TROPICAL CYCLONES IN THE SOUTH PACIFIC – Trends & ENSO

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INTRODUCTION

• **Trends**: TC occurrence and intensity

• **Relationship**: Tropical cyclones and El Niño Southern Oscillation

• **TC Seasonal Prediction**: Vital for adaptation
RESULTS

Trends - occurrence

Trends – intensity

Figure 3. Tropical cyclone occurrence during (A) El Niño events (B) neutral periods (C) La Niña events.
Based on the findings, weak non-significant correlation between TC numbers & ENSO indices indicates that using linear regression models for tropical cyclone seasonal prediction in the South Pacific region are of limited use.

<table>
<thead>
<tr>
<th></th>
<th>1-month</th>
<th>2-month</th>
<th>3-month</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-VAR</td>
<td>0.235 (S)</td>
<td>0.187 (AS)</td>
<td>0.182 (JAS)</td>
</tr>
<tr>
<td>Niño 3.4</td>
<td>0.235 (S)</td>
<td>0.207 (AS)</td>
<td>0.185 (JAS)</td>
</tr>
<tr>
<td>SOI</td>
<td>-0.202 (S)</td>
<td>-0.176 (MJ)</td>
<td>-0.206 (MAM)</td>
</tr>
</tbody>
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REFERENCES


- WMO. 2014. Tropical Cyclone Programme WMO 
  http://www.wmo.int/pages/prog/www/tcp/Advisories-RSMCs.html