Observation Monitoring

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

for 28122020 (1800 UTC)
Indian Observation Coverage
E_CYC

Data Coverage: Surface (20122200 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 285
(42 & 43 Block)

SYNOP(285)

Observation Frequency: ~ 3 hour
Data Coverage: Indian AWS (28122020 1800UTC +/- 3 Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 1730

Observation Frequency: ~ 1 hour
Data Coverage: Indian ARG (26122029 1800UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1004

Observation Frequency: ~ 1 hour
E_CYC

Data Coverage: BUOY (28122020 1800UTC +/- 3 Hrs)

Total Number of Observations Received at NCMRWF: 123

country code in GTS as: ● INDIA(20) ○ USA(27) + FRANCE(75) □ OTHERS(0)

Observation Frequency: ~ 1 hour & ~ 3 hour (India)
Data Coverage: Sondes (28122020 1600UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 12
(42 & 43 Block)

TEMPND(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 18 UTC) E_CYC

SYNOP
Avg=294
Today_Cnt=285
Dep=-3. %

BUOY
Avg=116
Today_Cnt=123
Dep=6. %

AWS+ARG
Avg=2684
Today_Cnt=2734
Dep=2. %

RS/RW
Avg=3
Today_Cnt=4
Dep=33. %

PILOT
Avg=38
Today_Cnt=36
Dep=-5. %

INSAT-3D AMV
Avg=136708
Today_Cnt=122352
Dep=-11. %
Global Observation Coverage
E_CYC

Data Coverage: Surface (2022-02-20 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 52189

LNDSYN(14496)  SHIP(2620)  BUOY(9732)  METAR(16829)  MOBILE/AWS(2734)
LNDSYN_BUFR(5590)  SHIP_BUFR(668)
E_CYC

Data Coverage: Sonde (28122020 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 4308
TWPLND(13)  TMPSPH(0)  TMPDRP(0)  TMPMOB(0)  PILOT(74)  PROFILER(4219)
TWPLND_BUF(8)  PILOT_BUFR(8)
E_CYC

Data Coverage: AIRCFT (28122020 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 97186
Count for different types of observation (Global) for the last 45 Days (valid for 18 UTC) E_CYC

SYNOP
Avg=20251
Today_CNT=20086
Dep=-1. %

SHIP
Avg=3048
Today_CNT=2988
Dep=-2. %

BUOY
Avg=10654
Today_CNT=9732
Dep=-9. %

AIRCRAFT
Avg=101751
Today_CNT=97186
Dep=-4. %

RS/RW
Avg=26
Today_CNT=21
Dep=-19. %

PILOT
Avg=82
Today_CNT=82
Dep=0. %

AMV
Avg=3584170
Today_CNT=3283373
Dep=-8. %
E_CYC

Data Coverage: SCATSAT-1 & ASCAT winds (20122020 18UTC +/- 03Hrs)

SCATSAT-1 (118185) ASCAT-A (67046) ASCAT-B (84174)
E_CYC

Data Coverage: SAT RADIANCE (MARS+IMD MARS) (20122020 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 467980
Data Coverage: GPSRO (28122020 1800UTC +/-03Hrs)
Total Number of Observations Received at NCMRWF: 260410

TerraSAR-X(3464)  TenDM-X(813)  FY-3D(19882)  FY-3C(0)  COSMIC-1(0)  COSMIC-RE1(89485)
METOP-A(21968)  METOP-B(26082)  METOP-C(18418)  PATH(219684)  ROMPSAT-5(88000)  COSMIC-6(0)
COSMIC-RE2(86837)  COSMIC-RE3(31195)  COSMIC-RE4(0)  COSMIC-RE5(26708)  COSMIC-RE6(25708)
Atmospheric Motion Wind Vectors
E_CYC

Data Coverage: AMV IR (28122020 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 728059

GOES-15(0) GOES-18(223488) GOES-17(232143) INSAT-3D(61841)
METEOSAT-5(41359) METEOSAT-11(45666) HIWAWRI-8(58568)
Data Coverage: AMV VIS (26122020 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 1997622

- GOES-15(0)
- GOES-18(079986)
- GOES-17(802848)
- INSAT-3D(0)
- METEOSAT-8(29988)
- METEOSAT-11(82396)
- HIMAWARI-8(8202)
Data Coverage: AMV WV (28122020 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 545382

GOES-15(0)  GOES-16(149742)  GOES-17(111043)  INSAT-3D(60511)
METEOSAT-8(20411)  METEOSAT-11(64771)  HIMAWARI-8(57321)
AMV IR POLAR NH (25.12.2020 1800UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 6279

METOP-A (1779) METOP-B (2775) NPP (0) MODIS/Aqua (0)
NOAA-15 (0) MODIS/Terra (1017) NOAA-18 (240) NOAA-18 (488)
AMV IR POLAR SH (28122020 1800UTC +/- 09 Hrs) E_CYC
Total Number of Observations Received at NCMWF: 4583

- METOP-A (1383)
- METOP-B (1586)
- NPP (0)
- MODIS/Aqua (182)
- NOAA-15 (0)
- MODIS/Terra (1223)
- NOAA-18 (352)
- NOAA-19 (195)
AMV WV POLAR NH (28122020 1800UTC +/- 03Hrs) N_CYC

Total Number of Observations Received at NCMRWF: 0

MODIS/Aqua(0) MODIS/Terra(0)
AMV WV POLAR SH (28122020 1800UTC +/- 03Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1143

MODIS/Aqua(1143)   MODIS/Terra(0)
Radiance Observations
Data Coverage: Humidity Sounders (2B122020 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 178125
E_CYC

Data Coverage: AMSUA (20122020 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 35260
E_CYC

Data Coverage: HIRS (26122020 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMWF: 322540
E_CYC
Geostationary Clear Sky Radiance (28122020 1800UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 145404

METEOSAT-11(133198)  METEOSAT-8(12206)  GFS-15(0)
E_CYC

Data Coverage: IASI (28122020 1800UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 19944
E_CYC

Data Coverage: AIRS (28122020 1800UTC +/- 03Hrs)

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

RECEIVED AT NCMRWF (20201228 18Z)
SCATTEROMETER SURFACE WINDS (28122020 1800UTC +/- 03Hrs)

ASCAT: Metop-A

ASCAT: Metop-B

SCATSAT-1 (Ind'an)
OBSERVATION—FIRST GUESS (28/12/2020 18 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) (28122020 1800UTC)

Low Level (Below 700 hPa)

Mid Level (700 - 401 hPa)

High Level (Above 400 hPa)
INSAT–3D ATMOSPHERIC MOTION VECTORS (IR,3.8) (28122020 1800UTC)

Low Level (Below 700 hPa)       Mid Level (700 – 401 hPa)
INSAT–3D ATMOSPHERIC MOTION VECTORS (WV & VIS) (281220 1800UTC)

WV, High Level (Above 400 hPa)  VIS, Low Level (Below 700 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,10.8) DEVIATION (28122020 1800UTC)

Low Level (Below 700 hPa)

Mid Level (700 – 401 hPa)

High Level (Above 400 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (IR,3.B) DEVIATION (28122020 1800JTC)

Low Level (Below 700 hPa)  Mid Level (700 - 401 hPa)
INSAT-3D ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28122020 1800UTC)

WV, High Level (Above 400 hPa)  VIS, Low level (Below 700 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (IR)(28122020 1800UTC)

Low level (Below 700 hPa)

Mid Level (700 - 401 hPa)

High Level (Above 400 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (IR) DEVIATION (28122020 1800UTC)

Low Level (Below 700 hPa)

Mid Level (700 - 401 hPa)

High Level (Above 400 hPa)
METEOSAT-8 ATMOSPHERIC MOTION VECTORS (WV & VIS) DEVIATION (28122020 1800UTC)

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: 20201228 at: 18 UTC