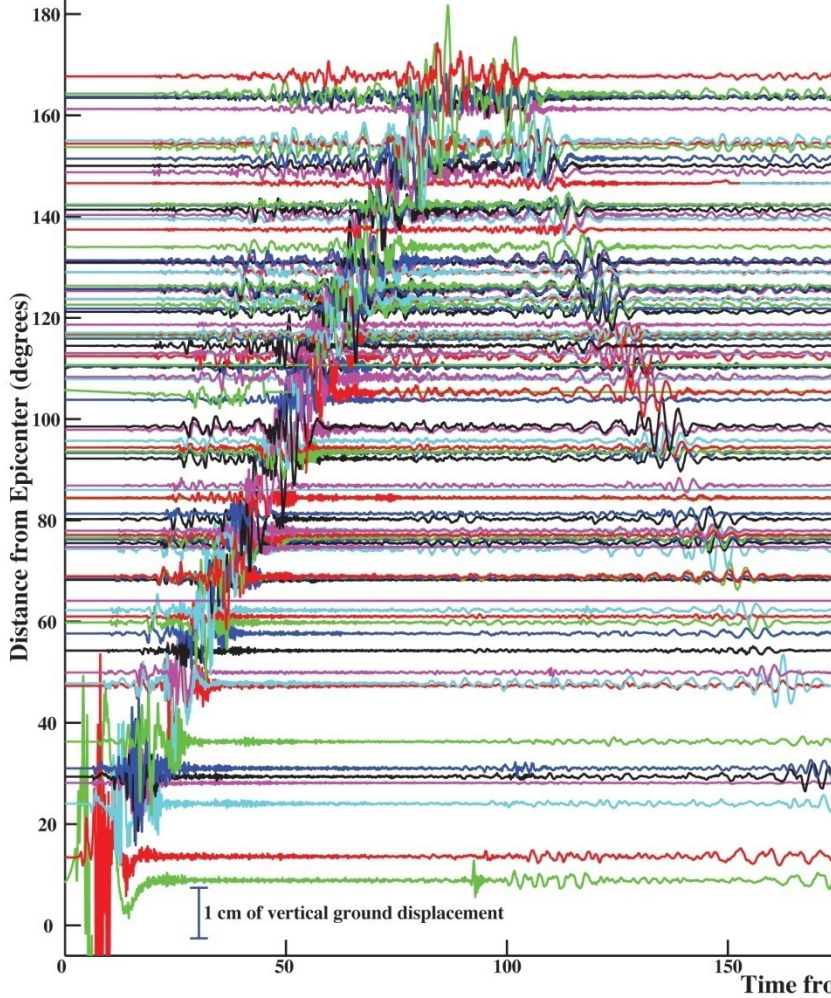


Ring the Earth like a bell

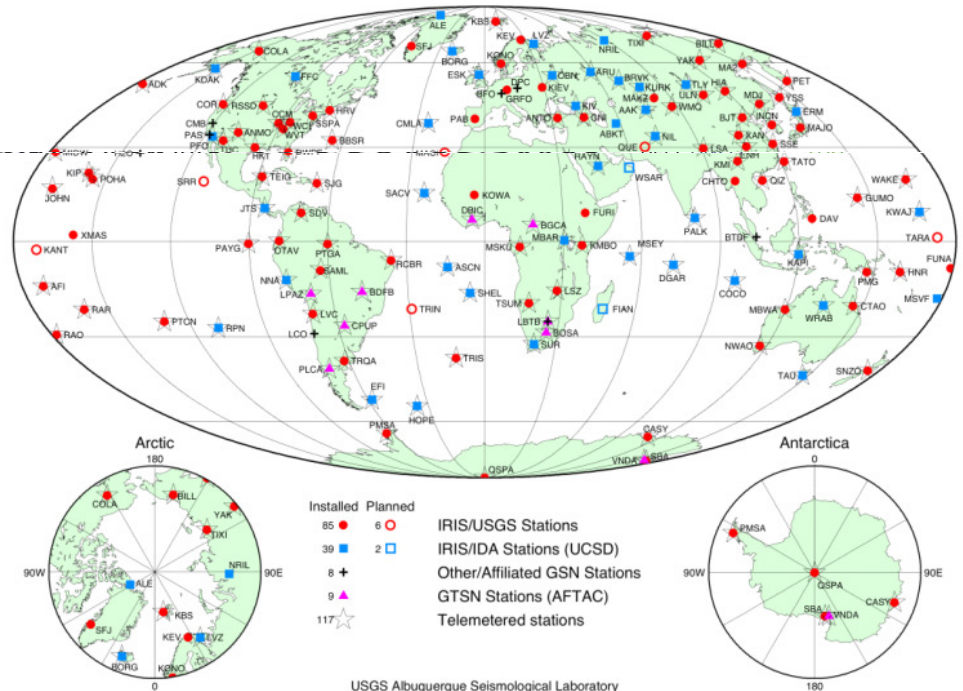
February 27, 2010 Chile Earthquake (M=8.8) Global Displacement Wavefield



Data from the IRIS-USGS Global Seismographic Network
Figure prepared by Richard Aster, New Mexico Tech

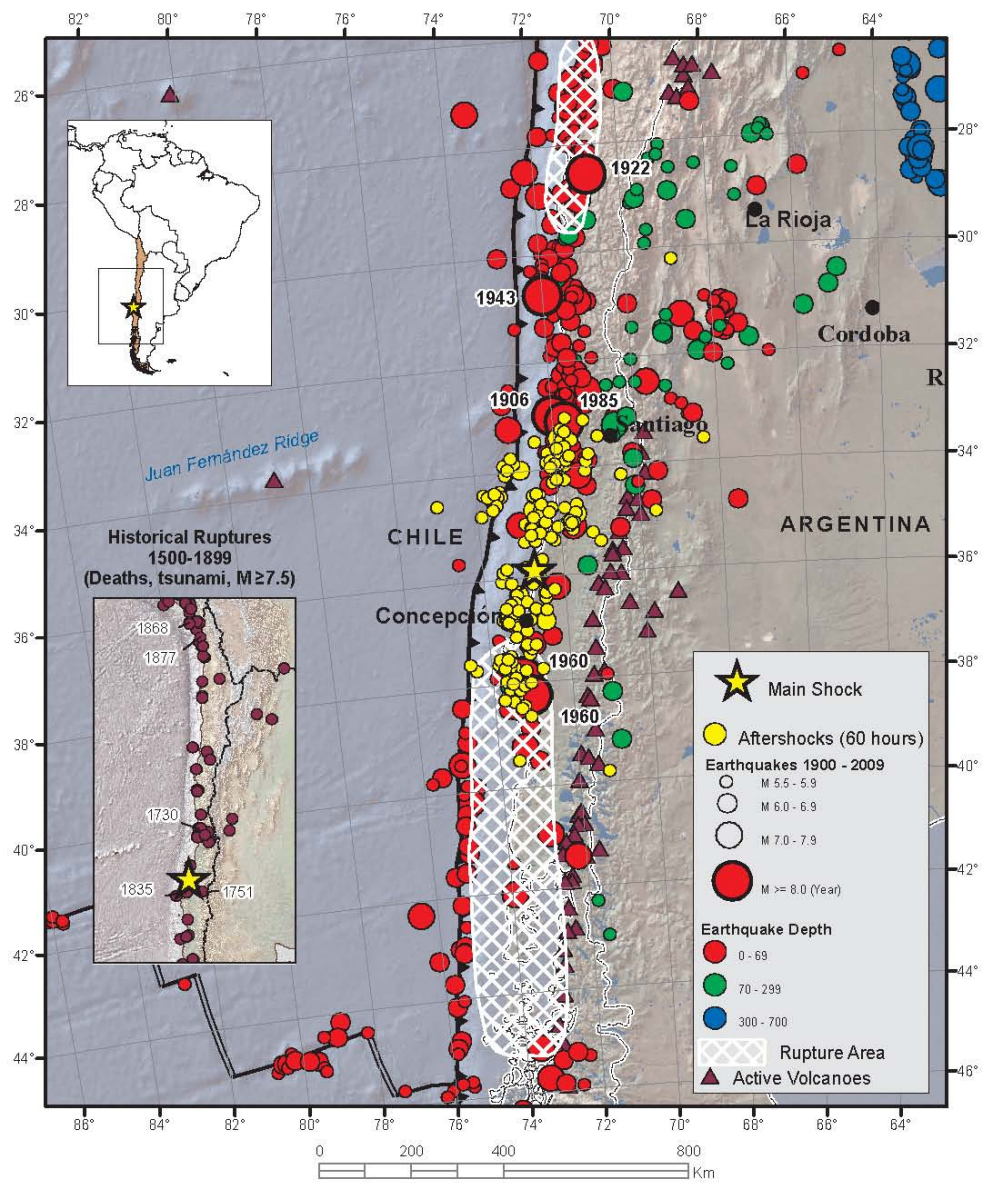
- ULN
- TLY
- CHTO
- INCN
- TATO
- MAJO
- AAK
- YAK
- DAV
- ARU
- KAPI
- BILL
- KIV
- LVZ
- KBS
- ANTO
- KURK
- ERM
- BRVK
- TIXI
- PALK
- PET
- GNI
- COCO
- OBN
- RAYN
- DGAR
- KEV
- ADK
- KIEV

Global Seismographic Network



USGS Albuquerque Seismological Laboratory
January 27, 2005 (crh/lw)





Situational awareness available in 20 minutes



M 8.8, OFFSHORE MAULE, CHILE

Origin Time: Sat 2010-02-27 06:34:14 UTC
 Location: 35.85°S 72.72°W Depth: 35 km



PAGER Version 6

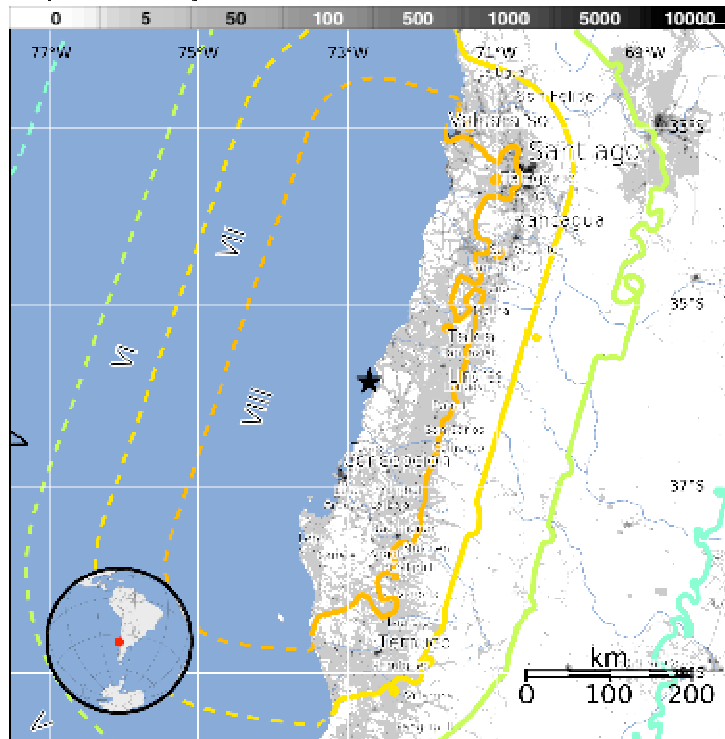
Created 9 hours 14 minutes after earthquake

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)	--'		45-k'	1,667k'	527k'	7,573k	5,124k	0	0
	I	II-III	IV	V	VI	VII	VIII	IX	X+
ESTIMATED MODIFIED MERCALLI INTENSITY									
PERCEIVED SHAKING	No. felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	10.16	10.16	10.16	V. Light	Light	Moderate	Moderate/Heavy	Heavy
	Vulnerable Structures	10.16	10.16	10.16	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy

Estimated exposure only includes population within 300 km of epicenter

Population Exposure

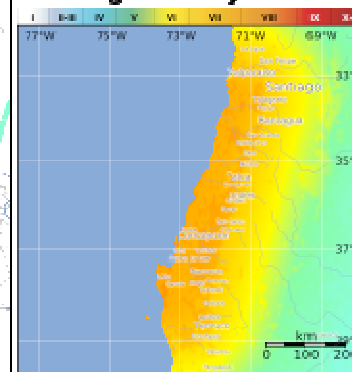


Selected City Exposure

MMI City	Population
VIII Arauco	25k
VIII Lota	50k
VIII Constitucion	38k
VIII Concepcion	215k
VIII Canete	20k
VII Melipilla	63k
VII Talca	197k
VII Rancagua	213k
VII Temuco	238k
VII Santiago	4,837k
VI Valparaiso	282k

bold cities appear on map (k = x1000)

Shaking Intensity



PAGER Version 8

Created: 1 day, 20 hours after earthquake

Population Exposed to Earthquake Shaking

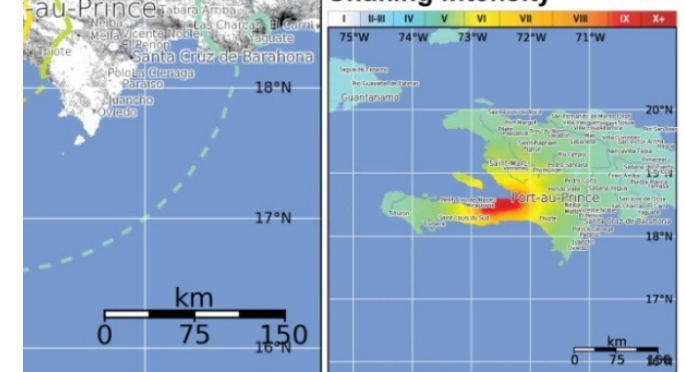
	7k*	7,261k	1,049k	571k	314k	2,246k	332k
ESTIMATED MODIFIED MERCALLI INTENSITY	V	VI	VII	VIII	IX	X+	
PERCEIVED SHAKING	Moderate	Strong	Very Strong	Severe	Violent	Extreme	
POTENTIAL DAMAGE	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	
	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy	

Selected City Exposure

MMI City	Population
X Grand Goave	5k
IX Port-au-Prince	1,235k
IX Carrefour	442k
IX Petionville	108k
IX Delmas 73	383k
IX Croix des Bouquets	9k
VI Miragoane	6k
V Verrettes	49k
III Santo Domingo	2,202k
III Guantanamo	273k

bold cities appear on map (k = x1000)

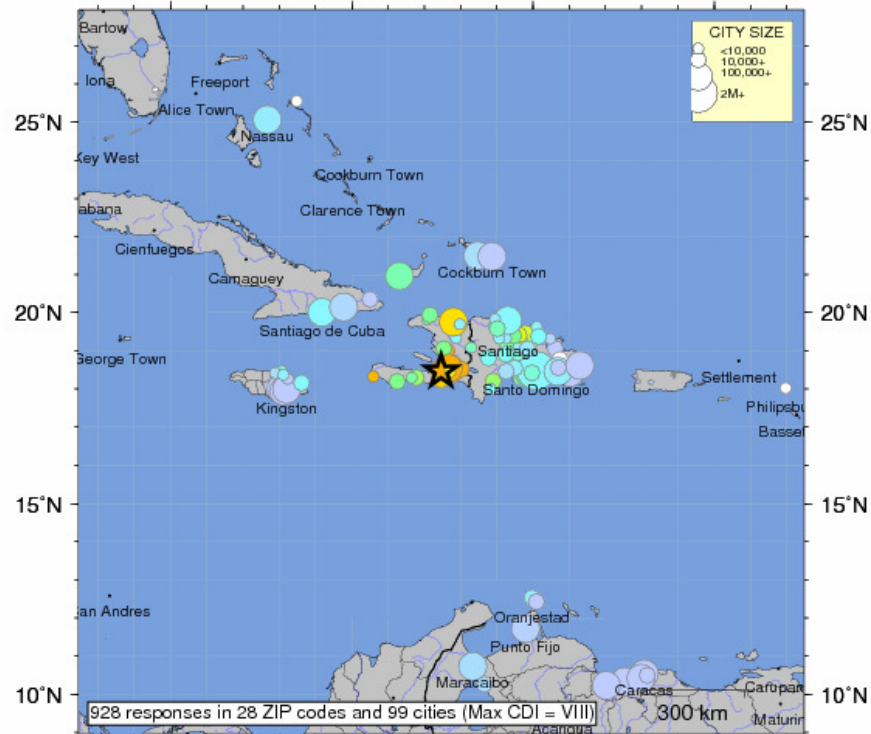
Shaking Intensity



Did You Feel It?

USGS Community Internet Intensity Map
HAITI REGION

Jan 12 2010 16:53:10 local 18.4573N 72.5332W M7.0 Depth: 13 km ID:us2010rja6



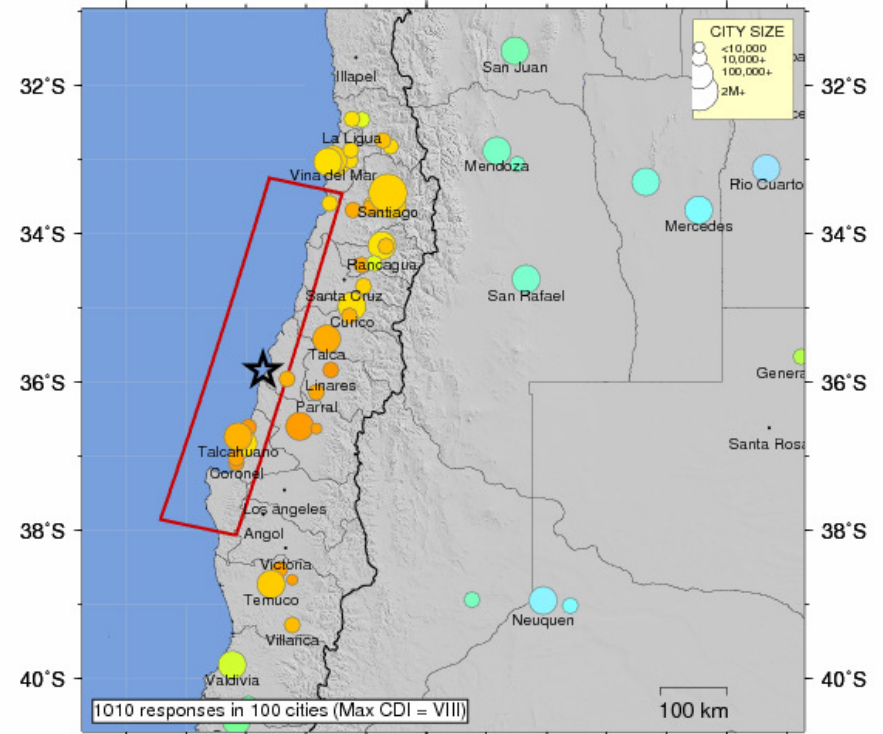
928 responses in 28 ZIP codes and 99 cities (Max CDI = VIII)

	80°W	75°W	70°W	65°W					
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	none	none	none	Very light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy

Processed: Sun Feb 28 14:00:02 2010

USGS Community Internet Intensity Map
OFFSHORE MAULE, CHILE

Feb 27 2010 03:34:14 local 35.8464S 72.7189W M8.8 Depth: 35 km ID:us2010tfan



1010 responses in 100 cities (Max CDI = VIII)

	75°W	70°W	65°W						
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	none	none	none	Very light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy

Processed: Mon Mar 1 05:14:24 2010

Tsunami Warning Center Advisory

NOAA's National Weather Service

West Coast and Alaska
Tsunami Warning Center

WORKING TOGETHER TO SAVE LIVES

Serving the U.S. mainland, Canada, Puerto Rico, and the Virgin Islands.

contact us event map

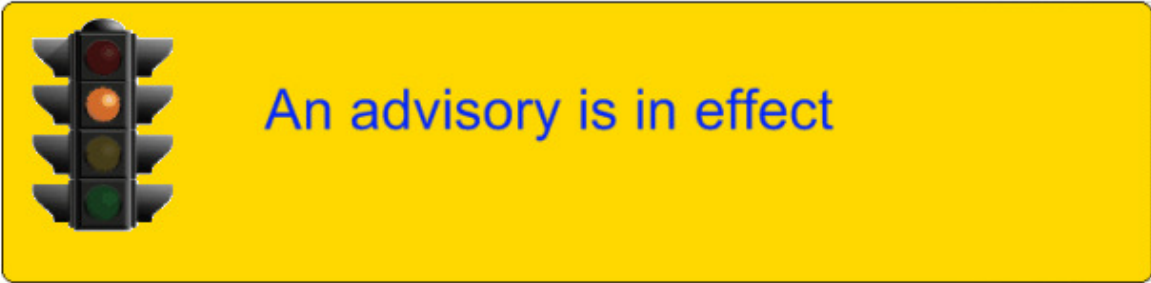
Search NWS All NOAA GO

Local weather forecast by "City, St" or "ZIP" GO

Recent Messages

- Products
- User Guide (PDF)
- Tsunami Catalogs
- Tsunamis
- Earthquakes
- WCATWC
- Tide Gauges
- TsunamiReady
- FAQs
- Links & References
- Send Info
- Emergency Services

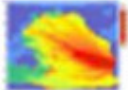
Tsunami Advisory in effect



An advisory is in effect

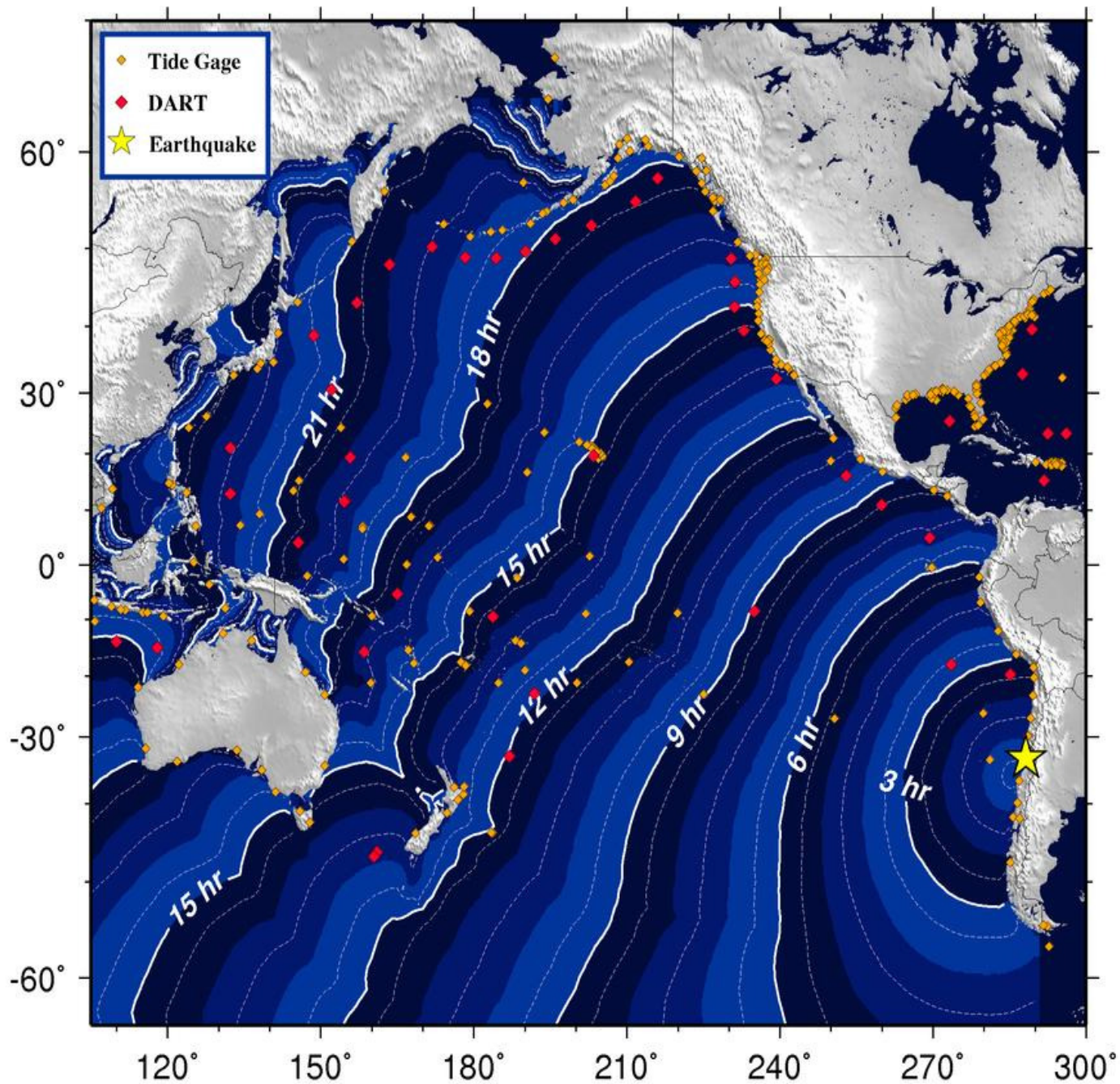
Note: Not all earthquakes result in the issuance of a tsunami message. For complete earthquake information, refer to the USGS Earthquake Hazards Program web site <http://earthquake.usgs.gov>

Your local time is: 2:42 / UTC is: 19:42

[Please click here to view the preliminary forecast model energy map](#) 

Estimated Times for Arrival can be viewed by clicking [here](#)
Forecasted Amplitudes can be viewed by clicking [here](#)

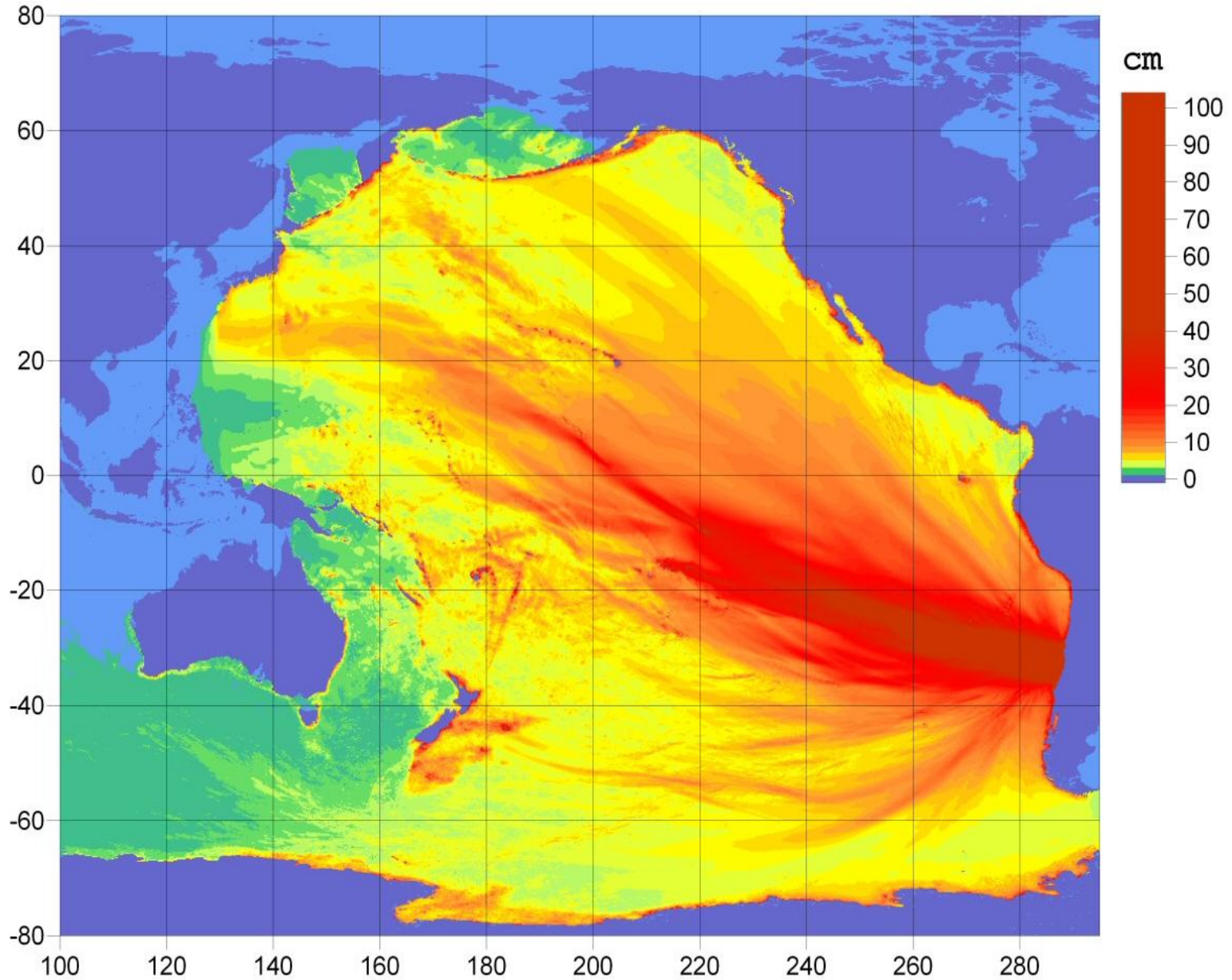
Tsunami Travel Time Prediction



West Coast and Alaska
Tsunami Warning Center

2010 Feb 27 19:08:59 UTC

Preliminary Forecast Model Energy Map



West Coast and Alaska Tsunami Warning Center

Tsunami wave height forecast

