

Introduction of "SACLA-J"

Site-based dataset for Assessment of Changing LAnd cover by JAXA

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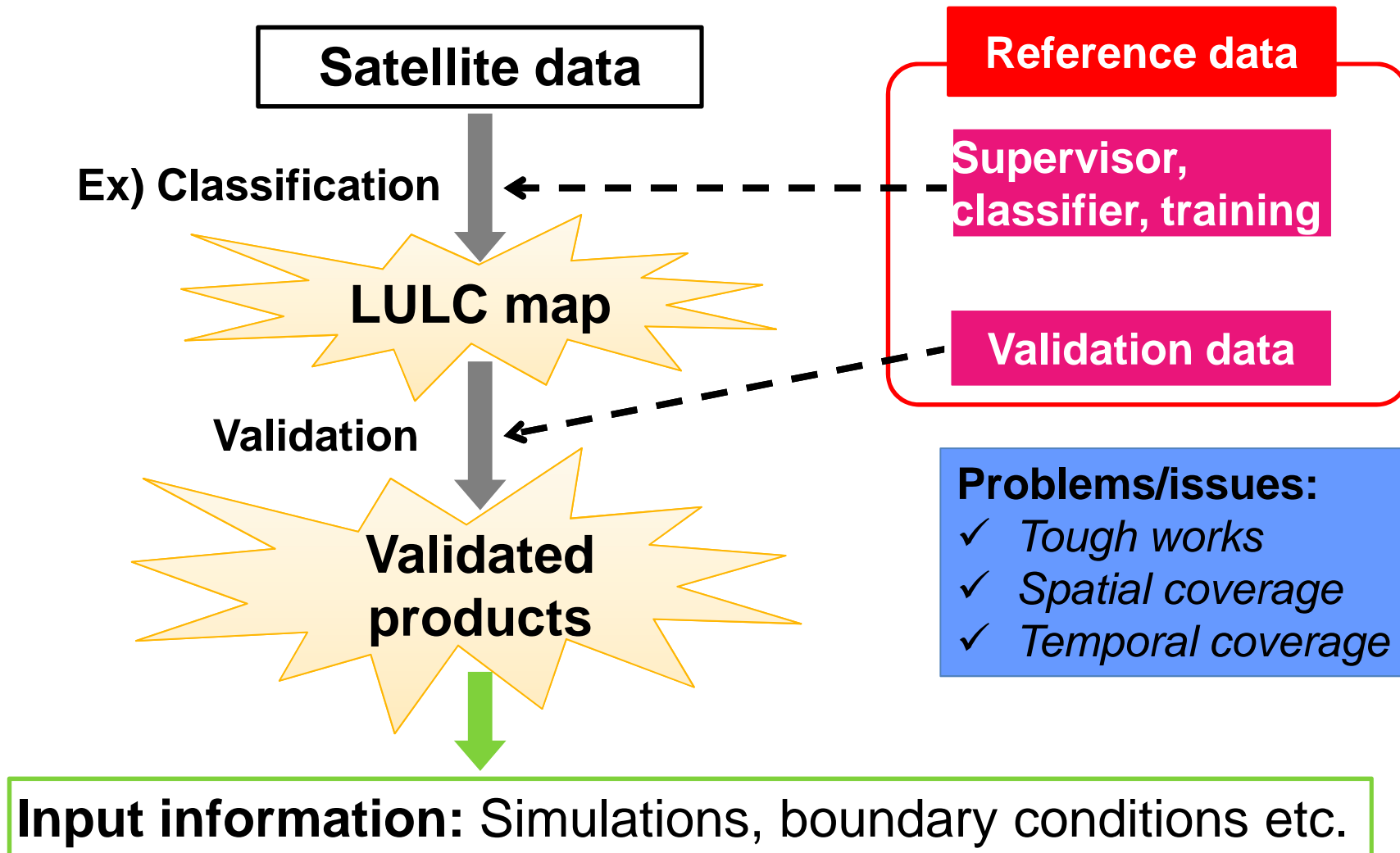
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Background

Any information derived from satellite remote sensing
> “Reference data” is important !



What's "SACLA-J"?

- ✓ **"SACLA-J"** (Site-based dataset for evaluating Annual Change of LAnd cover type by JAXA) is a **database of "on-site data"** for managing the **reference data** of the land-use and land-cover (LULC) products.
 - ❑ **"On-site data"**: It is "what is there" at a single location and at a single moment, and consists of date, location, land cover, representative area, author, and a photo to prove it.
 - ❑ Method: Various people and institutions interpret field data (mainly **field photos with GPS enabled camera**).
 - ❑ Collection policy: Collect only trustworthy information (interpretation) from field data. Do not collect uncertain information. If it is trustworthy enough, we collect non-field data such as Google Earth or aerial photos.
- ✓ **"SACLA-J Web"**: Online, Web-based User Interface



Let's collect "on-site data" from all over the world and all over the history!

Framework of "SACLA-J"

Data Sources

SACLA-J G

Personal field photos

Oklahoma Univ. Field Photo

Degree Confluence Project (DCP)

■ ■ ■



01-0403743-2002

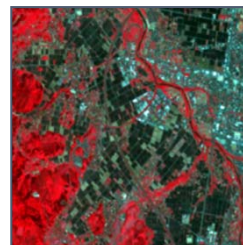
WILEY-BLANKENHORN, INC.

SACLA-J RS

High resolution satellite

Aerial photos

...



Others

Vegetation map

Ground station: FLUXNET

Monitoring Sites 1000

..

Input by users

SACLA-J Web

SACLA-J

| A/T | LON | DATE | カテゴリ | 空欄代表値 | 格納場所 | 写真枚数 | 撮影者 | 連絡先 | 備考 | | | |
|-----------|-----------|------|-----------|-------------|-----------|------|--------------------------------|------|------------|-----------------------|-------|----|
| 35.445400 | | | | | | | | | | | | |
| 35.445400 | A/T | LON | DATE | カテゴリ | 空欄代表値 | 格納場所 | 写真枚数 | 撮影者 | 連絡先 | 備考 | | |
| 35.445400 | 35.445400 | -11 | A/T | LON | DATE | カテゴリ | 空欄代表値 | 格納場所 | 写真枚数 | 撮影者 | 連絡先 | 備考 |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2005/5/12 | 12 | 5CD-WN85.4454W11.7718_20060512 | | 9FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2006/3/3 | 12 | 5CD-WN85.4454W11.7718_20060303 | | 12FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2007/1/1 | 12 | 5CD-WN85.4454W11.7718_20070101 | | 3FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2008/8/31 | 12 | 5CD-WN85.4454W11.7718_20080831 | | 6FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2009/12/5 | 12 | 5CD-WN85.4454W11.7718_20091205 | | 4FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2010/1/22 | 12 | 5CD-WN85.4454W11.7718_20100122 | | 8FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |
| 35.445400 | 35.445400 | -11 | 35.445400 | -111.771800 | 2011/2/14 | 12 | 5CD-WN85.4454W11.7718_20110214 | | 7FESTEC太郎 | t.jestec@restec.or.jp | 写真非公開 | |

Download in CSV and kml

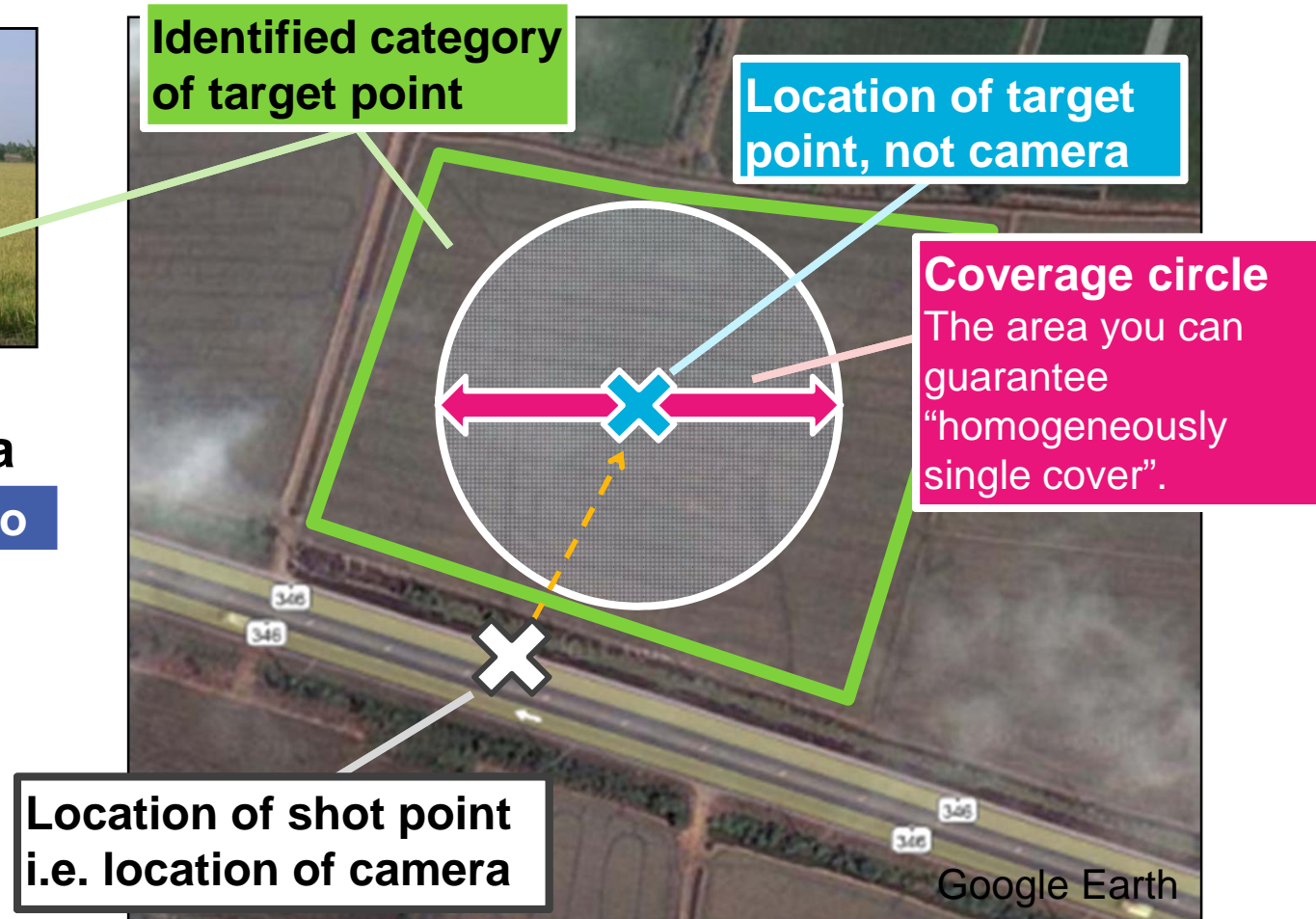
Reference data

On-Site Data in "SACLA-J"

On-site data = {**date**, **category**, **target point**, **coverage circle**}



**Field photo
by GPS camera**
Date took a photo



http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html

SACLAJ Web

What is SACLAJ

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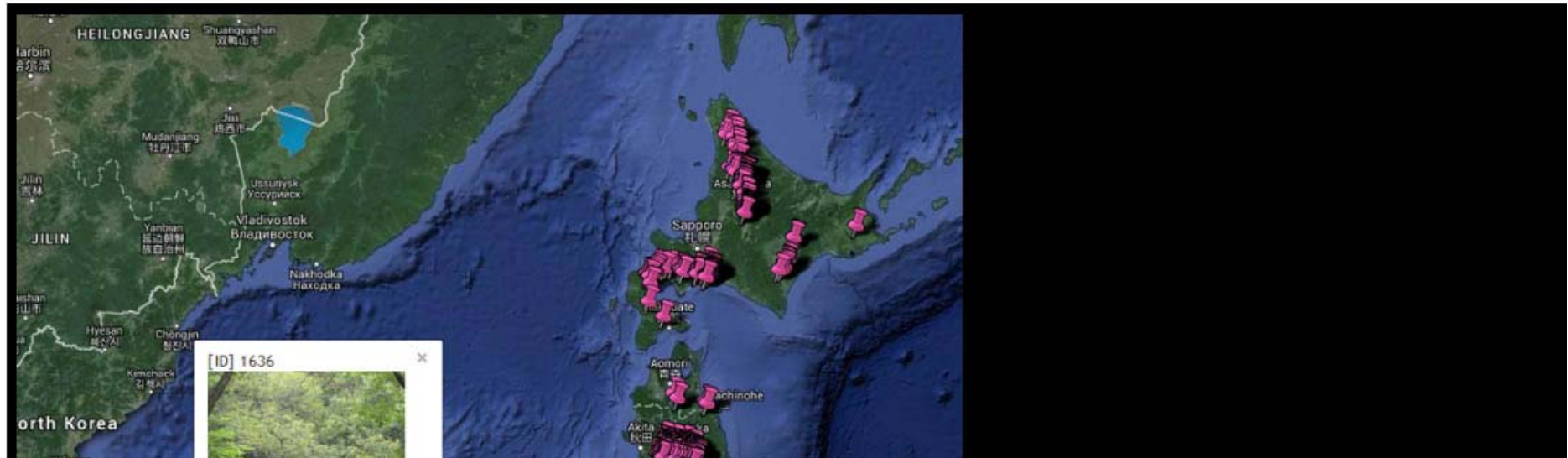
Message Board

Contact

Language
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SACLAJ

The project for building reference dataset for Land Use and Land Cover map. [Learn more](#)



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SACLAJ-G "on-site data" uploading system

Click [here](#) to using Google Maps instead of Google Earth.

How to upload your on-site data (you can close this by clicking here)

1. Click "Add photo" button and choose photos. Photo is the source of "on-site data".
2. Choose a photo from thumbnail list. Then a placemark appears on the maps.
3. Move the placemark on the right map to "Target point".
4. Input diameter of "Homogeneous area." Then a circle appears on the right map.
5. Check whether the circle is within a homogeneous patch on the map. If not, change the value of diameter again.
6. Input other items and save the data. Then Your photo and "on-site data" will be added to the database.

[Operating Environment]: This system operates on latest [Firefox](#) or [Google Chrome](#), with [Google Earth plug-in](#).

⊕ Add photo

参照
参照...

◀ Previous Photo Next Photo ▶ (0 / 0)

✓ User Interface improves day-by-day to become much convenience for user.

Demo movie

Manual, movie, and publication list are provided online.

http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html

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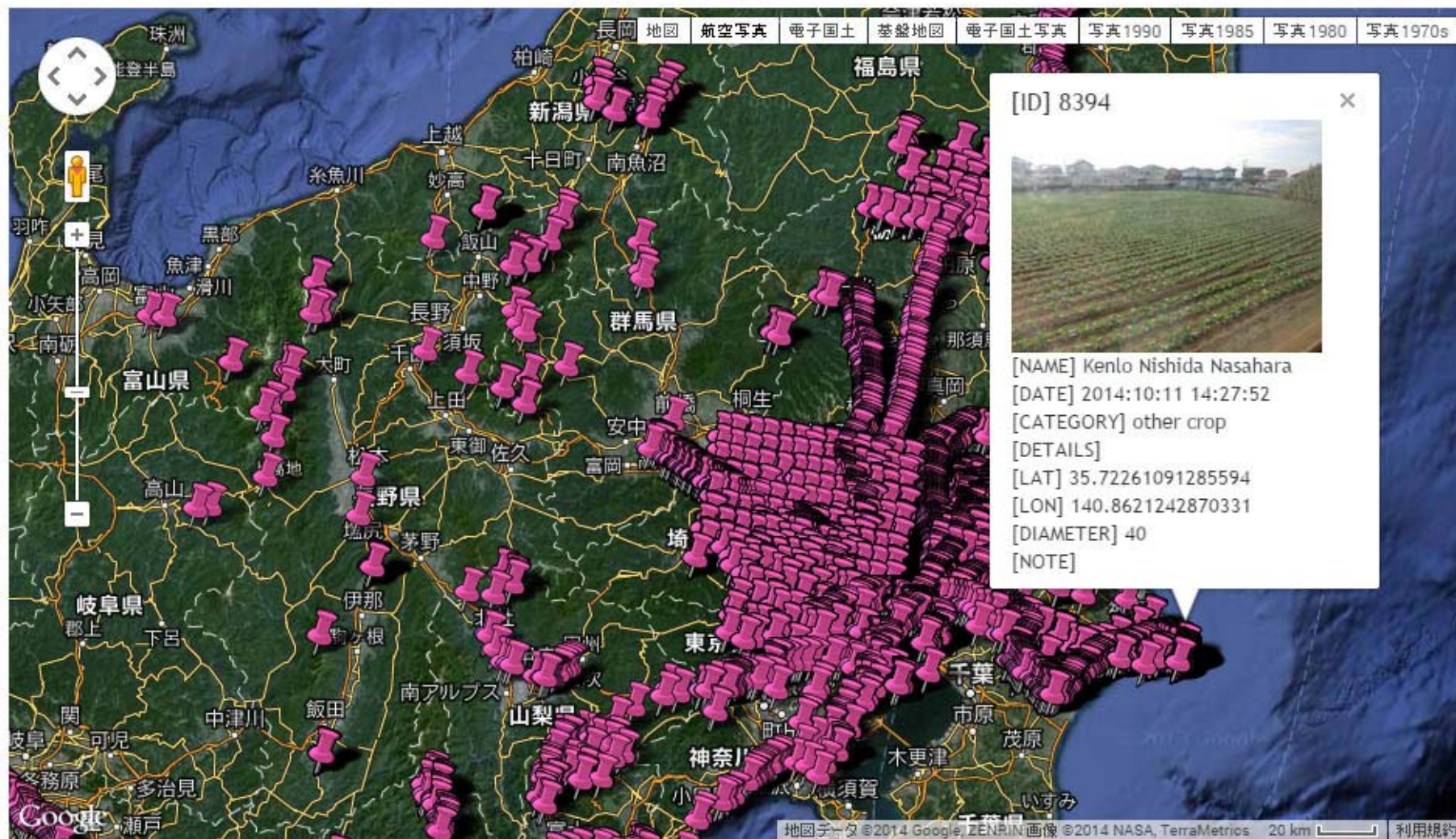
SACLAJ-G Search Data

Page: 1 1 - 100 / 12281(12281) 100

| ID | NAME | ADDRESS | DATE | FOLDER | PHOTO | CATEGORY | CATEGORY DETAILS | DIAMETER[m] | LATITUDE | LONGITUDE |
|----|------------------------|-------------------------|---------------------|------------------------|---|------------|---------------------|-------------|----------|-----------|
| | All | All | | | | All | All | All | | |
| 1 | Kenlo Nishida Nasahara | 24dakenlo@gmail.com | 2014:04:14 15:06:48 | 2014_0414_FHK_Nasahara |  | dbf | | 100 | 35.56044 | 139.65044 |
| 2 | zukemura | zukemura@affrc.go.jp | 2013:12:02 15:11:33 | Miyakojima |  | other crop | | 30 | 24.82481 | 121.77481 |
| 3 | zukemura | zukemura@affrc.go.jp | 2013:10:17 12:47:35 | Watari-cho, Miyagi |  | rice | Paddy rice | 80 | 38.06212 | 141.86212 |
| 4 | zukemura | zukemura@affrc.go.jp | 2013:10:17 13:13:10 | Watari-cho, Miyagi |  | rice | Paddy rice | 40 | 38.06250 | 141.86250 |
| 5 | zukemura | zukemura@affrc.go.jp | 2013:10:17 13:23:22 | Watari-cho, Miyagi |  | other crop | soy bean | 30 | 38.06267 | 141.86267 |
| 6 | R Dan | dan_risako@restec.or.jp | 2014:05:19 | Tsukuba/Tsukuba |  | other crop | Lotus root (Gyodan) | 35 | 36.09076 | 140.19076 |

"SACLA-J Web"

http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html



http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html

SACLAJ Web

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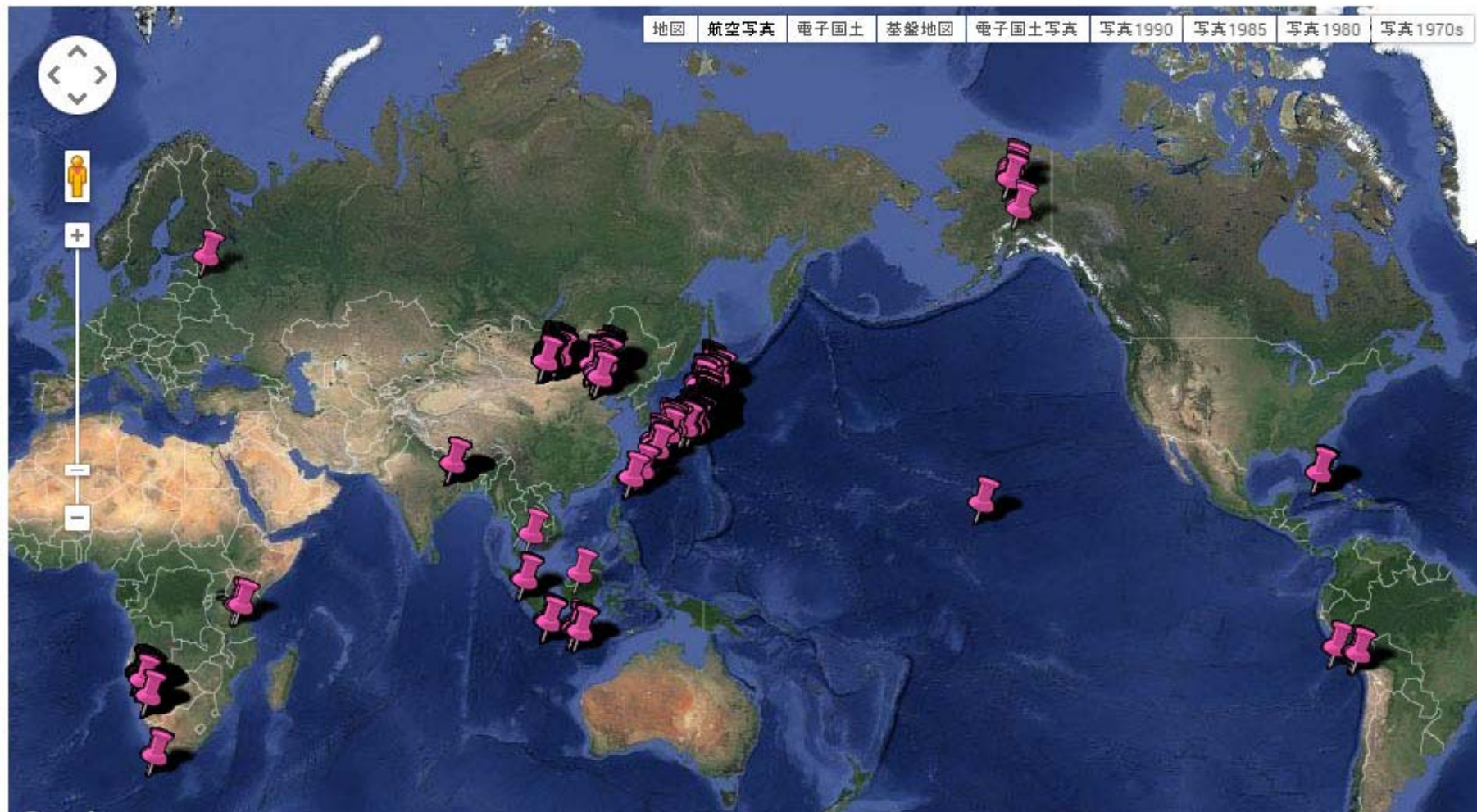
Ranking

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SACLAJ-G Search Data(by Map)



http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html

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SACLAJ-G Ranking

12,281 POINTS (Wed Dec 3 18:30:58 JST 2014)

Contributor Ranking

GRADING SCALE: What are [KYU](#) and [DAN](#)?

| # | POINTS | NAME | GRADE |
|---|--------|------------------------|--------|
| 1 | 5667 | M Doutsu (RESTEC) | [6DAN] |
| 2 | 3022 | Kenlo Nishida Nasahara | [4DAN] |
| 3 | 801 | MIZUOCHI Hiroki | [1DAN] |
| 4 | 796 | Kentaro Aida | [1DAN] |
| 5 | 481 | R Dan (RESTEC) | [1KYU] |
| 6 | 435 | T Watanabe (RESTEC) | [1KYU] |
| 7 | 366 | K Yamasaki (U Tsukuba) | [2KYU] |

Category Ranking

| # | POINTS | Category |
|---|--------|--------------------|
| 1 | 3433 | rice |
| 2 | 1990 | grasslands |
| 3 | 1434 | other_crop |
| 4 | 1226 | urban_and_built-up |
| 5 | 898 | enf |
| 6 | 644 | dbf |
| 7 | 538 | water_area |
| 8 | 336 | ebf |

- ✓ You can see "great contributors" by yourself.
- ✓ Do you know Grade "**KYU**" and "**DAN**"?

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Download SACLAJ-G data

 [Download on-site data \(CSV\)](#) [\[UTF-8\]](#) [\[SJIS\(For Excel\)\]](#)

 [Download on-site data \(KML\)](#) **[NEW]**

 [View uploaded field photo](#)

University of Tsukuba, Japan Aerospace Exploration Agency (JAXA), Remote Sensing Technology Center (RESTEC)

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SACLA-J – Data Policy

JAXA is considering the data policy of “SACLA-J” database base on “**Creative Commons**”, which is defined between “All rights reserved” and “Public Domain” i.e. “*Some rights reserved*”.

“**CC BY-SA 4.0 International**” (under discussing)

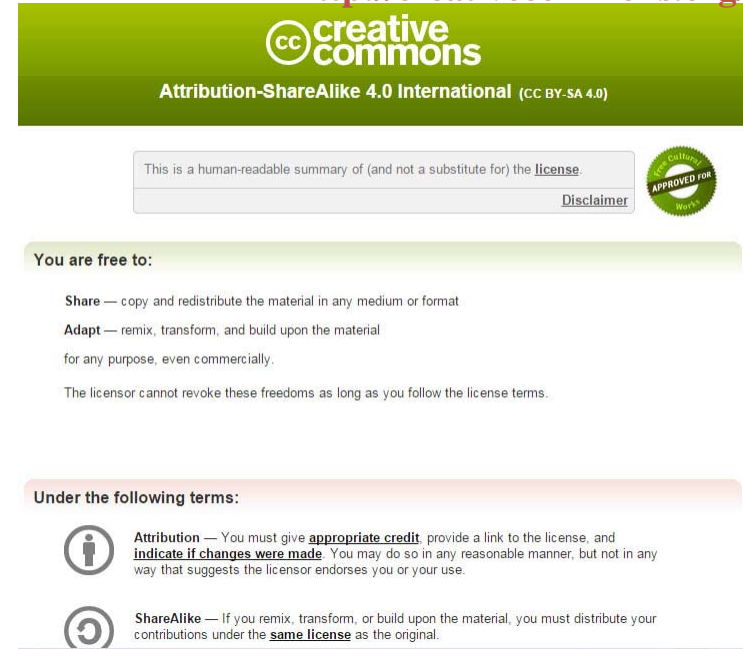
Anyone can be free to “Share” and “Adapt” for any purposes, however must give appropriate credit attached by yourself.

If you agree with the policy, share the field photos with supplementary information!

http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html

Please contact to Takeshi MOTOHKA
<motooka.takeshi@jaxa.jp> for collecting the K&C ground data.

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