

CMIP6 requires bias-correction, and spatial and temporal downscaling to study renewable energy generation



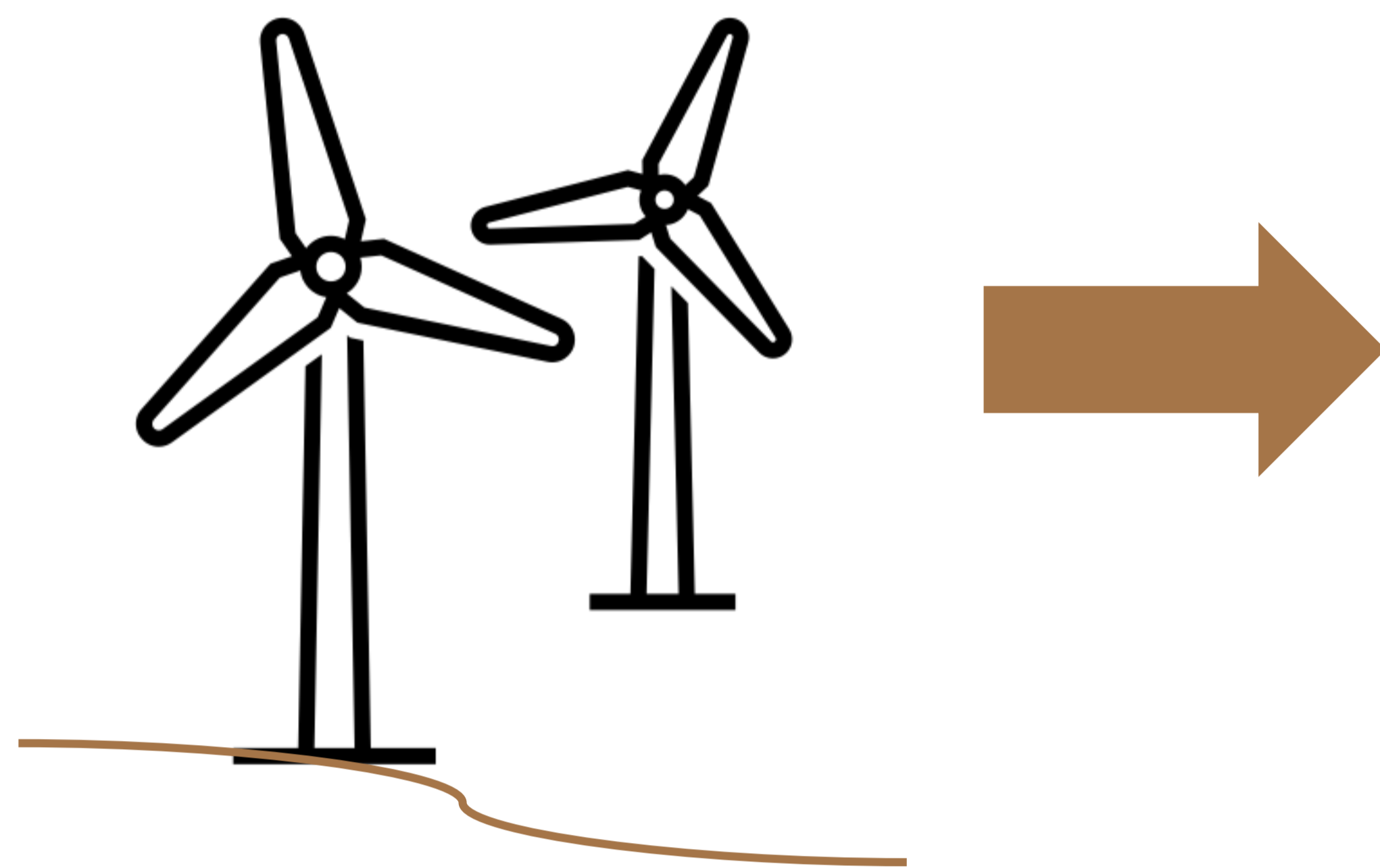
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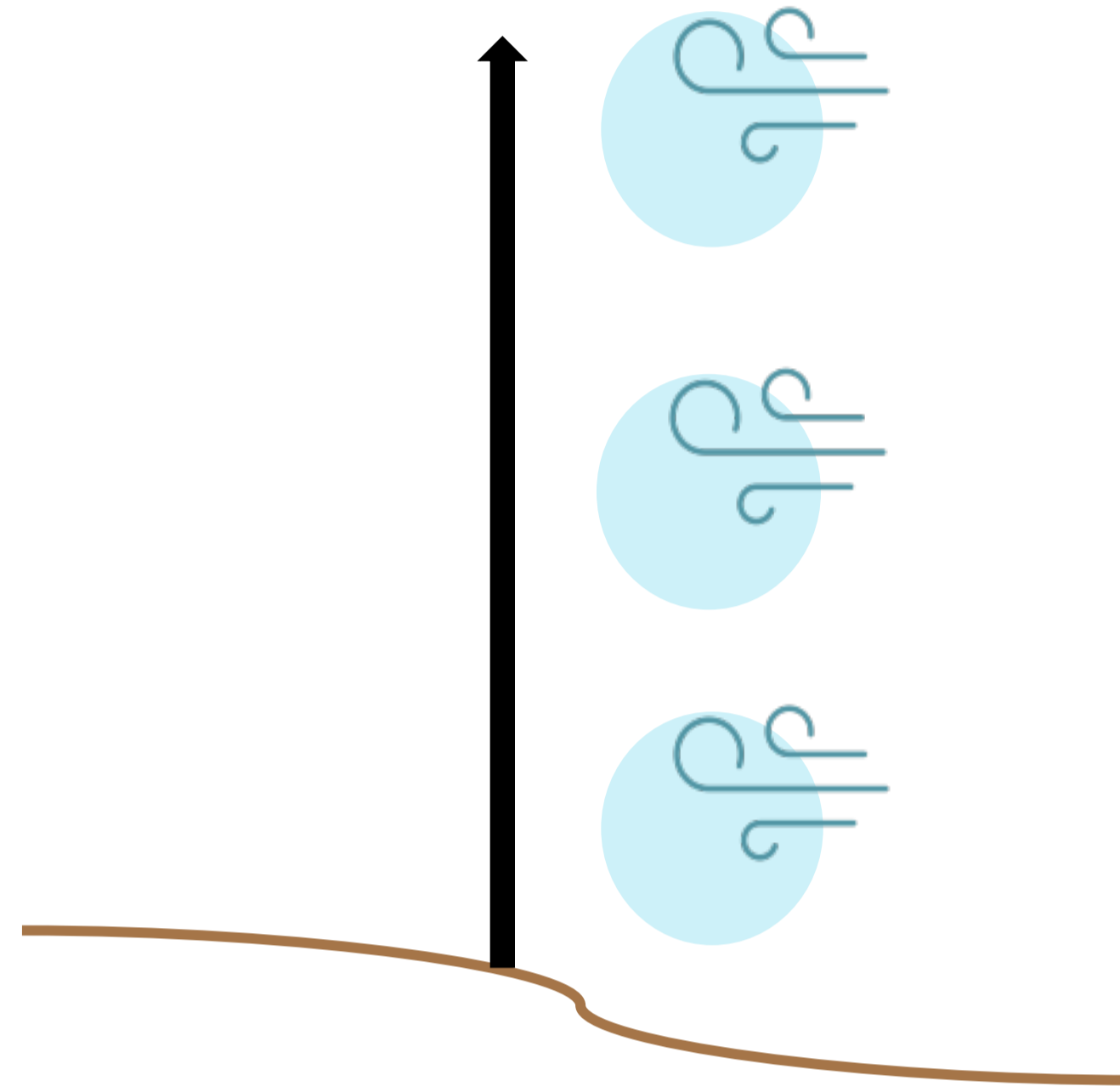
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Effects of future climate scenarios on wind energy generation in Chile

How renewable energy generation will change according to future climate scenarios?

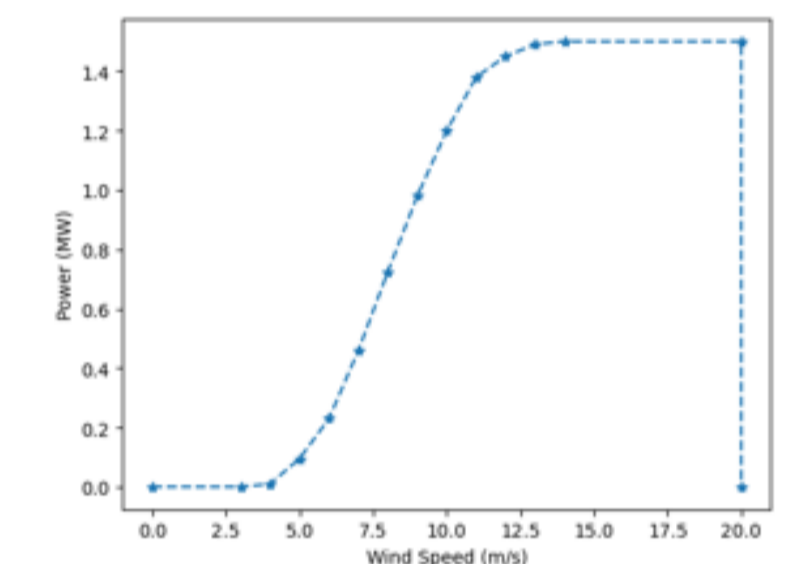
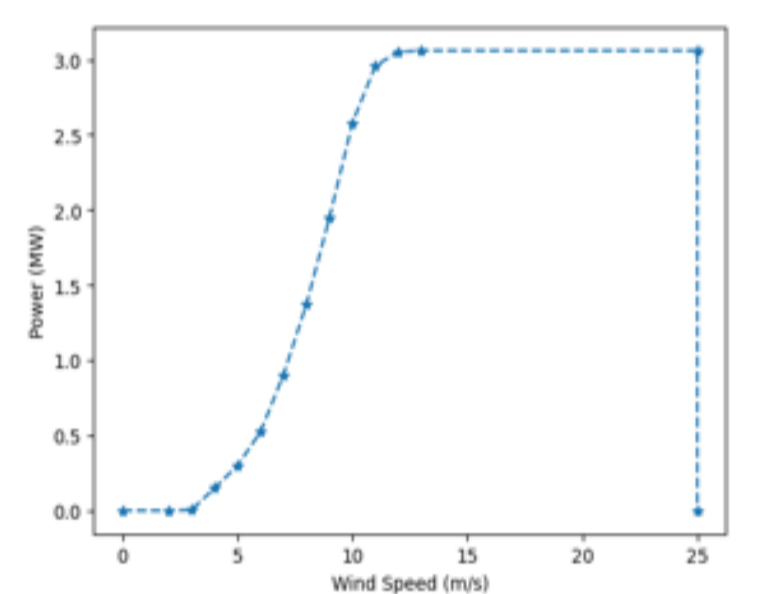


Methodology



Wind speed at different heights

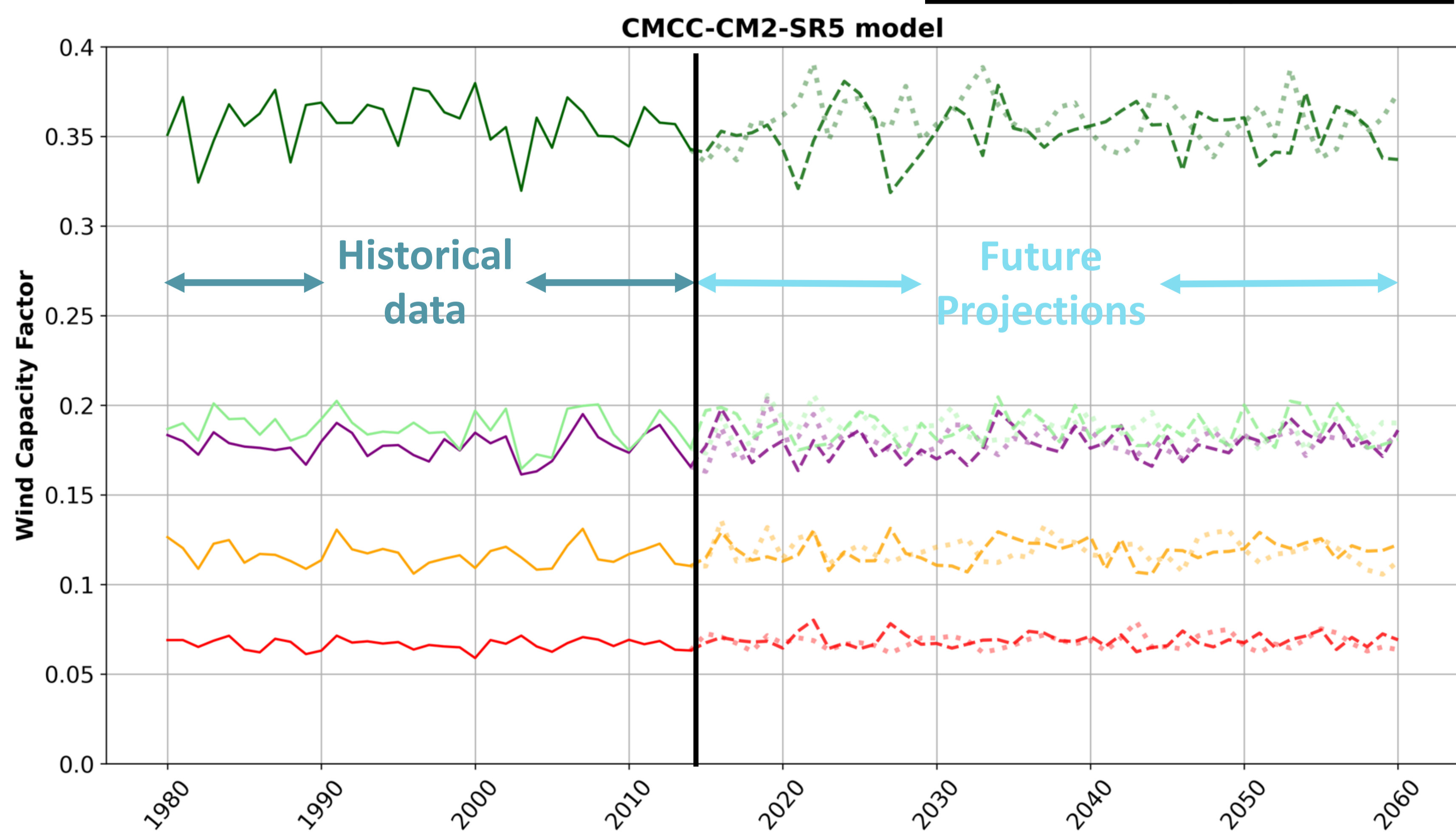
ATLITE



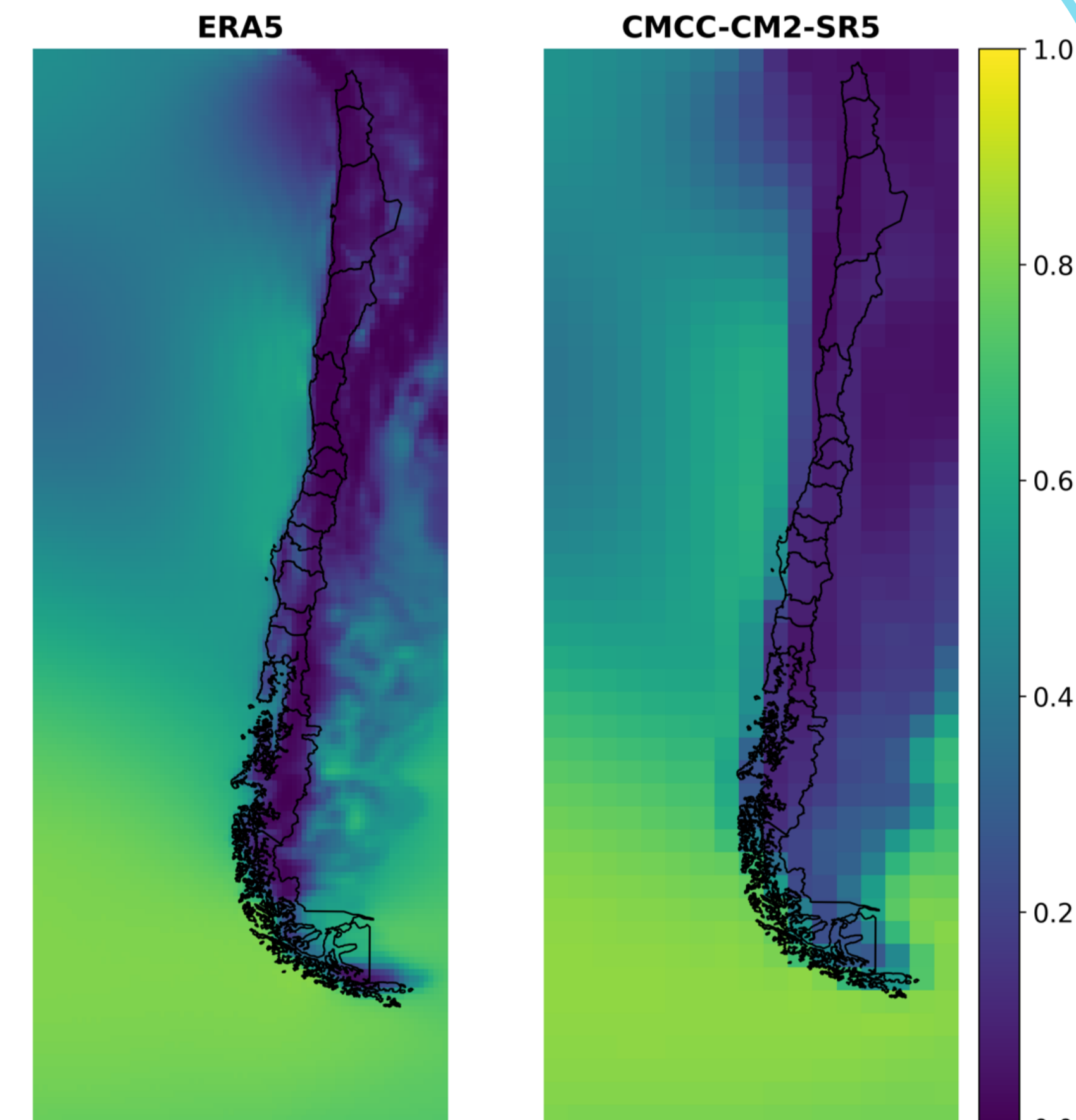
Wind turbine power curve

Hahmann, et al., "Current and future wind energy resources in the North Sea according to CMIP6," [10.5194/wes-7-2373-2022](https://doi.org/10.5194/wes-7-2373-2022).

Preliminary results



- Natural Regions
- Far North
 - Near North
 - Central Chile
 - Southern Zone
 - Austral Zone
- Scenarios
- ssp126
 - ssp585



Future Works: Temporal and spatial downscaling

