December 15, 2023

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(https://github.com/doan-van/Python_class/tree/main/examination)

Netcdf A4

1.0.1 GPV

http://database.rish.kyoto-u.ac.jp/arch/jmadata/gpv-netcdf.html NetCDF (MSM, RSM) – [OPeNDAP] http://database.rish.kyoto-u.ac.jp/arch/jmadata/data/gpv/netcdf/

1.0.2

https://www.data.jma.go.jp/mscweb/ja/info/sample_data_netcdf.html

[2]:
```
import xarray as xr
import cartopy
```

1.0.3 GPV

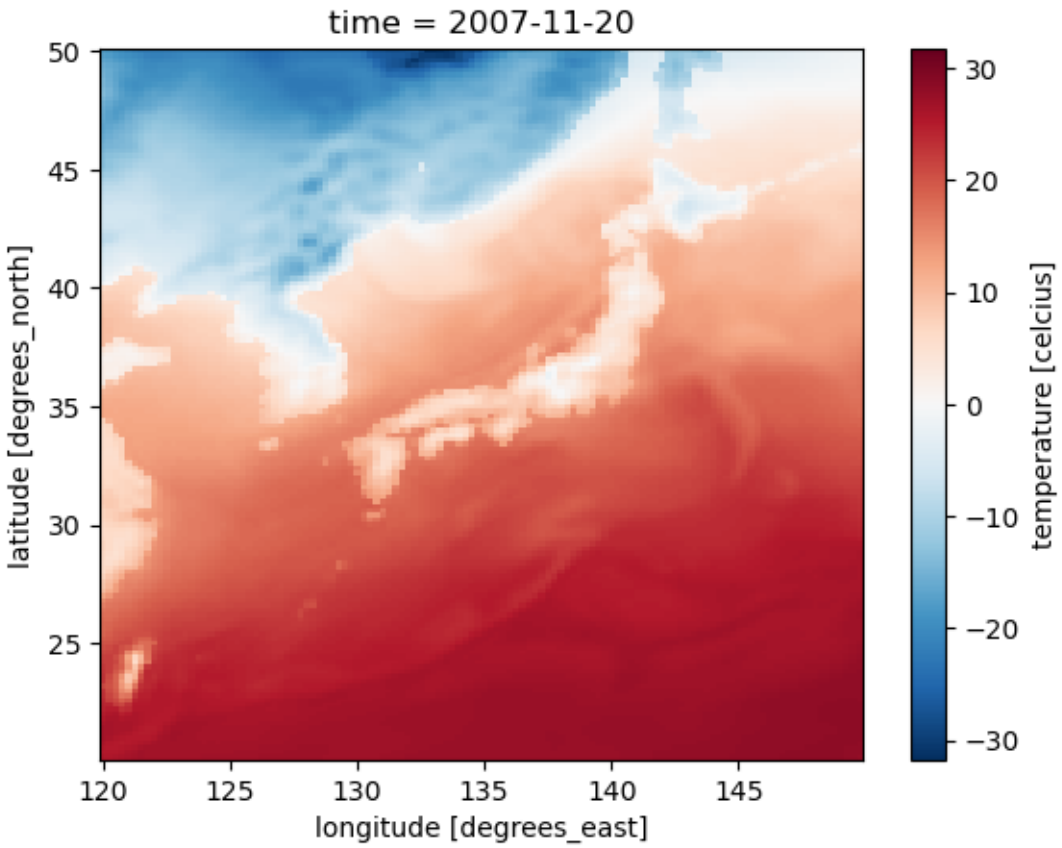
[3]:
```
ds = xr.open_dataset('data/1120.nc')
```

[4]:
```
ds.temp
```

[4]:
```
<xarray.DataArray 'temp' (time: 24, lat: 150, lon: 120)>
[432000 values with dtype=float64]
Coordinates:
  * lon      (lon) float32 120.0 120.2 120.5 120.8 … 149.0 149.2 149.5 149.8
  * lat      (lat) float32 50.0 49.8 49.6 49.4 49.2 … 21.0 20.8 20.6 20.4 20.2
  * time     (time) datetime64[ns] 2007-11-20 … 2007-11-20T23:00:00
Attributes:
    long_name:      temperature
    units:          celcius
    standard_name:  air_temperature
```

[5]:
```
ds['temp'][0].plot()
```

[5]:
```
<matplotlib.collections.QuadMesh at 0x1697a5f10>
```



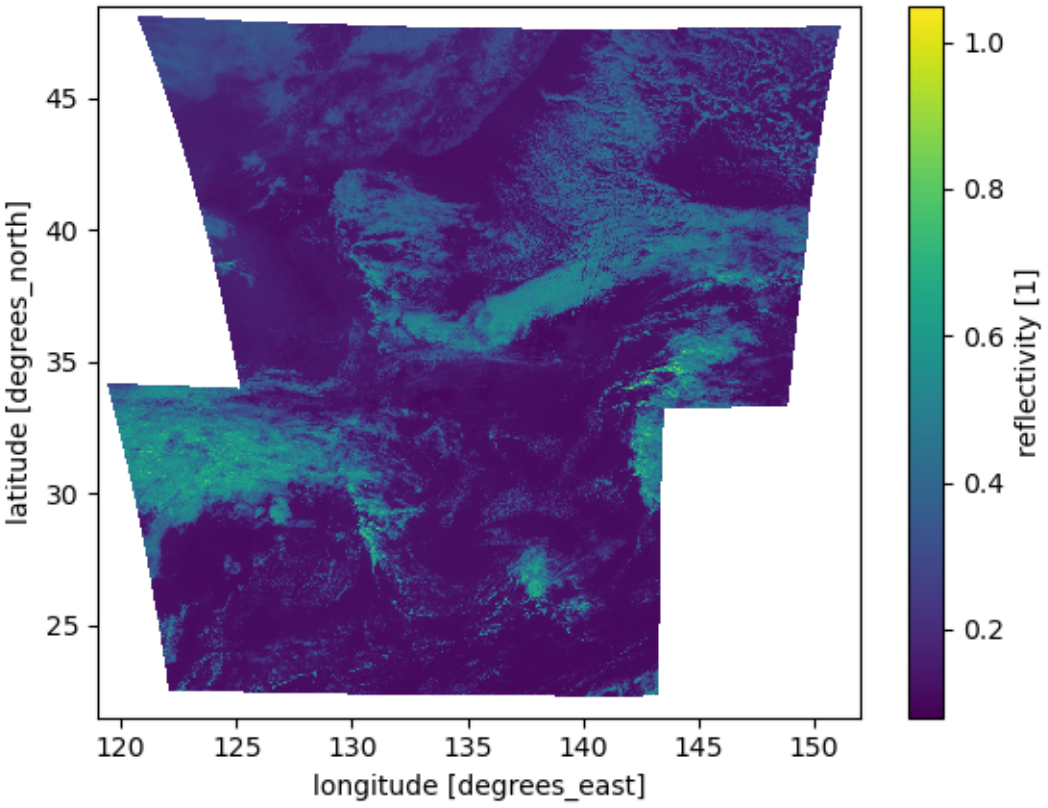
1.0.4 Himawari

[9]:
```
ds = xr.open_dataset('data/NC_H08_20161117_0230_B01_JP02_R10.nc')
ds['albedo']
```

[9]:
```
<xarray.DataArray 'albedo' (latitude: 2701, longitude: 3301)>
[8916001 values with dtype=float32]
Coordinates:
  * latitude   (latitude) float32 48.5 48.49 48.48 48.47 … 21.52 21.51 21.5
  * longitude  (longitude) float32 119.0 119.0 119.0 119.0 … 152.0 152.0 152.0
Attributes:
    units:      1
    long_name:  reflectivity
```

[8]:
```
ds['albedo'].plot()
```

[8]:
```
<matplotlib.collections.QuadMesh at 0x1697a7950>
```


45
40
35
30
25
latitude [degrees_north]
120
125
130
135
140
145
150
longitude [degrees_east]
1.0
0.8
0.6
0.4
0.2
reflectivity [1]

[ ]: