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METEOROLOGICAL MODELING OF THE PM10 EPISODE IN KAĞITHANE-ISTANBUL UNDER VERY STABLE CONDITIONS FOR NOVEMBER 6-9, 2010 EPISODE

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ABSTRACT

This paper presents verification results of numerical simulations of meteorological conditions leading to an air pollution episode on 6-9 November 2010 in Istanbul. WRF-ARW ver 3.3 is run with GFS and ECMWF input. For verification, horizontal wind components and temperature data of nine meteorological stations are used for both simulations. Results indicate that the model is successful in simulating the meteorological conditions with both two different input data, especially with the GFS input, although ECMWF runs had a finer horizontal resolution of 1 km.

Keywords: PM10, episode, air quality, meteorological modelling, WRF.