ncdisp('ndvi3g_geo_v1_2_2016_0712.nc4')
approximate size of each netcdf4 file: 448MB
Source:
ndvi3g_geo_v1_2_2016_0712.nc4
Format:
netcdf4_classic
Global Attributes:
FileName = 'ndvi3g_geo_v1_2_2016_0712.nc4'
Institution = 'NASA/GSFC GIMMS'
Data = 'NDVI3g version 1.2'
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 1981-2016 AVHRR NDVI3g.v1.1 Time Series:
a Bayesian regularization update. Remote Sens. 2020, in preparation.
Comments Version1 = 'version1.1(2) includes three major fixes (a-c), and five minor (e-i):
(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 periodic profiles at coast lines and their respective
time series when applying to missing values -similar to fix (b)
This artifact was identified using the spectral analysis reported in
3. Recuero, L et al.
Mapping periodic patterns of global vegetation based on spectral
analysis of NDVI time series *Remote Sens.* **2019**, *11*(21), 2497.
(d) version v1.2: integrating Metop-B NDVI data
integration will replace NOAA19 NDVI data that has increasing NOAA19
localized reflectance problems (2017-current) that have impacted NDVI
products specially in Northern latitudes.
(e) 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.

(f) Rescaled ndvi values (-5000,10000) with separated flag values layer

(g) Added a new layer, QA_percentile, to represent the distribution of ndvi values in the time series. Range 10*[0, 100], negative (missing values)

(h) QA 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)

flag 3: missing value

(i) Flag values are embedded on the QA_percentile variable: 2000*flag + percentile. Thus, the actual percentile four ranges [0 1000], [2000 3000], [4000 5000] and 5985 could provide direct information of how interpolation is affecting the time series.

TemporalIrange = '1981-07-01 -> 2018-12-31'
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]'