



## ICELAND'S MONSTER BARES ITS HEART

This past spring's eruption of the Eyjafjallajökull volcano in Iceland was a nightmare for travelers, but it gave scientists in Europe unprecedented access to a complex eruption right in their backyard. Old workhorses of volcanology—seismometers and GPS sensors, which detect movement of the ground—first picked up Eyjafjallajökull's stirrings in early January. (For the record: The name is pronounced “AY-yah-fyah-lah-YOH-kuul.”) But when the volcano turned volatile in mid-April, scientists took to the skies, enlisting airplanes and high-tech equipment to study the eruption and its effects on the overlying glacier. Synthetic aperture radar allowed the researchers to watch through thick steam and ash as heat released from the volcano melted the 650-foot-thick ice at its summit. The result was like pouring water into a pan of hot oil, making the eruption even more explosive. And geologist Björn Oddsson, a graduate researcher at

the University of Iceland, reports that temperature data gleaned from infrared monitors will help scientists calculate the volcano's overall energy flow, which may yield insight into the dynamics that produced the eruption's unusually fine, far-reaching ash plume.

Meanwhile, on the ground, earth scientists from the National Institute of Geophysics and Volcanology in Italy are taking aim at the volcano with spectrometers, which measure the types and amounts of gases spewing from its mouth. Previous studies of other volcanoes have revealed a change in gas composition prior to an eruption that could serve as an early detection mechanism. But the comprehensive study of the Eyjafjallajökull eruption, with “all of the data in one pot,” Oddsson says, will give scientists an extraordinary opportunity to improve their understanding of how volcanoes work and apply it to other sites.

LUCAS LAURSEN

Scientists from the National Institute of Geophysics and Volcanology study gases emitted from Iceland's 2010 eruption.

## The Good News

- Eleven African nations are joining together in an attempt to **fight the creeping expansion of the Sahara desert**. Their plan—to slow desertification by planting a 9-mile-wide, 4,500-mile-long band of trees—has received \$119 million in funding.
- The flooding of hurricanes Katrina and Rita had an upside: It brought cleaner sediment into New Orleans, with noticeable health benefits. Scientists at Tulane report that local children now show **lower blood-stream lead levels**.
- New road surfaces could reduce vehicle pollution. Researchers in the Netherlands found that **air-purifying paving stones** reduce outdoor nitrogen oxide pollution by 25 to 45 percent.

## The Bad News

- Justice is skin-deep. In a jury-simulation study at Cornell University, unattractive defendants were **more likely to be convicted** and received sentences 22 months longer than good-looking ones.
- Frequent coffee drinkers are **no more alert after a dose of caffeine** than non-drinkers given a placebo, according to a study from Bristol University in the U.K. Tolerance may blunt the effect of your morning joe.
- The original pendulum Léon Foucault used to show the Earth's rotation was **irreparably dented** when its cable snapped at a Paris museum.