ECT <u>Foundation for Environment</u> Climate and Technology

c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.

Phone (+94) 81-2376746, 4922992

E-mail climate@sltnet.lk

Web Site http://www.climate.lk

Experimental Climate Monitoring and Prediction

by: Ruchira Lokuhetti, Chalani Malge, Janan Visvanathan,

Lareef Zubair and Michael Bell¹ (FECT and IRI¹)

13 September 2018

Highlights

- The IRI weekly rainfall forecast predicts total rainfall up to 25 mm in most parts of the island during 12th 17th Sep.
- Between 5 11 Sep: Dry weather conditions were observed in the entire country.
- From 2 8 Sep: minimum temperature of 15 °C was recorded from Nuwara Eliya district while northeastern and southeastern coastal regions of the island recorded a maximum temperature between 35-40 °C.
- From 4 10 Sep: up to 36 km/h, northwesterly winds were experienced by the entire island.
- Average sea surface temperature was observed in the seas around Sri Lanka.

Monitoring

Rainfall

Weekly Monitoring: No significant rainfalls were recorded in any part of the island on September 5th. On the 6th, Ratnapura district received up to 10 mm of rainfall; and Kegalla, Nuwara Eliya and Colombo districts up to 5 mm. No significant rainfalls were recorded in any part of the island on the 7th and 8th. On the 9th, Anuradhapura, Polonnaruwa, Kurunegala and Kandy district received up to 10 mm of rainfall; and Gampaha, Kegalla, Nuwara Eliya and Matale districts received up to 5 mm. On the 10th, Anuradhapura, Trincomalee, Kegalla, Ratnapura and Nuwara Eliya districts received up to 10 mm of rainfall; and Kilinochchi, Mannar, Mullaitivu, Vavuniya, Polonnaruwa, Matale, Kandy, Badulla and Monaragala districts up to 5 mm. On the 11th, Nuwara Eliya, Badulla and Monaragala districts received up to 5 mm. On the 11th, Nuwara Eliya, Badulla and Monaragala districts received up to 5 mm.

Total Rainfall for the Past Week: The RFE 2.0 tool shows total rainfall 10-25 mm of total rainfall in Ratnapura and Anuradhapura districts; and up to 5-10 mm in Matale, Kandy, Nuwara Eliya, Kegalla and Polonnaruwa districts. Below average rainfall up to 25-50 mm is shown for Puttalam, Gampaha, Colombo, Kalutara, Galle, Matara, Hambantota, Kegalla, Kandy, Badulla and Nuwara Eliya districts; and up to 10-25 mm in most parts of the island.

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.

FECT <u>Foundation for Environment</u> Climate and Technology c/o, Maintenance Office, Mahaweli Authority, Digana Village, Rajawella, Sri Lanka.

Phone (+94) 81-2376746, 4922992

E-mail climate@sltnet.lk

Web Site http://www.climate.lk

Predictions

Rainfall

14-day prediction:

NOAA NCEP models:

From 12th – 18th Sep: Total rainfall between 15-25 mm in Jaffna, Kilinochchi, Vavuniya, Mannar, Anuradhapura, Trincomalee, Matale, Kandy and Nuwara Eliya districts; and up to 15 mm in most parts of the island.

From 19th – 25th Sep: Total rainfall between 45-55 mm in Galle and Matara districts; up to 35-45 mm in Ratnapura, Nuwara Eliya, Badulla and Monaragala districts; and up to 25-35 mm in Gampaha, Kegalla, Matale and Ampara districts.

IMD NCMWRF Forecast:

14th Sep: Up to 40 mm of rainfall in Nuwara Eliya and Kandy districts; and up to 20 mm in Matale and Polonnaruwa districts.

15th Sep: Up to 20 mm in Nuwara Eliya, Polonnaruwa and Trincomalee districts.

IRI Model Forecast:

From 12 - 17 Sep: Total rainfall up to 25 mm in most parts of the island.

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.

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/