

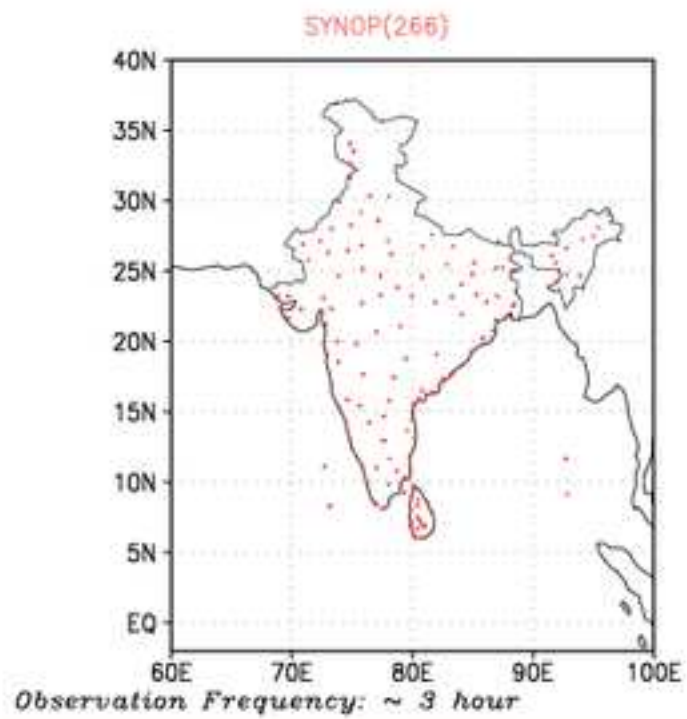
Observation Monitoring

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

for 12122017 (0000 UTC)

Indian Observation Coverage

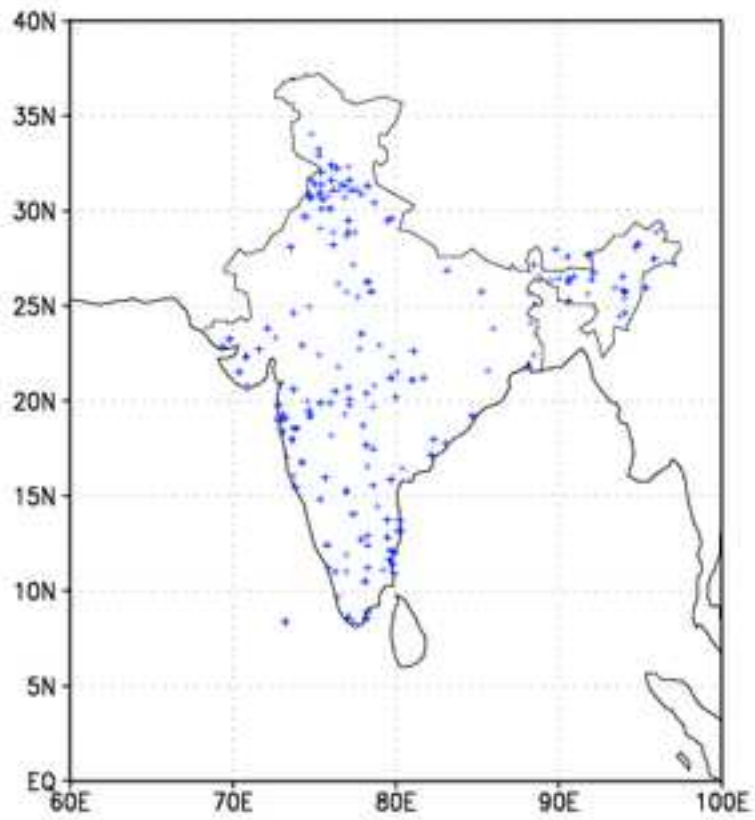
Data Coverage: Surface (12122017 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 266
(42 & 43 Block)



Data Coverage: Indian AWS (12122017 0000UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 522

AWS PRESSURE (522)

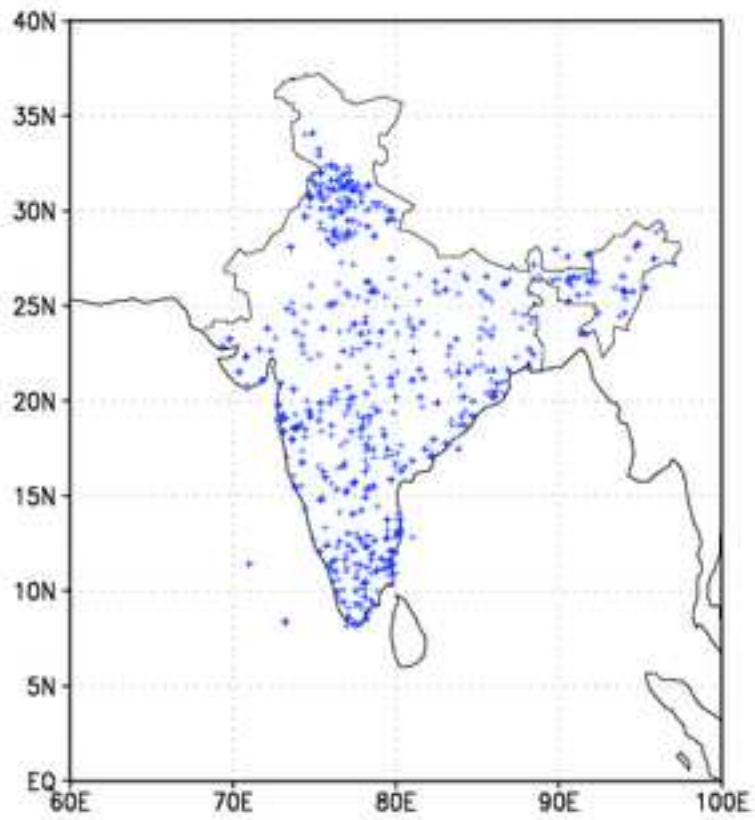


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (12122017 0000UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1072

AWS + ARG (1072)

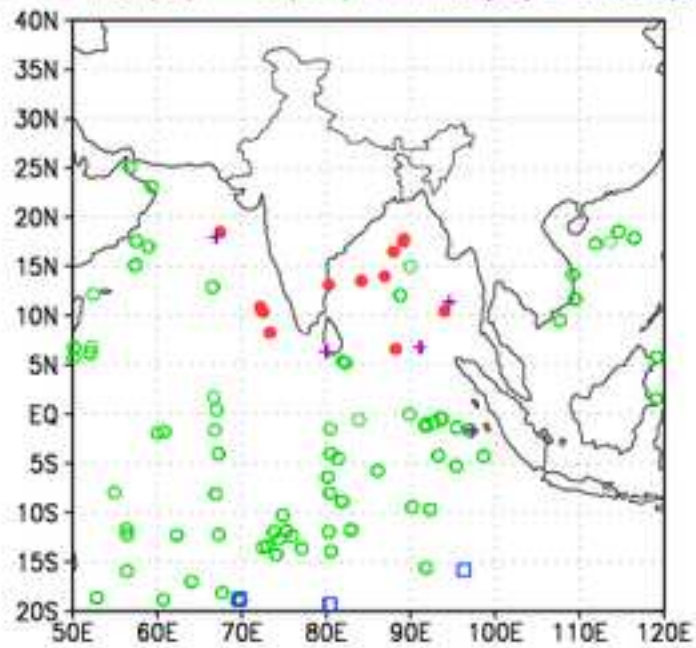


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (12122017 0000UTC +/- 3 Hrs)

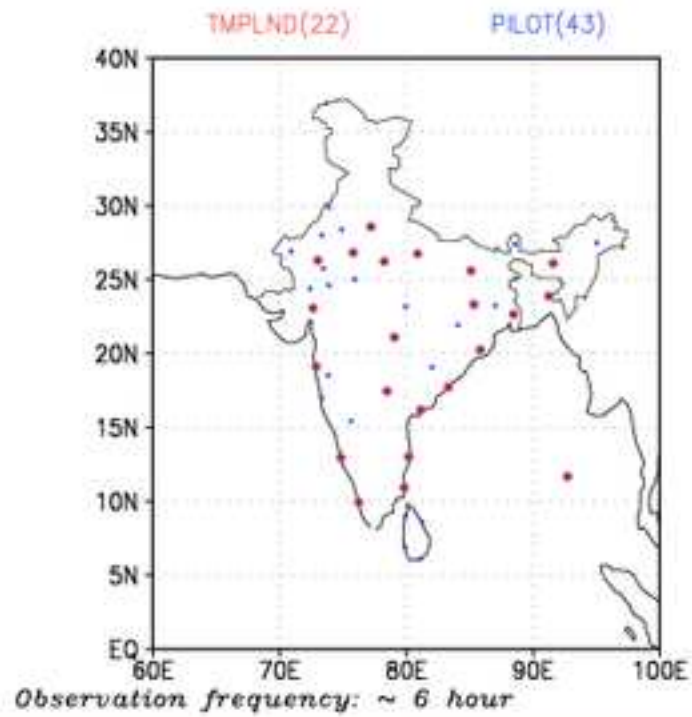
Total Number of Observations Received at NCMRWF: 518

country code in GTS as ● INDIA(25) ○ USA(401) + FRANCE(62) □ OTHERS(30)



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

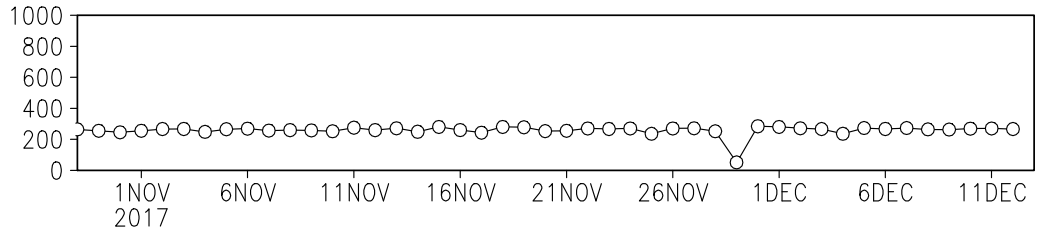
Data Coverage: Sonde (12122017 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 65
(42 & 43 Block)



Count for different types of observation (Over Indian Region) for the last 45 days (valid for 00 UTC)

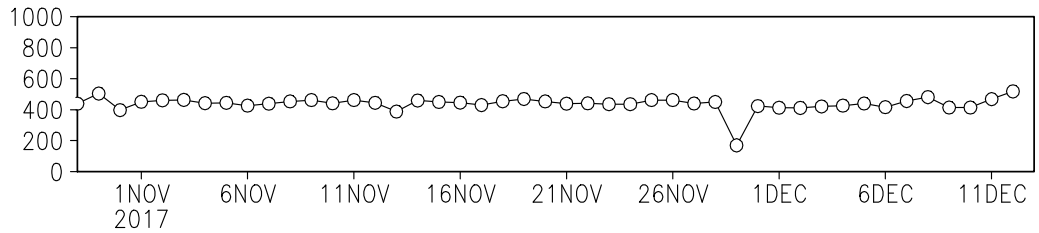
SYNOP

Avg=269
Today_Cnt=266
Dep=-1. %



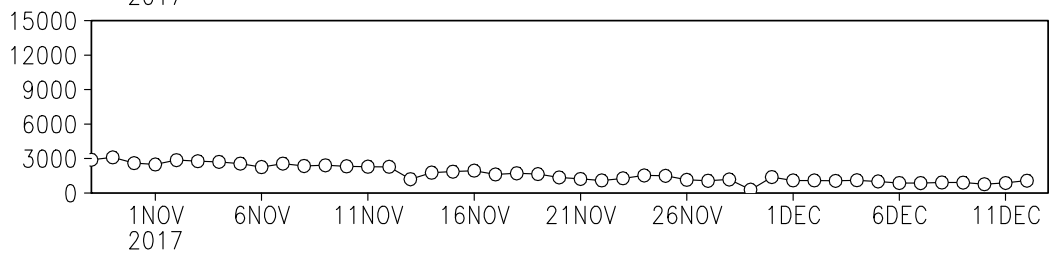
BUOY

Avg=453
Today_Cnt=518
Dep=14. %



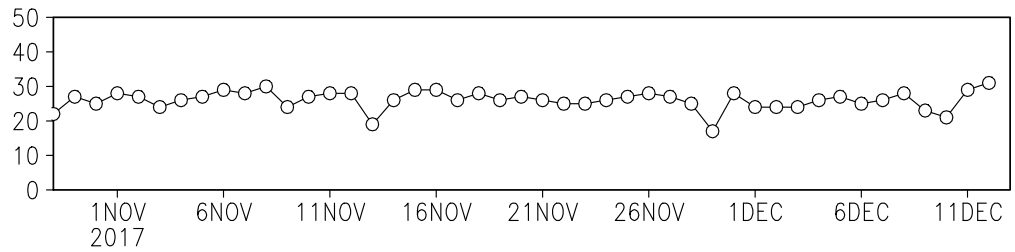
AWS+ARG

Avg=2386
Today_Cnt=1072
Dep=-55. %



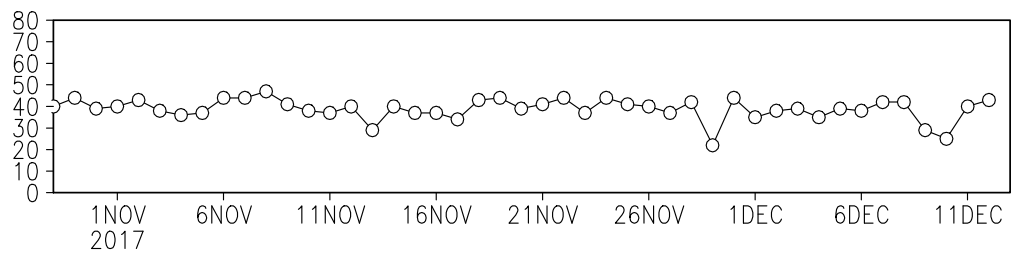
RS/RW

Avg=27
Today_Cnt=31
Dep=15. %



PILOT

Avg=41
Today_Cnt=43
Dep=5. %

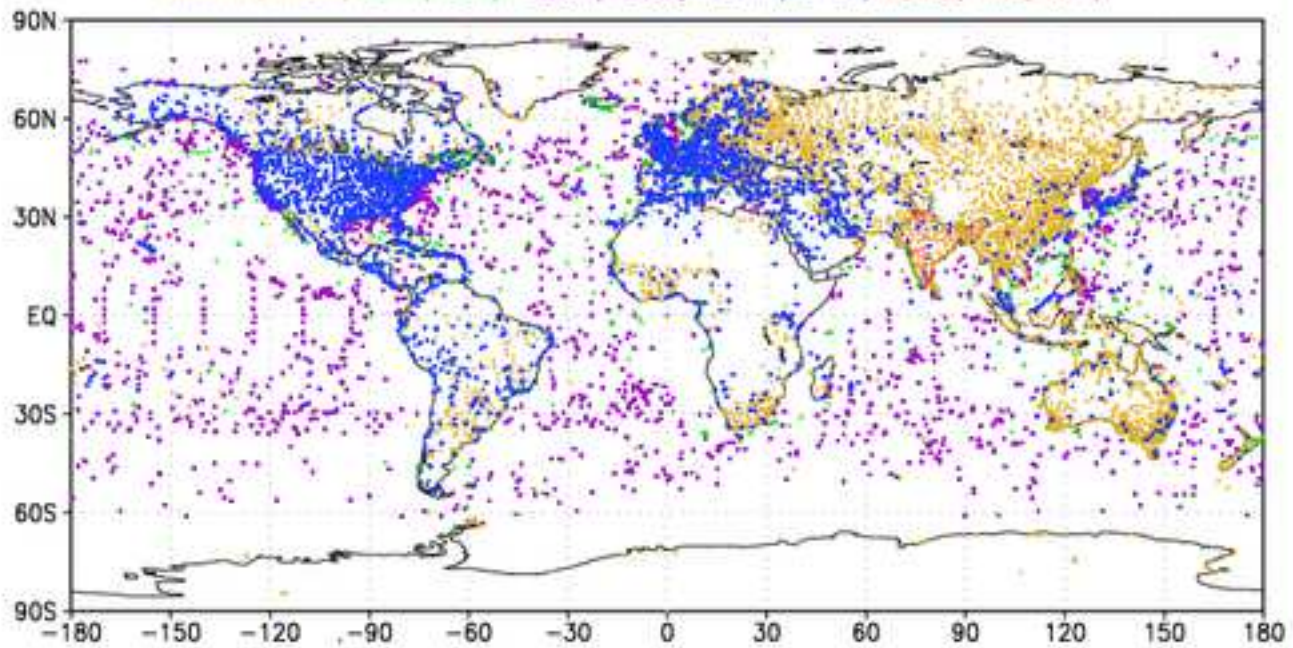


Global Observation Coverage

Data Coverage: Surface (12122017 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 48966

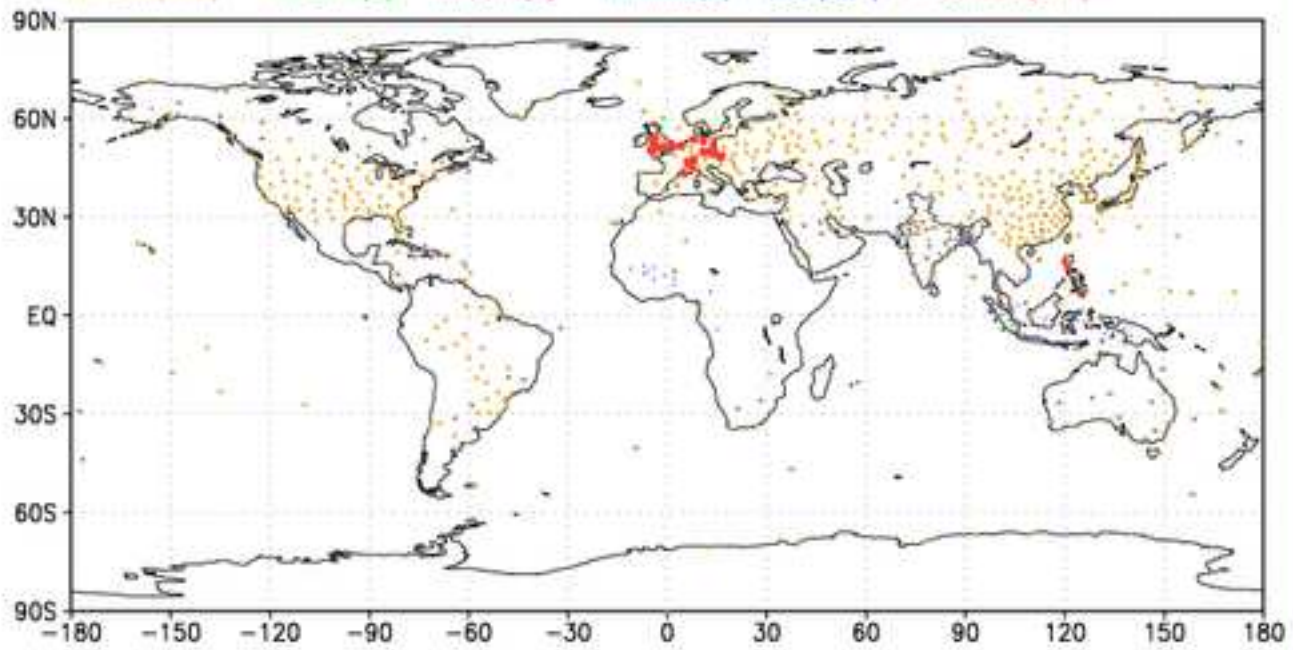
LNDSYN(13829) SHIP(1990) BUOY(13002) METAR(18491) MOBILE/AWS(1654)



Data Coverage: Sonde (12122017 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1468

TMP LND(638) TMP SHP(2) TMP DRP(0) TMP MDB(0) PILOT(254) PROFILER(574)



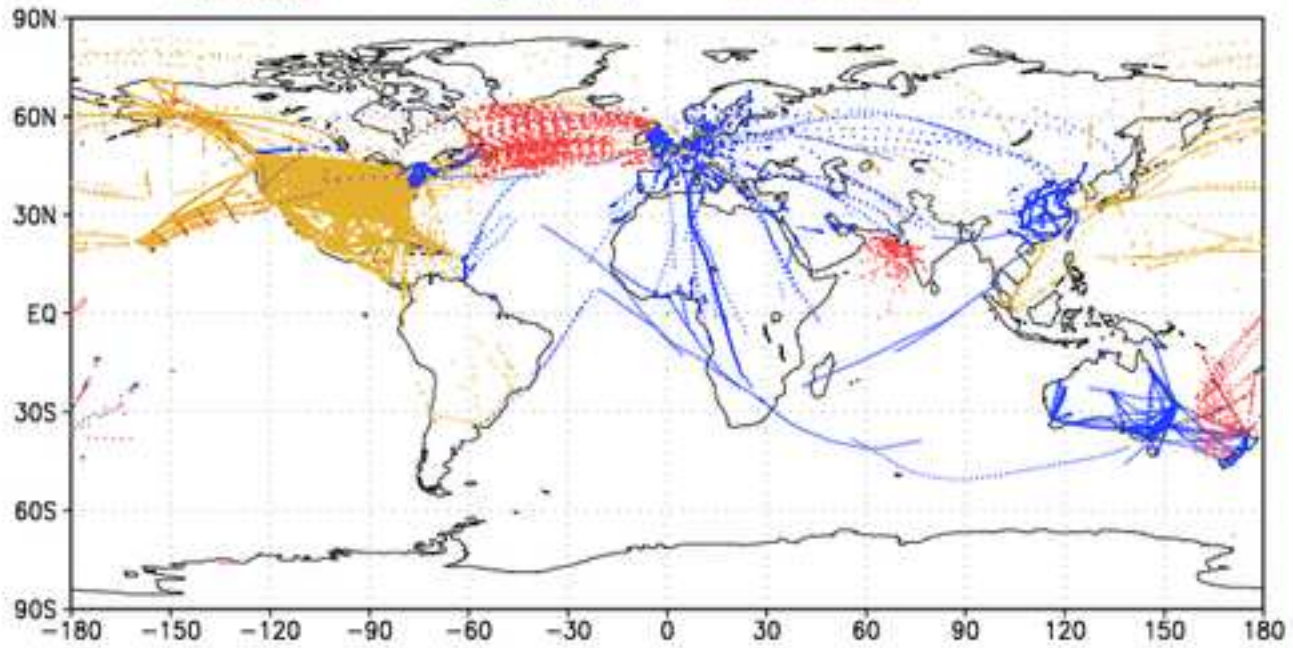
Data Coverage: AIRCFT (12122017 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 168237

AIREP(3538)

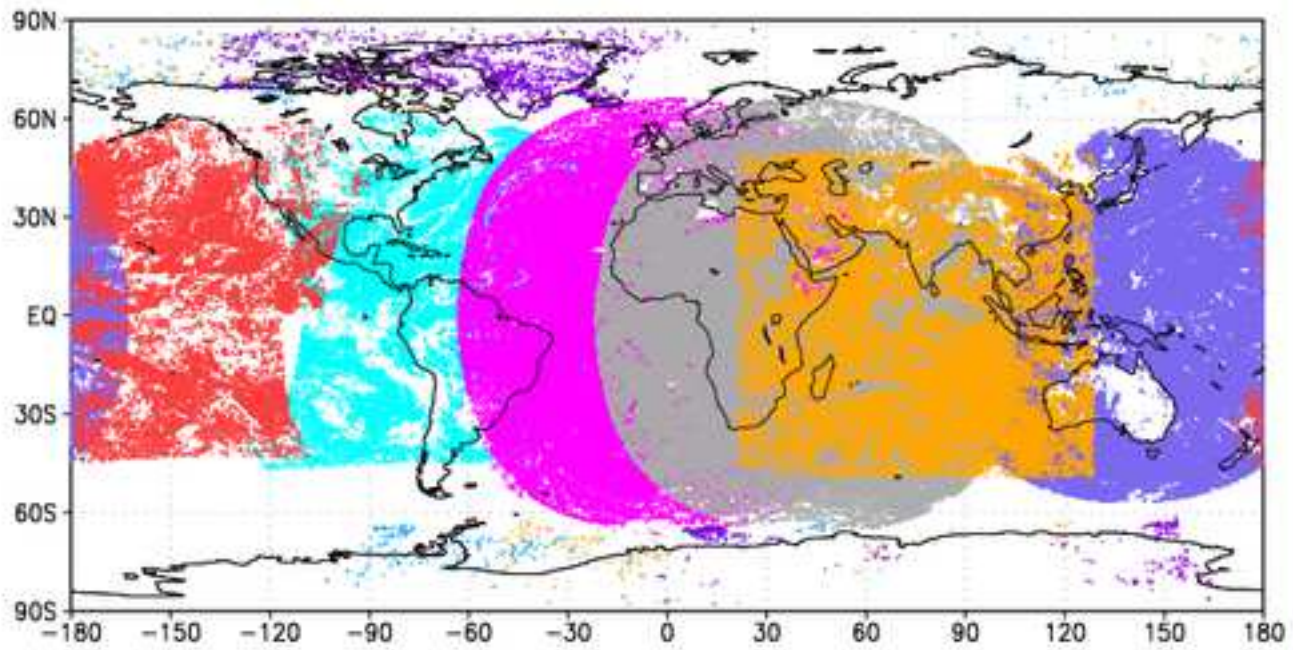
AMDAR(14911)

ACARS(149786)



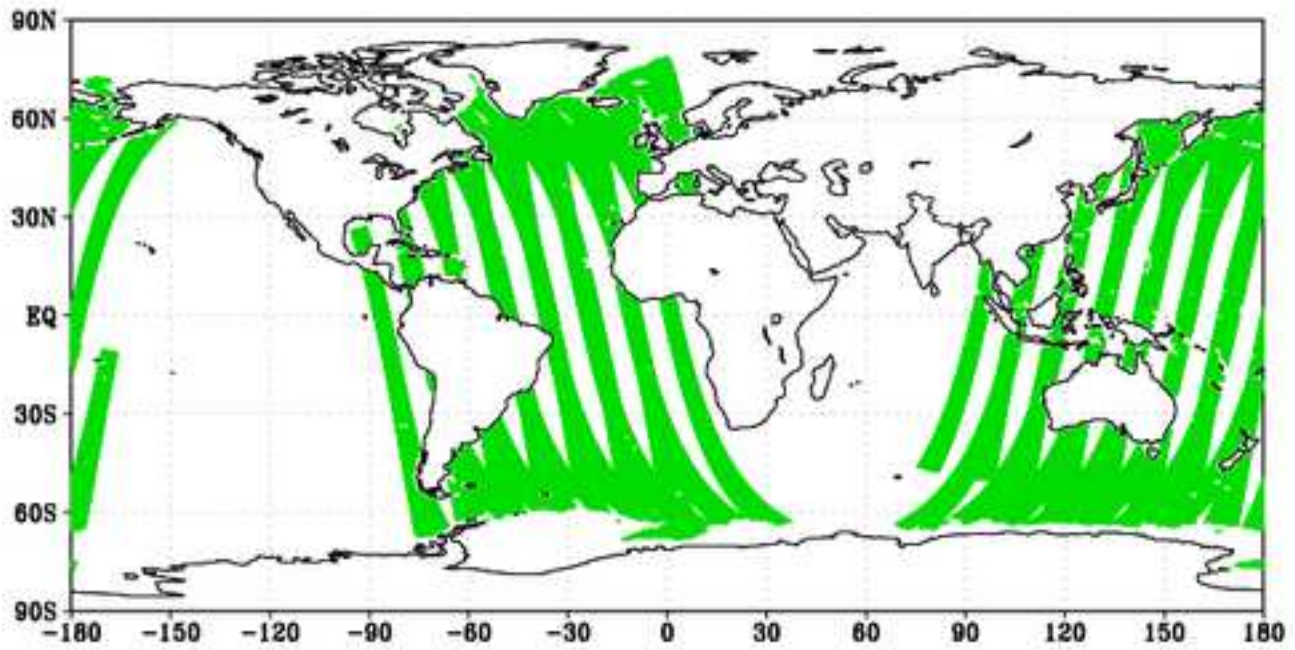
Data Coverage: AMV (12122017 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 580743

GOES-15(22617) GOES-13(37058) INSAT-3D(36840) METEOSAT-8(180625)
METEOSAT-10(157659) HIMAWARI-8(160657) MODIS/Terra(0) MODIS/Aqua(0)
METOP(2672) NOAA-15(459) NOAA-18(0) NOAA-18(0) NOAA-19(546)



Data Coverage: ASCAT winds (12122017 00UTC +/- 03Hrs)

ASCAT (240665)



Data Coverage: SAT RADIANCE (12122017 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 4009747

NOAA15(80970)

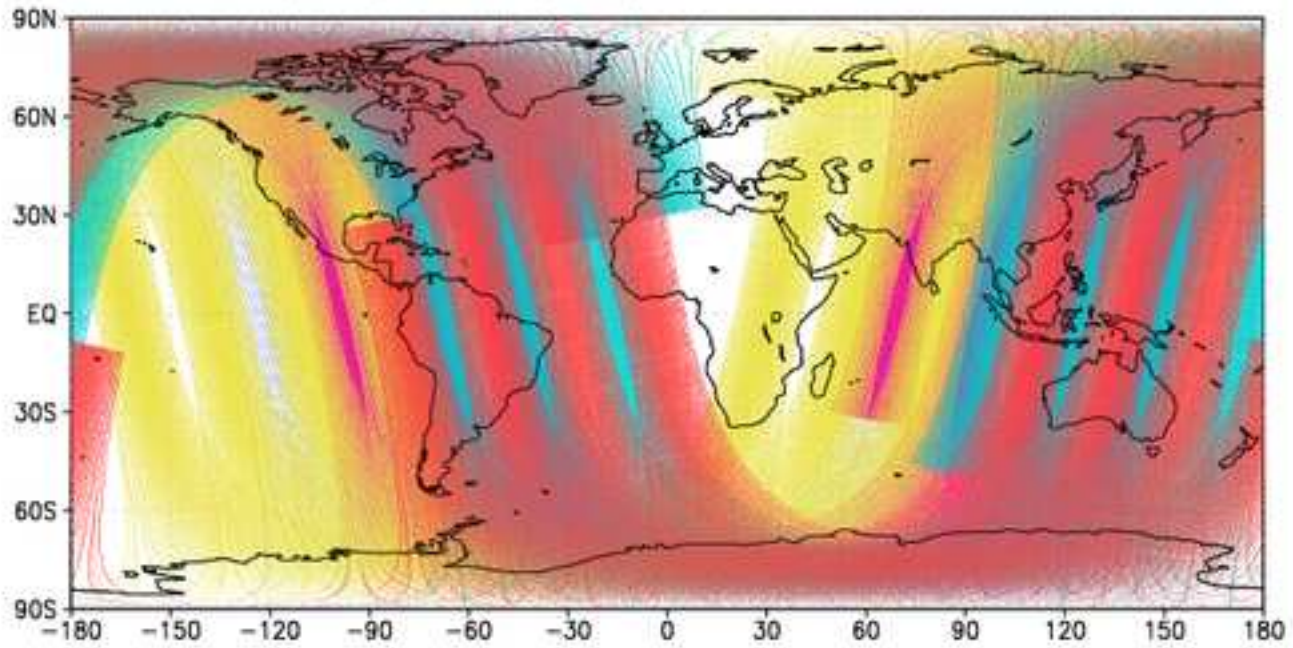
NOAA18(0)

NOAA19(980142)

NOAA17(9851822)

METOP1(985117)

METOP2(978336)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (12122017 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2337214

NOAA15(0)

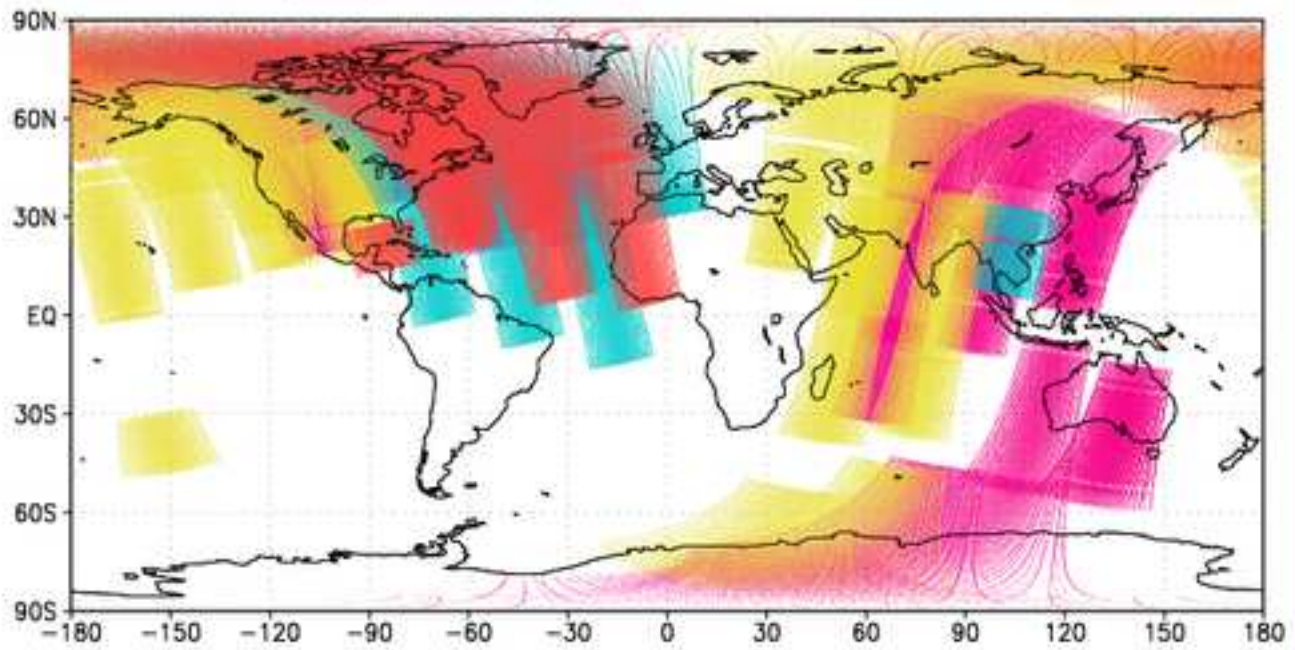
NOAA16(0)

NOAA18(876338)

NOAA19(727817)

METOP1(426190)

METOP2(355369)

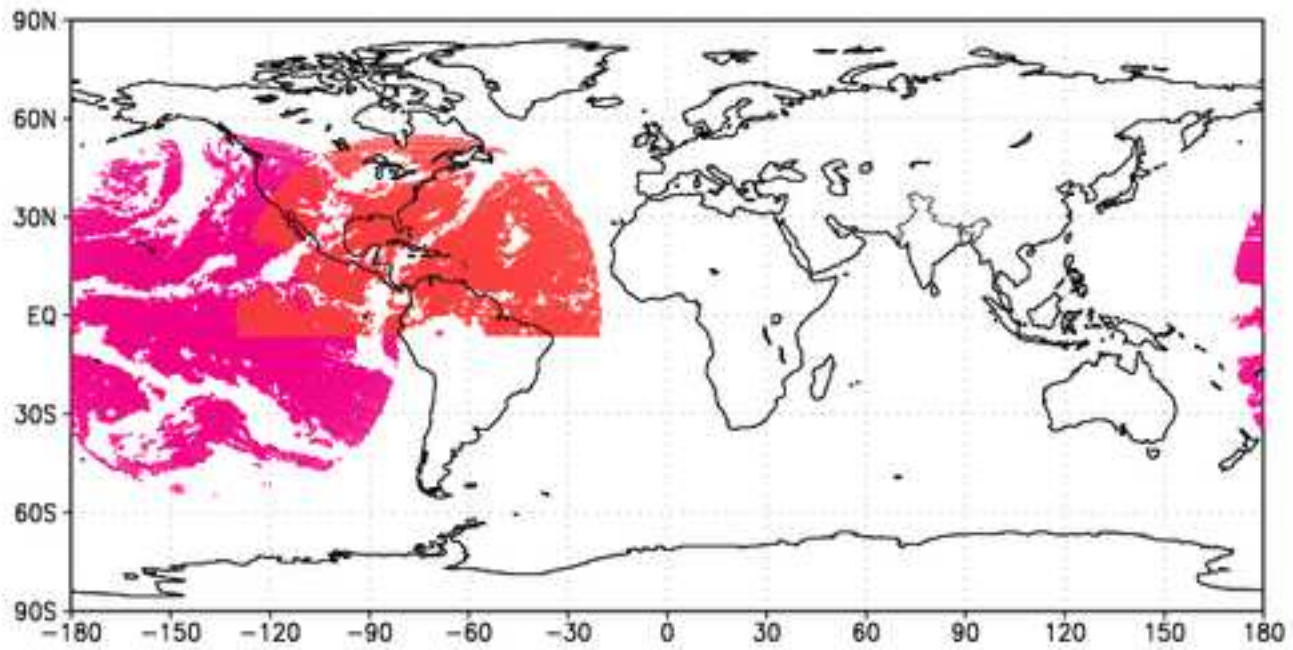


Data Coverage: GOES CSBT (12122017 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 42910

GOES-15(26891)

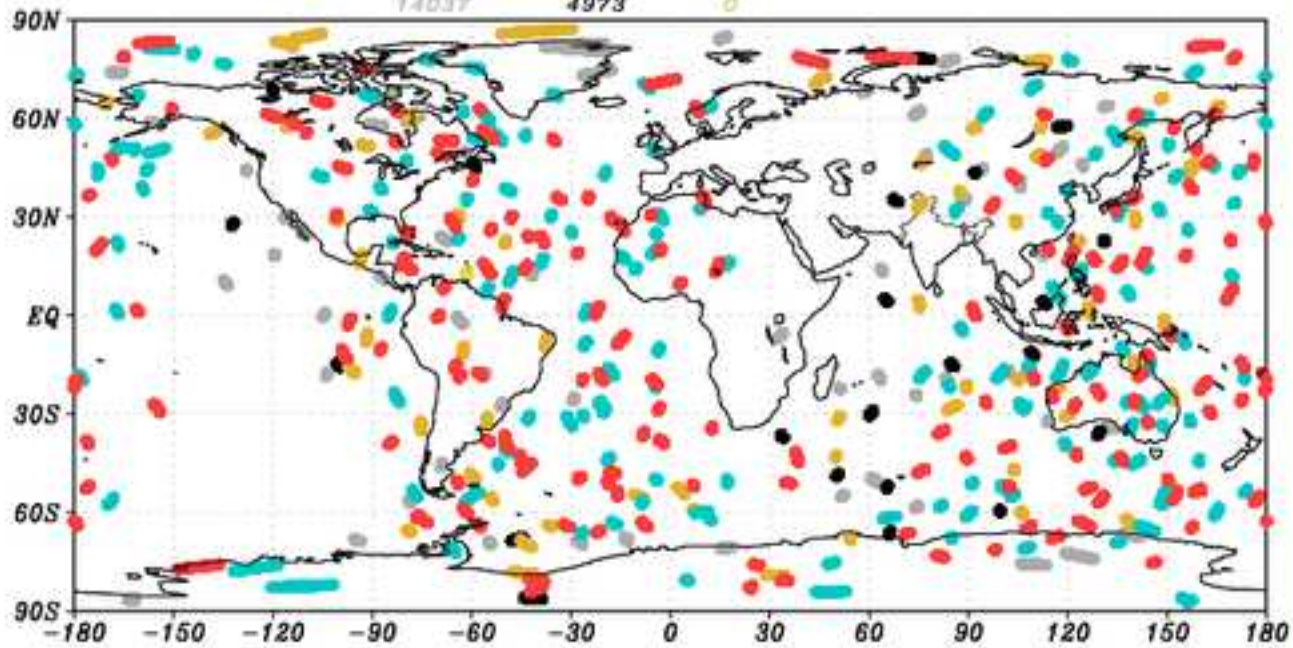
GOES-13(16019)



Data Coverage:GPSRO (12122017 0000UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 112801

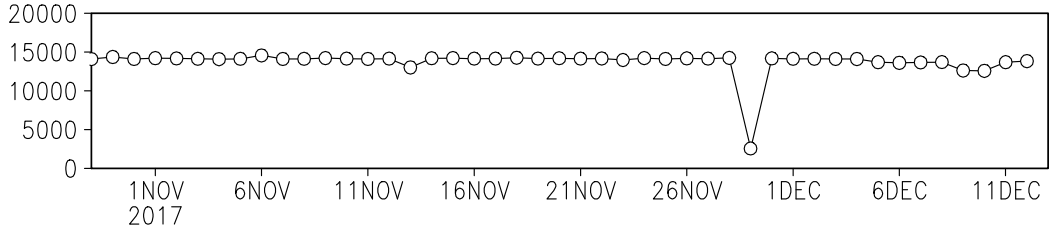
GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	39563	35633	0	0	234	0	0	18301
			TerraSAR-X	TenDEM-X	GRACE-B			
			14037	4973	0			



Count for different types of observation (Global) for the last 45 Days (valid for 00 UTC)

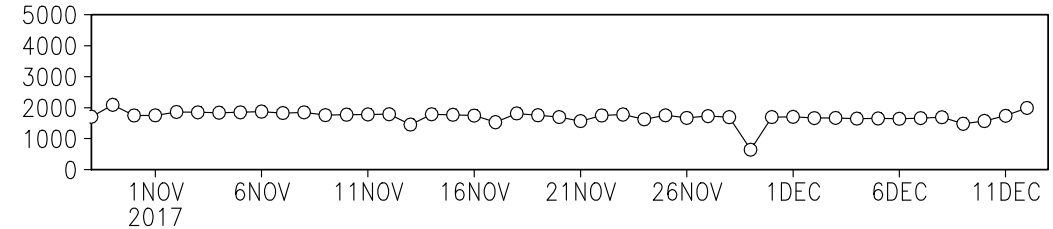
SYNOP

Avg=14169
Today_Cnt=13829
Dep=-2. %



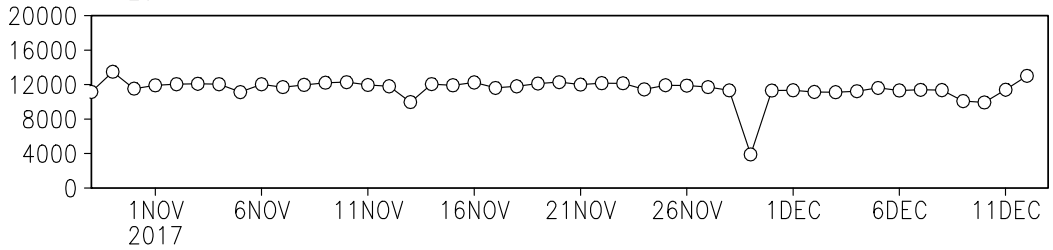
SHIP

Avg=1794
Today_Cnt=1990
Dep=11. %



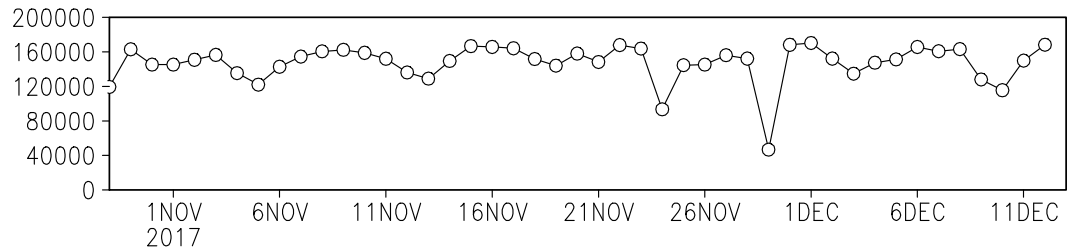
BUOY

Avg=12009
Today_Cnt=13002
Dep=8. %



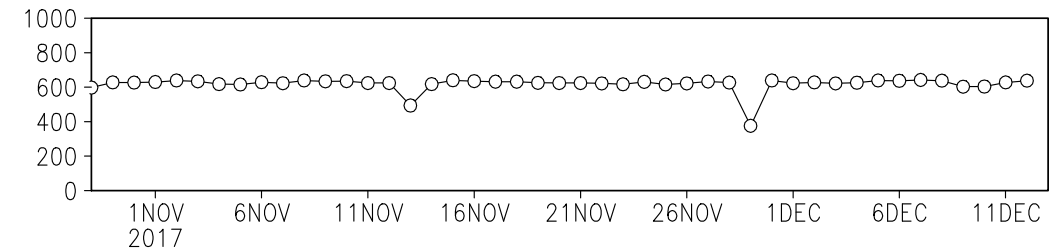
AIRCRAFT

Avg=158599
Today_Cnt=168237
Dep=6. %



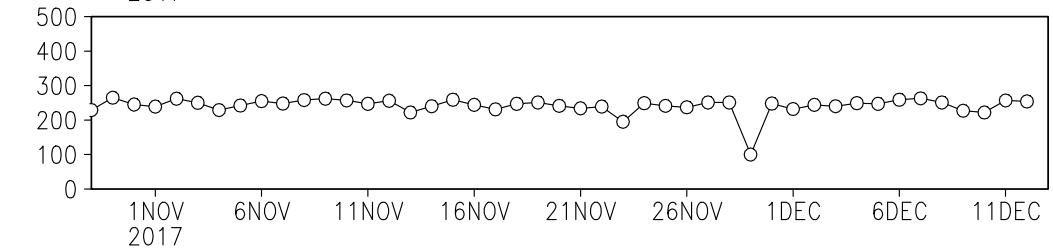
RS/RW

Avg=629
Today_Cnt=638
Dep=1. %



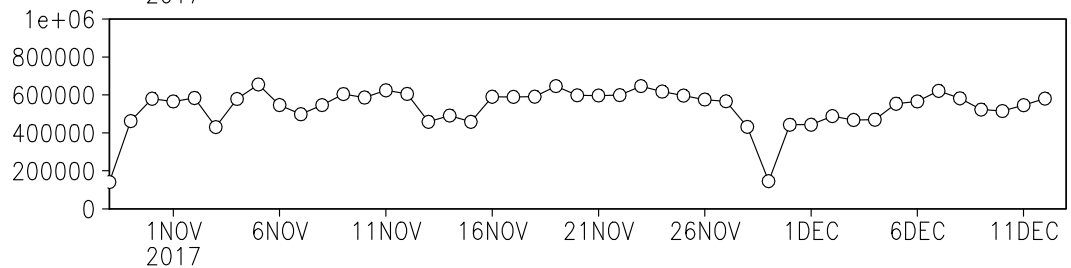
PILOT

Avg=250
Today_Cnt=254
Dep=2. %



AMV

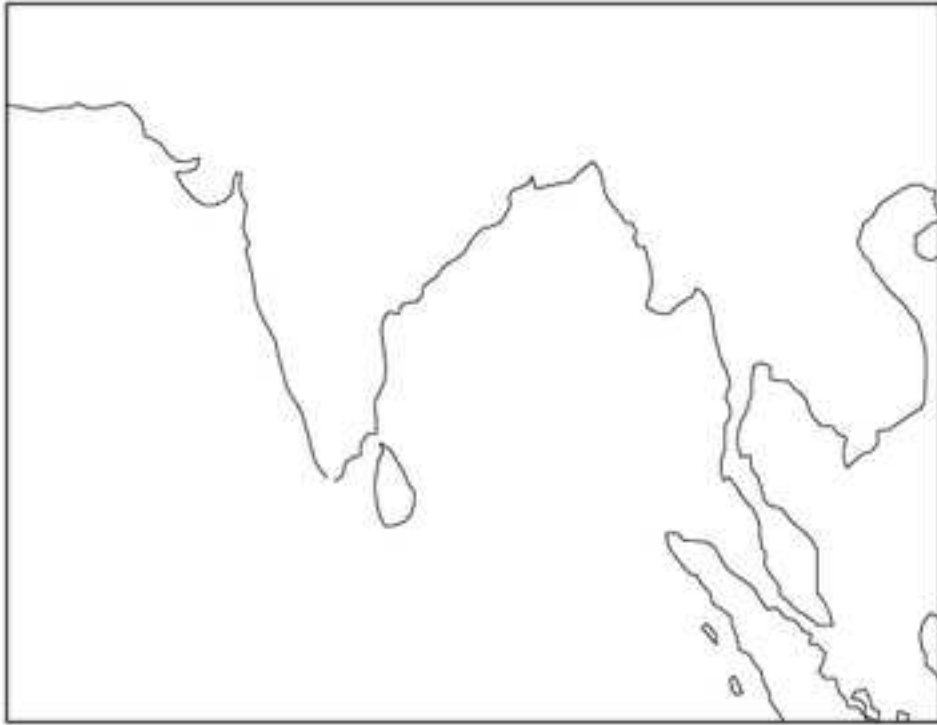
Avg=591317
Today_Cnt=580743
Dep=-2. %



SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20171212 00Z)

ASCAT WINDS (12122017 00 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

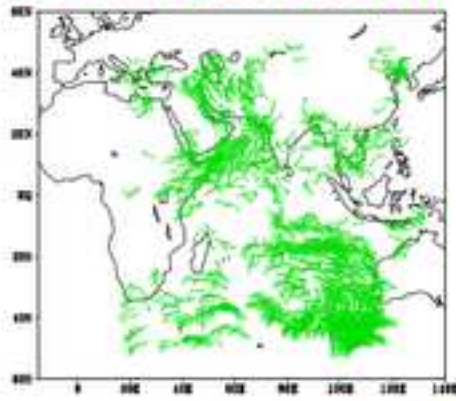
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

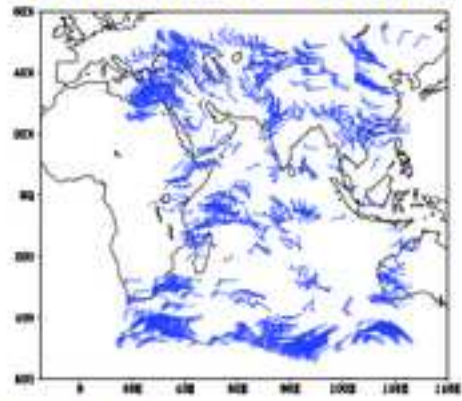
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (12122017 0000UTC)

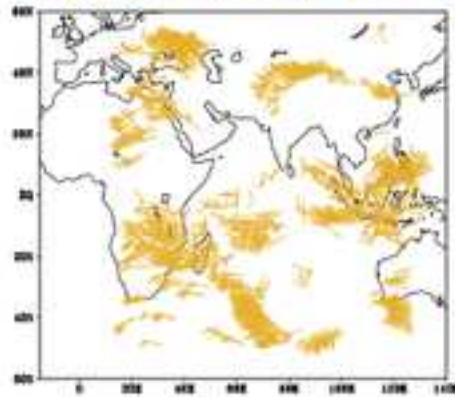
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

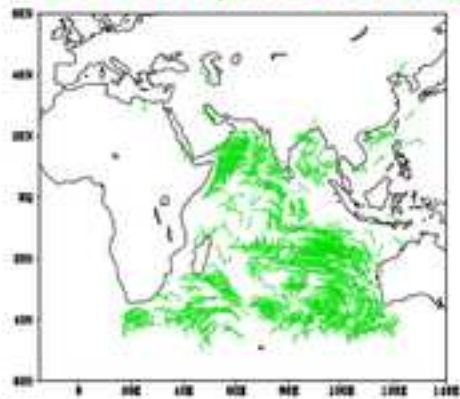


High Level (Above 400 hPa)

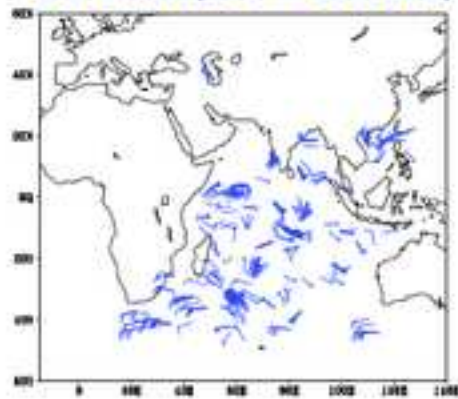


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (12122017 0000UTC)

Low Level (Below 700 hPa)



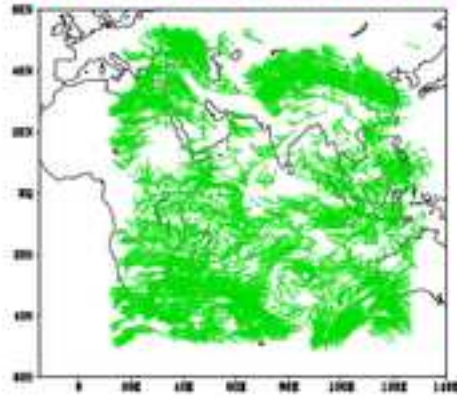
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (12122017 0000UTC)

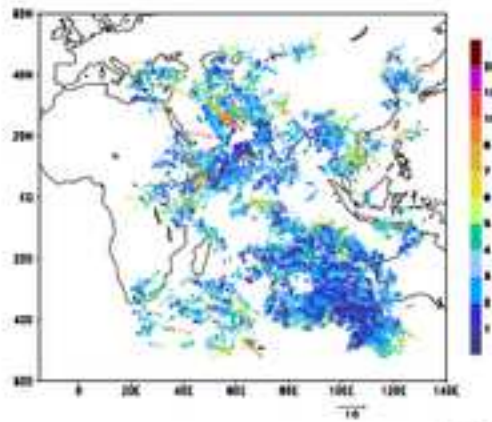
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

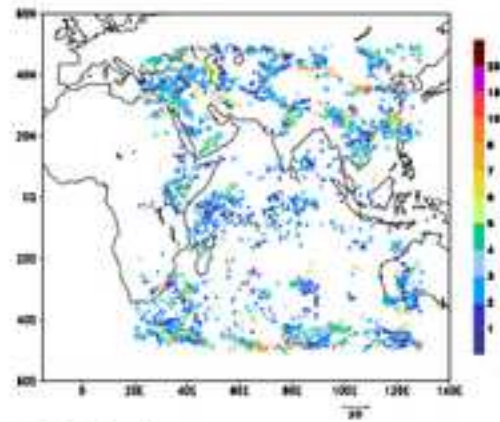


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (12122017 0000UTC)

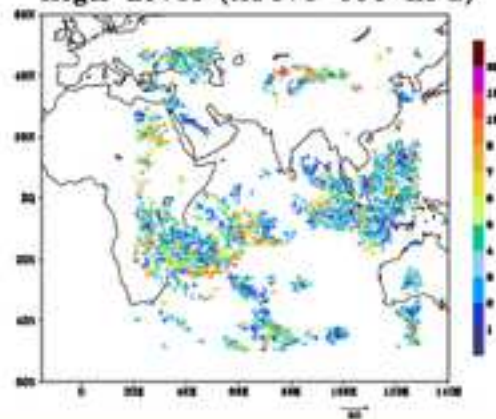
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

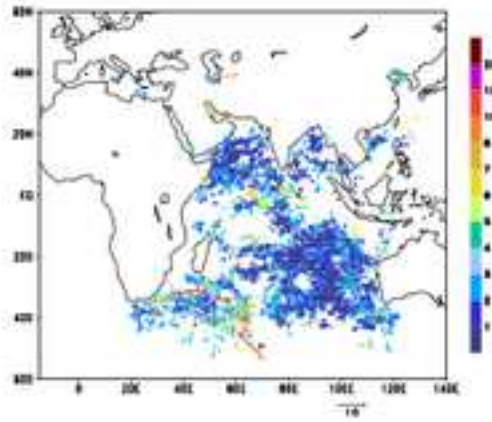


High Level (Above 400 hPa)

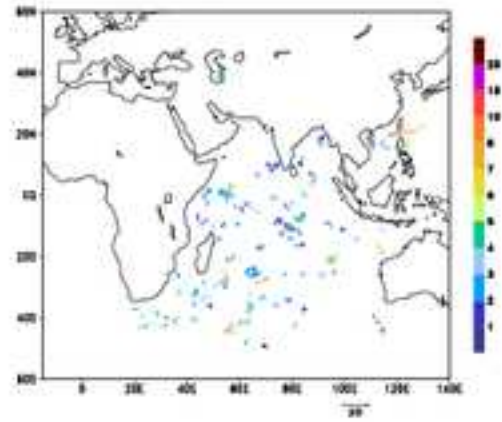


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (12122017 0000UTC)

Low Level (Below 700 hPa)



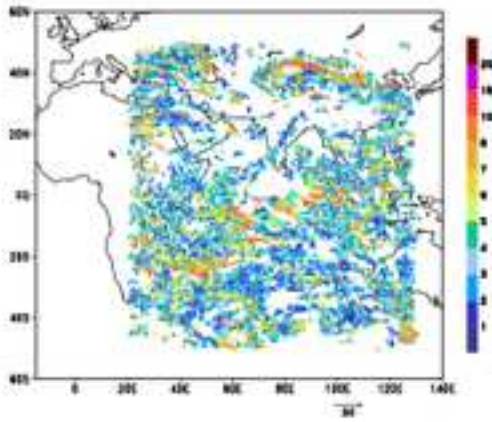
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 0000UTC)

WV, High Level (Above 400 hPa)

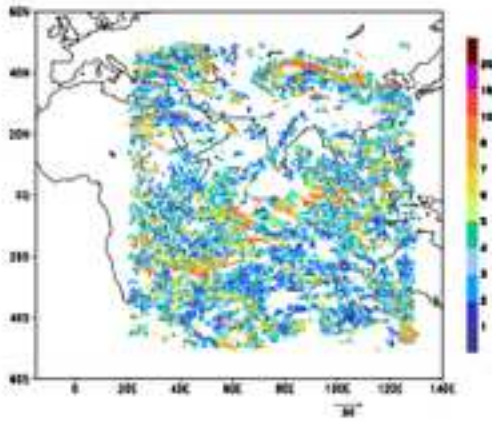
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 0000UTC)

WV, High Level (Above 400 hPa)

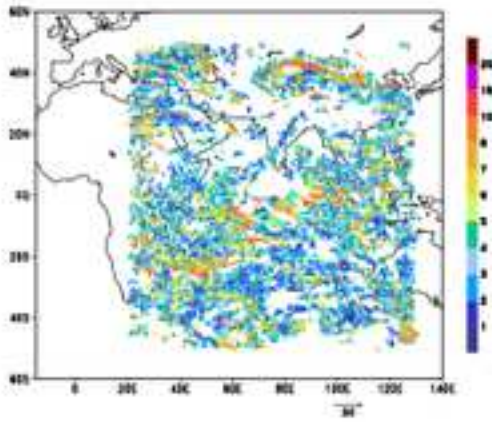
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 0000UTC)

WV, High Level (Above 400 hPa)

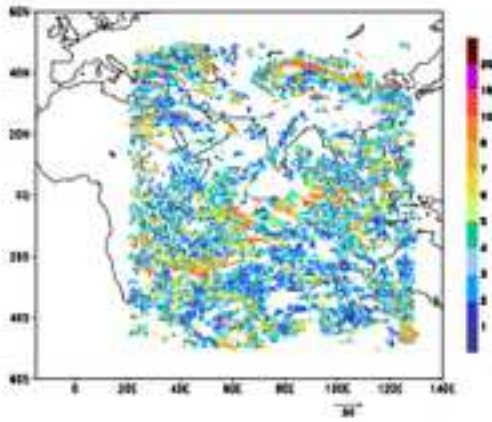
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 0000UTC)

WV, High Level (Above 400 hPa)

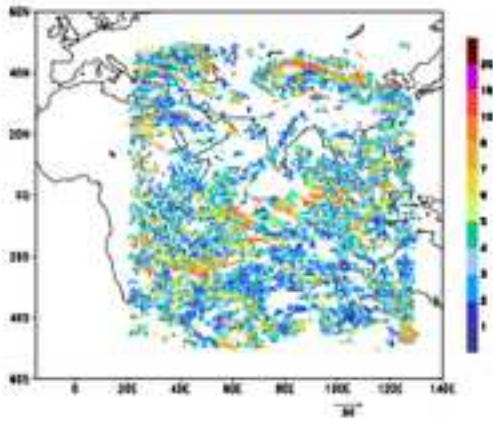
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 0000UTC)

WV, High Level (Above 400 hPa)

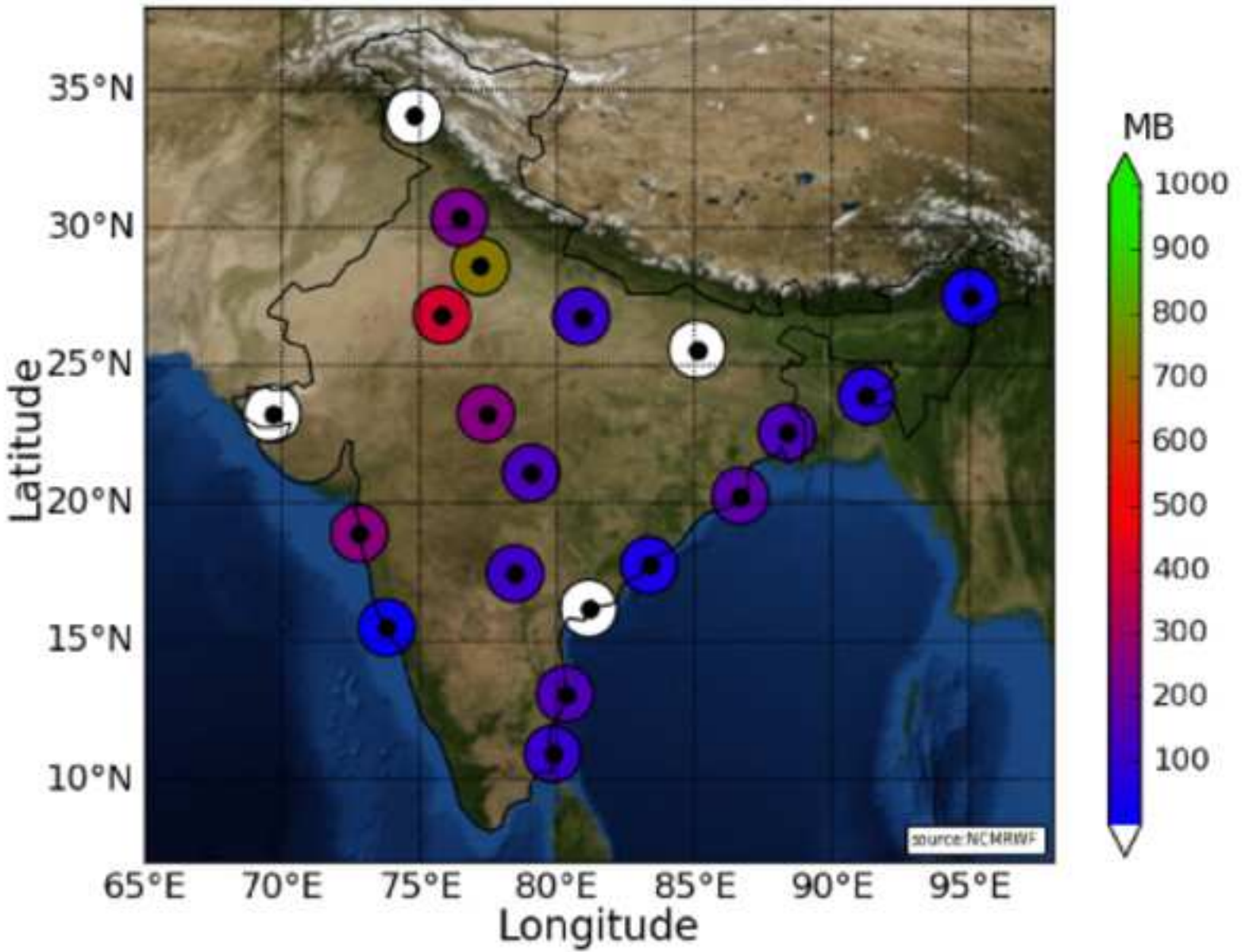
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

Date: 20171212 at : 00UTC



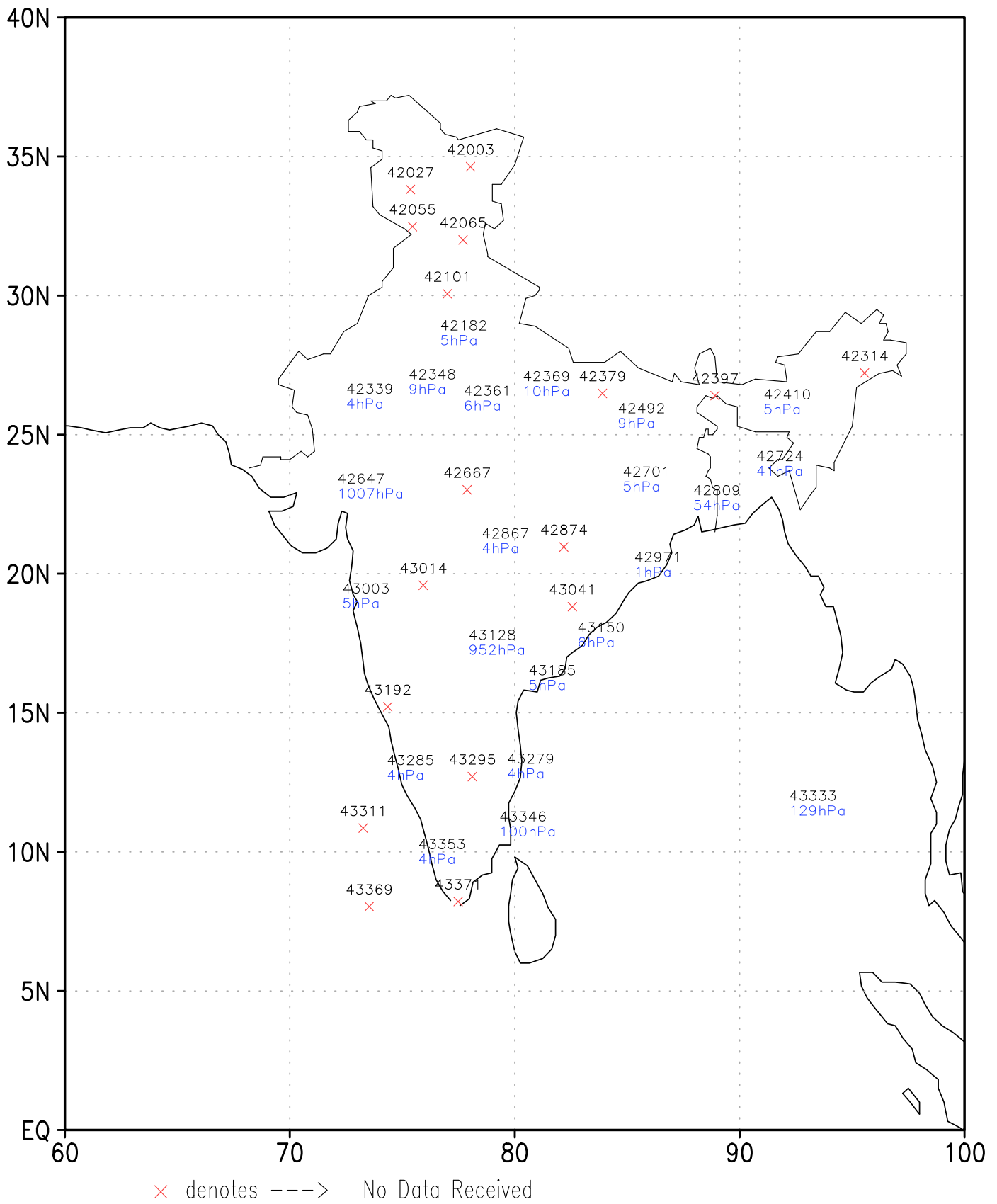
source: NCMRWF

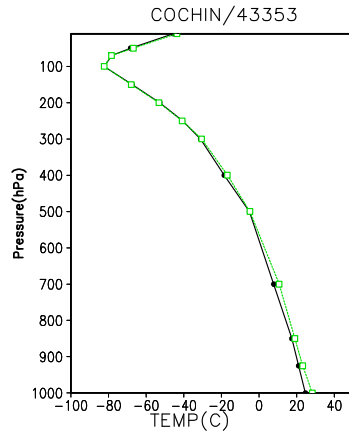
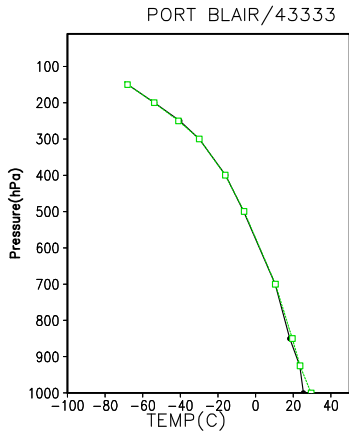
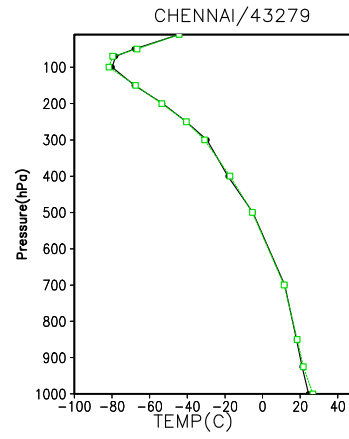
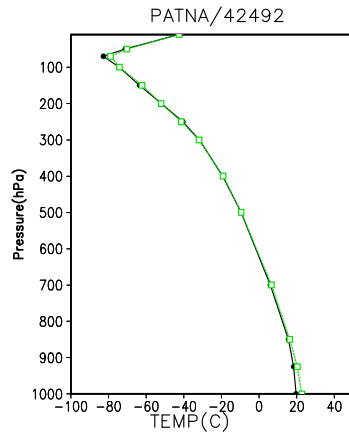
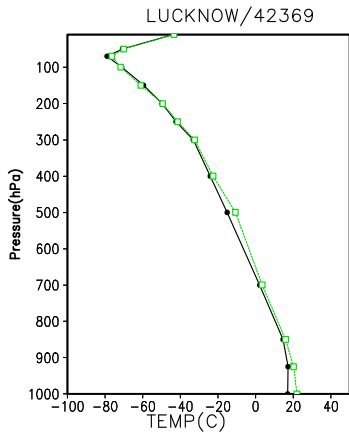
Quality of Indian RS/RW Observations

Maximum height reported
by RS/RW ascents

Temperature and Zonal Wind
Rejections by NGFS GDAS

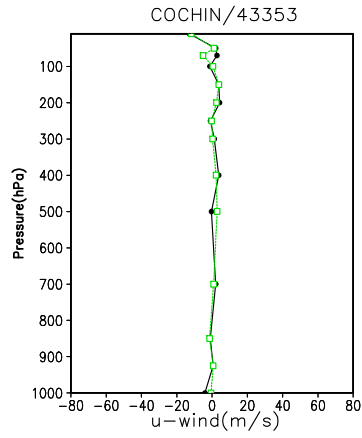
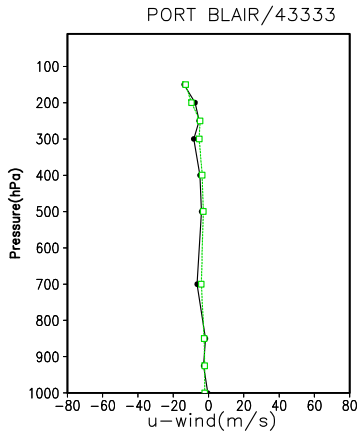
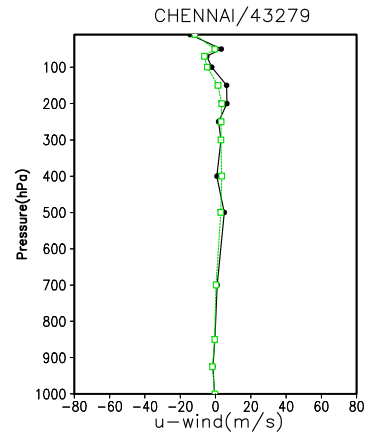
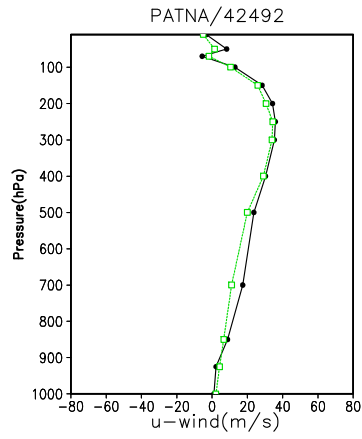
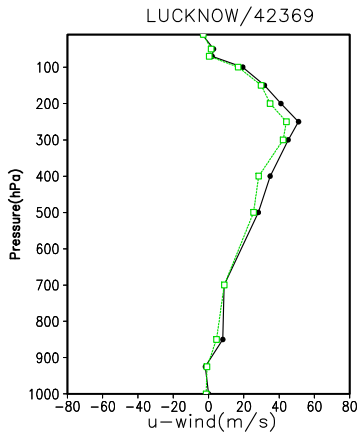
Highest Level Reported by RS/RW (12122017 0000UTC +/- 03Hrs)





Observed (—) and 1st-guess (—) Temperature (Deg C) for 00UTC 12122017

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



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 00UTC 12122017
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)