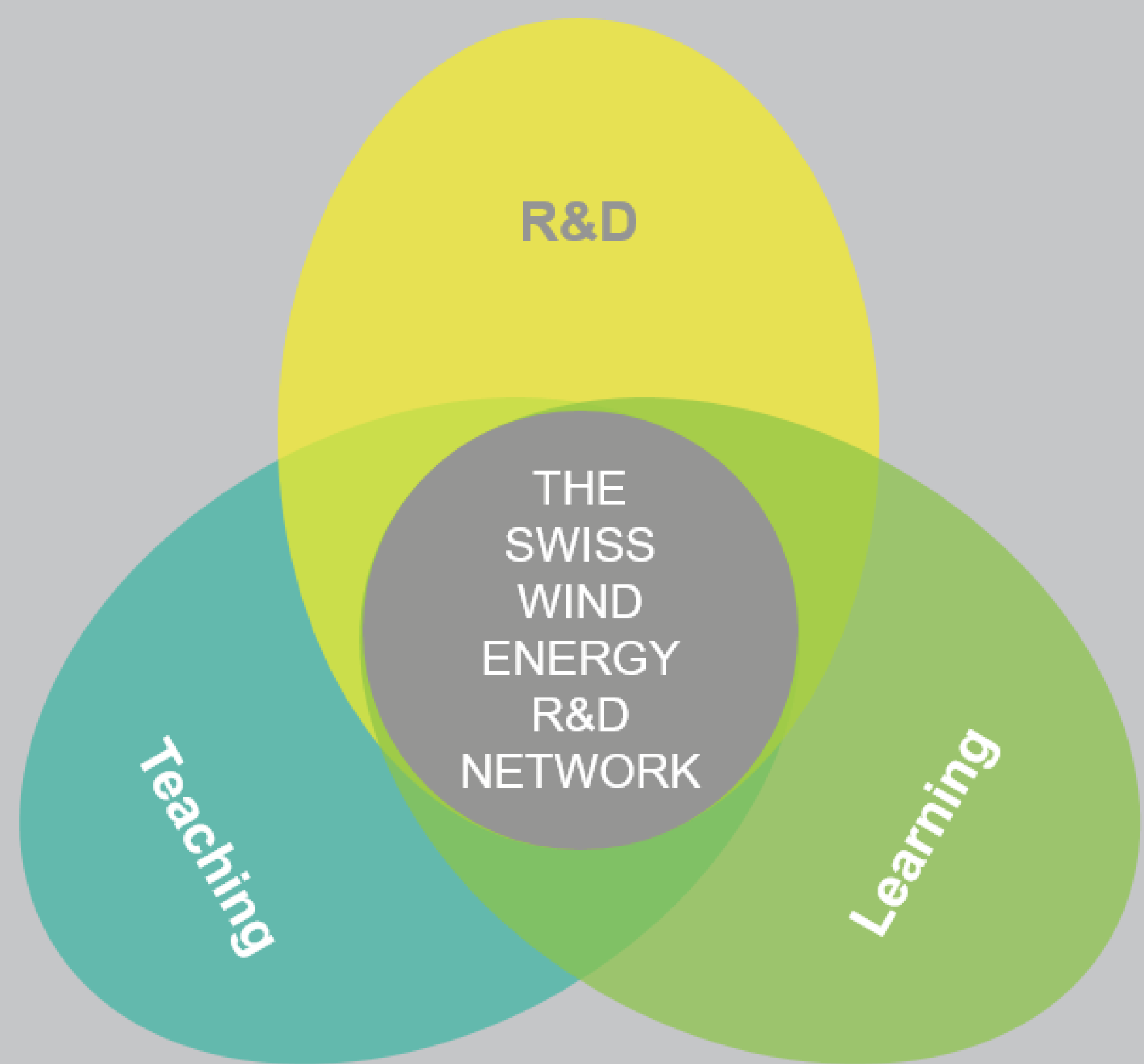


A WIND ENERGY REVOLUTION IN SWITZERLAND?



BUNDLING SWISS WIND ENERGY R&D CAPABILITIES THE SWISS WIND ENERGY R&D NETWORK



DATABASE

Find project partners, experts, customers, students, interns and more amongst members



PROJECT PAGE

Post and view your project ideas and requests as well those from other members



EVENTS

Attend our yearly forum, bi-monthly informal meet-ups or operators' workshops.



R&D RESOURCES

R&D project calls, funding information and wind energy experimental test facilities.



LEARNING RESOURCES

Coordination of international collaborations and working group participation.



TEACHING RESOURCES

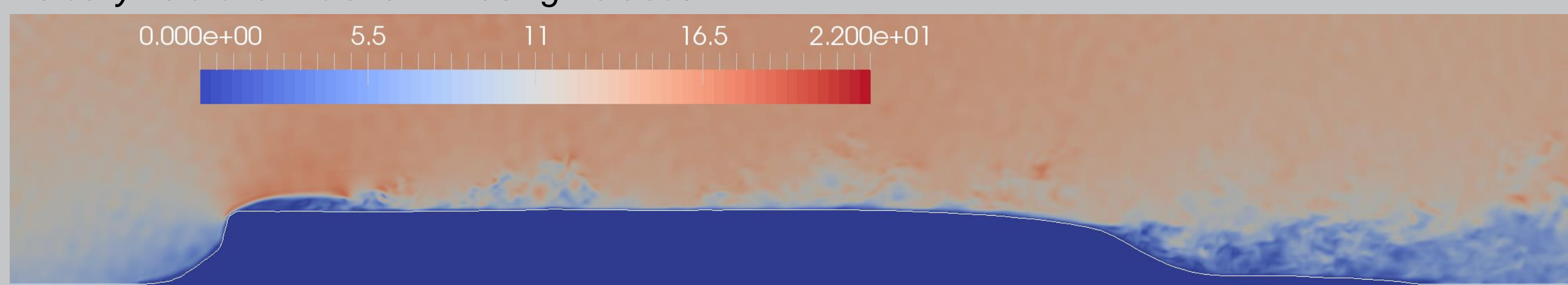
List of existing wind energy courses in Switzerland and abroad, online teaching resources.

THE NEW WIND ENERGY RESEARCH PROGRAMME AT HSR

PRAGMATIC CHOICE OF WIND MODELS IN COMPLEX TERRAIN

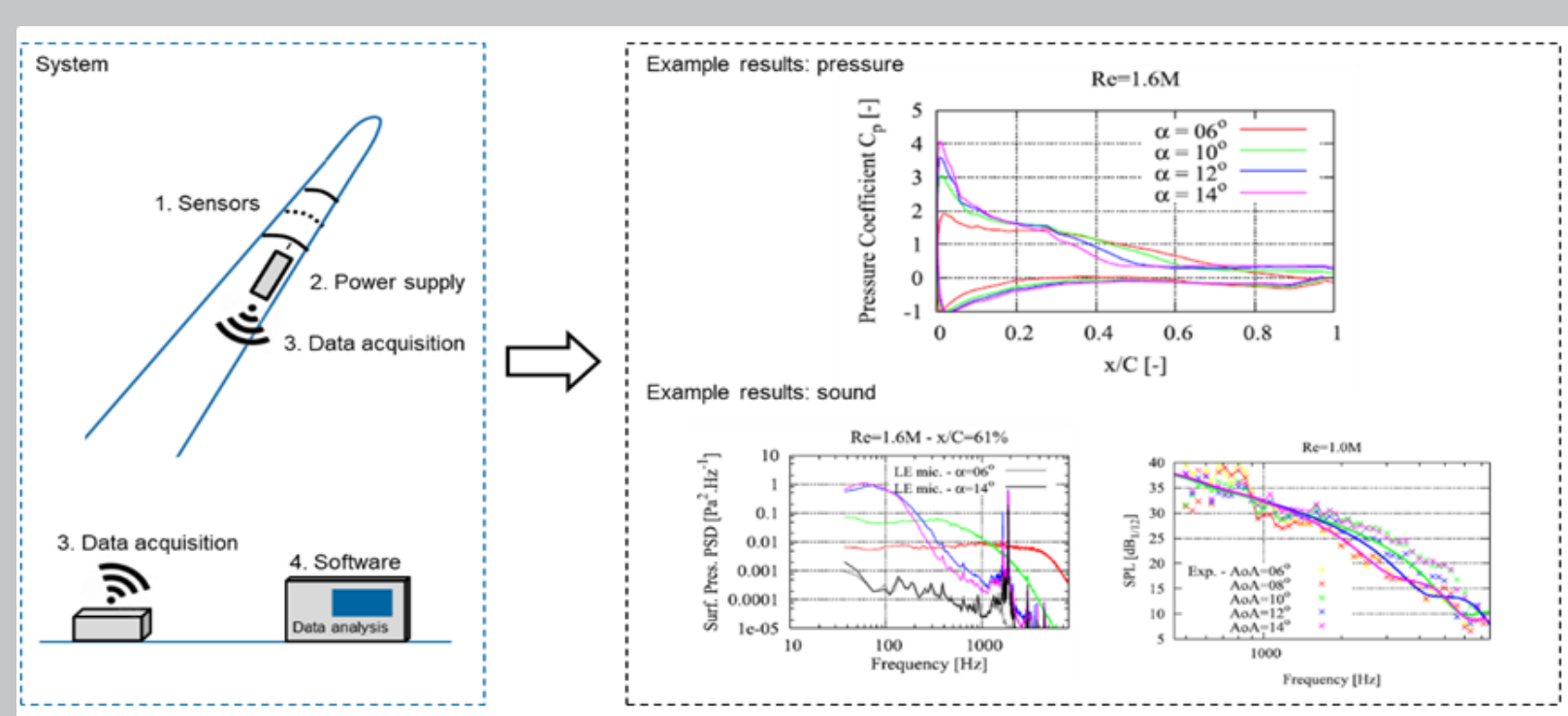
Developing a new process for the pragmatic choice of wind models in complex terrain, helping wind modellers choose the best model for a specific site.

Velocity field over Bolund Hill using Palabos LBM:



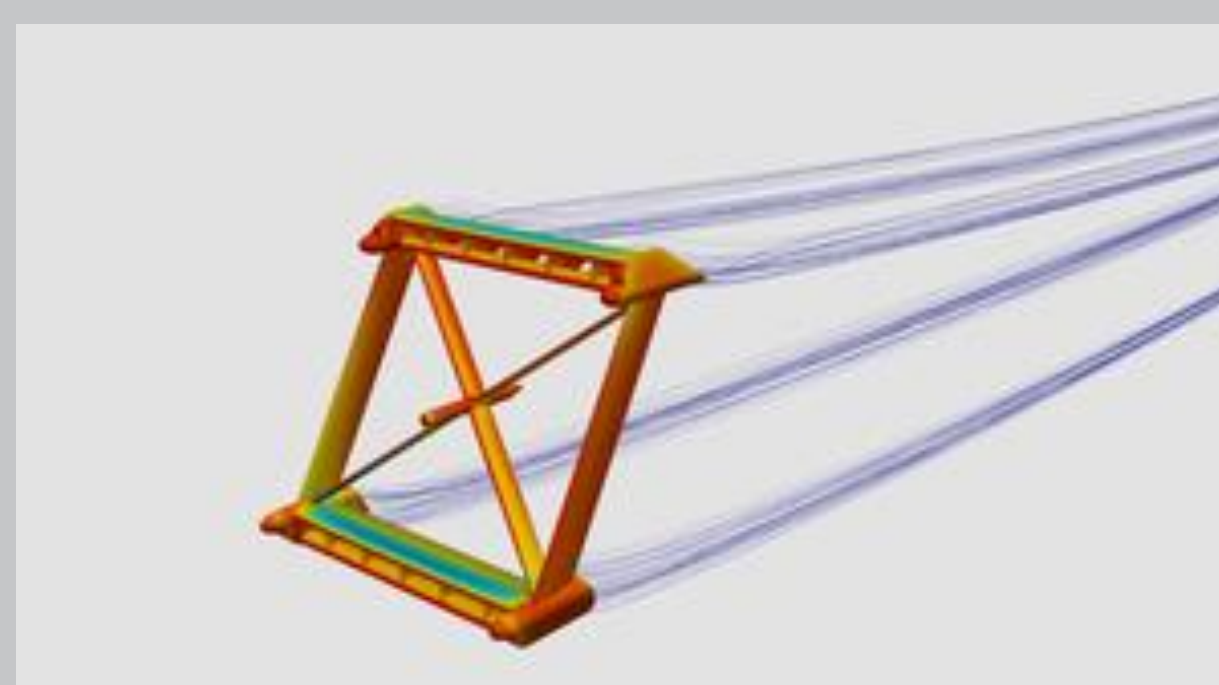
AEROSENSE

Developing a novel mems-based surface pressure and acoustic smart measurement system for wind turbines.



SKYPULL AERODYNAMICS

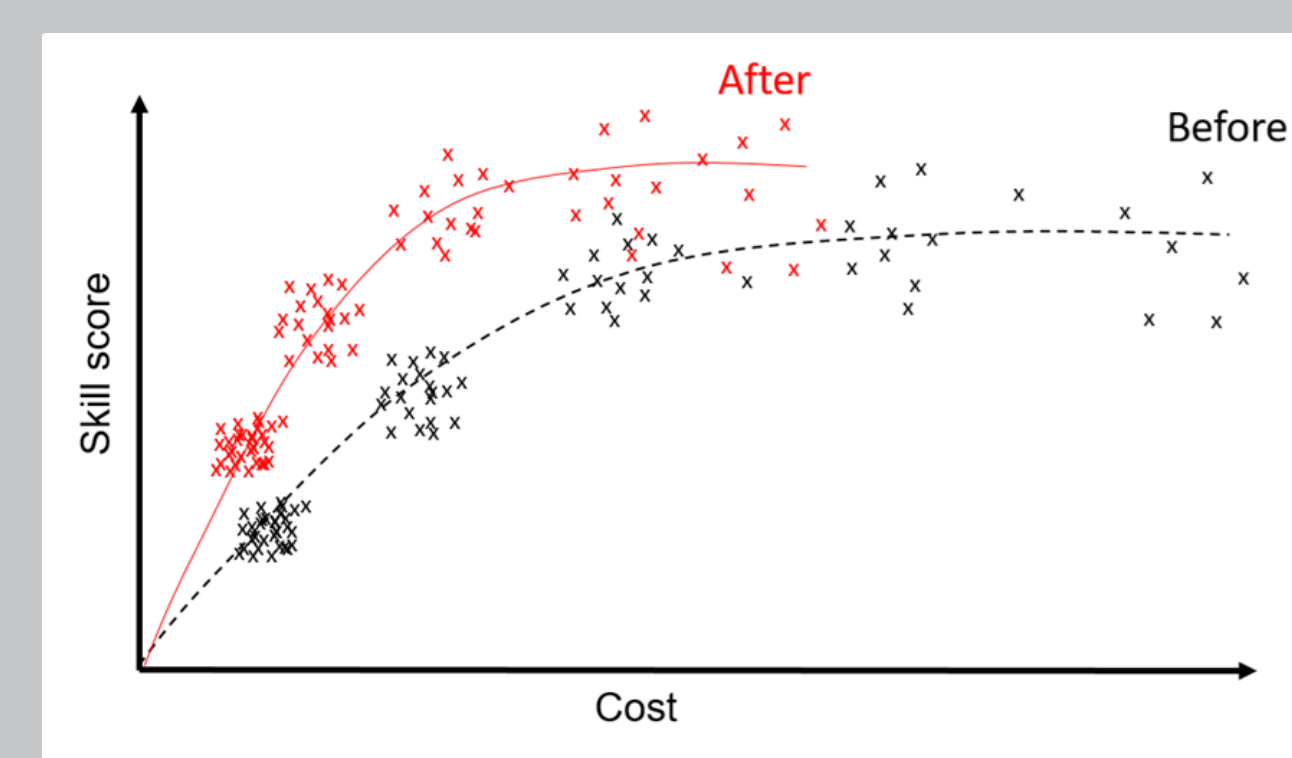
Implementing a new aerodynamically optimised multi-wing design of the Skypull flight device using a novel aerodynamic simulation tool based on the Lattice Boltzmann Method.



COMPARISON METRICS CHALLENGE

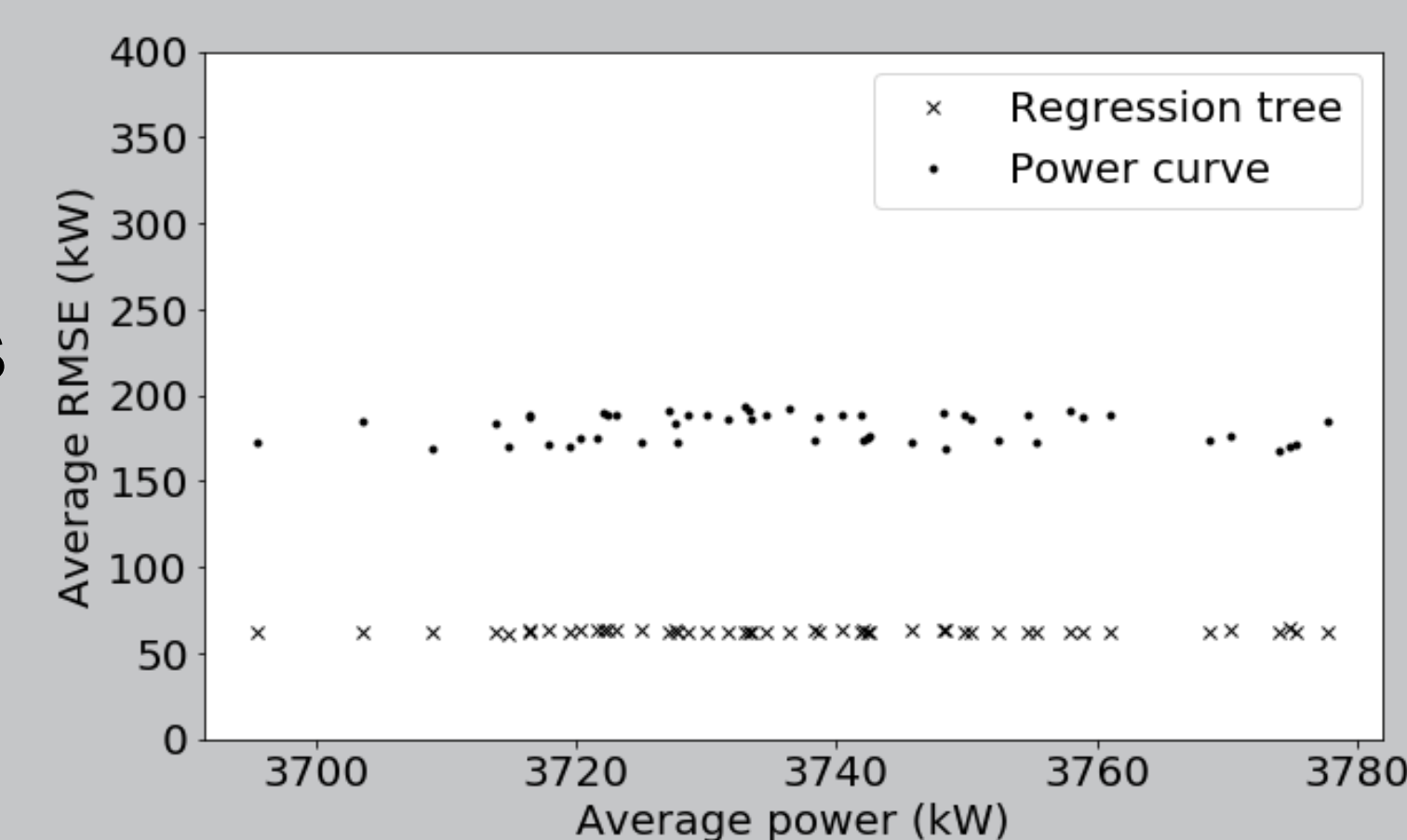
Implementing a public "simulation challenge" for wind energy sites in complex terrain and developing transfer functions for the accurate prediction of tool suitability.

Expected results:



MACHINE LEARNING POWER CURVE

Applying regression tree methods to improve site-specific power predictions for more accurate wind farm planning and operation.



RECYCLOBLADE

Developing bio-materials based on flax plants for more environmentally-friendly rotor blades.

