Table S1. Tukey honestly significant difference (HSD) test with Bonferroni correction for feeding type comparisons in the station groupings determined to be significant by ANOVA. Feeding strategies were classified as SUS (suspension), SUS/SDF (suspension/surface deposit), SDF (surface deposit), SSDF (subsurface deposit), and P/S (predator/scavenger). Significant p-values are denoted as less than 0.05 (*), 0.01 (**) and 0.001 (***).

DBO Region - Tukey HSD

DBO 3	p	Icy Cape	p	DBO 4	p	DBO 5	p
SDF-PS	**0.04 ***	SDF-PS	1	SDF-PS	1	SDF-PS	0.45
SSDF-PS	0.64	SSDF-PS	1	SSDF-PS	1	SSDF-PS	0.49
SUS-PS	0.93	SUS-PS	0.14	SUS-PS	0.63	SUS-PS	1
SUS/SDF-PS	1	SUS/SDF-PS	0.95	SUS/SDF-PS	0.72	SUS/SDF-PS	0.89
SSDF-SDF	0.15	SSDF-SDF	1	SSDF-SDF	1	SSDF-SDF	1
SUS-SDF	0.08	SUS-SDF	0.21	SUS-SDF	0.24	SUS-SDF	0.07
SUS/SDF-SDF	**0.03 ***	SUS/SDF-SDF	0.95	SUS/SDF-SDF	0.26	SUS/SDF-SDF	0.71
SUS-SSDF	0.96	**SUS-SSDF**	**0.04 ***	**SUS-SSDF**	**0.03 ***	**SUS-SSDF**	**0.05 ***
SUS/SDF-SSDF	0.52	SUS/SDF-SSDF	0.92	**SUS/SDF-SSDF**	**0.01 ***	SUS/SDF-SSDF	0.75
SUS/SDF-SUS	0.88	SUS/SDF-SUS	0.63	SUS/SDF-SUS	1	SUS/SDF-SUS	0.46

Cluster - Tukey HSD

Cluster 2	p	Cluster 3	p
SDF-PS	0.99	SDF-PS	0.38
SSDF-PS	0.96	SSDF-PS	0.99
SUS-PS	0.57	**SUS-PS**	**0.05 ***
SUS/SDF-PS	0.89	SUS/SDF-PS	0.87
SSDF-SDF	0.99	SSDF-SDF	0.46
SUS-SDF	0.17	**SUS-SDF**	**0.01 ****
SUS/SDF-SDF	0.38	SUS/SDF-SDF	0.10
SUS-SSDF	**0.03 ***	**SUS-SSDF**	**<0.001 *****
SUS/SDF-SSDF	**0.04 ***	SUS/SDF-SSDF	0.21
SUS/SDF-SUS	0.88	SUS/SDF-SUS	0.09

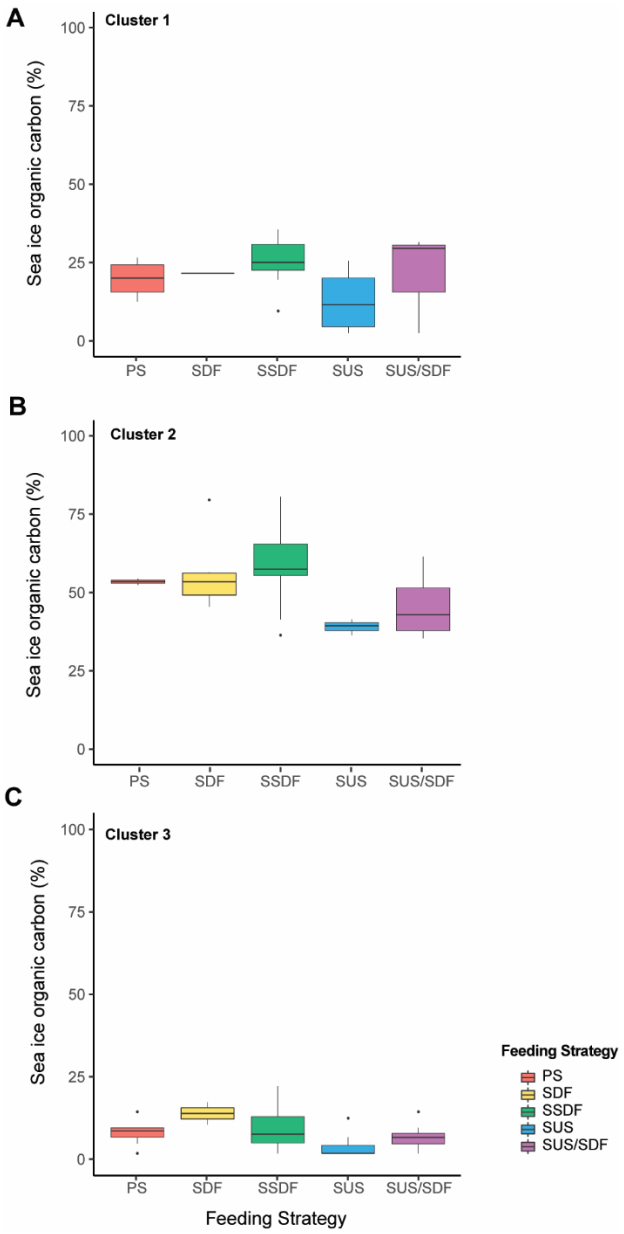

Fig. S1. Boxplots of sea ice organic carbon (iPOC%) and feeding strategy by cluster A) Cluster 1, B) Cluster 2, C) Cluster 3. Boxes indicate the interquartile range from the first to third quartiles, with the median shown as the line within each box. The minimum and maximum points are indicated by the lines and outliers are shown as individual points.