

News in brief

PUBLISHERS UNITE TO TACKLE DOCTORED IMAGES

Some of the world's largest publishers have come together to tackle the growing problem of image manipulation in scientific papers. They have developed a three-tier classification system that editors can use to flag suspicious content, and detailed instructions on how to deal with doctored images.

A working group of representatives from eight publishers, including Elsevier, JAMA, Wiley and Springer Nature, as well as industry group STM, based in The Hague, the Netherlands, has created the guide, which was published on preprint server OSF on 9 September (J. van Rossum *et al.* Preprint at <https://osf.io/xp58v>; 2021). The publishers say that it should be used as part of a screening process before publication, or to address issues raised about published articles. (*Nature*'s news team is independent of its publisher, Springer Nature.)

The guide lists three categories of manipulation, ranging from level one – in which images have been “beautified” in a way that does not affect a paper's conclusions – to level three, which includes “severe image manipulation, with unequivocal evidence of obfuscation or fabrication”. Each level has a list of examples and actions for editors to take.

Image-integrity specialists welcome the guidelines, but say they are overdue. “They will not prevent science misconduct, but they provide stronger scrutiny both at the submission stage, as well as after publication,” says Elisabeth Bik, a research-integrity consultant based in California.



CLIMATE TO LOOM LARGE IN GERMAN COALITION TALKS

Climate and energy policies are expected to be a key discussion point in negotiations over which parties will form Germany's next government, after a much-anticipated federal election on 26 September.

The centre-left Social Democrats, junior partner in the current coalition government, narrowly won the election ahead of outgoing Chancellor Angela Merkel's centre-right Christian Democrats.

The two parties are unlikely to continue their coalition, and a new government, whoever leads it, could include the Green Party (co-leader Annalena Baerbock, pictured) and the liberal Free Democrats, who won 14.8% and 11.5% of the votes, respectively. It could take weeks of discussions before a coalition is formed.

Climate change was a key issue in this election, and the new government will need to lay out a plan to achieve the country's climate goals – a 65% reduction in greenhouse-gas emissions relative to 1990 levels by 2030, and becoming carbon neutral by 2045.

Analysts expect the Greens to claim ministerial responsibility for environment and transport – key ministries for climate policies – whereas the liberals could claim the ministry of the economy. It is too early to tell which party might get the science ministry, and what is in store for researchers.

ARCTIC SEA ICE HITS 2021 MINIMUM

Arctic sea ice passed its minimum extent for this year – 4.72 million square kilometres – on 16 September, the US National Snow and Ice Data Center (NSIDC) has reported.

Owing to a cool and cloudy Arctic summer, this year's annual minimum was the highest since 2014: ice covered nearly 1 million square kilometres more than last year's extent of 3.82 million square kilometres, which was the second-lowest ever observed (see 'Ice cover'). But it is still the twelfth-lowest sea-ice extent in nearly 43 years of satellite recordings, and scientists say that the long-term trend is towards lower ice cover.

“Including this year, the last 15 years have had the 15 lowest minimum Arctic extents on record,” says Walt Meier, a senior research scientist at the NSIDC, who is based at the University of Colorado Boulder. The lowest minimum extent on record was set in 2012, after a very strong storm sped up the loss of thin ice

that was already on the verge of melting.

In June and July this year, weak low pressure in the central Arctic prevented warmer, southern winds from being drawn into the area. This kept the air cold and stopped some of the ice from melting. Low pressure also causes the formation of clouds, which block sunlight. This can slow melting further. In August, the low-pressure system shifted to the north of Alaska's Beaufort and Chukchi seas, producing air temperatures that were 2–3 °C lower than average.

A transient increase in sea ice might create better conditions for species that use the ice to hunt, says Steven Amstrup, chief scientist of Polar Bears International in Bozeman, Montana. “But it's that downward trend of ice, caused by an increasing frequency of bad ice years, that determines the ultimate fate of polar bears and other sea-ice-dependent wildlife.”

ICE COVER

Minimum Arctic sea-ice extent is shrinking by around 13% per decade.

— 2021 — 2012 — Past 10 years — 1981–2010 median

