# Meteorological Super-Resolution vs Wind Representations

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#### Purpose

The purpose of the project is to study the impact of different wind representations in the context of super-resolution.

## Problem explaination and theory recap

[1]

## Datasets and Preprocessing

## Model and hyperparameters

## Training

#### Results

#### Final Considerations

#### References

[1] Fabio Merizzi, Andrea Asperti e Stefano Colamonaco. "Wind speed super-resolution and validation: from ERA5 to CERRA via diffusion models". In: *Neural Computing and Applications* 36.34 (2024), pp. 21899–21921.