

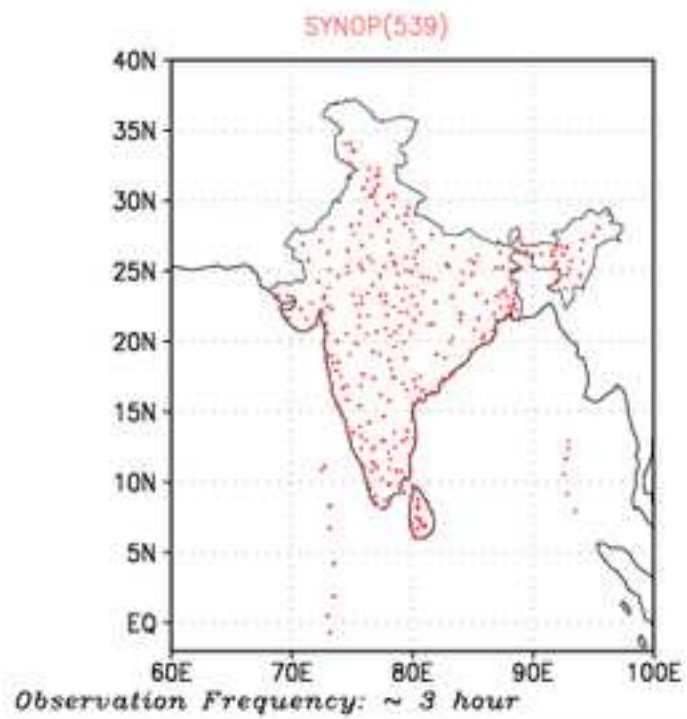
Observation Monitoring

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

for 21082017 (0600 UTC)

Indian Observation Coverage

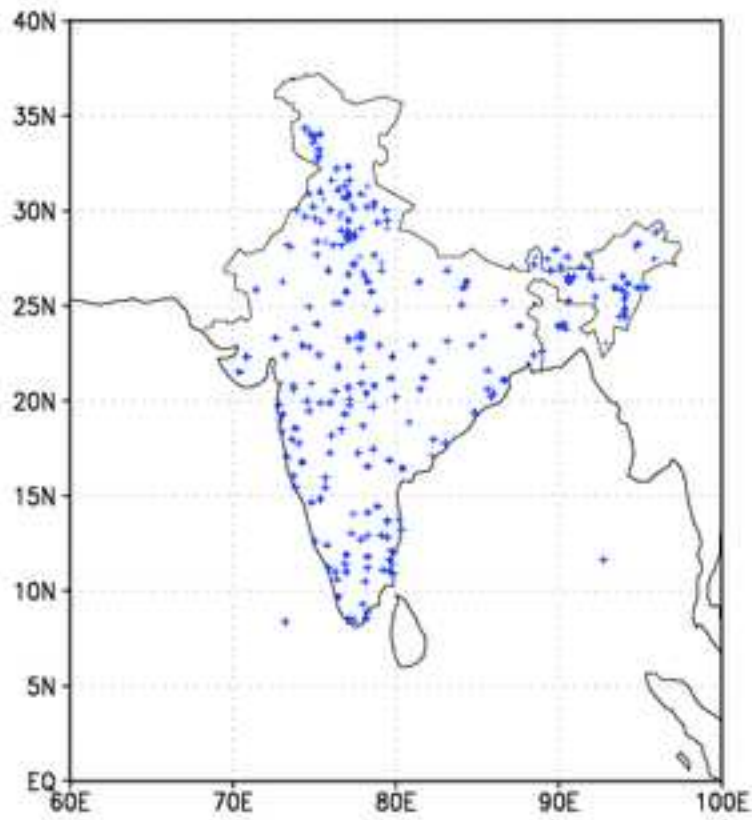
Data Coverage: Surface (21082017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 539
(42 & 43 Block)



Data Coverage: Indian AWS (21082017 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1148

AWS PRESSURE (1148)

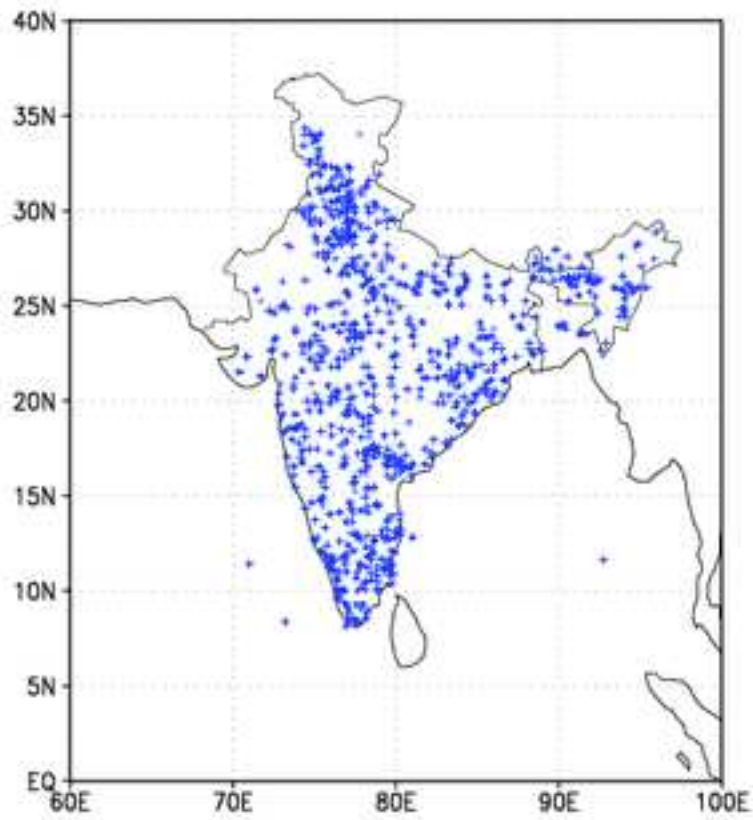


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (21082017 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 4129

AWS + ARG (4129)

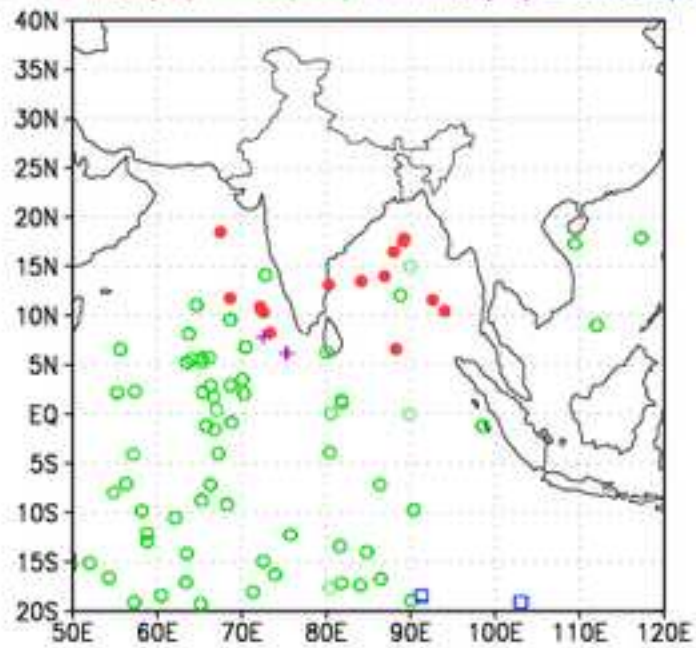


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (21082017 0600UTC +/- 3 Hrs)

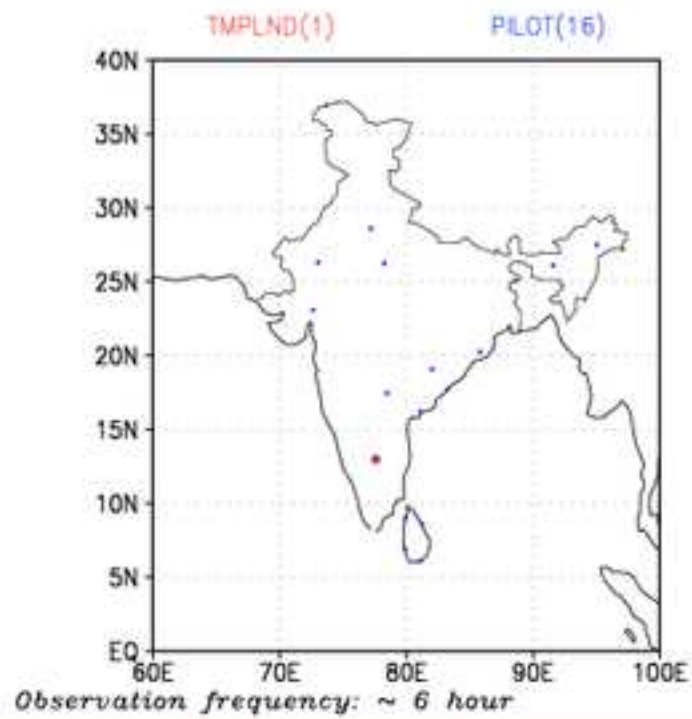
Total Number of Observations Received at NCMRWF: 380

country code in GTS as ● INDIA(30) ○ USA(319) + FRANCE(15) □ OTHERS(16)



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

Data Coverage: Sonde (21082017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 17
(42 & 43 Block)



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

SYN0P

Avg=
Today_Cnt=
Dep= %

BUOY

Avg=
Today_Cnt=
Dep= %

AWS+ARG

Avg=
Today_Cnt=
Dep= %

RS/RW

Avg=
Today_Cnt=
Dep= %

PILOT

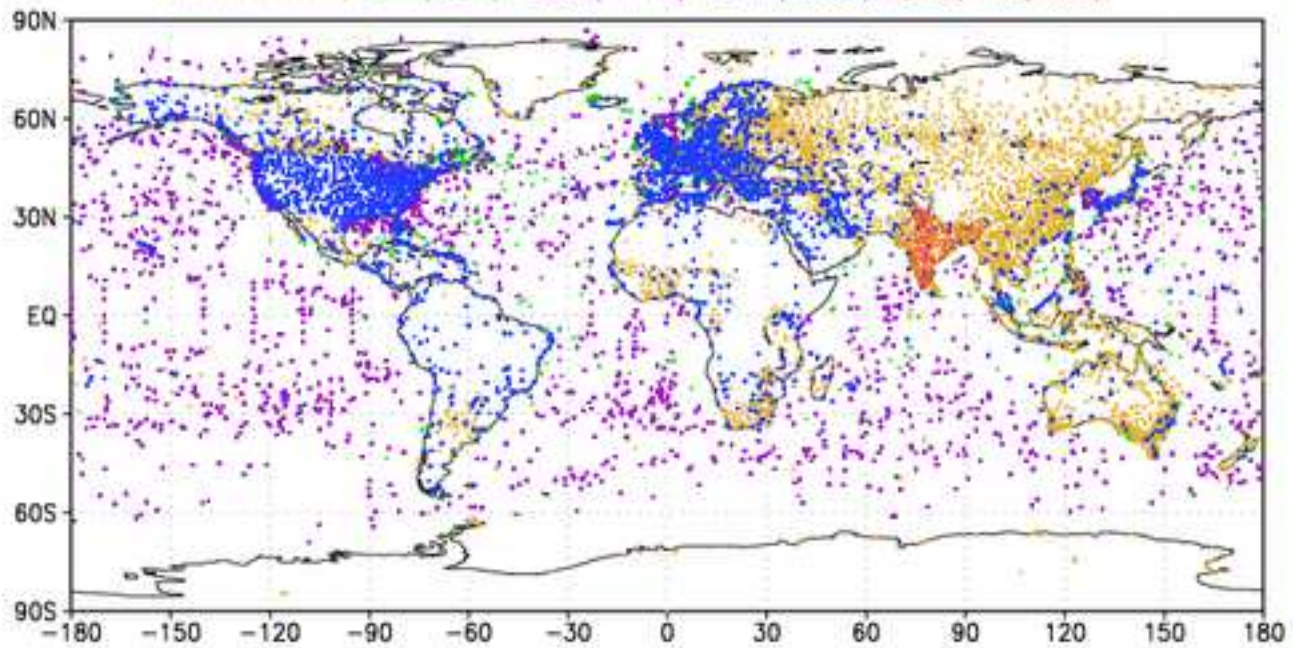
Avg=
Today_Cnt=
Dep= %

Global Observation Coverage

Data Coverage: Surface (21082017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 55641

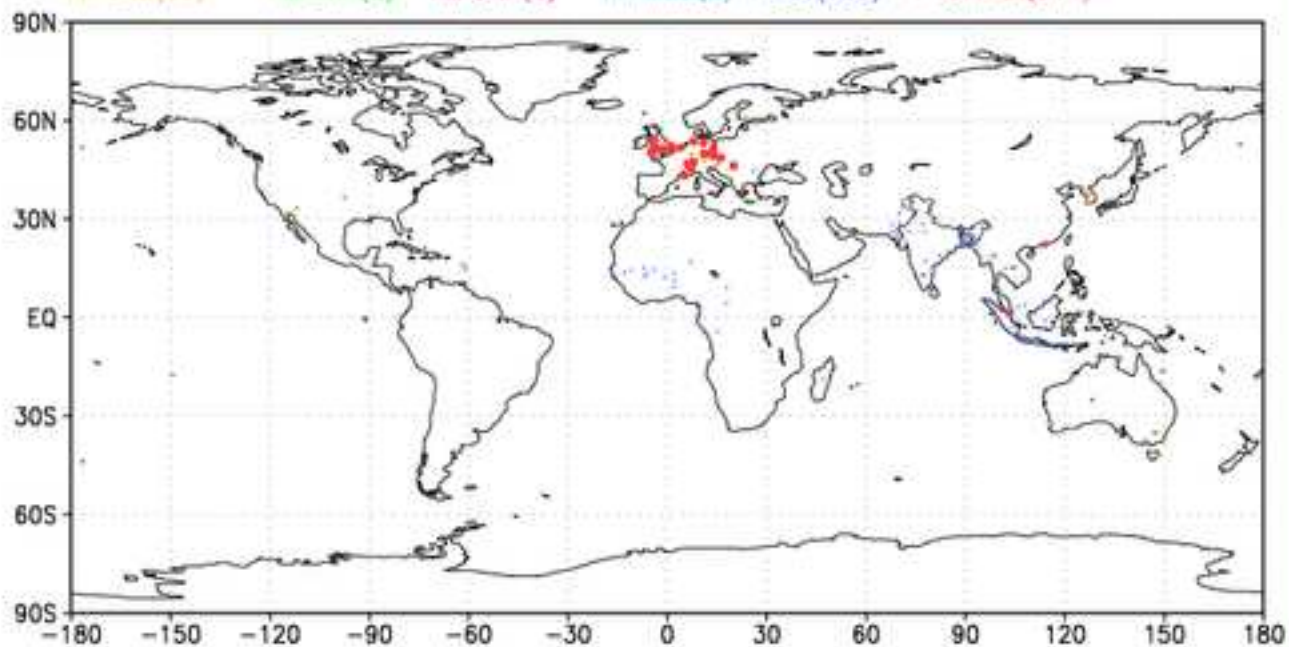
LNDSYN(14973) SHIP(2237) BUOY(14119) METAR(19623) MOBILE/AWS(4689)



Data Coverage: Sonde (21082017 0600UTC +/- 03Hrs)

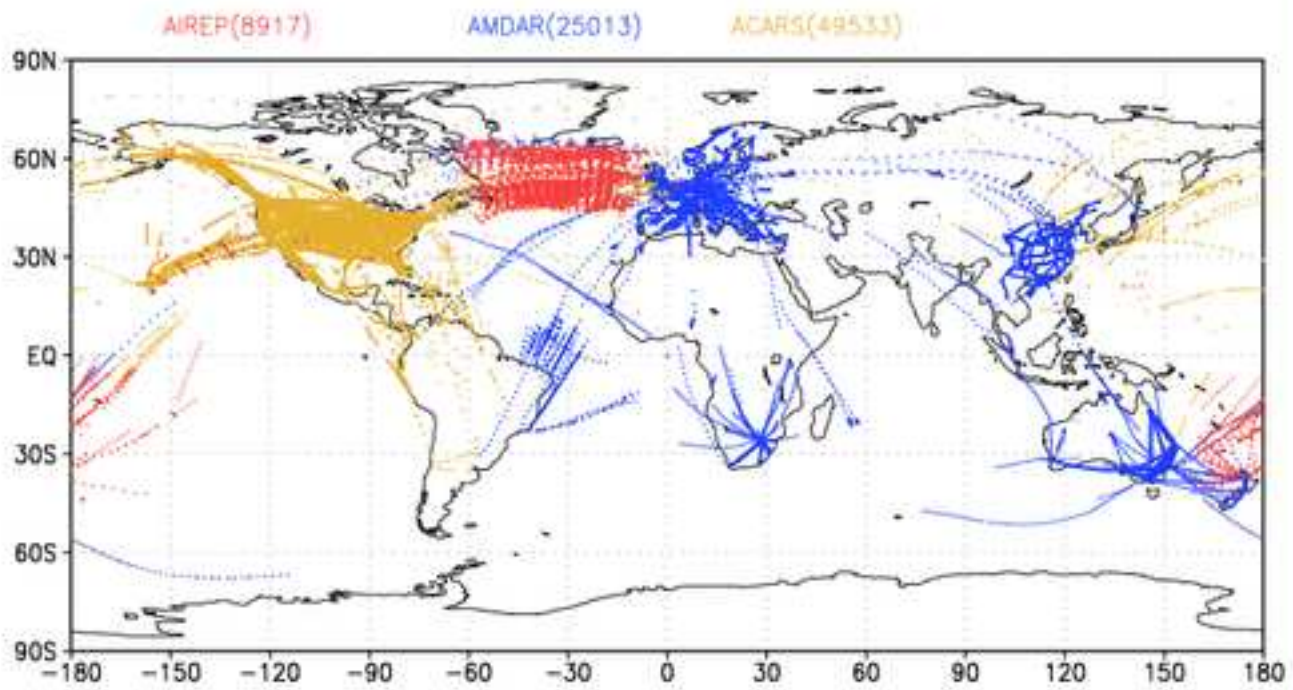
Total Number of Observations Received at NCMRWF: 691

TMPLND(39) TMPSHP(0) TMPDRP(0) TMPMDB(0) PILOT(138) PROFILER(514)



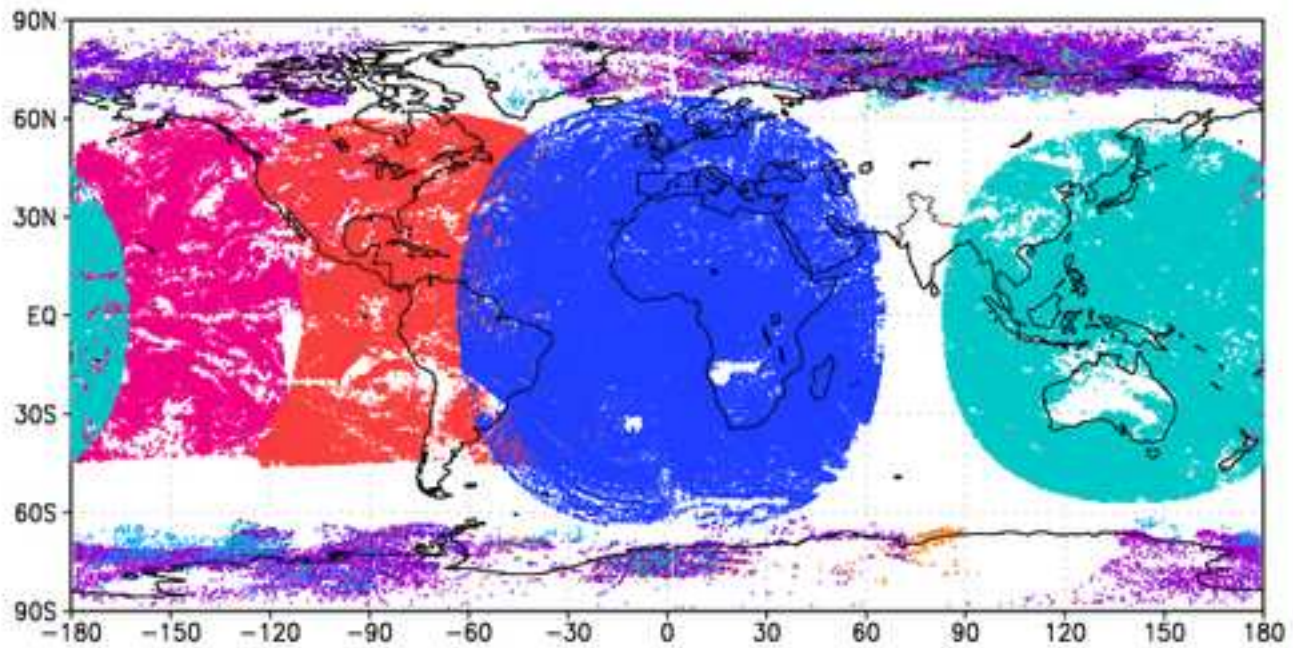
Data Coverage: AIRCFT (21082017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 83463



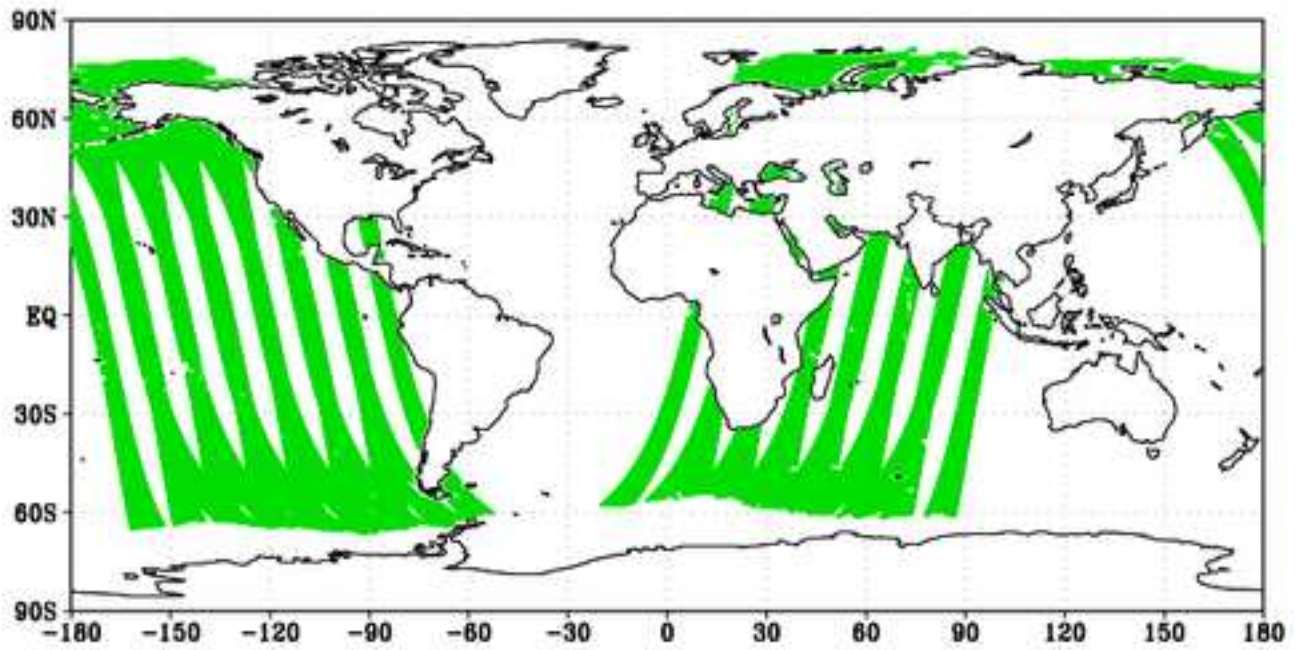
Data Coverage: AMV (21082017 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 568866

GOES-15(65630) GOES-13(67105) METEOSAT-7(0) METEOSAT-8(0)
METEOSAT-10(153914) GMS/MTSAT(168569) MODIS/Terra(3228) MODIS/Aqua(15328)
METOP(15654) NOAA-15(477) NOAA-16(0) NOAA-18(959) NOAA-19(1895)



Data Coverage: ASCAT winds (21082017 06UTC +/- 03Hrs)

ASCAT (233686)



Data Coverage: SAT RADIANCE (21082017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3990968

NOAA15(57330)

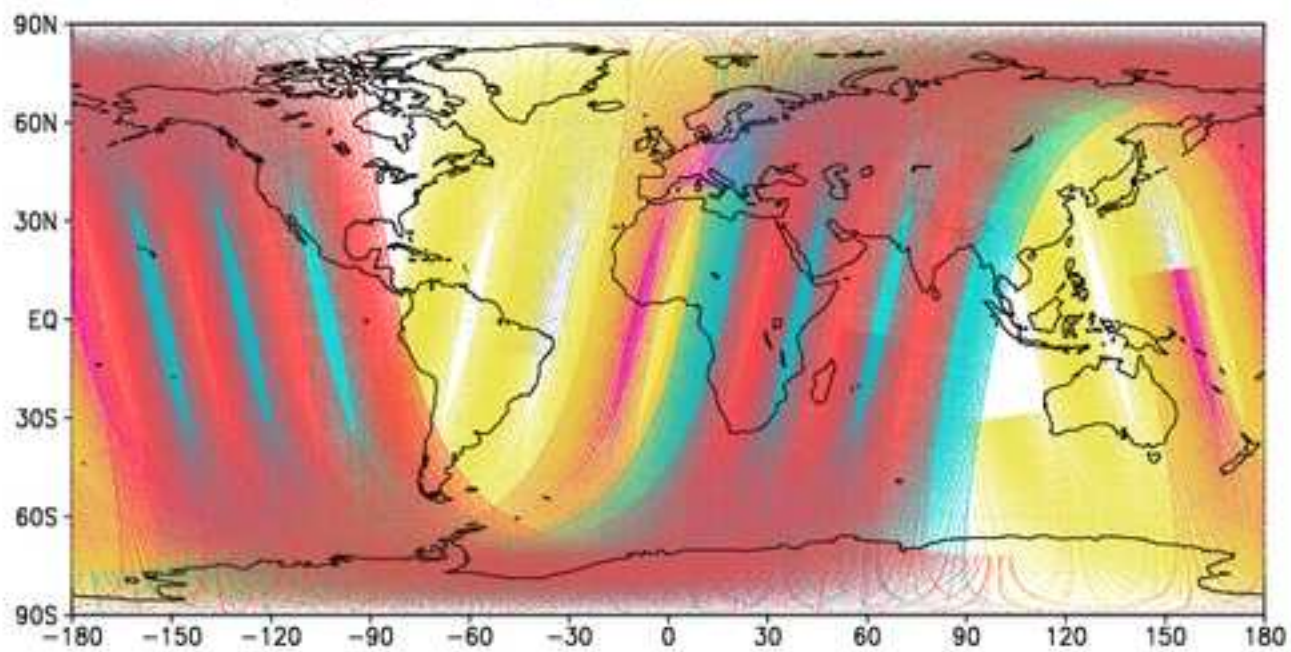
NOAA18(0)

NOAA18(985622)

NOAA18(985622)

METOP1(985528)

METOP2(974896)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (21082017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 1717831

NOAA15(0)

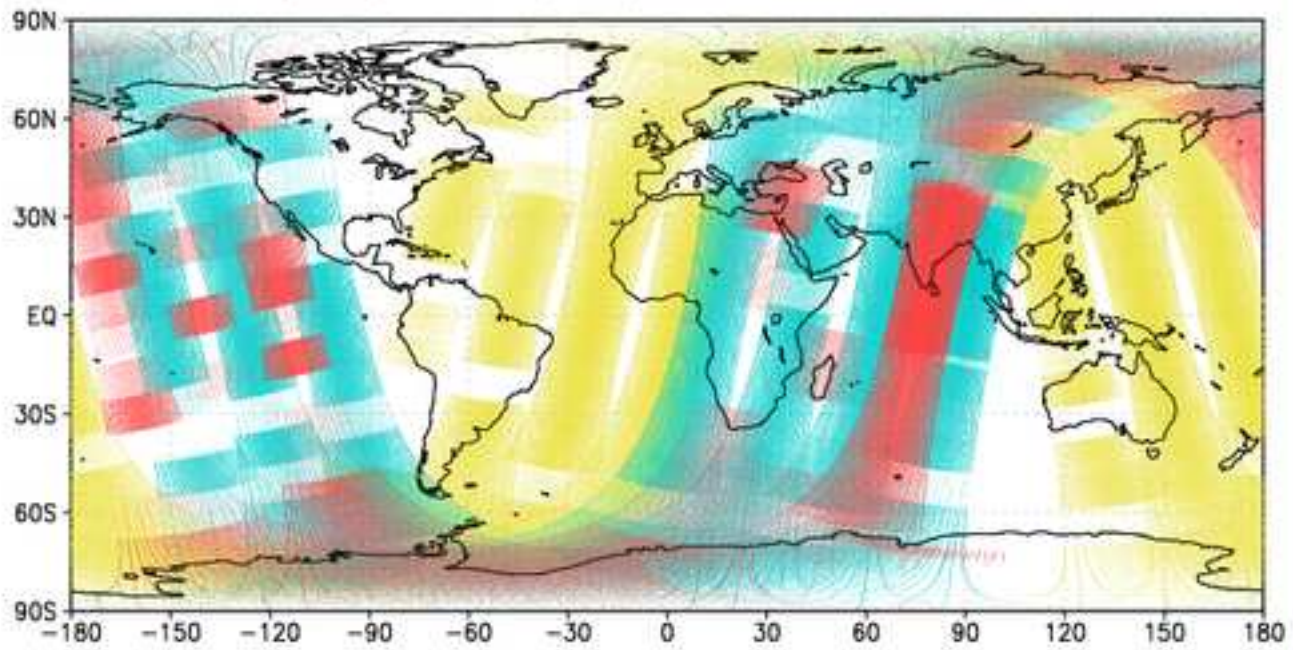
NOAA18(0)

NOAA18(29)

NOAA18(610278)

METOP1(338226)

METOP2(709300)

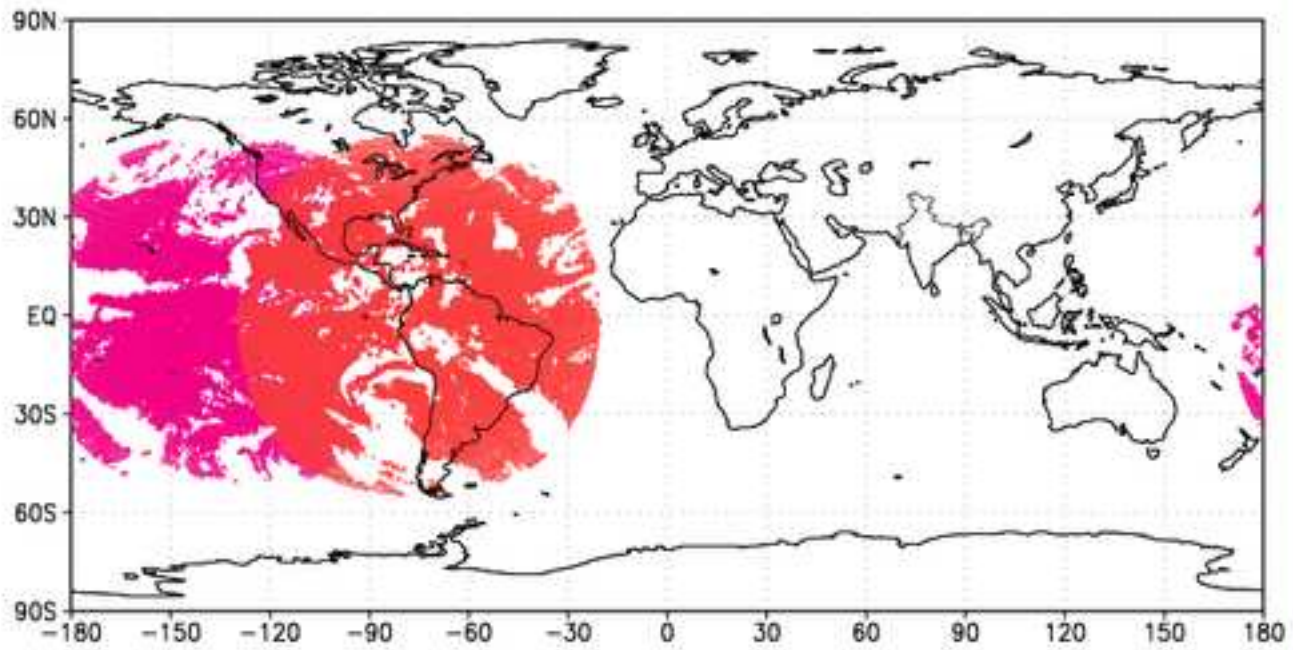


Data Coverage: GOES CSBT (21082017 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 57130

GOES-15(28586)

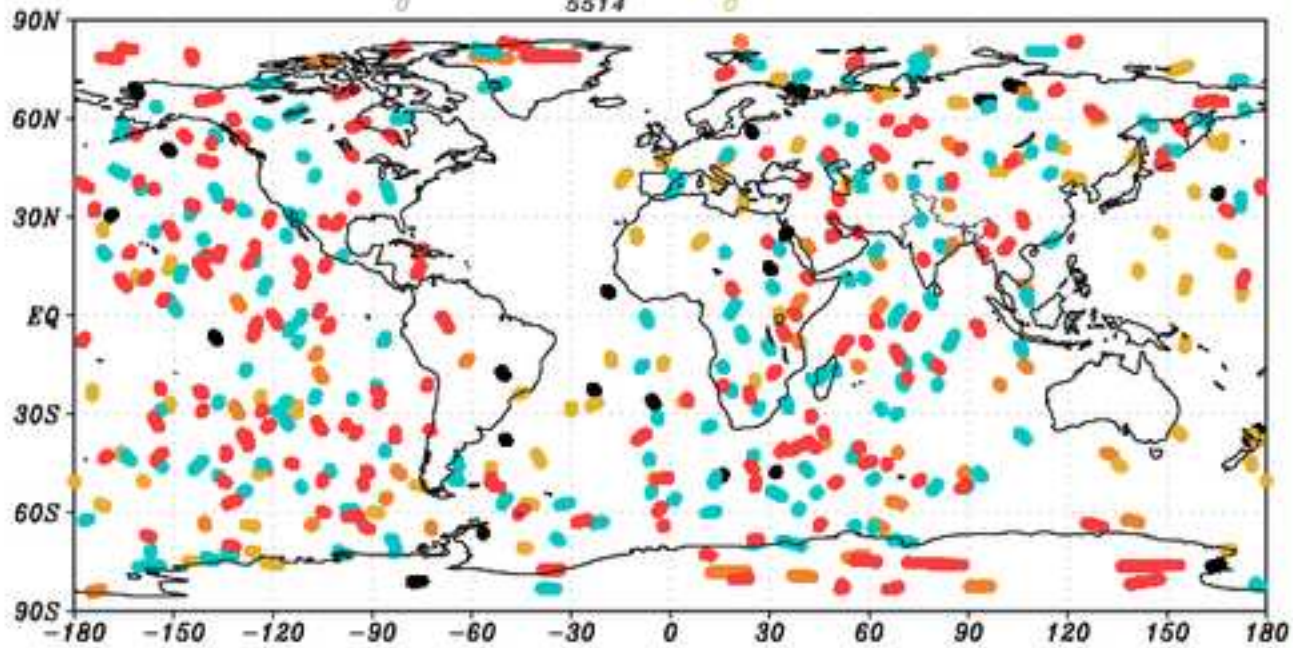
GOES-13(28544)



Data Coverage:GPSRO (21082017 0600UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 113140

GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
10604	39742	38618	0	0	0	0	0	18662
		TerraSAR-X	TenDEM-X	GRACE-B				
		0	5514	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= %

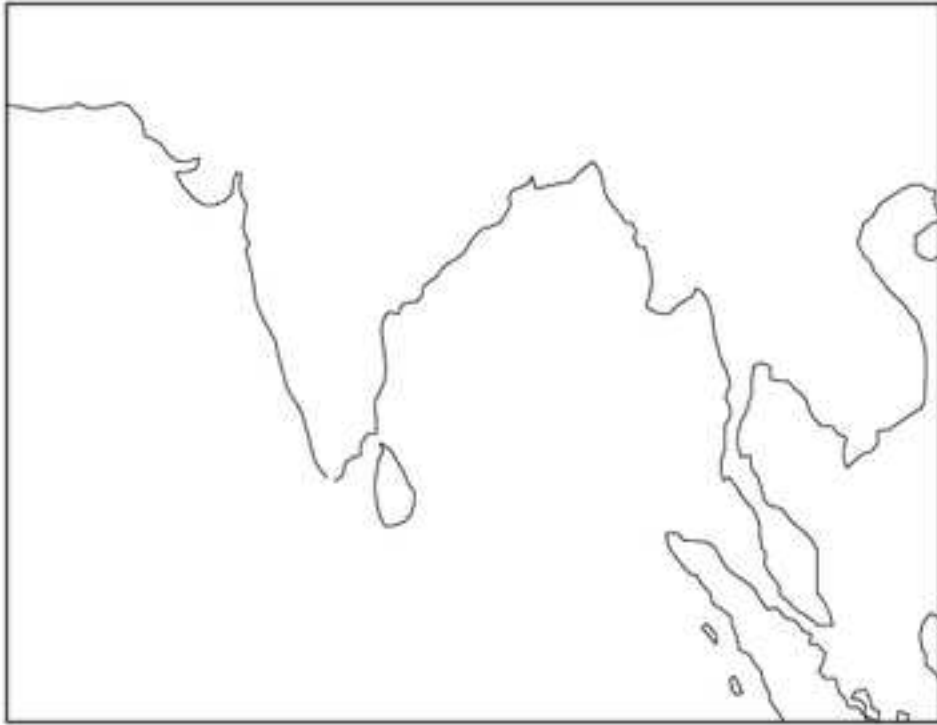
AMV

Avg=
Today_Cnt=
Dep= %

SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20170821 06Z)

ASCAT WINDS (21082017 06 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

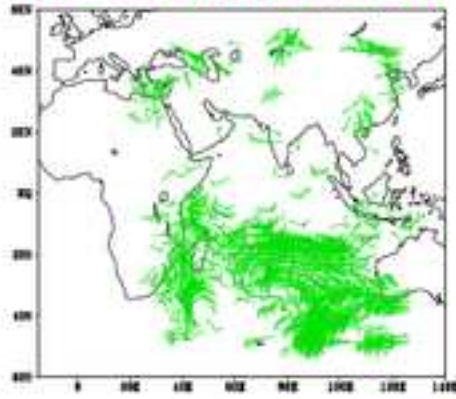
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

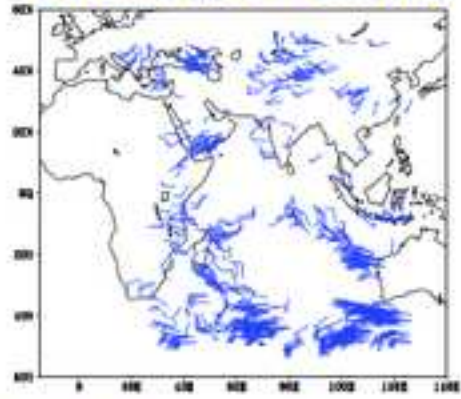
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (21082017 0600UTC)

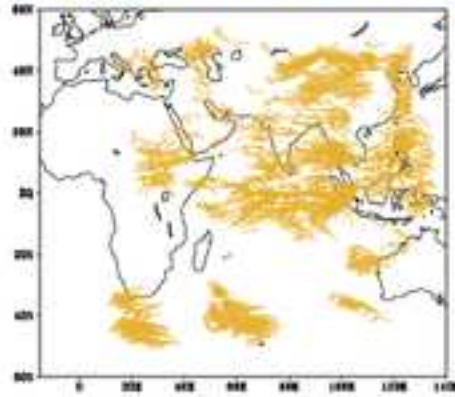
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



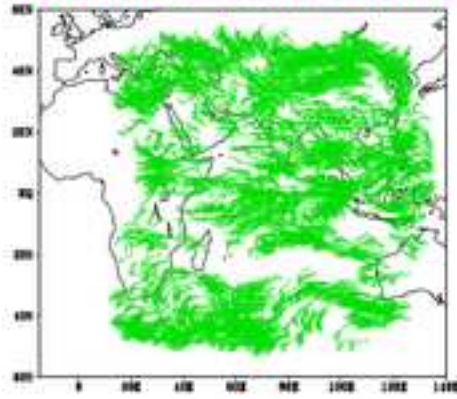
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (21082017 0600UTC)

Low Level (Below 700 hPa)

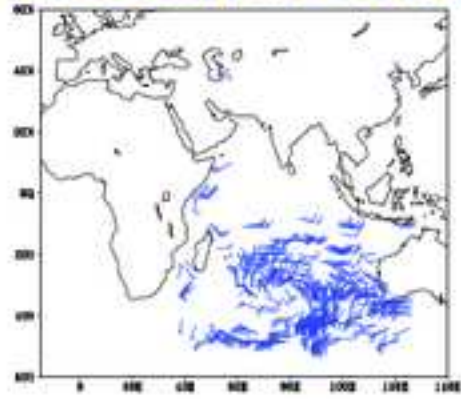
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (21082017 0600UTC)

WV, High Level (Above 400 hPa)

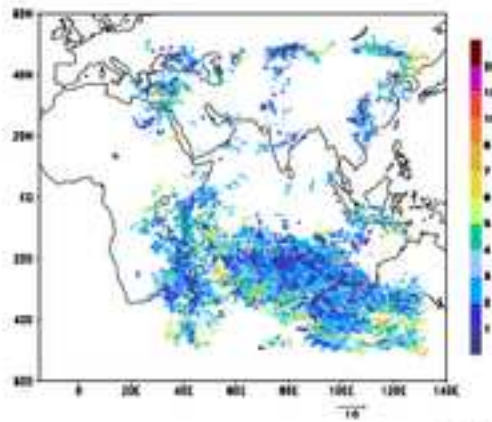


VIS, Low Level (Below 700 hPa)

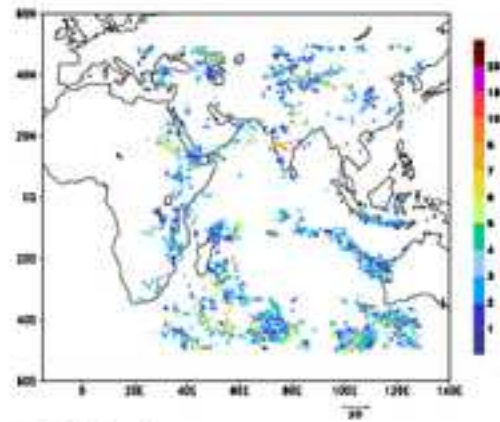


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (21082017 0600UTC)

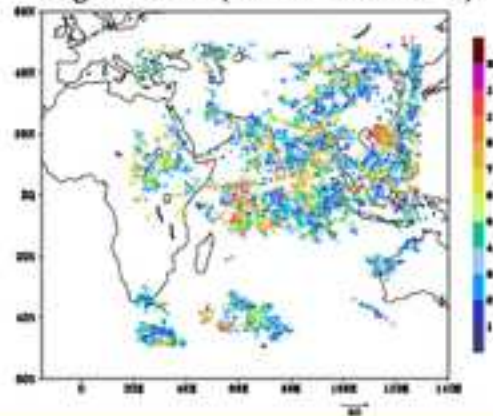
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



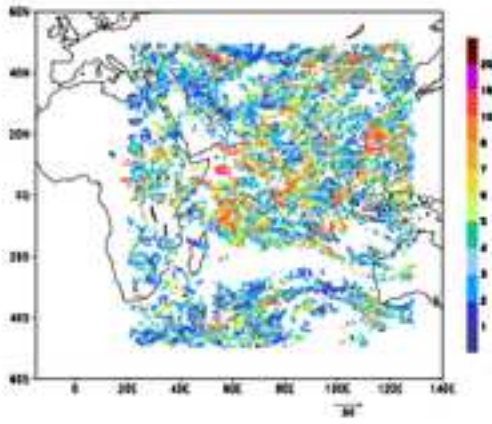
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (21082017 0600UTC)

Low Level (Below 700 hPa)

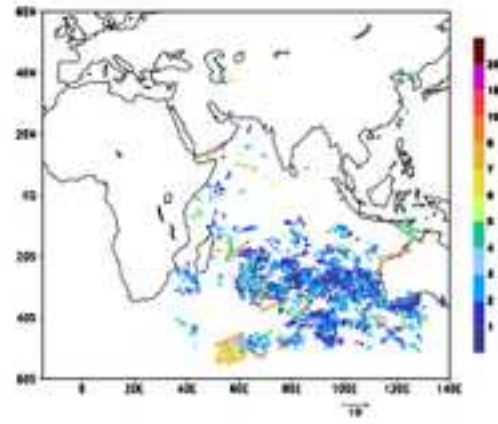
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (21082017 0600UTC)

WV, High Level (Above 400 hPa)

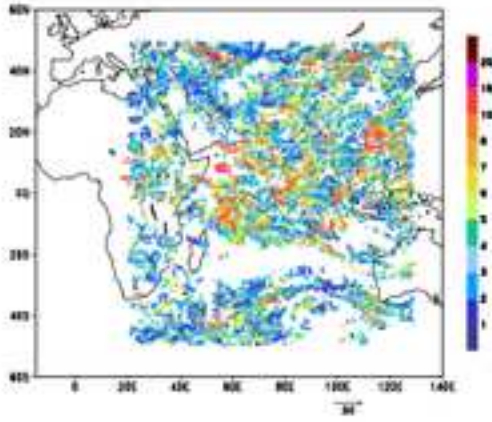


VIS, Low level (Below 700 hPa)

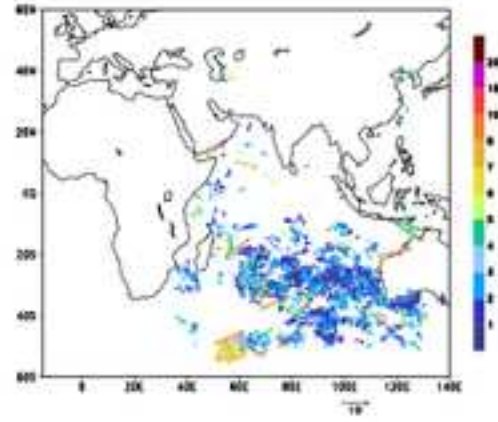


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (21082017 0600UTC)

WV, High Level (Above 400 hPa)

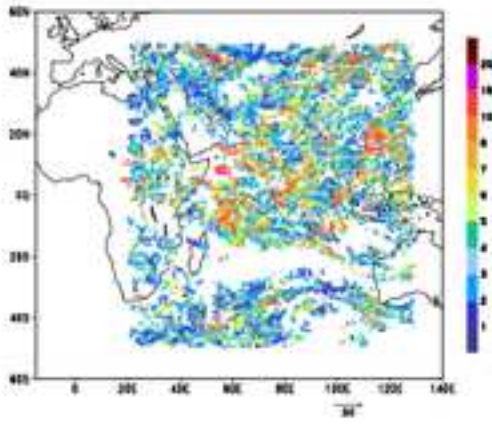


VIS, Low level (Below 700 hPa)

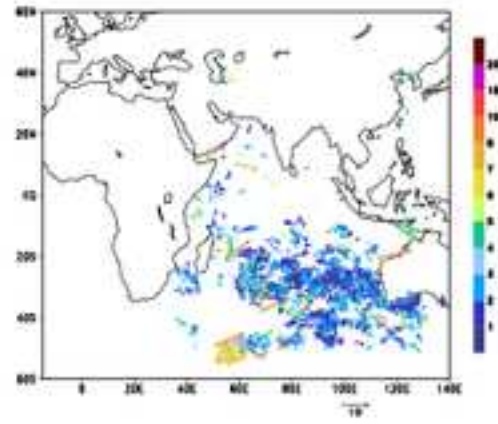


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (21082017 0600UTC)

WV, High Level (Above 400 hPa)

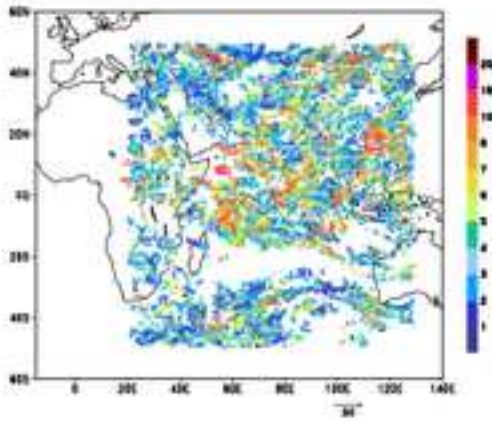


VIS, Low level (Below 700 hPa)

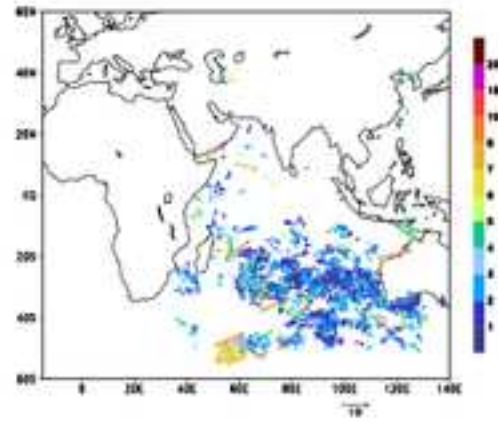


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (21082017 0600UTC)

WV, High Level (Above 400 hPa)

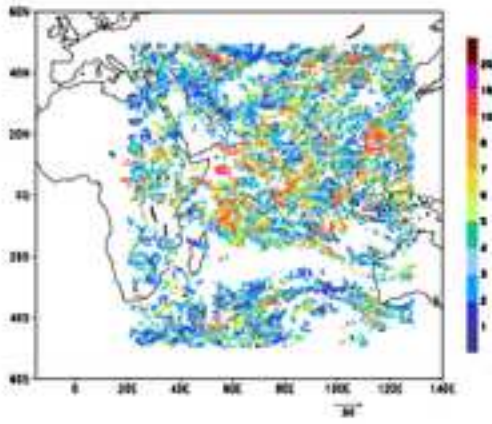


VIS, Low level (Below 700 hPa)

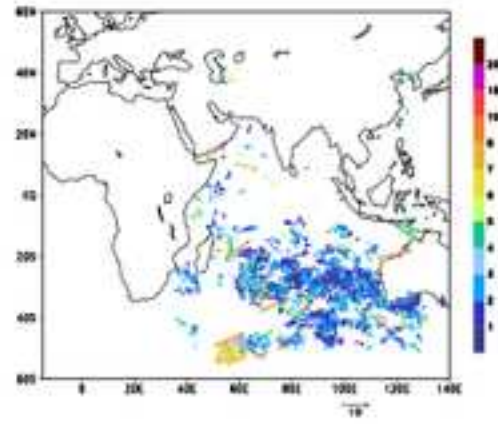


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (21082017 0600UTC)

WV, High Level (Above 400 hPa)



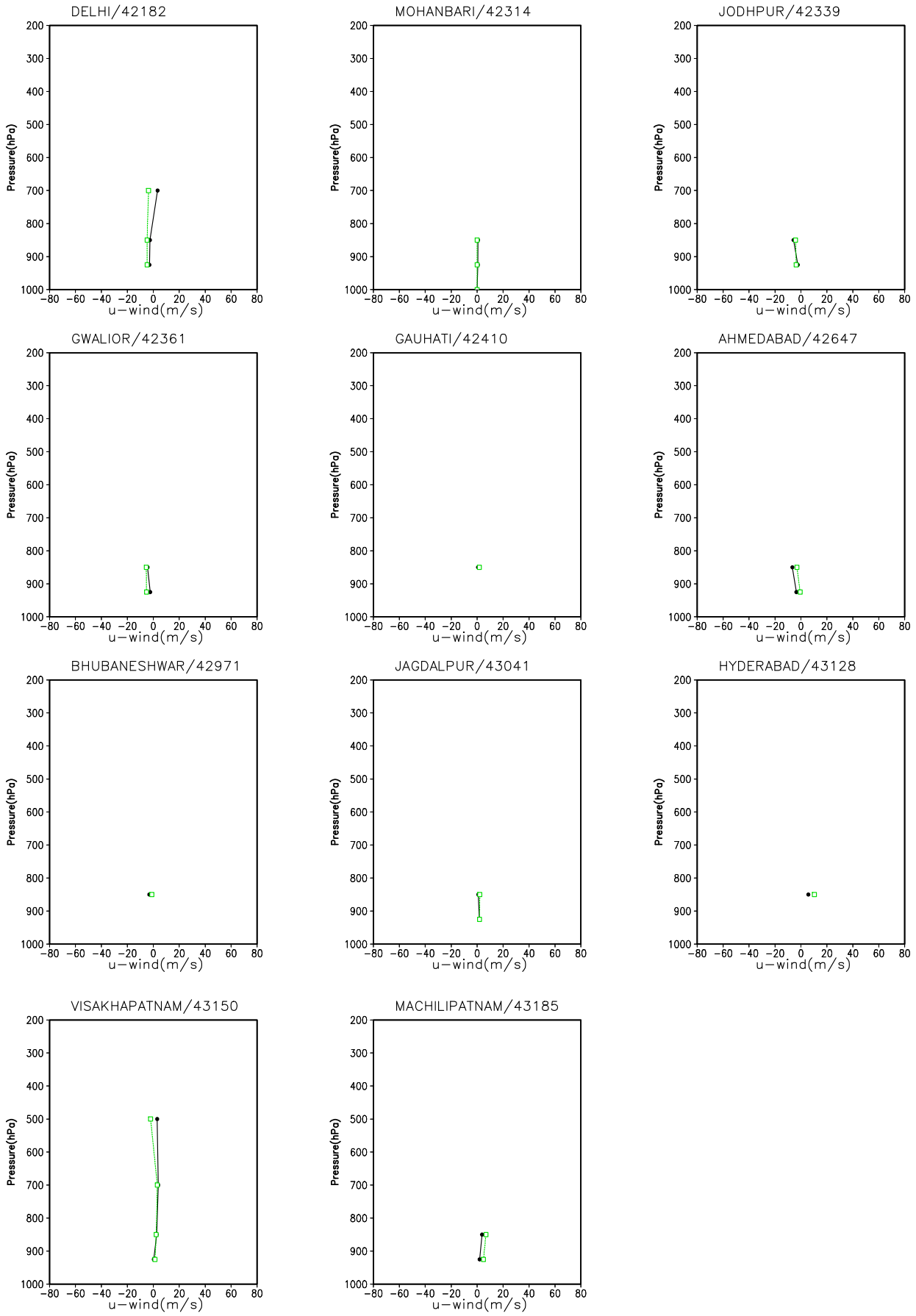
VIS, Low level (Below 700 hPa)



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 21082017

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