

Experimental Climate Monitoring and Prediction

by: Ruchira Lokuhetti, Chalani Malge, Janan Visvanathan,
Lareef Zubair and Michael Bell¹ (FECT and IRI¹)

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Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 100 mm in Galle districts during 10 - 15 Oct.
- Between 3 - 9 Oct: up to 120 mm of rainfall was recorded in Kalutara, Galle and Matara districts on the 6th.
- From 30 Sep - 6 Oct: minimum temperature of 15 °C was recorded from Nuwara Eliya district while most parts of the island recorded a maximum temperature between 30-35 °C.
- From 2 - 8 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 October 3rd, Jaffna and Kilinochchi districts received up to 20 mm of rainfall. On the 4th, Badulla district received up to 100 mm of rainfall; Monaragala and Kurunegala districts up to 90 mm; Anuradhapura, Polonnaruwa, Matale, Batticaloa and Ampara districts up to 80 mm; Jaffna, Kilinochchi, Mullaitivu, Vavuniya, Mannar, Puttalam, Trincomalee, Gampaha, Kegalle, Kandy and Nuwara Eliya districts up to 50 mm; Kalutara and Ratnapura districts up to 30 mm; and Matara and Hambantota districts up to 20 mm. On the 5th, Colombo district up to 60 mm; Mannar, Puttalam, Kurunegala, Gampaha and Kalutara districts up to 50 mm; Vavuniya, Anuradhapura, Kegalle, Kandy, Ratnapura, Nuwara Eliya and Galle districts up to 30 mm; and Matara and Kilinochchi districts up to 20 mm. On the 6th, Kalutara, Galle and Matara districts received up to 120 mm of rainfall; Colombo district up to 100 mm; Gampaha and Ratnapura districts up to 80 mm; Puttalam, Kurunegala and Kegalle districts up to 60 mm; Anuradhapura, Vavuniya, Matale and Hambantota districts up to 50 mm; Mannar, Kandy, Nuwara Eliya, Badulla and Monaragala districts up to 30 mm; and Jaffna, Kilinochchi, Polonnaruwa and Ampara districts up to 20 mm. On the 7th, Anuradhapura and Puttalam districts received up to 90 mm of rainfall; Vavuniya, Polonnaruwa, Badulla, Kurunegala, Matale and Kandy districts up to 60 mm; Mannar, Trincomalee, Ampara, Monaragala and Nuwara Eliya districts up to 50 mm; Mullaitivu, Gampaha, Kegalle and Colombo districts up to 30 mm; and Kalutara, Ratnapura, and Hambantota districts up to 20 mm. On the 8th, Puttalam, Anuradhapura and Trincomalee districts received up to 90 mm of rainfall; Gampaha district up to 80 mm; Colombo, Kalutara and Ratnapura districts up to 60 mm; Mannar, Vavuniya, Kurunegala, Galle, Matara, Kegalle, Matale and Badulla districts up to 50 mm; Kilinochchi, Mullaitivu, Kandy, Nuwara Eliya, Polonnaruwa, Batticaloa, Monaragala and Hambantota districts up to 30 mm; Ampara and Jaffna districts up to 20 mm. On the 9th, Gampaha district received up to 50 mm of rainfall; Mannar, Puttalam, Anuradhapura, Kurunegala, Colombo, Kalutara, Galle, Matara, Hambantota and Ratnapura districts up to 30 mm; Mullaitivu, Vavuniya, Trincomalee, Batticaloa, Polonnaruwa, Kegalle, Matale and Nuwara Eliya districts up to 20 mm.

Total Rainfall for the Past Week: The RFE 2.0 tool shows total rainfall 200-300 mm of total rainfall in Anuradhapura, Puttalam, Kurunegala, Gampaha, Colombo, Kalutara and Galle districts; up to 150-200 mm in Mannar, Vavuniya, Kegalle, Ratnapura, Matara and Badulla districts; and up to 75-100 mm in Jaffna, Kilinochchi, Mullaitivu, Trincomalee, Batticaloa, Ampara, Monaragala and Hambantota districts. Above average rainfall up to 200-300 mm is shown for Anuradhapura district; up to 100-200 mm in Mannar, Vavuniya, Puttalam, Kurunegala, Matale, Kandy, Badulla, Gampaha, Colombo, Kalutara, Matara, Kegalle and Ratnapura districts; and up to 50-100 mm for most parts of the island.

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

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 10th – 16th Oct: Total rainfall more than 85 mm in Galle district; up to 65-75 mm in Matara, Ratnapura, Kegalle, Nuwara Eliya, Kandy and Badulla districts; up to 45-55 mm in Gampaha, Kurunegala, Matale, Hambantota and Ampara districts; and up to 35-45 mm in Puttalam, Anuradhapura, Polonnaruwa and Batticaloa districts.

From 17th – 23rd Oct: Total rainfall between 85 mm in Gampaha, Colombo, Kegalle, Ratnapura and Kurunegala districts; up to 65-75 mm in Puttalam, Anuradhapura, Matale, Kandy, Nuwara Eliya and Galle districts; up to 55-65 mm in Polonnaruwa and Badulla; and up to 45-55 mm in Mannar, Vavuniya, Monaragala, Ampara and Hambantota districts.

IMD NCMWRF Forecast:

12th Oct: Up to 80 mm of rainfall in Mullaitivu, Trincomalee, Vavuniya and Ratnapura districts; and up to 40 mm in Nuwara Eliya and Badulla districts; and up to 20 mm in Matara and Kalutara districts.

13th Oct: Up to 80 mm in Jaffna, Kilinochchi, Mullaitivu, Vavuniya, Anuradhapura, Polonnaruwa, Ratnapura and Nuwara Eliya districts; up to 40 mm in Matale, Kandy and Galle districts; and up to 20 mm in Mannar, Puttalam and Kurunegala districts.

IRI Model Forecast:

From 10 – 15 Oct: Total rainfall up to 100 mm in Galle district; up to 75 mm in Kalutara, Galle, Ratnapura, Nuwara Eliya, Kandy, Polonnaruwa, Badulla, Monaragala, Ampara, Batticaloa and Trincomalee districts; and up to 50 mm in Gampaha, Colombo, Kegalle, Matale, Anuradhapura, Vavuniya and Mullaitivu districts.

MJO based OLR predictions

For the next 15 days:

MJO shall enhance the rainfall in Sri Lanka.

¹ International Research Institute for Climate and Society, Earth Institute at Columbia University, New York.
Official hydro-meteorological statements are provided by the Sri Lanka Department of Meteorology and Department of Irrigation.

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