# Mesoscale models benchmarking exercise

In spring 2015 KNMI submitted KNW atlas data for the "Mesoscale models benchmarking exercise" organised by EWEA in collaboration with the Technical University of Denmark, Department of Wind Energy: http://www.ewea.org/events/workshops/past-workshops/resource-assessment-2015/mesoscale-benchmarking-exercise/ .

KNW is submission 9 in the figures below. On the panels in the top row the mesoscale model submissions have been compared to measurements (from left to right: FINO03 offshore, Hovsore on the coast and Cabauw on land), the "Dataless" panels in the bottom row are locations with no measurements (again from left to right: offshore, coast and on land).
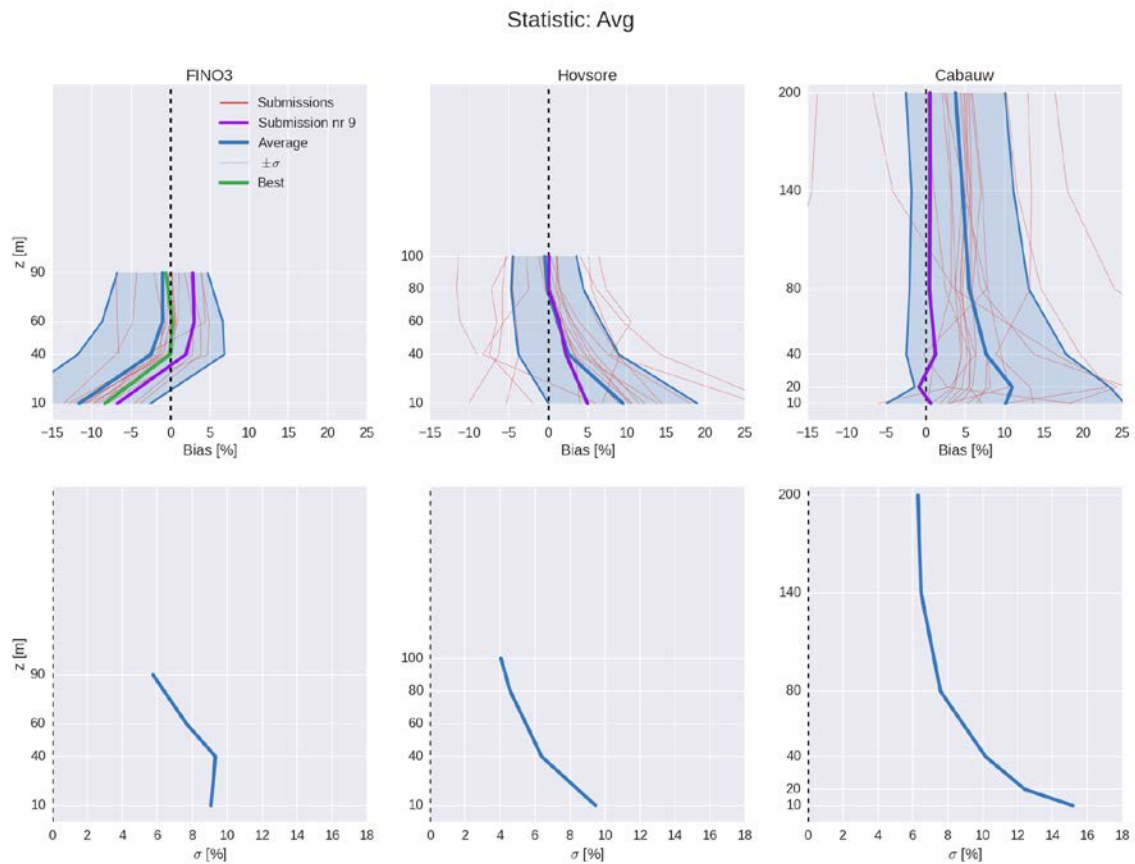
Name	Longitude	Lattitude
FINO 03	7.1638 E	55.1968 N
Hovsore	8.14296 E	56.4377 N
Cabauw	4.9182 E	51.9628 N
Dataless 1	9.019 E	57.6785 N
Dataless 2	10.3407 E	56.0188 N
Dataless 3	10.156 E	52.8273 N

Mean (U) versus standard deviation (σ):
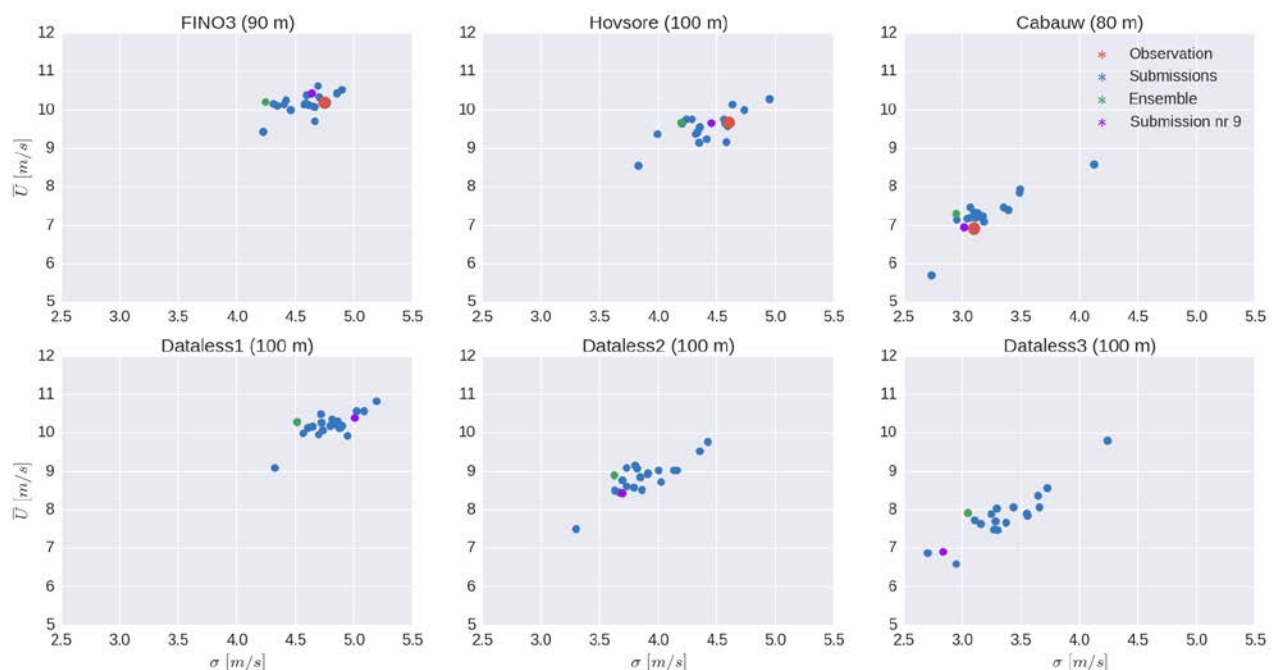
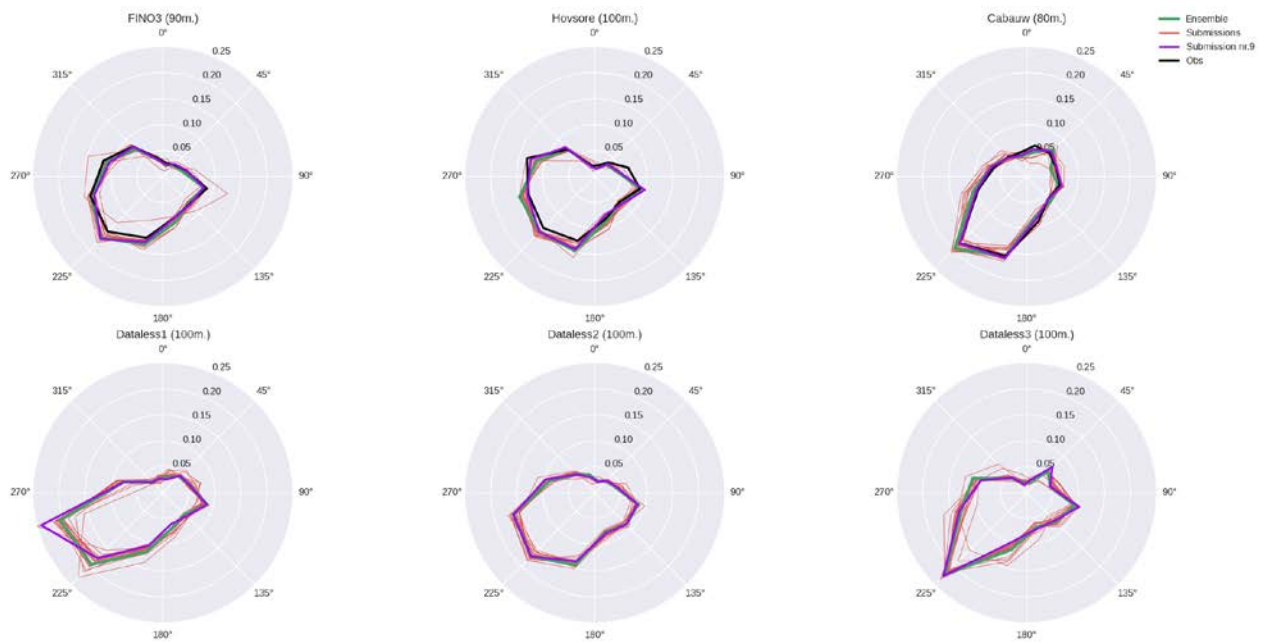The heights (80,90 or 100m) are shown above the panels.

Wind profile:

Statistic: Avg

Only for FINO3 the KNW profile (purple) is not the best entry (green), but the FINO3 measurements have not been corrected for wind mast effects .. (compare chapter 5.2 http://www.knmi.nl/bibliotheek/knmipubTR/TR352.pdf). For the locations with no measurements only the profile of the standard deviation (averaged over all mesoscale models) is shown.

Wind rose:

The heights (80,90 or 100m) are shown above the panels.