

QUARTERLY NETWORK REPORT 2006-C

on

Seismicity of Washington and Oregon

July 1 through September 30, 2006

Pacific Northwest Seismograph Network

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This report is prepared as a preliminary description of the seismic activity in Washington State and Oregon. Information contained in this report should be considered preliminary and not cited for publication without checking directly with network staff. The views and conclusions contained in this document should not be interpreted as necessarily representing the official policies, either express or implied, of the U.S. Government.

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INTRODUCTION

This is the third quarterly report of 2006 from the Pacific Northwest Seismograph Network (PNSN), at the University of Washington Dept. of Earth and Space Sciences, covering seismicity of Washington and western Oregon. In these reports we provide information about network operations, our educational and outreach activities, and seismicity of the region including special coverage (figures, counts, listings, etc.) of earthquake swarms, aftershock sequences, or unusual events or findings.

This report is preliminary, and subject to revision. The PNSN routinely records signals from selected stations in adjoining networks. This improves our ability to locate earthquakes at the edges of our network. However, our earthquake locations may be revised if new data become available. Findings mentioned in these quarterly reports should not be cited for publication.

Prior to 2004, each quarterly included station tables and maps. Beginning in 2004, station tables and maps appear in the quarterly report only once a year. These tables are included in Appendix 1 of this Quarterly Report. Comprehensive quarterlies have been produced by the PNSN since the beginning of 1984. Prior to that, we published quarterly reports for western Washington in 1983 and for eastern Washington from 1975 to 1983. Annual technical reports covering seismicity in Washington since 1969 are available from the U.W. Dept. of Earth and Space Sciences. The complete PNSN earthquake catalog is available on-line, both through our web-site and through the ANSS earthquake catalog.

NETWORK OPERATIONS

Lists of currently operating stations are available on-line through web page <http://www.pnsn.org/OPS/stations.html>. We currently receive data from 345 stations in our network area. There are 220 stations in Washington and 107 in Oregon. These stations provide short-period data from 167 stations, strong motion data from 98 stations, and broadband data from 116 stations. The PNSN operated 230 of these stations and receives data from 112 stations operated by other seismic networks. The PNSN is receiving data from Earthscope USArray Transportable Array stations. Installation of these stations began in fall of 2005 and is ongoing. At the time of this report we were receiving data from 70 of these stations. Although we do not install or maintain the sites, keeping track of the stations in our database and configuration files has added to our workload.

Table 1 gives approximate periods of time when individual stations were inoperable. Data for Table 1 are compiled from weekly plots of network-wide teleseismic arrivals and automated and manual digital and analog signal checks, plus records of maintenance and repair visits.

TABLE 1 - Station outages and installations

Station	Outage Dates	Comment
ALCT	08/16/05-End	Removed for repair
BEVT	09/05/06-End	No communications
ELW	06/11/06-End	Intermittent communications
ERW	04/05/06-End	Broadband removed
EVCC	07/29/06-08/07/06	No communications
GNW	05/23/06-End	Broadband E-W channel has high counts
GTWN	06/01/05-End	No communications; telemetry being moved for bldg. renovation
HOOD	08/15/06-08/28/06	No communications
HUO	05/18/06-07/09/06	Dead
JBO	10/15/04-End	Noisy
JRO	08/16/06	Broadband removed
KCAM	08/16/06-08/30/06	No communications
KEEL	03/24/06-End	Removed for repair
KICC	03/04/05-End	Bad timing
KICC	12/14/05-End	No communications
KIMB	07/3/06-End	Removed for repair
KNEL	07/16/06-07/25/06	No communications
LTY	09/07/05-End	Intermittent communications
LYNC	06/01/06-08/16/06	No communications

TABLE 1 - Station outages and installations

Station	Outage Dates	Comment
NLWA	07/05/06	New USNSN broadband installed
OBH	01/31/02-End	Temp. removed for logging
OCWA	07/05/06	Removed when NLWA was installed
OSD	07/14/06-08/16/06	Radio problem
PERL	07/25/06-09/01/06	Intermittent
RER	12/19/05-06/15/06	Battery replaced
RHAZ	07/13/06-09/11/06	No communications
SBES	05/18/05-End	Short period noisy
SEA.HH?	12/05/03-End	Disconnected for renovation
SFER	09/01/04-End	Short period dead; needs removal
SOPS	08/27/02-End	K2 flash-memory problem
SQM	06/17/06-08/17/06	No communications
SWID	08/06-End	Bad timing
TAKO	08/30/06-09/13/06	No communications
TBPA	07/29/06-08/31/06	No communications
TIMB	09/29/06	Installed (analog short period near Mt. Hood)
TTW	12/01/05-End	Removed; strong motion sensor moved to USArray site for 2 years
UPS	05/11/06-End	Removed for building renovation
UWFH	05/01/05-End	Short period problems; needs removal
VALT	09/25/06	Installed (BB at Mount St. Helens)
VIP	02/19/06-07/05/06	Dead
VIP	08/29/06-End	Dead
VTH	08/29/06-End	Dead

Mt. St. Helens eruption, 2004-2006

The dome-building eruption of Mount St. Helens that began on September 23, 2004 continues. The procedure for selecting events at Mt. St. Helens to be located remains the same; triggering produces preliminary solutions for locatable events (which are manually processed), webcorders are reviewed to identify events to be manually retrieved from the continuous data stream, and the continuous data are fully reviewed only for one hour of every six.

- **MSH Equipment**

The JRO broadband was removed on August 16, 2006 because of radio problems. Installation of a new broadband station, VALT, was completed on September 25, 2006. On September 11, 2006, installation began for another new broadband station on the southwest flank of Mount St. Helens. The installation of that station should be complete in early October 2006.

Other Station News

During a trip to do field work in summer 2005 to our Glacier Peak station, GPW, damage to the mast and solar panel was discovered. A temporary fix was done until a trip could be made with a new mast and other appropriate equipment. A trip was planned this quarter at the end of September. A new mast, antenna, solar panel, and battery were to be installed after being delivered by a helicopter. Unfortunately, the helicopter dropped the equipment into a valley and it was damaged. The site is still operating; however, the antenna and antenna cable still need work. Because of weather changes quickly approaching and the difficulty level of getting to the site, work at GPW most likely will not happen until next summer.

Strong Motion & CREST Instrumentation Update

There were no new strong motion or CREST installations this quarter.

Computer Hardware Update

Scossa continues to be our “master” real-time data processing computer. *Tremito* acts as a live backup for *scossa*, provides additional computational power for manual processing of earthquake data and acts as a fileserver for all the other networked

computers in the group. Data acquisition is done by four dedicated computers; *pigia* handles digitization of analog data, while *verme*, *milli*, and *verli* acquire digital data.

Use of PNSN Data through the IRIS DMC

The IRIS Data Management Center reports 3,113 requests for PNSN trace-data this quarter. Almost 137,000,000 traces were requested. The number of traces requested remains at an elevated level compared to a "typical" quarter prior to the current eruption of Mount St. Helens.

PNSN PERSONNEL CHANGES

Dr. Paul Bodin, the new network manager of the PNSN, and Dr. John Vidale, the new director of the PNSN, began work at the PNSN at the end of August. The PNSN's retiring director, Dr. Stephen Malone, will be cutting back to half time at the end of September.

Michael Archbold was hired as a new Electronics Technician and began work at the PNSN in September. The job announcement for a Senior Computer Specialist is still out and we are hoping to fill the position early next quarter.

PNSN staff has been busy throughout this quarter renovating the PNSN seismology lab. The lab is being upgraded and reorganized by projects including: cleaning and reorganizing, painting, demolition and construction of new walls, and removal of some helicorders to create a more modern digital display.

EARTHQUAKE DATA – 2006-C

Between July 1 and September 30, 2006, 1,509 events were digitally recorded and processed at the University of Washington. Additional unlocated events occurred at Mount St. Helens associated with the dome-building eruption which began in late September 2004. Of the processed events, locations in Washington, Oregon, or southernmost British Columbia were determined for 1,091 of these events; 1,002 were classified as earthquakes and 89 as known or suspected blasts. The remaining processed events include teleseisms (189 events), regional events outside the PNSN, and unlocated events within the PNSN, mostly at Mt. St. Helens. Due to large number of events associated with the ongoing eruption of Mt. St. Helens, only a representative sample of Mt. St. Helens seismicity was located. Other unlocated events within the PNSN normally include surficial events on Mt. St. Helens and Mt. Rainier, very small earthquakes, and blasts. Frequent mining blasts occur near Centralia, Washington and we routinely locate a sample of them.

Table 2 lists earthquakes reported to have been felt during this quarter. Events with ShakeMaps or Community Internet Intensity Maps (CIIM) are indicated. No event this quarter was large enough to generate a ShakeMap. Two events this quarter produced "CIIM" maps (<http://pasadena.wr.usgs.gov/shake/pnw/>), which convert "felt" reports sent by the general public (via Internet) into numeric intensity values. CIIM maps show the average intensity by zip code.

Table 3 is this quarter's catalog of earthquakes M 2.0 or greater, located within the network - between 42-49.5 degrees north latitude and 117-125.3 degrees west longitude.

Figure 1. Earthquakes with magnitude greater than or equal to 0.0 ($M_c \geq 0$).

Figure 2. Blasts and probable blasts ($M_c \geq 0$).

Figure 3. Earthquakes located near Mt. St. Helens ($M_c \geq 0$).

Figure 4. Earthquakes located near Mt. Rainier ($M_c \geq 0$).

TABLE 2 - Felt Earthquakes during the 2nd Quarter of 2006

DATE-(UTC)-TIME yy/mm/dd hh:mm:ss	LAT(N)	LON(W)	DEP	MAG	COMMENTS	CIIM	CIIM - # of felt reports	Shake Map
	deg.	deg.	km	M				
06/07/04 20:37:02	48.35	123.19	45.7	3.6	13.7 km SE of Victoria, BC	✓	260	✓
06/07/25 06:13:37	47.63	120.20	6.7	3.1	3.0 km SSE of Entiat, WA	✓	18	
06/08/03 08:39:18	45.80	122.60	14.6	3.8	29.7 km N of Portland, OR	✓	3748	✓
06/08/09 14:32:16	45.80	122.60	12.7	2.3	29.7 km N of Portland, OR	✓	13	
06/09/13 17:56:07	46.19	122.19	0	3.2	0.4 km SSW of Mt St Helens, WA	✓	11	

OREGON

During the third quarter of 2006, 77 earthquakes were located in Oregon between 42.0 degrees and 45.5 degrees north latitude, and between 117 degrees and 125 degrees west longitude. The largest felt earthquake recorded by the PNSN this quarter was a M 3.8 earthquake, located at a depth of about 15 km about 30 km north of Portland (this is actually closer to Battleground, Washington) on August 3 (UTC). This event was preceded by a M. 2.0 foreshock less than a minute earlier, and followed by 10 aftershocks, ranging in magnitude from 1.0 to 2.7, during the month of August. More than 3,700 individuals reported feeling M 3.8 mainshock to the CIIM site. One aftershock, M 2.3 on Aug. 9 was also reported felt. This quarter, 24 earthquakes were located near Mount Hood with magnitudes ranging from -0.3 to 2.1. Fourteen of them occurred within a one-hour period on July 11 (UTC).

WESTERN WASHINGTON SEISMICITY

During the third quarter of 2006, 802 earthquakes were located between 45.5 degrees and 49.5 degrees north latitude and between 121.0 degrees and 125.3 degrees west longitude. Most western Washington seismicity this quarter was in the Mount St. Helens area, see discussion below. In addition to the two earthquakes felt in the Portland urban area (see discussion of Oregon seismicity above), one additional earthquake, M 3.6, was felt this quarter in western Washington. It occurred on July 4th at about 46 km depth beneath the Strait of Juan de Fuca about half-way between Port Angeles, WA and Victoria, B.C. - near the international border. It was reported lightly felt on the northern Olympic Peninsula, the San Juan Islands, the southern end of Vancouver Island, and western Washington from north of Everett to Bellingham.

Many shallow earthquakes this quarter were within the crater and of Mt. St. Helens and associated with the continuing eruption. Activity this quarter included 28 events of magnitude 3.0 or greater. The 3 largest quakes were all M 3.6. One quake at Mt. St. Helens was reported felt by a few people, and is included in the list of felt quake in Table 2, though we suspect that these reports are spurious.

WASHINGTON CASCADE VOLCANOES

Mount St. Helens

Mount St. Helens seismicity and dome building eruption continued through this quarter. During the third quarter of 2006 seismicity decreased. Figure 3 shows located volcano-tectonic earthquakes near Mount St. Helens. Low frequency (L) and avalanche or rockfall events (S) are not shown. The PNSN catalog lists only a small subset of events selected for manual processing. See the operations section for details on how events are selected for processing, and instrumentation changes, if any.

This quarter, 447 earthquakes were located in the area shown in Fig. 3 using conventional manual processing procedures (including 396 earthquakes between magnitude 1.0 and 2.9, and 28 slightly larger events with magnitudes between 3.0 and 3.6). All locatable earthquakes in the 2004/2006 sequence are relatively shallow. Only a few events have been located deeper than 2 km. Seismicity this quarter continued to be located on the boundary between the old and new domes near the vent that appeared in early October, 2004.

Seth Moran of CVO has provided counts of seismic events during the current eruptive sequence. These numbers represent automated counts at HSR. HSR suffered numerous noise spikes during the third quarter, and the automatic counts have not

been reviewed to remove the many false triggers. A crude estimate of the number of events in this quarter is 1,800. Seismicity dropped significantly in late June, and remained low through the end of this quarter (2006C). The extrusion rate also appears to have slowed down, although extrusion is still continuing.

Mount St. Helens 2004-2006 Quarterly earthquake counts at HSR; provided by CVO.		
Year	Quarter	HSR event count
2004	4th	292,352
2005	1st	123,502
	2nd	49,811
	3rd	12,085
	4th	30,315
2006	1st	30,617
	2nd	*13,236
	3rd	*1,800

* - Count is an estimate, review is incomplete

Mount Rainier

The number of events in close proximity to the cone of Mt. Rainier varies over the course of the year, since the source of much of the shallow activity is presumably ice movement or avalanching at the surface, which is seasonal in nature. Events with low frequency signals (1-3 Hz) believed to be icequakes are assigned type "L" in the catalog. Emergent, very long duration signals, probably due to rockfalls or avalanches, are assigned type "S" (see Key to Earthquake Catalog). Three events flagged "L" or "S" were located at Mount Rainier this quarter and 88 "L" or "S" events were recorded, but were too small or too emergent to locate reliably. Type L and S events are not shown in Fig. 4.

A total of 102 tectonic events (29 of these were smaller than magnitude 0.0, and thus are not shown in Fig. 4) were located within the region shown in Fig. 4. The largest tectonic earthquake located near Mt. Rainier this quarter was a magnitude 2.9 event on August 3 (UTC), located about 12 km west of the summit of Mt. Rainier at about 11 km depth. This quarter, 78 tectonic earthquakes (18 of them smaller than magnitude 0.0 and thus not shown in Fig. 4) were located in the "Western Rainier Seismic Zone" (WRSZ), a north-south trending lineation of seismicity approximately 15 km west of the summit of Mt. Rainier (for counting purposes, the western zone is defined as 46.6-47.0 degrees north latitude and 121.83-122 west longitude). Several small swarms occurred in the WRSZ this quarter and can be seen in Fig. 4.

Within 5 km of the summit, there were 18 (9 of them smaller than magnitude 0.0 and thus not shown in Fig. 4) higher-frequency tectonic-style earthquakes, and the remaining events were scattered around the cone of Rainier as shown in Fig. 4.

EASTERN WASHINGTON SEISMICITY

During the third quarter of 2006, 117 earthquakes were located in eastern Washington in the area between 45.5 - 49.5 degrees north latitude and 117 - 121 degrees west longitude. The largest earthquake recorded in eastern Washington this quarter was a felt earthquake, magnitude 3.1 event on July 25 (UTC), located about 3 km south-southeast of Entiat at about 7 km depth. This quarter, 26 events were located near Entiat, a locale with an ongoing above-average rate of seismicity since at least 1970.

East-northeast of Moses Lake, a swarm of 39 earthquakes, ranging in magnitude from 0.9 to 3.0, most with depths of less than 1 km, began on July 9 and continued until Sept. 4. Although the standard PNSN locations seem to indicate a linear distribution, the PNSN station coverage is not ideal in this area, and a preliminary study suggests that all these swarm events probably occurred in a fairly tight spatial cluster.

OTHER SOURCES OF EARTHQUAKE INFORMATION

We provide automatic computer-generated alert messages about significant Washington and Oregon earthquakes by e-mail, FAX or via the pager-based RACE system to institutions needing such information, and we regularly exchange phase data via e-mail with other regional seismograph network operators.

Other regional agencies provide earthquake information. These include the Geological Survey of Canada (Pacific Geoscience Centre), Sidney, B.C. <http://www.pgc.nrcan.gc.ca/seismo/table.htm> and other regional networks in the United States <http://earthquake.usgs.gov/regional/> The US Geological Survey coordinates earthquake information nationally; <http://earthquake.usgs.gov>.

Complete catalog listings are available on-line through <http://www.pnsn.org/CATDAT/catalog.html> Key to earthquake catalog can be found in the last quarterly report of each year, or at:

http://www.pnsn.org/INFO_GENERAL/PNSN_QUARTERLY_EQ_CATALOG_KEY.htm

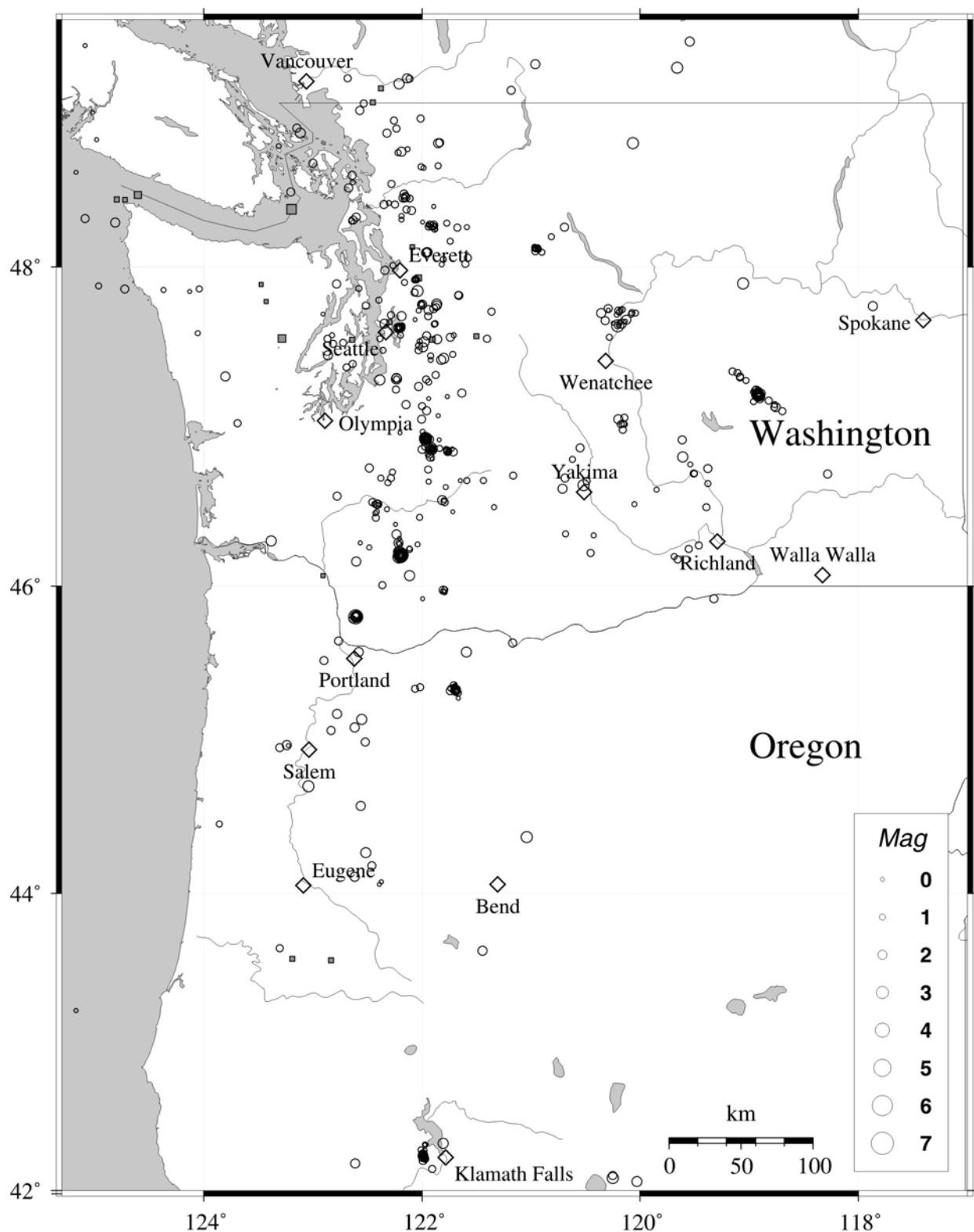


Figure 1 Earthquakes with magnitude greater than or equal to 0.0 ($M_c \geq 0.0$).

Unfilled diamonds represent cities. Quakes shallower than 30 km are indicated by circles, and deeper quakes by filled squares.

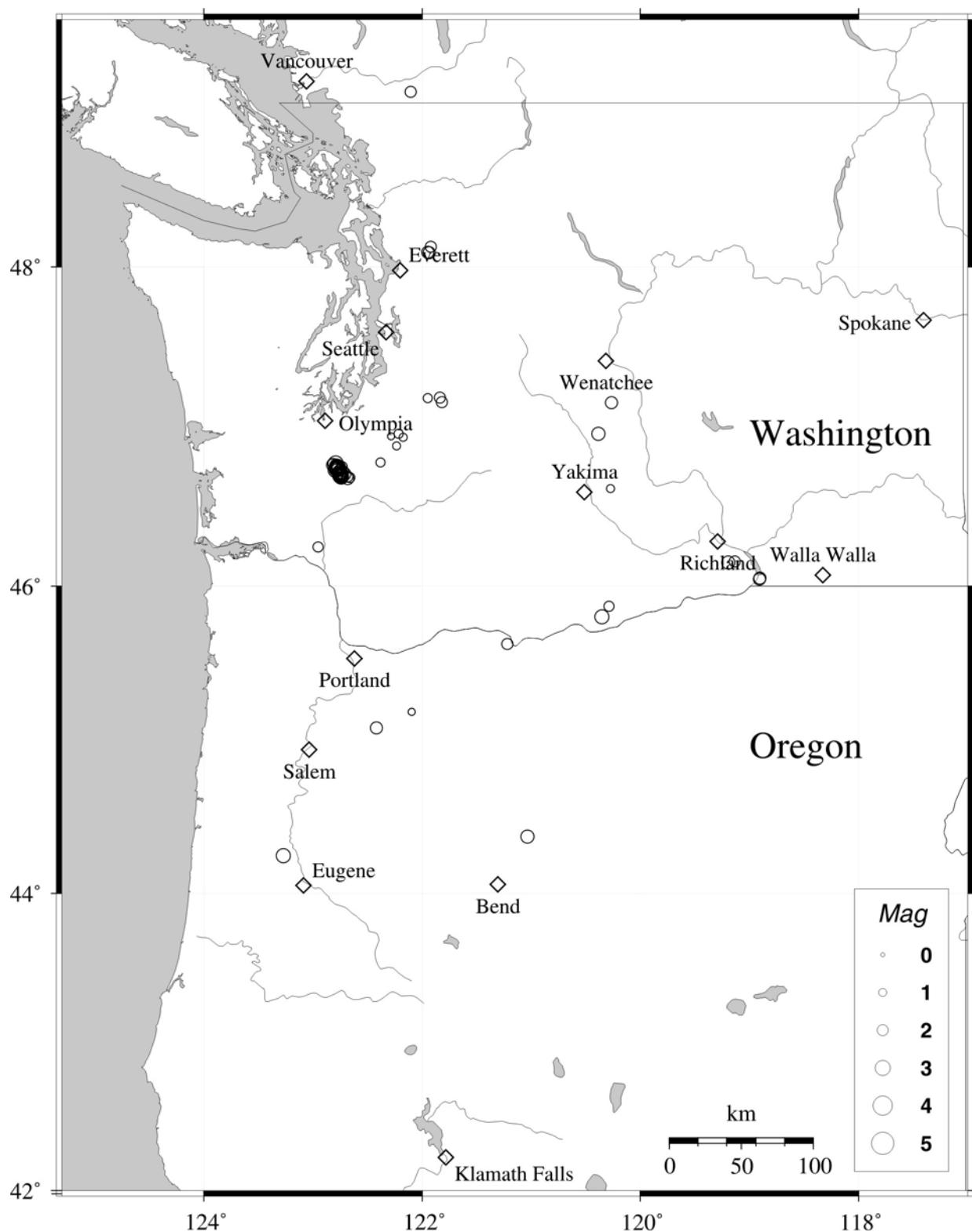


Figure 2. Blasts and probable blasts. Unfilled diamonds represent cities.

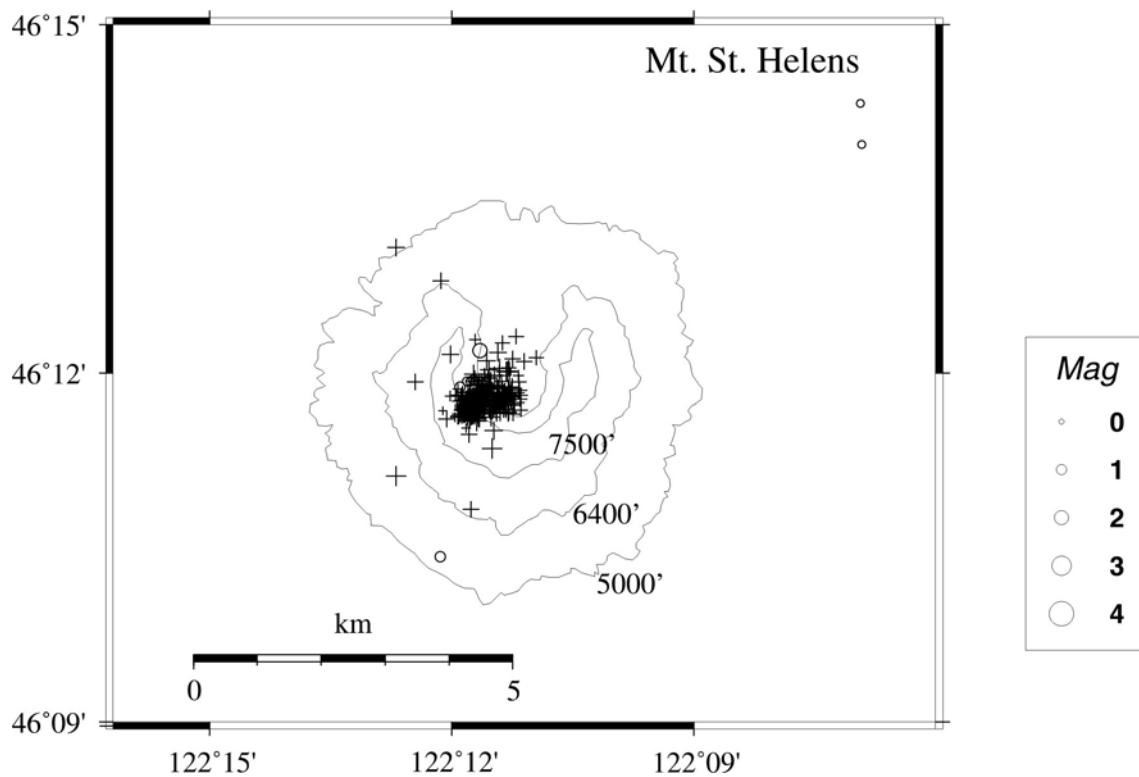


Figure 3. Selected Earthquake at Mt. St. Helens; ($Mc \geq 0.0$)

Events elected by the analyst for location are small fraction of the number of events recorded during the quarter.
Plus symbols indicate depth less than 1 km. Circles indicate depth greater than 1 km. Elevation contours shown in feet.

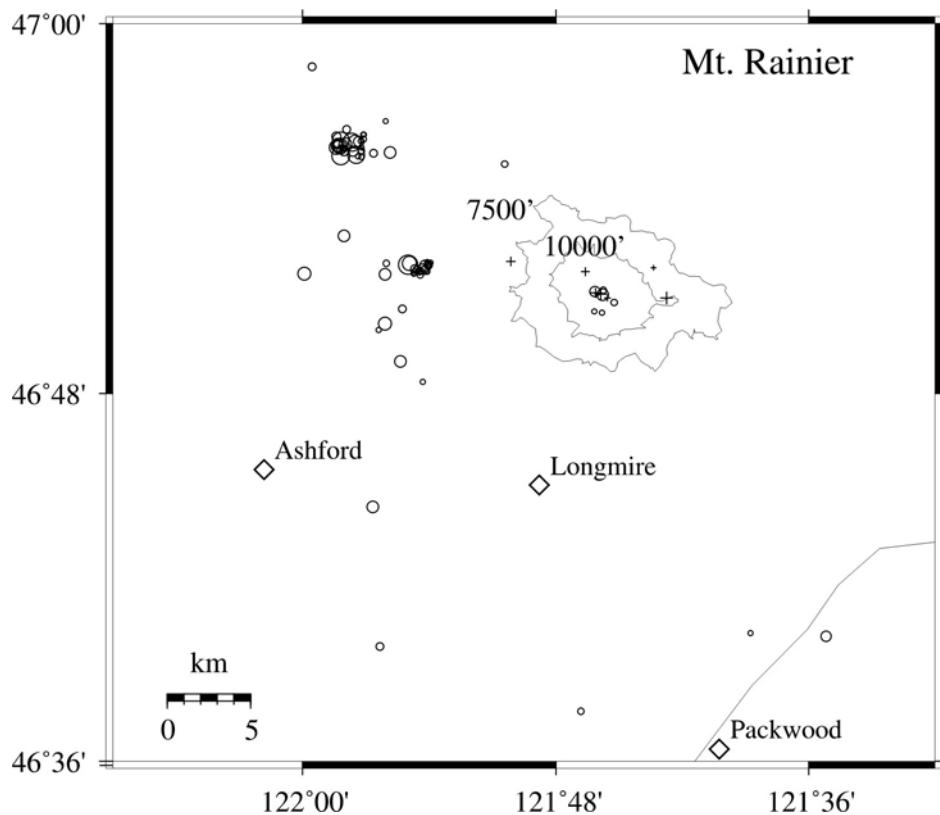


Figure 4. Earthquakes at Mt. Rainier; ($Mc \geq 0.0$)

EARTHQUAKE CATALOG, 2006-C

This quarter's catalog lists earthquakes of magnitude 2.0 or larger. Complete catalog listings are available on-line through <http://www.pnsn.org/CATDAT/catalog.html>. Key to earthquake catalog can be found in the first quarterly report of each year, or at: http://www.pnsn.org/INFO_GENERAL/PNSN_QUARTERLY_EQ_CATALOG_KEY.htm

July, 2006												
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP	
1	06:31:14.05	46 11.58	122 11.68	0.03*	3.3	21/021	57	0.34	CA	S4		
3	09:53:20.17	46 11.91	122 12.44	0.03*	2.4	8/008	88	0.38	CA	S4		
3	18:37:57.45	42 19.38	121 48.26	0.04*	2.3	7/007	186	0.44	CD	K3		
4	01:33:49.61	47 44.11	121 56.23	16.74	2.1	28/029	44	0.18	BA	P3		
4	20:37:02.96	48 21.28	123 11.72	45.71	3.6	78/091	125	0.43	CB	P3	F	
4	22:32:29.11	46 11.80	122 11.86	0.02*	2.7	12/012	79	0.26	BA	S4		
5	00:21:22.35	42 05.14	120 15.13	1.64\$	2.7	19/019	179	1.11	DD	K3		
5	10:20:34.80	49 14.07	120 57.57	10.58\$	2.1	15/015	264	0.56	DD	C3		
6	02:36:20.88	46 11.65	122 11.87	0.04#	3.1	17/017	66	0.64	DA	S4		
7	09:54:39.35	47 26.09	121 48.07	20.01*	2.4	41/045	86	0.17	BA	P3		
7	16:29:47.59	46 11.61	122 12.05	0.02#	2.5	12/012	87	0.67	DA	S4		
8	06:26:37.59	46 49.02	119 36.49	18.53	2.2	38/040	32	0.2	BA	E3		
8	16:47:11.71	46 11.88	122 11.53	0.02#	2.9	16/016	61	0.24	BA	S4		
9	12:56:35.43	46 11.97	122 11.41	0.02*	3.2	13/013	77	0.35	CA	S4		
9	14:00:24.17	46 11.81	122 11.47	0.03*	2.1	12/012	101	0.13	AB	S4		
11	14:54:02.45	47 33.50	123 16.97	47.12	2.5	60/062	46	0.22	BA	P3		
11	22:38:01.12	45 19.57	121 41.35	6.37	2.1	8/009	135	0.06	AB	O0		
12	03:24:48.62	46 11.84	122 11.26	0.84	3.3	36/036	42	0.18	BA	S4		
13	12:38:10.90	46 11.65	122 11.29	0.02*	2.4	8/008	103	0.31	CB	S4		
13	20:35:09.74	44 06.64	122 37.01	15.94	2	4/005	141	0	AD	O0		
14	21:27:15.58	46 12.79	122 12.12	0.05*	2.5	10/010	78	0.38	CA	S4		
15	20:07:21.38	46 11.87	122 11.36	0.02*	2.2	7/007	126	0.13	AB	S4		
16	10:19:53.87	48 42.39	122 11.30	19.4	2.1	19/019	77	0.27	BA	P3		
17	01:29:11.59	46 11.98	122 11.73	0.02#	3	13/013	73	0.44	CA	S4		
18	00:46:58.98	46 11.71	122 11.59	0.02#	2.4	9/009	109	0.54	DB	S4		
18	16:55:46.44	46 11.80	122 11.27	0.71	3.5	46/046	37	0.34	CA	S4		
19	08:30:11.99	47 46.37	121 52.01	2.13	2.4	53/059	50	0.37	CB	P3		
19	13:20:49.85	46 11.78	122 11.32	0.02*	2.1	8/008	98	0.27	BB	S4		
21	02:59:53.02	46 11.64	122 11.91	0.02*	2.4	12/012	85	0.38	CA	S4		
22	05:01:55.56	46 11.67	122 11.40	0.03*	2.9	15/015	82	0.42	CA	S4		
23	04:16:02.87	46 11.65	122 11.43	0.02#	2.4	12/012	107	0.29	BB	S4		
24	18:39:29.76	46 12.10	122 11.55	0.02*	2.9	15/015	61	0.51	DA	S4		
25	06:13:37.88	47 38.21	120 12.42	6.71	3.1	41/042	45	0.28	BB	N3	F	
25	12:31:45.73	46 11.77	122 11.42	0.48	3.6	47/047	39	0.21	BA	S4		
26	04:43:42.39	46 11.81	122 11.34	0.63	3.1	30/030	47	0.13	AA	S4		
26	23:01:00.08	46 11.91	122 11.16	0.04#	2.3	10/010	80	0.55	DA	S4		
27	19:41:39.01	47 54.03	119 03.33	0.78\$	2.7	20/021	107	0.28	CC	N3		
27	22:41:39.26	46 12.04	122 11.28	0.05#	2.2	8/008	200	0.35	CD	S4		
27	23:41:59.26	46 11.82	122 11.36	0.99	3.3	43/043	42	0.21	BA	S4		
28	01:58:24.20	46 11.78	122 11.41	0.96*	3.1	27/027	46	0.12	AA	S4		
28	22:09:52.98	46 12.26	122 11.36	0.03#	2.2	6/006	140	0.42	CC	S4		
28	23:59:15.87	45 10.55	122 46.77	21.71	2.1	44/047	72	0.39	CA	O0		

July, 2006												
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP	
30	02:31:10.46	46 11.75	122 11.34	0.03*	2.9	12/012	103	0.22	BB	S4		
30	03:05:14.11	42 14.68	121 59.25	9.18*	2.1	12/014	79	0.21	BA	K3		
30	20:14:16.16	46 56.14	121 57.66	11.56	2.8	77/078	20	0.26	BA	C3		
31	09:33:59.58	46 11.80	122 11.36	0.87	3.6	49/049	40	0.24	BA	S4		
31	16:44:25.49	46 11.80	122 11.34	0.75	3.3	45/045	41	0.24	BA	S4		
31	18:38:19.20	46 55.71	121 58.20	9.76	2.6	60/068	22	0.27	BA	C3		
August, 2006												
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP	
1	12:15:11.24	46 55.74	121 57.46	9.04	2.4	70/072	29	0.3	BA	C3		
1	17:21:53.82	46 56.22	121 58.19	13.06	2.5	49/050	31	0.12	AA	C3		
1	17:38:42.80	46 12.17	122 11.42	0.03#	2.7	11/011	92	0.63	DB	S4		
2	10:42:58.20	47 42.95	120 21.47	6.06	2.1	22/024	70	0.21	BC	N3		
2	18:57:19.92	46 12.16	122 12.00	0.02*	2.7	15/015	68	0.05	AA	S4		
2	19:17:40.42	44 42.20	123 02.54	3.36\$	2.5	9/009	188	1.07	DD	O0		
2	23:53:00.60	46 17.18	123 22.96	10.13	2.4	7/007	135	0.03	AC	P3		
3	08:38:39.70	45 48.21	122 36.10	14.21	2	26/026	70	0.14	AB	C3		
3	08:39:18.62	45 48.12	122 36.40	14.61	3.8	77/078	26	0.17	BB	C3	F	
3	10:03:39.24	45 48.38	122 36.34	15.96*	2.3	53/053	45	0.17	BB	C3		
3	10:21:25.19	45 48.22	122 36.00	13.33	2.7	64/064	25	0.17	BB	C3		
3	10:25:25.89	45 48.47	122 36.38	14.2	2	49/053	45	0.16	BB	C3		
3	10:27:30.15	46 52.19	121 55.00	10.88	2.9	50/050	30	0.13	AA	C3		
3	19:49:34.64	44 16.07	122 30.99	2.92	2.3	7/007	137	0.29	BC	O0		
3	21:12:16.95	46 11.69	122 11.47	0.03#	2.3	8/008	106	0.39	CB	S4		
4	00:58:55.39	47 13.14	118 55.63	4.74	2.1	27/027	139	0.31	CC	N3		
4	23:13:42.57	48 05.47	121 56.73	0.02*	2	12/013	90	0.18	BC	P3		
5	16:45:43.04	46 11.12	122 12.69	0.02*	3.2	13/013	96	0.39	CB	S4		
5	20:15:14.33	46 11.81	122 11.34	0.84	3.6	41/041	46	0.23	BA	S4		
6	13:50:42.56	47 12.85	118 55.06	1.4	2.1	20/020	142	0.29	BC	N3		
6	14:46:04.12	47 12.65	118 55.85	0.97\$	2.1	19/019	157	0.36	CC	N3		
6	15:02:52.87	47 12.72	118 55.12	2.75	2.1	23/023	142	0.27	BC	N3		
7	08:08:20.62	46 11.48	122 11.79	0.04#	2.4	6/006	127	0.48	CC	S4		
7	14:41:54.60	46 11.78	122 11.40	0.29	2.7	15/015	79	0.1	AA	S4		
8	10:00:44.18	46 10.83	122 11.75	0.02#	2.4	7/007	156	1.23	DC	S4		
9	03:01:05.46	46 11.87	122 11.25	0.56	3.3	31/031	45	0.15	BA	S4		
9	14:32:16.41	45 48.11	122 36.09	12.73	2.3	55/056	48	0.16	BB	C3	F	
9	21:12:15.19	46 56.01	121 58.22	12.58	2.1	37/039	38	0.11	AA	C3		
10	21:12:23.98	47 27.16	122 51.75	5.17	2.1	17/018	89	0.15	AB	P3		
11	13:24:10.42	46 11.51	122 11.47	0.54	2.9	12/012	106	0.12	AB	S4		
11	23:47:35.70	47 12.84	118 55.36	0.86\$	2.1	17/017	141	0.37	CC	N3		
12	02:43:39.75	47 40.58	120 07.48	0.61	2	16/018	52	0.36	CC	N3		
13	02:11:48.22	46 12.13	122 10.95	0.02#	2.2	8/008	134	0.55	DB	S4		
13	13:46:30.43	46 12.04	122 11.41	0.04#	3.1	11/012	92	0.31	CB	S4		
14	01:04:43.49	46 11.88	122 11.43	0.02*	2.7	11/011	97	0.1	AB	S4		
14	02:40:09.99	49 22.12	119 32.81	0.03*	2	7/007	249	0.19	BD	N3		
14	22:25:13.12	46 11.75	122 11.87	0.67	3	12/012	80	0.12	AA	S4		
16	08:34:33.49	46 11.80	122 11.60	0.03*	2.1	14/015	62	0.09	AA	S4		
17	05:41:29.90	46 11.78	122 11.34	0.02*	3.1	16/016	63	0.31	CA	S4		

August, 2006												
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP	
17	15:12:40.19	46 19.72	122 14.08	9.87	2	37/038	54	0.18	BA	S4		
19	16:20:00.87	46 11.88	122 11.53	0.02*	3.1	14/014	76	0.16	BA	S4		
21	06:23:39.63	46 11.84	122 11.49	0.02*	3.2	16/016	77	0.14	AA	S4		
22	01:06:09.59	47 12.40	118 55.05	5.7	3	34/034	123	0.23	BC	N3		
22	03:38:29.16	48 26.46	124 36.18	38.32	2.2	5/005	273	0.08	BD	P3		
22	13:05:14.88	47 12.49	118 55.67	0.55	2	12/012	141	0.34	CC	N3		
22	21:18:01.76	42 03.72	120 01.65	4.37#	2.3	14/014	124	0.35	CD	K3		
23	07:18:20.49	46 11.97	122 11.47	0.05*	2.9	9/010	94	0.13	AB	S4		
24	11:29:06.95	49 12.74	119 39.66	5.02\$	2.5	9/009	266	0.66	DD	N3		
24	21:32:24.14	46 13.07	122 12.69	0.02*	2.8	8/008	121	0.45	CB	S4		
25	09:28:08.35	46 11.71	122 11.60	0.03*	2.1	14/015	63	0.09	AA	S4		
25	18:20:43.96	46 11.77	122 11.59	0.7	2	13/013	106	0.07	AB	S4		
25	22:38:30.73	46 12.00	122 11.32	0.03*	3.2	16/016	56	0.17	BA	S4		
26	03:30:57.88	46 11.72	122 11.68	0.71	2.1	14/014	72	0.1	AA	S4		
26	09:10:15.68	46 11.82	122 11.34	0.04*	2.1	15/017	59	0.13	AA	S4		
27	06:33:54.62	47 32.21	121 58.73	18.66	2.4	51/055	40	0.29	BA	P3		
27	16:06:32.41	46 11.78	122 11.59	0.05*	2.1	14/015	62	0.11	AA	S4		
27	22:00:46.80	49 06.95	122 12.56	3.20\$	2.3	17/018	275	0.31	CD	P3		
28	02:46:31.69	46 11.78	122 11.72	0.03*	2	15/016	64	0.1	AA	S4		
28	19:26:55.30	46 11.77	122 11.60	0.04*	2	14/015	63	0.1	AA	S4		
29	10:31:53.34	46 11.36	122 11.49	0.03*	3.2	12/012	120	0.37	CB	S4		
29	19:03:42.97	46 11.75	122 11.34	0.02*	2.1	13/015	59	0.12	AA	S4		
30	12:40:55.19	46 12.19	122 11.65	1.73	2	13/013	89	0.14	AA	S4		
31	03:33:15.87	46 11.78	122 11.34	0.02*	2.1	14/016	59	0.11	AA	S4		
31	11:24:49.80	46 11.78	122 11.56	0.02*	2.1	15/015	62	0.08	AA	S4		

September, 2006												
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP	
3	08:00:10.05	46 11.75	122 11.21	0.04*	3.2	15/016	51	0.29	BA	S4		
3	08:27:57.58	46 11.75	122 11.67	0.02*	2.1	13/014	63	0.1	AA	S4		
3	14:56:39.06	46 11.81	122 11.62	0.02*	2	15/015	63	0.11	AA	S4		
4	08:56:58.17	46 11.77	122 11.64	0.02*	2.1	12/012	107	0.07	AB	S4		
4	14:07:08.50	46 11.77	122 11.65	0.03*	2	11/011	107	0.06	AB	S4		
5	02:41:41.38	46 11.65	122 11.74	0.1	2.1	14/015	75	0.11	AA	S4		
5	07:45:43.35	47 51.15	122 02.29	26.02	2.5	54/058	59	0.33	CA	P3		
5	09:28:25.25	46 11.72	122 11.46	0.71	2.2	14/014	67	0.13	AA	S4		
5	14:52:40.36	46 11.67	122 11.48	0.03*	2.1	11/012	108	0.12	AB	S4		
5	22:09:05.80	46 11.90	122 11.60	0.02*	2.1	11/011	62	0.07	AA	S4		
6	07:05:06.82	46 11.84	122 11.15	0.77	2.3	16/018	55	0.14	AA	S4		
6	13:52:12.85	46 11.82	122 11.34	0.04*	3.2	19/019	50	0.23	BA	S4		
6	14:22:28.83	46 11.75	122 11.32	0.03*	2.1	13/014	59	0.1	AA	S4		
6	20:20:09.86	45 05.31	122 37.05	17.28	2	5/007	222	0.13	BD	O0		
7	00:42:00.10	46 03.99	122 06.88	16.59	2.4	40/042	41	0.23	BA	S4		
7	09:52:21.35	46 11.81	122 11.68	0.86*	2	13/013	71	0.08	AA	S4		
7	16:40:42.65	46 11.64	122 11.67	0.89	2.3	15/015	74	0.1	AA	S4		
7	21:59:06.56	47 25.57	121 49.27	19.06	2.1	23/029	68	0.18	BA	P3		
8	01:46:16.41	46 11.93	122 11.38	0.68	2.1	17/018	59	0.16	BA	S4		
8	10:11:15.24	46 11.68	122 11.33	0.49	2.3	14/015	103	0.12	AB	S4		

September, 2006												
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP	
8	17:18:28.85	46 11.87	122 11.29	0.67	2.4	11/011	95	0.09	AB	S4		
8	22:11:28.92	48 49.08	123 06.87	14.49	2.2	18/020	204	0.33	CD	P3		
9	10:06:02.29	46 11.72	122 11.29	0.13	2	16/018	59	0.14	AA	S4		
9	16:50:05.89	46 11.69	122 11.33	0.02*	2.2	14/016	59	0.11	AA	S4		
9	19:03:34.81	46 12.01	122 11.30	0.04#	3.1	14/014	72	0.4	CA	S4		
10	00:20:34.55	46 11.71	122 11.40	0.09	2.2	15/016	60	0.12	AA	S4		
10	07:07:02.70	46 11.87	122 11.28	0.93	2.2	13/014	94	0.1	AB	S4		
10	09:22:39.96	46 11.81	122 11.41	1.12	3	16/016	78	0.1	AA	S4		
10	09:24:40.52	46 11.88	122 11.25	0.51	2.3	16/017	54	0.11	AA	S4		
10	14:12:07.95	46 11.71	122 11.65	0.02*	2.1	14/015	63	0.09	AA	S4		
11	03:50:30.22	46 11.84	122 11.64	0.65	2.1	15/015	63	0.11	AA	S4		
11	11:17:18.70	46 11.71	122 11.40	0.44	2.2	14/015	103	0.12	AB	S4		
11	18:05:24.89	46 11.81	122 11.29	0.02*	2.3	12/014	59	0.11	AA	S4		
12	03:13:01.25	46 11.75	122 11.77	0.67	2	15/015	110	0.11	AB	S4		
12	09:44:14.62	46 11.75	122 11.58	0.02*	2.2	16/016	62	0.09	AA	S4		
12	17:23:44.41	46 38.54	120 31.00	0.02*	2.7	27/027	48	0.33	CC	E3		
13	07:09:08.56	46 11.75	122 11.60	0.02*	2.1	9/009	107	0.06	AB	S4		
13	10:29:38.79	47 19.30	123 48.02	29.73	2.1	13/015	149	0.21	BC	P3		
13	14:48:49.63	46 11.68	122 11.86	0.03*	2.1	11/011	116	0.06	AB	S4		
13	17:56:07.45	46 11.71	122 11.59	0.03*	3.2	19/019	46	0.24	BA	S4		
14	09:38:04.09	46 11.71	122 11.60	0.79	2.1	14/014	71	0.07	AA	S4		
15	03:29:40.31	46 11.68	122 11.60	0.31	2.1	12/012	110	0.07	AB	S4		
15	14:27:55.60	46 11.77	122 11.28	0.29	2.4	17/018	61	0.13	AA	S4		
15	19:51:26.68	44 22.22	121 02.33	0.96	2.7	18/018	85	0.19	BC	O0		
16	00:41:28.53	46 11.80	122 11.34	0.72	2	15/016	99	0.12	AB	S4		
16	10:34:28.80	46 12.03	122 11.54	0.04*	2.7	10/010	94	0.17	BB	S4		
16	13:37:20.83	46 11.81	122 11.25	0.54	2.2	10/011	96	0.1	AB	S4		
17	00:45:37.25	46 11.84	122 11.60	0.91*	2	17/017	62	0.09	AA	S4		
17	13:07:43.68	46 32.76	121 48.78	3.51\$	2.1	37/039	74	0.13	AC	C3		
18	01:25:01.94	46 11.96	122 11.54	0.05#	2.1	9/009	105	0.21	BB	S4		
18	04:44:53.88	46 11.81	122 11.66	0.03*	2	16/017	63	0.11	AA	S4		
18	11:59:47.14	46 11.75	122 11.34	0.03#	2.5	11/011	80	0.17	BA	S4		
18	14:09:35.48	46 11.71	122 11.68	0.04*	2.3	14/014	82	0.08	AA	S4		
19	05:23:43.56	46 11.75	122 11.38	0.15	2	13/014	101	0.12	AB	S4		
19	12:57:25.82	46 11.68	122 11.14	0.02*	2	12/013	97	0.11	AB	S4		
19	15:31:46.11	46 12.10	122 11.09	0.02#	2.5	11/011	120	0.34	CB	S4		
19	22:40:53.63	46 11.62	122 11.67	0.27	2.4	14/014	63	0.09	AA	S4		
20	11:59:15.69	46 11.71	122 11.58	0.39	2.3	12/012	108	0.07	AB	S4		
20	16:53:33.71	48 16.34	124 48.54	6.98\$	2.1	9/009	257	0.3	DD	P3		
20	18:48:39.85	47 45.78	121 51.99	3.80\$	2.1	20/020	89	0.14	AB	P3		
20	19:42:48.81	46 37.02	120 42.76	0.86	2.1	8/008	136	0.31	CC	C3		
20	19:52:02.74	46 11.78	122 11.26	0.02*	2.9	16/016	65	0.4	CA	S4		
20	21:10:24.69	45 08.41	122 33.13	2.71	2.3	7/007	218	0.22	CD	O0		
21	16:05:09.42	46 11.62	122 11.92	0.91	2.1	10/010	121	0.07	AB	S4		
22	04:35:55.98	46 11.81	122 11.32	0.02*	2.3	14/015	59	0.11	AA	S4		
22	16:45:34.83	46 11.67	122 11.28	0.02*	2.4	12/013	102	0.13	AB	S4		
22	17:24:22.83	48 45.36	120 03.97	3.44	2.7	17/019	118	0.57	DD	N3		

September, 2006													
DAY	TIME	LAT	LON	DEPTH	M	NS/NP	GAP	RMS	Q	MOD	TYP		
23	04:50:40.61	46 11.81	122 11.14	0.02*	2	12/013	72	0.1	AA	S4			
23	17:40:10.12	46 11.65	122 11.23	0.02*	2.1	7/008	108	0.15	BB	S4			
24	04:52:48.11	46 12.00	122 11.28	0.03*	3	16/016	56	0.33	CA	S4			
24	07:23:46.23	46 11.71	122 11.47	0.05*	2.1	13/013	61	0.06	AA	S4			
24	09:15:46.63	47 18.02	122 23.25	28.61	2.2	46/048	59	0.32	CA	P3			
25	08:33:37.59	46 11.88	122 11.41	0.02*	2.1	6/006	165	0.02	AC	S4			
26	09:25:24.93	46 11.72	122 11.22	0.04*	2.3	10/011	98	0.07	AB	S4			
26	16:04:01.54	46 12.32	122 11.20	0.03*	2.3	8/008	147	0.35	CC	S4			
26	22:32:37.96	46 11.65	122 11.71	0.02*	2	12/012	120	0.09	AB	S4			
27	10:08:05.62	46 11.61	122 11.67	0.02*	2.3	13/013	116	0.11	AB	S4			
27	17:58:21.65	45 34.50	121 35.47	6.71	2.4	16/016	54	0.27	BC	C3			
28	06:53:35.10	46 11.72	122 11.72	0.03*	2.3	11/011	111	0.07	AB	S4			
28	07:46:28.48	46 11.62	122 11.51	0.02#	2.9	11/011	96	0.38	CB	S4			
29	06:06:05.86	47 18.44	122 14.13	20.54	2.3	65/068	30	0.33	CA	P3			
29	10:24:08.08	46 11.75	122 11.66	0.46	2.1	15/015	63	0.06	AA	S4			
29	12:30:52.54	46 12.11	122 11.25	0.02*	2.4	10/010	108	0.32	CB	S4			
30	01:54:02.83	46 11.78	122 11.28	0.42	2.1	12/013	97	0.13	AB	S4			
30	10:42:06.55	46 11.75	122 11.60	0.5	2.4	12/012	107	0.06	AB	S4			

APPENDIX 1, PNSN Quarterly Report 2006-C – Station Maps and Locations

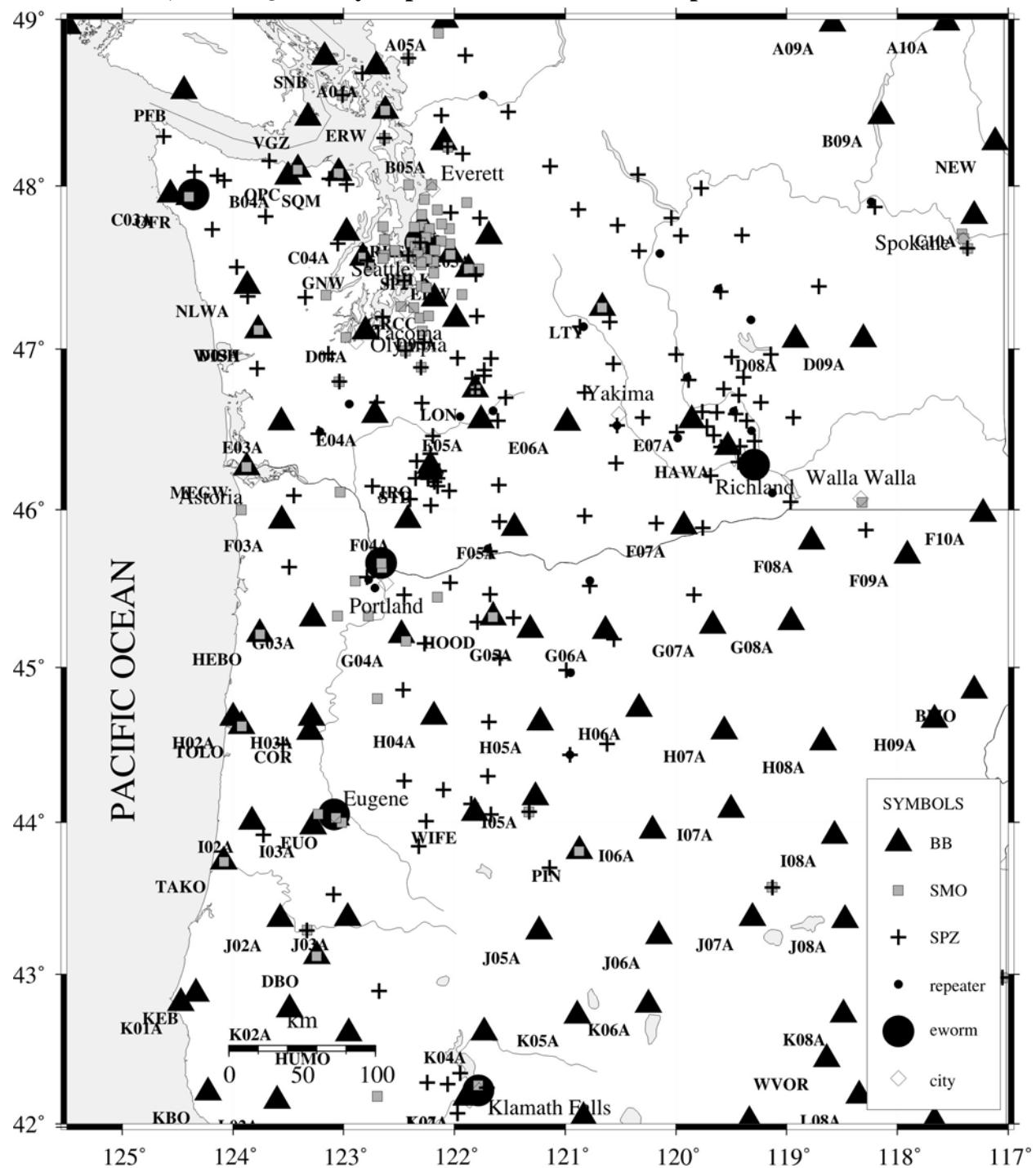


Figure 1 A. Seismograph Stations.

"BB" indicates broadband stations (Table 1B) "SMO" indicates strong motion stations (Table 1C), and "SPZ" indicates short-period stations (usually vertical component only) (Table 1A). "Repeater" designates a site with radio receivers and transmitter used in the transmission of seismic data to the UW via FM telemetry. "eworm" represents sites where a "mini-earthworm" system is running on a local computer to collect data for transfer to the UW via the internet.

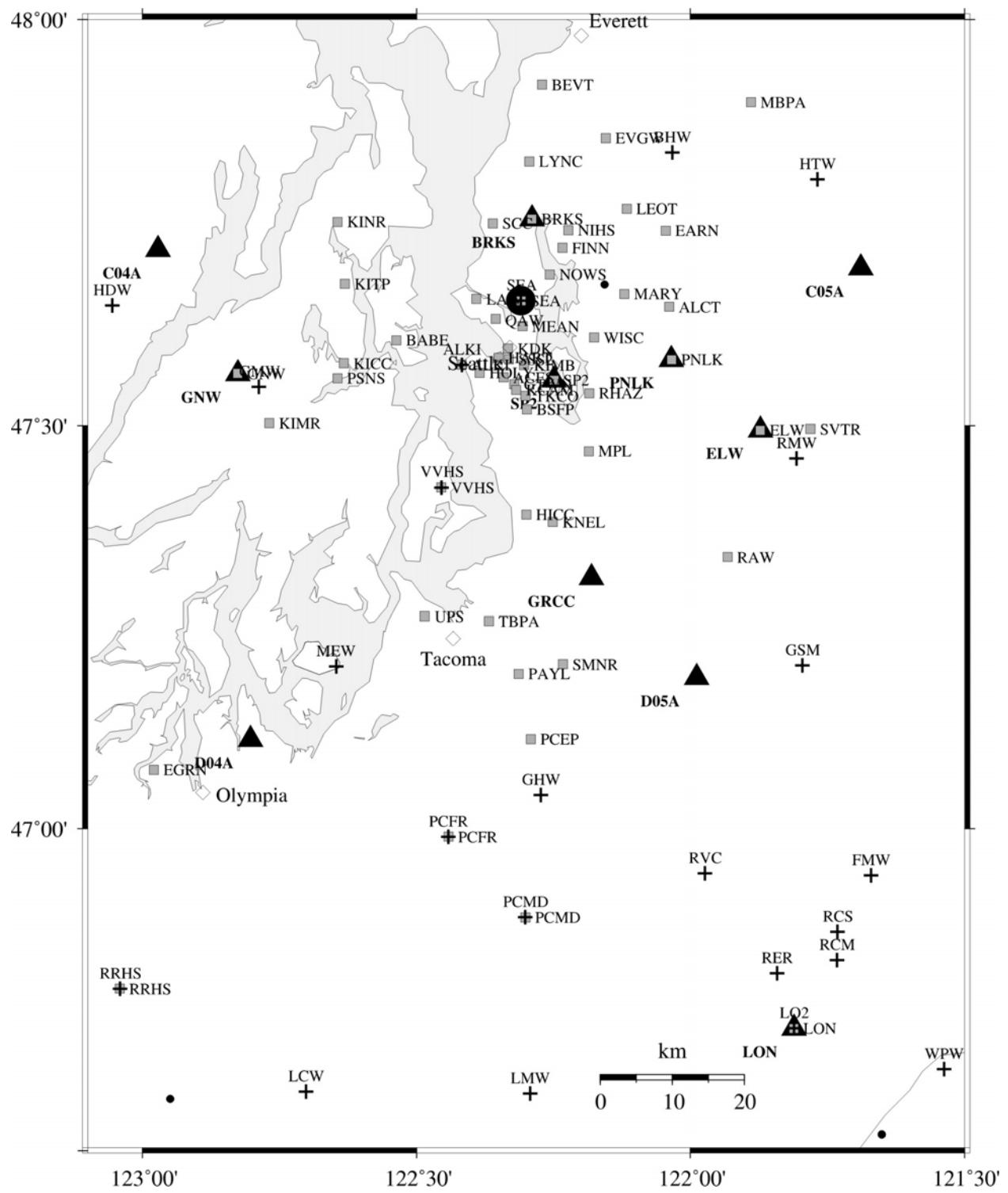


Figure 1 B. Puget Sound seismograph stations, detail of Fig. 1 A

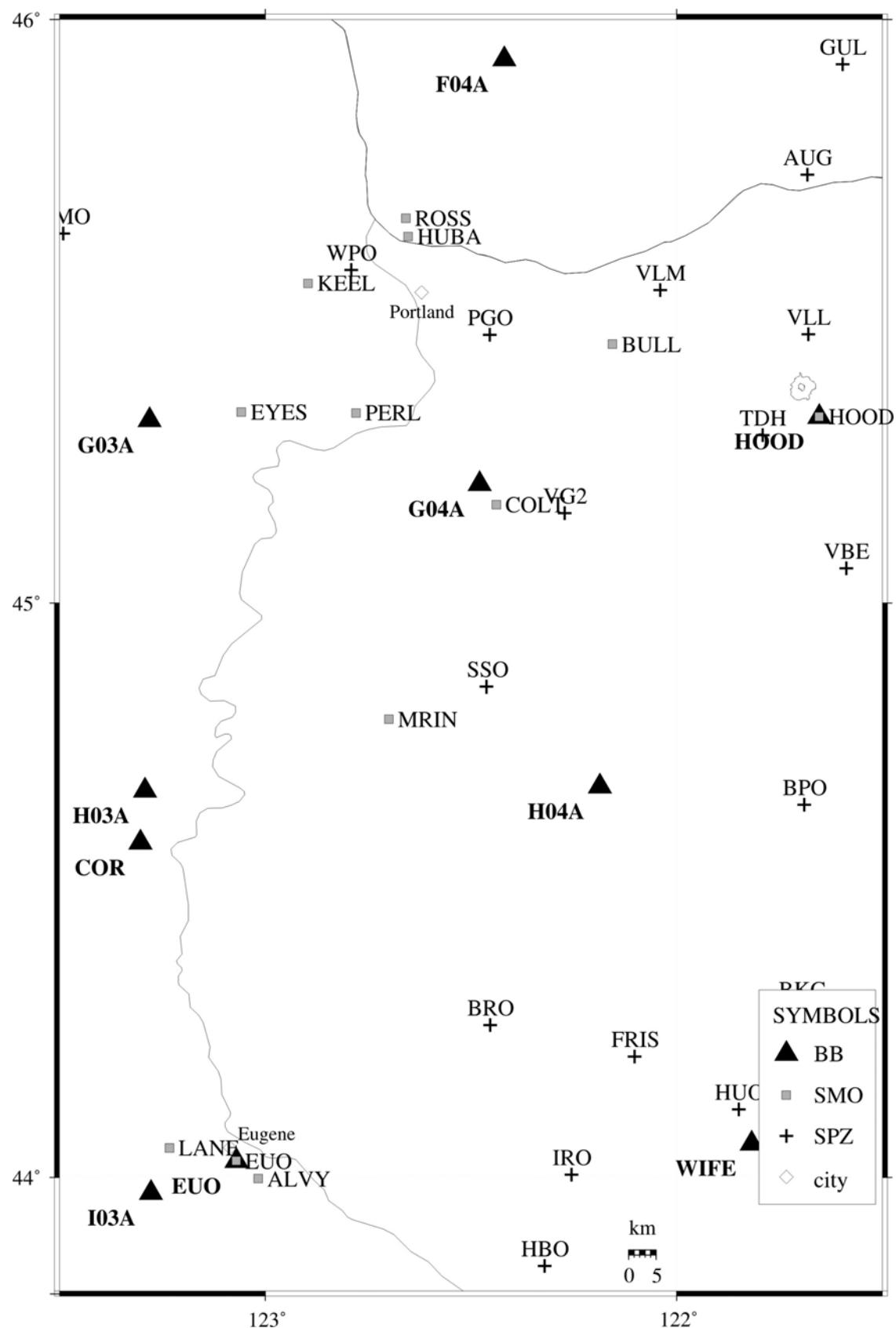


Figure 1 C. Willamette Valley seismograph stations, detail of Fig. 1 A

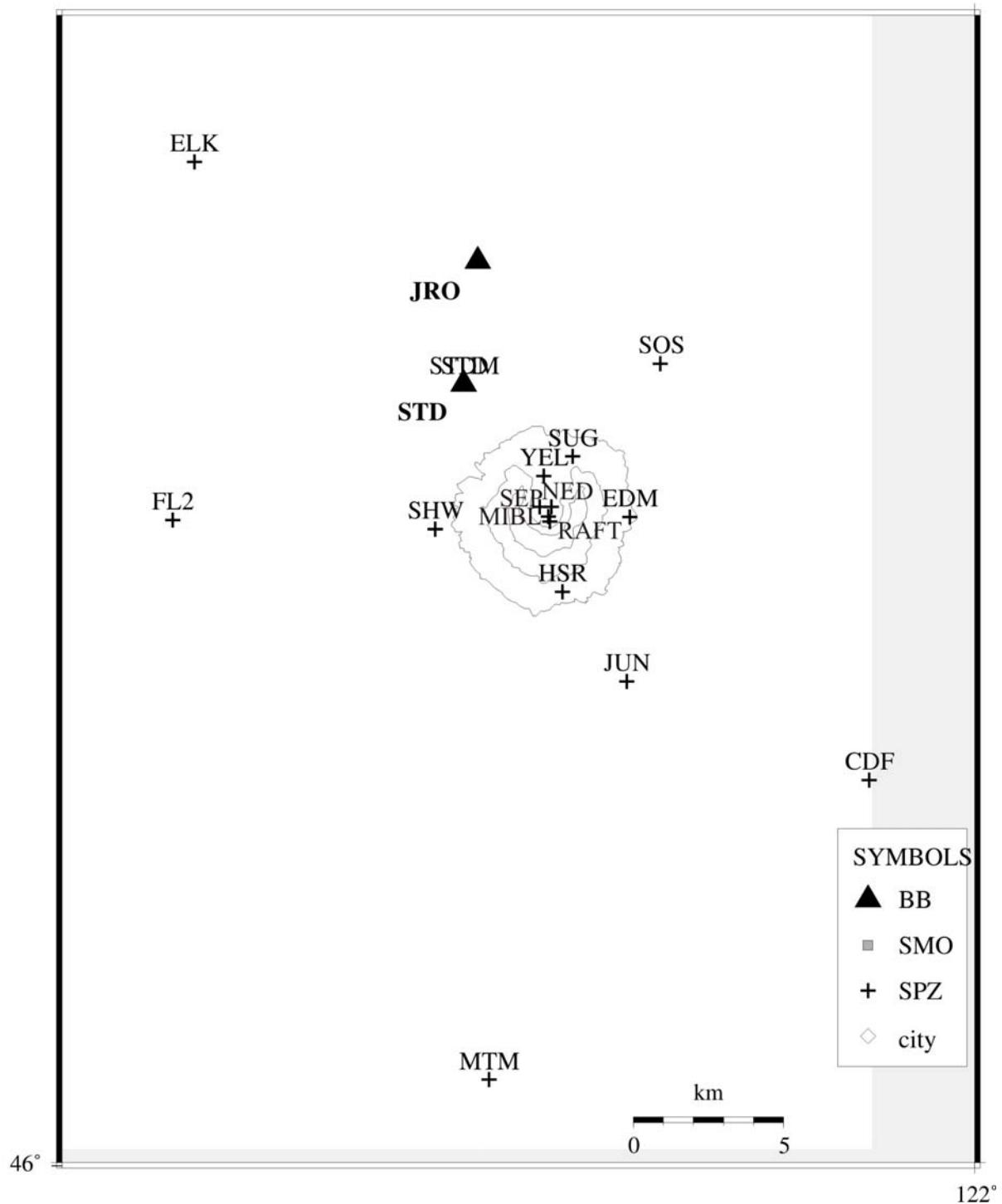


Figure 1 D. Mount St. Helens seismograph stations, detail of Fig. 1 A

Station Tables

Table 1 lists locations of stations that the PNSN uses to locate seismic events in Washington and Oregon. In addition to operating stations, the PNSN .**Table 1A** lists short-period, mostly vertical-component stations the PNSN also receives and records data from stations in other networks. **Table 1B** lists broad-band, mostly 3-component stations, and **Table 1C** lists strong motion, mostly 3-component stations. The first column gives the station code, columns 2-8 give latitude (decimal degrees, north positive), longitude (decimal degrees, east positive), elevation in kilometers. the network that operates the station, the funding agency, the state where the station is located, and the full station name.

Column 5, “NET”, gives the Network Code (as per FDSN, http://www.iris.washington.edu/data/reg_nets.htm).

Stations operated by PNSN are designated “UW” and “UO”, CC is the USGS Cascades Volcano Observatory, TA and PB are EarthScope Transportable Array (TA) and Plate Boundary Observatory (PB), MB is Montana Bureau of Mines, CN is the Canadian Pacific Geoscience Centre, HW is the network operated by Battelle on the Hanford Reservation, NC is the Northern California network jointly operated by UC Berkeley and the USGS.

Column 6, “F”, gives the funding source for the station:

% - USGS ANSS

- Operated by the USGS Cascades Volcano Observatory

C - Canadian stations operated by the Pacific Geoscience Centre

E - EarthScope project funded by NSF

H - Supported under Pacific Northwest National Laboratory, Battelle contract 259116-A-B3

M - Montana stations operated by Montana Bureau of Mines

N - Stations operated by the Northern California Network (USGS and UC Berkeley)

U - US National Network Station

TABLE 1 Stations providing data for use in WA & OR earthquake analysis

TABLE 1A - Short-Period Stations

STA	LAT	LONG	EL	NET	F	State	NAME
ALKI	47.575	-122.418	0.001	UW	%	WA	Alki Wastewater Plant, ANSS-SMO
ASR	46.153	-121.602	1.357	UW	%	WA	Mt. Adams - Stagman Ridge
ATES	48.236	-122.060	0.062	UW	%	WA	Arlington Trafton ES ANSS-SMO
AUG	45.736	-121.682	0.865	UW	%	WA	Augspurger Mtn
BBO	42.887	-122.681	1.671	UW	%	OR	Butler Butte
BEN	46.520	-119.722	0.335	HW	H	WA	PNNL station
BEND	44.067	-121.328	1.141	UW	%	WA	UO Bend Office, DOGAMI SMO
BHW	47.837	-122.033	0.198	UW	%	WA	Bald Hill
BKC	44.299	-121.697	1.208	UW	%	OR	Black Crater
BLN	48.007	-122.973	0.585	UW	%	WA	Blyn Mt.
BLT	45.915	-120.177	0.659	UW	H	WA	Bickleton
BOW	46.475	-123.229	0.87	UW	%	WA	Boistfort Mt.
BPO	44.652	-121.690	1.957	UW	%	OR	Bald Peter
BRO	44.267	-122.453	1.341	UW	%	OR	Big Rock Lookout
BRV	46.485	-119.992	0.92	UW	+	WA	Black Rock Valley
BSMT	47.851	-114.788	1.95	MB	M	MT	Bassoo Peak
BUO	42.278	-122.246	1.797	UW	%	OR	Burton Butte
BURN	43.573	-119.131	1.615	UW	G	OR	Burns SMO
BVW	46.811	-119.883	0.67	UW	+	WA	Beverly
CBS	47.805	-120.043	1.067	UW	+	WA	Chelan Butte, South
CDF	46.117	-122.046	0.756	UW	%	WA	Cedar Flats
CHMT	46.914	-113.253	0	MB	M	MT	Chamberlain Mtn.
CMW	48.424	-122.120	1.19	UW	%	WA	Cultus Mtns.
CPW	46.973	-123.138	0.792	UW	%	WA	Capitol Peak

TABLE 1A - Short-Period Stations

STA	LAT	LONG	EL	NET	F	State	NAME
CRF	46.825	-119.388	0.189	UW	+	WA	Corfu
DPW	47.871	-118.204	0.892	UW	+	WA	Davenport
DY2	47.985	-119.773	0.89	UW	+	WA	Dyer Hill 2
EDM	46.197	-122.151	1.609	UW	%	WA	East Dome, Mt. St. Helens
ELK	46.305	-122.342	1.27	UW	%	WA	Elk Rock
ELL	46.910	-120.568	0.789	UW	+	WA	Ellensburg
EPH	47.356	-119.597	0.661	UW	+	WA	Ephrata
ET3	46.577	-118.939	0.286	UW	+	WA	Eltopia (replaces ET2)
ETW	47.604	-120.334	1.477	UW	+	WA	Entiat
FHE	46.952	-119.498	0.455	UW	+	WA	Frenchman Hills East
FL2	46.196	-122.351	1.378	UW	%	WA	Flat Top 2
FMW	46.941	-121.671	1.859	UW	%	WA	Mt. Fremont
FRIS	44.212	-122.102	1.642	UO	%	OR	Frissel Point
GBB	46.609	-119.629	0.185	HW	H	WA	PNNL Station
GBL	46.598	-119.461	0.33	UW	+	WA	Gable Mountain
GHW	47.041	-122.274	0.268	UW	%	WA	Garrison Hill
GL2	45.960	-120.824	1	UW	+	WA	New Goldendale
GLK	46.558	-121.611	1.305	UW	%	WA	Glacier Lake
GMO	44.439	-120.957	1.689	UW	%	OR	Grizzly Mountain
GMW	47.548	-122.788	0.506	UW	%	WA	Gold Mt.
GPW	48.118	-121.138	2.354	UW	%	WA	Glacier Peak
GSM	47.203	-121.796	1.305	UW	%	WA	Grass Mt.
GUL	45.924	-121.597	1.189	UW	%	WA	Guler Mt.
H2O	46.396	-119.424	0.175	HW	H	WA	Water PNNL Station
HAM	42.069	-121.971	1.999	UW	%	OR	Hamaker Mt.
HBO	43.844	-122.321	1.615	UW	%	OR	Huckleberry Mt.
HDW	47.648	-123.056	1.006	UW	%	WA	Hoodsport
HOG	42.242	-121.706	1.887	UW	%	OR	Hogback Mtn.
HSO	43.526	-123.091	1.02	UW	%	OR	Harness Mountain
HSR	46.174	-122.181	1.72	UW	%	WA	South Ridge, Mt. St. Helens
HTW	47.804	-121.769	0.833	UW	%	WA	Haystack Lookout
HUO	44.120	-121.849	2.037	UO	%	OR	Husband OR (UO)
IRO	44.005	-122.255	1.642	UO	%	OR	Indian Ridge
JBO	45.461	-119.838	0.645	UW	+	OR	Jordan Butte
JCW	48.195	-121.927	0.792	UW	%	WA	Jim Creek
JORV	42.978	-117.054	1.338	UW	G	OR	Jorden Valley SMO
JUN	46.147	-122.152	1.049	UW	%	WA	June Lake
KMO	45.635	-123.491	0.975	UW	%	OR	Kings Mt.
KOS	46.463	-122.196	0.61	UW	%	WA	Kosmos
KTR	41.908	-123.378	1.347	NC	N	CA	NCSN
LAB	42.268	-122.064	1.774	UW	%	OR	Little Aspen Butte
LAM	41.610	-122.626	1.769	NC	N	CA	NCSN
LAS	41.599	-121.578	2.047	NC	N	CA	NCSN
LBC	40.837	-121.350	1.525	NC	N	CA	NCSN
LCCM	45.838	-111.879	1.669	MB	M	MT	Lewis and Clark Caverns
LCW	46.670	-122.702	0.396	UW	%	WA	Lucas Creek
LHE	41.629	-122.232	2.117	NC	N	CA	NCSN
LMW	46.668	-122.293	1.195	UW	%	WA	Ladd Mt.
LNO	45.872	-118.286	0.771	UW	+	OR	Linton Mt.

TABLE 1A - Short-Period Stations

STA	LAT	LONG	EL	NET	F	State	NAME
LO2	46.750	-121.811	0.853	UW	%	WA	Longmire
LOC	46.717	-119.432	0.21	UW	+	WA	Locke Island
LTI	41.176	-121.489	1.156	NC	N	CA	NCSN
LVP	46.066	-122.402	1.13	UW	%	WA	Lakeview Peak
MBW	48.784	-121.901	1.676	UW	%	WA	Mt. Baker
MCMT	44.828	-112.850	2.323	MB	M	MT	McKenzie Canyon
MCW	48.679	-122.833	0.693	UW	%	WA	Mt. Constitution
MDW	46.613	-119.762	0.33	UW	+	WA	Midway
MEW	47.202	-122.647	0.097	UW	%	WA	McNeil Island
MIBL	46.197	-122.187	2.132	CC	#	WA	St. Helens between BLIS and MIDE
MJ2	46.557	-119.360	0.146	UW	+	WA	May Junction 2
MOON	44.052	-121.669	2.24	UW	%	OR	Moon Mt
MOX	46.577	-120.299	0.501	UW	+	WA	Moxie City
MPO	44.505	-123.551	1.249	UW	%	OR	Mary's Peak
MTM	46.025	-122.213	1.121	UW	%	WA	Mt. Mitchell
NAC	46.733	-120.825	0.728	UW	+	WA	Naches
NCO	43.704	-121.139	1.908	UW	%	OR	Newberry Crater
NED	46.200	-122.185	2.06	CC	#	WA	NE part of old Dome, St. Helens
NEL	48.070	-120.341	1.5	UW	+	WA	Nelson Butte
NLO	46.089	-123.452	0.826	UW	%	OR	Nicolai Mt.
OBC	48.035	-124.079	0.938	UW	%	WA	Olympics - Bonidu Creek
OBH	47.326	-123.867	0.383	UW	%	WA	Olympics - Burnt Hill
OCP	48.298	-124.625	0.487	UW	%	WA	Olympics - Cheeka Peak
OD2	47.388	-118.711	0.553	UW	+	WA	Odessa site 2
ON2	46.881	-123.782	0.257	UW	%	WA	Olympics - North River
OOV	47.734	-124.187	0.561	UW	%	WA	Octopus West
OSD	47.816	-123.705	2.008	UW	%	WA	Olympics - Snow Dome
OSR	47.505	-123.963	0.815	UW	%	WA	Olympics Salmon Ridge
OT3	46.669	-119.234	0.322	UW	+	WA	New Othello (replaces OT2 8/26/94)
OTR	48.085	-124.345	0.712	UW	%	WA	Olympics - Tyee Ridge
PAT2	45.884	-119.758	0.259	UW	+	WA	Paterson 2
PCFR	46.990	-122.442	0.137	UW	%	WA	PC Firing Range ANSS-SMO
PCMD	46.889	-122.301	0.239	UW	%	WA	PC Mountain Detachment ANSS-SMO
PGO	45.462	-122.454	0.253	UW	%	OR	Gresham
PRO	46.213	-119.687	0.553	UW	+	WA	Prosser
RAFT	46.196	-122.186	2.132	CC	#	WA	RAFT, St Helens Crater
RCM	46.836	-121.733	3.085	UW	%	WA	Mt. Rainier, Camp Muir
RCS	46.871	-121.732	2.877	UW	%	WA	Mt. Rainier, Camp Schurman
RED	46.297	-119.439	0.33	HW	H	WA	Red Mountain PNNL Station
RER	46.819	-121.842	1.756	UW	%	WA	Mt. Rainier, Emerald Ridge
RMW	47.460	-121.807	1.024	UW	%	WA	Rattlesnake Mt. (West)
RNO	43.916	-123.725	0.85	UW	%	OR	Roman Nose
RPW	48.448	-121.515	0.85	UW	%	WA	Rockport
RRHS	46.799	-123.042	0.047	UW	%	WA	Rochester HS ANSS-SMO
RSW	46.394	-119.592	1.045	UW	+	WA	Rattlesnake Mt. (East)
RVC	46.944	-121.974	1	UW	%	WA	Mt. Rainier - Voight Creek
RVW	46.148	-122.743	0.46	UW	%	WA	Rose Valley
SAW	47.702	-119.402	0.701	UW	+	WA	St. Andrews
SBES	48.768	-122.416	0.119	UW	%	WA	Silver Beach ES ANSS-SMO

TABLE 1A - Short-Period Stations

STA	LAT	LONG	EL	NET	F	State	NAME
SEP	46.200	-122.191	2.116	UW	#	WA	September lobe, Mt. St. Helens (Dome)
SFER	47.619	-117.367	0.715	UW	%	WA	Spokane Schools, Ferris High ANSS-SMO
SHW	46.193	-122.236	1.425	UW	%	WA	Mt. St. Helens
SHWZ	46.193	-122.236	1.425	UW	%	WA	Mt. St. Helens (CVO version)
SLF	47.761	-120.529	1.75	UW	%	WA	Sugar Loaf
SMW	47.319	-123.344	0.877	UW	%	WA	South Mtn.
SNI	46.464	-119.661	0.323	HW	H	WA	Snively PNNL station
SOS	46.244	-122.138	1.27	UW	%	WA	Source of Smith Creek
SSO	44.856	-122.462	1.242	UW	%	OR	Sweet Springs
STD	46.238	-122.224	1.268	UW	%	WA	Studebaker Ridge
STDM	46.238	-122.224	1.268	UW	%	WA	Studebaker Ridge Microphone
STW	48.151	-123.671	0.308	UW	%	WA	Striped Peak
SUG	46.216	-122.176	1.859	UW	%	WA	Sugar Bowl, MSH
SVOH	48.289	-122.633	0.022	UW	%	WA	Skagit Valley CC ANSS-SMO
TBM	47.170	-120.599	1.006	UW	+	WA	Table Mt.
TDH	45.290	-121.792	1.541	UW	%	OR	Tom,Dick,Harry Mt.
TDL	46.351	-122.217	1.4	UW	%	WA	Tradedollar Lake
TIMB	45.336	-121.710	1.901	CC	#	OR	Timberline, Oregon
TRW	46.292	-120.543	0.723	UW	+	WA	Toppenish Ridge
TWW	47.138	-120.870	1.027	UW	+	WA	Teanaway
UMPQ	43.291	-123.332	0.162	UW	%	WA	Umpqua Community College, DOGAMI SMO
UWFH	48.546	-123.013	0.01	UW	%	WA	UW Friday Harbor ANSS-SMO
VBE	45.060	-121.588	1.544	UW	%	OR	Beaver Butte
VCR	44.983	-120.989	1.015	UW	%	OR	Criterion Ridge
VDB	49.026	-122.103	0.404	CN	C	BC	Canada
VFP	45.318	-121.466	1.716	UW	%	OR	Flag Point
VG2	45.155	-122.272	0.823	UW	%	OR	Goat Mt.
VGB	45.516	-120.779	0.729	UW	+	OR	Gordon Butte
VIP	44.508	-120.620	1.731	UW	%	OR	Ingram Pt.
VLL	45.463	-121.680	1.195	UW	%	OR	Laurance Lk.
VLM	45.538	-122.040	1.15	UW	%	OR	Little Larch
VSP	42.342	-121.950	1.545	UW	%	OR	Spence Mtn
VT2	46.967	-120.000	0.385	UW	+	WA	Vantage2
VTH	45.181	-120.562	0.773	UW	%	OR	The Trough
VVHS	47.423	-122.455	0.095	UW	%	WA	Vashon HS ANSS-SMO
WA2	46.755	-119.567	0.244	UW	+	WA	Wahluke Slope
WAT	47.699	-119.955	0.821	UW	+	WA	Waterville
WIW	46.429	-119.289	0.128	UW	+	WA	Wooded Island
WPO	45.573	-122.791	0.334	UW	%	OR	West Portland
WPW	46.699	-121.537	1.28	UW	%	WA	White Pass
WRD	46.970	-119.146	0.375	UW	+	WA	Warden
WRW	47.856	-120.883	1.189	UW	%	WA	Wenatchee Ridge
YA2	46.527	-120.531	0.652	UW	+	WA	Yakima
YEL	46.210	-122.189	1.75	UW	#	WA	Yellow Rock, Mt. St. Helens
YPT	46.049	-118.963	0.325	UW	+	WA	Yellepit

TABLE 1B – BROAD-BAND STATIONS

STA	LAT	LONG	EL	NET	F	State	NAME
A04A	48.720	-122.706	0.024	TA	E	WA	Lummi Island
A05A	48.998	-122.085	0.174	TA	E	WA	Maple Falls
A09A	48.975	-118.585	0.931	TA	E	WA	Danville
A10A	48.981	-117.559	0.688	TA	E	WA	Northport
B04A	48.058	-123.504	0.029	TA	E	WA	Port Angeles
B05A	48.264	-122.096	0.154	TA	E	WA	Bryant
B09A	48.423	-118.149	0.63	TA	E	WA	Rice
BMO	44.853	-117.306	1.154	US	U	WA	Blue Mountain Ob (USNSN) BB
C03A	47.948	-124.566	0.048	TA	E	WA	Quillayute Airport Forks
C04A	47.717	-122.972	0.053	TA	E	WA	Brinnin
C05A	47.695	-121.690	0.541	TA	E	WA	Tolt Res
C10A	47.819	-117.308	0.684	TA	E	WA	Spilker Farm, Colbert.
COR	44.586	-123.303	0.121	US	U	OR	Corvallis (USNSN) BB
D03A	47.116	-123.770	0.049	TA	E	WA	Wishkah
D04A	47.111	-122.804	0.03	TA	E	WA	Lacey
D05A	47.188	-121.989	0.266	TA	E	WA	Enumclaw
D08A	47.057	-118.921	0.385	TA	E	WA	Wollman Farm, Schrag.
D09A	47.062	-118.309	0.54	TA	E	WA	Jones Farm, Ritzville.
DBO	43.119	-123.244	0.984	UO	%	OR	Dodson Butte (UO CREST BB SMO)
E03A	46.546	-123.563	0.072	TA	E	WA	Lebam
E04A	46.593	-122.720	0.215	TA	E	WA	Onalaska
E05A	46.561	-121.760	0.451	TA	E	WA	Randle
E06A	46.543	-120.979	0.911	TA	E	WA	Yakima
E07A	46.559	-119.855	0.561	TA	E	WA	Sunnyside
EUO	44.029	-123.070	0.16	UO	%	OR	Eugene, OR UO CREST BB SMO
F03A	45.931	-123.559	0.325	TA	E	OR	Seaside
F04A	45.933	-122.419	0.211	TA	E	WA	Amboy
F05A	45.884	-121.459	0.454	TA	E	WA	White Salmon
F07A	45.895	-119.928	0.227	TA	E	WA	Phinny Hill Vineyards, Prosser.
F08A	45.797	-118.777	0.487	TA	E	OR	Pendleton.
F09A	45.709	-117.909	0.894	TA	E	OR	S2 Ranch, Elgin.
F10A	45.973	-117.228	1.136	TA	E	OR	Beach Ranch, Enterprise.
G03A	45.315	-123.281	0.208	TA	E	OR	Yamhill
G04A	45.206	-122.478	0.273	TA	E	OR	Mulino
G05A	45.242	-121.317	0.594	TA	E	OR	Wamic
G06A	45.236	-120.635	0.78	TA	E	OR	Carlson Farm, Grass Valley
G07A	45.266	-119.669	0.801	TA	E	OR	Ruggs Ranch, Heppner
G08A	45.290	-118.960	1.318	TA	E	OR	Pilot Rock
GNW	47.564	-122.827	0.165	UW	%	WA	Green Mt CREST BB SMO
GRCC	47.312	-122.181	0.13	UW	%	WA	Green River CC BB
H02A	44.676	-124.000	0.209	TA	E	OR	Toledo
H03A	44.677	-123.292	0.214	TA	E	OR	Soap Creek Ranch, Albany
H04A	44.684	-122.186	0.652	TA	E	OR	Detroit Lake
H05A	44.647	-121.227	0.721	TA	E	OR	Madrase
H06A	44.734	-120.335	0.516	TA	E	OR	Lindquist Farm, Mitchell
H07A	44.591	-119.565	1.204	TA	E	OR	Lands Inn, Kimberly
H08A	44.519	-118.670	1.373	TA	E	OR	Prairie City

TABLE 1B – BROAD-BAND STATIONS							
STA	LAT	LONG	EL	NET	F	State	NAME
H09A	44.665	-117.664	1.263	TA	E	OR	Durkee
HAWA	46.392	-119.533	0.367	US	U	WA	Hanford Nike USNSN BB
HEBO	45.214	-123.755	0.875	UW	%	OR	Mt. Hebo CREST BB SMO
HLID	43.563	-114.414	1.772	US	U	ID	Hailey USNSN BB
HOOD	45.321	-121.653	1.52	UW	%	OR	Mt Hood Meadows CREST BB SMO
HUMO	42.607	-122.957	0.555	BK	N	OR	Hull Mountain, OR BB from UCB
I02A	44.004	-123.830	0.17	TA	E	OR	Mapleton
I03A	43.973	-123.278	0.206	TA	E	OR	Eugene
I05A	44.163	-121.268	1.011	TA	E	OR	Bend
I06A	43.944	-120.211	1.297	TA	E	OR	Prineville
I07A	44.082	-119.504	1.293	TA	E	OR	Izee
I08A	43.910	-118.569	1.189	TA	E	OR	Drewsey
I09A	43.973	-117.741	0.95	TA	E	OR	Lost Marbles Ranch, Westfall
J02A	43.365	-123.575	0.136	TA	E	OR	Umpqua
J03A	43.372	-122.965	0.292	TA	E	OR	Ideyld Park
J05A	43.284	-121.236	1.54	TA	E	OR	Fort Rock
J06A	43.252	-120.153	1.407	TA	E	OR	Christmas Valley
J07A	43.374	-119.311	1.273	TA	E	OR	Hines
J08A	43.358	-118.474	1.229	TA	E	OR	Circle Bar Ranch, Crane
J09A	43.347	-117.754	1.303	TA	E	OR	Fry Pan Ranch, Harper
JRO	46.275	-122.218	1.28	CC	#	WA	Johnston Ridge Observatory
K01A	42.809	-124.469	0.175	TA	E	OR	Sixes
K02A	42.767	-123.490	0.963	TA	E	OR	Glendale
K04A	42.613	-121.731	1.305	TA	E	OR	Chilquin
K05A	42.726	-120.893	1.887	TA	E	OR	Summer Lake
K06A	42.799	-120.251	1.34	TA	E	OR	Valley Falls
K07A	42.180	-121.890	1.41	TA	E	OR	Frenchgler
K08A	42.731	-118.486	1.391	TA	E	OR	Mann Creek Ranch, Princeton
K09A	42.700	-117.725	1.176	TA	E	OR	Rome
L02A	42.156	-123.602	0.485	TA	E	OR	Cave Junction
L04A	42.175	-121.891	1.336	TA	E	OR	Klamath Falls
L05A	42.047	-120.834	1.751	TA	E	OR	Lakeview
L07A	42.019	-119.340	1.816	TA	E	OR	Adel
L08A	42.190	-118.345	1.49	TA	E	OR	Fields
L09A	42.019	-117.667	1.431	TA	E	NV	Wilkinson Ranch, McDermitt
LON	46.750	-121.811	0.853	UW	%	WA	Longmire CREST BB LONLZ SMO
LTY	47.256	-120.666	0.97	UW	%	WA	Liberty BB CREST SMO
MEGW	46.266	-123.877	0.351	UW	%	WA	Megler CREST BB SMO
MOD	41.902	-120.303	1.554	BK	N	WA	Modoc Plateau, CA from UCB
NEW	48.264	-117.120	0.76	US	U	WA	Newport Observatory USNSN BB
NLWA	47.390	-123.870	0.61	US	U	WA	Neilton Lookout USNSN BB
OFR	47.933	-124.396	0.152	UW	%	WA	Olympics - Forest Resource Center CRE
OPC	48.100	-123.413	0.09	UW	%	WA	Olympic Penn College CREST BB SMO
OZB	48.960	-125.493	0.671	CN	C	BC	Canada BB
PIN	43.811	-120.873	1.865	UO	%	OR	Pine Mt. (U0 CREST, BB, SMO)
PNT	49.317	-119.617	0.55	CN	C	BC	Canada, BB
SNB	48.775	-123.171	0.408	CN	C	BC	Canada BB
SQM	48.077	-123.047	0.03	UW	%	WA	Sequim (CREST BB SMO)
STD	46.238	-122.224	1.268	UW	%	WA	Studebaker Ridge

TABLE 1B – BROAD-BAND STATIONS

STA	LAT	LONG	EL	NET	F	State	NAME
SWFL	46.189	-122.202	2.268	CC	#	WA	Southwest Flank, St. Helens
TAKO	43.743	-124.082	0.046	UW	%	OR	Tahkenitch CREST BB SMO
TOLO	44.622	-123.923	0.021	UW	%	OR	Toledo BPA CREST BB SMO
VALT	46.214	-122.189	1.681	CC	#	WA	St. Helens Crater
VGZ	48.414	-123.324	0.067	CN	C	BC	Canada
WIFE	44.060	-121.817	1.955	CC	#	WA	Wife at 3-Sisters from CVO
WISH	47.117	-123.771	0.045	UW	%	WA	Wishkah CREST BB SMO
WVOR	42.434	-118.637	1.344	US	U	OR	Wildhorse Valley (USNSN BB)
BRKS	47.755	-122.290	0.02	UW	%	WA	Brookside ANSS-SMO BB
ELW	47.494	-121.873	0.267	UW	%	WA	EchoLakeBPA BB-SMO-IDS20
HUMO	42.607	-122.957	0.555	BK	N	OR	Hull Mountain, OR BB from UCB
KBO	42.213	-124.226	1.008	NC	N	OR	Bosley Butte CREST BB
KEB	42.872	-124.334	0.818	NC	N	OR	Edson Butte CREST BB
KRMB	41.523	-123.908	1.265	NC	N	OR	NCSN Red Mtn CREST BB
KSXB	41.830	-123.877	0	NC	N	OR	NCSN Camp Six CREST BB
MOD	41.902	-120.303	1.554	BK	N	WA	Modoc Plateau, CA from UCB
PFB	48.572	-124.440	0.465	CN	C	BC	P.Renfrew, Canada BB
PNLK	47.582	-122.035	0.128	UW	%	WA	Pine Lake JH ANSS-SMO BB
SP2	47.556	-122.249	0.03	UW	%	WA	Seward Park, Seattle SMO-IDS24 BB(7/
YBH	41.732	-122.710	1.06	BK	N	WA	Yreka, CA from UCB BB

TABLE 1-C – STRONG MOTION STATIONS

STA	LAT	LONG	EL	NET	F	State	NAME
ACES	47.560	-122.341	0	UW	%	WA	Army Corps of Engineers Seattle ANSS-
ALKI	47.575	-122.418	0.001	UW	%	WA	Alki Wastewater Plant, ANSS-SMO
ALST	46.109	-123.034	0.198	UW	%	OR	Alston BPA site - SMO
ALVY	43.998	-123.017	0.155	UW	%	OR	Alvey BPA site - SMO
ATES	48.236	-122.060	0.062	UW	%	WA	Arlington Trafton ES ANSS-SMO
BABE	47.606	-122.537	0.083	UW	%	WA	Bainbridge School ANSS-SMO
BEND	44.067	-121.328	1.141	UW	%	WA	UO Bend Office, DOGAMI SMO
BEVT	47.920	-122.271	0.17	UW	%	WA	Boeing Everett ANSS-SMO
BRKS	47.755	-122.290	0.02	UW	%	WA	Brookside ANSS-SMO BB
BSFP	47.520	-122.298	0.005	UW	%	WA	Boeing Fire Protection
BULL	45.446	-122.156	0.222	UW	%	OR	Bull Run Dam SMO
BURN	43.573	-119.131	1.615	UW	G	OR	Burns SMO
COLT	45.170	-122.438	0.213	UW	%	OR	Colton HS ANSS SMO
EARN	47.741	-122.045	0.159	UW	%	WA	East Ridge ES ANSS-SMO
EGRN	47.073	-122.979	0.057	UW	%	WA	Evergreen College ANSS-SMO
ELW	47.494	-121.873	0.267	UW	%	WA	EchoLakeBPA BB-SMO-IDS20
ERW	48.454	-122.626	0.389	UW	%	WA	Mt. Erie SMO-IDS24 BB
EVCC	48.007	-122.206	0.03	UW	%	WA	Everett College ANSS-SMO
EVGW	47.854	-122.155	0.122	UW	%	WA	Everett Gateway Middle School ANSS-SM
EYES	45.329	-123.058	0.061	UW	%	OR	Ewing Young ES, Newberg ANSS SMO
FINN	47.719	-122.233	0.121	UW	%	WA	Finn Hill Jr High ANSS-SMO
GTWN	47.551	-122.322	0.025	UW	%	WA	Georgetown Playfield ANSS-SMO
HART	47.584	-122.350	0.002	UW	%	WA	Harbor Island, ANSS-SMO
HICC	47.390	-122.299	0.115	UW	%	WA	Highline CC ANSS-SMO
HOLY	47.565	-122.385	0.106	UW	%	WA	Holy Rosary ANSS-SMO
HUBA	45.631	-122.653	0.023	UW	%	WA	Hudson Bay HS, ANSS SMO

TABLE 1-C – STRONG MOTION STATIONS							
STA	LAT	LONG	EL	NET	F	State	NAME
JORV	42.978	-117.054	1.338	UW	G	OR	Jorden Valley SMO
KCAM	47.544	-122.319	0.005	UW	%	WA	King County Airport Maint. Shop, ANSS
KDK	47.595	-122.333	0.004	UW	%	WA	Coastal Environmental, Seattle ANSS-S
KEEL	45.550	-122.896	0.067	UW	%	OR	Keeler BPA site - SMO
KFAL	42.258	-121.786	1.326	UW	%	OR	Klamath Falls ANSS-SMO
KICC	47.577	-122.632	0.017	UW	%	WA	Kitsap 911 center ANSS-SMO
KIMB	47.575	-122.304	0.069	UW	%	WA	Kimball School ANSS-SMO
KIMR	47.503	-122.768	0.123	UW	%	WA	Kitsap Mod Risk ANSS-SMO
KINR	47.751	-122.644	0.008	UW	%	WA	Kitsap Road Shed ANSS-SMO
KITP	47.675	-122.631	0.076	UW	%	WA	Kitsap Road Shed ANSS-SMO
KNEL	47.381	-122.252	0.014	UW	%	WA	Kent Elementary ANSS-SMO
LANE	44.052	-123.233	0.12	UW	%	OR	Lane BPA site - SMO
LAWT	47.656	-122.391	0.05	UW	%	WA	Lawton School ANSS-SMO
LEOT	47.768	-122.117	0.115	UW	%	WA	Leota J. High ANSS-SMO
LYNC	47.826	-122.294	0.019	UW	%	WA	Lynnwood City Hall, ANSS-SMO
MARY	47.663	-122.121	0.011	UW	%	WA	Marymoor Park ANSS-SMO
MBKE	48.917	-122.143	1.01	UW	%	WA	M Baker Kendall ANSS-SMO
MBPA	47.898	-121.890	0.186	UW	%	WA	Monroe BPA SMO-IDS20
MEAN	47.623	-122.306	0.037	UW	%	WA	Meany Middle School, ANSS SMO
MPL	47.468	-122.186	0.122	UW	%	WA	Maple Valley SMO-IDS24
MRIN	44.800	-122.699	0.187	UW	%	WA	Marion BPA site DOGAMI SMO
NIHS	47.741	-122.223	0.137	UW	%	WA	Inglemoor HS ANSS-SMO
NOWS	47.686	-122.257	0.002	UW	%	WA	NOAA, Seattle Bldg 3-SMO-IDS20
OHC	47.334	-123.159	0.006	UW	%	WA	Hood Canal JH ANSS-SMO
PAYL	47.193	-122.314	0.009	UW	%	WA	Puyallup School ANSS-SMO
PCEP	47.111	-122.291	0.16	UW	%	WA	PC East Precinct ANSS-SMO
PCFR	46.990	-122.442	0.137	UW	%	WA	PC Firing Range ANSS-SMO
PCMD	46.889	-122.301	0.239	UW	%	WA	PC Mountain Detachment ANSS-SMO
PERL	45.328	-122.779	0.068	UW	%	WA	Pearl BPA site DOGAMI SMO
PNLK	47.582	-122.035	0.128	UW	%	WA	Pine Lake JH ANSS-SMO BB
PSNS	47.559	-122.644	0.006	UW	%	WA	PSNS Bremerton SMO
QAW	47.632	-122.356	0.14	UW	%	WA	Queen Anne, Seattle SMO-IDS24
RAW	47.337	-121.933	0.208	UW	%	WA	Raver BPA SMO-IDS20
RHAZ	47.540	-122.185	0.108	UW	%	WA	Hazelwood ES ANSS-SMO
ROSS	45.662	-122.658	0.061	UW	%	WA	Ross BPA Vancouver -SMO
RRHS	46.799	-123.042	0.047	UW	%	WA	Rochester HS ANSS-SMO
SBES	48.768	-122.416	0.119	UW	%	WA	Silver Beach ES ANSS-SMO
SCC	47.750	-122.361	0	UW	%	WA	Shoreline CC ANSS-SMO
SEA	47.654	-122.309	0.03	UW	%	WA	UW, Seattle (Wood Anderson BB SMO-IDS
SEAS	45.997	-123.926	0.005	UW	%	OR	Seaside SMO
SFER	47.619	-117.367	0.715	UW	%	WA	Spokane Schools, Ferris High ANSS-SMO
SMNR	47.204	-122.233	0.022	UW	%	WA	Sumner HS ANSS-SMO
SOUA	42.184	-122.695	0.634	UW	%	WA	Southern Oregon Univ., DOGAMI SMO
SP2	47.556	-122.249	0.03	UW	%	WA	Seward Park, Seattle SMO-IDS24 BB(7/
SSS2	47.582	-122.331	0.005	UW	%	WA	John Stanford Center surface ANSS-SMO
SVOH	48.289	-122.633	0.022	UW	%	WA	Skagit Valley CC ANSS-SMO
SVTR	47.496	-121.782	0.146	UW	%	WA	Two Rivers School, Snoqualmie Valley
SWID	48.008	-122.413	0.062	UW	%	WA	South Whidbey SD ANSS-SMO
TBPA	47.258	-122.368	0.002	UW	%	WA	Tacoma WA BPA SMO-IDS20

TABLE 1-C – STRONG MOTION STATIONS							
STA	LAT	LONG	EL	NET	F	State	NAME
TKCO	47.537	-122.302	0.005	UW	%	WA	King Co EOC - SMO
UMPQ	43.291	-123.332	0.162	UW	%	WA	Umpqua Community College, DOGAMI SMO
UWFH	48.546	-123.013	0.01	UW	%	WA	UW Friday Harbor ANSS-SMO
VVHS	47.423	-122.455	0.095	UW	%	WA	Vashon HS ANSS-SMO
WISC	47.609	-122.176	0.056	UW	%	WA	Wilburton Center ANSS-SMO
WWHS	46.045	-118.318	0.01	UW	%	WA	Walla Walla HS ANSS SMO
SHLY	47.708	-117.416	0.626	—	—	WA	Spokane temp K2 (Swanson)
SNIO	47.679	-117.405	0.584	—	—	WA	Spokane SMO. Nat. Inst. Occ. Safety H
DBO	43.119	-123.244	0.984	UO	%	OR	Dodson Butte (UO CREST BB SMO)
EUO	44.029	-123.070	0.16	UO	%	OR	Eugene, OR U0 CREST BB SMO
GNW	47.564	-122.827	0.165	UW	%	WA	Green Mt CREST BB SMO
HEBO	45.214	-123.755	0.875	UW	%	OR	Mt. Hebo CREST BB SMO
HOOD	45.321	-121.653	1.52	UW	%	OR	Mt Hood Meadows CREST BB SMO
LON	46.750	-121.811	0.853	UW	%	WA	Longmire CREST BB LONLZ SMO
LTY	47.256	-120.666	0.97	UW	%	WA	Liberty BB CREST SMO
MEGW	46.266	-123.877	0.351	UW	%	WA	Megler CREST BB SMO
OFR	47.933	-124.396	0.152	UW	%	WA	Olympics - Forest Resource Center CRE
OPC	48.100	-123.413	0.09	UW	%	WA	Olympic Penn College CREST BB SMO
PIN	43.811	-120.873	1.865	UO	%	OR	Pine Mt. (U0 CREST, BB, SMO)
SQM	48.077	-123.047	0.03	UW	%	WA	Sequim (CREST BB SMO)
TAKO	43.743	-124.082	0.046	UW	%	OR	Tahkenitch CREST BB SMO
TOLO	44.622	-123.923	0.021	UW	%	OR	Toledo BPA CREST BB SMO
WISH	47.117	-123.771	0.045	UW	%	WA	Wishkah CREST BB SMO