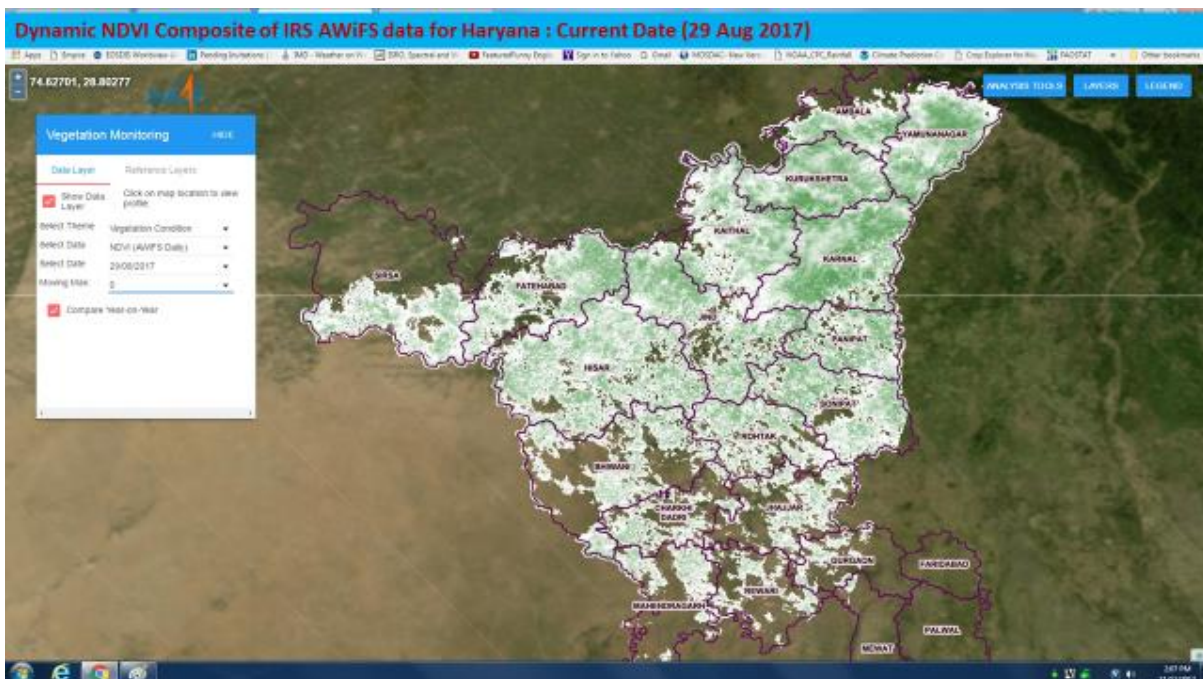


Visualization of Village Level AWiFS NDVI Statistics: A case study of Haryana

Village level statistics play an important role to assist policy makers as decision support feature. It gives policy makers a peek into a high volume of data organised village wise according to his/her interest. VEDAS has successfully developed a system that gives village and successively coarser administrative levels statistics of Normalised Difference Vegetation Index (NDVI) – a function of reflectance in Red and NIR channels which is a very good indicator of vegetation status - to users. This type of information help planners and decision makers to evaluate performance of vegetation growth at a village level rather than traditionally done at pixel level.

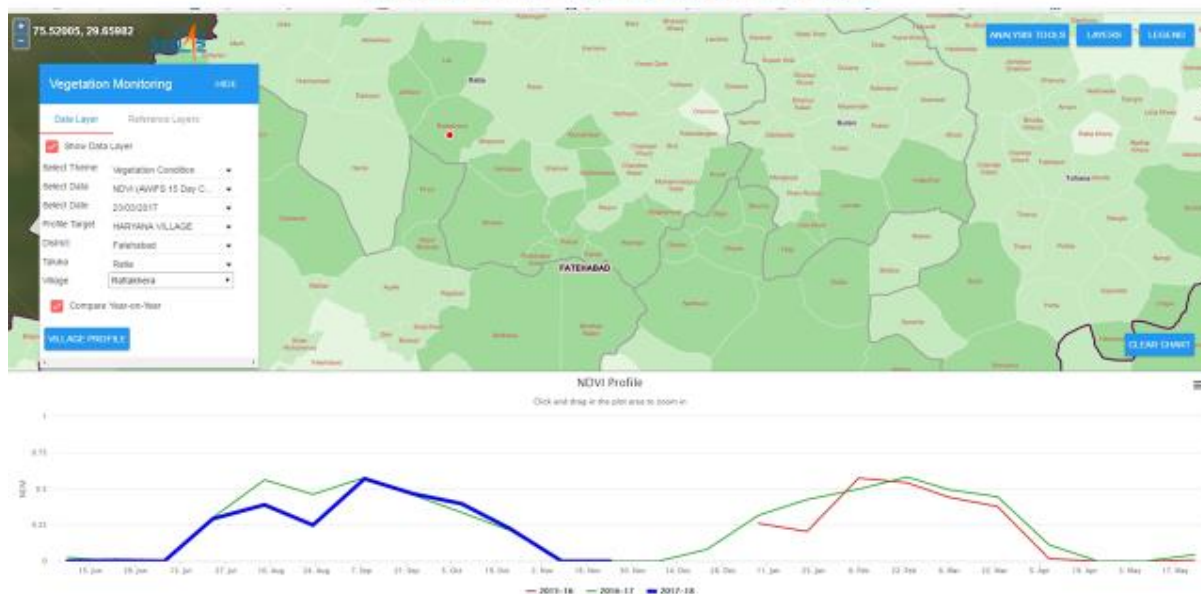
Daily ResourceSat – 1 (RS-1) and ResourceSat-2 (RS-2) AWiFS sensor images over Haryana from Jan 01, 2016 to till date, which have spatial resolution of 56 meters in four spectral bands (G, R, NIR, SWIR) at temporal resolution of 5 days, is acquired and automatically processed for NDVI. Depending upon user requirement, a 5, 10 or 15-day dynamic moving max NDVI composite, which corresponds to vegetation status at clearest atmospheric condition and / or nadir looking geometry, can be generated. Village (and taluka and district) level boundaries of Haryana is overlaid. A graphical view of temporal profile of village level average NDVI can be seen on Vegetation Monitoring module of VEDAS. An on the fly difference image of the two dates / seasons can also be seen.

A current day, illustrative 5 and 10-day composite images and temporal profile at village level are shown below:





Village level NDVI profile using AWiFS data



Visualization of temporal NDVI at village level is very helpful in determining current season vegetation status vis-à-vis its situation in previous years. Such interpretation, along with corresponding environmental status of soil moisture and weather conditions can be a supportive tool to strengthen objective data based decision support system to assist claims of farmers, say under Krishi Bima Yojna. A tabular data in commonly used formats such as comma separated values (.csv), excel (.xls) and portable document format (.pdf) is also available to users for inspection and analysis.

Users can access and see this feature on internet at below url:

http://vedas.sac.gov.in:8080/VM2/app/index_aw.html