

National Report of Latvia



EUREF 2008 - Session 6

Brussels, 18 - 21 June, 2008



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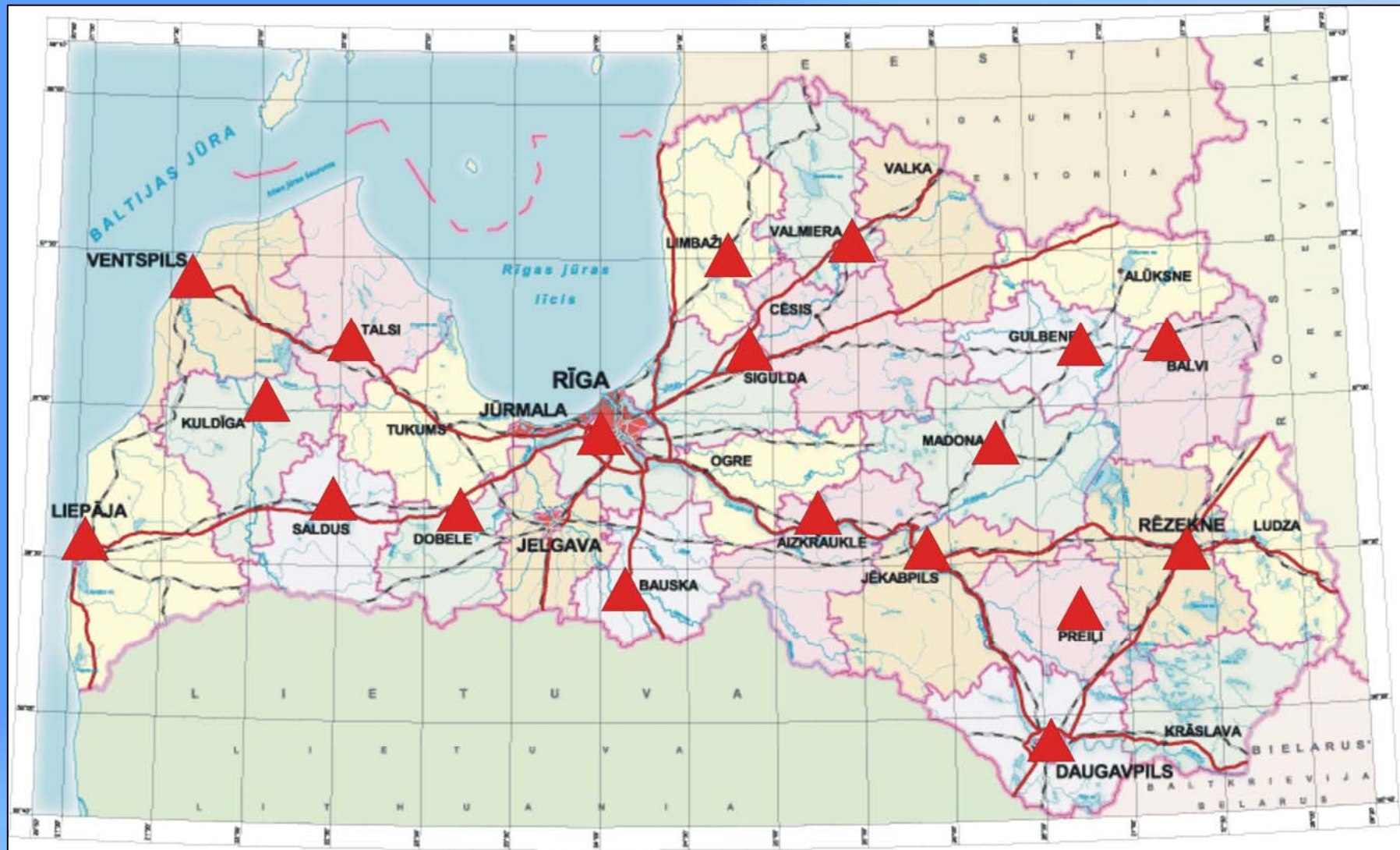
Outline:

- GPS observations and GPS reference system – **LatPOS**;
- National height network - levelling;
- Gravimetric measurements;
- Plans for the next years.

LatPOS, network of base stations of Global Positioning System (GPS)

- Established Year 2005;
- 19 Leica GPS base stations are maintained;
- Control and computation center in Riga;
- Average distance between stations 70 km;
- Maximal baseline outside network is 76 km;
- Corrections: RTK, DGPS, post processing data;
- 139 RTK users, Post processing : 344 users.

Network of base stations



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National height network – levelling

- Levelling works are carried out by one self-dependent team of LGIA;
- Levelling works are carried out in the period from May until November;
- In levelling, level DiNi12 is used;
- In this year, probably we will complete field works of levelling of the first order, and the planned total length of lines 3000 km will be reached;
- It is possible to reach the planned volume only then, if the second levelling brigade is engaged;
- We will start attachment of levelling networks to Lithuania (in 3 sites) and to Estonia (in 4 sites), it will be continued in 2009.

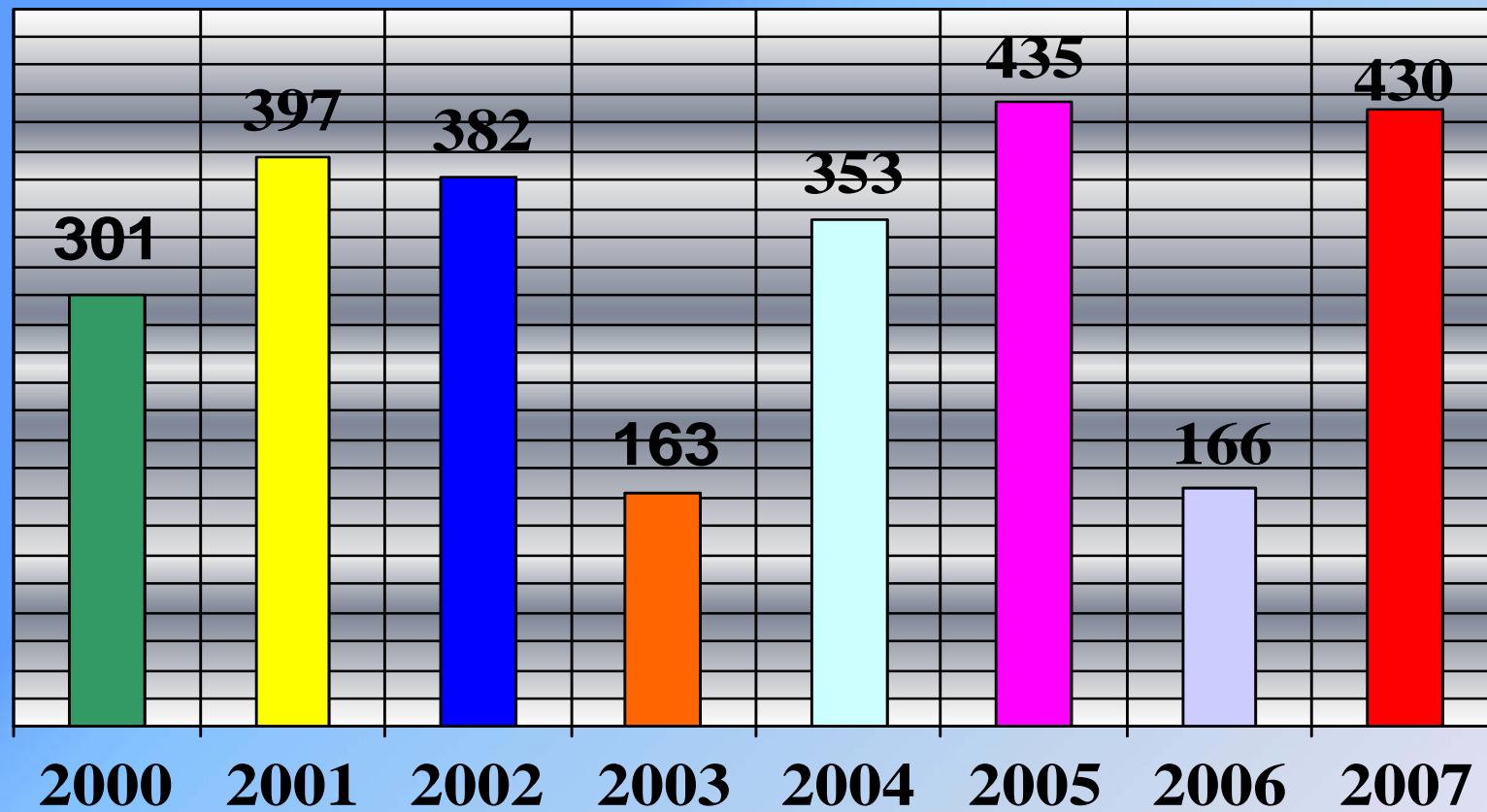






LATVIJAS GEOTELPISKAS INFORMACIJAS AGENTURA GEODEZIJAS DEPARTAMENTS
LATVIAN GEOSPATIAL INFORMATION AGENCY DEPARTMENT OF GEODESY

km

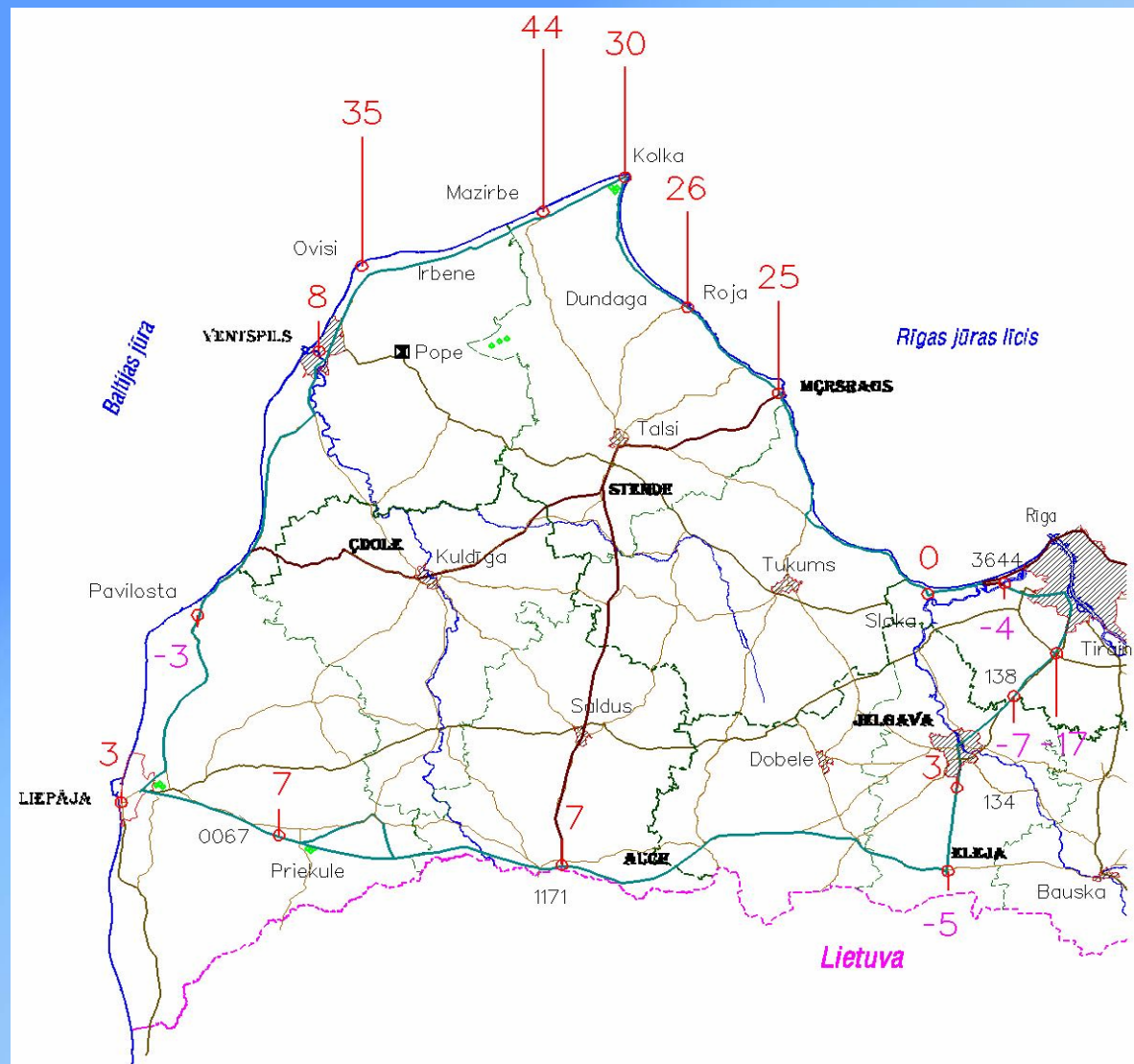


TOTAL 2626 km

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Variations of heights in Western part of Latvia [mm]

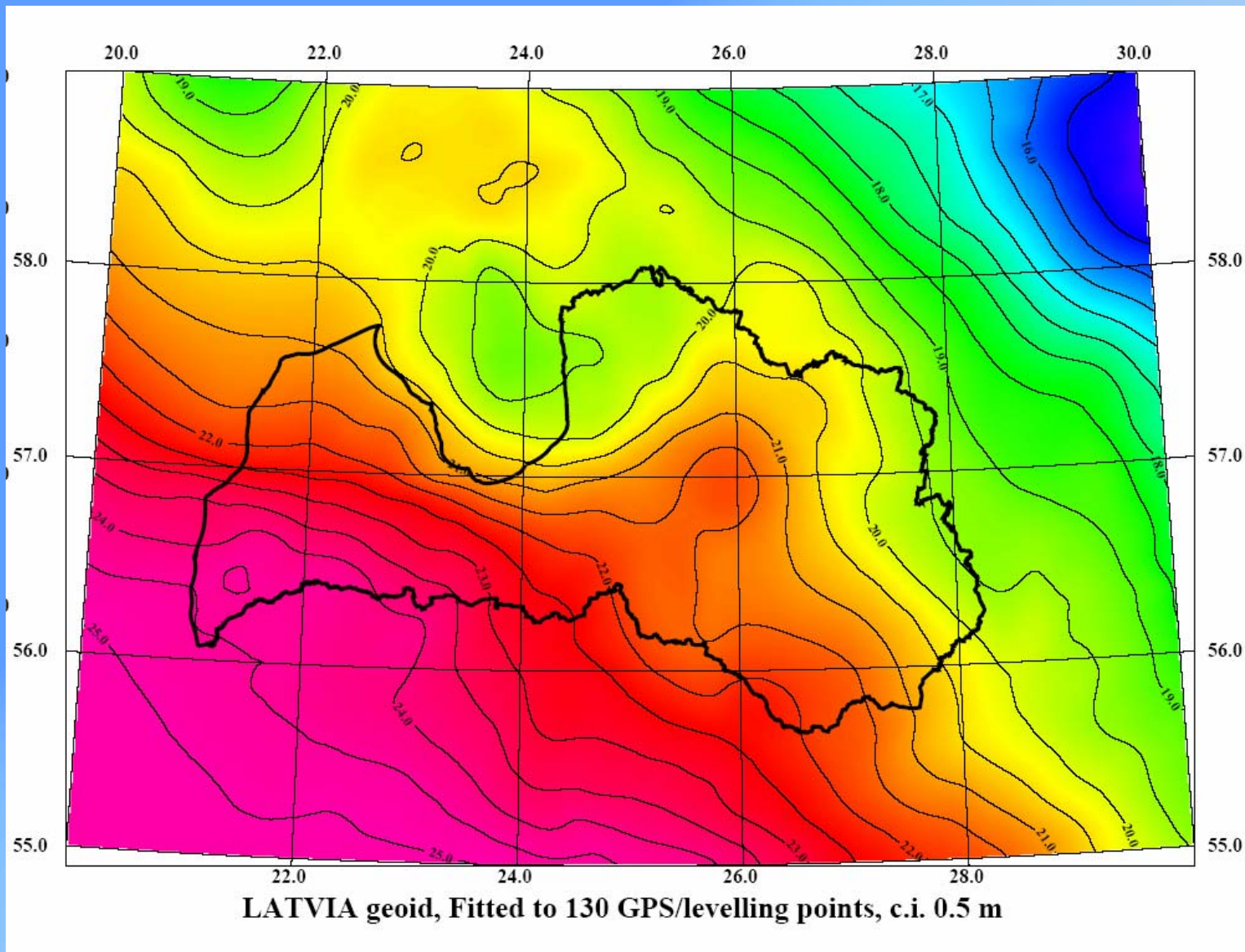


Gravimetric measurements;

- Gravimetric measurements is carried out by one observer
- We are using gravimeter CG-5;
- We have 2 new gravimeters CG-5 at our disposal;
- We carry out regular gravimetric measurements also in our absolute gravimetric point in Rīga, in the territory of the Botanic Garden;
- We intend to continue joint gravimetric measurements with Estonian and Danish colleagues.



“OLD” GEOID LV’98 – STILL IN OPERATION



Plans for the next years:

- To participate in GPS campaign of 2008 arranged by Nordic Countries -NKG (end of September);
- To continue repeated and more precise determination of coordinates of triangulation points by GPS;
- To complete repeated precise levelling of the state;
- To continue other geodetic field and cameral works;
- To engage in fundamental scientific European projects;
- To improve accessibility of geodetic information according to present possibilities and requirements;
- To participate and organize international conferences, as for example W.Struve conference in Jēkabpils, in Latvia from 22nd August until 23rd August, 2008.

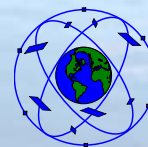
Thank you for attention!



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