

Anatomy of a severe dust storm in the Middle East: Impacts on aerosol optical properties and radiation budget

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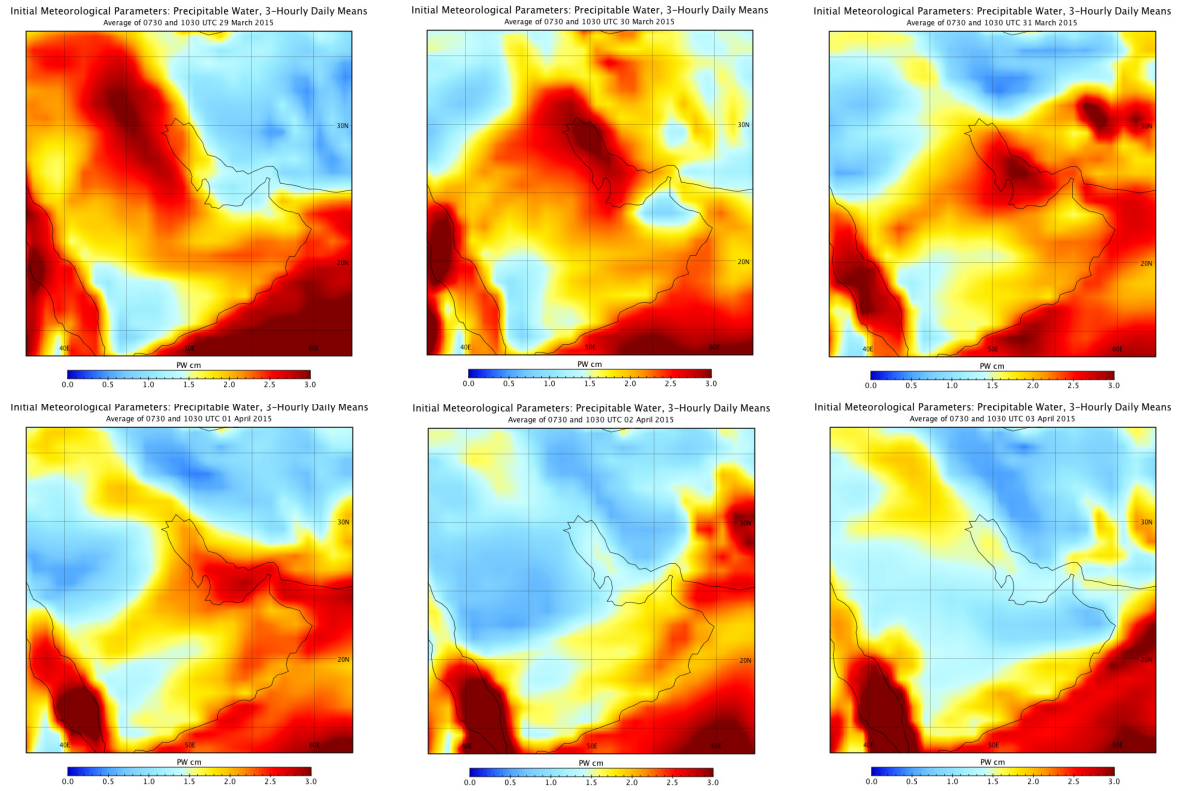


Figure S1. Spatial distribution of precipitable water over the Arabian Peninsula and the Gulf Sea retrieved by MODIS aboard Aqua and Terra during a 3-hour period (average of 07:30-10:30 UTC) between 29 March and 3 April 2015.

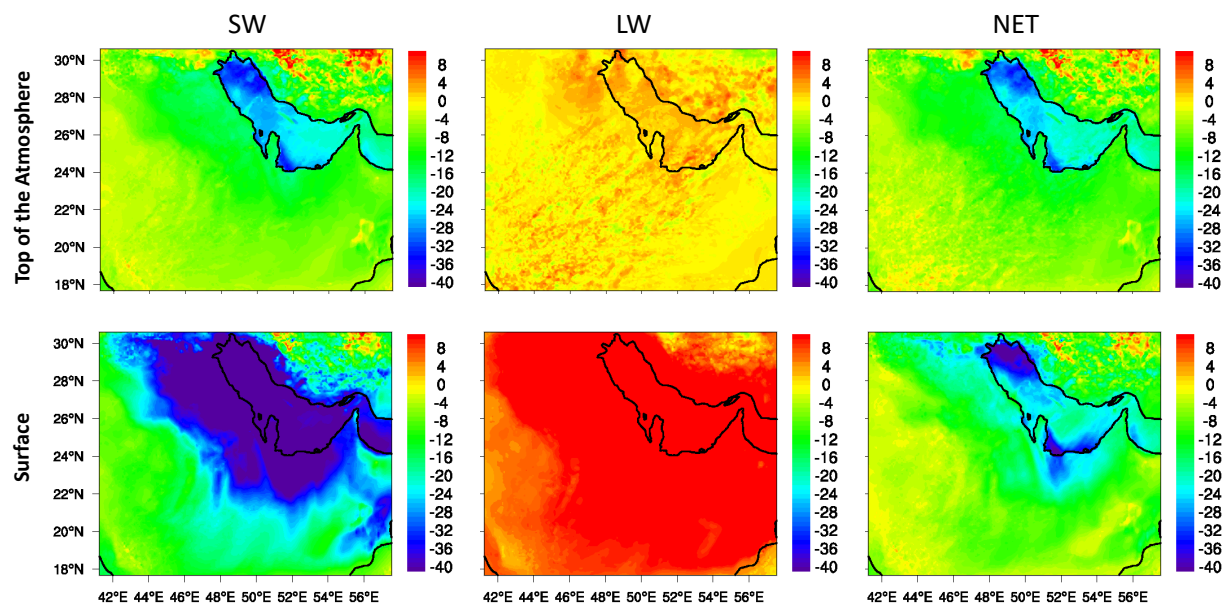


Figure S2. Average simulated (WRF-Chem) spatial distribution of shortwave (SW), longwave (LW) and net (SW+LW) radiation perturbation due to aerosols at the surface (bottom panels) and at the top of the atmosphere (top panels) during 31 March – 2 April 2015.

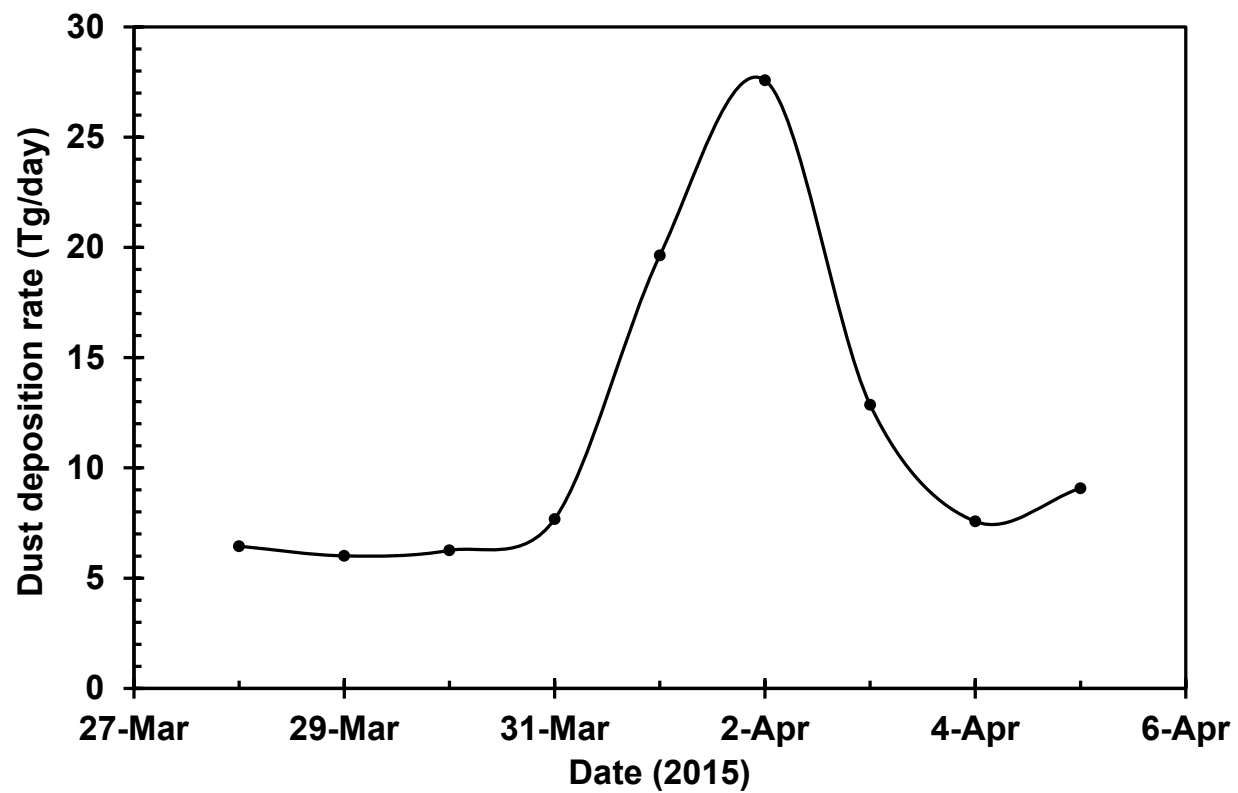


Figure S3. Average simulated daily dust deposition rate over the modeling domain (domain 2) during 28 March – 5 April 2015.