DESCRIPTION OF DIRECTORY

Content of directory: products created from MODIS measurements onboard NASA Terra and Aqua satellites.

Files in directory:

mNvI: Normalized Difference Vegetation Index (NDVI) from a 16 day long period.

mNvC: The map shows the changes between two successive NDVI images.

mNvA: The NDVI anomaly map shows the difference between the actual NDVI and the climatology

CHARACTERISTICS OF THE DATA

Filenames: <type>-<YYYYMMDD>_<HHMM>.jpg, where

<type>: types listed above (e.g.:mNvA)

<YYYYMMDD>_<HHMM>: last date of the 16 day long period (UTC)

Update frequency:

8 day from 1 April to 31 October

Format: jpg**.**

Uncertainty of measurement/methodology:

The spatial and temporal resolution of the satellite measurements limits the observation. (Spatial resolution of the MODIS instrument is 250 m at nadir.)

METHODOLOGY

To determine the density of green on a patch of land, researchers must observe the distinct colors (wavelengths) of visible and near-infrared sunlight reflected by the plants. When sunlight strikes objects, certain wavelengths of this spectrum are absorbed and other wavelengths are reflected. The pigment in plant leaves, chlorophyll, strongly absorbs visible light (from 0.4 to 0.7 μm) for use in photosynthesis. The cell structure of the leaves, on the other hand, strongly reflects near-infrared light (from 0.7 to 1.1 μm). The more leaves a plant has, the more these wavelengths of light are affected, respectively. The NDVI is created by NASA from a 16 day long period.
(*K. Didan. (2015). MOD13Q1 MODIS/Terra Vegetation Indices 16-Day L3 Global 250m SIN Grid V006. NASA EOSDIS Land Processes DAAC.*)

ADDITIONAL INFORMATION

https://lpdaac.usgs.gov/products/mod13q1v006/

REVISION HISTORY

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CONTACT POINT

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