



India Meteorological Department

FDP STORM Bulletin No. 5 (11-03-2018)

1. CURRENT SYNOPTIC SITUATION:

NWFC INFERENCE (0300UTC of the Day):

- ♦ The low pressure area over southwest Bay of Bengal and adjoining Equatorial Indian Ocean & south Sri Lanka coast now lies over Equatorial Indian Ocean & southwest Bay of Bengal & south Sri Lanka coast and associated cyclonic circulation extends upto mid tropospheric levels. It is likely to move west north-westwards and become a well marked low pressure area during next 48 hours and depression during subsequent 24 hours over southeast Arabian Sea .
- ♦ The other trough of low at mean sea level from Lakshadweep area to Konkan along the west coast persists.
- ♦ The fresh western Disturbance as an upper air cyclonic circulation at 3.1 km above mean sea level over eastern parts of Afghanistan and neighbourhood now lies over East Afghanistan & adjoining Pakistan.
- ♦ The cyclonic circulation over south Pakistan & adjoining west Rajasthan now lies over southwest Rajasthan & neighbourhood at 1.5 km above mean sea level.
- ♦ The north south trough in the westerlies along Long. 88°E to the north of Lat. 25°N now runs roughly along Long. 90°E to the north of Lat. 24°N at 3.1 km above mean sea level.
- ♦ The cyclonic circulation over south Konkan & adjoining Madhya Maharashtra now lies over north Madhya Maharashtra & neighbourhood at 0.9 km above mean sea level.

SATELLITE OBSERVATIONS during past 24hrs and current observation:

Current Observation (based on 0300UTC imagery of INSAT 3D):

Western Disturbance (WD):

Scattered multi-layered clouds seen over Northeast Iran North Afghanistan adjoining North Pakistan and over area between Lat 38.0N to 50.0N Long 70.0E to 80.0E in association with Western Disturbance over the area

LOW LEVEL CIRCULATION (LLC) :

Broken low/medium clouds with embedded intense to very intense convection seen over South Srilanka exterior Southwest Bay adjoining Indian Ocean between Equator to Lat 7.0N Long 79.0E to 85.0E association with Low Level Circulation over the area (Minimum CTT Minus 80 Deg C)

Clouds descriptions within India:

Scattered low/medium clouds with embedded isolated weak convection seen over Sikkim, Arunachal Pradesh, Northeast Assam, Nagaland, and Vidarbha. Scattered low/medium clouds seen over Jammu & Kashmir, North Himachal Pradesh, North Uttarakhand, Chhattisgarh, West Odisha, North Sub Himalayan West Bengal, West Assam, Manipur, South Madhya Pradesh, North Madhya Maharashtra, Telangana, adjoining North Rayalaseema, South Kerala, North Tamilnadu, and Andaman Islands.

Arabian Sea:

Scattered low medium clouds with embedded moderate embedded isolated weak intense convection seen over Gulf of Mannar Comorin adjoining Indian Ocean Bet Lat 2.0S To 6.0N Long 70.0E To 79.0E.

Bay of Bengal & Andaman Sea:

Scattered low/medium clouds with embedded moderate to intense convection rest South Bay South of Lat. 8.5N and rest Srilanka & weak to moderate convection seen over Andaman Sea

Past Weather:**Convection (during last 24 hrs):**

Weak to Moderate convection was observed over J&K Punjab Himachal Pradesh Uttarakhand Sikkim Arunachal Pradesh North-East Assam Nagaland Madhya Pradesh Maharashtra Kerala Tamilnadu.

OLR:-

Upto 230 w-m² was observed over J&K North Himachal Pradesh North Uttarakhand Sikkim Arunachal Pradesh Kerala Tamilnadu.

Westerly Trough & Jet-Stream: Westerly trough & Jet Stream are not observed.

Dynamic Features:

Negative shear tendency is observed over East Uttar Pradesh Bihar Extreme South Tamilnadu and Positive shear tendency over rest parts of India. Medium to high wind shear is observed over North & Central India. A positive Vorticity field is observed over Himachal Pradesh Uttarakhand North Uttar Pradesh Bihar Maharashtra. Negative low level convergence is observed over Kerala Tamilnadu and Positive Low Level Convergence over rest parts of India.

Precipitation:**IMR:**

Rainfall upto 10 mm observed over J & K North-East Himachal Pradesh Arunachal Pradesh.

HEM:

Rainfall upto 14 mm observed over Arunachal Pradesh.

RADAR and RAPID Observation:

Light to moderate convection was seen in DWR Nagpur at 1300 IST.

Light convection is seen over East Vidarbha in RAPID RGB Satellite imagery at 1200IST.

Environmental condition (dust etc) and its forecast based on 00UTC of date:

Not Received

2. NWP MODEL GUIDANCE:**IMD GFS (T1534) based on 00UTC the day:-**

Not Received

IMD WRF (9km based on 00UTC of the day):

Not Received

NCMRWF (NCUM Forecasts based on 00 UTC of the day):-

Not Received

3. IOP ADVISORY FOR 24 and 48Hrs:

Summary and Conclusions:

Day-1 & Day-2:

In association with the cyclonic circulation over north Madhya Maharashtra & neighbourhood at 0.9 km above mean sea level, and associated moisture incursion and wind convergence over Vidarbha, thunderstorms are likely over Vidarbha, Odisha on day 1 and over Odisha over day 2,.

24 hour Advisory for IOP:

Rainfall:

Nil

Thunderstorm with associated phenomena:

Vidarbha and Odisha

48 hour Advisory for IOP:

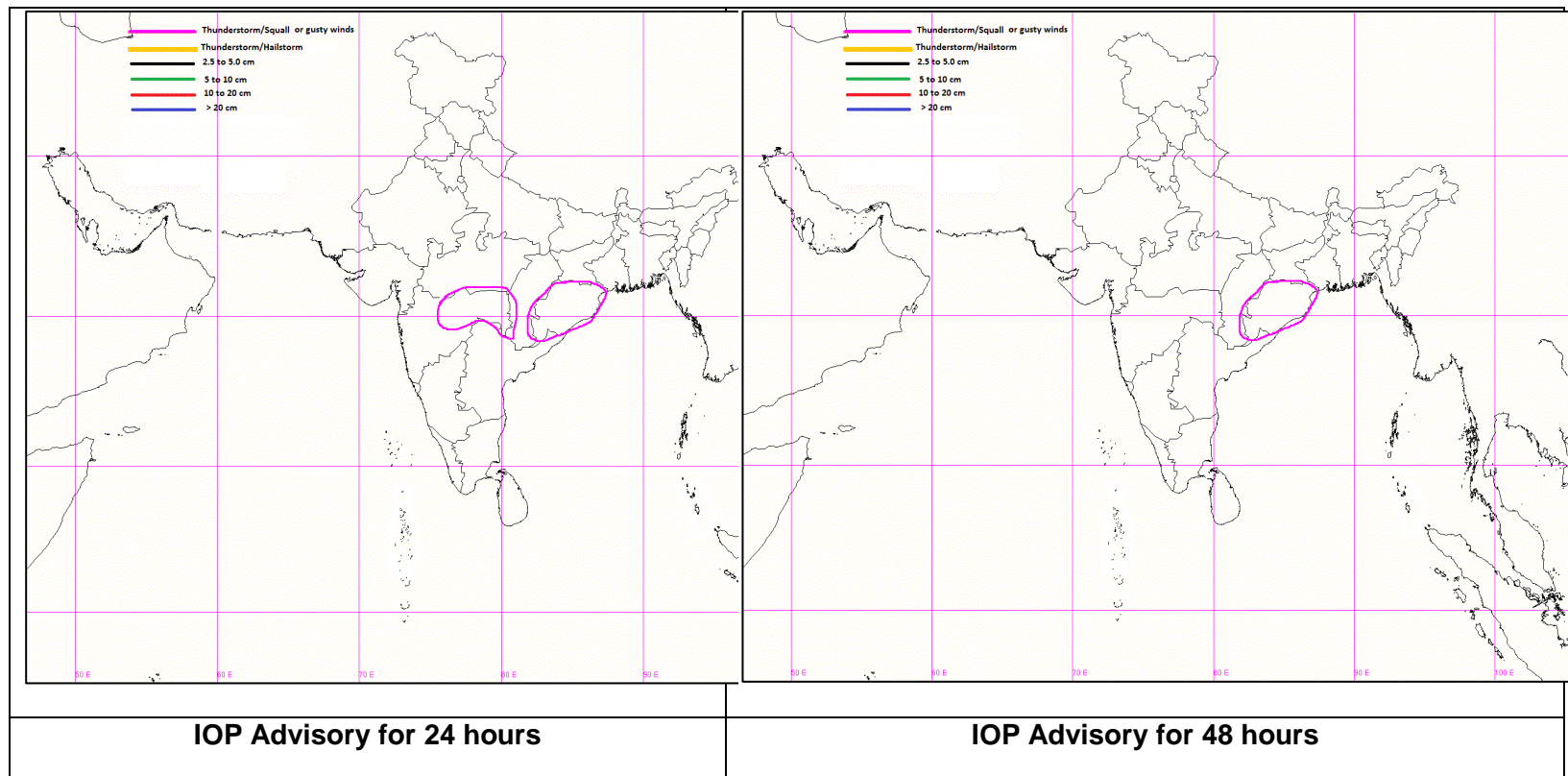
Rainfall:

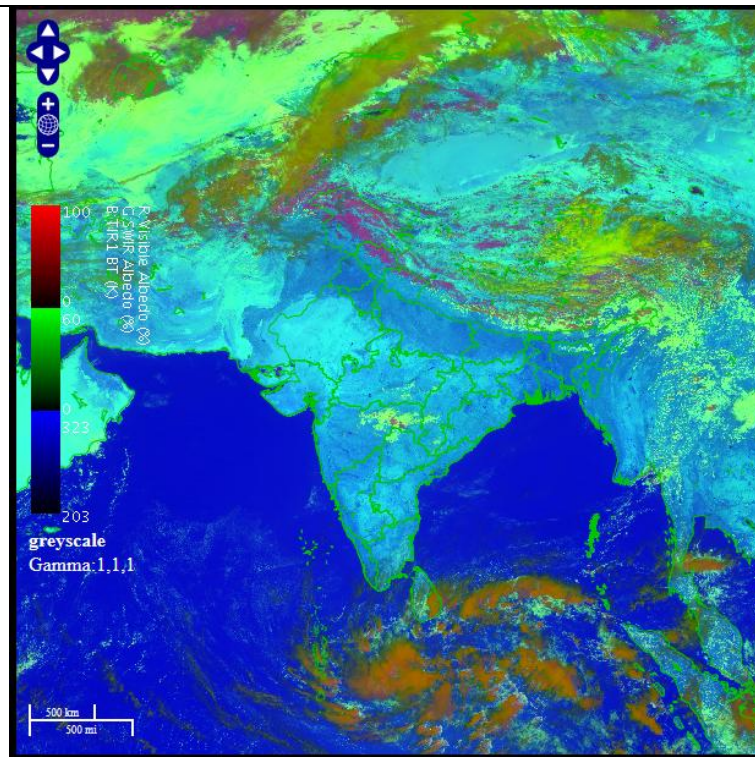
Nil

Thunderstorm with associated phenomena:

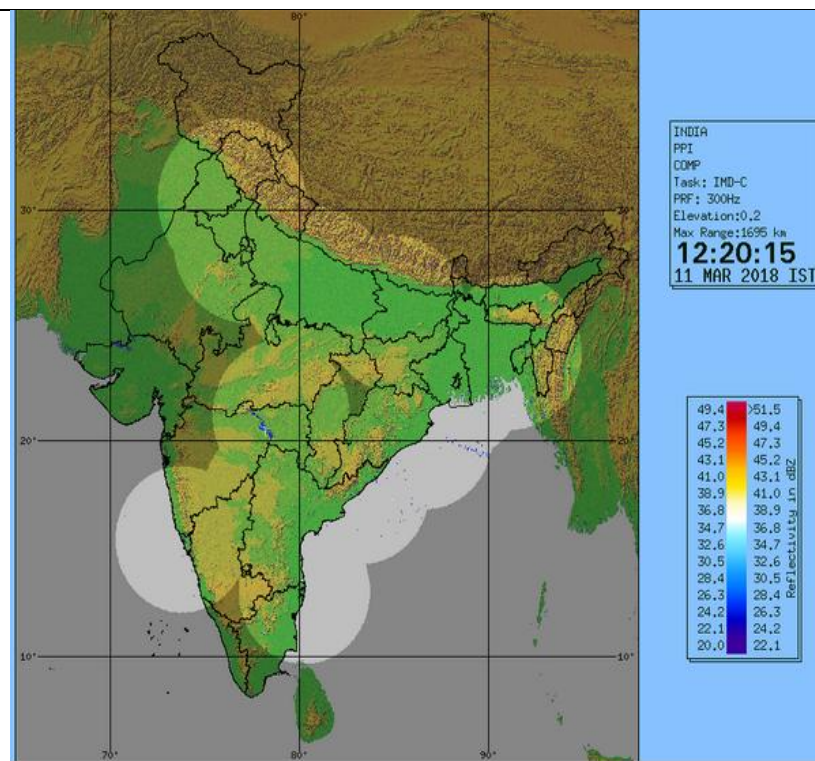
Odisha

Graphical Presentation of Potential Areas for Severe Weather:





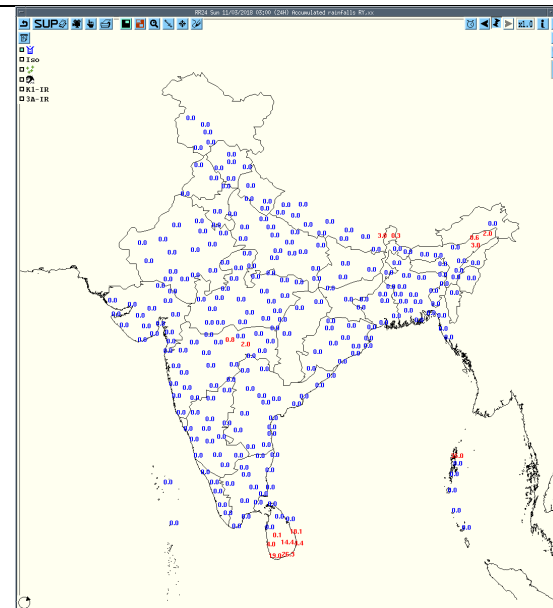
RAPID RGB Imagery at 1200IST of the Day



DWR Composite at 1200 IST of the Day

Not Received

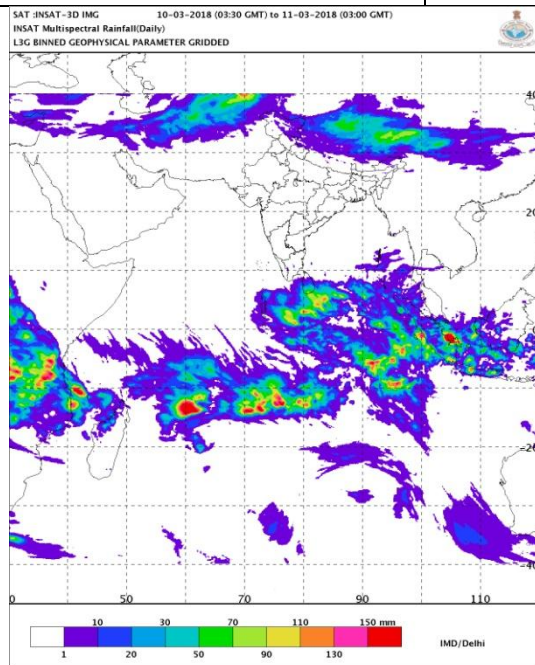
Not Received



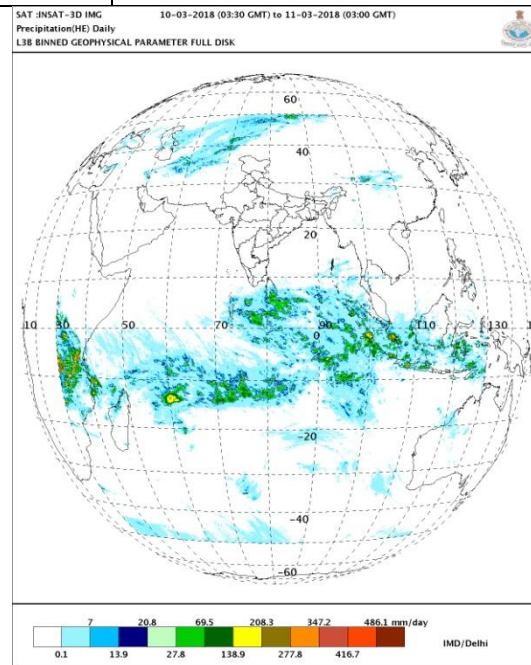
Forecast Dust Concentration

PM10 Forecast

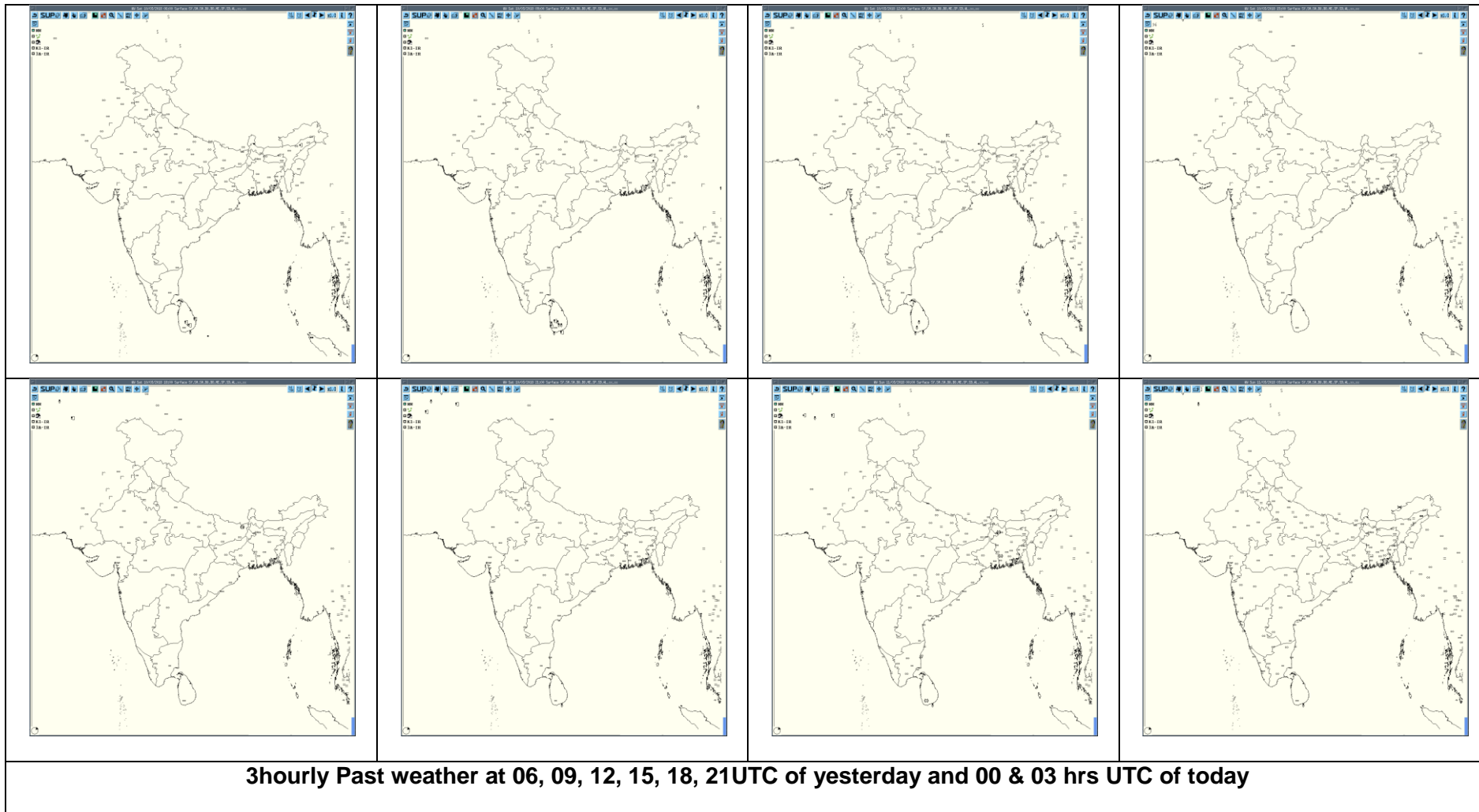
Accumulated 24 Hour rainfall (in red) recorded at 0300UTC of today

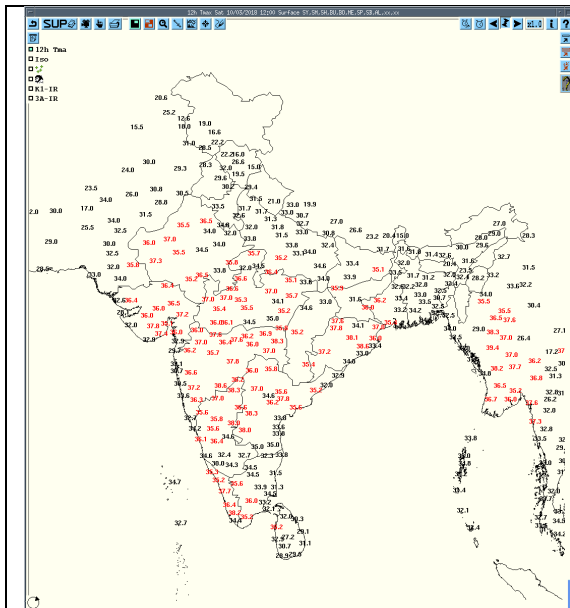


IMR

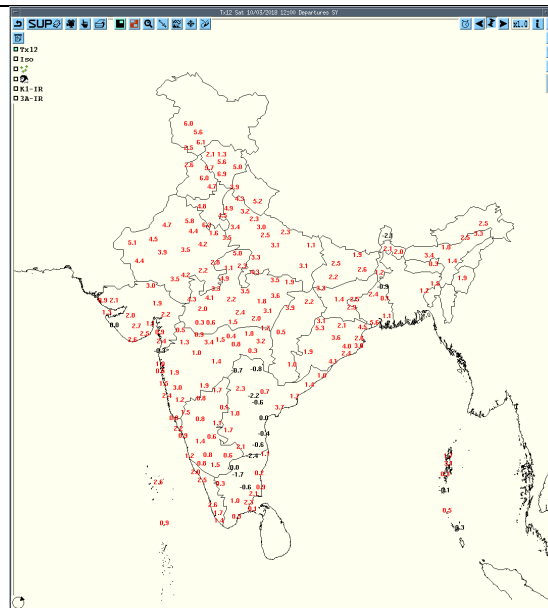


HEM

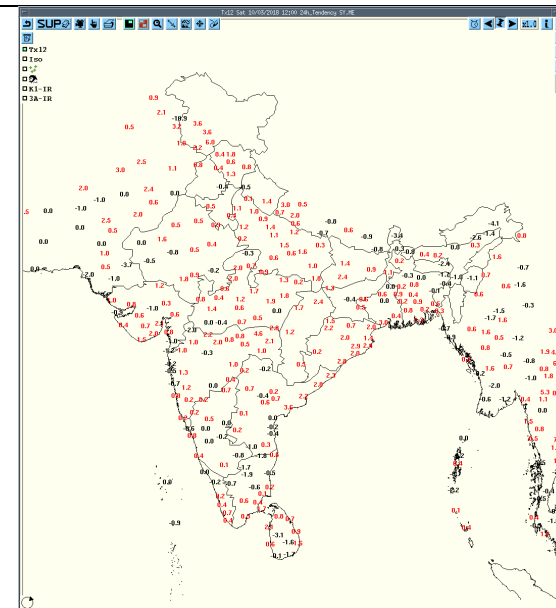




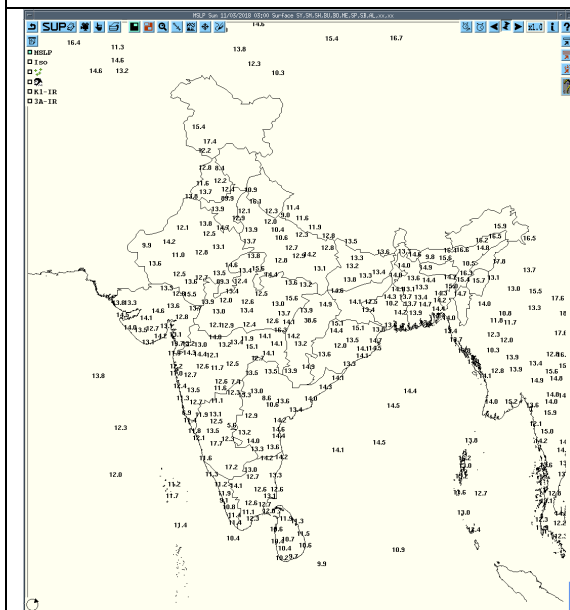
Tmax



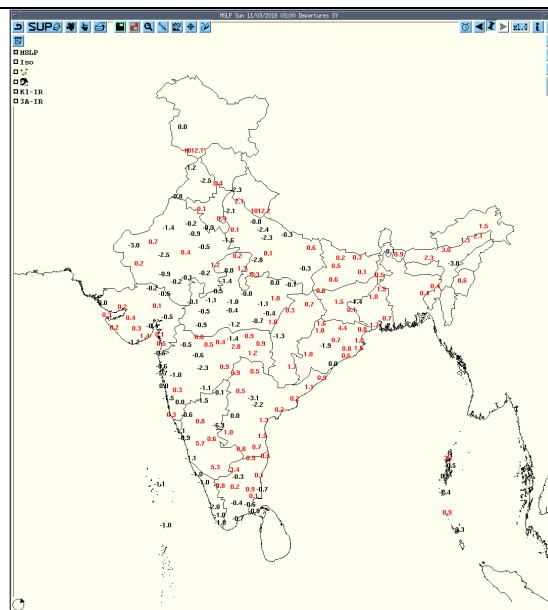
Departure Tmax



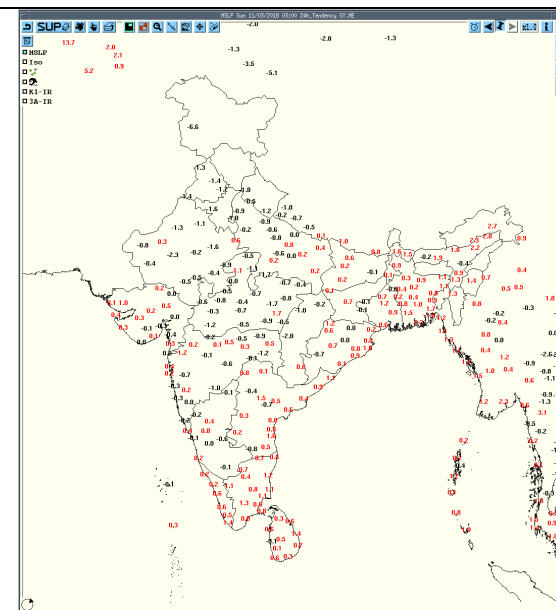
Tendency Tmax



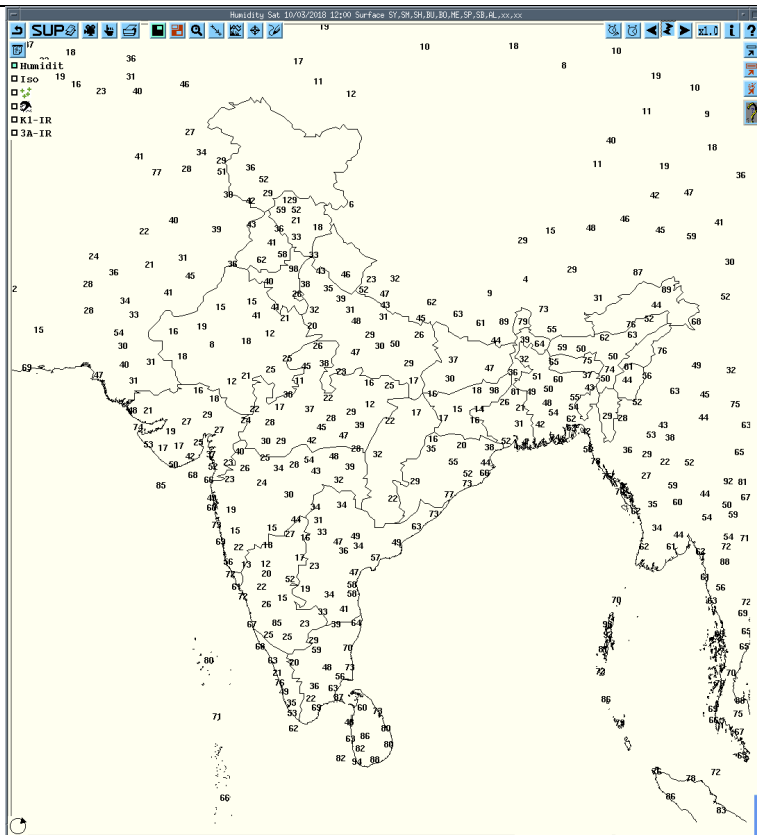
MSLP



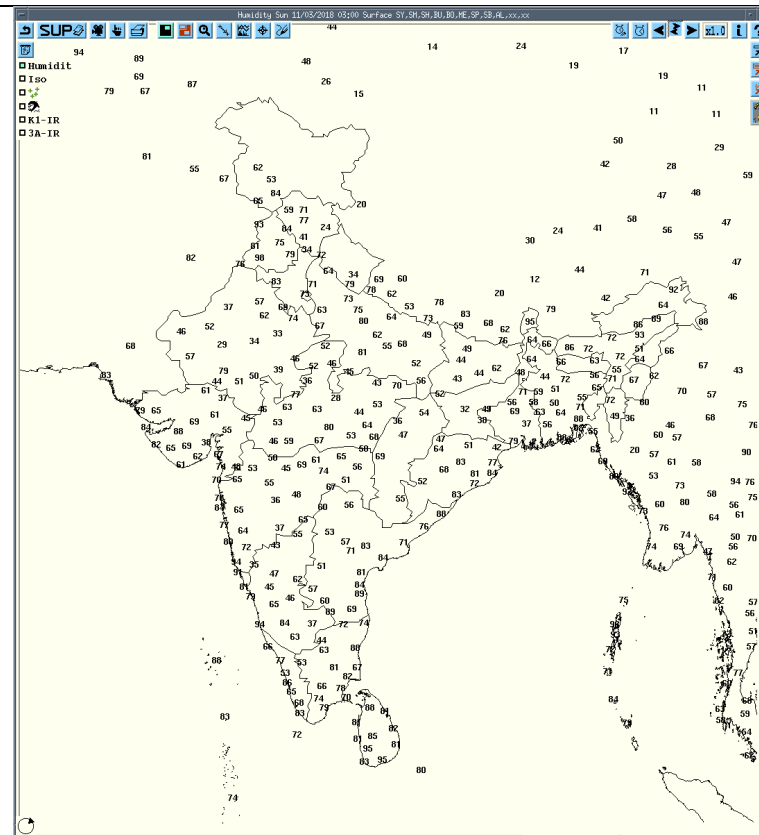
Departure MSLP



Tendency MSLP



RH at 12UTC yesterday



RH at 03UTC today

Past 24 hours DWR Report:

DWR Station Name	Date of Report	Time Interval of Observation (UTC)	Organisation of cells (Isolated single cells/multiple cells/convective regions /squall lines) with height of 20 dBZ echo top and maximum reflectivity	Formation w.r.t. radar station and Direction of movement	Remarks	Associated Severe Weather if any	Districts affected
Agartala	11-03-18	100300 - 110300	Nil	Nil	Nil	Nil	Nil
Jaipur	11-03-18	100300 - 110300	Nil	Nil	Nil	Nil	Nil
Lucknow	11-03-18	100300 - 110300	Nil	Nil	Nil	Nil	Nil
Patna	11-03-18	100300 - 110300	Nil	Nil	Nil	Nil	Nil
Vishakhapatnam	11-03-18	100300 - 110300	Nil	Nil	Nil	Nil	Nil

IMPORTANT LINKS:

For NCMRWF NWP products:(<http://www.ncmrwf.gov.in/HomePage/NEPS-prod-1.php>)

For IMD NWP products:(http://nwp.imd.gov.in/diagpro_new.php)

For Synoptic plotted data and charts

<http://amssdelhi.gov.in/>

<http://www.amsskolkata.gov.in/>

For RAPID tool:

<http://rapid.imd.gov.in/>

Low Level Winds

http://satellite.imd.gov.in/archive/INSAT-3D-IMAGER/3D-PRODUCTS/AMV/LLW/MAR_2017/?C=M;O=D

Upper level winds

http://satellite.imd.gov.in/archive/INSAT-3D-IMAGER/3D-PRODUCTS/AMV/HLW/MAR_2017/?C=M;O=D

Past24hourHEMandIMRainfall(upto03UTCof today)

IMR: http://satellite.imd.gov.in/img/3Ddaily_imr.jpg

HEM: http://satellite.imd.gov.in/img/3Ddaily_he.jpg

For Radar images of the past 24 hours including mosaic of images:

http://ddgmui.imd.gov.in/dwr_img/

Satellite sounder based T- Phigram

http://satellite.imd.gov.in/map_skm2.html

WEATHER SYMBOLS:



+ thunderstorm



+ heavy thunderstorm



sandstorm or dust storm



squall



hail shower



tropical storm



+ tornado



+ lightning



+ hurricane



haze



smoke



dust or sand storm



fog



drizzle



rain



snow



showers



hail



thunderstorm

Weather Symbols