

Supplement

Table S1. Annual correlation coefficients for temperature, wind components, and pressure at Barrow and Zeppelin.

Note. Correlation coefficients are dimensionless. T denotes temperature; U and V denote the zonal and meridional wind components, respectively. NA indicates unavailable data in the original spreadsheet. Values are shown to two decimal places without rounding.

(a) Barrow

Year	T	U	V	Pressure
2000	0.97	0.95	0.91	0.99
2001	0.96	0.94	0.89	0.99
2002	0.97	0.95	0.90	0.99
2003	NA	NA	NA	NA
2004	0.98	0.83	0.77	0.99
2005	0.99	0.95	0.92	0.99
2006	0.99	0.94	0.89	0.99
2007	0.98	0.94	0.90	0.99
2008	0.98	0.92	0.90	0.97
2009	0.99	0.95	0.91	0.99
2010	0.97	0.94	0.90	0.99
2011	0.97	0.95	0.89	0.99
2012	0.98	0.94	0.83	0.99
2013	0.98	0.97	0.92	0.99
2014	0.97	0.95	0.87	0.99
2015	0.98	0.96	0.91	0.99
2016	0.99	0.94	0.90	0.99
2017	0.98	0.97	0.83	0.99
2018	0.97	0.95	0.93	0.99
2019	0.98	0.95	0.93	0.99
2020	0.97	0.97	0.93	0.99
2021	0.98	0.94	0.90	0.99
2022	0.98	0.96	0.92	0.99
2023	0.98	0.94	0.94	0.99
2024	0.99	0.95	0.94	0.99

Table S1. Continued.**(b) Zeppelin**

Year	T	U	V	Pressure
2000	NA	NA	NA	NA
2001	0.96	0.55	0.50	0.99
2002	0.94	0.59	0.47	0.99
2003	0.96	0.58	0.50	0.99
2004	0.93	0.70	0.34	0.99
2005	0.96	0.67	0.47	0.93
2006	0.97	0.68	0.49	0.89
2007	0.96	0.61	0.35	0.99
2008	0.96	0.56	0.45	0.99
2009	0.96	0.64	0.62	0.98
2010	NA	NA	NA	NA
2011	0.94	0.68	0.63	NA
2012	0.94	0.61	0.49	0.99
2013	0.96	0.53	0.31	0.99
2014	0.94	0.52	0.79	0.99
2015	0.95	0.60	0.47	0.99
2016	0.97	0.64	0.66	0.99
2017	0.94	0.56	0.68	0.99
2018	0.96	0.64	0.72	0.99
2019	0.95	0.65	0.70	0.99
2020	0.98	0.74	0.77	0.99
2021	0.95	0.78	0.67	0.99