(two pages max.)

Entity: CEO

Prepared By: Steven Hosford (ESA/CNES)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

- CEO/DCEO. No further progress made on this point since SEC-247.
- CEOS 2019-2021 Work Plan. Draft work plan distributed on 28/02. Some feedback and comments received that have now been included in the updated document. The final version for endorsement will hopefully have been sent to principals before SEC-248. Many thanks to all of you who contributed (and encouraged, poked and prodded those who contributed). Despite the US Govt. shutdown, we have collectively managed to gain more than 2 weeks on the 2018 delivery schedule.
- CEOS-GEO Bilateral meeting. The CEOS-GEO bilateral meeting proved to be a very interesting opportunity to exchange with the GEOSEC and the GEOSEC director on a number of important topics for CEOS. Among these we discussed and noted actions on: "results orientated GEOSS" and the implications for the way that CEOS agencies publish and distribute their data; Mutual support through the CEOS/GEO Work plan/programme. SIT Chair will report further.

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

Other highlights, activities, actions, projects, collaborations

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

- Point 1
- Point 2

Upcoming meetings or events

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

- Point 1
- Point 2

Attachments

CEOS SEC-248 Report

Entity: SIT Chair Team

Prepared By: Kerry Sawyer (NOAA)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (Dot points)

See below

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

- Updates on SIT-34
 - Agenda shared with entire CEOS community on 3 Mar with request for any edits due 13
 Mar. No comments received. Final agenda will be sent on Friday, 15 Mar.
 - Presentation templates are available on the SIT-34 website. Please follow the templates when preparing presentations and provide them well in advance of the SIT meeting (due date is 26 Mar but we expect all presentations to be final and submitted by 1 Apr).
 - o Side meetings are also confirmed; schedule will be in agenda
 - Please ensure that all attendees stay for the entirety of the SIT meeting. Substantive
 discussion will take place afternoon of the 4th and it will be difficult and disruptive for people
 to leave early. The meeting is scheduled for two days and if we have a majority of
 participants leaving at lunch on the second day, that means they miss 25% of the meeting.
 - Two site visits to NOAA's Atlantic Oceanographic and Meteorological Laboratory in Key Biscayne are proposed for 2 Apr – one AM and one PM. AJ will be contacting those that have indicated an interest in attending the site visit separately to confirm logistical arrangements, participation, and to get details for access required by the site (due Thursday, 28 Mar).
 - Still have disconnect between those that have registered for SIT-34 and those that have made hotel room reservations with the Mayfair. To be clear, registering for SIT-34 does not guarantee a hotel room. Hotel reservations must be made separately and directly with the hotel. The hotel has graciously extended the date to make reservations using the CEOS link on the SIT-34 website. A reminder ALL persons attending SIT, regardless of where they are staying, will be required to pay a \$105 registration/meeting fee directly to the Mayfair.
- Update on 2019 SIT Technical Workshop location
 - o Take place in Fairbanks, Alaska, at the University of Alaska, Fairbanks
 - Week of 9 September and will be four days VC/WV Working Day, Side Meeting Day, twoday SIT Technical Workshop
 - Open for suggestions on Monday Thursday or Tuesday Friday
 - Site visit to NOAA's Fairbanks Command Data and Acquisition Station

SCO Letter Update

No.	Action	Due Date
CEOS-32-03	SIT Chair to lead the drafting of a CEOS letter to CNES suggesting the approach required for CEOS to consider information on the SCO, its scope, and relevance to existing activities.	December 2018

- VC Reports and SDG AHT
 - No response from VCs and SDG AHT for items of interest to SEC
- VC/WG/AHT Telecons
 - Completed 15 of 15 telecons. Many thanks to all who took the time to participate in and prepare for the discussions with the SIT Chair. The SIT Chair Team will be providing summaries to all of the calls and will be reviewing outcomes for background and discussion points at SIT-34
- Outcomes from CEOS-GEO Bilateral in Geneva
 - A meeting summary with actions will be shared shortly
- Updates on any relevant CEOS 32nd Plenary, SIT Technical Workshop and SIT-33 actions
 - o Plenary actions CEOS-32-05, -06, -09, -10, -11, -12, -13, -15, SIT Workshop Actions SITTW-2018-08, -09, -14, and -15 will all be addressed at SIT-34
 - SIT-33 Action SIT-33-18 will discussed during Troika (new CEO recruitment process)

Other highlights, activities, actions, projects, collaborations

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

GEO ExCom-47 and 13th Programme Board (PB) Meetings will take place next week. Kerry Sawyer will be attending both on behalf of CEOS (ExCom as Participating Organization Observer to ExCom; as CEOS Principal to PB). Lots of other CEOS-friendly attendees at both meetings with member country hats: Steve Volz, Ivan Petiteville, Jono Ross, Osamu Ochiai

Upcoming meetings or events

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

- GEO ExCom-47 and 13th GEO PB: 19-22 March 2019
- SIT-34: 2-4 April 2019

(two pages max.)

Entity: GEO SEC

Prepared By: Akiko Noda (GEO Secretariat)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

- NA

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

– NA

Other highlights, activities, actions, projects, collaborations

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

- CEOS-GEO Bilateral meeting was held in Geneva on 21-22 February and agreed on the followings:
 - ✓ GEO Sec will share all the GEO WP Implementation Plan proposals with CEOS and CEOS agencies for its internal review. Then CEOS will give feedback to GEO;
 - ✓ Craig Larlee, Work Programme Coordinator, will participate in the CEOS SIT meeting to share the GEO Work Programme review status with CEOS;
 - ✓ CEOS will help GEO to create a prototype to demonstrate the knowledge hub by the 2019 GEO Plenary. CEOS will facilitate connection among knowledge hub, CEOS data and ODC technology;
 - ✓ GEO will facilitate a session for Essential Valuables at the 2020 GEO Symposium and invite GEO WP activities which have created or being a discussion about Essential Valuables to present their effort;
 - ✓ GEO Sec will propose CEOS a presentation slot at the 2019 GEO Ministerial Plenary to show what Earth observation can do for country's SDG needs.

Upcoming meetings or events

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

GEO 47th Executive Committee, 19-20 March, Geneva

The updated strategy of the Result Oriented GEOSS will be discussed. The change of the Rule of Procedure to create 'GEO associate category' is to be discussed and if approved, it will engage private companies' further involvement with GEO.

GEO 13th Programme Board Meeting, 21-22 March, Geneva

Main topics are Interim Report on GEO WP Implementation Plan review, GEO Foundational Task descriptions, adjustment of the review process and planning for the 2019 GEO Symposium.

- GEO Data Technologyy Workshop, 23-25 April, Vienna
- GEO Symposium, 27-29 May, Geneva
- 2019 GEO Ministerial Summit, 4-9 November, Canberra

Attachments

CEOS SEC-248 Report - March 2019

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

Brian Killough (SEO) will attend the 4th GEO Data Technology Workshop on April 23-25 in Vienna,
 Austria. Several presentations will be given on the topic of data cubes.

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 the GEO Secretariat on February 20 to provide Open Data Cube training and to discuss GEO plans for managing \$1.5M of Amazon cloud credits for their new GEO-Amazon Cloud Credit Programme. They are expecting many of the proposals will use the data cube. GEO has agreed to allow CEOS access to the proposals to provide feedback and review.
- NASA and USGS have completed pre-processing and delivery of over 110,000 Landsat archive images over Mexico. These images were requested by INEGI (statistical agency) following the GEO meeting. They will use these images to develop a new country-level data cube.
- Brian Killough and the AMA team completed a 3-day data cube training session with Ken Mubea from the Global Partnership for Sustainable Development and Data (GPSDD). This training will allow GPSDD to be more active in the management of the Africa Regional Data Cube (ARDC) and support user requests from ARDC countries.

CEOS SEC 248 Report

Entity: WG/SIT Chair Team/CEO Team/CEOS Chair Team/SEO/Ad Hoc Team/GEO SEC

Prepared By: Simona Zoffoli (Italian Space Agency), David Green (NASA)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference

(Dot points)

None

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (Dot points)

None

Other highlights, activities, actions, projects, collaborations

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

- The 11th CEOS WG Disasters meeting took place in Athens, March 5-7, 2019 with broad CEOS-member representation (25 attendees in person and 1-3 participants by teleconference) and substantial progress identified:
 - Status of the WG Disasters
 - Common reflection on achievements of the WG Disasters, on its objectives, on its current and possible future activities.
 - Agreed to review and possibly update the Term of Reference considering as a reference the Sendai Framework for Disasters Risk reduction. Agreed to review and possibly update the Consensus Report (2012) and EO for DRM Strategy (2013), considering other risks (i.e. climate change impacts, coastal area, ...)
 - Discussed to put greater emphasis on risk (not just hazards). Consider work on exposure and vulnerability, but also greater effort to apply hazard work (where value of EO is arguably greatest) to multi-hazard problems in a full risk and resilience context.

o CEOS/GEO

 Overview of GEO DRR activities. Shared the decision to update the GEO Community activity "EO 4 DRM" in the GEO workplan 2020-2022 under WG Disasters Chair responsibility.

o GSNL

- The Hawaii and Enceladus supersite Reports accepted by the WG Disasters and continuation of these two supersite projects have been endorsed for another 2 years. Extensive presentation of the Enceladus supersite activities.
- Good progress on existing GSNL in form of data use and research activities Intention to focus on multi-hazard approach when this is appropriate.
- Presentation of a new supersite in Perù.
- Underlined the value of L-band SAR data for different supersites where there is a high decorrelation between images.

GEODARMA

- Concept phase completed for Africa and Asia; further work underway for Latin America/Caribbean.
- Myanmar NRT Flooding (GD1): need to set up data access and ensure coordination in data processing/value adding.
- Projects being consolidated (GD2,3,4): monitoring urban area in ASIA, coastal erosion mapping in Kiribati and other island states, DRM in Africa.
- o Recovery Observatory & Generic RO
 - Progress in Haiti with growing stakeholder engagement, training on the first products delivered and positive feedback. Signature of the CNIGS/CNES MOU.
 The current workplan plan foresees a user workshop n.3 in May in Haiti, a field

- mission for validation of land use and landslide thematic products and academic training by ASI and CNES with Haiti State University.
- Shared and discussed the draft content of the Generic RO (G-RO) advocacy paper that documents existing experience using EO for recovery and drafts a generic RO concept.
- Geohazard Labs
 - Progress on work plan supporting WG disasters activities and persuading the generation and distribution of advanced science products. On going integration of services and tools to better meet community needs (i.e. on line processing of Pleiades data in GEP)
 - New service on automatic production of deformation maps triggered by USGS pager and INGV Twitter
 - Capacity building, planned courses in Greece and Indonesia
- Disaster Risk Management (DRM) Demonstrators
 - Seismic hazard demonstrator: realized advanced research products for earthquake response in Indonesia e in Greece, on going discussion with Charter to provide EO products on best effort.
 - Volcano demonstrator: on-going activities to define a detailed implementation plan with regional leaders and tasks.
- o Partnerships and Engagement
 - Joint session with Capacity Building Working Group. Shared description of deliverables highlighting potential area of cooperation (i.e. training on SAR for disasters applications....)

Upcoming meetings or events

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

- EGU (7-12 April, 2019): WG Disasters Chair co-convenor of the Session NH6.1 Application of remote sensing and Earth-observation data in natural hazard and risk studies.
- Living Planet Symposium (13-17 May, 2019)
 - Session D.1.2: Using Earth Observations to deliver on international risk reduction efforts, jointly proposed by CEOS and GEO
 - Session Disaster Risk Reduction for Developing Countries (co-organized by CNES)
- Global Platform and WRC4 (May 2019)
 - Side session: Facilitating recovery and inclusion through satellite EO technology (CNES/GFDRR)
- CEOS WG Disasters meeting n.12, University of Iceland /Nordic Volcanological center, Iceland, September, 23-27, 2019

Attachments

CEOS SEC-248 Report

(two pages max.)

Entity: WG Climate

Prepared By: Jörg Schulz (EUMETSAT)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

none

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

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Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- CEOS work plan final version is fine with WGClimate;
- The population of the ECV Inventory is still ongoing because many agencies were not able to finish their entries. A few have not responded and the WGClimate#10 meeting will address this. Agencies shall in any case continue to work on entries. WGClimate #10 will decide on the content of the 2019 gap analysis that needs to start in April to be able to deliver reports by CEOS Plenary in October;
- WGClimate Chair was participating in the WCRP GEWEX Science Steering Group #31 meeting that had invited space agencies for a discussion on space agency contributions to the monitoring of the energy and water cycle. There is a chance to receive help from GEWEX for gap analysis of energy and water cycle related variables. Also results from GEWEX scientific assessments may be added on climatemonitoring.info for those ECV climate data records that participated in those assessments (see http://gewex-vap.org/as an example for water vapour);

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Upcoming meetings or events

(<u>Dot points</u>, e.g. meetings, conferences of relevance, visits)

- Planning for the WGClimate #10 in Marrakech, Morocco in 18-22 March 2019 is completed. Final agenda and more material is available on ceos.org.
- WGClimate #10 will discuss if WGClimate #11 shall take place prior to the 2019 Technical Workshop in Fairbanks, Alaska, USA.

Attachments

CEOS SEC 248 Report

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

Prepared By: Mirko Albani - Chair (ESA), Rob Woodcock – Vice-chair (CSIRO)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

None

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

None

Other highlights, activities, actions, projects, collaborations

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

- Preparation of next WGISS-47 meeting including dedicated sessions on FDA elements demonstration and technology, EO Services in the Cloud and Artificial Intelligence & Machine Learning is ongoing.
- A "CEOS Agencies Participation/Contribution to WGISS" table (showing the different WGISS groups, their scope, CEOS agencies interest/benefits, and skills of representatives) is being finalised, and will be distributed and posted to advertise and stimulate participation to WGISS
- New web page published on CEOS web site (http://ceos.org/ourwork/lessons-learned-best-practices/) containing best practices and guidelines from all Working Groups in order to improve collaboration and knowledge sharing.
- WGISS activities presented to the GSICS (Global Space-based Inter-Calibration System) Data and Research Working Group (GDWG) during its plenary meeting, which was held at the occasion of the GSICS (Global Space-based Inter-Calibration System) annual meeting 2019 held at ESA/ESRIN on 4-8 March. Potential synergy and cooperation opportunities identified in the domain of CEOS Maturity Matrix and Data Discovery and Access (WGISS Connected Data Assets). Discussions to be continued in the upcoming months.
- Collaborations with:
 - COVERAGE Initiative to make some key thematic datasets discoverable and accessible through the WGISS Connected Data Assets. Coordination ongoing with identified data providers for the utilisation of FedEO for automatic registration in IDN.
 - WGCV is mainly focussing on the use of data cubes in support to CAL/VAL activities and on the CEOS data Maturity Matrix. Two data cube prototypes (ESA and GA/CSIRO) are being used to access ACIX (16 sites), RadCalNet (4 sites) and LPV (3 sites) sites cal/val data. WGCV is also providing detailed feedback on data quality aspects defined in the CEOS WGISS Maturity Matrix.
 - Carbon Team on prototype carbon portal development. The RECCAP Team is reviewing the carbon portal version that was opened to public in December 2018 and will provide feedback by the end of March. Carbon Portal development team looking into the possibility to support a case study on forest monitoring in the Mekong area. Next team teleconference and teleconference with VAST team planned by end March 2019. Carbon Portal handover and governance after final release to be defined.
 - WGClimate on ECV inventory Version 2.0 datasets registration in IDN as first step for accessibility through WGISS Connected Data Assets Infrastructure. Registration of an initial set of data is being addressed in coordination with WGClimate chair using the FedEO dedicated "fast registration" procedure also used in the frame of the COVERAGE/WGISS activity and through CWIC. Second batch of data will be registered through collecting relevant information from data providers during the ECV Inventory update to V3. Dedicated presentation from WGISS will be done during WGClimate

- Plenary Meeting-10 next week. Additional possible synergy between WGISS Maturity Matrix and WGClimate Maturity Indexes to be further explored.
- WGCapD for technology and user oriented webinars. WGISS remotely presented during the last WGCapD plenary meeting in March. Next steps defined and agreed.
- Virtual Constellations to update the inventory of Virtual Constellations datasets and ensure discoverability/accessibility through WGISS Connected Data Assets infrastructure. Inventory update to be started in cooperation with CEO.
- GEO: WGISS (Mirko Albani, Rob Woodcock) supporting the organization, in coordination with SEO and SIT Chair team, of the 4th GEO Data Technology workshop which will be hosted by UNOOSA in Vienna Austria from the 23rd to the 25th April 2019. Rob Woodcock will chair the CEOS organised session and participate to the 3rd Expert Advisory Group meeting.

Data Preservation and Stewardship

- Proposal for GEO Data Management Principles Implementation Guidelines (DMP IG) improvement/update on the basis of CEOS WGISS Maturity Matrix will be discussed during WGISS-47 meeting.
- Possible collaboration with the World Meteorological Organization (WMO) Expert Group
 on Data Management, and with some selected Research Data Alliance (RDA) interest
 groups being analysed. Discussions will be held at WGISS-47.

Data Discovery and Access (WGISS Connected Data Assets Activities)

- Possible implementation of a map based front-end/portal within the IDN for CEOS data discovery and access is being discussed by the System Level Team.
- 150 EO data collections from JAXA have been registered in IDN. Access at granule level will be addressed in the upcoming months; NOAA OneStop datasets being registered/updated in the International Directory Network (IDN) and granule search/access is being implemented, tests ongoing.
- A metadata model for services description is being defined and circulated. It will be used to describe services with the goal to make them discoverable through the IDN SERF interface.
- CWIC tests with National Remote Sensing Center of China (NRSCC) ChinaGEOSS platform for metadata harvesting to be started.
- A simplified procedure for collections/granules discovery and access through FedEO and automatic registration in IDN is being used to increase number of partners and collections and in different cooperation activities.
 - All FedEO data collections are being registered in the IDN; granule access to FedEO datasets registered in the IDN will be provided through FedEO.
 - Activities ongoing with JAXA for discovery/access through WGISS CDA and automatic registration in IDN; activities progressing with DLR and EUMETSAT and to be resumed with ROSCOSMOS.
 - Granule search and access to Essential Climate Variables (ECV) and COVERAGE data collections is being implemented.
- CEOS IDN added in the catalogues visible and searchable through the GEOSS Platform. This will increase visibility of CEOS contribution to GEO/GEOSS.

Interoperability and Use

- Future Data Architectures:
 - FDA actions assigned to WGISS in the CEOS 2018-2020 Work-plan are being actively discussed and addressed by WGISS members with substantial progress in most of them.
 - Open source Software and tools inventory lists now more than a hundred items; DB implementation solution is under development in coordination with SEO
 - Side meetings being organised at the upcoming SIT-34 on "Future Data Architectures" and "GEO Knowledge Hub Implications for CEOS".

- First version of FDA inventory table under review.
- Recovery Observatory: awaiting proposals for new activities and/or requests for support from WGDisasters.

Technology Exploration:

- Next webinar will focus on "Tools and Data Interoperability Demonstrations" and will be promoted in cooperation with WGCapD. It will consist in a dedicated hands-on workshop during WGISS-47 meeting.
- Dedicated sessions on "Cloud Computing services" and on "Artificial Intelligence and Machine Learning application in EO" are being organised during WGISS-47 meeting.

Upcoming meetings or events

(<u>Dot points</u>, e.g. meetings, conferences of relevance, visits)

- 4th GEO Technology Workshop, 23-25 April 2019, Vienna (Austria).
- WGISS-47 April 29 to May 02, Silver Spring, Maryland (MD), USA.
- ESA 2019 Living Planet Symposium, Milan, 13-17 May 2019: focus on how Earth Observation contributes to science and society, and how disruptive technologies and actors are changing the traditional Earth Observation landscape, which is also creating new opportunities for public and private sector interactions.

CEOS SEC-248 Report

(two pages max.)

Entity: WGCapD

Prepared By: Prakash Chauhan (Chair/ISRO) and Nancy Searby (Vice Chair/NASA)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

None

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

None

Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- WGCapD-8 was hosted by ISRO on March 6-8, 2019 in Dehradun, India with participants from the following agencies: CNES, DLR, ESA, INPE, ISRO, NASA, SANSA, UK's National Center for Earth Observation (UK NCEO), VNSC, as well as the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (CRECTEALC), and Global Open Data for Agriculture and Nutrition (GODAN). Updates were provided by the representatives of GEO regional initiatives in the Americas and Africa, by the representatives of the GEO Capacity Development working group, and the representatives of the WMO/CGMS VLab.
- Work is ongoing on WGCapD deliverables. In particular, a white paper describing ways WGCapD can cooperate with capacity building networks supported by other entities, e.g. UN and other entities, will be provided at SIT-34 for discussion (deliverable CB-37).
- Roscosmos has offered a member to join WGCapD.
- WGCapD leadership participated in the CEOS SIT Chair telecon March 11, 2019.

(two pages max.)

Entity: WGVC

Prepared By: Cindy Ong (CSIRO)

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

None

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (<u>Dot points</u>)

None

Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

- The ACSG chair, WGCV vice chair and PoC for WGCV will be attending the WGClimate Plenary in Morocco next week. During this meeting, they will meet with WGClimate chair and ACVC members to discuss collaboration on the CEOS GHG initiative. A concrete contribution from WGCV is likely to be CO₂ and CH₄ reference standards.
- The Microwave Sub Group is developing the work plan on their main topic: calibration of microwave scatterometry for surface ocean wind vector. The potential contributors to this tasks are Dutch Meteorological Inst, Inst of Marine Science, CMA, ASOS, ASSA. The MWSG chair will be meeting with collaborators at the IOVWST meeting in Maine, USA in May 2019 to discuss the scope of work, deliverables, timelines, contributions, etc.
- The Microwave Sub Group is looking for a vice-chair to assist in the SG and would be keen to hear from interested microwave experts.

Upcoming meetings or events

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

- IVOS Subgroup will hold a meeting at CSIRO in Perth, Australia March 25-29,
 2019 including a tour of the proposed RadCalNet site north of Perth.
- Next LPV Plenary to be held during the ESA Living Planet (13-17 May, exact dates TBC) Objective: Consolidate the LPV WP for 2019-2021 period.
- Pre-flight calibration workshop is being scheduled for February 2020
- WGCV Plenary will be held in the week of 15th July 2019 in Perth, Western Australia
- Second ACIX2/CMIX workshop to be held at ESRIN (evaluation of the comparison results) in the time frame of June to September 2019.

(two pages max.)

Entity: SDCG for GFOI

Prepared By: Osamu Ochiai and Stephen Ward

Updates on issues raised during the <u>last</u> CEOS SEC teleconference (<u>Dot points</u>)

- n/a

Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference (Dot points)

- n/a

Other highlights, activities, actions, projects, collaborations (<u>Dot points</u>, e.g. outputs, new products, papers, technical reports, media, pipeline and new projects, interactions, project status changes, new opportunities)

The new SDCG Work Plan aims to prioritise the promotion of the policy relevance of the new generation of data-streams from CEOS space agencies relevant to estimation of above ground biomass (AGB). To ensure a thorough understanding of the status and outlook for these missions and of the related technical work underway within the WGCV Land Product Validation Subgroup on the CEOS Biomass Protocol, to help standardise and characterise the data from them, an exploratory Biomass Day will be held in conjunction with the SDCG-15 meeting being hosted by the NASA SEO in Virginia in late March.

The proposed objectives of the meeting are as follows:

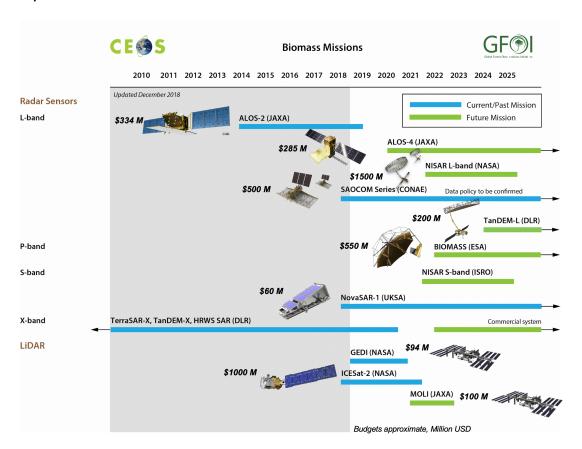
- Reporting on the latest status and outlook for all related CEOS missions;
- Establishing a complete understanding of activities in relation to cal-val, intercomparison studies, data accuracy etc including the plans for finalisation and promotion of the CEOS Biomass Protocol; and of the suitability of the various CEOS agency products in support of the monitoring and reporting efforts of GFOI countries;
- Debating how LPV and SDCG might cooperate, and their respective roles, through the GFOI framework to promote uptake of the Biomass Protocol, and uptake of CEOS agency biomass data products broadly;
- Establish areas where the incoming SIT Chair (CSIRO) might support and give higher profile to this work and where the priorities lie for the 2020-21 period;
- Brainstorm possible collaborations among CEOS agencies (and other GFOI stakeholders) to address these priorities eg through promotion of an L-band SAR virtual constellation:
- Update the draft SDCG Work Plan tasks and outcomes accordingly;

- Finalise CEOS inputs to GFOI Plenary in relation to Biomass and the education of GFOI countries as to the potential of the data.
- Attendance is expected to include the usual CEOS agency representatives, equipped with reports on the relevant biomass missions, their cal-val and in-situ activities, and their intended data 'customers'. Reports are expected from: NASA, ESA, JAXA, CONAE and DLR

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

- Biomass Day 26th March
- SDCG-15 27-28 March

Attachments





CEOS Space Data Coordination Group for GFOI

Biomass Day Prospectus v0.2 26th March 2019, Hampton, VA

The new SDCG Work Plan aims to prioritise the promotion of the policy relevance of the new generation of data-streams from CEOS space agencies relevant to estimation of above ground biomass (AGB). To ensure a thorough understanding of the status and outlook for these missions and of the related technical work underway within the WGCV Land Product Validation Subgroup on the CEOS Biomass Protocol, to help standardise and characterise the data from them, an exploratory Biomass Day will be held in conjunction with the SDCG-15 meeting being hosted by the NASA SEO in Virginia in late March.

The proposed objectives of the meeting are as follows:

- Reporting on the latest status and outlook for all related CEOS missions;
- Establishing a complete understanding of activities in relation to cal-val, intercomparison studies, data accuracy etc including the plans for finalisation and promotion of the CEOS Biomass Protocol; and of the suitability of the various CEOS agency products in support of the monitoring and reporting efforts of GFOI countries;
- Debating how LPV and SDCG might cooperate, and their respective roles, through the GFOI framework to promote uptake of the Biomass Protocol, and uptake of CEOS agency biomass data products broadly;
- Establish areas where the incoming SIT Chair (CSIRO) might support and give higher profile to this work and where the priorities lie for the 2020-21 period;
- Brainstorm possible collaborations among CEOS agencies (and other GFOI stakeholders) to address these priorities eg through promotion of an L-band SAR virtual constellation;
- Update the draft SDCG Work Plan tasks and outcomes accordingly;
- Finalise CEOS inputs to GFOI Plenary in relation to Biomass and the education of GFOI countries as to the potential of the data.

Attendance is expected to include the usual CEOS agency representatives, equipped with reports on the relevant biomass missions, their cal-val and in-situ activities, and their intended data 'customers'. Reports are expected from: NASA, ESA, JAXA, CONAE and DLR. Where attendance is not possible, SDCG requests presentation materials provided in advance. Representatives from WGCV-LPV are also confirmed. GFOI colleagues from World Bank and from USGS/SilvaCarbon have also been invited.

Speakers are asked to include materials highlighting activities their agency is engaged in or planning in relation to multi-mission coordination, such as cal-val, inter-comparison or accuracy studies – that might be identified as part of an identified and coordinated CEOS effort in relation to AGB missions.

An outline agenda is proposed below.



CEOS Space Data Coordination Group for GFOI

Biomass Day Agenda v0.2 26th March 2019, Hampton, VA

0900	Intro and Welcome (SDCG Co-Chairs)	
0915	Content and objectives for the day (SDCG SEC)	
0930	Space Agency Status and Outlook Reports (inc break) - NASA (Hank Margolis) - ESA (Steven Hosford) - JAXA (Ake Rosenqvist) - CONAE (Ake Rosenqvist) - DLR (?) - Relevant commercial systems (Stephen Ward)	
1130	CEOS Biomass Protocol (Laura Duncanson and John Armston)	
1245	Lunch	
1330	Discussion Topic 1: Multi-Mission Collaboration (Joanne Nightingale) - Based on known activities and gaps - To realise the Protocol objectives - ARD & standards	
1430	Discussion Topic 2: SIT Chair contribution (SDCG SEC)	
1500	Discussion Topic 3: Utilizing the GFOI Framework to best effect (Ake Rosenqvist) - Dataset suitability for NFMS needs & reporting - Accelerating policy relevance	
1530	Break	
1545	Discussion Topic 4: Organisational aspects and roles (Steven Hosford) - Including new scope and structures such as a VC	
1615	Wrap up - Inputs for GFOI Plenary (Tom Maiersperger) - SDCG WP impact (SDCG SEC) - Way forward on actions	
1715	Adjourn	