

Press Release Date: 29th May, 2022

Time of Issue: 1315 hrs IST

Subject: Advancement of Southwest Monsoon over Kerala today, the 29th May, 2022

Weather observed during past 24 hours ending at 0830 hrs IST of today:

> Isolated heavy rainfall occurred over Kerala, Tamilnadu, Sub-Himalayan West Bengal and Bihar.

Advancement of Southwest Monsoon:

- ➤ Southwest Monsoon has advanced into remaining parts of south Arabian Sea, Lakshadweep area, most parts of Kerala, some parts of south Tamil Nadu, some parts of Gulf of Mannar and some more parts of southwest Bay of Bengal today, the 29th May 2022. Thus, Southwest Monsoon has set in over Kerala today, the 29th May, 2022 against the normal date of 01st June i.e. 3-days ahead of its normal date (Table-I).
- ➤ The Northern Limit of Monsoon (NLM) now passes through lat. 12°N/ Long. 60°E, lat. 12°N/ Long. 70°E, Kannur, Palakkad, lat. 9°N/ Long. 79°E, lat. 8.0°N/ Long. 83°E, 12.5°N/90°E, 16.0°N/93°E and 18.0°N/94.5°E (Annexure-I).

Following conditions are satisfied for declaration of onset of southwest Monsoon over Kerala today, the 29th May 2022:

- ✓ The depth of westerly winds extends upto 4.5 km above mean sea level.
- ✓ The strength of the westerly winds have increased over southeast Arabian Sea and is about 15-20kts (25-35kmph).
- ✓ Cloudiness over southeast Arabian Sea and adjoining areas of Kerala have increased and the average outgoing long wave radiation(OLR) is about 189.7 W/M² (thus <200 W/M²).
- ✓ There has been widespread rainfall activity over Kerala during past 24 hours and out of 14 rainfall monitoring stations for declaring onset of monsoon over Kerala, 10 stations have received rainfall of 2.5 mm or more.
- Conditions are favourable for further advance of southwest monsoon into some parts of central Arabian Sea, reaming parts of Kerala, some more parts of Tamil Nadu, some parts of Karnataka, and some more parts of south and Central Bay of Bengal, some parts of northeast Bay of Bengal and northeastern states during next 3-4 days.

Rainfall/thunderstorm Forecast & Warnings:

➤ Under the influence of monsoonal westerly winds from Arabian Sea over the south peninsular India in lower & middle tropospheric levels and a cyclonic circulation over Kerala & neighbourhood in mid tropospheric levels:

- ✓ Widespread light/moderate rainfall with thunderstorm/lightning very likely over Kerala & Mahe & Lakshadweep and isolated to scattered rainfall over Andhra Pradesh, Telangana, Karnataka and Tamilnadu, Puducherry & Karaikal during next 5 days. Isolated heavy rainfall also likely over Kerala & Mahe during 29th May-02nd June; over Tamilnadu and Lakshadweep on 29th May, 2022.
- ✓ Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over southwest Arabian Sea during next 5 days; over Southeast Arabian Sea, Lakshadweep area, along & off Kerala coast, Comorin area, Northeast Arabian Sea & adjoining Gujarat coast on 29th & 30th May, 2022. Fishermen are advised not to venture into these areas.
- ➤ Under the influence of a trough in westerlies and southwesterly winds from Bay of Bengal to northeast India at lower tropospheric levels:
 - ✓ Scattered to fairly widespread light/moderate rainfall very likely over Northeast India and Sub-Himalayan West Bengal & Sikkim and isolated to scattered rainfall with isolated thunderstorm/lightning/gusty winds over Bihar, Jharkhand, Odisha and Gangetic West Bengal next 5 days.
 - ✓ Isolated heavy rainfall also likely over Sub-Himalayan West Bengal & Sikkim during 30th May-1st June; over Assam-Meghalaya during 29th May-02nd June; over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura on 01st & 02nd June, 2022.

Maximum Temperature forecast and Heat wave warnings:

- ✓ Gradual rise in maximum temperatures by 2-4°C very likely over many parts of Northwest during next 3 days and over East India during next 5 days and no significant change thereafter.
- ✓ No significant change in maximum temperatures very likely over rest parts of the country during next 5 days.

Heat wave warnings:

✓ No significant heat wave conditions very likely over the country during next 5 days.

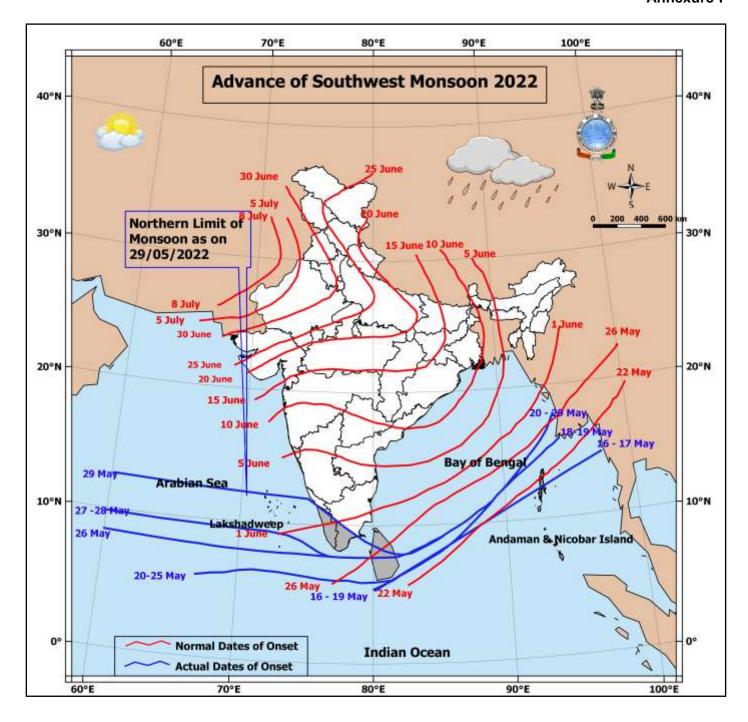
Multi-hazard warning are given in annexure-II

For more details refer: https://mausam.imd.gov.in/imd latest/contents/subdivisionwise-warning.php

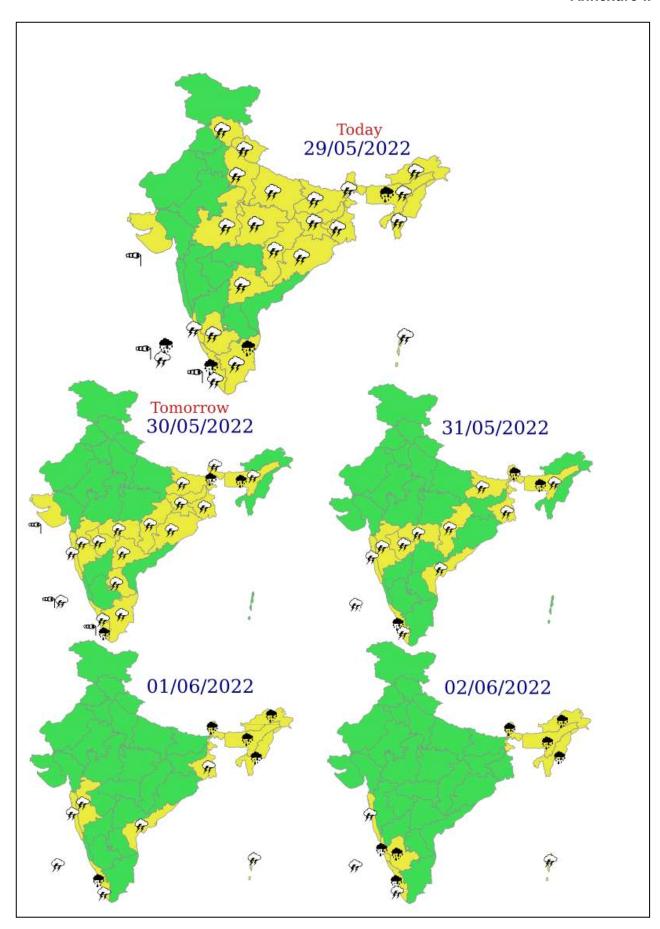
Year	Date of monsoon onset over Kerala
2013	1-Jun
2014	6-Jun
2015	5-Jun
2016	8-Jun
2017	30-May
2018	29-May
2019	8-Jun
2020	1-Jun
2021	3-Jun
2022	29-May

Table-I: Past Date Monsoon Onset over Kerala (MOK) (2013-2022)

Annexure-I



Annexure-II



Legends:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

- 1) **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- 2) Central India: West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.





Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

F Thunderstorm with Lightning

