



Observation Monitoring

based on data
received/decoded at NCMRWF
(within operational data cut-off)
and NGFS GDAS

for 14102024 (1800 UTC)



Indian Observation Coverage

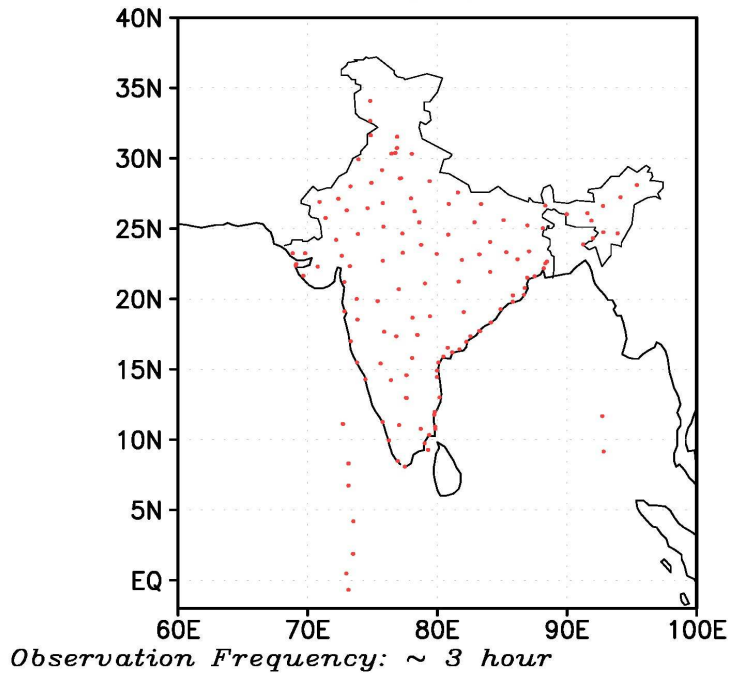


NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: Surface (14102024 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 254
(42 & 43 Block)

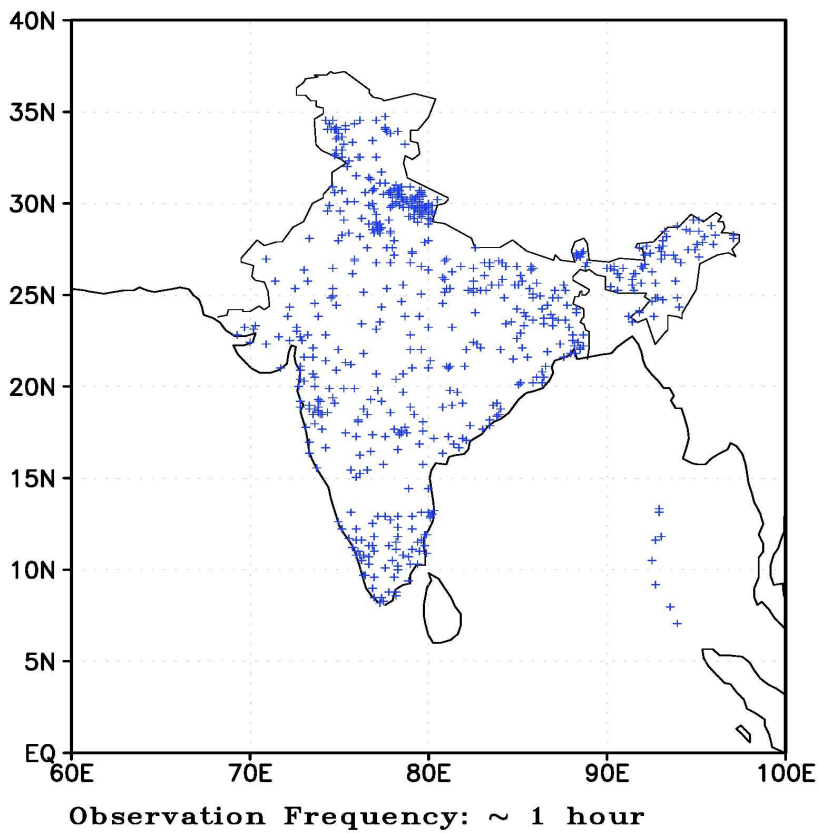
SYNOP(254)





NCMRWF OBSERVATIONS MONITORING

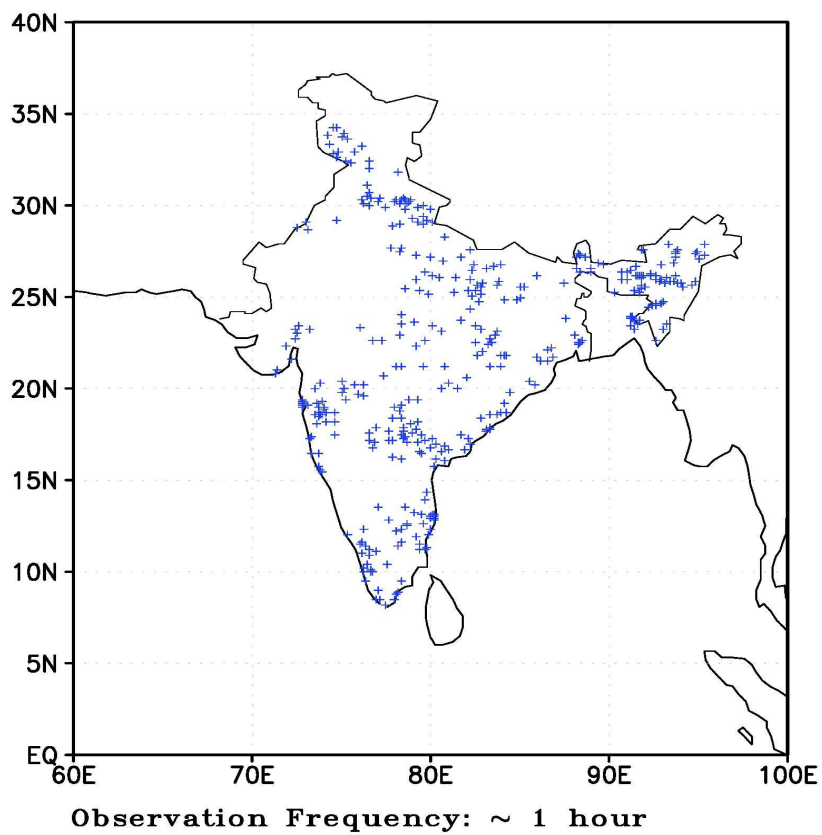
Data Coverage: Indian AWS (14102024 1800UTC +/- 3 Hrs) U_CYC
Total Number of Observations Received at NCMRWF: 3302





NCMRWF OBSERVATIONS MONITORING

Data Coverage: Indian ARG (14102024 1800UTC +/- 3 Hrs) U_CYC
Total Number of Observations Received at NCMRWF: 2236





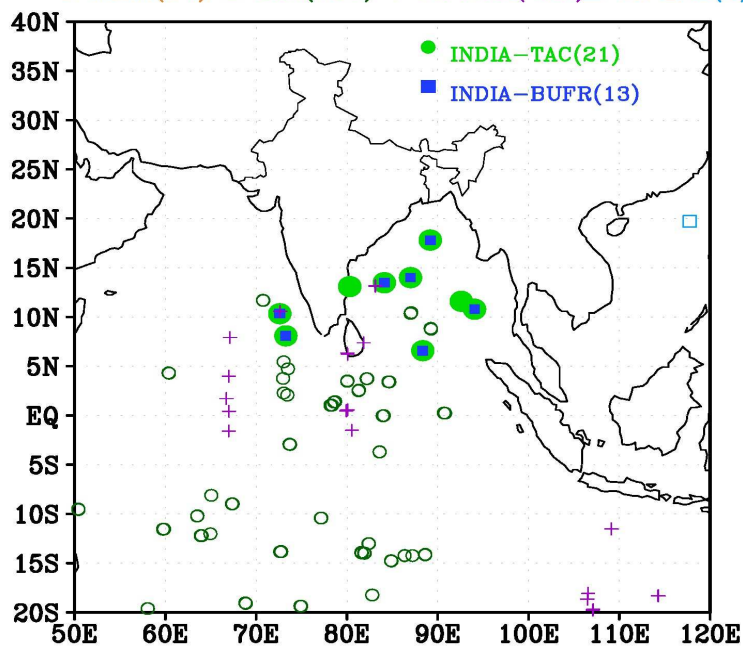
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: BUOY (14102024 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 346

country code in GTS as ● INDIA(34) ○ USA(187) + FRANCE(122) □ OTHERS(3)



Observation Frequency: ~ 1 hour & ~ 3 hour (India)

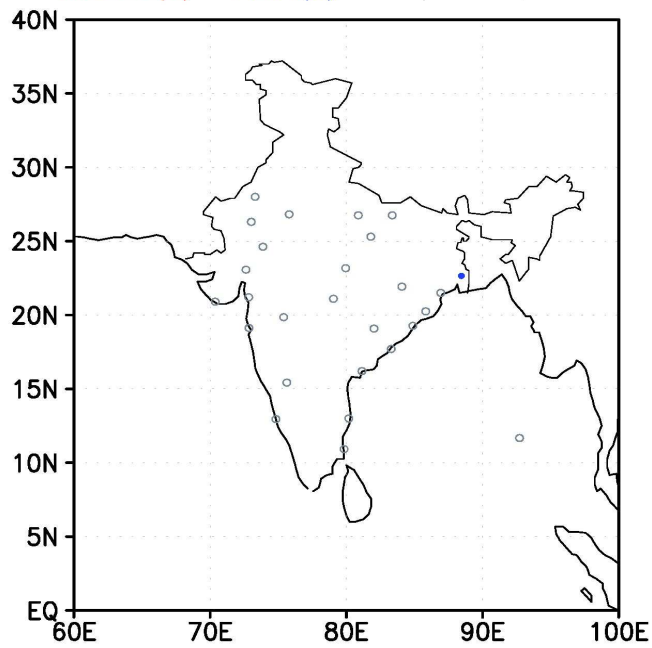


NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: Sonde (14102024 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 1
(42 & 43 Block)

TMPLND(0) PILOT(1) Reported, no ascent



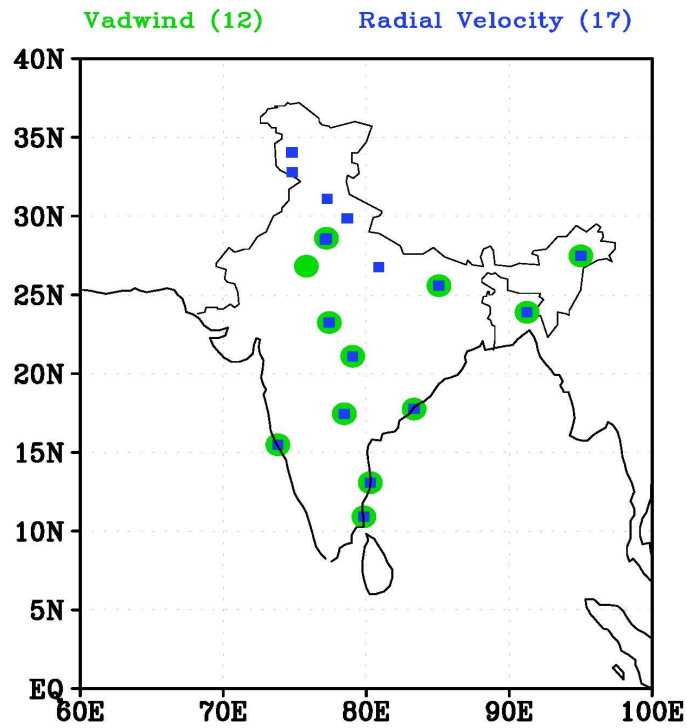
Observation frequency: ~ 6 hour



NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: Indian DWR Stations (14102024 1800UTC +/- 03Hrs)



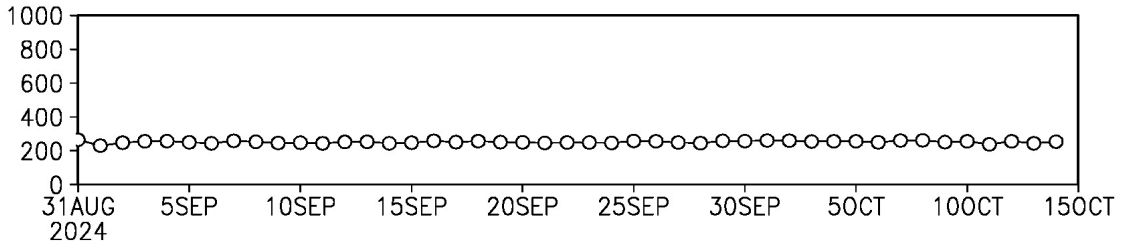


NCMRWF OBSERVATIONS MONITORING

Count for different types of observation (Over Indian Region)
for the last 45 days (valid for 18 UTC) U_CYC

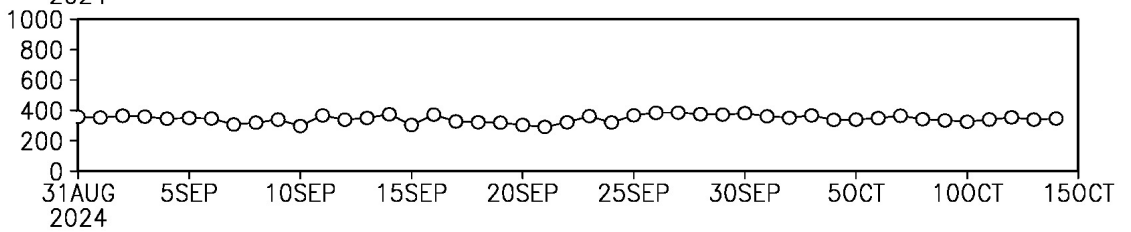
SYNOP

Avg=257
Today_Cnt=254
Dep=-1. %



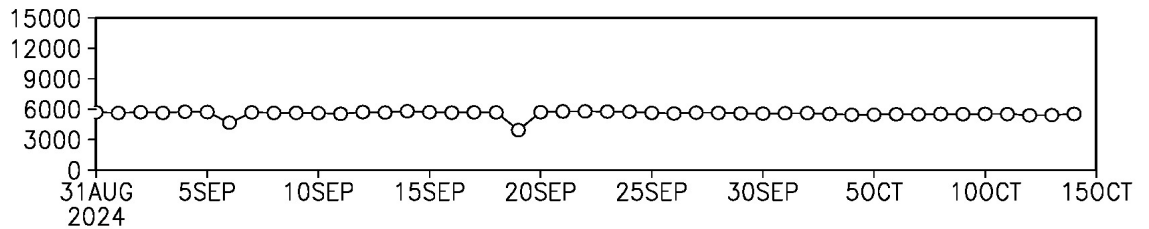
BUOY

Avg=363
Today_Cnt=346
Dep=-5. %



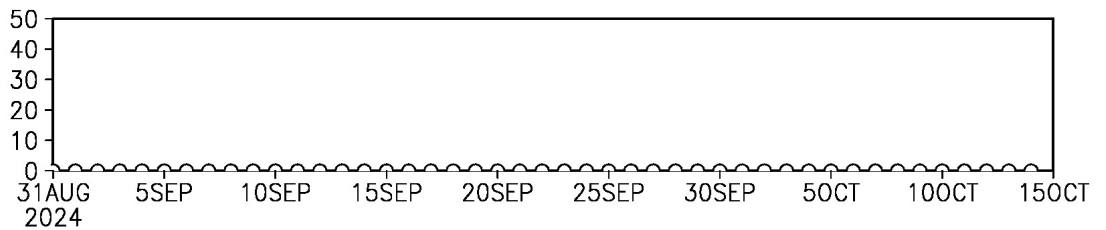
AWS+ARG

Avg=5680
Today_Cnt=5538
Dep=-2. %



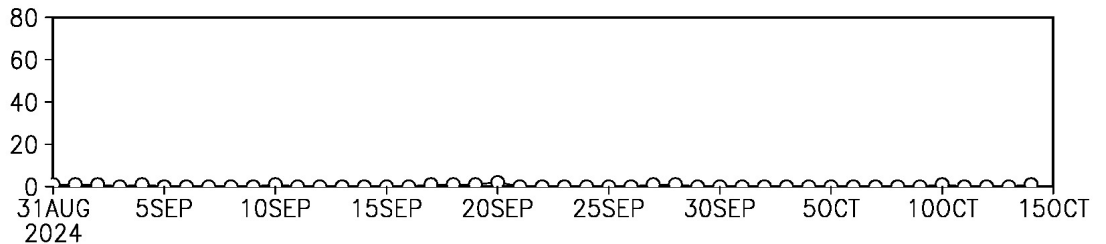
RS/RW

Avg=0
Today_Cnt=0
Dep=NaN %



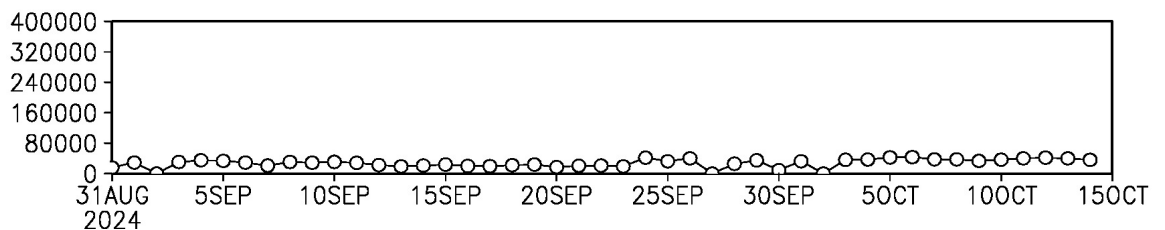
PILOT

Avg=0
Today_Cnt=1
Dep=Inf %



INSAT-3DR AMV

Avg=28082
Today_Cnt=28750
Dep=2. %





Global Observation Coverage



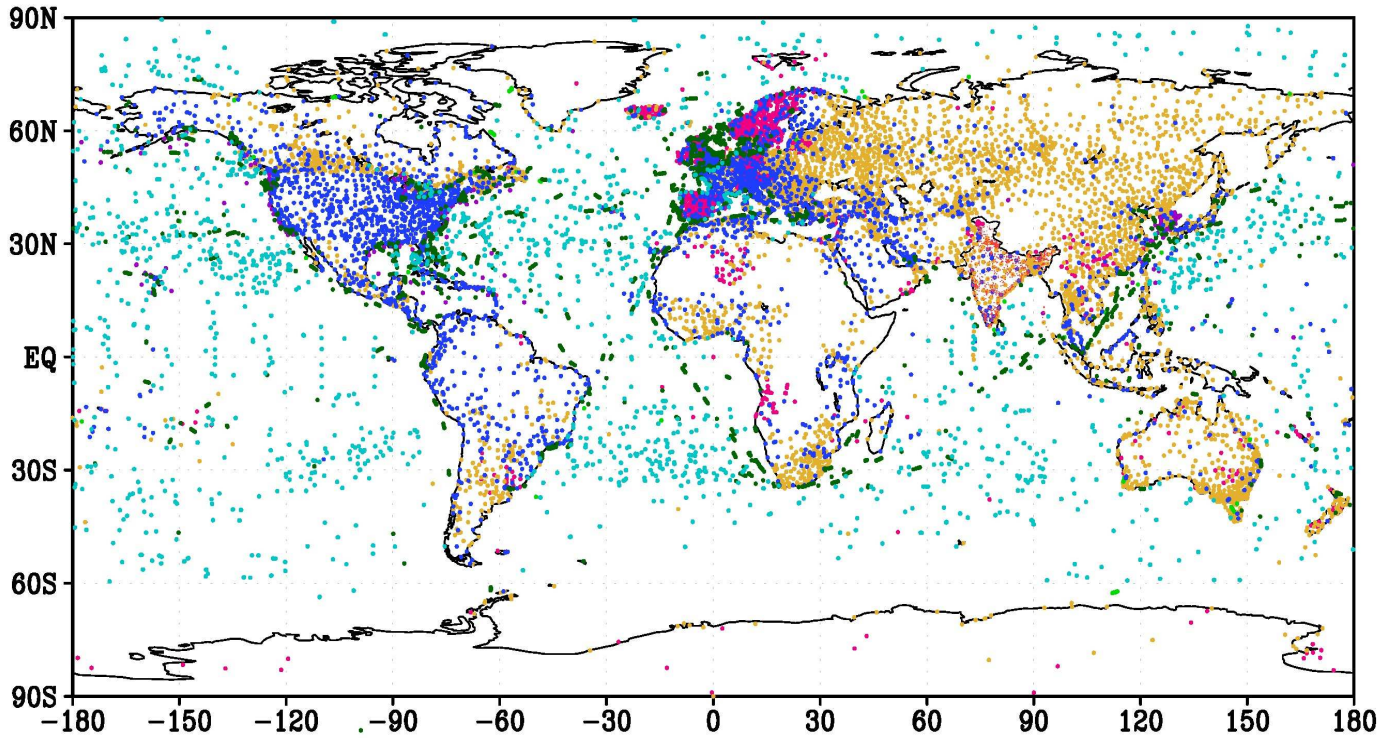
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: Surface (14102024 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 70785

LNDSYN(16764) SHIP(3028) BUOY(6680) METAR(19995) MOBILE/AWS(5538)

LNDSYN_BUFR(5409) SHIP_BUFR(3746) BUOY_BUFR(9625)



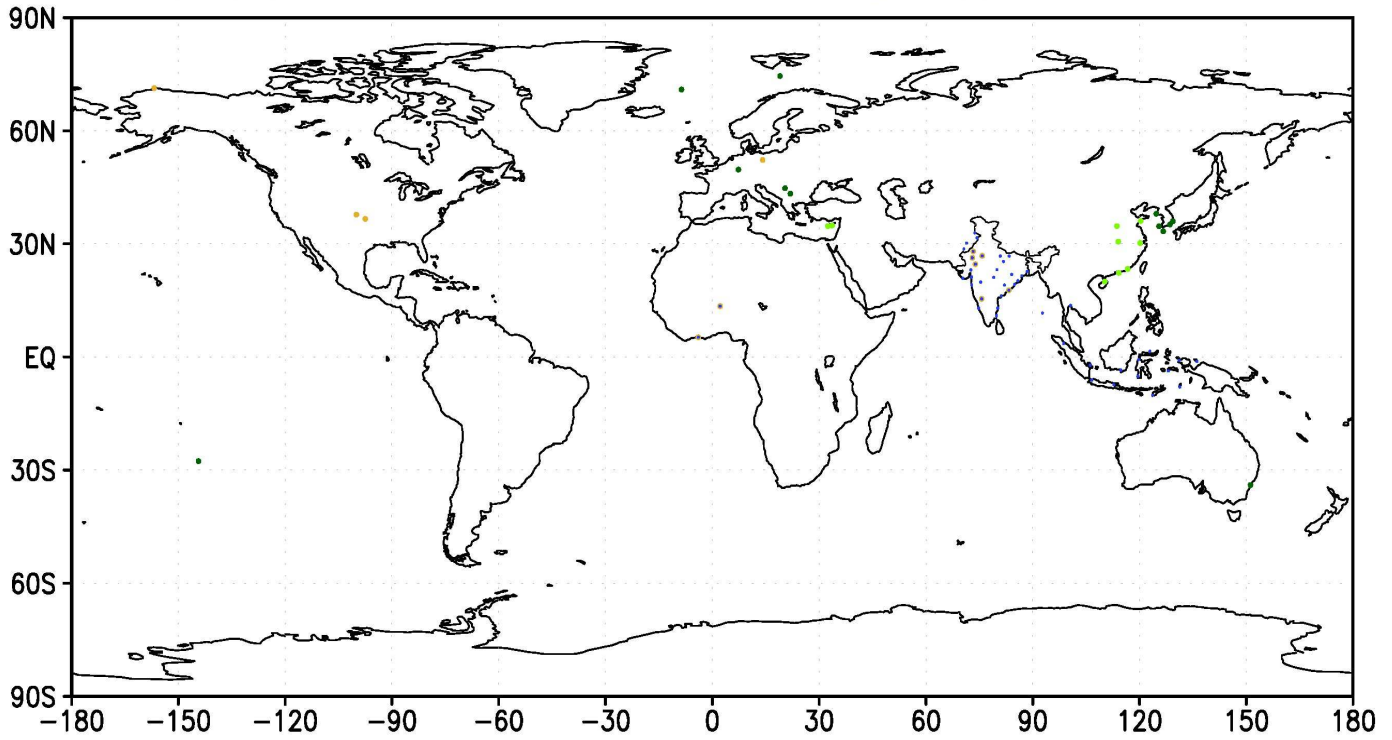


NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: Sonde (14102024 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 59

TMPLND(12) TMPSHP(0) TMPDRP(0) TMPMOB(0) PILOT(47) PROFILER(0)
TMPLND_BUF(12) PILOT_BUF(9)





NCMRWF OBSERVATIONS MONITORING

U_CYC

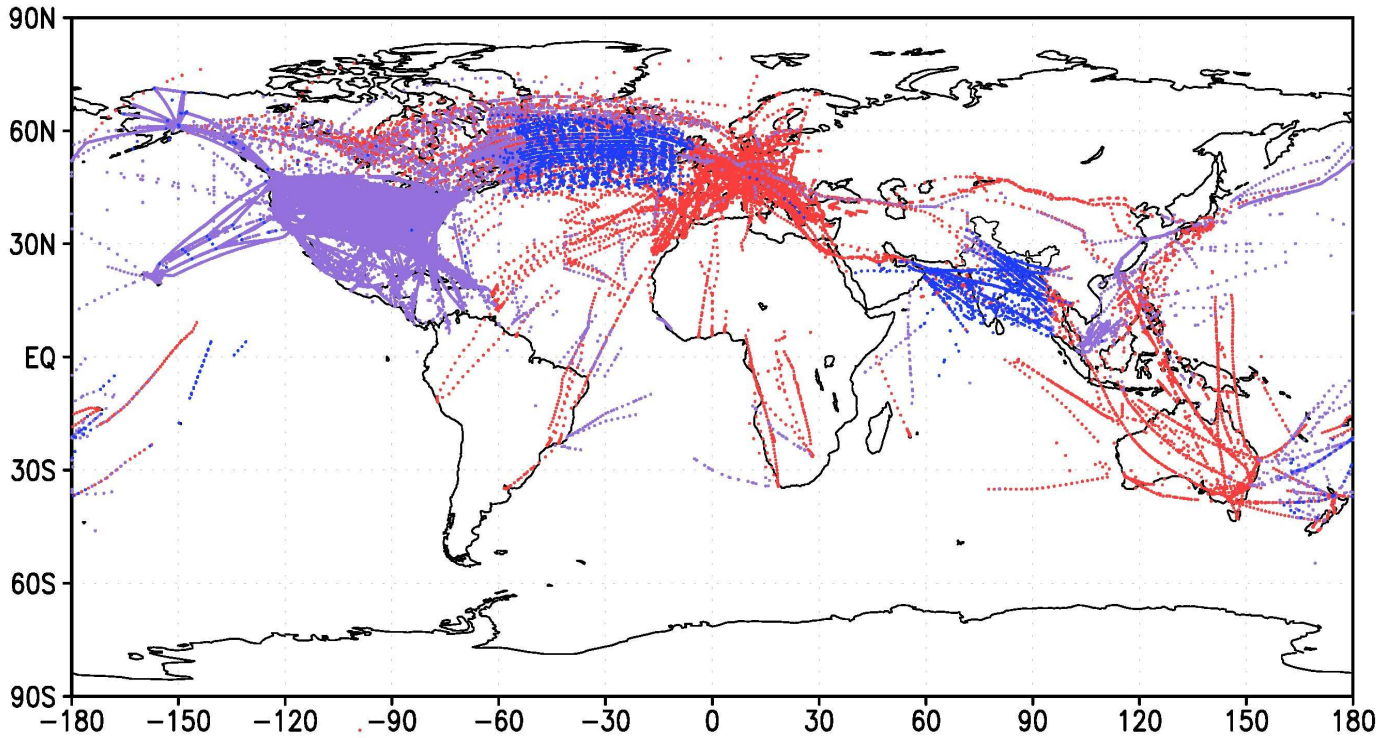
Data Coverage: AIRCFT (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 188081

AIREP(4863)

AMDAR(28206)

WIGOS-AMDAR(155012)



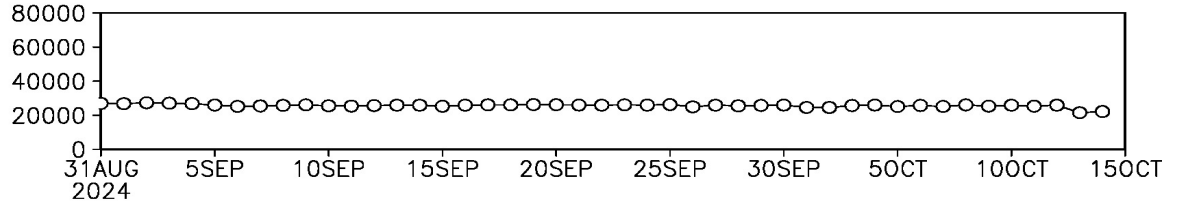


NCMRWF OBSERVATIONS MONITORING

Count for different types of observation (Global)
for the last 45 Days (valid for 18 UTC) U_CYC

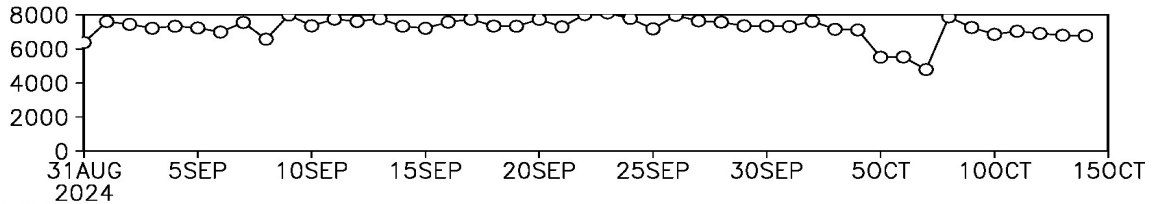
SYNOP

Avg=26219
Today_Cnt=22173
Dep=-15. %



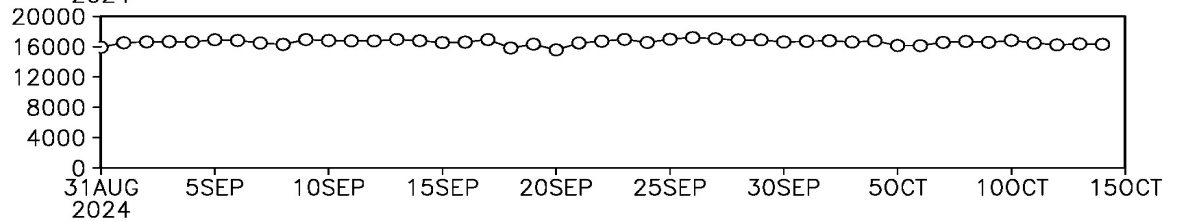
SHIP

Avg=7591
Today_Cnt=6774
Dep=-11. %



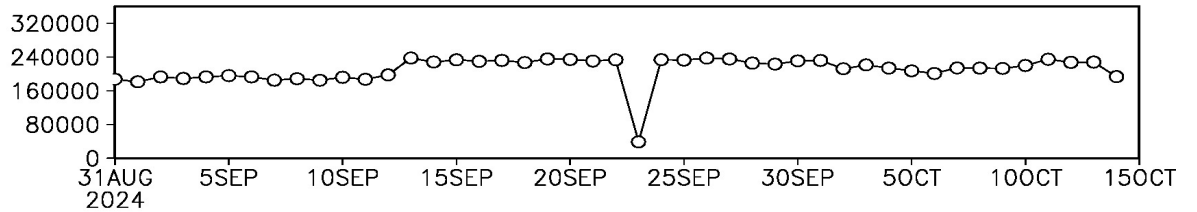
BUOY

Avg=16805
Today_Cnt=16305
Dep=-3. %



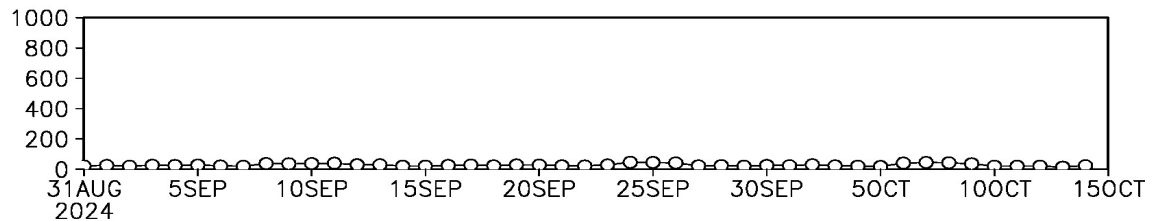
AIRCRAFT

Avg=221847
Today_Cnt=188081
Dep=-15. %



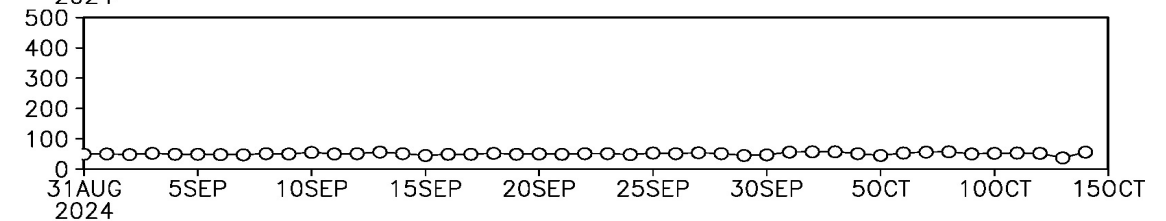
RS/RW

Avg=35
Today_Cnt=24
Dep=-31. %



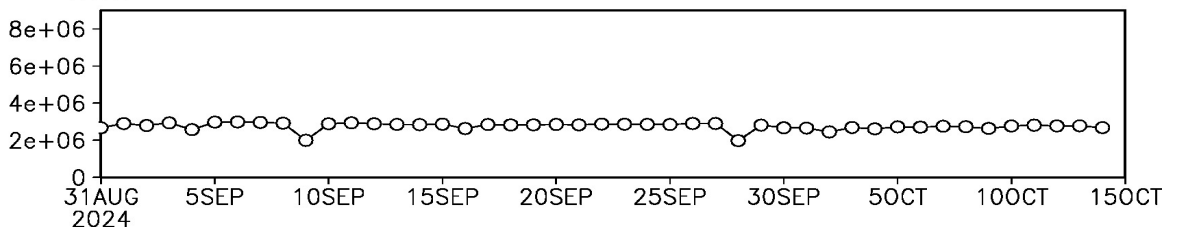
PILOT

Avg=52
Today_Cnt=56
Dep=8. %



AMV

Avg=2861988
Today_Cnt=2673819
Dep=-7. %





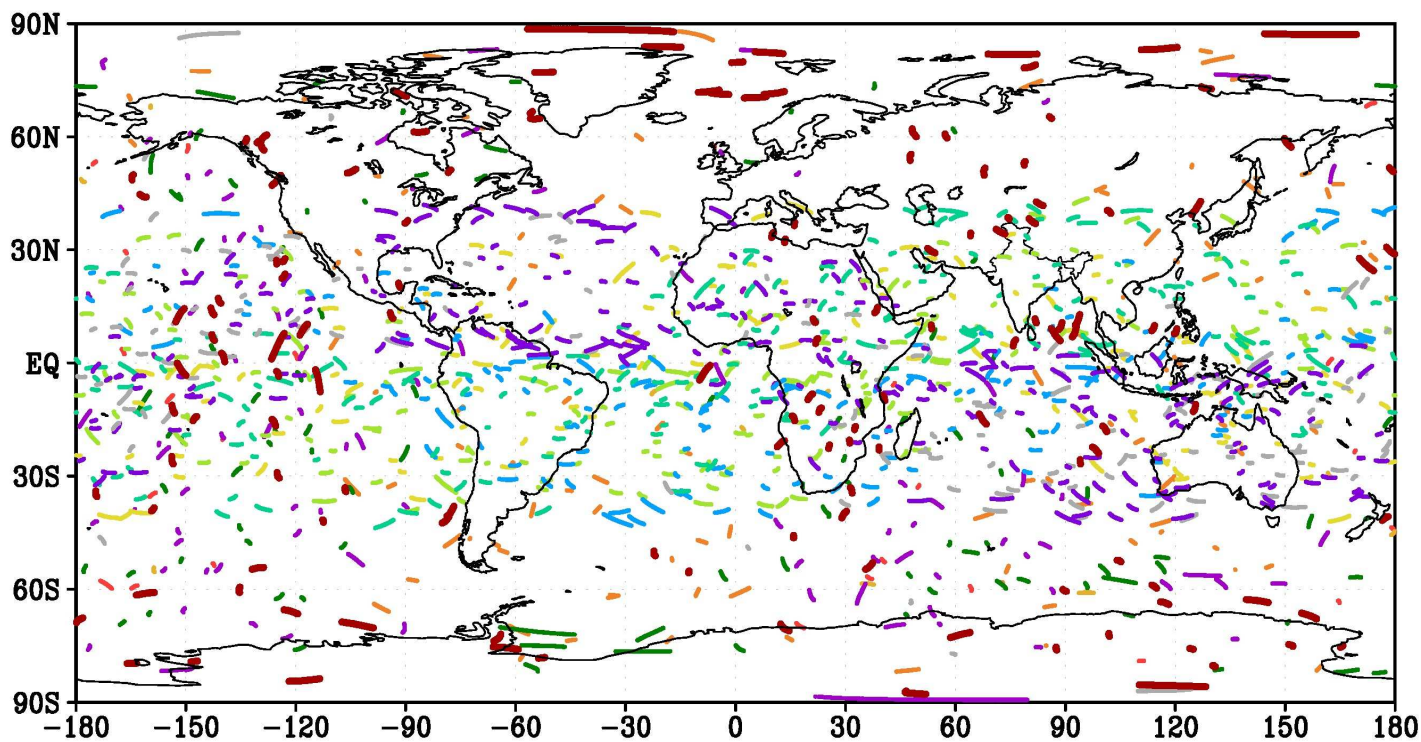
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage:GNSSR0 (14102024 1800UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 365998

| | | | | |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| TerraSAR-X(5700) | TenDEM-X(2679) | FY-3D(24059) | SPIRE(32917) | COSMIC-2E1(31843) |
| COSMIC-2E2(42969) | COSMIC-2E3(37612) | COSMIC-2E4(48028) | COSMIC-2E5(30973) | COSMIC-2E6(55871) |
| METOP-B(23681) | METOP-C(23066) | PAZ(6600) | KOMPSAT-5(0) | GeoOptics(0) |





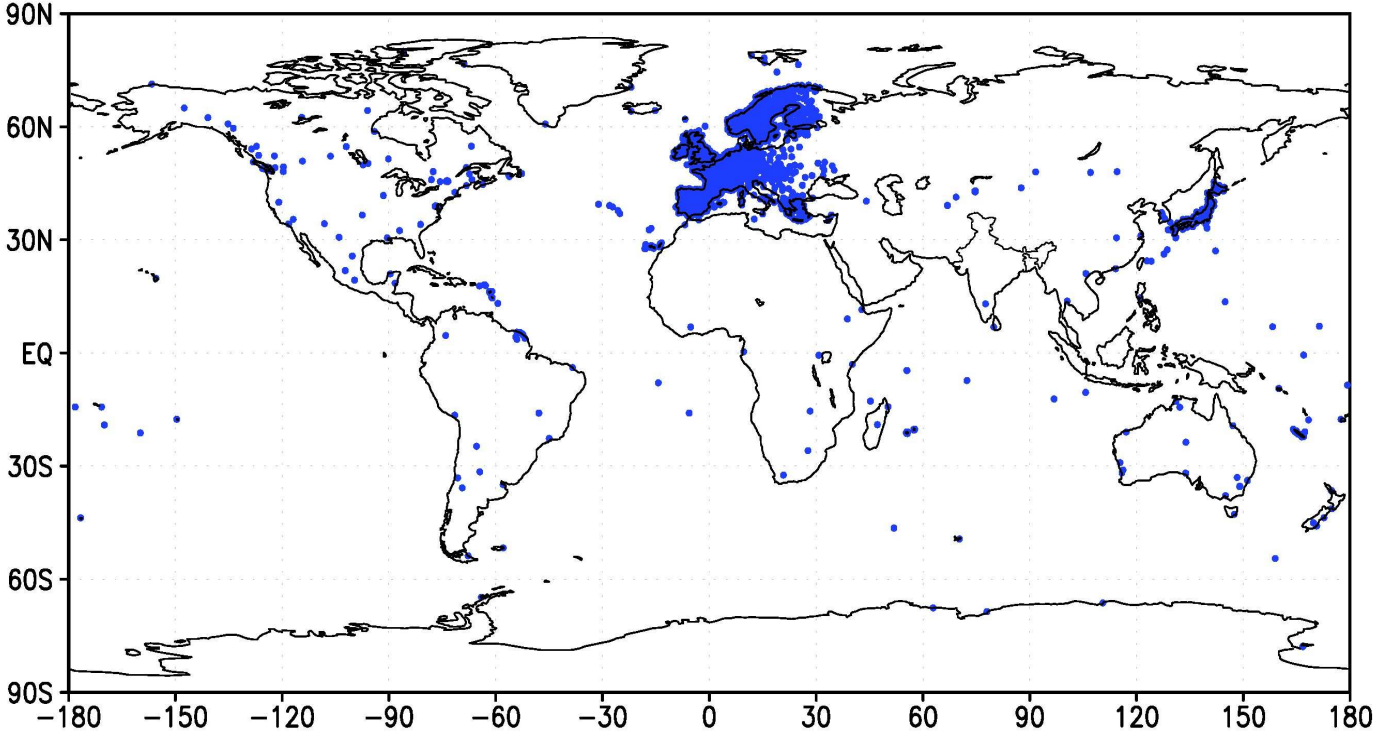
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: GNSS-IPW (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 22982

GPSIPW(22982)





NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: OZONE (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 0

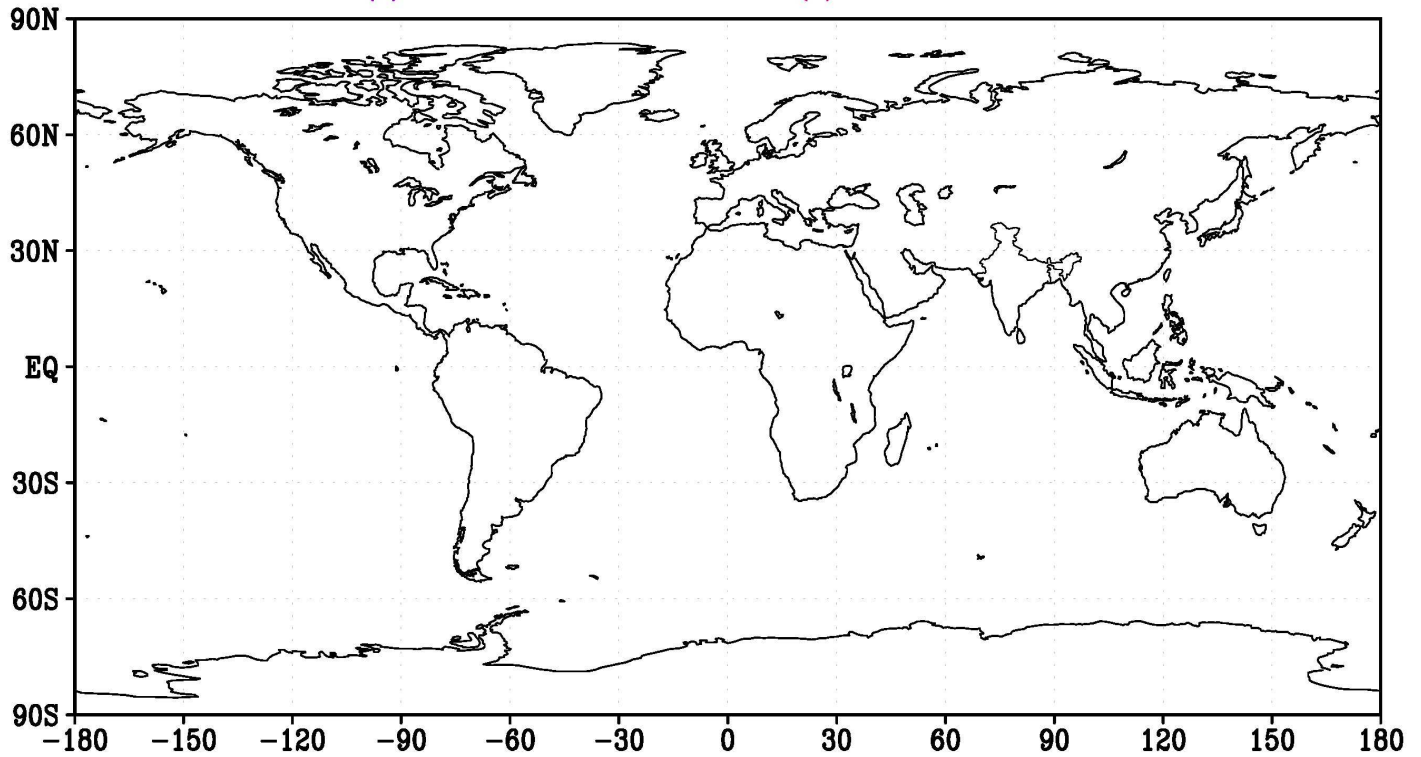
GOME-METOP-B(0)

OMPS-Nadir-NPP(0)

OMPS-Nadir-NOAA20(0)

OMPS-TotCol-NPP(0)

OMPS-TotCol-NOAA20(0)





NCMRWF OBSERVATIONS MONITORING

U_CYC

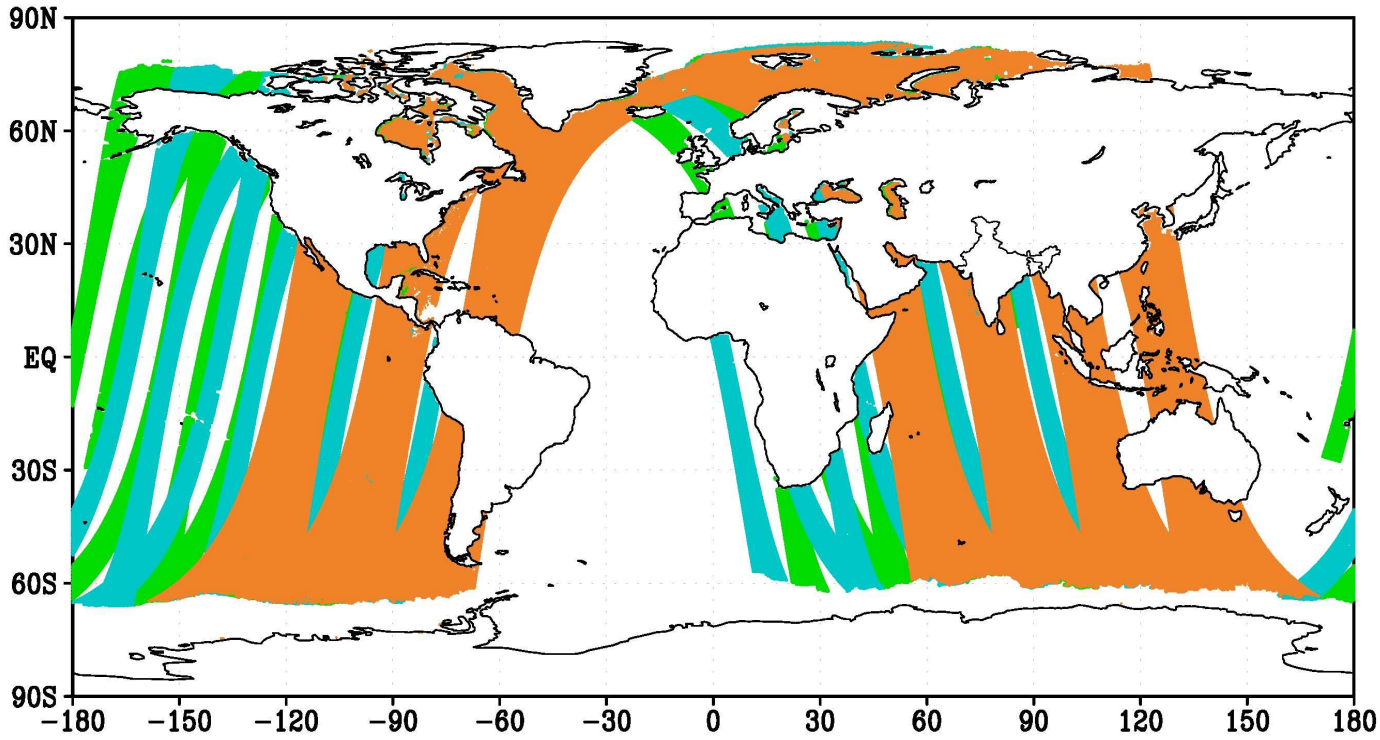
Data Coverage: Scatterometer winds (14102024 18UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1939415

ASCAT (METOP-B) (464641)

ASCAT (METOP-C) (498082)

SCATSAT (OCEANSAT-3) (976692)





Atmospheric Motion Wind Vectors



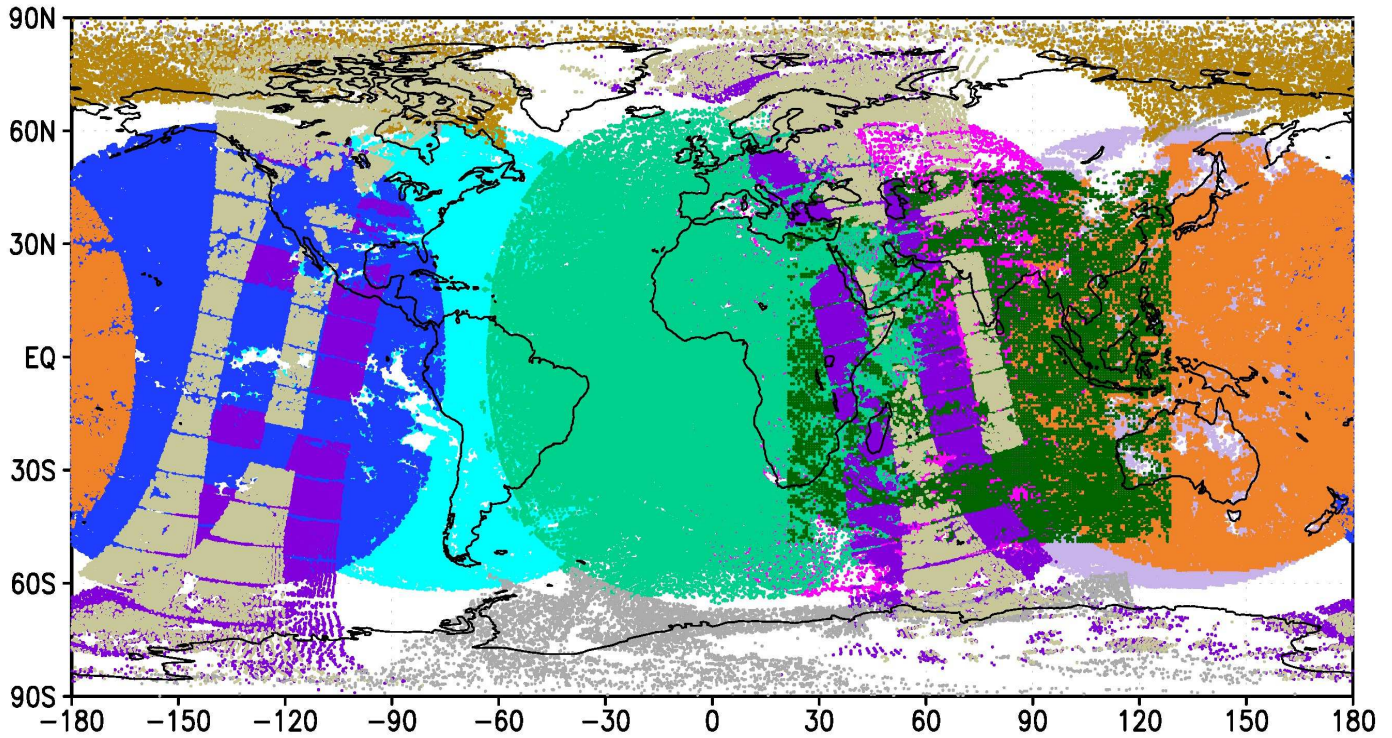
NCMRWF OBSERVATIONS MONITORING

U_CYC

Total Number of Observations Received at NCMRWF: 2673818

Data Coverage: AMV_ALL (14102024 1800UTC +/- 03Hrs)

| | | | | |
|-----------------|-----------------|---------------------|------------------|--------------------|
| GOES-16(690387) | GOES-18(680581) | NOAA-18(0) | NOAA-19(0) | METEOSAT-9(136064) |
| METEOSAT-11(0) | NPP(17206) | NOAA-20(14131) | MODIS/Terra(0) | MODIS/Aqua(0) |
| METOP-B(53484) | METOP-C(48985) | INSAT-3D(0) | INSAT-3DR(28749) | HIMAWARI-9(129010) |
| NOAA-15(0) | COMS-2(656473) | METEOSAT-10(194146) | | |



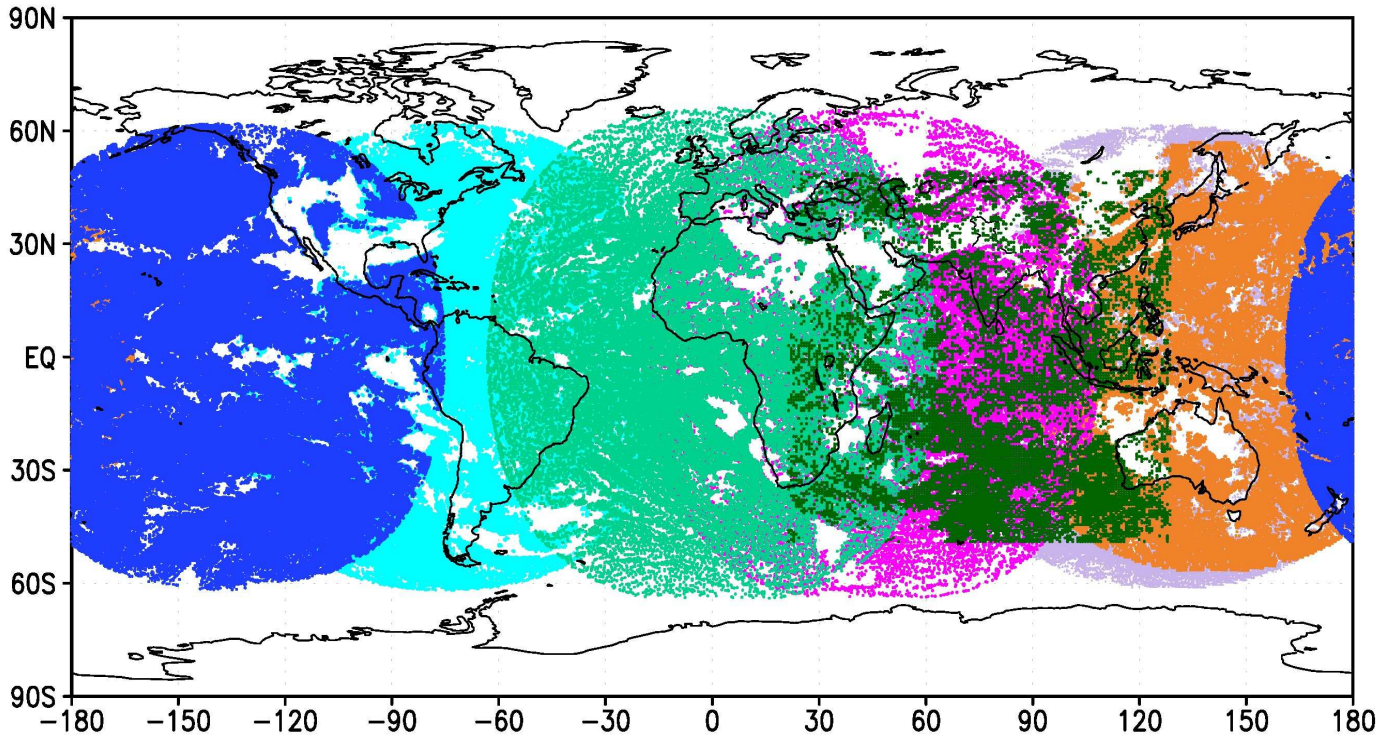


NCMRWF OBSERVATIONS MONITORING

U_CYC

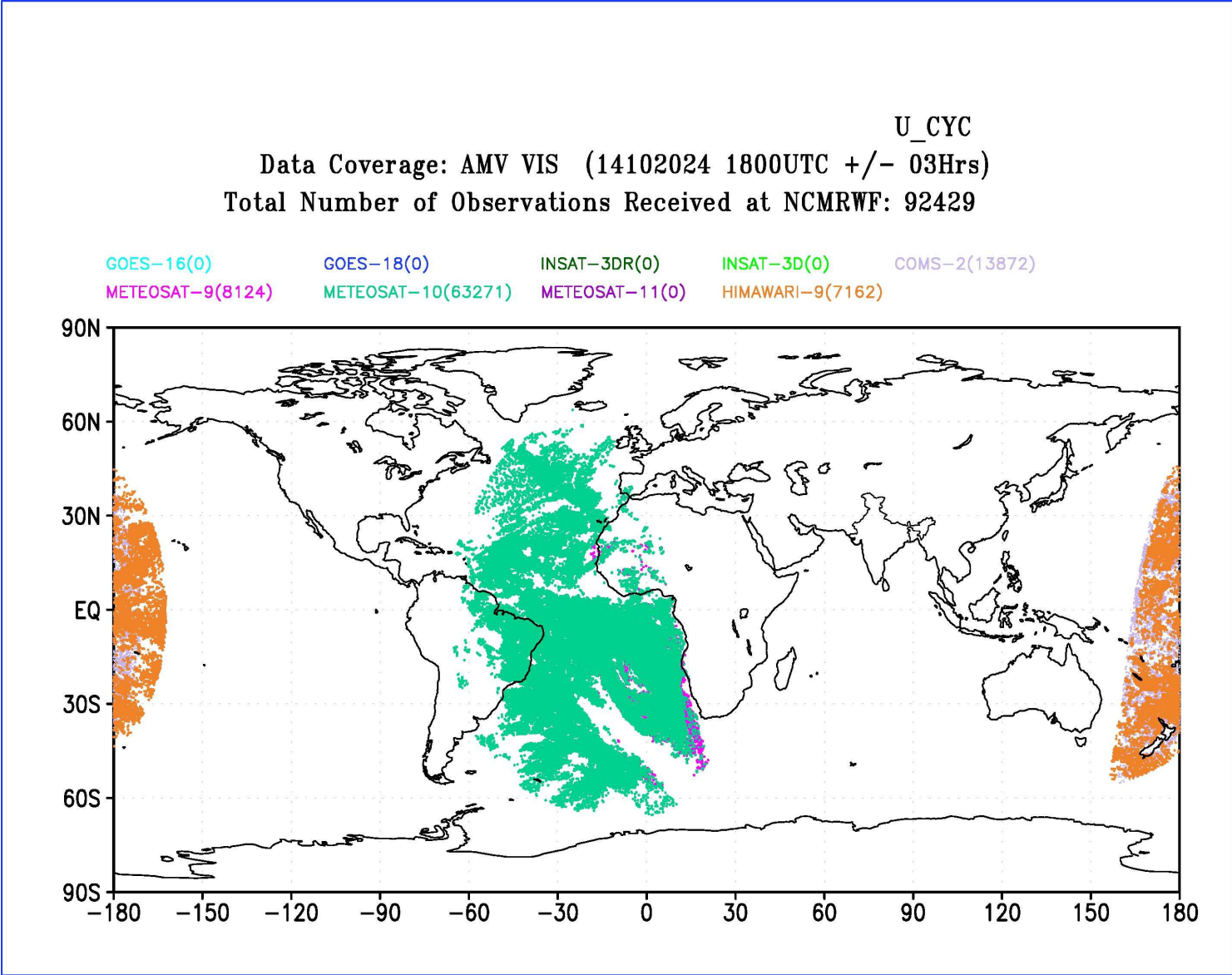
Data Coverage: AMV IR (14102024 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 1353834

GOES-16(396075) GOES-18(431595) INSAT-3DR(16483) INSAT-3D(0) COMS-2(352956)
METEOSAT-9(44789) METEOSAT-10(47133) METEOSAT-11(0) HIMAWARI-9(64803)





NCMRWF OBSERVATIONS MONITORING



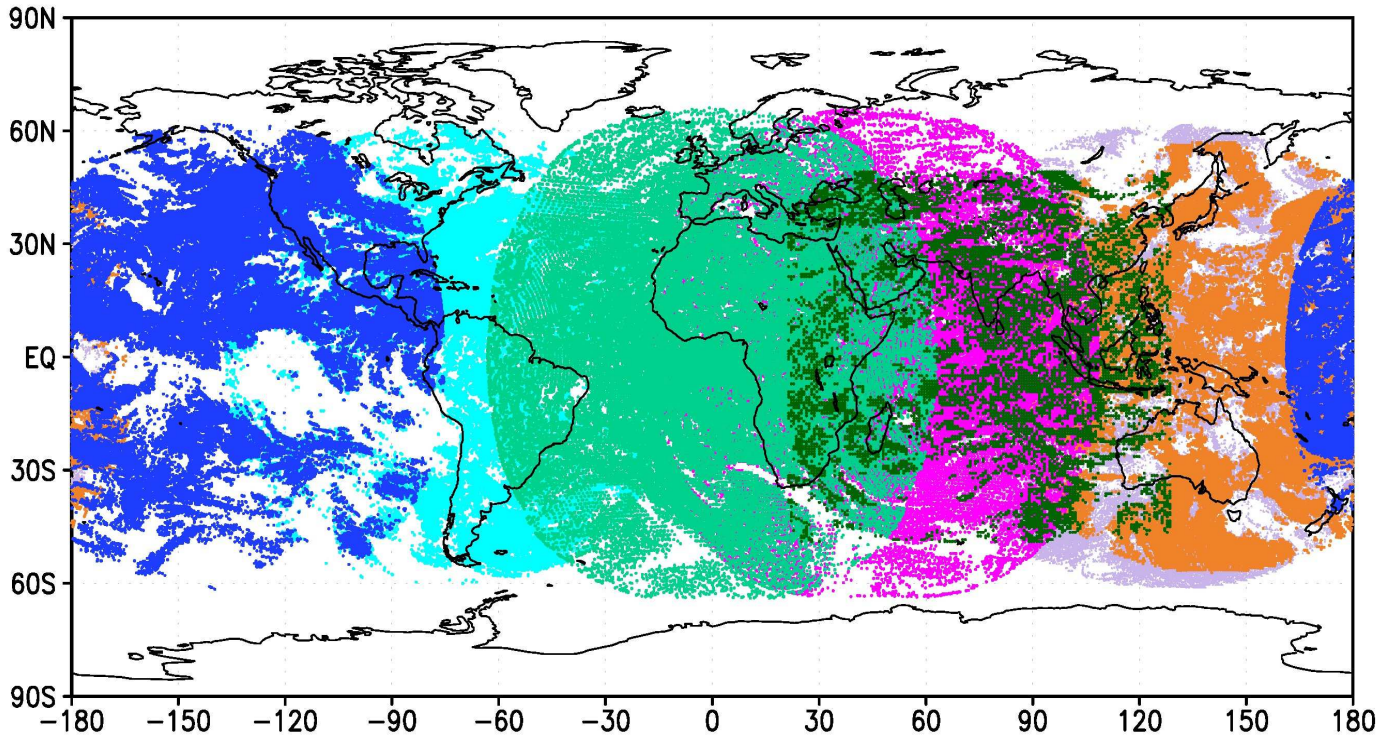


NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: AMV WV (14102024 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 1069144

GOES-16(294312) GOES-18(248986) INSAT-3DR(12264) INSAT-3D(0) COMS-2(289645)
METEOSAT-9(83151) METEOSAT-10(83742) METEOSAT-11(0) HIMAWARI-9(57044)



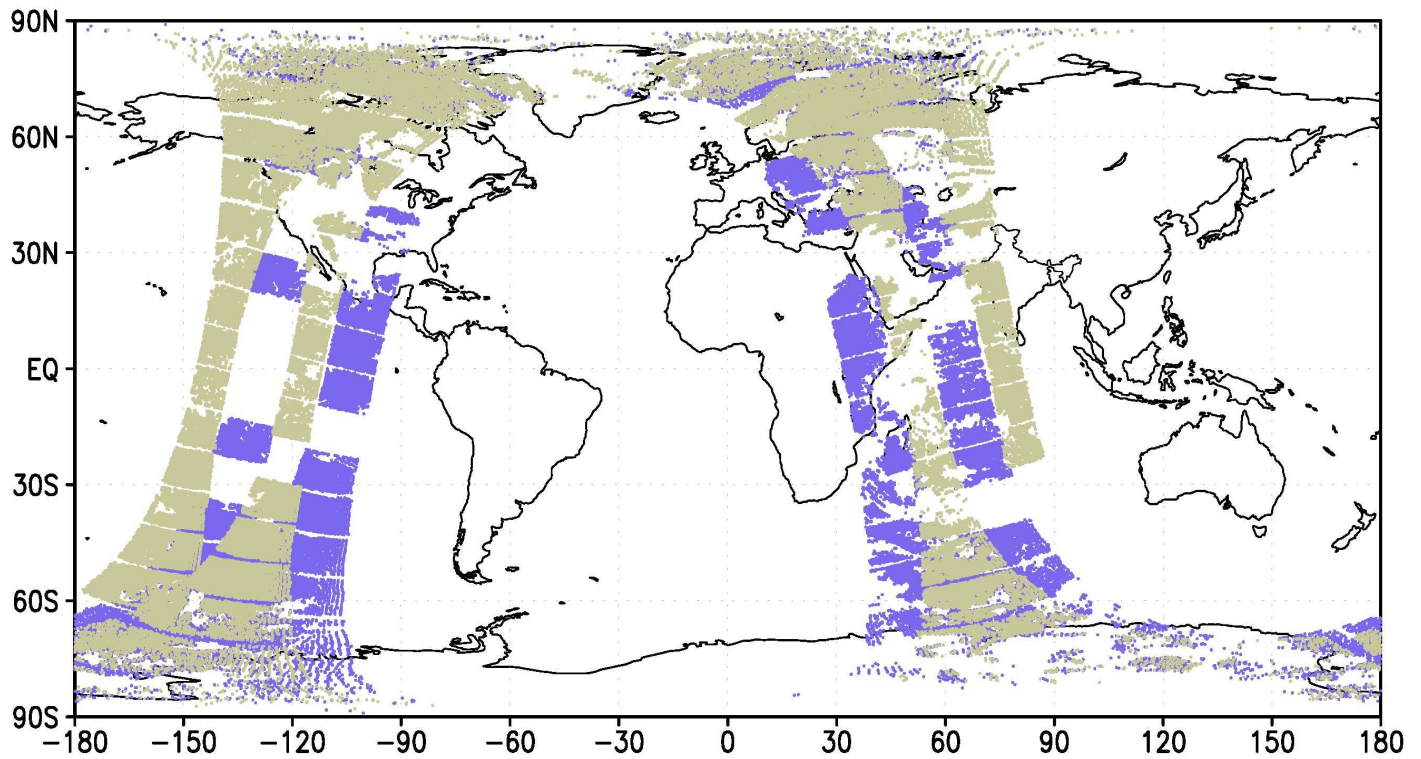


NCMRWF OBSERVATIONS MONITORING

AMV POLAR (14102024 1800UTC +/- 03Hrs) U_CYC

Total Number of Observations Received at NCMRWF: 102469

- NOAA-15(0)
- NOAA-18(0)
- NOAA-19(0)
- MODIS/Aqua(0)
- MODIS/Terra(0)
- METOP-B(0)
- DUAL-MetOp-B(53484)
- DUAL-MetOp-C(48985)



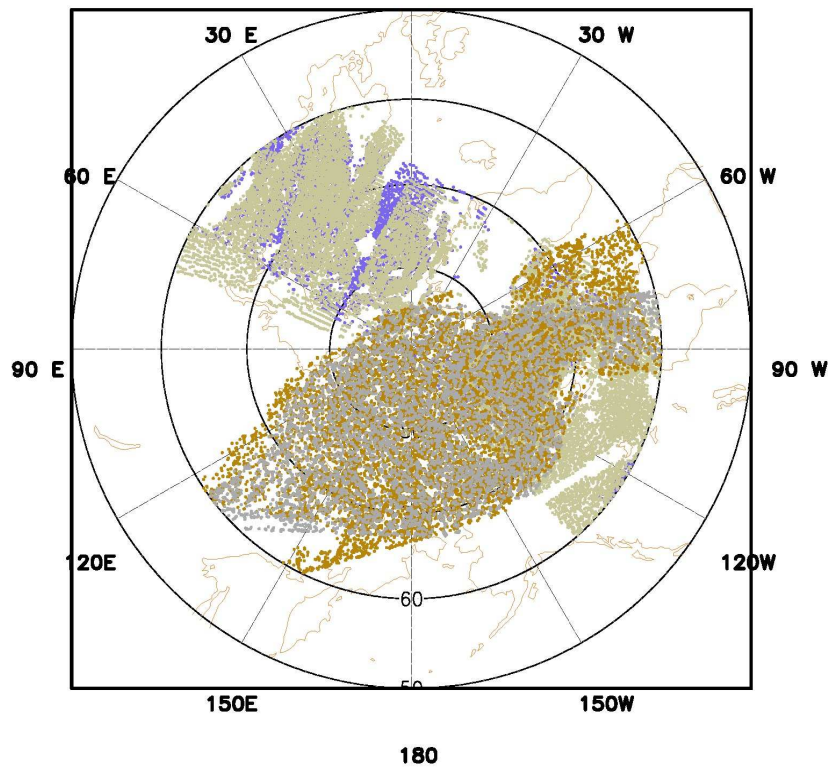


NCMRWF OBSERVATIONS MONITORING

AMV IR POLAR NH (14102024 1800UTC +/- 03Hrs) U_CYC

Total Number of Observations Received at NCMRWF: 54720

| | | | |
|------------|----------------|------------------|----------------|
| NOAA-15(0) | NOAA-18(0) | NOAA-19(0) | NOAA-20(13870) |
| NPP(7105) | MODIS/Aqua(0) | MODIS/Terra(0) | |
| METOP-B(0) | METOP-C(13619) | DUAL-METOP(6189) | |



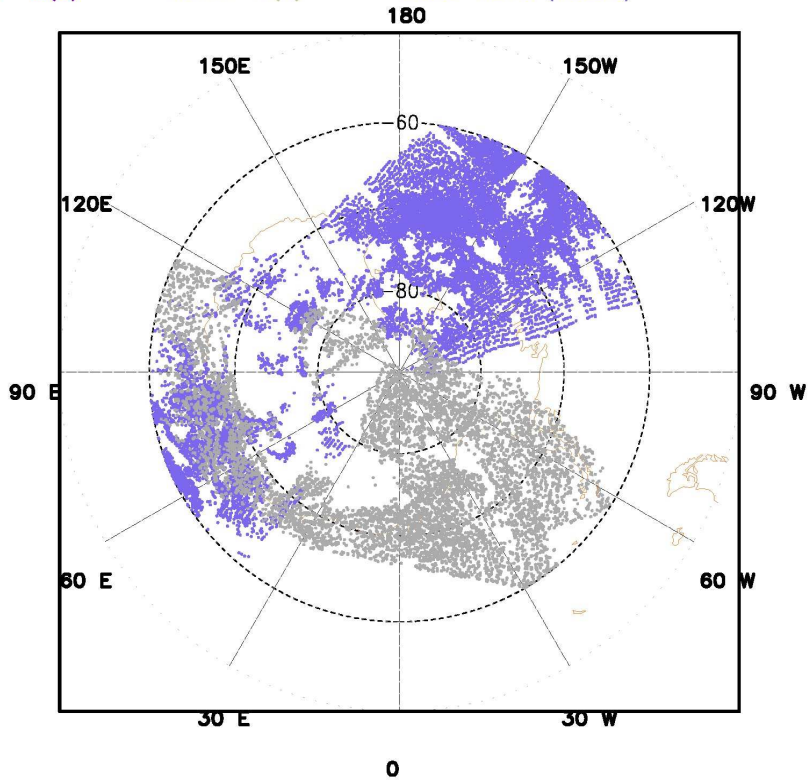


NCMRWF OBSERVATIONS MONITORING

AMV IR POLAR SH (14102024 1800UTC +/- 03Hrs) U_CYC

Total Number of Observations Received at NCMRWF: 33421

- NOAA-15(0)
- NOAA-18(0)
- NOAA-19(0)
- NOAA-20(0)
- NPP(9747)
- MODIS/Aqua(0)
- MODIS/Terra(0)
- METOP-B(0)
- METOP-C(0)
- DUAL-METOP(13356)



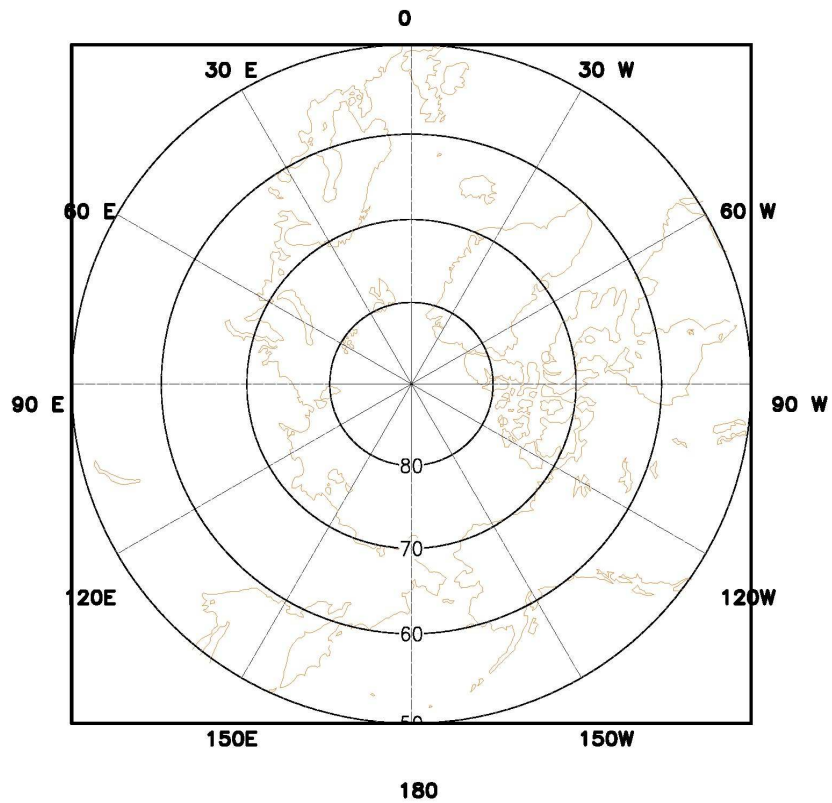


NCMRWF OBSERVATIONS MONITORING

AMV WV POLAR NH (14102024 1800UTC +/- 03Hrs) U_CYC
Total Number of Observations Received at NCMRWF: 0

MODIS/Aqua(0)

MODIS/Terra(0)



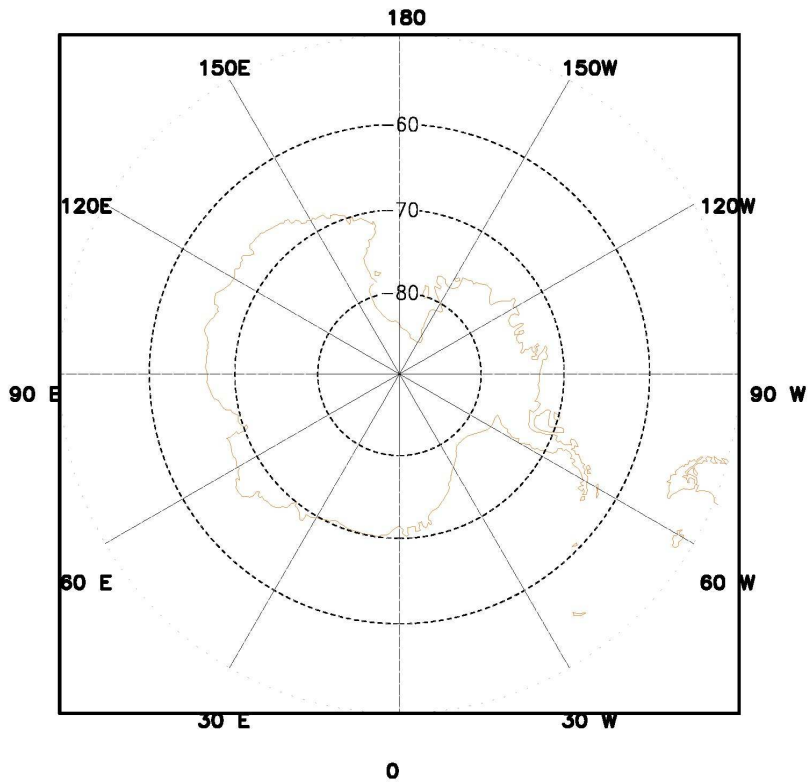


NCMRWF OBSERVATIONS MONITORING

AMV WV POLAR SH (14102024 1800UTC +/- 03Hrs) U_CYC
Total Number of Observations Received at NCMRWF: 0

MODIS/Aqua(0)

MODIS/Terra(0)





Radiance Observations



NCMRWF OBSERVATIONS MONITORING

U_CYC

Geostationary Radiance (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1031843

METEOSAT-9(226087)

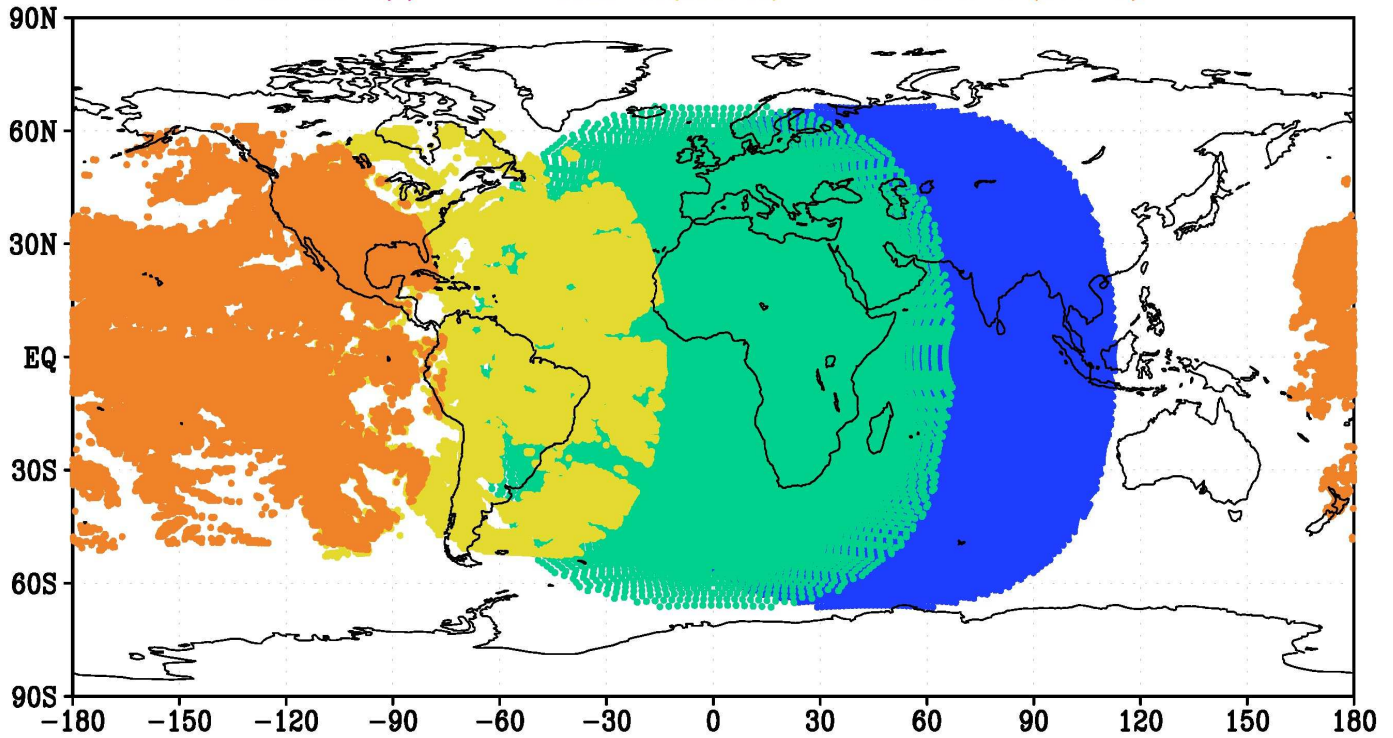
METEOSAT-10(226536)

METEOSAT-11(0)

HIMAWARI-9(0)

GOES-16(288728)

GOES-18(290492)





NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: SAT RADIANCE (EARS+IMD RARS) (14102024 1800UTC +/- 03Hrs)

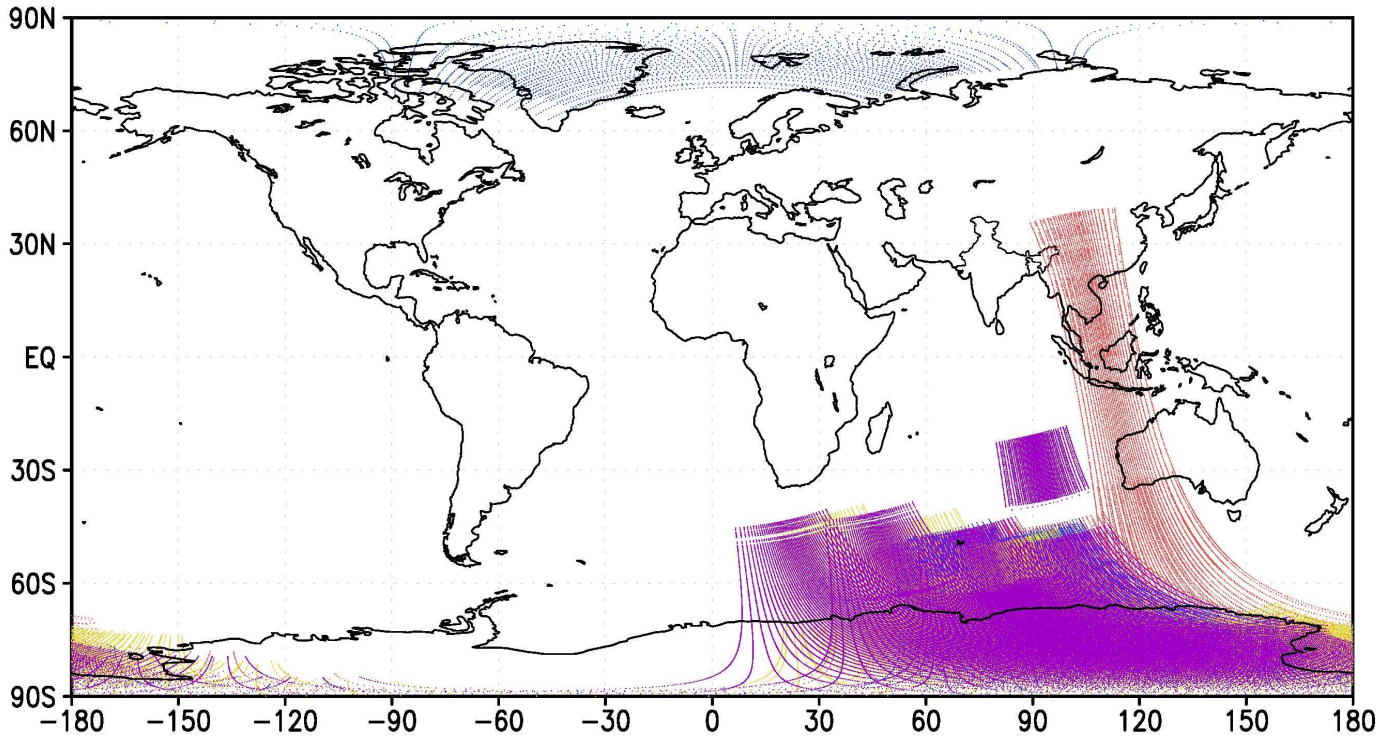
Total Number of Observations Received at NCMRWF: 503454

NOAA18(60028)

NOAA19(84071)

METOP-B(115472)

METOP-C(243883)





NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: Humidity Sounders (14102024 1800UTC +/- 03Hrs)

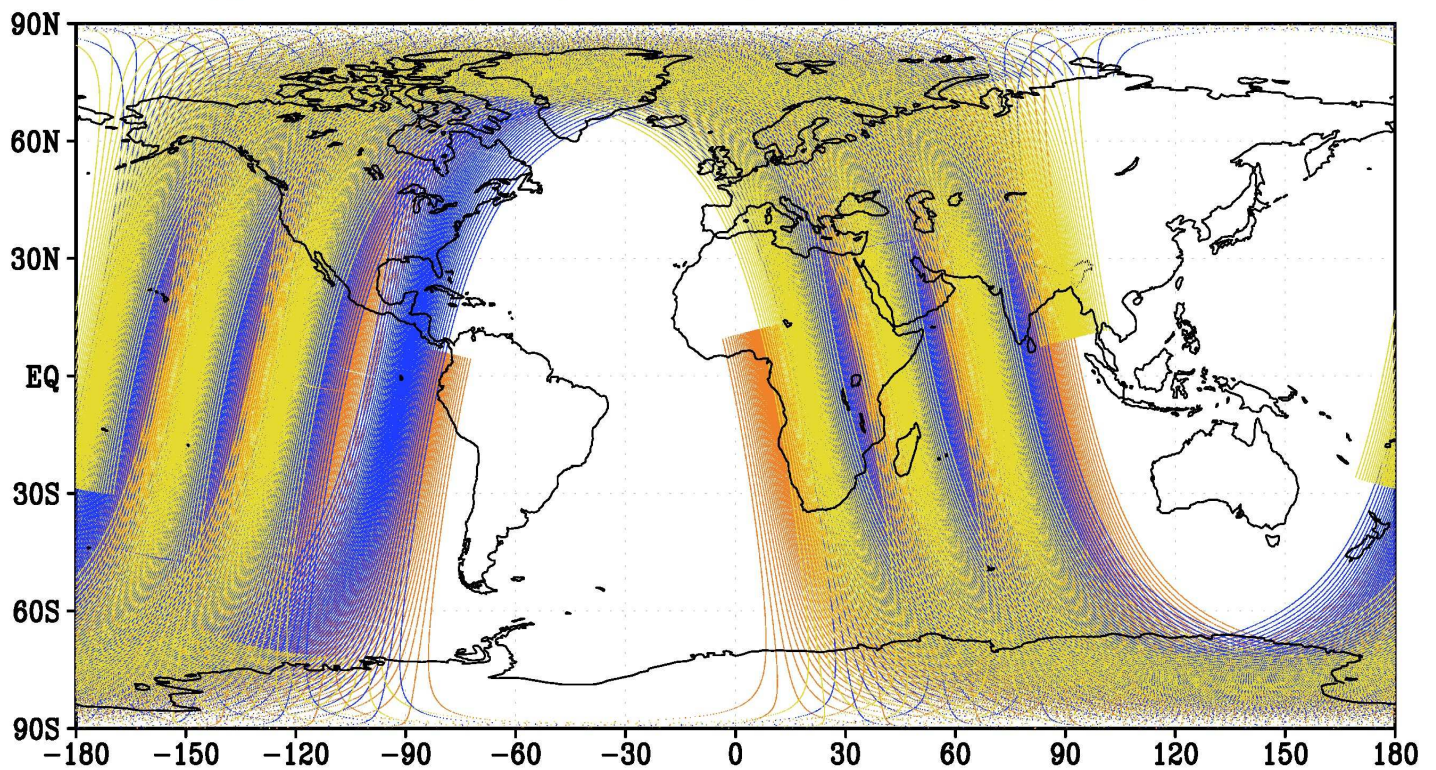
Total Number of Observations Received at NCMRWF: 1370729

SAPHIR(0)

NOAA19(724662)

METOP-B(646067)

METOP-C(711693)





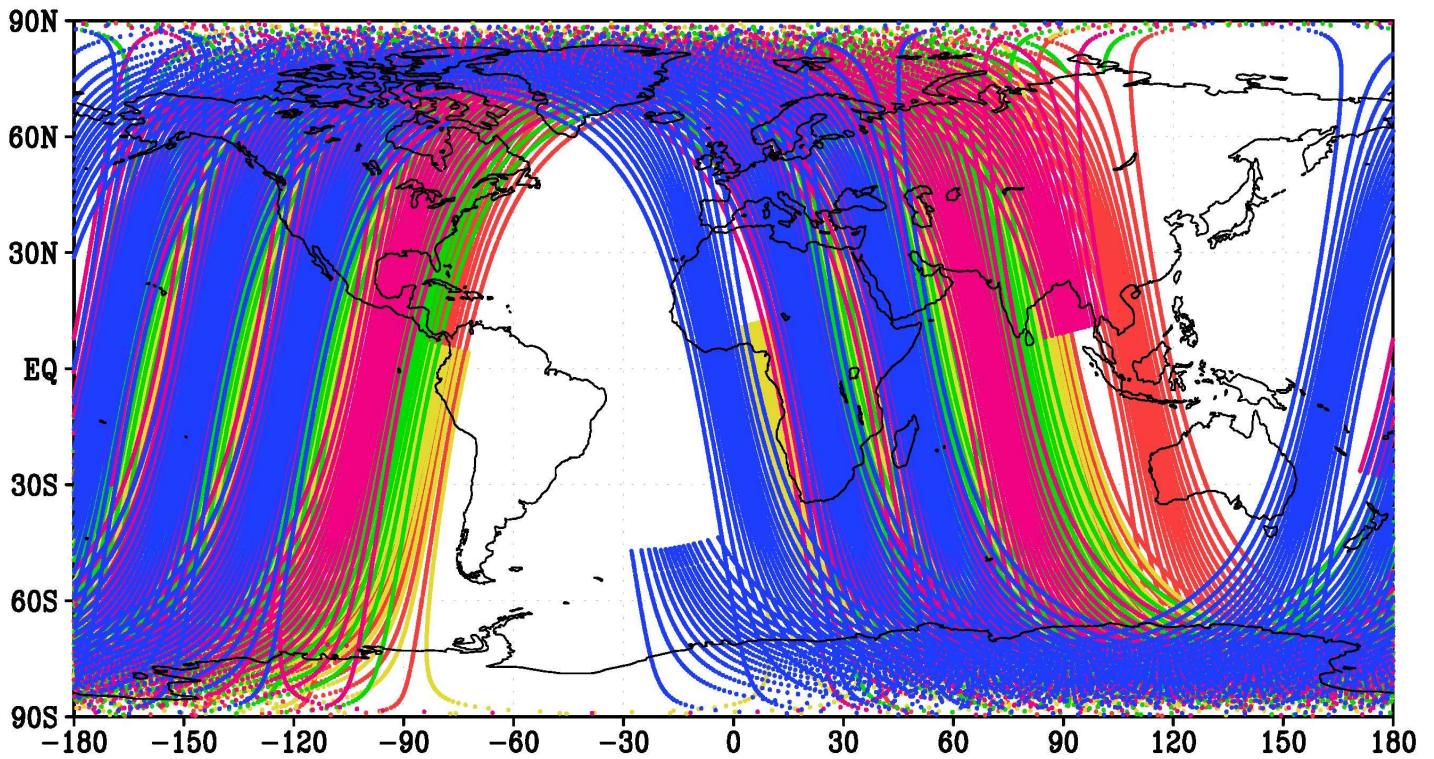
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: AMSUA (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 401755

NOAA15(80910) NOAA18(77818) NOAA19(80910) METOP-B(81089) METOP-C(81028)





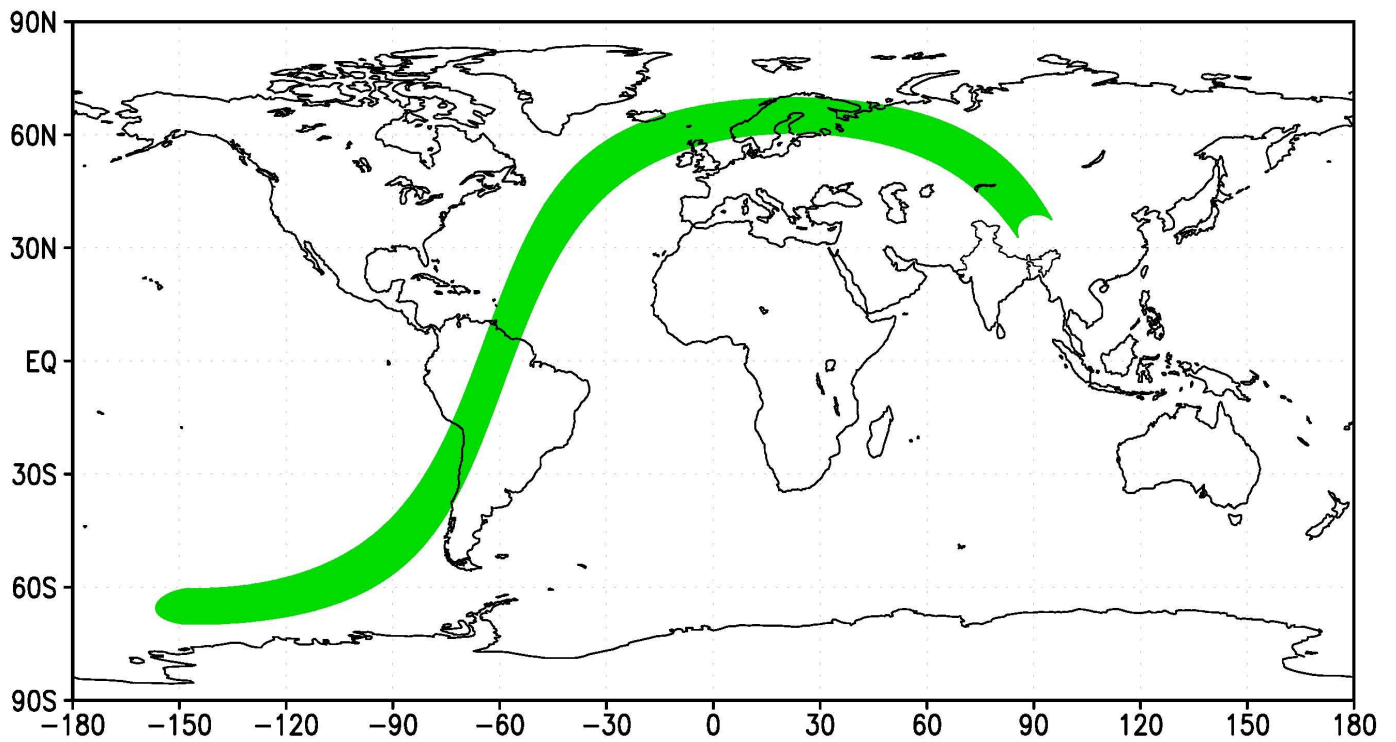
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: GPM-GMI (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 424320

GPM(424320)





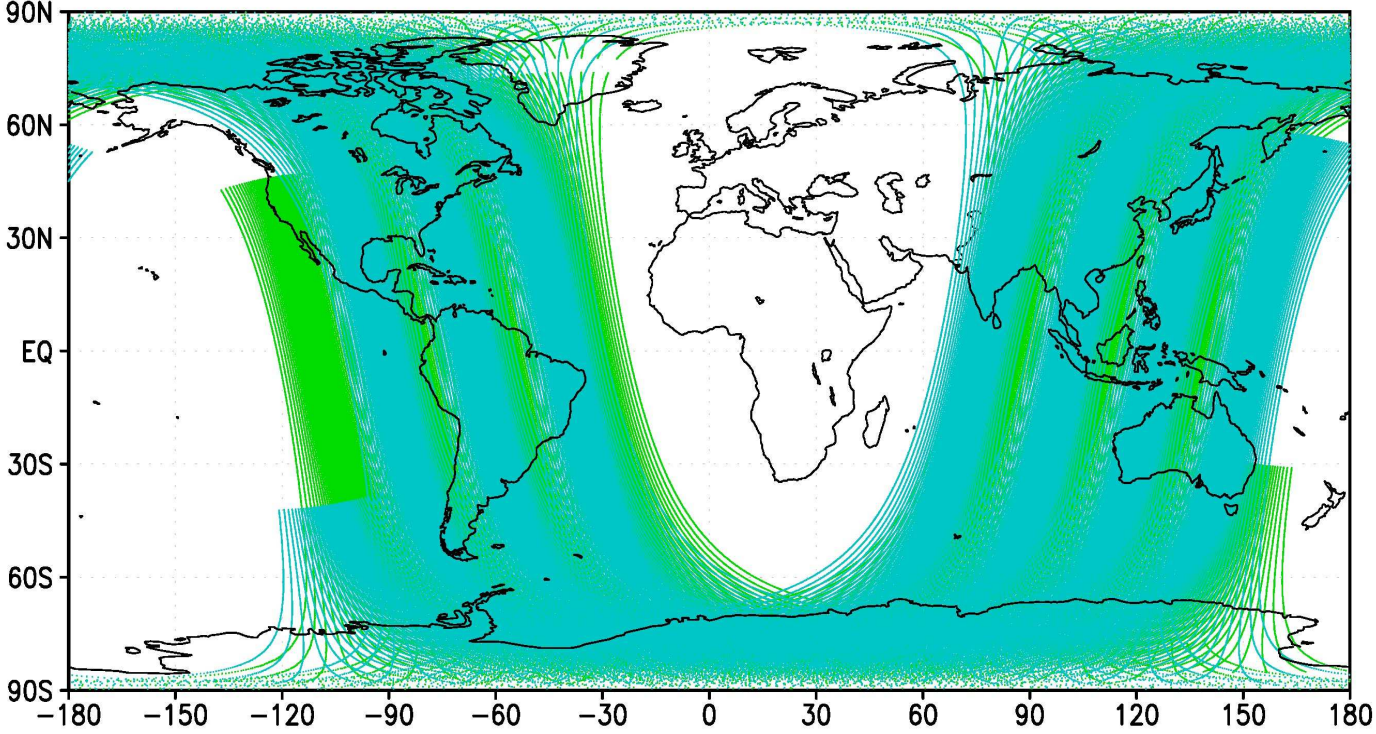
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: ATMS (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1534464

NOAA-20(777600) NPP(756864)





NCMRWF OBSERVATIONS MONITORING

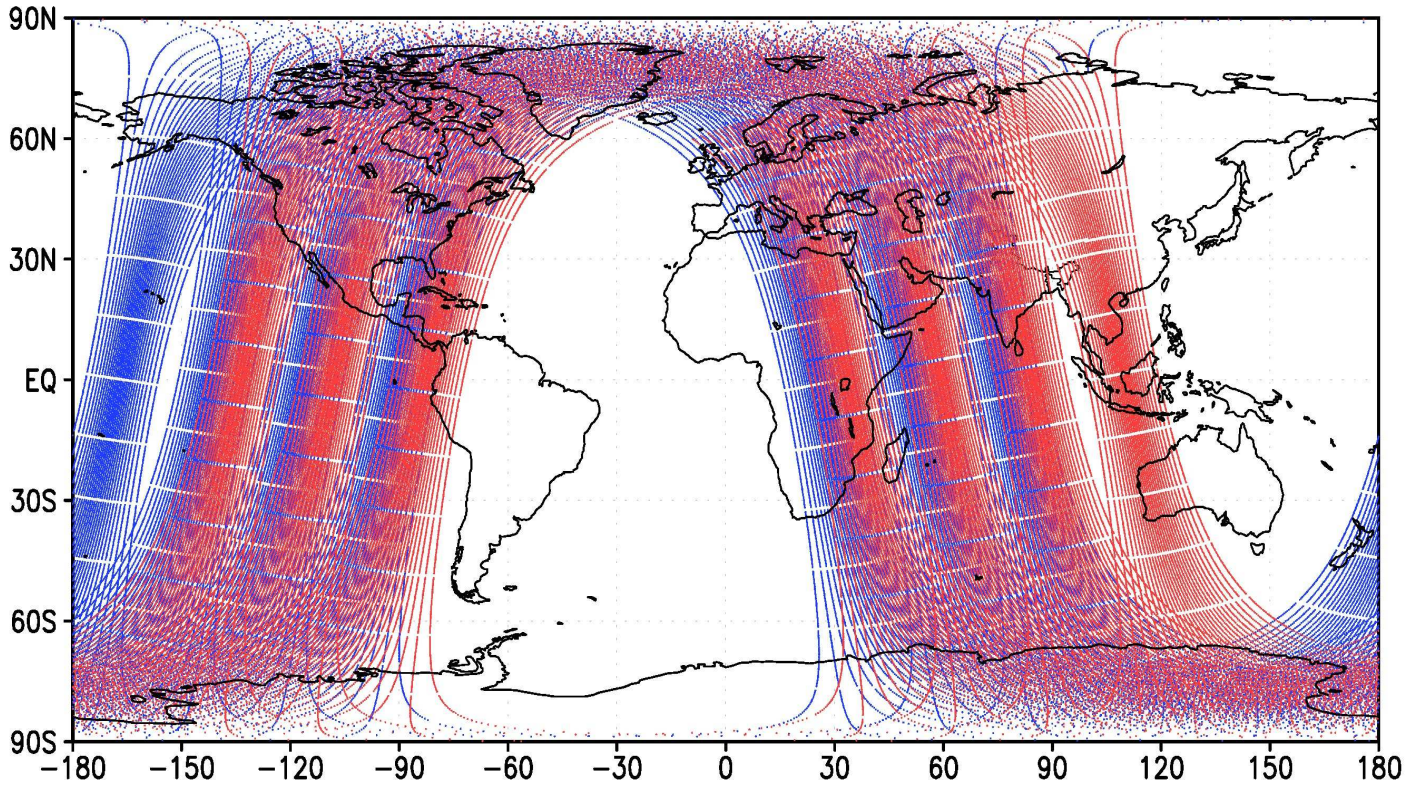
U_CYC

Data Coverage: HIRS (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 353125

NOAA18(173649)

NOAA19(179476)





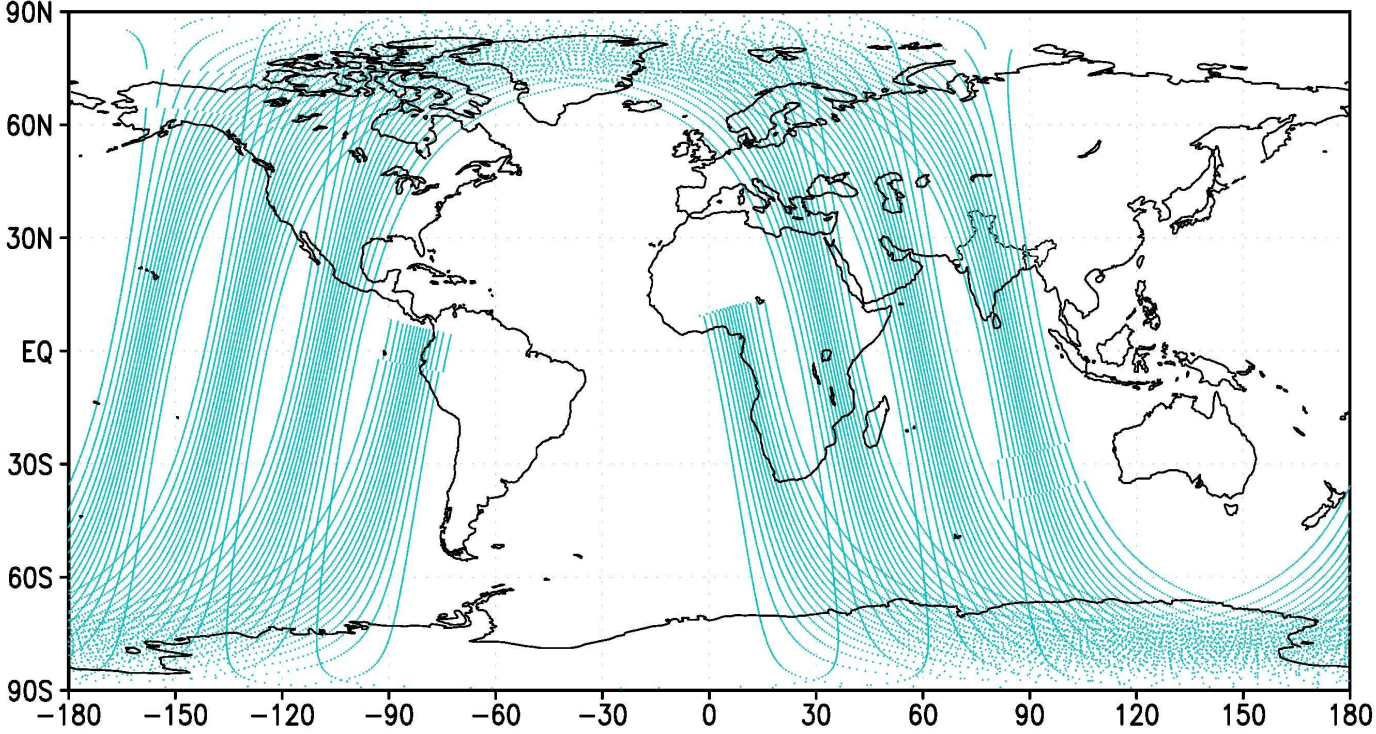
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: IASI (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 81000

METOP-C(81000) METOP-B(0)





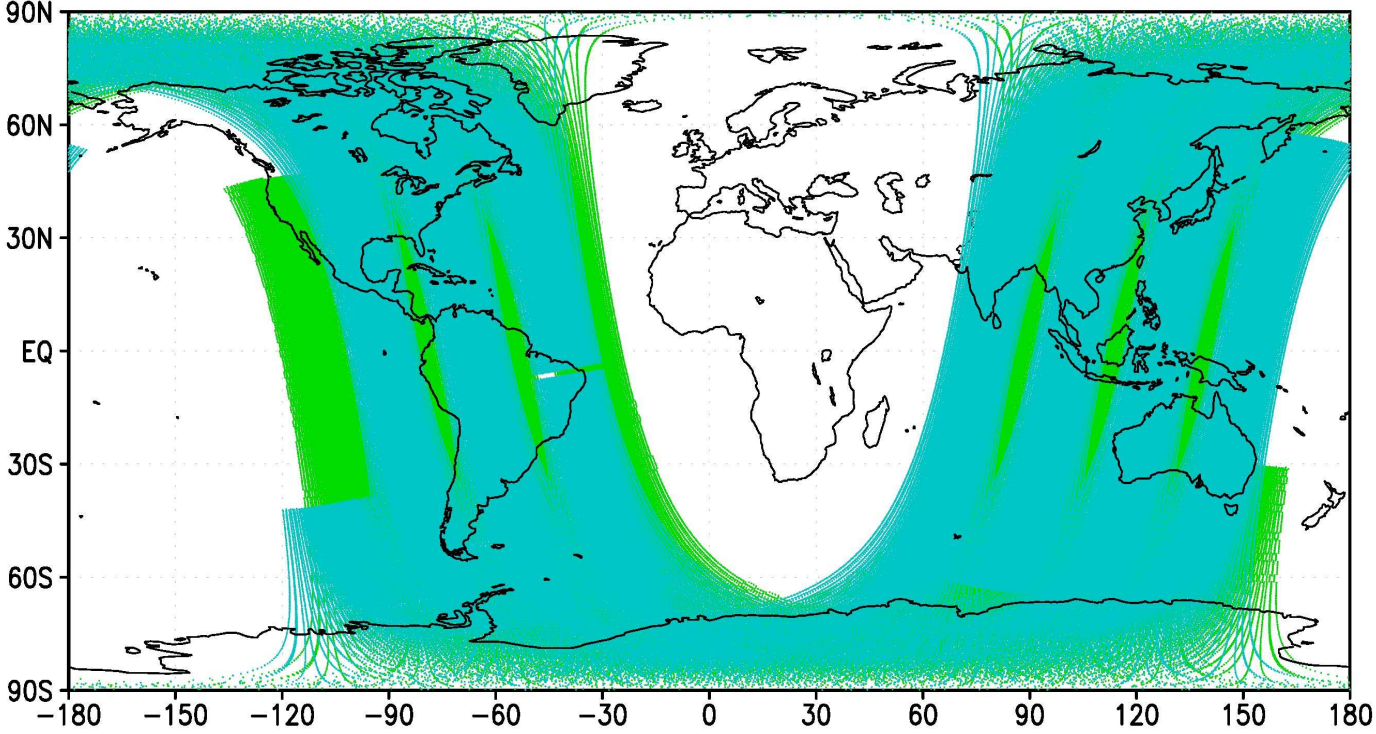
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: CrIS (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1436119

NOAA-20(708671) NPP(727448)





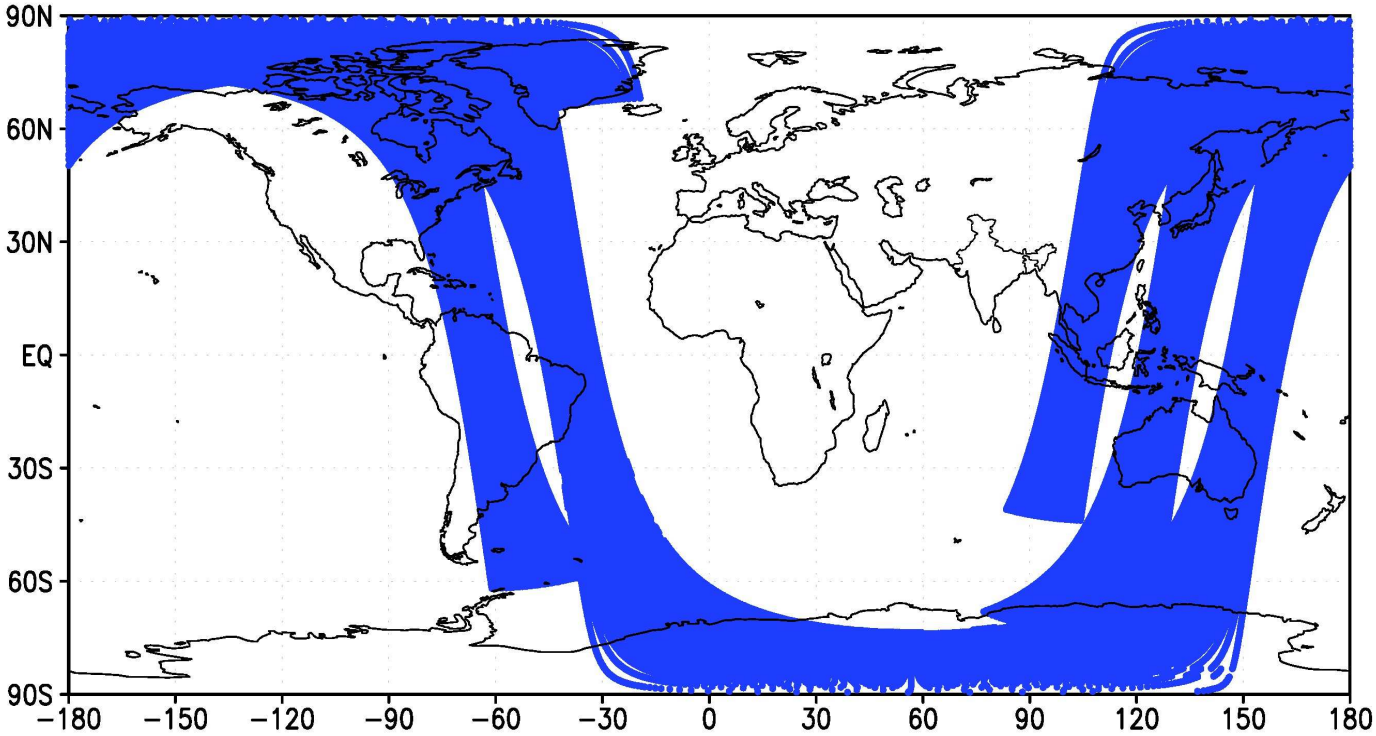
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: AIRS (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF(UM): 461447

AQUA(461447)





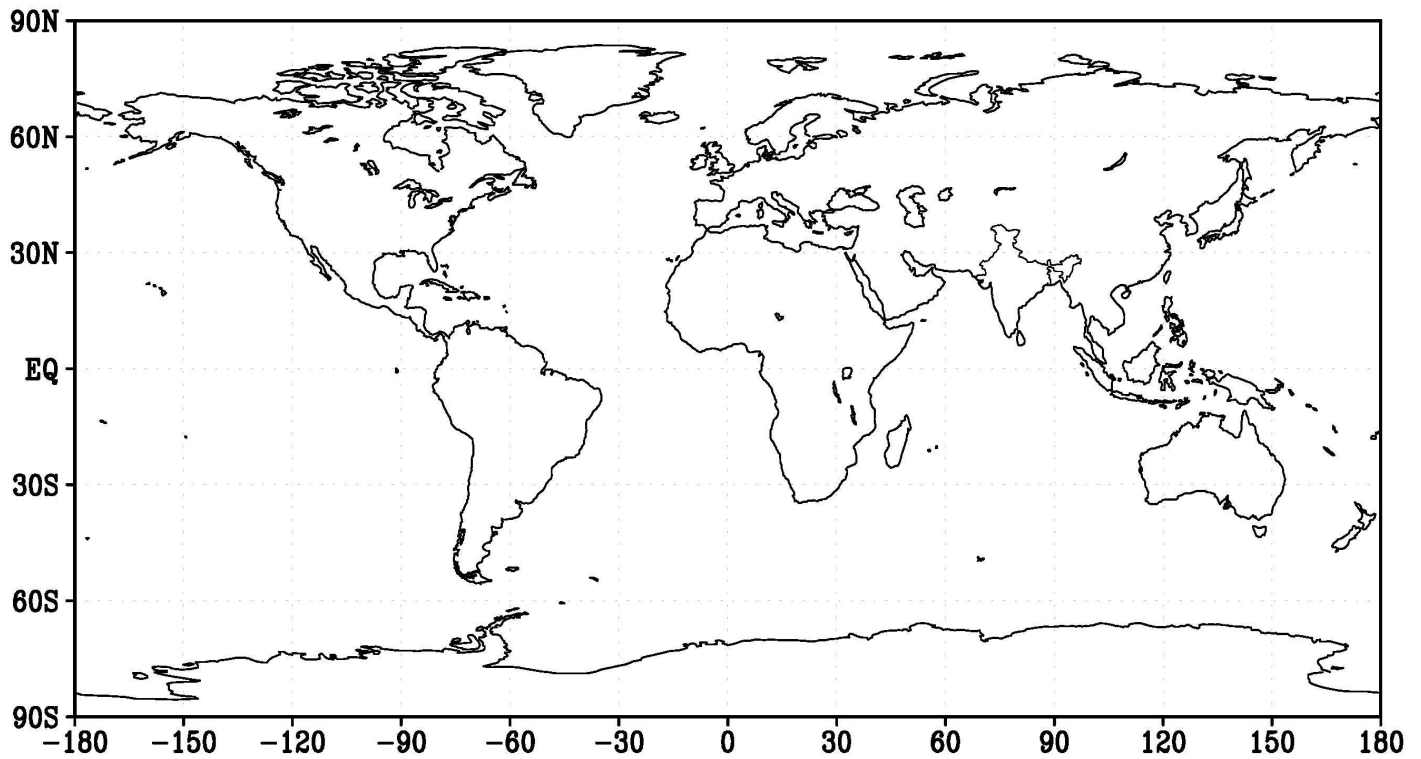
NCMRWF OBSERVATIONS MONITORING

U_CYC

Data Coverage: UV radiances (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 0

SBUV-NOAA19(0)





NCMRWF OBSERVATIONS MONITORING

U_CYC

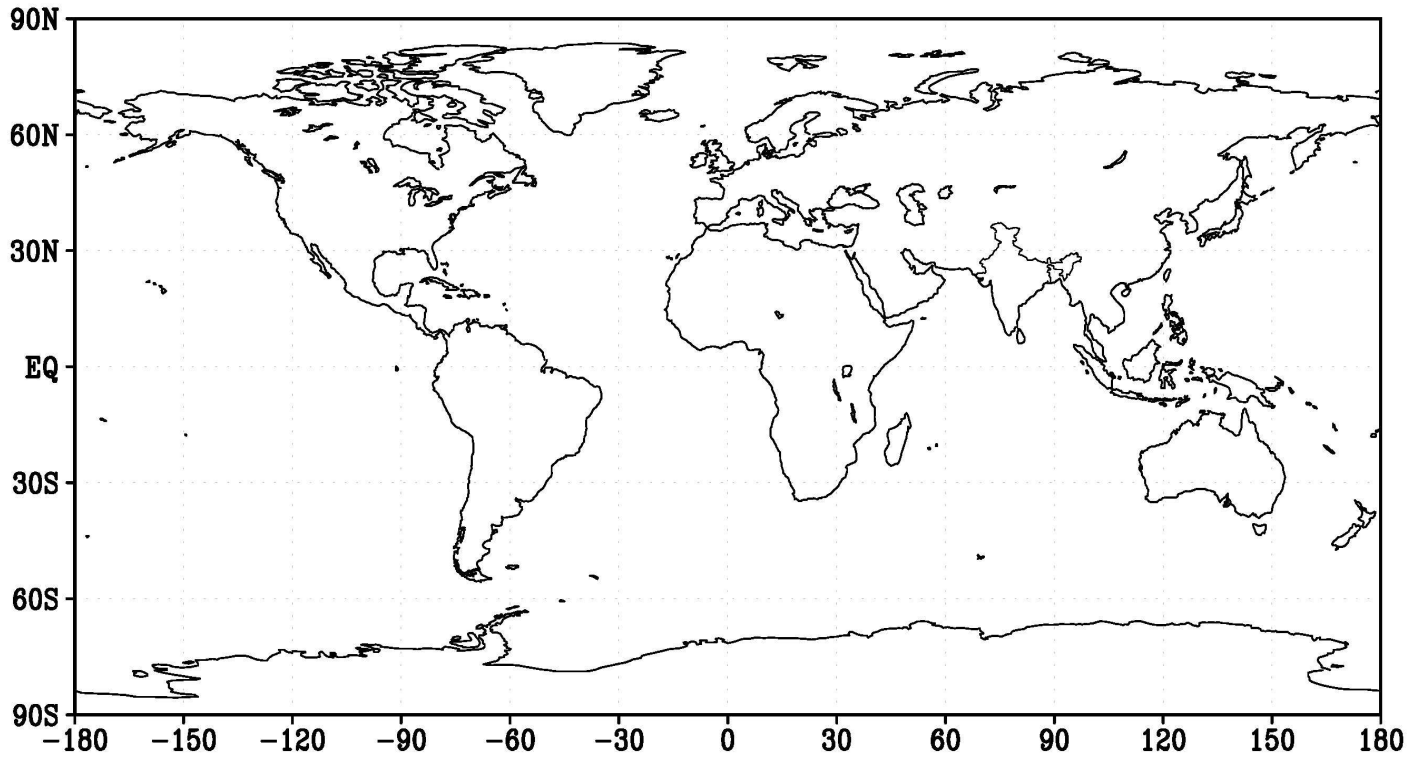
Data Coverage: AVHRR NCEP-BT (14102024 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 0

NOAA18(0)

METOP-B(0)

METOP-C(0)





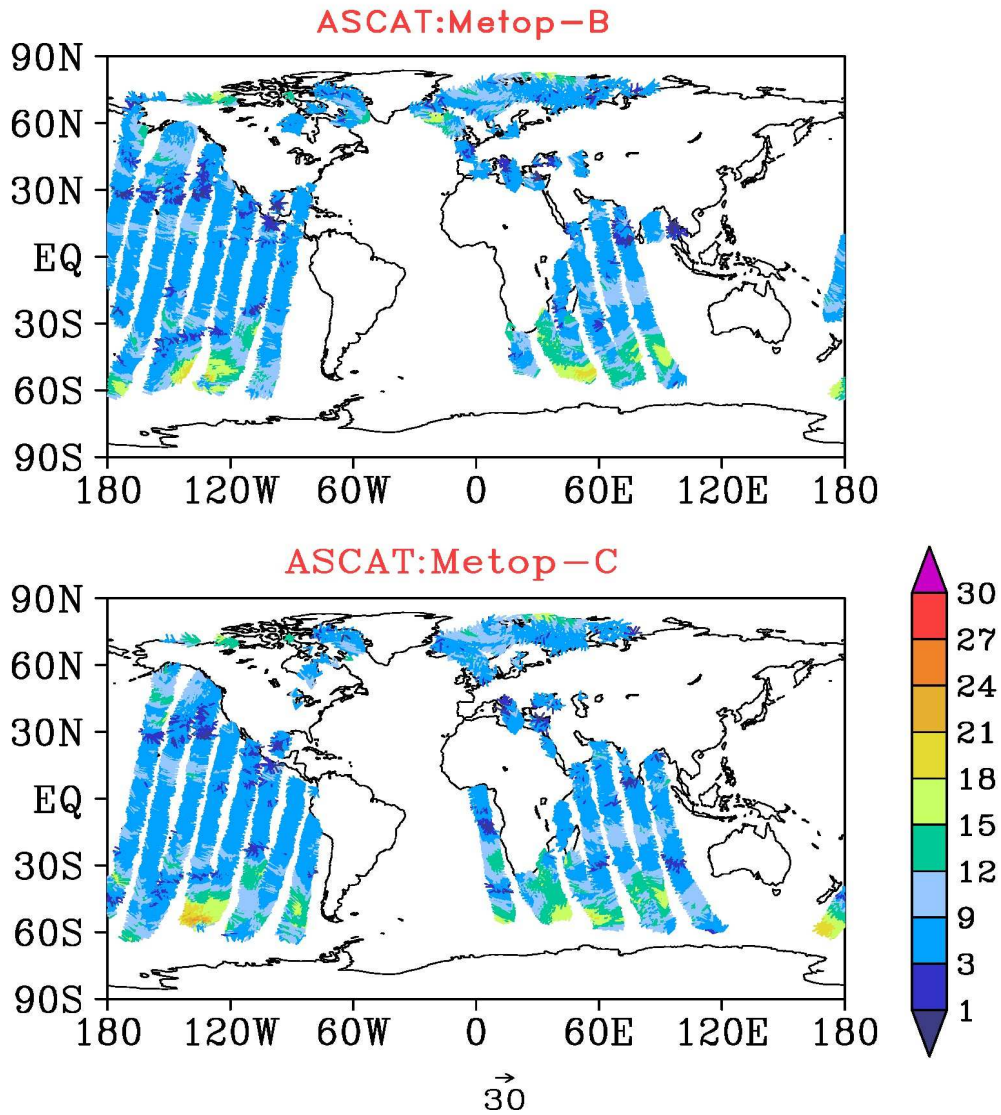
SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20241014 18Z)



NCMRWF OBSERVATIONS MONITORING

SCATTEROMETER SURFACE WINDS (14102024 1800UTC +/- 03Hrs)

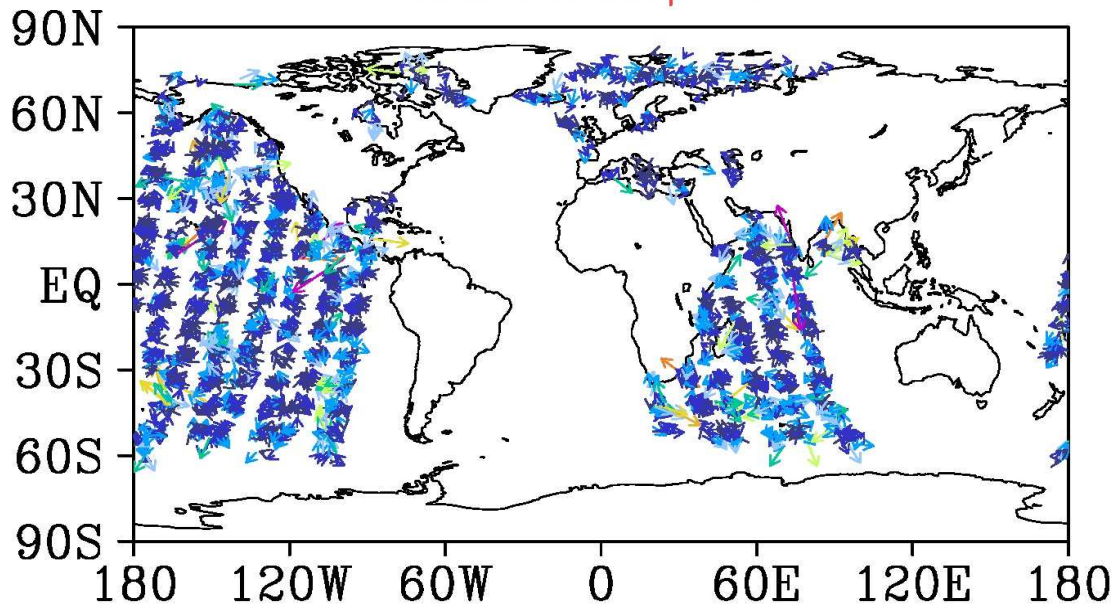




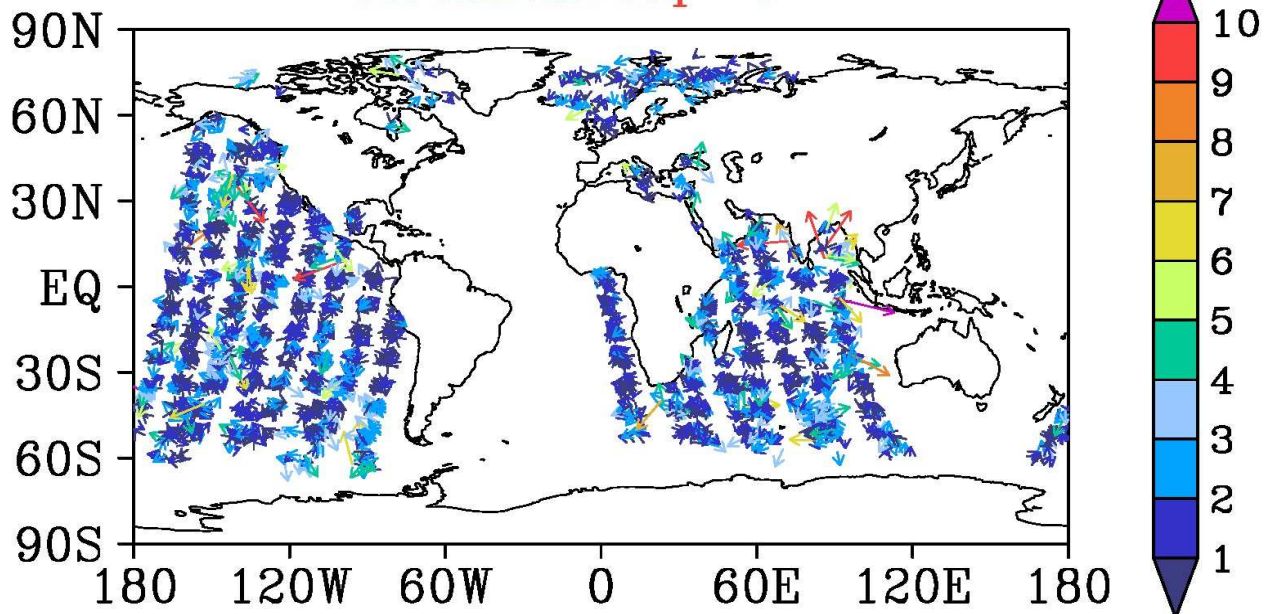
NCMRWF OBSERVATIONS MONITORING

OBSERVATION—FIRST GUESS (14102024 18 UTC):NCMRWF

ASCAT:Metop-B



ASCAT:Metop-C





ATMOSPHERIC MOTION VECTORS (AMVs)

INFRARED (IR) WINDS

WATER VAPOUR (WV) WINDS

VISIBLE (VIS) WINDS

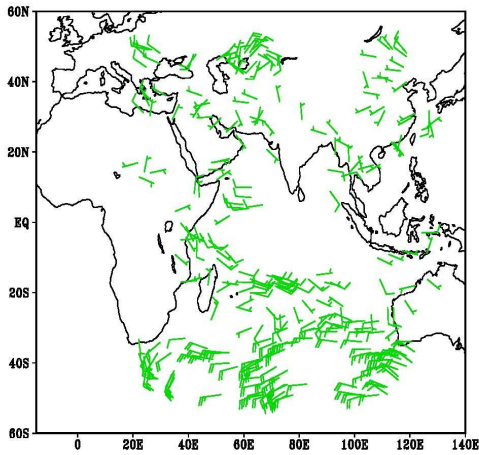
AMV DEVIATION
(OBSERVATION – FIRST GUESS)



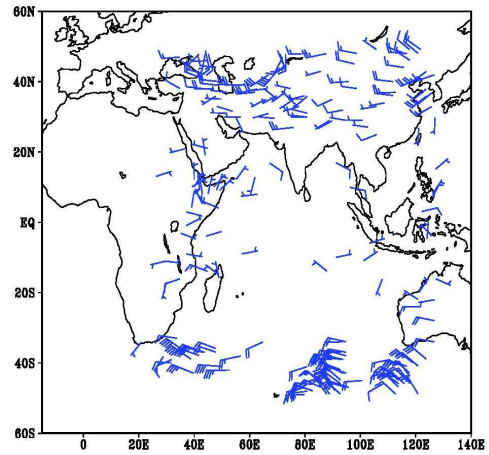
NCMRWF OBSERVATIONS MONITORING

INSAT-3DR ATMOSPHERIC MOTION VECTORS (IR,10.8) (14102024 1800UTC)

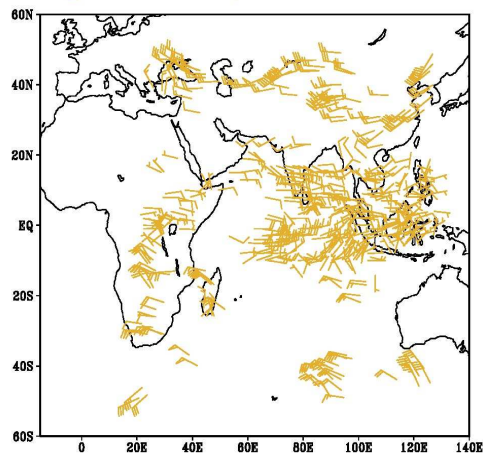
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)

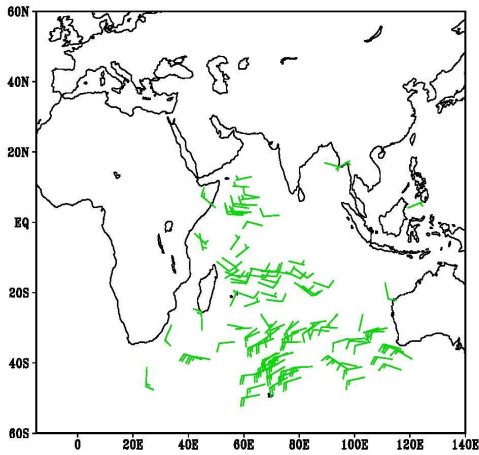




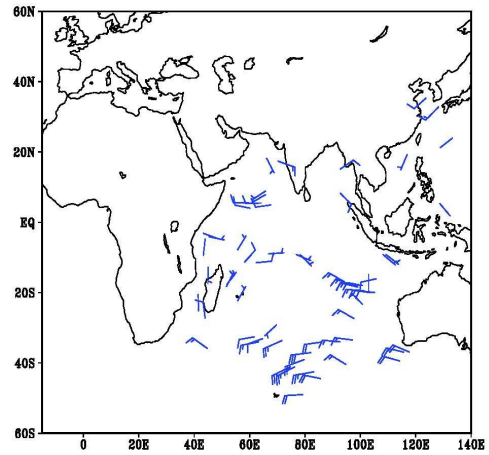
NCMRWF OBSERVATIONS MONITORING

INSAT-3DR ATMOSPHERIC MOTION VECTORS (IR,3.8) (14102024 1800UTC)

Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

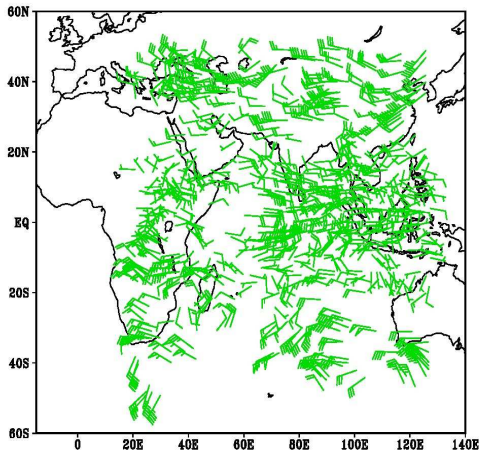




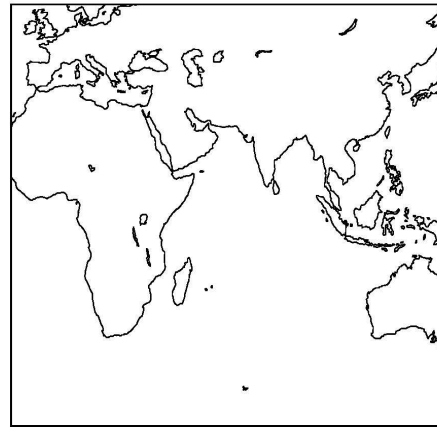
NCMRWF OBSERVATIONS MONITORING

INSAT-3DR ATMOSPHERIC MOTION VECTORS (WV & VIS) (14102024 1800UTC)

WV, High Level (Above 400 hPa)



VIS, Low Level (Below 700 hPa)

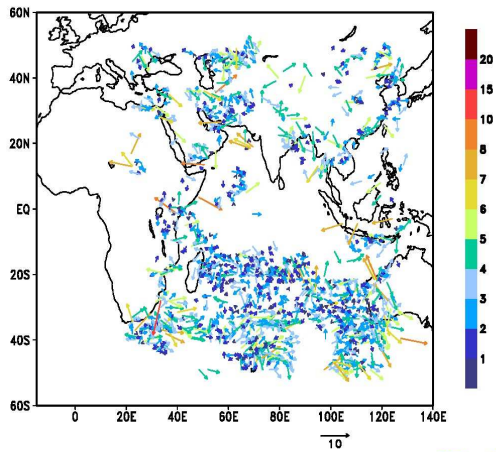




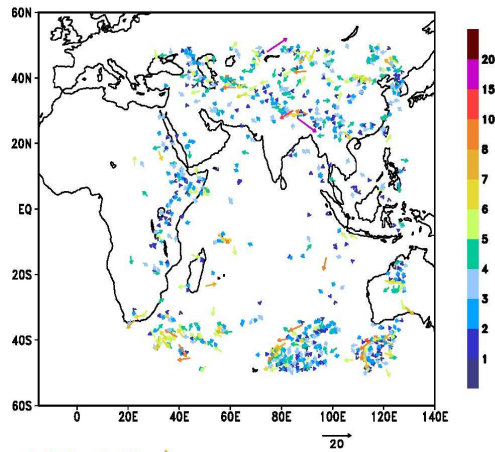
NCMRWF OBSERVATIONS MONITORING

INSAT-3DR ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (14102024 1800UTC)

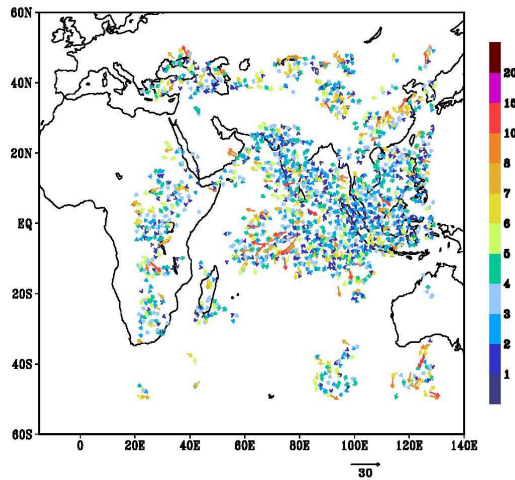
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)

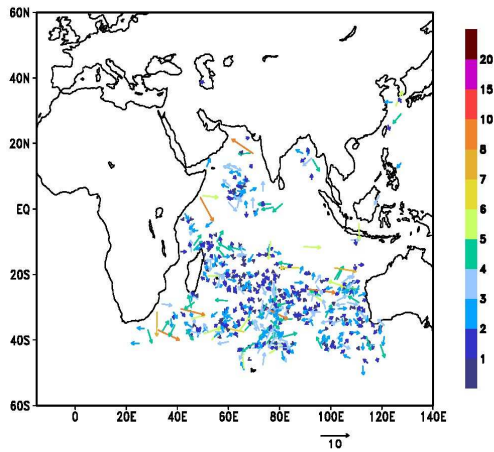




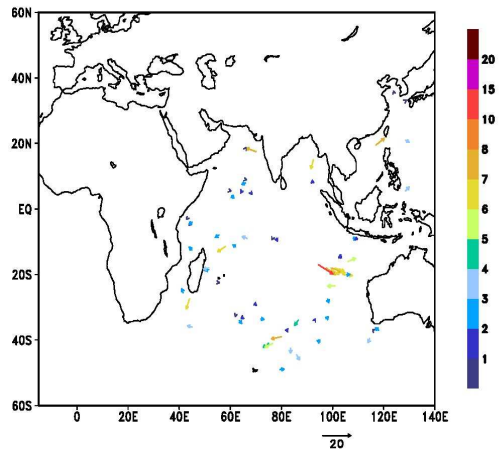
NCMRWF OBSERVATIONS MONITORING

INSAT-3DR ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (14102024 1800UTC)

Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



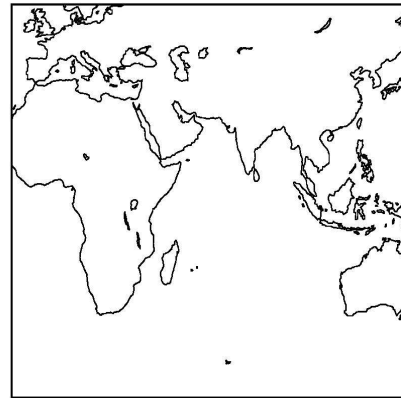
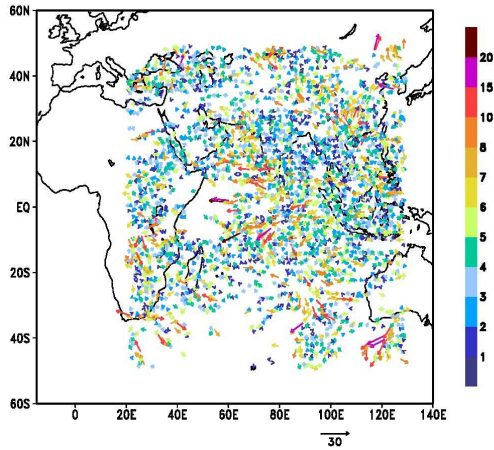


NCMRWF OBSERVATIONS MONITORING

INSAT-3DR ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (14102024 1800UTC)

WV, High Level (Above 400 hPa)

VIS, Low level (Below 700 hPa)

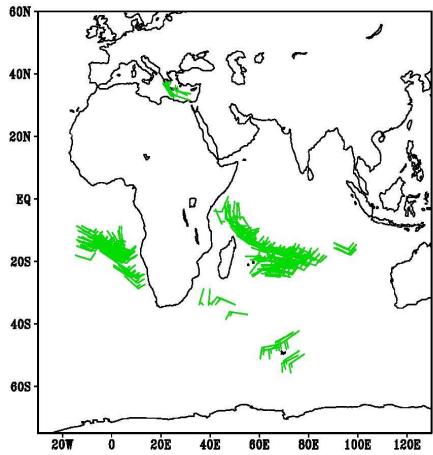




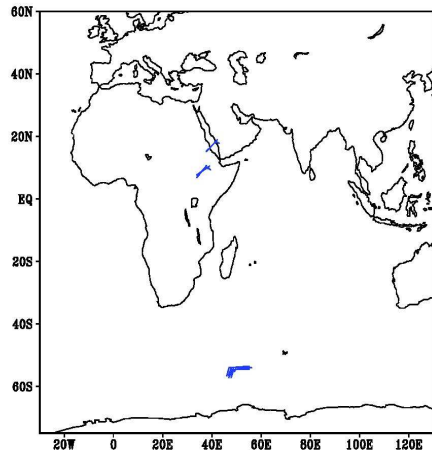
NCMRWF OBSERVATIONS MONITORING

METEOSAT-9 ATMOSPHERIC MOTION VECTORS (IR)(14102024 1800UTC)

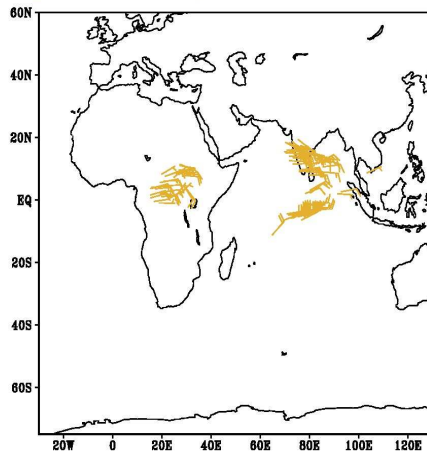
Low level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)

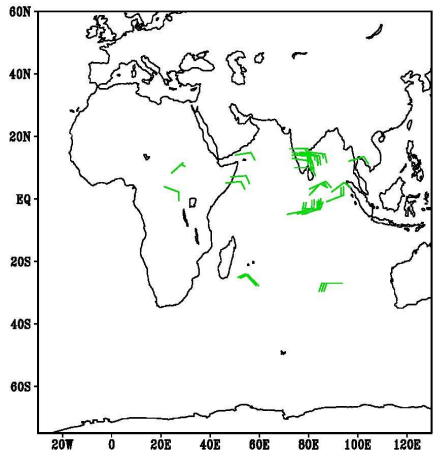




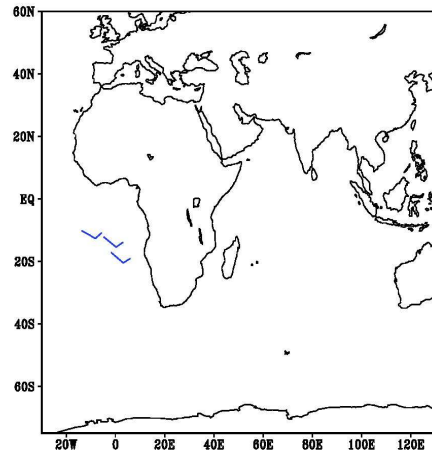
NCMRWF OBSERVATIONS MONITORING

METEOSAT-9 ATMOSPHERIC MOTION VECTORS (WV & VIS)(14102024 1800UTC)

WV, High Level (Above 400 hPa)



VIS, Low Level (Below 700 hPa)

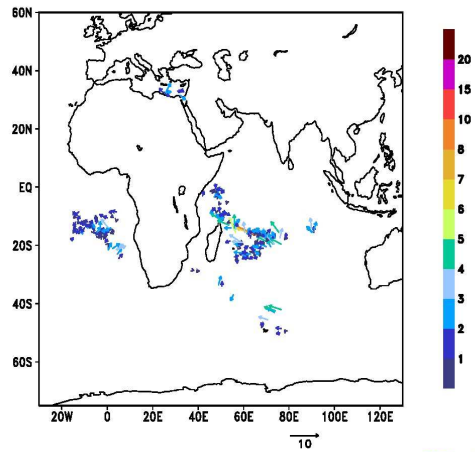




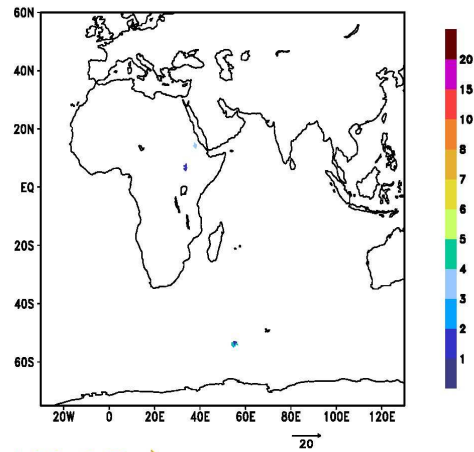
NCMRWF OBSERVATIONS MONITORING

METEOSAT-9 ATMOSPHERIC MOTION VECTORS (IR) DEVIATION (14102024 1800UTC)

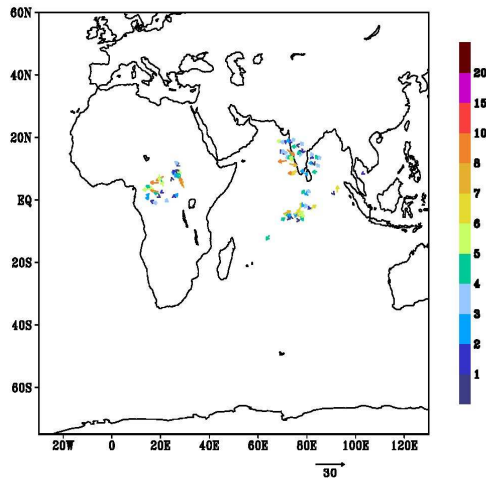
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)

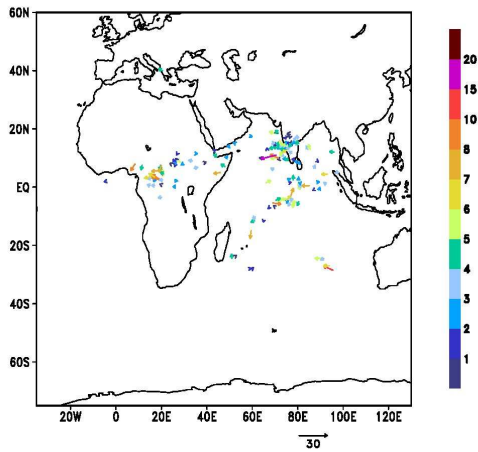




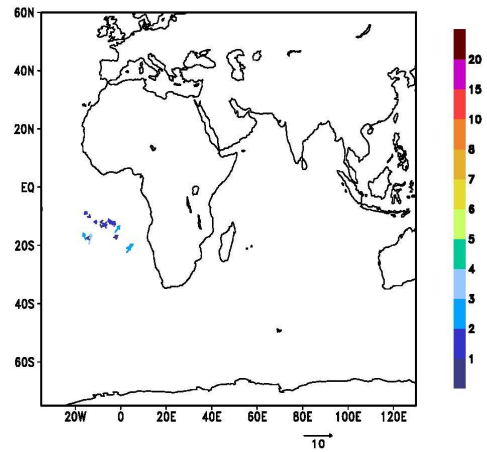
NCMRWF OBSERVATIONS MONITORING

METEOSAT-9 ATMOSPHERIC MOTION VECTORS(WV & VIS) DEVIATION (14102024 1800UTC)

WV, High Level (Above 400 hPa)



VIS, Low level (Below 700 hPa)





Indian Doppler Weather Radar Data Monitoring



NCMRWF OBSERVATIONS MONITORING

Volume of DWR observations received at NCMRWF
Date: 20241014 at : 18 UTC

