



Climate Change Toolkit-Case study: Switzerland

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This paper describes the development of a Climate Change Toolkit (CCT) to rapidly perform tasks needed in a climate change study. CCT consists of five modules: data extraction, global climate data management, bias correction, spatial interpolation, and critical consecutive day analyzer to calculate extreme events. CCT is linked to an archive of big dataset consisting of daily global historic (CRU, 1970-2005), and global GCM data (1960-2099) from 5 models and 4 carbon scenarios. Application of CCT in Switzerland using ensemble results of scenario RCP8.5 showed an increase in Max temperature, and a wide change in precipitation. Frequency of dry periods will likely increase. The frequency of wet periods suggests higher risk of flooding in the country.