

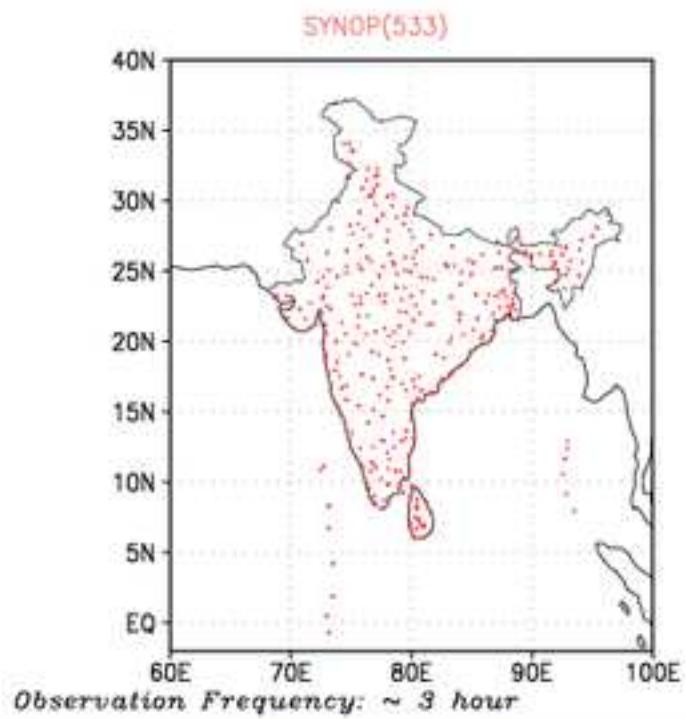
Observation Monitoring

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

for 28062017 (0600 UTC)

Indian Observation Coverage

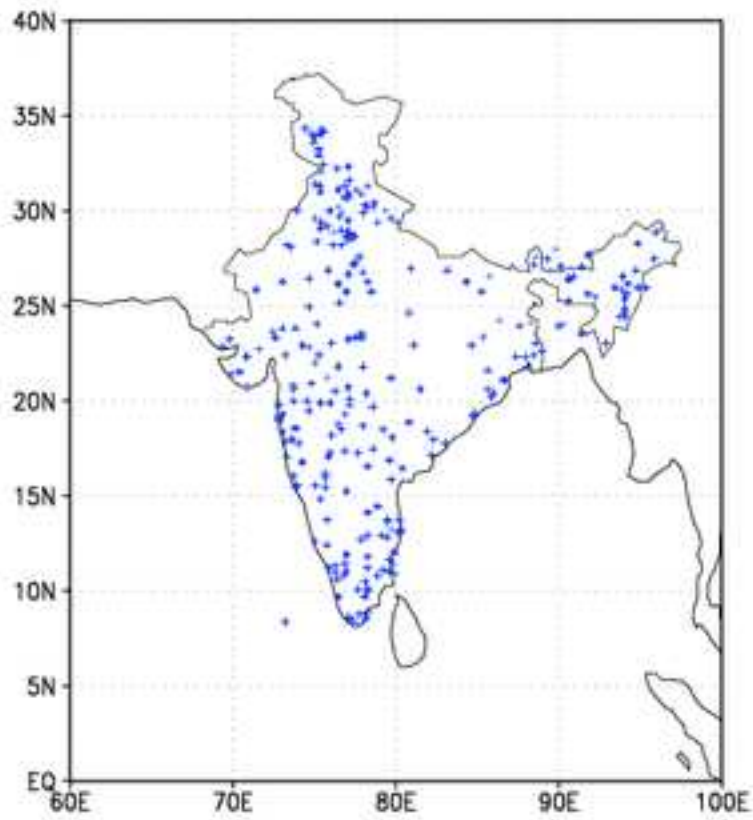
Data Coverage: Surface (28062017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 533
(42 & 43 Block)



Data Coverage: Indian AWS (28062017 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1282

AWS PRESSURE (1282)

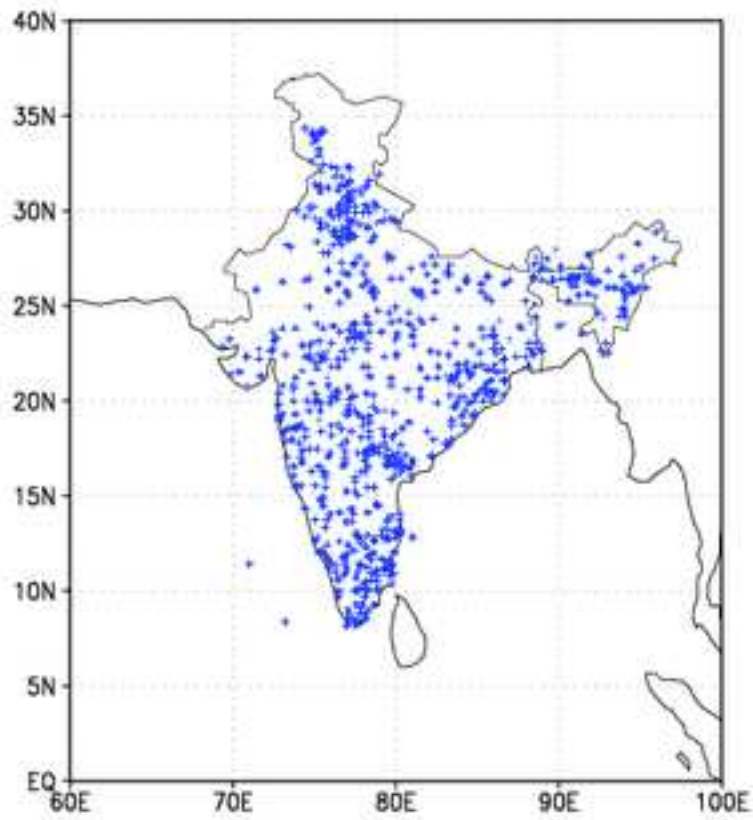


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (28062017 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 3818

AWS + ARG (3818)

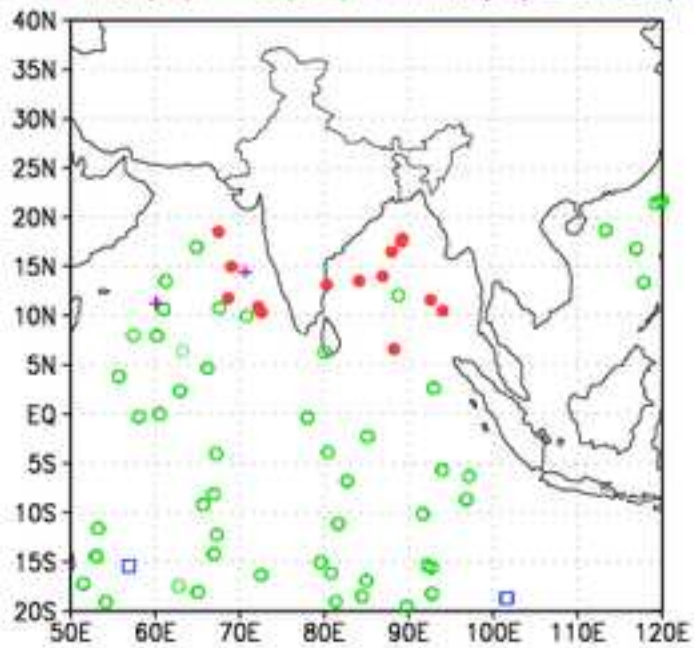


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (28062017 0600UTC +/- 3 Hrs)

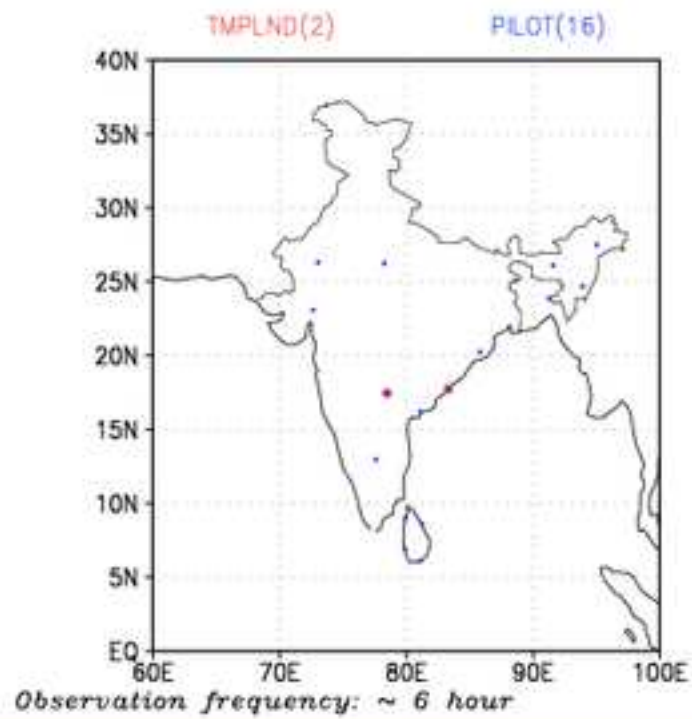
Total Number of Observations Received at NCMRWF: 333

country code in GTS as ● INDIA(30) ○ USA(279) + FRANCE(10) □ OTHERS(14)



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

Data Coverage: Sonde (28062017 0600UTC +/- 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 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

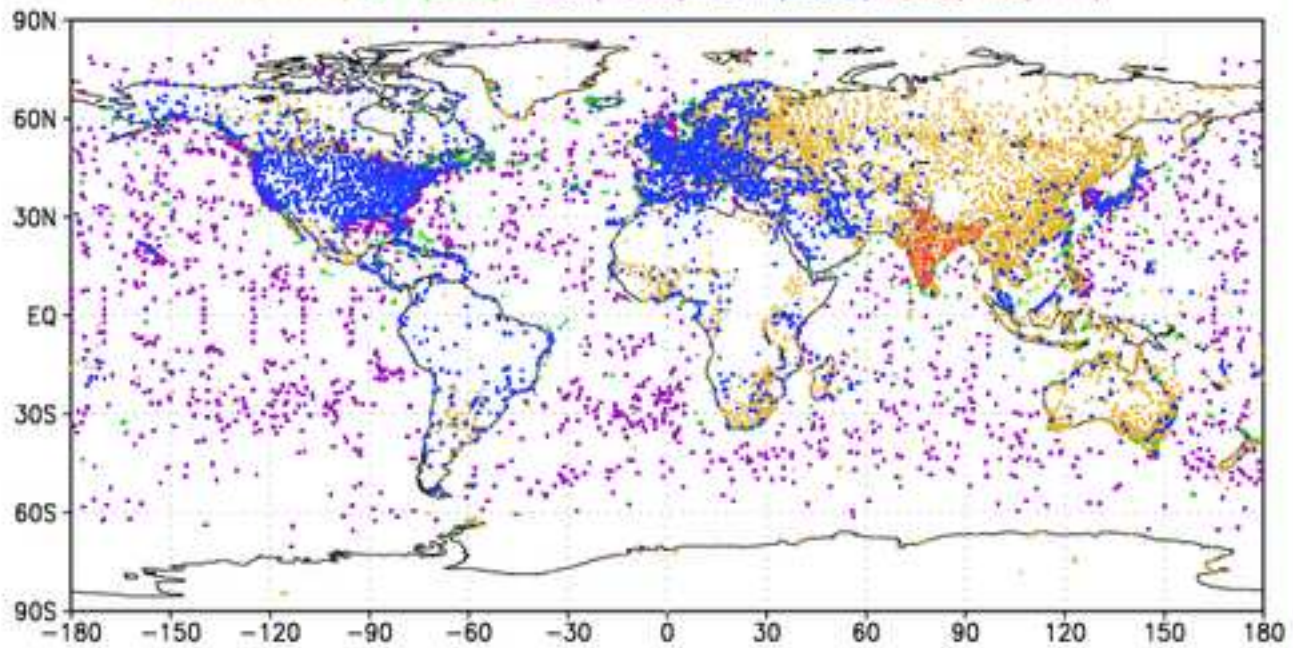
Avg=
Today_Cnt=
Dep= %

Global Observation Coverage

Data Coverage: Surface (28062017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 54408

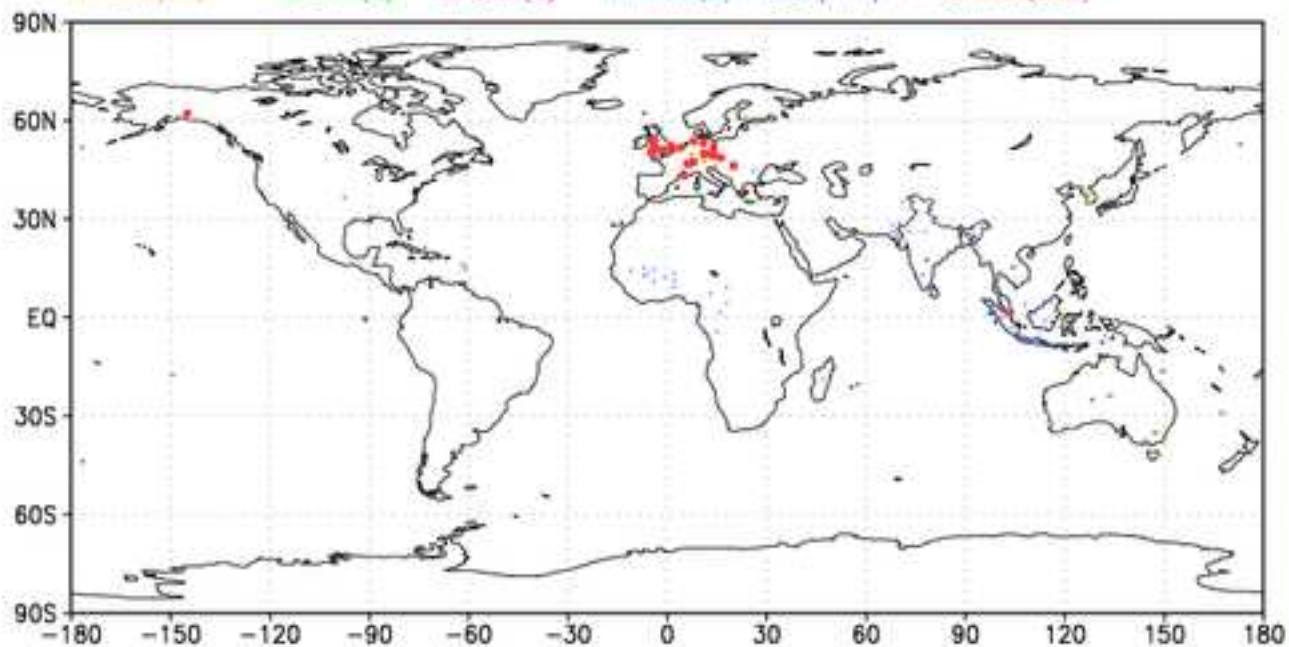
LNDSYN(14945) SHIP(2163) BUOY(14063) METAR(18820) MOBILE/AWS(4417)



Data Coverage: Sonde (28062017 0600UTC +/- 03Hrs)

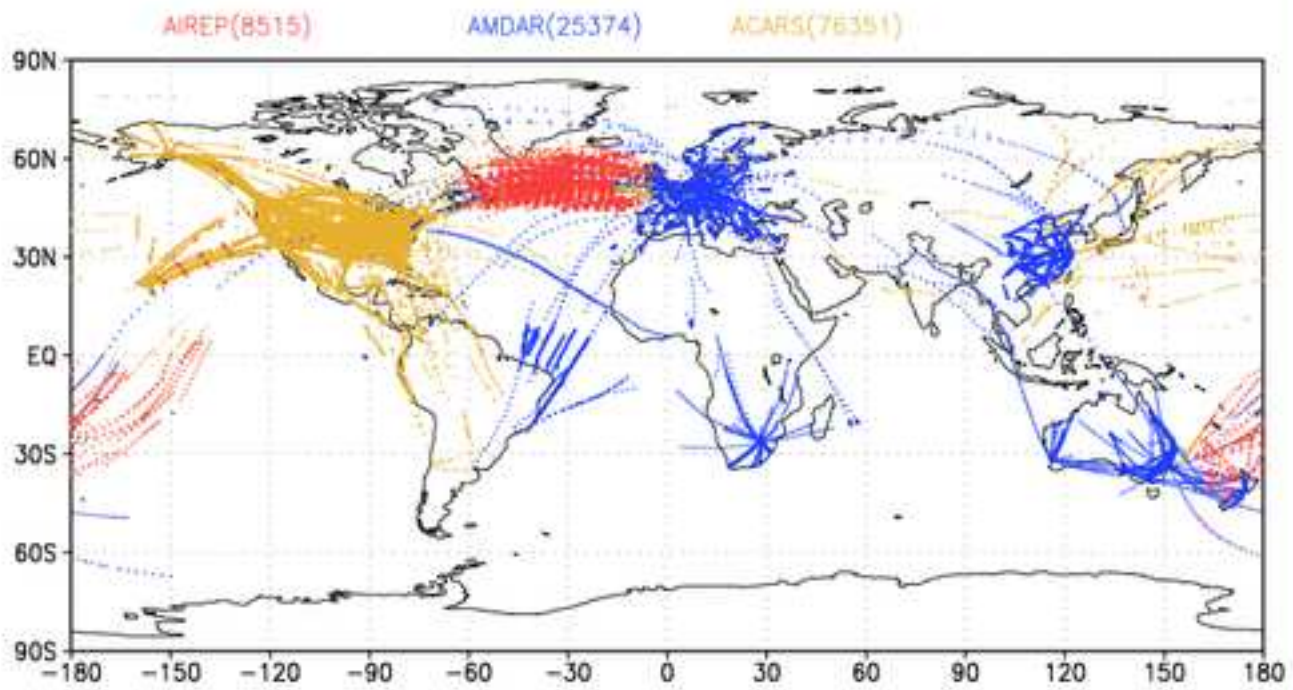
Total Number of Observations Received at NCMRWF: 705

TMPLND(35) TMPSHP(0) TMPDRP(0) TMPMDB(0) PILOT(111) PROFILER(559)



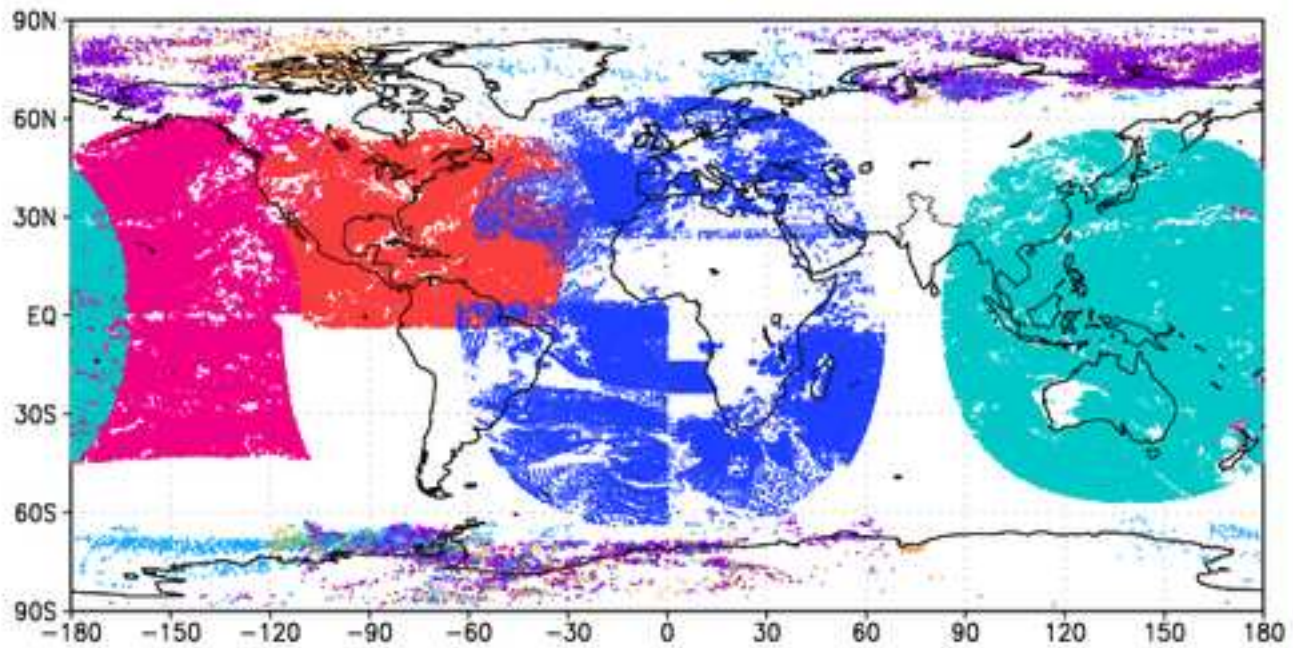
Data Coverage: AIRCFT (28062017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 110240



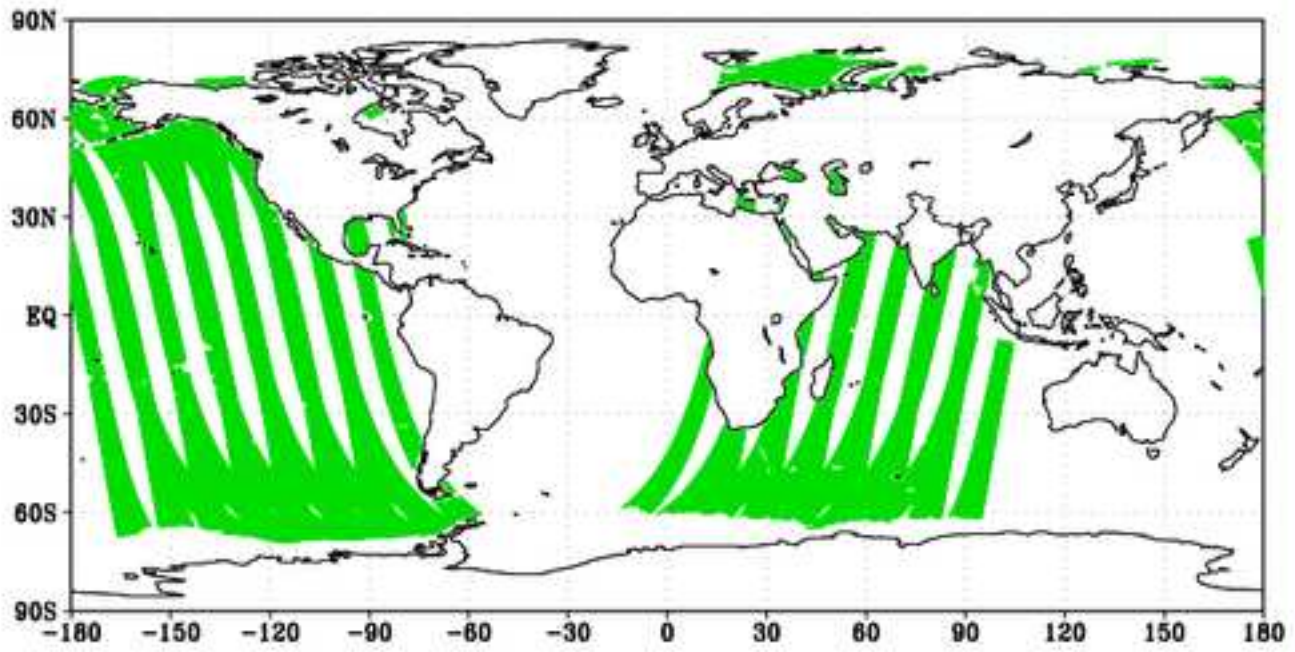
Data Coverage: AMV (28062017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 562160

GOES-15(174016) GOES-13(114052) METEOSAT-7(0) METEOSAT-8(0)
METEOSAT-10(50043) GMS/MTSAT(182249) MODIS/Terra(4335) MODIS/Aqua(0)
METOP(9329) NOAA-15(260) NOAA-16(0) NOAA-18(300) NOAA-19(1906)



Data Coverage: ASCAT winds (28062017 06UTC +/- 03Hrs)

ASCAT (228579)



Data Coverage: SAT RADIANCE (28062017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3216224

NOAA15(37610)

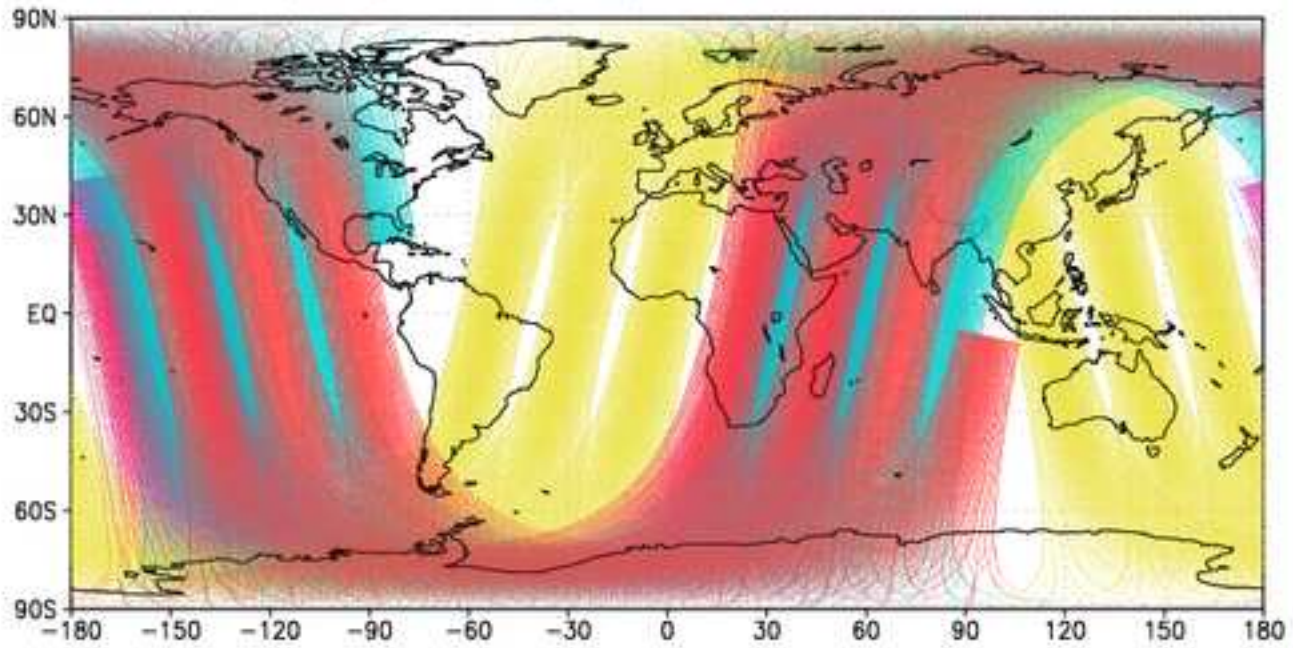
NOAA18(0)

NOAA18(515888)

NOAA18(844281)

METOP1(925014)

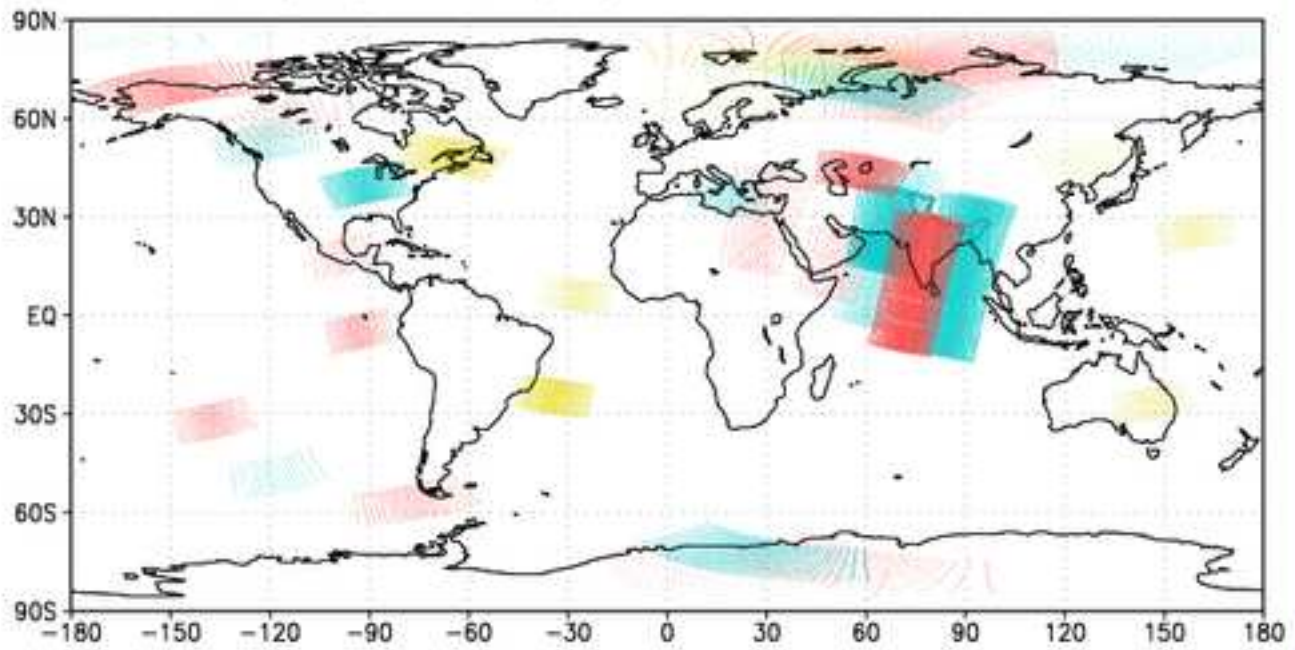
METOP2(659421)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (28062017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 181108

NOAA15(0) NOAA18(0) NOAA18(0) NOAA18(23928)
METOP1(65780) METOP2(91400)

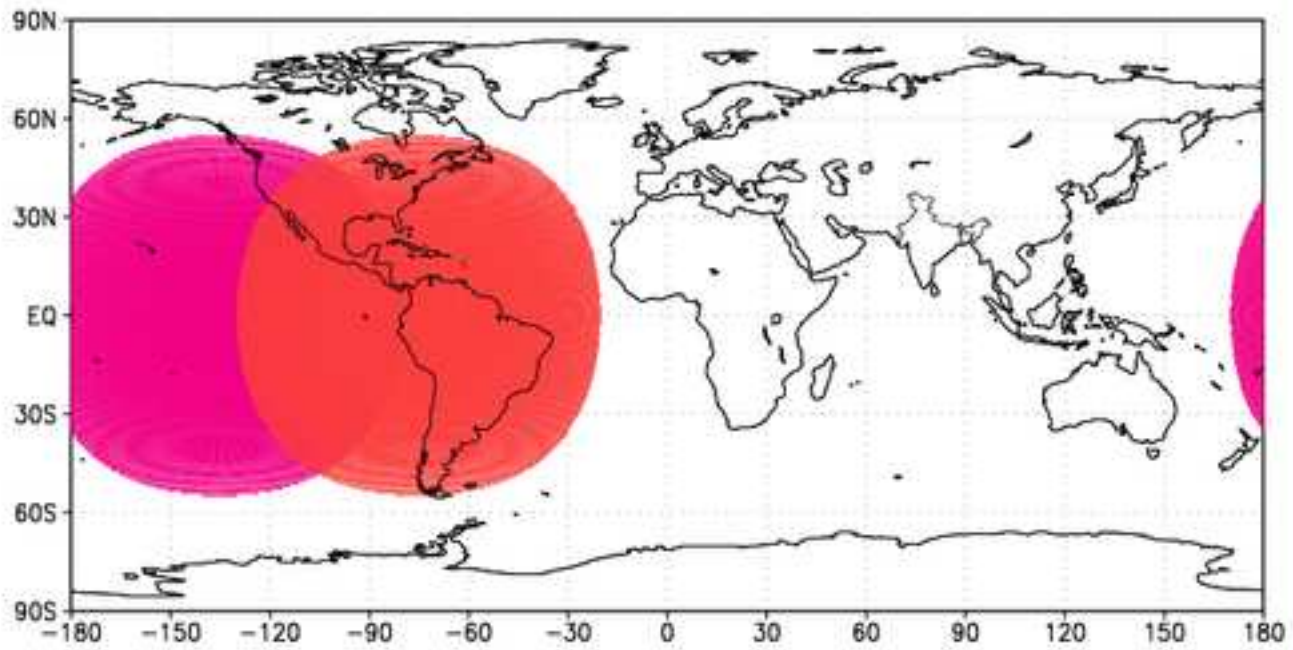


Data Coverage: GOES CSBT (28062017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 84777

GOES-15(42392)

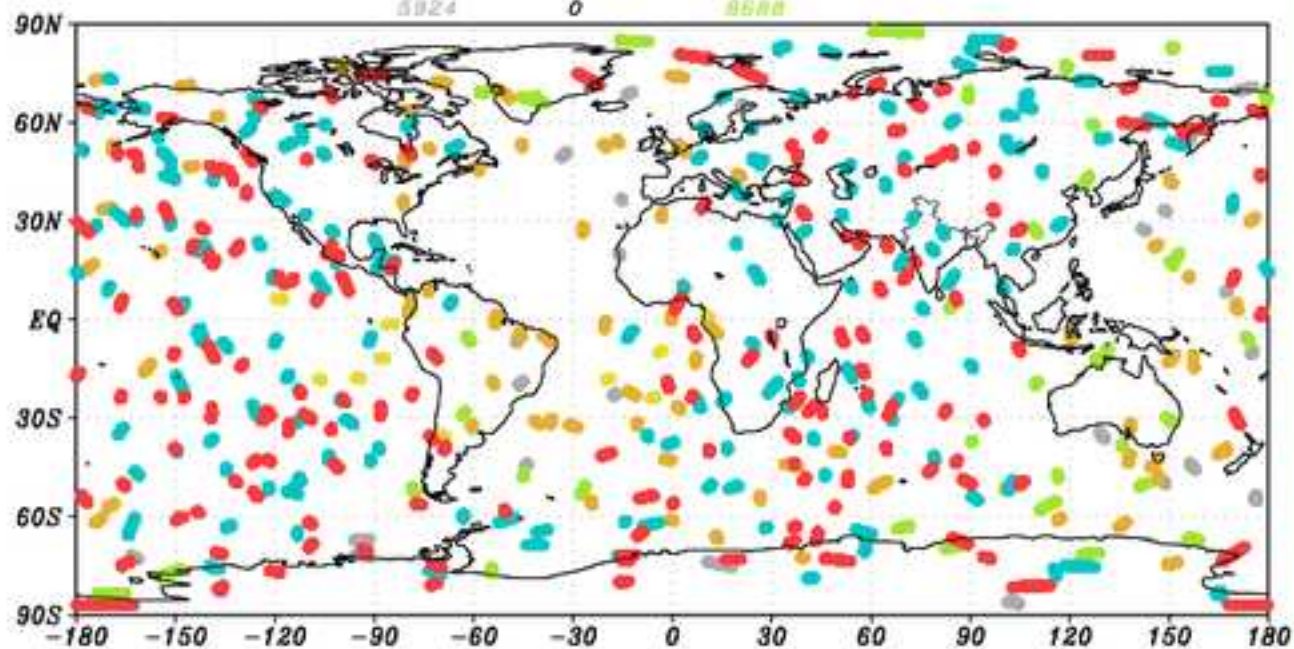
GOES-13(42385)



Data Coverage:GPSRO (28062017 0600UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 116705

GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	39548	38978	0	0	1895	0	0	21672
		TerraSAR-X	TenDEM-X	GRACE-B				
		5924	0	8588				



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

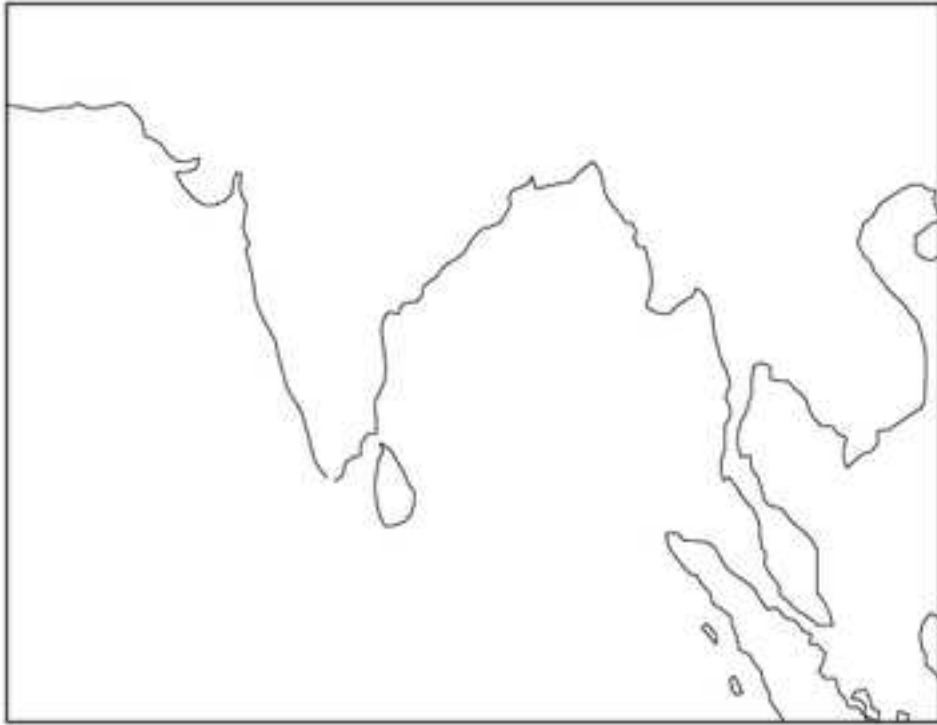
AMV

Avg=
Today_Cnt=
Dep= %

SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20170628 06Z)

ASCAT WINDS (28062017 06 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

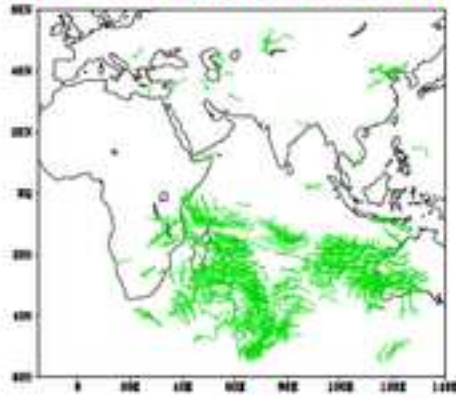
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

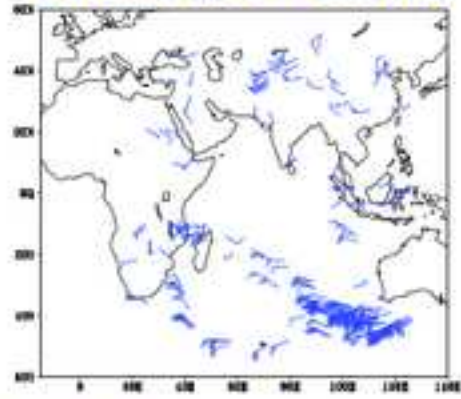
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (28062017 0600UTC)

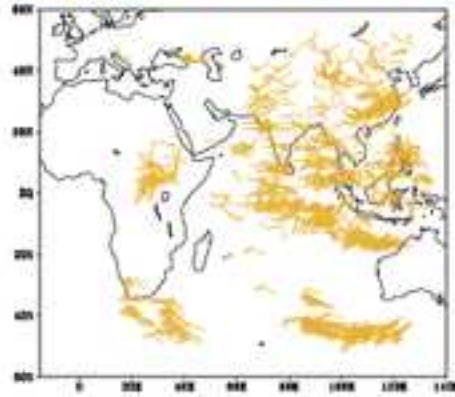
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



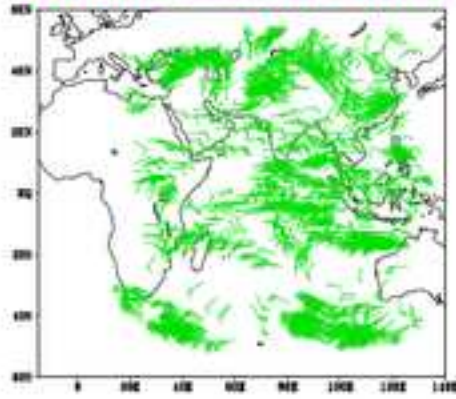
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (28062017 0600UTC)

Low Level (Below 700 hPa)

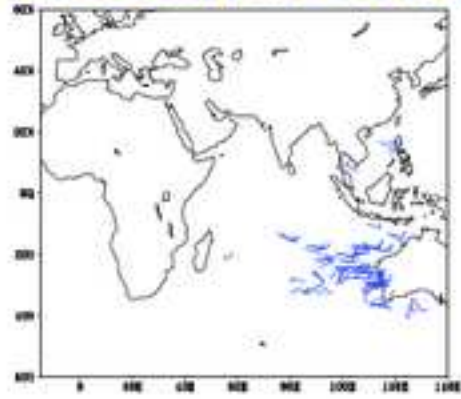
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (28062017 0600UTC)

WV, High Level (Above 400 hPa)

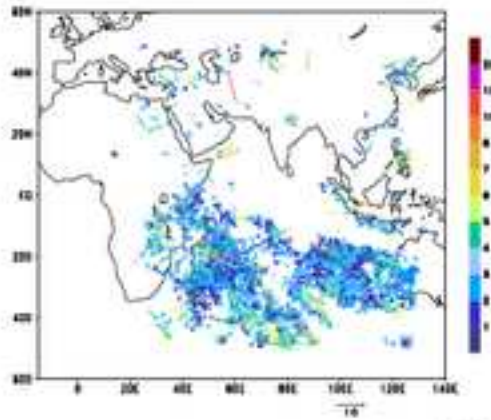


VIS, Low Level (Below 700 hPa)

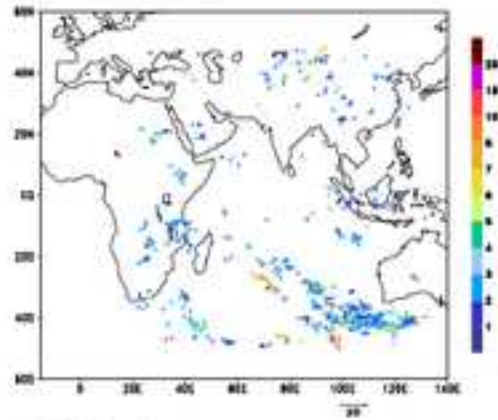


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (28062017 0600UTC)

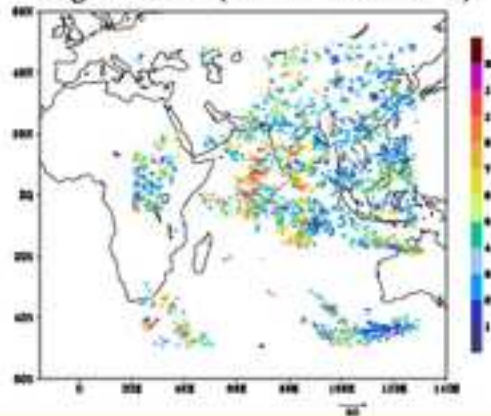
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



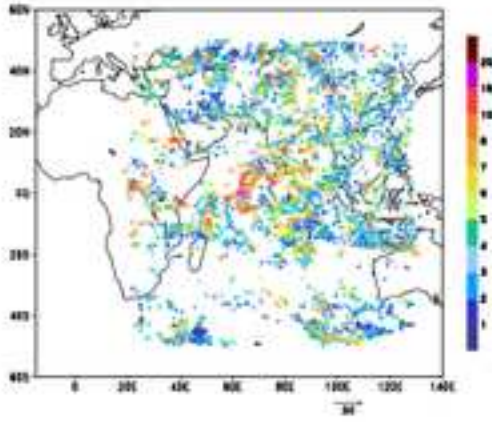
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (28062017 0600UTC)

Low Level (Below 700 hPa)

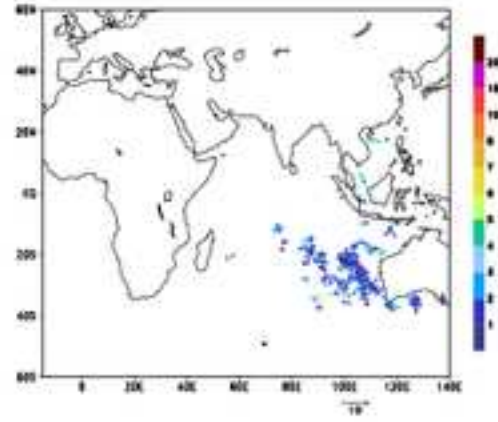
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28062017 0600UTC)

WV, High Level (Above 400 hPa)

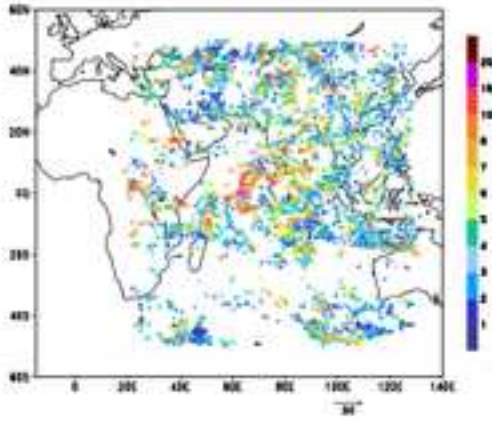


VIS, Low level (Below 700 hPa)

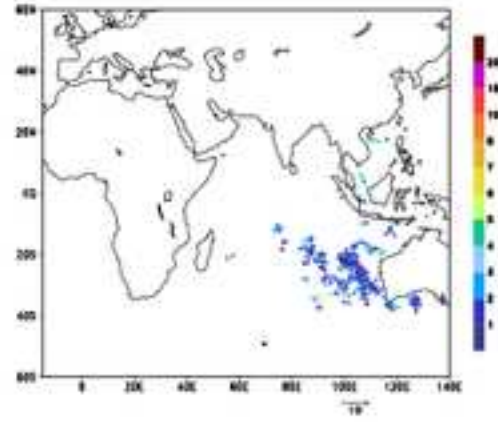


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28062017 0600UTC)

WV, High Level (Above 400 hPa)

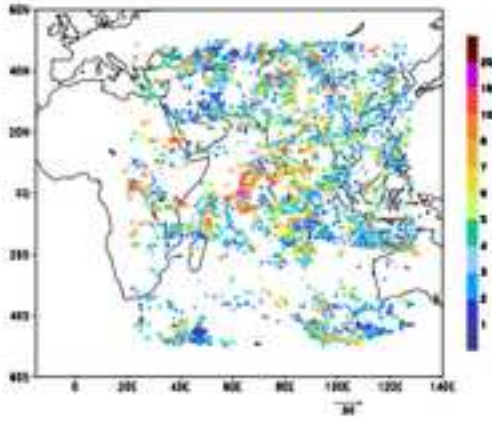


VIS, Low level (Below 700 hPa)

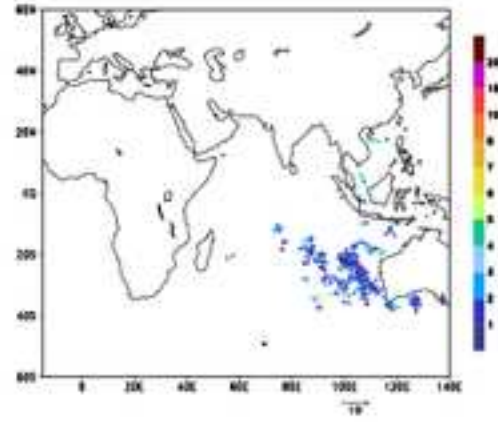


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28062017 0600UTC)

WV, High Level (Above 400 hPa)

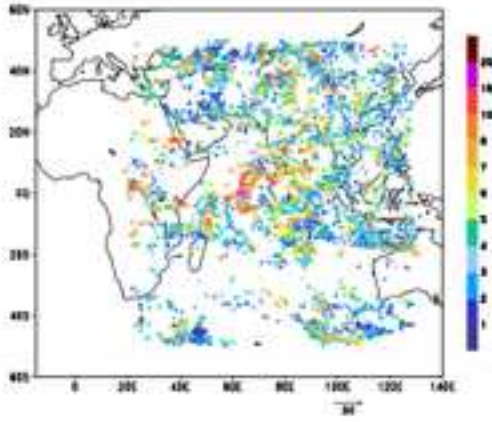


VIS, Low level (Below 700 hPa)

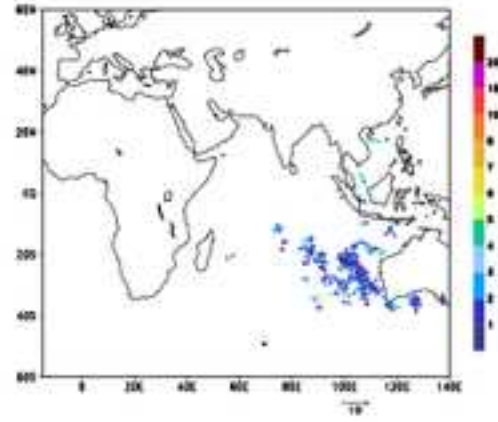


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28062017 0600UTC)

WV, High Level (Above 400 hPa)

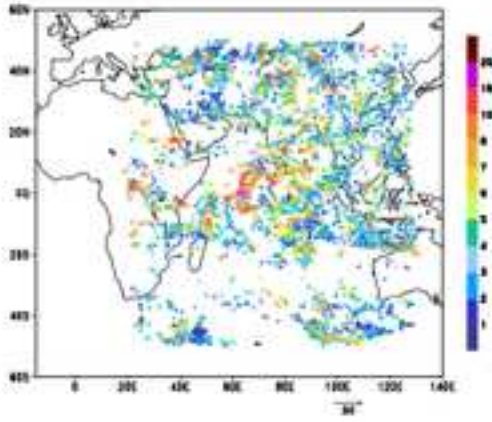


VIS, Low level (Below 700 hPa)

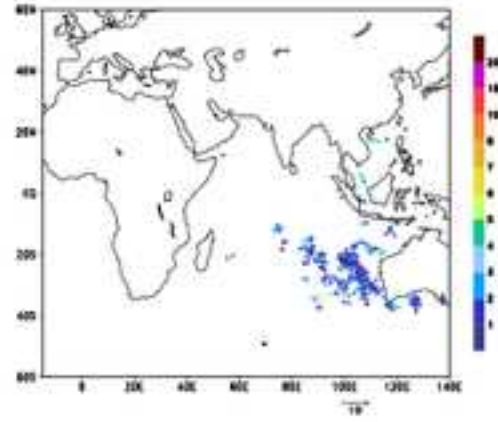


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28062017 0600UTC)

WV, High Level (Above 400 hPa)



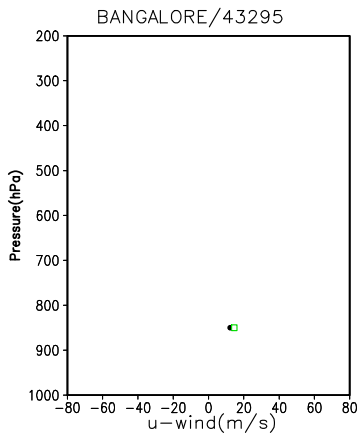
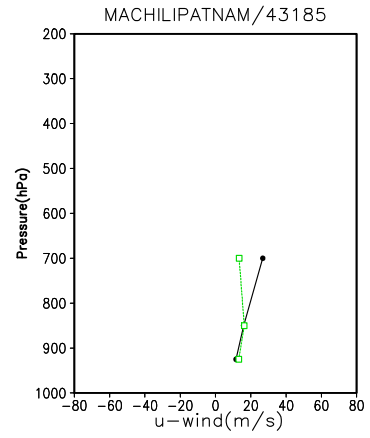
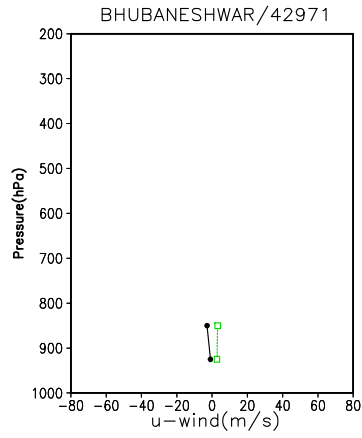
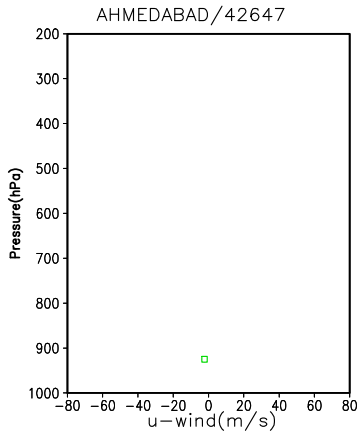
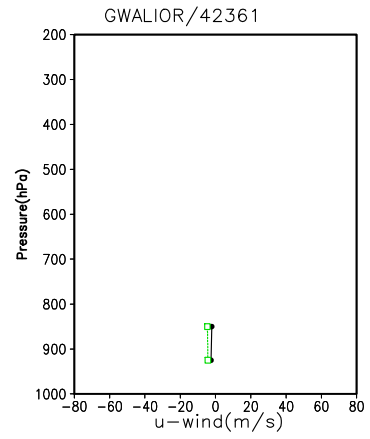
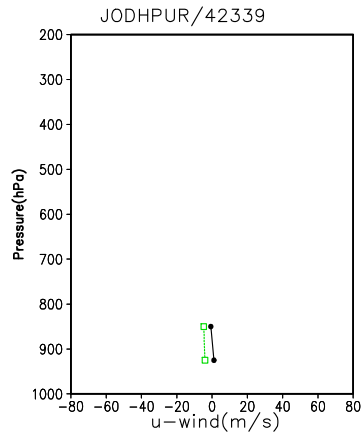
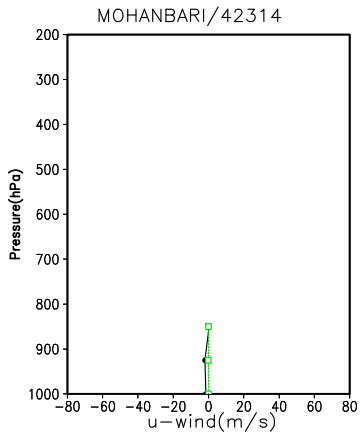
VIS, Low level (Below 700 hPa)



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 28062017
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)