HAITI - Grand Sud Region

Difference in NDVI Values between November 2015 and October 2016

For Humanitarian Purposes Only

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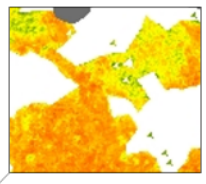
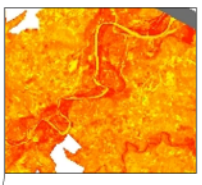
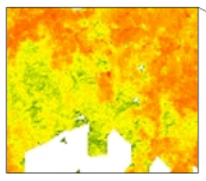
The Normalized Difference Vegetation Index (NDVI) is an indicator of vegetation health. NDVI is calculated from the visible and near-infrared light reflected by vegetation. Healthy vegetation absorbs most of the visible light that hits it, and reflects a large portion of the near-infrared light. Unhealthy or sparse vegetation reflects more visible light and less near-infrared light. The time frame has been chosen to compare vegetation health before and after Hurricane Matthew.



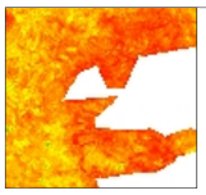
All clouds have been masked out for both years (2015 & 2016) to enhance analysis results.



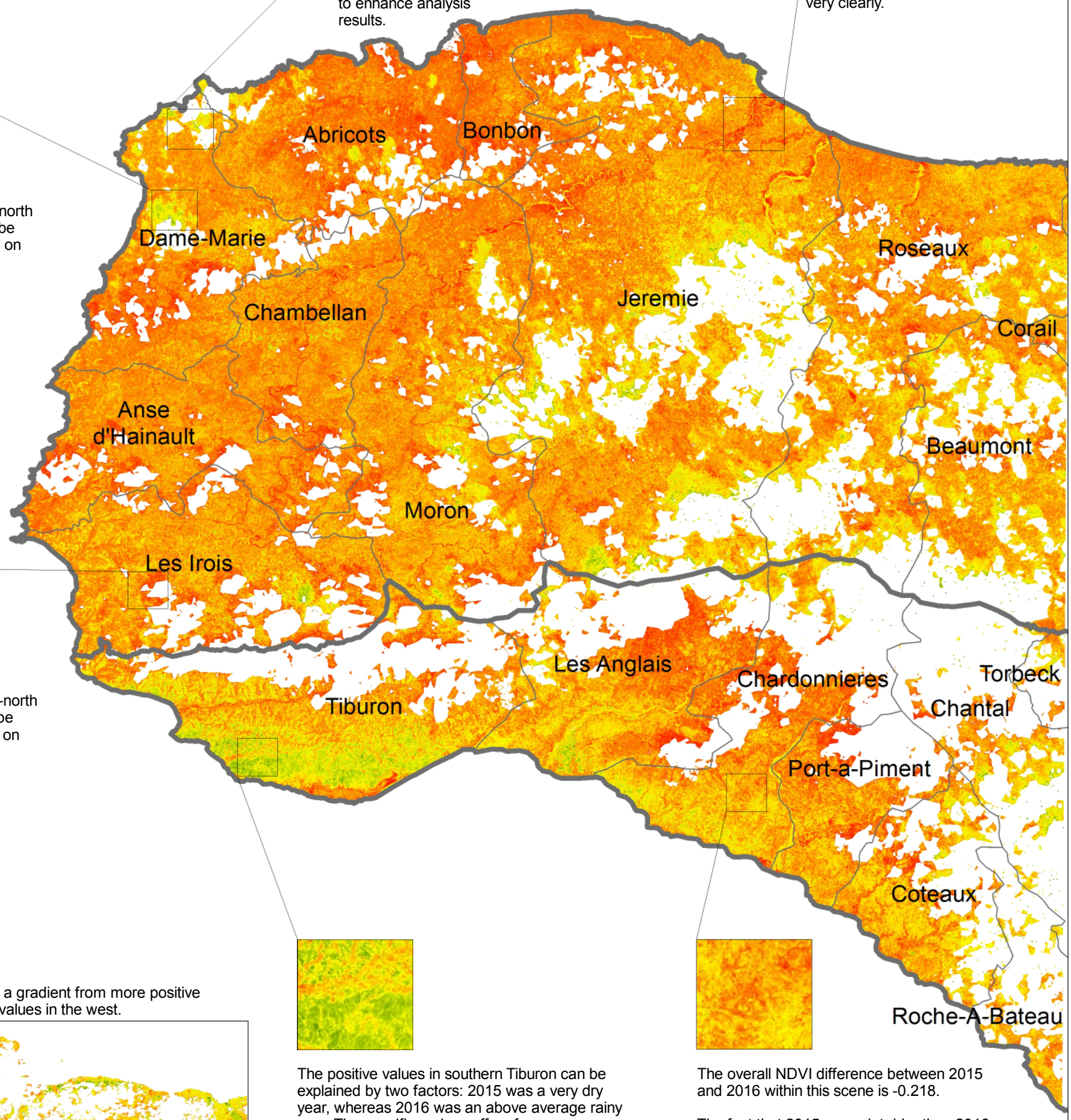
In the proximity of larger rivers, differences are amplified and can be seen very clearly.



The positive values north-north west of many clouds can be caused by cloud shadows on the 2015 image.



The negative values north-north west of many clouds can be caused by cloud shadows on the 2016 image.

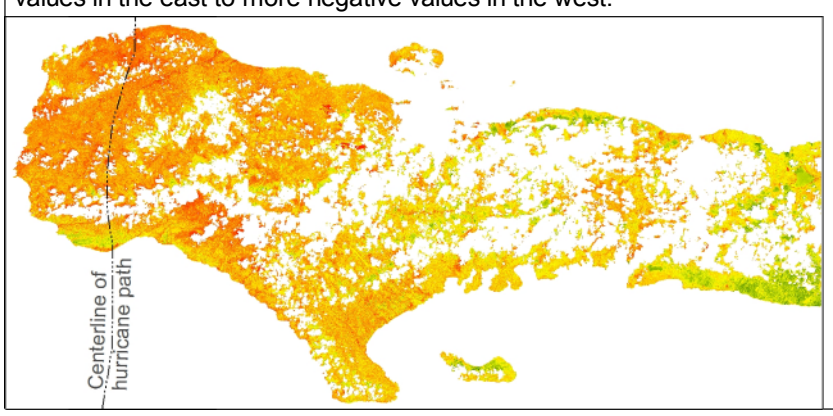


The positive values in southern Tiburon can be explained by two factors: 2015 was a very dry year, whereas 2016 was an above average rainy year. The specific region suffers from deforestation. This means that the majority of vegetation is composed of grass and scrubs, which reacts more quickly and intensely to rainfall during a season.

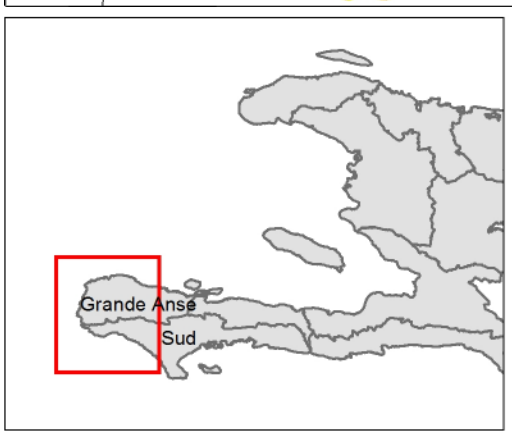
The overall NDVI difference between 2015 and 2016 within this scene is -0.218.

The fact that 2015 was a lot drier than 2016 should also be taken into consideration when interpreting the NDVI data.

The larger map extent below shows a gradient from more positive values in the east to more negative values in the west.



0 5 10 15 Kms



Legend

NDVI difference 2016 - 2015

+ 0.5

0

- 0.5

The normalized difference vegetation index (NDVI) is calculated, using the Red and Near Infrared bands of a satellite image. The resulting value range is between -1 and +1.
The map displays the difference of the NDVI between November 2016 and October 2015.

Data sources:
Satellite Imagery: Sentinel 2A
Administrative Boundaries: CNIGS

Coordinate System:GCS WGS 1984
File: HTI_NDVI_Difference_20170503
Contact: reach.mapping@impact-initiatives.org

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners, associated, donors mentioned on this map.

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