

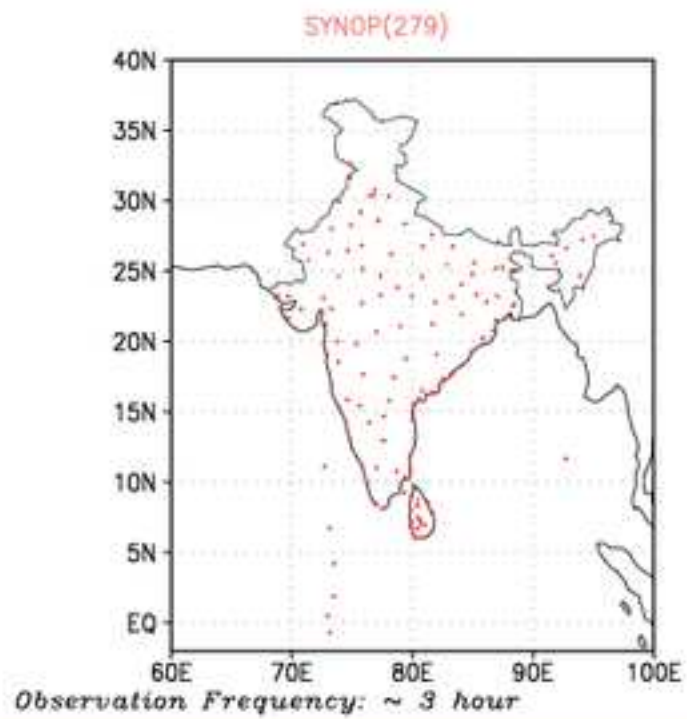
Observation Monitoring

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

for 22052017 (1800 UTC)

Indian Observation Coverage

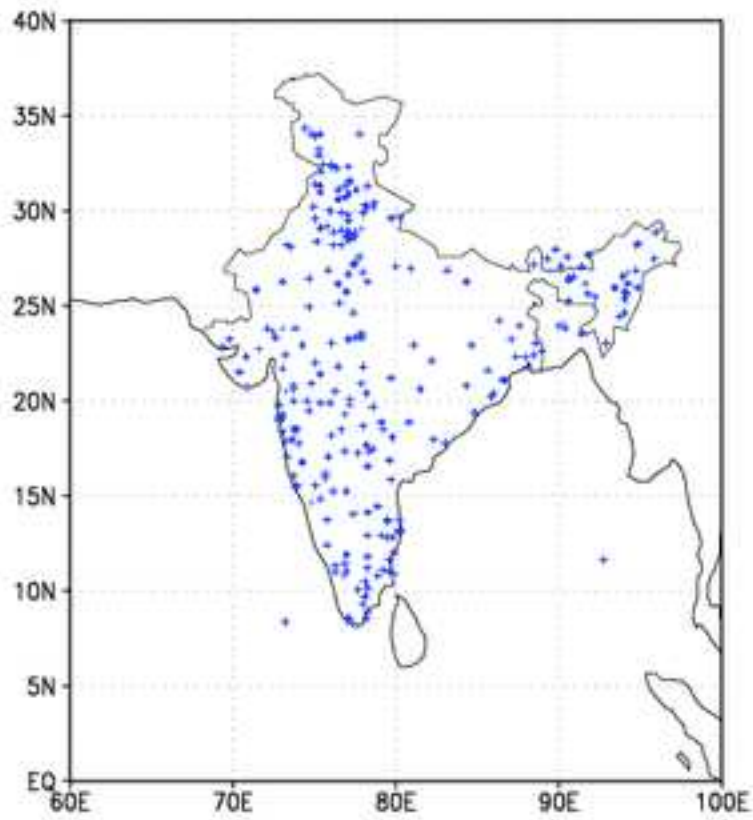
Data Coverage: Surface (22052017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 279
(42 & 43 Block)



Data Coverage: Indian AWS (22052017 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1279

AWS PRESSURE (1279)

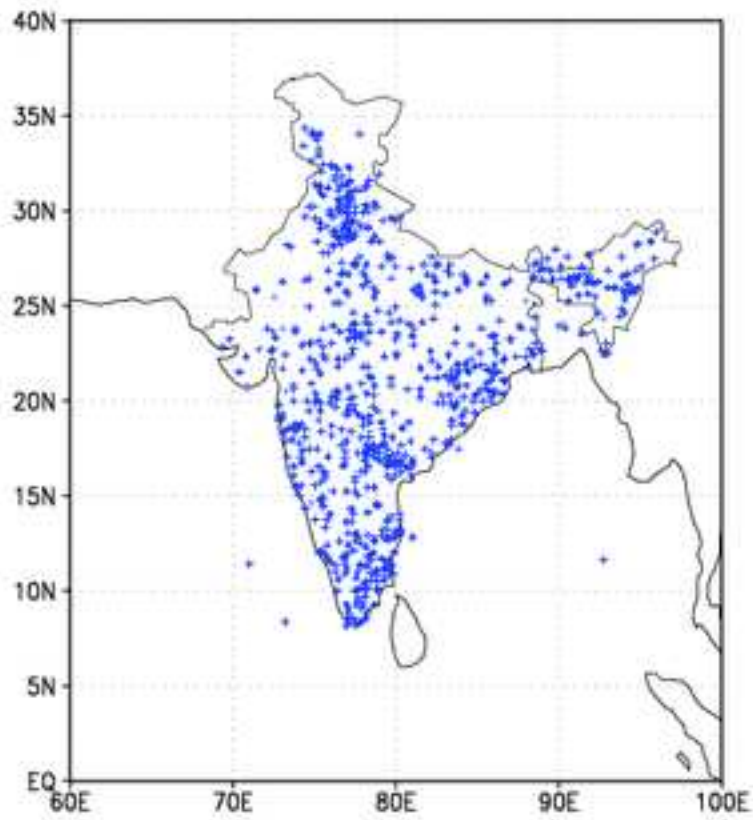


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (22052017 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 3991

AWS + ARG (3991)

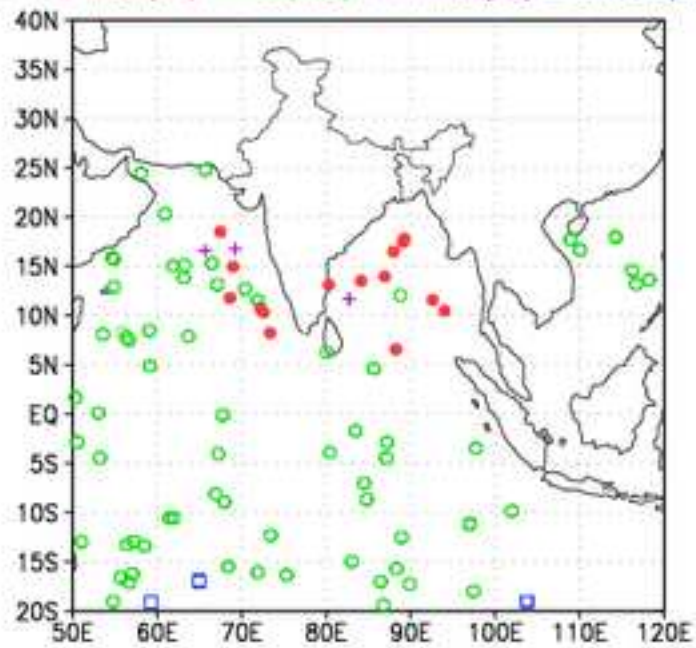


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (22052017 1800UTC +/- 3 Hrs)

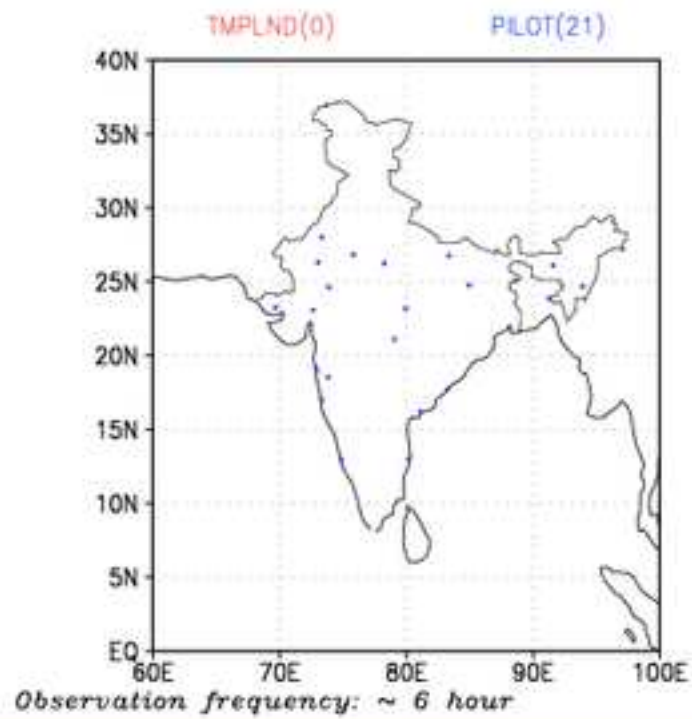
Total Number of Observations Received at NCMRWF: 451

country code in GTS as ● INDIA(31) ○ USA(372) + FRANCE(22) □ OTHERS(26)



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

Data Coverage: Sonde (22052017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 21
(42 & 43 Block)



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

SYN0P

Avg=
Today_Cnt=
Dep= %

BUOY

Avg=
Today_Cnt=
Dep= %

AWS+ARG

Avg=
Today_Cnt=
Dep= %

RS/RW

Avg=
Today_Cnt=
Dep= %

PILOT

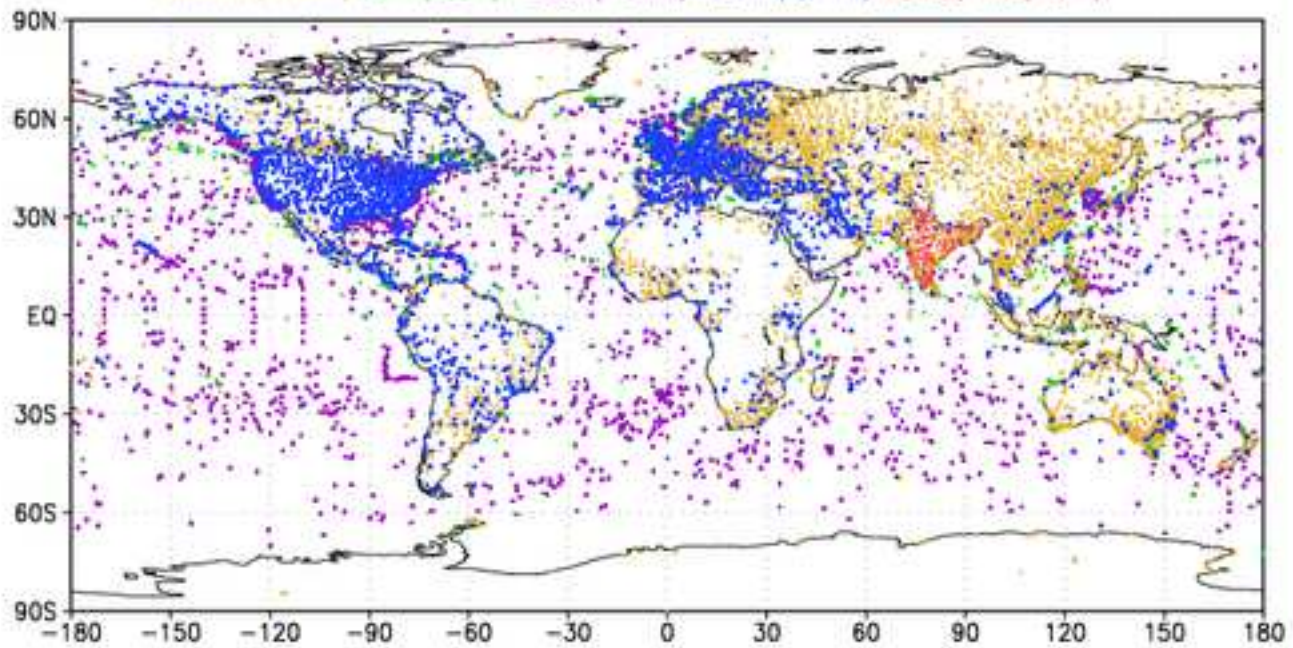
Avg=
Today_Cnt=
Dep= %

Global Observation Coverage

Data Coverage: Surface (22052017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 55945

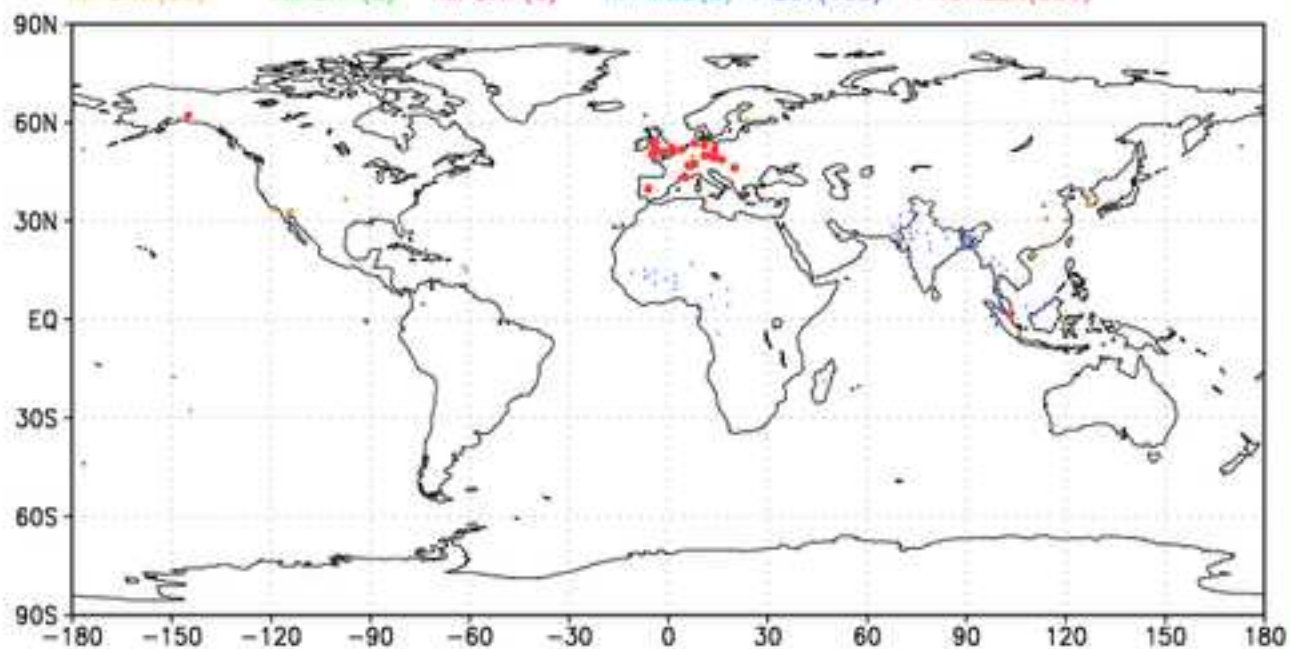
LNDSYN(14619) SHIP(2201) BUOY(14074) METAR(20477) MOBILE/AWS(4574)



Data Coverage: Sonde (22052017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 759

TMP LND(53) TMP SHP(0) TMP DRP(0) TMP MDB(0) PILOT(100) PROFILER(606)



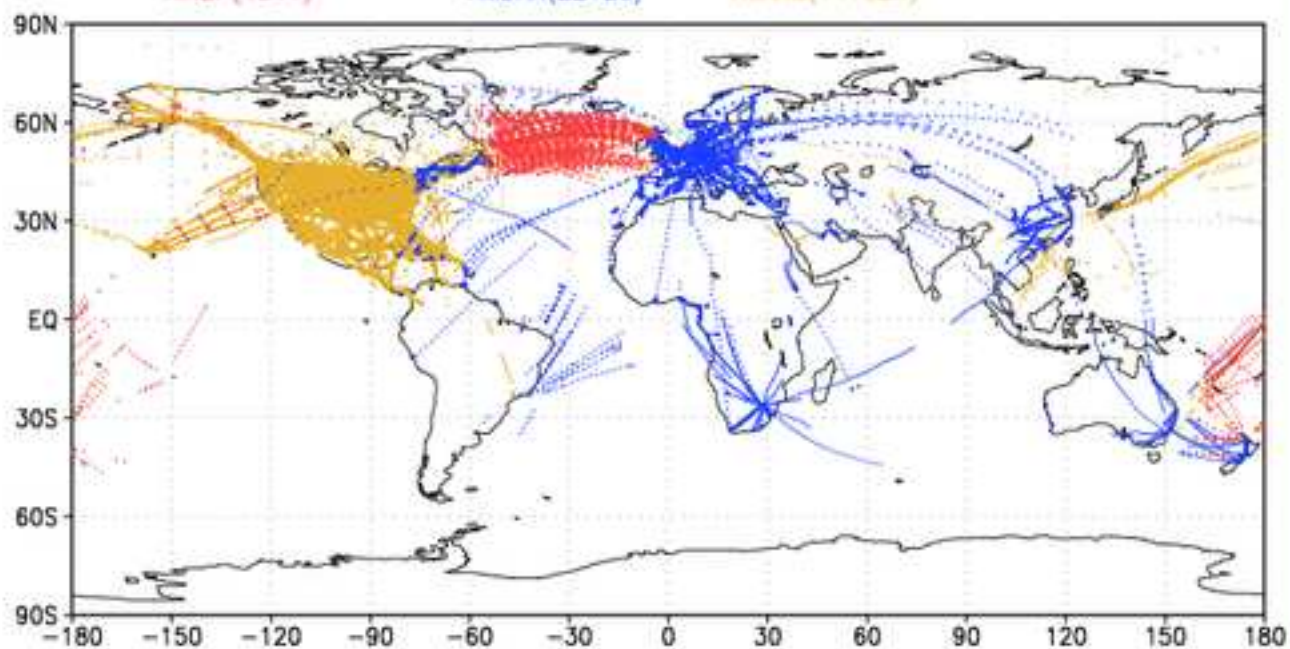
Data Coverage: AIRCFT (22052017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 168391

AIREP(4941)

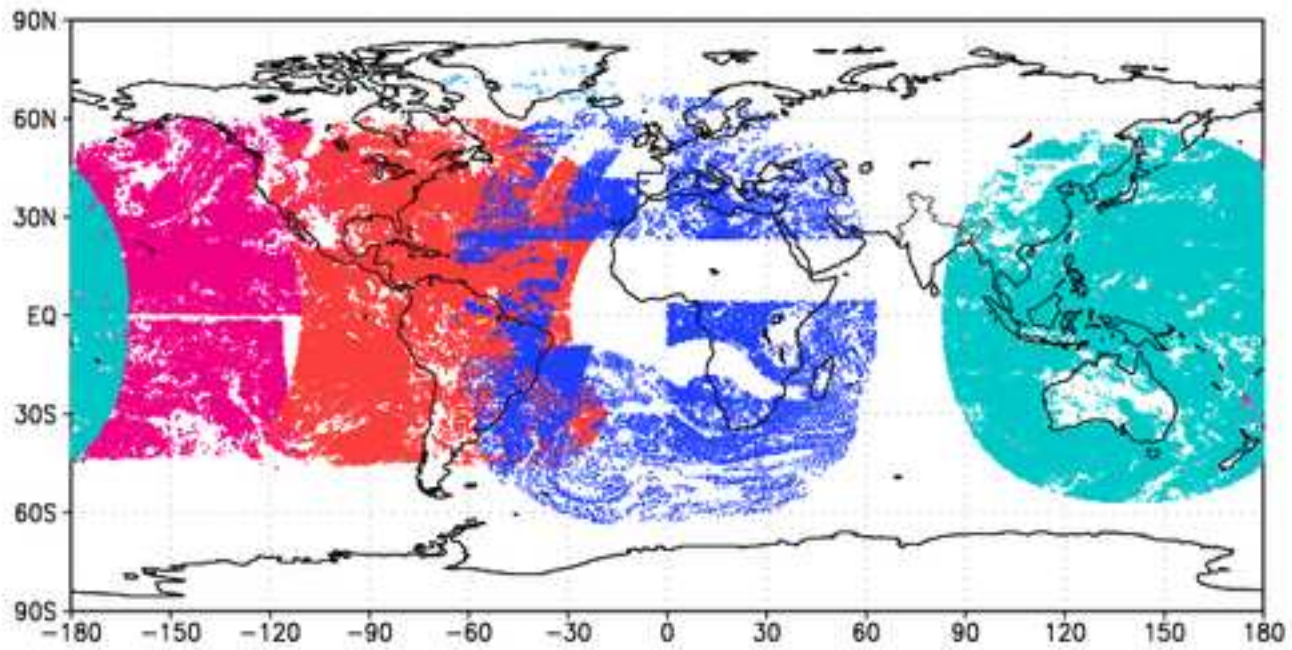
AMDAR(22126)

ACARS(141324)



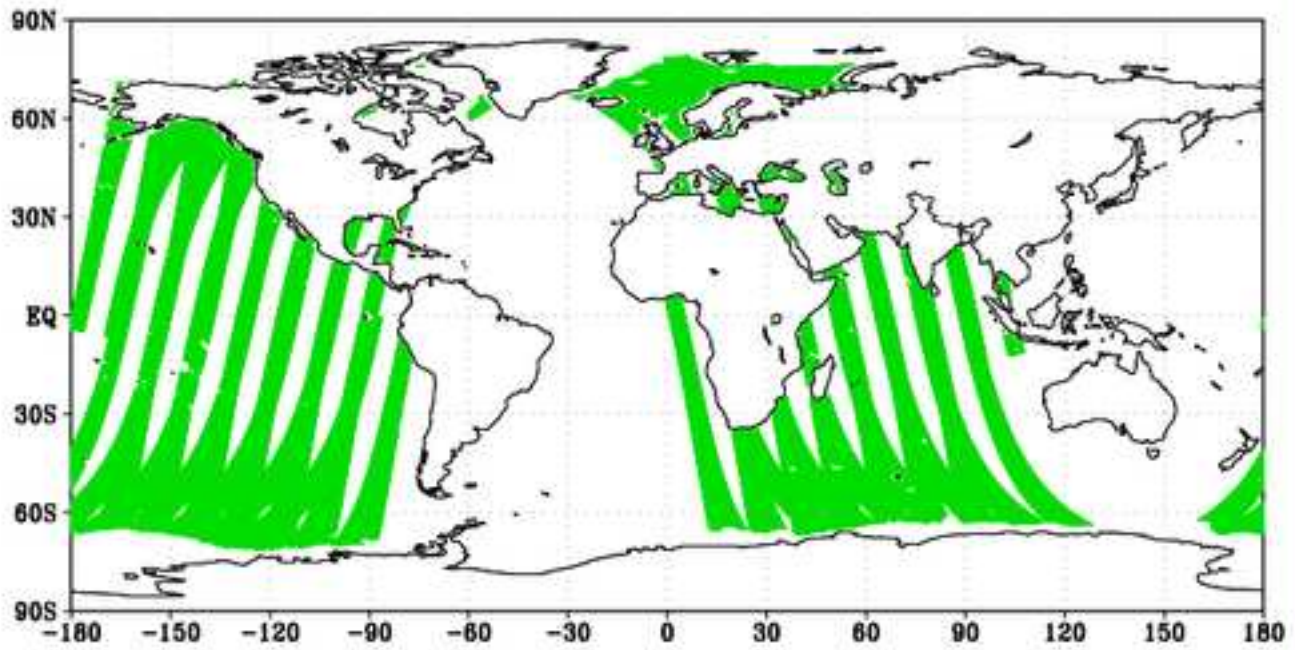
Data Coverage: AMV (22052017 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 363955

GOES-15(77695) GOES-13(93343) METEOSAT-7(0) METEOSAT-8(0)
METEOSAT-10(20549) GMS/MTSAT(122741) MODIS/Terra(0) MODIS/Aqua(0)
METOP(0) NOAA-15(0) NOAA-16(0) NOAA-18(0) NOAA-19(108)



Data Coverage: ASCAT winds (22052017 18UTC +/- 03Hrs)

ASCAT (238347)



Data Coverage: SAT RADIANCE (22052017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3490206

NOAA15(42741)

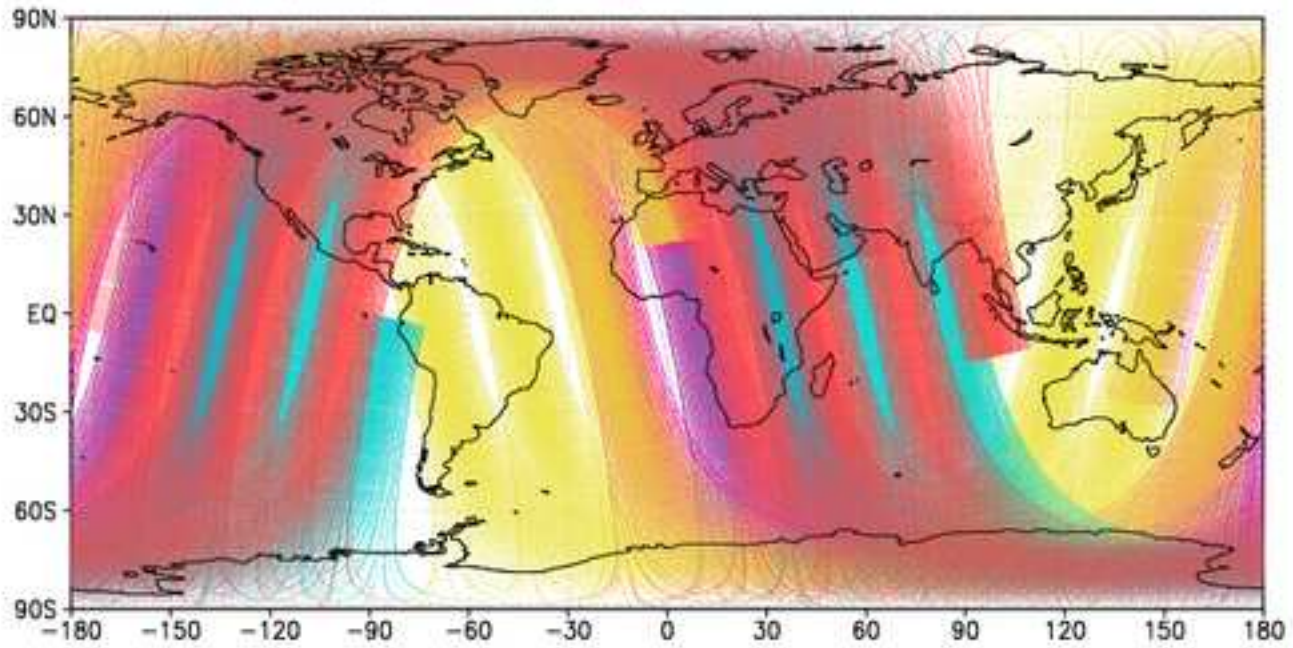
NOAA18(0)

NOAA19(910462)

NOAA18(870554)

METOP1(895605)

METOP2(770764)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (22052017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 600776

NOAA15(0)

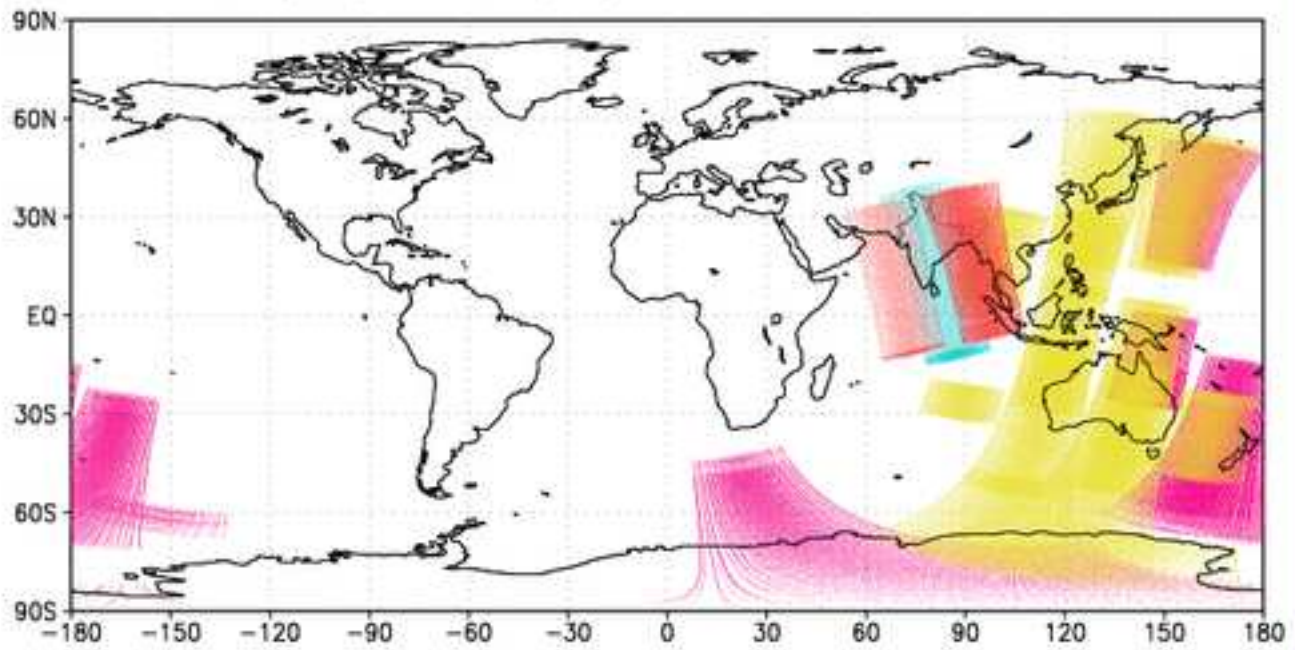
NOAA18(0)

NOAA18(204590)

NOAA18(337188)

METOP1(48214)

METOP2(12786)

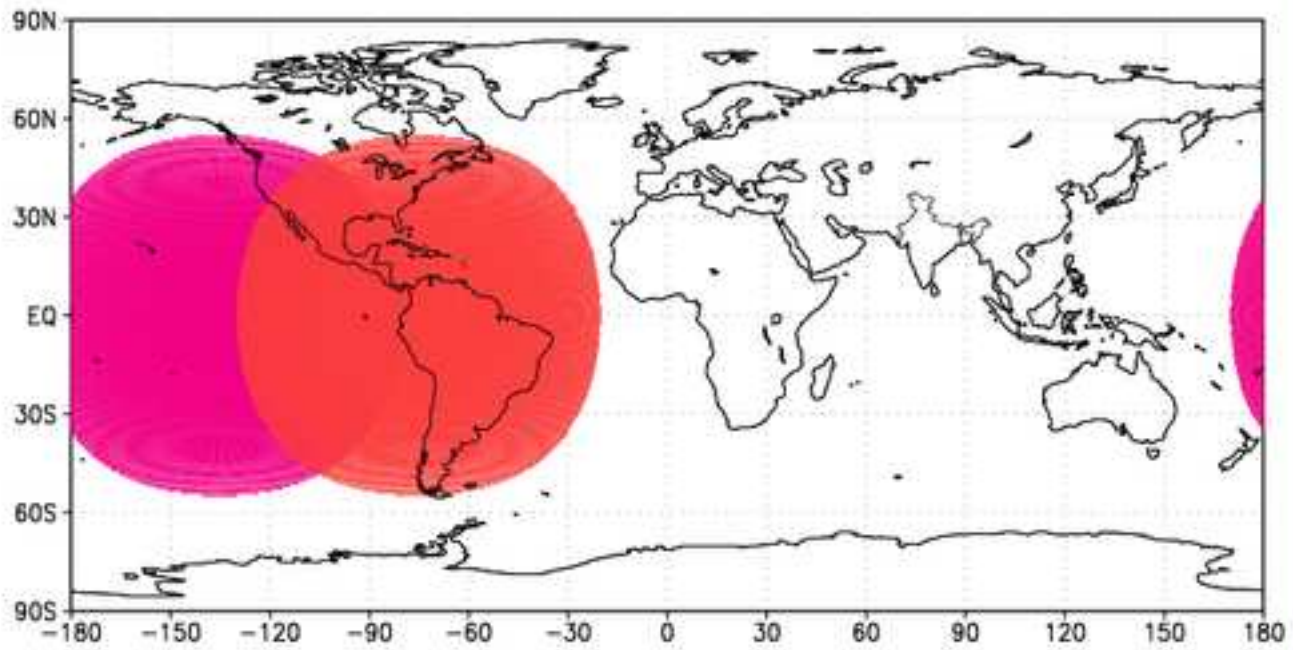


Data Coverage: GOES CSBT (22052017 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 84776

GOES-15(42391)

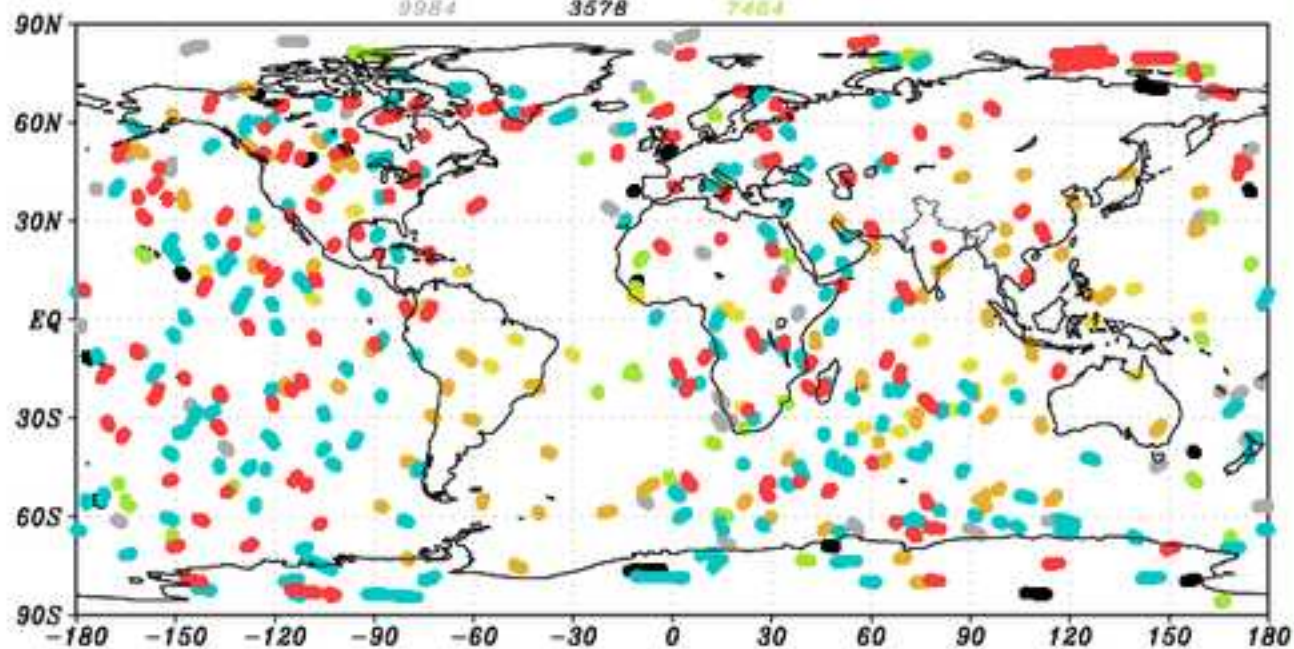
GOES-13(42385)



Data Coverage:GPSRO (22052017 1800UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 115159

GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	32087	36866	0	0	4411	0	0	20789
		TerraSAR-X	TenDEM-X	GRACE-B				
		9984	3578	7464				



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= %

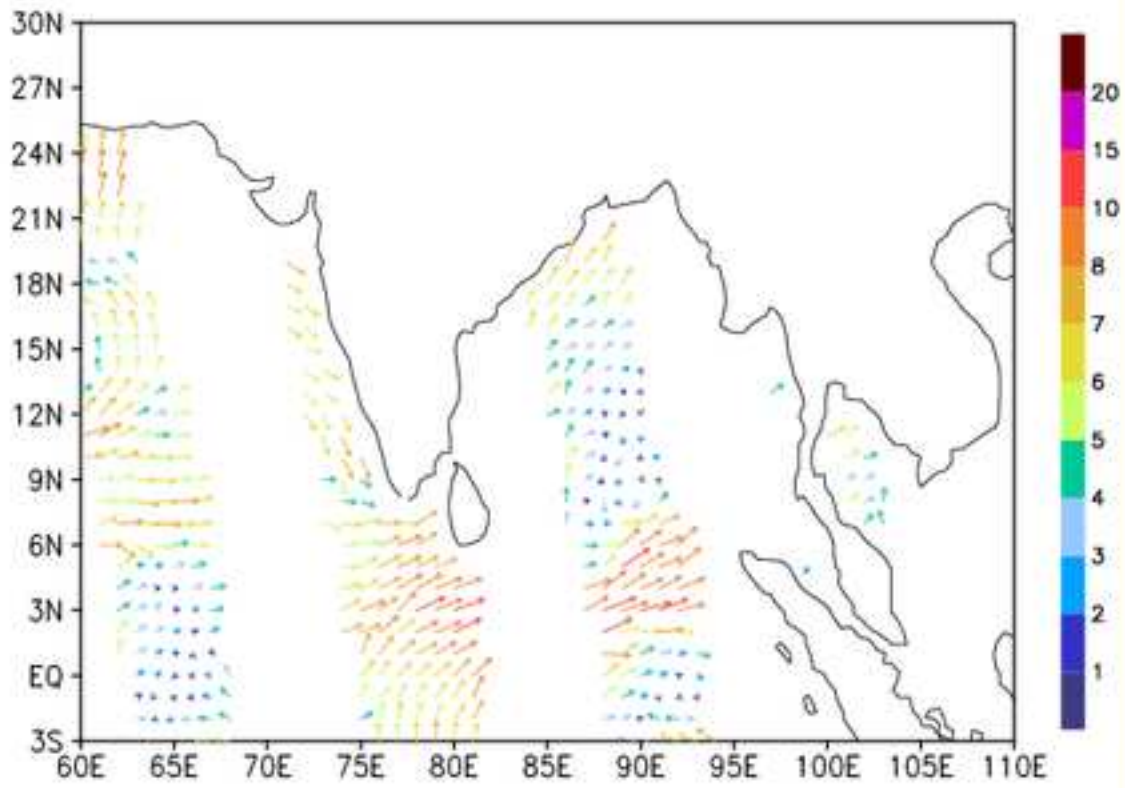
AMV

Avg=
Today_Cnt=
Dep= %

SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20170522 18Z)

ASCAT WINDS (22052017 18 UTC):NCMRWF



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

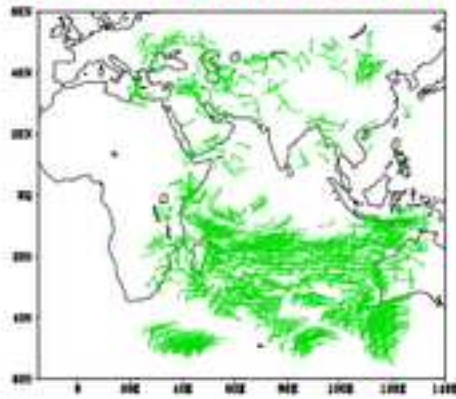
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

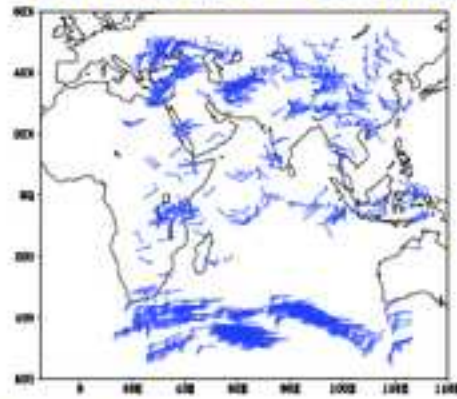
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (22052017 1800UTC)

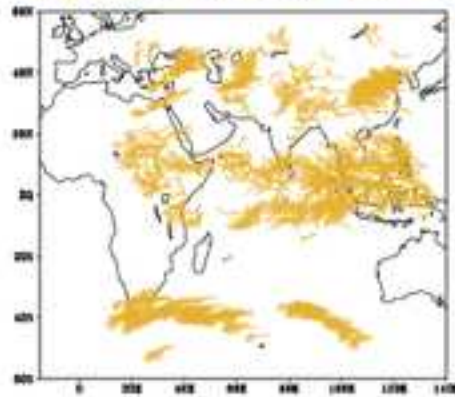
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

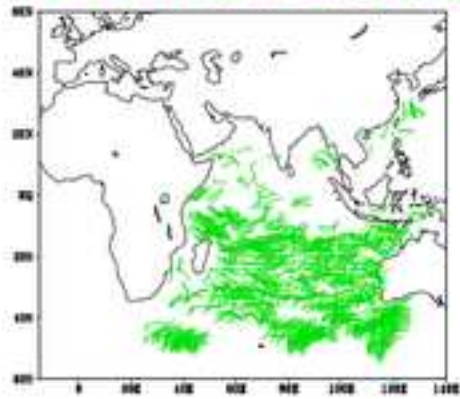


High Level (Above 400 hPa)

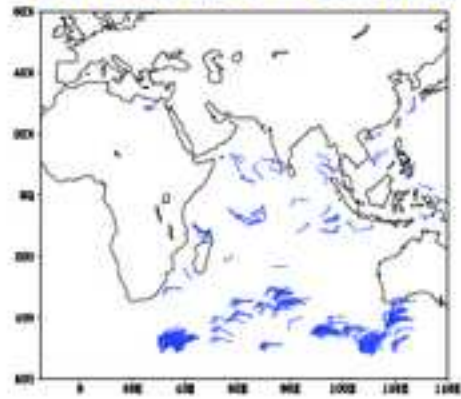


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (22052017 1800UTC)

Low Level (Below 700 hPa)



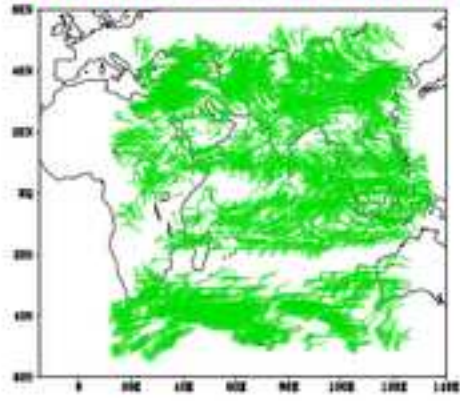
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (22052017 1800UTC)

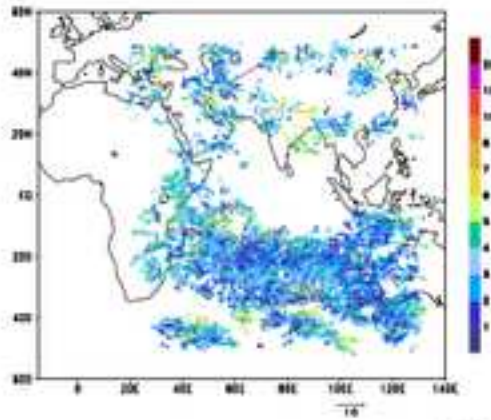
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

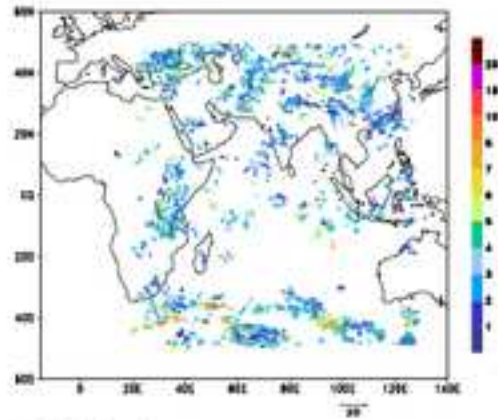


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (22052017 1800UTC)

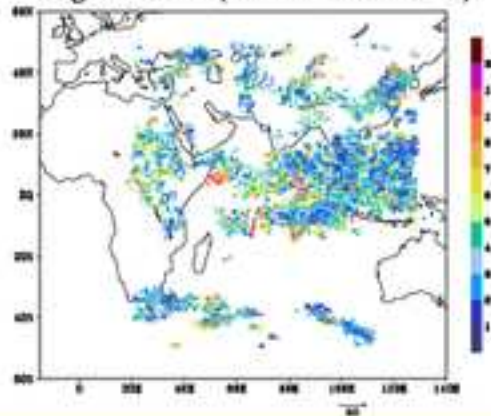
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

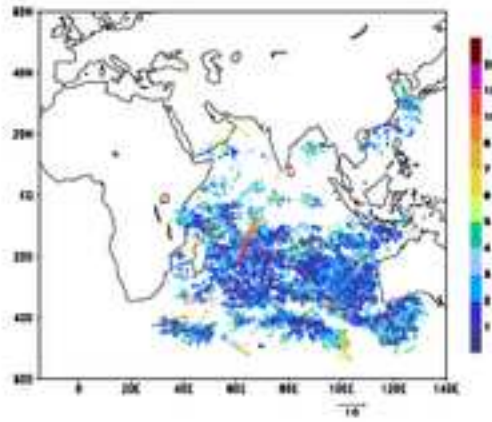


High Level (Above 400 hPa)

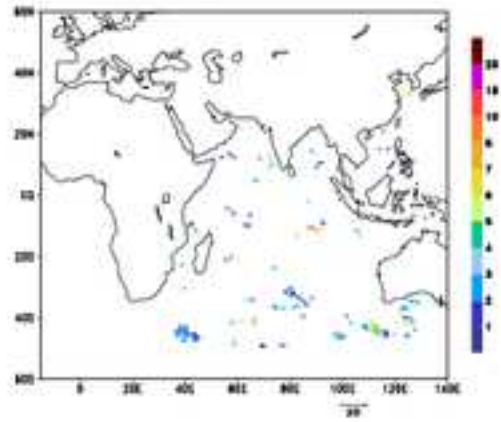


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (22052017 1800UTC)

Low Level (Below 700 hPa)



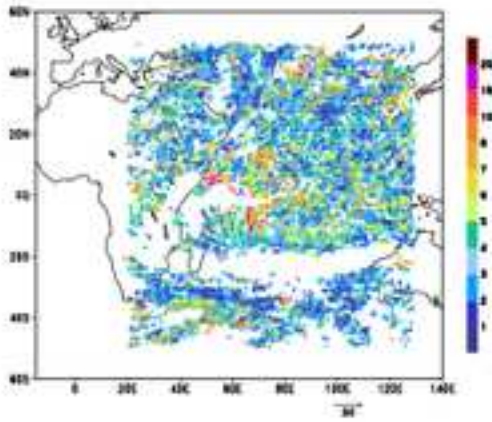
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (22052017 1800UTC)

WV, High Level (Above 400 hPa)

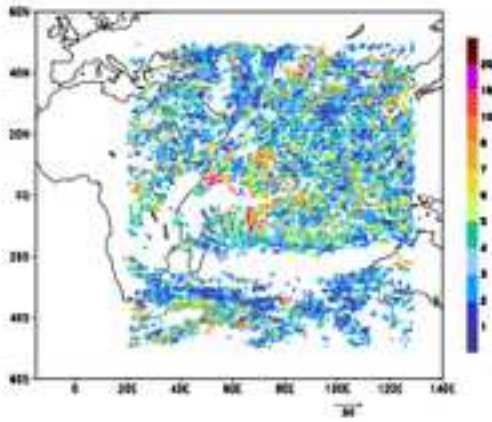
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (22052017 1800UTC)

WV, High Level (Above 400 hPa)

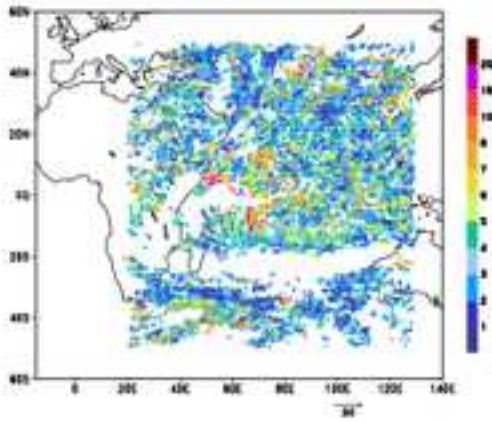
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (22052017 1800UTC)

WV, High Level (Above 400 hPa)

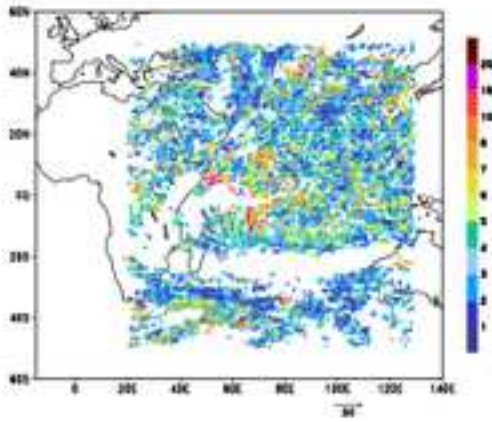
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (22052017 1800UTC)

WV, High Level (Above 400 hPa)

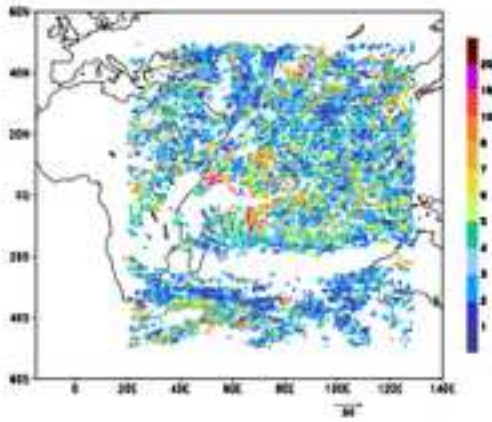
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (22052017 1800UTC)

WV, High Level (Above 400 hPa)

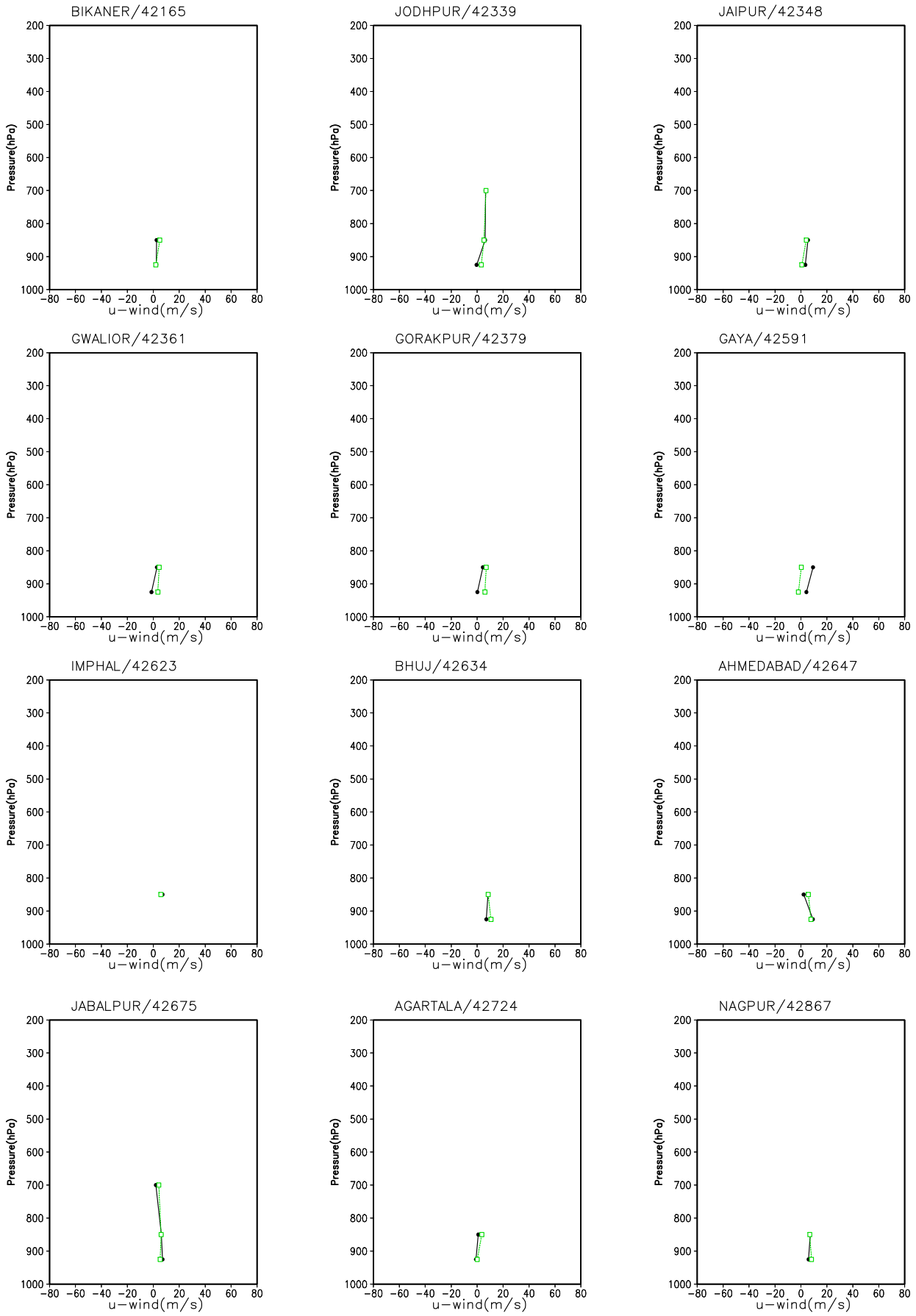
VIS, Low level (Below 700 hPa)



Quality of Indian PIBAL Observations

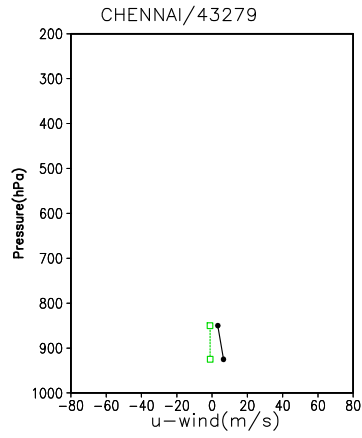
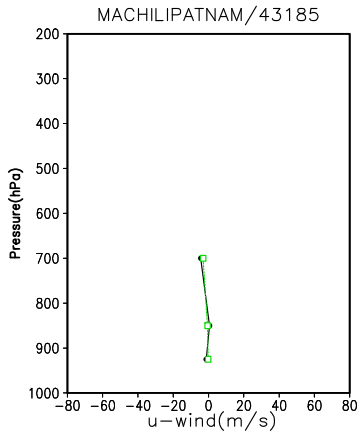
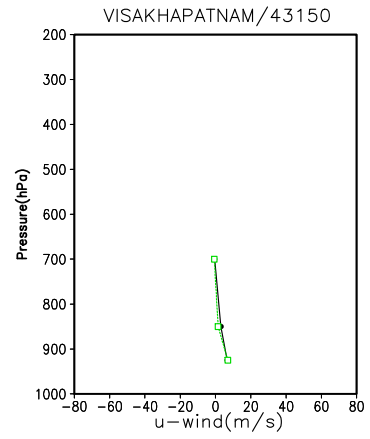
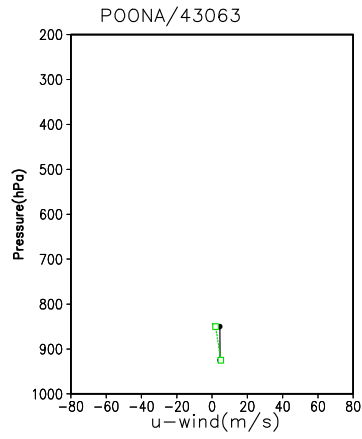
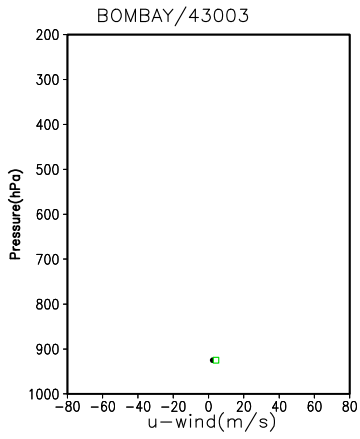
Maximum height reported
by PIBAL ascents

Zonal Wind Rejections by NGFS GDAS



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 22052017

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



Observed (—) and 1st-guess (—) Zonal wind (m/s) for 18UTC 22052017
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)