



**India Meteorological Department**  
**FDP STORM Bulletin No.82 (26-05-2017)**

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

Southwest monsoon has further advanced into some parts of Comorin area, some more parts of southwest & southeast Bay of Bengal. The northern limit of monsoon (NLM) passes through 5.0°N/ 76.0° E, 8.0°N/83.0°E, 10.0°N/ 86.0°E, 14.0°N/ 92.0°E and 16.0°N/ 95.0°E. Under the influence of the low pressure area over southeast Bay of Bengal & adjoining central Bay of Bengal, which is likely to become marked during next 2-3 days, conditions are becoming favourable for the further advance of southwest monsoon in some more parts of southwest & eastcentral Bay of Bengal, remaining parts of southeast Bay of Bengal in coming 4-5 days. Conditions are also favourable for the advance of southwest monsoon into northeast segment of India covering Nagaland, Manipur, Mizoram & Tripura during 30-31 May 2017. With the strengthening of westerlies and northward shift of shear zone, conditions are also becoming favourable for the advance of southwest monsoon into some parts of south Arabian sea, entire Maldives-Comorin area and south Kerala during 30-31 May 26, 2017. The low pressure area over southeast Bay of Bengal & adjoining area of Central Bay of Bengal persists. The associated upper air cyclonic circulation extending upto 5.8 Km above mean sea level also persists. It is likely to become more marked over eastcentral Bay of Bengal during next 48 hours. The Western Disturbance as an upper air cyclonic circulation over eastern parts of Jammu & Kashmir at 5.8 Km above mean sea level has moved away east-northeastwards. A trough runs from northwest Rajasthan to Vidarbha across Madhya Pradesh and extends upto upto 0.9 km above mean sea level. The upper air cyclonic circulation over western parts of westcentral Arabian sea & neighbourhood extending upto 1.5 Km above mean sea level persists. The upper air cyclonic circulation over southeast Uttar Pradesh & neighbourhood, now lies over Jharkhand and adjoining Bihar and extends upto 0.9 Km above mean sea level. The trough from this system to North Interior Karnataka across Chhattisgarh, Vidarbha & Marathwada extending upto 0.9 km above mean sea level has become less marked. An upper air cyclonic circulation lies over north interior Karnataka & neighbourhood and extends upto 0.9 km above mean sea level. The upper air cyclonic circulation over eastern parts of Assam & neighbourhood extending upto 0.9 km above mean seal level has become less marked.

**SATELLITE OBSERVATIONS during past 24hrs and current observation:**

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

**Convective Activity:**

Cell No	Date/time (UTC)	Location/Area	MIN CTT (- DEG C)	Movement	Remarks
5	26/0100 0200 0300	NE Bihar -DO- -DO-	75 78 73	E-Wards	Developing

**Western Disturbance:**

Scattered low/medium clouds were seen over area between Lat 37.0N TO 47.0N Long 70.0E TO 90.0E in association with WD over the Area.

**Cloud Description:**

Scattered low/medium clouds were seen over Himachal Pradesh, Uttarakhand, Northeast Uttar Pradesh, Southeast Madhya Pradesh, and Maharashtra. Scattered low/medium clouds with embedded moderate to intense convection were seen over Northeast Bihar, Nagaland, Manipur and Bay Islands. Scattered low/medium clouds with embedded isolated weak to moderate convection were seen over Sikkim, Meghalaya, Arunachal Pradesh, East Assam, Kerala, Tamilnadu and Lakshadweep.

**Arabian Sea:**

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

**Bay of Bengal & Andaman Sea:**

Broken low/medium clouds with embedded intense to very intense convection were seen over rest Bay and Andaman Sea.

**Past Weather:****Convection:-**

Moderate to Intense convection was observed over J&K Uttarakhand Uttar Pradesh South Chhattisgarh Bihar Jharkhand Odisha West Bengal Meghalaya North East States Karnataka Kerala Tamilnadu.

**OLR:-**

Upto **230**  $\text{wm}^{-2}$  was observed over East J&K Uttarakhand Meghalaya, Assam, Arunachal Pradesh, South Interior Karnataka Kerala adjoining Tamilnadu.

Upto **250**  $\text{wm}^{-2}$  was observed over Rest J&K South West Odisha adjoining South Chhattisgarh North West Bengal South Andhra Pradesh.

**Westerly Trough & Jet-Stream:**

No Trough in Westerlies & Jet Stream observed over India.

**Dynamic Features:**

Low to Medium wind shear is observed over India.

Negative shear tendency is observed over Haryana East Rajasthan South Interior Karnataka and Positive shear tendency is observed over rest parts of India

A positive Vorticity field is observed over Saurashtra Telangana Rayalaseema Bihar.

Positive low level convergence is observed over East Gujarat Bihar Odisha and Negative low level convergence observed over rest parts of India.

**Precipitation:****IMR:**

Rainfall Up to **70** mm was observed over North West Bengal. Rainfall Up to **50** mm was observed over South West Odisha Meghalaya, South Interior Karnataka. Rainfall Up to **30** mm was observed over North East Bihar South East Assam. Rainfall Up to **20** mm was observed over Kerala. Rainfall Up to **10** mm was observed over J& K Uttarakhand North West Bihar Madhya Maharashtra West Madhya Pradesh adjoining Rajasthan Rest Assam Nagaland Manipur East Arunachal Pradesh West Tamilnadu.

**HEM:.**

Rainfall Up to **70** mm was observed over North Kerala Meghalaya, Southwest J & K, North Himachal Pradesh, Coastal Odisha South Interior Karnataka. Rainfall Up to **14** mm was observed over Uttarakhand, North West Bengal West Assam. Rainfall Up to **07** mm was observed over Madhya Maharashtra North Bihar South West Odisha adjoining South Chhattisgarh Rest Assam Arunachal Pradesh Nagaland Manipur South Interior Karnataka South Kerala adjoining Tamilnadu.

### **RADAR and RAPID Observation:**

DWR Composite at 1230hrs IST indicated significant convection over East Assam, Central Jharkhand and Central Odisha and in RAPID RGB Satellite imagery at 1600hrs IST also including Lakshadweep, Minicoy, Andaman & Nicobar Islands.

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

Higher Dust concentration was observed over north-west Africa and Arab countries . Dust concentration is expected to increase over north-west India for next five days. High PM10 concentration was observed over Rajasthan and is expected to increase over north India in next five days.

## **2. NWP MODEL GUIDANCE:**

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

#### **1. Weather Systems:**

**12UTC Charts of Day 0-4** show evolution of heat low over NW India and adjoining Pakistan with MSLP values lower than 990hPa on Day-2 to Day-4.

**12UTC charts on days from Day0-1:** show a zone of wind discontinuity at 925 hPa; SW-NE extending from NIK-Maharashtra region to Jharkhand and WB region. Region confine to Odisha and Jharkhand in Day 2-3.

**A CYCIR is seen over Bay of Bengal** from Day-0 onwards and is seen to intensify on Day-2, tracking towards Myanmar and **is likely to cross the coast at around 06UTC on 29<sup>th</sup> May 2017 near 19N/94E.**

#### **2. Location of jet and jet core at 500hPa:-500hPa Jet core (>60kt):**

Weaker core winds at 12 UTC on all days over India.

#### **3. Convergence at 850 hPa:**

**(Day/Index: Subdivisions with Lower Level Convergence >  $15 \times 10^{-5}$  /s):**

Day0: Jharkhand, Chhattisgarh

Day1: Jharkhand, Punjab, Odisha, Madhya Maharashtra

Day2: Jharkhand, East UP, East MP, Chhattisgarh, TN Puducherry

Day3: Jharkhand, East UP, Haryana, Chandigarh, Delhi, West RJ, East RJ, Odisha, West MP

Day4: Arunachal Pradesh, NENMMT, Jharkhand, Bihar

#### **4. Low level Vorticity:-Positive Vorticity (> $15 \times 10^{-5}$ /s):**

**(Day/Index: Subdivisions with Lower Level Vortex >  $15 \times 10^{-5}$  /s):**

Day0: Jharkhand, Uttarakhand, Himachal Pradesh, TN Puducherry,

Day1: Gangetic WB, Jharkhand, Bihar, East UP, West UP, Saurashtra Kutch, TN Puducherry,

Day2: Jharkhand, Bihar, East UP, West UP, Haryana, Chandigarh, Delhi, Punjab, Saurashtra, Kutch, TN Puducherry, Kerala,

Day3: Assam, Meghalaya, NENMMT, East UP, Haryana, Chandigarh Delhi, West RJ, Saurashtra, Kutch, TN, Puducherry, Kerala,

Day4: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Jharkhand, Haryana, Chandigarh Delhi, TN Puducherry

### **5. Showalter Index: -3 to -4[Very unstable]:**

#### **(Day/Index: Subdivisions with Showalter Index < -4):**

Day0: Arunachal Pradesh, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Odisha, Konkan Goa, Madhya Maharashtra, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, Coastal Karnataka, NI Karnataka, SI Karnataka, Kerala,

Day1: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Himachal Pradesh, Jammu Kashmir, Odisha, East MP, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, SI Karnataka, Kerala,

Day2: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, Odisha, West MP, East MP, Gujarat region Coastal AP, TN Puducherry, SI Karnataka,

Day3: Arunachal Pradesh, Assam, Meghalaya, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, East RJ, Odisha, West MP, East MP, Gujarat region Madhya Maharashtra, Coastal AP,

Day4: Arunachal Pradesh, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, Odisha, West MP, East MP, Gujarat region Saurashtra, Kutch

### **6. K-Index :> 35[Very Unstable thunderstorm likely]:**

#### **(Day/Index: Subdivisions with K Index > 40):**

Day0: Arunachal Pradesh, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, East RJ, Odisha, West MP, Gujarat region Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, NI Karnataka, SI Karnataka, Kerala,

Day1: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Himachal Pradesh, Jammu Kashmir, Odisha, West MP, East MP, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, NI Karnataka, SI Karnataka, Kerala,

Day2: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, East RJ, Odisha, West MP, East MP, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, NI Karnataka, SI Karnataka,

Day3: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, East RJ, Odisha, West MP, East MP, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, NI Karnataka, SI Karnataka,

Day4: Arunachal Pradesh, NENMMT, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, East RJ, Odisha, West MP, East MP, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, TN Puducherry, NI Karnataka, SI Karnataka

## **7. Spatial distribution of TTI (TTI >50 [Scattered Thunderstorms few severe]):**

### **(Day/Index: Subdivision with Total Totals Index > 52):**

Day0: Arunachal Pradesh, Sub Himalayan WB, Jharkhand, Bihar, East UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, West RJ, Odisha, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema, SI Karnataka,

Day1: Arunachal Pradesh, Sub Himalayan WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, Odisha, East MP, Chhattisgarh, Coastal AP, Telangana,

Day2: Arunachal Pradesh, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, Odisha, West MP, East MP, Marathwada, Vidarbha, Chhattisgarh, Coastal AP, Telangana, Rayalaseema,

Day3: Arunachal Pradesh, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, East RJ, Odisha, West MP, East MP, Vidarbha, Chhattisgarh, Coastal AP,

Day4: Arunachal Pradesh, Sub Himalayan WB, Gangetic WB, Jharkhand, Bihar, East UP, West UP, Uttarakhand, Punjab, Himachal Pradesh, Jammu Kashmir, West RJ, Odisha, West MP, East MP, Vidarbha, Chhattisgarh, Coastal AP, Telangana

## **8. Rainfall and thunder storm activity:**

### **(Day/Index: Subdivisions with Precipitation > 2 cm):**

Day1: Arunachal Pradesh, Assam Meghalaya, Sub Himalayan WB, Bihar, Uttarakhand, Andaman Nicobar, Kerala

Day2: Arunachal Pradesh, Assam Meghalaya, Sub Himalayan WB, Jharkhand, Bihar, East UP, Uttarakhand, Andaman Nicobar, Kerala

Day3: Arunachal Pradesh, NENMMT, Bihar, East UP, West UP, Uttarakhand, Himachal Pradesh, Jammu Kashmir, Andaman Nicobar, Telangana, Kerala

Day4: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Gangetic WB, Jharkhand, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, Himachal Pradesh, Andaman Nicobar, TN Puducherry, Coastal Karnataka, Kerala

Day5: Arunachal Pradesh, Assam, Meghalaya, NENMMT, Sub Himalayan WB, Bihar, East UP, West UP, Uttarakhand, Haryana, Chandigarh Delhi, TN Puducherry, Coastal Karnataka, Kerala

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

### **1. Weather Systems:**

00 UTC analysis shows an east west trough over Haryana, UP, Bihar, Jharkhand and adjoining areas. The trough also has a N-S component and is seen extending along MP up to Maharashtra region. . The trough is now extending up to interior TN in the forecast and the low formed in the BOB region is now shown to move towards Myanmar Coast and dissipate by day 4.

**2. Location of jet and jet core at 500 hPa:-500 hPa Jet core (>60kt):** No presence of jet core over the Indian region for the next 5 days

**3. Low level Vorticity:-Positive Vorticity 850hPa (>12 x 10<sup>-1</sup>/s):**

Analysis shows low level positive vorticity (>12 x 10<sup>-5</sup>/s) mainly over isolated pockets in Punjab, MP, AP, Karnataka and over the north eastern region. The high vorticity belts are mainly confined over regions of UP, Haryana, Bihar, MP, AP and south peninsular region during next 3 days.

**4. Spatial distribution of T-Storm Initiation Index, Lifted Index, Total Total Index, CAPE, CINE and Sweat Index (High potential for thunderstorm):**

**T-Storm Initiation Index (> 4):** Significant threshold values are noticed over GWB, Odisha, Coastal AP and also over few regions in Gujarat and Rajasthan in the analysis. Forecast shows high threshold values over Gujarat, Rajasthan along with few pockets in Odisha and coastal AP for the next 3 days.

**Lifted Index (< -2):** The areas with index less than -2 lies along east UP, Bihar, Chhattisgarh, GWB and major regions of AP and TN along with major regions along the west coast for the next 3 days.

**Sweat Index (> 400):** 00UTC shows significant values over major parts over UP, Bihar, GWB, Odisha, AP, TN and over major regions bordering the west coast of the country and is expected to persist for the next 3 days.

**CAPE (> 1000):** Mostly over Bihar, GWB, Odisha, and AP and other regions over the east coast, Gujarat, Rajasthan and along with major regions bordering the west coast during the next 3 days.

**CINE (50-150):** Maximum CIN values are found in areas over UP, Bihar, GWB, Odisha, AP and TN and along with major pockets in the Maharashtra, Gujarat and Rajasthan region for the next 2-3 days.

**5. Rainfall and thunderstorm activity:**

10-40 mm rainfall is forecasted tomorrow over major pockets over Kerala, Odisha, WB, north eastern states and along with the foothills of the Himalayas and is expected to persist for the next 3 days.

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

**1. Model Reflectivity (Max. dBz):** 15-40 dBZ over regions of the Himalayan foothills adjoining UP, Bihar and WB and isolated pockets of the south peninsular region today.

15-40 dBZ: over major parts of the north eastern states, along the foothills and few isolated pockets over UP, Bihar and WB during tomorrow.

**2. Spatial distribution of Total Total Index, K-Index, CAPE and CIN [High potential for thunderstorm]**

**CAPE (> 1000):** Mostly along Bihar, Jharkhand, WB, Odisha, AP and TN and along major regions bordering the west coast during next 3 days.

**CINE (50-150):** Higher values over most regions of India except over J & K region and NE states during next three days.

**3. Rainfall and thunderstorm activity:**

10-40 mm over isolated pockets in UP, Bihar and WB region adjoining the Himalayas, along the north east region and over few pockets in the Kerala region and it is expected to persist for the next 3 days.

### **3. IOP ADVISORY FOR 24 and 48Hrs:**

#### **Summary and Conclusions:**

#### **Day-1 & Day-2:**

Under the influence of the low pressure area over southeast Bay of Bengal & adjoining central Bay of Bengal, which is likely to become marked during next 2-3 days and move in a northwards direction, rainfall is likely to continue and increase over the North Eastern states and Andaman and Nicobar Islands during the next two days. With the strengthening of westerlies and northward shift of shear zone, rainfall is also likely to increase over the south-west peninsular coast of India during the next two days. In association with the Western Disturbance, which has moved east-northeastwards from over Jammu and Kashmir, thunderstorm activity is expected over Uttarakhand on day 1. In association with the upper air cyclonic circulation over Jharkhand and adjoining Bihar weather is expected over eastern India during the next two days.

#### **24 hour Advisory for IOP:**

Assam and Meghalaya, Sikkim and Sub Himalayan West Bengal  
Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura  
Andaman and Nicobar Islands  
Interior Tamil Nadu, Kerala, South Interior Karnataka,  
North Coastal Andhra Pradesh, Telangana,  
Orissa, Jharkhand, Bihar, Gangetic West Bengal,  
Uttarakhand

#### **48 hour Advisory for IOP:**

Assam and Meghalaya, Arunachal Pradesh, Sikkim and Sub Himalayan West Bengal  
Nagaland, Manipur, Mizoram, Tripura  
Andaman and Nicobar Islands  
South Interior Karnataka, Kerala, Interior Tamil Nadu  
Jharkhand, Bihar, Orissa, Gangetic West Bengal,  
Uttarakhand, West Uttar Pradesh and East Uttar Pradesh

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

Past24hourHEMandIMRrainfall(upto03UTCoftoday)

IMR: [http://satellite.imd.gov.in/img/3Ddaily\\_imr.jpg](http://satellite.imd.gov.in/img/3Ddaily_imr.jpg)

HEM: [http://satellite.imd.gov.in/img/3Ddaily\\_he.jpg](http://satellite.imd.gov.in/img/3Ddaily_he.jpg)

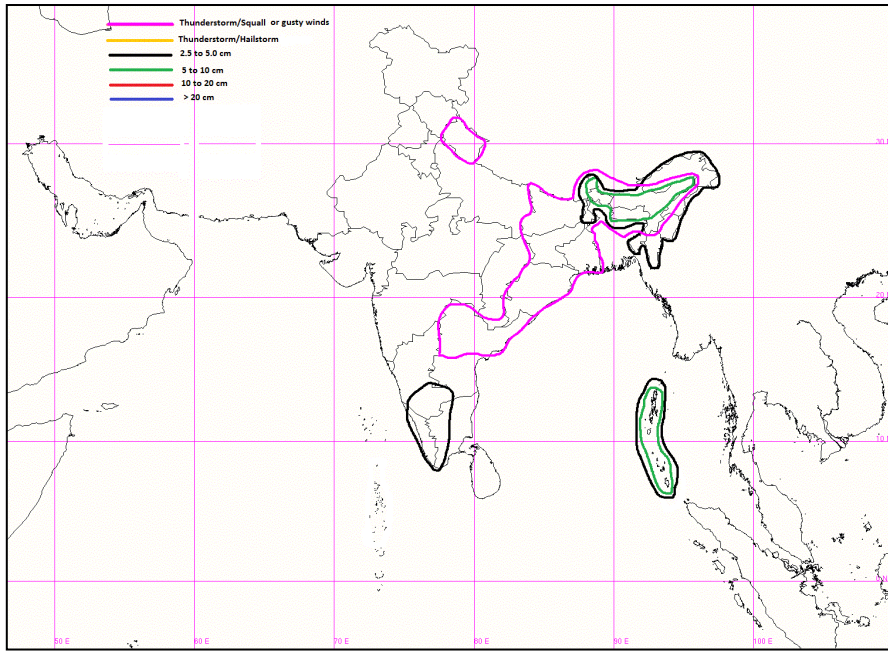
ForRadarimagesofthepast24hoursincludingmosaicofimages:

[http://ddgmui.imd.gov.in/dwr\\_img/](http://ddgmui.imd.gov.in/dwr_img/)

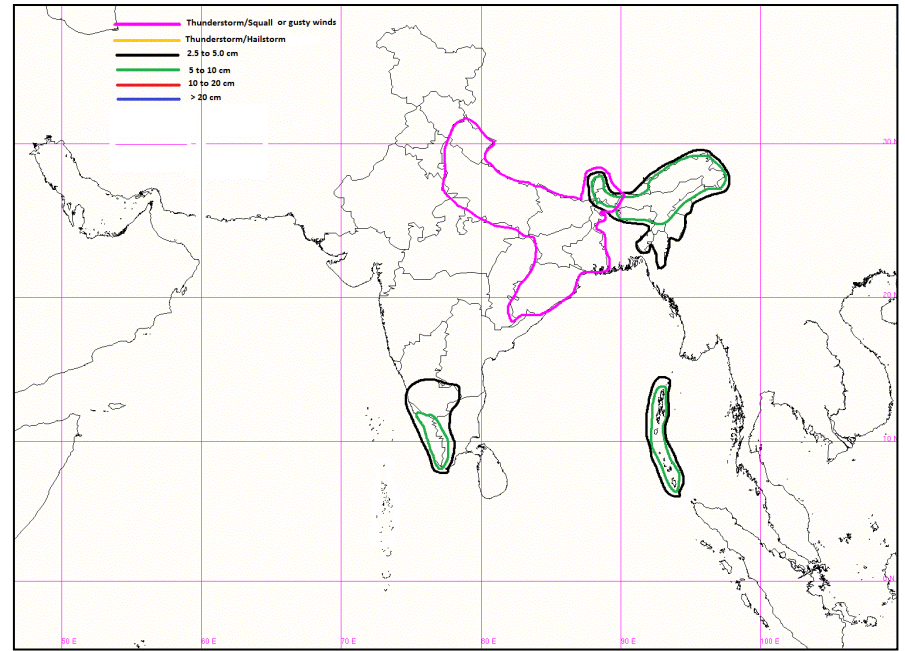
Satellite sounder based T- Phigram

[http://satellite.imd.gov.in/map\\_skm2.html](http://satellite.imd.gov.in/map_skm2.html)

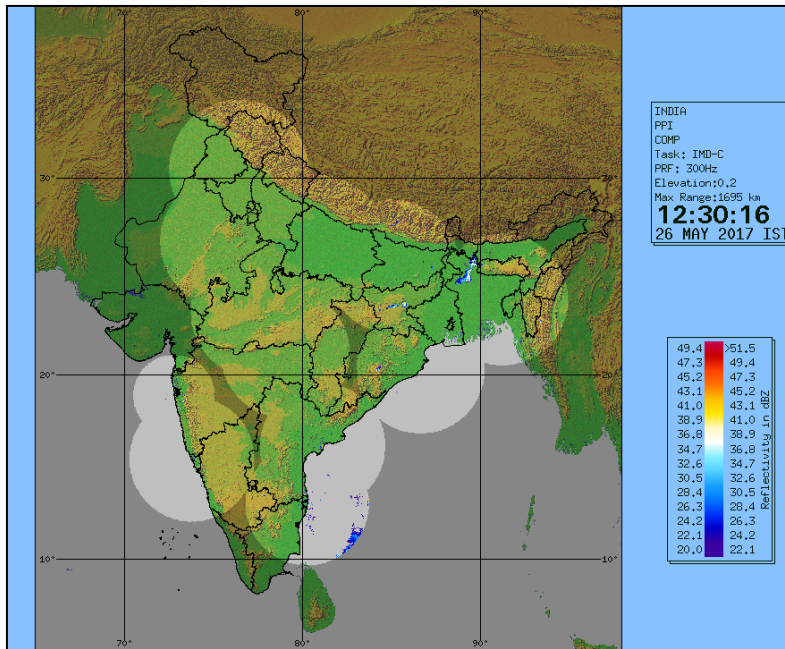




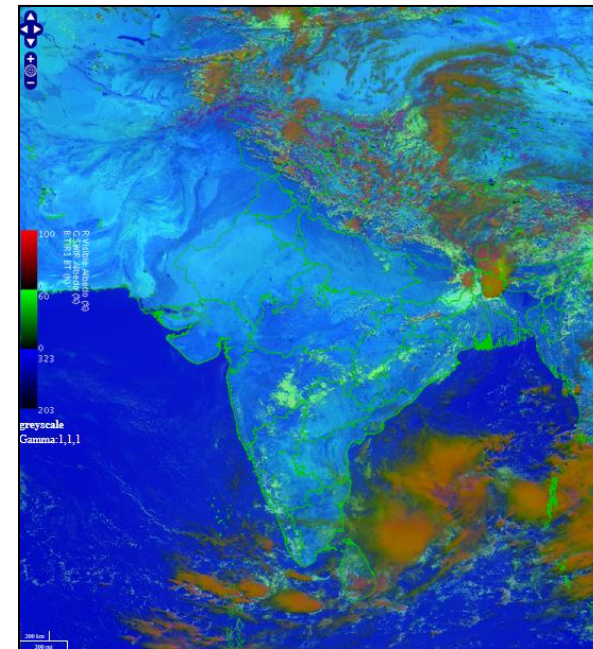
**IOP Advisory for 24 hours**



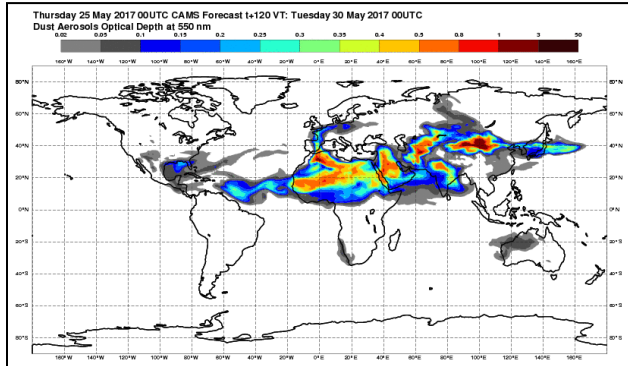
**IOP Advisory for 48 hours**



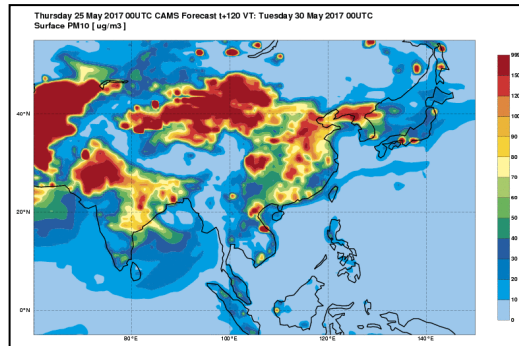
**DWR Composite at 1230 hrs IST of today**



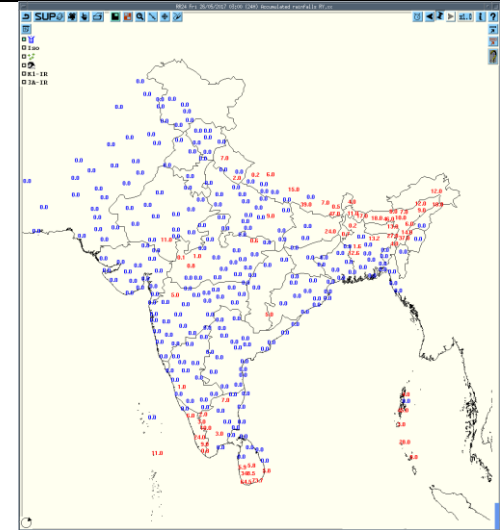
**RAPID RGB Satellite Imagery at 1130 hrs IST of today**



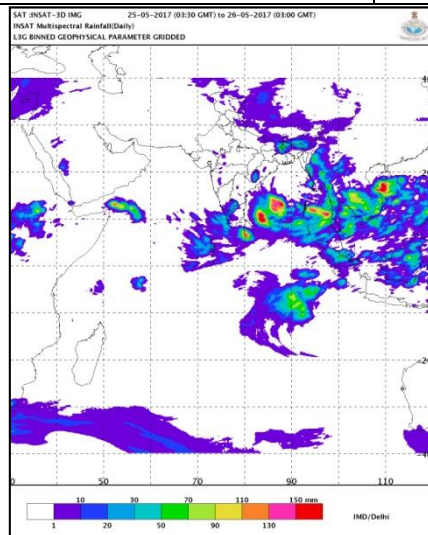
**Forecast Dust Concentration for 00UTC of 30<sup>th</sup> May**



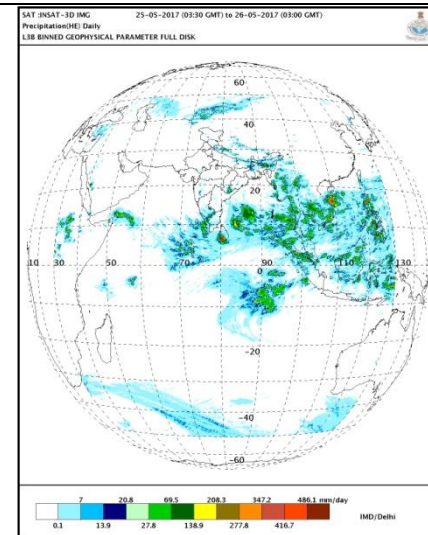
**PM10 Forecast for 00UTC of 30<sup>th</sup> May**



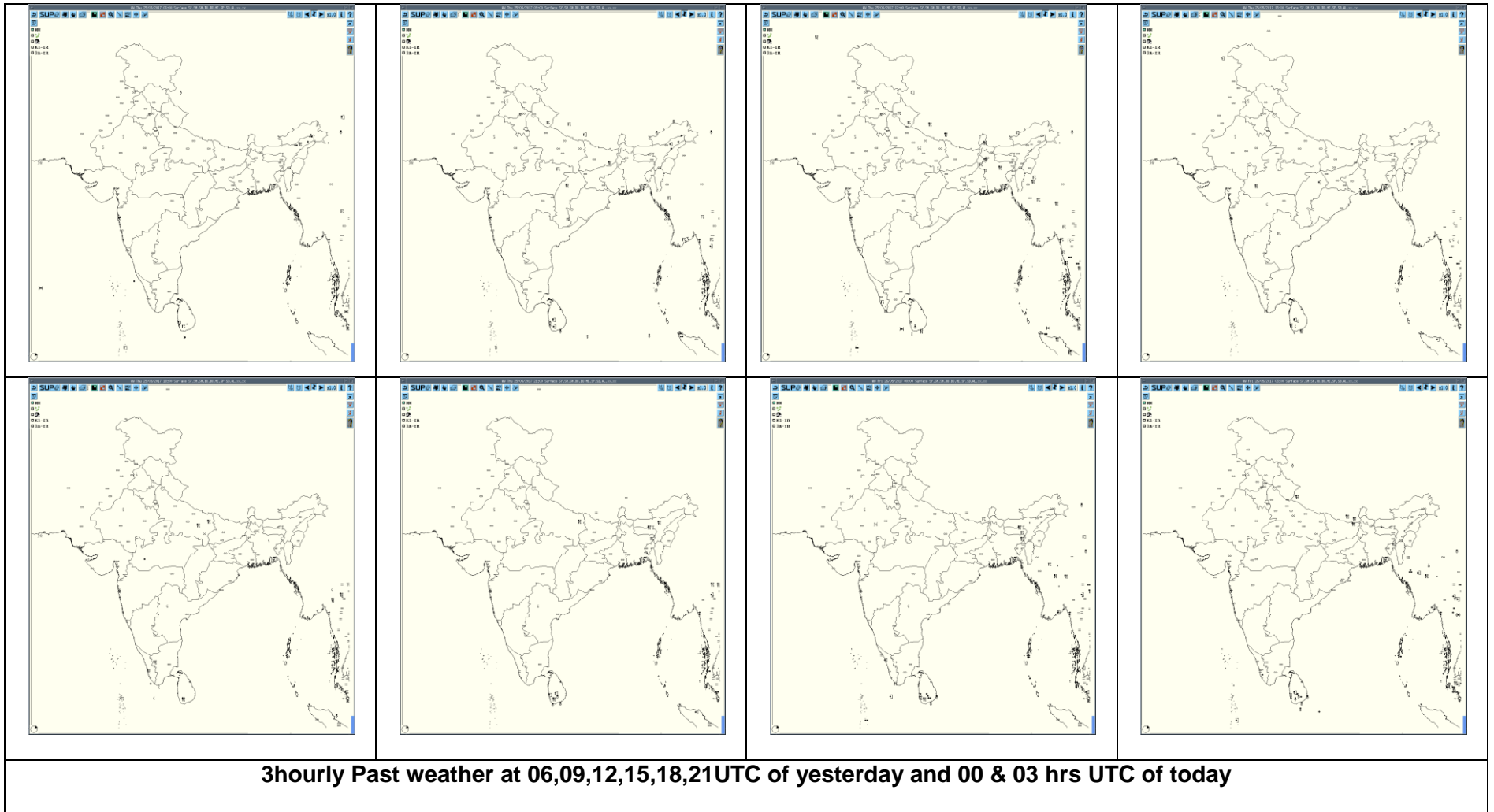
**Accumulated 24 Hour rainfall (in red) recorded at 0300UTC of today**

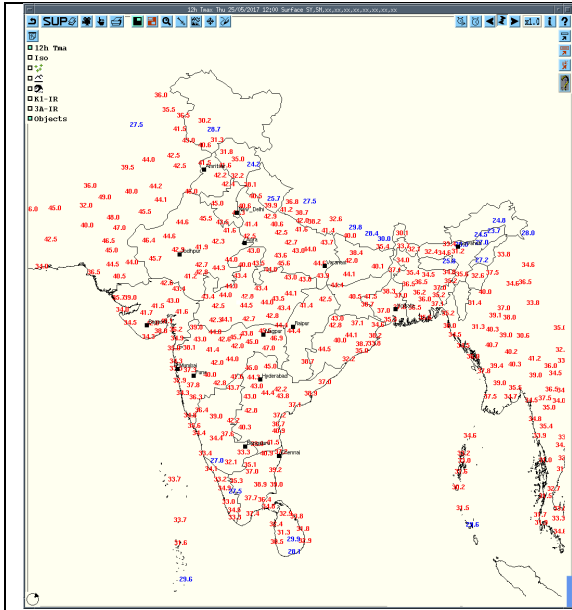


**IMR Rainfall**

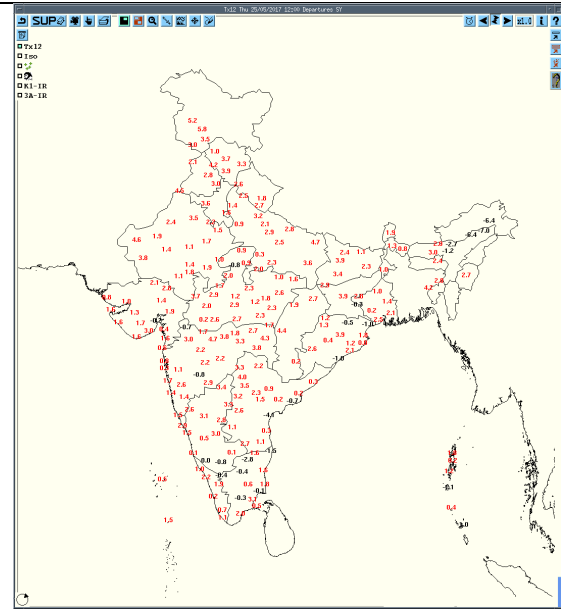


**HEM Rainfall**

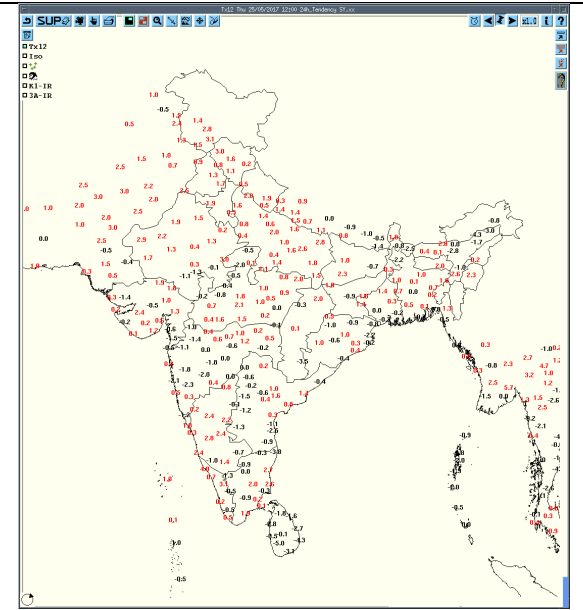




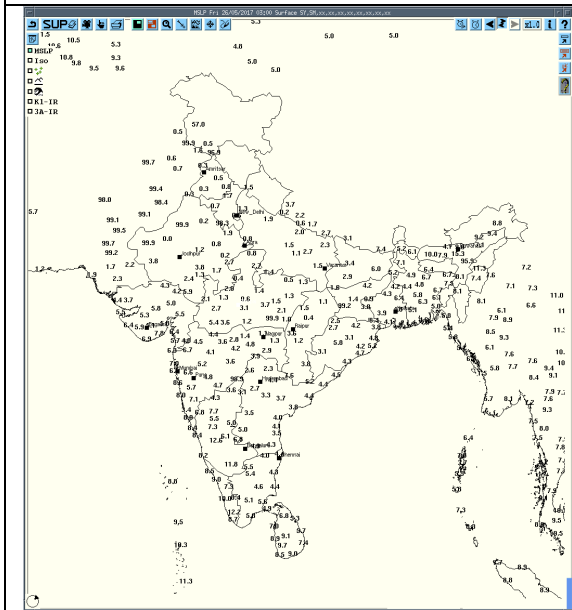
Tmax



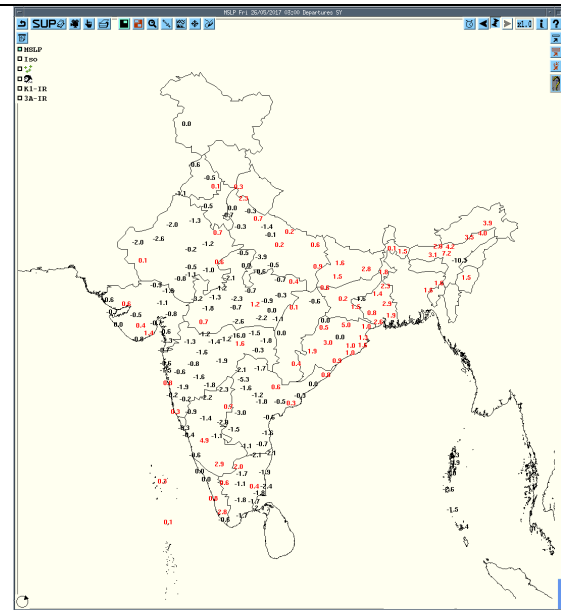
Departure Tmax



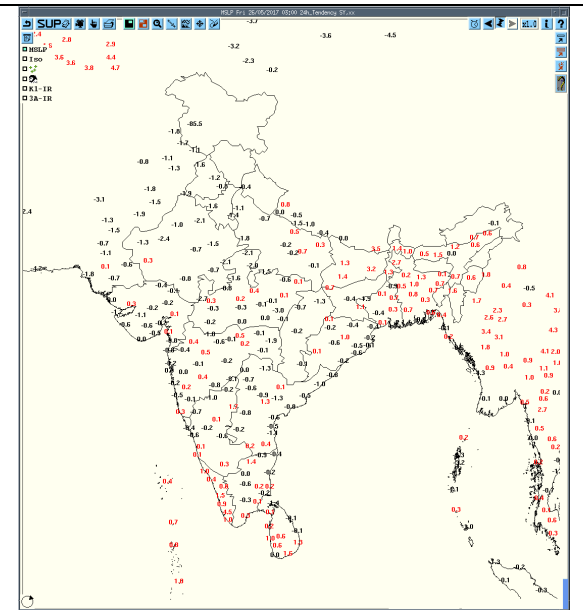
Tendency Tmax



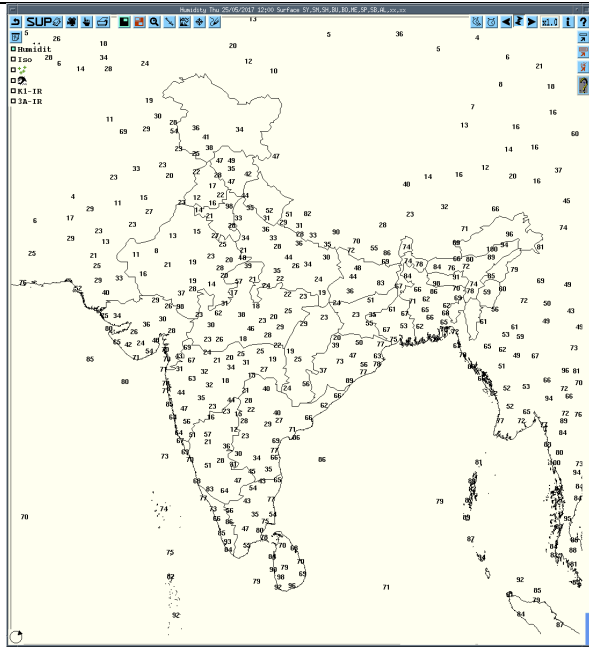
MSLP



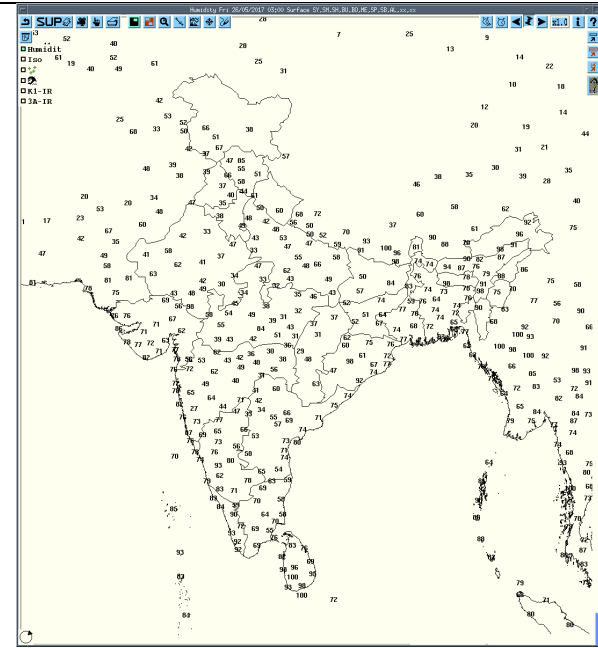
Departure MSLP



Tendency MSLP



**RH at 12UTC yesterday**



**RH at 03UTC today**

**Realised past 24hrs TS/SQ/HS Data (reported at 0300UTC of the day):**

<b>Realized weather past 24hours (Based on SYNERGIE Products)</b>					
<b>Date</b>	<b>Time of Reporting</b>	<b>Name of Station Reporting</b>	<b>Region</b>	<b>STATE</b>	<b>Weather Event</b>
25-05-17	0600UTC	North Lakhimpur	NE India	Assam	Thunderstorm
25-05-17	0900UTC	Mukteshwar	NW India	Uttarakhand	Thunderstorm
		Bhagalpur	East India	Bihar	Thunderstorm
		Pendra road, Jagdalpur	Central India	Chhattisgarh	Thunderstorm
25-05-17	1200UTC	Tehri, Mukteshwar	NW India	Uttarakhand	Thunderstorm
		Gangtok	East India	Sikkim	Thunderstorm
		Malda	East India	West Bengal	Thunderstorm
		Bagdogra	East India	West Bengal	Thunderstorm
		Kottayam, Thiruvanthapuram	South India	Kerala	Thunderstorm
25-05-17	1500UTC	Indore	Central India	Madhya Pradesh	Thunderstorm
		Hyderabad	South India	Andhra Pradesh	Thunderstorm
		Thiruvanthapuram	South India	Kerala	Thunderstorm
25-05-17	1800UTC	Sultanpur, Gorakhpur	NW India	Uttar Pradesh	Thunderstorm
		Hyderabad	South India	Andhra Pradesh	Lightning
		Coimbatore	South India	Tamilnadu	Thunderstorm
		Cochin	South India	Kerala	Thunderstorm
25-05-17	2100UTC	Gorakhpur	NW India	Uttar Pradesh	Thunderstorm
		Guwahati, Tezpur	NE India	Assam	Thunderstorm
		Hyderabad	South India	Andhra Pradesh	Lightning
26-05-17	0000UTC	Guwahati,	NE India	Assam	Thunderstorm
		Shillong	NE India	Meghalaya	Thunderstorm
		Hyderabad	South India	Andhra Pradesh	Lightning
		Thiruvanthapuram	South India	Kerala	Thunderstorm
26-05-17	0300 UTC	Nil	Nil	Nil	Nil

## Past 24 hours DWR Report:

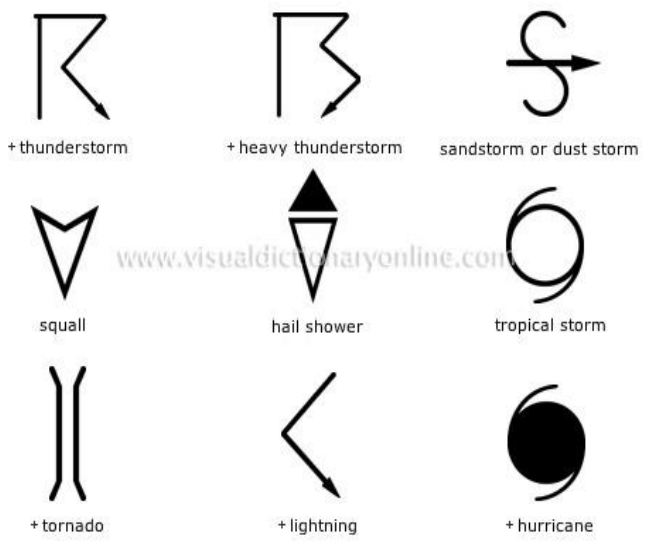
Radar Station name	Date	Time interval of observation (UTC)	Organization of the cells (Isolated single cells/multiple cells/ convective regions/ squall lines) with height of 20dBZ echo top and maximum reflectivity	Formation w.r.t radar station and Direction of movement	Remarks	Associated severe weather if any	Districts affected
DWR Machilipatnam	03Z of 25/05/17 to 03Z of 26/05/17	0911 to 1301 UTC	Multiple cells average height of 11.5 km with maximum reflectivity of 63 dBZ	NE (247km) and moving SW ly direction with average speed of 27 kmph	Cell started forming at 0911UTC, at NE (247km) from Radar the maximum reflectivity during 0911 to 1251 UTC and died down at 1301UTC	Possibility of Thunder storm with Hail and rain with moderate winds	Visakhapatnam and East Godavari Districts
	03Z of 25/05/17 to 03Z of 26/05/17	1011 to 1121 UTC	Multiple cells average height of 9.5 km with maximum reflectivity of 60.5 dBZ	NW (239km) and moving SE ly direction with average speed of 12 kmph	Cell started forming at 1011UTC, at NW (239km) from Radar the maximum reflectivity during 1011 to 1111 UTC and died down at 1121UTC	Possibility of Thunder storm with Hail and rain with winds	Jayasankar Bhupalapalli and Mahabubabad Districts
	03Z of 25/05/17 to 03Z of 26/05/17	1011 to 1051 UTC	Multiple cells average height of 7.5 km with maximum reflectivity of 55.5 dBZ	W(238km) stationary	Cell started forming at 1011UTC, at W (238km) from Radar the maximum reflectivity during 1011 to 1041 UTC and died down at 1051UTC	Possibility of Thunder storm and rain with light winds	Kurnool District
	25/05/17	0702-0742 0822-1722 1800-2400	<b>Multiple</b> <b>Multiple</b> <b>Single</b>	<b>101 km NNE</b> <b>120 km NE, moving towards E</b> <b>111km E</b>	<b>Max Z=29 ht of cloud=1.2-4.8km</b> <b>Max Z=46 ht of cloud=2.3-5.0km</b> <b>Max Z=41 ht of cloud=2.0-4.7km</b>	<b>Nil.</b>	<b>Isolated places in district of Seoni, Balaghat, Mandla, Goindia and Bhandara.</b>
	26/05/17	0000-0252	<b>Nil</b>				
Paradeep		<b>260517</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>	<b>Nil</b>



DWR Station	Date	Time interval of observation	Organization of the cells ( isolated single cell/multiple cells convective regions/squall lines) with height of 20 dBZ echo top and maximum reflectivity	Formation w.r.t. radar station & direction of movement	Remarks	Associated severe weather, if any	Districts affected
Lucknow	26052017	250952 UTC TO 251022 UTC	Isolated cell formed over 30 Km NNW that weakened with movement. Max. reflectivity was observed to be 46 dBZ & cell height was 11 Km(20 dBZ echo top)	The system moved easterly with avg. velocity 40 Km/h maintaining distance of 30 Km from the station. Dissipated at around 1022 UTC over 30 Km N.	NIL	NIL	NIL
		251022 UTC to 251214 UTC	Multiple cell system started forming at around 1022 UTC over 20 Km North, 20-40 Km S,SE. The system matured & more widespread at 1042 UTC extending from 30-60 Km North, 20 Km East & 20-40 Km SE. It became more intense with movement. Max. Reflectivity was 54 dBZ & height reached 9 Km (20 dBZ echo top).	System move at high speed 75 Km/h Easterly weakened & later dissipated at around 1214 UTC.	Radar was on standby/shut down from 1117 UTC to 1214 UTC due to power failure.	TS	Lucknow Sultanpur
		251233 UTC To 251312 UTC	<b>At 30 Km SE, multiple cell system formed but it weakened with movement. Max. reflectivity of the system was 46 dBZ &amp; height was 8 Km.</b>	Moved easterly with speed 90 Km/h & dissipated at around 1312 UTC over 50 Km ESE.		NIL	NIL
		251532 UTC to 251732 UTC	Formed as isolated cell at 1532 UTC over 120 Km East, matured with movement at around 1622 UTC over 150 Km East. System spitted, forming a multiple cell system over the same location. Max. Reflectivity was 46 dBZ and height was 8 Km at standard scale.	Moved easterly with avg. velocity 65 Km/h first grew stronger but later weakened & dissipated at around 180 Km East w.r.t. the station.		TS	Gorakhpur
		251632 UTC To 251922 UTC	Isolated cell formed over 120 Km SE, matured at around 1742 UTC over 130 Km ESE. It weakened around 1812 UTC but grew stronger further with movement over 180 Km East. Max. reflectivity was 46 dBZ & height reached 8 Km.	The system moved with 70 Km/h NE & dissipated 200 Km East.		TS	Ghazipur Ballia
Bhuj	26052017	Nil	Nil	Nil	Nil	Nil	Nil

Radar station name	Date	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
Jaipur	25/05/17	0710-1140 UTC	multiple cells with average height of 8.5 km maximum reflectivity 59.0 dBZ	Cell develop 0710 to 1140 UTC of 25/05/17 towards N,NNW,NNE,SW of Jaipur and movement S and SE at speed 18-24 km/hr	Cells starts forming from 0710 UTC AT NE of Jaipur and reaches maximum reflectivity during 0830-1100 UTC.	Moderate Thunderstorm at a few places and isolated places	Sikar, Ajmer, Tonk, Jaipur, Nagaur
	25/05/17	1700-2050 UTC	multiple cells with average height of 6.0 km maximum reflectivity 48.5 dBZ	Cell develop 1700 to 2050 UTC of 25/05/17 towards SE of Jaipur and movement S and SE at speed 30-36 km/hr	Cells starts forming from 0504 UTC NW of Jaipur and maximum reflectivity during 1820-2000 UTC.	Moderate Thunderstorm at a few places and isolated places	Tonk and Bundi
Patiala		25 MAY 0300 UTC-TO 0600 UTC	NO SIGNIFICANT ECHO	-----.	-----	-----	-----
			NO SIGNIFICANT ECHO	-----.	-----	-----	-----
		25 MAY 0900 UTC-TO 1200 UTC	Multiple cells max. 55.0 dBZ Ht. 10-11 km	NE SECTOR. MOVEMENT SE WARDS	-----	-----	Nahan, Uttarkashi, Kathial
		25 MAY 1200 UTC TO 1500 UTC	Multiple cells max. 51.5 dBZ Ht. 09-10 km	SE WARDS	-----	-----	Mussorrie, Dehradun, Hardiwar.

Radar Station Name	Date	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
Kolkata	25-05-2017	0301-0711 UTC	NIL	NIL	NO ECHO	NIL	NIL
		0811 -1351 UTC	Isolated cell at a position 24.325 N/ 86.845 E/ 322.0 Degree/ 248.4 km away from radar transformed into big cells with maximum reflectivity of 66.0 dBz at 1001 UTC and maximum height of 19.92 Km at 1021 UTC	NW (248.8 km) Moving in E-ly direction.	A cell formed at 0811 UTC in NW at a distance of 248.8 km from radar. Matured and dissipated at 1351UTC in NE	Thunderstorm Hail/ Rain	N/A
		1031 -1341 UTC	Isolated cell at a position 24.077 N/ 87.371 E/ 329.2 Degree/ 195.2 km away from radar transformed into big cells with maximum reflectivity of 65.0 dBz at 1151 UTC and maximum height of 21.29 Km at 1211 UTC	NNW (195.2 km) Moving in ESE-ly direction.	A cell formed at 1031 UTC in NNW at a distance of 195.2 km from radar. Matured and dissipated at 1341 UTC in North	Thunderstorm Hail/ Rain	N/A
Agartala	26/05/17	250850 - 251320	Multiple cells formed one after another with Maximum Height <b>16 km</b> and maximum reflectivity <b>53 dBZ at 1142 UTC</b>	Formed 140 km NW of DWR and moved SE-wards at around 58 kmph	Cells dissipated at 1322 UTC over Bangladesh	N/A	N/A
		251230 - 251502	Multiple cells with Maximum Height <b>14 km</b> and maximum reflectivity <b>43 dBZ at 1402 UTC</b>	Formed 80 km SE of DWR and moved NE-wards at around 28 kmph	Cells dissipated at 1502 UTC over East Mizoram.	N/A	N/A
		251410 - 260300	Multiple cells with Maximum Height <b>16 km</b> and maximum reflectivity <b>50 dBZ at 2353 UTC</b>	Formed 250 km NNW of DWR and moved S E-wards at around 53 kmph, formed squall line at 2140 UTC	Cells dissipated at 0300 UTC over East Mizoram.	N/A	N/A



∞	haze
⌋	smoke
⊞	dust or sand storm
≡	fog
⚡	drizzle
•	rain
✱	snow
▽	showers
△	hail
⌋	thunderstorm
<b>Weather Symbols</b>	