

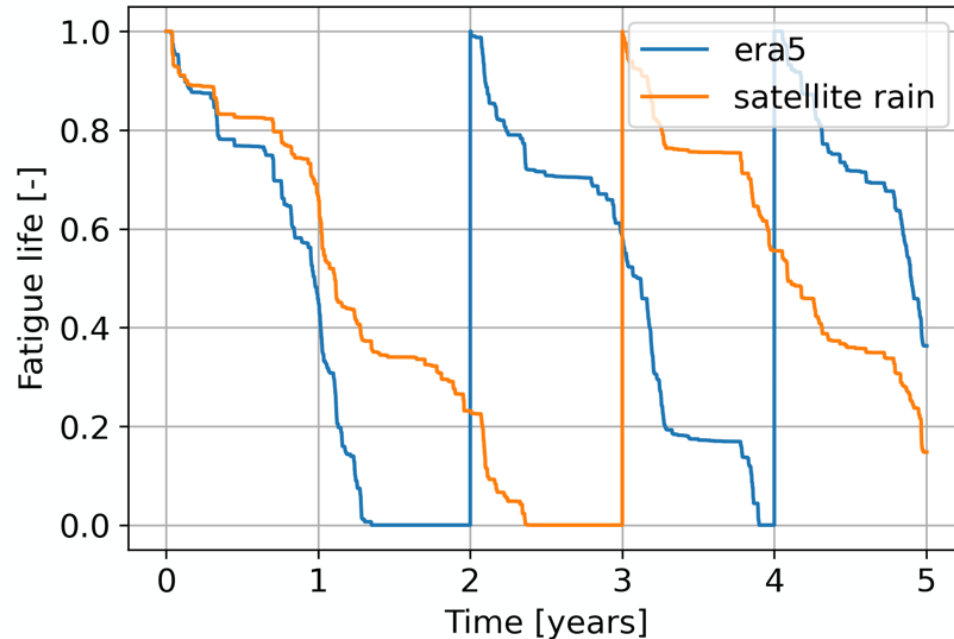
Pilots with EDP in WindFloat and Moray East projects

Example: Combination of wind and precipitation statistics with wind turbine information to provide wind turbine blade lifetime estimates at the project site

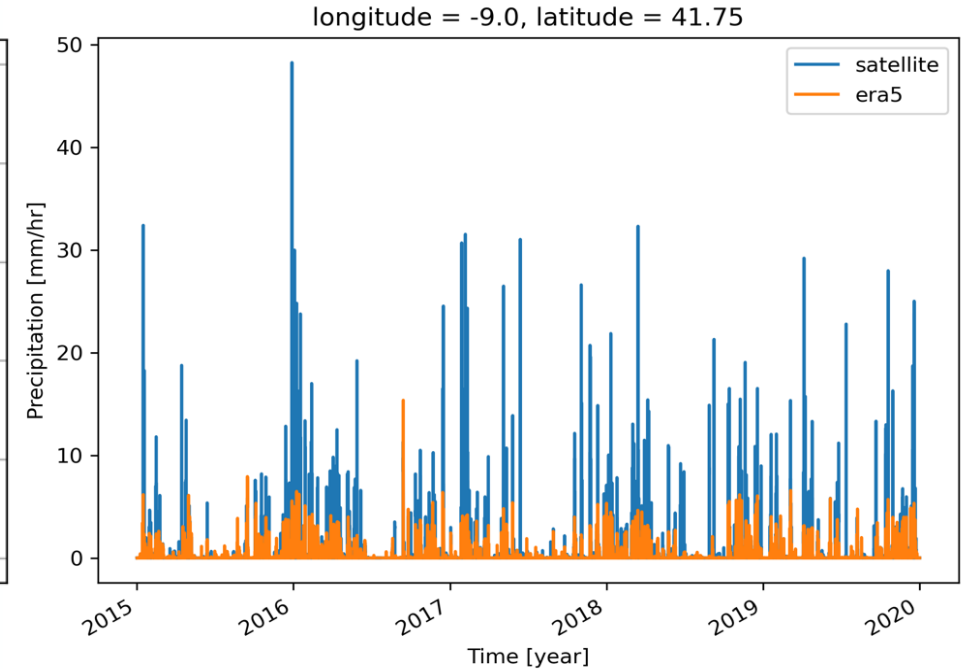
Photo: Jakob I. Bech



Erosion damage on a wind turbine blade.



Estimated damage development using rain data from the GPM satellite and ERA5 model. Both with ERA5 wind data.



Time series of precipitation from GPM satellite (half-hourly) and ERA5 model (hourly).

Dataset	Average annual rainfall [mm]	Average annual wind speed at 10 m [m/s]	Predicted lifetime [years]
ERA5 model	1393	5.79	1.71
GPM satellite	1178	-	2.50

Estimated blade lifetime using rain data from the GPM satellite and ERA5 model