Dear MCCIP news subscriber,

The MCCIP website has recently been updated with new marine climate change news and events. Below is a brief summary of the new items that have been added. For more details on all of the items listed below, simply go to www.mccip.org.uk and go to the relevant links in the ‘news and events’ box on our homepage. Please note that the material presented in MCCIP news does not necessarily reflect the views of MCCIP.

- **Ocean's oxygen starts running low**
  Climate change is doing more than warming the world’s oceans. It’s also making it harder for marine life to breathe. Curtis Deutsch, from the University of Washington’s School of Oceanography, studies how increasing global temperatures are altering the levels of dissolved oxygen in the world’s oceans. Scientists have been warning that decreasing amounts of available oxygen will increase stress on a range of species, even as they also face the effects of rising temperatures and ocean acidification.

- **Ancient marine sediments provide clues to future climate change**
  Atmospheric carbon dioxide concentration was the major driver behind the global climatic shifts that occurred between 53 and 34 million years ago, according to new research led by the University of Southampton. The study, which has been published in *Nature*, is the first to resolve the relationship between carbon dioxide and climate during the period known as the ‘Eocene epoch’ when global temperatures were around 14 degrees warmer than today. This is an important step in understanding ancient climate and thus helping scientists better predict future climate change.

- **World governments vow to end fossil fuel era at UN climate signing ceremony**
  More than 170 governments declared an end to the fossil fuel era on Friday, using the signing ceremony for the landmark Paris agreement as an occasion to renew
their vows to fight climate change. The outpouring of support – the largest ever single-day turn-out for a signing ceremony – underscored strong international commitment to deliver on the promises made in Paris last December to avoid a climate catastrophe, the leaders said.

- **Face-to-face with Great Barrier Reef’s worst coral bleaching**
  This year’s bleaching of the Great Barrier Reef has been linked to the strongest El Niño event on record and climate change, both of which are driving up ocean temperatures in Australia. One of the impacts of El Niño in Australia is a weaker monsoon, which puts more heat stress on the corals. The baseline of sea temperature is going up decade by decade due to global warming. When an El Niño event comes along, it adds an extra spike to that rising baseline.

- **New tool puts a consistent value on experts’ uncertainty on climate change models**
  For the first time in the climate field, a Princeton University researcher and collaborators have combined two techniques long used in fields where uncertainty is coupled with a crucial need for accurate risk-assessment -- such as nuclear energy -- in order to bridge the gap between projections of Earth’s future climate and the need to prepare for it. Reported in the journal *Nature Climate Change*, the resulting method consolidates climate models and the range of opinions that leading scientists have about them into a single, consistent set of probabilities for future sea-level rise.

**News stories:** If there are any relevant news items or events that you would like to highlight on the MCCIP website please contact Susana Lincoln at office@mccip.org.uk. New items will be added to the website next month.

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