

Experimental Climate Monitoring and Prediction

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Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 200 mm in Jaffna, Kilinochchi, Mullaitivu, Trincomalee, Badulla, Monaragala and Nuwara Eliya districts during 3 - 8 Oct.
- Between 26 Sep – 2 Oct: up to 70 mm of daily rainfalls were recorded in several parts of the island on the 26th, 27th, 29th, and 30th.
- From 23 - 29 Sep: minimum temperature of 15 °C was recorded from Nuwara Eliya district while North-Central province recorded a maximum temperature between 35-40 °C.
- From 25 Sep - 1 Oct: up to 18 km/h, northwesterly winds were experienced by the entire island.
- 0.5 °C above average sea surface temperature was observed in the seas around Sri Lanka.

Monitoring

Rainfall

Weekly Monitoring: On September 26th, Badulla district received up to 70 mm of rainfall; Ampara district up to 60 mm; Mannar, Vavuniya, Anuradhapura, Matale, Kandy, Nuwara Eliya and Monaragala districts up to 50 mm; Trincomalee, Polonnaruwa, Kurunegala and Kegalle districts up to 30 mm; and Puttalam, Galle and Ratnapura districts up to 20 mm. On the 27th, Anuradhapura and Kurunegala districts received up to 70 mm of rainfall; Mullaitivu, Vavuniya, Mannar, Puttalam, Polonnaruwa and Matale districts up to 50 mm; Kegalle and Kandy districts up to 30 mm; and Trincomalee, Badulla and Monaragala districts up to 20 mm. On the 28th, Kurunegala, Anuradhapura, Matale and Kandy districts up to 30 mm; and Kegalle, Ratnapura, Nuwara Eliya and Badulla districts up to 20 mm. On the 29th, Kandy, Badulla, Monaragala and Ratnapura districts received up to 70 mm of rainfall; Hambantota district up to 60 mm; Kurunegala, Matale, Kegalle, Matara and Ampara districts up to 50 mm; Jaffna, Anuradhapura and Galle districts up to 30 mm; and Mannar, Puttalam, Gampaha, Colombo, Kalutara and Polonnaruwa districts up to 20 mm. On the 30th, Kalutara and Galle districts received up to 70 mm of rainfall; Anuradhapura, Colombo, Ratnapura, Matara and Hambantota districts up to 30 mm; and Puttalam, Kurunegala, Gampaha, Kegalle and Monaragala districts up to 20 mm. On October 1st, Puttalam district received up to 20 mm of rainfall. On the 2nd, Kurunegala, Kegalle, Kandy, Ampara, Monaragala and Batticaloa districts received up to 20 mm of rainfall.

Total Rainfall for the Past Week: The RFE 2.0 tool shows total rainfall 100-150 mm of total rainfall in Monaragala, Anuradhapura, Kurunegala, Matale and Kandy districts; up to 75-100 mm in Kegalle, Nuwara Eliya, Ratnapura, Kalutara and Ampara districts; and up to 50-75 mm in Mannar, Puttalam, Gampaha, Colombo, Matara, Hambantota and Polonnaruwa districts. Above average rainfall up to 50-100 mm is shown for Anuradhapura, Kurunegala, Matale, Kandy, Ratnapura, Monaragala and Badulla districts; and up to 25-50 mm in most parts of the island. Below average rainfall up to 10-25 mm is shown for Jaffna and kilinochchi districts.

Monthly Monitoring: During September - above average rainfall conditions up to 210 mm were experienced by Ratnapura, Monaragala, Badulla, Kandy, Anuradhapura districts and north eastern regions of Kurunegala district; and up to 60 mm in Mannar, Vavuniya, Puttalam, Matale, Polonnaruwa, Kalutara, Galle and several regions of Matara and Ampara districts. Mullaitivu, Trincomalee, Batticaloa, Gampaha, Colombo and south western regions of Kurunegala district experienced below average rainfall up to 90 mm. The CPC Unified Precipitation Analysis tool shows up to 300 mm of total rainfall in Ratnapura, Kalutara and Galle districts; and up to 200 mm in Anuradhapura, Kurunegala, Kandy, Nuwara Eliya, Kegalle, Colombo, Matara, Badulla and Monaragala districts.

Ocean State (Text Courtesy IRI)

Pacific sea state: September 19, 2018

In mid-September 2018, the east-central tropical Pacific waters reflected ENSO-neutral conditions, with near to slightly above-average SST. The key atmospheric variables also suggested neutral conditions, although weakly westerly low-level wind anomalies have developed. The subsurface water temperature continued to be above-average. The official CPC/IRI outlook calls for a 50-55% chance of El Niño development during fall, rising to 65-70% for winter 2018-19. An El Niño watch is in effect. The latest forecasts of statistical and dynamical models collectively favor El Niño development during fall, most likely maintaining weak strength during late fall and winter; most forecasters agree with this scenario.

Indian Ocean State

Predictions

Rainfall

14-day prediction:

NOAA NCEP models:

From 3rd – 9th Oct: Total rainfall more than 135 mm in Jaffna and Kilinochchi districts; up to 125-135 mm in Mullaitivu, Vavuniya and Mannar districts; up to 105-115 mm in Trincomalee district; up to 95-105 mm in Anuradhapura district; up to 85-95 mm in Puttalam district; 75-85 mm in Colombo, Ratnapura and Matara districts; and up to 65-75 mm in Kurunegala, Kegalle, Kandy and Nuwara Eliya districts.

From 10th – 16th Oct: Total rainfall between 45-55 mm in Jaffna, Mannar, Kilinochchi, Vavuniya, Anuradhapura, Polonnaruwa, Matale, Kandy, Nuwara Eliya, Badulla, Kegalle, Ratnapura and Colombo districts; and up to 35-45 mm in rest of the island.

IMD NCMWRF Forecast:

5th Oct: Up to 160 mm of rainfall in Mullaitivu, Trincomalee, Badulla, Kalutara, Galle, Matara and Ratnapura districts; and up to 80 mm in Vavuniya, Mannar, Badulla, Monaragala and Galle districts; and up to 40 mm in Gampaha and Kalutara districts.

6th Oct: Up to 160 mm in Anuradhapura, Polonnaruwa and Matale districts; and up to 40 mm in Mullaitivu, Mannar and Ratnapura districts.

IRI Model Forecast:

From 3 – 8 Oct: Total rainfall up to 200 mm in Jaffna, Kilinochchi, Mullaitivu, Trincomalee, Badulla, Monaragala and Nuwara Eliya districts; up to 100 mm in Mannar, Vavuniya, Anuradhapura, Polonnaruwa, Matale, Kandy, Kegalle, Ratnapura, Galle and Ampara districts; and up to 75 mm in most parts of the island.

MJO based OLR predictions

For the next 15 days:

MJO shall enhance the rainfall in Sri Lanka.

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Official hydro-meteorological statements are provided by the Sri Lanka Department of Meteorology and Department of Irrigation.

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