NATIONAL REPORT OF HUNGAY ON EUREF RELATED ACTIVITIES 2024-2025

Ambrus KENYERES – I Galambos – B Magyar – MF Varga LTK Satellite Geodetic Observatory

EUREF symposium / AC Workshop, Covilha, Portugal, 24-26 June, 2025

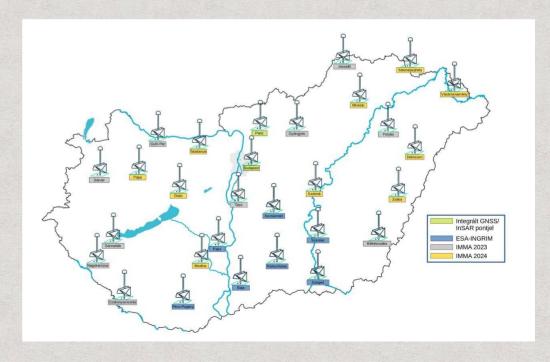
HIGHLIGHTS

- InSAR / GNSS infrastructure build
- GNSS network and service development
- InSAR service development
- EPN Densification WG
- EPN processing activities

GNSS / Insar infrastructure DEVELOPMENT

Integrated InSAR/GNSS base network for height determination STATUS – 2025 Q2





STATUS of GNSSnet.hu



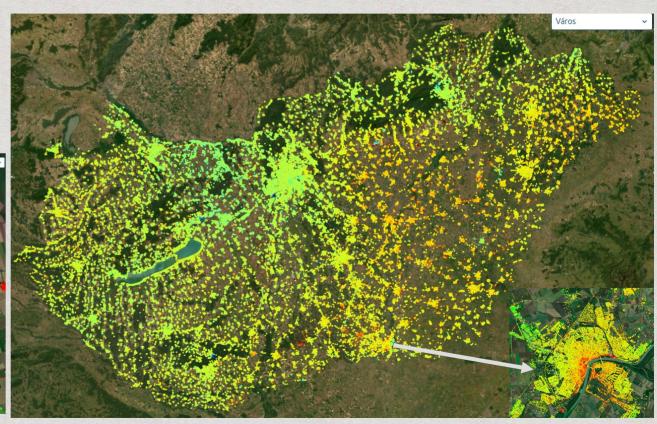
- 47 stations
- 27 with InSAR CR
- full multi-GNSS coverage
- All stations being moved from buildings down to the ground

NEW InSAR GROUND MOTION SERVICE

https://insar-hungary.hu

- Interactive web tool for browsing
- Based on Sentinel-1 data from 2016-2022
- EPND as velocity reference



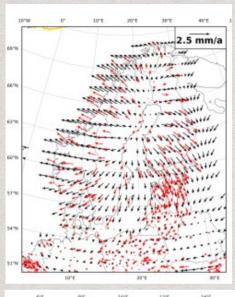


EPN Densification https://epnd.sgo-penc.hu



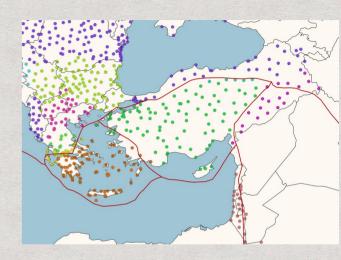
- WG to combine all European GNSS networks;
- EPOS pan-European solution was also integrated;
- Up to 4000 stations involved;
- Prepared to handle repro3 results;
- Generates reference velocity solution to used for velocitiy field generation.

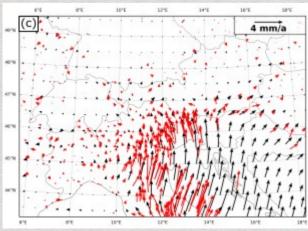
EPND - BASIS FOR VELOCITY MODELING

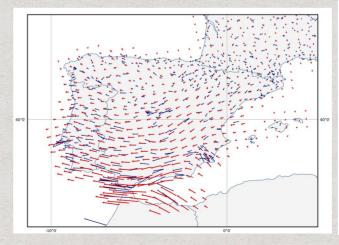


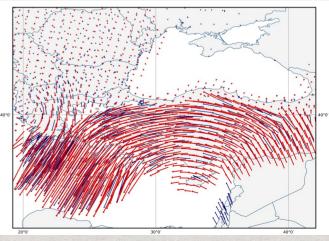
EuVm2022 https://doi.org/10.23701/ euvem2022

EGMS by SGO

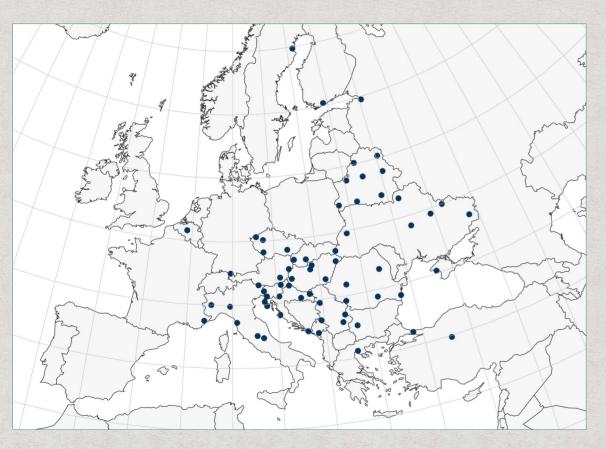








EPN Analysis Centre



- 79 EPN stations had been assigned to SGO AC;
- EPN repro3 had been completed;
- National repro is also ready;
- Additionally we do the processing of the APOS network.