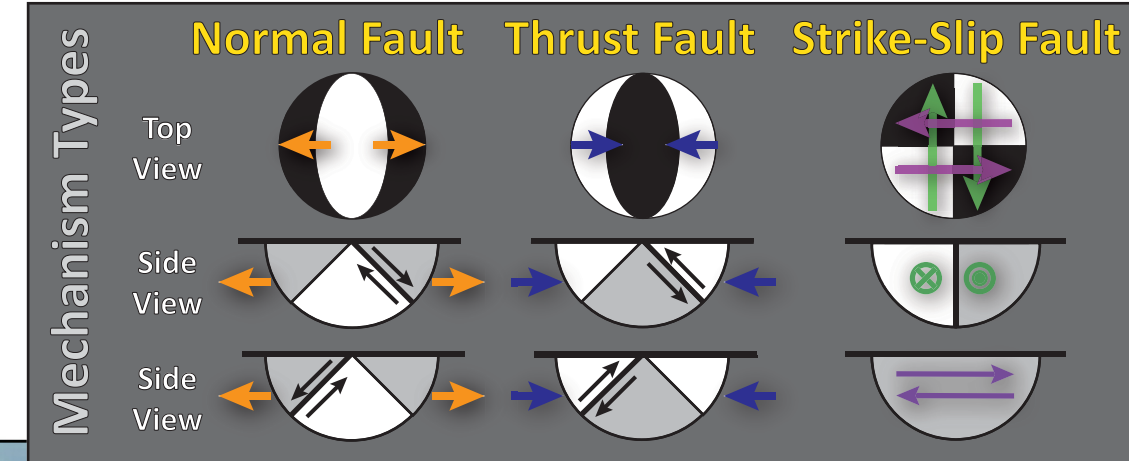
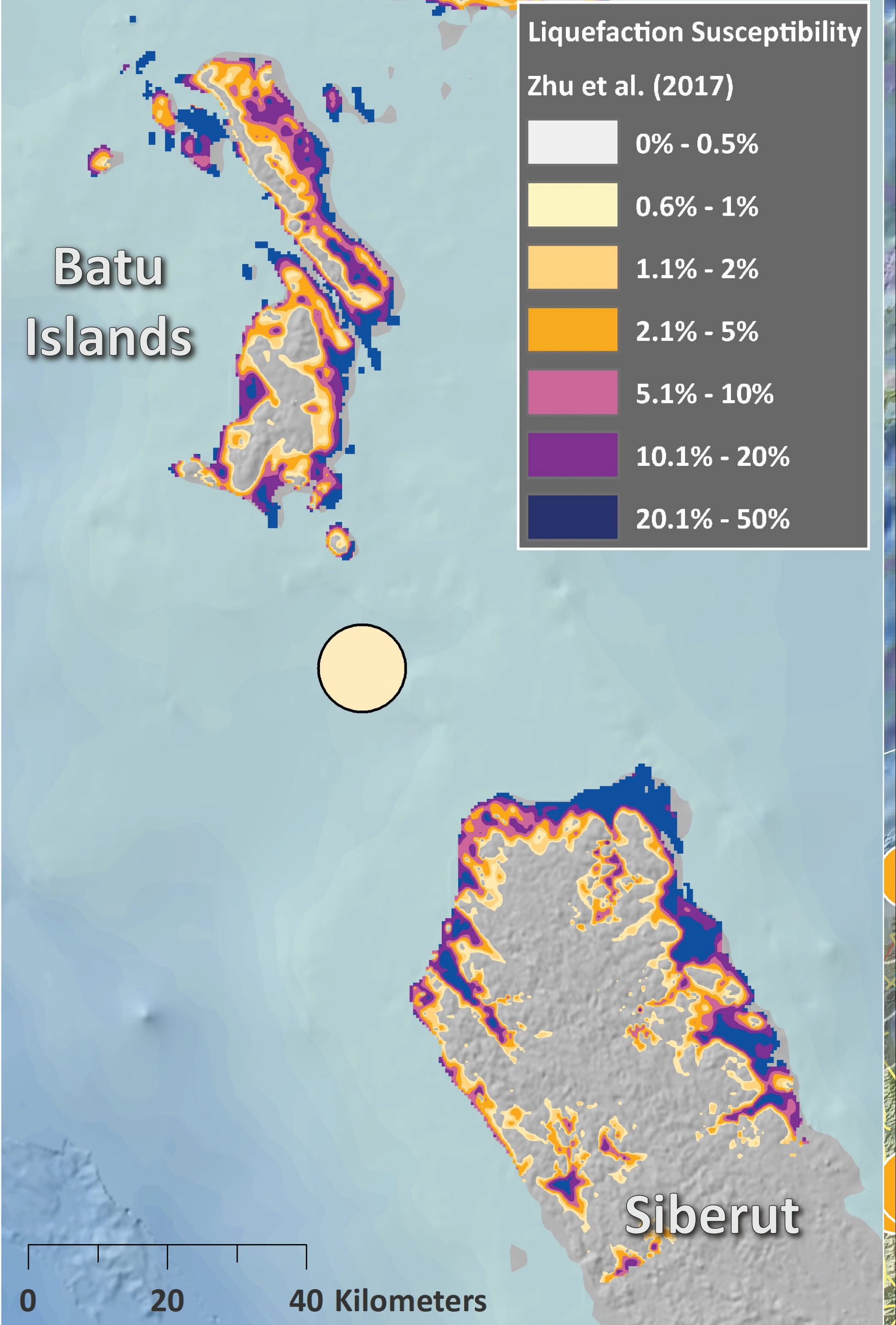
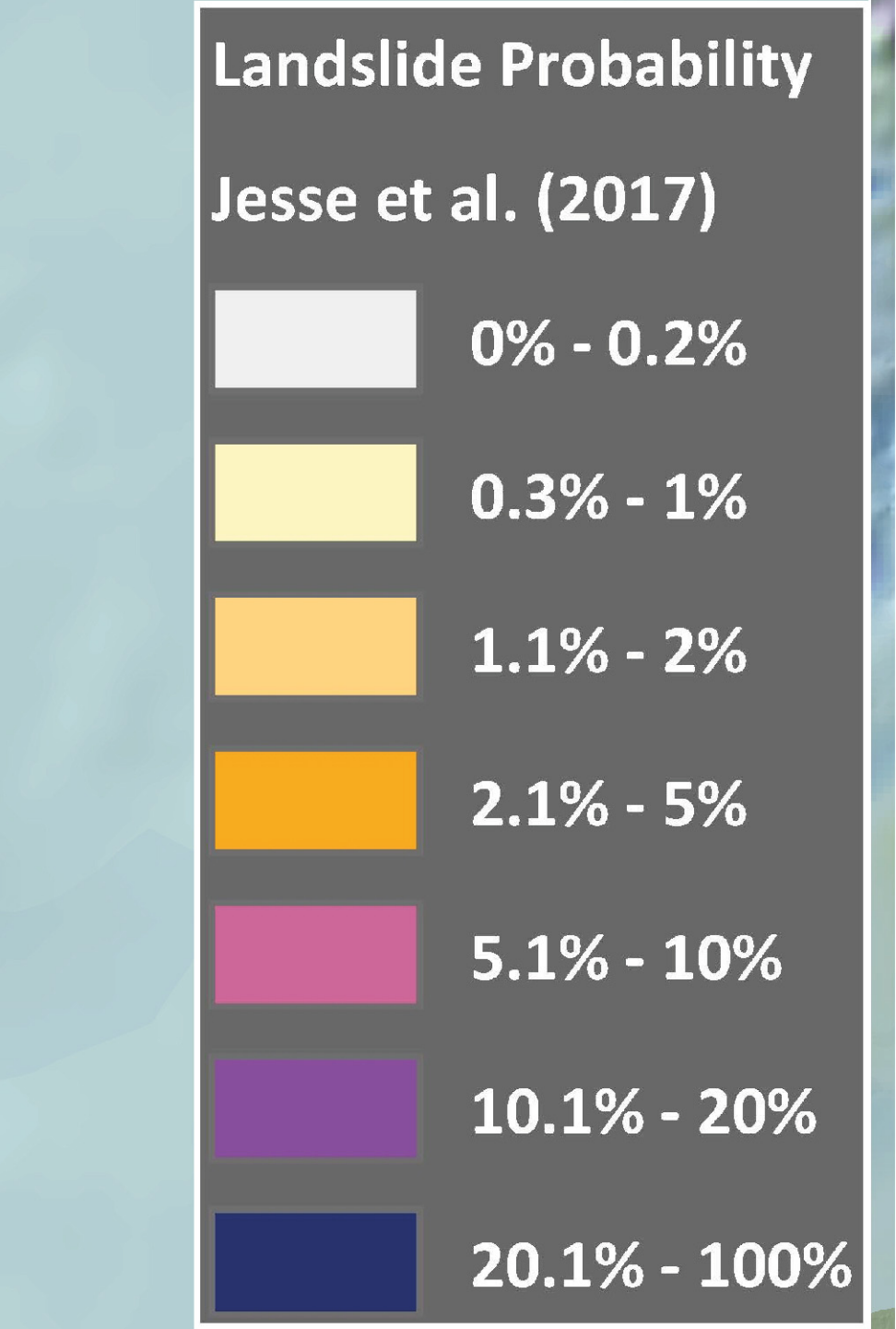
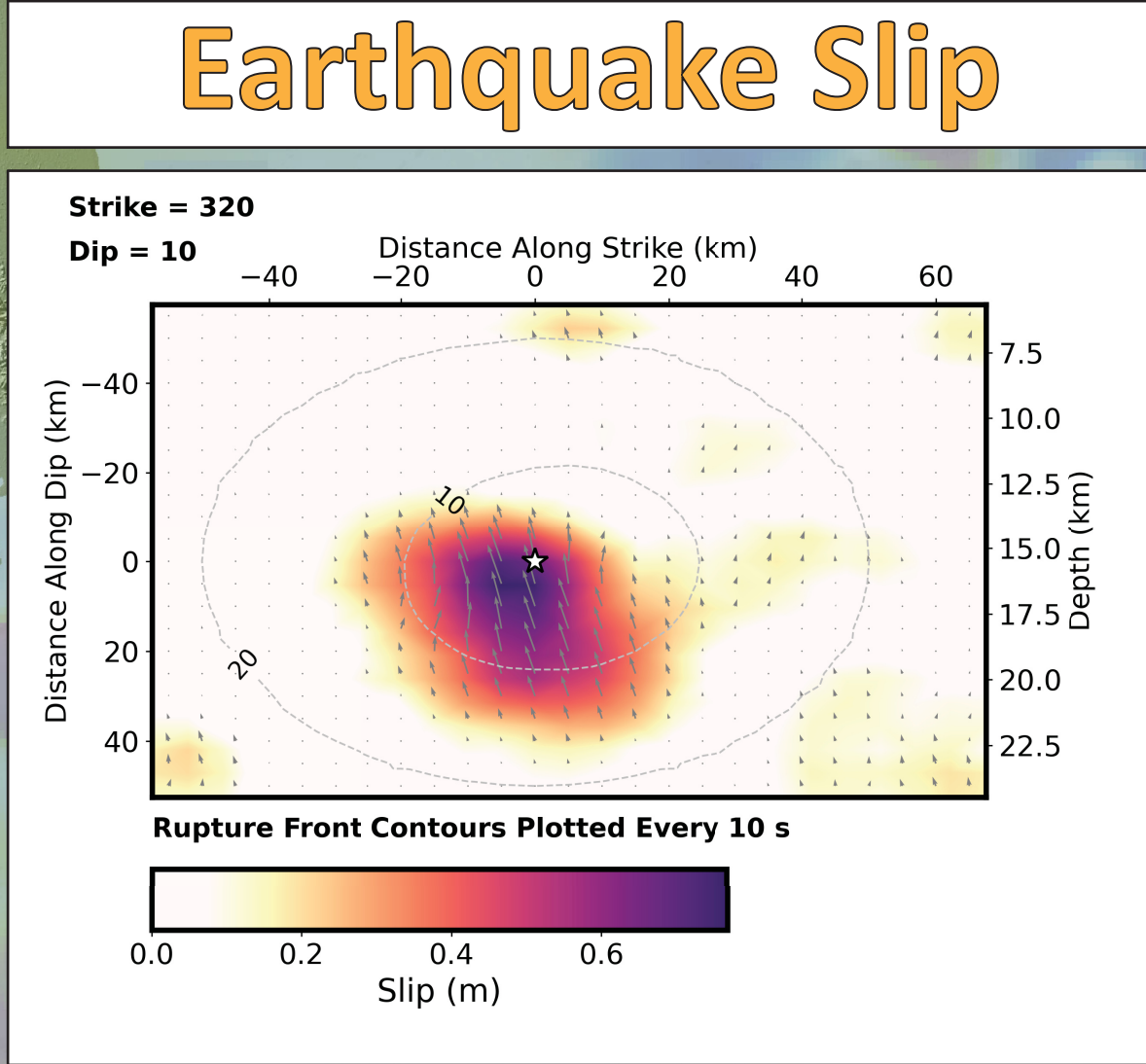
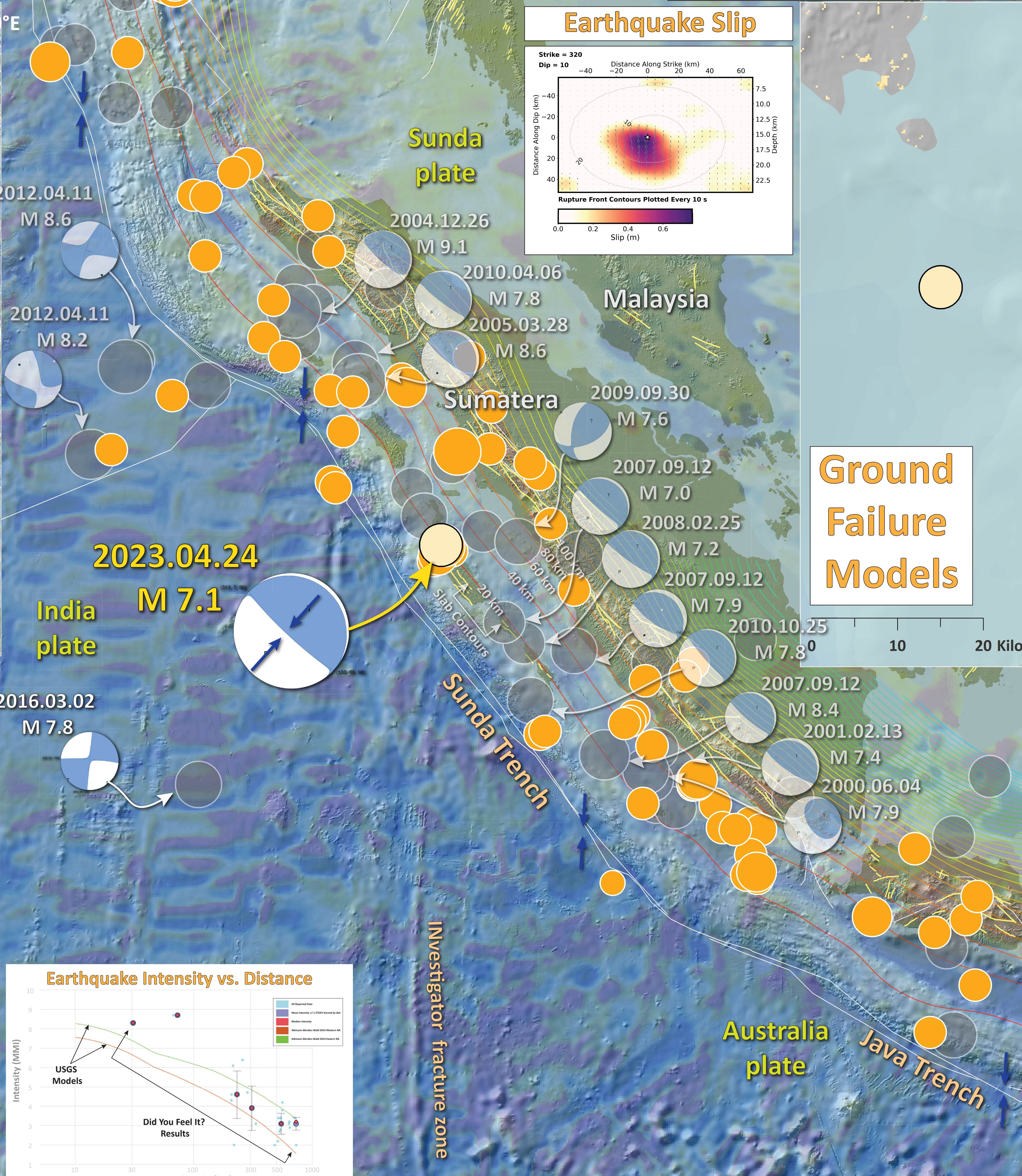
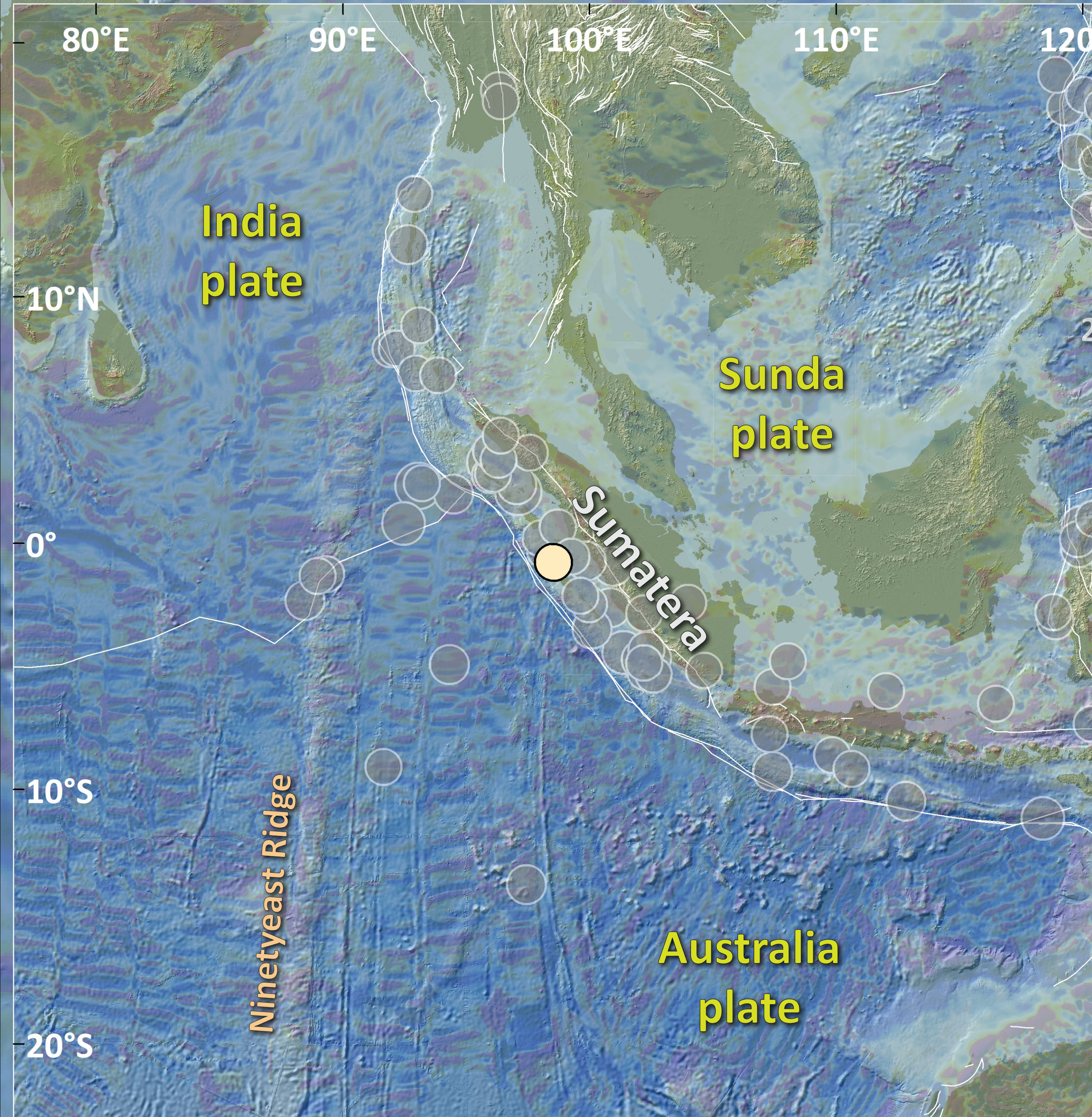


# Earthquake Report: 2023.04.24

## M 7.1 Sumatra (& USGS Seismicity 1923-2023 M ≥ 7.0)



SHAKING	Not Felt	Weak	Light	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

**Seismicity (USGS - 1 century) magnitude**

- 24 Apr '23 M 7.1
- 7.0 - 7.5
- 7.6 - 8.0
- 8.1 - 8.5
- 8.6 - 9.1

**Seismicity (USGS - 3 month) magnitude**

- 0.0 - 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

**Depth**

Shallow to Deep

**Elevation**

High to Low

**Fault**

- CCOP
- GEM

Topography: Ryan et al., 2009  
doi:10.1029/2008GC002332.

**GEM**  
GLOBAL EARTHQUAKE MODEL  
working together to assess risk

Jason R. Patton  
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**USGS**  
science for a changing world

**Total Intensity Anomaly (nT)**

Earth: -200 to 200

**Depth to Slab (km)**

0 to 400

