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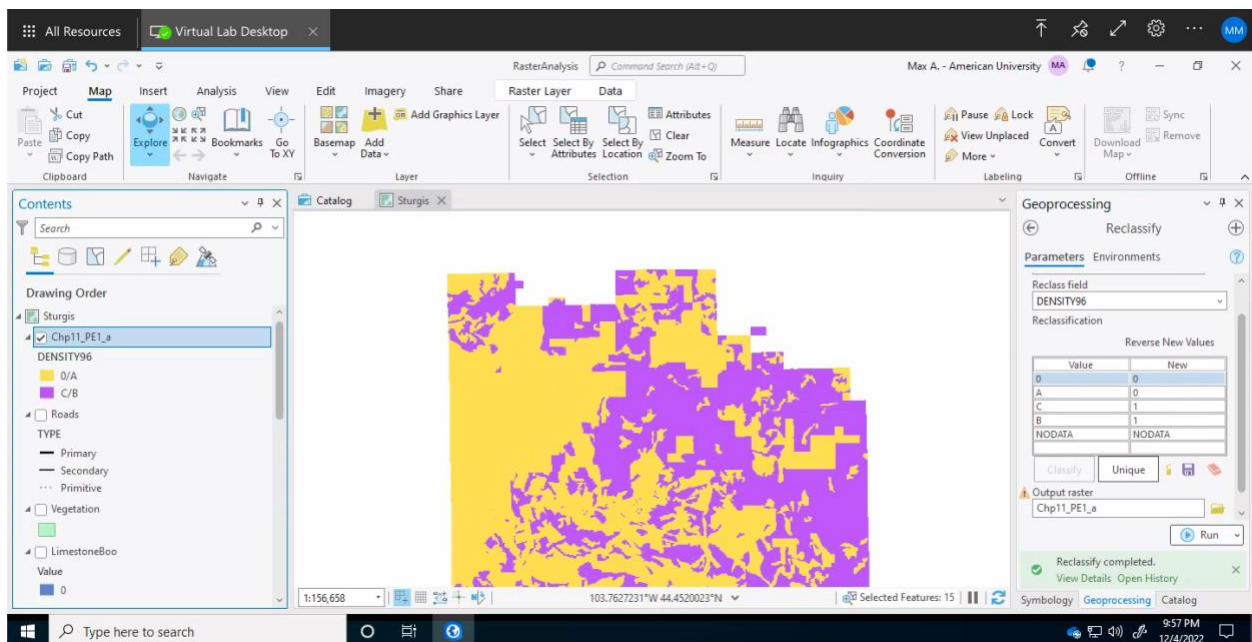
ENVS-654 Geographic Information Systems

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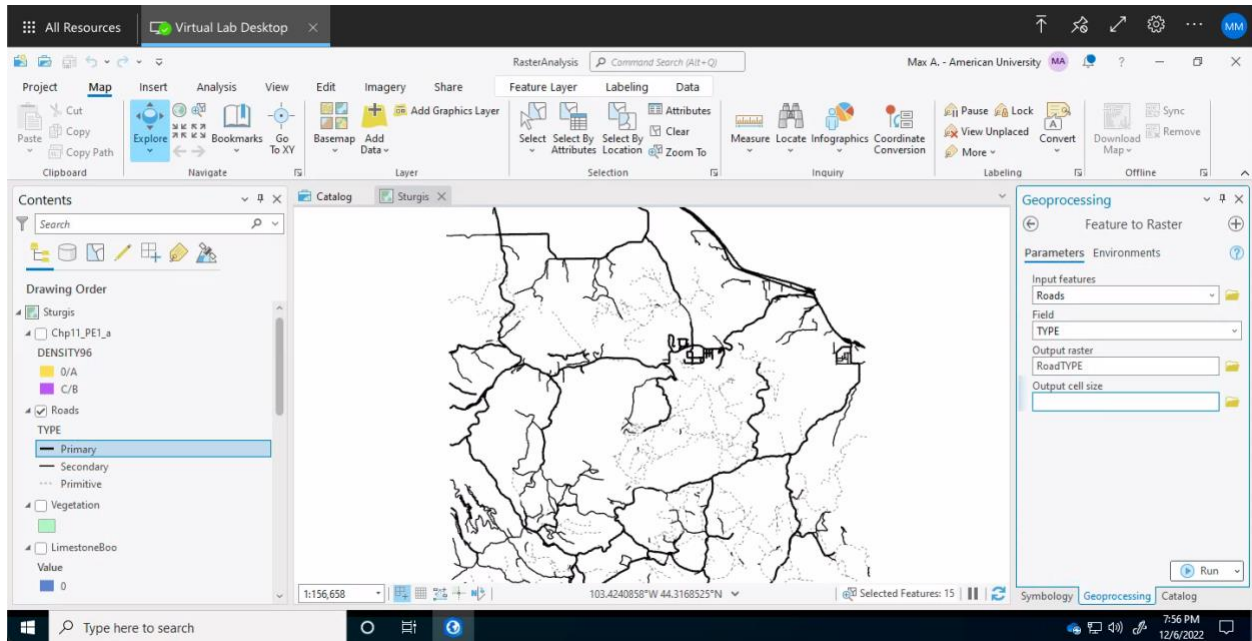
Assignment 10

I was having issues with Arc GIS and several tools (Slope, Feature to Raster, Euclidean Distance, and Raster Calculator) were not working properly.

Practice Exercise 1



Practice Exercise 2



The first thing I would do is to use the *Feature to Raster* tool. I would use **Roads** as my input features and select **TYPE** in the Field entry. I would name this new raster **RoadsRast**.

I would then use the *Reclassify* tool to set **Primary** and **Secondary** equal to 1, and **Primitive** and **NODATA** equal to 0. I would name this new raster **RoadsBool**.

After that, I would use the *Euclidean Distance* tool and input **RoadsBool** as my input raster. I would set **300** as the maximum distance.

Practice Exercise 3

I would open the *Block Statistics* tool, use **slope30m** as my input raster, set both the width and height as **300**, and set the statistics type as **Mean**. I would save this raster as **slope300m**.

I would then open the *Reclassify* tool and set **slope300m** as the input raster. The cells where the average slope is greater than 15 would be converted to 1, the cells where the average slope is 15 or less or NODATA would be converted to 0.

Practice Exercise 4

I would take the final rasters created in Practice Exercises 1-3 and use the *Raster Calculator* to multiply the three rasters together to yield the intersecting regions the three raster have in common.