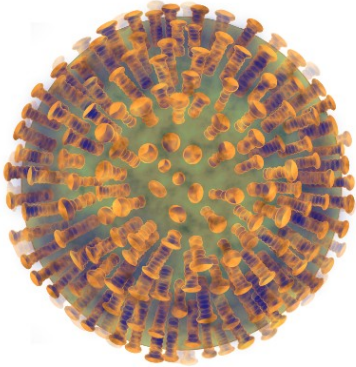


November 18, 2024

News and notes



I have been sick this week, so I will just show some news items that I thought were interesting.

Virus

Credit: [DataBase Center for Life Science \(DBCLS\)](#)
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Free Geology Books

- 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](#); there is a new book here: [Public Health Risk Assessment and Risk Management for Safe Drinking Water](#).
- [Lithium in Nevada-origins, extent, role in the energy transition, and implications for economic development and national security](#).
- I'll add more sites when I find them.

Geopolitics

- [Ex-FM warns about 'internal collapse' in Ukraine](#).
- [War Games Show UK's Beleaguered Flagship Aircraft Carriers 'Get Sunk' Every Time](#).
- Russia/China alliance: [Russia Eyes New Gas Route to China, Betting Big on Growing Demand](#).
- Meanwhile: [Gazprom Cuts Gas To Austria Off, Just in Time for Winter](#).
- [Russia takes aim at US nuclear power by throttling uranium](#).
- [This is What Wall Street Banks are Hiding in the Post-Election Euphoria](#); Nomi Prins is an astute observer.
- Incoming Trump Administration: [Steel, Copper, Nickel, Cobalt: How Policy Changes Could Impact Metal Demand](#).

Research and News

- [Layered intrusions in the Precambrian: Observations and perspectives](#).

- From the New Mexico Bureau of Geology & Mineral Resources, the [November 2024 edition of Lite Geology](#).
- [A chlorine isotope transect across Sudbury Basin \(Canada\) impact deposits reveals systematic isotope fractionation](#).
- [Geology Bites](#) discusses the new [geologic map of Greenland](#).
- [Mineralogy and Petrology of the Petalite-subtype Prof Pegmatite, Revelstoke, British Columbia, Canada](#).
- [Hematite U-Pb dating of Snowball Earth meltwater events](#); summary in The conversation [here](#).

Bad Science

- Retraction Watch: [Weekend reads: RFK Jr's 2011 retraction; 'the great AI witch hunt'; scientific misconduct in Switzerland](#).
- [Geology is racist, claims university professor](#); here is the link to her [website](#) if you want to let here know what you think.
- 'You Are Not Needed...Please Die': Google AI Tells Student He Is 'Drain On The Earth'; related: [Large language models not fit for real-world use, scientists warn – even slight changes cause their world models to collapse](#).
- [Engineering publisher pulled 57 papers in a day for peer review 'irregularities'](#).
- ['All the red flags': Scientific Reports retracts paper sleuths called out in open letter](#).

Plate Tectonics

- [Organic matter accumulation under the Middle-Upper Ordovician tectonic transition on the western margin of the North China platform](#).
- Assembling the African Craton: [The Neoproterozoic Mozambique Belt in the Gol Mountains \(N Tanzania\): Structural Analysis of Amphibolite and Granulite-Facies Nappe Tectonites From a Crustal Orogenic Channel](#).
- [Modulation of Deformation by Magmatic Tempo, Coast Mountains Batholith, British Columbia, Canada](#).
- [Anatomy of the late Pennsylvanian to early Triassic failed rift system of the Cooper Basin, eastern Australia](#).

Sedimentology

- [Topographic controls on the distribution of bioturbation in an intertidal sandflat](#).
- [Pedogenic continental red beds: How, why and when red? Redox geochemistry and quantitative colour analysis of the Old Red Sandstone, South Wales, UK](#).

- [Coastal lake sediments from Arctic Svalbard suggest colder summers are stormier](#); Phys.org summary [here](#).
- [Benthic response to event deposition and environmental disturbance in a shoreface to subaqueous delta system: Ichnology of the Silurian-Devonian Furada Formation of Asturias, Spain](#).

Paleontology

- [A Decade of Vertebrate Palaeontology Research in the UK: Bibliometric and Topic Modelling Analysis](#).
- [An Equus-Dominated Middle Pleistocene \(Irvingtonian\) Vertebrate Fauna from Northcentral Florida, USA](#).
- Book review: [The Genetic Book of the Dead by Richard Dawkins review – the great/15 biologist’s swansong](#).
- [Phylogenetic relationships of Neogene hamsters \(Mammalia, Rodentia, Cricetinae\) revealed under Bayesian inference and maximum parsimony](#).
- Gondwana: [A new moradisaurine captorhinid reptile \(Amniota: Eureptilia\) from the upper Permian of India](#).
- [Cretaceous bird from Brazil informs the evolution of the avian skull and brain](#); University of Cambridge press release [here](#).
- [Mammoth quiz: Test your knowledge of the ice age beasts](#).
- [How to Make a Mammal in Nine Evolutionary Steps](#).
- [First discovery of Antarctic amber](#); Phys.org summary [here](#).
- [Diminutive temnospondyls from the lower and middle Fremouw Formation \(Lower Triassic\) of Antarctica](#).
- [The oldest tadpole reveals evolutionary stability of the anuran life cycle](#); Science Alert summary [here](#).

Mining and Energy

- Gold deposit geology: [Formation of the intrusion-hosted orogenic-type gold lodes: Exemplified by the Axile gold deposit in the Chinese Altai](#).
- [Gold loses some luster after Trump’s decisive win](#).
- Alberta, video: [Bekevar Wind Farm goes online, produces zero power due to no wind](#).
- [Russian Refiners Cut Crude Processing as Hefty Losses Mount](#).
- Australia: [Devastated farmers told Avonbank mineral sands mine will go ahead on their land](#).

- Nebraska: [Hydrogen Goldmine? According to Scientists, This Billion-Year-Old Rift Could Provide Us a Near-Endless Supply of Natural Hydrogen.](#)
- [China's weak economy and record US production will lead to a surplus of one million barrels of oil a day next year, IEA says.](#)
- [South African government says it won't help 4,000 illegal miners inside a closed mine.](#)
- [Deep sea mining risks over \\$560 billion in countries' annual export earnings – report.](#)
- [Why Canada could become the next nuclear energy 'superpower'.](#)
- [Hudbay Minerals shares up on record gold production in Manitoba.](#)
- [Discovery of over 2,000,000,000 tons of rare Earth mineral found in US could make country the new 'world leader';](#) some of this is mining promoter hype, some is genuine opportunities.
- [Oil could plunge to \\$40 in 2025 if OPEC unwinds voluntary production cuts, analysts say;](#) [James Kunstler](#) likes to point put that oil above \$75/bbl crushes economies and oil below \$75/bbl crushes oil companies; related: [OPEC Slashes Oil Demand Growth Estimate Again.](#)
- Video: [Why Canada's critical minerals industry is lacking investment.](#)
- Making fuel from waste plastic: [Tandem Methanolysis and Catalytic Transfer Hydrogenolysis of Polyethylene Terephthalate to p-Xylene Over Cu/ZnZrO_x Catalysts:](#) Phys.org summary [here.](#)

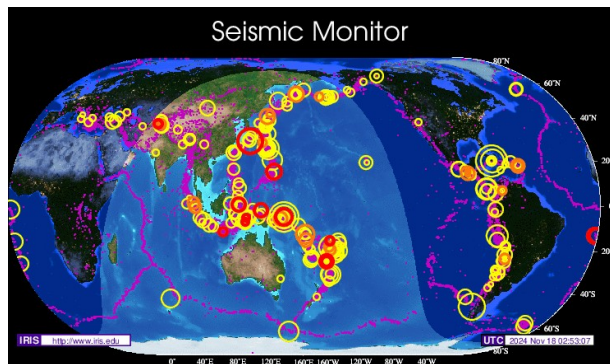
Environmental Geology and Hydrogeology

- Aquifer geology: [Hydroacoustic Observations Reveal Drivers of Mixing and Salinization of a Karst Subterranean Estuary During Intense Precipitation.](#)
- [The 3D Hydrostratigraphic model of southern Ontario, Canada.](#)
- Carbon capture: [What's a drilling rig doing southeast of Moose Jaw? Drilling a CO2 sequestration well, naturally.](#)
- [Shell defeats landmark climate ruling ordering cut in carbon emissions.](#)

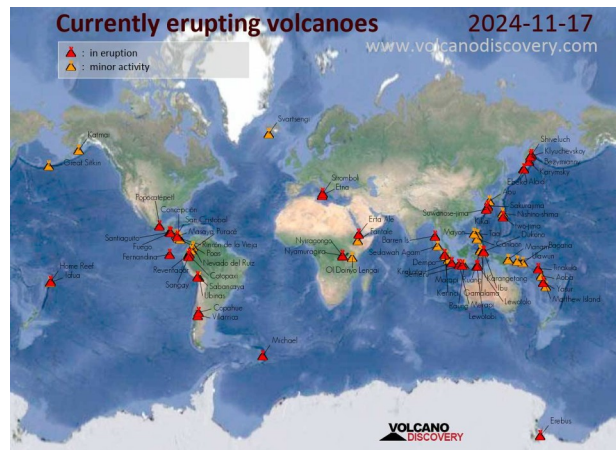
Glaciers and Climate Change

- UK [Government to Fund Bill Gates' Geoengineering Experiments to Fight 'Global Warming' by Cooling Earth;](#) what could go wrong?
- [Hydroclimatic impacts of the abrupt cooling event 8200 years ago in the western Indo-Pacific Warm Pool.](#)
- [Durability of carbon dioxide removal is critical for Paris climate goals.](#)

Volcanoes, Earthquakes and Geohazards



[Seismic Monitor](#)



[Active Volcano Map](#)

Volcanoes

- United States Geological Survey (USGS) Volcano Watch: [‘Ailā’au or Kualoloa? Hawaiian chants suggest lava flow name change.](#)
- USGS Yellowstone Volcano Observatory: [Benchmarking benchmarks.](#)
- [Smithsonian / USGS Weekly Volcanic Activity Report.](#)
- [Satellite Geodesy Uncovers 15 m of Slip on a Detachment Fault Prior to the 2018 Collapse at Anak Krakatau, Indonesia.](#)
- [Fire Vs Ice: Dazzling Footage Shows Lava Oozing Over Snow In Iceland.](#)
- [The next massive volcano eruption will cause climate chaos – and we are unprepared.](#)

Earthquakes

- [Euro-Mediterranean Seismological Centre \(EMSC\).](#)
- [Earthquakes Monitoring Live Worldwide.](#)
- Earthquake research: [Dynamically Triggered Tectonic Tremors and Earthquakes in the Caucasian Region Following the 2023 Kahramanmaraş, Türkiye, Earthquake Sequence.](#)
- Anthropogenic earthquakes: [Reduced Injection Rates and Shallower Depths Mitigated Induced Seismicity in Oklahoma.](#)
- Earthquake history: [The Ghost Forest of Girdwood.](#)
- [Earthquake Hazard Uncertainties Improved Using Precariously Balanced Rocks; BBC summary \[here.\]\(#\)](#)

Upcoming Events

- The Geological Society: [Hybrid Conferences, November 25, 2024 – September 9, 2025, Climate and Ecology: Off the Rails.](#)
- [University of Saskatchewan, November 27, 2024, 2025 Darcy Lecture: Deep Groundwater, Deep Time.](#)
- [The Saskatchewan Geological Open House, December 2 to 4, Delta Bessborough Hotel, Saskatoon;](#) the Bessborough Hotel is the most beautiful building in Saskatoon.
- [Groundwater Week 2024,](#) December 10-12 in Las Vegas, Nevada; related video [here.](#)
- [2024 National Pollution Prevention Training and Conference,](#) U.S. Environmental Protection Agency (USEPA), Washington, D.C., Dec. 10-11.
- European Geosciences Union: [EGU General Assembly 2025, Vienna, Austria & Online 27 April–2 May 2025](#)
- [Copper to the World Conference, Tuesday 26 – Wednesday 27 August 2025,](#) in Adelaide, Australia; report on 2024 conference [here.](#)
- 2024-2025 [Society of Petroleum Engineers Distinguished Lecturer Schedule.](#)
- [List of geoscience events in 2025 from the International Union of Geological Sciences.](#)
- [American Geophysical Union List of Upcoming Meetings.](#)

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.