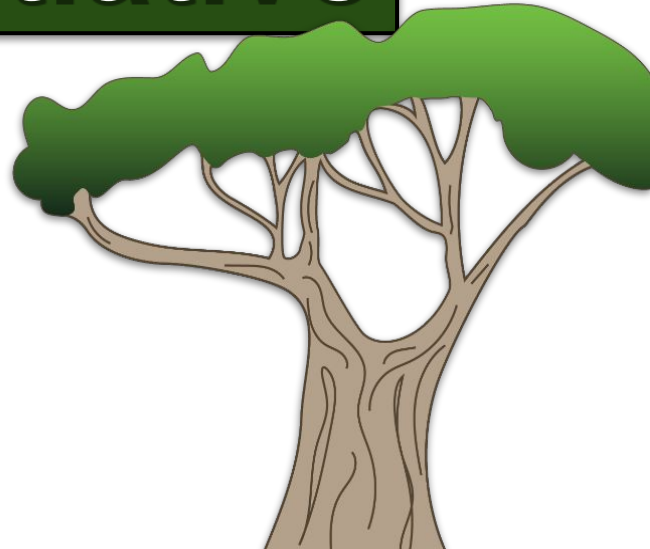


# Studying Tree Cover in LA's Parks Before and After the MTLA Initiative

Presented By: Diana Bonnarens  
@ CUGOS Spring Fling 04/21/23

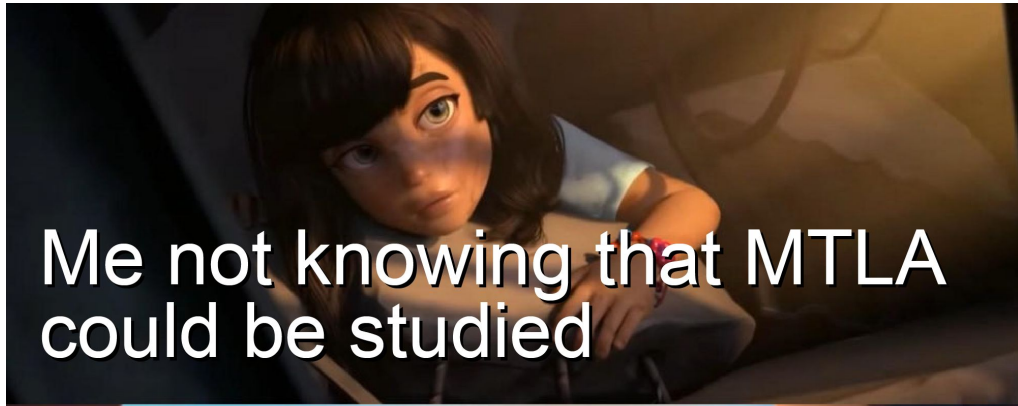


# 1 The "GIST" of it

2

3

4



**CUGOS**  
INTERNET ARCHIVE  
**WayBack Machine**

   
Earth Engine Data Catalog

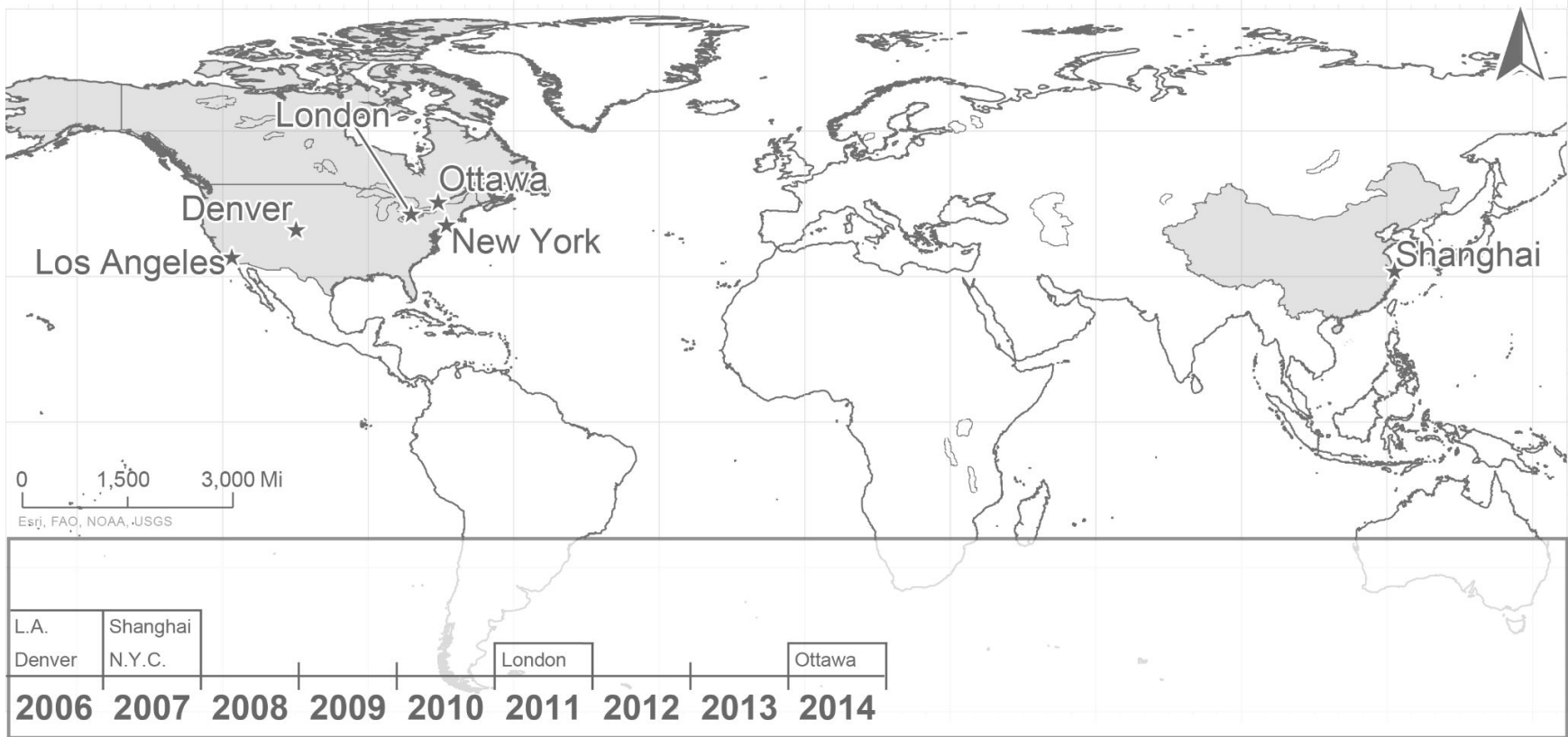
 **LARIAC**  
Los Angeles Region Imagery  
Acquisition Consortium

# 1 Million Trees Initiatives

2

3

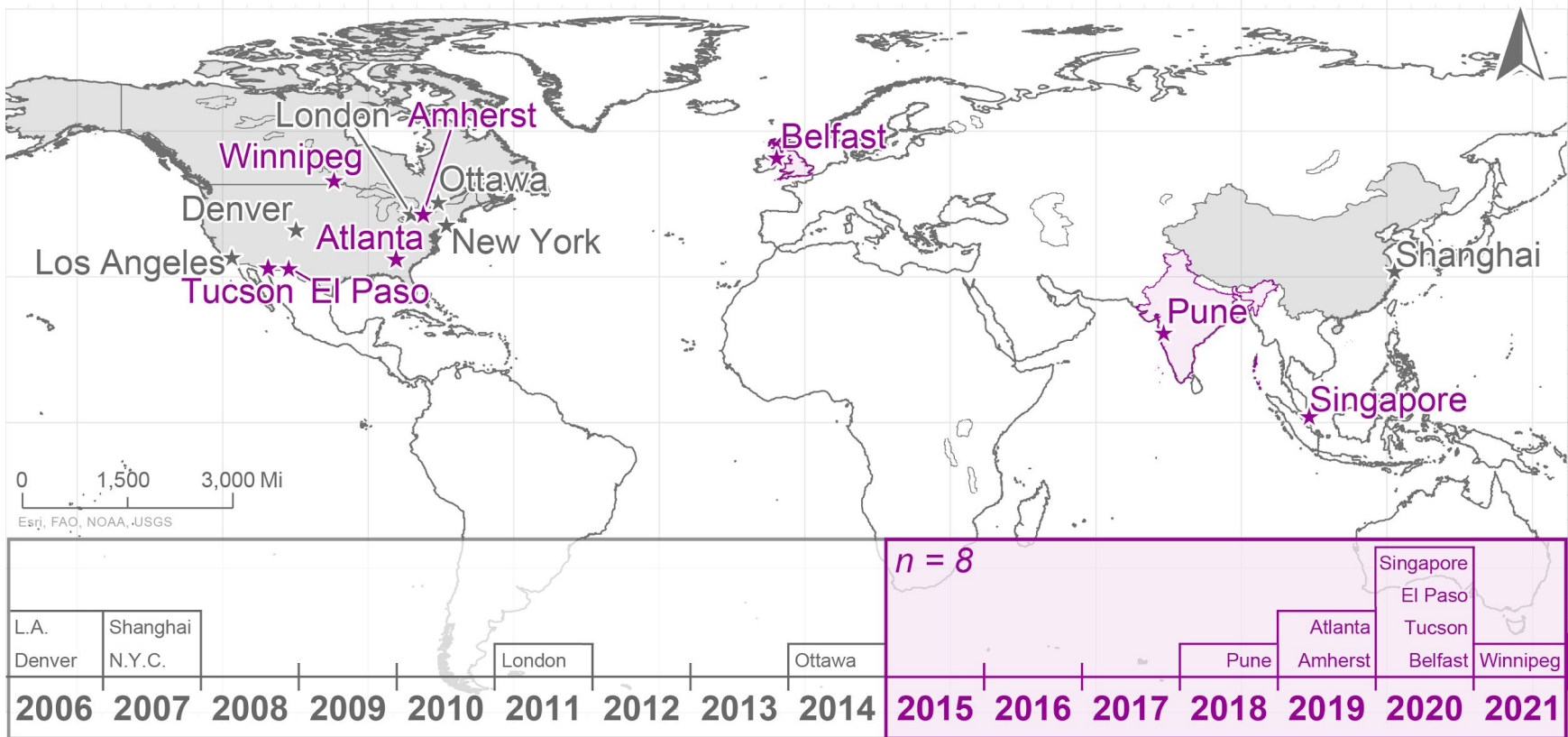
4



*Note: Map only shows cities w/ MTIs. Some counties also have TPIs (including King County!)*

# 1 Million Trees Initiatives

- 2
- 3
- 4



Note: Map only shows cities w/ MTIs. Some counties also have TPIs (including King County!)

1

# Million Trees Los Angeles

2

3

4

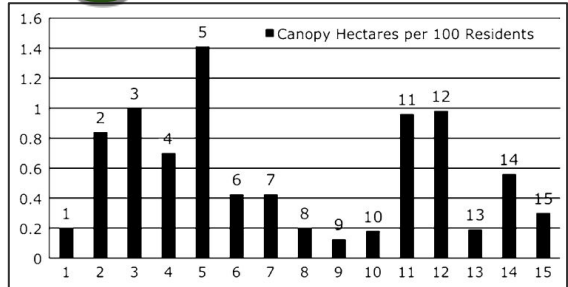
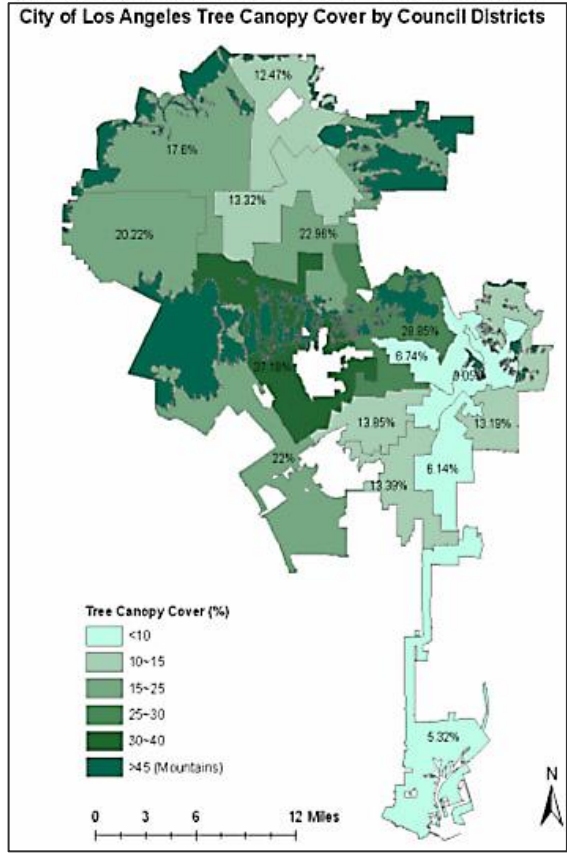
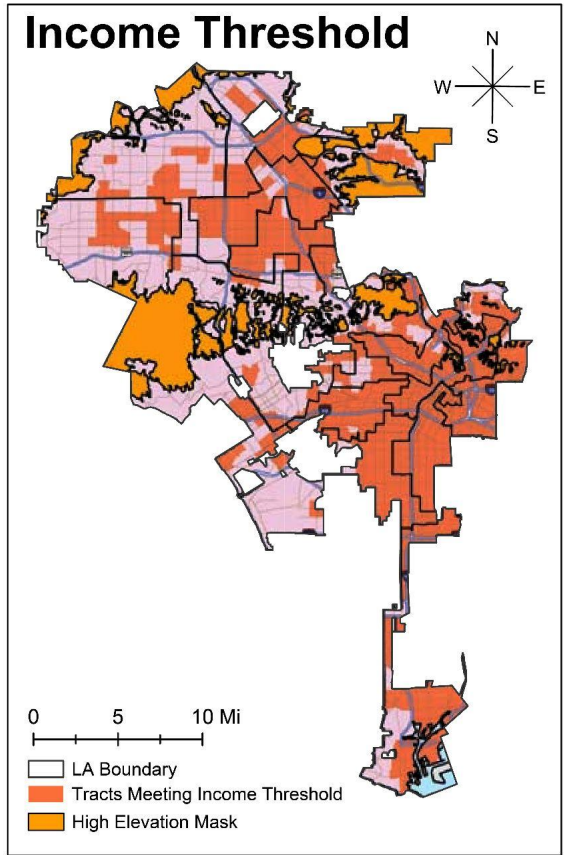
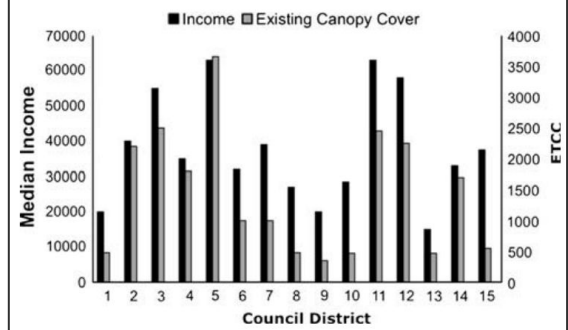


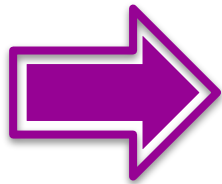
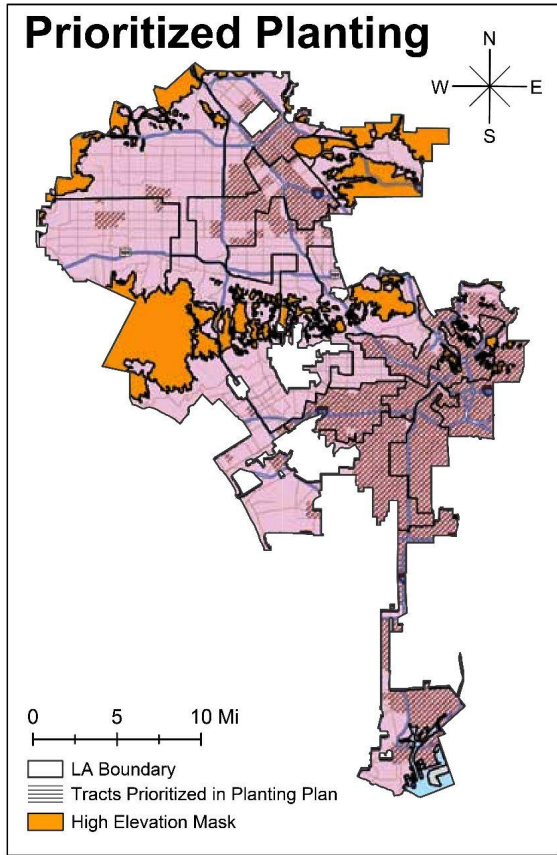
Fig. 4 Canopy hectares per 100 residents by council district



Source: [Pincetl \(2009\)](#)

# 1 Million Trees Los Angeles

- 2
- 3
- 4



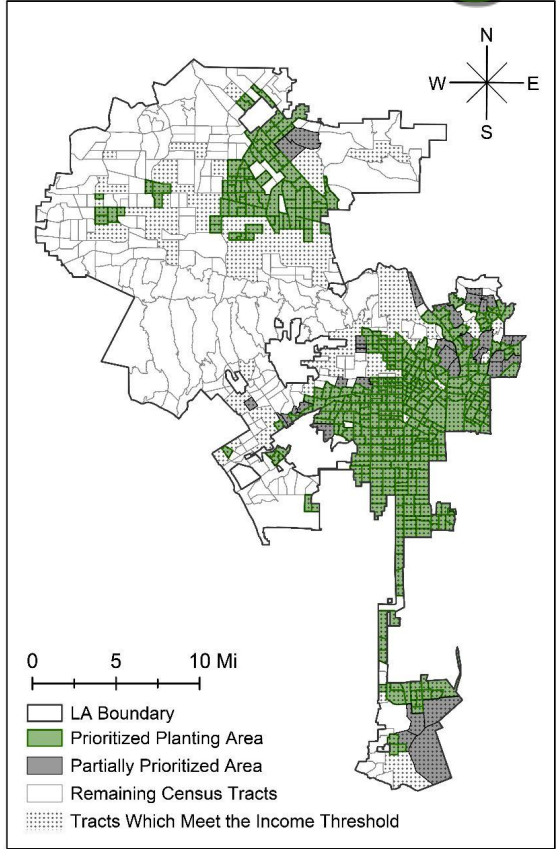
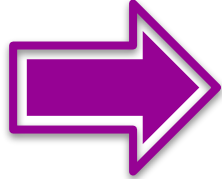
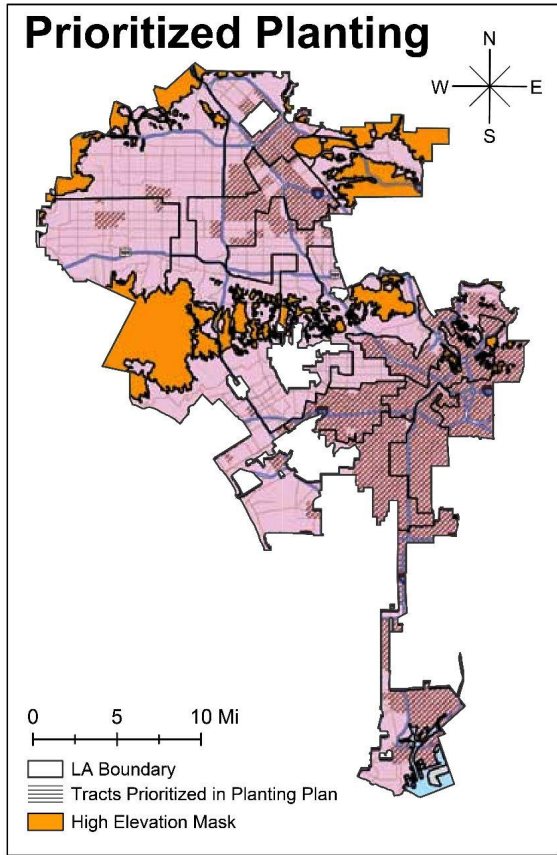
Census Tracts (2000)

# 1 Million Trees Los Angeles

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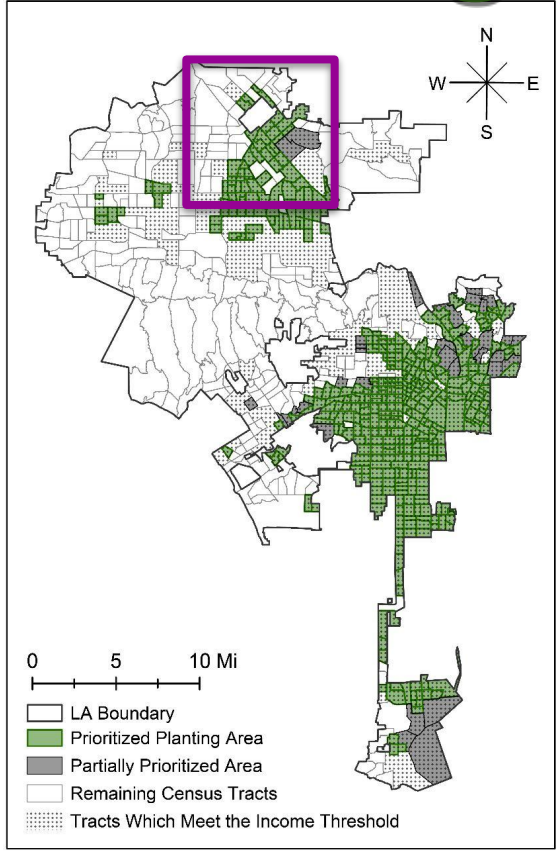
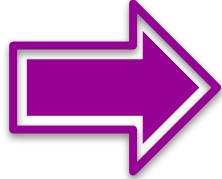
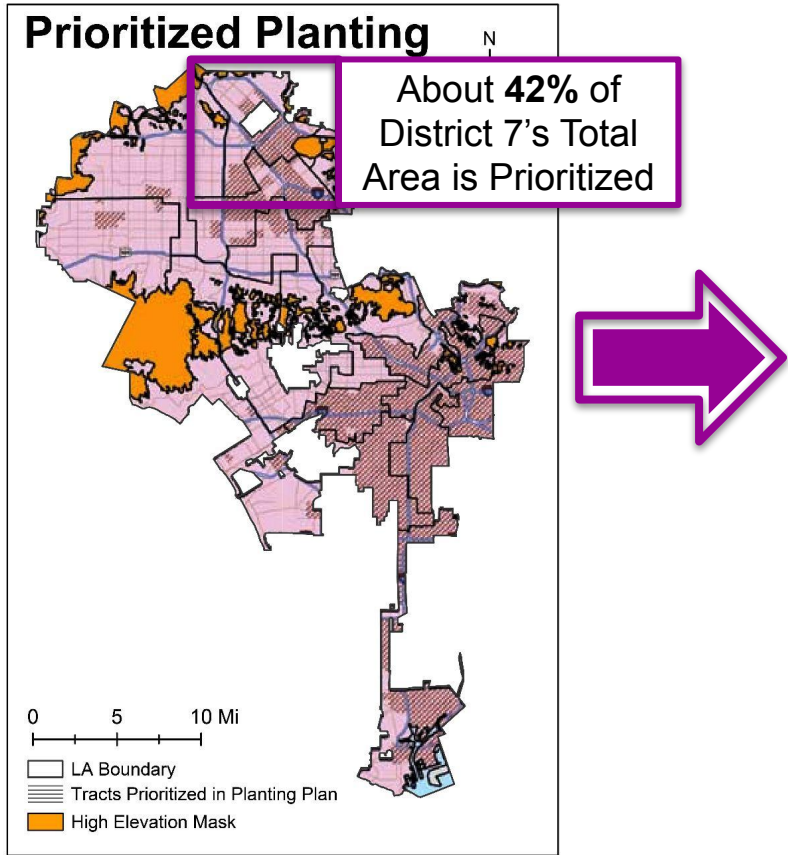
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# Million Trees Los Angeles

2

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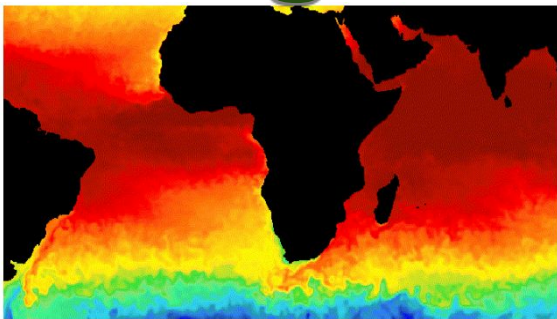




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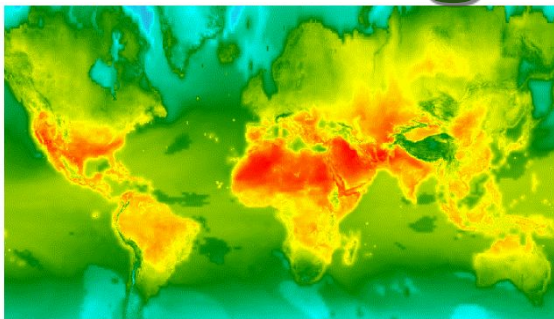
# Google Earth Engine

2



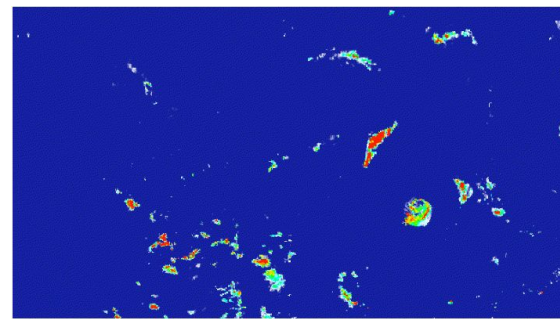
Surface Temperature

3



Climate

4



Weather



Landsat



High-Resolution Imagery

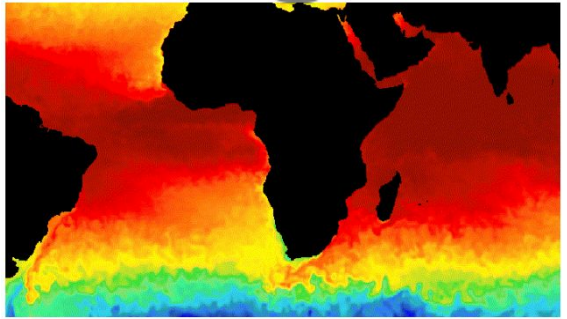


Sentinel

1

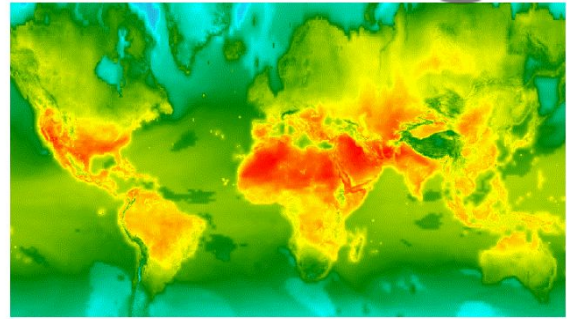
# Google Earth Engine

2



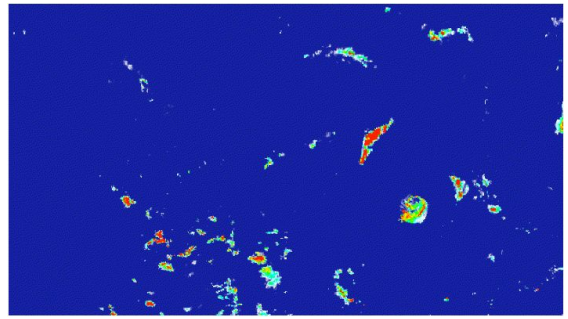
Surface Temperature

3



Climate

4



Weather



Landsat

Spatial Resolution: 0.6-m  
Temporal Resolution: 1x/year

**NAIP**

High-Resolution Imagery

Spatial Resolution: 10-m  
Temporal Resolution: ~ 10 Days

**S2**

Sentinel

Click Me to Learn More

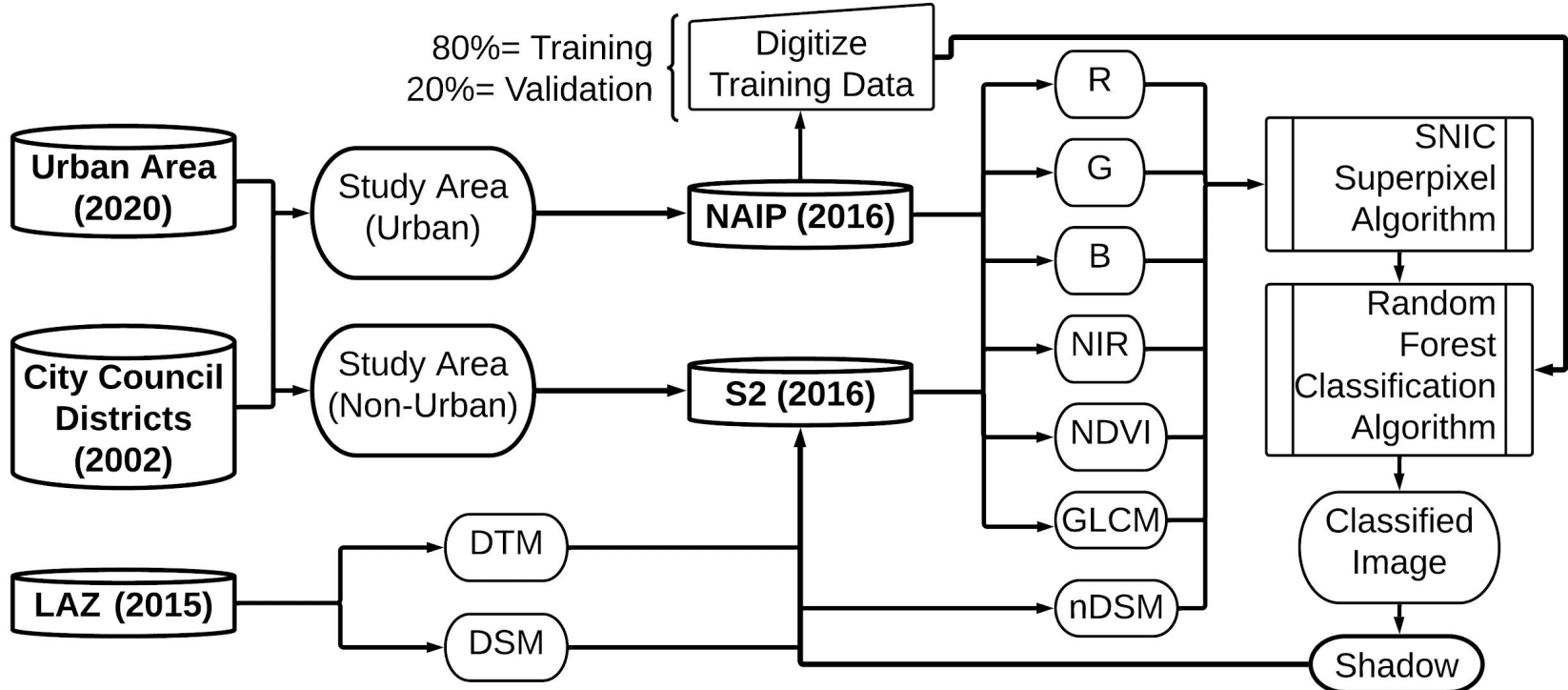


# 1 How I did it

2

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Adapted from [Coleman et al. \(2020\)](#)

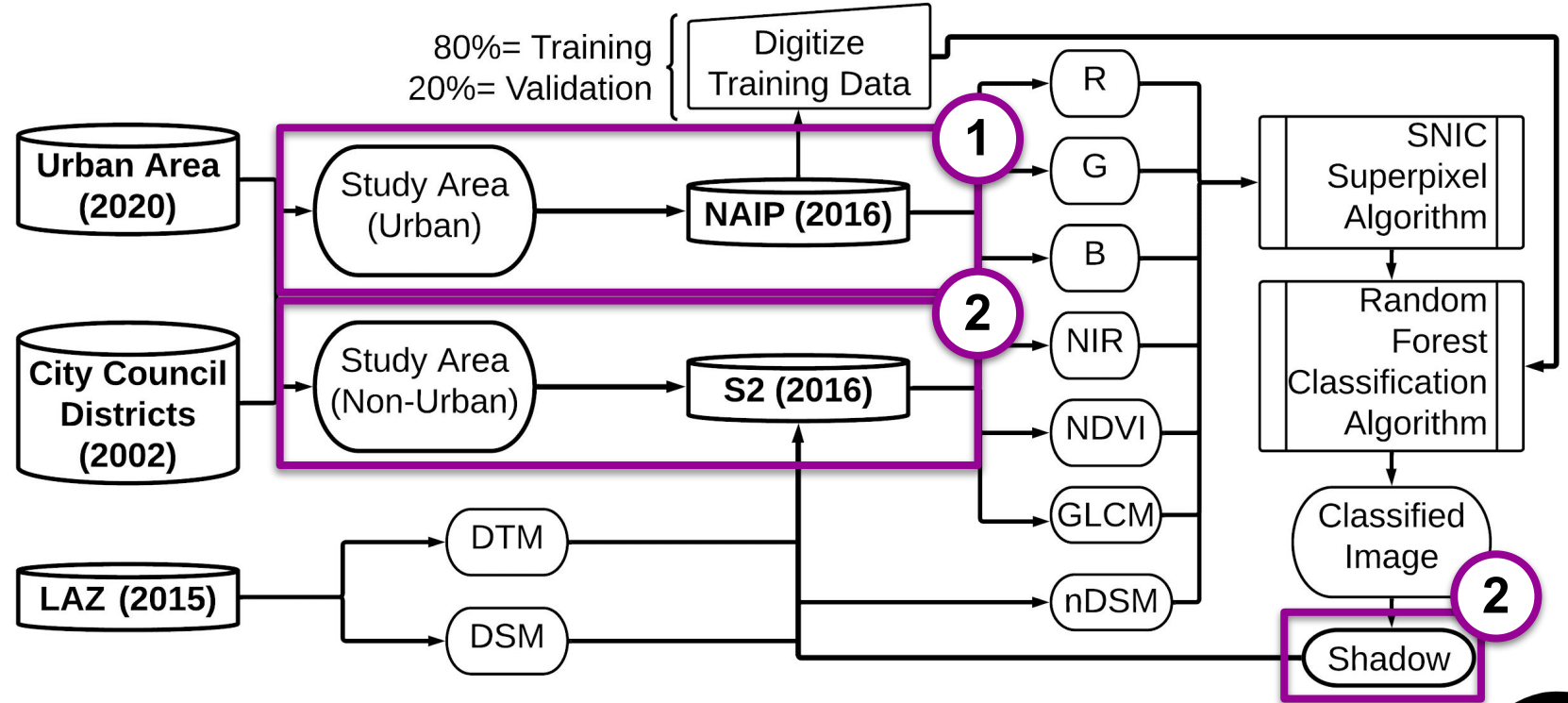


# 1 How I did it

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Adapted from [Coleman et al. \(2020\)](#)

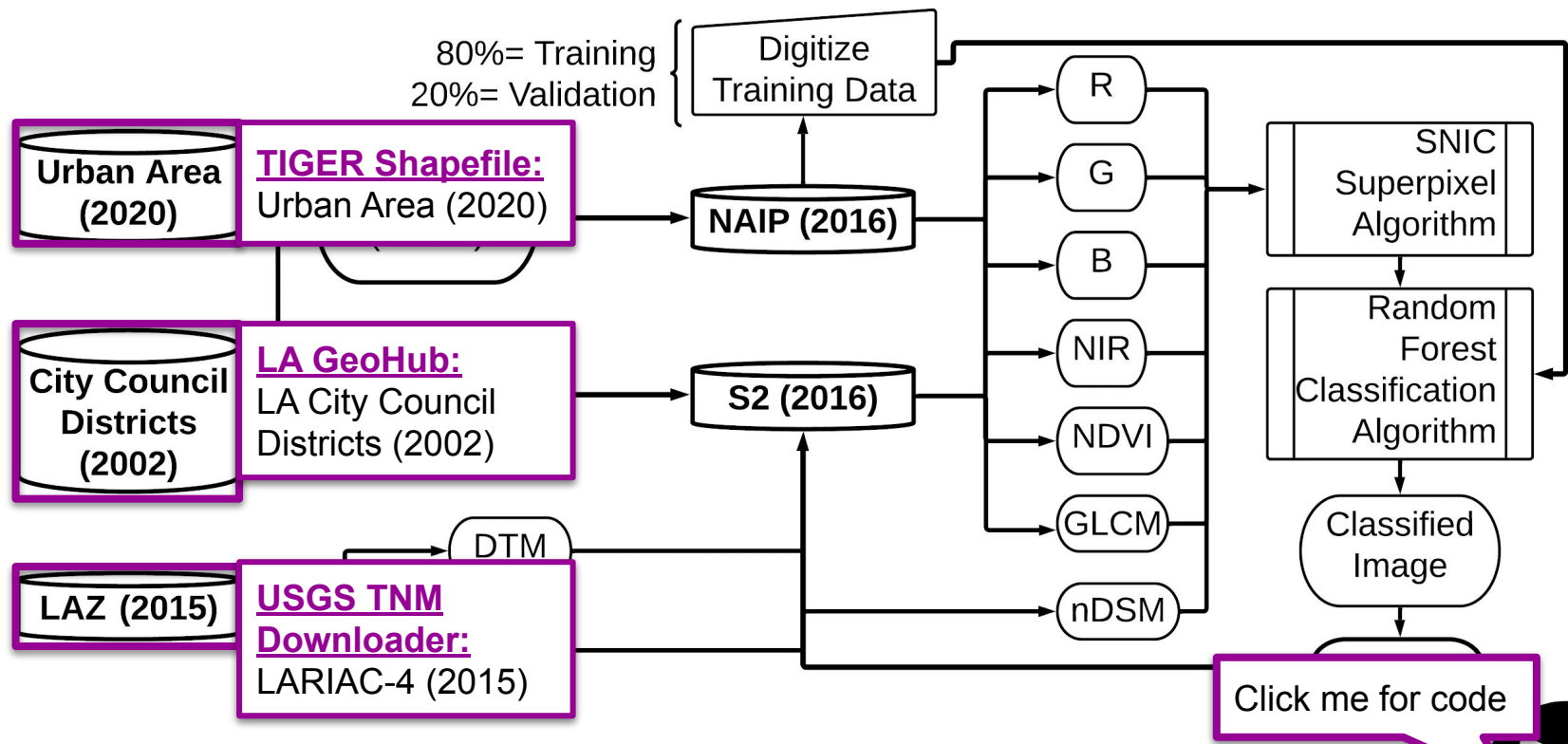


# 1 How I did it

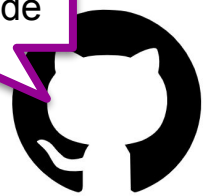
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Adapted from [Coleman et al. \(2020\)](#)

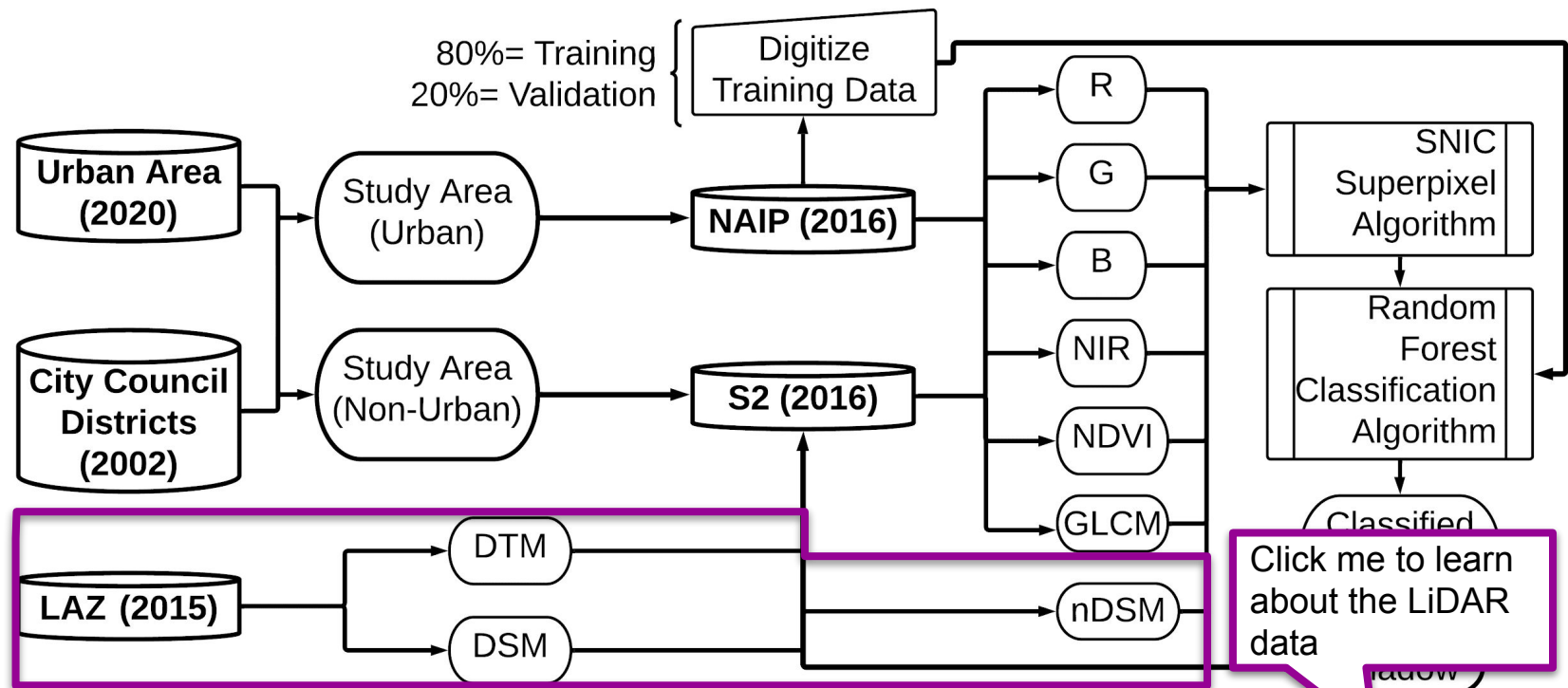


# 1 How I did it

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*My addition to the code*

Adapted from *Coleman et al. (2020)*



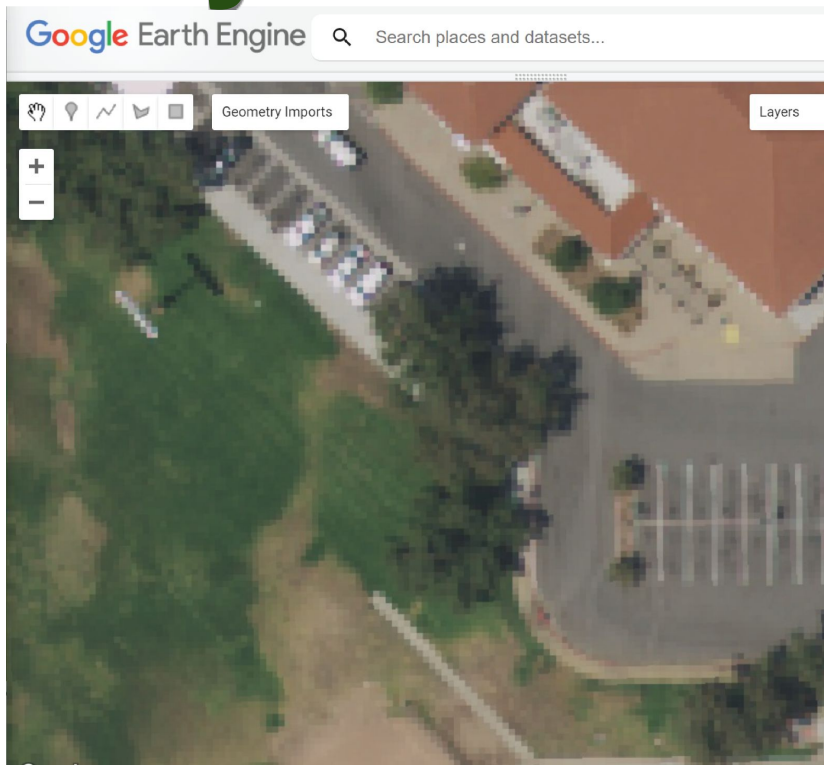
1

# Why I added nDSM

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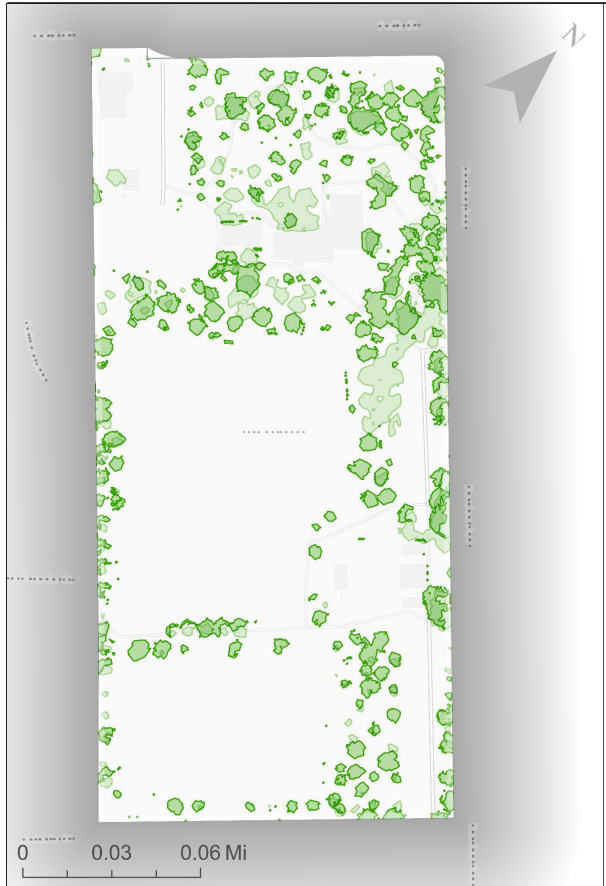
Background Info: [Guan et al. 2013](#)



# 1 Preliminary Results

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-  : 2006 Tree Canopy Cover (TCC)
-  : 2016 Tree Canopy Cover (TCC)

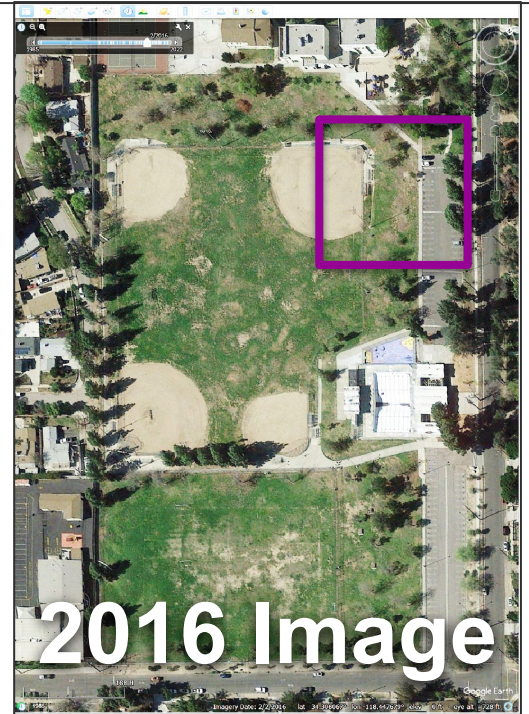




# 1 Preliminary Results

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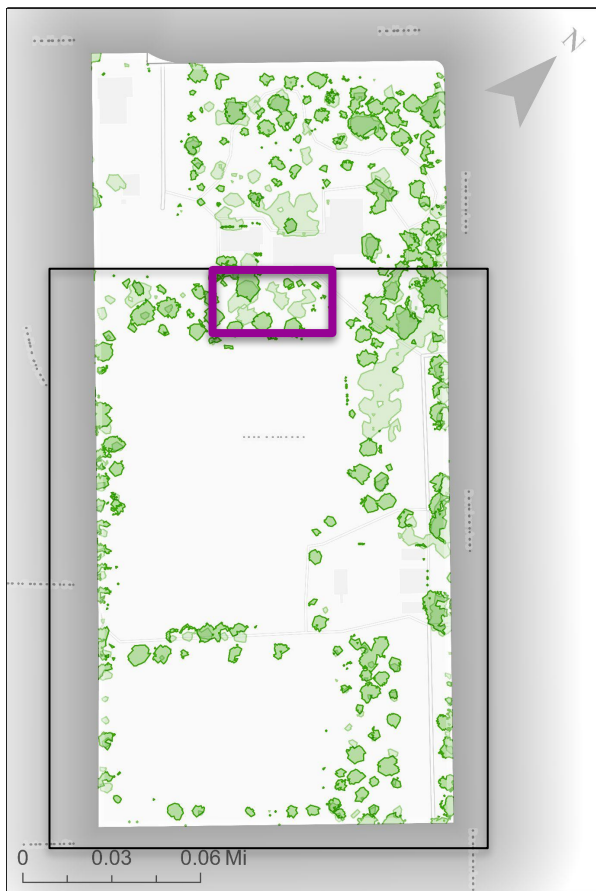
-  : 2006 Tree Canopy Cover (TCC)
-  : 2016 Tree Canopy Cover (TCC)



# 1 Preliminary Results

2

3

4



-  : 2006 Tree Canopy Cover (TCC)
-  : 2016 Tree Canopy Cover (TCC)

# 1 Questions?

2



diana.bonnarens@gmail.com

3

4



@gistdoinmybest



CUGOS monthly meeting