

Japan International Cooperation Agency (JICA)  
Japan Aerospace Exploration Agency (JAXA)

# **JJ-FAST API**

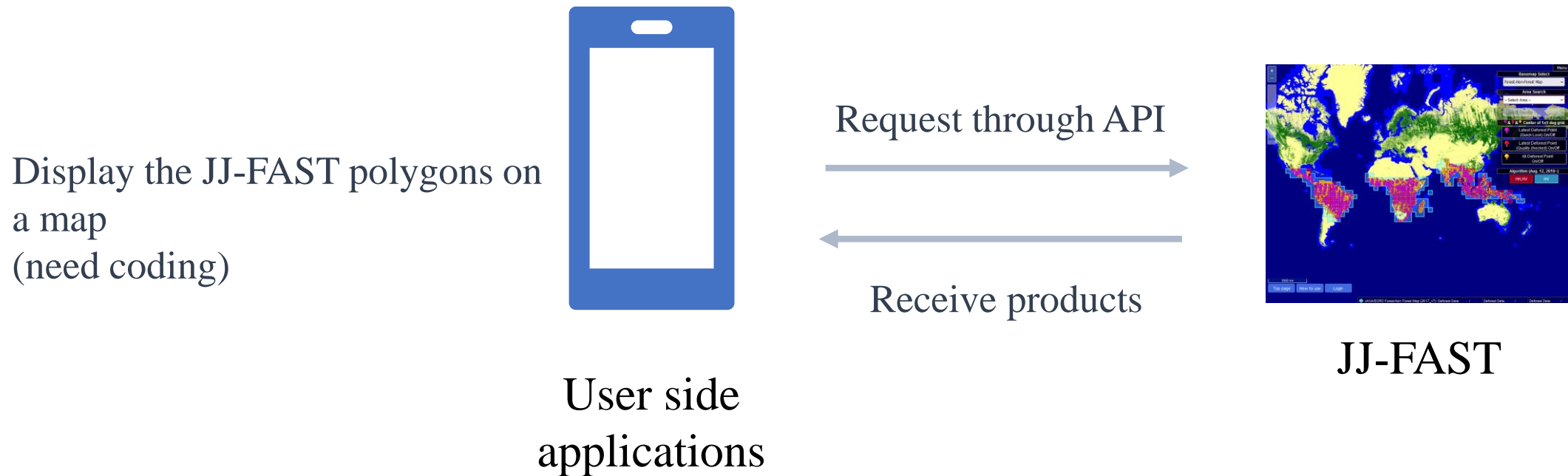
## **User's guide**

Version 1.1  
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# Introduction of JJ-FAST API

JJ-FAST application programming interface (API) provides a web service for searching files of the JJ-FAST forest change products.

Users can search and receive URLs of JJ-FAST polygons and display it on their preferred map applications.



# Usage of JJ-FAST API

The JJ-FAST API allows users to search a list of URLs of JJ-FAST products (1°x1° tiles) by using a single URI as shown in the example below. The XX.X, xxx.x, and YYYYMMDD represent latitude, longitude (decimal degrees) and date, respectively, and should be modified by the user. If date is specified as “date=0”, the URLs of all the JJ-FAST products in a specific location are returned.

URI:

<https://www.eorc.jaxa.jp/cgi-bin/jjfast/api/getlist.cgi?lat=XX.X&lon=xxx.x&date=YYYYMMDD>

Example:

1. using negative numbers for south latitude and west longitude:

<https://www.eorc.jaxa.jp/cgi-bin/jjfast/api/getlist.cgi?lat=-6.6&lon=-69.8&date=20200502>

2. using S and W for south latitude and west longitude, respectively:

<https://www.eorc.jaxa.jp/cgi-bin/jjfast/api/getlist.cgi?lat=S6.6&lon=W69.8&date=20200502>

# Try a request on Firefox browser

<https://www.eorc.jaxa.jp/cgi-bin/jjfast/api/getlist.cgi?lat=-6.6&lon=-69.8&date=20200502>

“file” key

“map” key

URL of geojson, polygon file

JJ-FAST Map URL

JJ-FAST API returns a json file that contains a lists of two types of URLs, a geojson (polygon) file and a JJ-FAST Map URL.

```
num: 1
data:
  0:
    name: "data1"
    file: "https://www.eorc.jaxa.jp/jjfast/data/geojson/S06/W070/S06W070_200710_200501_Ver_3_0_Area1_QL.geojson"
    map: "https://www.eorc.jaxa.jp/cgi-bin/jjfast/jj_mapmonitor_phase2_v7.cgi?zoom=10&id=S06W070_200710_200501_Ver_3_0_Area1_QL.geojson"
```

# Geojson file containing all polygons in a 1°x1° tile (key: file)

```
{
  "type": "FeatureCollection",
  "features": [
    { "type": "Feature", "properties": { "Country": "Brazil", "Continent": "South_America", "ChangeArea": 2.25, "Accuracy": 2, "Polygon_id": "S06W070_200710_200501_0000000A", "State": "Amazonas", "Town": "Eirunepé", "Latitude": "S6° 34' 0\""},
    { "type": "Feature", "properties": { "Country": "Brazil", "Continent": "South_America", "ChangeArea": 2.0, "Accuracy": 1, "Polygon_id": "S06W070_200710_200501_0000001A", "State": "Amazonas", "Town": "Eirunepé", "Latitude": "S6° 50' 51\""}
  ]
}
```

Geojson is a standard format for web map systems, and widely used by web map services.

# JJ-FAST Map URL (key: map)

The URL is linked to JJ-FAST map, 1°x1° tile product.

# Quick Look (QL) and Quality checked products

JJ-FAST offers two type of products, Quick Look (QL) and Quality checked products. The user can recognize the QL product from its filename ending with “\_QL”.

## **QL product:**

S09W060\_210428\_210317\_Ver\_3\_0\_Area1\_QL.geojson

## **Quality checked product:**

S09W060\_210428\_210317\_Ver\_3\_0\_Area1.geojson

# Try a geojson on the QGIS software

[https://www.eorc.jaxa.jp/jjfast/data/geojson/S06/W070/S06W070\\_200710\\_200501\\_Ver\\_3\\_0\\_Area1\\_QL.geojson](https://www.eorc.jaxa.jp/jjfast/data/geojson/S06/W070/S06W070_200710_200501_Ver_3_0_Area1_QL.geojson)

The image shows a screenshot of the QGIS software interface. On the left, a map is displayed with various geographical features and labels in Japanese. The map includes labels such as 'アマダバン Aquidabã', 'ボア・ヴィスタ Boa Vista', 'ボア・ノヴァ Boa Nova', 'ポルト・フランコ Porto Franco', 'モウラン Mourão', 'アレイグレッタ Alegrete', 'ヴォータ・ダ・オンサ Volta da Onça', 'イトクマ Itucumã', 'カシタナ Casitana', 'マヌエル・ウルバノ Manoel Urbano', 'マギューバ Maguba', 'パレスチナ Palestina', 'コンセイワン Conceição', 'フオス・ド・タラウバ Foz do Tarabó', and 'アムエウ・ウルバノ Manoel Urbano'. The map is overlaid with a green and blue color scheme.

On the right, a dialog box titled 'データソースマネージャ | ベクタ' (Data Source Manager | Vector) is open. The 'ソースタイプ' (Source Type) section has 'プロトコル' (Protocol) selected. The 'エンコーディング' (Encoding) is set to 'Shift\_JIS'. The 'プロトコル' (Protocol) section has 'タイプ' (Type) set to 'HTTP/HTTPS/FTP'. The 'URI' field contains the URL: [https://www.eorc.jaxa.jp/jjfast/data/geojson/S06/W070/S06W070\\_200710\\_200501\\_Ver\\_3\\_0\\_Area1\\_QL.geojson](https://www.eorc.jaxa.jp/jjfast/data/geojson/S06/W070/S06W070_200710_200501_Ver_3_0_Area1_QL.geojson). The '認証' (Authentication) section is visible, with a red text overlay 'Specify the URL' pointing to the URI field. The dialog box has buttons for '閉じる' (Close), '追加(A)' (Add), and 'ヘルプ' (Help).



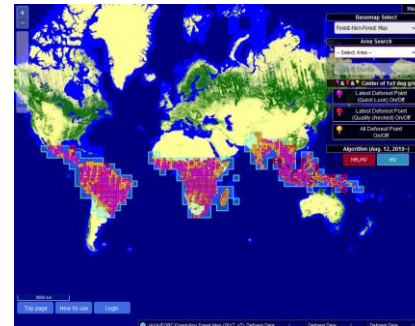
# Coding with JavaScript, Python, etc...

The JJ-FAST API allows users to search JJ-FAST products in their web map system. Coding with JavaScript or Python is a common technology in today's web mapping systems, and the JJ-FAST API is easy to implement with these codes. So, effective use of JJ-FAST products can be expected in your forest monitoring systems.



Forest monitoring  
system

search  
Products



JJ-FAST

# JJ-FAST information

- **JJ-FAST Home:**  
[https://www.eorc.jaxa.jp/jjfast/jj\\_index.html](https://www.eorc.jaxa.jp/jjfast/jj_index.html)
- **Technical note:**  
<https://www.eorc.jaxa.jp/jjfast/note.html>
- **JJ-FAST manual:**  
[https://www.eorc.jaxa.jp/jjfast/how\\_to\\_use.html](https://www.eorc.jaxa.jp/jjfast/how_to_use.html)
- **JJ-FAST system:**  
<https://www.eorc.jaxa.jp/jjfast/system.html>
- **Forest Governance Initiative: FGI**  
<https://www.eorc.jaxa.jp/jjfast/initiative.html>