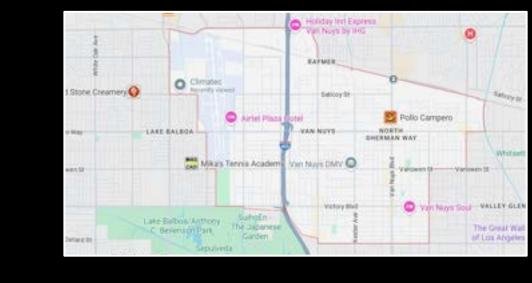
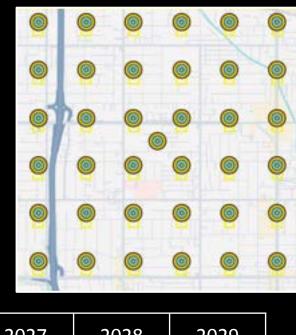
Adopt-a-Pixel3Km

A 2025 case study of Van Nuys, CA

Sophia Mdinaradze (0009-0006-9412-1533)





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Discussion Summary

The results of this investigation confirm the urban characteristics of Van Nuys while also showing how the land cover has changed at a slow rate. Graphs displaying the land cover during different years show only slight changes, most commonly slight decreases or increases in the tree cover. This shows that the grid area has been comprised of urban land for a long period of time and has gone through little change in recent years.

While the area is urban, much of the land cover is made up of tree canopies, which is not reflected by the ESRI and Dynamic World Cover satellite data, which detailed it as being completely built-up. This may be due to a sporadic placement of the trees, or a discrepancy between how land cover is interpreted by each of the datasets. The World Cover database provides more information and a more accurate reflection of the land cover, while the Dynamic World and ESRI datasets are more suited for the purpose of summarizing the general land cover trends in a region.

Conclusions | Recommendations

The data from this case study is conclusive, as the satellite data is verified by the ground images of the AOI points. However, there is some room for error as some of the images are not from the center of the points, rather closer to the edge of the grid box.

References

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https://www.collect.earth/
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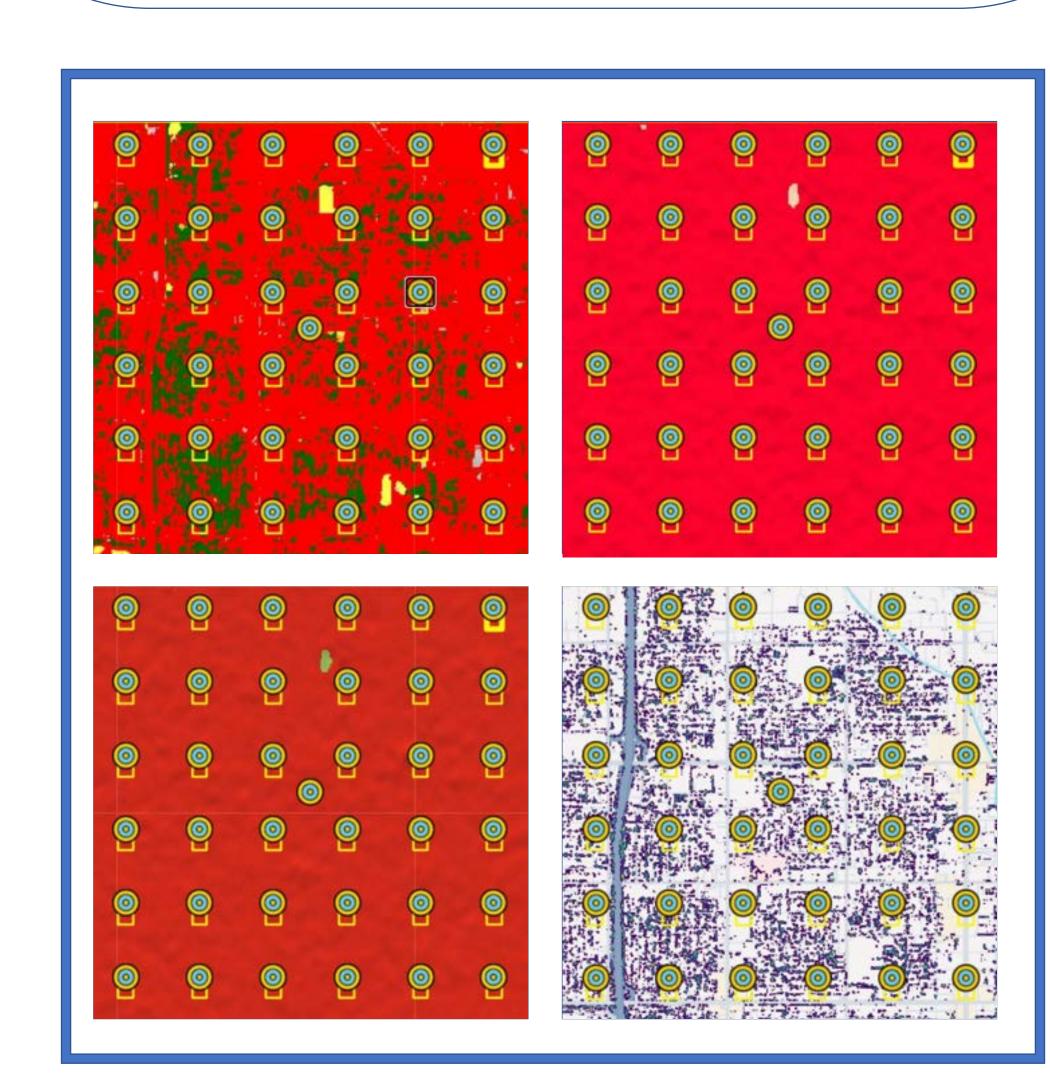
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Results Summary

Van Nuys has been a fairly urban area since the early twentieth-century, and it continues to grow. Over time, climate patterns have changed, as the seasons the strong winds, rain, and dry conditions are present in vary every year. I wonder if the field data taken from Van Nuys matches its urban land cover and the available satellite data.

The investigation done Van Nuys confirmed that it was mainly urban, consisting mainly of buildings and roads. However, there is a discrepancy between the World Cover and Tree Canopy data with the Dynamic World and ESRI data; the former show various levels of tree canopies, while the latter show only urban areas. Globe photographs of the AOI points clarify that the World Cover and Tree Canopy images are more accurate.

Most of the discrepancies were in residential areas, namely AOI point 7, where there was extensive tree cover. However, in the later points, such as point 30, all data agrees, as the area is incredibly urban.



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