Future Projections of Air Temperature and Precipitation for the CORDEX-MENA Domain by Using RegCM4.3.5

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In this study, the projected changes for the periods of 2016 – 2035, 2046 – 2065, and 2081 – 2100 in the seasonal averages of air temperature and precipitation variables with respect to the reference period of 1981 - 2000 were examined for the Middle East and North Africa region. In this context, Regional Climate Model (RegCM4.3.5) of ICTP (International Centre for Theoretical Physics) was run by using two different global climate models. MPI-ESM-MR global climate model of the Max Planck Institute for Meteorology and HadGEM2 of the Met Office Hadley Centre were dynamically downscaled to 50 km for the CORDEX-MENA domain. The projections were realized according to the RCP4.5 and the RCP8.5 emission scenarios of the IPCC (Intergovernmental Panel of Climate Change).