



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Dated: 1st June, 2020
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Sub: Onset of Southwest Monsoon over Kerala 2020

1. Southwest Monsoon has set in over Kerala today, the 1st June, 2020, coinciding with its normal date.
2. The Northern Limit of Monsoon (NLM) passes through lat. 12°N/ Long. 60°E, lat. 12°N/ Long. 70°E, Cannur, Coimbatore, Kanyakumari, lat. 8°N/ Long. 86°E, lat. 11°N/ Long. 90°E, lat. 14°N/ Long. 93°E and lat. 16°N/ Long. 95°E (**Fig.1**).

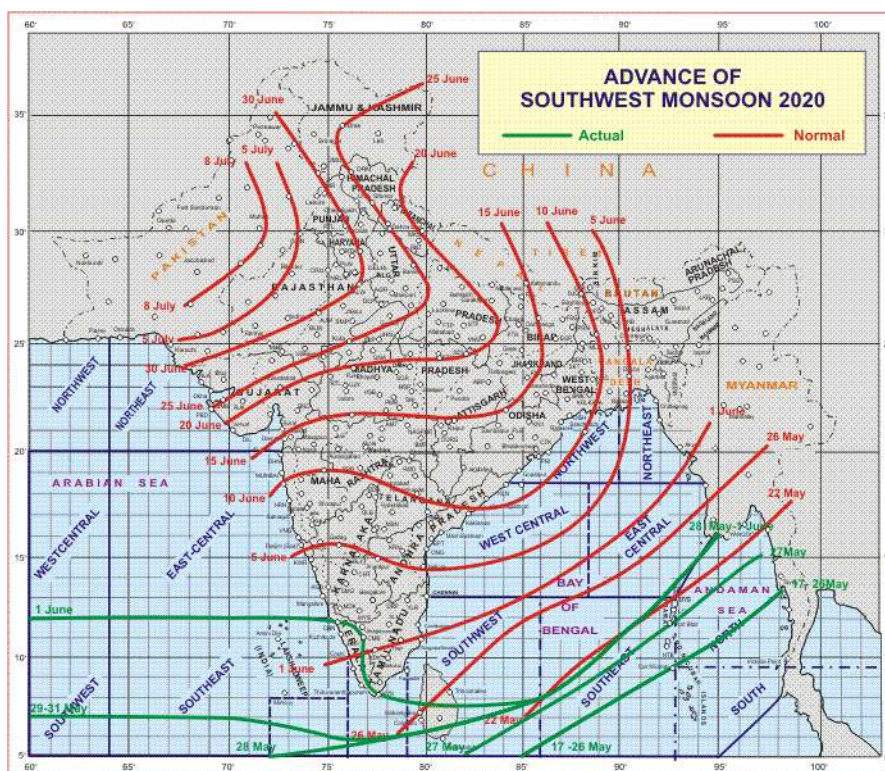


Fig.1. Advance of Southwest Monsoon 2020

3. Meteorological conditions leading to onset of southwest monsoon over Kerala

- a) Widespread rainfall occurred over Kerala, during past 2 days. More than 70% of the 14 rainfall monitoring stations for Monsoon onset over Kerala have reported rainfall during last 48 hours (**Fig-2**).
- b) Westerly winds have strengthened in the lower levels (wind speed upto 20 knots) and deepened upto 4.5 km over the south Arabian Sea.

- c) There is persistent convection (cloudiness indicated by Outgoing Longwave Radiation values $<200 \text{ Wm}^{-2}$) from satellite imagery and coastal Doppler Weather Radars from 27th May, 2020 onwards.
- d) In addition to the above features, a **low pressure area** has formed over Southeast & adjoining Eastcentral Arabian Sea and Lakshadweep area on 31st May, 2020 which intensified into a **depression** over eastcentral & adjoining southeast Arabian Sea today morning, the 1st June, 2020.
- e) Criterion for declaration of southwest monsoon over Kerala is given in **Annexure 1**.

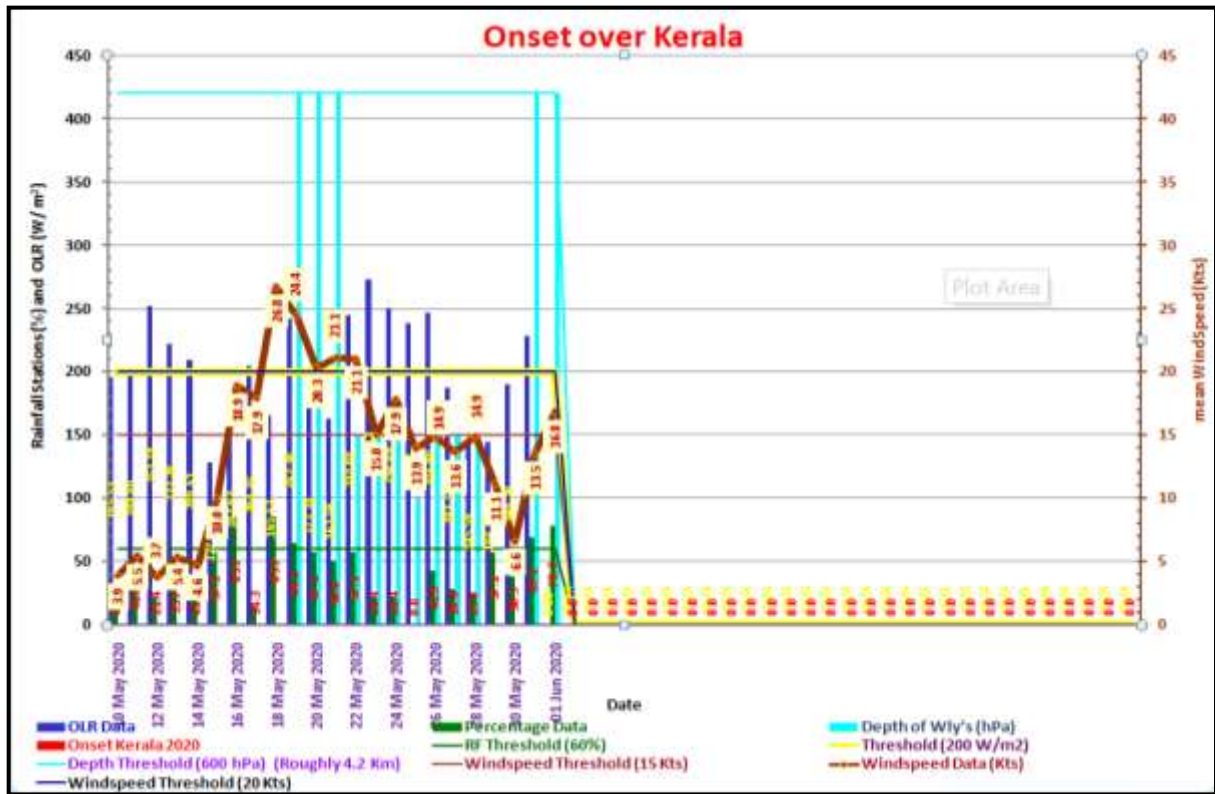


Fig.2. Observed Rainfall, OLR & wind speed from 10th May, 2020 to 1st June

For updated forecast kindly visit:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

Criterion for declaration of southwest monsoon over Kerala

- a) Rainfall If after 10th May, 60% of the available 14 stations enlisted*, viz. Minicoy, Amini, Thiruvananthapuram, Punalur, Kollam, Alapuzha, Kottayam, Kochi, Vellanikkara (Thrissur), Kozhikode, Thalassery, Kannur, Kudulu (Kasargod) and Mangaluru report rainfall of 2.5 mm or more for two consecutive days, the onset over Kerala be declared on the 2nd day, provided the following criteria are also in concurrence.
- b) Wind field Depth of westerlies should be maintained upto 600 hPa, in the box equator to Lat. 10°N and Long. 55°E to 80°E. The zonal wind speed over the area bounded by Lat. 5-10°N, Long. 70-80°E should be of the order of 15 – 20 Kts. at 925 hPa. The source of data can be RSMC wind analysis/satellite derived winds.
- c) Outgoing Longwave Radiation (OLR) INSAT derived OLR value should be below 200 Wm^{-2} in the box confined by Lat. 5-10°N and Long. 70-75°E.