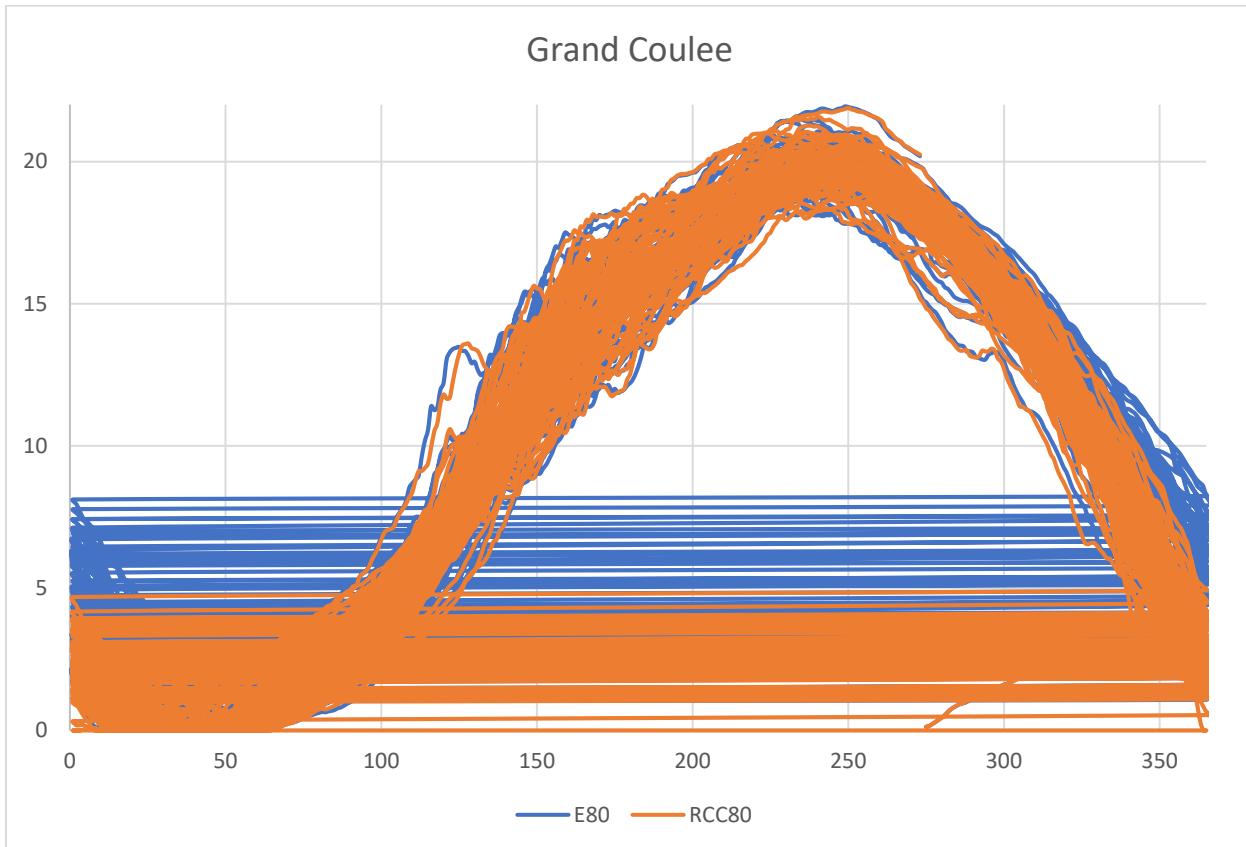
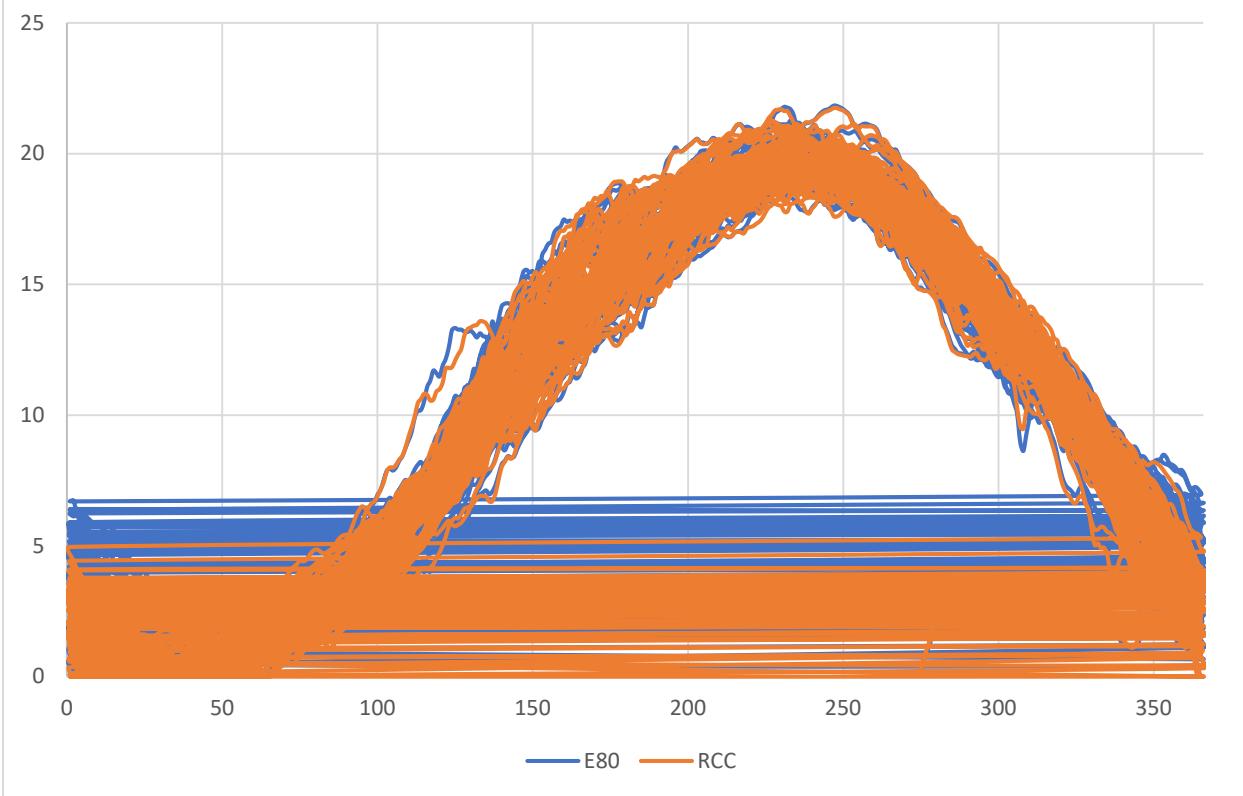


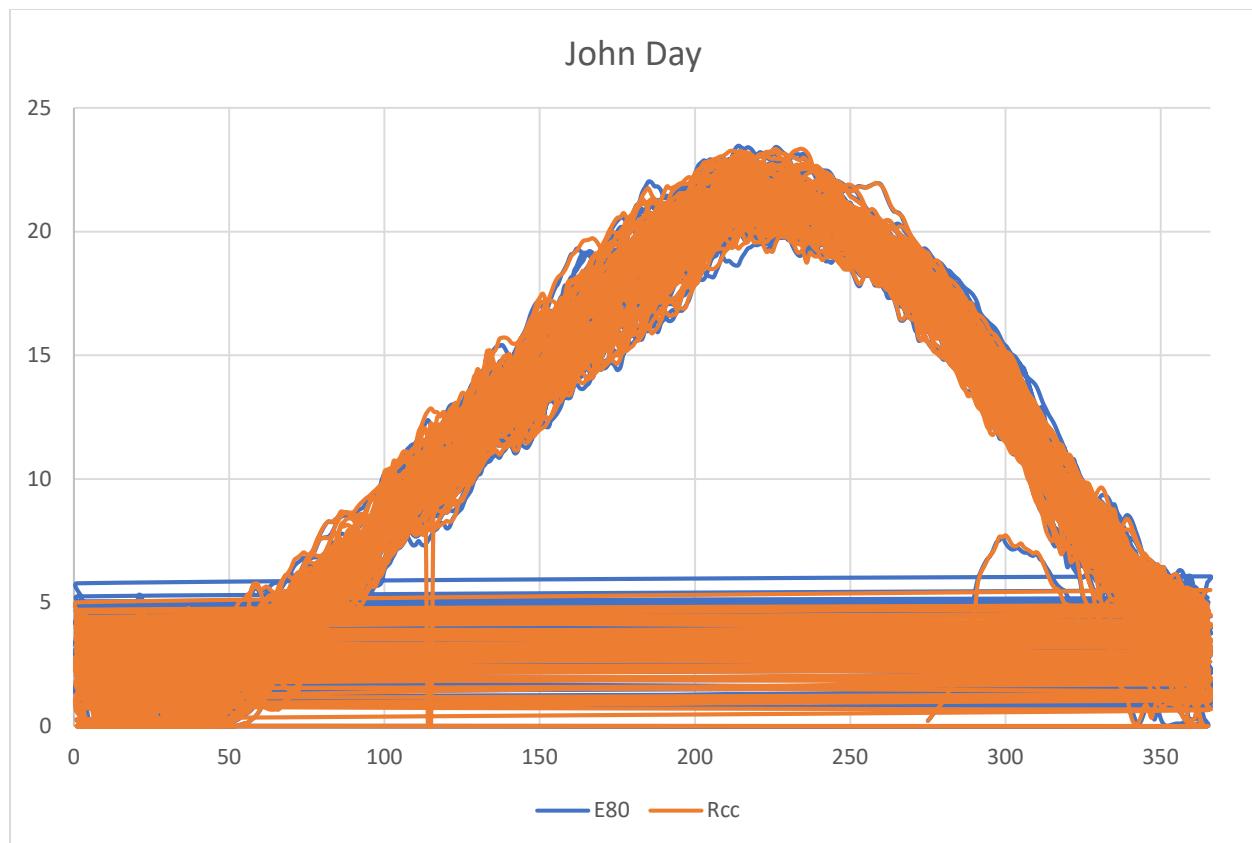
The following are charts of Temperature versus day of year for all years from 1928 – 1998 for several projects on the Columbia. The blue lines are for the 4E model and the orange for RCC. Note that the horizontal lines at the bottom are just connections between day 365 and day 1.

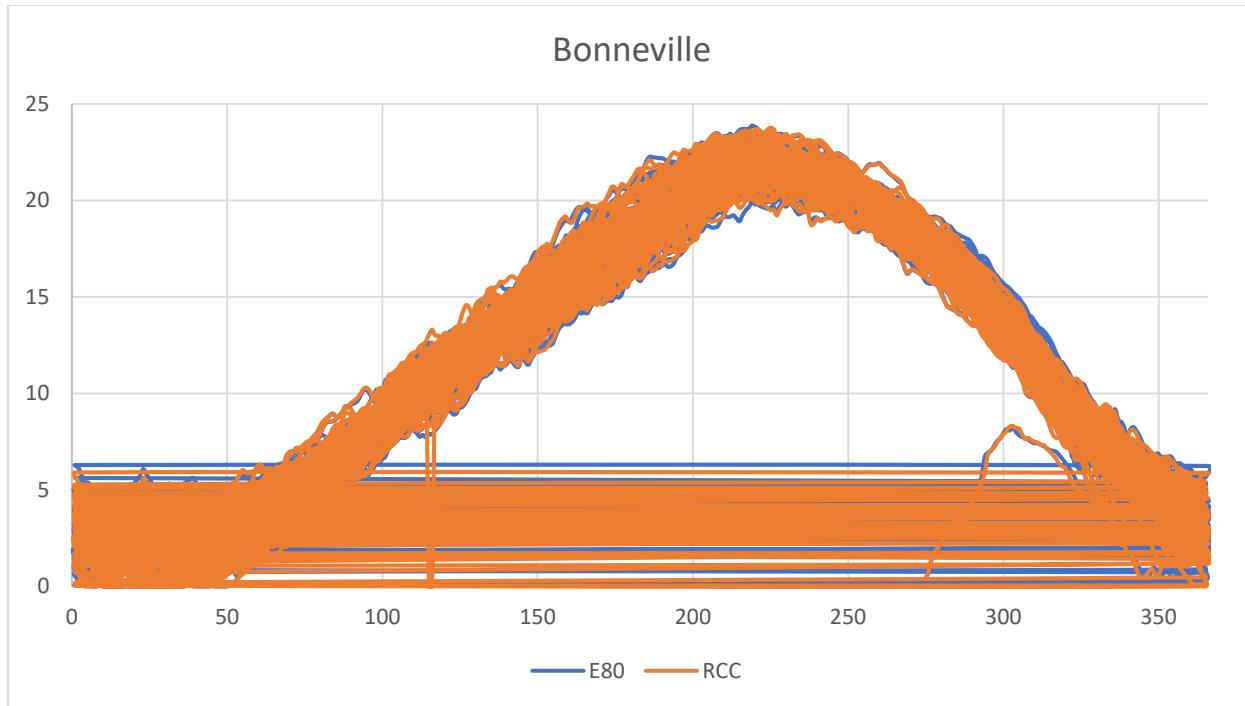
(from David) I compared differences in temperature between the RCC80 and 4E runs at several different RM locations on the Columbia (595, 515, 474, 416, 318...) and see that around the Dec/Jan time frame, that the temperatures are considerably cooler in the RCC80 run than 4E. This effect diminishes somewhat as the model moves downriver (not surprising, given tributary input) until below the Snake where the difference is much smaller. So, it is a Columbia effect, which I think probably makes sense since 4E saves more water for the spring freshet, meaning more water flowing through the RCC at this time of year. It may be worth an email after this to John Yearsley for his opinion since the difference seems pretty large (1-2 deg C) and I'm not sure the differences in flow support this.



Rocky Reach 474







The next couple of charts show Flow on the left axis and temperature on the right axis for the initial year 1928-29, 1936-37, 1940-41 at Grand Coulee versus the date. Note that 1928-29 is the start of the model run. You can see the flow in the winter months impacting the onset of temperature declines for these examples.

