Connections between electricity production and climate variability in Europe: a spatial and temporal analysis

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One-sentence Abstract:

This study investigates the correlation between electricity production potentials (Hydro ,Wind, and Solar) over Europe and climate indices.

• Method:

Correlation analysis

Cross-correlation analysis

Composite analysis

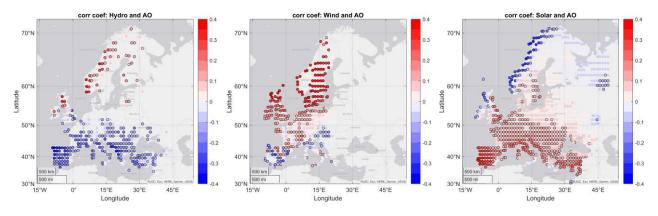


Figure. Spatial patterns for the correlations between power potential data and climate index AO (Arctic Oscillation). Color red and blue indicate positive/negative correlations, respectively. Circles with edge denote for the significant correlations at 0.05 level.

• Questions to answer:

Which are the most correlated climate indices?

What are the patterns of correlation?

How could the climate indices influence the electricity productions?

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