

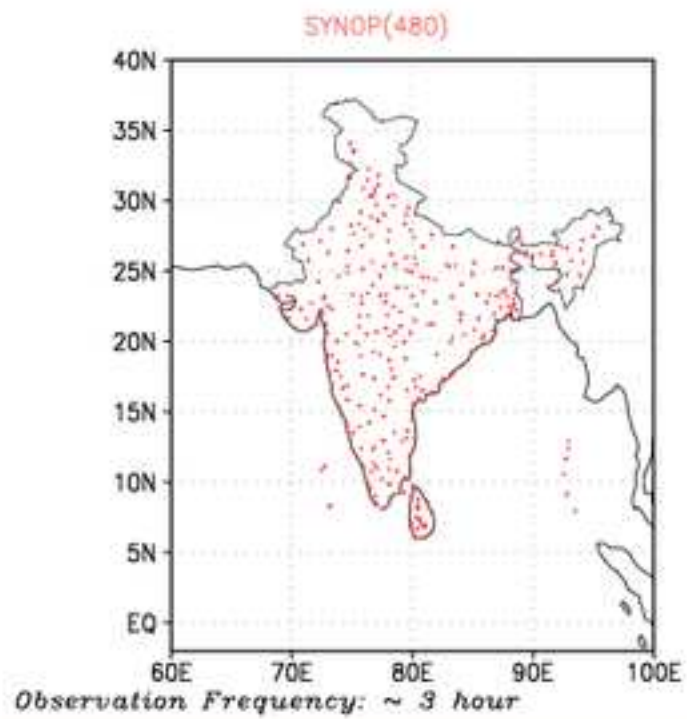
Observation Monitoring

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

for 12122017 (1200 UTC)

Indian Observation Coverage

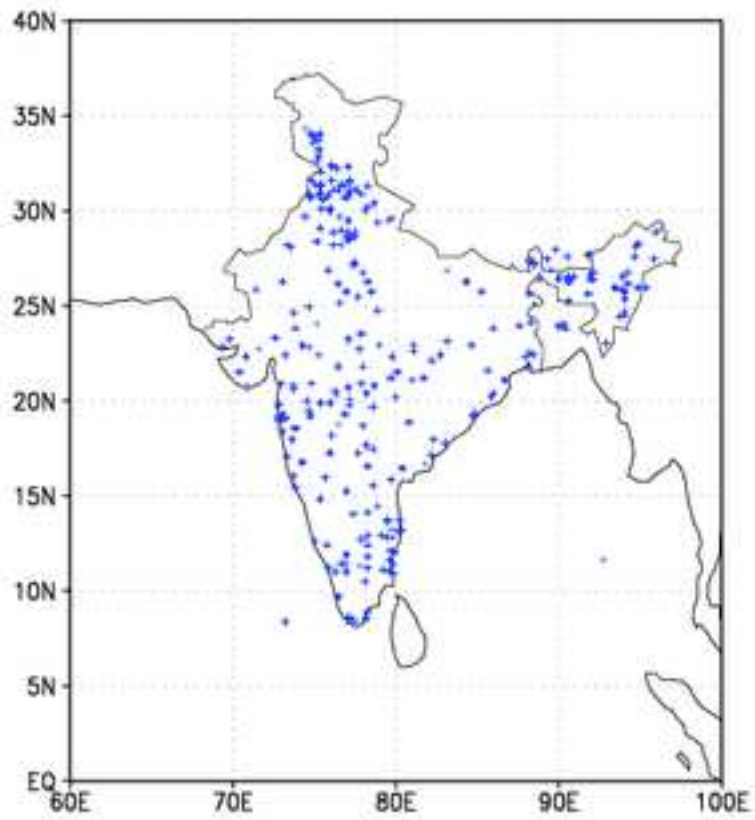
Data Coverage: Surface (12122017 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 480
(42 & 43 Block)



Data Coverage: Indian AWS (12122017 1200UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1320

AWS PRESSURE (1320)

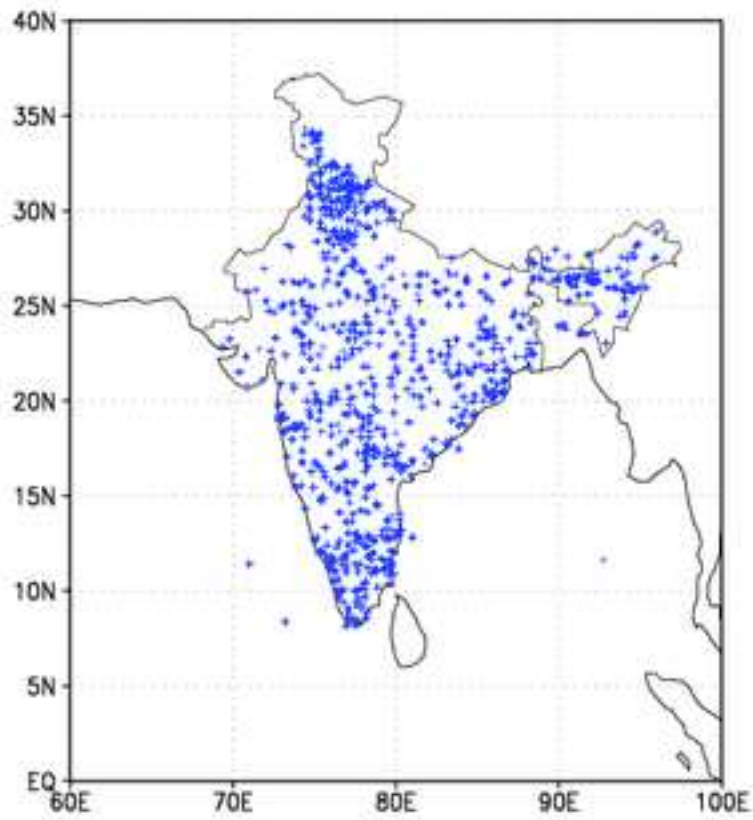


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (12122017 1200UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 3953

AWS + ARG (3953)

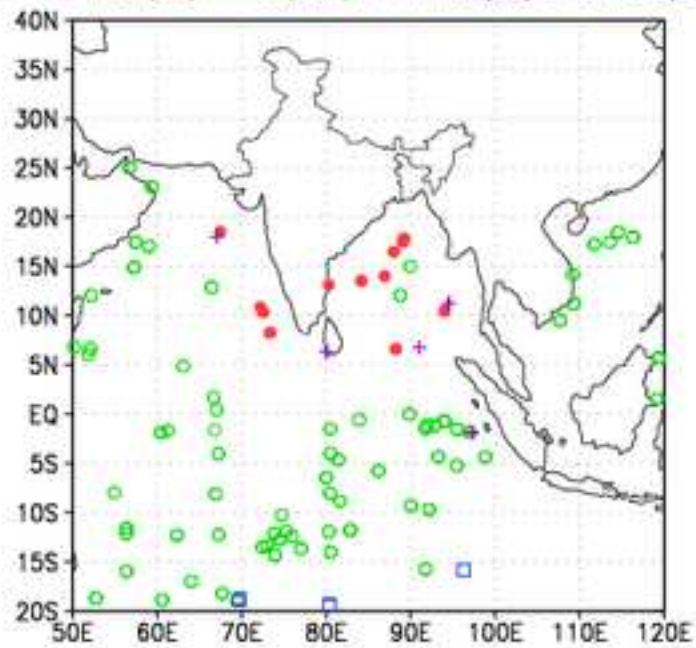


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (12122017 1200UTC +/- 3 Hrs)

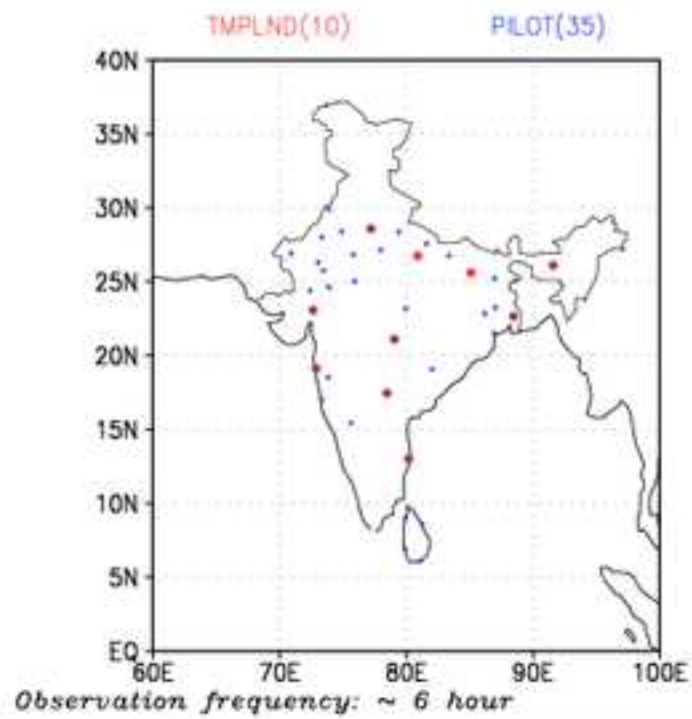
Total Number of Observations Received at NCMRWF: 480

country code in GTS as ● INDIA(22) ○ USA(385) + FRANCE(52) □ OTHERS(21)



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

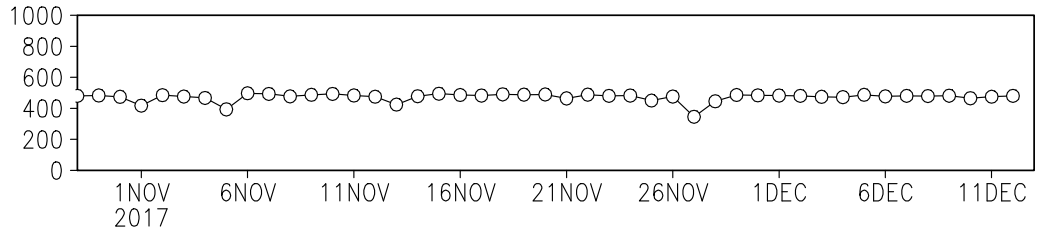
Data Coverage: Sonde (12122017 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 45
(42 & 43 Block)



Count for different types of observation (Over Indian Region) for the last 45 days (valid for 12 UTC)

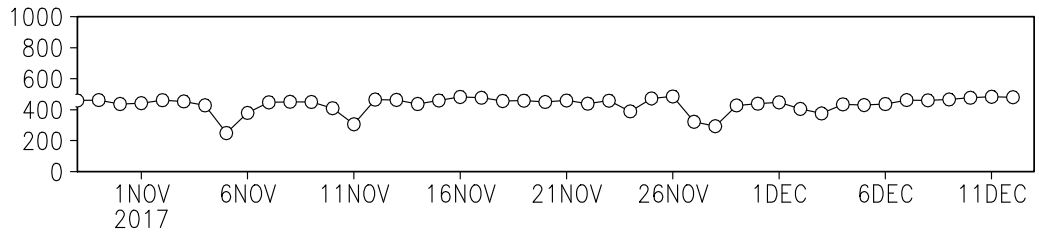
SYNOP

Avg=482
Today_Cnt=480
Dep=-0. %



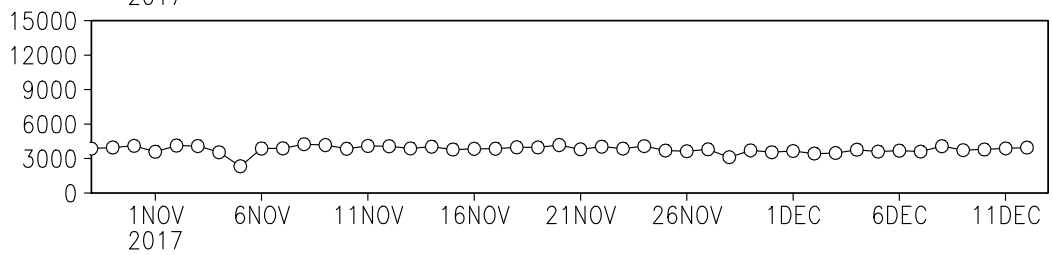
BUOY

Avg=456
Today_Cnt=480
Dep=5. %



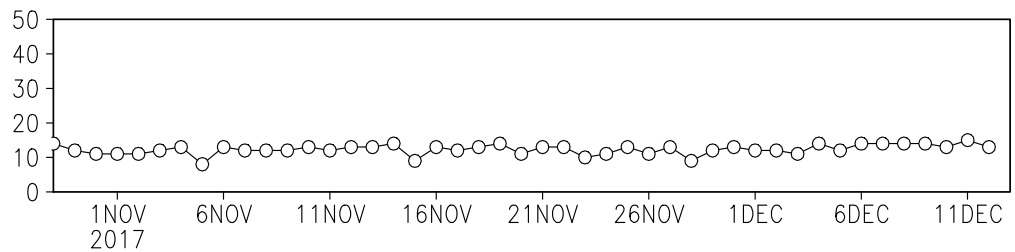
AWS+ARG

Avg=3994
Today_Cnt=3953
Dep=-1. %



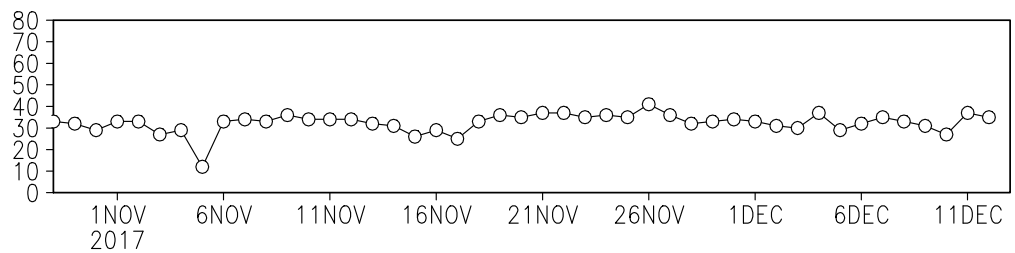
RS/RW

Avg=12
Today_Cnt=13
Dep=8. %



PILOT

Avg=34
Today_Cnt=35
Dep=3. %

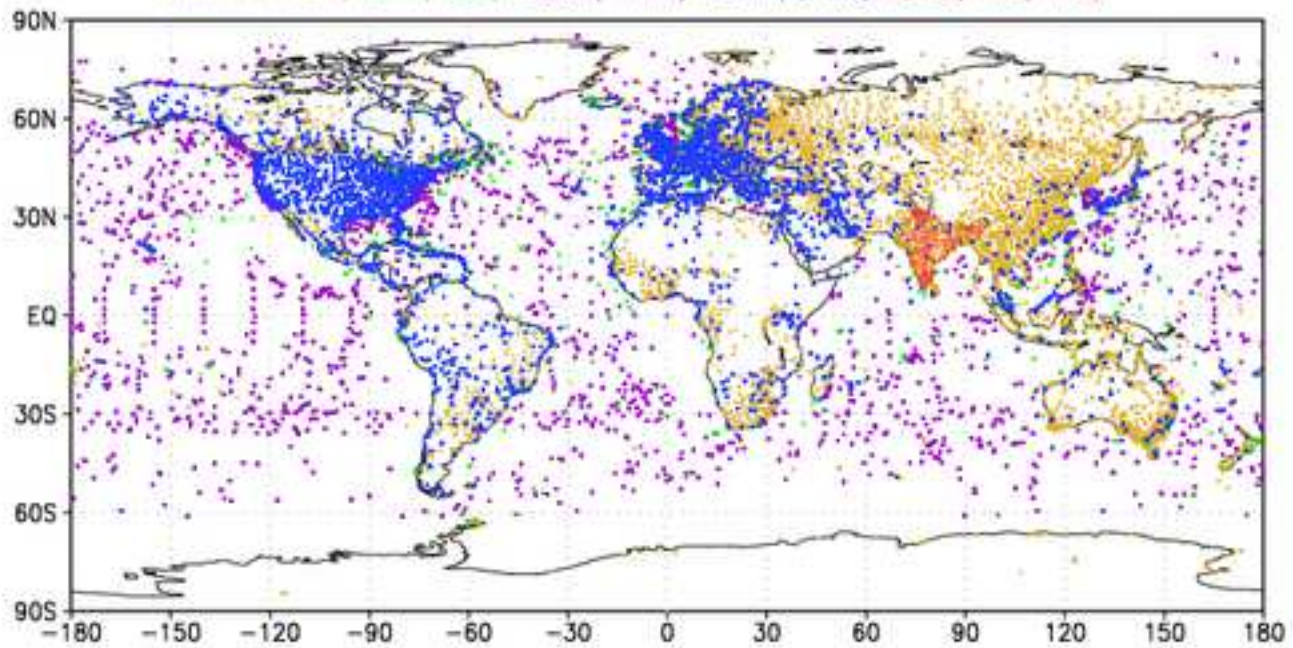


Global Observation Coverage

Data Coverage: Surface (12122017 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 53782

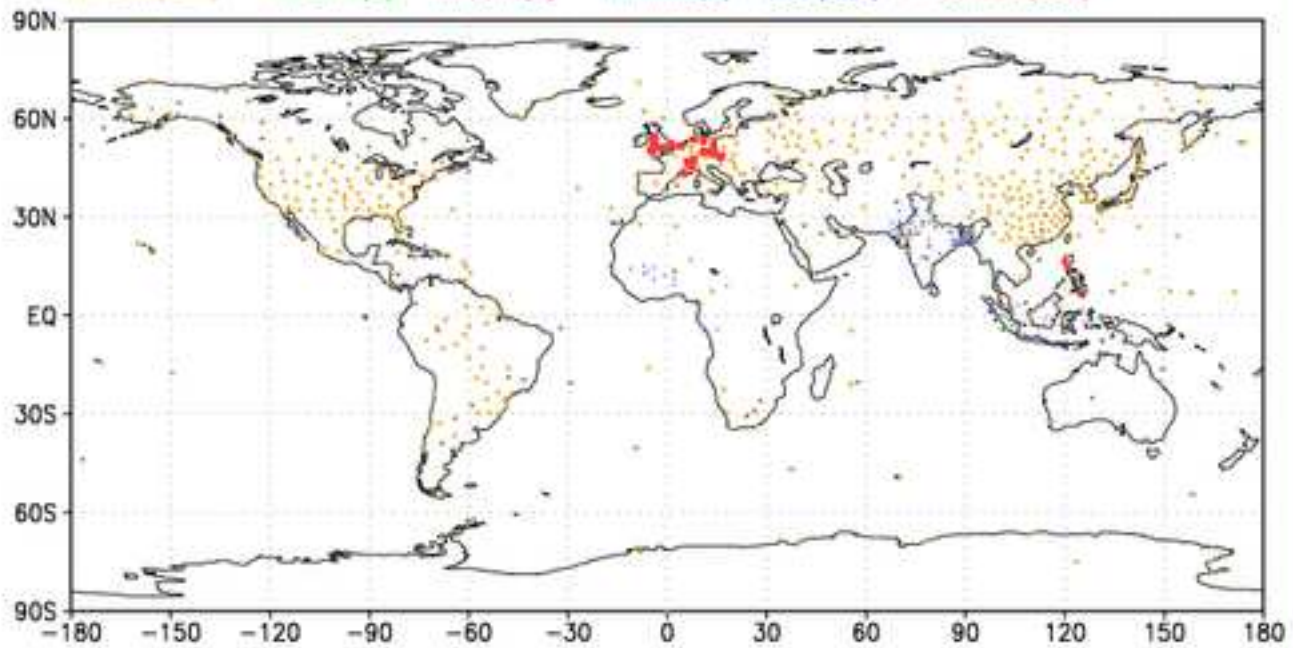
LNDSYN(14831) SHIP(1939) BUOY(11777) METAR(20762) MOBILE/AWS(4473)



Data Coverage: Sonde (12122017 1200UTC +/- 03Hrs)

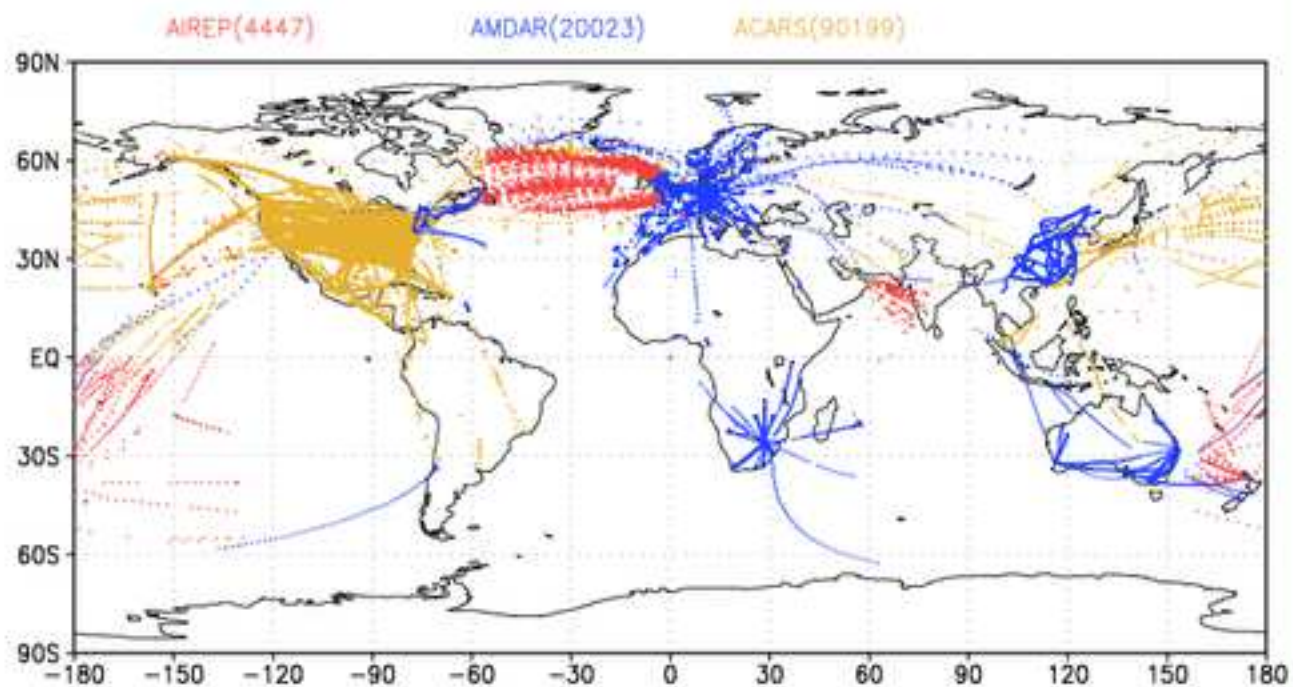
Total Number of Observations Received at NCMRWF: 1453

TMP LND(626) TMP SHP(2) TMP DRP(0) TMP MDB(0) PILOT(239) PROFILER(586)



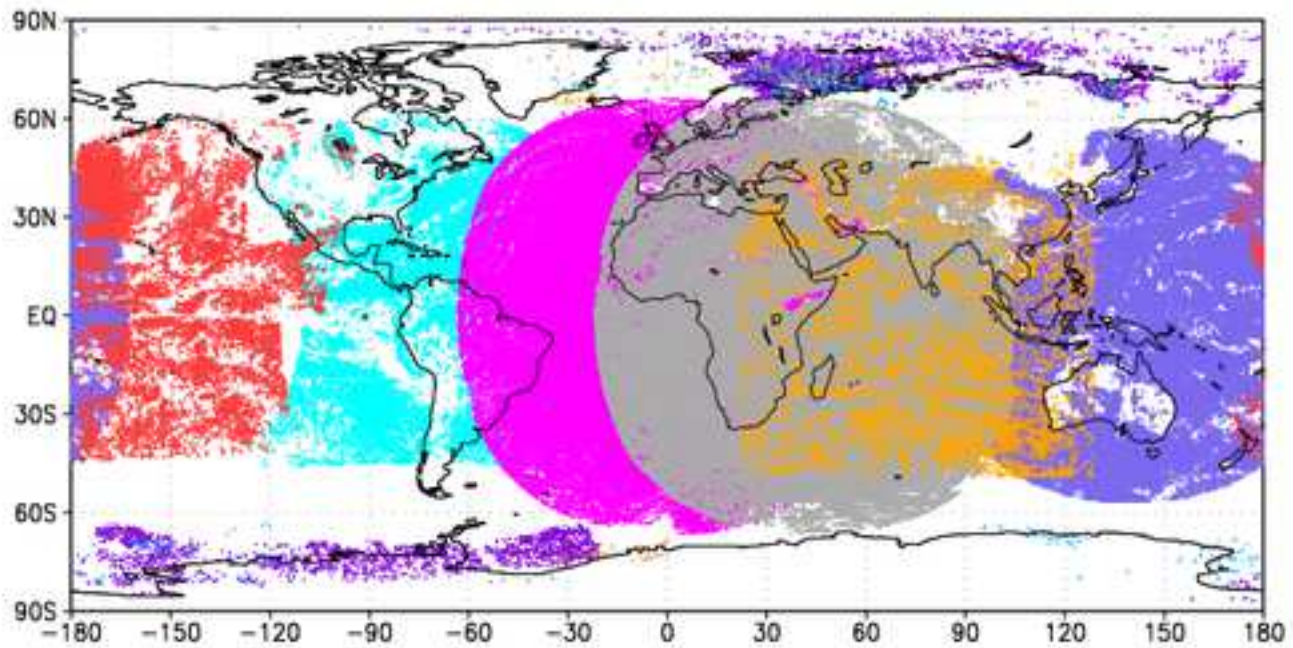
Data Coverage: AIRCFT (12122017 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 114669



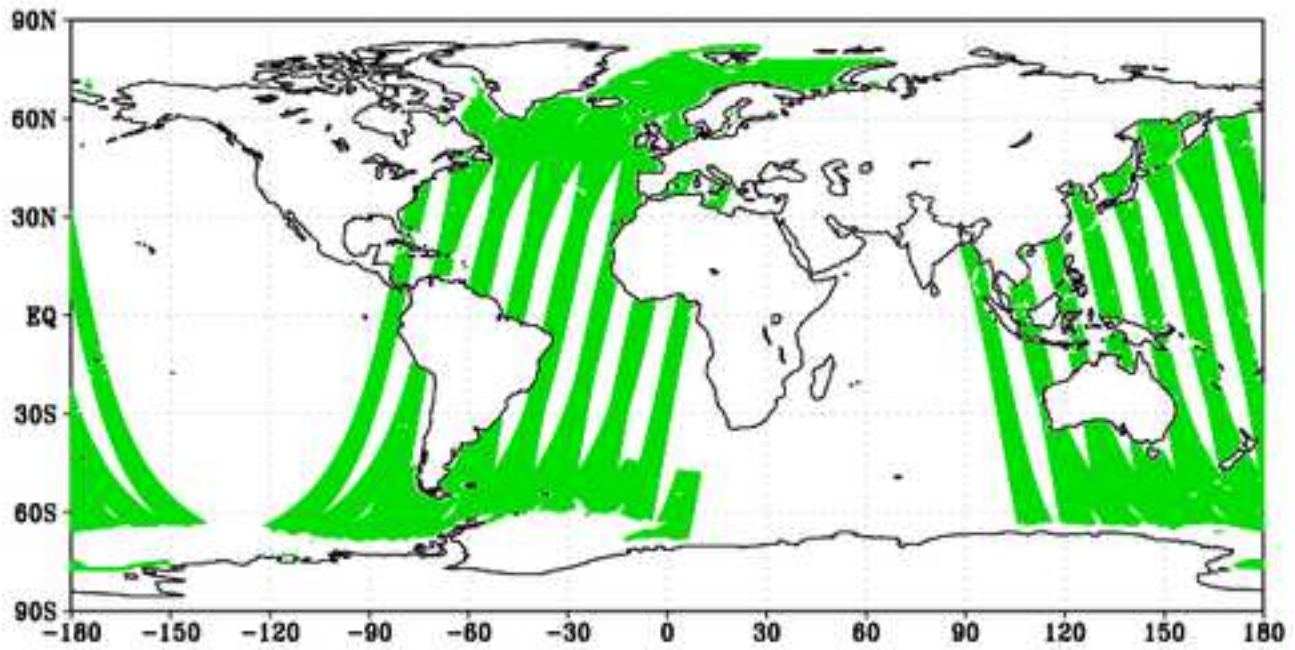
Data Coverage: AMV (12122017 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 673982

GOES-15(17075) GOES-13(36984) INSAT-3D(8848) METEOSAT-8(233036)
METEOSAT-10(250106) HIMAWARI-8(112557) MODIS/Terra(156) MODIS/Aqua(0)
METOP(6583) NOAA-15(245) NOAA-18(0) NOAA-18(285) NOAA-19(403)



Data Coverage: ASCAT winds (12122017 12UTC +/- 03Hrs)

ASCAT (240327)



Data Coverage: SAT RADIANCE (12122017 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3254547

NOAA15(34455)

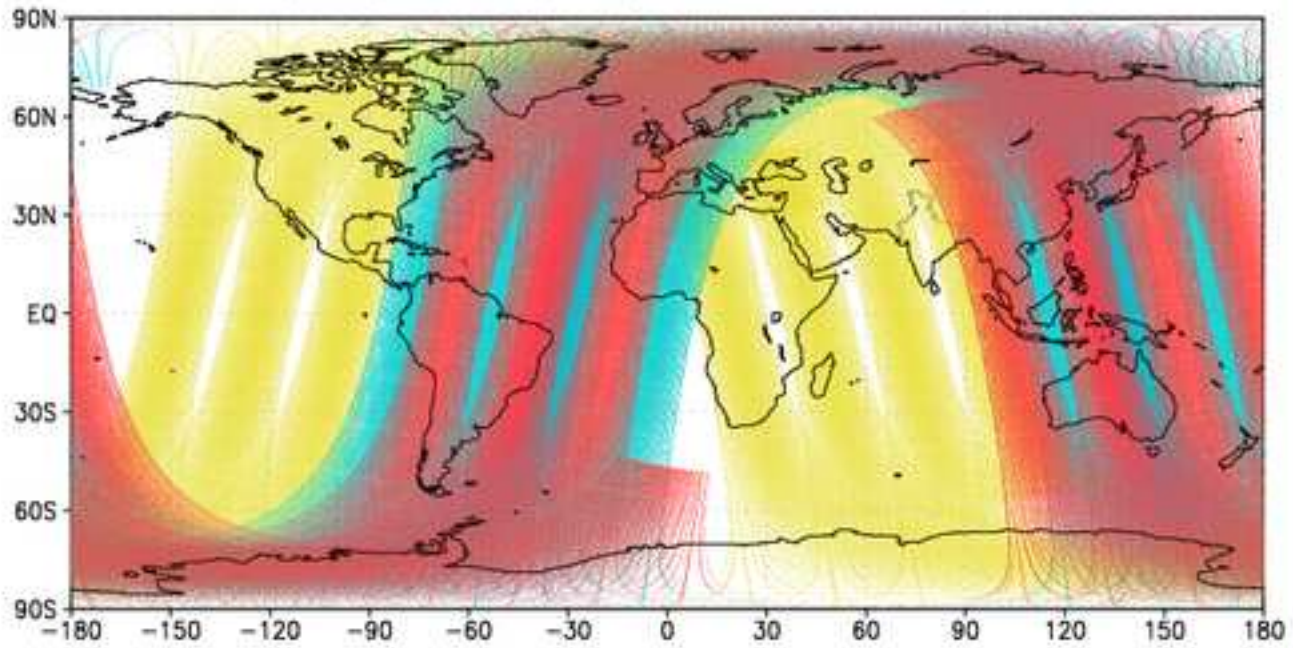
NOAA18(0)

NOAA18(319008)

NOAA18(834320)

METOP1(987259)

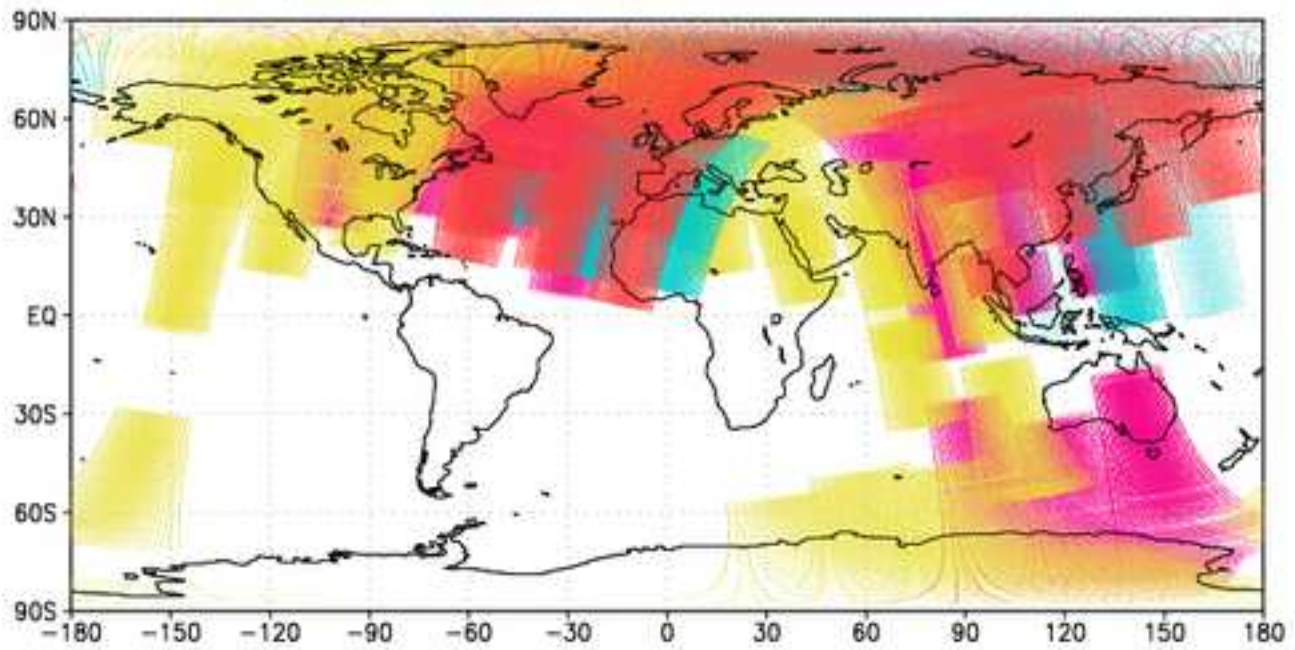
METOP2(079485)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (12122017 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2551524

NOAA15(0) NOAA18(0) NOAA18(845905) NOAA18(823812)
METOP1(532502) METOP2(249204)

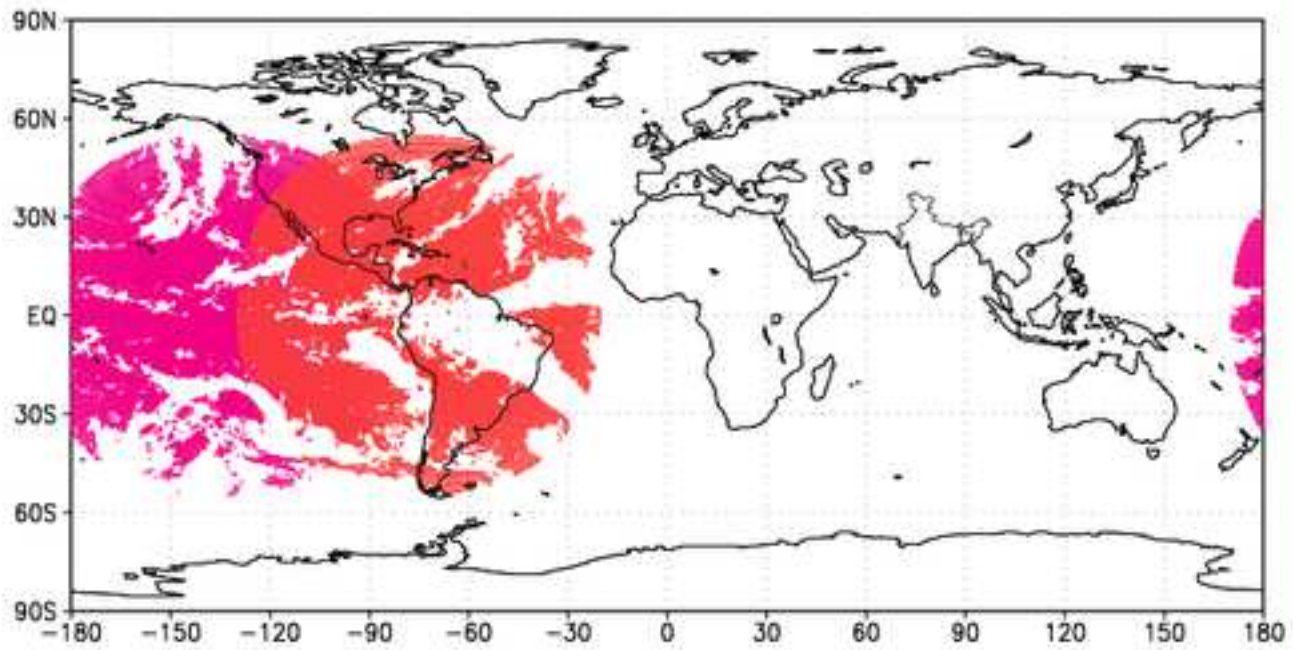


Data Coverage: GOES CSBT (12122017 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 50881

GOES-15(27349)

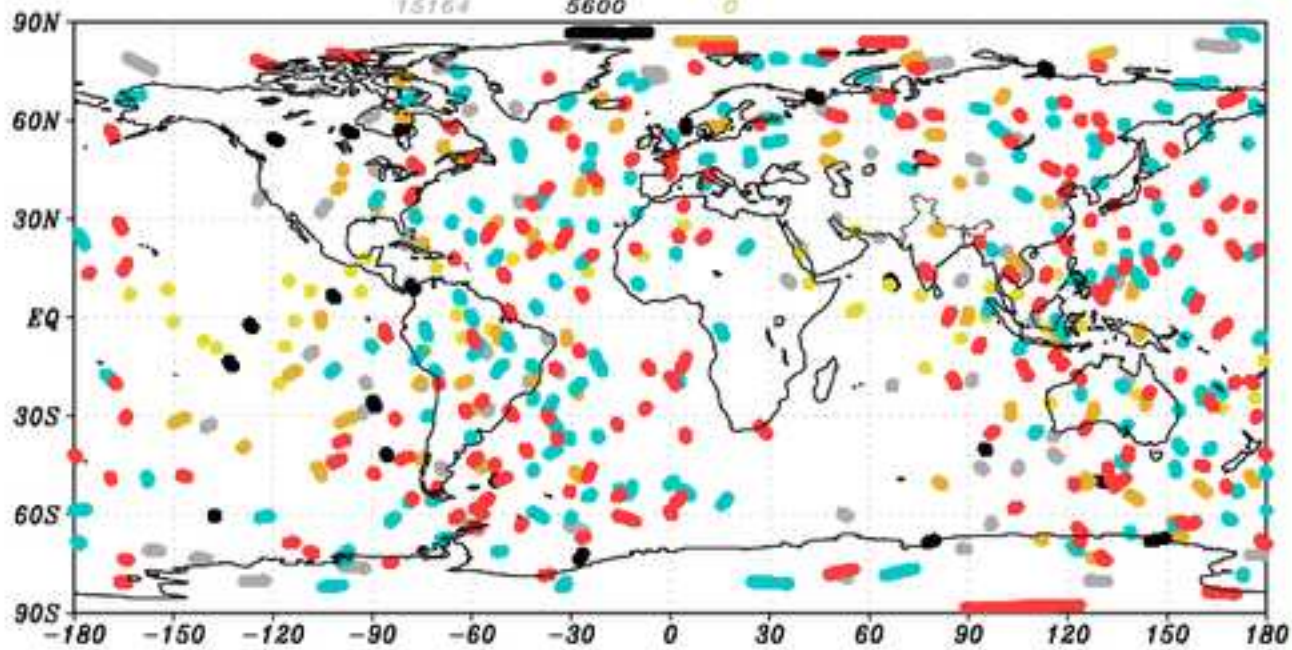
GOES-13(23532)



Data Coverage:GPSRO (12122017 1200UTC +/-03Hrs)

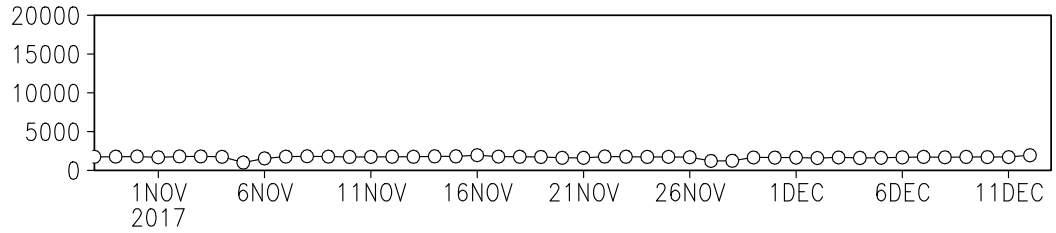
Total Number of Observations Received at NCMRWF: 124916

GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	40282	36610	0	0	6598	0	0	18662
			TerraSAR-X	TenDEM-X	GRACE-B			
			15164	5600	0			

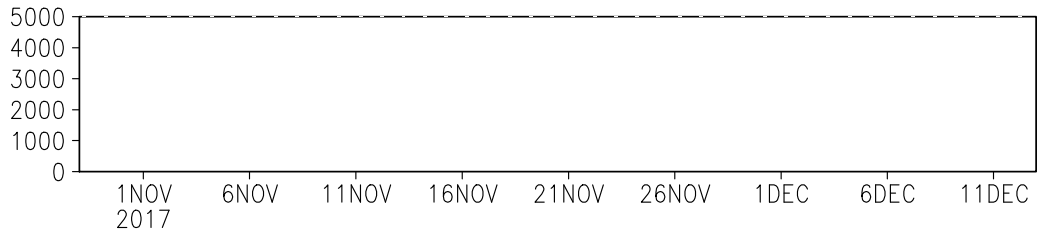


Count for different types of observation (Global) for the last 45 Days (valid for 12 UTC)

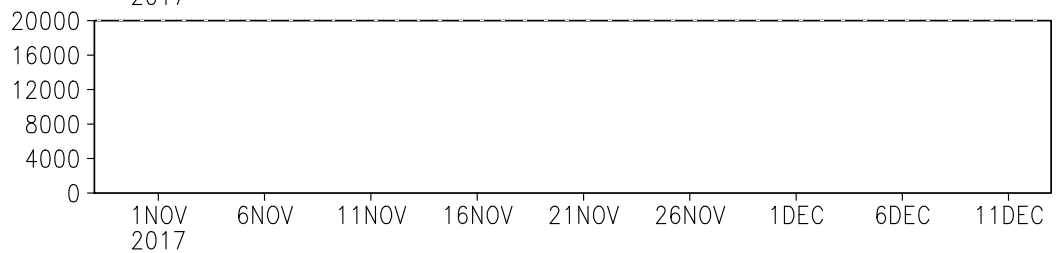
SYNOP
Avg=
Today_Cnt=
Dep= %



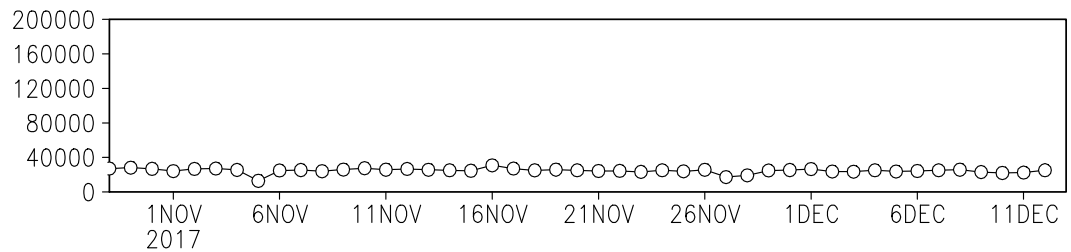
SHIP
Avg=1761
Today_Cnt=1939
Dep=10. %



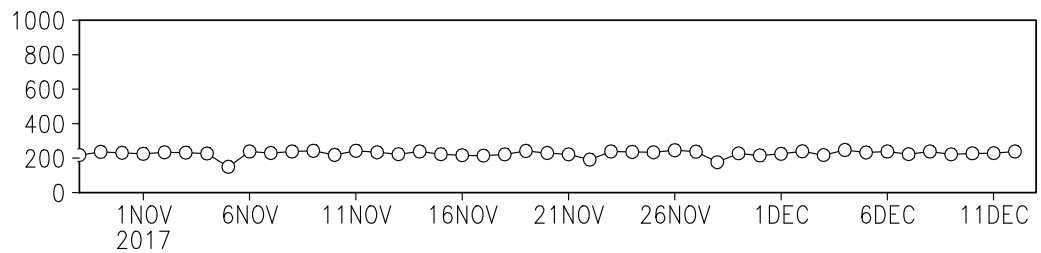
BUOY
Avg=11919
Today_Cnt=11777
Dep=-1. %



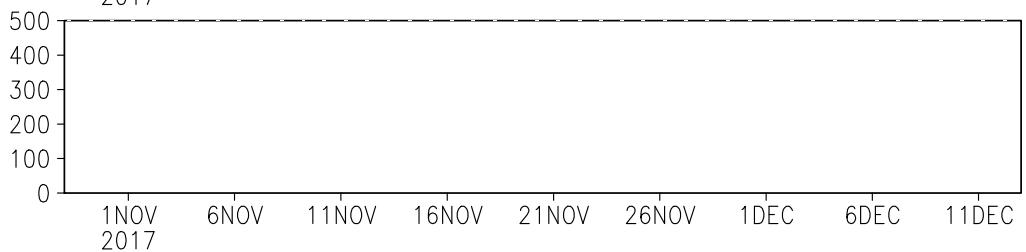
AIRCRAFT
Avg=104231
Today_Cnt=114669
Dep=10. %



RS/RW
Avg=613
Today_Cnt=626
Dep=2. %



PILOT
Avg=235
Today_Cnt=239
Dep=2. %

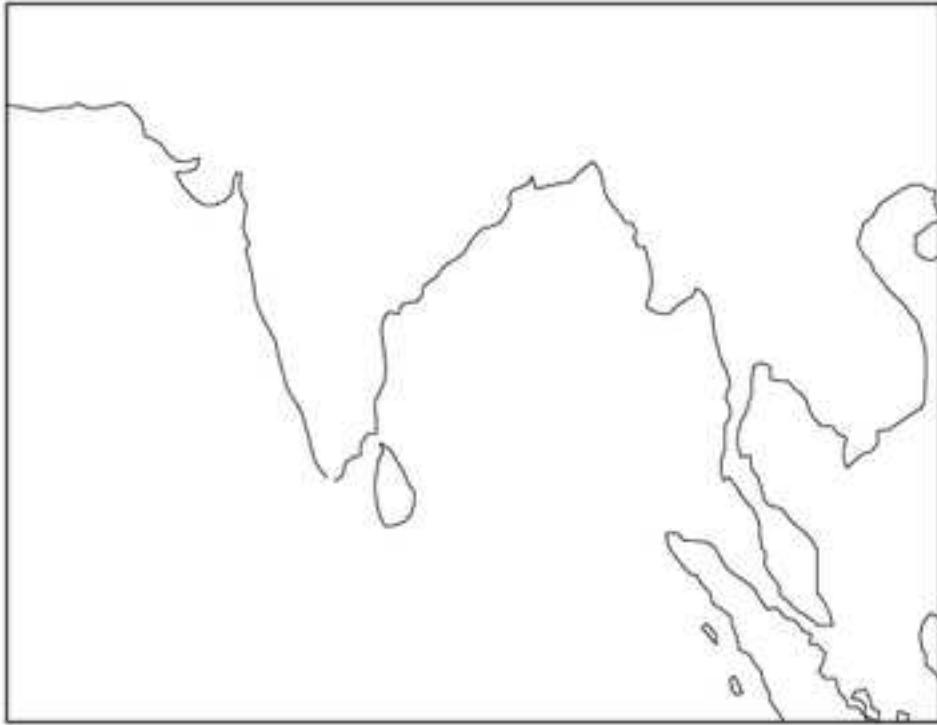


AMV
Avg=740356
Today_Cnt=673982
Dep=-9. %

SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20171212 12Z)

ASCAT WINDS (12122017 12 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

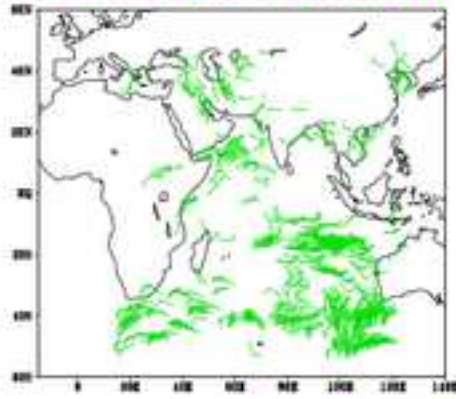
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

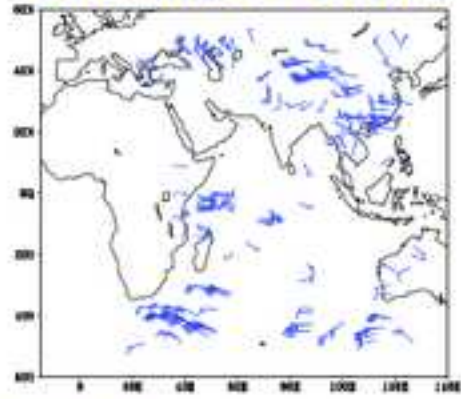
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (12122017 1200UTC)

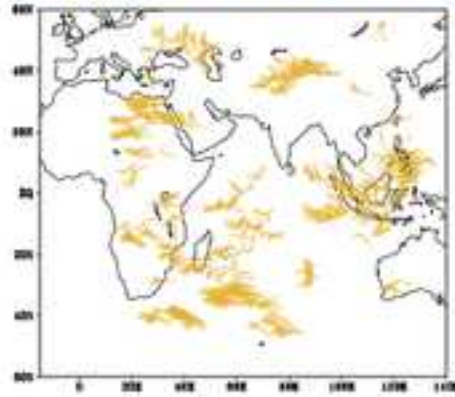
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



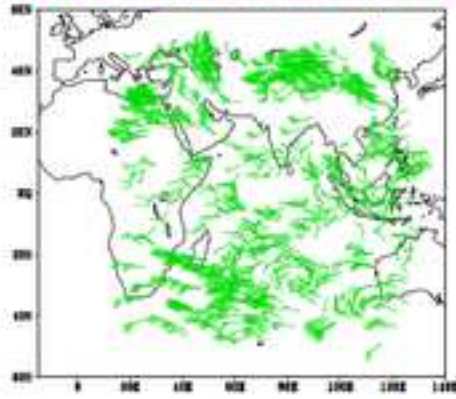
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (12122017 1200UTC)

Low Level (Below 700 hPa)

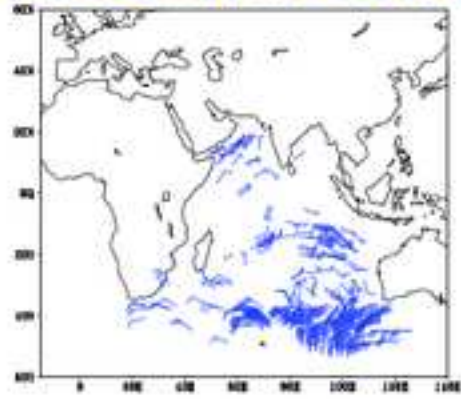
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (12122017 1200UTC)

WV, High Level (Above 400 hPa)

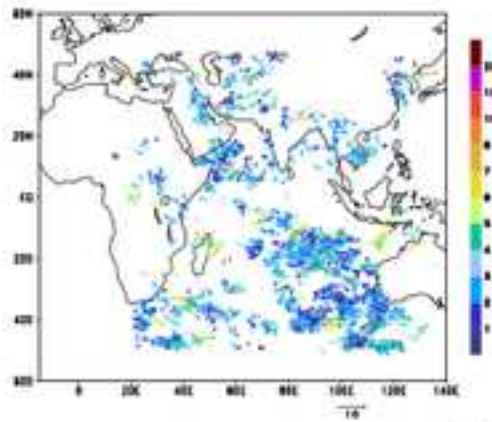


VIS, Low Level (Below 700 hPa)

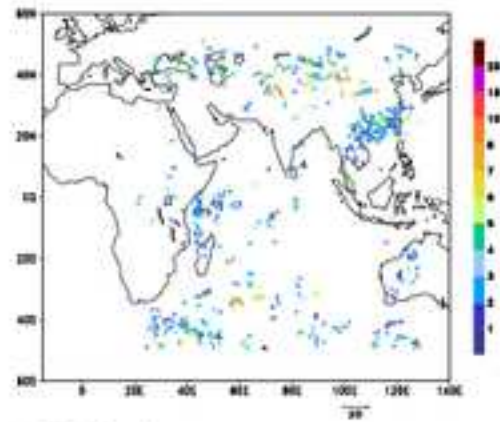


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (12122017 1200UTC)

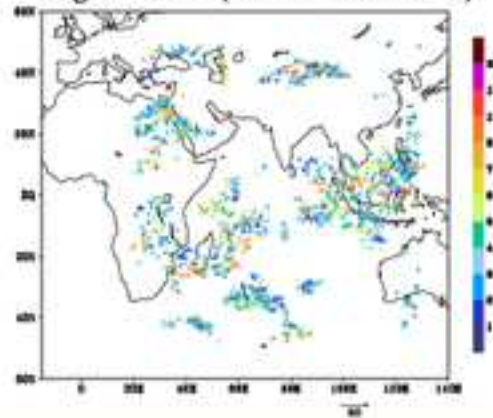
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



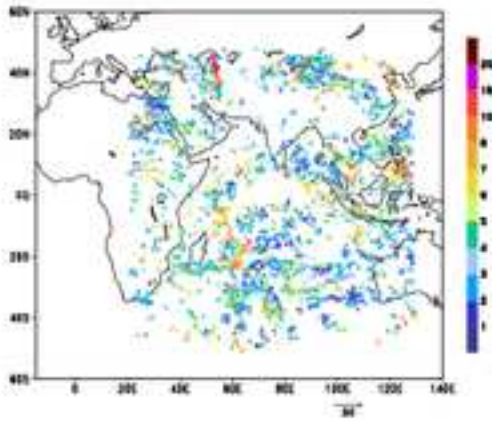
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (12122017 1200UTC)

Low Level (Below 700 hPa)

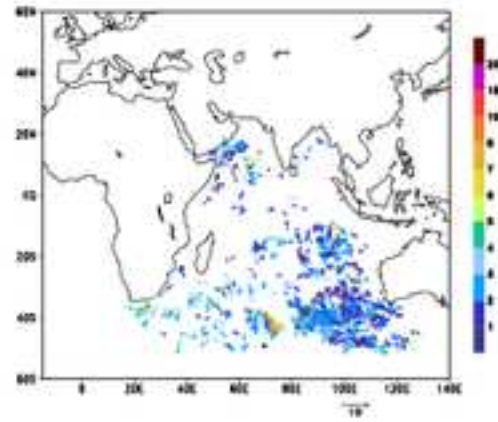
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 1200UTC)

WV, High Level (Above 400 hPa)

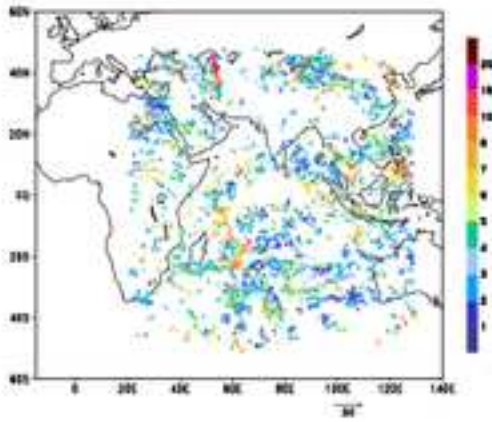


VIS, Low level (Below 700 hPa)

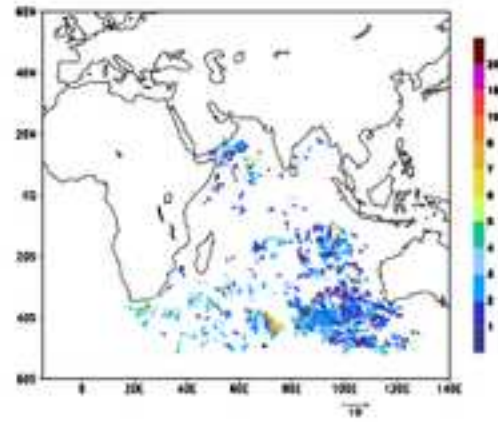


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 1200UTC)

WV, High Level (Above 400 hPa)

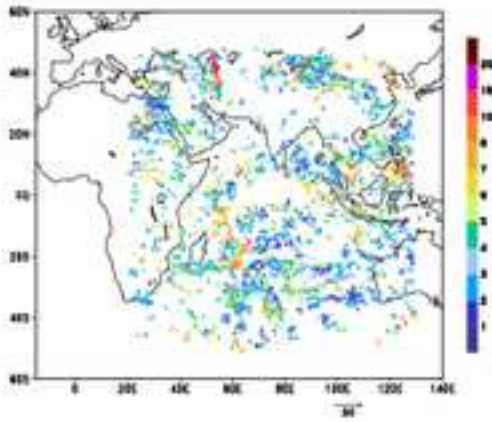


VIS, Low level (Below 700 hPa)

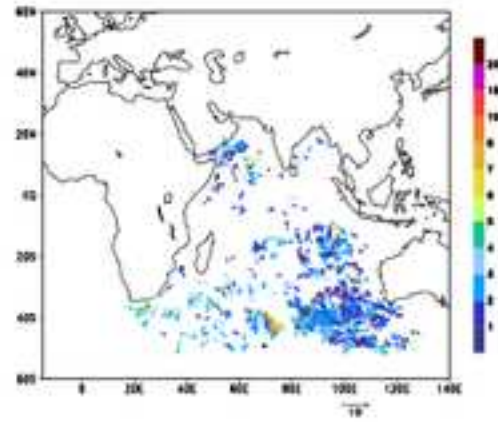


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 1200UTC)

WV, High Level (Above 400 hPa)

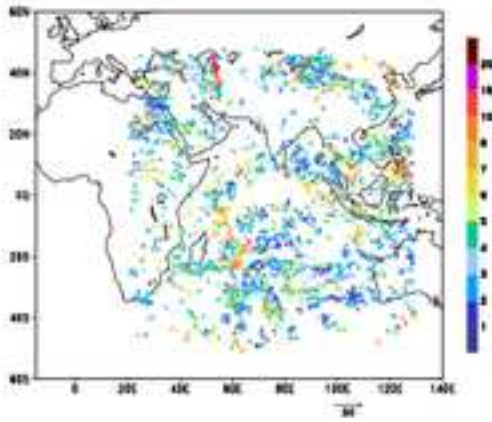


VIS, Low level (Below 700 hPa)

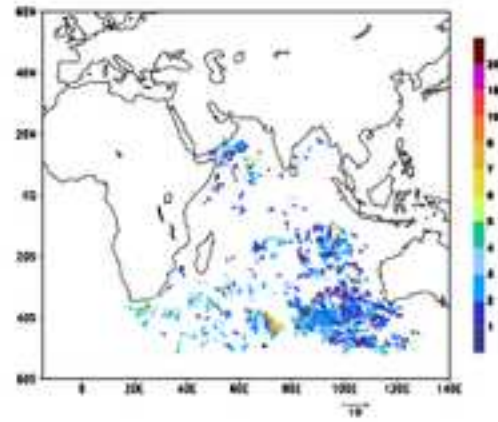


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 1200UTC)

WV, High Level (Above 400 hPa)

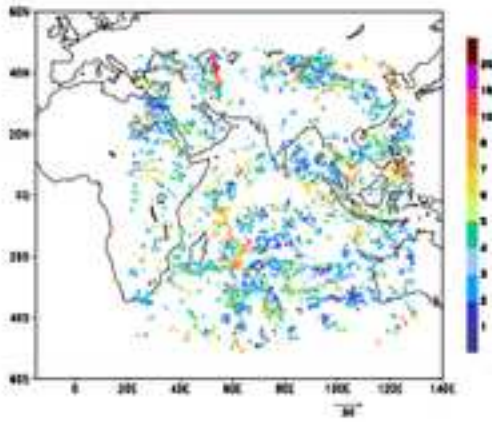


VIS, Low level (Below 700 hPa)

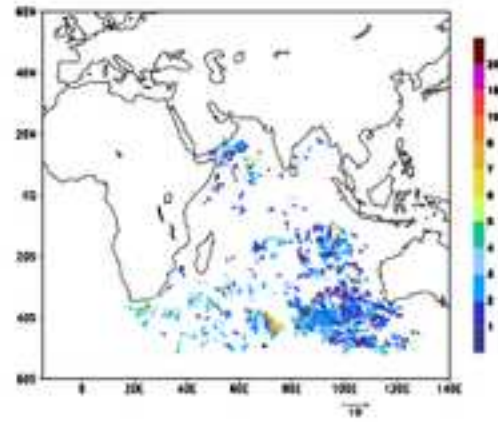


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (12122017 1200UTC)

WV, High Level (Above 400 hPa)



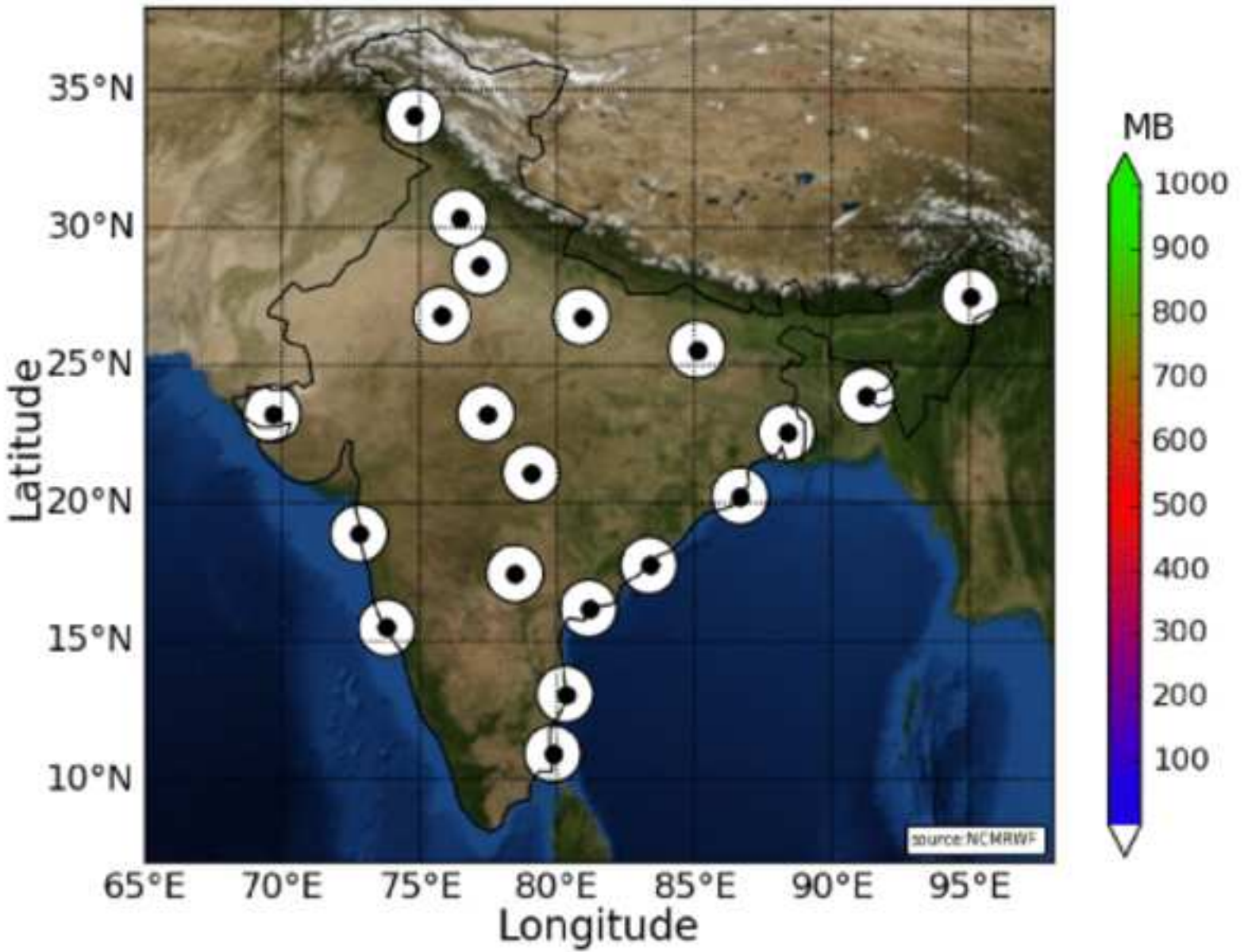
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

Date: 20171212 at : 12UTC

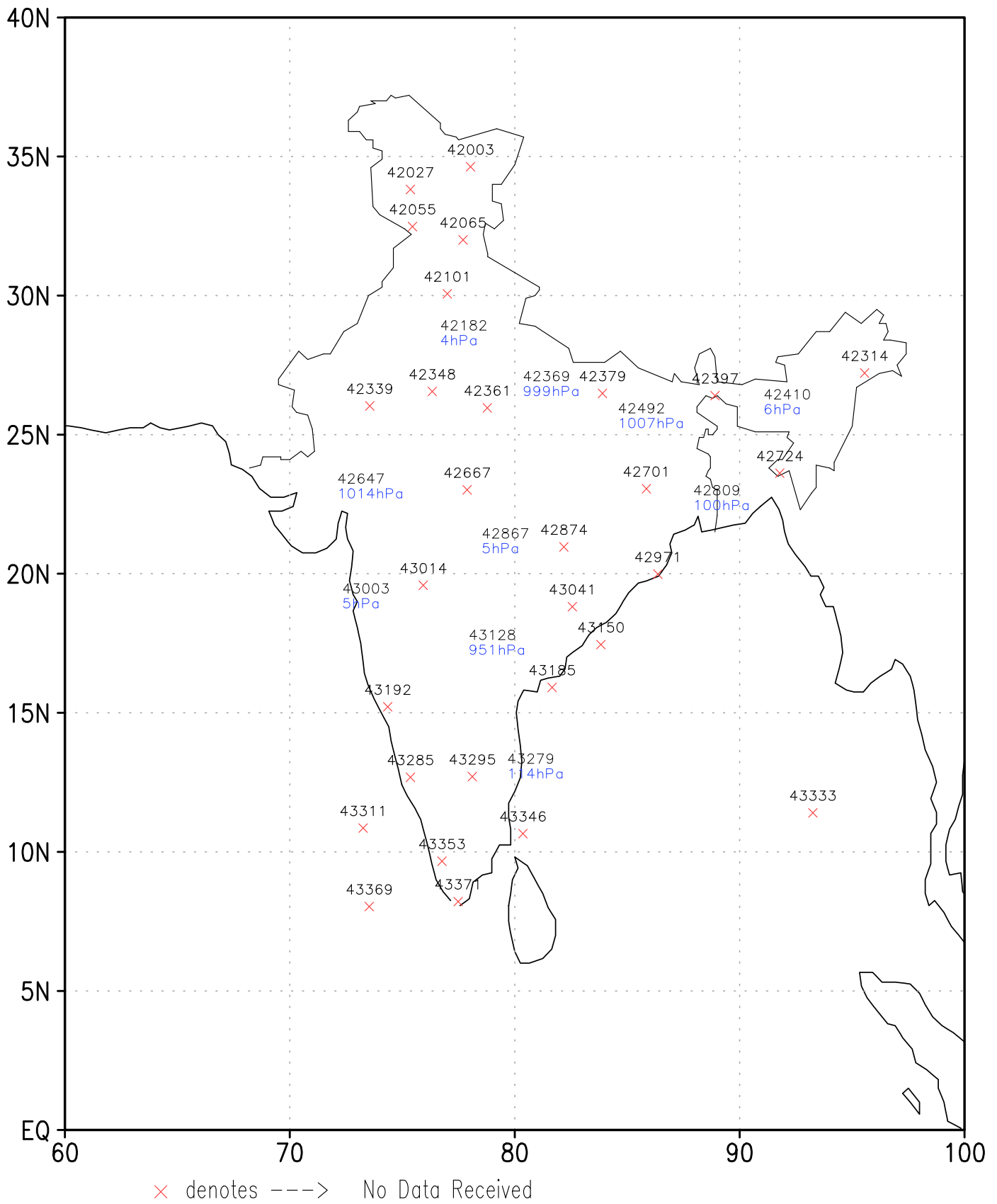


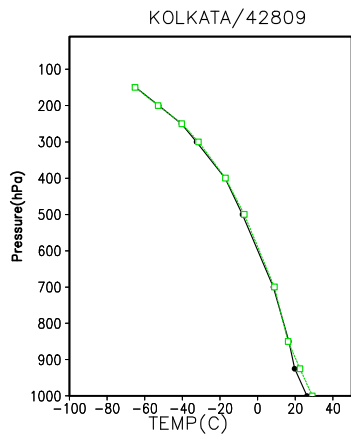
Quality of Indian RS/RW Observations

Maximum height reported
by RS/RW ascents

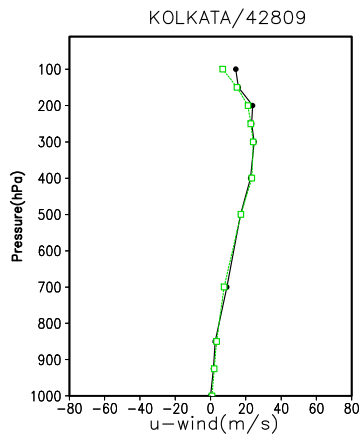
Temperature and Zonal Wind
Rejections by NGFS GDAS

Highest Level Reported by RS/RW (12122017 1200UTC +/- 03Hrs)





Observed (—) and 1st-guess (—) Temperature (Deg C) for 12UTC 12122017
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 12UTC 12122017

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