Storch, H.v.; Zwiers, F.:  
**Strategies to deliver information on regional climate changes to communities**  
In: Eos - Transactions (2012) AGU

DOI: 10.1029/2012EO230009
Recognizing that adaptation to both current and projected climate variability and change is best undertaken locally and regionally, a recent workshop was convened to analyze how regional climate services are delivered. Regional climate service organizations facilitate efficient adaptation by interacting with local and regional stakeholders. Regional and local contextualization of observed and projected climate change is an important issue in large federally organized countries like Canada and Germany (as opposed to centralized countries). Exchanging knowledge and knowledge needs on changing climate regimes takes place in societal context within which scientific knowledge is challenged by various interest-led knowledge claims about climate change and its societal significance.

Various approaches to this bundle of tasks were presented, with examples from mostly Canada and Germany, along with the United States and the Netherlands. Practical examples as well as media analyses were examined and discussed.

In Canada, relatively large regional climate service institutions cooperate on specific projects with various regional and local stakeholders, ranging from conglomerates of municipalities, park managers, and aboriginal communities to investors and industrial representatives. Examples of projects discussed at the meeting included strategies to mitigate the vulnerability of water resources to climate change in diverse drainage basins and support for adaptation planning for these changes in small interior British Columbia communities. In most cases the way in which information and climate mitigation strategies are delivered regionally is based on specific scientific questions that derive from practical management problems.

In Germany the work is generally focused on ad hoc dialogue between scientific institutions and scientific, economic, and political stakeholders. The dialogue includes social and cultural scientists who help to unravel the competitive coexistence of different knowledge claims. Presentations explained how regional climate services in Germany are provided by small "outlets" of larger research laboratories that integrate sectoral issues (such as coastal defense or agriculture) on regional scales. These small outlets use mostly the scientific knowledge available from their parent labs and report the public’s and stakeholders’ needs for actionable adaptation knowledge back to the parent labs.

Workshop participants engaged in detailed debates, often using examples from British Columbia as case studies, on specific issues such as how to balance stakeholder perspectives with scientific evidence, the role of regional climate service providers, how to best communicate regional climate science, and the role of mass media in the public’s perception of climate science. Other relevant elements involved practical issues, such as how best to divide labor between national and regional services and how to provide communities with regionalized and localized scenarios, projections, and assessments. Other mostly conceptual issues, which would benefit from a stronger engagement with the social and cultural sciences, relate to the dynamics and evolution of knowledge; its cultural conditioning; the role of knowledge gaps; demand and supply of knowledge; competition with other knowledge systems (such as philosophy, politics, or religion), including the ability to distinguish between accurate, inaccurate, and value judgment statements; and the role of communication and media.

—HANS VON STORCH, Helmholtz-Zentrum Geesthacht Centre for Materials and Coastal Research, Geesthacht, Germany; E-mail: hvonstorch@web.de; and FRANCIS ZWIERS, University of Victoria, Victoria, British Columbia, Canada