Dear MCCIP news subscriber,

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.

**PRODUCTS**

- **The economics of climate resilience**

  DEFRA’s Economics of Climate Resilience project has developed an economic framework to assess the case for adaptation in the UK. The project reports can help businesses, other organisations, communities and individuals to identify the key obstacles they face in adapting to the threat of climate change and suggest ways these can be overcome. There is also a set of recommendations for government.

- **New editions of climate risk assessment tools**

  The Adaptation Wizard and BACLIAT are the first of a suite of resources which will be made available from the EA (Environmental Agency) Climate Ready later this year.

  1) The Adaptation Wizard’s simple five step process makes it ideal for organisations just starting to think about the impacts of the weather and our changing climate. The Adaptation Wizard helps assess the risks and opportunities and monitor the effectiveness of the actions taken.

  2) BACLIAT (Business Areas Climate Impacts Assessment Tool) helps organisations complete step three of the Adaptation Wizard. Although it was originally designed for businesses, BACLIAT has been refreshed so that it can be used by other organisations to understand how changes in the climate could affect the delivery of their services.

- **A brief summary of marine geo-engineering techniques published**

  Prepared to support discussions about amending the London Convention to regulate marine geo-engineering, this document summarises suggested marine geo-engineering techniques and directs the reader to further literature covering
their impacts.

NEWS

- **Man-made climate causes extreme weather conditions**

  Petoukhov’s recent scientific article explains a phenomenon that is causing an increased number of weather extremes. The researchers suggest that greenhouse gases in the atmosphere, apparent as a result of human activities, are disturbing natural patterns of mid-latitude airflow, causing extreme events. Publication: Petoukhov, V. Et al. (2013) Quasiresonant amplification of planetary waves and recent Northern Hemisphere weather extremes. *PNAS March 1, 2013*, doi: 10.1073/pnas.1222000110.

- **Another large rise in CO2 emissions sounds climate change alarm**

  Carbon dioxide levels measured at Mauna Loa observatory, in Hawaii, jumped by 2.67 parts per million (ppm) in 2012 to 395ppm, said Pieter Tans, who leads the greenhouse gas measurement team for the US National Oceanic and Atmospheric Administration (NOAA). The standing record is an increase of 2.93ppm in 1998.

- **Medium-sized waves can break wind turbines**

  Medium-sized waves, occurring in even small storms, can break offshore wind turbines like matches. Professor John Grue, from the Department of Mathematics at the University of Oslo, discovered an inexplicable wave phenomenon called ringing, which is a special type of vibration that occurs when choppy waves hit marine installations. Ringing does not harm wind turbines alone. It is already a big problem for the oil industry. The designers of one oil platform did not take ringing into account, and lost US$ 2.1 bn.

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

**Georgia Bayliss-Brown** BSc (Hons) MSc
MCCIP Secretariat
The Centre for Environment, Fisheries and Aquaculture Science
Pakefield Road, Lowestoft, Suffolk, NR33 0HT, UK
Tel: +44(0)1502 524340 - Email: georgia.bayliss-brown@cefas.co.uk