Observation Monitoring

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

for 25122020 (0600 UTC)
Indian Observation Coverage
E_CYC

Data Coverage: Surface (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 555
(42 & 43 Block)

Observation Frequency: ~ 3 hour
Data Coverage: Indian AWS (25122020 0600UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 2005

Observation Frequency: ~ 1 hour
Data Coverage: Indian ARG (25122020 0600UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1682

Observation Frequency: ~ 1 hour
Data Coverage: BUOY (25122020 0600UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 132

country code in GTS as ● INDIA(21) ○ USA(26) + FRANCE(80) □ OTHERS(5)

Observation Frequency: ~ 1 hour & ~ 3 hour (India)
Data Coverage: Sondes (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 12
(42 & 43 Block)

TMPLND(0) PILOT(12) Reported, no ascent

Observation frequency: ~ 6 hour
Count for different types of observation (Over Indian Region) for the last 45 days (valid for 06 UTC) E_CYC

**SYNOP**
- Avg=555
- Today_Cnt=555
- Dep=0. %

**BUOY**
- Avg=128
- Today_Cnt=132
- Dep=3. %

**AWS+ARG**
- Avg=3696
- Today_Cnt=3688
- Dep=-0. %

**RS/RW**
- Avg=2
- Today_Cnt=3
- Dep=50. %

**PILOT**
- Avg=27
- Today_Cnt=29
- Dep=7. %

**INSAT-3D AMV**
- Avg=136550
- Today_Cnt=126685
- Dep=-7. %
Global Observation Coverage
Data Coverage: Surface (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 52584

LNDYN(14637)  SHIP(1989)  BUOY(9704)  METAR(16057)  MOBILE/AWS(3688)
LNDYN BUFR(5575)  SHIP BUFR(654)
E_CYC

Data Coverage: Sonde (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 4214

TNPLND(27)  TMPSHP(0)  TMPDRP(0)  TMPMOB(0)  PILOT(93)  PROFILER(4094)

TNPLND_BUF(10)  PILOT_BUFR(0)
E_CYC

Data Coverage: AIRCFT (25122020 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 38873
Count for different types of observation (Global) for the last 45 Days (valid for 06 UTC) E_CYC

**SYNOP**
Avg=20402
Today_CNT=20212
Dep=-1. %

**SHIP**
Avg=3140
Today_CNT=2923
Dep=-7. %

**BUOY**
Avg=11626
Today_CNT=9704
Dep=-17. %

**AIRCRAFT**
Avg=59102
Today_CNT=38873
Dep=-34. %

**RS/RW**
Avg=34
Today_CNT=37
Dep=9. %

**PILOT**
Avg=92
Today_CNT=93
Dep=1. %

**AMV**
Avg=1652857
Today_CNT=1614416
Dep=-2. %
Data Coverage: SCATSAT-1 & ASCAT winds (25122020 06UTC +/- 03Hrs)

SCATSAT-1 (393489) ASCAT-A (73971) ASCAT-B (85701)
E_CYC

Data Coverage: SAT RADIANCE (MARS+IMD MARS) (25122020 0800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 469687

NOAA15(0)  NOAA18(0)  NOAA18(9427C)  NOAA19(375337)
Data Coverage: GPSRO (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 232667
Atmospheric Motion Wind Vectors
E_CYC

Data Coverage: AMV VIS (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 259352

GOES-15(0)  GOES-10(0)  GOES-17(124733)  INSAT-3D(17548)
METEOSAT-8(71486)  METEOSAT-11(32925)  HIMAWARI-8(42720)
E_CYC

Data Coverage: AMV WV (25122020 0600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 538864
AMV IR POLAR NH (25122020 0600UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 4658

METOP-A (2344) METOP-B (1950) NPP (0) MODIS/Aqua (0)
NOAA-15 (0) MODIS/Terra (0) NOAA-18 (282) NOAA-19 (0)
AMV IR POLAR SH (25122020 0600UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 2938

METOP-A(0) METOP-B(988) NPP(0) MODIS/Aqua(1091)
NOAA-15(211) MODIS/Terra(270) NOAA-18(144) NOAA-18(23)

180
150E
150W
120E
120W
90E
90W
60E
60W
30E
30W
0
AMV WV POLAR NH (25122020 0600UTC +/- 03Hrs) N_CYC

Total Number of Observations Received at NCMRWF: 0

MODIS/Aqua(0) MODIS/Terra(0)
AMV WV POLAR SH (25122020 0600UTC +/- 09hrs) E_CYC
Total Number of Observations Received at NCMRWF: 2078

MODIS/Aqua(2078)  MODIS/Terra(0)
Radiance Observations
Data Coverage: Humidity Sounders (25122020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 76097
E_CYC

Data Coverage: AMSUA (25122020 0300UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 5689
E_CYC

Data Coverage: HIRS (25122020 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 341517
E_CYC
Geostationary Clear Sky Radiance (25122020 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCEP: 112109

METEOSAT-11(100381)  METEOSAT-8(11728)  GFS-15(G)
Data Coverage: IASI (25122020 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 16092
E_CYC

Data Coverage: AIRS (25122020 0600UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 0
SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20201225 06Z)
SCATTEROMETER SURFACE WINDS (25122020 0600UTC +/- 03Hrs)

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) (25122020 0800UTC)

Low Level (Below 700 hPa)  Mid Level (700 - 401 hPa)

High Level (Above 400 hPa)
INSAT–3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (25122020 0600UTC)

Low Level (Below 700 hPa)  Mid Level (700 - 401 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (25122020 0600UTC)

WV, High Level (Above 400 hPa)  VIS, Low Level (Below 700 hPa)
INSAT–3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (25122020 0600UTC)

Low Level (Below 700 hPa)  Mid Level (700 – 400 hPa)

High Level (Above 400 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.B) DEVIATION (25122020 0600JTC)

Low Level (Below 700 hPa)  Mid Level (700 - 401 hPa)
Meteosat-8 Atmospheric Motion Vectors (WV & VIS) (25122020 0600UTC)

WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (IR) DEVIATION (25122020 0600UTC)

Low Level (Below 700 hPa)

Mid Level (700 - 401 hPa)

High Level (Above 400 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (25122020 0800UTC)

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: 20201225 at: 06 UTC