



Saturday 21 April 2018

**MORNING**

**Time of Issue: 0800 hours IST**

**ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN**

**Significant Weather Features**

- ◆ Isolated thunder-squalls and hailstorms are very likely over Sub- Himalayan and Sikkim today. Isolated thunderstorms accompanied with squalls/ gusty winds are also likely over Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Manipur, Mizoram & Tripura, south Chhattisgarh and Kerala today.
- ◆ Kindly visit <http://www.incois.gov.in/portal/osf/osf.jsp> for Sea conditions in association with swell wave warning.
- ◆ Fairly widespread rain/thundershowers and gusty winds are likely to continue over northeast and adjoining eastern India during next 2 days. Isolated thunder-storms with gusty winds and occasional squalls & lightning are likely over parts of south peninsula during the forecast period.
- ◆ Day maximum temperatures are likely to remain above 40°C over parts of northwest and central India and parts of Telangana and Interior Andhra Pradesh.
- ◆ Yesterday, **Heat wave conditions** prevailed at one or two pockets over Vidarbha.
- ◆ **Thunderstorm** observed at a few places over Jammu & Kashmir, Himachal Pradesh and Uttarakhand; at isolated place over Chandigarh, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Tamilnadu and Kerala from 1130 hours IST of yesterday to 0530 hours IST of today.

**Main Weather Observations**

- ◆ **Rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday):** Rain/thundershowers at most places over Jammu & Kashmir; at many places over Himachal Pradesh; at a few places over Assam & Meghalaya and at isolated places over Uttarakhand, Chandigarh, Tamilnadu, Tripura, Sub-Himalayan West Bengal & Sikkim and South Interior Karnataka.
- Amount of Rainfall** recorded at 1730 hours IST of yesterday (1 cm or more) are: Srinagar, Qazi Gund, Banihal & Gangtok-3 each; Pahalgaoon, Bhaderwah & Bangaluru-2 each and Agartala, Jammu, Kupwara, Kokarnag, Batote, & Guwahati-1 each.
- ◆ **Maximum temperature departures as on 20-04-2018:** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over Jharkhand and East Madhya Pradesh; at a few places over Konkan & Goa and Vidharbha; **above normal (1.6°C to 3.0°C)** at most places over Telangana; at a few places over West Madhya Pradesh, Saurashtra & Kutch, Coastal Andhra Pradesh and Tamilnadu & Puducherry; at isolated places over Gangetic West Bengal, Rayalaseema and Andaman & Nicobar Islands. They were **markedly below normal (-5.1°C or Less)** at a few places over Jammu & Kashmir; at isolated places over Assam & Meghalaya; **appreciably below normal (-3.1°C to -5.0)** at many places over West Rajasthan; at isolated places over Sub-Himalayan West Bengal & Sikkim and Madhya Maharashtra and near normal over rest of the country. Yesterday, the **highest maximum temperature of 45.9°C** was recorded at Chandrapur (**Vidarbha**) over the plains of the country.
- ◆ **Minimum temperature departures as on 20-04-2018:** Minimum temperatures were **markedly above normal (5.1°C or more)** at isolated places over West Madhya Pradesh; **appreciably above normal (3.1°C to 5.0°C)** at most places over East Rajasthan; at many places over West Rajasthan; at a few places over Haryana, Chandigarh & Delhi and Telangana; at isolated places over Punjab and East Madhya Pradesh; **above normal (1.6°C to 3.0°C)** at most places over Gujarat and West Bengal & Sikkim; at many places over West Uttar Pradesh and Coastal Andhra Pradesh; at a few places over Uttarakhand, East Uttar Pradesh, Odisha, Chhattisgarh, Vidarbha, Assam & Meghalaya and Rayalaseema; at isolated places over Himachal Pradesh, Madhya Maharashtra, North Interior Karnataka and Tamilnadu & Puducherry. They were **below normal (-1.6°C to -3.0°C)** at a few places over Coastal Karnataka; at isolated places over South Interior Karnataka and near normal over rest parts of the country.

\* Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day

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### Meteorological Analysis (Based on 0530 hours IST)

- ◆ The Western Disturbance as an upper air cyclonic circulation extending upto 3.1 Km above mean sea level over north Pakistan & neighbourhood persists. The trough aloft in mid and upper tropospheric levels with its axis at 5.8 Km above mean sea level roughly along longitude 70°E to the north of latitude 28°N persists.
- ◆ The cyclonic circulation over northwest Madhya Pradesh and adjoining East Rajasthan extending upto 1.5 km above mean sea level persists.
- ◆ The trough from north Pakistan to above cyclonic circulation across southern parts of Punjab & Haryana extending upto 1.5 km above mean level persists.
- ◆ The cyclonic circulation over East Uttar Pradesh & neighbourhood extending upto 0.9 km above mean sea level persists.
- ◆ The cyclonic circulation over Sub-Himalayan West Bengal & adjoining west Assam extending upto 1.5 km above mean level persists.
- ◆ The east-west trough at 0.9 km above mean sea level from cyclonic circulation over East Uttar Pradesh & neighbourhood to Manipur across Bihar and the cyclonic circulation over Sub-Himalayan West Bengal & adjoining west Assam persists.
- ◆ The cyclonic circulation over interior parts of Odisha at 1.5 km above mean sea level persists.
- ◆ The north-south wind discontinuity at 0.9 km above mean sea level from southeast Madhya Pradesh to south Tamilnadu across east Vidarbha, Telangana & Rayalaseema persists.

### Weather Forecast for next 5 days \* upto 0830 hours IST of 26th April 2018

- ◆ **Meteorological sub-division wise detailed 5 days precipitation forecast is given in Table.**
- ◆ Day maximum temperatures are likely to remain above 40°C over central and Eastern India during next 2-3 days.
- ◆ No significant change in maximum temperatures likely over major parts of the country during next 2 days, outside northwest India & Gujarat where it is likely to fall by 2-3°C during next 24 hours.

### Weather Outlook for subsequent 2 days from 26th to 28th April 2018

- ◆ A fresh western Disturbance is likely to cause scattered to fairly widespread precipitation over Western Himalayan region.
- ◆ Fairly widespread to widespread rain/thundershowers likely over northeast India.
- ◆ Isolated to Scattered rain/thundershowers likely over south peninsular India and along east coast.
- ◆ Dry weather likely over remaining parts of the country.
- ◆ Maximum temperatures are likely to rise by 2-3°C over Northwest and Central India, thereby leading to development of heat wave conditions over parts of Rajasthan around 26th April.



Weather Warning during next 5 days \*

- 21 April (Day 1):** ♦ **Thunderstorm accompanied with squall and hail** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ♦ **Thunderstorm accompanied with squall** very likely at isolated places over Jharkhand and Gangetic West Bengal.
  - ♦ **Thunderstorm accompanied with gusty winds** very likely at isolated places over Odisha, Assam & Meghalaya, Manipur, Mizoram, Tripura, south Chhattisgarh and Kerala.
  - ♦ **Heavy rain** very likely at isolated places over south Assam & Meghalaya and Mizoram & Tripura.
  - ♦ **Heat wave conditions** very likely in one or two pockets over Vidharbha.
  - ♦ **Strong winds speed** occasionally reaching 40-50 kmph with moderate to rough sea conditions are very likely along and off West Bengal-Odisha coasts. Fishermen are advised not to venture into the Sea along & off these coasts.
  - ♦ Based on the forecast generated by INCOIS, moderate to rough sea conditions are very likely to prevail along the West coast of India and rough to very rough over southern parts of West Coast and Lakshadweep area in the morning hours. Fishermen are advised to be cautious while venturing into the Sea along & off these areas.
- 22 April (Day 2):** ♦ **Thunderstorm accompanied with squall and hail** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ♦ **Thunderstorm accompanied with squall** likely at isolated places over Gangetic West Bengal.
  - ♦ **Thunderstorm accompanied with gusty winds** likely at isolated places over Telangana, Rayalaseema, Tamilnadu, interior Karnataka and Kerala.
  - ♦ **Heat wave conditions** very likely in one or two pockets over Vidharbha.
  - ♦ Based on the forecast generated by INCOIS, moderate to rough sea conditions are very likely to prevail along & off the West coast of Andaman & Nicobar Islands. Fishermen are advised to be cautious while venturing into the Sea along & off these areas.
- 23 April (Day 3):** ♦ **Heat wave conditions** are likely to prevail in some parts of Jammu & Kashmir, Himachal Pradesh and Uttarakhand.
- ♦ **Heat wave conditions** very likely in one or two pockets over Vidharbha.
  - ♦ Based on the forecast generated by INCOIS, rough to very rough sea conditions are likely to prevail along & off the West coast of Andaman & Nicobar Islands. Fishermen are advised not to venture into the Sea along & off these areas.
- 24 April (Day 4):** ♦ **Thunderstorm accompanied with gusty winds** likely at isolated places over Telangana.
- ♦ **Heat wave conditions** are likely to prevail in some parts of Jammu & Kashmir Himachal Pradesh, Uttarakhand and one or two pockets over Vidharbha.
- 25 April (Day 5):** ♦ **Thunderstorm accompanied with gusty winds** likely at isolated places over Telangana.
- ♦ **Heat wave conditions** are likely to prevail in some parts of Jammu & Kashmir Himachal Pradesh, Uttarakhand and one or two pockets over Vidharbha.



Table-1

## 5 Day Rainfall Forecast (MORNING)

21-April-2018

Met-Sub-Division	21-Apr Today	22Apr Sun	23Apr Mon	24Apr Tue	25Apr Wed
1. Andaman & Nicobar Islands	ISOL	ISOL	ISOL	DRY	DRY
2. Arunachal Pradesh	FWS	FWS	ISOL	SCT	SCT
3. Assam & Meghalaya	FWS	SCT	ISOL	ISOL	ISOL
4. N. M. M. & T.	FWS	SCT	ISOL	ISOL	ISOL
5. S.H. West Bengal & Sikkim	FWS	FWS	SCT	SCT	SCT
6. Gangetic West Bengal	SCT	ISOL	DRY	DRY	DRY
7. Odisha	ISOL	ISOL	ISOL	ISOL	ISOL
8. Jharkhand	SCT	DRY	DRY	DRY	DRY
9. Bihar	ISOL	DRY	DRY	DRY	DRY
10. East Uttar Pradesh	ISOL	DRY	DRY	DRY	DRY
11. West Uttar Pradesh	ISOL	DRY	DRY	DRY	DRY
12. Uttarakhand	ISOL	DRY	DRY	DRY	DRY
13. Haryana, Chd & Delhi	DRY	DRY	DRY	DRY	DRY
14. Punjab	DRY	DRY	DRY	DRY	DRY
15. Himachal Pradesh	ISOL	DRY	DRY	DRY	DRY
16. Jammu & Kashmir	ISOL	DRY	DRY	DRY	DRY
17. West Rajsthan	DRY	DRY	DRY	DRY	DRY
18. East Rajasthan	DRY	DRY	DRY	DRY	DRY
19. West Madhya Pradesh	DRY	DRY	DRY	DRY	DRY
20. East Madhya Pradesh	DRY	DRY	DRY	DRY	DRY
21. Gujarat Region	DRY	DRY	DRY	DRY	DRY
22. Saurashtra & Kutch	DRY	DRY	DRY	DRY	DRY
23. Konkan & Goa	DRY	DRY	DRY	DRY	DRY
24. Madhya Maharashtra	DRY	DRY	DRY	DRY	DRY
25. Marathawada	DRY	DRY	DRY	ISOL	ISOL
26. Vidharbha	DRY	DRY	DRY	ISOL	ISOL
27. Chhattisgarh	ISOL	ISOL	ISOL	ISOL	ISOL
28. Coastal Andhra Pradesh	ISOL	ISOL	ISOL	ISOL	ISOL
29. Telangana	ISOL	ISOL	ISOL	SCT	SCT
30. Rayalaseema	ISOL	ISOL	DRY	ISOL	ISOL
31. Tamilnadu & Puducherry	ISOL	ISOL	ISOL	ISOL	ISOL
32. Coastal Karnataka	ISOL	ISOL	ISOL	ISOL	ISOL
33. North Interior Karnataka	ISOL	SCT	ISOL	ISOL	ISOL
34. South Interior Karnataka	ISOL	SCT	SCT	SCT	SCT
35. Kerala	SCT	SCT	SCT	SCT	SCT
36. Lakshadweep	SCT	ISOL	SCT	SCT	SCT

### % Station Reporting Rainfall

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)
No Rain	Dry		

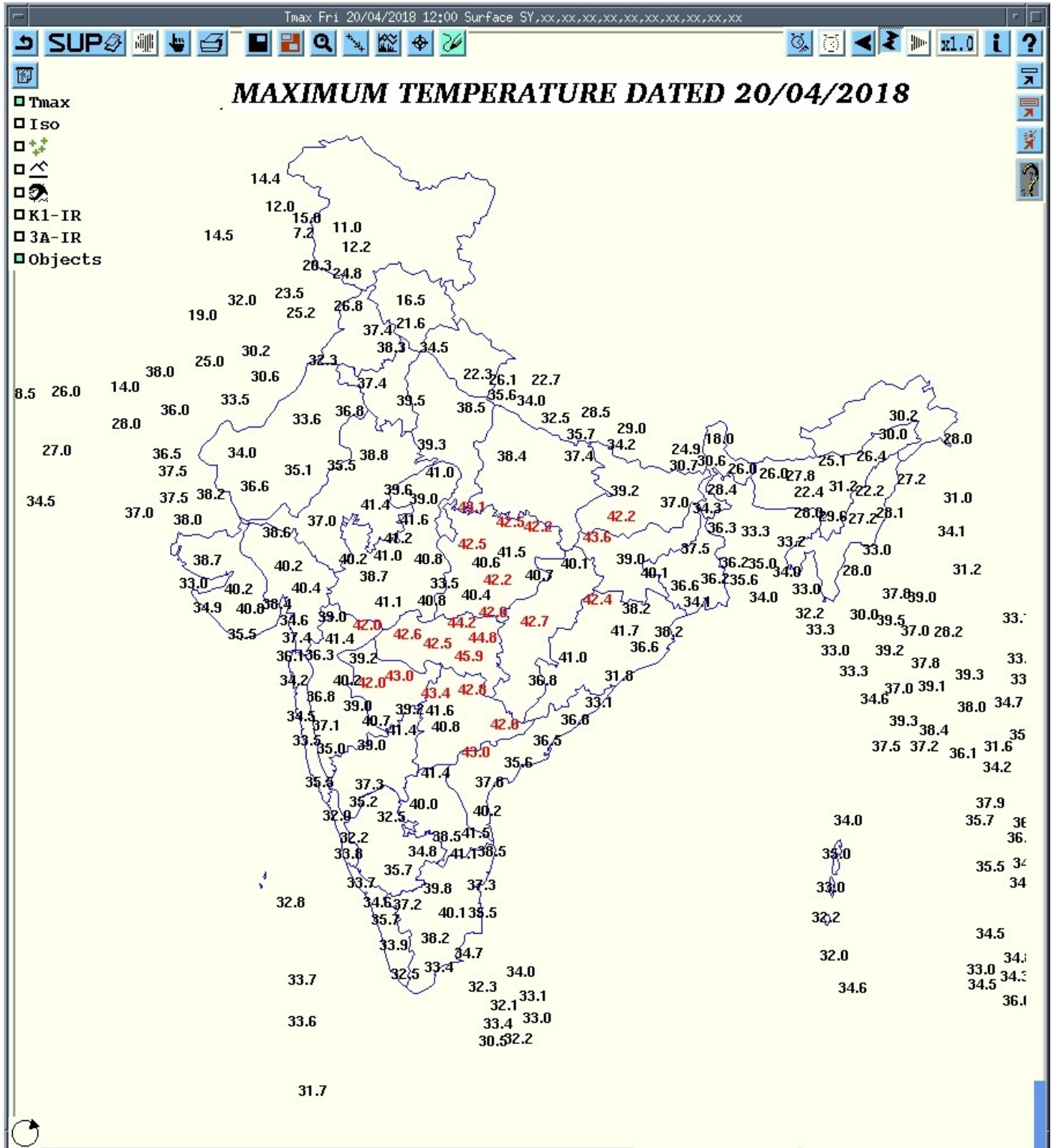
\* Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day

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Fig. 1: Maximum Temperature during past 24 hours



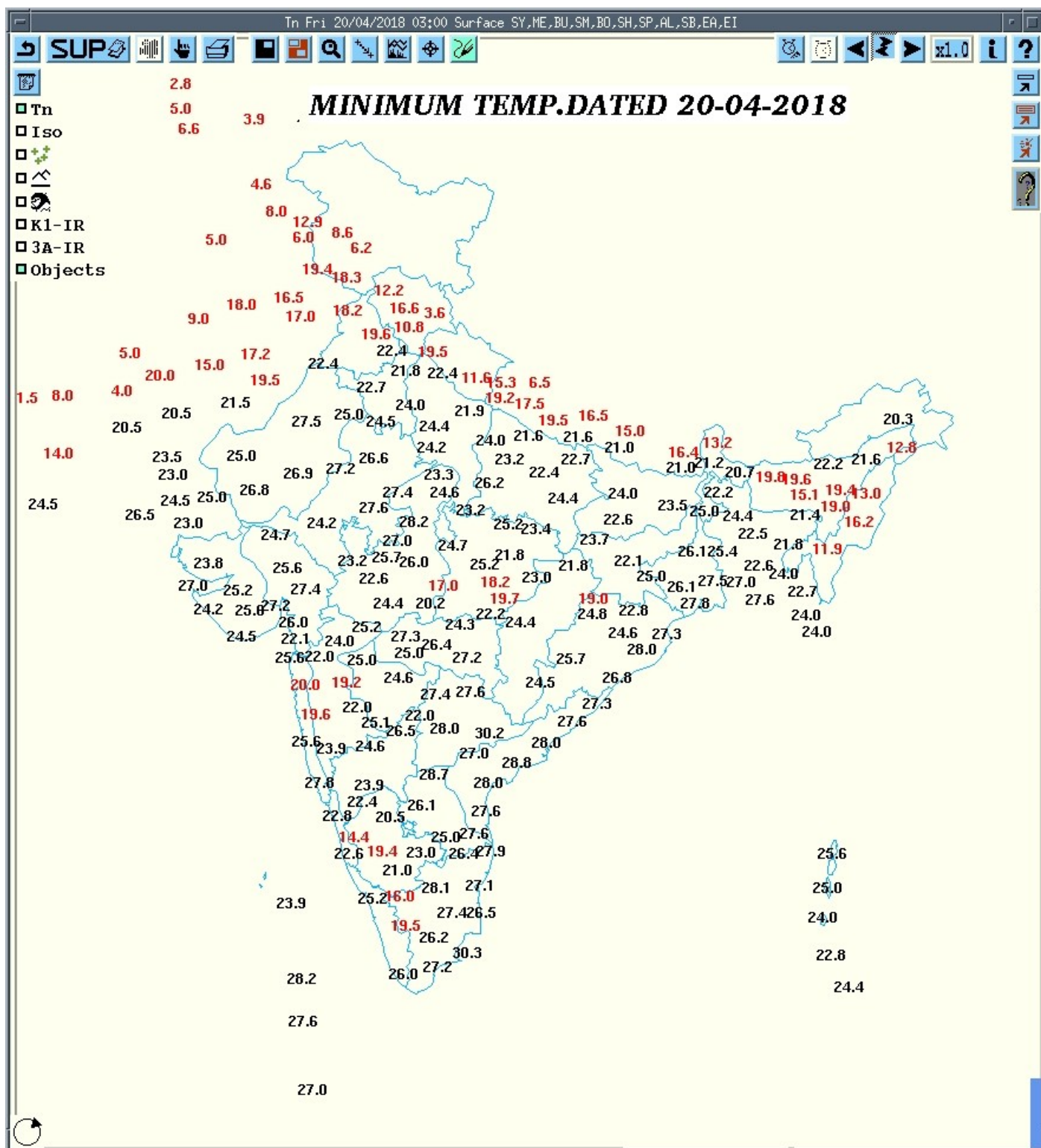
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Fig. 2: Minimum Temperature during past 24 hours



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**Fig. 3 : Departure from Normal of Maximum Temperatures**

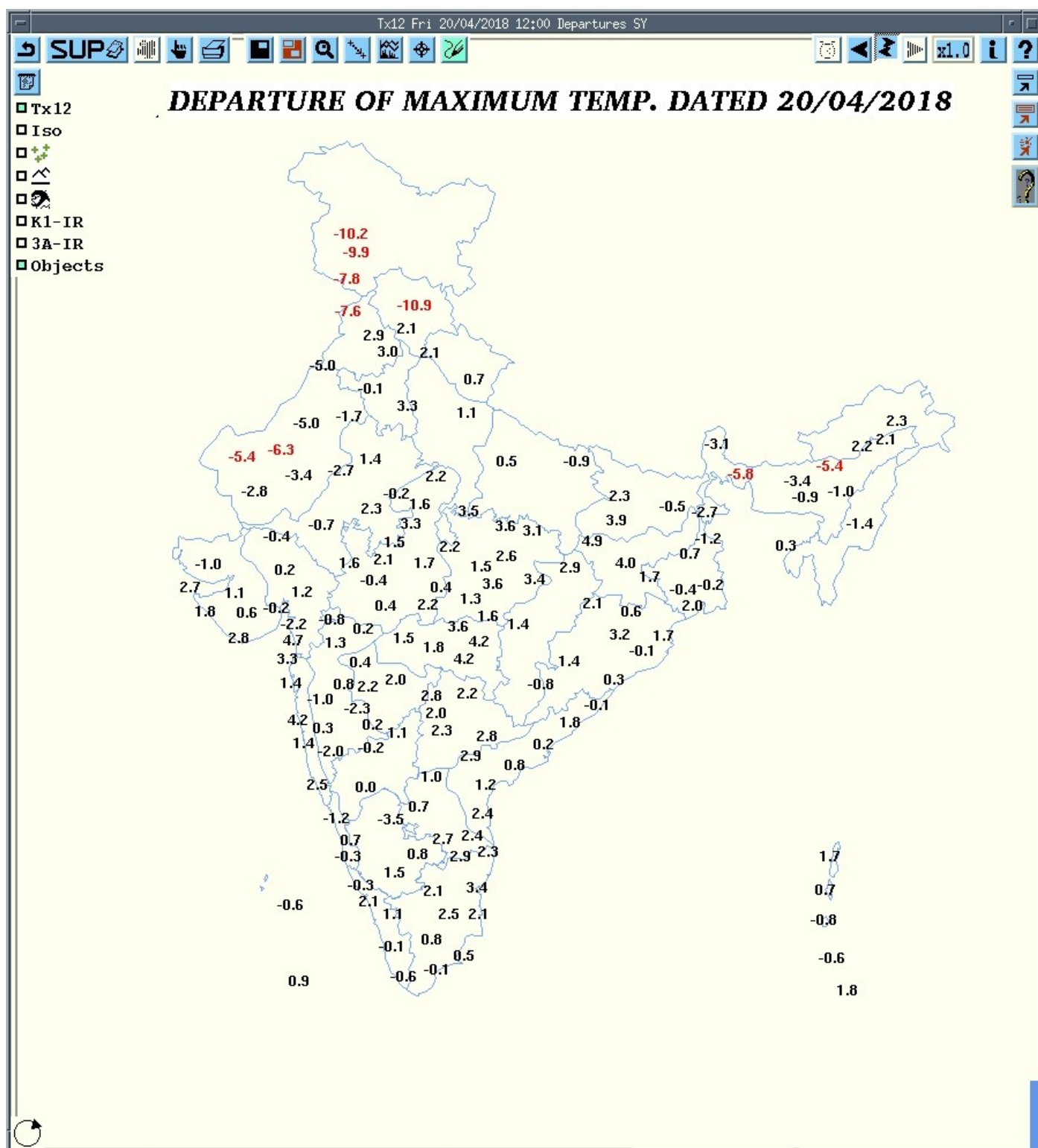
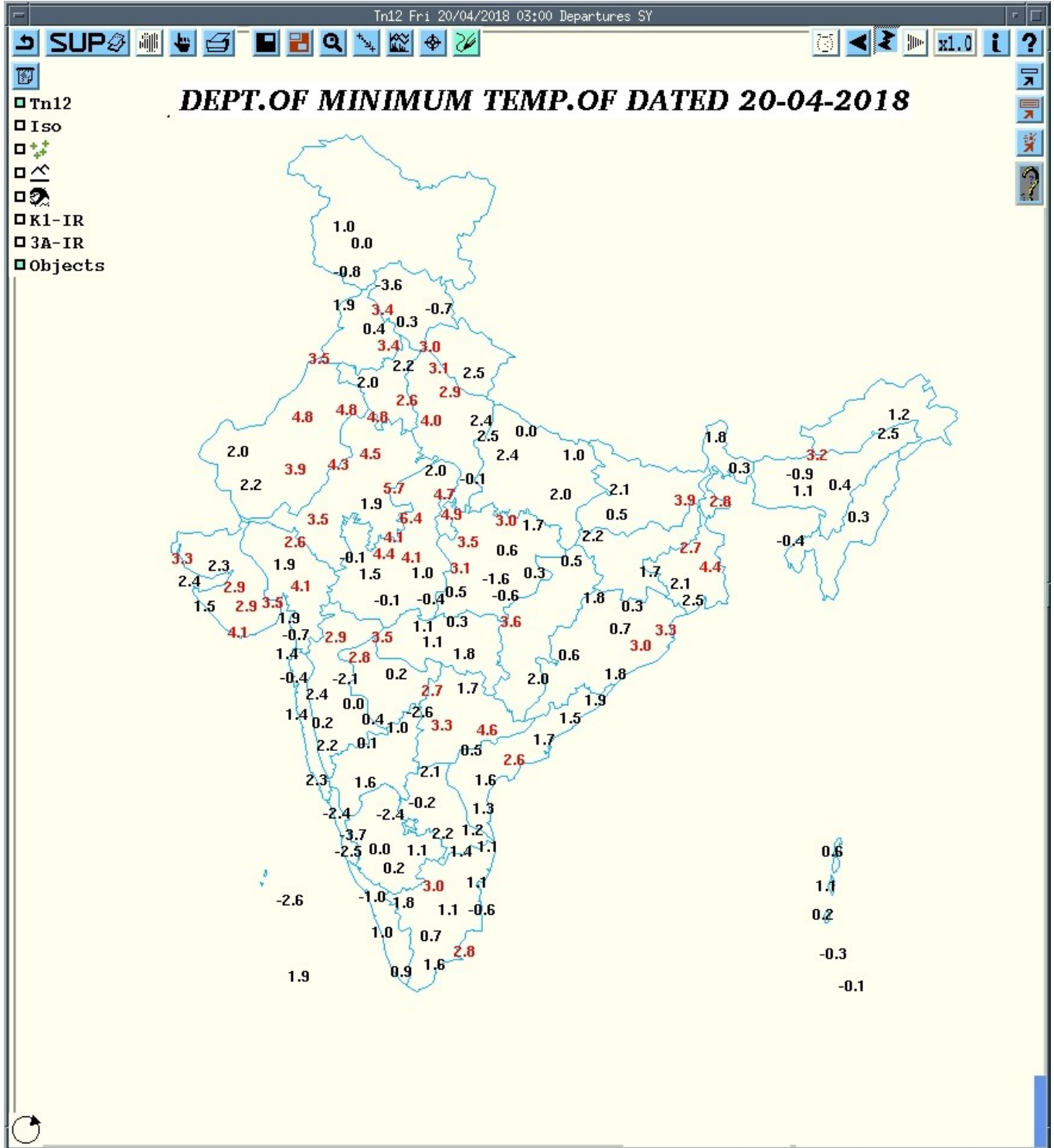


Fig. 4 : Departure from Normal of Minimum Temperatures



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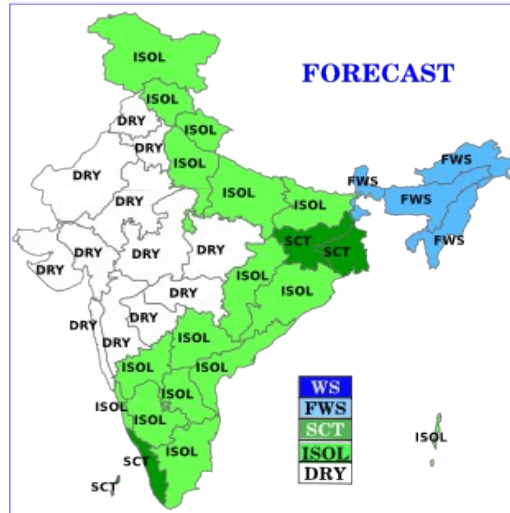
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**Saturday 21 April 2018**



- 21 April (Day 1):** ♦ **Thunderstorm accompanied with squall and hail** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ♦ **Thunderstorm accompanied with squall** very likely at isolated places over Jharkhand and Gangetic West Bengal.
- ♦ **Thunderstorm accompanied with gusty winds** very likely at isolated places over Odisha, Assam & Meghalaya, Manipur, Mizoram, Tripura, south Chhattisgarh and Kerala.
- ♦ **Heavy rain** very likely at isolated places over south Assam & Meghalaya and Mizoram & Tripura.
- ♦ **Heat wave conditions** very likely in one or two pockets over Vidharbha.
- ♦ **Strong winds speed** occasionally reaching 40-50 kmph with moderate to rough sea conditions are very likely along and off West Bengal-Odisha coasts. Fishermen are advised not to venture into the Sea along & off these coasts.
- ♦ Based on the forecast generated by INCOIS, moderate to rough sea conditions are very likely to prevail along the West coast of India and rough to very rough over southern parts of West Coast and Lakshadweep area in the morning hours. Fishermen are advised to be cautious while venturing into the Sea along & off these areas.

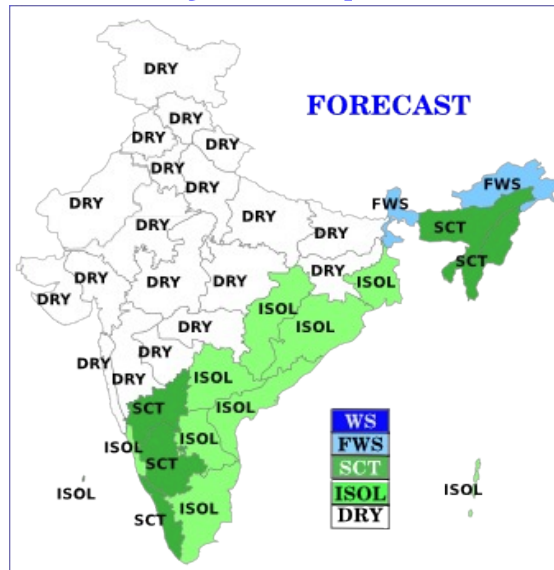
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**Sunday 22 April 2018**



- 22 April (Day 2): ♦ **Thunderstorm accompanied with squall and hail** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ♦ **Thunderstorm accompanied with squall** likely at isolated places over Gangetic West Bengal.
- ♦ **Thunderstorm accompanied with gusty winds** likely at isolated places over Telangana, Rayalaseema, Tamilnadu, interior Karnataka and Kerala.
- ♦ **Heat wave conditions** very likely in one or two pockets over Vidharbha.
- ♦ Based on the forecast generated by INCOIS, moderate to rough sea conditions are very likely to prevail along & off the West coast of Andaman & Nicobar Islands. Fishermen are advised to be cautious while venturing into the Sea along & off these areas.

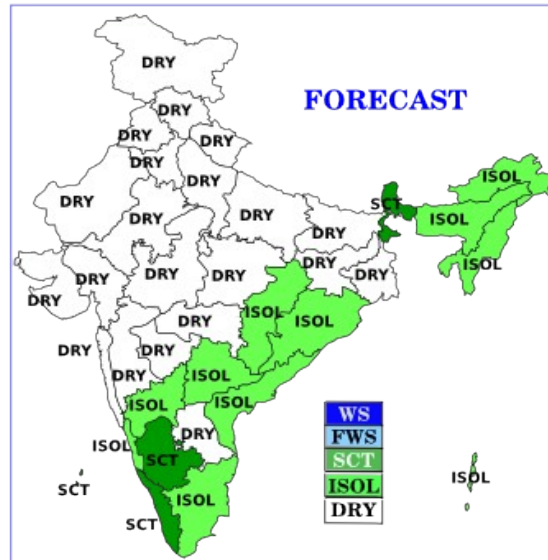
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**Monday 23 April 2018**



**23 April (Day 3) :** ♦ **Heat wave conditions** are likely to prevail in some parts of Jammu & Kashmir, Himachal Pradesh and Uttarakhand.

♦ **Heat wave conditions** very likely in one or two pockets over Vidharbha.

♦ Based on the forecast generated by INCOIS, rough to very rough sea conditions are likely to prevail along & off the West coast of Andaman & Nicobar Islands. Fishermen are advised not to venture into the Sea along & off these areas.

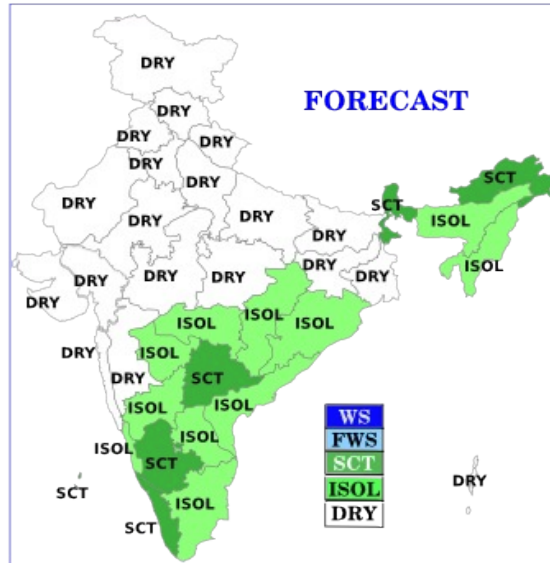
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**Tuesday 24 April 2018**



24 April (Day 4): ♦ Thunderstorm accompanied with gusty winds likely at isolated places over Telangana.

♦ Heat wave conditions are likely to prevail in some parts of Jammu & Kashmir Himachal Pradesh, Uttarakhand and one or two pockets over Vidharbha.

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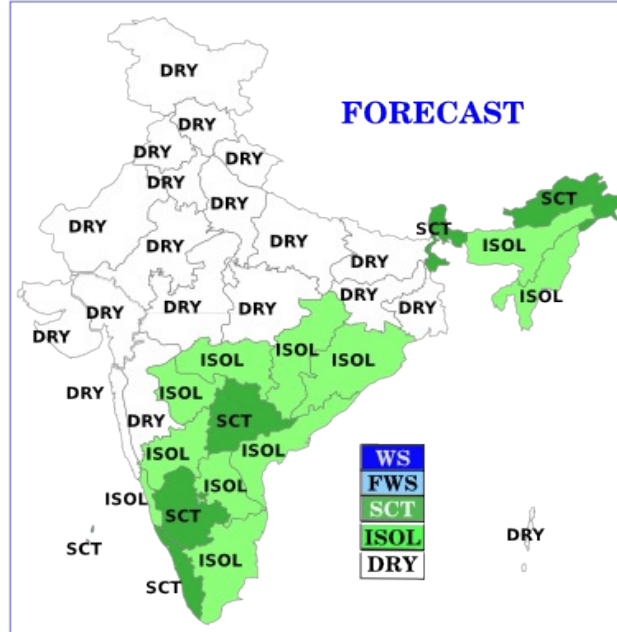
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**Wednesday 25 April 2018**



25 April (Day 5): ♦ Thunderstorm accompanied with gusty winds likely at isolated places over Telangana.

♦ Heat wave conditions are likely to prevail in some parts of Jammu & Kashmir Himachal Pradesh, Uttarakhand and one or two pockets over Vidharbha.

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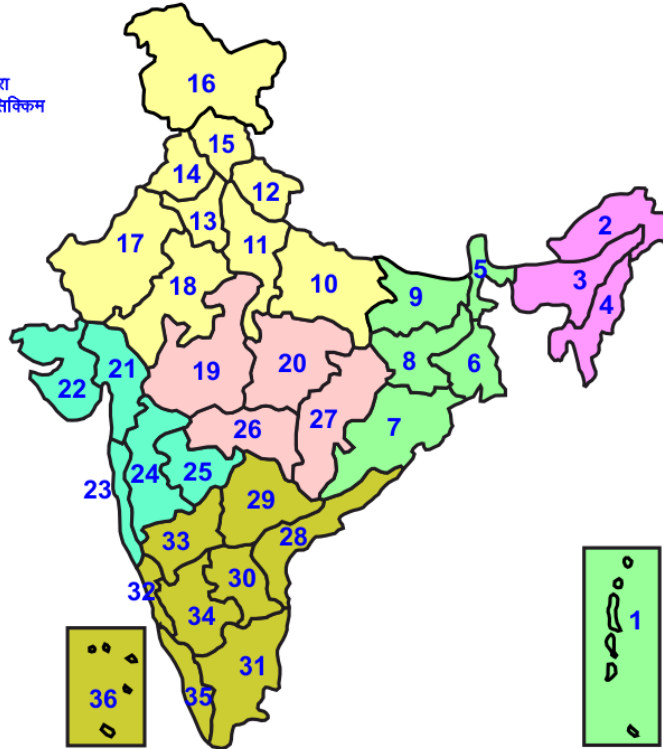
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## LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम गंगेय बंगाल
- 7 ओडिसा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडीगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटिय आंध्र प्रदेश
- 29 तेलंगाना
- 30 रायलसीमा
- 31 तमिलनाडु
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh
29. Telangana
30. Rayalaseema
31. Tamilnadu & Pondi
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala
36. Lakshadweep

## SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)
Dry (No station reported Rainfall)			

## WARNING

<b>WARNING (TAKE ACTION)</b>
<b>ALERT ( BE PREPARED)</b>
<b>WATCH (BE UPDATED)</b>
<b>NO WARNING ( NO ACTION)</b>

## Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



Heavy Rain



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State

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## LEGENDS

### WARNING

<b>WARNING (TAKE ACTION)</b>
<b>ALERT (BE PREPARED)</b>
<b>WATCH (BE UPDATED)</b>
<b>NO WARNING (NO ACTION)</b>

### Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



Rain/ Snow \*

Heavy: 64.5 to 115.5 mm/cm \*  
Very Heavy: 115.6 to 204.4 mm/cm\*  
Extremely Heavy: > 204.4 mm/cm \*



Heat Wave

When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions  
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .

Severe Heat Wave: Maximum Temperature Departure from normal  $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature  $\geq 45^{\circ}\text{C}$ .

Severe Heat Wave: When actual maximum temperature  $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$



Warm Night

When maximum temperature remains  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .

Severe Warm Night: When minimum temperature departure  $> 6.4^{\circ}\text{C}$ .



Cold Wave

When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .

Severe Cold Wave: Minimum Temperature Departure from normal  $\geq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is  $\leq 4.0^{\circ}\text{C}$

Severe Cold Wave: When Minimum Temperature is  $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  or actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$



Cold Day

When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions  
Based on departure

Cold Day: Maximum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .

Severe Cold Day: Maximum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$



Fog

Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility  $< 50$  metres



Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Frost

Ice deposits on ground

Air temperature  $\leq 4^{\circ}\text{C}$  ( over Plains)



Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-87 kmph

Very Severe: Wind speed  $> 87$  kmph



Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre

Phenomenal: Wind speed  $> 117$  kmph ( $> 63$  knots) & Wave height  $> 14$  metre



Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Strom: Wind speed  $> 220$  kmph ( $> 119$  knots)

\* Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day

For more details kindly visit [www.imd.gov.in](http://www.imd.gov.in) or contact : +91 11 24631913, 24643965, 24629798

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