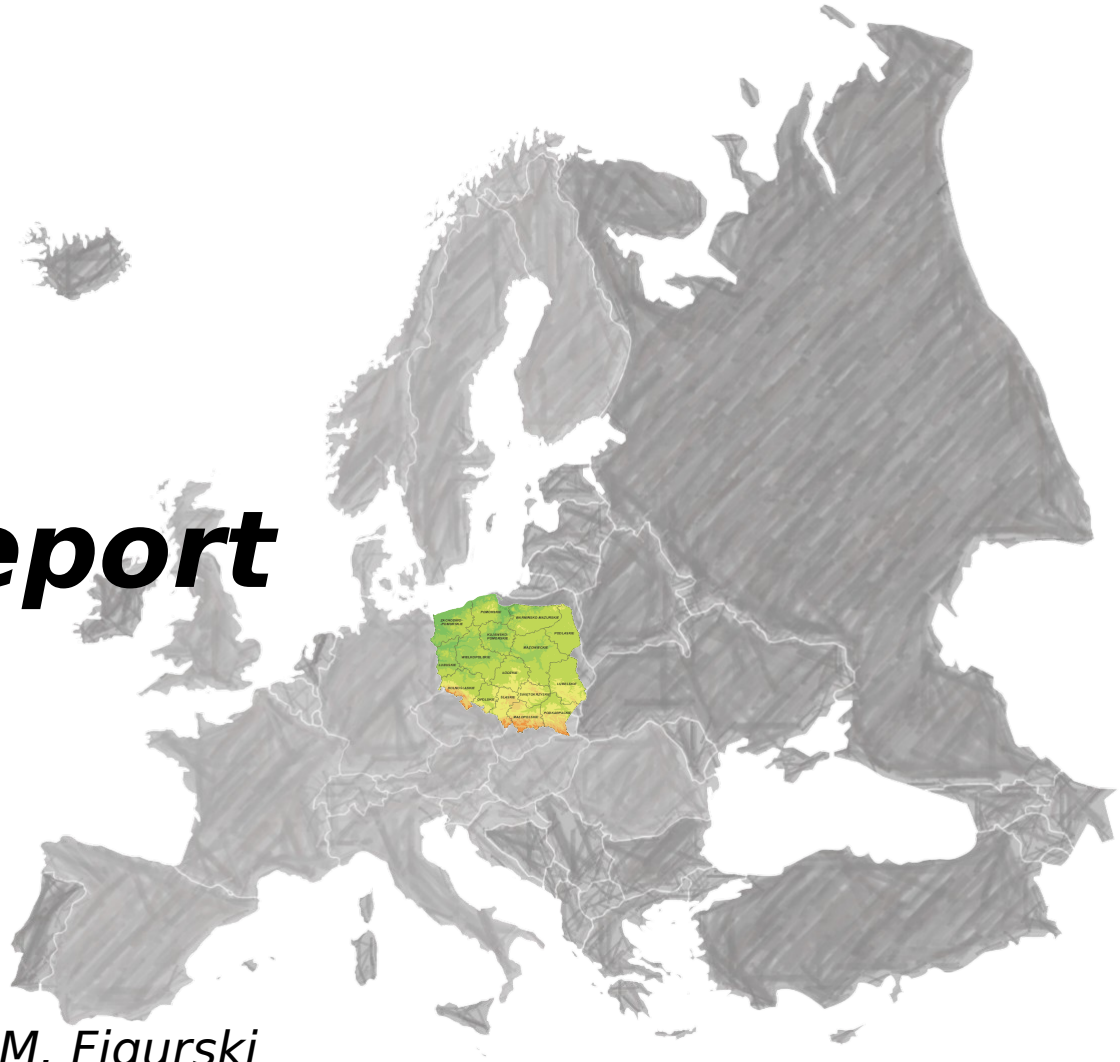


MUT LAC Report

K. Szafranek, A. Araszkiewicz, M. Figurski

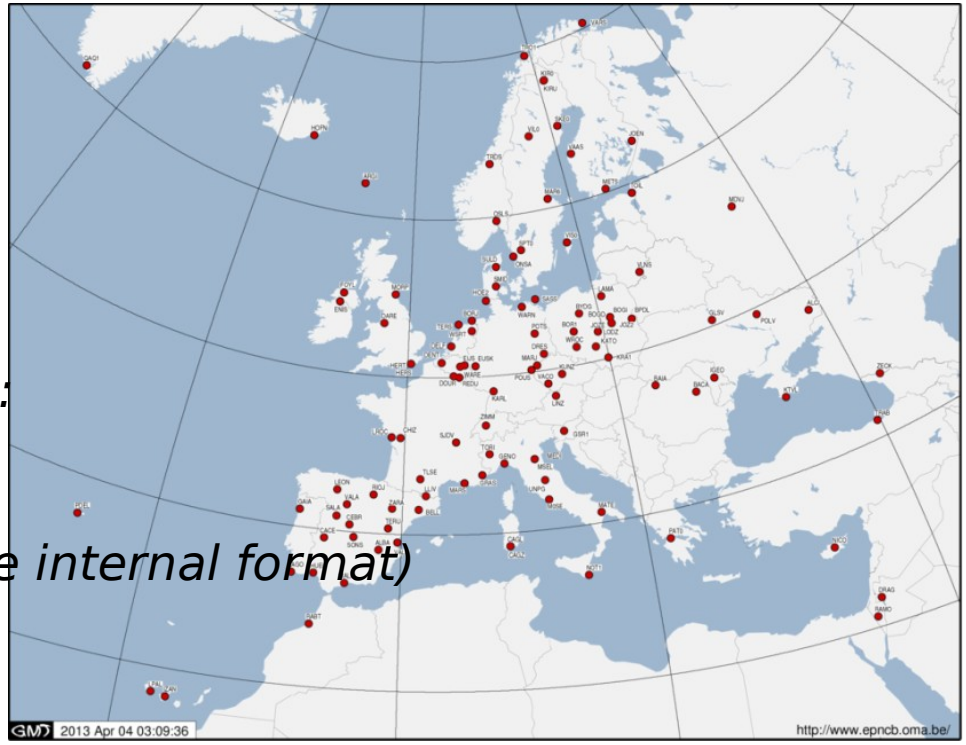
MUT LAC Report

1. EUREF contribution
2. Local network monitoring center
3. Troposphere and weather
4. Geodynamical studies
5. Our facilities

EUREF contribution

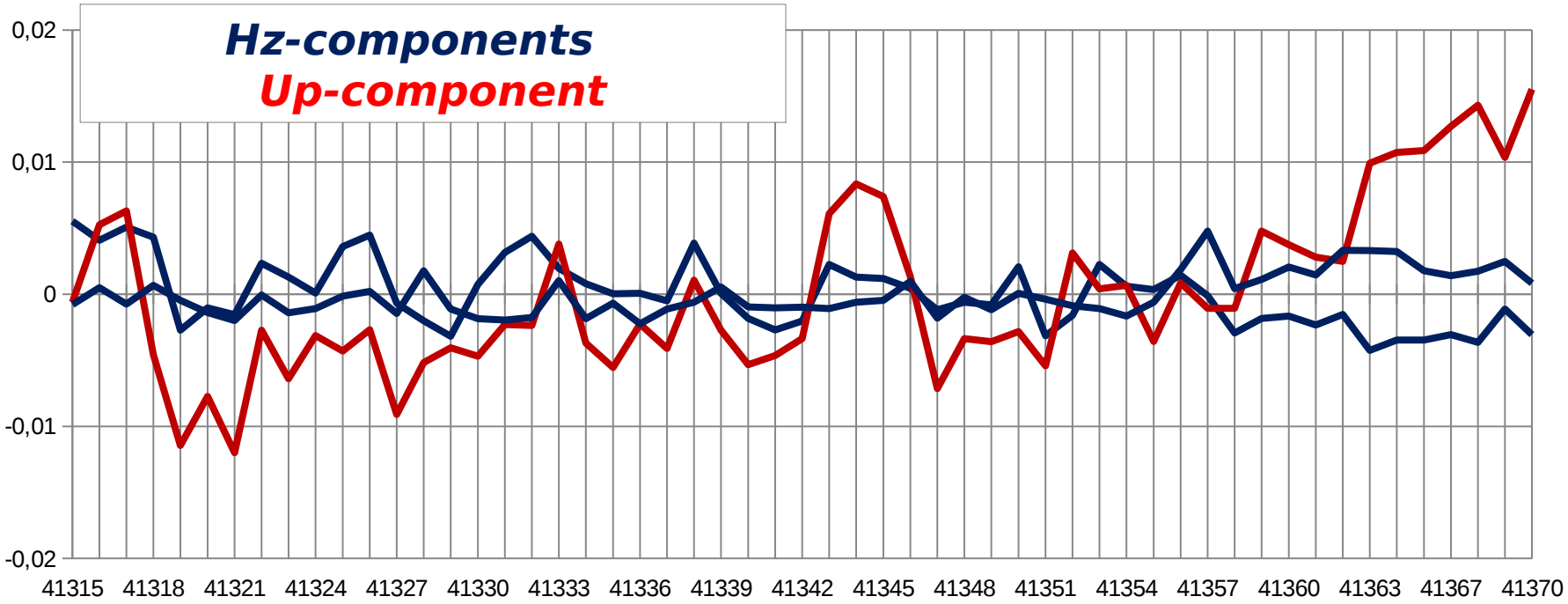
Main processing (117 stations):
- *based on **BERNESE 5.0***
- *standard products*
- *(daily, weekly SINEX*
- *and troposphere SINEX)*

Additional processing (117 stations):
- *based on **GAMIT/GLOBK v 10.4***
- *standard products*
- *(daily SINEX and troposphere in the internal format)*



EUREF contribution

Gamit/Globk solution still need to be improved.



*Station: **BYDG**, Poland*

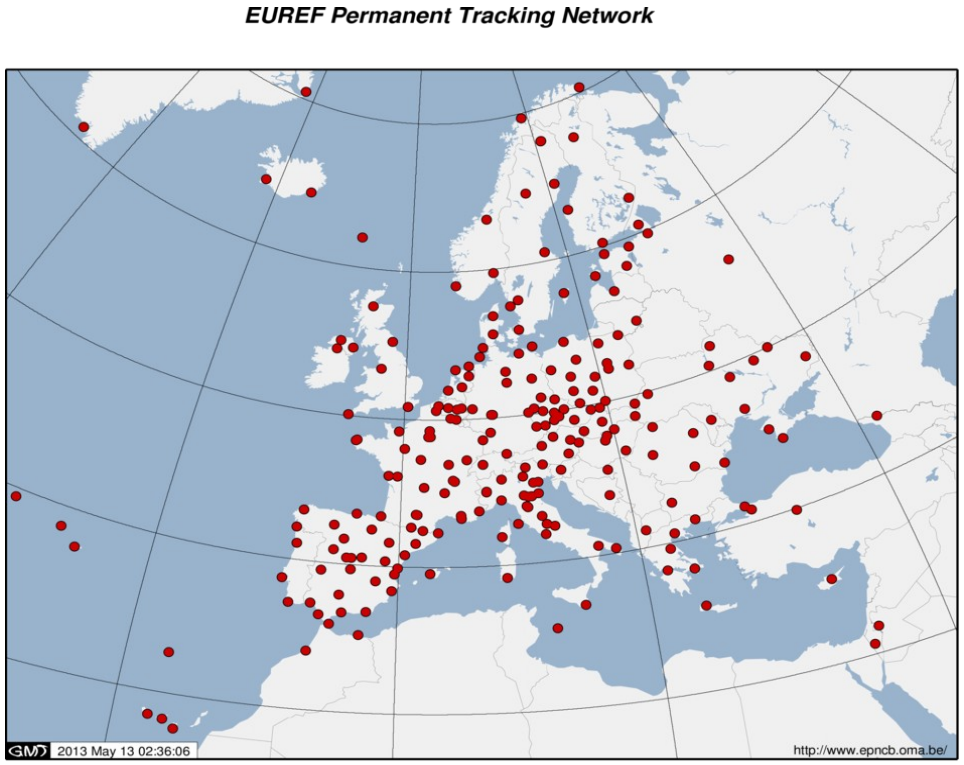
EUREF contribution

We participated in repro1:

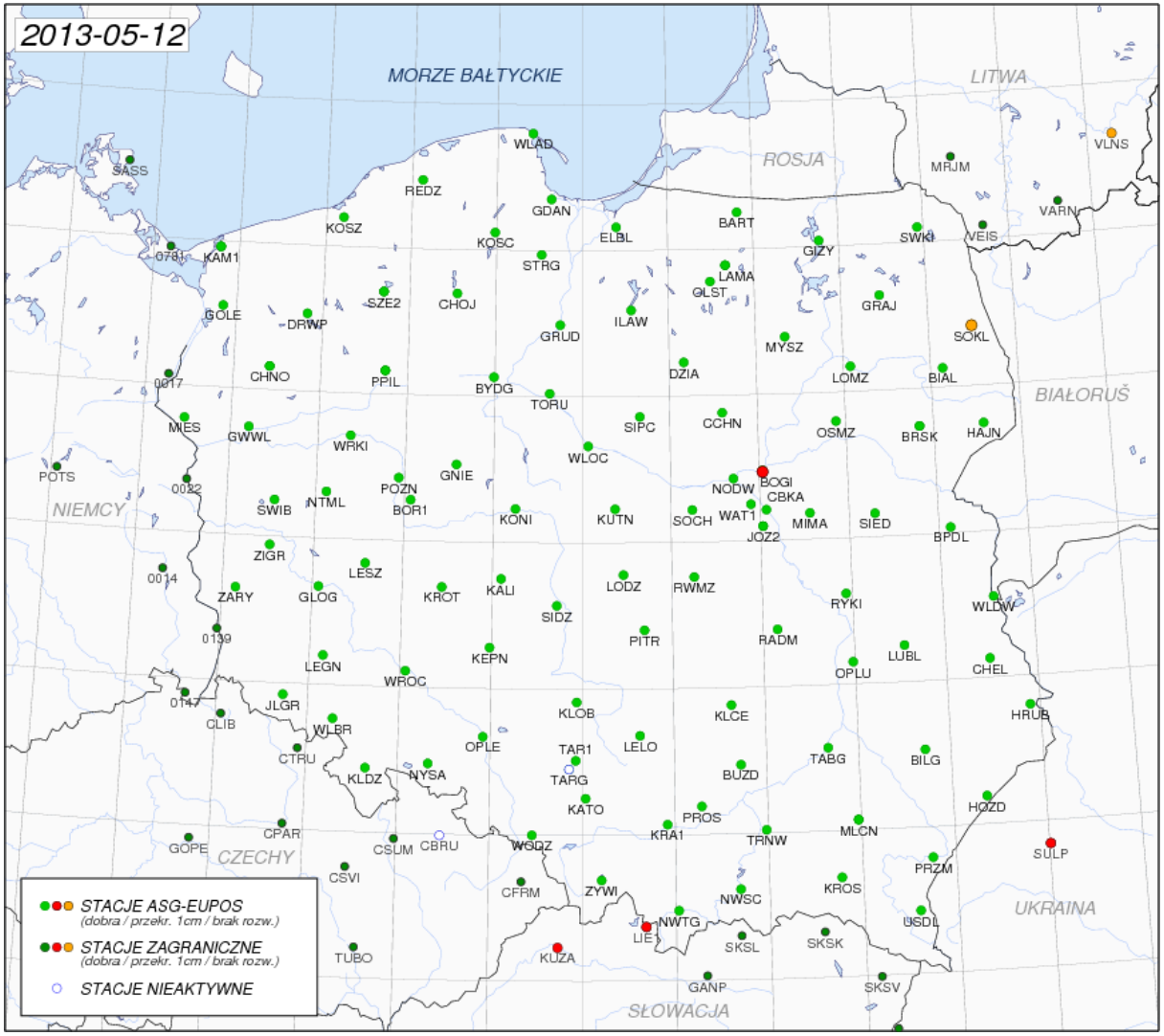
- ***BERNESE 5.0***
- ***GAMIT/GLOBK 10.4***
-

Ready for repro2:

- ***BERNESE 5.2 ?***
- ***GAMIT/GLOBK 10.4 (10.5 ?)***
-
- *- new version in June 2013*

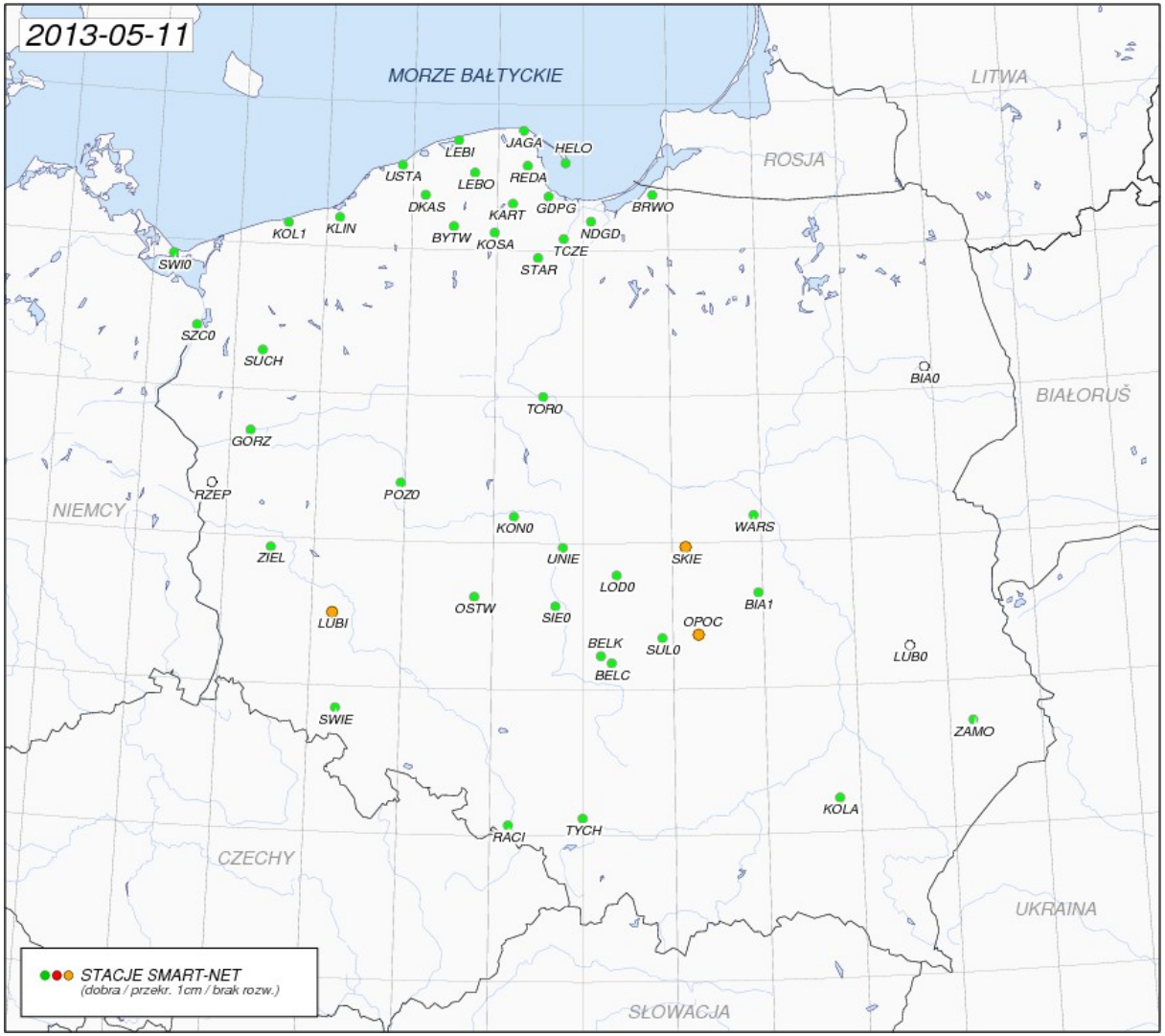


Monitoring Centre of local networks



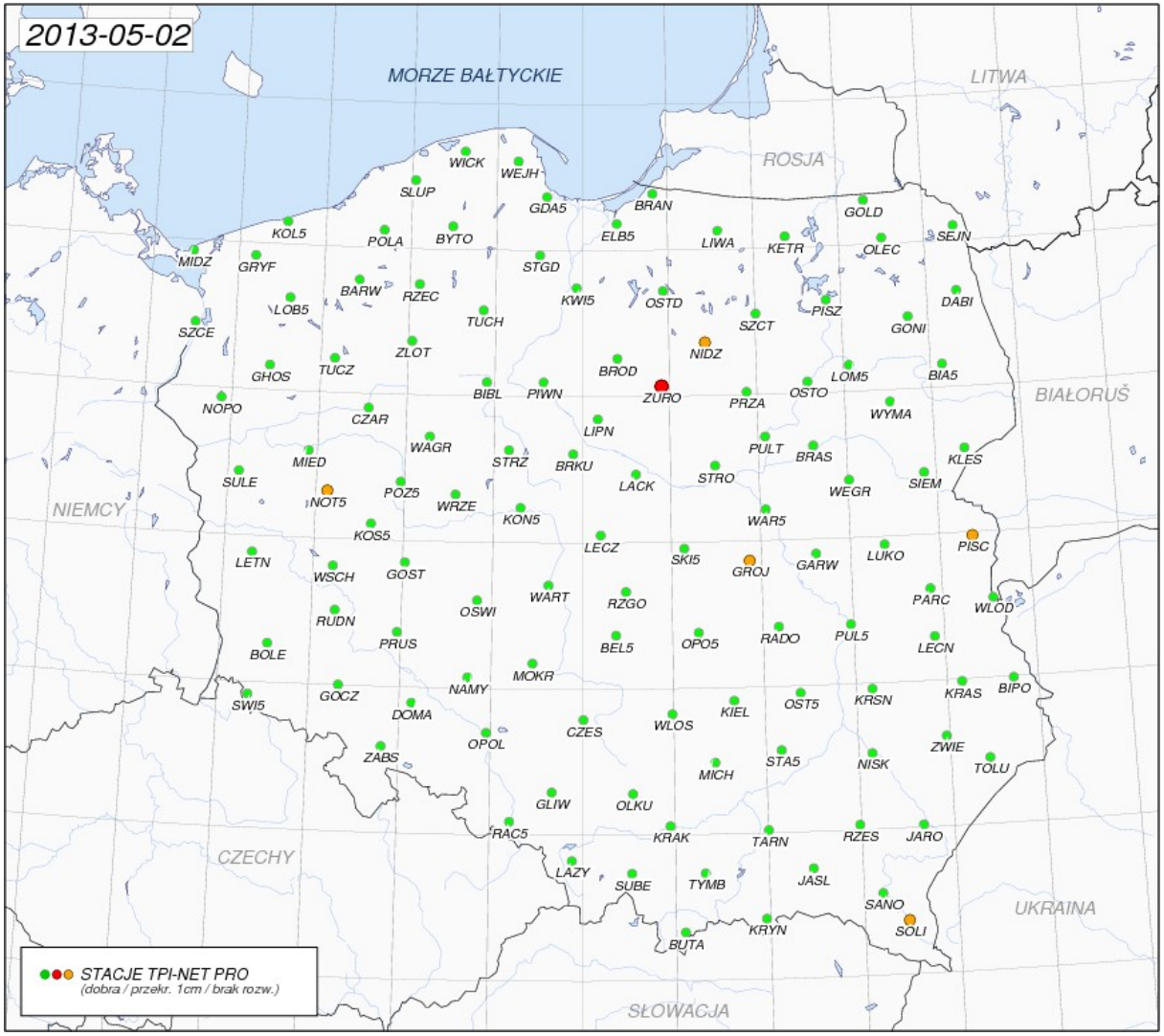
ASG eupos

Monitoring Centre of local networks

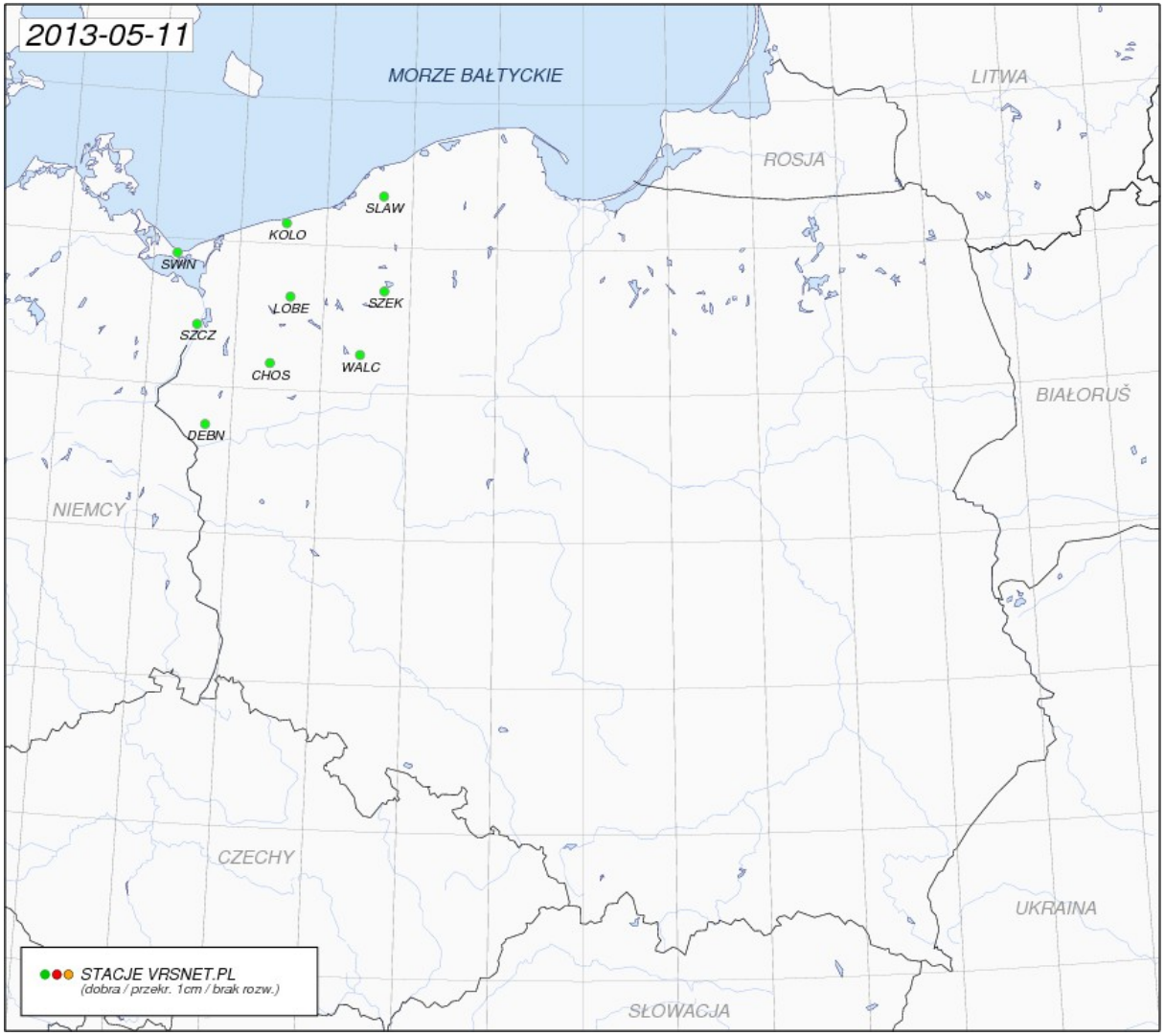


SmartNet
powered by Leica Geosystems

Monitoring Centre of local networks



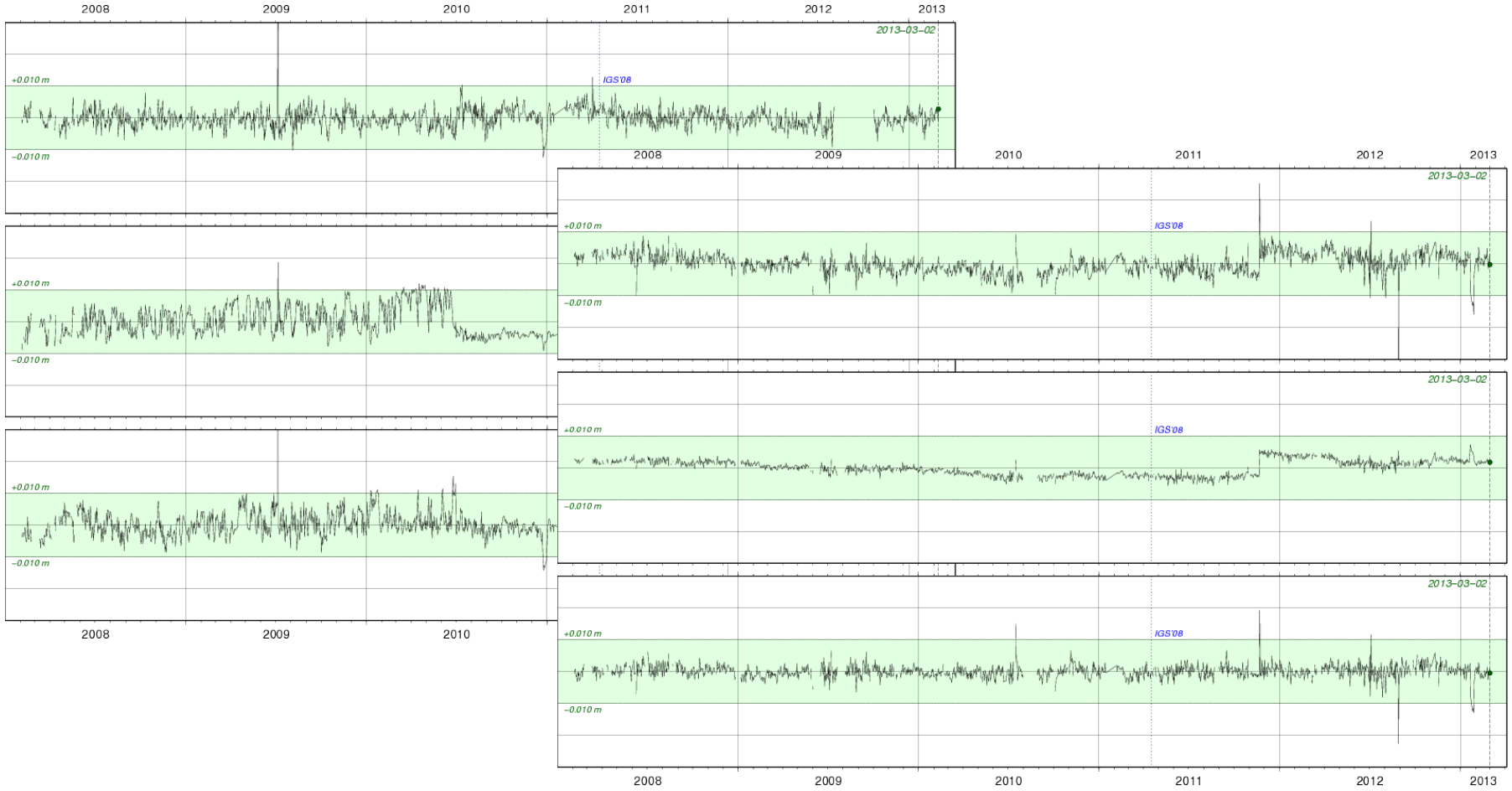
Monitoring Centre of local networks



VRSNET.PL
POWERED BY TRIMSAT

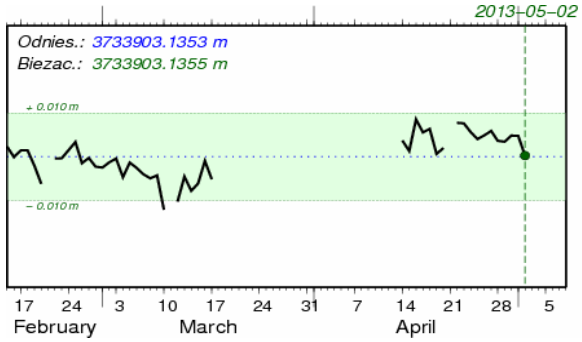
Monitoring Centre of local networks

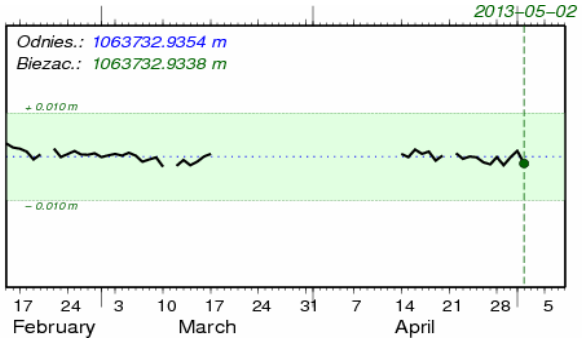
*Monitoring based on **IGS Final** products (ASG-EUPOS) – FINAL MODULE*

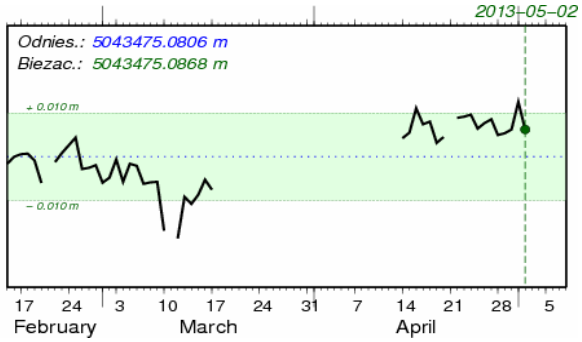


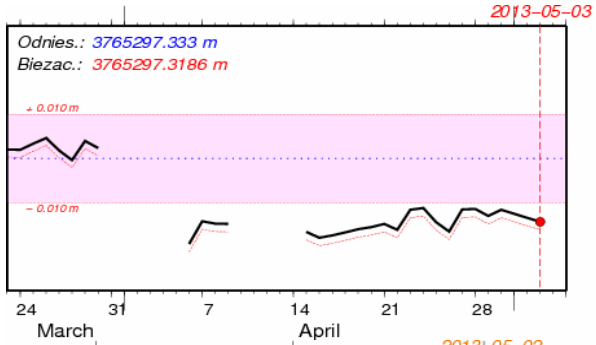
Monitoring Centre of local networks

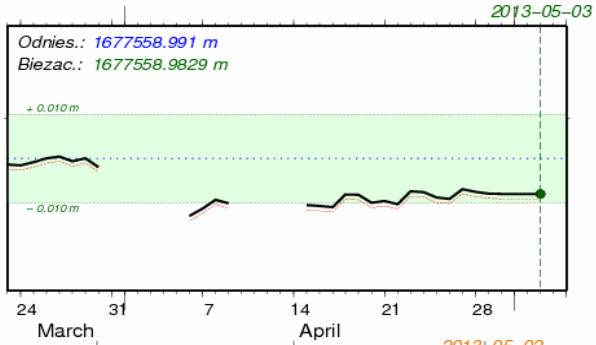
*Monitoring based on **IGS Rapid** products (ALL NETWORK) – RAPID MODULE*

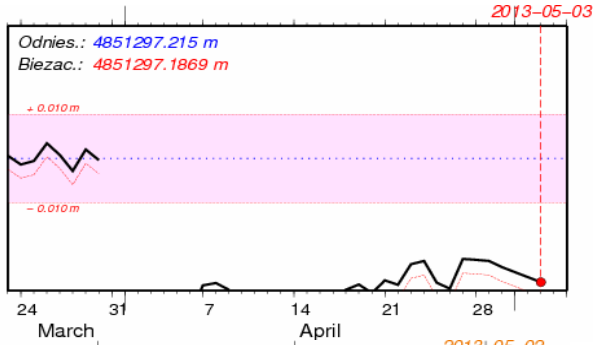


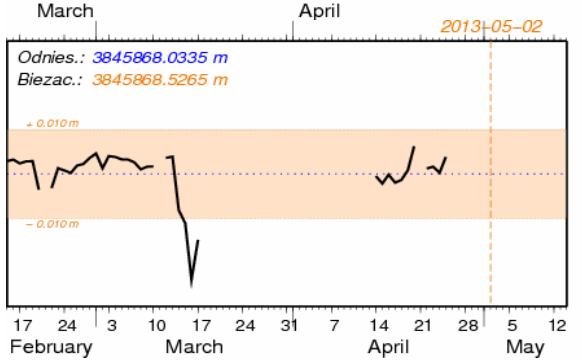


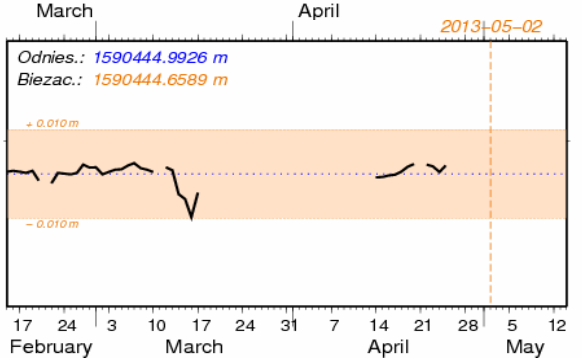


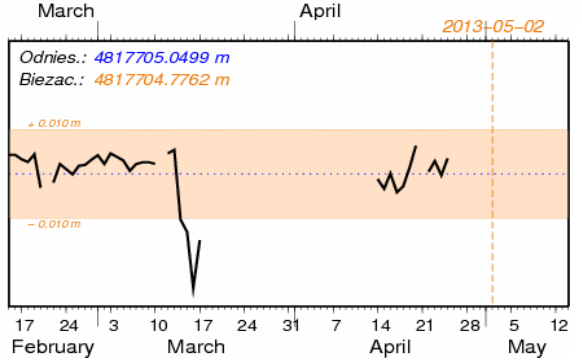






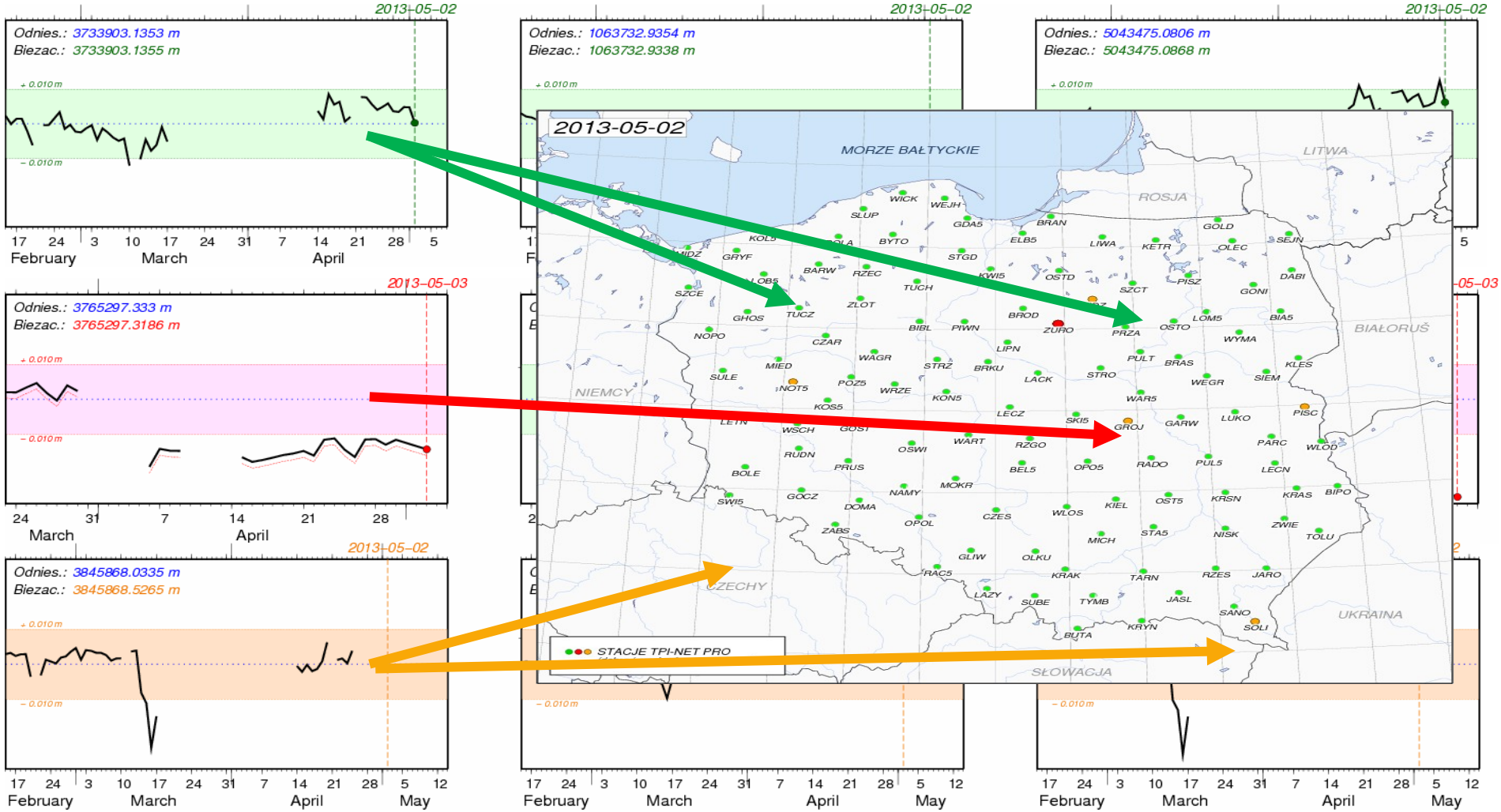






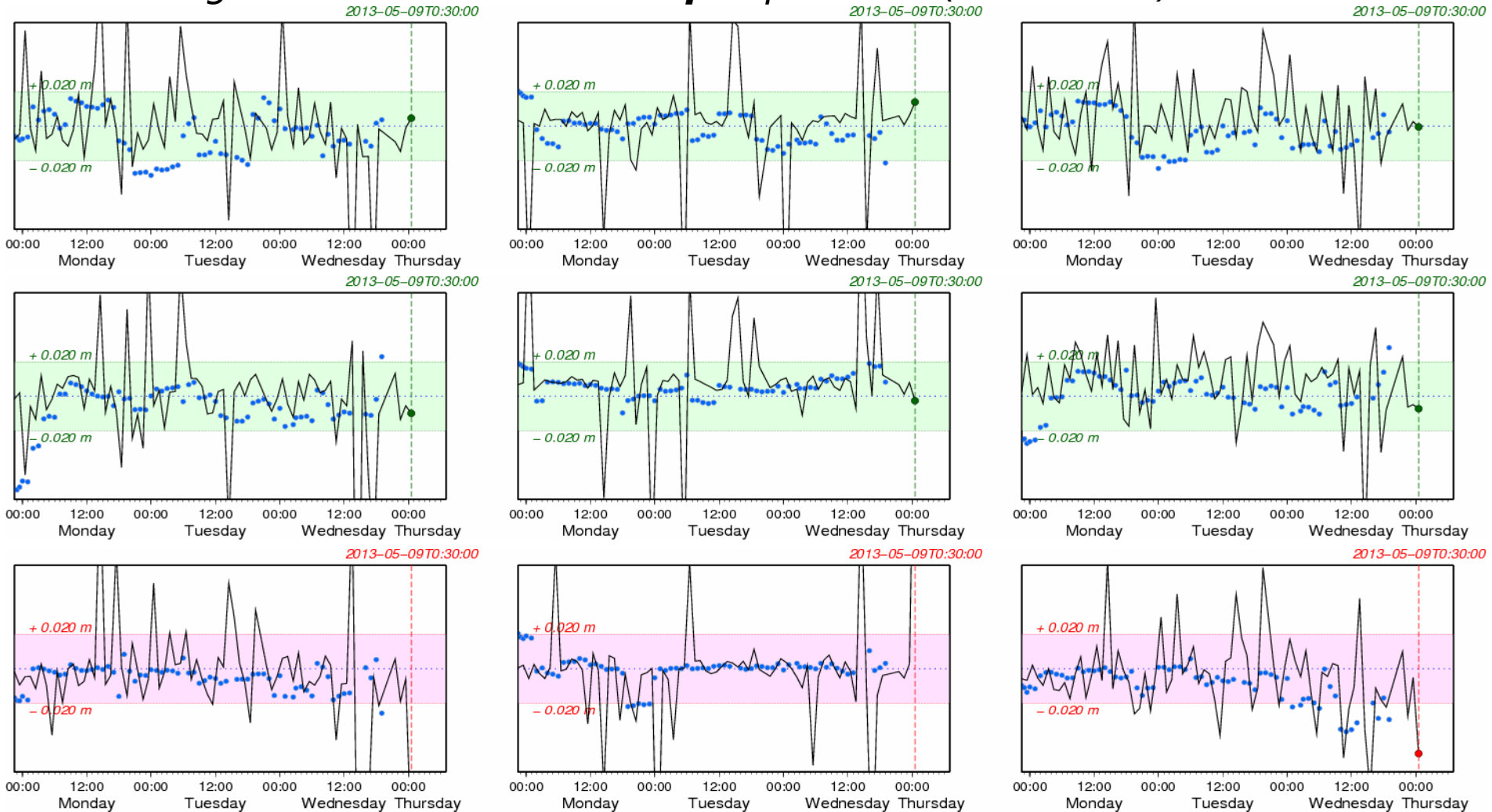
Monitoring Centre of local networks

*Monitoring based on **IGS Rapid** products (ALL NETWORK) – RAPID MODULE*



Monitoring Centre of local networks

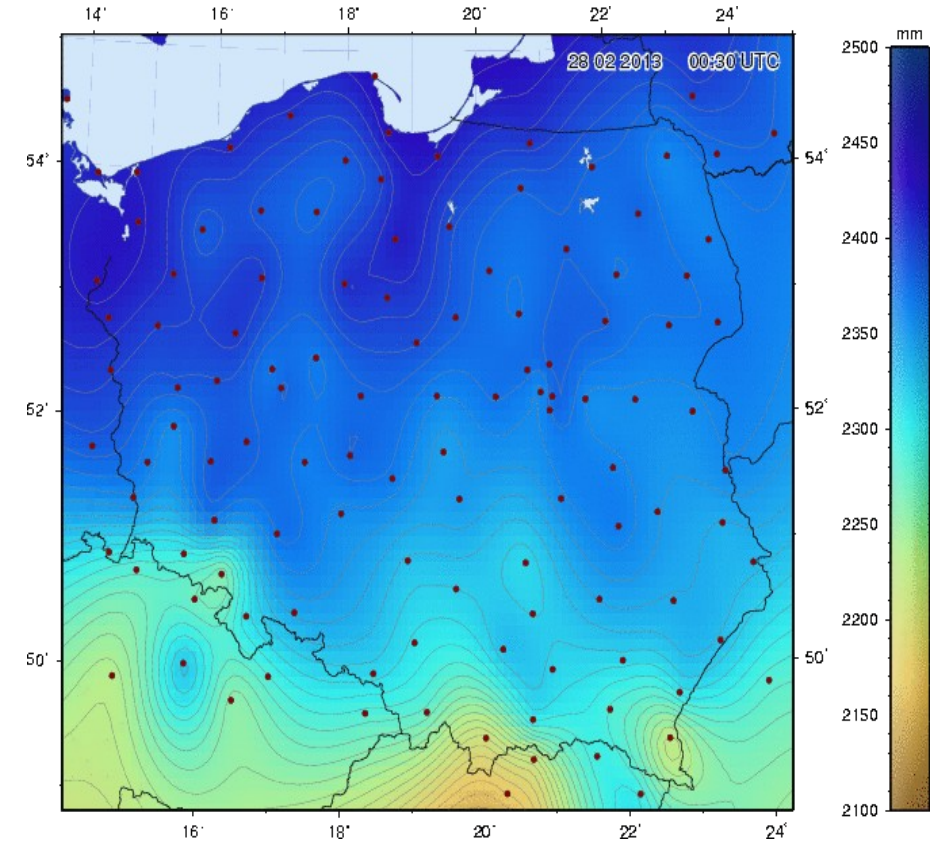
*Monitoring based on **IGS Ultra-Rapid** products (VRSNET.PL) – ULTRA R.*



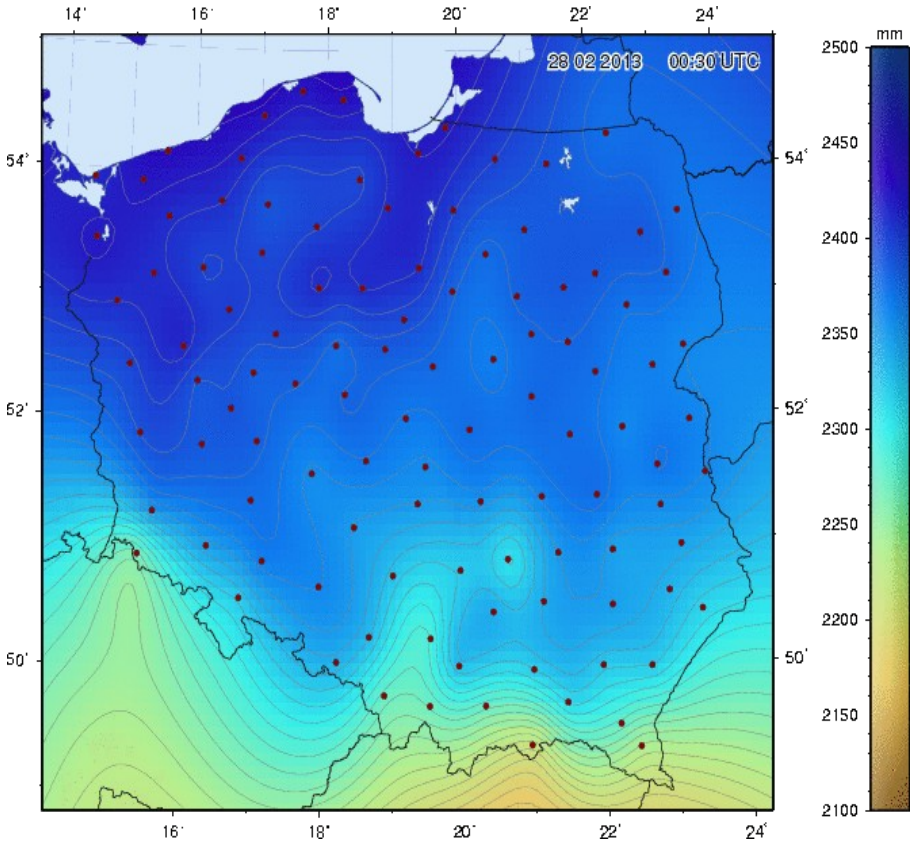
Troposphere and weather prediction

Verification of the troposphere products based on independently GPS sources

ASG eupos

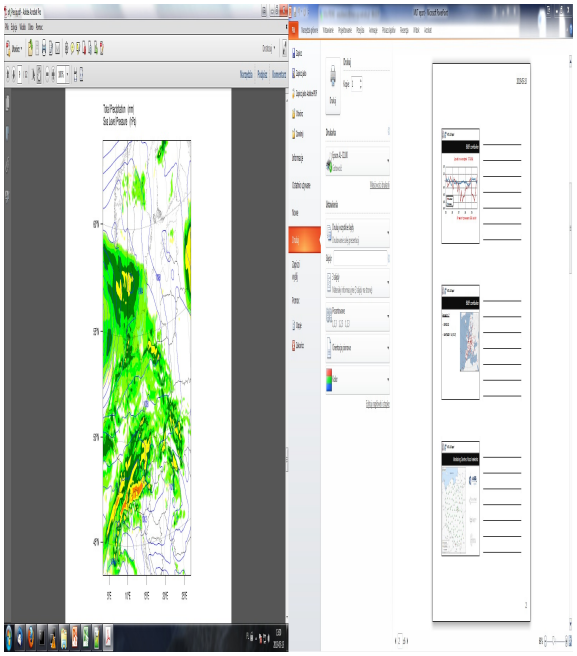


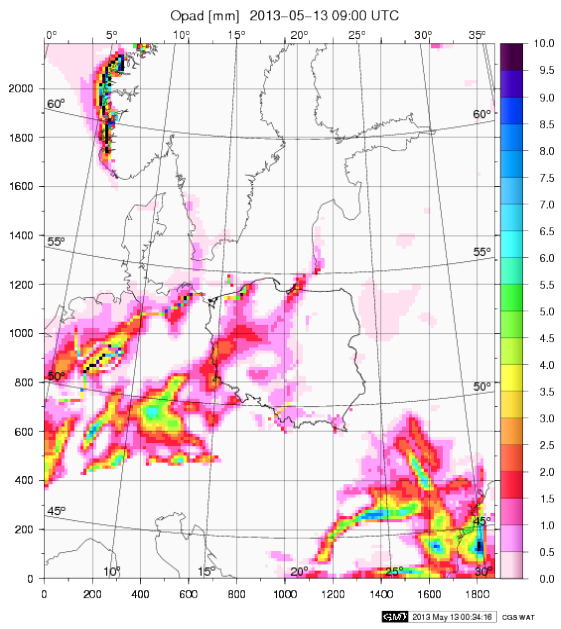
EPN NET PRO



Troposphere and weather prediction

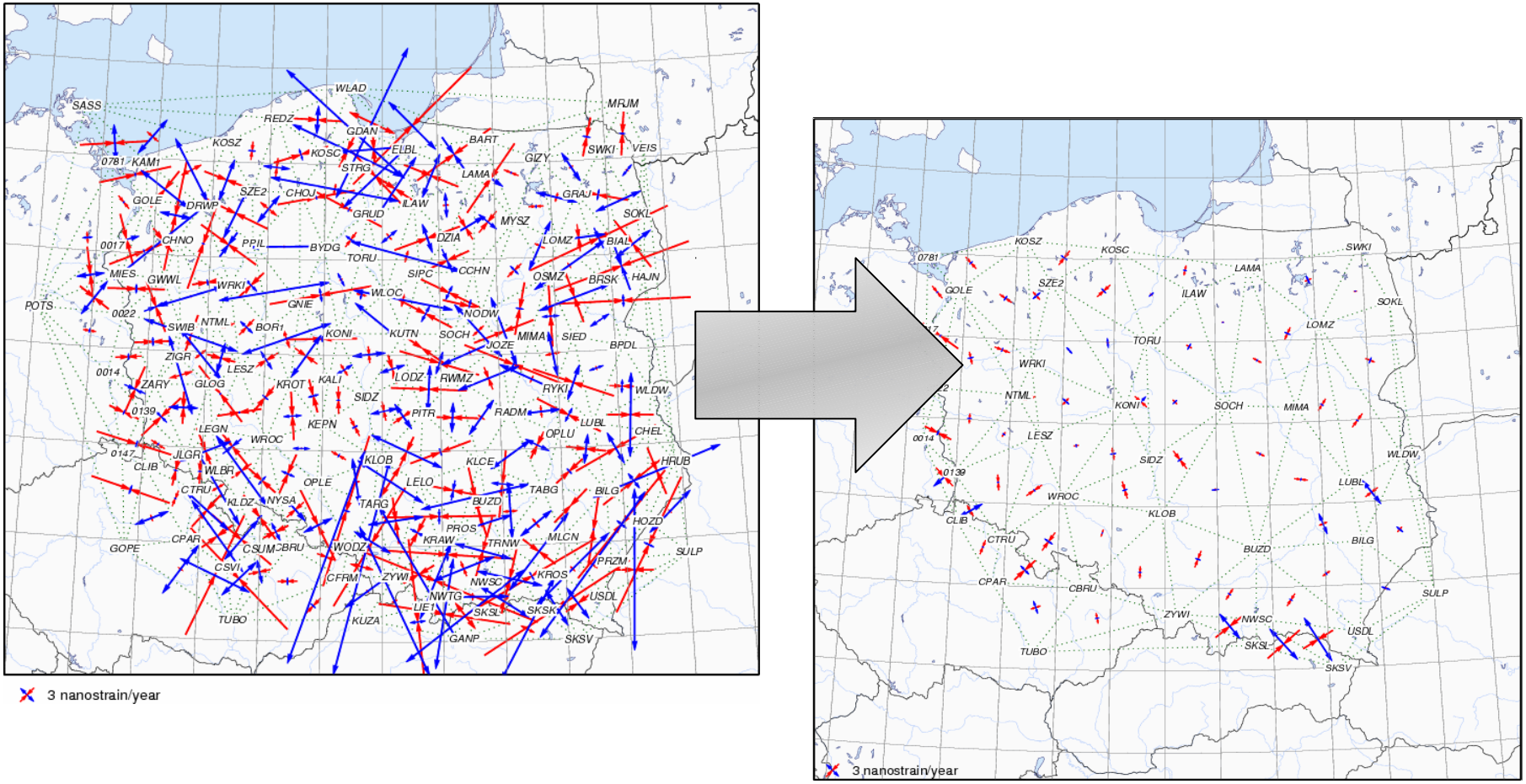
- *Participation in new COST action: Advanced Global Navigation Satellite System troposphere products for monitoring severe weather events and climate (**GNNS4SWEC**)*
- *Continue working on numerical weather prediction (**COAMS**, **WRF**)*





Geodynamical studies

Real value of GPS velocities in tectonically stable areas ?



Our facilities

- *Processing performed on High Performance Computing (HPC)*

HP BladeSystems c7000 – 4.5 TFLOPS
HP RX16205 Cluster Server – 0.5 TFLOPS

- *Based on Open Source Systems (Debian 6, FreeBSD, OpenBSD)*
- *Core of network is based on HP 10508 Switch Chassis;*
- *it enables a cloud-connected and media-rich capable infrastructure*
- *(10GbE/40 GbE port density, 3 microsecond latency, ...)*
- *Two parallel and independent links (20 mpbs, 50mpbs)*

<u>Conclusion</u>: We can still process mo

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Thanks for your attention!