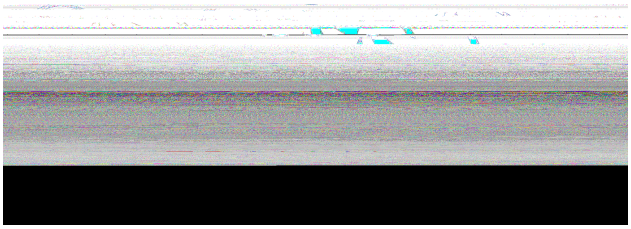
Press Release



02/2014 | Please note: This press release is under embargo until Jan. 2, 7 pm GMT

Methane Hydrates and Global Warming
Dissolution of hydrates off Svalbard caused by natural processes

Off the coast of Svalbard methane gas flares originating from gas hydrate deposits at depth of several hundred metres have been observed regularly. A new study conducted by an international team under the leadership of scientists from GEOMAR Helmholtz Centre for Ocean Research Kiel and MARUM - Center for Marine Environmental Sciences in Bremen shows, that the observed outgassing is most likely caused by natural processes and can not be attributed to global warming. The study has been recently published in the internationally renowned scientific journal .

Methane hydrates are fragile. At the sea floor the ice-like solid fuel composed of water and methane is only stable at high pressure and low temperature. In some areas, for instance in the North Atlantic off the coast of Svalbard, scientists have detected gas flares regularly. The reasons for their occurrence were still unclear but one hypothesis was that global warming might cause the dissolution of gas hydrates. Over the past years, comprehensive investigations by an international team of researchers led by scientists from GEOMAR Helmholtz Centre for Ocean Research Kiel have now shown that it is very likely that the gas flares are caused by natural processes.

“In 2008, when we observed the outgassing of methane for the first time, we were alarmed”,

Berndt, C., T. Feseker, T. Treude, S. Krastel, V. Liebetrau, H
Dünnbier, B. Ferré, C. Graves, F. Gross, K. Hissmann, V. Hühnerbach, S. Krause, K. Lieser, J. Schauer, and L. Steinle, 2014: Temporal constraints on hydrate-controlled methane seepage off Svalbard. Science, http://www.sciencemag.org/lookup/doi/10.1126/science.1246298

Links:
www.geomar.de GEOMAR Helmholtz Centre for Ocean Research Kiel
www.marum.de MARUM Centre for Environmental Sciences at the University of Bremen.

Images:
After the embargo is lifted, images are available for download at www.geomar.de/n1666

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