
  - May require further software/web implementation
  - Could create a Facebook/LinkedIn/Other site for each project
“The clear purposes of this CFP are to identify and promote practical applications of Earth observations to improve decision making and to call attention to specific examples in which Earth observations provide societal benefit.”

“This CFP requests organizations to propose or participate in projects that incorporate Earth observations into decision making for societal benefit. Projects should be results-oriented and focused on the integration of Earth observations into decision support systems, assessments, decision processes, or other decision making activities. Projects need to focus on the use of Earth observations by the end users.“
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**Issue:** Intent was to have the decision-making organizations be the ones managing the project with aid from advisors. Some projects are general data-provision projects for broad areas with no in-country people in project leadership. Articulation of a specific area and decision-making is needed to demonstrate applicability as well as leadership from in-country.
Discussion