

# EMD-WRF Middle East Mesoscale Data



## EMD-WRF Middle East Mesoscale Data Set

windPRO includes a subscription service to download free time series from a high resolution mesoscale data set covering a large section of the Middle East.

The data is modelled in-house on EMD's computer cluster using WRF.

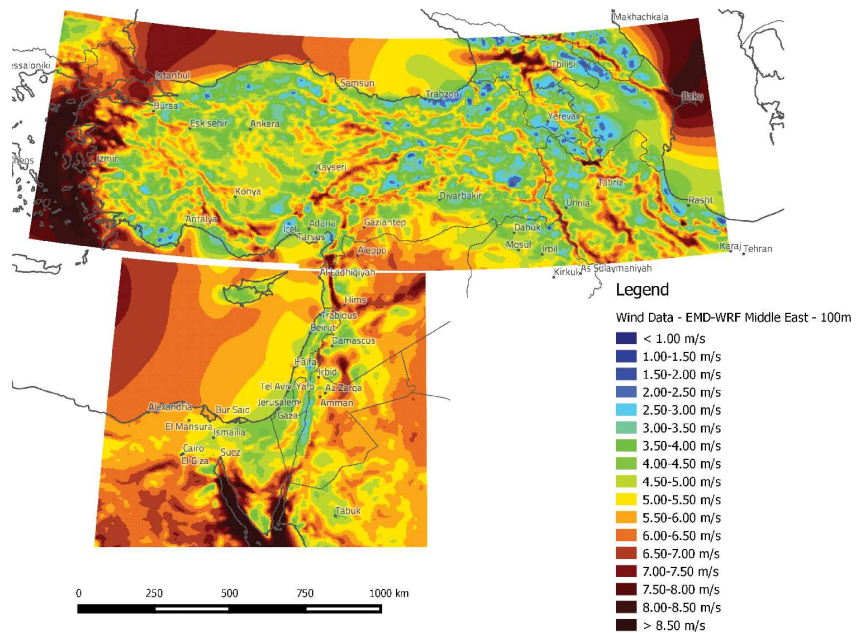
The mesoscale model is run at a high spatial resolution of  $0.03^\circ \times 0.03^\circ$ , approximately  $3 \times 3$  km, with hourly temporal resolution. ERA Interim data from ECMWF is the global boundary data set.

The EMD-WRF Middle East data set covers selected regions and countries in the Middle East region, including the whole of Turkey, Jordan, Cyprus, Azerbaijan and Lebanon. Also included is selected parts of other countries like Syria, Egypt Georgia and Iran.

Please consult the map shown to the right for exact coverage. The data is divided into Southwest (SW) and Northwest (NW).

The data set covers more than 20 years. Data is updated monthly with app. three months delay defined by ERA Interims availability.

Data access is directly via windPRO's user-friendly, on-line data interface – approximately 400,000 time series are available for instant download, thus no delivery time.



## Access to the Mesoscale Data Set

To access the EMD-WRF Middle East (SW and NW) mesoscale data set, the following are required:

- windPRO BASIS module
- windPRO Meteo or MCP module
- Subscription to EMD-WRF Middle East data set

## Very Competitive Pricing

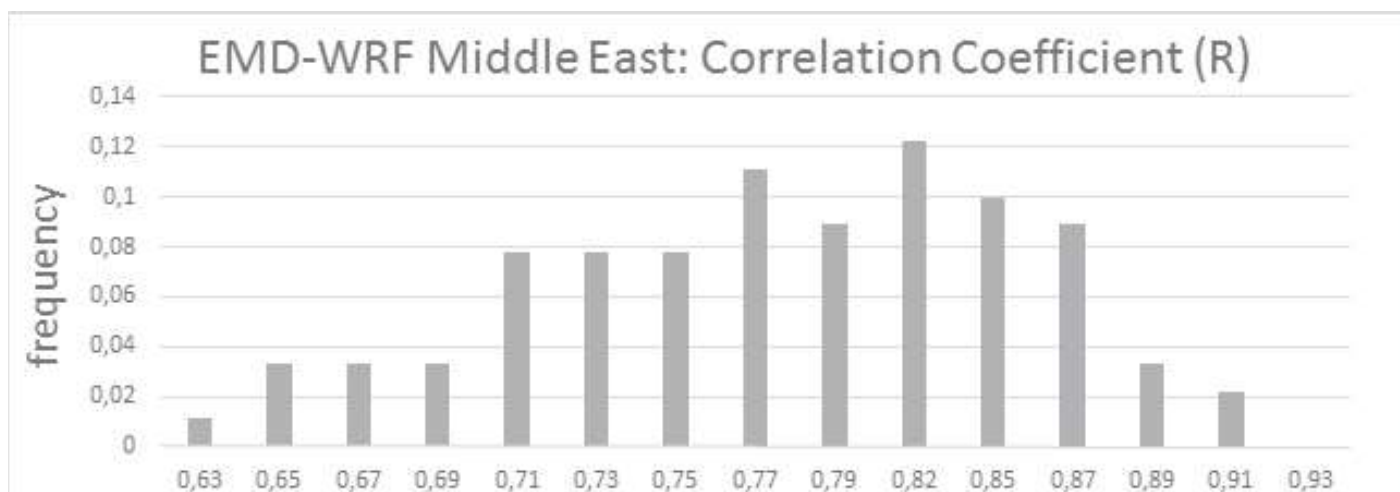
Access to the EMD-WRF Middle East mesoscale data set is offered at the following annual prices:

- Euro 1,500 for the first subscription
- Euro 450 (30%) for each additional subscription within the same company

Subscribers may download up to 100 time series per calendar month. Additionally, a refresh of already downloaded time series is not counted as a new download.

## Validation

The histogram below shows correlation coefficients for several high quality masts across the domain.



The table below shows the correlation, both the mean and standard deviation in comparison to MERRA.

	Mean	Std. Dev.
MERRA	0.61	0.17
EMD-WRF Middle East	0.76	0.09

