

## Experimental Climate Monitoring and Prediction

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### Highlights

- The IRI rainfall forecast predicts total rainfall up to 100 mm in Trincomalee district during 23<sup>rd</sup> - 28<sup>th</sup> August.
- Between 16 - 22 Aug: up to 30 mm of daily rainfall was recorded in Nuwara Eliya district on the 16<sup>th</sup>, 17<sup>th</sup> and 19<sup>th</sup>.
- From 12 - 18 Aug: minimum temperature of 20 °C was recorded from Nuwara Eliya district while eastern coastal regions of the island recorded a maximum temperature between 35-40 °C.
- From 15 - 21 Aug: up to 108 km/h, westerly winds were experienced by the central and southern regions of the island.
- 0.5 °C below average sea surface temperature was observed in the western and southeastern seas of Sri Lanka.

### Monitoring

#### Rainfall

**Weekly Monitoring:** On the 16<sup>th</sup>, Nuwara Eliya district received up to 30 mm of rainfall; and Kegalla and Ratnapura districts received up to 20 mm of rainfall. On the 17<sup>th</sup>, Nuwara Eliya, Ratnapura, Matara, Galle and Hambantota districts received up to 30 mm of rainfall; and Kalutara, Badulla and Monaragala districts received up to 20 mm of rainfall. On the 18<sup>th</sup>, Galle, Kandy and Nuwara Eliya districts received up to 10 mm of rainfall. On the 19<sup>th</sup>, Nuwara Eliya and Kandy districts received up to 30 mm of rainfall and Monaragala district received up to 20 mm. No significant rainfalls were recorded in any part of the island during the period 20<sup>th</sup>-22<sup>nd</sup>.

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

**Monthly Monitoring:** During July - above average rainfall conditions up to 60 mm were experienced by Nuwara Eliya, Monaragala and northern regions of Ampara districts; and rest of the island experienced up to 60 mm of below average rainfall. The CPC Unified Precipitation Analysis tool shows up to 150 mm of total rainfall in Kegalla, Ratnapura, Colombo, Nuwara Eliya and Kalutara districts; and up to 100 mm in Badulla, Monaragala, and Gampaha 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 western and southeastern seas of Sri Lanka.

## Predictions

### Rainfall

#### 14-day prediction:

##### NOAA NCEP models:

From 23<sup>rd</sup> – 28<sup>th</sup> Aug: Total rainfall between 15-25 mm in Matale, Kandy, Ratanpura and Colombo districts.

From 30<sup>th</sup> Aug – 5<sup>th</sup> Sep: Total rainfall between 15-25 mm in Matale, Kurunegala, Kandy, Kegalla and Ratnapura districts.

#### IMD NCMWRF Forecast:

25<sup>th</sup> Aug: Up to 80 mm of rainfall in Anuradhapura, Batticaloa, Matale, Kandy, Badulla and Monaragala districts; up to 40 mm in Nuwara Eliya, Hambantota and Polonnaruwa district; and up to 20 mm in Ampara district.

26<sup>th</sup> Aug: Up to 80 mm of rainfall in Vavuniya and Trincomalee districts; and up to 20 mm in Matale, Kandy, Nuwara Eliya, Batticaloa, Badulla, Monaragala and Ampara districts.

#### IRI Model Forecast:

From 23<sup>rd</sup> – 28<sup>th</sup> Aug: Total rainfall up to 100 mm expected in Trincomalee district; and up to 50 mm in Jaffna, Kilinochchi, Mullaitivu, Vavuniya, Anuradhapura, Matale, Kandy, Badulla, Monaragala and Ampara districts.

#### MJO based OLR predictions

##### For the next 15 days:

MJO shall not have an impact on the rainfall in Sri Lanka.

<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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