

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 75 mm in Gampaha and Colombo districts during 28 Nov – 3 Dec.
- Between 20 – 26 Nov: up to 120 mm of rainfall was recorded in Gampaha and Kurunegala districts on the 23rd.
- From 18 – 24 Nov: Nuwara Eliya district recorded a minimum temperature between 10-15 °C and most parts of the island recorded a maximum temperature between 30-35 °C.
- From 20 -26 Nov: up to 10 km/h, northwesterly winds were experienced by the entire island.

Monitoring

Rainfall

Weekly Monitoring: On November 20th, Jaffna and Kilinochchi districts received up to 30 mm of rainfall; and Batticaloa district up to 20 mm. On the 21st, Badulla and Ampara districts received up to 60 mm of rainfall; Trincomalee, Polonnaruwa, Batticaloa and Monaragala districts up to 50 mm; Anuradhapura and Kandy districts up to 30 mm; and Mullaitivu, Vavuniya, Matale and Nuwara Eliya districts up to 20 mm. On the 22nd, Kurunegala district received up to up to 100 mm rainfall; Kegalle, Matale and Nuwara Eliya districts up to 90 mm; Anuradhapura district up to 60 mm; Nuwara Eliya and Badulla districts up to 50 mm; Mannar, Trincomalee, Ampara, Monaragala, Puttalam and Gampaha districts up to 30 mm; Jaffna, Kilinochchi, Batticaloa, Hambantota, Matara, Galle, Ratnapura, Kalutara and Colombo districts up to 20 mm; and rest of the island up to 10 mm. On the 23rd, Gampaha and Kurunegala districts received up to 120 mm of rainfall; Kegalle district up to 100 mm; Colombo, Kalutara and Kegalle districts up to 90 mm; Puttalam district up to 60 mm; Galle and Nuwara Eliya districts up to 50 mm; Jaffna, Kilinochchi, Kandy and Matara districts up to 30 mm; Mannar, Mullaitivu, Vavuniya, Anuradhapura, Trincomalee, Matale, Badulla, Monaragala and Hambantota districts up to 20 mm; and rest of the island up to 10 mm. On the 24th, Monaragala and Hambantota districts received up to 10 mm of rainfall. On the 25th, Kalutara district received up to 20 mm of rainfall; and Ratnapura, Galle and Matara districts up to 10 mm. On the 26th, Kalutara and Galle districts received up to 50 mm of rainfall; Ratnapura and Polonnaruwa districts up to 30 mm; and Batticaloa, Gampaha, Kegalle, Colombo, Nuwara Eliya, Badulla and Ampara districts up to 20 mm.

Total Rainfall for the Past Week: The RFE 2.0 tool shows total rainfall up to 100-200 mm in Gampaha district; up to 100-150 mm in Kurunegala, Puttalam, Colombo, Kegalle and Ratnapura districts; up to 75-100 mm in Matale, Kandy, Nuwara Eliya, Kalutara, Badulla, Monaragala, Ampara and Batticaloa districts; and up to 50-75 mm in Trincomalee, Galle and Matara districts. Above average rainfall up to 50-100 mm is shown for Gampaha and southern regions of Kurunegala district; and up to 25-50 mm in Colombo, Kegalle and northern regions of Ratnapura districts. Below average rainfall up to 50-100 mm is shown for Northern and North-central provinces and Monaragala and Hambantota districts; and up to 25-50 mm Eastern province and Galle, Matara, Badulla, Puttalam and northern regions of Kurunegala districts; and up to 10-25 mm for rest of the island.

Monthly Monitoring: During October - above average rainfall conditions up to 210 mm were experienced by Anuradhapura district; up to 150 mm in Ratnapura, Colombo, Kalutara, Galle, Matara, Mannar, Vavuniya, Puttalam, Badulla and northern regions of Kurunegala and south western regions of Monaragala districts; and up to 60 mm in Jaffna, Kilinochchi, Gampaha, Kandy, Nuwara Eliya, Mullaitivu and southern regions of Kegalle and western regions of Monaragala districts. Polonnaruwa and Batticaloa districts experienced below average rainfall up to 150 mm; and Trincomalee, Matale and Ampara districts up to 90 mm. The CPC Unified Precipitation Analysis tool shows up to 500 mm of total rainfall in Kegalle, Ratnapura, Puttalam, Gampaha, Colombo, Kalutara, Galle, Kurunegala, Mannar, Anuradhapura and Vavuniya districts; and up to 300 mm in for the rest of the island.

Ocean State (Text Courtesy IRI)

Pacific sea state: November 19, 2018

El Niño-level SSTs were observed in the October average, and the subsurface waters also continued to be markedly warmer than average. However, the atmospheric variables showed mainly ENSO-neutral patterns. Only lower-level wind anomalies averaged weakly westerly in the eastern Pacific—a suggestion of El Niño. The official CPC/IRI outlook calls for an 80% chance of El Niño prevailing during winter, and a 55-60% chance of continuing into spring 2019. An El Niño watch is in effect. New forecasts of statistical and dynamical models collectively show continuing El Niño-level SSTs, most likely weak to moderate in strength, continuing through spring.

Indian Ocean State

Average sea surface temperature was observed in the seas around Sri Lanka.

Predictions

Rainfall

14-day prediction:

NOAA NCEP models:

From 28th Nov - 4th Dec: Total rainfall up to 55 mm in Trincomalee, Polonnaruwa, Matale, Kurunegala, Puttalam, Gampaha, Colombo, Ratnapura, Nuwara Eliya, Kandy, Badulla, Monaragala and Ampara districts; and up to 35-45 mm in Anradhapura and Galle districts.

From 5th - 11th Dec: Total rainfall up to 95 mm in Batticaloa and Ampara districts; up to 75-85 mm in Trincomalee. Polonnaruwa, Monaragala and Hambantota districts; 65-75 mm in Badulla district; 55-65 mm in Anuradhapura, Matale, Kandy and Nuwara Eliya districts; and up to 45-55 mm in Kegalle and Ratnapura districts.

IMD NCMWRF Forecast:

30th Nov: Up to 80 mm of rainfall in Ratnapura, Trincomalee and Ampara districts; and up to 20 mm in Mannar. Mullaitivu, Polonnaruwa, Kegalle and Hambantota districts.

1st Dec: Up to 80 mm in Galle and Matara districts; up to 20 mm in Polonnaruwa district; and up to 10 mm in Jaffna, Kilinochchi, Mullaitivu and Ratnapura districts.

IRI Model Forecast:

From 28 Nov – 3 Dec: Total rainfall up to 75 mm in Gampaha and Colombo districts; and up to 50 mm in the rest of the island.

MJO based OLR predictions

For the next 15 days:

MJO shall not have an impact in the rainfall in Sri Lanka in the next 5 days and shall enhance in the following 10 days.

FECT BLOG

Past reports available at <http://fectsl.blogspot.com/> and <http://fectsl.wordpress.com/>

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