

November 24, 2025

## News and notes



**Don't worry, its just Raymond**

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I am busy this week with various things, so we'll only look at some news items that I thought were interesting. If you enjoy my blogs, bookmark the site and check on Monday afternoon rather than relying on social media postings which can get lost in the shuffle.

## Comments

If anyone has comments on any of my postings, please leave a comment on the LinkedIn page for the posting or email me at [raymondreichelt@gmail.com](mailto:raymondreichelt@gmail.com).

## Geopolitics

- Sabre rattling: [US to launch new phase of Venezuela operations, sources say](#); related: [Venezuela Doubles Down on Energy Alliance with Russia](#).
- Commentary: [Iran: drought, incompetence, and maybe revolution](#); related: [How dry Iran?](#)
- International trade: [Why illegal gold mining is overtaking cocaine as the drug of choice for traffickers in Latin America](#).
- [Australia–South Korea critical-minerals cooperation gets results beyond frameworks](#).
- Video from Caspian Report: [America on the brink of war with Venezuela](#).

## Research and News

- [A geological carbon cycle sink hosted by ocean crust talus breccias.](#)
- [Origin and HFSE enrichment potential of a Late Cretaceous basalt to peralkaline rhyolite suite in central Queensland, Australia.](#)
- Planetary geology: [Widespread ancient anorthosites in the lower crust of Mars.](#)
- Geophysics: [Earth just got hit by a stealth solar storm no one saw coming.](#)
- [Intertwined weathering and metamorphic controls on river dissolved inorganic carbon in the interior of a mountain belt.](#)
- [Sedimentology: Volume 72, Issue 7, December 2025.](#)
- **Geoscience education:** [Federation University scraps one of Australia's oldest geology courses as students turn away from mining](#); related: [A geoscientist shortage could undermine U.S.-Australian deal on critical minerals.](#)
- [Yellowstone plume drives drainage reorganization in the early Miocene.](#)
- Bedrock chemical weathering: [Decoupling between silicate and phosphate mineral weathering in the granitic periglacial weathering-limited landscape of the Loch Vale watershed, Rocky Mountain National Park, Colorado, USA.](#)
- [Geometry and Kinematics of the Hormuz Salt at Jebel Al Dhanna, United Arab Emirates: Implications for Salt Tectonics and Subsurface Storage.](#)
- [New age-estimate data and implications for marine isotope stage 7 and 5e sea levels in Fenland, eastern England.](#)

## Plate Tectonics

- [Fractionated nickel isotopic compositions in the subducting slab – implications for mantle heterogeneity.](#)
- [Intraplate deformation of Gondwana terranes and implications for the Wilson Cycle.](#)
- [Tracing the Syn-Convergence Extrusion Tectonics of the Sulu Orogenic Belt and Its Implication for North China–South China Collision.](#)
- [Machine Learning Model for Assessing Melting Pressure Conditions of the TTG Genesis: Implications for the Timing of the Onset of Global Plate Tectonics.](#)
- [North-South Shear Along the West-Lut Fault, Iran, Imaged From Burst Overlap InSAR.](#)
- [Mantle Structure Beneath the Greater Alpine Region From Teleseismic Full P-Waveform Inversion.](#)
- Mexican subduction zone: [Slow slip events in Mexico: A historical perspective.](#)

- Cascadia Subduction Zone: [Rapid fault healing from cementation controls the dynamics of deep slow slip and tremor.](#)
- [Is the Suez Rift in Its Post-Rift Phase?](#) Live Science summary [here.](#)

## Paleontology

- [Wing morphology of \*Anchiornis huxleyi\* and the evolution of molt strategies in paravian dinosaurs.](#)
- [A re-evaluation of the notosuchian crocodyliform \*Eremosuchus elkoholicus\* from the lower Eocene of Algeria and the evolutionary and biogeographic history of sebecids.](#)
- [First supralittoral gastropod \(Eupulmonata: Ellobiidae\) preserved in uppermost Albian-lowermost Cenomanian opaque amber of Charente-Maritime \(France\).](#)
- Early life: [Isotope constraints on nutrient supply, bio-productivity and redox dynamics in the Mesoproterozoic McArthur Basin, Australia: Insights from  \$\delta^{114}\text{Cd}\$ ,  \$\delta^{13}\text{C}\$  and  \$\delta^{15}\text{N}\$  proxies.](#)
- [Seawater Sr isotopes in belemnites from the Upper Jurassic of southern Germany.](#)
- [Walk through the asteroid strike that killed the dinosaurs with American Museum of Natural History's new 'Impact' exhibit.](#)
- [Organic geochemical evidence for life in Archean rocks identified by pyrolysis–GC–MS and supervised machine learning; Eureka Alert summary \[here.\]\(#\)](#)
- [Galesphyrus capensis from the Permian of South Africa and the origin of Neodiapsida.](#)
- [Earliest long-necked sauropterygian \*Lijiangosaurus yongshengensis\* and plasticity of vertebral evolution in sauropterygian marine reptiles; SciNews summary \[here.\]\(#\)](#)

## Mining and Energy

- [Second silica sand mine proposed for southern Manitoba.](#)
- [LNG Shipping Rates Surge to Two-Year High as U.S. Exports Soar; related: \[U.S. associated natural gas production increased 6% in 2024.\]\(#\)](#)
- [France's two nuclear giants have a plan to make the most of reactors by producing cobalt-60.](#)
- [Barrick Mining and Mali agree in principle to resolve dispute over gold mine.](#)
- [Shale rigs idle, layoffs rise as \\$60 oil tests resilience of Permian.](#)
- [The World's First Thorium Molten Salt Reactor.](#)
- [CNSC begins key hearings on NexGen's proposed Rook I uranium mine.](#)
- ['Uranium prices have skyrocketed': Canada at core of uranium squeeze.](#)
- [West scrambles to fill heavy rare earth gap as China rivalry deepens.](#)

- Platinum: [Friedland opens \\$2B Platreef mine in South Africa.](#)
- [EIA Reports Surprise Crude Oil Inventory Dip.](#)
- [Pakistan to build island to boost oil exploration: report.](#)
- Japan: [The World's Largest Nuclear Plant Inches Toward Restart After Key Approval.](#)
- ["This Is A National Emergency" - US Govt To Buy 10 Large, New Nuclear Reactors.](#)
- [Yttrium price surges to record as rally approaches 1,500%.](#)

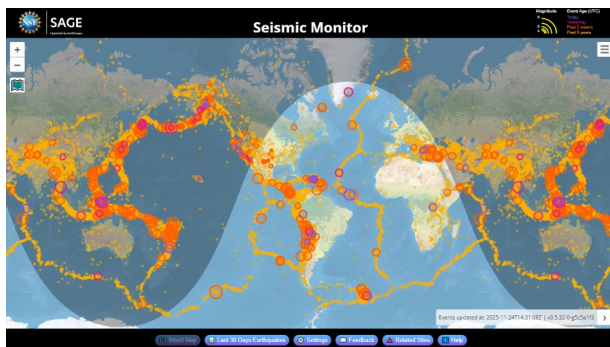
## Environmental Geology and Hydrogeology

- Australia: [Water is under pressure in the Great Artesian Basin.](#)
- REE in groundwater: [A surface complexation model for simulating sorption of rare earth elements onto goethite in low ionic strength \( \$I = 0.01\$  M\) aqueous solutions for use in groundwater flow systems.](#)
- Mineral reactions in porous media: [The impacts of well-connected intragranular porosity on mineral dissolution rates.](#)
- USA: [EPA Fines Southern California Facility for Hazardous Waste Violations.](#)

## Glaciers and Climate Change

- [NZ's earliest climate change debate: the 150-year-old feud over glacial retreat.](#)
- [Contrasting melt regime in the Ice Grounding Zone of Thwaites Glacier, West Antarctica.](#)
- [Glacier or Not? The Importance of Nuance in Definitions of Vanishing Glaciers.](#)
- Like losing an old friend: [Continuous monitoring of a glacier's extinction.](#)

## Volcanoes, Earthquakes and Geohazards



[Seismic Monitor](#)



[Active Volcano Map](#)

### ***Volcanoes***

- [Smithsonian / USGS Weekly Volcanic Activity Report](#).
- United States Geological Survey (USGS) Volcano Observatories:
  - Yellowstone Caldera Chronicles: [Was there ever a Yellowstone on Mars?](#)
  - [Cascades Volcano Observatory Weekly Update](#).
  - Volcano Watch – [Remembering the destructive Kalapana earthquake 50 years ago](#).
- [Ethiopian volcano erupts for first time in 12,000 years](#).
- [Indonesia's Semeru volcano erupts prompting aviation warning in Australia](#).
- [Developing: Guatemala's Volcan de Fuego erupts, Volcanic Ash Advisory in effect](#).
- Mt. Rainier: [False alarm strikes America's deadliest volcano that appeared as strange tremors for 72 hours](#).

### ***Earthquakes***

- [Euro-Mediterranean Seismological Centre \(EMSC\)](#).
- [Earthquakes Monitoring Live Worldwide](#).
- [Bangladesh shaken by deadly M5.5 earthquake](#); USGS summary [here](#).
- [AFG - Active Faults Greece: a comprehensive geomorphology-based 1:25,000 fault database](#).
- [The 2025 Santorini unrest unveiled: Rebounding magmatic dike intrusion with triggered seismicity](#); related story from the [BBC](#).
- [Fault zone damage caused by the mainshock rupture during the 2014 Northern Nagano earthquake](#).

### ***Geohazards***

- [Evidence of tsunami forces shaping clifftop boulder fields from integrated morphometric and numerical modeling approaches](#).

### **Free Geology Books and Other Stuff**

Free geology books can be downloaded from these sites:

- [OreZone Readers and Experts Telegram Channel](#); the Ore Zone channel also shows employment opportunities for geologists.
- [The Groundwater Project](#) has many groundwater geology books for free download; also they now have a [Free Online Learning Module: Pumping Test Analysis](#).

- Free Groundwater Modeling Course – [HydroGeoCenter](#).
- From Western Australia: [Carbonatite, lamprophyre and host rocks in the northern Aileron Province](#).
- Two volumes of Geology of Indonesia now can be accessed for [FREE/GRATIS](#). The books can be accessed from: vol 1 <https://lnkd.in/eH6Gcka4>; vol 2 <https://lnkd.in/egTYmpjk>.
- Brett Davis’ book on veins in a deforming rock mass: “[The Veining Bible](#)”; also at [this site](#).
- From the Mineralogical Society of America: [Handbook of Mineralogy](#).

## Upcoming Events

- [Saskatchewan Geological Open House, December 1 to 3, 2025, Delta Bessborough Hotel, Saskatoon](#); Registration for the 2025 conference closes today, November 24.
- [Groundwater Week 2025, December 9-11, 2025 in New Orleans](#).
- [Feb. 16-18, 2026, Inaugural Mineralogical Society of America Annual Meeting, Tuscon AZ](#)
- [GAC-MAC 2026 St. John's NL, St. John's Convention Center, May 25-28, 2026](#).
- [PEG2026: 11th International Symposium on Granitic Pegmatites; 16th–19th August 2026, in Perth, Western Australia](#).
- [14-18 September 2026 , IAH 2026, 53rd Congress of the International Association of Hydrogeologists; Budapest Congress Center](#).
- [Society of Petroleum Engineers Distinguished Lecturer Schedule](#).
- [American Geophysical Union List of Upcoming Meetings](#).
- The Geological Society: [Events & Courses](#).
- [International Union of Geological Sciences calendar of geoscience events](#).
- [“Geology Hour” Online](#), evenings on the 3rd Monday of the Month from the Geological Society of the Oregon Country.
- [Canadian Energy Geoscience Association Upcoming Events](#).

## Standard Caveat

### **J. Robert Oppenheimer on freedom and scientific inquiry**

The purpose of my weblog postings is to spark people's curiosity in geology. Don't entirely believe me until you've done your own research and checked the evidence. If I have sparked your curiosity in the subject of this posting, follow up with some of the links provided here. If you want to, go out into the field and examine some rocks on your own with the help of a good field guide. Follow the evidence and make up your own mind.

In science, the only authority is the evidence.