



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 means 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 Marathawada 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 0300UTC imagery of INSAT 3D):****Convective Activity and cloud description:**

Cell No	Date/Time (UTC)	Area/Location	CTT (- Deg C)	Movement	Remarks
10 (old)	13/1900	NE Bihar, Sub-Himalayan West Bengal adjoining Nepal	76	E-WARDS	Developing
	2000	DO	75		
	2100	DO	71		
	2200	DO	67		
	2300	Sub-Himalayan West Bengal adjoining Bihar extreme N Bangladesh adjoining Meghalaya	65		
	14/0000	Sub-Himalayan West Bengal, extreme N Bangladesh, W Meghalaya adjoining Assam	78		
	0100	DO	71		
	0200	DO	69		
	0300	DO	68		

Scattered low/medium clouds with embedded moderate to intense convection were seen over W Meghalaya, extreme W & SE Assam adjoining Manipur, Tripura and Bay Islands. Scattered low/medium clouds with embedded isolated weak to moderate convection were seen over Arunachal Pradesh, rest Assam, Nagaland and rest Manipur. Scattered low/medium clouds with embedded weak convection were seen over Maharashtra adjoining Gujarat. Scattered low/medium clouds were seen over J & K, Himachal Pradesh, North Uttarakhand, S Madhya Pradesh and rest parts of East & South India. Isolated low/medium clouds over SE Rajasthan and rest 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:

No Significant convection was observed in DWR Composite at 12330hrs IST of today.

RAPID RGB satellite imagery at 1200hrs IST indicated convective clouds over west Assam adjoining Meghalaya, south Assam, Nagaland, Manipur, Mizoram, Tripura, Sikkim, Arunachal Pradesh, J & K 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 Coastal Andhra Pradesh
Sub Himalayan West Bengal, Sikkim
Himachal Pradesh
South Madhya Maharashtra, Vidarbha

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>

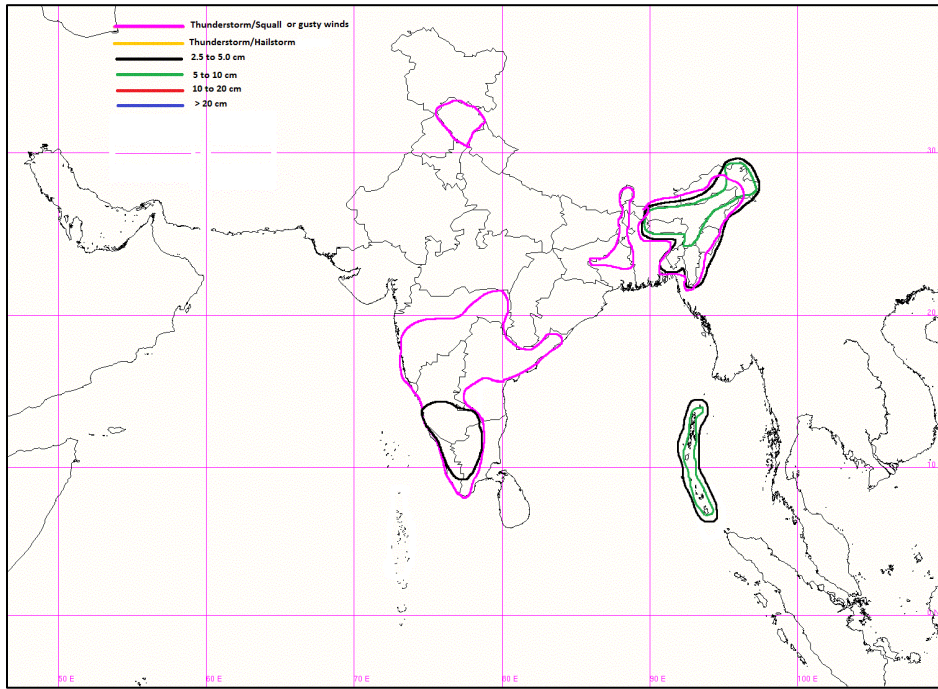
HEM:<http://satellite.imd.gov.in/img/3Ddailyhe.jpg>

ForRadarimagesofthepast24hoursincludingmosaicofimages:

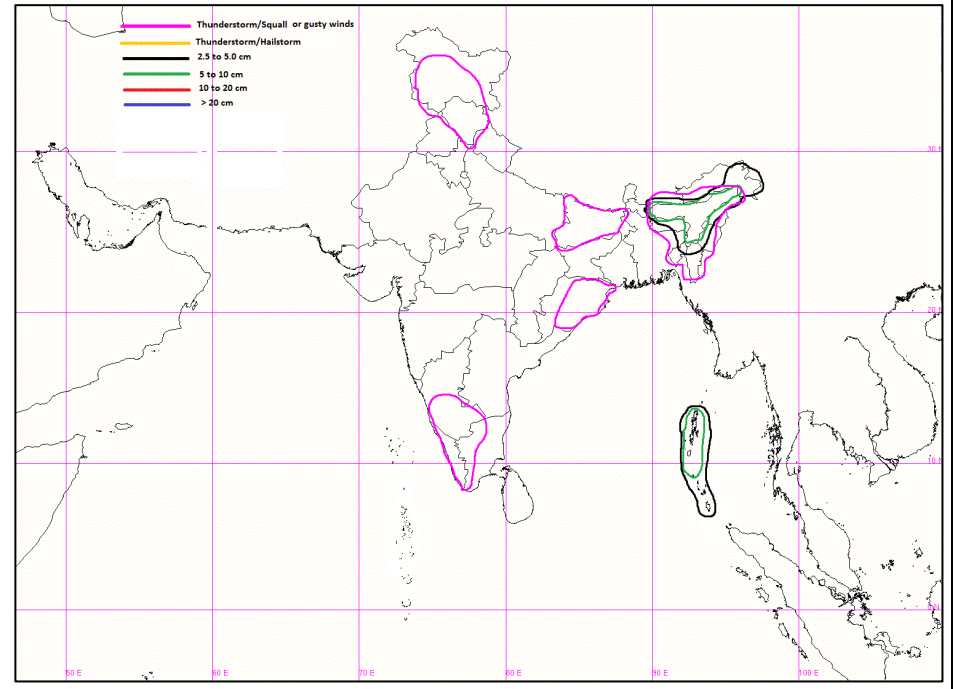
<http://ddgmui.imd.gov.in/dwrimg/>

SatellitesounderbasedT-Phigram

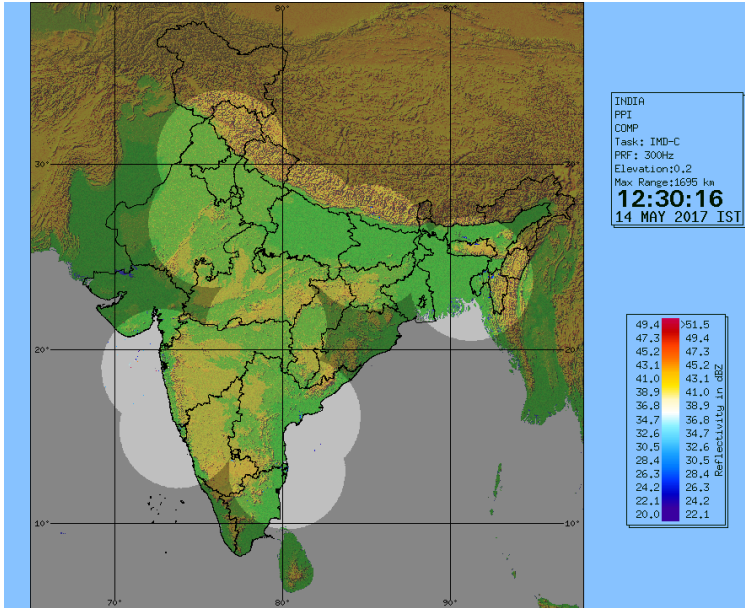
<http://satellite.imd.gov.in/mapskm2.html>



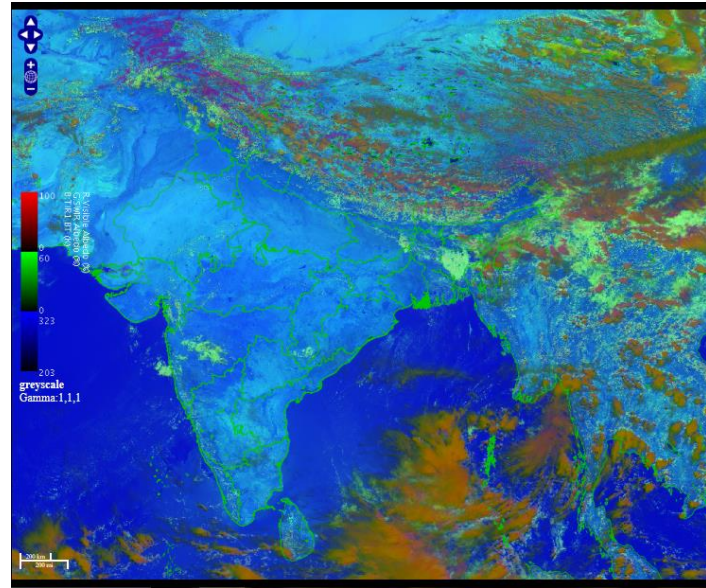
IOP Advisory for 24 hours



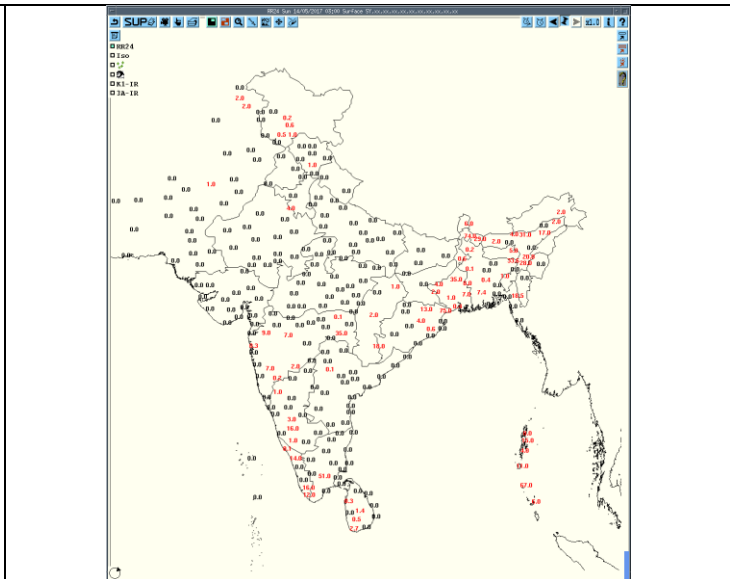
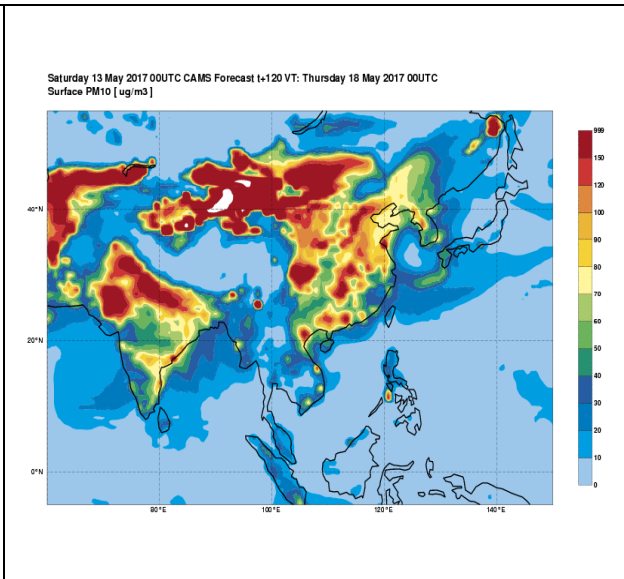
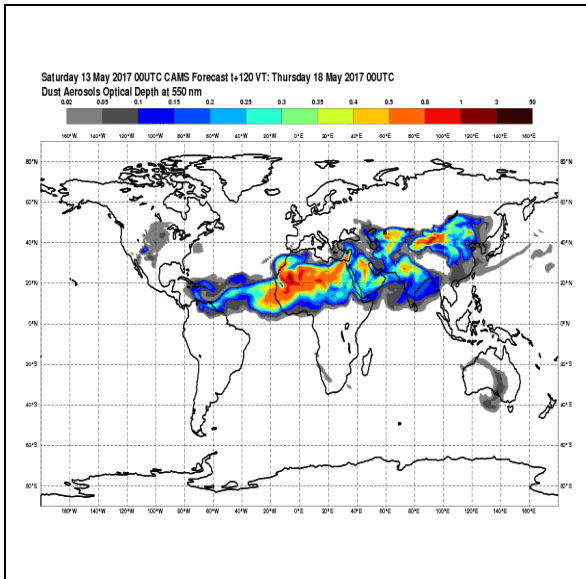
IOP Advisory for 48 hours



DWR Composite at 1230hrs IST of today



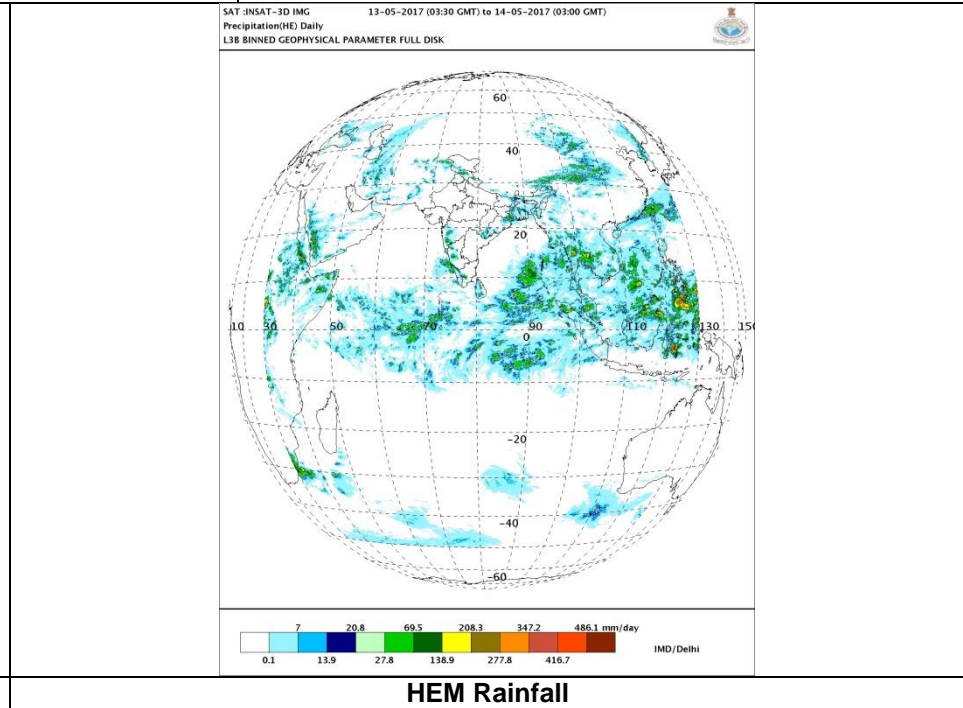
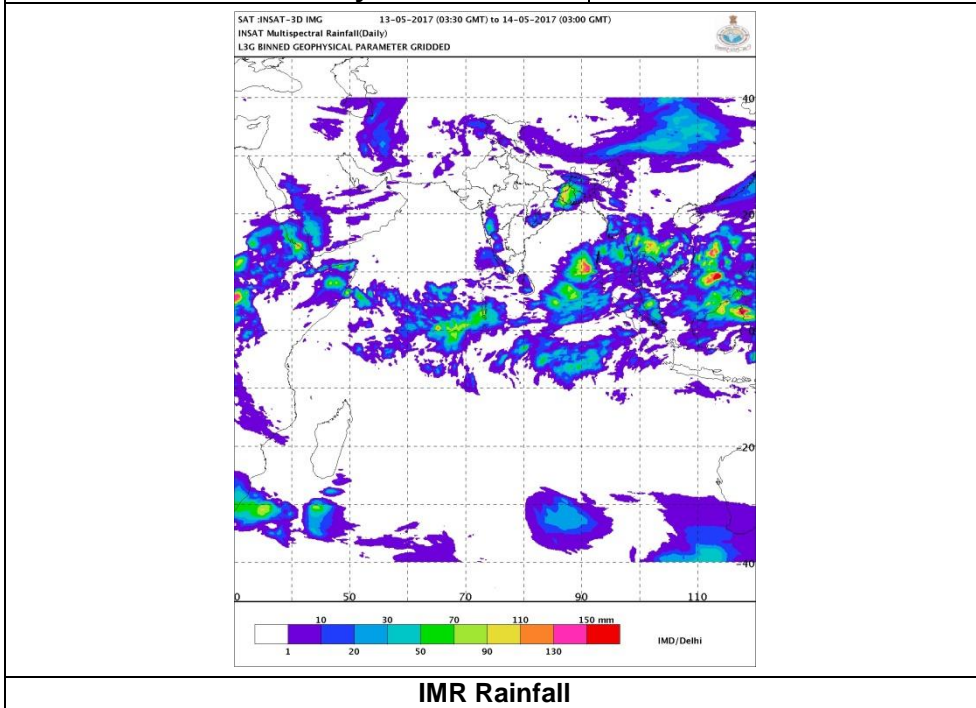
RAPID RGB Image of INSAT 3D at 1200 hrs IST of today

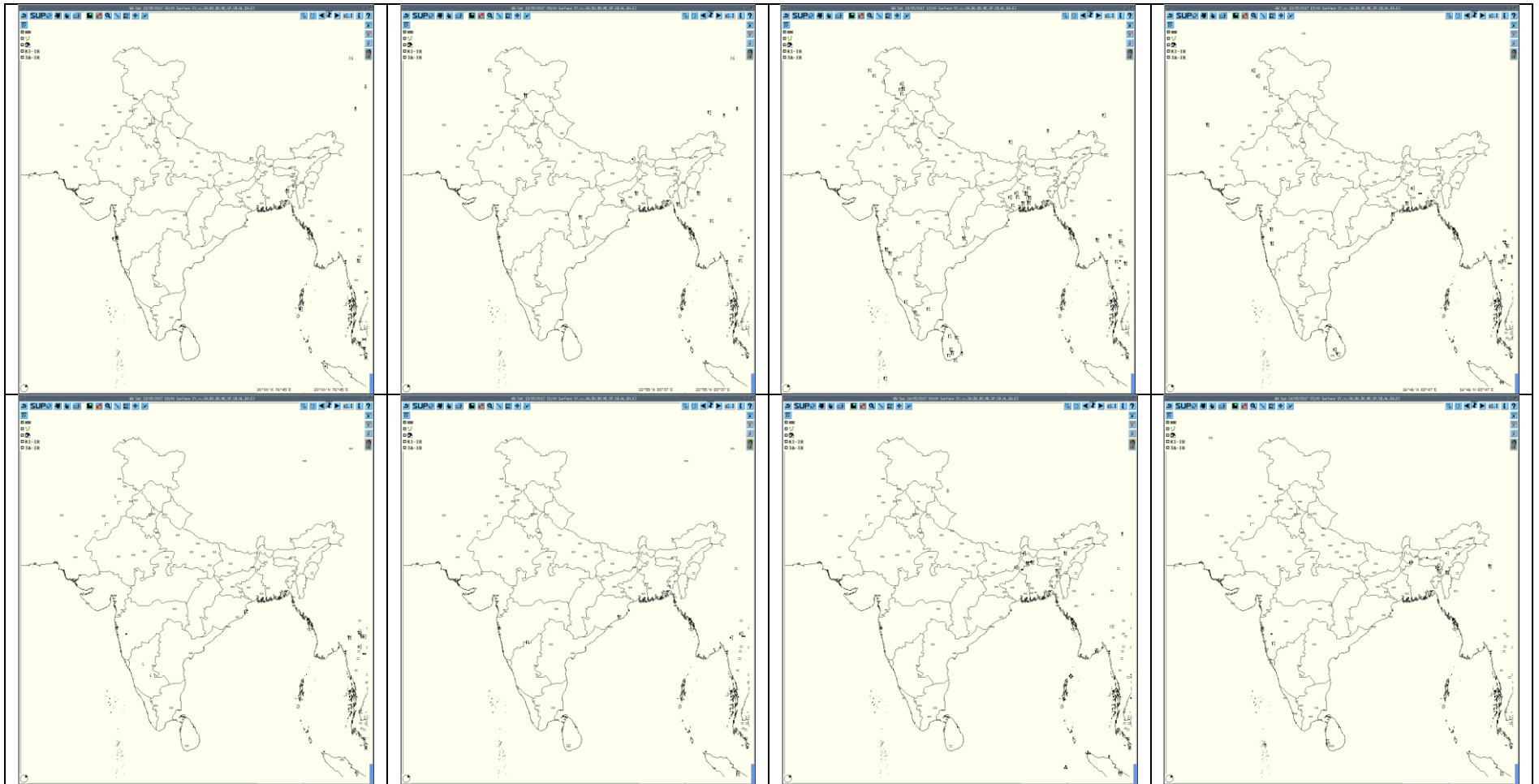


Forecast Dust Concentration for 00UTC of 18th May

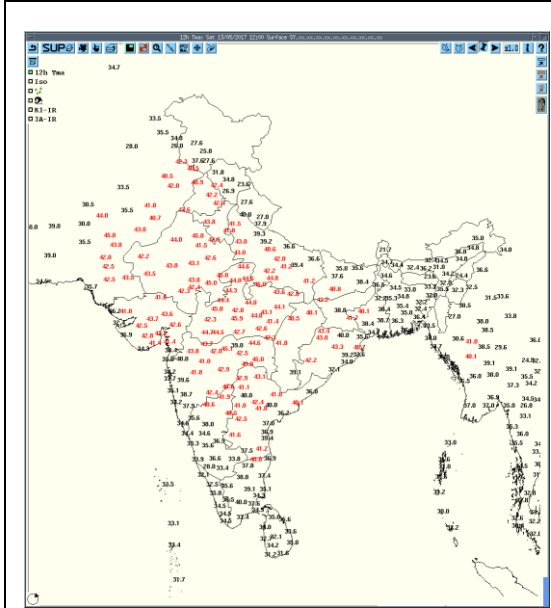
PM10 Forecast for 00UTC of 18th May

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

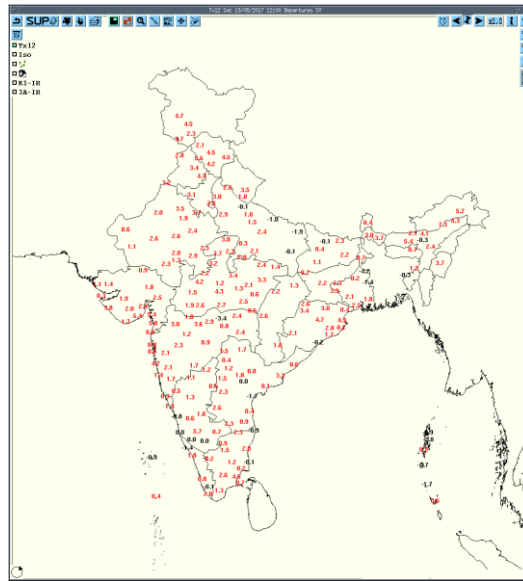




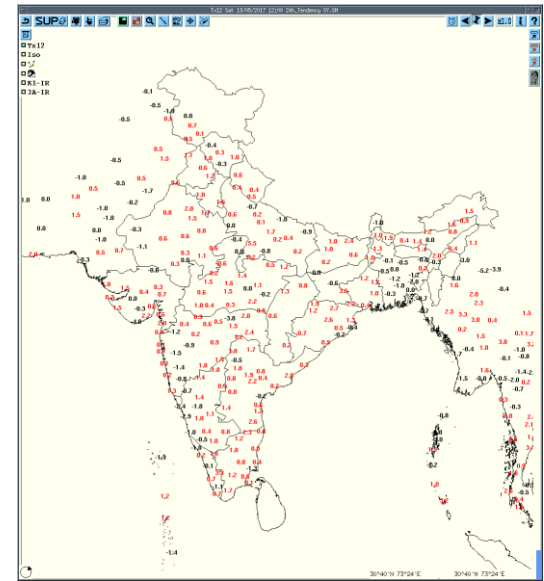
3hourly Past weather at 06,09,12,15,18,21UTC of yesterday and 00 & 03 hrs UTC of today



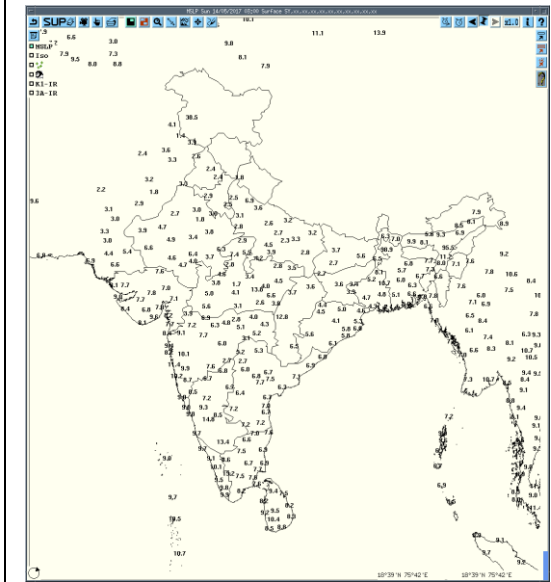
Tmax



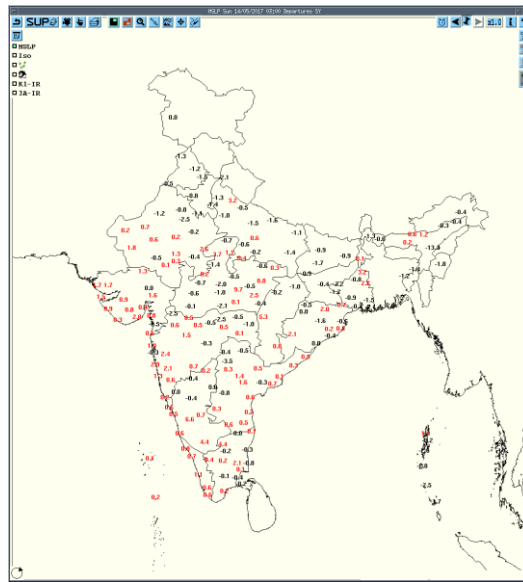
Departure Tmax



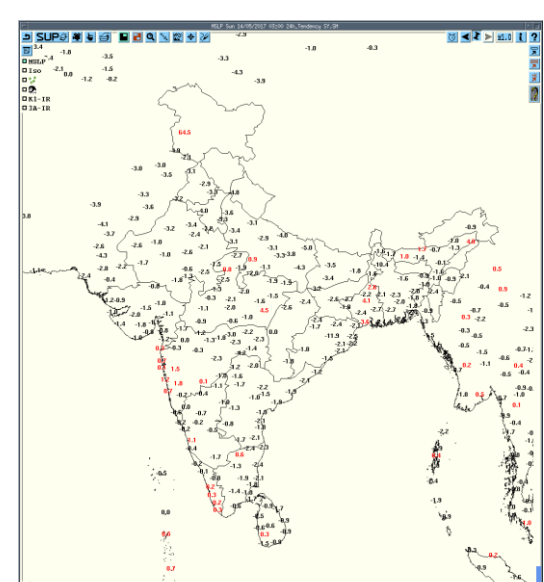
Tendency Tmax



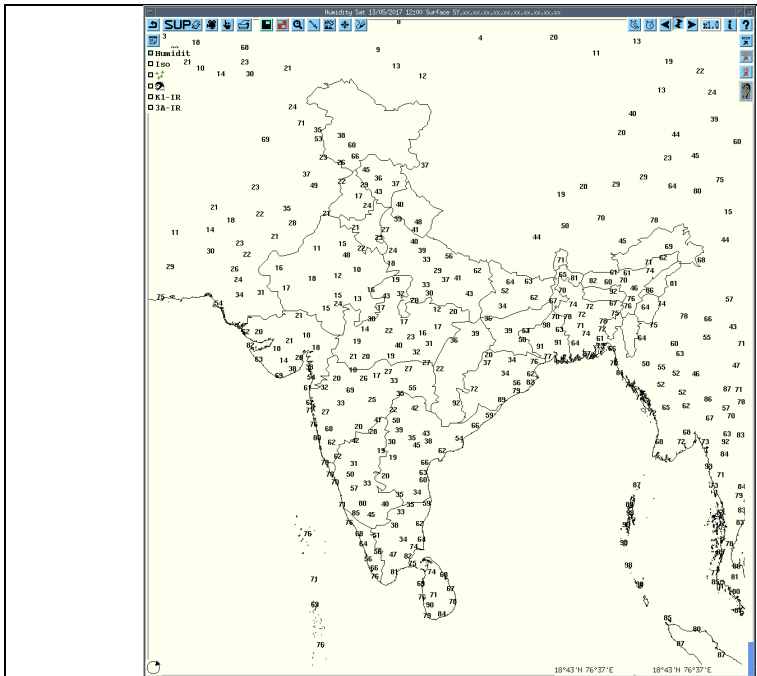
SLP



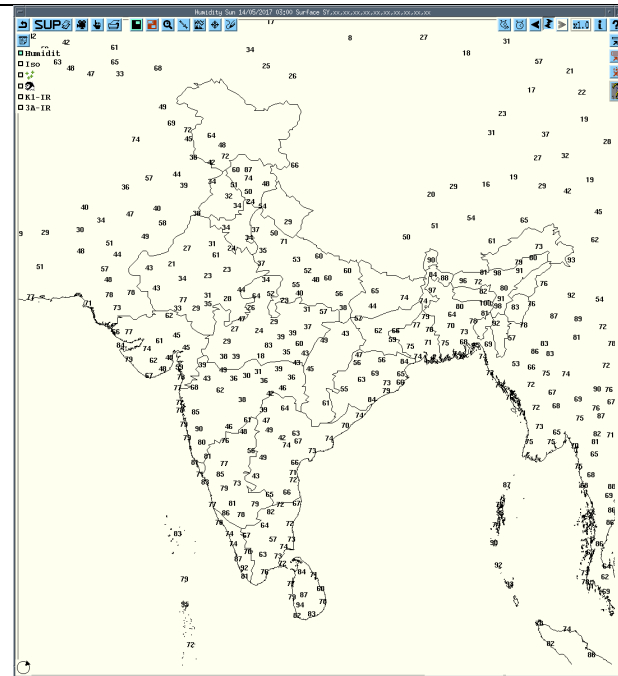
Departure MSLP



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

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/TS	HAMIRPUR AND ADJ. AREAS.
		131202-131502	ISOLATED PATCH. Max= 54.5 dBz Ht.=12-15 km	N & NE SECTOR. MOVING TOWARDS SE-WARDS. .	----		R/TS	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	










		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

			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

			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

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