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Experimental Climate Monitoring and Prediction

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Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 75 mm in Kalutara, Galle and Matara districts during 19th 24th Sep.
- Between 12 18: Sep: up to 30 mm of rainfalls were recorded in the central parts of the island on the 12th and the 15th.
- From 9 15 Sep: minimum temperature of 15 °C was recorded from Nuwara Eliya district while northern regions of the island recorded a maximum temperature between 35-40 °C.
- From 11 17 Sep: up to 18 km/h, southwesterly winds were experienced by the entire island.
- Average sea surface temperature was observed in the seas around Sri Lanka.

Monitoring

Rainfall

Weekly Monitoring: On September 12th, Ratnapura and Badulla districts received up to 30 mm of rainfall; and Nuwara Eliya and Monaragala districts up to 20 mm. On the 13th, Badulla and Monaragala districts received up to 20 mm of rainfall. On the 14th, Polonnaruwa district received up to 20 mm of rainfall; and Anuradhapura, Kandy and Matale districts up to 10 mm. On the 15th, Nuwara Eliya district received up to 30 mm of rainfall; and Badulla and Monaragala districts up to 20 mm. On the 16th, Jaffna and Kilinochchi districts received up to 20 mm. On the 17th, Nuwara Eliya, Badulla, Monaragala, Ampara, Kalutara and Galle districts received up to 10 mm of rainfall. On the 18, Colombo and Kalutara districts received up to 10 mm of rainfall.

Total Rainfall for the Past Week: The RFE 2.0 tool shows total rainfall 25-50 mm of total rainfall in Nuwara Eliya, Kandy, Ratnapura, Badulla and Monaragala districts; and up to 10-25 mm in Anuradhapura, Matale, Ampara, Kegalla, Gampaha and Colombo districts. Above average rainfall up to 25-50 mm is shown for Nuwara Eliya, Badulla, Monaragala districts and eastern regions of Ratnpura district. Below average rainfall up to 25-50 mm is shown for western regions of Ratnpura district; and up to 10-25 mm in Trincomalee, Batticaloa, Ampara, Matale, Kurunegala, Puttalam, Kegalla, Gampaha, Colombo, Kalutara, 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: September 13, 2018

In early September 2018, the east-central tropical Pacific waters reflected ENSO-neutral conditions, with near to slightly above-average SST. The key atmospheric variables also suggested neutral conditions, although weakly westerly low-level wind anomalies have developed. The subsurface water temperature continued to be above-average. The official CPC/IRI outlook calls for a 50-55% chance of El Niño development during fall, rising to 65-70% for winter 2018-19. An El Niño watch is in effect. The latest forecasts of statistical and dynamical models collectively favor El Niño development during fall, growing to weak, or less likely moderate, strength during late fall and winter; most forecasters agree with this scenario.

Indian Ocean State

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

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Predictions

Rainfall

14-day prediction:

NOAA NCEP models:

From 19th – 25th Sep: Total rainfall between 35-45 mm in Ampara, Monaragala, Badulla, Kandy, Nuwara Eliya and Hambantota districts; up to 25-35 mm in Batticaloa, Matale, Ratnapura, Galle and Matara districts; and up to 15 mm in most parts of the island.

From 26th Sep – 2nd Oct: Total rainfall between 35-45 mm in Ampara, Hambantota, Matara, Badulla, Monaragala, Kandy, Nuwara Eliya and Ratnapura districts; and up to 25-35 mm in Batticaloa, Matale and Galle districts.

IMD NCMWRF Forecast:

21st Sep: Up to 80 mm of rainfall in Colombo, Kalutara, Galle, Matara and Hambantota districts; and up to 20 mm in Kurunegala, Kegalle and Ratnapura districts.

22nd Sep: Up to 160 mm in Gampaha, Galle and Matara districts; up to 80 mm in Puttalam, Kurunegala, Kegalle, Colombo, Kalutara districts; and up to 40 mm in Kandy, Nuwara Eliya, Ratnapura, Monaragala and Hambantota districts.

IRI Model Forecast:

From 19 - 24 Sep: Total rainfall up to 75 mm in Kalutara, Galle and Matara districts; and up to 50 mm in Trincomalee, Batticaloa, Ampara, Hambantota, Colombo, Gampaha, Kegalle, Matale, Kandy, Nuwara Rliya, Ratnapura, Badulla and Monaragala districts.

MJO based OLR predictions

For the next 15 days: MJO shall not have an impact in the rainfall of Sri Lanka.

¹ 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.

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