

Penn State short-term activities

- Take 2050 RCP8.5 centroid model with Nov–Jun precipitation and May–Oct temperature. Evaluate the daily historical (1980–2005) temperature and precipitation using the MACA training set.
- If the centroid historical model looks good, send the daily temperature and precipitation output to CBP and Auburn so they can compare it with their own forcing.
- Download all daily climate variables (humidity, winds, solar radiation) for full time period (to 2065) for centroid model.
- Compute the daily longwave radiation and other derived variables (daily mean temperature and pressure)
- Upload all daily variables to Box.

Possible Penn State long-term projects

- Understand the differences between BCSD, MACA, and the native GCMs
- Examine historical trends in radiation and wind speed
- Investigate the causes of projected future increases in MACA radiation
- Literature review on all of the above—have such analyses been conducted in the Chesapeake system or elsewhere?