EMD webinar 7/4-2016:

An introduction to the new: EMD-WRF mesoscale data sets and windPROSPECTING portal

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Questions submitted during the webinar:

Questions		Answers
Do you ask ConWx to provide the data when a customer orders a mesoscale dataset?		No. All EMD-WRF datasets are run in-house at EMD, both pre-run subscriptions and on-demand "point" and "area" services. The EMD-ConWx dataset for Europe was made in a collaboration between EMD and ConWx, but it is run in-house at EMD.
Is it possible, or will it be possible to show other parameters apart from wind speed in windPROSPECTING? Turbulence, solar radiation humidity, etc		Yes, we will extend the range of parameters in windPROSPECTING based on user requests and our own confidence in the data. For the suitability related paremeters like TI we are working on how to obtain the best accuracy from the meso results. For many of these parameters downscaling is needed (addition of microscale effects). We will add downscaled datasets at a later stage.
What is the horizontal resolution of the spatial meso terrain dataset?		Internally in WRF the land surface models match the model resolution which is 0.03 deg (ca. 3 km). But generally, the input terrain and land-use models have a finer resolution than can actually be appreciated by the WRF model setup. To account for finer scale terrain effects downscaling using microscale models is needed, we will this at a later stage as mentioned above.
Can the legend classes be adjusted to finer/larger scales when you zoom in/out?		The legend classes in windPROSPECTING are fully customizable from the Setup menu. The spatial areas (small squares) visible when you zoom in directly reflect the underlaying mesoscale grid data, no interpolation is done to make data look finer than they are. This is the most honest way to mesoscale data and also the recommended way of visualization by the World bank for mesoscale model data.
"MERRA data will be discontinued later this year". Does that mean no free long-term wind data in windPRO?		No. MERRA-2 will replace it and is already in windPRO on-line data. NASA has chosen to discontinue the MERRA model, however, they already have introduced the replacement named MERRA-2. Our tests (200+ masts) show that for correlation there is not much difference between MERRA and MERRA-2, whereas it seems that the absolute level has been significantly improved in MERRA-2 for data-sparse regions like Africa.
Why should I choose windPROSPECTING over e.g. DTU Global Wind Atlas?		Well, if mesoscale effects are important in your region of interest the DTU Global Wind Atlas will come short as it only combines a global model with a microscale model, omitting the entire mesoscale

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		range. In some places this can work OK, but in many places in the world the mesoscale contribution to the wind resource cannot be neglected without loss of significant accuracy.
Can users see or download the spatial data of wind index or weibull parameter on WindPROSCPECTING?		Users with full access can export the data as grid, shape or kmz files. So far, we do not include weibull parameters in the visualization, but we will consider this.
In the comparison you have shown StdDev values is it from "None" or "monthly average"		The correlation coefficients (R) and the mean and stdev for a large number of masts shown in the webinar represent the "raw" un-averaged data. The correlations are generally significantly higher for monthly averages.
Will we have this data set for Brazil?		Yes, there will eventually. Brazil is a very big country with a very diverse meteorology and we are working on the most beneficial setup in terms of modelling setup and costumer basis (we only make pre-run datasets for region with enough users).
Can I buy a subscription to windprospecting if I am not a windPRO user?		Not at this stage. However, we will make it available to non-windPRO users at a later stage.
It might be better, if the company can buy the subscription license, all members of the same company could be accessible to Windprospecting server, not by the windpro computer installed the subscription license. I hope this will be already in your mind. Thanks for interesting webinar.		Thanks for the feedback. We will consider this. However, since the access to windPROSPECTING is tied to the mesoscale subscription, which is personal, it requires a quite different subscription model to allow all employees in a company to have access. As mentioned above we will also allow subscriptions to not-windPRO users later on, this might be the solution to the rest of your company to give them a direct login.
Are you planning to release more pre-run datasets in more regions of the world?		It is definitely something that we are considering, but we would very much like input from you our users regarding which regions or areas to prioritize. You are very welcome to drop us a line if you have specific wishes.
Can we calculate the annual energy yield with these mesoscale data)		If you use the mesoscale data directly as it was a 'virtual met mast', you will have a large uncertainty for most sites - but this may be acceptable in the prospecting phase. However with the proper treatment of the data, e.g. using the new downscaling possibilities in windPRO and to include other calibration data-sources to remove residual bias and reduce uncertainties), you can obtain very precise estimates of the long-term energy yield.