



INSTITUTO GEOGRÁFICO PORTUGUÊS

National Report of PORTUGAL



H. Kol (hkol@igeo.pt), M. Vasconcelos,
G. Crisóstomo, C. Martins, A. Medeiro

Riga, Latvia



14 - 17 June, 2006



GPS Permanent Network

EPN: CASC, GAIA, LAGO, PDEL

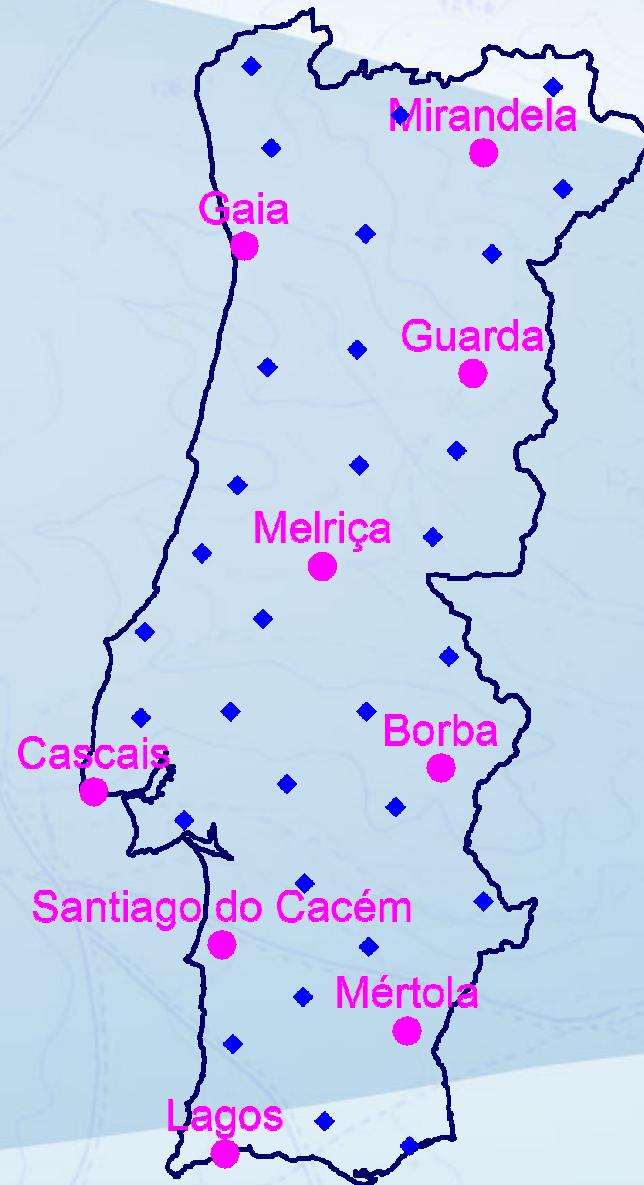




Future GNSS Continuous Network



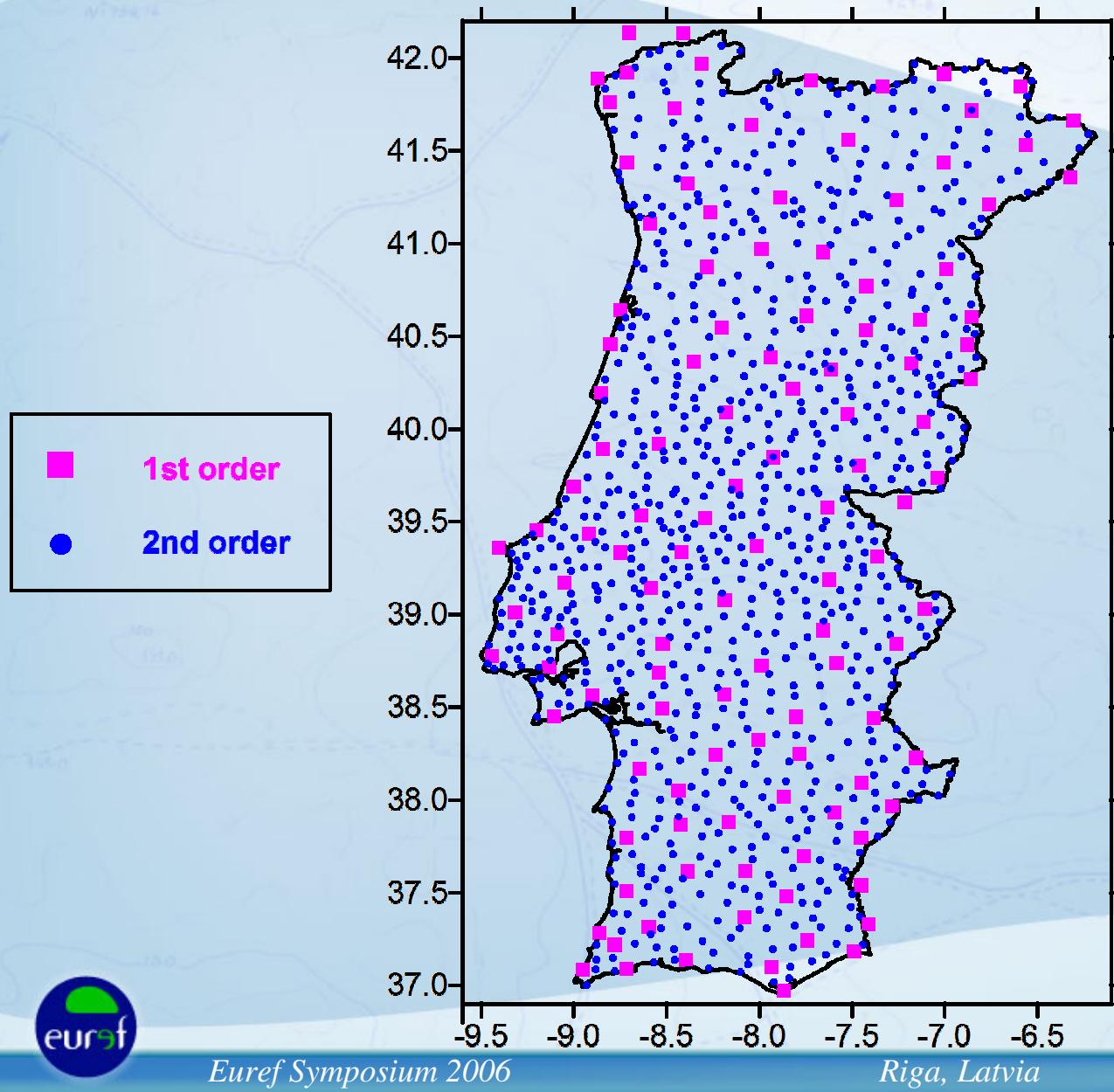
Reference
Stations







Geodetic Network



1st order	ETRS89 σ
lat	0.01 m
long	0.01 m
height	0.02 m

2nd order	ETRS89 σ
lat	0.03 m
long	0.03 m
height	0.04 m



Geodetic Network – Online

http://www.igeo.pt/\$vg/rgn/ficha.asp?num=22 - Microsoft Internet Explorer provided by IGP

VÉRTICE GEODÉSICO: BOURO	ORD: 1	
CONCELHO: CALDAS DA RAINHA	N: 22	
COORDENADAS NO SISTEMA ETRS89		
GEODÉSICAS		
$\lambda: 9^{\circ} 12' 04.1337'' \text{ O}$	$\phi: 39^{\circ} 27' 13.8936'' \text{ N}$	
PROJEÇÃO PT-TM06 (m)		
X: -91927.51 ± 0.01	Y: -23259.41 ± 0.00	
CONV. MERID.: $0^{\circ} 00' 14.3893''$	COEF.DEFORM.: 1.00017	
ALTITUDES NO TOPO (m)		
GEOMÉTRICA (ELIP): 221.07 ± 0.01		
ORTOMÉTRICA (MSL): 167.62 ± 0.10		
TIPO: BOLEMBREANO S/ CILINDRO		
SUPORTE: TERRENO		
DIMENSÕES DO SINAL (m)		
-	PILAR	BASE
ALTURA:	5.99	0.00
LARGURA NO TOPO:	0.40	0.00
LARGURA NA BASE:	1.82	0.00
ALTURA AO 1º GRAMPO:	1.45	
ACESSO: Viatura ligeira (0 minutos) -		
OBS:		

Imprimir

ETRS89

Done Internet



Azores Archipelago

Island	Number of stations
Flores	33
Corvo	6

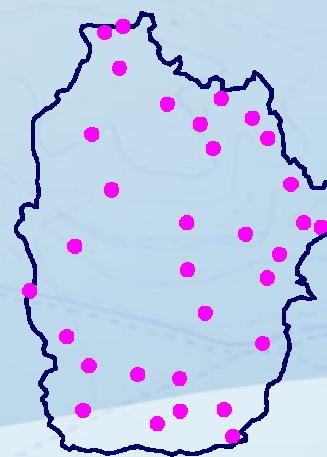


Corvo

	ITRF 93 σ Max
N	0.04 m
E	0.04 m
U	0.04 m

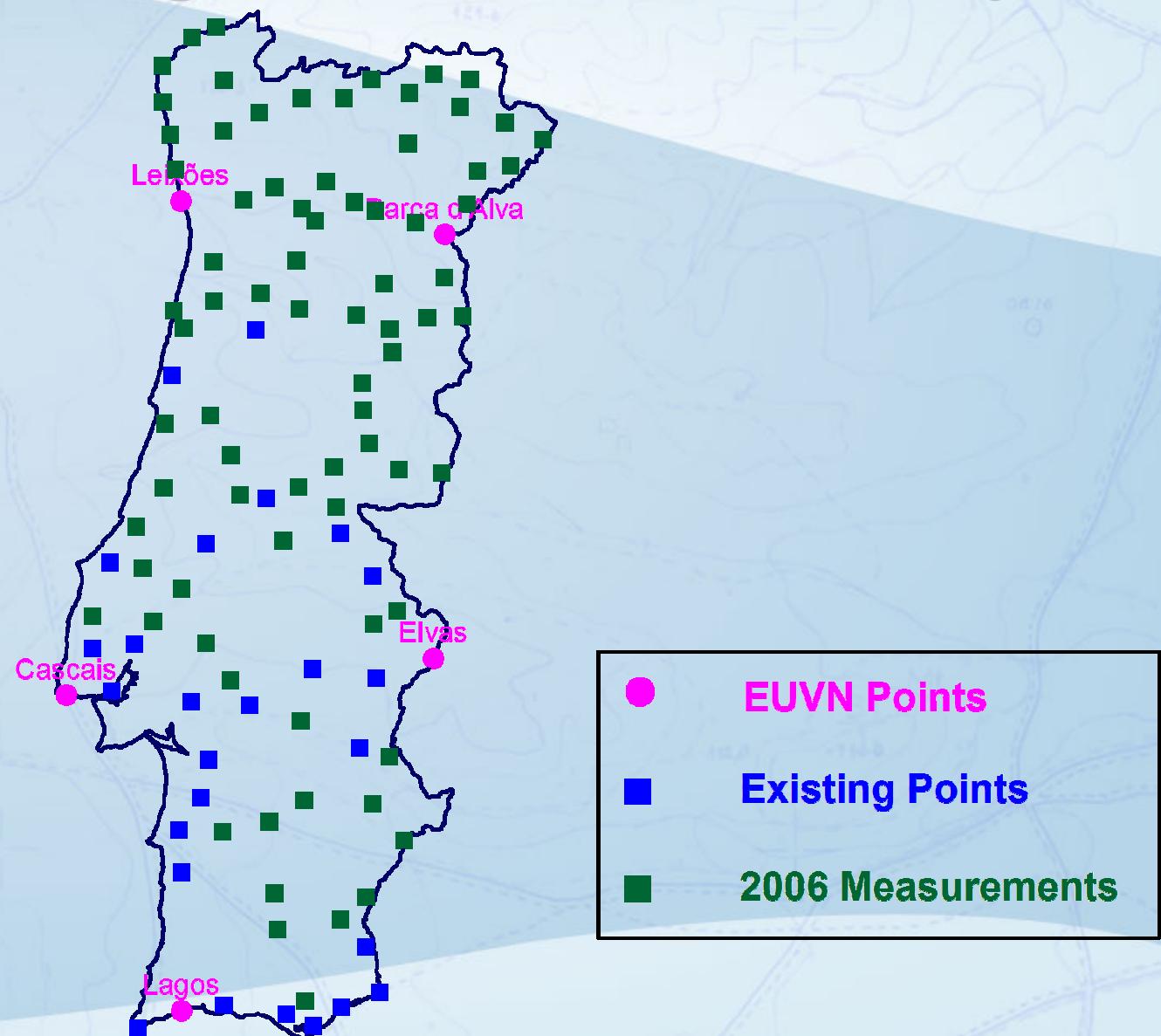
Flores

	ITRF 93 σ Max
N	0.02 m
E	0.02 m
U	0.02 m





GPS on levelling bench marks – 2006 Project





INSTITUTO GEOGRÁFICO PORTUGUÊS

National Report of PORTUGAL



H. Kol (hkol@igeo.pt), M. Vasconcelos,
G. Crisóstomo, C. Martins, A. Medeiro

Riga, Latvia



14 - 17 June, 2006