

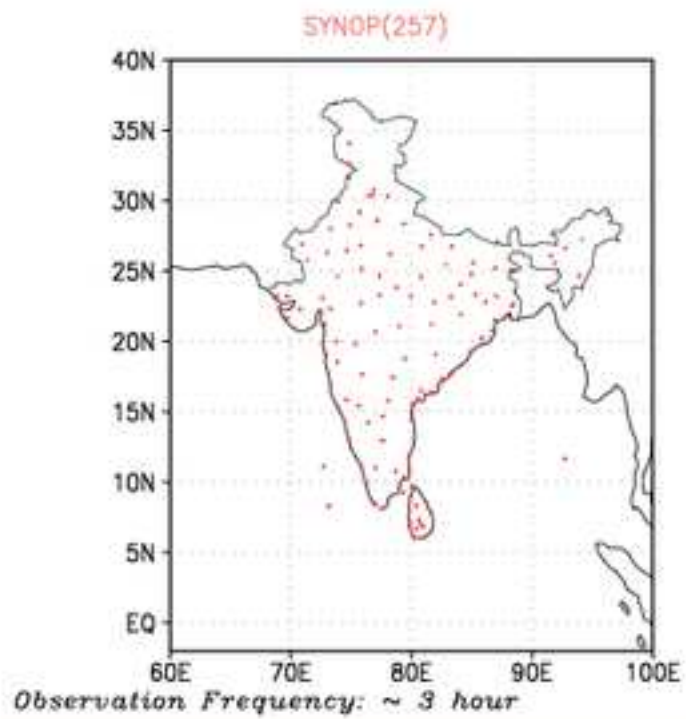
Observation Monitoring

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

for 20102017 (1800 UTC)

Indian Observation Coverage

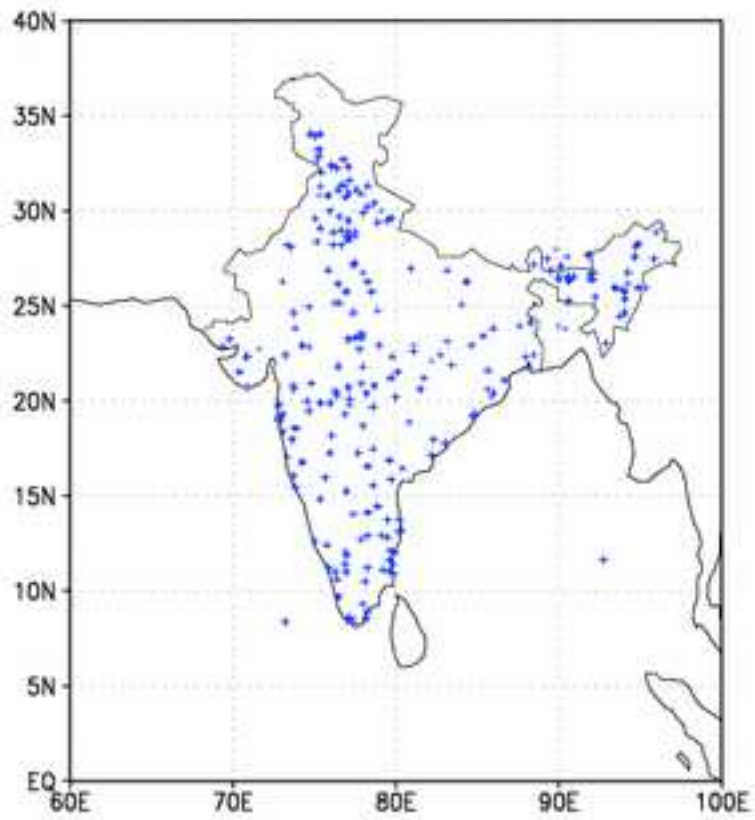
Data Coverage: Surface (20102017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 257
(42 & 43 Block)



Data Coverage: Indian AWS (20102017 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1132

AWS PRESSURE (1132)

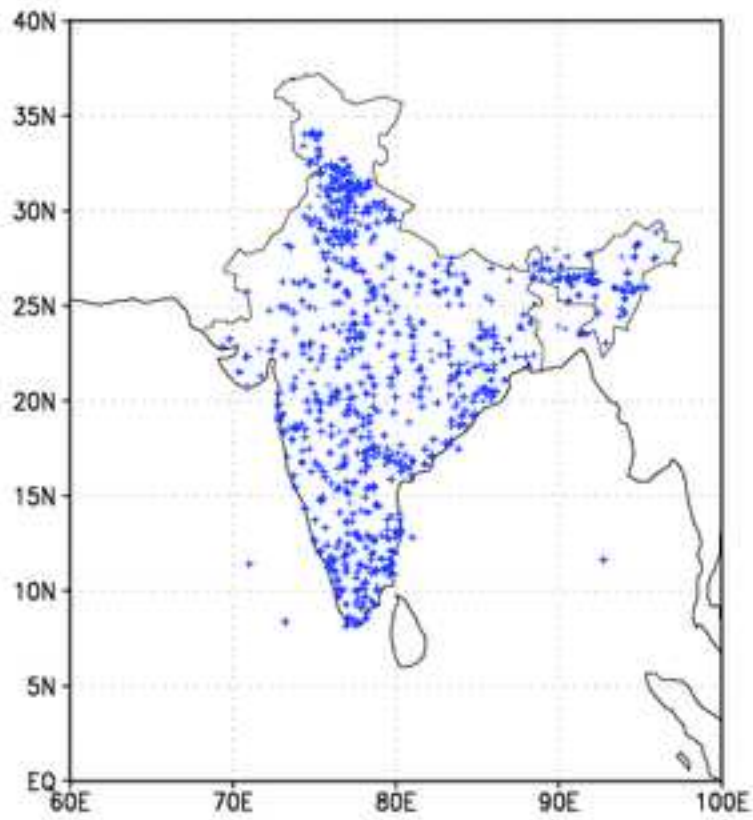


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (20102017 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 2896

AWS + ARG (2896)

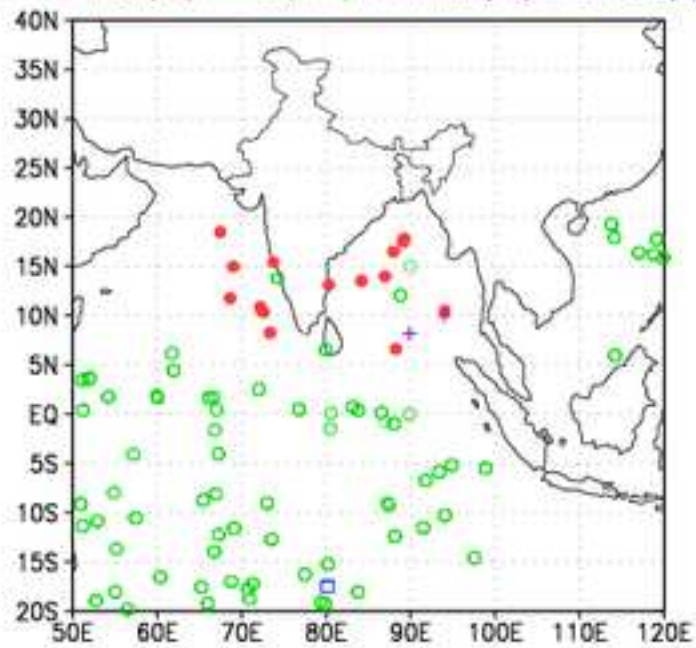


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (20102017 1800UTC +/- 3 Hrs)

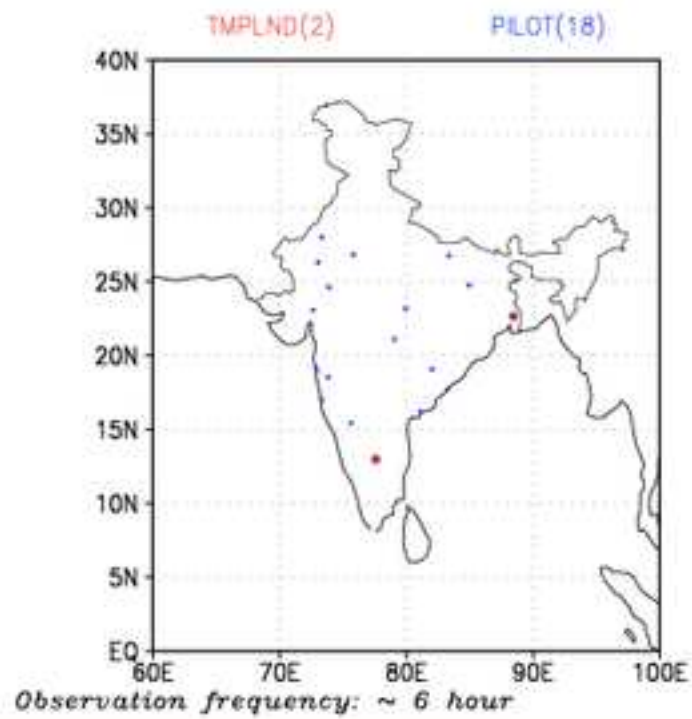
Total Number of Observations Received at NCMRWF: 422

country code in GTS as ● INDIA(30) ○ USA(376) + FRANCE(10) □ OTHERS(6)



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

Data Coverage: Sonde (20102017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 20
(42 & 43 Block)



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

SYNOP

Avg=
Today_Cnt=
Dep= %

BUOY

Avg=
Today_Cnt=
Dep= %

AWS+ARG

Avg=
Today_Cnt=
Dep= %

RS/RW

Avg=
Today_Cnt=
Dep= %

PILOT

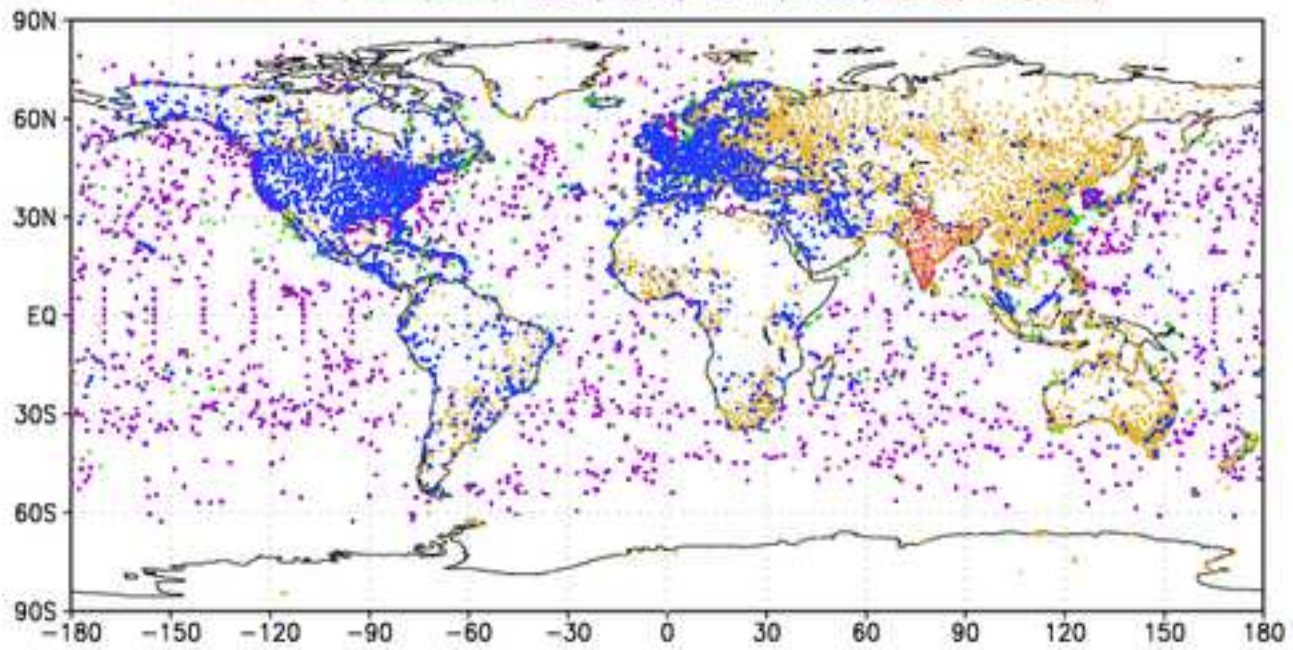
Avg=
Today_Cnt=
Dep= %

Global Observation Coverage

Data Coverage: Surface (20102017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 52988

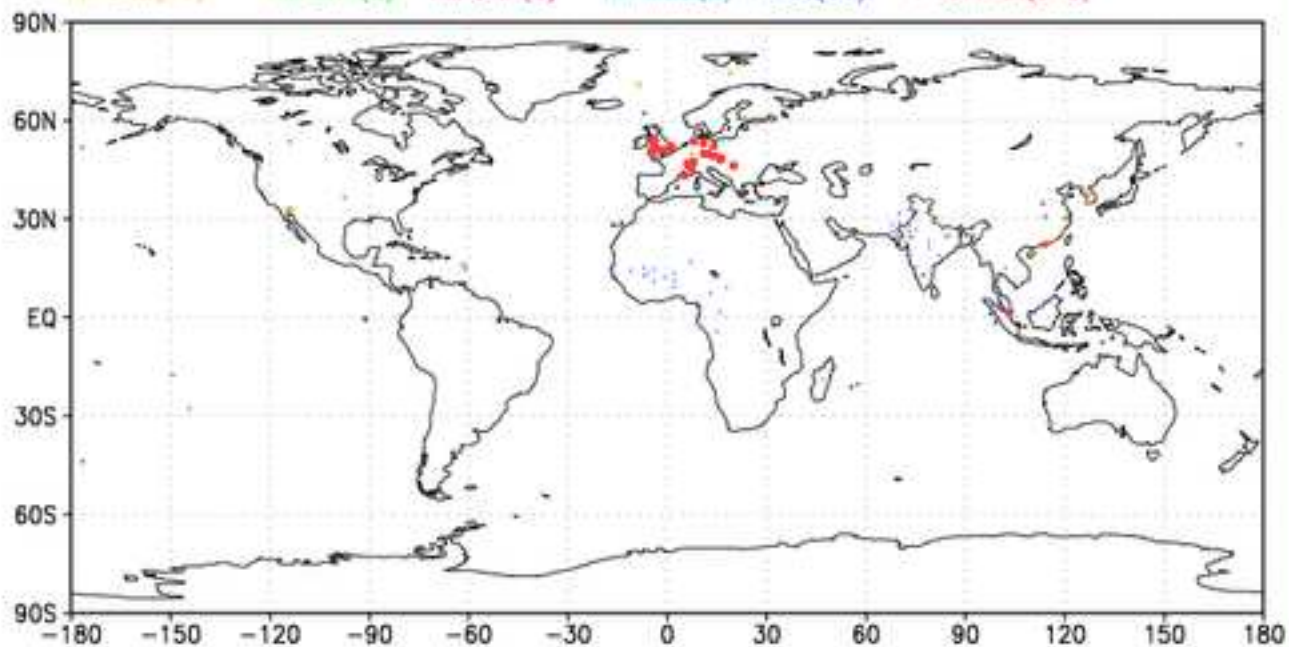
LNDSYN(14539) SHIP(2101) BUOY(13215) METAR(19628) MOBILE/AWS(3505)



Data Coverage: Sonde (20102017 1800UTC +/- 03Hrs)

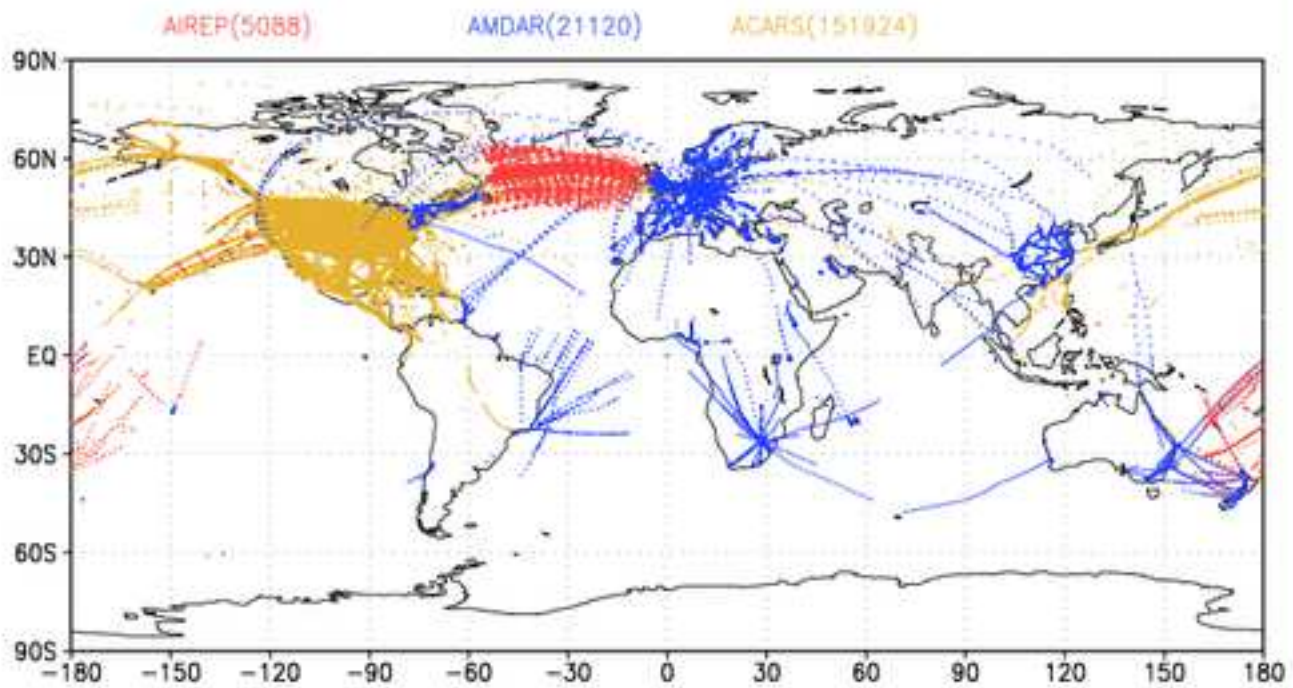
Total Number of Observations Received at NCMRWF: 695

TMP LND(40) TMP SHP(0) TMP DRP(0) TMP MDB(0) PILOT(80) PROFILER(575)



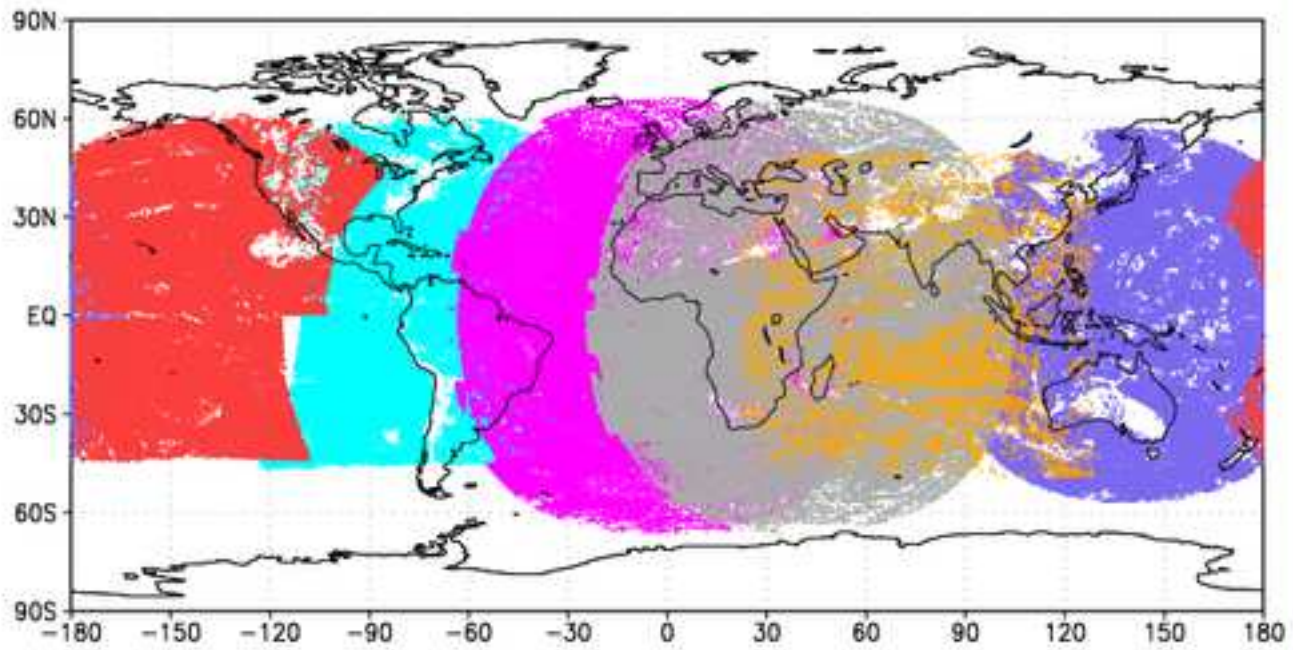
Data Coverage: AIRCFT (20102017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 178132



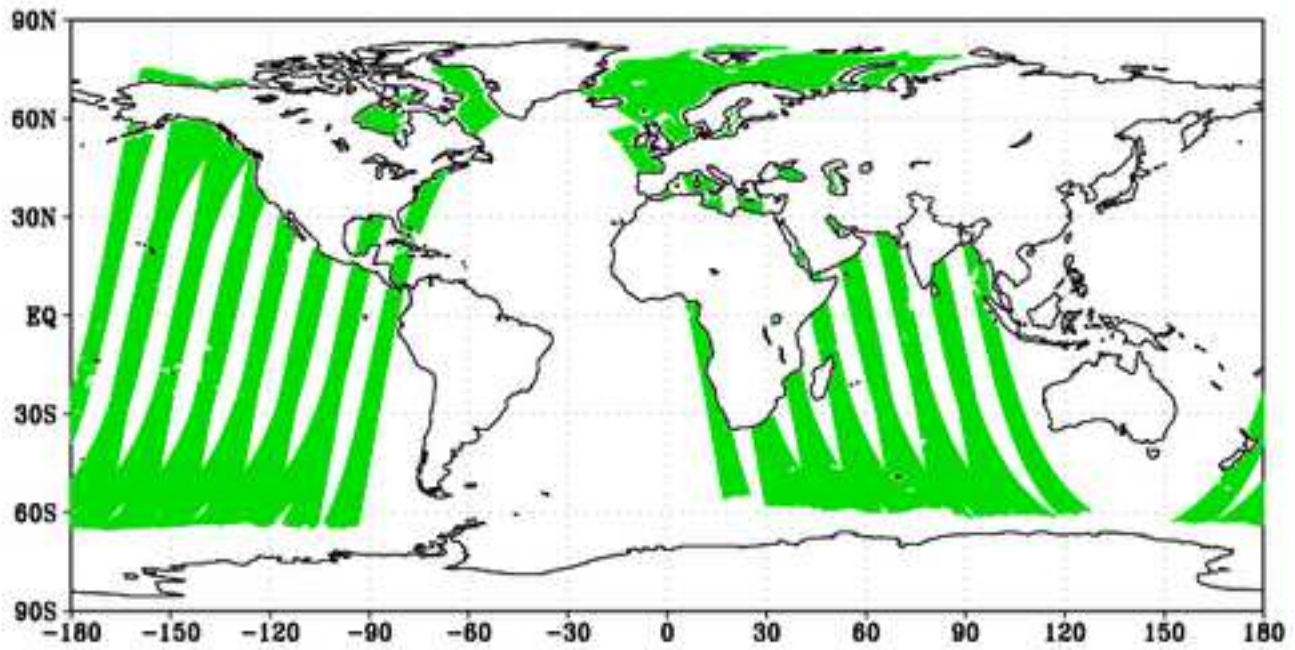
Data Coverage: AMV (20102017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 700118

GOES-15(146513) GOES-13(158086) INSAT-3D(7068) METEOSAT-8(112527)
METEOSAT-10(151869) HIMAWARI-8(123035) MODIS/Terra(0) MODIS/Aqua(0)
METOP(0) NOAA-15(0) NOAA-18(0) NOAA-18(0) NOAA-19(0)



Data Coverage: ASCAT winds (20102017 18UTC +/- 03Hrs)

ASCAT (227495)



Data Coverage: SAT RADIANCE (20102017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2375164

NOAA15(80970)

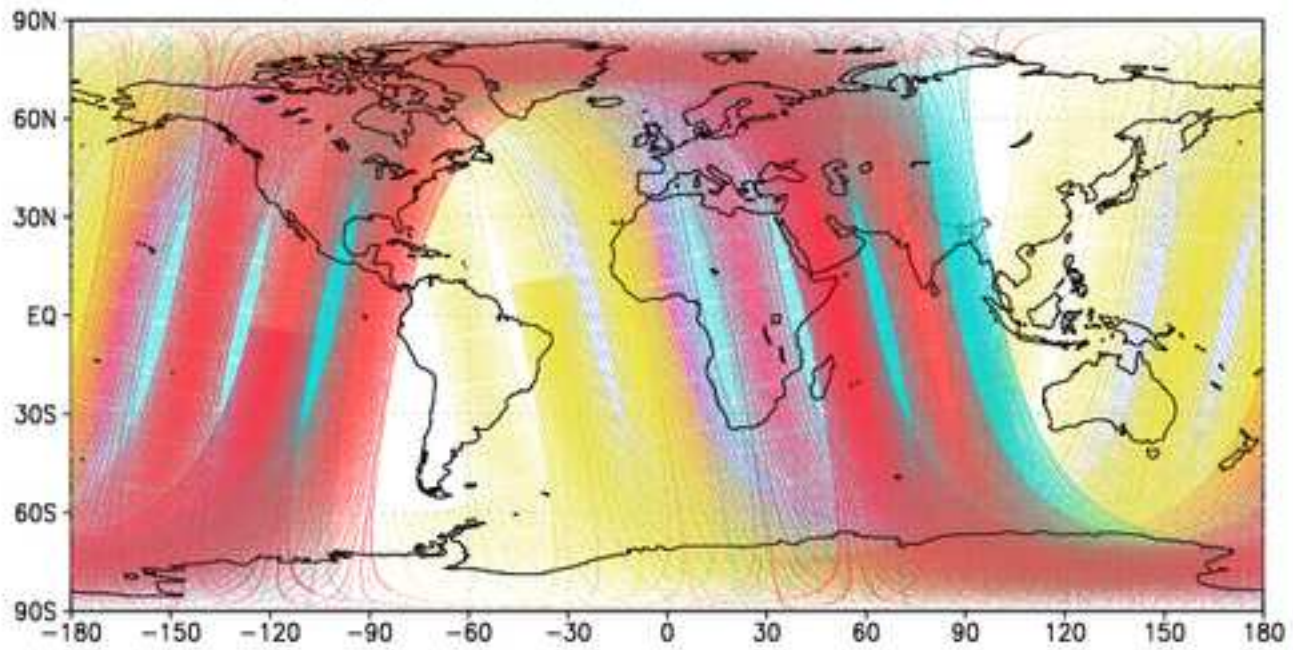
NOAA18(0)

NOAA19(341181)

NOAA17(614488)

METOP1(706192)

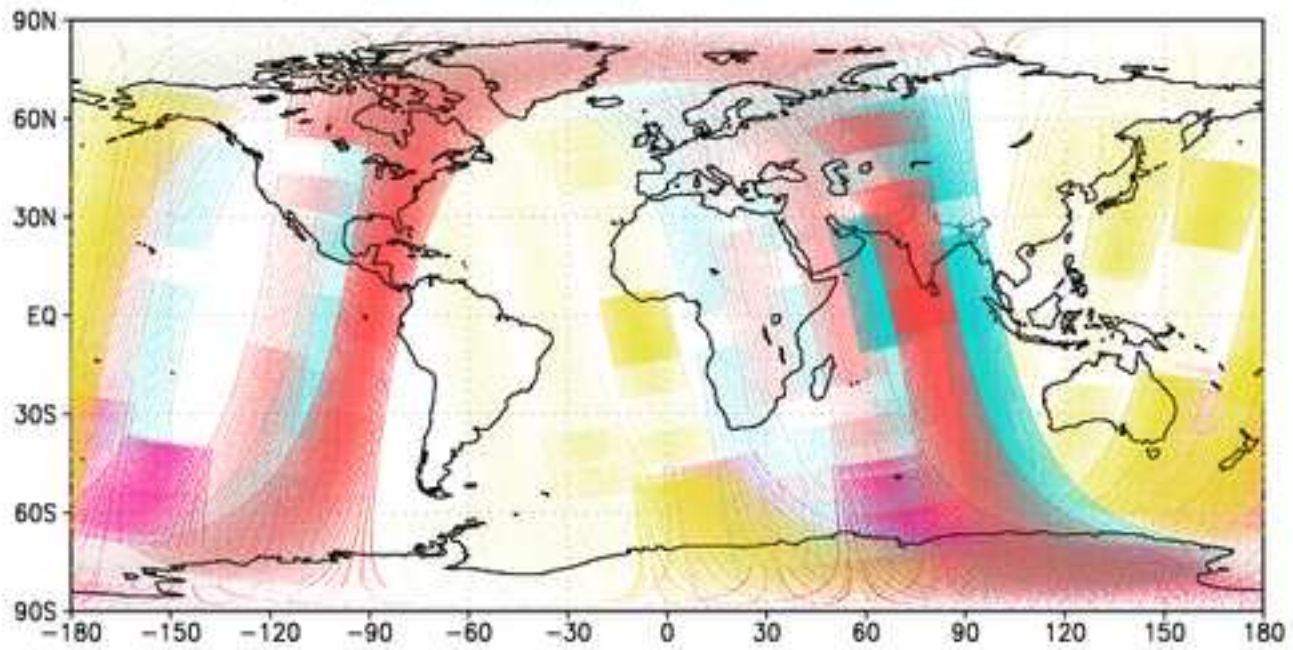
METOP2(552325)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (20102017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1095235

NOAA15(0) NOAA16(0) NOAA18(125563) NOAA19(286725)
METOP1(351583) METOP2(237364)

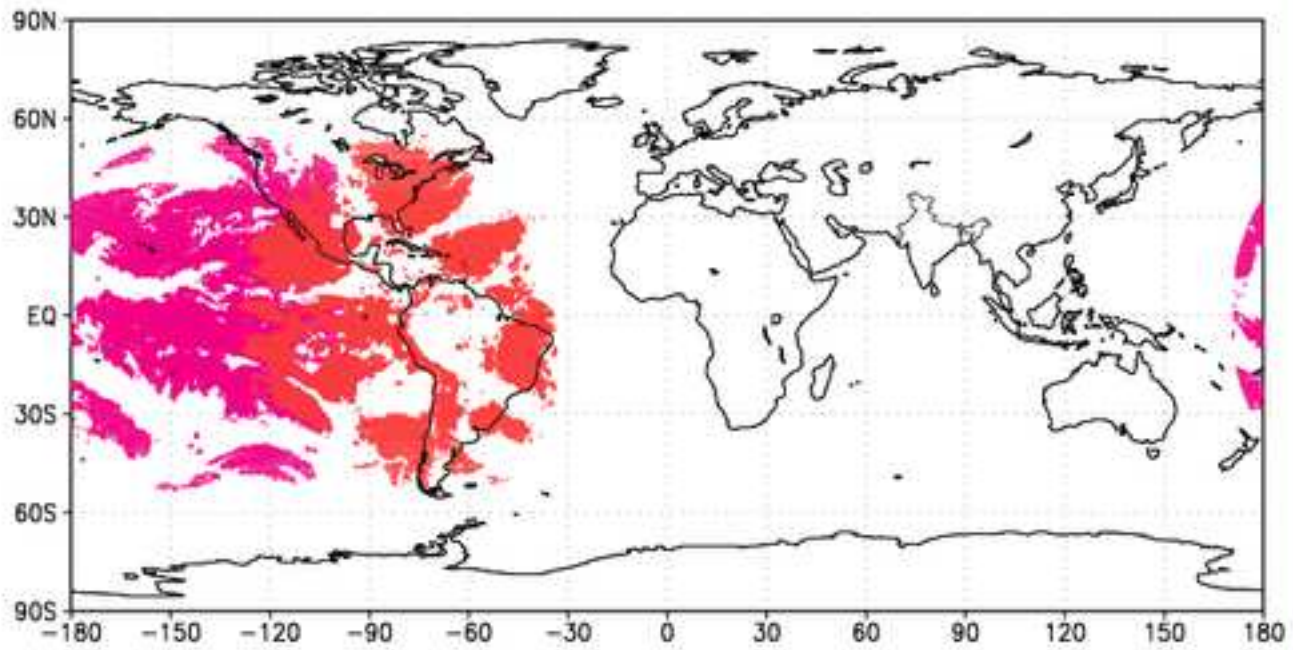


Data Coverage: GOES CSBT (20102017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 41060

GOES-15(24328)

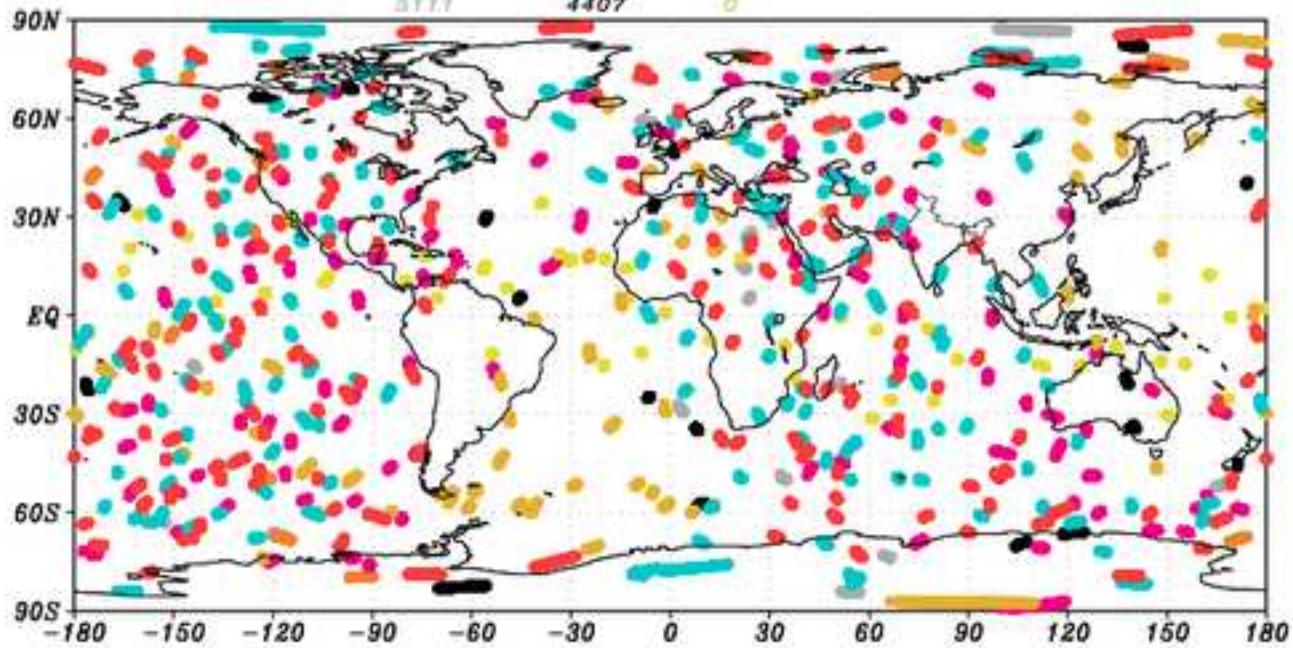
GOES-13(16732)



Data Coverage:GPSRO (20102017 1800UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 150611

GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
3660	40517	38062	29498	0	3891	0	0	19505
		TerraSAR-X	TenDEM-X	GRACE-B				
		5111	4407	0				



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

SYN0P

Avg=
Today_Cnt=
Dep= %

SHIP

Avg=
Today_Cnt=
Dep= %

BUOY

Avg=
Today_Cnt=
Dep= %

AIRCRAFT

Avg=
Today_Cnt=
Dep= %

RS/RW

Avg=
Today_Cnt=
Dep= %

PILOT

Avg=
Today_Cnt=
Dep= %

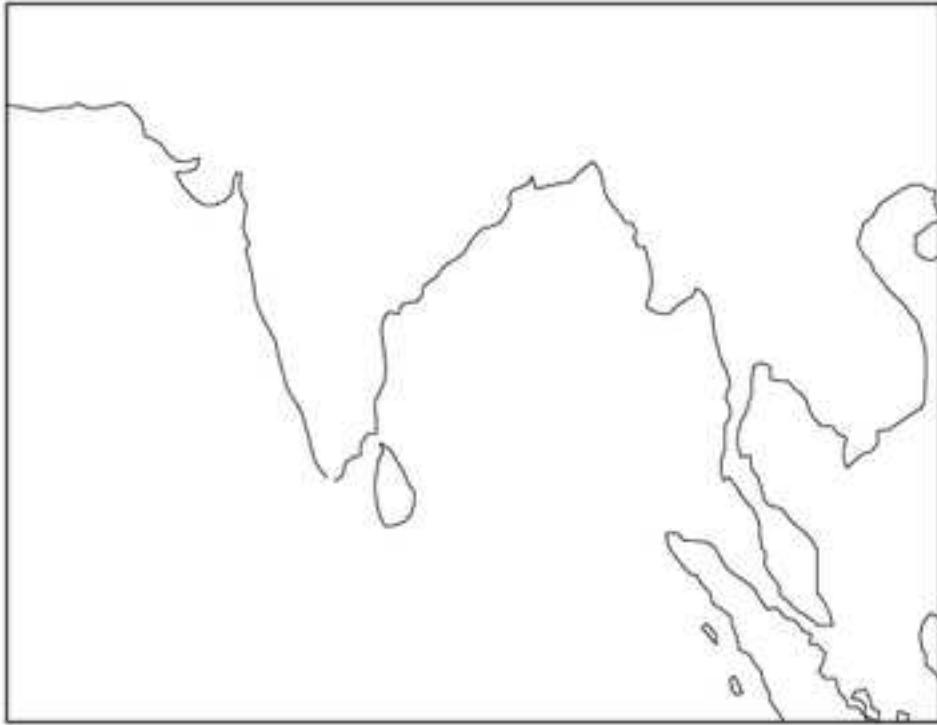
AMV

Avg=
Today_Cnt=
Dep= %

SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20171020 18Z)

ASCAT WINDS (20102017 18 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

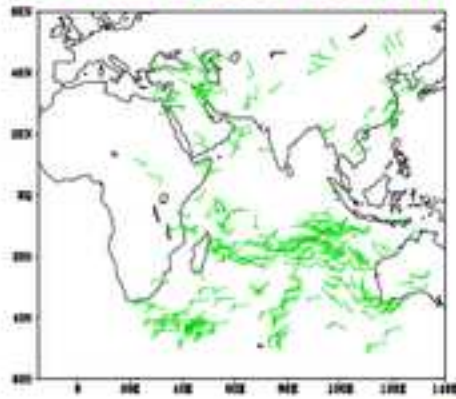
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

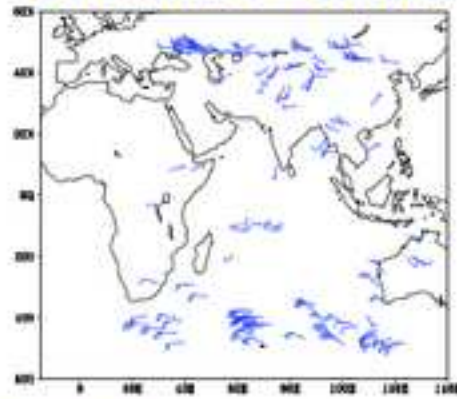
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (20102017 1800UTC)

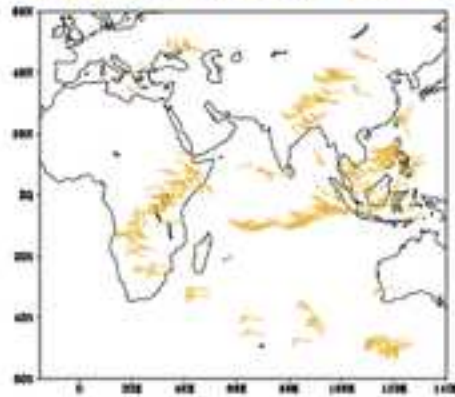
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

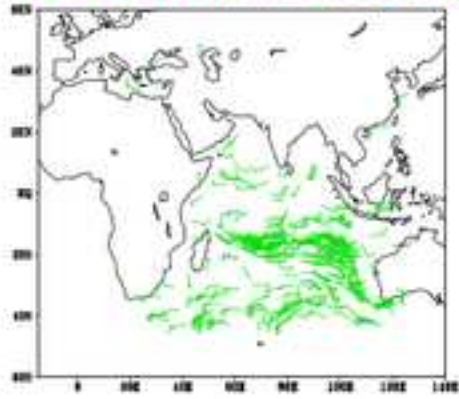


High Level (Above 400 hPa)

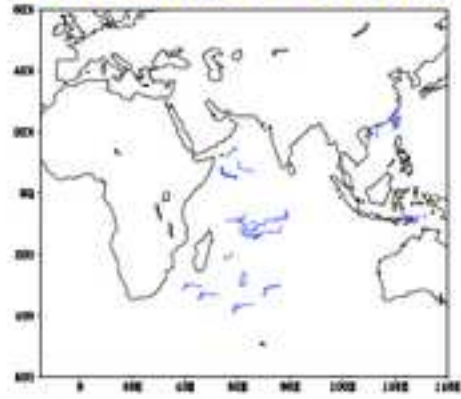


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (20102017 1800UTC)

Low Level (Below 700 hPa)



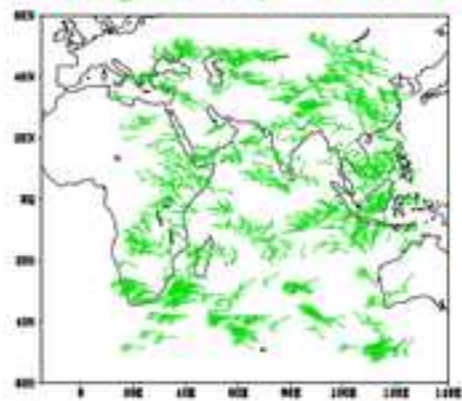
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (20102017 1800UTC)

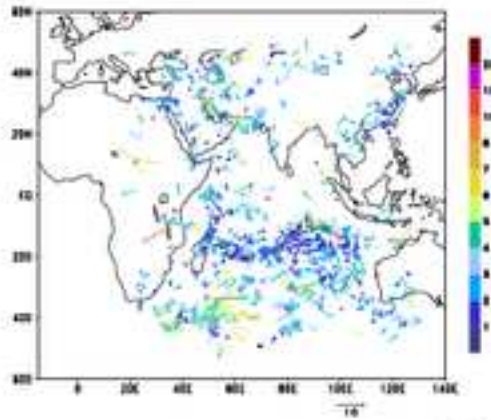
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

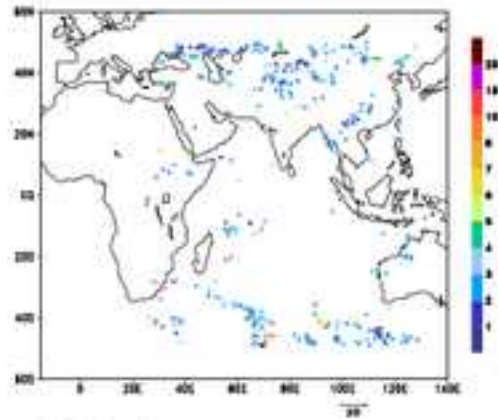


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (20102017 1800UTC)

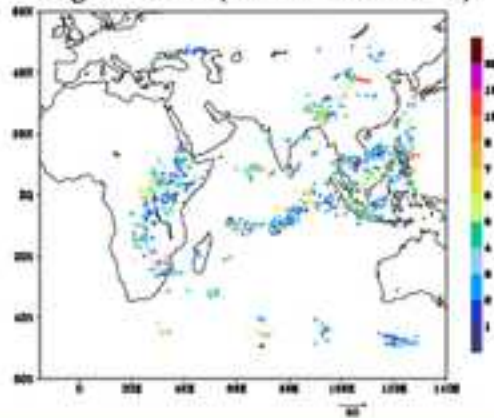
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

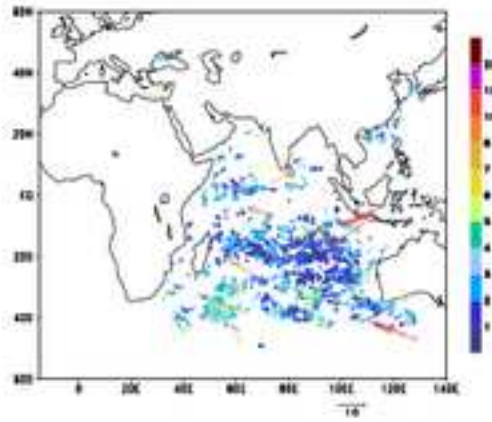


High Level (Above 400 hPa)

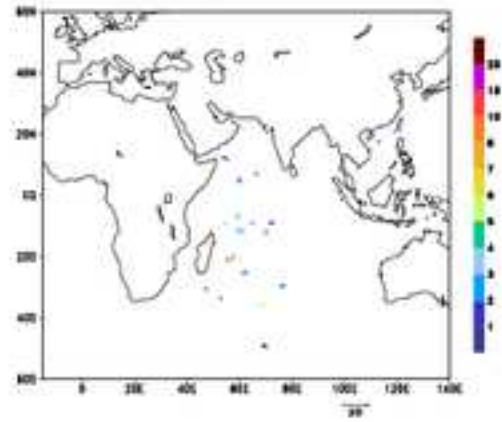


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (20102017 1800UTC)

Low Level (Below 700 hPa)



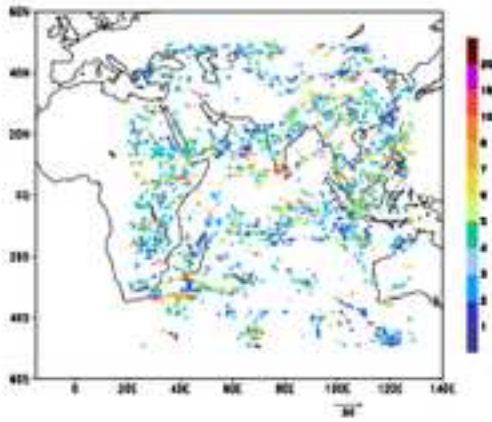
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 1800UTC)

WV, High Level (Above 400 hPa)

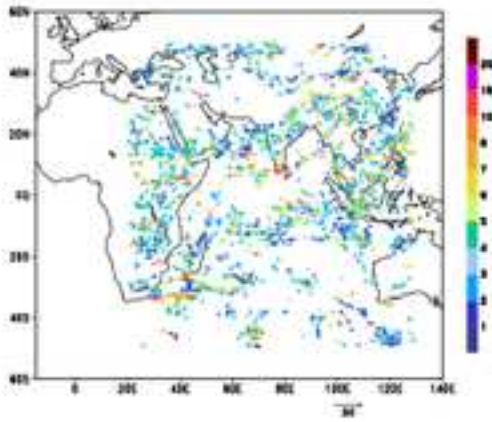
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 1800UTC)

WV, High Level (Above 400 hPa)

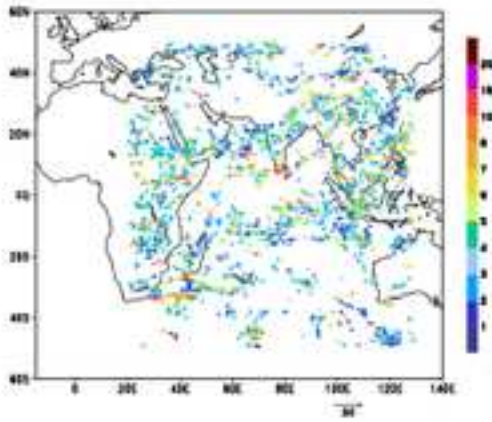
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 1800UTC)

WV, High Level (Above 400 hPa)

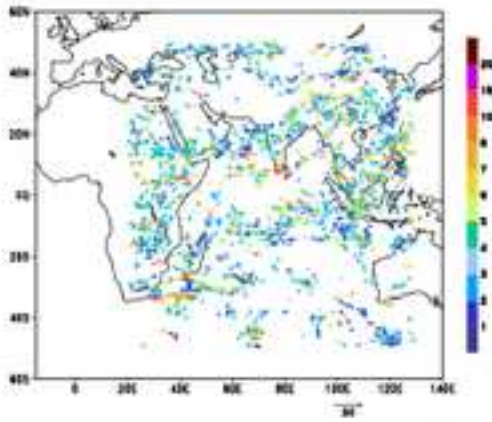
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 1800UTC)

WV, High Level (Above 400 hPa)

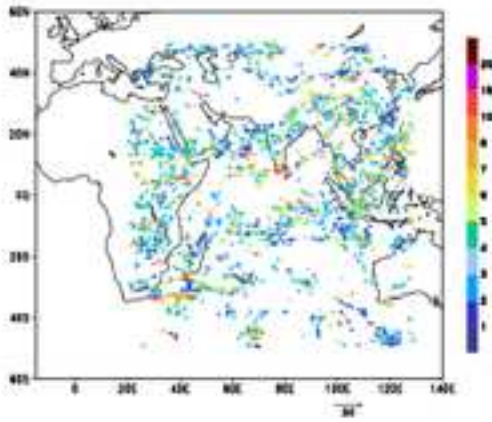
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 1800UTC)

WV, High Level (Above 400 hPa)

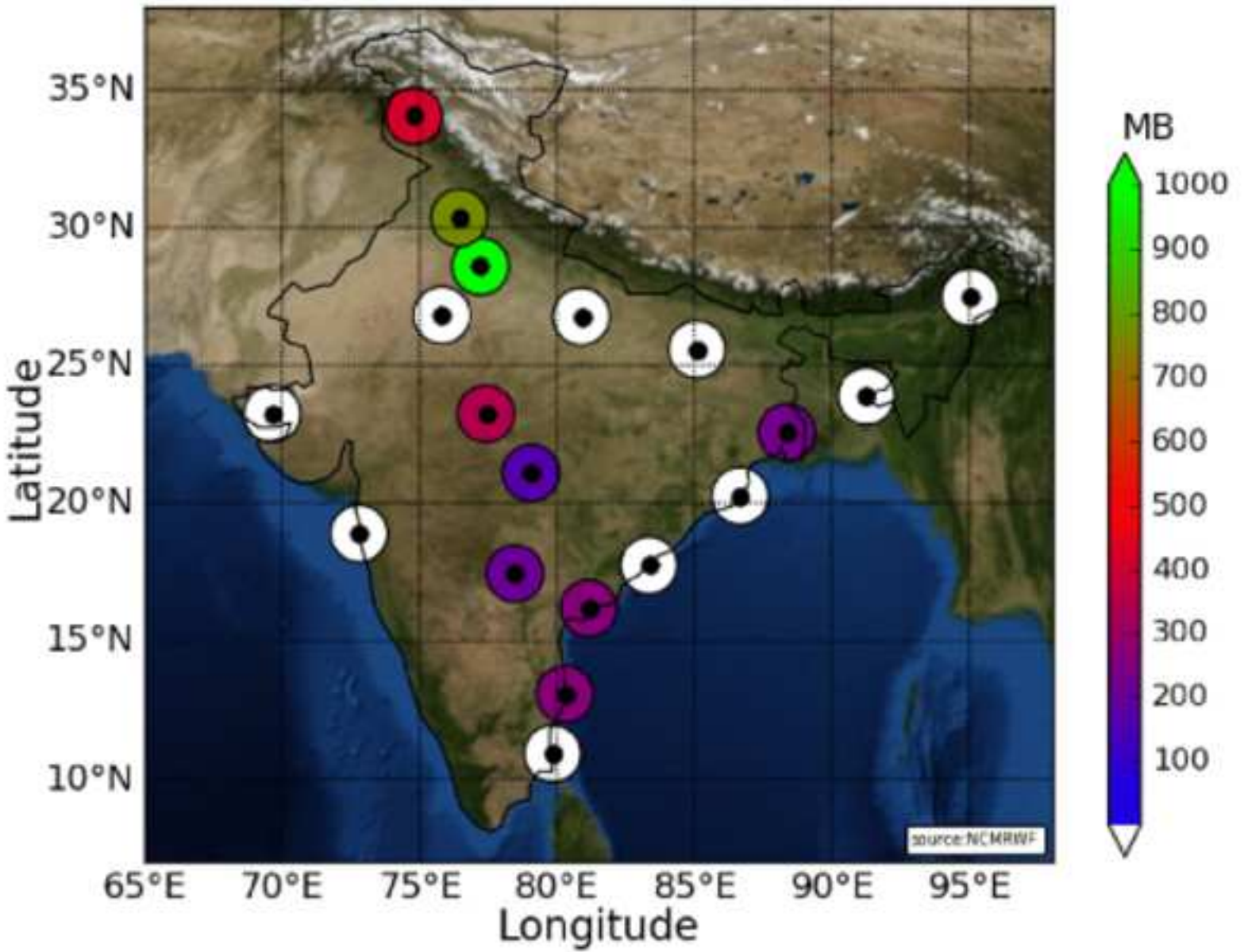
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

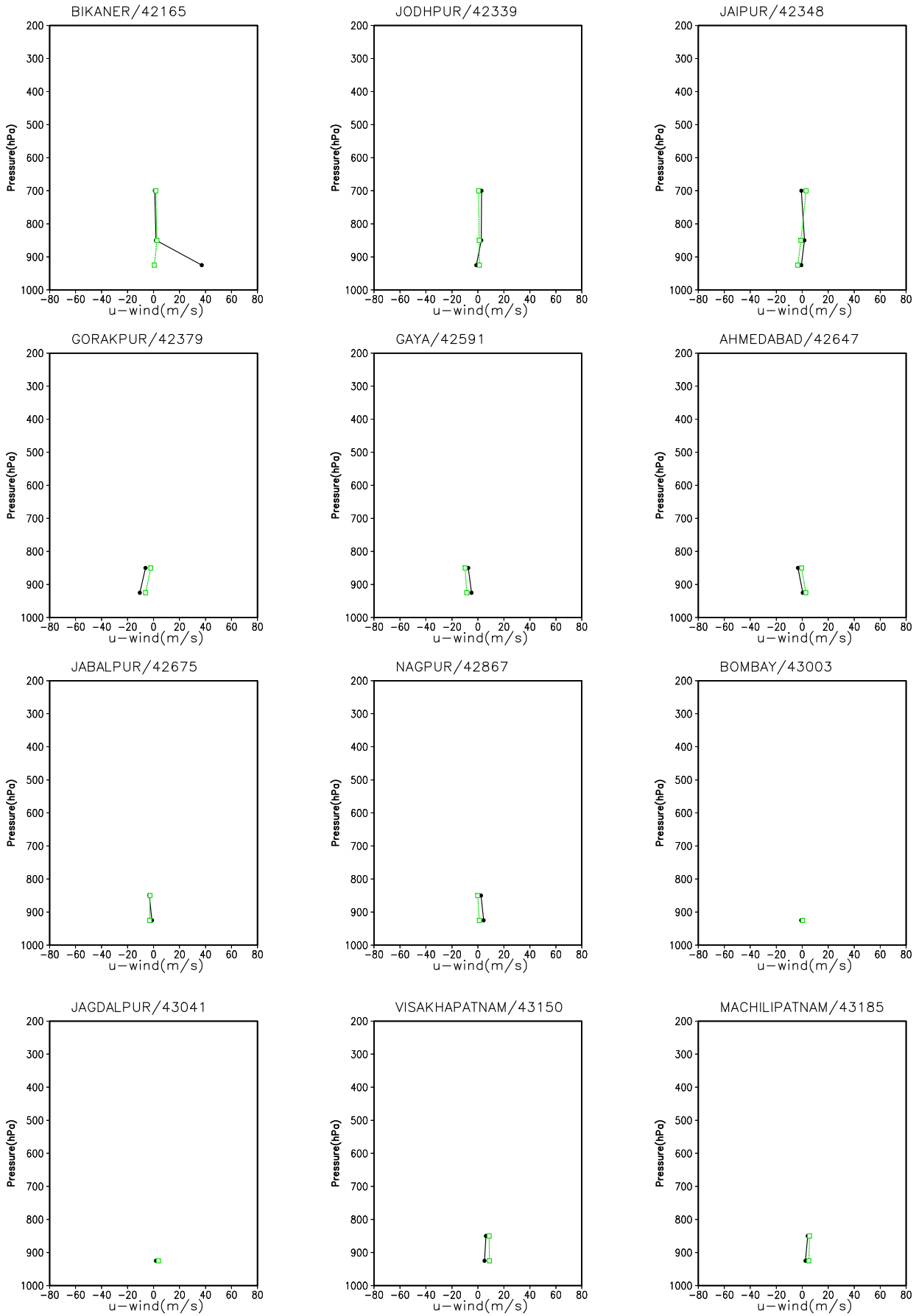
Date: 20171020 at : 18UTC



Quality of Indian PIBAL Observations

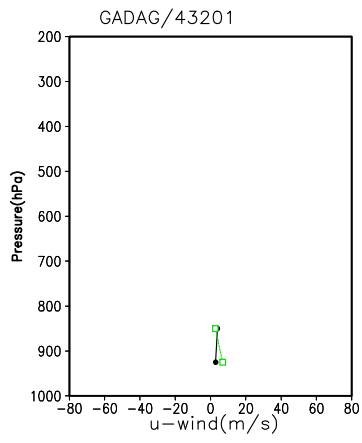
Maximum height reported
by PIBAL ascents

Zonal Wind Rejections by NGFS GDAS



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 20102017

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



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 20102017
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)