



Athena ENTERPRISE

Network Cataloguing and Notification System



Earthquake 20110916-3
 » Events » Event / Earthquake » [Origins | Picks | Amplitudes | Ground Motions]
 2011-09-16 19:26:41.7300 7.0 Mw (MT) 40.3886°N, 142.7474°E
 North Pacific Ocean; 80 km from Shiramae, Iwate, Japan
 587 km NE of Tokyo, Japan
 Time Error: 1.84 s Depth: 32.5 km Num. Stations: 31
 Time RMS: 0.91 s Depth Error: 3.4 km Num. Phases: 32
 Azimuth Gap: 51° Analysis Type: Automatic
 This is an UNCHECKED, FULLY AUTOMATIC LOCATION calculated using USGS/NEIC Hydra operated by Nanometrics

Preferred	Magnitude	Stations	Error	Author	Action
	6.6 Mb	4	1.0	Hydra_1.4	
	5.2 Md	1	1.0	Hydra_1.4	
	5.6 ML	1	1.0	Hydra_1.4	
	5.5 mblg	2	1.0	Hydra_1.4	
	7.0 Mw (MT)	5	1.0	Hydra_1.4	

Moment Tensors				Best Double Couple											Moment Tensor				Action
Type	Traces	% DC	Misfit/Var. Red.	Centroid	M0	Plane	Strike	Dip	Rake	Mrr	Mrt	Mrp	Mtt	Mtp	Mpp	Action			
MT	5	69%	0.82	36.0 km	3.64e+19 nt-m	NP1 NP2	17.0 139.0	72.0 32.0	117.0 36.0	1.74e+19	9.04e+18	2.41e+19	1.12e+19	6.25e+18	-2.55e+19				

Channel	Time	Amplitude	Period/Duration	Magnitude	Event Distance	Event Azimuth	Action
IU.PET.00.BHZ	2011-09-16 19:30:34.5290	3200.5	1.20 s	5.6 Mb	16.63°	35.0°	
IU.TATO.00.BHZ	2011-09-16 19:31:46.8590	52348.5	2.20 s	6.6 Mb	23.50°	235.0°	
II.KDAK.00.BHZ	2011-09-16 19:34:44.6600	9203.5	1.30 s	6.4 Mb	43.90°	44.0°	
II.KURK.00.BHZ	2011-09-16 19:34:51.5090	-41679.0	0.80 s	7.3 Mb	44.72°	305.0°	
IU.COLA.00.BHZ	2011-09-16 19:35:00.0590	6736.0	1.00 s	6.1 Mb	45.65°	33.0°	
II.BRVK.00.BHZ	2011-09-16 19:35:26.9100	15962.0	1.40 s	7.0 Mb	49.15°	310.0°	
II.KAPI.00.BHZ	2011-09-16 19:35:31.1090	18794.5	1.50 s	6.7 Mb	49.91°	210.0°	
IU.KIP.00.BHZ	2011-09-16 19:35:56.9600	7728.0	1.00 s	6.8 Mb	53.26°	92.0°	
II.ERM.00.BHZ	2011-09-16 19:35:28.4400		500.1 s	5.2 Md	1.65°	10.6°	
IU.MAJO.00.BHZ	2011-09-16 19:29:38.3090	-40577.5	2.30 s	5.6 ML	5.24°	224.3°	
IU.MAJO.00.BH1	2011-09-16 19:29:38.8590	40375.5	1.80 s	5.5 ML	5.24°	224.3°	
II.ERM.00.BHZ	2011-09-16 19:27:44.7070	514086.5	1.15 s	5.8 mblg	1.65°	10.6°	
IU.MAJO.00.BHZ	2011-09-16 19:29:52.9830	152336.0	1.20 s	5.3 mblg	5.24°	224.3°	

Channel	Phase	Time	Time Residual	Dir.	Event Distance	Event Azimuth	Automatic?	Defined By	Action
II.ERM.00.BHZ	Pn	2011-09-16 19:27:08.3900	-0.300 s	c	1.65°	10.0°	yes	Time	
IU.MAJO.00.BHZ	Pn	2011-09-16 19:27:58.3590	0.40 s	c	5.24°	224.0°	yes	Time	
IU.PET.00.BHZ	P	2011-09-16 19:30:34.5290	-0.100 s	c	16.63°	35.0°	yes	Time	
IU.TATO.00.BHZ	P	2011-09-16 19:31:46.8590	-2.200 s	c	23.50°	235.0°	yes	Time	
IU.GUMO.00.BHZ	pP	2011-09-16 19:32:29.7100	1.70 s	c	26.77°	175.0°	yes	Time	
II.KDAK.00.BHZ	P	2011-09-16 19:34:44.6600	-0.700 s	c	43.90°	44.0°	yes	Time	
II.KURK.00.BHZ	P	2011-09-16 19:34:51.5090	-0.500 s	c	44.72°	305.0°	yes	Time	
IU.COLA.00.BHZ	P	2011-09-16 19:35:00.0590	0.80 s	c	45.65°	33.0°	yes	Time	
II.BRVK.00.BHZ	P	2011-09-16 19:35:26.9100	0.30 s	c	49.15°	310.0°	yes	Time	
II.KAPI.00.BHZ	P	2011-09-16 19:35:31.1090	-1.100 s	c	49.91°	210.0°	yes	Time	
IU.KIP.00.BHZ	P	2011-09-16 19:35:56.9600	-0.500 s	c	53.26°	92.0°	yes	Time	
IU.HNR.00.BHZ	pP	2011-09-16 19:36:03.2100	4.80 s	c	52.10°	158.0°	yes	Time	
IU.CTAD.00.BHZ	P	2011-09-16 19:36:46.6090	-0.400 s	c	60.30°	176.0°	yes	Time	
II.PALK.00.BHZ	P	2011-09-16 19:37:13.5090	0.20 s	c	64.15°	256.0°	yes	Time	
IU.MBWA.00.BHZ	P	2011-09-16 19:37:15.3090	-2.500 s	c	64.93°	203.0°	yes	Time	
IU.COR.00.BHZ	P	2011-09-16 19:37:23.5090	1.40 s	c	65.49°	51.0°	yes	Time	
II.OSN.00.BHZ	P	2011-09-16 19:37:24.6900	-0.400 s	c	65.97°	322.0°	yes	Time	
II.MSVF.00.BHZ	P	2011-09-16 19:37:27.6390	-0.700 s	c	66.58°	143.0°	yes	Time	
II.COCO.00.BHZ	P	2011-09-16 19:37:36.4100	1.20 s	c	67.45°	229.0°	yes	Time	
II.KIV.00.BHZ	P	2011-09-16 19:37:47.7200	0.40 s	c	68.48°	310.0°	yes	Time	
IU.CNK.00.BHZ	P	2011-09-16 19:37:54.4800	0.60 s	c	70.80°	305.0°	yes	Time	
II.UOES.00.BHZ	P	2011-09-16 19:37:58.8090	-1.700 s	c	71.78°	341.0°	yes	Time	
CU.PHL.BHZ	P	2011-09-16 19:38:06.7100	-0.300 s	c	72.00°	18.0°	yes	Time	
CU.PHL.BHZ	P	2011-09-16 19:38:06.7100	-0.300 s	c	72.00°	18.0°	yes	Time	

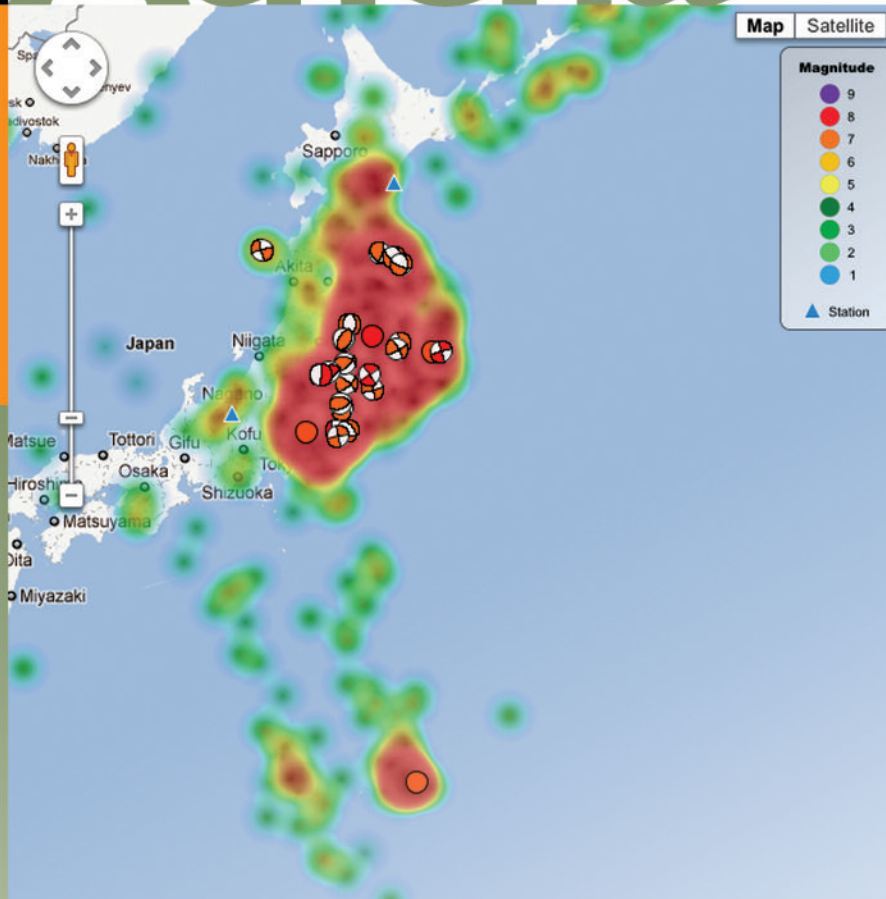
Athena Enterprise is a cataloging and notification system for earthquake monitoring networks that can be accessed via any web browser. Athena allows the distribution of near real-time and fully processed earthquake data via a wide range of channels or routes including email, SMS, RSS news feeds, web pages, and Google Earth™ or Generic Mapping Tools (GMT) mapping screen displays.

- Seismic events are displayed on a map allowing click-throughs to specific earthquakes for detailed earthquake parameters and full processing history.
- A wide range of earthquake notifications are featured. Network managers can create email groups and set rules for the notification of earthquake activity, such as:
 - Notifications based on magnitude and/or location
 - Restrict notifications until they have been reviewed and authorized for publication



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SCREEN CAPTURES



Channel	Phase	Time	Time Residual	Dir.	Event Distance	Event Azimuth	Automatic?	Defined By	Action
CI.PHL.BHZ	P	2011-09-16 19:38:06.7100	0.80 s	c	72.54°	58.0°	yes	Time	
CI.PHL.BHZ	pP	2011-09-16 19:38:12.1600	-3.900 s	c	72.54°	58.0°	yes	Time	
CI.TIN.BHZ	pP	2011-09-16 19:38:17.0890	-1.900 s	c	73.01°	55.0°	yes	Time	
CI.RCT.BHZ	pP	2011-09-16 19:38:18.0190	0.20 s	c	72.83°	56.0°	yes	Time	
IU.NWAO.00.BHZ	P	2011-09-16 19:38:27.8590	-1.500 s	c	76.72°	201.0°	yes	Time	
II.PFO.00.BHZ	P	2011-09-16 19:38:27.9100	0 s	c	76.29°	57.0°	yes	Time	
IU.RSSD.00.BHZ	P	2011-09-16 19:38:29.2590	-0.400 s	c	76.57°	42.0°	yes	Time	
CI.SHO.BHZ	pP	2011-09-16 19:38:29.4600	-0.800 s	c	74.96°	55.0°	yes	Time	
CI.IRM.BHZ	P	2011-09-16 19:38:30.6090	0 s	c	76.78°	56.0°	yes	Time	
CI.ADO.BHZ	pP	2011-09-16 19:38:31.3900	0.30 s	c	75.07°	57.0°	yes	Time	

Origin Details			
Ellipse Major:	6.80 km	Min. Distance:	1.65°
Ellipse Minor:	4.20 km	Max. Distance:	76.78°
Ellipse Strike:	122.0°	Fixed Location:	no
Author:	Hydra_1,4	Location Method:	Inversion
External Event ID:	HYDRA_RED@4110	External Origin ID:	HYDRA_RED@29730
Event Type:		Suspected Earthquake	

Error Ellipse			
Max	123°	8°	16.1 km
Intermediate	33°	4°	9.8 km
Min	275°	80°	4.7 km

Athena Enterprise maintains a catalog of all earthquakes processed in your network or groups of networks. Specific seismic activity such as earthquakes by time, depth, magnitude and location, can be browsed or queried through the Athena Web application.

The Athena Enterprise database is an online historic archive containing all known information about each earthquake. Athena Enterprise can be used internally within an institute or externally powering an institute's website.

<http://athena.nanometrics.ca/>