

Supplementary Material

MATERIALS & METHODS

S1. Practical implementation of the interaction web model

The *TI* and *NTI* web matrices were constructed in *R* (version 4.3.0) (R-Core Team 2022) using the self-written functions *fillTI* and *fillNTI* (link available in the data statement). In the first step, the functions extracted three arrays from the input file: Array 1 identified records of all taxa that were present, Array 2 listed their diet items/ preys, and Array 3 included information about any commensal relationships among taxa, which may be obligatory or facultative. Data from Arrays 1 and 2 contributed to the development of the *TI* matrix, and data from arrays 1 and 3 were used to develop the *NTI* matrix.

Array 1 was combined with a list of additional diet items (e.g., bacteria, sedimentary detritus, suspended detritus) for all taxa that were not predators, and a compartment called “Astrophorina sponge” to specifically assess *NTIs* with any taxon belonging to sponges of the suborder Astrophorina. This extended array 1 formed the structure of the squared *NTI* and *TI* matrices as follows:

NTI or TI

$$= \begin{bmatrix} \text{Food compartment}_{1,2,\dots,n} & \text{Astrophorina sponge} & \text{Faunal compartment}_{1,2,\dots,n} \\ \text{Astrophorina sponge} & \dots & \dots \\ \text{Faunal compartment}_{1,2,\dots,n} & \dots & \dots \end{bmatrix}$$

Subsequently, the *TI* matrix was filled by the *fillTI* function with the information from Array 2. Rows in the matrix were prey, while columns were predators; the cipher 1 described a *TI*, and cipher 0 meant that there was no *TI*. By default, there were no *TIs* with the Astrophorina sponge compartment, as *TIs* to specific Astrophorina sponge species were assessed separately. For instance, when two species of the suborder Astrophorina were present in a faunal assemblage, *TIs* between these two species were listed individually as *TIs* between sponge species A and its predators and sponge species B and its predators.

The *NTI* matrix was filled by the *fillNTI* function with information from Array 3 from rows to columns. An obligatory *NTI* was defined in the matrix as 1, and a facultative *NTI* was defined as 2.

The role of a specific faunal compartment or the Astrophorina compartment for *TIs* and *NTIs* in a specific assemblage was assessed with the self-written function *Remove* (link available in the data statement). This function identified all *TIs*, facultative *NTIs*, and obligatory *NTIs* within a selected compartment, which would be lost as a level 1 loss. Subsequently, the function estimated maximum secondary losses and continued to iteratively assess any further maximum higher-level losses until no more compartments were lost, and the results were reported in a summary table (Table S2).

Table S1. Taxonomic resolution of faunal interaction-web compartments. Specification of the lowest taxonomic level to which the compartments for (A) the deep-sea coral assemblage, (B) the lower slope assemblage 1, (C) the lower slope assemblage 2, and (D) the deep-sea sponge assemblage interaction webs were resolved for the size classes protozoan and metazoan meiobenthos, macrobenthos, invertebrate megabenthos, and fish.

A) Deep-sea coral assemblage

Phylum	Class	Subclass	Order	Family	Lowest taxonomic level
Prozoan and metazoan meiobenthos					
Foraminifera					Phylum
Nematoda					Phylum
Macrobenthos					
Annelida	Polychaeta	Errantia	Eunicida	Eunicidae	Species
Annelida	Polychaeta	Errantia	Phyllodocida	Goniadidae	Genus
Annelida	Polychaeta	Errantia	Phyllodocida	Aphroditidae	Genus
Annelida	Polychaeta	Errantia	Eunicida	Onuphidae	Genus
Annelida	Polychaeta	Sedentaria		Maldanidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Nereididae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Polynoidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida	Sabellidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida	Serpulidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida	Siboglinidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda		Order
Arthropoda	Malacostraca	Eumalacostraca	Cumacea		Order
Arthropoda	Malacostraca	Eumalacostraca	Isopoda		Order
Arthropoda	Malacostraca	Eumalacostraca	Mysida		Order
Arthropoda	Malacostraca	Eumalacostraca	Tanaidacea		Order
Arthropoda	Hexanauplia	Copepoda			Subclass
Arthropoda	Ostracoda				Class
Echinodermata	Echinoidea	Euechinoidea	Camarodonta	Echinidae	Species
Mollusca	Caudofoveata	-	Chaetodermatida	Chaetodermatidae	Family
Nemertea					Phylum
Invertebrate megabenthos					

Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Acanthephyridae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Aristeidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Benthescymidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Cranonidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Lithodidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Munididae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Munidopsidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Nematocarinidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Pandalidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Pasiphaeidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Polychelidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Sergestidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Thoridea	Species
Arthropoda	Malacostraca	Eumalacostraca	Euphausiacea		Order
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida	Eucopiidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida	Gnathophausiidae	Species
Arthropoda	Pycnogonida	-	Pantopoda	Colossendeidae	Genus
Arthropoda	Hexanauplia	Thecostraca	Scalpelliformes	Scalpellidae	Family
Brachiopoda	Rhynchonellata	-	Terebratulida	Cancellothyrididae	Species
Bryozoa					Phylum
Chaetognatha					Phylum
Chordata	Ascidiacea	-	Aplousobranchia	Didemnidae	Family
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinernidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinostolidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinoscyphiidae	Family
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Hormathiidae	Species
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Liponematidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Antipatharia	Schizopathidae	Species
Cnidaria	Anthozoa	Hexacorallia	Corallimorpharia		Order
Cnidaria	Anthozoa	Hexacorallia	Scleractinia	Caryophylliidae	Species
Cnidaria	Anthozoa	Hexacorallia	Scleractinia	Flabellidae	Species
Cnidaria	Anthozoa	Hexacorallia	Zoantharia	Epizoanthidae	Family
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Acanthogorgiidae	Genus

Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Alcyoniidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Anthothelidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Chrysogorgiidae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Isididae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Nephtheidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Paragorgiidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Plexauridae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Primnoidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Anthoptilidae	Genus
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Funiculinidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Halapteridae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Kophobelemnidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Pennatulidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Protoptilidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Umbellulidae	Genus
Cnidaria	Scyphozoa	Coronamedusae	Coronatae	Atollidae	Genus
Cnidaria	Hydrozoa	Hydroidolina	Anthoathecata	Stylasteridae	Family
Cnidaria	Hydrozoa	Hydroidolina	Leptothecata	Aglaoopheniidae	Genus
Cnidaria	Hydrozoa	Hydroidolina	Leptothecata	Sertulariidae	Family
Echinodermata	Asteroidea	-	Brisingida	Brisingidae	Family
Echinodermata	Asteroidea	-	Forcipulatida	Asteriidae	Species
Echinodermata	Asteroidea	-	Forcipulatida	Zoroasteridae	Species
Echinodermata	Asteroidea	-	Notomyotida	Benthopectinidae	Family
Echinodermata	Asteroidea	-	Paxillosida	Ctenodiscidae	Species
Echinodermata	Asteroidea	-	Paxillosida	Astropectinidae	Species
Echinodermata	Asteroidea	-	Paxillosida	Pseudarchasteridae	Genus
Echinodermata	Asteroidea	-	Spinulosida	Echinasteridae	Genus
Echinodermata	Asteroidea	-	Valvatida	Goniasteridae	Species
Echinodermata	Asteroidea	-	Valvatida	Poraniidae	Species
Echinodermata	Asteroidea	-	Valvatida	Asterinidae	Species
Echinodermata	Asteroidea	-	Velatida	Pterasteridae	Genus
Echinodermata	Asteroidea	-	Valvatida	Solasteridae	Species
Echinodermata	Crinoidea	Articulata	Comatulida	Rhizocrinidae	Genus

Echinodermata	Echinoidea	Euechinoidea	Spatangoida	Schizasteridae	Species
Echinodermata	Echinoidea	Euechinoidea	Echinothurioida	Phormosomatidae	Species
Echinodermata	Holothuroidea	Actinopoda	Molpadida	Caudinidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Amphilepidida	Amphilepididae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Amphilepidida	Ophiopholidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Euryalida	Asteronychidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Euryalida	Gorgonocephalidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiacanthida	Ophiacanthidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophioscolecida	Ophioscolecidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiosphalmidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiuridae	Genus
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiopyrgidae	Species
Hemichordata	Enteropneusta				Class
Mollusca	Bivalvia	Autobranchia	Arcida	Limopsidae	Genus
Mollusca	Bivalvia	Autobranchia	Carditida	Astartidae	Genus
Mollusca	Bivalvia	Autobranchia	Pectinida	Pectinidae	Species
Mollusca	Cephalopoda	Coleoidea	Octopoda	Bathypolypodidae	Species
Mollusca	Cephalopoda	Coleoidea	Octopoda	Octopodidae	Family
Mollusca	Cephalopoda	Coleoidea	Octopoda	Chiroteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Cranchiidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Gonatidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Histioteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Ommastrephidae	Species
Mollusca	Cephalopoda	Coleoidea	Sepiida	Sepiolidae	Genus
Mollusca	Cephalopoda	Coleoidea	Vampyromorpha	Vampyroteuthidae	Genus
Mollusca	Gastropoda	Heterobranchia	Cephalaspidea	Scaphandridae	Species
Mollusca	Gastropoda	Caenogastropoda	Littorinimorpha	Aporrhaidae	Species
Mollusca	Gastropoda	Caenogastropoda	Neogastropoda	Buccinidae	Genus
Mollusca	Gastropoda	Caenogastropoda	Neogastropoda	Muricidae	Species
Mollusca	Gastropoda	Heterobranchia	Nudibranchia		Order
Mollusca	Polyplocophora	Neoloricata	Chitonida	Mopaliidae	Genus
Mollusca	Scaphopoda				Class
Porifera	Hexactinellida	Hexasterophora	Lyssacinosa	Rossellidae	Genus

Porifera	Demospongiae	Heteroscleromorpha	Polymastiida	Polymastiidae	Genus
Porifera	Demospongiae	Heteroscleromorpha	Suberitida	Stylocordylidae	Genus
Porifera	Demospongiae	Heteroscleromorpha	Poecilosclerida	Cladorhizidae	Family
Porifera	Demospongiae	Heteroscleromorpha	Tetractinellida	Geodiidae	Family
Porifera	Demospongiae	Heteroscleromorpha	Tetractinellida	Tetillidae	Family
Sipuncula					Phylum
Fish					
Chordata	Actinopterygii	-	Anguilliformes	Nemichthyidae	Species
Chordata	Actinopterygii	-	Anguilliformes	Serrivomeridae	Genus
Chordata	Actinopterygii	-	Anguilliformes	Synaphobranchidae	Species
Chordata	Actinopterygii	-	Argentiniformes	Argentinidae	Species
Chordata	Actinopterygii	-	Argentiniformes	Bathylagidae	Species
Chordata	Actinopterygii	-	Argentiniformes	Microstomatidae	Species
Chordata	Actinopterygii	-	Aulopiformes	Bathysauridae	Species
Chordata	Actinopterygii	-	Aulopiformes	Notosudidae	Species
Chordata	Actinopterygii	-	Aulopiformes	Paralepididae	Species
Chordata	Actinopterygii	-	Beryciformes	Anoplogastridae	Species
Chordata	Actinopterygii	-	Cetomimiformes	Rondeletiidae	Species
Chordata	Actinopterygii	-	Gadiformes	Gadidae	Species
Chordata	Actinopterygii	-	Gadiformes	Lotidae	Species
Chordata	Actinopterygii	-	Gadiformes	Macrouridae	Species
Chordata	Actinopterygii	-	Gadiformes	Moridae	Species
Chordata	Actinopterygii	-	Gadiformes	Phycidae	Species
Chordata	Actinopterygii	-	Lophiiformes	Ceratiidae	Species
Chordata	Actinopterygii	-	Lophiiformes	Linophryinae	Family
Chordata	Actinopterygii	-	Lophiiformes	Oneirodidae	Species
Chordata	Actinopterygii	-	Myctophiformes	Myctophidae	Genus
Chordata	Actinopterygii	-	Notacanthiformes	Notacanthidae	Species
Chordata	Actinopterygii	-	Osmeriformes	Alepocephalidae	Species
Chordata	Actinopterygii	-	Osmeriformes	Platyroctidae	Species
Chordata	Actinopterygii	-	Perciformes	Anarhichadidae	Species
Chordata	Actinopterygii	-	Perciformes	Chiasmodontidae	Species
Chordata	Actinopterygii	-	Perciformes	Zoarcidae	Species

Chordata	Actinopterygii	-	Pleuronectiformes	Pleuronectidae	Species
Chordata	Actinopterygii	-	Saccopharyngiformes	Eurypharyngidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Agonidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Liparidae	Genus
Chordata	Actinopterygii	-	Scorpaeniformes	Psychrolutidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Sebastidae	Species
Chordata	Actinopterygii	-	Stephanoberyciformes	Melamphaidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Gonostomatidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Stemoptychinae	Species
Chordata	Actinopterygii	-	Stomiiformes	Stomiidae	Species
Chordata	Elasmobranchii	Neoselachii	Rajiformes	Arhynchobatidae	Species
Chordata	Elasmobranchii	Neoselachii	Rajiformes	Rajidae	Species
Chordata	Elasmobranchii	Neoselachii	Squaliformes	Etmopteridae	Species
Chordata	Elasmobranchii	Neoselachii	Squaliformes	Somniosidae	Species

B) Lower slope assemblage 1

Phylum	Class	Subclass	Order	Family	Lowest taxonomic level
Prozoan and metazoan meiobenthos					
Nematoda					Phylum
Macrobenthos					
Annelida	Polychaeta	Errantia	Eunicida	Dorvilleidae	Genus
Annelida	Polychaeta	Errantia	Eunicida	Eunicidae	Species
Annelida	Polychaeta	Errantia	Eunicida	Lumbrineridae	Genus
Annelida	Polychaeta	Errantia	Eunicida	Onuphidae	Species
Annelida	Polychaeta	Errantia	Phyllodocida	Aphroditidae	Genus
Annelida	Polychaeta	Errantia	Phyllodocida	Goniadidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Nephtyidae	Genus
Annelida	Polychaeta	Errantia	Phyllodocida	Polynoidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida	Siboglinidae	Family
Annelida	Polychaeta	Sedentaria	-	Chaetopteridae	Family
Annelida	Polychaeta	Sedentaria	-	Maldanidae	Species
Annelida	Polychaeta	Echiura			Subclass
Arthropoda	Hexanauplia	Copepoda			Subclass
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Caprellidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda		Suborder
Arthropoda	Malacostraca	Eumalacostraca	Cumacea		Order
Arthropoda	Malacostraca	Eumalacostraca	Isopoda		Order
Arthropoda	Malacostraca	Eumalacostraca	Mysida		Order
Arthropoda	Malacostraca	Eumalacostraca	Tanaidacea		Order
Arthropoda	Ostracoda				Class
Mollusca	Caudofoveata	-	Chaetodermatida	Chaetodermatidae	Family
Nemertea					Phylum
Priapulida					Phylum
Invertebrate megabenthos					
Arthropoda	Hexanauplia				Class
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	AcanthePHYRIDAE	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Benthescymidae	Species

Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Lithodidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Munidopsidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Nematocarcinidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Pandalidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Pasiphaeidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Polychelidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Sergestidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Euphausiacea		Order
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida	Eucopiidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida	Gnathophausiidae	Species
Arthropoda	Pycnogonida	-	Pantopoda	Colossendeidae	Genus
Brachiopoda	Rhynchonellata	-	Terebratulida	Cancellothyrididae	Species
Bryozoa					Phylum
Chaetognatha					Phylum
Chordata	Ascidiacea	-	Aplousobranchia	Didemnidae	Family
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Hormathiidae	Species
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinernidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actiniidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinoscyphiidae	Family
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Alcyoniidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Chrysogorgiidae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Isididae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Nephtheidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Antipatharia	Schizopathidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Anthoptilidae	Genus
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Funiculinidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Halopteridae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Kophobelemnidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Pennatulidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Protoptilidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Umbellulidae	Genus
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Virgulariidae	Species

Cnidaria	Anthozoa	Hexacorallia	Scleractinia	Flabellidae	Species
Cnidaria	Anthozoa	Octocorallia	Telestacea		Order
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Protoptilidae	Species
Cnidaria	Anthozoa	Ceriantharia			Subclass
Cnidaria	Hydrozoa	Hydroidolina	Leptothecata	Aglaopheniidae	Genus
Cnidaria	Scyphozoa	Coronamedusae	Coronatae	Atollidae	Genus
Cnidaria	Scyphozoa	Coronamedusae	Coronatae	Periphyllidae	Family
Echinodermata	Asteroidea	-	Brisingida	Brisingidae	Family
Echinodermata	Asteroidea	-	Forcipulatida	Zoroasteridae	Species
Echinodermata	Asteroidea	-	Notomyotida	Benthopectinidae	Family
Echinodermata	Asteroidea	-	Paxillosida	Astropectinidae	Species
Echinodermata	Asteroidea	-	Paxillosida	Pseudarchasteridae	Genus
Echinodermata	Asteroidea	-	Spinulosida	Echinasteridae	Family
Echinodermata	Asteroidea	-	Valvatida	Goniasteridae	Species
Echinodermata	Asteroidea	-	Valvatida	Poraniidae	Species
Echinodermata	Asteroidea	-	Valvatida	Solasteridae	Family
Echinodermata	Asteroidea	-	Velatida	Pterasteridae	Family
Echinodermata	Asterozoa	Ophiuroidea	Ophintegrida	Amphiuroidea	Species
Echinodermata	Echinoidea	Euechinoidea	Echinothurioida	Echinothuriidae	Family
Echinodermata	Echinoidea	Euechinoidea	Echinothurioida	Phormosomatidae	Species
Echinodermata	Echinoidea	Euechinoidea	Spatangoida	Schizasteridae	Species
Echinodermata	Holothuroidea	Actinopoda	Dendrochirotida	Psolidae	Genus
Echinodermata	Holothuroidea	Actinopoda	Molpadida	Caudinidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Amphilepidida	Ophionereididae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Euryalida	Asteronychidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Euryalida	Gorgonocephalidae	Family
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiacanthida	Ophiacanthidae	Genus
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiosphalmidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiuridae	Genus
Hemichordata	Enteropneusta	Hemichordata			Class
Mollusca	Bivalvia	Autobranchia	Carditida	Astartidae	Genus
Mollusca	Bivalvia	Protobranchia	Nuculanida	Nuculanidae	Genus
Mollusca	Bivalvia	Protobranchia	Nuculanida	Yoldiidae	Species

Mollusca	Cephalopoda	Coleoidea	Octopoda	Bathypolypodidae	Species
Mollusca	Cephalopoda	Coleoidea	Octopoda	Cirroteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Octopoda	Megaleledonidae	Genus
Mollusca	Cephalopoda	Coleoidea	Octopoda	Octopodidae	Family
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Chiroteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Cranchiidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Gonatidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Histioteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Ommastrephidae	Species
Mollusca	Cephalopoda	Coleoidea	Vampyromorpha	Vampyroteuthidae	Genus
Mollusca	Gastropoda	Vetigastropoda	Lepetellida	Fissurellidae	Genus
Mollusca	Gastropoda	Caenogastropoda	Littorinimorpha	Aporrhaidae	Species
Mollusca	Gastropoda	Caenogastropoda	Neogastropoda	Buccinidae	Genus
Mollusca	Gastropoda	-	Nudibranchia		Order
Mollusca	Scaphopoda	-	Dentaliida	Dentalliidae	Genus
Platyhelminthes					Phylum
Porifera	Demospongiae	Heteroscleromorpha	Polymastiida	Polymastiidae	Genus
Porifera	Demospongiae	Heteroscleromorpha	Tetractinellida	Geodiidae	Family
Sipuncula					Phylum
Fish					
Chordata	Actinopterygii	-	Anguilliformes	Nemichthyidae	Species
Chordata	Actinopterygii	-	Anguilliformes	Nettastomadtidae	Species
Chordata	Actinopterygii	-	Anguilliformes	Serrivomeridae	Genus
Chordata	Actinopterygii	-	Anguilliformes	Synaphobranchidae	Species
Chordata	Actinopterygii	-	Argentiniiformes	Bathylagidae	Species
Chordata	Actinopterygii	-	Argentiniiformes	Microstomatidae	Species
Chordata	Actinopterygii	-	Aulopiformes	Anopteridae	Species
Chordata	Actinopterygii	-	Aulopiformes	Notosudidae	Species
Chordata	Actinopterygii	-	Aulopiformes	Paralepididae	Species
Chordata	Actinopterygii	-	Beryciformes	Anoplogastridae	Species
Chordata	Actinopterygii	-	Beryciformes	Trachichthyidae	Species
Chordata	Actinopterygii	-	Cetomimiformes	Rondeletiidae	Species
Chordata	Actinopterygii	-	Gadiformes	Lotidae	Species

Chordata	Actinopterygii	-	Gadiformes	Macrouridae	Species
Chordata	Actinopterygii	-	Gadiformes	Moridae	Species
Chordata	Actinopterygii	-	Lophiiformes	Ceratiidae	Species
Chordata	Actinopterygii	-	Lophiiformes	Melanocetidae	Species
Chordata	Actinopterygii	-	Lophiiformes	Oneirodidae	Species
Chordata	Actinopterygii	-	Myctophiformes	Myctophidae	Genus
Chordata	Actinopterygii	-	Notacanthiformes	Notacanthidae	Species
Chordata	Actinopterygii	-	Osmeriformes	Alepocephalidae	Species
Chordata	Actinopterygii	-	Osmeriformes	Platyroctidae	Species
Chordata	Actinopterygii	-	Perciformes	Chiasmodontidae	Species
Chordata	Actinopterygii	-	Perciformes	Zoarcidae	Species
Chordata	Actinopterygii	-	Perciformes	Pleuronectidae	Species
Chordata	Actinopterygii	-	Pleuronectiformes	Eurypharyngidae	Species
Chordata	Actinopterygii	-	Saccopharyngiformes	Saccopharyngidae	Genus
Chordata	Actinopterygii	-	Saccopharyngiformes	Cottidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Liparidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Psychrolutidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Sebastidae	Species
Chordata	Actinopterygii	-	Scorpaeniformes	Melamphidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Gonostomatidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Sternoptychidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Stomiidae	Species
Chordata	Elasmobranchii	Neoselachii	Carcharhiniformes	Pentanchidae	Genus
Chordata	Elasmobranchii	Neoselachii	Rajiformes	Arhynchobatidae	Species
Chordata	Elasmobranchii	Neoselachii	Rajiformes	Rajidae	Species
Chordata	Elasmobranchii	Neoselachii	Squaliformes	Etmopteridae	Species
Chordata	Holocephali	-	Chimaeriformes	Chimaeridae	Species

C) Lower slope assemblage 2

Phylum	Class	Subclass	Order	Family	Lowest taxonomic level
Prozoan and metazoan meiobenthos					
Arthropoda					Order
Nematoda					Phylum
Macrobenthos					
Annelida	Polychaeta	Errantia	Amphinomida	Amphinomidae	Family
Annelida	Polychaeta	Errantia	Eunicida	Dorvilleidae	Family
Annelida	Polychaeta	Errantia	Eunicida	Eunicidae	Species
Annelida	Polychaeta	Errantia	Eunicida	Lumbrineridae	Family
Annelida	Polychaeta	Errantia	Eunicida	Onuphidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Aphroditidae	Genus
Annelida	Polychaeta	Errantia	Phyllodocida	Glyceridae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Goniadidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Hesionidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Nephtyidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Nereididae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Phyllodocidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Pilargidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Polynoidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Sphaerodoridae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Syllidae	Family
Annelida	Polychaeta	Sedentaria	Spionida	Poecilochaetidae	Family
Annelida	Polychaeta	Errantia	Spionida	Spionidae	Family
Annelida	Polychaeta	Sedentaria	Terebellida	Ampharetidae	Family
Annelida	Polychaeta	Sedentaria	Terebellida	Cirratulidae	Family
Annelida	Polychaeta	Sedentaria	Terebellida	Terebellidae	Family
Annelida	Polychaeta	Sedentaria	-	Capitellidae	Family
Annelida	Polychaeta	Sedentaria	-	Maldanidae	Family
Annelida	Polychaeta	Sedentaria	-	Orbiniidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida	Sabellidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida	Siboglinidae	Family

Annelida	Polychaeta	Sedentaria	-	Chaetopteridae	Family
Annelida	Polychaeta	Sedentaria	-	Cossuridae	Family
Annelida	Polychaeta	Sedentaria	-	Opheliidae	Family
Annelida	Polychaeta	Sedentaria	-	Paraonidae	Family
Arthropoda	Ostracoda				Class
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Ampeliscidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Caprellidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Corophiidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Dulichiiidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Haustoriidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Isaeidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Ischyroceridae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Oedicerotidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Phoxocephalidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Pleustidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Stegocephalidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Stenothoidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Unciolidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda		Suborder
Arthropoda	Malacostraca	Eumalacostraca	Decapoda		Genus
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Arcturidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Gnathiidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Ischnomesidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Munnidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Munnopsidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Janiroidea incertae sedis	Family
Arthropoda	Malacostraca	Phyllocarida	Leptostraca		Order
Arthropoda	Malacostraca	Eumalacostraca	Mysida		Order
Arthropoda	Malacostraca	Eumalacostraca	Tanaidacea	Sphyrapodidae	Genus
Arthropoda	Hexanauplia	Copepoda			Subclass
Echinodermata	Echinoidea				Class
Mollusca	Caudofoveata	-	Chaetodermatida		Order

Nemertea					Phylum
Priapulida	-				Phylum
Invertebrate megabenthos					
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda	Lysianassidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Acanthephyridae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Aristeidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Benthescymidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Lithodidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Munidopsidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Pandalidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Pasiphaeidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Polychelidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Decapoda	Sergestidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Euphausiacea	Euphausiidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Leptanthuridae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida	Eucopiidae	Species
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida	Gnathophausiidae	Species
Arthropoda	Pycnogonida	-	Pantopoda	Colossendeidae	Genus
Brachiopoda	Rhynchonellata	-	Terebratulida	Cancellothyrididae	Species
Chaetognatha					Phylum
Chordata	Ascidiacea				Class
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Hormathiidae	Species
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinoscyphiidae	Family
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Alcyoniidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Chrysogorgiidae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Isididae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Nephtheidae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Plexauridae	Genus
Cnidaria	Anthozoa	Hexacorallia	Antipatharia	Schizopathidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Anthoptilidae	Genus
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Funiculinidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Halopteridae	Species

Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Kophobelemnidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Pennatulidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Protoptilidae	Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea	Umbellulidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Scleractinia	Flabellidae	Species
Cnidaria	Anthozoa	Octocorallia	Telestacea		Order
Cnidaria	Anthozoa	Hexacorallia	Zoantharia	Epizoanthidae	Order
Cnidaria	Hydrozoa				Family
Cnidaria	Scyphozoa	Coronamedusae	Coronatae	Atollidae	Family
Cnidaria	Scyphozoa	Coronamedusae	Coronatae	Periphyllidae	Family
Echinodermata	Asteroidea	-	Brisingida	Brisingidae	Family
Echinodermata	Asteroidea	-	Forcipulatida	Zoroasteridae	Species
Echinodermata	Asteroidea	-	Notomyotida	Benthopectinidae	Family
Echinodermata	Asteroidea	-	Paxillosida	Astropectinidae	Species
Echinodermata	Asteroidea	-	Paxillosida	Pseudarchasteridae	Genus
Echinodermata	Asteroidea	-	Spinulosida	Echinasteridae	Family
Echinodermata	Asteroidea	-	Valvatida	Goniasteridae	Species
Echinodermata	Asteroidea	-	Valvatida	Solasteridae	Family
Echinodermata	Crinoidea				Class
Echinodermata	Echinoidea	Euechinoidea	Echinothurioida	Echinothuriidae	Family
Echinodermata	Echinoidea	Euechinoidea	Echinothurioida	Phormosomatidae	Species
Echinodermata	Holothuroidea				Class
Echinodermata	Ophiuroidea	Myophiuroidea	Amphilepidida	Ophiopholidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Euryalida	Asteronychidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiacanthida	Ophiacanthidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiosphalmidae	Species
Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiuridae	Genus
Ephyrina spp	Crustacea	Malacostraca	Eucarida	Oplophoroidea	Genus
Mollusca	Bivalvia	Autobranchia	Carditida	Astartidae	Genus
Mollusca	Bivalvia	Protobranchia	Nuculanida	Nuculanidae	Genus
Mollusca	Bivalvia	Protobranchia	Nuculida	Nuculidae	Genus
Mollusca	Cephalopoda	Coleoidea	Octopoda	Bathypolypodidae	Species
Mollusca	Cephalopoda	Coleoidea	Octopoda	Cirroteuthidae	Species

Mollusca	Cephalopoda	Coleoidea	Octopoda	Megaleledonidae	Genus
Mollusca	Cephalopoda	Coleoidea	Octopoda	Octopodidae	Family
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Chiroteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Cranchiidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Gonatidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Histioteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Ommastrephidae	Species
Mollusca	Cephalopoda	Coleoidea	Sepiida	Sepiolidae	Genus
Mollusca	Gastropoda	Caenogastropoda	Neogastropoda	Buccinidae	Genus
Mollusca	Gastropoda	-	Nudibranchia		Order
Mollusca	Scaphopoda				Class
Porifera	Demospongiae	-	Polymastiida	Polymastiidae	Family
Porifera	Demospongiae	-	Tetractinellida	Geodiidae	Species
Porifera	Demospongiae	-	Tetractinellida	Pachastrellidae	Genus
Porifera	Hexactinellida	Hexasterophora	Lyssacinosida	Rossellidae	Genus
Sipuncula	Sipunculidea	-	Golfingiida	Sipunculidae	Family
Fish					
Chordata	Actinopterygii		Aulopiformes	Alepisauridae	Species
Chordata	Actinopterygii		Osmeriformes	Alepocephalidae	Species
Chordata	Actinopterygii		Perciformes	Anarhichadidae	Species
Chordata	Actinopterygii		Beryciformes	Anoplogastridae	Species
Chordata	Actinopterygii		Aulopiformes	Anopteridae	Species
Chordata	Elasmobranchii	Neoselachii	Rajiformes	Arhynchobatidae	Species
Chordata	Actinopterygii		Argentiniiformes	Bathylagidae	Species
Chordata	Actinopterygii		Perciformes	Chiasmodontidae	Species
Chordata	Holocephali		Chimaeriformes	Chimaeridae	Species
Chordata	Elasmobranchii	Neoselachii	Squaliformes	Etmopteridae	Species
Chordata	Actinopterygii		Saccopharyngiformes	Eurypharyngidae	Species
Chordata	Actinopterygii		Stomiiformes	Gonostomatidae	Species
Chordata	Actinopterygii		Aulopiformes	Ipnopidae	Species
Chordata	Actinopterygii		Lophiiformes	Linophrynidae	Family
Chordata	Actinopterygii		Scorpaeniformes	Liparidae	Species

Chordata	Actinopterygii		Gadiformes	Lotidae	Species
Chordata	Actinopterygii		Gadiformes	Macrouridae	Species
Chordata	Actinopterygii		Stephanoberyciformes	Melamphaidae	Species
Chordata	Actinopterygii		Gadiformes	Moridae	Species
Chordata	Actinopterygii		Myctophiformes	Myctophidae	Genus
Chordata	Actinopterygii		Anguilliformes	Nemichthyidae	Species
Chordata	Actinopterygii		Notacanthiformes	Notacanthidae	Species
Chordata	Actinopterygii		Aulopiformes	Notosudidae	Species
Chordata	Actinopterygii		Lophiiformes	Oneirodidae	Family
Chordata	Actinopterygii		Aulopiformes	Paralepididae	Species
Chordata	Elasmobranchii	Neoselachii	Carcharhiniiformes	Pentanchidae	Genus
Chordata	Actinopterygii		Osmeriformes	Platyroctidae	Species
Chordata	Actinopterygii		Pleuronectiformes	Pleuronectidae	Species
Chordata	Actinopterygii		Scorpaeniformes	Psychrolutidae	Species
Chordata	Elasmobranchii	Neoselachii	Rajiformes	Rajidae	Species
Chordata	Actinopterygii		Cetomimiformes	Rondeletiidae	Species
Chordata	Actinopterygii		Saccopharyngiformes	Saccopharyngidae	Species
Chordata	Actinopterygii		Anguilliformes	Serrivomeridae	Genus
Chordata	Elasmobranchii	Neoselachii	Squaliformes	Somniosidae	Species
Chordata	Actinopterygii		Stomiiformes	Stomiidae	Species
Chordata	Actinopterygii		Anguilliformes	Synaphobranchidae	Species
Chordata	Actinopterygii		Perciformes	Zoarcidae	Species

D) Deep-sea sponge assemblage

Phylum	Class	Subclass	Order	Family	Lowest taxonomic level
Prozoan and metazoan meiobenthos					
Arthropoda	Hexanauplia				Order
Foraminifera					Phylum
Nematoda					Phylum
Macrobenthos					
Annelida	Polychaeta	Errantia	Amphinomida		Family
Annelida	Polychaeta	Sedentaria	Canalipalpata		Family
Annelida	Polychaeta	Errantia	Eunicida	Dorvilleidae	Family
Annelida	Polychaeta	Errantia	Eunicida	Eunicidae	Genus
Annelida	Polychaeta	Errantia	Eunicida	Lumbrineridae	Genus
Annelida	Polychaeta	Errantia	Eunicida	Onuphidae	Genus
Annelida	Polychaeta	Errantia	Phyllodocida	Aphroditidae	Genus
Annelida	Polychaeta	Errantia	Phyllodocida	Glyceridae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Goniadidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Nephtyidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Nereididae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Phyllodocidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Polynoidae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Sphaerodoridae	Family
Annelida	Polychaeta	Errantia	Phyllodocida	Syllidae	Family
Annelida	Polychaeta	Sedentaria	Sabellida		Family
Annelida	Polychaeta	Sedentaria	Spionida		Family
Annelida	Polychaeta	Sedentaria	Terebellida		Family
Annelida	Polychaeta	Sedentaria	-	Capitellidae	Family
Annelida	Polychaeta	Sedentaria	-	Maldanidae	Species
Annelida	Polychaeta	Sedentaria	-	Opheliidae	Family
Annelida	Polychaeta	Sedentaria	-	Orbiniidae	Family
Annelida	Polychaeta	Sedentaria	-	Paraonidae	Family
Arthropoda	Hexanauplia	Copepoda	Calanoida		Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda		Family

Arthropoda	Malacostraca	Eumalacostraca	Cumacea		Order
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Arcturidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Cirolanidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Munnidae	Family
Arthropoda	Malacostraca	Eumalacostraca	Isopoda	Munnopsidae	Genus
Arthropoda	Malacostraca	Eumalacostraca	Mysida		Order
Arthropoda	Malacostraca	Eumalacostraca	Tanaidacea		Genus
Echinodermata	Echinoidea				Species
Mollusca	Caudofoveata				Family
Mollusca	Solenogastres				Class
Nemertea					Phylum
Invertebrate megabenthos					
Arthropoda	Hexanauplia				Family
Arthropoda	Malacostraca	Eumalacostraca	Amphipoda		Family
Arthropoda	Malacostraca	Eumalacostraca	Decapoda		Genus
Arthropoda	Malacostraca	Eumalacostraca	Euphausiacea		Order
Arthropoda	Malacostraca	Eumalacostraca	Isopoda		Genus
Arthropoda	Malacostraca	Eumalacostraca	Lophogastrida		Species
Arthropoda	Pycnogonida				Genus
Brachiopoda					Species
Bryozoa					Order
Chaetognatha					Phylum
Chordata					Family
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinostolidae	Species
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Hormathiidae	Species
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Sagartiidae	Species
Cnidaria	Anthozoa	Hexacorallia	Actiniaria	Actinernidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Acanthogorgiidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Alcyoniidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Anthothelidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Chrysogorgiidae	Species
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Isididae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Nephtheidae	Species

Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Paragorgiidae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Plexauridae	Genus
Cnidaria	Anthozoa	Octocorallia	Alcyonacea	Xeniidae	Genus
Cnidaria	Anthozoa	Hexacorallia	Antipatharia		Species
Cnidaria	Anthozoa	Octocorallia	Pennatulacea		Genus
Cnidaria	Anthozoa	Hexacorallia	Scleractinia		Species
Cnidaria	Anthozoa	Octocorallia	Telestacea		Order
Cnidaria	Anthozoa	Hexacorallia	Zoantharia		Family
Cnidaria	Anthozoa	Ceriantharia			Subclass
Cnidaria	Hydrozoa	Hydroidolina	Anthoathecata		Family
Cnidaria	Hydrozoa	Hydroidolina	Leptothecata	Aglaopheniidae	Genus
Cnidaria	Hydrozoa	Hydroidolina	Leptothecata	Plumulariidae	Family
Cnidaria	Hydrozoa	Hydroidolina	Leptothecata	Sertulariidae	Family
Cnidaria	Scyphozoa	Coronamedusae	Coronatae		Family
Echinodermata	Asterozoa	-	Brisingida		Genus
Echinodermata	Asterozoa	-	Forcipulatida		Species
Echinodermata	Asterozoa	-	Notomyotida		Genus
Echinodermata	Asterozoa	-	Paxillosida		Species
Echinodermata	Asterozoa	-	Spinulosida		Genus
Echinodermata	Asterozoa	-	Valvatida	Asterinidae	Species
Echinodermata	Asterozoa	-	Valvatida	Goniasteridae	Species
Echinodermata	Asterozoa	-	Valvatida	Poraniidae	Species
Echinodermata	Asterozoa	-	Valvatida	Solasteridae	Genus
Echinodermata	Asterozoa	-	Velatida		Genus
Echinodermata	Crinozoa				Genus
Echinodermata	Echinozoa	Euechinozoa	Echinothurioida	Echinothuriidae	Family
Echinodermata	Echinozoa	Euechinozoa	Echinothurioida	Phormosomatidae	Species
Echinodermata	Holothurozoa				Genus
Echinodermata	Ophiurozoa	Myophiurozoa	Amphilepidida		Species
Echinodermata	Ophiurozoa	Myophiurozoa	Euryalida		Species
Echinodermata	Ophiurozoa	Myophiurozoa	Ophiacanthida	Ophiacanthidae	Genus
Echinodermata	Ophiurozoa	Myophiurozoa	Ophiacanthida	Ophiomyxidae	Family
Echinodermata	Ophiurozoa	Myophiurozoa	Ophiurida	Ophiosphalmidae	Species

Echinodermata	Ophiuroidea	Myophiuroidea	Ophiurida	Ophiuridae	Genus
Mollusca	Bivalvia	Autobranchia	Carditida	Astartidae	Family
Mollusca	Bivalvia	Protobranchia	Nuculanida	Nuculanidae	Family
Mollusca	Bivalvia	Protobranchia	Nuculida		Genus
Mollusca	Bivalvia	Autobranchia	-	Verticordiidae	Genus
Mollusca	Cephalopoda	Coleoidea	Octopoda	Bathypolypodidae	Genus
Mollusca	Cephalopoda	Coleoidea	Octopoda	Cirroteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Octopoda	Opisthoteuthidae	Family
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Chiroteuthidae	Genus
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Cranchiidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Gonatidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Histioteuthidae	Species
Mollusca	Cephalopoda	Coleoidea	Oegopsida	Ommastrephidae	Species
Mollusca	Cephalopoda	Coleoidea	Sepiida		Family
Mollusca	Cephalopoda	Coleoidea	Vampyromorpha		Genus
Mollusca	Gastropoda	Caenogastropoda	Neogastropoda		Family
Mollusca	Gastropoda	Heterobranchia	Nudibranchia		Order
Mollusca	Gastropoda	Vetigastropoda	Trochida		Genus
Mollusca	Polyplacophora				Class
Mollusca	Scaphopoda				Class
Porifera	Demospongiae	Heteroscleromorpha	Axinellida		Family
Porifera	Demospongiae	Heteroscleromorpha	Poecilosclerida		Genus
Porifera	Demospongiae	Heteroscleromorpha	Polymastiida		Genus
Porifera	Demospongiae	Heteroscleromorpha	Suberitida		Genus
Porifera	Demospongiae	Heteroscleromorpha	Tetractinellida		Genus
Porifera	Demospongiae	Hexasterophora	Lyssacinosida		Genus
Sipuncula					Phylum
Fish					
Chordata	Actinopterygii	-	Anguilliformes	Nemichthyidae	Species
Chordata	Actinopterygii	-	Anguilliformes	Serrivomeridae	Genus
Chordata	Actinopterygii	-	Anguilliformes	Synaphobranchidae	Species
Chordata	Actinopterygii	-	Argentiniiformes		Species
Chordata	Actinopterygii	-	Aulopiformes		Species

Chordata	Actinopterygii	-	Beloniformes		Species
Chordata	Actinopterygii	-	Beryciformes		Species
Chordata	Actinopterygii	-	Gadiformes		Species
Chordata	Actinopterygii	-	Myctophiformes	Myctophidae	Genus
Chordata	Actinopterygii	-	Notacanthiformes		Species
Chordata	Actinopterygii	-	Osmeriformes		Species
Chordata	Actinopterygii	-	Perciformes		Species
Chordata	Actinopterygii	-	Pleuronectiformes		Species
Chordata	Actinopterygii	-	Saccopharyngiformes		Species
Chordata	Actinopterygii	-	Scorpaeniformes		Species
Chordata	Actinopterygii	-	Stephanoberyciformes		Genus
Chordata	Actinopterygii	-	Stomiiformes	Gonostomatidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Sternoptychidae	Species
Chordata	Actinopterygii	-	Stomiiformes	Stomiidae	Genus
Chordata	Elasmobranchii	Neoselachii	Carcharhiniformes		Genus
Chordata	Elasmobranchii	Neoselachii	Rajiformes		Species
Chordata	Elasmobranchii	Neoselachii	Squaliformes		Species

Table S2. Faunal interaction web compartments lost by *Astrophorina* removal. All taxa are listed that disappear in the absence of *Astrophorina* due to trophic and non-trophic interactions with *Astrophorina* and other fauna.

Abbreviations of faunal assemblages: Cor = deep-sea coral assemblage, Slo_1 = lower slope assemblage 1, Slo_2 = lower slope assemblage 2, Spo = deep-sea sponge assemblage.

Taxon	Trophic obligatory link with <i>Astrophorina</i>				Trophic link with other fauna				Non-trophic facultative links with <i>Astrophorina</i>				Non-trophic facultative links with other fauna			
	Cor	Slo_1	Slo_2	Spo	Cor	Slo_1	Slo_2	Spo	Cor	Slo_1	Slo_2	Spo	Cor	Slo_1	Slo_2	Spo
Macrobenthos																
Annelida																
Amphinomidae											X	X				
Cirratulidae											X	X				
Dorvilleidae											X	X				
Glyceridae											X	X				
<i>Goniada</i> sp.									X							
Goniadidae										X	X	X				
<i>Laetmonice</i> sp.									X	X	X	X				
Lumbrineridae											X					
<i>Maldane sarsi</i>										X		X				
Maldanidae									X		X					
Nephtyidae											X	X				
<i>Nephtys</i> sp.										X						
Nereididae									X		X	X				
Onuphidae											X					
<i>Onuphis</i> sp.									X			X				
<i>Onuphis opalina</i>										X						
Opheliidae											X	X				
Orbiniidae											X	X				
Oweniidae												X				
Paraonidae											X	X				
Phyllodocidae											X	X				
<i>Protodorvillea</i> sp.										X						

Sphaerodoridae										X	X				
Spionidae										X	X				
Syllidae			X							X	X				
Terebellidae										X	X				
Trochochaetidae											X				
Arthropoda															
Amphipoda													X		
<i>Apseudes</i> sp.												X			
<i>Astacilla</i> sp.										X	X				
Calanidae						X									
Caprellidae								X	X						
Cirolanidae											X				
Copepoda												X	X	X	
Corophiidae										X	X				
Cumacea							X	X			X				
Dulichidae										X	X				
<i>Eurycope</i> sp.										X	X				
Gnathiidae										X					
Isaeidae										X	X				
Ischyroceridae										X					
Isopoda							X	X							
Munnidae										X	X				
Mysida							X	X	X	X					
Oedicerotidae										X					
Pardaliscidae											X				
Phoxocephalidae										X	X				
Pleustidae										X					X
Sabellidae							X			X	X				
<i>Sphyrapus</i> sp.										X	X				
Stegocephalidae										X					
Stenothoidae										X	X				

Tanaidacea									X	X						
Unciolidae															X	
Invertebrate megabenthos																
Annelida																
Sipuncula									X	X		X				
Arthropoda																
<i>Acanthephyra</i> sp.													X	X		X
<i>Acanthephyra pelagica</i>															X	
<i>Aega</i> sp.												X				
<i>Atlantopandalus propinquus</i>										X	X					
<i>Calathura</i> sp.											X	X				
<i>Colossendeis</i> sp.									X	X	X	X				
Euphausiacea							X									
<i>Eusergestes arcticus</i>				X	X											
<i>Gnathophausia zoea</i>									X	X	X	X				
Lysianassidae											X	X				
<i>Munida</i> sp.									X							
<i>Munidopsis curvirostra</i>													X			
<i>Neolithodes</i> sp.													X			
<i>Neolithodes grimaldii</i>									X	X	X					
Oedicerotidae													X			
<i>Pandalus</i> sp.																X
<i>Pandalus montagui</i>													X	X	X	
<i>Robustosergia</i> sp.							X									
<i>Sabinea</i> sp.													X			
<i>Sabinea hystrix</i>									X	X	X					

<i>Sabinea sarsii</i>									X	X							
<i>Stereomastis</i> sp.									X	X	X	X					
Brachiopoda																	
<i>Terebratulina septentrionalis</i>									X	X	X	X					
Bryozoa																	
Bryozoa									X	X							
Cheilostomatida													X				
Cyclostomatida													X				
Chordata																	
Ascidiacea												X					
Didemnidae									X	X			X				
Cnidaria																	
<i>Acanella</i> sp.													X				
<i>Acanella arbuscula</i>									X	X	X						
<i>Acanthogorgia</i> sp.									X				X				
<i>Anthomastus</i> sp.									X	X			X				
<i>Anthoptilum</i> sp.									X	X	X	X					
<i>Desmophyllum dianthus</i>							X										
<i>Drifa</i> sp.									X								
<i>Drifa glomerata</i>													X				
<i>Duva</i> sp.									X	X							
<i>Duva florida</i>												X	X				
Eudendriidae													X				
<i>Balticina</i> sp.													X				
<i>Balticina christii</i>									X	X	X						
<i>Balticina finmarchica</i>									X	X	X						
<i>Heteropolypus</i> sp.									X	X	X	X					
Hydrozoa												X					
<i>Pennatula</i> sp.													X				

<i>Pennatula aculeata</i>									X	X	X						
<i>Ptilella</i> sp.										X		X					
<i>Ptilella grandis</i>									X		X						
<i>Radicipes gracilis</i>									X	X	X	X					
Sertulariidae									X			X					
<i>Umbellula</i> sp.									X	X	X	X					
Echinodermata																	
<i>Diplopteraster multipes</i>									X								
Echinasteridae		X	X														
<i>Gorgonocephalus lamarckii</i>								X									
Gorgonocephalidae										X							
<i>Henricia</i> sp.									X			X					
<i>Mediaster bairdi</i>									X	X	X	X					
<i>Ophiacantha</i> sp.										X							
<i>Ophiomusa lymani</i>									X	X	X	X					
<i>Ophiopholis aculeata</i>											X						
<i>Ophiura</i> sp.									X	X	X	X					
Pterasteridae					X												
<i>Zoroaster fulgens</i>									X	X	X	X					
Mollusca																	
<i>Astarte</i> sp.									X		X						
Astartidae										X		X					
Buccinidae												X					
Polyplacophora												X					
Porifera																	
<i>Asconema</i> sp.									X		X	X					
<i>Craniella</i> sp.												X					
<i>Polymastia</i> sp.												X					
Polymastiidae											X						

<i>Tentorium</i> sp.									X	X		X				
Fish																
Chordata																
<i>Antimora</i> <i>rostrata</i>									X	X	X	X				
<i>Apristurus</i> sp.										X	X	X				
<i>Bathylagus</i> <i>euryps</i>									X	X	X	X				
<i>Bathyraja</i> <i>spinicauda</i>									X	X	X					
<i>Benthoosema</i> sp.													X	X	X	X
<i>Ceratoscopelus</i> sp.					X											
<i>Chauliodus</i> sp.												X				
<i>Chauliodus</i> <i>sloani</i>									X	X	X					
<i>Coryphaenoides</i> <i>rupestris</i>									X	X	X	X				
<i>Cyclothone</i> <i>microdon</i>							X									
<i>Gaidropsarus</i> <i>argentatus</i>											X					
<i>Gaidropsarus</i> <i>ensis</i>									X	X	X	X				
<i>Sigmops</i> <i>bathyphilus</i>							X									
<i>Halargyreus</i> <i>johnsonii</i>					X											
<i>Hydrolagus</i> <i>affinis</i>											X					
<i>Hydrolagus</i> <i>mirabilis</i>										X	X					
<i>Lampadena</i> sp.									X	X	X	X				
<i>Lampanyctus</i> sp.									X	X	X	X				
<i>Leptagonus</i> <i>decagonus</i>					X											
<i>Myctophum</i> sp.									X	X	X	X				

<i>Nezumia bairdii</i>									X	X	X	X				
<i>Notoscopelus</i> sp.									X	X	X	X				
<i>Poromitra</i> sp.							X									
<i>Reinhardtius hippoglossoides</i>									X	X	X	X				
<i>Serrivomer</i> sp.									X	X	X	X				
<i>Stomias</i> sp.												X				
<i>Stomias boa</i>									X	X	X					
<i>Synaphobranchus kaupii</i>									X	X	X	X				
<i>Trachyrincus murrayi</i>					X											

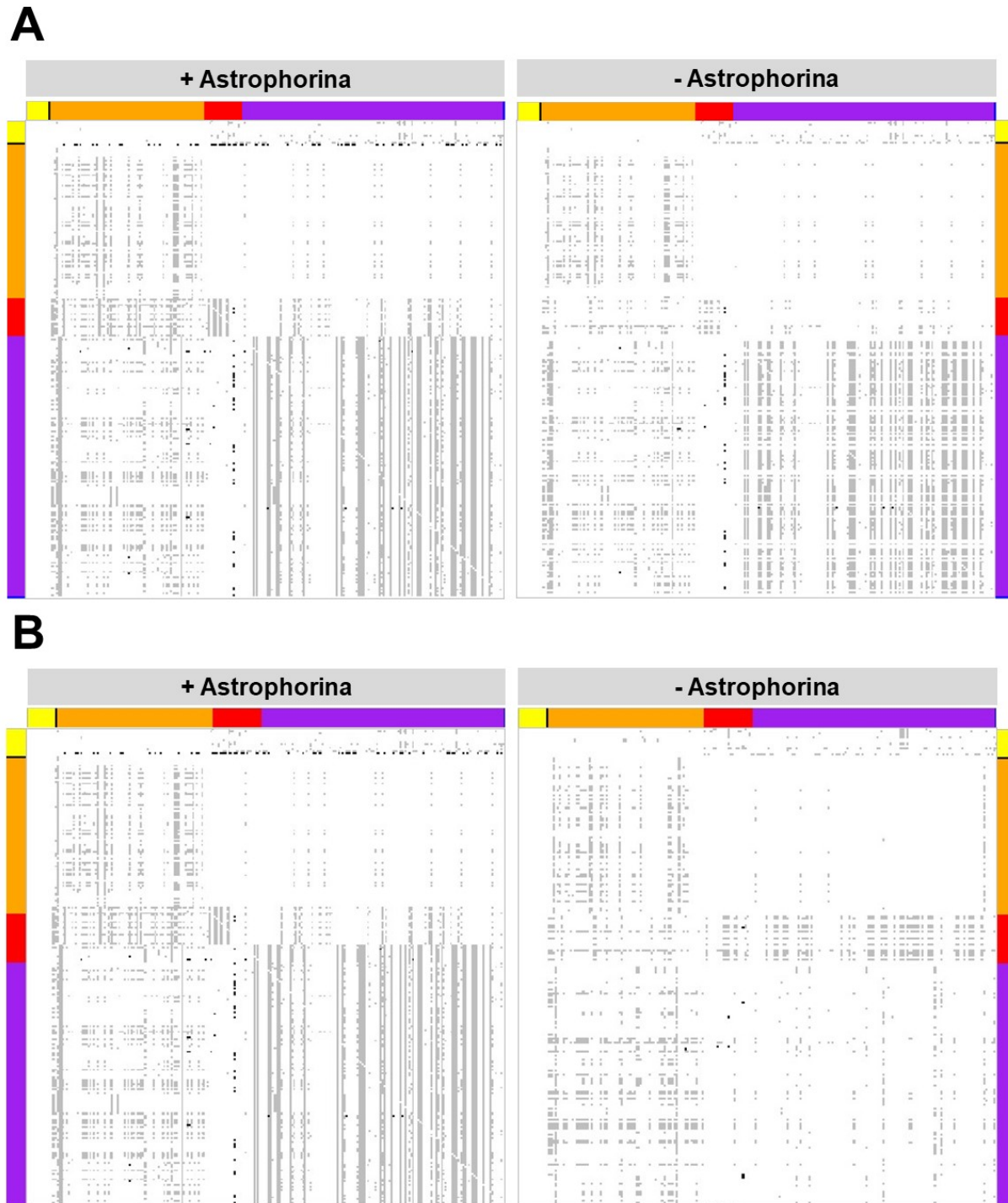
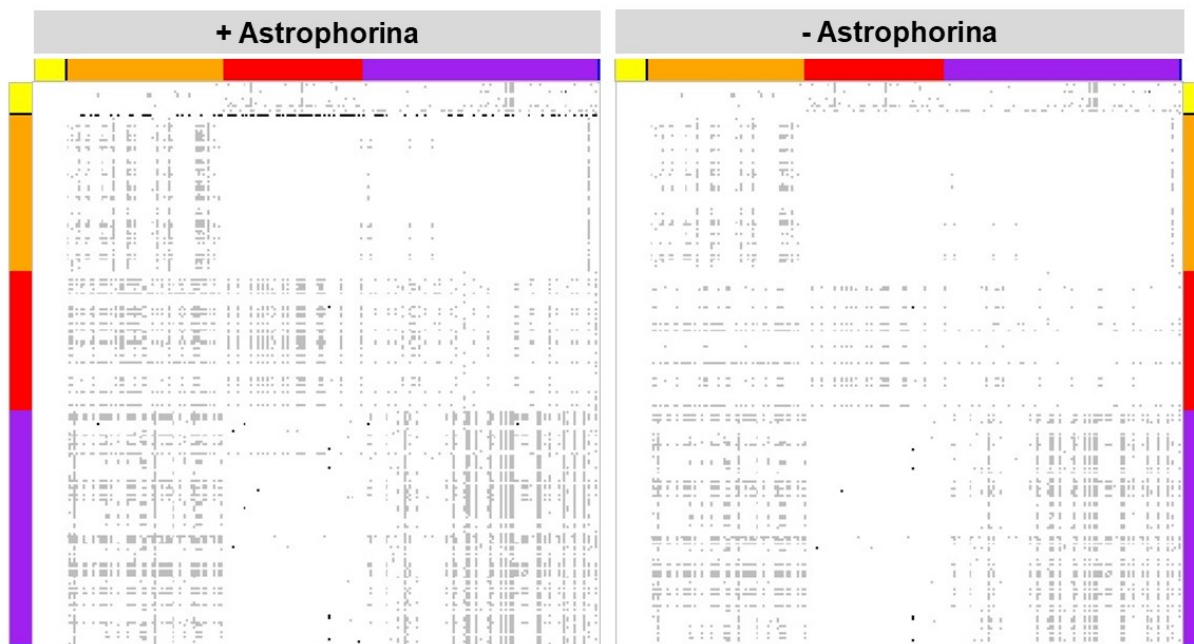


Figure S1. (A) Network interactions between food-web compartments of the deep-sea coral assemblage. Each pixel symbolizes an individual interaction between *Astrophorina* (black section) and another faunal food-web compartment (orange = fish, red = macrobenthos, purple = megabenthos, blue = meiobenthos), two different faunal food-web compartments, or a faunal food-web compartment and an extra food-source compartment (yellow section). Trophic interactions are shown as grey pixels and non-trophic interactions as back pixels.

(B) Network interactions between food-web compartments of the lower slope assemblage 1. **(C)** Network interactions between food-web compartments of the lower slope assemblage 2. **(D)** Network interactions between food-web compartments of the deep-sea sponge assemblage.

C



D

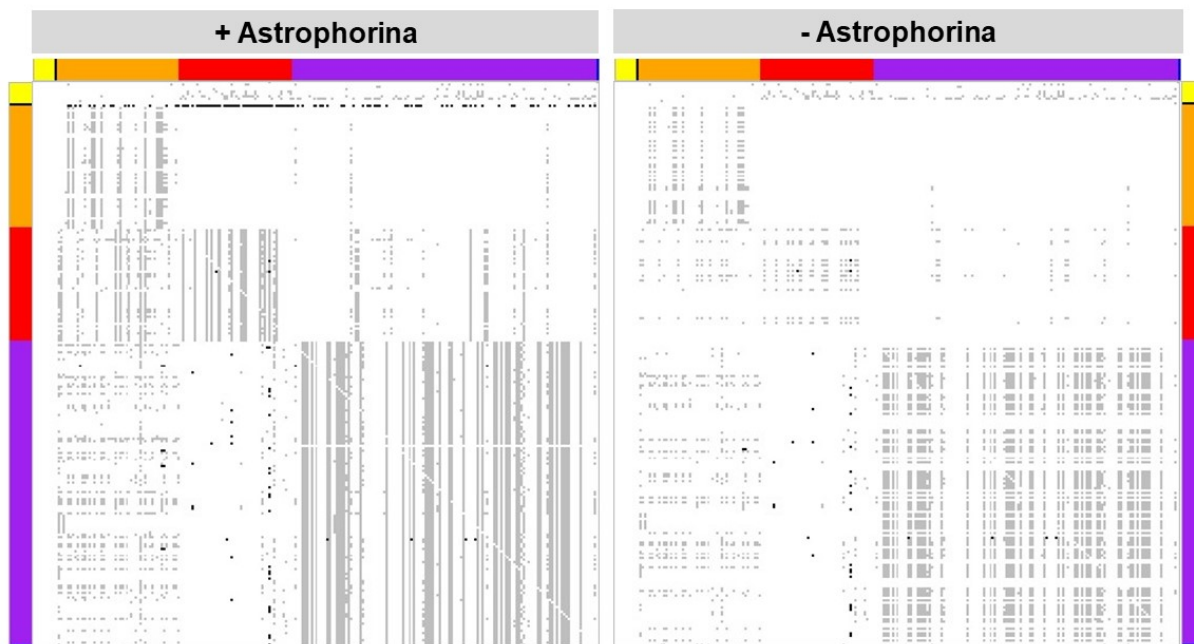


Figure S1 continued.