Module 8 – Verification of Renewable Energy Forecasts

Module introduction

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A few interesting quotes on forecasting

Some of my favorites:

“Prediction is very difficult, especially if it's about the future”
– Nils Bohr, Nobel laureate in Physics

“Forecasting is the art of saying what will happen, and then explaining why it didn’t!”
– Anonymous

“It is far better to foresee even without certainty than not to foresee at all”
– Henri Poincaré
Let’s accept it...

- **Forecasts are always wrong!**
  - Bad forecasts translate to **consequences** - these may be:

  - *security issues* in, e.g., offshore wind farm maintenance
  - *financial losses* for those participating in the markets
  - *overall decrease in social welfare*

  - *blackouts!* (well, hopefully not)

  - ... but definitely, *harsh criticism on using renewables for supplying us with electricity*
Learning objectives

Through this module, it is aimed for you to be able to:

1. Explain what makes renewable energy forecasts of different quality and value
2. Describe how one may evaluate the quality of different forms of forecasts
3. Appraise how different scores and diagnostic tools should be used and interpreted
Module outline

Module 8 is based on 3 video lectures and associated self-assessment quizzes:

8.1 What makes a good forecast?

8.2 Verification of deterministic forecasts

8.3 Verification of probabilistic forecasts
Good luck with Module 8!