

# **GEOGLAM Ex-Com Meeting, Meeting Notes and Actions**

Milan, May 16 2019

# 1. **GEOGLAM Secretariat Updates**

A brief presentation on the status of previous actions and what the new priorities are for the next year (Secretariat Update.ppt). Key discussion points and actions follow:

# **Knowledge Hub:**

The Knowledge Hub is a top priority for GEO this year. To make it a sustained priority the GEO Director must get approval from the GEO plenary in Canberra. As a result they are moving forward with a proof of concept (PoC) project to gain plenary acceptance. GEOGLAM will be the test case for the POC using existing content from the Sen2Agri project. Ian is working closely with the GEO Sec KH team with Pierre and Sophie supporting on the content side. There is uncertainty of continuity past the plenary if it is not approved, but overall the GEO initiative offers a low risk way support GEO, while possibly getting an effective solution to the GEOGLAM KH requirements. In the meantime the re-design of the GEOGLAM website (see below) should provide an interim solution.

### **Action:**

Milan 1.1. Ian work closely with GEO KH team with support for the Sen2Agri content from Sophie, Pierre and the UCL team for delivery during the GEO Plenary in Canberra on November 6-7

## Website:

The GEOGLAM website renewal has gone nowhere, we were relying on teaming with the GEO re-design but the GEO effort is stalled indefinitely. Consequently Ian will do this work and look to the GEO secretariat staff for some technical support. As work progresses Ian will look to the GEOGLAM community to provide input to the structure and content in the new site. The site will also be used to point toand coordinate links to the community websites and portals. We will also strive to harmonize the look and feel, as much as possible, across the various GEOGLAM sites ( GEOGLAM.org, Cropmonitor.org, JECAM.org).

# **Action:**

Milan 1.2. Ian will develop a GEOGLAM website prototype to be completed by the end of July

# Computing Infrastructure Coordination (Cloud processing, Data cubes, DIAS, TEP, etc...):

It was suggested in Rome that a working group is required around computing infrastructure as this is a gap that needs to be filled. This has yet to happen.. Agreed that GEOGLAM should have gotten out in front of this issue. We have already decided to adopt a federated approach, no build, but use what is available in a more coordinated way. We don't want to duplicate other efforts but often we don't know which of the many



existing models to use and how they could be implemented. Reference to this is maybe why nothing has yet come from the China Sanya meeting. This is certainly a case with JECAM though the current business case assessment being undertaken by our IT should provide some guidance and possibly be more widely applicable. Pierre suggests that this is an opportunity:

- 1. for the GEOGLAM community to share common experiences in cloud computing to avoid duplication
- 2. to allow GEOGLAM to apply for credit or access to some of these platforms,
- 3. to investigate longer term support and finance for operational implementation.

How do we move forward? Chris suggests that for 1) a workshop is needed (and leadership can come from that) to know who is doing what and where. Some preparation documentation would be needed. Sven offered to find someone to support that.

How will the GEOGLAM KH address this? Chris also suggests a position might need to be created to do this (secondment?). Someone who understands the community involvement. Suggested creation of an infrastructure WG, with a workshop next purely to address infrastructure and cloud issues. Need to share experience. Sven offers to find someone in VITO to coordinate; Brad to also look into NASA data systems

# **Actions:**

Milan 1.4 Develop a desktop review of current experiences (as per item 1 from Pierre's list above). – Sven offered to find someone to do that.

Milan 1.5. Develop a An infrastructure workshop following on from the review to cover experience with the cloud/cube. Infra-WG- hold a workshop and based on that

Milan 1.3. Create an infrastructure working group Sven (Sven on behalf of Vito)

Milan 1.6. Find out if RADI-China wants to be re-engaged in infrastructure, and if so what role they would like to play. Chris

# 2. Essential Agricultural Variable (EAV) – CEOS working Group Update

A presentation updating the status of CEOS engagement, EAV activity and the future of the CEOS GEOGLAM adhoc working group was provided by Alyssa (CEOS EAV ExCom.ppt).

Presented to CEOS; need for common definitions. SAR capacity development identified as critical, making inroads into this with SAR inter-comparison SAR for ag course and sen2agri incorporation of Sentinel-1 data. Other CEOS-related interests include coordination on data QAQC, ARD and EAVs (including ARD+). Need to integrate EAVs with research agenda and best practices.

Ad hoc WGs: CEOS have made it clear that the ad hoc WGs should not be permanent. Suggestions of moving to a permanent presence on CEOS in some form; but need participation of space agencies.



Discussions pointed out the need to align EAV development with the Research Agenda and use this to drive our research priorities. The EAV activity was viewed as a key priority for GEOGLAM and it was decided that a face-to-face workshop should be conducted to accelerate the activity ideally by end of 2020 before next SIT technical workshop. Other discussion was focused on scoping the activity and included open ended questions: How should EAVs intersect with other EAVs? What is the timeline for execution? When do we consider it done? Does it get reviewed by GEOGLAM executive committee then becomes a community document?

#### Action:

Milan 2.1. A workshop will be held at UCL, and a date that works with Pierre in October is being determined, likely the week of October 21.

EAVs – Workshop UCL – Alyssa, Sven, Pierre

- Add selected water variables to the EAV list –e.g. tied to thermal instruments how to build - EAV WG w. Link/crosswalk to GEOGLOWS Essential Water Variables - EAV WG
- Finalize Tech Requirements for CEOS by Sept next year EAV WG

# 3. Capacity Development Working Group Update

Andy Nelson provided a update presentation (Working Group for CapD.ppt). A capacity building working group will be a key new activity within GEOGLAM. We are now assembling and coordinating it. The CapD WG will develop a strategic vision for CapDev in GEOGLAM which will facilitate the transition of GEOGLAM research and development to operations. There is a need to link to /leverage CEOS CapDWG. Need to leverage what members are doing and raise awareness of best practices. Need selection criteria to identify and characterize countries for future capacity development interventions. Deliverable documents aimed for 2020.

#### **Action:**

Milan 3.1. Complete the CapD WG ToR and develop a Capacity Development – Best Practices document (2020) -to help inform CEOS CapDev etc - Andy/Alyssa

# 4. GEOGLAM Secretariat Funding Sustainability Initiative

A brief presentation prepared by Jay Aldous, our resource mobilization consultant was presented by Ian (Funding Sustainabilty.ppt). Some key points discussed:

Funding sustainability from the GEOGLAM secretariat needs to be taken more seriously; need to be more engagement to leverage resources; will be out of direct financial support by end of 2019. The value of a healthy GEOGLAM was articulated; potential sources of funding were identified that included the G20 members, Foundations, commodity groups and the private sector. How can the GEOGLAM executive committee best identify funding sources, make introductions and support resource mobilization? Suggestion to perhaps start with France, the originator of the G20 action plan. It was noted ask is pretty small compared to the money that is out there. Beyond the secretariat capacity development funding was seen as a key opportunity. Steve Ramage



presented various options about opening doors for funding, thinks plan needs to be more ambitious - need to know what is already in place, what are we delivering, what will the impact be and how can this be scaled up. Need to align GEOGLAM with wherever the money is coming from, need to speak the same language as the funding organizations. Chris reiterates need for us to identify places where links can be made and that the initiative on best practices may help the community to move forward. Steve suggests raising the GEO profile at the World Economic Forum. If Ministers are already engaged then they may be more likely to provide ministerial endorsement (and to do this the message will have to be that GEOGLAM helps drive national agendas). Chris mentions that we do not want to be dependent on external funds but that we do need external funds to get going for setup, and that the funds need to be sustainable, and to do this we need to understand exactly what funding people agencies needare looking for. Another possible opportunity is the ministerial GEO in Canberra. Steve Ramage suggests that we pick a couple of countries and try to get national country World Bank managers involved (in his experience, they are less concerned about data and products but focus on long term development and tackling national priorities). Final suggestion is to not limit avenues of contribution to just money if other options are available.

#### **Actions:**

Milan 4.1. GEOGLAM should reconnect formally with France this year to discuss the need for support and also present the idea for a 2021 decadal AMIS/GEOGLAM accomplishments recognition at the 2021 G20 hosted by Italy – Inbal, Ian, Steven

Milan 4.2. Provide content to Steve Ramage of what's needed for our developing country partners - Catherine, Thuy/Nguyen/Christina, Others? >Ian bundling> Steve

# 5. Research Agenda

A brief presentation was given by Chris (Research agenda.ppt). The document was seen as a living document that will need to be updated periodically, Also it was note that there is a need to use the EAV's to prioritize the key GEOGLAM research needs.

# **Actions:**

Milan 5.1. Link the research agenda to the EAV's as they develop and use these to set research priorities. EAV WG

#### **Round Table**

**Sen4stats** from Pierre: Every country is different but has same problems/issues regarding statistical agencies. UCL consortium with 4 partners. Complements GEOGLAM priorities and FAO and World Bank initiatives for ag stats. Aim is to link agricultural stats with space. The idea will evolve and UCL will work with Inbal to coordinate. Idea of a workshop on information for statistical agencies, and how GEOGLAM can feed information to national statistical agencies to leverage EO success. Question is what can we do in a broader community for GEOGLAM? An exchange of best practices for EO into national statistics surveys would be useful. Are there other experiences to share? Need to figure out who is doing what.



- EO and Ag Stats
  - o EO Information to the Statistical Agencies
  - Uptake of EO within –
  - possible thematic Workshop next year experience and best practices building on Sen4Stat, Canada momentum — possibly Pierre (Sen4stat), Andy, other National programs (should invite mark miller US NASA)

Which countries are the primary focus

**AMIS** from Inbal: Update on AMIS. Starting to integrate private partners as a test. Partnership between GEOGLAM and AMIS is strong and we need to continue support for that; Chris suggests we do something for 2021 as a G@) push for a decadal success with an event. Take advantage of rotating chairs to make a splash.

**JECAM best practices** from Andy: Need to move quickly on the development of JECAM best practices and capacity development in the framework of GEOGLAM. Need to ensure that JECAM is integral to the Research Agenda and EVA development. JECAM to speed up generation of Best Practices documents making this the highest priority – suggested next push for best practices documents on Within season crop type and Crop area estimation (beyond the Gallego document) – *Andy / JECAM Team/Ian to explore providing Sec Funding* 

**Expansion** from Brad: Brad suggests GEOGLAM expand into EO ag aspects of hydrology and irrigation; and who should we engage for ET and soil moisture – there are a number of groups? In situ and agromet data: What to do about these? Can we anticipate ground initiatives to coordinate this? Brad and his connection to GEOGLOWS. WMO is restructuring and may be difficult to work with. The critical question: are there people willing to lead a new community push in this area; and can we do this without losing the focus of GEOGLAM

**ESA update** from Espen: Within scope of GEOGLAM food security will be a high priority, including EAVs and SDGs. Sen2Agri advanced training courses this year will focus on agriculture. No date yet for the Sen4RAPP call yet, but it is in the work plan.

**VITO update** from Sven: EuroGEOSS showcases has became E-shape consortium of 55 partners; split over societal benefit areas, water, climate, ecosystems, agriculture, etc. Want to run pilot studies TBD. The agricultural pilot may be run at various levels, including GEOGLAM and industry etc. This has just started and will last for 4 years.

**RAPP Update** from Juan: RAPP map is the main current activity. Sen4RAPP will be a big push for activity. Would like to see more engagement of RAPP in adding rangeland to the crop monitor for early warning outside of Australia – an active rangeland monitoring community from early warning countries needs to be engaged. There may be a need for a dedicated workshop focused on range managers in food insecure countries to focus on the specific needs of the community and build an initiative, timing, funding and location TBD.

**UMD update** from Alyssa: Harvest is the primary contribution of NASA to GEOGLAM. HARVEST/UMD continues to support the GEOGLAM Secretariat and develop the Crop Monitors. AMA has seen some early successes but wants to establish better representation in south America.



## **CONAB Update from Lucas:**

Conab continues to collaborate on the AMIS Meeting as well as the AMA working group; Conab began work with GLAD (UMD) to test their methodology on crop mapping on Paraná. We had field work on December, and now we are waiting for them to process the data; We had implemented the Area Estimation method we learned from the Workshop at GLAD last year and applied it to estimate Maize area on Distrito Federal and the results were very good, as presented on the poster session at LPS 19. We will apply the methodology on other crops soon; Last December we participated in the workshop about SAR in Canada, also part of the GEOGLAM Capacity Development program.

# **COPERNICUS for GEOGLAM from Felix and Bettina:**

The JRC can use COPERNICUS budget in the range of 1 Mio. Euro in 2020 (and if successful more in the following years) in order to outsource the provision of agricultural monitoring reference products at the national level (eg. crop mask, crop type classification, irrigated areas map...), which will be complementary to COPERNICUS global land products. GEOGLAM Ex Com. to come up with a country list based on sound justification and stakeholder needs, where appropriate in coordination with the HARVEST national crop monitor activities. Felix to interact with Ian, Catherine and Inbal to discuss countries, products details and feasibility before June HARVEST meeting.