

DustCam Project

Georeferencing Terrestrial Imagery for Dust Emission Identification

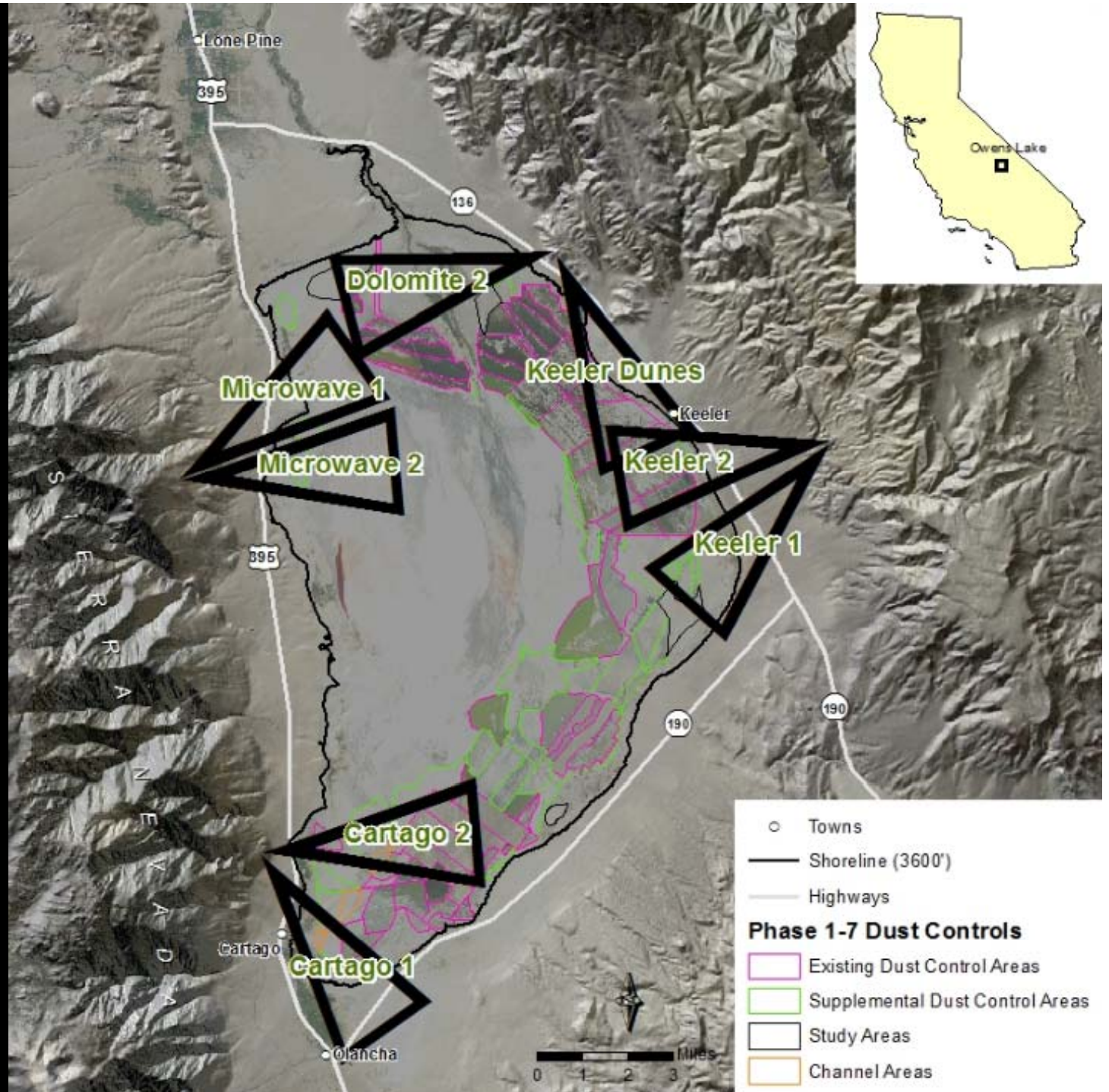
Keeler Dunes



HydroBio
Advanced Remote Sensing



DustCam Program Coverage



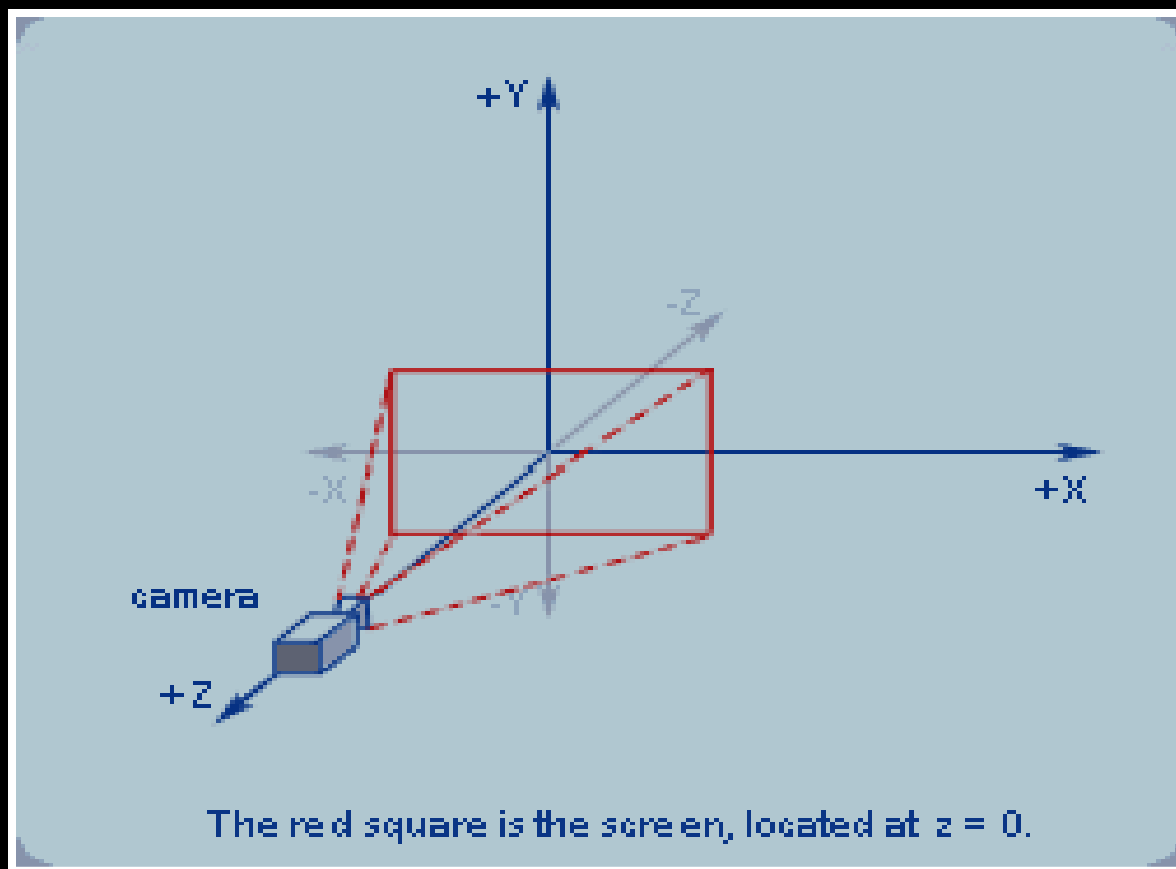
Video Sequence

April 25, 2011



Georeferencing Terrestrial Images

- Transforming Terrestrial Imagery to Geographic Coordinates
- Must Know What Every Pixel in the Flat Image Represents in the Real World



Transformation Concept



Imagery Date: 10/8/2010 1994

Image © 2011 GeoEye
© 2011 Google
11 S 419411.07 m E 4041055.67 m N elev 1121 m

©2010 Google

Eye alt 6.57 km

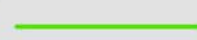
DustCam Images: Dolomite I



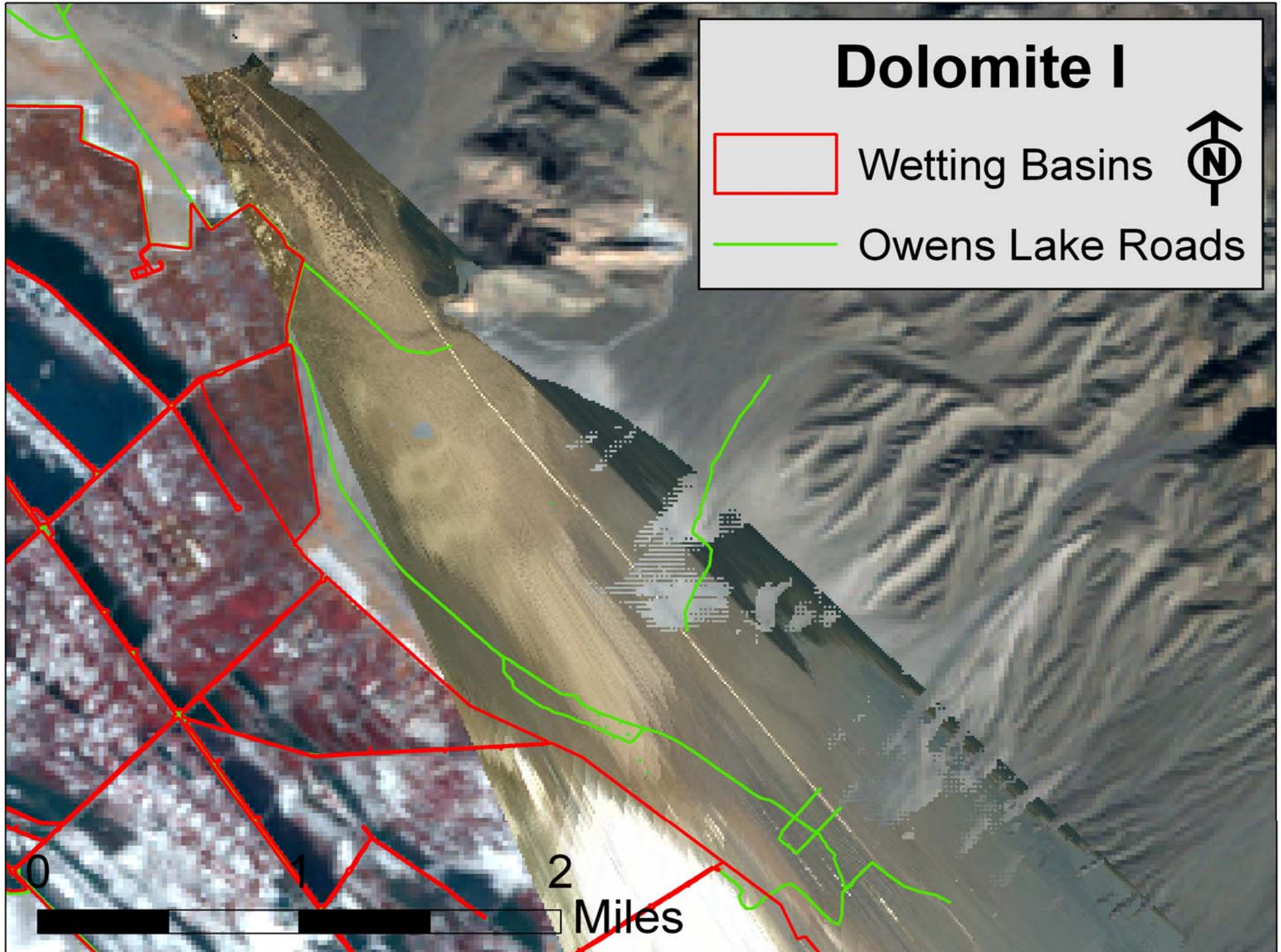
Dolomite I



Wetting Basins

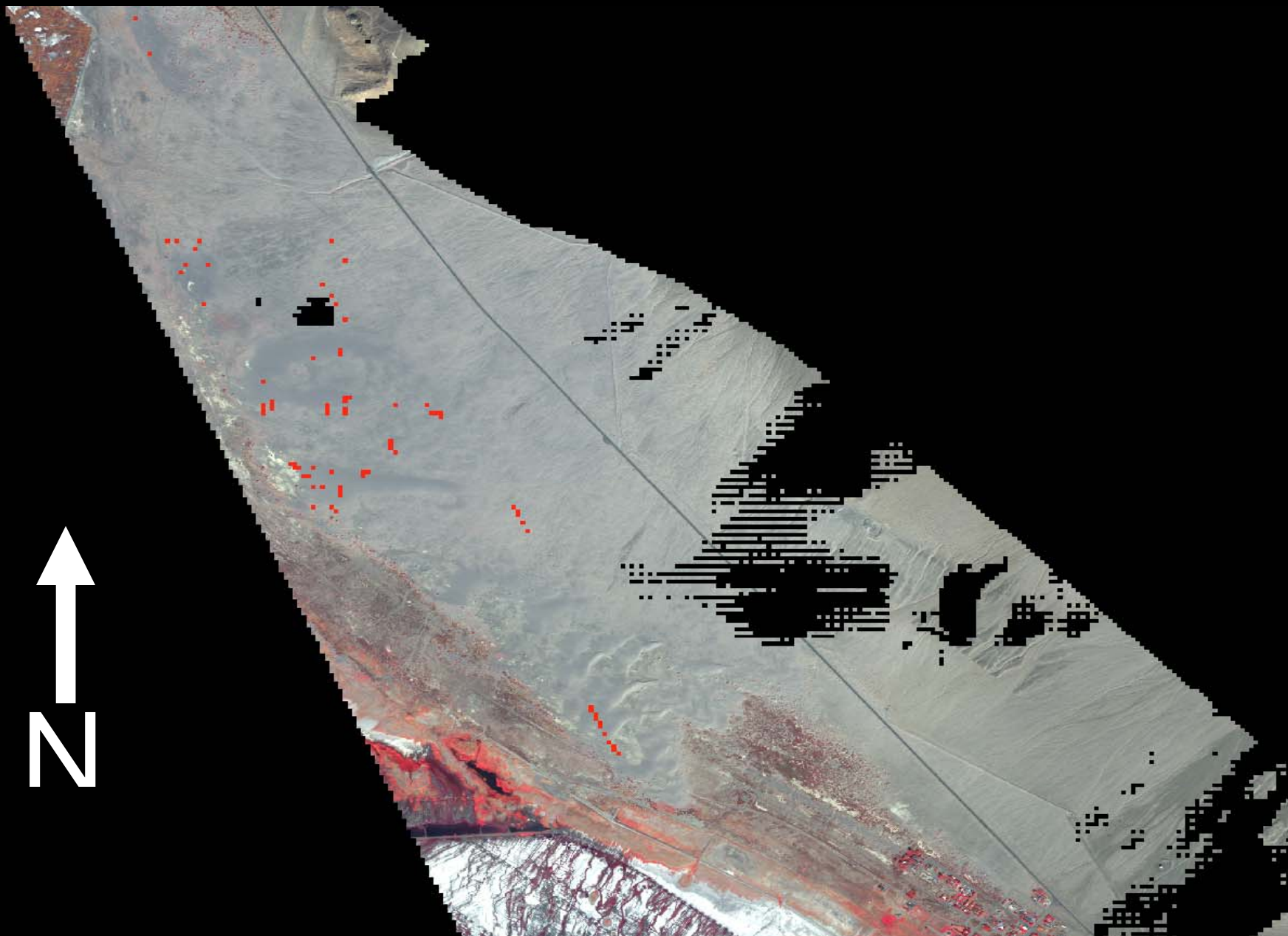


Owens Lake Roads

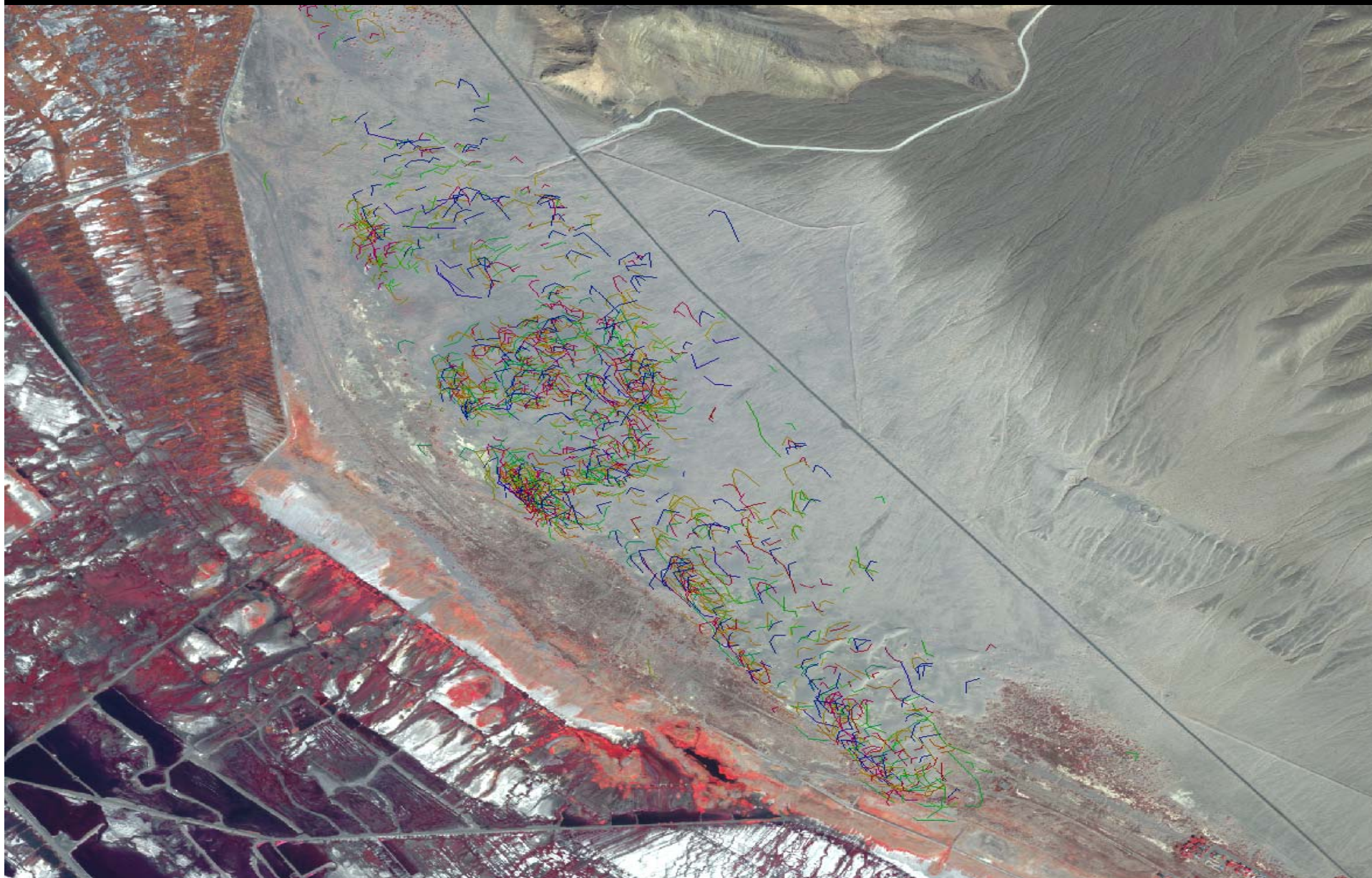


0 1 2 Miles

Transformed Dust Source Zones

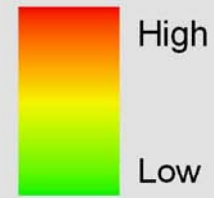


Raw TIG Results: Aug 2010 – APR 2011

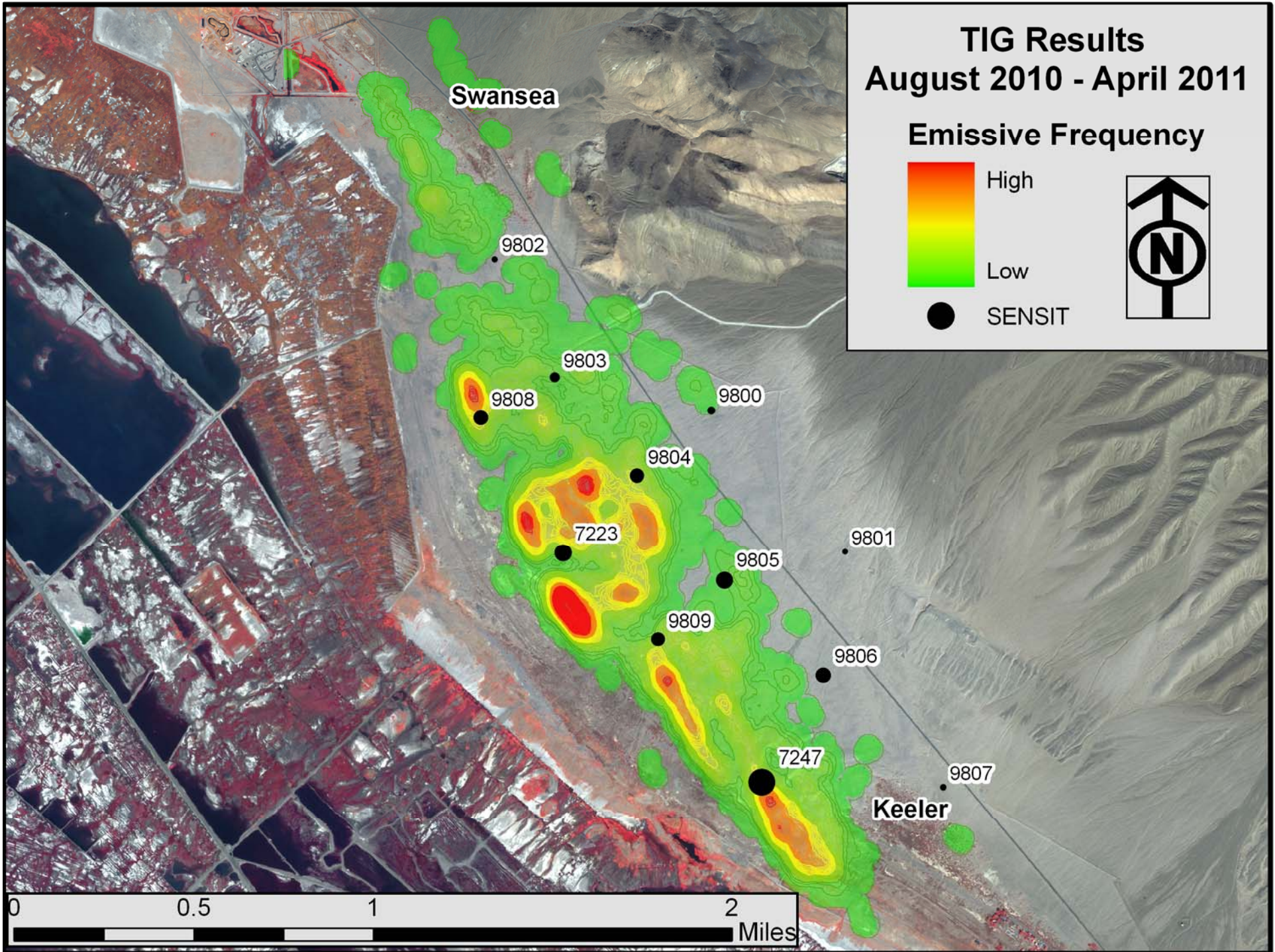


TIG Results August 2010 - April 2011

Emissive Frequency

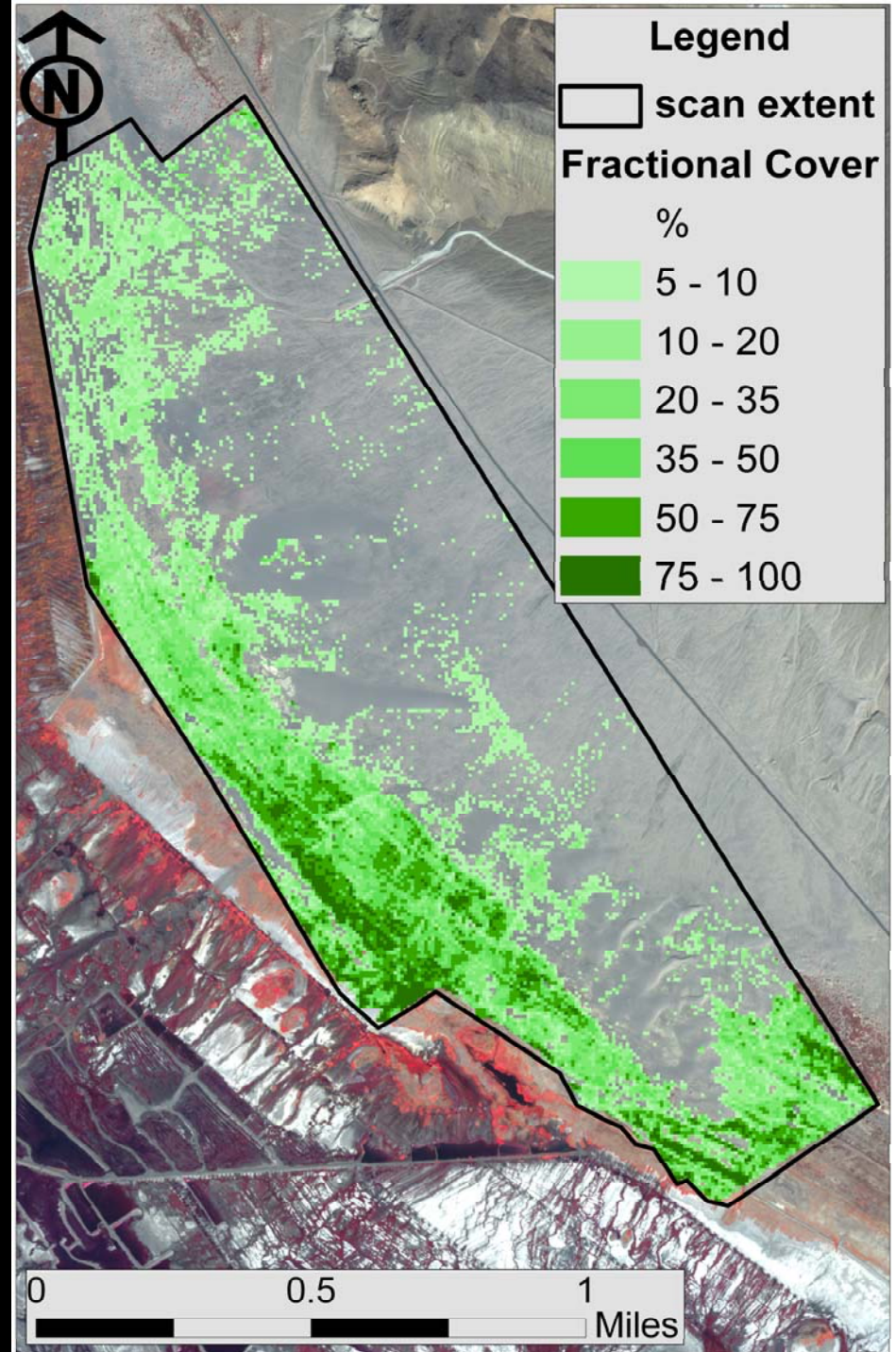


● SENSIT



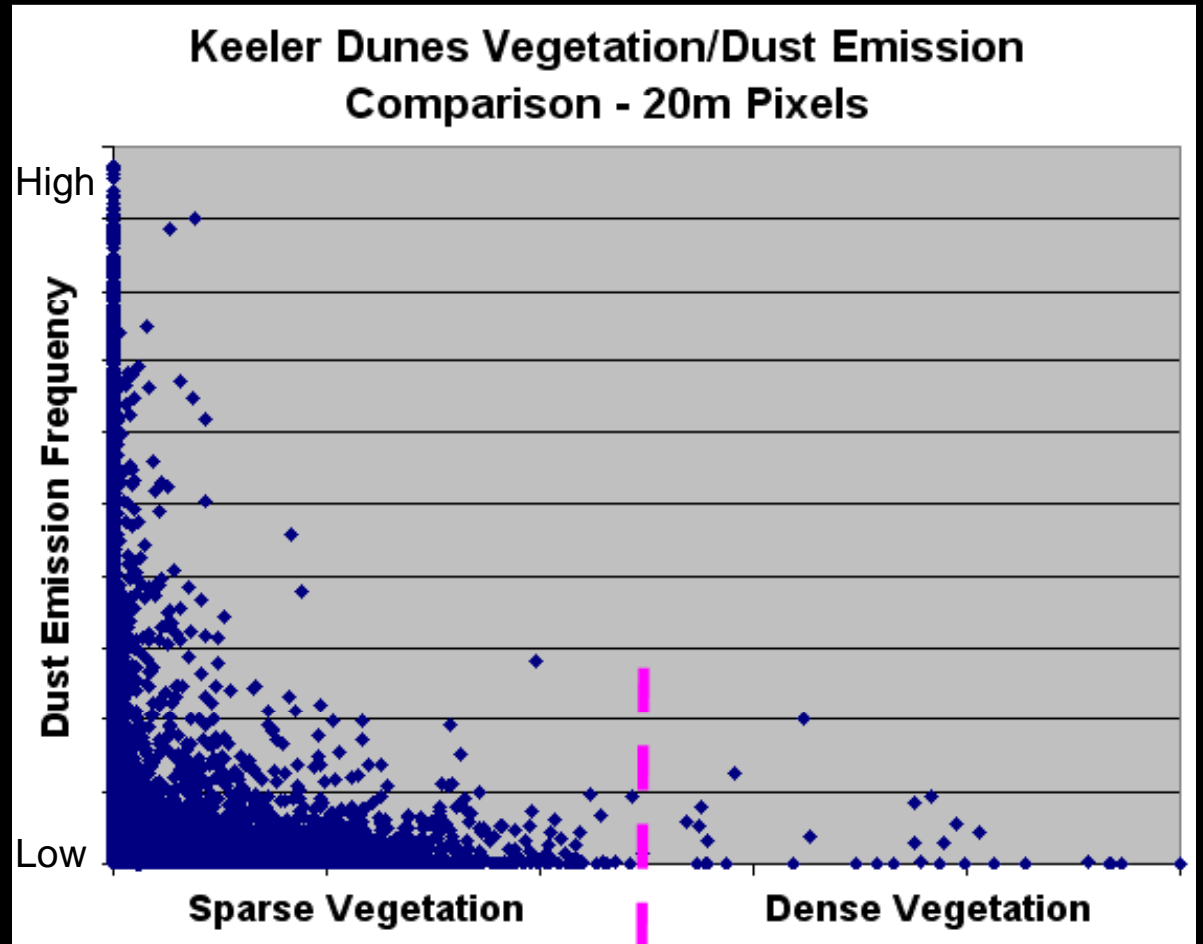
Vegetation Density

- Fractional Cover
- HydroBio High Resolution Aerial Imagery



Vegetation/Dust Emission Comparison

- DustCam Results
- Vegetation Density



Questions

