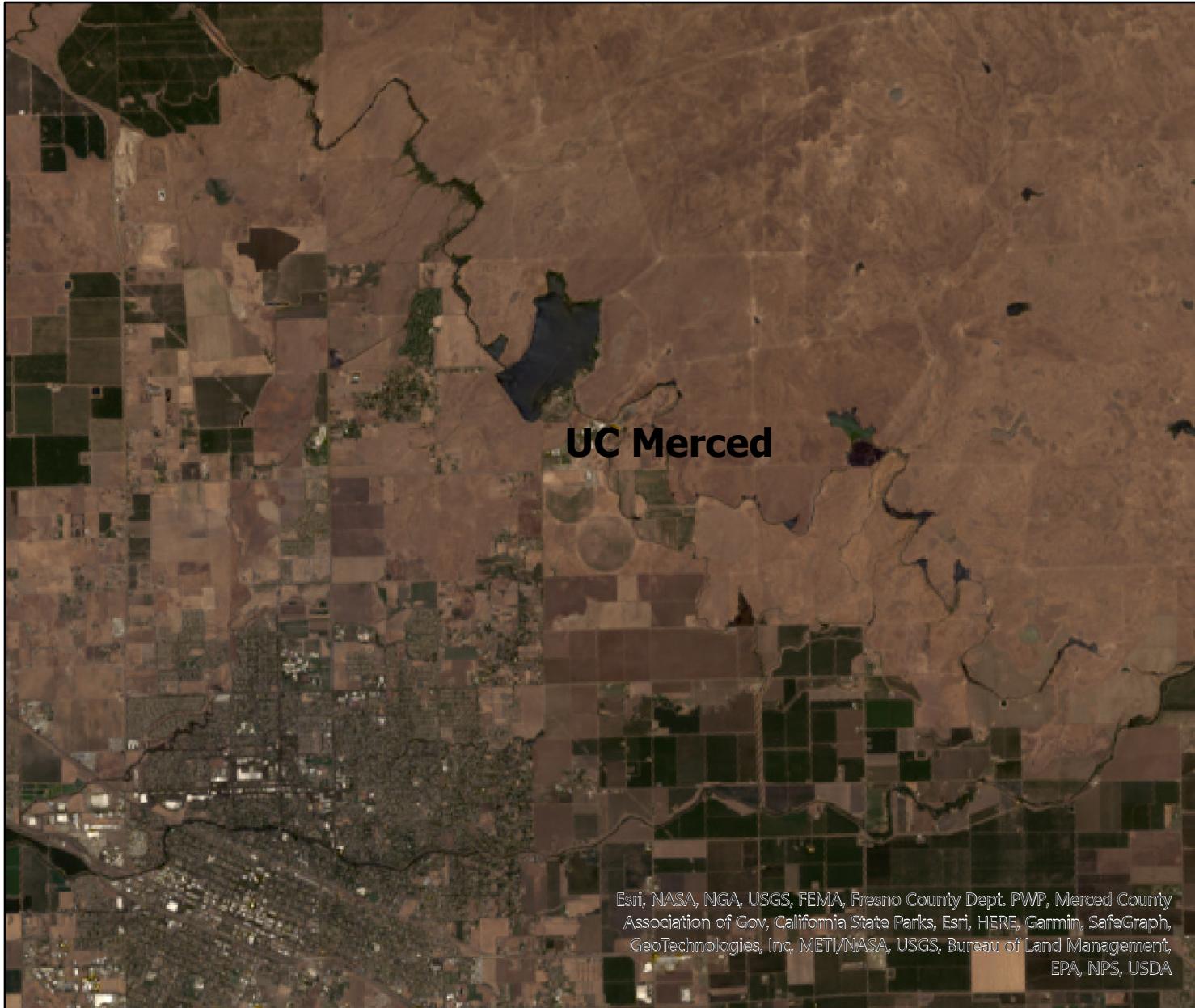


Composite UCM Map



0 1.25 2.5 5 Miles

Legend

Comp_432

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

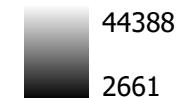
LC08_L2SP_043034

Value



LC08_L2SP_043034

Value



LC08_L2SP_043034

Value



Map Creator -
Frank Olotu

NDVI Results

Map Creator -
Frank Olotu
Legend

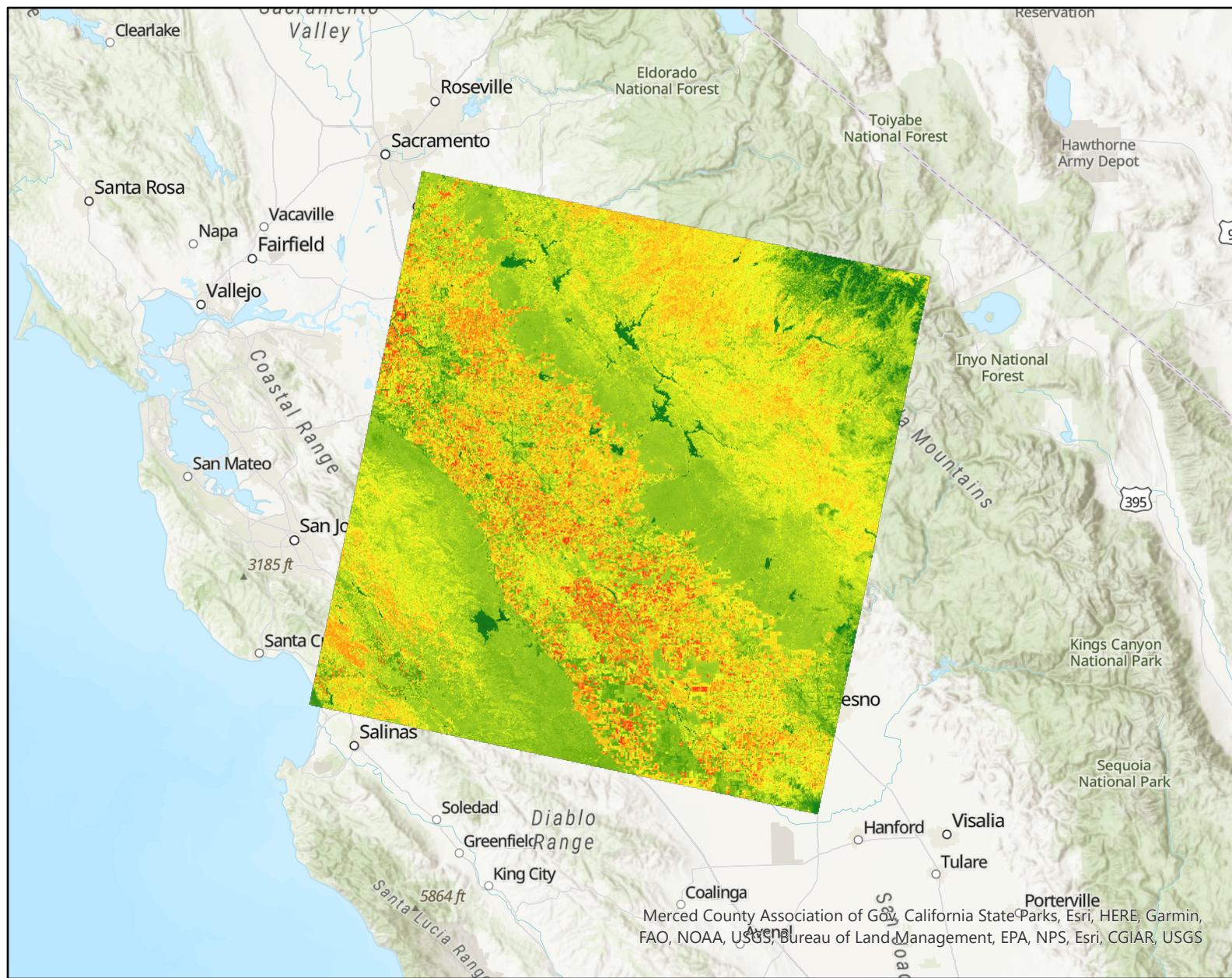
tm_1707_ndvi

Value

0.656174

-0.32661

The NDVI index ranges outputs from -1.0 to 1.0, positive NDVI values that range from 0.6 to 1 are used to denote thick green vegetation, and positive values ranging from 0.1 to 0.5 for less thick or scanty vegetation, while the negative NDVI values are correlated with clouds and water surfaces. ("Normalized difference vegetation index (NDVI);," n.d.)



NBR Results

Map Creator -
Frank Olotu

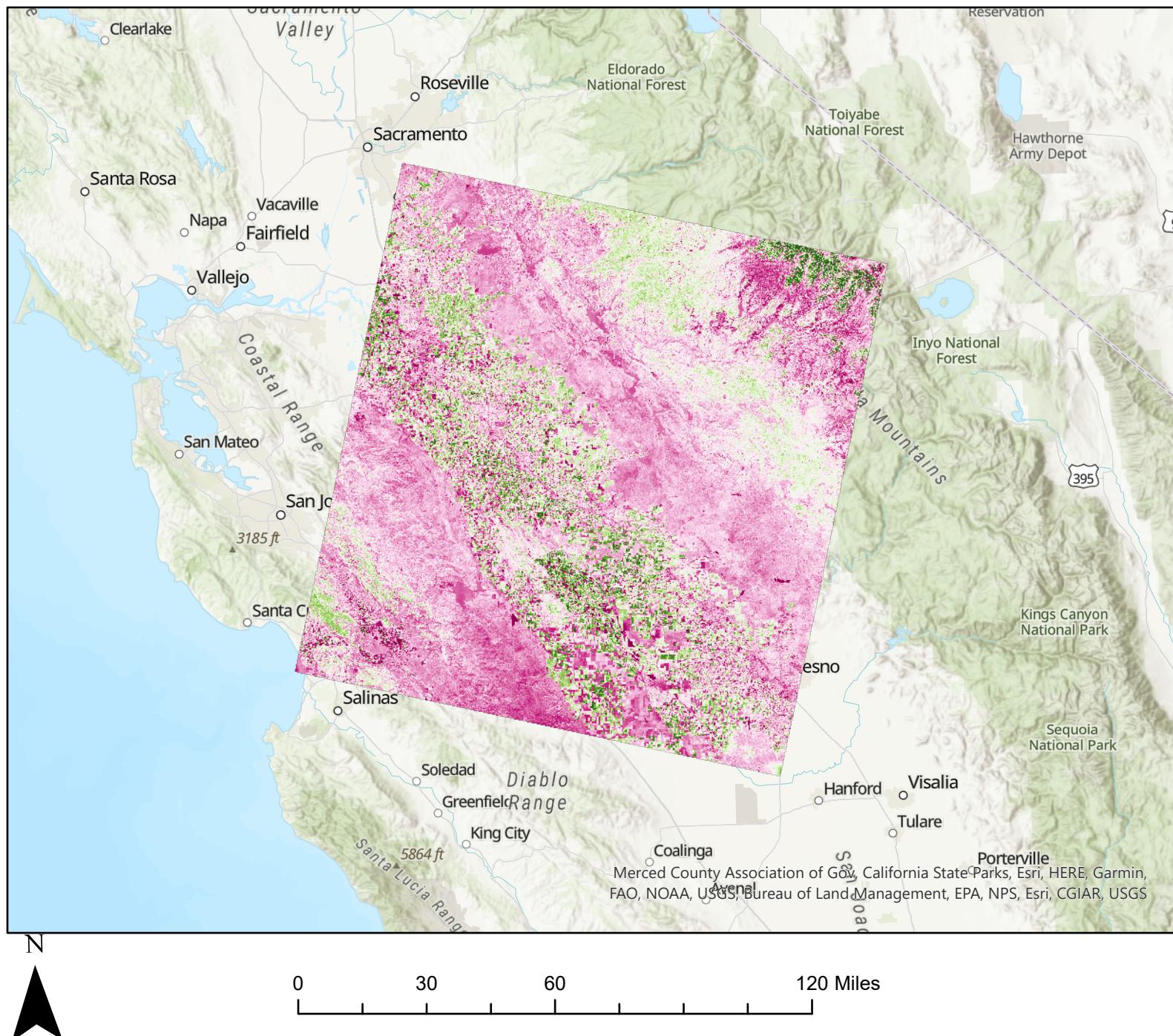
Legend

tm_1707_nbr

Value

0.64419

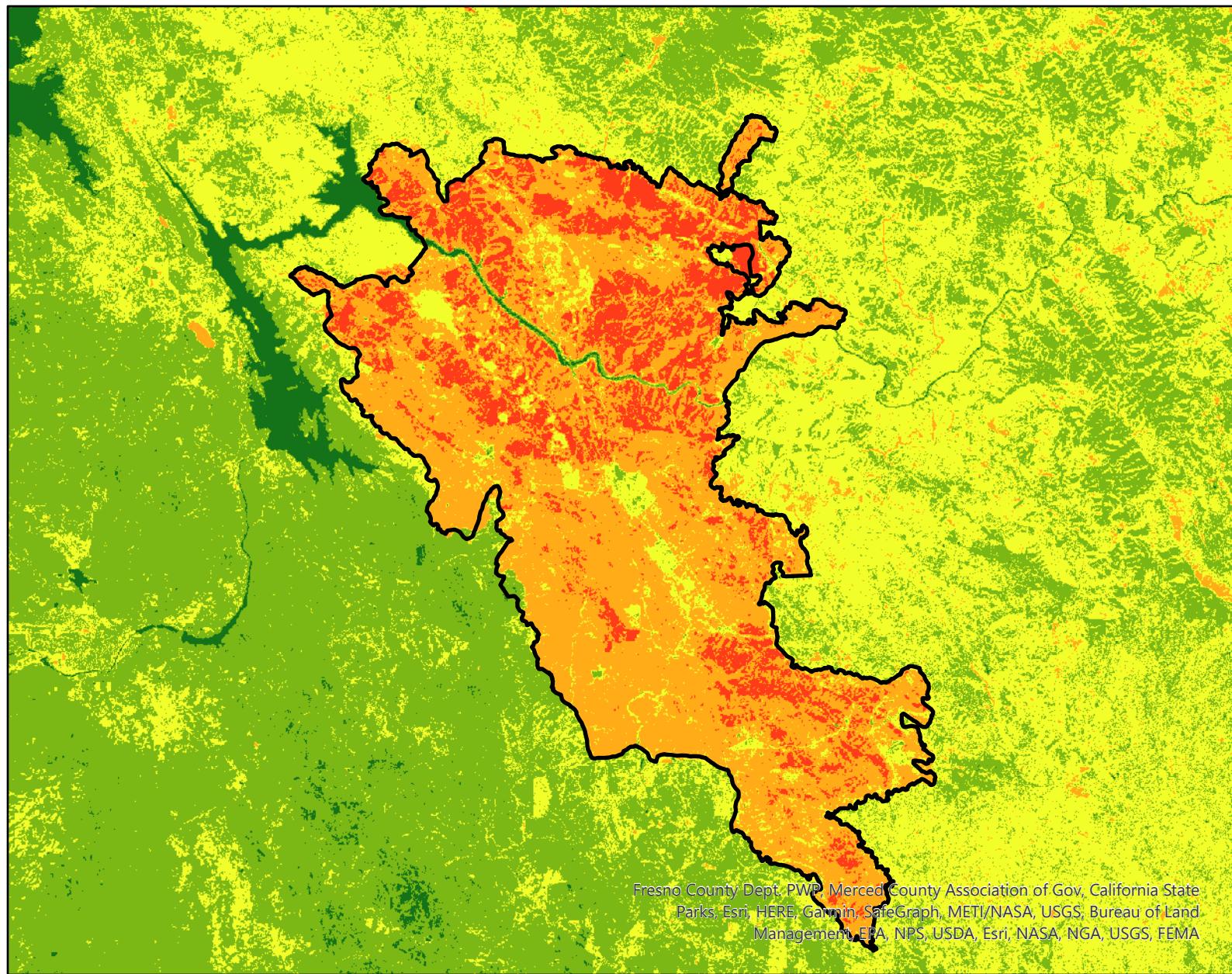
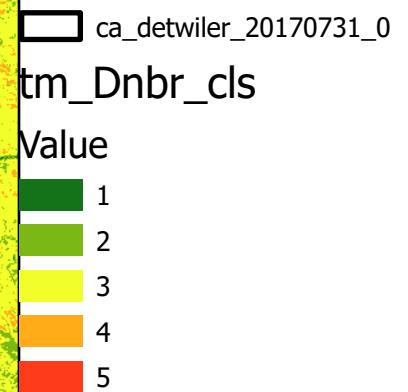
-0.727682



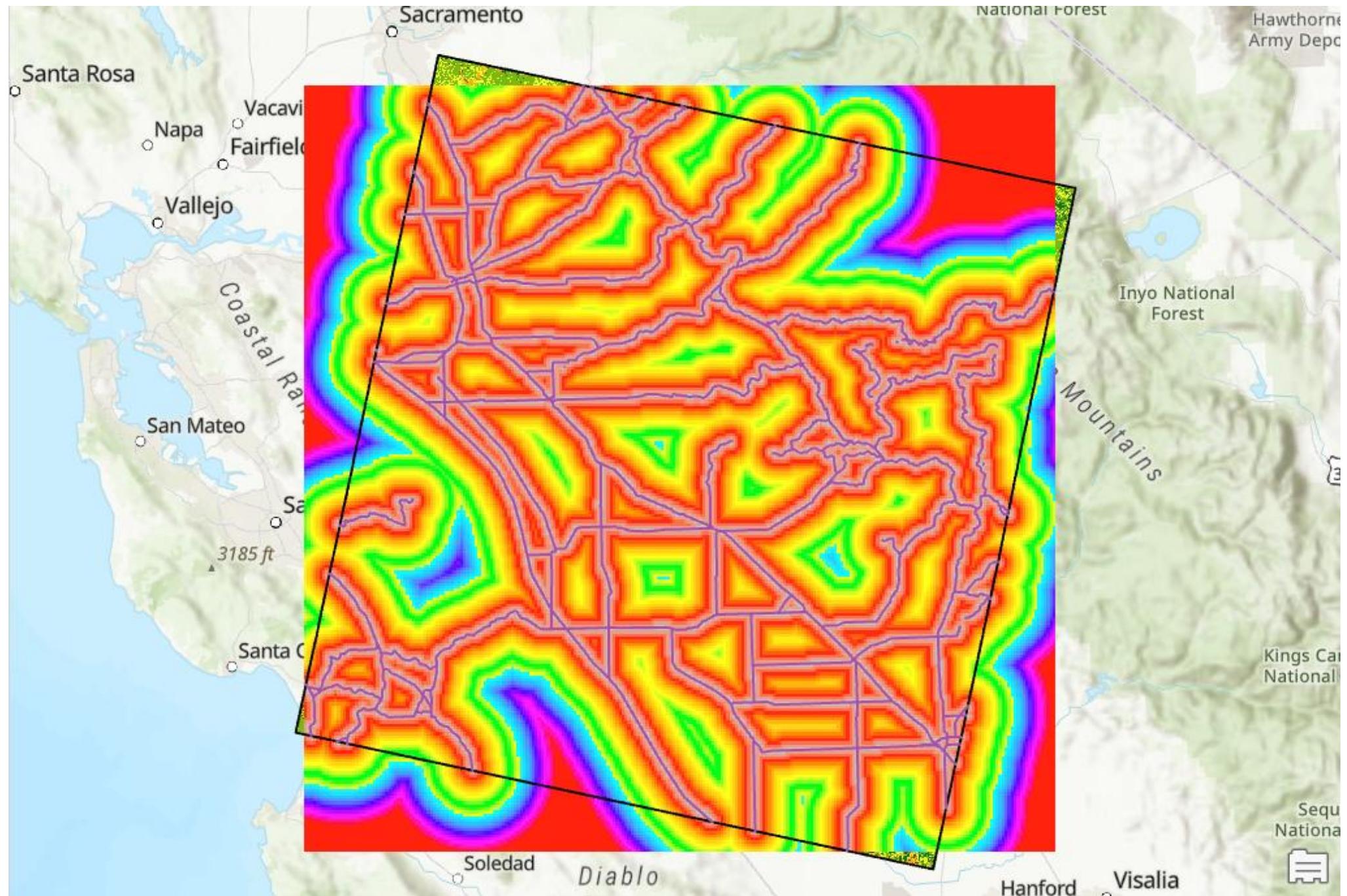
NBR Difference

Creator -
Frank Olotu

Legend

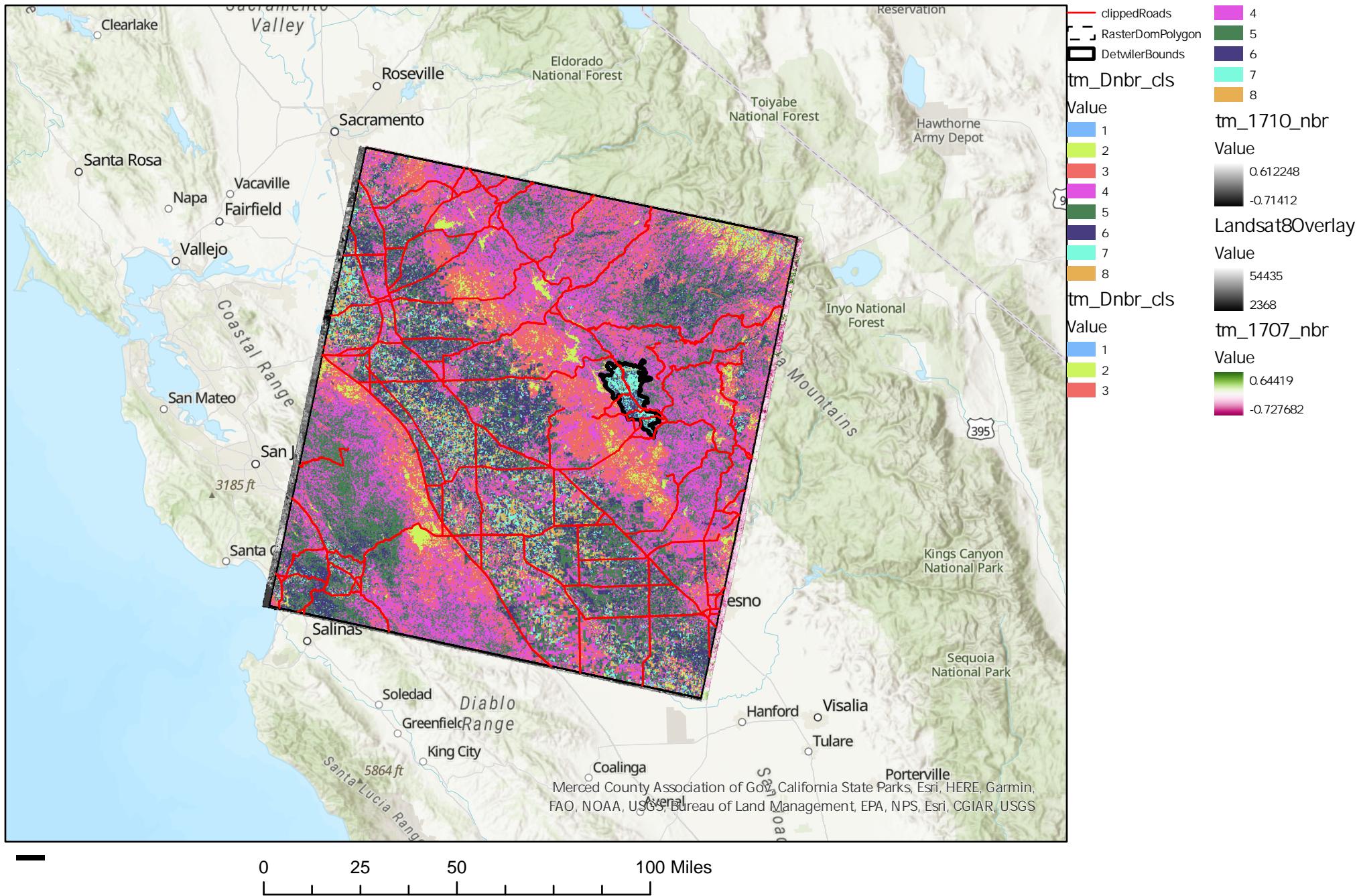


0 4 8 16 Miles



NBR Zones

Creator -
Frank Olotu



OBJECTID	Value	COUNT	AREA	MIN	MAX	RANGE	MEAN	STD	SUM	VARIETY	MAJORITY	MINORITY	MEDIAN	PCT90
1	1	312	222035969.2	0	34679	34679	8270.663	9599.134	2580447	116	843	3772	4217	27008
2	2	2167	1542153671	0	36596	36596	7241.49	8217.746	15692309	306	843	9544	4217	21933
3	3	9474	6742207605	0	34843	34843	5111.759	5127.325	48428807	331	843	14440	3772	10966
4	4	15842	11274018669	0	36225	36225	5174.072	5223.499	81967647	355	843	17935	3478	11989
5	5	13175	9376038124	0	34463	34463	5058.428	4864.244	66644795	312	843	18171	3478	11719
6	6	6217	4424351349	0	28990	28990	4152.577	3745.789	25816573	183	843	12166	3374	9279
7	7	1754	1248240673	0	20749	20749	3759.083	3037.087	6593431	82	843	8807	3041	7958
8	8	1027	730868398.8	0	13497	13497	3790.833	2987.528	3893185	75	843	7639	3041	8308

NBREUCZS

OBJECTID	Value	COUNT	AREA	MIN	MAX	RANGE	MEAN	STD	SUM	MEDIAN	PCT90
1	1	272556	2.45E+08	-0.32661	0.400269	0.726879	0.070736	0.086936	19279.39	0.082499705	0.185870409
2	2	1748581	1.57E+09	-0.1653	0.515813	0.68111	0.080399	0.090696	140585	0.103317536	0.188237429
3	3	7625271	6.86E+09	-0.09443	0.540692	0.635118	0.155811	0.067473	1188105	0.136045054	0.259676874
4	4	12688246	1.14E+10	-0.09286	0.586721	0.679585	0.18407	0.071887	2335531	0.170628637	0.287127167
5	5	10431471	9.39E+09	-0.07135	0.586298	0.657651	0.216332	0.087031	2256662	0.205760181	0.338027656
6	6	4905296	4.41E+09	-0.07124	0.591534	0.662771	0.266481	0.097917	1307169	0.273721308	0.391165882
7	7	1385647	1.25E+09	-0.04772	0.588207	0.635932	0.321563	0.101678	445573	0.319939703	0.464138907
8	8	825103	7.43E+08	-0.00759	0.656174	0.663764	0.440079	0.059367	363110.8	0.448132932	0.508215261

NBRNDVIZS

Frank Olotu

Prof. Joshua Viers

ENGR-180-01

07 October 2022

Lab3-1

Description of what positive and negative NDVI values correlate with.

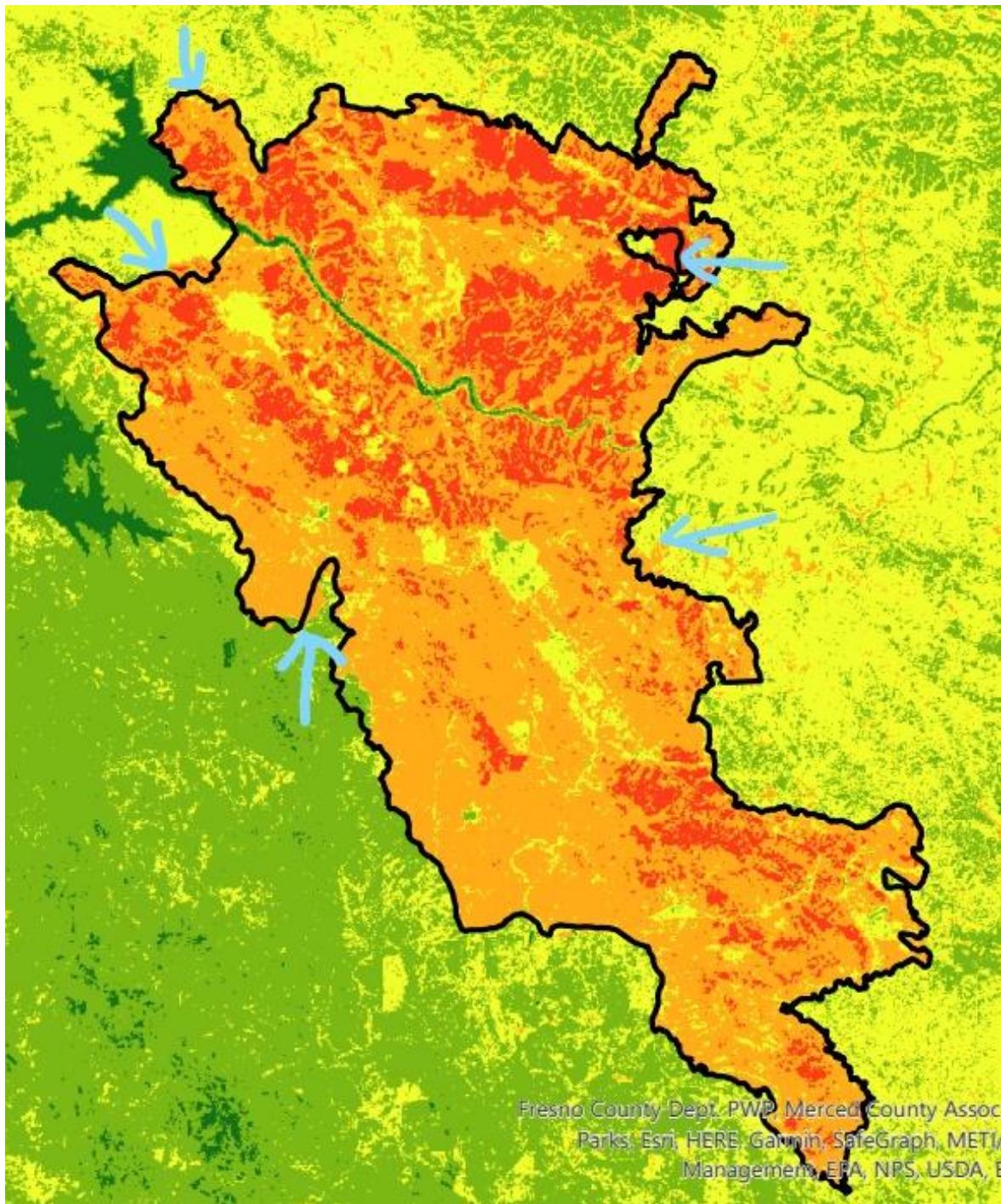
The NDVI index ranges outputs from -1.0 to 1.0, positive NDVI values that range from 0.6 to 1 are used to denote thick green vegetation, and positive values ranging from 0.1 to 0.5 for less thick or scanty vegetation, while the negative NDVI values are correlated with clouds and water surfaces. ("Normalized difference vegetation index (NDVI):," n.d.)

Describe what positive and negative values of NBR are correlated with.

Negative Normalized Burn Ratios are correlated with areas that have been burned recently, while positive NBR values indicate unburned vegetation. ("Landsat normalized burn ratio | U.S. geological survey," n.d.)

In writing, compare your raster to the Detwiler Fire burn perimeter.

There is some overlap between my raster (tm_Dnbr_cls) and the Detwiler Fire burn perimeter, in that the outline is very similar, although my raster encompasses some more spots that the Detwiler Fire burn perimeter misses. I highlight this in the screenshot of my NBR Difference map below.



Present your summary statistics in a tabular form and discuss your findings. Hint: Try Table to Excel to export the statistics. What do the tables tell us?

What I noticed from the NBRNDVIZS table is that most of the values fall below zero, the columns that fall in this category are the “Min”, “Max”, “Range”, “Mean”, “Std”, “Median” and “PCT90”. While on the NBREUCZS table, all values are positive values, the “Min” and “Majority” column are uniform in that the values are the same throughout all eight rows, for the “Min” column, it is all zeros and the “Majority” column it has a value of 843.

Works Cited

Landsat normalized burn ratio | U.S. geological survey. (n.d.). USGS.gov | Science for a changing world.

[https://www.usgs.gov/landsat-missions/landsat-normalized-burn-ratio#:~:text=Normalized%20Burn%20Ratio%20\(NBR\)%20is,SWIR%20values%20in%20traditional%20fashion](https://www.usgs.gov/landsat-missions/landsat-normalized-burn-ratio#:~:text=Normalized%20Burn%20Ratio%20(NBR)%20is,SWIR%20values%20in%20traditional%20fashion)

Normalized difference vegetation index (NDVI):. (n.d.). U.S Department of Agriculture.

<https://ipad.fas.usda.gov/cropexplorer/Definitions/spotveg.htm>