

In this formula, "NIR" represents the reflectance value in the near-infrared band, and "Red" represents the reflectance value in the red band of the electromagnetic spectrum. These reflectance values are typically obtained from satellite or remote sensing imagery. To calculate NDVI for a specific pixel or location, you subtract the red reflectance value from the near-infrared reflectance value and divide it by the sum of the two values. The result is a single NDVI value for that pixel, ranging from -1 to 1. Higher NDVI values (closer to 1) indicate a higher density of healthy vegetation, while lower NDVI values (closer to -1) correspond to areas with less vegetation or non-vegetated surfaces such as water or bare soil. It's important to note that the NDVI formula can vary slightly depending on the characteristics of the remote sensing data used, such as the specific wavelength ranges used for NIR and red bands. However, the general concept of calculating the difference between NIR and red reflectance remains the same in most applications of NDVI..