Wind Speed Prediction

High precision and reliable wind speed forecasting is a challenge for meteorologists. Severe wind due to convective storms, causes considerable damages (large scale forest damage, outage, buildings/houses damage, etc.). Convective events such as thunderstorms, tornadoes as well as large hail, strong winds, are natural hazards that have the potential to disrupt daily life, especially over complex terrain favoring the initiation of convection. Even ordinary convective events produce severe winds which causes fatal and costly damages. Therefore, wind speed prediction is an important task to get advanced severe weather warning.

Your task is to estimate the wind speed using other measurements, using this dataset.

The report must have:

1. A problem statement.
2. Data processing (data pre-processing, data splitting) used, etc.
3. Models used. You should use one shallow and a deep-learning model.
4. Training algorithm(s) employed, including hyperparameters selection.
5. Results obtained and discussed.
6. Conclusions
7. References