



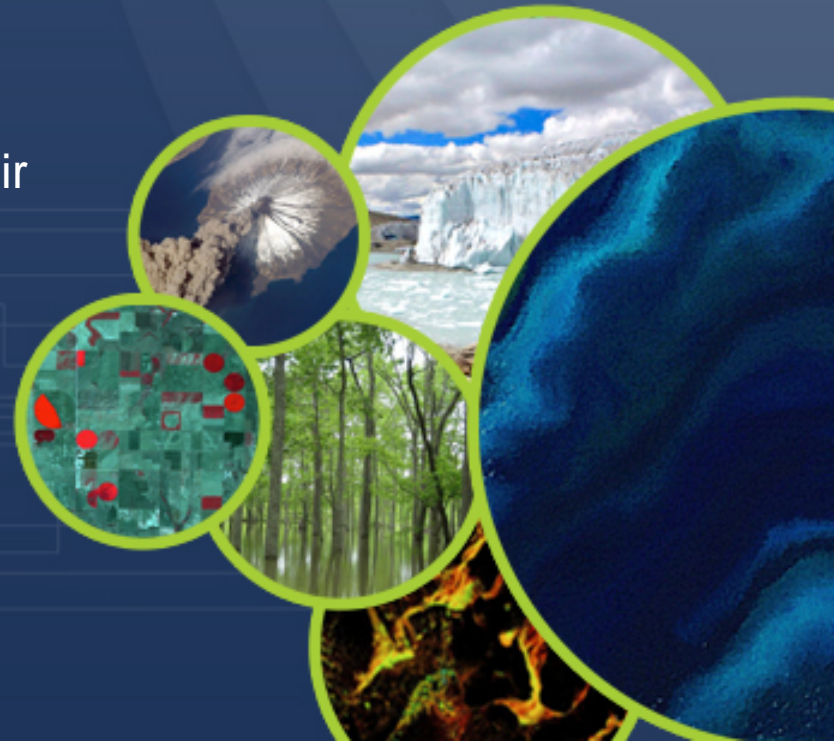
Committee on Earth Observation Satellites

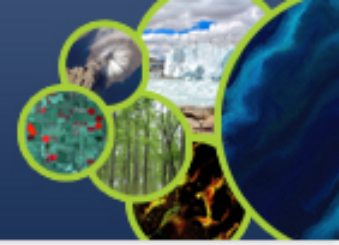
WG Disasters Workplan

Simona Zoffoli, ASI, WG Disasters Chair

David Green, NASA, WG Disasters Vice-Chair

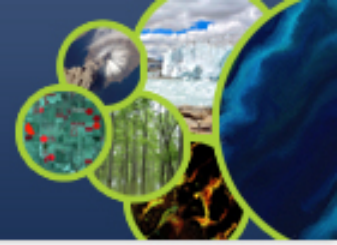
Andrew Eddy, WG Disasters Secretary





- **WG Disasters: 9 deliverables related to the main initiatives**
 - **GEO Initiatives**
 - GSNL, DIS-10 Data coordination for GSNL (Q4 2020)
 - GEODARMA, DIS-15, Ident. of DRM priorities (Q2 2019) / **CLOSED**
 - **CEOS WG Disasters DRM Initiatives**
 - Landslide Pilot, DIS-16, Final report
 - Recovery Observatory, DIS-12 (Q3 2019, early evaluation)
 - Recovery Observatory, DIS-22 (Q1 2021, final rep.)
 - Volcano Demonstrator, DIS-18 (Q4 2021 /annual report)
 - Seismic Demonstrator, DIS-21 (Q1 2020 report)
 - **CEOS WG Disasters Cross-cutting Initiatives**
 - GeoHazards Lab, DIS-19 (e-collaboration, Q3 2019) / **CLOSED**
 - DIS-20 (Q1 2020 standardization)
- **WG Disasters has no open SIT and Plenary actions.**
- **All deliverables running as planned, one year extension agreed for Landslide Pilot**

- On Sept. 11, CEOS CEO requested WG Disasters Chair to provide progress reports on all WG Disasters deliverables by Sept., 30.
- Updated information provided timely by all the leaders and uploaded on the CEOS deliverable System by the WG Disasters Chair
- All deliverables running as planned
- One year extension agreed for Landslide Pilot
- 2 deliverables have been closed (see next slides)
- Need to review the deliverables list (i.e. Geodarma, Seismic demo, Geohazard Lab, ...) in view of the next workplan.



Objective/Deliverable	Projected Completion Date	Background Information	Status
DIS-10: Implementation of data coordination for the GEO-GNSL initiative	Q4 2020	<p>Potential proposals for new GSNL activities (i.e. new permanent & event Supersites) aiming at expanding the objectives of the current pilots will be assessed by the Data Coordination Team and the various pilot teams in due time. The assessment will be done by WG Disasters following the procedures endorsed by CEOS.</p> <p>The status of implementation of the plan, of the pilots and supersites being supported, and the coordination relating to the GSNL initiative will be reported at CEOS SIT and Plenary meetings.</p>	<p>CEOS contribution to GEO GSNL initiative proceeds smoothly. ASI, DLR, CNES, CSA continue to support the Supersites with imagery. ESA supports the initiative providing data archiving and processing capacities through the Geohazard Exploitation Platform. There are currently 11 Supersites worldwide. One proposal from Peru is still under evaluation. One proposal for an earthquake Supersite in China has been received September 15, 2019 and is now under evaluation. Continues the reporting from the Supersites, biennial reports from the Hawaii, Enceladus (GR), Taupo (NZ), Ecuador, and San Andreas Fault Supersites have been received and positively evaluated by WGDDisasters Data Coordination Team. Agencies defined the image quotas available for each Supersite. For some of them image delivery has started. Supersite activities have also been reported by GSNL Chair at WG Disaster telecons and meetings. Coordination between GSNL and the Pilots has been put in place to avoid duplication of requests</p>

DIS-10-2019-3 Establishment of new Supersites in 2019

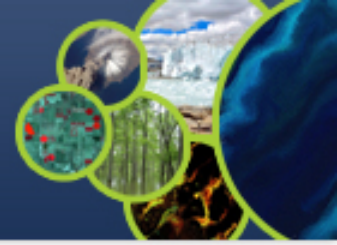
Only one new Supersite proposal received in 2019, for a volcanic/seismic area in Peru, but the proposal is still under evaluation and the Supersite has not been established yet

DIS-10-2019-2 Delivery of Supersite biennial reports for 2019

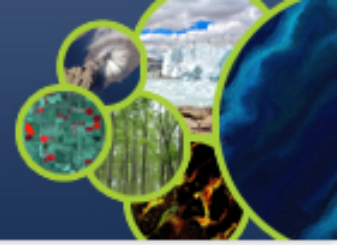
Biennial reports from the Hawaii, Enceladus (GR), Taupo (NZ), Ecuador, and San Andreas Fault Supersites have been received and positively evaluated by WGDDisasters Data Coordination Team

DIS-10-2019-1 Delivery of San Andreas Fault NL biennial report for 2019

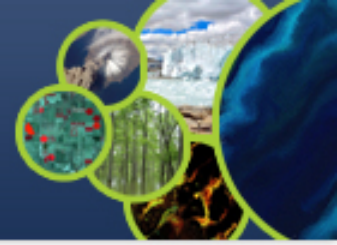
The report has been delivered



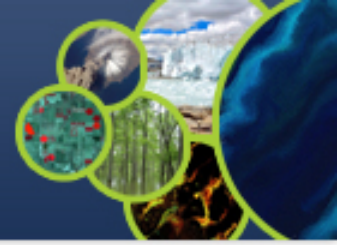
<p>DIS-12: Report on Haiti RO Early Evaluation by local users and international organizations</p>	<p>Q3 2019</p>	<p>WGDisasters will develop a survey of initial results of the Recovery Observatory from the perspective of institutional donors, and include outlooks on possible inclusion of additional hazards and the sustainability of Recovery Observatory activities for 2018 onwards.</p> <p>The findings of this survey will be presented in a lessons learned report in mid 2019 (after 3rd Series of User Workshops) to enable timely consideration by CEOS Agencies.</p>	<p>In March 2019, CNES contracted with AG Europe SAS to conduct a survey of local and international users and partners, as well as to perform a critical review of progress against objectives and to interview members of the RO Steering Committee. The draft report was reviewed by CNES and Steering Committee members in August and the final report is now complete and being translated into English. The review concludes that most of the initial objectives of the RO have been completed or partially completed. In addition, the RO has created solid long-term relationships with key Haitian stakeholders and is working on legacy strategies to ensure that the key successes are sustainable.</p>
<p>DIS-15: Support for GEO-DARMA identification of major hazards and DRR issues for each selected region</p> <p style="color: red; text-align: center;">CLOSED</p>	<p>Q2 2019</p>	<p>GEO-DARMA will seek independent identification of disaster risk management priorities at regional level by authoritative regional institutions in line with the priorities from the Sendai Framework for Disaster Risk Reduction 2015-2030.</p> <p>This task will require the active support of major stakeholders in the field of disaster risk management at global, regional and national levels in order to implement a series of pilot projects.</p>	<p>The regional assessment summaries for Africa and Asia were completed in 2018. The final assessment summary for the Latin America and Caribbean region was delayed due to the slow engagement process with the regional organizations. This process was accelerated after further outreach by the GEO-DARMA team and during the Global Platform in May 2019 in Geneva, with the support of the UNDRR Americas office, new partners were brought on board, including the Andean Community and CEPREDANAC. A draft regional assessment has been prepared, closely tied to the Regional Action Plan for Sendai Implementation, and this strategy was presented at the AmeriGEO meeting in Lima Peru in August 2019. It is expected to be ratified shortly, completing the regional assessment process. Now that assessments are complete, project proposals are being developed in each of the regions, in line with the regional assessments.</p>



<p>DIS-16: Report on Landslide Pilot and follow-on actions.</p>	<p>Q4 2020</p>	<p>A report will be prepared to summarize the learnings from the landslide pilot, and to recommend pathways forward.</p>	<p>The pilot has been extended by 1 year to fulfill the quota allocated by CEOS members and ensure that the pilot members have time to work with the data and produce some more results by the end of the pilot.</p> <p>A report is in progress to summarize case studies, lessons learned, and recommended pathways forward for the landslide pilot. A companion peer-reviewed publication is also being prepared to characterize the current state of remote sensing monitoring, mapping and modeling opportunities for landslide hazards based on lessons learned and activities from the pilot.</p>
<p>DIS-18: Volcano Demonstrator Reports</p>	<p>Q4 2021</p>	<p>Three annual reports (2019 preliminary, 2020 progress and 2021 final) will be generated by the Volcano Demonstrator</p>	<p>In 2019 Volcano demonstrator team focused on expanding from the Volcano Pilot's focus on Latin American volcanoes to encompass both Africa and SE Asia in the Demonstrator. The team also released the Volcano Demonstrator implementation Plan. The number of volcanoes with a recent eruption or episode of unrest spanned by the demonstrator will increase by a factor of three, and the team focused on involving more scientists from SE Asia in the projects and expanding their networks to include volcano observatories in this region. The team will hold a teleconference in mid-October to encourage participation in the Volcano Demonstrator. They are also developing a strategy to coordinate and optimize the use of the X-band SAR imagery available through the CEOS Volcano Demonstrator, in the context of recently available global Sentinel-1 imagery and automatic processing projects. This work is informed by the results of the Powell Centre Volcano Working Group.</p>



<p>DIS-19: Expanding the use of EO data for monitoring, measuring and understanding disasters</p> <p style="text-align: center;">CLOSED</p>	<p>Q3 2019</p>	<p>Develop e-collaboration with EO practitioners to promote further utilisation of CEOS data</p>	<p>Brochure prepared and disseminated on how the Geohazards Exploitation Platform supports users from the geohazards community with cloud-based EO services</p> <p>Terrain Motion Demo made available on GEP https://geohazards-tep.eu/geobrowser/?id=terrainmotion_demo</p> <p>SNAP Cosmo-SkyMed service: first service able to process Cosmo-Skymed data made available on GEP (under testing)</p> <p>Sentinel-1 P-SBAS service (CNR-IREA) is available on the Geohazards Exploitation Platform. The service was tested over several pilot sites and updates have been implemented to the new version.</p> <p>Open dialogue on benchmarking activities for geohazards monitoring using online processing optical and SAR services organised in the frame of the MDIS 2019 Workshop</p> <p>Presentation: Geohazards Exploitation Platform presented at IGARSS conference in Japan (July 2019), SNAP-StaMPS service presented at Φ-week at ESRIN, Italy (September 2019)</p>
<p>DIS-20: Pursue the standardization of geohazards EO-products</p>	<p>Q1 2020</p>	<p>Identify a framework for standardization of geohazards related EO-products to achieve acceptance by the EO community and decision makers</p>	<p>2nd GLab meeting organised during LPS 2019</p> <p>Survey focusing on EO products and formats to be circulated among geoscience centres within Q4 2019</p>



DIS-21: Deliver and report on the results of the Seismic Demonstrator

Q1 2020

Deliver and report on the results of the period Q3 2018-Q4 2019, including report on the newly-reached geoscience centers and end users supported by the Demonstrator.

New users (University of Oxford (UK) and IPGP (France)) expressed interest to participate in the Demonstrator. First results with Pleiades data provided to University of Leeds will be presented at the 12th CEOS WG Disasters: 1) over Central Asia, to address the UN sustainable cities and communities global challenge by improving our understanding of earthquake hazard for three major cities along the northern Tien Shan mountains in Kyrgyzstan and Kazakhstan that have been struck by huge earthquakes in the past; 2) over Palu, to assess the potential of Pleiades for deriving the Palu fault rupture offsets through both the urban city and rural environment.

Work is on going (EO products to be made available within 2019) with Pleiades data provided to University of Leeds for Ecuador and Nepal, to support the GSRF Hubs, aiming to derive models of multi-hazard risk to inform urban development planning.

Results on mapping the faults of 2019 California earthquakes jointly using the Copernicus Sentinel-1 & 2 data by the Corinth Rift Laboratory (supported by the CEOS GLab, as part of the results were generated using SNAP toolbox and DIAPASON service on GEP). were published here:
<https://eo4society.esa.int/2019/07/30/mapping-the-faults-of-2019-california-earthquakes-with-sentinel-1-2/>.



<p>DIS-22: Final Haiti RO Report</p>	<p>Q1 2021</p>	<p>Final report on Haiti RO results</p>	<p>The RO made significant progress in 2019, with a second local user workshop being held to reach out to local users, and a third national workshop. The workshops were the opportunity to review products generated by the RO team with end users and to define the strategy for long-term sustainability of elements that are working well. In particular linkages were identified with World Bank projects that could use RO methodologies, and the capacity building plan for 2019-2020 was approved, including training on SAR processing for Haitian colleagues provided by ASI. The due date for the final report has been moved to Q4 2020 in order to allow the RO team to report to the 2020 plenary.</p>
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