# Climate change impact of wind energy availability in the Eastern Mediterranean using the regional climate model PRECIS

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Renewable energy resources - and among them wind energy availability - are of great interest in view of the efforts to mitigate the impact of climate change. Within this framework the high-resolution regional climate simulations performed with the PRECIS climate model over the Eastern Mediterranean area are evaluated. The PRECIS model was developed at the Hadley Centre (UK Meteorological Office) and is based on the latest version of the global climate model HadCM3. A 25km horizontal resolution was chosen for the application of the PRECIS model at NOA. The objectives of the work are to determine (a) whether the PRECIS model-simulated 10-m winds reproduce realistic features when compared to the ERA40 reanalysis at a 1.125˚x1.125˚ resolution during the 1961-1990 reference period and (b) whether there are substantial differences between the current climatic wind speed distribution and wind energy density and those projected for the period 2071-2100 for the IPCC A2 emission scenario.