*Diversity and Distributions*

**SUPPORTING INFORMATION**

**It is the time for oceanic seabirds: tracking year-round distribution of gadfly petrels across the Atlantic Ocean**

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**Table S4.** Spatial overlap (in %) in the 95% kernel UDs of the eight gadfly petrel species during specific time periods. Relevant spatio-temporal overlap events (> 15.0%) are depicted in bold.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | PMAD | PDES | | PCAH | | PHAS | | PFEA | | PARM | PINC |
| *December*–*February* | | |  |  | |  | |  | |
|  | PDES | **37** |  | |  | |  | |  | |  |  |
|  | PCAH | 1 | 9 | |  | |  | |  | |  |  |
|  | PHAS | 0 | 0 | | 0 | |  | |  | |  |  |
|  | PFEA | **17** | 7 | | 0 | | 0 | |  | |  |  |
|  | PARM | 11 | **20** | | **17** | | 0 | | 1 | |  |  |
|  | PINC | 1 | **25** | | 0 | | 0 | | 0 | | 5 |  |
|  | PMOL | 1 | 0 | | 0 | | 0 | | 0 | | 0 | 9 |
| *March*–*May* | |  |  |  | |  | |  | |
|  | PDES | **22** |  | |  | |  | |  | |  |  |
|  | PCAH | **28** | **21** | |  | |  | |  | |  |  |
|  | PHAS | 0 | 5 | | 8 | |  | |  | |  |  |
|  | PFEA | 3 | 13 | | 0 | | 0 | |  | |  |  |
|  | PARM | 0 | **18** | | 0 | | 0 | | 1 | |  |  |
|  | PINC | 0 | 12 | | 0 | | 0 | | 0 | | 14 |  |
|  | PMOL | 0 | 0 | | 0 | | 0 | | 0 | | 1 | 7 |
| *June*–*August* | |  |  |  | |  | |  | |
|  | PDES | **61** |  | |  | |  | |  | |  |  |
|  | PCAH | **20** | **36** | |  | |  | |  | |  |  |
|  | PHAS | 0 | 0 | | **26** | |  | |  | |  |  |
|  | PFEA | 0 | 1 | | 0 | | 0 | |  | |  |  |
|  | PARM | 0 | 3 | | 0 | | 0 | | 1 | |  |  |
|  | PINC | 0 | 0 | | 0 | | 0 | | 0 | | 3 |  |
|  | PMOL | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 2 |
| *September*–*November* | | |  |  | |  | |  | |
|  | PDES | **33** |  | |  | |  | |  | |  |  |
|  | PCAH | 3 | 6 | |  | |  | |  | |  |  |
|  | PHAS | 0 | 1 | | 6 | |  | |  | |  |  |
|  | PFEA | **19** | 5 | | 0 | | 0 | |  | |  |  |
|  | PARM | **27** | 9 | | **16** | | 0 | | 1 | |  |  |
|  | PINC | 0 | 0 | | 0 | | 0 | | 0 | | 3 |  |
|  | PMOL | 1 | 0 | | 0 | | 0 | | 0 | | 3 | **36** |

**Table S5.** Habitat-use (in number of positions) of the eight gadfly petrel species that occur within Atlantic Exclusive Economic Zones and International Waters. Data are presented for each species, and separately for breeding and non-breeding periods. The most relevant areas (accounting for > 10.0% of positions) are depicted in bold.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Species | Period | Exclusive Economic Zone | Country | Positions | % |
| PMAD | Breeding | **Azores** | Portugal | 391 | **19** |
|  |  | Canary Islands | Spain | 208 | 10 |
|  |  | Cape Verdean | Cape Verde | 10 | 1 |
|  |  | Irish | Ireland | 11 | 1 |
|  |  | **Madeiran** | Portugal | 341 | **16** |
|  |  | Mauritanian | Mauritania | 5 | 0 |
|  |  | Moroccan | Morocco | 9 | 0 |
|  |  | Portuguese | Portugal | 38 | 2 |
|  |  | Senegalese | Senegal | 5 | 0 |
|  |  | Spanish | Spain | 11 | 1 |
|  |  | Western Saharan | Morocco | 144 | 7 |
|  |  | **International Waters** | International Waters | 929 | **44** |
|  | Non-breeding | Ascension | United Kingdom | 8 | 0 |
|  |  | Azores | Portugal | 8 | 0 |
|  |  | Brazilian | Brazil | 90 | 4 |
|  |  | Canary Islands | Spain | 28 | 1 |
|  |  | **Cape Verdean** | Cape Verde | 580 | **26** |
|  |  | Gambian | Gambia | 12 | 1 |
|  |  | Ghanaian | Ghana | 12 | 1 |
|  |  | Guinea Bissau | Guinea Bissau | 3 | 0 |
|  |  | Ivory Coast | Ivory Coast | 19 | 1 |
|  |  | Liberian | Liberia | 6 | 0 |
|  |  | Mauritanian | Mauritania | 73 | 3 |
|  |  | Senegalese | Senegal | 81 | 4 |
|  |  | Sierra Leonian | Sierra Leone | 2 | 0 |
|  |  | St. Helena | United Kingdom | 80 | 4 |
|  |  | Western Saharan | Morocco | 82 | 4 |
|  |  | **International Waters** | International Waters | 1112 | **51** |
| PDES | Breeding | **Azores** | Portugal | 1671 | **14** |
|  |  | Canadian | Canada | 2 | 0 |
|  |  | **Canary Islands** | Spain | 1374 | **11** |
|  |  | Cape Verdean | Cape Verde | 63 | 1 |
|  |  | French | France | 2 | 0 |
|  |  | Gambian | Gambia | 4 | 0 |
|  |  | Guinea Bissau | Guinea Bissau | 7 | 0 |
|  |  | Guinean | Guinea | 2 | 0 |
|  |  | Irish | Ireland | 17 | 0 |
|  |  | **Madeiran** | Portugal | 2338 | **19** |
|  |  | Mauritanian | Mauritania | 70 | 1 |
|  |  | Moroccan | Morocco | 276 | 2 |
|  |  | Portuguese | Portugal | 161 | 1 |
|  |  | Senegalese | Senegal | 21 | 0 |
|  |  | Spanish | Spain | 37 | 0 |
|  |  | Western Saharan | Morocco | 545 | 4 |
|  |  | **International Waters** | International Waters | 5627 | **46** |
|  | Non-breeding | Antigua and Barbuda | Antigua and Barbuda | 4 | 0 |
|  |  | Azores | Portugal | 290 | 2 |
|  |  | Bahamas | Bahamas | 93 | 1 |
|  |  | Barbados | Barbados | 7 | 0 |
|  |  | Bermudian | United Kingdom | 16 | 0 |
|  |  | **Brazilian** | Brazil | 3848 | **24** |
|  |  | Canary Islands | Spain | 98 | 1 |
|  |  | **Cape Verdean** | Cape Verde | 2314 | **14** |
|  |  | French Guiana | France | 9 | 0 |
|  |  | Gambian | Gambia | 2 | 0 |
|  |  | Guyanese | Guyana | 2 | 0 |
|  |  | Madeiran | Portugal | 105 | 1 |
|  |  | Mauritanian | Mauritania | 11 | 0 |
|  |  | Moroccan | Morocco | 5 | 0 |
|  |  | Portuguese | Portugal | 9 | 0 |
|  |  | Senegalese | Senegal | 7 | 0 |
|  |  | St. Helena | United Kingdom | 2 | 0 |
|  |  | Surinamese | Suriname | 5 | 0 |
|  |  | Trindade | Brazil | 88 | 1 |
|  |  | United States | United States | 1101 | 7 |
|  |  | Virgin Islands | United Kingdom | 2 | 0 |
|  |  | Western Saharan | Morocco | 57 | 0 |
|  |  | **International Waters** | International Waters | 8021 | **50** |
| PCAH | Breeding | Bahamas | Bahamas | 16 | 2 |
|  |  | **Bermudian** | United Kingdom | 188 | **28** |
|  |  | Canadian | Canada | 22 | 3 |
|  |  | **United States** | United States | 86 | **13** |
|  |  | **International Waters** | International Waters | 357 | **53** |
|  | Non-breeding | **Azores** | Portugal | 167 | **17** |
|  |  | Bahamas | Bahamas | 6 | 1 |
|  |  | Bermudian | United Kingdom | 30 | 3 |
|  |  | Canadian | Canada | 16 | 2 |
|  |  | French | France | 2 | 0 |
|  |  | Irish | Ireland | 6 | 1 |
|  |  | Spanish | Spain | 6 | 1 |
|  |  | Turks and Caicos | United Kingdom | 2 | 0 |
|  |  | **United States** | United States | 241 | **25** |
|  |  | **International Waters** | International Waters | 486 | **51** |
| PHAS | Breeding | Bahamas | Bahamas | 7 | 2 |
|  |  | Cayman Islands | United Kingdom | 10 | 3 |
|  |  | Colombian | Colombia | 142 | 39 |
|  |  | Cuban | Cuba | 3 | 1 |
|  |  | **Dominican Republic** | Dominican Republic | 75 | **21** |
|  |  | **Haitian** | Haiti | 39 | **11** |
|  |  | **Jamaican** | Jamaica | 37 | **10** |
|  |  | Panamanian | Panama | 7 | 2 |
|  |  | United States | United States | 3 | 1 |
|  |  | **Venezuelan** | Venezuela | 38 | **10** |
|  |  | International Waters | International Waters | 2 | 1 |
|  | Non-breeding | **Bahamas** | Bahamas | 85 | **18** |
|  |  | Cuban | Cuba | 3 | 1 |
|  |  | Haitian | Haiti | 19 | 4 |
|  |  | **United States** | United States | 197 | **41** |
|  |  | **International Waters** | International Waters | 173 | **36** |
| PFEA | Breeding | Azores | Portugal | 13 | 0 |
|  |  | Canary Islands | Spain | 46 | 1 |
|  |  | **Cape Verdean** | Cape Verde | 2108 | **58** |
|  |  | Gambian | Gambia | 3 | 0 |
|  |  | Madeiran | Portugal | 6 | 0 |
|  |  | Mauritanian | Mauritania | 27 | 1 |
|  |  | Senegalese | Senegal | 28 | 1 |
|  |  | Western Saharan | Morocco | 47 | 1 |
|  |  | **International Waters** | International Waters | 1332 | **37** |
|  | Non-breeding | **Cape Verdean** | Cape Verde | 686 | **20** |
|  |  | Gambian | Gambia | 29 | 1 |
|  |  | Guinea Bissau | Guinea Bissau | 241 | 7 |
|  |  | Guinean | Guinea | 28 | 1 |
|  |  | Mauritanian | Mauritania | 11 | 0 |
|  |  | Senegalese | Senegal | 317 | 9 |
|  |  | Sierra Leonian | Sierra Leone | 6 | 0 |
|  |  | Western Saharan | Morocco | 3 | 0 |
|  |  | **International Waters** | International Waters | 2125 | **62** |
| PARM | Breeding | Brazilian | Brazil | 20 | 4 |
|  |  | **Trindade** | Brazil | 132 | **24** |
|  |  | **International Waters** | International Waters | 402 | **73** |
|  | Non-breeding | Barbados | Barbados | 2 | 0 |
|  |  | Brazilian | Brazil | 34 | 2 |
|  |  | Canadian | Canada | 8 | 0 |
|  |  | Cape Verdean | Cape Verde | 4 | 0 |
|  |  | Guadeloupe & Martinique | France | 2 | 0 |
|  |  | St. Helena | United Kingdom | 7 | 0 |
|  |  | Tristan da Cunha | United Kingdom | 6 | 0 |
|  |  | **International Waters** | International Waters | 1863 | **97** |
| PINC | Breeding | Antarctica | Antarctica | 33 | 1 |
|  |  | Argentinean | Argentina | 120 | 2 |
|  |  | Bouvet Island | Norway | 4 | 0 |
|  |  | Brazilian | Brazil | 51 | 1 |
|  |  | Falkland Islands | United Kingdom | 161 | 3 |
|  |  | South Georgian | United Kingdom | 123 | 3 |
|  |  | Tristan da Cunha | United Kingdom | 323 | 7 |
|  |  | Uruguayan | Uruguay | 54 | 1 |
|  |  | **International Waters** | International Waters | 3906 | **82** |
|  | Non-breeding | Antarctica | Antarctica | 4 | 0 |
|  |  | Argentinean | Argentina | 182 | 5 |
|  |  | **Brazilian** | Brazil | 723 | **20** |
|  |  | Falkland Islands | United Kingdom | 12 | 0 |
|  |  | South Georgian | United Kingdom | 19 | 1 |
|  |  | Trindade | Brazil | 5 | 0 |
|  |  | Tristan Da Cunha | United Kingdom | 11 | 0 |
|  |  | Uruguayan | Uruguay | 236 | 7 |
|  |  | **International Waters** | International Waters | 2411 | **67** |
| PMOL | Breeding | Antarctica | Antarctica | 3 | 0 |
|  |  | Bouvet Island | Norway | 47 | 7 |
|  |  | Tristan da Cunha | United Kingdom | 60 | 8 |
|  |  | **International Waters** | International Waters | 600 | **84** |
|  | Non-breeding | Crozet Islands | France | 5 | 1 |
|  |  | Madagascan | Madagascar | 19 | 2 |
|  |  | Prince Edward Islands | South Africa | 16 | 2 |
|  |  | Réunion | France | 2 | 0 |
|  |  | South African | South Africa | 10 | 1 |
|  |  | **International Waters** | International Waters | 706 | **93** |

**Table S6.** Habitat-use (in % of annual positions) of the eight gadfly petrel species within Atlantic Exclusive Economic Zones (EEZs) and International Waters. Data of each species are presented for every EEZ country. The most relevant countries (those accounting for > 10.0% of annual positions for any of the species) are depicted in bold.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EEZ country | PMAD | PDES | PCAH | PHAS | PFEA | PARM | PINC | PMOL |
| Antarctica |  |  |  |  |  |  | 0 | 0 |
| Antigua and Barbuda |  | 0 |  |  |  |  |  |  |
| Argentina |  |  |  |  |  |  | 4 |  |
| **Bahamas** |  | 0 | 1 | **11** |  |  |  |  |
| Barbados |  | 0 |  |  |  | 0 |  |  |
| **Brazil** | 2 | **14** |  |  |  | 7 | 9 |  |
| Canada |  | 0 | 2 |  |  | 0 |  |  |
| **Cape Verde** | **14** | 8 |  |  | **40** | 0 |  |  |
| **Colombia** |  |  |  | **17** |  |  |  |  |
| Cuba |  | 0 |  | 1 |  |  |  |  |
| Dominican Republic |  |  |  | 9 |  |  |  |  |
| France |  | 0 | 0 |  |  | 0 |  | 0 |
| Gambia | 0 | 0 |  |  | 0 |  |  |  |
| Ghana | 0 |  |  |  |  |  |  |  |
| Guinea |  | 0 |  |  | 0 |  |  |  |
| Guinea Bissau | 0 | 0 |  |  | 3 |  |  |  |
| Haiti |  |  |  | 7 |  |  |  |  |
| Ireland | 0 | 0 | 0 |  |  |  |  |  |
| Ivory Coast | 0 |  |  |  |  |  |  |  |
| Jamaica |  |  |  | 4 |  |  |  |  |
| Liberia | 0 |  |  |  |  |  |  |  |
| Madagascar |  |  |  |  |  |  |  | 1 |
| Mauritania | 2 | 0 |  |  | 0 |  |  |  |
| Morocco | 5 | 3 |  |  | 1 |  |  |  |
| Norway |  |  |  |  |  |  | 0 | 3 |
| Panama |  |  |  | 1 |  |  |  |  |
| **Portugal** | **18** | **16** | **10** |  | 0 |  |  |  |
| Senegal | 2 | 0 |  |  | 5 |  |  |  |
| Sierra Leone | 0 | 0 |  |  | 0 |  |  |  |
| Spain | 6 | 5 | 0 |  | 1 |  |  |  |
| **United Kingdom** | 2 | 0 | **13** | 1 |  | 0 | 8 | 4 |
| Uruguay |  |  |  |  |  |  | 3 |  |
| **United States** |  | 4 | **20** | **24** |  |  |  |  |
| Venezuela |  | 0 |  | 4 |  |  |  |  |
| **International Waters** | **47** | **48** | **52** | **21** | **49** | **91** | **75** | **89** |