

edited by Mitch Leslie

IMAGES

Tune In for the Quake Cast

The cool greens and blues above are good news for Californians because they signify a low risk of earthquakes. Worried residents and curious visitors can now check the local quake forecast throughout the state, thanks to a new online map that's updated hourly. The site won't tell people when a big quake is imminent, but it can predict the probability of aftershocks, which can still cause substantial damage.

The map is the brainchild of seismologist Matt Gerstenberger of the U.S. Geological Survey in Pasadena, California, and colleagues. Their procedure, published in last week's issue of *Nature*, uses all the known faults in the state and records of past earthquakes to generate a baseline historical level of risk. Whenever an earthquake occurs, the program estimates the likely locations and sizes of aftershocks and maps them. Blue signifies a one-in-a-million chance of intensity 6 shaking (forceful enough to break windows and crack plaster), whereas red indicates a greater than one in 10 chance.

pasadena.wr.usgs.gov/step

DATABASE

Frozen in Time

Researchers are keeping an eye on the world's ice for signs of climate change. For data on one warming spot, glide over to the Great Lakes Ice

Atlas by Raymond Assel of the National Oceanic and Atmospheric Administration. The archive charts ice cover on the lakes from 1973 to 2002, combining measurements from satellites, aircraft, shipboard observers, and other sources. You can summon weekly maps of ice extent or watch animations that portray the waxing and waning of lake ice for each winter. Visitors can also download data such as daily ice cover values. The records suggest that like much of the world's frozen water, Great Lakes ice is dwindling. For example, between 1853 and 1972, Grand Traverse Bay on Lake Michigan didn't freeze over during 17 winters. But between 1973 and 2002, it remained open in 16 years.

www.glerl.noaa.gov/data/ice/atlas

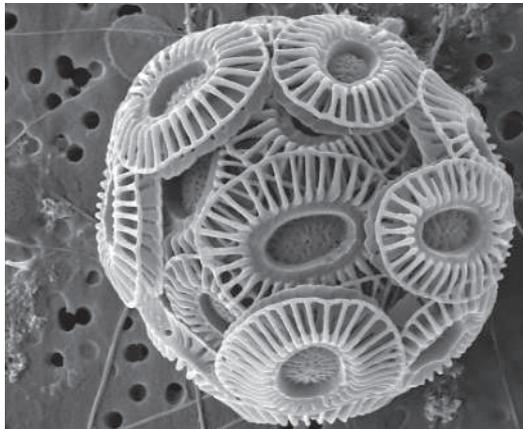


EDUCATION

Gems of the Ocean

Individual cells of the protist *Emiliana huxleyi* (below) are so tiny that researchers can barely see them with a light microscope. But *E. huxleyi*, or "Ehux" for short, has a disproportionately large impact on the planet. This Ehux site from oceanographer Toby Tyrrell of Southampton University in the United Kingdom offers backgrounders by experts on the cells' anatomy, reproduction, ecology, and other topics. The creatures' calcium carbonate armor scatters light and can color large swaths of the ocean turquoise. By making the surface water more reflective, Ehux reduces the amount of light penetrating into the ocean and cools the lower layers. Although the cells are photosynthetic, they might worsen global warming, the site explains, because their changes

to water chemistry boost the amount of dissolved carbon dioxide. The site also includes a gallery of delicate Ehux shells, a bibliography, and a link to NASA satellite photos of Ehux blooms.



www.noc.soton.ac.uk/soes/staff/tt/eh/index.html

ARCHIVE

Evolution's Big Hitter

Stephen Jay Gould dubbed R. A. Fisher "the Babe Ruth of statistics and evolutionary theory." A British geneticist and mathematician, Fisher (1890–1962) earned the rave review with achievements from inventing the analysis of variance to helping mesh natural selection and genetics, which many scientists in the early 1900s believed were incompatible.

To delve into Fisher's complex and eclectic work, click over to the R. A. Fisher Digital Archive from the University of Adelaide Library in Australia. Readers can browse more than 170 of Fisher's publications, which probe questions such as the origin of dominant genes and the inheritance of the Rh blood groups. A stack of Fisher's correspondence lets you follow along as he discusses heredity, natural selection, and other topics with thinkers such as Charles Darwin's son Leonard, a soldier and scientist. Fisher's papers also reveal what Gould called one of his "major-league errors," his campaign to discredit the link between smoking and lung cancer. A pipe smoker, Fisher argued that we needed stronger evidence "before plant[ing] fear in the minds of perhaps 100 million smokers around the world."

www.library.adelaide.edu.au/digitised/fisher

Send site suggestions to netwatch@aaas.org. Archive: www.sciencemag.org/netwatch