# Background Note on WGCapD and SEO

# What is the Working Group on Capacity Building and Data Democracy?

Created in 2011, WGCapD undertakes activities based on the four pillars of the Data Democracy Initiative Mission and aims to unify CEOS efforts toward:

- Providing wider and easier access to Earth Observation data
- Increasing the sharing of software tools such as the use of open source software and open systems interface
- Increasing data dissemination capabilities and transferring relevant technologies to end users
- Providing intensive capacity building, education, and training (including awareness and outreach) for enabling end users to gather the information they need and for increasing communication on achieved results

# What is the Systems Engineering Office?

Conceived by NASA in 2007 as a contribution to CEOS, and currently funded and led by NASA, the SEO formally reports to the SIT Chair but also considers requests for work from the CEOS Chair. The SEO provides systems engineering leadership to the Virtual Constellations, Working Groups and other ad hoc CEOS activities. The SEO facilitates the use of systems engineering methodologies and tools to strengthen plans and improve CEOS collaboration.Continued leadership and funding for the SEO will be addressed annually by the sponsoring organization. To meet SEO objectives, NASA currently utilizes a mix of NASA employees and contractors representing various CEOS agencies. Participation from other Agencies is desired to meet the expanding efforts of the SEO.

**Purpose/objectives**: The SEO provides systems engineering leadership and support to CEOS through technical and management services and the development of tools and products that facilitate systems engineering solutions for societal benefit. Examples include:

- <u>SEO technical functions</u>: systems engineering tool development, requirements and gap assessments, data acquisition planning, and special projects (e.g. the COVE Tool, The Open Data Cube initiative, contributions to the Land Surface Imaging Virtual Constellation Analysis Ready Data work, and more)
- <u>SEO management functions</u>: improving communications through web-based tools, managing CEOS social media, coordinating meeting logistics, and developing education and outreach products (e.g. the CEOS Data Policy Portal, Measurements, Instruments, & Missions Database support, WGCapD Training Calendar, WGISS Open Source Software Inventory Tool, and more.)

#### Past collaborations between the two working groups

- CEOS Training Calendar
- CB-12: Build awareness of new CEOS missions, tools, and datasets (2017)
- CB-23: Provide training on CEOS Visualization Environment (COVE) action frozen by CapD until it was ready to be reopened (details: <u>http://deliverables.ceos.org/task\_manager/deliverables/369/</u>)
- CB-24: Work with the CEOS Data Cube team to identify concrete opportunities for collaboration
- Presentation at WGCapD-8: <u>http://ceos.org/document\_management/Working\_Groups/WGCapD/Meetings/WGCapD-8-</u> 2019/Day2\_Items20-43/38\_Killough\_WGISS-SEO\_v2.pptx

#### Opportunities for future collaborations

- Joint deliverables upcoming:
  - CB-43: COVE Webinar
  - CB-53: Collaborative Feasibility Project (DEVELOP data cube activity)
- Other deliverables of interest to SEO:
  - CB-44: CARD4L Awareness Webinar
  - CB-45: Jupyter Notebooks Awareness Webinar
  - CB-54: Indigenous Peoples-focused In-Person Training (Canada)
  - CB-55: Indigenous Peoples-focused In-Person Training (Australia)