G8 leaders make progress towards Kyoto successor

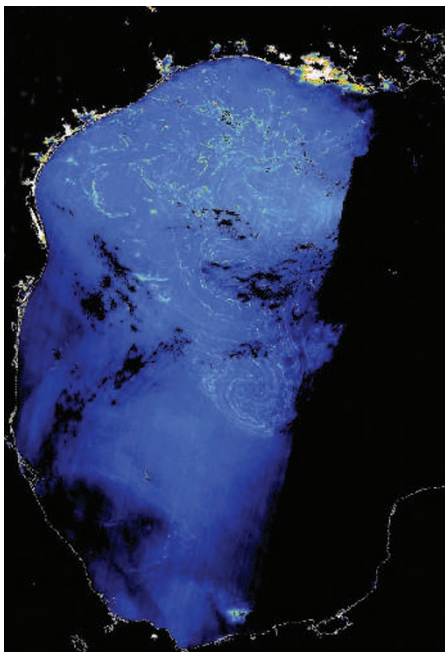
A climate agreement reached by world leaders at last week's G8 summit in Germany has "re-energized" the process to find a successor to the Kyoto treaty, says Yvo de Boer, executive secretary of the United Nations body that oversees the Kyoto protocol. De Boer, who will lead the negotiations in Bali in December, says that the deal sends "an important signal to developing countries" ahead of the climate-change summit.

G8 leaders, including US President George W. Bush, have agreed to "consider seriously" the decision made by the European Union, Canada and Japan to at least halve global emissions by 2050. Although some environmental groups have criticized the agreement's lack of hard targets, the G8 communiqué notes it is "vital" that major emitters agree to a detailed global framework by 2009 (see http://tinyurl.com/28xyta). This, says de Boer, raises the likelihood that a follow-on agreement for Kyoto will be in place before the current treaty expires in 2012.

Satellite detects invasive seaweed's fluorescence

Sargassum, a dense floating brown seaweed famous for entangling ships in the Sargasso Sea, has been detected from space for the first time, thanks to the European Space Agency's Envisat. The satellite's Medium Resolution Imaging Spectrometer (MERIS) detects fluorescence emission from chlorophyll, and is unique among ocean-observing satellites in being able to pick up emissions at 709 nanometres. This allowed scientists at the Institute of Ocean Sciences in British Columbia, Canada, and the University of South Florida in Tampa to detect lines of the seaweed in the Gulf of Mexico. Being able to measure sargassum from space should improve estimates of ocean primary productivity; the alga has spread as an invasive species to many spots around the world.

ESA



Sargassum in the Gulf of Mexico, seen from space.

Kamchatkan mudslide wipes out study sites

I. SHPILENOK

A massive mudslide on 3 June in the Valley of Geysers, on the Kamchatka Peninsula in the far east of Russia, has loosed an estimated 4.5 million cubic metres of rock, gravel, snow and ice onto the World Heritage site.

Scientists have been sent to investigate the extent of the damage. Juergen Wiegel, a microbiologist at the US University of Georgia in Athens, who has previously worked in the region, says the slide will "definitely" affect future research into unique extremophiles living in the vents. The loss "is very sad", he says.

Botanists worry for rare plants in the valley, and wildlife officials are concerned about salmon — an important food source for other animals in the region. Geologists add that mud caps over the geysers could cause explosions.

Transit of Earth-like planet eludes astronomers

Astronomers who had been anxiously keeping an eye on the dwarf star Gliese 581, in hopes of observing an Earth-like planet pass in front of it, have been met with disappointment so far. The star's light, as viewed by the Canadian Space Agency's MOST space satellite, has been remarkably constant — meaning the recently spotted planet 581c has not passed between the star and Earth. Data collected from such a pass would have allowed a precise determination of the planet's size and composition.

Astronomers have not yet had time to check whether another planet, 581d, passes between the star and Earth, but say the odds for this are very slim. Some say that 581d, which is cooler than 581c, may have more promising conditions for the possible formation of complex life in that system.

US House votes to free up federal stem-cell funding

The US House of Representatives voted on 7 June to loosen restrictions on federal stem-cell funding. The bill, passed by the Senate in April (see *Nature* **446**, 842; 2007), allows US funding for research on stem cells derived from left-over embryos at fertility clinics. But President Bush quickly made clear he would again veto the measure, which he first quashed last July (see *Nature* **442**, 335; 2006).

Speaking at the G8 summit in Germany, Bush highlighted research published last week showing that adult mouse cells can be reprogrammed to an early embryonic state without the need for eggs or embryos (see *Nature* **447**, 618–19; 2007). "These reports give us added hope that we may one day enjoy the potential benefits of embryonic stem cells without destroying human life," he said. The Senate may succeed in mustering the two-thirds majority needed to override a veto; its vote in April was 63–34, with three absentees. At 247–176, the House remains dozens of votes short of a veto-proof majority.

EU ministers fail to agree on Galileo rescue plan

Galileo, the EU's proposed satellite navigation rival to the US's global positioning system, has an uncertain future. The partnership set up between the public sector and European aerospace companies to develop the project was pronounced dead at a meeting of EU transport ministers in Luxembourg last Friday.

Progress had stalled mainly because the companies couldn't agree on the sharing of costs. The ministers said they would come up with a new funding plan by this autumn, in which the EU or governments may end up picking up the €2.4-billion (US$3.6-billion) bill for completing the 30-satellite system.

Correction

The News Feature 'Seeking absolute security' (*Nature* **447,** 372–373; 2007) incorrectly stated that Hoi-Kwong Lo and his colleagues hacked into a quantum-cryptographic system that did not use the standard BB84 protocol for quantum security. In fact, the system did use BB84.