

GEO Priority Engagement Area



GEO DRR Working Group Activities

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**SENDAI
FRAMEWORK
FOR DISASTER RISK REDUCTION**

CEOS WGDisasters-16 Meeting: Virtual Meeting



Thursday September 23, 2021

GEO Disaster Risk Reduction WG

- Purpose

Develop and implement a coherent and crosscutting approach within GEO to advance the use of Earth observations in support of countries' disaster risk reduction and resilience efforts.

- Serve as primary GEO liaison to UNDRR

Promote the dissemination and use of Earth observations to strengthen capabilities to reduce disaster risk according to the needs of countries as identified by UNDRR

- Determine links and actionable opportunities between disaster risk reduction, climate change, SDGs and urban activities

- Promote awareness of relevant global policy frameworks across the WP, to include the ***UN-GGIM WG-Disasters Strategic Framework on Geospatial Information and Services for Disasters***

Visit our renewed website

https://earthobservations.org/drr_wg.php



Disaster Risk Reduction Working Group

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About us

The Group on Earth Observations (GEO) supports efforts to build disaster resilience and Disaster Risk Reduction (DRR). The GEO Work Programme (GWP) is currently implementing more than two dozen activities using Earth Observations (EO) for disaster preparedness and prevention, mitigation of potential damage, and better management of and recovery from disasters. Significant reductions in fatalities and property damage can be achieved by strengthening cooperation and data sharing for satellite and surface data to manage risks posed by fires, floods, earthquakes, and other hazards. Better information, made widely accessible, leads to improved understanding of disaster risk.

GEO's DRR Working Group (DRR-WG) was established in June 2020 to develop and implement a coherent and crosscutting approach within GEO to advance the use of EO to support national DRR and resilience efforts. The DRR-WG promotes awareness of relevant global policy frameworks, such as the [United Nations Office for Disaster Risk Reduction \(UNDRR\) Sendai Framework for Disaster Risk Reduction 2015-2030](#), while serving as the primary GEO liaison to UNDRR. The DRR-WG also collaborates with other working groups and activities across the GEO engagement priorities relating to three international policy areas, namely climate action, sustainable development and urban resilience.

Governance

DRR Working Group Co-chairs and Deputy-chairs

Three co-chairs are selected by and from the DRR-WG members. Each co-chair leads a designated subgroup (SG) and is supported in their role by three deputy chairs.

- GEO DRR WG Co-Chair - SG1 Lead: David Borges, NASA, United States
- SG1 Deputy Chairs: Fernando Belda (Spain), Tatiya Chuentragum (Thailand), Godstime James (Nigeria)
- GEO DRR WG Co-Chair - SG2 Lead: Nathaniel K. Newlands, Agriculture and Agri-Food Canada
- SG2 Deputy Chairs: Abdullahi Aliyu (Nigeria), Nhilce Esquivel (Sweden), John LaBrecque (IUGG)
- GEO DRR WG Co-Chair - SG3 Lead: Kene Onukwube, DEAR Africa, Nigeria
- SG3 Deputy Chairs: Cheila Cullen (United States), Ghulam Rasul (ICIMOD), Ramesh P.

DRR WG Subgroup 1:

Coordination across the GEO Work Programme

SG1 aims to develop and implement a coherent and crosscutting approach within GEO to advance the use of EO to support countries' disaster risk reduction and resilience efforts. SG1 works closely with SG2 and SG3 to understand real requirements at the national level and communicate these requirements to relevant activities within the GWP while:

• Highlighting aspects of the GWP related to DRR, and describe key elements and locations of each activity (*Task 1.1: Development of Joint Engagement Mapping Exercise and dashboard*);

• Promoting sharing of data and knowledge to improve DRR, including through good practices and impact (*Task 1.2: Development of EO Risk Toolkit and GAR Contributing Papers*); and

• Promoting awareness of relevant global policy frameworks across the GWP, such as UN-GGIM WG-Disasters Strategic Framework on Geospatial Information and Services (*Task 1.3: Outreach and engagement events/meetings*).

Survey for CC, DRR, and CD Activities in GEO

This survey is to be filled out by a core team composed of CC-WG, DRR-WG and CD-WG experts on the basis of available information (e.g., Implementation Plans) as well as consultations with GEO Work Programme leads (to be planned). The resulting outcomes (pre-filled answers) will then be circulated to the GEO Work Programme Leads.

Section 1: GEO WP Activity and Point(s) of Contact

Please provide the participant information requested below.

Name
Please enter your name(s).

Last Name
Please enter your last name(s).

Email
Please enter your email address.

– Section 2: Scope and Area of Impact

– Section 3: Climate Change

– Section 4: Disaster Risk Reduction

– Section 5: Capacity Development

– Section 6: Further Information

Submit

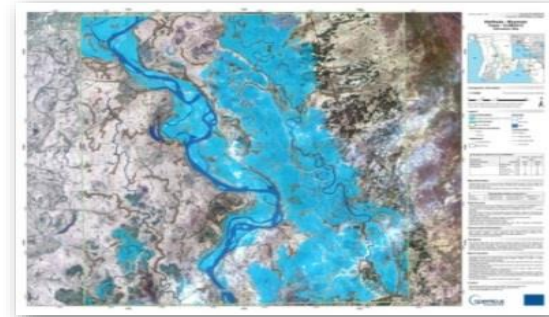
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DRR WG Subgroup 2:

UNDRR Coordination for Sendai Framework Priorities

SG2 leverages the efforts of SG1 and uses the combined resources of SG2 to promote the dissemination and use of EO to strengthen disaster risk reduction capabilities according to country needs as identified by UNDRR. Serving as primary GEO liaison to UNDRR, SG2 works towards:

- ✓ Increasing the use of EO data for local and national DRR strategies (*Task 2.1: Assessment of EO descriptions in DRR strategies of GEO member countries*); (*Task 2.2: Policy briefs and use cases on the use EO to create disaster loss data for DRR strategies and for reporting on the Sendai Monitor Global Indicators [via EO4Sendai-Monitoring]*); (*Task 2.3: Development and implementation of EO-leveraged data collection tools to visualize vulnerability and exposure to be used in DRR strategies*);
- ✓ Increasing the use of GNSS-enhanced EO data through consortia (*Task 2.4: GAR Contribution Paper, policy briefs and new partnerships with ITU [via GEODESY4Sendai]*); and
- ✓ Increasing the use of EO data to show trends over time and hot spots while predicting and analyzing future risks (*Task 2.5: Use cases and workshops [via GSNL]*).



Credit: Copernicus

DRR WG Subgroup 3:

Climate Change and SDG Coordination

SG3 leverages SG1 efforts to provide an overview of links, and actionable opportunities, between disaster risk reduction, climate change, SDGs, and urban activities. Serve as primary link to CC-WG, SDG and Urban related activities, SG3 is working on:

- ✓ Developing EO-links between DRR, Climate Change and SDGs, notably for adaptation, early warning and resilience (*Task 3.1: Policy briefs on EO use in handling various types of natural hazards, such as landslides, wildfire and snow melt*) (*Task 3.2: Compendium with collection of texts and references on EO's role in SDG targets and indicators in relation to the SFDRR and the Paris Agreement [in collaboration with [HPI](#), [EO4SDG](#) etc.].*)



Source: [Climate risks and related impacts](#)

GEO Work Programme (GWP) Mapping

- Aim to identify potential disconnect and synergy opportunities among GWP activities to meet policy needs while contributing to next GWP

- GEO Cross-WG effort among CC, DRR, Capacity Development since the end of 2020

- Technical support from ESRI (Pat Cummins) and AmeriGEO (America Alvarez)

- 6 sections: 1) GEO WP activity identification, 2) scope and area of impact, 3) CC, 4) DRR, 5) CapD, 6) additional feedback

- 11 questions on DRR

- Officially launched on 31 August through invitations to GEO WP leads (initial deadline 10 Sept)



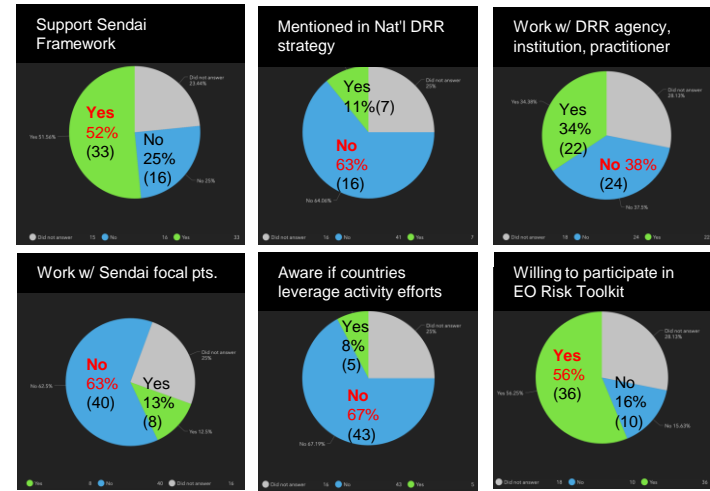
GWP Mapping – initial results on DRR

Strength: alignment with SFDRR priorities for action

Weakness: existing coordination/collaboration with DRR users → *need to ensure Toolkit helps match EO-tech "seeds" with user "needs"*

GWP Activities' Alignment with or Support for UNDRR Sendai Framework Priorities for Action

	Understanding Disaster Risk	Strengthening governance & management of DR	Investing in DR for resilience	Enhancing disaster preparedness for effective response, recovery, rehabilitation and reconstruction
Total	30	14	7	23
Flagship	0	0	1	1
Initiative	12	6	3	7
Regional GEO	3	2	0	2
CA	15	6	3	13



GEO Work Programme (GWP) Mapping

Initial observations

of completed responses: 46
out of 64 (good!)

Establishment of baseline

GEO Work Programme link to
policy: needs improvement

Survey results will help guide
activities of Cross-GEO
Working Groups (such as this
workshop)



Next steps

- Continue mapping: open-ended process (second deadline for submissions/updates tbd)
- Gaps report to PB in 2022 to inform call for proposals for next GEO WP
- Dashboard to be hosted on GEO website

Implications for CEOS WG Disasters

Please add more details to GWP Mapping (i.e. scope and area of impact, regions, subregions, countries, local/municipality, relevant SFDRR indicators, names of partner DRR practitioners/institutions/agencies, ways of being mentioned in National DRR strategies...) and respond to follow-up work with us while continue updating info on:

- GEO-DARMA
- GSNL
- GWIS? (input from Wildfire Pilot?)
- EO4DRM (input from all other pilots and demonstrators)

Please join us for the GEO Week 2021 (Nov 22-26): i.e. Plenary Session 3, side event organized by GEO DRR-WG, and the Youth Track

For more information, please visit <https://www.earthobservations.org/geoweeek2021.php>

**GEO Priority Engagement
Area**



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Thank You!

Collaborate and communicate with GEO:

