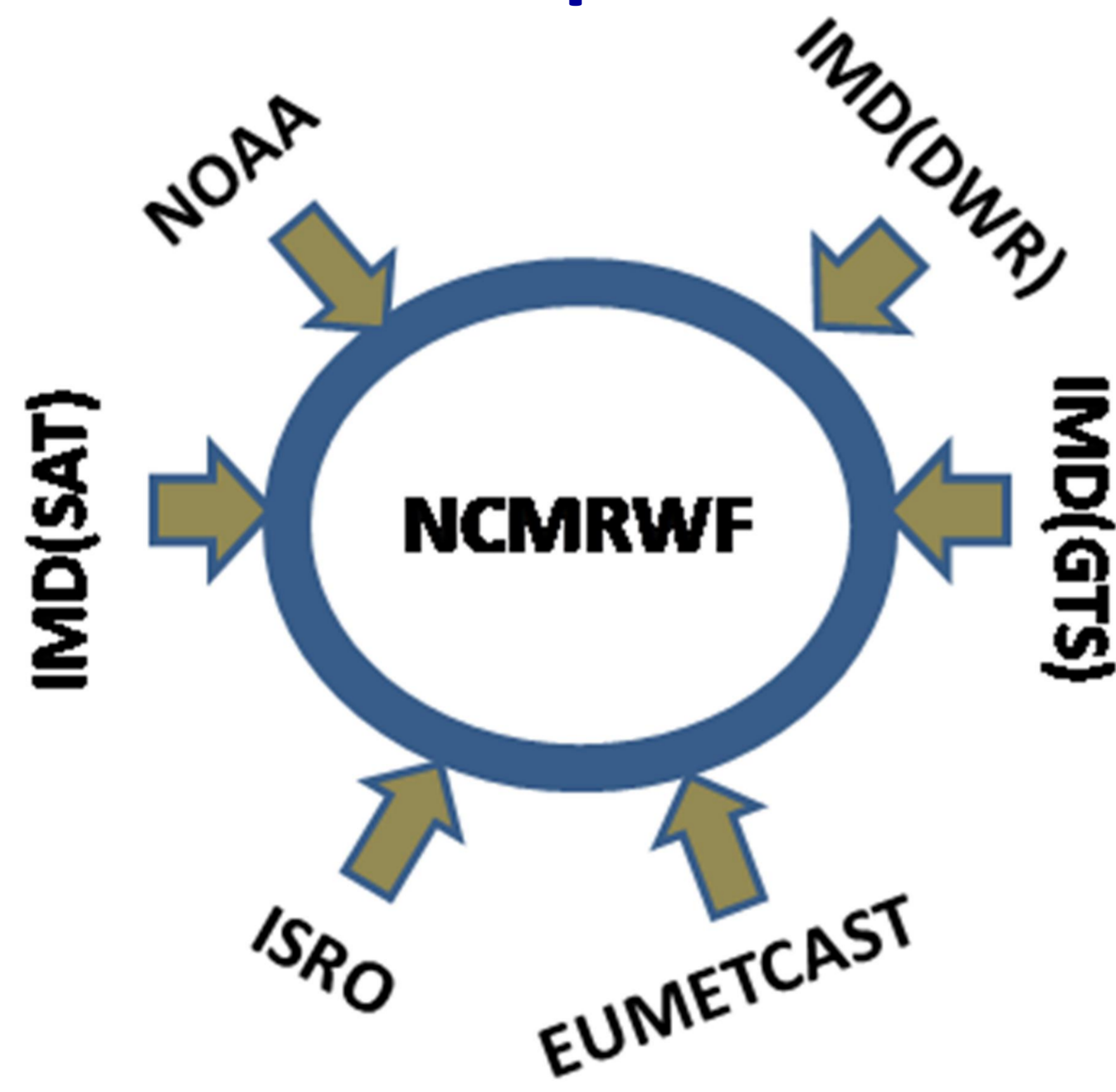


# NCMRWF NWP: Current status and future plans (4p.13)

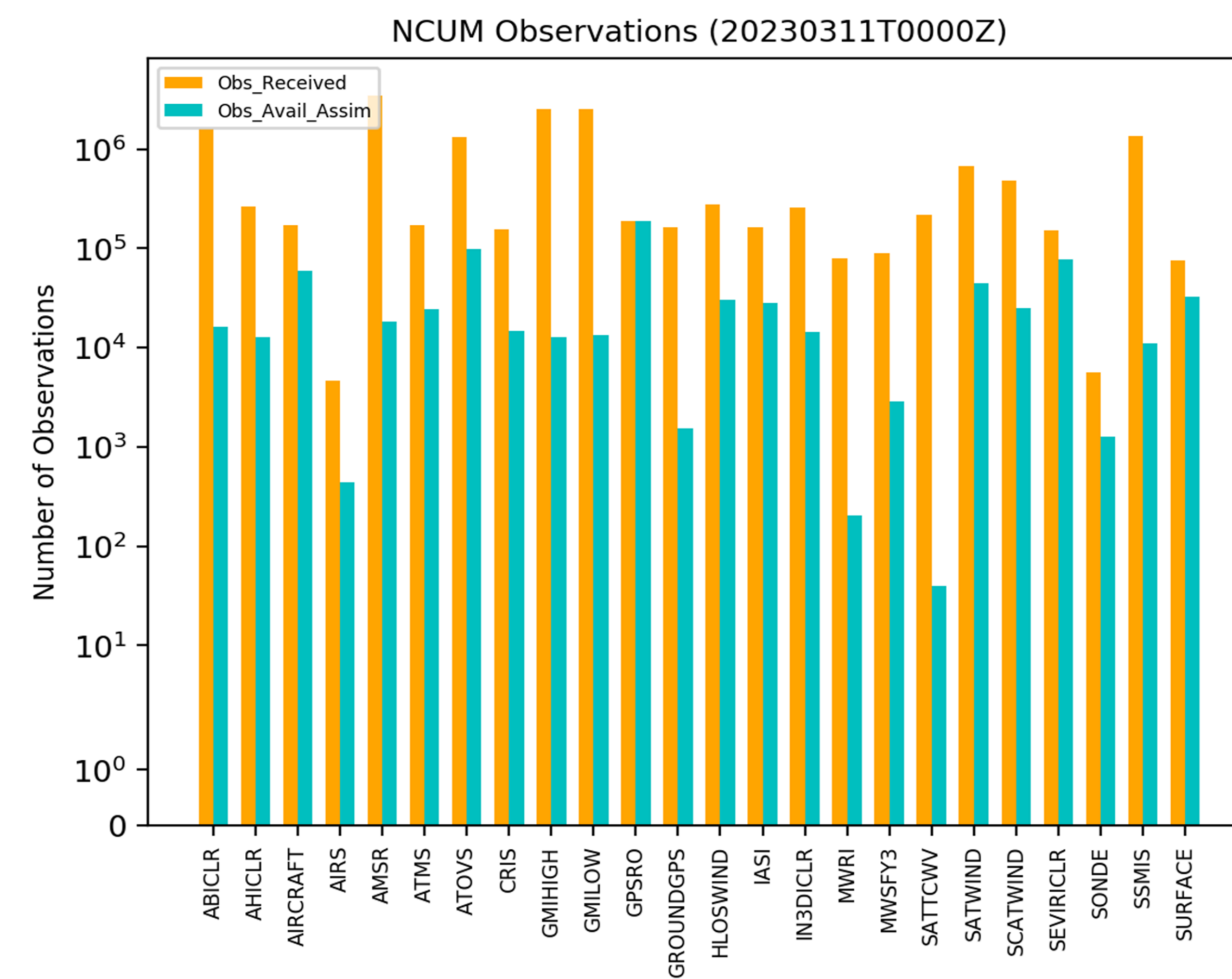
S. Indira Rani, D. Srinivas, Sumit Kumar, John P. George and V.S. Prasad

[indirarani.s@gov.in](mailto:indirarani.s@gov.in), [indira@ncmrwf.gov.in](mailto:indira@ncmrwf.gov.in)

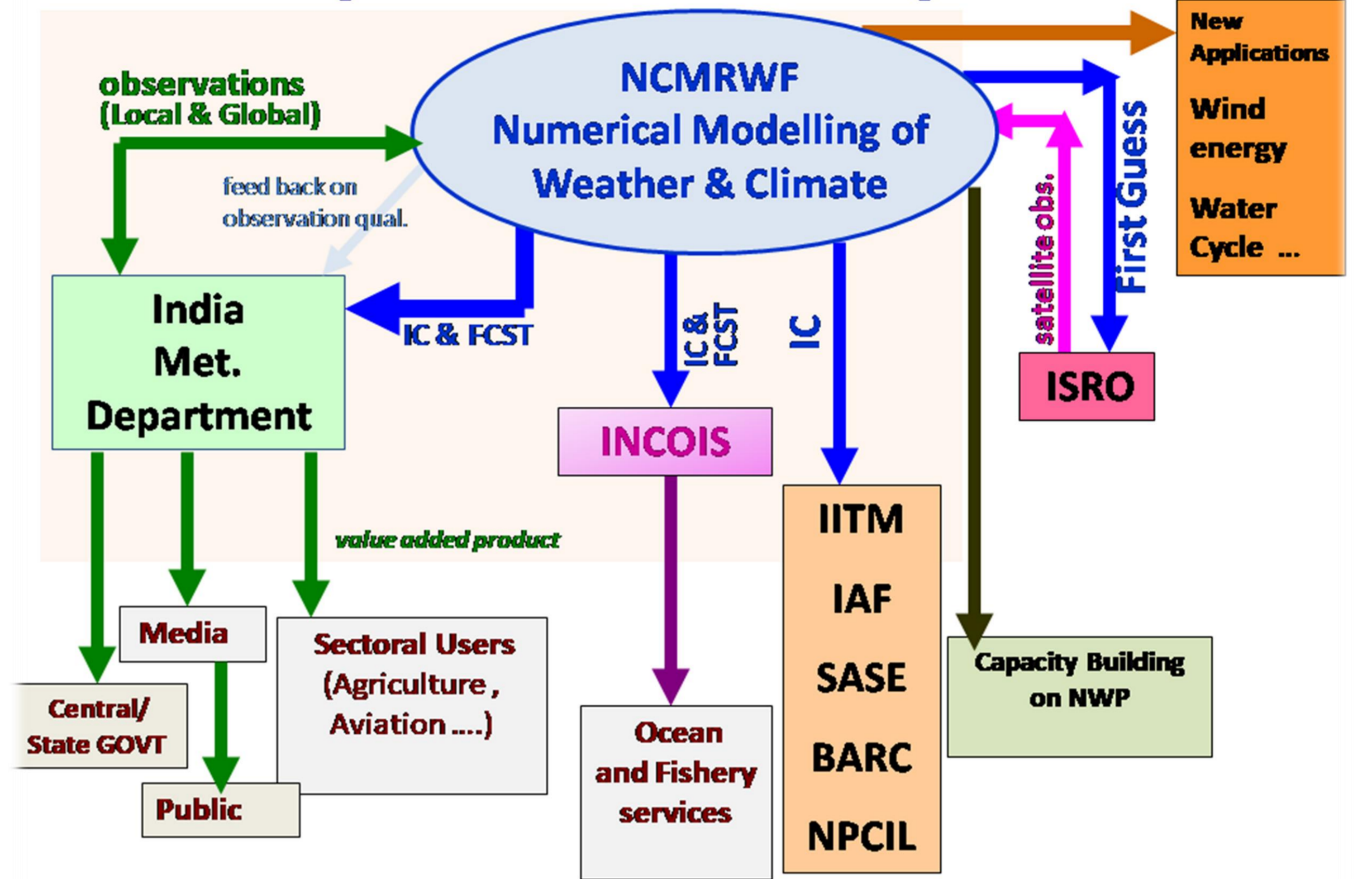
## Data Reception



## Data Monitoring

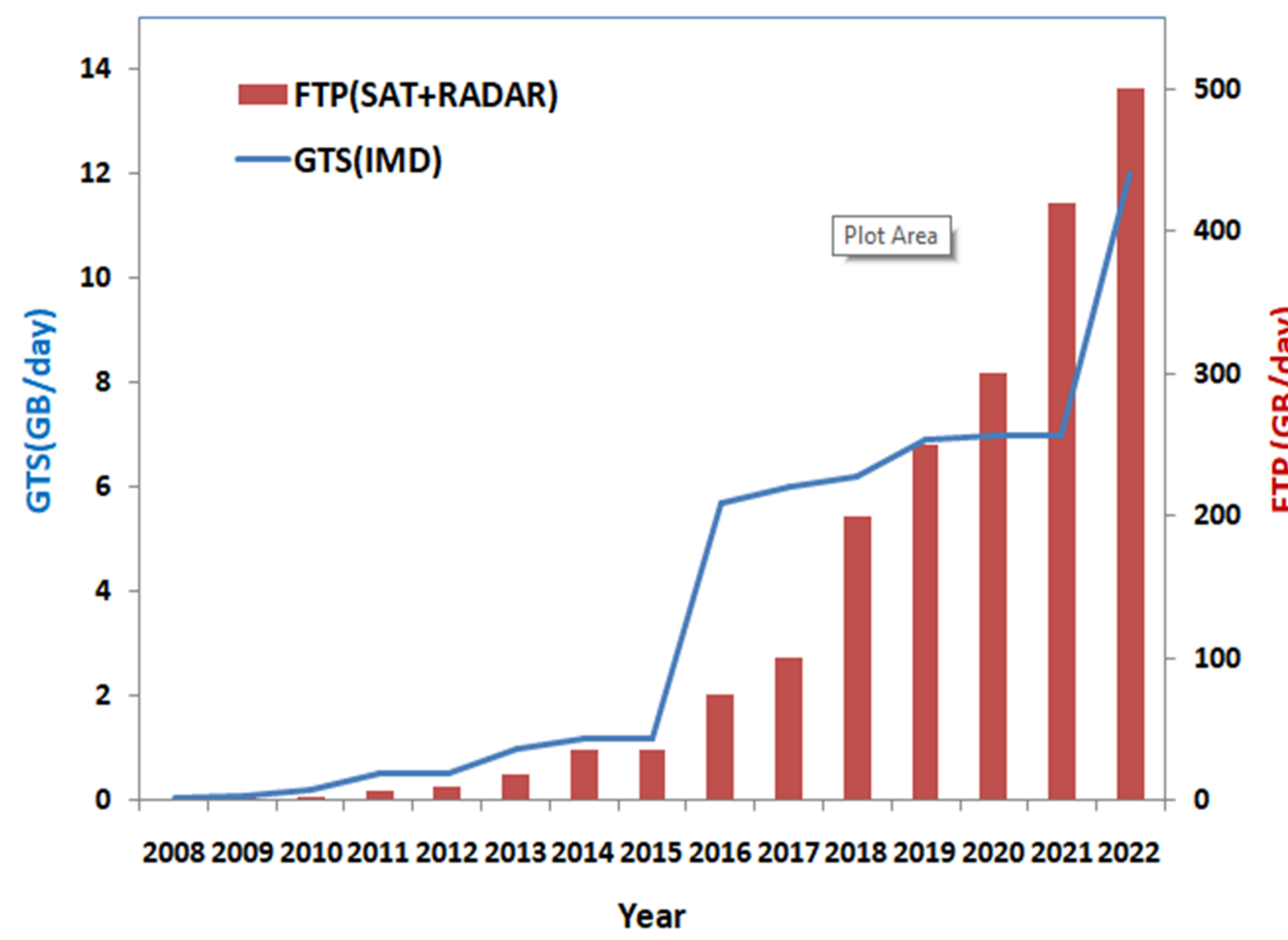


## Linkage of NCMRWF with Various Organizations



## Operational NWP Systems

**Global Deterministic:**  
NGFS (IMD) 12 km, 64 levels  
NCUM (NCMRWF) 12 km, 70 levels  
**Global Ensemble:**  
NGEFS, 12 km, 21 members  
NEPS, 12 km, 23 members  
**Regional**  
NCUM-R, 4 km, 80 levels (~40km)  
NEPS-R, 4 km, 11 members



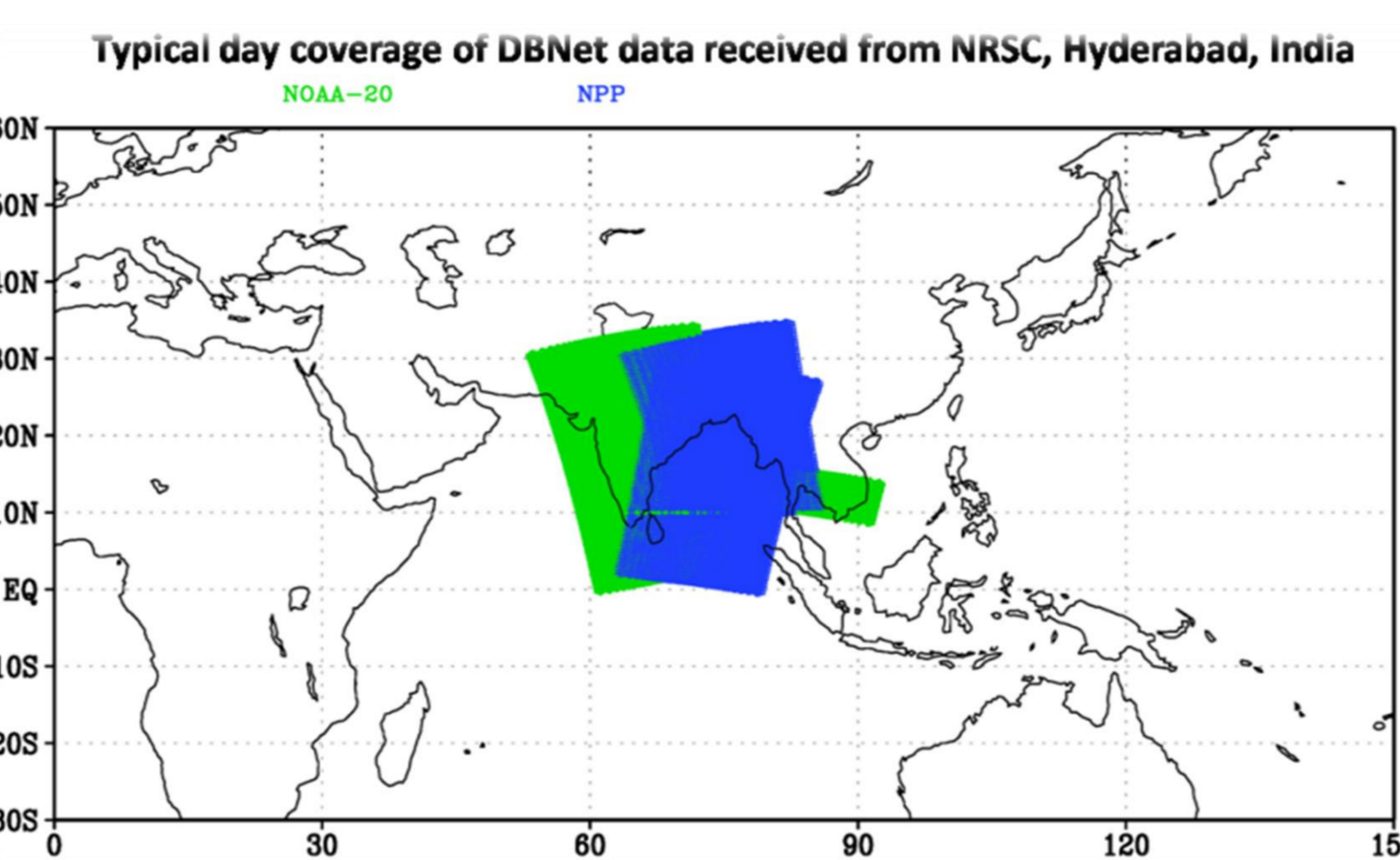
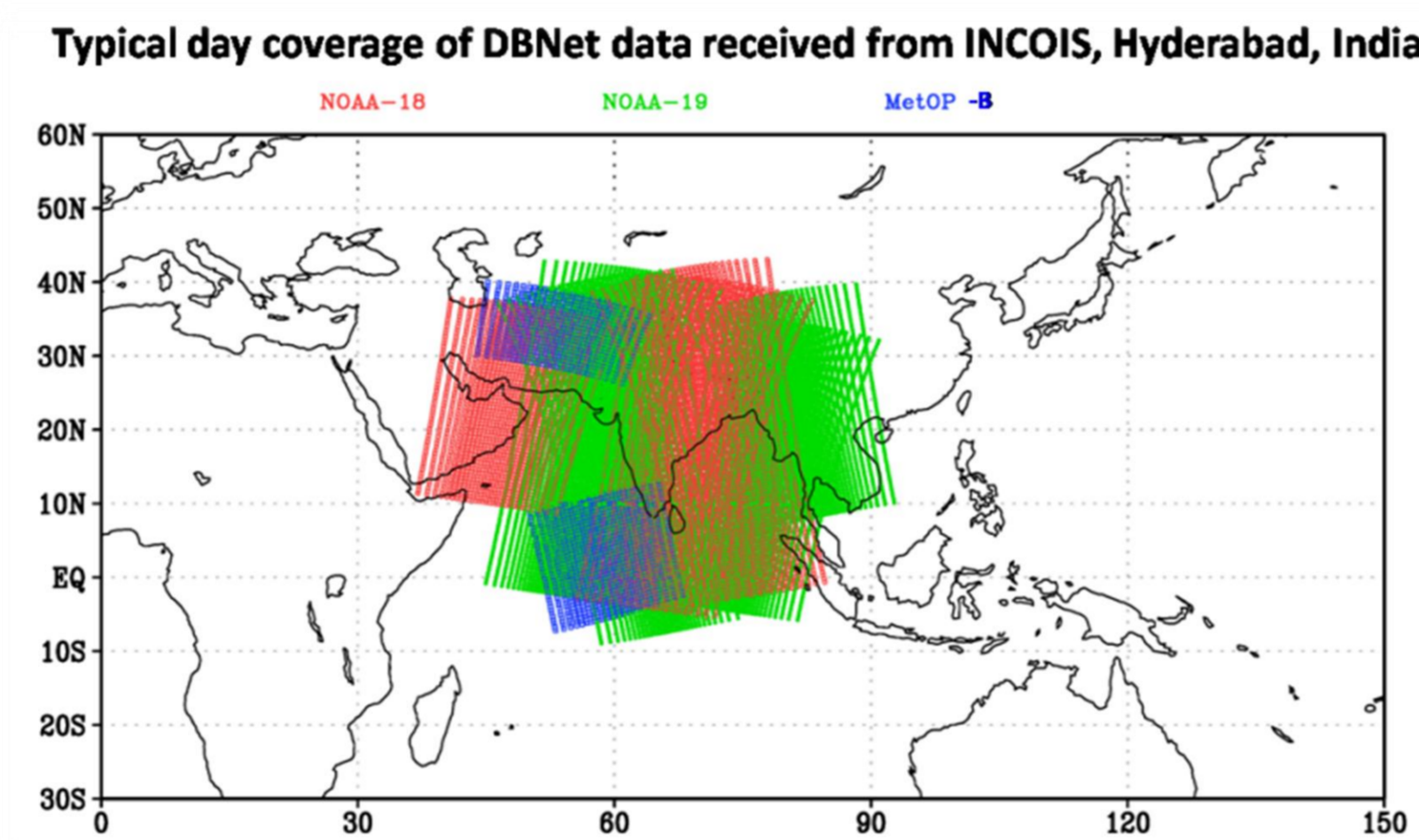
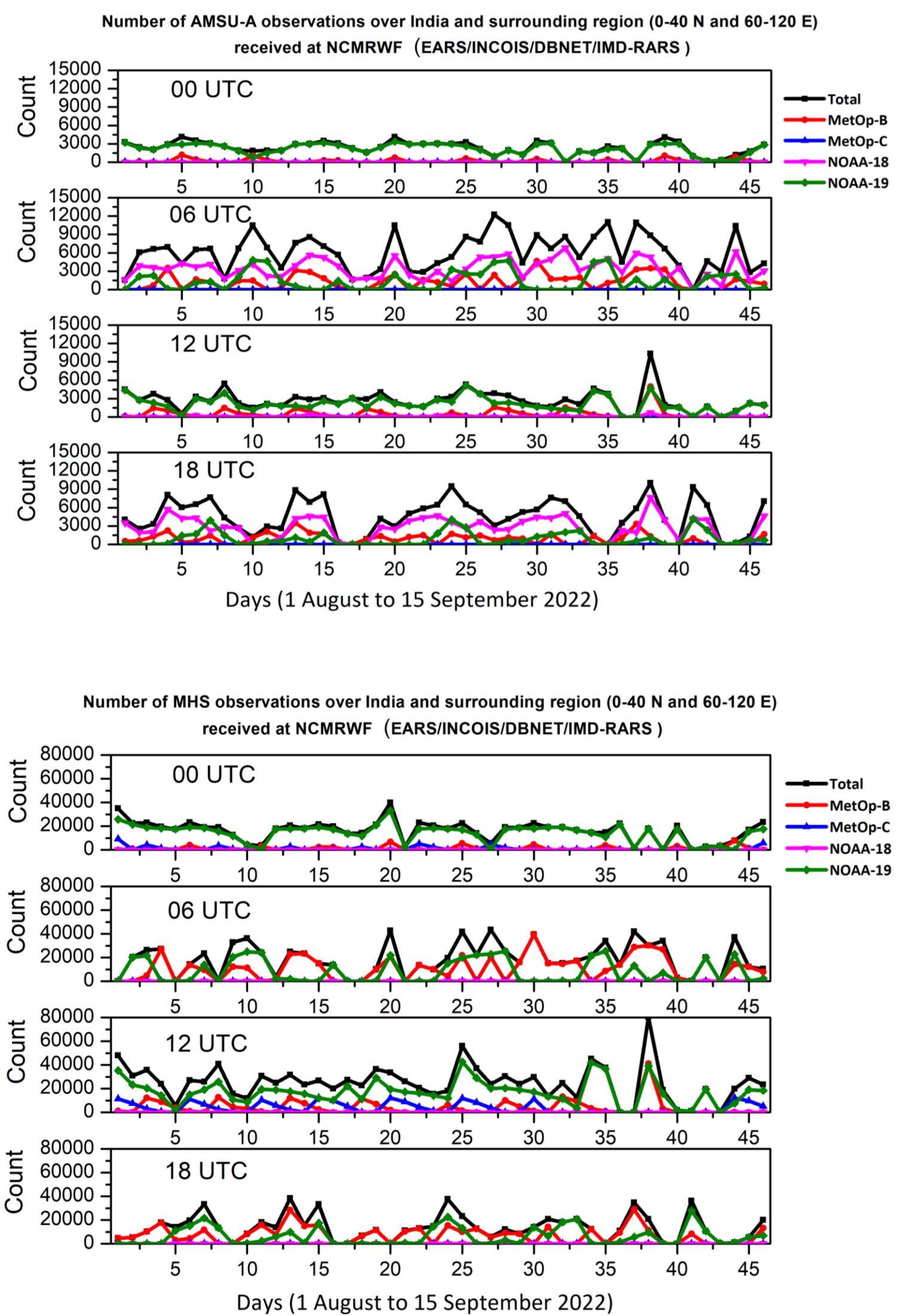
## New Observations added

Indian RS/RW BUFR (11 stations),  
Additional AIREP over the Indian Ocean region,  
Indian DBNET stations (ATOVS, IASI, ATMS, CrIS),  
Smallsats GPSRO (SPIRE and GeoOptics)

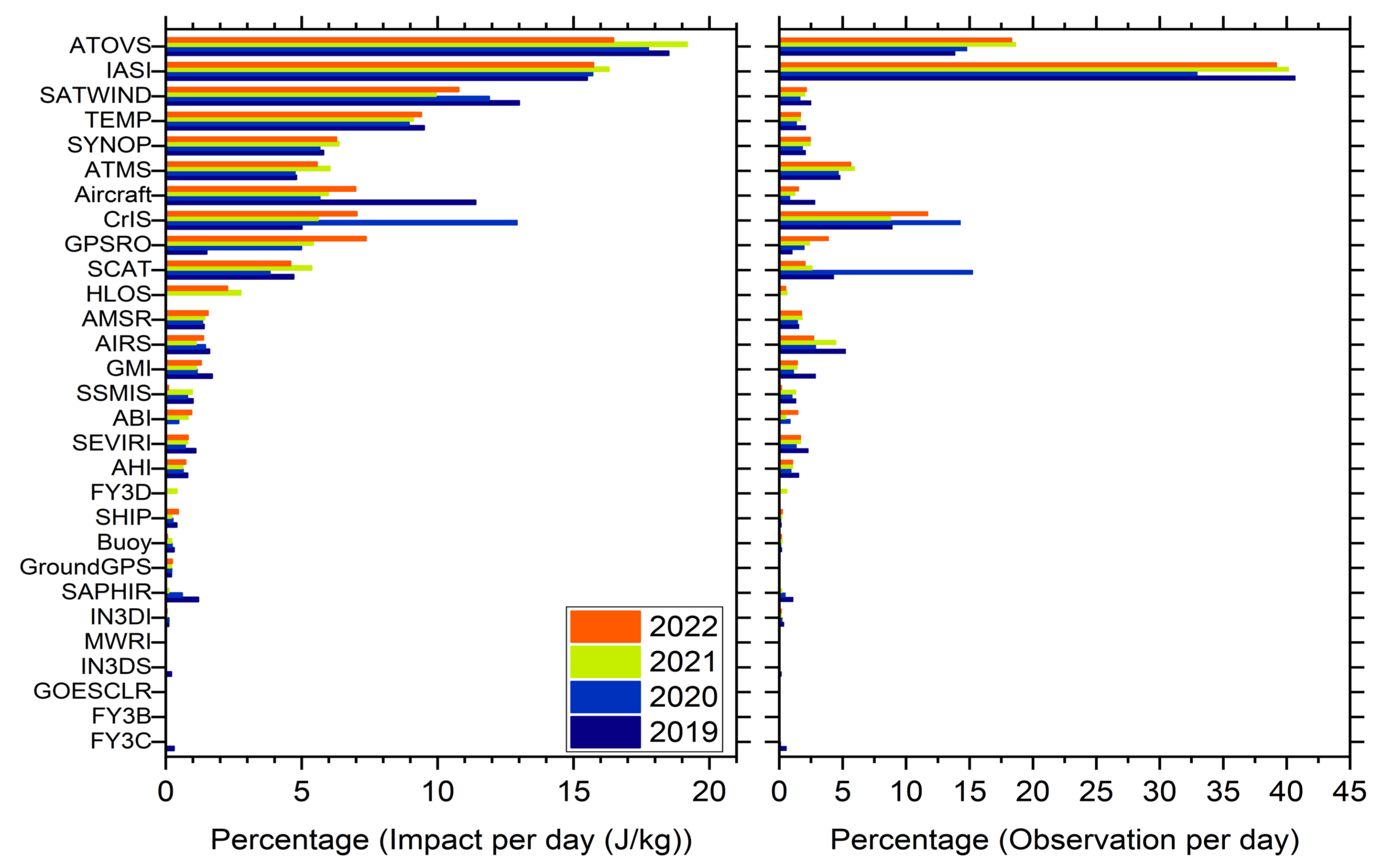
## Indian BUFR RS/RW available in GTS

S. No.	STATION	START DATE	TIME of OBSERVATION
1	DELHI	10-01-2023	1200 UTC
2	AHMEDABAD	21-01-2023	0000 UTC
3	BHUJ	24-01-2023	0000 UTC
4	PUNE	21-01-2023	0000 UTC
5	AURANGABAD	24-01-2023	0000 UTC
6	GWALIOR	21-01-2023	0000 UTC
7	JABALPUR	24-01-2023	0000 UTC
8	IMPHAL	21-01-2023	0000 UTC
9	AGARTALA	24-01-2023	0000 UTC
10	PATNA	21-01-2023	0000 UTC
11	BANKURA	24-01-2023	0000 UTC

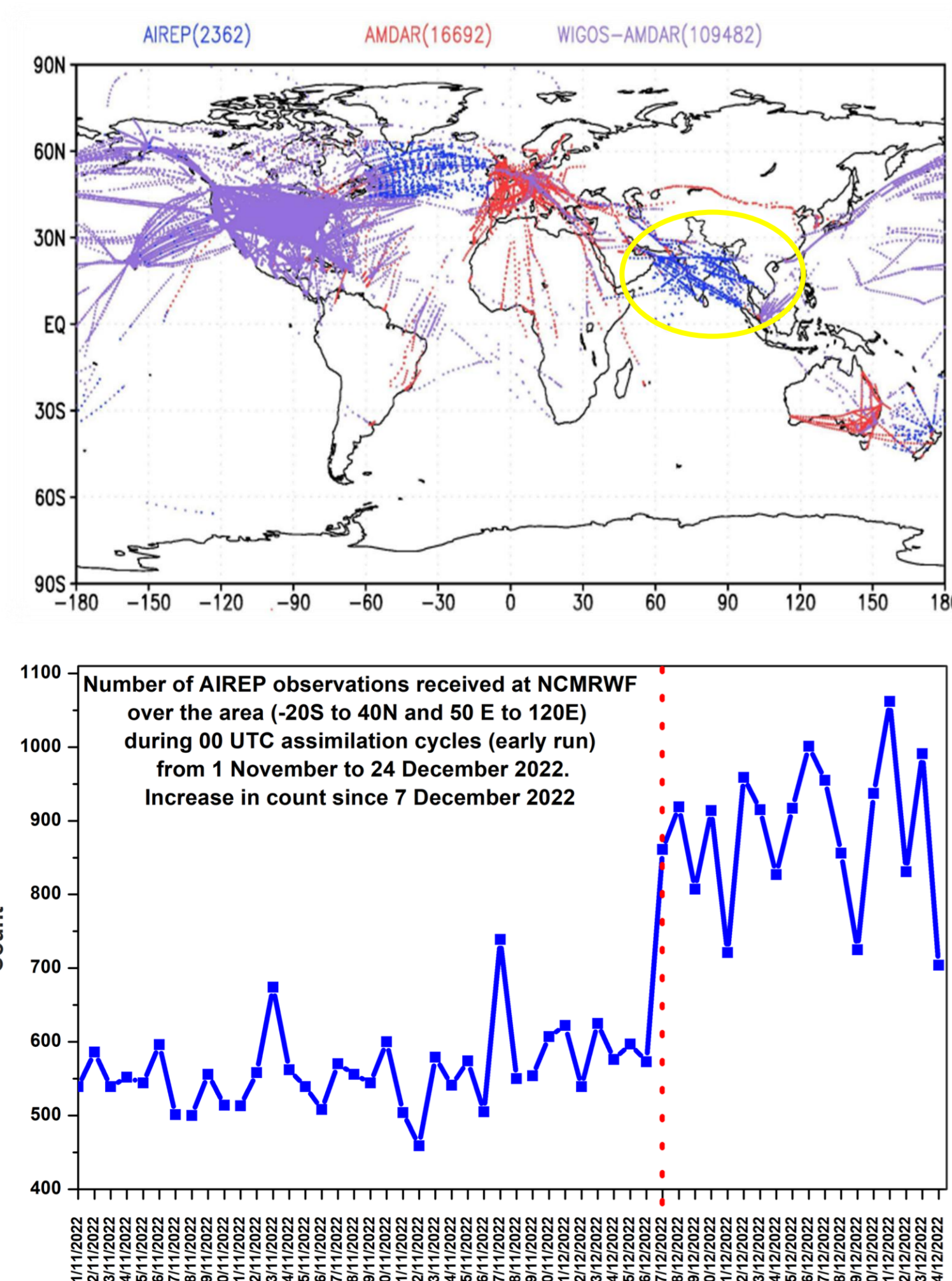
## Indian DBNET Data coverage (For more details 15.07)



## FSOI (For more details 15.02)

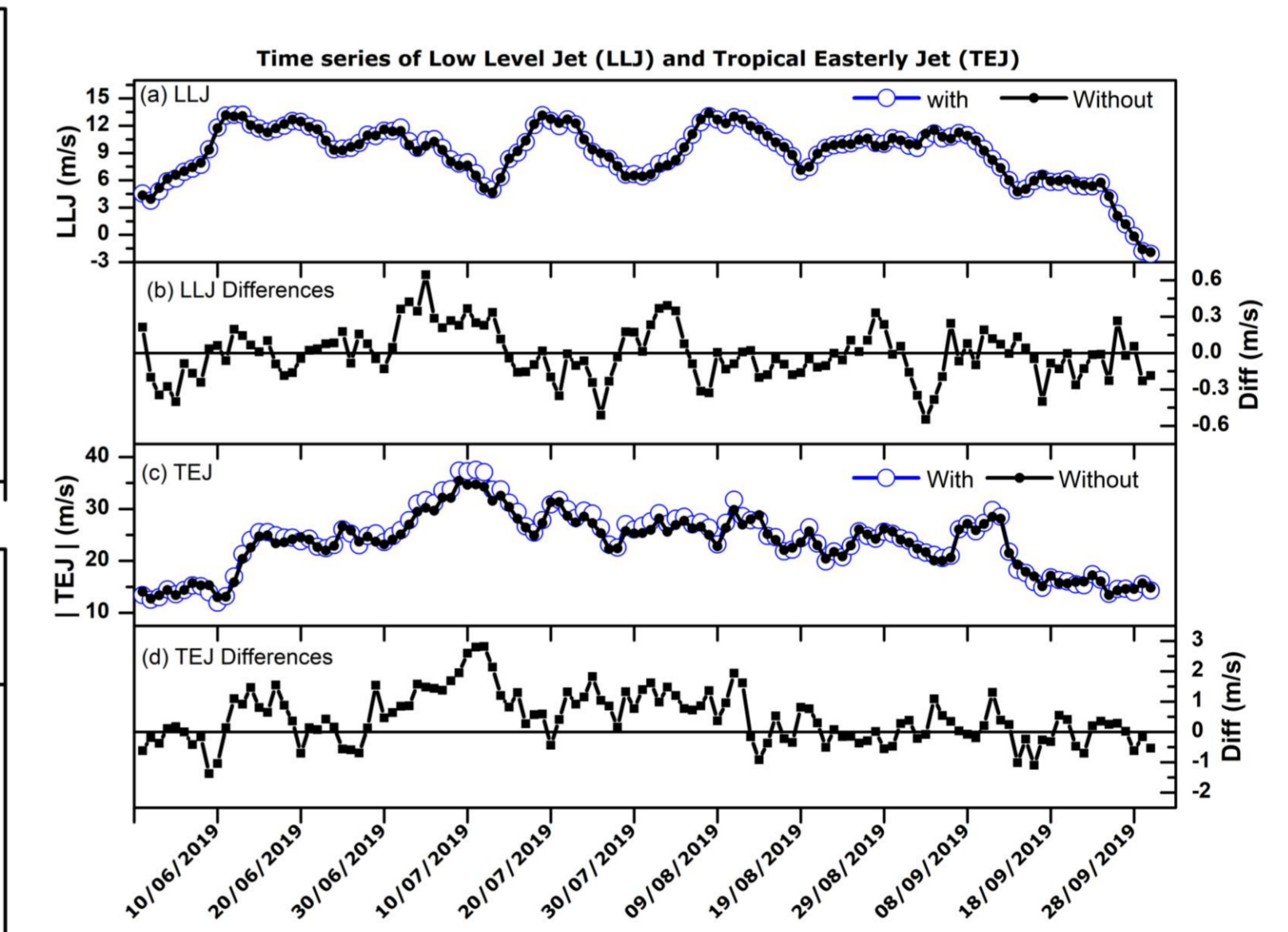
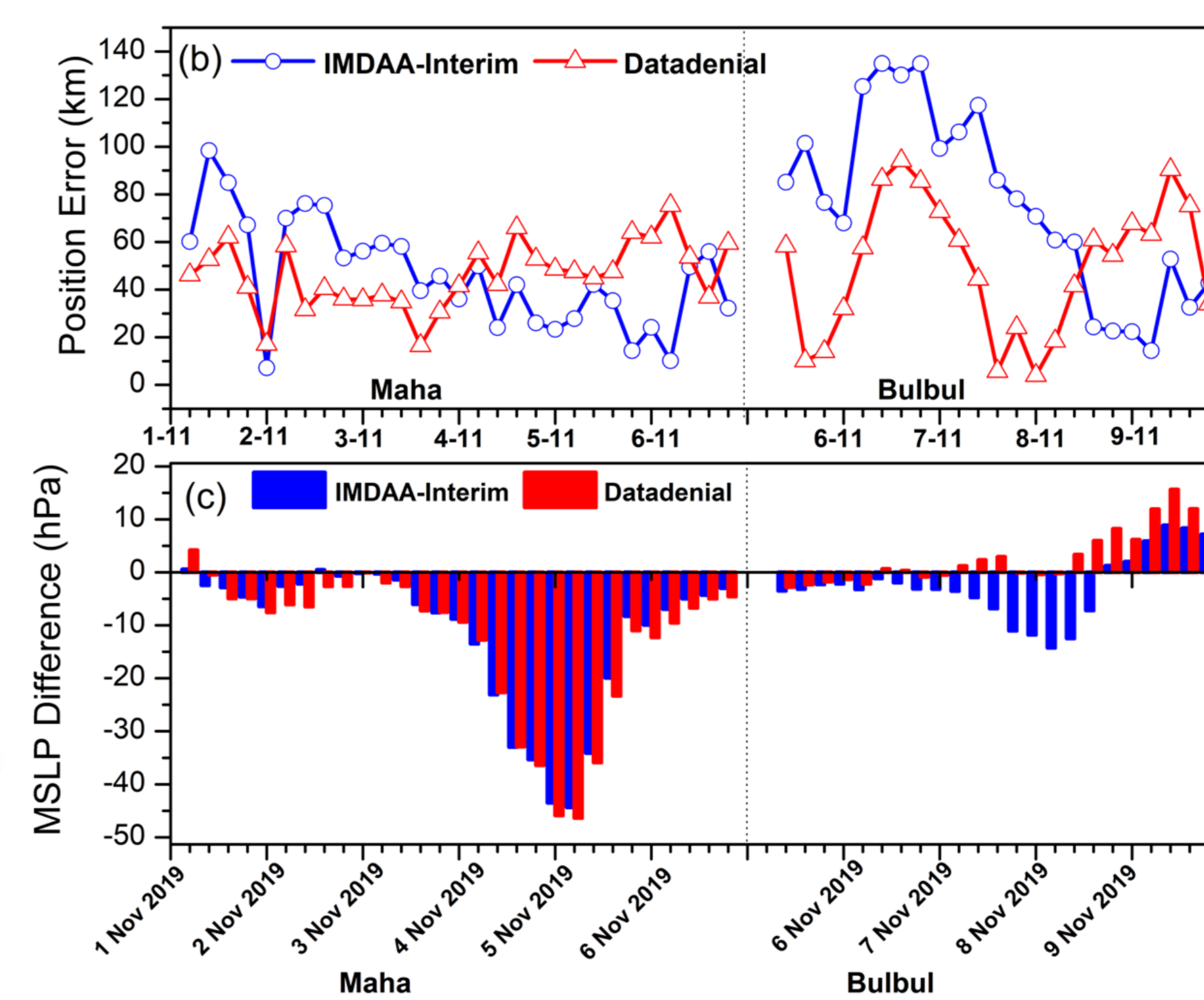
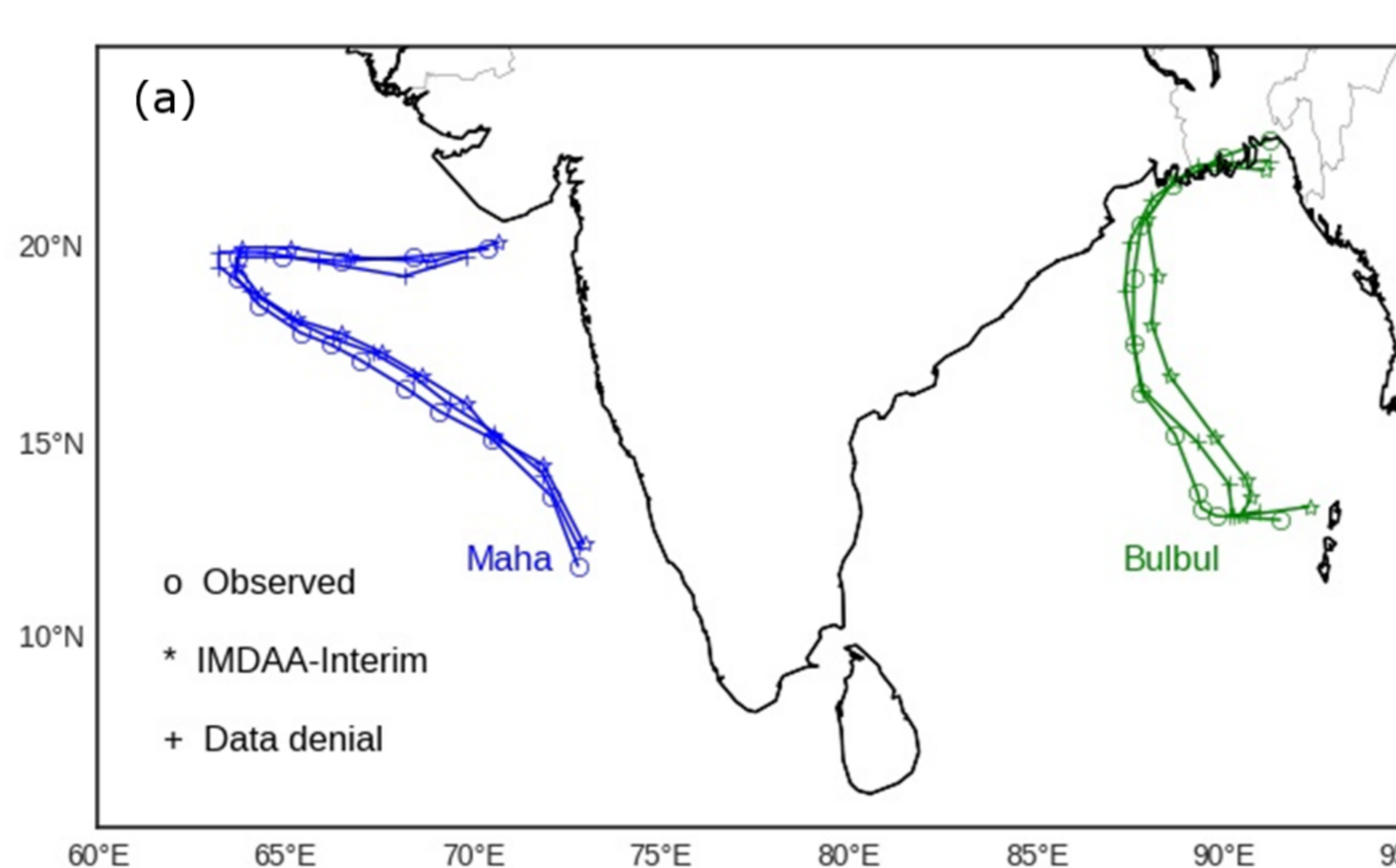


## AIRCRAFT data over the Indian region



## AIRCRAFT data: Assimilation impact over the Indian region

### Tropical cyclones



For more details: <https://doi.org/10.1002/qj.4439>

Assimilation planned: Oceansat-3 Scatterometer winds, Millimeter Wave Humidity Sounder onboard EOS7 (For more details 15p.13)