



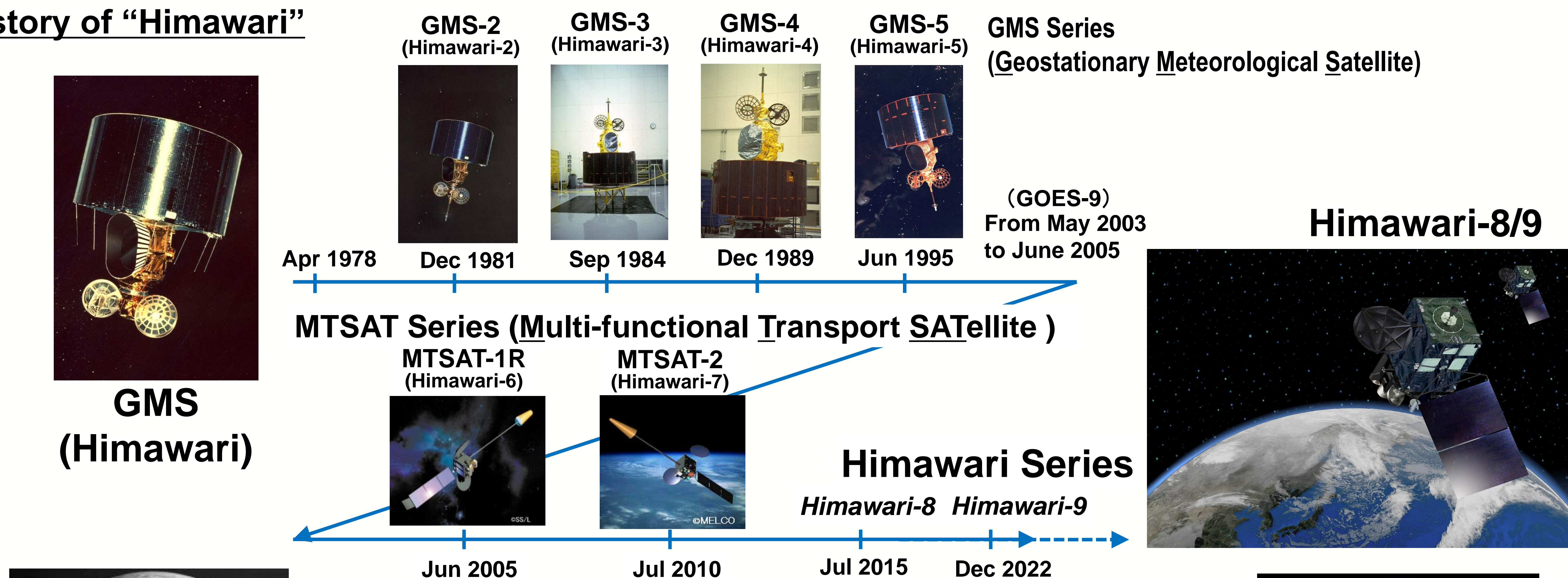
History of the Japanese geostationary meteorological satellite “Himawari”



- Since 1978, JMA has operated geostationary meteorological satellites and provided the data on a free and unrestricted basis, as well as technical cooperation for effective use of the data.
- Manufacturing of the follow-on satellite, Himawari-10, is underway, with operations planned to begin in the Japanese fiscal year 2029.

History of “Himawari” and its contribution

History of “Himawari”



The first image from GMS (Himawari) on April 6, 1978

Himawari improvement

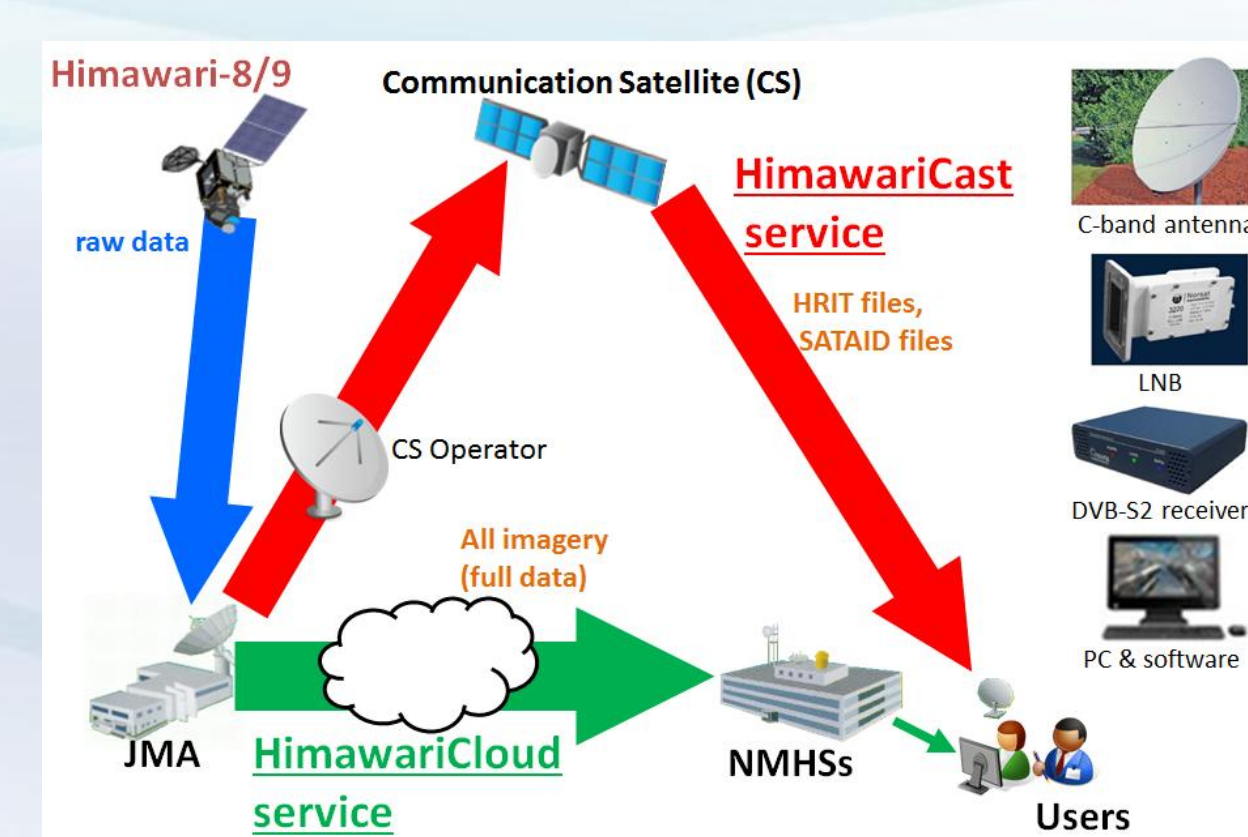
	GMS (Himawari)	Himawari-8/9
Spectral Bands	1 Visible	3 Visible
	1 Infrared	3 Near Infrared
Observing Interval	3 hours (Full disk)	10 minutes (Full disk)
Spatial resolution	1.25 km (Visible)	0.5 or 1.0 km (Visible)
	5 km (IR)	2 km (IR)



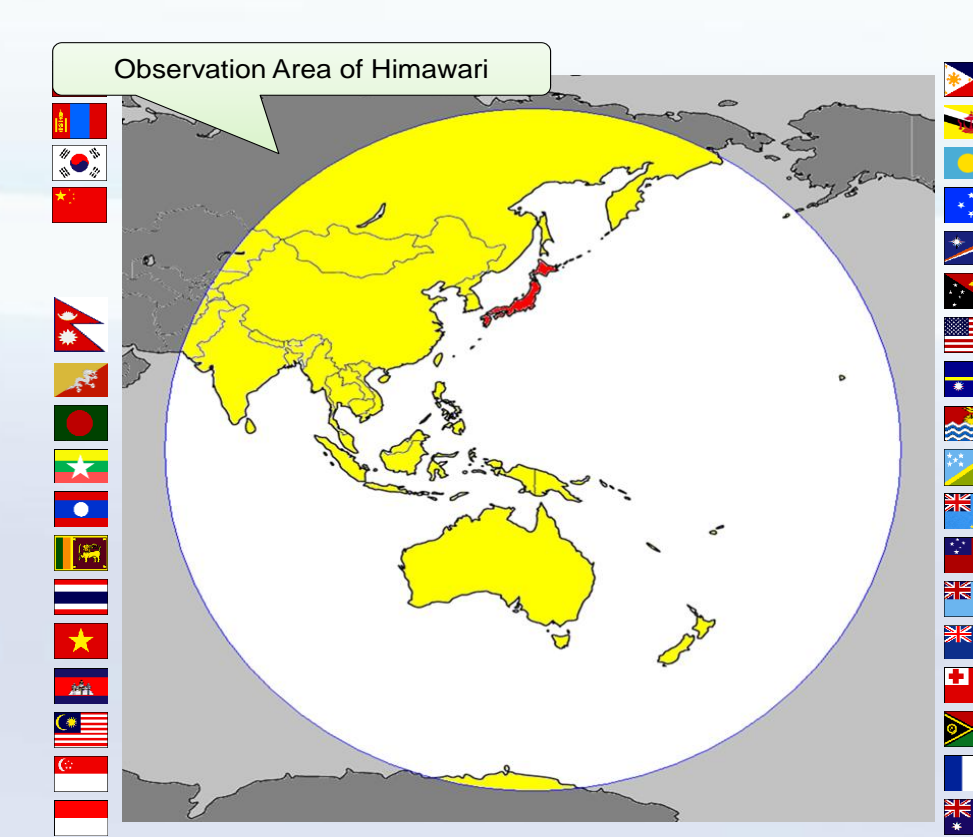
First image from Himawari-9 on January 24, 2017 (JMA, NOAA/NESDIS, CSU/CIRA)

Himawari Data Dissemination

- “**HimawariCloud**” service provides full-spec data via landlines. A total of 24 NMHSs and EUMETSAT use this service.
- “**HimawariCast**” service provides moderate-spec data via telecommunication satellite, for countries with limited landline capacity. A total of 34 NMHSs operate HimawariCast receiving systems.



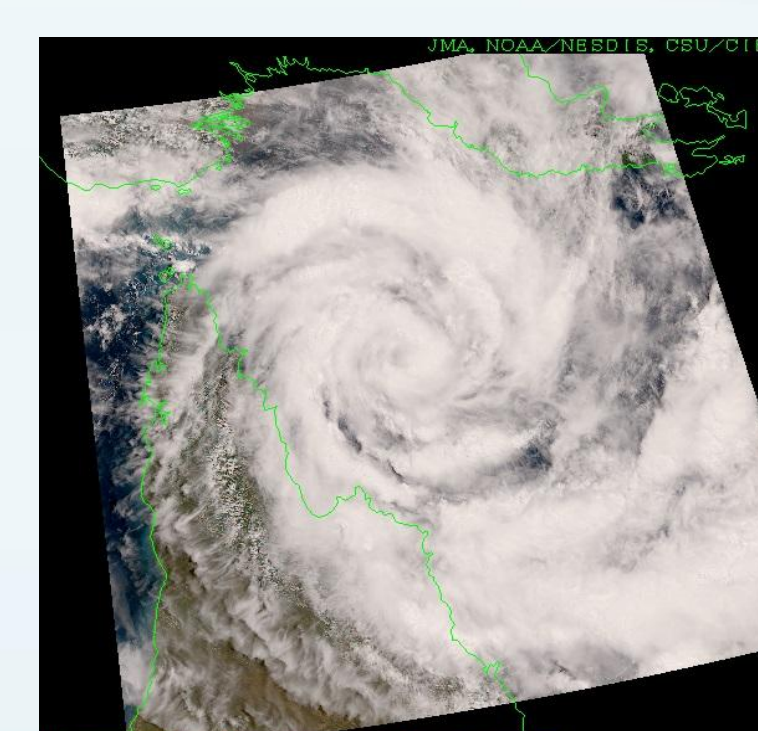
Himawari-8/9 Data Dissemination



Observation Area of Himawari

HimawariRequest Service and Technical support

- JMA provides extra high-frequency observation services upon request from NMHSs called “**HimawariRequest**”, aiming to enable NMHSs to monitor hazardous events more closely and enhance their preparedness against such events.
- For effective and efficient use of the Himawari data, **technical training** courses have been organized and the update of **HimawariCast receiving systems** is also planned.



Tropical Cyclone image requested by Australia



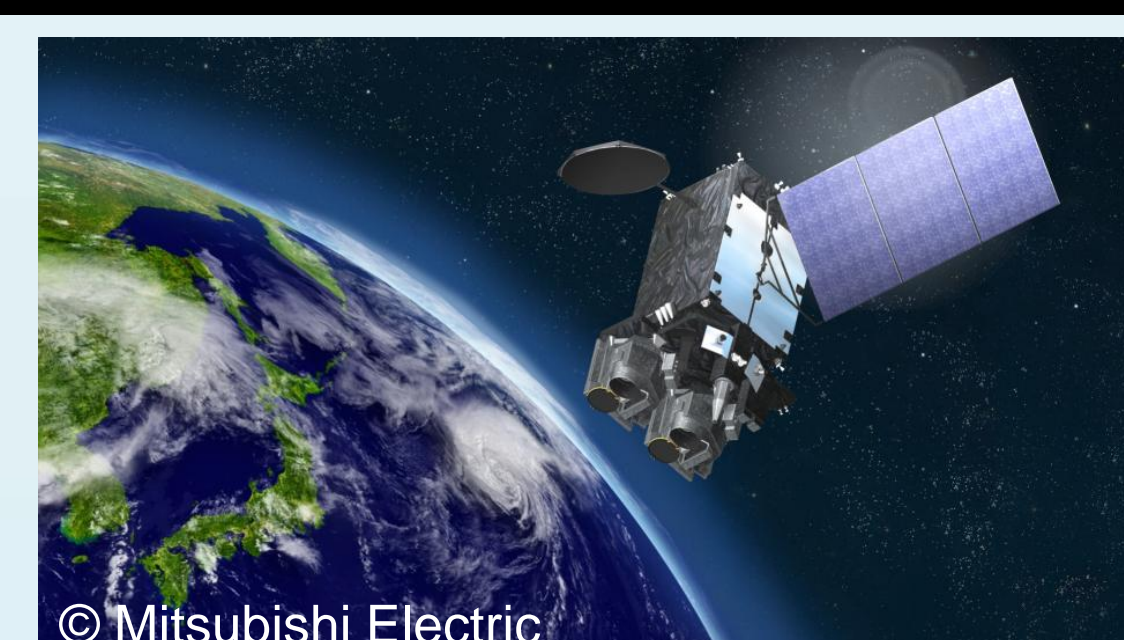
Technical training in Fiji for Pacific island countries



HimawariCast receiving system in Vanuatu

Himawari follow-on satellite “Himawari-10”

- JMA has started manufacturing the follow-on satellite, “**Himawari-10**”.
- Himawari-10 will start operation in the Japanese fiscal year 2029.
- Himawari-10 will be equipped with not only imager but also **hyperspectral IR sounder** in order to grasp the flow of atmospheric humidity which cause hazardous precipitation.



Himawari-10

3D humidity distribution observation by infrared sounder (diagram)

