

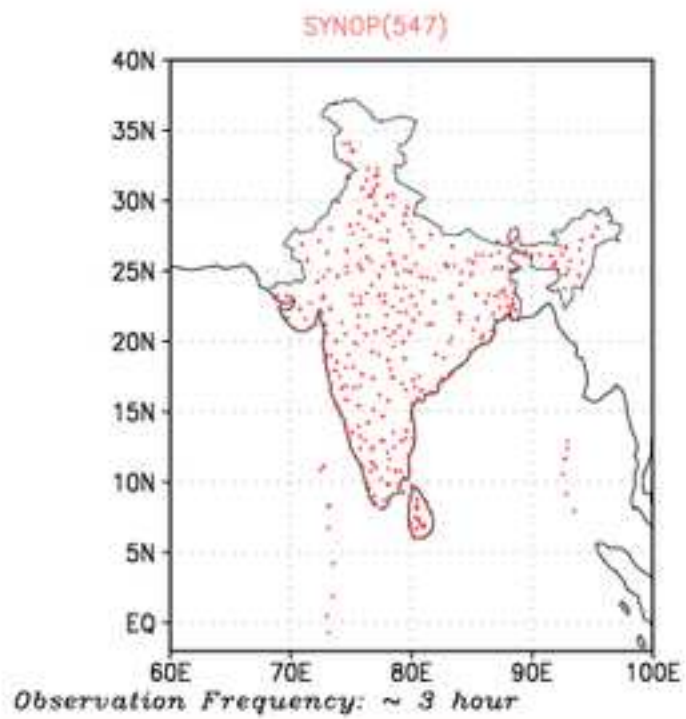
Observation Monitoring

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

for 18062018 (0600 UTC)

Indian Observation Coverage

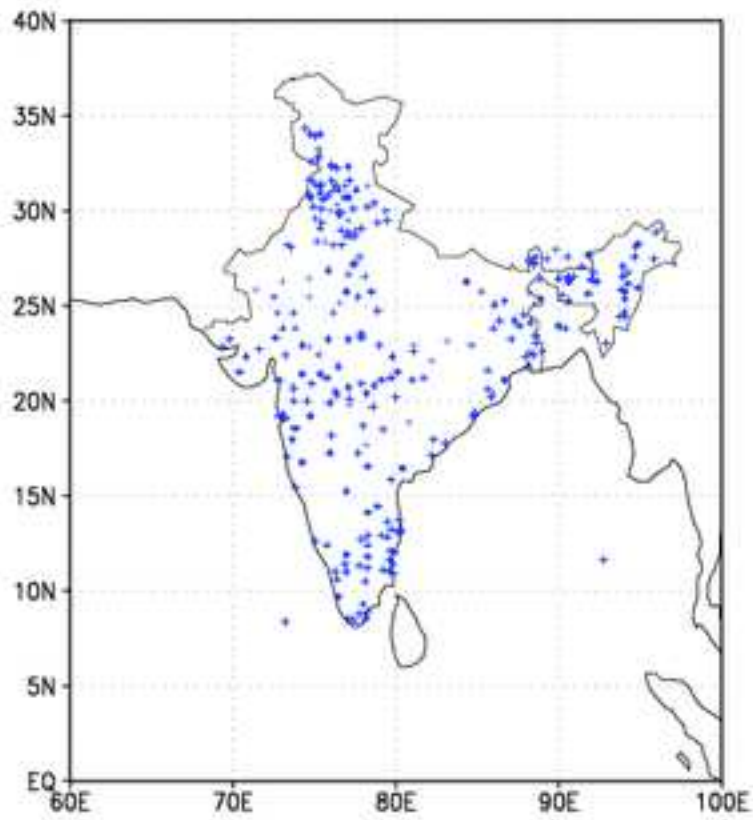
Data Coverage: Surface (18062018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 547
(42 & 43 Block)



Data Coverage: Indian AWS (18062018 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1323

AWS PRESSURE (1323)

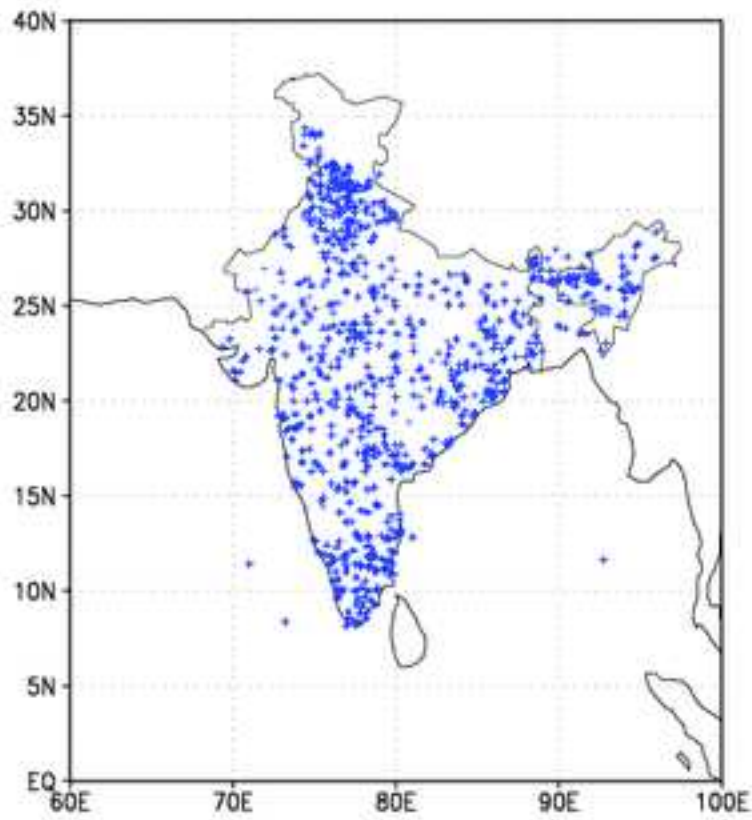


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (18062018 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 4196

AWS + ARG (4196)

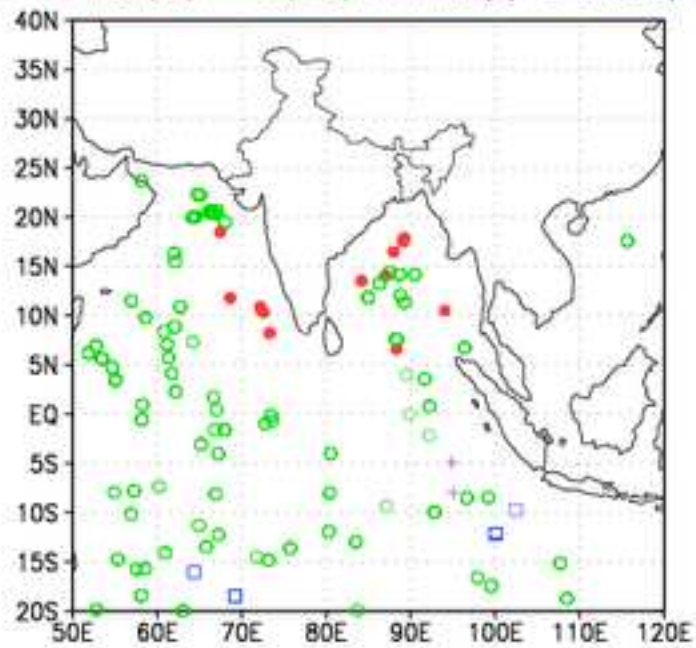


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (18062018 0600UTC +/- 3 Hrs)

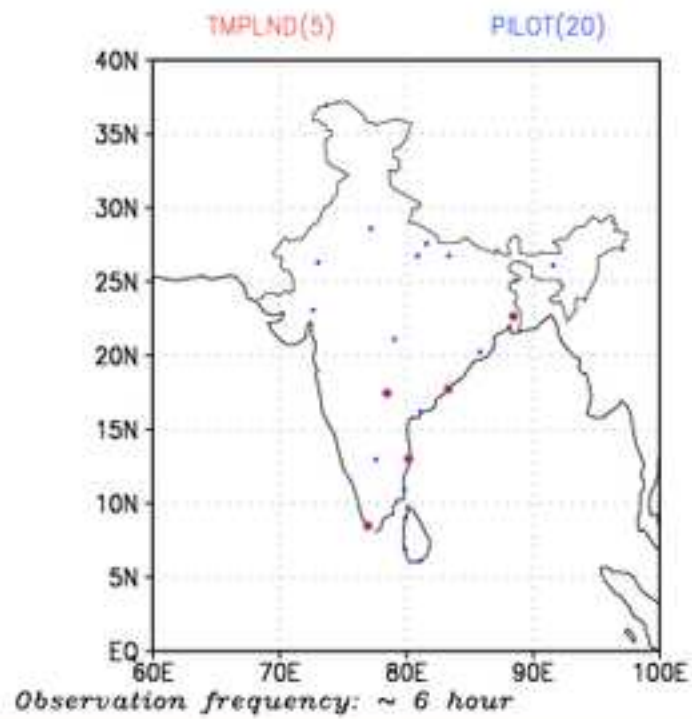
Total Number of Observations Received at NCMRWF: 556

country code in GTS as ● INDIA(25) ○ USA(512) + FRANCE(2) □ OTHERS(17)



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

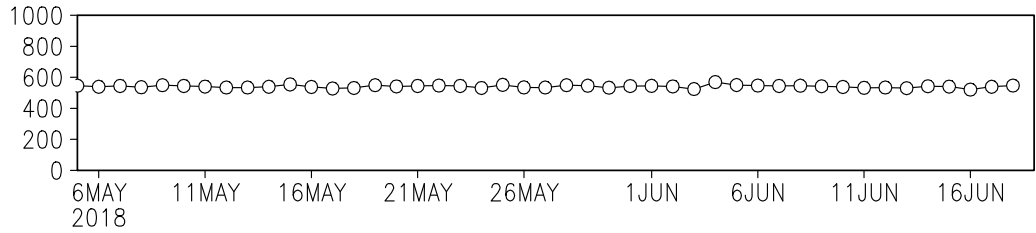
Data Coverage: Sonde (18062018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 25
(42 & 43 Block)



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

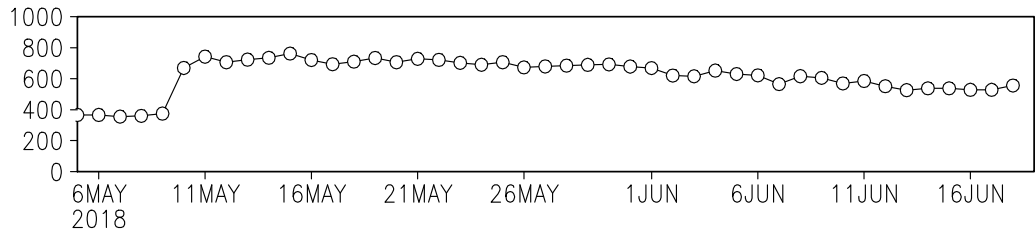
SYNOP

Avg=546
Today_Cnt=547
Dep=0. %



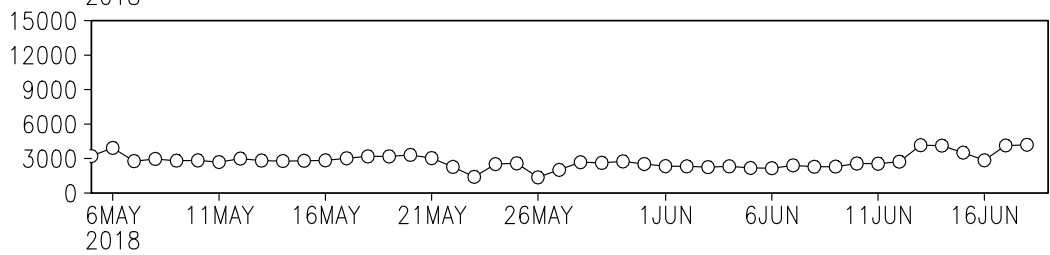
BUOY

Avg=688
Today_Cnt=556
Dep=-19. %



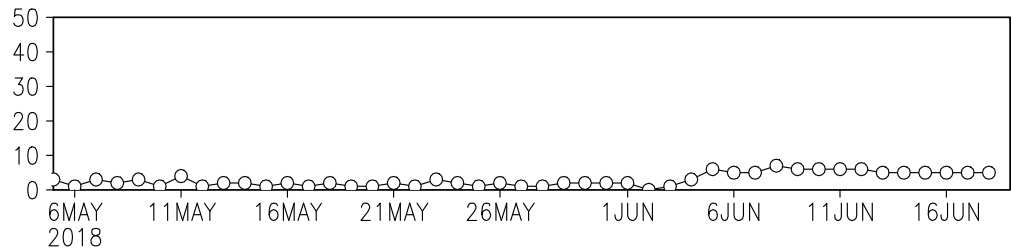
AWS+ARG

Avg=3211
Today_Cnt=4196
Dep=31. %



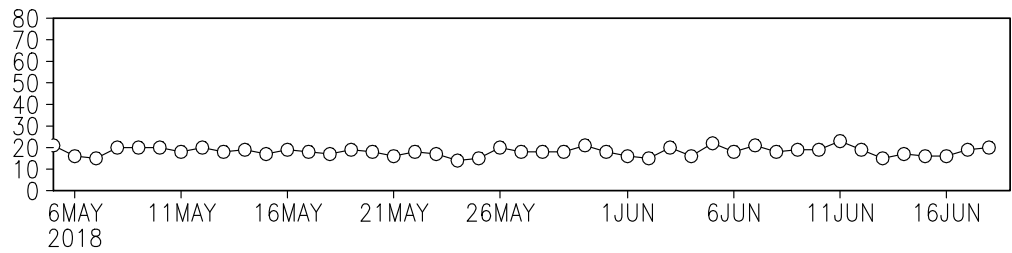
RS/RW

Avg=3
Today_Cnt=5
Dep=67. %



PILOT

Avg=19
Today_Cnt=20
Dep=5. %

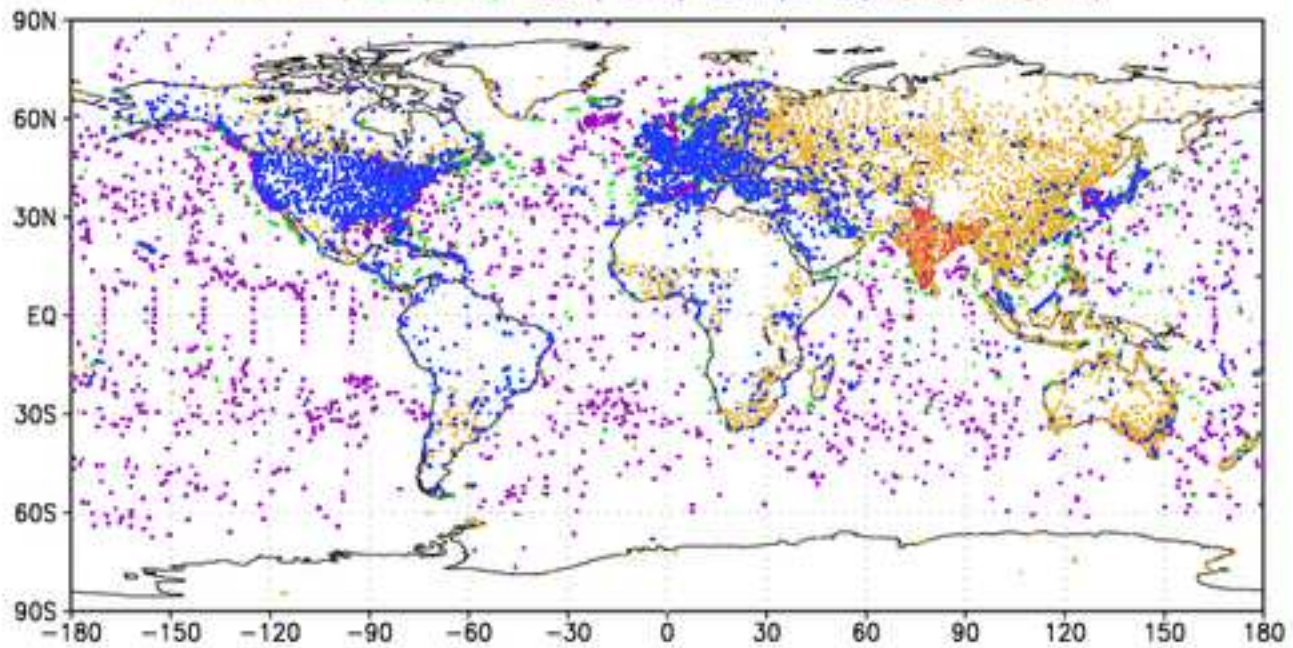


Global Observation Coverage

Data Coverage: Surface (18062018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 55274

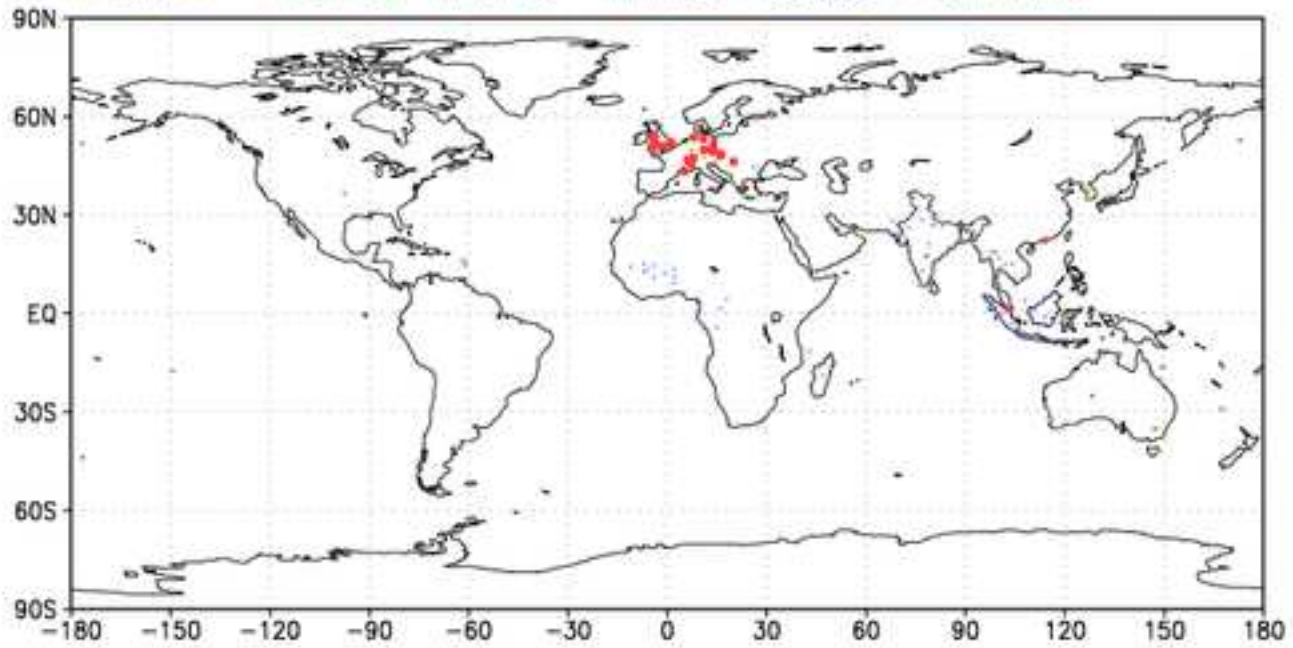
LNDSYN(14093) SHIP(2512) BUOY(14043) METAR(19432) MOBILE/AWS(5194)



Data Coverage: Sonde (18062018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 743

TMP LND(36) TMP SHP(0) TMP DRP(0) TMP MDB(0) PILOT(102) PROFILER(605)



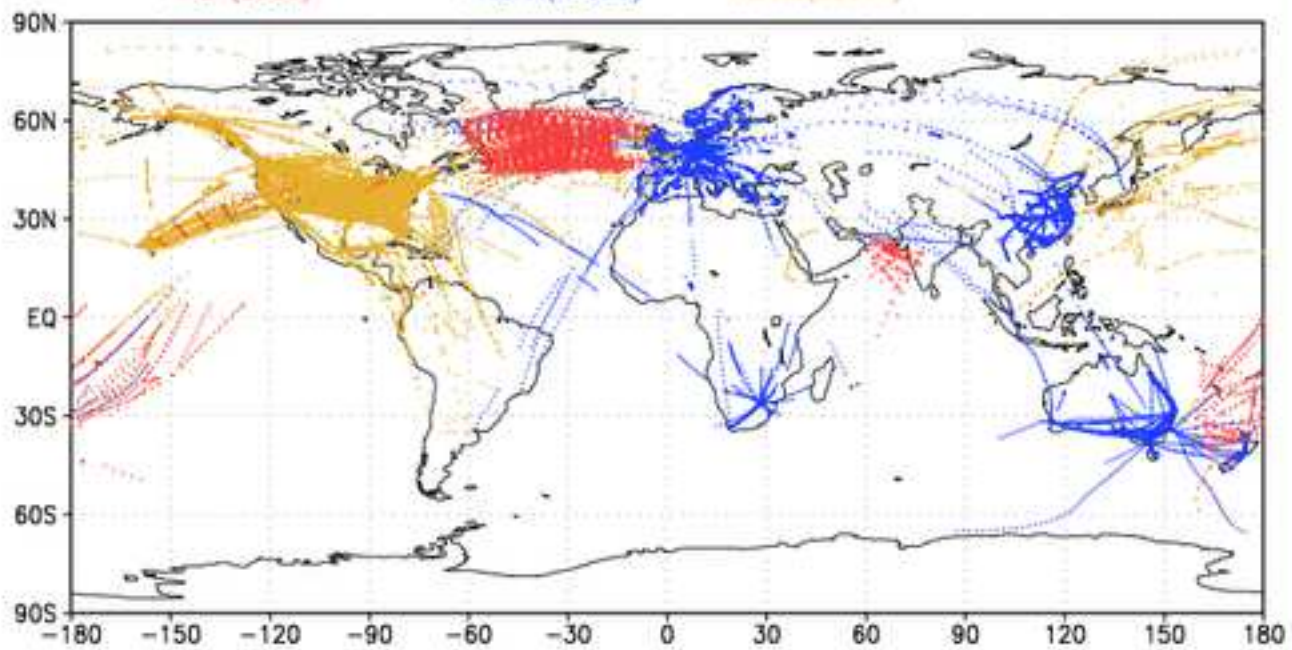
Data Coverage: AIRCFT (18062018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 91474

AIREP(9389)

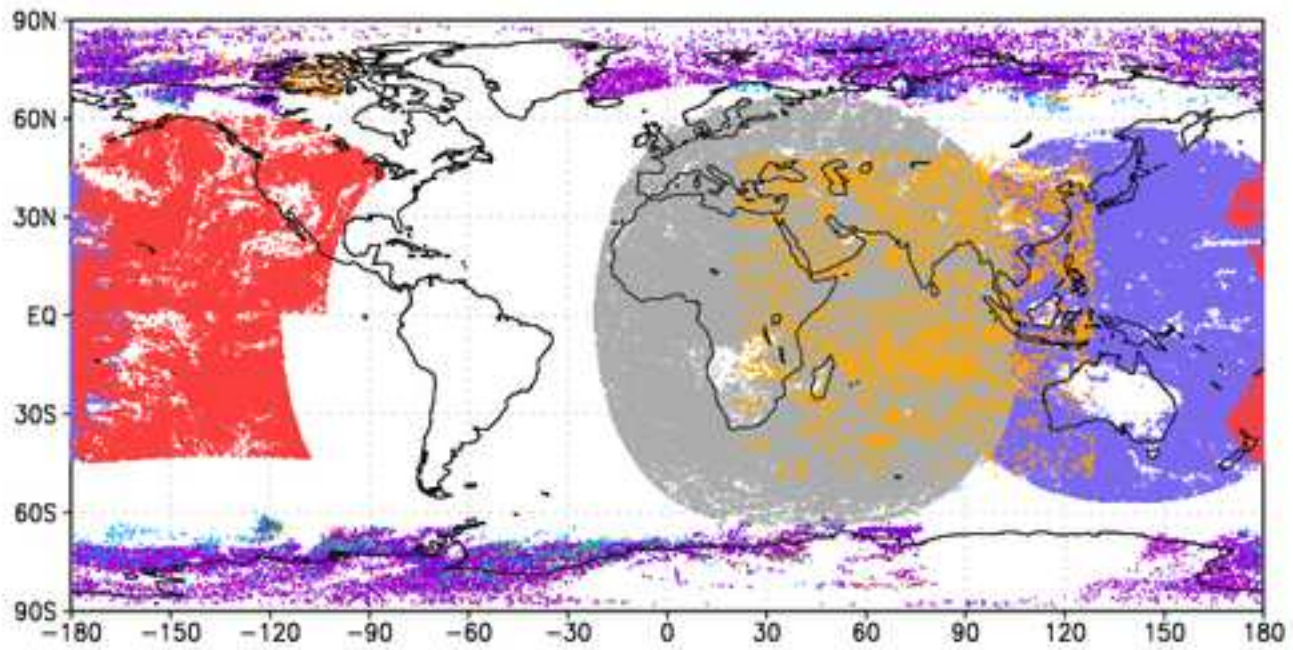
AMDAR(21388)

ACARS(60697)



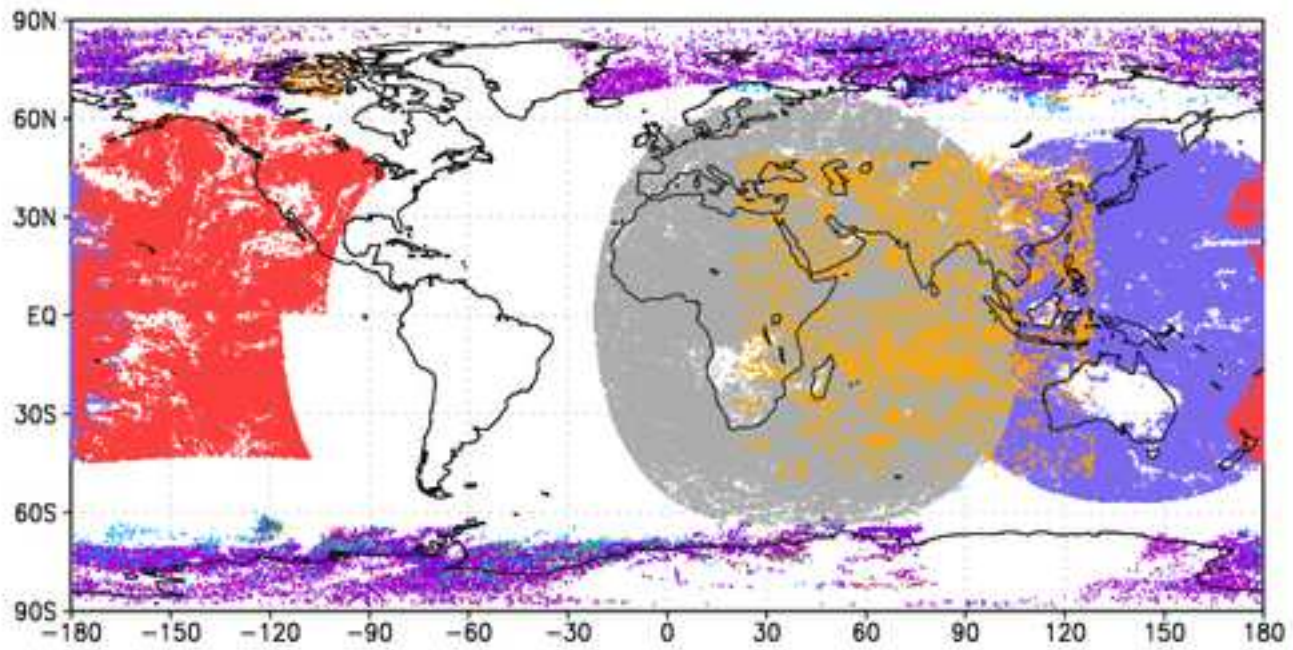
Data Coverage: AMV (18062018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 711067

GOES-15(77264) GOES-13(0) INSAT-3D(9177) METEOSAT-8(230898)
METEOSAT-10(0) HIMAWARI-8(165107) MODIS/Terra(4538) MODIS/Aqua(10386)
METOP(10714) NOAA-15(189) NOAA-18(0) NOAA-18(716) NOAA-19(941)



Data Coverage: AMV (18062018 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 711067

GOES-15(77264) GOES-13(0) INSAT-3D(9177) METEOSAT-8(230898)
METEOSAT-10(0) HIMAWARI-8(165107) MODIS/Terra(4538) MODIS/Aqua(10386)
METOP(10714) NOAA-15(189) NOAA-18(0) NOAA-18(716) NOAA-19(941)



Data Coverage: SAT RADIANCE (18062018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 3750721

NOAA15(41260)

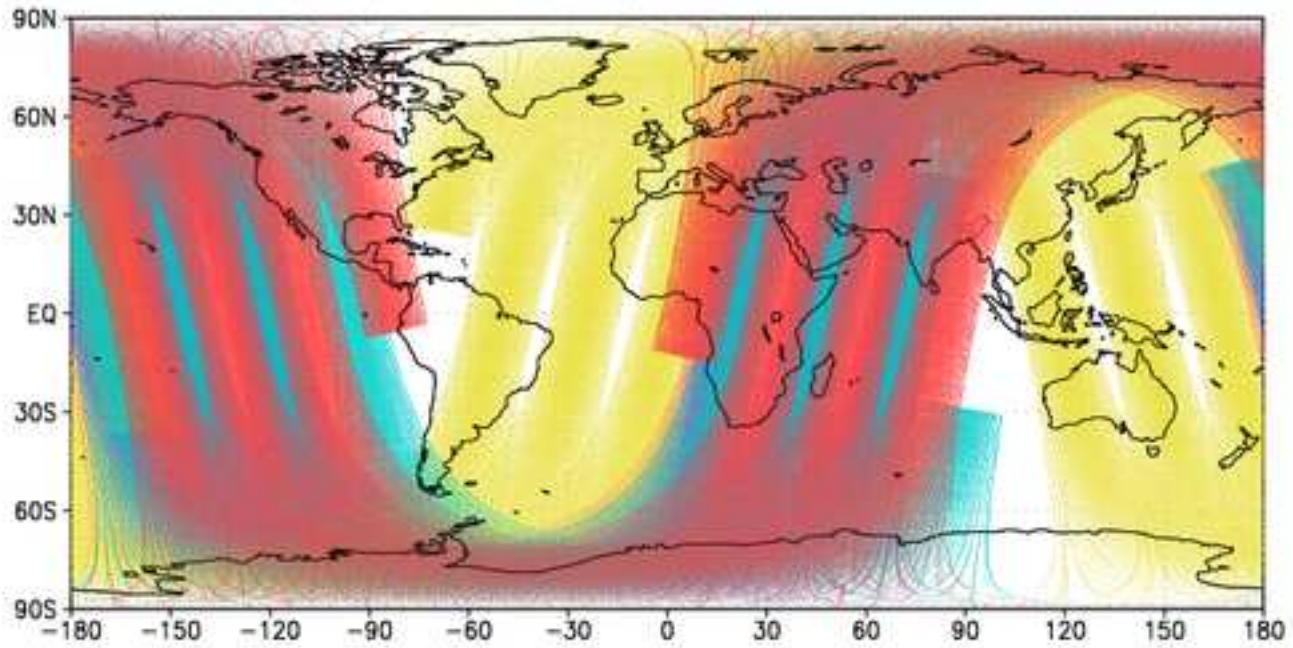
NOAA18(0)

NOAA18(764942)

NOAA18(987230)

METOP1(983946)

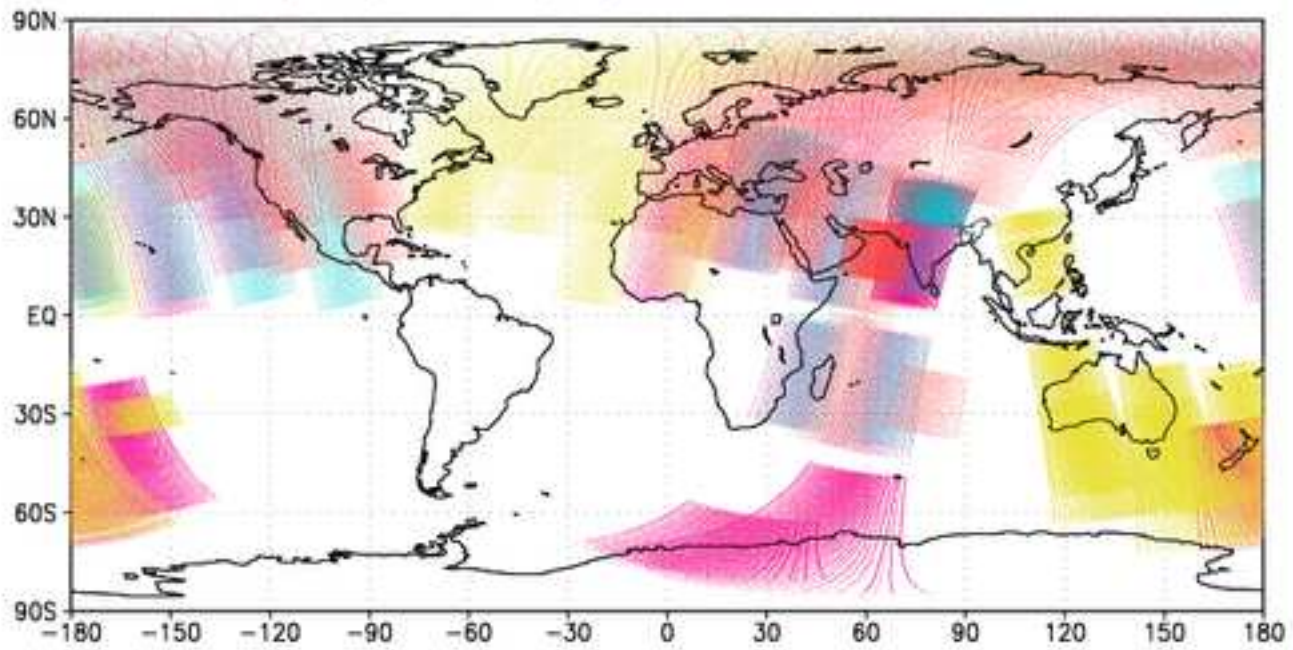
METOP2(973343)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (18062018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 760914

NOAA15(0) NOAA18(0) NOAA18(238401) NOAA18(295151)
METOP1(145234) METOP2(92128)

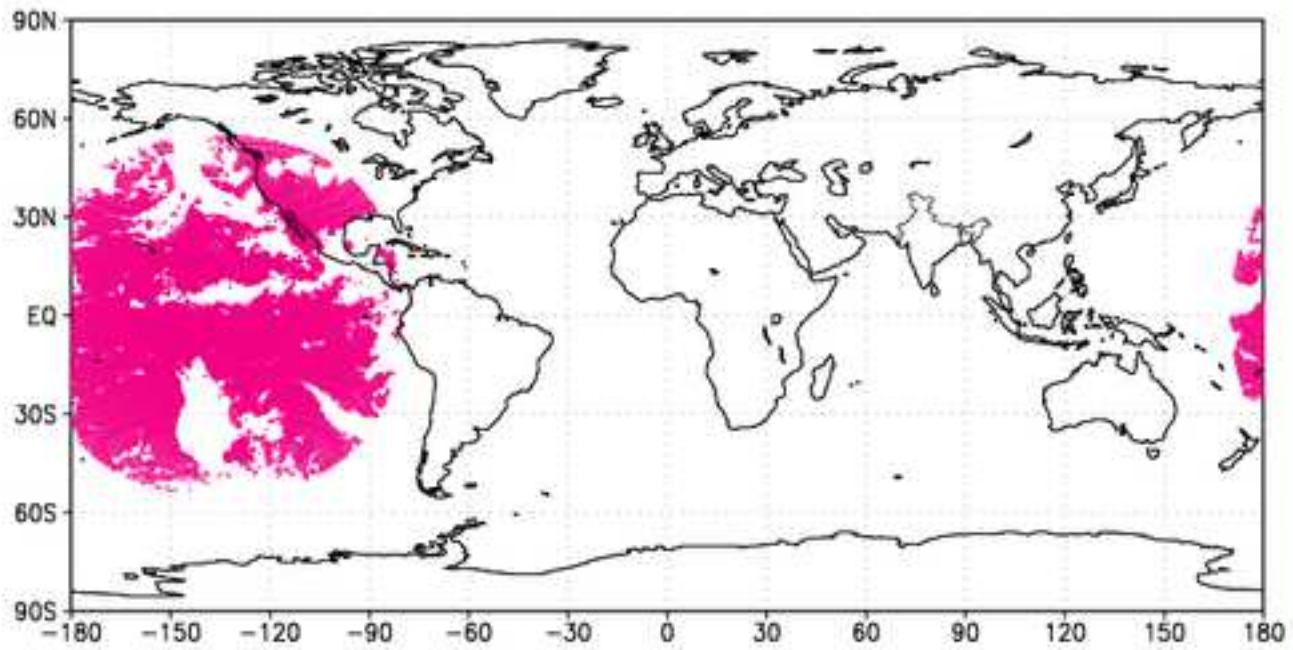


Data Coverage: GOES CSBT (18062018 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 28548

GOES-15(28548)

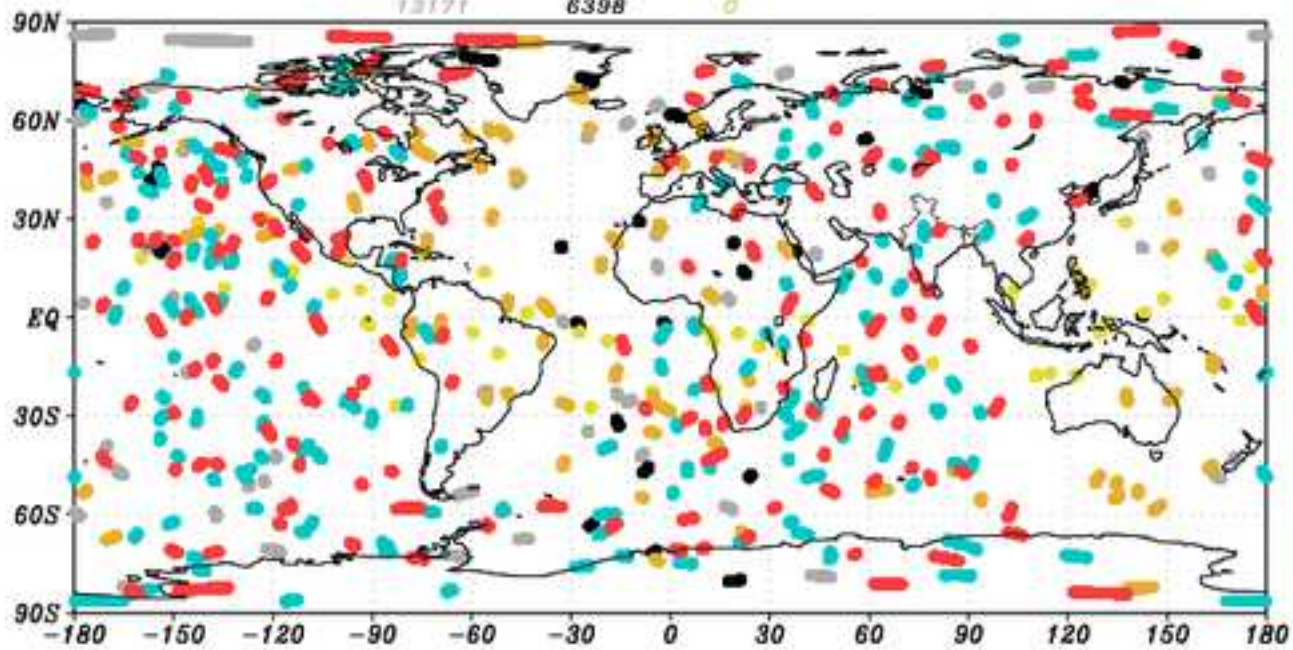
GOES-13(0)



Data Coverage:GPSRO (18062018 0600UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 132355

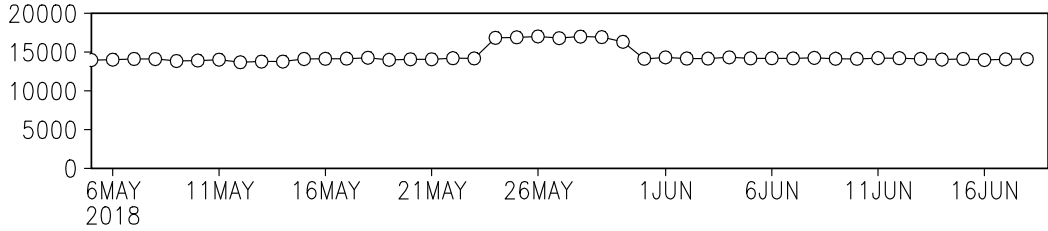
GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	40017	39720	0	0	3371	0	0	23478
		TerraSAR-X	TenDEM-X	GRACE-B				
		13171	6398	0				



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

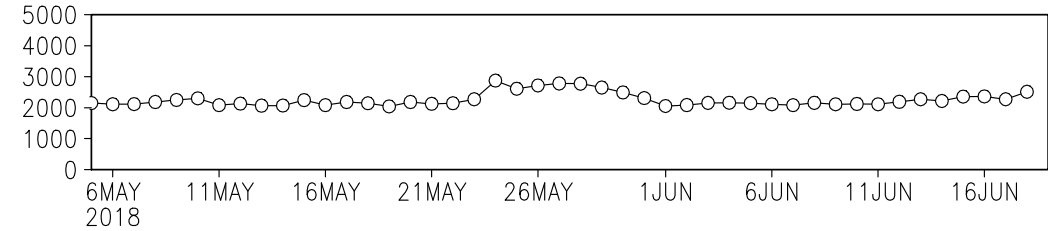
SYNOP

Avg=16824
Today_Cnt=14093
Dep=-16. %



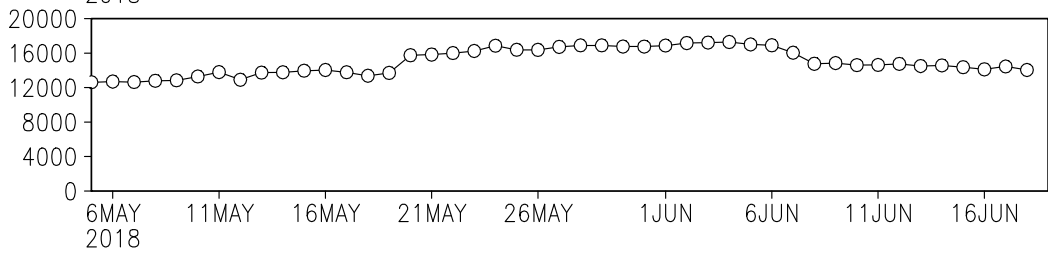
SHIP

Avg=2485
Today_Cnt=2512
Dep=1. %



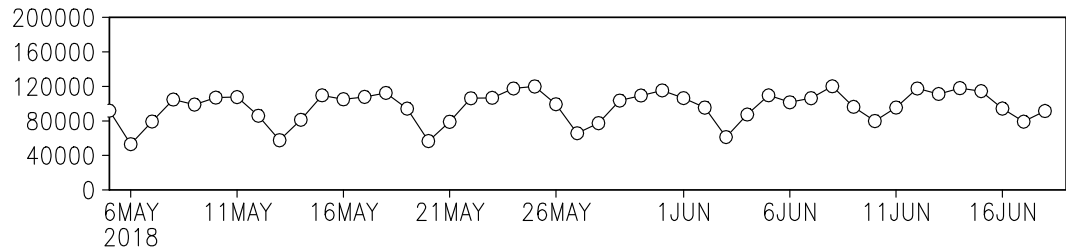
BUOY

Avg=16626
Today_Cnt=14043
Dep=-16. %



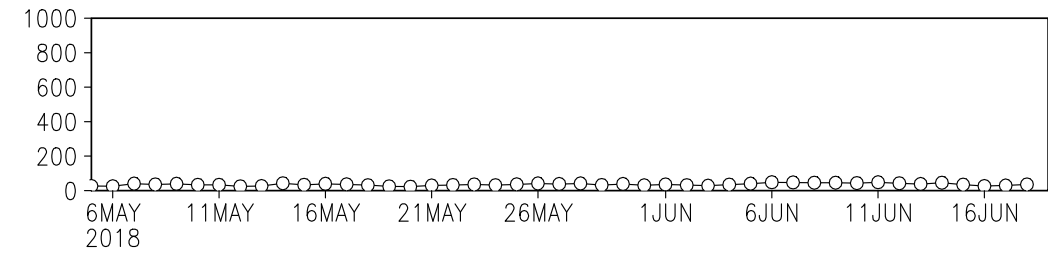
AIRCRAFT

Avg=114065
Today_Cnt=91474
Dep=-20. %



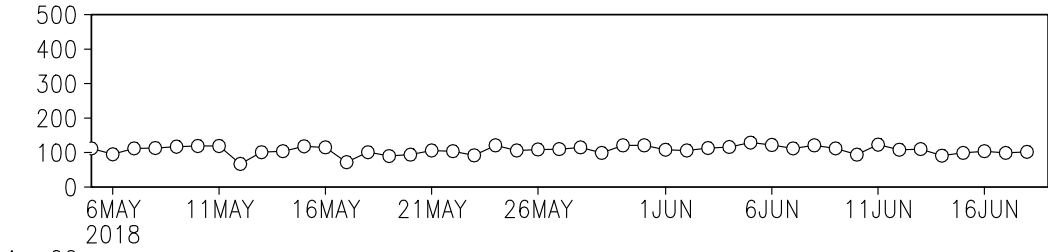
RS/RW

Avg=41
Today_Cnt=36
Dep=-12. %



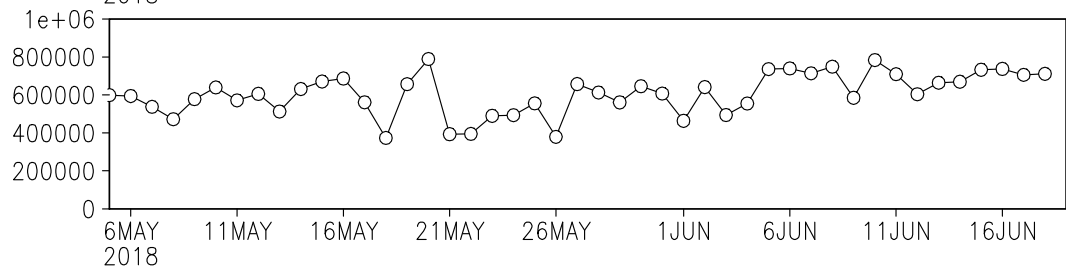
PILOT

Avg=116
Today_Cnt=102
Dep=-12. %



AMV

Avg=682644
Today_Cnt=711067
Dep=4. %

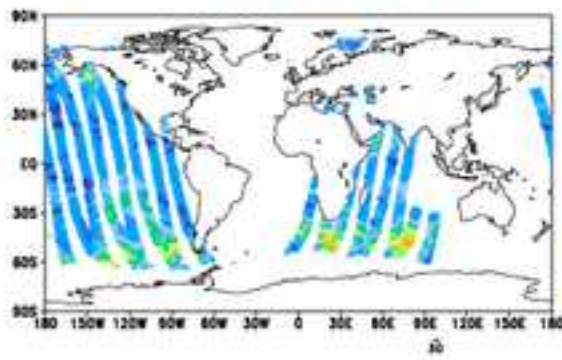


SCATTEROMETER WIND VECTORS

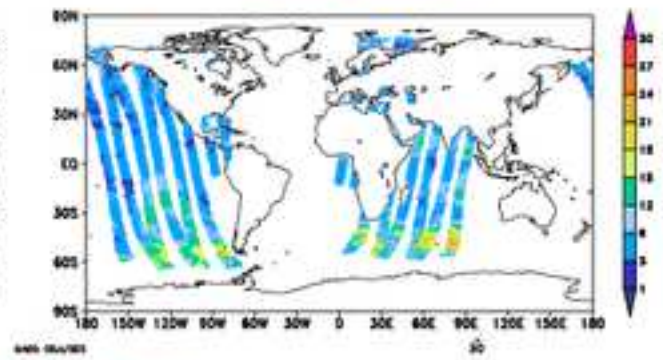
RECEIVED AT NCMRWF (20180618 06Z)

SCATTEROMETER SURFACE WINDS (18062018 0600UTC +/- 03Hrs)

ASCAT:Metop-A



ASCAT:Metop-B

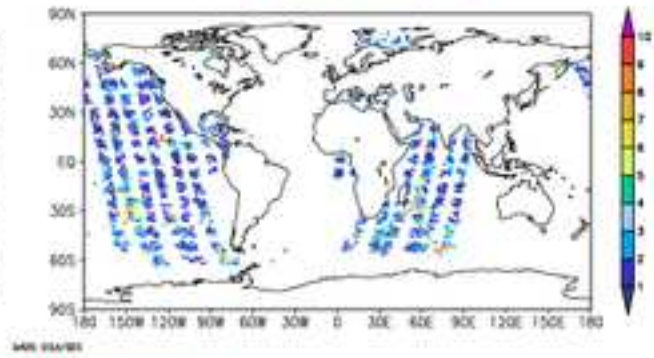
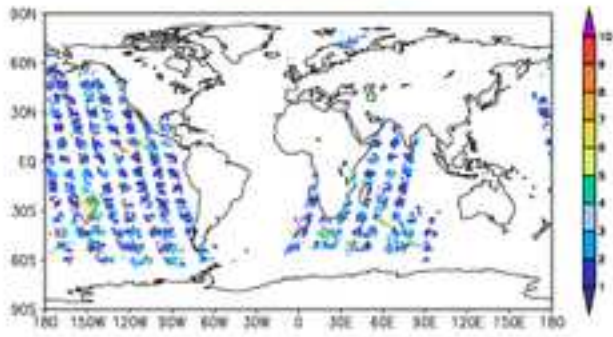


SCATSAT-1 (Indian)

OBSERVATION-FIRST GUESS (18062018 06 UTC):NCMRWF

ASCAT:Metop-A

ASCAT:Metop-B



SCATSAT-1(Indian)

INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

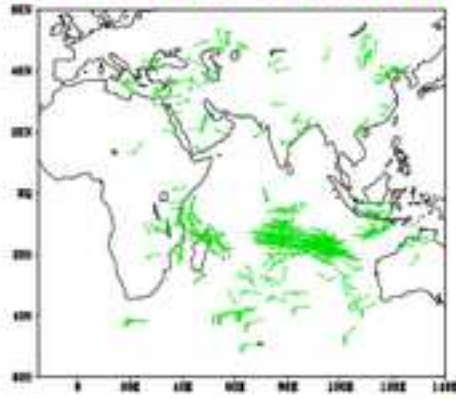
WATER VAPOUR WINDS (WV)

VISIBLE WINDS (VIS) }

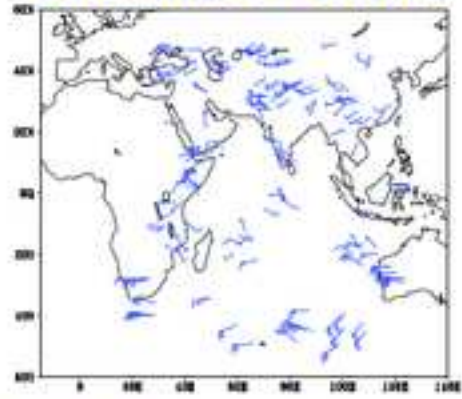
AMV DEVIATION
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (18062018 0600UTC)

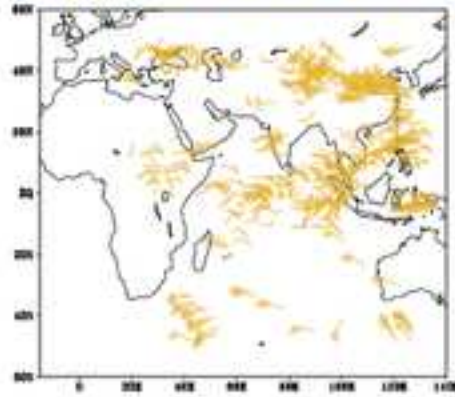
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



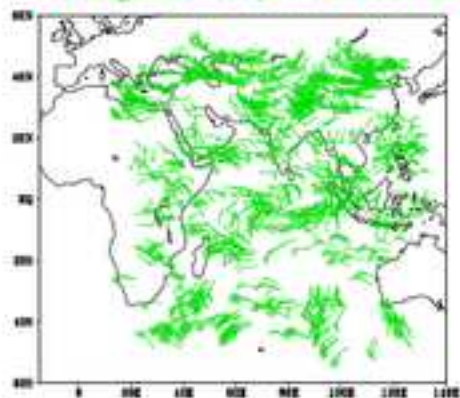
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (18062018 0600UTC)

Low Level (Below 700 hPa)

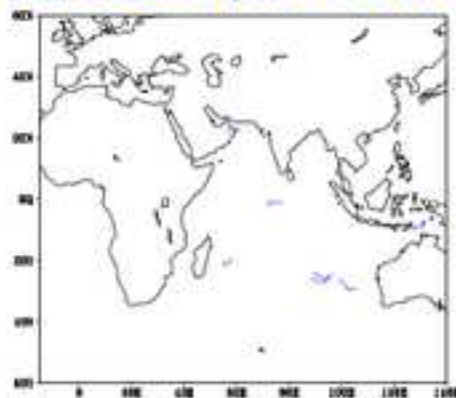
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (18062018 0600UTC)

WV, High Level (Above 400 hPa)

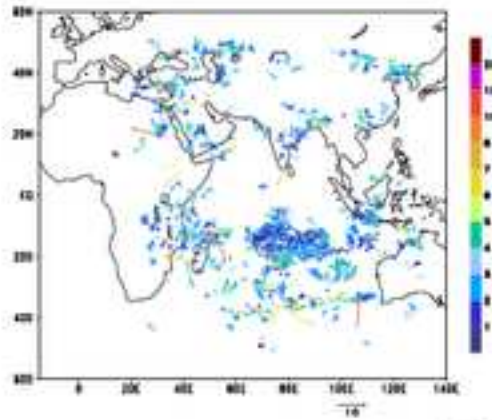


VIS, Low Level (Below 700 hPa)

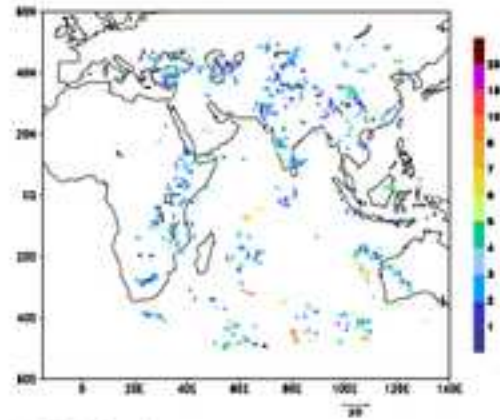


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (18062018 0600UTC)

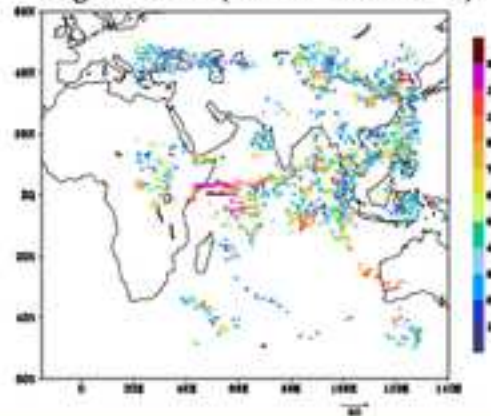
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)



High Level (Above 400 hPa)



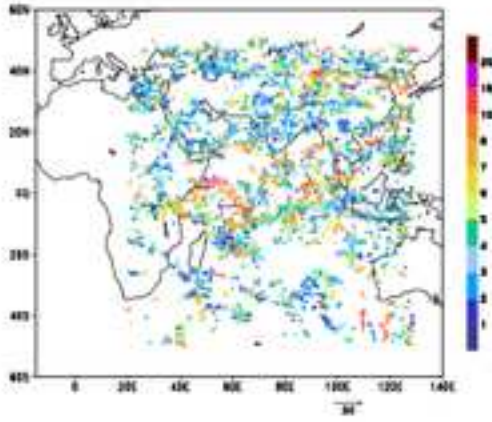
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (18062018 0600UTC)

Low Level (Below 700 hPa)

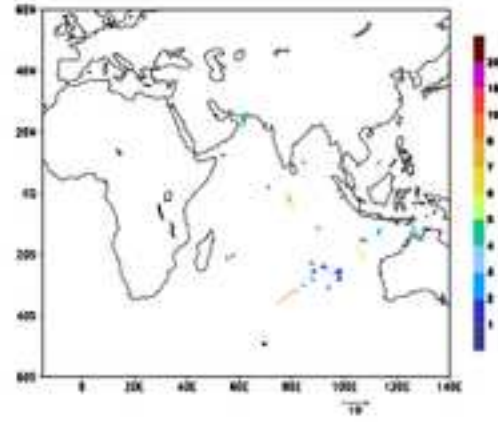
Mid Level (700 - 401 hPa)

INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 0600UTC)

WV, High Level (Above 400 hPa)

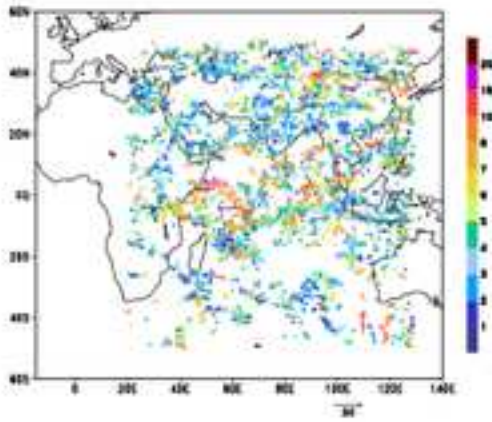


VIS, Low level (Below 700 hPa)

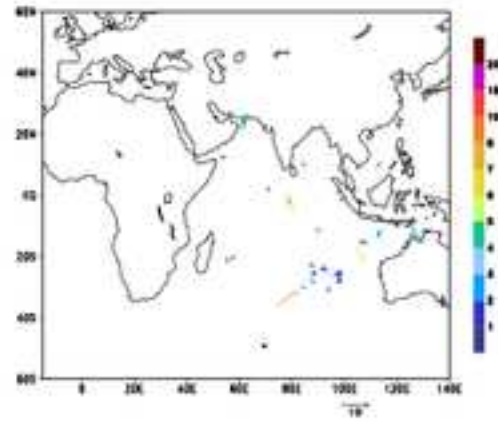


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 0600UTC)

WV, High Level (Above 400 hPa)

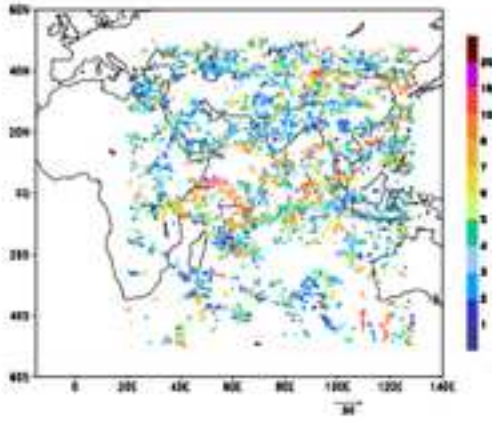


VIS, Low level (Below 700 hPa)

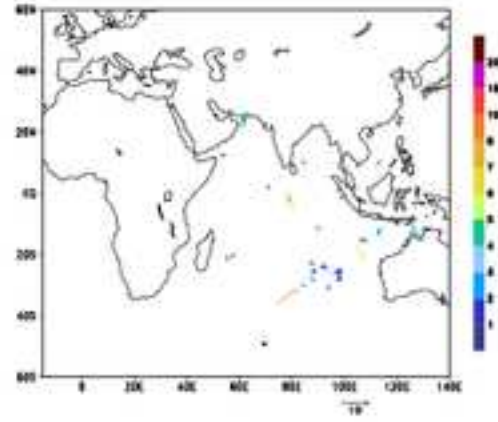


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 0600UTC)

WV, High Level (Above 400 hPa)

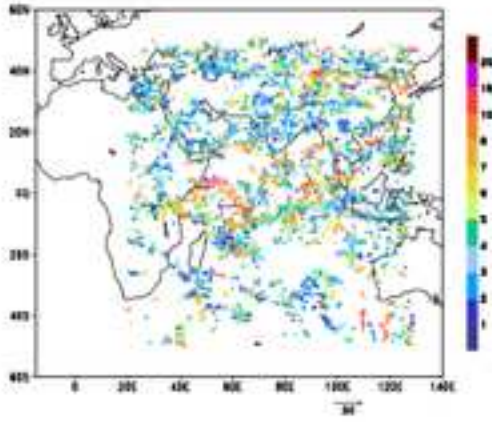


VIS, Low level (Below 700 hPa)

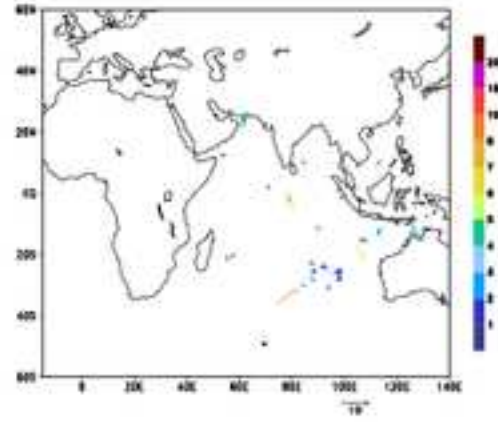


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 0600UTC)

WV, High Level (Above 400 hPa)

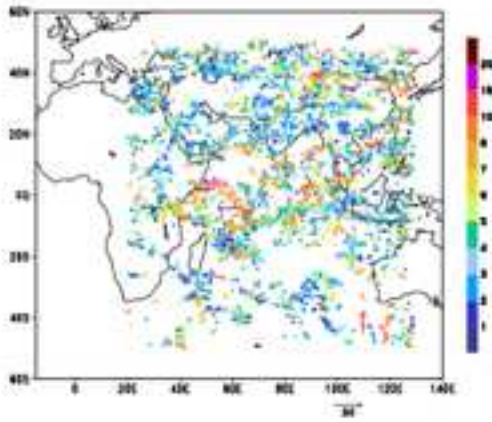


VIS, Low level (Below 700 hPa)

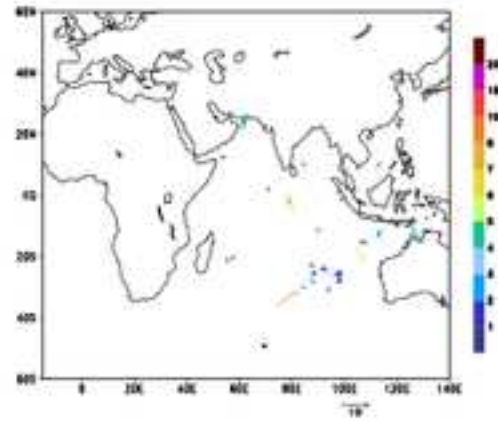


INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (18062018 0600UTC)

WV, High Level (Above 400 hPa)



VIS, Low level (Below 700 hPa)

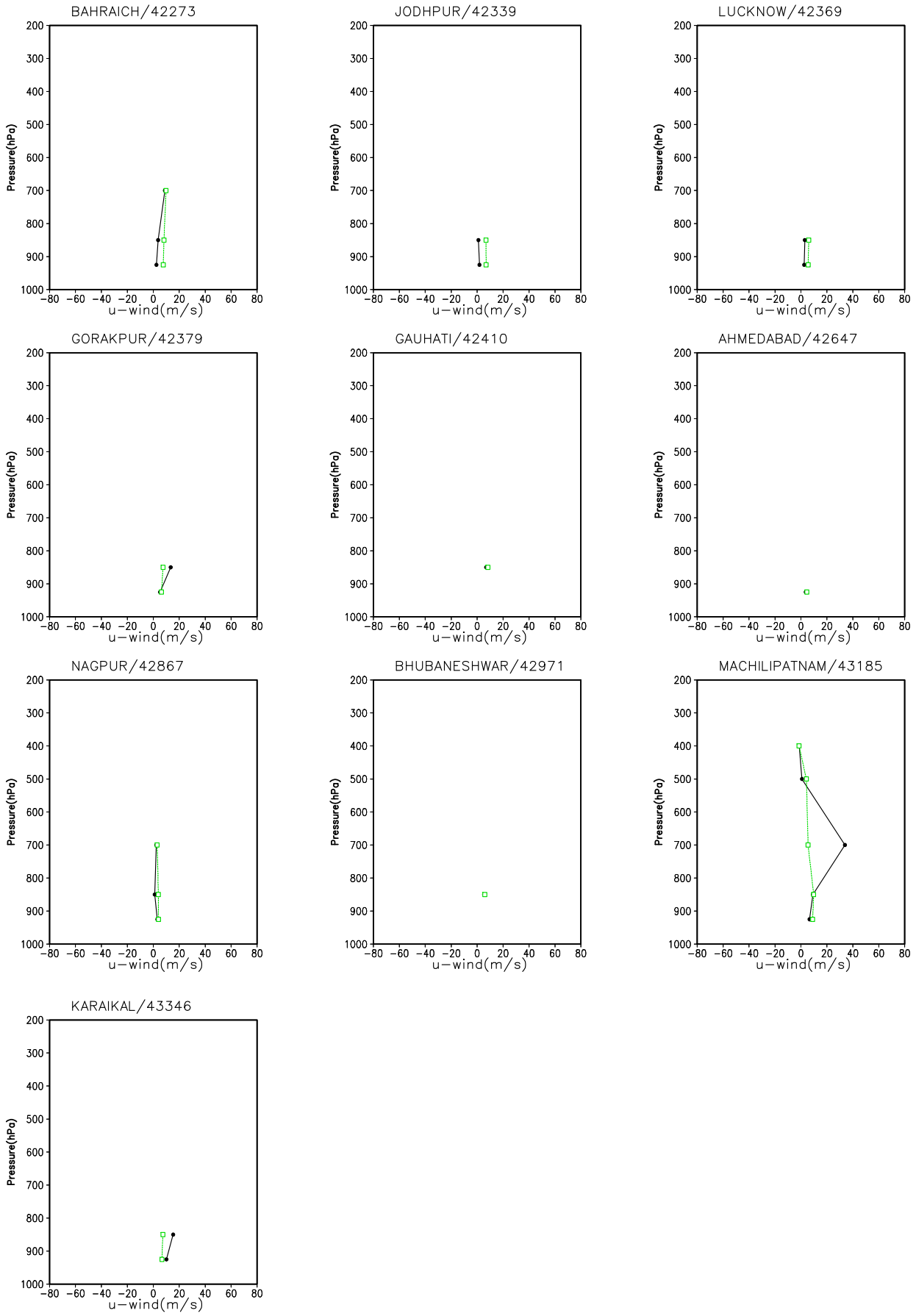


Indian Doppler Weather Radar
Data Monitoring

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 18062018

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