

POP2022-04 Deep diving into decades of uncatalogued corals

Milestone 3. Draft Final Report

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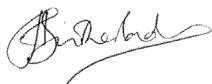
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Executive summary

The NIWA Invertebrate Collection (NIC) had an estimated backlog of ~670 unregistered and unidentified coral specimens collected on wide-ranging fisheries and biodiversity research surveys in the New Zealand region over the past 70 years in storage. These specimens were essentially invisible to researchers, and through this project, which funded specimen registration and identification, their details have now been made available. After the registration process was completed and non-protected coral groups were excluded from exports, a total of 650 unidentified protected coral samples were located and made available to subject matter experts for identification. In the period from March–June 2023 a total of 652 protected coral samples collected from the New Zealand EEZ (1682 specimens) were identified by experts and updated in the NIC *niwainvert* database.

Data summaries of the recently identified samples are provided in tables and as maps, followed by summaries of all protected coral specimen data held in the NIC from the NZ EEZ. Taxonomic highlights are noted including the discovery of a new family of Scleralcyonacea (previously Gorgonacea).

At the conclusion of the project a total of 9596 samples and 22,247 specimens of protected coral are now recorded in the *niwainvert* database, from observer, fishery trawl survey and biodiversity trip sources. The largest number of samples in the NIC were collected from biodiversity surveys, followed by observer collections, then fishery trawl surveys, and the widest spatial distribution of corals were collected from biodiversity surveys. Corals in *niwainvert* have been collected from shallow diving depths in Fiordland through to 5748 m in the Kermadec Trench and were collected from the years 1955 to 2023. Most records come from shelf to outer shelf and slope depths (201–1000 m depth range) with very few coral records from below 2000 m.

A total of 800 samples are not yet identified beyond family level and could benefit from further expert attention, especially the gorgonian coral groups Keratoisididae and Plexauridae. We recommend that international experts are invited to further identify these challenging protected coral taxon groups that are still poorly known and contain many undescribed taxa.

A core strategic objective of the Department of Conservation (DOC) Conservation Services Programme (CSP) is to understand and address the effects of commercial fishing on protected species in New Zealand waters, and this relies on robust data, and on gaining a good understanding of the distribution and abundance of protected species. This project supports the research priorities of the CSP Protected Coral Medium-Term Research Plan by providing accurate and consistent identification of live coral specimens collected in the New Zealand Exclusive Economic Zone (NZ EEZ).

1 Background

The Conservation Services Programme (CSP) of the Department of Conservation undertakes research to understand and address the effects of commercial fishing on protected species in New Zealand waters. Achieving core Conservation Services Programme (CSP) strategic objectives relies on robust data and a good understanding of the distribution and abundance of protected species. This element is picked up in the CSP Protected Coral Medium-Term Research Plan (2022), where research priorities list the ‘identification of biodiversity hot spots/ areas of high protection value’ and ‘modelling distribution abundance/biomass (not just presence/absence)’ with high and medium-high priority, respectively. Both priorities depend on the accurate and consistent identification and measurement of live coral communities in the New Zealand region. Therefore, this project examines stored protected coral specimens to improve coral taxonomic and distribution information and to discover the full range of coral biodiversity in our region.

The National Institute of Water and Atmospheric Research (NIWA) Invertebrate Collection (NIC) is the custodian of over 70 years of accumulated research specimens from the New Zealand region, and has been cataloguing specimens into a Specify database, *niwainvert*, since 2004. This project aims to examine the backlog of unidentified protected coral specimens held at NIC from the 1950s–2004, collected from wide-ranging early fisheries and biodiversity research programmes by the New Zealand Oceanographic Institute (NZOI) and NIWA. These coral specimens and their accompanying data are essentially ‘invisible’ to science in their current, unregistered state.

Initial estimates indicated that there were 378 unregistered samples from the New Zealand region to be catalogued into the NIC Specify database, *niwainvert*, with an additional 309 specimens already catalogued and accumulated ready for further identification.

The registration and identification of fisheries observer-collected specimens are excluded from this project, as they are examined through ongoing CSP coral identification projects (INT2019-04, see Mills et al. 2023 and DOC Project INT2022-03).

This project has allowed work to begin to address the backlog of unidentified protected corals and the results have been used to update databases relevant to coral diversity and distribution for current and downstream research purposes. The results are also used to provide updated taxonomic inventory and location lists, to identify key areas where taxonomic experts could be enlisted for focused studies and to generate updated presence-based distribution maps for select taxa of interest to the Conservation Services Programme.

2 Objectives

The specific project objectives set by the Conservation Services Programme (CSP) service requirements for project POP2022-04 (NIWA project DOC23305) are as follows:

1. Determine the taxonomic composition of previously collected unidentified protected coral specimens currently held in the NIWA Invertebrate Collection (NIC).
2. Augment and improve existing coral and/or bycatch databases with new taxonomic and collection location information.
3. Improve understanding of coral diversity and distribution in the New Zealand region.

3 Methods

3.1 Milestone 1 – Sample scoping and registration methods.

At the onset of the project in November 2022 the NIC team began locating unregistered protected corals within the shelving of the NIC. Shelving in the Cnidaria section of the NIC wet collection was searched for unregistered jars and pails. Searches focussed on the end of protected coral family and order sections and within identified species sections. Registered jars and pails are clearly labelled with a printed label and catalogue number. This means that unregistered samples were relatively easy to locate as these usually only contain a single hand-written station label (Fig. 3-1). Note that each sample jar/pail may contain a single specimen (colony) or several specimens (colonies) and some jars may contain multiple species.



Figure 3-1: Unregistered protected coral samples in jars and pails on compacter shelving in the NIWA Invertebrate wet collection. [Sadie Mills, NIWA].

Once located, the project team began registering the accumulated unregistered coral samples into the *niwainvert* database.

The NIC collection management database, *niwainvert*, is run on Specify Software <https://www.specifysoftware.org/>. It is a relational database that allows the storage of taxonomic information (determination, determiner name and type status) along with geographical data (Station and cruise information, geographical coordinates, gear type, depths, collector name and permit data), and preparation information (preservation type, count, jar size etc.). NIC staff assigned each sample jar or pail from a separate geographic area (Cruise/station) with a unique NIWA catalogue

number registering details of the preliminary taxon name, station number, count of specimens, and other preparation data into *niwainvert*.

Once the registration process was completed, a meeting was held with the DOC contract manager Lyndsey Holland to discuss the scope of focus taxa for inclusion in the project, and to present results of the initial triage and registration of the backlog of uncatalogued sample lots. This meeting informed targeted specimen identification and database updates under Milestone 2.

3.2 Milestone 2 - Prioritisation of samples to be identified and database updating method.

Guided by Milestone 1 a select set of at least 678 coral specimens, which included the 309 previously catalogued but unidentified specimens and the newly catalogued specimens described above, were given to subject matter experts to have their identification updated to the lowest practical level, which was usually species level for common taxa but as high as family level for unusual or difficult groups.

The following NIWA experts provided identifications:

- Rob Stewart – Antipatharia (Black corals)
- Peter Marriott – Stylasteridae (hydrocorals)
- Jaret Bilewitsch and Di Tracey – Gorgonian corals previously in the order Alcyonacea and now in orders Scleralcyonacea and Malalcyonacea*
- Di Tracey – Scleractinia (stony corals)

NIC staff entered updated expert identification data for the protected corals into *niwainvert* including the expert determiner name and date to verify the records.

The updated *niwainvert* data will be used to provide an annual update to the NIC Ocean Biodiversity Information System (OBIS) and Global Biodiversity Information Facility (GBIF) datasets. Relevant fisheries research trawl survey sample identification updates will be provided to the Fisheries New Zealand contracted Research Data Manager at NIWA to enable database updates to be made by an appropriate database expert onto the Fisheries New Zealand Research Trawl Database (*trawl*).

*Note that for the purpose of making database updates consistent at this time the taxonomy of the gorgonian/alcyonacean corals in the appendices and tables of this report do not follow the recent systematic updates to the orders by McFadden et al. (2022), although the genera previously placed in family Plexauridae have been moved to Astrogorgiidae, Paramuricidae and Euplexauridae as appropriate with reference to this work.

3.3 Milestone 3 – reporting method.

This report details the project achievements and outcomes under each of the project objectives and includes an updated inventory of previously and newly-catalogued samples in *niwainvert* that have been further identified by subject matter experts. Detailed information on all protected coral taxa registered in *niwainvert* has been provided as agreed with the DOC contract manager.

All data extracts have been provided to CSP in an Excel spreadsheet including GPS locations of study sites, updated species identifications and summaries of numbers of specimens (colonies). Presentation of findings will be presented to the CSP Technical Working Group in September 2023.

4 Results: Objective 1. Determine the taxonomic composition of previously collected unidentified protected coral specimens currently held in the NIWA Invertebrate Collection (NIC).

A summary of results is provided below detailing the steps taken to achieve objective 1, including cataloguing of unregistered samples and identification and subsequent database updating of previously and newly-catalogued samples in *niwainvert*.

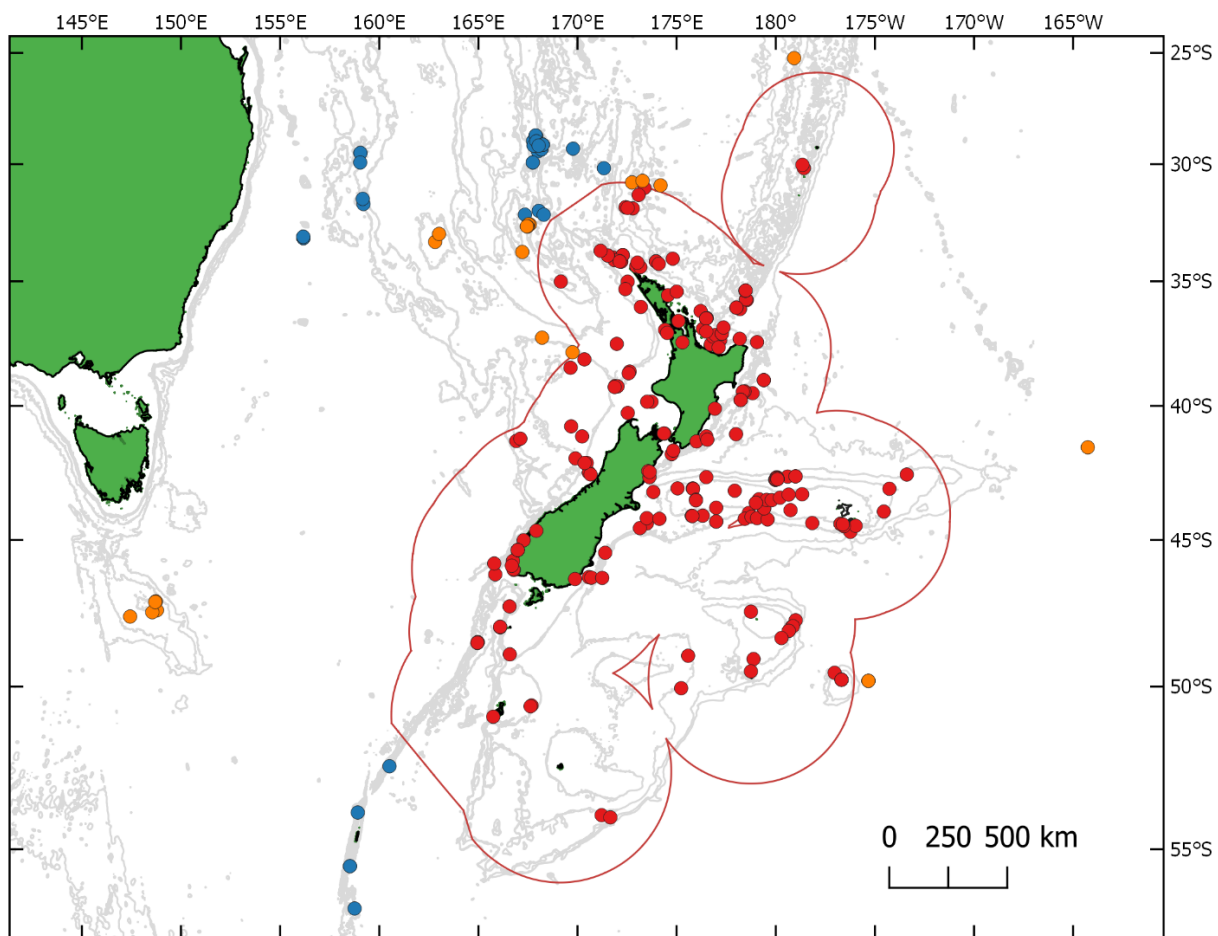
4.1 Cataloguing of unregistered protected corals

The total number of protected coral samples (jars or pails) registered between 1 November 2022 and 25 March 2023 is 323 (Table 4-1). This is slightly less than the 378 unregistered coral samples originally estimated at the onset of the project. Several of the unregistered samples in the shelves were found to be either collected from the Ross Sea in Antarctica or mis-shelved unprotected soft coral species, which are both out of scope for this project. In some cases, the unregistered jars were duplicate jars of existing registered material so these were noted and added to existing registrations. The backlog of uncatalogued protected coral samples remaining in the NIC now comprises only Antarctic corals and shallow water Pacific Island corals (Cook Islands, Tonga, New Caledonia, Fiji).

Table 4-1: Summary of protected coral specimens catalogued by NIWA Invertebrate Collection staff between 1 Nov 2022 and 25 March 2023.

Zone	NZOI/NIWA surveys	Scientific Observer	Total No. of samples
New Zealand EEZ	236	18	254
International waters (Challenger Plateau, Three Kings Ridge, South Tasman Rise, Norfolk Ridge, Wanganella Bank)	18	8	26
Australian Territorial waters (Macquarie Ridge, Tasmanian Seamount, Lord Howe & Norfolk Ridge areas)	43		43
Total	297	26	323

Twenty-six of the catalogued samples were collected by scientific observers and these will be passed on for identification under DOC project (INT2022-03). Sixty-nine samples were collected either in international waters or Australian territorial waters just outside the NZ Exclusive Economic Zone (EEZ). While it would be useful to have these samples identified, the remit of this project is to include only samples collected from inside the New Zealand zone. This leaves a total of 236 samples collected within the NZ zone from NIWA/NZOI fisheries or biodiversity research surveys. Note that some samples collected by international vessels visiting New Zealand waters (such as the RV *Sonne*) are included in this number.



- International waters samples catalogued
- Australian EEZ samples catalogued
- NZ EEZ samples catalogued

Figure 4-1: Map of protected coral samples catalogued into the NIWA Invertebrate Collection *niwainvert* database between 1 Nov 2022 and 25 March 2023.

The map in Fig 4-1 shows the distribution of newly registered protected coral samples within the NZ region, which are in scope, and just outside in international and Australian zones the samples that are out of scope.

The breakdown of protected coral groups included in the 236 newly registered samples from the NZ region is provided in table 4-2. There were very few backlogged Antipatharia and Stylasteridae amongst the previously unregistered samples, but large numbers of gorgonians and scleractinians.

Table 4-2: Taxonomic breakdown of protected coral groups represented in New Zealand samples catalogued in the NIWA Invertebrate Collection database *niwainvert*. Samples counts are provided for corals that were catalogued between 1 November 2022 and 25 March 2023, and all samples awaiting identification including all previously registered and newly registered samples in *niwainvert* on 25 March 2023.

Phylum	Class	Order	Coral group	No. of samples catalogued between 1 November 2022 and 25 March 2023	No. of samples awaiting identification on 25 March 2023			
Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	3	10			
			Anthothelidae	9	11			
			Chrysogorgiidae	9	18			
			Coralliidae	0	2			
			Keratoisididae	45	84			
			Keroeidae	1	0			
			Mopseidae	30	29			
			Paragorgiidae	0	5			
			Plexauridae	37	52			
			Primnoidae	32	77			
			Undetermined Gorgonacea	5	61			
					Antipatharia	Antipathidae	1	1
						Leiopathidae	0	4
			Schizopathidae	0	4			
			Undetermined Antipatharia	2	20			
		Scleractinia	Caryophylliidae	13	41			
			Dendrophylliidae	0	7			
			Flabellidae	8	12			
			Fungiidae	0	1			
			Oculinidae	0	3			
			Undetermined Scleractinia	39	51			
	Hydrozoa	Anthoathecata	Stylasteridae	2	157			
Grand Total				236	650			

Several of the 236 previously unregistered NZ EEZ corals had been historically identified by experts when collected (n=31) and these identifications were applied at the time of cataloguing.

A spreadsheet was prepared which contained all unidentified protected corals from within the NZ EEZ (including recently registered and previously registered samples) and provided to DOC. The number of unidentified protected corals totalled 650 samples. This excluded unidentified samples from the Kermadec region, which will be identified in the Te Mana O Rangitāhua project (<https://tearawhanuiresearch.com/te-mana-o-rangitahua/>) in collaboration with Ngāti Kuri and Auckland Museum (n = 148 samples).

Table 4-2 also provides a breakdown of the protected coral groups that were available for identification by experts following the registration of backlogged material and includes previously registered samples, accumulated in the NIC.

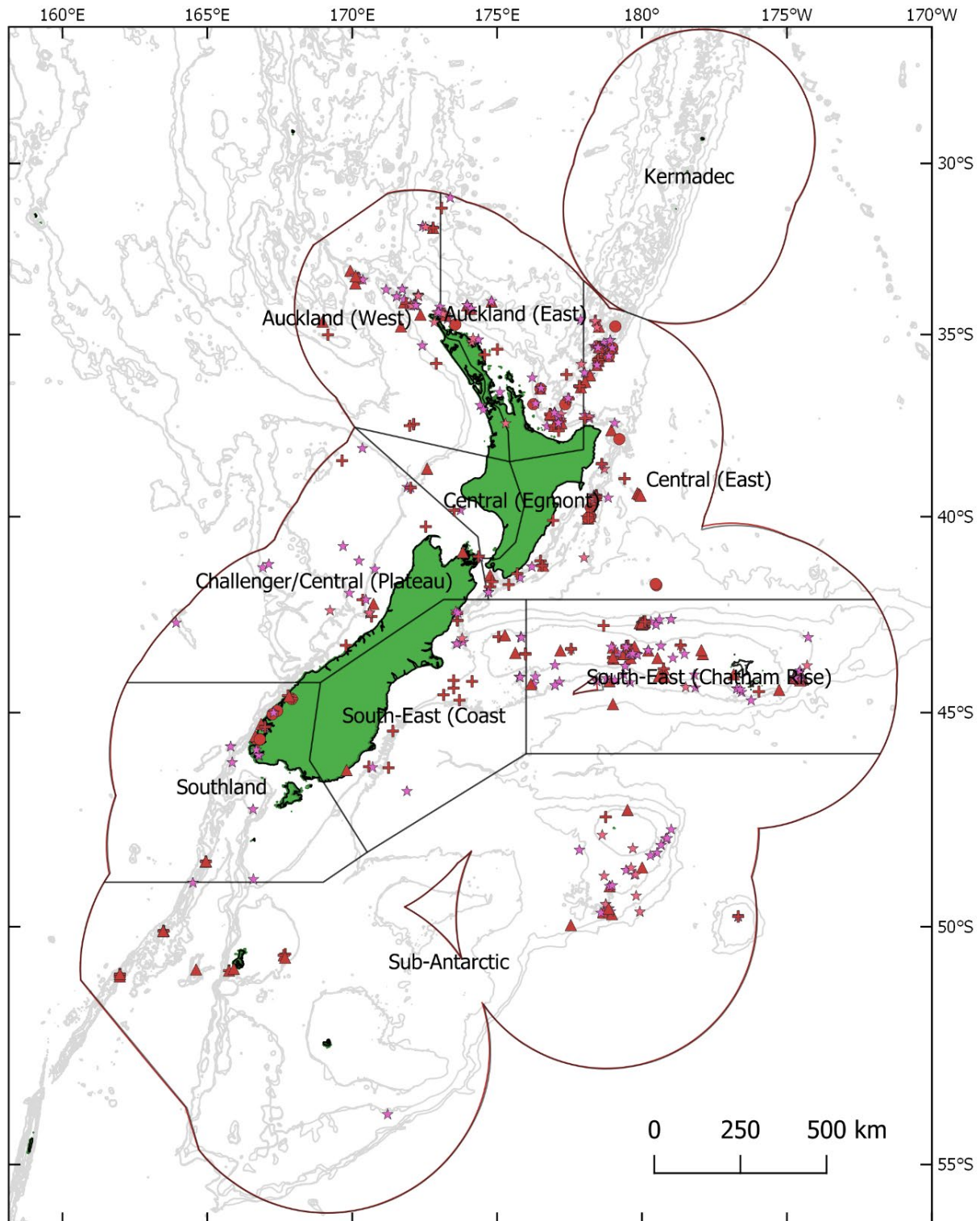


Figure 4-2: Map of accumulated protected coral samples awaiting identification in the NIWA Invertebrate Collection on 25 March 2023 coded by taxon group. Symbols: stars = gorgonian corals, pluses = stony corals, circles = black corals, triangles = hydrocorals.

4.2 Identification of protected coral samples

In the period from March–June 2023 a total of 652 protected coral samples collected from the New Zealand EEZ (1682 specimens) were identified by experts and updated in *niwainvert*. This number differs from the number of samples before the identification process as some samples were split further upon identification and some samples were identified as non-corals (mainly Bryozoa misidentified as hydrocorals). Table 4-3 provides a taxonomic breakdown of the number of specimens and number of samples identified.

Order Alcyonacea had the highest number of samples identified (n=386), as well as the highest number of individual specimens recorded. Within this order, protected soft corals in the family Primnoidae were the group with the greatest number of samples identified (n=107). The two bamboo coral families Mopseidae and Keratoisididae followed with 70 and 62 samples respectively. Other families with more than 20 samples identified included Paramuriceidae (n = 38), Anthothelidae (n = 28), and Acanthogorgiidae (n = 27)

The next order with previously high numbers of unidentified samples was the stony corals, order Scleractinia. A total of 106 samples comprising of 397 specimens were identified. Fifty-eight samples were identified from Family Caryophylliidae (227 specimens), with the next most identified Family being Flabellidae.

Black corals, order Antipatharia, had a total of 25 samples that had updated identifications. Eleven of these were from the family Schizopathidae.

One hundred and thirty-five samples were identified from the protected hydrocoral Family Stylasteridae, comprising 446 individuals.

Table 4-3: Summary of identified protected coral groups collected in the New Zealand EEZ and updated in *niwainvert*.

Phylum	Class	Order	Family	No. of samples	No. of specimens
Cnidaria	Anthozoa	Alcyonacea	Gorgonian indet.	3	3
			Acanthogorgiidae	27	89
			Anthothelidae	28	31
			Astrogorgiidae	1	2
			Chrysogorgiidae	19	23
			Coralliidae	1	1
			Ellisellidae	2	2
			Euplexauridae	5	5
			Isididae	1	1
			Keratoisididae	62	71
			Keroeididae	1	1
			Keroeididae?	1	1
			Mopseidae	70	233
			Paragorgiidae	3	3
			Paramuriceidae	38	47

Phylum	Class	Order	Family	No. of samples	No. of specimens
			Plexauridae	9	9
			Primnoidae	107	276
			Scleralcyonacea n. fam.	8	16
		Alcyonacea Total		386	814
		Antipatharia	Antipathidae	2	2
			Leiopathidae	5	5
			Myriopathidae	6	6
			Schizopathidae	11	11
			Stylopathidae	1	1
		Antipatharia Total		25	25
		Scleractinia	Scleractinia indet.	4	9
			Caryophylliidae	58	227
			Dendrophylliidae	15	87
			Flabellidae	22	51
			Fungiidae	4	11
			Oculinidae	1	3
			Rhizangiidae	2	9
		Scleractinia Total		106	397
	Hydrozoa	Anthoathecata	Stylasteridae	135	446
		Anthoathecata Total		135	446
Grand Total				652	1682

4.2.1 Taxonomic highlights

Along with the opportunity to augment the distribution of protected coral taxa in the region these new identifications have increased our knowledge of the biodiversity of some of these groups.

Samples identified during this project add to the known specimens of a newly recognised undescribed family of gorgonian corals in the revised order Scleralcyonacea. These are very similar to the genus *Primnoeides*, in the family Primnoidae but are not that genus, nor in that family. They also bear some resemblance to the family Pleurogorgiidae but after closer inspection of the specimens and comparing sequence data from another project (Bilewitch, 2022) we believe they are representatives of a separate, new family.



Figure 4-3: Scleralcyonacea n. fam., identified from Graveyard and Andes seamounts, Chatham Rise 610–1254 m (Credit: Rob Stewart, NIWA, TAN1503 Seamount survey).

There were previously two records of the genus '*Anthogorgia*' amongst the NIC specimens. Both were mis-identified and have been reidentified as part of this project. One specimen is in genus *Acanthogorgia* and the second is a distinct form of the genus *Anthomuricea*. This means there are no records of *Anthogorgia* left in the NIC.

A rare specimen of *Isidoidea* was identified during this project and adds to the distribution records for this group.

Additional specimens of undescribed new species of stylasterid hydrocorals were identified amongst the historical samples. *Errinopsis* n. sp. (62 specimens in 5 jars) were identified from the Andes and Diamondhead seamounts on the Chatham Rise (Fig 4-4); a single specimen identified as cf. *Distichopora* n. sp. was identified from Diamondhead seamount; Finally, a species of *Lepidotheca* n. sp. was identified from the NZ region of the Macquarie Ridge seamounts.



Figure 4-4: Specimens of undescribed hydrocoral species *Errinopsis* n. sp. identified from Diamondhead A Seamount, 724–838 m (credit: Rob Stewart, NIWA, TAN1503 Seamount survey).

5 Results: Objective 2. Augment and improve existing coral and/or bycatch databases with new taxonomic and collection location information.

The updated identifications have now been registered in the NIC *niwainvert* database. A complete list of the updated coral records is provided in Appendix A.

After the updating of new identifications into *niwainvert* some of the outstanding unidentified coral data were able to be checked and corrections to the database records for specimens were made:

- Some specimen jars are no longer at the NIC. These samples were historically donated to collaborators at other institutions for other analyses and were not correctly recorded as such in the system. These have now been updated and listed properly as donations, and where possible identification of the donated specimens have been linked to other specimens still retained at the NIC based on hand-written catch notes made onboard the research vessel.
- Some specimens in the original data extract were actually ‘subsamples’ of specimens, rather than whole individuals. The opportunity was taken to update *niwainvert* to link subsamples to parent samples.
- Some samples initially identified as corals were in fact non-protected soft corals, sea-pens, hydroids or non-coral groups such as Bryozoa. Several small branching species of Bryozoa, in particular, were misidentified as Stylasteridae (20 samples). These samples

have been correctly labelled with their proper taxonomic names and placed with their corresponding taxon groups.

- Several samples (37 jars) were “split lots”, where more than one coral species was found within a single jar, so these were split into separate registered lots.

An updated *niwainvert* extract with the new protected coral information will be provided to the NIWA OBIS database manager by December 2023 so as to be included in the annual upload from *niwainvert* to the OBIS and GBIF online databases.

Forty-two of the identified records were collected on fisheries research trawl surveys. A summary list of protected coral identification updates for these 42 samples has been provided to the Fisheries New Zealand contracted Research Data Manager at NIWA to enable database updates to be made by an appropriate database expert onto the Fisheries New Zealand Research Trawl Database (*trawl*). *Trawl* is another reference database frequently used by species distribution modellers and ecologists so it is important to update these sources of data to improve accuracy in outputs.

6 Results Objective 3. Improve understanding of coral diversity and distribution in the New Zealand region.

This section provides a summary of the updated distribution and biodiversity of corals in the NZ EEZ using all data now accumulated in the NIC *niwainvert* database.

An extract of all protected coral records was taken from *niwainvert* on 19 July 2023 (Appendix B, separate Excel spreadsheet). This extract includes a total of 9596 records and (22,247 specimens) from within the boundaries of the NZ EEZ (Table 6-1, Figs. 6-1 & 6-2). The group with the largest number of samples held in the NIC are the gorgonian corals (3751 samples) followed by the stony corals, hydrocorals and black corals. The group with the highest number of specimens are the stony corals (11,161 specimens), which may in part reflect a difficulty in correctly assigning accurate specimens counts to the reef forming stony coral clumps that are retrieved from fishing trawls. The group with the lowest number of specimens is the black corals (1503 specimens), which may reflect the sparse natural distribution of the species in this group.

Table 6-1: Number of samples and specimens of protected coral groups in New Zealand EEZ *niwainvert* extract with a breakdown of the collection source. Biodiversity = Collected on either NIWA, NZOI or overseas research vessels for the purposes of biodiversity, geology or other survey type using a range of sampling gears targeted to the survey and bottom type; Fishery trawl survey = bycatch collected by scientific fisheries research trawl survey staff; Observer = Scientific observer collected bycaught corals from commercial fishing activities.

Phylum	Class	Protected coral group	Collection source	No. of samples	No. of specimens
Cnidaria	Anthozoa	Black corals	Biodiversity	654	1108
			Fishery trawl survey	82	83
			Observer	298	312
Black corals Total				1034	1503
		Gorgonian corals	Biodiversity	2483	4893
			Fishery trawl survey	355	457
			Observer	913	1041
Gorgonian corals Total				3751	6391
		Stony corals	Biodiversity	2638	9550
			Fishery trawl survey	276	611
			Observer	689	1000
Stony corals Total				3603	11161
	Hydrozoa	Hydrocorals	Biodiversity	1083	3039
			Fishery trawl survey	37	45
			Observer	88	108
Hydrocorals Total				1208	3192
Grand Total				9596	22247

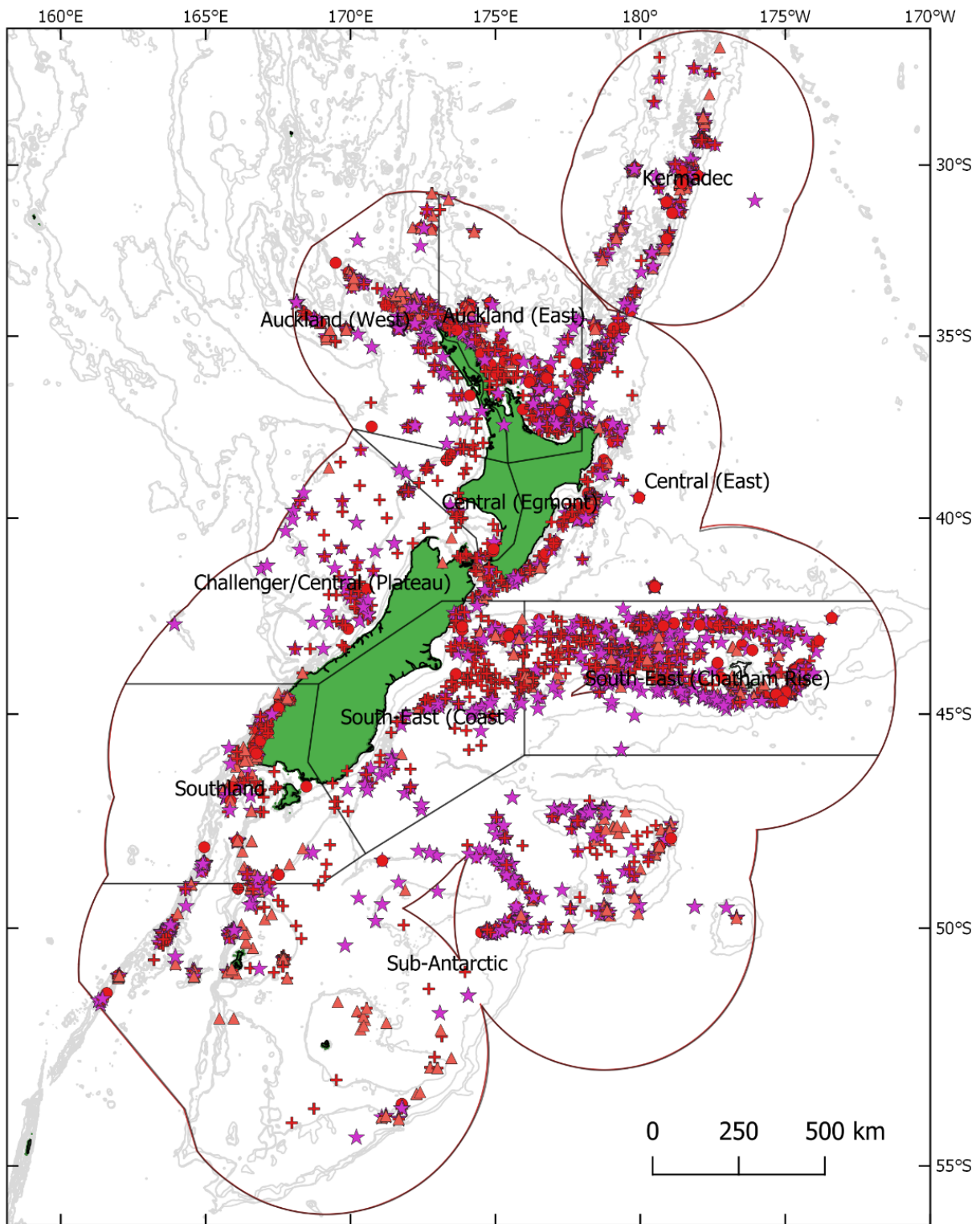


Figure 6-1: Map of protected coral samples collected from within the New Zealand EEZ and registered in the NIWA Invertebrate Collection as of 19 July 2023, coded by taxon group. Symbols: stars = gorgonian corals, pluses = stony corals, circles = black corals, triangles = hydrocorals.

The geographic distribution of protected corals seems fairly similar throughout the New Zealand region when comparing the four protected coral groups (Fig 6-2).

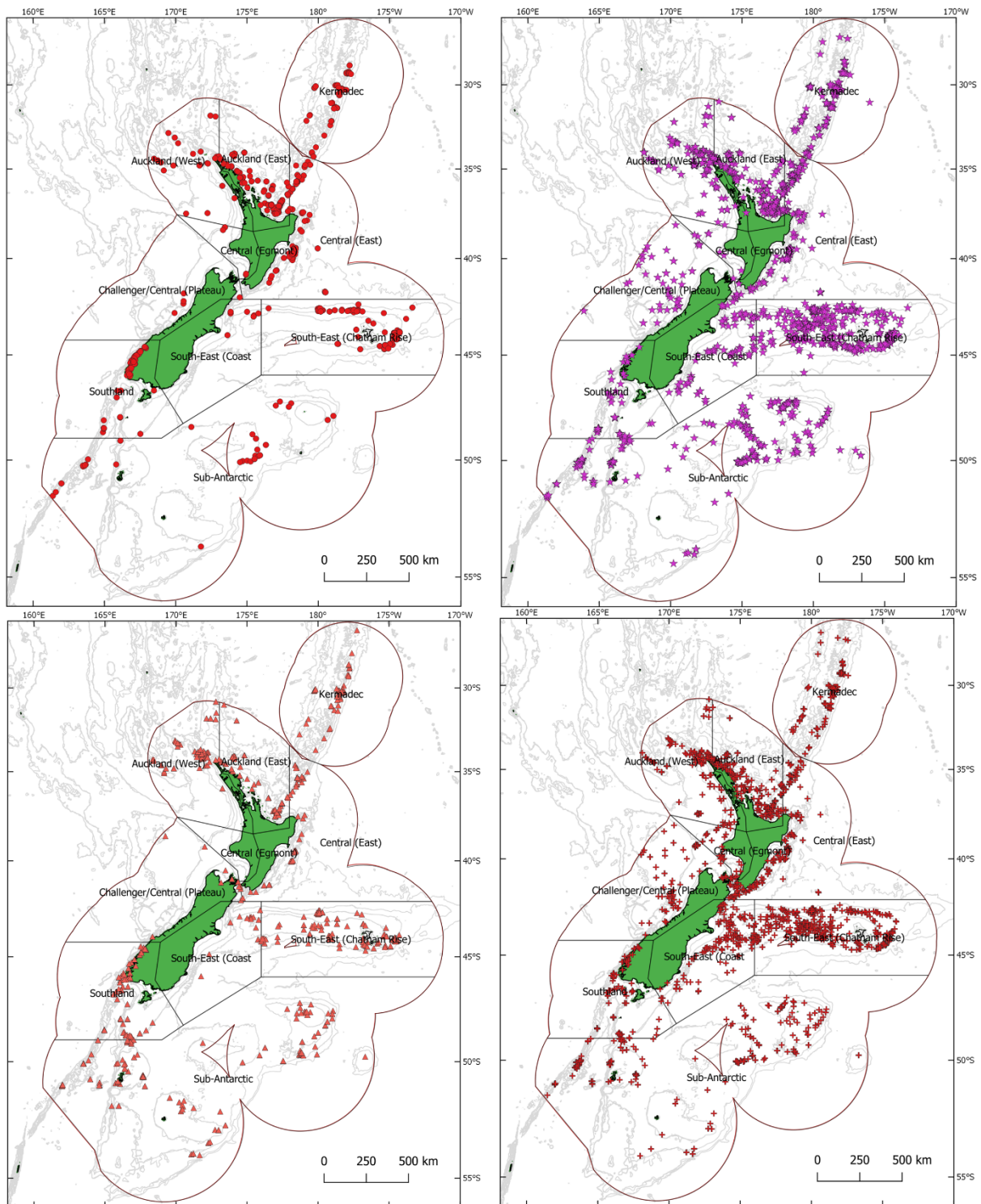


Figure 6-2: Maps of protected coral samples collected from within the New Zealand EEZ and registered in the NIWA Invertebrate Collection, as of 19 July 2023. Clockwise from top left: black corals; gorgonian corals; stony corals; hydrocorals.

Numbers of coral samples and specimens can be grouped into three collecting group categories 'fisheries trawl survey', 'observer' and 'biodiversity' and a breakdown of these is presented in Table 6-1. The three collection groups represent the source of the samples i.e. 'Observer' group are collected by scientific observers as bycaught corals from commercial fishing activities, 'Fisheries trawl survey group are bycaught corals collected from fisheries research trawl surveys from bottom trawling, 'Biodiversity' group samples are collected on either NIWA, NZOI or overseas research

vessels for the purposes of biodiversity, geology or other survey types using a range of sampling gear targeted to the survey and bottom type (for example, scuba diving, Agassiz trawls, grabs, bottom trawls, epibenthic sleds etc.). Fig 6-3 shows the distribution of corals from each of these three sources.

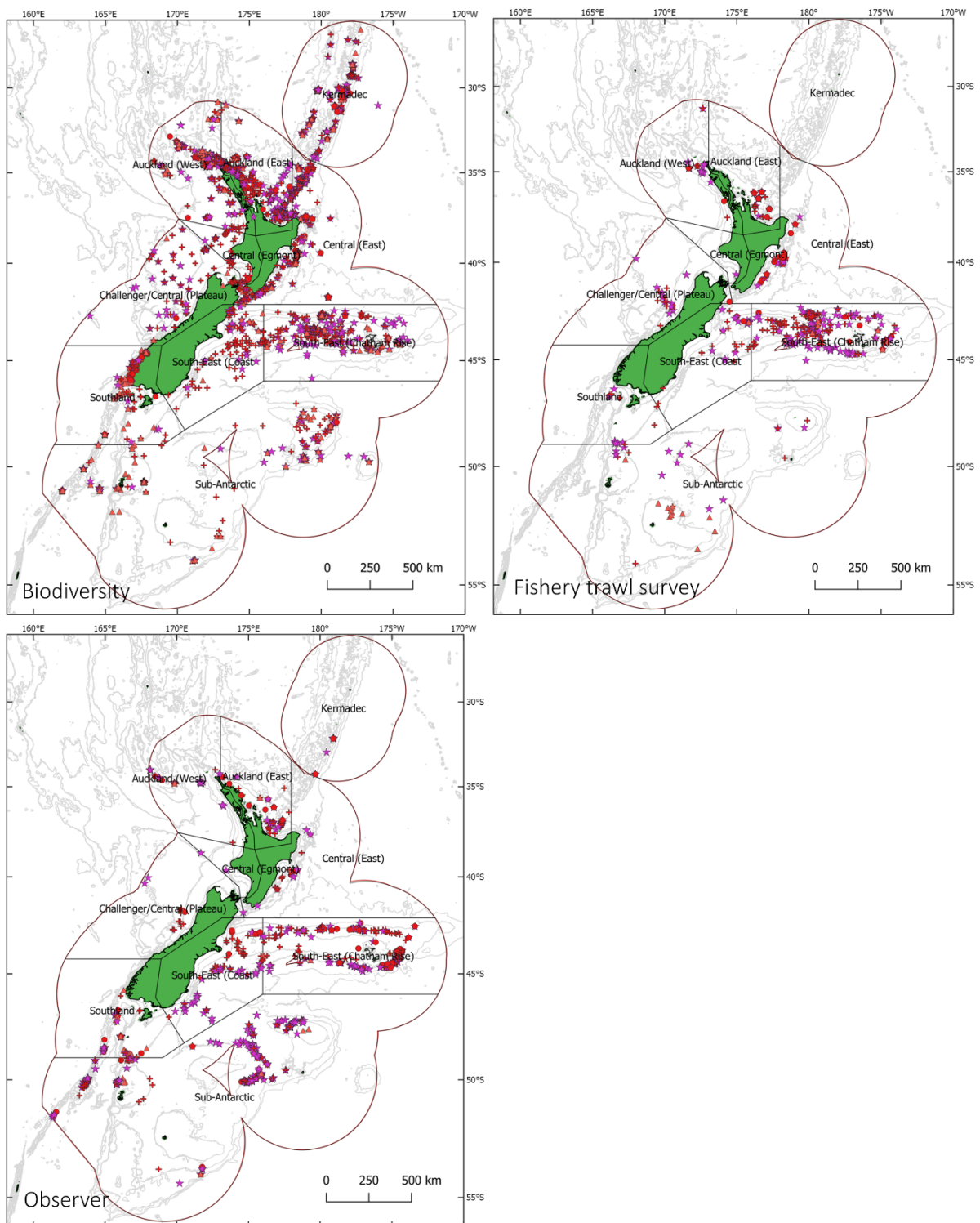


Figure 6-3: Maps of protected coral samples collected from within the New Zealand EEZ and registered in the NIWA Invertebrate Collection, by collection source. Biodiversity = Collected on either NIWA, NZOI or overseas research vessels for the purposes of biodiversity, geology or other survey type using a range of sampling gears targeted to the survey and bottom type; Fishery trawl survey = bycatch collected by scientific fisheries research trawl survey staff; Observer = Scientific observer collected bycaught corals from commercial fishing activities.

Biodiversity group trips collected a much greater number of samples than observer and fishery trawl survey groups over a wider area of the EEZ (Table 6-1, Fig 6-3). Almost all samples known from the Kermadec, Three Kings and Challenger Plateau regions were collected on biodiversity trips, which reflects the effort of the large historical biodiversity surveys such as the Oceans Survey 20/20 Challenger Plateau survey (TAN0707, see Bowden, 2011), the Biogenic Habitats on the Continental Shelf survey in 2011 (voyages TAN1105, see Jones et al. 2018) and a series of voyages conducted from 2000-2009 under the “Ecology of Seamounts” program and later the “Vulnerable Deep-Sea Communities” project (e.g. Clark et al. 2019, Clark et al. 2022). Numbers of observer collected samples are higher than numbers of fishery trawl survey samples in the NIC, but the distribution of observer collected samples is much more concentrated on specific areas compared to fishery trawl survey samples.

Corals have been collected from shallow diving depths (the black coral *Antipathella fiordensis* and stony cup coral *Monomyces rubrum* from Fiordland) through to 5748 m (an unidentified bamboo coral, Keratoisididae recently collected from the Kermadec Trench). The oldest sample collected was in 1955 from a NZOI survey near North Cape, and the most recently collected was in April 2023 (an observer collected sample).

Most records are from shelf to outer shelf and slope depths (5952 samples in the 201–1000 m depth range, see Fig 6-4). A total of 330 coral records are from within recreational diving depth limits of 40 m with the rest of the 1094 records in the coastal-shelf depth range occurring from 41–200 m. In the bathyal range (1001–4000 m) there are only 70 records from below 2000 m, and only 7 records below 3000 m. Three records were collected from below 4000 m in the abyssal zone.

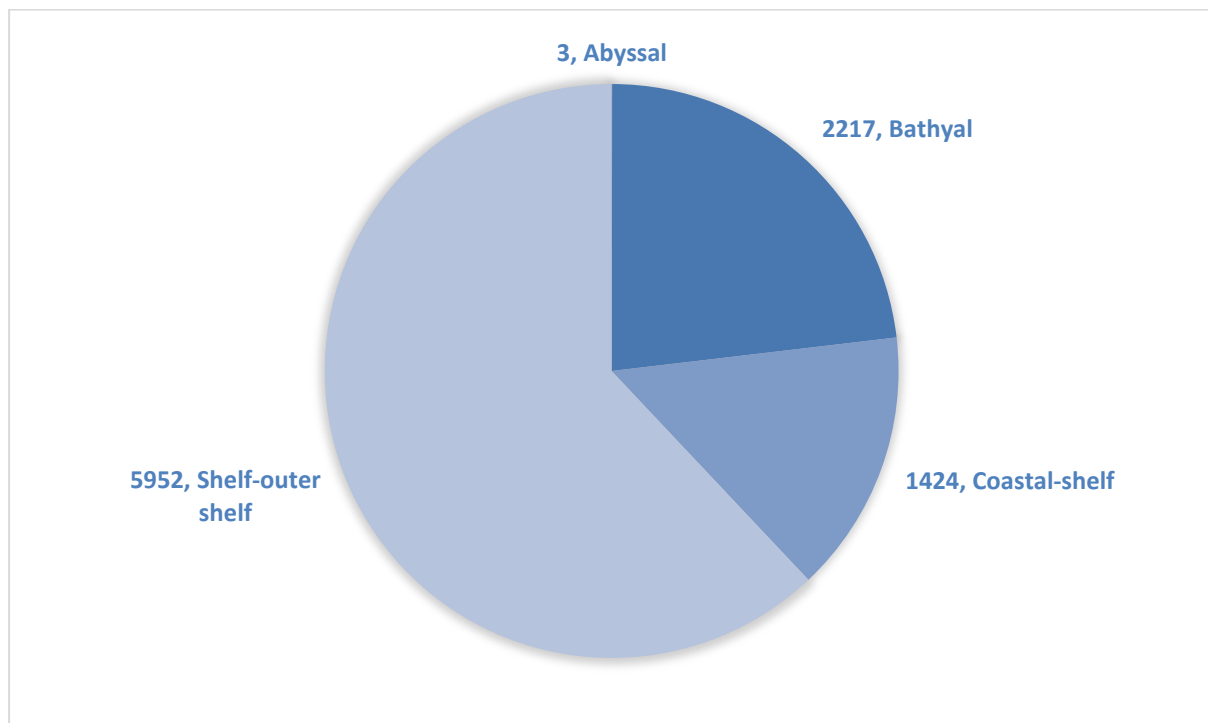


Figure 6-4: Depth distribution of coral records in the New Zealand EEZ in *niwainvert*. Number of records is indicated for each depth category. Coastal-shelf = 0–200 m, Shelf-outer shelf = 201–1000 m, Bathyal = 1001–4000 m, Abyssal = 4001–6000 m.

A total of 8585 samples have been examined by an expert, leaving 1011 samples undetermined or not yet verified by an expert. Note that a sample may be recorded as undetermined but may still have been identified by an expert: this reflects an issue with data entry in some historical records where the determiner name was not recorded on the specimen label and could not be inferred by the cataloguer. Since we cannot verify that these samples were identified by an expert and who that expert was, we report these samples as still needing expert verification. However, of the 1011 undetermined samples, 372 have a species level ID and 248 have a genus level ID so the data may still be useful in some applications where taxonomic accuracy is not critical. This leaves 391 samples only with a family or higher taxon level identification that could be determined further. Amongst the 8585 samples that were determined by an expert 5865 are identified to species, 2311 are identified to genus. This leaves 409 expert determined records that have only a family or higher taxon level identification. Of these some are records that cannot be identified further (usually because they are lacking polyps or some other diagnostic character).

Table 6-2 provides a breakdown of the 800 coral samples (391 undetermined, 409 expert determined) that are only identified to family or higher taxon level to show where future targeted expert verification and identification work could take place.

Table 6-2: Protected coral samples that are only identified to family or higher taxon level in *niwainvert* on 19 July 2023. These counts include samples that have been examined by experts to a parataxonomic level and samples that have not been verified by an expert.

Protected coral group	Order	Family	No. of samples	No. of specimens
Black corals	Antipatharia	Leioopathidae	1	1
		Myriopathidae	3	3
		Schizopathidae	2	3
		Stylopathidae	1	1
		Antipatharia undet.	61	197
Black corals Total			68	205
Gorgonian corals	Alcyonacea	Acanthogorgiidae	11	66
		Anthothelidae	13	16
		Chrysogorgiidae	16	23
		Coralliidae	13	16
		Ellisellidae	4	11
		Gorgoniidae	2	2
		Keratoisididae	111	150
		Keroeidae	8	15
		Keroeidae?	1	1
		Mopseidae	56	83
		Plexauridae	113	216
		Primnoidae	67	93
		Gorgonian corals undet.	133	157
Gorgonian corals Total			548	849

Protected coral group	Order	Family	No. of samples	No. of specimens
Hydrocorals	Anthoathecata	Stylasteridae	97	473
Hydrocorals Total			97	473
Stony corals	Scleractinia	Caryophylliidae	13	47
		Caryophylliidae?	1	1
		Dendrophylliidae	8	16
		Oculinidae	1	1
		Scleractinia undet.	64	142
Stony corals Total			87	207
Grand Total			800	1734

The gorgonian corals are the most in need of further identification with the highest number of samples not yet identified beyond family (548 samples, 849 specimens), followed by hydrocorals, stony corals and black corals with less than a hundred samples each that are not yet identified beyond family. Undetermined gorgonians, the bamboo coral Keratoisididae and sea fan family Plexauridae have the highest number of unidentified samples and could benefit from further taxonomic attention. The Plexauridae are most likely paramuriceids based on the current taxonomic understanding of the family according to McFadden et al. (2022). Currently there is work underway to have Kermadec specimens further identified by experts via the Ngāti Kuri and Auckland Museum Te Mana O Rangitāhua project, and current year observer collected specimens will be identified under DOC project (INT2022-03), so that will address some of the unidentified samples in this list.

7 Conclusion and recommendations

The new information provided in this report can better inform DOC managers and other stakeholders about the biodiversity and distribution of protected coral groups in the New Zealand EEZ. The 652 new identifications and the 9596 coral records from the full NZ EEZ extract from *niwainvert* will specifically provide more confidence and resolution for assessment of threat to coral species during the next New Zealand Threat Classification workshop for marine invertebrates.

There are still many specimens (800 samples, 1734 specimens), particularly in the gorgonian coral groups, that have only been identified to family or higher taxon level, highlighting the gap in knowledge of this group in NZ waters. We recommend that international expert taxonomists are invited to further identify specimens to further determine genus and species level diversity of the groups Paramuriceidae/Plexauridae, Keratoisididae and Mopseidae.

8 Acknowledgements

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Appendix A Updated identification of previously and newly registered protected coral species collected in the New Zealand region.

This is an abbreviated extract of the data with some columns removed, for the full list of data please see the accompanying Excel spreadsheet.

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
56200	Cnidaria	Anthozoa	Alcyonacea		Gorgonacea indet.	Bilewitch, Jaret	09/05/2023	TAN0906/135	13/07/2009	-34.452	173.220	157	159	1
16456	Cnidaria	Anthozoa	Alcyonacea		Gorgonacea indet.	O'Shea, Steve	2003	TAN0307/85	02/05/2003	-49.547	-177.028	2040	1906	1
14519	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Mills, Sadie	17/03/2023	Z10170	03/06/1999	-39.471	178.413	865	865	1
14447	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	18/04/2023	Z9437	26/10/1998	-44.430	-178.616	843		1
14474	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	Z2371	15/04/1971	-41.383	170.783	366		1
14494	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	Z2375	16/04/1971	-42.500	170.600	348		1
14506	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	Z2376	17/04/1971	-42.450	169.233	348		1
163539	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	O'Shea, Steve	2000	Z10132	21/04/2000	-42.532	170.577	277		1
102330	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	TAN1503/56	03/04/2015	-42.790	-179.987	918	944	1
102344	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	TAN1503/67	04/04/2015	-42.798	179.988	936	1031	1
162827	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	E731	25/03/1967	-37.392	177.200	602		1
14435	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	G888	14/12/1970	-48.267	177.840	1020		1
14491	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	G886	13/12/1970	-48.233	179.683	335		1
162818	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	X486	04/07/1994	-42.777	-179.914	910		1
72542	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	09/05/2023	TAN1104/59	11/03/2011	-35.360	178.511	1270	1410	1
126183	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	03/05/2023	SO254/36ROV10_BIOBOX8	09/02/2017	-39.990	178.215	778.2		1
126272	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	03/05/2023	SO254/77ROV14_BIOBOX17	20/02/2017	-43.289	173.606	679		1
53331	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	23/05/2023	TAN0905/61	20/06/2009	-41.798	-179.504	1219	1286	1
53578	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	40
53949	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	23/05/2023	TAN0905/111	27/06/2009	-44.148	-174.691	458	648	20

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
53954	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	09/05/2023	TAN0905/111	27/06/2009	-44.148	-174.691	458	648	1
54067	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	23/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	5
54341	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	23/05/2023	TAN0905/121	28/06/2009	-44.028	-174.591	801	823	1
149763	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	TAN0104/48	16/04/2001	-42.786	-179.985	993	900	1
14512	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Mills, Sadie	17/03/2023	S71	27/09/1978	-47.920	178.627	365		1
14443	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	R440	16/06/1990	-39.438	178.345	970		1
14445	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	R439	16/06/1990	-39.447	178.333	1000		1
14517	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	17/04/2023	X700	12/02/1996	-35.841	177.908	1525	1798	1
162738	Cnidaria	Anthozoa	Alcyonacea	Acanthogorgiidae	Acanthogorgia	Bilewitch, Jaret	14/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
163743	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothelidae	Bilewitch, Jaret	08/05/2023	Q13	15/03/1978	-43.460	-179.782	415		1
162865	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothelidae	Bilewitch, Jaret	18/04/2023	J59	20/05/1970	-43.850	179.417	309		1
162828	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothelidae	Bilewitch, Jaret	17/04/2023	X486	04/07/1994	-42.777	-179.914	910		1
140314	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothelidae	Bilewitch, Jaret	03/05/2023	TAN1903/106	21/06/2019	-43.368	179.451	396	396	1
162843	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	I721	26/03/1979	-44.123	175.770	540		1
162995	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	18/04/2023	S192	31/10/1979	-43.250	173.828	130		1
162839	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	Q38	24/03/1978	-44.413	-176.727	345		1
162859	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	Q39	24/03/1978	-44.433	-176.617	255		1
163742	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	08/05/2023	Q13	15/03/1978	-43.460	-179.782	415		1
93575	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	N868	18/12/1976	-43.550	179.800	395		1
162886	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	09/05/2023	Z9385	27/10/1998	-44.060	179.367	673		1
162829	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	18/04/2023	E731	25/03/1967	-37.392	177.200	602		1
163745	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	08/05/2023	T109	24/04/1981	-39.763	178.235	288		1
16446	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	U246	10/12/1982	-42.508	173.643	660		1
163684	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Williams, Gary, C.	09/05/1995	A910	13/09/1963	-43.067	-178.650	549		1
162825	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	18/04/2023	X486	04/07/1994	-42.777	-179.914	910		1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
126883	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Kessel, G. & Bilewitch, J.	15/03/2023	TAN1801/25	11/01/2018	-42.454	-178.003	865	893	1
162820	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	E842	16/03/1968	-33.900	172.283	224		1
149758	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	G697	21/01/1970	-46.325	170.700	528		1
162883	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	TAN0104/48	16/04/2001	-42.786	-179.985	993	900	2
163748	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	03/05/2023	S46	21/09/1978	-53.997	171.220	1075		2
149943	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela	Bilewitch, Jaret	17/04/2023	Z9752	02/04/1999	-34.172	172.197	190		1
163692	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Anthothela?	Bilewitch, Jaret	18/04/2023	E842	16/03/1968	-33.900	172.283	224		1
163685	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Iciligorgia	Bilewitch, Jaret	17/04/2023	Z10972	04/09/2001	-43.121	175.819	467		1
163511	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Iciligorgia	Bilewitch, Jaret	17/04/2023	Z9741	16/04/1999	-34.170	172.210	200		2
162899	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Iciligorgia?	Bilewitch, Jaret	17/04/2023	Q24	22/03/1978	-44.495	-176.562	320		1
163519	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Iciligorgia?	Bilewitch, Jaret	18/04/2023	Z10929	04/09/2001	-43.121	175.819	467		1
149736	Cnidaria	Anthozoa	Alcyonacea	Anthothelidae	Solenocaulon	Mills, Sadie	07/12/2022	Z2697	22/11/1977	-34.400	173.083	101		1
162715	Cnidaria	Anthozoa	Alcyonacea	Astrogorgiidae	Astrogorgia?	Bilewitch, Jaret	14/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	2
149748	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgiidae indet.	Mills, Sadie	07/12/2022	X631	09/02/1996	-35.383	178.473	1990	2120	1
149771	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	Tracey, Di	08/05/2023	Z11063	18/04/2002	-34.164	173.964	820	805	1
163392	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	Tracey, Di	08/05/2023	Z9160	24/06/1998	-36.520	176.497	912		1
163082	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	Tracey, Di	08/05/2023	X140	27/11/1989	-37.190	176.973	770		1
162881	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	O'Shea, Steve		Z10168	03/06/1999	-39.476	178.422	874		1
149761	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	Tracey, Di	08/05/2023	KAH9907/52	05/06/1999	-36.520	176.492	975	1190	1
16461	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	Tracey, Di	08/05/2023	E879	22/03/1968	-35.317	172.417	768		1
114380	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Chrysogorgia	Tracey, Di	08/05/2023	TAN0307/55	28/04/2003	-49.669	179.925	2648	2650	1
163390	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Iridogorgia	Bilewitch, Jaret	03/05/2023	Z9160	24/06/1998	-36.520	176.497	912		1
163535	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Iridogorgia	Sanchez, Juan A.	2005	Z10804	23/05/2001	-35.738	178.508	1045	500	1
162858	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Isidoides	Xu, Yu	15/05/2023	P970	17/06/1980	-39.500	178.833	3391		1
91301	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Metallogorgia	Bilewitch, Jaret	09/05/2023	TAN1003/45	24/03/2010	-39.784	178.364	830		1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
64443	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Metallogorgia	Bilewitch, Jaret	09/05/2023	TAN1007/52	01/06/2010	-35.348	178.549	1180	1284	3
64444	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Metallogorgia	Bilewitch, Jaret	09/05/2023	TAN1007/52	01/06/2010	-35.348	178.549	1180	1284	1
72235	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Metallogorgia	Bilewitch, Jaret	09/05/2023	TAN1104/19	03/03/2011	-36.476	177.892	1460	1456	1
72509	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Metallogorgia	Bilewitch, Jaret	09/05/2023	TAN1104/55	10/03/2011	-35.358	178.526	1335	1425	1
53356	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Metallogorgia	Bilewitch, Jaret	09/05/2023	TAN0905/63	20/06/2009	-41.766	-179.528	1255	1430	2
64851	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Pseudochrysogorgia	Bilewitch, Jaret	09/05/2023	TAN1007/107	07/06/2010	-35.362	178.539	1128	1214	1
163281	Cnidaria	Anthozoa	Alcyonacea	Chrysogorgiidae	Radicipes	Mills, Sadie	17/04/2023	W260	19/09/1993	-42.950	179.000	665	625	2
127101	Cnidaria	Anthozoa	Alcyonacea	Coralliidae	Corallium	Tracey, Di	03/05/2023	SO254/33ROV08_BIOBOX19	07/02/2017	-35.382	178.980	1190.8		1
126098	Cnidaria	Anthozoa	Alcyonacea	Ellisellidae	Verrucella?	Bilewitch, Jaret	20/04/2023	SO254/25ROV07_BIOBOX5	05/02/2017	-30.232	-178.462	349.9		1
126106	Cnidaria	Anthozoa	Alcyonacea	Ellisellidae	Viminella?	Bilewitch, Jaret	20/04/2023	SO254/25ROV07_BIOBOX10	05/02/2017	-30.232	-178.452	234.1		1
163693	Cnidaria	Anthozoa	Alcyonacea	Euplexauridae	Euplexaura	Bilewitch, Jaret	17/04/2023	Z2375	16/04/1971	-42.500	170.600	348		1
16455	Cnidaria	Anthozoa	Alcyonacea	Euplexauridae	Euplexaura	Bilewitch, Jaret	18/04/2023	S238	16/02/1980	-45.907	166.687	28		1
163751	Cnidaria	Anthozoa	Alcyonacea	Euplexauridae	Euplexaura	Bilewitch, Jaret	03/05/2023	E312	10/04/1965	-34.000	171.792	119		1
163092	Cnidaria	Anthozoa	Alcyonacea	Euplexauridae	Euplexaura	Bilewitch, Jaret	03/05/2023	Z9744	18/04/1999	-34.363	172.972	100		1
149757	Cnidaria	Anthozoa	Alcyonacea	Euplexauridae	Euplexaura?	Bilewitch, Jaret	17/04/2023	C183	05/09/1959	-39.833	173.733	95		1
41290	Cnidaria	Anthozoa	Alcyonacea	Isidiidae	Isidiidae	Marriott, Peter	22/05/2023	TAN0306/6	14/04/2003	-50.943	164.609	1140	1105	1
163757	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae indet.	Marriott, Peter	21/04/2023	KAH0204/44	18/04/2002	-34.266	174.103	850	840	2
64401	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae	Bilewitch, Jaret	09/05/2023	TAN1007/19	26/05/2010	-34.579	177.883	1670	1392	3
149749	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae indet.	Mills, Sadie	07/12/2022	X631	09/02/1996	-35.383	178.473	1990	2120	1
163699	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae	Bilewitch J. & Marriot P.	23/04/2023	C632	27/05/1961	-39.233	172.017	406		5
53335	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae	Bilewitch, Jaret	09/05/2023	TAN0905/61	20/06/2009	-41.798	-179.504	1219	1286	1
125644	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae	Bilewitch, Jaret	09/05/2023	TAN1611/DR-16	14/10/2016	-32.715	178.740	1840	1590	1
90012	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisididae	Bilewitch, Jaret	20/04/2023	TAN1311/50	24/10/2013	-42.761	163.923	2760		1
163219	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	20/04/2023	Z9843	05/06/1999	-36.506	176.516	920		1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
163697	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Tracey, D & Bilewitch, J	17/04/2023	C956	07/03/1963	-43.117	175.050	232		1
163224	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	20/04/2023	F872_TAM	03/10/1968	-37.343	178.187	878	832	1
126329	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	20/04/2023	SO254/84ROV18_BIOBOX17	23/02/2017	-37.911	179.216	1269.8		1
149772	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	O'Shea, Steve		TAN0107/127	20/05/2001	-35.767	178.542	2120	1722	1
14384	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	20/04/2023	T35	13/03/1981	-48.827	179.782	832		1
99689	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	19/04/2023	T36	13/03/1981	-48.728	179.452	775		1
99689	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	19/04/2023	T36	13/03/1981	-48.728	179.452	775		1
163229	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	19/04/2023	T32	13/03/1981	-48.393	-179.710	668		1
163719	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Acanella	Bilewitch, Jaret	20/04/2023	TAN0307/47	23/04/2003	-49.597	178.849	725	731	1
163542	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Isidella	Tracey, Di	03/05/2023	Y30	14/03/1997	-46.211	165.856	1335		1
163543	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Isidella	Tracey, Di	03/05/2023	P939	22/04/1980	-41.340	166.913	1760		1
126336	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Isidella	Bilewitch, Jaret	03/05/2023	SO254/85ROV19_BIOBOX16	24/02/2017	-35.610	178.854	1149.9		1
162690	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Isidella?	Bilewitch, Jaret	20/04/2023	TAN0509/28	25/06/2005	-42.671	-178.997	1123	1130	1
144437	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Isidella?	Bilewitch, Jaret	09/05/2023	TAN1807/58	06/08/2018	-42.092	170.002	915	920	1
163388	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	Z9160	24/06/1998	-36.520	176.497	912		1
163282	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	KAH9907/52	05/06/1999	-36.520	176.492	975	1190	1
163258	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	KAH9907/53	05/06/1999	-36.505	176.508	990	1100	1
163260	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	03/05/2023	KAH9907/51	05/06/1999	-36.506	176.516	920	1053	1
114382	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	08/05/2023	I689	17/03/1979	-48.858	178.692	808		1
162689	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Bilewitch, Jaret	03/05/2023	TAN0509/23	24/06/2005	-42.680	-179.397	1140	1145	1
162688	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	TAN0509/28	25/06/2005	-42.671	-178.997	1123	1130	1
162672	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	O'Shea, Steve	2001	Z10958	07/11/2001	-44.018	178.646	760		1
163248	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	Q343	14/11/1979	-44.130	175.797	500		1
149845	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	T109	24/04/1981	-39.763	178.235	288		2

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163252	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	X633	10/02/1996	-35.372	178.484	1780	1600	1
163541	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	P941	23/04/1980	-41.253	167.120	1463		1
154041	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Bilewitch, Jaret	09/05/2023	TAN0803/36	01/04/2008	-50.099	163.485	1144	1365	1
162668	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Grant, Ralph, A		E906	28/03/1968	-38.650	172.633	691		1
163247	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	I368	23/11/1977	-34.213	173.022	452	460	1
72907	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	TAN1104/123	19/03/2011	-35.861	178.448	1251	1478	1
53721	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Bilewitch, Jaret	09/05/2023	TAN0905/99	26/06/2009	-44.140	-174.720	641	758	1
53758	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Bilewitch, Jaret	09/05/2023	TAN0905/102	26/06/2009	-44.127	-174.570	845	940	1
163250	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	TAN0107/234	24/05/2001	-36.135	178.201	1140	698	1
92175	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, D & Bilewitch, J	03/05/2023	J681	08/09/1974	-37.353	177.102	363		1
163257	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	TAN0414/67	16/12/2004	-48.938	166.587	467	503	1
149750	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis indet.	Mills, Sadie	07/12/2022	Z9897	19/10/1999	-37.487	175.295			1
162841	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis	Tracey, Di	19/04/2023	Z10173	23/05/2000	-49.774	-176.679	1000	1089	1
143084	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis flexibilis	Tracey, D & Bilewitch, J	03/05/2023	X138	27/11/1989	-37.250	176.841	335		1
162838	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis flexibilis	O'Shea, Steve		Z9890	30/10/1999	-35.008	172.530	167		1
162998	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis flexibilis	Tracey, D & Bilewitch, J	03/05/2023	E844	16/03/1968	-34.150	172.125	0		1
114358	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis hikurangiensis	Tracey, D & Bilewitch, J	03/05/2023	I691	17/03/1979	-48.835	179.737	827		1
64404	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis hikurangiensis	Tracey, D & Bilewitch, J	03/05/2023	TAN1007/24	27/05/2010	-35.330	178.352	2428	2294	1
126067	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis hikurangiensis	Tracey, D & Bilewitch, J	03/05/2023	SO254/18ROV05_BIOBOX16	03/02/2017	-29.288	-178.016	236.9		1

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16452	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis hikurangiensis?	Bilewitch, Jaret	20/04/2023	E773	15/10/1967	-42.000	169.900	968		1
163259	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis zelandica	Tracey, D & Bilewitch, J	03/05/2023	KAH9907/51	05/06/1999	-36.506	176.516	920	1053	1
105096	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis zelandica	Tracey, D & Bilewitch, J	03/05/2023	TAN1312/D7-d81	15/11/2013	-33.704	171.729	932	837	1
126009	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis zelandica	Tracey, D & Bilewitch, J	03/05/2023	SO254/02ROV01_BIOBOX1	30/01/2017	-30.733	173.910	770.1		1
163756	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Keratoisis?	Bilewitch, Jaret	09/05/2023	TAN0905/61	20/06/2009	-41.798	-179.504	1219	1286	1
162666	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Lepidisis	Sanchez, Juan A.	07/2007	KAH0204/32	17/04/2002	-34.162	173.962	810	780	1
163254	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Lepidisis	Tracey, Di	19/04/2023	KAH0204/40	18/04/2002	-34.164	173.964	820	805	1
163218	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Lepidisis	Tracey, Di	19/04/2023	Z10005	16/02/2000	-36.939	176.328	551	550	2
162670	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Lepidisis	Sanchez, Juan A.	07/2007	TAN0205/77	23/04/2002	-30.019	-178.651	883	682	1
163226	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Lepidisis	Bilewitch, Jaret	20/04/2023	F885	04/10/1968	-37.567	176.725	499		1
162669	Cnidaria	Anthozoa	Alcyonacea	Keratoisididae	Lepidisis	Sanchez, Juan A.	07/2007	Z10804	23/05/2001	-35.738	178.508	1045	500	1
162685	Cnidaria	Anthozoa	Alcyonacea	Keroeidae	Keroeides	Sanchez, Juan A.	2005	TAN0205/64	22/04/2002	-30.162	-178.578	328	287	1
163749	Cnidaria	Anthozoa	Alcyonacea	Keroeidae?	Keroeidae?	Bilewitch, Jaret	03/05/2023	S46	21/09/1978	-53.997	171.220	1075		1
163223	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Mopseidae	Bilewitch, Jaret	20/04/2023	Z9466	19/10/1998	-44.702	-176.233	1046		1
56173	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Mopseidae	Tracey, Di	08/05/2023	TAN0906/134	13/07/2009	-34.465	173.212	141	140	2
162675	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Mopseidae	Sanchez, Juan A.	2005	R435	15/06/1990	-39.430	178.422	985	1190	1
163264	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	19/04/2023	X524	12/07/1994	-43.131	-174.263	799		1
162674	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	03/05/2023	KAH9907/37	03/06/1999	-39.491	178.418	1000	980	1
163238	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	19/04/2023	Z9843	05/06/1999	-36.506	176.516	920		1
163242	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	19/04/2023	Z10929	04/09/2001	-43.121	175.819	467		1
163244	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	19/04/2023	Z10931	30/10/2001	-43.137	175.837	441		1
102610	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	03/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	3
102657	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	20/04/2023	TAN1503/122	11/04/2015	-44.148	-174.748	570	600	23
163690	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	03/05/2023	V480	07/06/1994	-41.293	176.550	725		1

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148150	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	03/05/2023	TAN2009/58	16/08/2020	-44.202	-174.538	782	933	1
148160	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	30/05/2023	TAN2009/80	19/08/2020	-44.136	-174.721	640	622	5
163750	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	03/05/2023	TAN1805/157	28/05/2018	-43.351	179.458	390	389	1
53668	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	09/05/2023	TAN0905/99	26/06/2009	-44.140	-174.720	641	758	30
54066	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	09/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	30
54117	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	09/05/2023	TAN0905/114	27/06/2009	-44.150	-174.768	830	900	10
54269	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	09/05/2023	TAN0905/119	28/06/2009	-44.158	-174.555	487	616	1
54334	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis	Bilewitch, Jaret	09/05/2023	TAN0905/121	28/06/2009	-44.028	-174.591	801	823	3
163740	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis?	Bilewitch, Jaret	08/05/2023	Q13	15/03/1978	-43.460	-179.782	415		1
162676	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis?	Bilewitch, Jaret	03/05/2023	N857	17/12/1976	-43.543	179.542	399		1
163267	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Chathamisis?	Bilewitch, Jaret	19/04/2023	Z9469	07/10/1998	-44.385	-178.157	805		1
125210	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	19/04/2023	I684	15/03/1979	-48.333	-179.483	705		1
163263	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	19/04/2023	V385	16/09/1989	-44.330	176.998	1086		1
163221	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	19/04/2023	Z9436	29/09/1998	-44.230	178.441	1090		1
163228	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	20/04/2023	Z9442	01/10/1998	-44.157	178.781	922		1
102613	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	08/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	10
163227	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	19/04/2023	X493	06/07/1994	-43.967	-174.544	665	855	1
163266	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	19/04/2023	X484	04/07/1994	-42.766	-179.906	899		1
53969	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	09/05/2023	TAN0905/111	27/06/2009	-44.148	-174.691	458	648	1
54064	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	09/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	30
54065	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	09/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	20
54116	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	09/05/2023	TAN0905/114	27/06/2009	-44.150	-174.768	830	900	3
54138	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	09/05/2023	TAN0905/115	27/06/2009	-44.136	-174.720	610	692	4
163747	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	03/05/2023	S46	21/09/1978	-53.997	171.220	1075		1
114361	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	19/04/2023	TAN0307/46	23/04/2003	-49.665	178.907	524	504	1
163233	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis	Bilewitch, Jaret	03/05/2023	Y31	14/03/1997	-45.828	165.802	1800	1800	1

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163723	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis?	Bilewitch, Jaret	19/04/2023	1674	14/03/1979	-48.007	-179.175	750		1
163527	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis?	Bilewitch, Jaret	19/04/2023	V373	13/09/1989	-43.647	179.001	392		3
103153	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Minuisis?	Bilewitch, Jaret	20/04/2023	TAN1312/D15-d60	13/11/2013	-33.434	170.368	1204	1100	1
163246	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis	Bilewitch, Jaret	20/04/2023	D223	27/09/1964	-41.167	170.233	770		1
163508	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis	Bilewitch, Jaret	19/04/2023	U582	05/02/1988	-31.862	172.433	790		1
163217	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis	Tracey, D & Bilewitch, J	03/05/2023	E842	16/03/1968	-33.900	172.283	224		1
163285	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis	Bilewitch, Jaret	20/04/2023	TAN0104/114	17/04/2001	-42.798	179.985	1000	935	1
163524	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis?	Bilewitch, Jaret	08/05/2023	D224	27/09/1964	-40.783	169.683	903		1
162862	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis?	Bilewitch, Jaret	09/05/2023	E851	17/03/1968	-33.717	171.167	542		1
53116	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Notisis?	Bilewitch, Jaret	09/05/2023	TAN0905/39	17/06/2009	-42.779	-179.904	917	1021	1
162823	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	1674	14/03/1979	-48.007	-179.175	750		1
163243	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	I666	13/03/1979	-47.792	-178.992	1165		1
163270	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	I721	26/03/1979	-44.123	175.770	540		1
163284	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	20/04/2023	D230	29/09/1964	-38.167	170.350	861		1
163234	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	A904	12/09/1963	-44.253	179.590	1108		2
162885	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	T25	12/03/1981	-48.152	-179.340	693		1
163269	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	T23	11/03/1981	-47.995	-179.130	830		1
114368	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	20/04/2023	TAN0307/47	23/04/2003	-49.597	178.849	725	731	1
114381	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis	Bilewitch, Jaret	19/04/2023	TAN0307/55	28/04/2003	-49.669	179.925	2648	2650	1
163272	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis?	Bilewitch, Jaret	20/04/2023	KAH9907/53	05/06/1999	-36.505	176.508	990	1100	1
163222	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis?	Bilewitch, Jaret	19/04/2023	Z9468	02/10/1998	-44.207	179.059	959		1
163245	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Primnoisis?	Bilewitch, Jaret	19/04/2023	T25	12/03/1981	-48.152	-179.340	693		1
163268	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	Z1066		-37.105	174.525	9		1
163237	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	Z11064	18/04/2002	-34.266	174.103	850	840	1
163241	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	Z11067	19/04/2002	-34.050	174.808	800		1

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163265	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	X138	27/11/1989	-37.250	176.841	335		1
163240	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	I694	18/03/1979	-49.500	178.750	1004		1
149770	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	TAN9915/27A	18/12/1999	-36.622	175.095			1
163274	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	U600	08/02/1988	-31.028	173.378	620		1
163225	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	20/04/2023	F868	02/10/1968	-37.475	179.058	808	1000	1
105103	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	20/04/2023	TAN1312/D7-d81	15/11/2013	-33.704	171.729	932	837	1
103494	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	19/04/2023	T46	14/03/1981	-49.692	178.583	580		1
163720	Cnidaria	Anthozoa	Alcyonacea	Mopseidae	Sclerisis	Bilewitch, Jaret	20/04/2023	TAN0307/47	23/04/2003	-49.597	178.849	725	731	1
126355	Cnidaria	Anthozoa	Alcyonacea	Paragorgiidae	Paragorgia	Bilewitch, Jaret	03/05/2023	SO254/85ROV19_BIOBOX2	24/02/2017	-35.609	178.854	1168		1
126147	Cnidaria	Anthozoa	Alcyonacea	Paragorgiidae	Sibogagorgia	Bilewitch, Jaret	03/05/2023	SO254/33ROV08_BIOBOX9	07/02/2017	-35.379	178.976	1332.2		1
126356	Cnidaria	Anthozoa	Alcyonacea	Paragorgiidae	Sibogagorgia	Bilewitch, Jaret	03/05/2023	SO254/85ROV19_BIOBOX17	24/02/2017	-35.612	178.852	1149.8	1157.9	1
162716	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuriceidae indet.	Bilewitch, Jaret	22/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
64358	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	17/04/2023	TAN1007/12	24/05/2010	-34.623	178.389	1700	1540	1
162869	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	17/04/2023	Z7238	17/04/1991	-45.004	167.285	30	35	1
149745	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	18/04/2023	S261	22/02/1980	-45.352	166.988	32		1
162837	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	18/04/2023	P62	06/02/1977	-34.167	172.130	25		1
72818	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	03/05/2023	TAN1104/110	18/03/2011	-35.713	178.484	581	724	5
26883	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	23/05/2023	TAN0616/25	05/11/2006	-39.547	178.329	810	786	1
26883	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea	Bilewitch, Jaret	23/05/2023	TAN0616/25	05/11/2006	-39.547	178.329	810	786	1
162723	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Anthomuricea?	Bilewitch, Jaret	14/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
162856	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Bebryce	Bilewitch, Jaret	17/04/2023	TAN0104/288	19/04/2001	-42.761	-179.988	972	890	1
149841	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Bebryce	Bilewitch, Jaret	18/04/2023	D424	14/03/1965	-41.083	178.000	2850		1
149844	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Bebryce?	Bilewitch, Jaret	18/04/2023	E849	17/03/1968	-33.917	171.533	216		2
149938	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Clematissa?	Bilewitch, Jaret	18/04/2023	I674	14/03/1979	-48.007	-179.175	750		1
42512	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Muriceides	Bilewitch, Jaret	08/04/2023	TAN0617/93	20/12/2006	-50.390	169.808	607	607	1
163089	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Muriceides	Bilewitch, Jaret	03/05/2023	E312	10/04/1965	-34.000	171.792	119		1

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163081	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Muriceides?	Bilewitch, Jaret	20/04/2023	C627	26/05/1961	-39.217	171.900	397		1
162815	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paracis	Bilewitch, Jaret	18/04/2023	X369	13/02/1992	-36.077	178.018	505		1
163522	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paracis	Bilewitch, Jaret	18/04/2023	U608	10/02/1988	-31.892	172.532	1520		1
126354	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paracis?	Bilewitch, Jaret	03/05/2023	SO254/85ROV19_BIOBOX4	24/02/2017	-35.609	178.854	1164.3		1
162810	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Bilewitch, Jaret	18/04/2023	X369	13/02/1992	-36.077	178.018	505		1
163501	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Sanchez, Juan A.	2003	KAH0204/40	18/04/2002	-34.164	173.964	820	805	1
163506	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Sanchez, Juan A.	2004	KAH0204/40	18/04/2002	-34.164	173.964	820	805	1
149940	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Bilewitch, Jaret	17/04/2023	Z9841	05/06/1999	-37.469	177.116	230		1
163691	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Bilewitch, Jaret	18/04/2023	S233	15/02/1980	-46.030	166.770	9	22	1
127087	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Bilewitch, Jaret	20/04/2023	SO254/18ROV05_BIOBOX18	03/02/2017	-29.287	-178.013	139.9		1
163505	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paramuricea	Sanchez, Juan A.	2004	TAN0104/336	20/04/2001	-42.768	-179.922	955	890	1
104281	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Paraplexaura	Bilewitch, Jaret	18/04/2023	Z9695	27/01/1999	-34.367	173.000	89		3
162873	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia	Bilewitch, Jaret	18/04/2023	Z9841	05/06/1999	-37.469	177.116	230		1
163500	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia	Sanchez, Juan A.	2003	KAH9907/40	03/06/1999	-39.471	178.413	865	741	1
163512	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia	Bilewitch, Jaret	18/04/2023	S233	15/02/1980	-46.030	166.770	9	22	3
56717	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia	Bilewitch, Jaret	09/05/2023	TAN0906/162	14/07/2009	-34.397	173.102	119	116	1
126266	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia	Bilewitch, Jaret	20/04/2023	SO254/77ROV14_BIOBOX1	20/02/2017	-43.293	173.607	851		1
126267	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia	Bilewitch, Jaret	20/04/2023	SO254/77ROV14_BIOBOX1	20/02/2017	-43.293	173.607	851		1
163504	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia?	Sanchez, Juan A.	2004	TAN0104/125	17/04/2001	-42.711	-179.966	910	1010	1
144460	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Placogorgia?	Bilewitch, Jaret	08/05/2023	Z18260	04/03/1997	-34.178	172.043	25		1
14485	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Villogorgia	Bilewitch, Jaret	17/04/2023	Z9742	19/04/1999	-34.414	173.133	133	210	1
126099	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Villogorgia	Bilewitch, Jaret	20/04/2023	SO254/25ROV07_BIOBOX9	05/02/2017	-30.232	-178.454	255		1
149764	Cnidaria	Anthozoa	Alcyonacea	Paramuriceidae	Villogorgia	Bilewitch, Jaret	17/04/2023	TAN0104/2	15/04/2001	-42.766	-179.989	875	757	1
162996	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Plexauridae	Bilewitch, Jaret	18/04/2023	Q93A	06/11/1978	-46.053	166.788	0		1
163694	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Plexauridae	Bilewitch, Jaret	17/04/2023	Z2375	16/04/1971	-42.500	170.600	348		1
149941	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Plexauridae	Bilewitch, Jaret	17/04/2023	Z10891	25/08/2000	-42.170	170.470	478		1

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162997	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Plexauridae n. gen.	Bilewitch, Jaret	17/04/2023	E842	16/03/1968	-33.900	172.283	224		1
163521	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Swiftia	Bilewitch, Jaret	18/04/2023	Z10132	21/04/2000	-42.532	170.577	277		1
162888	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Swiftia	Bilewitch, Jaret	08/05/2023	T109	24/04/1981	-39.763	178.235	288		1
162855	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Swiftia	Bilewitch, Jaret	18/04/2023	E842	16/03/1968	-33.900	172.283	224		1
162826	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Swiftia	Bilewitch, Jaret	18/04/2023	C632	27/05/1961	-39.233	172.017	406		1
56051	Cnidaria	Anthozoa	Alcyonacea	Plexauridae	Plexauridae indet.	Bilewitch, Jaret	09/05/2023	TAN0906/132	13/07/2009	-34.557	173.285	139	141	1
162893	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Primnoidae indet.	Bilewitch, Jaret	09/05/2023	Q14	16/03/1978	-43.347	-179.347	476		1
149843	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Callogorgia	Bilewitch, Jaret	09/05/2023	E849	17/03/1968	-33.917	171.533	216		1
162742	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Callogorgia	Tracey, Di	13/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
162847	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Callogorgia?	Bilewitch, Jaret	09/05/2023	Z10173	23/05/2000	-49.774	-176.679	1000	1089	1
163391	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Calyptrophora	Bilewitch, Jaret	08/05/2023	Z9160	24/06/1998	-36.520	176.497	912		1
163509	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Calyptrophora clinata	Bilewitch, Jaret	08/05/2023	U582	05/02/1988	-31.862	172.433	790		1
25382	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Dasystenella austasensis	Bilewitch, Jaret	23/05/2023	TAN0604/9	28/05/2006	-42.763	-179.925	1019	1081	1
28748	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Dasystenella austasensis	Bilewitch, Jaret	23/05/2023	TAN0705/103	11/04/2007	-44.081	-177.971	474	479	1
9661	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Dasystenella austasensis	Bilewitch, Jaret	23/05/2023	Z10719	18/04/2001	-42.769	-179.928	987	895	1
163718	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Dasystenella?	Bilewitch, Jaret	18/04/2023	S192	31/10/1979	-43.250	173.828	130		1
162896	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Dasystenella?	Bilewitch, Jaret	09/05/2023	A846	27/08/1963	-47.320	166.575	1485		1
162840	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	09/05/2023	Q38	24/03/1978	-44.413	-176.727	345		1
154763	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	09/05/2023	N869	18/12/1976	-43.567	179.840	395		3
163753	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	09/05/2023	J59	20/05/1970	-43.850	179.417	309		1
25491	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0501/58	06/01/2005	-43.566	-178.818	447	442	1
27577	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0701/56		-43.779	179.577	446	460	1
27606	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0701/9	30/12/2006	-43.576	177.938	355	359	1
27624	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0701/14	31/12/2006	-43.358	179.583	409	423	2
45314	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0801/21	31/12/2007	-43.236	-179.461	508	515	1
162863	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	08/05/2023	Z10015	18/02/2000	-36.216	176.212	343	336	1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
102298	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN1503/44	02/04/2015	-42.766	-179.920	990	1100	1
102471	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN1503/116	11/04/2015	-44.160	-174.555	497	590	10
102509	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN1503/117	11/05/2014	-44.128	-174.572	740	961	1
149847	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	08/05/2023	T109	24/04/1981	-39.763	178.235	288		1
91997	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN1401/106	21/01/2014	-42.917	174.871	744		1
126957	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	09/05/2023	TAN1801/48	15/01/2018	-43.536	-175.216	243	243	1
25427	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0604/108	06/06/2006	-43.533	179.628	375	381	1
28731	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/06/2023	TAN0705/88	09/04/2007	-44.204	-178.926	470	479	2
154375	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	09/05/2023	TAN0705/92	10/04/2007	-44.374	-178.492	804	821	1
126269	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	03/05/2023	SO254/77ROV14_BIOBOX1	20/02/2017	-43.293	173.607	851		1
126308	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	03/05/2023	SO254/79ROV16_BIOBOX12	22/02/2017	-40.049	178.136	892.3		1
148120	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	03/05/2023	TAN2009/57	16/08/2020	-44.159	-174.554	486	659	9
131034	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	03/05/2023	TAN1805/157	28/05/2018	-43.351	179.458	390	389	15
131090	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	03/05/2023	TAN1805/254	06/06/2018	-43.427	177.553	304	306	1
140319	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN1903/107	21/06/2019	-43.371	179.453	391	384	4
53666	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/99	26/06/2009	-44.140	-174.720	641	758	20
53848	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/105	26/06/2009	-44.157	-174.554	485	533	2
53942	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/110	27/06/2009	-44.127	-174.570	650	800	1
54039	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/112	27/06/2009	-44.143	-174.725	760	821	2
54057	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	22/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	1
54141	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/115	27/06/2009	-44.136	-174.720	610	692	1
54250	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/119	28/06/2009	-44.158	-174.555	487	616	1
54340	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Bilewitch, Jaret	23/05/2023	TAN0905/121	28/06/2009	-44.028	-174.591	801	823	5
162743	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella	Tracey, Di	13/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
149937	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella?	Bilewitch, Jaret	08/05/2023	Q341	14/11/1979	-44.118	176.320	264		2
163526	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Metafannyella?	Bilewitch, Jaret	08/05/2023	TAN0104/392	21/04/2001	-42.795	-179.984	1058	900	1

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163471	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Narella?	Bilewitch, Jaret	08/05/2023	X494	06/07/1994	-43.839	-174.302	885		1
163722	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Narella?	Bilewitch, Jaret	20/04/2023	TAN1313/DR6	28/11/2013	-35.139	177.374	1315	1300	1
163746	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Paracalyptrophora	Bilewitch, Jaret	09/05/2023	E849	17/03/1968	-33.917	171.533	216		1
149970	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Paracalyptrophora?	Bilewitch, Jaret	08/05/2023	R440	16/06/1990	-39.438	178.345	970		1
55129	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Perissogorgia vitrea	Mills, Sadie	30/06/2023	TAN0906/54	07/07/2009	-35.145	174.351	108	109	1
58516	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Perissogorgia?	Bilewitch, Jaret	09/05/2023	KAH0907/240	07/09/2009	-35.209	174.117	30	29	50
102463	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN1503/103	09/04/2015	-44.183	-174.448	1099	1254	1
25335	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0604/9	28/05/2006	-42.763	-179.925	1019	1081	1
25400	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0604/31	30/05/2006	-42.789	179.999	1020	1054	1
25403	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0604/31	30/05/2006	-42.789	179.999	1020	1054	3
53120	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0905/40	17/06/2009	-42.780	-179.903	921	1024	1
53455	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0905/70	22/06/2009	-42.737	-179.691	840	1037	4
53468	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/06/2023	TAN0905/70	22/06/2009	-42.737	-179.691	840	1037	1
54312	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0905/120	28/06/2009	-44.028	-174.591	796	882	1
9658	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	Z10738	21/04/2001	-42.761	-179.989	920		1
9664	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	Z10721	19/04/2001	-42.761	-179.988	972	890	1
9670	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0104/194	18/04/2001	-42.788	-179.997	1042	880	1
9673	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella (Faxiella)	Bilewitch, Jaret	23/05/2023	TAN0104/150	18/04/2001	-42.716	-179.906	1181	1004	1
163744	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella?	Bilewitch, Jaret	08/05/2023	T109	24/04/1981	-39.763	178.235	288		1
65003	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Plumarella?	Bilewitch, Jaret	17/04/2023	TAN1007/122	08/06/2010	-35.237	178.681	3378	3375	1
162846	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Primnoa	Bilewitch, Jaret	08/05/2023	Z10173	23/05/2000	-49.774	-176.679	1000	1089	1
162860	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Primnoella	Bilewitch, Jaret	08/05/2023	TAN0104/150	18/04/2001	-42.716	-179.906	1181	1004	1
54123	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Primnoella insularis	Bilewitch, Jaret	23/05/2023	TAN0905/114	27/06/2009	-44.150	-174.768	830	900	2
149951	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	08/05/2023	U238	09/12/1982	-42.475	173.573	425		1
149967	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	09/05/2023	I693	18/03/1979	-49.093	178.883	778		1
149971	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	08/05/2023	Q13	15/03/1978	-43.460	-179.782	415		1

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149945	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	N868	18/12/1976	-43.550	179.800	395		1
149947	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	J58	20/05/1970	-43.517	179.158	512		1
149842	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	08/05/2023	V373	13/09/1989	-43.647	179.001	392		6
163002	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	09/05/2023	V387	16/09/1989	-43.827	176.997	498		1
163262	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	09/05/2023	V385	16/09/1989	-44.330	176.998	1086		1
162821	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	09/05/2023	X486	04/07/1994	-42.777	-179.914	910		2
127411	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	23/05/2023	TAN0705/99	10/04/2007	-44.561	-178.476	1076	1103	1
140259	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	TAN1902/24	06/03/2019	-46.893	171.886	1300		1
126294	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	SO254/78ROV15_BIOBOX21	21/02/2017	-41.609	175.790	1236.2		1
148133	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	TAN2009/58	16/08/2020	-44.202	-174.538	782	933	3
149765	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	08/05/2023	TAN0104/116	17/04/2001	-42.798	179.982	1000	922	1
149944	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	S46	21/09/1978	-53.997	171.220	1075		1
14724	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	03/05/2023	R440	16/06/1990	-39.438	178.345	970		1
162849	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella	Bilewitch, Jaret	09/05/2023	Z10173	23/05/2000	-49.774	-176.679	1000	1089	1
163507	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) diadema?	Bilewitch, Jaret	08/05/2023	U582	05/02/1988	-31.862	172.433	790		5
53309	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Euthouarella) laxa?	Bilewitch, Jaret	23/05/2023	TAN0905/60	20/06/2009	-42.810	-179.516	1251	1290	1
34997	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0709/116	22/07/2007	-44.485	-174.896	1199	1201	1
25333	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0604/8	28/05/2006	-42.786	179.997	898	1067	3
25345	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0604/25	29/05/2006	-42.758	-179.978	1017	1123	1
25350	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0604/38	30/05/2006	-42.766	-179.927	930	1090	1
25386	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0604/16	29/05/2006	-42.765	-179.988	993	1090	2

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25390	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0604/16	29/05/2006	-42.765	-179.988	993	1090	1
25410	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0604/39	30/05/2006	-42.788	-180.000	1021	1055	1
28706	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0705/58	07/04/2007	-43.808	178.117	497	502	1
128287	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0705/53	07/04/2007	-44.246	177.152	955	992	1
53457	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella (Thouarella) variabilis var. gracilis	Bilewitch, Jaret	23/05/2023	TAN0905/70	22/06/2009	-42.737	-179.691	840	1037	1
131017	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Thouarella?	Bilewitch, Jaret	03/05/2023	TAN1805/155	27/05/2018	-43.340	179.517	404	401	3
171031	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno	Cairns, Stephen	06/2019	TAN0307/46	23/04/2003	-49.665	178.907	524	504	2
102309	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno maia	Bilewitch, Jaret	23/05/2023	TAN1503/56	03/04/2015	-42.790	-179.987	918	944	33
102361	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno maia	Bilewitch, Jaret	23/05/2023	TAN1503/67	04/04/2015	-42.798	179.988	936	1031	1
102433	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno maia	Bilewitch, Jaret	23/05/2023	TAN1503/102	09/04/2015	-44.165	-174.445	963	1252	1
25415	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno maia	Bilewitch, Jaret	23/05/2023	TAN0604/97	04/06/2006	-42.791	-179.988	882	1000	1
25418	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno maia	Bilewitch, Jaret	23/05/2023	TAN0604/98	04/06/2006	-42.789	-179.985	960	1036	1
9662	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno maia	Bilewitch, Jaret	23/05/2023	Z10733	21/04/2001	-42.783	179.994	1000		1
39606	Cnidaria	Anthozoa	Alcyonacea	Primnoidae	Tokoprymno n. sp.	Alderslade, Phil	03/04/2023	TAN0803/19	30/03/2008	-48.532	164.948	1060	1112	1
93649	Cnidaria	Anthozoa	Antipatharia	Antipathidae	Antipathes	Stewart, Rob	19/04/2023	TAN0906/109	10/07/2009	-34.716	173.556	172	170	1
162901	Cnidaria	Anthozoa	Antipatharia	Antipathidae	Stichopathes	Stewart, Rob	19/04/2023	TAN0107/124	20/05/2001	-35.739	178.504	620	435	1
149848	Cnidaria	Anthozoa	Antipatharia	Leiopathidae	Leiopathes	Stewart, Rob	19/04/2023	T109	24/04/1981	-39.763	178.235	288		1
53327	Cnidaria	Anthozoa	Antipatharia	Leiopathidae	Leiopathes	Stewart, Rob	19/04/2023	TAN0905/61	20/06/2009	-41.798	-179.504	1219	1286	1
53350	Cnidaria	Anthozoa	Antipatharia	Leiopathidae	Leiopathes	Stewart, Rob	19/04/2023	TAN0905/63	20/06/2009	-41.766	-179.528	1255	1430	1
126178	Cnidaria	Anthozoa	Antipatharia	Leiopathidae	Leiopathes secunda	Stewart, Rob	19/04/2023	SO254/36ROV10_BIOBOX2	09/02/2017	-39.990	178.215	801		1
126182	Cnidaria	Anthozoa	Antipatharia	Leiopathidae	Leiopathes secunda	Stewart, Rob	19/04/2023	SO254/36ROV10_BIOBOX5	09/02/2017	-39.990	178.214	794		1
162737	Cnidaria	Anthozoa	Antipatharia	Myriopathidae	Antipathella	Stewart, Rob	21/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
17101	Cnidaria	Anthozoa	Antipatharia	Myriopathidae	Antipathella fiordensis	Stewart, Rob	19/04/2023	O800	18/04/1984	-45.038	167.247	0	30	1

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17102	Cnidaria	Anthozoa	Antipatharia	Myriopathidae	Antipathella fiordensis	Stewart, Rob	19/04/2023	O799	17/04/1984	-44.957	167.406	0	34	1
17103	Cnidaria	Anthozoa	Antipatharia	Myriopathidae	Antipathella fiordensis	Stewart, Rob	19/04/2023	O799	17/04/1984	-44.957	167.406	0	34	1
17105	Cnidaria	Anthozoa	Antipatharia	Myriopathidae	Antipathella fiordensis	Stewart, Rob	19/04/2023	O797	16/04/1984	-44.666	167.913	0	30	1
17107	Cnidaria	Anthozoa	Antipatharia	Myriopathidae	Antipathella fiordensis	Stewart, Rob	19/04/2023	O824	25/04/1984	-45.652	166.808	0	35	1
4285	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Alternatipathes alternata	Stewart, Rob	10/05/2023	TAN0413/52	10/11/2004	-37.234	177.217	1080	980	1
126181	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Alternatipathes alternata	Stewart, Rob	19/04/2023	SO254/36ROV10_BIOBOX15	09/02/2017	-39.989	178.214	759		1
126331	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Alternatipathes alternata	Stewart, Rob	19/04/2023	SO254/84ROV18_BIOBOX6	23/02/2017	-37.913	179.216	1409		1
163393	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Bathypathes	Stewart, Rob	19/04/2023	Z9160	24/06/1998	-36.520	176.497	912		1
126180	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Bathypathes	Stewart, Rob	19/04/2023	SO254/36ROV10_BIOBOX12	09/02/2017	-39.989	178.213	759.1		1
64394	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Bathypathes patula	Stewart, Rob	19/04/2023	TAN1007/16	25/05/2010	-34.798	178.442	1800	1860	1
126352	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Bathypathes patula	Stewart, Rob	19/04/2023	SO254/85ROV19_BIOBOX17	24/02/2017	-35.612	178.852	1149.8	1157.9	1
27796	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Dendrobathypathes isocrada	Stewart, Rob	19/04/2023	TAN0616/7	04/11/2006	-40.039	178.144	766	764	1
126143	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Parantipathes	Stewart, Rob	20/04/2023	SO254/33ROV08_BIOBOX14	07/02/2017	-35.382	178.979	1216.8		1
126179	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Parantipathes	Stewart, Rob	19/04/2023	SO254/36ROV10_BIOBOX10	09/02/2017	-39.989	178.214	767		1
126146	Cnidaria	Anthozoa	Antipatharia	Schizopathidae	Parantipathes helicosticha	Stewart, Rob	20/04/2023	SO254/33ROV08_BIOBOX11	07/02/2017	-35.379	178.976	1312		1
113898	Cnidaria	Anthozoa	Antipatharia	Stylopathidae	Stylopathes tenuispina	Stewart, Rob	19/04/2023	KAH9301/1	31/12/1992	-36.954	176.253	284	337	1
163572	Cnidaria	Anthozoa	Scleractinia		Scleractinia indet.	Mills, Sadie	24/03/2023	Z3143		-46.373	169.878			1
163573	Cnidaria	Anthozoa	Scleractinia		Scleractinia indet.	Mills, Sadie	24/03/2023	C504	19/06/1960	-41.358	176.005	146		1
163546	Cnidaria	Anthozoa	Scleractinia		Scleractinia indet.	Cairns, Stephen		C642	28/05/1961	-39.258	171.875	354		5
163143	Cnidaria	Anthozoa	Scleractinia		Scleractinia indet.	Tracey, Di	17/04/2023	S6	11/09/1978	-42.598	170.662	201		2
163169	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophylliidae	Tracey, Di	17/04/2023	J485	07/12/1973	-50.633	167.633	320	365	2
104359	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia indet.	Tracey, Di	19/04/2023	X155	29/11/1989	-36.127	177.395	1600		1
104351	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	19/04/2023	X122	24/11/1989	-37.418	177.185	365		2
104355	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	19/04/2023	X207	06/12/1989	-37.546	176.962	380		5
99615	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	08/04/2023	Z9940	03/06/1999	-39.476	178.421	874		10
104339	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	10/04/2023	KAH9907/37	03/06/1999	-39.491	178.418	1000	980	2

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163730	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2032	B686	28/10/1962	-40.267	172.538	127	126	2
163729	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2023	S125	20/10/1979	-43.535	175.975	365		1
163148	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2023	D865	23/03/1969	-43.917	-179.250	221		1
163145	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	17/04/2023	U619	12/02/1988	-37.547	171.983	1112		2
163141	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2023	C956	07/03/1963	-43.117	175.050	232		4
163124	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2023	E640	11/10/1966	-37.253	176.853	123		2
163154	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2023	E847	16/03/1968	-34.108	171.867	695		1
154774	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	17/04/2023	TAN0104/397	21/04/2001	-42.716	180.089	1050	1000	6
163147	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia	Tracey, Di	18/04/2023	B490	08/06/1961	-45.738	166.747	144	118	1
162780	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia diomedea	Tracey, Di	13/03/2023	KAH2205/47	12/10/2022	-34.684	172.263	172	175	1
103396	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia diomedea?	Tracey, Di	19/04/2023	B473	03/06/1961	-43.333	169.783	210	206	1
163760	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia lamellifera	Tracey, Di	18/04/2023	V480	07/06/1994	-41.293	176.550	725		1
72113	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia lamellifera	Tracey, Di	18/04/2023	TAN1104/10	03/03/2011	-36.475	177.865	1168	1198	1
163134	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	18/04/2023	Q129	15/12/1978	-41.837	174.753	125		2
163158	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	18/04/2023	Q155	16/12/1978	-41.703	174.833	210		2
103988	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	19/04/2023	KAH0011/40	05/11/2000	-37.550	176.971	176	155	1
163157	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	18/04/2023	S125	20/10/1979	-43.535	175.975	365		2
163127	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	18/04/2023	D897	29/03/1969	-44.483	-175.967	177		2
163123	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	18/04/2023	C703	19/06/1961	-42.700	173.630	184		1
149747	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia profunda	Tracey, Di	17/04/2023	S261	22/02/1980	-45.352	166.988	32		8
104341	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia rugosa	Tracey, Di	19/04/2023	KAH0006/45	23/04/2000	-37.504	172.119	960		2
163754	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia scobinosa	Tracey, Di	17/04/2023	V373	13/09/1989	-43.647	179.001	392		1
154016	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia scobinosa	Tracey, Di	19/04/2023	TAN0803/19	30/03/2008	-48.532	164.948	1060	1112	5
129299	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Caryophyllia scobinosa	Tracey, Di	18/04/2023	SO191-2/127	17/02/2007	-41.782	175.400	1035	1039	3
163156	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	17/04/2023	D39		-50.967	165.750	549		1
163144	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	17/04/2023	I705	21/03/1973	-47.500	178.750	390		95

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163155	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	19/04/2023	S126	20/10/1979	-43.557	175.977	322		1
162680	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	15/03/2023	Z9793	04/07/1999	-42.725	-179.921	1055	1110	1
163560	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Mills, Sadie	24/03/2023	V472	05/06/1994	-38.987	179.400	1650		7
149846	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	18/04/2023	T109	24/04/1981	-39.763	178.235	288		1
149740	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Mills, Sadie	07/12/2022	S261	22/02/1980	-45.352	166.988	32		5
72230	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	17/04/2023	TAN1104/18	04/03/2011	-36.450	177.840	836	840	5
72420	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	17/04/2023	TAN1104/39	08/03/2011	-35.334	178.429	1520	1550	3
72809	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	17/04/2023	TAN1104/110	18/03/2011	-35.713	178.484	581	724	8
127605	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus	Tracey, Di	18/04/2023	TAN0104/42	16/04/2001	-42.759	-179.994	1040	1035	1
163166	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Desmophyllum dianthus?	Tracey, Di	18/04/2023	D871	24/03/1969	-43.333	-178.667	454		1
162844	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Mills, Sadie	15/12/2022	Q38	24/03/1978	-44.413	-176.727	345		1
162682	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Kitahara, Marcelo	2017	Z9613	14/01/1999	-43.203	177.935	317		1
163755	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Bilewitch, Jaret	08/05/2023	T109	24/04/1981	-39.763	178.235	288		1
163162	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Tracey, Di	17/04/2023	D175	21/01/1964	-50.608	167.683	426		1
64353	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Bilewitch, Jaret	09/05/2023	TAN1007/11	24/05/2010	-34.607	178.389	1700	1540	1
163725	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Tracey, Di	18/04/2023	E847	16/03/1968	-34.108	171.867	695		3
131008	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Tracey, Di	17/04/2023	TAN1805/155	27/05/2018	-43.340	179.517	404	401	1
131030	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Tracey, Di	17/04/2023	TAN1805/156	28/05/2018	-43.347	179.460	396	392	2
131057	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Tracey, Di	07/04/2023	TAN1805/159	28/05/2018	-43.390	179.463	386	387	2
131098	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Goniocorella dumosa	Tracey, Di	17/04/2023	TAN1805/254	06/06/2018	-43.427	177.553	304	306	3
88270	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Solenosmilia variabilis	Tracey, Di	28/03/2023	X483	04/07/1994	-42.765	-179.908	890		1
163736	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Solenosmilia variabilis	Tracey, Di	17/04/2023	I705	21/03/1973	-47.500	178.750	390		1
163165	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Solenosmilia variabilis	Tracey, Di	17/04/2023	J36	17/04/1970	-38.500	169.650	560		1
48794	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Solenosmilia variabilis	Tracey, Di	28/03/2023	Z9793	04/07/1999	-42.725	-179.921	1055	1110	1
163152	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Solenosmilia variabilis	Tracey, Di	18/04/2023	U567	03/02/1988	-35.005	169.162	1480		2
163167	Cnidaria	Anthozoa	Scleractinia	Caryophylliidae	Solenosmilia variabilis	Tracey, Di	17/04/2023	Z10732	21/04/2001	-42.729	-179.893	1070	990	1

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163153	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Dendrophylliidae	Tracey, Di	18/04/2023	C184	06/09/1959	-39.833	173.517	95		1
102371	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Balanophyllia	Tracey, Di	18/04/2023	TAN1503/68	04/04/2015	-42.790	-179.921	932	1005	1
163138	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Dendrophyllia	Tracey, Di	17/04/2023	V480	07/06/1994	-41.293	176.550	725		20
162852	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Dendrophyllia	Tracey, Di	17/04/2023	Z10173	23/05/2000	-49.774	-176.679	1000	1089	1
104357	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Eguchipsammia	Tracey, Di	18/04/2023	X139	27/11/1989	-37.220	176.828	685		4
104361	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Eguchipsammia	Tracey, Di	18/04/2023	X138	27/11/1989	-37.250	176.841	335		5
124109	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Eguchipsammia	Tracey, Di	18/04/2023	TAN1708/31	07/09/2017	-42.524	173.614	1040		2
163731	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Eguchipsammia	Tracey, Di	18/04/2023	E640	11/10/1966	-37.253	176.853	123		1
163168	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Eguchipsammia	Tracey, Di	17/04/2023	F933	15/10/1968	-34.400	173.172	252	249	1
72810	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Eguchipsammia	Tracey, Di	17/04/2023	TAN1104/110	18/03/2011	-35.713	178.484	581	724	25
90943	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Enallopsammia	Tracey, Di	18/04/2023	X139	27/11/1989	-37.220	176.828	685		12
163759	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Enallopsammia	Tracey, Di	17/04/2023	U619	12/02/1988	-37.547	171.983	1112		1
163758	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Enallopsammia rostrata	Tracey, Di	17/04/2023	I705	21/03/1973	-47.500	178.750	390		10
91306	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Enallopsammia rostrata	Marriott, Peter	22/05/2023	TAN0308/149	03/06/2003	-34.630	168.977	560	520	1
72811	Cnidaria	Anthozoa	Scleractinia	Dendrophylliidae	Enallopsammia rostrata	Tracey, Di	17/04/2023	TAN1104/110	18/03/2011	-35.713	178.484	581	724	2
163136	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum indet.	Tracey, Di	19/04/2023	X234	09/12/1989	-37.686	177.124	195		1
163728	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum	Tracey, Di	18/04/2023	Q155	16/12/1978	-41.703	174.833	210		1
163737	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum	Tracey, Di	14/04/2023	I705	21/03/1973	-47.500	178.750	390		1
163159	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum	Tracey, Di	18/04/2023	S241	17/02/1980	-44.662	167.923	25		2
163561	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum apertum	Tracey, Di	17/04/2023	V472	05/06/1994	-38.987	179.400	1650		1
163132	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	U388	20/07/1987	-42.172	170.360	0		1
163118	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	T478	07/12/1983	-41.053	174.358	93		3
163119	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	S167	29/10/1979	-44.232	174.133	608		2
163146	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	S156	28/10/1979	-44.205	173.498	327		1
163142	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	17/04/2023	V373	13/09/1989	-43.647	179.001	392		5
163121	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	G700	22/01/1970	-46.333	171.250	1116		4

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163188	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	G675	19/01/1970	-45.450	171.400	792		1
163190	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	G664	18/01/1970	-44.567	173.150	511		3
163191	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	G663	18/01/1970	-44.400	173.500	612		1
131095	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum knoxi	Tracey, Di	18/04/2023	TAN1805/254	06/06/2018	-43.427	177.553	304	306	2
163761	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Flabellum messum	Tracey, Di	17/04/2023	V480	07/06/1994	-41.293	176.550	725		2
163117	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Monomyces	Tracey, Di	18/04/2023	F698	05/12/1965	-40.103	176.932	51		1
163160	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Monomyces	Tracey, Di	18/04/2023	B686	28/10/1962	-40.267	172.538	127	126	11
163139	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Monomyces	Tracey, Di	18/04/2023	U606	10/02/1988	-31.912	172.790	1100		2
104353	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Monomyces	Tracey, Di	16/04/2023	Z10092	03/09/1996	-44.583	167.783	20	25	3
149743	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Monomyces rubrum	Mills, Sadie	07/12/2022	S261	22/02/1980	-45.352	166.988	32		2
72448	Cnidaria	Anthozoa	Scleractinia	Flabellidae	Polymyces	Tracey, Di	18/04/2023	TAN1104/48	09/03/2011	-35.348	178.543	1180	1306	1
106758	Cnidaria	Anthozoa	Scleractinia	Fungiidae	Fungiacyathus	Tracey, Di	18/04/2023	TAN1007/64	03/06/2010	-35.439	178.625	1282	1363	1
72254	Cnidaria	Anthozoa	Scleractinia	Fungiidae	Fungiacyathus	Tracey, Di	18/04/2023	TAN1104/19	03/03/2011	-36.476	177.892	1460	1456	1
72488	Cnidaria	Anthozoa	Scleractinia	Fungiidae	Fungiacyathus	Tracey, Di	17/04/2023	TAN1104/54	10/03/2011	-35.353	178.536	1379	1440	1
163189	Cnidaria	Anthozoa	Scleractinia	Fungiidae	Fungiacyathus	Tracey, Di	18/04/2023	G696	21/01/1970	-46.308	170.575	690		8
163727	Cnidaria	Anthozoa	Scleractinia	Oculinidae	Madrepora	Tracey, Di	18/04/2023	C632	27/05/1961	-39.233	172.017	406		3
149744	Cnidaria	Anthozoa	Scleractinia	Rhizangiidae	Culicia	Tracey, Di	18/04/2023	S261	22/02/1980	-45.352	166.988	32		2
163137	Cnidaria	Anthozoa	Scleractinia	Rhizangiidae	Culicia	Tracey, Di	18/04/2023	C632	27/05/1961	-39.233	172.017	406		7
90866	Cnidaria	Anthozoa	Scleralcyonacea		Scleralcyonacea indet.	Mills, Sadie	21/04/2023	W247B	14/09/1993	-44.790	178.997	1932	1963	1
102380	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	TAN1503/101	09/04/2015	-44.178	-174.508	1005	1165	1
102403	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	TAN1503/102	09/04/2015	-44.165	-174.445	963	1252	2
102443	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	TAN1503/103	09/04/2015	-44.183	-174.448	1099	1254	5
102508	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	12/04/2015	TAN1503/117	11/05/2014	-44.128	-174.572	740	961	4
102558	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	TAN1503/119	11/04/2015	-44.200	-174.538	846	1034	1
9728	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	X494	06/07/1994	-43.839	-174.302	885		1
54157	Cnidaria	Anthozoa	Scleralcyonacea	n. fam.	Scleralcyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	TAN0905/115	27/06/2009	-44.136	-174.720	610	692	1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
54235	Cnidaria	Anthozoa	Scleractyonacea	n. fam.	Scleractyonacea n. fam. n. gen.	Bilewitch, Jaret	23/05/2023	TAN0905/118	27/06/2009	-44.163	-174.447	1040	1171	1
90878	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	17/04/2023	J703B	10/09/1973	-37.545	176.977	162		1
90885	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	17/04/2023	C814	25/02/1962	-37.667	178.940	209	157	2
90869	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	18/04/2023	A899	08/09/1963	-43.458	177.183	241		1
102564	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	17/04/2023	TAN1503/119	11/04/2015	-44.200	-174.538	846	1034	1
90872	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	17/04/2023	D39A	07/05/1963	-50.967	165.750	549		1
90888	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	18/04/2023	U573	04/02/1988	-33.534	170.107	1260		1
90877	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	17/04/2023	E855	17/03/1968	-33.167	169.933	742	716	1
163710	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	18/04/2023	C632	27/05/1961	-39.233	172.017	406		10
90871	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylasteridae indet.	Marriott, Peter	18/04/2023	B480	05/06/1961	-45.280	166.855	112	112	1
113520	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora	Marriott, Peter	22/05/2023	T34	13/03/1981	-48.665	-179.995	735		1
148126	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	23/05/2023	TAN2009/57	16/08/2020	-44.159	-174.554	486	659	3
90950	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	24/05/2023	G307	26/01/1968	-44.117	-179.217	402		1
102620	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	20/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	11
102490	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	17/04/2023	TAN1503/116	11/04/2015	-44.160	-174.555	497	590	25
102490	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	17/04/2023	TAN1503/116	11/04/2015	-44.160	-174.555	497	590	4
102563	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	17/04/2023	TAN1503/119	11/04/2015	-44.200	-174.538	846	1034	20
102563	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	17/04/2023	TAN1503/119	11/04/2015	-44.200	-174.538	846	1034	2
102658	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	23/05/2023	TAN1503/122	11/04/2015	-44.148	-174.748	570	600	25
148134	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	23/05/2023	TAN2009/58	16/08/2020	-44.202	-174.538	782	933	3
53568	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Calyptopora reticulata	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	20
160596	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	cf. Distichopora n. sp.	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	1
127132	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	SO254/36ROV10_BIOBOX9	09/02/2017	-39.989	178.214	777.9		2
160926	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN0413/93	13/11/2004	-37.476	177.216	180	179	1
26834	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN0616/70	10/11/2006	-41.289	176.587	731	720	2
160923	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN1104/59	11/03/2011	-35.360	178.511	1270	1410	1

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160921	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	W427	20/02/1995	-43.077	175.272	237	180	2
90957	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	24/05/2023	G382	06/02/1968	-43.450	-177.950	402		1
90868	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	24/05/2023	J485	07/12/1973	-50.633	167.633	320	365	1
3124	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	24/05/2023	KAH0204/40	18/04/2002	-34.164	173.964	820	805	1
104318	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	21/04/2023	KAH0204/44	18/04/2002	-34.266	174.103	850	840	1
104338	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	21/04/2023	KAH0204/52	19/04/2002	-34.055	174.808	910	820	3
90945	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	X102	21/11/1989	-37.471	177.217	192		1
163703	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	18/04/2023	S192	31/10/1979	-43.250	173.828	130		7
163708	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	18/04/2023	C623	07/05/1961	-44.442	-175.267	398	750	1
79250	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN1116/128	18/11/2011	-43.389	178.997	395	401	3
154043	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN0803/36	01/04/2008	-50.099	163.485	1144	1365	1
127235	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	SO254/80ROV17_BIOBOX5	22/02/2017	-40.047	178.136	882.9		1
27560	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN0616/12	04/11/2006	-40.040	178.145	749	787	1
163715	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	18/04/2023	C632	27/05/1961	-39.233	172.017	406		1
83378	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora	Marriott, Peter	22/05/2023	TAN1206/168	30/04/2012	-37.187	176.978	948	930	10
83331	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora verrucosa	Marriott, Peter	17/07/2023	TAN1206/166	30/04/2012	-37.184	176.984	928	928	11
54056	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora verrucosa	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	1
160929	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora verrucosa	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	1
154015	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Conopora verrucosa	Marriott, Peter	21/04/2023	TAN0803/19	30/03/2008	-48.532	164.948	1060	1112	3
160927	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	22/05/2023	TAN1206/168	30/04/2012	-37.187	176.978	948	930	1
148129	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	23/05/2023	TAN2009/57	16/08/2020	-44.159	-174.554	486	659	4
160930	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	2
83093	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	24/05/2023	TAN1206/130	27/04/2012	-37.227	176.991	953	966	1
160908	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	24/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	1
102498	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	17/04/2023	TAN1503/116	11/04/2015	-44.160	-174.555	497	590	20
102498	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	17/04/2023	TAN1503/116	11/04/2015	-44.160	-174.555	497	590	2

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90940	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	22/05/2023	TAN0205/101	28/04/2002	-34.777	178.511	825	771	1
127251	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	22/05/2023	SO254/85ROV19_BIOBOX17	24/02/2017	-35.612	178.852	1149.8	1157.9	1
105707	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	22/05/2023	NEP_11/3	15/03/2011	-35.350	178.541	1292		4
160598	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	1
90788	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Crypthelia fragilis	Marriott, Peter	21/04/2023	TAN0104/153	18/04/2001	-42.733	-179.899	1076	990	1
160907	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Distichopora	Marriott, Peter	20/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	1
163700	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Distichopora dispar	Marriott, Peter	21/04/2023	I693	18/03/1979	-49.093	178.883	778		1
163711	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Distichopora dispar	Marriott, Peter	17/04/2023	TAN0803/19	30/03/2008	-48.532	164.948	1060	1112	2
32823	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	17/02/2023	KOK0507/2	12/05/2005	-36.328	178.036	790	790	1
72824	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	TAN1104/110	18/03/2011	-35.713	178.484	581	724	1
91632	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	W427	20/02/1995	-43.077	175.272	237	180	2
90848	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	Z3885	10/05/1981	-44.601	167.818			1
90857	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	24/05/2023	S60	25/09/1978	-49.723	178.964	1520		1
160928	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	24/05/2023	TAN0905/112	27/06/2009	-44.143	-174.725	760	821	1
160934	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	7
102654	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	24/05/2023	TAN1503/122	11/04/2015	-44.148	-174.748	570	600	2
148123	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	24/05/2023	TAN2009/57	16/08/2020	-44.159	-174.554	486	659	7
160905	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	20/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	1
90870	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	18/04/2023	Q13	15/03/1978	-43.460	-179.782	415		1
91632	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	W427	20/02/1995	-43.077	175.272	237	180	2
163707	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	18/04/2023	C623	07/05/1961	-44.442	-175.267	398	750	1
163712	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	15/04/2023	A917	15/09/1963	-43.933	-179.250	203		1
90848	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	Z3885	10/05/1981	-44.601	167.818			1
127119	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	SO254/33ROV08_BIOBOX16	07/02/2017	-35.382	178.980	1204.7		3
160597	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	1
160601	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	20

NIWA Catalogue No.					Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
	Phylum	Class	Order	Family										
90785	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	17/04/2023	TAN0104/194	18/04/2001	-42.788	-179.997	1042	880	1
90811	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	17/04/2023	T47	14/03/1981	-49.965	177.543	1400		1
90883	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	17/04/2023	S30	18/09/1978	-50.683	167.680	265		1
82168	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	22/05/2023	TAN1206/25	17/04/2012	-36.330	178.035	866	847	6
90696	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina	Marriott, Peter	18/04/2023	B493	08/06/1961	-45.573	166.652	80	76	1
25450	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina cheilopora	Marriott, Peter	22/05/2023	TAN0604/55	01/06/2006	-42.726	-179.897	1030	1140	1
90766	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina cheilopora	Marriott, Peter	21/04/2023	TAN0104/198	18/04/2001	-42.765	179.927	1058		1
114371	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errina cheilopora	Marriott, Peter	22/05/2023	TAN0307/47	23/04/2003	-49.597	178.849	725	731	1
160933	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	4
160909	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis	Marriott, Peter	24/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	1
3134	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis n. sp.	Marriott, Peter	24/05/2023	KAH0204/29	17/04/2002	-34.163	173.962	790	782	1
102621	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis n. sp.	Marriott, Peter	24/05/2023	TAN1503/121	11/04/2015	-44.142	-174.713	724	838	35
148127	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis n. sp.	Marriott, Peter	24/05/2023	TAN2009/57	16/08/2020	-44.159	-174.554	486	659	3
148151	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis n. sp.	Marriott, Peter	24/05/2023	TAN2009/58	16/08/2020	-44.202	-174.538	782	933	3
160600	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Errinopsis n. sp.	Marriott, Peter	24/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	20
160599	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Inferiolabiata	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	1
25459	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	22/05/2023	TAN0604/113	07/06/2006	-42.728	-179.899	1000	1107	1
148128	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	24/05/2023	TAN2009/57	16/08/2020	-44.159	-174.554	486	659	1
91055	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	KAH0011/41	05/11/2000	-37.550	176.971	260	154	2
163704	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	C623	07/05/1961	-44.442	-175.267	398	750	3
25451	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	TAN0604/96	04/06/2006	-42.791	-179.987	930	1040	1
124737	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	TAN0604/100	04/06/2006	-42.716	-179.962	985	1050	1
90688	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	TAN0104/288	19/04/2001	-42.761	-179.988	972	890	1
90781	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	TAN0104/395	21/04/2001	-42.764	-179.988	927	886	1
90862	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora	Marriott, Peter	18/04/2023	TAN0107/1	19/05/2001	-35.742	178.503	470	260	1
91876	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora cryptocymas	Marriott, Peter	22/05/2023	E306	09/04/1965	-34.083	171.792	263		1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
105400	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora sarmentosa	Marriott, Peter	22/05/2023	TAN0413/93	13/11/2004	-37.476	177.216	180	179	3
163713	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidopora?	Marriott, Peter	17/04/2023	U606	10/02/1988	-31.912	172.790	1100		1
72321	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca	Marriott, Peter	22/05/2023	TAN1104/31	07/03/2011	-35.354	178.525	1150	1400	2
160936	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca	Marriott, Peter	24/05/2023	TAN0905/112	27/06/2009	-44.143	-174.725	760	821	1
104369	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca	Marriott, Peter	18/04/2023	C623	07/05/1961	-44.442	-175.267	398	750	1
72441	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca	Marriott, Peter	22/05/2023	TAN1104/48	09/03/2011	-35.348	178.543	1180	1306	1
160595	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca	Marriott, Peter	23/05/2023	TAN0905/97	26/06/2009	-44.147	-174.690	440	600	1
72543	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca fascicularis	Marriott, Peter	22/05/2023	TAN1104/59	11/03/2011	-35.360	178.511	1270	1410	1
163705	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Lepidotheca n. sp. ?	Marriott, Peter	21/04/2023	TAN0803/19	30/03/2008	-48.532	164.948	1060	1112	2
163701	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Leptohelia microstylus	Marriott, Peter	21/04/2023	I693	18/03/1979	-49.093	178.883	778		1
90865	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Sporadopora	Marriott, Peter	21/04/2023	W252	15/09/1993	-43.628	178.997	400	428	1
160925	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	22/05/2023	TAN1206/168	30/04/2012	-37.187	176.978	948	930	1
90847	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	24/05/2023	D74	12/05/1963	-50.928	165.913	168		1
53992	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	24/05/2023	TAN0905/112	27/06/2009	-44.143	-174.725	760	821	4
160932	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	10
163702	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	21/04/2023	KAH0204/52	19/04/2002	-34.055	174.808	910	820	4
90801	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	21/04/2023	I693	18/03/1979	-49.093	178.883	778		4
163709	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	18/04/2023	C623	07/05/1961	-44.442	-175.267	398	750	
163735	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	17/04/2023	V480	07/06/1994	-41.293	176.550	725		2
90880	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	17/04/2023	U606	10/02/1988	-31.912	172.790	1100		3
163706	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	21/04/2023	TAN0803/19	30/03/2008	-48.532	164.948	1060	1112	1
90876	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	15/04/2023	A917	15/09/1963	-43.933	-179.250	203		1
124579	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	18/04/2023	TAN0604/10	28/05/2006	-42.765	-179.928	1005	1082	1
163714	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster	Marriott, Peter	18/04/2023	C632	27/05/1961	-39.233	172.017	406		1
160602	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster eguchii	Marriott, Peter	22/05/2023	SO254/33ROV08_BIOBOX16	07/02/2017	-35.382	178.980	1204.7		1
26832	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster eguchii	Marriott, Peter	22/05/2023	TAN0616/18	05/11/2006	-39.541	178.332	775	810	1

NIWA Catalogue No.	Phylum	Class	Order	Family	Full Taxon	Determiner	Determined Date	Station ID	Date	Latitude1	Longitude1	Depth 1	Depth 2	Count
54062	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster imbricatus	Marriott, Peter	24/05/2023	TAN0905/113	27/06/2009	-44.150	-174.757	519	609	1
160910	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Stylaster?	Marriott, Peter	22/05/2023	SO254/33ROV08_BIOBOX16	07/02/2017	-35.382	178.980	1204.7		2
90761	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Systemapora	Marriott, Peter	17/04/2023	TAN0104/194	18/04/2001	-42.788	-179.997	1042	880	1
90787	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Systemapora	Marriott, Peter	17/04/2023	TAN0104/394	21/04/2001	-42.761	-179.989	920	771	1
90799	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Systemapora	Marriott, Peter	07/04/2023	TAN0104/198	18/04/2001	-42.765	179.927	1058		2
90800	Cnidaria	Hydrozoa	Anthoathecata	Stylasteridae	Systemapora	Marriott, Peter	17/04/2023	TAN0104/194	18/04/2001	-42.788	-179.997	1042	880	6

Appendix B All records of protected corals extracted from the NIWA Invertebrate Collection database niwainvert on 19 July 2023.

This data extract has 9597 rows, so has been provided only as a separate Excel sheet.