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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/

January 21, 2016 PACIFIC SEAS STATE

During mid-January 2015 the tropical Pacific SST was at a strong El Niño level, having peaked in November and December. All atmospheric variables strongly support the El Niño pattern, including weakened trade winds and excess rainfall in the east central tropical Pacific. The consensus of ENSO prediction models indicate continuation of strong El Niño conditions during the January-March 2016 season in progress. The beginning of a gradual weakening of the SST anomaly is underway, with the event dissipating to neutral conditions by late spring or early summer 2016.

(Text Courtesy IRI)

INDIAN OCEAN STATE

0.5^uC above average temperature was observed around Sri Lanka.

MJO STATE

MJD shall be in phase 4 therefore shall slightly enhance rainfall in Sri Lanka.

Highlights

Dry conditions were observed throughout the country between 27th January- 1st February except in the south western region of the country. In this region up to 40 mm rainfall was seen on the 26th. Furthermore, the entire country received less than average rainfall in January. Most models predict a continuation in dry conditions in the next two weeks.

Summary

Monitoring

Weekly Monitoring: During the week 26th January – 1st February 2016, significant rainfall was only observed in Galle, Matara, Kalutara and Ratnapura districts on the 26th. Up to 40 mm rainfall was observed in these regions. Thereafter no rainfall was observed throughout the country during 27th- 31st January. On the 1st light rainfall was observed in Hambantota District while the south eastern sea received up to 40 mm rainfall.

Monthly Monitoring: In January 2016 dry conditions were seen throughout the country. Below average rainfall was observed in the entire country except in Batticaloa district and some parts in Polonnaruwa, Trincomalee and Ratnapura districts where up to 4 mm/day rainfall was observed.

Predictions

14 day prediction: NOAA NCEP models predict up to 45 mm rainfall in north western regions in the country and up to 75 mm rainfall around Batticaloa during 2nd- 8th February. In the following week (9th- 15th) no rainfall is expected.

IMD WRF & IRI Model Forecast: According to the IMD WRF model, it shall not rain throughout the country during 3rd and 4th February 2016. IRI CFS models predict up to 50 mm rainfall around Batticaloa, Kalmunai during 1st- 6th February. There shall be up to 100 mm rainfall in the sea east of Kalmunai during this period.

Seasonal Prediction: As per IRI Multi Model Probability Forecast for February to April, the total 3 month precipitation has 50% likelihood of being below 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.

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- 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.