

CEOS SEC 222 Report

Entity: WGDIsasters

Prepared By: Stéphane Chalifoux (Canadian Space Agency) and Simona Zoffoli (Italian Space Agency)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- Need to appoint a Vice-Chair (and Chair) of the WGDIsasters starting next Plenary.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The Disaster Risk Management (DRM) pilot initiatives on floods, seismic hazards and volcanoes are in their final phase. Regular provision of satellite data to Pilots and Supersites. The pilot teams are summarizing what has been learned and preparing recommendations with a focus on the sustainability aspect, for after these pilots formally conclude their work at the end of 2017 for consideration by CEOS Plenary. No issue to report.
- Recovery Observatory (RO): Hurricane Matthew RO over Haiti, a 2nd Haiti meeting (user workshop) is planned for Late April or June in Haiti.
- GEO-DARMA began in mid-October, starting with its Concept Phase, which has a goal of Identifying hazards that have large regional impacts and transboundary risks that require regional and multi-country involvement. This Concept Phase is planned to wrap up in summer 2017, and the first projects are expected to be put forward for approval at the fall CEOS meetings. A Concept Workshop will shortly be developed for the Global Platform in Cancun.
- GSNL: A series of new proposals are expected in the coming weeks; up to three proposals: Chile, DR of Congo, Peru (Andes – multi-hazard supersite proposal). DLR, ASI and ESA support the San Andreas Fault Natural Laboratory proposal. Endorsement requests for new GSNL might be on the agenda of the SIT-32. The Second biennial report of Hawaii Supersite was reviewed by DCT and a new version will be send out to DCT based on space agency comments.
- GP-STAR side event for the Global Platform session in Cancun has now been selected and confirmed. CEOS already contributed with a Volcanoes fact sheet.
- Fruitful GEO-DARMA (Data Access for Risk Management) Kick-off Workshop held on March 14, 2017, and hosted by ASI at the Italian Space Agency.
- Successful WGDIsasters Meeting # 7 from March 14 to 16, 2017 at the Italian Space Agency (ASI). 30 attendees (also new participant from Russia) and 3 participants by teleconference.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- ISRSE (Tshwane, South Africa, 8-12 May, 2017)
- Global Platform for Disaster Risk Reduction, May 2017, Mexico, organized by The United Nations Office for Disaster Risk Reduction.
- GEO-DARMA Steering Committee and Concept Workshop (week of 22 May, Cancun, Mexico)
- World Reconstruction Conference 3 (Brussels, 6-8 June, 2017)
- 8th CEOS WGDIsasters meeting, hosted by CONAE with NASA support, is in the planning phase and is envisaged to be held in Buenos Aires, Argentina, from September 4 to 8, 2017.

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC 222 Report

Entity: WGISS (Working Group on Information System and Services)

Prepared By: Andrew Mitchell – Chair (NASA) / Mirko Albani Vice Chair (ESA)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- WGISS Vice Chair Nomination – Awaiting response from the CEOS agency which expressed interest in putting forward a nominee. They are considering the four-year commitment which would begin in Nov 2017.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- **Submitted the CWIC API to a recent Request for Information (RFI) call to the Open Geospatial Consortium (OGC) Concept Development Study (CDS).** This study is hoping to lead to increased understanding of the requirements for enhanced interoperability of geospatial Application Programming Interfaces (APIs), increased commonality of the semantic elements of APIs and support improved usability by software developers who need to use multiple APIs.
- Held the first **Technology Exploration webinar on March 14th on ‘Relevancy Ranking of Data Search Results’.** The **GEODAB (GEO Data Access Broker) along with NASA’s Common Metadata Repository (CMR) were co-presenters.** As CEOS Earth Observations, ranking data search results by their expected relevance for the user is potentially one of the most powerful ways to help users quickly zero in on the best data for their purpose. This webinar discussed some of the techniques being used within Earth Observation data search tools and also included a discussion of possible future directions in relevancy ranking.
<http://ceos.org/ourwork/workinggroups/wgiss/technology-exploration/ceos-wgiss-technology-exploration-webinars/>
- Held the initial WGISS Carbon Portal telecon with CEOS Carbon leads (Mark Dowell and Stephen Plummer) on March 28th to begin defining requirements for facilitating discoverability and accessibility of ECV Products and space-borne CDRs relevant for the CEOS Carbon Action via WGISS Interoperability Systems & Standards (FedEO/CWIC/IDN, OpenSearch).

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- WGISS 43 – April 3-7, 2017 Annapolis, Maryland US
 - Hosted by NASA
 - Technology Exploration Workshop
 - Future Data Access and Analysis Prototype Systems
 - WGISS GEOSS Interoperability Workshop
- GEO Data Provider’s Workshop in April 20-21
- WGISS 44 – September 25-29, 2017 Beijing, China
 - Hosted by Chinese Academy of Sciences

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC Report

Entity: WGCapD

Prepared By: Phila Sibandze (SANSA) and Senthil Kumar (ISRO)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- NIL

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- NIL

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- WGCapD Annual Meeting took place at Oberfafenhofen at DLR in March 26-29, 2017.
 - o It was attended by 12 participants from 10 organisations (DLR, ISRO, NASA, SANSA, USGS, INPE, ESA, UNOOSA, GEOGLAM, GEO and ISRO).
 - o Six other organisations participated virtually (CREACTEALC, SEO, VMO-CGMS Vlab, GFO, WGDIsasters, AGEOS and CSA).
 - o The working group is working on their 2017/2018 work plan.
 - o The position and discussion of the next Vice Chair is still on going and open.
 - o WGCapD requests CEOS Chair to please send a formal request to space agencies for their expression of interest to consider WGCapD Vice Chair position from CEOS Plenary this year.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- The working group will be coordinating the ISRSE 37 pre-conference workshop in May in Pretoria, South Africa
- The next WGCapD annual meeting will be held in Brazil 6-8 March 2018.

CEOS SEC Report

Entity: WGCV

Prepared By: Kurtis Thome (NASA)/Cindy Ong (CSIRO)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- Results from the GSICS/WGCV Reference Solar Spectrum web meetings were discussed during a morning session at the recent WGCV IVOS meeting in Tucson Arizona on March 16. Members of GSICS also participated in the discussion and a summary of the IVOS discussion was presented at the GSICS Working Group meeting on March 23. The two groups will work towards refining a recommended spectral resolution and basis spectrum that includes short-wavelength UV and longer wavelength IR than the current Thuillier-based CEOS spectrum. The results of the effort will be summarized in a report from WGCV in Fall 2017
- Results of the RadCalNet Beta testing were presented at the at the WGCV/IVOS meeting on March 13. The RadCalNet team received valuable input on how to improve the data format, web access, and communicating uncertainties. Results from the beta testers confirmed the current estimates for the network's uncertainties.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- Results of the Atmospheric Correction Intercomparison as part of the ACIX Task team will be presented at a workshop in April being hosted by ESA ESRIN. 14 Atmospheric Correction teams took part in the intercomparison.
- WGCV Chair and Vice Chair participated in the initial telecon of the Moderate Resolution Sensor Interoperability Formulation Team to address the Chair's initiative. The Vice Chair is serving as co-lead. The Chair gave the IVOS subgroup an update on the MRI's progress and attended an MRI side meeting as part of the recent LSI-VC-3 in Frascati on March 22. WGCV is collaborating with LSI-VC on ways that WGCV can assist in developing the framework for initial case studies

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- ACIX Task Team meeting April 11-12, 2017 hosted by ESA ESRIN, Frascati, Italy
- CEOS WGCV plenary hosted by USGS, EROS Data Center Sioux Falls, May 16-18, 2017

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC Report

Entity: CEO

Prepared By: Jonathon Ross (CEO, Geoscience Australia)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- **CEOS Work Plan 2017-2019.** Version 1.0 of the CEOS Work Plan has been circulated to the CEOS community, and will be published on the CEOS website shortly. Thank you to all involved in developing this document. A summary of changes will be presented at SIT-32. The concept of a 'version 1.1' is still in view, pending outcomes at SIT-32.
- **WIGOS Vision 2040.** CEOS comments were received with thanks from WMO. Thank you to all who participated.
- **CEO succession.** Agencies are invited to provide updates on any proposals that may be under consideration or development.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- **Advisory Committee representation.** Dr Kelly has been invited to sit on the GEOGLOWS Steering Committee, or to nominate a representative to do so. GEOGLOWS has been noted as an emerging 'reference point' for CEOS water-related activity, but SEC advice is sought on what advice to provide Dr Kelly on this point. The term is initially for two years, and the first meeting is in May in the United States.
- **IAC 2017.** Good news for satellite Earth observation – a Plenary Event proposal prepared by GA, CSIRO, NASA and NOAA on "satellite technology in support of sustainable development" has been accepted! This session will have a focus on the critical importance of getting Earth observation data from "up there" used "down here", and the value that uptake of data will have as catalysing future investment in advanced technologies. In addition, a Highlight Lecture (also in Plenary) on the use of satellite remote sensing for the Great Barrier Reef was selected. In addition, a session on CEOS activities and a session on the CEOS Data Cube Initiative have also been submitted.
- **ISRSE.** A session on CEOS activities will be delivered on behalf of the CEOS Chair. A session on the Open Data Cube/CEOS Data Cube will also be presented.

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- **CEOS Meetings.** CEO attended WGCapD-6 (hosted by DLR) and LSI-VC3 (hosted by ESA). Both were very interesting meetings, with active groups and a range of different activities underway.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- **GEO Work Programme Symposium.** CEO will attend GEO Work Programme Symposium.
- **GEO Programme Board.** CEO will not be able to attend the Programme Board meeting in Athens due to a prior commitment.
- **Blue Planet Symposium.** CEO will attend the GEO Blue Planet Symposium in College Park, Maryland, USA.

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC 222 Report

Entity: SIT Chair Team

Prepared By: SIT team (ESA)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

32nd CEOS SIT meeting (SIT-32):

- The SIT team is working on the preparation of both the next SIT-32 meeting taking into account in particular the decisions from the last 30th CEOS Plenary (1-2 Nov. 2016, Brisbane) and from the GEO-XIII Plenary (9-10 Nov. 2016, St Petersburg).
- The SIT-32 agenda had to be modified this week to cope with the availability of key persons. As a result, the “Future Data Access and Analysis Architectures” (FDA) and “Coordination of Climate Observations” sessions have been swapped and are now scheduled respectively on 26 and 27 April. This last version of the agenda will be circulated to SEC before Friday 31 March for comments.
- As of today, 70 persons have registered to SIT-32.
- Participants in the SIT-32 side-meetings are kindly requested to indicate their participation in the various side-meetings (25 April) by filling the Doodle poll at <http://doodle.com/poll/ges53vu6dugz9w3a> (only 18 persons have responded so far)

39th GEO Executive Committee meeting

- The SIT Chair (Stephen Briggs) represented CEOS at the 39th meeting of the GEO Executive Committee (ExCom) on 9 March. ongoing improvement in the effectiveness and focus of ExCom continued, Under the chairmanship of RJ Smits (EC) the ExCom meetings are improving in terms of efficiency. The Programme Board (PB) relationship with ExCom is very good and the division of labour between them well organised, with PB Chairs attending ExCom and giving full reports.
- ExCom approved the GEO Engagement Implementation Plan 2017-2019 and in particular agreed focussing on three priorities: 1) 2030 Agenda for Sustainable Development; 2) Climate Change – Greenhouse Gas Monitoring; 3) Disaster Risk Reduction.
- The GEO Secretariat (GEO SEC) introduced the Report from the Commercial Sector Working Group. ExCom welcomed the report, but noted that further work is needed; GEO SEC will revise the Commercial Sector report for the 40th ExCom meeting (11-12 July 2017). ExCom proposed forming a Commercial Sector Advisory Group, which would comprise membership from each caucus of the Commercial Sector Advisory Board. The Advisory Board would formulate best practices of inviting the Commercial Sector to GEO events.
- ExCom also identified the need to discuss further Carbon and GHG function of GEO, other relevant aspects of Paris Agreement. ExCom also discussed the post of GEO Secretariat director which has been advertised (May 15 closing date).

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- 32nd CEOS SIT meeting and side-meetings: 25-27 April 2017 at ESA Headquarters in Paris (France).
- 2017 GEO Work Programme Symposium: 12-13 May 2017, in Tshwane (South Africa).

- The 2nd GEO Programme Board meeting might be held on 23-24 May, in Athens (Greece).
- 40th GEO Executive Committee meeting, 11-12 July 2017, in Geneva (Switzerland)
- 2017 SIT Technical Workshop: 11-14 September 2017, at ESA ESRIN, in Frascati (Italy).

Attachments

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CEOS SEC-222 Report

Entity: LSI-VC

Prepared by: LSI-VC Leads

Updates on issues raised during the last CEOS SEC teleconference

- None.

Issues requiring discussion/decision during current CEOS SEC teleconference

- None.

Other highlights, activities, actions, projects, collaborations

- LSI-VC-3 was recently held at ESA ESRIN. Key outcomes:
 - Progressed the revision of the LSI-VC Implementation Plan, ensuring that it is consistent with current CEOS activities, priorities, and the CEOS Work Plan 2017-2019;
 - Shared updates on agency activities around the production of CEOS Analysis-Ready Data for Land (CARD4L) and Future Data Architectures (JAXA, ISRO, CSA, ESA, EC, USGS, GA);
 - Discussed the planned joint meeting of the SDCG for GFOI, CEOS-GEOGLAM *ad-hoc* Working Group, and the LSI-VC; decided next steps on meeting preparation;
 - **Collaboratively worked on the CARD4L Product Family Specification for surface reflectance, defining target and threshold requirements for CARD4L surface reflectance;**
 - **Worked directly with ESA SAR experts to make progress on the specification of SAR backscatter CARD4L;**
 - Confirmed the next steps for the LSI requirements analysis process, including its application in support of the *CEOS Strategy for Carbon Observations from Space*.
 - Provided input to the Moderate Resolution Sensor Interoperability (MRI) CEOS Chair Initiative, including via participation in its dedicated meeting the day following LSI-VC-3.
- The LSI-VC-3 meeting agenda, presentation materials, and minutes (currently being finalised) are available here: <http://ceos.org/meetings/lsi-vc-3/>

Upcoming meetings or events

- LSI-VC-4 and the Joint LSI-VC–GEOGLAM–SDCG–GFOI Meeting (6-8 September 2017, ESA ESRIN)

CEOS SEC 222 Report

Entity: GEO SEC

Prepared By: Osamu Ochiai (GEO Secretariat)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- A GEO letter inviting CEOS representative to GEOGLOWS Steering Committee

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- Digest report of GEO Executive Committee, March 9th and 10th – draft minutes will follow -
 - Robert-Jan Smits (2017 GEO Co-Chair) chaired
 - Selection process the GEO Secretariat Director
 - Approved the Vacancy Notice and the Recruitment Timeline
 - Program Board Report
 - Need to showcase select examples of where EO contributed to achievement of SDGs; scaling up where possible
 - Engagement Strategy
 - Commercial Sector report - further work needed on who and how (modus operandi) and creating advisory committee, exploring UNGGIM CS network
 - Example of success engagement process to showcase at GEO-XIV
 - Consider Climate adaptation emphasis under Paris Agreement
 - Design side-event at COP-23 – work together with key partners (e.g., UNFCCC, IPCC, CEOS, GCOS)
 - Encourage in-country collaboration
 - GEO Legal Status Update
 - New WMO-Swiss agreement that acknowledges GEO to become part of UNFCCC Observer and also GFCS PAC (Partnership Advisory Council)
- GEO Secretariat attended WMO Space Program Workshop on Operational Space-based Weather and Climate Extremes Monitoring, February 15th to 17th.
 - Discuss what satellite-derived products focusing on monitoring “heavy-precipitation” and “drought” are available and what are requirements from Regional Climate Centers to monitor weather and climate extreme in operations.
 - Assess the feasibility of a demonstration of space-based weather and climate extremes monitoring by utilizing some specific Interim CDR.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- April 20-21, GEO Data Providers Workshop, Florence, Italy
- May 8-12, 37th ISRSE Symposium (ISRSE-37), Tshwane, South Africa
- May 12-13, 2017 GEO Work Programme Symposium, Tshwane, South Africa
- May 31- June 2, 3rd Blue Planet Symposium, College Park, Maryland, USA
- June 13-15, AfriGEOSS Symposium, Sunyani, Ghana
- June 19-21, 11th GEO European Projects Workshop, Helsinki, Finland
- July 11-12, 40th GEO Executive Committee meeting, Geneva, Switzerland

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

CEOS SEC-222 Report – March 2017

Entity: SEO

Prepared By: Brian Killough (NASA)

Issues requiring discussion/decision during CEOS SEC teleconference

- None

Updates on issues raised during the last CEOS SEC teleconference

- None

Upcoming meetings or events

- The SEO team will be traveling to Vietnam in early April. The team will meet with local Vietnam representatives in Hanoi to train them on data cube installation and operation. The team will also support the SDCG and GFOI meeting in Ho Chi Minh City.

Other highlights, activities, actions, projects, collaborations

(e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The SEO team met with CSIRO and GA in Australia in early March. This annual face-to-face meeting of the three groups has been critical to our planning and sustained progress. One key objective of this meeting was to develop a governance plan for the open source Data Cube software site. We also changed the name of the initiative to "Open Data Cube". A website will soon be populated with links to the open source software, links to documentation and training content and a white paper.
- The SEO continues to make progress on the Data Cube core technology. The cloud-based (Amazon) user interface is now open to the public for testing (<http://tinyurl.com/datacubeui>). The interface includes **14 sample data cubes and 7 applications**. Additional work continues on the creation of sample cubes for SERVIR and Vietnam and evaluation and testing of the CCDC change detection algorithm.

CEOS SEC 222 Report – March 2017

Entity: SDCG

Prepared By: Stephen Ward (for CSIRO/NASA)

Updates on issues raised during the last CEOS SEC meeting (Brisbane)

(Dot points)

- LSI Rationalisation was discussed at LSI-VC-3 with some early discussions around practical considerations and strategy. The trial meeting (Sept) planning proceeds.
- GFOI Phase 2 remains in definition by the Leads. SDCG and Masanobu Shimada carefully monitoring the status to protect CEOS interests.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations (for reference only)

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- None

Upcoming meetings or events (for reference only)

(Dot points, e.g. meetings, conferences of relevance, visits)

- GFOI Plenary and SDCG will be in Ho Chi Minh, Vietnam in the week of April 10th 2017. With VNSC possibly taking on CEOS Chair and the progress on a Vietnam Cube pilot, this is a very timely opportunity.

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

Files on LSI rationalisation from the LSI-VC-3 meeting.

CEOS SEC 222 Report

Entity: CEOS ad hoc Working Group on GEOGLAM

Prepared By: George Dyke and Alyssa Whitcraft (GEOGLAM Sec) for Brad Doorn (NASA HQ)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

– None.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

– The GEOGLAM ad hoc WG supports the proposed the joint meetings in September, and would like to suggest a planning call with representatives from GEOGLAM, SDCG, LSI-VC and ESRIN, if possible prior to SIT-32, to start laying the groundwork for the meetings.

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

– Inputs for the GEOGLAM EO requirements review are still slowly trickling in from JECAM sites. The focus is on ensuring the quality of the requirements, and that they are *right*, rather than *soon*, though the nominal target remains 2017 Plenary.

In addition, the scope of the process has grown to take advantage of interest expressed by the community to consider the development of some GEOGLAM ‘best practice’ guidance (along the lines of the GFOI MGD).

– Inputs for the JECAM annual report are still being gathered.
– Potential linkages between an Asia-RiCE activity in the Vietnamese Mekong, VNSC, CSIRO, and the CEOS Data Cube are being considered, but coordination remains preliminary.

Upcoming meetings or events (Dot points, e.g. meetings, conferences of relevance, visits)

– Ian Jarvis (JECAM Co-Lead) is tentatively planning to attend SIT-32 in Paris on behalf of the GEOGLAM secretariat, pending AAFC approval and necessity.
– The May 2017 GEOGLAM EO requirements meeting at ESRIN is NO LONGER being considered. That was meant to happen alongside a Sen2Agri/SIGMA/JECAM session that was to be held the week of 19 May, but it was postponed. No firm date for the Sen2Agri meeting has yet been identified.
– A GEOGLAM RAPP workshop focused on grassland observations (optical and SAR) is planned for 16-17 May at ESRIN.
– There will be a GEOGLAM session at both ISRSE in South Africa and Brazilian Remote Sensing Symposium (both in May 2017). The latter will include a 1-day training session on Crop Monitor and GLAM systems.
– There will be an all-hands GEOGLAM implementation team meeting 19-21 June, followed by AMIS IG, 22-23 June 2017, at FAO in Rome.
– The ad hoc WG has reviewed the proposed draft agenda for the proposed joint LSIVC/SDCG/GEOGLAM meetings week of 5th September at ESRIN, and is in support of taking this plan forward as a trial.

– The possibility of a joint Asia-RiCE/JECAM meeting for rice monitoring activities hosted in Taiwan by TARI/NCU in the Q1/Q2 2018 timeline is being discussed. The meeting will be more focused on science, but CEOS should be aware.

Attachments (e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

– None.

CEOS SEC-222 Report – March 2017

Entity: FDA Ad-hoc Team

Prepared By: Steve Labahn (USGS), Nick Hanowski (ESA), Alex Held (CSIRO)

Updates on issues raised during the last CEOS SEC teleconference

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

- None

Other highlights, activities, actions, projects, collaborations

(e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- Team continues to be focused in several primary areas:
 - Preparing Strategic Assessment
 - Short survey distributed to solicit input on key strategic questions, including top FDA priorities from user perspective (~10 agencies responded)
 - Team met to analyze and draw conclusions from the responses, including:
 - A clear FDA roadmap would be useful to explain to Principals
 - Team should consider developing metrics on success criteria from the user perspective
 - Strong support to pursue CARD4L specification and compliant products
 - Clear need to make CEOS agency data easier to access and use
 - Key technologies can be leveraged including cloud and data platforms as well as open source tools
 - Data interoperability is a key component to CEOS agency success
 - Limited resources is the primary CEOS agency hurdle
 - Tiger Team was formed (led by Andy Mitchell) to prepare paper and develop presentation for SIT-32
 - SEO leading 5 FDA pilots (includes several contributing CARD4L-compliant data sets)
 - Colombia – SEO (Brian Killough)
 - Vietnam – CSIRO (Alex Held)
 - USA – USGS (Brian Sauer)
 - Europe – ESA (Mirko Albani)
 - Australia – CSIRO, GA (Adam Lewis)
 - LSI-VC working CARD4L specification and product generation supporting pilot needs
 - FDA pilot basic data needs appear to have been met, but opportunities for additional data provisioning still exist
 - WGISS working on technical and architectural insights report (best practices and lessons learned)
 - Preparing for SIT-32, including Side Meeting (25 April)

Upcoming meetings or events

(e.g. meetings, conferences of relevance, visits)

- FDA AHT Co-leads w/ Tiger Team Meeting – Thursday, 28 March 2017
- WGISS-43 (Technology Exploration Workshop, including Future Data Access & Analysis Architectures) – Tuesday, 4 April 2017
- FDA AHT Co-leads w/ Tiger Team Meeting – Thursday, 13 April 2017
- FDA AHT All-hands Meeting – Thursday, 20 April 2017
- FDA AHT Side Meeting – Tuesday, 25 April 2017 @ SIT-32

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)

SDG-AHT

- Co-leads' contacts:
 - Maurice Borgeaud (ESA) proposed early March that Marc Paganini takes over his seat as co-lead of the AHT SDG until the CEOS Plenary later this year.
 - NOAA also proposed that Satya Kalluri takes over Marie-Josée Bourassa (CSA) co-lead position from SIT-32.
- The team had a **very successful 2-day workshop** (first face to face meeting) in Washington DC earlier in March (8-9) - please see the updated CEOS webpage [here](#):
 - Day 1 was internal for CEOS and GEO members (~15 people) and was dedicated to discussions on the way forward for the AHT SDG (including links with GEO), current global SDG events and issues, stocktaking of SDG related activities around GEO and CEOS Agency activities, key messages to be delivered on Day 2 to external stakeholders, and above all on definition of the AHT and its objectives/deliverables for inclusion in the **draft Terms of Reference and an Implementation Plan**.
 - These two key strategic documents have been polished by the co-leads in the following days and were **sent yesterday to the broader AHT SDG members for review, before a final draft goes to SEC for approval**.
 - Day 2 (~25 in total): a few external organizations joined us and participated in the discussions: World Bank group, Global Partnership for Sustainable Development Data (GPSDD), University of Maryland (Cooperative Institute for Climate and Satellites), US State Department, National Academy of Sciences (US), Secure World Foundation, and two also joined us remotely (UNOOSA and UNGGIM). Very interesting discussions about potential collaborative work: the CEOS Data Cube project in particular drew attention.
 - The AHT SDG is planning a side-meeting at SIT-32 in Paris wishes to present a first draft of work plan at SIT.
 - Anything more to do prior sending the Terms of Reference for approval by SEC?

CEOS SEC Report

Entity: Moderate Resolution Sensor Interoperability Initiative (MRI)

Prepared By: Gene Fosnight (USGS)

Updates on issues raised during the last CEOS SEC teleconference

(Dot points)

- None

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

(Dot points, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The first face-to-face meeting of the MRI team was held at the LSI-VC-3 meeting hosted by ESA ESRIN. The MRI framework was presented to during the core LSI-VC-3 meeting with additional presentations by NASA, GA, and ESA/EC on agency interoperability activities
- A side meeting was held on the day following LSI-VC-3 with 14 attendees to discuss in detail the Landsat 8 Sentinel-2 case study.
- The Framework and case study deliverables were refocused to provide practical multi-sensor interoperability lessons learned for use by the agencies and user communities. Key among the multi-sensor interoperability issues discussed were standards, common reference grids, common DEMs, atmospheric models, BRDF corrections, and band differences. Solutions will involve a combination of homogenization, harmonization and complementary use of multiple data stream. Case studies, in addition to the core Landsat 8 Sentinel-2 case study building on the NASA/USGS and ESA/EU experiences, will include Future Data Architecture's GFOI and GEOGLAM related pilot studies.

Upcoming meetings or events

(Dot points, e.g. meetings, conferences of relevance, visits)

- WGISS-43 (Annapolis, US, 3-7 April)
- GFOI Plenary/SDCG-11 (Ho Chi Minh City, Vietnam, 9-13 April)
- SIT-32 (Paris, France, 25-27 April)

Attachments

(e.g. pictures, figures, graphs, links – for use in overall CEOS reporting and as website resources etc.)