THE FINNISH NATIONAL SEISMIC NETWORK (HEL)

FDSN REPORT 2007

The Finnish National Seismic Network (HEL), operated by the Institute of Seismology, University of Helsinki, consists of 11 permanent broad band stations, two permanent short period stations and one seismic array. Data from all permanent stations are transmitted in real time to Helsinki. Institute has also temporary network of five short period stations and one broad band station in eastern Finland in Kuusamo area. One broad band station is temporarily operating during the International Polar Year 2007-2008 at the Finnish Antarctic Station Aboa in Queen Maud Land.

The seismic array FINES is primary station (PS17) of IMS network of CTBTO. It has 16 vertical short period sensors at 3 rings. The central point (reference point FIA0) is a three component short period station. One of the points (FIA1) is equipped also with a 3C broad band seismometer.

The station KEV is part of the Global Seismograph Network of IRIS.

At the moment real time data of six broad band stations (MEF, RAF, VAF, SUF, JOF, HEF) are transmitted to GEOFON's GEVN and ORFEUS' VEBSN networks.

List of Stations

Permanent Stations

sta	type	net	lat	lon	elev	site	sensor	digitizer	acquisition software	access
MEF	bb	HE	60.2172	24.3958	55	Metsahovi	STS-2	EarthData PS6-24	SeisComP	rt
RAF	bb	HE	61.0224	21.7646	30	Laitila	STS-2	EarthData PS6-24	SeisComP	rt
HEF	bb	HE	68.4062	23.6643	375	Hetta	STS-2	EarthData PS6-24	SeisComP	rt
JOF	bb	HE	62.9187	31.3092	180	Ilomantsi	STS-2	EarthData PS6-24	SeisComP	rt
KAF	bb	HE	62.1116	26.3061	195	Kangasniemi	STS-2	EarthData PS6-24	SeisComP	rt
KEF	bb	HE	62.1667	24.8670	215	Keuruu	STS-2	EarthData PS6-24	SeisComP	rt
KIF	bb	HE	69.0432	20.8040	480	Kilpisjarvi	STS-2	EarthData PS6-24	SeisComP	rt
SUF	bb	HE	62.7194	26.1474	185	Sumiainen	STS-2	EarthData PS6-24	SeisComP	rt
VAF	bb	HE	63.0471	22.6684	55	Ylistaro	Guralp CMG-3T	EarthData PS6-24	SeisComP	rt
VJF	bb	HE	60.5388	27.5550	34	Virolahti	STS-2	EarthData PS6-24	SeisComP	rt
KEV	bb	IRIS/HE	69.7565	27.0036	81	Kevo	Guralp CMG-3T	Quanterra/ ED PS6-24	SeisComP	rt
FINES	array	IMS/HE	61.44388	26.07389	150	Sysma	Geotech S-13	Science Horizons AIM24	CD-tools	rt
FIA1	bb	IMS/HE	61.4447	26.0761	138	Sysma	Guralp CMG-3T	Science Horizons AIM24	CD-tools	rt
PVF	sp	HE	60.5454	25.8590	45	Pernaja	Geotech S-13	EarthData PS6-24	SeisComP	rt
KJN	sp	HE	64.0855	27.7073	262	Kajaani	Geotech S-13	DAS98	DAS98	dial-up

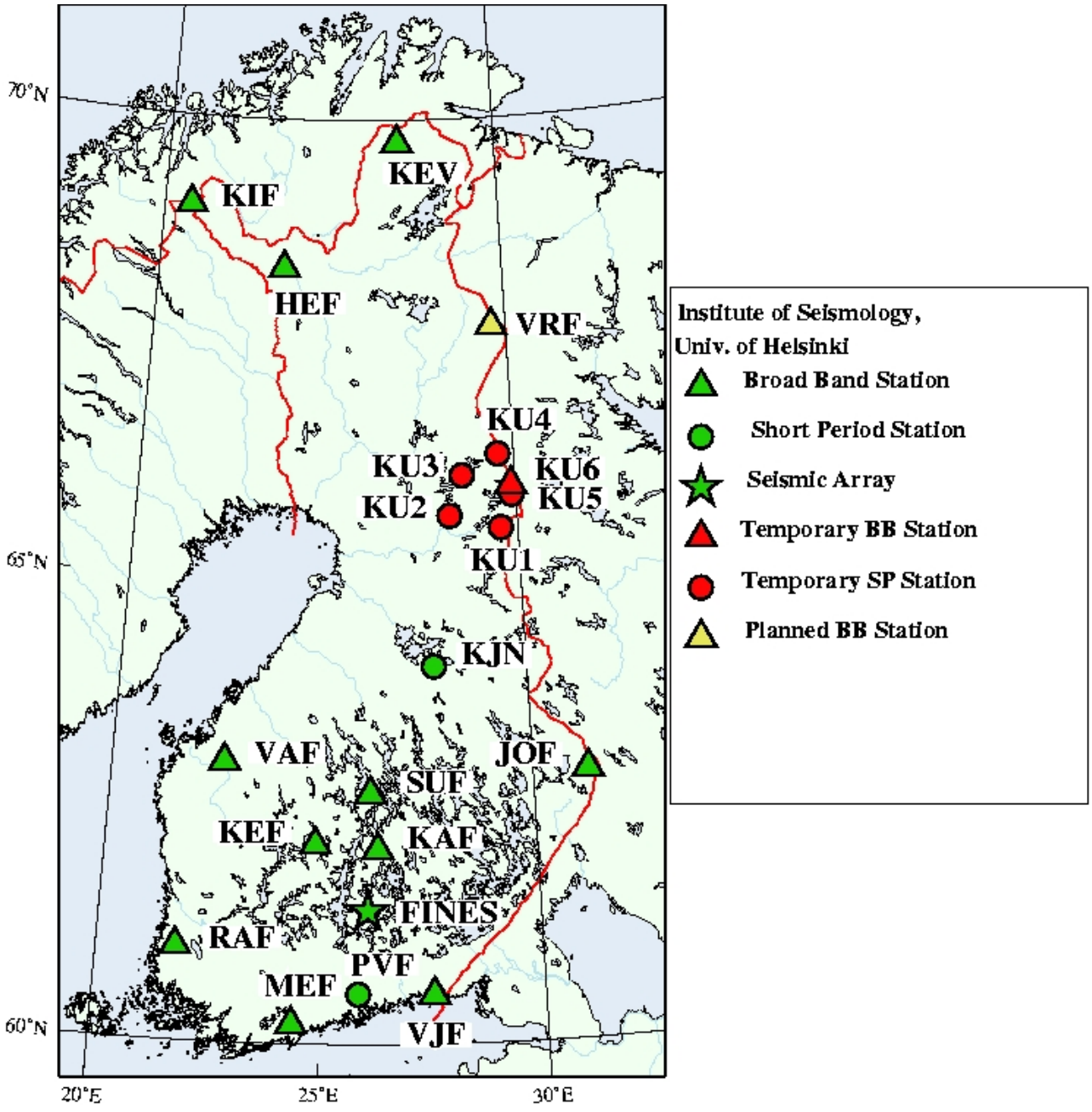
Temporary Stations

KU6	bb	HE	66.0255	29.8907	275	Kuusamo	STS-2	EarthData PS6-24	SeisComP	rt
KU1	sp	HE	65.56458	29.55826		Kurvinen	Geotech S-13	DAS98	DAS98	none
KU2	sp	HE	65.7096	28.23		Taivalkoski	Mark L4	DAS98	DAS98	none
KU3	sp	HE	66.14688	28.59841		Tolvanniemi	Geotech S-13	DAS98	DAS98	none
KU4	sp	HE	66.3645	29.5794		Liikasenvaara	Geotech S-13	DAS98	DAS98	dial-up
KU5	sp	HE	65.91464	29.8862		Karpankyla	Mark L4	DAS98	DAS98	none
ABOA	bb	HE	73.050	-13.417		Antarctica/Aboa	STS-2	Reftek 130	Reftek	none

Planned Stations 2007

VRF	bb	HE	67.748	29.609	350	Varrio	STS-2	EarthData PS6-24	SeisComP	rt

Map of the Finnish National Seismic Network (HEL)
operated by the Institute of Seismology, University of Helsinki



Planned stations

A new broad band station will be opened in 2007 to Värriö in Eastern Lapland. Station PVF is planned to be upgraded to broad band station. Station KJN is planned to be moved to better location and upgraded to broad band station with real time data transmission to the Institute at Helsinki.