



Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department

Press Release

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Sub: Weak monsoon spell over Central, Peninsular and northwest India during next 7 days and increase in rainfall activity over northeast India during same period

1. Monsoon till 21 June 2021

i. Status of Progress of Southwest monsoon 2021

Southwest monsoon 2021 so far covered most parts of the country except parts of Rajasthan, Delhi, Haryana and Punjab. The northern Limit of southwest monsoon (NLM) continues to pass through Lat. 26°N / Long. 70°E, Barmer, Bhilwara, Dholpur, Aligarh, Meerut, Ambala and Amritsar (refer **Fig 1**). The salient features of monsoon progress in the 2021 is "its progress to eastern, central and adjoining northwest India earlier than normal upto 7-10 days. However, further progress over the remaining parts of country is unlikely during next 7 days.

ii. Status of Southwest monsoon rainfall till 21 June 2021

For the country as a whole, cumulative rainfall during this year's Southwest Monsoon season's Rainfall till 21 June, 2021 has been excess by **about 37% above Long Period Average (LPA) with actual rainfall during the same period is 13.78cm against its normal of 10.05cm**. Details of the rainfall distribution over the four broad geographical regions of India are given in **Table 1**.

The Meteorological sub-division-wise rainfall for the season till 21 June 2021 is given in **Fig 2**.

Table 1-Rainfall(mm) status as on 21 June 2021 over the country

Cumulative rainfall (mm)	Actual	Normal	% Departure
EAST & NORTH-EAST INDIA	253.9	224.8	13%
NORTH-WEST INDIA	71.3	40.6	76%
CENTRAL INDIA	145.8	92.2	58%
SOUTH PENINSULA	133.6	107.7	24%
country as a whole	137.8	100.5	37%

2. Prevailing Monsoon Features as on 22 June 2021

a. The Madden-Julian oscillation (MJO) is one of the dominant modes of intra-seasonal variability in the tropical atmosphere. Its location and amplitude strongly modulates the genesis and intensity of tropical convection and associated circulating features like low pressure systems over the north **Indian** Ocean. It is currently lying in Phase 1 (east Africa) with amplitude greater than 1. It is likely to remain in phase 1 with amplitude greater than one during next 1 week. Hence the phase and amplitude of MJO are not favourable for enhancing the convection over north Indian Ocean region and hence monsoon rainfall activities over the region during next 1 week.

b. **Mid-latitude westerly and weakening of lower level easterly over north India:** Analysis of NWP models till 30 June 2021 indicate Mid latitude westerly winds dominating over north India during next week. A Western Disturbance as lies as a cyclonic circulation over north Pakistan & adjoining Jammu & Kashmir and a trough in mid and upper tropospheric levels and another mid-latitude trough likely to enhance rainfall along east coast during 24-26 June. These are not favourable for enhancing monsoon activity over Central & plains of Northwest India.

c. **Cross equatorial flow over Arabian Sea: Winds over eastern and central parts of Arabian Sea** have weakened and currently it is about 10-20 knots along west coast and such weak monsoonal winds are likely to prevail during next 7 days.

d. **Low Pressure Systems:** Forecasts based on model consensus show low probability of formation of low pressure systems over core monsoon areas as well as over north Bay of Bengal till 30 June 2021 and further weakening of lower levels easterly over northern plains of India.

3. Forecast and warning

◆ **Under the influence of Western Disturbance in mid & upper tropospheric westerlies;** current spell of isolated light to moderate rainfall very likely to continue over Western Himalayan Region and adjoining plains of northwest India during next 5 days.

◆ Gradual rise in maximum temperatures by 3-4° C over most parts of Northwest and adjoining Central India during next 3 days and no significant change thereafter.

◆ **Under the influence of lower level wind convergence and monsoonal easterly and south-easterly wind;** fairly widespread to widespread rainfall very likely over Odisha, West Bengal & Sikkim, Jharkhand, Chhattisgarh and Bihar during next 5 days with slight reduction thereafter. Isolated heavy rainfall likely over Gangetic West Bengal and Odisha during next 5 days; north Chhattisgarh and Jharkhand on 22nd & 23rd, Sub Himalayan West Bengal & Sikkim during 22-25 June; over Bihar on 22nd June, 2021

◆ **Under the influence of strengthening of moist south-westerly winds;** fairly widespread to widespread rainfall is likely over Northeast India during next 7 days with isolated heavy to very heavy rainfall over the region.

◆ **Subdued rainfall activity likely over westcentral and southern parts of India during next 1 week.**

For latest on day to day forecast and warning update refer

https://mausam.imd.gov.in/imd_latest/contents/subdivisionwise-warning.php

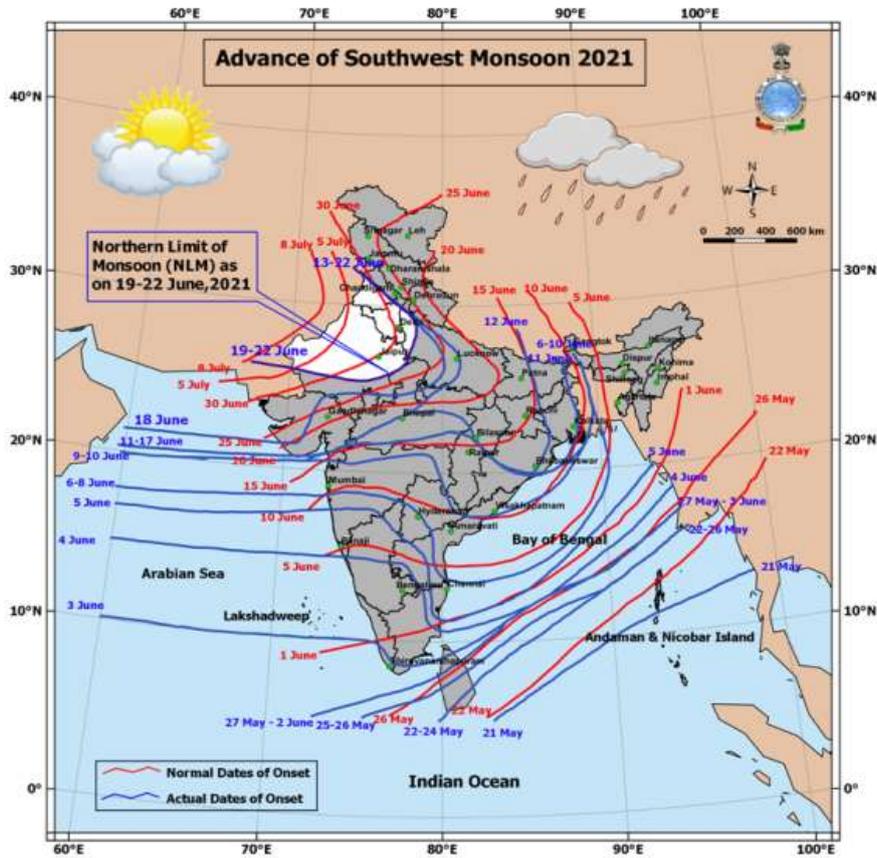


Fig 1: Northern Limit of the southwest Monsoon 2021 as on 22 June 2021

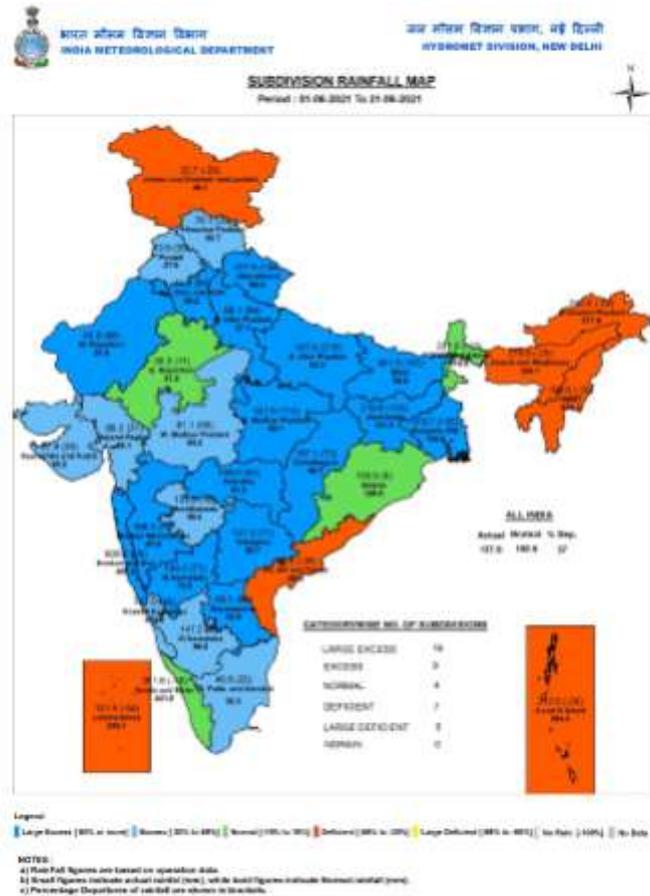


Fig 2: Meteorological sub-division-wise rainfall distribution for the southwest monsoon season 2021, till 21 June 2021