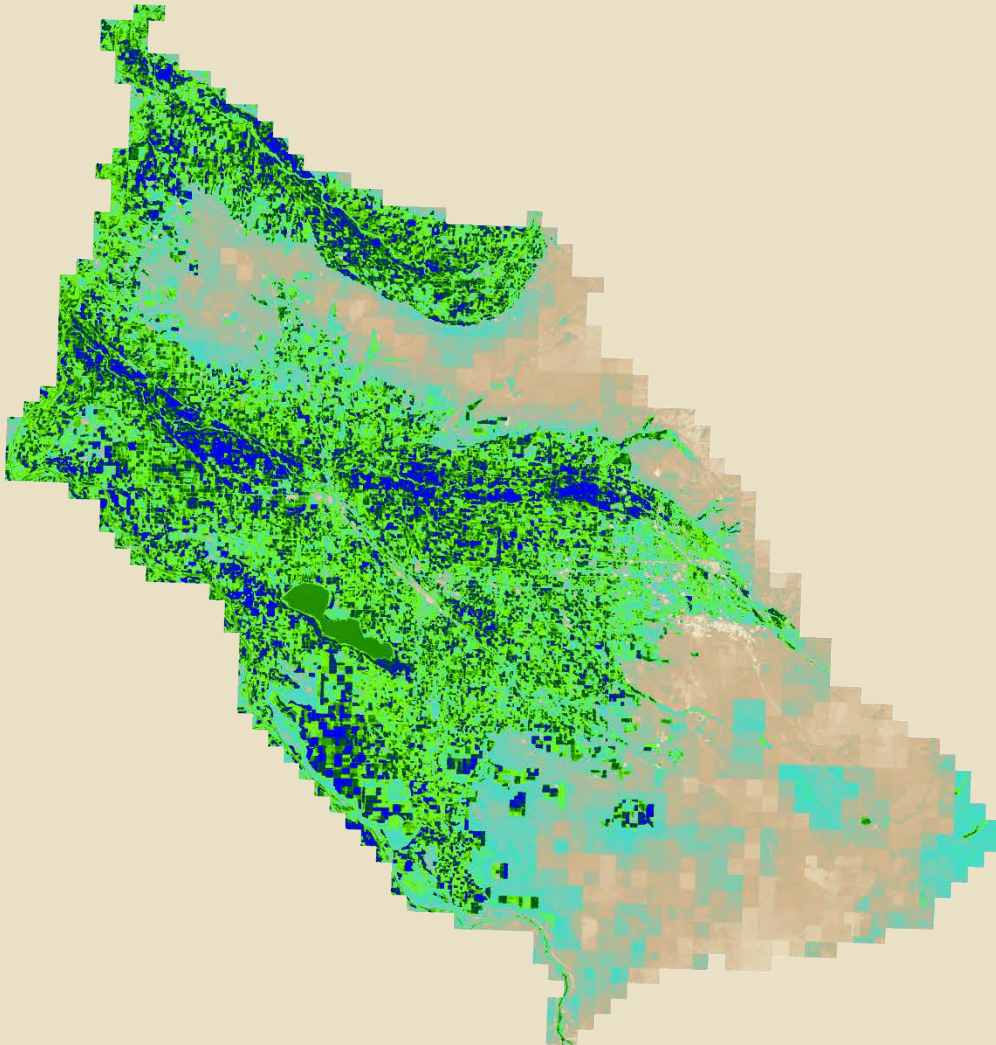


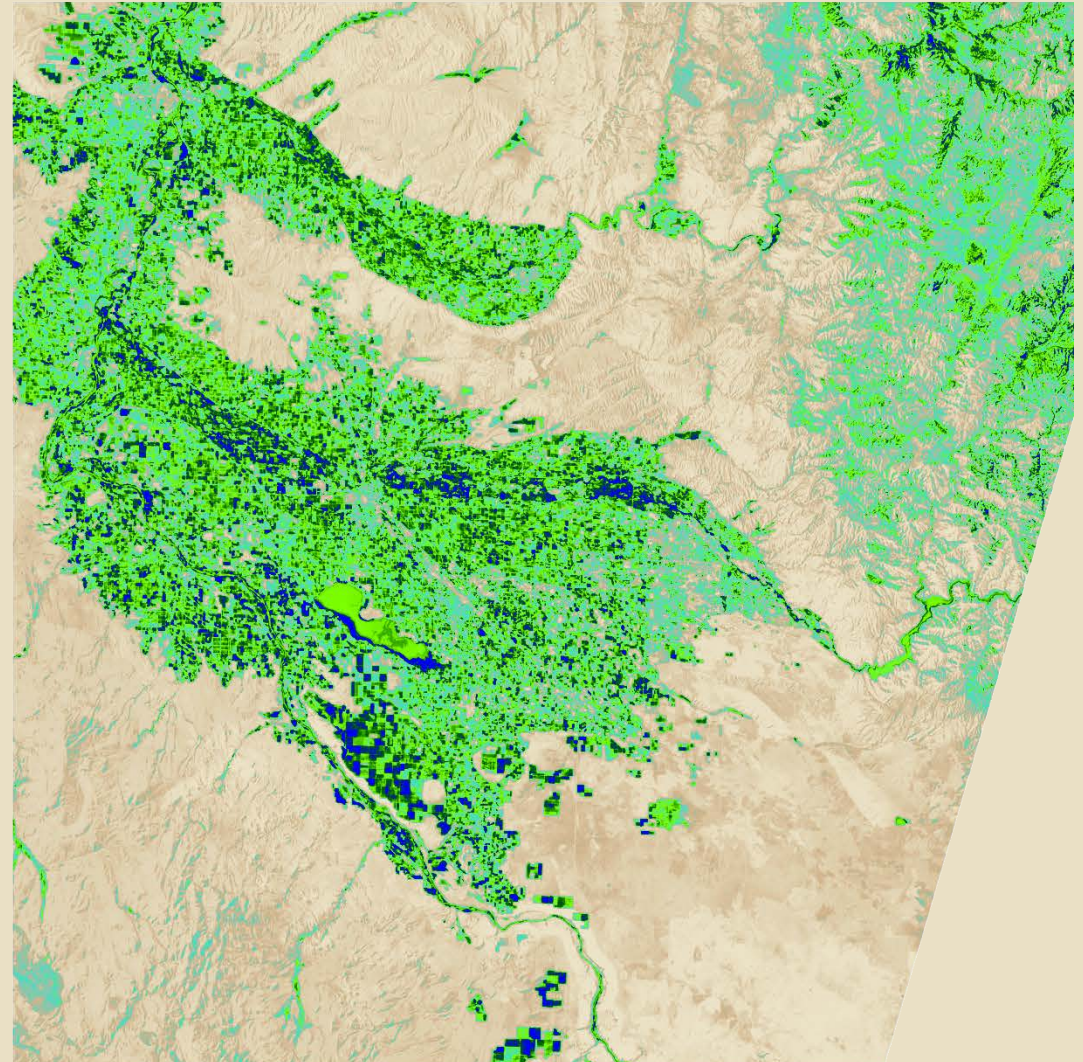
Correction to ET method comparison

Alex Moody, IDWR
Treasure Valley MTAC, 3 Sept 2020

Alternate



METRIC



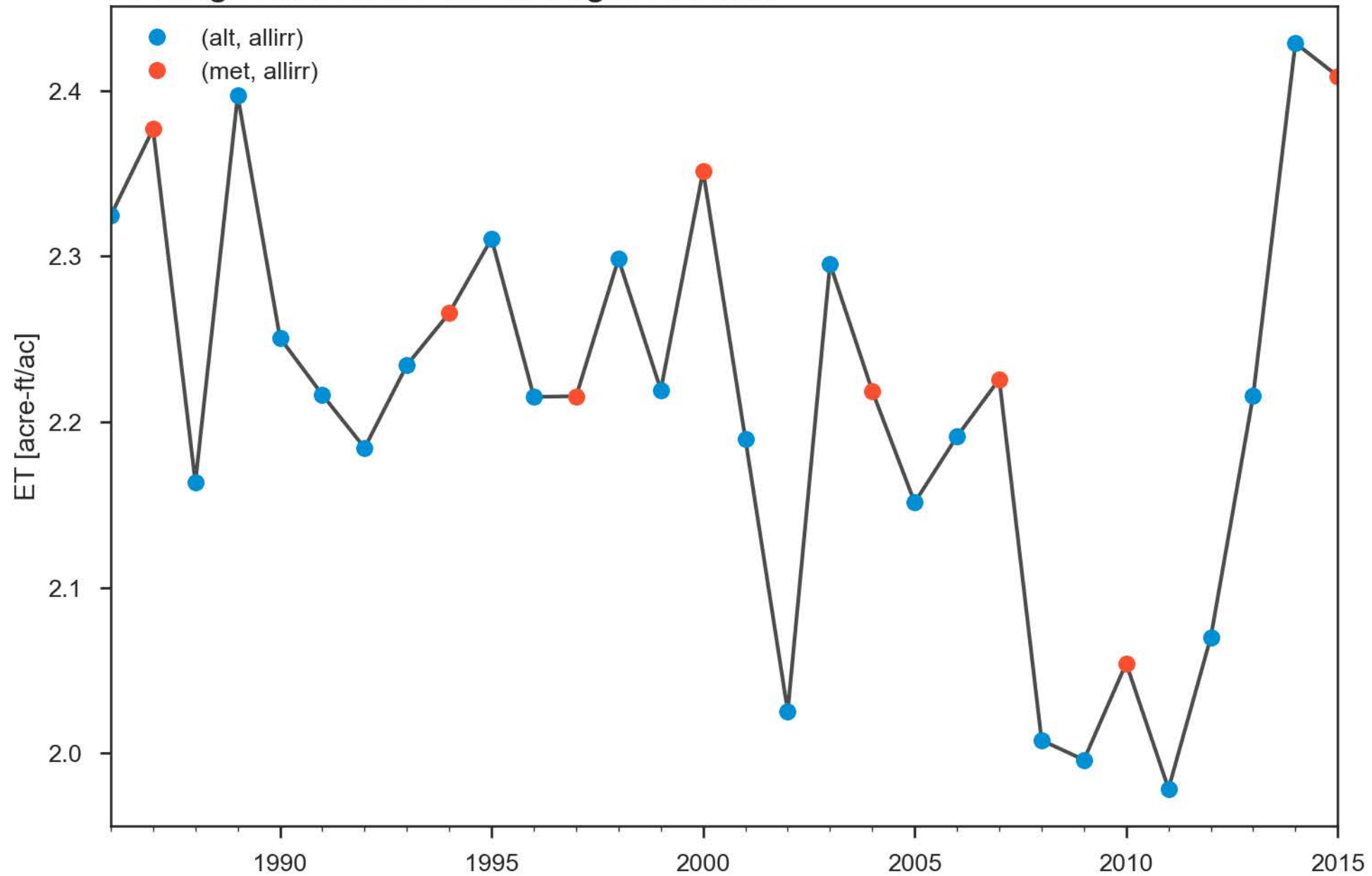
Preliminary analysis

- T-tests on monthly raster statistics zoned by irrigation status and grouped by method (METRIC or Alternate).
 - i.e. compare all March METRIC rasters with all march Alternate rasters
- Suggested methods had ET populations with different means.
 - METRIC generally shown to be much higher.
- Did not align with Clarence Robison's model-cell based comparison.
- Recommended exploring a bias correction for alternate method.

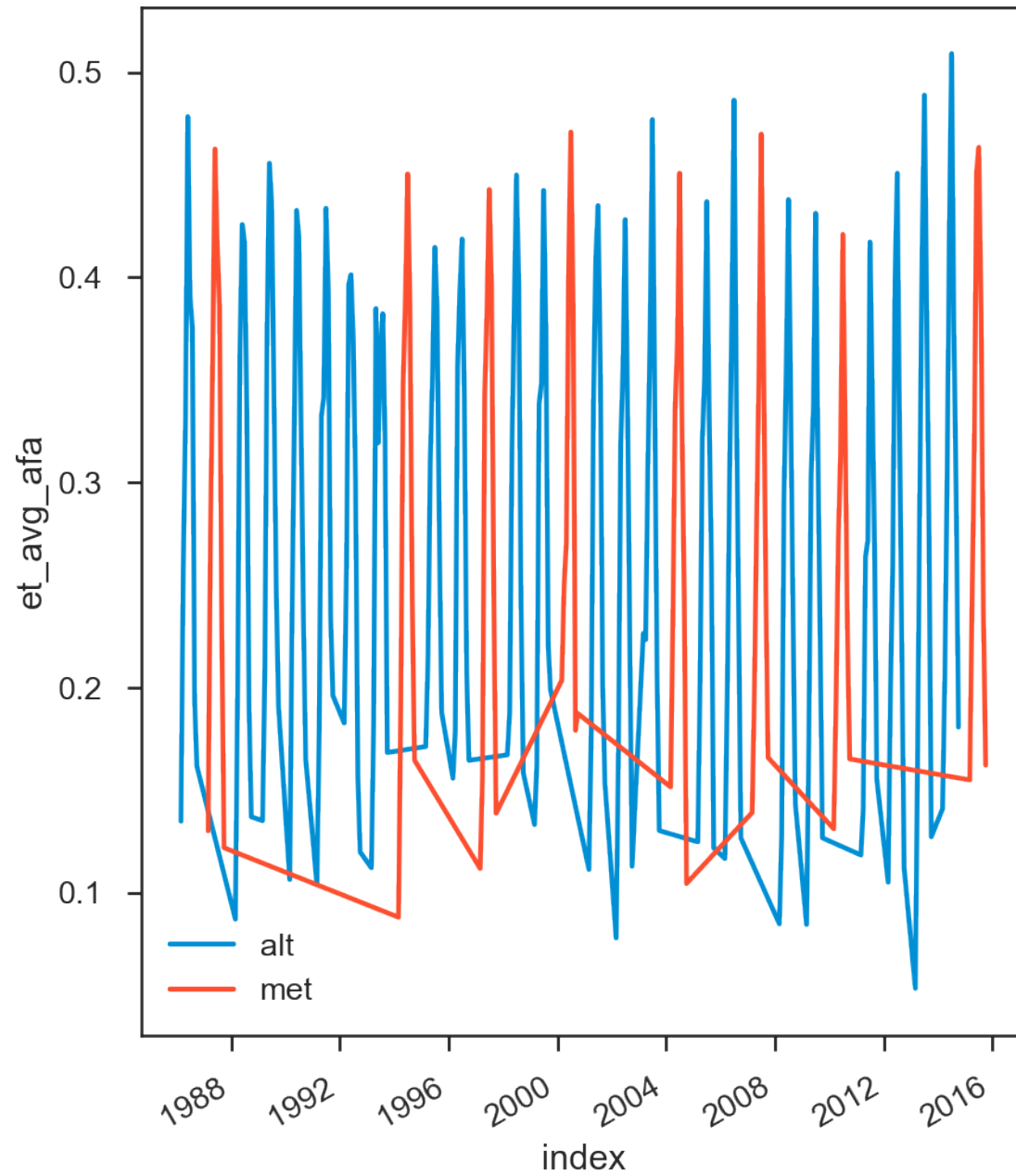
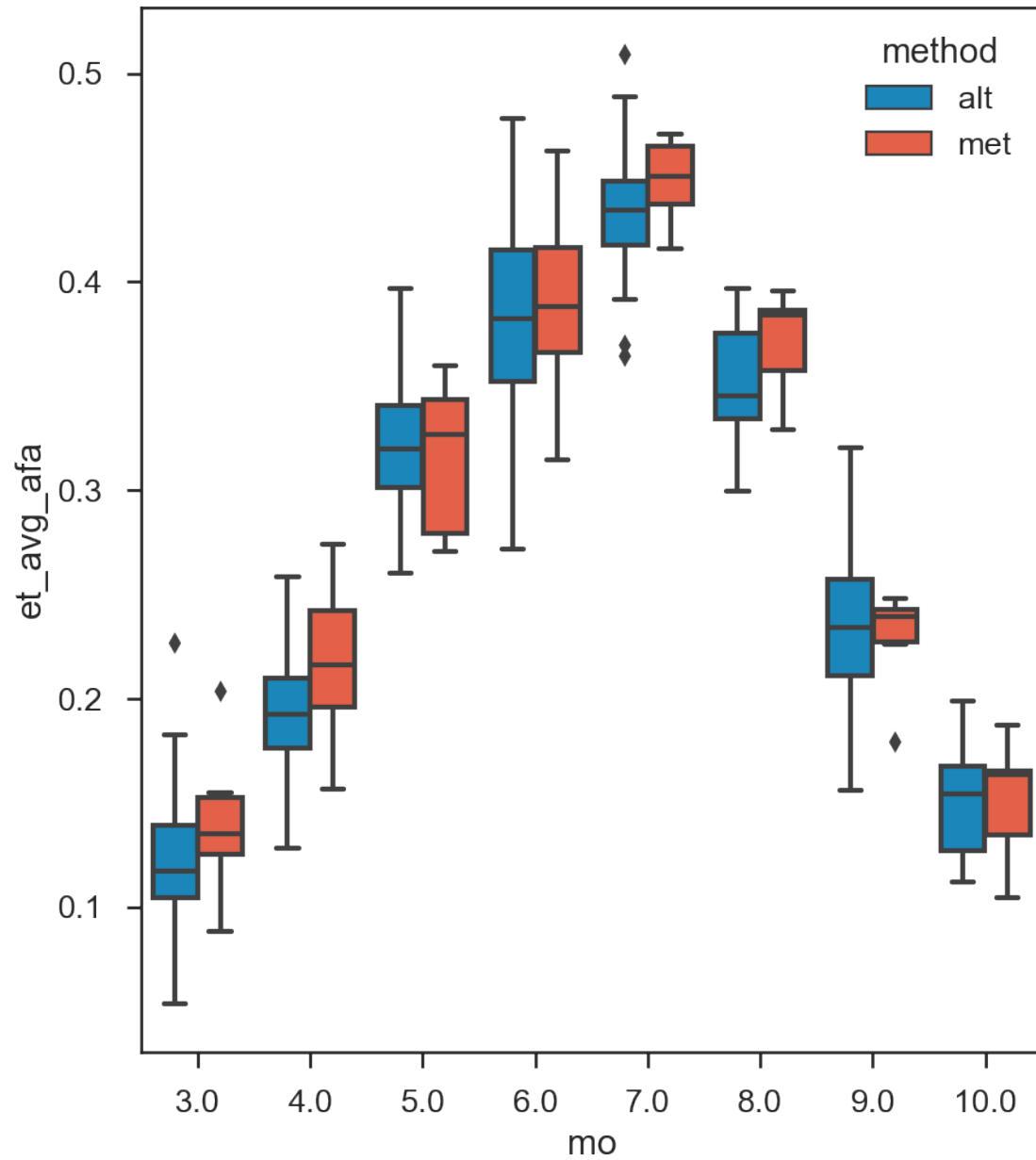
Processing error

- Discovered in final quality check before calculating correction.
- 2015 METRIC rasters were repeated for *all* METRIC years
 - Change in statistics due to different irrigated lands datasets.
- Corrected analysis suggests METRIC and Alternate datasets have ET distributions with the same mean.
 - >> Both ET methods are comparable without correction
- **Bias correction no longer recommended.**

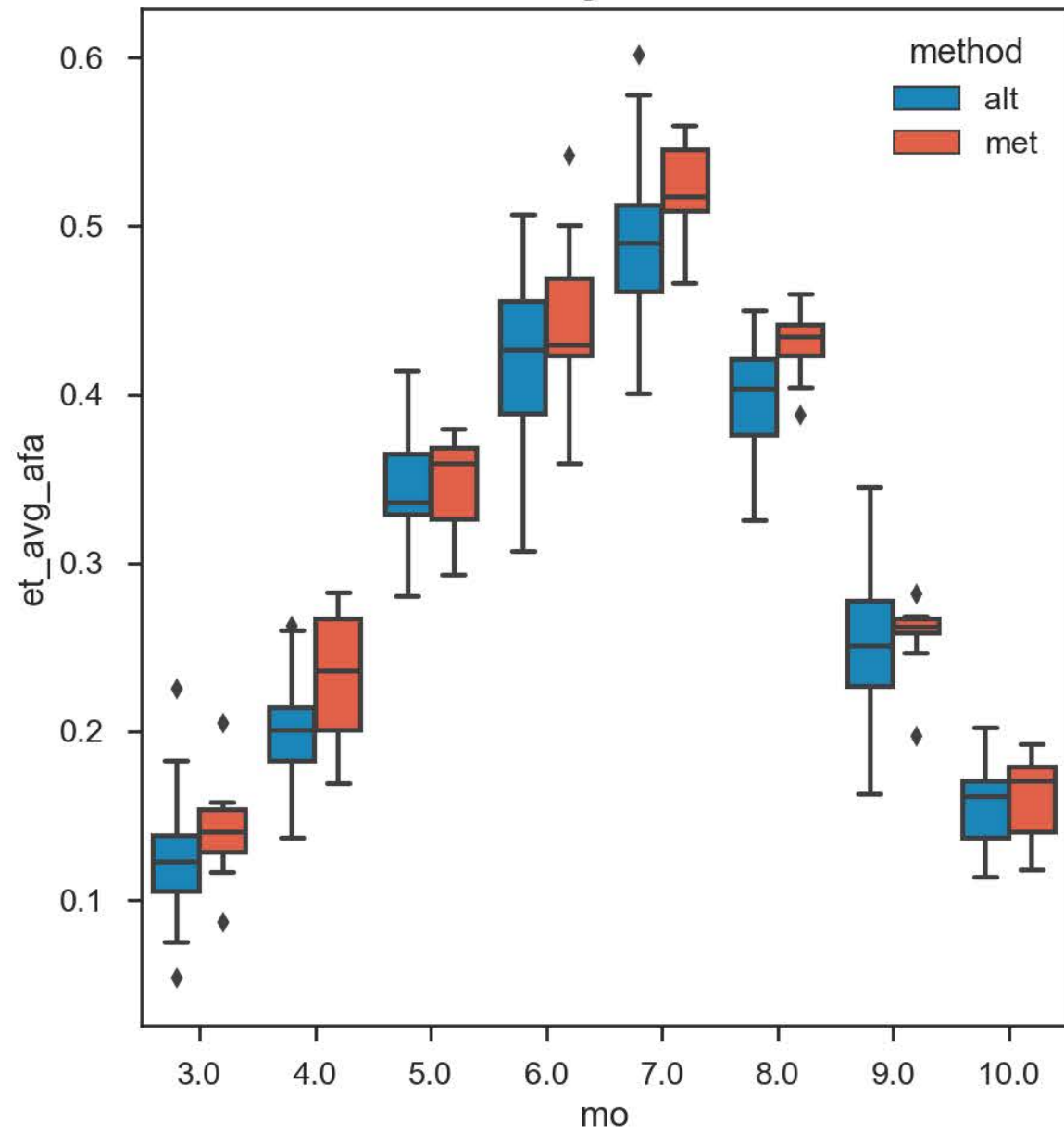
Average annual ET for all irrigated lands



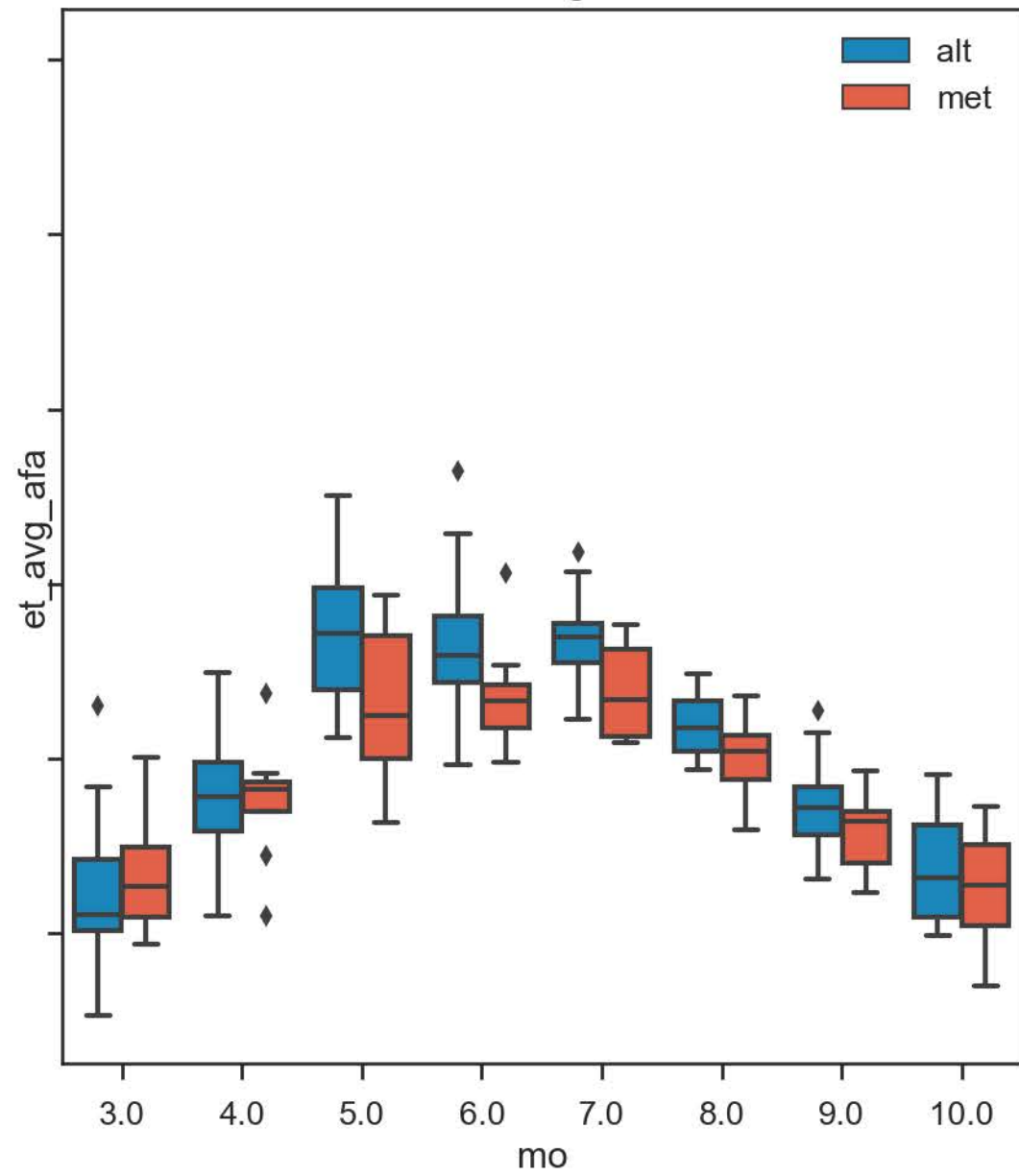
All Irrigated Areas



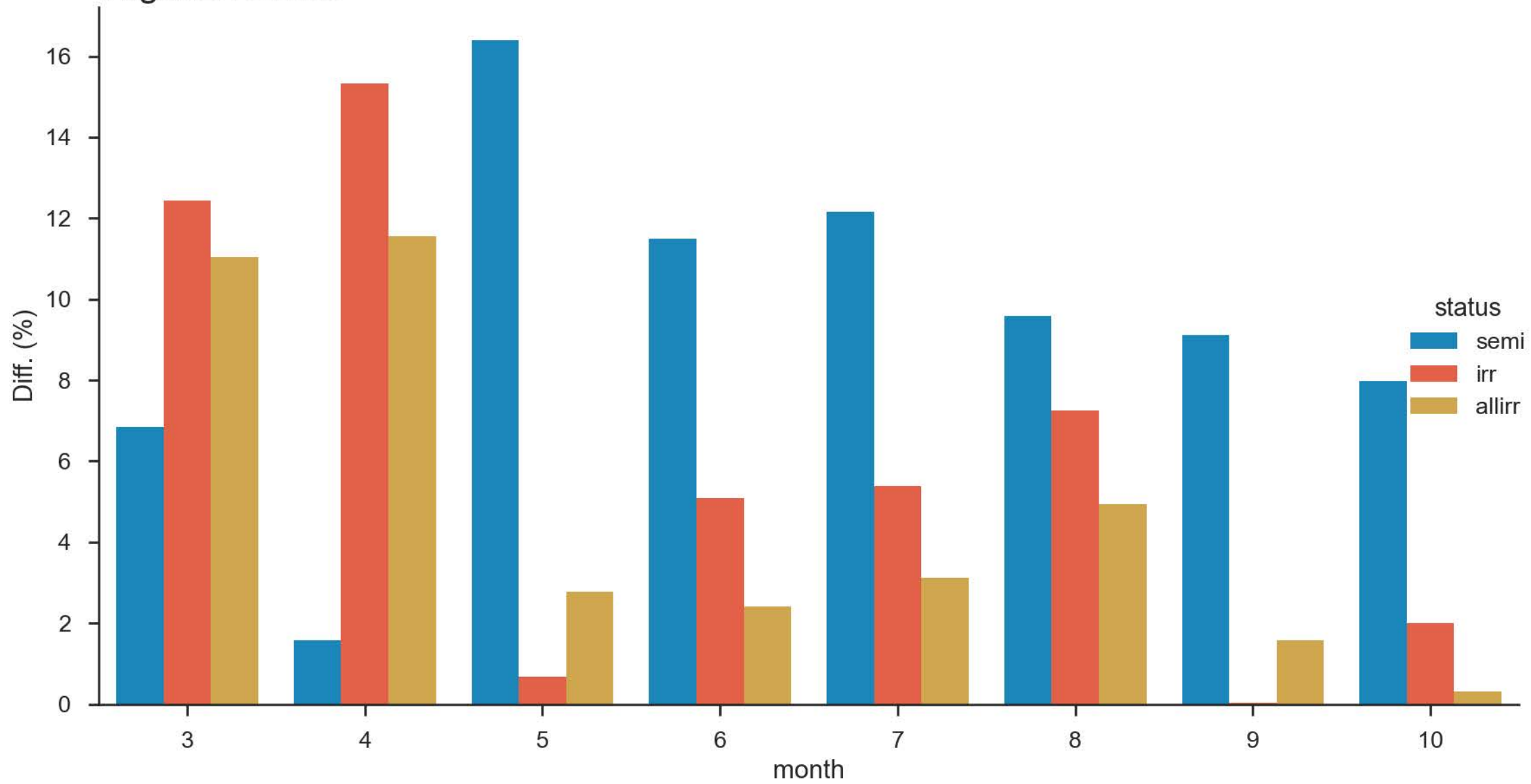
Irrigated



Semi Irrigated



Percent differences by irrigation status



Summary

- Corrected analysis aligns with U of I's quality control checks on alternate method.
- No bias correction carried forward into model.
- METRIC and Alternate ET rasters used directly.