Observation Monitoring

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

for 15062020 (0000 UTC)
Indian Observation Coverage
E_CYC

Data Coverage: Surface (15082020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 292 (42 & 43 Block)

Observation Frequency: ~ 3 hour
Data Coverage: Indian AWS (15062020 0000UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1137

Observation Frequency: ~ 1 hour
Data Coverage: Indian ARG (15082029 0000UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1068

Observation Frequency: ~ 1 hour
Data Coverage: BUOY (15062020 0000UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 104

country code in GTS as ○ INDIA(27) ○ USA(37) + FRANCE(40) □ OTHERS(0)

Observation Frequency: ~ 1 hour & ~ 3 hour (India)
Data Coverage: Sondes (16002020 0000UTC +/− 03Hrs)
Total Number of Observations Received at NCMRWF: 44
(42 & 43 Block)

TMPLND(20) PILOT(24) Reported, no ascent

Observation frequency: ~ 6 hour
Count for different types of observation (Over Indian Region)
for the last 45 days (valid for 00 UTC) E_CYC

SYNOP
Avg=285
Today_Cnt=292
Dep=2. %

BUOY
Avg=223
Today_Cnt=104
Dep=-53. %

AWS+ARG
Avg=2731
Today_Cnt=2205
Dep=-19. %

RS/RW
Avg=21
Today_Cnt=22
Dep=5. %

PILOT
Avg=54
Today_Cnt=47
Dep=-13. %

INSAT-3D AMV
Avg=91696
Today_Cnt=79494
Dep=-13. %
Global Observation Coverage
E_CYC

Data Coverage: Surface (15062020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 47806

BUFR(6992) LND SYN(12268) SHIP(2100) BUOY(8824) METAR(14937) MOBILE AWS(2687)
E_CYC

Data Coverage: Sonde (15062020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 4701
E_CYC

Data Coverage: AIRCFT (15082020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMWF: 60222
Count for different types of observation (Global) for the last 45 Days (valid for 00 UTC) E_CYC

SYNOP
Avg=20366
Today_Count=19260
Dep=-5. %

SHIP
Avg=2364
Today_Count=2100
Dep=-11. %

BUOY
Avg=12121
Today_Count=8824
Dep=-27. %

AIRCRAFT
Avg=52292
Today_Count=60222
Dep=15. %

RS/RW
Avg=454
Today_Count=436
Dep=-4. %

PILOT
Avg=230
Today_Count=217
Dep=-6. %

AMV
Avg=5384243
Today_Count=5914704
Dep=10. %
Data Coverage: SCATSAT-1 & ASCAT winds (15062020 00UTC +/- 03Hrs)

SCATSAT-1 (331967)  ASCAT-A (66981)  ASCAT-B (83561)
E_CYC

Data Coverage: SAT RADIANCE (HARS+IMD HARS) (15062020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 465007

NOAA19(0)  NOAA18(0)  NOAA18(83992)  NOAA19(331173)
METOP1(0)  METOP2(33333)
E_CYC

Data Coverage: GPSRO (15062020 0000UTC +/-03Hrs)

Total Number of Observations Received at NCMRWF: 76086

METOP-A(21696)   METOP-B(25832)   METOP-C(17734)   COSMIC-1(0)   COSMIC-5(0)
FerrasAR-X(4581)   TanDEM-X(697)   FY-3D(8496)   FY-3C(0)
Atmospheric Motion Wind Vectors
Data Coverage: AMV IR (15062020 0000UTC +/- 03hrs)
Total Number of Observations Received at NCMRWF: 1054358

GOES-15(0)   GOES-16(449368)   GOES-17(417942)   INSAT-3D(42719)
METEOSAT-5(41163)   METEOSAT-11(42986)   HIMAWARI-8(82097)
Data Coverage: AMV VIS (15082020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 4022180
Data Coverage: AMV WV (15062020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 623447
AMV IR POLAR NH (15062020 0000UTC +/- 09Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 1622

METOP-A(811) METOP-B(811) NPP(0) MODIS/Aqua(0)
NOAA-15(0) MODIS/Terra(0) NOAA-18(0) NOAA-19(0)
AMV IR POLAR SH (15062020 0000UTC +/- 03Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 10418

METOP-A(0) METOP-B(158) NPP(3870) MODIS/Aqua(1169)
NOAA-15(182) MODIS/Terra(772) NOAA-18(0) NOAA-19(212)
AMV WV POLAR NH (15092020 0000UTC +/- 03Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 0

MODIS/Aqua(0) MODIS/Terra(0)
AMV WV POLAR SH (15042020 0000UTC +/- 08Hrs) E_CYC

Total Number of Observations Received at NCMRF: 2476

MODIS/Aqua(2476) MODIS/Terra(0)
Radiance Observations
Data Coverage: Humidity Sounders (15062020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 286275
E_CYC

Data Coverage: AMSUA (15062020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 79271
E_CYC

Data Coverage: HIRS (15082020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 218365
E_CYC
Geostationary Clear Sky Radiance(15062020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 122152

METEOSAT-11(122152) METEOSAT-8(O) COFS-15(O)
E_CYC

Data Coverage: IASI (15062020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 94276
E_CYC

Data Coverage: AIRS (15082020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 337988
SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20200615 00Z)
SCATTEROMETER SURFACE WINDS (15062020 0000UTC +/- 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) (15062020 0000 UTC)

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

High Level (Above 400 hPa)
INSAT–3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (15062020 0000UTC)

Low Level (Below 700 hPa)       Mid Level (700 - 401 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (15062020 0000UTC)

WV, High Level (Above 400 hPa)  VIS, Low Level (Below 700 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (15062020 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 (15062020 0000UTC)

Low Level (Below 700 hPa)  Mid Level (700 - 401 hPa)
INSAT–3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (15082020 0000UTC)

WV, High Level (Above 400 hPa)  VIS, Low level (Below 700 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (WV & VIS) (15062020 0000 UTC)

WV, High Level (Above 400 hPa)

VIS, Low Level (Below 700 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (IR) DEVIATION (15062020 0000UTC)

Low Level (Below 700 hPa)

Mid Level (700 – 400 hPa)

High Level (Above 400 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (0000 UTC)

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: 20200615 at: 00 UTC
Quality of Indian RS/RW Observations

Maximum height reported by RS/RW ascents

Temperature and Zonal Wind Rejections by NGFS GDAS
Observed (---) and 1st-guess (---) Temperature (Deg C) for 000UTC 15062020

× --- denotes the rejection of observation by NGFS GDAS

( plotted for standard pressure levels only)
Observed ( — ) and 1st-guess ( —— ) Temperature (Deg C) for 00UTC 15062020

× —— denotes the rejection of observation by NGFS GDAS
( plotted for standard pressure levels only)
Observed (—) and 1st-guess (—–) Zonal wind (m/s) for 00UTC 15062020

× — denotes the rejection of observation by NGFS GDAS
  (plotted for standard pressure levels only)
Observed (---) and 1st-guess (---) Zonal wind (m/s) for 00UTC 15062020

× --- denotes the rejection of observation by NGFS GDAS

( plotted for standard pressure levels only )