Lecture 11: Climate and Weather Data

Friday 31 May 2024

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Presentation Slides

Recording

Q: What is the reason for the drop in number of weather stations in Africa after 2000? It seems systematic? Is each station able to collect richer info with technology?

A: Good question. It could be conflict but it could be advances in technologies that make some redundant. Do you want to ask Jonathan at the end?

Q: How the population weights are made? Is it like collapsing the data with the cells that have people inside?

A: Each geographical unit (e.g., grid cell, region) is assigned a weight based on the population in that respective unit. The climate metric you work with is then multiplied by its respective population weight before averaging.

A: In clearer terms, yes. population weights collapse the climate data by the relative population in a given geographical unit.

Q: Should the secondary weights be also gridded (the same grid size with the weather data) or could be per polygon (e.g. of administrative regions)?

A: Would you be comfortable asking this live? It's a great question!

Q: Could not find the AggFly python package. Is it already available? (Prof. Colmer said is "new").

A: It is not currently published, as we are wrapping up the documentation and testing, but it will be made available soon.

Q: Are there also data available on forecast accuracy over time, at a somewhat disaggregated level?

A: The data is available but may require tweaking to work with. Here's one paper that walks through the history of forecasting and the improvements over time. Corresponding data should be attached, although it can be found elsewhere: https://www.nature.com/articles/nature14956".

Q: Are there also data available on forecast accuracy over time, at a somewhat disaggregated level?

A: Jeff Shrader and Manuel Linsenmeier's paper also has some info on forecast accuracy and may be another place to find data: https://ideas.repec.org/p/osf/socarx/7e2jf.html.

Q: Would you please tell us how we reduce satellite data to be usable for analysis?

A:Hi, please check out David Weil's slides on the course website. That one is more focused on the satellite data per se.