

EUREF 2011 Symposium

National Report of Austria

by

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Permanent GNSS-Networks

5 Networks:

EPN – Subnetwork (75 stations)

MON - Eastern Medit./Arabian Plate (80 stations)

ALBPOS – Albanian RTK network (40 stations)

CERGOP – Central European Geodynamic Network

(85 stations)

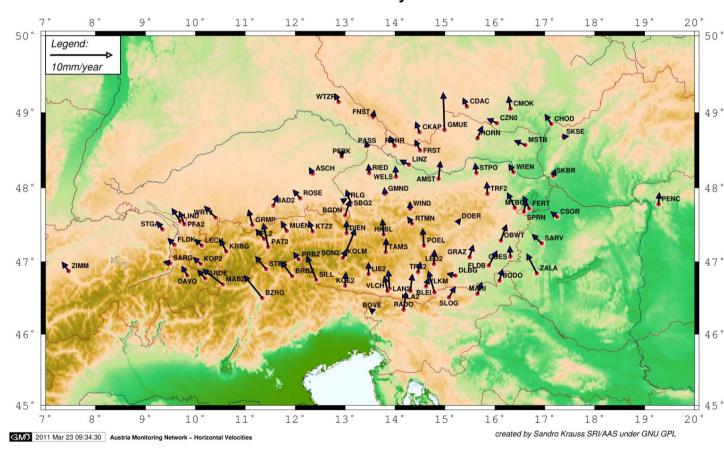
AMON-Austrian monitoring (85 stations)

AMON08 solution:

Base for the whole national realization of ETRS89 in AUSTRIA

1) OLG: Observatory Lustbühel/Graz

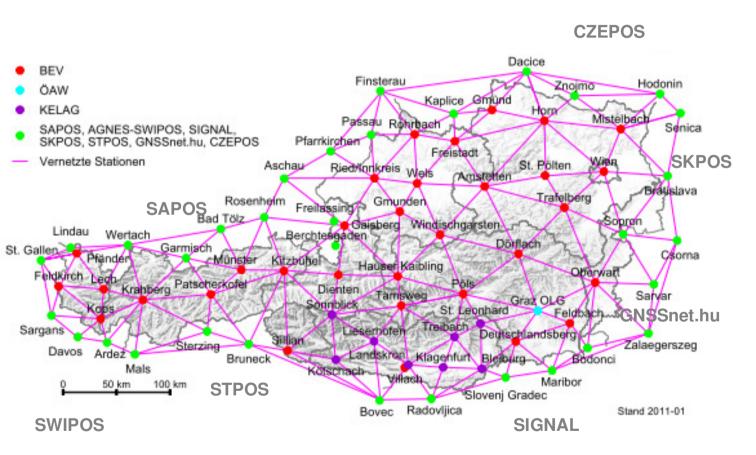
Cooperation between BEV and OLG¹⁾



Example: AMON horizontal velocities ETRF2000 from cumulated time series 1999-2011



APOS – Austrian Positioning Service



From GPS to GNSS

GPS+GLONASS+GALILEO-ready All stations in Austria during 2010

Central Computing Software:
Trimble GPSnet → VRS3net

Change of IT hardware: 2 redundant computing centers

Clearing of GNSS: 23rd of May

GIS Grid (NTv2)

From ETRS89 → national MGI 1σ: ± 4cm Via NTRIP/RTCM 3.1

EUREF2011: National Report of Austria



BEV - Bundesamt für Eich- und Vermessungswesen



Punktkarte ETRS89

Triangulierungspunkt 163-118

Punktname: KARWENDELBAHNBRÜCKE

Punktname: KARWENDE Ordnung: 5

Ordnung: 5
Auflage der Punktkarte: 5

UTM-Blattnr. ÖK50 2223, Zone 32

Bundesland: Tirol
Politische Gemeinde: Innsbruck
Vermessungsbezirk: Innsbruck
Katastralgemeinde (Nr.): Hötting (81111)

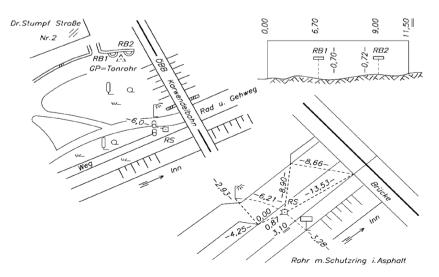
Punkthinweis: EHG Letzte Begehung: 06.06.2001



KZ	Х	[m]	Y [m]	Z [m]	Breite [° ' '	']	Länge [° ' "]		Höhe _{ell} [m]	RW _{UTM} [m]	HW _{UTM} [m]	
R2	42519	30,062	855476,142	4661697,369	47° 15' 26,828	343"	11° 22' 3	3,13157"	625,845	679753,40	5236512,33	
R1	42519	31,630	855474,987	4661696,146	47° 15' 26,770	042"	11° 22' 3	3,06301"	625,836	679752,02	5236510,50	
C1	42519	30,755	855476,972	4661695,310	47° 15' 26,763	314"	11° 22' 3	3,16377"	624,906	679754,14	5236510,34	
C2	42519	39,973	855499,307	4661684,731	47° 15' 26,211	102"	11° 22' 34,11863"		626,260	679774,73	5236493,90	
KZ	Stabilisierung, Bezug						SHW	N _{GRS80} [m]		N _{BESSEL} [m]	N _{BESSEL} [m]	
R2	RB/2/OBERFLÄCHE							49,364		1,108	1,108	
R1	RB/1/OBERFLÄCHE							49,364 1		1,108	1,108	
C1	ROHR/= GP/OBERFLÄCHE							49,364 1,108		1,108		
C2	RS/OBERFLÄCHE							49,364 1,108				
mX	[m]	mY [m]	mZ [m]	vX [m/Jahr]	vY [m/Jahr]	vZ [m/Jahr]	Koordinatenbestimmungsart				
+/- 0,006		+/- 0,003	+/- 0,005	+/- 0,000	+/- 0,000	+/- C	+/- 0,000 aus G		GPS Basislinien abgeleitet			
Geodätisches Datum / Epoche								Messdatum (kartesisch)				
ETRS	ETRS89/AUSTRIA 2002								18.09.2002			

Lage- und Wegbeschreibung:

Teil 1 / 1



ETRS89 - Coordinates

Presentation via online service

EGA - eGeodata Austria

2011-05-01:

38.100 coordinates of control points Available in ascii or csv format

Base of ETRS89 coordinates: EUREF-campaign 2002



Acquisition of absolute gravity meter FG-5







Cooperation between:

BEV – Federal Office of Metrology and SurveyingZAMG – Central Institute for Meteorology and Geodynamic

Main objectives:

- Gravity base network
- ECGN points like Trafelberg at the Conrad Observatory (COBS)