**Supplemental table 3:** List of reefs from the Australian Institute of Marine Science Temperature Logger (Australian Institute of Marine Science (AIMS) 2020) dataset that were used to determine the thermal regime of low- and high-latitude regions. Only temperature loggers that were placed between 7-15m deep were sampled. Latitude and longitude are measured in decimal degrees.

Site	Subsite id	Series	Latitude	Longitude	Latitude
Davies Reef	2630	DAVSL1	-18.806	147.6686	Low-latitude
Davies Reef	3272	DAVAWSL2	-18.8313	147.634	Low-latitude
Myrmidon Reef	2726	MYRSL1	-18.2572	147.3813	Low-latitude
Orpheus Island	14957	ORPHCH2	-18.6017	146.4881	Low-latitude
Rib Reef	10200	RIBSL1	-18.4719	146.8788	Low-latitude
John Brewer	2723	JBRSL1	-18.6188	147.0815	Low-latitude
Kelso Reef	2620	KELSL1	-18.4221	146.9846	Low-latitude
Dip Reef	2633	DIPSL1	-18.3999	147.4519	Low-latitude
Green Island, Qld	2672	GRESL1	-16.7755	145.9803	Low-latitude
Moore Reef	2708	MORSL1	-16.8477	146.2358	Low-latitude
Arlington Reef	2738	ARLSL1	-16.6461	146.1107	Low-latitude
Frankland Islands	3177	FRNKSL2	-17.227	146.0904	Low-latitude
Pandora Reef	3247	PANSL1	-18.8168	146.4346	Low-latitude
Pandora Reef	10016	PANSL2	-18.8116	146.43	Low-latitude
<b>Snapper Island North</b>	3291	SNAPISSL1	-16.2919	145.4965	Low-latitude
Chicken Reef	2635	CHISL1	-18.6521	147.7217	Low-latitude
Flinders Reef	14617	FLINDERSSL2	-17.7123	148.4509	Low-latitude
Havannah Island	14975	HAVSL2	-18.8315	146.5374	Low-latitude
Thetford Reef	10635	THETSL1	-16.7988	146.1981	Low-latitude
Thetford Reef	13535	THETFL1	-16.7995	146.1951	Low-latitude
19-131 Reef	12196	19131SL1	-19.7662	149.3802	Low-latitude
19-131 Reef	15438	19131SL3	-19.7728	149.376	Low-latitude
19-138 Reef	12198	19138SL1	-19.8069	149.4305	Low-latitude
Rebe Reef	12208	REBESL1	-19.7919	150.1612	Low-latitude
St Crispin Reef	12421	STCRISPSL1	-16.0713	145.8453	Low-latitude
Opal Reef	12579	OPALSL1	-16.2034	145.9065	Low-latitude
Peart Reef	12657	PEARTSL1	-17.4665	146.4031	Low-latitude
Feather Reef	12655	FEATHSL1	-17.5179	146.3905	Low-latitude
Hedley Reef	13638	HEDLSL1	-17.2251	146.479	Low-latitude
McCulloch Reef	12777	MCCULLSL1	-17.2841	146.4796	Low-latitude
Farquharson Reef	13637	FARQSL1	-17.7912	146.5324	Low-latitude
Taylor Reef	13636	TAYLORSL1	-17.8107	146.5716	Low-latitude
Roxburgh Reef	12761	ROXSL1	-18.4283	147.0593	Low-latitude
Helix Reef	12656	HELIXSL1	-18.6201	147.2976	Low-latitude
Grub Reef	12758	GRUBSL1	-18.6216	147.4327	Low-latitude
Knife Reef	12775	KNIFESL1	-18.5711	147.5772	Low-latitude
Hastings Reef	13898	HASTSL1	-16.4995	146.0223	Low-latitude
Agincourt Reef Number 1	14835	AG1SL1	-16.0384	145.8688	Low-latitude
Pine Island	3080	PINESL1	-20.378	148.8884	High-latitude
Seaforth Island	3087	SEAFSL1	-20.4685	149.0389	High-latitude

Shute and Tancred Islands	3679	SHTANSL1	-20.3009	148.7983	High-latitude
20-104 Reef	12204	20104SL1	-20.0294	149.6951	High-latitude
Border Island	12210	BORDERSL1	-20.1819	149.0377	High-latitude
21-245 Reef	12398	21245SL1	-21.2965	152.4465	High-latitude
21-062 Reef	12422	21062SL1	-21.0266	150.8538	High-latitude
21-139 Reef	12435	21139SL1	-21.4547	151.4654	High-latitude
21-187 Reef	12436	21187SL1	-21.4054	151.6384	High-latitude
Tern Reef	12763	TERNSL1	-20.899	150.0289	High-latitude
Penrith Reef	12760	PENRITHSL1	-21.0032	149.8875	High-latitude
21-591 Reef	12757	21591SL1	-21.0266	150.3807	High-latitude
21-550 Reef	12586	21550SL1	-21.9612	152.3168	High-latitude
<b>Gannet Cay Reef</b>	13639	GANNETSL1	-21.9758	152.4797	High-latitude