

## **Assessment of Human Discomfort Index in the CORDEX-MENA Region in a Changing Climate**

Cemre Kassara (1,6), M.Tufan Turp (2,6), Tugba Ozturk (3,6), Nazan An (4,6), Levent Kurnaz (5,6)

(1) Department of Computational Science and Engineering, Institute of Graduate Studies in Science and Engineering, Bogazici University, Istanbul, Turkey (cemre.kassara@boun.edu.tr), (2) Department of Environmental Sciences, Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey (tufan.turp@boun.edu.tr), (3) Department of Physics, Faculty of Arts and Sciences, Isik University, Istanbul, Turkey (tugbaozturkt@gmail.com), (4) Department of Environmental Sciences, Institute of Environmental Sciences, Bogazici University, Istanbul, Turkey (nazanan@gmail.com), (5) Department of Physics, Faculty of Arts and Sciences, Bogazici University, Istanbul, Turkey (levent.kurnaz@boun.edu.tr), (6) Center for Climate Change and Policy Studies, Bogazici University, Istanbul, Turkey

In recent years, the frequency, intensity, and duration of the climate extremes have been significantly increasing with global climate change. This increase has a major influence on human health. In this study, our aim is to examine the impact of climate change on human comfort in the CORDEX-MENA (Middle East & North Africa) region. For this purpose, we assessed the changes in the human discomfort index (DI) for the last three decades of the 21st century compare to the control period of 1971-2000 under two distinct concentration pathways (i.e. RCP4.5 and RCP8.5). Discomfort indices are calculated using relative humidity (RH) and dry bulb temperature (TD) variables which are obtained from dynamically downscaled (i.e. 50 km horizontal resolution) outputs of HadGEM2-ES via the Regional Climate Model (RegCM4.4) of the Abdus Salam International Centre for Theoretical Physics (ICTP).

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