

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 169

Country: Samoa

Part 1: Recent climate

TABLE 1: Monthly Rainfall

| Station (include data period) | Jul-2021 | Aug-2021 | Sep-2021 | | | | Rank |
|-------------------------------|------------|------------|---------------|---------|---------|--------|--------|
| | | | Total (mm) | 33%tile | 67%tile | Median | |
| | Total (mm) | Total (mm) | Rainfall (mm) | | | | |
| Apia (1890-2021) | 96.4 | 166.1 | 66.6 | 88.2 | 172.6 | 120.8 | 31/132 |
| Afiamalu (1903-2021) | 301.2 | 245.0 | 54.9 | 126.0 | 219.7 | 179.8 | 9/69 |
| Nafanua (1965-2021) | 100.1 | 156.9 | 27.3 | 102.2 | 175.5 | 151.4 | 4/49 |
| Faleolo (1956-2021) | 32.1 | 47.8 | 6.1 | 55.1 | 115.6 | 80.9 | 2/59 |

TABLE 2: Three-month Total Rainfall for July to September 2021

| Station | Three-month Total | | 33%tile | 67%tile | Median | Rank |
|----------------------|-------------------|--------------|---------|---------|--------|--------|
| | Rainfall (mm) | | | | | |
| Apia (1890-2021) | 329.1 | Normal | 275.4 | 440.1 | 387.0 | 61/132 |
| Afiamalu (1903-2021) | 601.1 | Normal | 541.1 | 691.0 | 627.8 | 36/67 |
| Nafanua (1965-2021) | 284.3 | Below normal | 341.8 | 505.6 | 406.0 | 14/49 |
| Faleolo (1956-2021) | 86.0 | Below normal | 206.8 | 346.7 | 275.8 | 3/57 |

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

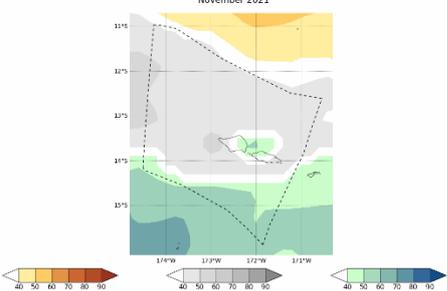
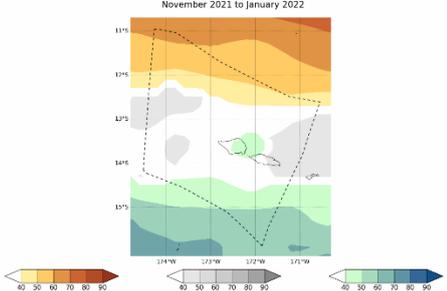
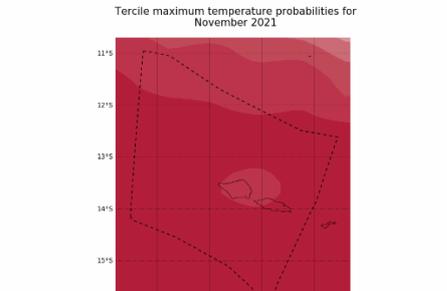
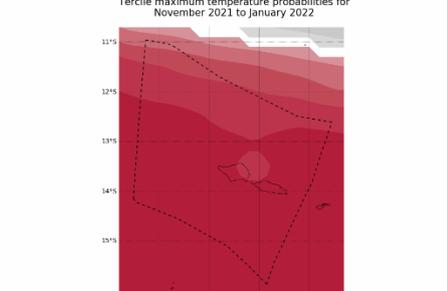
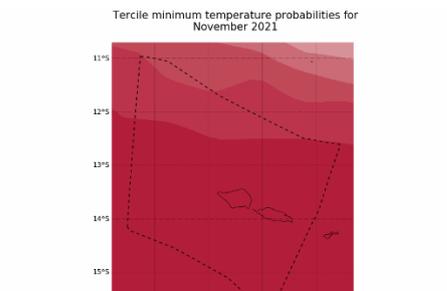
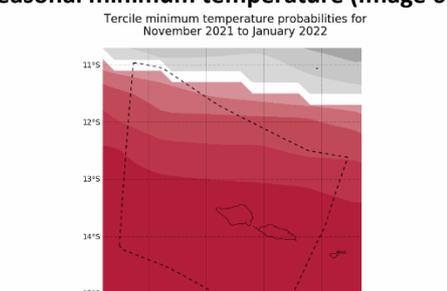
Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

Part 1i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

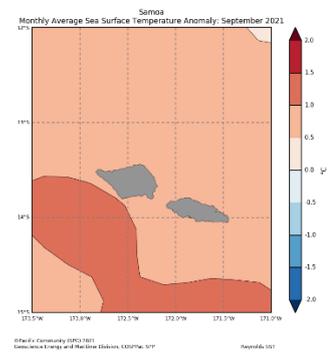
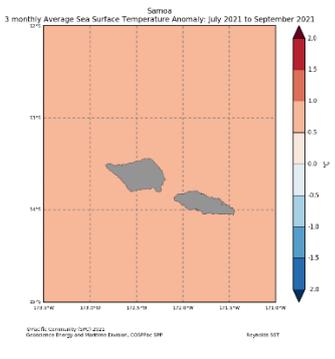
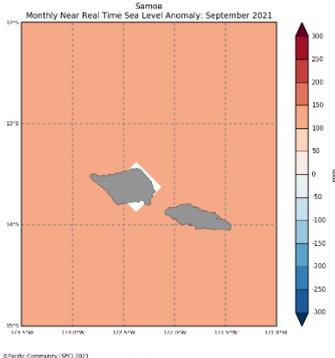
| Monthly | Seasonal |
|--|--|
| <p>Rainfall (Image 1)</p> <p>Tercile rainfall probabilities for November 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Model: ACCESS-S1 Base period: 1990-2012 Issued: 07/10/2021</small></p> | <p>Rainfall (Image 2)</p> <p>Tercile rainfall probabilities for November 2021 to January 2022</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Model: ACCESS-S1 Base period: 1990-2012 Issued: 07/10/2021</small></p> |
| <p>Monthly Maximum temperature (Image 3):</p> <p>Tercile maximum temperature probabilities for November 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Model: ACCESS-S1 Base period: 1990-2012 Issued: 07/10/2021</small></p> | <p>Seasonal maximum temperature (Image 4):</p> <p>Tercile maximum temperature probabilities for November 2021 to January 2022</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Model: ACCESS-S1 Base period: 1990-2012 Issued: 07/10/2021</small></p> |
| <p>Monthly minimum temperature (Image 5):</p> <p>Tercile minimum temperature probabilities for November 2021</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Model: ACCESS-S1 Base period: 1990-2012 Issued: 07/10/2021</small></p> | <p>Seasonal minimum temperature (Image 6):</p> <p>Tercile minimum temperature probabilities for November 2021 to January 2022</p>  <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Model: ACCESS-S1 Base period: 1990-2012 Issued: 07/10/2021</small></p> |

NB: The X LEPS % score has been categorised as follows:

- Very Low: $X < 0.0$
- Low: $0 \leq X < 5$
- Moderate: $5 \leq X < 10$
- Good: $10 \leq X < 15$
- High: $15 \leq X < 25$
- Very High: $25 \leq X < 35$
- Exceptional: $X \geq 35$

Part 2: Recent Ocean summary statement

Monthly: September 2021

| Monthly: September | Last three months: July to September 2021: |
|---|---|
| <p style="text-align: center;">Sea Surface Temperature (Image 1):</p>  <p style="text-align: center;">Samoa Monthly Average Sea Surface Temperature Anomaly: September 2021</p> <p style="text-align: center;">© Pacific Community (SPC) 2021 Geospatial Energy and Maritime Division, COOPAC SPP RMI/MSD/MSD/MSD/MSD</p> | <p style="text-align: center;">Sea Surface Temperature (Image 4):</p>  <p style="text-align: center;">Samoa 3 monthly Average Sea Surface Temperature Anomaly: July 2021 to September 2021</p> <p style="text-align: center;">© Pacific Community (SPC) 2021 Geospatial Energy and Maritime Division, COOPAC SPP RMI/MSD/MSD/MSD/MSD</p> |
| <p style="text-align: center;">Sea level (Image 2):</p>  <p style="text-align: center;">Samoa Monthly Near Real Time Sea Level Anomaly: September 2021</p> <p style="text-align: center;">© Pacific Community (SPC) 2021 Geospatial Energy and Maritime Division, COOPAC SPP RMI/MSD/MSD/MSD/MSD</p> | |
| <p style="text-align: center;">Daily coral bleaching alert (Image 3):</p> | |

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

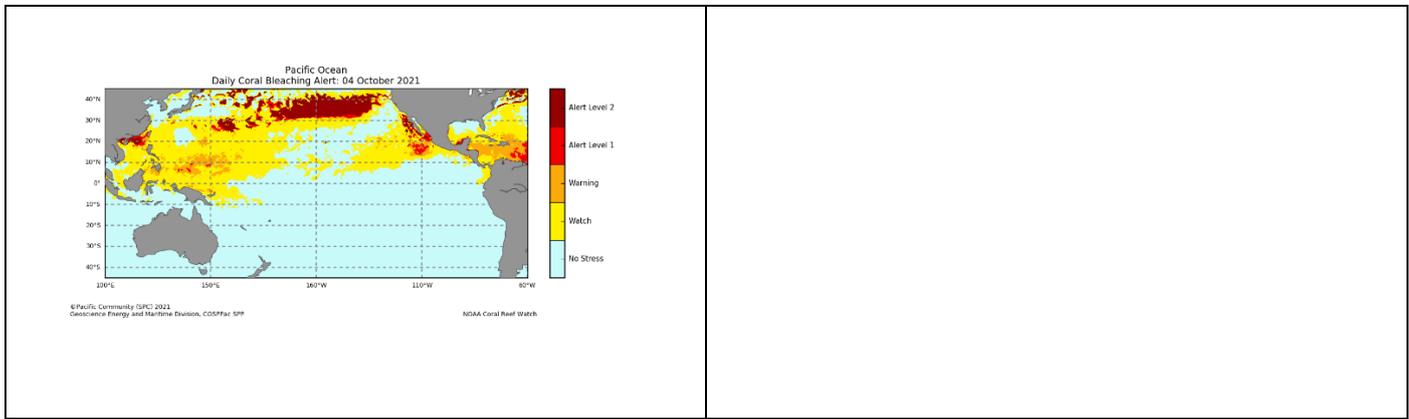
Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

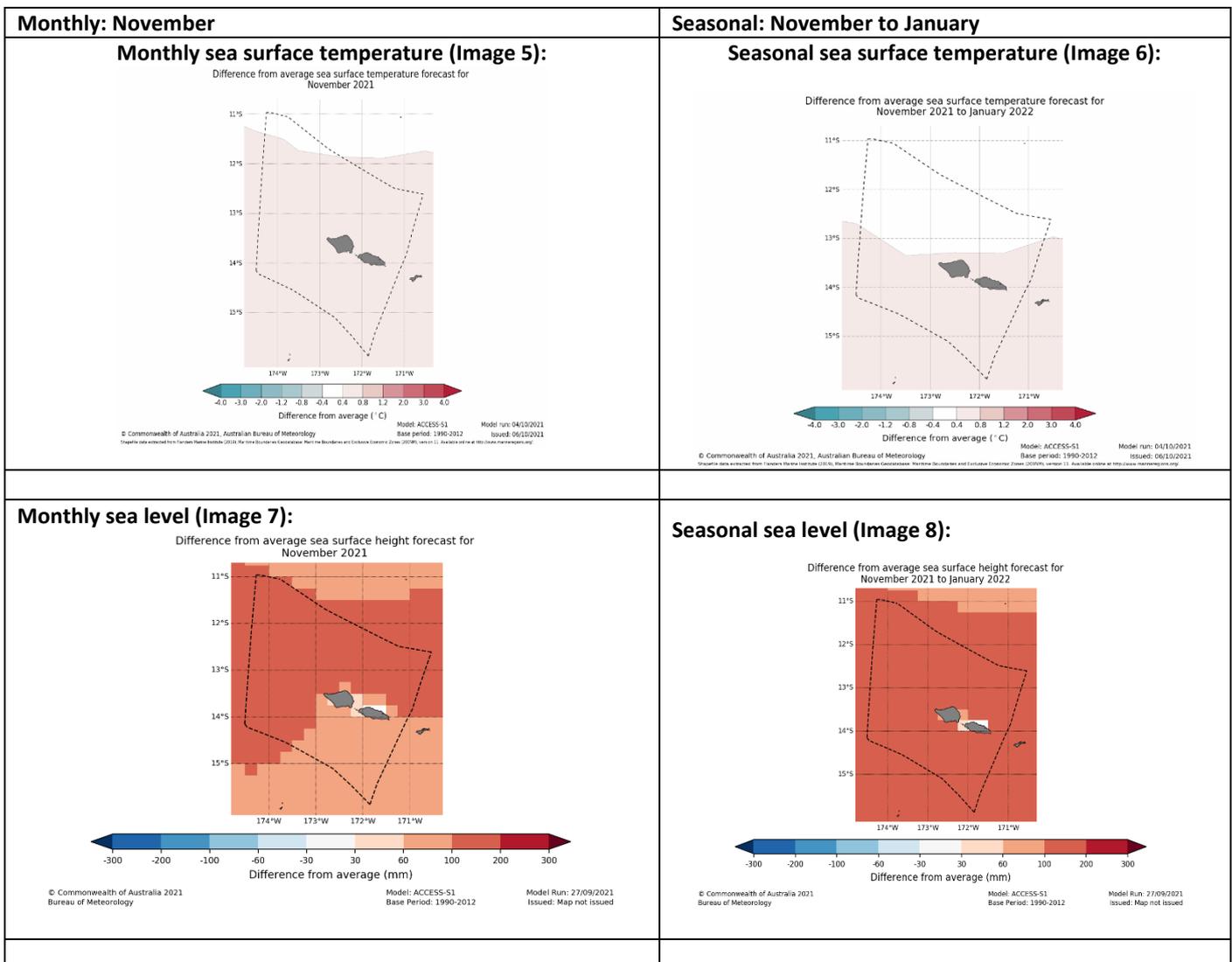
Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$



Part 2i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022



NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

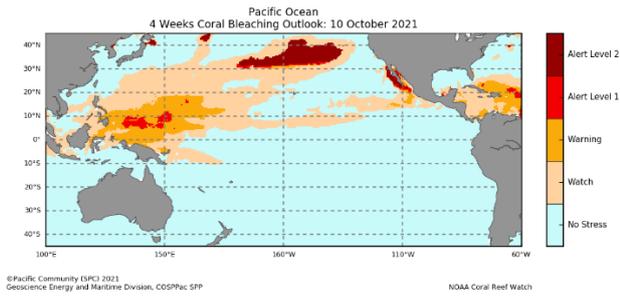
Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

4-week Coral Bleaching (Image 9):



Summary Statement

Monthly and last three months: September 2021/July to September statement (Highly significant changes)

For September, **below normal** rainfall was recorded in all stations. Faleolo recorded its 2nd driest September on record while Nafanua registered its 4th driest.

Apia and Afiamalu recorded **normal** rainfall in the past three months whereas **below normal** rainfall was experienced at Nafanua and Faleolo. Faleolo station recorded its 3rd driest July to September period on record.

Part 1i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

Monthly /Seasonal rainfall and temperature Outlook statements (Highly significant changes)

The monthly rainfall outlook and three-monthly outlook shows central Samoa to anticipate **above normal** conditions.

Above normal maximum and minimum temperatures are very likely across Samoa for November 2021 to January 2022.

Part 2: Recent Ocean summary statement

Monthly and last three months: September/July to September 2021 (Highly significant changes)

Sea Surface temperatures (SSTs) in the Samoa region experienced a slight warming in the last three months.

Sea Level Anomaly (SLA) showed a slight increase of 100mm-150mm in September 2021.

Part 2i. Monthly and Seasonal Outlooks for November and November 2021 to January 2022

Ocean Variable statement (Highly significant changes)

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$

The outlook for Samoa shows SSTs are likely to be close to average for both the monthly and seasonal outlook periods.

The outlook for the Samoa region shows a significant sea level elevation of 0.10m-0.20m for the period November 2021 to January 2022.

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

| Product | Date: September 2021 | Stakeholder | Total Number of Participants | Number of male | Number of female |
|--|--|--|---|---------------------------|-----------------------------|
| CREWS Community Awareness Program | 29 th August- 06 th October 2021 | SFESA, Samoa Met, Village Communities | 270 | 120 | 150 |
| Samoa College Open day | 15 th – 16 th | Samoa College | 300 | 150 | 150 |
| Total | | | 570 | 170 | 200 |

NB: The X LEPS % score has been categorised as follows:

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

Very High: $25 \leq X < 35$ Exceptional: $X \geq 35$