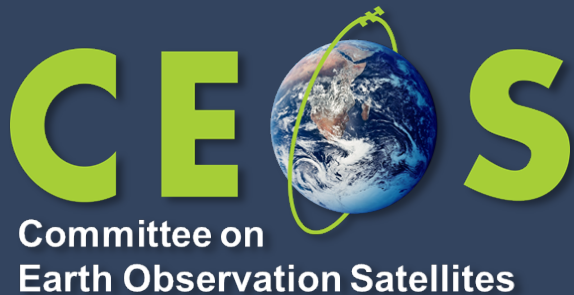


WGDisasters 24

*Agency Updates –
Italian Space Agency (ASI)
contribution*



Antonio Montuori, ASI
WGDisasters-24
Bariloche, Argentina
30 Sept - 2 Oct 2025

❖ COSMO-SkyMed:

- **CSK-3 deorbiting procedure started on May 2022**
- **CSG-2 is operational.**

Now, on the same orbit, 3 CSK + 2 CSG

- **CSG mission will be upgraded with third and fourth satellites CSG**
 - **CSG-3 launch expected by the end of 2025**
 - **CSG-4 launch expected by the end of 2026**

❖ An “Open Call for Science” on the use of CSK and CSG data is available on the ASI website:

https://www.asi.it/bandi_e_concorsi/open-call-for-science-data-utilization-of-the-cosmo-skymed-mission-first-and-second-generation-english-version/

- The main objectives of the Call include the scientific research promotion and the development of new methods and algorithms to achieve new SAR applications, as well as the improvement of applications based on X-band (SAR) products of COSMO-SkyMed Constellation.
- A New Committee has been recently appointed by the ASI to manage the COSMO-SkyMed Open Call, namely Deodato Tapete as PoC, Maria Elena Cianfanelli and Antonio Montuori as Members.
- E-mail contact: csk.science@asi.it

❖ **ASI updates on COSMO-SkyMed data delivery for GSNL Supersites**

- Starting from April 2025, COSMO-SkyMed data requested for GSNL Supersite projects will be delivered via conventional ASI FTP and further delivered, archived and made available through a dedicated ASI server, available at the following link <https://192.106.234.150/cgi-bin/> .
The access is allowed only to Supersite users and only to the Supersite project for which users have signed the COSMO-SkyMed license to use.
- ASI deeply thanks ESA for having hosted COSMO-SkyMed data on GEP Platform in support to GSNL projects and for all the cooperation provided during these years.
- ASI also thanks Terradue colleagues for the precious support and availability provided up to now in the use/access of the platform towards ASI, WGDIsasters and Supersite users.

- ❖ **PRISMA is operating nominally** (<https://prisma.asi.it/>).
- ❖ **PRISMA SG Phase A activity concluded. B/C/D/E1 contracts KO planned in 2025**
- ❖ **Since 20 July 2021, ASI has been started the provision of SAOCOM data within the ASI ZoE:** <https://www.asi.it/en/2021/07/asi-starts-the-exploitation-phase-of-data-acquired-in-europe-by-the-l-band-sar-sensors-of-the-argentinean-saocom-constellation/>. For accessing the products it is sufficient to download the [SAOCOM Registration Data Package](#) and submit via email a registration request. SAOCOM data will be accessed and disseminated through a dedicated [ASI SAOCOM portal](#).
- ❖ **ASI cooperation with other CEOS WGs:**
 - [WG on CalVal](#): ASI PoC Antonio Montuori
 - [WGISS](#): ASI PoC Antonio Montuori
 - [WGCapD](#): ASI PoC Luisa Santoro

- **LAGEOS-2** (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=238>):
 - **Instrument:** Laser Retroreflector Array
 - **Measurements:** Gravity field, Gravity gradients, Crustal plates positioning, Crustal Motion
- **LARES** (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=19>):
LARES-2 (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=968>)
 - **Instrument:** Laser Corner Cube Reflector Assembly
 - **Measurements:** Gravity field, Gravity gradients, Crustal plates positioning, Crustal Motion
- **PLT-1** (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=1282>)
 - **Instrument:** Synthetic Aperture Radar
 - **Measurements:** Land, multi-purpose imager
- **PLT-2** (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=1283>)
 - **Instrument:** Multi-Angle Imager for Aerosol (MAIA)
 - **Measurements:** Aerosol
- **SBG-TIR** (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=975>)
 - **Instrument:** OTTER (Thermal multispectral), VNIR Camera
 - **Measurements:** Land and ocean surface imagery

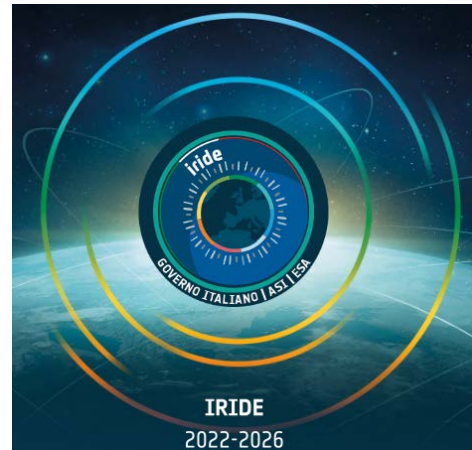


- **CSES** (<http://database.eohandbook.com/database/missionsummary.aspx?missionID=849>):
 - **Instruments:** High Energy Particle Detector, Electric Field Detector
 - **Measurements:** Electron Energy and Pitch Angle Distribution, Electric Field
- **LAGEOS-1**
(<http://database.eohandbook.com/database/missionsummary.aspx?missionID=201>):
 - **Instrument:** Laser Retroreflector Array
 - **Measurements:** Gravity field, Gravity gradients, Crustal plates positioning, Crustal Motion
- **NORDSAT-TD**
(<http://database.eohandbook.com/database/missionsummary.aspx?missionID=1012>):
 - **Instrument:** CORA-micro
 - **Measurements:** VHF Data Exchange maritime communication
- **SAOCOM**
(<http://database.eohandbook.com/database/missionsummary.aspx?missionID=405>):
 - **Instrument:** Synthetic Aperture Radar
 - **Measurements:** Land, multi-purpose imager

IRIDE system



- ❖ Europe's foremost EO space programs, initiated by the Italian Government, coordinated by ESA in collaboration with ASI with PNRR resources along with CNP funding. **Expected both to achieve full operational capability and ASI lead by June 2026.**
- ❖ Constellations of satellites in Low Earth Orbit (LEO) (**Upstream**), ground operational infrastructure (**Downstream**), and services for the Italian PA (**Services**).
- ❖ Geospatial services for each application domain:
 - Coasts
 - Air quality
 - Land motion
 - Land cover
 - Hydro-Meteo-Climate
 - Water resources
 - Society
 - Emergency
 - Security



<https://indd.adobe.com/view/189e6abd-0804-4430-b6a5-79a89f56f347>

❖ **EGU 2026 (3-8 May 2025, Wien, Austria): NH6.1 ORAL-POSTER Session** «Application of remote sensing and Earth-observation data in natural hazard and risk studies» (**PROPOSAL SUBMITTED**)

- Session short summary: *The session is dedicated to multidisciplinary contributions focused on benefit of EO use for natural hazard and risk management, including e.g. Hazard/risk forecasting models; Rapid hazard/vulnerability/risk mapping, post-disaster recovery; Tools to assess/validate hazard & risk models. We encourage contributions from early-stage researchers and international collaborations, such as CEOS and GEO.*
- Conveners: M. Parks, A. Montuori, M. Niculita, E. Straffelini, V. Drouin

❖ **ASI Session contributions on Disasters to National workshops:**

- XII AIT International Conference / 12-13-14 November / Milan on “Smart Earth Observation for a Sustainable Future”
 - *Special Session S1: Challenges and opportunities of remote sensing for climate change Elena Candigliota (ENEA, Bologna)*
 - *Conveners: Maria Virelli (ASI, Roma), Deodato Tapete (ASI, Roma)*

I4DP_SCIENCE & I4DP_PA results & perspectives



3 days of workshops & national user community consultation held at ASI HQs in Rome, 27-29 May 2025

All presentations and video-recordings available on the website

I4DP_SCIENCE

https://www.asi.it/2025/06/i4dp_science-risultati-e-prospettive-per-il-downstream-scientifico-nazionale/

I4DP_PA

https://www.asi.it/2025/06/i4dp_pa-risultati-e-prospettive-per-il-downstream-delle-pubbliche-amministrazioni-nazionali/



❖ **Landslide Demonstrator Follow-On**

➤ **Current status:**

- Investigating the feasibility and interest from the national scientific community and then internationally
- Positive support and reactions were provided by CEOS members and agencies @ WGD-23 (e.g. ESA, CAS, UNOOSA)

➤ **Possible topics (initial ideas only, TBC):**

- Multi-sensor data-based approaches for landslide detection
 - Impact on urban environments and infrastructure, fragility curves
- At ESA-LPS-25, interest from ERATOSTHENES Centre of Excellence (possible link to GSNL Cyprus Supersite)
- **Target:** collect other support @ WGD M24 by Dec 2025 and present draft proposal by the next CEOS WGD M25

Perspective for new activities (1/2) **CEOS**

❖ **Drought Pilot**

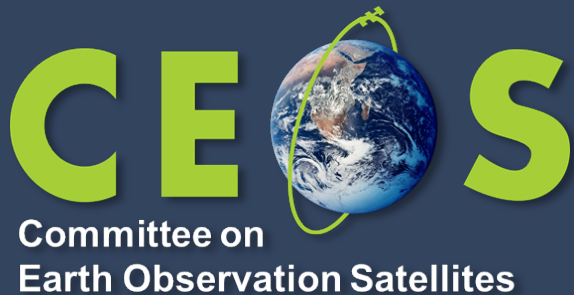
- **Current status:** Draft proposal prepared by CONAE & ASI to collecting interest by CEOS WGDIsasters members (ISRO already provided availability and interest)
- **Possible topics (initial ideas, TBC):**
 - Evaluate EO satellite and CEOS contributions to drought monitoring and early warning systems (Pillar 1 of IDM framework)
 - Identify main geographic areas most prone to drought phenomena (Pillar 2 of IDM framework)
 - Identify users and stakeholders for mitigation, preparedness and response activities (Pillar 3 of IDM framework)
- **Target:** Assess project draft, collect members interest, receive approval from WGD in view of 2025 CEOS Plenary proposal

THANK YOU FOR THE ATTENTION

ASI-CEOS Working Team:

Antonio Montuori

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