2014/15 Tropical Cyclone Season Outlook in the Regional Specialised Meteorological Centre Nadi-Tropical Cyclone Centre Area of Responsibility

The Tropical Cyclone (TC) activity in the 2014/15 TC Season within the Regional Specialized Meteorological Centre Nadi – Tropical Cyclone Centre (RSMC Nadi-TCC) Area of Responsibility (AOR) (Equator to 25˚ South between 160˚ East and 120˚ West) is expected to be ***near average*** with ***moderate confidence***. The official 2014/15 TC Season begins on the 1st of November 2014, and ends on 30th April, 2015.

Six to ten (6 to 10) TCs are expected to occur in the RSMC Nadi AOR during the 2014/15 Season. Two to four (2 to 4) of these are anticipated to reach category 3, with 1 to 2 reaching category 4 or 5. On average, for all the 45 TC Seasons from 1969/70 to 2013/14, 8.5 TCs usually occur; 8.6 during El Niño, 6.5 in La Niña and 6.5 during neutral (neither El Niño nor La Niña) seasons. An analogue of seven (7) TC seasons with similar atmospheric and oceanic conditions was used for this Outlook (Table 1).

The TC genesis trough in the 2014/15 season is expected to be located near and east of the Dateline, supported by the current and expected El Niño Southern Oscillation (ENSO) conditions, and existence of the warm pool of sea surface and sub-surface (within 150 metres) temperature anomalies in this region. Thus for countries near, and to the east of the Dateline, the chances for TC occurrences exceeding the climatological average this season, is higher.

Subsequently, TC activity for Wallis & Futuna, Tuvalu, Samoa, Niue, Tonga, Southern Cook Islands, Solomon Islands and Vanuatu is predicted to be **high**. For Fiji, New Caledonia, Northern Cook Islands and French Polynesia, chances are ***moderate. Low*** chance of TC activity is predicted for Kiribati (Table 2). For Tokelau, statistics indicate a ***low*** chance of TC activity for the 2014/15 TC Season. However, due to its proximity to the warm pool and genesis area, TC occurrence may possibly be elevated to ***moderate***. In past seasons with similar conditions to current, historical TC data suggest that TCs can affect any country, irrespective of the prevailing ENSO status. Additionally, TCs have formed outside the official TC Season. As a consequence, it is critical that all communities remain alert and prepared throughout the 2014/15 TC Season.

Furthermore, there is an increased chance of severe TCs affecting the region this season compared to last. Statistics show ***high*** chances of severe TCs affecting Tuvalu, Samoa, Niue, Tonga, Southern Cook Islands, Vanuatu and Solomon Islands this season. For New Caledonia, Fiji, Northern Cook Islands and French Polynesia, chances for severe TCs are ***moderate***, whilst **low** for Kiribati, Tokelau and Wallis & Futuna (Table 3).

For Fiji, one to two (1-2) TCs could be expected this season with one (1) possibly reaching or exceeding category 3. With the genesis area near and east of the Dateline, there is a high probability of TCs passing close to, or over, especially the northern and eastern quadrants of Fiji. In these circumstances, associated active cloud and rain bands may occasionally affect Fiji with heavy rain and possible flooding, including sea flooding of low-lying coastal areas.

Table 1: Analogue Years for 2014/15 TC Season

Season	TC Occurrence (RSMC Nadi-TCC AOR)	TC Formation (RSMC Nadi-TCC AOR)	Severe TCs (Cat 3-5) (RSMC Nadi-TCC AOR)
1969/70	7	5	2
1976/77	9	9	2
1977/78	8	7	3
1994/95	2	2	0
2002/03	10	9	7
2004/05	9	9	5
2006/07	6	6	2
Average (Median)	7.3 (8)	6.7 (7)	3 (2)

Table 2: TC Occurrence Risks in 2014/15 TC Season

Country	Risk
Kiribati	Low
Tokelau	Low
Fiji	Moderate
New Caledonia	Moderate
Northern Cooks	Moderate
French Polynesia	Moderate
Wallis and Futuna	High
Vanuatu	High
Tuvalu	High
Solomon Islands	High
Tonga	High
Niue	High
Samoa	High
Southern Cook Islands	High

Table 3: Severe TC (Cat 3-5) Risks in 2014/15 TC Season

Country	Risk
Kiribati	Low
Tokelau	Low
Wallis and Futuna	Low
Fiji	Moderate
Northern Cook Islands	Moderate
New Caledonia	Moderate
French Polynesia	Moderate
Tonga	High
Vanuatu	High
Niue	High
Solomon Islands	High
Samoa	High
Tuvalu	High
Southern Cook Islands	High

In summary:

- ***Near Average*** TC activity inside RSMC Nadi-TCC AOR in the 2014/15 season is anticipated;
- Six to ten (6 to 10) TCs are expected to occur in the RSMC Nadi AOR;
- 2 to 4 of these TCs are anticipated to reach category 3, with 1 to 2 reaching category 4 or 5;
- ***Low*** risk for TC activity predicted for Kiribati and Tokelau. However, for Tokelau, risk may be elevated to ***moderate*** due to its proximity to the warm pool and genesis area;
- ***Moderate*** risk for TC activity is expected for New Caledonia, Fiji, Northern Cook Islands and French Polynesia ;
- ***High*** risk for TC activity is expected for Wallis & Futuna, Tuvalu, Samoa, Niue, Tonga, Southern Cook Islands, Vanuatu and Solomon Islands;

- ***High*** risk for severe TC activity is predicted for Tuvalu, Samoa, Niue, Tonga, Southern Cook Islands, Vanuatu and Solomon Islands;

- ***Moderate*** risk for severe TCs is predicted for New Caledonia, Fiji, Northern Cook Islands and French Polynesia;

- ***Low*** risk for severe TCs predicted for Kiribati, Tokelau and Wallis & Futuna;

- For Fiji, 1 to 2 TCs could affect some part(s) of the country, with 1 expected to reach or exceed category 3;

- High probability of TCs passing close to, or over, especially the northern and eastern quadrants of Fiji. In these instances, associated active cloud and rain bands may occasionally affect Fiji with heavy rain and possible flooding, including sea flooding of low-lying coastal areas;

- Non TCs or Tropical Depressions have, and can still cause, loss of lives and severe damages to property.

The information provided should only be used as guidance, and the given range, is indicative only. It is expected that the total number of TCs could be in the vicinity of the listed values, and not necessarily within the given range. The values are the most likely number of TCs, based on statistical and scientific evidence, including influences by regional and global weather and climate variability drivers and indices.

All communities should remain alert and prepared throughout the 2014/15 TC Season and take heed of TC warnings and advisories, to mitigate the effects of TCs and associated severe weather on life and property.

Issued by:

The Director
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