

Experimental Climate Monitoring and Prediction

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Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 200 mm in Polonnaruwa, Kandy, Nuwara Eliya, Badulla and Monaragala districts during 26th Sep 1st Oct.
- Between 19 - 25 Sep: up to 90 mm of rainfall was recorded in Colombo district on the 24th.
- From 16 - 22 Sep: minimum temperature of 15 °C was recorded from Nuwara Eliya district while North-Central and Eastern provinces recorded a maximum temperature between 35-40 °C.
- From 17 - 23 Sep: up to 36 km/h, westerly 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 19th, Ratnapura district received up to 30 mm of rainfall; and Colombo, Kalutara, Galle, Matara and Hambantota districts up to 20 mm. On the 20th, Ratnapura district received up to 50 mm of rainfall; Gampaha, Kegalle, Nuwara Eliya, Colombo and Kalutara districts up to 20 mm. On the 21st, Ratnapura district received up to 50 mm of rainfall; Kalutara, Galle, Matara, Hambantota and Monaragala districts up to 30 mm; and Kurunegala, Kegalle, Colombo, Nuwara Eliya and Badulla districts up to 20 mm. On the 22nd, several regions of Monaragala and Ampara districts received up to 20 mm of rainfall. On the 23rd, Anuradhapura and Kurunegala districts received up to 20 mm. On the 24th, Colombo district received up to 90 mm of rainfall; Monaragala district up to 60 mm; Jaffna, Badulla, Gampaha, Kalutara, Ratnapura and Hambantota districts up to 50 mm; Kilinochchi, Polonnaruwa, Ampara, Matale, Kegalle, Galle and Matara districts up to 30 mm; and Mullaitivu, Mannar, Puttalam, Kurunegala, Anuradhapura, and Kandy districts up to 20 mm. On the 25th, Kalutara and Galle districts received up to 80 mm of rainfall; Ratnapura and Matara districts up to 50 mm; Colombo, Badulla and Monaragala districts up to 30 mm; and Kandy, Nuwara Eliya, Ampara and Hambantota districts up to 20 mm.

Total Rainfall for the Past Week: The RFE 2.0 tool shows total rainfall 75-100 mm of total rainfall in Monaragala, Hambantota, Galle, Matara, Ratnapura and Colombo districts; up to 50-75 mm in Gampaha, Kegalle, Nuwara Eliya, Matale and Badulla districts; and up to 25-50 mm in Kalutara, Puttalam, Kurunegala, Kandy, Polonnaruwa and Ampara districts. Above average rainfall up to 50-100 mm is shown for Colombo, Kalutara, Galle, Ratnapura, Hambantota and Monaragala districts; and up to 25-50 mm in Matara, Gampaha, Kegalle, Nuwara Eliya, Matara and Badulla districts. Below average rainfall up to 10-25 mm is shown for western regions of Anuradhapura district and Mullaitivu, Trincomalee and Batticaloa districts.

Monthly Monitoring: During August - above average rainfall conditions up to 180 mm were experienced by Nuwara Eliya district; and several regions of Polonnaruwa, Batticaloa, Ratnapura and Monaragala districts up to 60 mm. Rest of the island experienced below average rainfall up to 120 mm. The CPC Unified Precipitation Analysis tool shows up to 150 mm of total rainfall in Ratnapura, Nuwara Eliya, Matale, Ampara and Badulla districts; and up to 100 mm in Polonnaruwa, Kandy, Kegalle, Colombo and Matara 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

0.5 °C above average sea surface temperature was observed in the seas around Sri Lanka.

Predictions

Rainfall

14-day prediction:

NOAA NCEP models:

From 26th Sep – 2nd Oct: Total rainfall between 45-55 mm in Matara and Ratnapura districts; up to 35-45 mm in Ampara, Hambantota, Badulla, Monaragala, Nuwara Eliya and Galle districts; and up to 25-35 mm in Batticaloa, Kandy and Kegalle districts.

From 3rd – 9th Oct: Total rainfall between 45-55 mm in Ampara, Hambantota, Galle, Matara, Badulla, Monaragala, Nuwara Eliya and Ratnapura districts; and up to 35-45 mm in Kandy, Kegalle and Gampaha districts.

IMD NCMWRF Forecast:

28th Sep: Up to 160 mm of rainfall in Mullaitivu, Trincomalee, Badulla, Kalutara, Galle, Matara and Ratnapura districts; and up to 80 mm in Monaragala, Hambantota, Batticaloa and Vavuniya districts.

29th Sep: Up to 160 mm in Kandy, Matale, Badulla, Mullaitivu and Vavuniya districts; up to 80 mm in Anuradhapura, Polonnaruwa, Nuwara Eliya and Ampara districts; and up to 40 mm in Ratnapura district.

IRI Model Forecast:

From 26 Sep – 1 Oct: Total rainfall up to 200 mm in Polonnaruwa, Kandy, Nuwara Eliya, Badulla and Monaragala districts; up to 100 mm in Trincomalee, Batticaloa, Ampara and Matale districts; and up to 75 mm in Mullaitivu, Anuradhapura, Ratnapura and Hambantota districts.

MJO based OLR predictions

For the next 15 days:

MJO shall suppress the rainfall in Sri Lanka for next 10 days and shall enhance in the following 5 days.

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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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