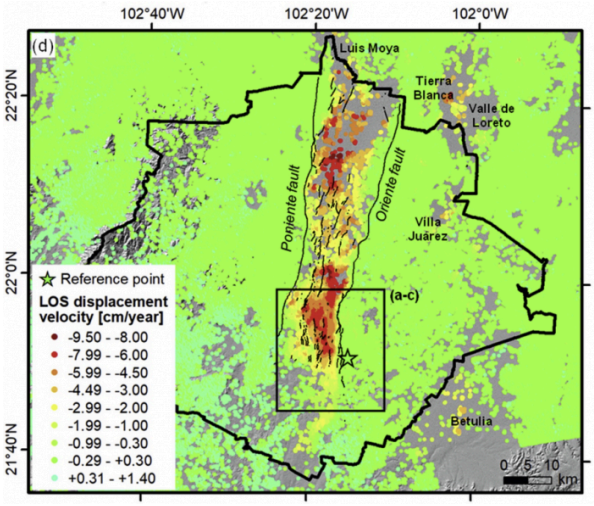
ICGS-SAR
INTERNATIONAL COORDINATION GROUP FOR SPACEBORNE SAR MISSIONS

Thematic Area 2: Interferometric SAR Applications

Thematic Area 2 (TA-2) covers the traditional interferometric SAR (InSAR) driven applications including solid earth (including crustal deformation and volcanoes), glaciers/ice caps and geo-hazards, where interferometric phase is the main measurement.

TA-2 Leads:

- Cathleen Jones (NASA/JPL)
- Björn Rommen (ESA)



Subsidence due to groundwater extraction, Aguascalientes Valley, Mexico (Cigna et al, 2021), provided by Andy Hooper

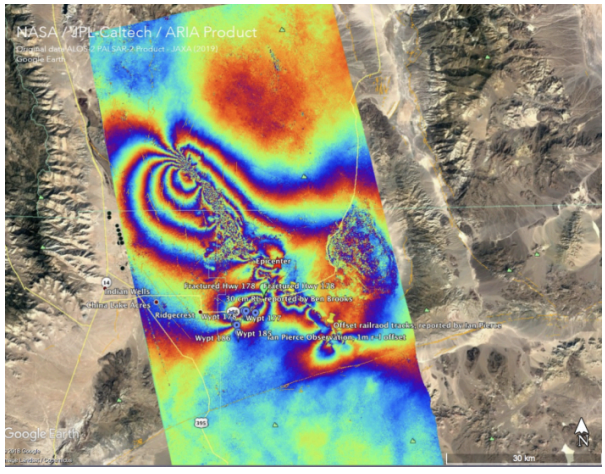
Formed for the second workshop hosted by ESA in 2022, TA-1 covers three primary themes: glaciers and ice sheets, dynamic events and slow processes. The ESA workshop saw presentations and discussions on each of these topics, resulting in a series of cross-cutting recommendations. The presentations included:

- Glaciers & Ice Sheets, by Eric Rignot of University of California Irvine
- InSAR for dynamic processes in Solid Earth science, by Eric Fielding of Jet Propulsion Laboratory, California Institute of Technology
- Slow processes, by Andy Hooper of University of Leeds

The summary presentation can be found here. Recommendations include the following:

Now / Near-Term

1. Open data policy for archives of all agencies
2. Standardised / unified interface for tasking and for data discovery / download
3. New Space data access: Need commercial data buys provided by the funding agencies for the PI community to obtain rapid repeats (no need for low latency delivery)
4. Reestablish Polar Space Task Group for an International Polar Decade



2019 Ridgecrest Earthquakes California, InSAR analysis by NASA / JPL CalTech / ARIA with ALOS-2 PALSAR-2 data, provided by Eric Fielding

2030+ Timeframe

1. Harmonised coordination of satellites sensors to give interferometric capability between different
2. High resolution, daily to sub-daily interferometric observations
3. Harmony-like companions for more missions

ICGS-SAR 2023