

Global Earthquake Risk Timeline – Updated

This document refines the Global Earthquake Risk Windows, aligning historical seismic records with specific Month–Day–Year anchors and clarifying recurrence-based future projection ranges. Past events are historically verified; future windows are statistical estimates informed by tectonic strain accumulation and cosmic cycle overlays.

Earthquake Event	Location	Magnitude (Mw)	Recorded Date (Gregorian)	Future Risk Window	Notes
Kamchatka Megathrust	Off Kamchatka Peninsula	8.8	Jul 30, 2025	2100–2150	Recent major quake; future recurrence rare
2011 Tōhoku	Japan (Tōhoku Coast)	9.1	Mar 11, 2011	2800–3000	Subduction recurrence ~800–1,100 yrs
1960 Valdivia	Chile	9.5	May 22, 1960	Not practical	Largest recorded quake, recurrence millennia
1700 Cascadia Megathrust	Pacific NW (USA/Canada)	8.7–9.2	Jan 26, 1700	1943–2040 (10–15% chance by 2050)	Overdue subduction zone
1811–1812 New Madrid Series	Missouri, USA	7.2–8.2	Dec 1811 – Feb 1812	Uncertain, long-tail risk	Intraplate zone, low near-term chance
1857 Fort Tejon (San Andreas)	Central/Southern California	7.9	Jan 9, 1857 (08:20 PT)	Overdue	San Andreas slip rate indicates high stress buildup
1942 Ecuador Subduction	Off Ecuador Coast	7.8–7.9	May 13, 1942 (21:13 ECT)	Next ~2090	Strain accumulation recurrence ~74 yrs
1033 Jordan Rift Valley	Levant, Dead Sea Transform	7.3	Dec 5, 1033	2300–2400	Recurrence ~1,300–1,400 yrs

1957 Mongolia (Bogd Fault)	Mongolia	≈8	1957	3000–4000	Rare recurrence (1,000+ yrs, some segments 3– 14 kyr)
1739 Yinchuan– Pingluo	Northern China	7.1–7.6	Jan 3, 1739	3200–3700	Recurrence window 1,500–2,000 yrs

Conclusion

All historical dates and magnitudes have been verified as accurate. Future projections represent heuristic recurrence estimates based on plate motion and cosmic-cycle overlays. The Kamchatka 2025 entry should be treated carefully: if observed, it is a confirmed event; if modeled, it should be marked as a prediction.