

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 167

Country: Papua New Guinea

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	May-2021	Jun-2021	Jul-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Momase Region							
Madang (1944-2021)				103.8	183.0	142.0	
Nadzab (1973-2021)	68.8	130.4	162.8	77.6	148.0	117.8	33/47
Wewak (1956-2021)	305.2	318.0	319.8	148.1	204.1	176.8	62/66
Vanimo (1918-2021)	257.6	247.8	206.8	144.9	219.3	193.2	39/67
Highlands Region							
Goroka (1948-2021)	118.4		28.0	43.7	70.8	55.0	15/58
New Guinea Islands Region							
Momote (1949-2021)	321.4	173.8	202.8	304.5	412.5	346.0	11/68
Kavieng (1916-2021)	324.4	170.8	140.6	188.7	277.8	220.2	14/91
Southern Region							
Misima (1917-2021)	222.0	439.0	396.8	89.0	189.1	139.2	88/96
Port Moresby (1875-2021)	18.8	30.4	15.2	6.3	25.5	14.0	66/122

Monthly: July 2021 statement

Below normal rainfall was recorded at Goroka, Momote and Kavieng. On the other hand, above normal rainfall was registered at Nadzab, Wewak and Misima. Normal rainfall was received at Vanimo and Port Moresby. It was the fifth wettest July on record at Wewak and the ninth wettest July on record at Misima.

Rainfall data is not available for Madang.

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: $X \geq 35$

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

Station	Three-month Total	33%tile	67%tile	Median	Rank	
	Rainfall (mm)					
Momase Region						
Madang (1944-2021)			636.1	813.3	743.2	
Nadzab (1973-2021)	362.0	Normal	274.5	372.9	314.4	29/46
Wewak (1956-2021)	943.0	Above normal	544.9	685.9	629.8	65/66
Vanimo (1918-2021)	712.2	Above normal	572.6	683.2	606.6	50/66
Highlands Region						
Goroka (1948-2021)			203.1	265.2	239.0	
New Guinea Islands Region						
Momote (1949-2021)	698.0	Below normal	798.0	1034.7	907.2	17/67
Kavieng (1917-2021)	635.8	Below normal	636.7	785.3	719.8	32/89
Southern Region						
Misima (1917-2021)	1057.8	Above normal	471.8	697.6	561.3	79/94
Port Moresby (1875-2021)	64.4	Below normal	87.5	157.7	119.8	23/111

Last three months: May to July 2021 statement:

Rainfall (Table 2):

Below normal rainfall was recorded at Momote, Kavieng and Port Moresby with normal rainfall at Nadzab. Other three stations recorded above normal rainfall. Madang and Goroka could not be analysed due to unavailability of data.

Wewak recorded its second wettest May to July periods in 66 years of record respectively.

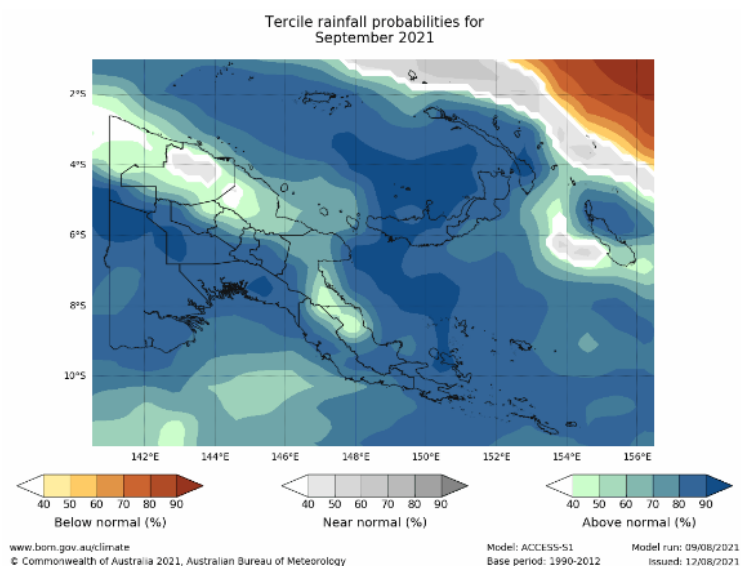
NB: The X LEPS % score has been categorised as follows:

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

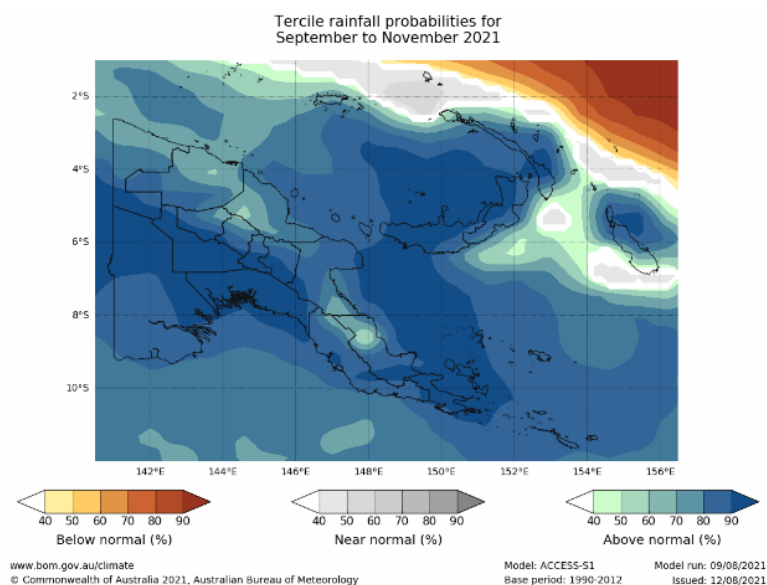
Monthly rainfall (Image 1):



Monthly rainfall Outlook statements

The rainfall outlook for PNG for September is very likely to be above normal.

Seasonal rainfall (Image 2):



Seasonal Rainfall Outlook statements

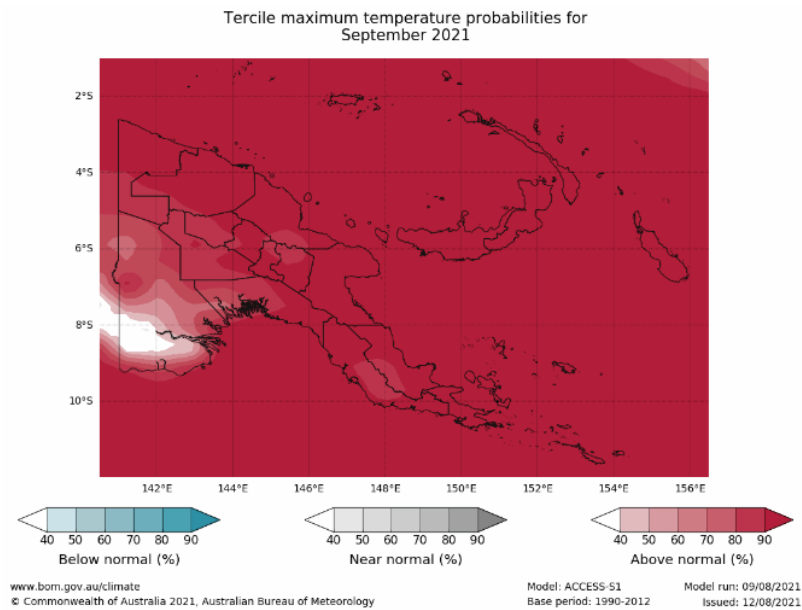
The rainfall outlook for PNG for September to November is very likely to be above normal.

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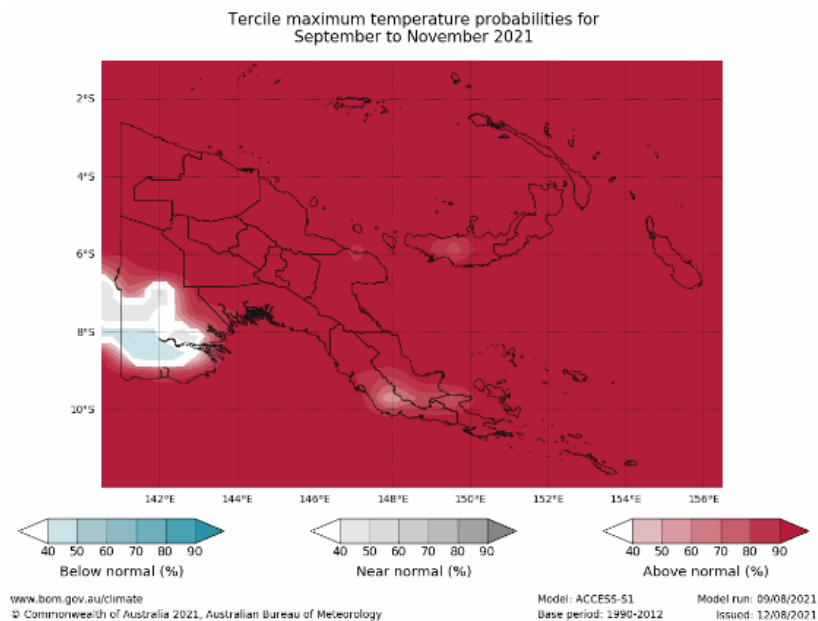
Monthly Maximum temperature (Image 3):



Monthly Maximum Outlook statements

The maximum temperature outlook for PNG for September is very likely to be above normal except for southern parts of Western Province where there is little guidance as the changes of below normal, normal and above normal are similar.

Seasonal maximum temperature (Image 4):



Seasonal maximum temperature Outlook statement

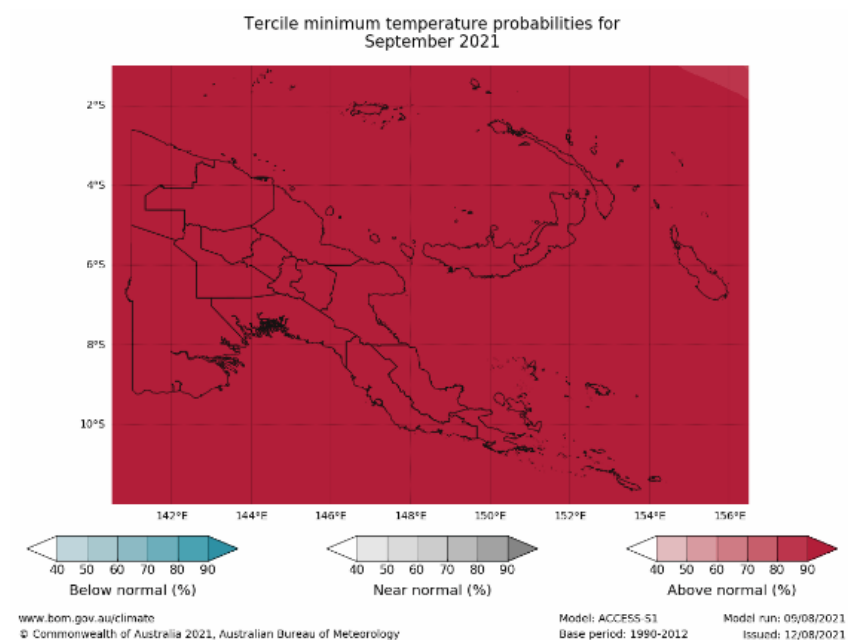
The maximum temperature outlook for PNG for September to November is very likely to be above normal except for southern parts of Western Province where it is likely to be normal or below normal.

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

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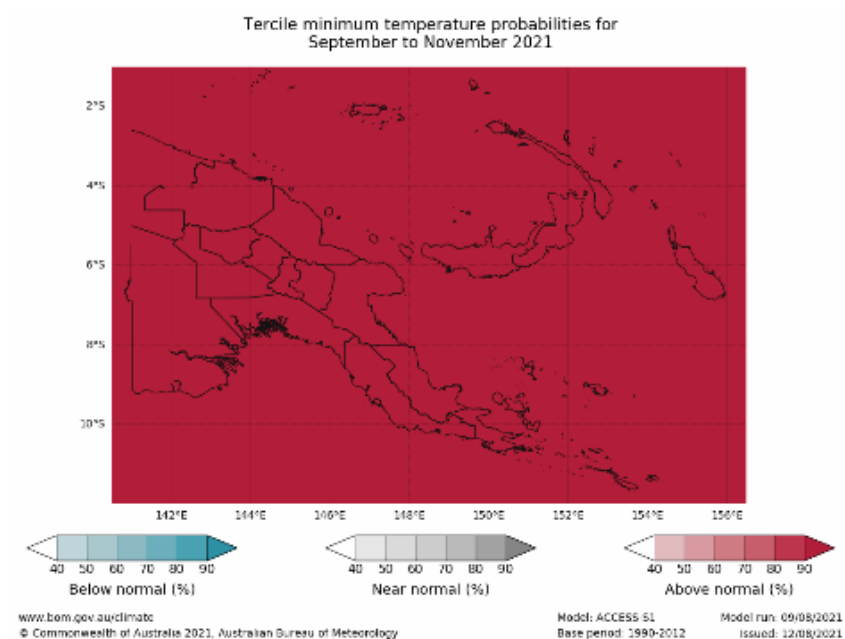
Monthly minimum temperature (Image 5):



Monthly Minimum Outlook statements

The minimum temperature outlook for PNG for September is very likely to be above normal.

Seasonal minimum temperature (Image 6):



Seasonal minimum temperature Outlook statement

The minimum temperature outlook for PNG for September to November is very likely to be above normal.

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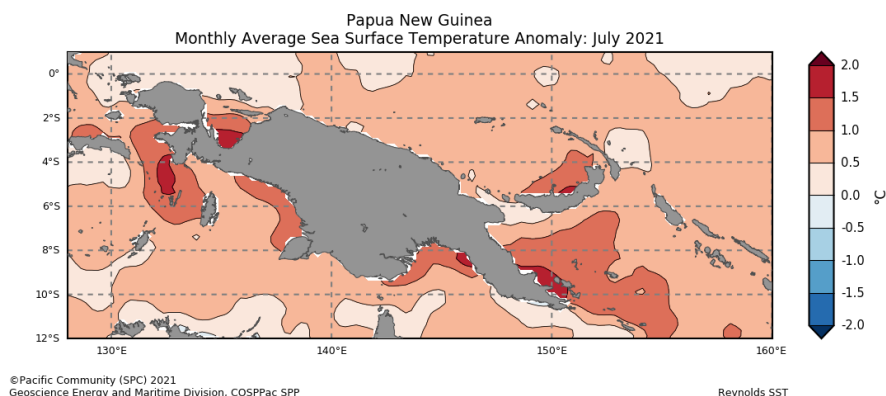
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Part 2: Recent Ocean summary statement

Monthly: July 2021

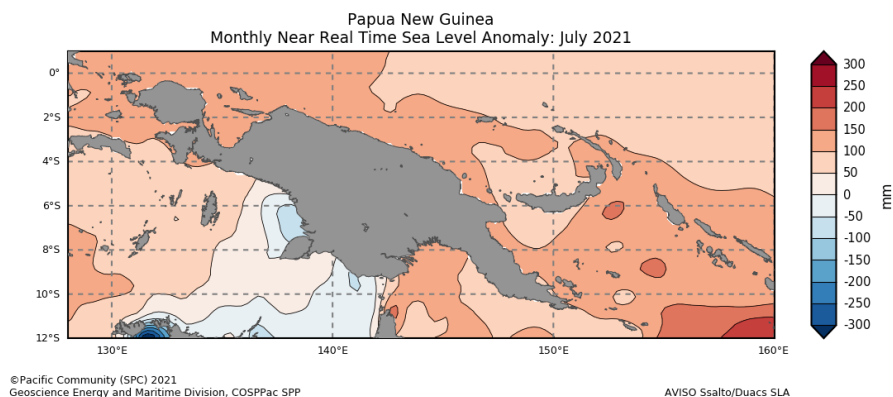
Sea Surface Temperature (Image 1):



Sea Surface Temperature statement

Most of Papua New Guinea experienced above average SST in the month of July 2021. Significant warm SSTs were experienced on the western side of Milne Bay, then spanning across the Bismark Sea to the north of New Britain island. Highest SSTs were 1.5 degrees above average and located off the coast of Milne Bay and NCD Province.

Sea level (Image 2):



Sea level statement

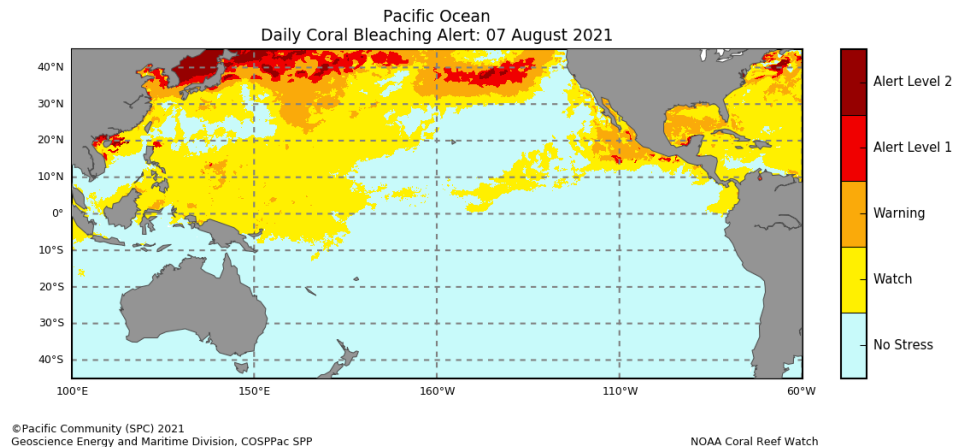
The sea level anomaly across Papua New Guinea in July 2021 was higher than normal, with majority of the EEZ in the range of 100 to 150 mm above average.

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Daily coral bleaching alert (Image 3):

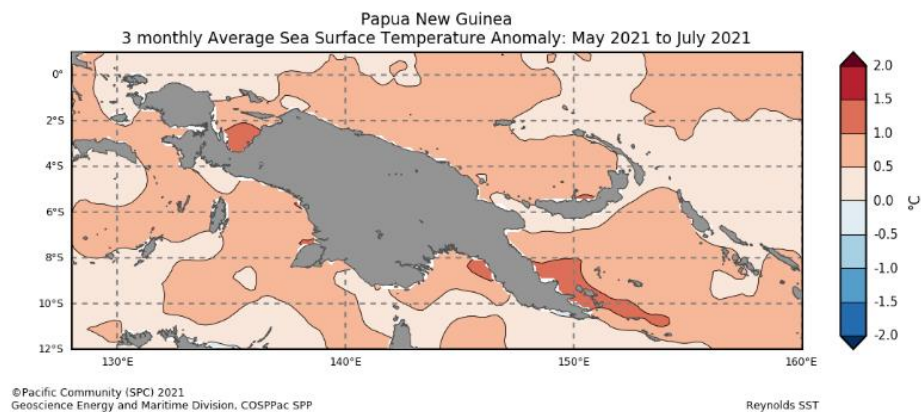


Daily bleaching alert statement

Warm SSTs experienced in the north of PNG has resulted in a 'watch' coral bleaching alert status for much of the region.

Last three months: May to July 2021:

Sea Surface Temperature (Image 4):



Last three months Sea Surface Temperature statement

For the May to July 2021 period, warmer than average SSTs were experienced in PNG ranging of 0.5 to 1.5 degrees above average.

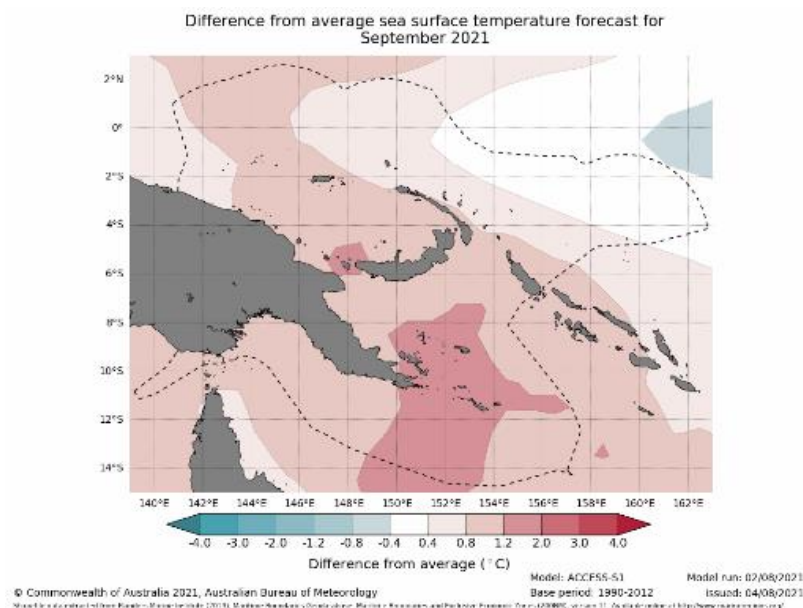
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Part 2i. Monthly and Seasonal Outlooks for September and September to November 2021

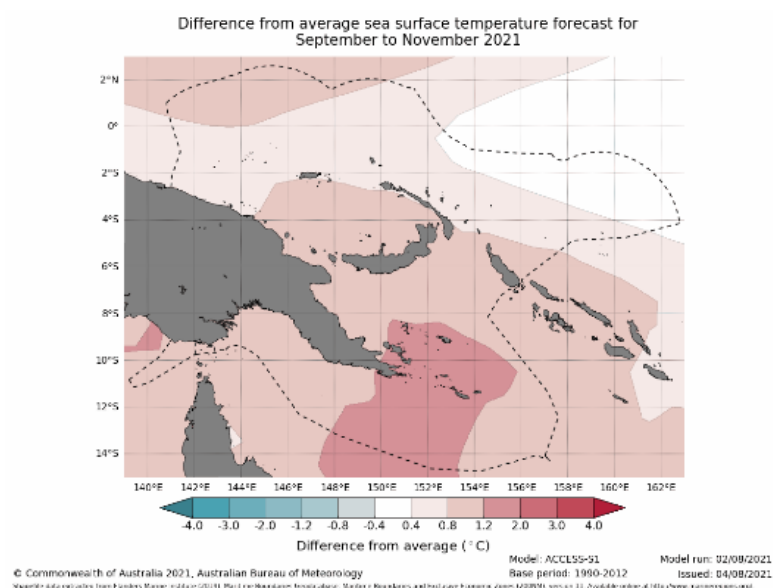
Monthly sea surface temperature (Image 5):



Monthly sea surface temperature statement

The outlook for PNG shows a significant temperature difference of 0.8-2.0°C for September.

Seasonal sea surface temperature (Image 6):



Seasonal Sea Surface Temperature statement

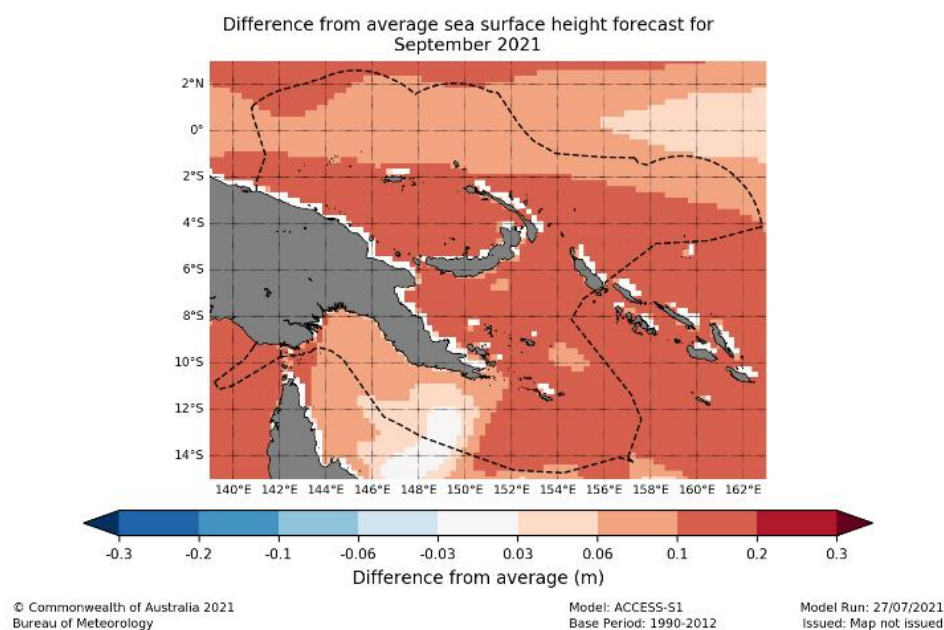
The outlook for PNG shows SSTs are likely to be above average for the September to November period. The outlook for East of Milne Bay shows a significant temperature difference of 1.2-2.0°C above normal for the September to November period.

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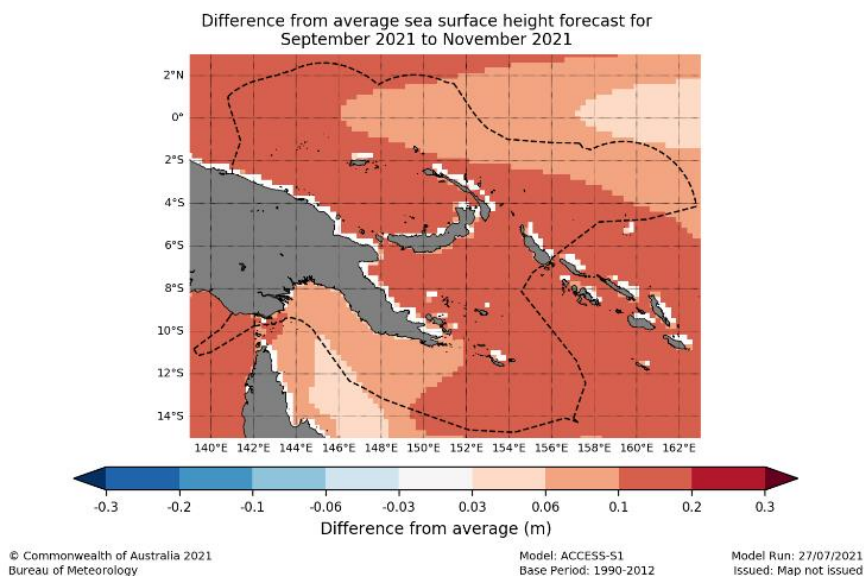
Monthly sea level (Image 7):



Monthly sea level statement

The outlook across PNG shows sea surface heights are likely to be above average for September. In the north of PNG is predicted to reach 0.1 to 0.2 metres above normal.

Seasonal sea level (Image 8):



Seasonal sea level statement

The outlook across PNG shows sea surface heights are likely to be above average for September to November and is predicted to reach 0.1 to 0.2 metres above normal.

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

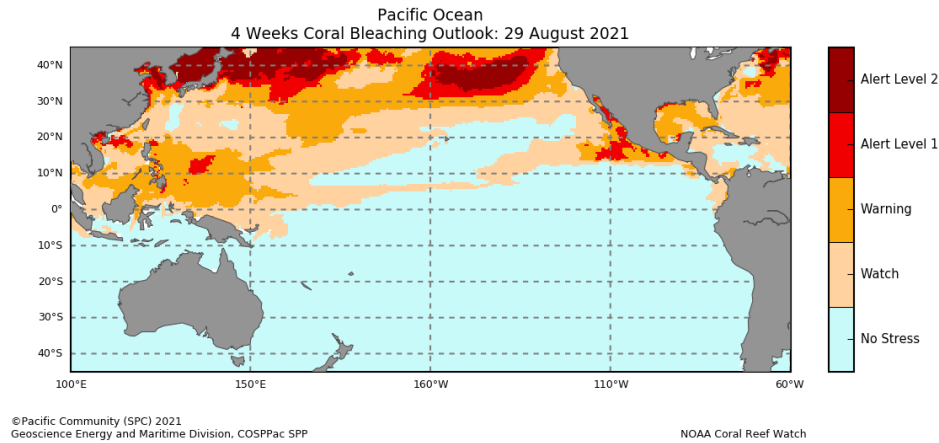
Moderate $5 \leq X < 10$

Good: $10 \leq X < 15$

High: $15 \leq X < 25$

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4-week Coral Bleaching (Image 9):



4-weeks Coral Bleaching statement

The outlook for PNG shows a Watch alert in north coast of PNG.

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

Product	Date: July 2021	Stakeholder	Total Number of Participants	Number of male	Number of female
Climate Bulletin	12 th July	National Disaster Centre, Climate Change Development Authority, Provincial Disaster Coordinators, Universities, NWS Staff, Mining & Energy Sector, Agriculture, Fisheries, Water PNG, Forestry, Tourism Promotion Authority, Education, Health, Aviation, Shipping, Transport, Banking Institutions, World Vision, UNDP, AHC/DFAT, Customs and Immigration, National Maritime Safety Authority, Coffee & Copra Industry, National Capital District Commission, Mineral Resource Authority, Media	145	103	42
EAR Watch	nil				
Monthly Climate Briefing	nil				
Ocean Outlook	nil				
Total			145	103	42

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