General processing workflow (have detail in my notes if needed). Same process for both the 30m DEM (USGS 3DEP) and the 1km PRISM DEM (i.e. USGS NED)

1. DEM > clipped to study area
2. Raster To Point
3. Add XY Coordinates on point feature
4. Table to Table to generate CSV for ClimateWNA (it needs lat/long/elevation)
5. Input CSV file into ClimateWNA
6. ClimateWNA generates CSV file with climate variables associated with each of the points provided. About 24 attributes plus the original lat/long/elev.
7. XY Table To Point to bring in the ClimateWNA data
8. Point To Raster (one raster per climate variable)
   a. Using the clipped DEM for the environment parameters: GCS, snap raster, cell size, extent

Had no issues with the 30m DEM. No problems on the PRISM 1km DEM either until I hit step 8 above. For some reason I am getting a one cell wide band across the center of the climate rasters (Figure 1) that is not there in the DEM or point data generated from the DEM.

Zooming in and overlaying the point features used to generate the raster, it looks like the raster cells are offset from the points (Figure 3). The points are not centered in the raster grid. The are centered when I compare the 1km DEM with the points (Figure 2). But offset when I compare the climate variable with the points (Figure 3).

Going back to the 30m DEM and climate rasters, no such issue (Figure 4) when I zoom in.

The process worked fine for the 30m but shifts for the 1km. If the points in step 7 did not align with the original DEM I would have suspected a problem with the ClimateWNA data. But the points look fine relative to the 1km DEM. The shift is happening when Point To Raster generates the raster.
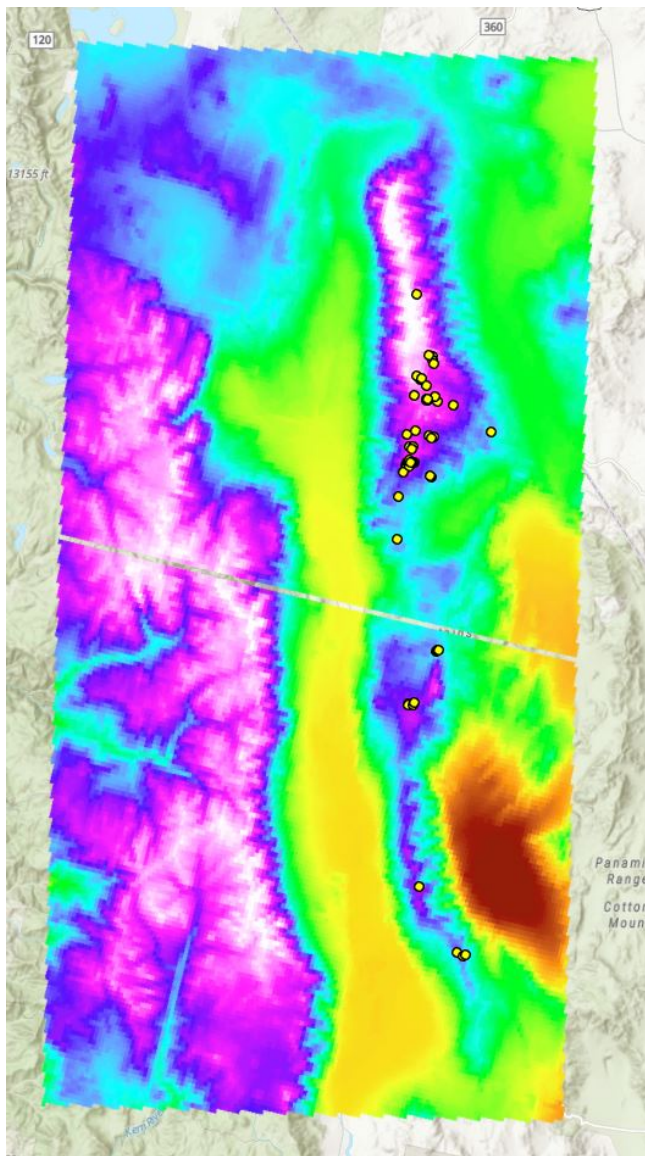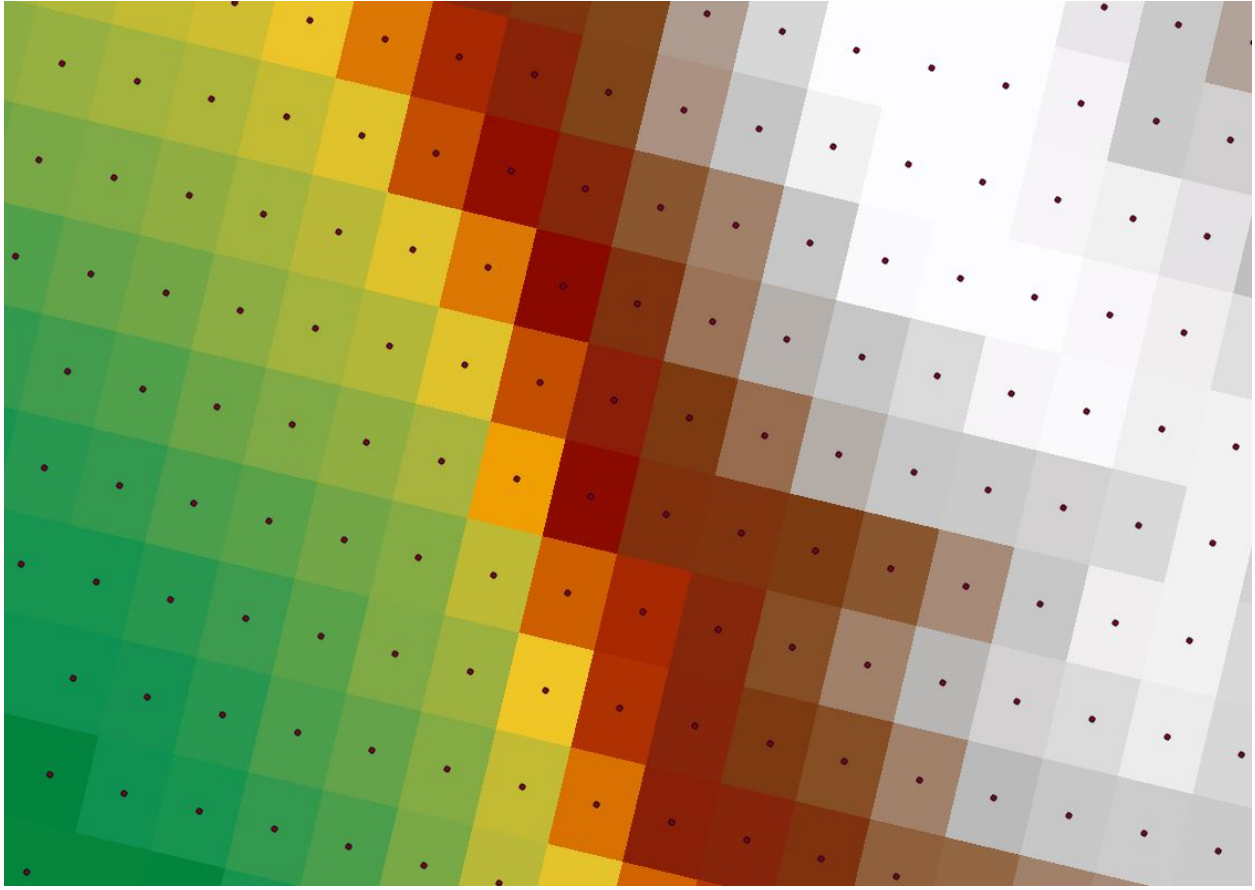
Figure 1: 1km with 1 cell band

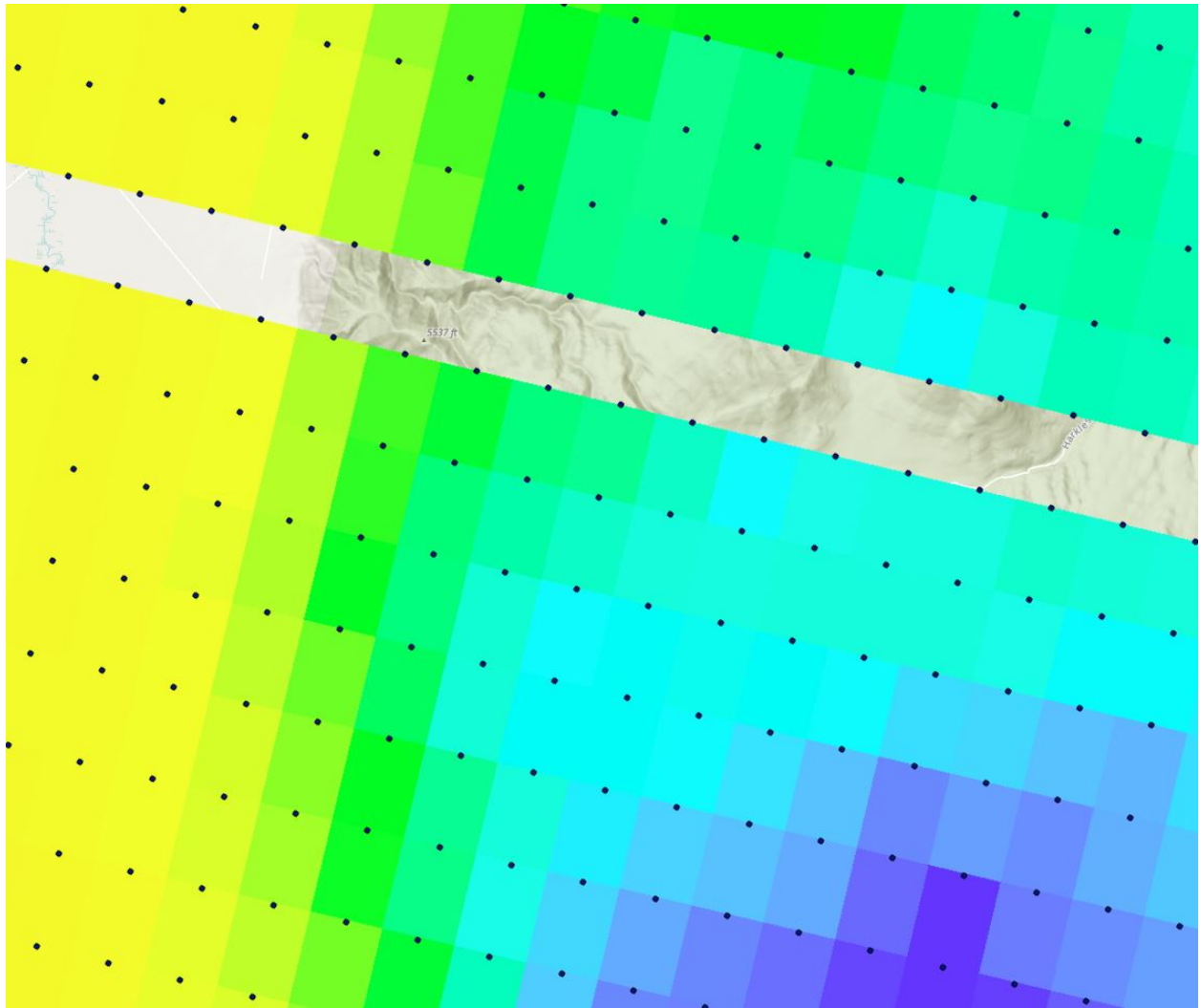*Figure 2 - 1km PRISM DEM with point overlay*

Figure 3 - Same 1km points overlayed on the climate raster (mean annual precip)

Figure 4: 30m climate raster (mean annual precip) with 30m point overlay