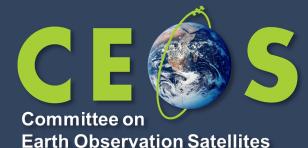
# CEOS Work Plan 2022-2024



Marie-Claire Greening CEOS Executive Officer WGCDisasters-17 15 March 2022

## **CEOS Mission & Objectives**



Mission: CEOS ensures international coordination of civil space-based Earth observation programs and promotes exchange of data to optimize societal benefit and inform decision making for securing a prosperous and sustainable future for humankind.

### **Primary Objectives:**

- To optimise the benefits of space-based Earth observation
- To serve as the focal point for international coordination of space-based Earth observation activities
- To encourage complementarity and compatibility

# CEOS Long-term Priorities



GCOS Signature Construction requirements identified by the Global Climate Observing System (GCOS) – and implications of the Paris Climate Agreement – are addressed.



Ensure, in the context of the Sendai Framework for Disaster Risk Reduction 2015-2030, that CEOS Agency data are made available in support of disaster risk reduction and that CEOS continues engagement with UN agencies and authorities.



Ensure that space-based Earth observations support the success of the next decade of the Group on Earth Observations (GEO), and that CEOS engagement in GEO governance and leadership is enhanced.



Proactively engage in global discussions on the critical challenges that face society, in support of the UN 2030 Agenda for Sustainable Development.

CEOS WGDisasters-17 Plenary, 15-17 March 2022





### Priority 1: Disaster Risk Reduction and Response, & Capacity Building to ensure long-term sustainability of CEOS strategies

### Priority 2: CEOS Support to the UNFCCC Global Stocktake

to ensure a strong and unified CEOS support to the UNFCCC Global Stocktake

#### Priority 3: Support to CEOS Cal/Val Initiatives

to increase CEOS Agency Cal/Val Collaboration



# WGDisasters Mission &



Mission: The CEOS WGDisasters ensures the sustained coordination of disaster-related activities undertaken by the CEOS Agencies and acts as an interface between CEOS and the community of stakeholders and users involved in risk management and disaster reduction.

### **Objectives:**

- Support the efforts of Disaster Risk Management authorities in protecting lives and safeguarding property by means of satellite-based EO and science-based analyses.
- ✤Foster increased use of EO in support of Disaster Risk Management.
- Support the implementation of the UNDRR Sendai Framework for Disaster Risk Reduction, and in particular contribute to its Priority One, "Understanding Risk".
- Raise the awareness of politicians, decision-makers, and major stakeholders of the benefits of using satellite EO in all phases of Disaster Risk Management.





- Four key governing documents primarily guide the work of CEOS:
  - 1. <u>CEOS Terms of Reference</u> defines the mission and scope of CEOS activities
  - <u>CEOS Strategic Guidance document</u> articulates the overarching long-term (7-10 years) purpose and goals of CEOS
  - 3. <u>CEOS Governance and Processes</u> document provides guidelines on the structure, operations, and processes CEOS employs to achieve its goals
  - 4. <u>CEOS Work Plan</u> (3-year rolling) sets forth near-term actions to achieve the goals outlined in the CEOS Strategic Guidance document
- The CEO is the custodian of all CEOS Governing Documents, including the annual update of the 3-year CEOS Work Plan and the definition and monitoring of the deliverables it informs



### **CEOS Work Plan**

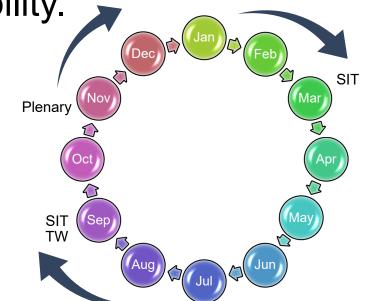






2021-2023 Work Plan March 2021 v1.0 3-year plan updated by all CEOS entities every year and put forward for formal endorsement at SIT in March. Rigorous work planning, execution and monitoring is critical to CEOS's credibility.

Deliver	ables					
Status open		mber contains	Title co	ntains	Description contains	Apply Filter
Number	Title	Status	Creation year	Completion date	Description	
AGRI-19-04	Iteratively respond to GEOGLAM EO Data Coordination team's definitions of "Applications Ready	open	2019	2021 Q4	GEOGLAM will internally lead the development of EAVs and ARD+ ba	ised on both
AGRI-20-01	CEOS Response to GEOGLAM Requirements	open	2020	2021 Q3	Very slight updates to EO data requirements are expected as result	of the EAV
BON-21-01	Explore the relationship between blodiversity and ecosystem function at different scales by	open	2021	2022 Q4	This work will explore the relationship between biodiversity and eco	system
BON-21-02	Explore concepts to improve the operational connection between BONs and broader information s	ystems open	2021	2022 Q3	Explore and develop ideas with other organizations (including, for	
CARB-17-05	Cal/val and production of biomass products from CEOS missions	open	2017	2022 Q4	Development of a coordinated cal/val strategy across NASA and ESA	biomass
CAR8-19-02	Phase II R&D Programme for GFOI	open	2019	2022 Q1	The existing GFOI R&D programme and corresponding data supply	activity
CAR8-19-03	Early Warning Module for GFOI	open	2019	2021 Q1	Scoping discussions continue amongst the GFOI Leads for the defini	tion of a
CARB-19-04	Forest Biomass measurements for GFOI countries	open	2019	2022 Q1	The new generation of Above Ground Biomass measurement missio	ons offers great
CARB-19-05	Forest applications in support of the CEOS ARD strategy	open	2019	2021 Q4	The LSI Forests and Biomass team will support the CEOS ARD strate	gy pilot
D CARB-20-01	Develop a CEOS AFOLU roadmap	open	2019	2021 Q4	The AFOLU roadmap is part of the broader convention engagement	
D CARB-20-02	Integrated Carbon Cycle Interface between CEOS and the UNFCCC	open	2019	2021 Q4	Building on the important connections established by WGClimate:th	is task will
CARB-20-04	Space Data support to GFOI Capacity Building component	open	2020	2021 Q4	Support to GFOI Capacity Building Component through the USGS Co	Chair to
CARB-20-05	Support and encourage space data uptake in GFOI countries	open	2020	2021 Q4	Awareness;education;coverage information;and facilitation of disco	very;uptake
CARB-21-01	GST1 Prototype Products and Guidance	open	2021	2021 Q4	Develop prototype CEOS data products and associated user guidant	e material in
CARB-21-02	National Inventory Users Test Group	open	2021	2021 Q2	Establish a test group of national inventory users to provide feedbar	ck on the
CARB-21-03	Forest Biomass Reference Network	open	2021	2022 Q4	Further development and support for the concept of the Forest Bior	nass
CARB-21-04	CEOS UNFCCC GST Strategy	open	2021	2021 Q2	Prepare an outline strategy paper proposing the CEOS approach to	support for
D CB-18-06	Advanced Multi-lingual MOOC on Radar Backscatter	open	2018	2021 Q2	Provide a multi-lingual MOOC (German, English, French, Spanish, Po	rtuguese
© CB-18-09	Land Cover and Land Use Change MODC	open	2018	2021 Q3	Provide a MOOC (Massive Online Open Course) on Land Cover and	Land Use Changes
© CB-19-06	Provide CB support to Hyperspectral Remote Sensing	open	2019	2022 Q1	Provide free & open learning material for Hyperspectral remote sen	sing
CB-20-01	Earth Observations Toolkit for Sustainable Cities and Human Settlements Training Webinar	open	2020	2021 Q4	Training focused on the Earth Observations Toolkit for Sustainable (	Ities and
D CB-20-04	Jupyter Notebooks Awareness Webinar	open	2020	2021 Q4	Work with WGISS to provide a Jupyter notebooks awareness webina	r
CB-20-05	Establish the Earth Observation Training, Education, and Capacity Development Network (EOTEC De	evNet) open	2020	2021 Q2	Establish the Earth Observation Training, Education, and Capacity D	evelopment
CB-20-06	Metadata Standards Tiger Team	open	2020	2021 Q4	Selection and definition of metadata standards for the exchange an	d processing



Detailed work defined as *deliverables:* outlined in the WP, reconciled and tracked in <u>CEOS deliverable tracking tool</u>



## CEOS Work Plan Structure



	Chapter in Work Plan	Responsible
1	Climate Monitoring, Research, and Services	WGClimate
2	Carbon Observations in Support of Climate Science and Policy	
3	Observations in Support of the Global Stocktake of the UNFCCC	
4	Observations for Agriculture	
5	Observations for Disasters	WGDisasters
6	Observations for Water	
7	Data Quality	WGCV
8	Capacity Building and Data Democracy	WGCapD
9	Data Discovery, Access, Preservation, Usability and Exploitation: approaches, systems, tools and technologies	WGISS
10	Advancement of the CEOS Virtual Constellations	VCs (includes ARD Oversight Group)
11	Support to Other Key Stakeholder Initiatives	SDG Coordination Group, Biodiversity experts, COVERAGE, COAST AHT
12	CEOS Services	

CEOS WGDisasters-17 Plenary, 15-17 March 2022



## 2021-23 vs 2022-24



	Closed from 2021-23 WP	Carried over from 2021-23 WP	New for 2022-24 WP
Climate Monitoring, Research, and Services	2	3	4
Carbon Observations in Support of Climate Science and Policy	3	10	1
Observations in Support of the Global Stocktake of the UNFCCC	-	-	10
Observations for Agriculture	1	1	3
Observations for Disasters	3	9	4
Observations for Water	0	0	0
Data Quality	5	6	2
Capacity Building and Data Democracy	17	13	14
Data Discovery, Access, Preservation, Usability and Exploitation: approaches, systems, tools and technologies	5	1	6
Advancement of the CEOS Virtual Constellations	8	23	6
c Support to Other Key Stakeholder Initiatives	1	12	2



### Deliverable deadlines



	2022	2023	2024 & beyond
Climate Monitoring, Research, and Services	4	2	1
Carbon Observations in Support of Climate Science and Policy	3	8	0
Observations in Support of the Global Stocktake of the UNFCCC	6	4	0
Observations for Agriculture	3	1	0
Observations for Disasters	5	4	4
Data Quality	6	1	1
Capacity Building and Data Democracy	18	8	1
Data Discovery, Access, Preservation, Usability and Exploitation: approaches, systems, tools and technologies	4	3	0
Advancement of the CEOS Virtual Constellations	19	5	5
Support to Other Key Stakeholder Initiatives	13	1	0
Totals	81	37	12

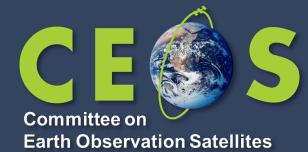


## WGDisasters Deliverables



Number	Objective/Deliverable Title	Projected Completion	Responsible CEOS Entity(ies)
DIS-15-04	Implementation of data coordination for the GEO GSNL initiative	2030 Q4	WGDisasters
DIS-18-01	Report on follow-on actions to Landslide Pilot	2022 Q1	WGDisasters
DIS-19-03	Seismic Demonstrator and Report	2022 Q2	WGDisasters
DIS-20-01	CEOS Contribution to GEO GSNL Initiative for DRR	2024 Q4	WGDisasters WGCapD WGISS
DIS-20-02	GNSL evolution feasibility study	2022 Q4	WGDisasters
DIS-20-03	CEOS Support for GEODARMA (Data Access for Risk Management) Regional Implementation	2022 Q4	WGDisasters
DIS-20-04	Landslide demonstrator showing value of combining optical and radar data for multi and cascading hazard disaster risk prediction and assessment products (maps and models in areas of high known risk due to activity, exposure and vulnerability), with report on effective practices, key data and practices	2024 Q4	WGDisasters
DIS-20-05	RO Demonstrator Proposal (3 to 5 PDNA over two years)	2023 Q4	WGDisasters
DIS-20-06	Flood Pilot with GEO-LEO-SAR for areas of intensive flood risk	2022 Q1	WGDisasters
DIS-22-01	Flood Pilot with GEO-LEO-SAR "Understanding Flood Risk from Space"	2024 Q4	WGDisasters
DIS-22-02	Volcano Demonstrator Sustainability Report	2023 Q4	WGDisasters
DIS-22-03	Use cases for the Operationalization of EO at the local level	2023 Q3	WGDisasters
DIS-22-04	Wildfire Pilot Final Report	2023 Q4	WGDisasters

# Thank you!



Marie-Claire Greening CEOS Executive Officer WGCDisasters-17

15 March 2022