

## Experimental Climate Monitoring and Prediction

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### Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 75 mm in Jaffna district during 13 - 18 Nov.
- Between 6 - 12 Nov: up to 90 mm of rainfall was recorded in Trincomalee district on the 7<sup>th</sup>.
- From 4 - 10 Nov: entire island recorded a minimum temperature between 20-25 °C and a maximum temperature between 30-35 °C.
- From 6 -12 Nov: up to 18 km/h, northeasterly winds were experienced by the Southern province; and up to 10 km/h in the same direction by the rest of the island.

#### Monitoring

##### Rainfall

**Weekly Monitoring:** On November 6<sup>th</sup>, Jaffna and Kilinochchi districts received up to 70 mm of rainfall; Batticaloa district up to 60 mm; Mullaitivu district up to 30 mm; and Mannar, Vavuniya, Anuradhapura and Trincomalee districts up to 20 mm. On the 7<sup>th</sup>, Trincomalee district received up to 90 mm of rainfall; Mullaitivu and Vavuniya districts up to 80 mm; Kilinochchi, Mannar, Batticaloa and Anuradhapura districts up to 60 mm; Jaffna, Kegalle, Colombo, Ratnapura, Polonnaruwa, Kandy Galle and Matara districts up to 50 mm; Kurunegala, Matale, Nuwara Eliya, Badulla, Monaragala, Gampaha, Hambantota, Ampara and Kalutara districts up to 30 mm; and Puttalam districts up to 20 mm. On the 8<sup>th</sup>, Jaffna, Anuradhapura and Matale districts received up to up to 50 mm rainfall; Mannar and Polonnaruwa up to 30 mm; and Kilinochchi, Mullaitivu, Kurunegala, Kandy, Ampara and Batticaloa districts up to 20 mm. On the 9<sup>th</sup>, Batticaloa district received up to 20 mm of rainfall; and Vavuniya, Mannar, Puttalam, Polonnaruwa and Ampara districts up to 15 mm. On the 10<sup>th</sup>, Kalutara district received up to 15 mm of rainfall; and Jaffna district up to 5 mm. On the 11<sup>th</sup>, Vavuniya and Mullaitivu districts received up to 10 mm of rainfall. On the 12<sup>th</sup>, No significant rainfalls were recorded in any part of the island.

**Total Rainfall for the Past Week:** The RFE 2.0 tool shows total rainfall up to 50-75 mm in Mannar, Vavuniya, Kilinochchi, Mullaitivu, Trincomalee and Ampara districts; up to 25-50 mm in Jaffna, Puttalam, Anuradhapura, Polonnaruwa, Matale, Kandy, Nuwara Eliya, Badulla, Monaragala, Kegalle, Ratnapura, Gampaha, Colombo, Kalutara, Galle and Matara districts; up to 10-25 mm in Kurunegala and Hambantota districts; Above average rainfall up to 10-25 mm is shown for Mannar, Vavuniya, Kilinochchi, Mullaitivu and Trincomalee districts. Below average rainfall up to 50-100 mm is shown for Puttalam, Kurunegala, Gampaha, Kalutara, Galle, Nuwara Eliya, Ratnapura, Badulla and Monaragala districts; and up to 25-50 mm for most parts 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 8, 2018

El Niño-level SSTs were observed in the October average, and the subsurface waters also continued to be warmer than average. However, the atmospheric variables showed mainly ENSO-neutral patterns, including the distribution of cloudiness/rainfall, sea level pressure and upper level winds. Only lower-level wind anomalies were 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 14<sup>th</sup> – 20<sup>th</sup> Nov: Total rainfall up to 85 mm in Jaffna, Kilinochchi, Anuradhapura, Mullaitivu and Vavuniya districts; up to 75-85 mm in Mannar and Trincomalee districts; up to 65-75 mm in Puttalam, Kurunegala, Polonnaruwa and Batticaloa districts; and up to 45-55 mm in Matale and Ampara districts.

From 21<sup>st</sup> – 27<sup>th</sup> Nov: Total rainfall up to 75 mm in Mullaitivu, Anuradhapura, Trincomalee, Batticaloa and Polonnaruwa districts; up to 55-65 mm in Kilinochchi, Mannar and Ampara districts; and up to 45-55 mm in Jaffna, Puttalam, Kurunegala, Matale, Kandy, Badulla, Monaragala, Kegalle, Ratnapura, Gampaha and Colombo districts.

**IMD NCMWRF Forecast:**

16<sup>th</sup> Nov: Up to 80 mm of rainfall in Jaffna district; up to 40 mm in Kegalle and Matale districts; and up to 20 mm in Puttalam and Mannar districts.

17<sup>th</sup> Nov: Up to 160 mm in Jaffna, Kilinochchi, Vavuniya, Mullaitivu, Trincomalee, Kurunegala, Kegalle, Ratnapura, Nuwara Eliya, Monaragala and Ampara districts; up to 80 mm in Mannar, Puttalam, Anuradhapura, Polonnaruwa and Batticaloa districts; and up to 40 mm in Kandy and Hambantota districts.

**IRI Model Forecast:**

From 13 – 18 Nov: Total rainfall up to 75 mm in Jaffna district; up to 50 mm in Kilinochchi, Mannar, Vavuniya, Anuradhapura, Mullaitivu, Trincomalee, Kandy, Nuwara Eliya, Badulla, Monaragala, Matale and Ratnapura districts.

**MJO based OLR predictions****For the next 15 days:**

MJO shall suppress the rainfall in Sri Lanka.

**FECT BLOG**

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

**FECT WEBSITES**

<http://www.climate.lk> and <http://www.tropicalclimate.org/>

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