

SEVEN DAYS

The news in brief

RESEARCH

Jason's quest ends

NASA last week decommissioned the long-running ocean-observation satellite Jason-1, following a terminal system failure. The successful mission had exceeded its nominal lifetime by more than six years. Equipped with instruments that measured tiny changes in sea-level heights, the satellite has orbited Earth more than 53,500 times since its 2001 launch. French and US ground stations lost contact with Jason-1 on 21 June, and subsequent attempts to repair its last remaining transmitter proved unsuccessful. A technically advanced successor mission, Jason-2, has been in orbit since 2008; Jason-3 is scheduled for launch in 2015.

Polio vaccines

Countries in and near the Horn of Africa, including Ethiopia and Yemen, have launched emergency polio-immunization campaigns in response to an ongoing outbreak. The outbreak, traced to viruses from northern Nigeria, is centred in the Banaadir region of Somalia, which includes Mogadishu. Officials from the World Health Organization have recorded 48 cases of polio in Somalia and Kenya since April.

Record warming

More nations reported new record temperatures in the 2000s than in any other decade since modern records began in 1850, according to the World Meteorological Organization (WMO). A report released by the organization on 3 July also shows that the decade had the highest land and sea temperatures in both hemispheres — with the

combined average estimated to be 14.47 °C, which is 0.21 °C above the 1991–2000 average. This rate of warming is “unprecedented”, says WMO secretary-general Michel Jarraud.

MERS preparations

The World Health Organization (WHO) announced on 5 July plans to convene an emergency committee to consult on the MERS coronavirus. So far, 80 MERS cases have been recorded, with 44 deaths. Although the disease pattern remains stable, the WHO created the panel preemptively to guide the agency should conditions worsen or a major outbreak occur. The committee will discuss

by teleconference this week whether MERS should be considered a public-health emergency of global concern, requiring international action.

EVENTS

Pluto moons named

Pluto's smallest known moons have been dubbed Kerberos and Styx, the International Astronomical Union announced on 2 July. The names were included in a public Internet vote, but were ultimately chosen over the winner of most votes: Vulcan, suggested by actor William Shatner of the *Star Trek* television series (see *Nature* 496, 407; 2013). In classical mythology, the god Pluto ruled the underworld,

which was guarded by the three-headed dog Kerberos and bordered by the river Styx. The Hubble Space Telescope identified Kerberos, formerly named P4, in 2011 and Styx, formerly P5, in 2012.

Power pullout

In a row over management issues, the DESERTEC foundation on 1 July announced its withdrawal from an industry consortium behind a planned network of solar power plants in North Africa and the Middle East. Backers of the €400-billion (US\$517-billion) project, which include European utilities and banks, have said that the Sahara Desert facilities could generate some 125 gigawatts of power for



JEAN REVILLARD/REZO.CH/SOLAR IMPULSE

Solar plane completes coast to coast

The first aeroplane to fly day and night powered only by solar energy landed in New York city on 6 July after completing its 5,650-kilometre journey across the United States. The *Solar Impulse HB-SIA* (pictured on an April test flight) took off on 3 May from Moffett Field in Mountain View, California, and stopped at four cities along the way (see go.nature.com/bfmrwe).

André Borschberg, chief executive and co-founder of Swiss non-profit company Solar Impulse, co-piloted the plane with Bertrand Piccard, one of the first people to fly a balloon non-stop around the world. The aircraft has 12,000 photovoltaic cells on its surface, and stores energy in batteries weighing 400 kilograms — more than 25% of the plane's weight.

XINHUA/PHOTOSHOT

local use or delivery to Europe by 2050. In the past year, other major backers have also quit the project. See go.nature.com/aedvox for more.

Pyramid destroyed

A property developer in Peru was charged last week with destroying cultural heritage, after workers razed a 4,000-year-old pyramid at El Paraíso, one of the oldest archaeological sites in the greater Lima area. On 29 June, workers tore down the 6-metre-tall pyramid with heavy machinery, according to Peru's Ministry of Culture. Police stopped the workers from bulldozing three similar structures at the 50-hectare National Cultural Heritage site. El Paraíso represents a culture that preceded the rise of the Incan Empire by thousands of years. See go.nature.com/hyh9hi for more.

Russian crash

A Russian rocket crashed (pictured) in Kazakhstan on 1 July, seconds after launching from the Baikonur Cosmodrome. The Proton-M rocket had no crew, but was carrying satellites that were slated to become part of Russia's GLONASS navigation system, an alternative to the US Global Positioning System. On the same day, India successfully launched the first of seven satellites that



will form its own space-based navigation system, planned for completion by 2016.

POLICY

Stem-cell patents

Patents covering the derivation of human embryonic stem cells were challenged by consumer advocacy groups and scientists on 2 July. Consumer Watchdog and the Public Patent Foundation filed a brief with the US Court of Appeals for the Federal Circuit, renewing their unsuccessful 2006 challenge to patents held by the Wisconsin Alumni Research Foundation. The new challenge cites a recent US Supreme Court decision, which ruled that unmodified genes cannot be patented because they occur naturally.

Carbon market lift

The European Parliament has approved a plan intended to temporarily raise prices for carbon-emissions permits

in Europe's carbon-trading market. The 3 July vote would withhold the release of some permits to emit carbon dioxide, which have flooded the market since the recession. Politicians hope the shortage will boost prices and spur investment in low-carbon energy. The plan must still be approved by ministers of the European Union's member states. See go.nature.com/zctzc for more.

Routine genomics

The UK government has set up an organization to bring genome sequencing into routine health care, health secretary Jeremy Hunt said on 5 July. Genomics England, which is owned by the Department of Health, will arrange sequencing and analysis of genomes, initially focusing on those of people with lung and paediatric cancers, rare diseases or infections. The effort follows the announcement last December that the government would commit £100 million (US\$150 million) to sequence the genomes of up to 100,000 patients over the next five years.

Stem-cell questions

A controversial stem-cell therapy slated for a €3-million (US\$3.9-million) government-sponsored clinical trial in Italy seems to be founded on flawed data. Key micrographs in a

COMING UP

13–18 JULY

Researchers meet in Boston, Massachusetts, for the Alzheimer's Association International Conference. Topics will include risk factors for dementia and animal models of Alzheimer's disease.

go.nature.com/hjybb

14–17 JULY

The Optical Society hosts four meetings on advanced photonics in Rio Grande, Puerto Rico, to discuss subjects such as optical sensors and photonic networks and devices.

go.nature.com/h3lsip

2010 patent application, upon which the method is said to be based, seem to have been taken from papers published years earlier in Ukrainian and Russian journals. When *Nature* went to press, the Italian government had not yet said whether the trial would proceed. See go.nature.com/ne7vqr and page 125 for more.

FUNDING

High-energy moves

France, Germany and the United Kingdom last week agreed to provide the majority of the funding for the Laue-Langevin Institute (ILL) neutron source in Grenoble, France, for the next decade. Around 75% of the institute's funding comes from the three founding nations. Last week also saw the announcement that the ILL's current director-general, Andrew Harrison, will be the new chief executive of the Diamond Light Source national synchrotron in Harwell, UK, from 1 January. The next director-general of the ILL has yet to be appointed.

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TREND WATCH

Last month, the Pan-STARRS-1 telescope on Maui, Hawaii, spotted asteroid 2013 MZ5 — the 10,000th asteroid or comet discovered within 200 million kilometres of Earth since 1898. Near-Earth object (NEO) discovery took off after NASA began its NEO observations programme in 1998, launching the Catalina Sky Survey. About 14% of all known NEOs are considered potential hazards — exceeding 110 metres across and coming within about 7.5 million kilometres of Earth.

KNOWN NEAR-EARTH OBJECTS PASS 10,000 MARK

Observation programmes are finding more and more asteroids and comets, but most are too small or far away to pose much danger.

