

GeoAffinity

Provide Context for GeoSpatial Inquiry,
Comparisons, and Search

Use Cases:

- UN-HCR
- Science Team

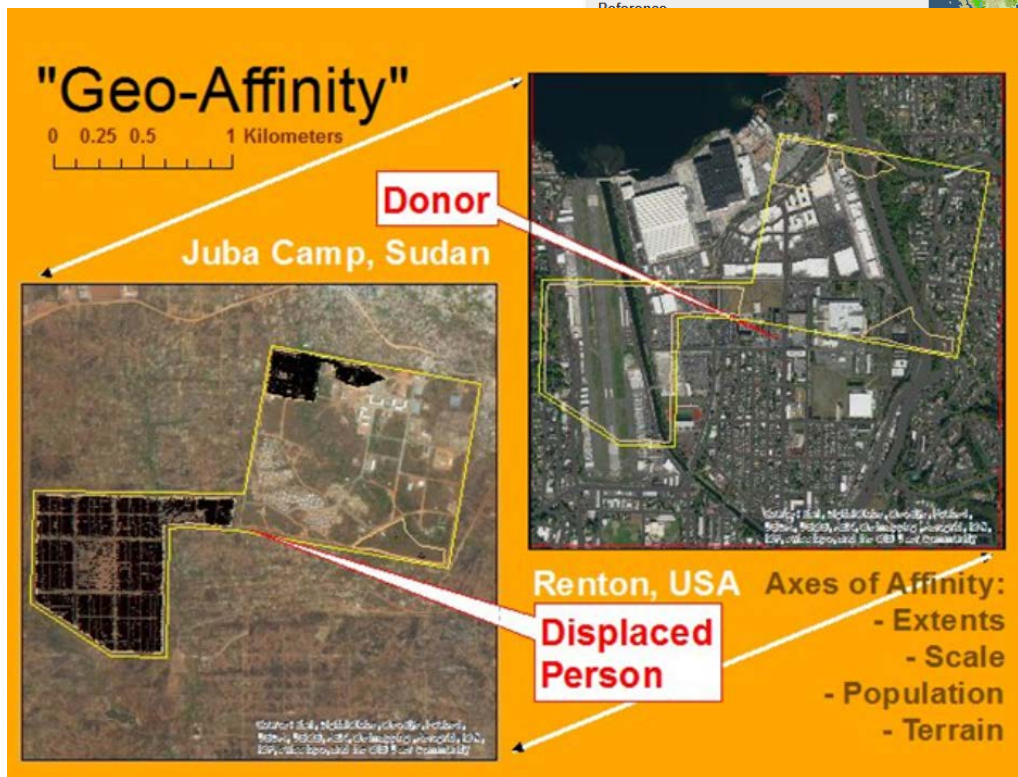
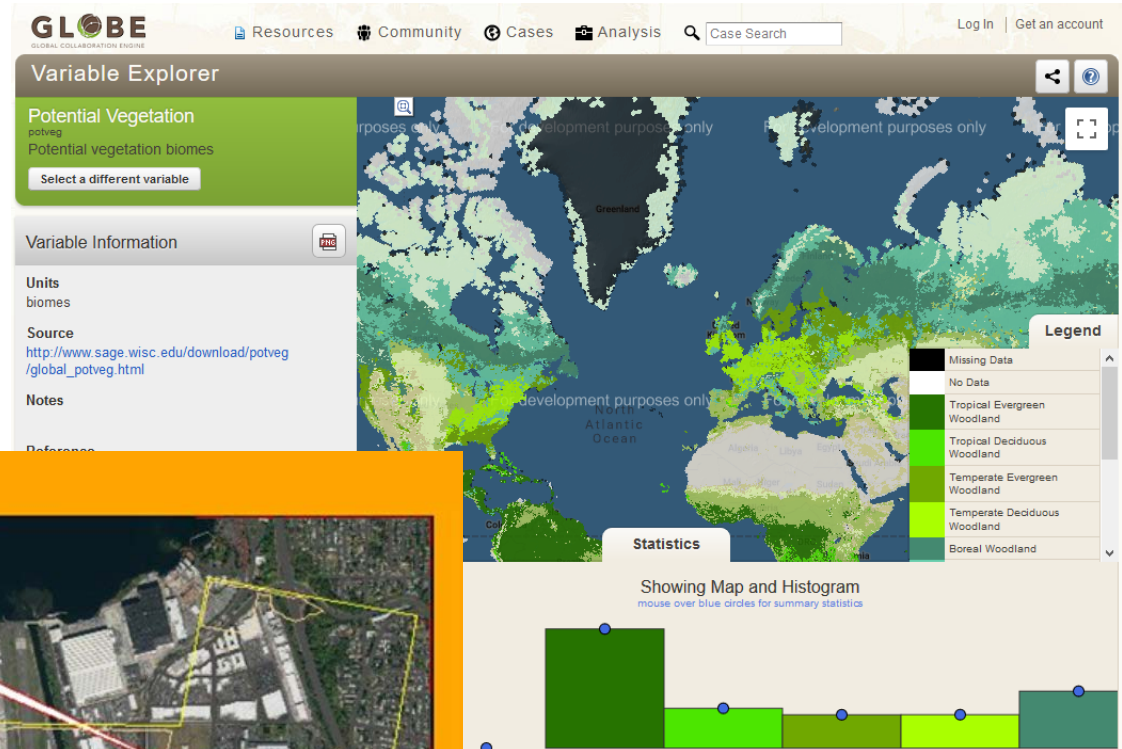


Table Of Contents



☒ HomeSector

☒ Basemap

☒ ESA2015campsector.tif

10

11

12

20

30

40

50

60

61

62

70

71

72

80

81

82

90

100

110

120

121

122

130

140

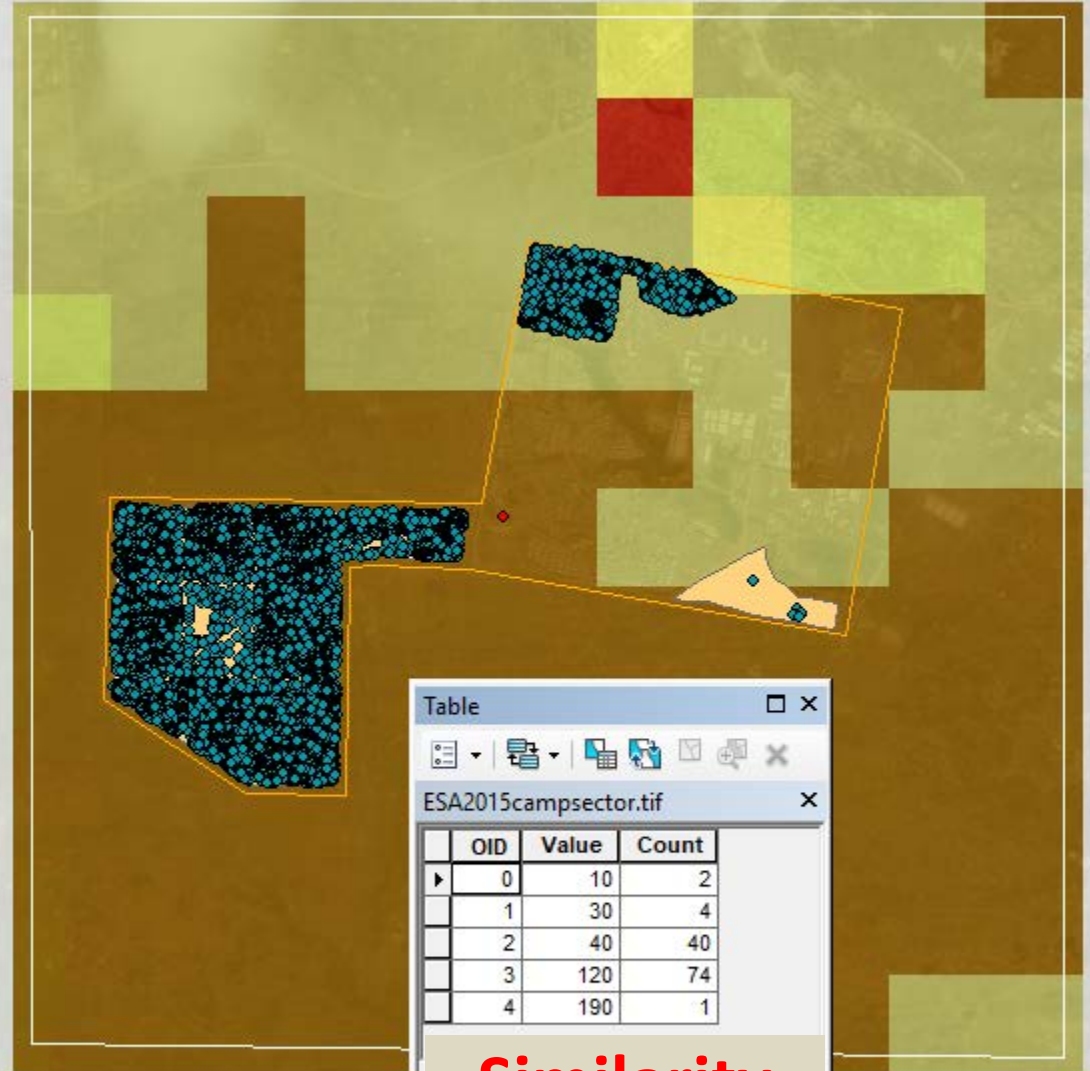
150

151

152

153

**11 x 11
cell
kernel**



Table

ESA2015campsector.tif

	OID	Value	Count
▶	0	10	2
	1	30	4
	2	40	40
	3	120	74
	4	190	1

**Similarity
Vectors**


```
In [2]: images = ["ESA2015campsector.tif",
                  "ESA2015homesector.tif",
                  "ESA2015region.tif",
                  "ESA2015region2.tif"]

for image in images:
    print(image)

    with rasterio.open(image) as dataset:
        # Display the image
        pyplot.imshow(dataset.read(1), cmap='pink')
        pyplot.show()

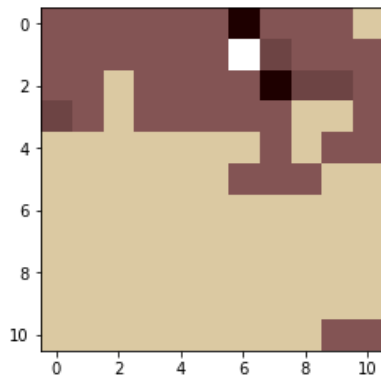
        # Read the dataset's valid data mask as a ndarray.
        mask = dataset.dataset_mask()

        # Extract feature shapes and values from the array.
        for geom, val in rasterio.features.shapes(
            mask, transform=dataset.transform):

            # Transform shapes from the dataset's own coordinate
            # reference system to CRS84 (EPSG:4326).
            geom = rasterio.warp.transform(
                dataset.crs, 'EPSG:4326', geom)

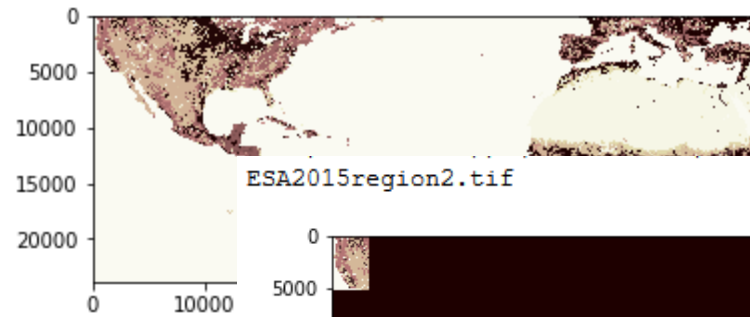
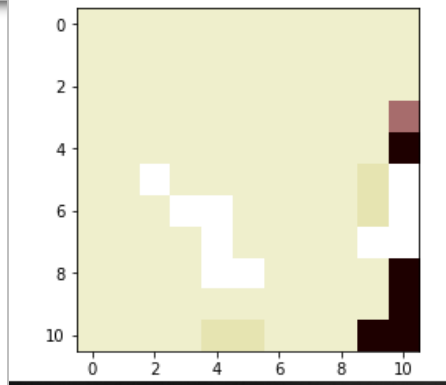
            # Print GeoJSON shapes
            print(geom)
```

ESA2015campsector.tif

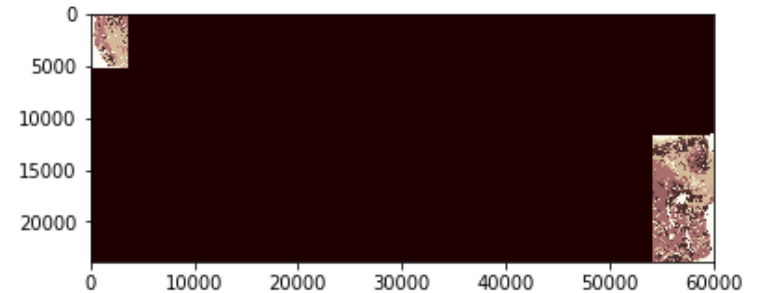


```
{'type': 'Polygon', 'coordinates':
[[[27778], [31.522222, 4.827778]]]}
```

ESA2015homesector.tif



ESA2015region2.tif



Data Source Search

APIs

Google Earth

GDAL WMS

Download

Downsizing

ESA Land Cover CCI Climate
Research Data Package (CRDP)

Similarity Algorithms

Python: Rasterio

xArray – No, NaNs

