

## Space scientists support satellites as aid for Afghanistan

**Paris** After more than three decades of war and economic strife, the Afghan people can use all the help they can get. Satellite-based education, telemedicine and remote sensing would be a cost-effective way for Western nations to provide support, according to a study from the International Academy of Astronautics.

For an estimated \$750,000, the United Nations or other organizations could set up pilot projects such as two-way video connections between doctors in Kabul and rural health centres. There is currently only one doctor for every 50,000 people in Afghanistan, and the medical charity Médecins Sans Frontières recently pulled out of the country owing to safety concerns.

For about the same amount of money, Afghanistan could use satellites to beam lessons to rural schools, say study leaders François Becker, dean emeritus of the International Space University in Strasbourg, France, and Krishnaswamy Kasturirangan, a member of India's parliament and former head of that country's space agency. Images from remote-sensing satellites could also prove invaluable for planning the new roads and other infrastructure that Afghanistan needs, they add.

♦ [www.iaonet.org/p\\_papers/spaceforpeace.pdf](http://www.iaonet.org/p_papers/spaceforpeace.pdf)

## Remote Indian doctors give healthy boost to Pakistan

**New Delhi** As scientists advocate the use of satellites to help developing nations such as Afghanistan, a similar project has been established in India and Pakistan.

On 28 September, a telemedicine link was established between a state-run medical imaging centre in Lahore, Pakistan, and the private Indraprastha Apollo Hospital

in New Delhi, India. The link will give doctors in Pakistan access to expert medical advice in real time, and the Indian hospital has promised to provide the first 100 teleconsultations free of charge.



Flood of objections: environmentalists want to drain Yosemite's Hetch Hetchy reservoir.

## Yosemite dam targeted in valley drainage plan

**San Diego** An environmental report has added fresh impetus to a campaign to drain a reservoir in Yosemite National Park, California, restoring a canyon flooded by water 90 metres deep to its former glory.

The non-profit campaign group Environmental Defense, based in New York, released a report on 27 September showing how the water in the 80-year-old Hetch Hetchy reservoir could be stored elsewhere without detrimentally affecting San Francisco's water supply. Three other reservoirs already in the Tuolumne River could take up the slack, they say, if supplemented with some new pipes connecting them to the city.

The cost of the programme is estimated at \$500 million to \$1.6 billion. Supporters suggest that this could be factored into the current \$3.6-billion plan to rework the Tuolumne River system. Officials have made no comment about the feasibility of the plan, but say the security of the city's water supply will be their top priority.

## Tree-ring study heats up climate-change debate

**Munich** Temperatures on Earth might have fluctuated more widely during the past 1,000 years than had been thought, according to a recent study. If so, the recent trend of global warming — particularly before 1980 — is less unusual than was previously thought.

The study questions researchers' use of tree rings and ice cores to construct a picture of past global temperatures. Hans von Storch, a climate modeller at the GKSS Research Centre in Geesthacht, Germany, and his colleagues tested this process by creating virtual tree-ring records from a computer model of Earth's past climate. They then used these records to reconstruct global climate. Surprisingly, the temperature fluctuations in the reconstruction were much smaller than those in the original model (A. von Storch *et al.* *Science* doi:10.1126/science.1096109; 2004). Von Storch says the result indicates that researchers might have underestimated the size of past temperature fluctuations by a factor of two or more.

"This is the first critical look I have seen into possible limitations of this widely used methodology," says Chris Forest, a climate researcher at the Massachusetts Institute of Technology. Von Storch's finding doesn't alter the fact that human emissions of carbon dioxide are warming the planet, he says. But, he adds, if the analysis stands up, it will challenge our understanding of how natural climate swings have affected temperature changes.

## SpaceShipOne hits the heights to win X prize

**San Diego** The privately built SpaceShipOne scooped the US\$10-million Ansari X prize for manned, commercial space flight on Monday when it punched into suborbital space for the second time in five days.

The craft, designed by Burt Rutan and his team at Scaled Composites and backed by Microsoft co-founder Paul Allen, reached an altitude of more than 100 kilometres over the Mojave Desert, after being released from a booster plane at about 14 kilometres.

Supporters of the prize hope the flight will pave the way for an era of affordable space travel. But many experts question whether space tourism can really take off before companies have overcome the much tougher hurdle of achieving orbit.

♦ [www.nature.com/news/specials/xprize](http://www.nature.com/news/specials/xprize)

## Mentors award

*Nature* and the UK National Endowment for Science, Technology and the Arts are launching a new award for creative mentorship in science. See page 28 in this week's *Naturejobs* and [www.nature.com/nature/nestaaward](http://www.nature.com/nature/nestaaward)

## Program crosses web to fill in puzzling words

**Munich** Italian scientists have developed a computer program that they claim can solve crossword puzzles in any language by using the Internet search engine Google to find answers on the web.

Marco Gori and his colleague Marco Ernandes of the University of Siena say the program should be ready for use by the research community by the end of the year. "The idea is not to spoil the enjoyment of players," says Gori — this quixotic use of the program has simply helped them to explore an area of artificial intelligence.

Gori thinks the program will be useful to those who are trying to develop intelligent ways of searching for information online or of scheduling complex interlinked events, for example.

