

Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 170

Country: Kiribati

Part 1: Recent climate

TABLE 1: Monthly Rainfall

Station (include data period)	Aug-2021	Sep-2021	Oct-2021				
			Total (mm)	33%tile	67%tile	Median	Rank
	Total (mm)	Total (mm)	Rainfall (mm)				
Beru (1932-2021)	31.0	73.5	9.6	18.0	62.0	33.0	13/64
Butaritari (1931-2021)	152.0	122.1	8.8	96.5	186.6	140.4	3/84
Kiritimati (1921-2021)	7.4	29.9	4.2	4.0	22.0	13.3	35/96
Tarawa (1950-2021)	54.3	25.0	0.9	40.4	118.7	65.0	2/74
Arorae (1950-2021)	45.7	80.8	31.4	26.0	81.0	44.3	22/55

TABLE 2: Three-month Rainfall for August to October 2021

Station	Three-month Total		33%tile	67%tile	Median	Rank
	Rainfall (mm)					
Beru (1932-2021)	114.1	Normal	110.7	194.6	137.0	23/63
Butaritari (1931-2021)	282.9	Below normal	351.1	612.5	555.0	14/84
Kanton (1937-2021)			108.6	173.1	131.0	
Kiritimati (1921-2021)	41.5	Normal	26.8	58.0	43.9	51/95
Tarawa (1950-2021)	80.2	Below normal	202.7	405.5	278.6	9/74
Arorae (1950-2021)	157.9	Normal	156.0	412.0	254.9	19/53

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

Very Low: $X < 0.0$

Low: $0 \leq X < 5$

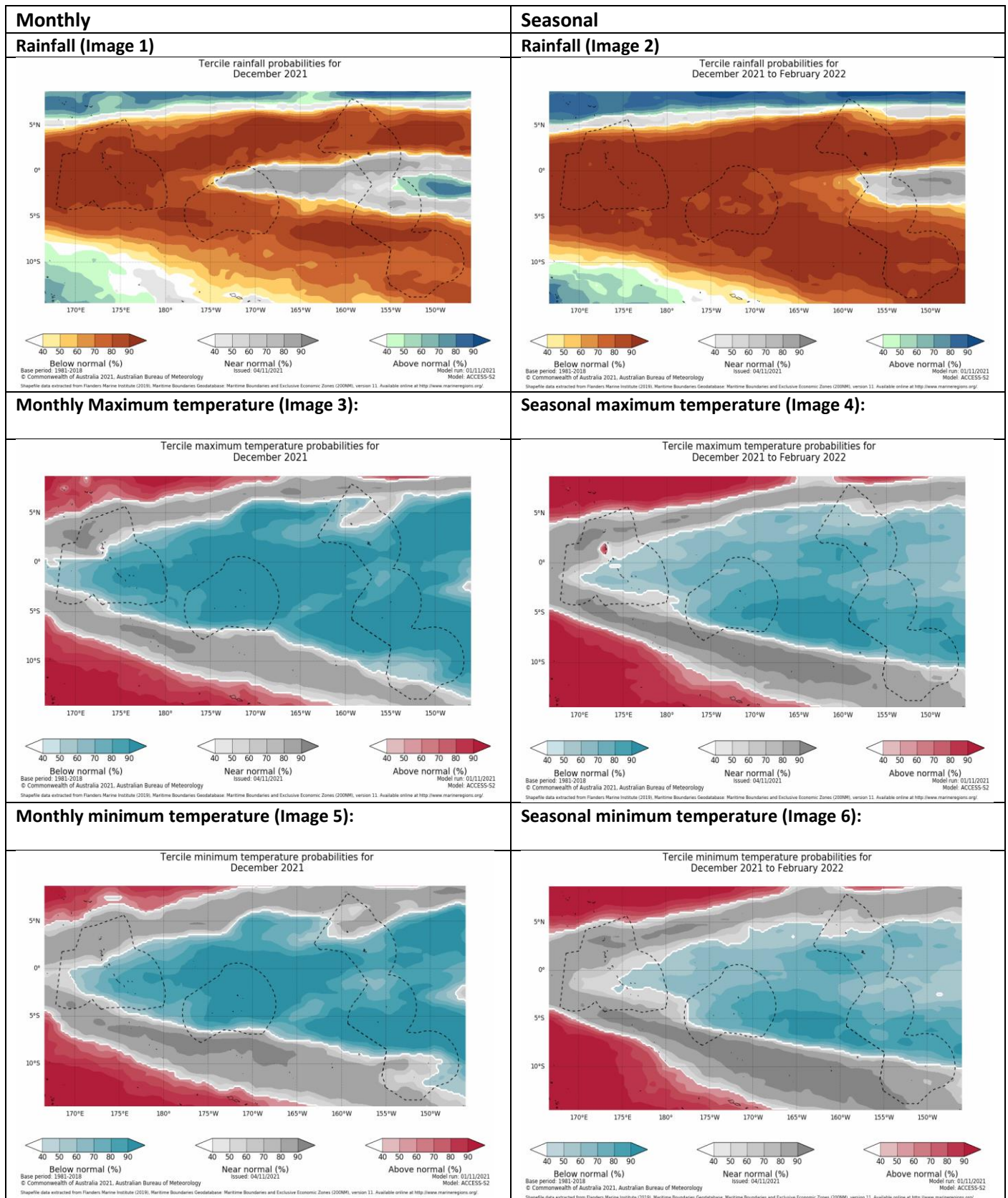
Moderate $5 \leq X < 10$

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 December and December 2021 to February 2022



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Part 2: Recent Ocean summary statement

Monthly: October 2021

Monthly: October	Last three months: August to October 2021:
Sea Surface Temperature (Image 1): <p>Kiribati Monthly Average Sea Surface Temperature Anomaly: October 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>Reynolds SST</p>	Sea Surface Temperature (Image 4): <p>Kiribati 3 monthly Average Sea Surface Temperature Anomaly: August 2021 to October 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>Reynolds SST</p>
Sea level (Image 2): <p>Kiribati Monthly Near Real Time Sea Level Anomaly: October 2021</p> <p>©Pacific Community (SPC) 2021 Geoscience Energy and Maritime Division, COSPPac SPP</p> <p>AVISO SeaLtoDuacs SLA</p>	
Daily coral bleaching alert (Image 3): <p>Pacific Ocean Daily Coral Bleaching Alert: 01 November 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 December and December 2021 to February 2022

Monthly: December	Seasonal: December to February
Monthly sea surface temperature (Image 5):	Seasonal sea surface temperature (Image 6):
<p>Difference from average sea surface temperature forecast for December 2021</p> <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Seafile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2009), version 11. Available online at http://www.marinegaps.org</p> <p>Model run: 01/11/2021 Model: ACCESS-S2 Issued: 03/11/2021</p>	<p>Difference from average sea surface temperature forecast for December 2021 to February 2022</p> <p>Base period: 1981-2018 © Commonwealth of Australia 2021, Australian Bureau of Meteorology Seafile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase, Maritime Boundaries and Exclusive Economic Zones (2009), version 11. Available online at http://www.marinegaps.org</p> <p>Model run: 01/11/2021 Model: ACCESS-S2 Issued: 03/11/2021</p>
Monthly sea level (Image 7):	Seasonal sea level (Image 8):
<p>Difference from average sea surface height forecast for December 2021</p> <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018 Model Run: 27/10/2021 Issued: Map not issued</p>	<p>Difference from average sea surface height forecast for December 2021 to February 2022</p> <p>© Commonwealth of Australia 2021 Bureau of Meteorology</p> <p>Model: ACCESS-S2 Base Period: 1981-2018 Model Run: 27/10/2021 Issued: Map not issued</p>
4-week Coral Bleaching (Image 9):	
<p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 21 November 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: October 2021/August to October statement (Highly significant changes)

Arorae and Kiritimati recorded normal rainfall while Beru, Butaritari and Tarawa received below normal rainfall for October 2021. The October record in Tarawa is the 2nd driest and in Butaritari the 3rd driest on record.

For August to October, below normal rainfall was received in Butaritari and Tarawa. Normal rainfall was recorded in Beru, Kiritimati and Arorae.

Part 1i. Monthly and Seasonal Outlooks for December and December 2021 to February 2022

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

The monthly and seasonal rainfall outlook for Kiribati group, southern Phoenix and Line and northern Line islands are very likely to be below normal. Near normal rainfall is very likely for Northern Phoenix and Central line groups.

The monthly and seasonal maximum and minimum temperatures are very likely to be below normal for Southern Gilbert, Phoenix group and Central islands in the Line group. Near normal temperature is expected for the northern islands in the Gilbert and Line groups as well as in further south of the Line group.

Part 2: Recent Ocean summary statement

Monthly and last three months: October/August to October 2021 (Highly significant changes)

The October SST around Kiribati groups were all cooler, this is same at the last three months (Aug-Oct). However, a warm patch exists at the tip of the northern part of western Kiribati and Line islands.

The October Sea level anomaly is slightly increased by within the range of 50 to 150mm (0.05 to 0.1m) across Kiribati region.

Part 2i. Monthly and Seasonal Outlooks for December and December 2021 to February 2022

Ocean Variable statement (Highly significant changes)

The monthly and seasonal outlook for Kiribati shows a significant cooling temperature over the south of western Kiribati and central Line and Phoenix islands.

The monthly and seasonal outlook for Kiribati shows a significant sea surface heights difference of up to -100 in the east and to up to 60mm in the west.

The four weeks coral bleaching outlook shows that there are no coral bleaching alerts except for southwest of Kiribati which are on watch.

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

Product	Date: October 2021	Stakeholder	Total Number of Participants	Number of males	Number of females
Climate Bulletins (Seasonal Climate and Ocean Outlooks)	7 th	Government and Non Government Organisations and General public subscribed to the products.	118	45	73
	26 th	Buota village Communities	12	6	6
Media Release	7 th	Media Outlets	13	7	6
PICOF 9	21-22 nd	NMHS in the Pacific, Regional Organisations (SPREP, SPC) and Met Agencies around the globe (NOAA, APCC, NIWA, WMO, BOM, Meteo France, RCC members, ECCC, COSPPac, University of Hawaii).	~70	~30	~40
National Seasonal Forecasting training	5-6 th	NMHS in the Pacific (Cook Island, Fiji, PNG, Kiribati, Samoa, Solomon, Tuvalu and Vanuatu) and Facilitators from BOM, SPREP and PICS panel Chairs/Secrétariat.	~30	~10	~20
Total			~243	~98	~145

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