Observation Monitoring

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

for 29082020 (1200 UTC)
Indian Observation Coverage
E_CYC

Data Coverage: Surface (29082020 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 524
(42 & 43 Block)

Observation Frequency: ~ 3 hour
Data Coverage: Indian AWS (29082020 1200UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1248

Observation Frequency: ~ 1 hour
Data Coverage: Indian ARG (29082020 1200UTC +/- 3 Hrs) E_CYC
Total Number of Observations Received at NCMRWF: 1503

Observation Frequency: ~ 1 hour
Data Coverage: BUOY (29082020 1200UTC +/- 3 Hrs)
Total Number of Observations Received at NCMRWF: 104

Country code in GTS as: • INDIA(16) ○ USA(32) + FRANCE(55) □ OTHERS(0)

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

Data Coverage: Sondes (29082020 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 27
(42 & 43 Block)

TMPLND(6) 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 12 UTC) E_CYC

SYNOP
Avg=520
Today_Cnt=524
Dep=1. %

BUOY
Avg=182
Today_Cnt=104
Dep=-43. %

AWS+ARG
Avg=2863
Today_Cnt=2751
Dep=-4. %

RS/RW
Avg=13
Today_Cnt=12
Dep=-8. %

PILOT
Avg=52
Today_Cnt=49
Dep=-6. %

INSAT-3D AMV
Avg=123931
Today_Cnt=46093
Dep=-63. %
Global Observation Coverage
Data Coverage: Surface (29082020 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 51487

- LND(SYN) 13179
- SHIP 2160
- BUOY 10204
- METAR 16230
- MOBILE/AWS 2751
- LND(SYN)_BUFR 8758
- SHIP_BUFR 205
E_CYC

Data Coverage: Sonde (29062020 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 4784

TNPLND(431)  TMPSHP(1)  TMPDRP(0)  TMPMOB(0)  PILOT(150)  PROFILER(4202)
TNPLND_BUF(97)  PILOT_BUFR(50)
E_CYC

Data Coverage: A/RCFT (29082020 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 50219
Count for different types of observation (Global) for the last 45 Days (valid for 12 UTC) E_CYC

**SYNOP**
Avg=19987  
Today_Count=19937  
Dep=-0. %

**SHIP**
Avg=2505  
Today_Count=2365  
Dep=-6. %

**BUOY**
Avg=12866  
Today_Count=10204  
Dep=-21. %

**AIRCRAFT**
Avg=60699  
Today_Count=50219  
Dep=-17. %

**RS/RW**
Avg=545  
Today_Count=528  
Dep=-3. %

**PILOT**
Avg=218  
Today_Count=200  
Dep=-8. %

**AMV**
Avg=1854431  
Today_Count=1638750  
Dep=-12. %
Data Coverage: SCATSAT-1 & ASCAT winds (29082020 12UTC +/- 03Hrs)

SCATSAT-1 (175799)  ASCAT-A (57708)  ASCAT-B (82811)
E_CYC

Data Coverage: SAT RADIANCE (MARS+IMD MARS) (29062020 1200UTC +/- 03Hrs)

Total Number of Observations Received at NCMRWF: 460459

NOAA15(0)  NOAA18(0)  NOAA18(90111)  NOAA18(370348)
Data Coverage: GPSRO (29062020 1200UTC +/-03Hrs)
Total Number of Observations Received at NCMRWF: 182989

TerraSAR-X(0)  TerraSAR-X(0)  FY-3D(0)  FY-3C(0)  COSMIC-1(0)  COSMIC-2E(18027)
METOP-A(18060)  METOP-B(21993)  METOP-C(21968)  P3(01403)  KOMPSAT-5(G5S0)  COSMIC-6(0)
COSMIC-2E(0)  COSMIC-2E(48058)  COSMIC-2E(48720)  COSMIC-2E(0)  COSMIC-2E(0)
Data Coverage: AMV IR (200820 1200UTC +/- 03hrs)
Total Number of Observations Received at NCMRWF: 653698

GOES-15(0)  GOES-18(181654)  GOES-17(247537)  INSAT-3D(27366)
METEOSAT-6(63277)  METEOSAT-11(46004)  HMAWARI-8(56680)
E_CYC

Data Coverage: AMV VIS (29082020 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 549642

GOES-15(0)  GOES-10(301171)  GOES-17(14667)  INSAT-3D(1761)
METEOSAT-8(238339)  METEOSAT-11(67193)  HIMAWARI-8(1000)
Data Coverage: AMV WV (29062020 1200UTC +/- 03Hrs)
Total Number of Observations Received at NCMRWF: 393388

GOES-15(0)   GOES-18(134686)   GOES-17(28709)   INSAT-3D(16948)
METEOSAT-5(79648)   METEOSAT-11(60076)   HIMAWARI-8(52323)
AMV IR POLAR NH (29062020 1200UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 6752

METOP-A(1943) METOP-B(2221) NPP(0) MODIS/Aqua(0)
NOAA-15(355) MODIS/Terra(326) NOAA-19(0) NOAA-19(407)
AMV IR POLAR SH (29032020 1200UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF: 6266

<table>
<thead>
<tr>
<th>Satellite/Instrument</th>
<th>Count</th>
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<tbody>
<tr>
<td>METOP-A (2185)</td>
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<td>METOP-B (3348)</td>
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<td>NPP (0)</td>
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<td>MODIS/Aqua (0)</td>
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<td>NOAA-15 (345)</td>
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<td>MODIS/Terra (3)</td>
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<td>NOAA-19 (0)</td>
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<td>NOAA-18 (416)</td>
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Map of observations over the polar region with various data points.
AMV WV POLAR NH (29092020 1200UTC +/- 03Hrs) E_CYC

Total Number of Observations Received at NCMRWF:

MODIS/Aqua()  MODIS/Terra()
Total Number of Observations Received at NCMRWF:
SCATTEROMETER WIND VECTORS

RECEIVED AT NCMRWF (20200829 12Z)
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: 20200829 at: 12 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 12UTC 29082020

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

( plotted for standard pressure levels only)
Observed (---) and 1st-guess (---) Zonal wind (m/s) for 12UTC 29082020

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