Japanese satellite data platform
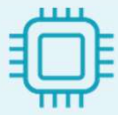
April 5th, 2023

"Create new value through Space × Information Technology"

The 6 functions of Tellus

Tellus

Computing resources

Processing   Data/API   Network

Interface

Tellus Operation Systems   Integrated development Environment

Market

Data/API   Algorism   Application

Owned media
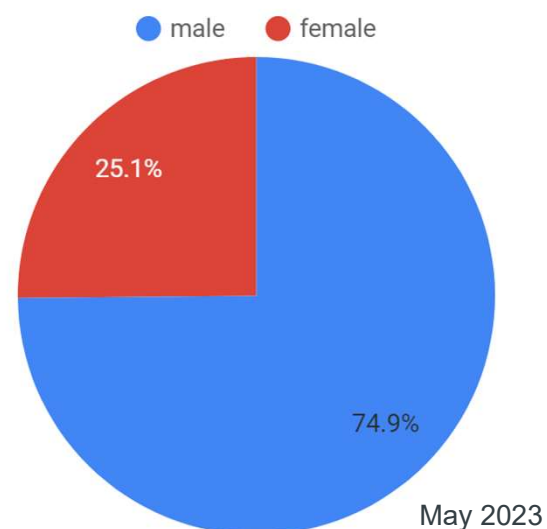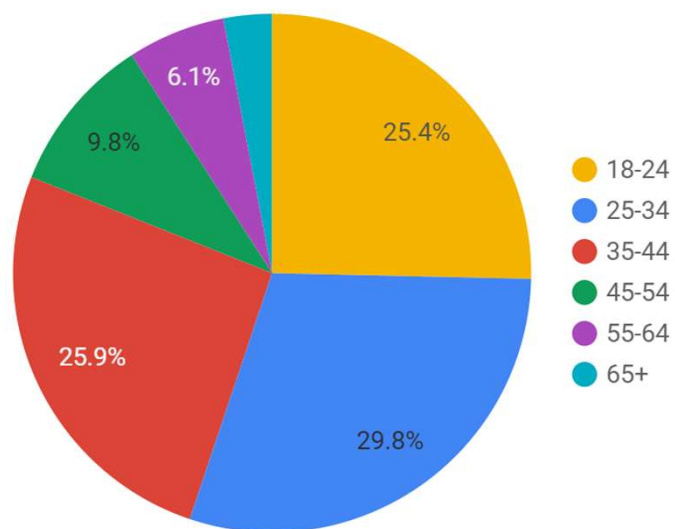
SORABATAKE

Learning opportunity

BootCamp

Data competition

Tellus Satellite Challenge

Figures at a glance

5,842
February 2019

➡️

37,424
April 2024

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

25.4%
29.8%
25.9%
9.8%
6.1%

male   female

25.1%

74.9%

May 2023

※Please note that this analysis is based upon "Google Analytics"

Data as a Service (DaaS)

Tellus Business Model

Money Flow　　Data / Service Stream

End Users（Satellite Data/ Apps Users）

SaaS （Software）

Fee　　Data,Tools

Fonctions provided by Tellus
Apprication Developer, etc.
-Analysis Tools, Apps for Satellite data in Tellus
（RESTEC,Ridge-i,ABEJA,JSI,PASCO, etc.）

Fee

Tools

・Satellite Data Analysis Tools
・Satellite Date Apps
・Observation Request, etc.

Fee　　Platform

PaaS （Platform）

Fonctions provided by Tellus
Other Geospatial Data PF,
Third Parties' Web Systems
（G-spatial information Center,　WAGRI,
Plateau, etc.）

Fee　　Platform

Fee　　Data

・Satellite Data Hosting　（Storage, Search and Distribution）
・Market Function to Provide and Charge for Satellite Data,
Satellite Data Analysis Tools, and Geospatial Data APIs

Fee　　Data,Storage etc.

DaaS （data）

Functions provided by Tellus
・Satellite data sales
・GIS/Satellite data provision （APIs）

IaaS （Infrastructure）

・APIs for Satellite data
・CPU、GPU（computing recouses）for Development and Analysis Environment
・Strage: Satellite Data Strage Area for Satellite Operator

Data　Revenue share

Fee　　Platform

Fee　　Strage, Analysis Environment

Satellite/Satellite Data Owners　　（PASCO,JEOSS,JSI,AXELSPACE,Japan space systems,JAXA, etc.）
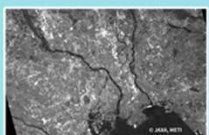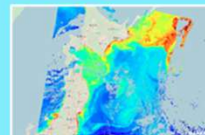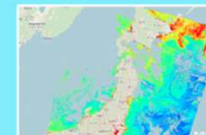
Platform as a Service (PaaS)
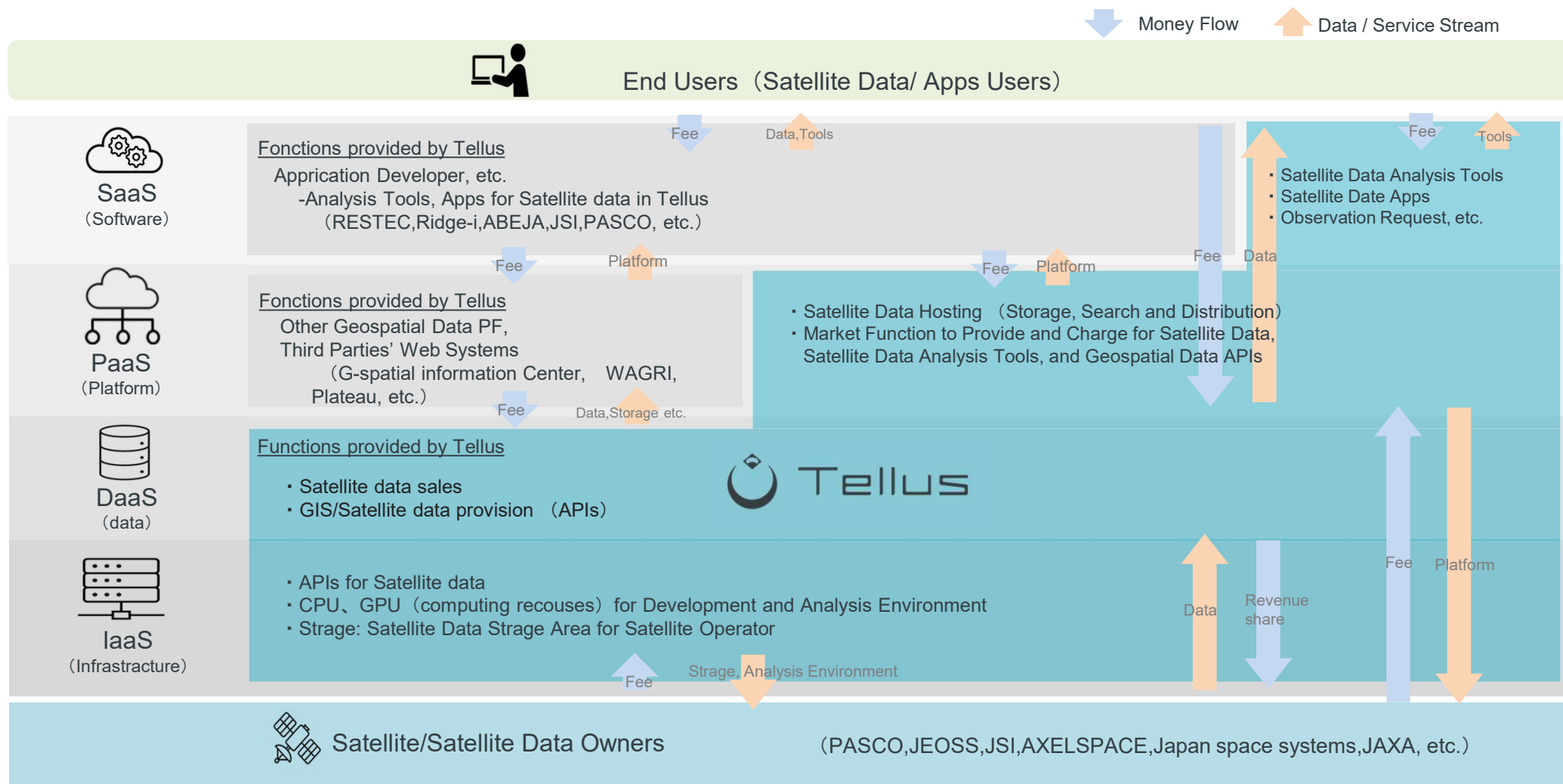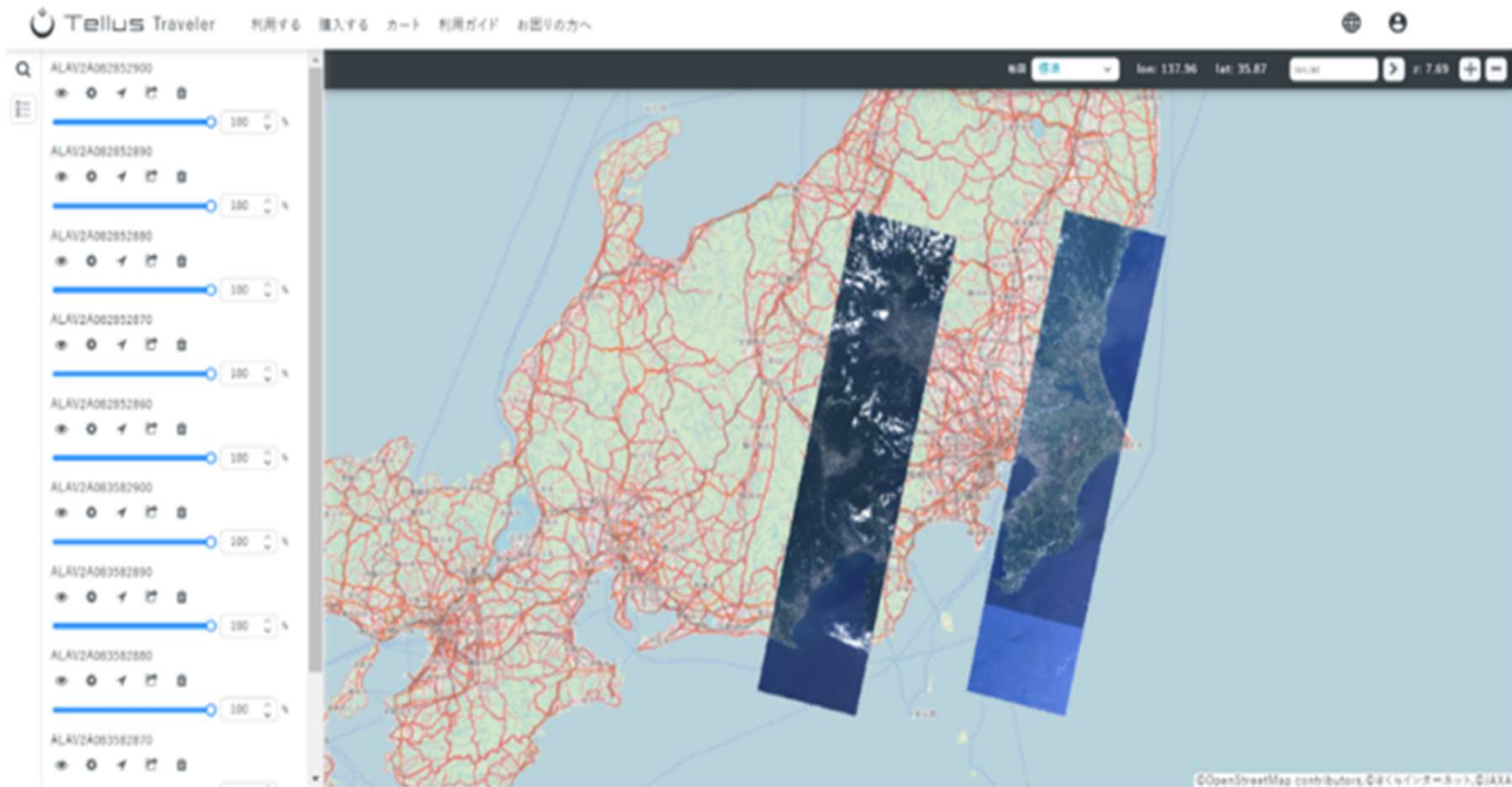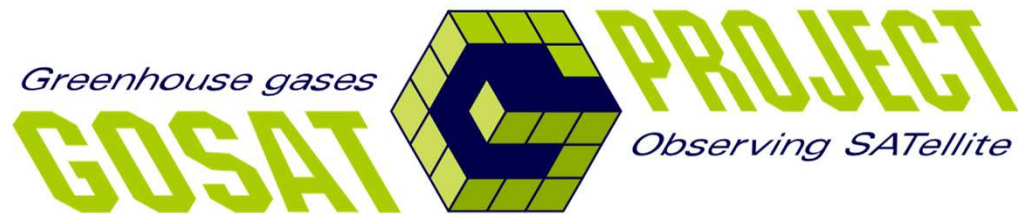
Satellite Data Hosting Service

Platform as a Service (PaaS）

Ministry of the Environment, government of Japan decided to disseminate data of GSSAT series through satellite data hosting service of Tellus.

Software as a Service (SaaS)

Tellus

This is a service that provides a web-based application.
Users need only an internet connection and a device: tablet etc., to use our service immediately.

TelluSAR
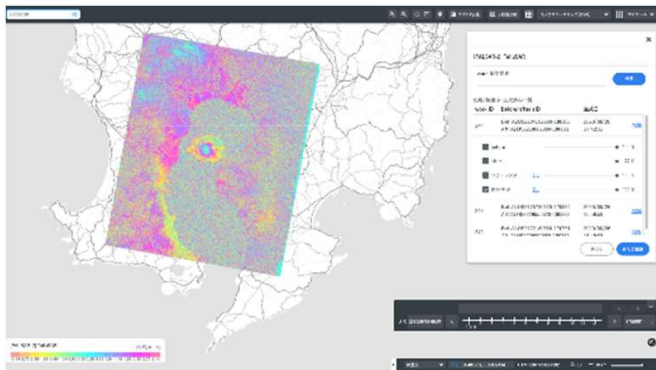
Tool for analyzing satellite SAR data.
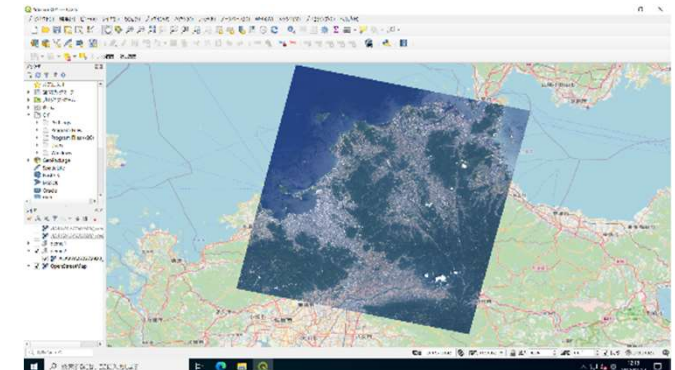API and add-in are available.

Tellus VPL
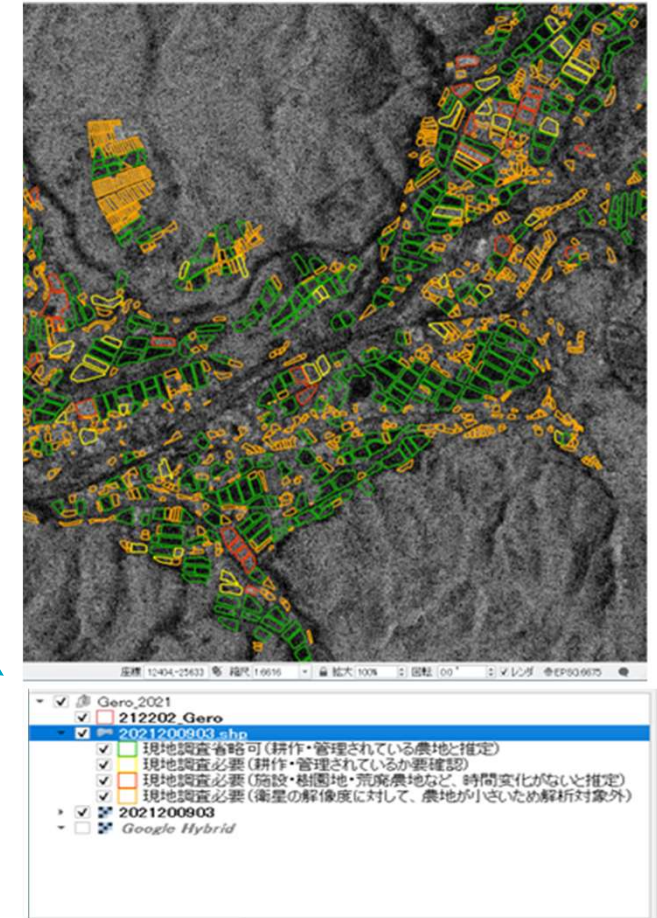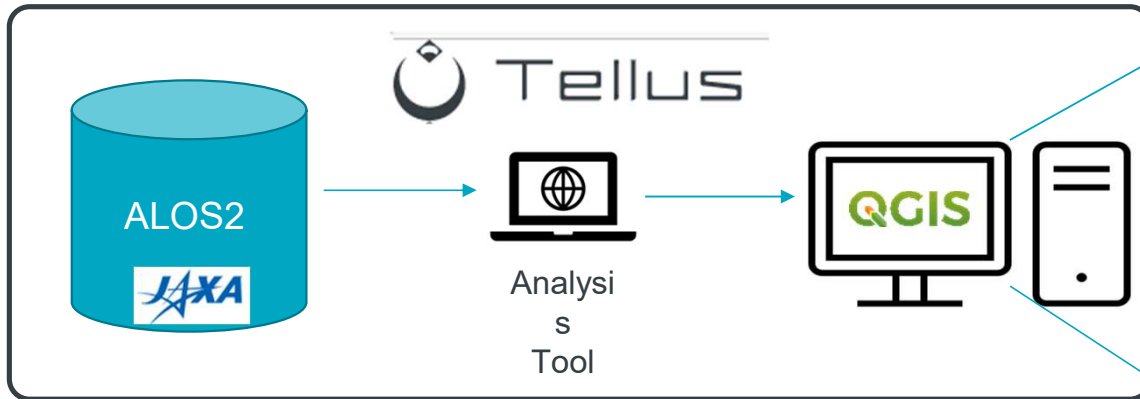（Tellus Visualizer for Parking Lot）

One of our free official tool that can identify the   potential parking lots using satellite data.

Tellus Satellite Data Master ＋ QGIS

QGIS on Tellus can provide satellite data, analysis tool and computing resources.

JAXA ALOS2 experiment

- Local government needs to check with the current status of farmland.

- Once end user can connect internet, they can identify the farmland where is well-maintain, not maintain and suspicious by using the ALOS2 data, special tool and QGIS on Tellus

- This experiment has been implemented by JAXA, RESTEC, Sagri inc. Gero City and Tellus(Sakura internet)

Made by Sakura Internet based upon JAXA's Presentation

A use case of real estate company

Dividing the area where real estate is located using NDVI

Analysis Result
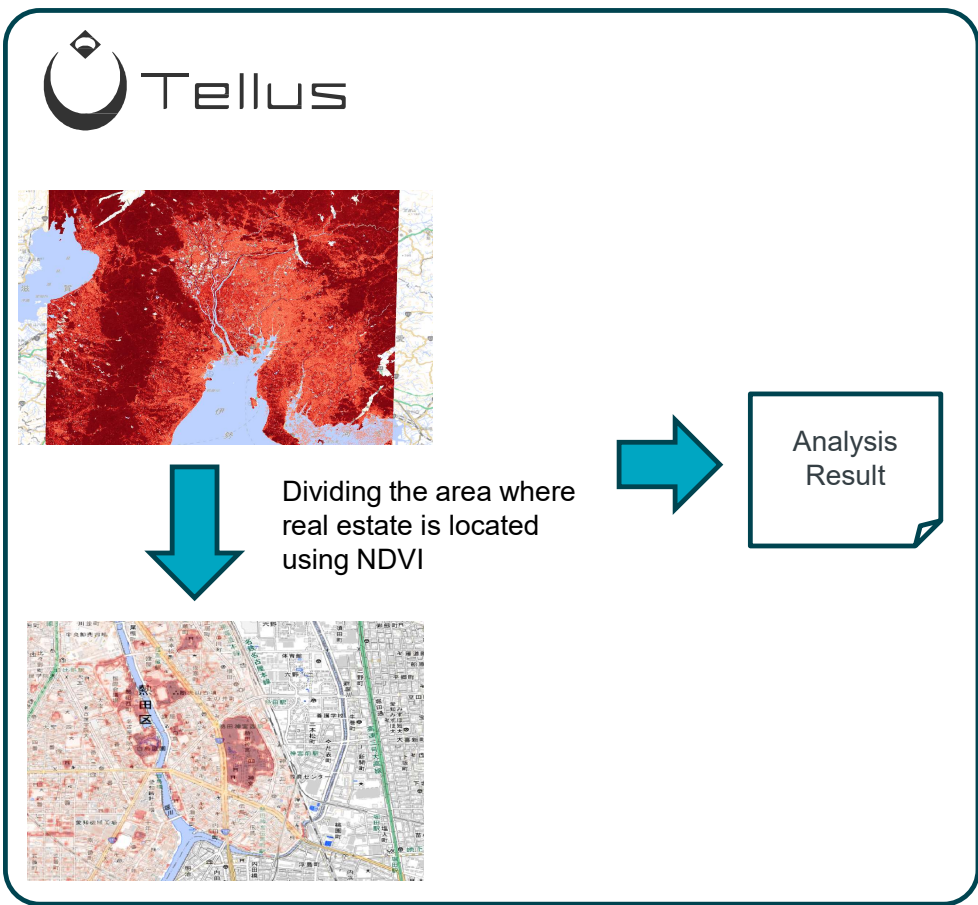
Deep Learning

Real estate search System (Web)

- Used as a search condition for location criteria
- Used as a recommendation factor for users.

- To enhance the fundamental function of Tellus

- To challenge our business internationally.

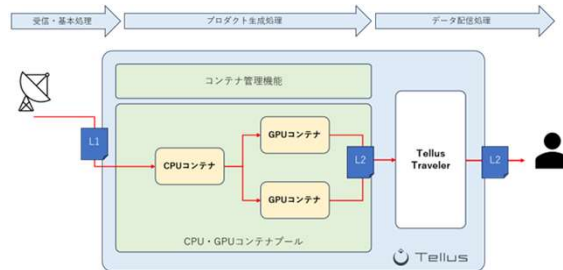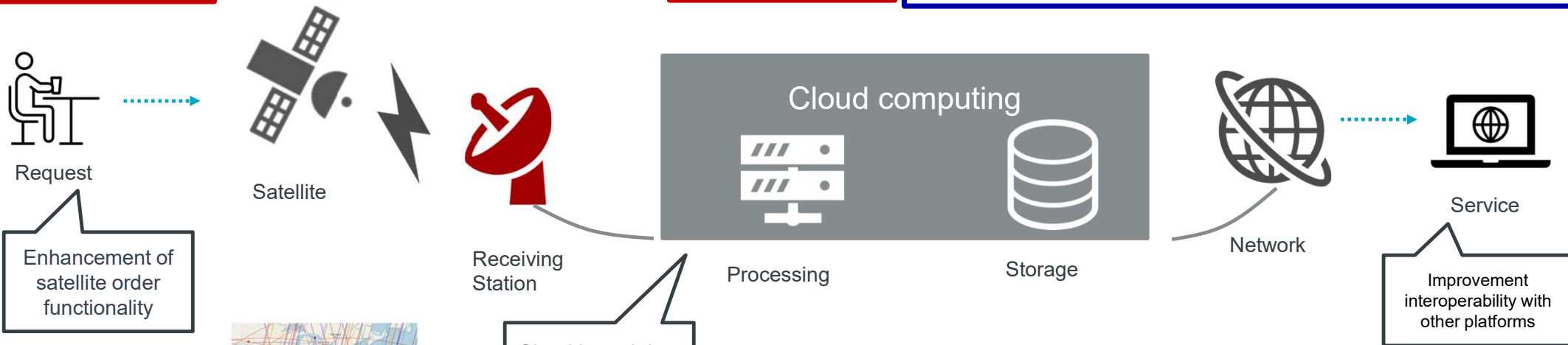- To generate synergy with new technologies such as AI

https://www.meti.go.jp/english/press/2023/0118_003.html

Enhancement of the fundamental function of Tellus

NEXT — Order

NEXT — Data production

Done — Data store · Data dissemination/API · Application

Order → observation → Data receive → Data production → Data store → Data dissemination/API → Application

Request — Enhancement of satellite order functionality

Satellite

Receiving Station — Cloud-based data production

Cloud computing — Processing — Storage

Network

Service — Improvement interoperability with other platforms

AXELSPACE

PASCO
Surveying the Earth to Create the Future

Synspective

iQPS

生きる、を支える科学技術
SCIENCE FOR RESILIENCE
NIED 防災科研

Sharing and Utilization of Satellite Data with Europe

Highlights of the cooperation

1. Exchange data between the satellite data platform Tellus and the European Commission-operated Copernicus.
2. Encourage cooperation on data processing for common use and development of services in fields such as monitoring of marine and coastal areas, climate, water resource management, and disaster risk reduction.
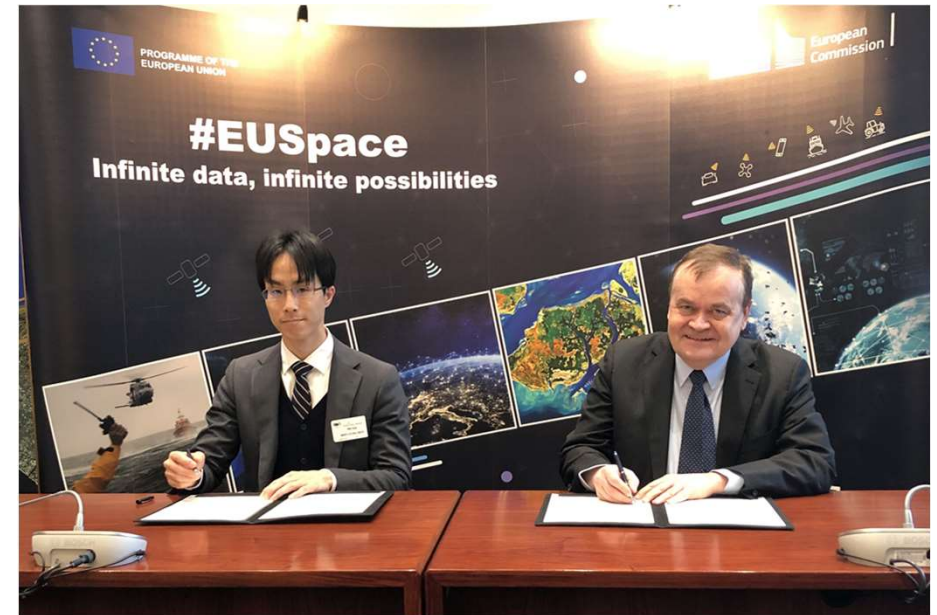
https://www.meti.go.jp/english/press/2023/0118_003.html

Satellite data, GPU and AI

https://www.sakura.ad.jp/corporate/information/newsreleases/2023/06/16/1968211860/

https://www.tellusxdp.com/en-us/