

भारत मौसम विज्ञान विभाग
पृथ्वी विज्ञान मंत्रालय



INDIA METEOROLOGICAL DEPARTMENT
Ministry of Earth Sciences

WEEKLY WEATHER REPORT

साप्ताहिक मौसम विवरण

For the week ending on **9th November 2022** (18th Kartika 1944 Saka)

CHIEF FEATURES: 1) Under the influence of cyclonic circulations in the lower/ middle tropospheric levels close to the coastal areas of southeast peninsula and an east west trough in the lower tropospheric levels running close to extreme south peninsula; fairly widespread to widespread rainfall /thunderstorms occurred over Kerala, Mahe, Tamil Nadu, Puducherry, Karaikal for three to four days and over South interior Karnataka for a single day whereas fairly widespread rainfall /thunderstorms occurred over Rayalaseema, Lakshadweep for one /two days of the week; scattered heavy rainfall /thunderstorms occurred over Kerala, Mahe, Tamil Nadu, Puducherry, Karaikal on the remaining days of the week and over Coastal and South interior Karnataka, Coastal Andhra Pradesh, Yanam, Lakshadweep on one or two days whereas isolated rainfall /thunderstorms occurred over Coastal Karnataka on many days and over interior Karnataka, Rayalaseema, Telangana and Coastal Andhra Pradesh, Yanam for three to four days; isolated extremely heavy rainfall also occurred over Tamil Nadu, Puducherry, Karaikal on one day. 2) Movement of western disturbances caused fairly widespread to widespread rainfall /thunderstorms over Jammu -Kashmir and Ladakh and isolated rainfall /thunderstorms over Himachal Pradesh for two to three days during the second half of the week whereas isolated rainfall /thunderstorms occurred over Jammu -Kashmir and Ladakh, Uttarakhand on one day each during the same period; passage of these systems and their induced cyclonic circulations caused isolated rainfall /thunderstorms over adjoining plains of northwest India also for one or two days.

Activity of North East Monsoon:

The Northeast Monsoon was active over Tamil Nadu, South interior Karnataka on 3rd; active over Kerala on 5th and 7th.

SEMI-PERMANENT FEATURES:

Sub-Tropical Ridge (STR): It oscillated between Lat.10°N and Lat.15°N at 200 hPa.

Inter Tropical Convergence Zone (ITCZ): During the week, it was located between the Lat. 8°N and Lat.15°N over the Indian region.

Sub-Tropical Westerly Jet (STWJ): The highest wind speed of 97 knots was recorded over Delhi on 6th November at 225 hPa.

MINIMUM TEMPERATURE:

The lowest minimum temperature of 10.8°C reported at Mandla (east Madhya Pradesh) on 8th November over the plains of the country.

SYNOPTIC WEATHER:

Thunderstorms / lightning were reported at isolated places over coastal Andhra Pradesh, Kerala, Tamil Nadu on 3rd; at isolated places over coastal Karnataka, Tamil Nadu, Puducherry, Karaikal, coastal Andhra Pradesh, Yanam on 4th; at isolated places over Kerala, Mahe, coastal Karnataka, Tamil Nadu, Puducherry, Karaikal, coastal Andhra Pradesh, Yanam on 5th; at a few places over Kerala, Mahe on 6th; at a few places over Jammu-Kashmir and Ladakh, Gilgit, Baltistan, Muzaffarabad, Kerala, Mahe and at isolated places over Tamil Nadu, Puducherry, Karaikal, Lakshadweep on 7th; at a few places over Jammu- Kashmir and Ladakh, Gilgit, Baltistan, Muzaffarabad, Kerala, Mahe and at isolated places over coastal Karnataka, Tamil Nadu, Puducherry, Karaikal, Lakshadweep on 8th; at isolated places over west Rajasthan, Kerala, Mahe, Tamil Nadu, Puducherry, Karaikal on 9th.

WEATHER AND ASSOCIATED SYNOPTIC FEATURES:

- An east-west trough ran from cyclonic circulation over Kerala coast and neighbourhood to south Andaman sea across south Tamil Nadu and south Bay of Bengal which extended between 1.5

and 3.6 km above m. s. l. on 4th. It ran from Comorin area to south Andaman sea across south Bay of Bengal at 1.5 km above m. s. l. on 5th. It ran from Comorin area to the cyclonic circulation over southeast Bay of Bengal and adjoining equatorial Indian ocean across south Bay of Bengal which extended upto 1.5 km above m. s. l. on 6th. It ran from southeast Bay of Bengal and adjoining equatorial Indian Ocean to southwest Bay of Bengal off south Sri Lanka coast which extended upto 3.1 km above m. s. l. on 7th. Extending upto 4.5 km above m. s. l., it ran from southeast Bay of Bengal to the cyclonic circulation over southwest Bay of Bengal and adjoining equatorial Indian Ocean on 8th and ran from central Bay of Bengal to the cyclonic circulation associated with the low pressure area over southwest Bay of Bengal and adjoining equatorial Indian ocean on 9th.

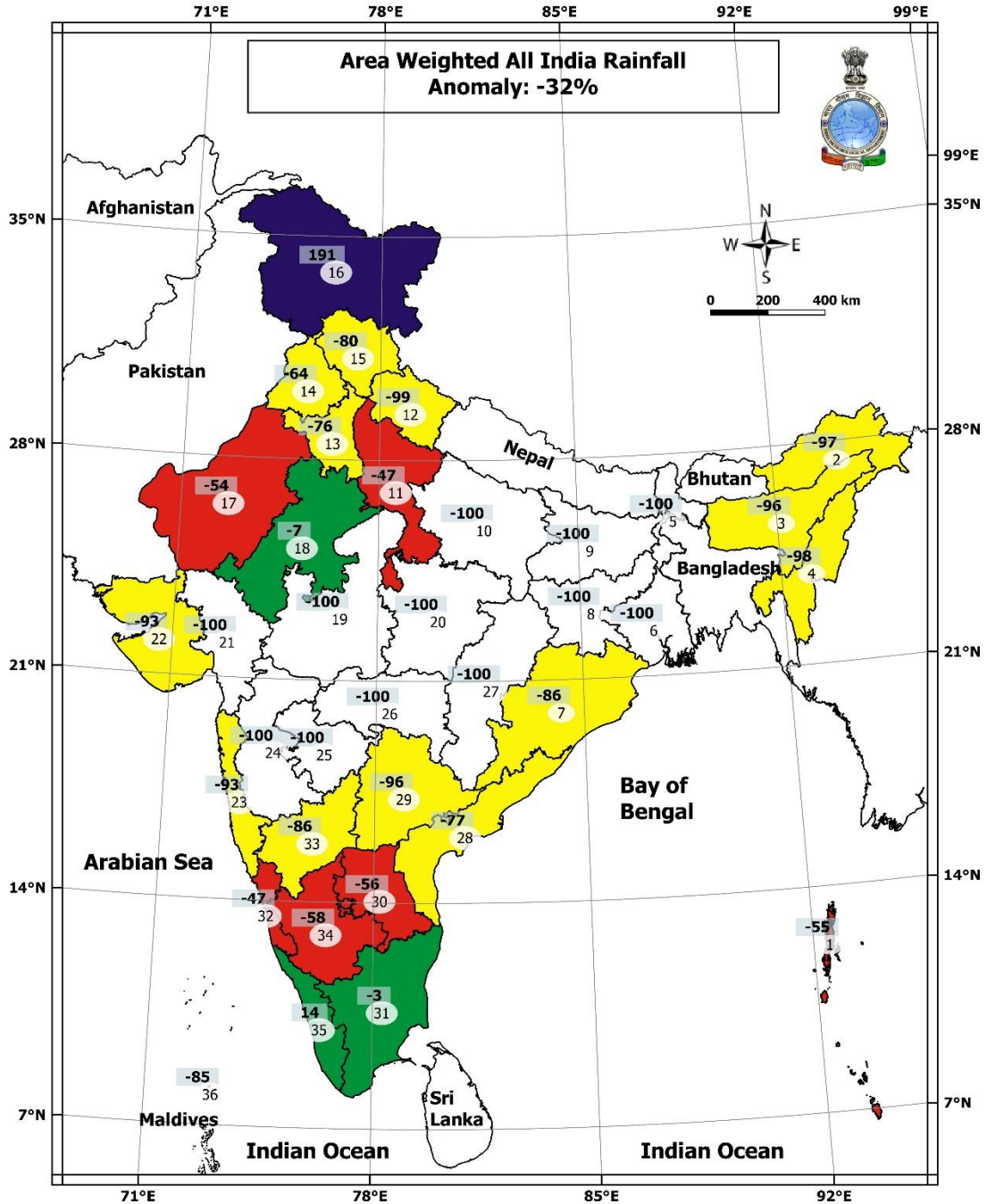
- A western disturbance as a trough in westerlies between 3.1 and 7.6 km above m. s. l. ran roughly along Long. 55°E to the north of Lat. 30°N on 6th morning and then ran with its axis at 5.8 above m. s. l. roughly along Long. 60°E to the north of Lat. 30°N. It ran roughly along Long. 62°E to the north of Lat. 30°N on 7th, ran roughly along Long. 65°E to the north of Lat. 20°N on 8th. and ran roughly along Long. 70°E to the north of Lat. 28°N on 9th.
- A cyclonic circulation lay over southwest Bay of Bengal and adjoining equatorial Indian Ocean which extended upto 4.5 km above m. s. l. on 8th. Under its influence, a low pressure area formed over the same region with the associated cyclonic circulation extending upto 7.6 km above m. s. l. on 9th.
- An Induced cyclonic circulation lay over southwest Rajasthan and neighbourhood which extended upto 1.5 km above m. s. l. on 8th which persisted at 1.5 km above m. s. l. on 9th.
- A cyclonic circulation lay over Nagaland and neighbourhood which extended upto 0.9 km above m. s. l. on 7th. It lay over Bangladesh and neighbourhood at 1.5 km above m. s. l. on 8th which became less marked on 9th.
- A cyclonic circulation over south Andaman sea and adjoining southeast Bay of Bengal which extended between 3.1 and 4.5 km above m. s. l. on 4th. Extending between 3.1 and 4.5 km above m. s. l., it lay over southeast Bay of Bengal and adjoining south Andaman sea on 5th. It lay over southeast Bay of Bengal and adjoining equatorial Indian ocean extending upto 1.5 km above m. s. l. on 6th which merged with the east - west trough running from southeast Bay of Bengal and adjoining equatorial Indian Ocean to southwest Bay of Bengal on 7th.
- An induced cyclonic circulation lay over central Pakistan and adjoining Punjab, on 5th morning. It then lay over north Pakistan and adjoining Punjab which extended upto 1.5 km above m. s. l. Extending upto 1.5 km above m. s. l., it lay over Haryana and neighbourhood on 6th which became less marked on 7th.
- Last week's cyclonic circulation over Tamil Nadu and neighbourhood lay over south Tamil Nadu and neighbourhood which extended upto 5.8 km above m. s. l. on 3rd. It lay over Kerala coast and neighbourhood which extended upto 3.6 km above m. s. l. on 4th. Extending upto 0.9 km above m. s. l., it lay over Kerala coast and adjoining southeast Arabian sea on 5th. It lay over southeast and adjoining southwest Arabian sea on 6th morning which extended upto 1.5 km above m. s. l. and then became less marked.
- A western disturbance as a trough in westerlies which extended between 3.1 and 7.6 km above m. s. l. with its axis at 5.8 km above m. s. l. ran roughly along Long. 55°E to the north of Lat. 30°N on 4th. It ran roughly along Long. 60°E to the north of Lat. 30°N on 5th which moved away northeastward on 6th.
- Last week's western disturbance as a trough in westerlies with its axis at 5.8 km above m. s. l. ran roughly along Long. 84°E to the north of Lat. 25°N on 3rd. It ran roughly along Long. 90°E to the north of Lat. 25°N on 4th which moved away northeastward on 5th.
- Last week's trough, extending upto 5.8 km above m. s. l., ran from the cyclonic circulation over south Tamil Nadu and neighbourhood to Lakshadweep area across Kerala on 3rd which became less marked on 4th.
- A cyclonic circulation lay over southwest Bay of Bengal and neighbourhood which extended upto 1.5 km above m. s. l. on 3rd. It merged with the east-west trough running from cyclonic circulation over Kerala coast and neighbourhood to south Andaman sea on 4th.

MEDIA REPORTS: Nil.

9th November 2022
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Rainfall % Departure For the Week ending 9 November 2022



- Indicates rainfall anomaly
- Indicates sub-division number

Rainfall % Departure For the Season ending 9 November 2022

