THE CUIZINART – A Tool For Automatic Subsetting of Large Gridded Datasets and Data Dissemination

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Introduction

The Cuizinart provides a system to subset and disseminate **large-scale gridded datasets**. Similar to the CaSPAr system that is a platform for Environment and Climate Change Canada's numerical weather predictions, the Cuizinart allows the user to select variables, time periods, forecast horizons (if applicable), and a polygonal domain. The Cuizinart system is then **automatically processing** the requested data either on ComputeCanada's system Graham or using PySpark. The data will be made available as **download** using Globus.

Available Data

- WRF pseudo-global warming (CONUS)
- WRF control run (CONUS)
- WRF pseudo-global warming (Western CA)
- WRF control run (Western CA)
- Monthly & weekly aggregates of satellite-based Land/lake Surface temperature of MODIS sensor (merged MODIS-Aqua and MODIS-Terra) (Great Lakes)
- ERA5 Precipitation, Evaporation, Cloud Cover, Run-off (global)
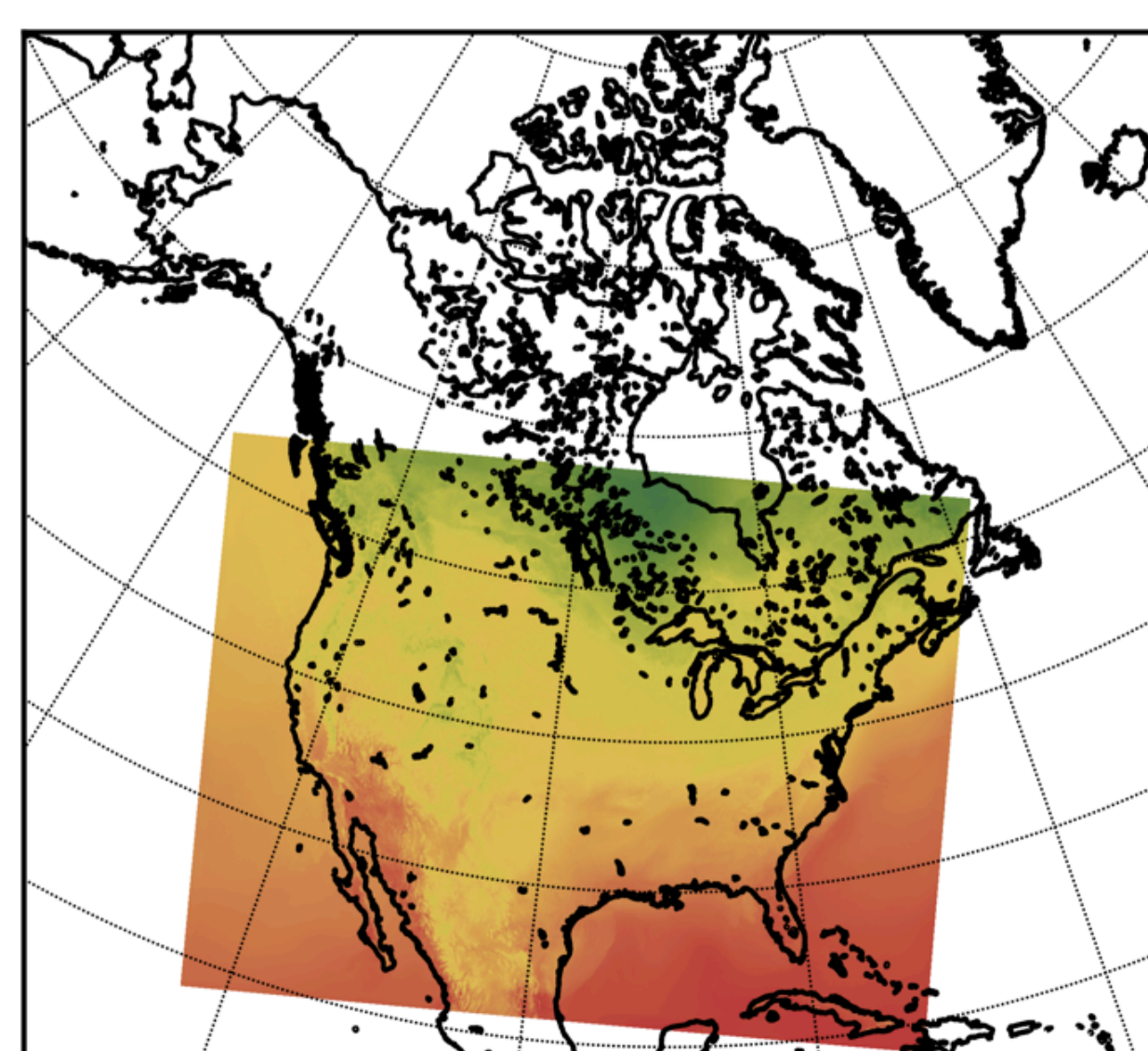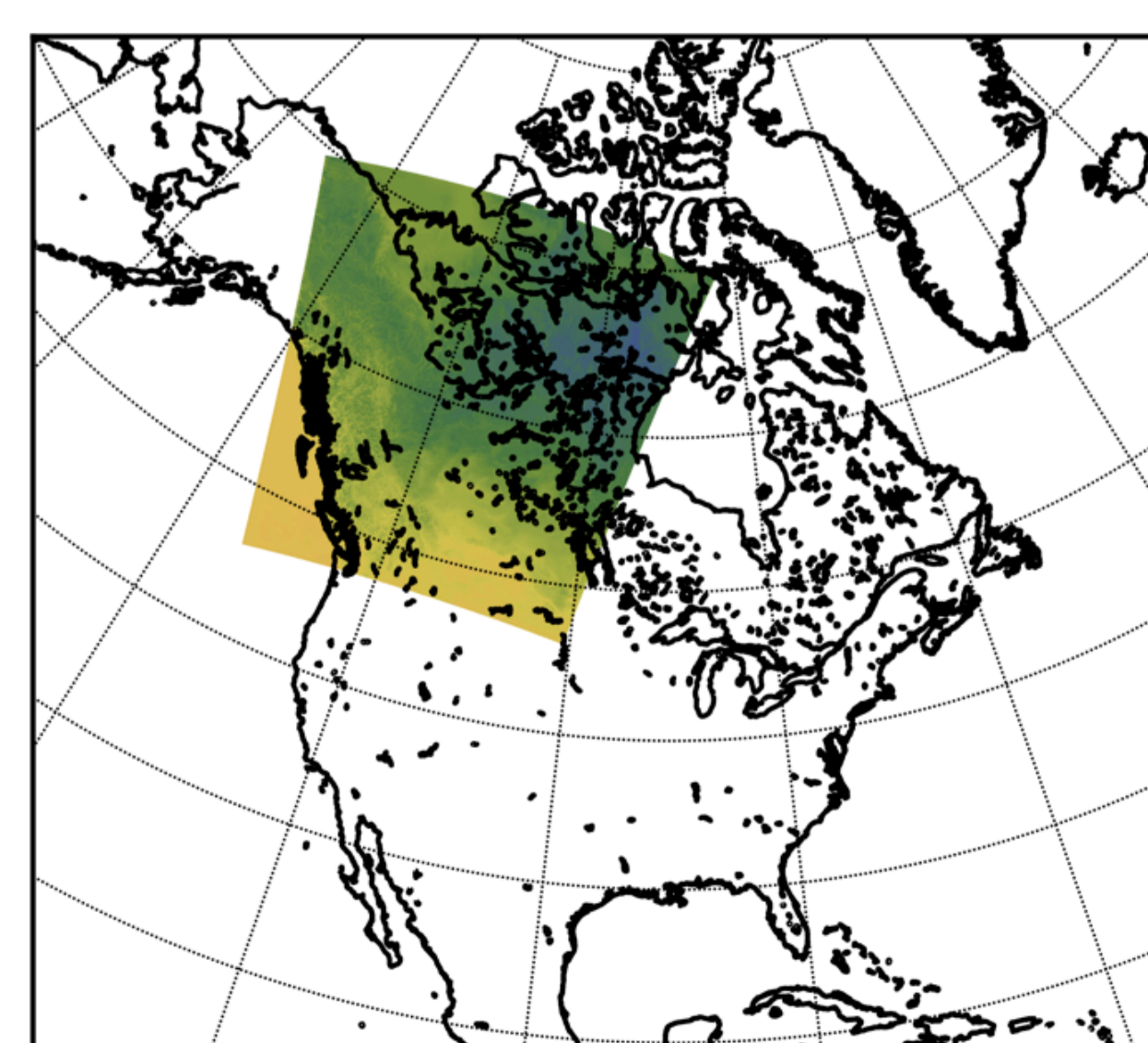
WRF (CONUS) domain *WRF (Western CA) domain*

Get Your Data of Interest

Select:
- Product
- Time period
- Variables
- Forecast horizons and issues (if applicable)
- Domain (draw polygon or upload shape file)

Process …

Download data using Globus

What we are working on

- Include your NetCDF data
- Working on conversion scripts of data into CF-1.6 compliant NetCDF-4
- Establish PySpark backend for online processing of data
- Connecting datasets to database of metadata records

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