

Table S1. Main diatom species in core PSh-6066 with remarks to their environmental characteristics.

Diatom species	Environmental characteristic			
	Habitat	Salinity tolerance (Simonsen&Pankow)	Distribution	
			Phytogeographic al groups	
Relatively warm-water species				
<i>Actinocyclus curvatus</i> Janisch	p	m	c	n
<i>Actinoptychus senarius</i> (Ehrenberg) Ehrenberg	p	m	c	on
<i>Coscinodiscus asteromphalus</i> Ehrenberg	p	m	b	on
<i>Coscinodiscus perforatus</i> Ehrenberg	p	m	b	on
<i>Coscinodiscus radiatus</i> Ehrenberg	p	m	b	n
<i>Thalassiosira angustelineata</i> (A.Schmidt) G.Fryxell et Hasle	p	m	c	n
<i>Thalassiosira latimarginata</i> Makarova	p	m	c	n
<i>Shionodiscus oestrupii</i> (Ostenfeld) A.J.Alverson, S.-H.Kang & E.C.Theriot	p	m		on
Relatively cold-water species				
<i>Coscinodiscus oculus-iridis</i> (Ehrenberg) Ehrenberg	p	m	ab	n
<i>Coscinodiscus marginatus</i> Ehrenberg	p	m	ab	n
Relatively cold-water species, which develop in the plankton of the marginal ice zone				
<i>Bacterosira bathyomphala</i> (Cleve) Syvertsen et Hasle	p	m	c	n
<i>Chaetoceros furcellatus</i> Bailey	p	m	c	n
<i>Porosira glacialis</i> (Grunow) Jørgensen	p	m	c	n
<i>Rhizosolenia hebetata</i> f. <i>hebetata</i> Bailey	p	m	c	on
<i>Thalassiosira nordenskioeldii</i> Cleve	p	m	c	n
Sea ice species				
<i>Attheya septentrionalis</i> (Østrup) Crawford	p	m	ab	n
<i>Melosira arctica</i> Dickie	p	m	ab	s
<i>Nitzschia frigida</i> Grunow	p	m	ab	n
Freshwater species				
<i>Stephanodiscus neoastreae</i> Håkansson et Hickel	p	fr	c	
<i>Aulacoseira ambigua</i> (Grunow) Simonsen	p	fr	c	
<i>Cyclotella meneghiniana</i> Kützing	p	fr	c	
<i>Diploneis elliptica</i> (Kützing) Cleve	b	fr	c	
Sublittoral species				
<i>Paralia sulcata</i> (Ehrenberg) Cleve	pb	m	b	s
<i>Delphineis surirella</i> (Ehrenberg) Andrews	b	m		s
<i>Grammatophora hamulifera</i> Kützing	b	m	c	s
<i>Grammatophora marina</i> (Lyngbye) Kützing	b	m	c	s

Environmental characteristics: p – planktonic, pb – meroplanktonic, b – benthic; salinity tolerance: m – marine, fr – freshwater; phytogeographical groups: c – cosmopolitan, b – boreal, ab – arctoboreal; by belonging to the zones of the ocean: s – sublittoral, n – neritic, on – panthalassic.

