

Supplements

Section 1: Radiocarbon dating

Table S1: Radiocarbon dating data including sample name and number, material, conventional age plus error, the modelled age for correction, ventilation age, corrected age and final calibrated ages with error.

Sample depth [cmbsf]	Sample Name	AWI-No.	Material	Conventional <sup>14</sup> C age [ <sup>14</sup> C a BP]	Error of conv. <sup>14</sup> C age [a]	Modelled age for correction after Butzing et al. (2017) [a]	Ventilation age for correction [a]	Corrected <sup>14</sup> C age for calibration [a BP]	Calibrated age [cal. A BP]	Error for calibrated age [a]
190	PS97/072-1_190cm	1428.1.1	calcareous	5076	118	1076	1200	2800	2936	118
212	PS97/072-1_212cm	2744.1.1	calcareous	5246	82	1107	1200	2939	3096	82
312	PS97/072-1_312cm	1429.2.1	calcareous	6054	118	1083	1200	3771	4150	118
340	PS97/072-1_340cm	1430.1.1	calcareous	6156	52	1089	1200	3867	4291	52
451.5	PS97/072-1_451.5cm	1431.1.1	calcareous	7081	52	1142	1200	4739	5478	52
464	PS97/072-1_464cm	1432.2.1	calcareous	7329	117	1157	1200	4972	5720	117
866.5	PS97/072-1_866.5cm	7405.1.1	calcareous	12865	101	1599	1200	10066	11600	101
868.5	PS97/072-1_868.5cm	7406.1.1	calcareous	12983	100	1571	1200	10212	11903	100 *

Are these errors just copied from the conventional age or actually calculated for the corrected and calibrated ages? If calculated, how?

\* If the errors were derived from the outputs of the Bayesian age modelling, I would expect the error to be larger for the 868.5 cm date since there is no constraint on the age of sediment below this depth.

Section 2: Matching piston core PS97/072-1 and short core PS97/072-2

We matched the core top of piston core PS97/072-1 with the short core PS97/072-2 from the same sample site (and from the same cruise) using TOC and biogenic opal data (Fig. S1). An age model for the short core was already developed based on <sup>210</sup>Pb dating done by Vorrath et al. (2020). By overlapping the data we found that the top of the piston core is likely matching with the short core in a depth of 25 cm which corresponds to the calendar year 1902 in the common era. Therefore, we have set the core top of PS97/072-1 to 0.05 ka BP.

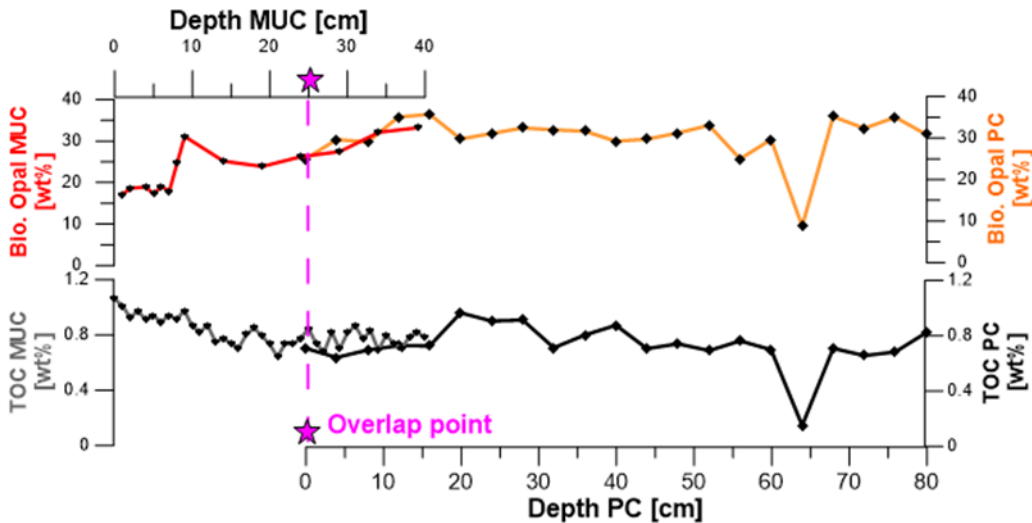
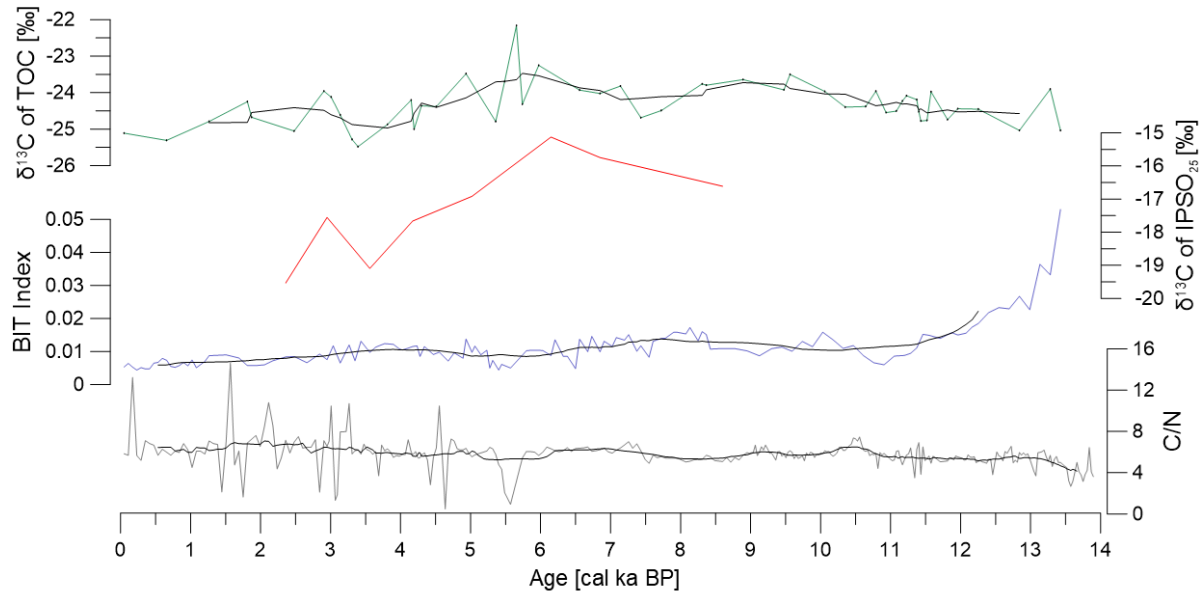


Figure S2: Overlap point of the short sediment core (MUC) and piston core (PC) based on total organic carbon and biogenic opal (wt%). Data from the short core from Vorrath 2020,

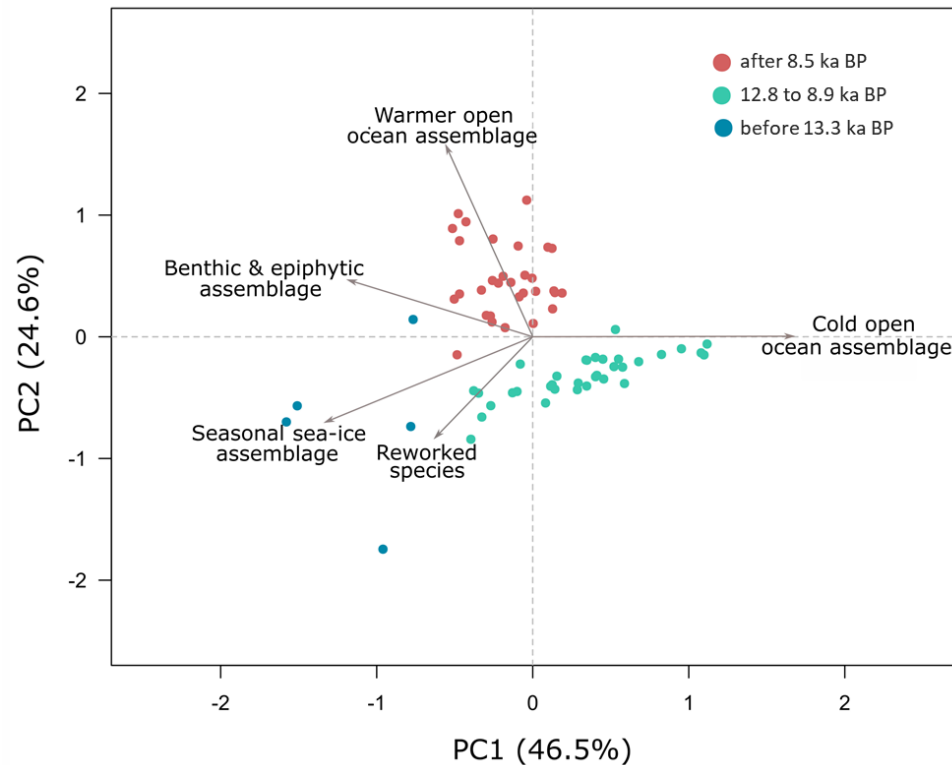
**Section 3: Stable isotopes of TOC and IPSO<sub>25</sub>**

Organic carbon stable isotope ratios ( $\delta^{13}\text{C}$ ) range between -22.2 and -25.5‰, while the stable carbon isotope composition of IPSO<sub>25</sub> varies between -15.1‰ and -19.5‰ supporting its origin from sea ice algae (Massé et al., 2011; Sinninghe Damsté et al., 2007). The mean molar C/N ratio below 8.5 and BIT indices below 0.05 indicate a marine origin of the organic matter and that the input of terrigenous organic matter did not affect the composition of GDGTs.



**Figure S3: The stable isotope composition of a) TOC and b) IPSO<sub>25</sub>, the c) BIT index and d) C/N ratio of core PS97/72-1.**

**Section 4: PCA of diatom assemblages**



Need to make it clear whether the PCA was performed using the grouped diatom data or the ungrouped species and genera? If the latter, how were the position and length of the arrows for the groups determined?

You should also give a significance score (+/- 1 or 2 sigma) for each of the axes - either on the plot, in the figure caption or in the text.

As it isn't possible to evaluate the relationship between the ages and assemblage-types beyond the three age classes used here, it would be better if you either included the PCA data tables too OR replaced the three age groups with a colour spectrum/gradient for the whole age range.



30

31 **Figure S4: The Spearman principal component analysis (PCA) biplot shows the relationship between the five diatom**  
32 **assemblages indicative for an open warmer and open colder ocean, seasonal sea-ice, benthic and reworked fossils in**  
33 **core PS97/072-1. PC1 represents 45.7% and PC2 25.7% represents of the variance. Before 16.7 ka BP seasonal sea-ice**  
34 **diatoms are common, between 15.8 ka and 9.8 ka BP assemblages of a colder open ocean are dominant whereas a**  
35 **warmer open ocean is indicated by diatom assemblages from 9.3 ka BP until today.**

These descriptions are misleading. The PCA extracts which species/assemblages are most important in explaining variability not dominance.

Section 5: Diatom concentrations

Table S5: Diatom concentrations (%) of species from all samples, valves per gram and grouping of seasonal sea-ice, open ocean cold, open ocean warm, fossil, benthic and epiphytic assemblages.

Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	0.00	0.04	0.40	0.80	1.20	1.28	1.36	1.44	1.52	1.60	1.68
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffeaeformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis fasciolata [%]	0.00	0.10	0.37	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis californica var californica [%]	0.00	0.10	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis melchiorigoides [%]	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis imperatrix [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilla ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Gomphomenopsis littoralis [%]	0.20	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.17	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula directa [%]	0.00	0.20	0.19	0.00	0.22	0.00	0.00	0.00	0.17	0.00	0.00
Navicula glaciei [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula perminuta [%]	0.40	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planothidium vicentii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
Actinocyclus actinochilus [%]	1.20	0.50	0.74	0.40	0.66	1.03	0.17	0.75	0.17	0.00	0.22
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corethron pennatum [%]	0.40	0.20	0.00	0.20	0.22	0.00	0.00	0.94	0.33	0.00	0.00
Eucampia antarctica var.recta [%]	0.00	0.10	0.19	0.20	0.00	0.00	0.00	0.00	0.00	0.45	0.00
Fragilariopsis curta [%]	2.60	1.39	1.11	1.39	2.41	1.24	1.17	0.75	2.49	1.11	0.00
Fragilariopsis cylindrus [%]	0.00	1.09	1.48	0.59	0.00	0.00	0.33	0.19	0.33	0.22	0.22
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.40	0.00	0.00	0.59	0.22	0.41	0.00	0.19	0.00	0.22	0.00
Fragilariopsis peragallii [%]	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.22
Fragilariopsis rhombica [%]	0.20	0.40	0.00	0.20	0.00	0.21	0.17	0.19	0.17	0.00	0.00
Fragilariopsis ritscheri [%]	0.00	0.00	0.19	0.20	0.44	0.00	0.00	0.19	0.17	0.22	0.00
Fragilariopsis sublinearis [%]	0.00	0.20	0.00	0.00	0.22	0.41	0.00	0.19	0.00	0.00	0.43
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	0.00	0.10	0.00	0.20	0.22	0.00	0.00	0.00	0.33	0.00	0.43
Neodenticula seminae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Nitzschia stellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
N. taenniformis [%]	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Odontella weissflogii [%]	1.80	1.49	0.56	2.57	0.44	1.24	0.33	0.75	0.83	0.00	0.65
Porosira glacialis [%]	0.20	0.40	0.00	0.40	0.00	0.21	0.17	0.19	0.33	0.00	0.00
Porosira pseudodenticulata [%]	0.00	0.10	0.00	0.20	0.44	0.00	0.00	0.00	0.00	0.00	0.00
Porosira spp. [%]	0.40	0.10	0.00	0.00	0.00	0.00	0.17	0.75	0.33	0.00	0.65
Stellarima microtrias (rs and veg) [%]	0.40	0.20	0.00	0.00	0.00	0.00	0.50	0.19	0.00	0.00	0.00
Synedropsis laevis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis recta [%]	0.60	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira antarctica (T1=cold) [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asteromphalus hyalinus [%]	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eucampia antarctica var. antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis separanda [%]	0.00	0.10	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.22
Proboscia inermis (winter) [%]	0.40	1.19	0.00	0.00	1.97	0.21	0.33	0.00	0.83	0.00	0.22
Proboscia inermis (spring) [%]	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proboscia alata [%]	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proboscia spp. [%]	0.00	0.00	0.37	0.40	0.00	0.00	0.00	0.00	0.00	0.45	0.00
Pseudo-nitzschia turgiduloides [%]	0.00	0.20	0.00	0.20	0.44	0.21	0.50	0.00	0.00	0.22	0.00
Rhizosolenia antennata f. antennata [%]	0.20	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.40	0.50	2.04	0.59	0.88	1.03	0.50	0.00	0.00	0.45	0.22
R. polydactyla f. polydactyla [%]	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.60	0.20	0.00	0.20	0.44	1.03	0.50	0.00	0.33	0.00	0.22
Shionodiscus gracilis var. expectus [%]	0.80	1.19	0.56	0.79	0.22	1.03	1.50	0.00	0.17	0.89	0.43
Shionodiscus gracilis var. gracilis [%]	1.20	1.39	0.74	5.94	0.44	0.83	1.83	0.56	0.83	1.56	1.08
Shionodiscus frenguelliopsis [%]	1.40	1.49	0.00	0.00	0.44	1.24	0.00	1.51	0.66	0.00	0.43
Thalassiosira antarctica (veg+RS) [%]	3.60	4.37	2.78	2.38	0.66	2.89	2.17	2.82	2.82	0.45	2.59
Thalassiosira gravida [%]	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira lentiginosa [%]	0.80	0.79	0.37	0.20	0.22	0.62	0.50	0.75	0.17	0.00	0.00
Thalassiosira maculata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.00	0.20	0.00	0.00	0.17	0.19	0.17	0.00	0.00
Thalassiosira scotia [%]	0.40	0.10	0.00	0.79	0.22	0.00	0.00	0.00	0.33	0.67	0.00
Thalassiosira antarctica/scotia [%]	0.00	0.00	0.00	0.40	0.00	0.21	1.17	0.19	0.33	0.45	0.65
Thalassiosira tumida [%]	0.00	0.10	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiothrix antarctica [%]	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.17	0.22	0.22
Trichotoxon reinboldii [%]	0.00	0.00	0.00	0.00	0.00	0.21	0.17	0.00	0.33	0.00	0.00
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus acculus-irridis [%]	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Fragilariopsis kerguelensis [%]	3.40	1.49	1.30	1.39	1.31	0.83	1.67	0.56	1.99	0.22	1.08
Nitzschia bicapitata [%]	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stephanopyxis turris [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unidentified taxa [%]	0.80	0.20	0.56	1.39	0.22	0.62	0.67	0.75	0.66	0.00	0.43
Chaetoceros resting spores [%]	76.00	79.27	84.97	77.23	86.65	83.88	85.00	86.44	83.89	92.20	89.42
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	500	1008	539	505	457	485	600	533	602	449	654
Diatom concentration [valves/g]	1.12E+08	6.15E+07	1.16E+08	7.47E+07	2.02E+08	1.18E+08	1.43E+08	7.04E+07	1.82E+08	1.57E+08	3.66E+08
seasonal sea-ice assemblage [% without CRS]	35.06	30.02	27.87	39.59	36.04	26.53	23.61	37.58	40.83	33.33	31.60
open ocean cold assemblage [% without CRS]	49.44	56.35	58.38	44.65	51.29	59.59	59.55	46.14	44.38	51.78	52.36
open ocn warm assemblage [% without CRS]	11.69	7.16	5.84	7.88	7.72	8.16	12.53	9.81	9.27	9.85	11.56
fossil species [% without CRS]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
benthic and epiphytic assemblage [% without CRS]	2.25	4.62	5.65	2.44	1.19	2.24	2.46	2.92	3.55	1.89	1.89
Diatom concentration [valve/g without CRS]	2.72E+07	1.32E+07	1.28E+07	1.63E+07	2.51E+07	1.49E+07	2.03E+07	1.27E+07	2.17E+07	1.43E+07	2.03E+07

Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	1.76	1.84	1.92	2.00	2.16	2.24	2.32	2.40	2.48	2.80	2.96
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffeaeformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
Cocconeis fasciolata [%]	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
Cocconeis californica var californica [%]	0.00	0.00	0.18	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
Cocconeis melchioroides [%]	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
Cocconeis imperatrix [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilla ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
Gomphomenopsis littoralis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula directa [%]	0.00	0.21	0.18	0.00	0.20	0.00	0.00	0.35	0.21	0.00	0.00
Navicula glaciei [%]	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Navicula perminuta [%]	0.00	0.21	0.00	0.00	0.00	0.00	0.16	0.00	0.43	0.00	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planothidium vicientii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
Actinocyclus actinochilus [%]	0.00	0.00	0.18	0.00	0.20	0.41	0.82	0.00	0.21	0.20	0.55
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corethron pennatum [%]	0.00	0.41	0.18	0.17	0.40	0.00	0.16	0.00	0.00	0.00	0.37
Eucampia antarctica var. recta [%]	0.22	0.00	0.00	0.17	0.00	0.00	0.33	0.00	0.21	0.00	0.00
Fragilariopsis curta [%]	0.22	0.83	0.71	0.51	0.79	0.20	1.81	1.92	1.91	1.43	1.83
Fragilariopsis cylindrus [%]	0.22	0.41	0.18	1.19	0.00	0.00	0.00	0.52	0.00	0.20	0.92
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.00	0.00	0.00	0.00	0.20	0.00	0.16	0.17	0.00	0.00	0.37
Fragilariopsis peragallii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis rhombica [%]	0.43	0.00	0.18	0.17	0.59	0.61	0.33	0.35	0.64	0.00	0.00
Fragilariopsis ritscheri [%]	0.00	0.00	0.00	0.00	0.20	0.20	0.33	0.00	0.00	0.00	0.00
Fragilariopsis sublinearis [%]	0.00	0.00	0.35	0.00	0.00	0.00	0.33	0.00	0.21	0.20	0.00
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	0.43	0.21	0.00	0.51	0.59	0.20	0.33	0.00	0.43	0.00	0.37
Neodenticula seminae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitzschia stellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N. taenniformis [%]	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.18
Odontella weissflogii [%]	0.86	0.41	0.53	0.51	1.19	0.00	1.15	0.17	0.43	0.20	0.37
Porosira glacialis [%]	0.22	0.21	0.00	0.17	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Porosira pseudodenticulata [%]	0.00	0.00	0.18	0.17	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Porosira spp. [%]	0.22	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00
Stellarima microtrias (rs and veg) [%]	0.00	0.21	0.53	0.17	0.00	0.00	0.16	0.00	0.00	0.00	0.18
Synedropsis laevis [%]	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis recta [%]	0.43	0.00	0.00	0.00	0.00	0.20	0.33	0.00	0.00	0.00	0.18
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira antarctica (T1-cold) [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.17	0.00	0.00	0.00
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
Asteromphalus hyalinus [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.18
Eucampia antarctica var. antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
Fragilariopsis separanda [%]	0.00	0.00	0.18	0.00	0.00	0.00	0.16	0.00	0.21	0.00	0.55
Proboscia inermis (winter) [%]	1.51	0.00	0.71	0.34	0.00	0.00	0.33	0.00	0.00	0.00	0.00
Proboscia inermis (spring) [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
Proboscia alata [%]	0.00	0.00	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proboscia spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00
Pseudo-nitzschia turgiduloides [%]	0.22	0.00	0.18	0.34	0.00	0.00	0.16	0.00	0.00	0.00	0.00
Rhizosolenia antennata f. antennata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.43	0.41	0.89	0.17	0.00	0.00	0.66	0.17	0.64	0.00	0.00
R. polydactyla f. polydactyla [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus gracilis var. expectus [%]	0.86	0.62	0.89	0.00	0.40	0.20	0.49	2.44	0.85	0.41	0.37
Shionodiscus gracilis var. gracilis [%]	0.86	0.41	0.89	0.17	0.40	0.20	1.31	0.00	0.64	0.61	0.55
Shionodiscus frenguelliopsis [%]	0.65	0.41	0.35	0.17	0.40	0.00	0.33	0.00	1.28	0.00	0.37
Thalassiosira antarctica (veg+RS) [%]	2.59	2.28	2.84	0.51	1.98	2.65	4.76	3.31	3.40	1.23	3.67
Thalassiosira gravida [%]	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira lentiginosa [%]	0.65	0.41	0.18	0.00	0.00	0.61	0.49	0.17	0.43	0.00	0.18
Thalassiosira maculata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.41	0.00
Thalassiosira scotia [%]	0.00	0.00	0.35	0.00	0.00	0.00	0.33	0.00	0.43	0.20	0.18
Thalassiosira antarctica/scotia [%]	0.00	1.45	0.89	0.00	0.20	0.00	0.16	0.00	0.43	0.00	0.00
Thalassiosira tumida [%]	0.43	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
Thalassiothrix antarctica [%]	0.00	0.21	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.18
Trichotoxon reinboldii [%]	0.22	0.00	0.18	0.00	0.20	0.00	0.00	0.17	0.00	0.00	0.00
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus aculus-irridis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis kerguelensis [%]	0.65	1.86	0.35	0.34	0.00	0.61	1.64	1.22	0.43	1.02	1.65
Nitzschia bicipitata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stephanopyxis turris [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unidentified taxa [%]	0.65	0.41	0.00	0.00	0.00	0.00	1.97	0.00	0.64	0.00	0.73
Chaetoceros resting spores [%]	85.96	87.58	86.17	93.71	91.49	93.67	77.83	87.11	85.11	93.24	85.69
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	463	483	564	589	505	490	609	574	470	488	545
Diatom concentration [valves/g]	1.97E+08	1.35E+08	1.23E+08	1.63E+08	1.78E+08	1.61E+08	5.78E+07	5.93E+07	1.28E+08	1.76E+08	1.40E+08
seasonal sea-ice assemblage [% without CRS]	29.76	31.58	26.00	48.96	41.08	33.94	27.75	29.28	36.93	34.99	31.51
open ocean cold assemblage [% without CRS]	56.46	46.00	62.00	36.67	44.25	51.36	50.96	57.98	50.90	43.40	46.40
open ocn warm assemblage [% without CRS]	8.75	12.36	8.00	5.63	8.31	10.18	12.68	7.60	5.99	15.30	13.90
fossil species [% without CRS]	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.20	0.00	0.00
benthic and epiphytic assemblage [% without CRS]	2.41	4.58	2.25	2.08	3.91	1.81	3.83	4.18	3.39	3.82	3.47
Diatom concentration [valve/g without CRS]	2.04E+07	1.95E+07	1.60E+07	1.14E+07	1.78E+07	1.49E+07	1.98E+07	1.11E+07	1.46E+07	1.29E+07	1.73E+07

Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	3.20	3.48	3.60	4.00	4.20	4.40	4.64	4.80	5.04	5.20	5.40
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffeaeformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis fasciolata [%]	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis californica var californica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis melchioroides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.19
Cocconeis imperatrix [%]	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilla ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gomphomenopsis littoralis [%]	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula directa [%]	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
Navicula glaciei [%]	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula perminuta [%]	0.00	0.34	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.09	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planothidium vicentii [%]	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus actinochilus [%]	0.75	1.02	0.44	0.55	0.56	0.00	0.00	0.19	0.00	0.09	0.19
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corethron pennatum [%]	0.19	1.02	0.00	0.00	0.38	0.00	0.23	0.00	0.18	0.09	0.19
Eucampia antarctica var. recta [%]	0.19	0.00	0.00	0.91	0.38	0.48	0.46	0.57	0.74	1.81	1.70
Fragilariopsis curta [%]	1.32	3.41	2.20	0.73	1.50	1.12	1.62	1.15	1.29	1.08	1.51
Fragilariopsis cylindrus [%]	0.19	0.68	0.44	0.91	0.56	0.16	0.00	0.00	0.18	0.18	0.38
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.00	0.00	0.44	0.18	0.00	0.00	0.00	0.00	0.00	0.18	0.00
Fragilariopsis peragallii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.18	0.00	0.00
Fragilariopsis rhombica [%]	0.38	0.68	0.66	0.36	0.00	0.00	0.00	0.00	0.00	0.45	0.95
Fragilariopsis ritscheri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.09	0.00
Fragilariopsis sublinearis [%]	0.19	0.00	0.00	0.00	0.00	0.16	0.23	0.00	0.00	0.00	0.19
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	0.19	0.17	0.22	0.18	0.19	0.00	0.00	0.19	0.00	0.27	0.00
Neodenticula seminae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitzschia stellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N. taeniiiformis [%]	0.00	0.00	0.44	0.00	0.09	0.00	0.23	0.00	0.00	0.00	0.00
Odontella weissflogii [%]	0.00	0.34	0.00	0.36	0.94	0.00	0.23	0.00	0.55	0.81	0.19
Porosira glacialis [%]	0.00	0.00	0.00	0.00	0.19	0.00	0.23	0.19	0.00	0.00	0.00
Porosira pseudodenticulata [%]	0.00	0.34	0.00	0.00	0.19	0.48	0.23	0.00	0.00	0.09	0.19
Porosira spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.36	0.00
Stellarima microtrias (rs and veg) [%]	0.00	0.34	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.27	0.19
Synedropsis laevis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis recta [%]	0.19	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira antarctica (T1-cold) [%]	0.38	0.85	0.00	0.00	0.38	0.00	0.00	0.19	0.18	0.00	0.00
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Asteromphalus hyalinus [%]	0.00	0.17	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
Eucampia antarctica var. antarctica [%]	0.00	0.17	0.00	1.64	1.88	0.64	1.15	0.38	0.74	1.63	0.95
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis separanda [%]	0.19	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Proboscia inermis (winter) [%]	2.07	0.68	0.00	0.00	0.19	0.00	0.46	0.00	0.18	0.09	0.00
Proboscia inermis (spring) [%]	0.94	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00
Proboscia alata [%]	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proboscia spp. [%]	0.00	0.00	0.88	0.00	0.00	1.44	0.00	0.00	0.00	0.00	0.19
Pseudo-nitzschia turgiduloides [%]	0.19	0.17	0.00	0.00	0.09	0.00	0.00	0.00	0.18	0.09	0.00
Rhizosolenia antennata f. antennata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.56	0.85	0.22	0.00	0.19	1.60	1.85	0.00	0.37	0.09	0.19
R. polydactyla f. polydactyla [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.00	0.00	0.00	0.18	0.00	0.16	1.39	0.00	0.00	0.09	0.00
Shionodiscus gracilis var. expectus [%]	1.50	1.19	0.44	0.00	0.38	0.16	0.23	0.57	0.55	0.00	0.76
Shionodiscus gracilis var. gracilis [%]	0.38	1.19	0.44	0.55	0.19	0.32	0.23	0.38	0.00	0.90	0.95
Shionodiscus frenguelliopsis [%]	0.56	0.00	0.00	0.18	0.38	0.00	0.00	0.00	0.00	0.09	0.00
Thalassiosira antarctica (veg+RS) [%]	1.32	7.67	1.10	1.64	0.94	1.28	2.77	0.76	2.40	3.89	7.75
Thalassiosira gravida [%]	0.00	0.34	0.00	0.00	0.19	0.00	0.00	0.00	0.18	0.00	0.00
Thalassiosira lentiginosa [%]	0.56	0.34	0.00	0.00	0.38	0.00	0.23	0.19	0.37	0.18	0.00
Thalassiosira maculata [%]	0.00	1.70	0.44	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.22	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.38
Thalassiosira scotia [%]	0.00	0.00	0.22	0.00	0.19	0.00	0.69	0.19	0.18	0.00	0.19
Thalassiosira antarctica/scotia [%]	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
Thalassiosira tumida [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
Thalassiothrix antarctica [%]	0.00	0.00	0.00	0.00	0.09	0.00	0.23	0.00	0.18	0.18	0.00
Trichotoxon reinboldii [%]	0.00	0.00	0.00	0.00	0.09	0.16	0.23	0.00	0.09	0.00	0.19
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus aculus-irridis [%]	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.18	0.00	0.00
Fragilariopsis kerguelensis [%]	2.26	3.75	1.76	1.28	0.94	0.96	1.85	2.48	1.11	1.36	1.51
Nitzschia bicipitata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stephanopyxis turris [%]	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unidentified taxa [%]	0.94	0.85	1.32	0.55	1.31	1.12	1.39	0.57	2.22	0.45	2.27
Chaetoceros resting spores [%]	82.89	70.53	87.25	89.05	85.93	89.62	83.60	91.03	86.61	84.45	78.45
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	532	587	455	548	533	524	433	549	542	1106	529
Diatom concentration [valves/g]	1.63E+08	7.52E+07	1.48E+08	1.51E+08	1.06E+08	3.14E+08	1.18E+08	1.71E+08	1.79E+08	1.11E+08	2.88E+07
seasonal sea-ice assemblage [% without CRS]	26.03	27.37	36.32	36.06	38.89	29.95	22.54	40.51	26.20	32.38	30.51
open ocean cold assemblage [% without CRS]	55.06	55.35	44.17	45.22	38.89	54.26	51.56	33.58	48.23	55.24	52.54
open ocn warm assemblage [% without CRS]	11.99	12.35	13.68	11.95	8.85	10.53	13.67	21.17	10.19	8.95	11.23
fossil species [% without CRS]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
benthic and epiphytic assemblage [% without CRS]	3.75	2.26	2.24	2.99	1.44	0.00	1.20	0.36	0.62	0.95	1.69
Diatom concentration [valve/g without CRS]	2.32E+07	2.00E+07	2.31E+07	1.73E+07	2.46E+07	3.31E+07	1.19E+07	3.97E+07	3.03E+07	1.75E+07	1.02E+07

Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	5.44	5.52	5.60	5.68	5.84	6.00	6.52	6.76	6.90	6.98	7.10
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffaeaeformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.00	0.00	0.00	0.23	0.22	0.00	0.00	0.00	0.00	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis fasciolata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
Cocconeis californica var. californica [%]	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Cocconeis melchioroides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.14
Cocconeis imperatrix [%]	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilla ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gomphomenopsis littoralis [%]	0.00	0.18	0.00	0.14	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula directa [%]	0.20	0.18	0.00	0.14	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Navicula glaciei [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula perminuta [%]	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planothidium vicentii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus actinochilus [%]	0.40	0.72	0.43	0.14	0.23	1.52	0.23	0.32	0.00	0.17	0.14
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corethron pennatum [%]	0.20	0.00	0.00	0.00	0.46	0.22	0.00	0.16	0.48	0.00	0.14
Eucampia antarctica var. recta [%]	0.99	1.62	0.43	1.26	0.00	0.65	0.70	0.81	0.48	1.22	1.82
Fragilariopsis curta [%]	1.58	3.42	1.74	0.14	0.92	1.30	2.10	1.13	0.24	2.62	1.54
Fragilariopsis cylindrus [%]	0.00	0.36	1.09	0.00	0.23	0.00	0.70	0.81	0.71	0.35	0.28
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.00	0.18	0.00	0.00	0.23	0.22	0.70	0.32	0.00	0.17	0.28
Fragilariopsis peragallii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis rhombica [%]	0.00	0.72	0.22	0.00	0.69	0.87	0.00	0.00	0.24	0.35	0.14
Fragilariopsis ritscheri [%]	0.20	0.00	0.43	0.14	0.00	0.22	0.00	0.16	0.24	0.17	0.00
Fragilariopsis sublinearis [%]	0.00	0.00	0.22	0.00	0.00	0.22	0.23	0.32	0.00	0.00	0.14
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	0.20	0.90	0.00	0.14	0.23	0.22	0.47	0.48	0.48	0.17	0.28
Neodenticula seminae [%]	0.00	0.00	0.00	0.14	0.00	0.00	0.23	0.00	0.00	0.00	0.14
Nitzschia stellata [%]	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N. taeniiiformis [%]	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.32	0.00	0.00	0.00
Odontella weissflogii [%]	0.79	1.44	1.52	0.14	0.00	0.43	0.47	0.81	1.19	1.57	0.14
Porosira glacialis [%]	0.00	0.36	0.43	0.28	0.00	0.00	0.47	0.00	0.00	0.00	0.14
Porosira pseudodenticulata [%]	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.48	0.00	0.17	0.00
Porosira spp. [%]	0.00	0.36	0.22	0.00	0.00	0.00	0.00	0.81	0.71	0.35	0.00
Stellarima microtrias (rs and veg) [%]	0.20	0.54	0.00	0.00	0.23	0.43	0.23	0.00	0.00	0.35	0.14
Synedropsis laevis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis recta [%]	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira antarctica (T1-cold) [%]	0.00	0.18	0.00	0.00	0.00	0.65	0.00	0.16	0.24	0.00	0.98
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asteromphalus hyalinus [%]	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Eucampia antarctica var. antarctica [%]	0.59	0.72	0.22	0.42	0.00	1.09	0.47	0.00	0.24	0.00	0.56
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis separanda [%]	0.00	0.00	0.00	0.28	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Proboscia inermis (winter) [%]	0.20	0.00	0.00	0.28	0.00	0.87	0.00	0.16	0.00	0.35	0.00
Proboscia inermis (spring) [%]	0.20	0.00	0.43	0.00	0.00	0.22	0.00	0.00	0.24	0.00	0.00
Proboscia alata [%]	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
Proboscia spp. [%]	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Pseudo-nitzschia turgiduloides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.24	0.09	0.14
Rhizosolenia antennata f. antennata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.20	1.26	0.43	0.56	0.00	0.22	0.23	0.00	0.48	0.52	0.14
R. polydactyla f. polydactyla [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.00	0.00	0.22	0.28	0.46	0.43	0.00	0.00	0.00	0.17	0.00
Shionodiscus gracilis var. expectus [%]	0.59	0.00	0.00	0.00	0.00	0.00	0.47	0.16	0.24	1.22	0.42
Shionodiscus gracilis var. gracilis [%]	0.99	0.36	0.22	0.42	0.46	0.22	0.00	0.16	1.43	0.35	1.82
Shionodiscus frenguelliopsis [%]	0.20	0.00	0.22	0.00	0.00	0.00	0.00	0.32	1.19	0.35	0.00
Thalassiosira antarctica (veg+RS) [%]	5.53	9.55	1.74	3.51	1.15	3.04	2.80	21.61	5.94	8.54	9.26
Thalassiosira gravida [%]	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
Thalassiosira lentiginosa [%]	0.59	0.36	0.00	0.56	0.23	0.43	0.23	0.00	0.00	0.00	0.00
Thalassiosira maculata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.16	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.00	0.00	0.69	0.22	0.70	0.65	0.24	0.00	0.42
Thalassiosira scotia [%]	0.00	1.80	0.65	0.00	0.46	0.43	2.33	1.61	0.71	2.79	4.21
Thalassiosira antarctica/scotia [%]	0.00	0.00	0.22	0.14	0.00	0.00	0.00	4.35	0.95	0.00	0.00
Thalassiosira tumida [%]	0.00	0.00	0.00	0.00	0.00	0.22	0.23	0.00	0.24	0.17	0.14
Thalassiothrix antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichotoxon reinboldii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.28
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus aculus-irridis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis kerguelensis [%]	2.77	1.98	0.87	1.54	0.92	2.83	0.70	0.16	0.48	0.52	0.70
Nitzschia bicipitata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stephanopyxis turris [%]	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unidentified taxa [%]	0.99	2.34	0.00	0.70	0.92	0.65	1.17	1.94	1.43	2.62	0.70
Chaetoceros resting spores [%]	82.21	70.27	86.74	87.94	90.78	80.43	83.92	60.97	80.29	74.28	74.33
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	506	555	460	713	435	435	429	620	421	574	713
Diatom concentration [valves/g]	1.18E+08	6.07E+07	2.57E+08	6.68E+07	9.69E+07	4.49E+07	8.20E+07	6.32E+07	1.28E+08	1.06E+08	7.12E+07
seasonal sea-ice assemblage [% without CRS]	31.40	37.35	44.64	23.96	34.18	27.32	35.00	21.59	30.29	26.58	27.27
open ocean cold assemblage [% without CRS]	47.44	44.98	47.62	47.03	40.27	51.22	51.35	71.59	60.42	66.21	67.60
open ocn warm assemblage [% without CRS]	12.25	7.03	2.78	19.56	17.94	13.41	4.62	1.14	2.88	1.74	1.61
fossil species [% without CRS]	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
benthic and epiphytic assemblage [% without CRS]	1.11	1.81	0.60	1.10	2.88	2.44	3.27	0.68	0.80	1.24	0.73
Diatom concentration [valve/g without CRS]	1.65E+07	1.97E+07	3.83E+07	8.53E+06	8.68E+06	7.95E+06	1.05E+07	2.24E+07	2.09E+07	2.68E+07	1.71E+07

Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	7.22	7.30	7.38	7.46	7.54	7.62	7.70	7.78	7.84	7.90	7.98
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffaeaeformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis fasciolata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis californica var. californica [%]	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis melchioroides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis imperatrix [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilla ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gomphomenopsis littoralis [%]	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula directa [%]	0.00	0.00	0.35	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula glaciei [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula perminuta [%]	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planothidium vicentii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus actinochilus [%]	0.33	1.58	0.70	0.49	0.65	0.43	0.17	0.55	0.39	0.85	0.00
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corethron pennatum [%]	0.99	0.23	0.17	0.99	0.22	0.21	0.17	0.37	0.58	0.85	0.40
Eucampia antarctica var. recta [%]	0.66	1.58	0.70	0.00	0.86	0.64	0.17	0.00	0.00	0.21	0.20
Fragilariopsis curta [%]	2.64	1.13	2.80	1.72	0.65	1.28	1.32	1.83	1.35	4.48	2.20
Fragilariopsis cylindrus [%]	0.66	0.68	1.22	0.99	0.43	1.07	0.33	2.20	0.39	0.21	0.20
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.16	0.23	0.35	0.25	0.22	0.43	0.00	0.00	0.39	0.00	0.20
Fragilariopsis peragallii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Fragilariopsis rhombica [%]	0.16	0.00	0.00	0.00	0.00	0.21	0.17	0.55	0.00	0.21	0.20
Fragilariopsis ritscheri [%]	0.16	0.00	0.00	0.25	0.00	0.64	0.00	0.00	0.19	0.21	0.00
Fragilariopsis sublinearis [%]	0.16	0.45	0.00	0.00	0.00	0.00	0.17	0.37	0.00	0.00	0.00
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	1.15	0.45	0.35	0.49	0.22	0.43	0.00	0.37	0.39	0.64	1.00
Neodenticula seminae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
Nitzschia stellata [%]	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.18	0.00	0.00	0.00
N. taeniiiformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
Odontella weissflogii [%]	1.32	0.90	0.00	0.00	0.00	0.43	0.00	0.18	0.19	0.43	0.00
Porosira glacialis [%]	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
Porosira pseudodenticulata [%]	0.33	0.45	0.35	0.00	0.22	0.21	0.33	0.00	0.00	0.21	0.00
Porosira spp. [%]	0.33	0.00	1.40	1.23	0.22	0.64	0.33	0.18	0.58	0.21	0.40
Stellarima microtrias (rs and veg) [%]	0.16	0.00	0.52	0.00	0.22	0.21	0.00	0.00	0.00	0.00	0.20
Synedropsis laevis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis recta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira antarctica (T1-cold) [%]	0.00	0.00	0.17	0.25	0.43	0.43	0.00	0.18	0.19	1.07	0.20
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asteromphalus hyalinus [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eucampia antarctica var. antarctica [%]	0.16	0.23	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis separanda [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
Proboscia inermis (winter) [%]	0.00	0.00	0.35	0.99	0.22	0.64	0.00	0.55	0.19	0.00	0.00
Proboscia inermis (spring) [%]	0.33	0.00	0.35	0.00	0.22	0.43	0.00	0.18	0.00	0.00	0.00
Proboscia alata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.21	0.00
Proboscia spp. [%]	0.00	0.23	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00
Pseudo-nitzschia turgiduloides [%]	0.25	0.00	0.35	0.49	0.00	0.43	0.00	0.18	0.00	0.21	0.00
Rhizosolenia antennata f. antennata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.16	0.00	0.17	0.25	0.00	0.00	0.00	0.00	0.00	0.21	0.20
R. polydactyla f. polydactyla [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Shionodiscus gracilis var. expectatus [%]	0.82	0.45	0.17	0.25	0.22	0.21	0.66	0.92	0.00	0.00	0.00
Shionodiscus gracilis var. gracilis [%]	0.49	0.00	0.17	0.00	0.22	0.21	0.17	0.73	1.16	0.21	0.20
Shionodiscus frenguelliopsis [%]	0.33	0.00	0.52	0.00	0.00	0.21	0.33	0.00	0.00	0.00	0.00
Thalassiosira antarctica (veg+RS) [%]	11.54	6.53	6.99	2.96	2.81	4.90	7.43	2.57	3.87	1.92	3.00
Thalassiosira gravida [%]	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira lentiginosa [%]	0.00	0.00	0.00	0.25	0.00	0.43	0.33	0.18	0.00	0.43	0.00
Thalassiosira maculata [%]	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.35	0.00	0.43	0.21	0.00	0.18	0.39	0.21	0.00
Thalassiosira scotia [%]	2.31	0.68	1.57	0.49	0.00	0.64	0.66	0.18	0.58	0.21	0.00
Thalassiosira antarctica/scotia [%]	0.49	0.23	0.70	0.49	0.86	0.85	1.32	0.55	0.39	0.64	0.20
Thalassiosira tumida [%]	0.16	0.00	0.35	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Thalassiothrix antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichotoxon reinboldii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus acculus-irridis [%]	0.16	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis kerguelensis [%]	0.33	0.00	0.17	0.00	0.22	0.43	0.17	0.37	0.39	0.00	0.00
Nitzschia bicipitata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00
Stephanopyxis turris [%]	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unidentified taxa [%]	1.32	1.35	0.70	0.99	0.00	0.43	0.66	0.92	0.19	0.43	0.80
Chaetoceros resting spores [%]	70.90	82.66	77.62	85.71	90.06	81.66	84.16	84.40	88.01	85.29	90.20
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	607	444	572	406	463	469	606	545	517	469	500
Diatom concentration [valves/g]	6.07E+07	9.71E+07	1.07E+08	9.27E+07	1.58E+08	1.20E+08	6.28E+07	1.09E+08	6.82E+07	9.23E+07	1.00E+08
seasonal sea-ice assemblage [% without CRS]	29.34	36.25	37.11	38.77	44.25	37.67	27.47	50.98	50.48	55.69	60.75
open ocean cold assemblage [% without CRS]	63.74	60.10	57.14	56.84	48.73	56.02	68.19	44.66	44.71	39.34	35.03
open ocn warm assemblage [% without CRS]	1.95	0.73	0.37	0.70	1.20	2.29	2.17	1.53	1.44	1.42	0.44
fossil species [% without CRS]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
benthic and epiphytic assemblage [% without CRS]	1.42	0.73	1.67	1.23	1.49	0.96	0.24	2.18	1.44	0.71	0.22
Diatom concentration [valve/g without CRS]	2.82E+07	1.28E+07	2.16E+07	2.38E+07	1.96E+07	2.11E+07	1.08E+07	1.83E+07	7.40E+06	1.18E+07	9.75E+06

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Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	8.06	8.10	8.14	8.22	8.30	8.38	8.46	8.54	8.62	8.70	8.78
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffeaeformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.23	0.00
Cocconeis fasciolata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
Cocconeis californica var. californica [%]	0.00	0.00	0.00	0.00	0.16	0.20	0.00	0.00	0.00	0.00	0.00
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis melchioroides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
Cocconeis imperatrix [%]	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilla ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gomphonemopsis littoralis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Navicula directa [%]	0.00	0.00	0.16	0.00	0.00	0.40	0.00	0.00	0.24	0.00	0.00
Navicula glaciei [%]	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.24	0.00	0.00
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula perminuta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planothidium vicentii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus actinochilus [%]	0.80	0.23	1.09	0.66	1.56	0.79	0.45	0.21	1.21	1.38	1.00
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corethron pennatum [%]	0.32	0.00	0.47	0.00	0.00	0.00	0.00	0.21	0.49	0.00	0.00
Eucampia antarctica var. recta [%]	0.00	0.00	0.16	0.00	0.00	0.20	0.00	0.21	0.12	0.23	0.00
Fragilariopsis curta [%]	0.80	0.46	1.25	1.98	3.13	5.34	2.45	1.87	2.55	0.46	0.40
Fragilariopsis cylindrus [%]	0.16	0.23	0.00	0.44	0.63	1.78	0.22	0.00	1.33	0.00	0.00
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.00	0.23	0.16	0.22	0.31	0.40	0.22	0.42	0.12	0.46	0.00
Fragilariopsis peragallii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis rhombica [%]	0.16	0.00	0.00	0.22	0.47	0.20	0.22	0.62	0.49	0.00	0.00
Fragilariopsis ritscheri [%]	0.00	0.00	0.00	0.22	0.00	0.59	0.00	0.00	0.36	0.23	0.20
Fragilariopsis sublinearis [%]	0.00	0.00	0.16	0.22	0.31	0.20	0.22	0.62	0.61	0.00	0.20
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	0.16	0.23	0.16	1.54	0.63	2.17	0.00	0.62	0.85	0.00	0.60
Neodenticula seminae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Nitzschia stellata [%]	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00
N. taeniiiformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
Odontella weissflogii [%]	0.00	0.00	0.16	0.00	0.47	0.59	0.00	0.21	0.24	0.23	0.20
Porosira glacialis [%]	0.32	0.00	0.16	0.22	0.31	0.00	0.00	0.21	0.00	0.00	0.00
Porosira pseudodenticulata [%]	0.00	0.00	0.00	0.22	0.00	0.59	0.67	0.83	0.97	0.23	0.00
Porosira spp. [%]	0.00	0.00	0.31	0.00	0.31	0.79	0.00	0.00	0.24	0.00	0.20
Stellarima microtrias (rs and veg) [%]	0.48	0.23	0.62	0.22	0.31	0.79	0.00	0.00	0.24	0.69	1.20
Synedropsis laevis [%]	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Synedropsis recta [%]	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira antarctica (T1-cold) [%]	0.64	0.23	0.62	0.00	1.25	0.79	1.34	3.74	1.46	0.92	1.40
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asteromphalus hyalinus [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eucampia antarctica var. antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis separanda [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.20
Proboscia inermis (winter) [%]	0.00	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
Proboscia inermis (spring) [%]	0.00	0.00	0.16	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.20
Proboscia alata [%]	0.32	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.12	0.00	0.00
Proboscia spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudo-nitzschia turgiduloides [%]	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.49	0.00	0.20
Rhizosolenia antennata f. antennata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.00	0.00	0.16	0.00	0.16	0.20	0.00	0.00	0.00	0.00	0.20
R. polydactyla f. polydactyla [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.00	0.23	0.00	0.66	0.31	0.40	0.00	0.62	0.00	0.00	0.00
Shionodiscus gracilis var. expectus [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00
Shionodiscus gracilis var. gracilis [%]	0.00	0.00	0.16	0.22	0.16	0.20	0.22	0.83	0.12	0.23	0.40
Shionodiscus frenguelliopsis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00
Thalassiosira antarctica (veg+RS) [%]	3.18	3.87	5.92	5.49	13.44	9.49	15.81	15.80	8.13	46.31	13.63
Thalassiosira gravida [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira lentiginosa [%]	0.00	0.23	0.16	0.22	0.00	0.20	0.00	0.42	0.00	0.00	0.20
Thalassiosira maculata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira scotia [%]	0.64	0.00	0.31	0.22	0.16	1.98	0.22	1.04	1.33	0.00	0.20
Thalassiosira antarctica/scotia [%]	0.80	0.68	2.18	2.64	6.56	3.36	0.00	8.73	3.16	0.92	7.41
Thalassiosira tumida [%]	0.00	0.00	0.00	0.00	0.31	0.00	0.22	0.83	0.24	0.00	0.00
Thalassiothrix antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichotoxon reinboldii [%]	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus acculus-irridis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis kerguelensis [%]	0.00	0.23	0.00	0.44	0.47	1.58	1.11	0.83	0.49	1.15	0.60
Nitzschia bicipitata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
Stephanopyxis turris [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unidentified taxa [%]	0.16	0.00	0.16	0.22	0.63	0.20	0.45	0.00	0.36	0.92	0.00
Chaetoceros resting spores [%]	90.92	92.94	84.89	83.30	67.50	64.82	76.17	59.88	73.42	44.93	70.74
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	628	439	642	455	640	506	449	481	824	434	499
Diatom concentration [valves/g]	8.29E+07	2.69E+07	3.98E+07	2.35E+07	9.62E+07	1.64E+07	4.49E+07	1.00E+07	5.06E+07	1.01E+07	1.50E+07
seasonal sea-ice assemblage [% without CRS]	43.27	30.54	34.81	40.17	31.90	43.17	23.49	25.97	47.91	10.69	17.00
open ocean cold assemblage [% without CRS]	52.98	65.38	62.38	55.98	64.48	50.54	69.07	70.39	47.75	86.53	80.04
open ocn warm assemblage [% without CRS]	0.66	0.90	0.70	1.50	1.58	4.34	4.88	1.94	2.34	1.58	1.19
fossil species [% without CRS]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
benthic and epiphytic assemblage [% without CRS]	0.66	0.68	1.17	1.07	0.68	1.30	0.93	0.97	1.00	0.20	0.99
Diatom concentration [valve/g without CRS]	6.73E+06	2.68E+06	8.84E+06	4.03E+06	3.37E+06	6.42E+06	2.15E+07	3.68E+06	1.23E+07	6.69E+06	3.80E+06

Event	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1	PS97/072-1
Depth [m]	8.86	8.90	8.94	9.02	9.10	9.20	9.32	9.44	9.80	10.00
Achnanthes brevipes [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora copulata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphora coffaeiformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis costata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00
Cocconeis dalmannii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis fasciolata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
Cocconeis californica var californica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Cocconeis californica var. kerguelensis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
Cocconeis melchioroides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis imperatrix [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 1 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocconeis sp. 2 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entopilea ocellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fallacia marnieri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gomphonopsis littoralis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grammatophora angulosa [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Licmophora gracilis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Melosira adeliae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navicula directa [%]	0.00	0.00	0.00	0.00	0.00	0.36	0.16	0.44	0.39	1.94
Navicula glaciei [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Navicula imperfecta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Navicula perminuta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paralia sulcata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	1.18	0.24
Pianothidium vicentii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudogomphonema kantschaticum [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus actinocylus [%]	0.00	0.48	0.63	0.00	0.42	0.91	1.91	2.19	2.35	0.00
Berkeleya spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Corethron pennatum [%]	0.00	0.00	0.00	0.00	0.00	0.55	0.32	0.22	0.00	0.00
Eucampia antarctica var. recta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.66	0.39	0.49
Fragilariopsis curta [%]	0.17	0.72	0.31	0.88	1.17	1.82	5.57	7.02	1.96	14.08
Fragilariopsis cylindrus [%]	0.00	0.00	0.00	0.35	0.32	0.18	1.59	0.44	0.39	0.00
Fragilariopsis nana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis obliquecostata [%]	0.52	0.00	0.31	0.35	0.11	0.73	0.80	2.41	0.39	1.46
Fragilariopsis peragallii [%]	0.00	0.00	0.00	0.00	0.00	0.18	0.32	0.00	0.00	0.24
Fragilariopsis rhombica [%]	0.00	0.00	0.16	0.35	0.00	0.18	1.11	0.88	0.39	0.00
Fragilariopsis ritscheri [%]	0.17	0.00	0.16	0.35	0.11	0.18	1.43	2.41	0.00	0.24
Fragilariopsis sublinearis [%]	0.00	0.00	0.00	0.00	0.21	0.55	0.96	2.41	1.18	2.18
Fragilariopsis sublin/obliq [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis vanheurckii [%]	0.35	0.00	0.00	1.23	0.32	0.36	1.75	1.75	0.39	3.40
Neodenticula seminae [%]	0.00	0.00	0.31	0.00	0.32	0.00	0.00	0.22	4.31	0.24
Nitzschia stellata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N. taeniiiformis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
Odontella weissflogii [%]	0.00	0.00	0.00	0.00	0.11	0.00	0.96	0.88	0.00	0.24
Porosira glacialis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
Porosira pseudodenticulata [%]	0.17	0.24	0.16	0.00	0.11	0.00	0.48	0.22	0.00	1.46
Porosira spp. [%]	0.00	0.00	0.00	0.00	0.21	0.55	0.96	1.10	2.35	0.00
Stellarima microtrias (rs and veg) [%]	0.17	0.48	0.47	0.35	0.11	0.36	1.75	1.10	3.53	0.00
Synedropsis laevis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91
Synedropsis recta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.39	1.94
Synedra/Synedropsis spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Synedropsis sp. [%]	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.39	0.00
Thalassiosira antarctica (T1=cold) [%]	0.87	0.24	0.94	0.18	0.85	1.64	7.64	9.87	5.49	0.73
Asteromphalus hookeri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Asteromphalus hyalinus [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eucampia antarctica var. antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00
Fragilariopsis pseudonana [%]	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
Fragilariopsis separanda [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proboscia inermis (winter) [%]	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.24
Proboscia inermis (spring) [%]	0.00	0.00	0.00	0.00	0.00	0.18	0.64	0.00	0.39	0.00
Proboscia alata [%]	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.44	0.00	0.49
Proboscia spp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pseudo-nitzschia turgiduloides [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
Rhizosolenia antennata f. antennata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. antennata f. semispina [%]	0.00	0.00	0.00	0.00	0.11	0.00	0.16	0.22	8.24	0.00
R. polydactyla f. polydactyla [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R. simplex [%]	0.17	0.00	0.31	0.00	0.00	0.00	0.00	0.00	1.57	0.24
Shionodiscus gracilis var. expectus [%]	0.17	0.00	0.16	0.35	0.21	0.00	0.00	0.88	0.00	0.00
Shionodiscus gracilis var. gracilis [%]	0.17	0.00	0.16	0.18	0.11	0.55	1.27	1.10	0.00	0.00
Shionodiscus frenguelliopsis [%]	0.00	0.00	0.00	0.11	0.18	0.00	1.10	0.00	0.00	0.24
Thalassiosira antarctica (veg+RS) [%]	6.45	17.83	20.31	8.23	8.49	10.20	30.10	16.45	8.24	7.28
Thalassiosira gravida [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00
Thalassiosira lentiginosa [%]	0.00	0.24	0.00	0.00	0.00	0.00	0.16	1.10	2.35	0.24
Thalassiosira maculata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thalassiosira oliverana [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.39	0.00
Thalassiosira ritscheri [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00
Thalassiosira scotia [%]	0.35	0.00	0.00	0.00	0.11	1.09	6.85	1.97	0.00	0.00
Thalassiosira antarctica/scotia [%]	3.83	0.00	0.00	0.35	0.42	0.73	8.60	4.82	1.18	0.00
Thalassiosira tumida [%]	0.17	0.00	0.00	0.00	0.32	0.55	0.64	0.66	0.00	0.24
Thalassiothrix antarctica [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichotoxon reinboldii [%]	0.00	0.00	0.00	0.00	0.11	0.18	0.16	0.22	3.14	0.49
Azpeitia tabularis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coscinodiscus acculus-irridis [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.39	0.00
Fragilariopsis kerguelensis [%]	0.17	0.24	0.00	0.53	0.11	0.18	0.64	2.41	0.78	0.73
Nitzschia bicapitata [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shionodiscus oestrupii [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.22	0.00	0.00
Stephanopyxis turris [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Actinocyclus ingens [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	3.14	0.00
Cladogramma sp. [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rouxia constricta [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	2.35	0.00
Rouxia leventerae [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	1.21
Unidentified taxa [%]	0.17	0.00	0.16	0.00	0.21	0.36	0.80	2.85	7.45	2.67
Chaetoceros resting spores [%]	85.89	79.52	75.28	86.16	84.93	77.23	20.86	29.61	32.16	50.49
Total [%]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
diatom counted	574	415	635	570	941	549	628	456	512	412
Diatom concentration [valves/g]	3.23E+07	1.97E+07	1.86E+07	7.77E+07	5.65E+07	3.58E+07	9.79E+06	1.47E+07	8.01E+05	1.43E+06
seasonal sea-ice assemblage [% without CRS]	14.96	13.17	12.96	30.08	28.89	31.77	35.61	47.95	34.30	73.35
open ocean cold assemblage [% without CRS]	81.50	84.67	85.43	64.34	68.65	64.10	61.57	40.82	40.12	13.01
open ocean warm assemblage [% without CRS]	2.36	1.30	1.01	3.72	0.61	1.32	1.41	4.10	1.74	2.56
fossil species [% without CRS]	0.20	0.00	0.00	0.16	0.00	0.00	0.00	0.86	9.30	1.28
benthic and epiphytic assemblage [% without CRS]	0.20	0.00	0.00	0.62	0.20	0.75	0.40	1.51	3.49	4.90
Diatom concentration [valve/g without CRS]	3.93E+06	3.08E+06	4.84E+06	9.90E+06	7.33E+06	4.71E+06	7.75E+06	8.97E+06	5.38E+05	8.61E+05

Not clear in the text or here, which species are included in each of the groups.

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