EMS Annual Meeting Abstracts
Vol. 15, EMS2018-87, 2018

Translating the Dutch KNMI'14 scenarios into impacts in the Climate Adaptation Atlas

Janette Bessembinder (1), Arjen Koekoek (2), and Hasse Goosen (2)

(1) KNMI, WKD (Weather and Climate Services), De Bilt, Netherlands (janette.bessembinder@knmi.nl), (2) Stichting Climate Adaptation Services, Bussum, Netherlands

After the publication of the KNMI'06 climate scenarios in 2006 it became clear that translation of these scenarios into impacts is needed to make people understand what climate change means. For this more detailed climate data, time series and contact with impact researchers is needed. During the Dutch research programmes Climate Changes spatial Planning (CCsP) and Knowledge for Climate (KfC) climate and impact researchers worked together and the first Climate Adaptation Atlas (CAA; available via klimaateffectatlas.nl) was developed for which these climate time series were used. During the development of the KNMI'14 climate scenarios, from the start also the development of climate datasets for the future were taken into account in order to make impact research easier. The CAA was initiated around 2008 by the Dutch provinces that articulated a need for spatial information about climate change impacts and vulnerabilities. It is an open-access collection of interactive maps showing current and future climatic risks related to coastal flooding, pluvial flooding, drought and heat in the Netherlands. In addition to climate-related maps, the atlas shows other spatially relevant information, like sensitive functions e.g. nature reserves, the proportion of elderly people and such. The helpdesk facility enables users to ask questions, make comments or request GIS data layers). The CAA project organised a close collaboration between stakeholders from the various Dutch provinces and researchers active within the CCsP and KfC research programmes. The development of the Atlas started with a series of interviews with end users. It became clear that the specification of information requirements was not straightforward. Considerable time and financial resources (half of the budget was allocated to stakeholder interactions) were invested in better understanding the underlying questions of the users. The CAA now discloses a wide range of climate information from over 10 knowledge institutes. Both the knowledge providers and the end users learnt that defining the right set of impacts, indicators and scenarios needed to be done together. This interaction also is needed to find a balance between what can be provided by the knowledge institutes and what is required by the users. The level of certainty and detail to be provided in the atlas was discussed in many user sessions. The aims were to find a balance between providing complete and detailed data, and an easy-to-use, accessible atlas.