Introduction of "SACLA-J"

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

December 5, 2014

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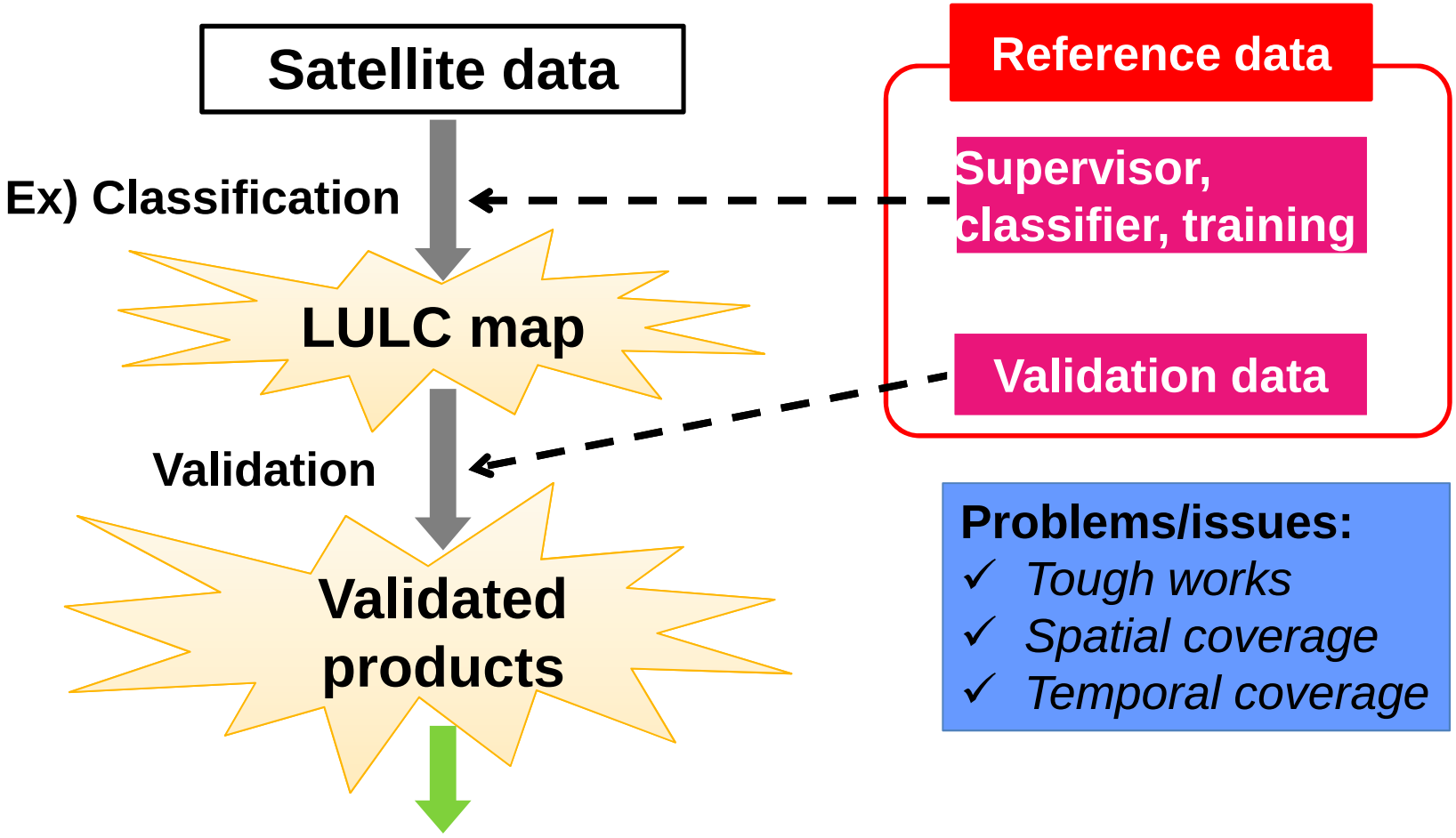
Background

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



Input information: Simulations, boundary conditions etc.

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)

...

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

LAT	LON	DATE	カテゴリ	空間代表径	格納場所	写真枚数	撮影者	連絡先	備考
35.445400	-111.771800	2005/5/12	12	5	CD:¥N35.4454W111.7718_20050512	9	RESTEC太郎	t_restec@restec.or.jp	写真非公開
35.445400	-111.771800	2006/3/3	12	5	CD:¥N35.4454W111.7718_20060303	12	RESTEC太郎	t_restec@restec.or.jp	写真非公開
35.445400	-111.771800	2007/11/1	12	5	CD:¥N35.4454W111.7718_20071101	3	RESTEC太郎	t_restec@restec.or.jp	写真非公開
35.445400	-111.771800	2008/8/31	12	5	CD:¥N35.4454W111.7718_20080831	5	RESTEC太郎	t_restec@restec.or.jp	写真非公開
35.445400	-111.771800	2009/12/5	12	5	CD:¥N35.4454W111.7718_20091205	4	RESTEC太郎	t_restec@restec.or.jp	写真非公開
35.445400	-111.771800	2010/1/22	12	5	CD:¥N35.4454W111.7718_20100122	8	RESTEC太郎	t_restec@restec.or.jp	写真非公開
35.445400	-111.771800	2011/2/14	12	5	CD:¥N35.4454W111.7718_20110214	7	RESTEC太郎	t_restec@restec.or.jp	写真非公開

Download in CSV and kml

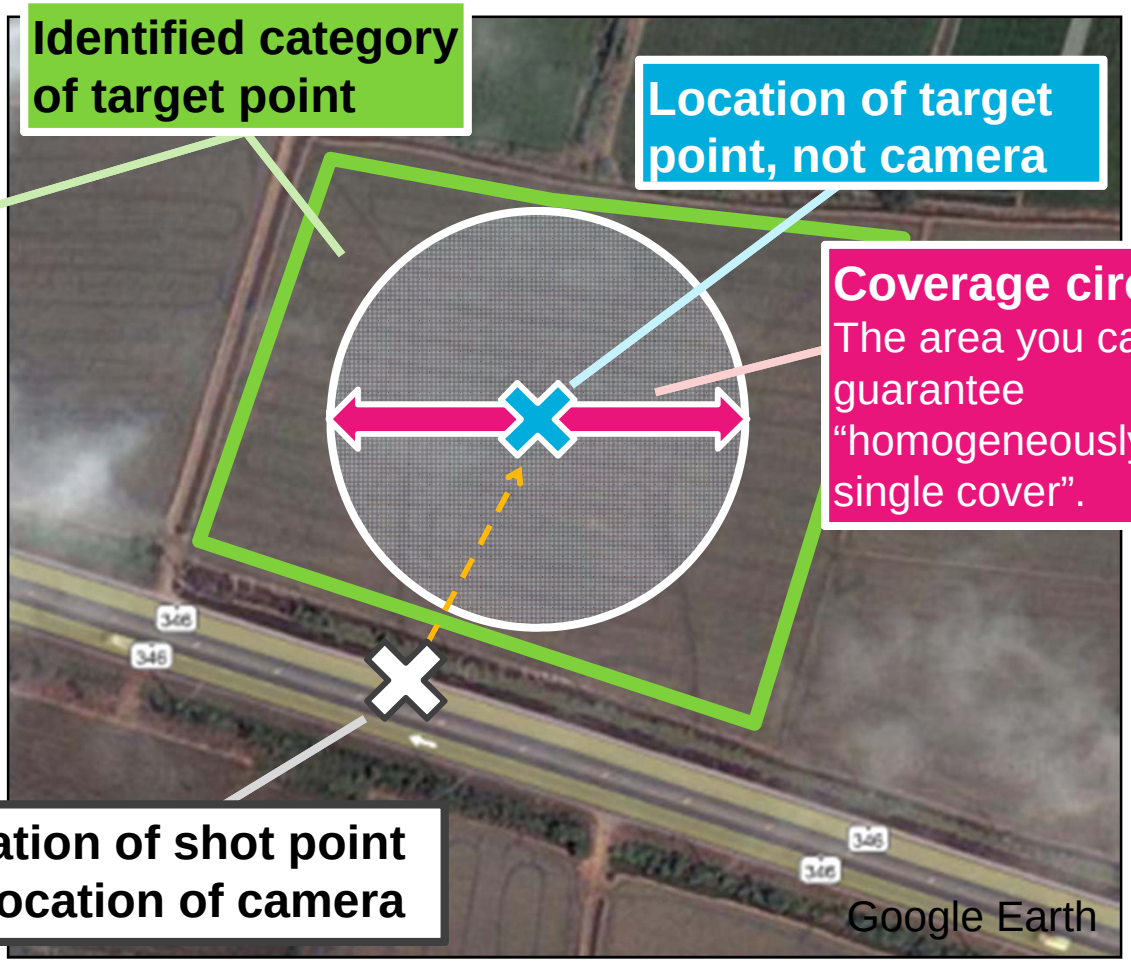
Reference data

On-Site Data in “SACLA-J”

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

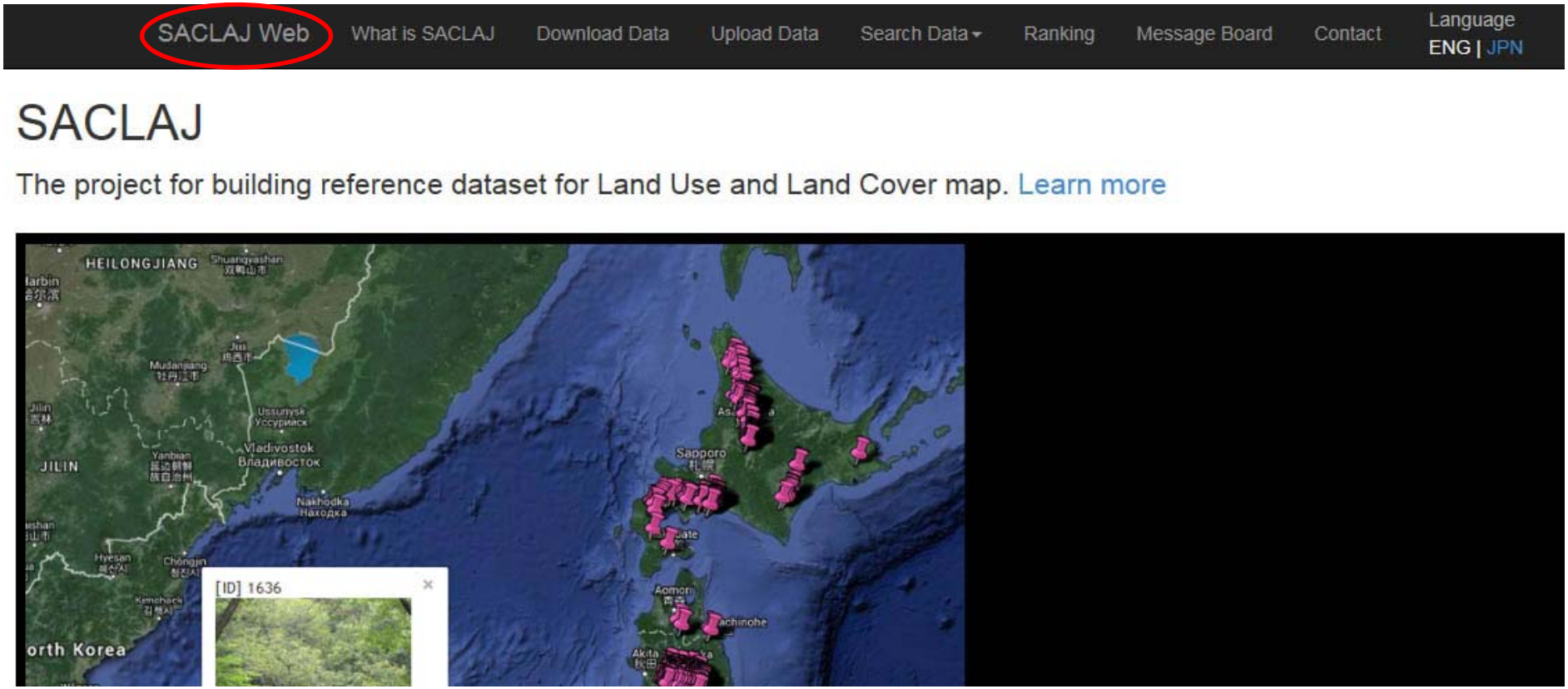
Field photo by GPS camera

Date took a photo



“SACLA-J Web”

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



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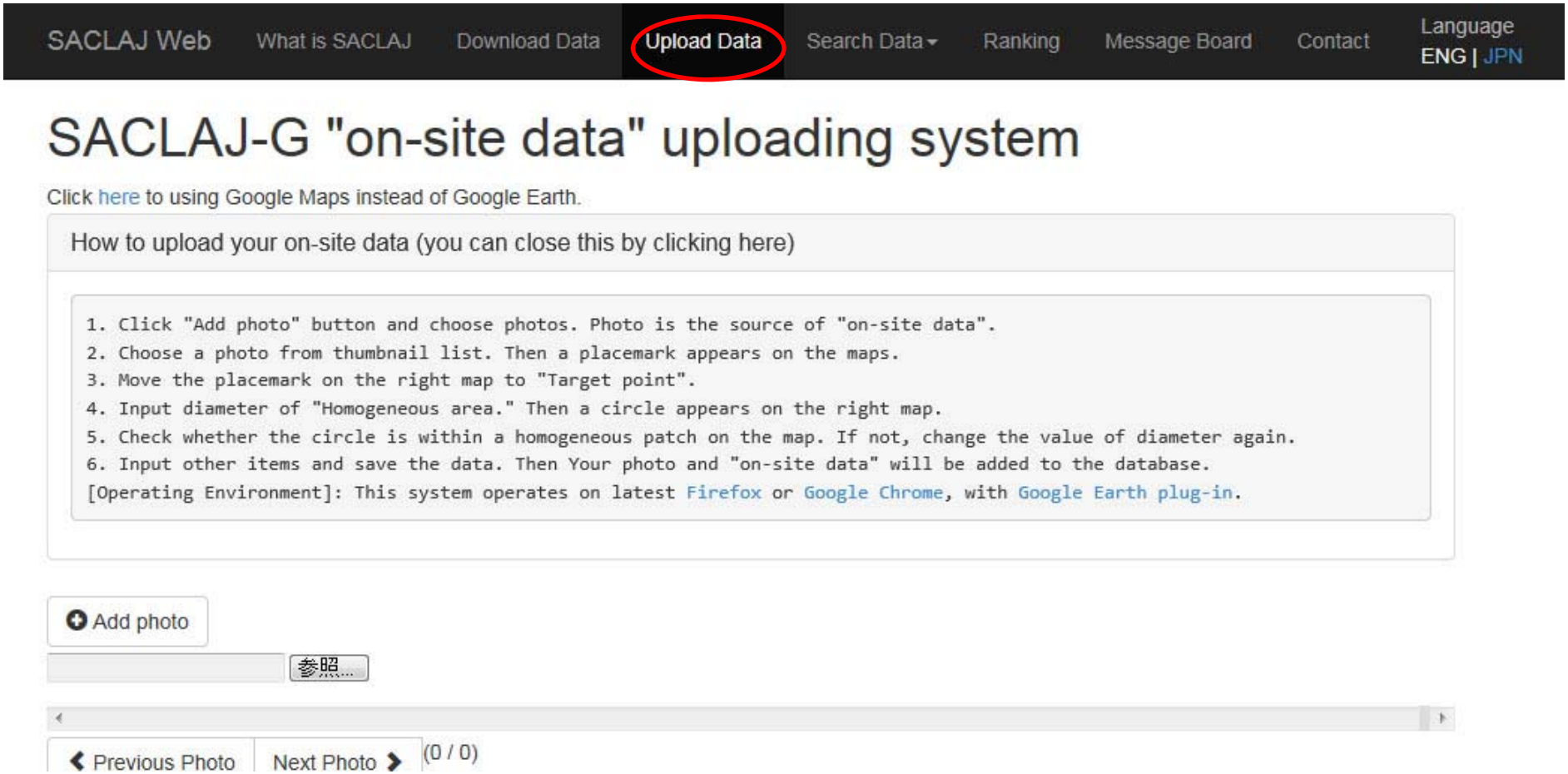

✓ User Interface improves day-by-day to become much convenience for user.

“SACLA-J Web”

Demo movie

Manual, movie, and publication list are provided online.

“SACLA-J Web”

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

SACLAJ Web | What is SACLAJ | Download Data | Upload Data | Search Data | Ranking | Message Board | Contact | Language ENG | JPN

SACLAJ-G Search Data

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

ID	NAME	ADDRESS	DATE	FOLDER	PHOTO	CATEGORY	CATEGORY DETAILS	DIAMETER[m]	LATITUDE	LO
	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	13
2	zukemura	zukemura@affrc.go.jp	2013:12:02 15:11:33	Miyakojima		other crop		30	24.82481	12
3	zukemura	zukemura@affrc.go.jp	2013:10:17 12:47:35	Watari-cho, Miyagi		rice	Paddy rice	80	38.06212	14
4	zukemura	zukemura@affrc.go.jp	2013:10:17 13:13:10	Watari-cho, Miyagi		rice	Paddy rice	40	38.06250	14
5	zukemura	zukemura@affrc.go.jp	2013:10:17 13:23:22	Watari-cho, Miyagi		other crop	soy bean	30	38.06267	14
6	R Dan	dan_risako@restec.or.jp	2014:05:19	Tsukuba/Tsuchiura		other crop	lotus root レンコン	35	36.09076	14

“SACLA-J Web”

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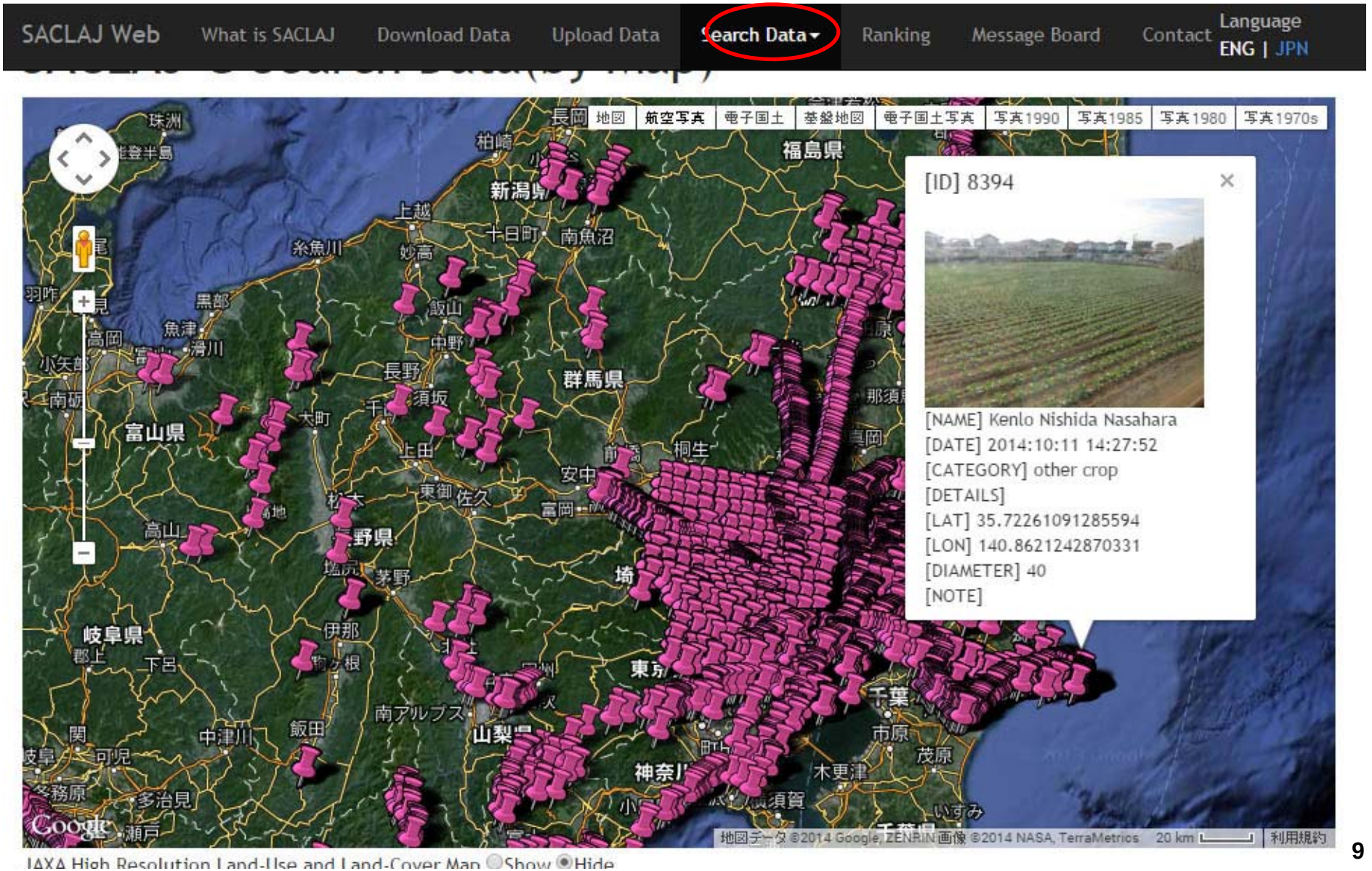

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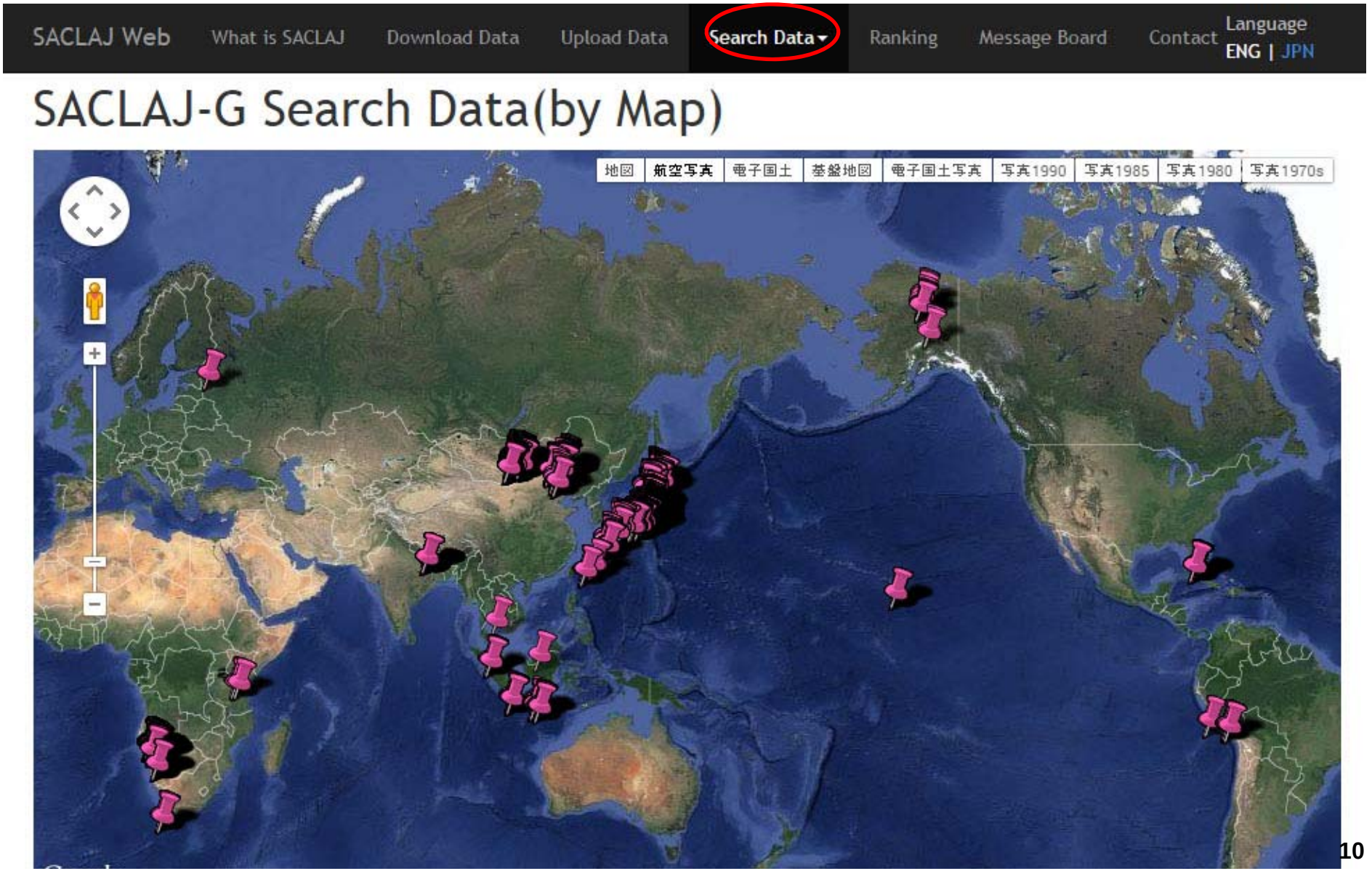

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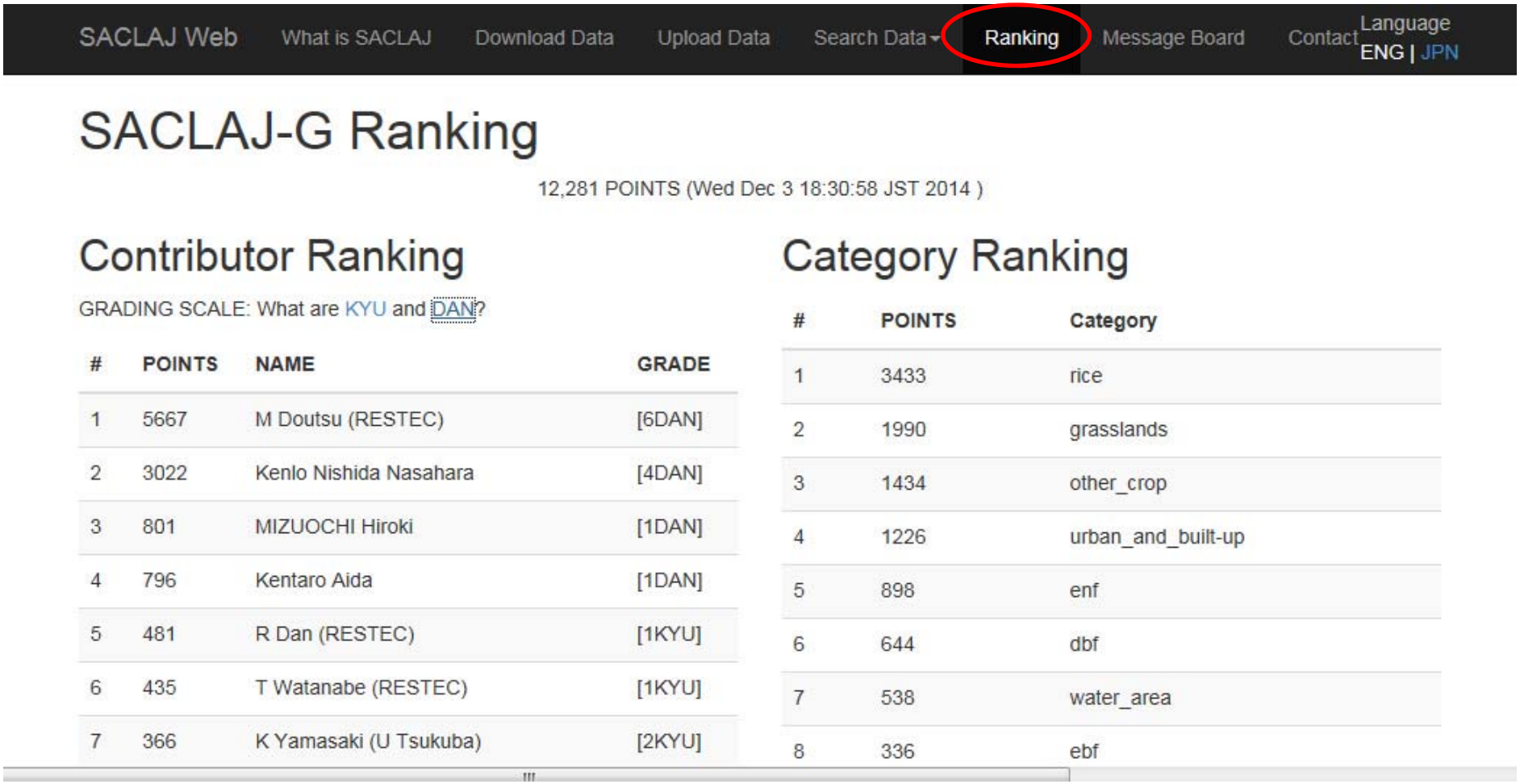
http://pen.agbi.tsukuba.ac.jp/~lulc/SACLAJ/index_eng.html



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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]

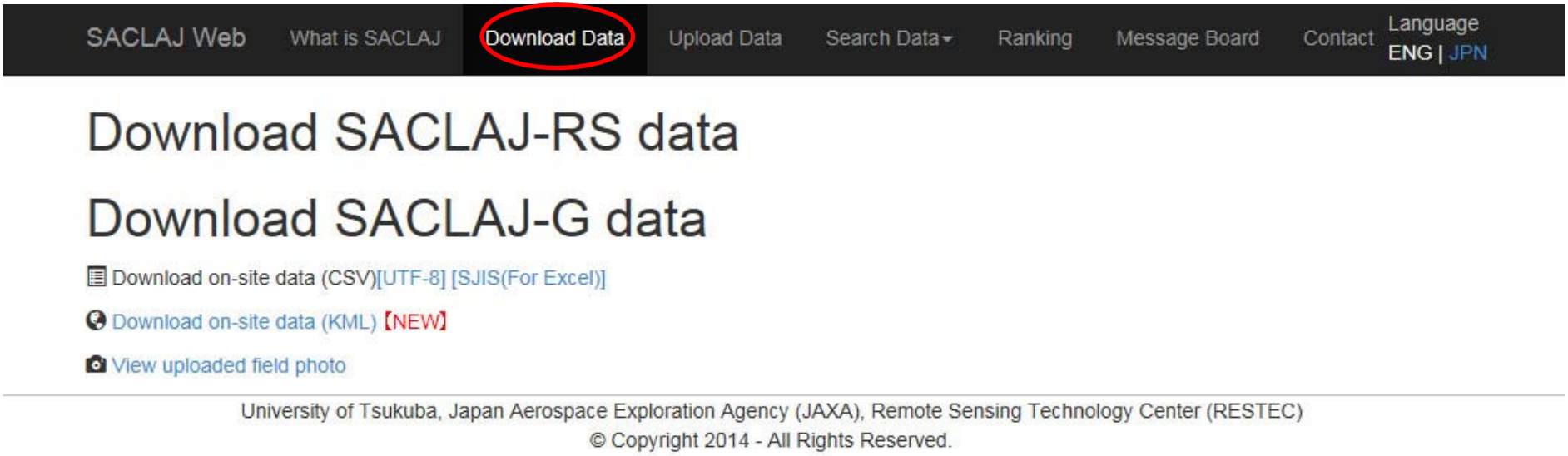
Category Ranking

#	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”***?

“SACLA-J Web”

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



SACLA-J – Data Policy

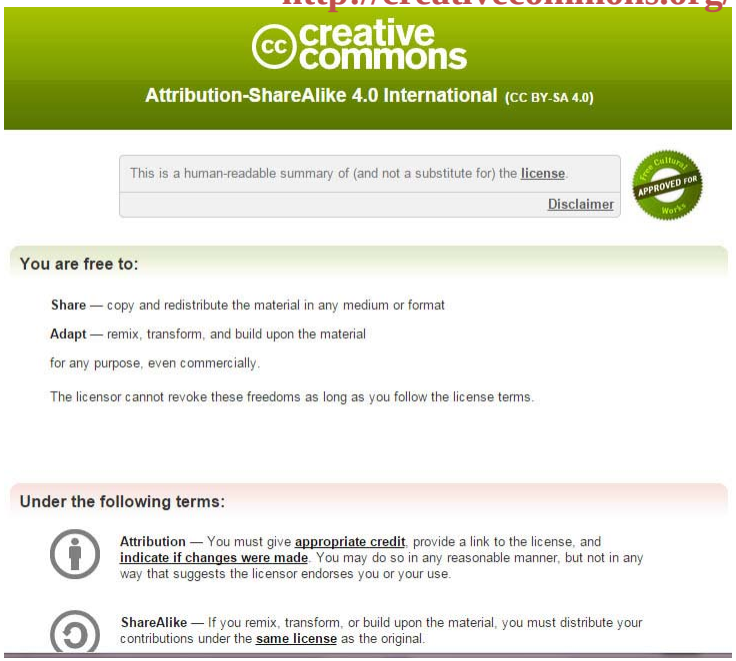
JAXA is considering the data policy of “SACLA-J” database base on ***“Creative Commons”***, which is defined between “All rights reserved” and “Public Domain” i.e. *“Some rights reserved”*.

“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://creativecommons.org/



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

User name: lulc
Password: avnir2

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