

Thursday, 22nd February 2024 (3rd Phalguna 1945 Saka)

Summary of observations recorded at 0830 hours IST: Jet stream winds with maximum speed upto 165 knots are prevailing over north India at 12.6 km above m. s. l. A fresh western disturbance as a trough in mid. tropospheric westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 70°E to the north of Lat. 32°N. System is likely to move east-northeastwards. Another fresh western disturbance is likely to affect western Himalayan Region from 24th February night. The trough from southeast Madhya Pradesh to Tamil Nadu ran from Marathwada to south Tamil Nadu across Karnataka at 0.9 km above m. s. l. A cyclonic circulation lay over north Chhattisgarh at 0.9 km above m. s. l. The induced cyclonic circulation over northwest Uttar Pradesh and neighbourhood became less marked today morning. The western disturbance as a trough in lower tropospheric westerlies with its axis at 3.1 km above m. s. l. moved away east-northeastwards. The cyclonic circulation over northeast Assam and neighbourhood became less marked.

Night temperatures were markedly above normal (5.1°C or more) at isolated places over Odisha and Nagaland, Manipur, Mizoram and Tripura; **appreciably above normal (3.1°C to 5.0°C)** at most places over Bihar and Jharkhand; at many places over east Madhya Pradesh and Gujarat state; at a few places over Uttar Pradesh and Chhattisgarh; at isolated places over Assam, Meghalaya, Gangetic West Bengal, Rayalaseema, Tamil Nadu, Puducherry and Karaikal; **above normal (1.6°C to 3.0°C)** at many places over east Rajasthan, Marathwada, coastal Andhra Pradesh, Yanam and Kerala and Mahe; at a few places over west Madhya Pradesh; at isolated places over west Uttar Pradesh, Madhya Maharashtra, north interior Karnataka, sub-Himalayan West Bengal and Sikkim. They are **markedly below normal (-5.1°C or less)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Himachal Pradesh; **below normal (-1.6°C to -3.0°C)** at many places over Haryana-Chandigarh-Delhi and **near normal** over rest parts of the country. **Today, the lowest minimum temperature of 6.1°C is reported at Karnal (Haryana) over the plains of the country.**

Hailstorm recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Madhya Pradesh.

Fog conditions observed (at 0830 hours IST of today): Moderate fog in isolated pockets of east Uttar Pradesh, sub-Himalayan West Bengal and Sikkim and shallow fog in isolated pockets of Bihar.

Visibility recorded (at 0830 hours IST of today) (≤500 metres): east Uttar Pradesh: Bahraich-200, Lucknow-500; sub-Himalayan West Bengal and Sikkim: Cooch Behar-200; Bihar: Forbesganj-500.

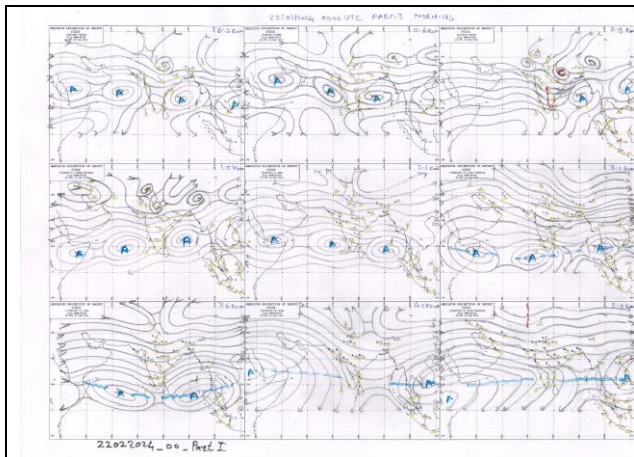


Fig. 1. Analysed upper air chart based on 00z observation (Part 1)

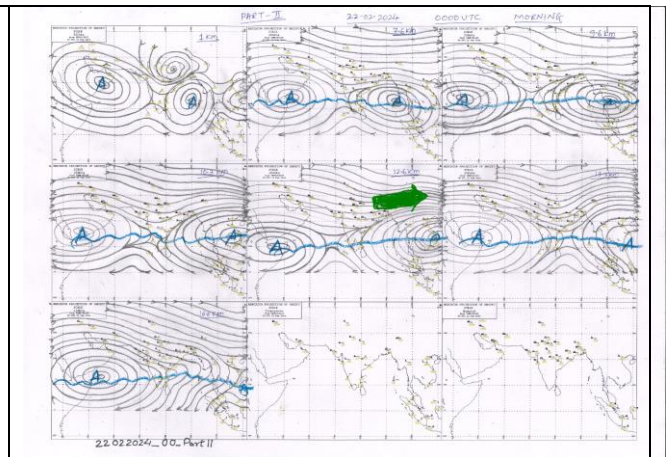


Fig. 2. Analysed upper air chart based on 00z observation (Part 2)

Surface chart not available due to technical error.

Fig. 3. Analysed surface chart based on 03z observation

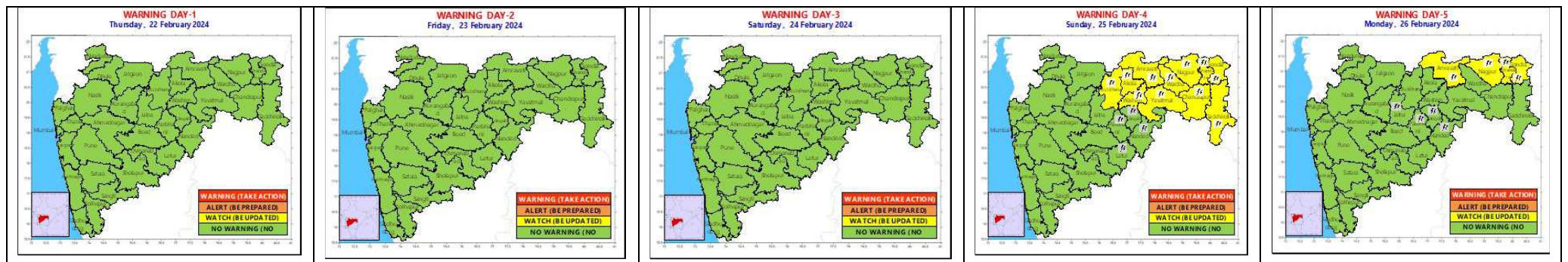
Indian Regions	Table 1. Realized rainfall (chief amount in cm during past 24 hrs.)
East	many places: Arunachal Pradesh+ isolated places: Assam & Meghalaya, Nagaland-Manipur-Mizoram-Tripura, West Bengal & Sikkim, Jharkhand and Bihar dry weather: Odisha Pasighat AP 6.7, Tuting 5.8, Lakhipur & Kanchanpur 4.8 each, Oyan ARG 4.5, A p ghat 4.1, Silchar 3.5, Tamenglong 2.1, Singhik 1.5, Hajipur 1.4, Maheshpur & Asarganj 1.2 each, Mangan 1.1, Chapra 0.8, Imphal AP 0.6, Kalyani smo, Bagati & Pakur kvk AWS 0.5 each, Burdwan PTO 0.4, Malda 0.1.
North	isolated places: Uttar Pradesh, Uttarakhand● / *, Himachal Pradesh● / *, Jammu-Kashmir and Ladakh● / * and east Rajasthan dry weather: Haryana, Punjab and west Rajasthan Ballia 2.1, Manali 1.8, Kargil 1.3, Attarra 1.1, Kulpahar 0.9, Beberu & Bharmaur 0.8 each, Mahoba, Dalhousi alha AWS & Badarwah 0.7 each, Jhansi, Tiuni, Joshimath & Dunda 0.6 each, Mangrol 0.5, Qazi gund & Bayana 0.4 each, Bharatpur tehsil SR 0.1.
Central	isolated places: Madhya Pradesh dry weather: Vidarbha and Chhattisgarh Jawa 2.4, Orchha 1.6, Ghatigaon 0.7, Karera 0.2, Gwalior 0.1.
Peninsula	dry weather: Gujarat State, Konkan & Goa, Madhya Maharashtra, Marathwada, coastal Andhra Pradesh, Telangana, Rayalaseema, Tamil Nadu, coastal Karnataka, interior Karnataka and Kerala
Islands	dry weather: Andaman & Nicobar and Lakshadweep

Table 2. Forecast / warnings (distribution of rain / thundershowers) for 7 days (valid from time of origin upto 0830 hrs IST of next day)

Sr. No	Sub-division Name	Day 1 22 Feb	Day 2 23 Feb	Day 3 24 Feb	Day 4 25 Feb	Day 5 26 Feb	Day 6 27 Feb	Day 7 28 Feb	Sr. No.	Sub-division Name	Day 1 22 Feb	Day 2 23 Feb	Day 3 24 Feb	Day 4 25 Feb	Day 5 26 Feb	Day 6 27 Feb	Day 7 28 Feb
1	Andaman Nicobar Islands	D	D	D	D	I	I	I	19	west Madhya Pradesh	I R	D	D	I R	I R	I	I
2	Arunachal Pradesh	W R +/●/*	F R +/●/*	S	S	I	I	I	20	east Madhya Pradesh	I R	D	D	I R	F R	S	I
3	Assam-Meghalaya	W R +/●/*	F R	I	I	D	D	D	21	Gujarat region	D	D	D	D	D	D	D
4	Nagaland-Manipur-Mizoram-Tripura	F R +/●/*	F R	F	I	D	D	D	22	Saurashtra and Kutch	D	D	D	D	D	D	D
5	Sub Himalayan West Bengal/Sikkim	F R +/●/*	I	I	I	D	D	D	23	Konkan and Goa	D	D	D	D	D	D	D
6	Gangetic West Bengal	S R	I	I R	I	I	I	D	24	Madhya Maharashtra	D	D	D	D	D	D	D
7	Odisha	I	I R	S R	I	I	I	I	25	Marathwada	D	D	D	I	I	I	D
8	Jharkhand	S R	D	I	I	I	S	D	26	Vidarbha	D	D	I	S R	S R	I	I
9	Bihar	S R	I	D	D	D	I	I	27	Chhattisgarh	D	D	I R	I R	F R	S	I
10	east Uttar Pradesh	I	D	D	D	I	I	D	28	Coastal Andhra Pradesh and Yanam	D	I	I	I	I	D	D
11	west Uttar Pradesh	I	D	D	D	D	I	D	29	Telangana	D	D	I	I	I	D	D
12	Uttarakhand	I	D	I	I	I R	S	I	30	Rayalaseema	D	D	I	I	D	D	D
13	Haryana, Chandigarh and Delhi	D	D	D	D	D	D	D	31	Tamil Nadu, Puducherry and Karaikal	I	I	I	I	D	D	D
14	Punjab	D	D	D	D	I	D	D	32	Coastal Karnataka	D	D	D	D	D	D	D
15	Himachal Pradesh	I	D	I	I	S R	S	S	33	north interior Karnataka	D	D	D	D	D	D	D
16	Jammu-Kashmir and Ladakh	I	D	I	I	F R	S	I	34	south interior Karnataka	D	D	D	D	D	D	D
17	west Rajasthan	D	D	D	D	I	I	D	35	Kerala and Mahe	I	D	I	I	D	D	D
18	east Rajasthan	I	D	D	D	I	I	D	36	Lakshadweep	D	D	D	D	D	D	D

Legends: D = Dry I = Isolated S = Scattered F = Fairly widespread W = Widespread # = heavy to very heavy rain at a few places with extremely heavy rain at isolated places +++ = heavy rain at a few places with very heavy rain at isolated places ++ = heavy to very heavy rainfall + = heavy rain ●/* = rain or snow ◆ = very light rain ≡ = fog R = thunderstorm with lightning S = Squall / Gusty wind / strong wind / gale wind - = cold wave/cold day + = heat wave S = Duststorm S = ground frost = Hail

Fig. 4: Districtwise warnings for five days for Maharashtra State



Pune, Lohegaon and Pashan observations at 0830 hrs. IST of Today

	Temperature (°C)					Humidity (%)				Rainfall (mm)		
	Max. past 24 hrs	Dep. from normal	Min. past 24 hrs.	Dep. from normal	Dry Bulb	At 0830 hrs. IST	Dep. From normal	At 1730 hrs. IST of y'day	Dep. from normal	Past 24 hrs.	Since 1 st Jan.	Dep. from normal
PNE	32.6	0.0	12.5	0.0	18.0	81	13	37	14	0.0	1.6	-0.1
PSN	32.8	-	13.8	-	16.0	84	16	38	-	0.0	2.3	-
LHG	33.4	0.4	15.4	0.4	21.5	66	13	30	10	0.0	3.6	0.8

Local (Pune and neighbourhood) forecast)

Max. / Min. Temperature (°C)									Weather
Date	Pune	Pashan	Lohegaon	Chinchwad	Lavale	Magarpatta	NDA	Koregaon Park	
22/02	32 / 12.5*	32 / 13.8*	33 / 15.4*	31 / 17.8*	35 / 18.5*	34 / 18.7*	32 / 10.9*	33 / 17.8*	Clear sky.
23/02	31 / 11	31 / 13	32 / 14	31 / 17	35 / 17	33 / 18	31 / 10	32 / 17	Clear sky.
24/02	31 / 11	31 / 12	33 / 14	30 / 16	34 / 17	33 / 17	31 / 09	32 / 16	Clear sky.
25/02	32 / 11	32 / 12	33 / 14	30 / 16	34 / 17	33 / 17	31 / 09	33 / 16	Mainly Clear sky.
26/02	32 / 12	32 / 13	33 / 15	31 / 17	35 / 18	34 / 18	32 / 10	33 / 17	Mainly Clear sky becoming partly cloudy sky towards afternoon/evening.
27/02	32 / 11	32 / 12	33 / 14	31 / 16	35 / 17	34 / 17	32 / 09	33 / 16	Mainly Clear sky becoming partly cloudy sky towards afternoon/evening.
28/02	32 / 11	32 / 12	33 / 13	31 / 16	35 / 17	34 / 17	32 / 09	33 / 16	Mainly Clear sky.

* = realized temperatures

Mumbai (Colaba)				Nagpur (AP)		
Date 2024	T max °C	T min °C	Weather	T max °C	T min °C	Weather
22/02	29	19	Mainly clear sky.	34	18	Mainly Clear sky.
23/02	29	18	Clear sky.	33	17	Mainly Clear sky.
24/02	31	19	Clear sky.	34	14	Partly cloudy sky.
25/02	32	20	Clear sky.	34	14	Generally cloudy sky with a few spells of rain or thundershowers.
26/02	31	20	Clear sky.	34	15	Generally cloudy sky with a few spells of rain or thundershowers.
27/02	31	19	Partly cloudy sky.	34	16	Partly cloudy sky with possibility of rain or Thunderstorm.
28/02	32	20	Mainly clear sky.	34	16	Partly cloudy sky with possibility of rain or Thunderstorm.

Fairly widespread (F)	51 - 75
Scattered (S)	26 - 50
isolated (I)	1 - 25
Dry (D)	No Rain
Probability Terms in %:	
unlikely	< 25
likely	between 25 50
very likely	between 51 75
most likely	>75

Light rain	2.5 to 15.5
Moderate rain	15.6 to 64.4
Heavy rain	64.5 to 115.5
Very heavy rain	115.6 to 204.4
Extremely heavy rain	≥ 204.5
Heavy snow	6.5 to 11.5 cms water equivalent of rain
Very heavy snow	11.6 to 20.4 cms water equivalent of rain