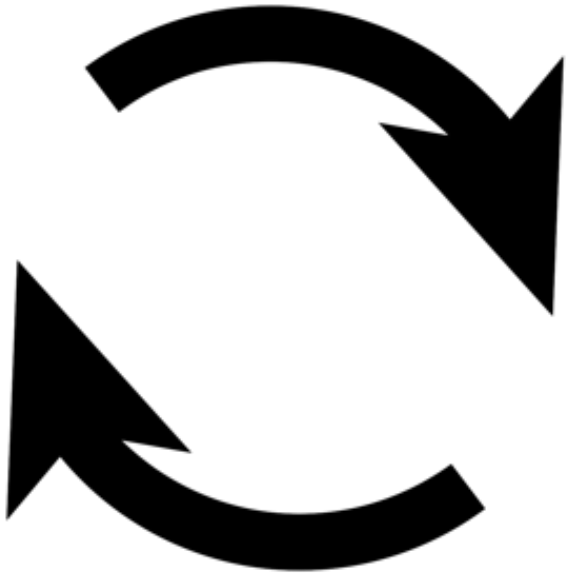


High-Resolution Tree Canopy Change Mapping

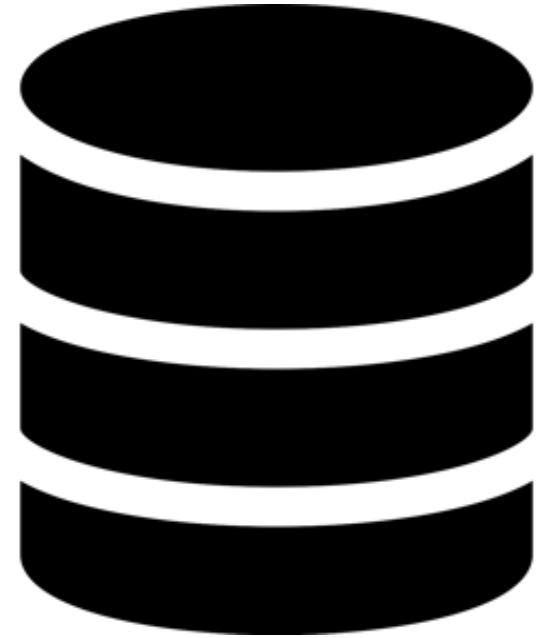
Jarlath O'Neil-Dunne



**Heterogenous
landscapes are
dynamic**

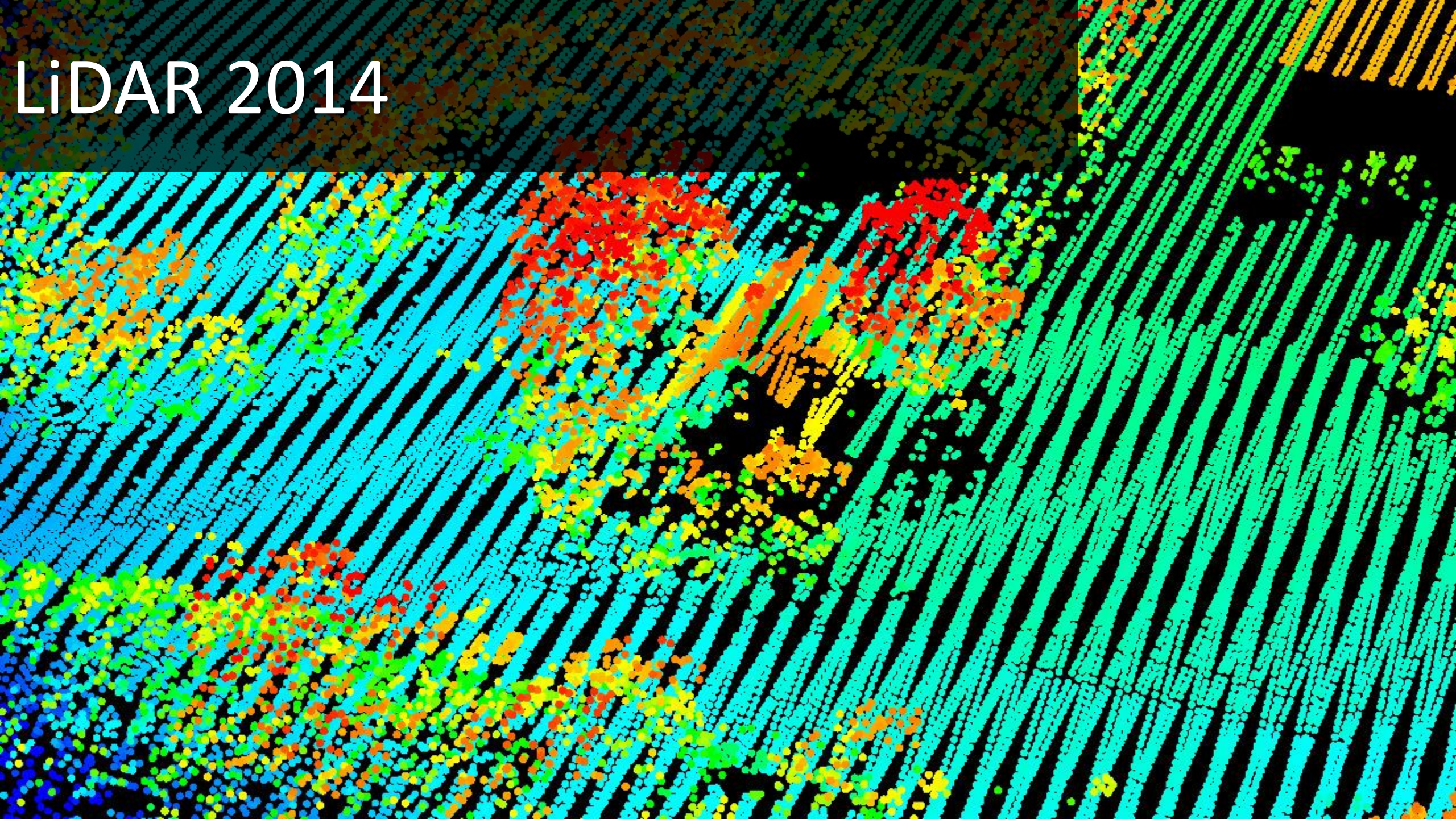


**Change occurs at
fine scales**

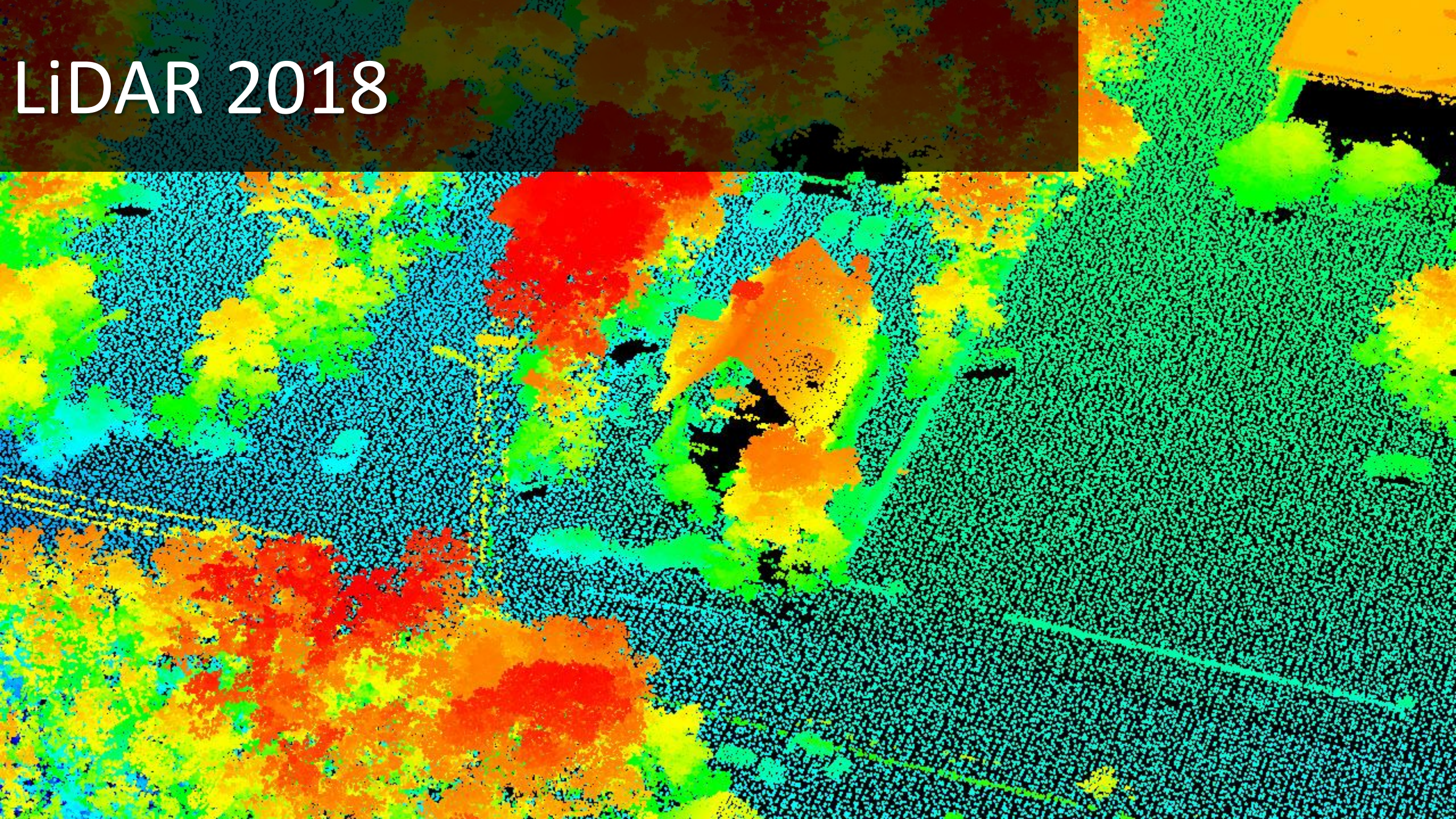


**Data are not
consistent**

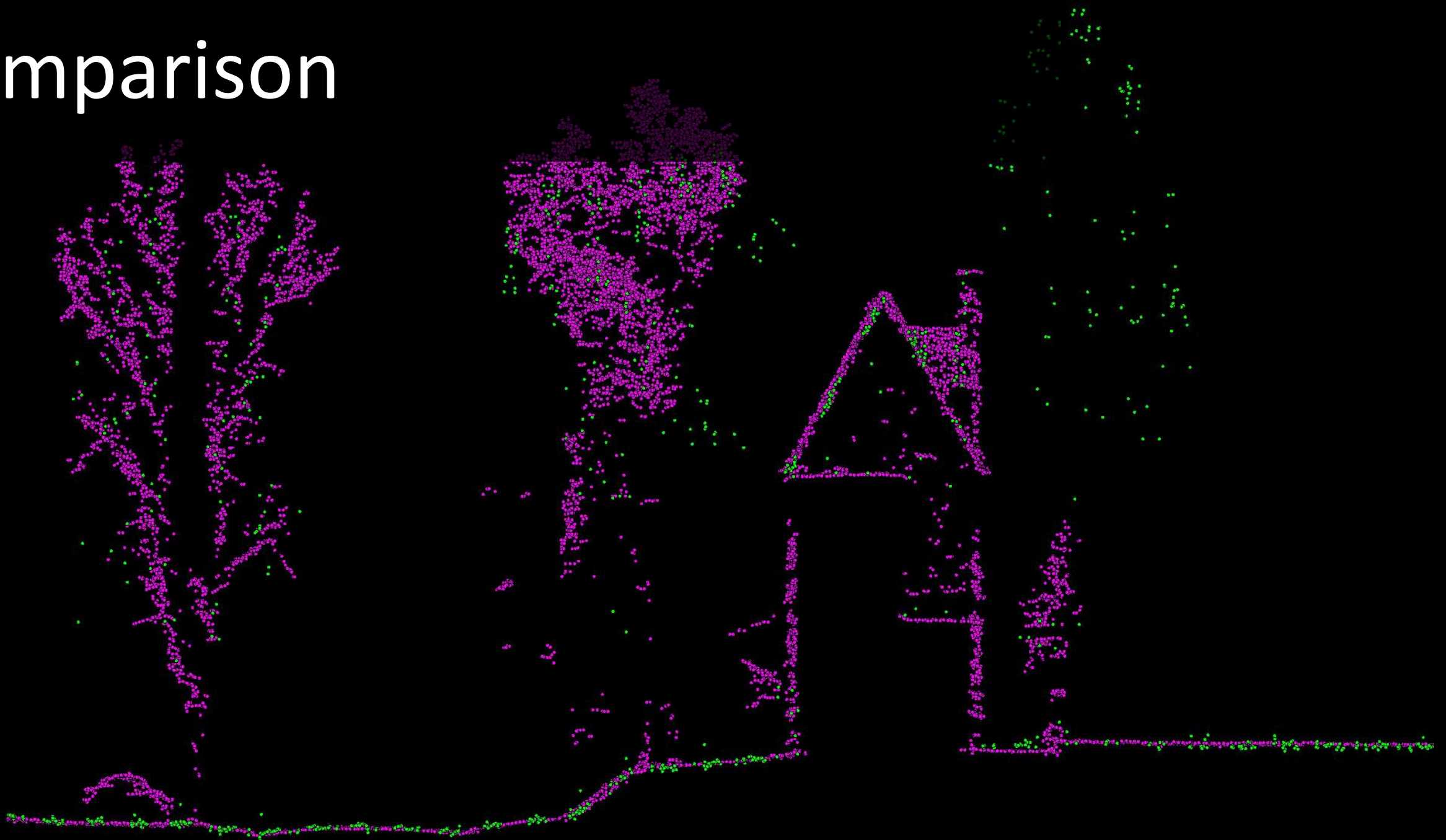
LiDAR 2014



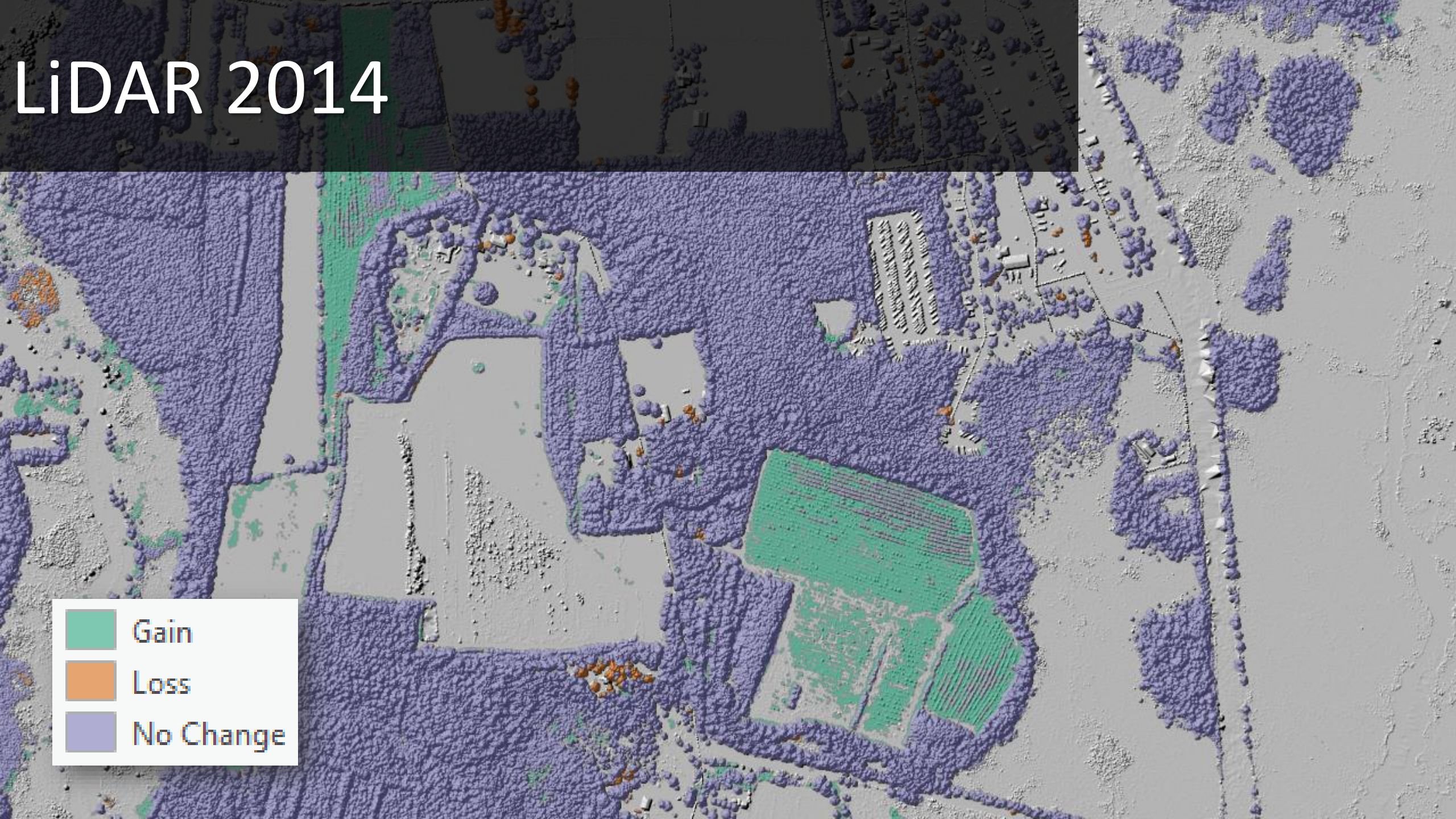
LiDAR 2018



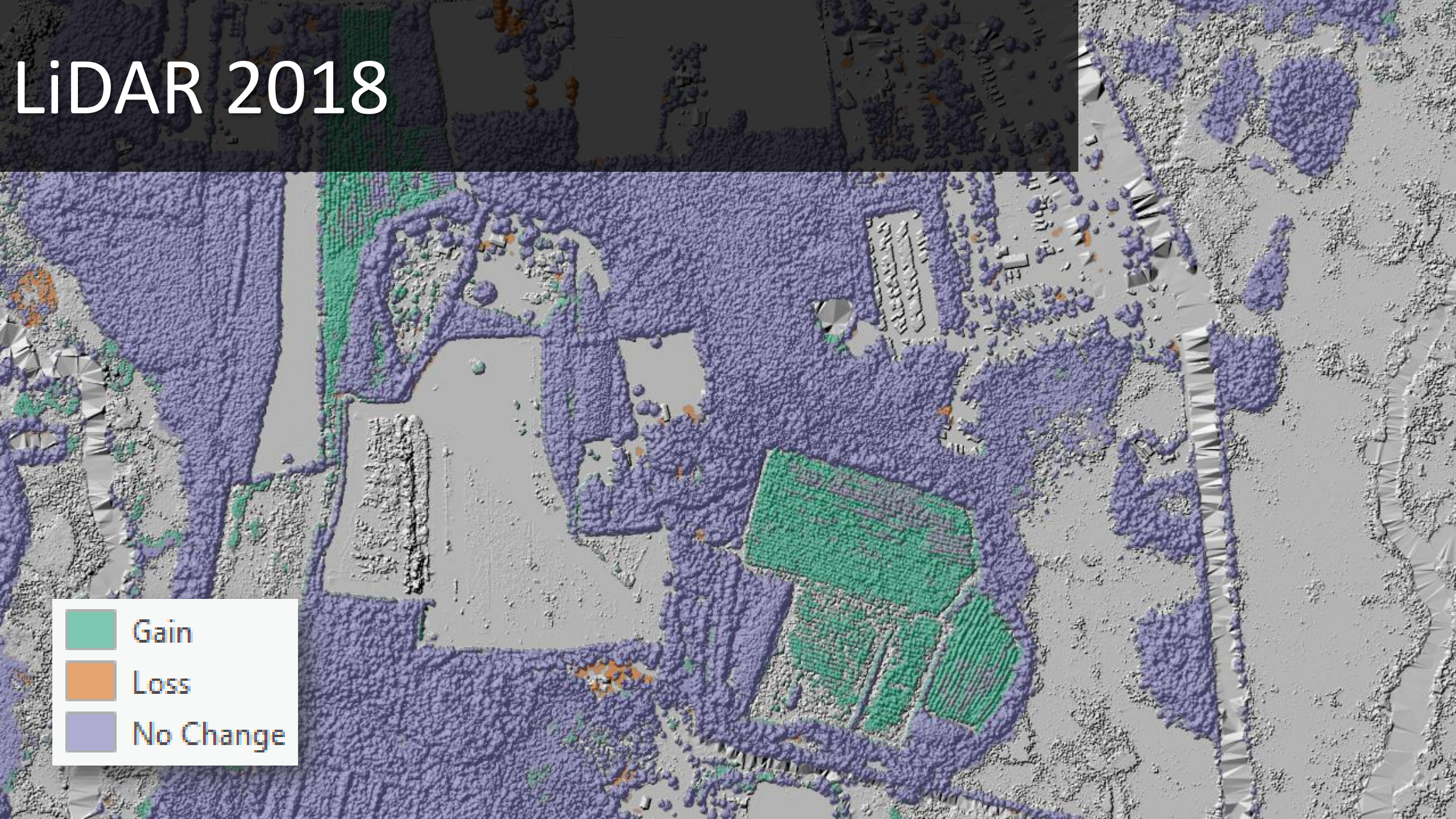
Comparison



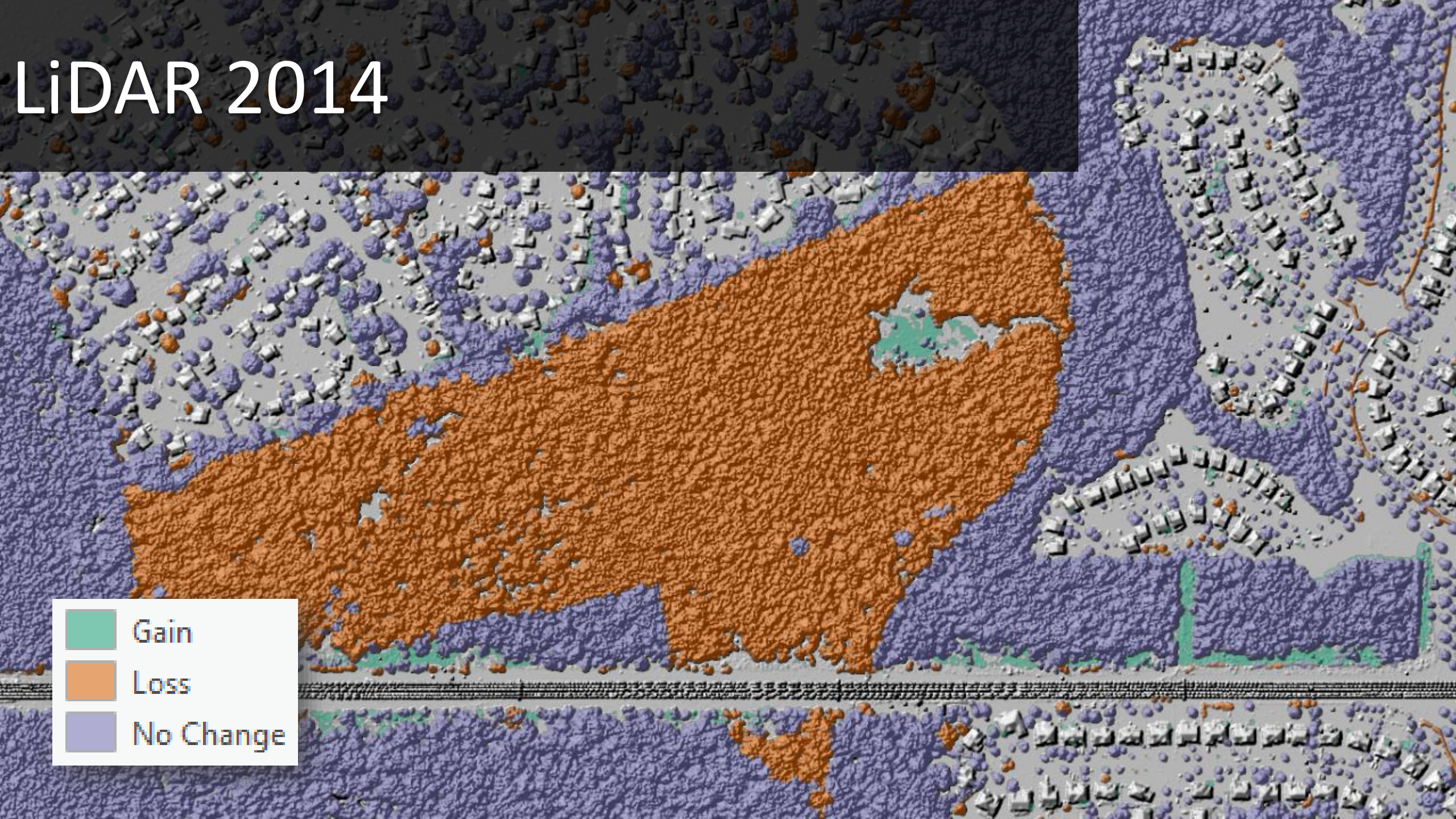
LiDAR 2014



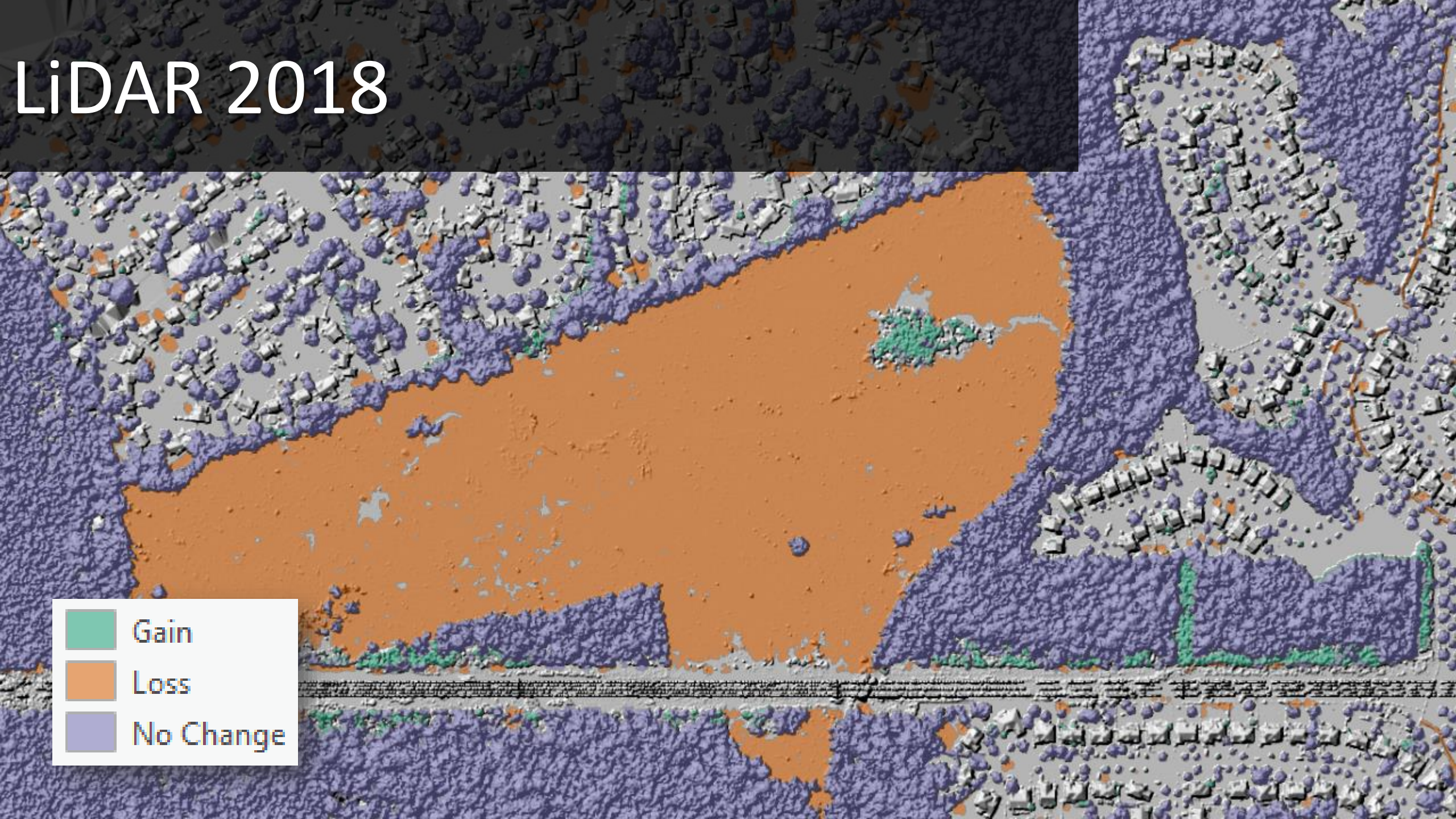
LiDAR 2018



LiDAR 2014



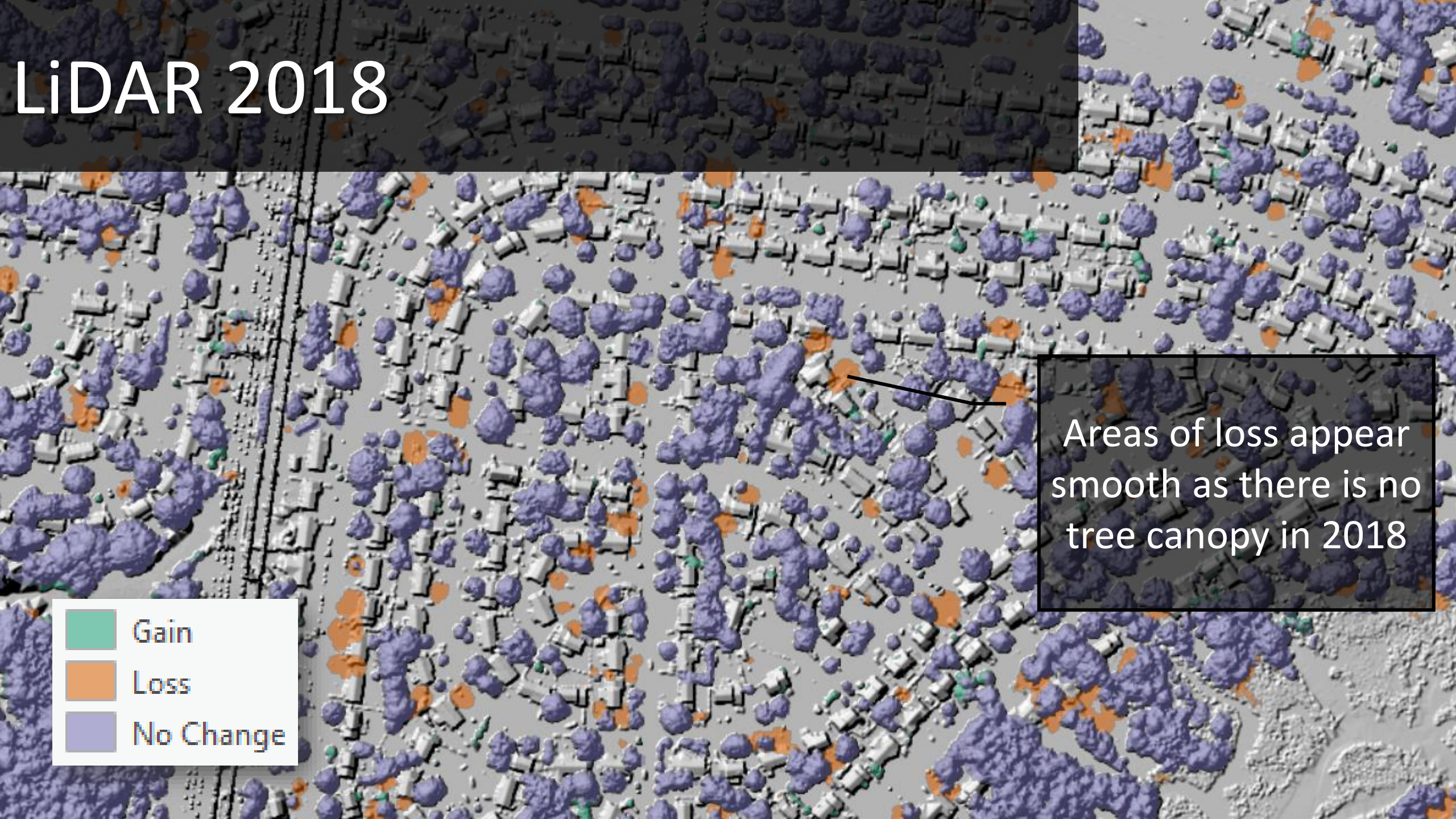
LiDAR 2018



LiDAR 2014



LiDAR 2018



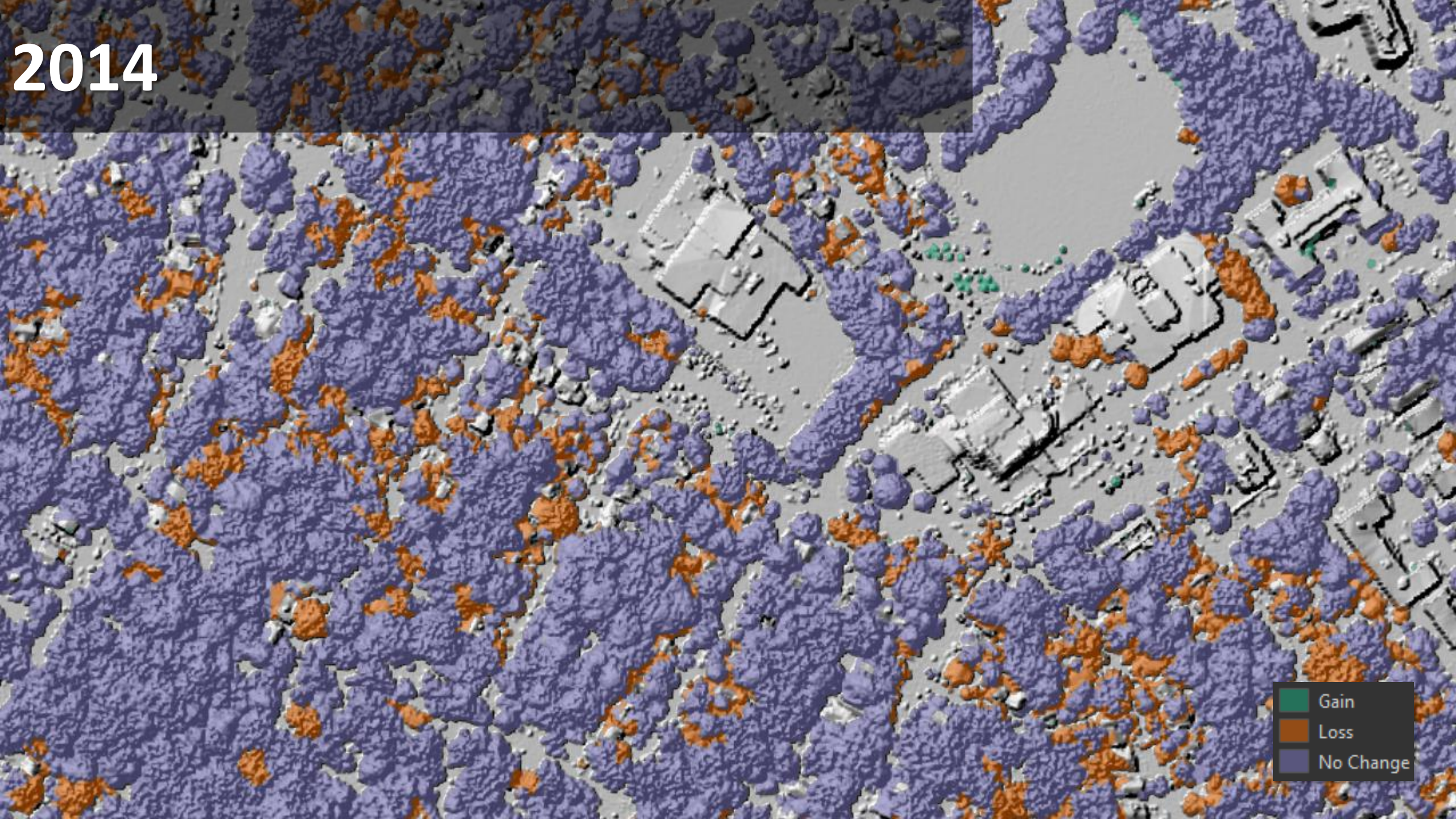
2013



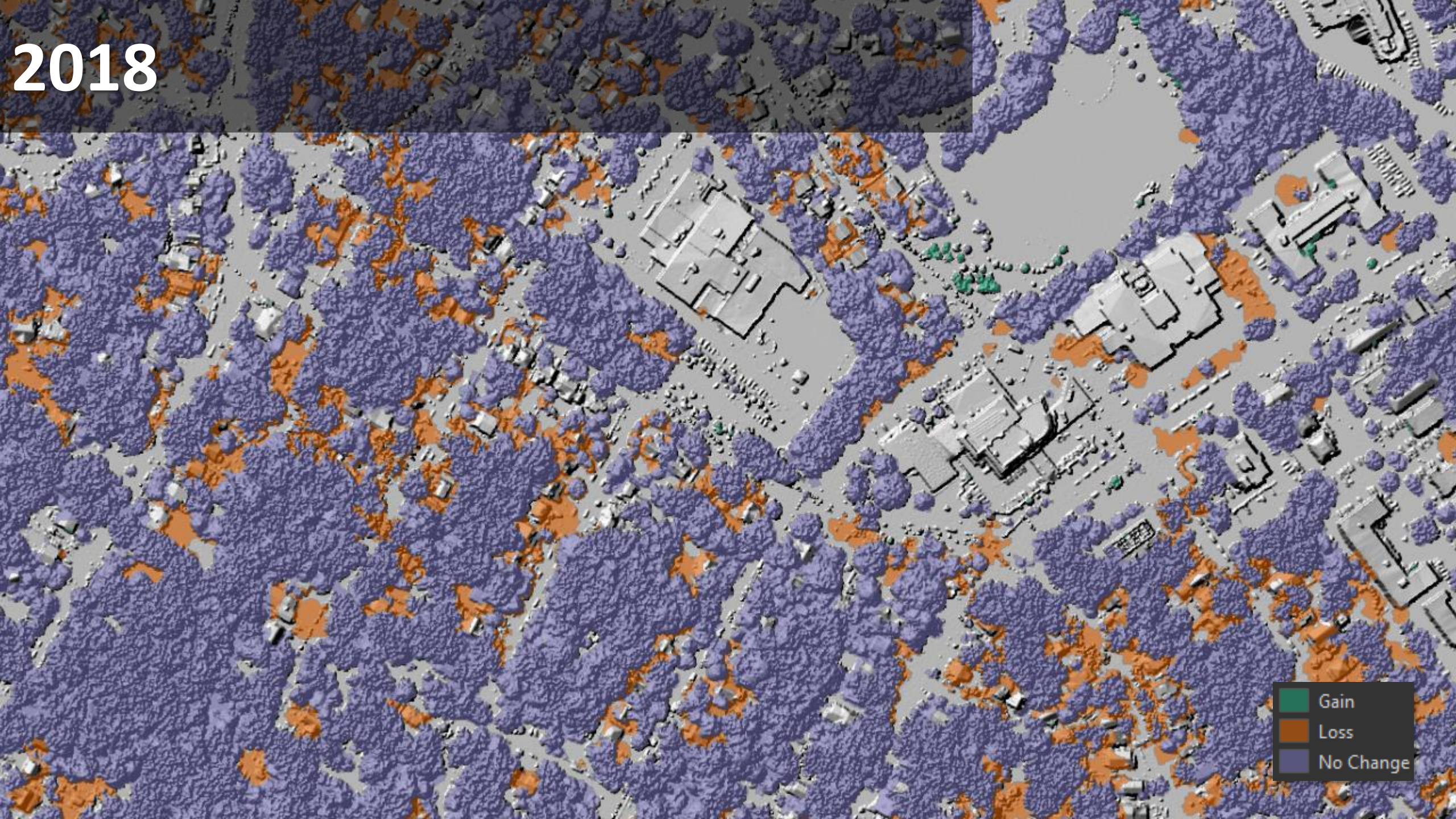
2017



2014



2018



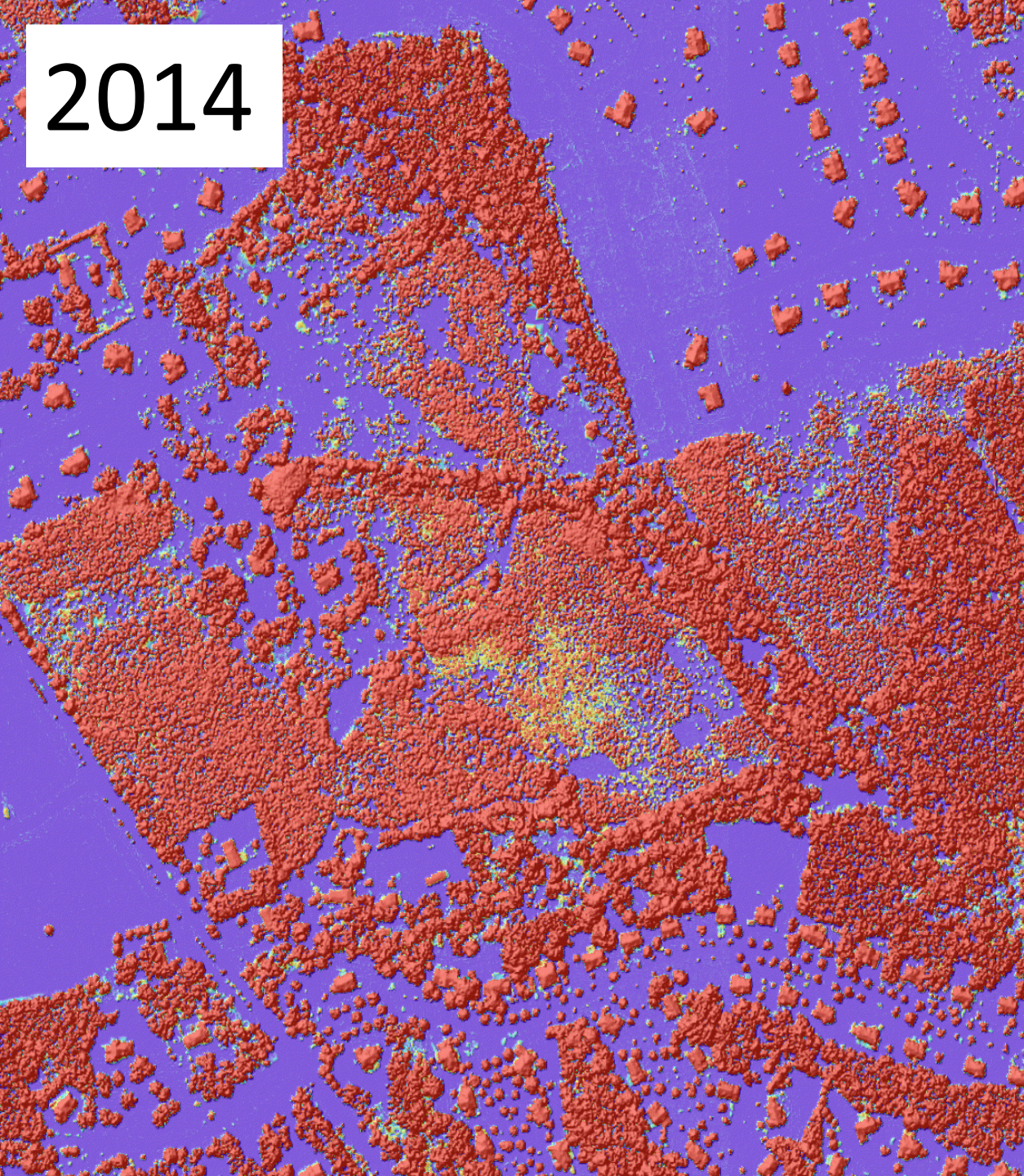
2014



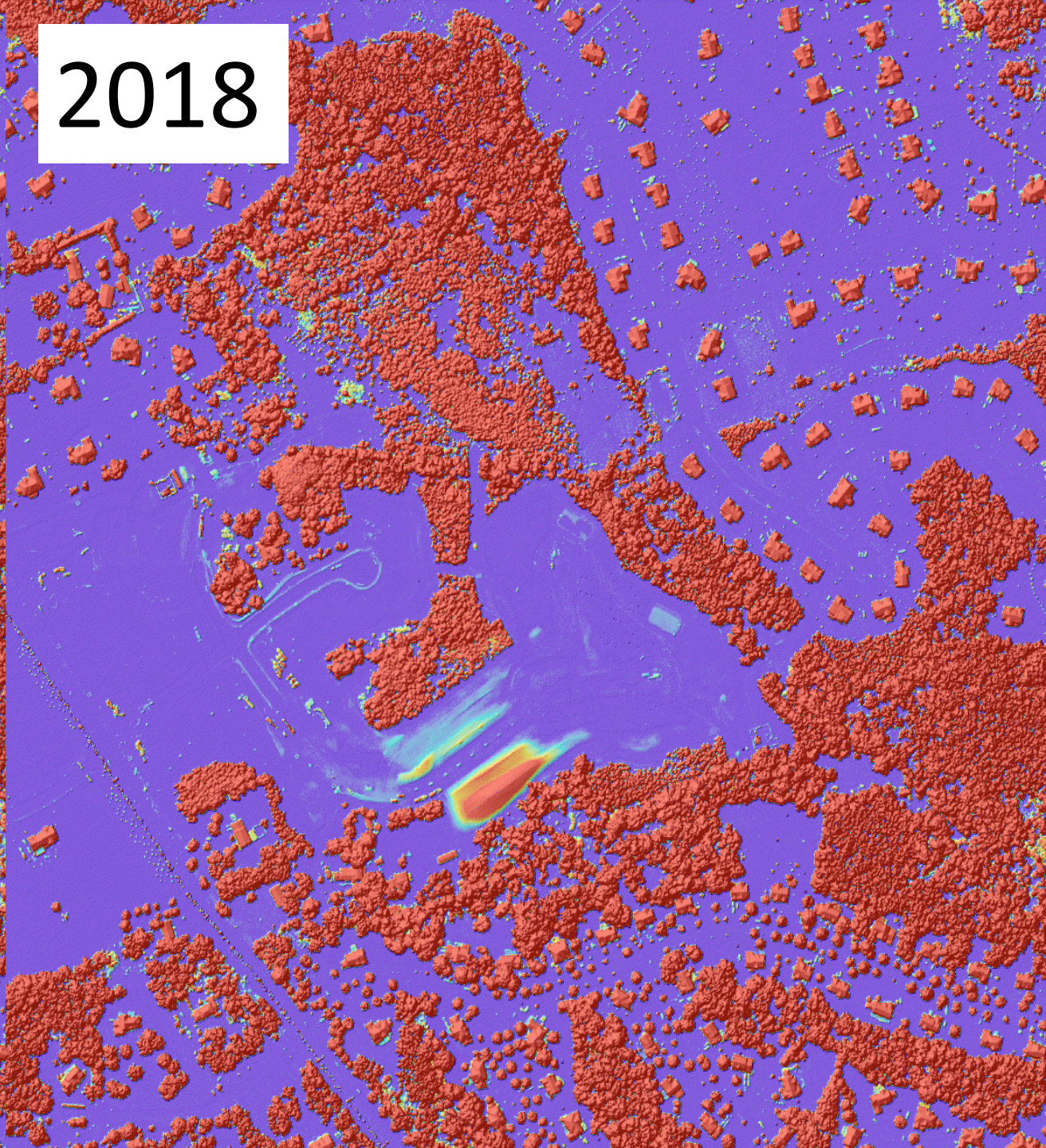
2018



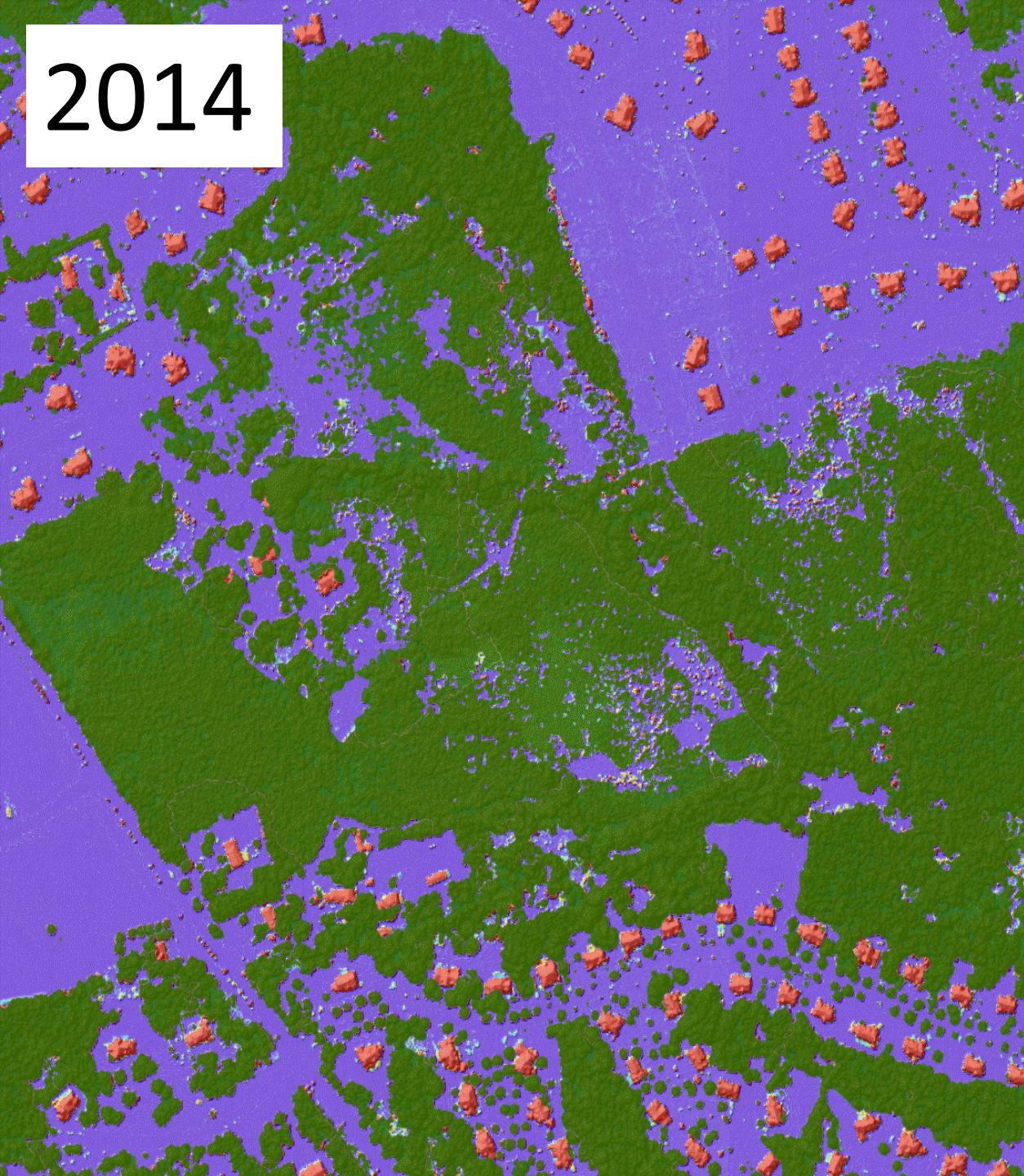
2014



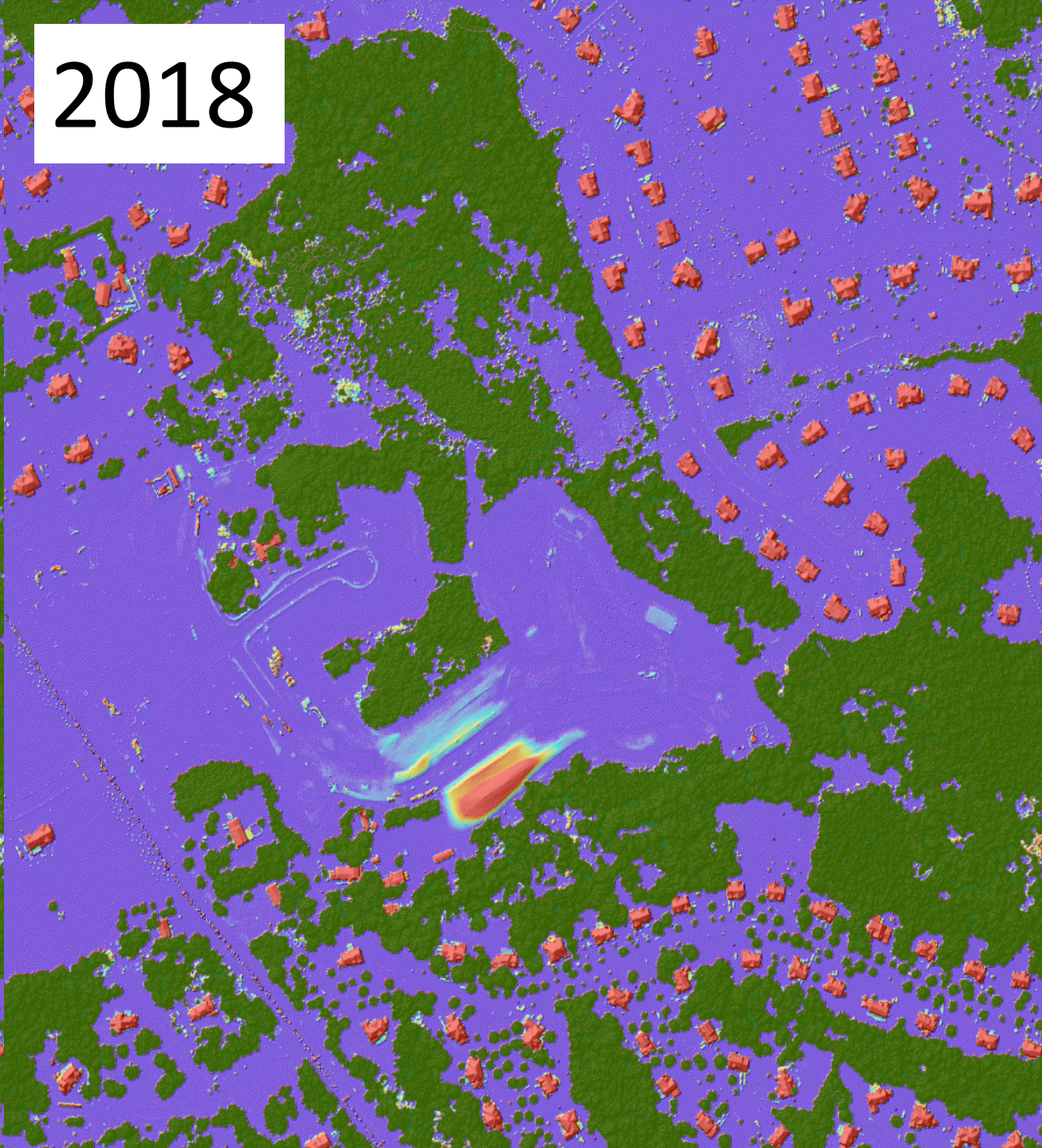
2018



2014



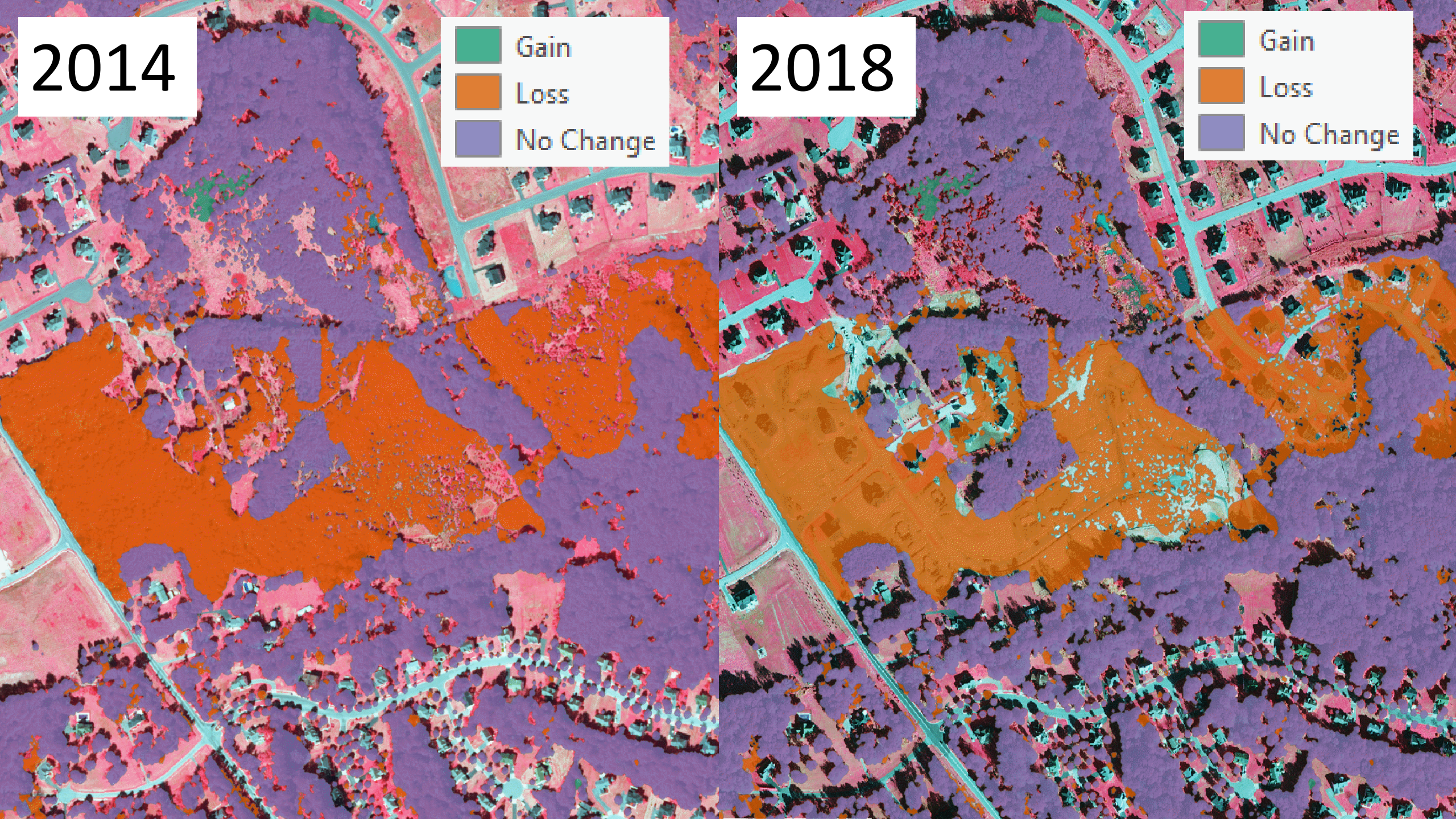
2018



2014



2018



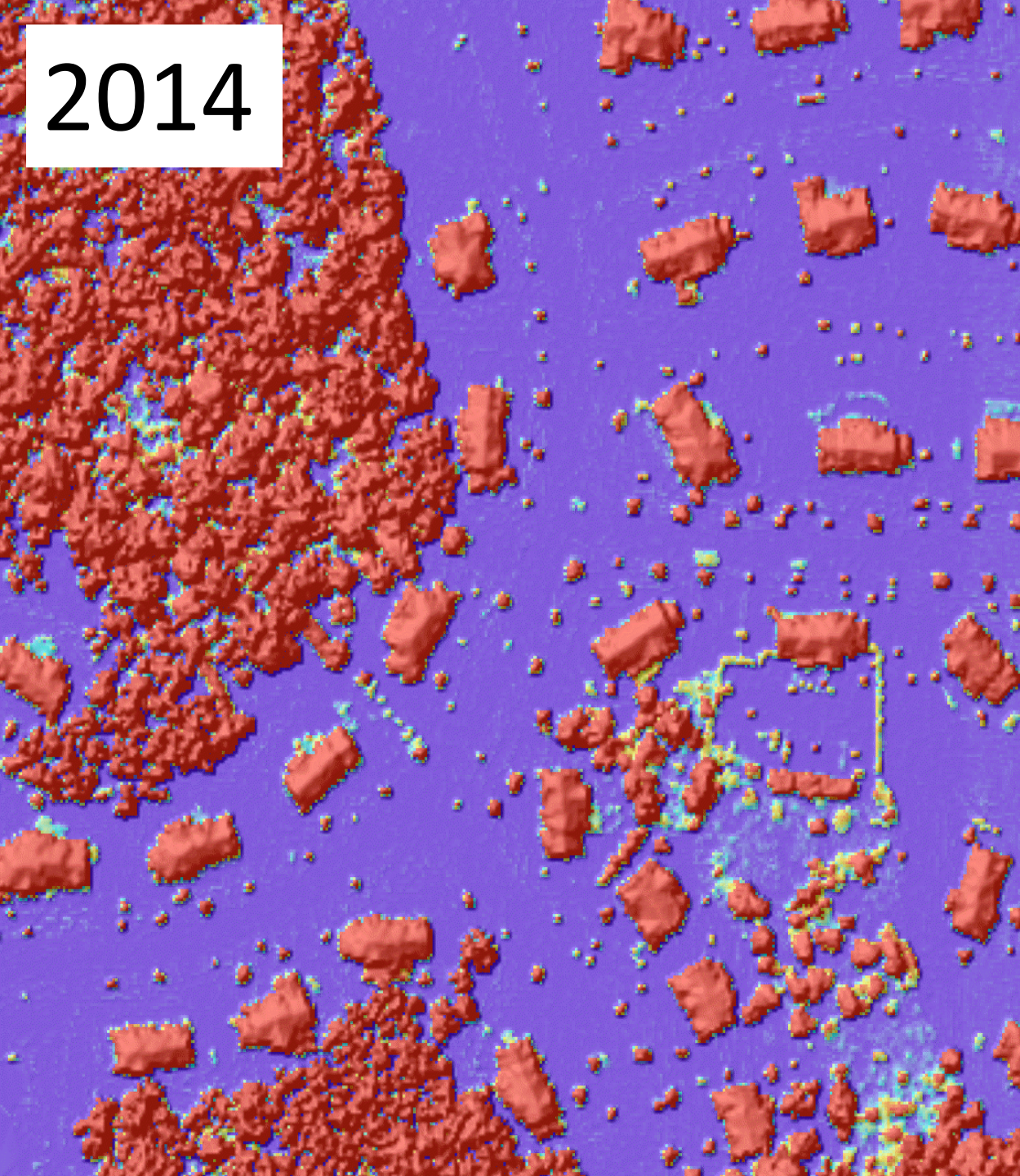
2014



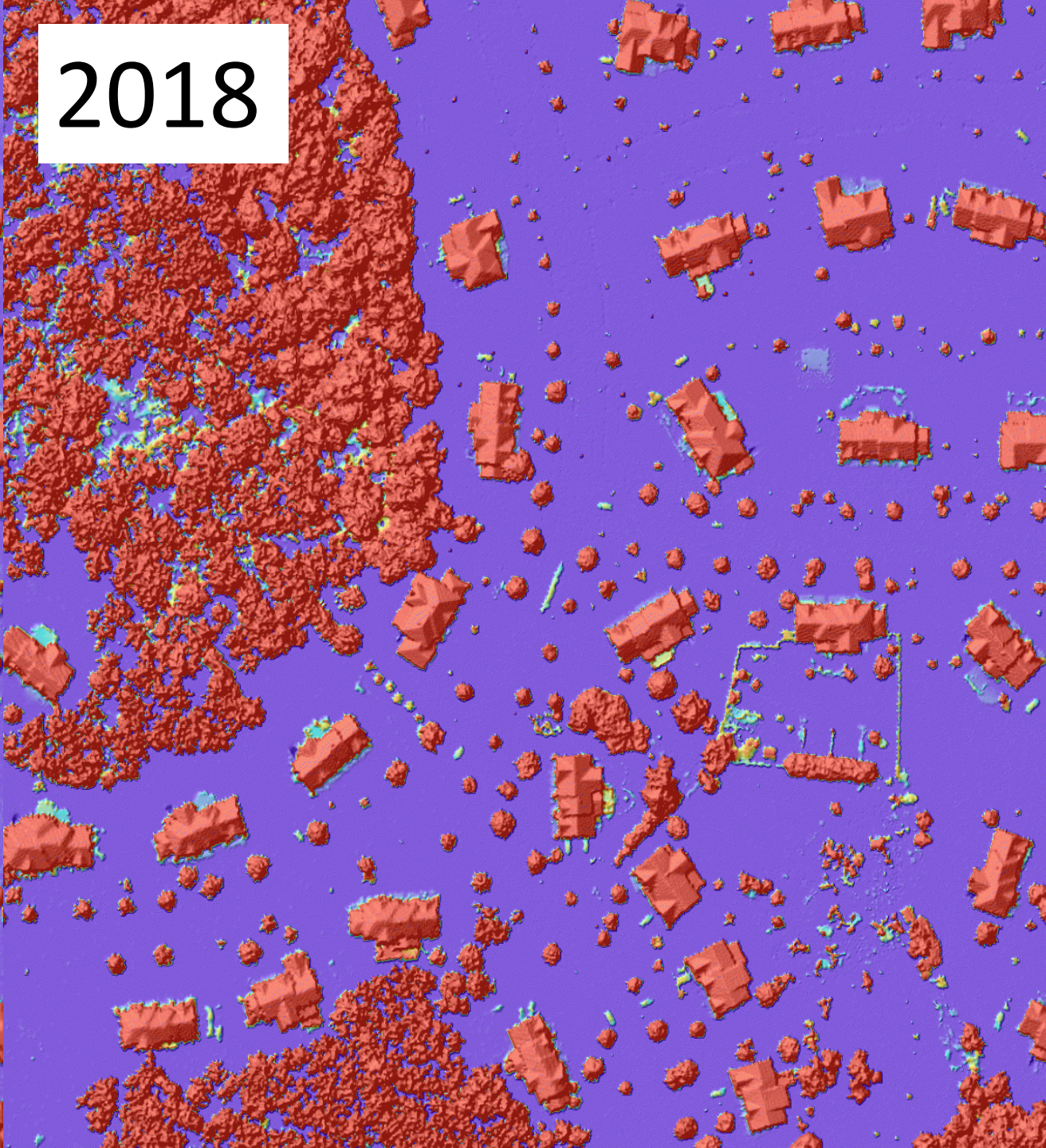
2018



2014



2018



2014



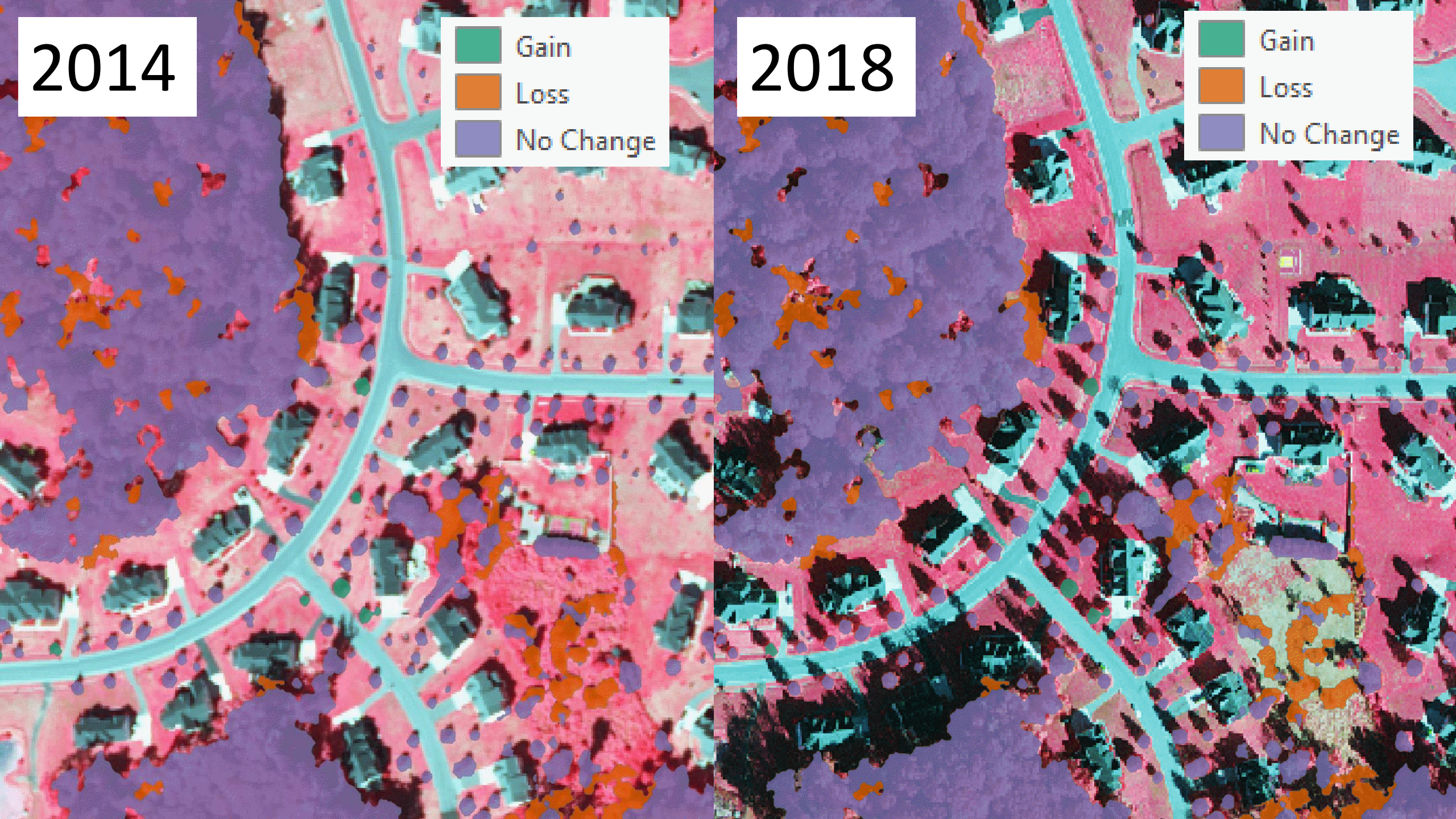
2018

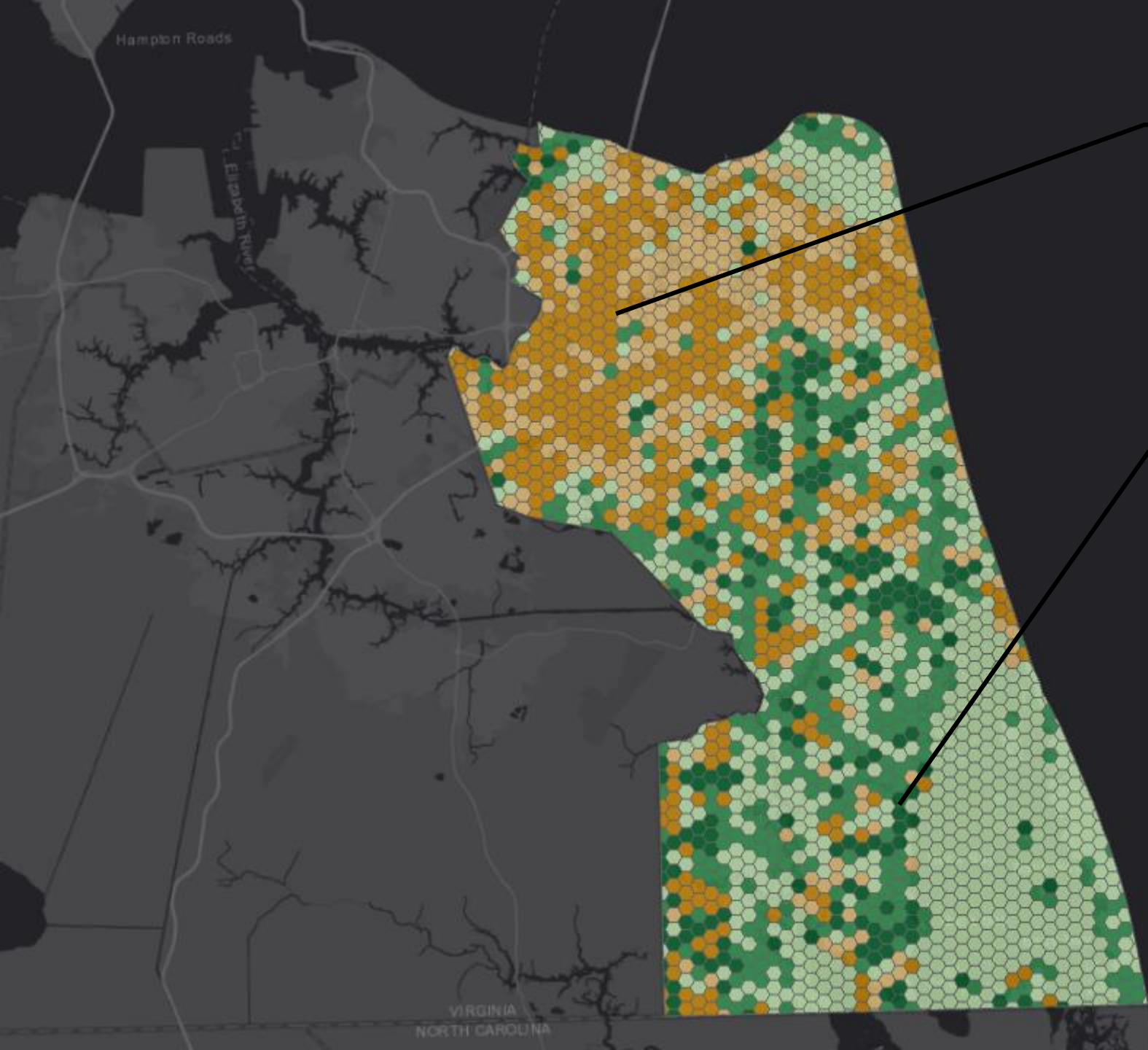


2014



2018





Losses have occurred in the residential urbanized northern part of the city

Gains have occurred in the undeveloped southern part of the city

Absolute Change

≤ -2%

≤ -1%

≤ 0%

≤ 1%

≤ 42%

