

**Table S1.** Composition and mean abundance, ind. m<sup>-3</sup> ( $\pm$  SD) of mesozooplankton in the Bransfield Strait (BS), Antarctic Sound (AS), Weddell Sea (WS), and off the South Orkney Islands (SOI) during the austral summer of 2022.

Taxon	Study region			
	BS	AS	WS	SOI
Amphipoda, <i>Themisto</i>				
<i>gaudichaudii</i>	2.06 $\pm$ 6.60	0.00	0.15 $\pm$ 0.20	0.24 $\pm$ 0.20
<i>Primno macropa</i>	0.34 $\pm$ 0.87	0.63 $\pm$ 0.48	0.10 $\pm$ 0.12	0.07 $\pm$ 0.15
<i>Cyllopus magellanicus</i>	0.12 $\pm$ 0.30	0.00	0.00	0.07 $\pm$ 0.13
Appendicularia	0.00	0.00	0.29 $\pm$ 0.45	0.73 $\pm$ 0.93
Chaetognatha	3.36 $\pm$ 3.01	1.85 $\pm$ 2.21	1.82 $\pm$ 1.42	1.15 $\pm$ 0.70
Copepoda, <i>Calanoides</i>				
<i>acutus</i>	29.02 $\pm$ 20.73	28.29 $\pm$ 19.32	61.35 $\pm$ 59.23	334.39 $\pm$ 219.07
<i>Calanus propinquus</i>	4.89 $\pm$ 4.04	4.15 $\pm$ 1.03	27.93 $\pm$ 41.34	134.16 $\pm$ 62.38
<i>Calanus simillimus</i>	7.68 $\pm$ 12.83	2.44 $\pm$ 3.05	1.46 $\pm$ 2.02	3.66 $\pm$ 1.99
<i>Candacia</i> spp.	0.00	0.00	0.00	1.49 $\pm$ 1.26
<i>Euchirella rostromagna</i>	0.65 $\pm$ 1.56	0.00	2.63 $\pm$ 3.24	2.24 $\pm$ 2.21
<i>Metridia gerlachei</i>	138.25 $\pm$ 87.57	154.05 $\pm$ 136.25	69.51 $\pm$ 60.30	34.66 $\pm$ 22.51
<i>Metridia</i> spp.	0.09 $\pm$ 0.15	3.54 $\pm$ 4.99	1.34 $\pm$ 2.29	14.63 $\pm$ 19.27
<i>Oithona</i> spp.	381.83 $\pm$ 192.48	104.02 $\pm$ 9.14	170.91 $\pm$ 82.72	156.71 $\pm$ 79.32
<i>Oncea</i> spp.	16.76 $\pm$ 33.27	0.00	2.28 $\pm$ 2.87	4.98 $\pm$ 6.57
<i>Paraeuchaeta antarctica</i>	4.48 $\pm$ 3.48	3.41 $\pm$ 2.07	2.55 $\pm$ 2.63	1.13 $\pm$ 1.66
<i>Paraeuchaeta</i> spp.	0.16 $\pm$ 0.24	0.00	0.00	0.00
<i>Rhincalanus gigas</i>	7.88 $\pm$ 5.49	6.10 $\pm$ 4.48	28.86 $\pm$ 48.73	4.09 $\pm$ 3.75
<i>Haloptilus oxycephalus</i>	0.56 $\pm$ 0.76	0.00	0.37 $\pm$ 0.55	0.62 $\pm$ 0.47
Copepod nauplii	3.73 $\pm$ 5.28	0.00	1.63 $\pm$ 3.02	0.00
<i>Euphausia superba</i> (eggs, nauplii)	5.52 $\pm$ 4.47	405.37 $\pm$ 559.48	178.51 $\pm$ 162.10	279.76 $\pm$ 454.96
<i>E. superba</i> (calyptopis)	2.35 $\pm$ 3.09	52.20 $\pm$ 65.54	58.19 $\pm$ 71.15	580.50 $\pm$ 402.73
<i>E. superba</i> (furcilia)	0.49 $\pm$ 0.59	31.90 $\pm$ 40.98	7.68 $\pm$ 8.30	730.74 $\pm$ 517.22
<i>E. triacantha</i>	0.00	0.00	0.00	0.24 $\pm$ 0.49
Ctenophora	0.00	1.46 $\pm$ 2.07	0.05 $\pm$ 0.12	0.00
Hydromedusae	0.01 $\pm$ 0.09	0.00	0.03 $\pm$ 0.08	0.00
Ostracoda	11.51 $\pm$ 8.52	31.71 $\pm$ 3.45	23.63 $\pm$ 36.73	13.26 $\pm$ 9.12
Pteropoda, <i>Limacina</i>				
<i>helicina</i>	0.42 $\pm$ 0.90	0.49 $\pm$ 0.62	0.33 $\pm$ 0.56	1.46 $\pm$ 0.83
<i>Clione antarctica</i>	0.00	0.00	0.00	0.12 $\pm$ 0.24
<i>Spongiobranchaea</i> <i>australis</i>	0.13 $\pm$ 0.14	0.00	0.06 $\pm$ 0.06	0.10 $\pm$ 0.14
Salpida, <i>Salpa</i> <i>thompsoni</i>	1.18 $\pm$ 1.27	0.00	3.41 $\pm$ 5.09	2.18 $\pm$ 1.64
<i>Ihlea racovitzai</i>	0.13 $\pm$ 0.20	0.00	0.16 $\pm$ 0.30	0.07 $\pm$ 0.14
Siphonophorae, <i>Dimophyes arctica</i>	0.30 $\pm$ 0.29	0.00	0.00	0.00
<i>Diphyes chamissonis</i>	0.28 $\pm$ 0.31	0.00	0.24 $\pm$ 0.22	0.39 $\pm$ 0.40
<i>D. dispar</i>	0.15 $\pm$ 0.29	0.00	0.07 $\pm$ 0.12	0.00
Echinodermata, larvae	0.51 $\pm$ 0.68	0.24 $\pm$ 0.34	0.00	0.02 $\pm$ 0.05
Cirripedia, larvae	24.57 $\pm$ 33.97	3.24 $\pm$ 2.31	4.23 $\pm$ 5.31	2.44 $\pm$ 4.88
Polychaeta, larvae	2.59 $\pm$ 2.10	7.12 $\pm$ 5.93	1.60 $\pm$ 0.87	80.35 $\pm$ 90.06
Fish ova, larvae	0.04 $\pm$ 0.09	0.00	0.00	0.00
Mean total abundance	652.01 $\pm$ 470.86	842.22 $\pm$ 516.95	651.35 $\pm$ 549.64	2386.84 $\pm$ 300.05