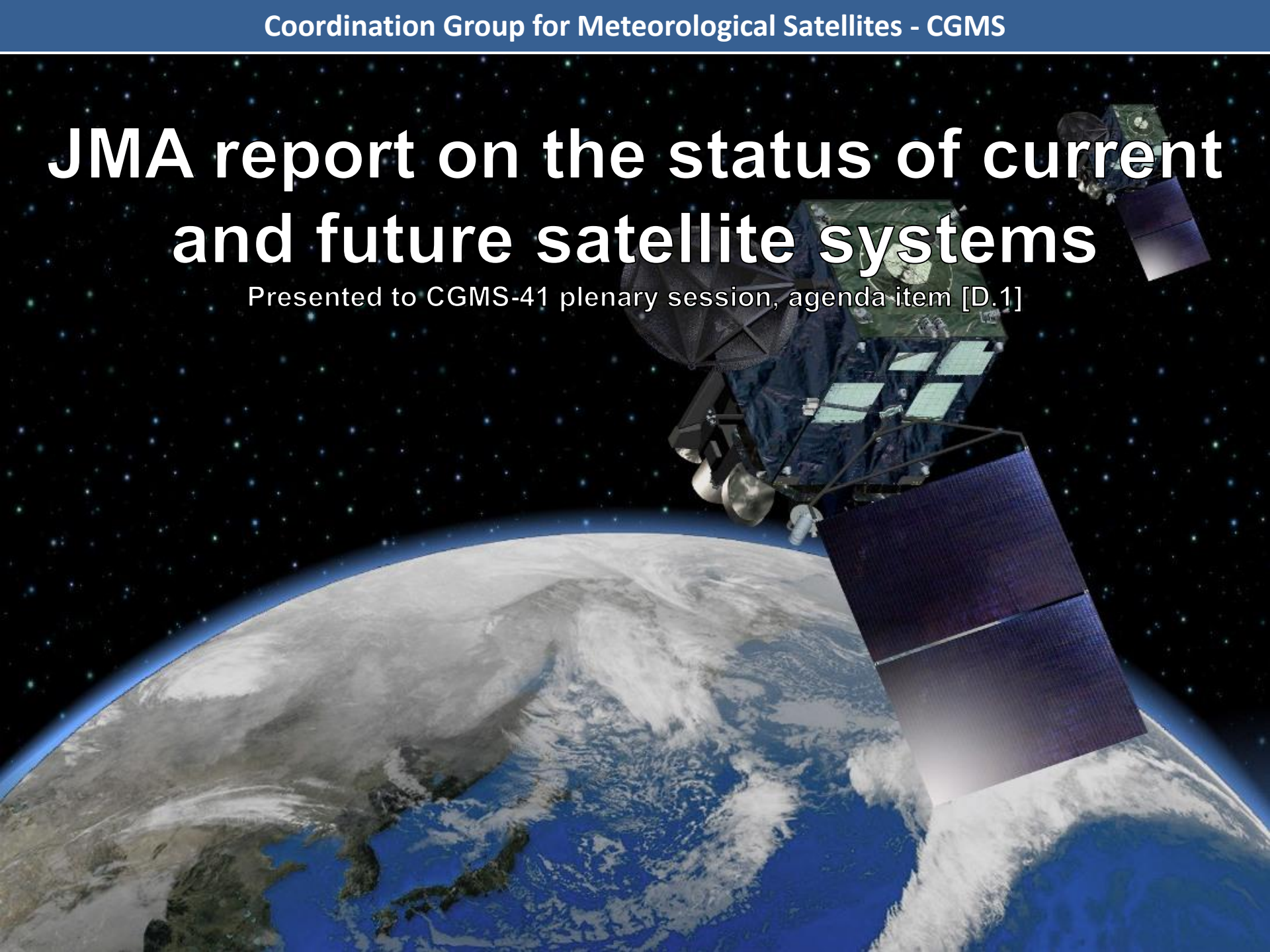


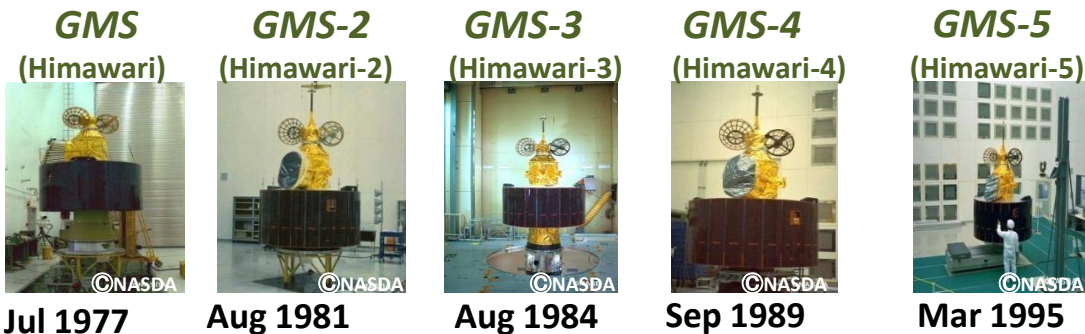
JMA report on the status of current and future satellite systems

Presented to CGMS-41 plenary session, agenda item [D.1]



Overview - Planning of JMA satellite systems (Himawari-series)

GMS (Geostational Meteorological Satellite)

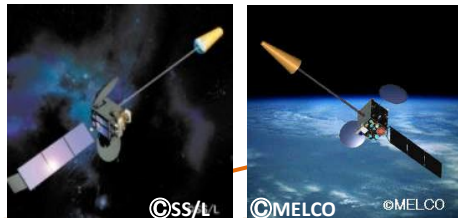


(GOES-9)

Back-up operation of GMS-5 with GOES-9 by NOAA/NESDIS from May 22, 2003 to June 28, 2005

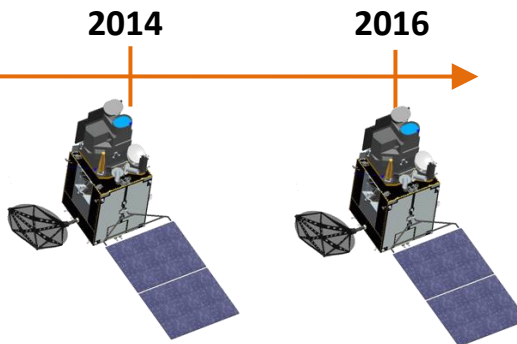
MTSAT (Multi-functional Transport SATellite)

MTSAT-1R (Himawari-6) MTSAT-2 (Himawari-7)



Feb 2005 Feb 2006

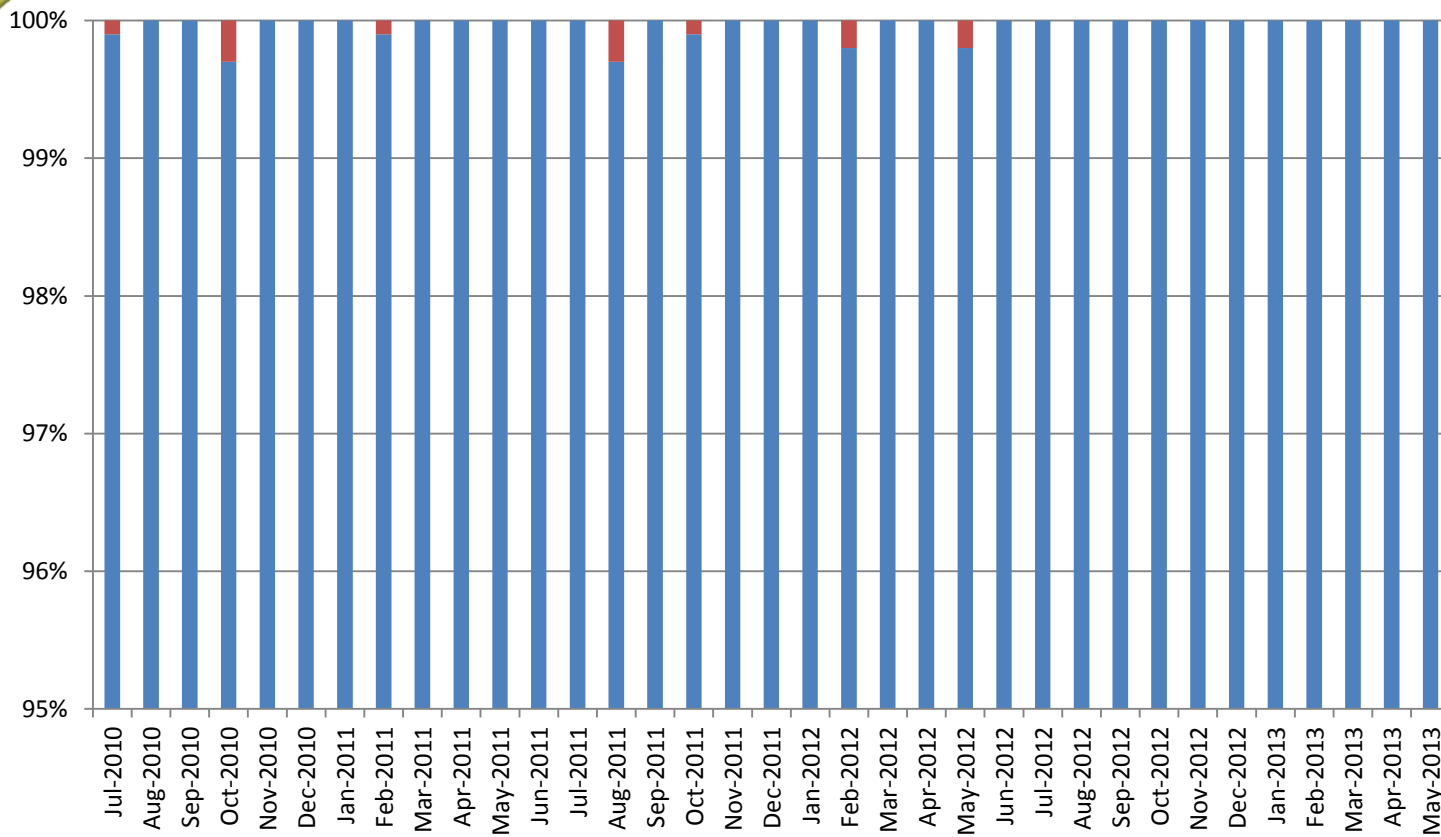
Himawari-8 Himawari-9 Himawari



Satellite	Observation period
GMS	1978 – 1981
GMS-2	1981 – 1984
GMS-3	1984 – 1989
GMS-4	1989 – 1995
GMS-5	1995 – 2003
GOES-9	2003 – 2005
MTSAT-1R	2005 – 2010
MTSAT-2	2010 – 2015
Himawari-8	2015 – 2022
Himawari-9	2022 – 2029

CURRENT GEO SATELLITES

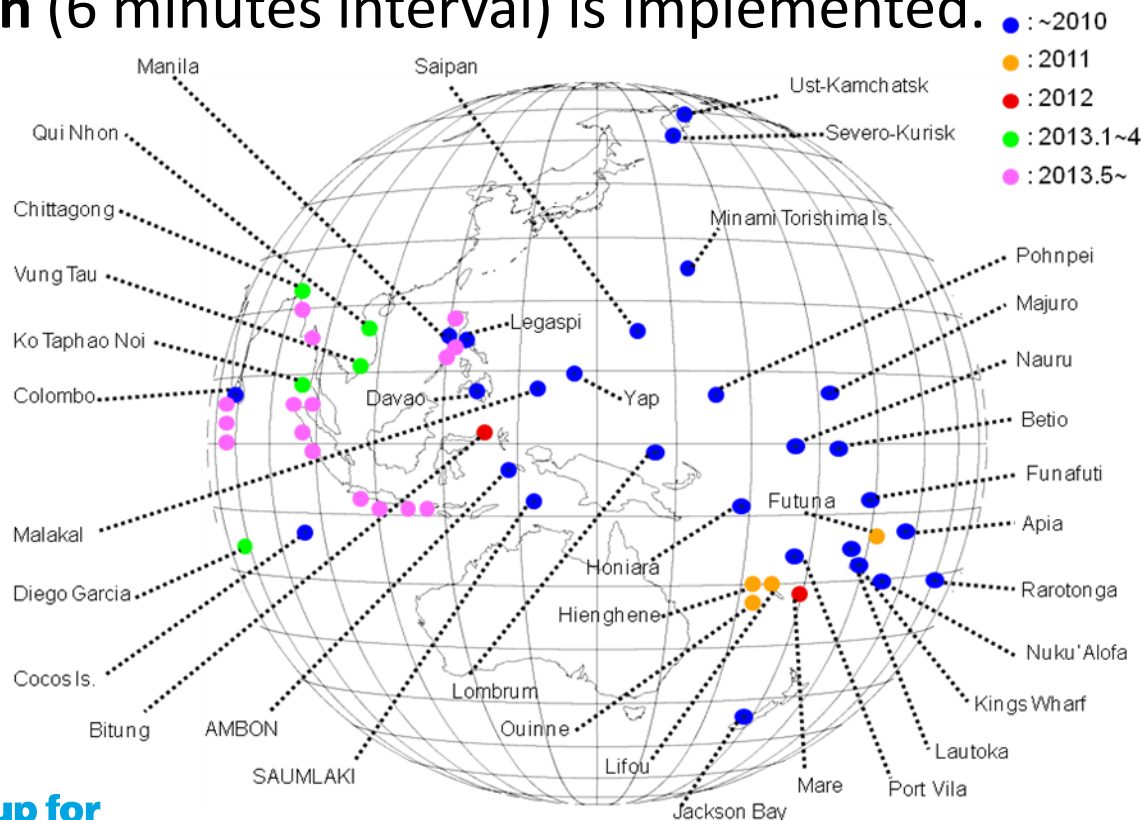
- Operation of **MTSAT-2** is extremely **stable** after **MTSAT-2** started its operation in July 2010.



HRIT availability from July 2010 to May 2013

CURRENT GEO SATELLITES

- **MTSAT-DCS** (Data Collection System) plays a very important role in **disaster prevention services** in the Asia and Pacific regions.
- In recent years, the number of **tidal/tsunami stations** using **MTSAT-DCS** has rapidly increased. In addition, the **high-frequent collection** (6 minutes interval) is implemented.



CURRENT GEO SATELLITES

Special Observations by the backup satellite, **MTSAT-1R**

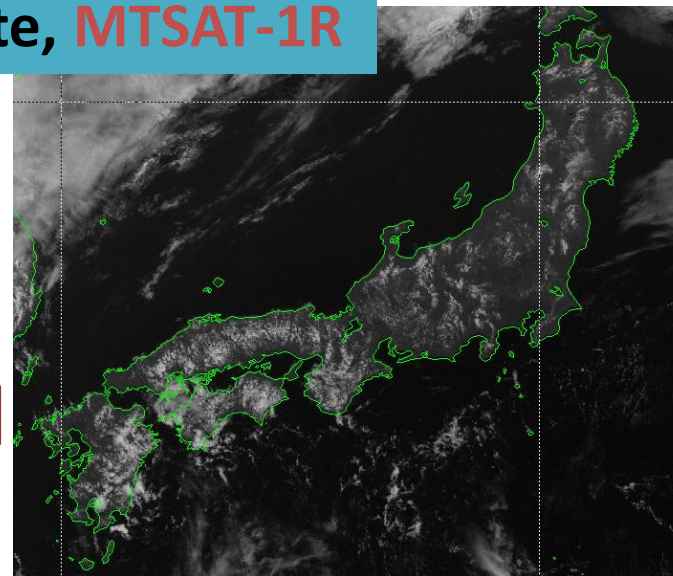
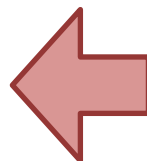
Rapid Scan Observation

Period: 31 May – 30 September
00 UTC – 09 UTC (daytime)

Interval: 5 minutes
Area: around Japan



Aviation users



2011-07-11
0305 UTC
1205 JST



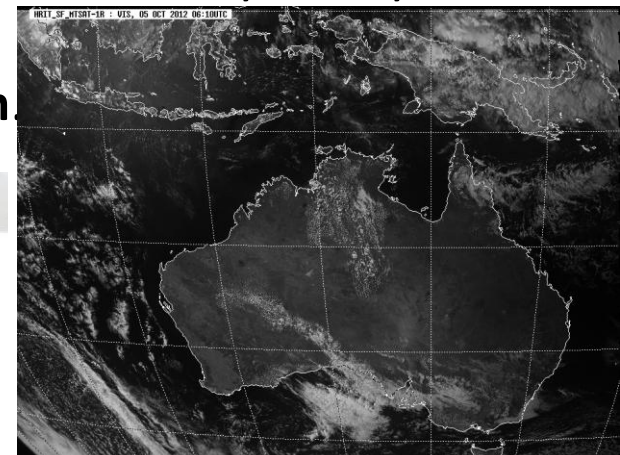
High Ice Water Content (HIWC) Study in Darwin, Australia

- HIWC Study: Study on phenomena of jet-engine power-loss by ice crystals.
- JMA will support the HIWC Study field campaign by conducting **MTSAT-1R** rapid scan observation.

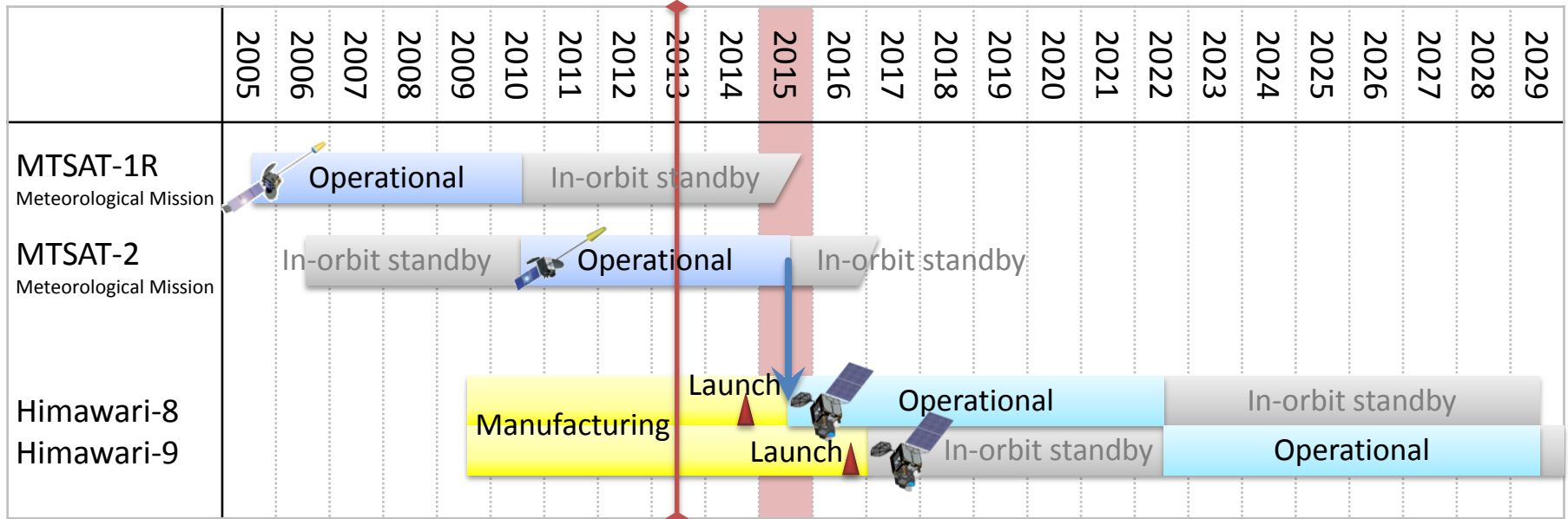
Period: January – March 2014
Interval: 10 minutes
Area: around Australia



NASA



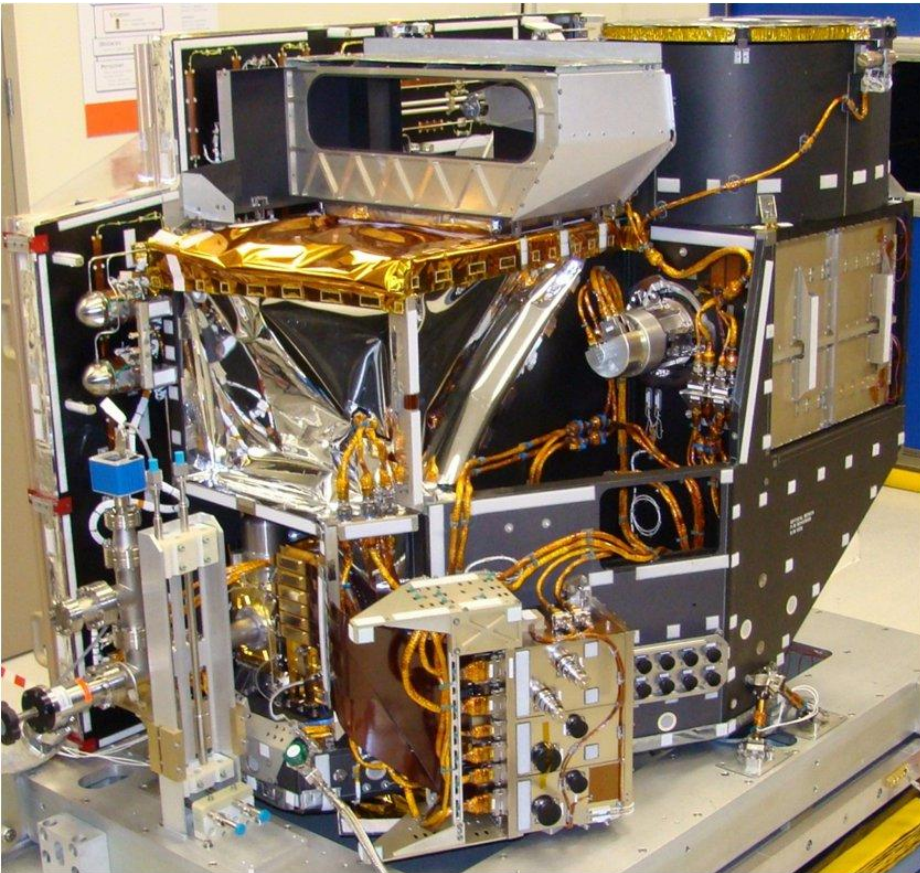
FUTURE GEO SATELLITES



- JMA plans to launch **Himawari-8** in **2014** and begin its operation in **2015**.
- The launch of **Himawari-9** for in-orbit standby is scheduled in **2016**.
- **Himawari-8/9** will be in operation around **140 degrees East** covering the East Asia and Western Pacific regions for 15 years.

FUTURE GEO SATELLITES

Advanced Himawari Imager (AHI)



ITT Exelis

- Both **Himawari-8/9** will carry the **AHI** unit.
- The performance of **AHI** is almost the same as **ABI**, which is the imager on board **GOES-R**.
- **AHI** successfully passed the **thermal vacuum testing (TVT)**.
- If everything goes well, **AHI** will be shipped to Japan next month (**August 2013**).

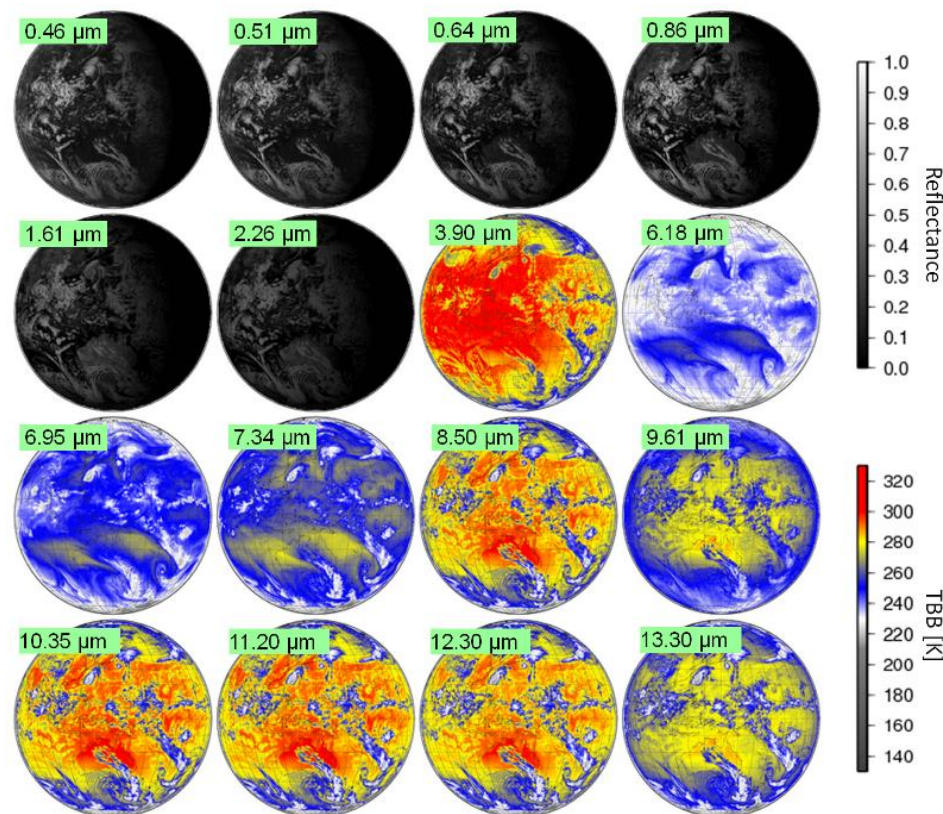
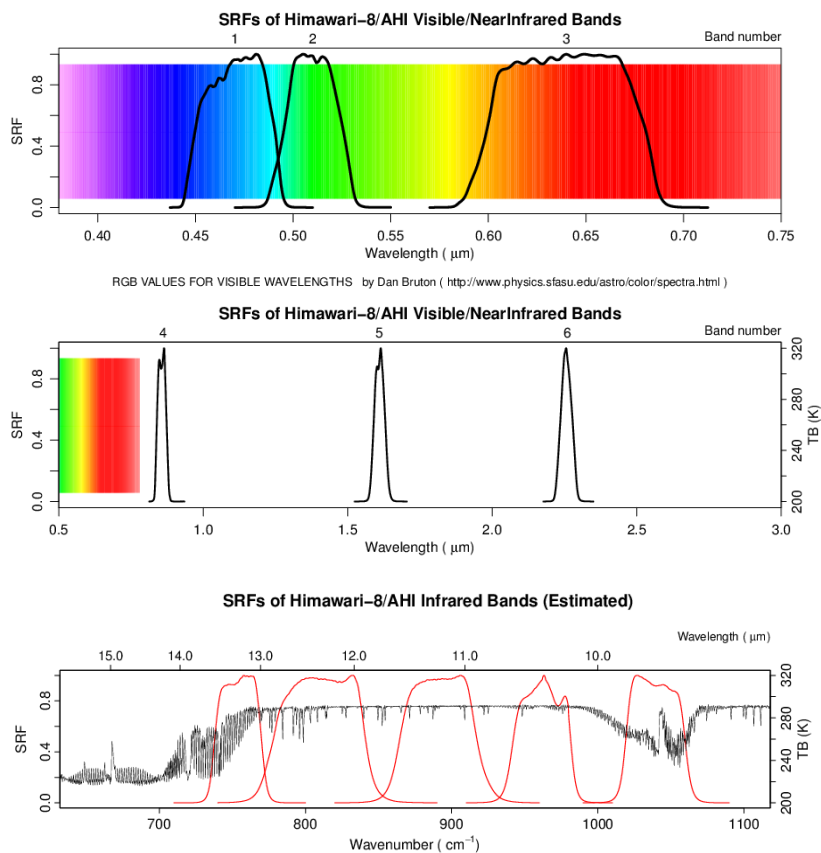
FUTURE GEO SATELLITES

To support research and development of products based on **Himawari-8/9**,

■ Estimated Spectral Response Functions (SRFs) of **AHI** are **available** on JMA website.

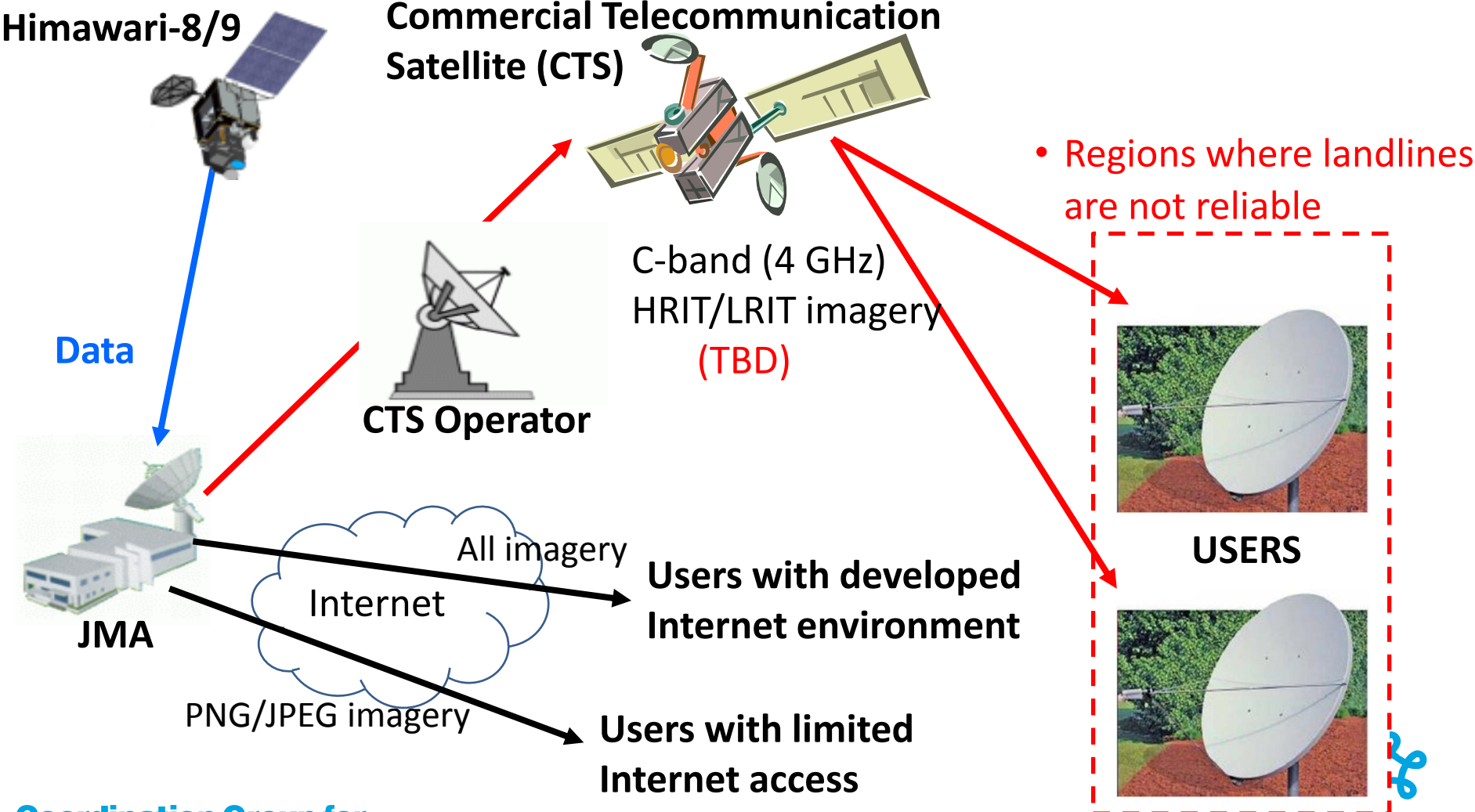
■ **Simulation data** generated using a radiative transfer model are also **available** on JMA website.

<http://mscweb.kishou.go.jp/himawari89/>



FUTURE GEO SATELLITES

Outline of the Distribution/Dissemination Plan



New equipment needs to be installed.

Thank you.

