

CEOS SEC 225 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)

- 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 Disaster Risk Management (DRM) pilot initiatives on floods, seismic hazards and volcanoes will request approval of their final report at CEOS Plenary in October 2017. These reports summarize lesson learned and preparing recommendations with a focus on the sustainability aspect. Ongoing provision of satellite data to Pilots and Supersites.
- Recovery Observatory (RO): The World Bank is expected to forward request to Copernicus Emergency Service for activation. A User Workshop was held May 30 and 31st to present the updated Operational Plan and prospective products, that aim to be produced regularly. The event is being prepared closely with Haitian partners the Centre national d'information Géospatiale (CNIGS), the Comité interministériel pour l'aménagement du territoire (CIAT), l'Observatoire national pour l'environnement et la vulnérabilité (ONEV, part of the Environment ministry), as well as international organizations active in Haiti including UNDP, UNEP, WHO and others. The operational plan is planned to be presented at CEOS Plenary for approval.
- Continue support to the GEO GSNL Initiative. A series of new proposals is expected in the coming weeks that might request approval at CEOS Plenary; up to three proposals: Chile, DR of Congo, Peru (Andes – multi-hazard supersite proposal).
- GEO-DARMA: The Concept Workshop and 1st Steering Committee meeting took place during that Global Platform for Disaster Risk Reduction meeting, on May 25th. The Africa regional meeting is tentatively planned for Fall 2017. The first phase of GEO-DARMA (Concept Phase) will wrap this Fall, and the first projects (in SE Asia) are expected to be put forward for approval at CEOS Plenary, with more projects in the other two regions being identified for Spring 2018.
- The Global Partnership on Space Technology Applications for Disaster Risk Reduction (GP-STAR) held a side event at Global Platform for Disaster Risk Reduction in Cancun on May 26th. CEOS was one of the four panellists in the side event, and the CEOS representative discussed CEOS activities and challenges.

Upcoming meetings or events

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

- 8th CEOS WGDIsasters meeting, hosted by CONAE with NASA support, is in the final 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 225 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

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- Held the second **Technology Exploration webinar on June 19th with the topic: ‘The Concept of Data Cubes to Enable Analysis of Large Earth Observation Data Sets’**. Rob Woodcock of CSIRO and Brian Killough of the CEOS System Engineering Office (SEO) provided an introduction to Data Cubes. Discussions included Data Cubes user needs, key features and basic high-level architecture.
<http://ceos.org/ourwork/workinggroups/wgiss/technology-exploration/ceos-wgiss-technology-exploration-webinars/>
- Continuing to work with the **GEODAB (GEO Data Access Broker)** team to identify and create best practices for GEO to connect to WGISS Connected Data Assets (FedEO, CWIC and IDN). On the 19th of May, GEODAB updated their connection to CWIC to production.
- CEOS OpenSearch Best Practices updates should be finalized by the end of June. Next step will be to start working on the CEOS OpenSearch Conformance Document.
- Deployment of a new FedEO Gateway and new FedEO Client is currently on-going. It should be completed by the end of June.

Upcoming meetings or events

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

- WGISS 44 – September 25-29, 2017 Beijing, China
 - Hosted by Chinese Academy of Sciences

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)

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)

- One Health workshop was held in Montreal Canada on 21 June 2017
- Organise WGCapD webpage to reflect recent projects
- Webinar series conducted by ISRO which started in 5 April was successfully completed in 17 June with 252 participants from 53 countries.

Upcoming meetings or events

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

- Preparations are underway for the AmeriGEOSS SAR workshop (1 – 4 August 2017)

Attachments

- NIL

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)

- WGCV proposed to study methods to validate and determine uncertainties for a merged surface reflectance product from two sensors across different cover as part of Moderate Resolution Interoperability. The activities will leverage work currently being done by WGCV subgroups as well as the Landsat-8/Sentinel 2 studies that are part of MRI.
- A description of the GSICS/WGCV IVOS proposed solar irradiance spectrum is being evaluated by WGCV membership for the spectrum's suitability for inclusion on the CEOS Cal/Val Portal. The spectrum is an update to the Thuillier Reference Spectrum 2003 that is currently on the portal.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- None

Other highlights, activities, actions, projects, collaborations

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- RadCalNet continues to keep pace for a November 2017 opening of the RadCalNet website to the public in November 2017. Terms of Reference for a RadCalNet admissions panel are under development.
- WGCV members presented RadCalNet related material at the Newrad meeting June 13-16, 2017 in Tokyo, Japan
- Results presented by the LPV subgroup demonstrated significant progress on the WGCV's CARB-19 action in the CEOS Work Plan. The results are being formalized and are expected to allow closure of that action by September 2017 leading to likely closure of the Carbon Task Force's Action #08.

Upcoming meetings or events

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

- WGCV members will be presenting RadCalNet related material at the Calcon meeting Aug. 22-24 in Logan, Utah
- Radiometric Calibration Workshop for European Missions is scheduled for Aug. 30-31, 2017 at ESA ESRIN

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)

- **Process for SBSTA Statement (Action 224-02).** EC, WGClimate Chair and CEO met to agree a process for development and approval of CEOS statement to SBSTA. Process is as follows:
 1. Writing team prepares first draft drawing on key issues in space agency response to gcos ip- by 10 june
 2. Circulate to sec for comment - in parallel informal circulation within ec
 3. Discuss at june sec meeting
 4. Revise draft to reflect sec comments - by 8 july
 5. Recirculate to sec for comments "by exception" (ie silence is consent) - with deadline of 14 july
 6. Commence ec process
 7. As soon as finished - writing team consider comments, revise draft and circulate to sec for comment - within 5 days of receipt
 8. In the very unlikely event that ec process throws up issues (eg no-compromise suggestions ceos cannot agree with - convene sec telcon)
 9. Discuss at sit tech workshop sec.
 - Plenary session for endorsement if chair wishes
 - If no plenary session undertake virtual endorsement procedure
- **CEO succession.** Two agencies are currently coordinating in relation to a formal candidature for the CEO role for 2018-2019. Current CEO proposes to continue as 'Assistant CEO', to aid the transition, for the first 6-9 months of 2018, consistent with the practice adopted for transition from Kerry Sawyer to Marie-Josée Bourassa and Jonathon Ross. A DCEO is still sought.

Issues requiring discussion/decision during current CEOS SEC teleconference

(Dot points)

- **GEO Plenary Delegation.** Agencies are reminded to indicate their planned presence at the GEO Plenary in Washington DC to support coordination. So far very few responses have been received. This does not need to be final names or numbers.

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)

- **Work Plan Status Updates.** Final updates to reflect Work Plan v1.1 have been made to the Deliverables Tracker database by CEO and SEO. WGs and VCs have been asked to provide updates **prior to** their TagUps with the SIT Chair. Requests for Non-VC/WG updates will be made at the same time, but direct to the relevant Entities rather than via the SIT Chair Team process.
- **Blue Planet Symposium.** A very interesting event. A team will be working on 'analysis ready' data for coastal (and inland waters) which will complement the CARD4L and Future Data Architectures initiative, as well as the CEOS Water Strategy.
- **Membership of National Institute of Environmental Research (NIER).** An expression of interest to join as an Associate has been received. Information on the process has been provided, with no further contact. JAXA, as regional agency, are welcome to follow up.

Upcoming meetings or events

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

- N/A

Attachments

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

CEOS SEC 225 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)

1) SIT Technical Workshop

- The SIT team is working on the preparation of the SIT Technical Workshop and side-meetings (11-14 September 2017). In that scope, the second round of teleconferences between the SIT team and each one of the Working Groups and Virtual Constellation teams will start early June; so far only 3 groups out of 12 have indicated their preferred date & time to the SIT team.
- The deadline for requesting a side-meeting room is 23 June. Side-meetings planned so far are: GEOGLAM, International Financing Institutions and SDG.
- Participants are invited to register on-line on the CEOS web site and to rapidly book their accommodations as it might be difficult to find a hotel room in September. Fifty-five hotel rooms has been reserved for CEOS – please refer to the Invitation letter from the SIT Chair, sent out to CEOS on 5 June.
- The second round of teleconferences between the SIT Chair Team and each of the Working Groups and Virtual Constellations is on-going: 9 out of 12 have been conducted by SEC 225. The telcon with the Ocean Surface Topography VC cannot be currently planned due to the lack of leadership (both EUMETSAT and CNES are working on the replacement of the two co-chairs).

2) Other topics:

- The final minutes for the SIT-32 meeting have just been distributed to CEOS. Thanks for those who have sent comments.
- The SIT Chair represented CEOS on 23-24 May at the GEO Programme Board (PB) meeting in Athens. The meeting focused on the reports from the three PB subgroups on the SDGs, on the GEO Work Programme Symposium and the Monitoring & Evaluation.

Upcoming meetings or events

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

- 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

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

CEOS SEC 225 Report

Entity: GEO SEC

Prepared By: Osamu Ochiai (GEO Secretariat)

Updates on issues raised during the last CEOS SEC teleconference

- Osamu Ochiai has been assigned a virtual secondee to the GEO Secretariat until July including CEOS interface.

Issues requiring discussion/decision during current CEOS SEC teleconference

- None

Other highlights, activities, actions, projects, collaborations

- May 23-24, 6th GEO Program Board, Athens, Greece
 - Functions of GEO Work Program Symposium are principally for course-correction of WP and also to inform the co-design/co-construction of next WP development. PB will provide guidelines (coherence, clustering) to Flagships and Initiatives based on WPS outcomes.
 - The PB believes that an SBA-approach to identifying user needs is no longer viable. The Flagships, which serve "common needs and/or well-defined user groups", provide a measure of GEO's success in addressing user needs. The PB recognizes that GEO still needs a way to report on fulfilling user needs more broadly, not just those being addressed by the Flagships, but this should fall under M&E.
 - M&E - Data collection has begun (GEOGLOWS, GEO Wetlands, GFOI). Secretariat will provide mock-up report to be presented at July ExCom.
 - Subgroup 1 (SDG, Secretariat, Task Teams & EO4SDGs) will initiate contact with Initiatives/Flagships to identify/refine contributions (mapping process) to engagement priority areas and organize virtual Workshop with Initiatives/Flagships to discuss synergies and "cross-pollination".
- 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
- **SDGs:** The next major campaign is the High Level Political Forum in New York in July, where the EO4SDGs Initiative plans to meet with GEO Members and explain the ongoing work and possibilities for further engagement relating to Earth observations and SDGs.
- **Paris Agreement:** The Secretariat continued its engagement process with the UN Framework Convention on Climate Change (UNFCCC), which has led to an increased recognition of GEO's role in the implementation of the Paris Agreement. As an outcome, GEO was invited by UNFCCC to contribute to the 8th Research Dialogue at the Subsidiary Body of Scientific and Technological Advice (SBSTA) with a focus on regional activities.
- **Sendai Framework for Disaster Risk Reduction:** The Secretariat worked directly with the UN Office for Disaster Risk Reduction (UNISDR) in the planning phase for the Global Platform for Disaster Risk Reduction (GPDRR) that was convened on 22-26 May, in Cancun, Mexico. The UNISDR is responsible for reporting on progress for the Sendai Framework, and GEO's presence at the meeting included presentations and an information booth supported by various GEO Members and Participating Organizations, including DLR, ESA, EC/JRC and NASA. The GEO Secretariat is also working with UNISDR and UNECE locally in Geneva, as well as UNESCAP, to address several aspects of the Sendai Framework and links to Earth observations, as well as ongoing work to develop disaster statistics.

Upcoming meetings or events

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

- July 11-12, 40th GEO Executive Committee meeting, Geneva, Switzerland
- October 23-26, GEO-XIV week (25-26 for Plenary)

CEOS SEC-225 Report – June 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 is preparing for the 2017 IGARSS Conference in Fort Worth, Texas on July 23-28. The SEO will be leading a CEOS Open Data Cube workshop on the first day (4 hours, free of charge) and will be hosting a CEOS exhibition booth with a focus on Data Cube activities. As of last week, the workshop is full (50 attendees). The SEO is preparing a tutorial package that can be run locally and online (Amazon Cloud) and can be used for future training.

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)

- Brian Killough participated (remotely) in the 1st meeting to discuss a Balkans Data Cube on June 17. This effort plans to support of SDGs for the region. GEO, GEOGLAM and NASA also participated.
- Brian Killough, along with Rob Woodcock (CSIRO) participated in a WGISS Webinar on June 19 to highlight the Data Cube initiative. The webinar was recorded and can be used for future training opportunities.
- The SEO team is actively engaged in the Open Data Cube initiative. Recent advancements and work include: advancing the governance plan, developing plans for the main website (www.opendatacube.org), enhancements to the online Amazon demo tool, validation testing of change detection (PyCCD), and a new student project to develop a water detection algorithm for Sentinel-1. There are currently 3 operational country-level data cubes (Australia, Colombia, Switzerland), 4 in development (Vietnam, USA, Uganda, Taiwan), and 16 more under review or expressing interest.

CEOS SEC-225 Report

Entity: CEOS ad hoc WG on GEOGLAM

Prepared By: George Dyke (GEOGLAM ad hoc WG SEC)

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

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- The GEOGLAM ad hoc WG is currently preparing its inputs for the September joint meetings, both for the joint sessions with LSI-VC and SDCG, as well as for its own meetings, and the SIT Technical Workshop.
- Linkages between the Data Cube pilot for the Vietnamese Mekong and GEOGLAM continue to be explored, including along the lines of rice crop monitoring (with algorithms from ESA and CNES), and on the data side with ALOS-2 PALSAR. Potential collaboration (via JAXA) with Taiwan and Indonesia is also envisioned.
- The GEOGLAM Leads have met this week at FAO in Rome, and it is anticipated that the outputs and outcomes of this meeting will influence GEOGLAM's focus for the September meetings and CEOS Plenary.

Upcoming meetings or events

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

- GEOGLAM Leads, week of 19 June, FAO/Rome
- Joint meetings with LSI-VC and SDCG, 5-8 September
- SIT TWS side meeting requested for 11 September

Attachments

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

CEOS SEC-225 Report – June 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

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- Based on the ‘what’ items endorsed at SIT-32, as follows, the FDA AHT has been working on the roadmap for ‘how’ and ‘when’:
 - Pursue CARD4L interoperability (optical and SAR)
 - Develop interoperable open source tools (Open Data Cube)
 - Capture user feedback and user statistics
 - Implement standardization when necessary
 - Accommodate analytical processing capabilities (longer term goal, standardization is an enabler)
- Held FDA AHT meetings on 30 May and 13 June to further develop the ‘how’ and the ‘when’ based on the 5 ‘what’ items above
- Symbios supporting the FDA AHT is developing a narrative paper targeted at CEOS Principals explaining the ‘what’, the ‘how’, and the ‘when’

Upcoming meetings or events

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

- FDA AHT Meeting: TBD
- CEOS SIT Technical Workshop: 11-14 September 2017
- CEOS Plenary-31: 18-20 October 2017

Attachments

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

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

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- The most recent draft of the MRI Framework document was distributed on 19 June for review to the MRI team for feedback.
- The last draft will be release for wider review on 26 July 2017
- The last MRI call was held on 28 May with the next call to be held in early July
- The Harmonized Sentinel-2 Landsat 8 version 1.3 was released, which includes the data needed for the Nile Delta Agricultural phenology use case. Version 1.4 is scheduled for release by the end of 2017 and the processing will migrate to Amazon Web Services.
- MRI Action items from WGCV-42 includes to study of methods to validate uncertainty methodologies for the evaluation of combined multi-sensor surface reflectance products.
- An initial component uncertainty budget was developed for the HLS product to understand the contributions associated with different adjustments including calibration, atmosphere, BRDF and spectral band differences

Upcoming meetings or events

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

- LSI-VC-4 (Frascati, Italy, 5-8 September 2017)
- SIT-TW (Frascati, Italy, 11-14 September 2017)

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