

**Table A2.** Seawater properties and box core top *C. wuellerstorfi*  $\delta^{18}\text{O}$  from Arctic Ocean *Polar Star* cruises

Core	Latitude	Longitude	Water Depth (m)	Temperature (°C)	Salinity (psu)	Seawater $\delta^{18}\text{O}$ (SMOW)	<i>C. wuellerstorfi</i> $\delta^{18}\text{O}$ (PDB)
P192AR-B6	74.996	-159.304	1845	-0.30	34.93	0.32	3.76
P192AR-B7	74.820	-157.558	1055	-0.31	34.93	0.32	3.80
P192AR-B8	74.824	-157.426	1402	-0.31	34.93	0.32	3.90
P192AR-B9	74.825	-157.205	2120	-0.31	34.93	0.32	3.66
P192AR-B10	74.813	-157.103	3145	-0.31	34.93	0.32	3.72
P192AR-B15	75.734	-160.861	2135	-0.36	34.95	0.34	3.63
P192AR-B16	75.729	-160.092	1388	-0.23	34.92	0.31	3.85
P193AR-B2	74.755	-157.887	893	-0.31	34.93	0.32	3.74
P193AR-B3	74.742	-157.457	1536	-0.31	34.93	0.32	3.66
P193AR-B4	74.740	-157.392	1799	-0.31	34.93	0.32	3.70
P193AR-B5	74.740	-157.362	1942	-0.31	34.93	0.32	3.92
P193AR-B7	74.740	-157.316	2476	-0.31	34.93	0.32	3.86
P193AR-B8	74.740	-157.285	2560	-0.31	34.93	0.32	3.68
P193AR-B10	74.742	-157.190	3365	-0.31	34.93	0.32	3.80
P193AR-B11	74.737	-157.158	3482	-0.31	34.93	0.32	3.69
P193AR-B18	72.142	-141.135	2940	-0.35	34.96	0.36	3.64
P194AR-B7	76.666	-173.385	2214	-0.43	34.95	0.34	3.71
P194AR-B8	78.128	-176.744	1031	-0.38	34.93	0.32	3.69
P194AR-B12	79.989	-174.289	1609	-0.41	34.95	0.34	3.83
P194AR-B16	80.339	-178.712	1533	-0.41	34.94	0.33	3.77
P194AR-B17	81.265	178.968	2217	-0.41	34.95	0.34	3.73
P194AR-B19	82.447	175.758	2400	-0.39	34.95	0.34	3.70
P194AR-B20	83.170	174.106	3110	-0.39	34.96	0.36	3.74
P194AR-B21	84.095	174.964	3193	-0.40	34.96	0.36	3.76
P194AR-B23	85.907	166.683	3475	-0.43	34.96	0.36	3.73
P194AR-B26	88.810	142.982	1020	-0.63	34.94	0.33	3.66
P194AR-B28	88.873	140.180	1990	-0.64	34.94	0.33	3.76