

# PACIFIC21\*1



## 2005 FDSN Report

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PACIFIC21 has integrated the broadband seismograms from three projects which had started in April 1996: (1) Fundamental Research on Earthquake and Earth'S Interior Anomaly (FREESIA), which is now integrated into F-NET, (2) Plume project, and (3) *Umi-Hankyu* (Ocean Hemisphere) Network. Under the FREESIA, they installed about 50 STS-1 or CMG-1 broadband seismometers in Japanese Islands. 3 component continuous data are archived at National Institute of Earth Science and Disaster Prevention in real-time. Under the Plume project they have collaborated with IRIS to establish broadband seismograph stations in Southern Pacific Ocean. This network is called SPANET. They also had mobile seismic array system with more than 20 broadband seismometers and operated this array in Indonesia. *Umi-Hankyu* is the successor of the project POSEIDON. Under *Umi-Hankyu* project, they have installed long term ocean bottom seismometer in ODP drill holes and ocean floor. *Umi-Hankyu* project maintains broadband seismograph stations that have been installed during project POSEIDON and upgraded data logging systems and seismometers.

Since both the plume project and the *Umi-Hankkyu* project had been terminated in 2001, it has been decided that terrestrial broadband seismic stations and marine geophysical network, which were constructed under *Umi-Hankkyu* project will be maintained by new project called, Institute for Frontier Research on Earth Evolution (IFREE), which has started in April of 2001. The SPANET broadband seismic stations will be maintained by NIED. The network data center has been set up under IFREE. This data center manages PACIFIC21 dataset and other geophysical dataset from marine geophysical network. This network data center is operated based on the network based datacenter system "ninja", developed by ERI of the University of Tokyo and IFREE. For the time being, seismograms of PACIFIC21 dataset can be retrieved at each data center, such as

(1) <http://ohpdm.eri.u-tokyo.ac.jp> and <http://www.jamstec.go.jp/pacific21/>

(2) <http://www.isn.bosai.go.jp/en/> (registration required)

(3) <http://www.fnet.bosai.go.jp/freesia/>

IFREE data center has also started to distribute broadband seismograms in XML-SEED format at <http://www.jamstec.go.jp/pacific21/xmlninja/>. and a new data distribution system, called Geophysical Data Service software, at <http://www.jamstec.go.jp/pacific21/gds/>.

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\*1 The network formerly known as POSEIDON

## PACIFIC21 DIGITAL BROADBAND SEISMOGRAPH STATIONS

Station	Location	Code	Lat.	Lon.	Status	Characteristics	DC
Jayapura	Indonesia	JAY	-2.51	140.70	Existing	VBB,24-bit,LG	PS1
Parapat	Indonesia	PSI*	2.70	98.92	Existing	VBB,24-bit	PS1
Aobayama	Japan	AOB	38.25	140.85	Existing	VBB,22-bit,RA	PS2
Aibetsu	Japan	AIB	43.91	142.65	Existing	VBB,16-bit	PS2
Fujigawa	Japan	FUJ	35.23	138.42	Existing	VBB,24-bit,RA	BO1
Hokuriku	Japan	HKJ	35.94	136.21	Existing	VBB,24-bit	
Ishigaki	Ryukyu Islands, Japan	ISG	24.38	124.24	Existing	VBB,22-bit,RA	PS1
Kaminokuni	Japan	KKJ	41.78	140.18	Existing	VBB,22-bit,RA	PS2
Kamitakara	Japan	KTJ	36.28	137.33	Existing	VBB,24-bit	
Kashiwazaki	Japan	KZK	37.30	138.52	Existing	VBB,24-bit,RA	BO1
Kishu	Japan	KIS	33.86	135.89	Existing	BB,24-bit,RA	BO1
Kitagami	Japan	KGJ	39.39	141.57	Closed	VBB,22-bit,RA	PS2
Kofu	Japan	KFU	35.74	138.57	Existing	VBB,24-bit,RA	BO1
Murotomisaki	Japan	MRMJ	33.24	134.18	Existing	VBB,22-bit,RA	PS2
Nago	Ryukyu Islands, Japan	NAGO	26.00	128.10	Closed	VBB,22-bit,RA	
Nakaizu	Japan	JIZ	34.91	139.00	Existing	VBB,24-bit,RA	BO1
Nemuro	Japan	NMR	43.37	145.73	Existing	VBB,16-bit,RA	BO1
Shiraki	Japan	SHK	34.53	132.68	Existing	VBB,22-bit,RA	PS2
Sugeno	Japan	SGN	35.51	138.95	Existing	VBB,24-bit,RA	BO1
Takakuma	Japan	TKA	31.51	130.79	Closed	VBB,24-bit,RA	BO1
Takeda	Japan	TKD	32.81	131.39	Existing	VBB,24-bit,RA	BO1
Tateyama	Japan	TYM	34.97	139.85	Closed	VBB,24-bit,RA	BO1
Tokushima	Japan	ISI	34.06	134.46	Existing	VBB,24-bit,RA	BO1
Tokyo	Japan	TOK	35.69	139.76	Existing	VBB,24-bit,RA	
Tottori	Japan	TTT	35.51	134.24	Existing	VBB,24-bit	
Tsukuba	Japan	TSK*	36.21	140.11	Existing	VBB,22-bit,RA	PS2
Pohang	South Korea	PHN	36.03	129.36	Closed	VBB,22-bit	
Taejeon	South Korea	TJN	36.37	127.37	Existing	VBB,22-bit	PS1

Baguio	Philippines	BAG*	16.41	120.58	Existing	VBB,24-bit	PS1
Tagaytay	Philippines	TGY	14.10	120.94	Existing	BB,106db	PS1
Kamenskoye	Russia	KMS	62.46	166.10	Existing	VBB,22-bit	PS1
Norfolk	Australia	NRFK	-29.04	167.96	Existing	BB,24-bit	BO2
Chichijima	Bonin Islands	OGS*	27.06	142.20	Existing	VBB,22-bit,RA	PS1
Chichijima	Bonin Islands	CBI	27.09	142.18	Closed	VBB,22-bit,RA	
Manihiki	Cook Islands	MNHK	-10.42	-161.03	Existing	BB,24-bit	BO2
Labasa	Fiji Islands	LBSA	-16.30	179.45	Existing	BB,24-bit	BO2
Pitcairn Island	South Pacific	PTCN*	-25.07	-130.09	Existing	VBB,24-bit (1)	BO2
Pohakuloa	Hawaii, U.S.A.	POHA	19.76	-155.53	Existing	VBB,24-bit,HF, LG,RA (1)	BO2
Raoul Island	Kermadec Islands	RAO	-29.25	-177.92	Planned	VBB,24-bit,HF, LG,RA (1)	
Kanton	Kiribati	?	-2.50	-171.40	Planned	VBB,24-bit,HF, RA (1)	
Kiritimati (Christmas Island)	Kiribati	XMAS	2.04	-157.45	Existing	BB,24-bit,HF (1)	BO2
Tarawa	Kiribati	?	1.30	173.00	Planned	VBB,24-bit,HF, LG,RA (1)	
Minamitorishima	Marcus Island	MCSJ*	24.29	153.98	Existing	BB,16-bit	PS1
Ponpei	Micronesia	PATS*	7.00	158.00	Existing	VBB,22-bit	PS1
Midway	Midway Islands	MDY*	28.21	-177.33	Existing	VBB,24-bit,HF, LG,RA (1)	BO2
Niue	Niue	NIUE	-19.08	-169.93	Existing	BB,24-bit	BO2
Palau	Palau	PALU	7.33	134.48	Existing	VBB,24-bit	PS1
Port Moresby	Papua New Guinea	PMG*	-9.41	147.15	Existing	VBB,24-bit,LG, RA (2)	PS1
Tongatapu	Tonga Islands	TNGT	-21.15	-175.18	Existing	BB,24-bit	BO2
Vava	Tonga Islands	VAVA	-18.66	-173.98	Existing	BB,24-bit	BO2
Funafuti	Tuvalu	?	-8.30	179.12	Planned	VBB,24-bit,HF, LG,RA (1)	
Syowa Station	Antarctica	SYO*	-69.01	39.59	Existing	VBB,24-bit	PS1

(1) IRIS/USGS(GSN)/PACIFIC21 (2) IRIS/USGS(GSN)/GEOFON/PACIFIC21

BO1 (former FREESIA stations are now called F-NET stations) <http://www.fnet.bosai.go.jp/freesia/>

BO2 <http://www.isn.bosai.go.jp/en/>

PS1 <http://ohpdmc.eri.u-tokyo.ac.jp> or <http://www.jamstec.go.jp/pacific21/>

PS2 <http://jarray.eri.u-tokyo.ac.jp/>

# Pacific 21 station map (As of September 2005)

★ **IFREE(OHP+SuperPlume)**

● **other networks**

