

## CLIMATE CHANGE

## Tropical storms not intensifying

The potential intensity of tropical cyclones has not increased in recent decades, contrary to expectations in a warming world.

James Kossin of the US National Climatic Data Center in North Carolina assessed past storm intensity by analysing 30 years of cloud-top temperature data from satellite imagery of tropical cyclones. This removed uncertainties found in other atmospheric analysis techniques. He did not find an increase worldwide in the average potential intensity of storms, even though a warmer climate is thought to support stronger cyclones.

The lack of a trend is largely due to the poleward migration of tropical cyclones into climates that are less able to fuel intense storms than the tropics, Kossin says.

*Bull. Am. Meteorol. Soc.*  
<http://doi.org/ww3> (2014)

## ASTRONOMY

## Amateurs spot unusual exoplanet

Citizen scientists have found an exoplanet that was overlooked in previous analyses of data from NASA's Kepler satellite.

The planet, about 700 parsecs away, is roughly four times as massive as Earth, according to Joseph Schmitt of Yale University in New Haven, Connecticut, and his colleagues — including three users of the Planet Hunters website, which crowdsources analysis of Kepler data. The planet, named PH3 c, also has a low density, suggesting a substantial atmosphere of hydrogen and helium gas.

The volunteers spotted dips in the brightness of the planet's host star as the planet moved in front of it every 66 days. The gravitational pull of other

planets caused the timing of these transits to vary by 10 hours, allowing the planet to elude Kepler's automated search. The planet is the third confirmed find by the Planet Hunters community.

*Astrophys. J.* 795, 167 (2014)

## NANOTECHNOLOGY

## Nanocoils make batteries stretchy

Coils of carbon nanotubes can be used to make lightweight, stretchable batteries.

Huisheng Peng and his team at Fudan University in Shanghai, China, twisted together several nanotube fibres and found that they had high electrical conductivity, even when stretched up to three times their initial length.

The team incorporated lithium-based nanoparticles into the springy fibres to make a lithium-ion battery, which also performed stably after being stretched. The device is smaller and lighter than batteries that are built on elastic substrates, and can store more charge than such stretchy batteries of similar weight.

The device could be used in 'smart' clothing and other applications, the authors say. *Angew. Chem. Int. Ed.* <http://doi.org/f2vxwm> (2014)

## COGNITIVE NEUROSCIENCE

## Ghostly feelings from brain mix-up

Sensations of a non-existent person nearby might arise from the brain's failure to integrate different body signals.

Olaf Blanke of the Swiss Federal Institute of Technology in Lausanne and his colleagues found that people who reported these feelings often had injuries in the frontoparietal cortex, which integrates different types of sensory and motor information.

The team recreated this effect in healthy volunteers who

## SOCIAL SELECTION

Popular articles  
on social media

## The benefits of being a big name

Scientists develop reputations that often work to their advantage. A study suggests that the presence of a well-known scientist on a list of authors can drive citations of the paper, regardless of the merits of the research — especially soon after its publication. The report rapidly started an online discussion. "How scientists too can be famous for being famous," tweeted Ed Rybicki, a virologist at the University of Cape Town in South Africa. Naupaka Zimmerman, a microbial ecologist at the University of Arizona in Tucson, took to Twitter to ask: "Do we cite papers b/c of what they say, or b/c of who wrote them?"

*Proc. Natl Acad. Sci. USA* 111, 15316–15321 (2014)



Based on data from altmetric.com. Altmetric is supported by Macmillan Science and Education, which owns Nature Publishing Group.

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were asked to move a robot in front of them using their finger. A second robot behind them mimicked the movements by touching their back. The participants were blindfolded and wore headphones so that they could not see or hear the robots moving.

When the rear robot moved immediately, most participants felt that they were touching themselves on the back with their own finger, even though their arms were stretched forward. But when there was a half-second delay, they felt that the touch was coming from someone, or something, else. The illusions were caused by a mismatch between the expected and actual sensory information, the authors say. *Curr. Biol.* <http://doi.org/wzb> (2014)

## AGRICULTURE

## Pasture plants are also weeds

Land used for pasture is at risk of becoming a breeding ground for weeds that invade natural areas.

Roughly 30% of land worldwide is devoted to growing forage plants for livestock, and as demand for meat rises, farmers are moving towards more-productive and hardier plants. Don Driscoll at the Australian National University in Canberra and his colleagues looked at data on pasture species promoted by 17 agribusinesses and government agriculture agencies on six continents, and found that 91% of the plants were classified as potentially invasive weeds — often in the same country in which they were developed and marketed. Only one of the 17 institutions had a formal process for identifying possible weeds.

The researchers suggest solutions for this problem, including making the organization that promotes the pasture species financially liable for controlling it if it becomes invasive.

*Proc. Natl Acad. Sci. USA* <http://doi.org/wxq> (2014)

For a video on the research, see [go.nature.com/gqxoed](http://go.nature.com/gqxoed)

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