

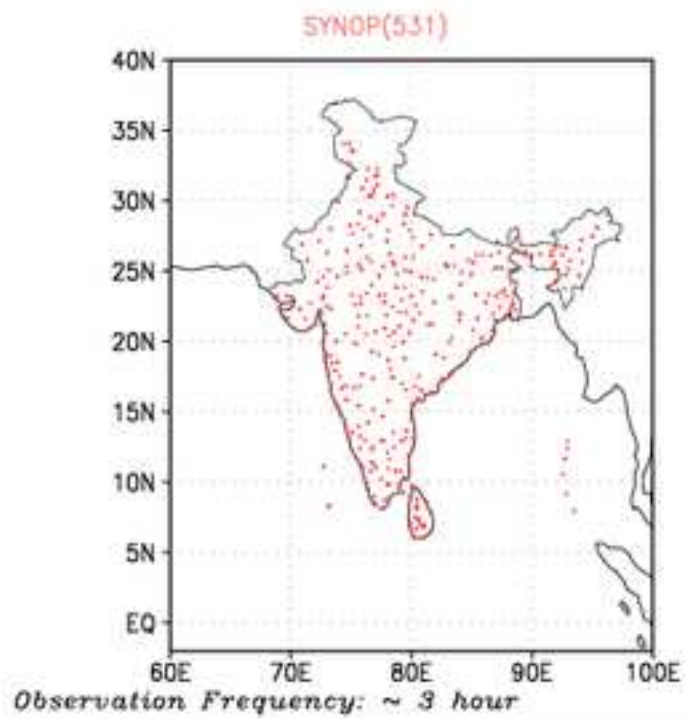
Observation Monitoring

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

for 18022018 (0600 UTC)

Indian Observation Coverage

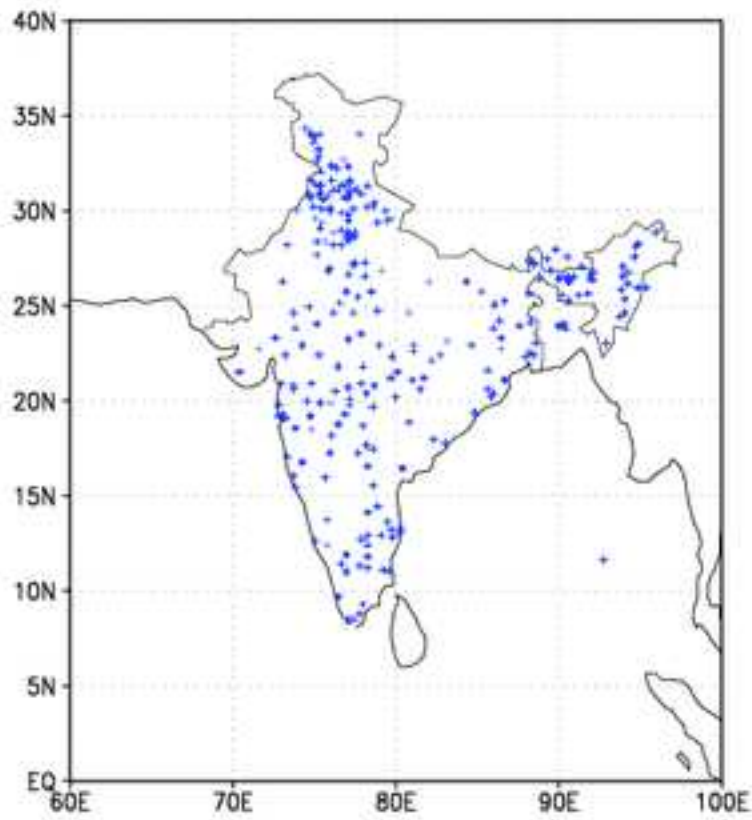
Data Coverage: Surface (18022018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 531
(42 & 43 Block)



Data Coverage: Indian AWS (18022018 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1235

AWS PRESSURE (1235)

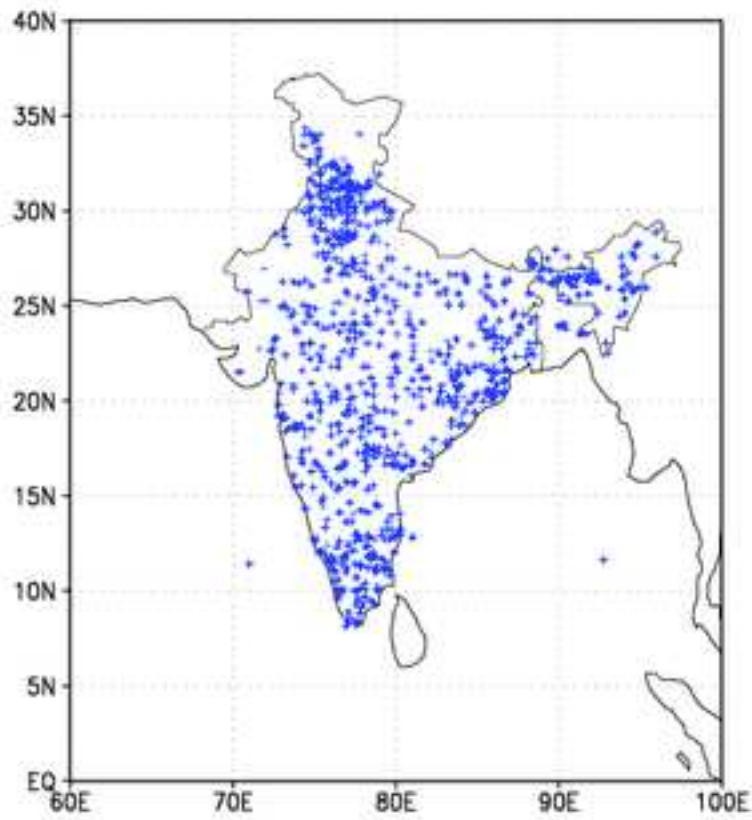


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (18022018 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 3875

AWS + ARG (3875)

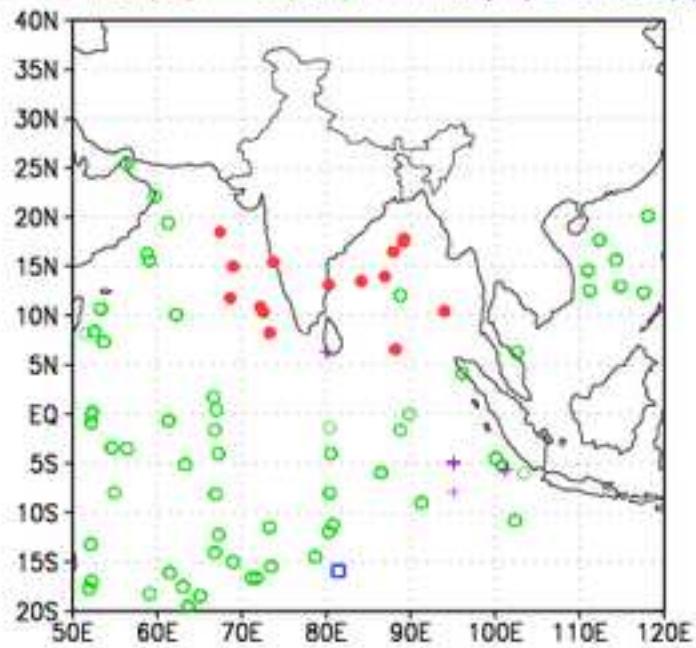


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (18022018 0600UTC +/- 3 Hrs)

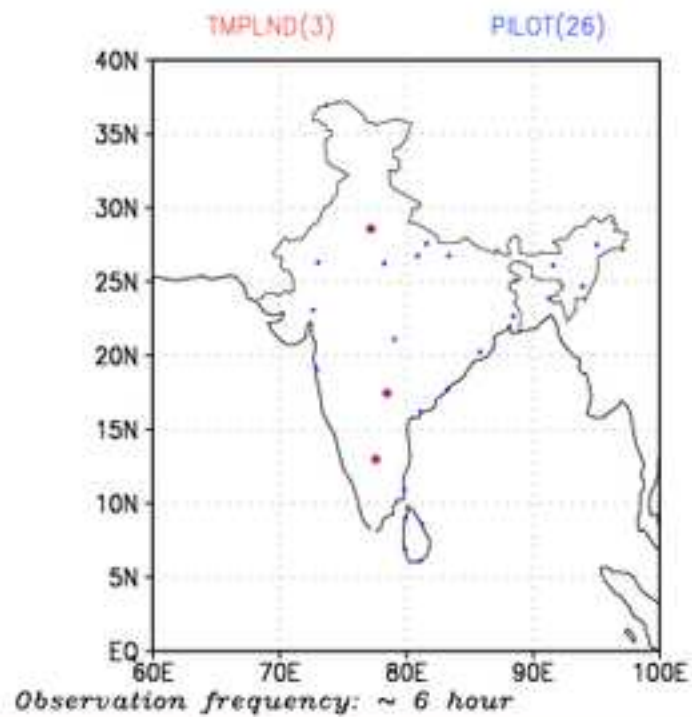
Total Number of Observations Received at NCMRWF: 357

country code in GTS as ● INDIA(29) ○ USA(306) + FRANCE(17) □ OTHERS(5)



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

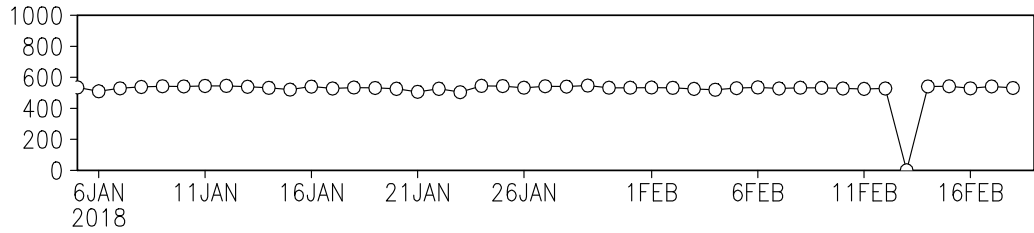
Data Coverage: Sonde (18022018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 29
(42 & 43 Block)



Count for different types of observation (Over Indian Region) for the last 45 days (valid for 06 UTC)

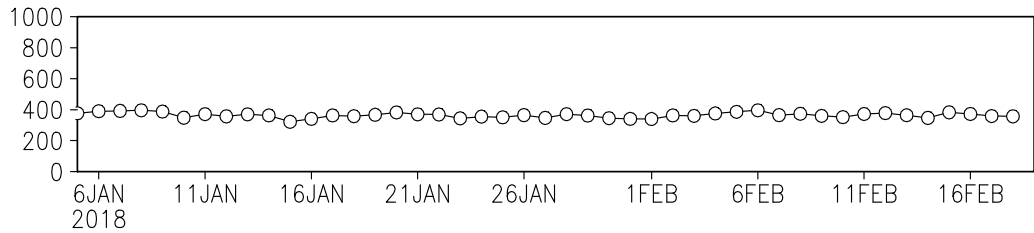
SYNOP

Avg=534
Today_Cnt=531
Dep=-1. %



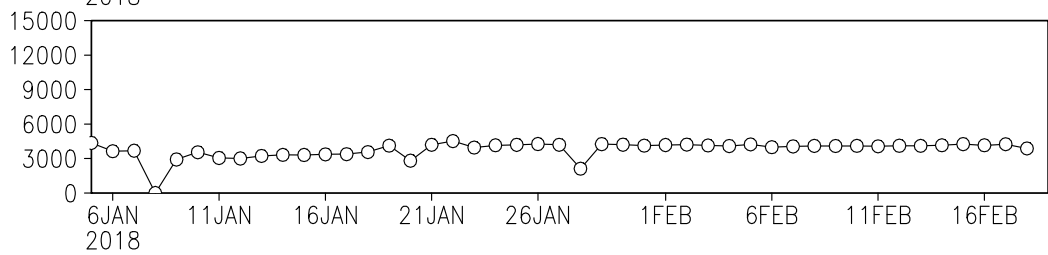
BUOY

Avg=378
Today_Cnt=357
Dep=-6. %



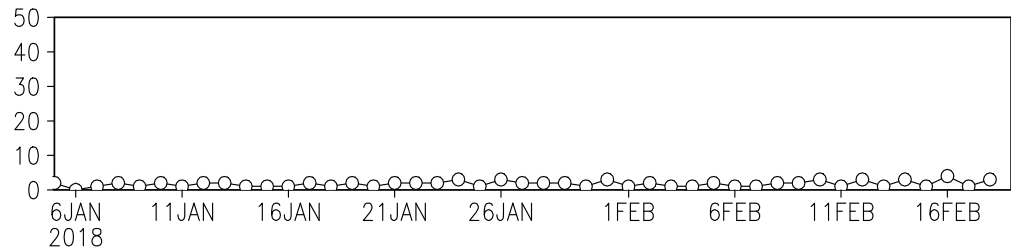
AWS+ARG

Avg=4166
Today_Cnt=3875
Dep=-7. %



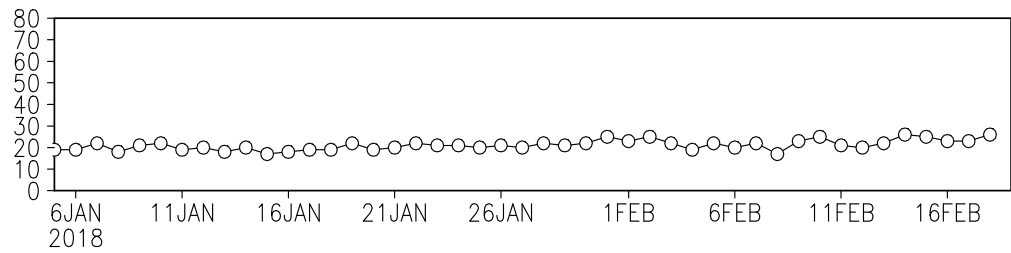
RS/RW

Avg=1
Today_Cnt=3
Dep=200. %



PILOT

Avg=22
Today_Cnt=26
Dep=18. %

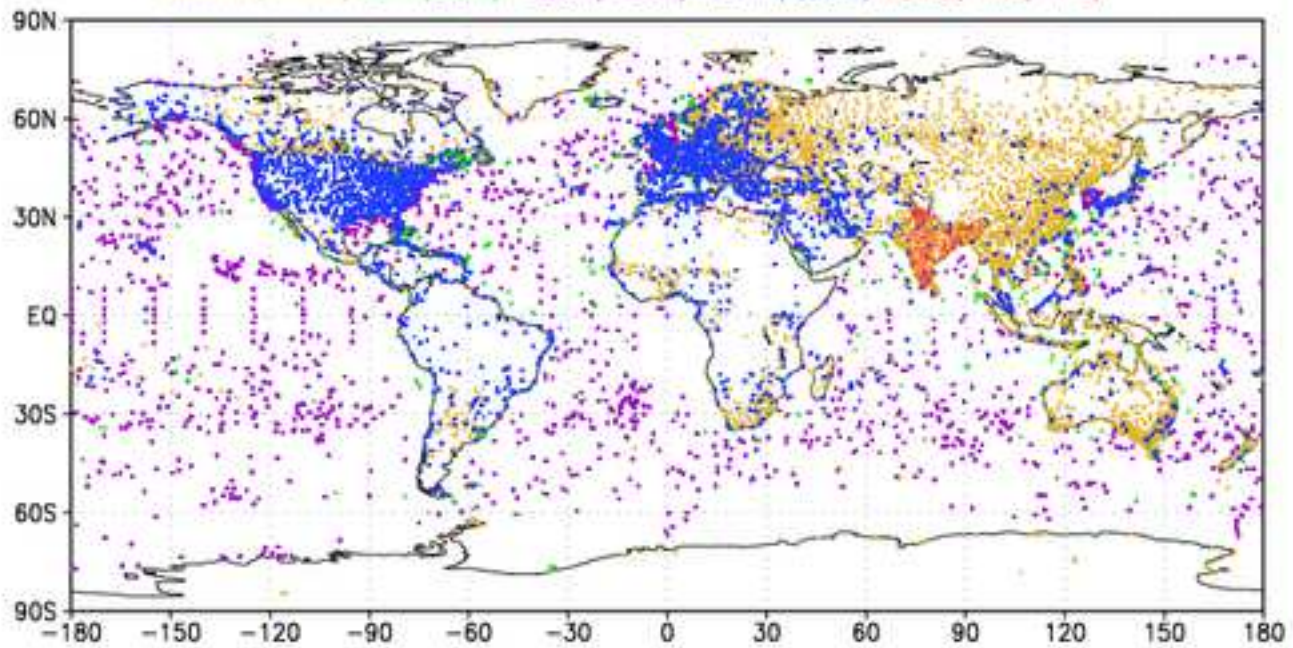


Global Observation Coverage

Data Coverage: Surface (18022018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 53432

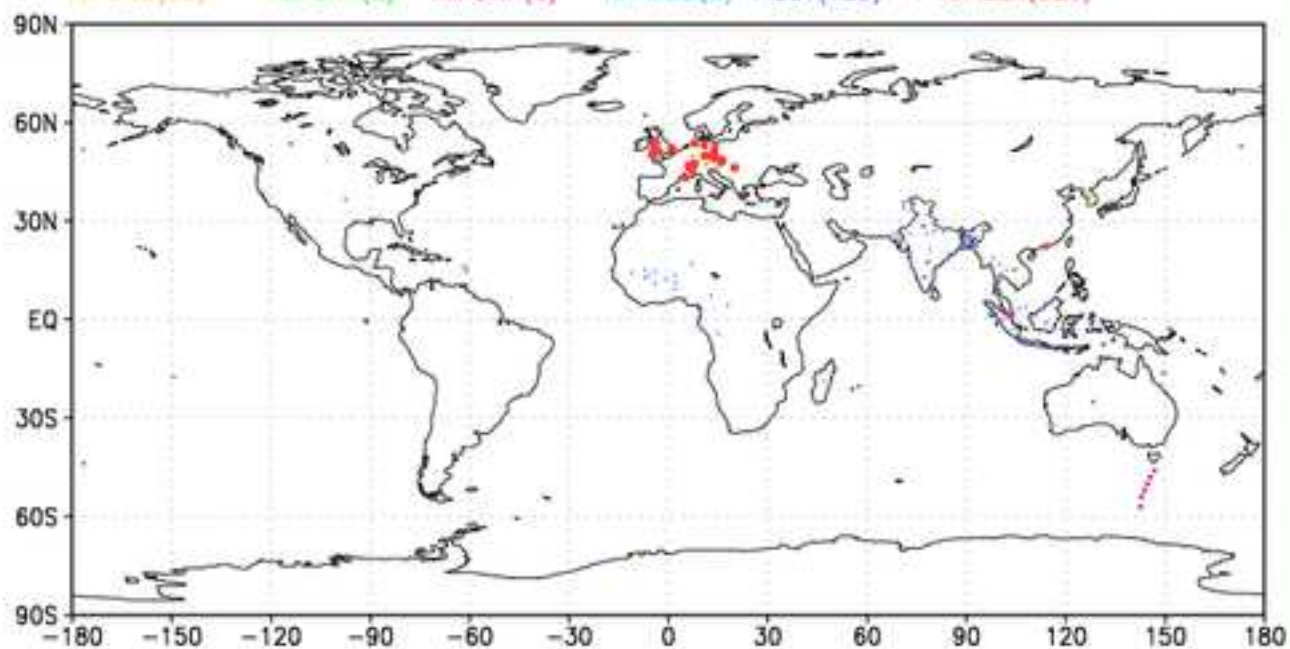
LNDSYN(14166) SHIP(2036) BUOY(12461) METAR(20297) MOBILE/AWS(4472)



Data Coverage: Sonde (18022018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 696

TMP LND(35) TMP SHP(0) TMP DRP(6) TMP MDB(0) PILOT(129) PROFILER(526)



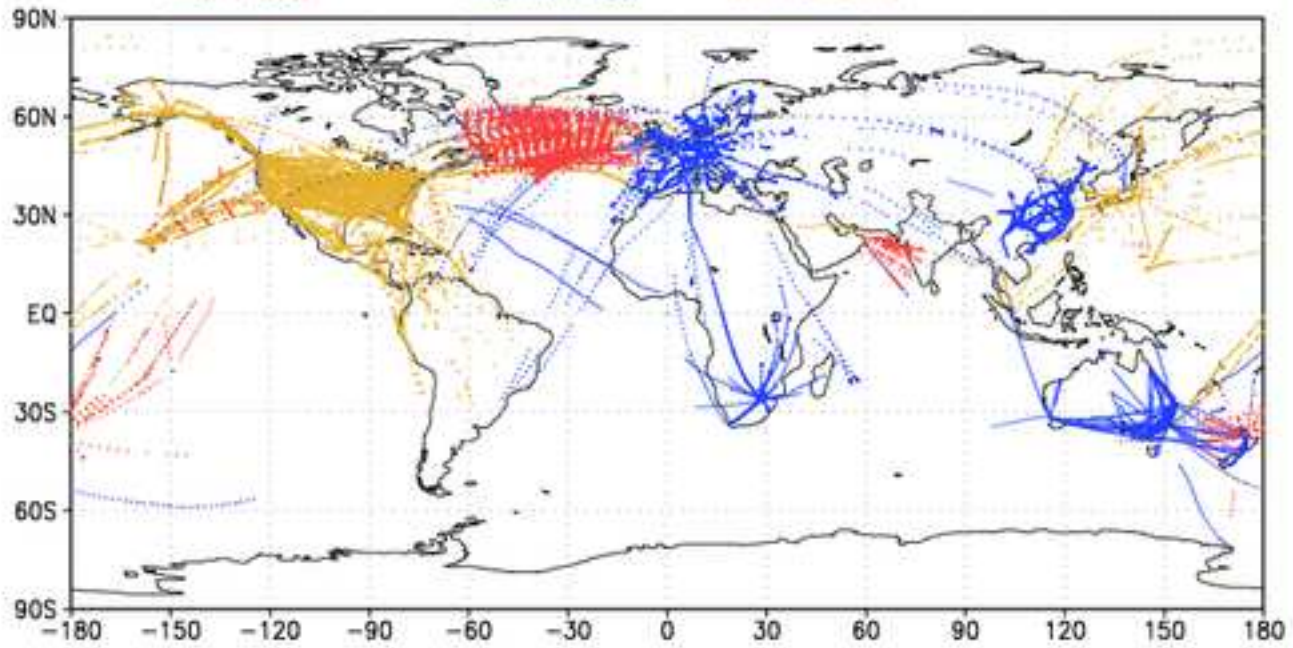
Data Coverage: AIRCFT (18022018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 65177

AIREP(7093)

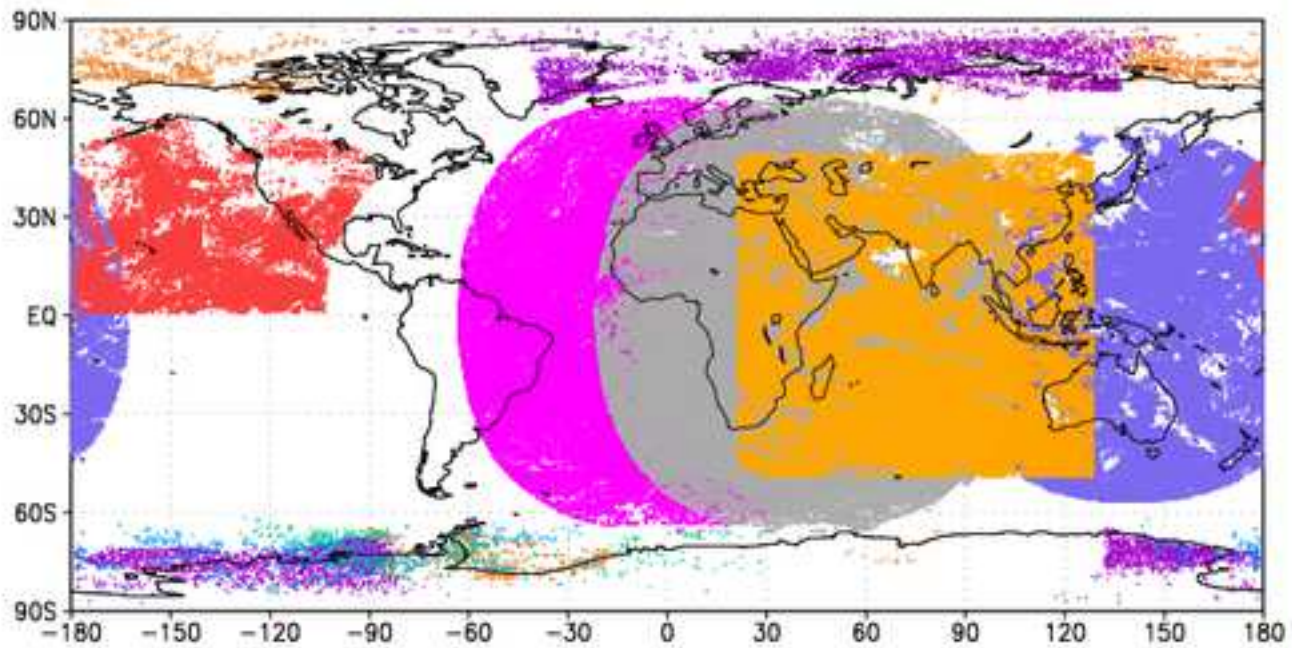
AMDAR(18235)

ACARS(39849)



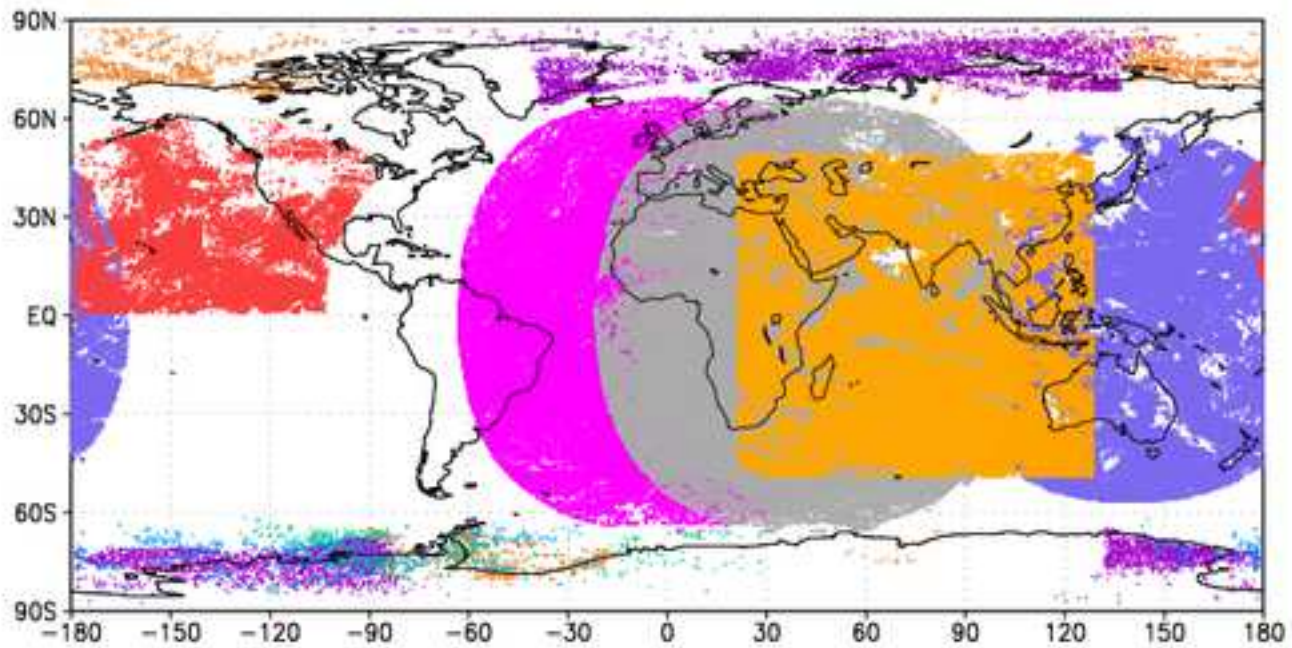
Data Coverage: AMV (18022018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 814461

GOES-15(33130) GOES-13(0) INSAT-3D(73968) METEOSAT-8(303413)
METEOSAT-10(241188) HIMAWARI-8(150659) MODIS/Terra(2843) MODIS/Aqua(7760)
METOP(0) NOAA-15(0) NOAA-18(0) NOAA-18(526) NOAA-19(954)



Data Coverage: AMV (18022018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 814461

GOES-15(33130) GOES-13(0) INSAT-3D(73968) METEOSAT-8(303413)
METEOSAT-10(241188) HIMAWARI-8(150659) MODIS/Terra(2843) MODIS/Aqua(7760)
METOP(0) NOAA-15(0) NOAA-18(0) NOAA-18(526) NOAA-19(954)



Data Coverage: SAT RADIANCE (18022018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3732370

NOAA15(42493)

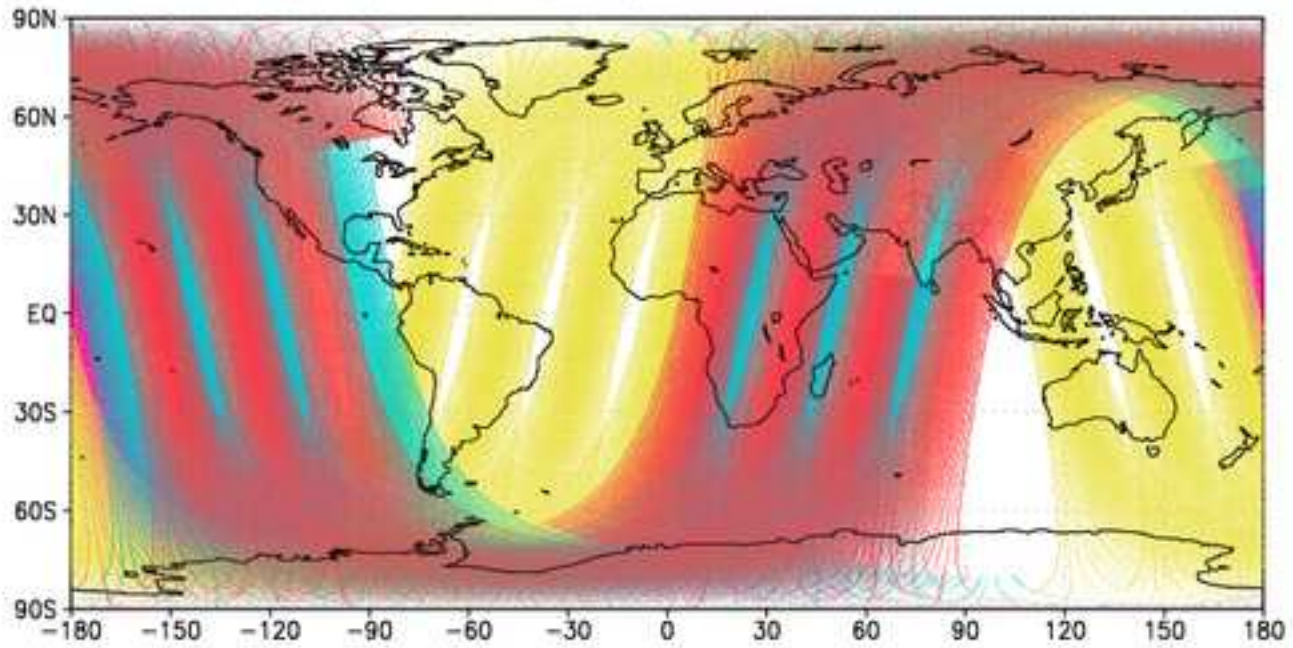
NOAA18(0)

NOAA18(743004)

NOAA18(884880)

METOP1(984024)

METOP2(977959)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (18022018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2458892

NOAA15(0)

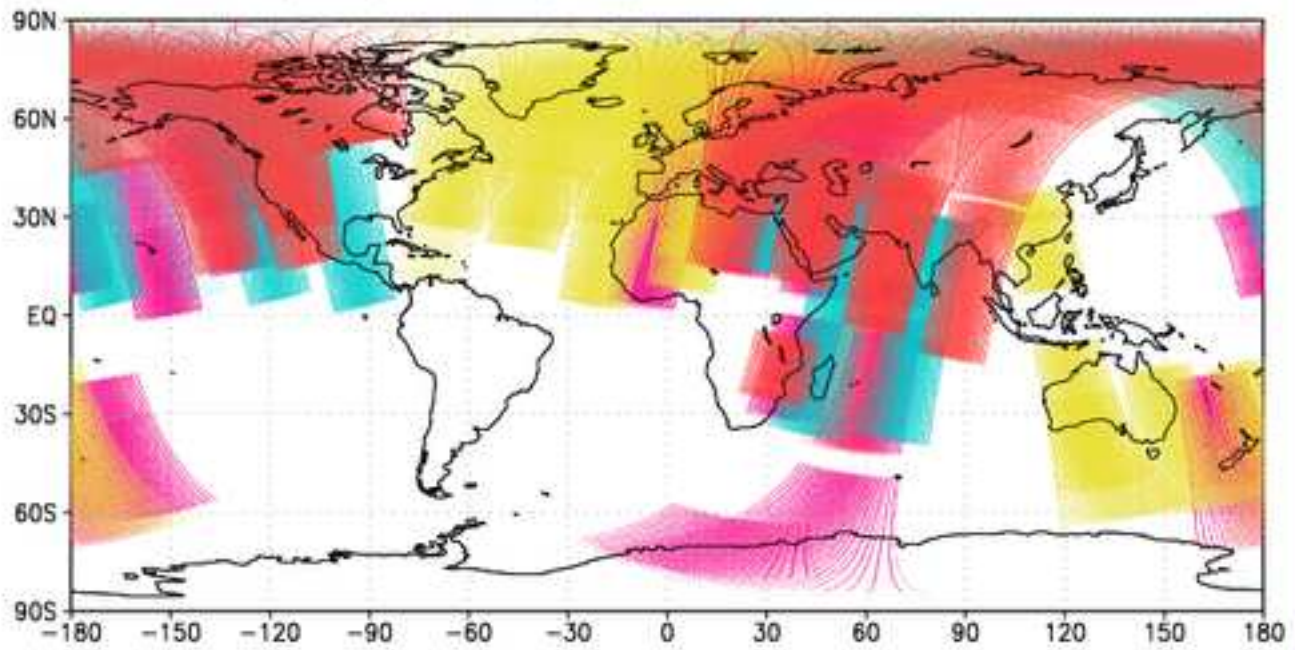
NOAA18(0)

NOAA19(660406)

NOAA18(409115)

METOP1(749477)

METOP2(389894)

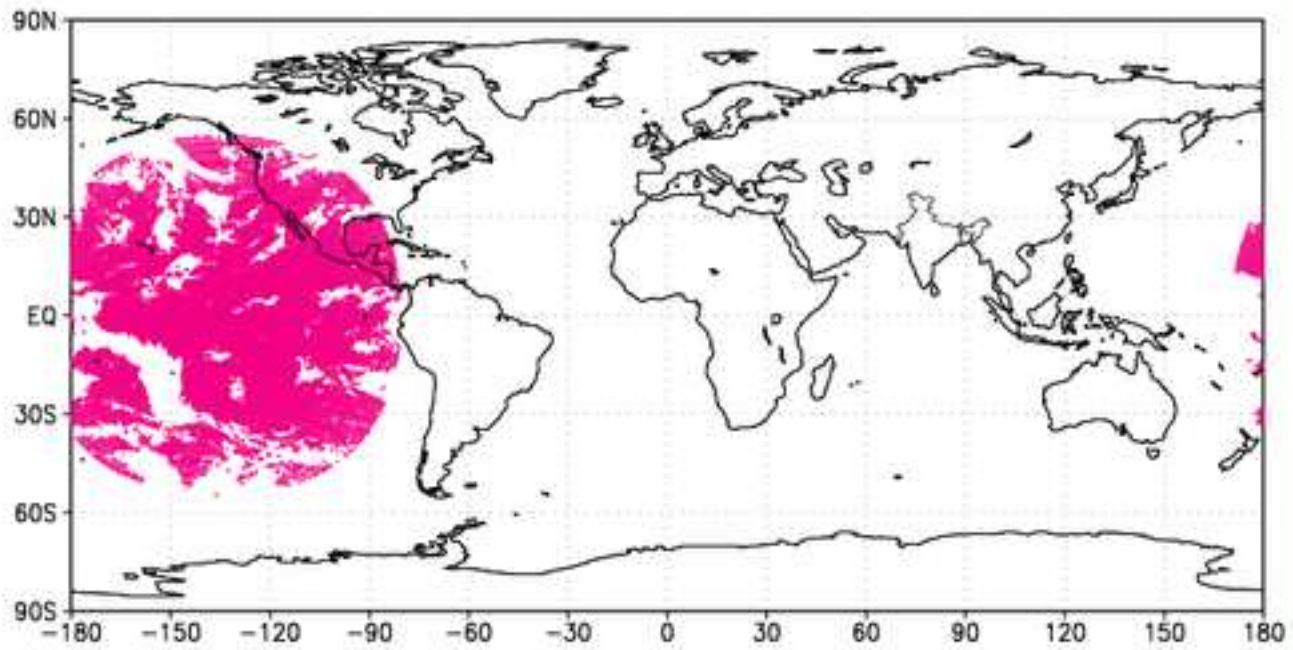


Data Coverage: GOES CSBT (18022018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 29158

GOES-15(29158)

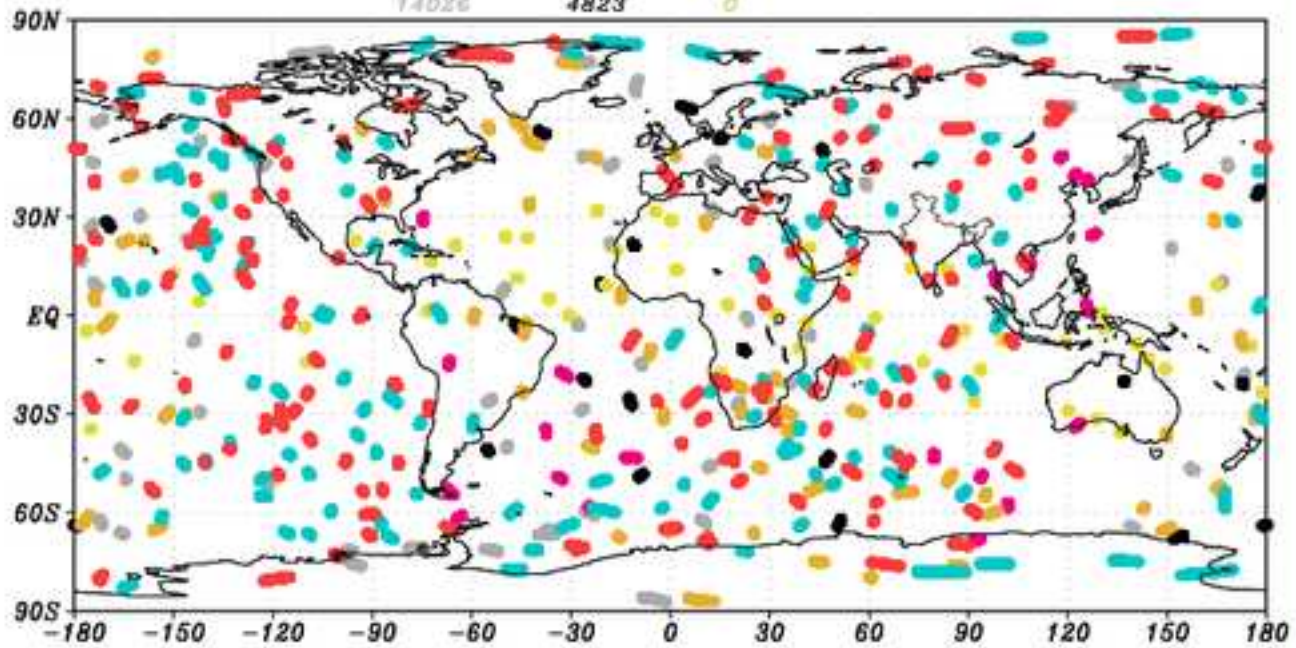
GOES-13(0)



Data Coverage:GPSRO (18022018 0600UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 120158

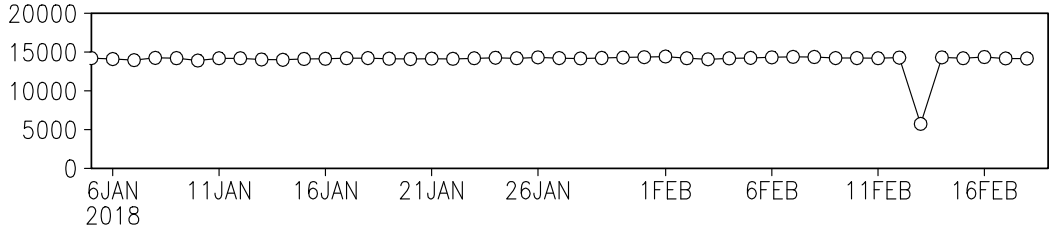
| | | | | | | | | |
|---------|---------|------------|----------|----------|----------|----------|----------|----------|
| GRACE-A | METOP-B | METOP-A | COSMIC-1 | COSMIC-2 | COSMIC-3 | COSMIC-4 | COSMIC-5 | COSMIC-6 |
| 0 | 34608 | 32720 | 6321 | 0 | 3600 | 0 | 0 | 16000 |
| | | TerraSAR-X | TenDEM-X | GRACE-B | | | | |
| | | 14026 | 4823 | 0 | | | | |



Count for different types of observation (Global) for the last 45 Days (valid for 06 UTC)

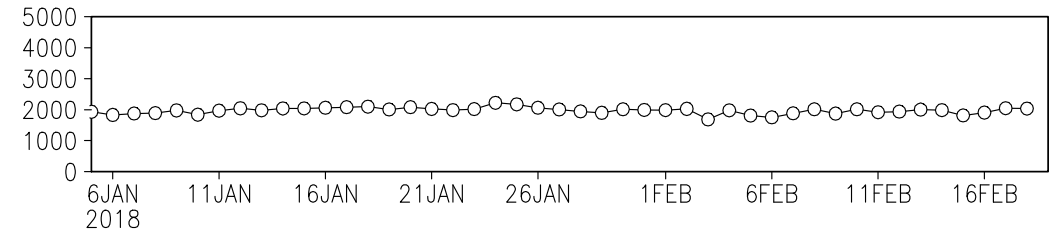
SYNOP

Avg=14301
Today_Cnt=14166
Dep=-1. %



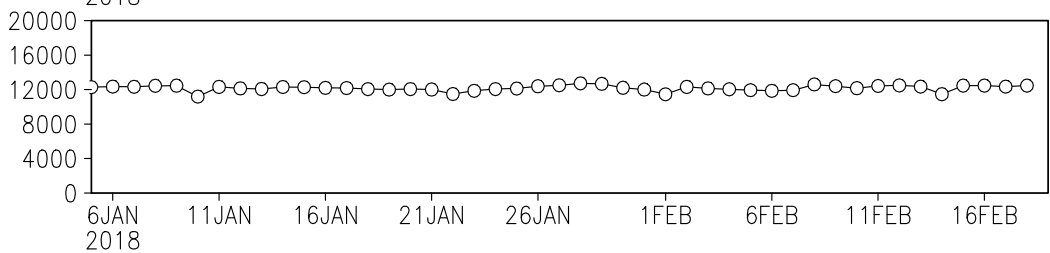
SHIP

Avg=2049
Today_Cnt=2036
Dep=-1. %



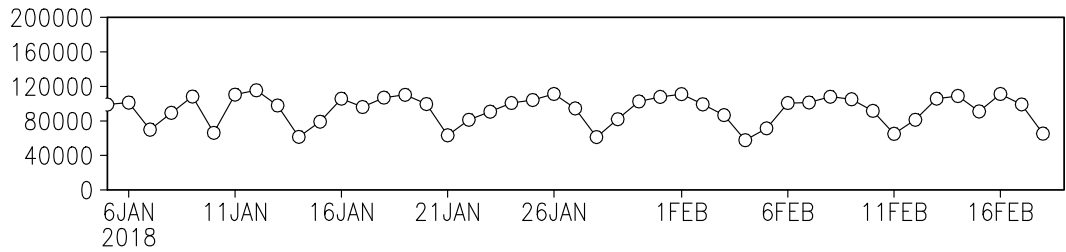
BUOY

Avg=12390
Today_Cnt=12461
Dep=1. %



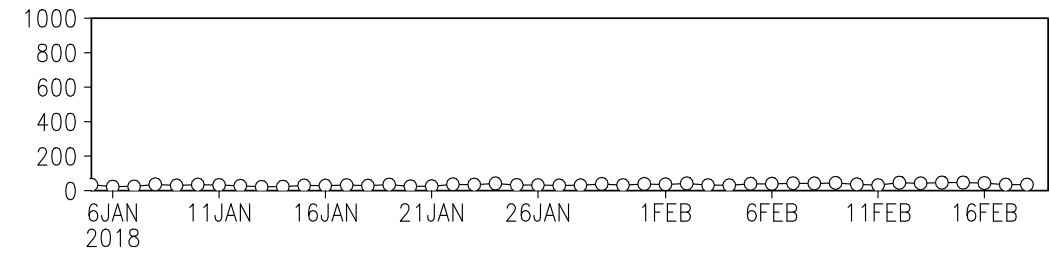
AIRCRAFT

Avg=106269
Today_Cnt=65177
Dep=-39. %



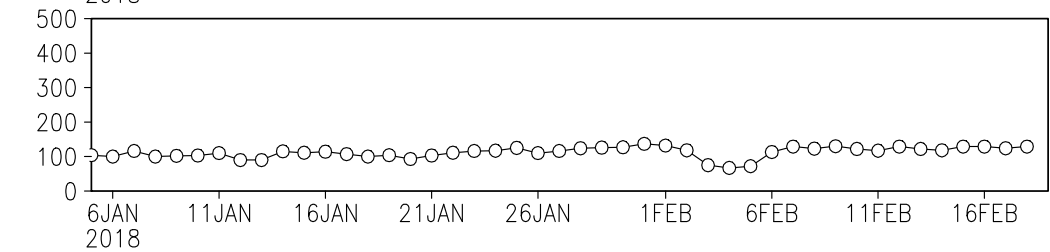
RS/RW

Avg=40
Today_Cnt=35
Dep=-12. %



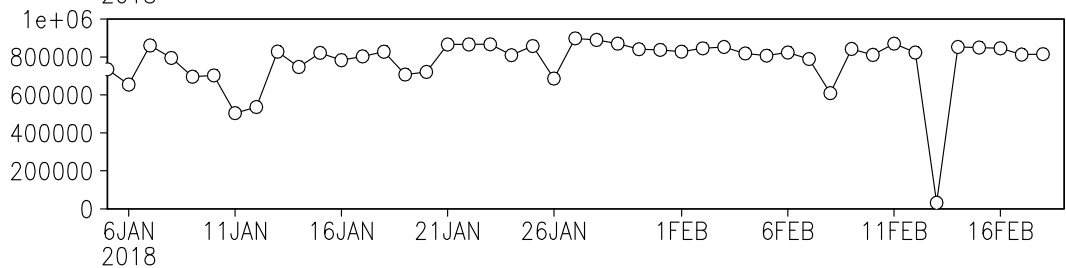
PILOT

Avg=121
Today_Cnt=129
Dep=7. %



AMV

Avg=837328
Today_Cnt=814461
Dep=-3. %

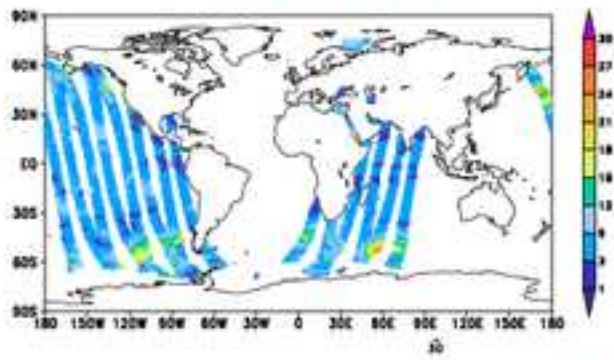


SCATTEROMETER WIND VECTORS

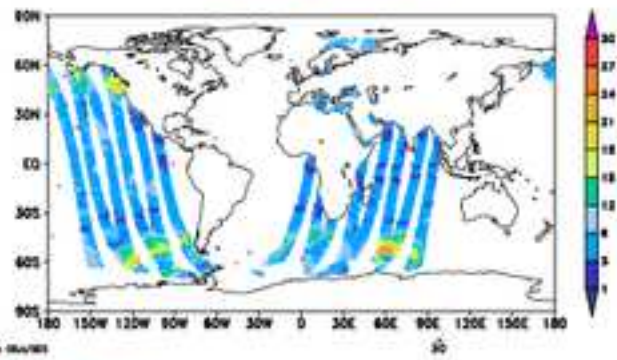
RECEIVED AT NCMRWF (20180218 06Z)

SCATTEROMETER SURFACE WINDS (18022018 0600UTC +/- 03Hrs)

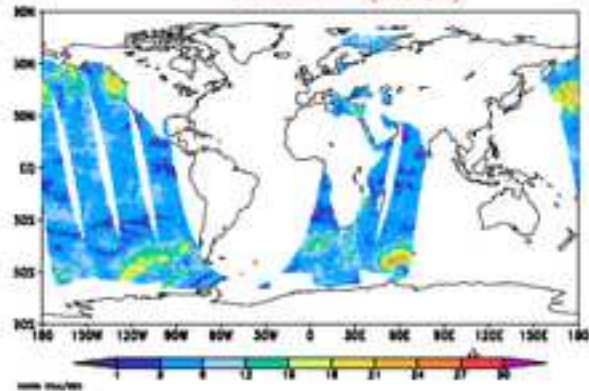
ASCAT:Metop-A



ASCAT:Metop-B



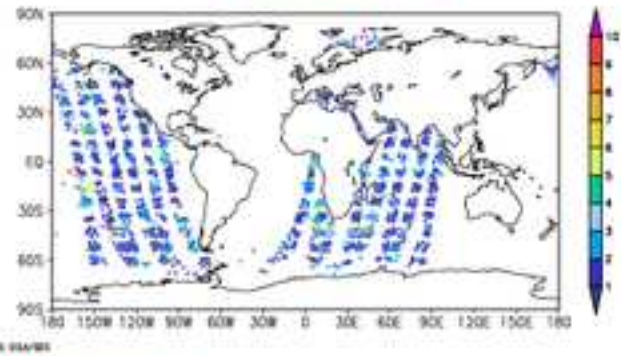
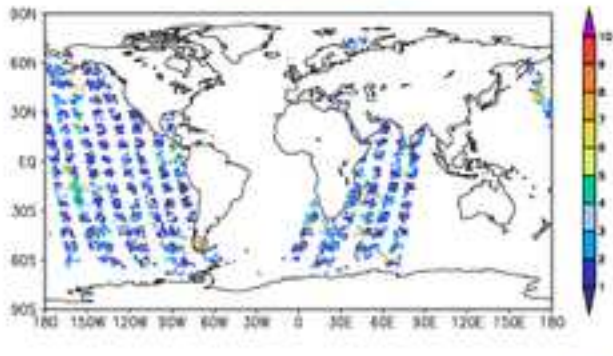
SCATSAT-1(Indian)



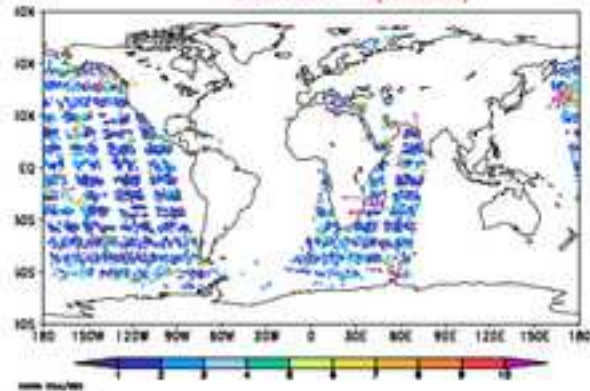
OBSERVATION—FIRST GUESS (18022018 06 UTC):NCMRWF

ASCAT:Metop-A

ASCAT:Metop-B



SCATSAT-1(Indian)



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

{ INFRA-RED WINDS [IR (10.8 & 3.8)]

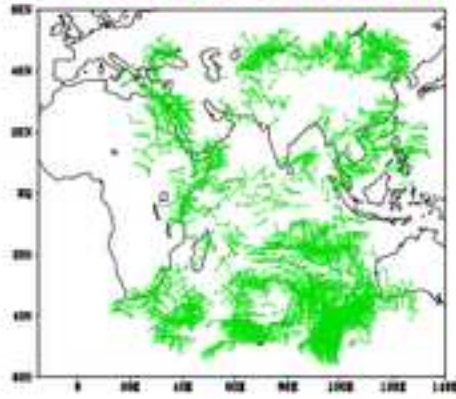
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

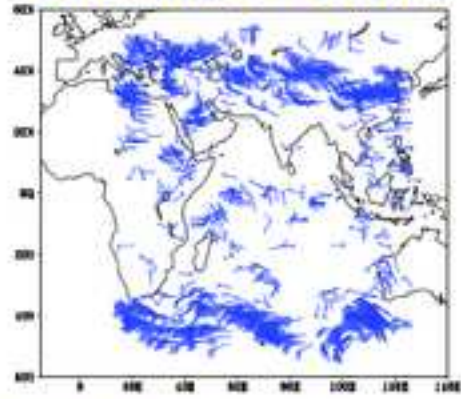
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (18022018 0600UTC)

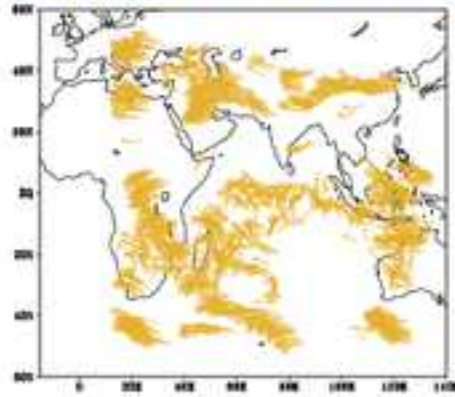
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



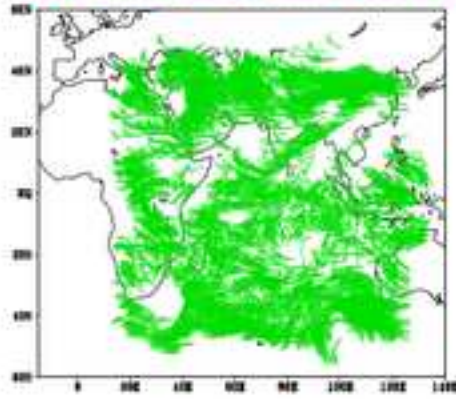
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (18022018 0600UTC)

Low Level (Below 700 hPa)

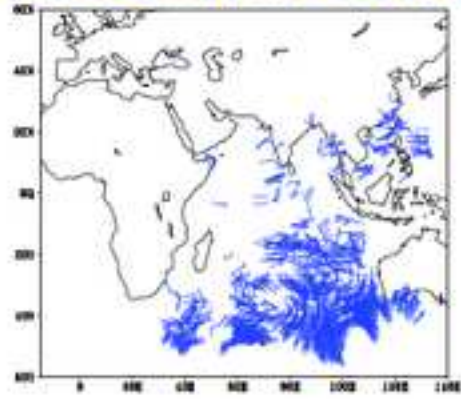
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (18022018 0600UTC)

WV, High Level (Above 400 hPa)

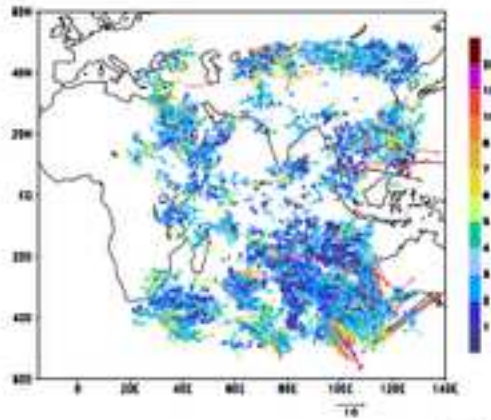


VIS, Low Level (Below 700 hPa)

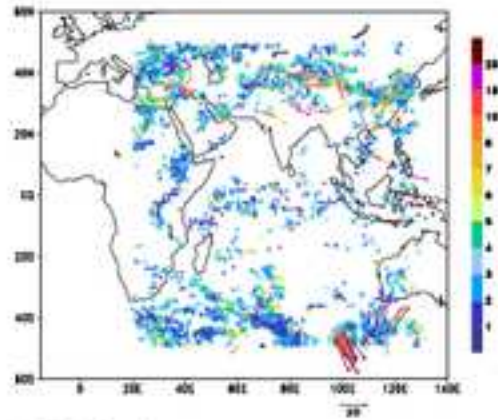


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (18022018 0600UTC)

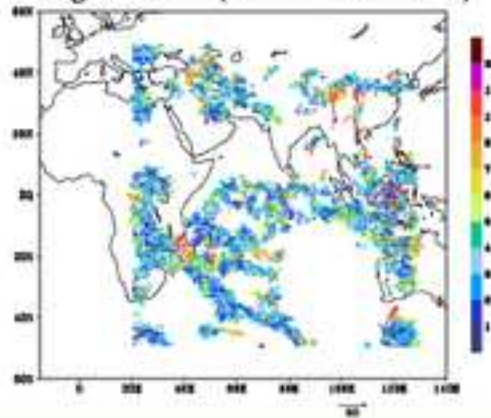
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



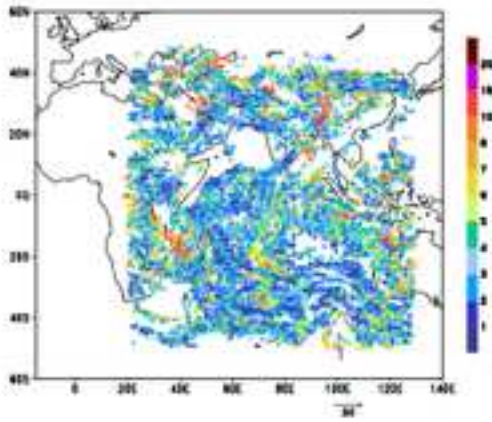
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (18022018 0600UTC)

Low Level (Below 700 hPa)

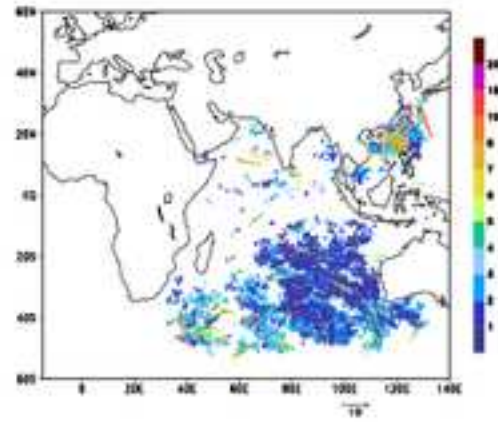
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18022018 0600UTC)

WV, High Level (Above 400 hPa)

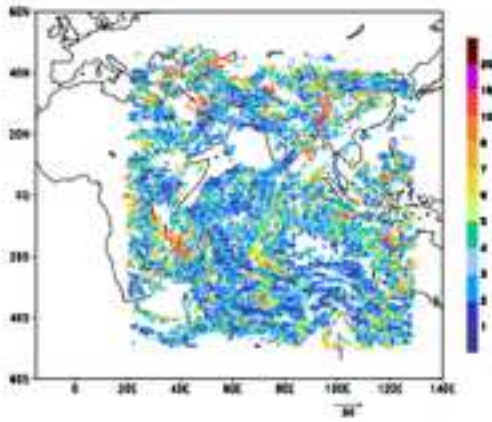


VIS, Low level (Below 700 hPa)

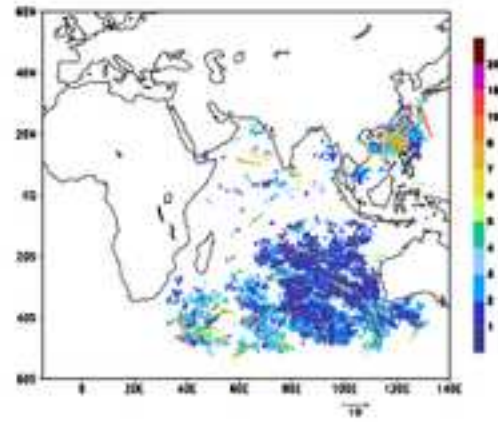


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18022018 0600UTC)

WV, High Level (Above 400 hPa)

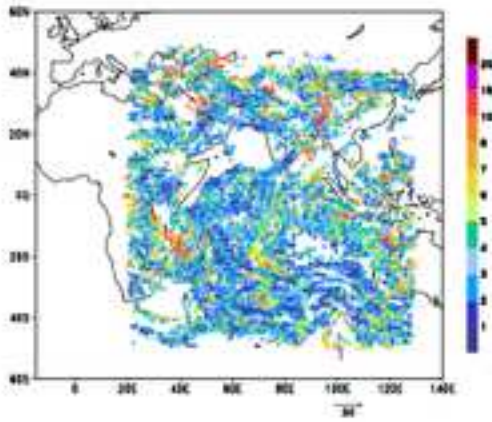


VIS, Low level (Below 700 hPa)

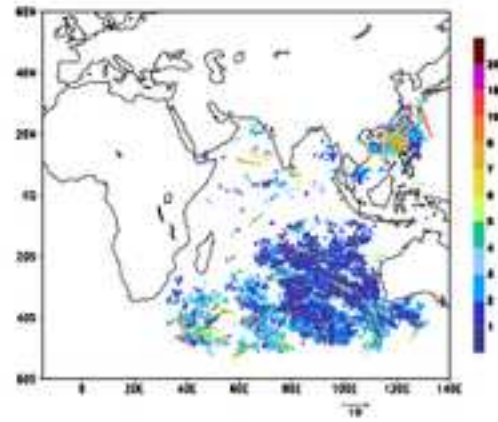


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18022018 0600UTC)

WV, High Level (Above 400 hPa)

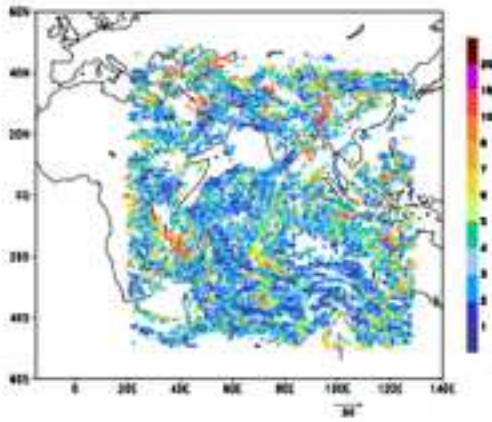


VIS, Low level (Below 700 hPa)

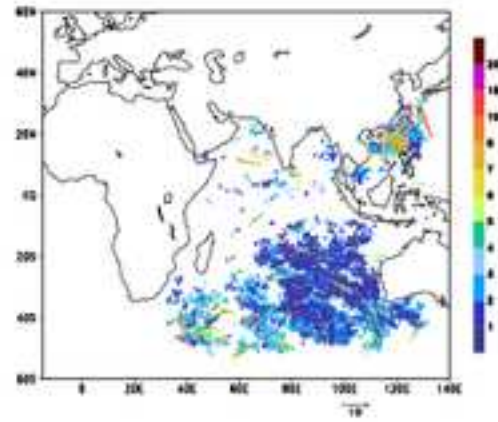


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18022018 0600UTC)

WV, High Level (Above 400 hPa)

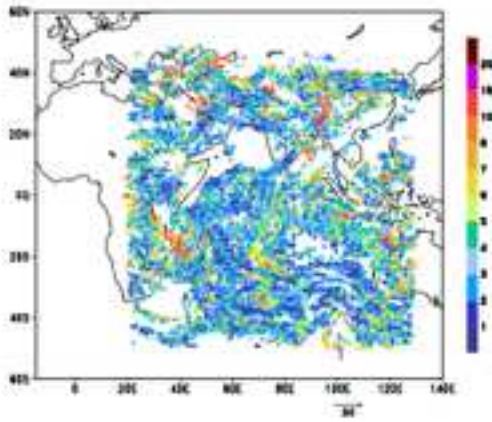


VIS, Low level (Below 700 hPa)

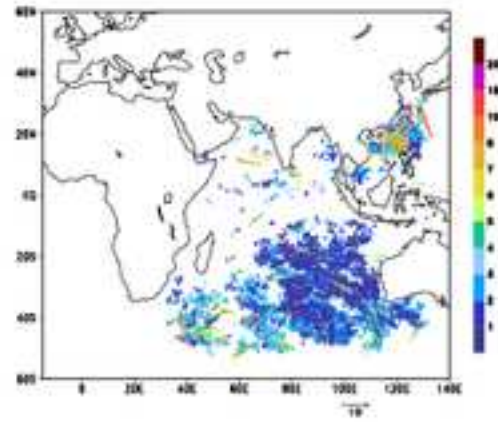


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18022018 0600UTC)

WV, High Level (Above 400 hPa)



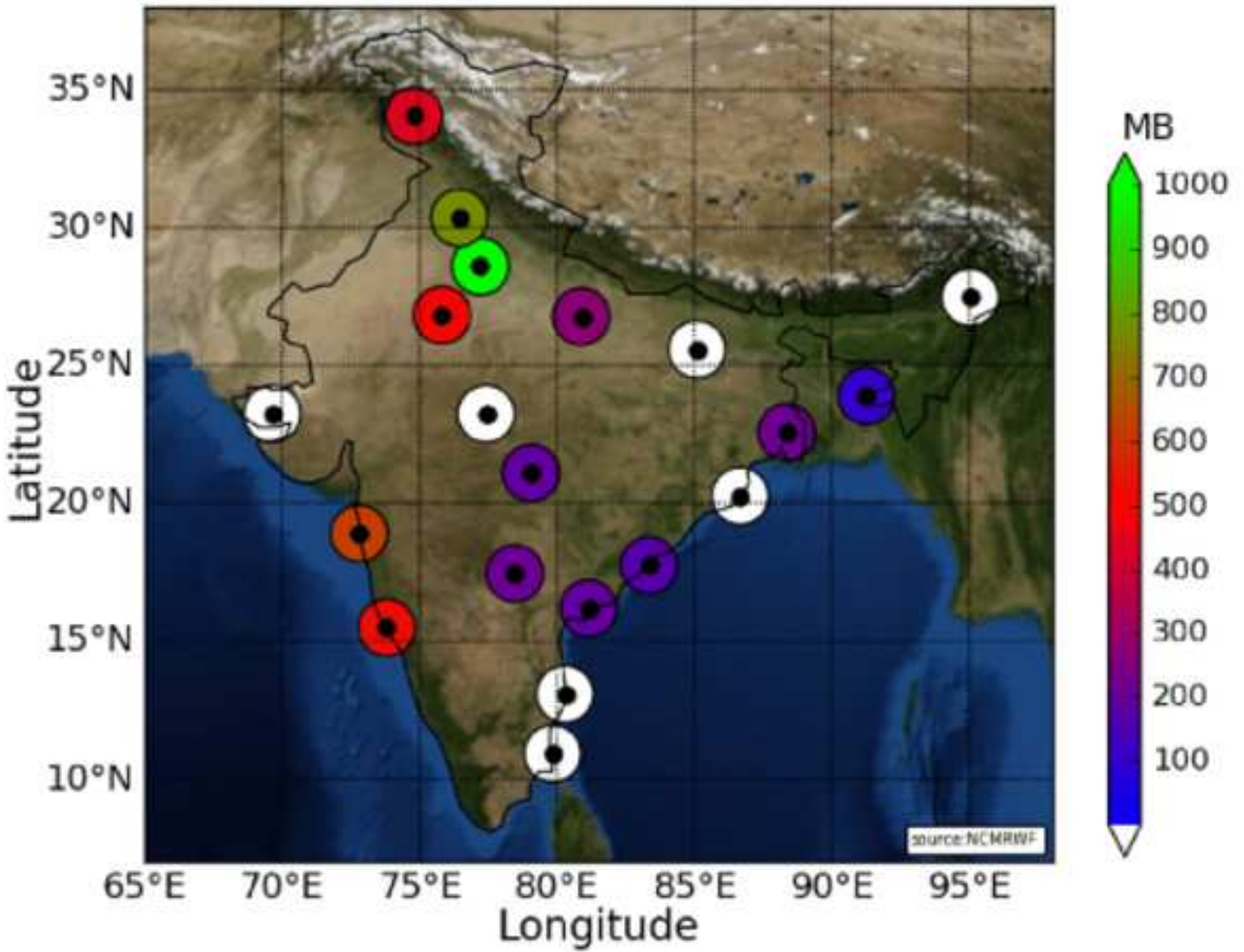
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

Date: 20180218 at : 06UTC



Quality of Indian PIBAL Observations

Maximum height reported
by PIBAL ascents

Zonal Wind Rejections by NGFS GDAS