



Committee on Earth Observation Satellites

# **The Ocean Surface Vector Wind Constellation: Status, Health and Future?**

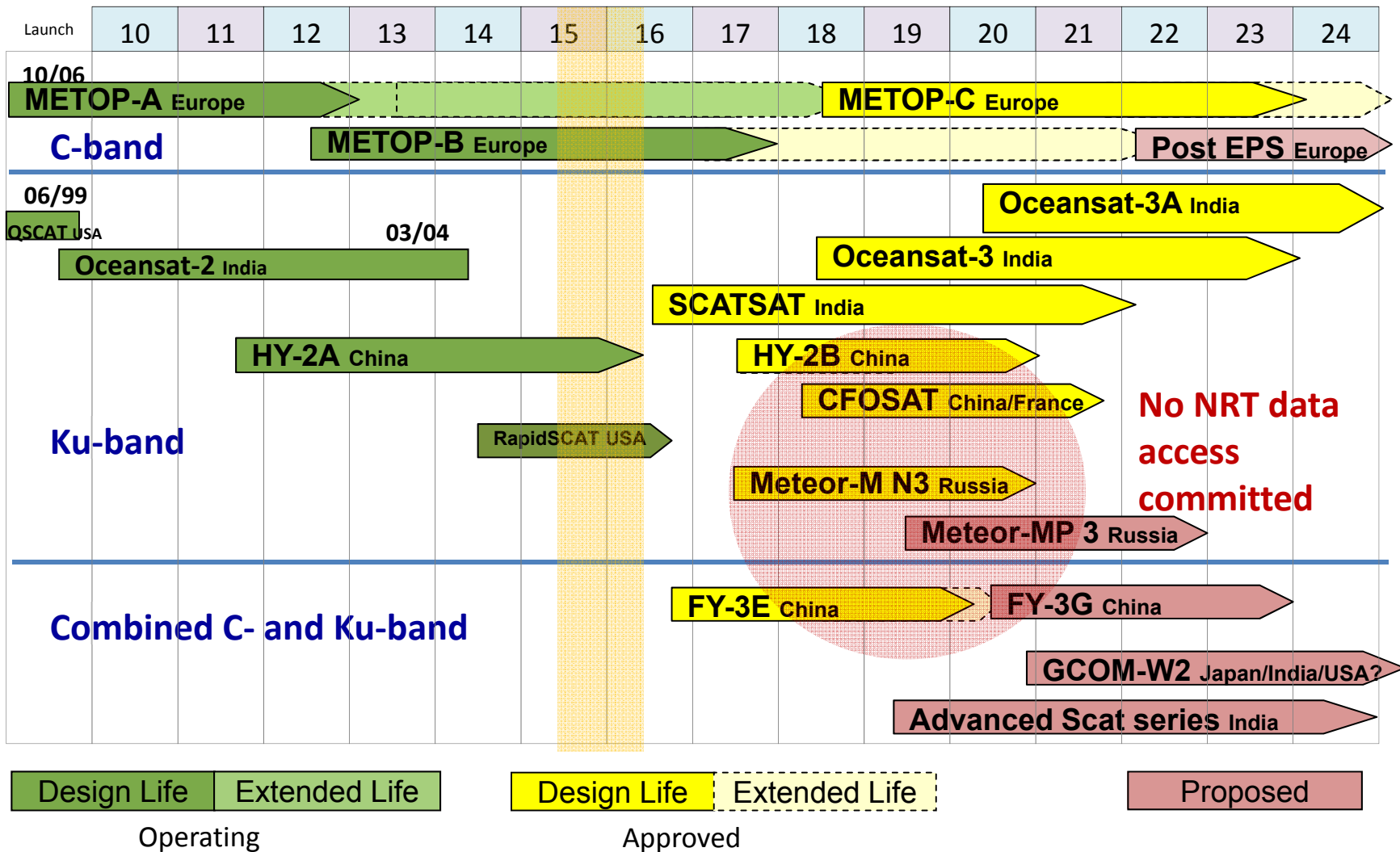
CEOS OSVW-Virtual Constellation

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# OSVW Constellation Status and Health

- ASCAT (METOP-A&B) and RapidScat
  - Open and near real-time data access
  - ASCAT available through EPS-SG(SCA) ~2023
  - RapidScat at least until Feb 2017
- SCA (ASCAT Follow-On, EPS-SG) ~2022/23
- ScatSat late July 2016 (Inject into ~9:45 am local crossing time and drift to 8:30 am)
  - Open and near real-time data access
- OSCAT follow-on (OceanSat-3) ~2018

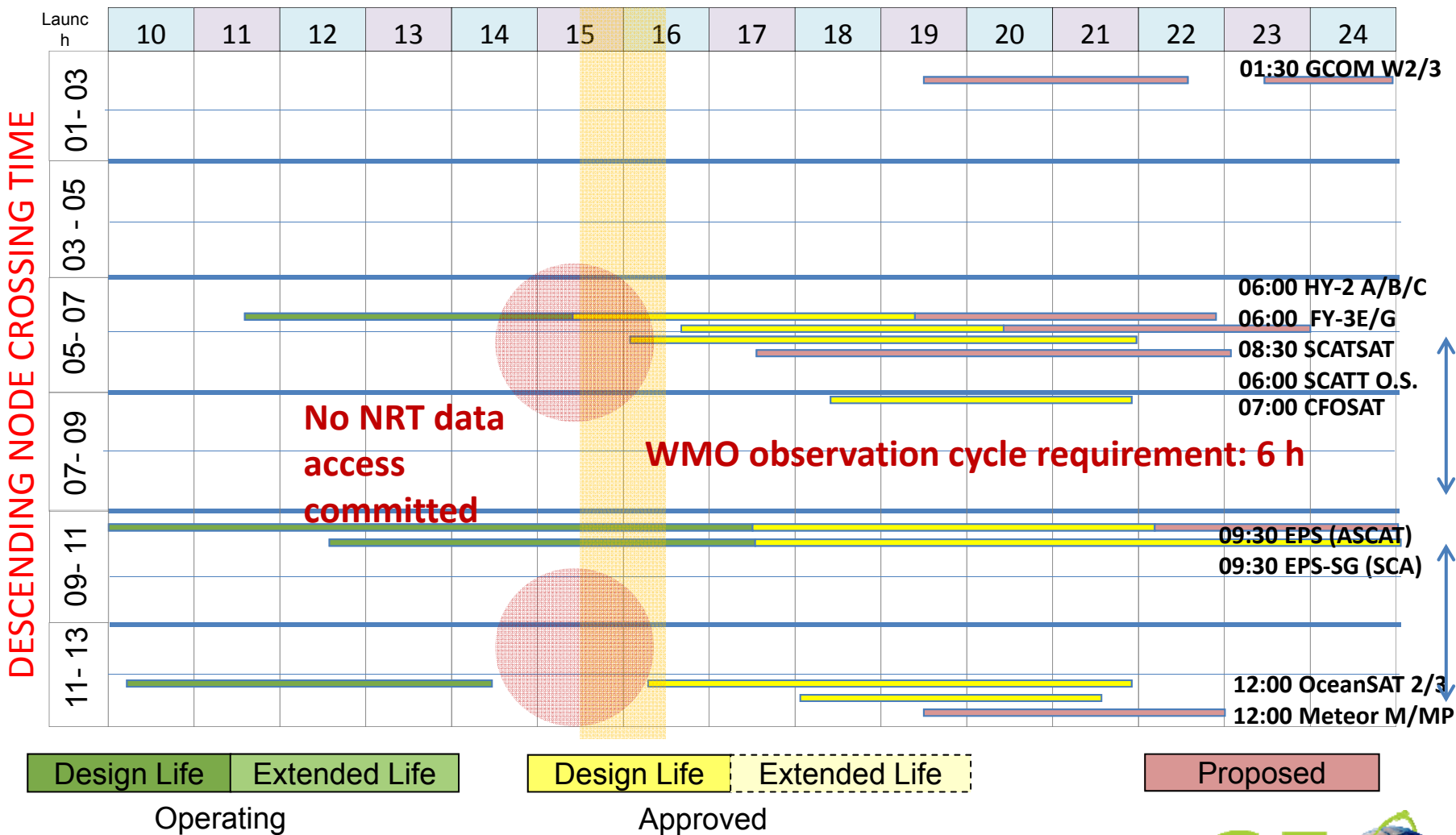
# CEOS Ocean Vector Surface Winds Virtual Constellation (OSVW-VC) Current status and outlook – NRT data access



Source: WMO OSCAR database and direct interactions with agencies

# Ocean Vector Surface Winds Constellation

## Local time coverage assessment (ground track) - NRT data access



Source: WMO OSCAR database and direct interactions with agencies

# Next Steps

- Any possibility of open and near real-time data access to planned missions by China and Russia?
  - planned orbits overlap with other missions
- Any future U.S. scatterometer plans?
  - Next NRC satellite decadal survey process is underway and will play a role in determining future U.S. EO missions.
- JAXA/ISRO AMSR-3 and scatterometer mission (GCOM-W1 follow-on)?

# Summary

- The OSVW Constellation is anchored by current and planned missions of EUMETSAT and ISRO
- The CEOS OSVW-VC advocates:
  - Open and near real-time data access
  - Coordination of orbits to optimize temporal sampling
  - Cross calibration of missions
  - Cal/val and data product standards
  - Outreach and education

Additional information including Terms of Reference can be found at <http://ceos.org/ourwork/virtual-constellations/osvw/>

- While each agency needs to work within its resource and political environment, international groups such as CEOS can help communicate objectives and recommendations of the international community directly to agencies

# OSVW-VC CEOS Action Items

- Constellation requirement for an optimum (minimum) scatterometer constellation
  - At least 3 scatterometers in orbits designed to roughly meet WMO requirements (observations available every 6 hours)
  - One instrument in a non-sun-synchronous orbit for sampling the diurnal cycle, better mid-latitude sampling and provide inter-calibration
- Define data and cal/val standards
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- Expand awareness of available OSVW data records – inclusion in CEOS International Directory Network (IDN)

(OSVW-VC meeting immediately after today's session)

# Questions

- Is the constellation minimum capability as defined sufficient?
  - Should continuity and new measurement capability be identified separately?
- What are the priorities of the OSVW community (i.e., IOVWST)?
- Is there any particular advocacy/actions from the OSVW community that would be helpful for the space agencies?
  - Scatterometer on GCOM-W1 follow-on? JAXA-ISRO partnership status?
  - Optimize orbits – Advocate for ScatSat to move toward 6:00 am local crossing time? Or earlier?
  - Impact the ongoing U.S. NRC Decadal Survey