

Big Island's land vegetation changes

By Andre Marquez, Kristine Tofte and Tommy Winning



?



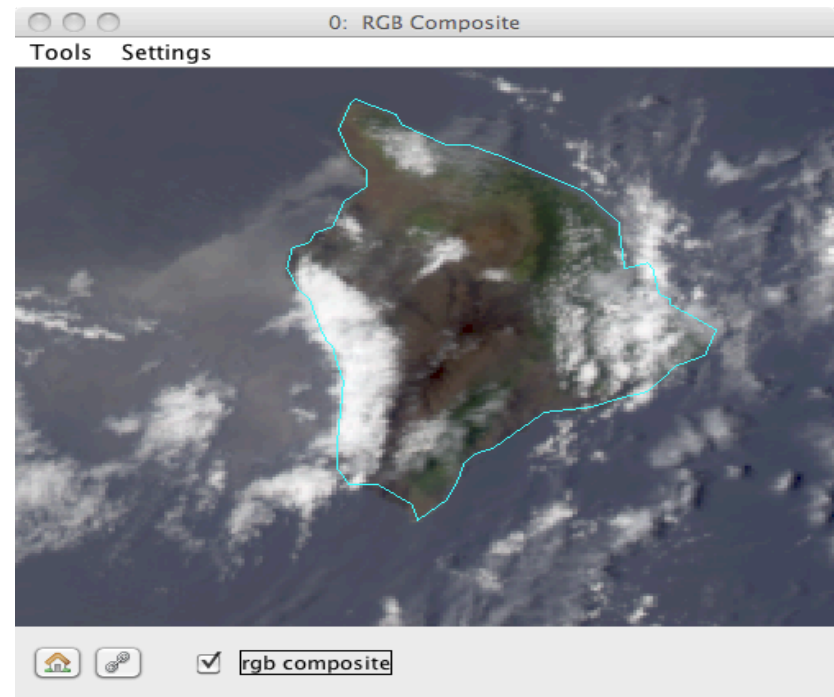
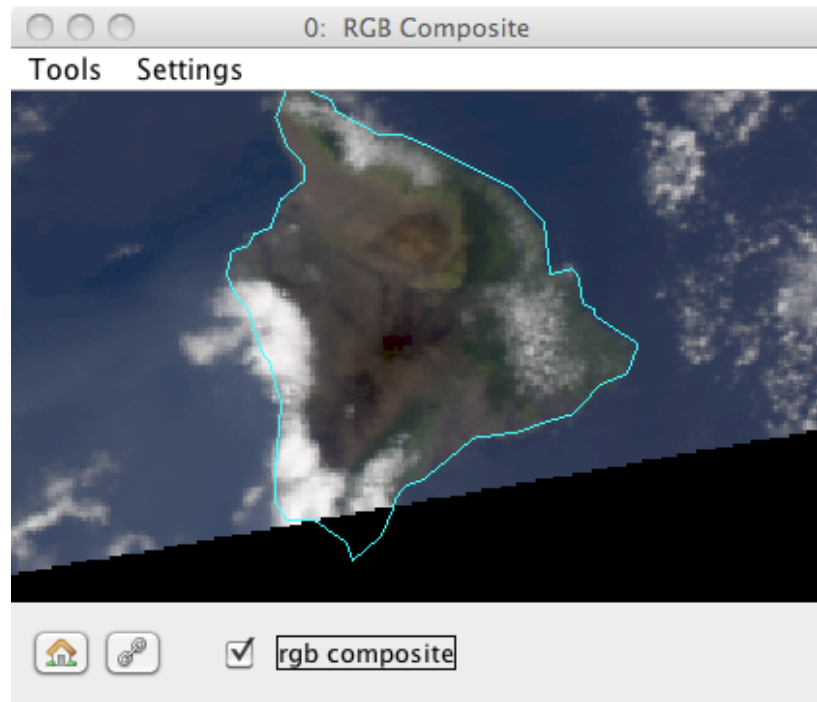
- Vegetation changes between summer and winter



- NDVI differences calculated using MODIS B1 & B2
 - RGB using MODIS 1,4,3
 - MODIS B1 for visible image

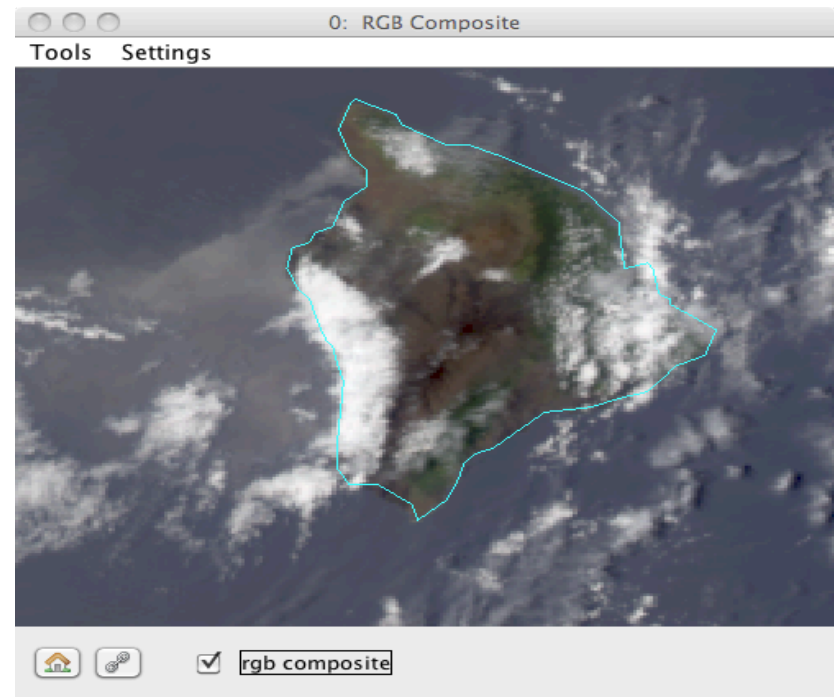
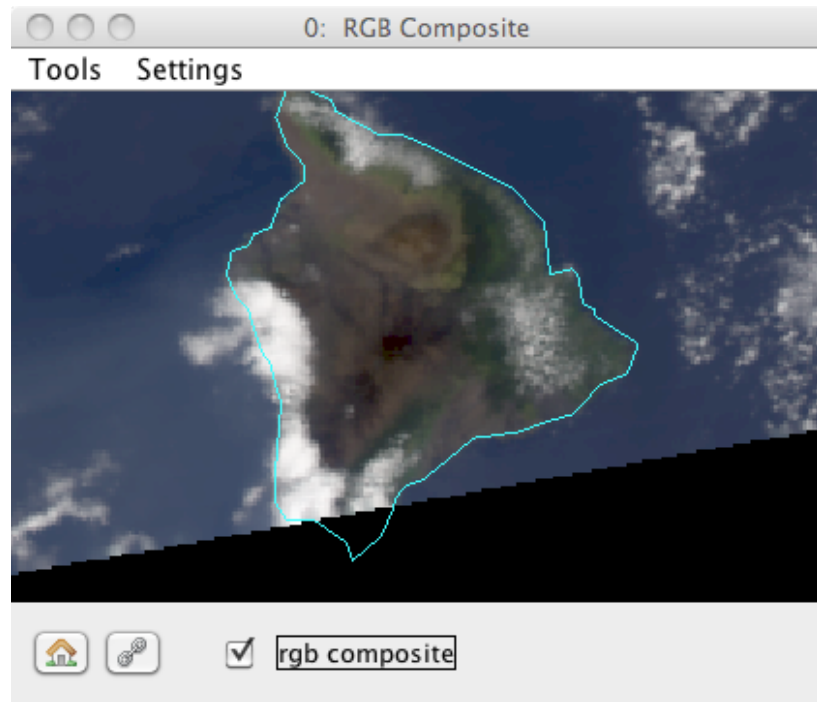
?

- Become familiar with MODIS for surface analysis purposes



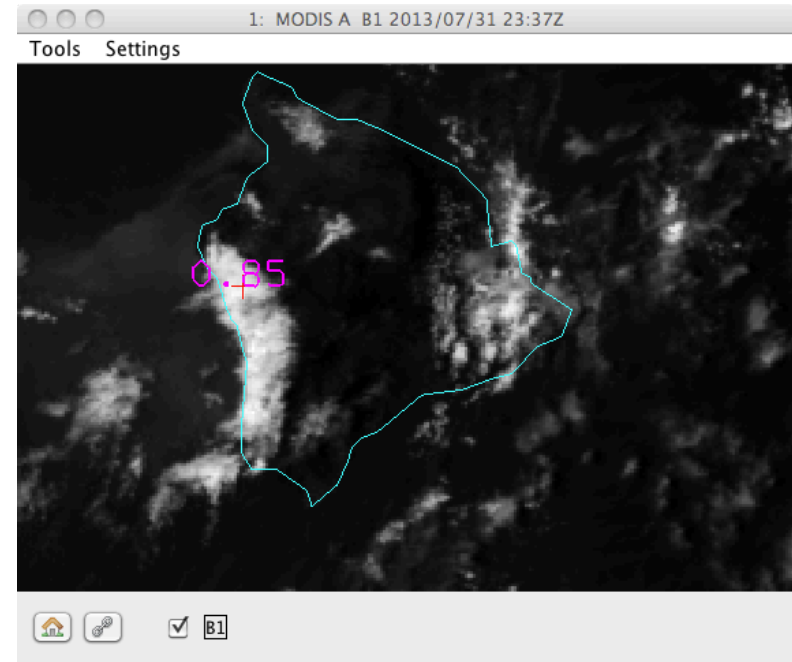
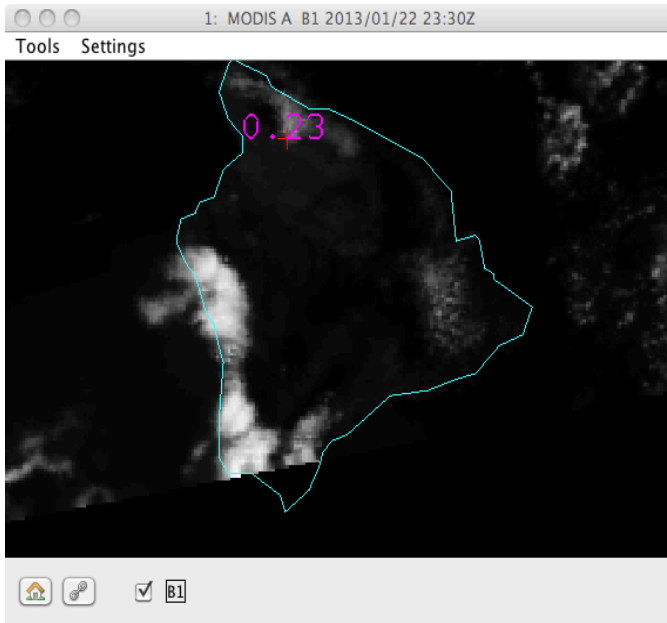
January 22, 2013 – RGB (1,4,3)

July 31, 2013 – RGB (1,4,3)



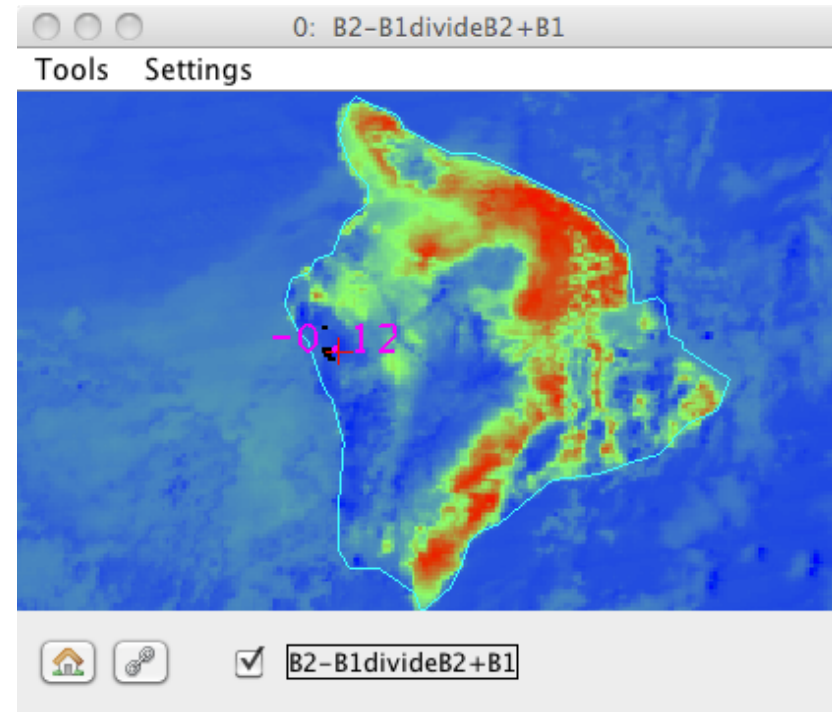
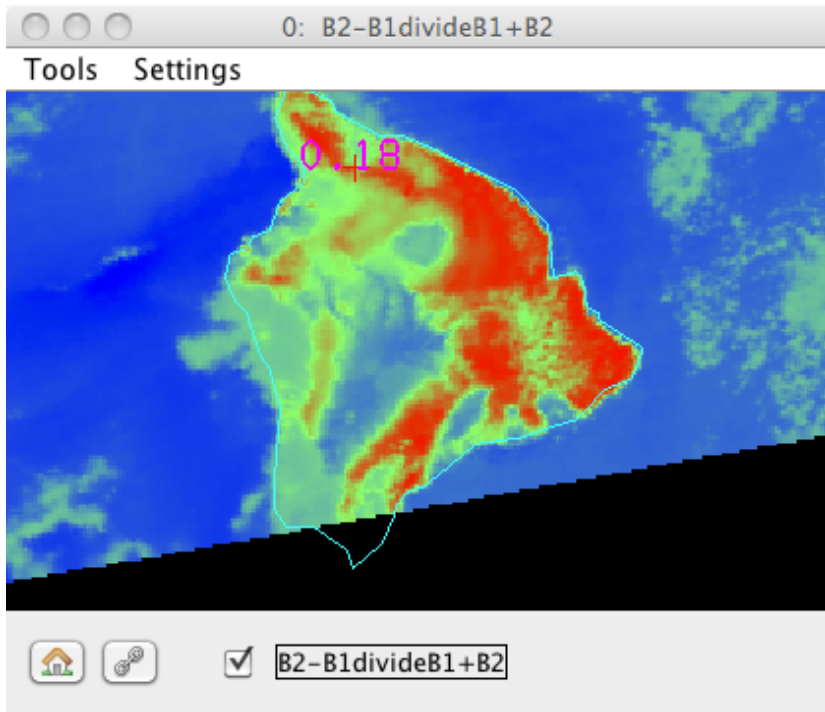
January 22, 2013 – RGB (1,4,3)

July 31, 2013 – RGB (1,4,3)



January 22, 2013 – B 1

July 31, 2013 – B 1

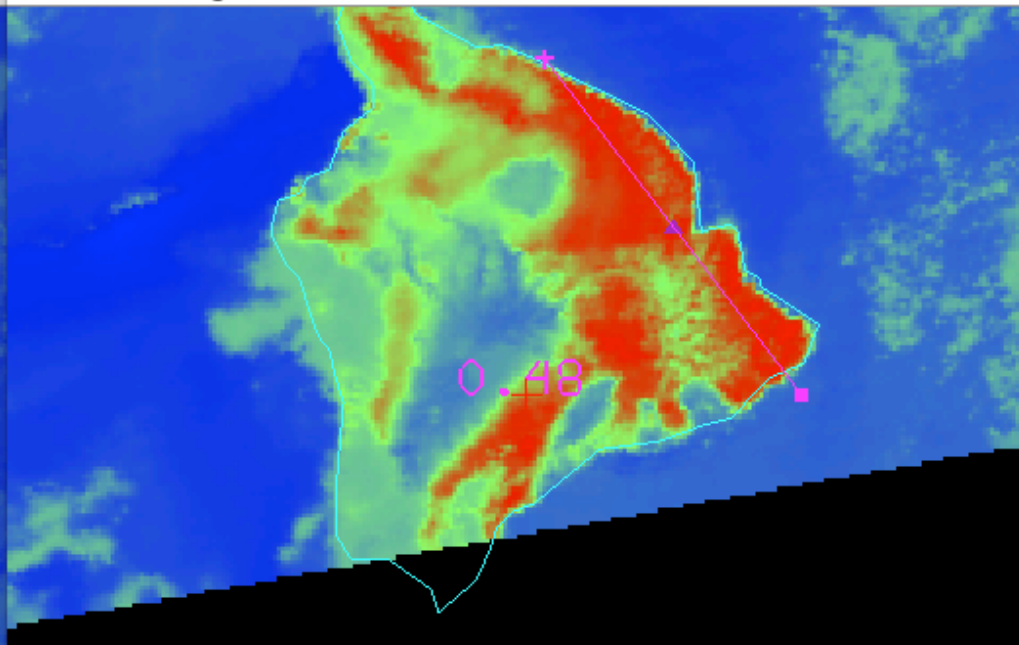
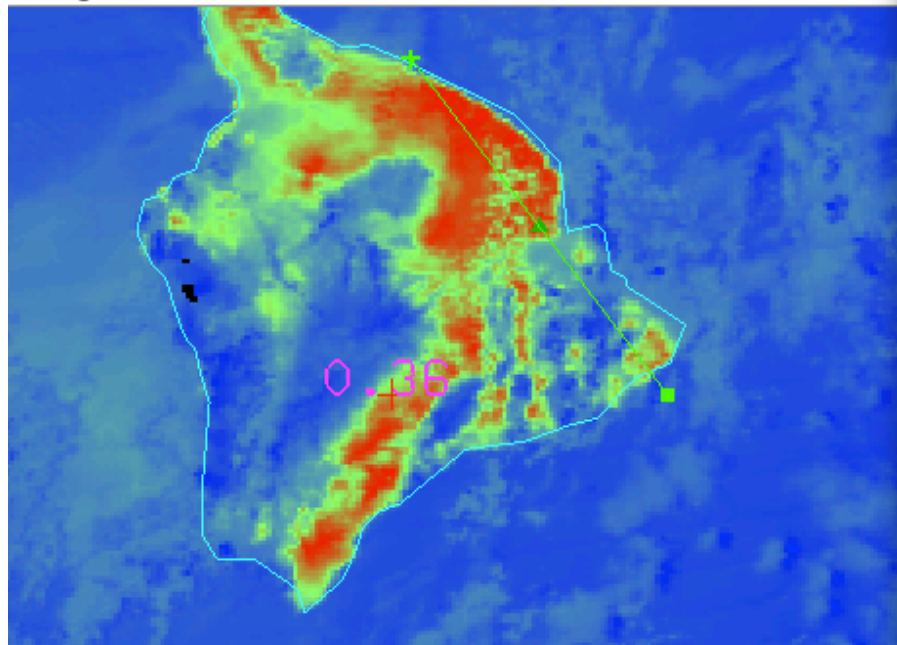


January 22, 2013 – $NDVI (B_{II} - B_I) / (B_I + B_{II})$

July 31, 2013 – $NDVI (B_{II} - B_I) / (B_I + B_{II})$

Settings

Tools Settings

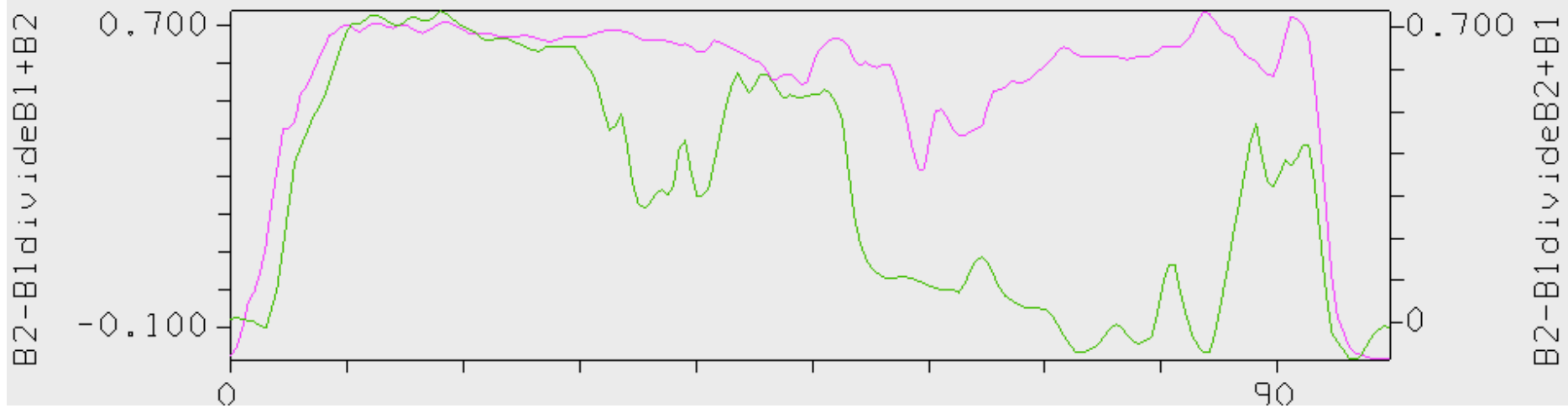


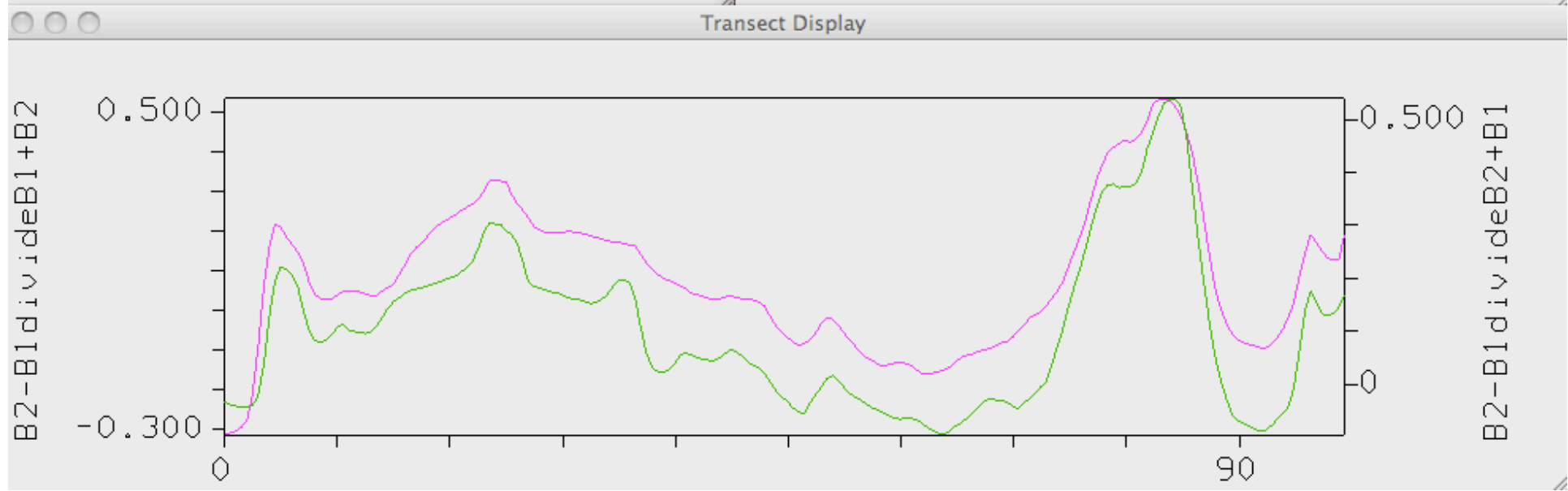
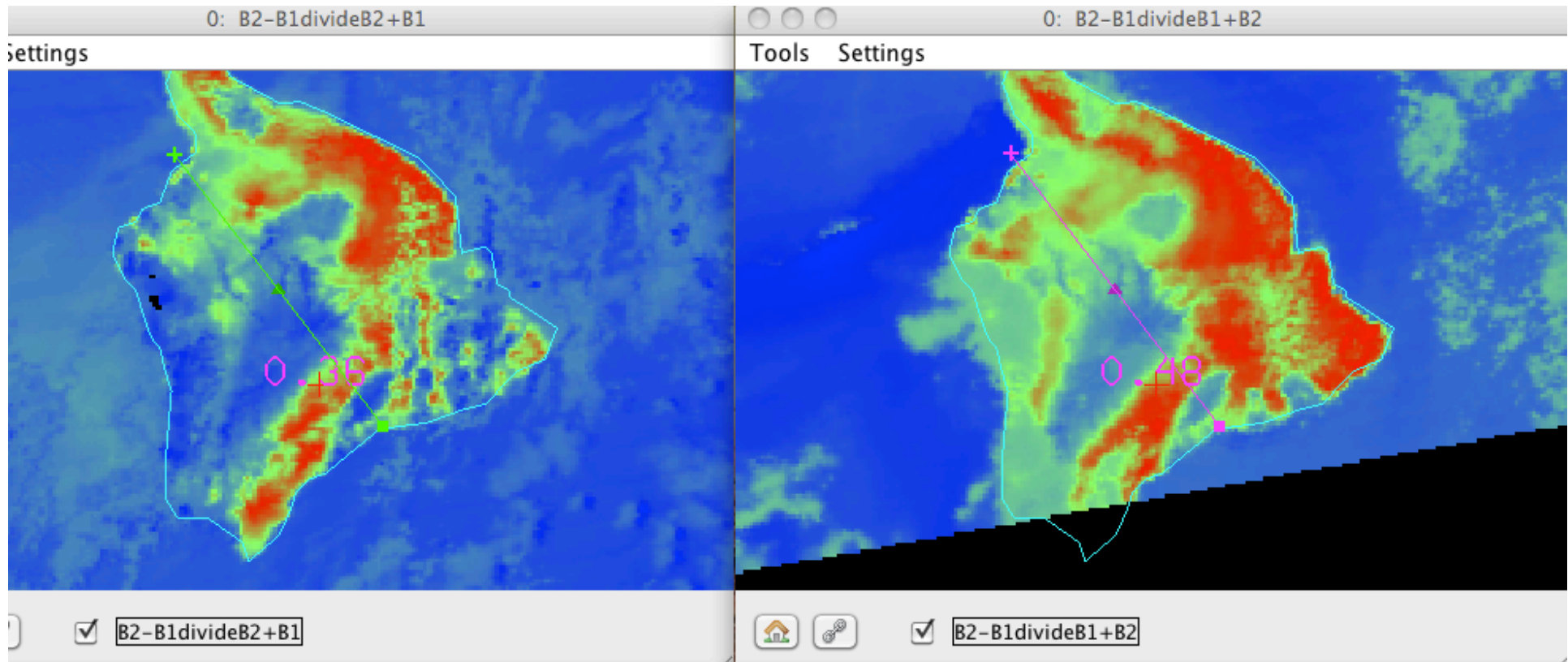
B2-B1divideB2+B1

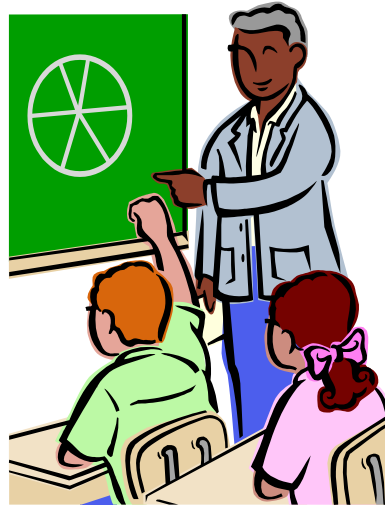


B2-B1divideB1+B2

Transect Display







NDVI

Bands 1 & 2

visible

MODIS

Clouds

affect

Vegetation

RGB (1,4,3)

changes