

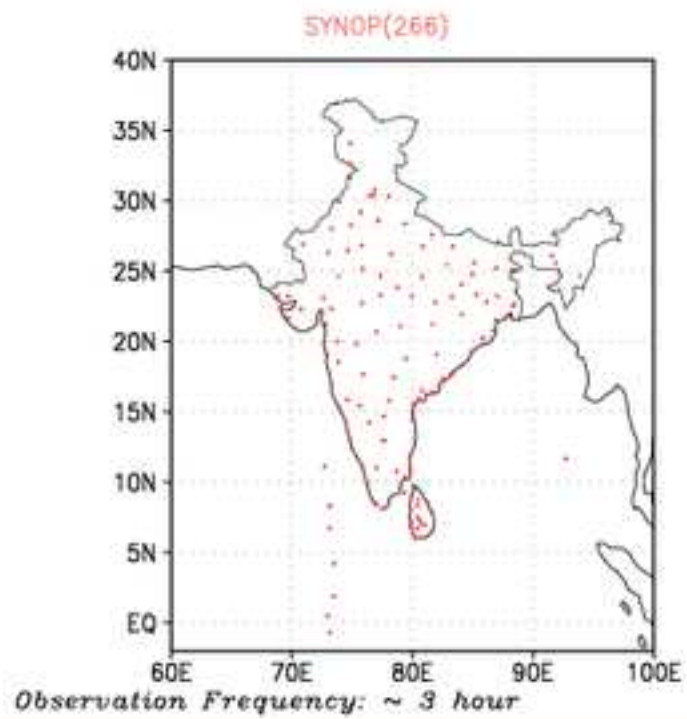
Observation Monitoring

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

for 18062018 (1800 UTC)

Indian Observation Coverage

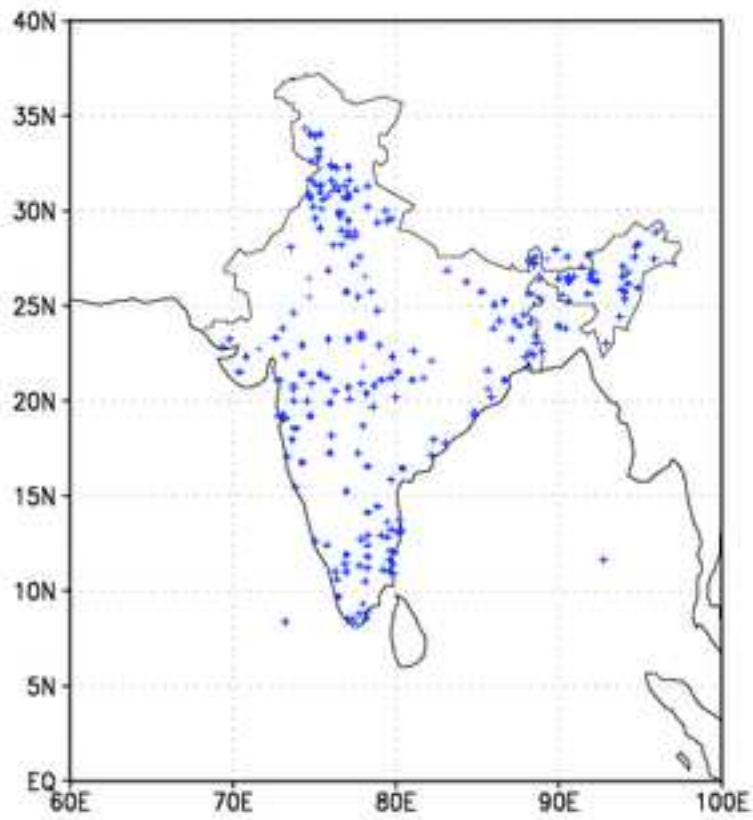
Data Coverage: Surface (18062018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 266
(42 & 43 Block)



Data Coverage: Indian AWS (18062018 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1277

AWS PRESSURE (1277)

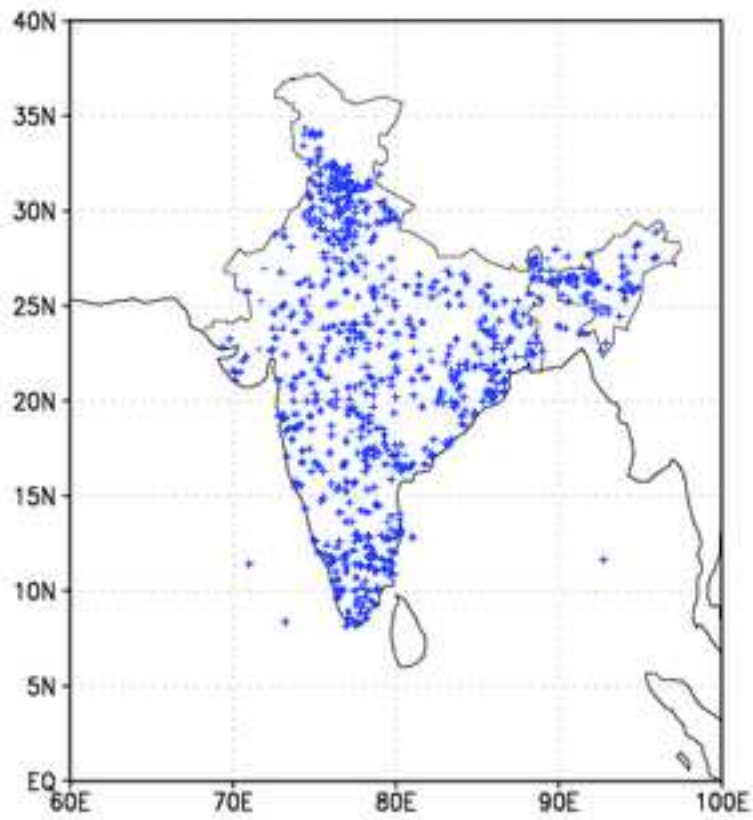


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (18062018 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 4156

AWS + ARG (4156)

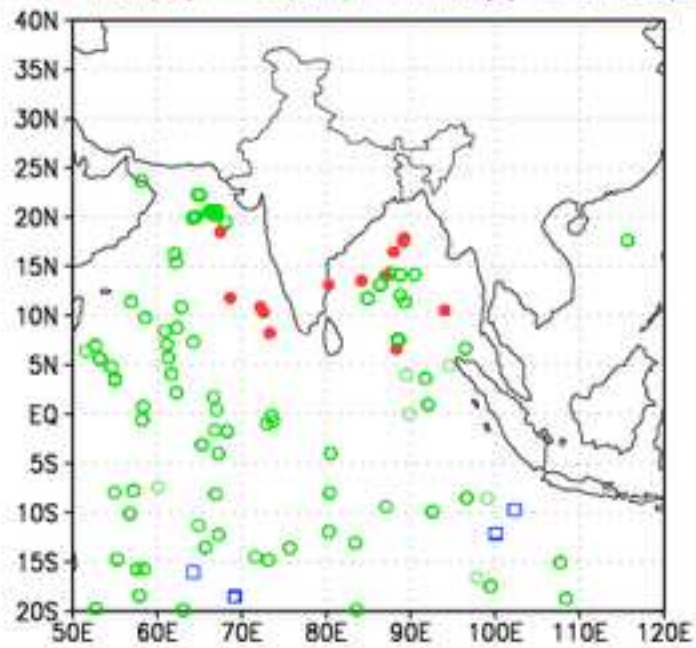


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (18062018 1800UTC +/- 3 Hrs)

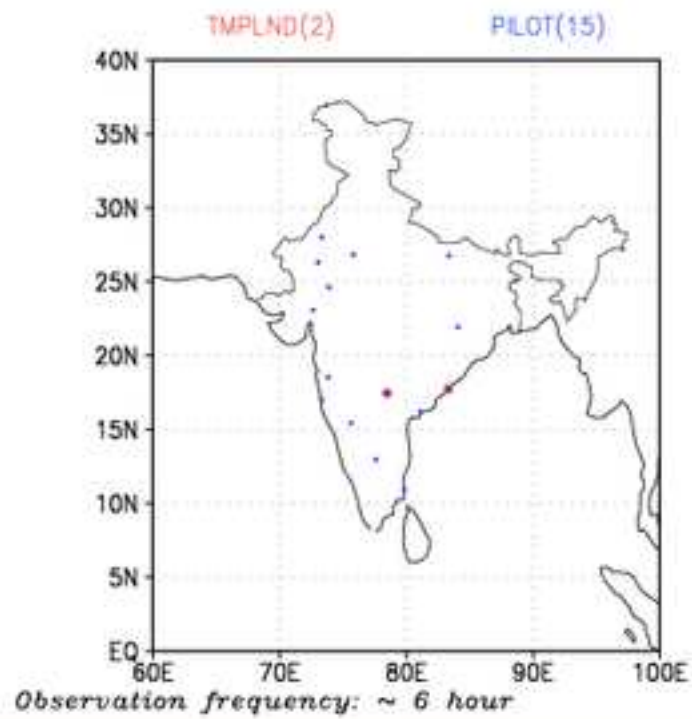
Total Number of Observations Received at NCMRWF: 555

country code in GTS as ● INDIA(25) ○ USA(506) + FRANCE(0) □ OTHERS(24)



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

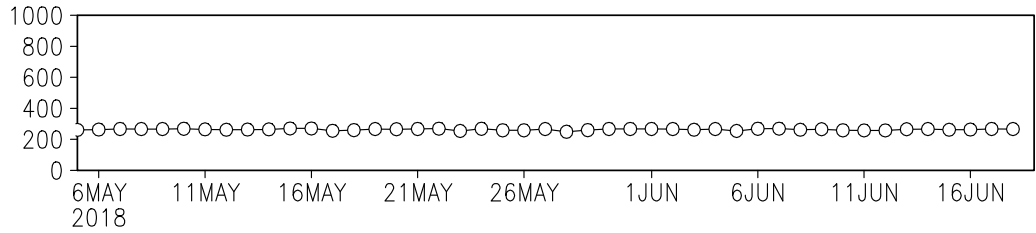
Data Coverage: Sonde (18062018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 17
(42 & 43 Block)



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

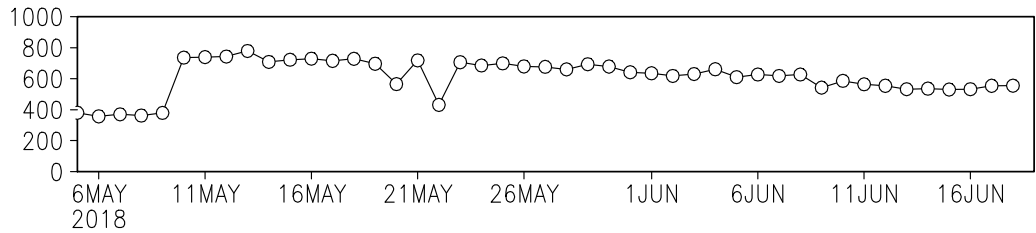
SYNOP

Avg=266
Today_Cnt=266
Dep=0. %



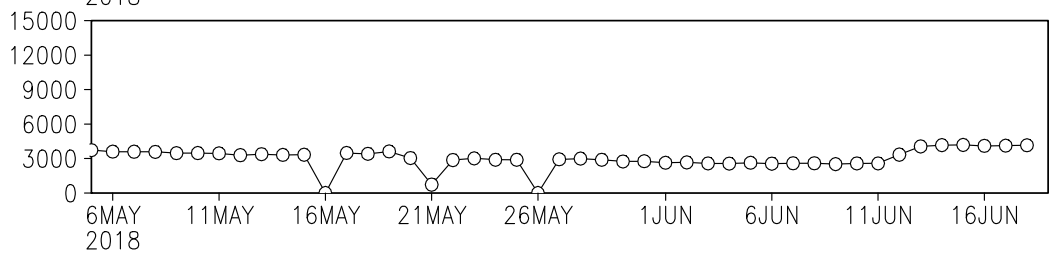
BUOY

Avg=684
Today_Cnt=555
Dep=-19. %



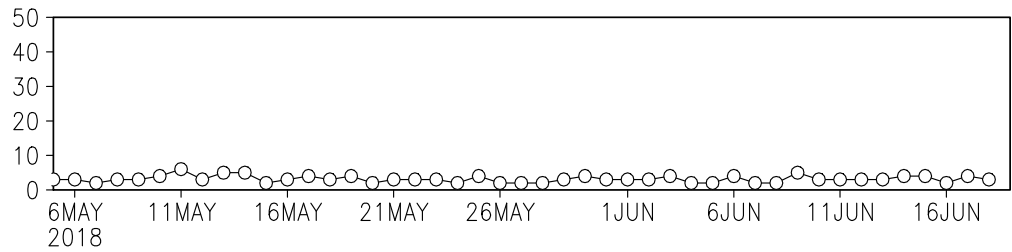
AWS+ARG

Avg=3562
Today_Cnt=4156
Dep=17. %



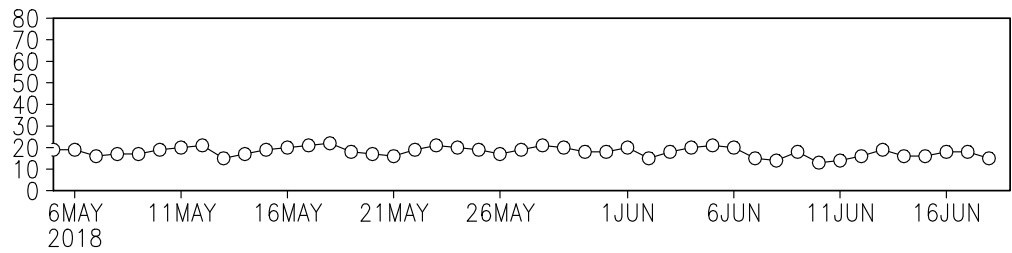
RS/RW

Avg=3
Today_Cnt=3
Dep=0. %



PILOT

Avg=19
Today_Cnt=15
Dep=-21. %

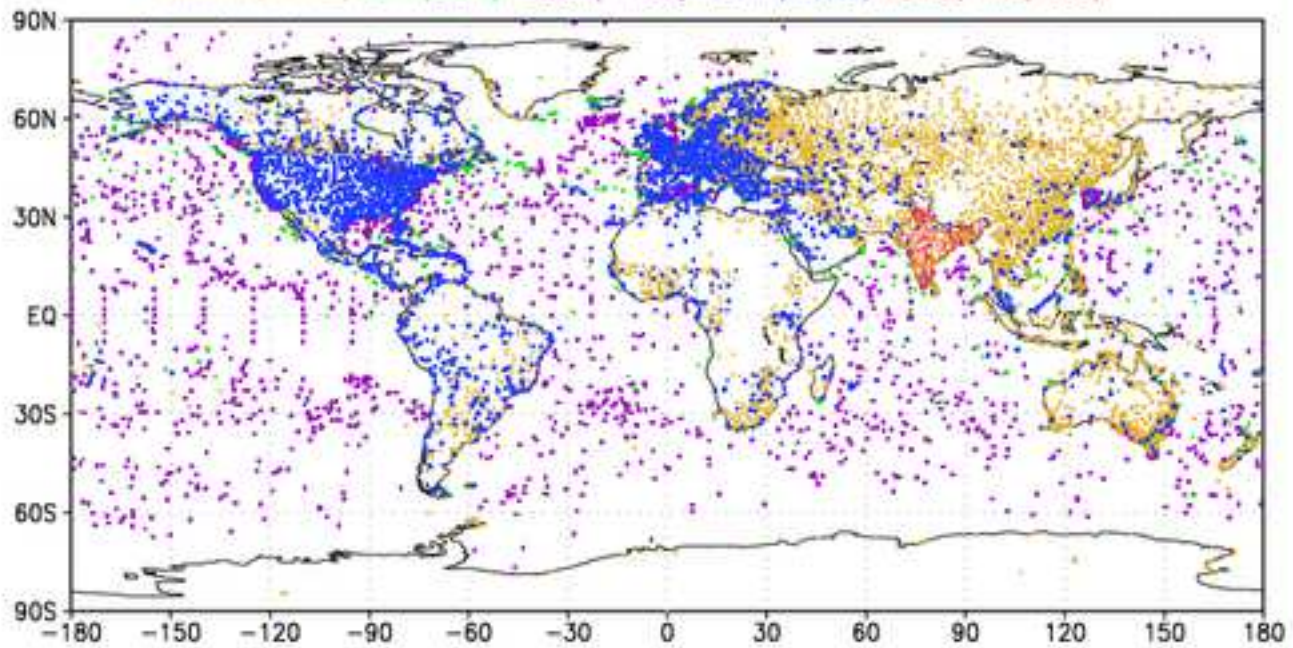


Global Observation Coverage

Data Coverage: Surface (18062018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 54682

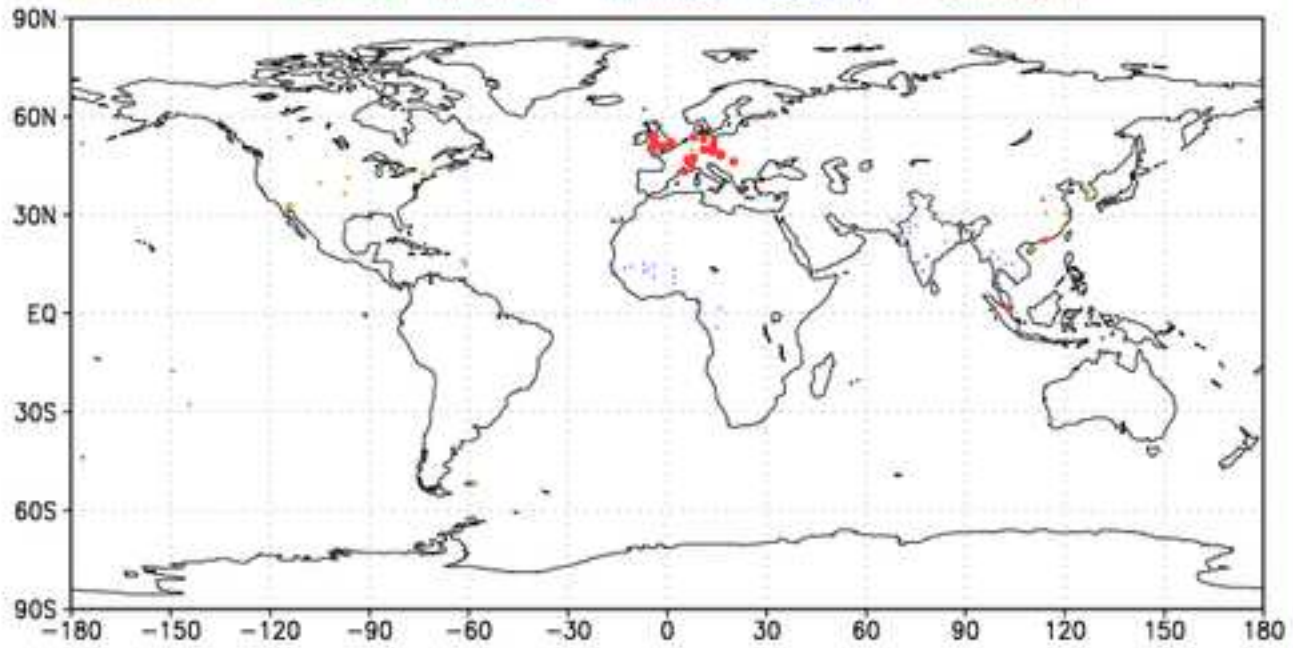
LNDSYN(13702) SHIP(2096) BUOY(14102) METAR(19927) MOBILE/AWS(4855)



Data Coverage: Sonde (18062018 1800UTC +/- 03Hrs)

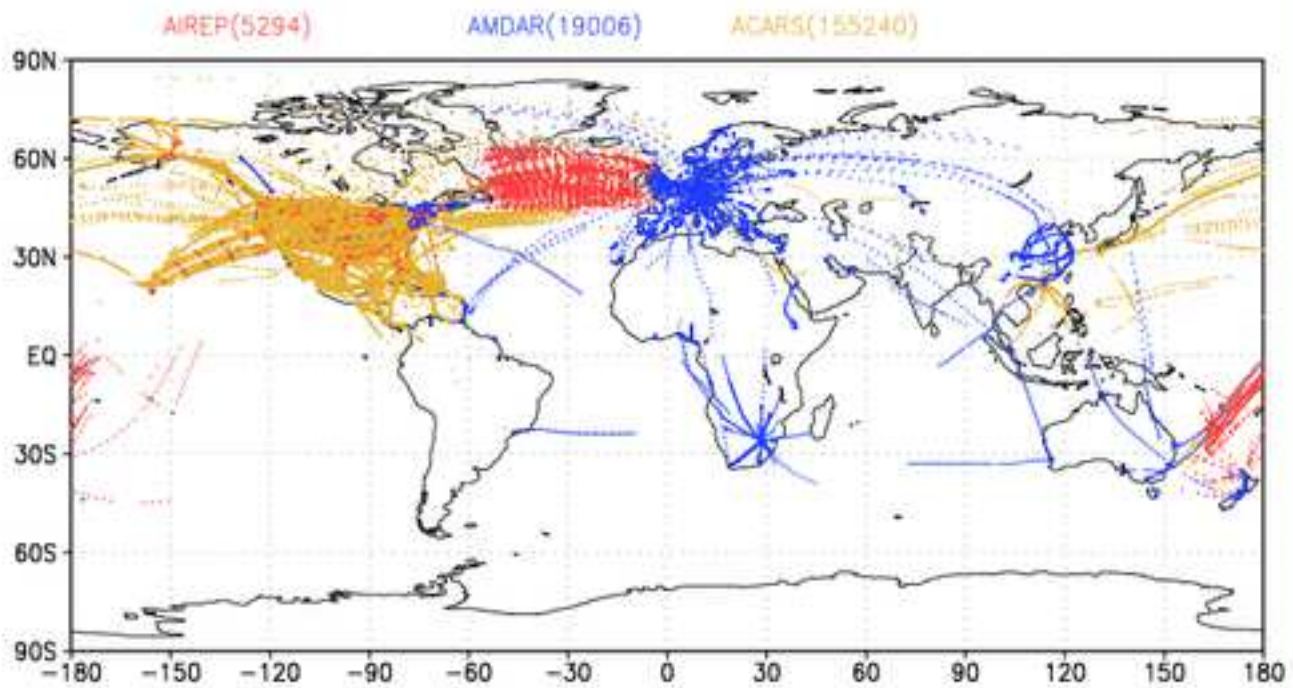
Total Number of Observations Received at NCMRWF: 663

TMP LND(41) TMP SHP(0) TMP DRP(0) TMP MDB(0) PILOT(51) PROFILER(571)



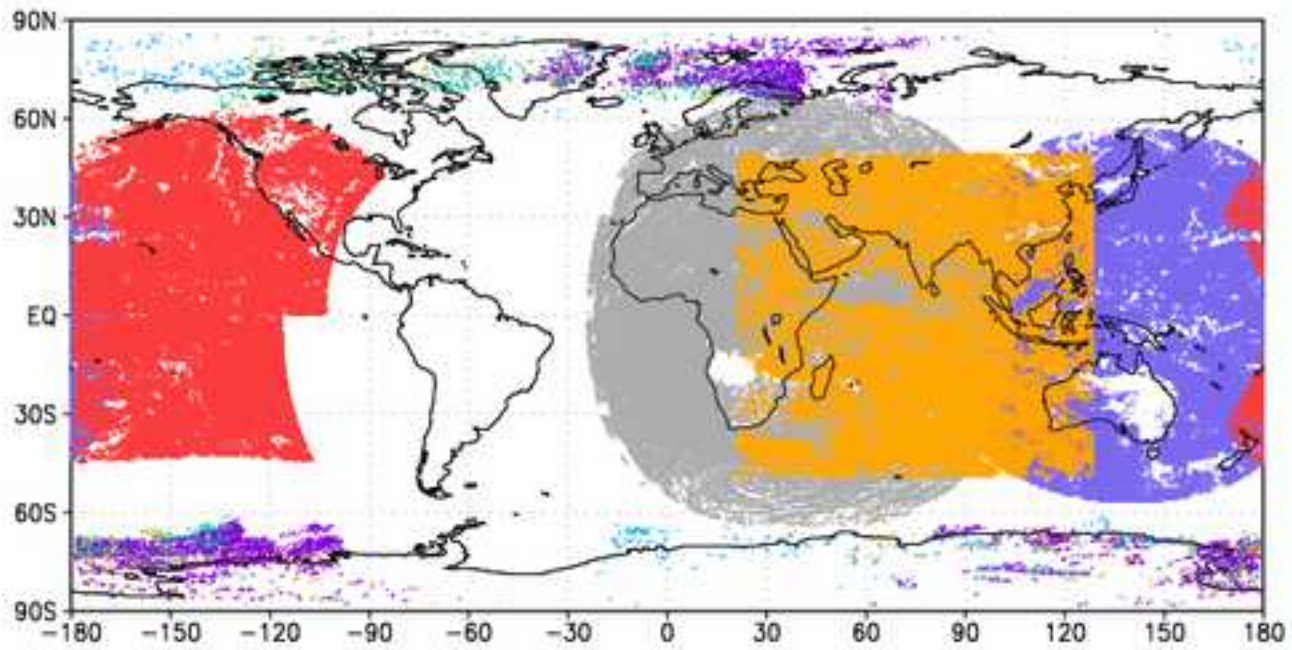
Data Coverage: AIRCFT (18062018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 179540



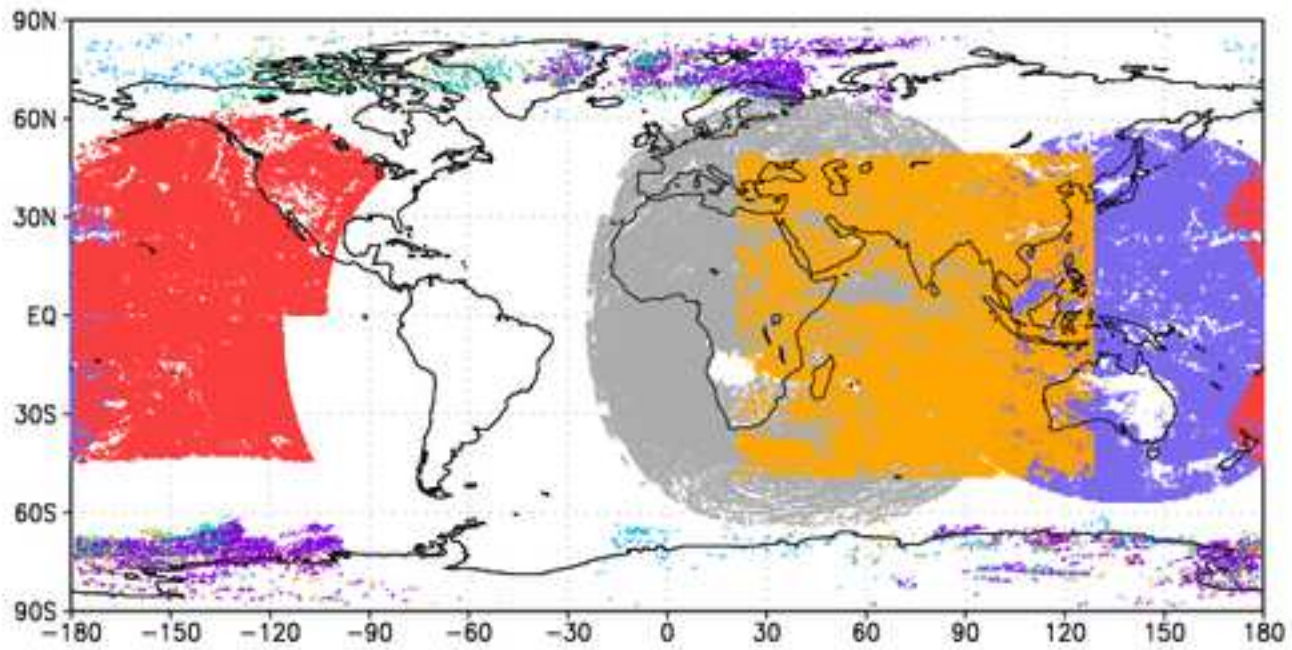
Data Coverage: AMV (18062018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 656371

GOES-15(151944) GOES-13(0) INSAT-3D(51464) METEOSAT-8(130430)
METEOSAT-10(0) HIMAWARI-8(122672) MODIS/Terra(915) MODIS/Aqua(0)
METOP(5894) NOAA-15(753) NOAA-18(0) NOAA-18(926) NOAA-19(752)



Data Coverage: AMV (18062018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 656371

GOES-15(151944) GOES-13(0) INSAT-3D(51464) METEOSAT-8(130430)
METEOSAT-10(0) HIMAWARI-8(122672) MODIS/Terra(915) MODIS/Aqua(0)
METOP(5894) NOAA-15(753) NOAA-18(0) NOAA-18(926) NOAA-19(752)



Data Coverage: SAT RADIANCE (18062018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3860546

NOAA15(63160)

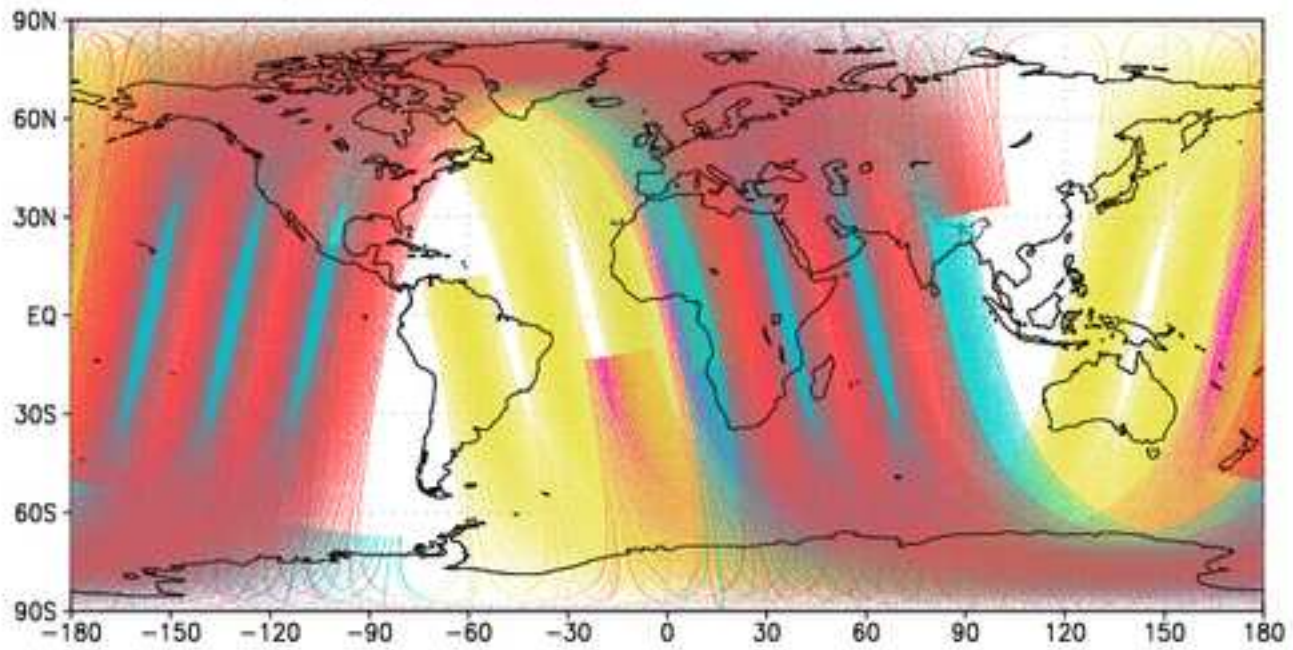
NOAA18(0)

NOAA19(982662)

NOAA17(226262)

METOP1(984379)

METOP2(972082)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (18062018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 934802

NOAA15(0)

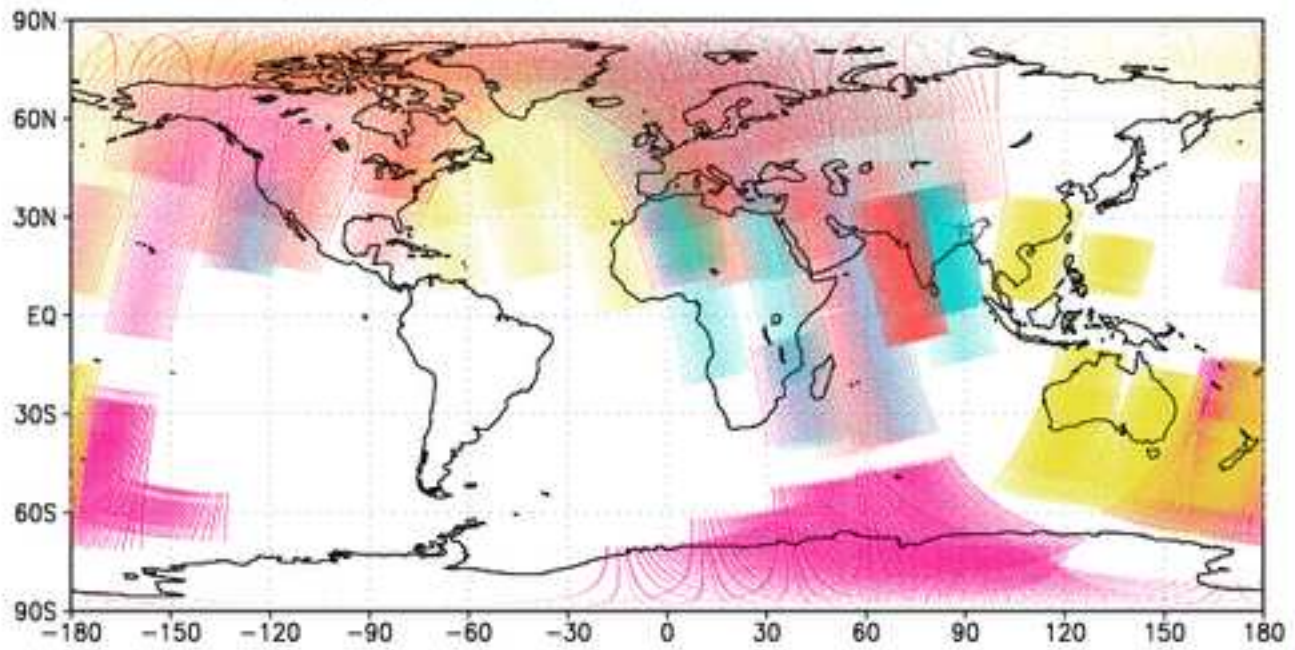
NOAA16(0)

NOAA18(301895)

NOAA19(228428)

METOP1(188695)

METOP2(115773)

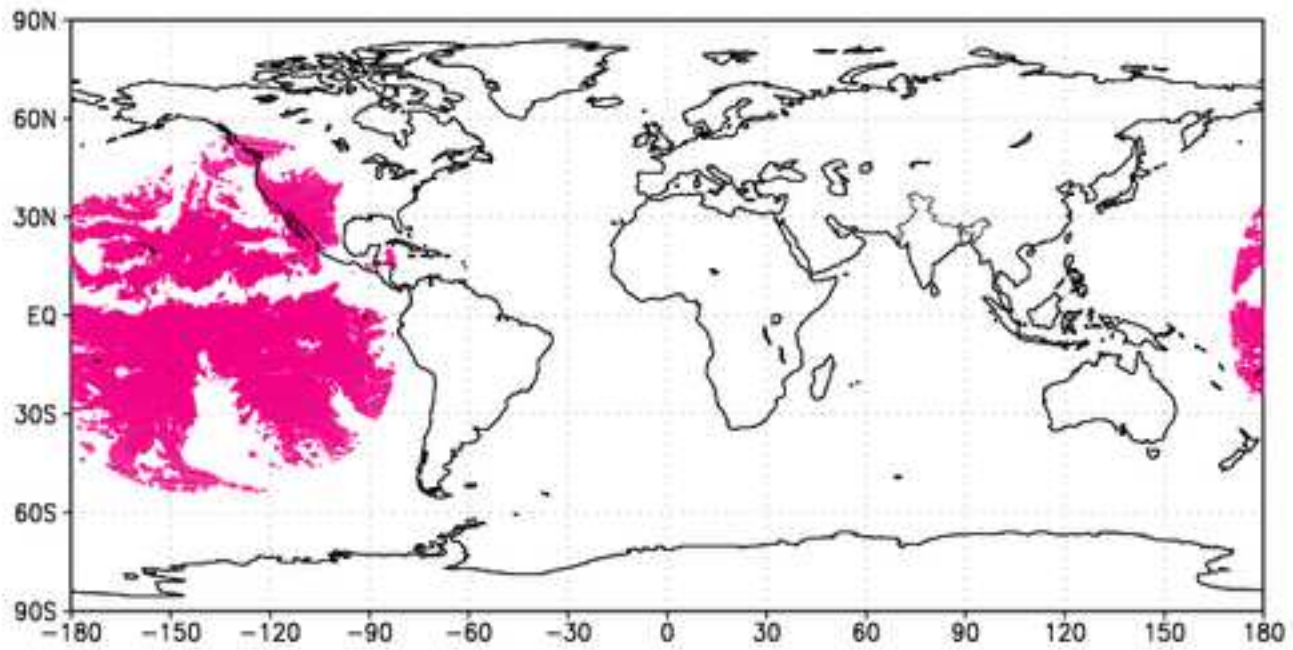


Data Coverage: GOES CSBT (18062018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 25966

GOES-15(25966)

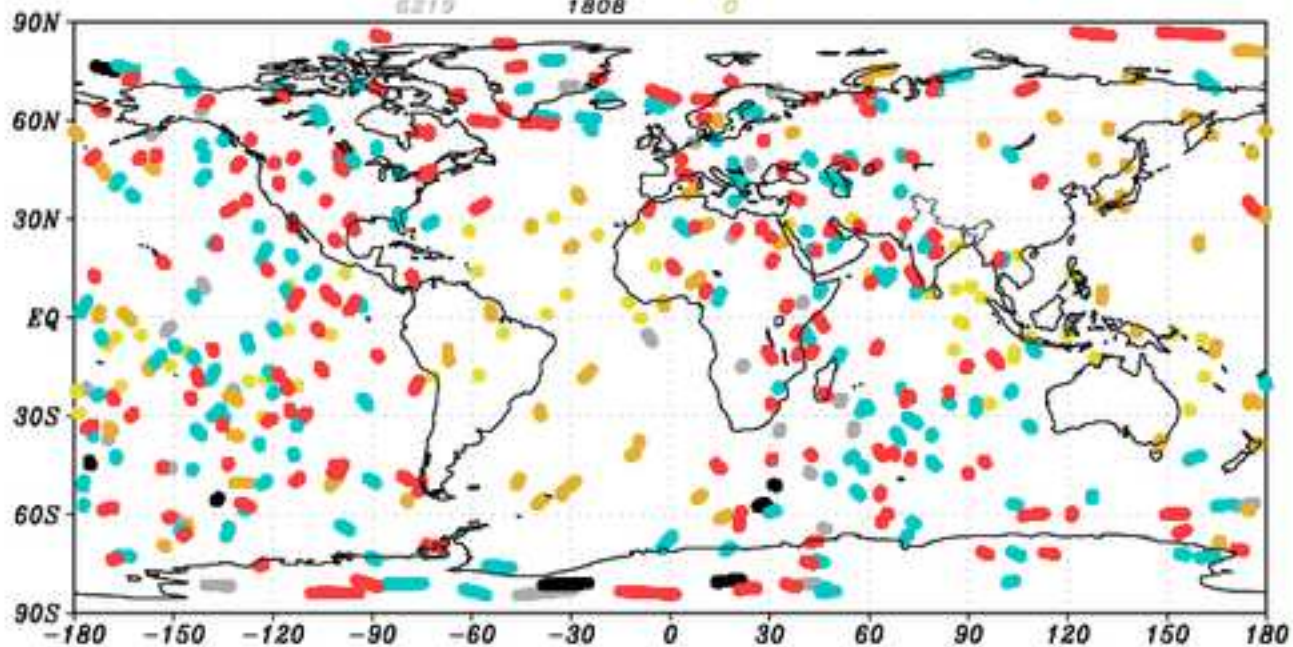
GOES-13(0)



Data Coverage:GPSRO (18062018 1800UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 109129

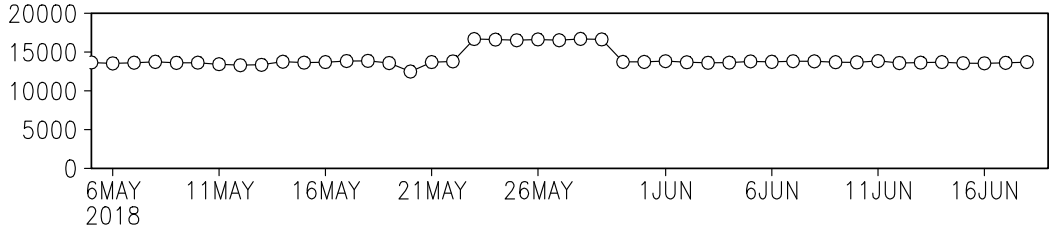
GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	38219	34641	0	0	3881	0	0	18381
			TerraSAR-X	TenDEM-X	GRACE-B			
			6219	1808	0			



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

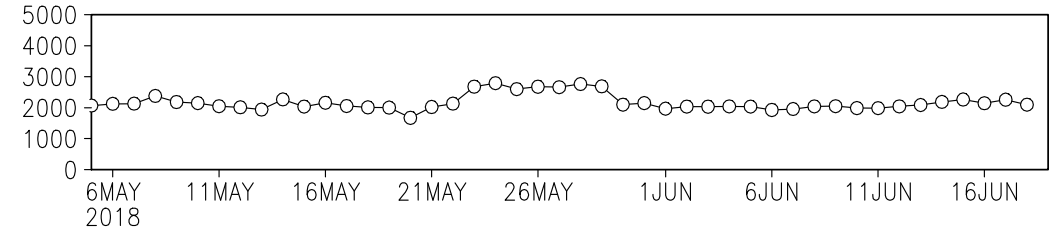
SYNOP

Avg=16615
Today_Cnt=13702
Dep=-18. %



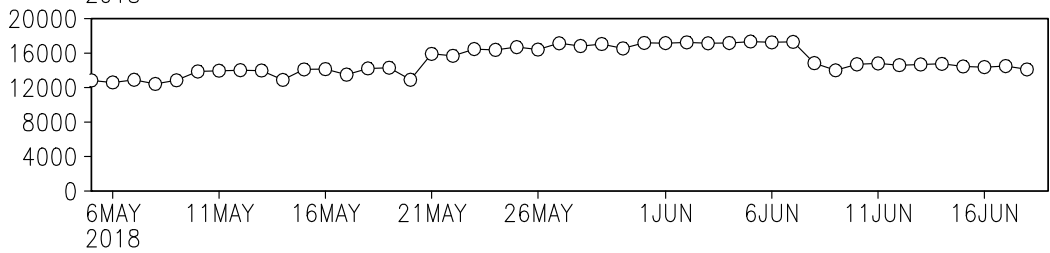
SHIP

Avg=2491
Today_Cnt=2096
Dep=-16. %



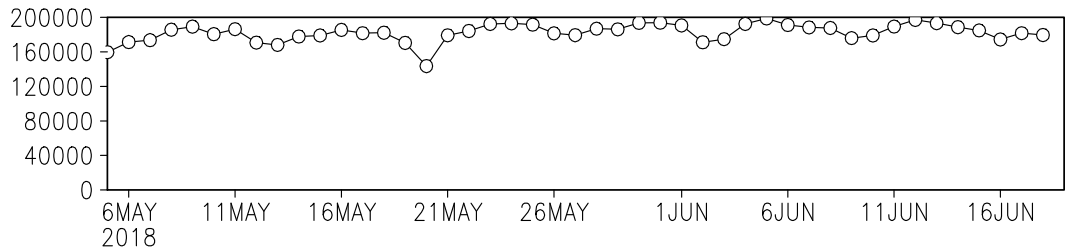
BUOY

Avg=16821
Today_Cnt=14102
Dep=-16. %



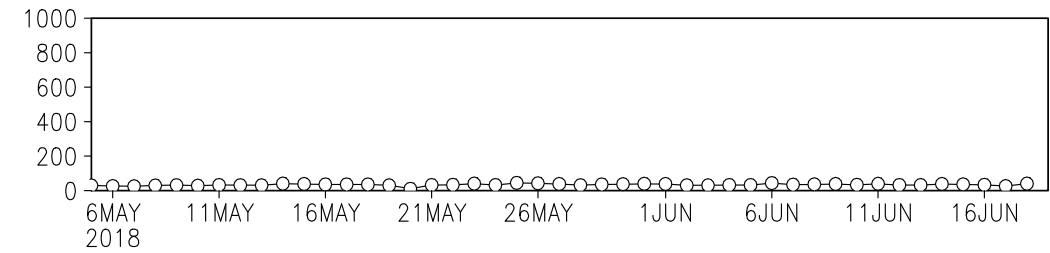
AIRCRAFT

Avg=190805
Today_Cnt=179540
Dep=-6. %



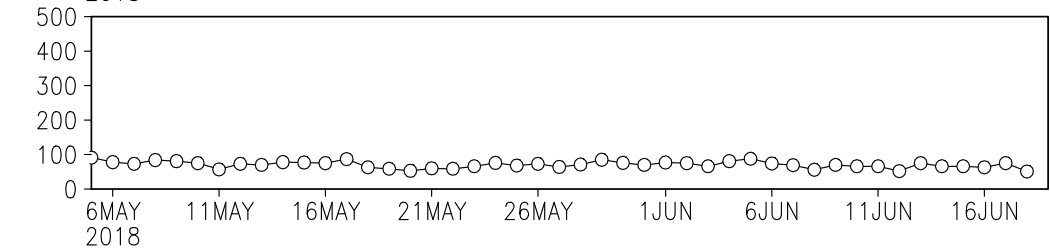
RS/RW

Avg=38
Today_Cnt=41
Dep=8. %



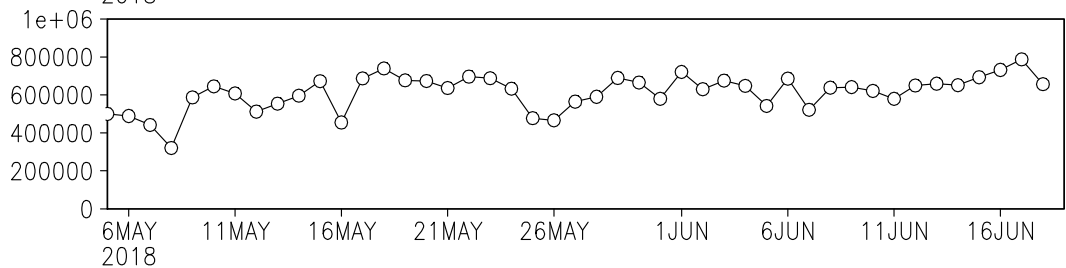
PILOT

Avg=78
Today_Cnt=51
Dep=-35. %



AMV

Avg=671785
Today_Cnt=656371
Dep=-2. %

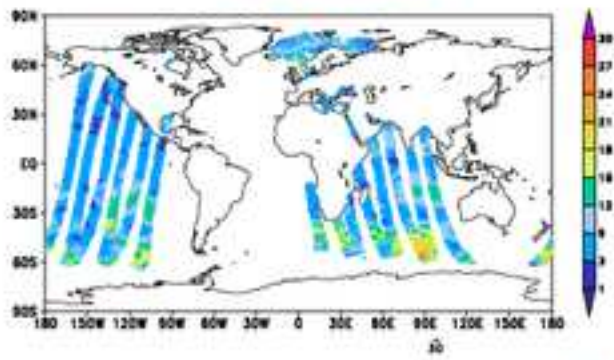


SCATTEROMETER WIND VECTORS

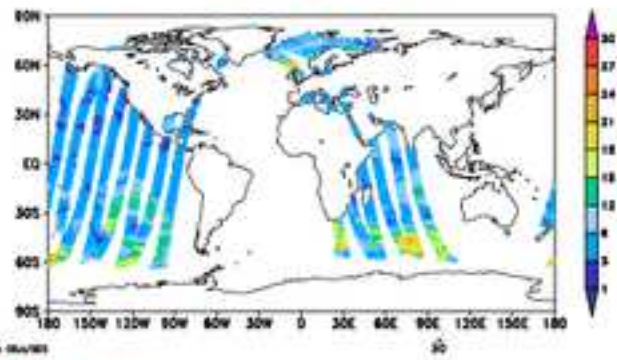
RECEIVED AT NCMRWF (20180618 18Z)

SCATTEROMETER SURFACE WINDS (18062018 1800UTC +/- 03Hrs)

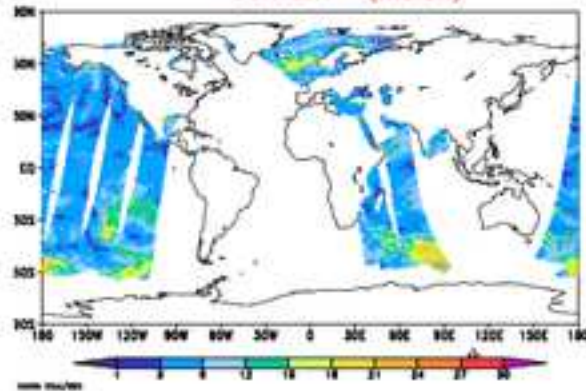
ASCAT:Metop-A



ASCAT:Metop-B



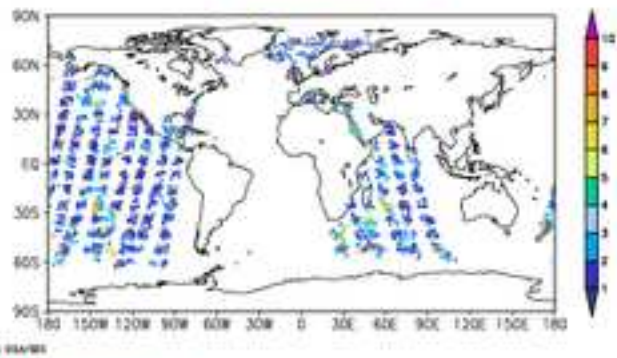
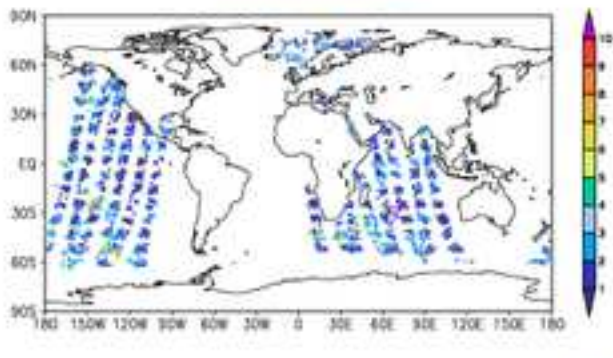
SCATSAT-1(Indian)



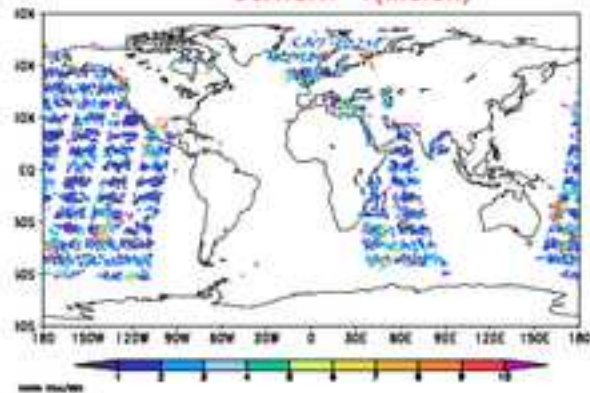
OBSERVATION-FIRST GUESS (18062018 18 UTC):NCMRWF

ASCAT:Metop-A

ASCAT:Metop-B



SCATSAT-1(Indian)



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

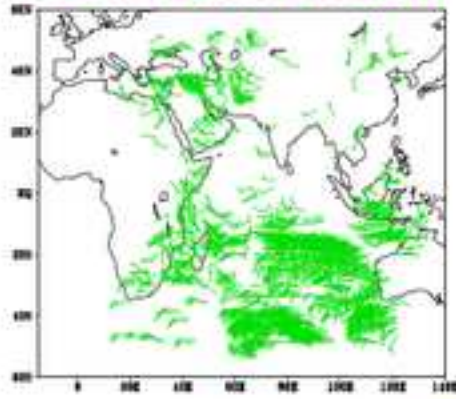
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

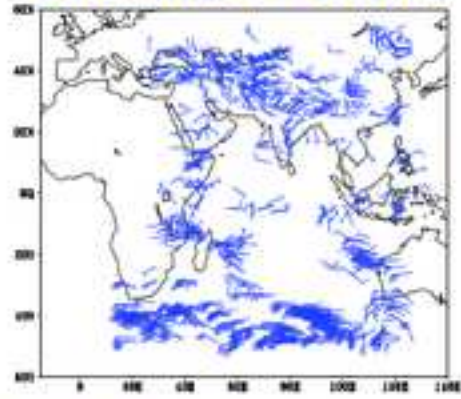
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (18062018 1800UTC)

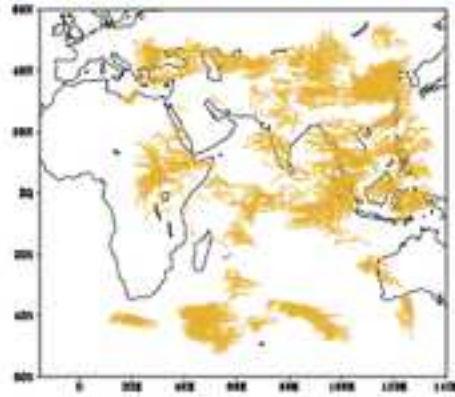
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

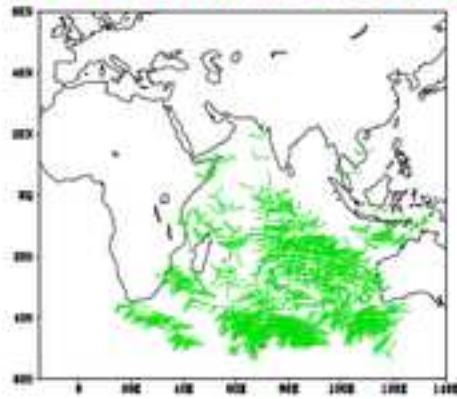


High Level (Above 400 hPa)

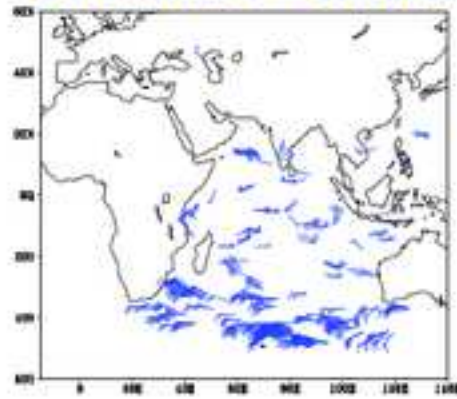


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (18062018 1800UTC)

Low Level (Below 700 hPa)



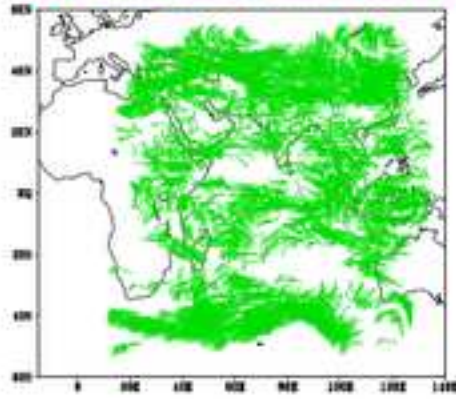
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (18062018 1800UTC)

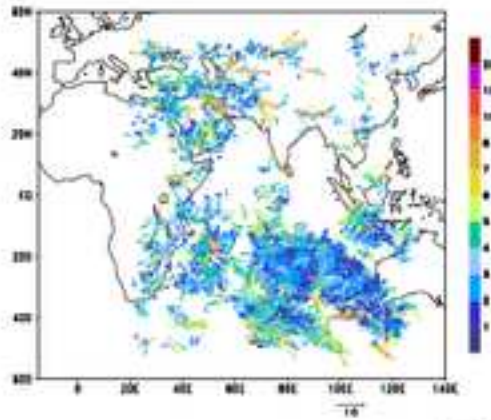
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

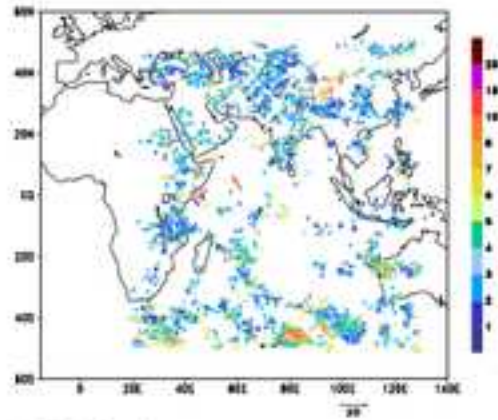


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (18062018 1800UTC)

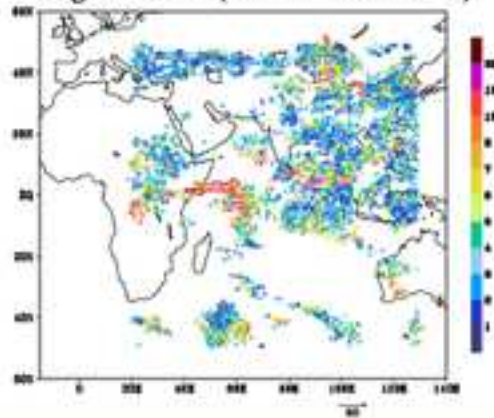
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

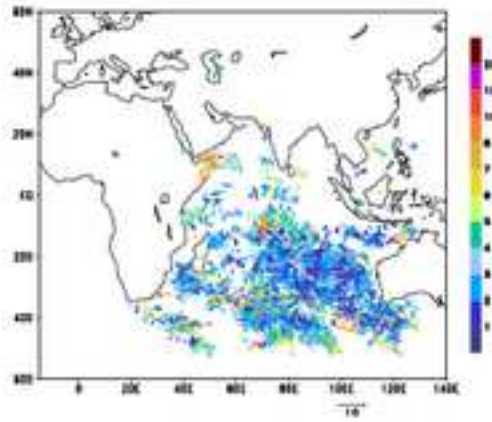


High Level (Above 400 hPa)

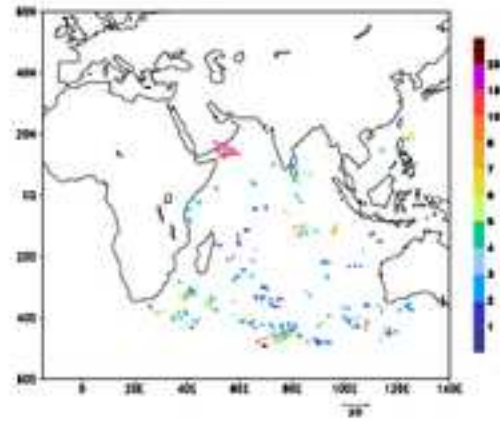


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (18062018 1800UTC)

Low Level (Below 700 hPa)



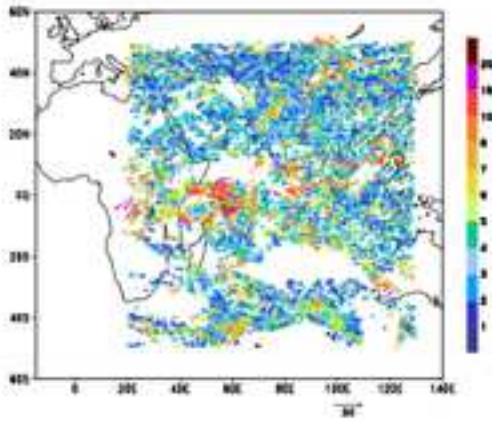
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 1800UTC)

WV, High Level (Above 400 hPa)

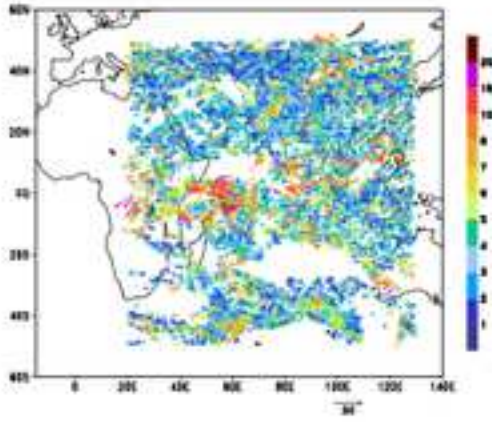
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 1800UTC)

WV, High Level (Above 400 hPa)

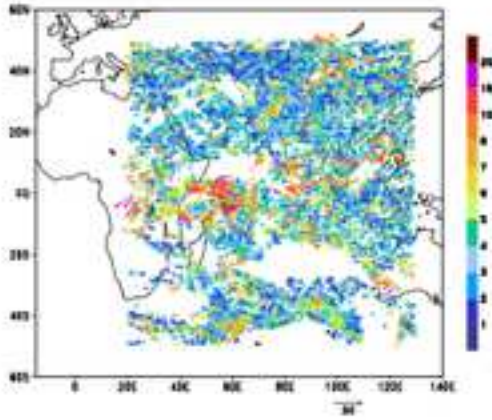
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 1800UTC)

WV, High Level (Above 400 hPa)

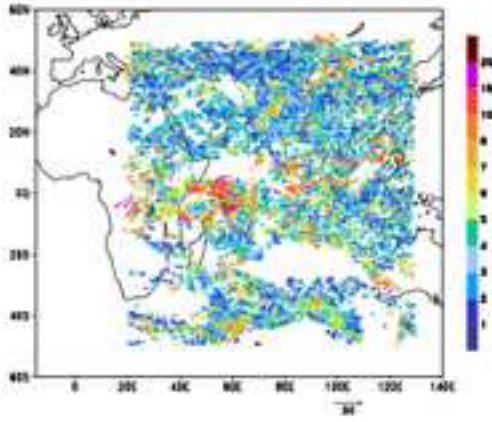
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 1800UTC)

WV, High Level (Above 400 hPa)

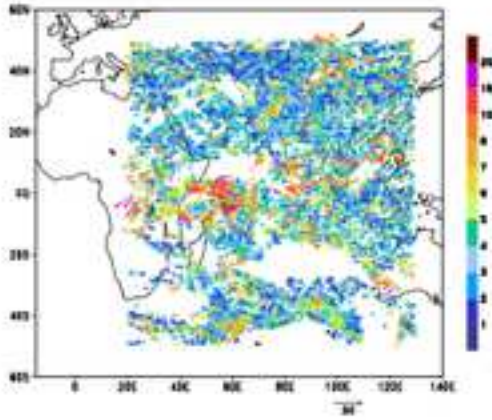
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 1800UTC)

WV, High Level (Above 400 hPa)

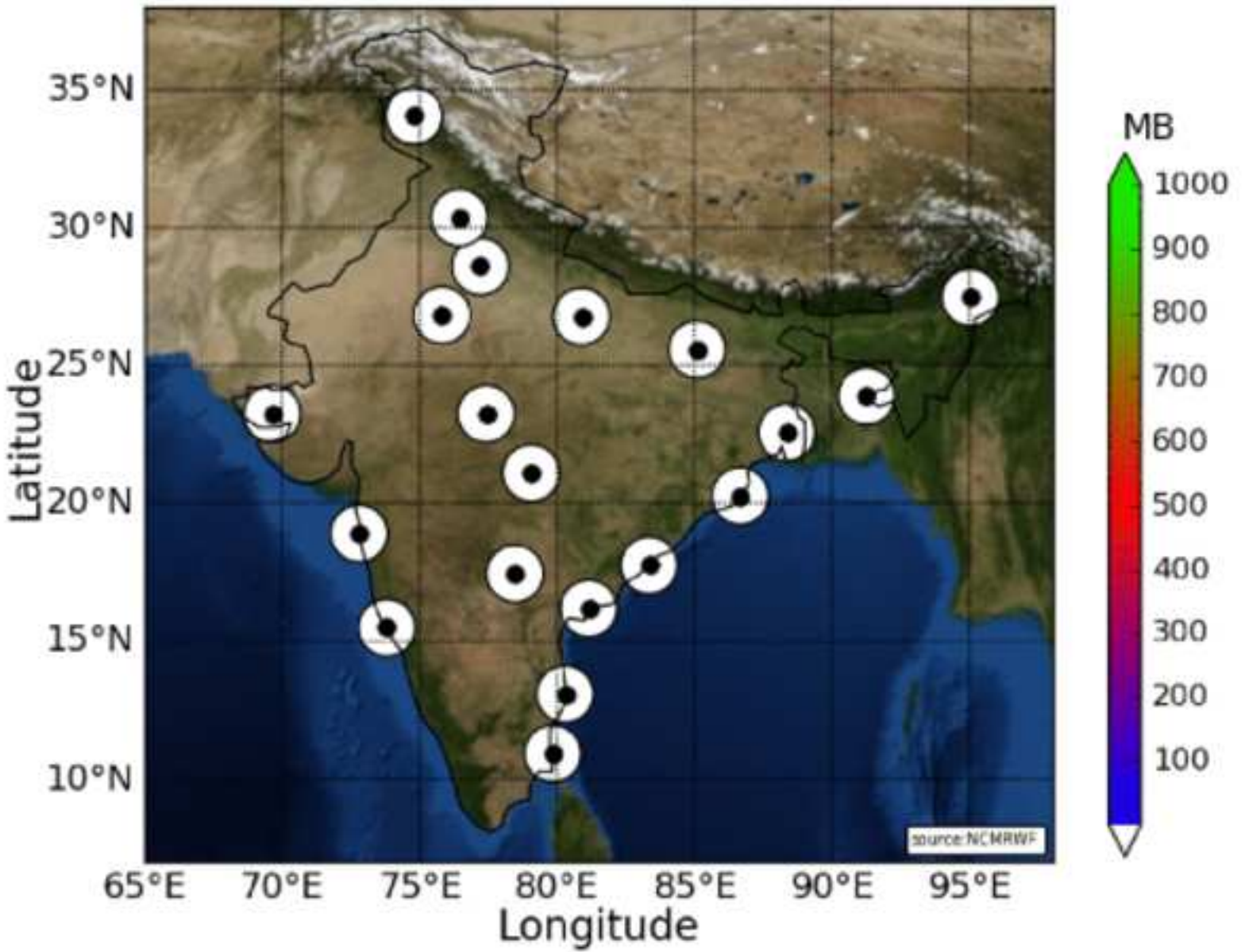
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar
Data Monitoring

Volume of DWR observations received at NCMRWF

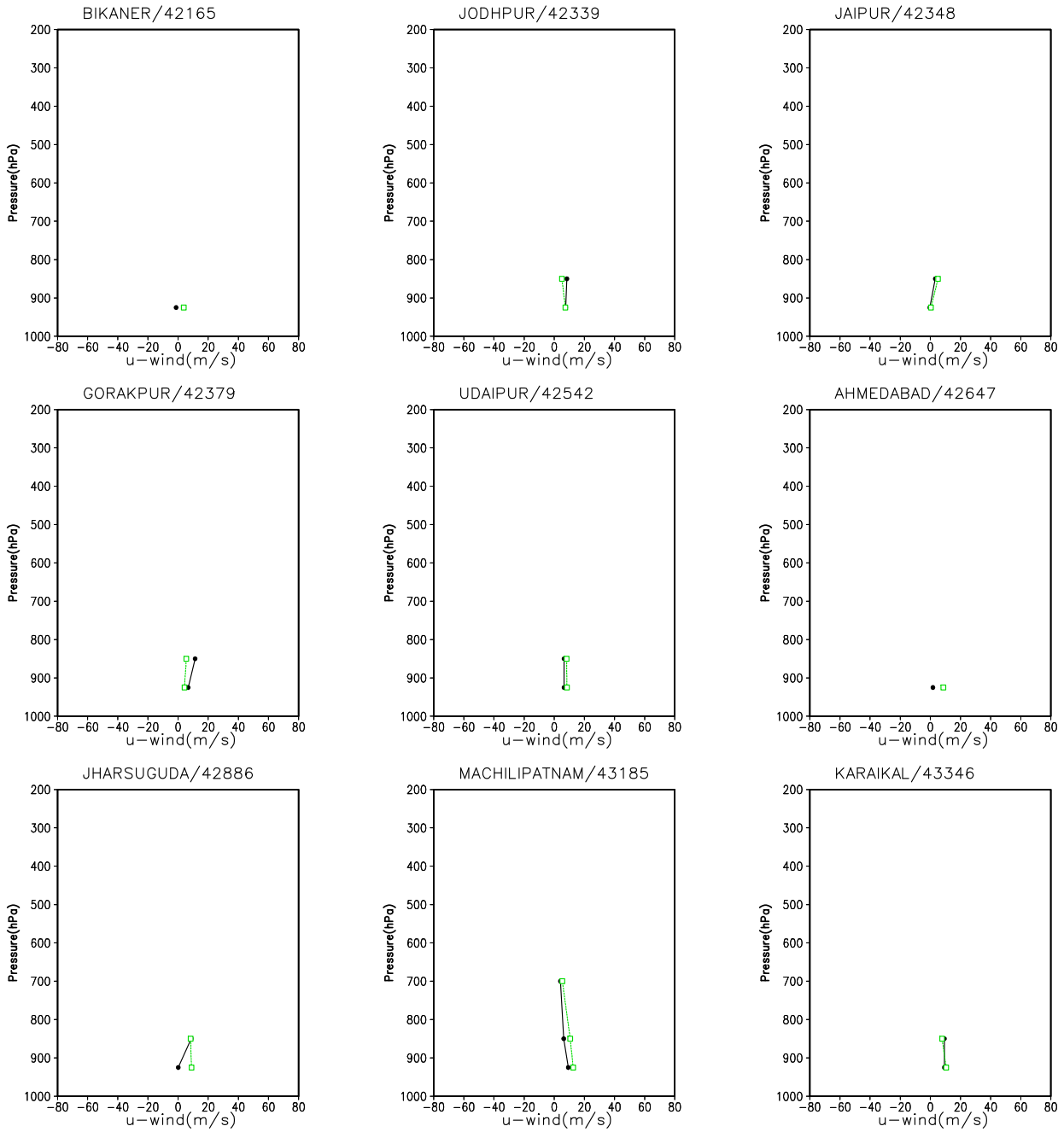
Date: 20180618 at : 18UTC



Quality of Indian PIBAL Observations

Maximum height reported
by PIBAL ascents

Zonal Wind Rejections by NGFS GDAS



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 18062018

× -- denotes the rejection of observation by NGFS GDAS
(plotted for standard pressure levels only)