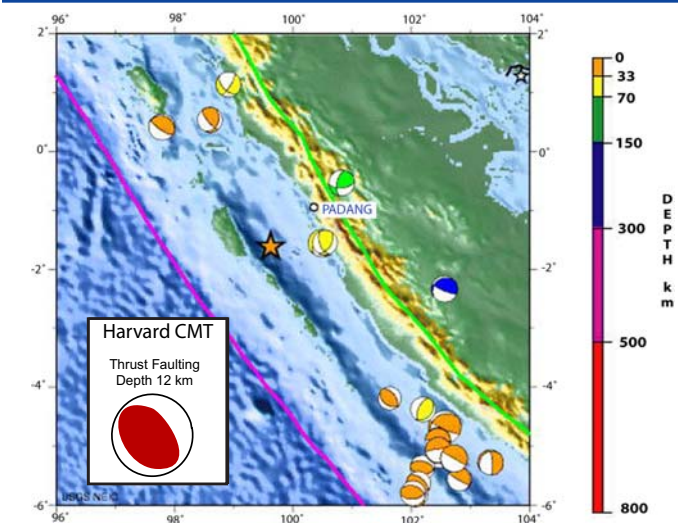


OFF SOUTHERN SUMATRA, INDONESIA,  $M_W=6.7$ , 10 APRIL 2005, 11:14 UTC



An earthquake off Southern Sumatra, Indonesia occurred on 10 April 2005, measured  $M_W$  6.7 (HRV). It was smaller and further south than the two previous large earthquakes off the coast of Sumatra. (see Figure 2 in 28 March 2005 section).

A tsunami with a wave height of 40 cm was observed at Padang, Sumatra. The account cannot be supported with tide records, as the gauge at Padang was out of service at the time of the earthquake.

Figure 1 (left). Historical Moment Tensor Solutions with recent earthquake location marked by orange star. (Map from NEIC).

OFF NORTHERN CALIFORNIA, USA  $M_W=7.2$ , 15 JUNE 2005, 02:51 UTC

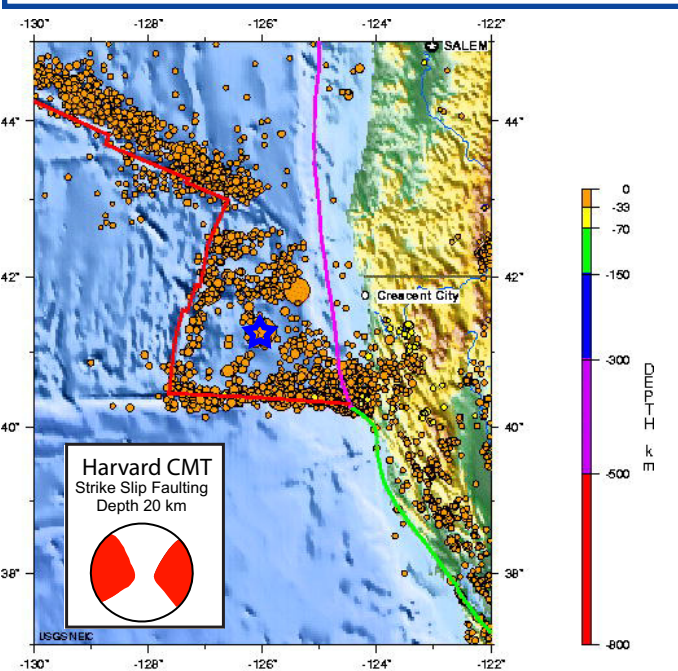


Figure 1. Map showing the location of the earthquake (blue star) and the historic seismicity of the area, with plate boundaries in red and purple. (Map from NEIC).

A major earthquake with a moment magnitude of 7.2 (HRV) occurred at 0251 UTC 15 June (7:51pm 14 June, local time) and was located off the northern coast of California, USA (41.3°N 125.7°W).

The earthquake produced a minor tsunami that was observed at Crescent City, California, USA (41.75°N 124.1°W) approximately 20 cm (p-t) (NOS). (Information posted on the West Coast/Alaska Tsunami Warning Center website, URL: <http://wcawc.arh.noaa.gov/06-15-05.htm>, which links to the Crescent City tide record and to a raw data file for the earthquake).

Tide gage site	Wave height (cm p-t)	Arrival time (UTC)	ETA (UTC)	Initial motion	Sample Interval (min)	Data File
Crescent City, California, USA	20	approx 0335 06/15	0329 06/15	recession	1	Data (m) starting at 0000 UTC 06-15-05

15 JUNE 2005 EARTHQUAKE AND TSUNAMI

by Dr. Alexander Rabinovich, [rabinovicha@pac.dfo-mpo.gc.ca](mailto:rabinovicha@pac.dfo-mpo.gc.ca), and Fred Stephenson, Canadian Hydrographic Service, [stephensonF@pac.dfo-mpo.gc.ca](mailto:stephensonF@pac.dfo-mpo.gc.ca), both at Institute of Ocean Sciences, P.O. Box 6000, Sidney, B.C. CANADA V8L 4B2.

At 02:51 UTC on 15 June 2005 (14 June at 19:51 local time) an earthquake occurred approximately 145 km northwest of Eureka, California (Figure 1). The magnitude of this earthquake was initially estimated as  $M_W=7.4$ , but was later corrected to  $M_W=7.2$  (USGS,

CISN). The epicentre coordinates were 41.28°N, and 125.98°W (USGS). Based on the earthquake's location and magnitude, the West Coast and Alaska Tsunami Warning Center (WC/ATWC) in Palmer, Alaska issued a Tsunami Warning for all coastal areas from the California – Mexico border to the north end of Vancouver Island (Cape Scott). This warning was issued at 02:56 UTC, i.e. 5 minutes after the main shock. In British Columbia the message was received by the Provincial Emergency Program (PEP), who initiated their tsunami response plan. Within half an hour of there