New Data and Data Products
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More Variables: We have added more impact-relevant variables. The archive now includes (all daily): precipitation, evaporation, maximum and average temperature, surface humidity, surface winds). We have also developed the computational framework for a multivariate bias correction and it is performing a preliminary test correction.

Visualizations: We have produced more than 200 figures and made them available through the project website for use in selecting simulation results. These figures show maps of the climatology and change signals for assessment and historic average temperature and precipitation for different days and years for different regions. We have also developed a change line intervention, which provides robust and reliable service, high

dependability UI, and powerful search capabilities.

Why analyze bias correction?
Climate projections have systematic bias. It is common practice to apply a bias correction to climate model outputs for use in impacts. There are many bias correction methods that will adjust model outputs to match the statistics of observations, but the results don’t always make sense. These analyses help us understand where the bias-corrected results are meaningful.

Phase 2 Analysis
This analysis compares two bias correction methods: Merzner Density Distribution Mapping (KDOM) and Quantile Delta Mapping (QDM). These methods can produce results that have significantly different biases. This feedback, but the results don’t always make sense. These analyses help us understand where the bias-corrected results are meaningful.

Comparison of two bias-correction methods
KDOM and QDM bias-corrected daily data are very similar for most of CONUS except for precipitation (JJA). Analysis indicate region where the distributions of the two datasets are significantly different.

Localized analysis
We have developed a quantile change line for assessment of absolute temperature changes (not anomaly temperatures) that reveal the presence of bias for a specific region and the season of interest. This feedback, but the results don’t always make sense. These analyses help us understand where the bias-corrected results are meaningful.

Different Climate Change Signals
Large errors (as much as 29°C or greater) can be seen at several locations. These errors increase by the end of the century. The application of the extra is very similar for both bias correction methods, although QDM has a somewhat smaller error magnitude.