

## Letters To The Editor

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### A SPELL OF EXCEPTIONALLY LOW TEMPERATURES OVER WESTERN PAKISTAN AND NORTHWEST INDIA FROM 6 TO 12 MAY 1955

A notable feature of weather over Western Pakistan and Northwest India during the first half of May this year, was the exceptionally low temperatures over large parts, particularly during 6-12 May, when a severe "cold wave" affected the areas. The average day temperatures (mean maximum temperatures) during 6th to 12th, were generally below normal by 15-20°F over the Punjab (P) and adjoining parts of Kashmir, by 10-15°F over Northwest Frontier Province, North Sind, northeast Baluchistan, rest of Kashmir, Punjab (I) and northern parts of Rajasthan, and by 4-8°F over rest of Rajasthan and most of northwest Uttar Pradesh and South Sind (Fig. 1). Punjab (P) enjoyed the coolest weather comparable to the spring weather of March, during this period. May is the hottest month of the year over Northwest India and Western Pakistan when a number of deaths occur every year due to heat strokes and as such this spell of cool weather this year was very welcome. The night temperatures were also generally below normal over the areas between 8 to 21 May, the coldest part being during the period 10 to 13 May 1955.

The largest departures from normal of maximum and minimum temperatures recorded at the stations are given in Table 1.

The day temperatures first started falling over Northwest Frontier Province and the Punjab (P) on the 1st in association with a western disturbance which caused scattered duststorms or thunderstorms with light rain in these areas, and were 4-7°F below normal. The average maximum temperatures till the 5th were,

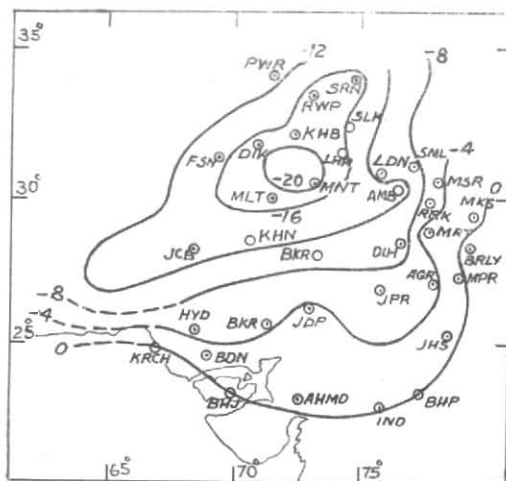


Fig. 1. Departure from normal of mean maximum temperature during 6-12 May 1955

however, only slightly below normal over most parts of western Pakistan, the Punjab (I) and north Rajasthan. Then a period of remarkably low temperatures followed, from 6th to 12th, owing to passage across N.W.F.P. and the Punjab (P) of active western disturbances and of induced secondaries across Rajasthan and the Punjab (I), which caused fairly widespread duststorms and thunderstorms accompanied at a number of places with hailstorms and good showers and also severe ground squalls, resulting in large fall of temperatures. It may be mentioned in this connection that in certain areas the advection of cold air in the upper air, made the situation exceptionally unstable. For instance, at Delhi upper air temperatures fell by 10-16°C between 700 and 200 mb, during 1500 GMT of 9th and 0300 GMT of 10th. A very severe hailstorm (hailstones of the size of ping-pong ball fell according to press reports), occurred at Khadpur, in the neighbourhood of Delhi, on the evening of 10th, involving loss of life and considerable damage to property.

TABLE 1

Province/State	Largest departure of max. temperature			Largest departure of min. temperature		
	Station	Date (May 1955)	Dep. (°F)	Station	Date (May 1955)	Dep. (°F)
Punjab (P)	Sialkot	10	- 25	Khushab	11	18
N.W.F.P.	D.I. Khan	8	- 26	D.I. Khan	11	- 10
				Pes'awar	12	- 10
Baluchistan	Ft. Sandaman	8	- 21	Ft. Sandaman	11	- 14
Sind	Jacobabad	10	- 17	Badin	13	- 8
Punjab (I)	Hissar	10	- 18	Ludhiana	11	- 15
	Ambala	11	- 18			
Rajasthan	Bikaner	10	- 21	Bikaner	13	- 14
West Uttar Pradesh	Dehra Dun	11	- 11	Dehra Dun	11	- 11
				Roorkee	11	- 11
				Roorkee	12	- 11
Kashmir	Srinagar	9	- 26	Srinagar	11	- 13

The day temperatures continued to remain generally below normal till the 16th over Western Pakistan and till the 15th over Northwest India; the night temperatures continued to be below normal generally over these areas till the 21st.

The principal amount of rainfall (1" or more) recorded during the period on any day are as follows:—

Province/State	Amount of rainfall recorded in 24 hours		
	Station	Date (May 1955)	Rain- fall (inches)
Baluchistan	Ft. Sandaman	7	1.5
Punjab (P)	Multan	7	1.0
Punjab (I)	Dalhousie	11	2.0
	Dharampur	11	1.5
	Simla	11	1.0
Kashmir	Gulmarg	11	1.5
	Srinagar	11	1.0
	Srinagar	10	1.0
	Gulmarg	10	1.0
West Uttar Pradesh	Nainital	11	1.0

The areas enjoyed a spell of cool weather (technically a cold wave) also during the previous month, from 13 to 19 April. The

two spells together considerably reduced the severity of hot season over these parts, this year.

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