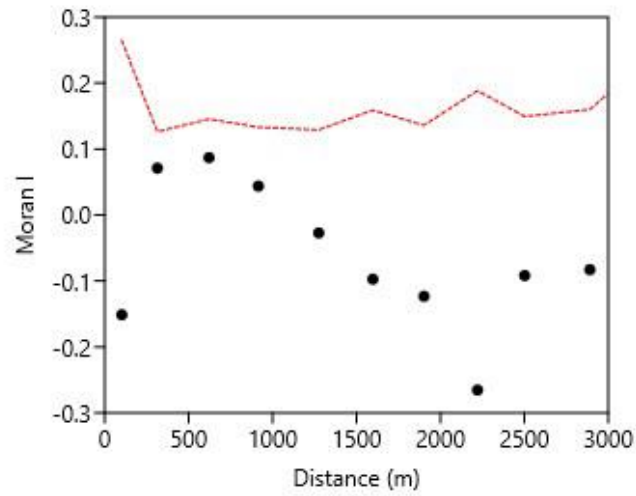


**Supplementary material for:** Schaefer J.A. 2023. Increases in graminoids after three decades of change in the High Arctic. *Polar Research* 42. Correspondence: James A. Schaefer, Department of Biology, Trent University, 2140 East Bank Drive, Peterborough, ON, K9L 0G2, Canada. E-mail: jschaefer@trentu.ca

**Supplementary Table S1.** Topographic and vegetation characteristics of the North and South transects, south-eastern Victoria Island, Nunavut, Canada, during the baseline (1991 and 1992) and contemporary periods (2019 and 2022).

Attribute	Period	North transect					South transect				
		<i>n</i>	mean	SD	min.	max.	<i>n</i>	mean	SD	min.	max.
Elevation (m)		39	160.26	59.80	50.00	250.00	39	62.82	31.87	50.00	200.00
Slope (°)		33	2.03	1.90	0.00	7.00	38	2.71	2.87	0.00	14.00
Soil depth (cm)	1991, 1992	35	30.43	24.14	0.00	82.00	39	36.59	20.75	0.00	68.00
	2019, 2022	39	33.28	25.51	0.00	95.00	39	46.13	23.06	0.00	80.00
<i>Cassiope tetragona</i> (%)	1991, 1992	39	1.63	3.67	0.00	18.13	39	0.29	1.43	0.00	8.50
	2019, 2022	39	0.52	1.20	0.00	5.00	39	0.21	0.91	0.00	4.25
<i>Dryas integrifolia</i> (%)	1991, 1992	39	17.13	10.94	0.00	45.00	39	19.73	14.01	0.00	49.38
	2019, 2022	39	11.85	9.47	0.00	35.63	39	11.76	10.22	0.00	36.25
Graminoids (%)	1991, 1992	39	18.30	15.37	0.00	60.00	39	20.84	16.30	0.00	64.44
	2019, 2022	39	21.56	14.90	0.00	62.50	39	25.00	18.05	0.00	71.25
Mosses (%)	1991, 1992	39	3.55	3.94	0.00	15.38	39	4.77	6.49	0.00	34.38
	2019, 2022	39	2.85	3.37	0.00	13.63	39	3.11	4.42	0.00	19.06
<i>Polygonum viviparum</i> (%)	1991, 1992	39	0.39	0.42	0.00	1.25	39	0.32	0.37	0.00	1.00
	2019, 2022	39	0.28	0.37	0.00	1.00	39	0.12	0.30	0.00	1.00
<i>Saxifraga oppositifolia</i> (%)	1991, 1992	39	1.40	1.72	0.00	5.00	39	0.60	1.59	0.00	7.38
	2019, 2022	39	0.17	0.30	0.00	1.00	39	0.03	0.17	0.00	1.00



**Supplementary Fig. S1.** Spatial autocorrelation (based on Moran's  $I$ ) of the difference in graminoid cover between the baseline (1991 and 1992) and contemporary periods (2019 and 2022), south-eastern Victoria Island, Nunavut, Canada. The dashed line displays the one-tailed critical value ( $p < 0.05$ ).