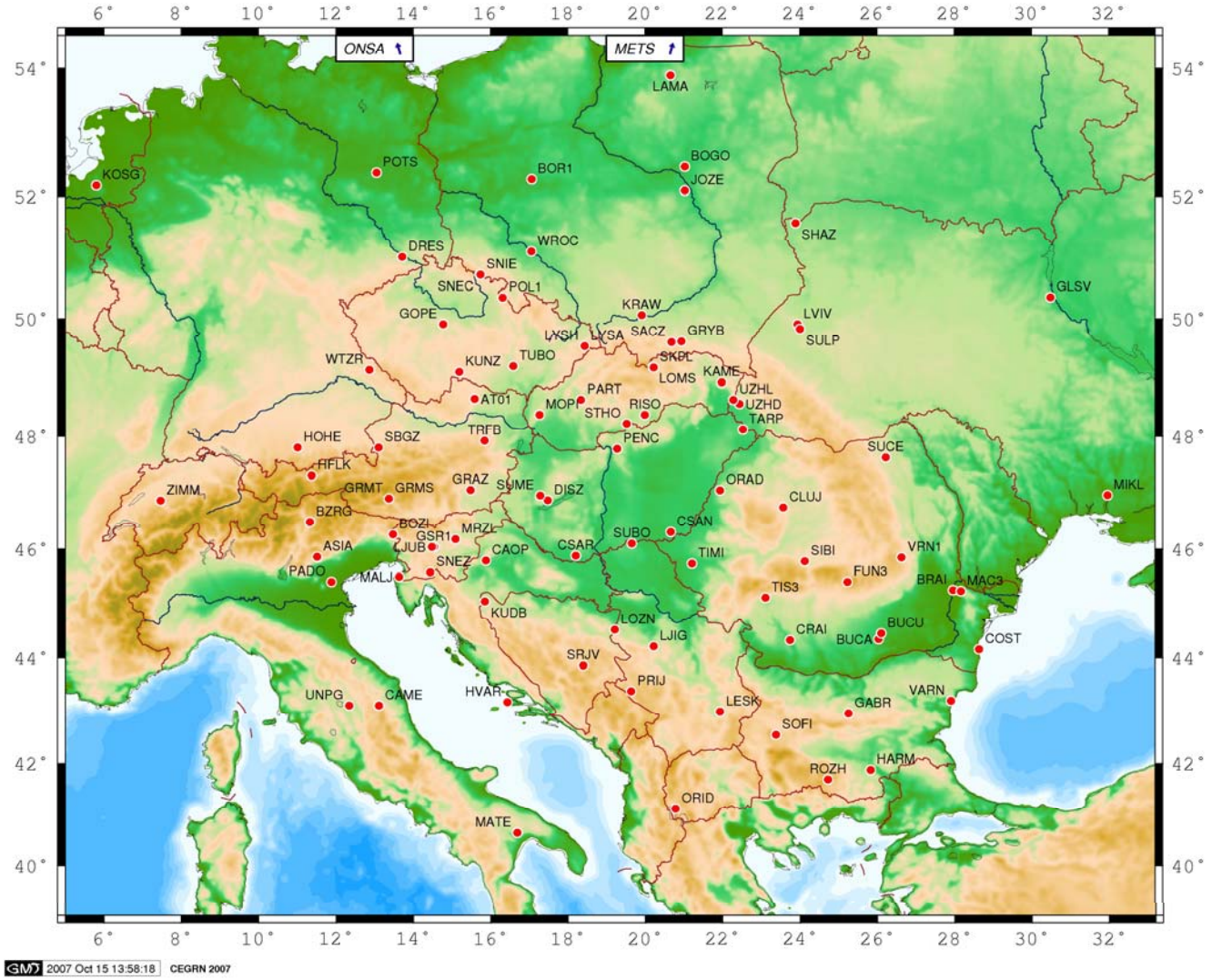
Alignement of CERGOP Results to EPN

G. Stangl

CERGOP Basics

- Long-term project of the CEI, >10 countries participating
- Study of the Geokinematics and Geodynamics of Central Europe
- GPS campaigns 1994- on epoch and permanent sites
- Goals are a dense velocity and strain field plus tectonic interpretation
- Geodetic work (equipment, campaigns, analysis) already according to EPN guidelines (more or less)
- Permanent network (EPN and non-EPN stations) analyzed by OLG

CEGRN07 Sites



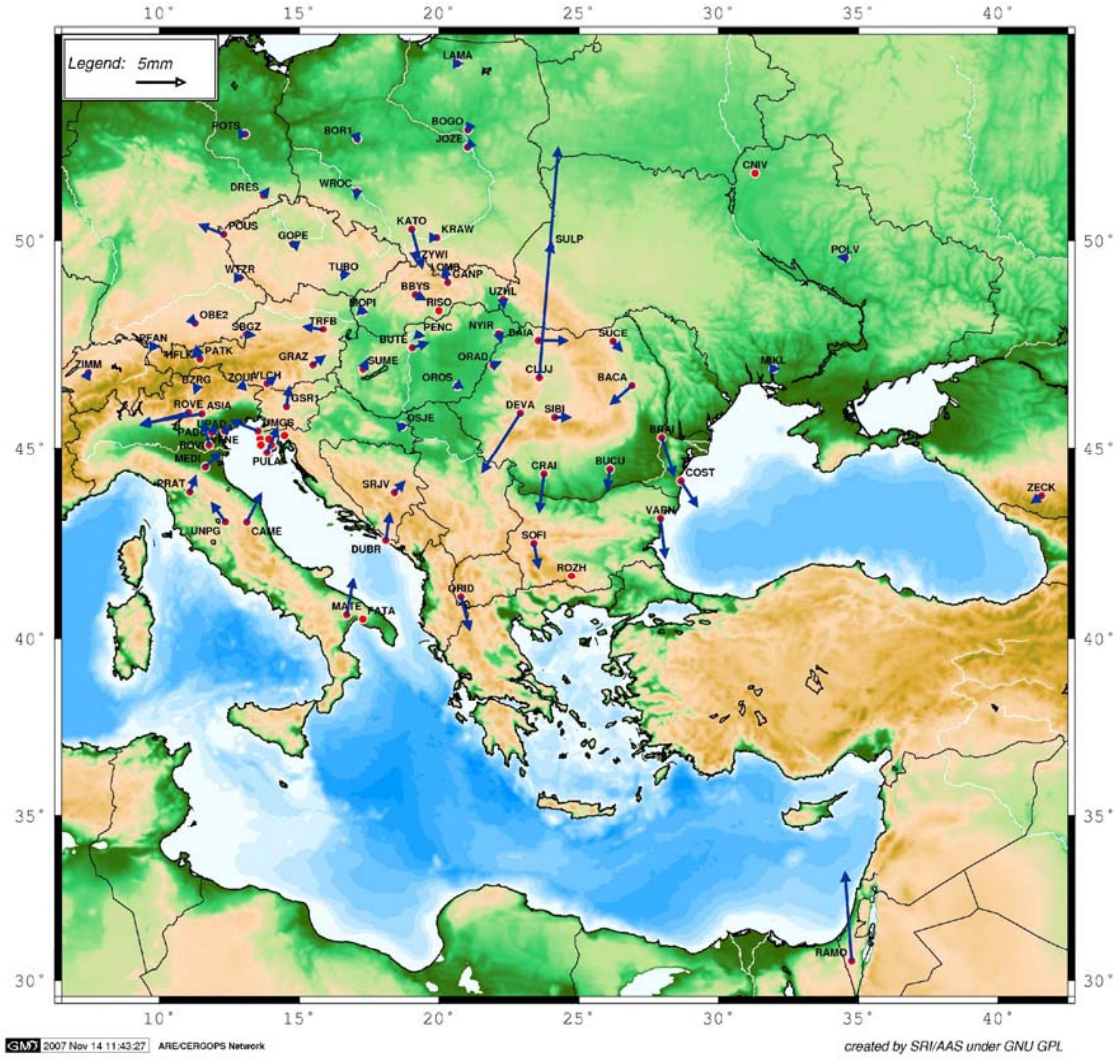
Ca. 90 sites

35 EPN sites

25 national permanent sites

30 epoch sites

Permanent Sites



Network computed by OLG (EPN guidelines)

EPN offsets/outliers applied

Station monitoring and velocity estimation since 2001

Alignement Problems

- Not all permanent stations have log sheets – CEGRN could do that
- Not all RINEX are data public – if needed, negotiations with station managers are possible
- Only one AC for permanent stations, 4-5 for epoch campaigns, sufficient?
- CEGRN campaigns reprocessed and aligned to ITRF2005 (not to IGS05), ok?
- Offsets and outliers of EPN not applied in campaigns, interpretation and combination may be wrong, but there are no official EUREF products
- Rotation of ‘stable Eurasian Plate’ not yet an official product, therefore other models used (ITRF2000, APKIM)

Questions to TWG

- Allow TOR for an alignement of the CERGOP permanent network?
- Are there official products of EUREF, offsets/outliers/plate rotation?
- What are the strategies for a combined European velocity field (distributed alignement by common guidelines, one combination centre for solutions, transformation of partial solutions?

Thank you!