Introduction of AXELGLOBE

AXELSPACE

AfricaGIS 2017

Who we are

Head Quarter

Our Track Record

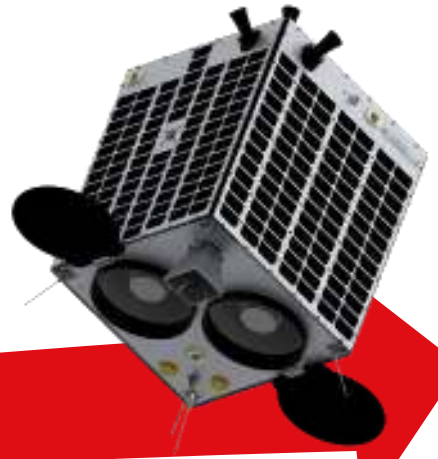
Our track records shows the confidence to archive next mission successfully.

Year 2013
WNISAT-1

Year 2014
Hodoyoshi-1

Year 2017
WNISAT-1R

Year 2018
GRUS



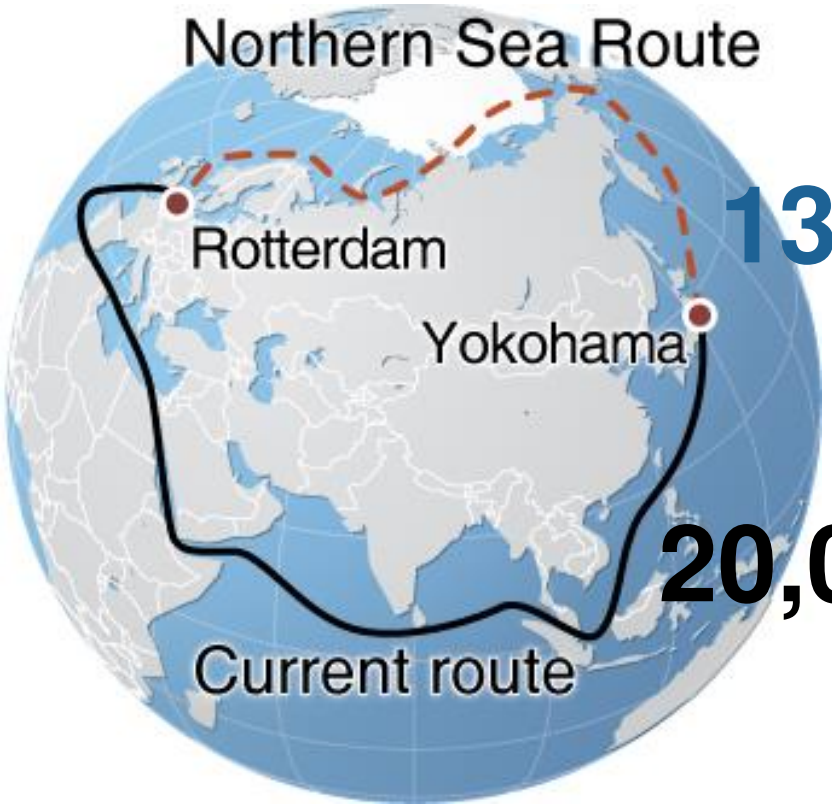
WNISAT-1R

SEA ICE, TYPHOONS, VOLCANOS.
THE LATEST DATA, STRAIGHT FROM SPACE.

AXELSPACE

weathernews

weathernews



13,000km

20,000km

HODOYOSHI-1

PIONEERING THE FUTURE
OF REMOTE SENSING

AXELSPACE


Lake Chad

Kilimanjaro


Alexandria

Recent Project

Our capacity of developing and operating is getting trust from Japanese Space Agency(JAXA)

Overview	We has been selected by JAXA for the production of the first satellite in the **“Innovative Satellite Technology Demonstration Program”** based on a technical proposal. JAXA makes a contract with a venture company for the first time for consigning whole process of satellite project (designing, building and operation).
Mission	In-orbit demonstration of new satellite component (eight instruments selected during a public tender)
Phase	Preparation phase
Expected Launch	In 2018, by Japanese Epsilon Rocket

Our Advantage

We have great experience and capacity in every phase of the small satellite business. It represents our confidence to achieve next mission successfully.

Our Capacity					
Designing	Building	Launching	Operating		Creating Business Application
• Design a unique satellite along with requests from our customer	• Procure and produce equipment for designed satellite • Assemble, integrate and Test the satellite	• Arrange suitable launch vehicle • Contract with launch service provider • Arrange Insurance • Arrange shipping of the satellite	• Develop satellite operation system • Calibrate satellite equipment after Launch • Execute daily tasking and operation maintenance	AND	• Develop business applications utilizing satellite imagery and cutting edge analysis method

AXELGLOBE VISION

We will launch 50 micro satellites that can image the whole civilized world every day with 2.5 meter spatial resolution.

Project Timeline

We have continuous plan to launch the satellites. Our constellation will be completed by 2022.

2018	3 first-gen GRUS satellites will be launched
2020	10 GRUS satellites
2021	20 GRUS satellites
2022	Constellation will be completed with 50 GRUS satellites

Completion of Fundraising for AXELGLOBE

We have completed its series A fundraising of JPY 1.9B ($17M) in 2015 for first 3 satellites launch.

Venture Capitals	Business Enterprises
GB Global Brain Corporation SBI Investment SMBC JST Energy Environment Investment SEIBU ITV ITOCHU TECHNOLOGY VENTURES	MITSUI & CO. SKY Perfect JSAT Group WN weathernews

GRUS Key Specifications

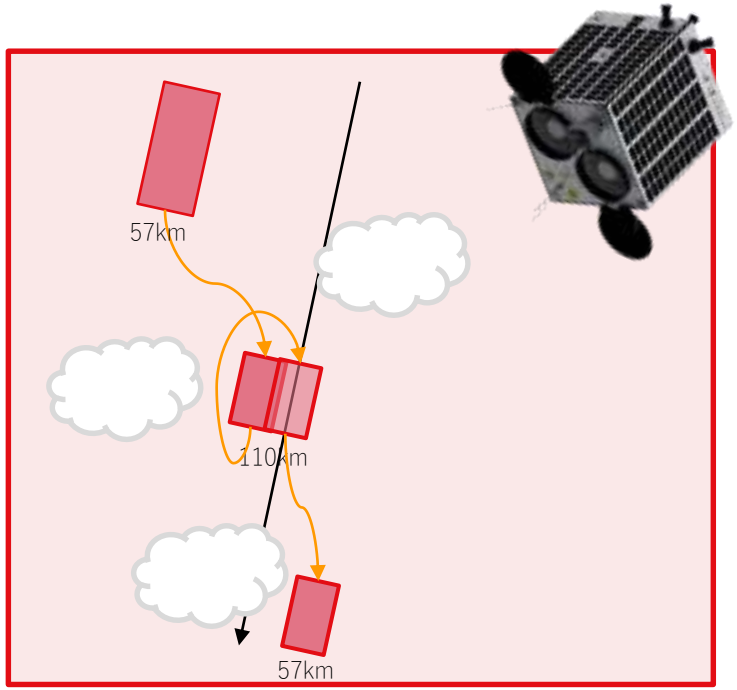
Our GRUS satellite has the capability to collect 2.5m resolution wide imageries. In the time of three satellites operating we can image on same specific area every day.

Size : 60cm x 60cm x 80cm
Mass : 100kg

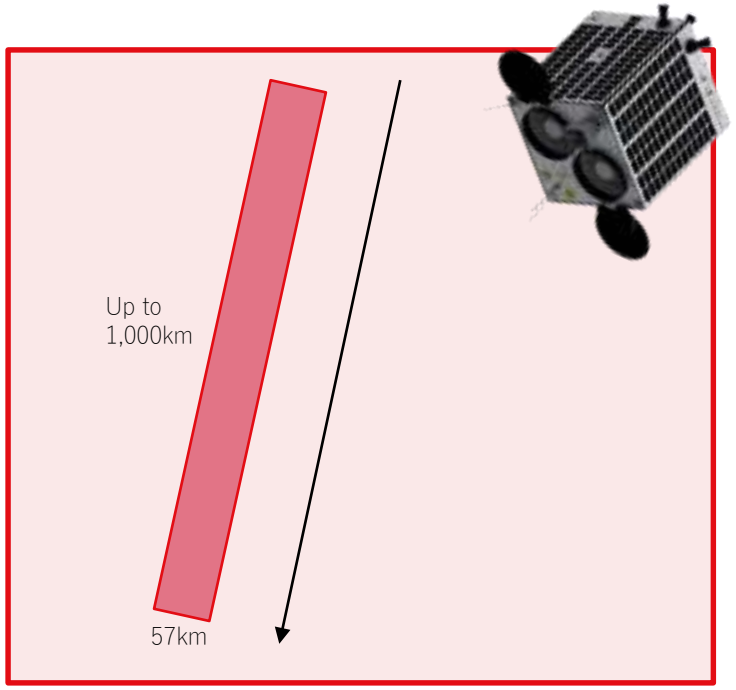
SPEC		
Product Resolution	Panchromatic： 2.0m (GSD: 2.5m)	
	Multispectral： 4.0m (GSD: 5.0m)	
Spectral Bands	Panchromatic	450-900nm
	Blue	450-505nm
	Green	515-585nm
	Red	620-685nm
	Red Edge	705-745nm
	Near Infrared	770-900nm
Swath	> 57km	
Revisit (for 3 first-gen satellites)	1day : up to 40° off-nadir angle (at the Equator) 7days : up to 5° off-nadir angle (at the Equator)	
Coverage Area	850,000km^2/day	

Collection capability

We can collect the image flexibly along the user's request by the GRUS satellite's ability.



Pointing Collection

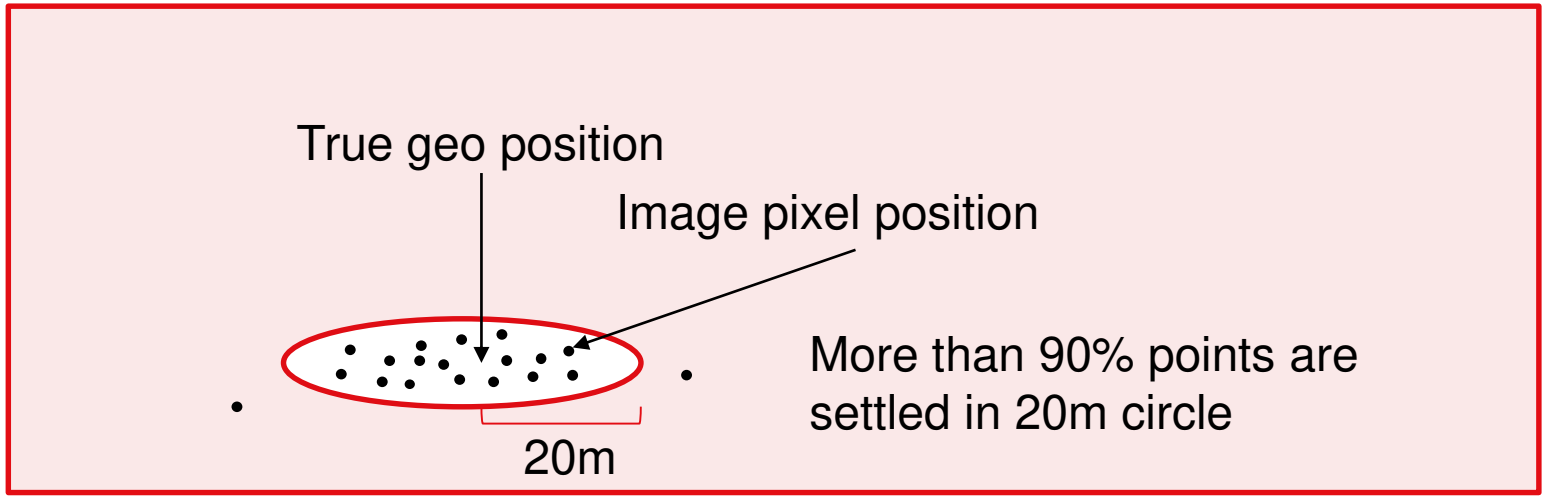


Long Strip Collection

Higher geo accuracy

GRUS images with higher geo accuracy will allow the change detection operation easily.

CE90 20m (without Ground Control Point)
And to will improve it with Ground Control Point



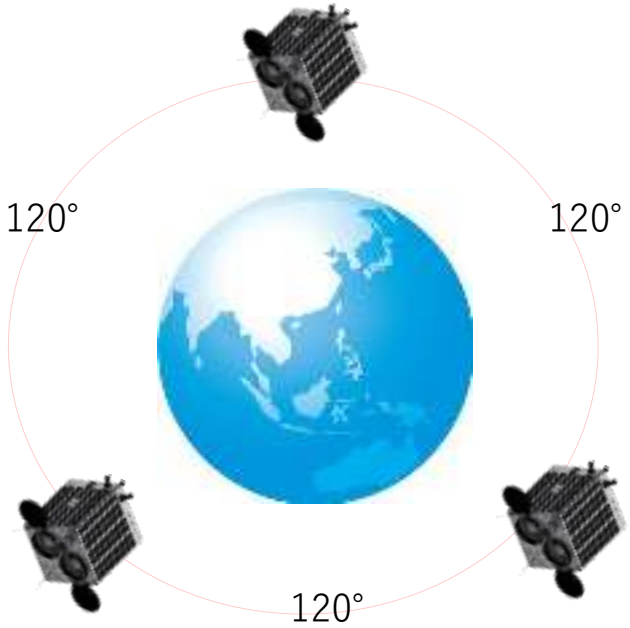
CE (Circular Error) 90 20m

Uniformity of data-set

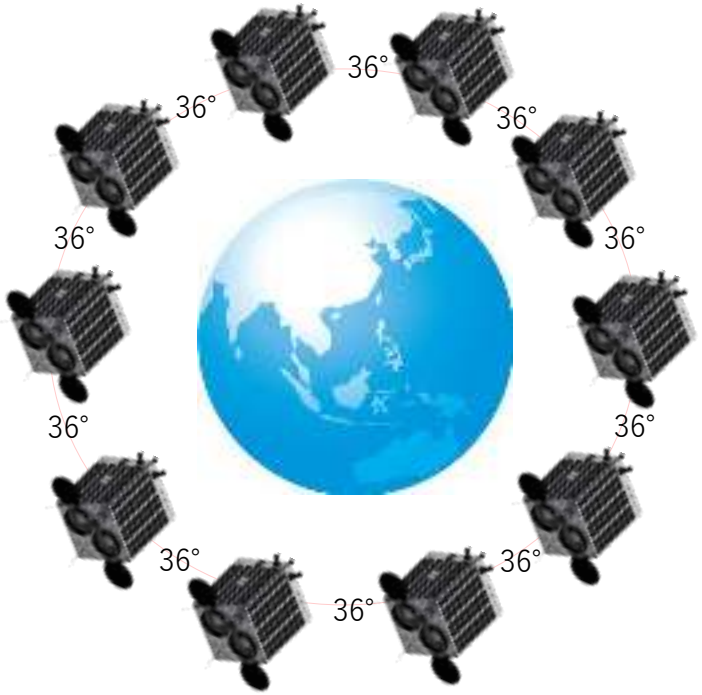
All satellites of AXELGLOBE will be launched into the same sun-synchronous orbit plain and each satellites has the same sensor.

Constellation arrangement

We will set GRUS satellites at regular intervals in one single orbit plane by using its propulsion system. It allows us to collect imagery data efficiently.



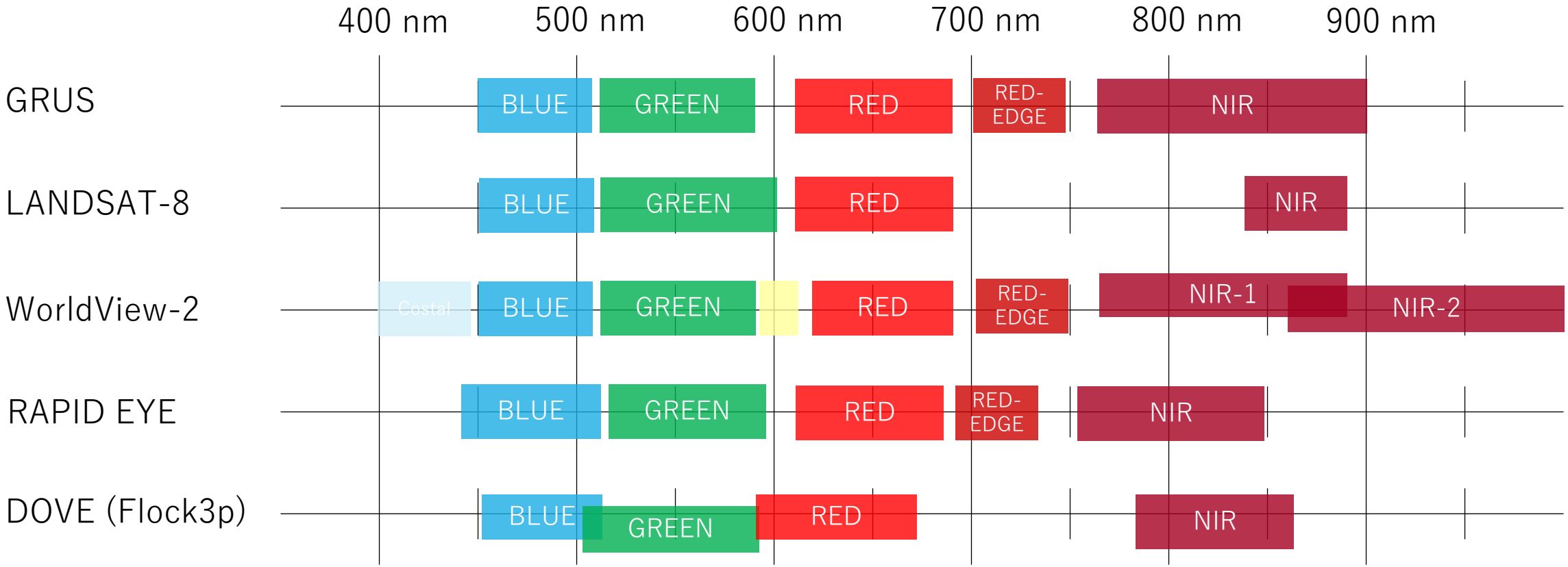
2018



2020

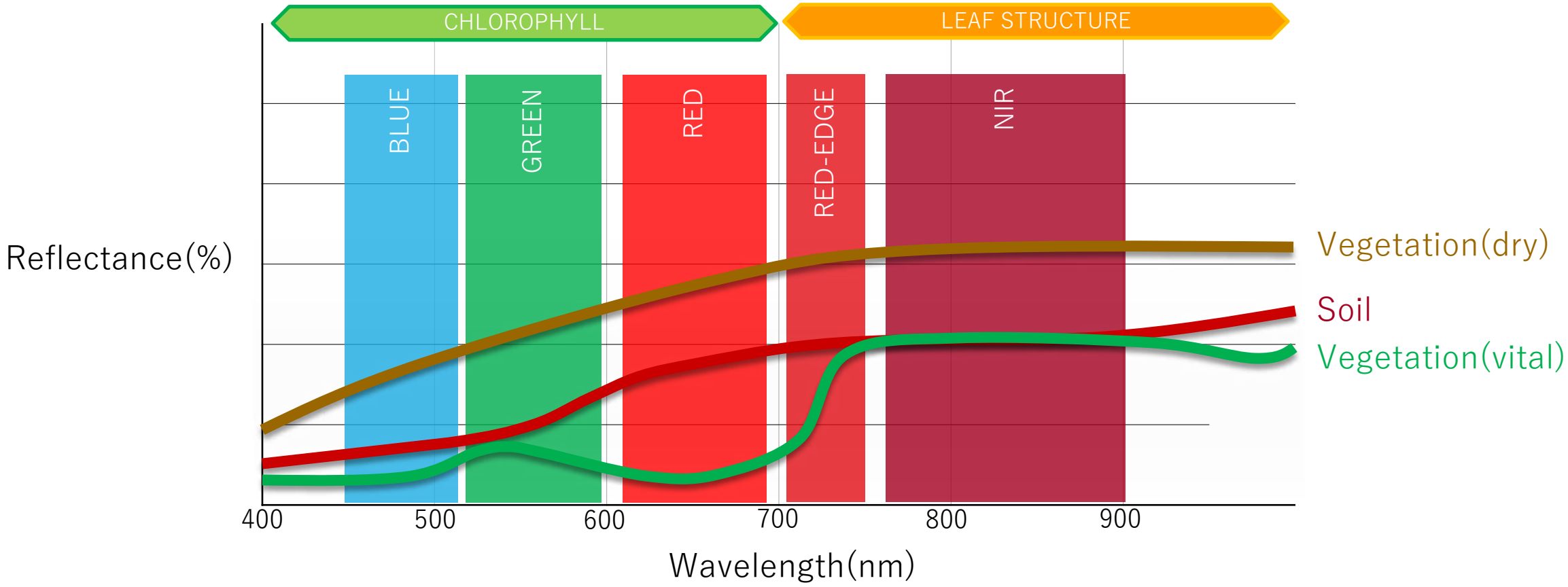
Compatibility of Spectral Bands

GRUS data will be easy to use because of its compatibility with other existing remote-sensing satellite data.



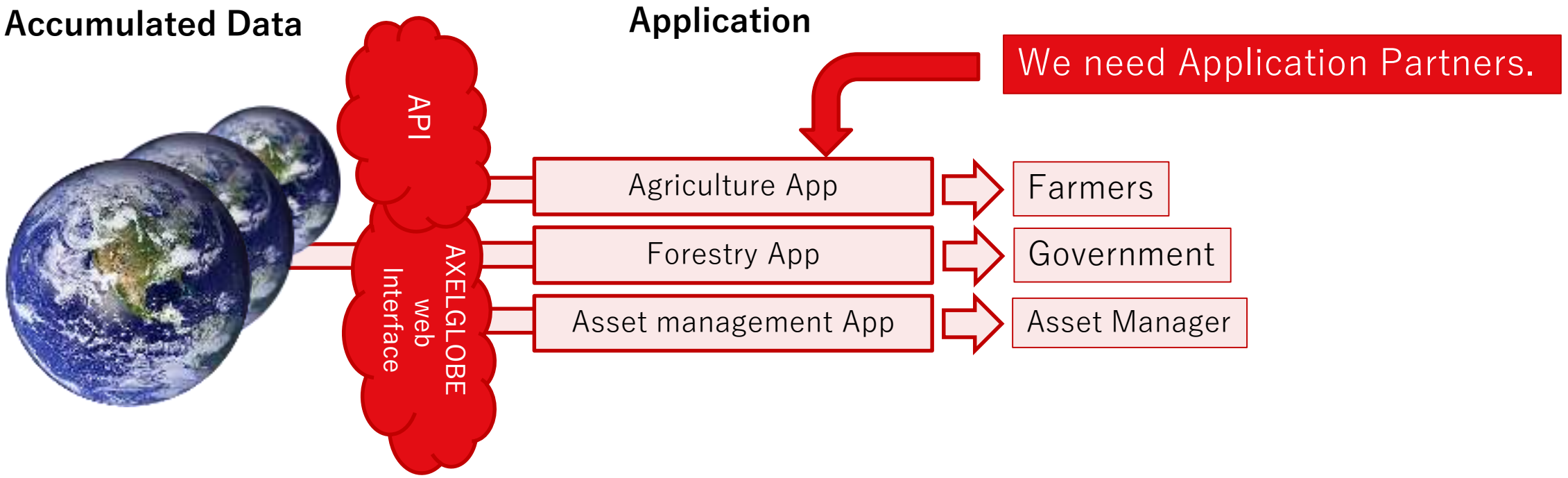
Red Edge Band

Red Edge Band is most powerful band to analyze the plant's condition with chlorophyll number on leaves.



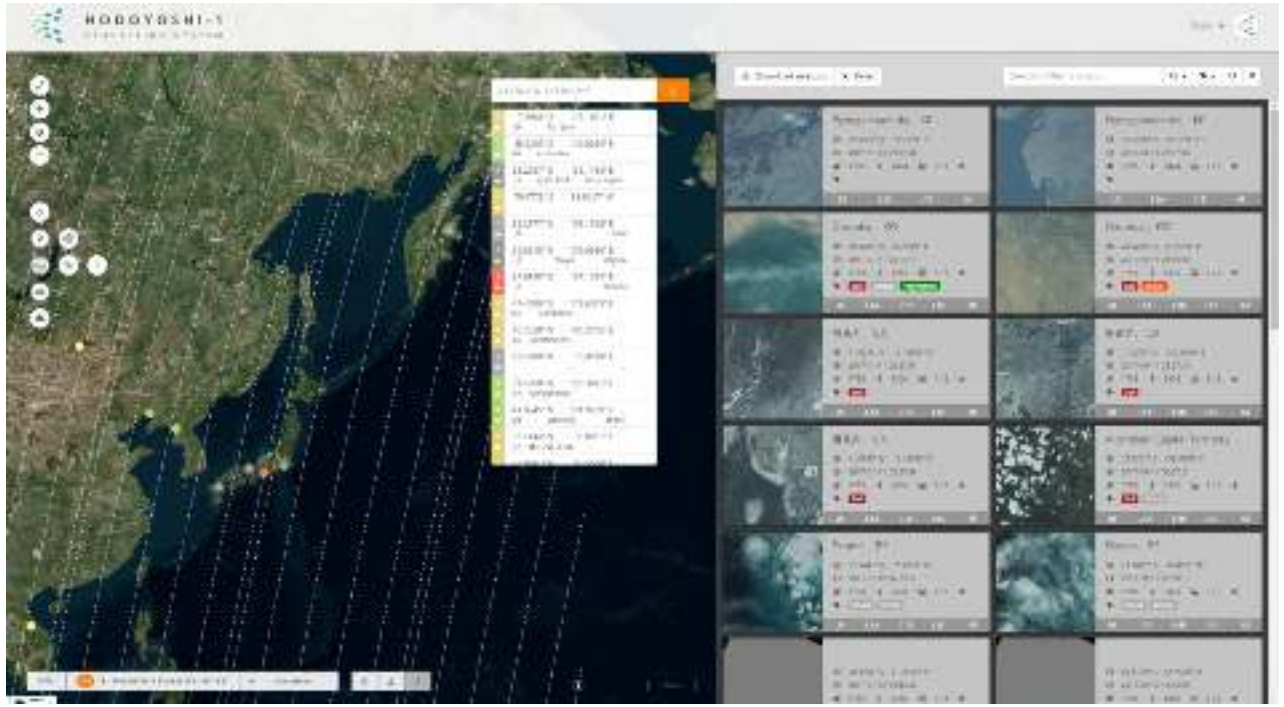
AXELGLOBE service distribution

Our partner will be able to use an application programming interface(API) and a web interface to develop and offer to end users their own services.



Online system

In addition to purchasing archives on web interface, you can also make requests for new collection. Exchanging by e-mail or sending an order form in PDF are not necessary.

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Sensing the world.
Changing the future.
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