

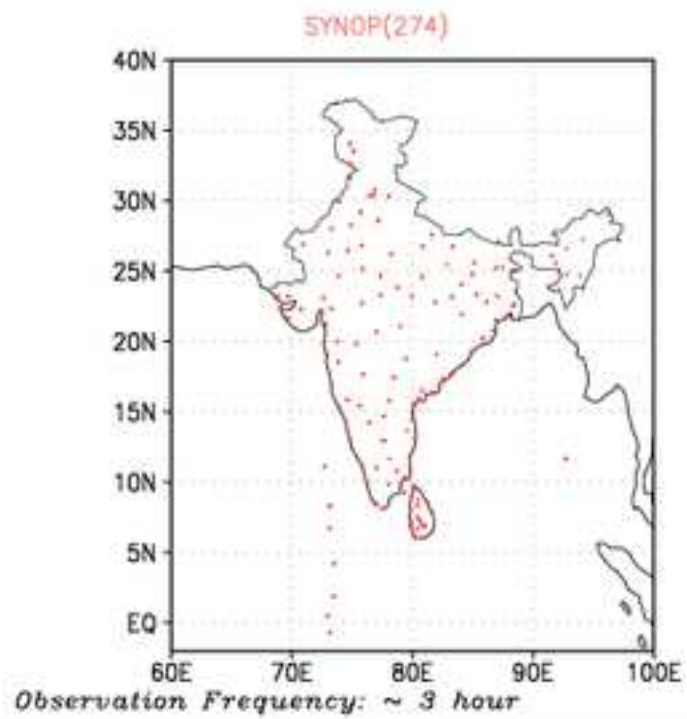
Observation Monitoring

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

for 19062018 (0000 UTC)

Indian Observation Coverage

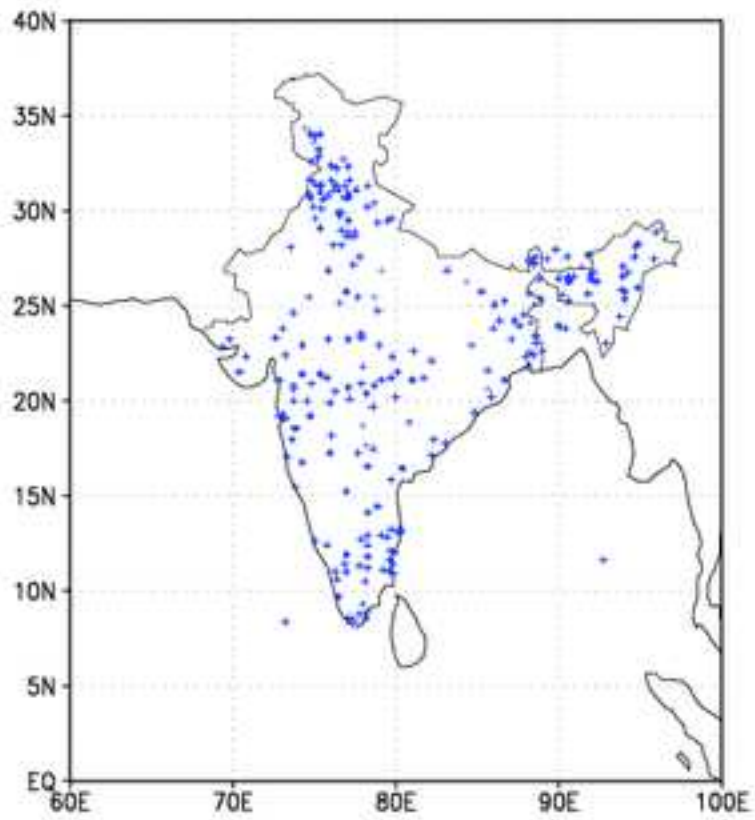
Data Coverage: Surface (19062018 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 274
(42 & 43 Block)



Data Coverage: Indian AWS (19062018 0000UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 1019

AWS PRESSURE (1019)

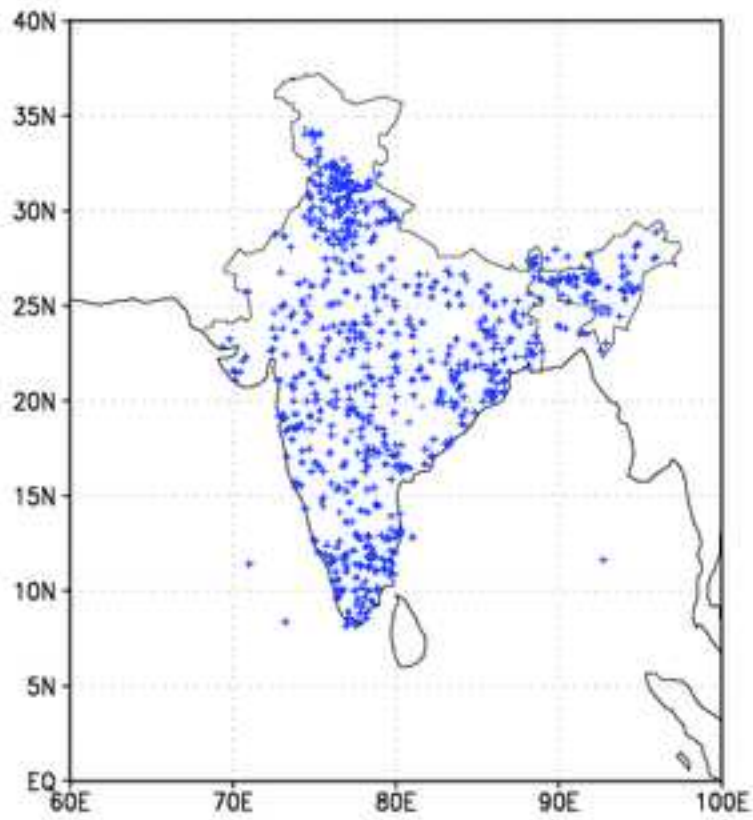


Observation Frequency: ~ 1 hour

Data Coverage: Indian AWS (19062018 0000UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 3259

AWS + ARG (3259)

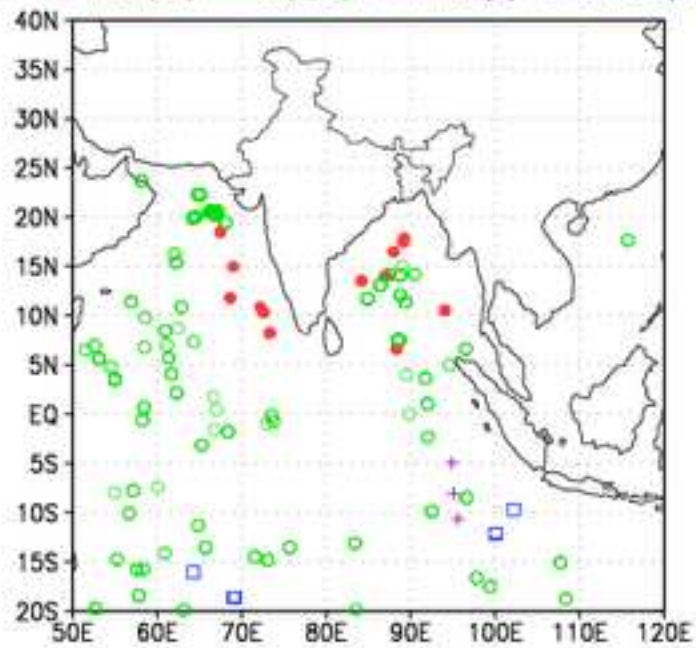


Observation Frequency: ~ 1 hour

Data Coverage: BUOY (19062018 0000UTC +/- 3 Hrs)

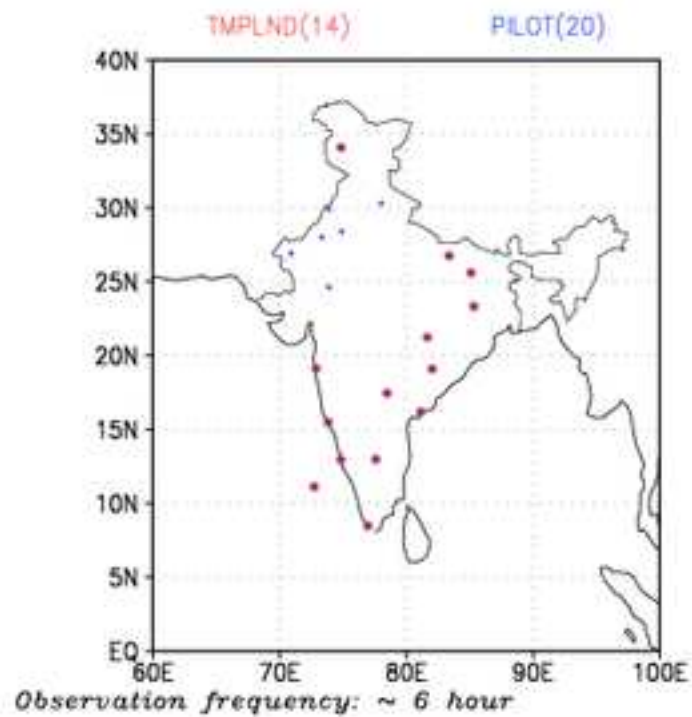
Total Number of Observations Received at NCMRWF: 374

country code in GTS as ● INDIA(23) ○ USA(326) + FRANCE(6) □ OTHERS(19)



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

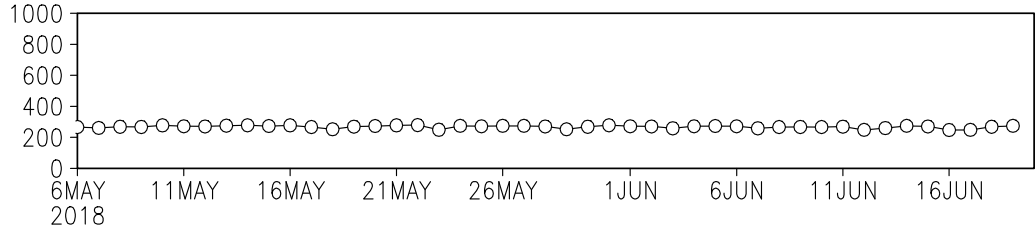
Data Coverage: Sonde (19062018 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 34
(42 & 43 Block)



Count for different types of observation (Over Indian Region) for the last 45 days (valid for 00 UTC)

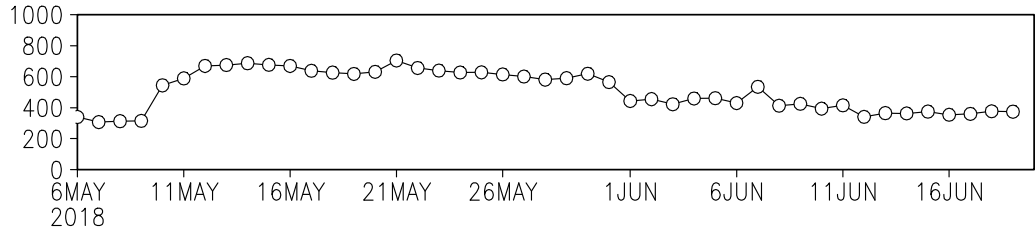
SYNOP

Avg=272
Today_Cnt=274
Dep=1. %



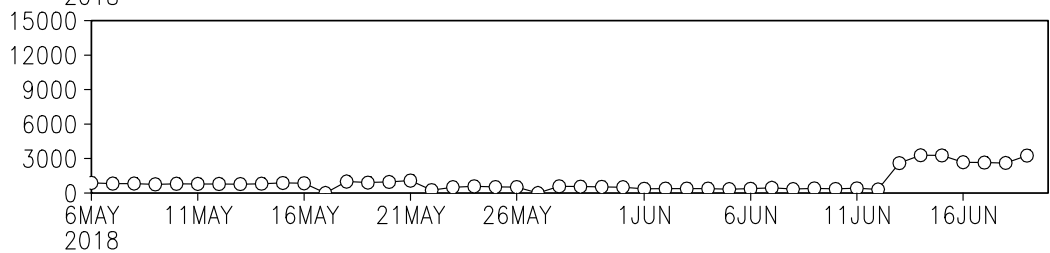
BUOY

Avg=625
Today_Cnt=374
Dep=-40. %



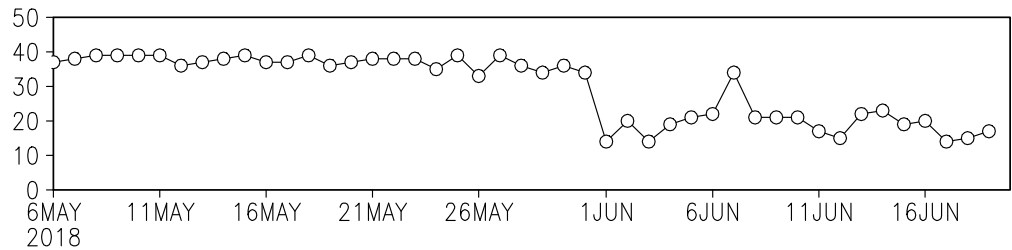
AWS+ARG

Avg=2108
Today_Cnt=3259
Dep=55. %



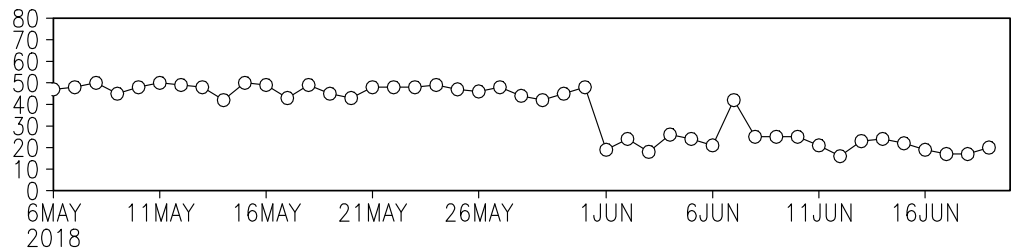
RS/RW

Avg=37
Today_Cnt=17
Dep=-54. %



PILOT

Avg=46
Today_Cnt=20
Dep=-57. %

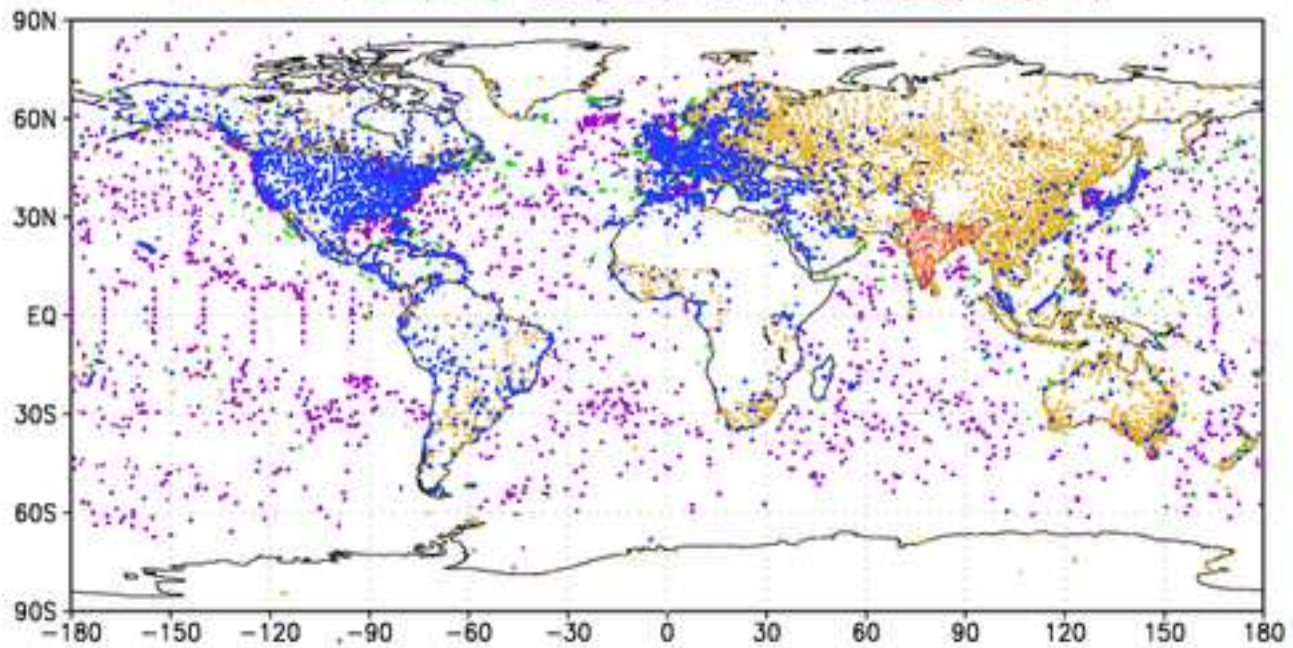


Global Observation Coverage

Data Coverage: Surface (19062018 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 40025

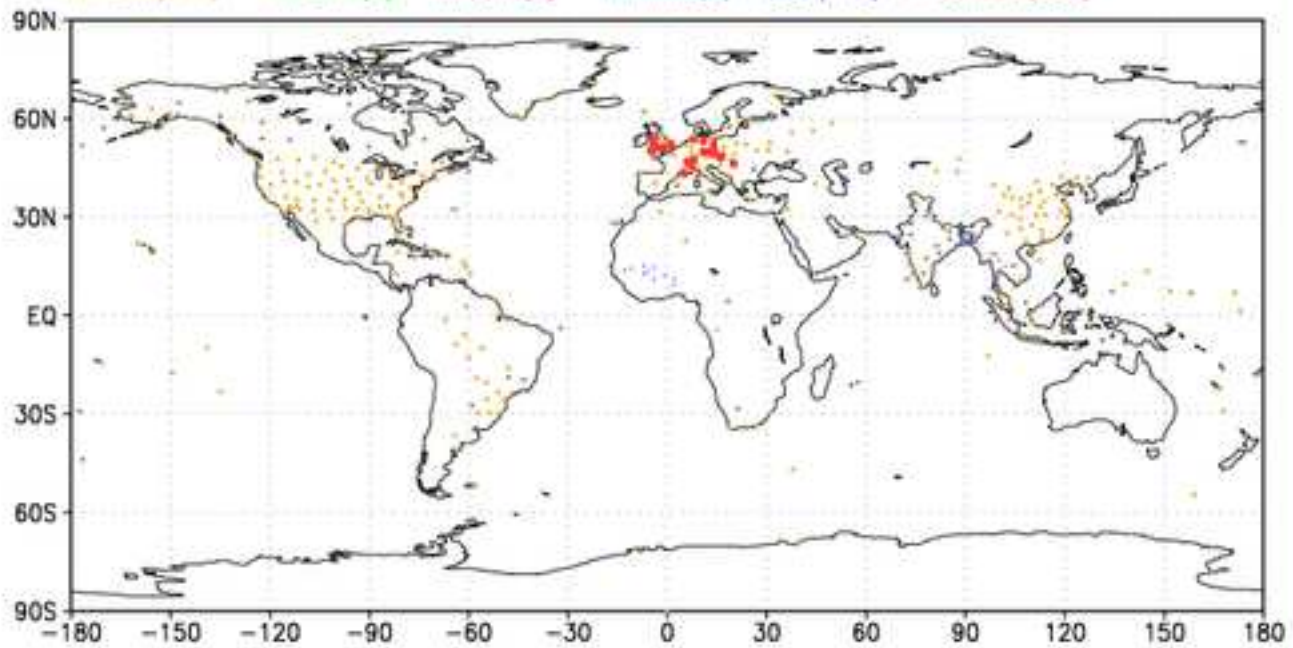
LNDSYN(12026) SHIP(1515) BUOY(9127) METAR(13740) MOBILE/AWS(3617)



Data Coverage: Sonde (19062018 0000UTC +/- 03Hrs)

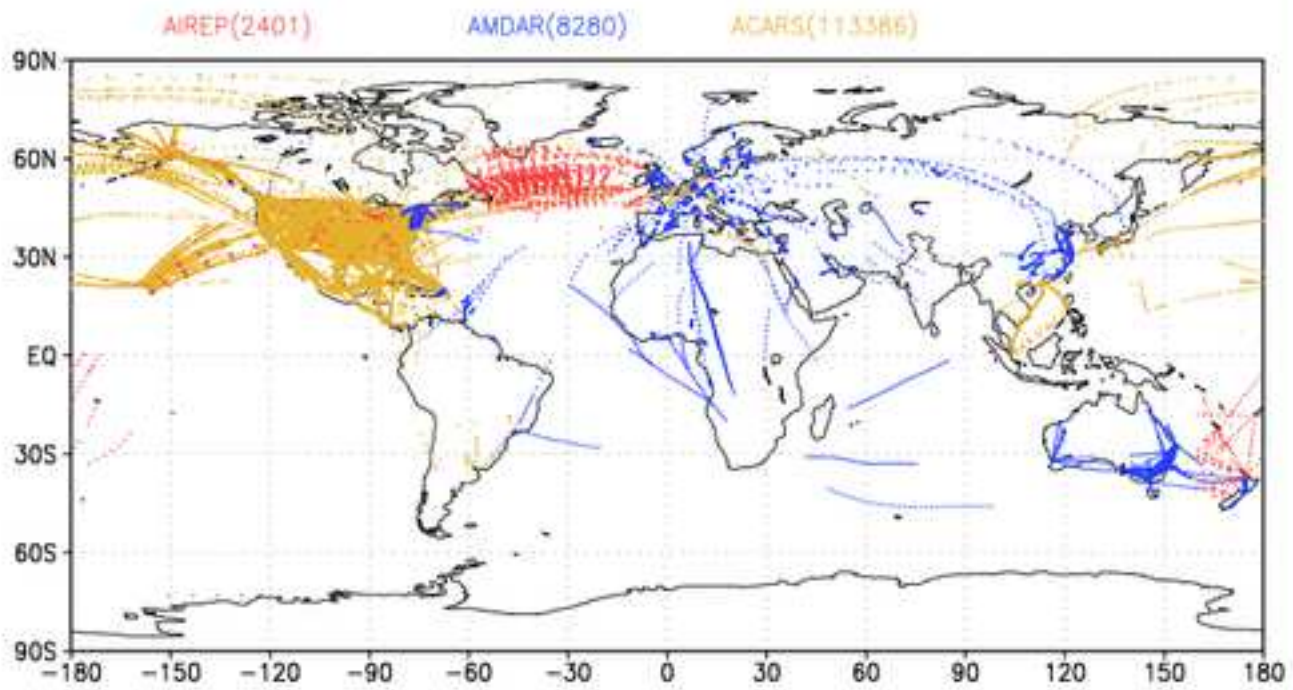
Total Number of Observations Received at NCMRWF: 889

TMP LND(360) TMP SHP(0) TMP DRP(0) TMP MDB(0) PILOT(149) PROFILER(380)



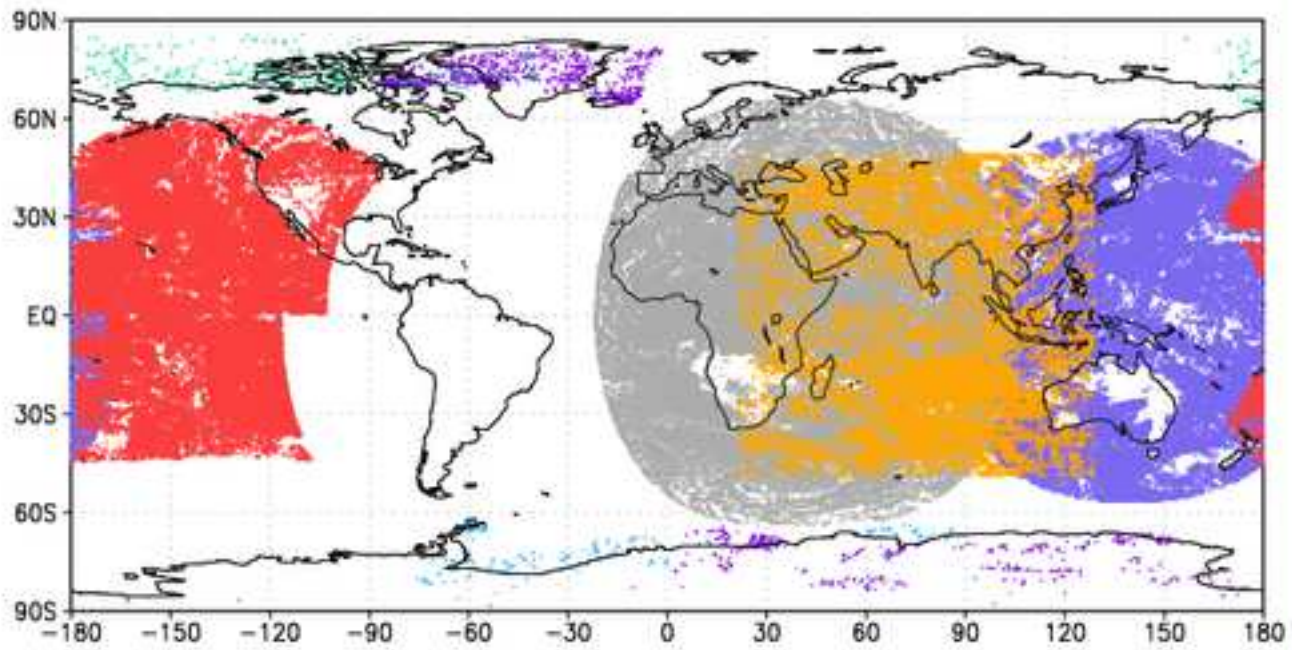
Data Coverage: AIRCFT (19062018 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 124067



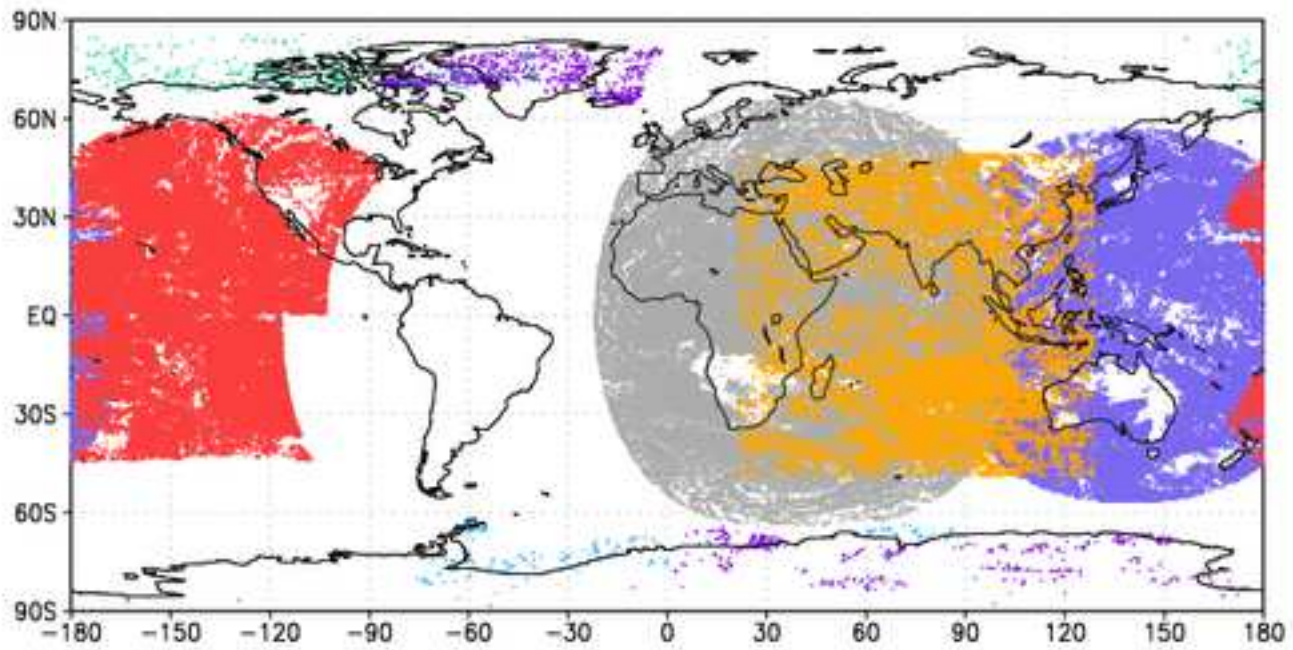
Data Coverage: AMV (19062018 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 482421

GOES-15(120358) GOES-13(0) INSAT-3D(20631) METEOSAT-8(113826)
METEOSAT-10(0) HIMAWARI-8(106694) MODIS/Terra(0) MODIS/Aqua(0)
METOP(1567) NOAA-15(0) NOAA-18(0) NOAA-18(484) NOAA-19(189)



Data Coverage: AMV (19062018 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 482421

GOES-15(120358) GOES-13(0) INSAT-3D(20631) METEOSAT-8(113826)
METEOSAT-10(0) HIMAWARI-8(106694) MODIS/Terra(0) MODIS/Aqua(0)
METOP(1567) NOAA-15(0) NOAA-18(0) NOAA-18(484) NOAA-19(189)



Data Coverage: SAT RADIANCE (19062018 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 2176168

NOAA15(22960)

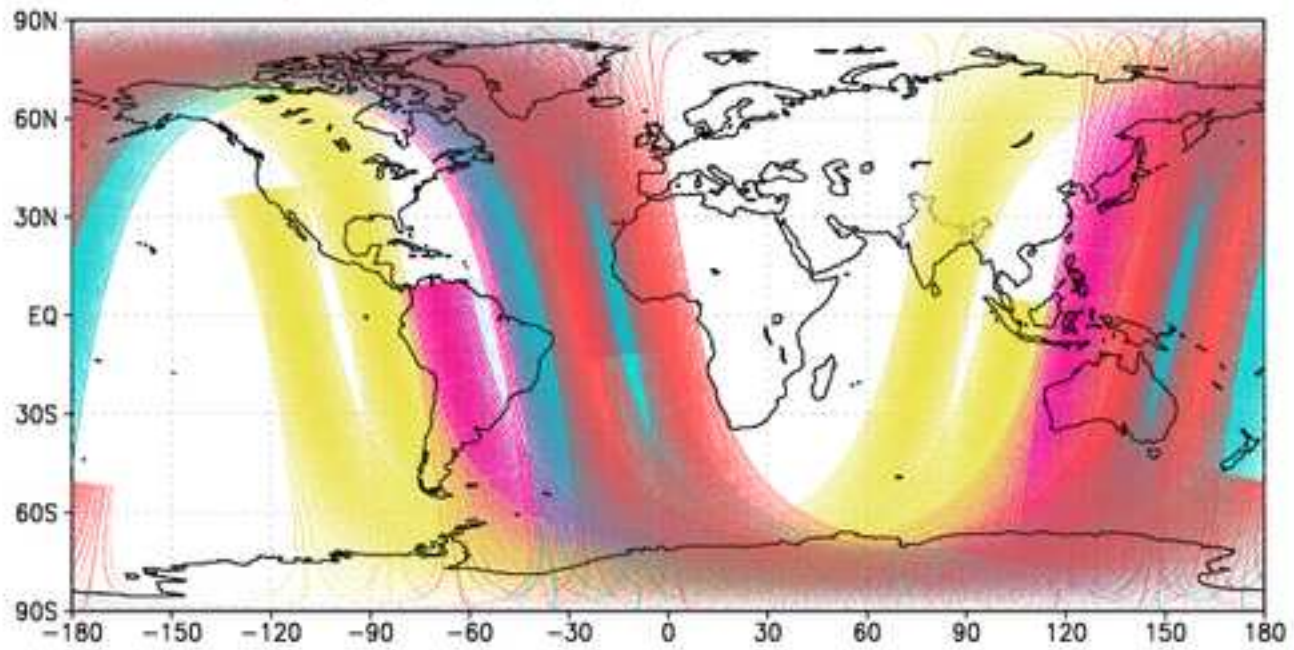
NOAA18(0)

NOAA18(573908)

NOAA18(452821)

METOP1(575566)

METOP2(550914)



Data Coverage: SAT RADIANCE (EARS+IMD RARS) (19062018 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 508635

NOAA15(0)

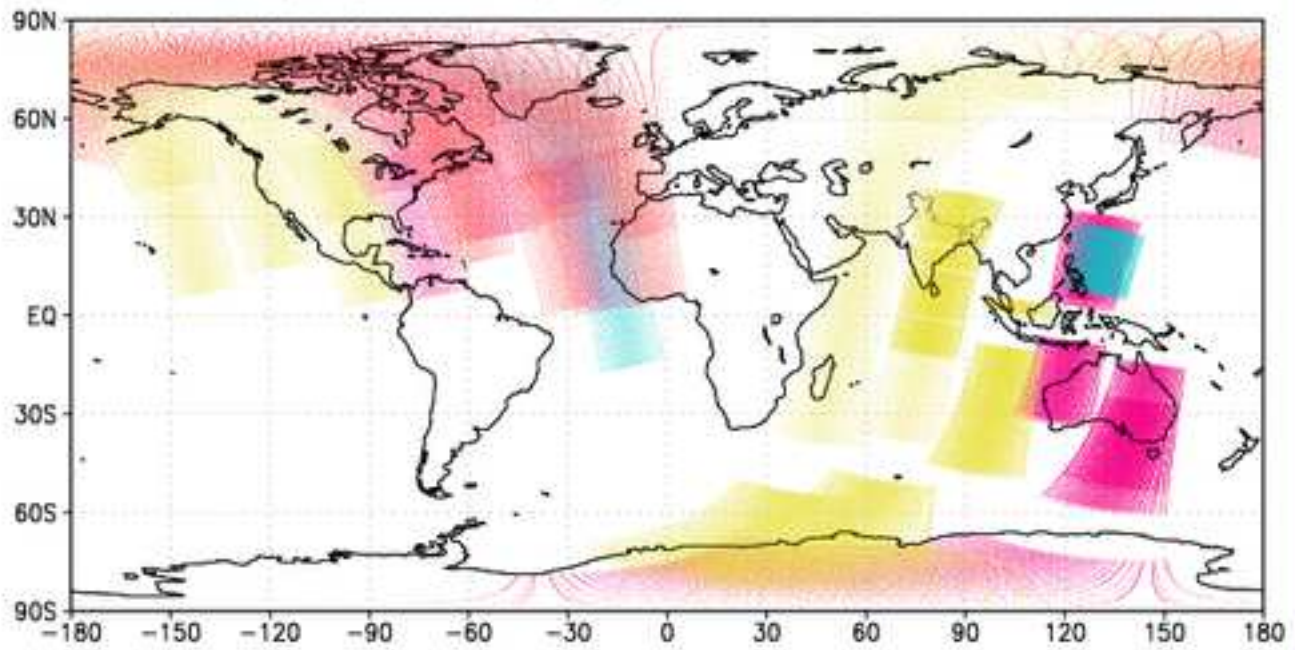
NOAA18(0)

NOAA18(167861)

NOAA18(212080)

METOP1(98742)

METOP2(29952)

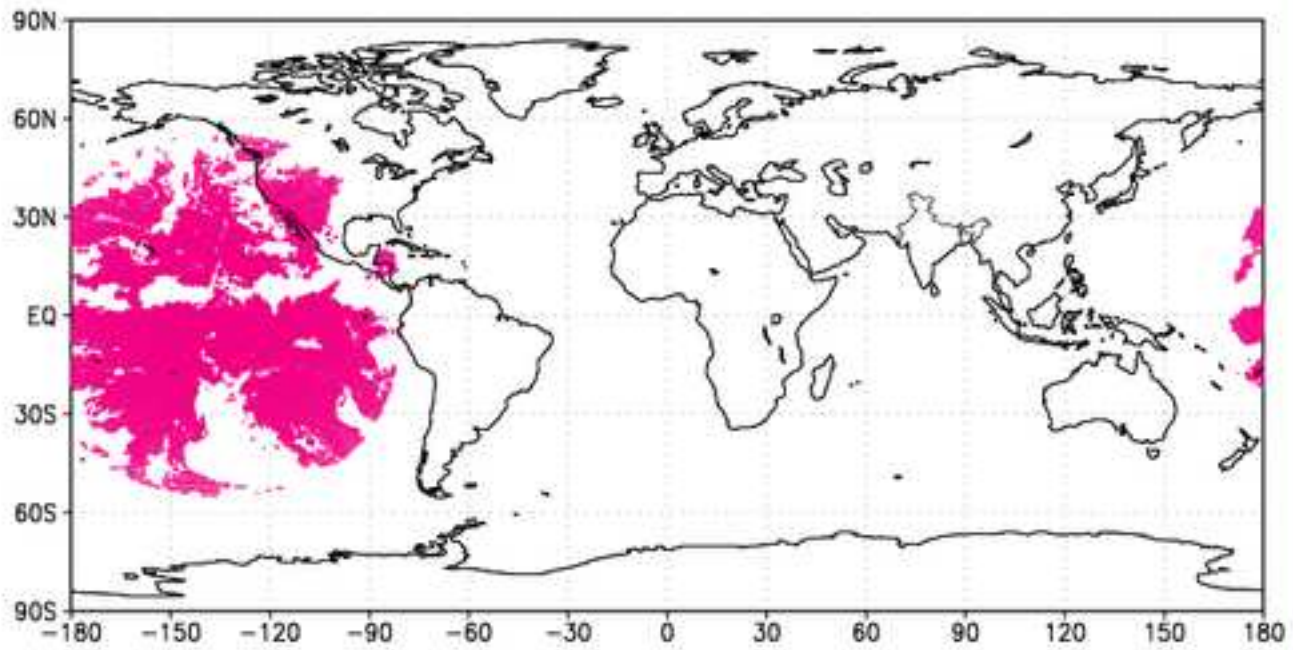


Data Coverage: GOES CSBT (19062018 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 26192

GOES-15(26192)

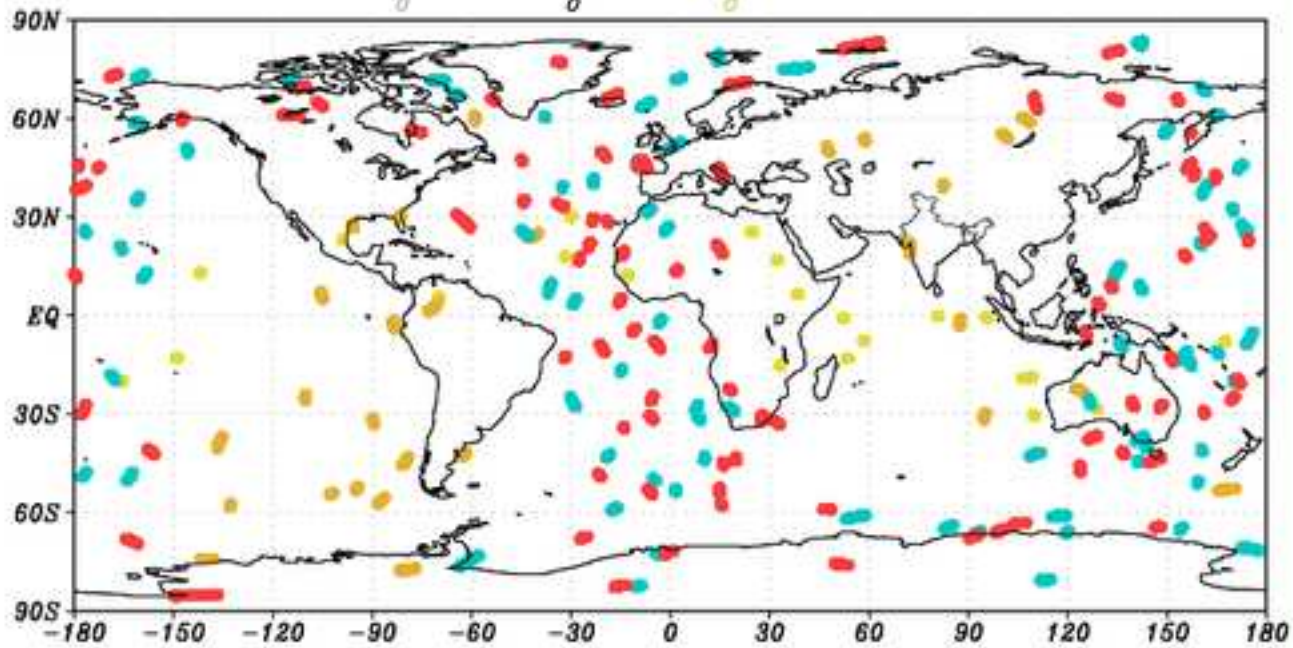
GOES-13(0)



Data Coverage:GPSRO (19062018 0000UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 51998

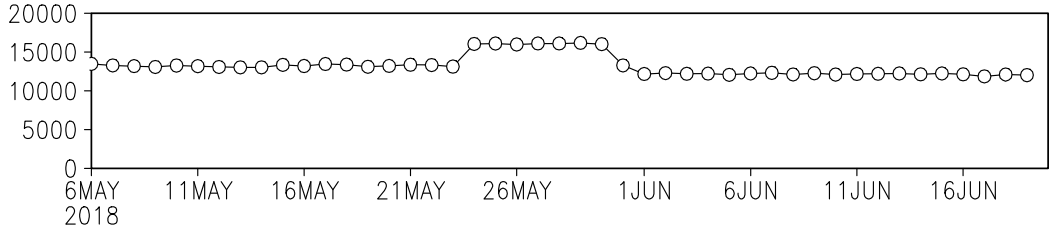
GRACE-A	METOP-B	METOP-A	COSMIC-1	COSMIC-2	COSMIC-3	COSMIC-4	COSMIC-5	COSMIC-6
0	21146	10181	0	0	4243	0	0	8429
		TerraSAR-X	TenDEM-X	GRACE-B				
		0	0	0				



Count for different types of observation (Global) for the last 45 Days (valid for 00 UTC)

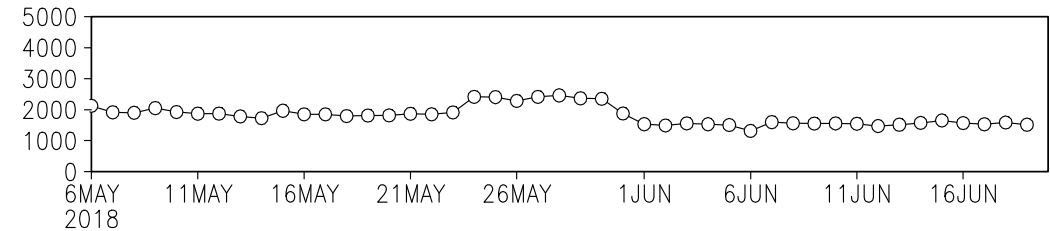
SYNOP

Avg=14543
Today_Cnt=12026
Dep=-17. %



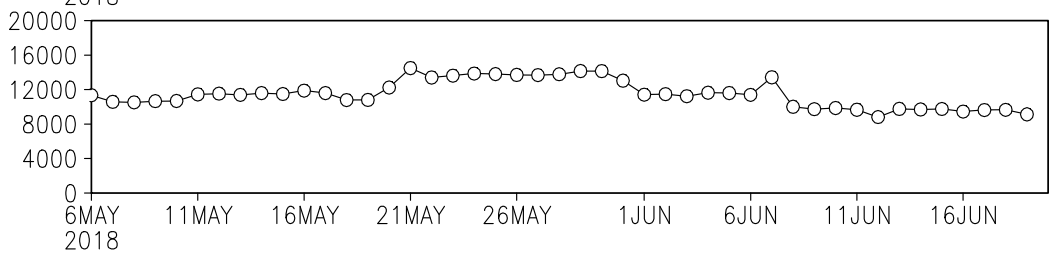
SHIP

Avg=2062
Today_Cnt=1515
Dep=-27. %



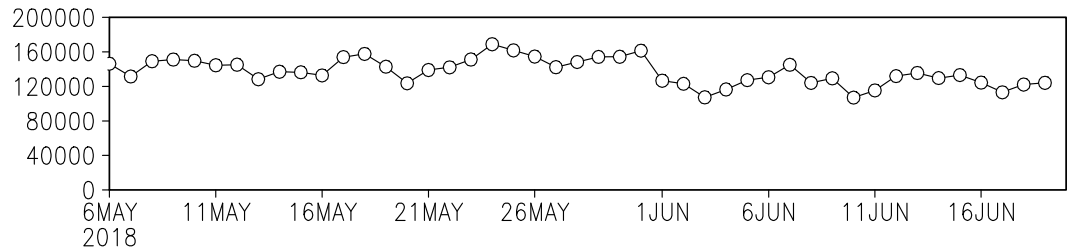
BUOY

Avg=13087
Today_Cnt=9127
Dep=-30. %



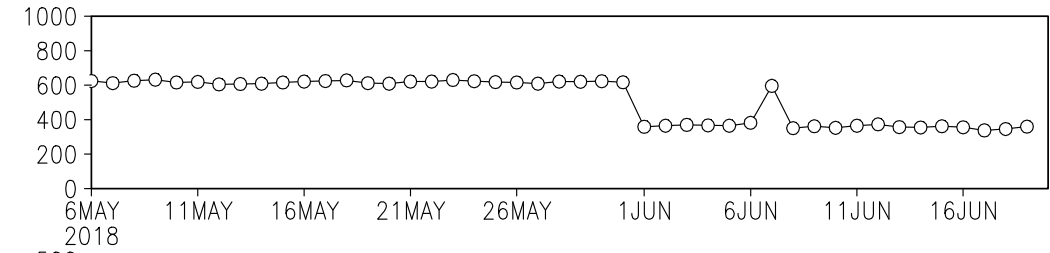
AIRCRAFT

Avg=151838
Today_Cnt=124067
Dep=-18. %



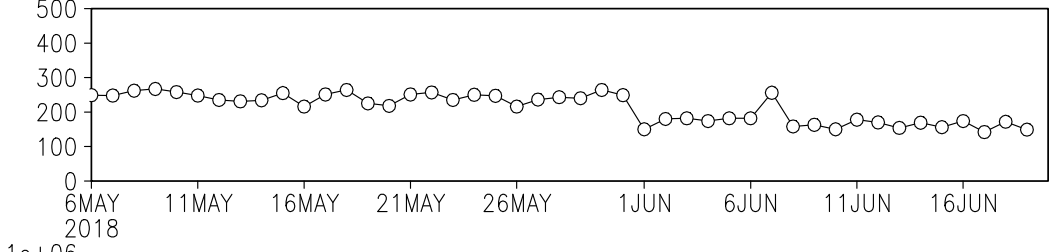
RS/RW

Avg=617
Today_Cnt=360
Dep=-42. %



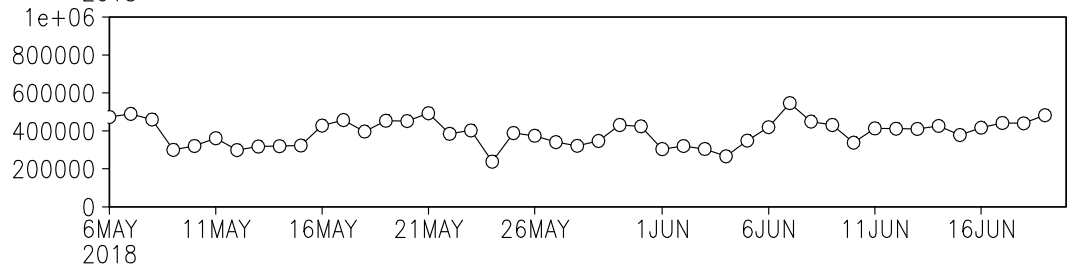
PILOT

Avg=244
Today_Cnt=149
Dep=-39. %



AMV

Avg=438113
Today_Cnt=482421
Dep=10. %

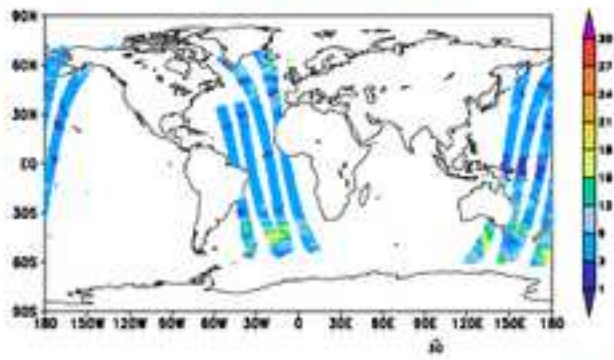


SCATTEROMETER WIND VECTORS

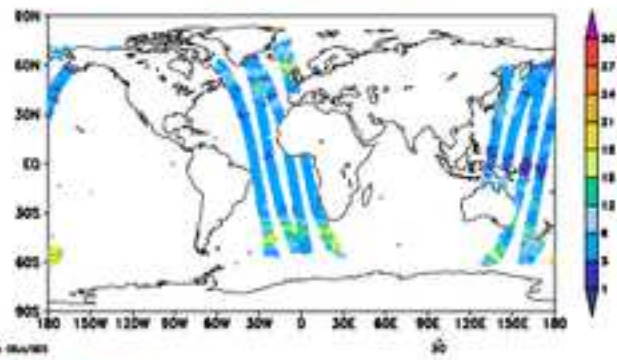
RECEIVED AT NCMRWF (20180619 00Z)

SCATTEROMETER SURFACE WINDS (19062018 0000UTC +/- 03Hrs)

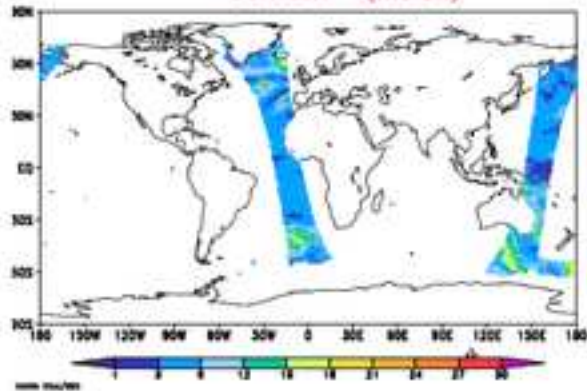
ASCAT:Metop-A



ASCAT:Metop-B

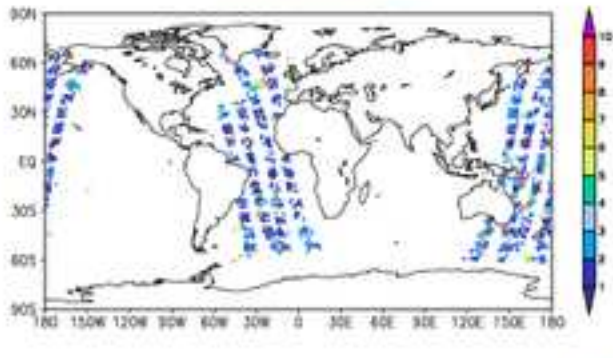


SCATSAT-1(Indian)

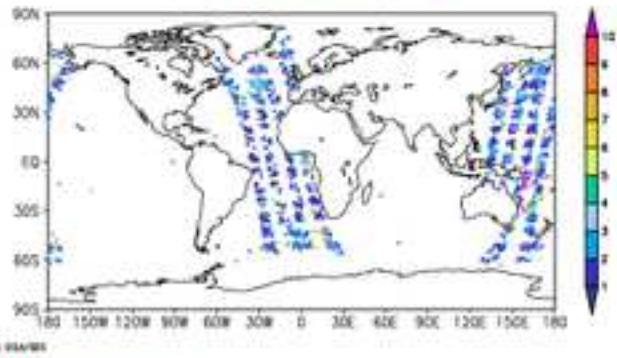


OBSERVATION—FIRST GUESS (19062018 00 UTC):NCMRWF

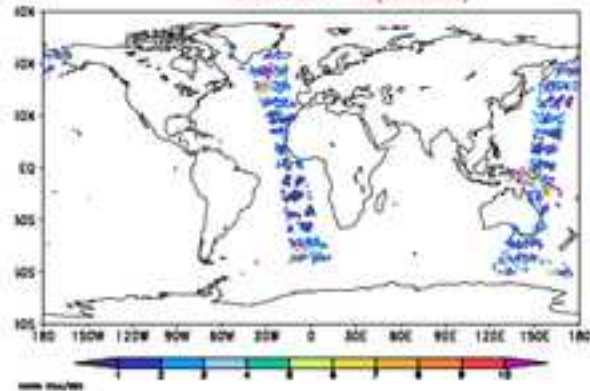
ASCAT:Metop-A



ASCAT:Metop-B



SCATSAT-1(Indian)



INSAT-3D

ATMOSPHERIC MOTION VECTORS (AMV)

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

WATER VAPOUR WINDS (WV)

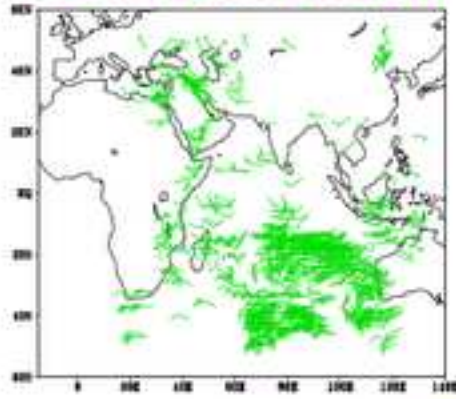
VISIBLE WINDS (VIS) }

AMV DEVIATION

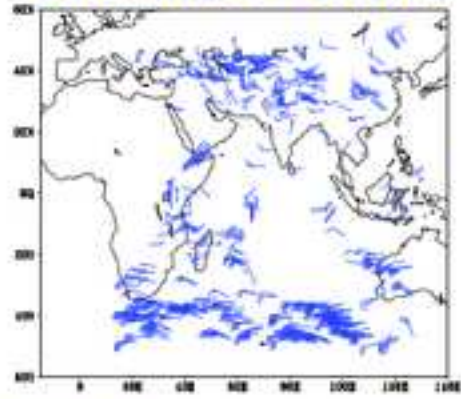
(OBSERVATION - FIRST GUESS)

INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) (19062018 0000UTC)

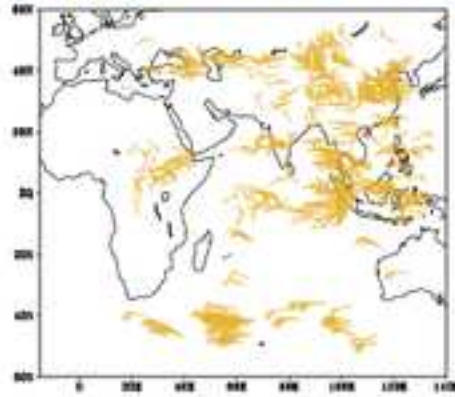
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

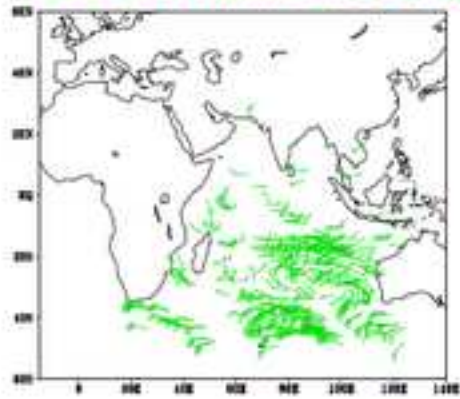


High Level (Above 400 hPa)

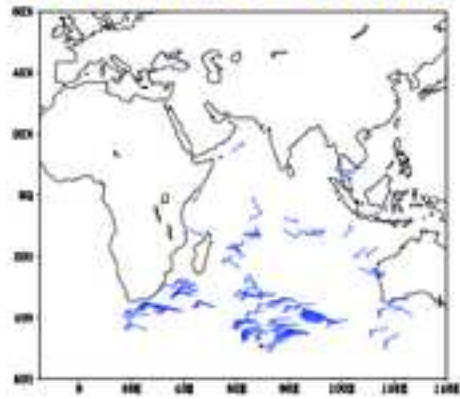


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (19062018 0000UTC)

Low Level (Below 700 hPa)



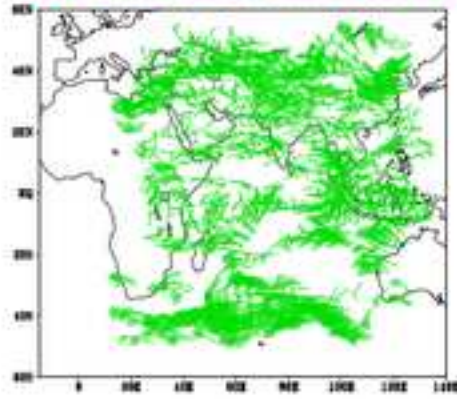
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (19062018 0000UTC)

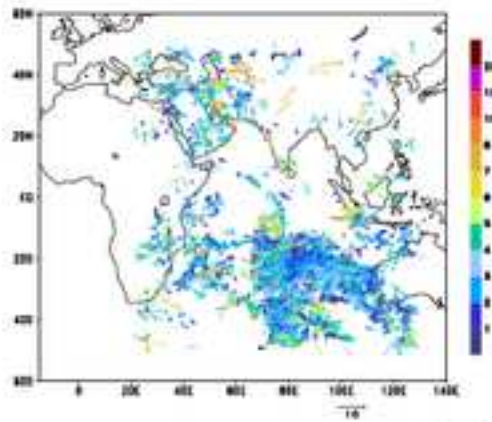
WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)

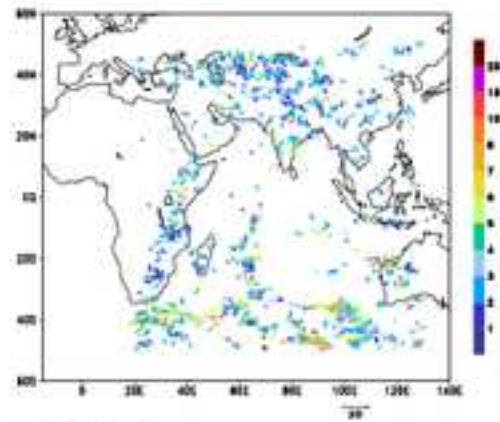


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (19062018 0000UTC)

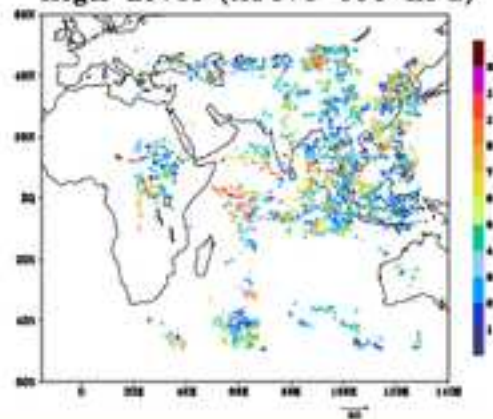
Low Level (Below 700 hPa)



Mid Level (700 - 401 hPa)

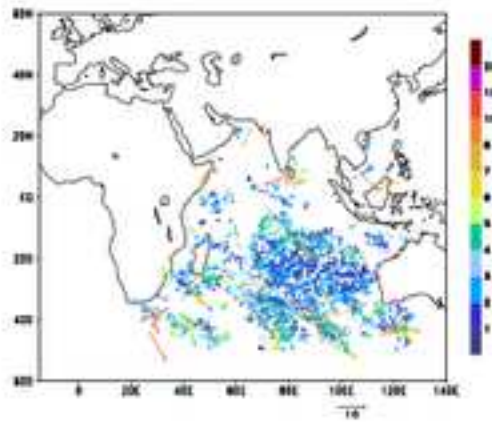


High Level (Above 400 hPa)

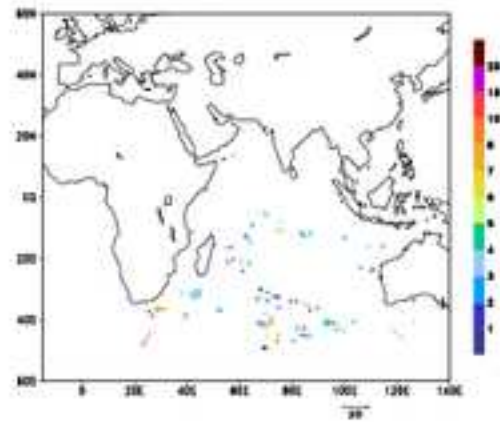


INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.8) DEVIATION (19062018 0000UTC)

Low Level (Below 700 hPa)



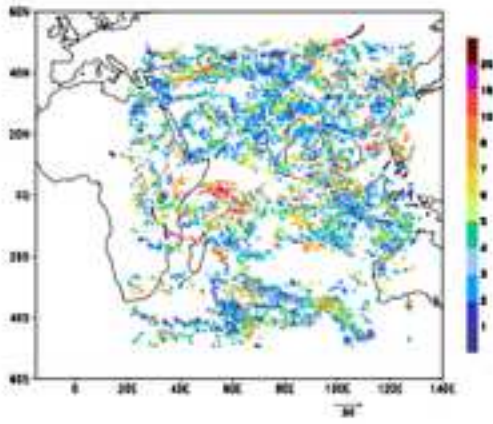
Mid Level (700 - 401 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (19062018 0000UTC)

WV, High Level (Above 400 hPa)

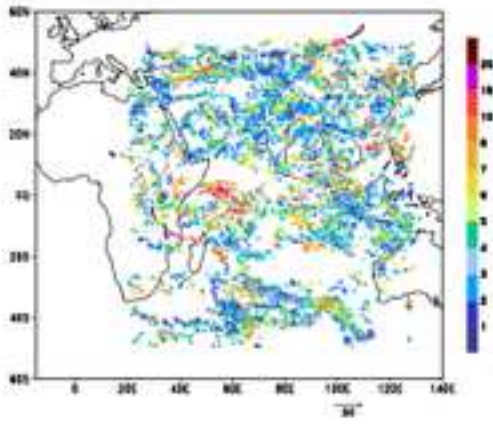
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (19062018 0000UTC)

WV, High Level (Above 400 hPa)

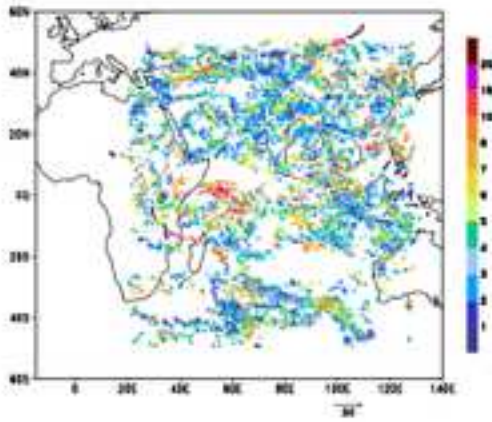
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (19062018 0000UTC)

WV, High Level (Above 400 hPa)

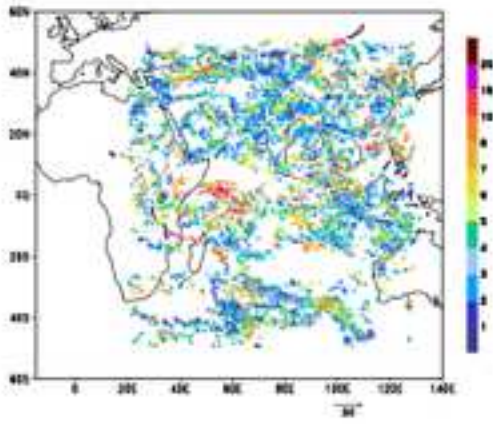
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (19062018 0000UTC)

WV, High Level (Above 400 hPa)

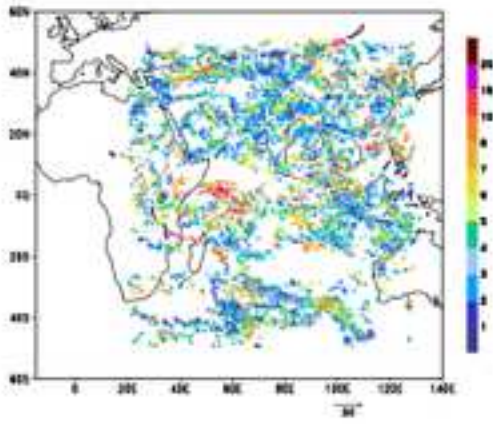
VIS, Low level (Below 700 hPa)



INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (19062018 0000UTC)

WV, High Level (Above 400 hPa)

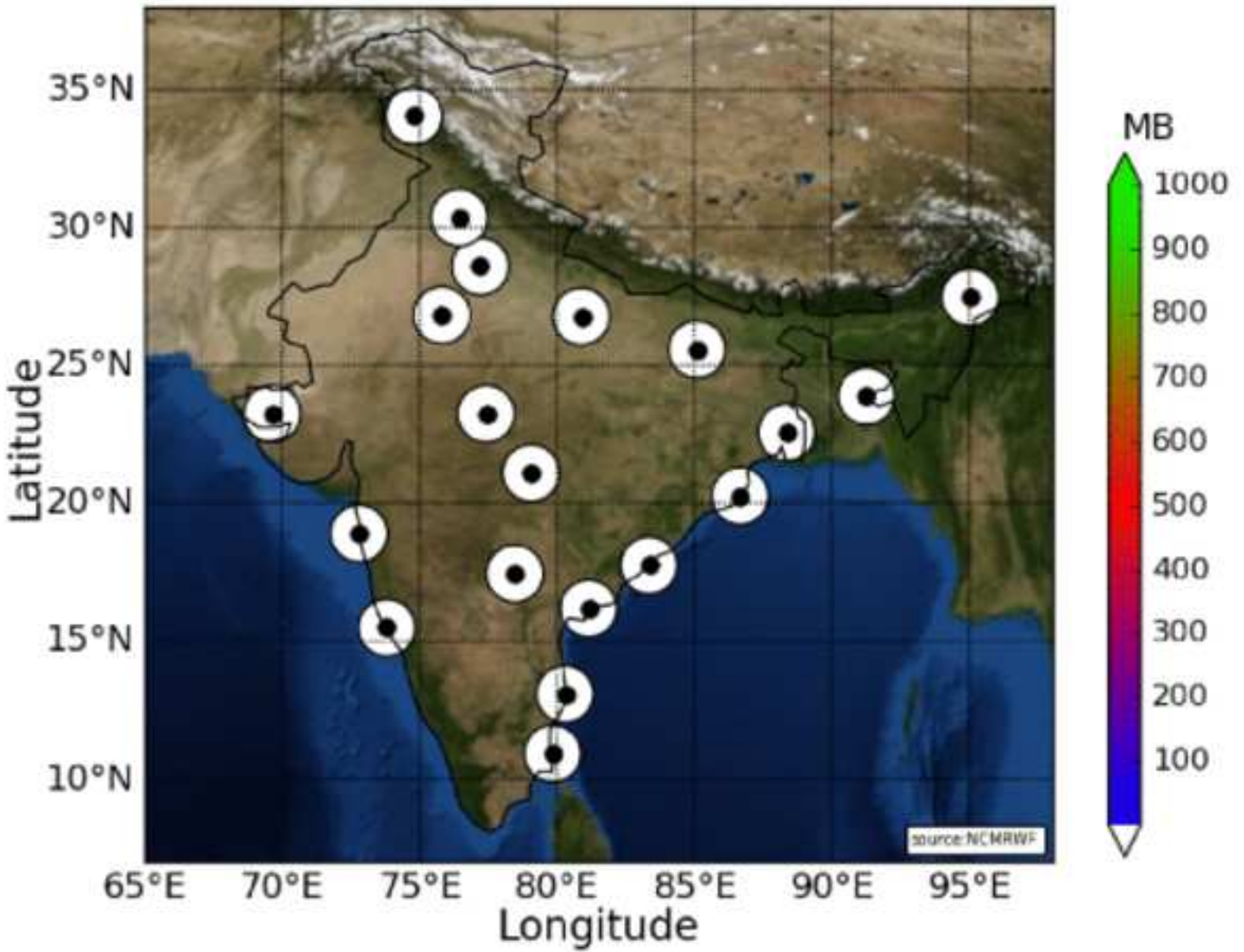
VIS, Low level (Below 700 hPa)



Indian Doppler Weather Radar Data Monitoring

Volume of DWR observations received at NCMRWF

Date: 20180619 at : 00UTC

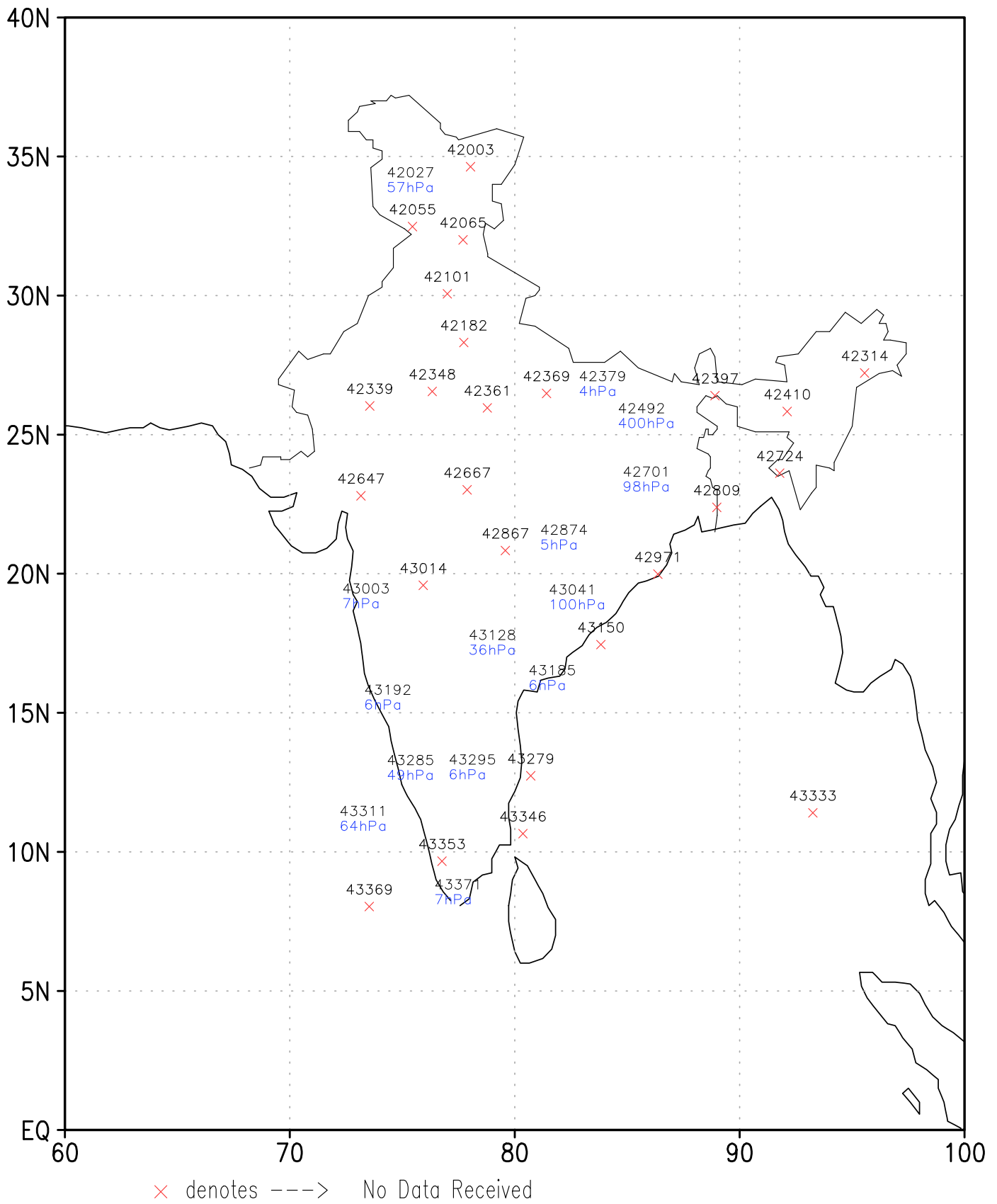


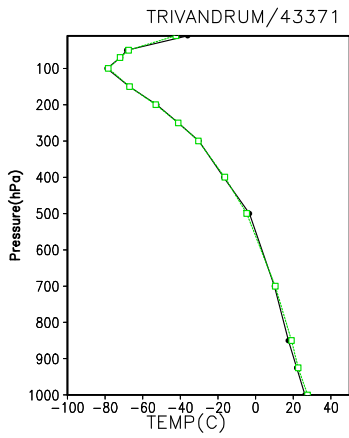
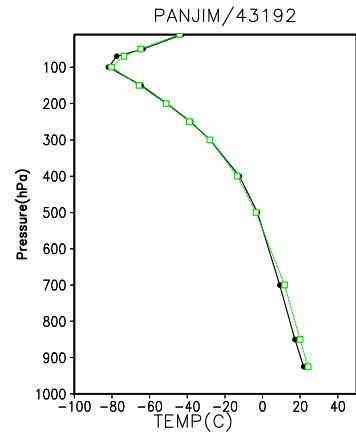
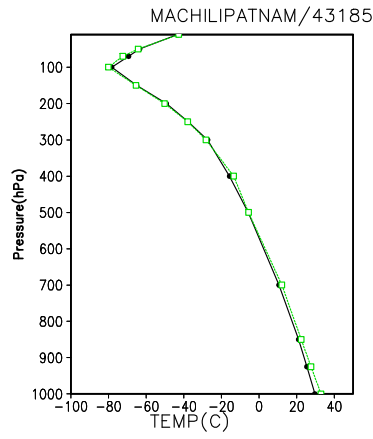
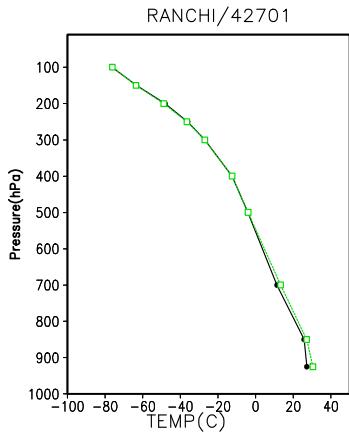
Quality of Indian RS/RW Observations

Maximum height reported
by RS/RW ascents

Temperature and Zonal Wind
Rejections by NGFS GDAS

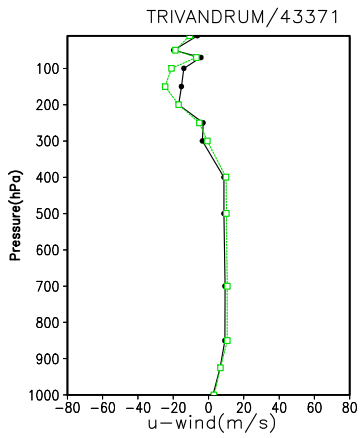
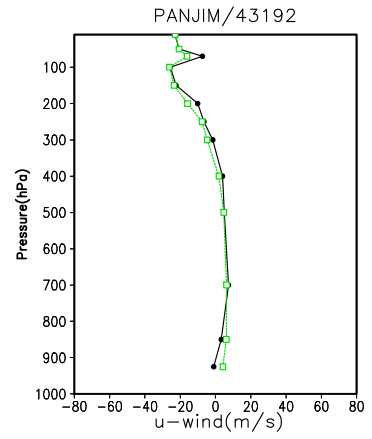
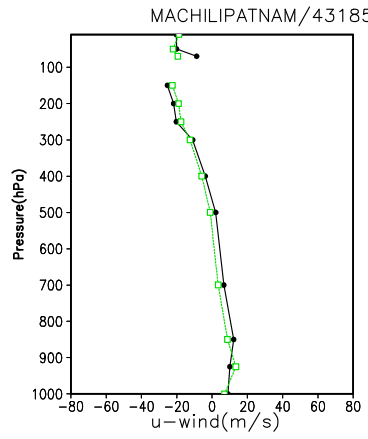
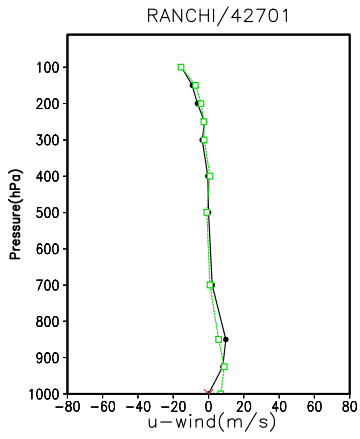
Highest Level Reported by RS/RW (19062018 0000UTC +/- 03Hrs)





Observed (—) and 1st-guess (—) Temperature (Deg C) for 00UTC 19062018

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



Observed (—) and 1st-guess (- -) Zonal wind (m/s) for 00UTC 19062018
 × -- denotes the rejection of observation by NGFS GDAS
 (plotted for standard pressure levels only)