

ncdisp('ndvi3g\_geo\_v1\_2015\_0712.nc4')  
approximate size of each netcdf4 file: 448MB  
Source:

ndvi3g\_geo\_v1\_2015\_0712.nc4

Format:

netcdf4\_classic

Global Attributes:

FileName = 'ndvi3g\_geo\_v1\_1\_2016\_0712.nc4'  
Institution = 'NASA/GSFC GIMMS'  
Data = 'NDVI3g version 1.1'  
Reference = '1. Pinzon, J.E.; Tucker, C.J.

A Non-Stationary 1981-2012 AVHRR

NDVI3g Time Series.

Remote Sens. 2014, 6, 6929-6960.

2. Pinzon, J.E.; Tucker, C.J.

A Non-Stationary 1981-2015 AVHRR

NDVI3g.v1 Time Series: an update.

Remote Sens. 2018, in preparation'

Comments Version1 = 'version1.1 includes three major fixes (a-c), and five minor (d-h):

(a) Reprocessed Level 2 entire SeaWiFS mission for the land products to reduce artifacts in the data, particularly changes in calibration after 2006 that generates drops in ndvi lower values.  
OB.DAAC / Ocean Biology Processing group NASA/GSFC 616

(april 2016)

(b) Recovered ndvi negative values of snow-covered regions in

winter

Northern latitudes. In Version0, we masked them with zero

values,

creating artifacts in phenology parameters.

(c) version v1.1: fixes profiles at coast lines and their respective time series when applying to missing values -similar to fix (b)  
This artifact is reported in

3. Palacios-Orueta, A. et al.

Raising open questions from a

novel global quantitative seasonality

map derived from remote sensing

time series 2018, in preparation.

(d) Arranged data in ncd format, compiled it in two nc4 files a year.  
Each nc4 file includes 6 months of ndvi data (jan-jun and jul-dec), with a total of 12 (15-day) composites each semester.

(e) Rescaled ndvi values and splitted the flag values from them.

(f) Added a new variable, percentile, to represent the distribution of ndvi values in the time series. Range 10\*[0, 100]

(g) Flag values are (simpler):

flag 0: ndvi without apparent issues

(good value)

flag 1: ndvi retrieved from spline

interpolation

flag 2: ndvi retrieved from seasonal

profile (possible snow/cloud)

(h) Flag values are embeded on the percentile variable:  $2000 \cdot \text{flag} + \text{percentile}$ .

Thus, the actual percentile three ranges [0 1000], [2000 3000] and [4000 5000]

could provide direct nformation of how interpolation is affecting the time series.

Temporalrange = '1981-07-01 -> 2016-12-31'  
Year = 2016  
RangeSemester = 'Jul 1 - Dec 31 (7:0.5:12.5)'  
SpatialResolution = '1/12 x 1/12 degrees'  
TemporalResolution = '1/24 a year'  
\_fill\_val = -32768  
NorthernmostLatitude = '90'  
SouthernmostLatitude = '-90'  
WesternmostLongitude = '-180'  
EasternmostLongitude = '180'

Dimensions:

lon = 4320  
lat = 2160  
time = 12

Variables:

lon

Size: 4320x1  
Dimensions: lon  
Datatype: double

lat

Size: 2160x1  
Dimensions: lat  
Datatype: double

time

Size: 12x1  
Dimensions: time  
Datatype: double

satellites

Size: 12x1  
Dimensions: time  
Datatype: int16

ndvi

Size: 4320x2160x12  
Dimensions: lon,lat,time  
Datatype: int16

Attributes:

units = '1'  
scale = 'x 10000'  
missing\_value = -5000  
valid\_range = [-0.3 1]

percentile

Size: 4320x2160x12

Dimensions: lon,lat,time

Datatype: int16

Attributes:

units = '%'  
scale = 'x 10'  
flags = 'flag 0: from data

flag 1:

spline interpolation flag 2: possible snow/cloud cover'  
valid\_range = 'flag\*2000 + [0 1000]'