

**COMPARATIVE STUDY OF
VEGETATION COVER IN
CALIFORNIA
(SAN DIEGO & LOS ANGELES)
USING SENTINEL-2**

ANERI PATEL

Need for afforestation programs in California

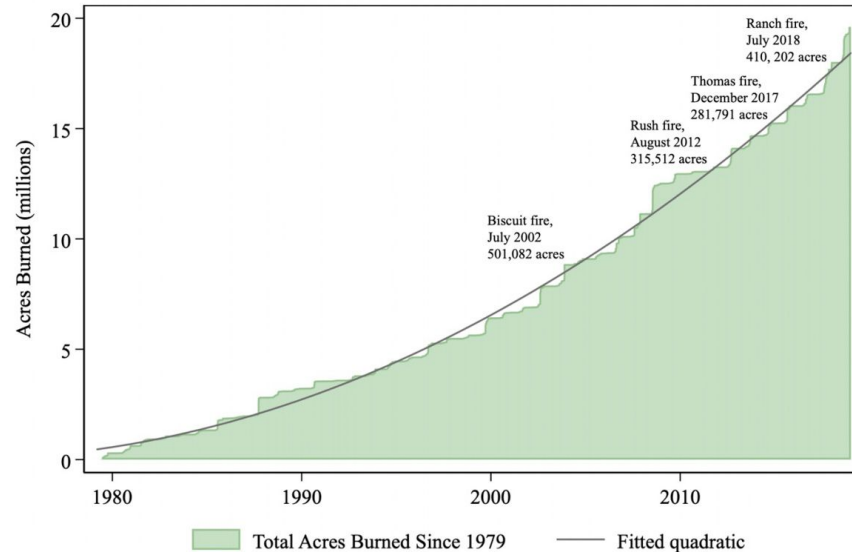
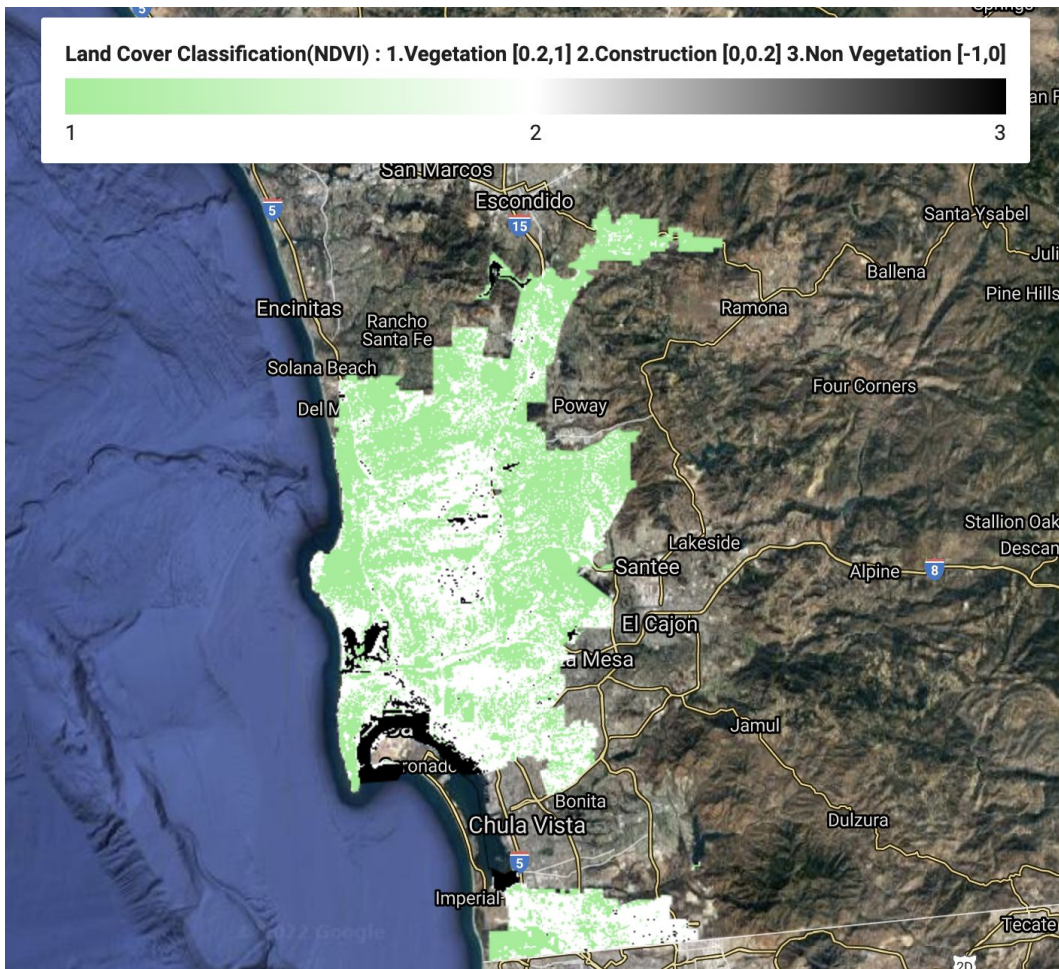


Figure 2. Cumulative Acres Burned, 1979-2018, for all Fires in California. Selected fires labeled for reference.

Wildfires estrange a multitude of species from their habitats while destroying wildlife. Thus, the state of California needs to focus on reforestation and afforestation to combat the effect of wildfires in the area.

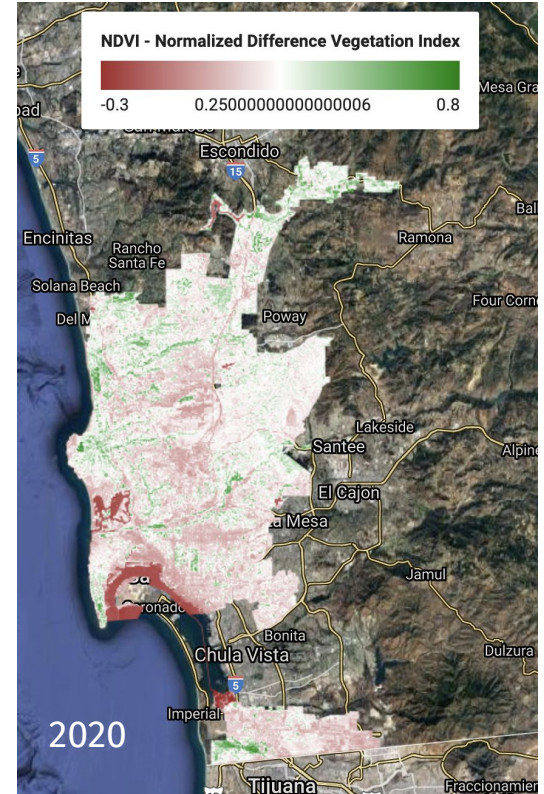
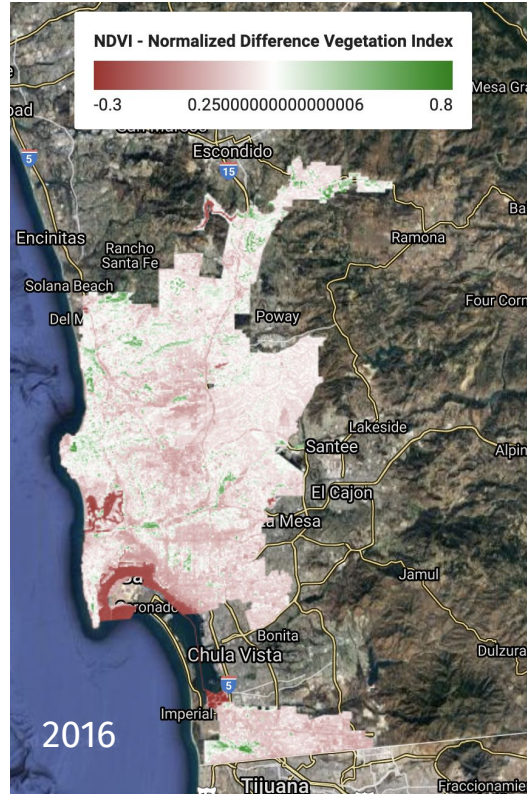
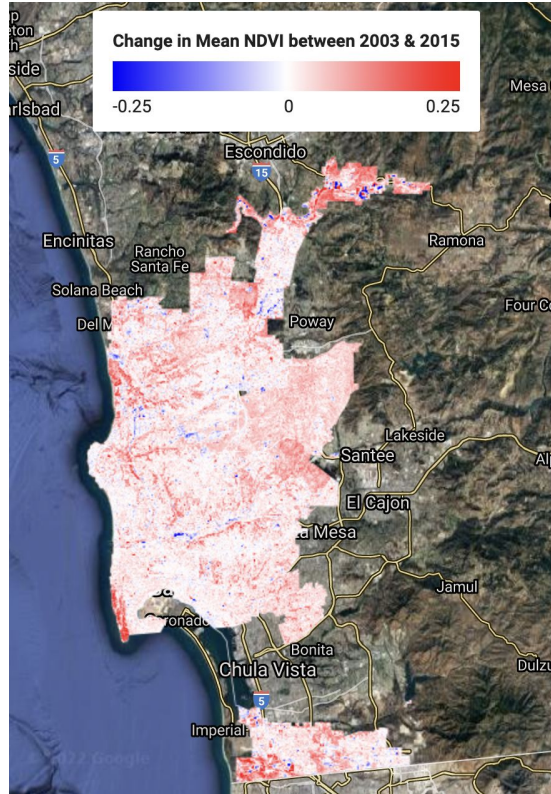
<https://wildfiretoday.com/2020/03/31/data-shows-the-worsening-trend-of-california-wildfires/>



Cover Type	No. of Pixels (scale: 100)
Vegetation	55012
No Class	47220
Non Vegetation	5642

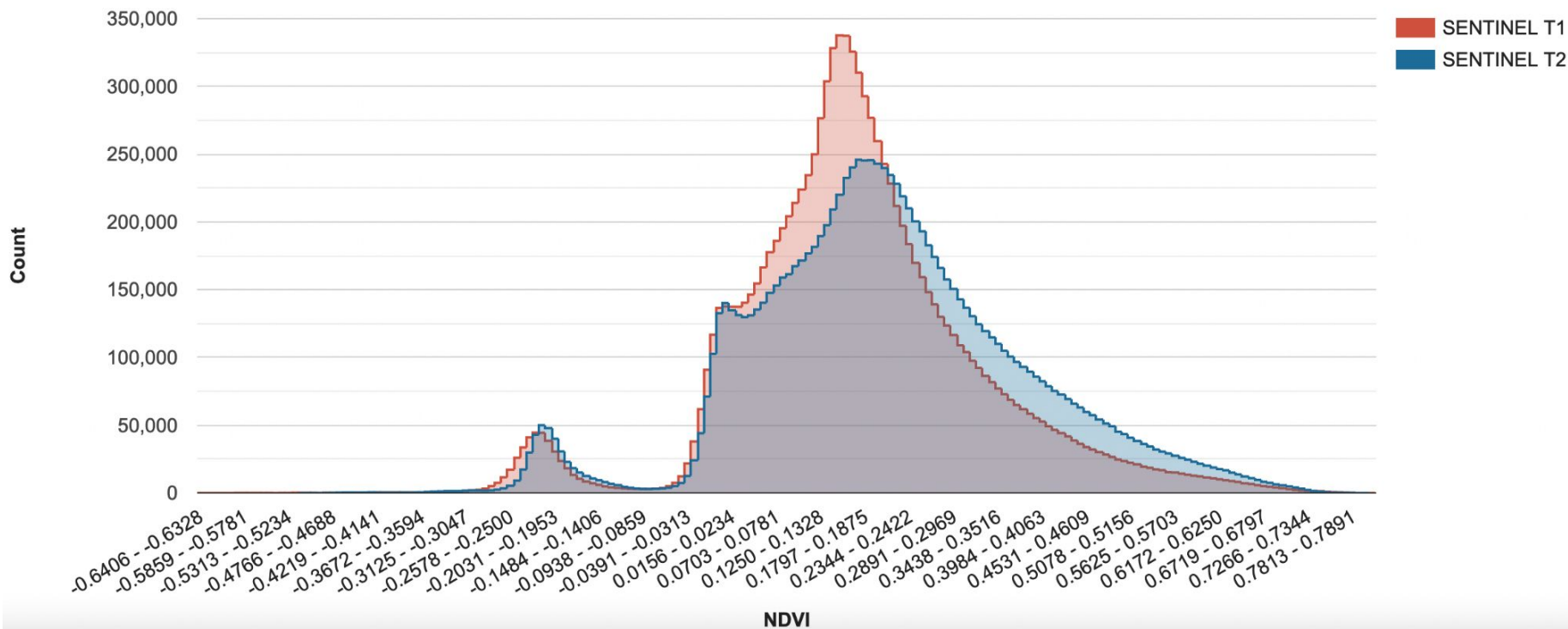
**SAN DIEGO
(2020)**

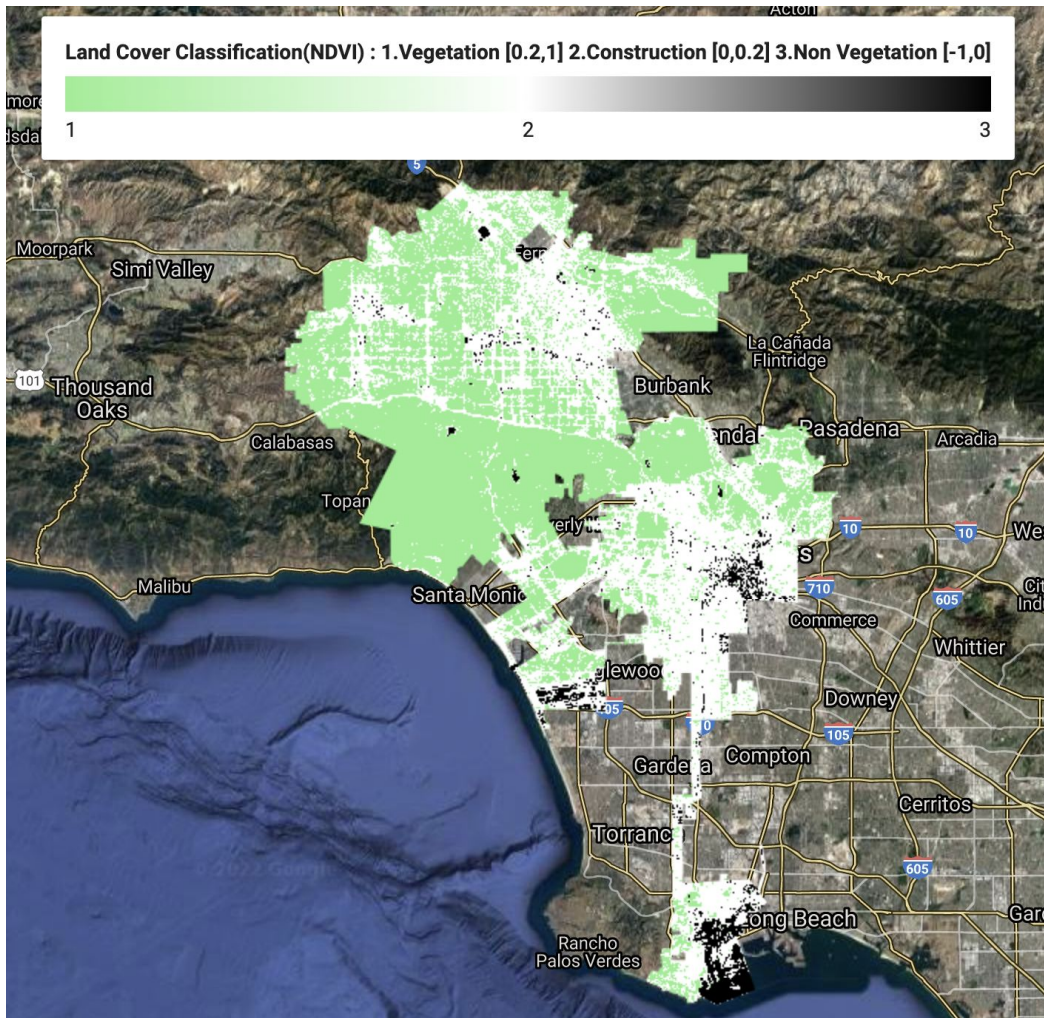
SAN DIEGO



NDVI Distribution - San Diego (T1 - 2016 T2 - 2020)

SENTINEL 2 NDVI Histograms for T1 and T2

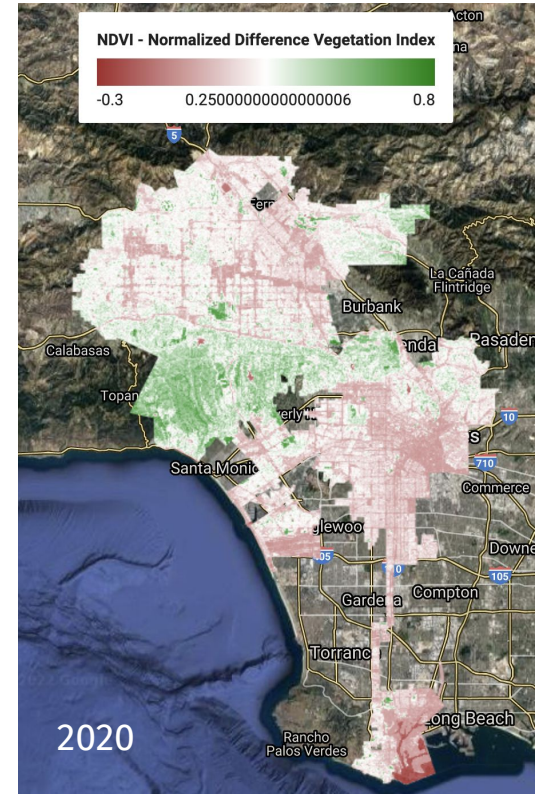
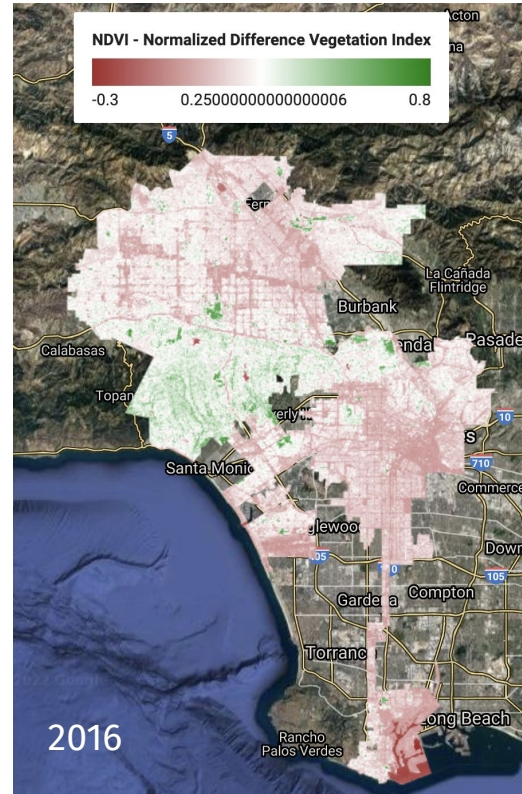
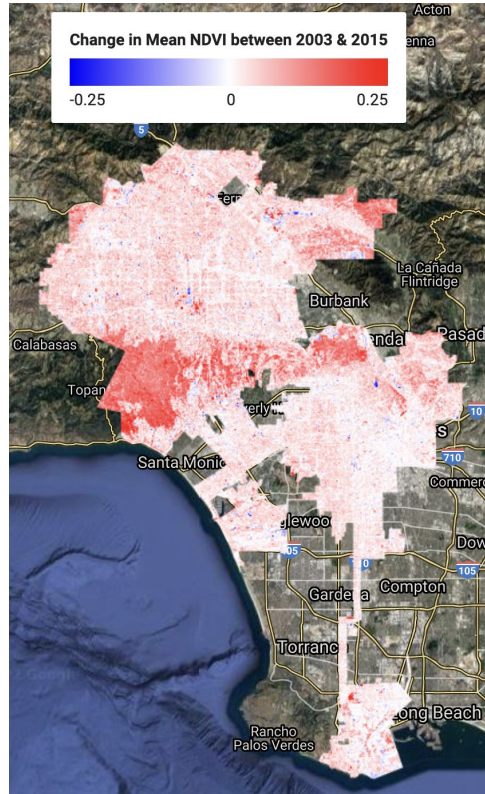




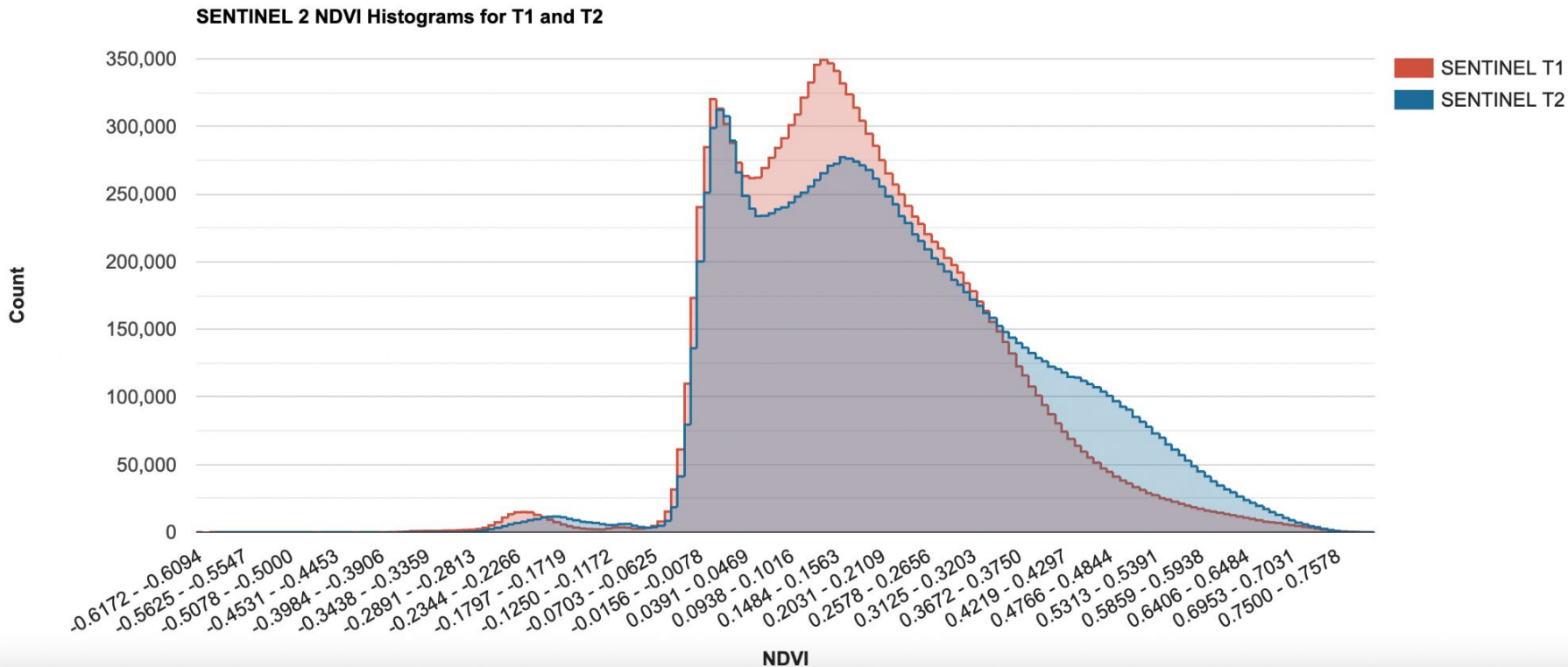
Cover Type	No. of Pixels (scale: 100)
Vegetation	79858
Construction	67171
Non Vegetation	5648

**LOS ANGELES
(2020)**

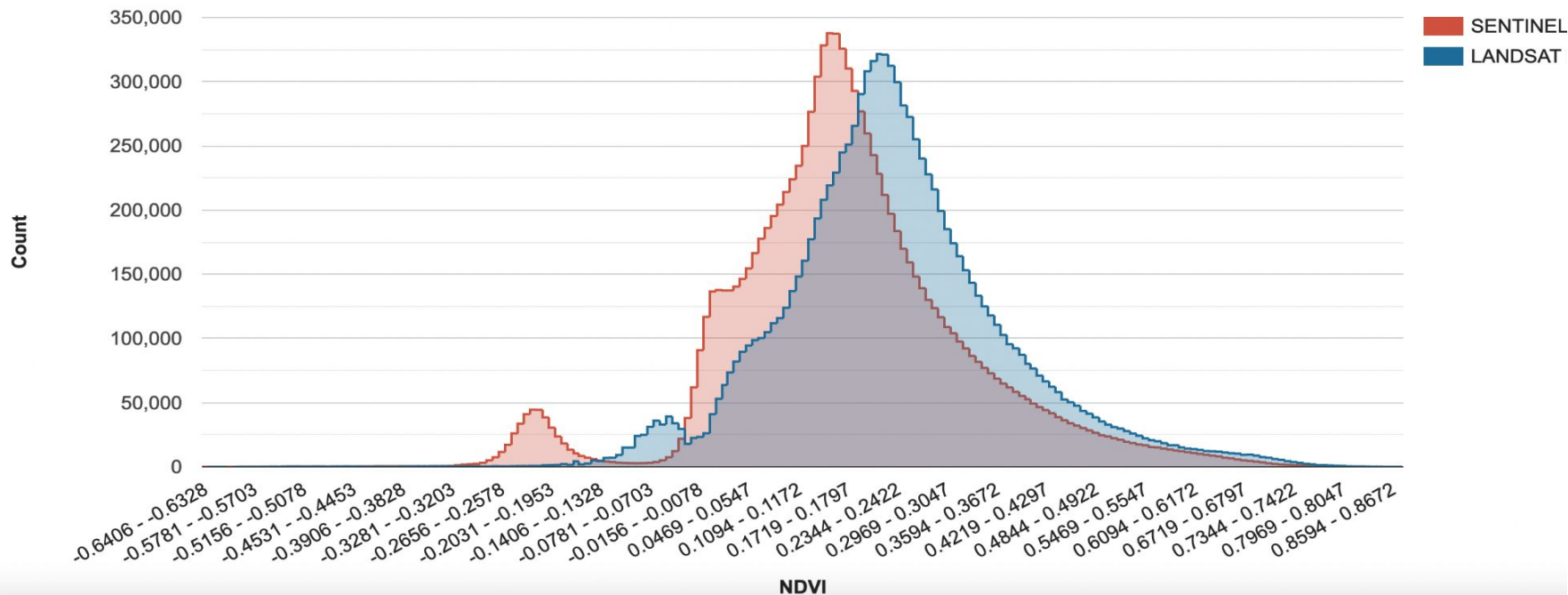
LOS ANGELES



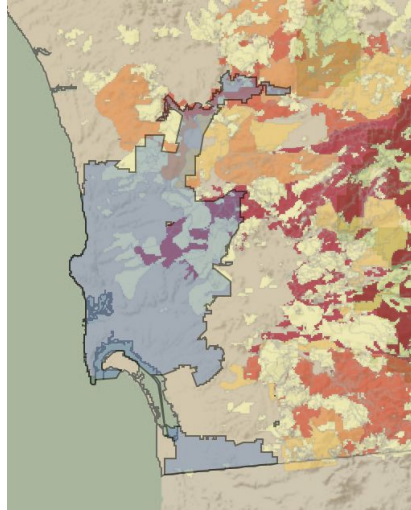
NDVI Distribution - Los Angeles (T1 - 2016 T2 - 2020)



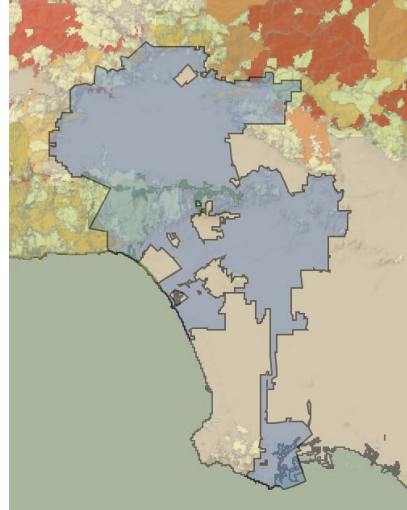
LANDSAT-7 AND SENTINEL-2 SENSITIVITY (SAN DIEGO 2016)



Wildfires in Los Angeles and San Diego (2020)



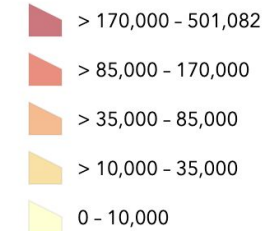
San Diego



Los Angeles

California Wildfires 2020 Update

Acres Burned



California National Forests



California National Parks



In recent years, there have been lesser wildfires in Los Angeles than San Diego due to successful Wildfire Prevention Programs by the government.

<https://www.arcgis.com/apps/webappviewer/index.html?id=4a7bab25ffd645e28557fb4799f5d434>

Analysis

We find that over the period between 2016 and 2020, vegetation surface cover in Los Angeles has increased by a margin significantly larger than that in San Diego, even though the average temperature in Los Angeles is greater than that in San Diego.

This is a result of some successful tree-planting programs by the LA Sanitation and Environment department. This is also the result of lesser wildfires in Los Angeles because of successful wildfire prevention programs.