

August 14, 2023

News and Notes

For today and the following week, I'll be blogging lightly. It's summertime and we're on vacation for a couple of weeks. The next regular blog on geology and geopolitics will be August 28.

Here are some photos from places we visited this past week on our vacation.



[Badlands Dinosaur Museum](#), Dickinson, North Dakota

[Credit: Df9465, Creative Commons Attribution-Share Alike 4.0 International license](#)



Mascot at the [Museum of Geology](#), Rapid City South Dakota



Installation art by [Georgia Rowswell](#), Cheyenne Wyoming

This is an artistic representation of rock cores from coal exploration using stacked cloth fibres



Desert Landscape in Utah

Research

- Inquiring minds want to know: [Why Do Geologists Lick Rocks?](#)
- Mineral cycles: [Carbonate-rich crust subduction drives the deep carbon and chlorine cycles](#); Phys.org summary [here](#).
- [The genesis of metamorphosed Paleoproterozoic massive sulphide occurrences in central Colorado: geological, mineralogical and sulphur isotope constraints](#).
- [Geochemistry, zircon U–Pb geochronology and Hf isotope of the early Permian gabbro and high-Mg diorites from the Zhusileng–Hangwula Belt in the northern Alxa area: Petrogenesis and tectonic implications](#).
- [Effect of temperature on the dynamic parameters of silty clay in a seasonally frozen region](#).

Geophysics and Plate Tectonics

- Plate collisions: [High-elevation Tibetan Plateau before India–Eurasia collision recorded by triple oxygen isotopes](#); Phys.org summary [here](#).
- More on the India/Eurasian plate collision: [Strengthening the argument for a large Greater India](#).
- Earth shattering kaboom: [Geophysics and origin of the Deniliquin multiple-ring feature, Southeast Australia](#); Phys.org summary [here](#).

Paleontology

- [First filter feeding in the Early Triassic: cranial morphological convergence between *Hupehsuchus* and baleen whales](#); CNN summary [here](#).
- Giant amphibian, *Arenaerpeton supinatus*: [A new chigutisaurid \(Brachyopoidea, Temnospondyli\) with soft tissue preservation from the Triassic Sydney Basin, New South Wales, Australia](#); Phys.org summary [here](#).
- [First discovery of parasite eggs in a vertebrate coprolite of the Late Triassic in Thailand](#); Phys.org summary [here](#).

Energy and Mining

- Opinion: [The lithium delusion: a big problem with big batteries](#).
- [Prospectors hit the gas in the hunt for ‘white hydrogen’](#).
- [U.S. drillers cut oil and gas rigs for fifth week in a row – Baker Hughes](#).
- Enhanced recovery research: [Optimization of salinity and composition of injected low salinity water into sandstone reservoirs with minimum scale deposition](#).
- [New Gold resumes mining at New Afton as tailings deemed safe](#).

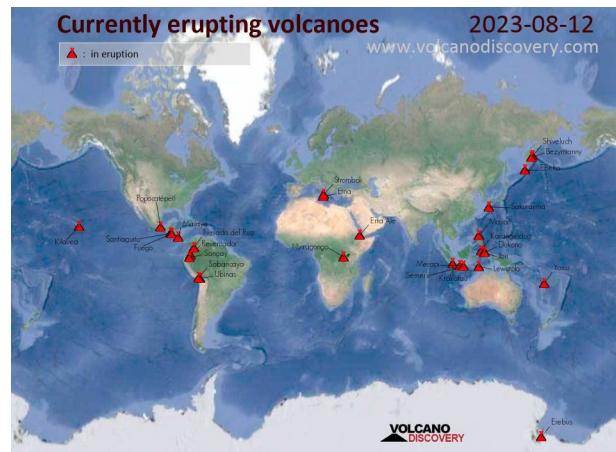
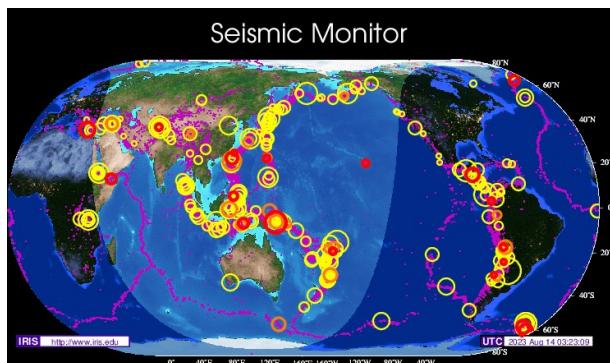
Glaciers and Climate Change

- [A seasonally ice-free Arctic Ocean during the Last Interglacial](#); Phys.org summary [here](#).
- Historical climate change: [A punctuated equilibrium analysis of the climate evolution of Cenozoic exhibits a hierarchy of abrupt transitions](#); Phys.org summary [here](#).

Environmental Geology and Hydrogeology

- [Flushing away the future: The effects of wastewater treatment plants on aquatic invertebrates](#); Phys.org summary [here](#).
- Remediation techniques: [Mussel-Inspired Nanocellulose Coating for Selective Neodymium Recovery](#); Mining.com summary [here](#).

Volcanoes, Earthquakes and Geohazards



Seismic Monitor

Active Volcano Map

- United States Geological Survey (USGS) Volcano Watch – [Searching for tephra from one of Kilauea's largest explosive eruptions](#).
- [Smithsonian / USGS Weekly Volcanic Activity Report](#).
- [Underwater volcanoes and shipwreck discovered off the coast of Sicily](#).
- [Oceanic intraplate explosive eruptions fed directly from the mantle](#); Phys.org summary [here](#).
- Man-made earthquakes: [Tremor signals during fluid injection are generated by fault slip](#); Phys.org summary [here](#).
- [M4.3 earthquake jolts Parkfield, California](#); USGS summary [here](#).
- [Unusual M5.4 earthquake strikes usually quiet part of eastern China](#); USGS summary [here](#).
- Fires: [‘Australia is sleepwalking’: a bushfire scientist explains what the Hawaii tragedy means for our flammable continent](#).

Standard Caveat

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.