

SEOM – INSARAP: Sentinel-1 InSAR Performance Study with TOPS Data

ESA-ESRIN Contract 4000110587/14/I-BG

Presentation of Consortium and Pilot Sites

Pau Prats

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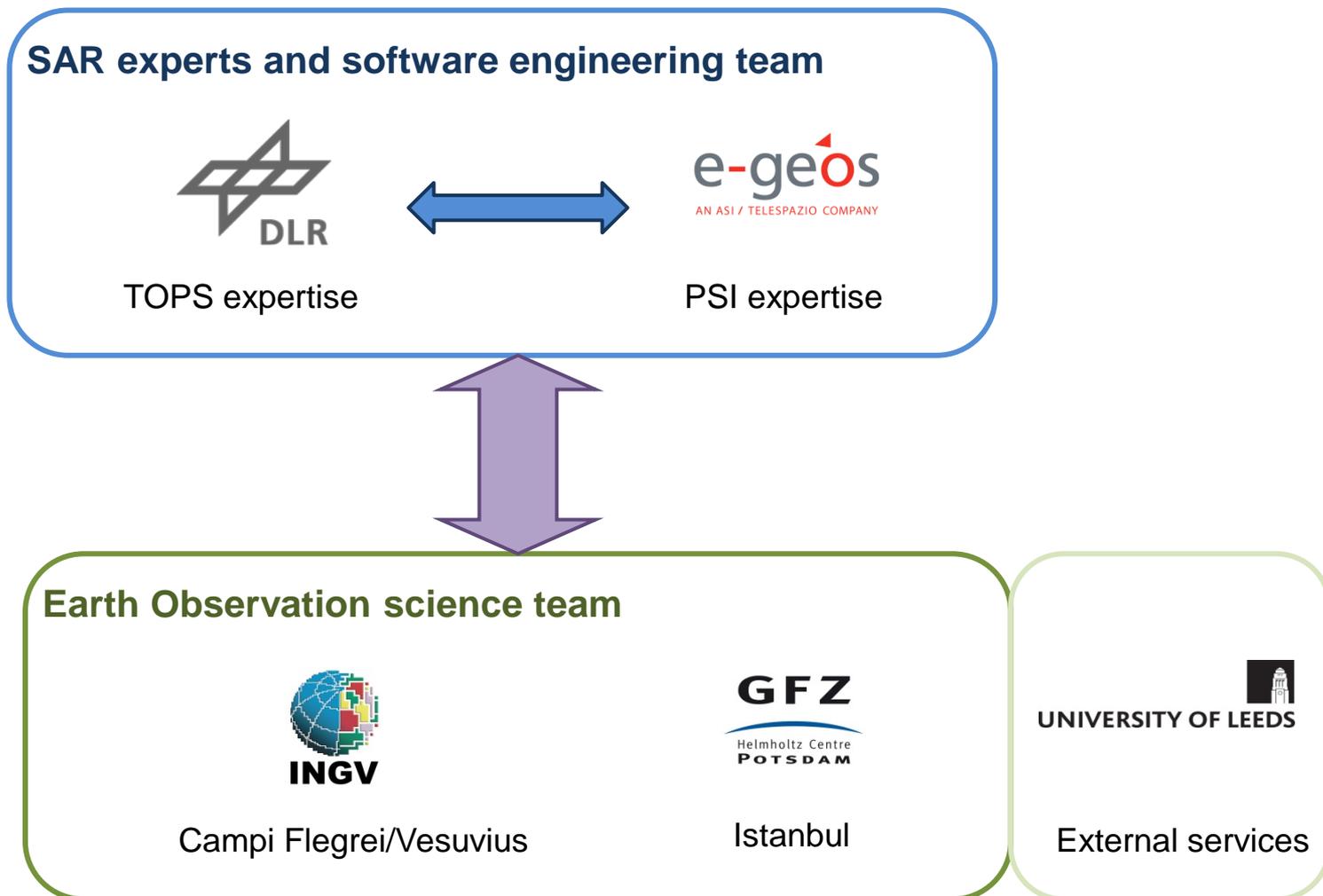
Knowledge for Tomorrow

INSARAP Study

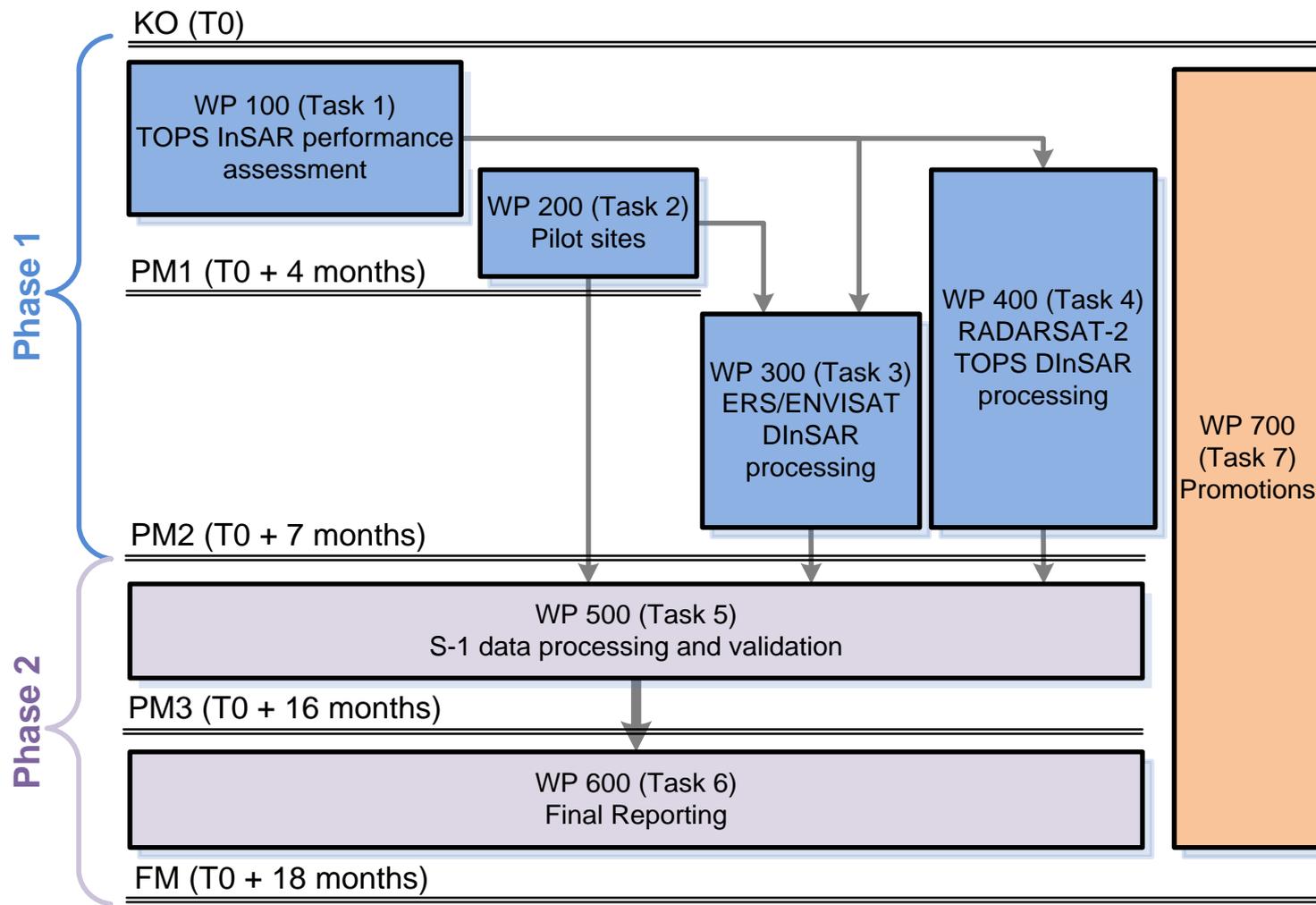
- **Goal:** assess the interferometric performance of the **TOPS** mode onboard the **Sentinel-1** satellite.
- **Phase 1:**
 - Theoretical assessment
 - Processing of ERS/ENVISAT data sets
 - Processing of RADARSAT-2 TOPS data set over Mexico City
 - ENVISAT time series over pilot sites
- **Phase 2:**
 - Processing and validation with Sentinel-1 data
 - Overall performance of TOPS DInSAR and TOPS PSI to detect and measure surface deformation



The Consortium



Study Logic



Pilot Sites

- **Campi Flegrei/Vesuvius** (1xasc/1xdesc)
- **Istanbul** (1xasc/2xdesc)
- **Mount Etna** (1xasc)
- **Mexico City** (2xasc/2xdesc)

Other suggested pilot sites for additional investigations:

- **Iceland** (volcanic/tectonic/ionosphere/glacier motion)
- **Petermann glacier**, Greenland (glacier motion/ionosphere)
- **Pine Island/Lambert glacier**, Antarctica (glacier motion)
- ???

