

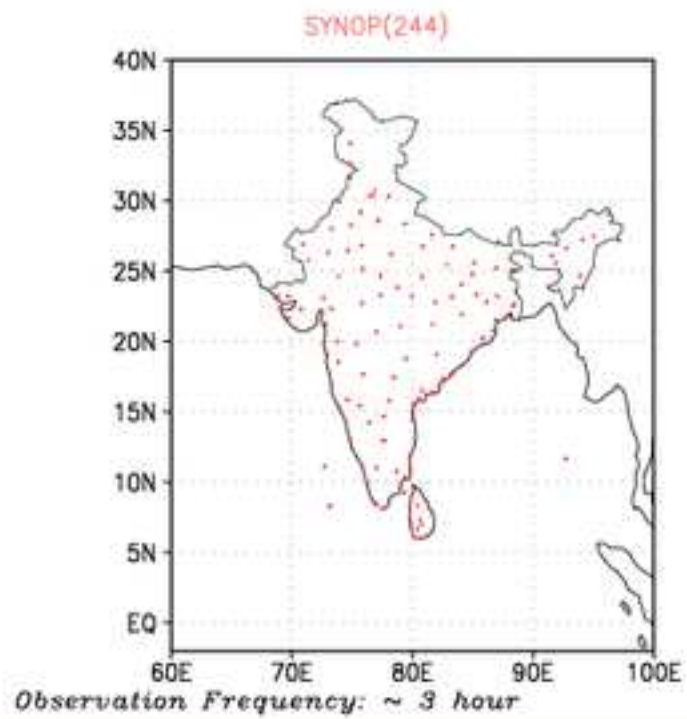
Observation Monitoring

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

for 11122017 (1800 UTC)

Indian Observation Coverage

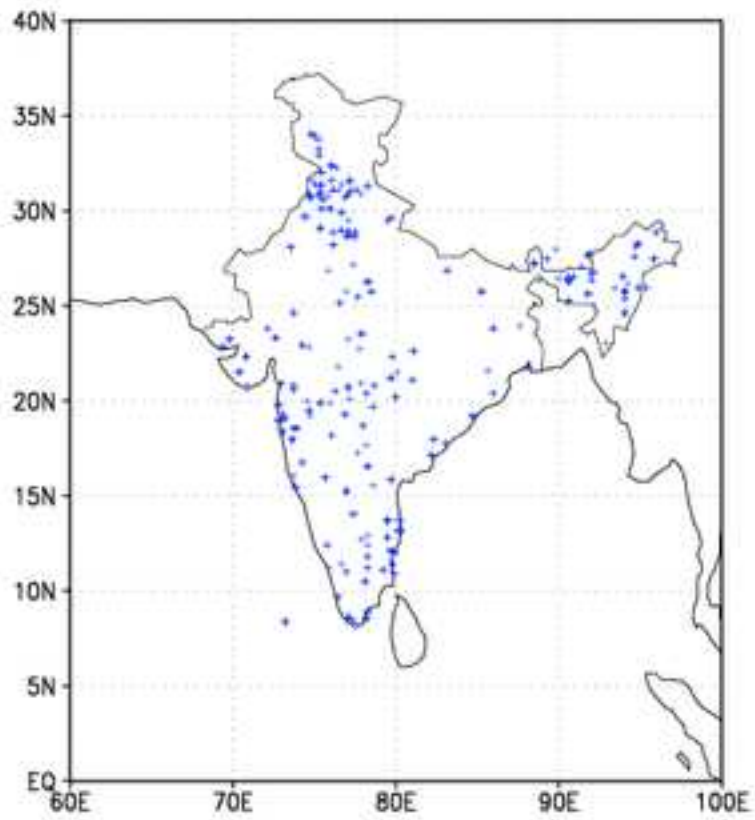
Data Coverage: Surface (11122017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 244
(42 & 43 Block)



Data Coverage: Indian AWS (11122017 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 572

AWS PRESSURE (572)

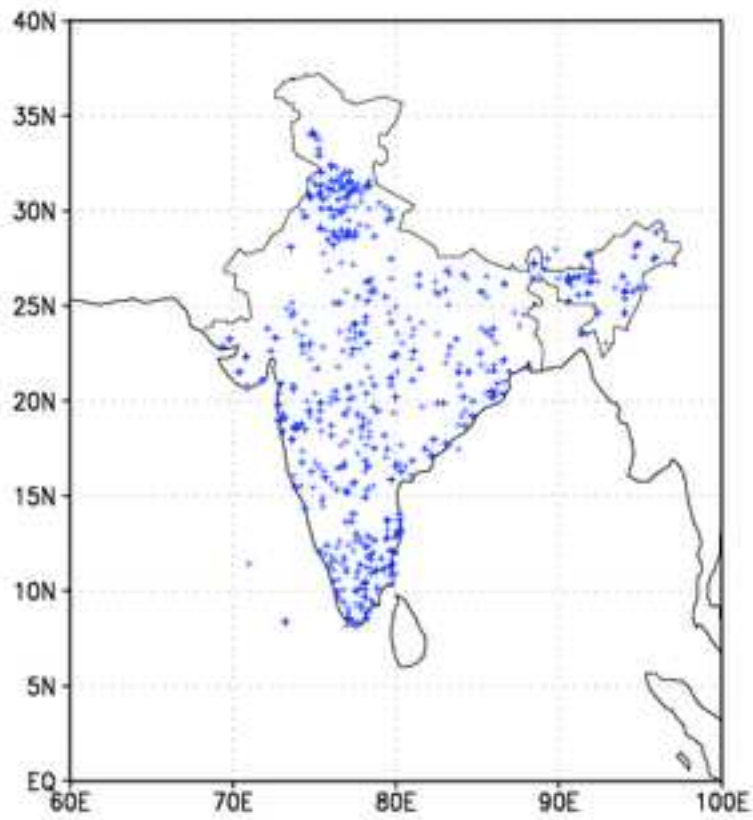


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (11122017 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1095

AWS + ARG (1095)

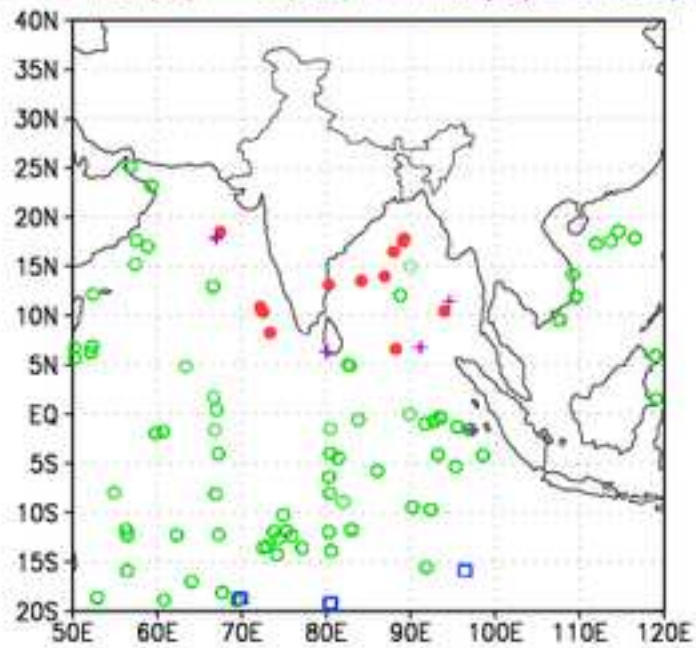


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (11122017 1800UTC +/- 3 Hrs)

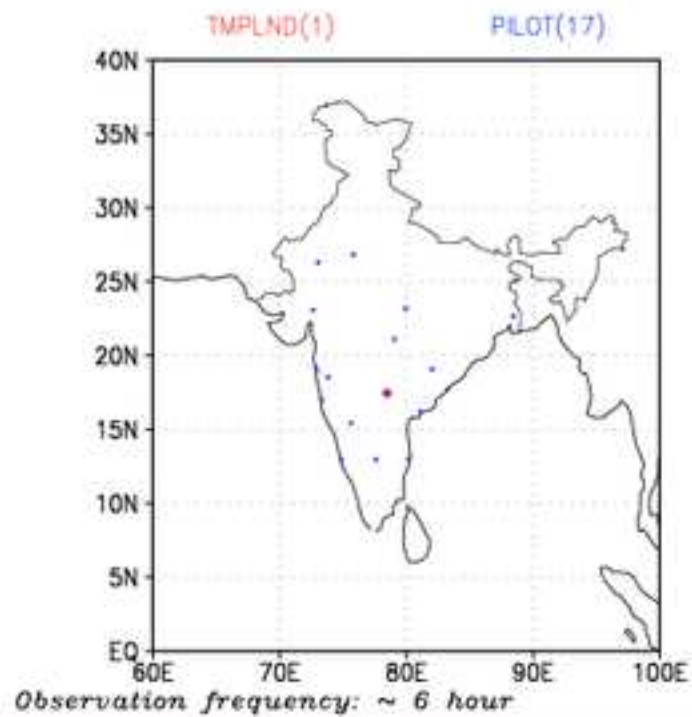
Total Number of Observations Received at NCMRWF: 465

country code in GTS as ● INDIA(26) ○ USA(382) + FRANCE(26) □ OTHERS(31)



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

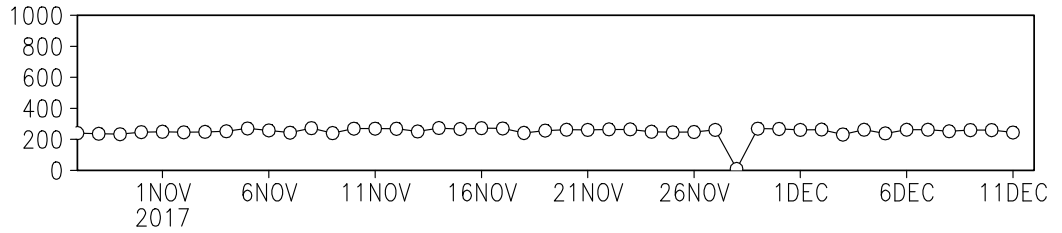
Data Coverage: Sonde (11122017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 18
(42 & 43 Block)



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

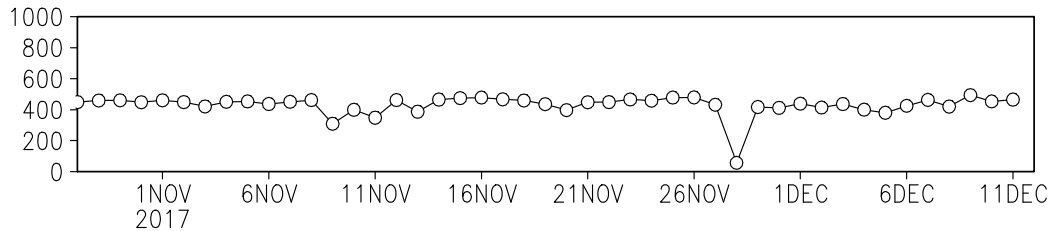
SYNOP

Avg=263
Today_Cnt=244
Dep=-7. %



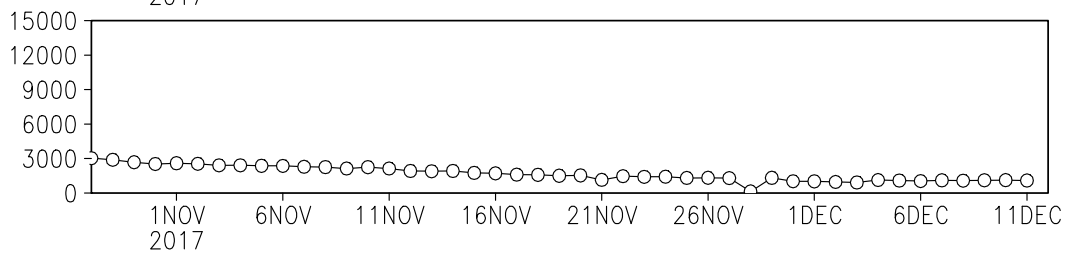
BUOY

Avg=457
Today_Cnt=465
Dep=2. %



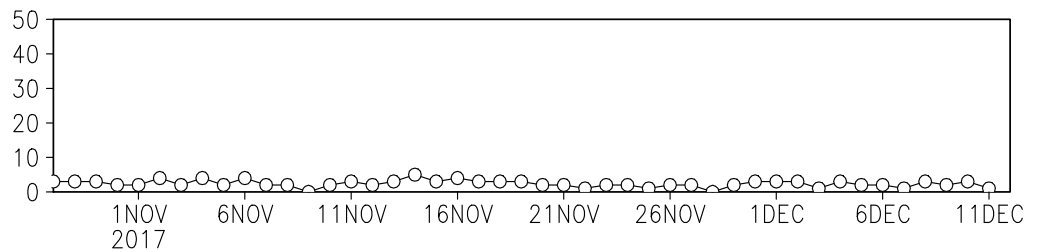
AWS+ARG

Avg=2294
Today_Cnt=1095
Dep=-52. %



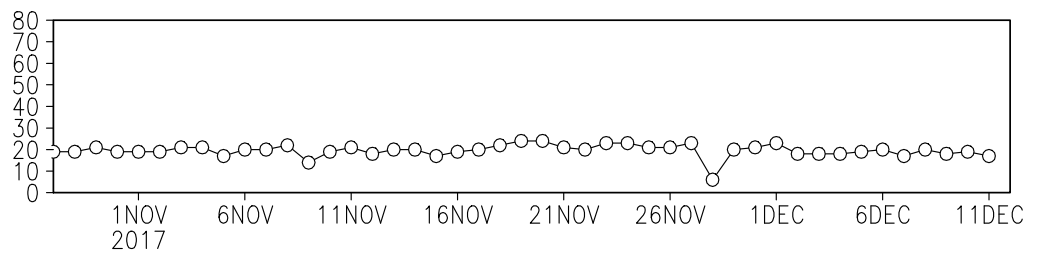
RS/RW

Avg=2
Today_Cnt=1
Dep=-50. %



PILOT

Avg=20
Today_Cnt=17
Dep=-15. %

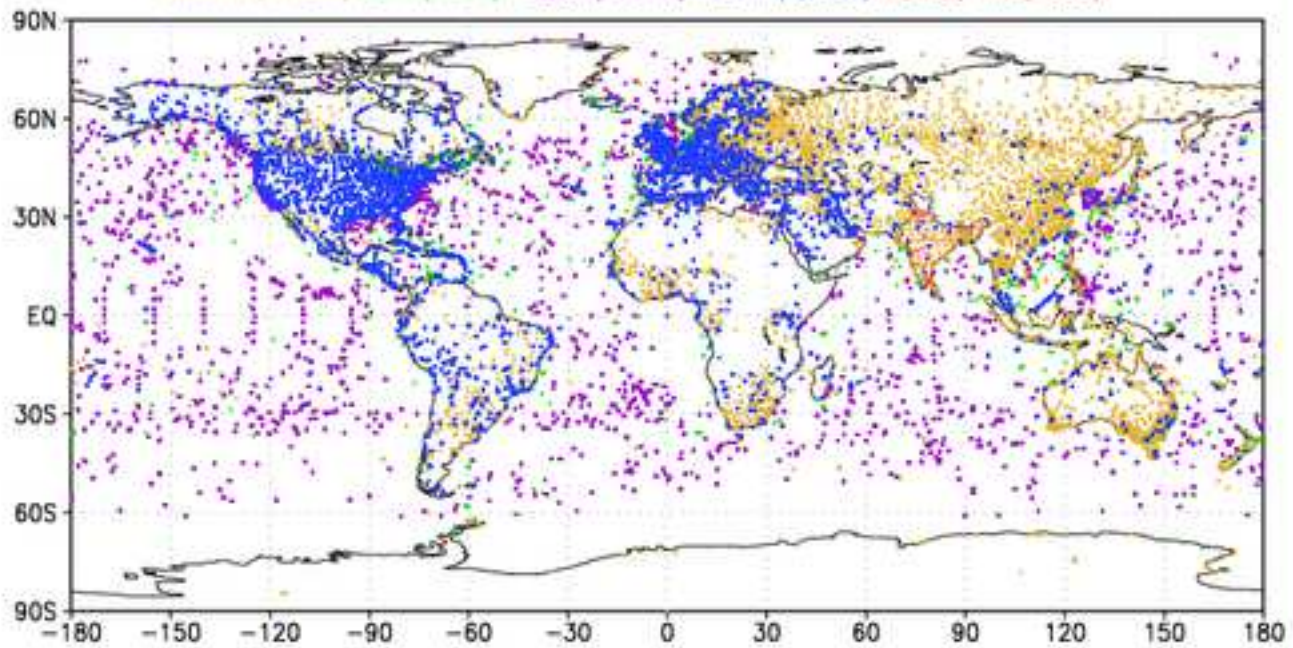


Global Observation Coverage

Data Coverage: Surface (11122017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 50055

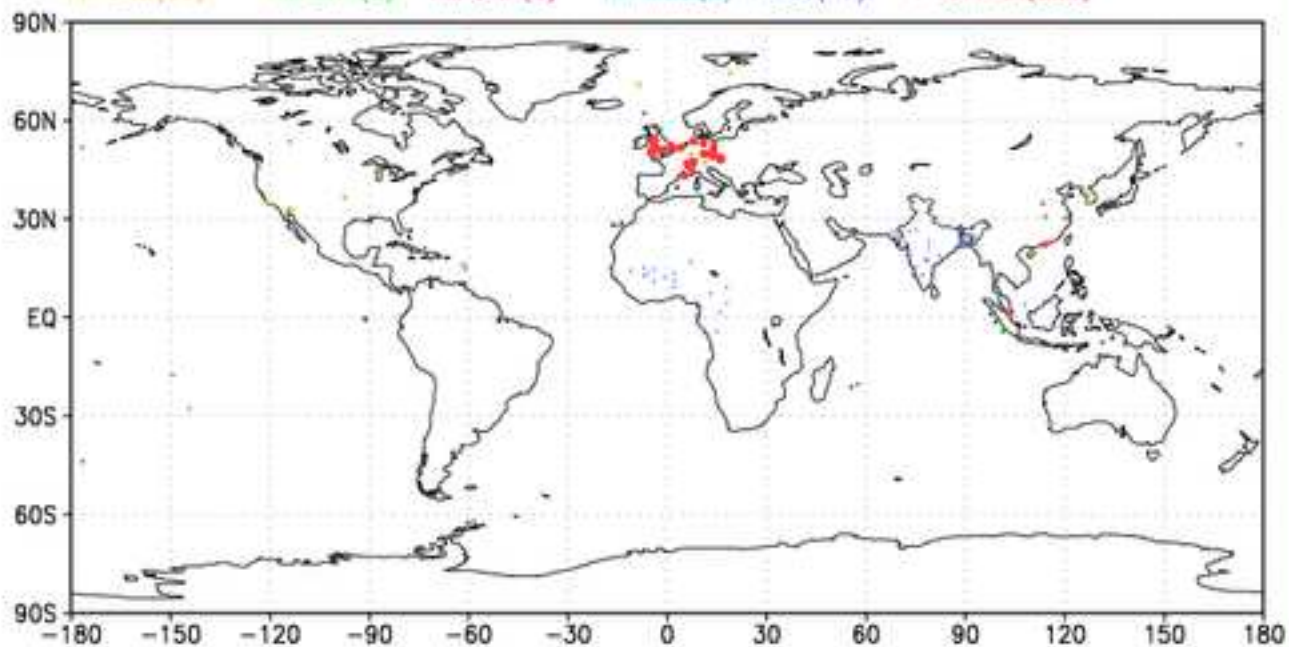
LANDSYN(14035) SHIP(1817) BUOY(12546) METAR(20061) MOBILE/AWS(1596)



Data Coverage: Sonde (11122017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 700

TMPLND(38) TMSHP(2) TMPDRP(0) TMPMDB(0) PILOT(77) PROFILER(583)



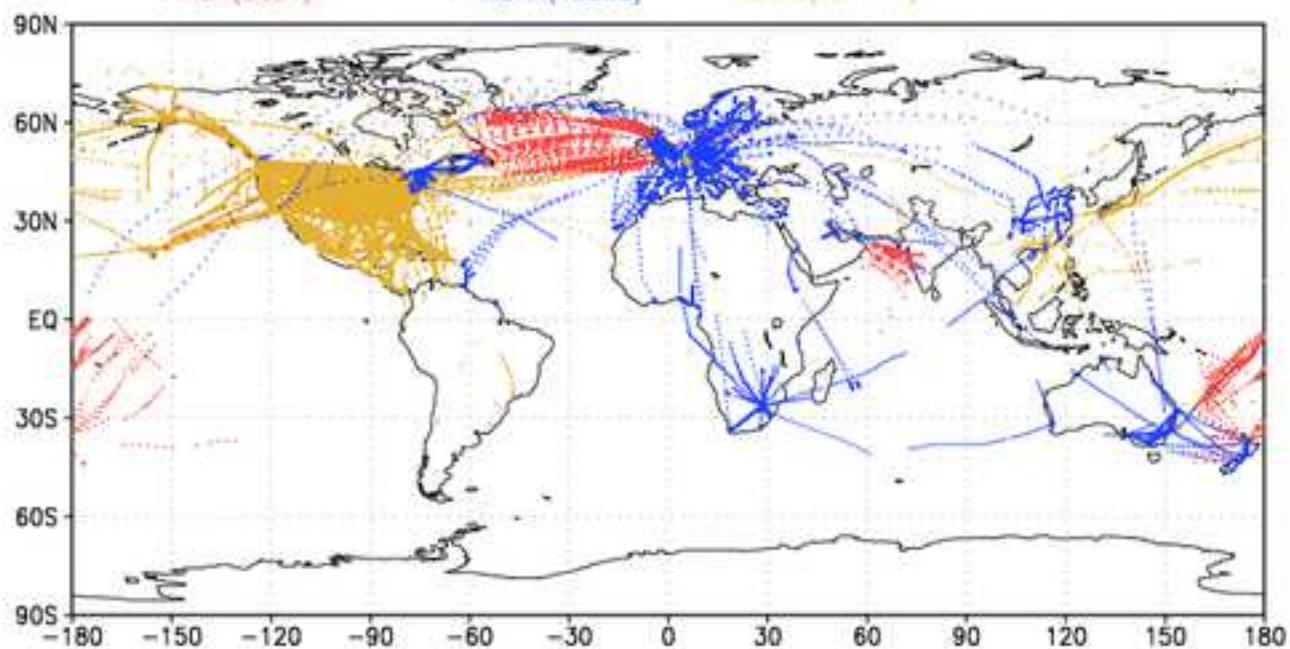
Data Coverage: AIRCFT (11122017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 173457

AIREP(3681)

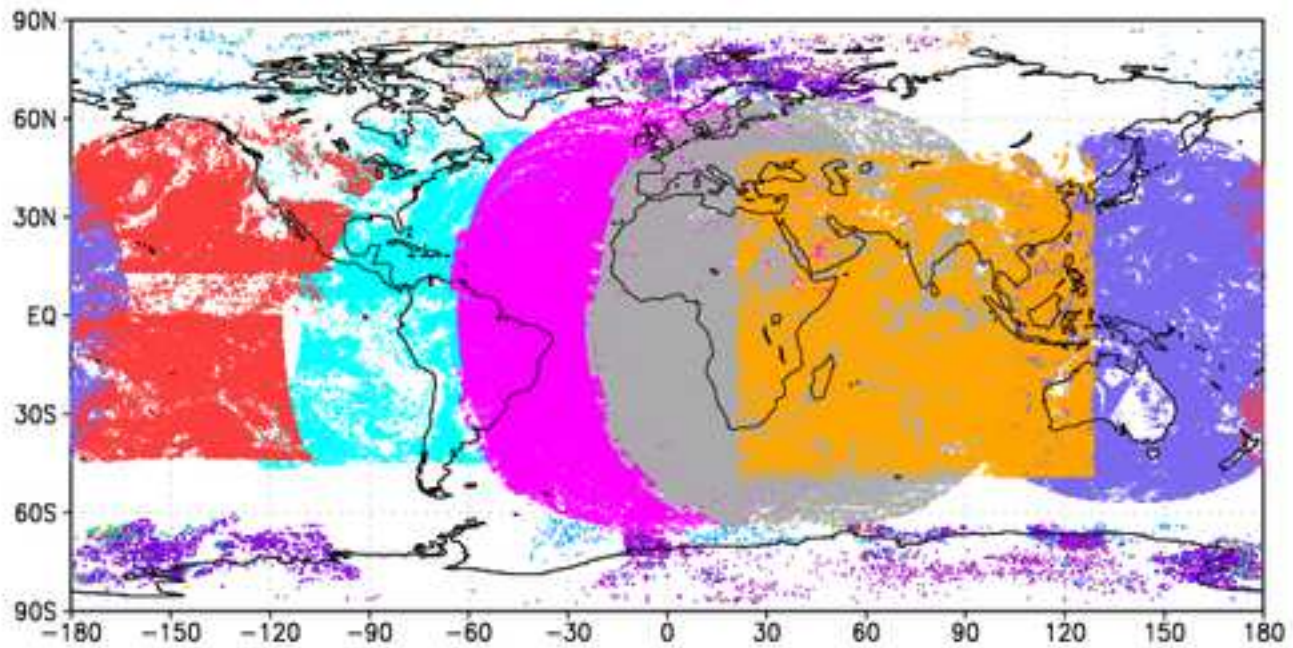
AMDAR(18332)

ACARS(151444)



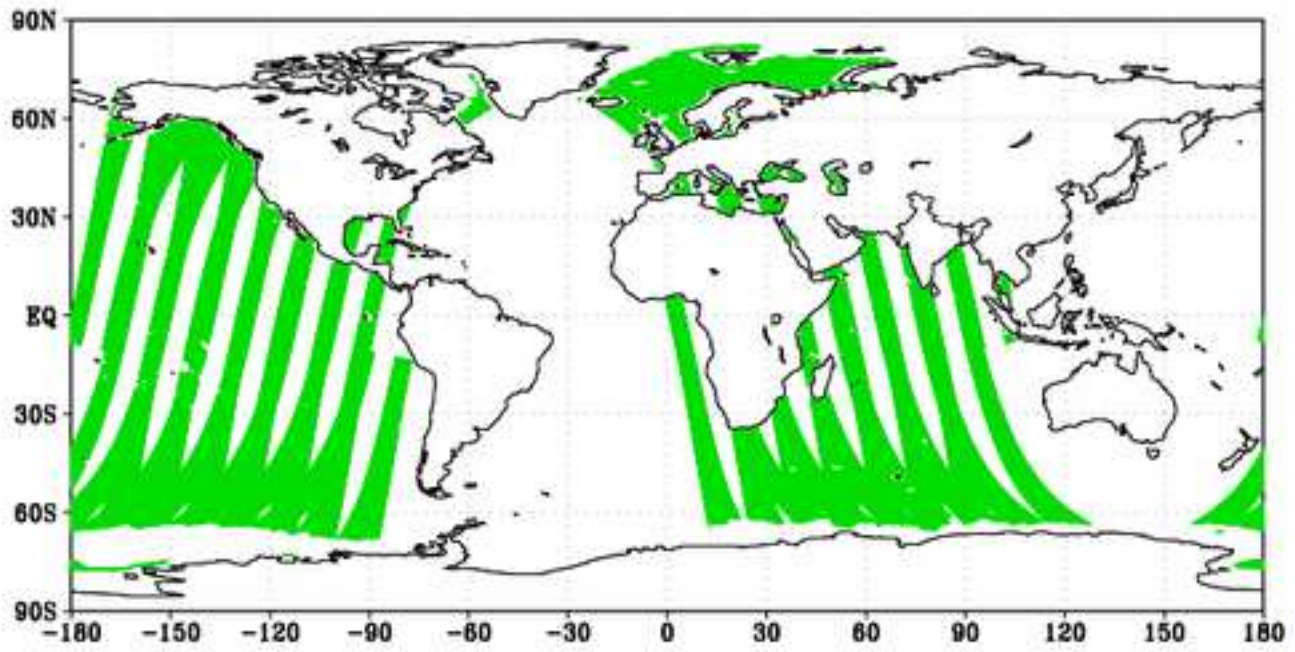
Data Coverage: AMV (11122017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 699580

GOES-15(56374) GOES-13(38479) INSAT-3D(55944) METEOSAT-8(203404)
METEOSAT-10(211573) HIMAWARI-8(116961) MODIS/Terra(670) MODIS/Aqua(1513)
METOP(6835) NOAA-15(454) NOAA-18(0) NOAA-18(670) NOAA-19(1035)



Data Coverage:ASCAT winds (11122017 18UTC +/- 03Hrs)

ASCAT (234558)



Data Coverage: SAT RADIANCE (11122017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3777469

NOAA15(81000)

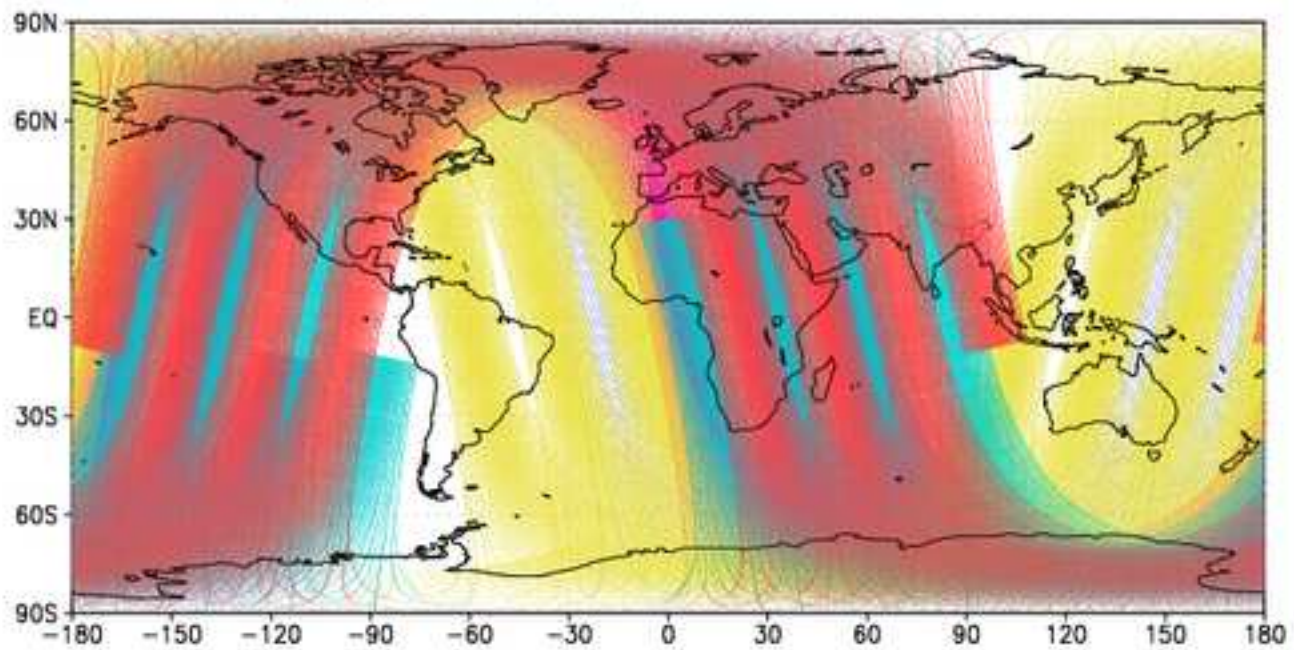
NOAA18(0)

NOAA18(748854)

NOAA18(985520)

METOP1(984182)

METOP2(977913)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (11122017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2610856

NOAA15(0)

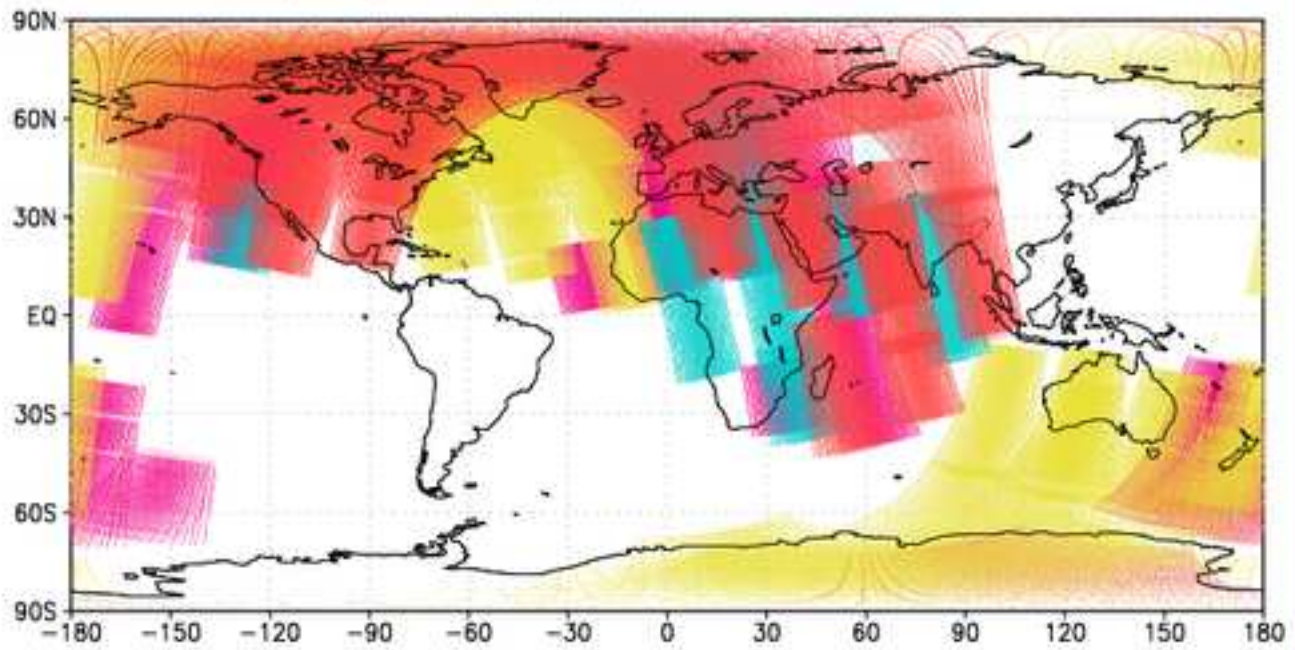
NOAA18(0)

NOAA18(701955)

NOAA18(842242)

METOP1(799170)

METOP2(267488)

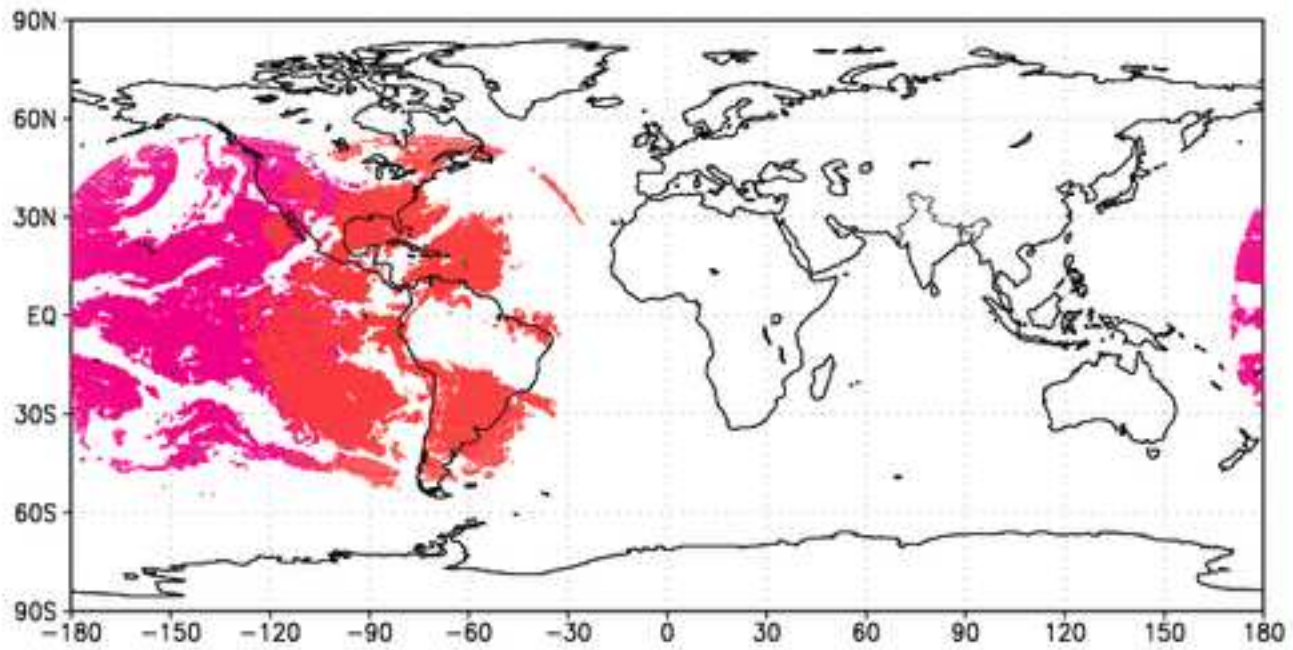


Data Coverage: GOES CSBT (11122017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 44072

GOES-15(26591)

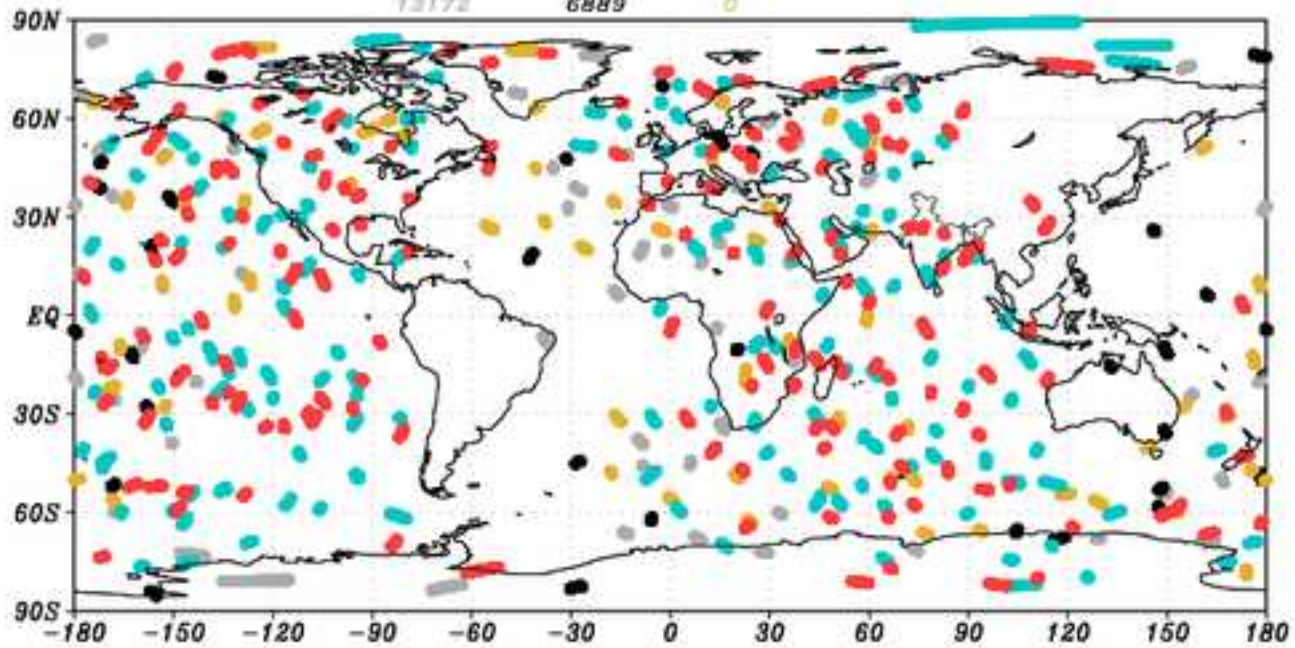
GOES-13(17481)



Data Coverage:GPSRO (11122017 1800UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 116310

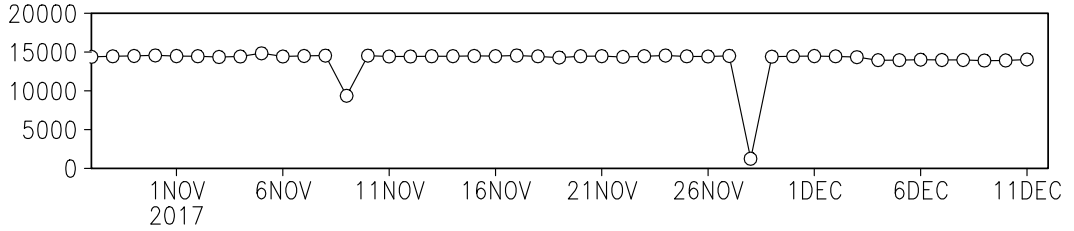
GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	39104	38784	0	0	0	0	0	18301
			TerraSAR-X	TenDEM-X	GRACE-B			
			13172	6889	0			



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

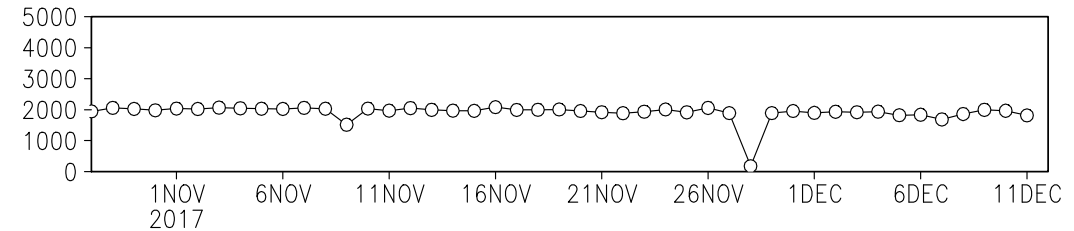
SYNOP

Avg=14424
Today_Cnt=14035
Dep=-3. %



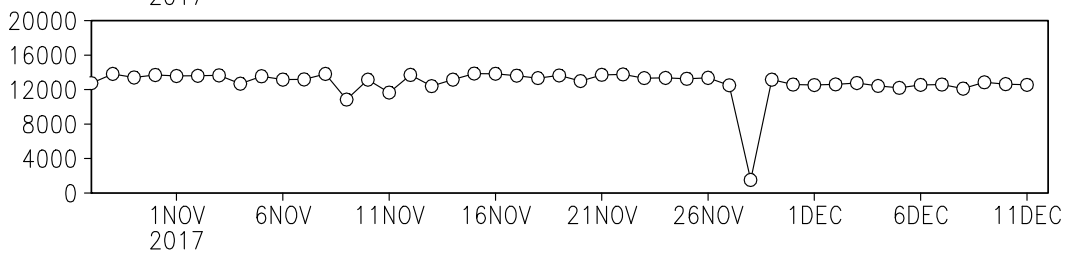
SHIP

Avg=1995
Today_Cnt=1817
Dep=-9. %



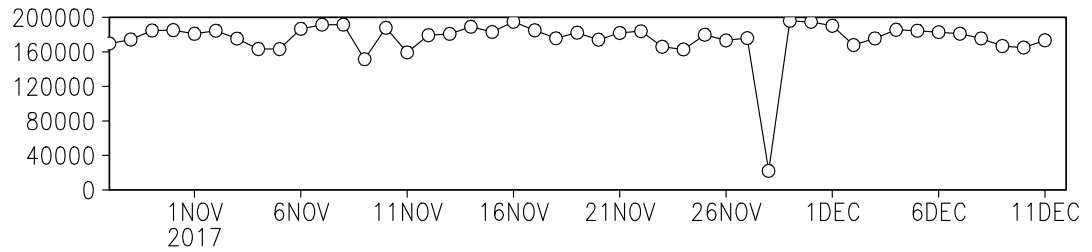
BUOY

Avg=13459
Today_Cnt=12546
Dep=-7. %



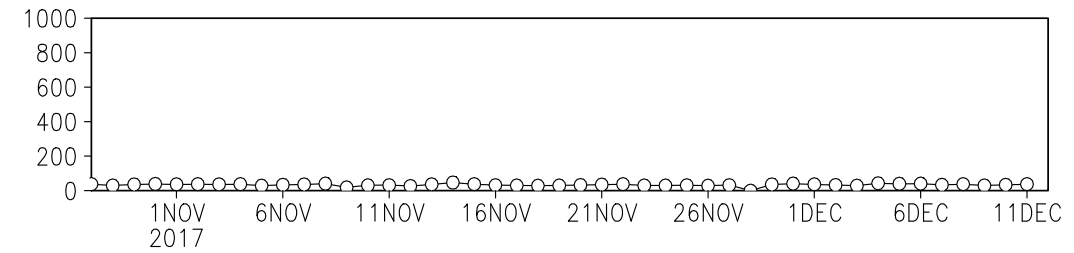
AIRCRAFT

Avg=185289
Today_Cnt=173457
Dep=-6. %



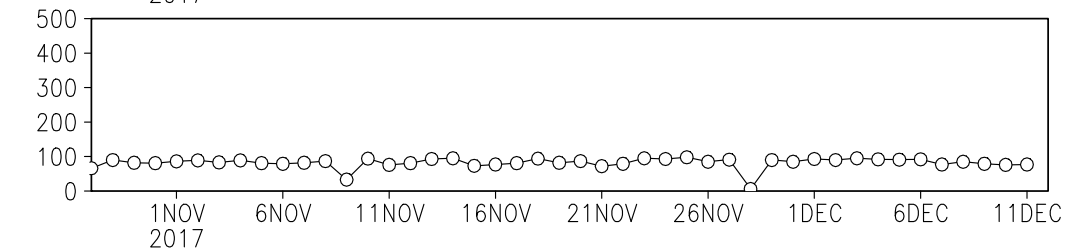
RS/RW

Avg=37
Today_Cnt=38
Dep=3. %



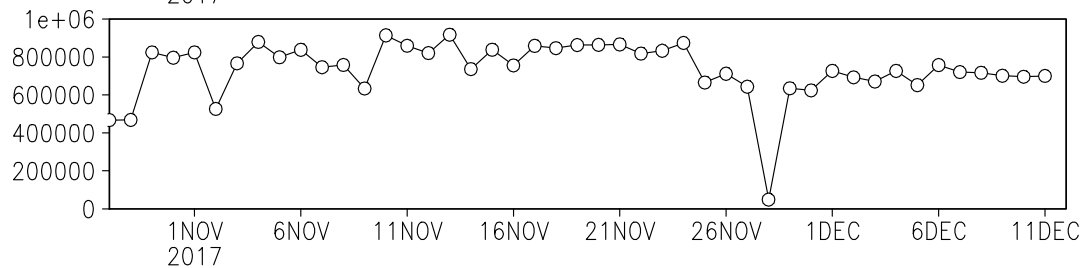
PILOT

Avg=89
Today_Cnt=77
Dep=-13. %



AMV

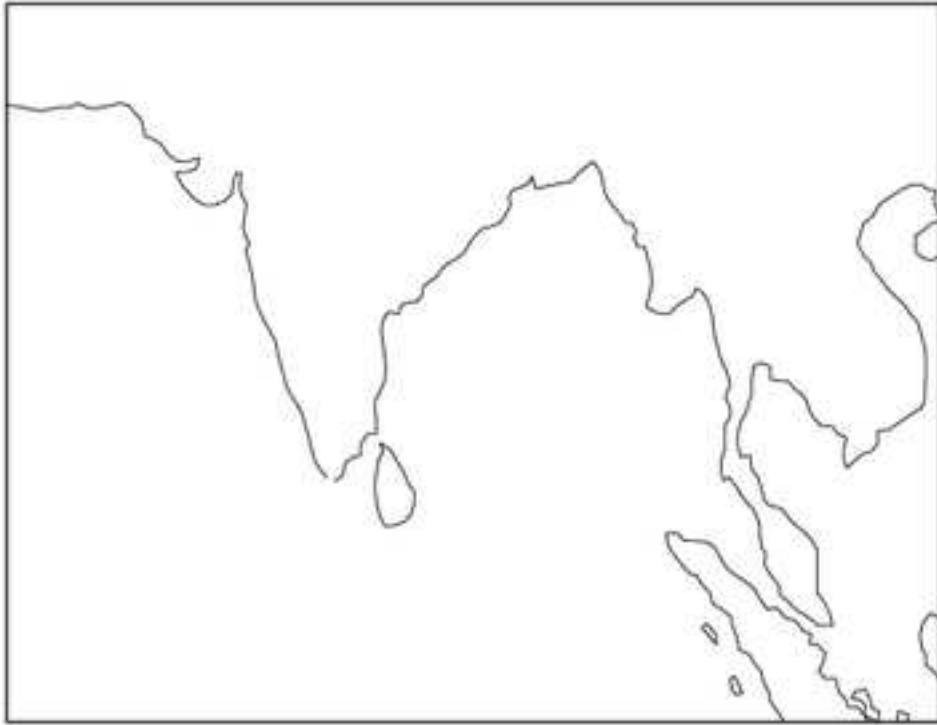
Avg=818285
Today_Cnt=699580
Dep=-15. %



SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20171211 18Z)

ASCAT WINDS (11122017 18 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

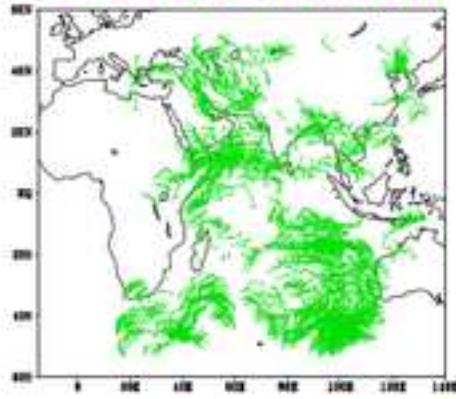
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

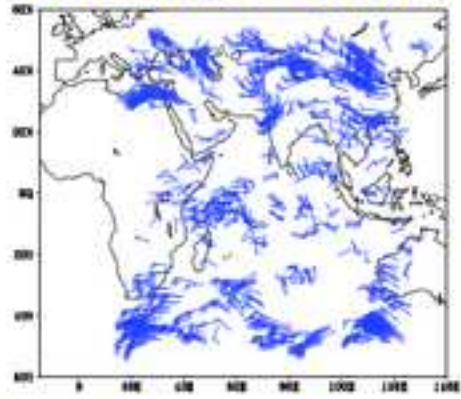
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (11122017 1800UTC)

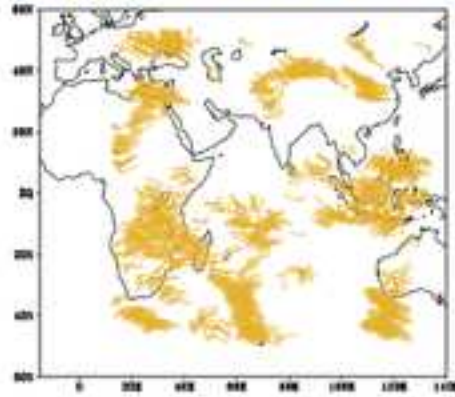
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

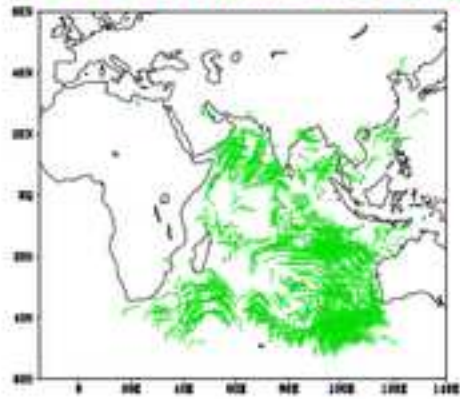


High Level (Above 400 hPa)

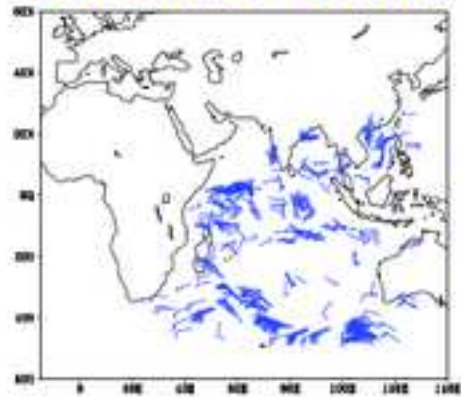


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (11122017 1800UTC)

Low Level (Below 700 hPa)



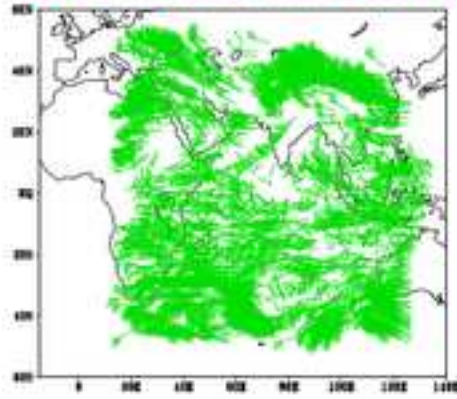
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (11122017 1800UTC)

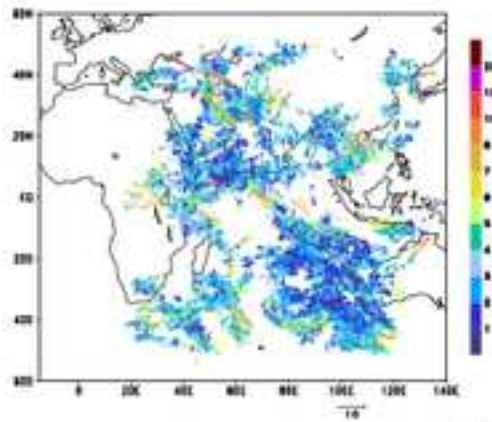
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

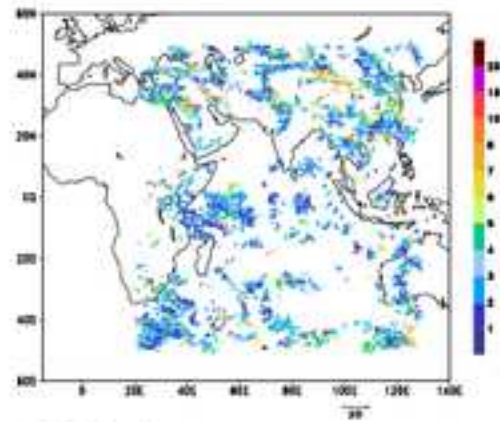


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (11122017 1800UTC)

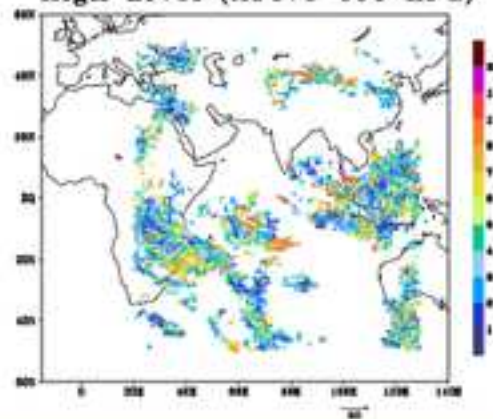
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

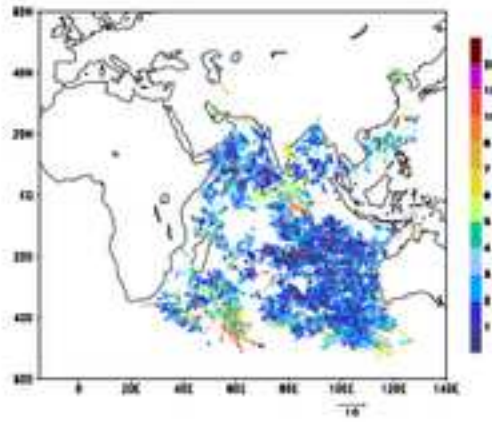


High Level (Above 400 hPa)

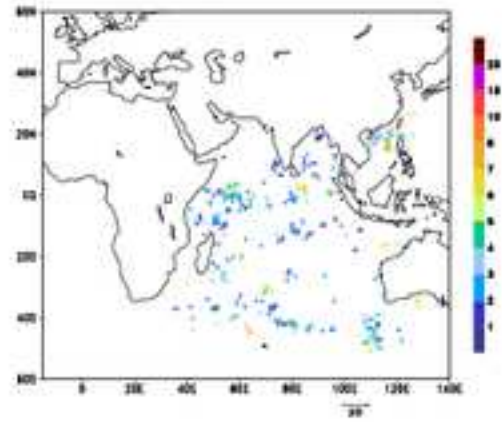


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (11122017 1800UTC)

Low Level (Below 700 hPa)



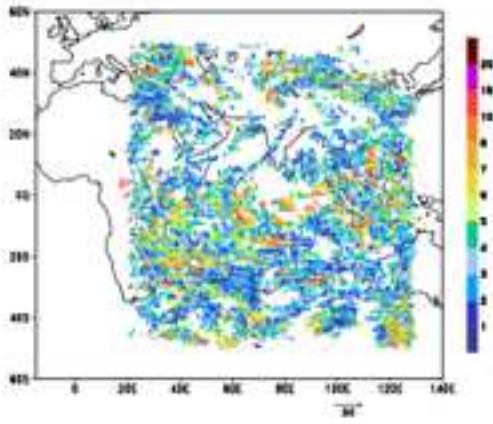
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (11122017 1800UTC)

WV, High Level (Above 400 hPa)

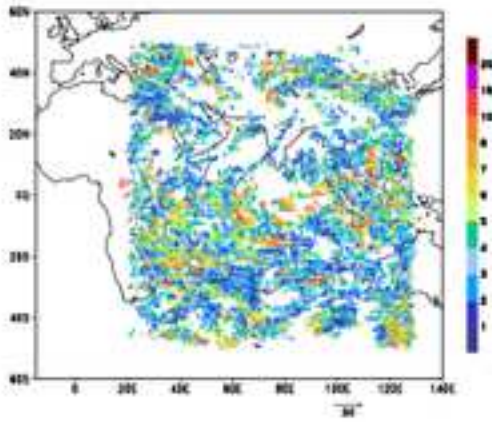
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (11122017 1800UTC)

WV, High Level (Above 400 hPa)

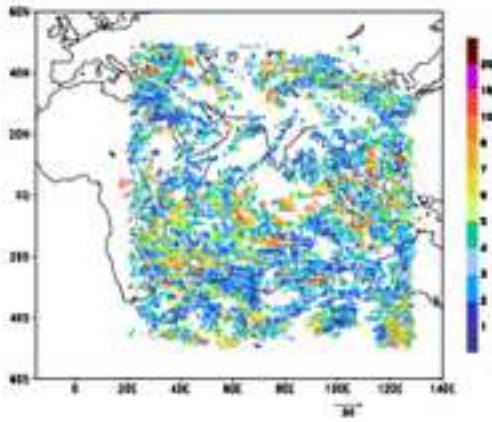
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (11122017 1800UTC)

WV, High Level (Above 400 hPa)

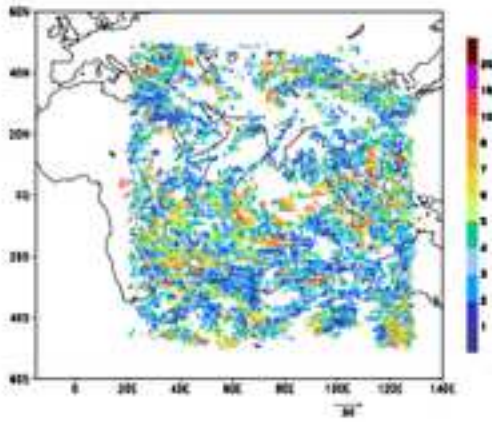
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (11122017 1800UTC)

WV, High Level (Above 400 hPa)

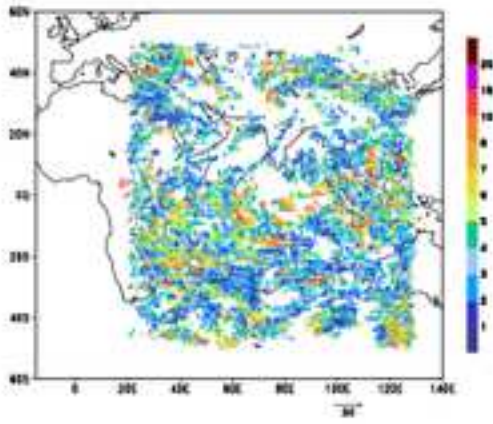
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (11122017 1800UTC)

WV, High Level (Above 400 hPa)

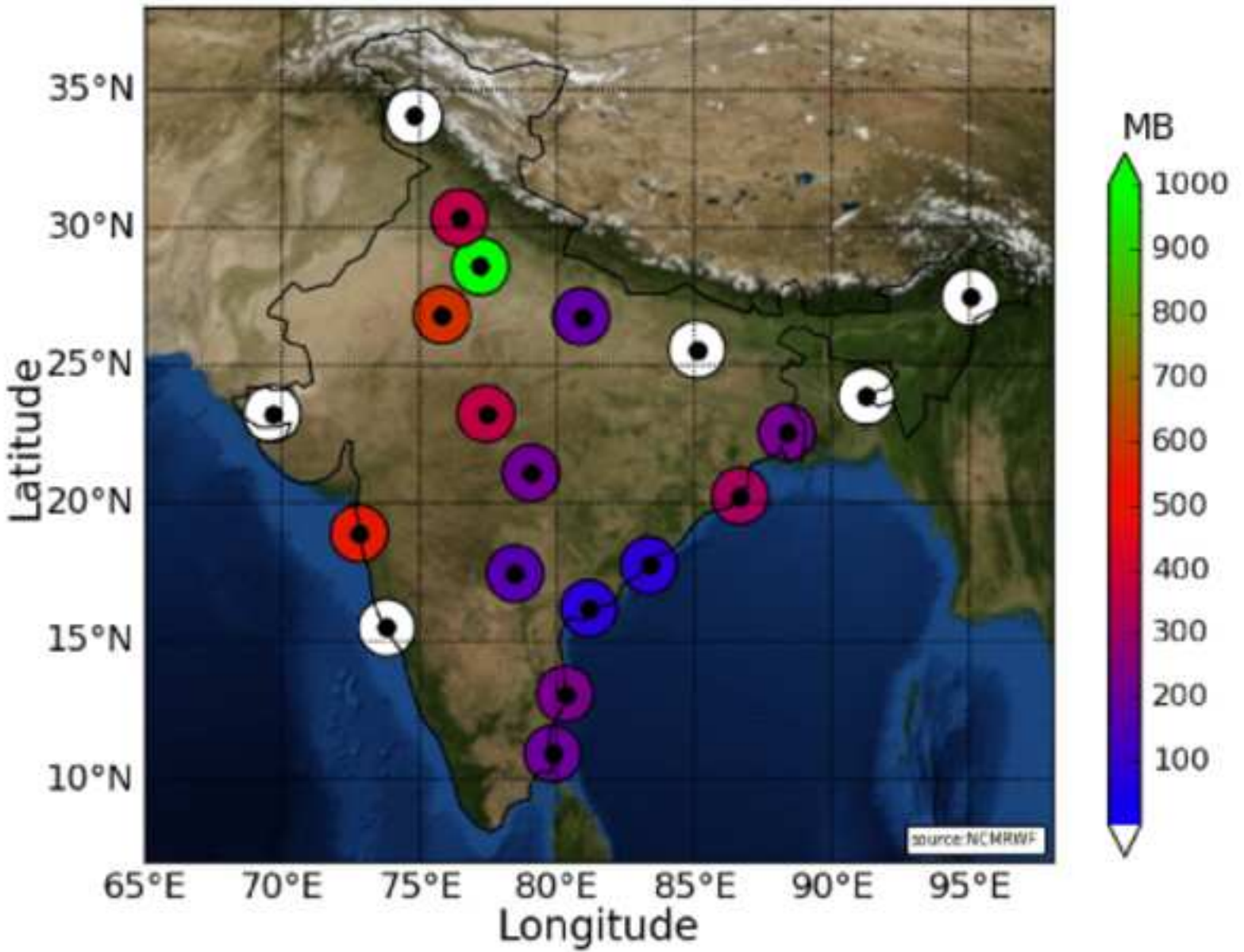
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

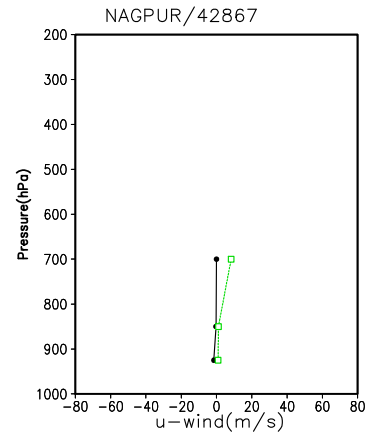
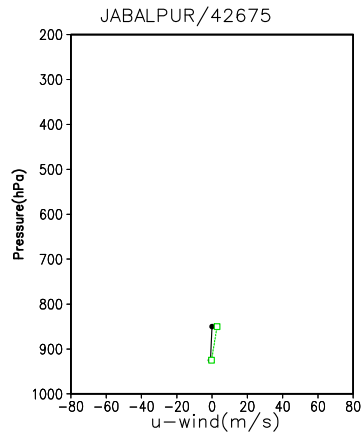
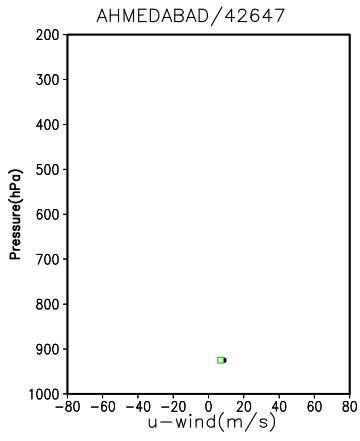
Date: 20171211 at : 18UTC



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 11122017
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)