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Experimental Climate Monitoring and Prediction

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FECT BLOG

Past reports available at http://fectsl.blogspot.com/and

http://fectsl.wordpress.com/

FECT WEBSITES

http://www.climate.lkand http://www.tropicalclimate.org/

September 17, 2015 PACIFIC SEAS STATE

During late August through early September 2015 the tropical Pacific SST was at a strong El Niño level. All atmospheric variables support the El Niño pattern, including weakened trade winds and excess rainfall in the eastcentral tropical Pacific. The consensus of ENSO prediction models indicate continuation of strong El Niño conditions during the September-November 2015 season in progress. Some further strengthening into later fall is possible, with the event lasting well into spring 2016.

(Text Courtesy IRI)

INDIAN OCEAN STATE

Neutral sea surface temperature was observed around Sri Lanka.

MJO STATE

MJD is weak and therefore significant impact on rainfall is not expected.

Highlights

Up to 40 mm rainfall was observed in northern, north eastern, western, south western and southern regions of the country during the time period 29th September- 5th October. Southern region of Anuradhapura received heavy rainfall up to 110 mm on 25th September and rainfall up to 70 mm was observed in Badulla on 1st October and in Moneragala on 2nd October. Every prediction model predict increase of rainfall during the next week.

Summary Monitoring

Weekly Monitoring: During 29th September – 5th October, few regions of the country received heavy rainfall. On 29th September heavy rainfall up to 110 mm was observed in southern region of Anuradhapura and in the ocean near Jaffna while rainfall up to 40 mm was observed in Hambantota. On 30th September Trincomalee, Galle and ocean near Colombo received rainfall up to 40 mm. On 1st October only Badulla received rainfall up to 70 mm and northern region of Moneragala received rainfall up to 70 mm on 2nd October. No rainfall was observed in any part of the country on 3rd October. Rainfall up to 90 mm was observed in Jaffna on 4th October while Ratnapura received rainfall up to 60 mm and Galle and Kalutara received rainfall up to 40 mm. No rainfall was observed in any part of the country on 5th October.

Monthly Monitoring: In September 2015 the entire country received above average rainfall while the ocean near northern and eastern provinces received below average rainfall.

Predictions

14 *day prediction:* NOAA NCEP models predict relatively high rainfall in south western region of the country compared to the rest of the country during 7th - 13th October. Total rainfall up to 85 mm is expected during the week in the south western region and total rainfall up to 55 mm is expected in the north eastern region. Rest of the country shall receive total rainfall up to 45 mm. These models predict the rainfall shall be increased significantly during 14th- 20th October and total rainfall up to 135 mm is expected in western region, total rainfall up to 125 mm is expected in north western, eastern and southern regions and the rest of the country shall receive total rainfall up to 95 mm.

IMD WRF & IRI Model Forecast: According to the IMD WRF model rainfall up to 35 mm is expected in Trincomalee on 9th October and any significant amount of rainfall is not expected for the rest of the country. Any part of the country shall not receive significant amount of rainfall on 10th October as well. IRI CFS models predict total rainfall up to 100 mm in south eastern region of the country during 7th - 12th October.

Seasonal Prediction: As per IRI Multi Model Probability Forecast for October to December, the total 3 month precipitation has 50% likelihood of being above average. The 3 month temperature has more than 70-80% likelihood in the entire country of being in the above-normal tercile during this period.

Inside this Issue Monitoring Daily Satellite Derived Rain fall Estimates Monthly Rain fall Estimates Decadal (10 Day) Satellite Derived Rainfall Estimates Weekly Average SST Anomalies Predictions

- a. NCEP GFS Ensemble 1-14 day predictions
- b. WRF model forecast Regional Meteorological Center, Chennai, Indian Meteorological Department)

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- c. Weekly precipitation forecast (IRI)
- d. Seasonal Predictions from IRI

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Official hydro-meteorological statements are provided by the Sri Lanka Department of Meteorology and Department of Irrigation.