



GEO Disaster Risk Reduction WG

UN-GGIM WG-Disasters June Meeting

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16 JUNE 2021

www.earthobservations.org
www.geoportal.org

Group on Earth Observations (GEO)

GEO is an international partnership of more than 100 national governments and in excess of 100 Participating Organizations working towards a future where decisions and actions for the benefit of humankind are informed by coordinated, comprehensive and sustained Earth observations.



UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan

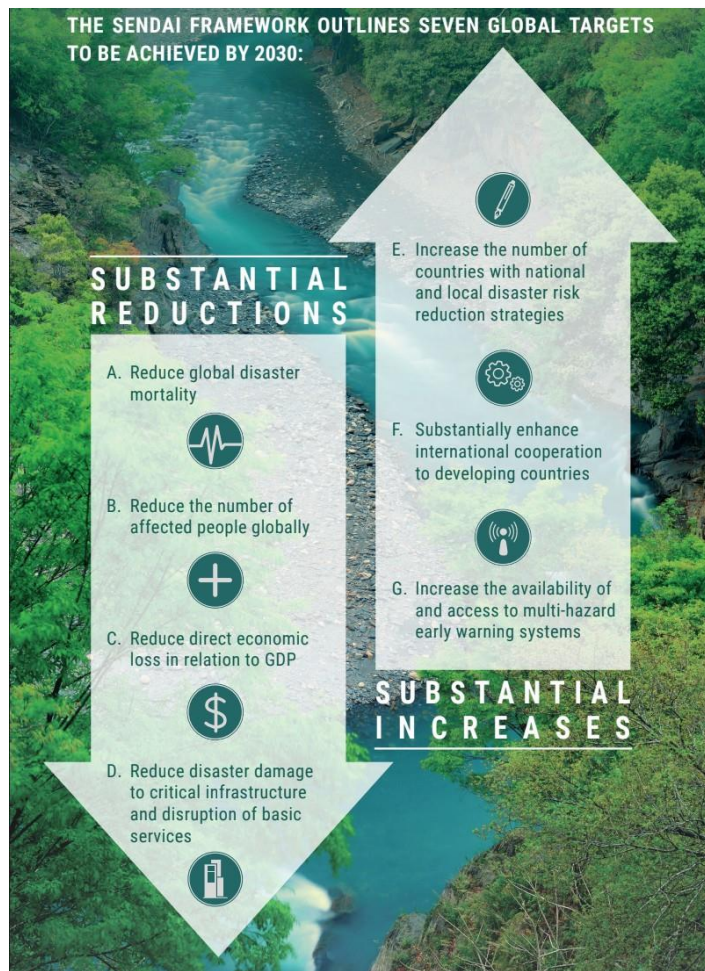


PARIS2015
CONFÉRENCE DES NATIONS UNIES
SUR LES CHANGEMENTS CLIMATIQUES
COP21-CMP11

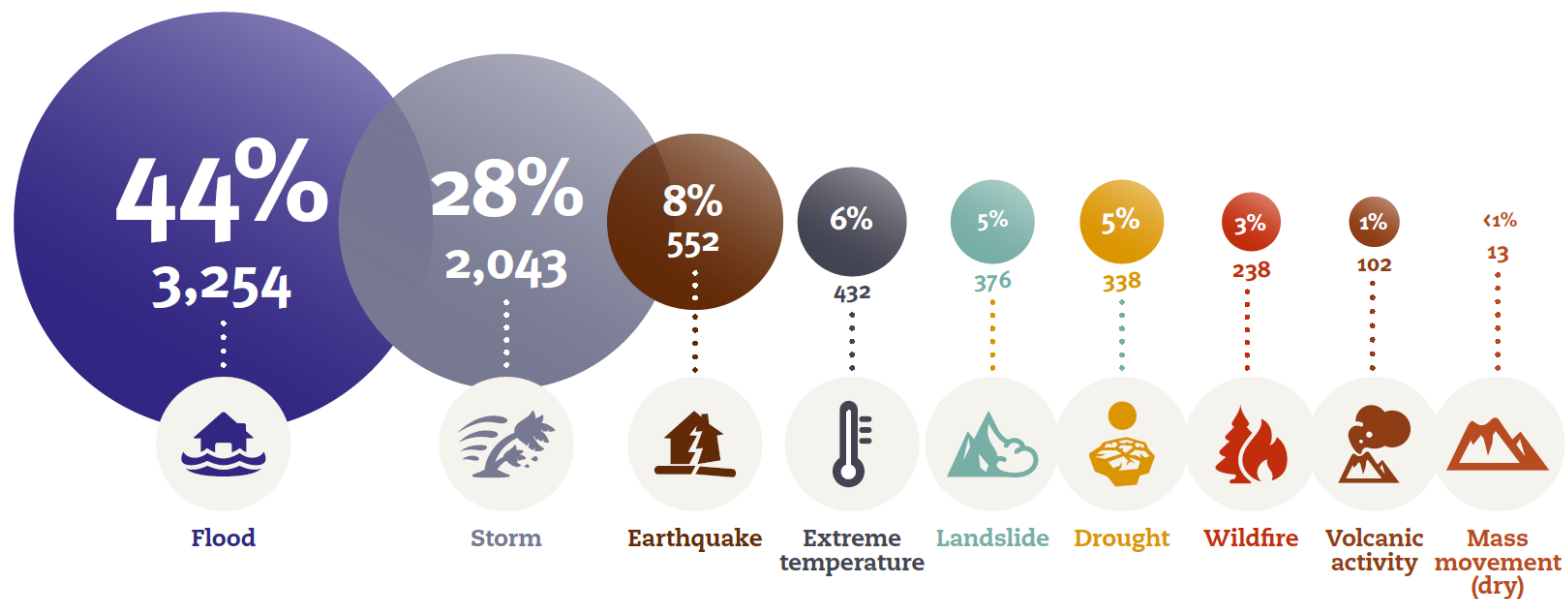
About us

UNDRR Sendai Framework for Disaster Risk Reduction 2015-2030

Promote and increase use of Earth observations to address disaster risk reduction efforts and achieve Global Targets.



Percentage of occurrences of disasters by disaster type (2000-2019)



2020 – 2022 GEO Work Programme

GEO Flagships

GEO Biodiversity Observation Network	GEO Global Agricultural Monitoring	Global Forest Observation Initiative	Global Observation System for Mercury
GEO BON	GEOGLAM	GFOI	GOS4M

GEO Initiatives

AquaWatch	Data Access for Risk Management	Data Integration and Analysis System	Earth Observations for Ecosystem Accounting	Earth Observations for Health	Earth Observations for the Sustainable Development Goals
AQUAWATCH	GEO-DARMA	DIAS	EO4EA	EO4HEALTH	EO4SDG
GEO Capacity Building in North Africa, Middle East, Balkans and Black Sea Region	GEO Global Water Sustainability	GEO Human Planet	GEO Land Degradation Neutrality	GEO Vision for Energy	GEO Wetlands
GEO-CRADLE	GEOGLOWS	HUMAN-PLANET	GEO-LDN	GEO-VENER	GEO-WETLANDS
Geohazard Superlaties and Natural Laboratories	Global Drought Information System	Global Network for Observations and Information in Mountain Environments	Global Observation System for Persistent Organic Pollutants	Global Urban Observation and Information	Global Wildfire Information System
GSNL	GDIS	GEO-MOUNTAINS	GOS4POPS	GUOI	GWIS
Oceans and Society: Blue Planet					
BLUE-PLANET					

GEO Community Activities

Advancing Communication Infrastructure and Services	Arctic GEOSS	Chinese High-resolution Satellite Data Resources	Climate Observation, Simulation and Impacts	Copernicus Atmosphere Monitoring Service	Copernicus Climate Change Service
ACIS	ARCTIC-GEOSS	CSDR	CLIMATE-OBS	CAMS	C3S
Digital Earth Africa	Earth Observation and Copernicus in support of Sendai Monitoring	Earth Observation Industrial Innovation Platform for Sustainable Development	Earth Observations for Disaster Risk Management	Earth Observations for Managing Mineral and Non-Renewable Energy Resources	Earth Observations for the Atlantic Region
DE-AFRICA	EO4SENDAI-MONITORING	EO-IIP	EO4DRM	EO4MIN	ATLANTIC-EO
Earth Observations for the Water-Energy-Food Nexus	Enhancing Food Security in African Agricultural Systems with the Support of Remote Sensing	GEO Citizen Science	GEO Essential Variables	GEO Global Ecosystems	Geodesy for the Sendai Framework
EO4WEF	AFRICULTURES	GEO-CITSCI	GEO-EV	GEO-ECO	GEODESY4SENDAI
Global Agricultural Drought Monitoring	Global Crop Pest and Disease Habitat Monitoring and Risk Forecasting	Global Ecosystems and Environment Observation Analysis Research Cooperation	Global Flood Awareness System	Global Flood Risk Monitoring	Global Land Cover
AGRI-DROUGHT	CROP-PEST-MONITORING	GEOARC	GLOFAS	GFRM	LAND-COVER
Global Observation of Deltas and Estuaries	In-Situ Observations and Applications for Ecosystem Status of China and Central Asia	Multi-source Synergized Quantitative Remote Sensing Products and Services	Next Generation Earth Observation Services	Night-Time Light Remote Sensing for Sustainable Development Goals	Open Earth Alliance
DELTA-ESTUARY	IN-SITU-ESC	MUSYQ	NEXT-EOS	NIGHT-LIGHT	OEa
Space and Security	Space Climate Observatory	The International Grand Global Ensemble	Understanding the Impacts and Value of Earth Observations		
SPACE-SECURITY	SCO	TIGGE	GEO-VALUE		

Regional GEOs

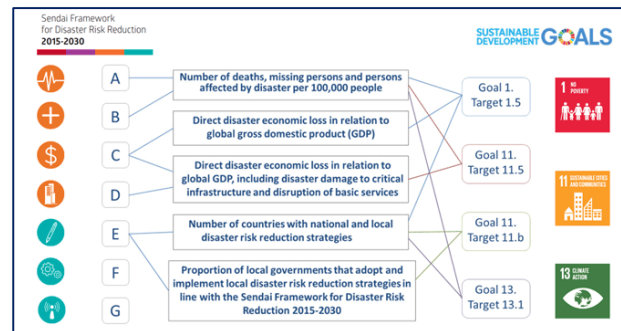
African Group on Earth Observations	Americas Group on Earth Observations	Asia-Oceania Group on Earth Observations	European Group on Earth Observations
AFRIGEO	AMERIGEO	AOGEO	EUROGEO

Foundational Tasks

GEO Engagement Priorities Coordination	GEOSS Data, Information and Knowledge Resources	GEOSS Infrastructure Development	GEO Work Programme Support	GEO Secretariat Operations
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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, such as ***UN-GGIM WG-Disasters Strategic Framework on Geospatial Information and Services for Disasters***



DRR WG Subgroup 1:

Coordination across the GEO Work Programme



- Focus Areas
 - Foster participation of stakeholders in GEO (DRR) initiatives
 - Promote, including through good practice, sharing of data and knowledge to improve use of EO in DRR
 - Enable discussion and communication on disaster-related activities across the GEO Work Programme

DRR WG Subgroup 1:

Coordination across the GEO Work Programme

- In Progress
 - Joint Survey of DRR, Climate Change, Capacity Development Activities across the GEO Work Programme
 - Earth Observation Risk Toolkit, in development
 - Outreach / Engagement
 - UN-GGIM WG-Disasters, Inter-Agency and Expert Group on Disaster-related Statistics (IAEG-DRS)
 - Meeting Organization / Representation
 - Ex: Understanding Risk Forum, Geospatial World Forum

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

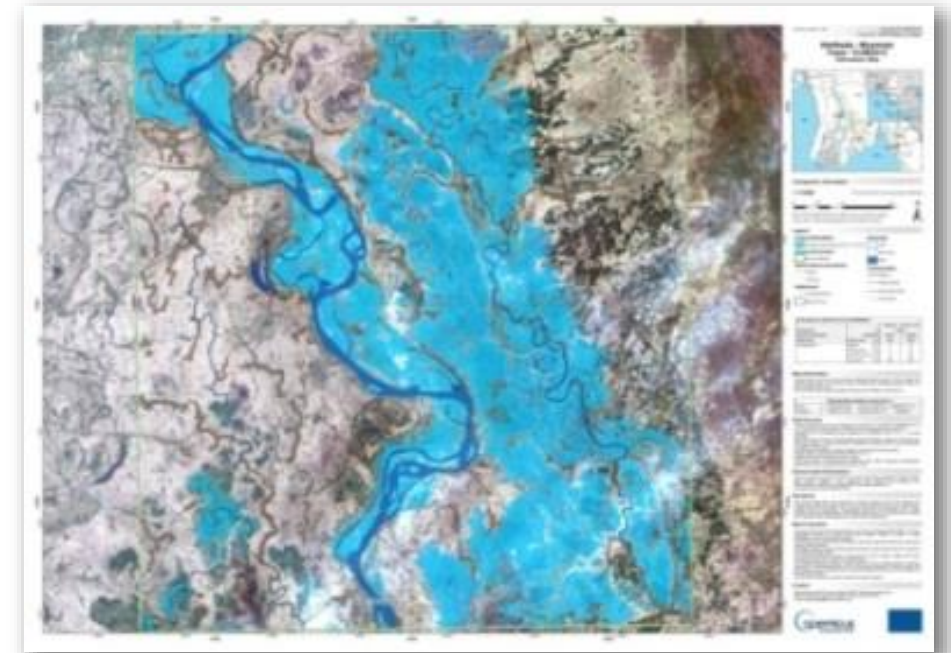
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DRR WG Subgroup 2:

UNDRR Coordination for Sendai Framework Priorities

- Focus Areas
 - Increase the use of EO data by national Sendai Framework Focal Point authorities for Global Target E (national & local DRR strategies)
 - Show how EO can be used to describe and visualize vulnerability and exposure.
 - Promote the use of EO to predict and analyze future risk trends and map hot spots.



Credit: Copernicus

DRR WG Subgroup 2:

UNDRR Coordination for Sendai Framework Priorities

In Progress

Activity 1

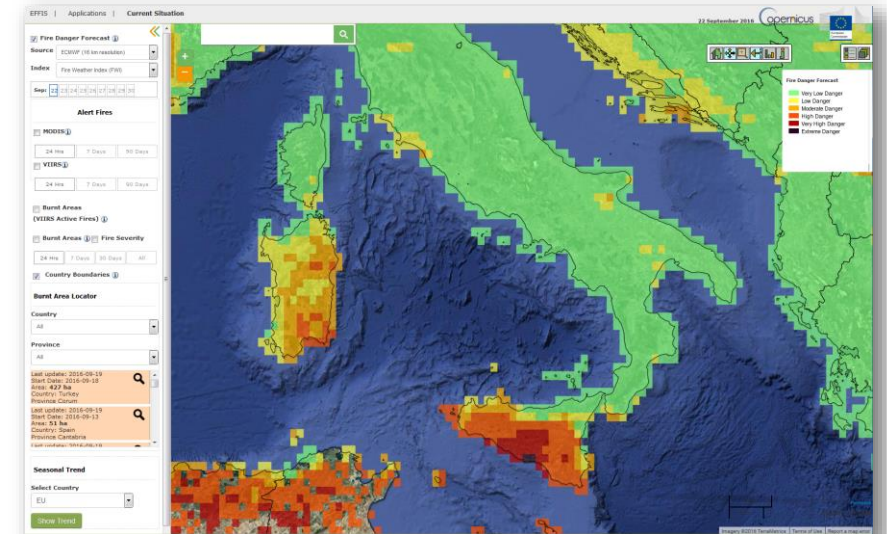
- Policy Brief on how EO can aid in creating disaster loss data for use in DRR strategies
- Assess current state of how GEO members use EO data for DRR (survey in collaboration with SG1)

Activity 2

- Collaboration with GEODESY4Sendai to create consortia with data for DRR and a means of distributing.

Activity 3

- UN Global Assessment Report 2022 Contributing Paper (in collaboration with SG1)



Credit: Copernicus

To be Started Later

Activity 4

- Examples and workshop on EO for analysis of risk trends and hot spots.

Events of Note

- First Expert Forum for Producers and Users of Disaster-related Statistics, IAEG-DRS; 7 – 10 June 2021
- GEO Virtual Symposium 2021; 21 – 24 June 2021
 - Many thanks to Simone Lloyd for presenting update on GGIM WG-D!
- AmeriGEO Week: DRR & Resilience Session Call for Abstracts
 - Aguascalientes Declaration
- OGC Disaster Pilot 2021: Workshop #1; 14 – 15 July 2021

- GEO Participating Organization recognized as the space-based Earth observation authority.
- Mechanism to coordinate civil space-based EO programmes globally and promote data exchange for society's benefit, and to inform decision-making to secure a prosperous and sustainable future for humankind.
 - 35 National Space Agency Members
 - 25 Associate Members



- *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.*
- Membership open to all CEOS Agencies (Members and Associates). In addition, the WG includes experts from non-CEOS Agencies who have relevant experience to contribute to the objectives of the WGDisasters.





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