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MENG	NACELLE	REUBEN MARLAND 23/05/2021	REUBEN MARLAND 23/05/2021
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		PROJECT DRAWING	COMPLETE
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		Sheet	1/1

Figure 1

File Edit View Insert Tools Desktop Window Help



For a 6 by 6 grid of windturbines, here we have 36 turbines.

Weather data:

Month = 'January'

Wind direction (°) = 180

Air density (kg/m³) = 1.2863

Initial wind speed = 10.5

Yaw angle = 0

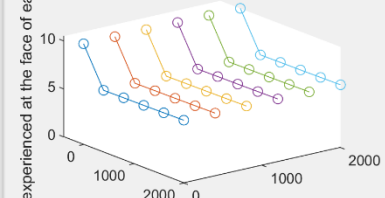
Each wind turbine is 400m perpendicularly away from its adjacent neighbouring turbine.

Figure 2

File Edit View Insert Tools Desktop Window Help

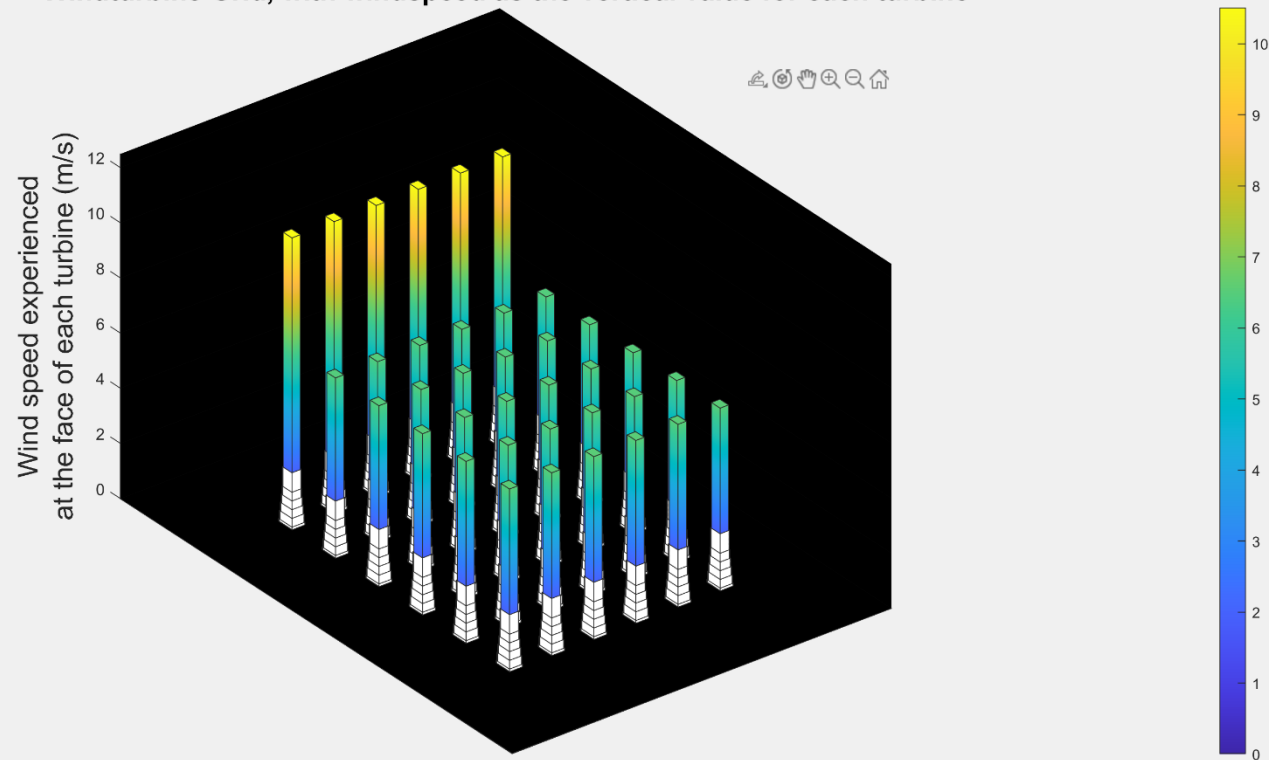


Look at the speeds for each turbine and how they decrease



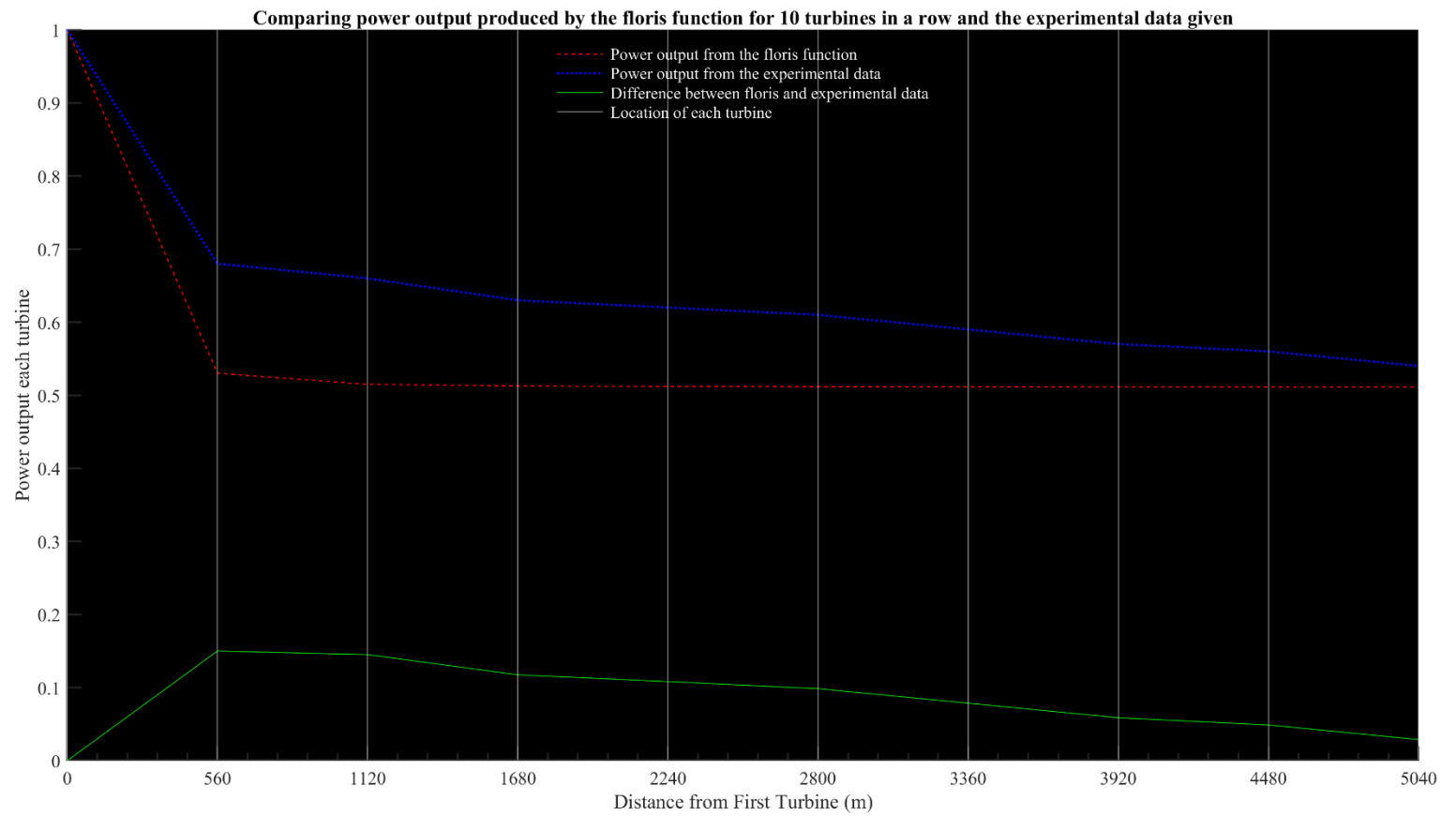
For a 6 by 6 grid of windturbines, here we have 36 turbines, X and Y axis are in metres.

Windturbine Grid, with windspeed as the vertical value for each turbine

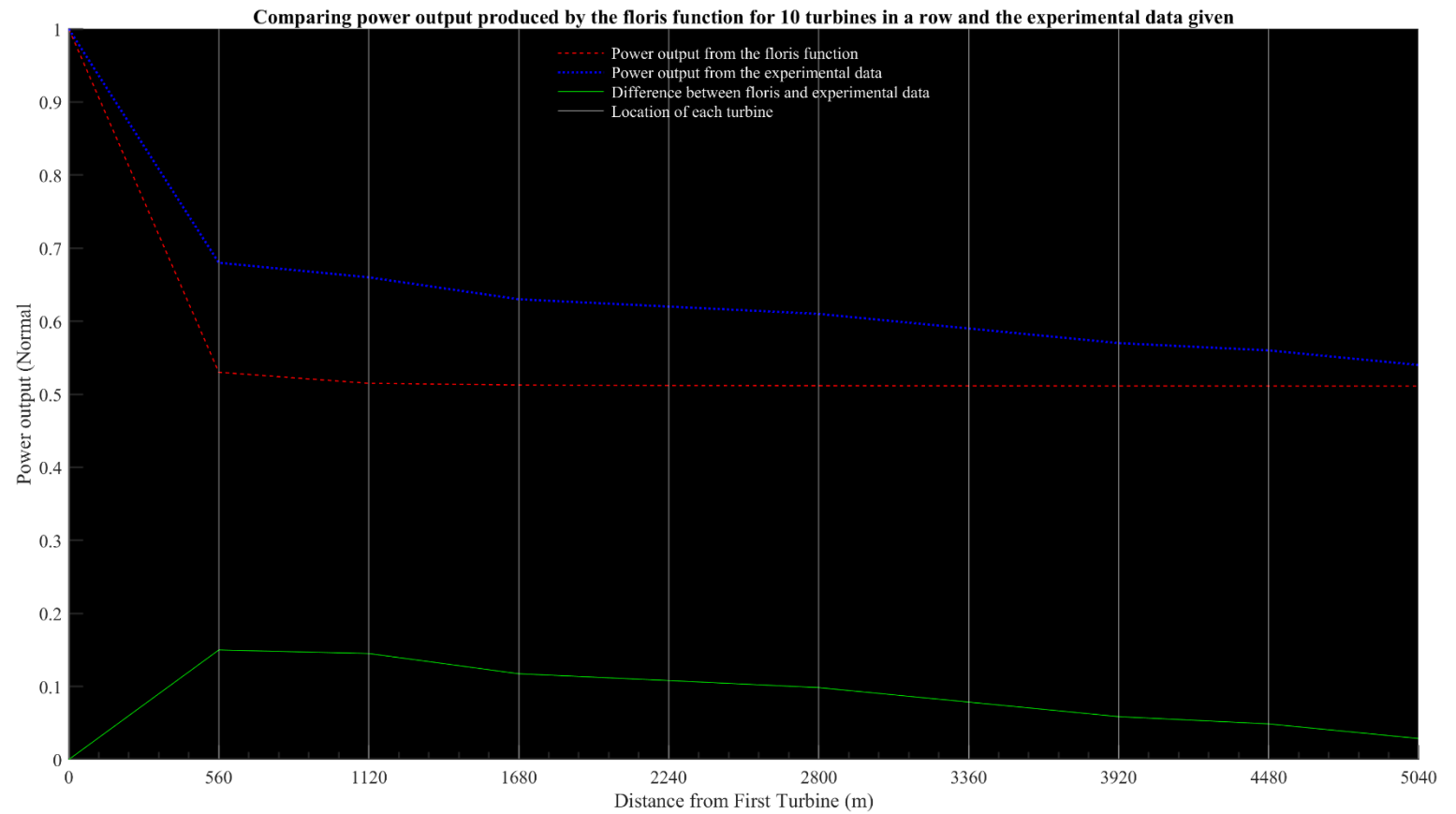


0 Degrees wind-direction perpendicular to the Wind speed Axis/Z axis

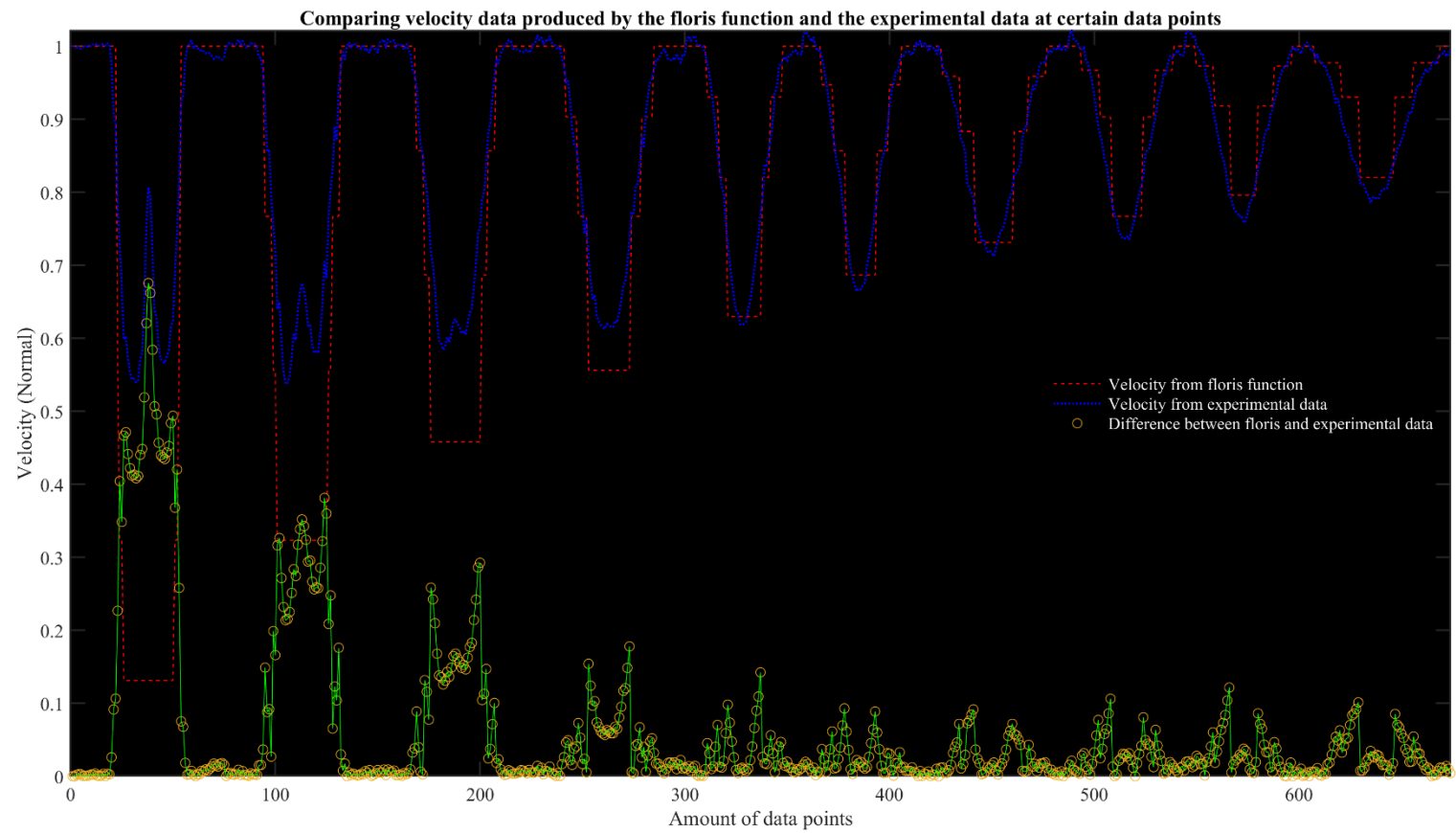
This is data for 10 turbines in a row
Wind direction = 0°
Yaw angle = 0°
Density = 1.225 kg/m³
Blade diameter = 80 m
Wind speed = 10 m/s
The turbines are spaced out between eachother by the white lines



This is data for 10 turbines in a row
Wind direction = 0°
Yaw angle = 0°
Density = 1.225 kg/m^3
Blade diameter = 80 m
Wind speed = 10 m/s
The turbines are spaced out between each other by the white lines



This is data for 1 turbine
Wind direction = 270°
Yaw angle = 0°
Density = 1.225 kg/m^3
Blade diameter = 0.416 m
Wind speed = 10 m/s
The turbine is 10m from
the front of the tunnel and
 3 metres from the floor



Average power output per month for a
6 by 6 turbine farm

Weather data:
Wind direction ($^{\circ}$) = 180
Air density (kg/m^3) = 1.2863
Initial wind speed = 10.5
Yaw angle = 0

Each wind turbine has
an 80 metre diameter

