

# Weather

WINTER SEASON (JANUARY-FEBRUARY 1962)

*Chief features*--(1) Dry spell over most parts of the country during the first three weeks of January, (2) Passage of five active western disturbances across the country, two during the second half of January and three in February, and (3) Moderate to severe cold wave conditions over north India and the central parts of the country in January.

Weather remained mainly dry over the country during the first three weeks of January, except for scattered to local showers of rain or snow in Jammu and Kashmir on 11th and 12th in association with the movement of a feeble western disturbance and a few showers in the south Madras State on 14th.

An active western disturbance lay over the Punjab on 20th and moved away eastwards across the Western Himalayas by 23rd. It caused fairly widespread rain or snow in Himachal Pradesh and the hills of the Punjab (I) and of west Uttar Pradesh on 22nd.

Another western disturbance lay over Baluchistan on 24th. It moved into the Punjab on 26th, intensified into a depression and later moved away eastwards across the Western Himalayas on 29th. A low pressure area formed over south Rajasthan and neighbourhood on 25th. Moving steadily eastwards, it crossed Assam by 29th. Under the combined influence of the two systems, good and well distributed rainfall occurred over most parts of north India. Rain or snow was fairly widespread in west Uttar Pradesh and the Punjab (I) and occurred locally in Himachal Pradesh on 26th and 27th. According to press reports, traffic and

communications in the Western Himalayas were considerably dislocated, following the heavy snow associated with the above two western disturbances. Thundershowers also occurred at a number of places in west Madhya Pradesh on 25th and 26th. The rainfall belt steadily shifted eastwards and local or fairly widespread showers occurred in east Uttar Pradesh on 26th and 27th, in east Madhya Pradesh and Bihar State on 27th and in Assam, West Bengal and Orissa on 28th.

Three active western disturbances moved across the country during February. The first of these moved into north Rajasthan and adjoining Punjab on 7th, lay over Uttar Pradesh and north Madhya Pradesh on 8th and moved away across Assam by 10th. It caused a good spell of rain or snow over the Western Himalayas and well distributed rainfall over northeast India on 8th and 9th.

Another western disturbance moved into the Punjab on 16th and lay over west Uttar Pradesh on 18th with a trough extending southwards upto north interior Mysore. It weakened as it moved eastwards and became unimportant by 20th. It caused local thundershowers or snow in the Western Himalayas from 16th to 19th. Thundershowers also occurred at some places in west Madhya Pradesh, Vidarbha and Andhra Pradesh on 18th and 19th and in northeast India outside Assam on 19th and 20th. According to press reports, a severe hailstorm hit Patna and neighbourhood on 19th causing heavy damage to crops and houses.

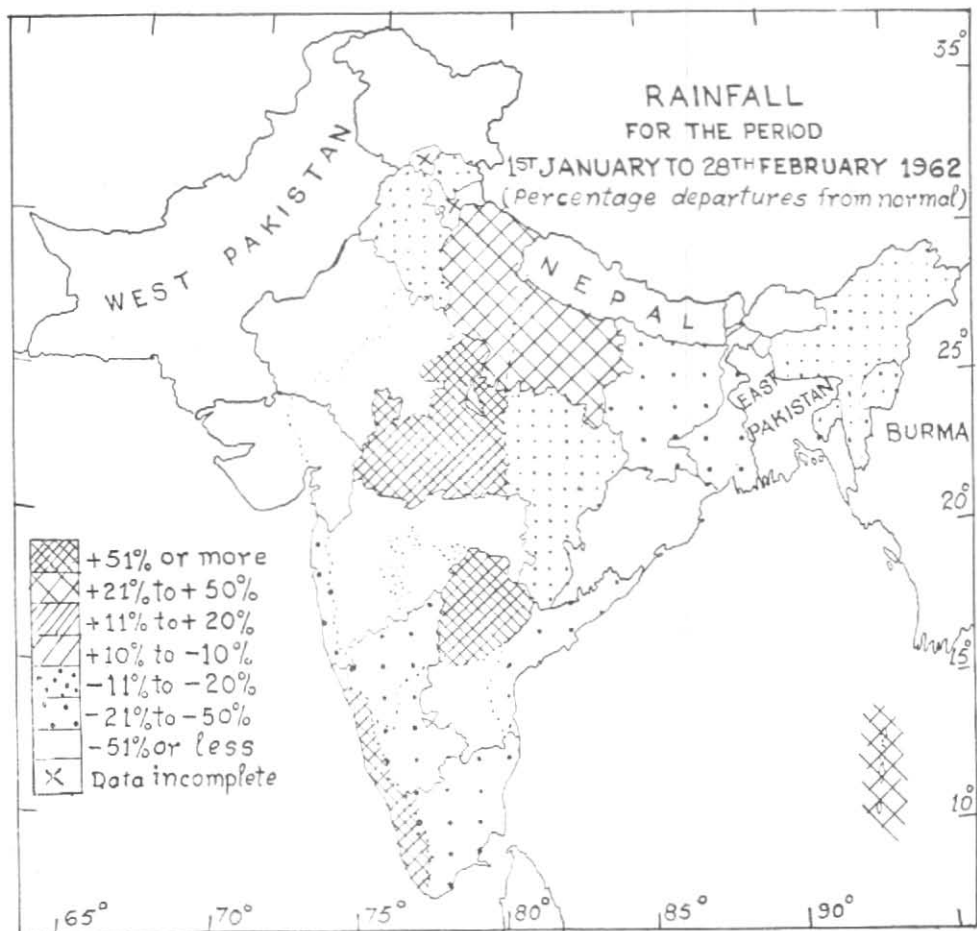


Fig. 1

The last western disturbance moved into north Rajasthan and the Punjab (P) on 23rd and intensified by 24th. It weakened thereafter and moving slowly eastwards passed away across Assam by the end of the month. This disturbance caused a good spell of rain or snow over the Western Himalayas between 24th and 26th and widespread thunderstorms in east Uttar Pradesh on 25th and in most parts of northeast India on 26th and 27th.

A few showers of rain or snow also occurred in the Western Himalayas on 1st and 2nd and again on 11th and 12th, under the influence of two feeble western disturbances. Thundershowers also occurred in Madhya Pradesh between 5th and 7th and in north-east India between 22nd and 25th in association with the eastward movement of two feeble upper air troughs.

Under the influence of two easterly waves that moved across the extreme south Peninsula and the Ceylon-Comorin area, thundershowers occurred in the south Peninsula on many days during the last week of January. Thunderstorm activity revived over the Peninsula between 18th and 22nd of February and continued over Kerala and the Madras State till 27th. Some of the noteworthy amounts of rainfall reported were: Hanamkonda 8 cm on 20th, Coonoor 9 cm on 21st, Kodaikanal 7 cm on 22nd and Trivandrum 11 cm and Mangalore 7 cm on 24th.

Night temperatures were generally below normal over the country outside the south Peninsula during the first half of January, being appreciably so over the central parts of the country and the north Peninsula on some days. In the wake of the first western

disturbance, moderate cold wave conditions developed over east Rajasthan on 16th and extended to south Uttar Pradesh, Bihar Plateau and Gangetic West Bengal on 17th. The cold wave abated by 21st.

Cold northerlies swept over northwest India and adjoining north Peninsula in the wake of the second western disturbance, resulting in a moderate cold wave over north Gujarat State and adjoining south Rajasthan on 21st. The cold wave became severe and extended to west Madhya Pradesh and north Maharashtra State on 22nd where a number of stations reported minimum temperature of 1°C. According to press reports, the cold wave caused a few deaths in Gujarat State and considerable damage to crops in Nasik district. Warm southeasterlies that penetrated into the north Peninsula under the influence of a well-marked trough in the easterlies arrested the further progress of the cold wave and also weakened it rapidly.

Night temperatures fell again in the wake of the next western disturbance and became appreciably below normal in east Rajasthan, Gujarat State, west Madhya Pradesh and adjoining Maharashtra State between 27 and 29 January. Minimum temperatures were below normal in Orissa in the first week of February. Similar cold spells occurred in west Madhya Pradesh and neighbouring areas between 2nd and 4th and again for a few days towards the end of the month. The minimum temperatures were otherwise normal or above normal over the country in February.

The season's rainfall in terms of its departure from normal over various sub-divisions of the country is shown in Fig. 1.