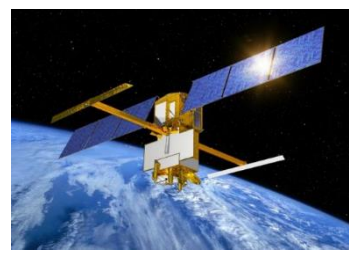


CNES agency update

SWOT



Launch on Dec. 16, 2022

- Cal/val 1 day orbit phase is now finalized with numerous international field campaigns which will be exploited;
- SWOT has been operational in its science orbit since the end of July (revisited at 21 days);
- The data set for the Science Team available at the end of August at the earliest, pre-validated data distribution will occur in the fall and validated next spring 2024;
- The International Science Team meeting will be held in Toulouse from 19th the 22nd of September, 9 months after the launch.

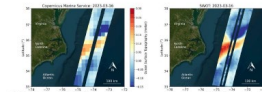
- **Cooperation with NASA, CSA (Canada) and UKSA (UK)**
- The SWOT satellite will map variations in the levels of inland and ocean waters
- CNES contribution: S/C bus, nadir altimeter, DORIS, KaRIn RFU, ground stations
- Specific SWOT « downstream » programme (SWOT-aval)



CNRS - CENTRE NATIONAL D'ÉTUDES SPATIALES

June 15th, 2023

CNES - DSDAP/EOT-2023.0003958



www.cnes.fr/2023/07/20/2023-07-20-swot-reception-les-jeux-2023-07-20-2023

RESEARCH ANNOUNCEMENT

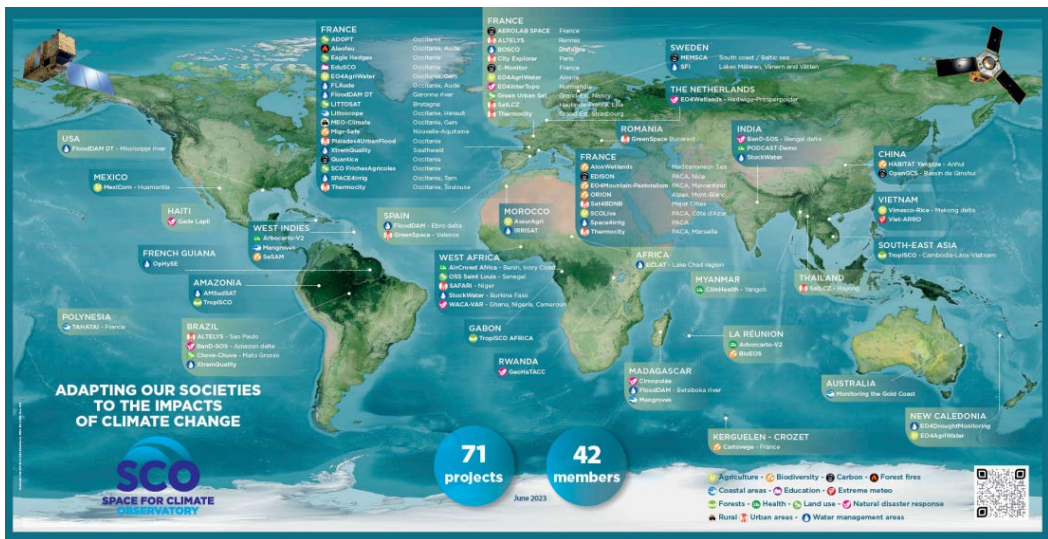
INTERNATIONAL SWOT SCIENCE TEAM RENEWAL

Notices of Interest Due Monday, October 2nd 2023
Proposals Due Monday, October 30th 2023

SPACE FOR CLIMATE OBSERVATORY - SCO

1st September 2023

Publication of the SCO international call for projects



- Encourage and stimulate the emergence of SCO projects as super-demonstrator : propose a common technical base of data visualization and related information towards public decision makers to monitor the implementation of climate policy on their scale. Facilitating SCO projects scaling up
- Broaden use cases of climate data through advanced products
- Open to international entities

<https://www.spaceclimateobservatory.org/sco-call-projects-2024>

Tuesday 3rd October 2023 – 12th Steering Committee

SCO members of the recently appointed Programme Committee



COP28 French Pavilion

SCO Roundtable submitted

Mitigating climate risks: lesson learned from Earth Observation tools



3D: Allies in Natural Disaster Management



In February 2023, Turkey and Syria experienced devastating earthquakes, highlighting the need for improved disaster preparedness.

How could **high resolution 3D Data on demand** serve as an additional aid?

Developed as part of the CO3D mission, they could be an aid to rapid mapping services:



Before the event

After the event

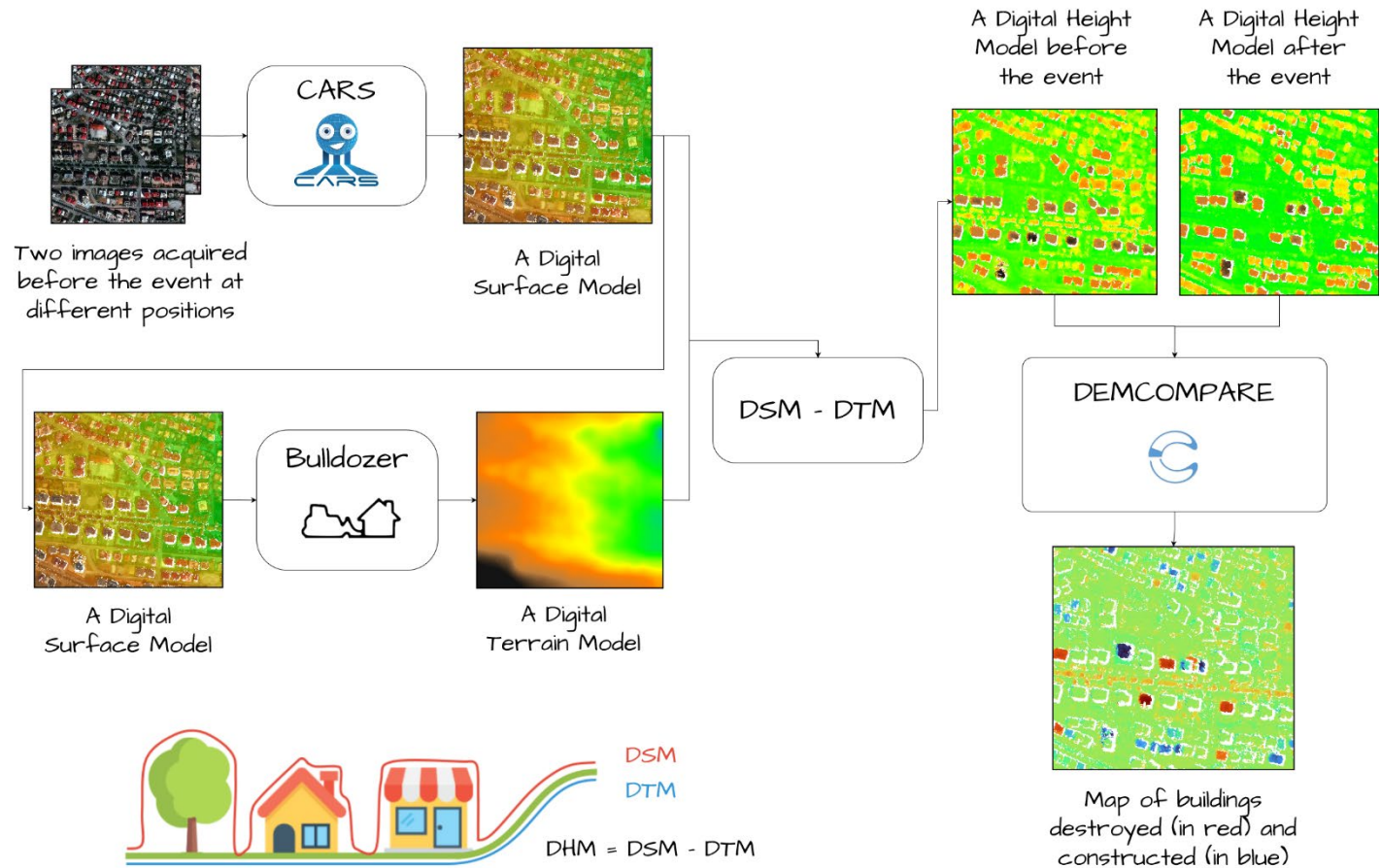
Using **pre-and post-event stereoscopic acquisition**, these software programs demonstrate their ability to **estimate damage quantitatively**.

Because this data is so vast, the maps produced could serve as a guide for manual annotators.

3D: Allies in Natural Disaster Management

Chained **CNES open-source 3D tools** combined with the capabilities of the **Pleiades satellites** demonstrate their ability to estimate damage:

- Generate a **Digital Surface Model** (an altimetric description of the ground and its superstructures) from satellite images acquired before and after the event from two different perspectives
- Extract the **Digital Terrain Model** (excluding "overground" elements like vegetation, buildings) from the Digital Surface Model
- Compare **Digital Height Model** (buildings only) before and after the disaster



Map of destroyed buildings to meet end-user needs