Observation Monitoring

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

for 29122020 (0000 UTC)
Indian Observation Coverage
E_CYC

Data Coverage: Surface (20120220 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 299
(42 & 43 Block)

Observation Frequency: ~ 3 hour
Data Coverage: Indian AWS (29122020 0000UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1746

Observation Frequency: ~ 1 hour
Data Coverage: Indian ARG (20120229 0000UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 961

Observation Frequency: ~ 1 hour
Data Coverage: BUOY (29122020 0000UTC +/- 3 Hrs)
Total Number of Observations Received at NCMWF: 105

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

Data Coverage: Sonde (29122020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 31
(42 & 43 Block)

TMPLND(10) PILOT(21) 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=297  
Today_Cnt=299  
Dep=1. %

**BUOY**
Avg=117  
Today_Cnt=105  
Dep=-10. %

**AWS+ARG**
Avg=2680  
Today_Cnt=2707  
Dep=1. %

**RS/RW**
Avg=17  
Today_Cnt=18  
Dep=6. %

**PILOT**
Avg=53  
Today_Cnt=53  
Dep=0. %

**INSAT-3D AMV**
Avg=127580  
Today_Cnt=98254  
Dep=-23. %
Global Observation Coverage
E_CYC

Data Coverage: Surface (29122020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 50952

LND SYN(14243)   SHIP(2346)   BUOY(9598)   METAR(15701)   MOBILE/AWS(2707)
LND SYN_ BUFR(5589)   SHIP BUFR(1089)
E_CYC

Data Coverage: Sonde (29122020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 4998
TNPLND(477) TMPSHP(0) TMPDRP(0) TMPMOB(0) PILOT(211) PROFILER(4310)
TNPLND_BUF(98) PILOT_BUF(4)
E_CYC

Data Coverage: AIRCFT (29122020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 100999

AIREP(1257)  AMDAR(12820)  WIGOS-AMDA(86922)
Count for different types of observation (Global) for the last 45 Days (valid for 00 UTC) E_CYC

SYNOP
Avg=19829
Today_Cnt=19831
Dep=0. %

SHIP
Avg=3108
Today_Cnt=3115
Dep=0. %

BUOY
Avg=11768
Today_Cnt=9598
Dep=-18. %

AIRCRAFT
Avg=104472
Today_Cnt=100999
Dep=-3. %

RS/RW
Avg=570
Today_Cnt=575
Dep=1. %

PILOT
Avg=228
Today_Cnt=215
Dep=-6. %

AMV
Avg=2952579
Today_Cnt=2829421
Dep=-4. %
E_CYC

Data Coverage: SCATSAT-1 & ASCAT winds (29122020 00UTC +/- 03Hrs)

SCATSAT-1 (149792) ASCAT-A (66377) ASCAT-B (95765)
E_CYC

Data Coverage: SAT RADIANCE (MARS+IMD MARS) (29122020 0000UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 425125

NOAA15(0)  NOAA18(0)  NOAA18(34984)  NOAA19(341561)

METOP 1(0)  METOP 2(0)
Data Coverage: GPSRO (29122020 0000UTC +/-03Hrs)
Total Number of Observations Received at NCMRWF: 241997
Atmospheric Motion Wind Vectors
Data Coverage: AMV IR (29122020 0000UTC +/- 03hrs)
Total Number of Observations Received at NCMRWF: 704944
Data Coverage: AMV VIS (29122020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 1563282
Data Coverage: AMV WV (29122020 0000UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 557613
AMV IR POLAR NH (29122020 0000UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 3193

METOP-A(1400)  METOP-B(1480)  NPP(0)  MODIS/Aqua(0)
NOAA-15(0)  MODIS/Terra(0)  NOAA-18(307)  NOAA-19(0)
AMV IR POLAR SH (2012/2020 0000UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 365

METOP-A(88)  METOP-B(0)  NPP(0)  MODIS/Aqua(0)
NOAA-15(0)  MODIS/Terra(0)  NOAA-18(0)  NOAA-19(0)
AMV WV POLAR SH (29122020 0000UTC +/- 08Hrs) E_CYC
Total Number of Observations Received at NCMRWF:

MODIS/Aqua() MODIS/Terra()
SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20201229 00Z)
INSAT–3D

ATMOSPHERIC MOTION VECTORS (AMV)

{ CLOUD MOTION VECTORS (IR)
WATER VAPOUR WINDS (WVW) }

SELECTION CRITERIA

Quality flag > 80%, Wind Speed > 2.5 m/s
Wind Speed Difference < 30 m/s
Wind Direction Difference < 60 degree

OBSERVATION ERROR
(OBSERVATION – FIRST GUESS)
Indian Doppler Weather Radar

Data Monitoring
Volume of DWR observations received at NCMRWF
Date: 20201229 at: 00 UTC
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(29122020 0000UTC +/- 03Hrs E_CYC)
Observed (-----) and 1st-guess (---) Temperature (Deg C) for 00UTC 29122020

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

( plotted for standard pressure levels only)
Observed ( - ) and 1st-guess ( - - ) Zonal wind (m/s) for 00UTC 29122020

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