

## Experimental Climate Monitoring and Prediction

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22 November 2018

### Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 100 mm in Kandy, Nuwara Eliya and Badulla districts during 21 - 26 Nov.
- Between 13 - 19 Nov: up to 70 mm of rainfall was recorded in Jaffna district on the 15<sup>th</sup>.
- From 11 - 17 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 13 -19 Nov: up to 18 km/h, northwesterly winds were experienced by the entire island.

### Monitoring

#### Rainfall

**Weekly Monitoring:** On November 13<sup>th</sup>, no significant rainfalls were recorded in any part of the island. On the 14<sup>th</sup>, Jaffna district received up to 10 mm of rainfall. On the 15<sup>th</sup>, Jaffna district received up to 70 mm of rainfall; Mullaitivu, Kilinochchi and Mannar districts up to 50 mm; and Vavuniya district up to 20 mm. On the 16<sup>th</sup>, several parts of Badulla and Monaragala districts received up to up to 15 mm rainfall. On the 17<sup>th</sup>, Kurunegala and Kegalle districts received up to 60 mm of rainfall; Kandy and Gampaha districts up to 50 mm; Matale and Badulla districts up to 30 mm; and Puttalam, Kalutara, Galle, Ratnapura, Nuwara Eliya and Monaragala districts up to 25 mm. On the 18<sup>th</sup>, Batticaloa district received up to 50 mm of rainfall; Ampara district up to 30 mm; and Trincomalee, Anuradhapura, Polonnaruwa, Monaragala and Gampaha districts up to 20 mm; and rest of the island up to 10 mm. On the 19<sup>th</sup>, Gampaha and Colombo districts received up to 60 mm of rainfall; Jaffna, Mullaitivu, Mannar, Anuradhapura, Vavuniya, Trincomalee, Puttalam, Kurunegala, Ampara, Kegalle, Kalutara, Galle, Ratnapura, Hambantota, and Monaragala districts up to 50 mm; Kilinochchi, Matale, Kandy and Badulla districts up to 30 mm; and rest of the island up to 20 mm.

**Total Rainfall for the Past Week:** The RFE 2.0 tool shows total rainfall up to 75-100 mm in Kurunegala, Gampaha and Kegalle districts; up to 50-75 mm in Jaffna, Kilinochchi, Vavuniya, Mullaitivu, Mannar, Colombo, Kandy, Galle and Anuradhapura districts; up to 25-50 mm in rest of the island; Above average rainfall up to 25-50 mm is shown for Jaffna and southern regions of Kurunegala district; and up to 10-25 mm in Gampaha, and Kegalle districts. Below average rainfall up to 50-100 mm is shown for Trincomalee, Polonnaruwa, Batticaloa, Ampara, Monaragala, Badulla, Nuwara Eliya and Ratnapura 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 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 21<sup>st</sup> – 27<sup>th</sup> Nov: Total rainfall up to 35 mm in Polonnaruwa, Batticaloa and Ampara districts; and up to 15-25 mm in Gampaha, Colombo, Kalutara, Ratnapura, Kegalle, Matale, Kandy, Nuwara Eliya, Badulla and Monaragala districts.

From 28<sup>th</sup> Nov - 4<sup>th</sup> Dec: Total rainfall up to 55 mm in Trincomalee, Batticaloa, Ampara and Polonnaruwa districts; up to 35-45 mm in Anuradhapura, Matale, Kandy, Nuwara Eliya, Kegalle and Ratnapura districts; and up to 25-35 mm in rest of the island.

#### **IMD NCMWRF Forecast:**

23<sup>rd</sup> Nov: Up to 80 mm of rainfall in Ratnapura and Matara districts; up to 40 mm in Kilinochchi, Mullaitivu, Trincomalee, Batticaloa, Kandy, Kegalle, Kalutara, Galle and Badulla districts; and up to 20 mm in Mannar. Gampaha, Colombo and Ampara districts.

24<sup>th</sup> Nov: Up to 160 mm in Mannar, Puttalam, Kurunegala, Colombo, Kegalle and Ratnapura districts; up to 40 mm in Jaffna, Matara, Hambantota and Ampara districts; and up to 20 mm in Vavuniya and Anuradhapura districts.

#### **IRI Model Forecast:**

From 21 – 26 Nov: Total rainfall up to 100 mm in Kandy, Nuwara Eliya and Badulla districts; up to 75 mm in Polonnaruwa, Matale, Kegalle, Ratnapura, Monaragala, Ampara and Batticaloa districts; and up to 50 mm in the rest of the island.

### **MJO based OLR predictions**

#### **For the next 15 days:**

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

### **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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