

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

| Station (include data period) | Mar-2024   | Apr-2024   | May-2024      |         |         |        |         |
|-------------------------------|------------|------------|---------------|---------|---------|--------|---------|
|                               |            |            | Total (mm)    | 33%tile | 67%tile | Median | Rank    |
|                               | Total (mm) | Total (mm) | Rainfall (mm) |         |         |        |         |
| Apia (1890-2024)              | 194.5      | 206.6      | 300.2         | 128.4   | 212.4   | 166.5  | 118/135 |
| Afiamalu (1903-2024)          | 142.4      | 260.7      | 576.4         | 235.0   | 364.6   | 306.8  | 65/71   |
| Nafanua (1965-2024)           | 131.5      | 179.0      | 502.4         | 187.7   | 261.1   | 204.8  | 51/53   |
| Faleolo (1956-2024)           | 94.7       | 164.4      | 286.4         | 101.9   | 179.8   | 135.6  | 56/63   |

TABLE 2: Three-month Total Rainfall for March to May 2024

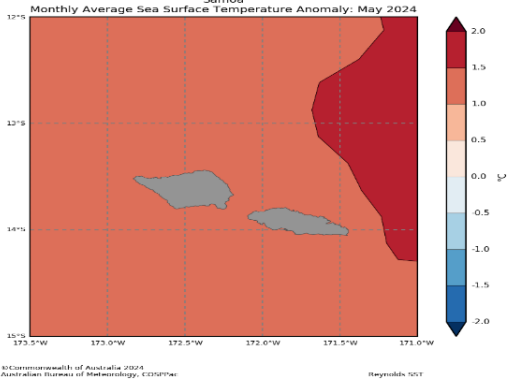
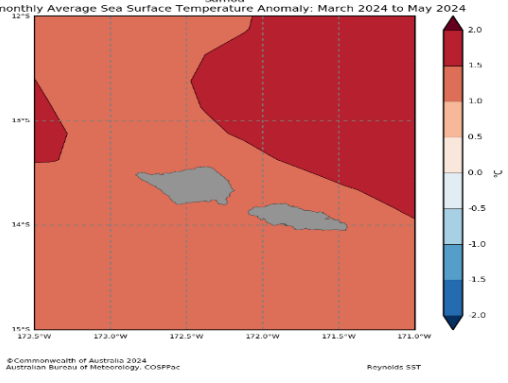
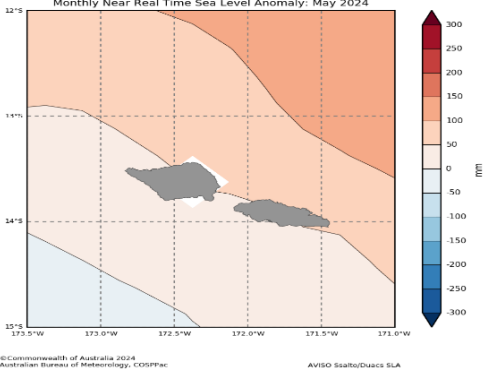
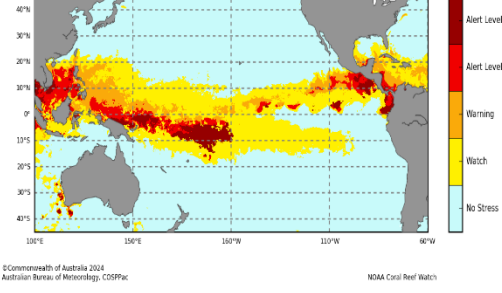
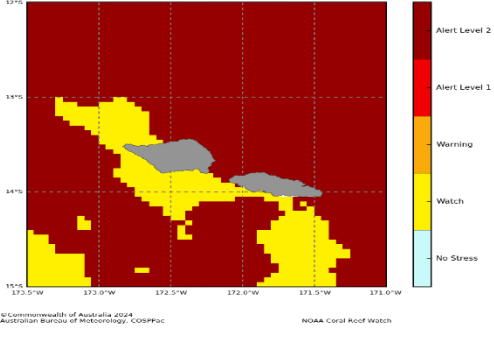
| Station              | Three-month Total |              | 33%tile | 67%tile | Median | Rank   |
|----------------------|-------------------|--------------|---------|---------|--------|--------|
|                      | Rainfall (mm)     |              |         |         |        |        |
| Apia (1890-2024)     | 701.3             | Normal       | 656.7   | 835.4   | 753.4  | 60/135 |
| Afiamalu (1903-2024) | 979.5             | Below normal | 989.8   | 1299.5  | 1153.2 | 24/70  |
| Nafanua (1965-2024)  | 812.9             | Normal       | 770.3   | 994.9   | 869.1  | 20/52  |
| Faleolo (1956-2024)  | 545.5             | Normal       | 472.6   | 622.7   | 536.2  | 32/62  |

Part 1i. Monthly and Seasonal Outlooks for July and July to September 2024

| Monthly: July  | Seasonal: July to September   |
|--|---|
| Rainfall (Image 1)   | Rainfall (Image 2)  |
| <p>Tercile rainfall probabilities for July 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapelle data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>            | <p>Tercile rainfall probabilities for July to September 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapelle data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p>            |
| Monthly Maximum temperature (Image 3):   | Seasonal maximum temperature (Image 4):   |
| <p>Tercile maximum temperature probabilities for July 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapelle data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> | <p>Tercile maximum temperature probabilities for July to September 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapelle data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> |
| Monthly minimum temperature (Image 5):   | Seasonal minimum temperature (Image 6):   |
| <p>Tercile minimum temperature probabilities for July 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapelle data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> | <p>Tercile minimum temperature probabilities for July to September 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapelle data extracted from Flinders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a></p> |

Part 2: Recent Ocean Observation

Monthly/Three months: May 2024 and March to May 2024

| Monthly: May 2024  | Last three months: March to May 2024:  |
|--|--|
| Sea Surface Temperature (Image 1):   | Sea Surface Temperature (Image 4):   |
| <div><p>Samoa</p><p>Monthly Average Sea Surface Temperature Anomaly: May 2024</p><p>©Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div>    | <div><p>Samoa</p><p>3 monthly Average Sea Surface Temperature Anomaly: March 2024 to May 2024</p><p>©Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac</p><p>Reynolds SST</p></div> |
| Sea level (Image 2):   |  |
| <div><p>Samoa</p><p>Monthly Near Real Time Sea Level Anomaly: May 2024</p><p>©Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac</p><p>AVISO SeaWiFS SLA</p></div>    |  |
| Daily coral bleaching alert (Image 3):   |  |
| <div><p>Pacific Ocean</p><p>Daily Coral Bleaching Alert: 07 June 2024</p><p>©Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div> | <div><p>Samoa</p><p>Daily Coral Bleaching Alert: 02 June 2024</p><p>©Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac</p><p>NOAA Coral Reef Watch</p></div>                      |

Part 2i. Monthly and Seasonal Outlooks for July and July to September 2024

|  |  |
|--|--|
| <p>Monthly: July</p> <p>Monthly sea surface temperature (Image 5):</p> <p>Difference from average sea surface temperature forecast for July 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a><br/>Model run: 03/06/2024<br/>Issued: 05/06/2024</p> | <p>Seasonal: July to September</p> <p>Seasonal sea surface temperature (Image 6):</p> <p>Difference from average sea surface temperature forecast for July to September 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a><br/>Model run: 03/06/2024<br/>Issued: 05/06/2024</p> |
| <p>Monthly sea level (Image 7):</p> <p>Difference from average sea surface height forecast for July 2024</p> <p>Base period: 1981-2018<br/>Model: ACCESS-S2<br/>© Commonwealth of Australia 2024, Australian Bureau of Meteorology<br/>Shapefile data extracted from Flinders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at <a href="http://www.marineregions.org/">http://www.marineregions.org/</a><br/>Model run: 03/06/2024<br/>Issued: 05/06/2024</p>   | <p>Seasonal sea level (Image 8):</p> <p>Difference from average sea surface height forecast for November 2022 to January 2023</p> <p>© Commonwealth of Australia 2022<br/>Bureau of Meteorology<br/>Model: ACCESS-S2<br/>Base Period: 1981-2018<br/>Model Run: 28/09/2022<br/>Issued: 03/10/2022</p>   |
| <p>4-week Coral Bleaching (Image 9):</p> <p>Pacific Ocean<br/>4 Weeks Coral Bleaching Outlook: 30 June 2024</p> <p>© Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac<br/>NOAA Coral Reef Watch</p>  | <p>Samoa<br/>4 Weeks Coral Bleaching Outlook: 30 June 2024</p> <p>© Commonwealth of Australia 2024<br/>Australian Bureau of Meteorology, COSPPac<br/>NOAA Coral Reef Watch</p>   |

## Summary Statement

### Monthly and last three months: May 2024/March to May 2024 statement

*Above normal* rainfall was recorded in May over Samoa. For the past three months, rainfall was *near-normal* for Apia, Nafanua and Faleolo stations while Afiamalu station received *below normal* rainfall. Nafanua recorded its 3<sup>rd</sup> wettest May on record.

## Part 1i. Monthly and Seasonal Outlooks for July and July to September 2024

### Monthly /Seasonal rainfall and temperature Outlook statements

The rainfall for July and over July to September is very likely to be *above normal* over Samoa.

Maximum and minimum temperatures during July and averaged over July to September are very likely to be *above normal* over Samoa

## Part 2: Recent Ocean summary statement

### Monthly and last three months: May 2024/March to May 2024

May ocean temperatures around Samoa's main Island were 1.0 to 2.0°C above normal

Averaged over March to May, ocean temperatures around Samoa's main Island were 1.0 to 2.0°C above normal

May sea levels around Samoa were 0mm to 100mm above normal

There is a coral bleaching 'Watch to Alert Level 2' for Samoa

## Part 2i. Monthly and Seasonal Outlooks for July and July to September 2024

### Ocean Variable statement

July and averaged over July to September, Ocean temperatures around Samoa's main island are likely to be 0.4 to 0.8°C above normal.

July and averaged over July to September Sea levels around Samoa are predicted to be 30mm to 100mm below normal.

There is a coral bleaching 'Watch' for northern part of Upolu and Savaii and a coral bleaching 'No stress' for the south eastern part of Upolu

### IN BRIEF for Teleconference

- During May and from March to May, observed rainfall was normal to above normal across Samoa.
- Rainfall for July and July to September is very likely to be *above normal* over Samoa.
- SSTs were *above normal* for May and March to May. The outlook also shows *above normal* SSTs for the next one and three months
- Sea-surface heights (SSH) were near normal for May. Below normal sea surface heights are predicted for June and June to August
- There is a coral bleaching 'Watch to Alert Level 2' for Samoa

**TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders**

| <b>Product</b>           | <b>Date:<br/>May<br/>2024</b> | <b>Stakeholder</b>   | <b>Total<br/>Number of<br/>Participants</b> | <b>Number of<br/>Male</b> | <b>Number of<br/>Female</b> | <b>Comments (If<br/>there are<br/>comments<br/>from you<br/>Stakeholders)</b> |
|--------------------------|-------------------------------|--|---|---------------------------|-----------------------------|---|
| EAR Watch                | 31st                          | RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines | 65  | 27                        | 38                          |   |
| Seasonal Climate Outlook | 31st                          | RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines | 65  | 27                        | 38                          |   |
| Ocean Outlook            | 31st                          | RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology,                            | 65  | 27                        | 38                          |   |

|            |   |  |     |    |    |  |
|------------|---|--|-----|----|----|--|
|            |   | Disaster Managers,<br>Marines  |     |    |    |  |
| Samoa NCOF | 3 <sup>rd</sup> 10 <sup>th</sup> June – 12 <sup>th</sup> June | RED Cross, Media, Health, Works & Infrastructure, Agriculture & Fisheries, Fire Services, Farmers and farming companies and Fisherman and fishing companies. | 40  | 20 | 20 |  |
| Total      |   |  | 105 | 47 | 58 |  |