

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

Country: Kiribati

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Jul-2021	Aug-2021	Sep-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Beru (1932-2021)	101.7	31.0	73.5	25.3	77.0	47.0	45/65
Butaritari (1931-2021)	553.6	152.0	122.1	111.3	179.3	138.0	38/84
Kanton (1937-2021)							
Kiritimati (1921-2021)	30.4	7.4	29.9	4.0	16.8	8.0	77/96
Tarawa (1950-2021)	133.6	54.3	25.0	59.0	142.9	87.3	11/74
Arorae (1950-2021)	151.1	45.7	80.8	40.3	116.3	72.5	31/55

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

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2021)	206.2	Normal	133.3	314.1	195.0	34/63
Butaritari (1931-2021)	827.7	Above normal	504.6	734.5	622.0	70/84
Kanton (1937-2021)			158.6	240.4	183.0	
Kiritimati (1921-2021)	67.7	Normal	52.1	115.0	85.0	48/96
Tarawa (1950-2021)	212.9	Normal	195.8	541.4	337.4	26/74
Arorae (1950-2021)	277.6	Below	215.0	447.0	334.0	24/53

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
Rainfall (Image 1) <p>Tercile rainfall probabilities for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p>	Rainfall (Image 2) <p>Tercile rainfall probabilities for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p>
Monthly Maximum temperature (Image 3): <p>Tercile maximum temperature probabilities for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p>	Seasonal maximum temperature (Image 4): <p>Tercile maximum temperature probabilities for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p>
Monthly minimum temperature (Image 5): <p>Tercile minimum temperature probabilities for November 2021</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p>	Seasonal minimum temperature (Image 6): <p>Tercile minimum temperature probabilities for November 2021 to January 2022</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 27/09/2021 Issued: 30/09/2021</p>

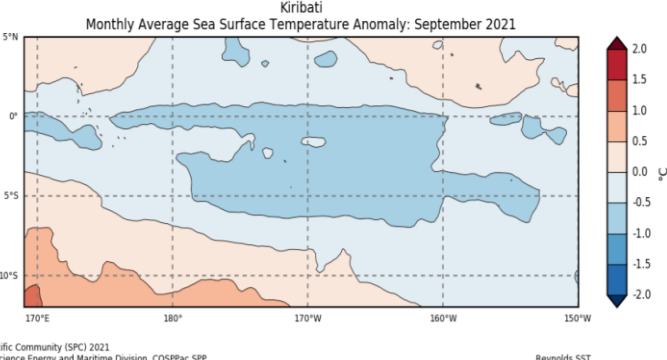
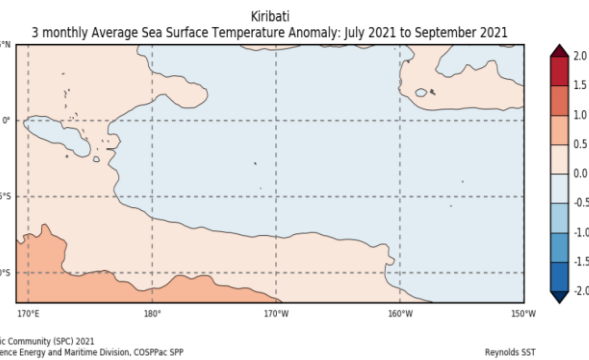
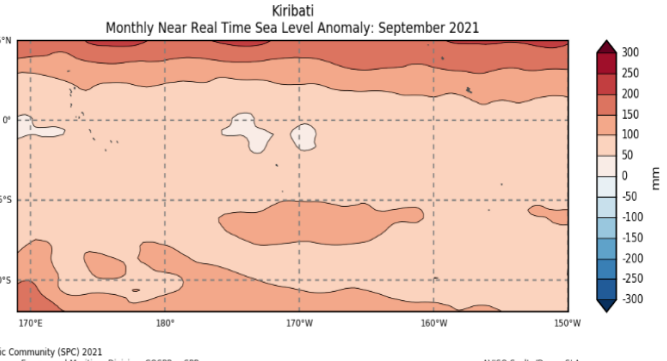
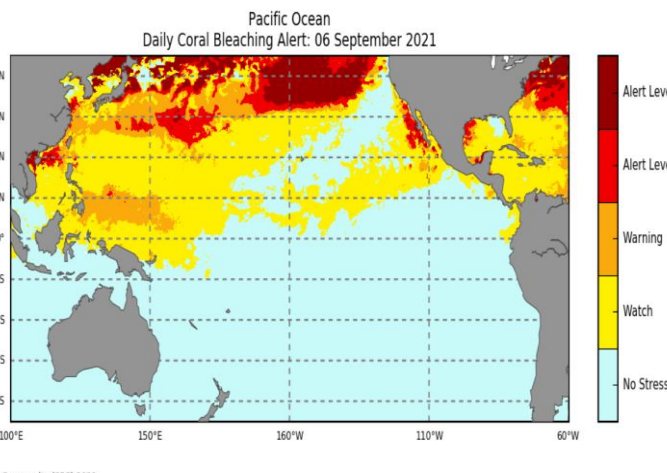
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Part 2: Recent Ocean summary statement

Monthly: September 2021

Monthly: September	Last three months: July to September 2021:
Sea Surface Temperature (Image 1):	Sea Surface Temperature (Image 4):
 <p>Kiribati Monthly Average Sea Surface Temperature Anomaly: September 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>Reynolds SST</p>	 <p>Kiribati 3 monthly Average Sea Surface Temperature Anomaly: July 2021 to September 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>Reynolds SST</p>
Sea level (Image 2): Insert map	
 <p>Kiribati Monthly Near Real Time Sea Level Anomaly: September 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>AVISO Ssalto/Duacs SLA</p>	
Daily coral bleaching alert (Image 3):	
 <p>Pacific Ocean Daily Coral Bleaching Alert: 06 September 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>NOAA Coral Reef Watch</p>	

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

Monthly: November	Seasonal: November to January
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for November 2021</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Sea surface data extracted from European Marine Institute (2019), Maritime Boundaries (Department of Maritime Resources and Fisheries) (2019), version 1.1. Available online at http://www.maritime.gov.au</small></p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 04/10/2021 Issued: 06/10/2021</p>	<p>Difference from average sea surface temperature forecast for November 2021 to January 2022</p> <p>© Commonwealth of Australia 2021, Australian Bureau of Meteorology <small>Sea surface data extracted from European Marine Institute (2019), Maritime Boundaries (Department of Maritime Resources and Fisheries) (2019), version 1.1. Available online at http://www.maritime.gov.au</small></p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model run: 04/10/2021 Issued: 06/10/2021</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for November 2021</p> <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model Run: 27/09/2021 Issued: Map not issued</p>	<p>Difference from average sea surface height forecast for November 2021 to January 2022</p> <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p> <p>Model: ACCESS-S1 Base period: 1990-2012 Model Run: 27/09/2021 Issued: Map not issued</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 October 2021</p> <p>© Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>NOAA Coral Reef Watch</p>	

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Summary Statement

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

Below normal rainfall was recorded at Tarawa. Near normal rainfall were received in Beru, Butaritari and Arorae while Kiritimati recorded above normal rainfall for September 2021.

For July to September period, Arorae received below normal rainfall while Beru, Kiritimati and Tarawa recorded normal rainfall. Above normal was recorded in Butaritari.

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 outlook is very likely to be below normal for temperature and rainfall at monthly and seasonal except for maximum and minimum seasonal temperature which are likely to be near-normal in the northern part of the Gilbert group.

Part 2: Recent Ocean summary statement

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

Some parts of the Gilbert and Line Groups experienced above average SST of 0.0 – 0.5 degrees while the Phoenix and the rest of the Gilbert and Line groups experienced below average SST ranging from 0.0 to -1.0 degrees for both periods (Monthly and Seasonal).

The monthly sea level anomaly across Kiribati in September 2021 was significantly higher than normal ranging from 50 to 200mm.

The daily coral bleaching alert for the northern Gilbert and Line groups are on watch status and the rest of the islands experienced no thermal stress.

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

Ocean Variable statement (Highly significant changes)

The monthly and seasonal outlooks for Kiribati both predict a significant temperature difference of up to -2.0°C.

The monthly sea surface height predicts a significant sea surface heights difference of from neutral to 0.1m.

The outlook for the Kiribati Waters predicts that there will be no coral bleaching alerts expected for the northern most islands in the Gilbert group (Makin & Butaritari) which are forecast to be on watch.

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

Product	Date: September 2021	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletin	21 st	Temaiku Mother Community	~15	7	8
EAR Watch	21 st	Temaiku Mother Community	~15	7	8
Ocean Outlook	21 st	Temaiku Mother Community	~15	7	8
Climate data request (Monthly rainfall, temperature and sea level data).		Secondary School	3	1	2
Climate trends and Climate Projections	22-23 rd	Disaster, Climate Change, Agriculture, Geoscience Division, Lands, Human Rights, Employment, Local Council reps (BTC, TUC), Church Faith Base (Catholic, Uniting Church, Mormon). KANGO, KiriCAN, KILGA, Child Fund, Internal Affairs, Disability rep.	33	16	17
Products send via email (Media Release, bulletins, EAR Watch, Ocean Outlook).	6 th	Government and Non Government Organisations and general public subscribed to the products.	118	45	73
		Total	169	69	100

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