

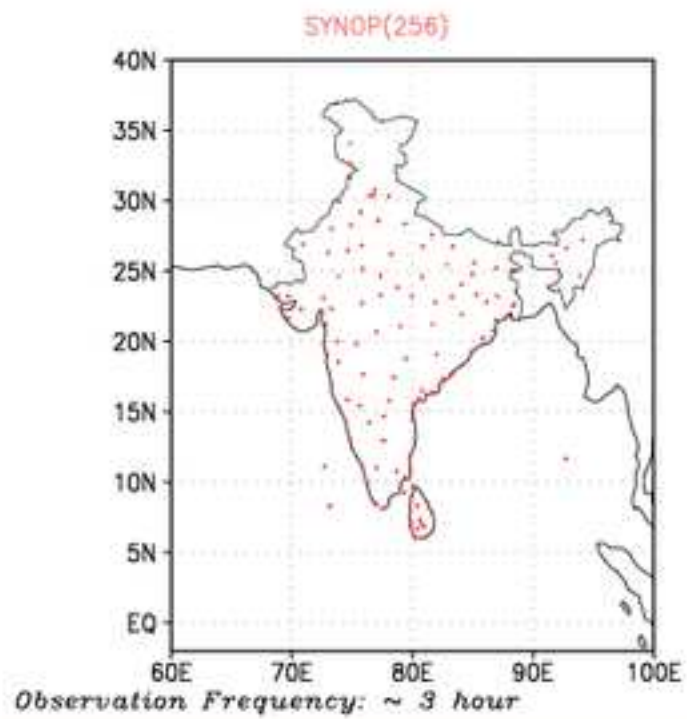
Observation Monitoring

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

for 17022018 (1800 UTC)

Indian Observation Coverage

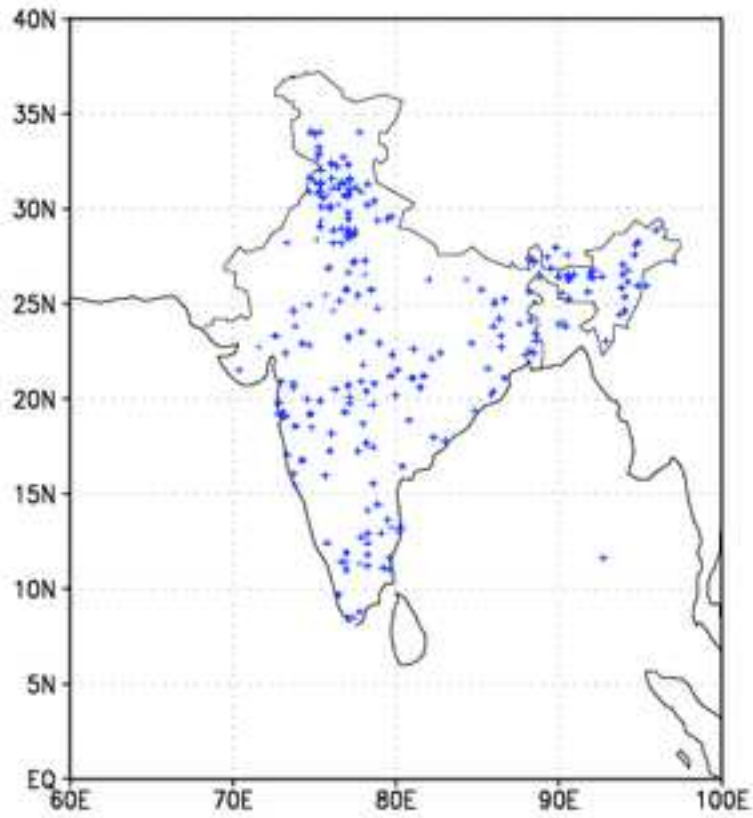
Data Coverage: Surface (17022018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 256
(42 & 43 Block)



Data Coverage: Indian AWS (17022018 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 951

AWS PRESSURE (951)

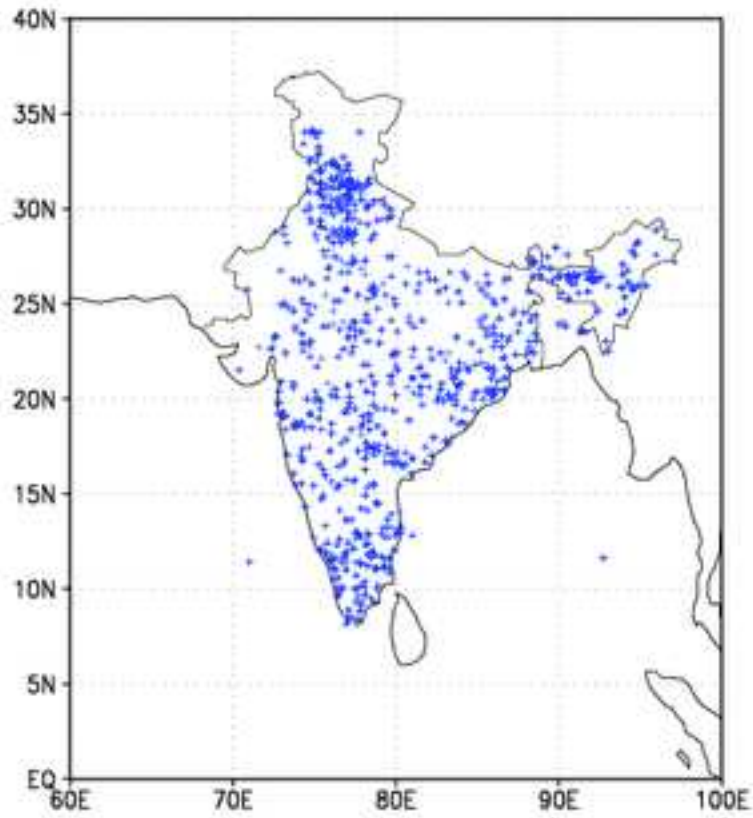


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (17022018 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 2241

AWS + ARG (2241)

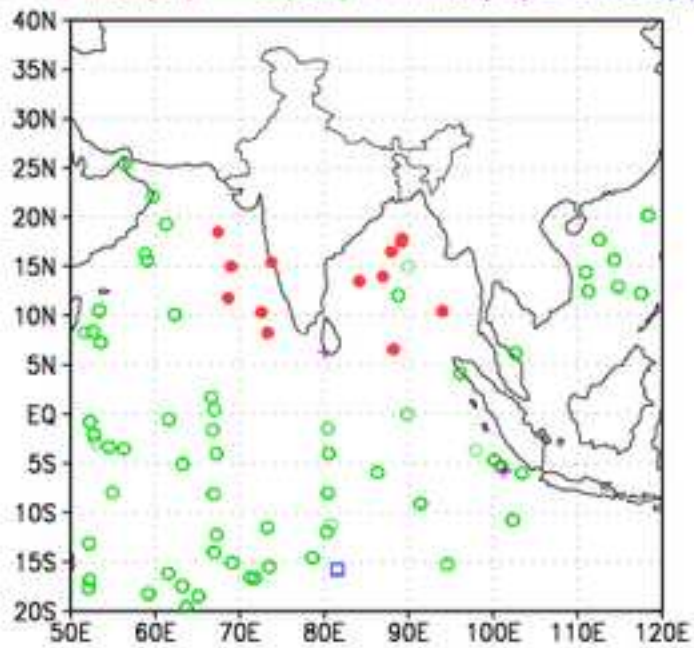


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (17022018 1800UTC +/- 3 Hrs)

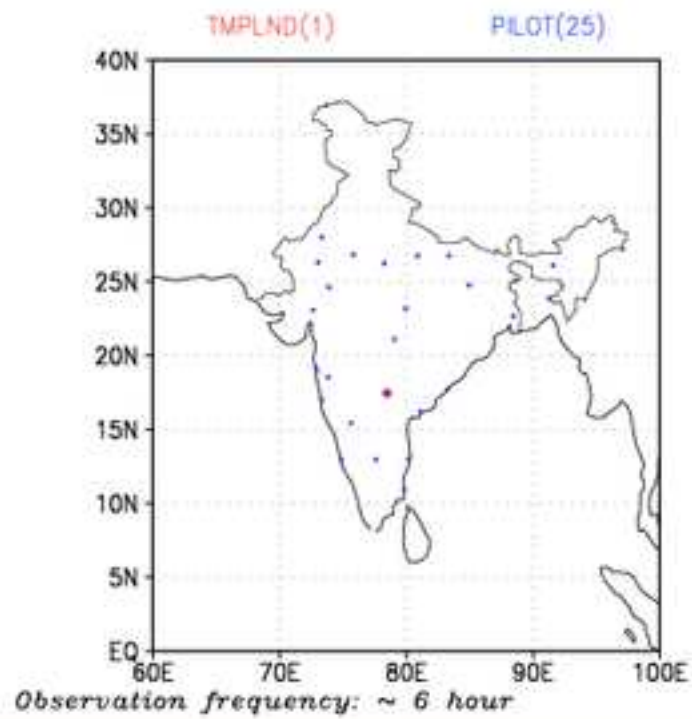
Total Number of Observations Received at NCMRWF: 347

country code in GTS as ● INDIA(24) ○ USA(308) + FRANCE(10) □ OTHERS(5)



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

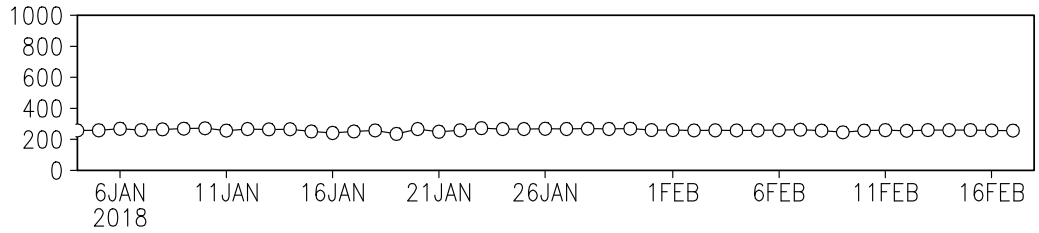
Data Coverage: Sonde (17022018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 26
(42 & 43 Block)



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

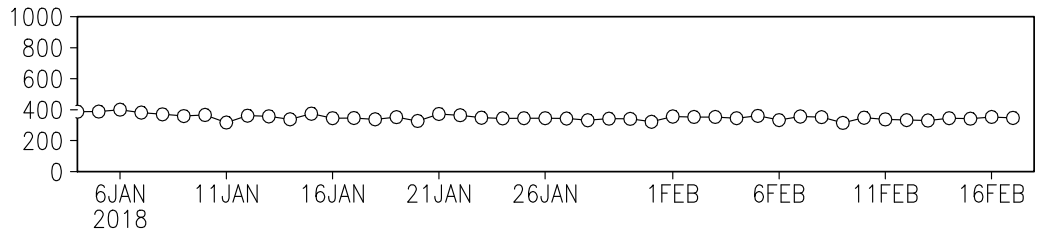
SYNOP

Avg=264
Today_Cnt=256
Dep=-3. %



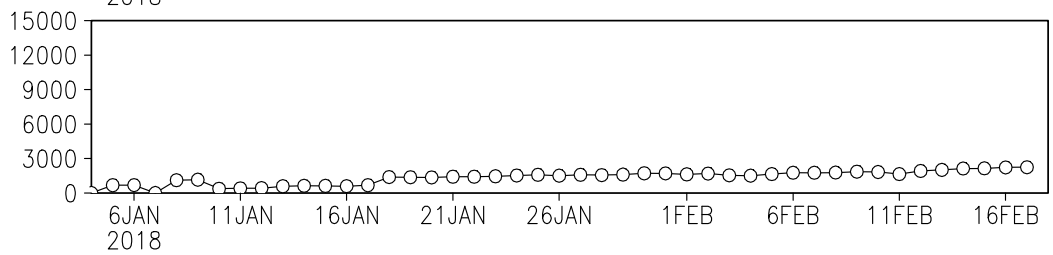
BUOY

Avg=367
Today_Cnt=347
Dep=-5. %



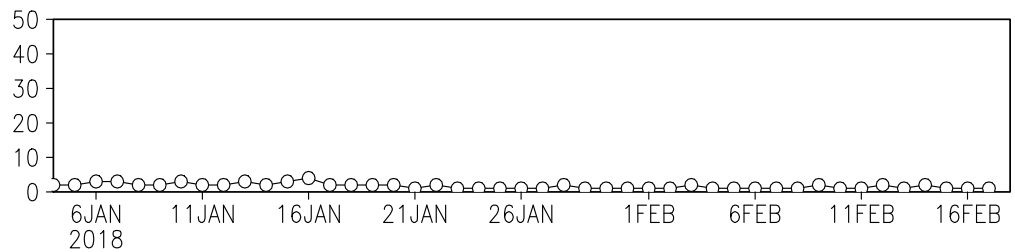
AWS+ARG

Avg=1678
Today_Cnt=2241
Dep=34. %



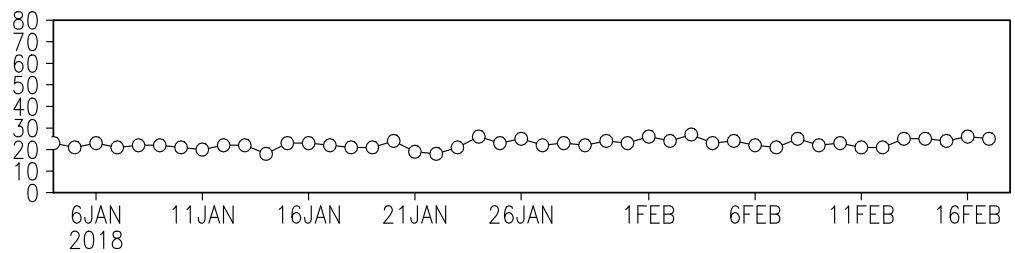
RS/RW

Avg=1
Today_Cnt=1
Dep=0. %



PILOT

Avg=23
Today_Cnt=25
Dep=9. %

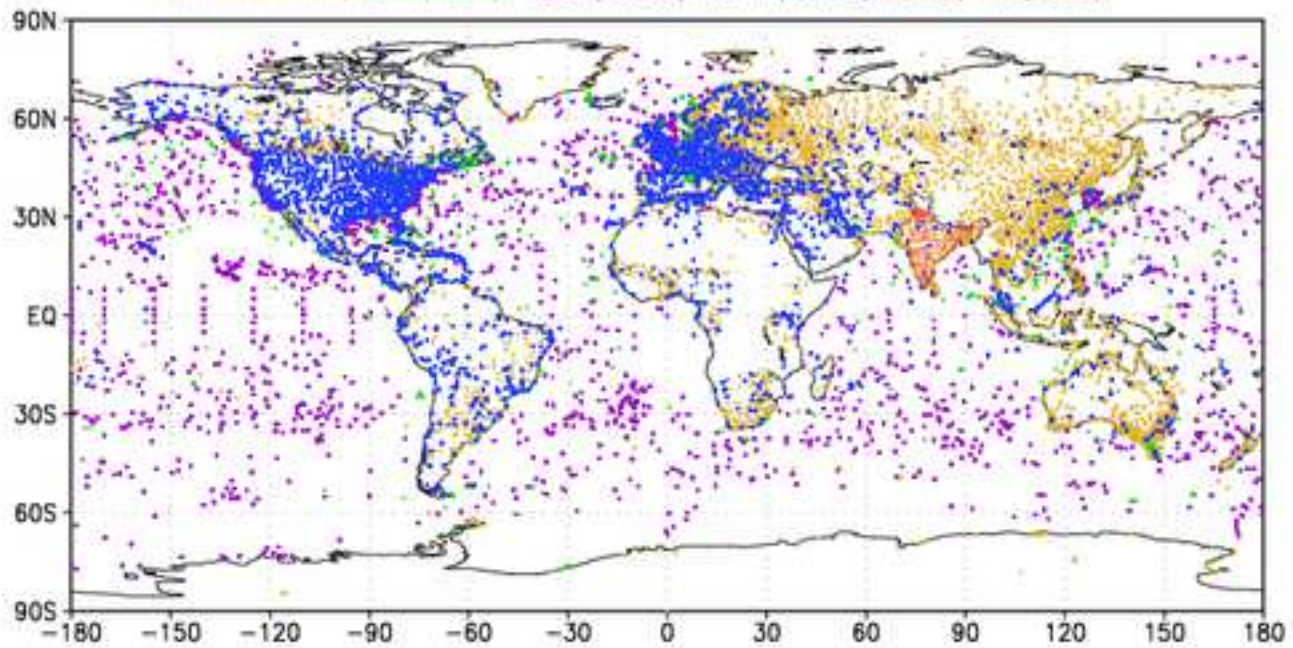


Global Observation Coverage

Data Coverage: Surface (17022018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 51949

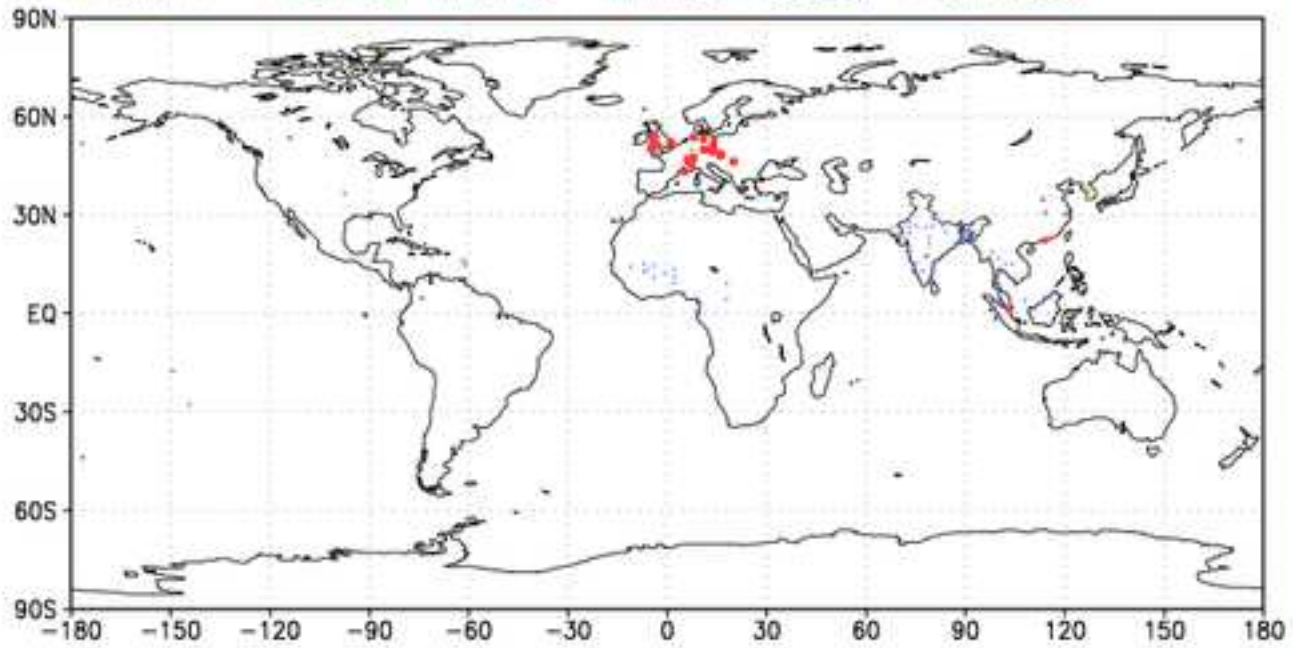
LNDSYN(13912) SHIP(1961) BUOY(12605) METAR(20612) MOBILE/AWS(2859)



Data Coverage: Sonde (17022018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 662

TMPLEND(34) TMPSHR(0) TMPDRP(0) TMPMDB(0) PILOT(98) PROFILER(530)



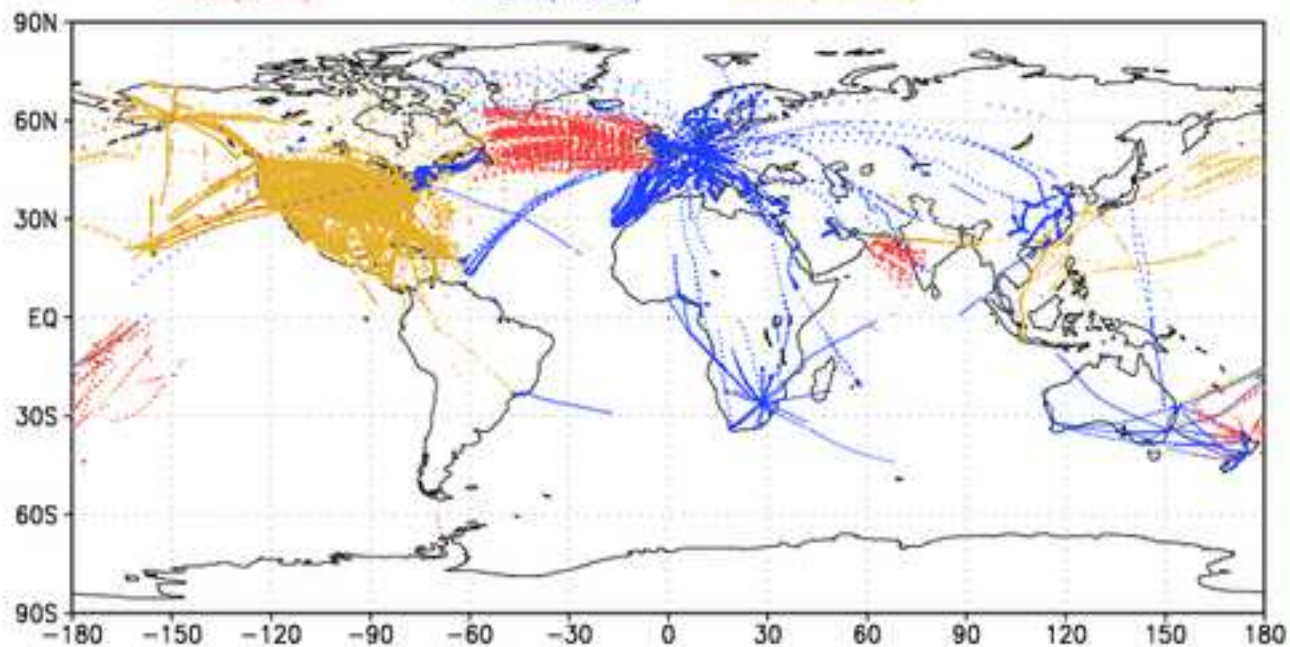
Data Coverage: AIRCFT (17022018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 165372

AIREP(3917)

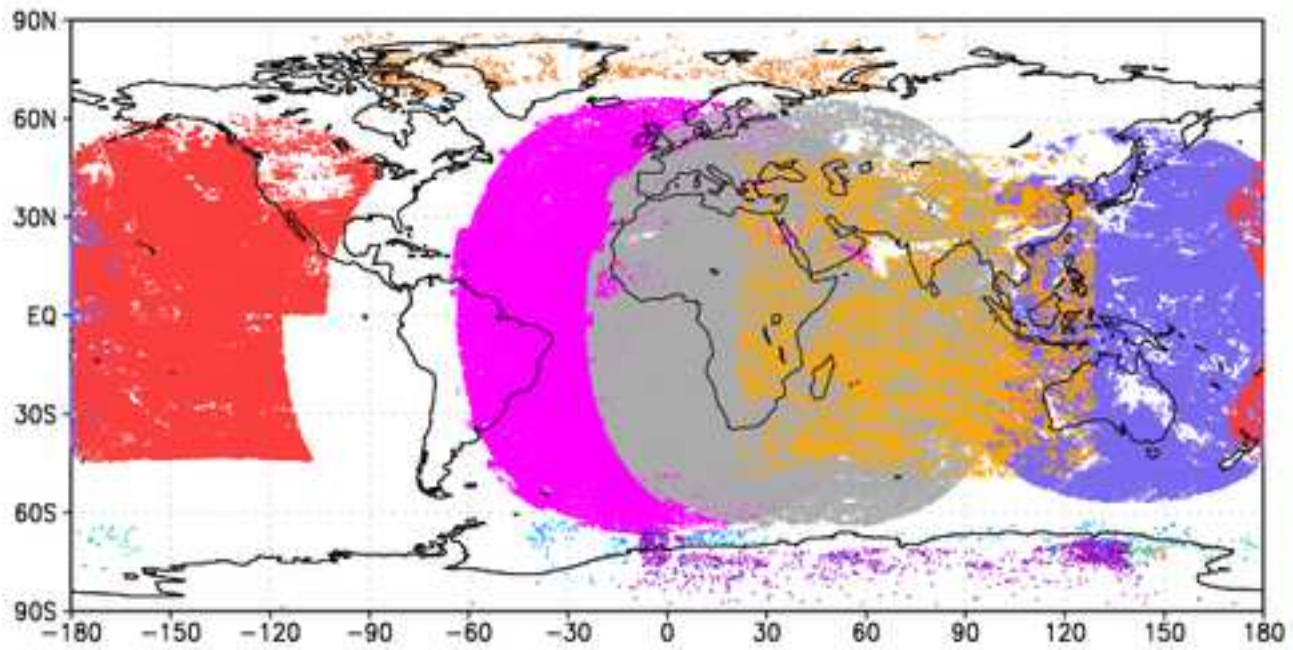
AMDAR(17535)

ACARS(143920)



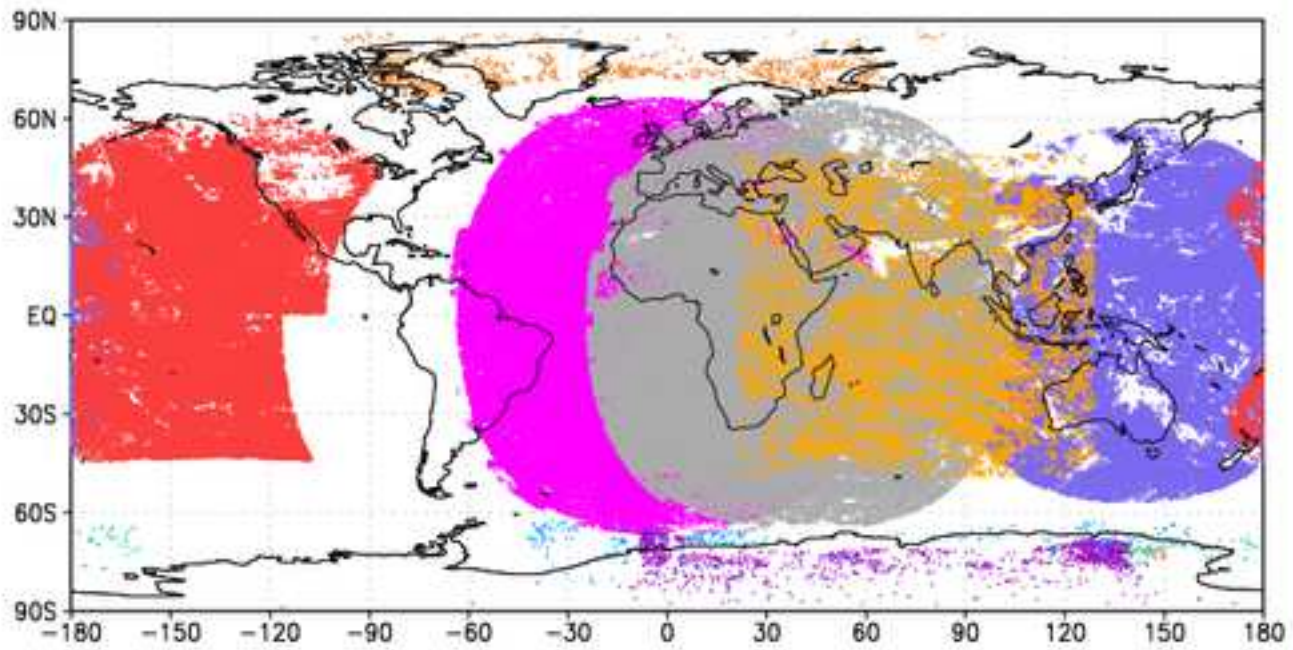
Data Coverage: AMV (17022018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 753729

GOES-15(154800) GOES-13(0) INSAT-3D(12086) METEOSAT-8(203693)
METEOSAT-10(275135) HIMAWARI-8(105068) MODIS/Terra(1286) MODIS/Aqua(1264)
METOP(0) NOAA-15(0) NOAA-18(0) NOAA-18(112) NOAA-19(315)



Data Coverage: AMV (17022018 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 753729

GOES-15(154800) GOES-13(0) INSAT-3D(12086) METEOSAT-8(203693)
METEOSAT-10(275135) HIMAWARI-8(105068) MODIS/Terra(1286) MODIS/Aqua(1264)
METOP(0) NOAA-15(0) NOAA-18(0) NOAA-18(112) NOAA-19(315)



Data Coverage: SAT RADIANCE (17022018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3813470

NOAA15(80940)

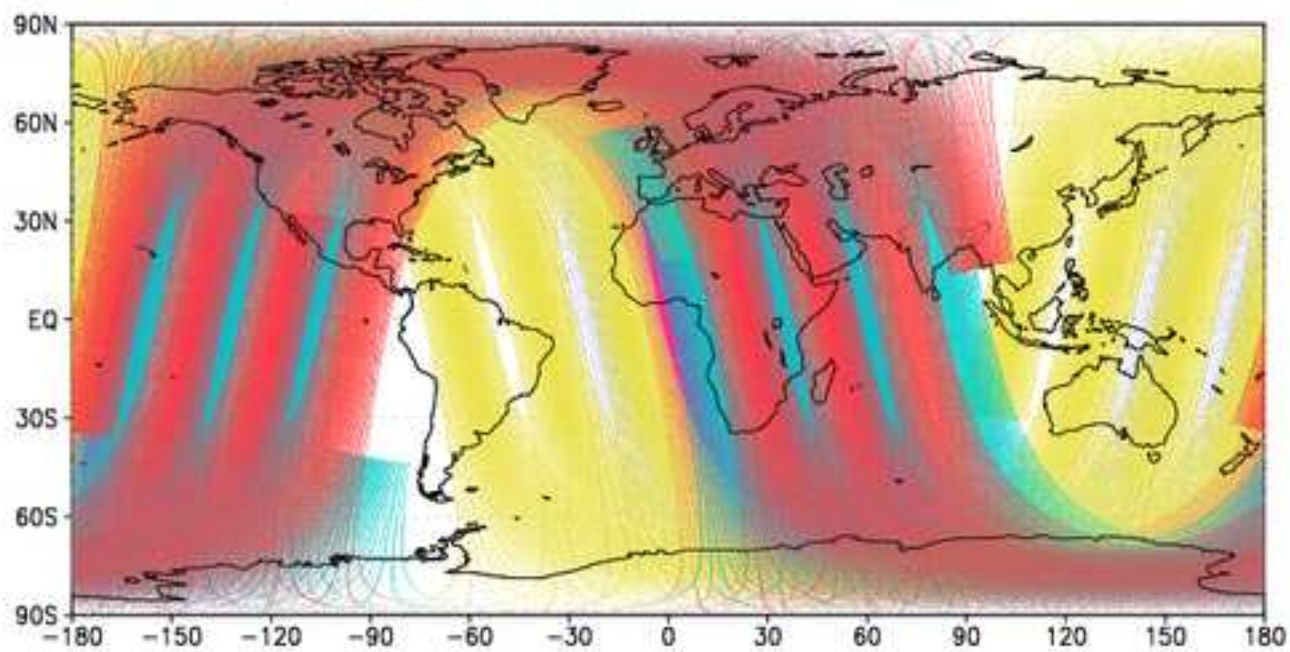
NOAA18(0)

NOAA18(784152)

NOAA18(985180)

METOP1(983897)

METOP2(079321)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (17022018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2981933

NOAA15(0)

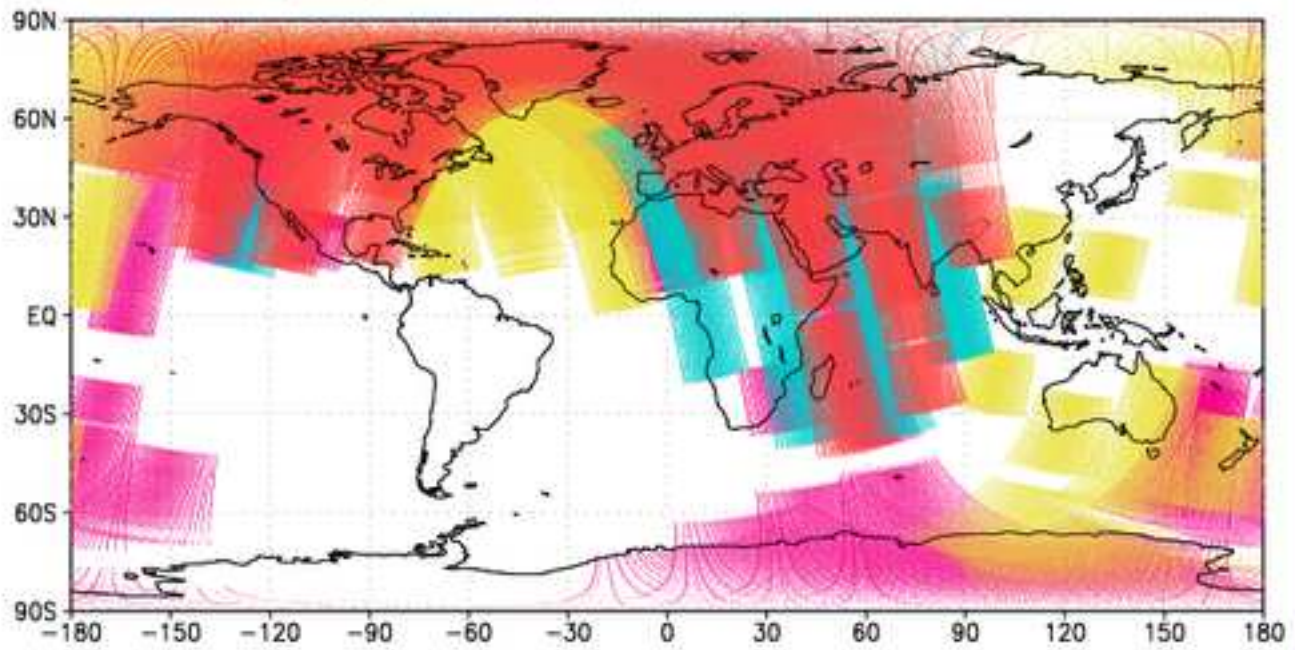
NOAA16(0)

NOAA18(845376)

NOAA19(752337)

METOP1(927250)

METOP2(446790)

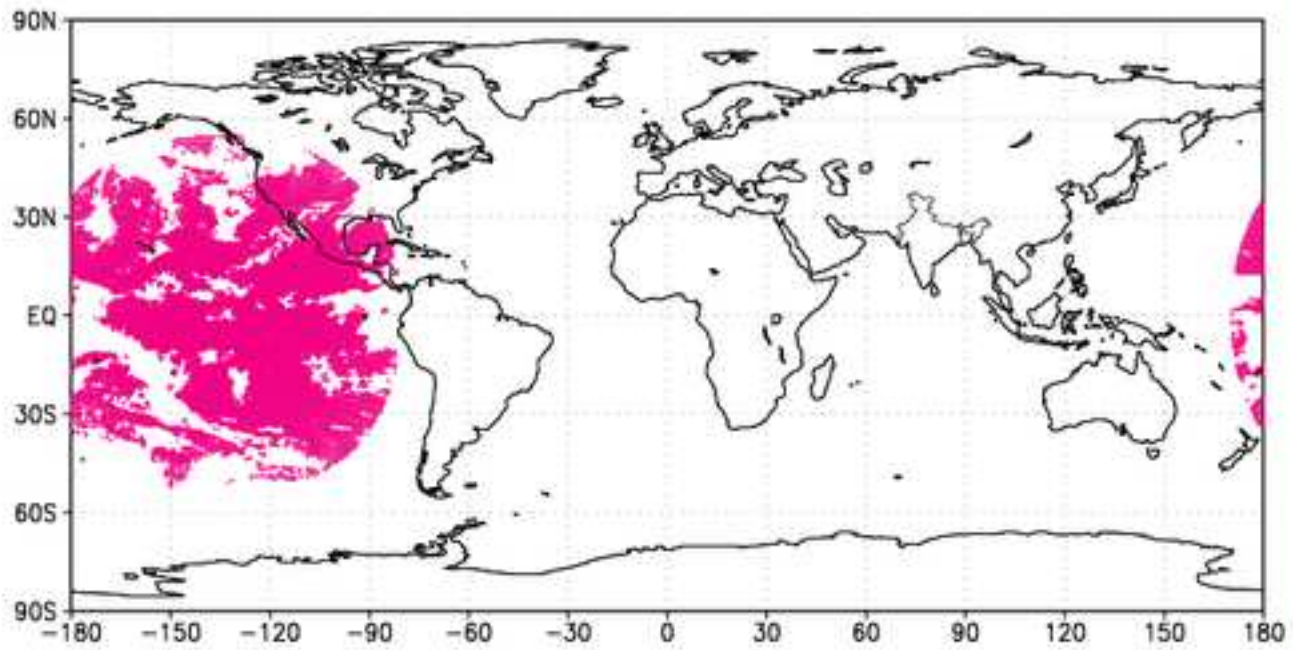


Data Coverage: GOES CSBT (17022018 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 26637

GOES-15(26637)

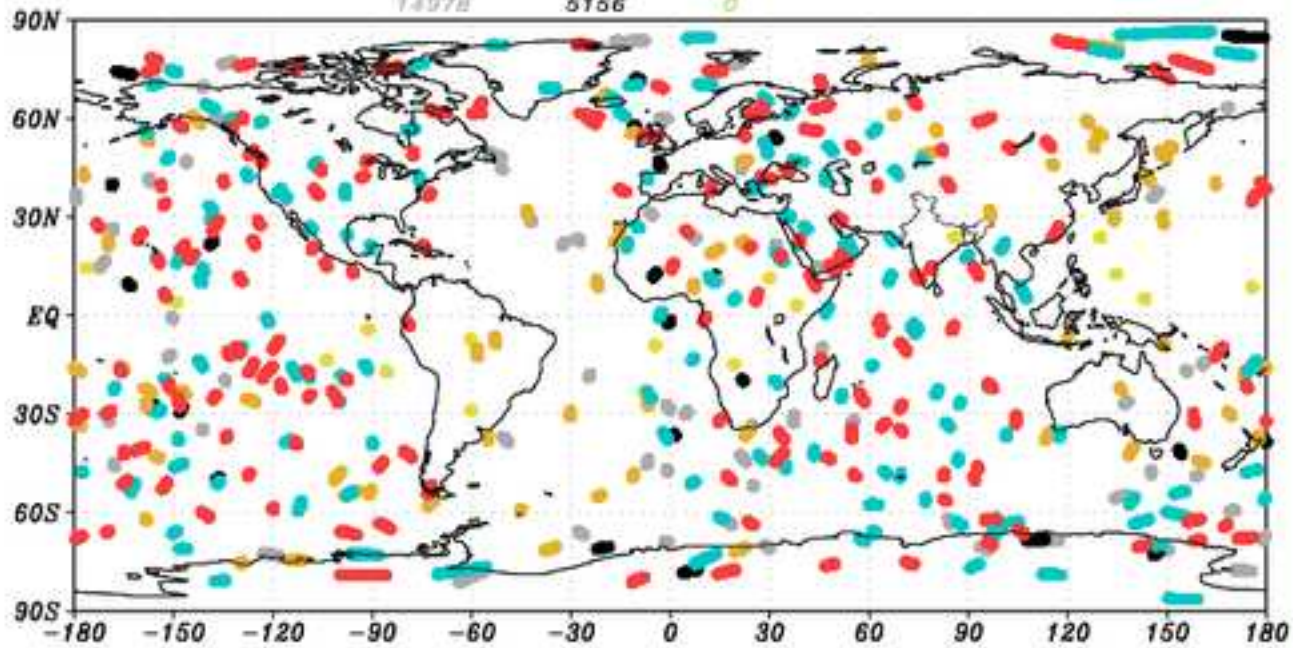
GOES-13(0)



Data Coverage:GPSRO (17022018 1800UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 113922

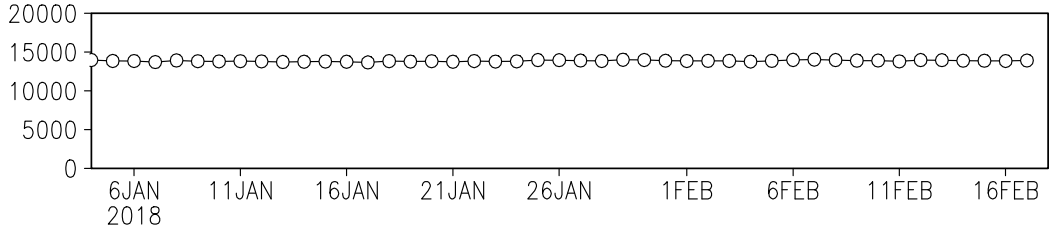
GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	38064	32395	0	0	3162	0	0	20167
			TerraSAR-X	TenDEM-X	GRACE-B			
			14978	5156	0			



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

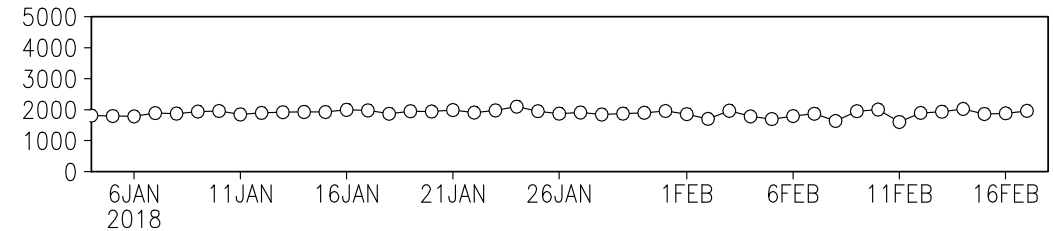
SYNOP

Avg=14235
Today_Cnt=13912
Dep=-2. %



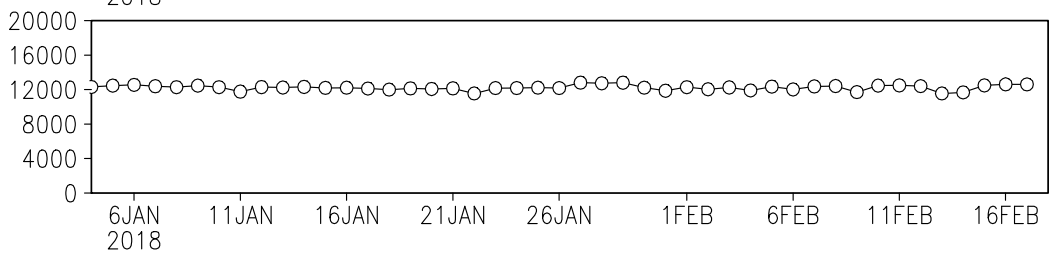
SHIP

Avg=1968
Today_Cnt=1961
Dep=-0. %



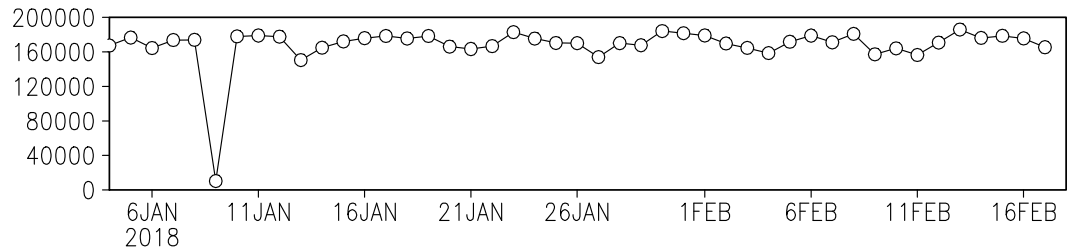
BUOY

Avg=12449
Today_Cnt=12605
Dep=1. %



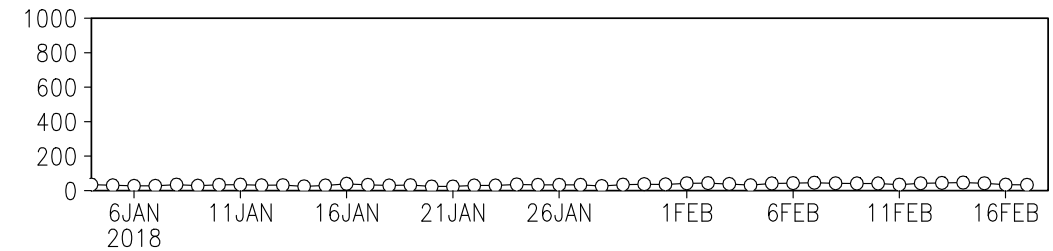
AIRCRAFT

Avg=178195
Today_Cnt=165372
Dep=-7. %



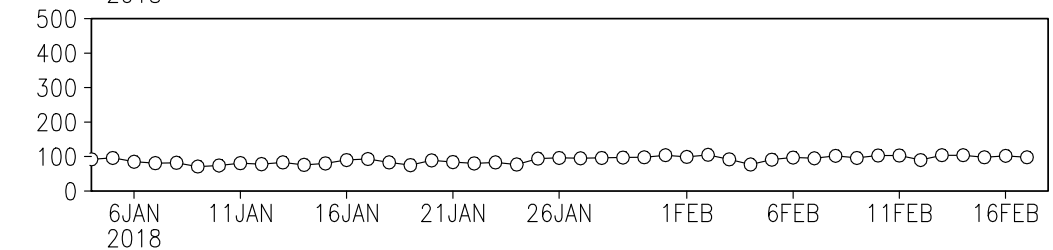
RS/RW

Avg=40
Today_Cnt=34
Dep=-15. %



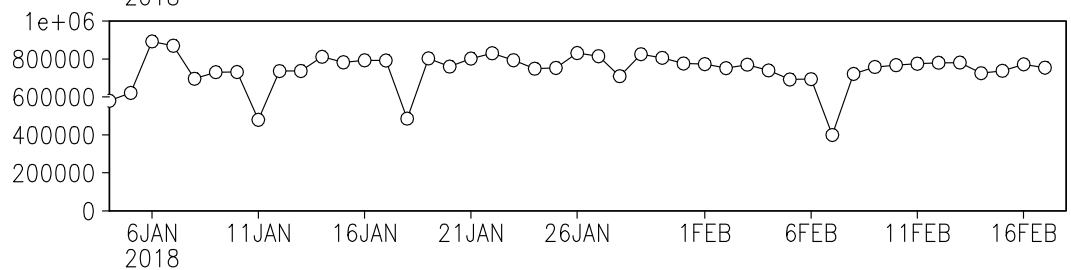
PILOT

Avg=97
Today_Cnt=98
Dep=1. %



AMV

Avg=799333
Today_Cnt=753729
Dep=-6. %

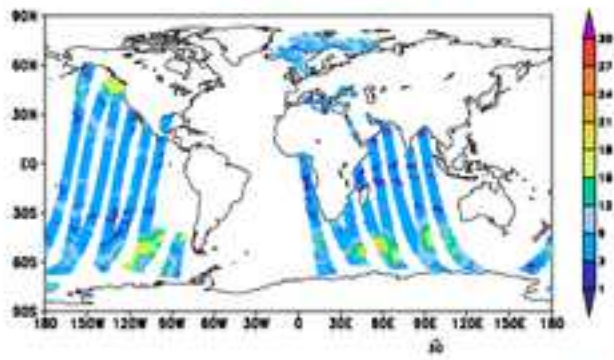


SCATTEROMETER WIND VECTORS

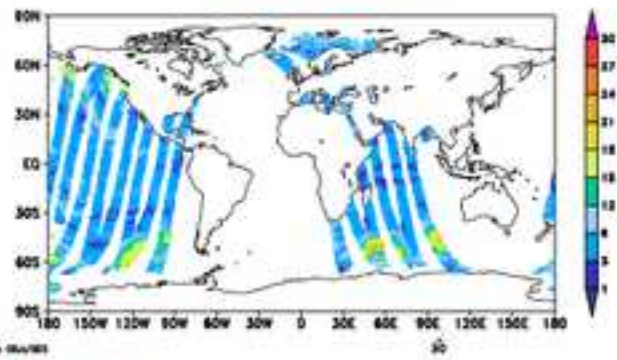
RECEIVED AT NCMRWF (20180217 18Z)

SCATTEROMETER SURFACE WINDS (17022018 1800UTC +/- 03Hrs)

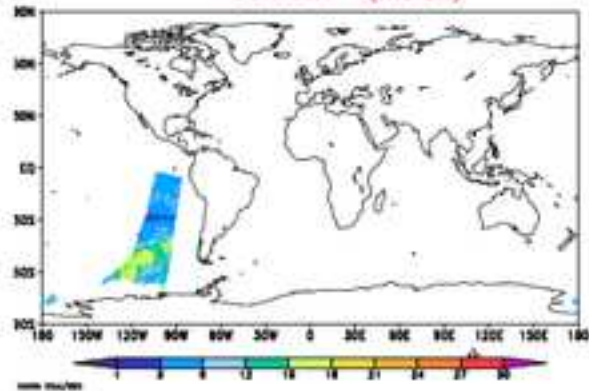
ASCAT:Metop-A



ASCAT:Metop-B



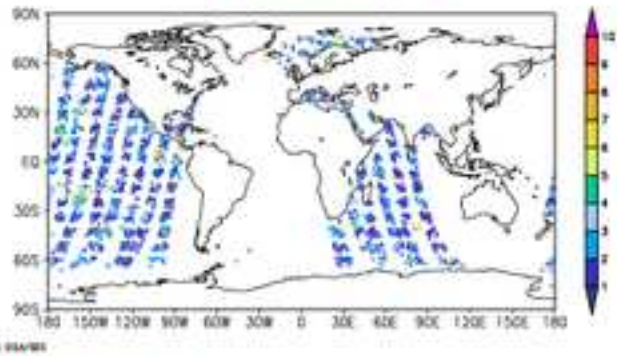
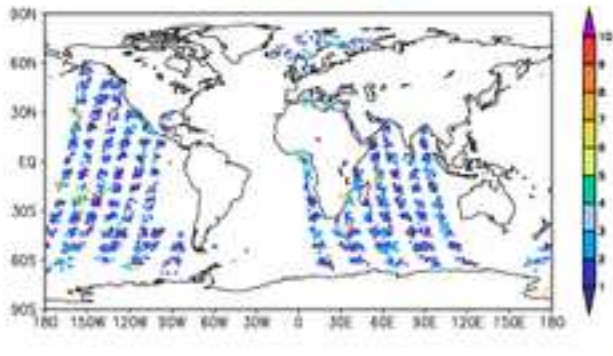
SCATSAT-1(Indian)



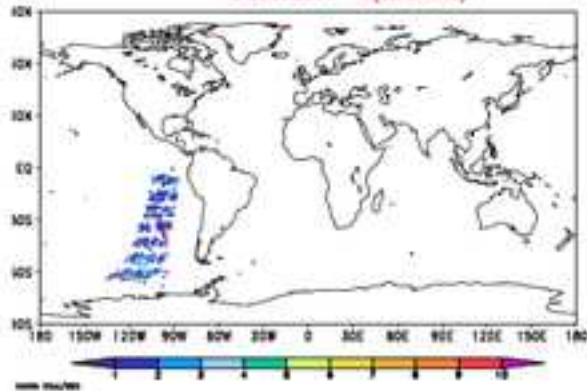
OBSERVATION—FIRST GUESS (17022018 18 UTC):NCMRWF

ASCAT:Metop-A

ASCAT:Metop-B



SCATSAT-1(Indian)



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

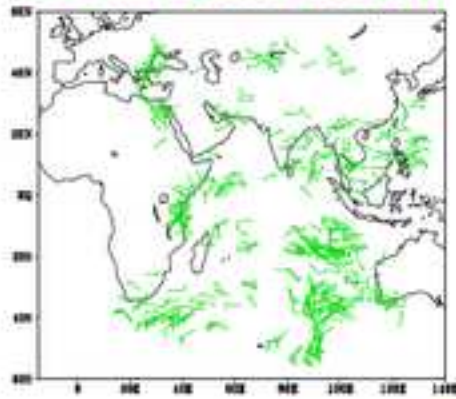
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

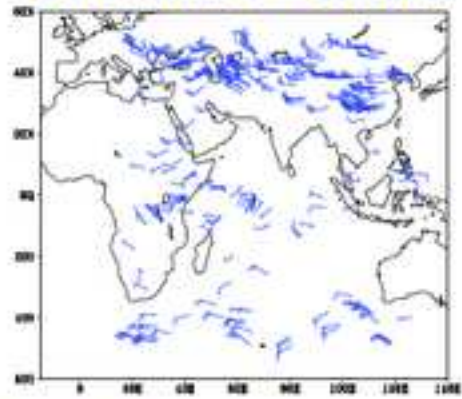
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (17022018 1800UTC)

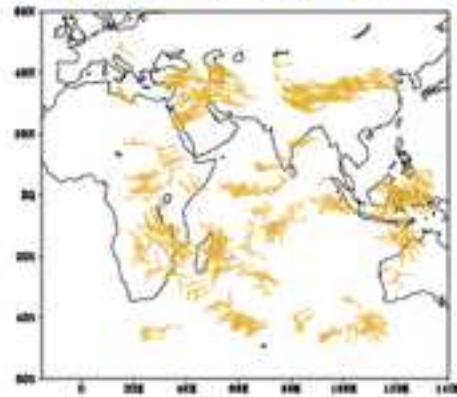
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

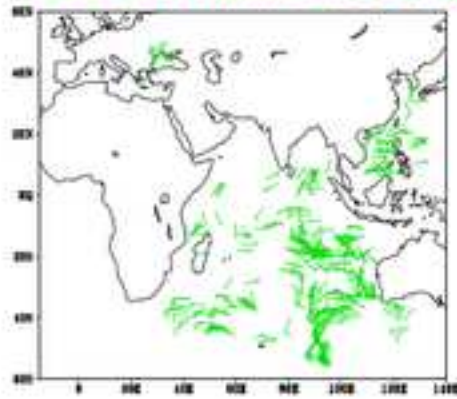


High Level (Above 400 hPa)

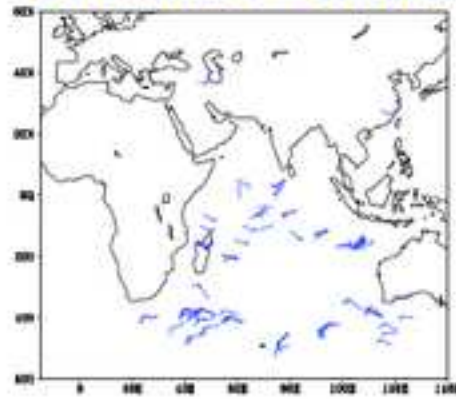


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (17022018 1800UTC)

Low Level (Below 700 hPa)



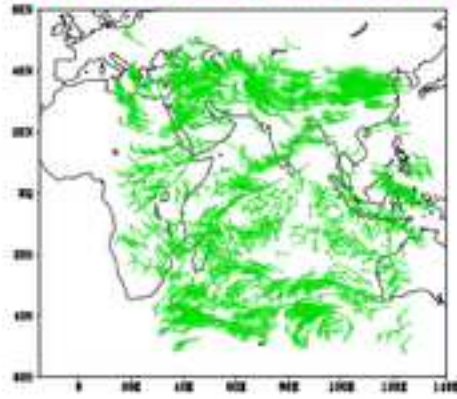
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (17022018 1800UTC)

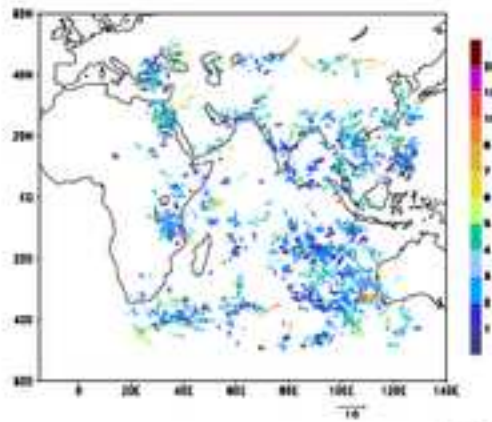
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

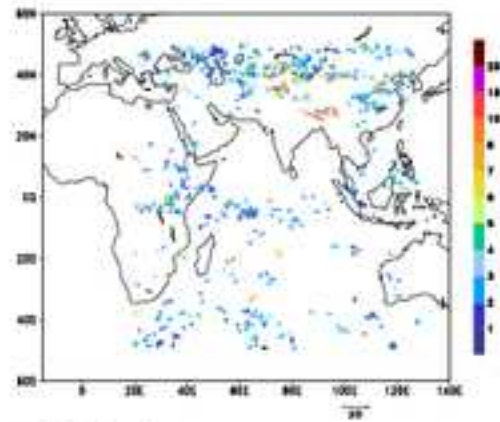


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (17022018 1800UTC)

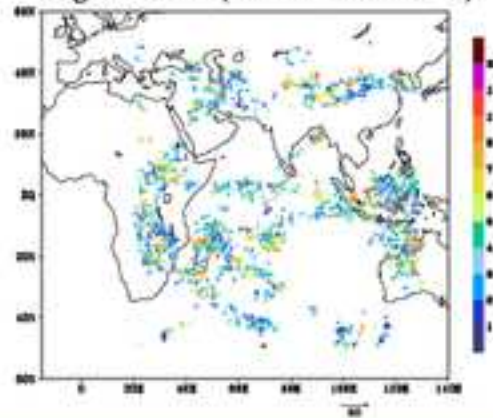
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

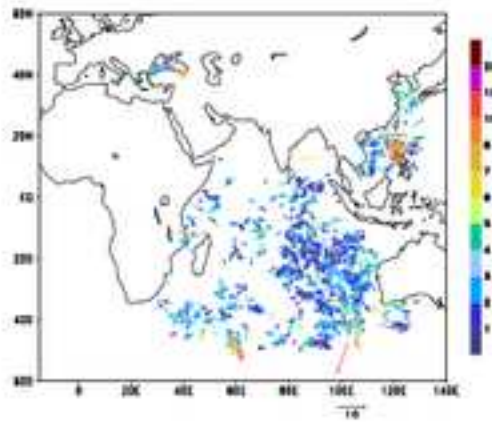


High Level (Above 400 hPa)

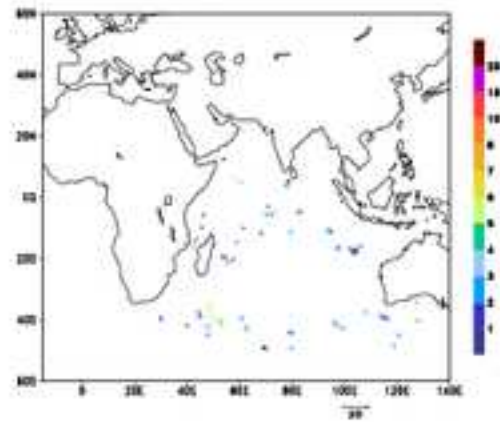


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (17022018 1800UTC)

Low Level (Below 700 hPa)



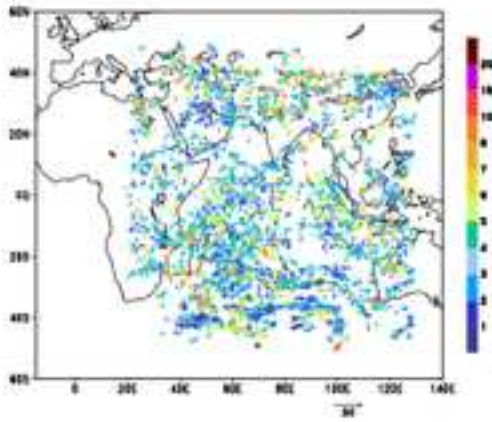
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (17022018 1800UTC)

WV, High Level (Above 400 hPa)

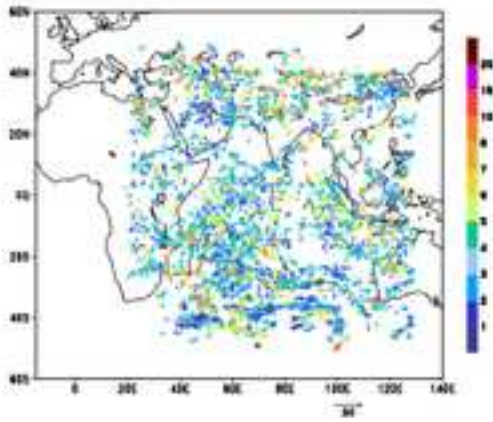
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (17022018 1800UTC)

WV, High Level (Above 400 hPa)

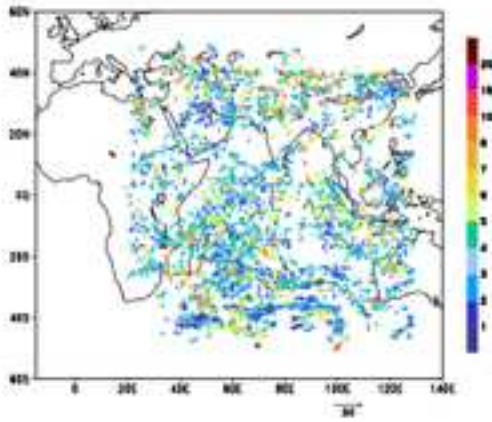
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (17022018 1800UTC)

WV, High Level (Above 400 hPa)

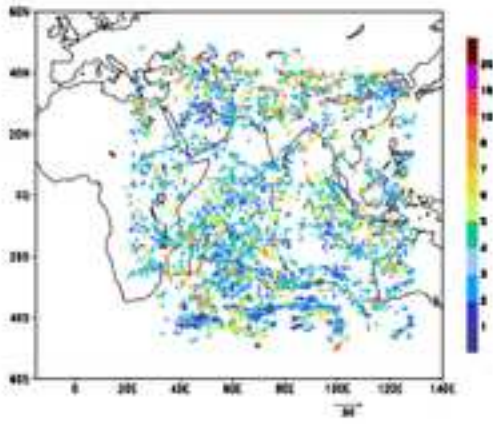
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (17022018 1800UTC)

WV, High Level (Above 400 hPa)

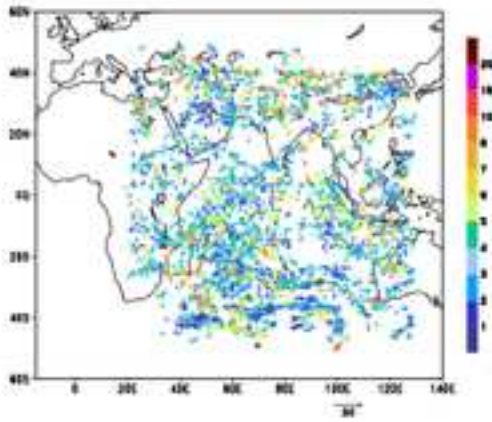
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (17022018 1800UTC)

WV, High Level (Above 400 hPa)

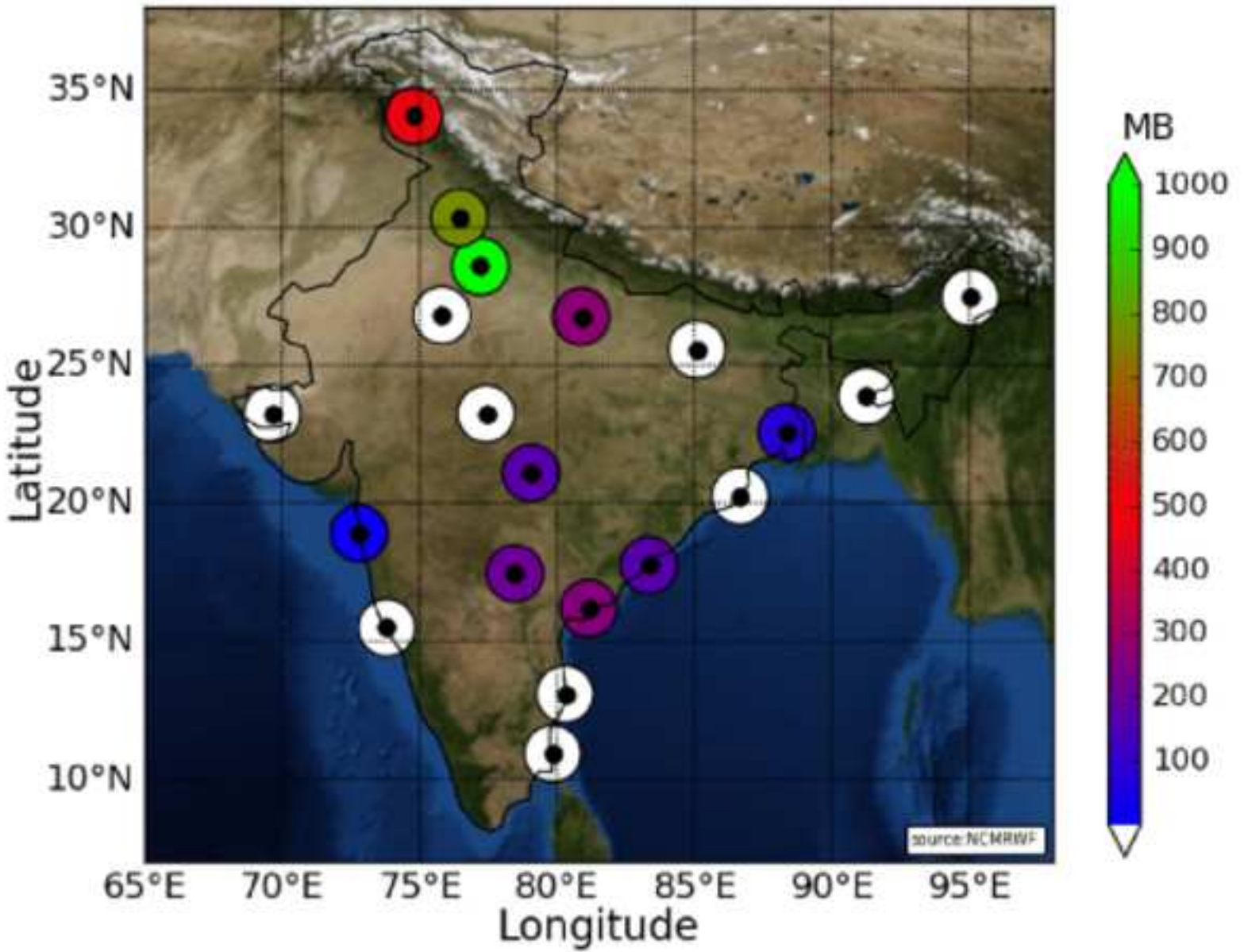
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

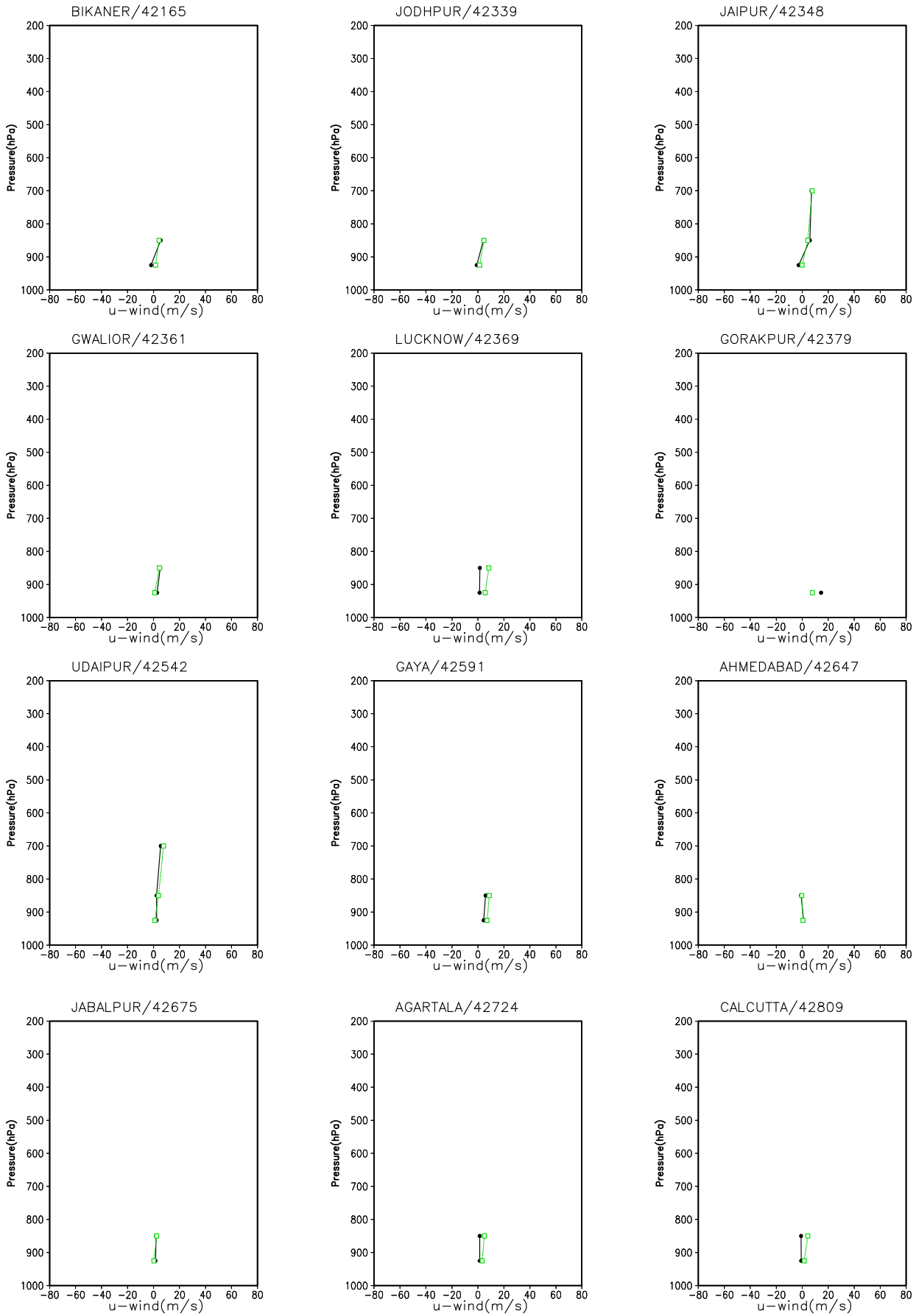
Date: 20180217 at : 18UTC



Quality of Indian PIBAL Observations

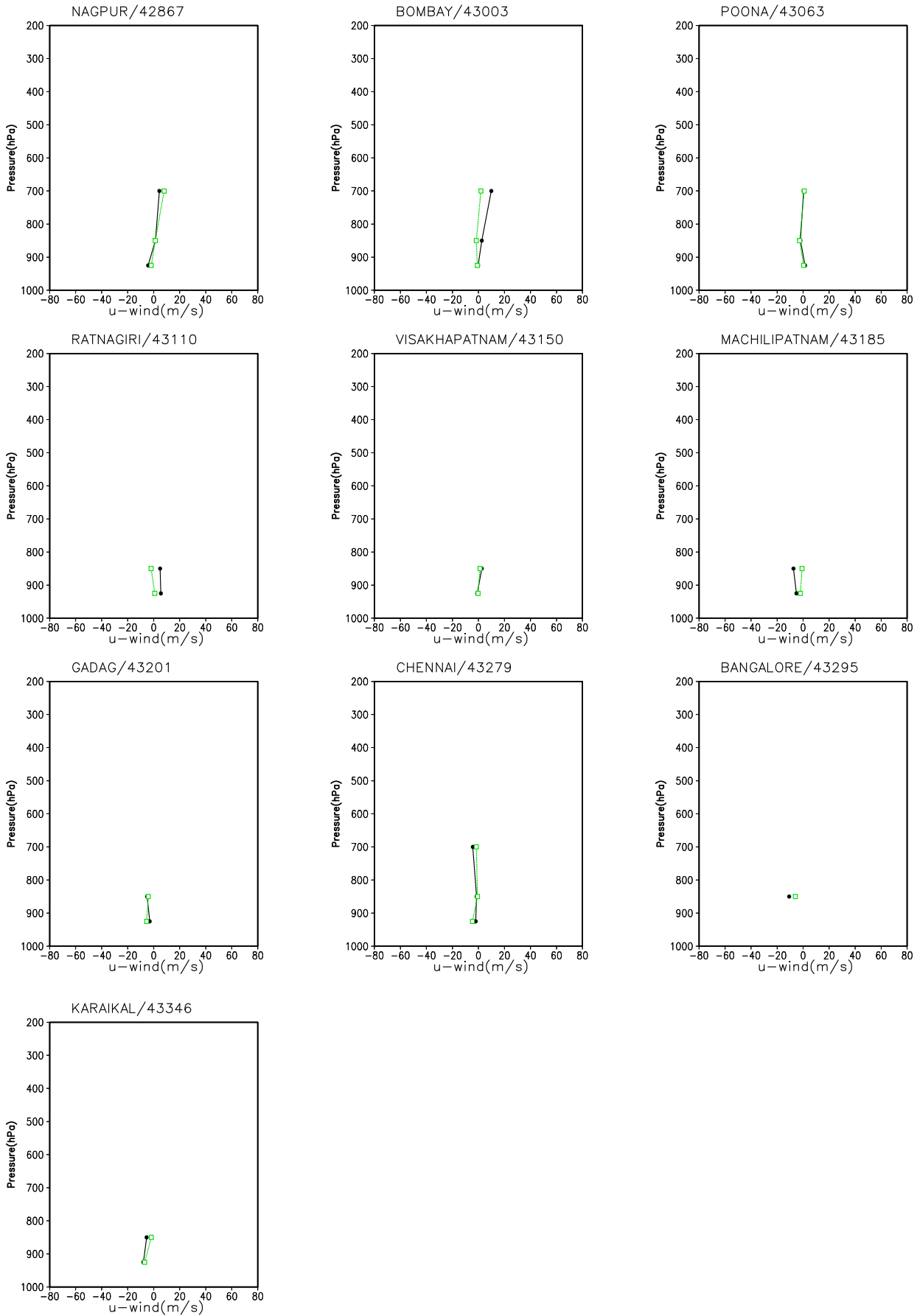
Maximum height reported
by PIBAL ascents

Zonal Wind Rejections by NGFS GDAS



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 17022018

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



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 17022018

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