



India Meteorological Department
FDP STORM Bulletin No.70 (14-05-2017)

1. CURRENT SYNOPTIC SITUATION at 0300UTC of the Day:

In view of the strengthening and deepening of south-westerly winds, persistent cloudiness & rainfall, southwest monsoon has advanced into some parts of southeast Bay of Bengal, Nicobar Islands, entire south Andaman sea and some parts of north Andaman Sea today, the 14th May 2017.

Conditions are favourable for further advance of southwest monsoon into some parts of southwest Bay of Bengal, some more parts of southeast Bay of Bengal, remaining parts of Andaman sea and Andaman & Nicobar Islands and some parts of east central Bay of Bengal during next 72 hours.

The Western Disturbance as an upper air cyclonic circulation over north Pakistan & adjoining Jammu & Kashmir now lies over Jammu & Kashmir and adjoining north Pakistan at 3.1 Km above mean sea level.

Another Western Disturbance as a trough in mid-tropospheric westerlies roughly along longitude 54.0°E and north of latitude 30.0°N persists.

A trough runs from northwest Madhya Pradesh to north Madhya Maharashtra and extends upto 0.9 km above mean sea level.

The upper air cyclonic circulation over Bihar & adjoining Jharkhand extending upto 0.9 km above mean sea level has become less marked.

The upper air cyclonic circulation over central parts of south Uttar Pradesh and adjoining north Madhya Pradesh now lies over East Uttar Pradesh and neighbourhood and extends upto 0.9 km above mean sea level. A trough runs from this system to Mizoram across Bihar, Sub Himalayan West Bengal & Assam and extends upto 0.9 km above mean sea level. The upper air cyclonic circulation over northern parts of Bangladesh & neighbourhood embedded with the above trough.

The upper air cyclonic circulation over South Andaman Sea and adjoining Malay peninsula now lies over south Andaman sea & neighbourhood and extends upto 3.6 km above mean sea level.

The upper air cyclonic circulation over North Interior Karnataka & neighbourhood persists and now seen at 1.5 km above mean sea level.

The trough from the above system to Comorin area across South Interior Karnataka and Interior Tamilnadu now runs from Marathwada to south Tamilnadu across interior Karnataka and extends upto 0.9 km above mean sea level.

The upper air cyclonic circulation over Lakshadweep area and neighbourhood extending upto 1.5 km above mean sea level has become less marked.

SATELLITE OBSERVATIONS during past 24hrs and current observation:

Current Observation (based on 0900UTC imagery of INSAT 3D):

Convective Activity and cloud description:

| Cell No | Date/Time (UTC) | Area/Location | CTT (- Deg C) | Movement | Remarks |
|---------|-----------------|---|---------------|----------|---------|
| 1 | 0900 | Extreme NW Punjab adjoining Pakistan | 50 | --- | --- |
| 2 | 0900 | C parts of North Interior Karnataka | 76 | --- | --- |
| 3 | 0900 | Extreme S Odisha adjoining North Coastal Andhra Pradesh | 71 | --- | --- |

Broken low/medium clouds with embedded moderate to intense convection were seen over J & K, Himachal Pradesh, and Uttarakhand. Scattered low/medium clouds with embedded moderate to intense convection were seen over S Mizoram and Bay Islands. Scattered low/medium clouds with embedded isolated weak to moderate convection were seen over Sikkim, Bhutan, Arunachal Pradesh, Nagaland, Manipur, rest Mizoram, Meghalaya and Tripura. Scattered low/medium clouds with embedded weak convection were seen over Madhya Maharashtra. Scattered low/medium clouds were seen over rest Punjab, Haryana, S Madhya Pradesh, rest parts of south India and rest parts of East India except Bihar, S Gangetic West Bengal, NE Odisha & E Sub Himalayan West Bengal. Isolated low/medium clouds over SE Rajasthan and SE Gujarat.

Arabian Sea:

Scattered low/medium clouds with embedded moderate to intense convection were seen over south Arabian Sea.

Bay of Bengal & Andaman Sea:

Scattered low/medium clouds with embedded moderate to intense convection were seen over Central & south Bay of Bengal and Andaman Sea, Gulf of Martaban and Tenasserim coast.

Past Weather:

Convection:-

Moderate to Intense convection was observed over NW J&k, Himachal Pradesh, Uttarakhand, Uttar Pradesh, South Chhattisgarh, Bihar, Jharkhand, Odisha, West Bengal, Meghalaya, Assam, Tripura, Maharashtra, Karnataka, Kerala Tamilnadu.

OLR:-

Upto 230 wm^{-2} was observed over North West J&K, Himachal Pradesh, North Uttarakhand, North East Odisha, South Madhya Maharashtra, South Interior Karnataka.

Upto 250 wm^{-2} was observed over South Chhattisgarh adjoining Odisha, North Interior Karnataka, Kerala adjoining Tamilnadu, Sikkim, Arunachal Pradesh, Meghalaya, Tripura, Nagaland and Mizoram.

Westerly Trough & Jet-Stream:

No Westerly Trough & Jet Stream

Dynamic Features

Low to Medium wind shear is observed over India.

Positive shear tendency is observed over India.

A positive Vorticity field is observed over Madhya Pradesh and south Uttar Pradesh.

Negative low level convergence observed over Rajasthan and Positive Low Level Convergence observed over the rest parts of India.

Precipitation:

IMR:

Rainfall Upto 110mm was observed over North East Jharkhand, West Bengal.

Rainfall Upto 70 mm was observed over South Madhya Maharashtra, North East Odisha.

Rainfall upto 30 mm was observed over West Karnataka, South Central Tamilnadu. Rainfall upto 20 mm was observed over North Himachal Pradesh, North East Bihar, South Chhattisgarh, North West Odisha.

Rainfall upto 10 mm was observed over North West J&K, North Uttarakhand, Extreme North Rajasthan, East Punjab, Meghalaya, Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram Tripura.

HEM:

Rainfall upto 70 mm was observed over North West J&K, Himachal Pradesh, North Uttarakhand, Madhya Maharashtra, South Chhattisgarh, North East Odisha, West Bengal, West Meghalaya, East Arunachal Pradesh, West Karnataka, South Central Tamilnadu and North Kerala.

Rainfall upto 07 mm was observed over Vidarbha, South West Odisha, East Bihar, North East Jharkhand, Assam, Rest Arunachal Pradesh, Nagaland, Manipur, Mizoram and Tripura.

RADAR and RAPID Observation:

Significant convection was observed over North Coastal Andhra Pradesh, South Odisha, North Tamilnadu and Karnataka in DWR Composite at 1610hrs IST of today. It also indicated isolated convection over Haryana, Uttarakhand and S Chhattisgarh.

RAPID RGB satellite imagery at 1530hrs IST indicated convective clouds over North Interior Karnataka, S Odisha adjoining coastal Andhra Pradesh, Telangana, J & K, Himachal Pradesh, Uttarakhand, extreme NW Punjab, Kerala, Tamilnadu and Andaman & Nicobar Islands.

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

Higher Dust concentration was observed over northern Africa and some parts of eastern Asia. Dust concentration is expected to remain high over western and northern India for next five days. High PM10 concentration was observed over north-western and northern India.

2. NWP MODEL GUIDANCE:**NCMRWF (NCUM Forecasts based on 00 UTC of the day):-**

Not Received (delayed due to technical reasons)

IMD GFS (T1534) based on 00UTC the day:-

Not Received

3. IOP ADVISORY FOR 24 and 48Hrs:

Summary and Conclusions:

Day-1 & Day-2:

Presently, conditions are favorable for further advance of southwest monsoon into some parts of southwest Bay of Bengal, some more parts of southeast Bay of Bengal, remaining parts of Andaman Sea and Andaman & Nicobar Islands and some parts of east central Bay of Bengal during next 72 hours. Apart from this, the upper air cyclonic circulation over South Andaman Sea and adjoining Malay Peninsula now lies over south Andaman sea & neighbourhood and extends upto 3.6 km above mean sea level. This will give rise to heavy rainfall activity over Andaman and Nicobar Islands on Day-1 and Day-2.

A trough runs from Mizoram across Bihar, Sub Himalayan West Bengal & Assam and extends upto 0.9 km above means sea level. The upper air cyclonic circulation over northern parts of Bangladesh & neighbourhood embedded with the above trough. This will give rise to heavy rainfall activity over Assam, Meghalaya and eastern parts of Arunachal Pradesh.

The upper air cyclonic circulation over North Interior Karnataka & neighbourhood persists, the trough from the this system to Comorin area across South Interior Karnataka and Interior Tamilnadu now runs from Marathawada to south Tamilnadu across interior Karnataka and extends upto 0.9 km above mean sea level. Due to this system, Kerala, Interior Tamilnadu, Coastal Karnataka, South Interior Karnataka, North Coastal Andhra Pradesh may experience the thunderstorm with gusty winds on Day-1. Kerala and South Interior Karnataka may experience some rainfall activity on Day-1.

24 hour Advisory for IOP:

Andaman and Nicobar Islands, Assam, Meghalaya, East Arunachal Pradesh
Nagaland, Manipur, Mizoram and Tripura
Kerala, Interior Tamilnadu, Coastal Karnataka, South Interior Karnataka, North Interior Karnataka
North Coastal Andhra Pradesh,
Sub Himalayan West Bengal, Sikkim
Himachal Pradesh,
South Madhya Maharashtra, Vidarbha
J & K, Uttarakhand, Odisha

48 hour Advisory for IOP:

Andaman and Nicobar Islands, Assam, Meghalaya, East Arunachal Pradesh
Nagaland, Manipur, Mizoram and Tripura
Kerala, Interior Tamilnadu, Coastal Karnataka
Orissa, Bihar
Jammu and Kashmir and Himachal Pradesh

ForNCMRWFNWPproducts:(<http://www.ncmrwf.gov.in/HomePage/NEPS-prod-1.php>)

ForIMDNWPproducts:(<http://nwp.imd.gov.in/diagpronew.php>)

ForSynopticplotteddataandcharts

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

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

ForRAPIDtool:

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

LowLevelWinds

<http://satellite.imd.gov.in/archive/INSAT-3D-IMAGER/3D-PRODUCTS/AMV/LLW/MAR2017/?C=M;O=D>

Upperlevelwinds

<http://satellite.imd.gov.in/archive/INSAT-3D-IMAGER/3D-PRODUCTS/AMV/HLW/MAR2017/?C=M;O=D>

Past24hourHEMandIMRrainfall(upto03UTCoftoday)

IMR:<http://satellite.imd.gov.in/img/3Ddailyimr.jpg>

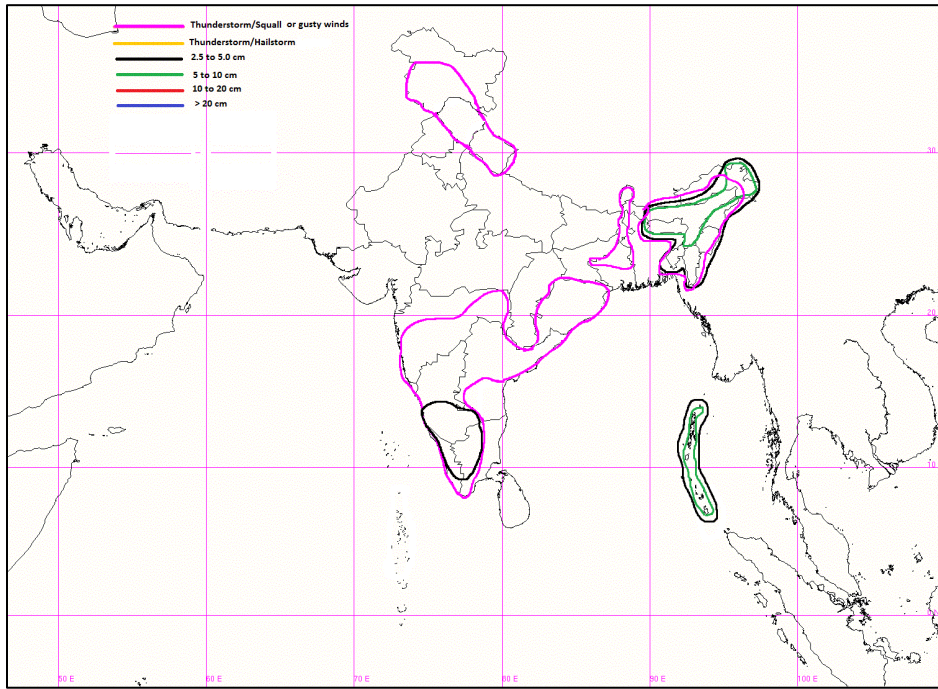
HEM:<http://satellite.imd.gov.in/img/3Ddailyhe.jpg>

ForRadarimagesofthepast24hoursincludingmosaicofimages:

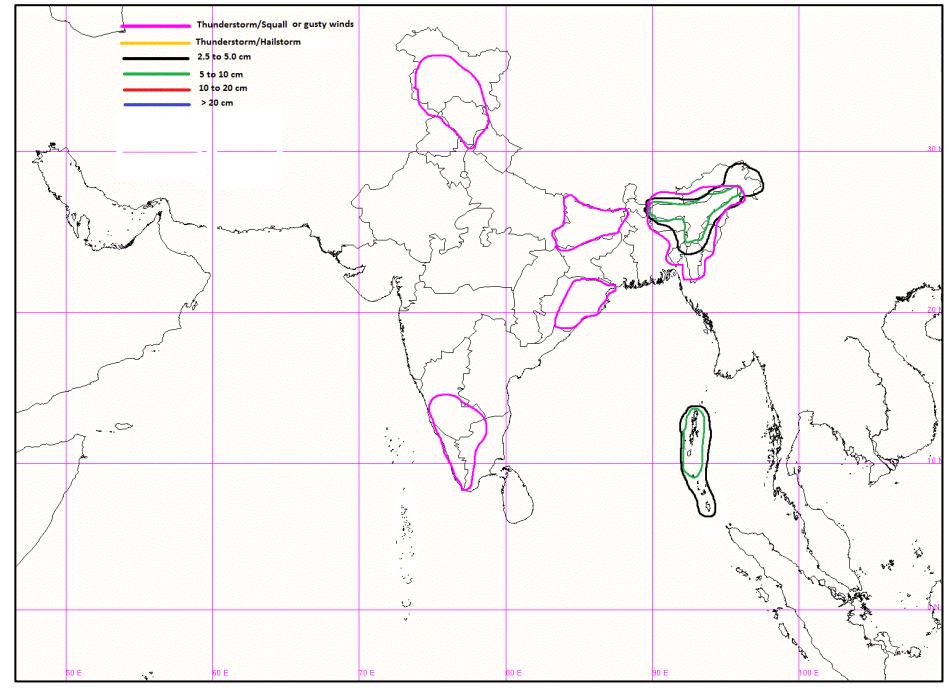
<http://ddgmui.imd.gov.in/dwrimg/>

SatellitesounderbasedT-Phigram

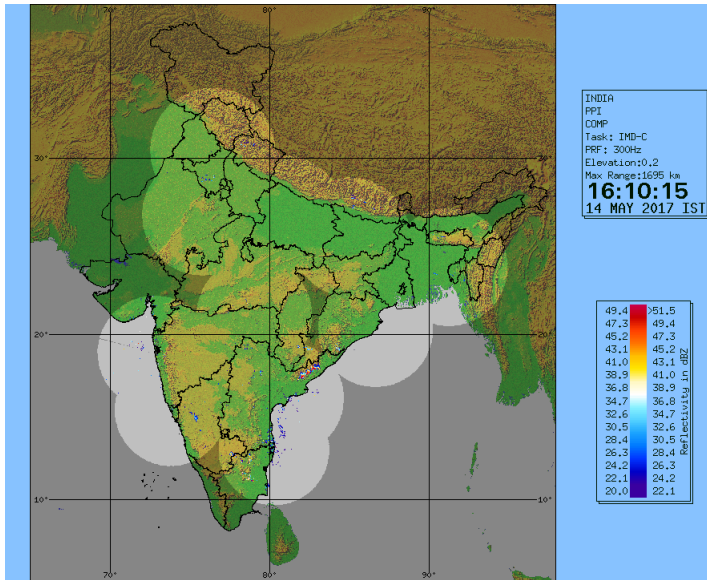
<http://satellite.imd.gov.in/mapskm2.html>



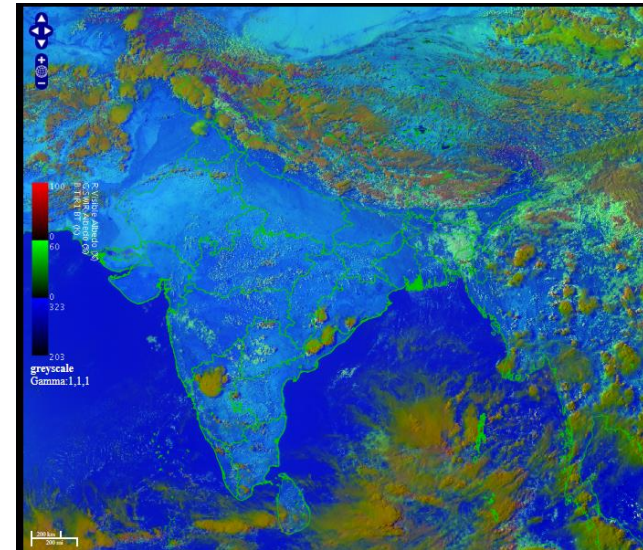
IOP Advisory for 24 hours



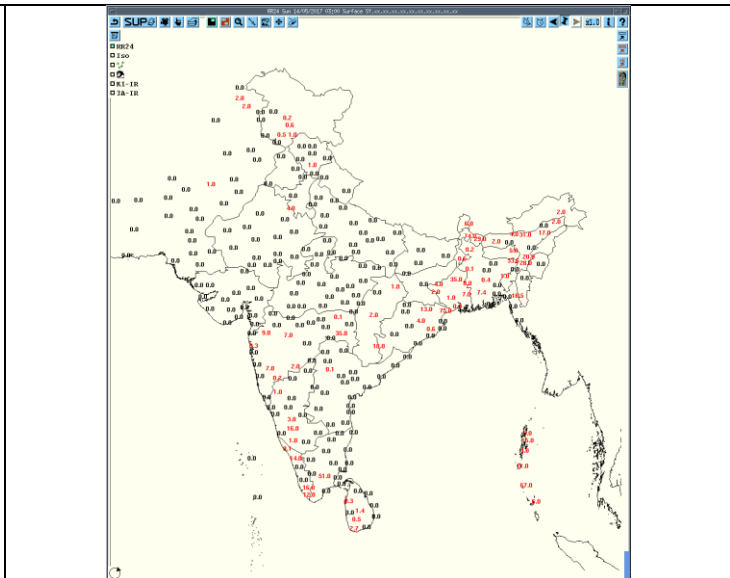
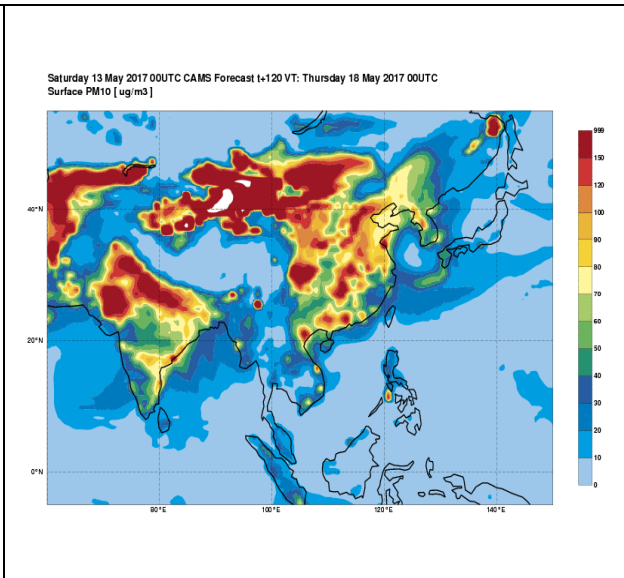
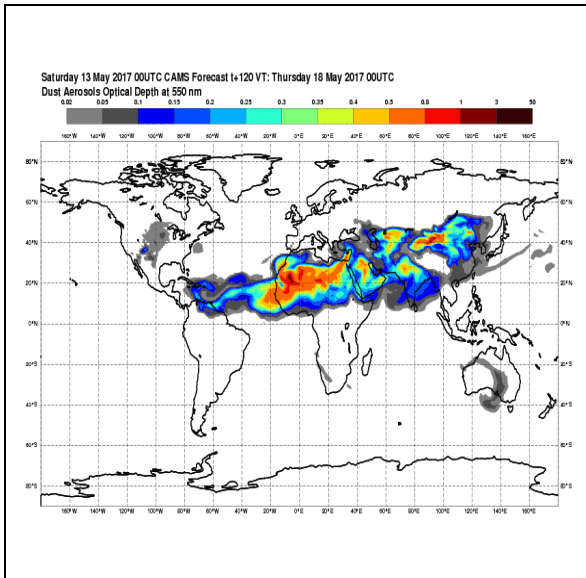
IOP Advisory for 48 hours



DWR Composite at 1610hrs IST of today



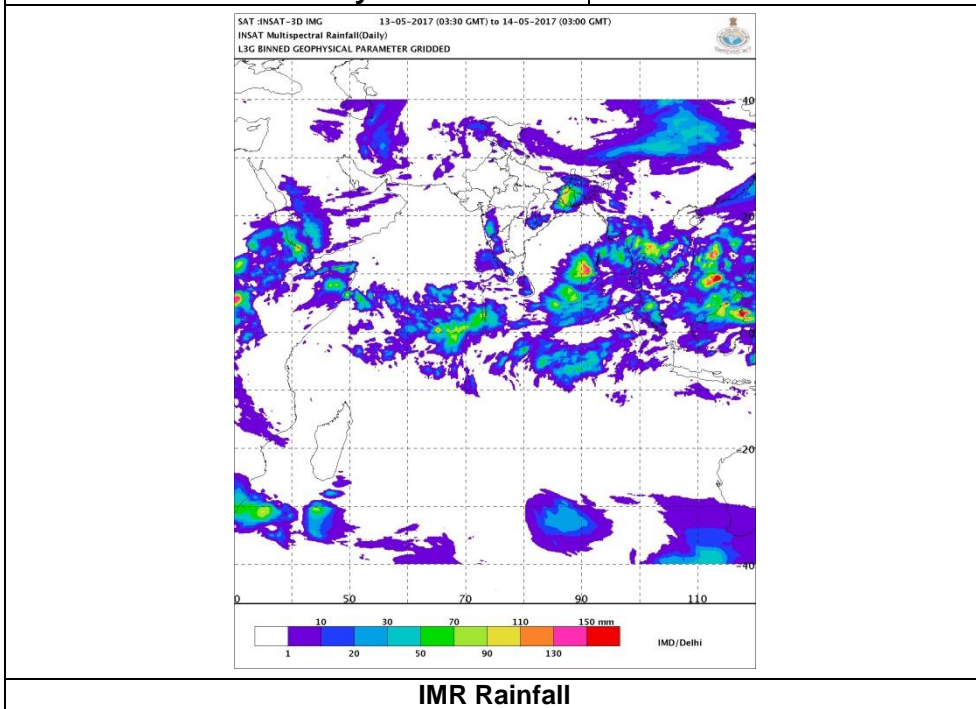
RAPID RGB Image of INSAT 3D at 1530 hrs IST of today



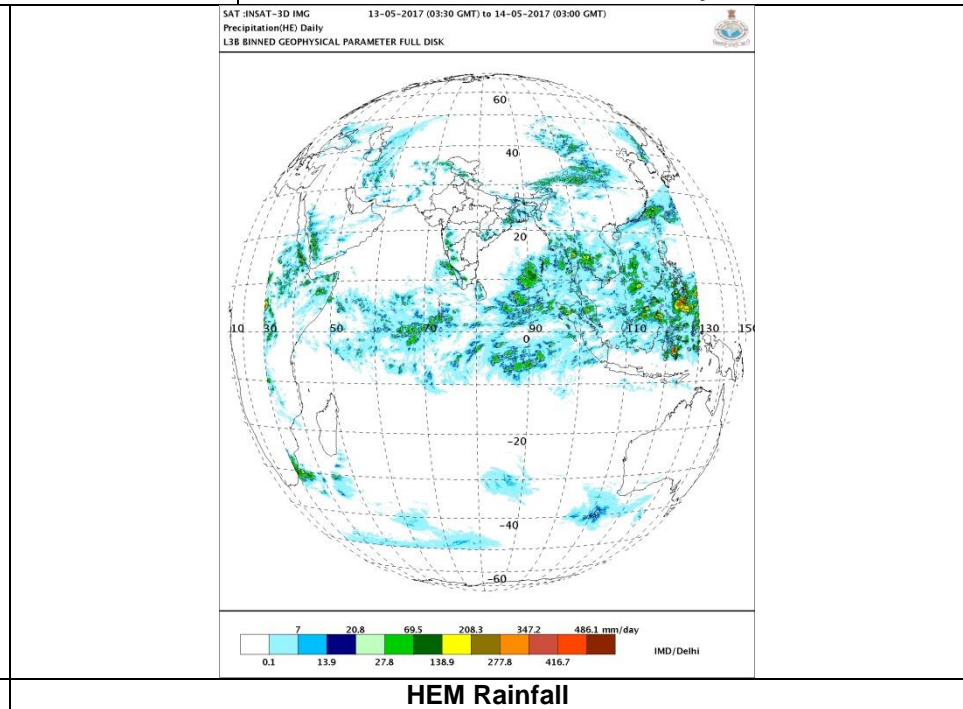
Forecast Dust Concentration for 00UTC of 18th May

PM10 Forecast for 00UTC of 18th May

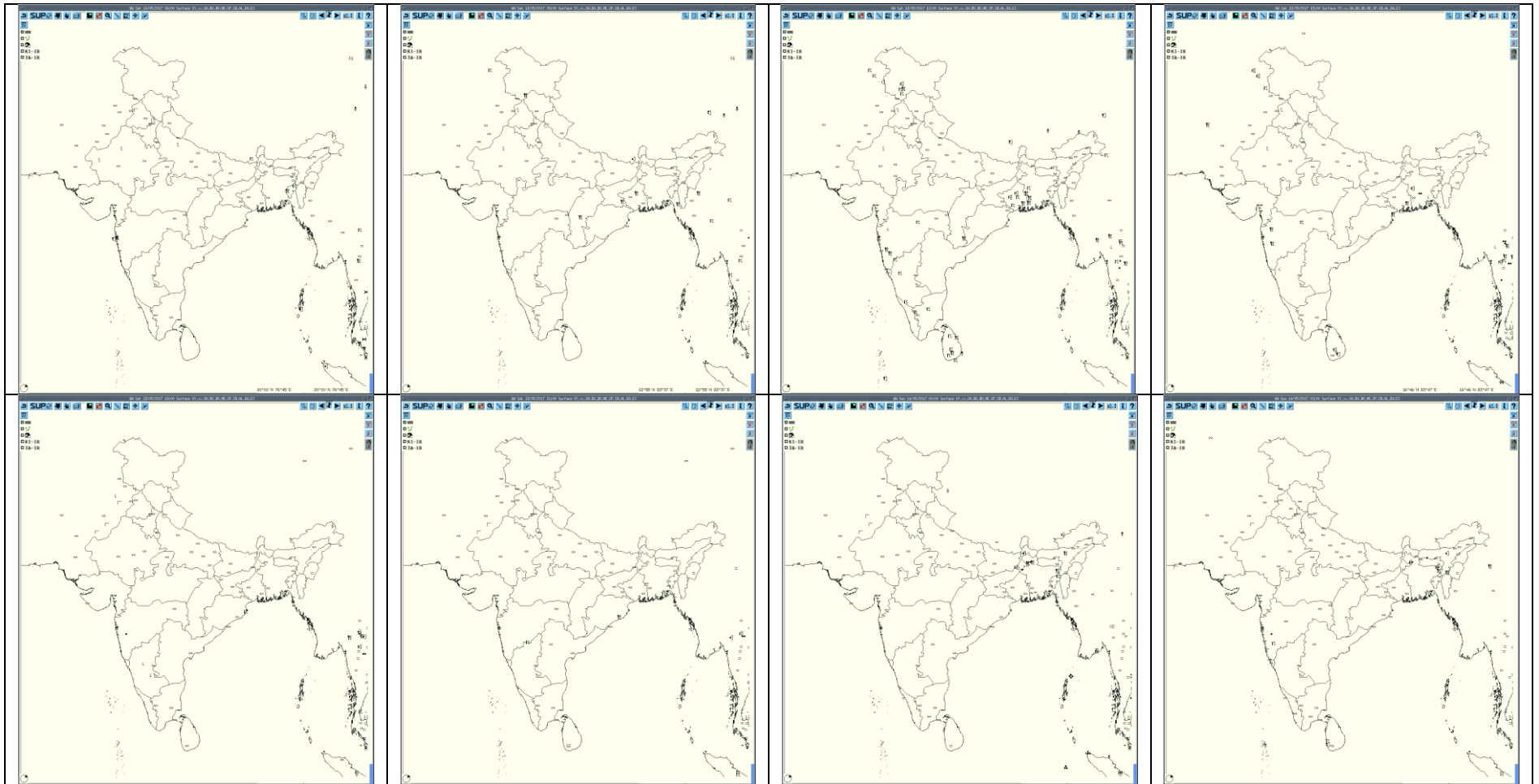
Accumulated 24 Hour rainfall (in red) recorded at 0300UTC of today



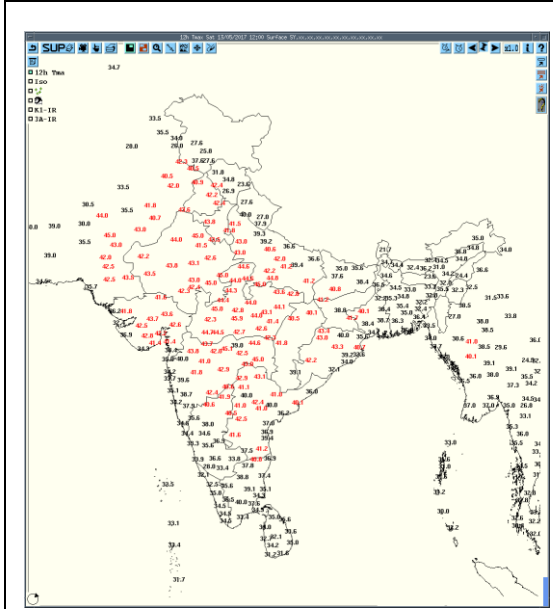
IMR Rainfall



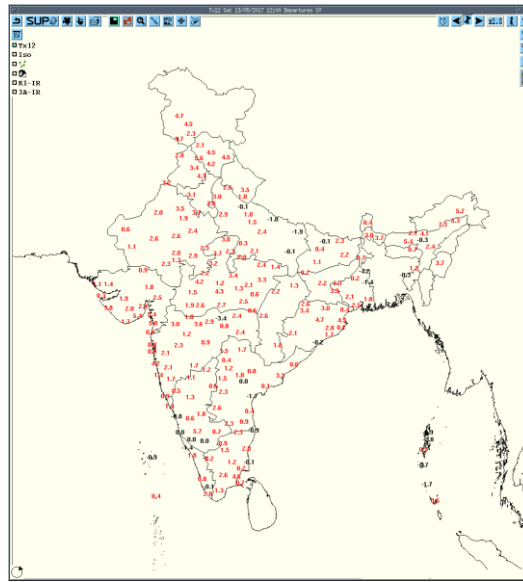
HEM Rainfall



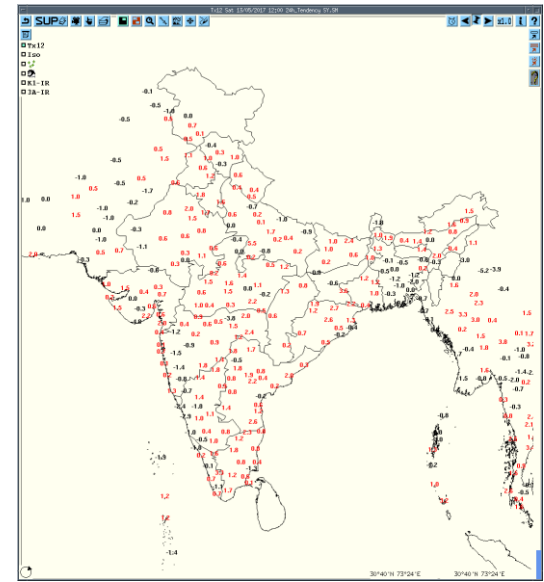
3hourly Past weather at 06,09,12,15,18,21UTC of yesterday and 00 & 03 hrs UTC of today



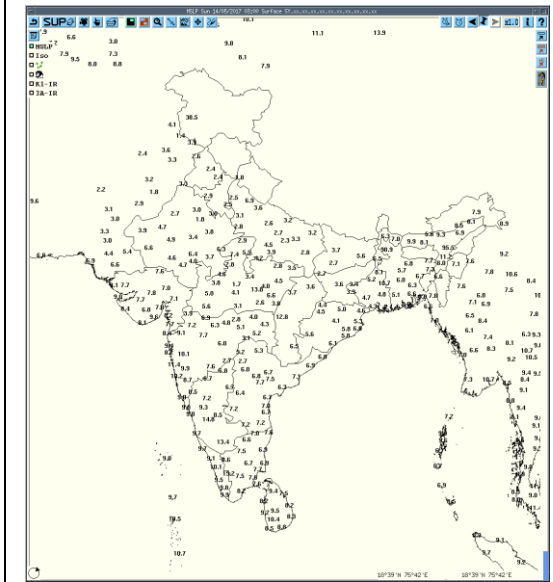
T_{max}



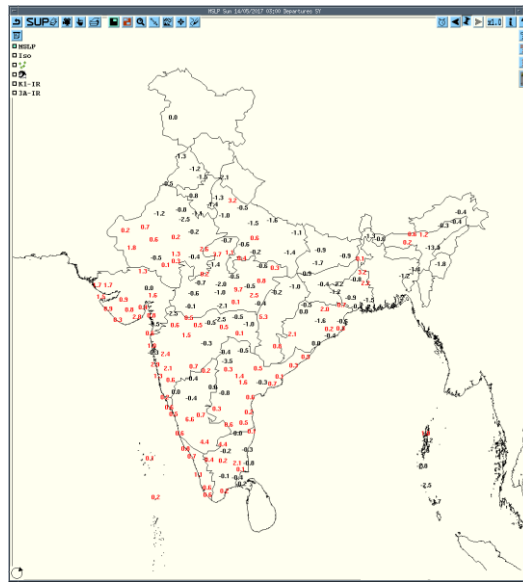
Departure T_{max}



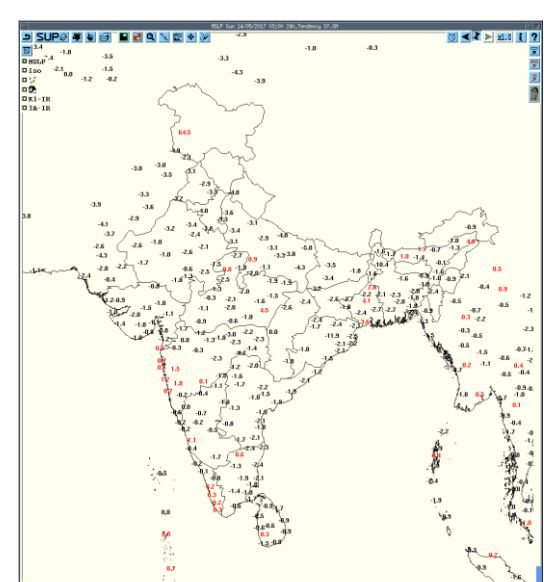
Tendency T_{max}



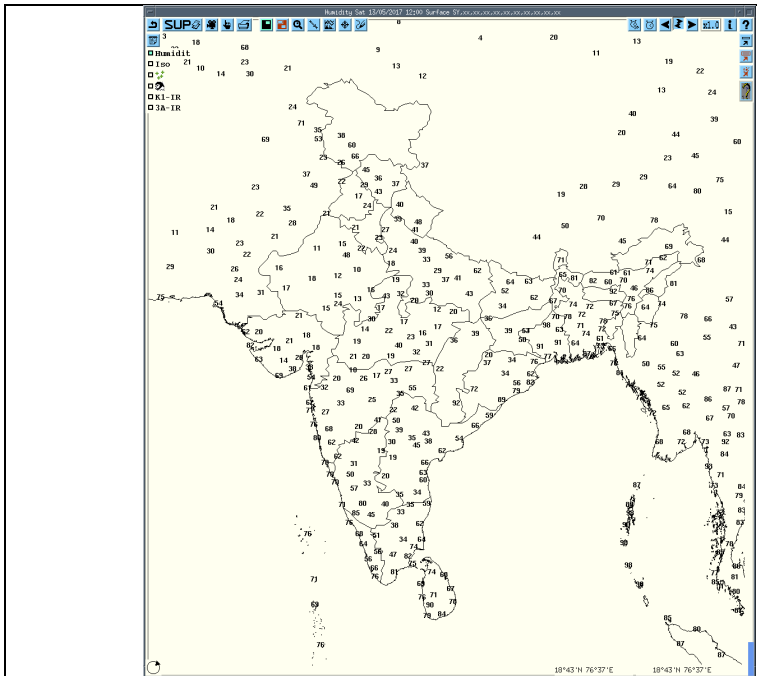
SLP



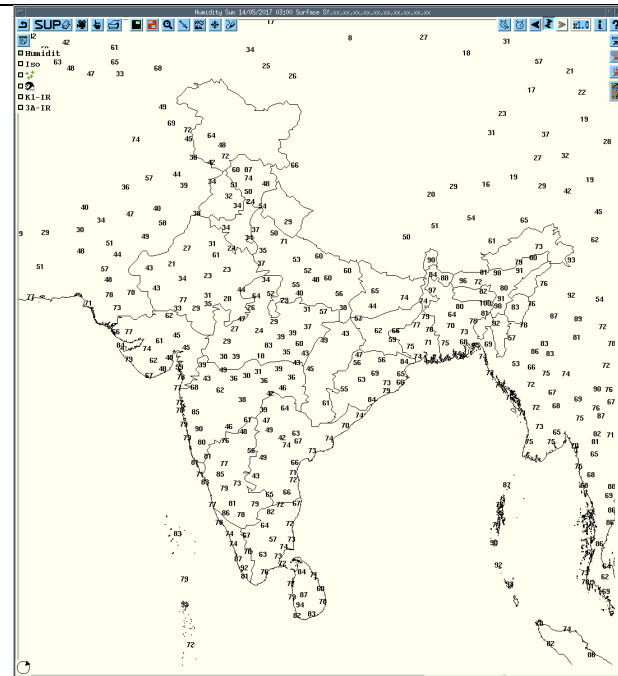
Departure MSLP



Tendency MSLP



RH at 12UTC yesterday



RH at 03UTC today

| Realized weather past 24hours (Based on SYNERGIE Products) | | | | | |
|---|-------------------|---|--------------|------------------|-------------------------------|
| Date | Time of Reporting | Name of Station Reporting | Region | STATE | Weather Event |
| 13-05-17 | 0600UTC | Kailasahar, Agartala | NE India | Tripura | Thunderstorm |
| | | Mumbai(SCZ) | W India | Maharashtra | Thunderstorm |
| 13-05-17 | 0900UTC | Bhaderwah | NW India | J & K | Thunderstorm |
| | | Shantiniketan | E India | West Bengal(GWB) | Thunderstorm |
| | | Jamshedpur | E India | Jharkhand | Thunderstorm |
| | | Raipur | C India | Chhattisgarh | Thunderstorm |
| | | Belgaum | S India | Karnataka | Thunderstorm |
| 13-05-17 | 1200UTC | Pahalgam, Kukernag, Qazigund, Banihal, Batote | NW India | J & K | Thunderstorm |
| | | Jagdapur | C India | Chhattisgarh | Thunderstorm |
| | | Akola, Mahabaleshwar, Satara, Sangli | W India | Maharashtra | Thunderstorm |
| | | Nasik | W India | Maharashtra | Lightening |
| | | Dharwad, Madikeri | S India | Karnataka | Thunderstorm |
| | | Coonoor | S India | Tamilnadu | Thunderstorm with Hail |
| | | Salem | S India | Tamilnadu | Thunderstorm |
| Bankura, Shantiniketan, Burdwan, Midnapore, Kolkata(Alipore & Dumdum), Haldia | E India | West Bengal(GWB) | Thunderstorm | | |
| 13-05-17 | 1500UTC | Nasik, Pune, Akola | W India | Maharashtra | Thunderstorm |
| | | Belgaum | S India | Karnataka | Lightening |
| | | Kolkata(Dumdum), Digha | E India | West Bengal(GWB) | Thunderstorm |
| | | Balasore | E India | Odisha | Thunderstorm |
| | | Chandbali | E India | Odisha | Lightening |
| | | Pamban | S India | Tamilnadu | Lightening |
| 13-05-17 | 1800UTC | Gadag, Chitradurga | S India | Karnataka | Lightening |
| | | Chandbali | E India | Odisha | Thunderstorm |
| | | Jammu | NW India | J & K | Lightening |
| 13-05-17 | 2100UTC | Bhubaneshwar | E India | Odisha | Thunderstorm |
| | | Solapur | W India | Maharashtra | Thunderstorm |
| 14-05-17 | 0000UTC | Tezpur | NE India | Assam | Thunderstorm |
| | | Kailasahar | NE India | Tripura | Thunderstorm |
| | | Purnea | E India | Bihar | Thunderstorm |
| 14-05-17 | 0300 UTC | Satara | W India | Maharashtra | Thunderstorm |
| | | Cherrapunjee | NE India | Meghalaya | Thunderstorm |
| | | Silchar | NE India | Assam | Thunderstorm |

Realized TS/HS/SQ during past 24 hours ending at 0300UTC of today (received from RMCs/MCs)

| Name of Station Reporting | Region | STATE | Weather Event (TS/Hail/Squall) | Date | Time of Commencement (IST) | Time of end (IST) |
|----------------------------------|---------------|------------------|---------------------------------------|----------------------|-----------------------------------|--------------------------|
| Agartala | NE India | Tripura | Thunderstorm | 13-05-17 | 0855 | 1230 |
| Kailasahar | NE India | Tripura | Thunderstorm | 13/14-05-17 | 1020 140500 | 1220 140610 |
| Ballia | NW India | Uttar Pradesh(E) | Thunderstorm | 13-05-17 | 0900 | 0930 |
| Pilani | NW India | Rajasthan(E) | Thunderstorm | 13-05-17 | 1745 | 1930 |
| Shimla | NW India | Himachal Pradesh | Thunderstorm | 13-05-17 | 1735 | 1830 |
| Qazigund | NW India | J & K | Thunderstorm | 13-05-17 | 1620 | 1740 |
| Pahalgam | NW India | J & K | Thunderstorm | 13-05-17 | 1550 | 1600 |
| Kukernag | NW India | J & K | Thunderstorm | 13-05-17 | 1545 | 1805 |
| Banihal | NW India | J & K | Thunderstorm | 13-05-17 | 1610 | 1800 |
| Batote | NW India | J & K | Thunderstorm | 13-05-17 | 1450 | 1820 |
| Katra | NW India | J & K | Thunderstorm | 13-05-17 | 2045 | 2120 |
| Bhaderwah | NW India | J & K | Thunderstorm | 13-05-17 | 1230 1815 | 1520 2030 |
| Akola | C India | Vidarbha | Thunderstorm | 13-05-17 | 1710 | 1750 |
| Chandrapur | C India | Vidarbha | Thunderstorm | 13-05-17 14-05-17 | 1630 0030 | 1720 0100 |
| Ambikapur | C India | Chhattisgarh | Thunderstorm | 13-05-17 | 1415 | 1435 |
| Jagdalpur | C India | Chhattisgarh | Thunderstorm | 13-05-17 | 1640 | 1900 |
| Pendra Rd | C India | Chhattisgarh | Thunderstorm | 13-05-17 | 0830 1445 | 0930 1520 |
| Hyderabad | S India | Telangana | Thunderstorm | 14-05-17 | 0620 | 0705 |
| Lengpui | NE India | Mizoram | Thunderstorm | 13-05-17 | 0831 | 0950 |
| Agartala | NE India | Tripura | Thunderstorm | 13-05-17 | 0855 | 1230 |
| Kailasahar | NE India | Tripura | Thunderstorm | 13-05-17 14-05-17 | 1020 0500 | 1220 0610 |

| | | | | | | |
|----------------------------|----------------------|-------------------|---|-----------------|--------------|--------------|
| Shillong | NE India NE India | Meghalaya | Thunderstorm | 13-05-17 | 1200 1450 | 1250 1515 |
| Barapani | NE India | Meghalaya | Thunderstorm | 13-05-17 | 1525 | 1640 |
| Imphal | NE India | Manipur | Thunderstorm | 13-05-17 | 1525 | 1640 |
| Dhubri | NE India | Assam | Thunderstorm | 13-05-17 | 1900 | 0540 |
| Guwahati | NE India | Assam | Thunderstorm | 13-05-17 | 1915 | 2135 |
| Passighat | NE India | Arunachal Pradesh | Thunderstorm | 14-05-17 | 0000 | 0300 |
| Jorhat | NE India | Assam | Thunderstorm | 14-05-17 | 0200 | 0510 |
| Tezpur | NE India | Assam | Thunderstorm | 14-05-17 | 0240 | 0500 |
| | | | Thunderstorm | 14-05-17 | 0520 | 0540 |
| Silchar | NE India | Assam | Thunderstorm | 14-05-17 | 0610 | 0830 |
| Cherrapunjee | NE India | Meghalaya | Thunderstorm | 14-05-17 | 0710 | 0800 |
| Bajpe | S India | Karnataka(CK) | Thunderstorm | 14-05-17 | 0340 | 0420 |
| Belagavi AP | S India | Karnataka(NIK) | Thunderstorm | 13-05-17 | 1415 1855 | 1610 2010 |
| Salem | S India | Tamilnadu(North) | Thunderstorm | 13-05-17 | 1625 | 1735 |
| Kodaikanal | S India | Tamilnadu (South) | Thunderstorm | 13-05-17 | 1430 | 1620 |
| Karipur A P | S India | Kerala | Thunderstorm | 13-05-17 | 1720 | 1825 |
| Thiruvananthapuram Airport | S India | Kerala | Thunderstorm | 14-05-17 | 0148 | 0410 |
| Karipur A P | S India | Kerala | Thunderstorm | 13-05-17 | 1720 | 1825 |
| Alipore | E India | West Bengal(GWB) | Thunderstorm | 13-05-17 | 1600 1700 | 1615 1745 |
| | | | Squall from NW direction with max speed 75kmph | 13-05-17 | 1602 | 1603 |
| | | | Lightening | 13-05-17 | 1807 | 1820 |
| Dum Dum | E India | West Bengal(GWB) | Thunderstorm | 13-05-17 | 1615 | 2128 |
| | | | Squall from NW direction with max speed 62kmph | 13-05-17 | 1601 | 1602 |
| | | | Lightening | 13-05-17 | 1625 | 2130 |

| | | | | | | |
|-------------|---------|---------------------------|---|-----------------|-------------|-------------|
| Haldia | E India | West Bengal(GWB) | Thunderstorm | 13-05-17 | 1705 | 1750 |
| | | | Squall from NW direction with max speed 82kmph | 13-05-17 | 1745 | 1748 |
| Digha | E India | West Bengal(GWB) | Thunderstorm | 13-05-17 | 1745 | 2145 |
| | | | Lightening | 13-05-17 | 2145 | 2245 |
| Asansol | E India | West Bengal(GWB) | Thunderstorm | 13-05-17 | 1352 | 1600 |
| | | | Lightening | 13-05-17 | 1357 | 1600 |
| Bankura | E India | West Bengal(GWB) | Thunderstorm | 13-05-17 | 1432 | 1645 |
| | | | Lightening | 13-05-31 | 1432 | 1530 |
| Purnia | E India | Bihar | Thunderstorm | 14-05-17 | 0235 | 0345 |
| | | | Lightening | 14-05-17 | 0235 | 0345 |
| Jamshedpur | E India | Jharkhand | Thunderstorm | 13-05-17 | 1350 | 1400 |
| Bhubaneswar | E India | Odisha | Thunderstorm | 14-05-17 | 140 | 310 |
| Balasore | E India | Odisha | Thunderstorm | 13-05-17 | 1740 | 2110 |
| Chandbali | E India | Odisha | Thunderstorm | 13-05-17 | 2300 | 2400 |
| Keonjhar | E India | Odisha | Thunderstorm | 13-05-17 | 1905 | 2300 |
| Port Blair | E India | Andaman & Nicobar Islands | Lightening | 13-05-17 | 2115 | 2200 |

Past 24 hours DWR Report:

| Radar Station name | Date of Reporting | Time interval of observation (UTC) | Organization of the 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 |
|--------------------|-------------------|------------------------------------|--|--|---|--|-------------------------------|
| Lucknow | 14-05-17 | 130300-140300 | Nil | | | | |
| Nagpur | 14/05/17 | 130642-140132 | Multiple | 130 km N, moving S'ly & SES'ly | maxZ=40 (ht of cloud=2.5 to 8.1 km), rest have reflectivity from 30 to 40 & cloud ht. Varies from 2.5 to 10.. disappear 200 km in S | Thunderstorm warning started at 0852 & continue till 1042 at regular interval mostly in S direction. At 0942= 80 km N & 200 km E, thunderstorm warning | Mostly in 200 km in S, |
| | | 130652-131332 | Multiple | 210 km E, moving S'ly | maxZ=30, cloud ht varies from 2 to 9 km | | |
| | | 130712-131332 | Multiple | 200 km in S, moving S | maxZ=50 & ht. of cloud =2.3 to 5 km, for 46 dBZ ht of cloud till 7 km | | |
| | | 140002-140302 | nil | | | | |
| Hyderabad | 14-05-17 | 130652 - 131132 | Scattered cells with an average height of 10 Km with a max reflectivity of 54.0 dBZ | N (55 Kms) moving in WSW- ly Direction at a speed of approx 6.0 kmph | Cells started forming at 0652 utc. Matured between 0942 and 1032 with max ref of 54 dBz and dissipated by 1132 UTC | Moderate Thunderstorm with or without rain | Siddipet and Medak districts. |

| | | | | | | | | |
|---------|----------|-----------------|--|---|---|-------|---------------------|-----------------------------|
| Patiala | 14-05-17 | 130302-130602 | NO ECHO | ---- | ----- | ----- | ----- | |
| | | 130602 - 130902 | NO ECHO | ---- | ----- | ----- | ----- | |
| | | 130902-131202 | Multiple cells Max= 58.5 dBz Ht.=12-14 km | N & NE SECTOR. MOVING TOWARDS SE-WARDS. . | ---- | | R/ATS | HAMIRPUR AND ADJ. AREAS. |
| | | 131202-131502 | ISOLATED PATCH. Max= 54.5 dBz Ht.=12-15 km | N & NE SECTOR. MOVING TOWARDS SE-WARDS. . | ---- | | R/ATS | NADAUN AND ADJ. AREAS. |
| | | 131502-131802 | NO ECHO | ---- | ----- | ----- | ----- | |
| | | 131802-132102 | NO ECHO | ---- | ----- | ----- | ----- | |
| | | 132102-130002 | NO ECHO | ---- | ----- | ----- | ----- | |
| | | 140002-140252 | NO ECHO | ---- | ----- | ----- | ----- | |
| Jaipur | 14-05-17 | 131132-131402 | Multiple cell with average height of 6.0 km maximum reflectivity 50.5 dBZ | Cells develop 1132 to 1402 UTC towards EAST at speed 40-45 km/hr | Cells continuous forming from 1132 UTC NW, N of Jaipur and multiple cell was observed and maximum reflectivity during 1212-1242 UTC and died down at 1402 UTC. | TSRA | CHURU, JHUNJHUNU | |










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|----------|----------|---------------|---|---|--|---|---------------------------|
| | | 131242-131412 | Multiple cell with average height of 6.0 km maximum reflectivity 42 dBZ | Cells develop 1242 to 1412 UTC towards EAST at speed 40-45 km/hr | Cells continuous forming from 1242 UTC South of Jaipur and multiple cell was observed and maximum relectivity during 1332-1342 UTC and died down at 1412 UTC | | Tonk |
| Srinagar | 14-05-17 | 130300-140300 | Multiple ceells developed in the SW and NW direction DWR Srinagar at around 1120 utc with max. reflectivity 50-55 DBZ and average height 9 kms and moved se wards | Developed at around 1130 moved ESE diecton of DWR and finally dissipated at around 1730 utc | Thunder and light rain reported from Phalgam . kukernag Qazigund Katra Bhaderwah Batote | Light rain has occurred at phalgam Kukernag Bhaderwah and katra | Anantnag Ramban and Reasi |
| Kolkata | 14-05-17 | 130301-130601 | NIL | NIL | NO SIG ECHO | NIL | NIL |
| | | 130612-131501 | 1. Isolated Single cell with maximum reflectivity of 59.0 dBz at 0731 UTC and maximum height of 12.63 Km at 0731 UTC | NNW(247.9 km) moving towards SE-ly direction | 1. Isolated single cell seen at 0612 UTC in NNW at a distance of 247.9 km from radar. Merged and moving towards SE-ly direction in Bangladesh. | Thunderstorm / Rain | N/A |
| | | 130711-131501 | 2. Multi celled system with maximum reflectivity of 62.5 dBz at 0901 UTC and maximum height of 15.4 Km at 0901 UTC | NW (243.2 km) Moving in SE-ly direction | Multicelled system coming from 0711 UTC from NW at a distance of 248.6 km from radar. Merged and moving towards SE-ly direction in Bangladesh.. | Thunderstorm /Squall/ Hail/ Rain | N/A |
| | | 131122-131521 | 3. Isolated Single cell with maximum reflectivity of 52.5 dBz at 1252 UTC and | W (244.3 km) Moving in SE-ly direction | Isolated single cell seen at 1122 UTC in W at a distance of 244.3 km from | Thunderstorm /Squall/ Hail/ Rain | N/A |

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|---------------|----------|---------------|--|--|---|---|--|
| | | | maximum height of 12.27 Km at 1252UTC | | radar, matured, dissipated in SW at 1521 UTC at a distance of 236.7 km from radar. | | |
| | | 131541-132351 | NIL | NIL | NO SIG ECHO | NIL | NIL |
| | | 140001-140301 | NIL | NIL | NO SIG ECHO | NIL | NIL |
| Machilipatnam | 14-05-17 | 130721-131241 | Isolated Multiple cells average height of 11.5 km with maximum reflectivity of 65dBZ | NE(125KM) and moving SW ly direction with average speed of 22 kmph | Cell started forming at 0721UTC, at NE (247km) from Radar the maximum reflectivity during 0731 to 1221 UTC and died down at 1241UTC | Possibility of Thunder storm with Hail and rain and moderate winds. | Visakhapatnam, East Godavari and West Godavari Districts |
| | | 130941-131131 | Isolated Multiple cells average height of 8.5km with maximum reflectivity of 56.5 dBZ | NWN (211KM) and moving S ly direction with average speed of 10kmph | Cells started forming at 1511UTC at NWN(231km) from radar the maximum reflectivity during 0951 to 1101 and died Down at 1131UTC | Possibility of Thunder storm with Rain and light winds. | Jayashankar Bhupalpalli District |
| | | 131211-131511 | Isolated Multiple cells average height of 12.5km with maximum reflectivity of 60.5 dBZ | N (175KM) and moving S ly direction with average speed of 23kmph | Cells started forming at 1211UTC at N(245km) from radar the maximum reflectivity during 1211 to 1501 and died Down at 1511UTC | Possibility of Thunder storm with Rain and moderate winds. | Dantewara District |
| | | 131231-131341 | Isolated Multiple cells average height of 10.5km with maximum | N (161KM) and moving S ly direction with average speed of | Cells started forming at 1231UTC at | Possibility of Thunder storm with Rain and | Bhadradri Kothagudem District |

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|----------|----------|-----------------------|--|---|--|--------------|---|
| | | | reflectivity of 59.5 dBZ | 13kmph | N(174km) from radar the maximum reflectivity during 1241 to 1331 and died Down at 1341UTC | light winds. | |
| Agartala | 14-05-17 | 130300 - 130540 | Multi cell with Maximum Height 10km and maximum reflectivity 37 dBZ (at 0320 UTC over Central Tripura) | Formed 90km WSW of DWR AGT at 2220 UTC of 12.05.17 and moved Eastwards at around 30 kmph | Cells Dissipated at 0540 UTC over Mizoram | TS with rain | Mamit District of Mizoram West, Sipahijala, Khowai districts of Tripura |
| | | 130300 - 130930 | Multi cell with Maximum Height 14km and maximum reflectivity 44 dBZ (at 0610UTC over South Assam) | Formed 150km West of DWR AGT at 2210 UTC of 12.05.17 divided into two parts at 0310 UTC, one part moved ENE-wards and another part moved ESE-wards at around 25kmph | Cells Dissipated at 0930 UTC over Manipur | TS with rain | All districts of Tripura |
| | | 130550 - 131040 | Multi cell with Maximum Height 14km and maximum reflectivity 46 dBZ (at 0640 UTC over Bangladesh) | Formed 300km WNW of DWR AGT at 0550 UTC and moved ESE-wards at around 35 kmph | Cells Dissipated at 1040 UTC over East Bangladesh | N/A | N/A |
| | | 130550 - 131420 | Multi cell with Maximum Height 13km and maximum reflectivity 46 dBZ (at 1120 UTC over Bangladesh) | Formed 500km WNW of DWR AGT at 0550 UTC and moved ESE-wards at around 35 kmph | Cells Dissipated at 1420 UTC over South Bangladesh | N/A | N/A |
| | | 131940 - 140300 | Multi cell with Maximum Height 9km and maximum reflectivity 41 dBZ (at 2110 UTC over East Bangladesh) | Formed 80km NNW of DWR AGT at 1940 UTC and moved ENE-wards at around 30 kmph | Cells persist at 0300 UTC ,over East Meghalaya and South Assam and in dissipating stage | TS with rain | East Khasi hills District of Meghalaya |
| | | 132040 - 140300 | Multi cell with Maximum Height 14km and maximum reflectivity 40 dBZ (at 0140 UTC over West Meghalaya) | Formed 350km NW of DWR AGT at 2040 UTC and moved ESE-wards at around 30 kmph | Cells persist at 0300 UTC, over West Meghalaya and Bangladesh and in growing stage | N/A | N/A |
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|-------|----------|-----------------------|---|---|--|---------------------------|--|
| Patna | 14-05-17 | 130300 - 130630 | NIL | NIL | NIL | NIL | NIL |
| | | 130630 - 130830 | Single Cell. Maximum Reflectivity : 52 dBZ Echo Top : 14.9 KM | Range: 167 km SE from DWR Patna Movement-South- Easterly | Warning E-mail and Fax sent to State Disaster management Authority and Concern DMs | Thunderstorm with Rain | BANKA |
| | | 130830 - 131800 | NIL | NIL | NIL | NIL | NIL |
| | | 131800 - 132200 | Multiple Cells. Maximum Reflectivity : 51 dBZ Echo Top : 14 KM | Range: 174km NE from DWR Patna Movement-South- Easterly | Warning E-mail and Fax sent to State Disaster management Authority and Concern DMs | Thunderstorm with Rain | MADHUBANI, MADHEPURA, SUPAUL, SAHARSA, PURNIA & BHAGALPUR |
| | | 132200 - 140000 | NIL | NIL | NIL | NIL | NIL |
| | | 140000 - 140300 | Multiple Cells. Maximum Reflectivity : 51 dBZ Echo Top : 14 KM | Range: 135 km N from DWR Patna Movement-South- Easterly | Warning E-mail and Fax sent to State Disaster management Authority and Concern DMs | Thunderstorm with Rain | SITAMARHI, DARBHANGA MADHUBANI, SAHARSA. |

| | |
|------------------------|--------------------|
| ∞ | haze |
| ☁ | smoke |
| ☄ | dust or sand storm |
| ☁ | fog |
| ☂ | drizzle |
| • | rain |
| ❄ | snow |
| ▽ | showers |
| △ | hail |
| ⚡ | thunderstorm |
| Weather Symbols | |

| | | |
|---|---|---|
|  |  |  |
| + thunderstorm | + heavy thunderstorm | sandstorm or dust storm |
|  |  |  |
| squall | hail shower | tropical storm |
|  |  |  |
| + tornado | + lightning | + hurricane |

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