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Visualization of climate change information - feedback from web page visitors

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Communicating climate change information to various audiences, ranging from the general public to stakeholders and decision makers, should be made in a compact and easily absorb-able way. Therefore visualization may play an important role in communication. This has become obvious in various climate change outreach activities in Finland. A few examples of these activities are given here. Firstly, a one-year exhibit ”Sunny Tomorrow?”, focusing on climate change, was launched in 2003; it belonged to an exhibition entitled “Open questions” that was particularly aimed at young people and their teachers and was organized by Heureka, the Finnish Science Centre. Secondly, since journalists have a key role in distributing relevant information on the scientific issues to the general public, two-day climate change educational courses for journalists have been annually organized by the Finnish Meteorological Institute (FMI) since 2006. Thirdly, to respond to the remarkably increased demand of climate change lectures in Finland during the EU’s Climate Change Awareness Campaign in 2006-2007, FMI enlisted a voluntary group of its meteorologists working e.g. in weather forecasting, and the group was trained for giving climate change lectures.

The material produced for the lecturers, as well as for the media courses and the exhibit in the Finnish Science Centre, contains maps that illustrate current climatic zones in Europe and their projected future shifts. Because an introduction to world climatic zones is included in the syllabus for geography in basic and secondary education in many countries, an assumption was made that such maps are easy to understand. However, if the maps are actually interpreted incorrectly, the attempt to strengthen people’s knowledge about regional impacts of climate change by this means is likely to fail.

In order to evaluate how the maps of shifting climatic zones in Europe are interpreted and understood, a website survey was conducted from the point of view of visualizing climate change information (Jylhä et al. 2010). The target group of the questionnaire consisted of visitors to the home page of the FMI, and the total number of responses received was about 400. The questions and statements in the survey dealt with the comprehensibility of the maps. The percentage of correct answers was 86% on average, ranging from 65 to 93% among the 13 checkbox questions. 81% of the respondents regarded the maps as an effective tool to visualize projections of climate change. The educational background of the respondents and their level of prior knowledge about climate change were clearly less influential than the process of answering, i.e. whether or not the respondent had utilized the maps when replying to the questions. The use of the charts notably helped the viewers to find the correct answers.

Based on survey, maps showing projected temporal evolutions of the climatic zones appeared to be an easily-comprehensible means for visualization of climate change information. Motivated by this feedback, the maps of migrating climatic zones in Europe have been updated and are presented elsewhere (Jokinen and Jylhä, 2011).

References

Jokinen, P. and Jylhä, K., 2011: Migration of climatic zones in Europe based on regional climate model simulations. Submitted as EGU2011 abstract 7568 to CL4.4.

Jylhä, K., Tuomenvirta, H., Ruosteenoja, K., Niemi-Hugaerts, H., Keisu, K. and Karhu, J., 2010: Observed and projected future shifts of climatic zones in Europe, and their use to visualize climate change information. Weather, Climate, and Society, 2, 148-167.