



Recent climate modelling activities at Meteorological and Hydrological Service of Croatia

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Regional climate modelling has become a common way to study possible future climate conditions. Despite of high demands for human and technical resources, today many climate simulations are available that provide various possible answers on the future state of our climate. The future climate change will be different at different time scales as well as at different places of the Earth. Our responsibility is to do our best to mitigate climate changes as well as to adapt measures in order to avoid their negative consequences.

During 2016-2017, regional climate modelling activity in Croatia has been performed within the Ministry of Environment and Energy project "Climate Change Adaptation and Development of the Draft Strategy for Climate Change Adaptation". Simulations at 50-km and 12.5-km horizontal resolution over the EURO-CORDEX domain were carried out by the ICTP regional climate model RegCM4. They cover the period 1971-2070, and include ensembles of simulations forced by the four CMIP5 GCMs and the two RCP scenarios. We present some of the results of these simulations.

The modelling results were input for studies in different sectors of economy, like agriculture, hydrology, natural ecosystems and biodiversity, fishery, tourism, health, civil protection and energy. The Action Plan for implementing the strategy of adaptation to climate change was also produced.