



Date: Sunday, 16 February 2020

Time of Issue: 1300 IST

**WEATHER WARNINGS PUNJAB**

Note: Forecast/Warning for any day is valid from 0830 hours IST of that day till 0830 hours IST of next day

Region	District	Today	Day-2	Day-3	Day-4	Day-5
		Warning	Warning	Warning	Warning	Warning
MAJHA	PATHANKOT	NIL	NIL	NIL	NIL	THUNDERSTORM ACCOMPANIED WITH LIGHTNING VERY LIKELY AT ISOLATED PLACES
	GURDASPUR					
	AMRITSAR					
	TARN TARAN					
DOABA	HOSHIARPUR	NIL	NIL	NIL	NIL	THUNDERSTORM ACCOMPANIED WITH LIGHTNING LIKELY AT ISOLATED PLACES
	NAWANSHAR					
	KAPURTHALA					
	JALANDHAR					
WEST MALWA	FIROZPUR	NIL	NIL	NIL	NIL	THUNDERSTORM ACCOMPANIED WITH LIGHTNING LIKELY AT ISOLATED PLACES
	FAZILKA					
	FARIDKOT					
	MUKTSAR					
	MOGA					
	BHATINDA					
EAST MALWA	LUDHIANA	NIL	NIL	NIL	NIL	THUNDERSTORM ACCOMPANIED WITH LIGHTNING LIKELY AT ISOLATED PLACES
	BARNALA					
	MANSA					
	SANGRUR					
	FATEHGARH SAHIB					
	RUPNAGAR					
	PATIALA					
	SAS NAGAR					

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WARNING	PROBABILISTIC FORECAST		SPATIAL		RAINFALL INTENSITY	
WARNING (TAKE ACTION)	Terms	Probability of Occurrence	DRY	No Rainfall	Light	2.5-15.5 mm
ALERT (BE PREPARED)	Unlikely	<25%	ISOLATED	1-25%	Moderate	15.6-64.4 mm
WATCH (BE UPDATED)	Likely	25-50%	FEW	26-50%	Heavy	64.5-115.5 mm
NO WARNING (NO ACTION)	Very Likely	50-75%	MANY	51-75%	Very Heavy	115.6-204.4 mm
	Most Likely	>75%	MOST	76-100%	Extremely Heavy	≥204.5 mm



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**WEATHER WARNINGS HARYANA**

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Region	District	Today	Day-2	Day-3	Day-4	Day-5
		Warning	Warning	Warning	Warning	Warning
NORTH	CHANDIGARH	NIL	NIL	NIL	NIL	THUNDERSTORM ACCOMPANIED WITH LIGHTNING LIKELY AT ISOLATED PLACES
	PANCHKULA					
	AMBALA					
	YAMUNANAGAR					
	KURUKSHETRA					
	KAITHAL					
	KARNAL					
SOUTH & SOUTH EAST	MAHENDERGARH	NIL	NIL	NIL	NIL	NIL
	REWARI					
	JHAJJAR					
	GURUGRAM					
	MEWAT					
	PALWAL					
	FARIDABAD					
	ROHTAK					
	SONIPAT					
	PANIPAT					
WEST & SOUTH WEST	SIRSA	NIL	NIL	NIL	NIL	THUNDERSTORM ACCOMPANIED WITH LIGHTNING LIKELY AT ISOLATED PLACES IN FATEHABAD AND JIND DISTRICTS
	FATEHABAD					
	HISAR					
	JIND					
	BHIWANI					
	CHARKHI DADRI					

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WARNING	PROBABILISTIC FORECAST		SPATIAL		RAINFALL INTENSITY	
WARNING (TAKE ACTION)	Terms	Probability of Occurrence	DRY	No Rainfall	Light	2.5-15.5 mm
ALERT (BE PREPARED)	Unlikely	<25%	ISOLATED	1-25%	Moderate	15.6-64.4 mm
WATCH (BE UPDATED)	Likely	25-50%	FEW	26-50%	Heavy	64.5-115.5 mm
NO WARNING (NO ACTION)	Very Likely	50-75%	MANY	51-75%	Very Heavy	115.6-204.4 mm
	Most Likely	>75%	MOST	76-100%	Extremely Heavy	≥204.5 mm



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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  $\geq 6.5^\circ\text{C}$

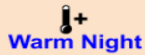
(b). Based on Actual maximum temperature

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 Storm: Wind speed  $> 220$  kmph ( $> 119$  knots)