



National Report of Turkey

to

EUREF 2012 Symposium

M. Simav, A. Turkezer, A.I. Kurt, Y. Erkan, M. Kurt, O. Lenk
mehmet.simav@hgk.msb.gov.tr

Department of Geodesy, General Command of Mapping, Ankara, Turkey.
www.hgk.msb.gov.tr



Activities After 2011 Symposium



Connection of national levelling network to the UELN



Workshop on height modernization





Levelling Network Connection

Meeting on 15 April 2010

- Construction of benchmarks at two border gates
- Field measurements of spirit levelling and gravity in 2011 summer
- Exchange data for individual processing
- Report preparation



NR10



NR7



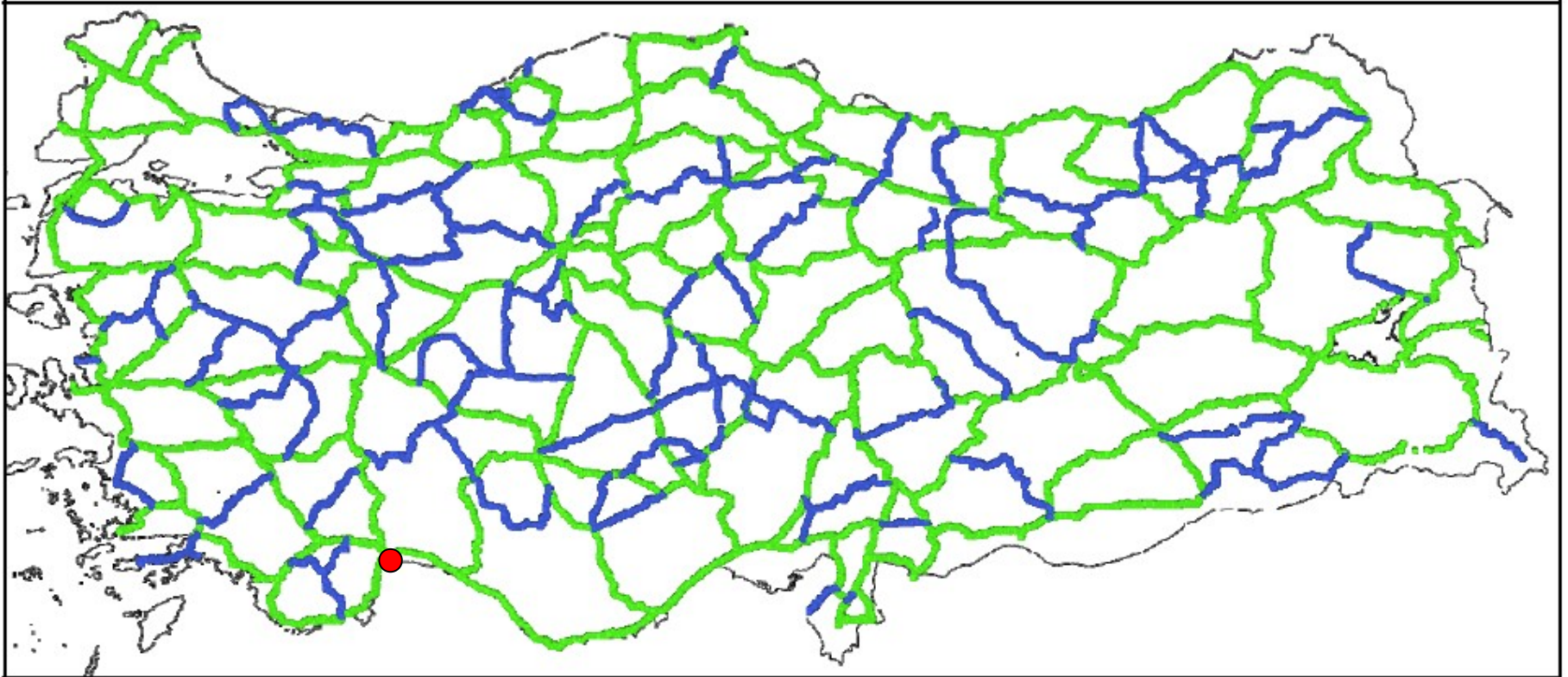


Levelling Network Connection



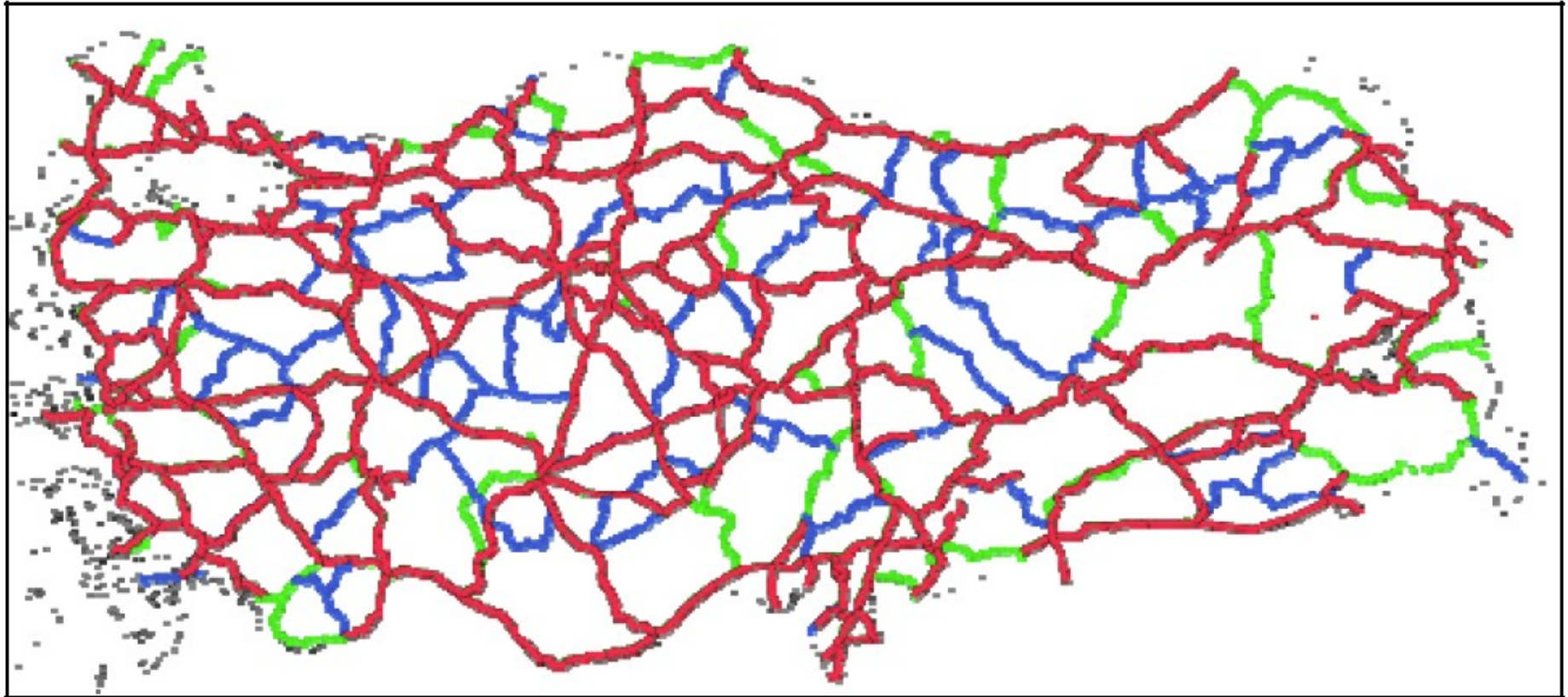
$$H_{\text{EVRF2007}} = H_{\text{TUDKA99}} + a_1$$

BM	H_{TUDKA99}	H_{EVRF2007}	a_1
NR10	48.2634	47.8574	-0.406 m.
NR07	653.9477	653.5430	-0.404 m.



Continuous Damage in Levelling Network
Current way of height determination not sustainable

Roads Enlargement (2003-2011)



~63% destroyed

Workshop on Height Modernization



- Held in March 2012 in Zonguldak Karaelmas University

Topics:

- Current situation of the national vertical reference system,
- Recent and presently conducted modernization projects throughout the world,
- Suggestions for the definition and realization of the new vertical CRS



Workshop on Height Modernization



The general conclusion;

- Improve the geoid model
- Make field works to increase quality and quantity of the gravity data,
- Re-level some part of the existing network and increase GNSS/levelling sites,
- Measure deflection of vertical by digital zenith camera.



Thank You