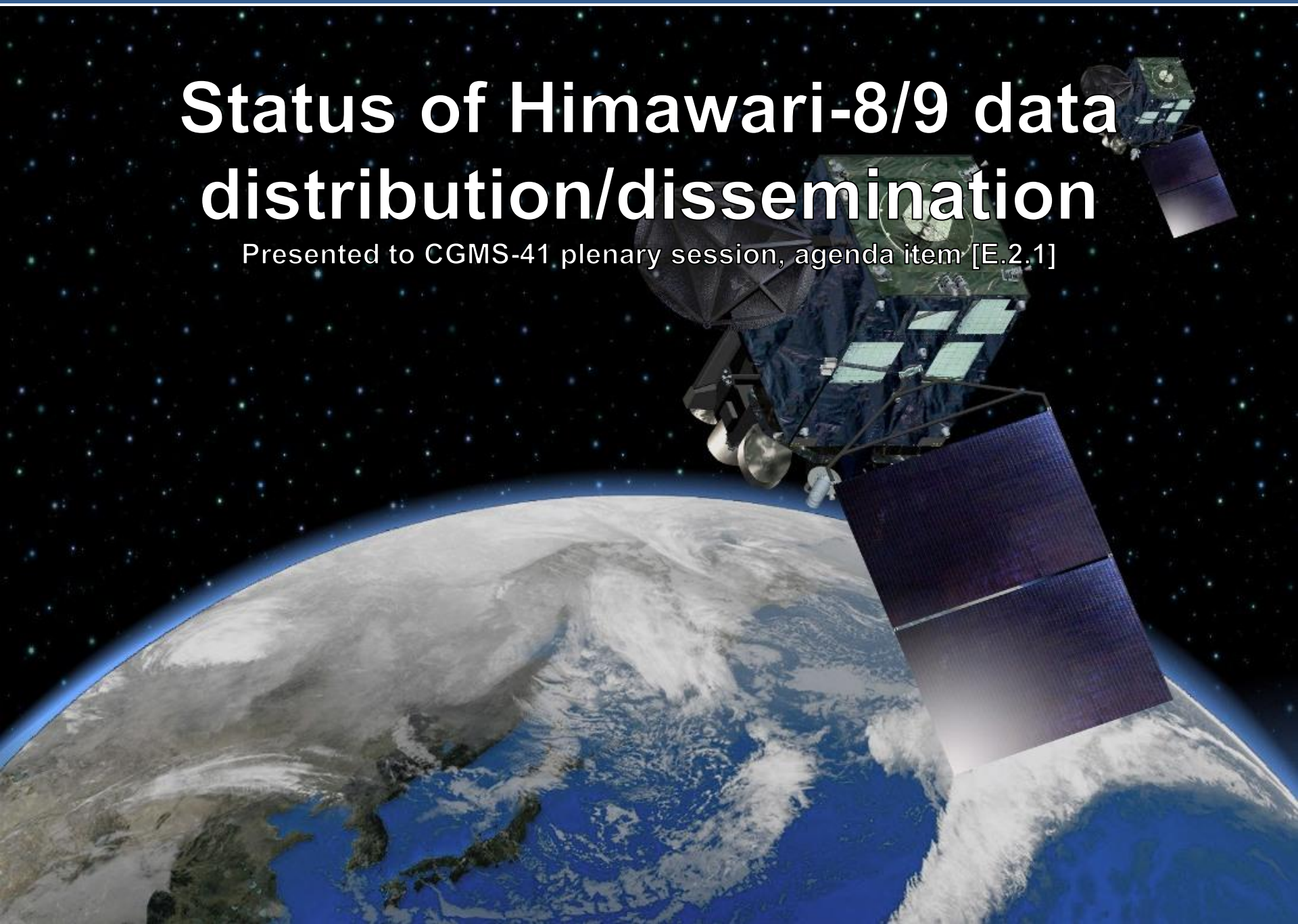
Status of Himawari-8/9 data distribution/dissemination

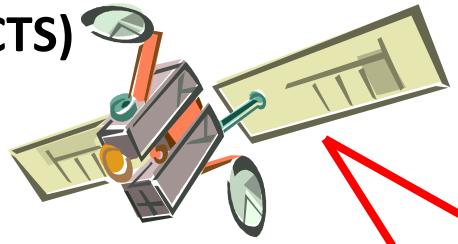
Presented to CGMS-41 plenary session, agenda item [E.2.1]



Outline of the Distribution/Dissemination Plan

Himawari-8/9

Commercial Telecommunication Satellite (CTS)



C-band (4 GHz)
HRIT/LRIT imagery
(TBD)

Data

CTS Operator

JMA

All imagery

Internet

PNG/JPEG imagery

Users with developed Internet environment

Users with limited Internet access

- Regions where landlines are not reliable

USERS

New equipment needs to be installed.

Coordination Group for Meteorological Satellites

Imagery via the Internet

	Name	Interval	Channel & Resolution	Size
Full disc observation	TBD	10 min	All (16) channels #3: 0.5 km #1, 2, 4: 1 km #5-16: 2 km	329 GB (1 day) #3: 930 MB (10 min) #1, 2, 4: 230 MB (10 min) #5-16: 60MB (10 min)
	PNG	10 min	Composite (#1-3) 1 km	49 GB (1 day) 350 MB (10 min)
	HRIT (same as MTSAT)	10 min	5 channels Vis: 1 km IR: 4 km	41 GB (1 day) Vis: 230 MB, IR: 15 MB (10 min)
	LRIT (same as MTSAT)	10 min	3 channels 5 km	432 MB (1 day) each: 1 MB (10 min)
Regional observation (Typhoon)	TBD & netCDF	2.5 min	All (16) channels #3: 0.5 km #1, 2, 4: 1 km #5-16: 2 km	12 GB (1 day) #3: 8 MB (2.5 min) #1, 2, 4: 2 MB (2.5 min) #5-16: 0.5 MB (2.5 min)
Cut-out	PNG JPEG	10 min	TBD (depends on requests)	Not so large

Imagery via a CTS

	Name	Interval	Channel & Resolution	Size
Full disc observation	TBD	10 min	All (16) channels #3: 0.5 km #1, 2, 4: 1 km #5-16: 2 km	329 GB (1 day) #3: 930 MB (10 min) #1, 2, 4: 230 MB (10 min) #5-16: 60MB (10 min)
	PNG	10 min	Composite (#1-3) 1 km	49 GB (1 day) 350 MB (10 min)
	HRIT (same as MTSAT)	10 min (TBD)	5 channels Vis: 1 km IR: 4 km	41 GB (1 day) Vis: 230 MB, IR: 15 MB (10 min)
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Cut-out	PNG JPEG	10 min	TBD (depend on requests)	Not so large

Tentative!

Equipment to receive imagery via a CTS

Needed equipment

C-band antenna

LNB

DVB-S2 receiver

PC & software

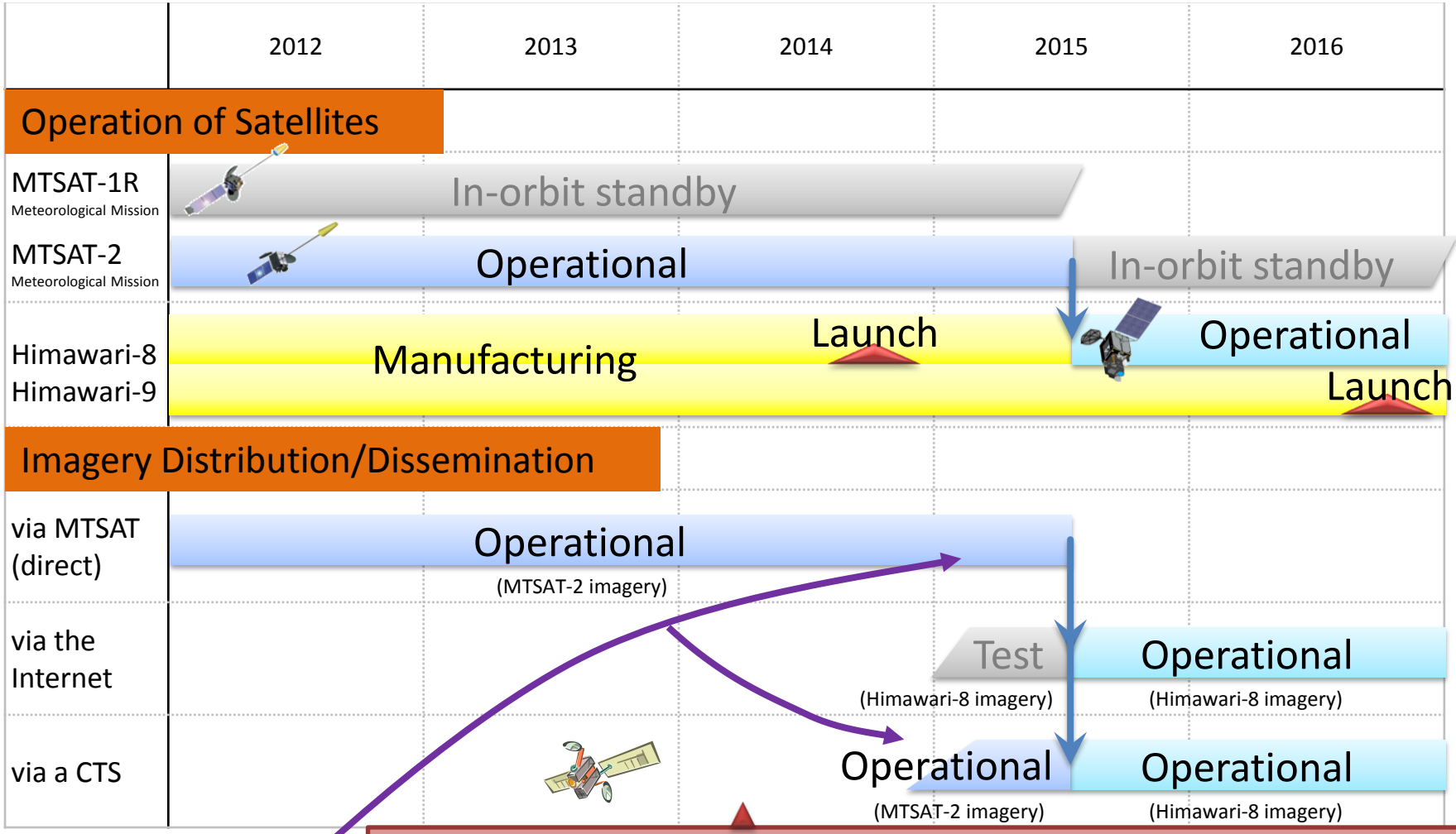
	Required/recommended specifications	Estimated cost (US$)
C-band antenna	Dish type with a diameter of 1.2 – 2.4 m	1,500 – 9,000
Low-noise block (LNB)	Standard-performance type	600 or less
DVB-S2* receiver	Standard-performance type such as Novra S300, Comtech EF DATA CMR-5975 or Advantech S4020	1,500 – 3,000
Software for DVB acquisition and processing	KenCast Fazzt standard software	900 or less

* DVB-S2: Digital Video Broadcasting – Satellite – Second Generation (a digital video broadcast standard)

Notes

- HRIT imagery can be displayed on a PC using a set of software modules for data processing and visualization.
- Construction of dish antenna foundations and wiring work for antenna-PC connection are required for installation of the above equipment.
- The diameter of a dish antenna depends on its geographical location and the footprint of the commercial telecommunication satellite to be used by JMA.

Schedule of Distribution/Dissemination



JMA will announce the details of CTS (to be fixed in April 2014) and its receiving equipment in the spring of 2014.

- **Parallel dissemination** is planned for **<u>users' smooth transitions</u>** to the receipt of imagery via a CTS.

Thank you.