**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. CEOS members and associates were again solicited by letter on 22<sup>nd</sup> May. I have been contacted by one agency asking for additional information and an informal discussion has taken place. There have been no further steps taken since this discussion.
- CEOS side event for GEO Ministerial/ Plenary. The action SIT-34-05 called for ideas to be submitted to "Jonathon Ross, Steven Hosford, and Kerry Sawyer for a possible CEOS side event at the GEO-XVI Plenary" for 25<sup>th</sup> May. No ideas have been submitted prior to this deadline. SEO, traditionally in charge of our CEOS "communications" presence at GEO Plenaries, will be reporting further on this point.
- Virtual Endorsements: Albrecht von Bargen as WGClimate Vice Chair and SBSTA-50 statement. Virtual CEOS endorsement of Albrecht von Bargen prior to CGMS-47 was completed. WGClimate Chair Jörg Schulz will inform SEC of the outcome of the CGMS discussion on this subject as well as the outcome of the Virtual endorsement of the SBSTA-50 statement.

### Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference

- CEOS delegation to the GEO Ministerial. The CEO is waiting for confirmation from the incoming CEOS Chair (ISRO) that they will participate in the GEO Plenary and Ministerial meeting as the CEOS principal to GEO.
- Upgrade of ceos-deliverables.org deliverables database and web interface. Work is progressing through the SEO to upgrade ceos-deliverables.org. After discussion, a new dashboard has been proposed to WG leads (email sent on 31/05). CEO is awaiting feedback from the WG leads on this proposal. The completion of the upgrade is scheduled for early august in order that all CEOS entities can update their deliverables ahead of the SIT Technical Workshop and the 30<sup>th</sup> September deadline for inclusion in the CEOS Work Plan Progress Report for CEOS Plenary.

### **Upcoming meetings or events**

- WGCV-45, 15<sup>th</sup>-19<sup>th</sup> July, Perth, Australia
- LSI-VC-8/GEOGLAM/SDCG-16, 4<sup>th</sup>-6<sup>th</sup> September, Anchorage
- CEOS-CGMS WGClimate-11, (TBC) 2<sup>nd</sup>-6<sup>th</sup> September, Anchorage
- SIT Technical Workshop, 9<sup>th</sup>-12<sup>th</sup> September, Fairbanks

**Entity:** SIT Chair Team

**Prepared By:** Kerry Sawyer (NOAA)

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

 SIT-34 minutes have been finalized and shared with all; also available on the SIT-34 website.

# Issues requiring discussion/decision during <u>current</u> CEOS SEC teleconference

### (Dot points)

- Working Group Study Team (WGST) and Ocean Virtual Constellation Merger Study Team (OVCMST) Status. Kickoff telecons for each Study Team took place on 6 June. The WGST has 17 members and the OVCMST has 11 members. Very good telecons with all expressing desires as to why participating on teams. Agreed to break up the work of the Study Teams by action. Request to all participants to indicate which action they wish to contribute to completing. Action on SIT Chair Team to prepare an outline/template of the final report to share by end of this week. Next telecom proposed for next week.
- Review of SIT-34 Actions:

I	No.	Actionee	Action	Due date
	SIT-34-01	CEOS VC Co-Leads, WG Chairs/Vic e Chairs	All CEOS Virtual Constellation Co-Leads, Working Group Chairs and Vice Chairs, and Ad Hoc Team Co-Leads to provide updated content and information for the CEOS website to CEOS SEO, with a cc to the CEO.	30 June 2019
		Rationale: Information on CEOS website is not current.		

- 34-03 closed Rob Woodcock has been relayed to GEO SEC to participate on the team
- 34-02, 34-04, and 34-05 to be discussed by SEO

SIT-34-08	CEOS Agencies	Any agency that is ready and able to support one, two, three, any or all of the 6.6.1, 11.3.1, and 15.3.1 Indicators are asked to indicate interest to the Co-Leads of the SDG AHT.	1 July 2019
	Rationale: D		

SIT-34-12	SIT Chair Team	Draft and distribute the proposed language for the proposed VC leadership rotation, which will identify at least 2, no more than 3 Co-Leads, with Co-Leads from any interested CEOS Member or Associate for a two-year, staggered term. Co-Leads can reapply for position.	Circulated: 30 June 2019 For discussion: 2019 SIT Technical Workshop
SIT-34-13	SIT Chair Team	Draft and distribute the proposed language for the proposed <i>ad hoc</i> Team (AHT) initiation cycle for standing up new AHTs. The two-year initial cycle will allow for defining the objective, evaluating the merit and value of the objectives, and determining the appropriate path forward for continued support within CEOS. Language should include AHT closure process.	Circulated: 30 June 2019 For discussion: 2019 SIT Technical Workshop
Rationale: Detail the proposal for ad hoc team review.			

### 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)

- Outcomes from 14<sup>th</sup> GEO Programme Board to be reported during SEC (taking place on 12<sup>th</sup> and 13<sup>th</sup> June)
- VC/WG/AHT(AHWG)-SIT Chair telecons planned for 30/31 July, 5, 7, 8
   August. We will be planning telecons as we did for last July with combined telecons, 90-minutes each. Kerry will be sending email requesting times for telecons next week.

### **Upcoming meetings or events**

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

- AC-VC-15 Meeting is taking place this week in Tokyo, Japan.
- CEOS 2019 SIT Technical Workshop: 11-12 September in Fairbanks, Alaska. September 10<sup>th</sup> for side meetings and September 9<sup>th</sup> for VC/WG/AHT(AHWG) Working Day (by invitation). Invitation letter sent on 7 June. Logistics package to follow shortly. Registration link should be active by end of next week.

#### **Attachments**

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

NONE

**Entity:** GEO SEC

Prepared By: Akiko Noda

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

- 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)

- 2019 GEO Symposium (27-29 May, Geneva) Approximately 110 people attended this Symposium. 28 candidate Work Programme activities and 4 Regional GEOs made presentations. New formation of GEO Foundational Tasks and the GEO Knowledge Hub were discussed. The Symposium had a few breakout sessions to promote interactive conversation among participants. The challenge would be how to coordinate similar efforts among some activities.
- 2020-2022 GEO Work Programme development The first draft of the GEO Work Programme for 2020-2022 became available on the GEO's website on 16<sup>th</sup> May. The Summary Document contains short descriptions of each of the activities. In addition to this summary document, the full implementation plans for each proposed activity can be downloaded. 55 plans (27 for Flagship and Initiative, 25 for Community Activity, 3 Regional GEO) have been received by 11<sup>th</sup> June. After 14<sup>th</sup> GEO Programme Board Meeting, the second version will be released in early July.
- GEO gains IPCC Observer status
   At its 49<sup>th</sup> Session in Kyoto this week, the Intergovernmental Panel on Climate Change (IPCC) recognised the Group on Earth Observations (GEO) as an official Observer.
- Results of GEO-AWS Cloud Credits Programme
   GEO and AWS announced on 11<sup>th</sup> June that the 21 projects from 17 developing countries will be awarded \$1.5 million USD worth of cloud services, grants and technical support from Amazon Web Services through the Earth Observation Cloud Credits Programme.
- GEO Secretariat stuff

Mr. Florian Franziskakis joined the GEO Secretariat as In-Situ Data Management Specialist in May. Ms. Theadora Mills was selected as a new Communications Officer and started her work from 3<sup>rd</sup> June. Guo Man (JPO from China) and Akiko Noda are leaving the GEO Sec in June.

### **Upcoming meetings or events**

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

- 14<sup>th</sup> GEO Programme Board Meeting (12-13 June, Geneva)
- 48<sup>th</sup> GEO Executive Committee (23-24 July, Geneva)

### CEOS SEC-251 Report - June 2019

**Entity: SEO** 

Prepared By: Brian Killough (NASA)

### Issues requiring discussion/decision during CEOS SEC teleconference

- Action SIT 34-02: The SEO, in consultation with SEC, will establish a working team to scope and develop content for the proposed CEOS presence at GEO-XVI Plenary.
   STATUS: The SEO has submitted a proposal for a CEOS exhibition booth. Are there any volunteers to support the booth through content or in-person attendance?
- Action SIT 34-04: CEOS Agencies to submit proposals to SEO for possible CEOS video to be shown at the GEO-XVI Plenary.

**STATUS**: CEOS will NOT have a speaking slot at the GEO Plenary. Therefore, a specific video or presentation is not needed. It is suggested that CEOS consider content for the CEOS exhibition booth (previous action) or submit talks (10-20 minutes) for the "Ideas Stage". This might be a good opportunity for CEOS projects to showcase their work and its relevance to the GEO audience

### Updates on issues raised during the last CEOS SEC teleconference

 Brian Killough (SEO), Steven Hosford, Adam Lewis, and Steve Labahn provided feedback to GEO on May 15 on the 24 received proposal for the GEO-Amazon project. 16 of 24 proposals plan to use CEOS satellite data. 5 of the proposals plan to use the Open Data Cube. We believe GEO has made the selections but no response has been received from GEO.

### **Upcoming meetings or events**

Brian Killough (SEO) will attend the Harvest meeting in Washington, D.C. on June 25-26.
 The meeting is directly connected to GEOGLAM and will have an Africa component that will discuss the Africa Regional Data Cube.

# 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 (SEO), Analytical Mechanics (AMA) and the Global Partnership for Sustainable Development and Data (GPSDD) conducted a 3-day Africa Regional Data Cube training in Accra, Ghana on May 22-24. The meeting was outstanding and helped move 3 countries (Ghana, Sierra Leone, Senegal) forward toward solving their key issues. The primary focus was illegal mining which is an ideal application solved with time series data (Landsat and Sentinel-1) in a data cube.
- CEOS Action 32-08: NASA SEO to confer with the CEOS Chair to establish a small brainstorming group to explore possible CEOS Agency contributions to the Digital Earth Africa initiative.

**STATUS**: The SEO has reached out to Adam Lewis and Trent Kershaw. It is believed the primary need from CEOS agencies is ARD from Landsat, Sentinel and ALOS. Brian has also connected with Stephen Hosford and Albrect Schmidt (ESA) regarding possible support for ARD production to support DE-Africa startup. The SEO has completed processing of the ALOS-PALSAR mosaics (7 epochs) for all of Africa.

### **CEOS SEC 251 Report**

**Entity:** WGDisasters

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 (<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)

#### General

- CNES offered to vice Chair for the period 2019-2021 and then Chair the WG Disasters in the period 2021-2023
- The Wg Disasters agreed to review the Term of Reference considering as a reference the Sendai Framework for Disasters Risk reduction. A draft has been circulated and discussed at the last WG Disasters teleconference on May 27. The new ToR will be presented to the SIT in September.
- Review and update of the GEO Community activity "EO 4 DRM" for the GEO workplan 2020-2022 is still on ongoing.
- Partnerships and Engagement
  - CSIRO has joined the group. CSA has also announced they are returning to the group.
  - The sessions at LPS and WRC were quite successful. The joint DRR session with GEO had over 100 attendees, and was co-chaired by the GEO Executive Director. The recovery session was also well-attended and CNIGS presented on the Haiti RO. At the Global Platform, CNES chaired a session on EO for inclusive recovery and the session summary was reported to the plenary as one of the main outputs of the WRC.
- Initiatives (below updates since the last report)
  - Landslide Pilot: Activities on the landslide pilot are progressing well and a progress meeting with about ten people was held during the EGU in Vienna in April. It was felt that a one-year extension within the existing quotas would be a good solution to fulfill all the activities. The schedule foresees a status update report for the WG Disasters September meeting and a final report by October 2020.

#### GSNL

- The Peru Supersite proposal has been put on stand-by due to internal changes of the proposing Organization.
- The bi-annual report from Ecuador, Taupo (NZ) and San Andreas Fault (SAF) Supersites have been submitted and are now under review.

### GEODARMA

- Concept phase completed for Africa and Asia; further work underway for Latin America/Caribbean (LAC). The LAC region has several new partners, including CEPREDENAC and the Andean Community. A draft regional assessment is expected soon.
- An updated proposal for an African project from RCMRD has been received and is under review. Data requirements are under assessment for the UNESCAP Megacities proposal.
- Several bilateral meetings have been held during the Global Platform meeting in Geneva.

### o Recovery Observatory & Generic RO

- A lot recent progress has been made. There was a mission to Haiti in early May with a local workshop in Jeremie and a national workshop in Port-au-Prince. Progress with growing stakeholder engagement, training on the first products delivered and positive feedback. There was also a validation field mission with ASI and CNES participating as well as CNIGS and SERTIT.
- The Haiti RO activity was presented at the Copernicus user workshop and lauded for its end user involvement. The GRO ad hoc team has almost completed the Advocacy Paper that documents existing experience using EO for recovery and drafts a generic RO concept. it will be published by GFDRR.

### Geohazard Labs

- Good progress on work plan with the on going integration of services on GEP and harmonization under EPOS and EGMS initiative
- Several dissemination activities performed and planned: GLab presented in LPS 2019 (Italy) and GSG 2019 (Greece) in May, IGARSS (Japan)in July 2019, Phi-Week (Italy) in September 2019 and MDIS Workshop (France) in October 2019
- Capacity building: EO4SD training on GEP (Indonesia) organised (late June)

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

 CEOS WG Disasters meeting n.12, University of Iceland /Nordic Volcanological center, Iceland, September,23-27, 2019

(two pages max.)

**Entity:** WGClimate

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>)

 Ask to abandon Action 237-03 (WGClimate Chair to share a summary of the Coordinated Action Plan implementation teleconference) as it is superseded by events. There will be no single teleconference but rather small joint meetings as held with SST-VC and now planned with LSI-VC. Results are in the meeting minutes, or are reported in coordinated action plan updates to be presented at Plenary.

# 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)

- WGClimate@CGMS-47:
  - Endorsed leadership proposal Abrecht von Bargen (DLR) is Vice Chair since 1<sup>st</sup> of June;
  - Endorsed change of ToR w.r.t. to GHG monitoring, that was endorsed by 32<sup>nd</sup> CEOS Plenary;
  - Endorsed establishment of GHG Task team in WGClimate and the way forward for developing the roadmap for it. Asked specifically on additional resources and implemented a feedback loop asking agencies at time of CGMS-48 if they provide the resources;
  - Endorsed the greenhouse gas monitoring constellation white paper, i.e., it is the accepted reference for all agencies now;
  - Agreed to review the statement for UNFCCC/SBSTA-50 until May, 31;
  - Noted plan for 2019 ECV Inventory gap analysis and written endorsement at time of 33<sup>rd</sup> CEOS Plenary;
  - Connected WGClimate search for climate data record use cases with WMO-CGMS Virtual Laboratory for Education and Training in Satellite Meteorology (VLab) that want to engage with the user community on the application of new ECVs. This will create new use cases. Could see during TW week if this is also interesting for WCapD;
  - Aligned CGMS High-Level Priority Plan with CEOS Work Plan.
- CGMS-47 also endorsed a new strategy for WMO SCOPE-CM that aims at facilitating climate data record generation solutions to gaps identified in the WG-

Climate Inventory and facilitating agency commitments to sustain existing production capabilities for CGMS agencies. SCOPE-CM was tasked by CGMS Plenary to develop implementation plan with first activities for CGMS-48 in 2020. Concept may be interesting for CEOS VCs;

- Statement for UNFCCC/SBSTA-50 delivered to UNFCCC on June, 12 after only editorial comments from NASA and NOAA. Thanks to all who contributed;
- Verification and preparation for ECV Inventory gap analysis ongoing. Team build up discussed with working group and ongoing. Schedule foresees 2<sup>nd</sup> draft of gap analysis report and updated coordinated action plan for September 20 for agency review prior CEOS Plenary. Docs will come via WGClimate representatives;
- GHG Monitoring Task team conducted roadmap meeting in Tokyo on June 9.
   Started to develop implementation schedule, more consolidated info to come next time or if Mark is on the line;
- WGClimate Chair participated in climate round table at ESA LPS in Milano and provided a presentation based on Space agency contribution in support of the Paris Agreement paper written last year. Round table, excellently organised by ESA, and the presentation was very well attended with lots of positive feedback;
- No time to address Action 238-07 (WGClimate Chair to work with the SEO to ensure climatemonitoring.info is appropriately advertised on ceos.org and via CEOS social media.) but will come.

#### **Upcoming meetings or events**

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

- UNFCCC/SBSTA-50: Statement at opening session on June, 17, dialogue on systematic observations on June, 21 with SBSTA Chair;
- WGClimate, 4-6 September, Anchorage, AL, USA. Joint sessions with LSI-VC and potentially SDCG-GFOI envisoned. The latter about biomass and realtion to GHG roadmap;
- Asked for a 2hr side-session during TW week, run by Mark, Albrecht, and Dave, to address two items: i) present for informal discussion the planned roadmap on the GHG activities to CEOS agencies (which will be formally presented at Plenary) and, ii)launch a new phase of CEOS Carbon Strategy Activities with interested CEOS entities.

### **Attachments**

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

### **CEOS SEC 251 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 ( $\underline{\text{Dot points}}$ )

Rob Woodcock has been identified as the WGISS representative to participate on the GEOSS
 Infrastructure Development Foundation Task/Implementation Coordination Task Force, closing action SIT-34-03.

### 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-48 meeting is starting. Follow-up sessions on STAC Technology, ARD tools, Data Cubes and state of art Big Data technologies like Machine Learning and Artificial Intelligence are going to be organised.
- The WGISS internal Work Plan has been updated based on CEOS Work Plan 2019-2021.
- "CEOS Agencies Participation/Contribution to WGISS" table (showing the different WGISS subgroups, their scope, CEOS agencies interest/benefits, and skills of representatives) is now finalised and will be distributed and posted to advertise and stimulate participation to WGISS.
- Reorganization and streamlining of the WGISS Website will be started in preparation of WGISS-48
- The new CEOS web page (<a href="http://ceos.org/ourwork/lessons-learned-best-practices/">http://ceos.org/ourwork/lessons-learned-best-practices/</a>) is being populated with best practices and white papers produced by all Working Groups to improve collaboration and knowledge sharing.
- Collaborations with:
  - WGCV: next joint teleconference will be held in July to discuss progress and next steps in the use of data cubes in support to CAL/VAL activities and on the CEOS data Maturity Matrix evolution.
  - WGCapD for technology and user oriented webinars (<u>Action FDA-05 and DATA-11</u>): a
    user webinar focusing on existing (pre)operational Exploitation and Application
    Platforms targeting the academic community is being organised in September.
  - WGClimate on ECV/CDR datasets registration in IDN as first step for accessibility through WGISS Connected Data Assets Infrastructure (<u>Action DATA-09</u>): registration of ECV inventory V3.0 datasets into CEOS IDN is being addressed in cooperation between the WGISS ESA team and WGClimate chair.
  - SDG-AHT: a set of SW tools and space-born CEOS agencies datasets relevant for SDG Indicators identified by the SDG-AHT is being further analysed by WGISS to facilitate discovery and access through WGISS systems.
  - Carbon Team on prototype carbon portal development (<u>Action CARB-15</u>): second version of the WGISS carbon portal was demonstrated at WGISS-47 and is now available for comments/feedback by carbon user communities. Further major release is planned before the WGISS-48 meeting based on received feedback. Carbon Portal demo will be organised at the occasion of the next WGClimate meeting in September. Possibility to support the Forest Monitoring initiative through the WGISS carbon portal being explored in cooperation with VSNC representatives.

- o WGDisasters: cooperation on generic recovery observatory under discussion.
- GEO: new version of the GEO Work Plan under review to identify where WGISS can contribute with Data Management Principles, WGISS Connected Data Access and Future Data Architectures.

#### Data Preservation and Stewardship

- Detailed proposal for GEO Data Management Principles Implementation Guidelines (DMP IG) improvement/update in relation to CEOS WGISS Maturity Matrix will be sent to GEO.
- Possible improvement of CEOS WGISS maturity matrix is being evaluated to include FAIR
  principles and to consider relevant work done in the Research for Data Alliance (RDA)
  and World Meteorological Organization (WMO) Expert Group on Data Management.

### Data Discovery and Access (WGISS Connected Data Assets Activities, Action DATA-2)

- System Level Team is working on NOAA request for IDN registering their Southern Ocean collection dataset.
- Technical solution for the implementation of a single map-based front-end/portal within the IDN to discover and access CEOS agencies data through WGISS CDA back-end is being discussed. A CEOS branding on IDN/CWIC/FedEO entry pages will be implemented.
- Japan Meteorological Agency (JMA) and Korea Meteorological Administration (KMA) will be contacted in the upcoming months to trigger possible registration of their respective data assets in CEOS IDN.
- 150 EO data collections from JAXA have been registered in IDN, access at granule level through FedEO will be implemented in the upcoming months.
- NOAA OneStop datasets being registered/updated in the International Directory Network (IDN) and granule search/access is being implemented through CWIC.
- CWIC tests with National Remote Sensing Center of China (NRSCC) ChinaGEOSS platform for metadata harvesting to be started.
- FedEO activities progressing with DLR and EUMETSAT and to be resumed with ROSCOSMOS.
- CEOS IDN, CWIC and FedEO searchable through the GEOSS Platform (<u>Action DATA-16</u>).

#### Interoperability and Use

- Open Source Software Inventory under finalisation and ready for deployment on the WGISS Web site. The same structure/approach will be used to implement on the WGISS website the FDA elements inventory resulting from CEOS Workplan Action FDA-08.
- A report on how the Google Dataset Search Tool allows discovery of CEOS agencies data has been prepared including contributions from DLR, ESA and NASA. Report is being reviewed and will be made available by end of June to CEOS.
- Services metadata for an initial set of EO services use cases will be defined and circulated for possible adoption in WGISS. They should then be used to describe CEOS agencies services with the goal to make them discoverable through the IDN interface and possibly link them to data discovery and access.
- First draft version of the Federated Identity Management (Single Sign on) white paper was finalised and circulated to all WGISS members for comments/feedback (<u>Action</u> <u>DATA-13</u>).

### Technology Exploration

- Next webinar targeting the academic community and focusing on existing (pre)operational Exploitation and Application Platforms is planned in September.
- A template for gathering inputs from agencies on current/planned use of Machine Learning and Artificial Intelligence technologies is being prepared.

#### **Upcoming meetings or events**

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

- EARTH OBSERVATION OPEN SCIENCE 2019 CONFERENCE September 25-27 hosted by ESA/ESRIN, Frascati.
- WGISS-48 October 8-11, Ha Noi, Vietnam, hosted by VAST/VSNC.

(two pages max.)

**Entity: WGCV** 

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 Microwave SG chair met with Ocean Vector Wind VC chair at the IOVWST meeting in Maine, USA in May 2019 to discuss to collaborative efforts.
  - OSVW VC chair will clarify requirements, which are, essentially
    - o quality control of surface wind data, and,
    - o calibration and cross-calibration of different ocean surface wind sensor data;
  - The work will include
    - the selection of reference in-situ data from global ocean buoys and the Amazon forest, and, associated satellite data, and,
    - joint evaluation of the various versions of the GMF models (Ku and C bands) to agree on the common models to use;
    - development of guidelines of calibration of microwave scatterometer for ocean surface wind vector, with focuses on global ocean calibration (for sigma 0 data and wind data) and amazon forest (for sigma 0 data).
  - The objective of the collaborative efforts are to develop:
    - Guidelines for calibration of ocean surface wind satellite:
    - Selection and collection of reference in-situ and satellite data.
- ACSG had 2 teleconference in preparation for the "working meeting on defining the Roadmap for Space Agency coordination on Greenhouse Gas monitoring" a joint effort between WGClimate, AC-VC, and WGCV. The meeting on 9 June held as part of the CEOS AC-VC meeting (June 10-12) in Tokyo was attended by the ACSG chair and the vice chair of the WGCV and hosted by JAXA. The implementation of a constellation architecture for monitoring carbon dioxide and methane from space and a timeline framework for roadmap was discussed. The next step will be presented at the SIT workshop in September.
- The ACSG chair and the vice chair of WGClimate are now in the process of planning the logistics of the topical ACSG meeting on the L2 GHG calibration action for October.

- A review paper on the Importance of Biomass Product Validation has now been published in Surveys in Geophysics (<a href="https://rdcu.be/bFdVw">https://rdcu.be/bFdVw</a>). This is an outcome of the LPV SG's work for CARB-16-2018-2.
- The LPV SG held their meeting during the ESA Living Planet Symposium in Milan in May.
   The LPV strategy for the 2019-2022 period was discussed with every focus area group presenting their activities and main plans. The outcome of the meeting is an action plan and roadmap for the LPV SG for mid 2019- mid 2022.

### **Upcoming meetings or events**

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

- Pre-flight calibration workshop is being scheduled for February 2020
- WGCV Plenary will be held in the week of 15<sup>th</sup> 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.

### **Attachments**

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

### **CEOS SEC-251 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>)

 We welcome comments from CEOS on WGCapD CB-37 (White paper describing approaches for capacity building networks, e.g. UN's, to work together). We continue to focus on a version for publication.

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 work plan deliverable CB-39, provide the hands-on training for AEM as well as for CONAFOR and CONACYT, took place end of February in Guadalaraja Mexico with the participation of ONF (Office National des Forêts) and ONF-I (International branch of ONF). Many topics on forest management were covered including forest fire detection, post fire damages assessment and on the use of change detection using remote sensing data sets. The training report is being prepared.
- As part of WGCapD work plan deliverable CB-32 to provide regional trainings on land use and land cover trainings, a regional science meeting followed by training is being organised in Johar Bahru, Malaysia with the participation of NASA, ISRO, JAXA, VNSC etc. during July 22-24, 2019. The training will be conducted during July 25-27, 2019. A three-day hands-on training session for young researchers will focus on the use of remote sensing and geographic information systems (GIS) for land cover/land use change applications including atmospheric impact studies using SAR, MODIS, Landsat, Sentinel, and other remote sensing datasets.
- The dates and location for WGCapD-9 have been finalized: March 9 13, 2020 in Mountain View, CA, USA.