

Appendix A. Supplementary data

Table S1

Aerial effort (in minutes) to monitoring roseate terns (*Sterna dougallii*) and common terns (*S. hirundo*) VHF tagged in coastal northeastern Brazil and Argentina respectively, between wintering periods of 2001 and 2003.

Year	Country	Species	Monitoring days	Total flight duration	Mean ($\pm$ SD)	Range (Min. – Max.)
2001	Argentina	common	1	228	-	-
2001	Brazil	roseate	8	1518	189.75 $\pm$ 142.4	35 – 443
2002	Argentina	common	2	465	232.5 $\pm$ 47.4	199 – 266
2002	Brazil	roseate	5	1135	227 $\pm$ 35.6	93 – 280
2003	Argentina	common	2	299	149.5 $\pm$ 159.1	37 – 262

Table S2

Summary of individual daily VHF detections of roseate terns (*Sterna dougallii*) and common terns (*S. hirundo*) tagged in coastal northeastern Brazil and Argentina respectively, between wintering periods of 2001 and 2003. Each row lists a uniquely tagged tern (Frequency) and the dates on which it was detected more than once via aerial VHF telemetry. Detection counts per date are shown in parentheses.

Frequency	Species	Detection Summary yyy-mm-dd (number of detections)
172.113	roseate	2001-02-13 (2)
172.382	roseate	2001-02-12 (2)
172.472	roseate	2001-02-13 (2)
172.552	roseate	2001-02-15 (7), 2001-02-16 (9)
172.557	roseate	2001-02-12 (3), 2001-02-15 (2), 2001-02-16 (5)
172.560	roseate	2001-02-10 (3), 2001-02-15 (2), 2001-02-16 (7)
172.601	roseate	2001-02-15 (2), 2001-02-16 (2)
172.608	roseate	2001-02-12 (2), 2001-02-15 (10), 2001-02-16 (3)
172.610	roseate	2001-02-13 (2)
172.625	roseate	2001-02-12 (2)
172.651	roseate	2001-02-10 (3), 2001-02-12 (5), 2001-02-13 (2), 2001-02-14 (3)
172.661	roseate	2001-02-12 (2), 2001-02-13 (3)
172.663	roseate	2001-02-12 (3), 2001-02-13 (2)
172.673	roseate	2001-02-12 (3)
172.693	roseate	2002-01-11 (9)
172.694	roseate	2001-02-15 (5)
172.696	roseate	2001-02-15 (3)
172.712	roseate	2001-02-12 (2)
172.734	roseate	2002-01-15 (10)

172.735	roseate	2001-02-10 (4), 2001-02-12 (2), 2001-02-13 (2)
172.752	roseate	2002-01-10 (4), 2002-01-11 (14)
172.753	roseate	2001-02-12 (12), 2001-02-13 (4)
172.758	roseate	2001-02-12 (41), 2001-02-13 (6), 2001-02-14 (9)
172.772	roseate	2002-01-10 (4)
172.790	roseate	2002-01-10 (2), 2002-01-15 (6)
172.794	roseate	2001-02-12 (16), 2001-02-13 (4)
172.797	roseate	2001-02-12 (21), 2001-02-13 (7), 2001-02-14 (3), 2001-02-20 (8)
172.820	roseate	2002-01-10 (3), 2002-01-15 (6)
172.835	roseate	2001-02-12 (20), 2001-02-14 (22)
172.842	roseate	2002-01-10 (9)
172.864	roseate	2002-01-10 (4)
172.902	roseate	2002-01-15 (5)
172.921	roseate	2002-01-15 (13)
172.964	roseate	2002-01-10 (11), 2002-01-15 (3)
172.980	roseate	2002-01-11 (3)
173.033	roseate	2002-01-10 (2), 2002-01-11 (9), 2002-01-15 (3)
173.102	roseate	2002-01-10 (3), 2002-01-11 (17), 2002-01-15 (17)
173.142	roseate	2002-01-10 (5), 2002-01-15 (30)
173.182	roseate	2002-01-10 (5), 2002-01-15 (17)
173.204	roseate	2002-01-10 (2)
173.213	roseate	2002-01-10 (4), 2002-01-13 (94), 2002-01-14 (79)
173.336	roseate	2002-01-10 (2), 2002-01-15 (12)
172.072	common	2002-01-21 (4), 2002-01-22 (8)
172.104	common	2002-01-21 (4), 2002-01-22 (5)
172.143	common	2002-01-21 (11), 2002-01-22 (3)
172.182	common	2002-01-21 (4), 2002-01-22 (7)
172.204	common	2002-01-22 (20)
172.259	common	2002-01-21 (2)
172.279	common	2002-01-21 (4)
172.323	common	2002-01-22 (5)
172.394	common	2002-01-21 (7), 2002-01-22 (5)
172.419	common	2002-01-22 (4)
172.442	common	2002-01-21 (4), 2002-01-22 (7)
172.481	common	2002-01-21 (5), 2002-01-22 (5)
172.503	common	2002-01-21 (19), 2002-01-22 (6)
172.542	common	2002-01-21 (4), 2002-01-22 (5)
172.585	common	2002-01-22 (8)
172.632	common	2002-01-21 (5), 2002-01-22 (21)
172.952	common	2003-02-16 (8)
173.032	common	2001-02-25 (163)
173.061	common	2001-02-25 (6)
173.120	common	2003-02-04 (2)
173.172	common	2001-02-25 (2)

173.184	common	2003-02-04 (2), 2003-02-16 (9)
173.204	common	2003-02-04 (10), 2003-02-16 (110)
173.211	common	2001-02-25 (3)
173.225	common	2001-02-25 (3)
173.230	common	2001-02-25 (3)
173.277	common	2001-02-25 (3)
173.285	common	2001-02-25 (5)
173.302	common	2001-02-25 (2)
173.359	common	2001-02-25 (3)
173.373	common	2001-02-25 (3)
173.393	common	2001-02-25 (4)
173.451	common	2001-02-25 (5)
173.484	common	2001-02-25 (2)
173.514	common	2001-02-25 (2)

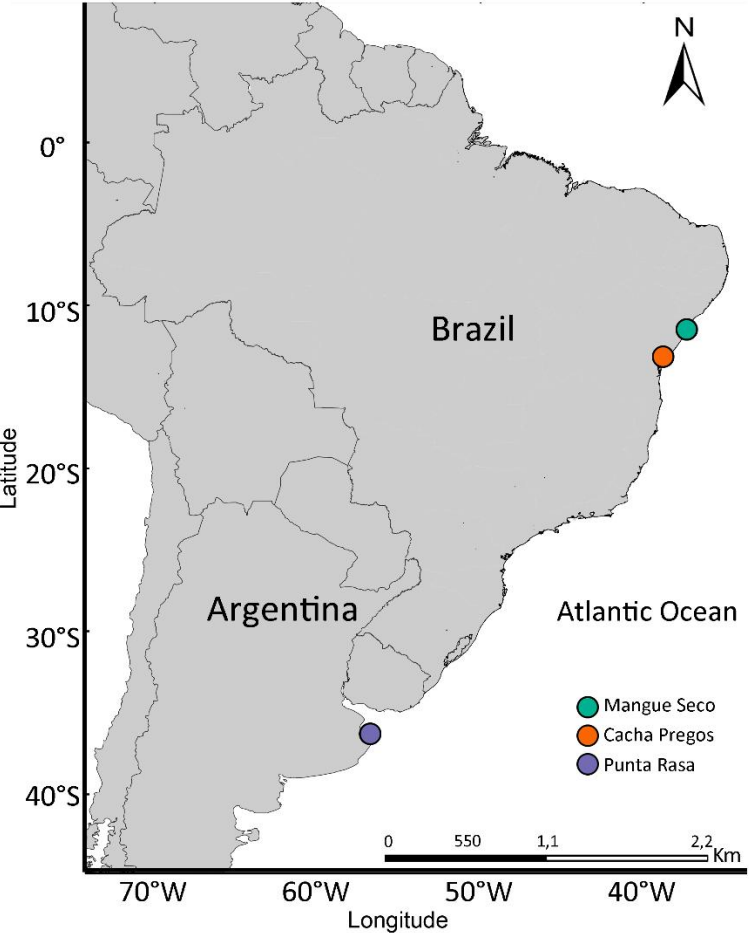


Fig. S1. Location of major roosting sites of common and roseate Terns monitored during wintering period (January and February) of 2001 to 2003 in South America.

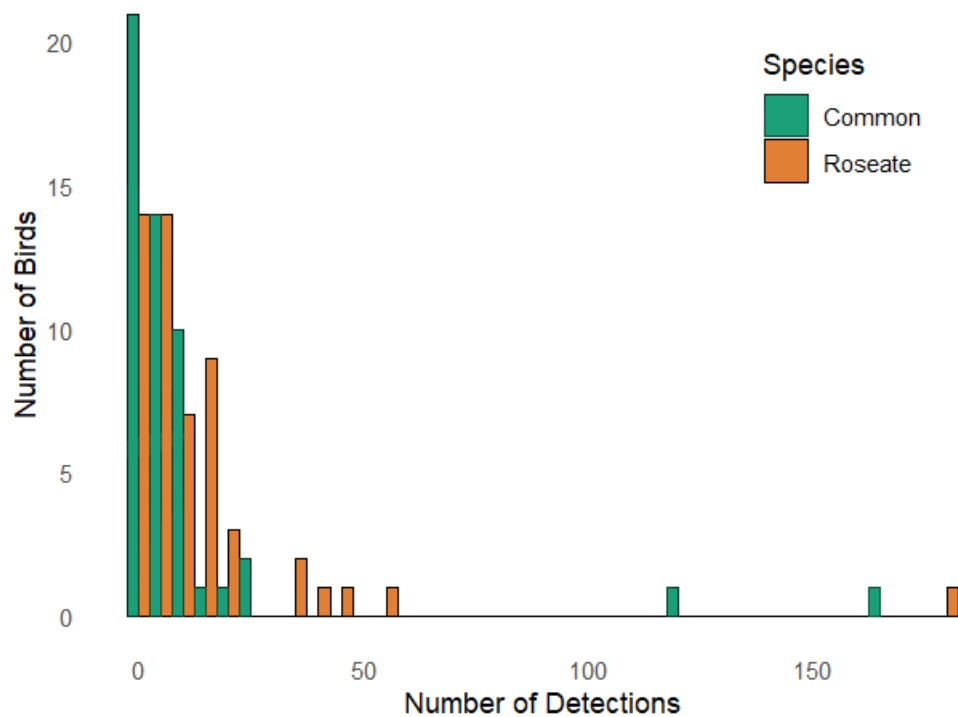


Fig. S2. Distribution of detection counts per individual roseate and common Terns monitored during wintering period (January and February) of 2001 to 2003 in South America.

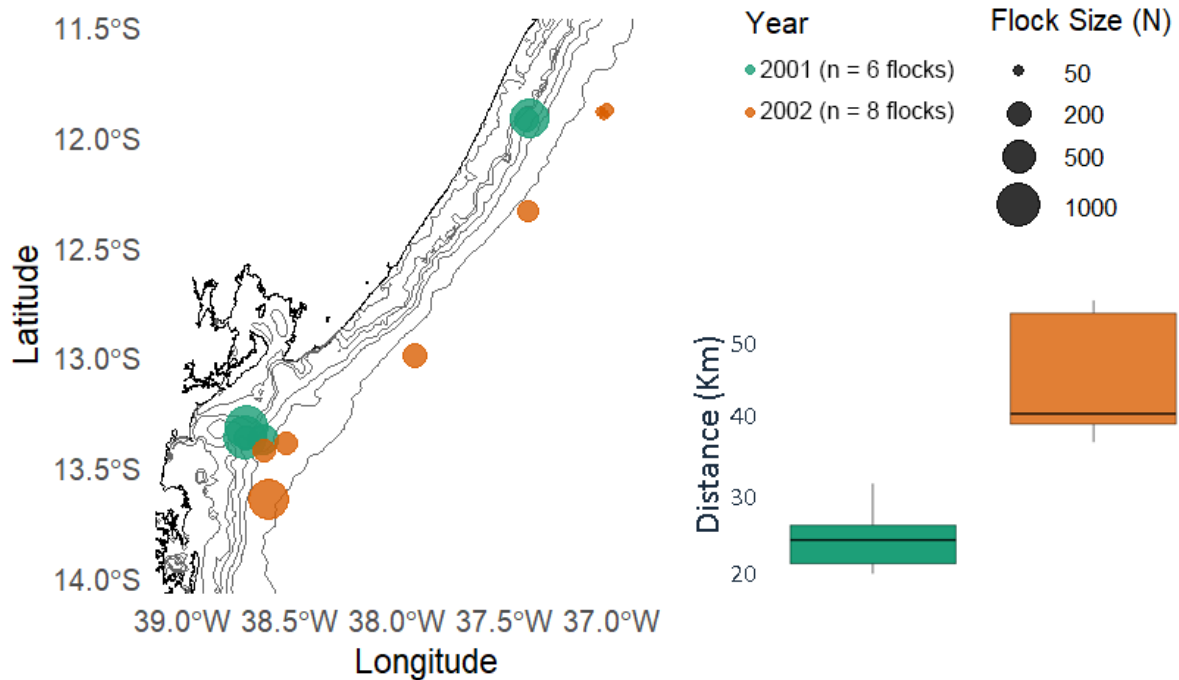


Fig. S3. Feeding flocks of terns observed during aerial monitoring in northeastern coast of Brazil during 2001 and 2002. Isobath lines are described in Figure 5.

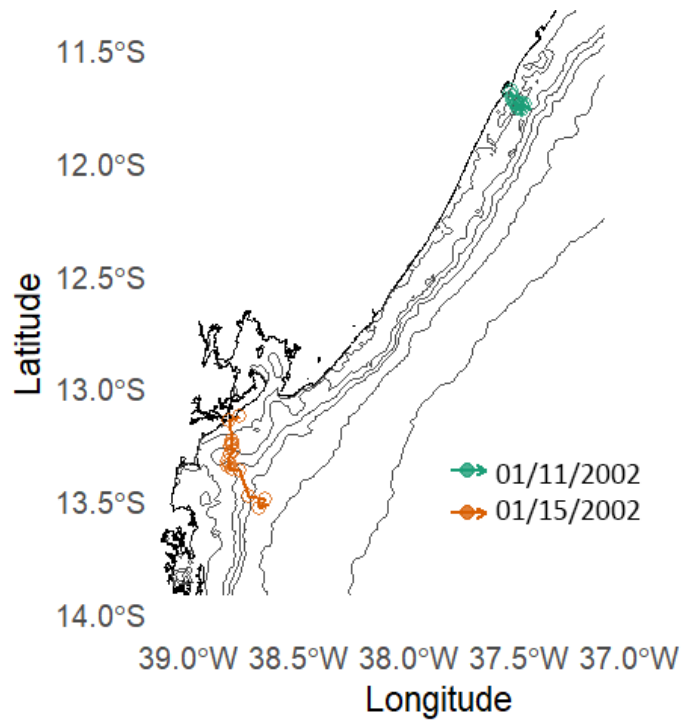


Fig. S4. Example of daily detections of roseate tern (*Sterna dougallii*) individual VHF tagged in coastal northeastern Brazil departing from two roosting sites during wintering period in 2002. Isobath lines and scales are described in Figure 5.