

Supplementary file for: Wolf C., Kiliyas E. & Metfies K. 2015. Protists in the polar regions: comparing occurrence in the Arctic and Southern oceans using pyrosequencing. *Polar Research* 34. Correspondence: Christian Wolf, Department of Bioscience, Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Am Handelshafen 12, DE-27570 Bremerhaven, Germany. E-mail: christian.wolf@awi.de.

Supplementary Table S1. List of abundant operational taxonomic units (OTUs), accession number of the best match originating from the warmest region, their query coverage and maximum identity and the native region.

OTU	Accession number	Query cover / identity	Region
Phaeocystaceae_1	KC488454.1	98% / 99%	North Atlantic
Phaeocystaceae_2	JX840877.1	99% / 99%	Polar
Phaeocystaceae_3	JX840877.1	95% / 100%	Polar
Phaeocystaceae_4	JX840877.1	99% / 99%	Polar
Phaeocystaceae_5	JX840877.1	99% / 99%	Polar
Phaeocystaceae_6	JX840877.1	99% / 99%	Polar
Phaeocystaceae_7	JX840877.1	99% / 99%	Polar
Phaeocystaceae_8	JX680367.1	99% / 99%	Sub-polar
Phaeocystaceae_9	JX840877.1	99% / 99%	Polar
Phaeocystaceae_10	JX840877.1	99% / 99%	Polar
Phaeocystaceae_11	JX680367.1	99% / 99%	Sub-polar
Phaeocystaceae_12	JX680415.1	99% / 97%	Sub-polar
Prymnesiaceae_1	AM491017.2	98% / 99%	Polar
Prymnesiaceae_2	AM491011.1	99% / 99%	North Pacific
Prymnesiaceae_3	KC488457.1	99% / 99%	North Atlantic
Prymnesiaceae_4	FN263276.1	99% / 99%	Baltic Sea
Prymnesiaceae_5	HQ865016.1	99% / 99%	North Pacific
Pavlovophyceae	EU682597.1	91% / 100%	North Atlantic
Incertae sedis	FN690514.1	100% / 99%	Baltic Sea
Diatom_1	JX840887.1	99% / 99%	Polar
Diatom_2	JX840887.1	96% / 99%	Polar
Diatom_3	KF925340.1	100% / 99%	South Atlantic
Diatom_4	KF925340.1	97% / 99%	South Atlantic
Diatom_5	EF140623.1	99% / 99%	Polar
Diatom_6	JX840887.1	99% / 99%	Polar
Diatom_7	HQ912646.1	98% / 97%	North Pacific
Diatom_8	JF794046.1	99% / 99%	Polar
Diatom_9	AJ535140.1	100% / 99%	Polar
Diatom_10	FN690544.1	99% / 99%	Baltic Sea
Bicoecea	AY821979.1	93% / 94%	Freshwater
Chrysophyceae	AY994316.1	99% / 100%	Spain
Dictyochophyceae_1	U14385.1	99% / 99%	Baltic Sea

Dictyochophyceae_2	KF422609.1	99% / 99%	English Channel
Dictyochophyceae_3	JF794054.1	99% / 100%	Polar
Dictyochophyceae_4	HQ438119.1	100% / 97%	Polar
Dictyochophyceae_5	HQ869665.1	99% / 100%	North Pacific
MAST_1A	KC488521.1	99% / 99%	North Atlantic
MAST_1B	KC488516.1	99% / 99%	North Atlantic
MAST_1C_1	KC488518.1	99% / 100%	North Atlantic
MAST_1C_2	HQ869499.1	99% / 99%	North Pacific
MAST_2_1	JQ782083.1	97% / 99%	East China Sea
MAST_2_2	HQ865141.1	98% / 100%	North Pacific
MAST_3_1	KC488532.1	100% / 99%	North Atlantic
MAST_3_2	HM581748.1	99% / 99%	Polar
MAST_7_1	KC488553.1	99% / 99%	North Atlantic
MAST_7_2	AY116219.1	99% / 100%	North Atlantic
MAST_7_3	HQ868802.1	99% / 100%	North Pacific
MAST_8_1	HQ869551.1	98% / 100%	North Pacific
MAST_8_2	HQ869384.1	99% / 100%	North Pacific
Pelagophyceae	KC488603.1	99% / 99%	North Atlantic
Dolichomastigales_1	HQ869376.1	100% / 99%	North Pacific
Dolichomastigales_2	GU824649.1	98% / 99%	Caribbean Sea
Mamiellales_1	JQ956271	99% / 99%	Polar
Mamiellales_2	JX840897.1	99% / 99%	Polar
Mamiellales_3	AF363156.1	99% / 99%	Polar
Halosphaeraceae_1	FN690733.1	99% / 99%	Baltic Sea
Halosphaeraceae_2	FN690733.1	100% / 99%	Baltic Sea
Halosphaeraceae_3	FN690733.1	100% / 99%	Baltic Sea
Halosphaeraceae_4	JN934689.1	98% / 99%	Polar
Halosphaeraceae_5	FN690733.1	100% / 99%	Baltic Sea
Halosphaeraceae_6	FN690733.1	100% / 99%	Baltic Sea
Halosphaeraceae_7	FN690733.1	100% / 99%	Baltic Sea
Halosphaeraceae_8	FN690733.1	100% / 99%	Baltic Sea
Dinophyceae_1	KC488434	95% / 100%	North Atlantic
Dinophyceae_2	GU825681	99% / 99%	Caribbean Sea
Dinophyceae_3	KC488434	100% / 99%	North Atlantic
Dinophyceae_4	FJ914494.1	99% / 99%	Coast of North Carolina
Dinophyceae_5	FJ431836.1	98% / 99%	English Channel
Unc. Alveolate	KC488434	99% / 99%	North Atlantic
Syndiniales_Group_I_1	JF826359.1	99% / 99%	Polar
Syndiniales_Group_I_2	JN832726	91% / 99%	Polar
Syndiniales_Group_II_1	KC488506	99% / 99%	North Atlantic
Syndiniales_Group_II_2	HQ867522.1	99% / 99%	North Pacific
Ciliophora_1	KC488390	100% / 99%	North Atlantic
Ciliophora_2	JX840885	100% / 99%	Polar