



THOR invited at UN conference COP18, Doha, Qatar, 29 Nov. 2012

The THOR project has presented its results at COP18 on invitation of the European Commission.

The 18th session of the Conference of the Parties to the UNFCCC and the 8th session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol opened on Monday, 26 November and continue until Friday, 7 December 2012 at the Qatar National Convention Centre in Doha, Qatar.

The United Nations climate change conference in Doha must start the hard work of turning last year's agreement to enhance global climate action into reality. The European Union wants an outcome that takes forward all elements of the package of decisions agreed in Durban towards a new global climate agreement by 2015.

For this purpose three selected projects dealing with Climate Change and financed by the Seventh Framework Programme were invited by the European Commission to take part to the conference and present their outstanding results. Among these, the project THOR "Thermohaline Overturning: At Risk?" which is coordinated by Prof. Detlef Quadfasel of the University of Hamburg.

At the European Commission event on "Global and Regional Impacts of Polar Warming", a senior scientist of the THOR partnership has illustrated the results of four years of researches: The THOR project explored the dynamics of the Atlantic circulation that, to a large extent, is responsible for Europe's moderate climate. A good knowledge of the state of the North Atlantic is a pre-requisite for reliable decadal climate forecasts.

In the last 4 years, the THOR project explored the dynamics of the Atlantic circulation and its impacts on the European climate. A good knowledge of the state of the circulation is a pre-requisite for reliable decadal climate forecasts. THOR's scientists employed ocean observations, reconstruction of paleodata, and climate models to define the present state of the Atlantic circulation, explore its natural variability and predict its future development. The circulation has been stable during the past decades, but it actually reacts to external drivers in just decades. With the tools developed THOR developed, scientists can take into account the different drivers influencing the future climate in the world (i.e. increased CO₂ emissions in the atmosphere, volcanism, changes in solar intensity etc.) and can feed these into the models to give much more accurate predictions of what will happen in the future.

There is actually a risk that something might happen to the Atlantic circulation, but we can be quite sure that its collapse of the thermohaline circulation isn't going to happen within the next ten years. Nevertheless, we need to continue the surveillance of the circulation, in order to develop an early

warning system and to allow the society to timely elaborate adaptation strategies.

The future does not look black, but we all have to be aware that human actions influence climate and prepare to take action.

With the participation to the COP18 event and the launching of a short documentary about its achievements <http://www.youtube.com/watch?v=ovlvtKSQy9Y>, the THOR project finalizes its activities today, 30 November 2012.

THOR scientists will continue their researches under a follow-up project, NACLIM www.naclim.eu, which has been launched on 1 November and will run until 31 January 2017.

About the other projects

Arctic Tipping Points (ATP) has come to an end in January 2012 <http://www.eu-atp.org/>. The project identified the elements of the Arctic marine ecosystem likely to show abrupt changes in response to climate change, and establishes the levels of the corresponding climate drivers inducing regime shift in those tipping elements.

ACCESS <http://www.access-eu.org/> is a European project supported within the Ocean of Tomorrow call. Its main objective is to assess climatic change impacts on marine transportation (including tourism), fisheries, marine mammals and the extraction of oil and gas in the Arctic Ocean