

1 **Appendices**

2 **Table A1:** Correlations between metrics used to describe foraging trip characteristics of
3 Antarctic and snow petrels tracked from Svarthamaren, Dronning Maud Land, Antarctica
4 during the breeding season 2022/23.

	Duration	Total distance	Maximum distance	Bearing
Mean speed	-0.07	0.23	0.28	0.39
Bearing	0.13	0.28	0.21	
Maximum distance	0.88	0.94		
Total distance	0.94			

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10 **Table A2:** Generalized Linear Mixed-effects Models of sea-ice indices at foraging locations
 11 of Antarctic petrels (AP) and snow petrels (SP) tracked from Svarthamaren, Dronning Maud
 12 Land as a function of species and breeding status. INC represents the incubation and CR the
 13 chick-rearing.

Response Variable	Predictors	Estimate	95% CI	p-value
<i>Duration (h)</i>	Intercept (AP, CR)	63	[41, 85]	< 0.001
	Species (SP)	44	[14, 74]	0.005
	Breeding Status (INC)	206	[175, 236]	< 0.001
	Species: Status (SP:INC)	-155	[-195, -116]	< 0.001
<i>Total Distance (km)</i>	Intercept (AP, CR)	1455	[1024, 1887]	<0.001
	Species (SP)	500	[-89, 1088]	0.094
	Breeding Status (INC)	4502	[3905, 5098]	<0.001
	Species: Status (SP:INC)	-3752	[-4527, -2977]	<0.001
<i>Maximum Distance (km)</i>	Intercept (AP, CR)	467	[332, 601]	<0.001
	Species (SP)	145	[-41, 331]	0.123
	Breeding Status (INC)	983	[794, 1172]	<0.001
	Species: Status (SP:INC)	-753	[-1003, -504]	<0.001
<i>Mean Speed (km/h)</i>	Intercept (AP, CR)	22	[21, 23]	<0.001
	Species (SP)	-4	[-6, -2]	<0.001
<i>Bearing</i>	Intercept (AP, CR)	2	[-9, 13]	0.755
	Species (SP)	-62	[-77, -47]	<0.001

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16 **Table A3:** Number of locations for each behavioral state and their proportions for Antarctic
17 (AP) and snow petrels (SP) from the Svarthamaren breeding colony, Dronning Maud Land,
18 Antarctica, during the breeding season 2022/2023.

States	Number locations AP	Proportion AP	Number locations SP	Proportion SP
Rest	4213	0.30	4836	0.31
Foraging	5159	0.37	5483	0.35
Transit	4676	0.33	5223	0.34

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