

AmeriGEOSS Week 2017

Summary and Actions – Day 1

San José, Costa Rica

July 31, 2017

Attendees:

Omar Franco, Colombia, GEO Principal, Americas Caucus Co-Chair
Juan Carlos Fallas, Costa Rica, GEO Principal
Hilcea Ferreria, Brazil, GEO Principal Delegate
Luciano Parodi, Chile, GEO Principal
Angelica Gutierrez, USA, AmeriGEOSS Coordination Working Group (CWG) Vice Chair
Nancy Searby, USA, AmeriGEOSS CWG US Participant
David Green, USA, AmeriGEOSS Disasters
Laura Griesbauer, USA, AmeriGEOSS

AmeriGEOSS Week 2017 opened with a plenary session with welcoming remarks from the Costa Rica GEO Principal, the Americas Caucus Co-Chair from Colombia, the University of Costa Rica President, and a virtual greeting from the Director of GEO. Following introductions, plenary participants were entertained with beautiful cello music. The AmeriGEOSS CWG Vice Chair welcomed the group of trainers and trainees, then each trainer provided a brief summary of the planning training. Each Plenary participant then introduced themselves, where they were from, and their role in AmeriGEOSS Week.

Following the plenary session and lunch, the three parallel training sessions in GEONETCast-Americas, GEOGLAM, and SAR applications began. Americas Caucus Principals, AmeriGEOSS CWG members, and Priority Area Working Group members met to discuss the planned topics on the agenda.

The first day included the following:

- Presentation on activities from each of the countries
- Presentations on each of the priority areas (thematic and foundational activities)
- Presentation on progress from CWG
- Feedback and discussion with Americas Caucus Principals

Benefits, needs, and issues identified by Principals

- GEO will soon be transitioning to new leadership, and AmeriGEOSS need to take an active role in the election and support of the new executive director.
- The AmeriGEOSS business model is different from other networks. AmeriGEOSS is an open network to acquire and transfer knowledge and doesn't rely on a donor construct. The business

model leverage resources within its network and promotes teamwork in the region. GEO's strategy for communication should be that GEO multiplies knowledge rather than subsidizing it.

- GEO has so many Initiatives to offer; it is each country's responsibility to seize the opportunities that respond to its needs.

ACTION: GEO-Principals requested that the GEO Initiatives establish a registry of projects and activities by country. This request is in response to the lack of communication between organizations/people engaged in GEO activities and the Principal where the activity is taking place.

- AmeriGEOSS-week is an investment in the region, and every year an investment by the host country to raise its capacity, as its workforce receives technical instruction. This message needs to be highlighted as a significant contribution from the region, to the region.
- When addressing the lack of engagement in AmeriGEOSS by some countries, the majority of Principals expressed the need for a national mechanism that provides political support to their work in GEO. It is not enough that the ministry of foreign affairs or environment designates an institution as the focal point for GEO without political support. This mechanism is a decree that establishes a path to the government and public organizations to consider projects that contribute to the GEO within their annual operational plans. Colombia, for example, has an instrument that gives political support to GEO. The Ministry of the Environment approved a decree in which GEO was recognized as a line of the environmental information system for the country and IDEAM has the responsibilities for coordination with other government organizations. Colombia has more than 10 agencies and organizations with contributions to GEO.

OUTCOME: Our job over the next year or more is to help build national GEO's.

ACTION: Develop a "lessons learned document" with Colombia's experience on building GEO in Colombia. GEO-Colombia will share information on their experience to gain political support for GEO.

ACTION: Develop a matrix to identify the type of organization where the GEO-Principal resides. The issue is that sometimes the Principals are in institutes with little connectivity to technical organizations in the country.

- Concerning Disaster preparedness: Although many countries are joining the Disaster Charter and becoming authorized users for the recovery phase, there is the need to have the same level of information for disaster preparedness. If the Charter is not the right entity to provide this information, what type of solution/mechanism can we develop in AmeriGEOSS?

ACTION: The CWG will explore possible solutions to present to the caucus at a future meeting.

ACTION: Write a thank you note to Barbara Ryan for her commitment and leadership in GEO and for her support to AmeriGEOSS.

ACTION: Principals also requested support from each other to advocate for each other's work in GEO at the High Level meetings. AmeriGEOSS provides the environment for the GEO members to be around the table as equals.

AmeriGEOSS Week 2017

Summary and Actions – Day 2

San José, Costa Rica

August 1, 2017

The three training sessions continued on the second day. The Americas Caucus Meeting was held; separate minutes were prepared for this formal meeting, which included virtual participation as well as in-person participation.

Following the Caucus meeting, the AmeriGEOSS CWG/Caucus Principals meeting continued according to the agenda.

Participants:

Omar Franco, Colombia, GEO Principal, Americas Caucus Co-Chair

Juan Carlos Fallas, Costa Rica, GEO Principal

Hilcea Ferreria, Brazil, GEO Principal Delegate

Luciano Parodi, Chile, GEO Principal

Angelica Gutierrez, USA, AmeriGEOSS Coordination Working Group (CWG) Vice Chair

Nancy Searby, USA, AmeriGEOSS CWG US Participant

David Green, USA, AmeriGEOSS Disasters

Laura Griesbauer, USA, AmeriGEOSS

Michelle Anthony, USA, AmeriGEOSS Community Platform

5) Discussion regarding tasks and recommendations for the CWG and 6) Discussion on possible new activities and areas for the AmeriGEOSS Initiative

Participants continued to discuss tasks and recommendations for the CWG and the AmeriGEOSS Initiative.

- Colombia said they believe it is very important to discuss how we can increase experience within AmeriGEOSS.
- Discussion on communicating the benefit of GEO and AmeriGEOSS.
- Objective: Develop a strategy for each Principal to be able to communicate the benefit of GEO and AmeriGEOSS in their countries.
 - We have learned about all of this and since last year, we have been lucky enough to have the support of one of the groups from OGC. One of the goals is to develop the AmeriGEOSS Community Platform.
 - We have been tweeting this week and the GEO Secretariat is sharing these communications. They are helping to establish these public communication links.
 - Chile recommended having greater relations with the InterAmerican Development Bank or World Bank in the region.
 - Establish certain ground rules for knowledge transfer and develop an inventory of activities to better communicate and collaborate in the region.
 - Need to start with recognizing each other.

- We need to have a more comprehensive understanding of all our projects, at the country level, to better understand how we could intersect with World Bank project or other projects.
- Tasks and recommendations for the AmeriGEOSS CWG
 - ACTION: Develop a road map, based on Colombia's experience, for the countries to implement GEO activities through a decree. Ecuador is already working along these lines.
 - ACTION: Map the information where all GEO Initiatives have participation within the Americas. This information is necessary for GEO coordination at the National level in each country.
 - RECOMMENDATION: Develop a strategy for the engagement of non-member countries in GEO from the region. AmeriGEOSS week 2018 included participants from the Dominican Republic, Nicaragua, and Haiti. The strategy may include presenting the benefits of the GEONETCast system and the new applications of GOES-16 to those countries, as well as other AmeriGEOSS success stories.
 - RECOMMENDATION: Communicate how AmeriGEOSS relates to its members. Colombia suggested that Geneva and Washington D.C. were strategic places to engage the countries through engagement with embassies of Americas countries. We would like to invite the GEO Secretariat to visit the embassies of Americas countries in Geneva, and to coordinate with USGEO to visit also America's embassies in Washington D.C.
 - We need to request that the AmeriGEOSS platform and webpage be linked to the GEO Secretariat page. The GEO Sec has been kind to host a page for AmeriGEOSS but our effort through the AmeriGEOSS platform conveys excitement and energy.
 - ACTION: To connect the AmeriGEOSS platform to the GEO site ASAP.
 - It was also recognized that not having a "doliente" in Geneva for the Americas was a disadvantage for AmeriGEOSS. This person would ensure that the Americas Interests were included in the overall GEO activities.
 - ACTION: Principals recommended reaching out to the following regional organizations: SICA, CARICOM, The Pacific Alliance, IAI, and others. CWG will develop a list of strategic organizations to engage and see how collaborations can be established.
 - RECOMMENDATION: Concerning a new thematic area, it was agreed to explore the possibility of adding wetlands. Mexico (CONABIO) and Colombia (Inst. Humboldt) are already working on declaring Ramsar wetlands. We need to explore how to advance progress in this area.

7) AmeriGEOSS Community Platform Demonstration

- Michelle Anthony (USGS, United States), provided an overview and demonstration of the AmeriGEOSS Community Platform.
- The platform provides an opportunity to use the AmeriGEOSS Capacity Building framework – User driven Framework, Capacity Building, Engaging Users (needs assessment and gap analysis), and delivering solutions.
- The group developing the platform has done some capacity building work by collaborating with GeoSur to connect the community to EO resources. The AmeriGEOSS platform is also now harvesting information from GeoSur.

- The vision for the AmeriGEOSS Community Platform is an increased awareness and availability of regional community resources to promote discovery, collaboration and coordination among the GEO members in the Americas.

ACTION: Need to reach out to the GEO Secretariat and make sure they are linking to this Community Platform. Need to also ask them to announce this as a news items on the GEO page. Speak to Steve Ramage about this to get their help with publicizing the platform with the community.

8) Discussion on AmeriGEOSS at the GEO-XIV Plenary

- We submitted an AmeriGEOSS side event and it was accepted. It is scheduled for Monday, Oct 23rd 3:30pm-5:30pm.
- We have also considered organizing a booth at the exhibition. There is an idea to invite the ambassadors at the embassies in Washington D.C. from the Americas Caucus member countries for an event, soiree, or something similar either at the side event or at the booth or another location.
- Suggestion to hold an event at one of the embassies in Washington D.C.
- Suggestion to draft a letter of invitation to the ambassadors signed by all the member countries. Share this invitation with all the principals as well so everyone is aware.

ACTION: Fill out the pre-registration form for an exhibit booth.

ACTION: Determine costs for exhibit booth.

ACTION: Draft a letter of invitation to either the booth or to the side event .

- Juan Carlos noted he has a WMO meeting during the same time and won't be able to attend.

Closing

- The AmeriGEOSS CWG/Caucus Principals meeting was adjourned.

AmeriGEOSS Week 2017

Summary and Actions – Day 3

San José, Costa Rica

August 2, 2017

During the Costa Rica national holiday, AmeriGEOSS Week participants toured a coffee plantation to understand some of the agricultural needs in the region.

AmeriGEOSS Week 2017
Summary and Actions – Day 4
**Training Sessions and Side Meeting: National Commission of
Disaster Response and AmeriGEOSS Coordination Working
Group**
San José, Costa Rica
August 3, 2017

The three parallel training sessions continued, and a side meeting was held to discuss Costa Rica disaster-related needs and progress.

Participants:

Dr. Ivan Brenner Reyes, Presidente Comisión Nacional de Prevención de Riesgos y Atención de Emergencias

Juan Carlos Fallas, Director, Hydromet Service (IMN), Costa Rica, GEO Principal

Need complete list of Costa Rica participants

Angelica Gutierrez, NOAA, USA, AmeriGEOSS Coordination Working Group (CWG) Vice Chair

David Green, NASA, USA, AmeriGEOSS Disasters

Laura Griesbauer, NOAA, USA, AmeriGEOSS

Michelle Anthony, USGS, USA, AmeriGEOSS Community Platform

Emil Cherrington, NASA, USA, AmeriGEOSS SAR Applications Trainer

Francisco Delgado, NASA, USA, AmeriGEOSS SAR Applications Trainer

<http://informa-tico.com/4-08-2017/eeuu-amplia-apoyo-cientifico-costa-rica-pronosticar-desastres-traves-nasa>

<https://www.cne.go.cr/index.php/270-noticias/1294-3-de-agosto-2017-para-mejorar-la-vigilancia-y-evaluar-eventos-que-generen-desastres>

Participants from CNE and Technical advisory committees to emergency response

Dr. Ivan Brenner Reyes, Presidente Comisión Nacional de Prevención de Riesgos y Atención de Emergencias, presided the meeting along with David Green and Angelica Gutierrez.

The objectives of the meeting were 1) to introduce the AmeriGEOSS Initiative to the Technical /Sectorial Advising Committees (CATs) for the National Commission for Prevention of Risks and Emergency Care, 2) to learn about the activities related to risk management in Costa Rica, and 3) to explore participation within the AmeriGEOSS Disaster Working Group activities.

These Committees, or CATs, are interdisciplinary technical teams made up of specialists and organized according to related thematic areas that provide advice to the CNE, the Emergency Operations Center (COE) and the other coordinating bodies of the National Risk Management

System, in the particular subjects of their competence. The objective of the CATs is to contribute to the process of integrated management of disaster risk in the country, strengthening the processes of estimation, prevention, and reduction of risk, as well as disaster preparedness, response, and recovery. Its criteria are specialized and constitute the basis for the coordination of prevention and emergency response actions in Costa Rica. The following CATs provided activities reports along with information on their technical needs:

- Hydrometeorology and rivers
- Geotechnical activities
- Volcanology and seismology
- Coastal marine emergencies
- Territorial management

Other presentations were provided by:

1. Juan Carlos Fallas, GEO-Principal of Costa Rica, gave a presentation on the AmeriGEOSS Initiative.
2. Angelica Gutierrez provided a short presentation on activities within AmeriGEOSS and GEO that address elements of disaster risk reduction such as the GEONETCast system, the GEOGLOWS Initiative with its Global hydrological forecasting Project, the Disaster Charter, and the AmeriGEOSS community platform. She also mentioned the Weather Ready Nation Project from NOAA/USAID.
3. Michelle Anthony provided a high-level presentation on the AmeriGEOSS community platform and noted the upcoming meeting with the Ministry of Science and Technology the following day. The discussion on the availability of the Costa Rican data led to identifying the issue of data standards in Costa Rica.
4. David Green provided information about NASA's Disasters Program and invited CNE to participate in the upcoming Disaster Symposium to take place in Buenos Aires, Argentina in early September.

Important results of the meeting:

- Engagement of Costa Rica (CNE) in the Disaster Charter was discussed. Angelica Gutierrez emphasized the need for CNE to identify experts within the Technical Advisory Committees (CATs) to obtain the Authorized User Training from Lucas Bruno. These experts will be selected from the CATs.

ACTION: Lidier Esquivel from CNE will communicate with Lucas Bruno in Argentina to set the training date.

OUTCOME: Dr. Ivan Brenner from CNE will represent GEO-Costa Rica at the GEO Plenary.

ACTION: Laura Griesbauer will provide GEO-Plenary information to Dr. Brenner's staff.

- CNE will meet in August with its CATs to define the Costa Rican contributions to GEO in the thematic area of disasters. CNE requested that all activities be coordinated through CNE (as they will be providing funding) and not to engage individually with members of the CATs without CNE's consent.

ACTION: Angelica will follow up on the outcome of this meeting.

AmeriGEOSS Week 2017
Summary and Actions – Day 5
Training Sessions and Side Meeting: Ministry of Science and
Technology and AmeriGEOSS Regional Coordination Working
Group
San José, Costa Rica
August 4, 2017

The three parallel training sessions continued, and a side meeting was held to discuss Costa Rica data-related needs and progress.

Participants:

Sander Pacheco Araya, Vice-minister of Science and Technology, Costa Rica

Orlando Uriza represented Mr. Juan Carlos Fallas, Costa Rica, GEO Principal.

Angelica Gutierrez, NOAA, USA, AmeriGEOSS Coordination Working Group (CWG) Vice Chair

Michelle Anthony, USGS, USA, AmeriGEOSS Community Platform

Costa Rica is in the process of opening their data and the National Strategy establishes mechanisms to solicit and obtain public information. The decrees "Transparency and access to public information in the State and its dependencies" and "Opening of Public Data" are intended to regulate and operationalize access to public information.

By decree, the Ministry of the Environment (MINAIE) is responsible for territorial ordering and geospatial information while the Ministry of Science and Technology (MINCIT) has the responsibility for information related to education and research. The environmental data is located in many entities of the Ministry, but the National Center for Geographical Information of the Environment (CENIGA) is in charge of consolidating the geospatial information.

Important results of the meeting:

During our meeting with the Vice-minister of Science and Technology, Dr. Sander Pacheco Araya, a pilot to connect the AmeriGEOSS platform to the ministry's data was agreed as the initial project. Dr. Pacheco will assist us later on with the connection to CENIGA.

Mr. Federico Torres, Director of Research and Technological Development was assigned as the leader from the Ministry while Michelle Anthony would take the lead from the AmeriGEOSS platform.

ACTION: Michelle Anthony will lead in the communication with Mr. Federico Torres to do the following:

- Develop contacts between the Costa Rica Open Data and AmeriGEOSS Community Platform technical teams
- Explore existing open data connections to the AmeriGEOSS platform
- Pursue new data resources to be added to the AmeriGEOSS Community Platform as suggested by their staff.

One of the participants in the GEONETCast course was Mr. Herberth Villavicencio Rojas, who works for MINAE and is in charge of the geographic information system of the direction of waters. Mr. Villavicencio is interested in connecting MINAE's data to the platform. We will continue exploring this possibility on the side.

Mr. Villavicencio also recommended connecting with the Conference of Ibero-American Directors of Water (CODIA). This is a Cooperation initiative of the Spanish government, CAF, UNESCO, and the CEDER Foundation. The most successful program is capacity building in water materials. Participant countries are: Colombia, Costa Rica, Nicaragua, Honduras, Guatemala, Panama, Ecuador, Uruguay, Brazil, Paraguay, Spain, and Portugal. The next conference will be in October 2017 in Uruguay.

ACTION: Angelica will be in communication with Mr. Villavicencio to explore water connections in the region.

AmeriGEOSS Week 2017

Outcomes of the Course in Agricultural Applications/GEOGLAM

Instructor: Carlos Marcelo Di Bella

San José, Costa Rica

July 31, August 1, 3, and 4, 2017

This course was about the use of remote sensors and their application for agricultural monitoring. It will focus on two tools established by the Group on Earth initiative Observations Global Agricultural Monitoring (GEOGLAM) and in an introduction to the Agriculture using satellite observations and data in situ.

The two tools are: The GLAM platform and the GEOGLAM Crop Monitor Platform and system. Also, the course will present a review on topics of national interest and themes Oriented to food security. The course was in Spanish.

Potential members/lead for the Agriculture Priority Area of AmeriGEOSS:

1) The Programa de Investigaciones Aerotransportadas (PRIAS), through the National Center of High Technology (CENAT), could be the nexus between GEOGLAM and the AmeriGEOSS effort in Costa Rica. This same laboratory could also lead the link with other Central American Institutions (eg SICA- Central American Integration System).

Contact Cornelia Miller (cmiller@cenat.ac.cr).

Contact between GEOGLAM National Monitoring Component 2 (Carlos Di Bella) and the University of Maryland (Inbal and Alyssa).

ACTION: We will start having monthly calls with this group from Costa Rica, the group from Colombia, and the group from Argentina to define agricultural activities of interest under the AmeriGEOSS agriculture Working Group. From the U.S. and for coordination purposes, we also would like to include in the discussions the group from FEWSNET. Laura Griesbauer will set a doodle pool for the initial call

II) CROP MONITOR, through the Costa Rican Coffee Institute (ICAFFE) - Graciela Romero Martinez (gromero@icafe.cr), the National Banana Corporation (CORBANA SA) - Jose Miguel Gonzalez (mgonzale@corbana.co.cr) And the Center for Agricultural Research (CIA-UCR) - (bryan.aleman@ucr.ac.cr), have shown a particular interest in adapting and using the platform for different crops.

ACTION: Alyssa / To determine the necessary actions to adapt the platform to regional crops. Who will do it, and what are the costs of such adaptation.

III) Interest in participating in RAPP (Rangeland and Pasture Productivity) through national initiatives in Nicaragua (UNA- Jorge Sobalvarro jlsmjssl@gmail.com) and Costa Rica (EEAFBM - UCR - Guillermo Vargas guillermo.vargas@ucr.ac.cr).

ACTION: GEOGLAM to provide more information on RAPP at the monthly agriculture working group call that is being set up.

IV) A possible link with current research under **GEOGLOWS**. The research focuses on the calculation of water balance in the soil and the monitoring of water stress at the regional level (Central America), based on the use of remote sensing and agrometeorological models. The contact would be Rafael Arce – (rarcemesen@gmail.com). There is even the possibility that some research topics may be funded through CONARE-CENAT scholarships for undergraduate or postgraduate students.

ACTION: Angelica will connect this group with the group from GEOGLOWS (Jim Nelson, Pierre Guillevic from UMCP) already working in this area.

AmeriGEOSS Week 2017

Outcomes of the Course in GEONETCast applications

Instructors: Bernie Connell, Diego Souza*, and Marcial Garbanzo

San José, Costa Rica

July 31, August 1, 3, and 4, 2017

* Virtual Instructor

The majority of the course was devoted to hands-on exercises that focused on display, manipulation, and interpretation of imagery and products that are or will potentially be available through the GNC-A broadcast. Display tools utilized during the workshop included

McIDAS-V, GDAL, and SigmaCast. Case examples will highlight meteorological and environmental applications of the new GOES-16 and JPSS satellites. The course was given in Spanish and English.

ACTION: Dr. Marcial Garbanzon from the University of Costa Rica as one of the instructors of the course. He requested assistance to convert an old EUMETSAT antenna located at the University. Dr. Garbanzo provided instruction using python language which was very well received by the students. Participants requested to have webinars with lessons on “how to” by Dr. Garbanzo and in Spanish. Angelica will coordinate the webinars with Dr. Garbanzo and will seek funding for providing the antenna conversion to a GNC-A system.

AmeriGEOSS Week 2017

Outcomes of the Course in SAR Applications

Instructors: Emil Cherrington and Francisco Delgado (in person),

list virtual instructors

San José, Costa Rica

July 31, August 1, 3, and 4, 2017

This course provided the geometric and radiometric basis of SAR remote sensing, it introduced the SAREDU learning platform, key SAR processing tools such as those in the Sentinel Applications Platform (SNAP) and application exercises using SAR data and image processing tools. The course also provided participants with the knowledge of where and how to obtain freely available SAR data and software for their use on return to their home countries and institutions. The course was given in Spanish and English.

AmeriGEOSS Week 2017

Outcomes of the AmeriGEOSS Platform Demonstrations

The FGDC team who support the development and implementation of the AmeriGEOSS Community Platform was requested to present an overview and training sessions throughout the conference.

The AmeriGEOSS Community Platform sessions were provided during the following sessions:

- Joint Americas Caucus and AmeriGEOSS Meeting
- Workshop: GEOGLAM Latin America Course: Agricultural Monitoring based on the use of remote satellite sensors.
- Workshop: Training on Satellite Data: Access through GEONETCast Americas, Display, Interpretation, and Usage
- Workshop: CEOS WGCapD Course on SAR Technology
- Disasters Meeting: CON Cat’s AmeriGEOSS Regional Coordination WG 2017

The AmeriGEOSS team was also requested to meet with the Costa Rica’s Vice Ministry of Science & Technology (Ministerio de Ciencia Tecnología y Telecomunicaciones) (MICITT). An overview of the AmeriGEOSS Community Platform was provided with discussions related to the Open

Data initiatives in Costa Rica, their Open Data portal and other potential datasets that should be added to the platform.

ACTION: Items Michelle Anthony will lead in the following activities:

- Follow up with Colombia's Environment Ministry to get their datasets included in the AmeriGEOSS Community Platform
- Follow up with staff from the National Meteorological Service of Belize. Following the AmeriGEOSS Community Platform session, they expressed interest on Open Data activities for their country, as well as participation in the AmeriGEOSS Community Platform.
- Follow up with staff from the Ministry of Science & Technology to do the following:
 - Develop contacts between the Costa Rica Open Data and AmeriGEOSS Community Platform technical teams
 - Explore existing open data connections to the AmeriGEOSS platform
 - Pursue new data resources to be added to the AmeriGEOSS Community Platform as suggested by their staff.