National Report of the Agency for Land Relations and Cadastre of the Republic of Moldova

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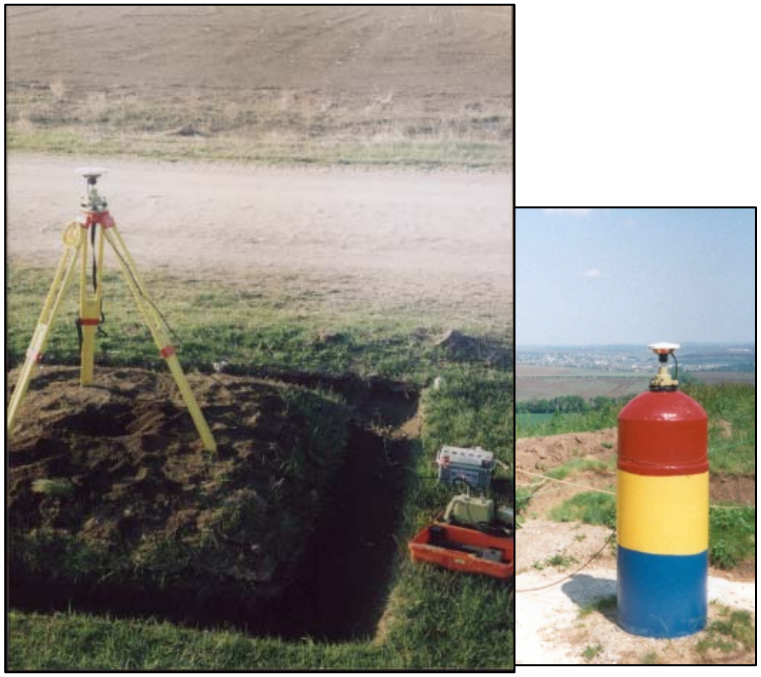
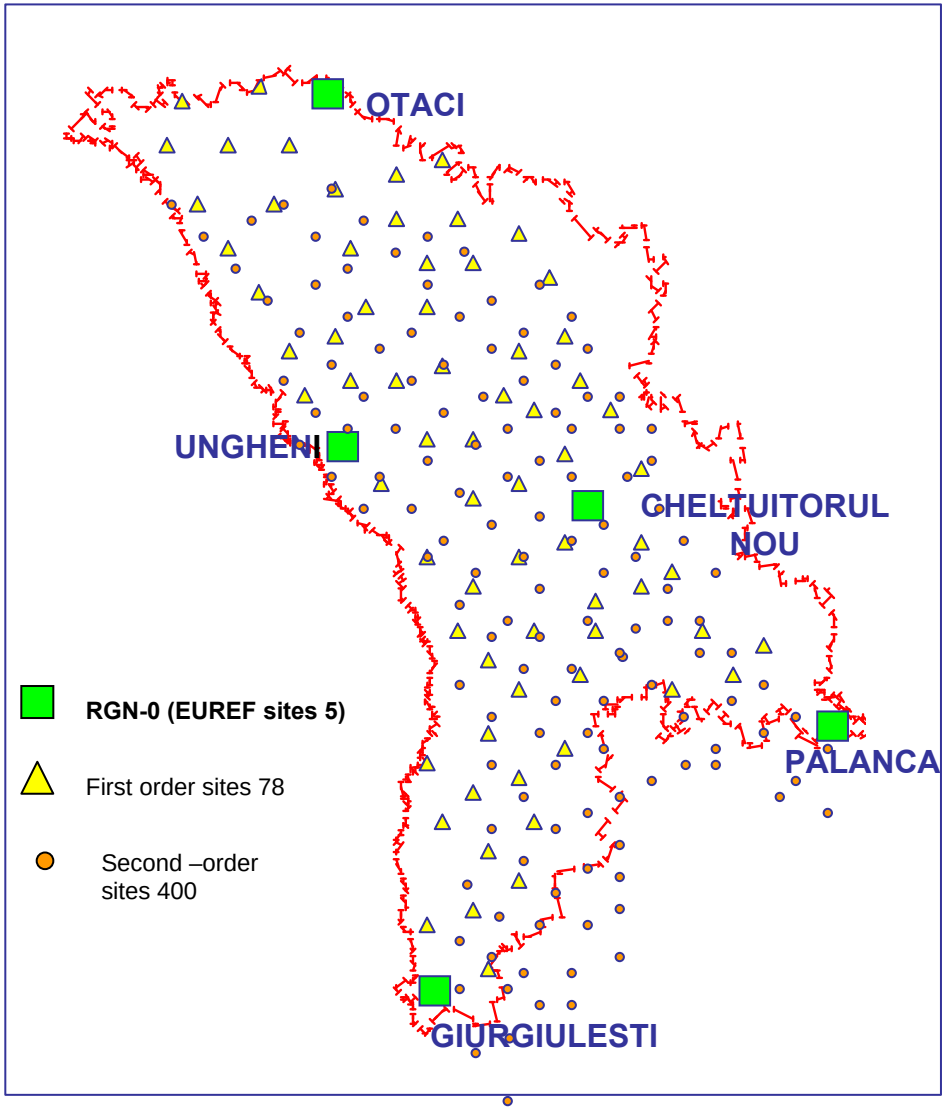
GPS Network...

♦ A new reference system MOLDREF 99 based on the ETRS89 and ITRS97 established

♦ The realization of MOLDREF 99 is the national GPS Network creation was made with density about 1 point per 15 km2.





Geodetic Network Modernisation ...

In 2007 the Agency, in collaboration with Bundesamt für Kartographie und Geodäsie (BKG) , EUREF and EuroGeographics, has installed and jointly operate the first GNSS permanent station IGEO in Chisinau. This reference station is integrated into the EUREF Permanent Network (EPN) and the International GNSS Service array (IGN).

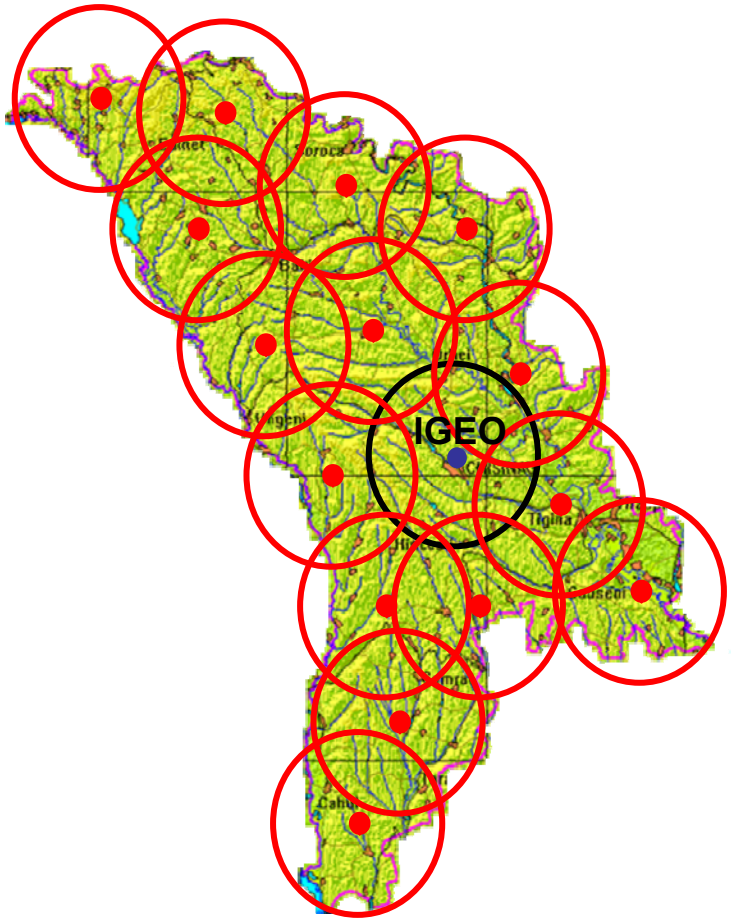
More information:
ftp://ftp. epncb. oma. be/pub/station/new
http://www.epncb.oma.be/_trackingnetwork

The GPS daily and hourly data of IGEO are available at the BKG and OLG regional data centers, SUT analysis centre and INGEOCAD data server:
ftp://ftp.ingeocad.md

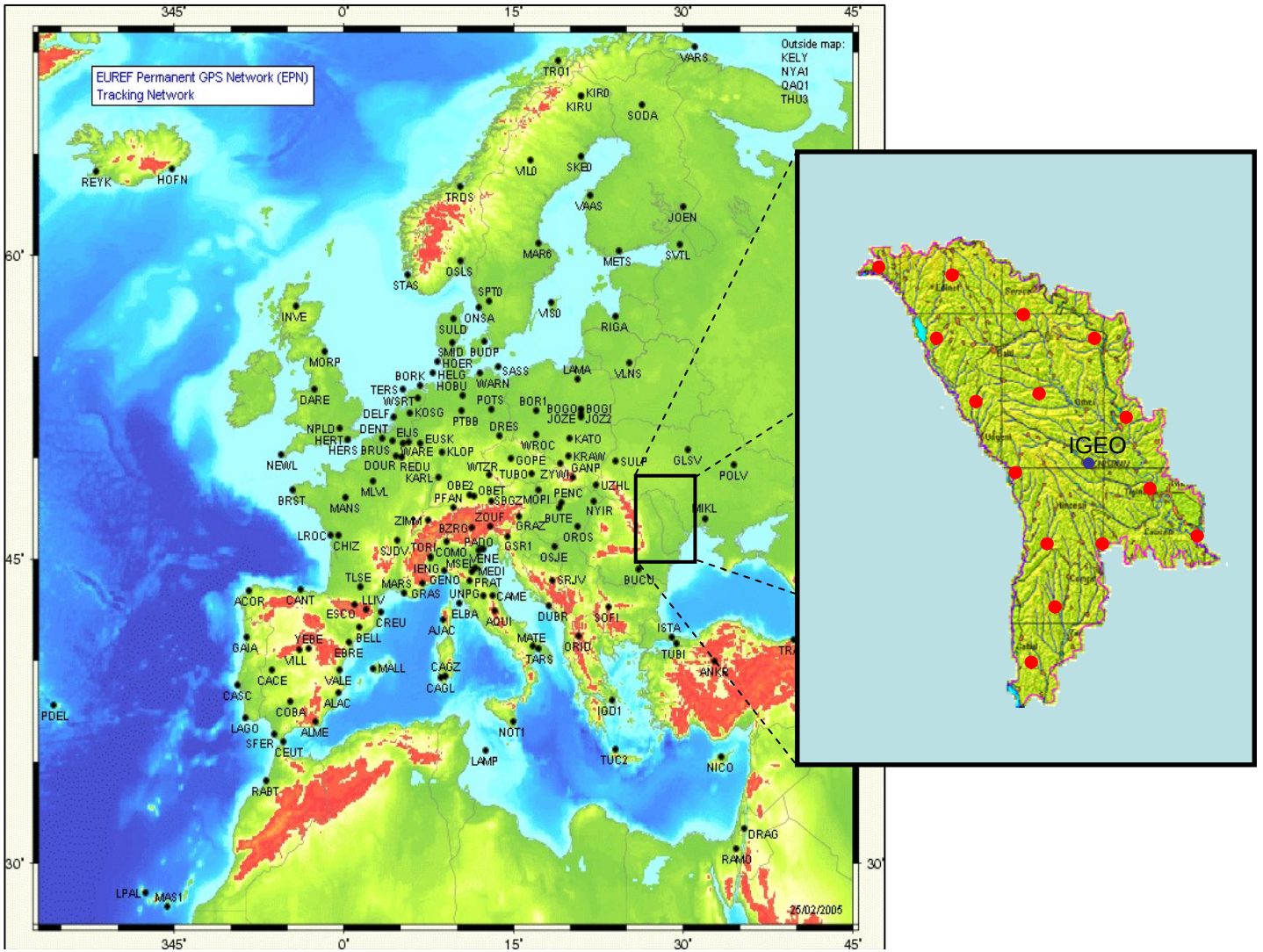
GNSS-MOLDPOS Network

- The development of GNSS-MOLDPOS network is one of the components of the Land Reform in Moldova.

- For the beginning Moldova needs 15 permanent GNSS stations to complete the system.

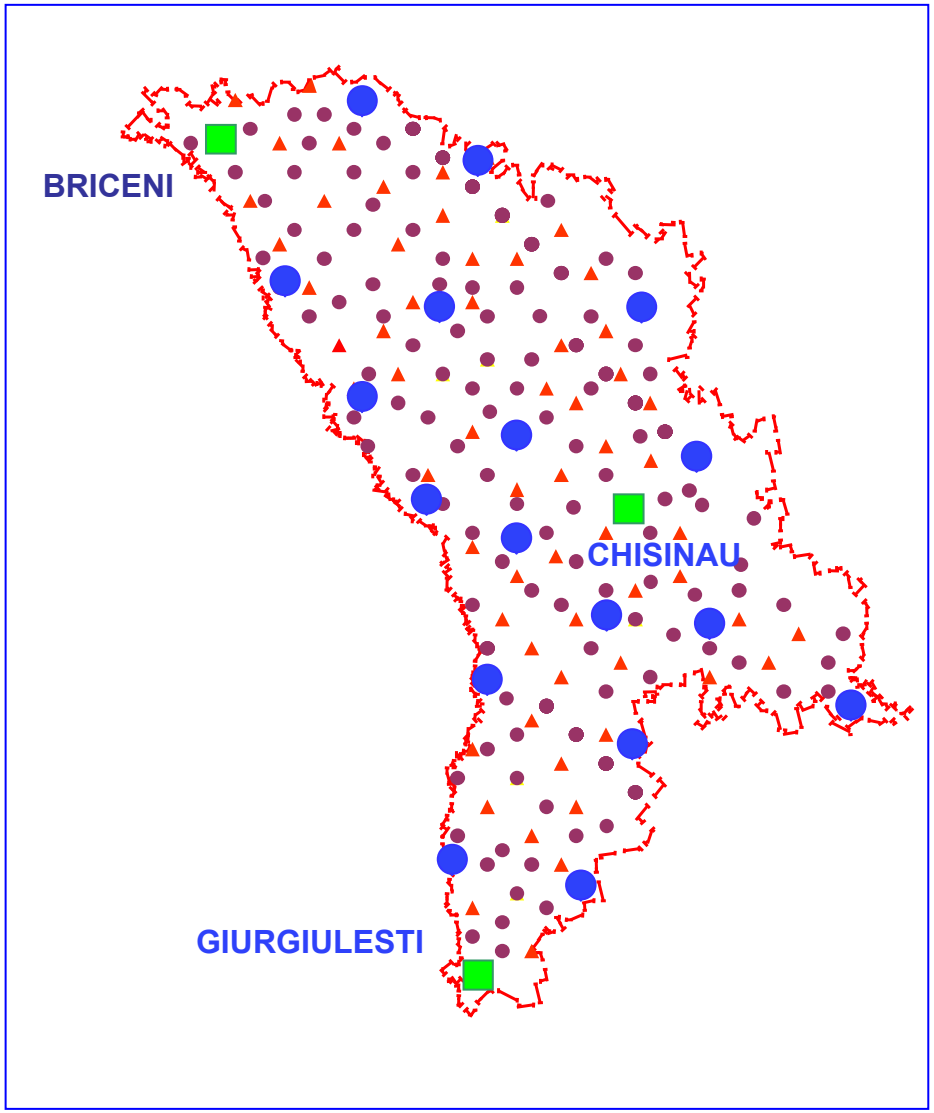


Integration in EPN Network ...



Gravity Network - MOLDGRAV 06

- Absolute gravity sites (3)
- RGS-1 (relative gravity first order sites -17)
- RGS-2 (relative second order sites - 112)
- RGS-3 (relative third order sites -1702)

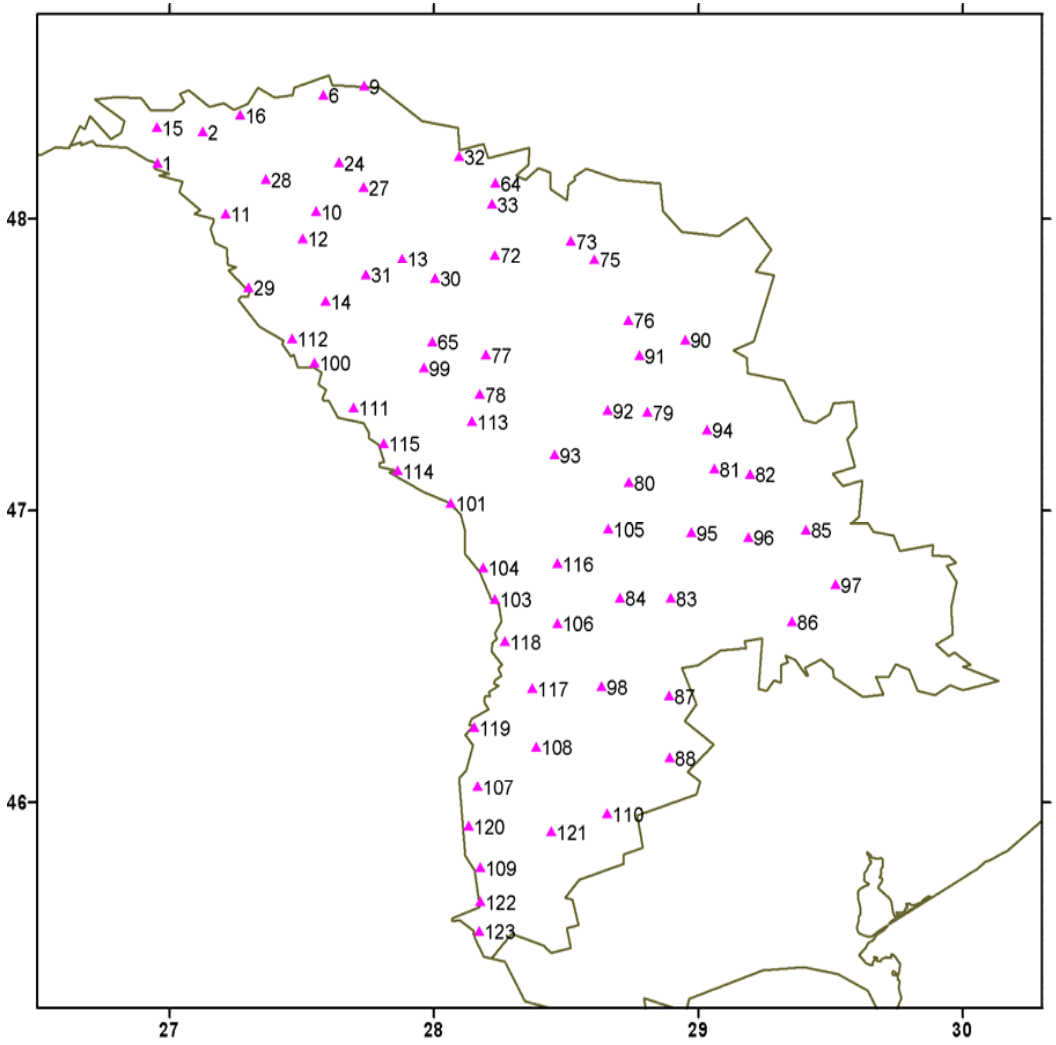


Gravity Network, status in Moldova

- The 3-rd order Gravity Network densification will be done in 2008-2010. This will allow the final network density about 1 point per 15-20 square kilometres for geophysical applications, precise levelling and the high resolution local quasigeoid modelling.

- The future steps are related to the gravity data integration in the IGFS and EUREF programs.

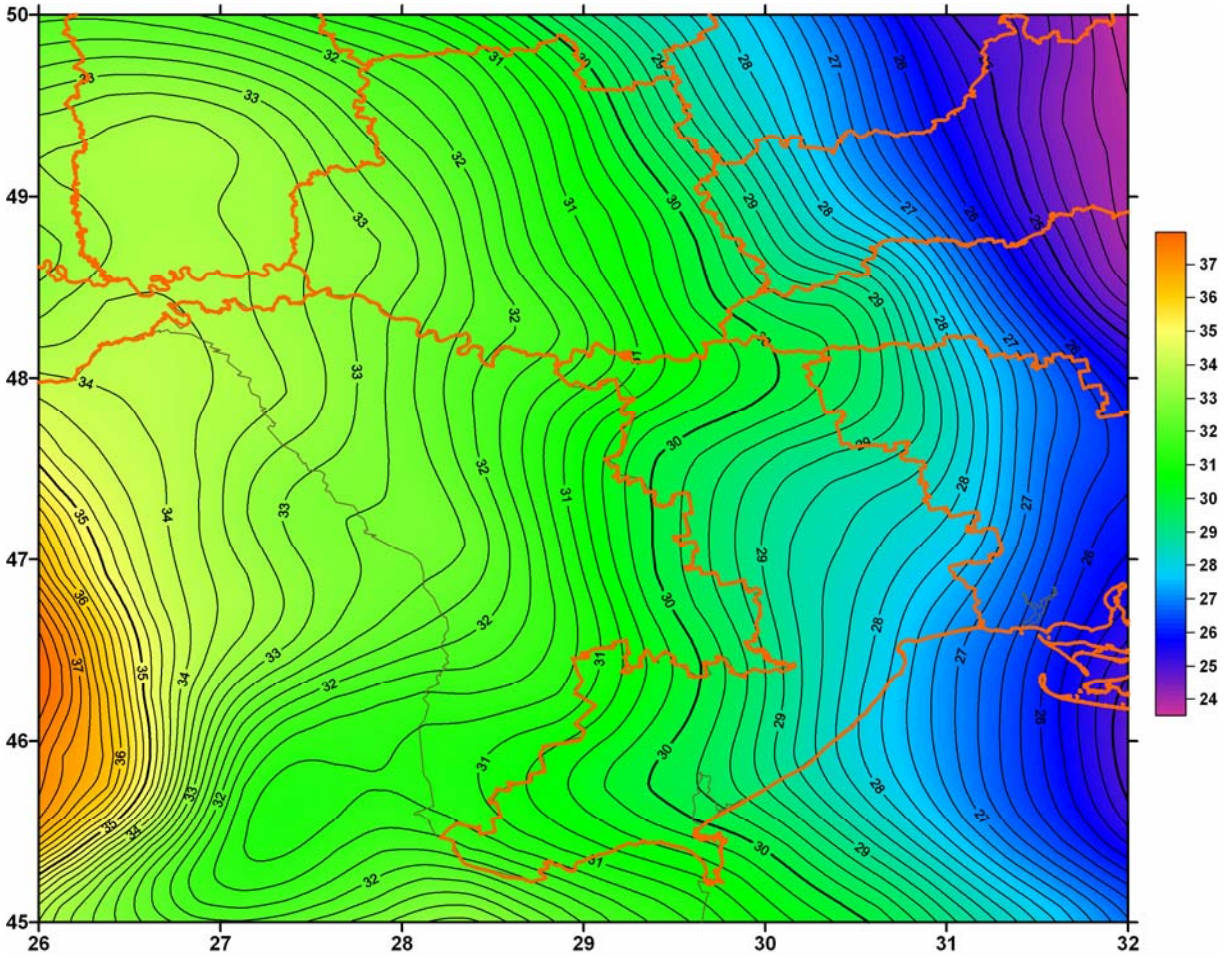
(Quasy) geoid of Moldova



Distribution of GPS points on the territory of Moldova

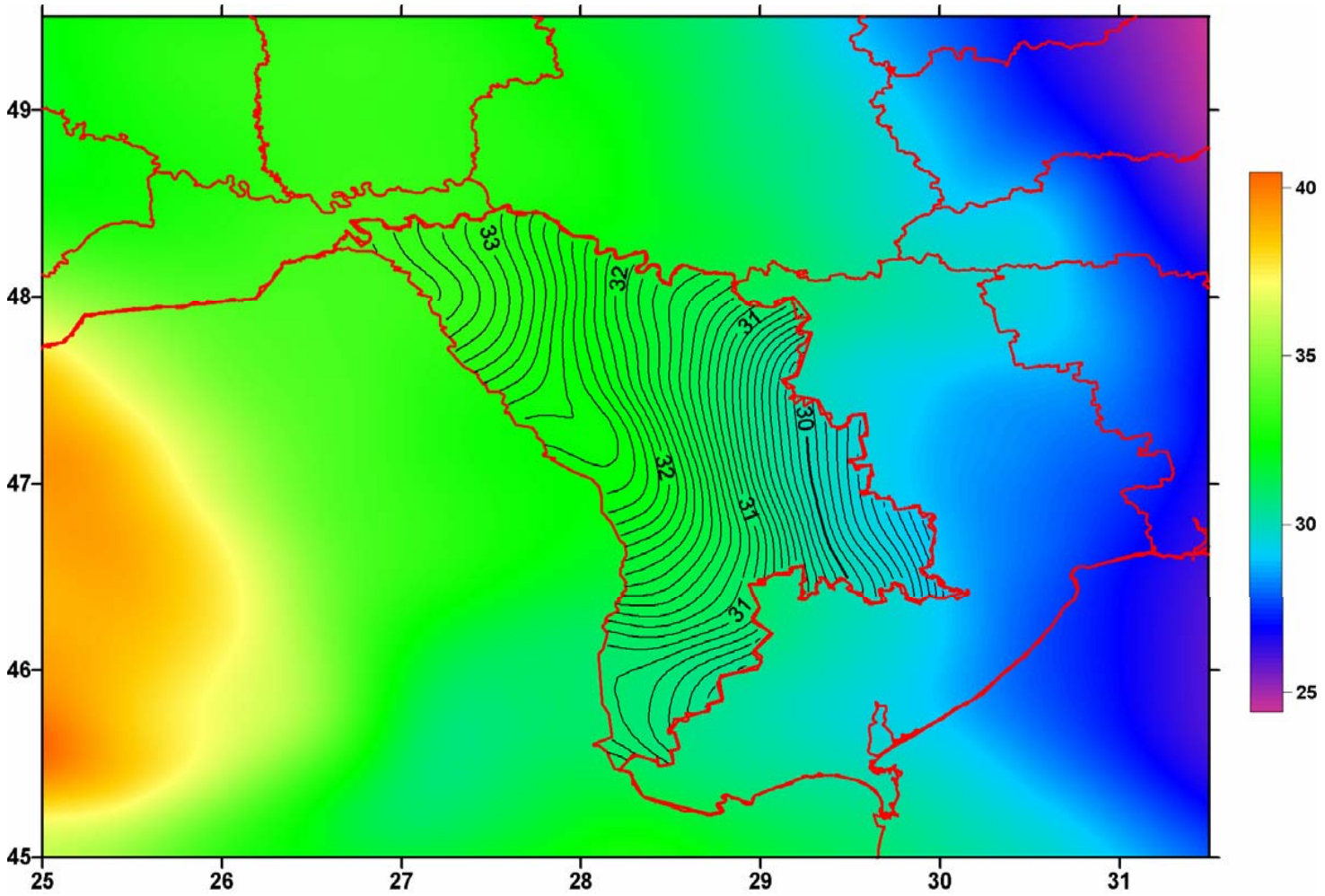
Medium accuracy of (Quasy) geoid elevation GM2005 for the Territory of Moldova make up 5-10 cm

(Quasy) geoid of Moldova



European Quasigeoid Moɗel of territory of Moldova and neighboring region

(Quasy) geoid of Moldova



Quasy geoid elevation scheme GM2005, created according to GPS/leveling and EGG97 quasigeoid, transformed into Baltic system 1977

Conclusion ...

- In period 2008-2010 Moldova needs to install 15 permanent GNSS stations to complete the MOLDPOS system.

- Quasigeoid model GM2005 was created for the territory along side of state boundary of Moldova , with quasigeoid elevation having error of 5 cm. Quasigeoid model for the that territory was maid in ETRS89 reference frame, ETRF97 realization (with regard to GRS-80 ellipsoid).

- In the period 2008 -2011 it need to unified National Network of Permanent GPS Stations to the EUPOS standards.

Thank you for Your attention

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