全球レベルの時系列衛星画像データを処理してOSSに渡すまで

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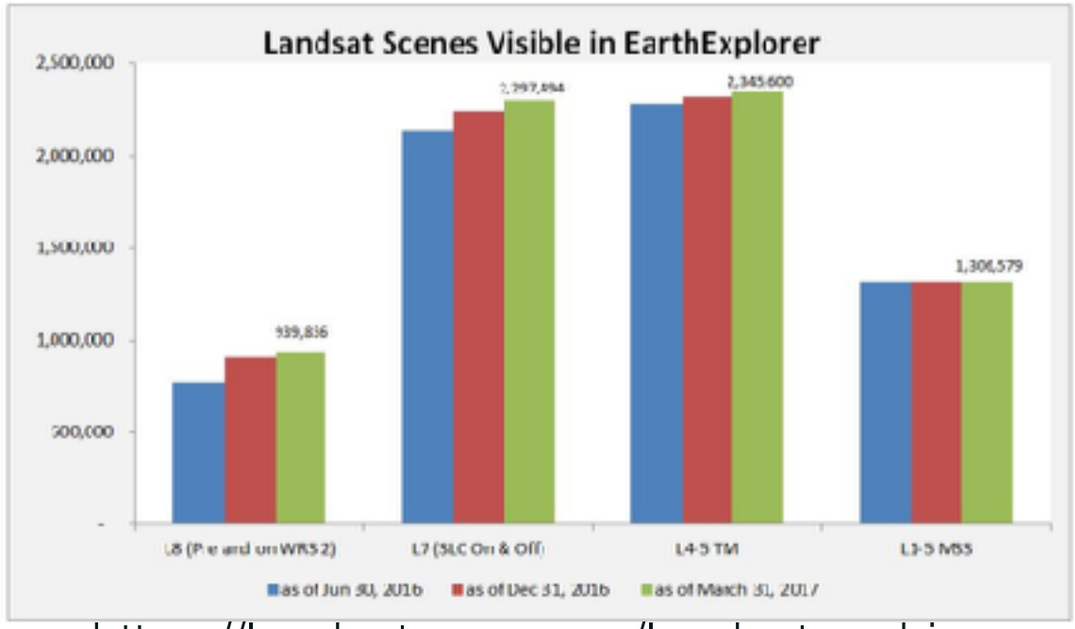
Introduction

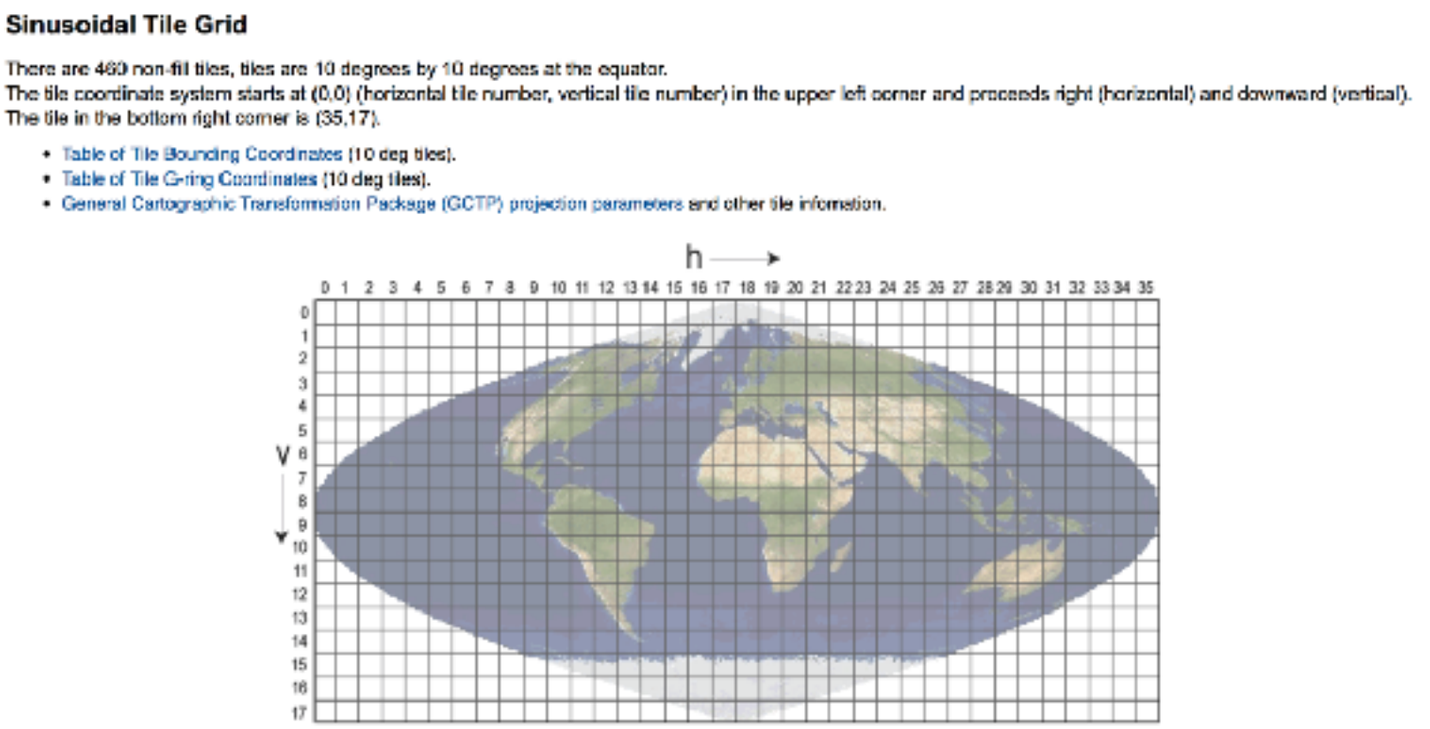
Themes:
Land cover monitoring, GIScience
Interests:
Terrestrial monitoring by RS; Open geo-data; Spatial accuracy assessment; Spatio-temporal analysis
Skill sets:
R, QGIS, GRASS, bash, (python, Google Earth Engine)


Massive remote sensing open data are now freely available!

- Landsat
- Sentinel
- MODIS …



https://landsat.usgs.gov/landsat-archive



https://modis-land.gsfc.nasa.gov/MODLAND_grid.html

Massive remote sensing open data Processing

Your interest

Define ROI

Data selection

Download

Mosaic

Reprojection

Analysis

Output

wget (shell)

GDAL
ModisTool …

GRASS
Python
R
C
C++ …

save time and resources
to focus on your main task!

Google Earth Engine

If you are interested in using open RS data

- No need to consider about RAM / Disk.
- No need to download raw data.

RS data processing in Google Earth Engine

- Define a target area
- Set a data product
- Data DL→Format conversion
  (HDF→Tiff) →Mosaic→…

DEMO: Time series changes in MODIS NDVI average at global scale

Your interest → Is NDVI average stable over time?

Define ROI → Not specific yet = global in 2001-2016

Data selection → MODIS

Download → GEE 460*24*16=176,640 hdf files…

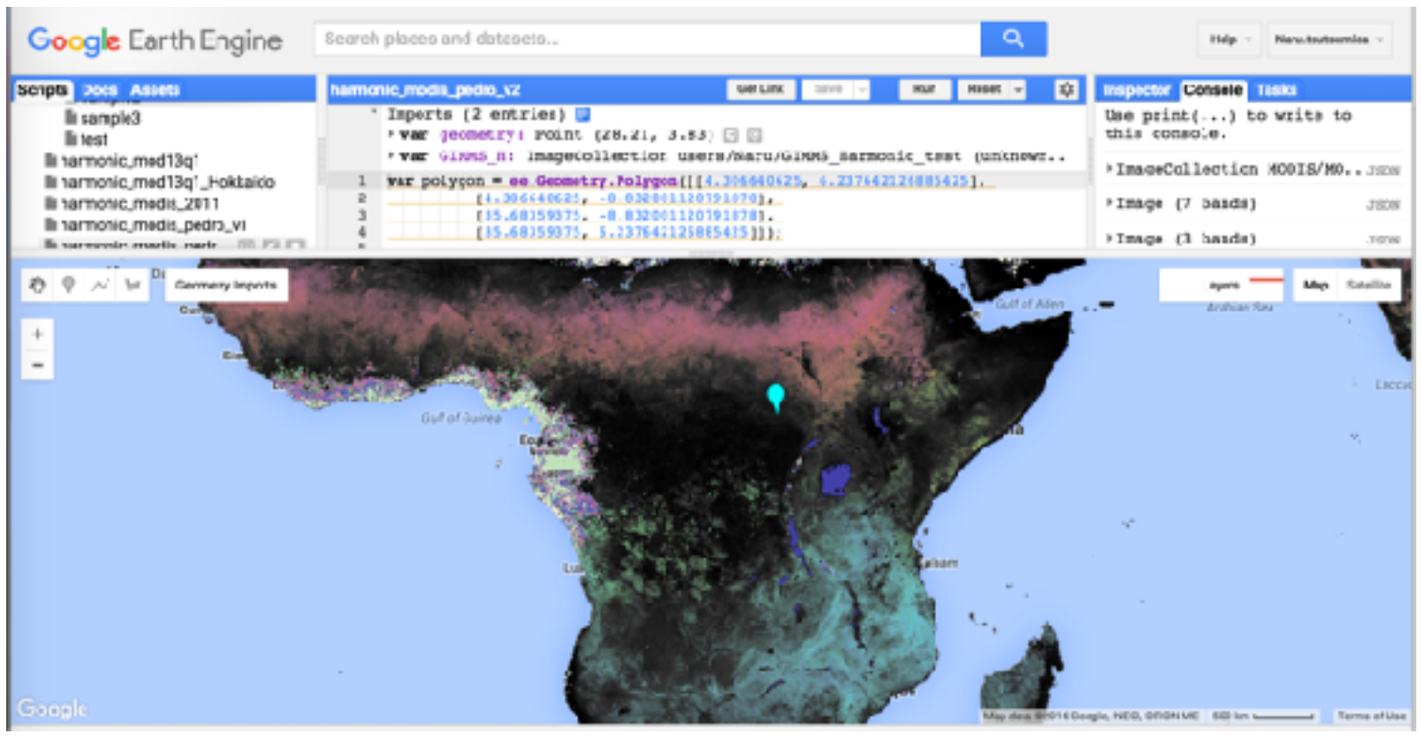
Mosaic → GEE

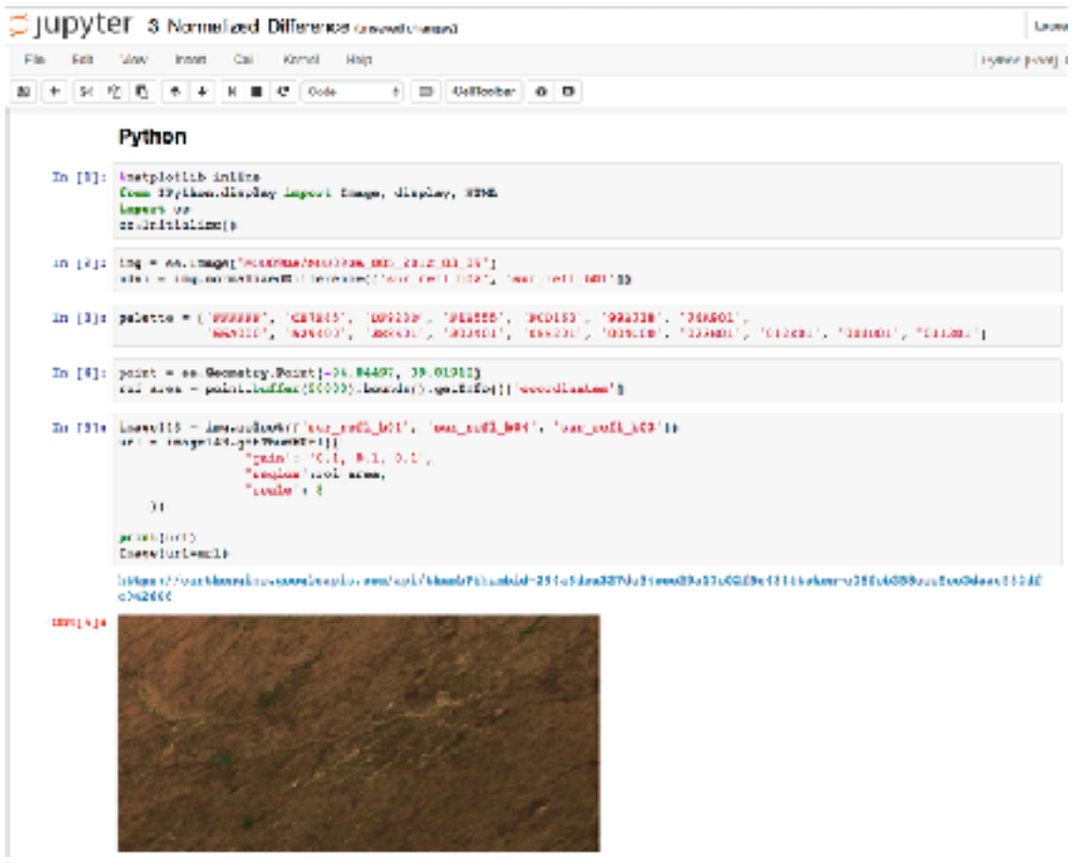
Reprojection → GEE

Analysis → Whatever you want

Output → Whatever you want

Javascript-based Playground / Python API





[Jupiter notebook]

https://github.com/naru-T/2017FOSS4GHOKKAIDO

GEE Workshop in Kyoto (18th July)

Google

Home　よくあるご質問 FAQ　お申し込み APPLY

Google Earth Engine チームによる Earth Engine ワークショップを京都で初めて開催します。

Google Earth Engine Team will be hosting a special hands-on workshop for the first time in Kyoto.

https://events.withgoogle.com/earth-engine-workshop-in-kyoto/

Thank you

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