

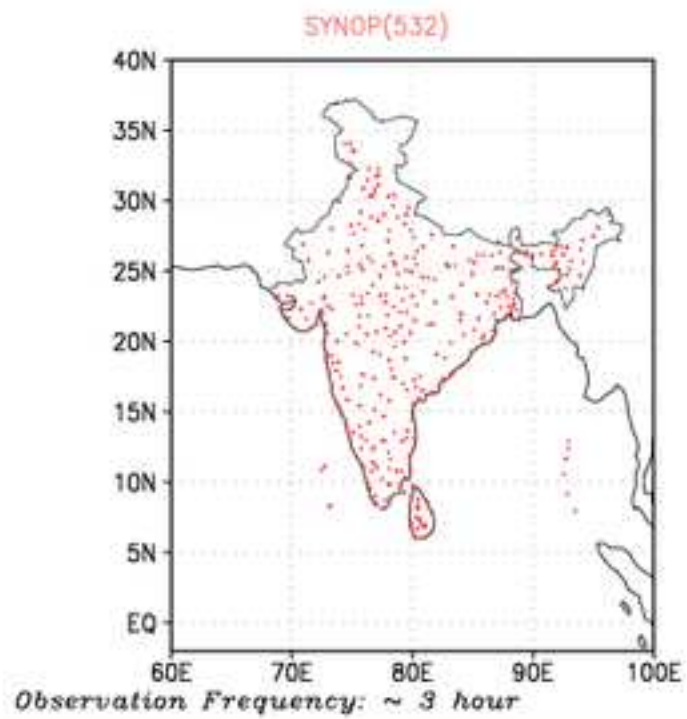
Observation Monitoring

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

for 20102017 (0600 UTC)

Indian Observation Coverage

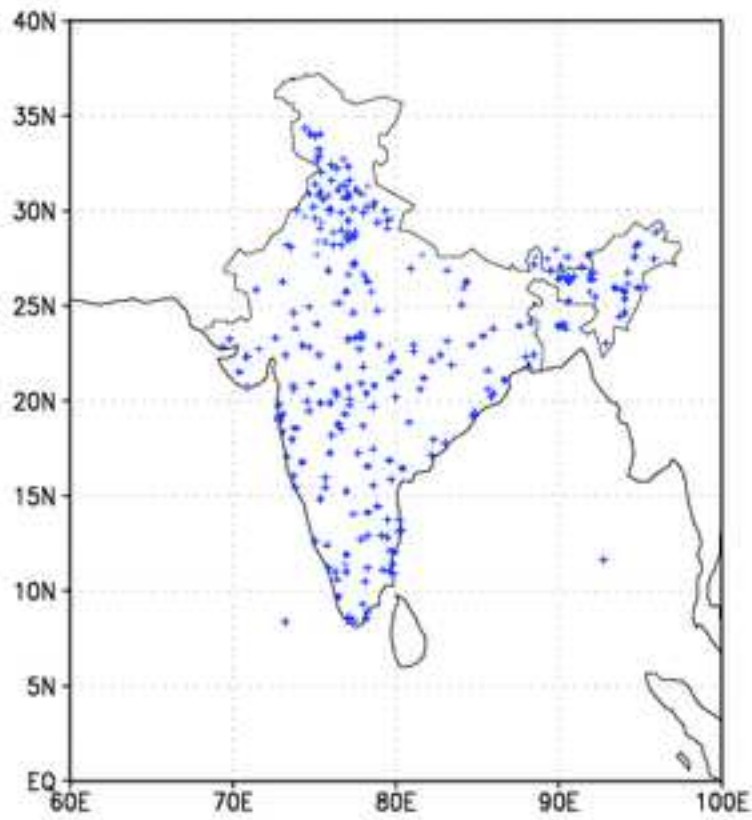
Data Coverage: Surface (20102017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 532
(42 & 43 Block)



Data Coverage: Indian AWS (20102017 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1348

AWS PRESSURE (1348)

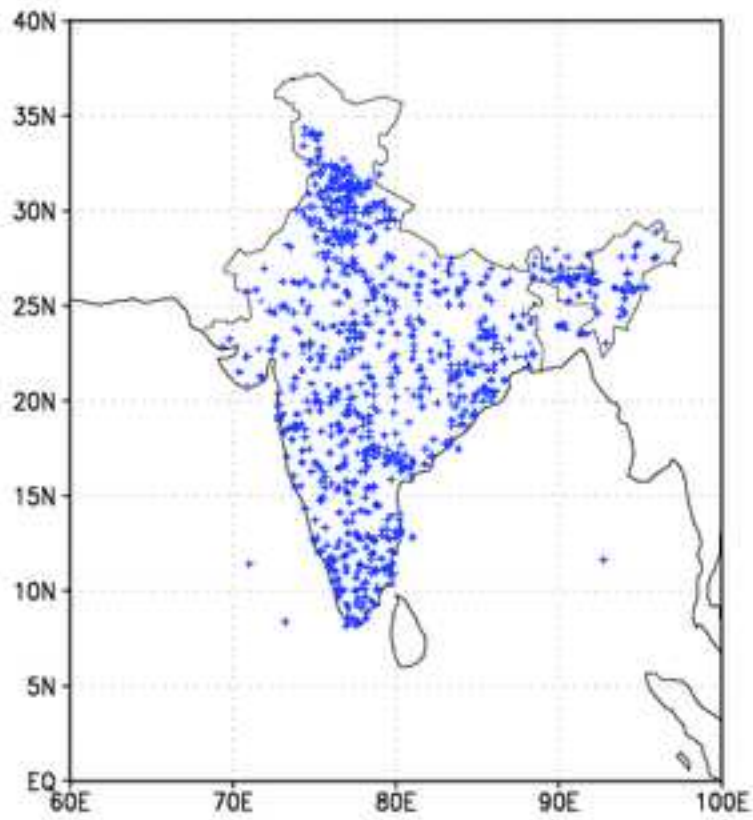


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (20102017 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 4354

AWS + ARG (4354)

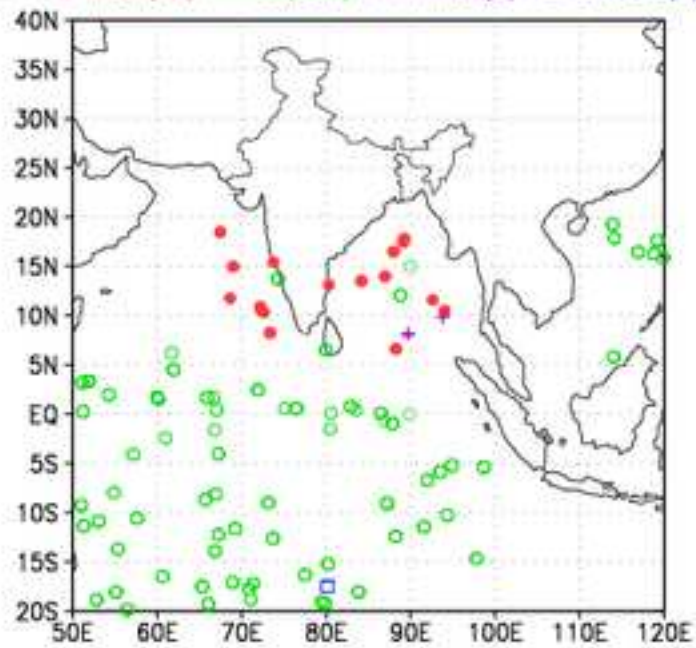


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (20102017 0600UTC +/- 3 Hrs)

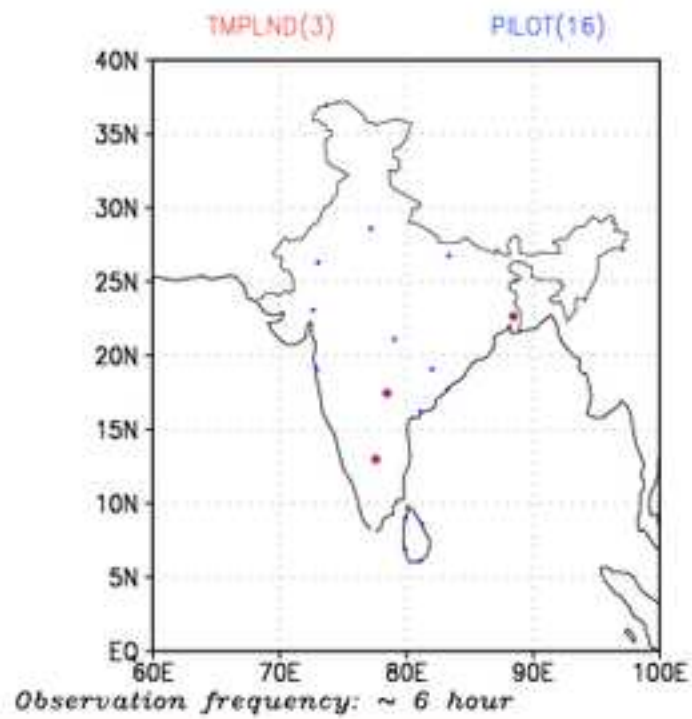
Total Number of Observations Received at NCMRWF: 411

country code in GTS as ● INDIA(30) ○ USA(366) + FRANCE(9) □ OTHERS(6)



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

Data Coverage: Sonde (20102017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 19
(42 & 43 Block)



Count for different types of observation (Over Indian Region)
for the last 45 days (valid for 06 UTC)

SYNOP

Avg=
Today_Cnt=
Dep= %

BUOY

Avg=
Today_Cnt=
Dep= %

AWS+ARG

Avg=
Today_Cnt=
Dep= %

RS/RW

Avg=
Today_Cnt=
Dep= %

PILOT

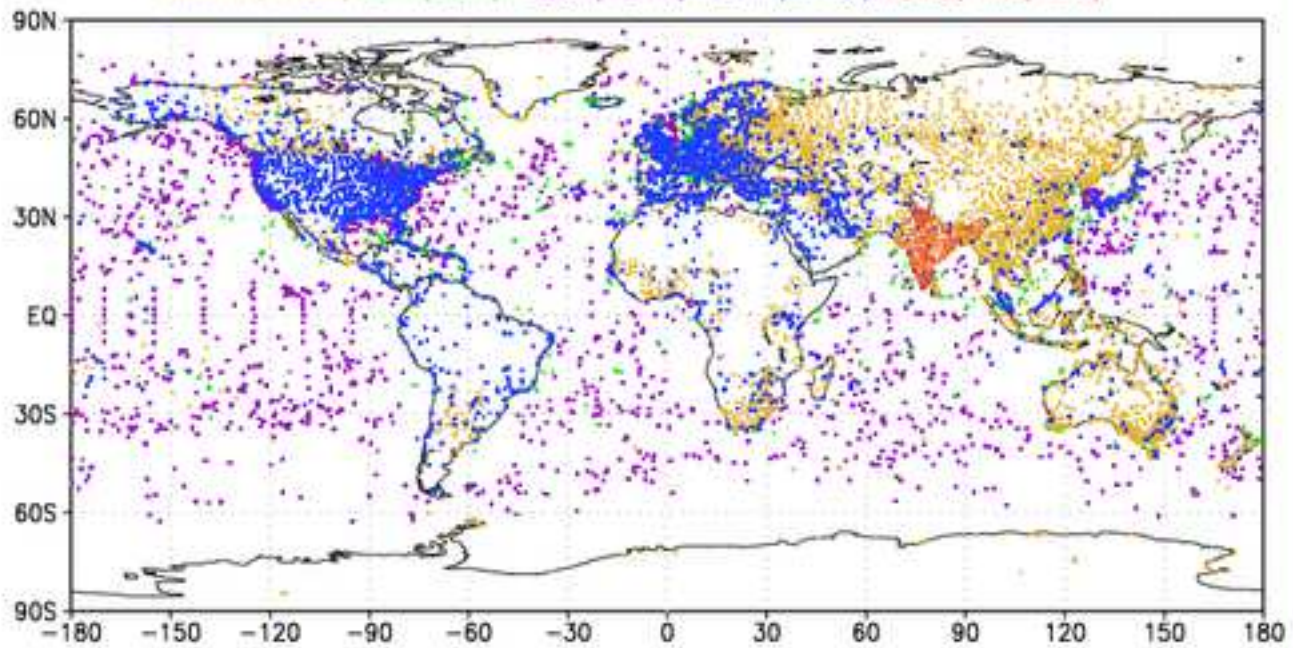
Avg=
Today_Cnt=
Dep= %

Global Observation Coverage

Data Coverage: Surface (20102017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 54572

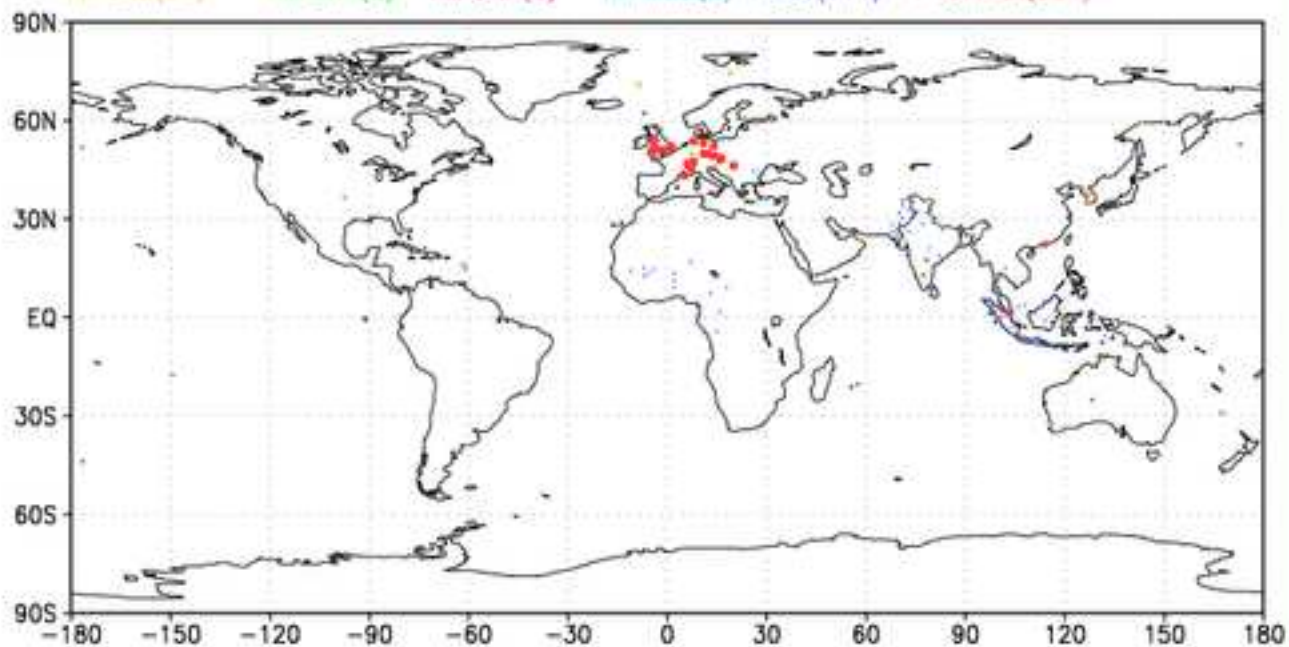
LNDSYN(14928) SHIP(2187) BUOY(13046) METAR(19436) MOBILE/AWS(4975)



Data Coverage: Sonde (20102017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 704

TMP LND(29) TMP SHP(0) TMP DRP(0) TMP MDB(0) PILOT(111) PROFILER(554)



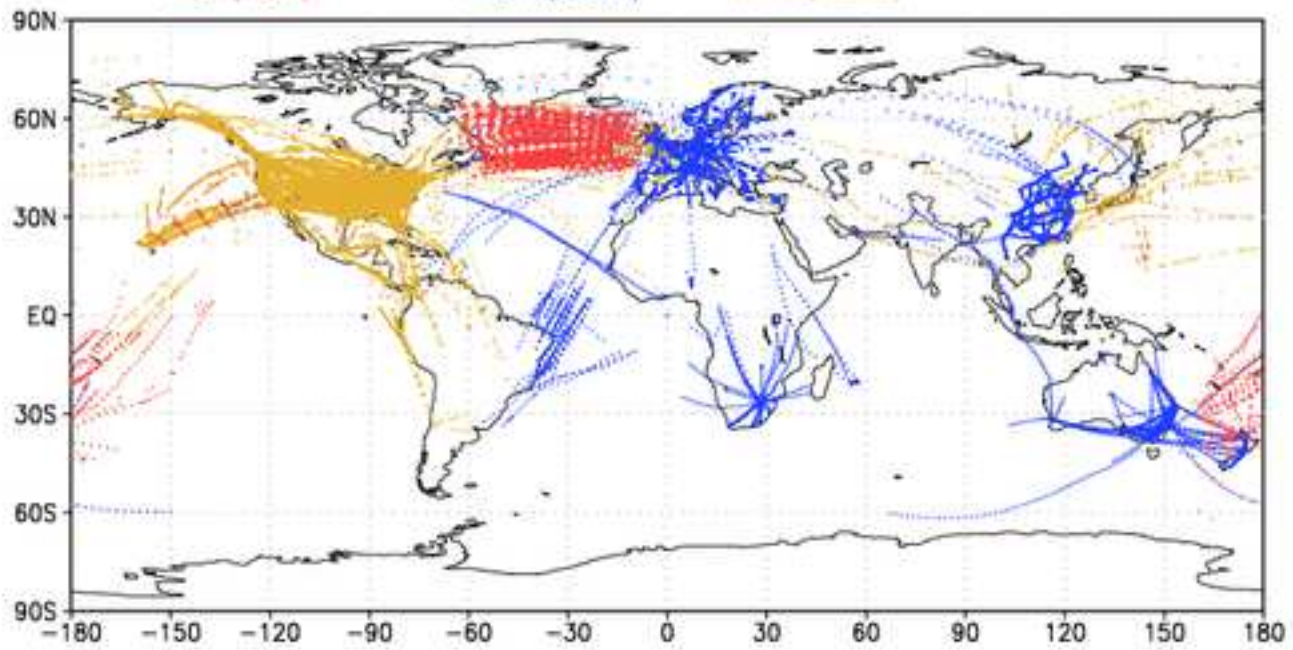
Data Coverage: AIRCFT (20102017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 96913

AIREP(7387)

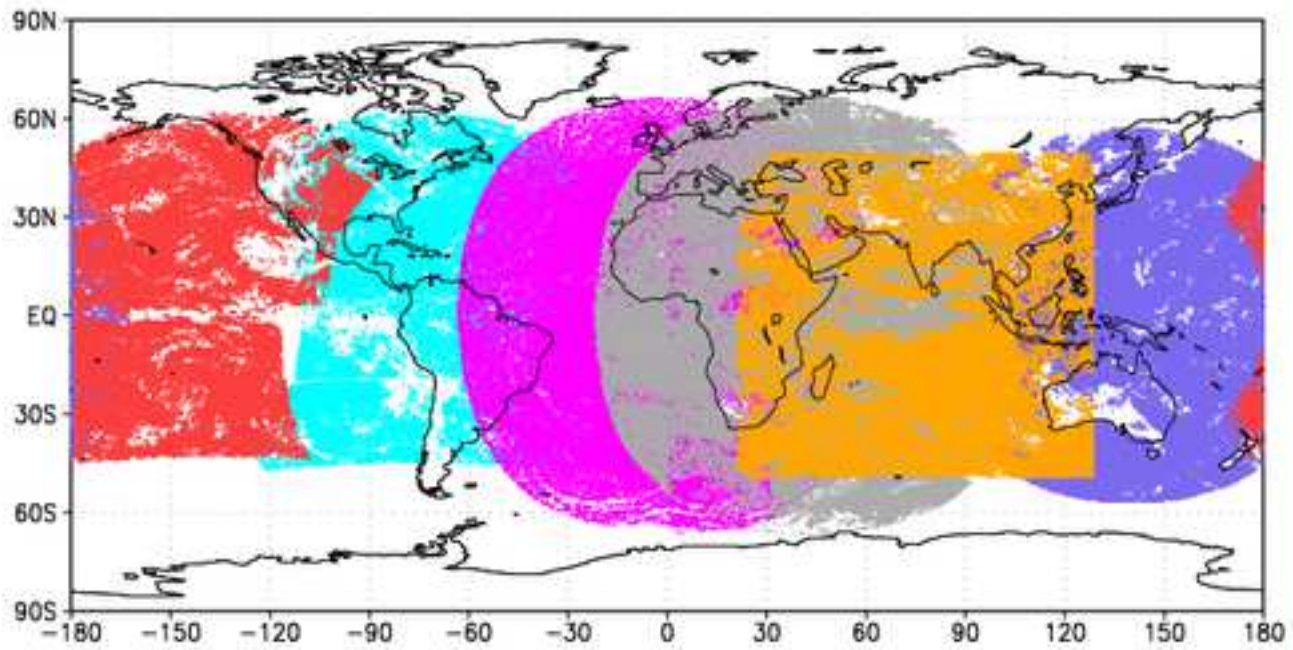
AMDAR(23564)

ACARS(85962)



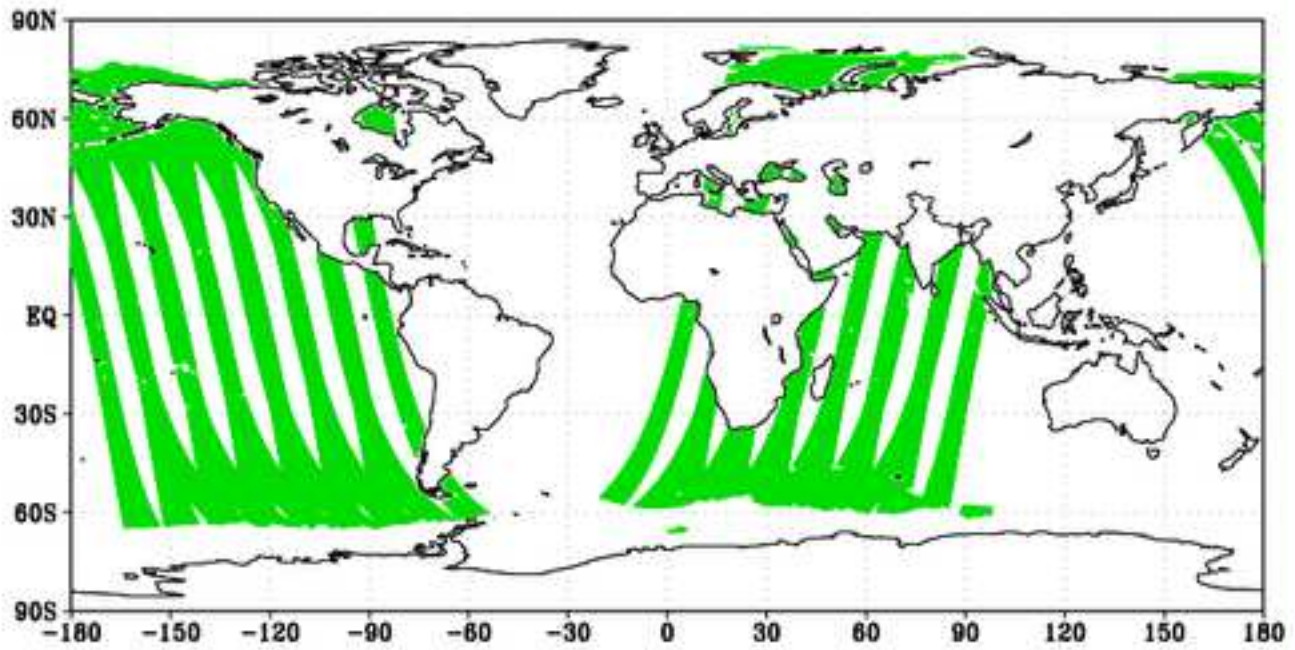
Data Coverage: AMV (20102017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 715367

GOES-15(59374) GOES-13(60731) INSAT-3D(55399) METEOSAT-8(207557)
METEOSAT-10(153917) HIMAWARI-8(158389) 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 06UTC +/- 03Hrs)

ASCAT (231578)



Data Coverage: SAT RADIANCE (20102017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2483865

NOAA15(57120)

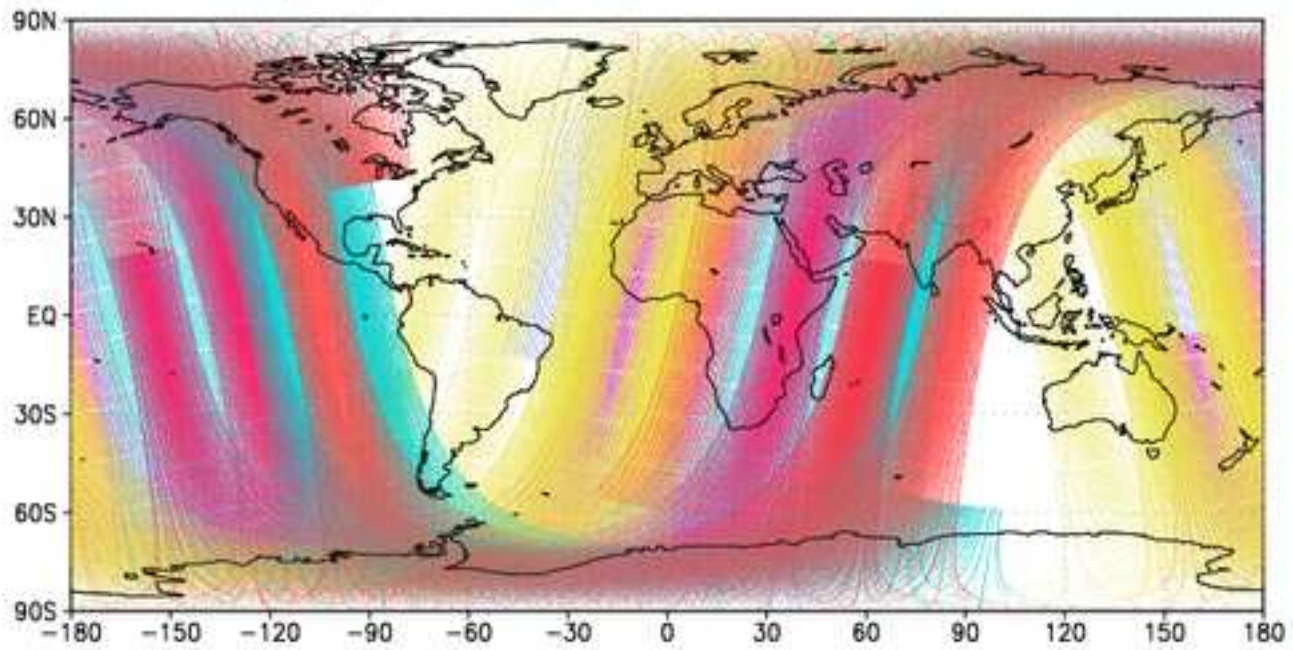
NOAA18(0)

NOAA18(589944)

NOAA18(848358)

METOP1(588520)

METOP2(589923)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (20102017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1119125

NOAA15(0)

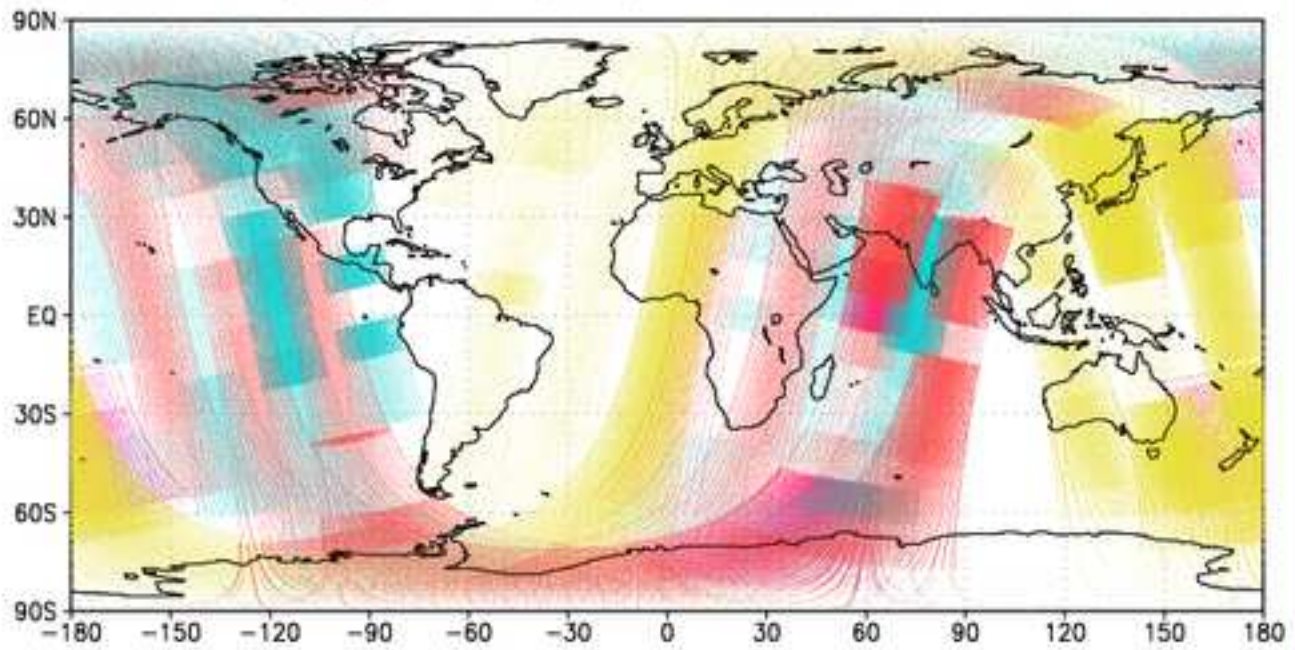
NOAA16(0)

NOAA18(56212)

NOAA19(488272)

METOP1(312962)

METOP2(259878)

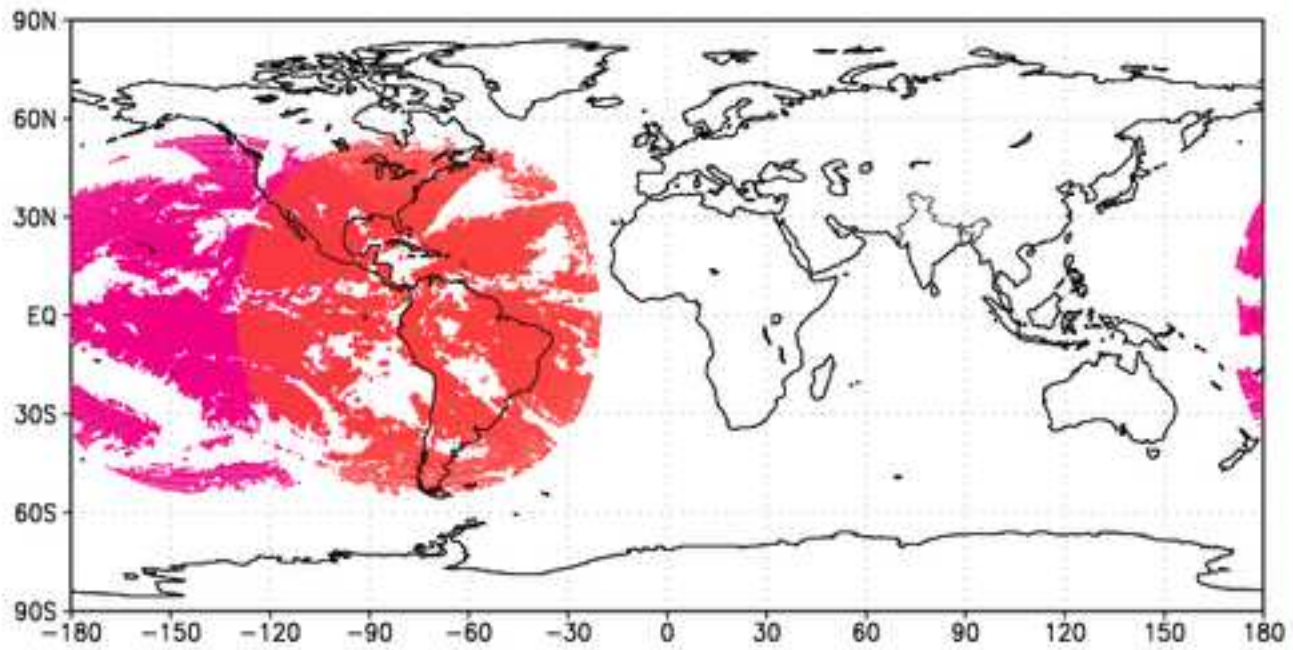


Data Coverage: GOES CSBT (20102017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 53193

GOES-15(26441)

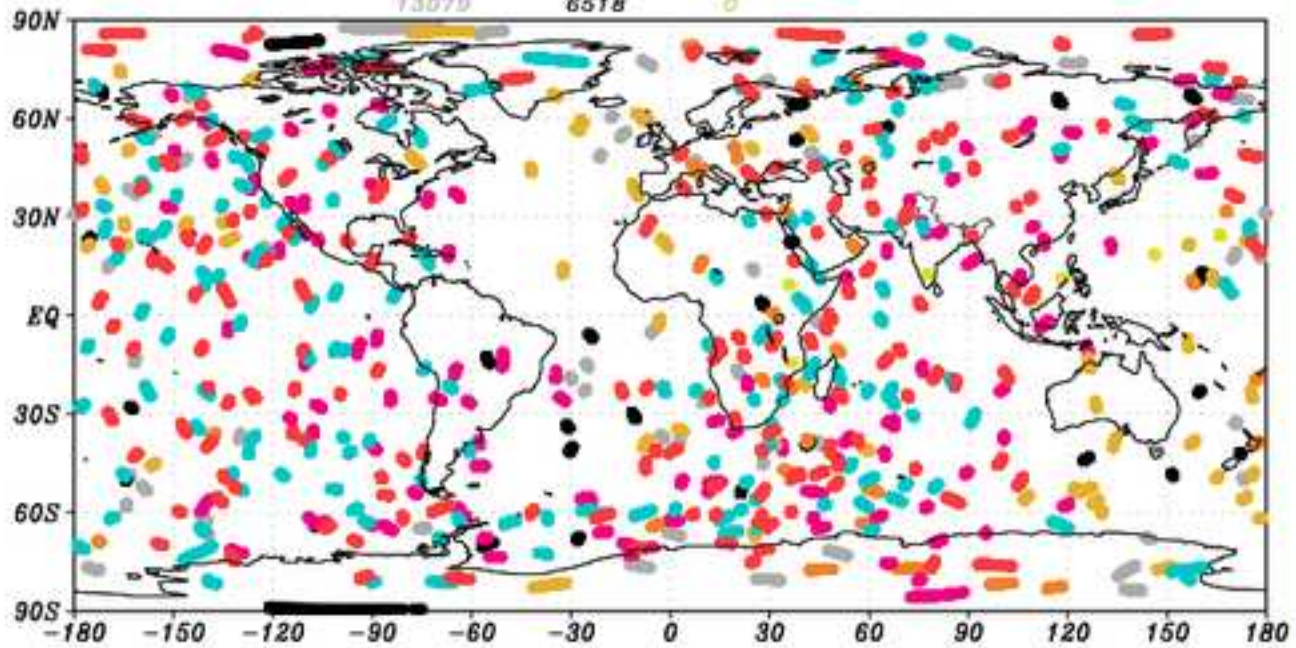
GOES-13(26752)



Data Coverage:GPSRO (20102017 0600UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 155817

GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
7226	40546	30138	33411	0	1247	0	0	15652
		TerraSAR-X	TenDEM-X	GRACE-B				
		13079	6518	0				



Count for different types of observation (Global)
for the last 45 Days (valid for 06 UTC)

SYNOP

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= %

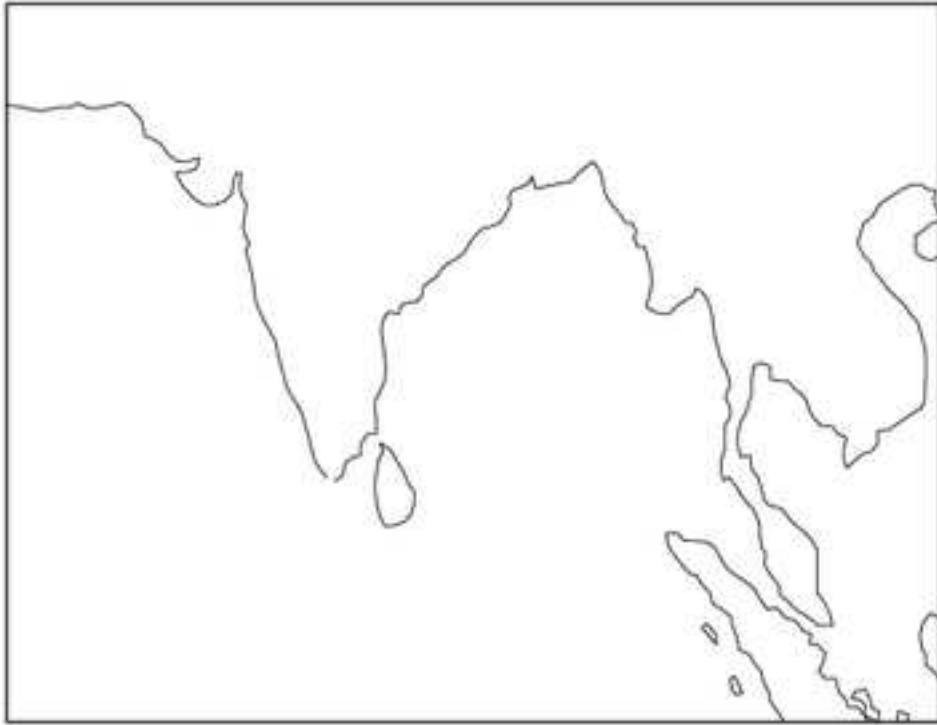
AMV

Avg=
Today_Cnt=
Dep= %

SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20171020 06Z)

ASCAT WINDS (20102017 06 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

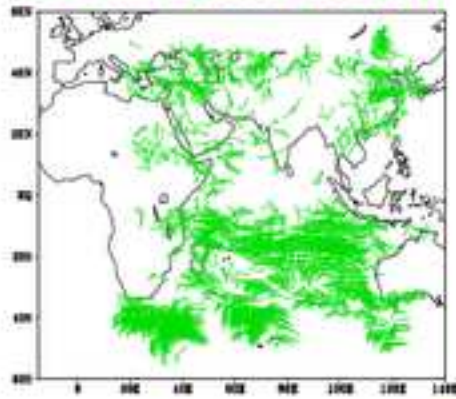
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

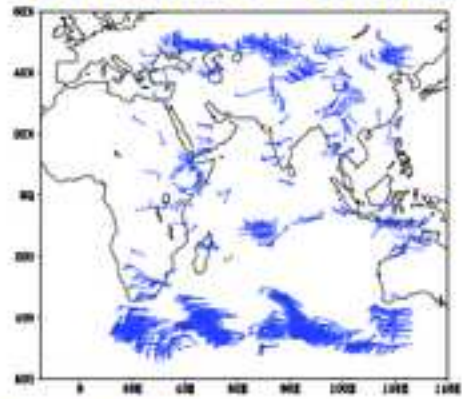
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (20102017 0600UTC)

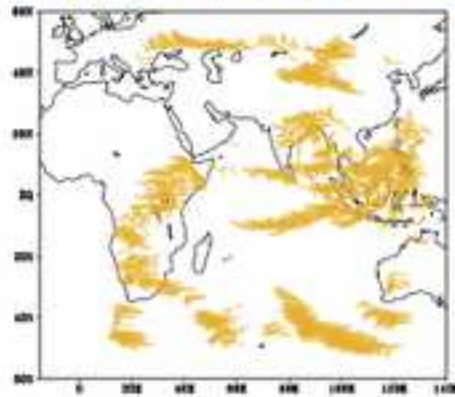
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



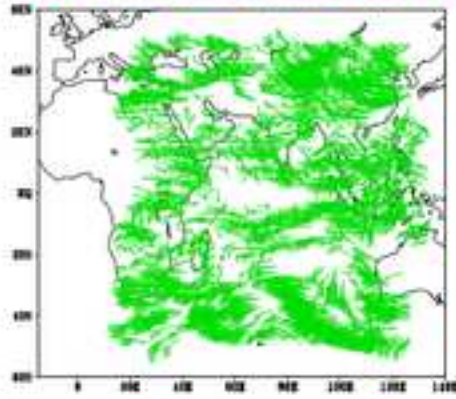
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (20102017 0600UTC)

Low Level (Below 700 hPa)

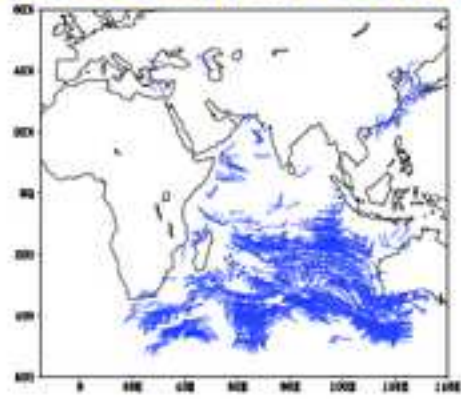
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (20102017 0600UTC)

WV, High Level (Above 400 hPa)

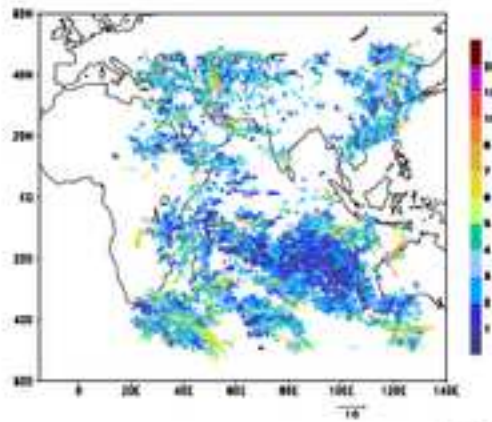


VIS, Low Level (Below 700 hPa)

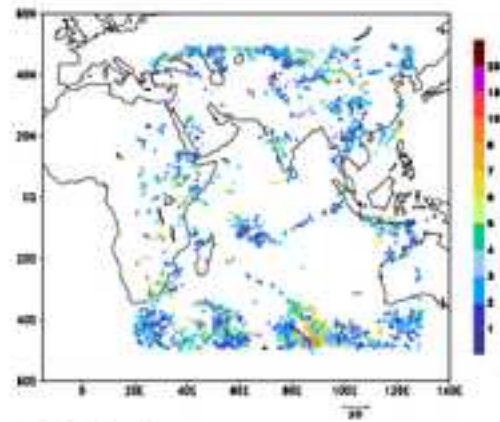


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (20102017 0600UTC)

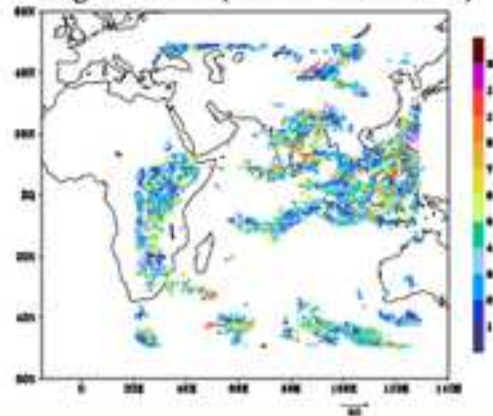
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



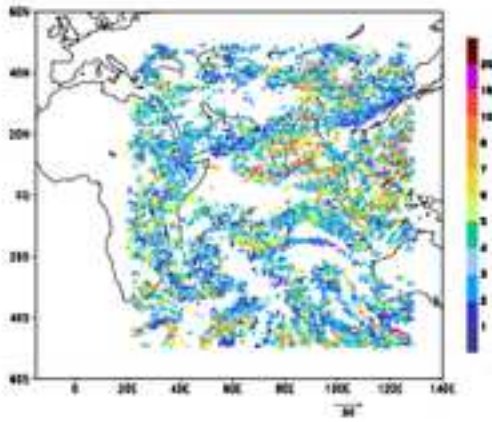
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (20102017 0600UTC)

Low Level (Below 700 hPa)

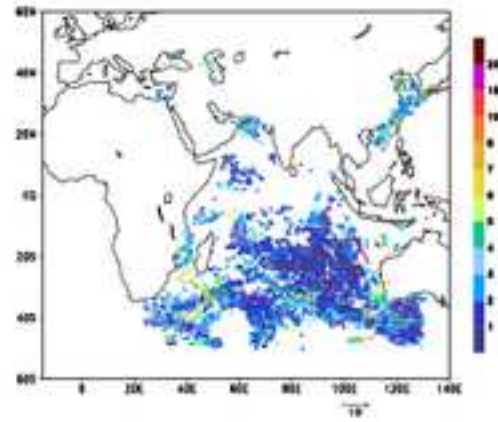
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 0600UTC)

WV, High Level (Above 400 hPa)

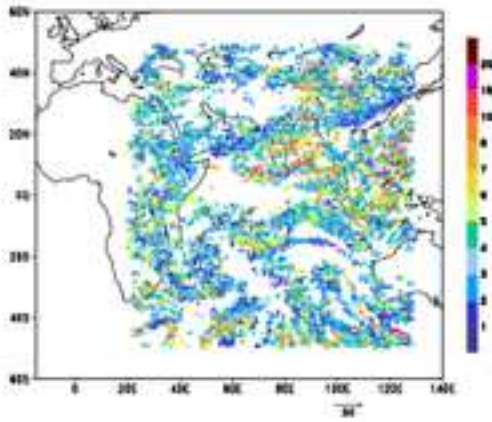


VIS, Low level (Below 700 hPa)

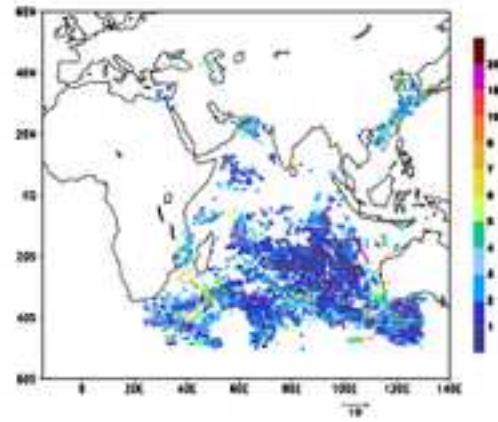


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 0600UTC)

WV, High Level (Above 400 hPa)

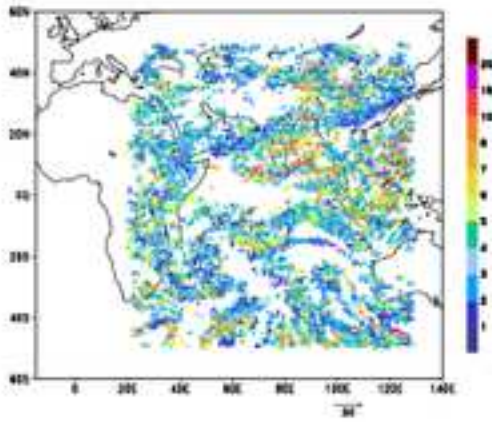


VIS, Low level (Below 700 hPa)

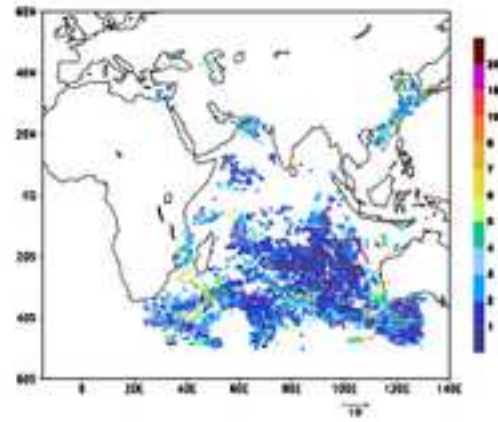


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 0600UTC)

WV, High Level (Above 400 hPa)

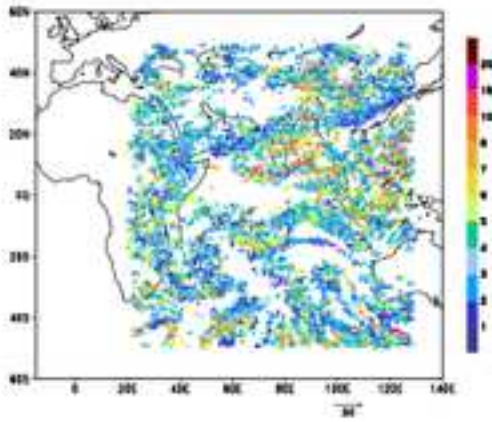


VIS, Low level (Below 700 hPa)

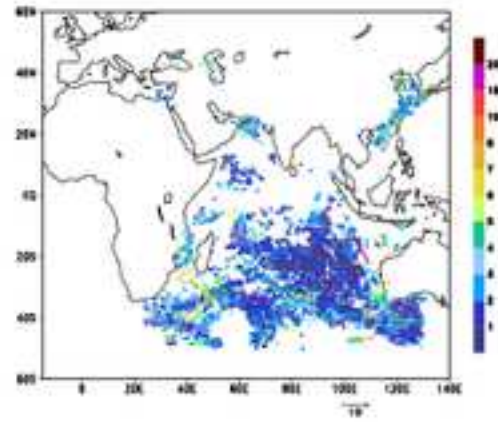


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 0600UTC)

WV, High Level (Above 400 hPa)

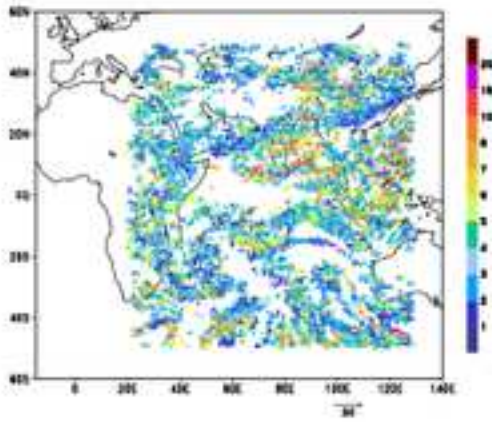


VIS, Low level (Below 700 hPa)

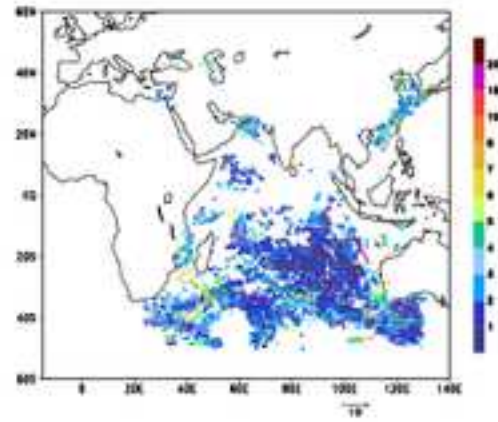


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (20102017 0600UTC)

WV, High Level (Above 400 hPa)



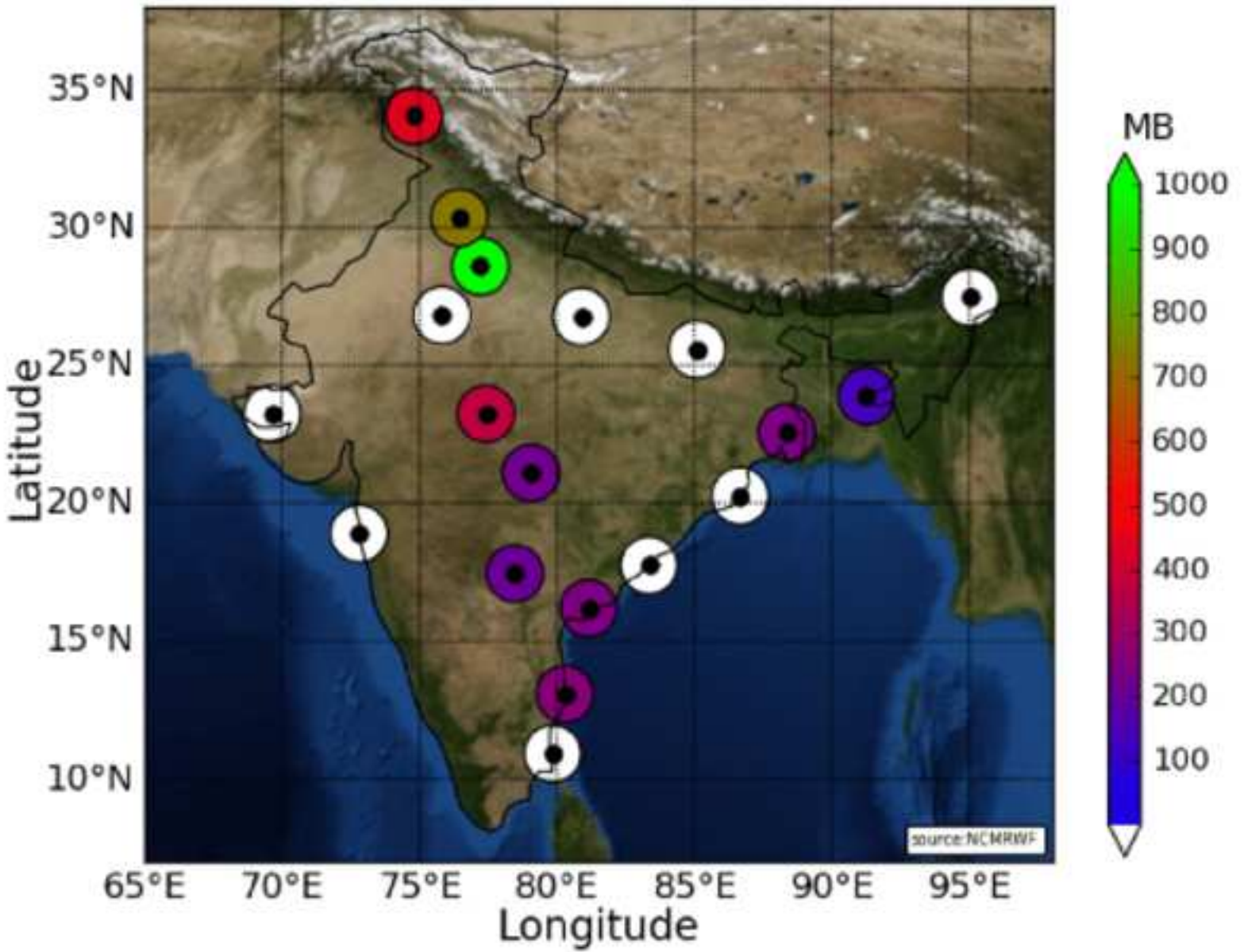
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

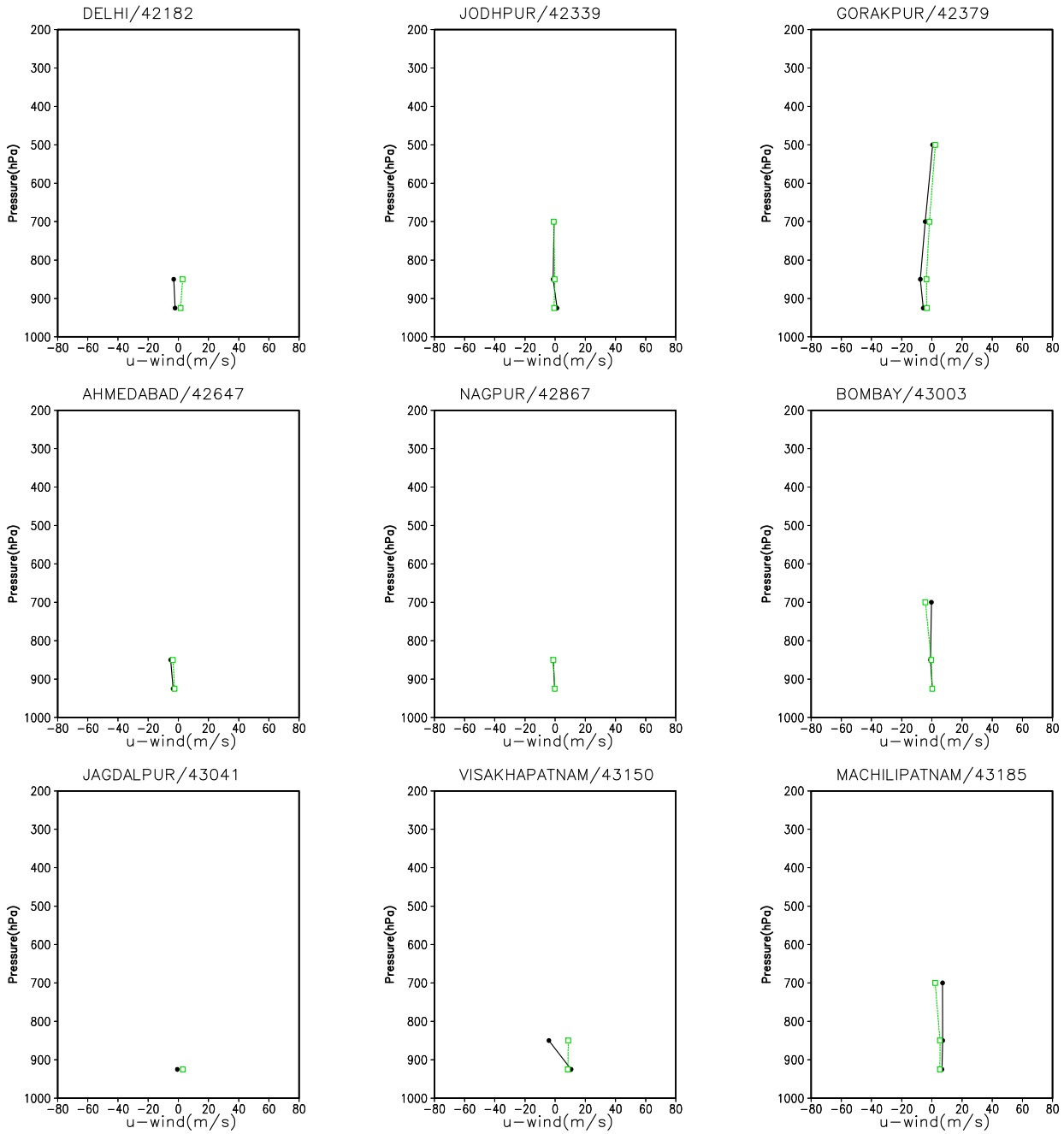
Date: 20171020 at : 06UTC



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 06UTC 20102017

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