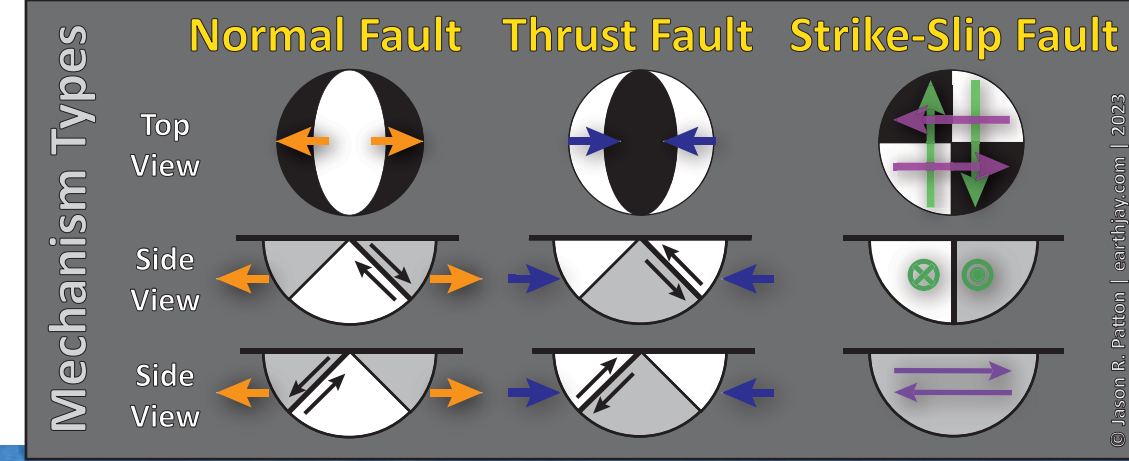
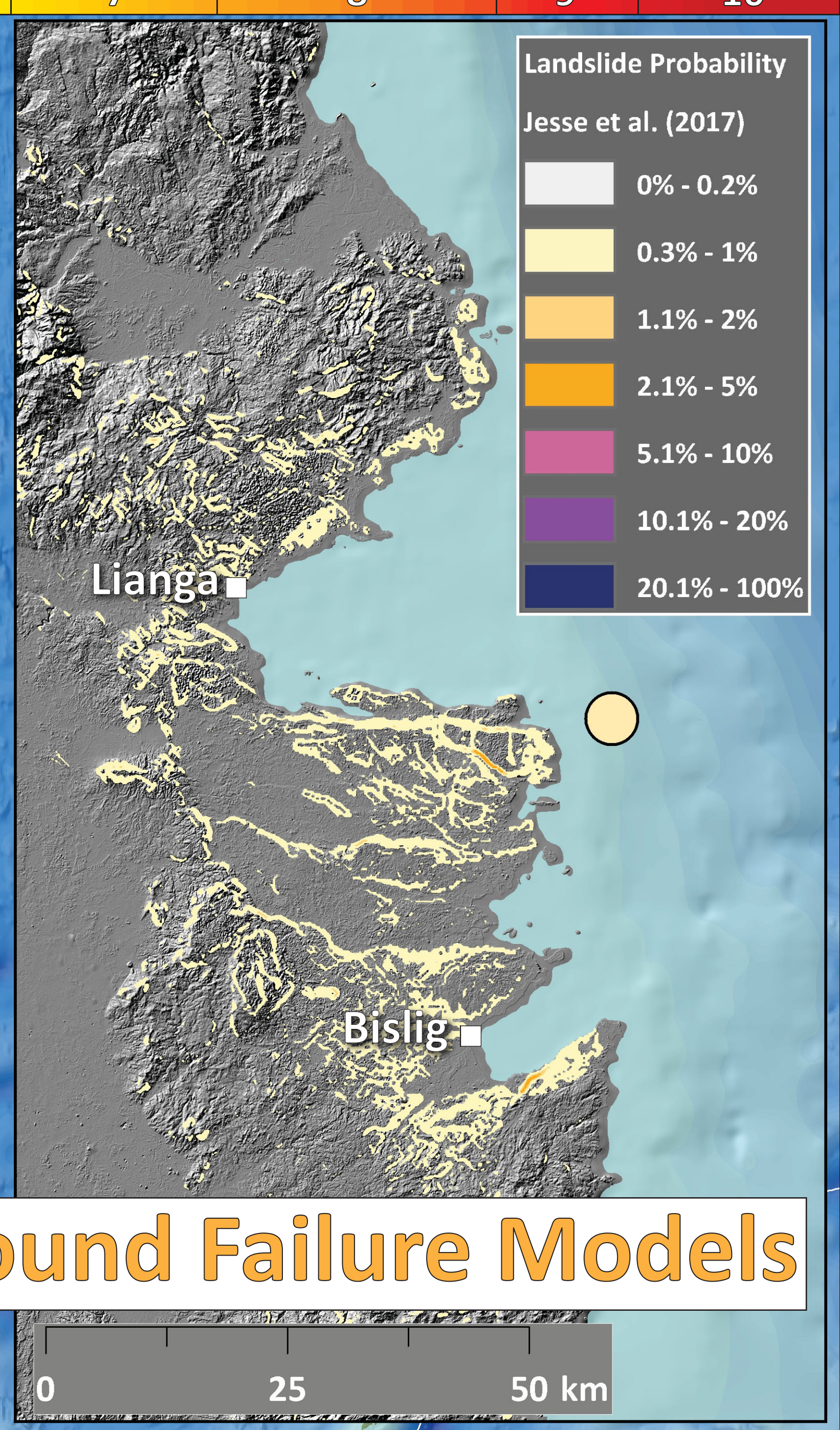
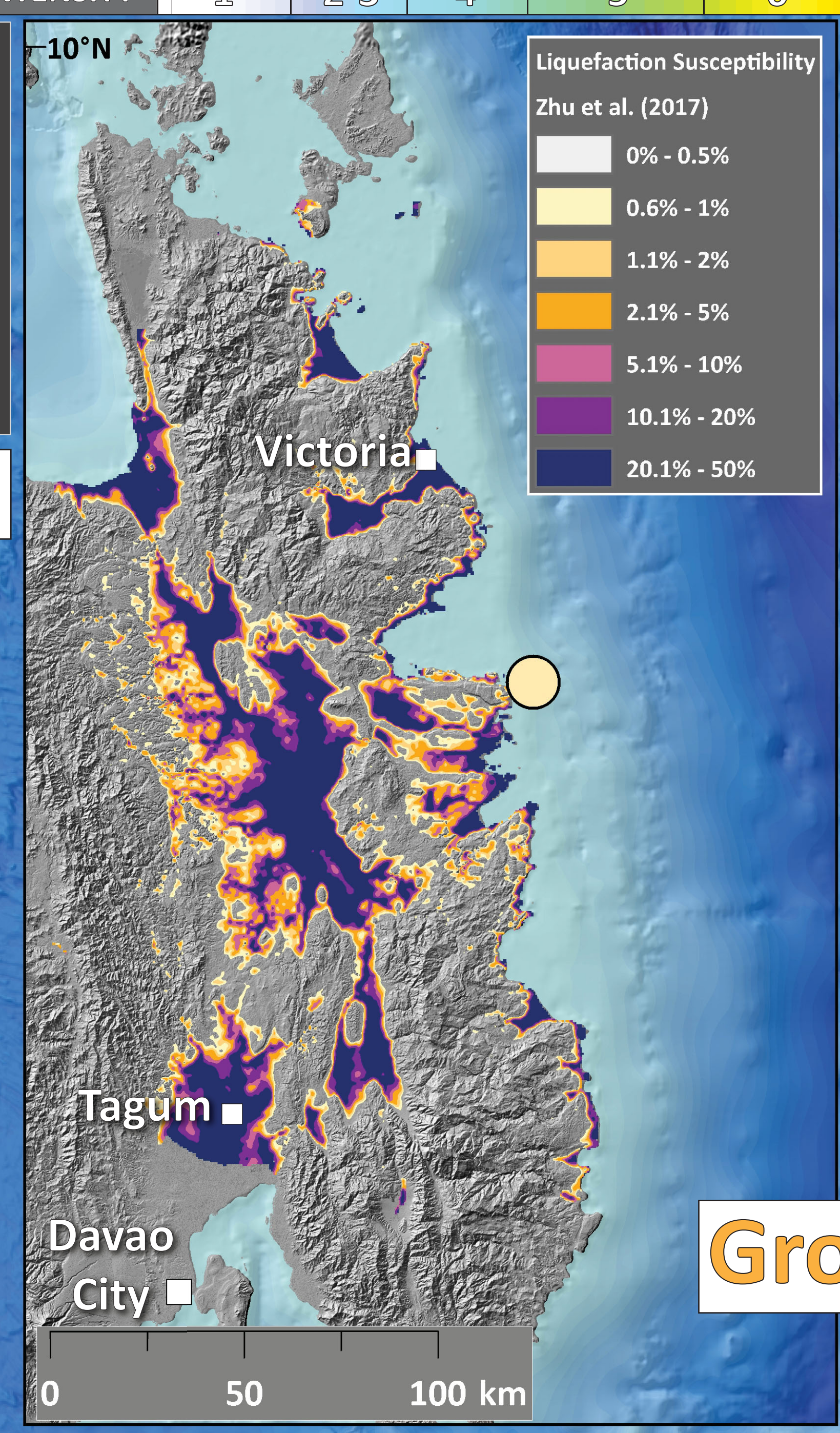
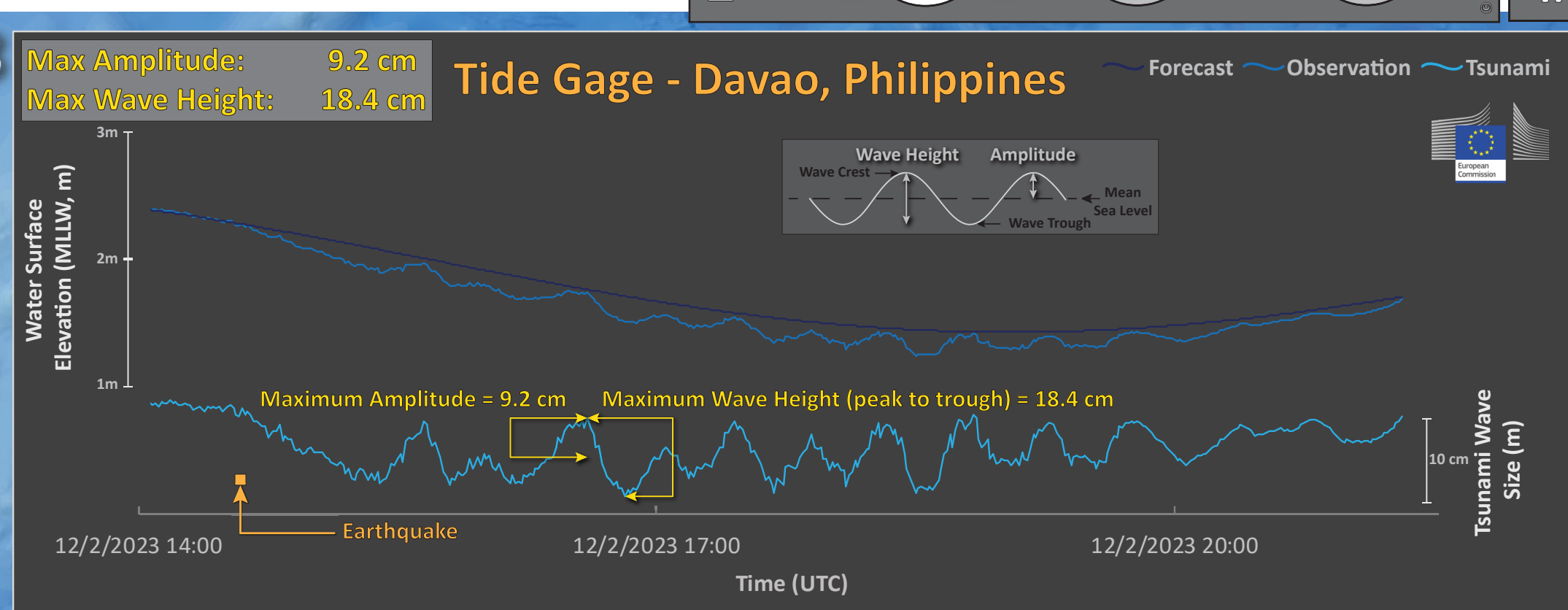
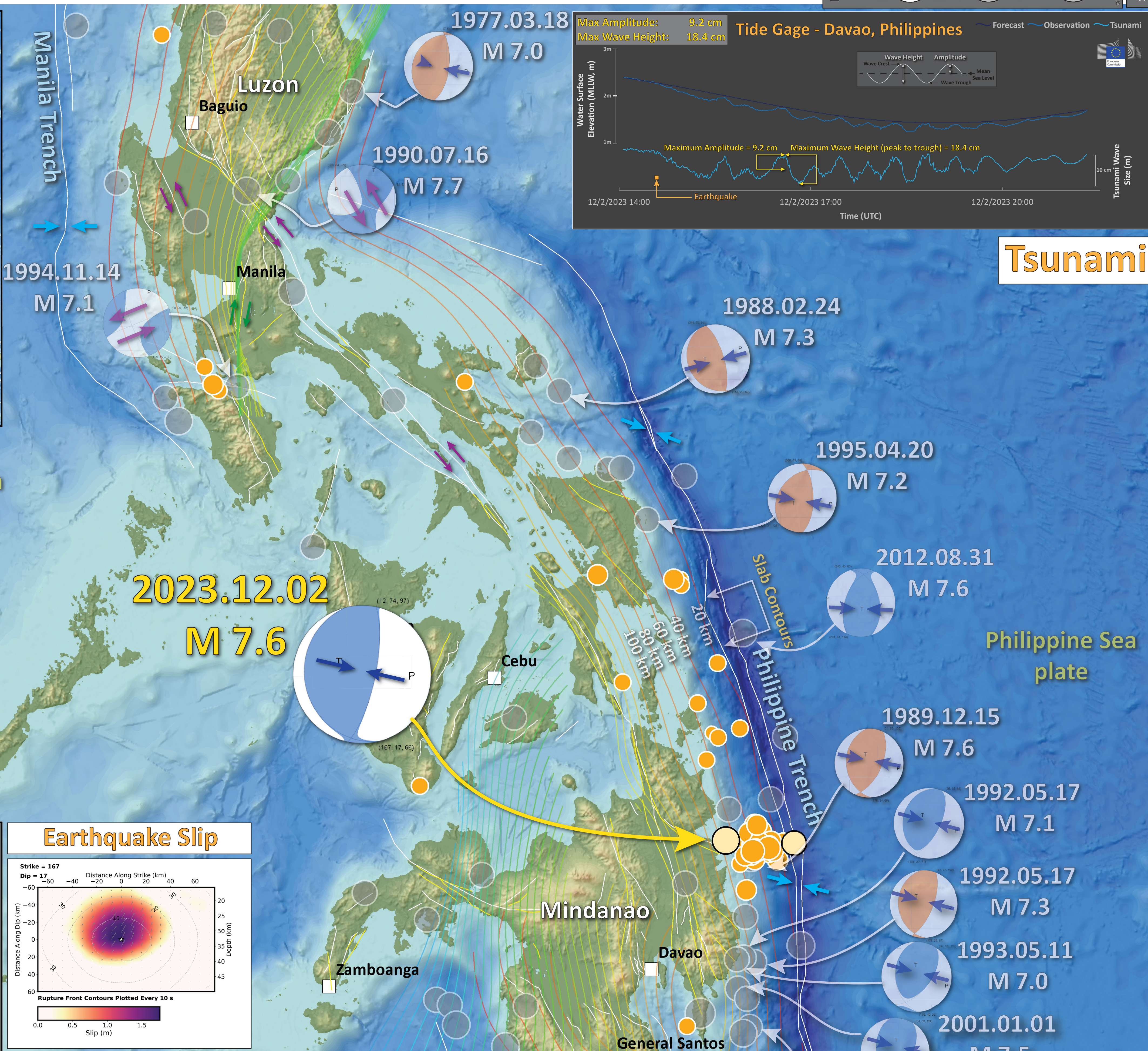
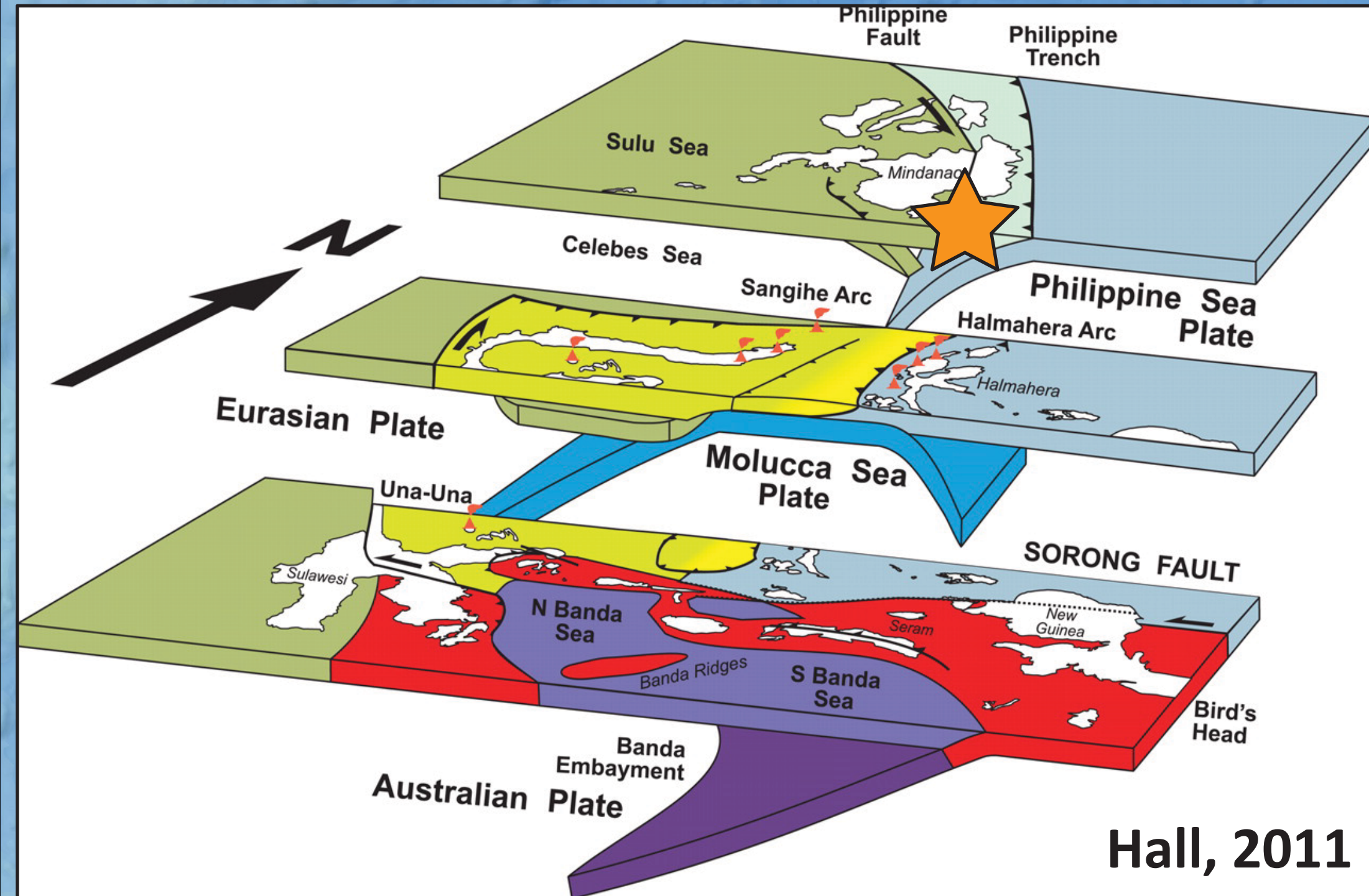
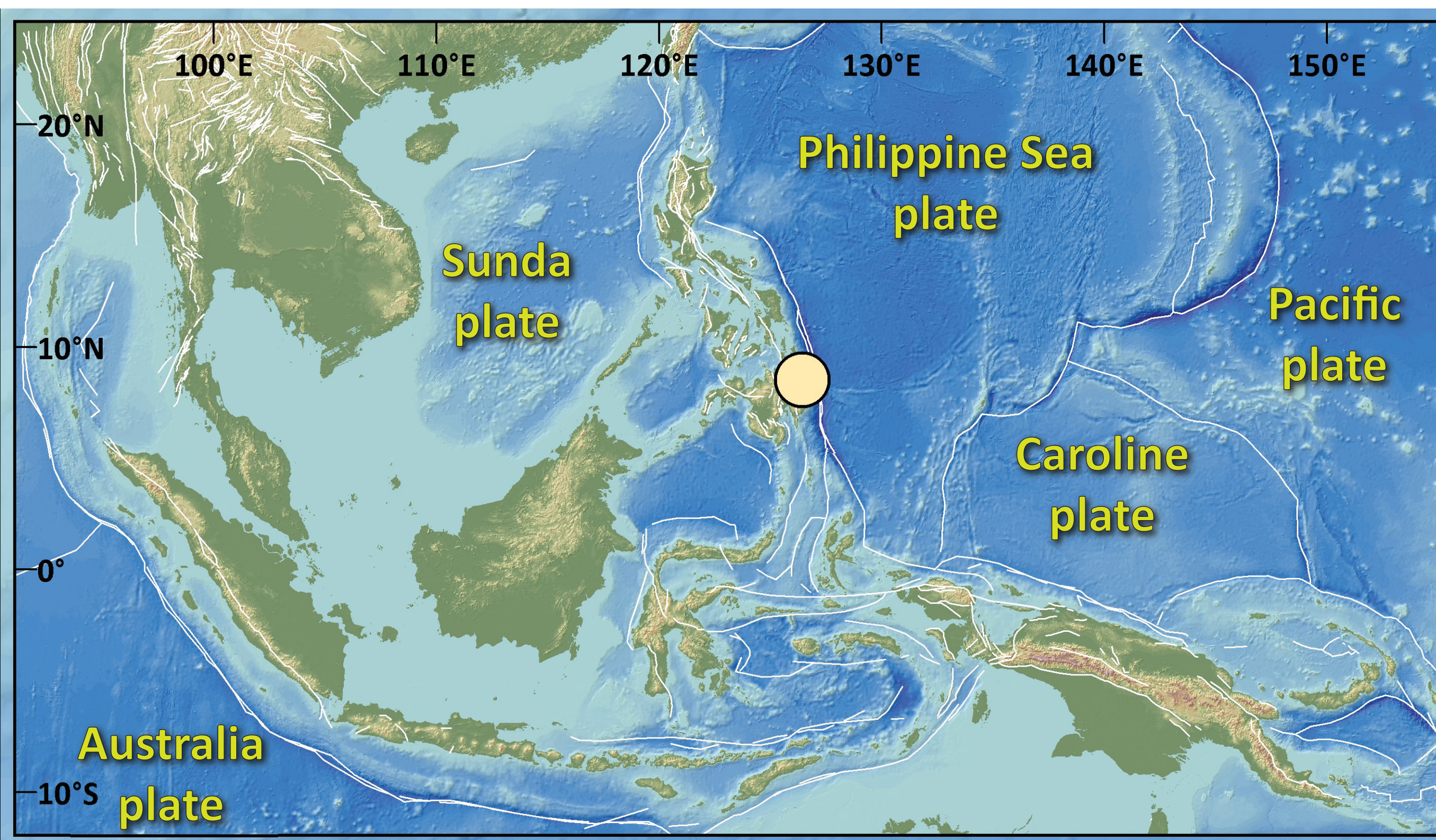


Earthquake Report: 2023.12.02

M 7.6 Philippines (& USGS Seismicity 1923-2023 M ≥ 7.0)



SHAKING	Not Felt	Weak	Moderate	Strong	Very Strong	Severe	Violent	Extreme	
DAMAGE	Note	None	None	Very Light	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy
PGA (%g)	<0.05	0.3	2.76	6.2	11.5	21.5	40.1	74.7	>139
PGV (cm/s)	<0.02	0.13	1.41	4.65	9.64	20	41.4	85.8	>178
INTENSITY	1	2-3	4	5	6	7	8	9	10



Ground Failure Models

● 2 Dec. '23 M 6.9
● 2 Dec. '23 M 7.6

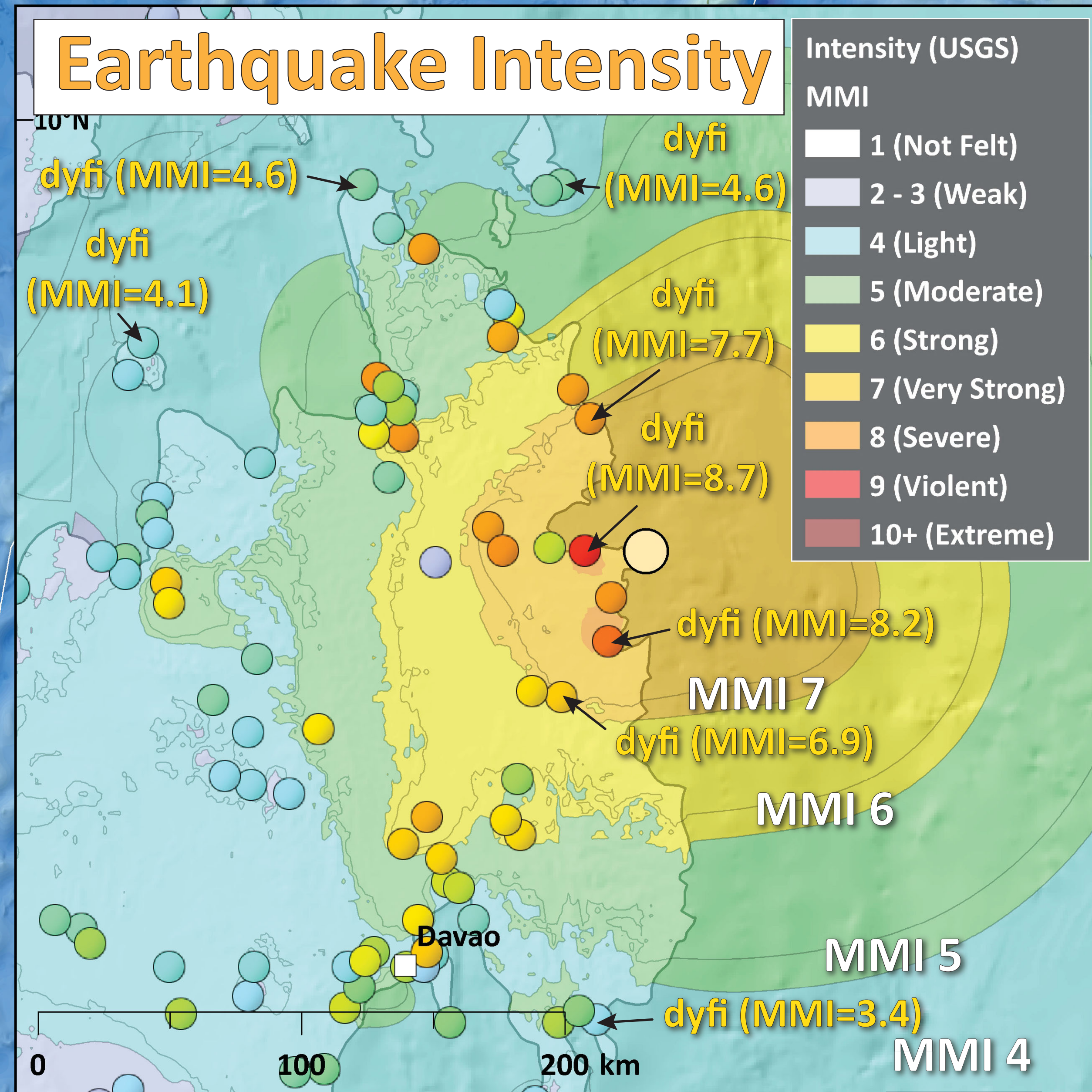
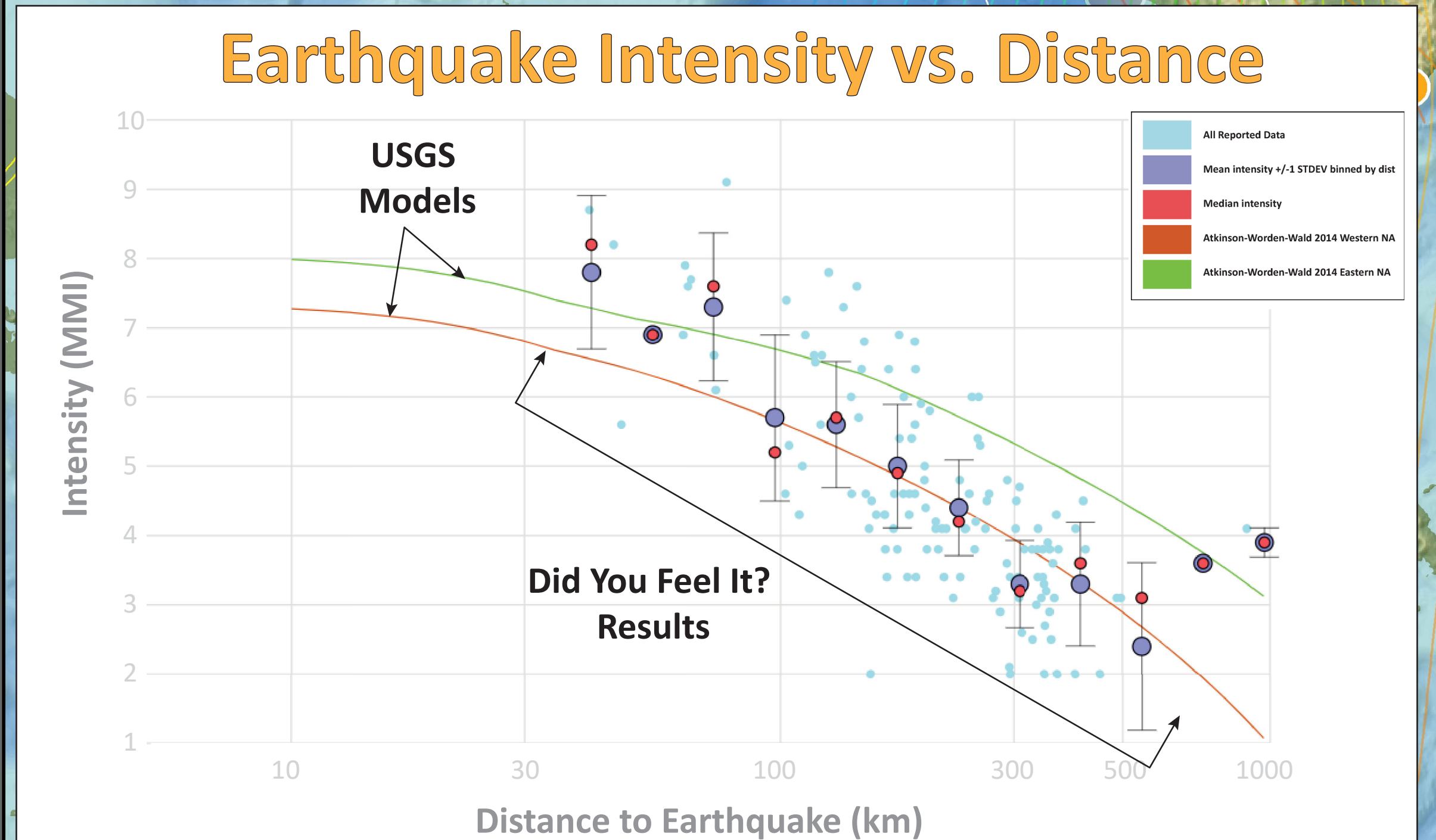
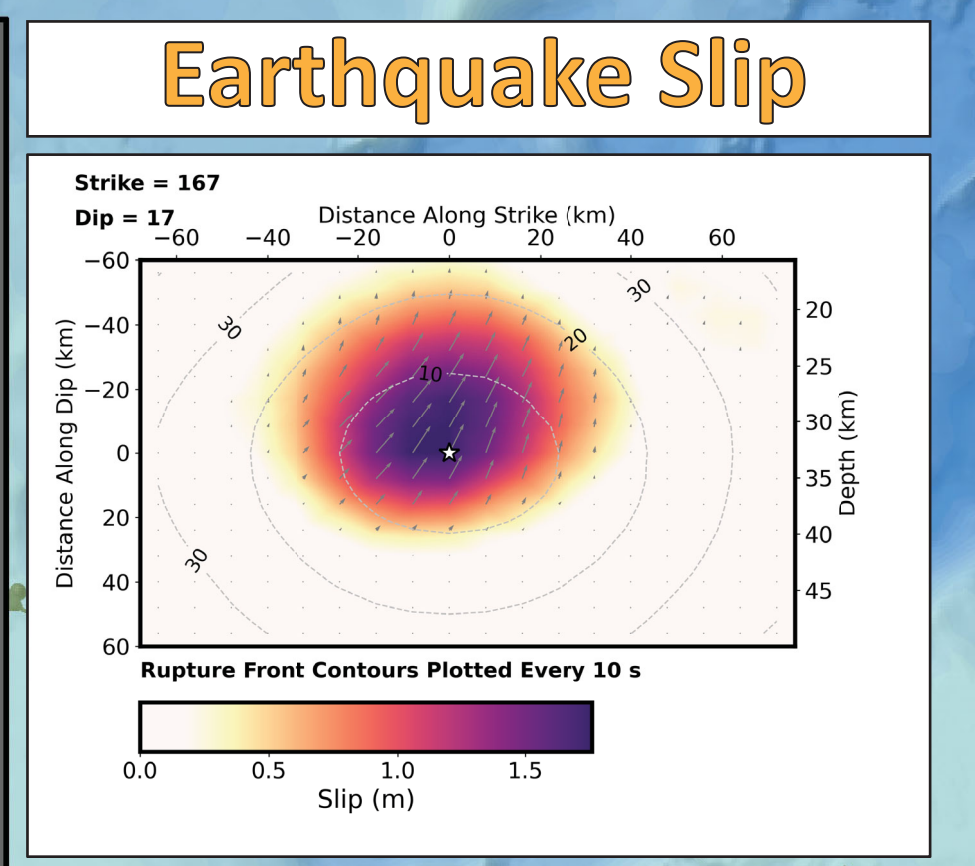
Seismicity (USGS - 1 century)
 magnitude
● 7.0 - 7.5
● 7.6 - 8.0
● 8.1 - 8.5
● 8.6 - 9.1

Seismicity (USGS - 1 month)
 magnitude
● 0.1 - 1.0
● 1.1 - 2.0
● 2.1 - 3.0
● 3.1 - 4.0
● 4.1 - 5.0
● 5.1 - 6.0
● 6.1 - 7.0
● 7.1 - 7.6

Fault
— Crustal (CCOP)
— (GEM)
■ Populated Places (NatEarth)

Elevation
 High
 Low

Depth
 Shallow
 Deep



Topography:
 GMRT Ryan et al., 2009
 DOI: 10.1029/2008GC002332
 ALOS AW3D30 Tadono et al., 2014:
 © JAXA doi:10.5194/isprsannals-II-4-71-2014

Depth to Slab (km)
 0 50 100 150 200 250 300 350 400 450 500 550 600 650 700

Jason R. Patton
 earthjay.com © 2023

CCOP
 COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMS IN EAST AND SOUTHEAST ASIA

GEM
 GLOBAL EARTHQUAKE MODEL
 Working together to assess risk

USGS
 science for a changing world

0 75 150 300 Miles
 0 125 250 500 Kilometers