

IN BRIEF— NOVEMBER 2005

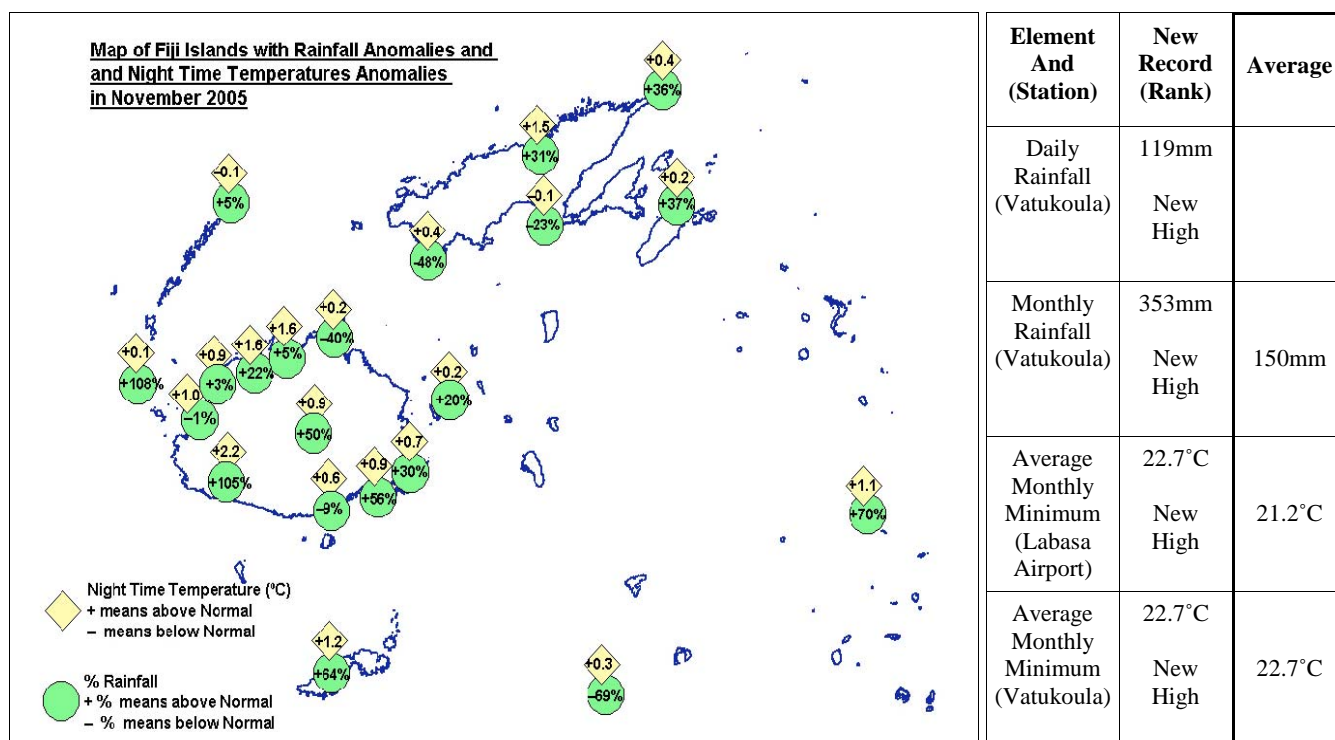
- *Above average rainfall over many places.*
- *Localized floods in low lying areas in the Eastern and Southern parts of Viti Levu.*
- *Generally above average night time temperatures across the country.*
- *Neutral ENSO Climate pattern persisting.*

CLIMATE IN NOVEMBER

November was generally wet and warm across most of the country. Widespread rainfall during the second and third week of the month resulted in many sites receiving average to above average rainfall except for a few sites in the northern and eastern parts. Significantly heavy falls saw Vatukoula in the western part of Viti Levu establishing new one day and monthly records set for the month. Heavy rain also caused localised flooding in low lying areas in the southern and eastern parts of Viti Levu.

Temperatures were average to above average in many places around the country. The maximum temperatures were generally near average however there were a few locations that recorded +0.4 to +0.9°C above average. Mean minimum temperatures were above average almost throughout the country with departures from average in the range from +0.5 to +2.0°C.

Some new records were set around the country during the month. Table below shows a list of sites with new records and the shows departures from average rainfall and minimum temperatures during the month.



TROPICAL CYCLONE SEASON 2005/06

The risk for Fiji being affected by a tropical cyclone season (November 2005—April 2006) is high. Based on the historical data (1969/70—2004/05), the average number of cyclones affecting Fiji during ENSO neutral is 1 to 2. Fiji has experienced 8 cyclones in December, 6 in January, 4 in February, 8 in March and 2 in April. The period December to February is a peak cyclone season and the chance of one affecting the country becomes high at this time of the season.

The statistics also show that at least one cyclone per season has reached hurricane intensity. Given the trend of more and more extreme events occurring in different parts of the globe, Fiji should always be prepared for the worst. We must take heed of tropical cyclones hints on general safety to avoid casualties in times of emergency. Prior to and during a cyclone, regular updates will be provided on the Fiji Met. Service website and through poll fax and media.

EL-NIÑO SOUTHERN OSCILLATION (ENSO) UPDATE

The **Southern Oscillation Index (SOI)** for November was -2.7 (October was $+10.9$) with the five-month running mean of $+1$ centred on September (August was $+2$). The SOI in the past months have been fluctuating near normal and the average for the last month was -2.7 with last 5 months average being $+1$. From September, the SOI has been rising and since mid November, it has been steadily falling and attained negative value by end of the month. The tropical Pacific Sea Surface Temperature (SST) continued to cool in the recent months (about 0.2°C) over much of equatorial Pacific this month with negative anomalies spreading west from South America. There has been cooling in the subsurface, with negative anomalies intensifying in the east. The current pattern is natural to borderline cold however it is unlikely that the cooling will be enough to reach La Nina threshold.

The key ENSO indicators and the computer models suggest that neutral ENSO conditions will continue into early 2006. In the latest survey of General Circulation and Statistical Models, all twelve models favour neutral temperature patterns till April 2006.

The ENSO update and SOI are provided by the National Climate Centre, Australian Bureau of Meteorology and can be found at <http://www.bom.gov.au/climate/enso/wrap-up.shtml>. Please contact FMS for further interpretations if required.

SEASONAL OUTLOOK — JANUARY TO MARCH 2006

Fiji Meteorological Service (FMS) currently uses "The Seasonal Climate Outlook for Pacific Island Countries (SCOPIC) Model" for seasonal rainfall guidance. SCOPIC uses Sea Surface Temperatures (SST) as a predictor across the Pacific Ocean and finds the most similar patterns experienced over the historical record. Then it constructs a rainfall forecast in a form of tercile probability distribution for a location.

The SST's are becoming closer to normal over the Pacific and there is no strong shifts in the odds towards either wetter or drier than average conditions and has slightly better chances of near normal rainfall.

The current chances for the three month January to March 2006 rainfall total being below normal is 20%, near normal is 45% and above normal is 35%.

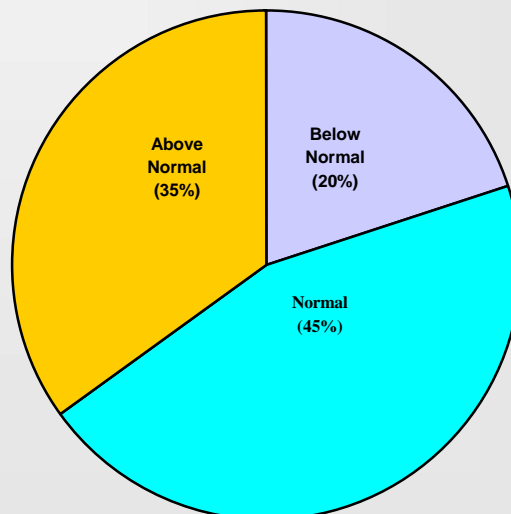
This means that there is higher chance of normal to above normal rainfall across most parts of the country. Significant fluctuations in monthly rainfall distribution can be expected.

FMS will continue to closely monitor any abnormal oceanic and atmospheric patterns in the coming months and keep updating as new development comes to hand. This outlook will be updated monthly.

Confidence in the forecast.

Outlook confidence is related to the influence of the Pacific Ocean temperatures on seasonal rainfall and is normally moderate to high during the wet season.

**Rainfall Forecast for Fiji Group
January to March 2006
(Probabilities : 20:45:35)**



This product is in its early stages of development and views and comments can be sent through e-mail (climate@met.gov.fj). This bulletin gives a one month lead forecast so that the predictions are well in time for clients to plan and make sound decisions to manage their risk better with informed climate information. Please contact us for more information and details.

Note: This "Fiji climate News" is prepared for rapid dissemination for sectoral support by the middle of the of each month. For detailed information and clarification, please contact FMS for expert advice or visit our website www.met.gov.fj. Any person wishing to re-print any information provided in this bulletin must seek permission from the Director of Meteorology and adequately acknowledge the source.