

Vegetation Pattern Correlations

Alina Liu

Mentors: Dr. Yuan Zhou

Objective:

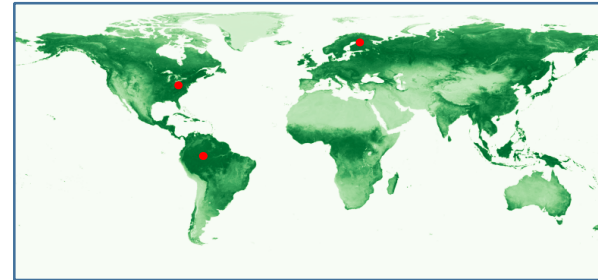
Find the correlation of meteorological parameters with vegetation patterns (NDVI & EVI) in the past decades.

Regions of interest: Amazon rainforest, West Virginia, Finland

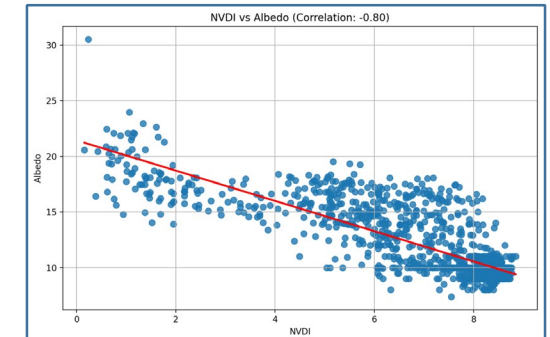
Results

- weaker correlations in January than July
- >60% parameters correlate at least 0.7 in Amazon rainforest in July
- Parameters with temperature (air, soil, surface) often had stronger correlations

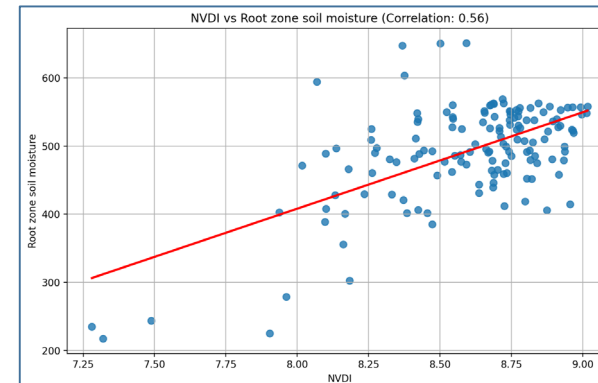
Figures



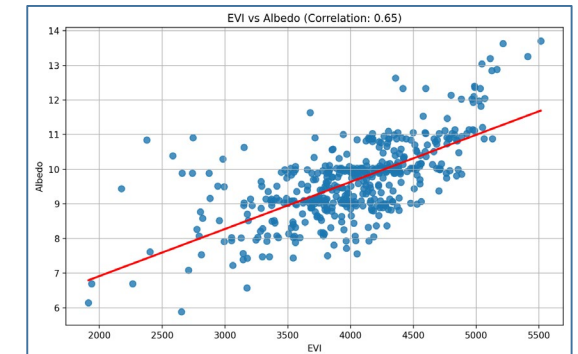
Global NDVI July 2005



Rainforest Jan 2023



West Virginia July 2023



Finland July 2023