

Review of May to October 2020 climate

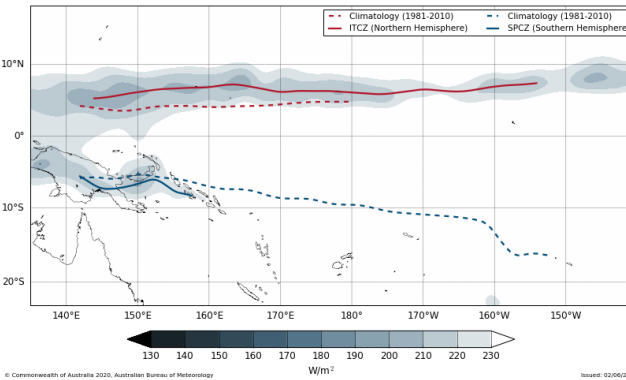
[Simon McGree, Bureau of
Meteorology]

PICOF-6 outlook

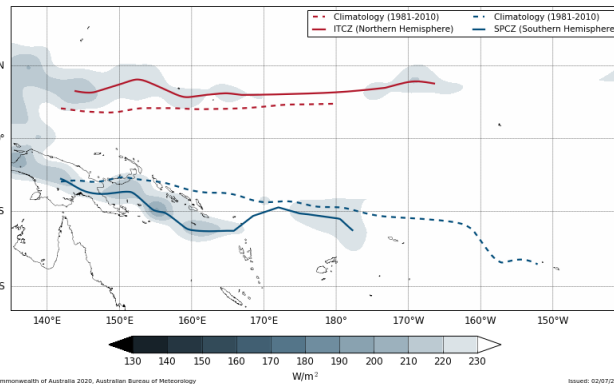
- Below average air temperatures likely over August to October in the central to eastern equatorial Pacific.
- With reference to rainfall outlooks, there is general agreement on below average rainfall for Nauru, below average to average rainfall for the Northern Mariana Islands, Niue and Pitcairn and average rainfall for American Samoa. For the remaining islands there is little agreement between the models over the coming three to six months.

Pacific outgoing longwave radiation (OLR)

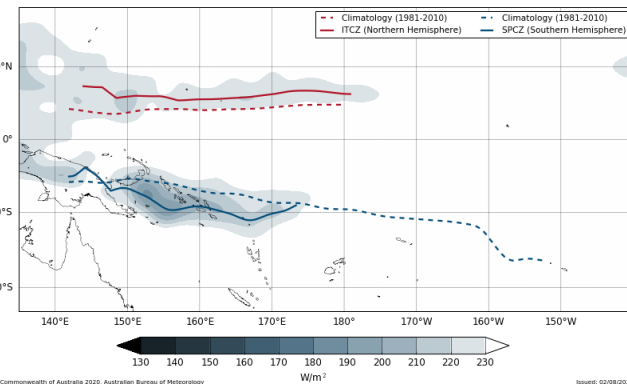
30 Day Average Outgoing Longwave Radiation (OLR) minimum to 2020-05-31



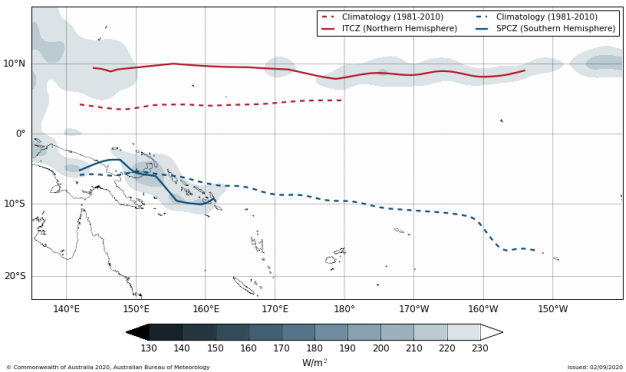
30 Day Average Outgoing Longwave Radiation (OLR) minimum to 2020-06-30



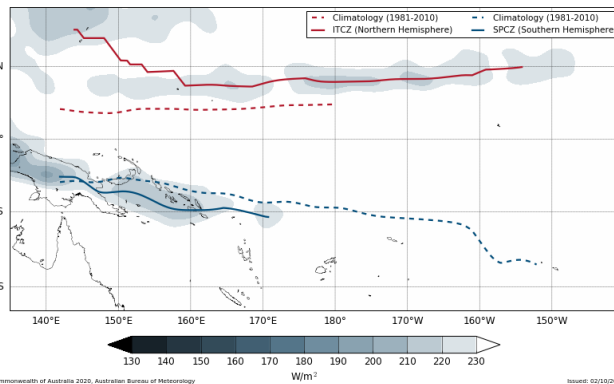
30 Day Average Outgoing Longwave Radiation (OLR) minimum to 2020-07-31



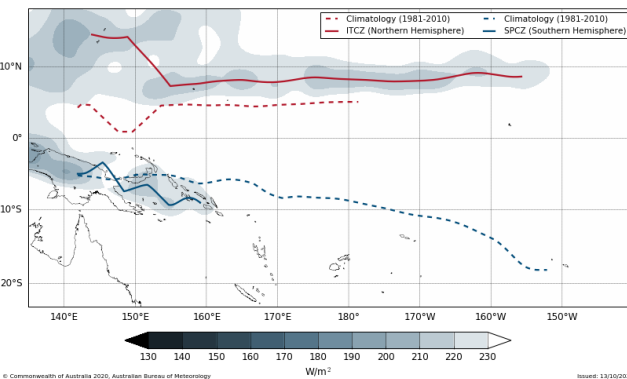
30 Day Average Outgoing Longwave Radiation (OLR) minimum to 2020-08-31



30 Day Average Outgoing Longwave Radiation (OLR) minimum to 2020-09-30

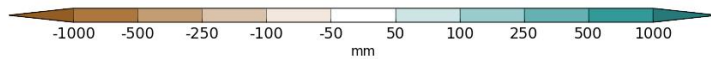
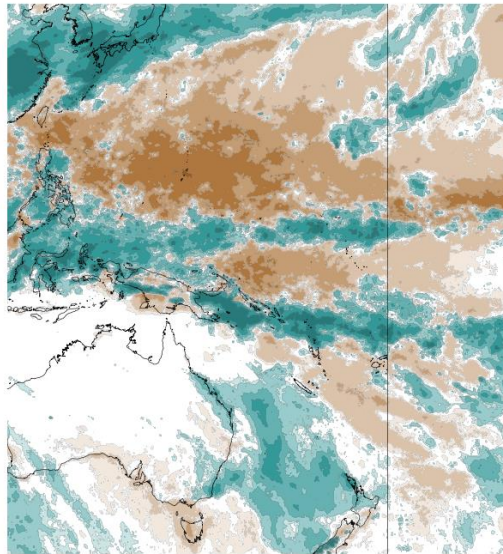


30 Day Average Outgoing Longwave Radiation (OLR) minimum to 2020-10-11



First 3-month rainfall (to July 2020)

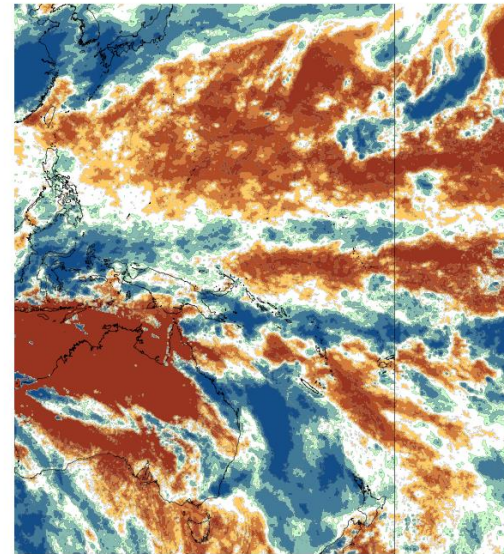
3-month total rainfall anomaly ending July 2020



Source: GSMaP

Map created: 1: Source: GSMaP

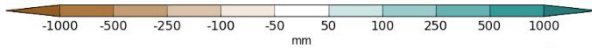
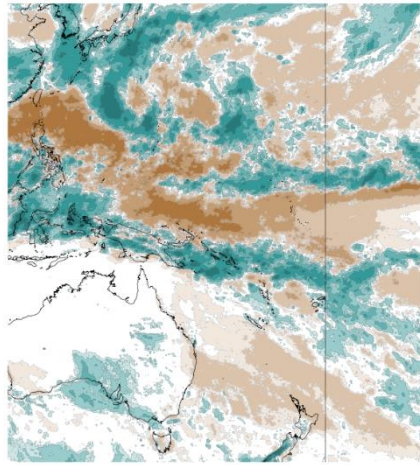
3-month total rainfall % of normal ending July 2020



Map created: 13/10/2020 (UTC)

Second 3-month rainfall (to September 2020)

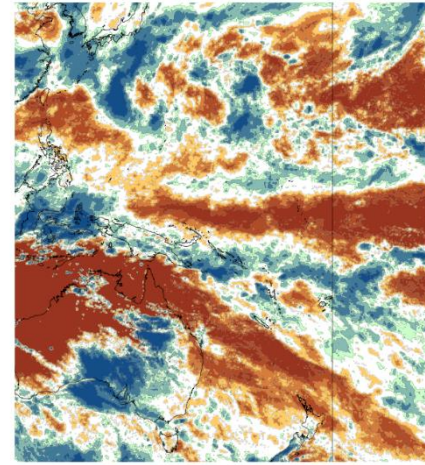
3-month total rainfall anomaly ending September 2020



Source: GSMap

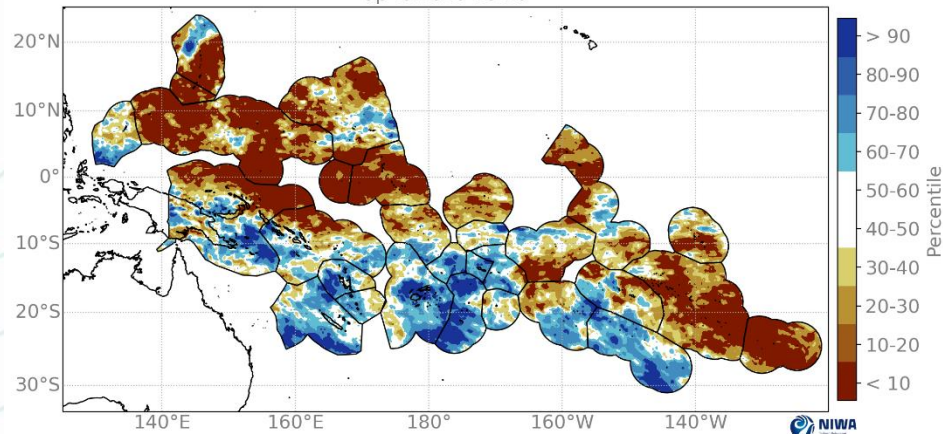
Map created: 13/10/2020 (UTC) Source: GSMap

3-month total rainfall % of normal ending September 2020



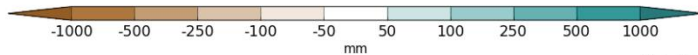
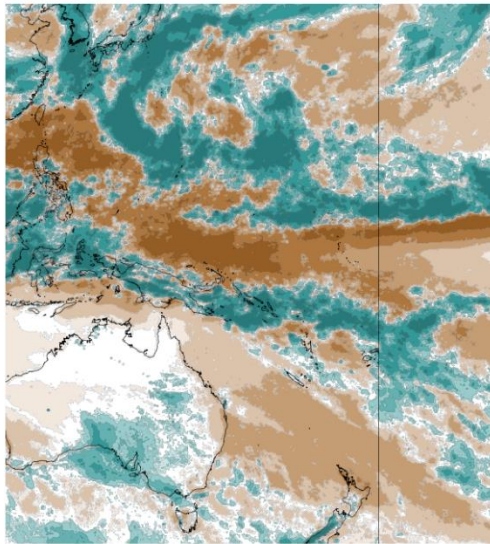
Map created: 13/10/2020 (UTC)

Percentile value for the last 90 days cumulative rainfall up to 2020-10-16



6-month rainfall (% of normal)

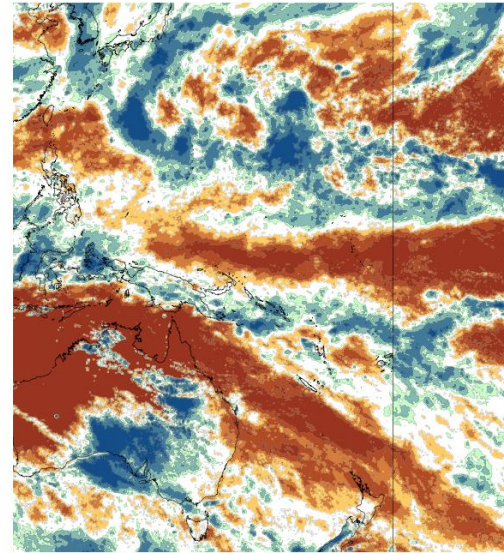
6-month total rainfall anomaly ending September 2020



Source: GSMap

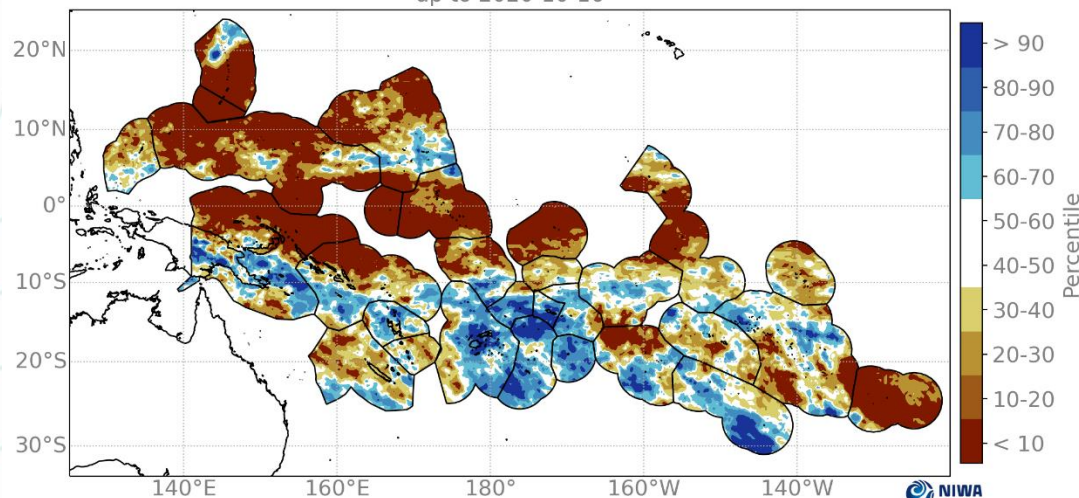
Map created: 13/1 Source: GSMap

6-month total rainfall % of normal ending September 2020

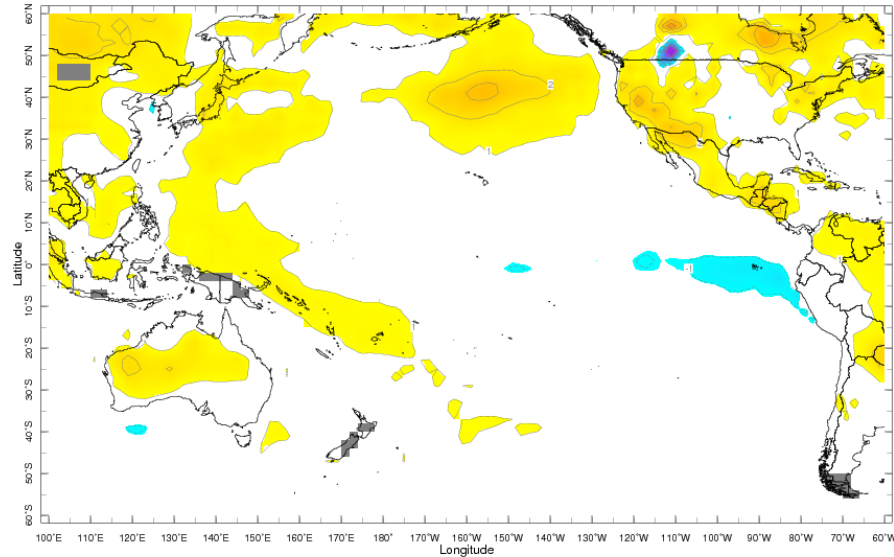
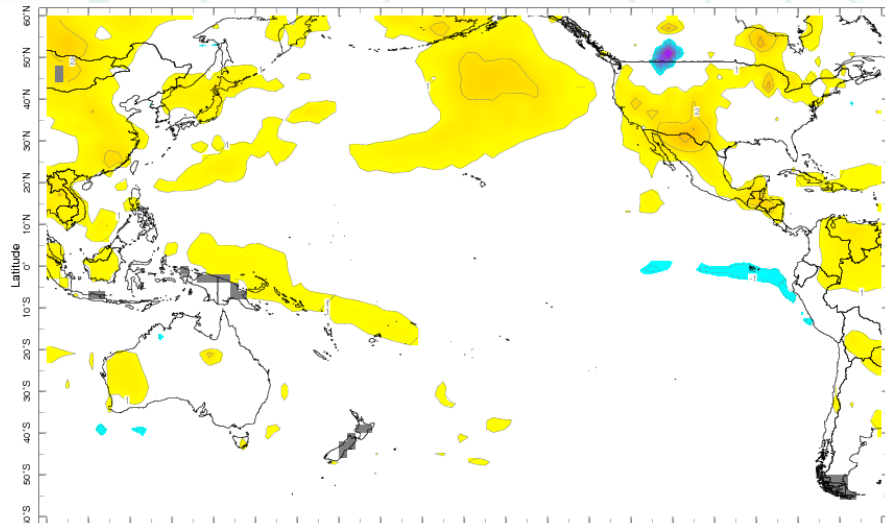


Map created: 13/10/2020 (UTC)

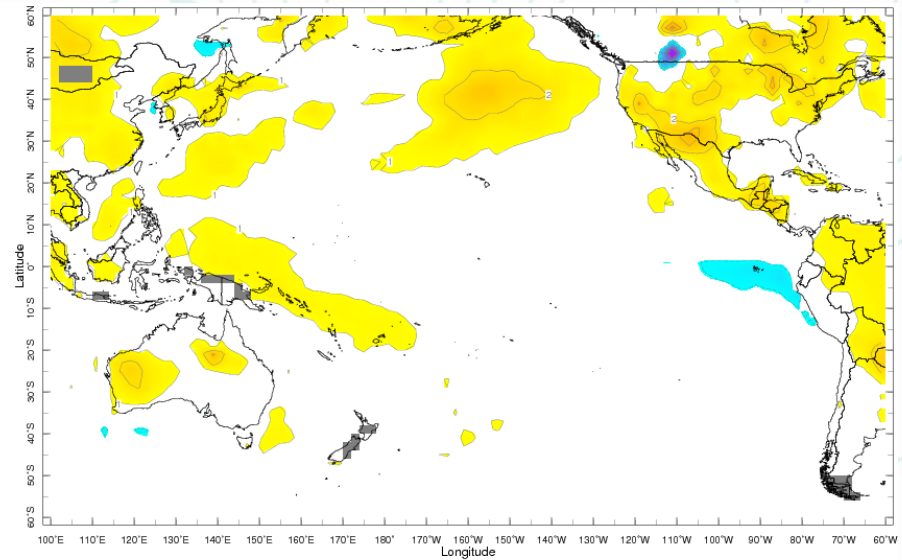
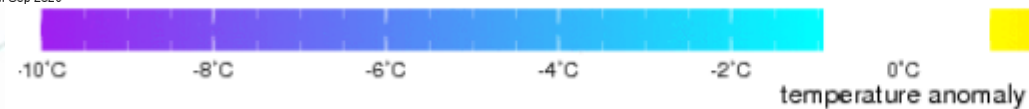
Percentile value for the last 180 days cumulative rainfall up to 2020-10-16



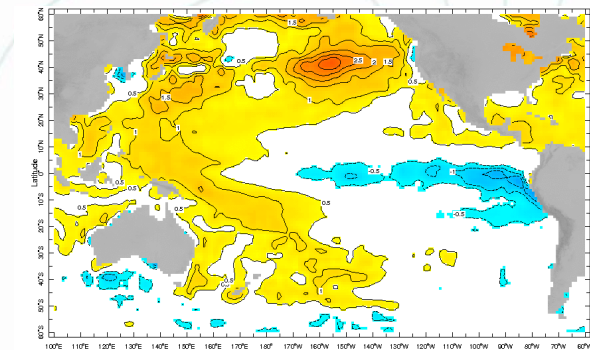
Air temperature anomalies



Jul-Sep 2020



Jun-Aug 2020



Jul-Sep 2020



Station based rainfall monitoring

Online Climate Outlook Forum

Observations and Verification of May to July 2020 outlooks:

Station	Period	Rainfall Amount (mm)	Rainfall Rank	Years of record
Penang Mil, Fiji	July	2.0	5	111
Rotuma, Fiji	July	517.6	104	105
Udu point, Fiji	May-July	682.0	65	70
Beru, Kiribati	July	9.9	4	62
Tarawa, Kiribati	July	33.3	9	86
Beru, Kiribati	May-July	39.0	2	61
Hanan Airport, Niue	May-July	580.9	106	113
Momote, PNG	May-July	476.8	4	66
Kavieng, PNG	May-July	460.8	6	88
Port Moresby	May-July	306.6	102	110
Apia, Samoa	July	221.7	122	131
Faleolo, Samoa	July	243.5	59	60
Apia, Samoa	May-July	700.1	121	131
Faleolo, Samoa	May-July	563.6	53	58
Henderson, Solomon Islands	July	41.0	4	46
Lata, Solomon Islands	July	584.5	43	46
Taro, Solomon Islands	May-July	652.7	3	41
Fua'amotu, Tonga	July	271.8	63	67
Nuku'alofa, Tonga	July	231.5	40	41
Nui, Tuvalu	July	421.1	70	75
Niulakita, Tuvalu	July	367.4	62	68
Sola, Vanuatu	July	595.2	45	46
Sola, Vanuatu	May-July	1484.8	44	45

Observations and Verification of June to August 2020 outlooks:

Station	Period	Rainfall Amount (mm)	Rainfall Rank	Years of record
Udu point, Fiji	Jun-Aug	480.8	66	70
Beru, Kiribati	Aug	11.9	5	63
Kirimati, Kiribati	Aug	00.0	1	96
Beru, Kiribati	Jun-Aug	35.7	1	61
Tarawa, Kiribati	Jun-Aug	98.6	8	84
Kwajalein, Marshall Islands	Aug	133.1	1	76
Kwajalein, Marshall Islands	Jun-Aug	511.8	7	76
Koror Airport, Palau	Aug	532.1	66	70
Vanimo, PNG	Aug	263.0	59	65
Nafanua, Samoa	Jun-Aug	654.3	46	49
Faleolo, Samoa	Jun-Aug	501.6	54	57
Taro, Solomon Islands	Aug	575.8	43	43
Niuauputapu, Tonga	Aug	267.9	71	73
Niuauputapu, Tonga	Jun-Aug	620.2	69	73
Niulakita, Tuvalu	Aug	1061.3	63	68
Pekoa, Vanuatu	Aug	189.9	45	50

Station based rainfall monitoring



NWS Climate Services
August PEAC Audio Conference Call
Summary
13 August, 1430 HST (14 August
2020, 0030 GMT)



Rainfall Verification MJJ– May, June, July

fication MJJ– May, June, July		Rainfall Outlook	Final Probs	3 month Verification		
Location				% norm	Total (in)	Tercile
Palau						
Airai 7° 22' N, 134° 32' E		Avg-above	30:35:35	95	48.58	Avg.
FSM						
Yap 9° 29' N, 138° 05' E		Avg-below	35:35:30	99	34.49	Avg.
Chuuk 7° 28'N, 151° 51'E		Avg.	30:40:30	92	32.31	Below
Pohnpei 6° 59'N, 158° 12'E		Avg.	30:40:30	92	46.14	Avg.
Kosrae 5° 21'N, 162° 57'E		Avg-above	30:35:35	142	66.97	Above
RMI						
Kwajalein 8° 43'N, 167° 44'E		Avg.	30:40:30	90	21.06	Avg.
Majuro 7° 04' N, 171° 17'E		Avg.	30:40:30	128	41.46	Above
Guam and CNMI						
Guam 13° 29'N, 144° 48' E		Avg.	30:40:30	101	19.82	Avg.
Saipan 15° 06'N, 145° 48' E		Avg-below	35:35:30	55	8.17	Below
American Samoa						
Pago Pago 14° 20'S, 170° 43'W		Avg.	30:40:30	189	38.89	Above
State of Hawaii						
19.7° - 21.0° N, 155.0° - 159.5° W						
Lihue		Avg-below	35:35:30	169	7.52	Above
Honolulu		Avg-below	35:35:30	151	1.42	Avg.
Kahului		Avg-below	35:35:30	107	1.03	Avg.
Hilo		Avg-below	35:35:30	57	13.18	Below



Summary

- SPCZ displaced southwest, ITCZ displaced north over the last few months. La Niña-like behaviour
- Significant rainfall suppression (<10th %ile) across equatorial Pacific, central Cook Islands, parts of northern and eastern French Polynesia, Pitcairn, most of FSM, northern RMI, Guam and southern NMI region in the last six months
- Warmer than normal temperatures in the western equatorial Pacific, extending to Fiji/Tonga. Cool anomalies in the eastern Pacific gradually extending into the central Pacific in the last 6 months. Pattern somewhat similar to SSTs over last 6 months
- Equatorial Pacific temperature observations consistent with PICO-6 outlooks. Rainfall consistent for Nauru, Saipan and Pitcairn over MJJ, inconsistent for Niue and American Samoa (wetter than expected).