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11/13/23

CEVE543

**Precipitation Downscaling Project**

Executive Summary

Global climate models are extremely valuable tools as they provide large scale estimates of climate data for wide-scale use. For this project, we were asked to use the ERA5 reanalysis temperature data. While global climate models offer climate data estimates for almost the entire world, they do have their drawbacks. One of these being the fact that it can be hard to use global climate models to model local-scale climate data. To help solve this issue that global climate models have, we can do what’s called downscaling to it to help offer higher resolution data at smaller scales.

For this project, I developed a downscaling model that would build a model to downscale precipitation from the ERA5 reanalysis data to