



Assessment of the intensity of dust events over Egypt with climate change scenarios.

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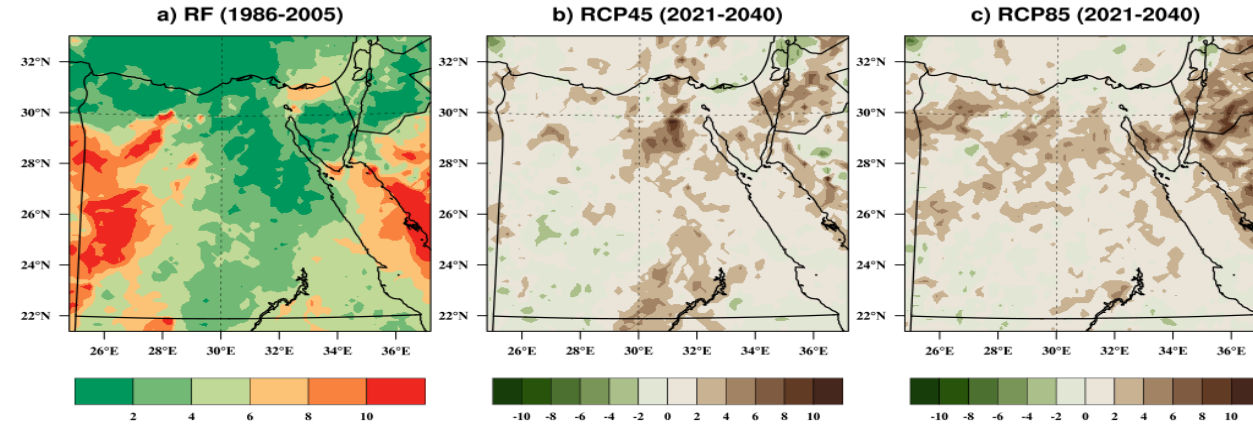
Egyptian Meteorological Authority

An indicator represents what might happen to the frequency and intensity of dust events with IPCC scenarios (RCP4.5 and RCP8.5) using the output of the regional climate model RegCM4.

Methodology:

- ❑ CDO software was used to calculate the maximum daily dust concentration from the output of RegCM4 at every grid point within the region.
- ❑ The time series of maximum daily concentrations were calculated during the reference period (1980-2005).
- ❑ These reference data were used to define thresholds corresponding to the dust concentrations: normal (percentile 75th), high (90th), very high (95th), and very high (99th).
- ❑ Then the percentages of occurrence of the different categories of dusty days were calculated up to 2100 based on the reference period.

Percentage of Normal dusty days



Percentage of Very High Dusty days

