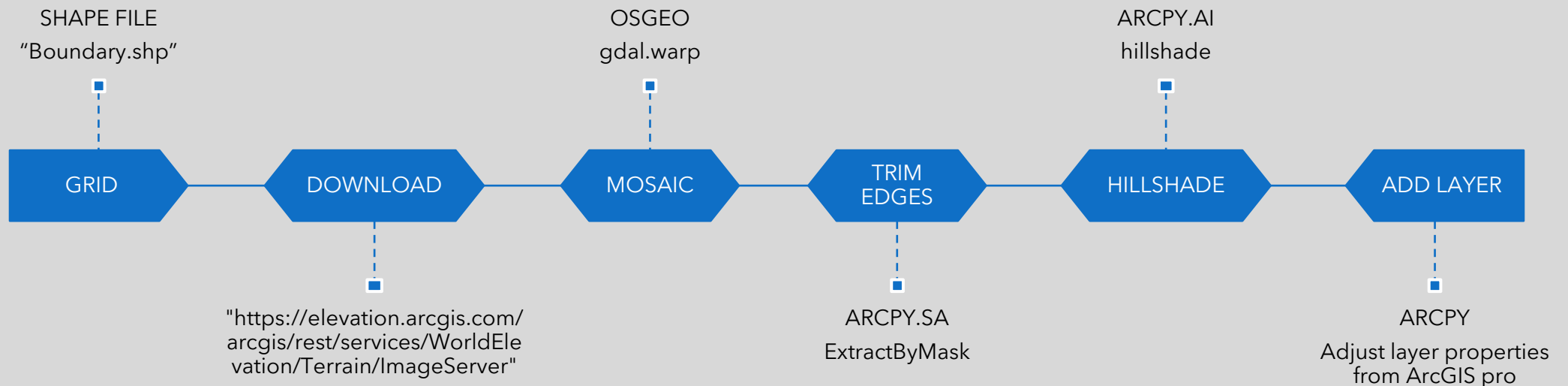




# MAP BACKGROUNDS

Michelle Walker

# ARCPY, the Cartography Helper





# Sticky Parts

-Making sure the workspace was consistent from python to ArcGIS Pro

-Using the GLOB (global) library to look for files in the workspace.

-Adding the raster layer to the map.

-Adjusting any layer attributes with Python

```
30
31 #Getting the shape file that we will use to define the boundaries of our grid(s)
32 #inputPoly="Boundary.shp"
33 inputPoly = arcpy.GetParameterAsText(0)
34
35 #We want the workspace to match the directory of the inputPoly
36 folder = arcpy.Describe(inputPoly)
37 path = folder.path
38 arcpy.env.workspace = str(path)
39 #print(arcpy.env.workspace)
40
```

```
106 #Hopefully the glob will find all the files with a certain format, ie my .tif(s) Check out glob
107 ##glob.glob('*.*.txt') :matches all files ending in '.txt' in current directory
108 ##glob.glob('*/*.*.txt') :same as 1
109 ##glob.glob('**/*.*.txt') :matches all files ending in '.txt' in the immediate sub
110 :#but not in the current directory
111 ##glob.glob('*.*.txt',recursive=True) :same as 1
112 ##glob.glob('*/*.*.txt',recursive=True) :same as 3
113 ##glob.glob('**/*.*.txt',recursive=True):matches all files ending in '.txt' in the subdirec
114 ##So it's best to always specify recursive=True.
115
116 #Here is a list (using glob2) of all the .tif in the current directory. #indicates the
117 #current directory. Recursive means that it looks in subdirectories:)
118 files_to_mosaic = glob2.glob('**/DEM_*.tif',recursive = True)
119 print(files_to_mosaic)
120
```

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```
151
152 #Here we are making a raster into a map layer. Referencing the "path" from near
153 #the beginning to the code.
154 B90 = arcpy.management.MakeRasterLayer(str(path) + "/hillshade90.tif", "Background90")
155 B100 = arcpy.management.MakeRasterLayer(str(path) + "/hillshade100.tif", "Background100")
156
157 #Now to add our new raster layers to the current open ArcGIS map (hopefully)
158 # Get Map
159 aprx = arcpy.mp.ArcGISProject("CURRENT")
160 aprxMap = aprx.listMaps("Map")[0]
161
162 # add raster layer to the map. OMG it worked! (I don't know the getOutput(0) is about
163 aprxMap.addLayer(B90.getOutput(0))
164 aprxMap.addLayer(B100.getOutput(0))
165
```

```
165
166 ###now to set the transparency to 50%, bc I like the look of 50% This bit does not work.
167 ##B90.transparency = 50
168 ##B100.transparency = 50
169
```

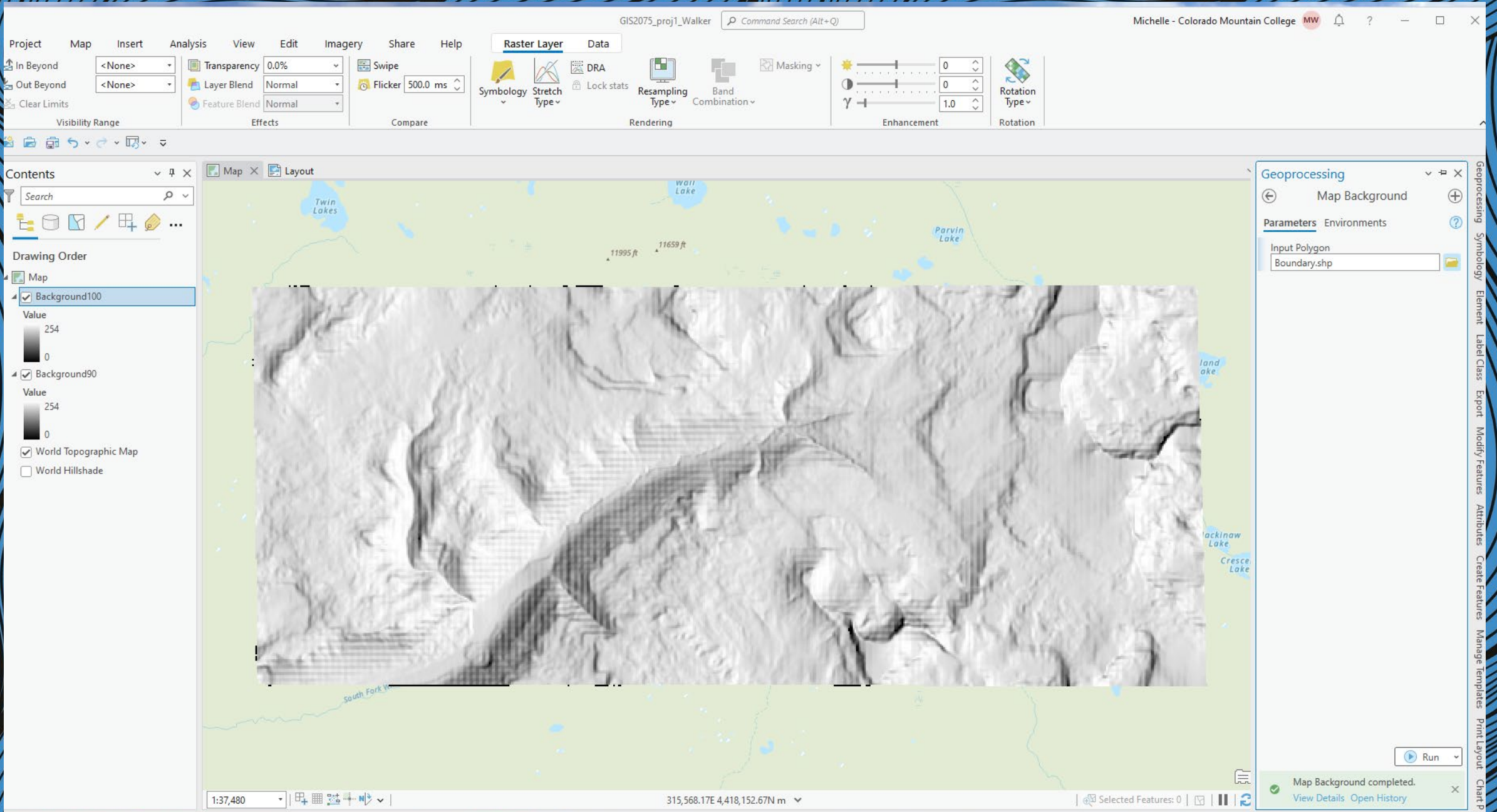
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GIS2075\_proj1\_Walker Command Search (Alt+Q) Michelle - Colorado Mountain College MW

Project Layout Insert Analysis View Imagery Share Help Raster Layer Data

Clipboard Navigate Elements Page Setup Show Map Review

Contents Map Layout

### South Fork of the White River - Garfield County Colorado

0 1.75 3.5 7 Miles

1:30,000 81% 15.145, 0.708

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    - DEM\_B-2.tif
    - DEM\_B-4.tif
    - DEM\_C-2.tif
    - DEM\_C-4.tif
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    - hillshade90.tif
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    - hillshade180.tif
    - hillshade200.tif
    - mosaic.tif
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    - SingleCell.shp

