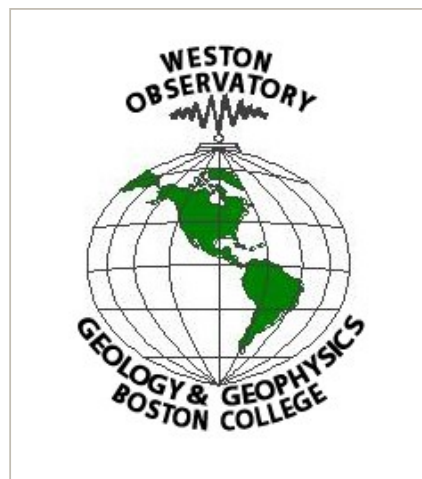
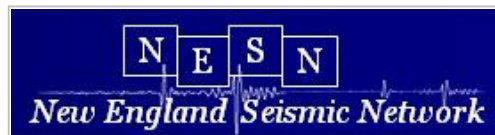


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A STUDY OF NEW ENGLAND SEISMICITY

Quarterly Earthquake Report

October-December, 2006



Weston Observatory

New England Seismic Network

381 Concord Road

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NEW ENGLAND SEISMIC NETWORK

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Award #04HQAG0020

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for

United States Geological Survey

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Notice

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Quarterly Earthquake Report

October-December 2006

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Introduction

The New England Seismic Network (NESN) is operated by the Weston Observatory (WES) of Boston College. The mission of the NESN is to operate and maintain a regional seismic network with digital recording of seismic ground motions for the following purposes: 1) to determine the location and magnitude of earthquakes in and adjacent to New England and report felt events to public safety agencies, 2) to define the crust and upper mantle structure of the northeastern United States, 3) to derive the source parameters of New England earthquakes, and 4) to estimate the seismic hazard in the area.

This report summarizes the work of the NESN for the period October-December, 2006. It includes a brief summary of the network's equipment and operation, and a short discussion of data management procedures. A list of participating personnel is given in Table 1. There were 23 earthquakes that occurred within or near the network during this reporting period. Phase information for these earthquakes is included in this report.

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Current Network Operation and Status

The New England Seismic Network of Weston Observatory of Boston College currently consists of 12 broadband three-component and 8 analog strong-motion stations. The coordinates of the stations are given in Table 2, and maps of the weak- and strong-motion networks are shown in Figures 1 and 2, respectively. The 12 stations consist of Guralp CMG-40T three-component sensors. Ground motions recorded by these sensors are digitized at 100 sps with 16-bit resolution. Additional gain-ranging provides 126 dB dynamic range. These stations are operated in dialup mode with waveform segments of suspected events transmitted in digital mode to Weston Observatory for analysis and archiving. Weston Observatory also maintains 8 SMA-1 strong-motion instruments in New England.

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Seismicity

There were 23 earthquakes that occurred in or adjacent to the NESN during this reporting period. A summary of the location data is given in Table 3. Figure 3 shows the locations of these events. Figure 4 shows the locations of all events since the beginning of network operation in October, 1975.

Table 4 gives the station phase data and detailed hypocenter data for each event listed in Table 3. In addition to NESN data, arrival time and magnitude data sometimes are contributed for seismic stations operated by the [Geological Survey of Canada \(GSC\)](#), the [Lamont-Doherty Cooperative Seismographic Network](#), and the [US National Seismic Network](#). Final locations for this section were computed using the program HYPO78. For regional events (those too far from the NESN to obtain accurate locations and magnitudes) phase data are given for NESN stations, but the entry in Table 3 lists the hypocenter and geographic location information adopted from the authoritative network. Accordingly, the epicenter is plotted on the maps using the entry from Table 3.

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Data Management

Recent event locations are available at www.bc.edu/research/westonobservatory/northeast/recenteqs/. Waveform data are saved in Nanometrics, ASCII, and SEED formats and are available by contacting, Anastasia Macherides Moulis, via email. Earthquake lists can be found at www.bc.edu/research/westonobservatory/northeast/eqcatalogs/. Currently available on the Weston Observatory web page is the full catalog of northeastern U.S. earthquake activity to the present time. This will be updated as new Northeastern U.S. Seismic Network Quarterly Earthquake Reports are produced.

For more information on matters discussed in this report or general earthquake information (reports, maps, catalogs, etc.) consult our web site www.bc.edu/westonobservatory or contact:

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Explanation of Tables

Table 1: List of personnel operating the NESN

Table 2: List of Seismic and Strong Motion Stations

1. Code = station name
2. Lat = station latitude, degrees north
3. Long = station longitude, degrees west
4. Elev = station elevation in meters
5. Location = geographic location
6. Operator = network operator

Table 3: Earthquake Hypocenter List

1. Date = date event occurred, Yr (year)/Mo (month)/Dy (day)
2. Time = origin time of event, Hr (hour):Mn (minute):Sec (second)
in UCT (Universal Coordinated Time, same as Greenwich Mean Time)
3. Lat = event location, latitude north in degrees
4. Long = event location, longitude west in degrees
5. Depth = event depth in kilometers
6. Mn = Nuttli Magnitude
7. Mc = Coda Magnitude
8. Int = event epicentral intensity
9. Location = event geographic location

Table 4: Earthquake detailed hypocenter and phase data list

1. Geographic location
2. DATE = date event occurred, yr/mo/dy (year/month/day)
3. ORIGIN = event origin time (UCT) in hours, minutes, and seconds
4. LAT N = latitude north in degrees and minutes
5. LONG W = longitude west in degrees and minutes
6. DEPTH = event depth in kilometers
7. MN = Nuttli Lg phase magnitude with amplitude divided by period
8. MC = signal duration (coda) magnitude
 $WES: 2.23 \text{ Log}(FMP) + 0.12 \text{ Log}(\text{Dist}) - 2.36$ (Rosario, 1979)
 $MIT: 2.21 \text{ Log}(FMP) - 1.7$ (Chaplin *et al.*, 1980)
9. ML = local magnitude
 WES : calculated from Wood-Anderson seismograms (Ebel, 1982)
 GSC (Geological Survey of Canada): Richter Lg magnitude
10. GAP = largest azimuthal separation, in degrees, between stations
11. RMS = root mean square error of travel time residual in seconds
12. ERH = standard error of epicenter in kilometers
13. ERZ = standard error of event depth in kilometers
14. Q = solution quality of hypocenter

A = excellent

- B = good
- C = fair
- D = poor

Table Body: earthquake phase data

1. STN = station name
2. DIST = epicentral distance in kilometers
3. AZM = azimuthal angle in degrees measured clockwise between true north and vector pointing from epicenter to station
4. Description of onset of phase arrival

- I = impulsive
- E = emergent

5. R = phase

- P = first P arrival
- S = first S arrival

6. M = first motion direction of phase arrival

- U = up or compression
- D = down or dilatation

7. K = weight of arrival

- 0 = full weight (1.0)
- 1 = 0.75 weight
- 2 = 0.50 weight
- 3 = 0.25 weight
- 4 = no weight (0.0)

8. HRMN = hour and minute of phase arriva l
9. SEC = second of phase arrival
10. TCAL = calculated travel time of phase in seconds
11. RES = travel time residual (error) of phase arrival
12. WT = weight of phase used in hypocentral solution
13. AMX = peak-to-peak ground motion, in millimicrons, of the maximum envelope amplitude of vertical-component signal, corrected for system response
14. PRX = period in seconds of the signal from which amplitude was measured
15. XMAG = Nuttli magnitude recorded at station
16. FMP = signal duration (coda), in seconds, measured from first P arrival
17. FMAG = coda magnitude recorded at station

Table 5: Microearthquakes and other non-locatable events

1. Date = date event occurred, Yr (year)/Mo (month)/Dy (day)
2. Sta = nearest station recording event
3. Arrival Time = phase arrival time, Hr (hour):Mn (minute):Sec (second)

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TABLE 1

WESTON OBSERVATORY PERSONNEL

Name	Position	voice phone	email address
John E. Ebel	Observatory Director, Seismologist, Principal Investigator	617-552-8319	ebel@bc.edu
Alan Kafka	Research Seismologist	617-552-8300	kafka@bc.edu
Anastasia Macherides Moulis	Seismologist, Analyst	617-552-8325	macherid@bc.edu
Dina Smith	Associate Director of Operations, Seismologist	617-552-8335	dina.smith.1@bc.edu
Michael Hagerty	New England Seismic Network Manager, Seismologist	617-552-8337	hagertmb@bc.edu
Weston Observatory		617-552-8300	
		617-552-8388 (FAX)	

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TABLE 2

SEISMIC STATIONS OF THE NEW ENGLAND SEISMIC NETWORK

Code	Lat	Long	Elev (m)	Location	Operator
BCX *	42.3350	-71.1705	61.0	Chestnut Hill, MA	WES
BRYW	41.9199	-71.5342	107	Smithfield, RI	WES
FFD	43.4700	-71.6539	131	Franklin Falls Dam, NH	WES
HNH	43.7051	-72.2865	180	Hanover, NH	WES
QUA2	42.2790	-72.3521	168	Belchertown, MA	WES
TRY	42.7305	-73.6658	131	Troy, NY	WES
EMMW	44.7101	-67.4580	34	Machias, ME	WES
VT1	44.3317	-72.7536	125	Waterbury, VT	WES

WES	42.3848	-71.3218	60	Weston, MA	WES
WVL	44.5648	-69.6575	85	Waterville, ME	WES
YLE	41.3165	-72.9209	10	New Haven, CT	WES
PQI	46.6701	-68.0133	175	Presque Isle, ME	WES

* = not in operation during this quarter

STRONG MOTION STATIONS OF THE NEW ENGLAND SEISMIC NETWORK

Code	Lat	Long	Location	Operator
SM1	44.90	-67.25	Dennysville, ME	WES
SM2	44.49	-73.10	Essex Junction, VT	WES
SM3	41.45	-71.33	Newport, RI	WES
SM4	42.38	-71.32	Weston, MA	WES
SM5	42.66	-71.30	Lowell, MA	WES
SM6	42.30	-71.34	Natick, MA	WES
SM7	42.39	-71.54	Hudson, MA	WES
SM8	44.48	-69.61	North Vassalboro, ME	WES

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TABLE 3

NEW ENGLAND AND ADJACENT REGIONS

October-December, 2006

Date	Time (UTC)	Lat	Long	Depth	Mn	Mc	Int	Location
M/D/Y	Hr:Mn:Sec			(km)				
10/03/2006	00:07:38.20	44.35	-68.15	10.83	4.2	4.0		ME, 6.5KM SE of Bar Harbor
10/08/2006	07:16:56.69	43.86	-73.31	02.27		1.4*		VT, 19KM SW of Middlebury
10/09/2006	12:04:48.42	47.03	-66.57	10.14	2.3			NB, 62KM ENE of Plaster Rock
10/10/2006	06:20:29.18	43.87	-73.32	04.38	2.3			VT, 19KM SW of Middlebury
10/10/2006	13:05:47.77	44.39	-68.18		1.5			ME, Near Bar Harbor, unreliable location and depth
10/15/2006	04:25:38.22	44.36	-68.17	05.00	0.7			ME, 4.8KM of Bar Harbor
10/17/2006	05:39:03.30	44.39	-68.19	05.97	1.1			ME, 1.6KM E of Bar Harbor
10/22/2006	18:34:31.52	44.40	-68.17	07.97	1.5			ME, 3.2KM NE of Bar Harbor
10/22/2006	19:00:52.48	44.40	-68.19	08.96	0.9			ME, 1.6KM ENE of Bar Harbor
10/22/2006	21:36:25.30	44.38	-69.18	09.89	2.3	2.5		ME, 2.4KM E of Bar Harbor
10/22/2006	22:49:40.19	44.40	-68.18	09.77	1.0			ME, 2.4KM NE of Bar Harbor
10/26/2006	13:03:03.61	43.50	-71.63	07.15	1.8	2.0		NH, 5.8KM NNE of Franklin
10/31/2006	02:41:41.04	47.62	-70.19	15.37	3.0^			PQ, 4.3KM SW OF La Malbaie
11/03/2006	01:10:34.28	44.33	-68.15	01.50	1.0			ME, 8KM SE of Bar Harbor
11/03/2006	01:34:36.01	44.48	-68.13	05.00	0.9			ME, 12KM NE of Bar Harbor
11/04/2006	04:22:42.38	44.45	-68.13	08.48	1.3			ME, 8KM NE of Bar Harbor
11/04/2006	04:50:04.42	44.43	-68.15	09.33	1.2			ME, 6.4KM NE of Bar Harbor
11/27/2006	21:12:20.47	47.02	-66.52	09.29	2.6			NB, 64KM ENE of Plaster Rock
12/07/2006	04:44:59.81	49.51	-81.56	18.94	4.2^			ON, 60KM NW of Cochrane
12/13/2006	19:07:53.32	40.29	-76.06	09.83	2.6			PA, 12KM WSW of Reading
12/15/2006	04.21:14.09	44.53	-70.40	05.00	1.6			ME, 12KM ESE of Rumford
12/18/2006	19:53:23.54	44.36	-68.16	05.00	2.4	2.6		ME, 4KM SE of Bar Harbor
12/29/2006	21:21:10.78	44.35	-68.17	08.45	3.1	3.1		ME, 4.4KM SE of Bar Harbor

* indicates magnitude as calculated by Lamont Doherty Earth Observatory
 ^ indicates magnitude as calculated by Earthquakes Canada (Natural Resources Canada)

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TABLE 4

**EARTHQUAKE PHASE DATA LIST
 NEW ENGLAND AND ADJACENT REGIONS
 October-December, 2006**

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D6A03A.XX
NORTHWEST MAINE CRUSTAL STRUCTURE
06OCT03 ME, OFFSHORE, 6.5KM (4MI) SE OF BAR HARBOR
DATE ORIGIN LAT N LONG W DEPTH MN MC ML GAP RMS ERH ERZ Q
61003 0 7 38.20 44-20.72 68- 8.72 10.83 4.2 4.0 141 .44 1.2 1.3 C
STN DIST AZM RMK HRMN SEC TOBS TCAL RES WT AMX PRX XMAG FMP FMAG
EMMW 68.1 53 IPDO 0 7 49.44 11.24 11.15 .08 3.03 391 3.7
S 0 0 7 57.63 19.43 19.85 -.43 3.00
WVL 122.9 280 IPDO 0 7 58.49 20.29 19.84 .44 2.63 429 3.8
S 2 0 7 72.04 33.84 35.32 -1.49 .40
GGN 135.5 51 EPDO 0 8 .22 22.02 21.83 .18 2.61
S 0 0 8 16.77 38.57 38.86 -.31 2.61
    
```


STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG
LBNH	299.0	267	S	0	19	1	31.45	38.97	38.57	.38	1.02			
LMN	311.4	59	S	0	19	1	69.35	76.87	76.48	.29	.62			
LMN	311.4	59	S	4	19	1	69.15	76.67	79.22	-2.65	.00			

D6A22C.XX
NORTHWEST MAINE CRUSTAL STRUCTURE
06OCT22 ME, OFFSHORE, 2.4KM (1.5MI) E OF BAR HARBOR

DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q			
61022	2136	25.30	44-23.08	68-10.60	9.89	2.3	2.5	143	.49	1.6	1.5	C			
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG	
EMMW	67.6	58	EPCO	2136	36.24	10.94	11.07	-.14	2.11				108	2.5	
			S	0	2136	44.48	19.18	19.71	-.54	2.11					
WVL	119.6	278	EP	0	2136	45.08	19.78	19.31	.46	1.88	83	.13	2.3	66	2.2
			S	0	2136	58.91	33.61	34.37	-.77	1.86					
PKME	131.7	318	EPCO	2136	47.51	22.21	21.23	.97	1.83					148	2.9
			S	0	2136	63.13	37.83	37.78	.01	1.83					
GGN	134.6	53	EP	0	2136	47.00	21.70	21.69	.01	1.81					
			S	0	2136	64.02	38.72	38.60	.10	1.81					
FFD	297.3	250	EP	4	2137	10.00	44.70	42.67	2.01	.00					
			S	4	2137	43.30	78.00	75.95	2.01	.00					
LBNH	299.6	267	EP	0	2137	8.47	43.17	42.96	.15	1.09					
LMN	311.4	58	EP	3	2137	11.02	45.72	44.41	1.25	.26					
			S	0	2137	44.42	79.12	79.06	-.04	1.04					
WES	338.1	229	EPDO	2137	13.30	48.00	47.70	.29	.93	11	.18	2.2			
			S	3	2137	48.70	83.40	84.91	-1.53	.22					
HNH	338.2	257	ES	4	2137	58.60	93.30	84.94	8.31	.00	10	.15	2.3		
MOQ	338.7	288	EP	0	2137	13.48	48.18	47.78	.26	.92					
			S	4	2137	48.12	82.82	85.05	-2.48	.00					
HRV	344.4	233	EP	0	2137	13.70	48.40	48.48	-.11	.90					
			S	0	2137	61.00	95.70	86.30	9.35	.00					
BATG	361.1	27	EP	0	2137	16.14	50.84	50.55	.23	.82					
			S	2	2137	54.47	89.17	89.98	-.92	.41					
HAL	365.7	86	S	0	2137	56.14	90.84	90.99	-.17	.80					
LMQ	389.1	335	EP	2	2137	20.00	54.70	54.00	.63	.35					
			S	1	2137	61.65	96.35	96.13	.10	.53					

QUA2 411.7 235
FRNY 432.6 277 EP 0 2137 24.40 59.10 59.37 -.31 .51 10 .18 2.4

D6A22D.XX
NORTHWEST MAINE CRUSTAL STRUCTURE
06OCT22 ME, OFFSHORE, 2.4KM (1.5MI) NE OF BAR HARBOR

DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q			
61022	2249	40.19	44-23.87	68-10.59	9.77	1.0	.0	218	.57	5.8	5.5	D			
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG	
EMMW	66.8	59	EP	0	2249	50.94	10.75	10.93	-.20	1.26			6.09	.9	
			S	0	2249	59.23	19.04	19.46	-.44	1.25					
WVL	119.4	277	S	1	2250	13.60	33.41	34.31	-.93	.76	3	.10	1.1		
PKME	130.6	318	EP	0	2250	2.50	22.31	21.05	1.23	.84					
			S	0	2250	17.73	37.54	37.48	.02	1.10					
GGN	133.7	53	EP	0	2250	2.27	22.08	21.54	.52	1.08					
			S	0	2250	18.60	38.41	38.35	.04	1.09					
LBNH	299.7	267	ES	4	2250	63.52	83.33	76.51	6.71	.00					
LMN	310.7	59	S	0	2250	58.95	78.76	78.91	-.26	.63					

D6A26A.XX
HUGHES AND LUETGERT NH
06OCT26 NH, 5.8KM (3.6MI) NNE OF FRANKLIN

DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q				
61026	13	3	3.61	43-29.80	71-38.01	7.15	1.8	2.0	125	.44	1.3	.9	C			
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG		
FFD	3.4	209	EP	0	13	3	5.33	1.72	1.35	.36	1.46			67	1.8	
			S	0	13	3	6.07	2.46	2.40	.03	1.48					
HNH	57.6	294	EP	0	13	3	13.37	9.76	9.69	.04	1.33	40	.08	1.7	82	2.2
			S	0	13	3	20.03	16.42	17.25	-.88	1.12					
HRV	110.2	177	EP	0	13	3	21.50	17.89	18.20	-.33	1.18					
			S	0	13	3	35.70	32.09	32.40	-.35	1.18					
WES	126.1	168	EP	0	13	3	24.70	21.09	20.67	.42	1.13	25	.12	1.9		
			S	0	13	3	39.99	36.38	36.79	-.42	1.12					
QUA2	147.5	203	EP	0	13	3	27.78	24.17	23.98	.17	1.09	18	.12	1.8		
			S	0	13	3	46.52	42.91	42.68	.18	1.09					
ACCN	165.3	266	EP	0	13	3	30.44	26.83	26.74	.03	1.04					
			S	0	13	3	51.50	47.89	47.60	.19	1.04					
MIV	165.9	293	EP	0	13	3	30.40	26.79	26.84	-.09	1.04					
			S	0	13	3	50.64	47.03	47.77	-.82	.91					
TRY	186.1	243	S	0	13	3	57.01	53.40	52.46	.85	.86	11	.13	1.8		
MOQ	207.7	346	EP	0	13	3	36.16	32.55	32.14	.27	.93					
			S	0	13	3	60.55	56.94	57.21	-.52	.90					
FRNY	215.7	314	S	0	13	4	3.10	59.49	58.98	.45	.88					
LONY	267.1	298	EP	3	13	3	44.35	40.74	39.48	1.20	.11					
			S	3	13	3	76.07	72.46	70.27	2.07	.00					
PKME	270.9	44	EP	0	13	3	43.07	39.46	39.95	-.50	.73					
			S	0	13	3	75.10	71.49	71.10	.35	.75					
PTN	293.9	294	EP	0	13	3	47.12	43.51	42.78	.70	.64					
			S	4	13	3	83.65	80.04	76.16	3.83	.00					

D6A31A.XX
NORTHWEST MAINE CRUSTAL STRUCTURE
06OCT31 CANADA, PQ, 4.3KM (2.7MI) SW OF LA MALBAIE

DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q			
61031	241	41.04	47-37.31	70-11.23	15.37	.0	.0	82	.47	1.0	.7	C			
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG	
A61	10.8	43	PCO	241	44.40	3.36	3.04	.25	1.42						
			S	0	241	46.50	5.46	5.41	-.06	1.42					
LMQ	13.3	232	PCO	241	44.65	3.61	3.30	.24	1.41						
			S	0	241	47.02	5.98	5.87	-.01	1.41					
A16	21.6	141	PDO	241	45.47	4.43	4.30	.13	1.39						
			S	0	241	48.03	6.99	7.65	-.67	1.36					
A54	25.0	223	P	0	241	46.06	5.02	4.76	.20	1.38					
			S	0	241	49.53	8.49	8.46	-.08	1.38					
A64	31.7	44	PCO	241	46.97	5.93	5.71	.20	1.37						
			S	0	241	51.14	10.10	10.16	-.10	1.37					
A21	38.4	76	PDO	241	48.05	7.01	6.69	.30	1.33						
			S	0	241	52.94	11.90	11.92	-.04	1.35					
A11	42.2	181	P	0	241	48.46	7.42	7.26	.15	1.34					
			S	0	241	53.35	12.31	12.92	-.63	1.32					
DAQ	87.8	296	P	0	241	55.51	14.47	14.34	-.03	1.22					
			S	0	241	66.81	25.77	25.53	-.04	1.22					
PQI	196.0	123	S	0	242	34.73	53.69	52.73	.91	.85					
DPQ	222.4	242	P	0	242	14.62	33.58	32.88	.67	.84					
			S	0	242	39.25	58.21	58.53	-.38	.86					
CNQ	243.5	40	P	0	242	16.60	35.56	35.48	.05	.81					
			S	0	242	43.80	62.76	63.16	-.45	.80					
GSQ	269.7	58	S	0	242	49.35	68.31	68.92	-.63	.73					

DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q		
QUA2 381.0	55 S	0 19 8	81.00	87.68	90.12	-2.50	.00							
BRYW 421.1	65 EP	0 19 8	50.93	57.61	57.77	-.22	.38	20 .16	2.7					
WES 459.9	60 S	0 19 9	43.40	110.08	111.37	-1.31	.15	15 .20	2.7					
LONY 495.8	14 S	0 19 9	51.80	118.48	119.24	-.89	.14							
D6C15A.XX														
SOUTHEAST MAINE CRUSTAL MODEL														
O6DEC15 ME, 12KM (7.5MI) ESE OF RUMFORD														
DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q		
61215	421 14.09	44-31.90	70-24.02	5.00	1.6	.0		130	.43	1.7	1.7	C		
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG
WVL	58.3	90	EPDO	421	23.99	9.90	9.51	.37	1.32	22	.09	1.4		
PKME	119.6	47	EPCO	421	33.96	19.87	19.23	.61	1.11					
LBNH	125.8	255	EPCO	421	34.47	20.38	20.22	.09	1.15					
FFD	155.0	220	EP	0	421	39.13	25.04	24.86	.16	1.07				
MOQ	170.2	301	P	4	421	38.44	24.35	26.77	-2.57	.00				
HNH	176.8	239	EP	0	421	42.05	27.96	27.59	.34	1.00	10 .13	1.7		
EMMW	234.5	85	EPCO	421	49.00	34.91	34.71	.19	.86	2 .09	1.6			
GGN	290.5	77	EP	0	421	56.77	42.68	41.63	1.04	.44				
DPQ	302.4	322	S	4	421	95.55	81.46	76.71	4.69	.00				
D6C18A.XX														
NORTHWEST MAINE CRUSTAL STRUCTURE														
O6DEC18 ME, OFFSHORE, 4KM (2.5MI) SE OF BAR HARBOR														
DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q		
61218	1953 23.54	44-21.98	68-9.65	5.00	2.3	2.6		171	.40	1.7	2.5	C		
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG
EMMW	67.7	56	EPCO	1953	34.42	10.88	11.08	-.20	1.72	172	.17	2.3	78	2.2
WVL	121.3	279	EP	0	1953	43.57	20.03	19.59	.43	1.53	81 .10	2.4		
PKME	134.0	318	EPCO	1953	45.79	22.25	21.60	.63	1.47				161	2.9
GGN	135.0	52	EPCO	1953	45.15	21.61	21.76	-.15	1.48				113	2.6
FFD	297.8	250	EP	0	1954	6.80	43.26	43.23	.02	.90				
LBNH	300.8	267	EP	0	1954	6.87	43.33	43.60	-.32	.88				
LMN	311.4	58	EP	0	1954	8.92	45.38	44.91	.41	.85				
WES	337.7	229	EP	0	1954	11.30	47.76	48.15	-.40	.75				
MOQ	340.5	288	EP	0	1954	12.50	48.96	48.50	.32	.75				
D6C29A.XX														
NORTHWEST MAINE CRUSTAL STRUCTURE														
O6DEC29 ME, OFFSHORE, 4.4KM (2.75MI) SE OF BAR HARBOR														
DATE	ORIGIN	LAT N	LONG W	DEPTH	MN	MC	ML	GAP	RMS	ERH	ERZ	Q		
61229	2121 10.78	44-21.25	68-10.17	8.45	3.1	3.1		140	.55	1.0	1.0	D		
STN	DIST	AZM	RMK	HRMN	SEC	TOBS	TCAL	RES	WT	AMX	PRX	XMAG	FMP	FMAG
EMMW	69.1	55	IPDO	2121	21.95	11.17	11.28	-.12	3.37	524	.14	2.8	213	3.1
WVL	120.9	279	EPDO	2121	30.82	20.04	19.50	.53	2.94	388	.26	2.9	179	3.0
GGN	136.4	52	P	0	2121	32.77	21.99	21.97	.01	2.90				
PQI	257.7	3	EP	4	2121	50.83	40.05	37.93	2.09	.00	347 .30	3.3		
FFD	296.7	251	EP	0	2121	53.57	42.79	42.74	.03	1.77				
LBNH	300.0	268	P	0	2121	54.35	43.57	43.15	.36	1.73				
LMN	312.7	58	P	2	2121	56.52	45.74	44.72	.96	.73				
WES	336.3	229	EP	0	2121	57.59	46.81	47.63	-.82	1.39				
HNH	338.0	258	EP	0	2121	59.03	48.25	47.84	.38	1.47	130 .26	3.1		
MOQ	340.3	288	P	0	2121	59.26	48.48	48.12	.22	1.47				
HRV	342.8	233	P	0	2121	58.75	47.97	48.43	-.49	1.44				
A11	357.7	334	P	2	2122	1.96	51.18	50.27	.90	.60				
QCQ	362.5	318	P	2	2122	2.37	51.59	50.86	.71	.63				
BATG	363.9	27	P	0	2122	2.04	51.26	51.04	.17	1.30				
HAL	365.4	85	P	0	2122	2.62	51.84	51.22	.61	1.25				
A16	374.6	338	P	0	2122	3.87	53.09	52.36	.74	1.16				
BRYW	384.9	225	EP	0	2122	4.47	53.69	53.63	.00	1.16				
A54	386.3	333	P	2	2122	5.39	54.61	53.80	.75	.54				
A21	390.5	342	P	0	2122	6.12	55.34	54.32	1.01	.98				
LMQ	392.4	335	P	2	2122	6.10	55.32	54.55	.70	.53				
A61	399.8	338	P	0	2122	6.90	56.12	55.47	.59	1.02				
A64	408.3	341	P	2	2122	7.96	57.18	56.52	.65	.48				
QUA2	410.3	236	EP	0	2122	7.50	56.72	56.76	-.07	.98	55 .20	3.1		
FRNY	433.6	277	P	0	2122	11.13	60.35	59.64	.68	.78				
UCCT	435.8	229	P	0	2122	10.62	59.84	59.91	-.10	.80				
DPQ	443.4	306	P	2	2122	12.54	61.76	60.85	.89	.34				
MNT	449.3	287	P	2	2122	13.20	62.42	61.58	.83	.33				
DAQ	466.1	329	P	0	2122	14.63	63.85	63.66	.03	.59				
NCB	485.7	265	P	3	2122	15.55	64.77	66.08	-1.41	.06				
LONY	510.9	273	P	0	2122	20.62	69.84	69.19	.59	.27				

			S	4	2122	72.00	121.22	123.15	-2.05	.00
GSQ	513.4	9	P	0	2122	20.79	70.01	69.49	.51	.25
			S	0	2122	73.24	122.46	123.70	-1.25	.19
GBN	538.7	77	P	0	2122	23.60	72.82	72.61	.20	.08
			S	3	2122	78.15	127.37	129.25	-1.89	.00
TRQ	542.2	293	P	0	2122	24.44	73.66	73.05	.61	.05
			S	3	2122	79.60	128.82	130.03	-1.21	.00
PTN	542.4	273	P	0	2122	24.40	73.62	73.07	.52	.05
ALFO	548.1	285	P	0	2122	24.58	73.80	73.77	.03	.00
CNQ	550.1	1	P	0	2122	25.36	74.58	74.03	.52	.00
			S	3	2122	81.17	130.39	131.77	-1.43	.00
WBO	567.8	277	P	0	2122	27.65	76.87	76.20	.66	.00
			S	3	2122	85.12	134.34	135.64	-1.32	.00
GAC	595.5	285	P	0	2122	30.83	80.05	79.63	.41	.00
			S	3	2122	90.90	140.12	141.74	-1.63	.00
OTT	607.2	281	P	0	2122	32.75	81.97	81.08	.88	.00
MFPO	644.4	274	P	0	2122	36.08	85.30	85.67	-.39	.00
GRQ	651.1	293	P	0	2122	37.77	86.99	86.50	.45	.00
SMQ	661.8	10	P	0	2122	38.97	88.19	87.81	.32	.00
BINY	678.1	249	P	4	2122	42.85	92.07	89.83	2.16	.00
MNQ	688.5	356	P	0	2122	42.28	91.50	91.11	.31	.00
PEMO	730.7	282	P	0	2122	46.52	95.74	96.32	-.61	.00
CRLO	747.5	284	P	0	2122	49.54	98.76	98.40	.34	.00
VLDQ	829.5	300	P	4	2123	1.95	111.17	108.52	2.64	.00
			S	3	2123	85.42	194.64	193.16	1.45	.00
SADO	872.4	273	P	3	2123	7.30	116.52	113.81	2.67	.00
PKRO	872.6	267	S	0	2123	90.36	199.58	202.62	-3.10	.00
EEO	889.3	287	P	0	2123	7.04	116.26	115.90	.29	.00
			S	4	2123	92.98	202.20	206.31	-4.23	.00
RSPO	930.6	282	P	0	2123	11.28	120.50	120.99	-.53	.00
LG4Q	1118.7	337	P	3	2123	33.86	143.08	144.23	-1.17	.00

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TABLE 5
MICROEARTHQUAKES AND OTHER NON-LOCATABLE EVENTS

Date	Sta	Arrival Time
Yr/Mo/Dy		Hr:Mn:Sec
None recorded this period.		

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NESN Station Map

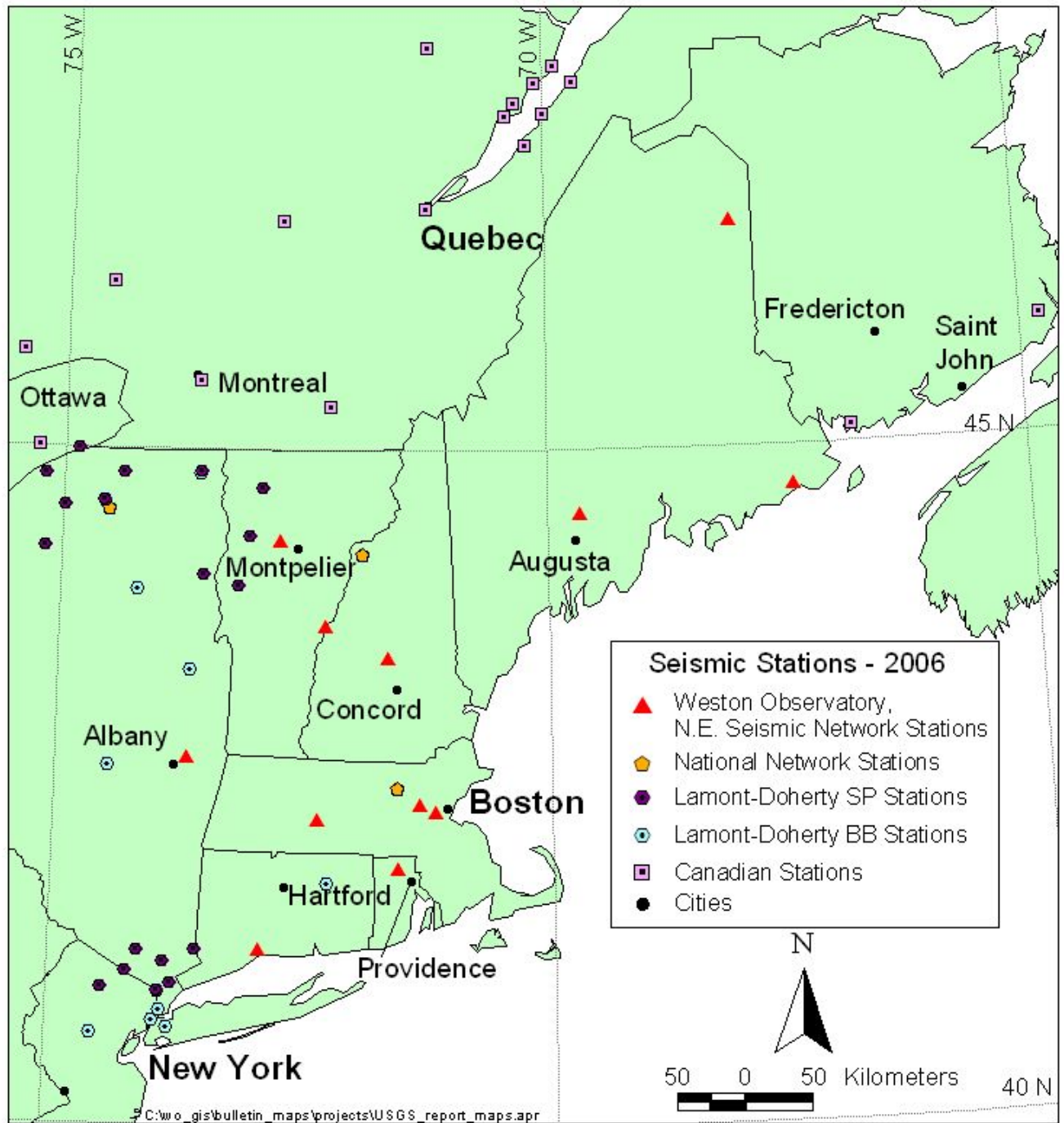


Figure 1: Map of stations of the New England Seismic Network (NESN) in operation during the period of this report. Also included are other Northeast U.S. and Canadian seismic stations in operation during this period.

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NESN Strong-Motion Station Map

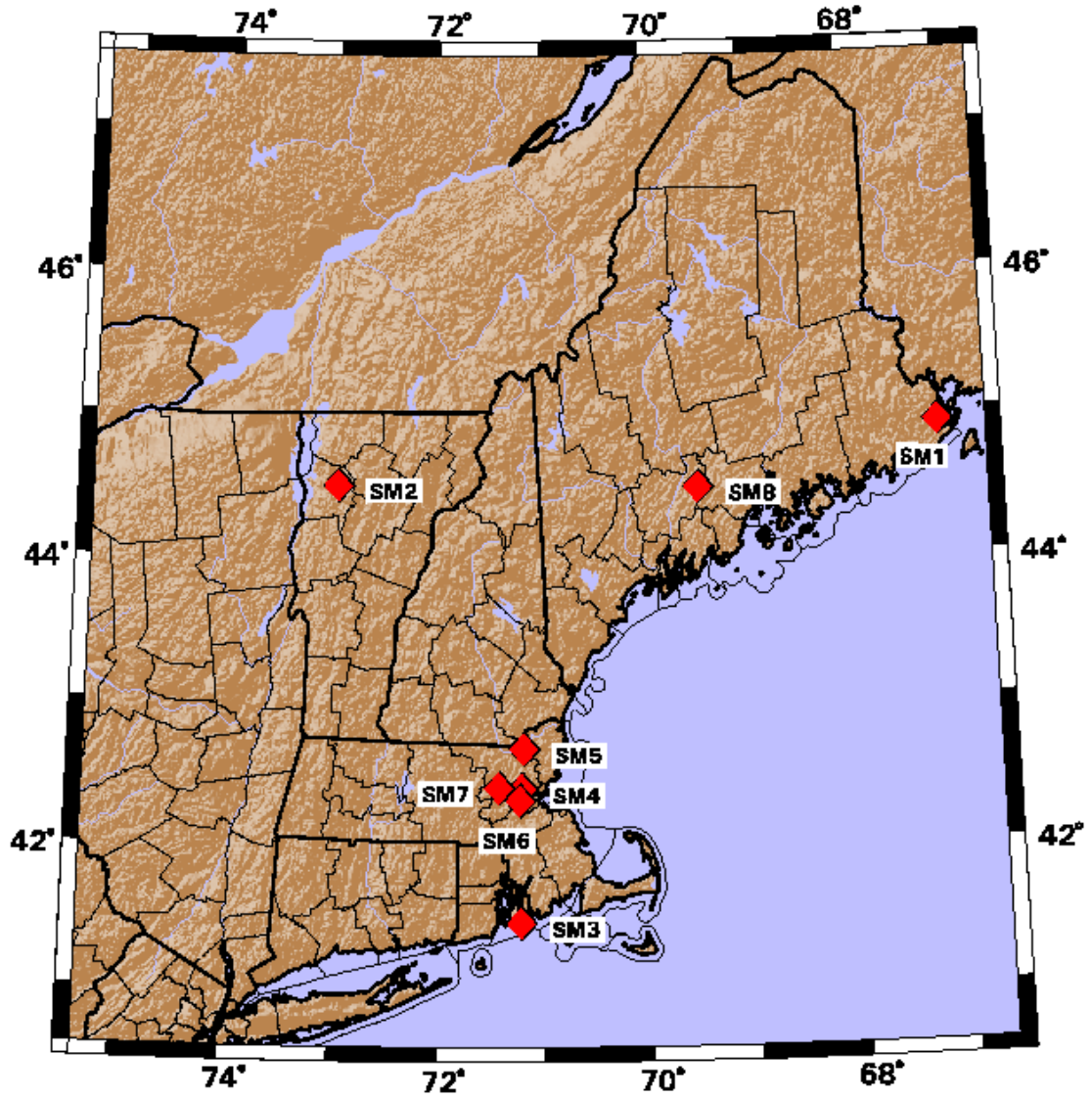


Figure 2: Map of strong-motion stations of the New England Seismic Network (NESN) in operation during the period of this report.

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NESN Quarterly Seismicity Map

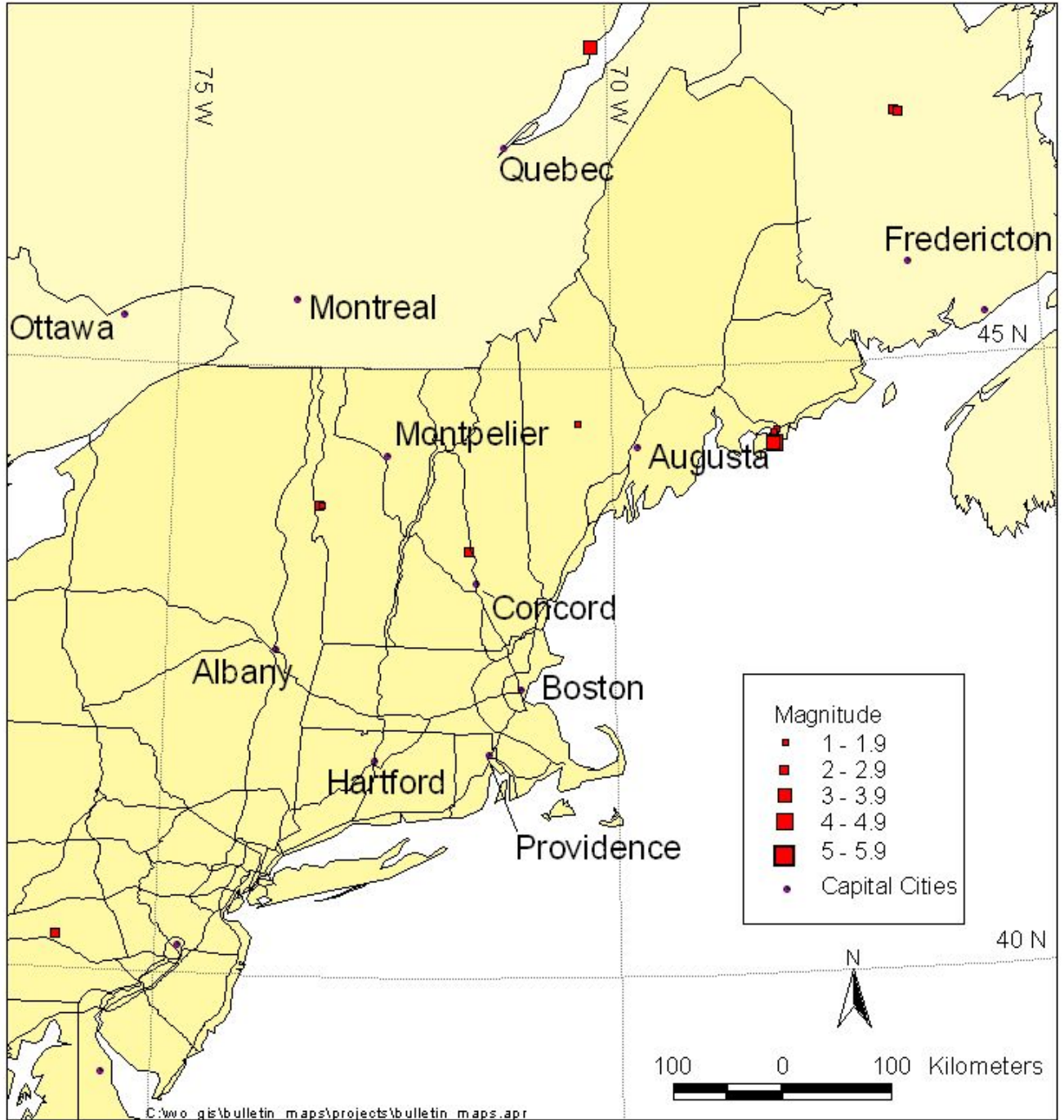


Figure 3: Earthquake epicenters located by the NESN during the period of this report.

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NESN Cumulative Seismicity Map

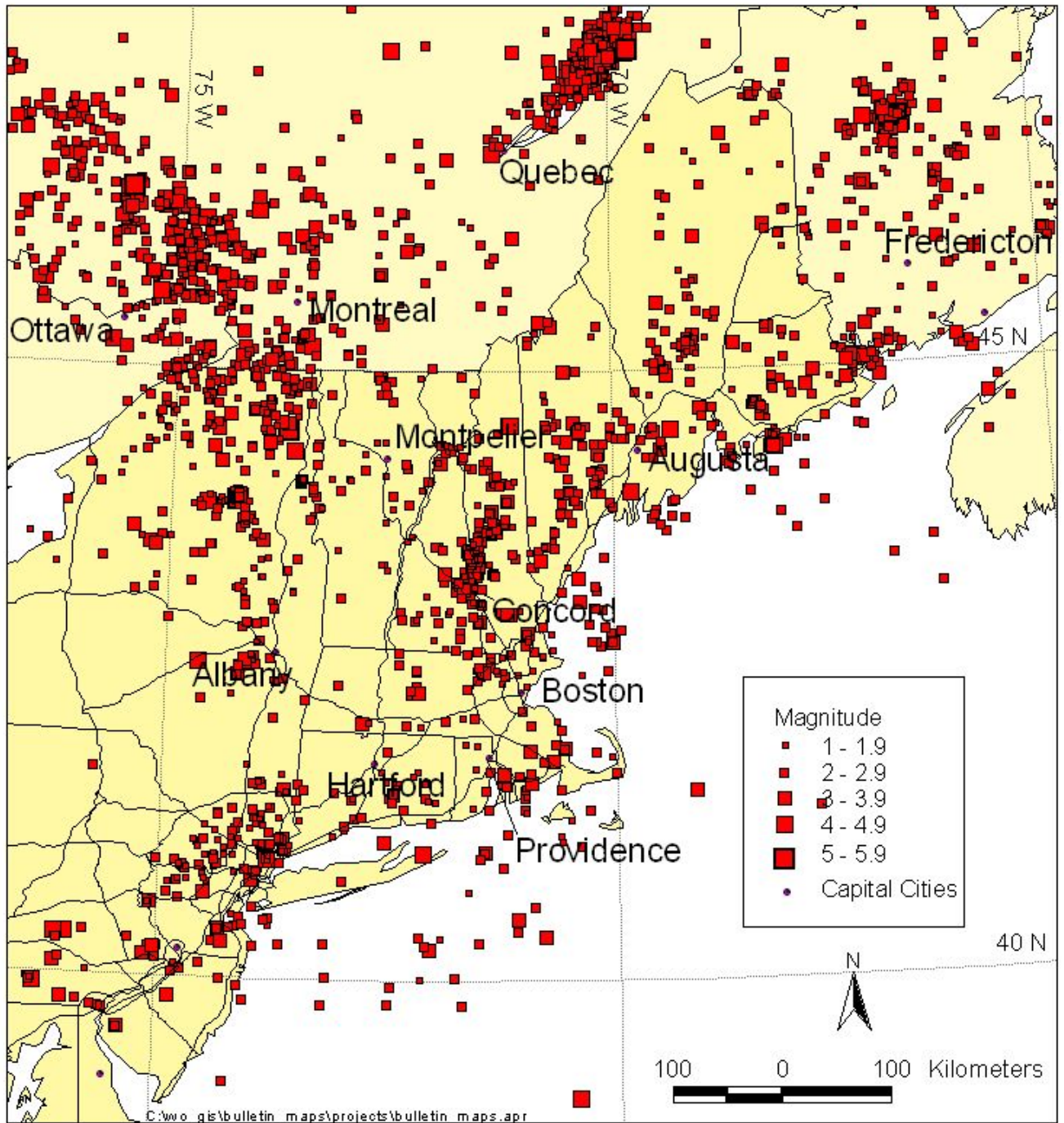


Figure 4: Seismicity for period October, 1975 - December, 2006.

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Acknowledgments

Our map database has been developed in-house using ArcView and in part basemap data provided by ESRI, Inc., USGS GTOPO30 Elevation Data, and TIGER/Line '94, '95, and '97 (US Census Bureau) spatial data.

References

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