

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



Me not knowing that MTLA
could be studied

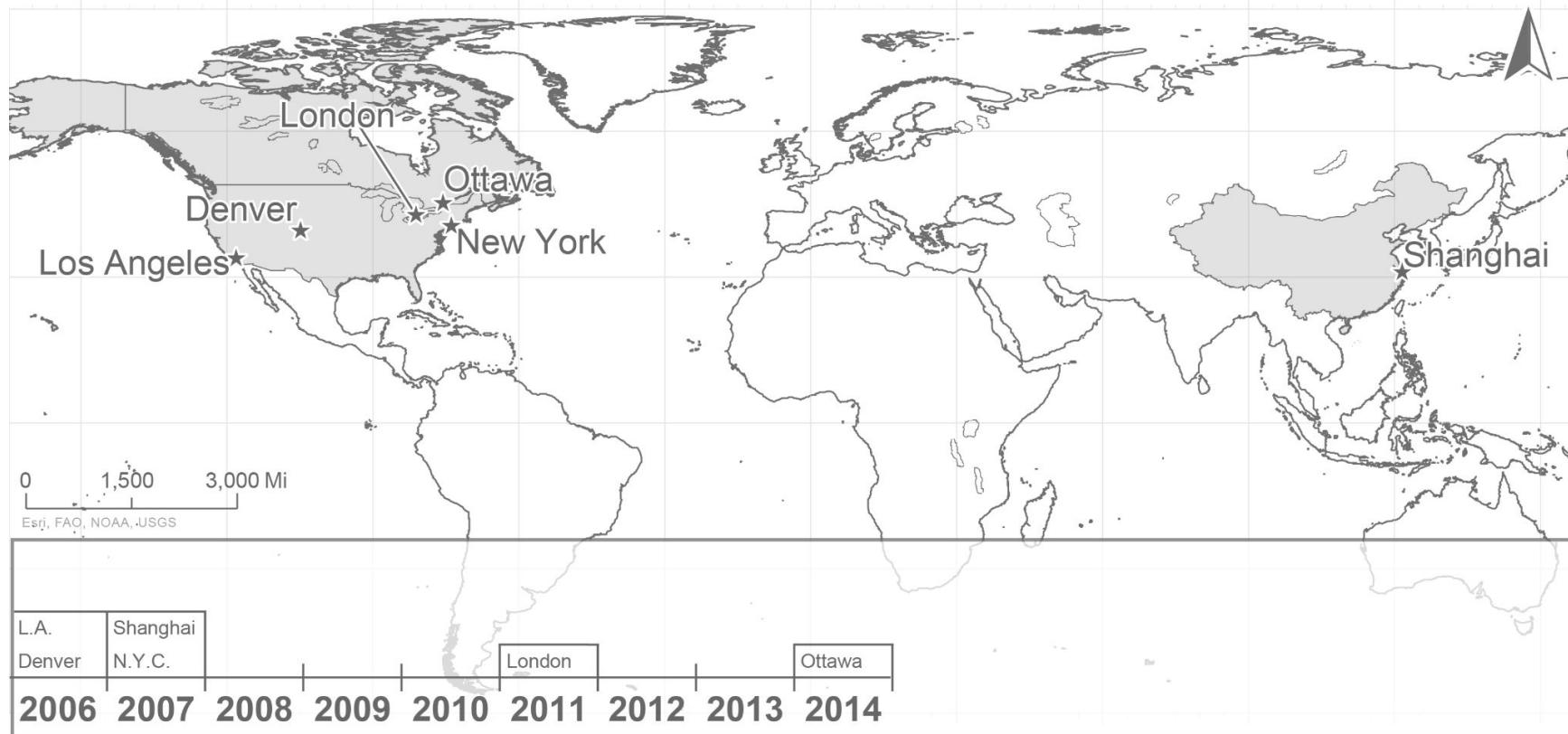


1 Million Trees Initiatives

2

3

4



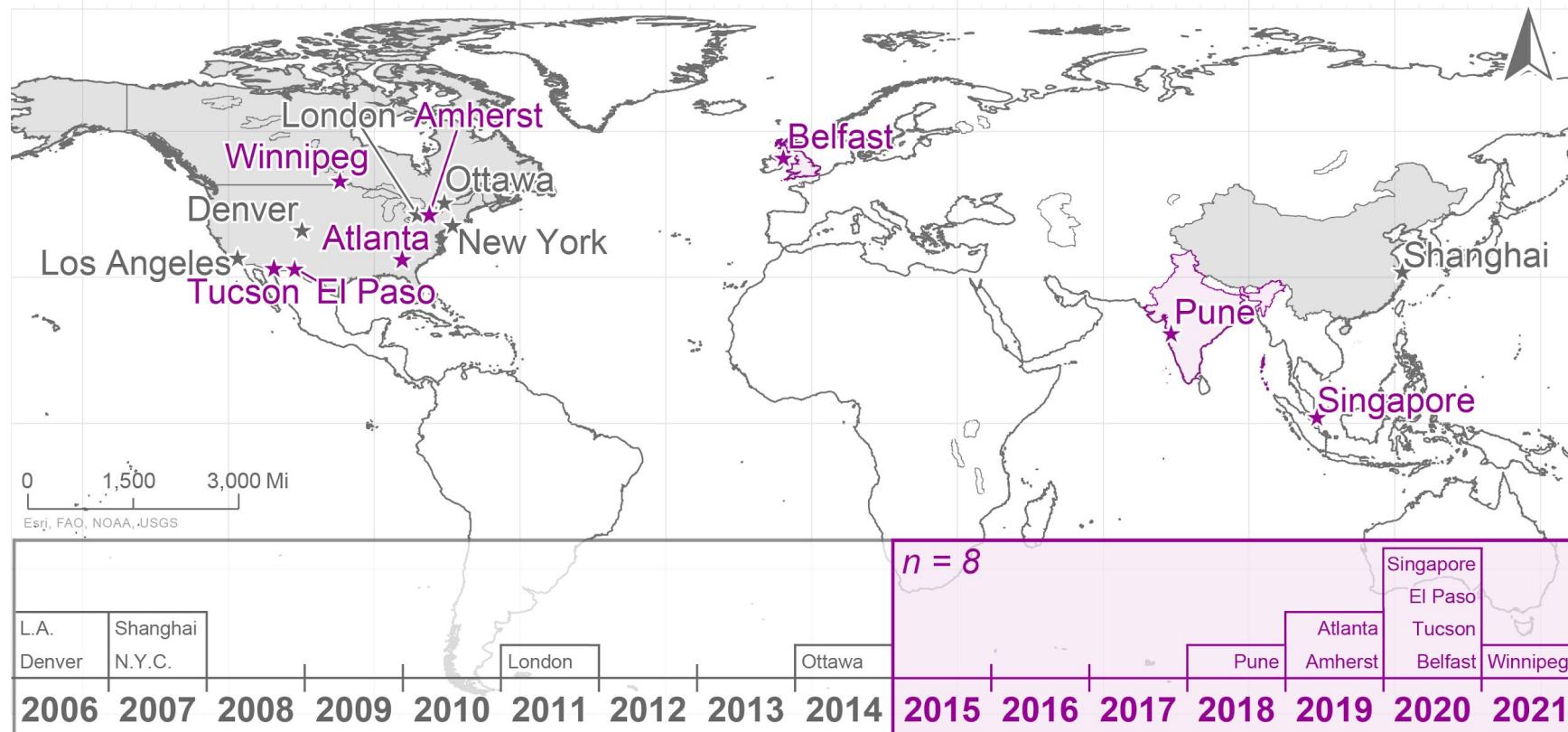
Note: Map only shows cities w/ MTIs. Some counties also have TPIs (including King County!)

1 Million Trees Initiatives

2

3

4



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

1

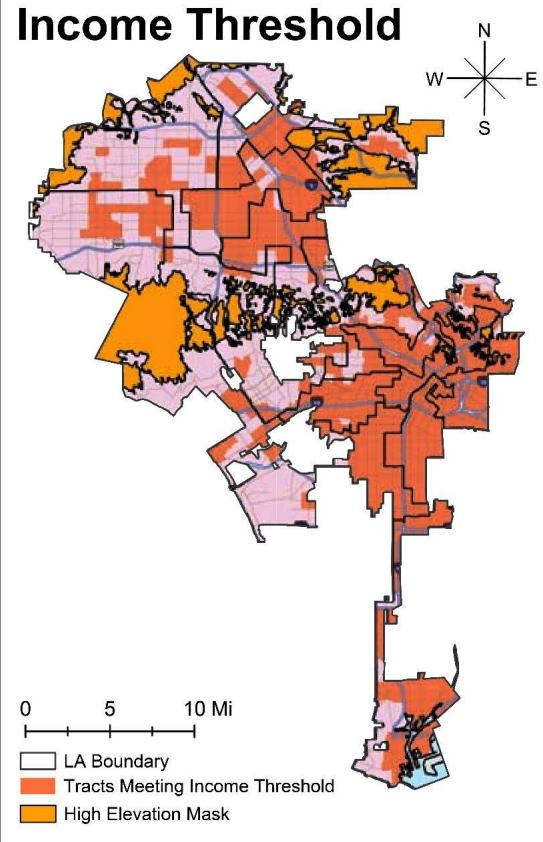
Million Trees Los Angeles

2

3

4

Income Threshold



City of Los Angeles Tree Canopy Cover by Council Districts

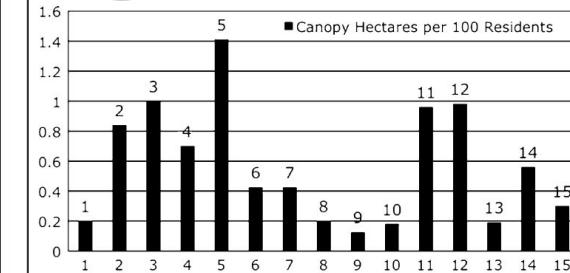
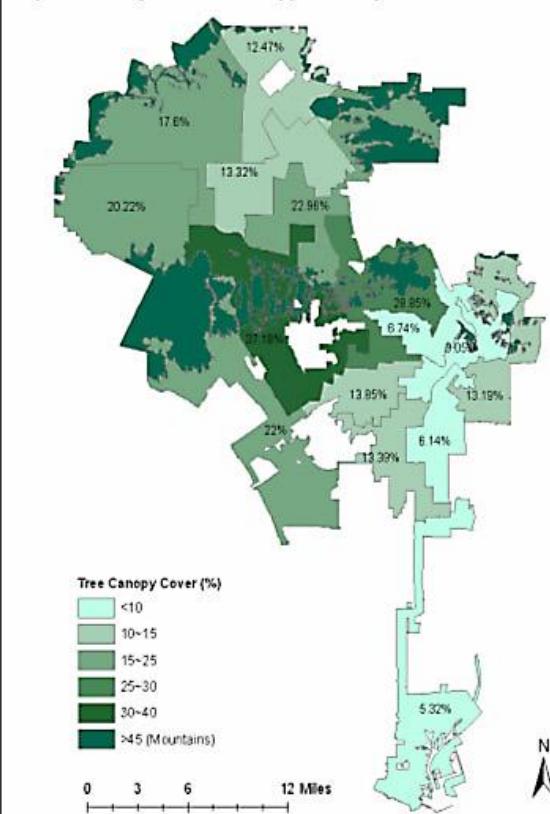
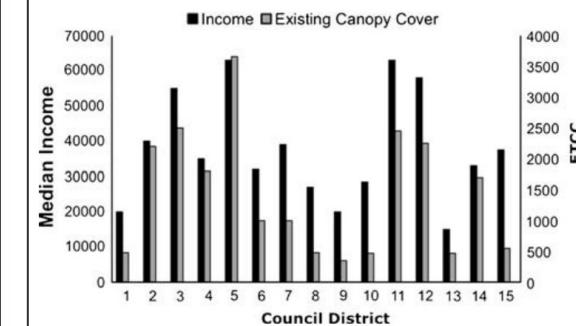


Fig. 4 Canopy hectares per 100 residents by council district



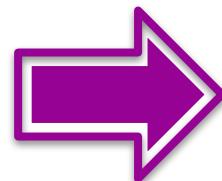
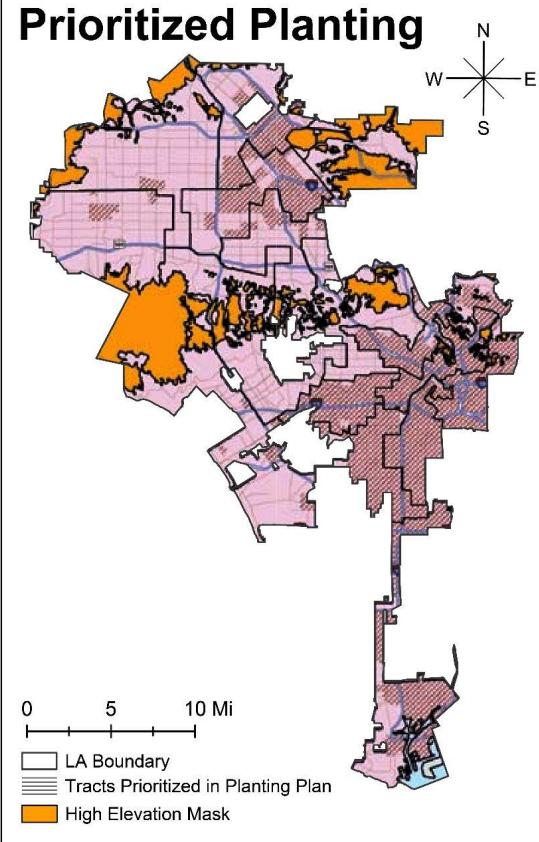
Source: [Pincetl \(2009\)](#)

1 Million Trees Los Angeles

2

3

4



Census Tracts (2000)

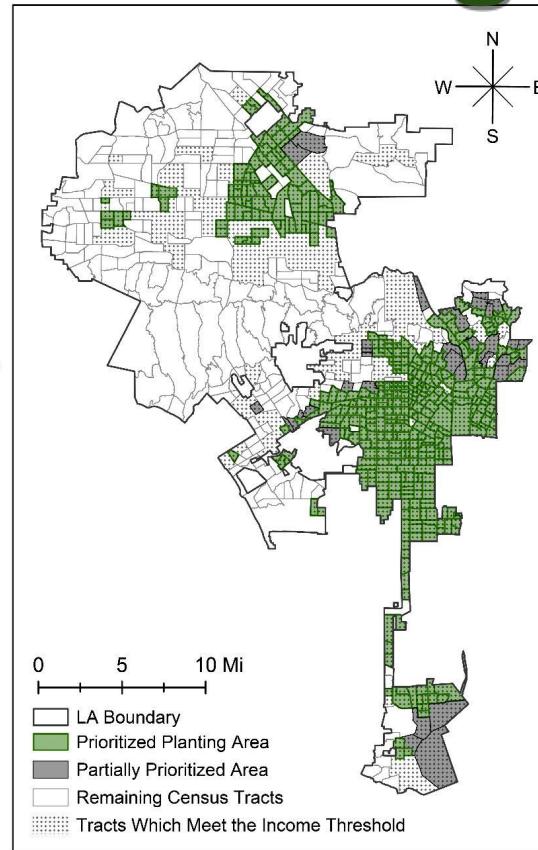
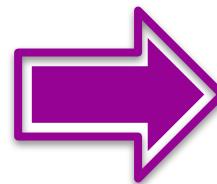
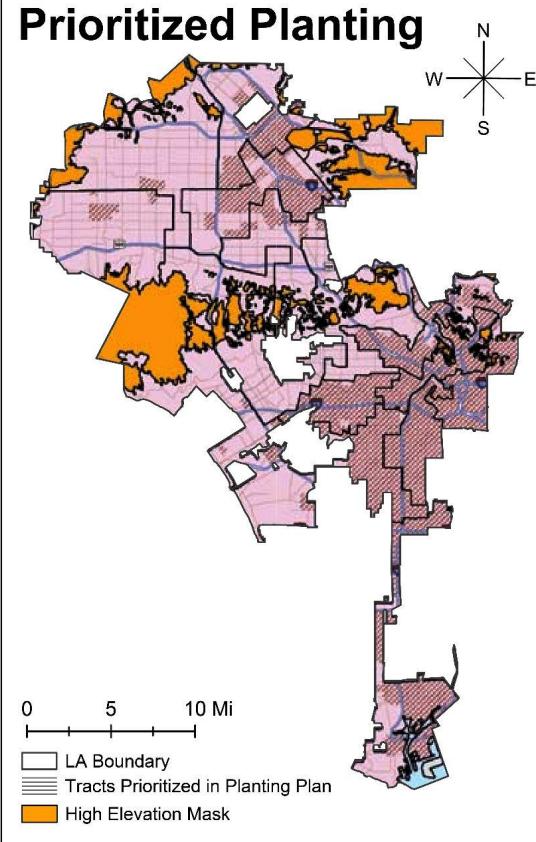
1

Million Trees Los Angeles

2

3

4



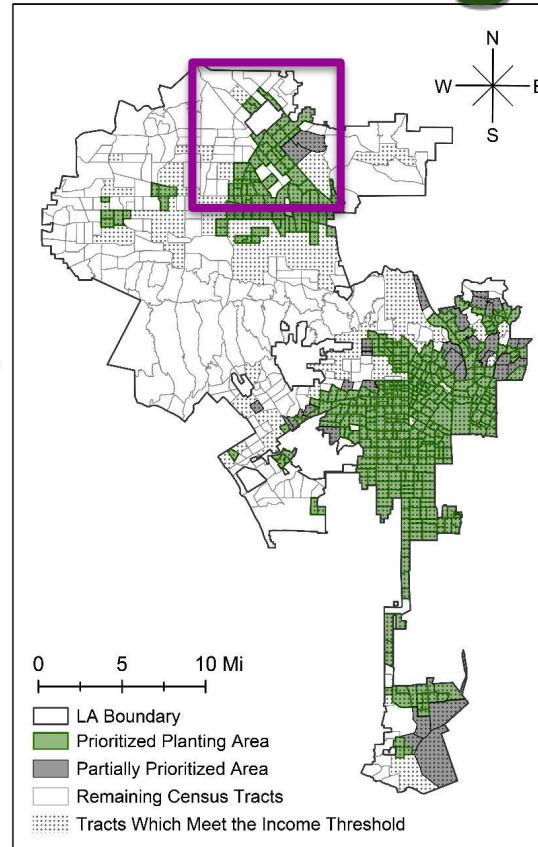
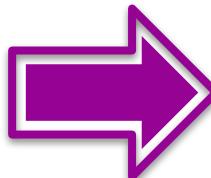
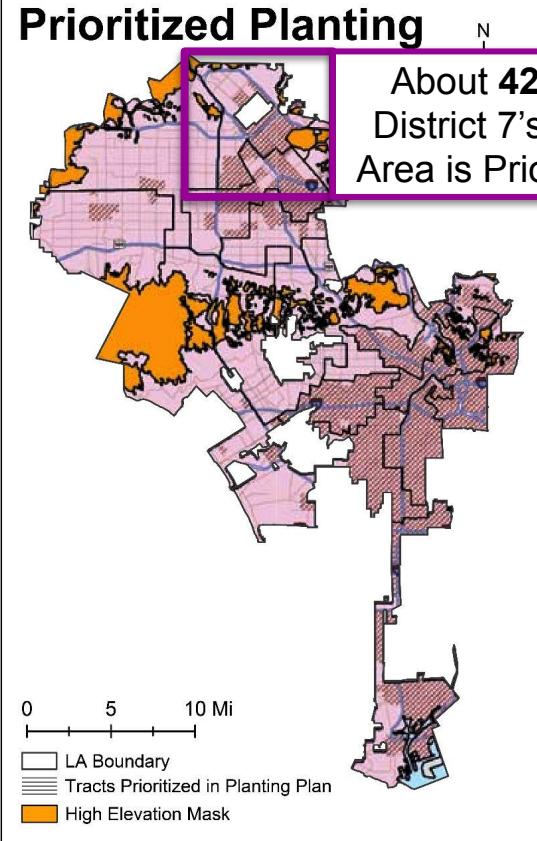
1

Million Trees Los Angeles

2

3

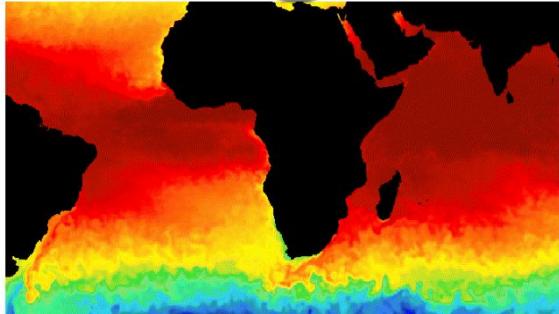
4



1

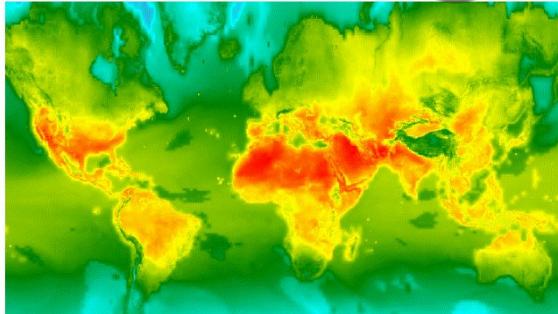
Google Earth Engine

2



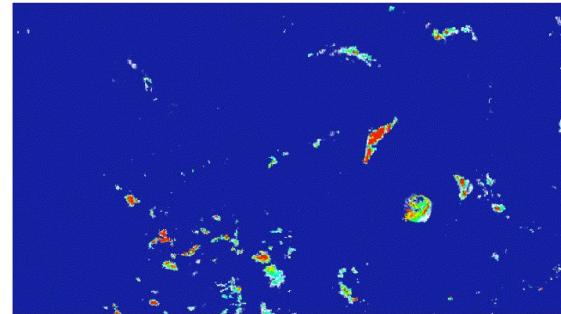
Surface Temperature

3



Climate

4



Weather



Landsat



High-Resolution Imagery



Sentinel

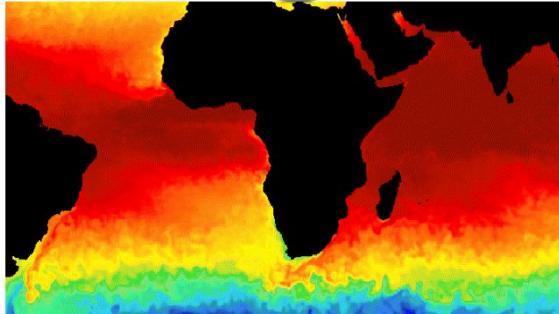


Earth Engine Data Catalog

1

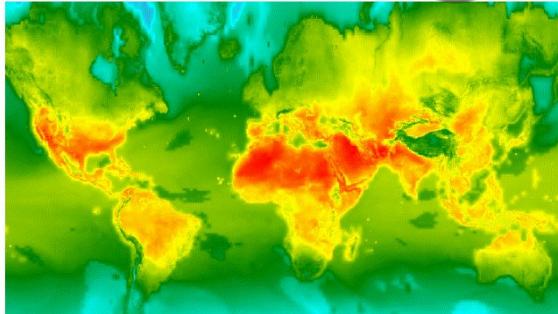
Google Earth Engine

2



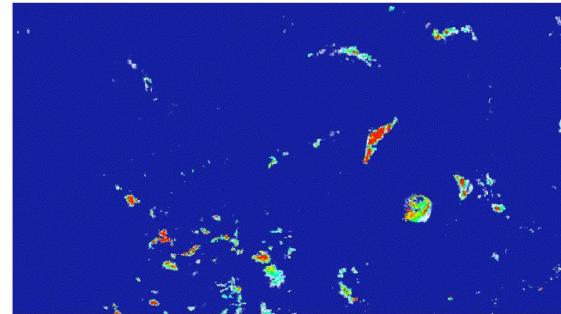
Surface Temperature

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

Click Me to Learn More

Sentinel



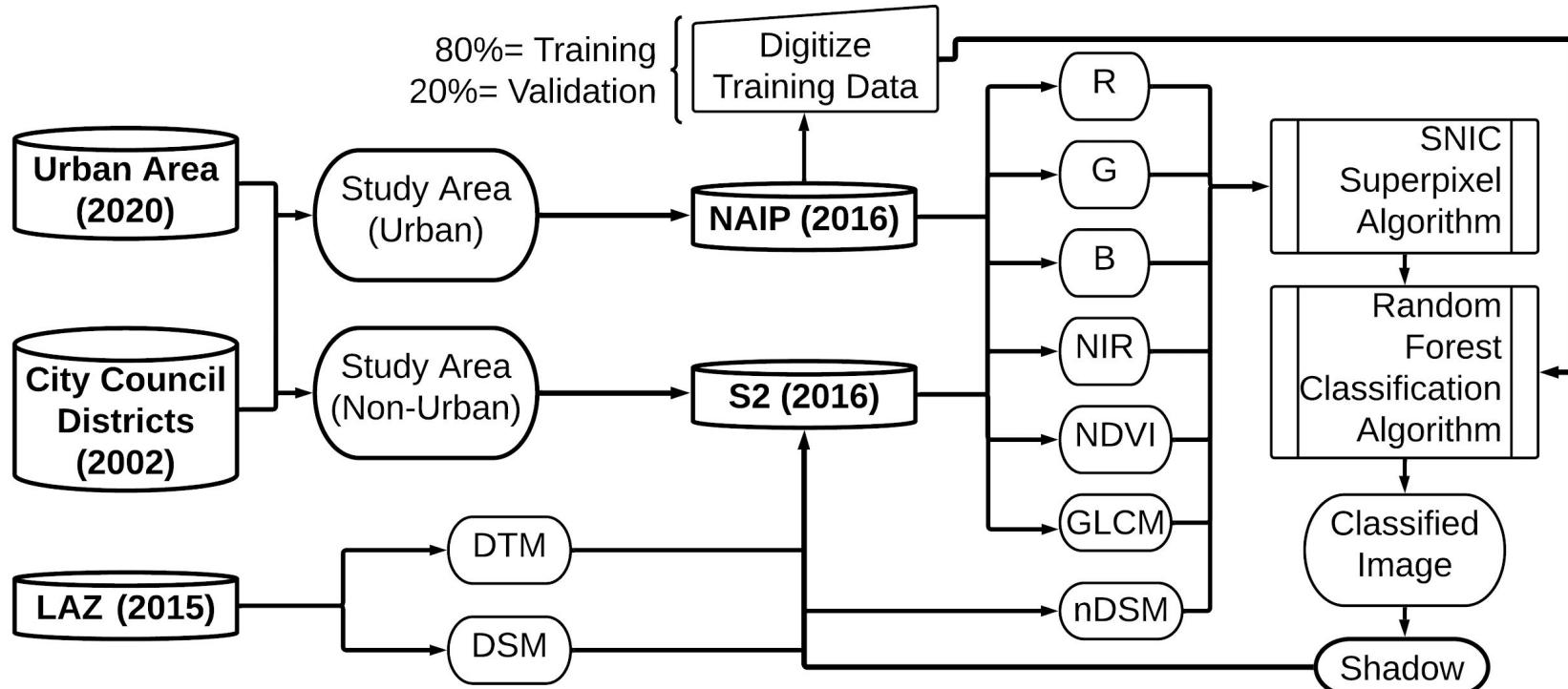
1

How I did it

2

3

4



Adapted from Coleman et al. (2020)



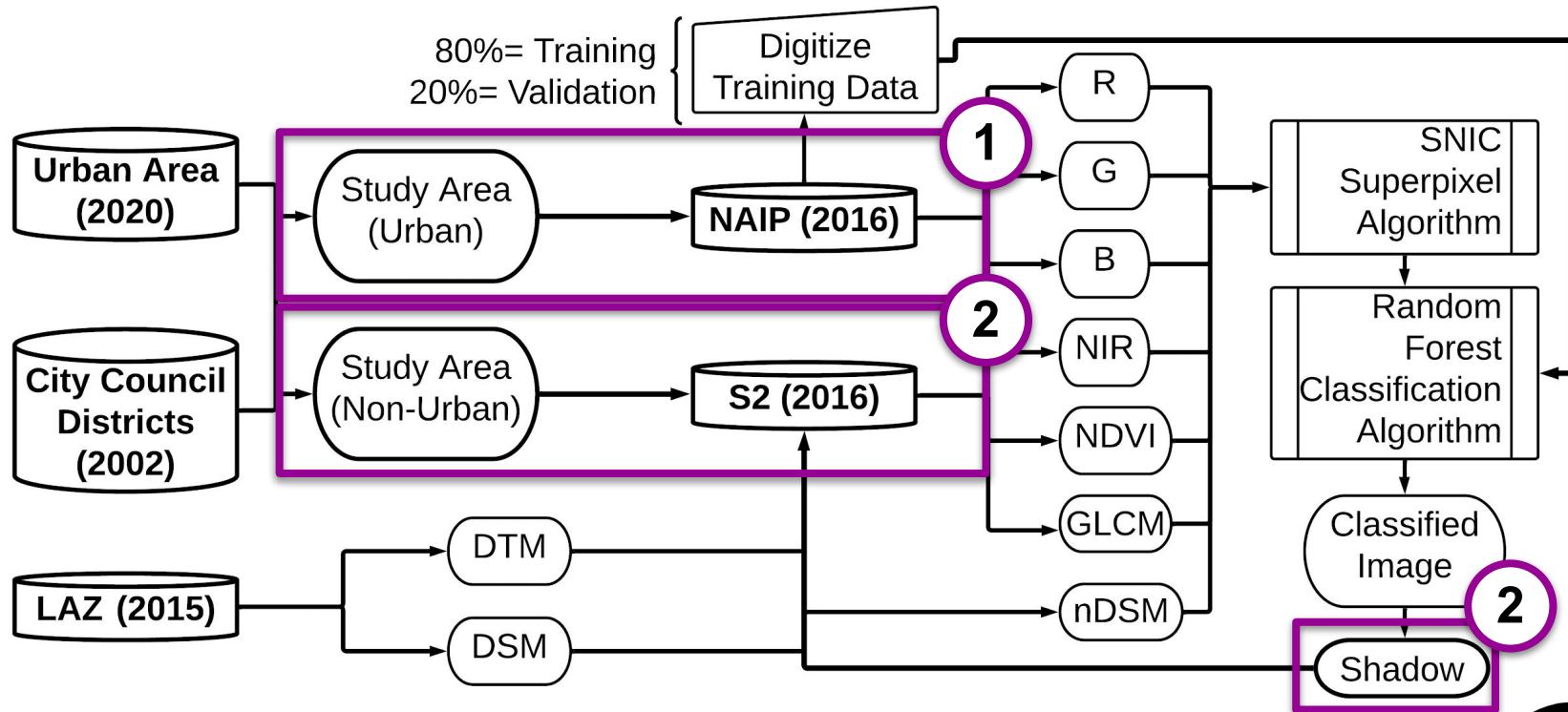
1

How I did it

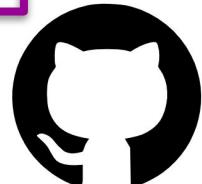
2

3

4



Adapted from Coleman et al. (2020)



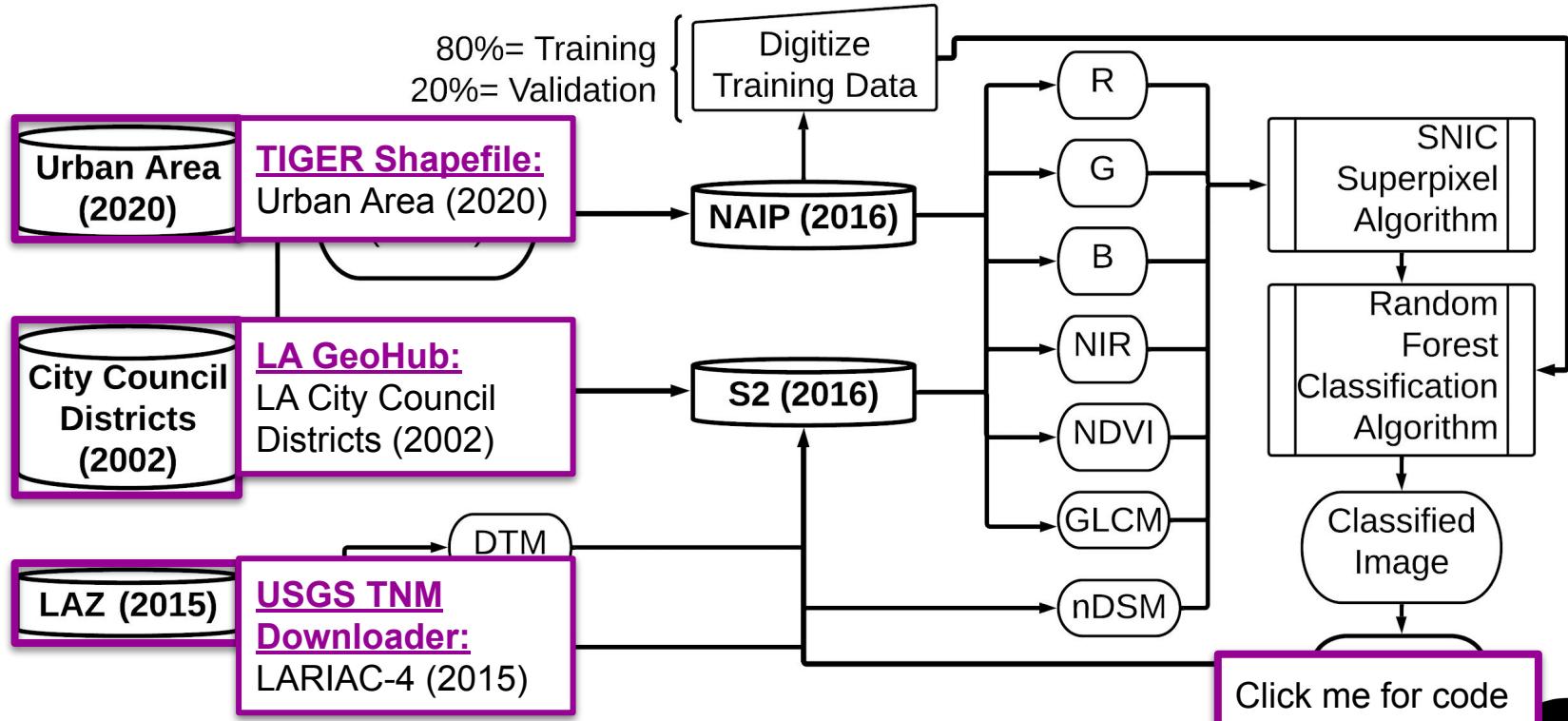
1

How I did it

2

3

4



Adapted from Coleman et al. (2020)

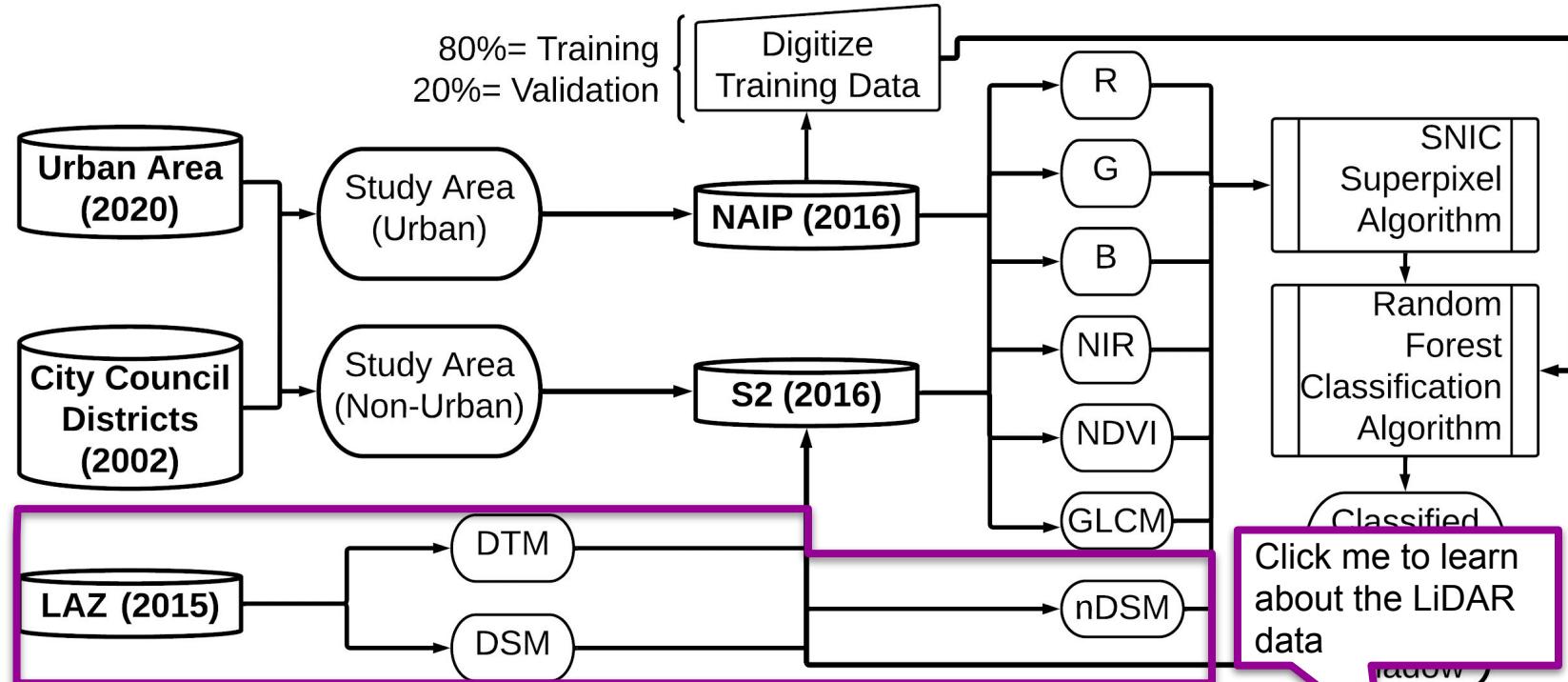
1

How I did it

2

3

4



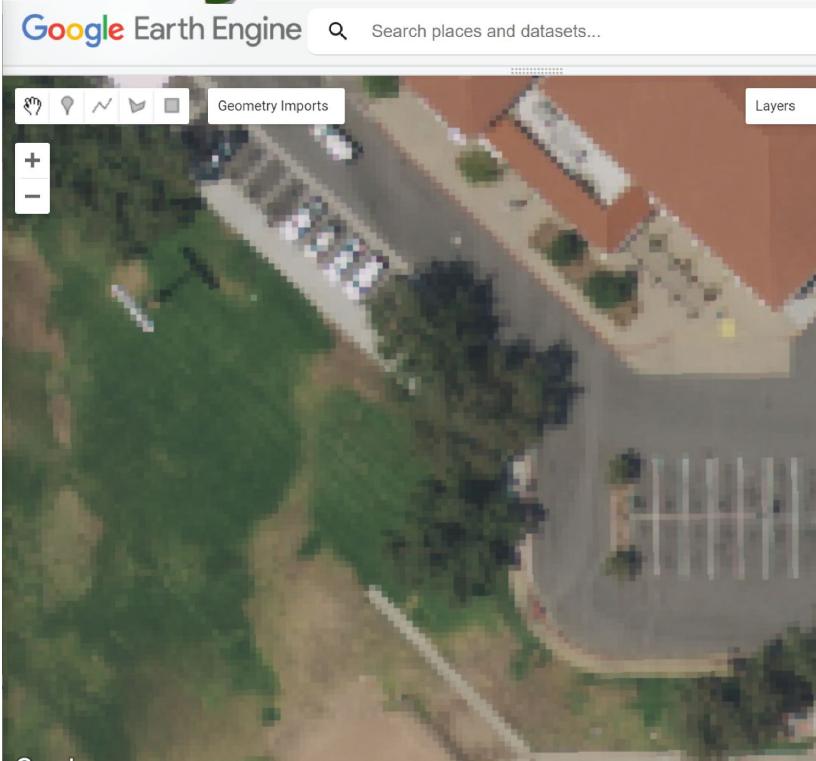
My addition to the code

Adapted from Coleman et al. (2020)

1

Why I added nDSM

2



3



4

Background Info: Guan et al. 2013

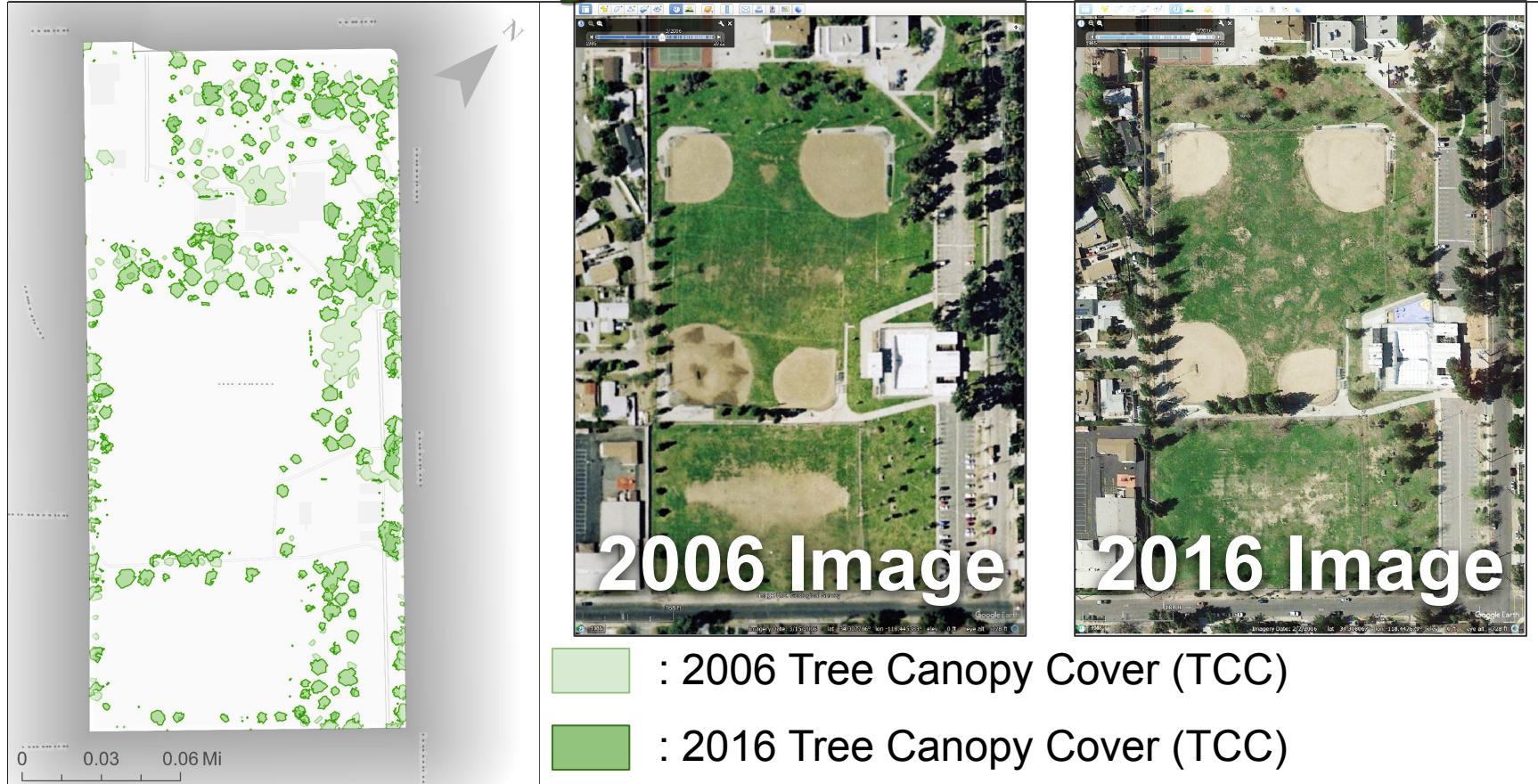
1

Preliminary Results

2

3

4



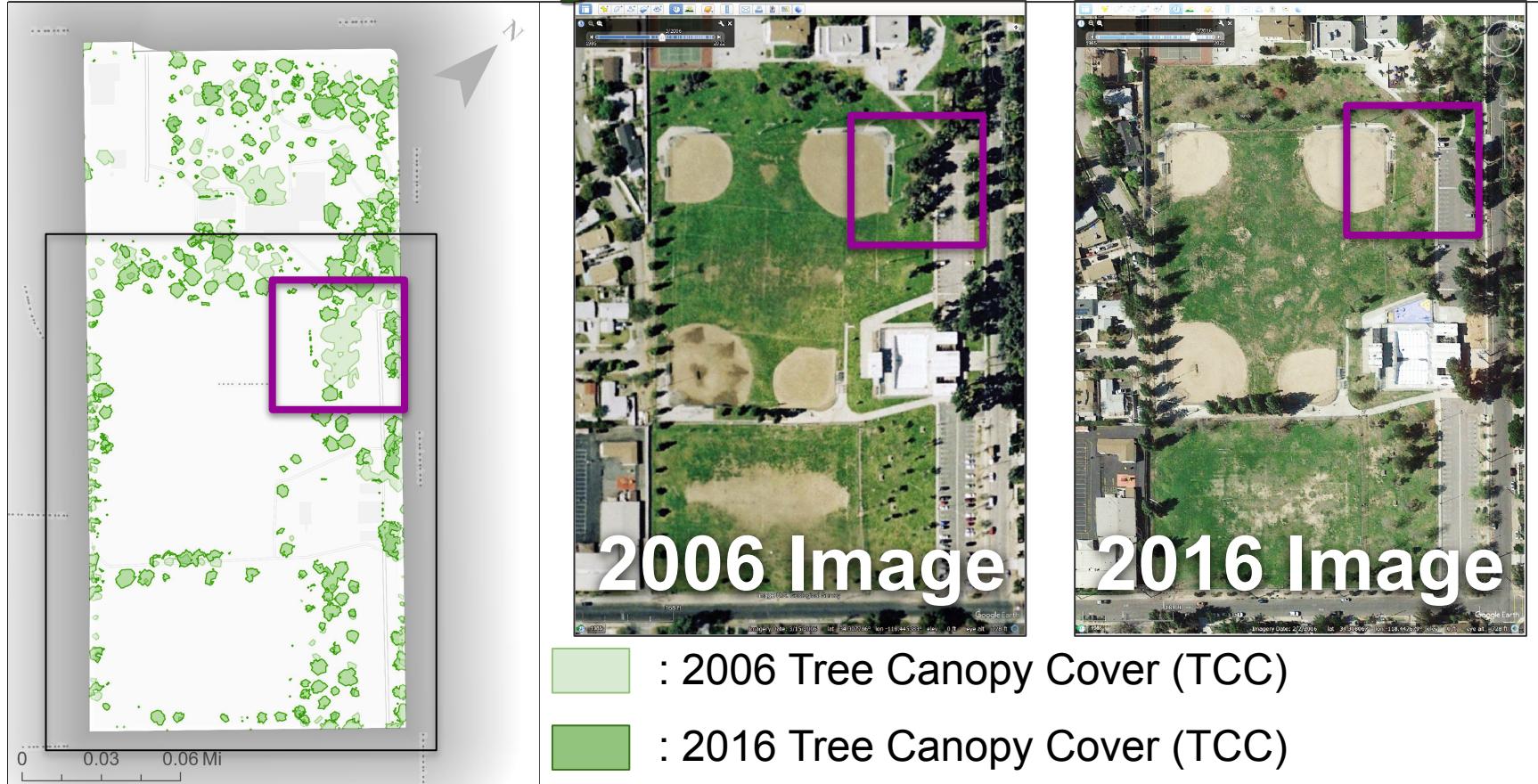
1

Preliminary Results

2

3

4



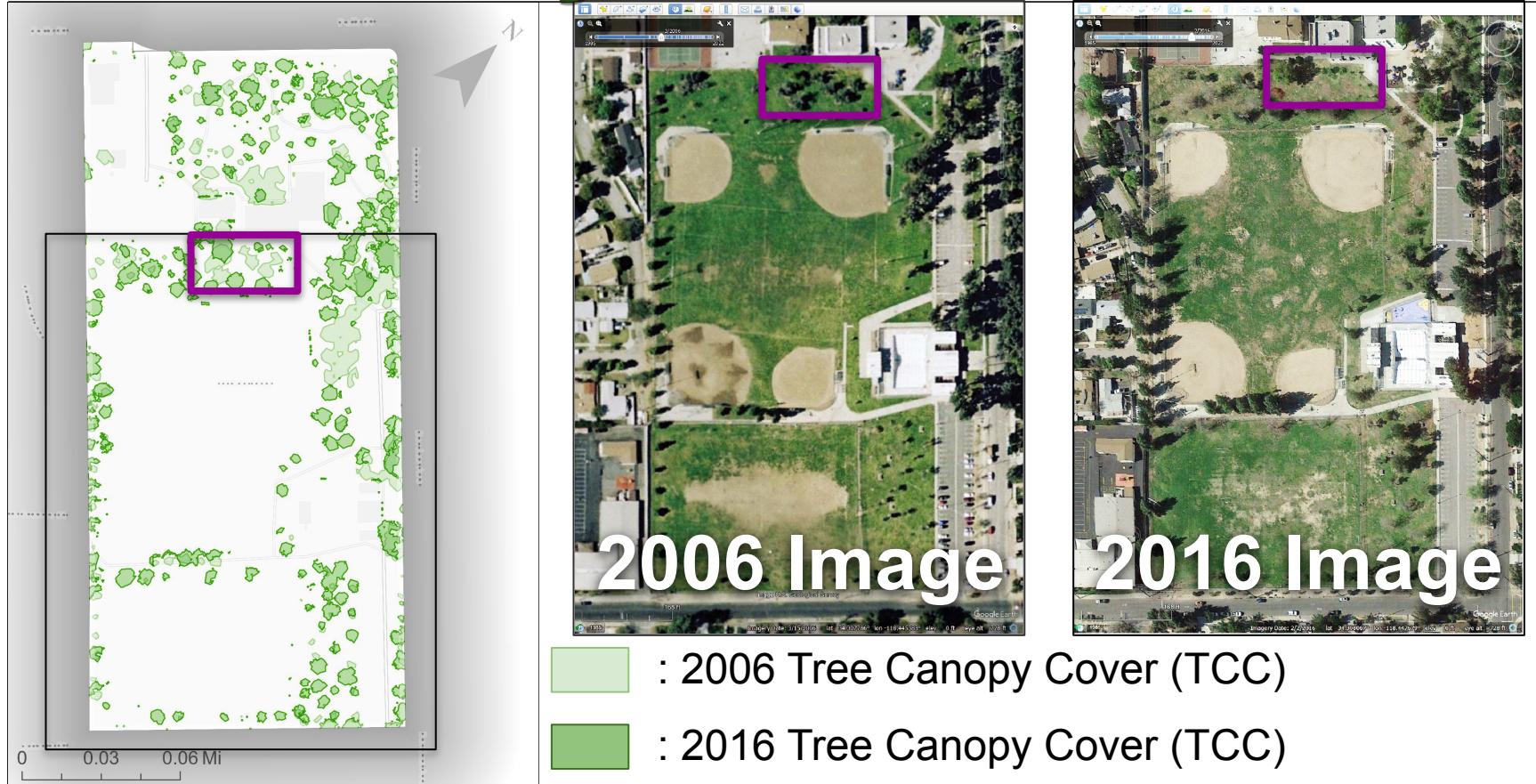
1

Preliminary Results

2

3

4



1 Questions?

2

✉ diana.bonnarens@gmail.com

3

🐦 @gistdoinmybest

4

📍 CUGOS monthly meeting