

***EUREF 2011 – Chişinău (Moldova)***

***National Report  
of Italy***

**ISTITUTO GEOGRAFICO MILITARE ITALIANO**  
***Geodetic Service***

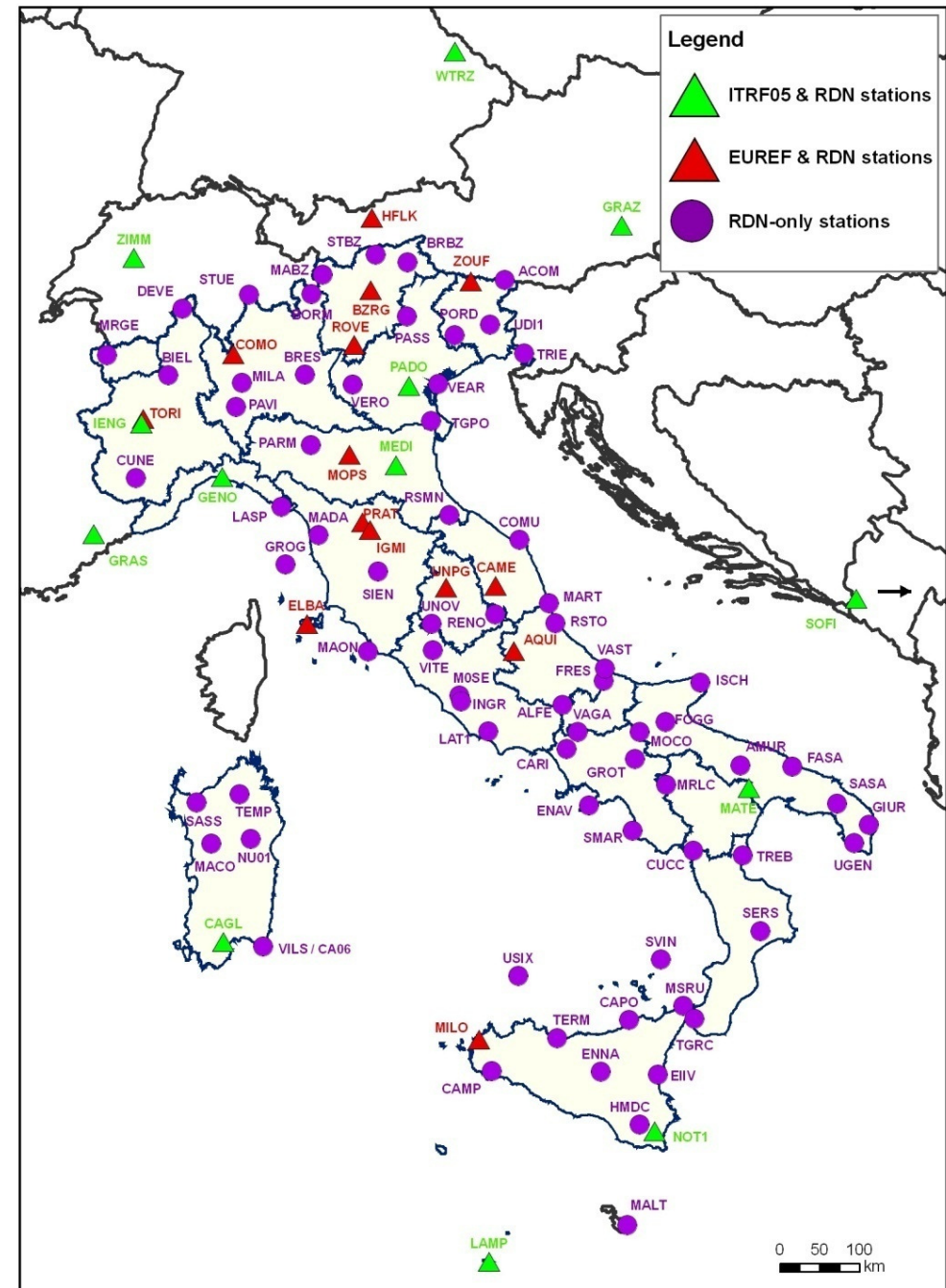
# GPS DYNAMIC PERMANENT NETWORK RDN

RDN was submitted to Firenze 2009 Symposium for the official endorsement (resolution 1)

The network consists of 99 stations, including 13 EUREF stations (realization ETRF2000 at epoch 2008.0)

Monitoring computations are performed every 6 months

Comparisons among the original and the monitoring computations show good consistency with the expected crustal movements



# GPS DYNAMIC PERMANENT NETWORK RDN

The screenshot shows the RDN (Rete Dinamica Nazionale) website. On the left, a map of Italy displays numerous station locations marked with red triangles. A red arrow originates from a station in the northern part of Italy (near Udine) and points to its corresponding entry in the station list on the right.

**Legend:**

- ▲ - station is active in RDN network
- △ - station is presently inactive

**Station List:**

Station Code	Station Name	IGS	EPN
ACOM	12767M001		
ALRA	00000M000		
AMUR	00000M000		
AQUI	12757M001		EPN
BIEL	00000M000		
BORM	00000M000		
BRBZ	00000M000		
BREA	00000M000		
BZRG	12751M001	IGS	EPN
CAGL	12725M000		EPN
CAME	12754M001		EPN
CAMP	00000M000		
CAPO	00000M000		
CARI	00000M000		
COMO	12761M001		EPN
COMU	00000M000		
CUCC	00000M000		
CUNE	00000M000		
DEVE	12779M001		
EIVV	00000M000		
ELBA	12721M002		EPN
ENAV	00000M000		
ENNA	00000M000		
FASA	00000M000		
FOGG	00000M000		
FRES	00000M000		
GENO	12712M002	IGS	EPN
GIUR	00000M000		
GRAS	10002M006	IGS	EPN
GRAZ	11001M002	IGS	EPN
GROG	00000M000		
GROT	00000M000		

**In the official IGM website:**

[www.igmi.org](http://www.igmi.org)

**you can find a RDN section with the dynamic graph and the site descriptions of all stations**

IGMI (Italian Military Geographic institute)

<b>Four char ID:</b> IGMI	<b>IERS Domes ID:</b> 12701M003	
<b>Site name:</b> Italian Military Geographic institute		
<b>Location:</b> Firenze (FIRENZE)		
<b>Antenna type:</b> TPSCR.G3 ( TPSH )		
<b>ARP:</b> BPA	<b>ARP Up Ecc.:</b> 0.0000 m	
<b>ARP North Ecc.:</b> 0.0000 m	<b>ARP East Ecc.:</b> 0.0000 m	
<b>Receiver type:</b> TPS ODYSSEY_E		
<b>RDN inclusion since:</b> 15/12/2007		
<b>Date of last change:</b> 03/12/2008		
<b>ETRF2000 epoch 2008.0</b>		
X	4523251.548 ± 0.001 m	
Y	896759.771 ± 0.001 m	

# GPS STATIC NETWORK IGM95

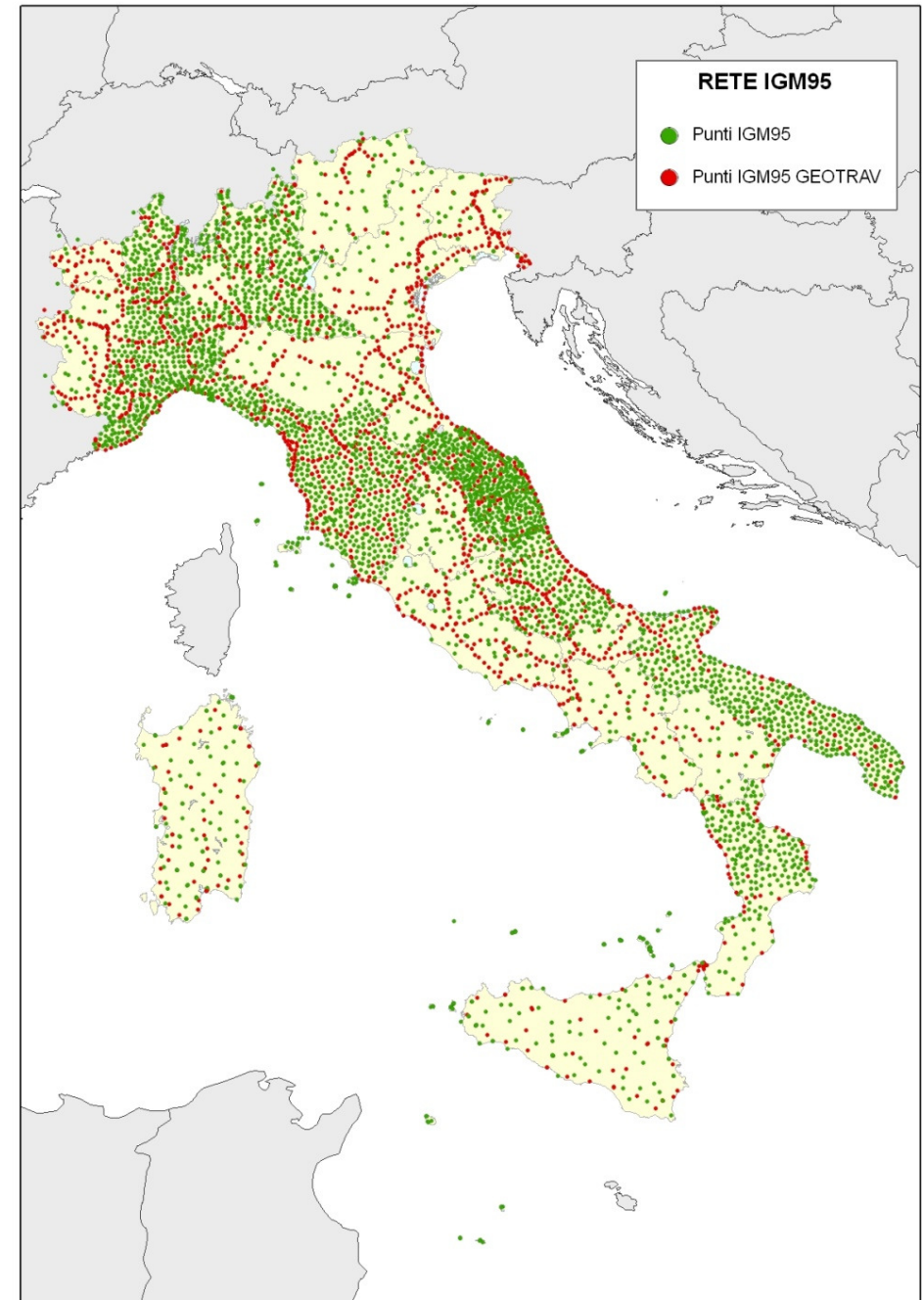
Original network realized from 1990 to 1995: ~1230 points (~450 points, called GEOTRAV, coincident with levelling benchmarks)

Subsequently densified:

- 1100 GEOTRAV
- 2850 points from regional densification (mean distance 7 km)

At present: ~ 5000 punti







Realization of ETRF89

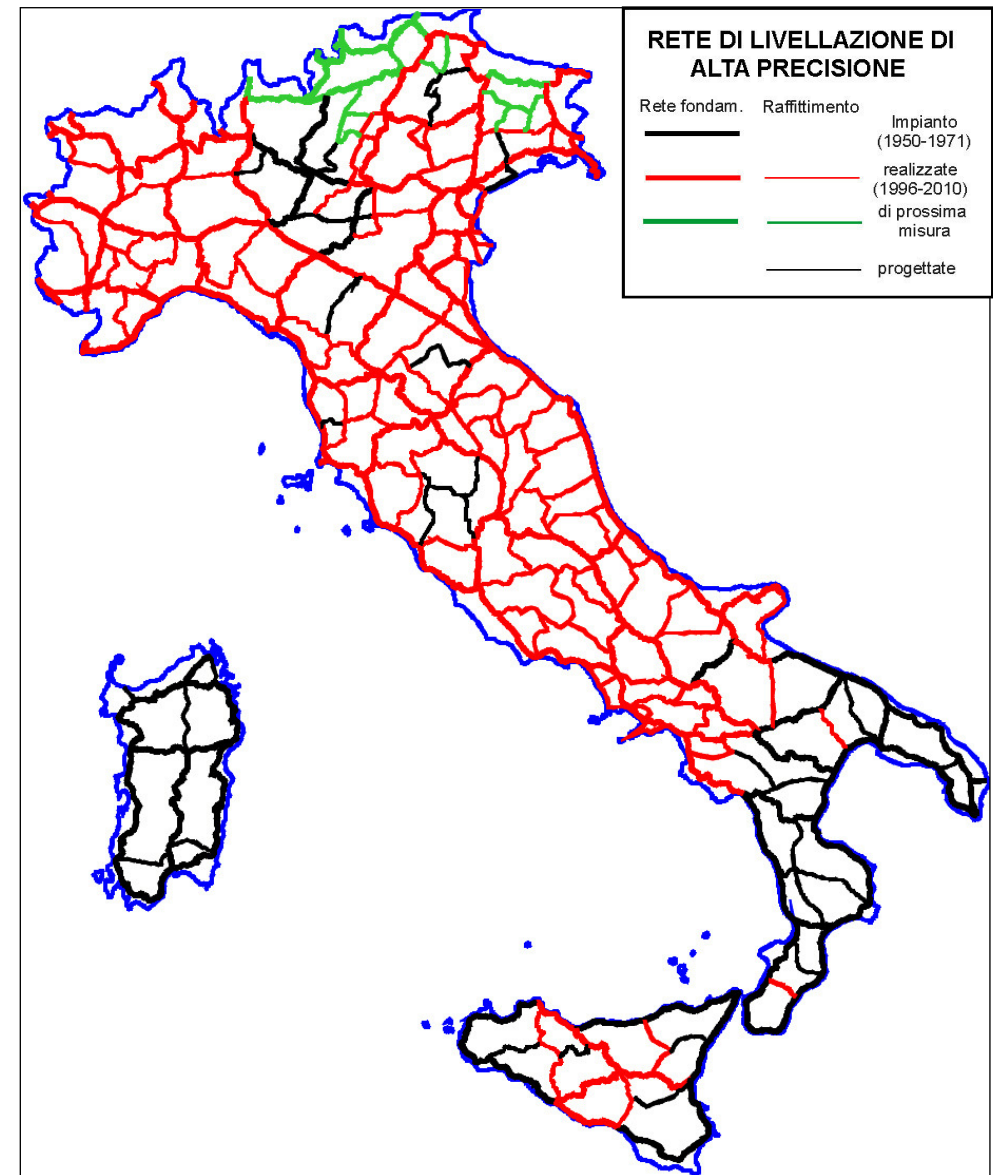




# HIGH PRECISION LEVELING NET

- Ancient network (1878-1900)
- Modern network (1950-1971) 13.000 km  
3 tide gauges: Continental Italy: Genova 1942  
Sardinia: Cagliari 1956  
Sicily: Catania 1965
- On-going densification (1996-2011):  
up to 20.000 km

Fundam. net	Densifi- cations	
		Set up 1950-71
		Measured 1996-10
		On-going 2011
		Planned



Relative precision: ~ 1 mm/km

Thank you for your attention!

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