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GEOG 4140-001

17 March 2021

Lab 7 Deliverable 5

Where did your classification perform well and where did it struggle? Why do you think

this is and how could the classification be improved?

The water classification from the algorithm did extremely well for the water body south

of the mountains, the Mesa Reservoir. However, the algorithm also picked up supposed bodies of

water within the mountains, I assume this is due to the similar dark coloration of the blues and

greens of the raster samples I input that caused this error. I also believe that the forest and barren

did well within the algorithm too, and they closely align with the original satellite image. The

barren classification was associated with the city, which I think is an accurate classification due

to the prevalence of buildings and roads. It did stretch farther up into the mountains than I would

have liked the classification to perform, and this is the same issue with the planted/cultivated

class as well.

The product can only be as accurate depending on the original image's quality—even

though it is impressive technology, the raster was still slightly coarse, but I do not think satellite

technology would yet produce a 4K resolution. Realistically, I should have set high expectations

and been selective about the sampling, *especially* for land classes—the barren and

plant/cultivated classifications proved the most difficult out of the rest to sample, and while

water was the easiest, there were still improper water classifications within higher altitudes.