



Himawari Overview

Mike Johnson & Joe Zajic (NWS/OST)
Proving Ground OCONUS / User Readiness
Conference
July 29, 2014



Initial Himawari Support within NOAA



- Initial Himawari data delivery and processing development is being funded with Sandy Supplement and comes with a number of Congressionally monitored caveats (see notes).
- NOAA is leveraging this development for support (to extent possible) real-time users of Western Pacific Imagery and products.
- Initial capabilities include:
 - HimawariCast at Guam, Hawaii and relay to AK
 - Full resolution imagery (subset) to AR, PR, NCEP
 - AMVs, Cloud Mask, Cloud Height, Cloud Type (modification of GOES-R algorithms)



JMA & HOPE

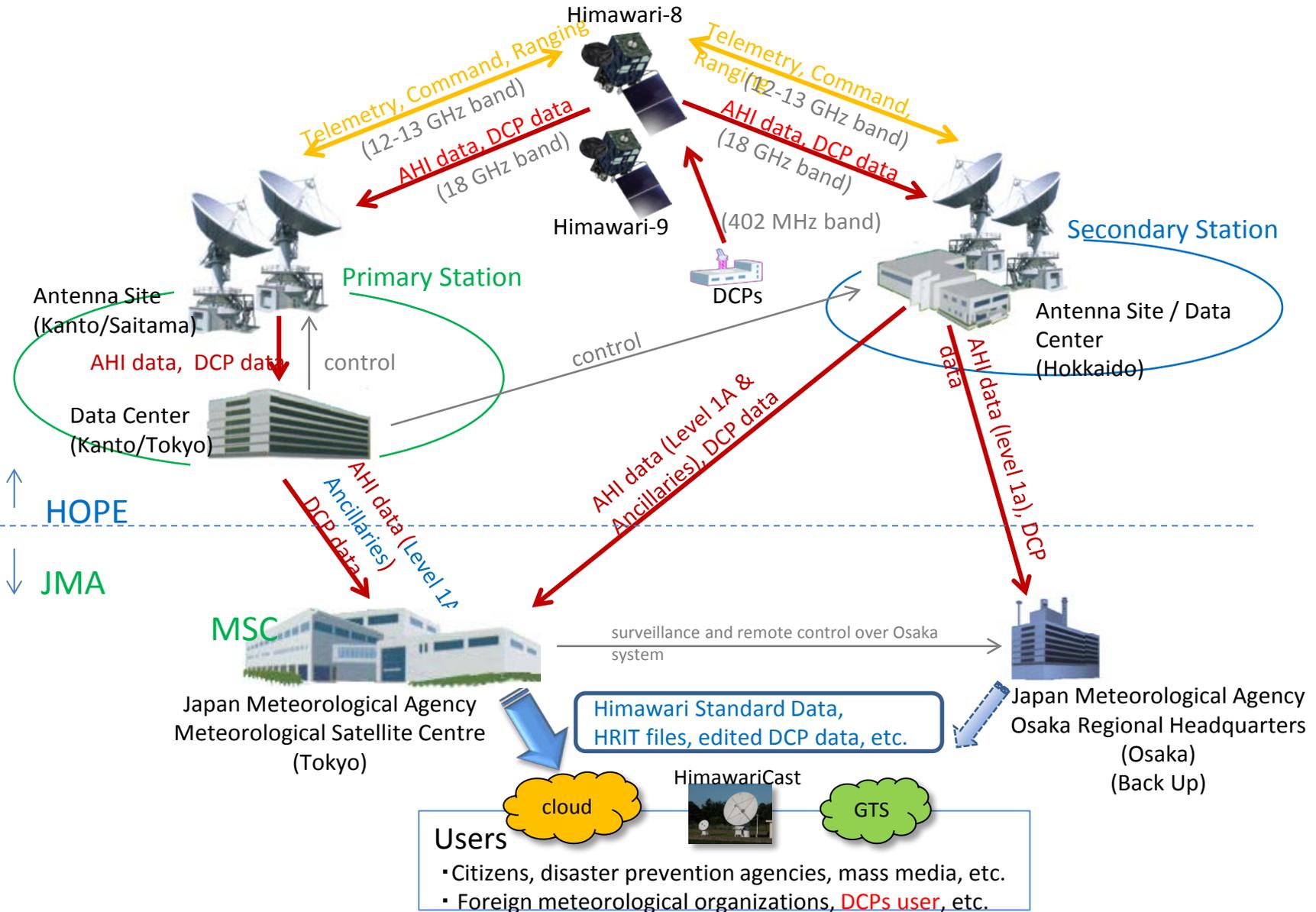
(Takashi Mori, Takuya Miyakawa, Ryo Yoshida, NOAA-JMA meeting 7-2-2014)



- Himawari-8/9 satellites and ground equipment are operated by a special purpose company (SPC) named:
 - HOPE: “Himawari Operation Enterprise Corporation”
 - Receives data from Advanced Himawari Imager (AHI) and Data Collection Platform (DCP) and transmits to JMA.
 - JMA MSC:
 - Processes those data and disseminates products to users.

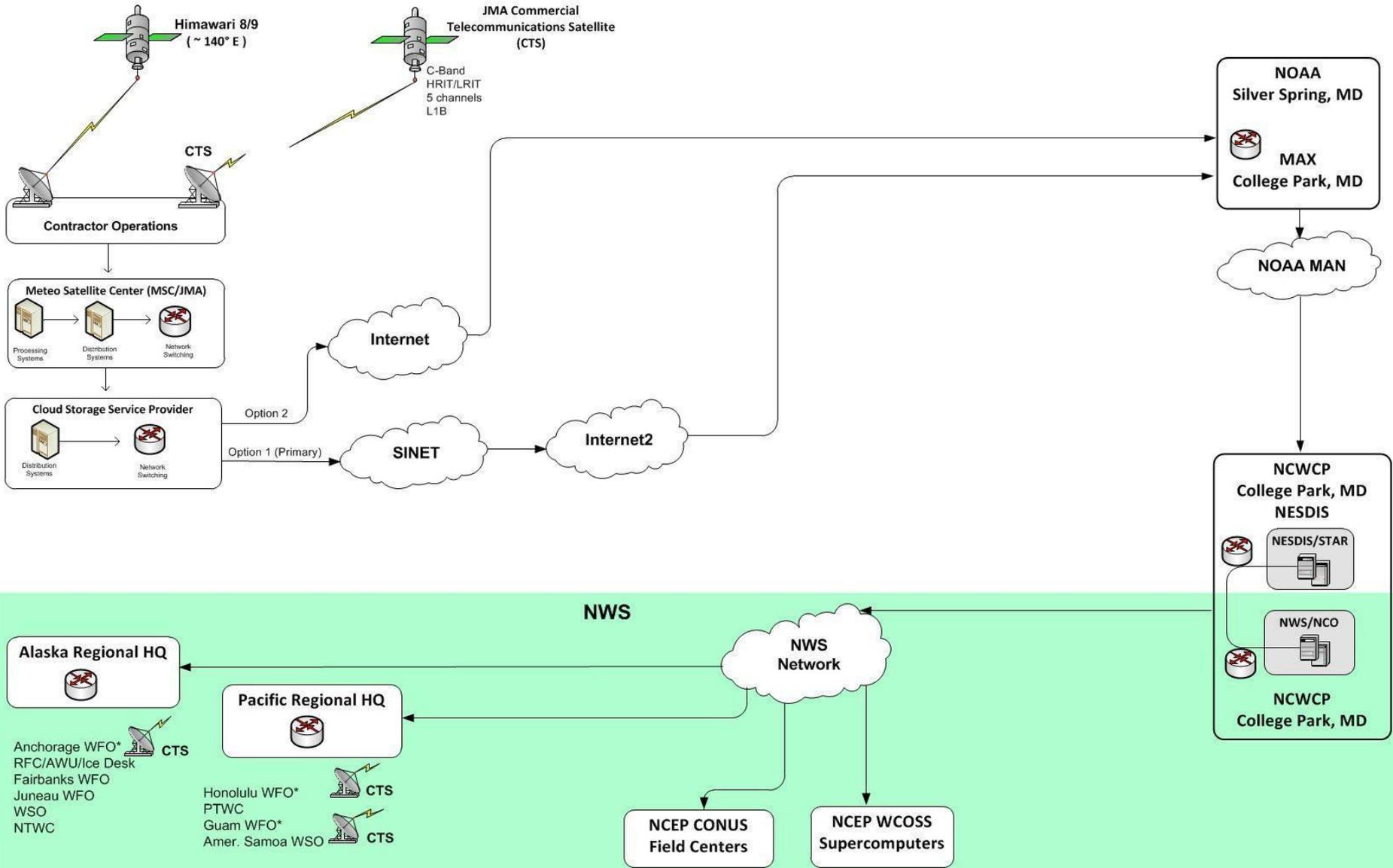
Himawari Ground System

(Takashi Mori, Takuya Miyakawa, Ryo Yoshida, NOAA-JMA meeting 7-2-2014)





Himawari Data Flow into NWS: 2015 (Pre-PDA Era)



Post-launch Test Overview

(Takashi Mori, Takuya Miyakawa, Ryo Yoshida, NOAA-JMA meeting 7-2-2014)

- **In-Orbit Test (IOT)**
 - Confirm the performance and functionality of Himawari 8/9 on orbit.
 - Intended to ensure deterioration does not occur by launch, separation from a rocket, and release to the space environment.
- **100-day Continuous Observation Test**
 - Continuous observation during 100 days after IOT.
 - Evaluate AHI performance and imagery quality.
 - Evaluate Cal./Nav. on ground system and tune the system.
 - Operator training

In-Orbit Test(IOT)

About 50 days after launch

MELCO (Satellite Contractor)

100-day Continuous Observation Test

100days after IOT

MELCO (Satellite Contractor)

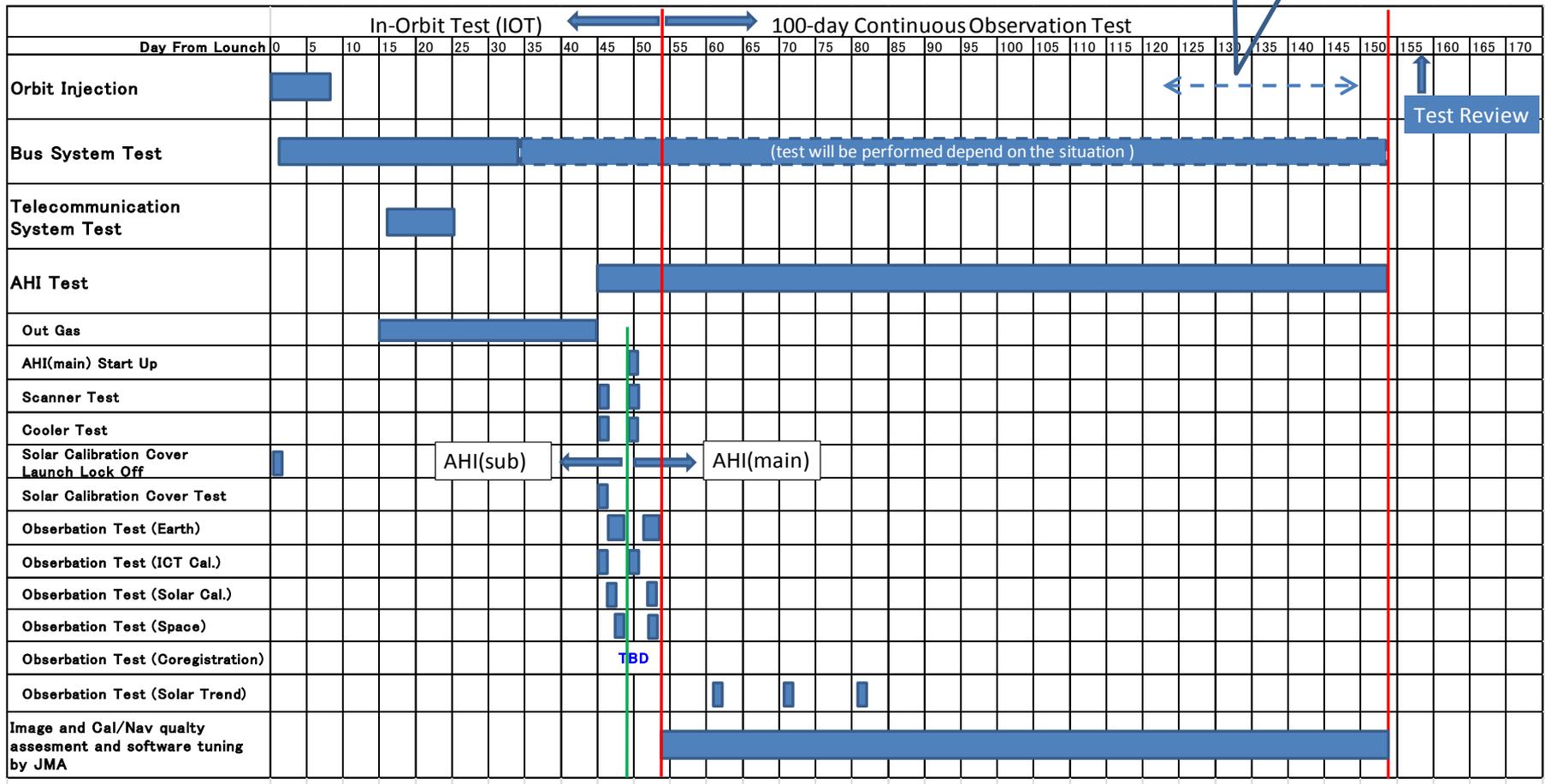
HOPE (Operator)

JMA

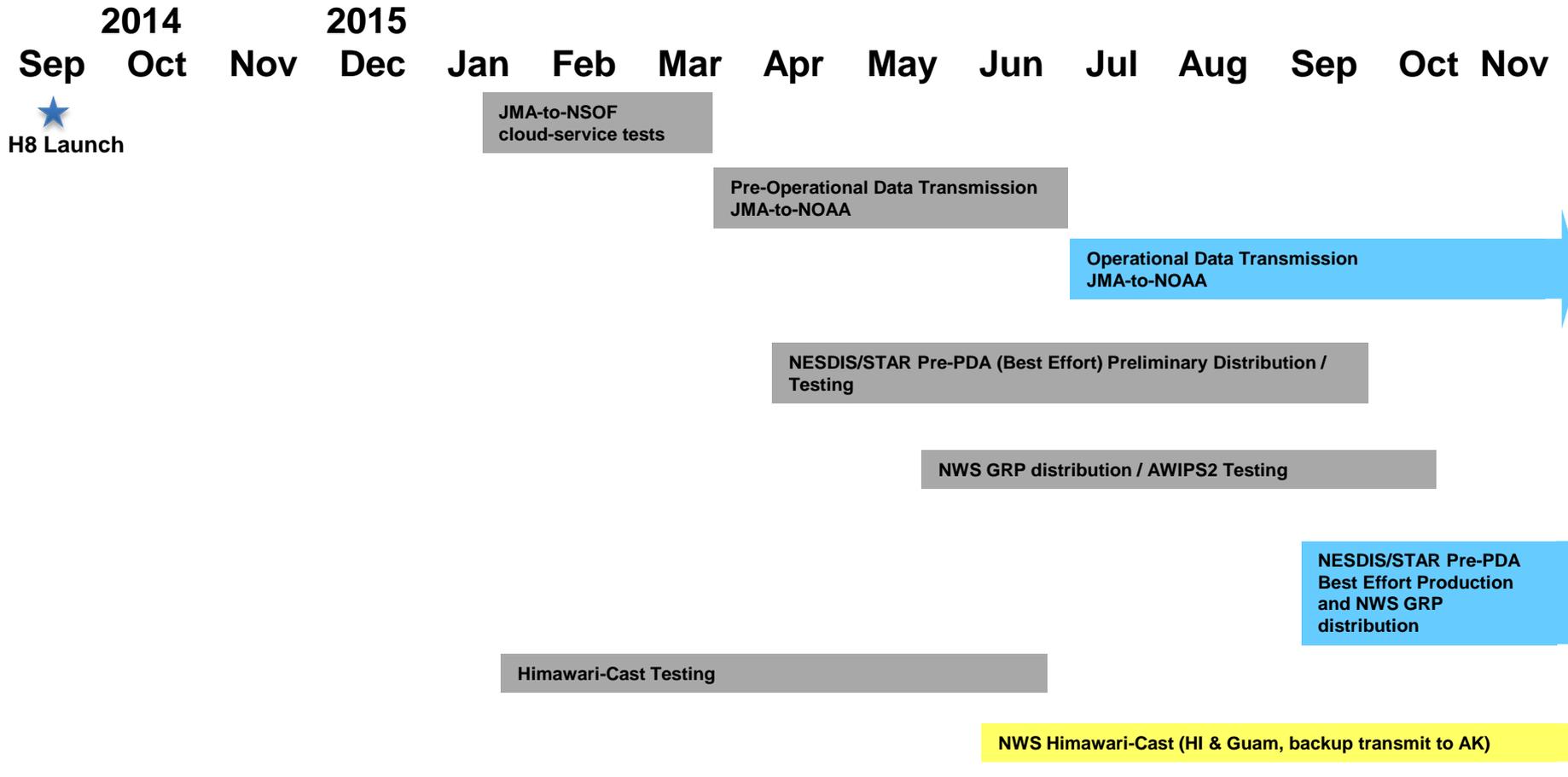
Schedule (Tentative)

(Takashi Mori, Takuya Miyakawa, Ryo Yoshida, NOAA-JMA meeting 7-2-2014)

Feb. 2015



Tentative Data Delivery Timelines





NWS Off-CONUS Product Distribution Priorities



Product	Resolution (Km)	Pri 1	Pri 2	Pri 3	Pri 4	Pri 5
AHI Ch1, 0.43-0.48um	1		X			
AHI Ch2, 0.50-0.52um	1		X			
AHI Ch3, 0.63-0.66 um	0.5	X				
AHI Ch4, 0.85-0.87 um	1				X	
AHI Ch5, 1.60-1.62 um	2				X	
AHI Ch6, 2.25-2.27 um	2				X	
AHI Ch7, 3.74-3.96 um	2	X				
AHI Ch8, 6.06-6.43 um	2			X		
AHI Ch9, 6.89-7.01 um	2	X				
AHI Ch10, 7.26-7.43 um	2			X		
AHI Ch11, 8.44-8.76 um	2			X		
AHI Ch12, 9.54-9.72 um	2				X	
AHI Ch13, 10.3-10.6 um	2				X	
AHI Ch14, 11.1-11.3 um	2	X				
AHI Ch15, 12.2-12.5 um	2				X	
AHI Ch16, 13.2-13.4 um	2				X	
NESDIS/StAR-derived AMVs	38 km / 7.5km*					X
NESDIS/StAR-derived Cloud Height	10 km					X
NESDIS/StAR-derived Cloud Phase	2 km					X

* IR-WV / Vis



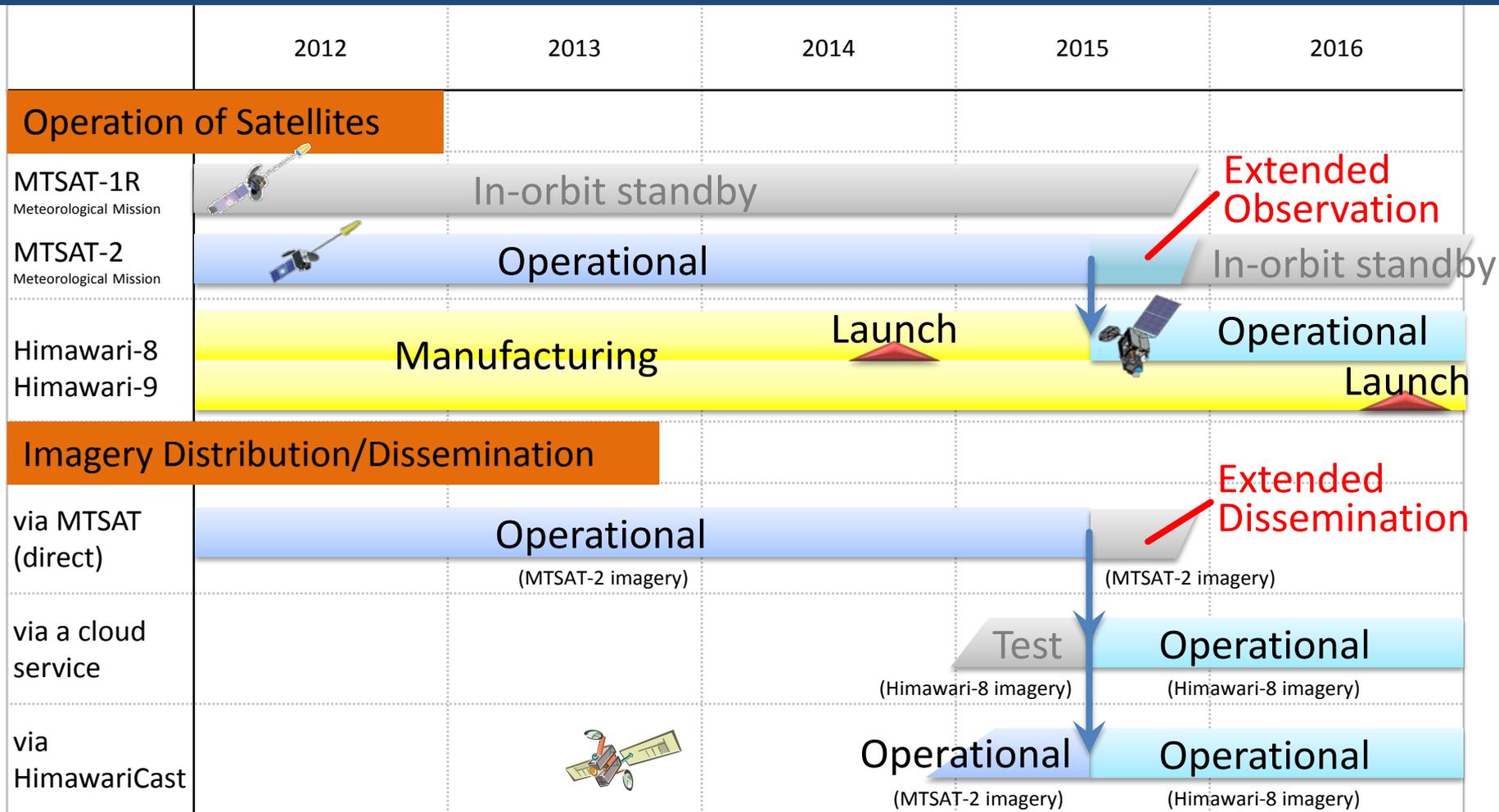
AWIPS-2 H8 Display

- Format Imagery and Derived Products per GOES-R PUG and SCMI ICD so that AWIPS-II functionality prepared for GOES-R can be reused.
- Initial capability for ABI SCMI developed and tested against 14.2.1
- Target incorporation of “Himawari Package” for Operational Release 14.4.1
 - Code Check-In: December 2014
 - Deployment: June 2015
- Approach
 - Define TOWR-G Threads for mission activities that incorporate AHI data
 - Develop and test as part of GOES-R readiness activity
 - Continuous Integration on NAPO platform (internet accessible)
 - Using Vlab/Ken Sperow approach
 - Realtime simulated input via RaFTR-CIMSS-SIM
 - Periodic Structured Tests by Raytheon on NHDA (next one in October 2014)
 - Initial capability for operational use via ATAN to appropriate facilities
- Need to establish working group (coordination – Eric Guillot)



Backups

Schedule of Distribution/Dissemination



- The cloud service will start its test operation in March, 2015.
- Before then, it may be possible to do a delivery test between NESDIS and the cloud. It would be also useful to find out the best settings for the cloud.



Parallel Dissemination
 for users' smooth transitions