2.2 Magnitude Earthquake, Crownsville, MD, 8/8/2015

M2.2 - 2km W of Crownsville, Maryland

III DYFI?

Location

Data Source US[1]

39.032°N 76.627°W depth=5.0 km (3.1 mi)
view interactive map

Time

2015-08-09 02:07:04 (UTC)
2015-08-08 22:07:04 (UTC-04:00) in your timezone
Times in other timezones

Nearby Cities

2km (1mi) W of Crownsville, Maryland
6km (4mi) ENE of Crofton, Maryland
8km (5mi) WSW of Severna Park, Maryland
8km (5mi) SE of Odenton, Maryland
13km (8mi) WNW of Annapolis, Maryland

Earthquakes in the Washington-Baltimore Urban Corridor

Since at least 1877 people in the urban corridor have felt small earthquakes. They occur about once per decade, although some decades have none and the 1990s had three. None are known to have caused damage since the arrival of European colonists. The corridor is between more seismically active regions to the southwest and northeast, and residents of Washington or Baltimore have felt several earthquakes that caused damage in those other, more active regions.

Earthquakes in the central and eastern U.S., although less frequent than in the western U.S., are typically felt over a much broader region. East of the Rockies, an earthquake can be felt over an area as much as ten times larger than a similar magnitude earthquake on the west coast. A magnitude 4.0 eastern U.S. earthquake typically can be felt at many places as far as 100 km (60 mi) from where it occurred, and it infrequently causes damage near its source. A magnitude 5.5 eastern U.S. earthquake usually can be felt as far as 500 km (300 mi) from where it occurred, and sometimes causes damage as far away as 40 km (25 mi).

Faults

Earthquakes everywhere occur on faults within bedrock, usually miles deep. Most bedrock beneath the Washington-Baltimore urban corridor was assembled as continents collided to form a supercontinent about 500-300 million years ago, raising the Appalachian Mountains. Most of the rest of the bedrock formed when the supercontinent rifted apart about 200 million years ago to form what are now the northeastern U.S., the Atlantic Ocean, and Europe.

At well-studied plate boundaries like the San Andreas fault system in California, often scientists can determine the name of the specific fault that is responsible for an earthquake. In contrast, east of the Rocky Mountains this is rarely the case. The Washington - Baltimore urban corridor is far from the nearest plate boundaries, which are in the center of the Atlantic Ocean and in the Caribbean Sea. The urban corridor is laced with known faults but numerous smaller or deeply buried faults remain undetected. Even the known faults are poorly located at earthquake depths. Accordingly, few, if any, earthquakes in the urban corridor can be linked to named faults. It is difficult to determine if a known fault is still active and could slip and cause an earthquake. As in most other areas east of the Rockies, the best guide to earthquake hazards in the Washington - Baltimore urban corridor is the earthquakes themselves.

Felt at Annapolis, Maryland.

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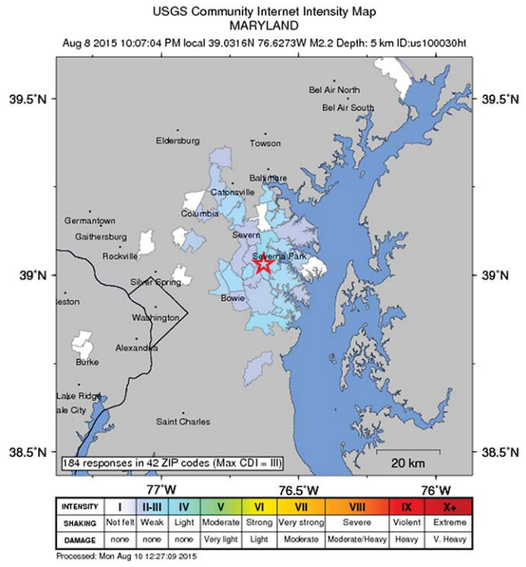
III DYFI?

Impact - Did You Feel It? - Tell Us!

Data Source US[1]

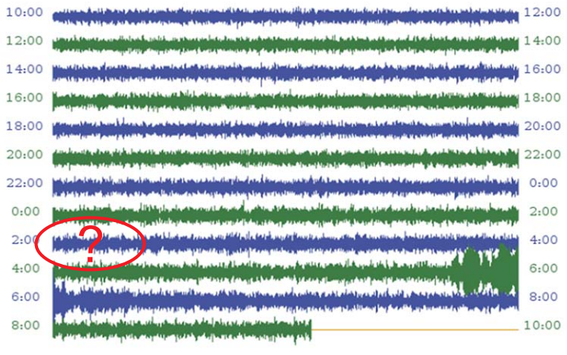
Intensity Map | Geocoded Map | Intensity Vs. Distance | Responses Vs. Time | DYFI Responses



You are here: Home > Day view for station Q54A

Station: Q54A - Coxs Mills, WV, USA
Date: Sunday, 9 August 2015 ; Vertical Ground Motion

Select Station



Today's Earthquakes

No earthquakes detected today!

Recent Earthquakes

Off Coast Of Ecuador, 08/07 12:18 PM, M=5.3, Depth: 10 km
Near East Coast Of Australia, 08/01 03:38 AM, M=5.6, Depth: 10 km
Southern Alaska, 07/29 02:35 AM, M=6.2, Depth: 121 km
Mona Passage, 07/29 12:27 AM, M=4.1, Depth: 129 km
Panama-Colombia Border Region, 07/29 12:10 AM, M=5.9, Depth: 10 km

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Scientific - Origin

Data Source US[1]

Origin Detail | Phases | Magnitudes

Phase Arrival Times

Sort by Distance | Download

Channel	Distance	Azimuth	Phase	Arrival Time	Status	Residual	Weight
NQ CAPTL HNZ 01	0.33°	244.65°	Pg	02:07:10.98	manual	0.10	2.77
NQ WNC HNZ 01	0.36°	253.89°	Pg	02:07:11.66	manual	0.10	2.66
NQ WNC HNN 01	0.36°	253.89°	Sg	02:07:16.86	manual	0.60	1.24
LD SDMD HHZ --	0.41°	336.43°	Pg	02:07:11.87	manual	-0.60	2.51
LD SDMD HHE --	0.41°	336.43°	Sg	02:07:17.80	manual	-0.10	1.22
LD MVL HHZ --	0.99°	12.40°	Pg	02:07:23.66	manual	0.10	1.51
US CBN BHZ 00	1.01°	215.52°	Pg	02:07:23.30	manual	-0.60	1.49
US CBN BH2 00	1.01°	215.52°	Sg	02:07:37.99	manual	0.90	0.99
TA P60A BHZ --	1.09°	44.29°	Pg	02:07:25.50	manual	0.00	1.41
N4 P57A BHZ --	1.17°	293.20°	Pn	02:07:26.83	manual	-0.60	1.25
N4 P57A BHN --	1.17°	293.20°	Sn	02:07:42.41	manual	-1.30	0.89
LD WUPA BHZ --	1.20°	40.98°	Pg	02:07:27.66	manual	0.10	1.32
N4 R58B BHZ --	1.45°	223.03°	Pn	02:07:30.04	manual	-1.30	1.21
N4 R58B BHN --	1.45°	223.03°	Sn	02:07:49.10	manual	-1.60	0.80
SE JSRW EHZ --	1.66°	216.76°	Pn	02:07:32.96	manual	-1.20	1.18
N4 N58A BHZ --	1.81°	357.87°	Pn	02:07:37.02	manual	0.80	1.16
N4 T60A BHZ --	1.89°	182.61°	Pn	02:07:35.66	manual	-1.70	1.15
TA O56A BHZ --	1.94°	310.14°	Pn	02:07:39.21	manual	1.10	1.14
N4 Q56A BHZ --	1.99°	271.08°	Pn	02:07:38.87	manual	0.00	1.14
N4 T59A BHZ --	2.18°	199.88°	Pn	02:07:42.40	manual	1.00	1.11

Not felt in West Virginia but seismologists used the signals from two WV seismic stations (highlighted in yellow) to locate the hypocenter of the quake.