



GEOFON Status Report for the FDSN Meeting Sapporo July 2003

Winfried Hanka, GeoForschungsZentrum, D-14473 Potsdam, Germany,
hanka@gfz-potsdam.de

Network

Not much has changed within the permanent GEOFON network. It still consists of 48 stations (table 1). Three more stations became available in real-time or near realtime (APE and SKD, Greece, and MLR, Romania). The station TRTE (Estonia) was moved to a new location and is called VSU now. MLR, VSU and RIOB (Brazil) are now equipped with new Earth Data digitizers rather than with the former Quanterra Q380s.

Data Center

Also in the GEOFON Data Center not much has changed. The data from 36 permanent stations are now acquired through SeedLink connections in (near) real-time. The achieved time delays range between a few seconds (Internet or dedicated lines) and 30 minutes for dial-up stations. The incoming SeedLink data are immediately forwarded to several other data centers like the IRIS DMC, the ODC and many more. An automated NRT data processing and archival system checks the data for quality problems, runs an event picker and copies the data into the online NRT data base. The AutoLoc system, which takes the picks, associates arrivals, locates events and distributes the results for the most important events as alert emails and web page entries in less than 3 minutes after the first arrivals, was extended by a number of foreign SeedLink stations in several european countries forming now a well-distributed virtual real-time network.

The online data storage system was extened to 4 Linux PC and turned into RAID disk systems with a total capacity of 6 TB for holding the entire data archive of the GEOFON DC. The GFZ tape robot system is still used as backup medium. All data from the GEOFON network and from presently 20 temporary experiments are now available online.



GEOFON Station Summary Permanent Network (Status July 2003)

	Code	Coordinates	Inst.Date	Cooper. with	Communication
Existing Permanent Stations					
Port Moresby, PNG	PMG	9.409S 147.154E	Sep 93	IRIS/PACIFIC21	phone
Moravsky Bercov, CR	MORC	49.776N 17.547E	Nov 93		Internet/SLK
Dublin, Ireland	DSB	53.245N 6.376W	Dec 93		phone/SLK
Walferdange, Luxembourg	WLF	49.665N 6.152E	Mar 94		Internet/SLK
Bar Giora, Israel	BGIO	31.722N 35.088E	May 94	GII	+++ May 96
Muntele Rosu, Romania	MLR	45.492N 25.946E	Oct 94		no
Ny Alesund, Spitsbergen	KBS	78.915N 11.938E	Nov 94	IRIS/AWI	Internet/SLK
Kilimambogo, Kenya (rep. NAI)	KMBO	1.274S 36.804E	Jan 95	IRIS	Internet/SLK
Michnevo, Russia	MHV	54.958N 37.767E	May 95		no
Rügen, Germany (rep. LID)	RGN	54.546N 13.364E	May 95	GRSN	ISDN/SLK
Suwalki, Poland	SUW	54.013N 23.181E	Nov 95		phone/SLK
Rüdersdorf, Germany (temp)	RUE	52.480N 13.780E	Nov 95		+++ Jan 00
Soend. Stroemfjord, Greenl.	SFJ	66.997N 50.615W	May 96	IRIS	ISDN/SLK
Piszkes, Hungary	PSZ	47.919N 19.894E	Jun 96	IG Budapest	Internet/SLK
San Fernando, Spain	SFUC	36.637N 6.175W	Jun 96	UCM/ROA	+++ Oct 01
Tartu, Estonia	TRTE	58.379N 24.721E	Jun 96		+++ Apr 03
Eilath, Israel	EIL	29.670N 34.951E	Jul 96	GII	Internet/SLK
Wanagama, Indonesia	UGM	7.913S 110.523E	Aug 96		Inmarsat
Isparta, Turkey	ISP	37.843N 30.509E	Oct 96	MEDNET	Internet/SLK
Limon Verde, Chile	LVC	22.618S 68.911W	Nov 96	IRIS	Internet/LISS
Sanae, Antarctica	SNAA	71.671S 2.838W	Mar 97	AWI	Internet/SLK
Manteigas, Portugal	MTE	40.403N 7.537W	Oct 97		ISDN/SLK
Cartagena, Spain	CART	37.587N 1.001W	Dec 97	UCM/ROA	phone/SLK
St. Petersburg, Russia	PUL	59.767N 30.316E	May 98		Internet/SLK*
Danmarkshavn, Greenl.	DAG	76.772N 18.654W	Aug 98	AWI	Inmarsat
Ibbenbüren, Germany	IBBN	52.307N 7.757E	Sep 98	U. Bochum	ISDN/SLK
Mathiatis, Cyprus	CSS	34.962N 33.331E	Dec 98	GII	phone/SLK
Boaco, Nicaragua	BOA	12.48 N 85.72 W	Jan 99		no
Rio Branco, Brasil	RIOB	10.150S 67.747W	Jan 99		Inmarsat
Mahon, Menorca, Spain	MAHO	39.896N 4.267E	Jun 99	UCM/ROA	phone/SLK
Kalwaria Paclawska, Poland	KWP	49.631N 22.708E	Jun 99		phone/SLK
Maui, Hawaii, USA	MAUI	20.768N 156.245W	Jun 99		phone/SLK
Melilla, Spain	MELI	35.290N 2.938W	Dec 99	UCM/ROA	phone/SLK
Rüdersdorf, Germany	RUE	52.480N 13.780E	Jan 00	GRSN	ISDN/SLK
Malatya, Turkey	MALT	38.313N 38.427E	May 00	MedNed	Internet/SLK
Gharyan, Libya	GHAR	31.122N 13.089E	Dec 00	ETH	no
San Fernando, Spain	SFS	36.466N 6.206W	Oct 01	UCM/ROA	Internet/SLK
Al Marj, Libya	MARJ	32.553N 20.878E	Dec 01	ETH	no
Helgoland, Germany	HLG	54.185N 7.884E	Dec 01	U. Kiel	ISDN/SLK
Summit Camp, Greenland	SUMG	72.576N 38.454W	Jun 02		Internet/SLK
Vasula, Estonia	VSU	58.462N 26.735E	Apr 02		Internet/SLK

Greek Sub Network (longterm)

Skordalos, Crete	SKD or SKOR	35.412N 23.928E	Aug 96		ISDN/SLK
Kristallenia, Crete	KRIS	35.178N 25.503E	Aug 96		ISDN/SLK
Santorini, Greece	SANT	36.371N 25.459E	Aug 96		phone/SLK
Gavdos Island, Greece	GVD	34.839N 24.087E	Nov 99		ISDN/SLK
Moni Apezanon, Crete	APEZ	34.977N 24.886E	Apr 00		GSM
Fodele, Crete	FODE	35.380N 24.958E	Apr 00		GSM
Apirathos, Naxos, Greece	APE	37.07 N 25.53 E	Aug 00		Internet/SLK

Loosely Associated Stations (Data Distribution only)

Stuttgart, Germany	STU	48.770N 9.193E	Apr 94	IG Stuttgart	Internet/SLK
Jerusalem, Israel	JER	31.772N 35.197E	May 96	GII	Internet/SLK
Mount Meron, Israel	MRNI	33.011N 35.400E	Mar 98	GII	+++ Jan 02
Sierra Elvira, Spain	SELV	37.238N 3.728W	Nov 01	IAG Granada	phone/SLK
Kfar Sold, Israel	KSDI	35.659N 33.192E	Feb 02	GII	Internet/SLK

SLK SeedLink (near) real-time data transfer
* Access denied by Russian authorities
+++ Station closed