

Midterm Review NWO/KfC 4 October 2012

Project 'Bridging the gap between stakeholders and climate modellers: demand-driven adaptation assessment for uncertain changes in weather extremes'

Present

Reviewers: Professor Bert Holtslag and Professor Kristine Kern

PI: Professor Arthur C. Petersen (PBL/LSE/VU)

Postdocs: Dr Eleftheria Vasileiadou (postdoc VU)
Dr Erik Min (postdoc KNMI)

In their presentations the two reviewers made the following comments:

Bert Holtslag

1. Given the formulations of the original proposal, the present focus on maximum temperatures is rather limited. Can't the researchers look at e.g. the length of dry spells, which lead to shortage of water in the rivers?
2. It is not yet clear how society has really been impacted by the stakeholder workshop.

Kristine Kern

3. The interdisciplinary cooperation of the postdocs could have been made more clear in the midterm report (a matter of presentation).
4. To which recommendations to a policymaker will the project lead? It is expected that a targeted second workshop with a specific group of policymakers will help in this regard.

The PI and postdocs provided the following responses to these useful comments:

1. We had to limit ourselves in terms of indicators we could study. Since at the beginning of our project already much work was being done in other projects on precipitation and hardly any work was being done on extreme heat, we chose to focus on extreme heat. Also the sectors that we engaged in the first stakeholder workshop were very much interested in extreme heat.
Still, recently we had already begun looking at the Universal Thermal Climate Index (UTCI), a one-dimensional quantity that aims to reflect the human physiological reaction to the multi-dimensionally defined actual outdoor thermal environment (including variables such as temperature, humidity, radiation and wind speed). We will now continue with the analysis of time series of the UTCI and have planned to meet with Bert Holtslag to discuss our progress and plans in this regard.
2. The first workshop was more intended to validate the outcomes of our social-psychological study into the perspectives on weather extremes than to have a societal impact (that is more the aim of the second workshop in which adaptation options will be discussed). Another aim of the first workshop was to learn about interest in uncertainty information in climate predictions with respect to extremes. It turned out that the interest in adequately communicating on uncertainty in short-term weather predictions (and warnings) was greater than in uncertainty in long-term climate predictions of changes in the weather.
3. We explained that even though the activities of the two subprojects (the social science subproject and the natural science subproject) were listed separately in the midterm report, a significant amount of work has been done by the two postdocs working together. And several of the resulting publications have coauthorship from both 'sides'. Also in the final stage of the project, this collaboration will continue. In fact, the social science postdoc will perform statistical analyses on the UTCI at KNMI and the natural science postdoc will assess potential adaptation options at the VU.
4. The second stakeholder workshop will focus on the governance of adaptation to changes in weather extremes. We will follow the advice of the reviewer to focus on policymakers in a specific area on a specific theme. The second stakeholder workshop should lead to recommendations on climate-change adaptation options relevant to the policymakers involved.