

Projection of Temperature for the Indonesian Maritime Continent under RCP4.5 and RCP8.5 Scenarios

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A number of CMIP5 Global Climate Models (GCMs) has been downscaled using Regional Climate Model (RegCM4) under CORDEX Southeast Asia framework, the latest member in WCRP CORDEX family. The scenario projection used RCP4.5 and RCP8.5, and the analysis is divided into three periods, i.e. near-term (2016-2035), mid-century (2046-2065) and end-of-century (2081-2100) over the Indonesian Maritime Continent region. We compared the temperature distributions (for average, minimum and maximum temperatures) of the future periods to the historical (1986-2005) period. We also discuss the future changes in various extreme temperature indices recommended by the Expert Team on Climate Change Detection and Indices (ETCCDI) for the three future periods relative to the historical period, and changes in return values of annual extreme temperatures.