

## Experimental Climate Monitoring and Prediction

by: Ruchira Lokuhetti, Chalani Malge, Janan Visvanathan,  
Lareef Zubair and Michael Bell<sup>1</sup> (FECT and IRI<sup>1</sup>)

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### Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 25 mm in most parts of the island during 5<sup>th</sup> – 10<sup>th</sup> Sep.
- Between 29 Aug – 4 Sep: up to 40 mm of daily rainfall was recorded in Batticaloa district on the 30<sup>th</sup>.
- From 26 Aug – 1 Sep: minimum temperature of 15 °C was recorded from Nuwara Eliya district while northeastern regions and eastern coastal regions of the island recorded a maximum temperature between 35-40 °C.
- From 28 Aug – 3 Sep: up to 28 km/h, northwesterly winds were experienced by the entire island.
- 0.5 °C below average sea surface temperature was observed in the northwestern seas of Sri Lanka.

### Monitoring

#### Rainfall

**Weekly Monitoring:** On August 29<sup>th</sup>, several regions of Anuradhapura and Trincomalee districts received up to 5 mm of rainfall. On the 30<sup>th</sup>, Batticaloa district received up to 40 mm of rainfall; Trincomalee, Polonnaruwa, Ampara and Badulla districts up to 30 mm; and Mullaitivu, Vavuniya, Anuradhapura, Matale and Monaragala districts received up to 20 mm. On the 31<sup>st</sup>, Jaffna and Kilinochchi districts received up to 15 mm of rainfall; and Mannar, Mullaitivu, Vavuniya and Anuradhapura districts up to 10 mm. On September 1<sup>st</sup>, Jaffna and Kilinochchi districts received up to 5 mm of rainfall. On the 2<sup>nd</sup>, several regions of Galle, Matara and Ratnapura districts received up to 5 mm of rainfall. On the 3<sup>rd</sup>, Mannar, Vavuniya, Anuradhapura and Trincomalee districts received up to 10 mm of rainfall. On the 4<sup>th</sup>, Kandy and Badulla districts received up to 5 mm of rainfall.

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

#### Ocean State (Text Courtesy IRI)

##### **Pacific sea state: August 20, 2018**

In mid-August 2018, the east-central tropical Pacific waters reflected ENSO-neutral conditions, with near-average SST, slightly lower than a month ago. The key atmospheric variables also suggested neutral conditions, although westerly low-level wind anomalies have recently developed. The subsurface water temperature continued to be above-average. The official CPC/IRI outlook calls for neutral conditions through the rest of northern summer, with a 60% chance of El Niño development during fall, rising to 70% for winter 2018-19. An El Niño watch is in effect. The latest forecasts of statistical and dynamical models collectively favor weak El Niño development by early fall, growing to weak or possibly moderate strength during late fall and winter; most forecasters agree with this scenario.

##### **Indian Ocean State**

0.5 °C below average sea surface temperature was observed in the northeastern seas of Sri Lanka.

## Predictions

### Rainfall

#### 14-day prediction:

##### NOAA NCEP models:

From 5<sup>th</sup> – 11<sup>th</sup> Sep: Total rainfall between 15-25 mm in Matale, Kandy and Nuwara Eliya districts; and up to 15 mm in Badulla, Kegalla and Ratnapura districts.

From 12<sup>th</sup> – 18<sup>th</sup> Sep: Total rainfall between 15-25 mm in Matale, Kandy, Nuwara Eliya, Kegalla, Ratnapura and Badulla districts.

##### IMD NCMWRF Forecast:

7<sup>th</sup> Sep: No Rainfall.

8<sup>th</sup> Sep: No Rainfall.

##### IRI Model Forecast:

From 5 - 10 Sep: Total rainfall up to 25 mm expected in most parts of the island.

### MJO based OLR predictions

#### For the next 15 days:

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

<sup>1</sup> 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.

### 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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