At-sea distributions of the *Thalassarche* and *Phoebetria* albatrosses of the Prince Edward Islands

AB Makhado, RJM Crawford, BM Dyer, L Upfold

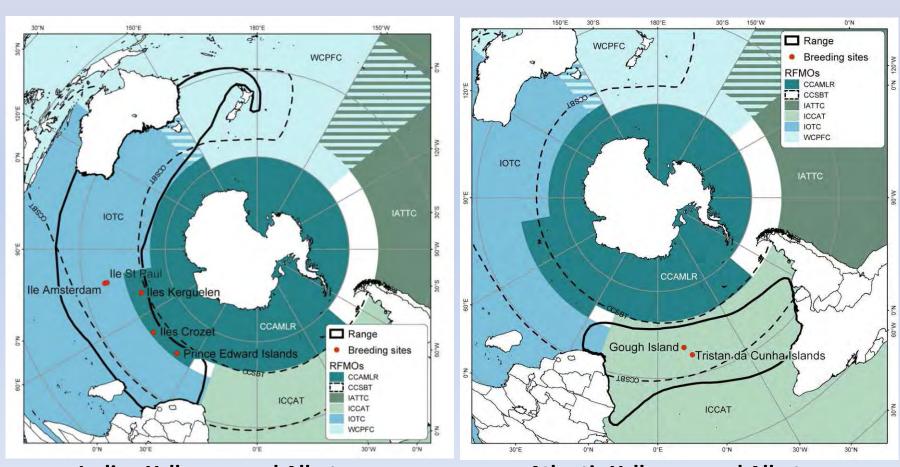


photo BirdLife International



Breeding localities of Yellow-nosed Albatrosses

from Agreement on the Conservation of Albatrosses and Petrels (2009)

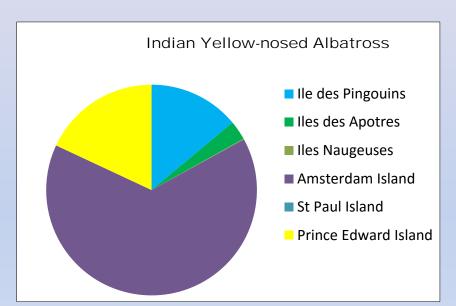


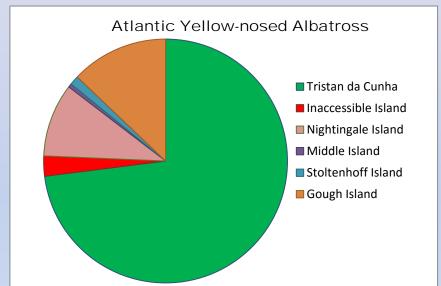
Indian Yellow-nosed Albatross *T. carteri*

Atlantic Yellow-nosed Albatross T. chlororhynchus

Contributions of breeding localities to overall populations of Yellow-nosed Albatrosses

from information in Agreement on the Conservation of Albatrosses and Petrels (2009)



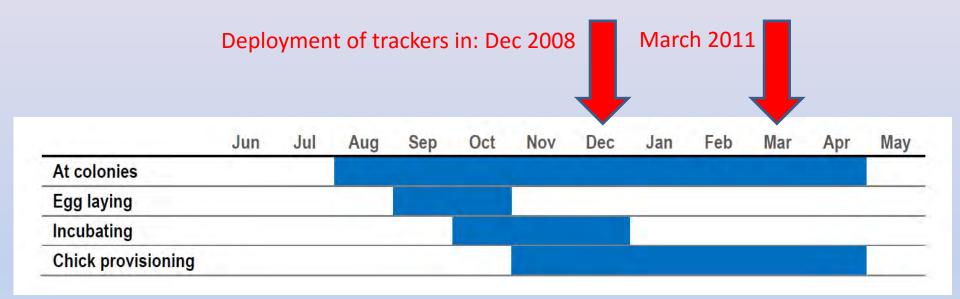








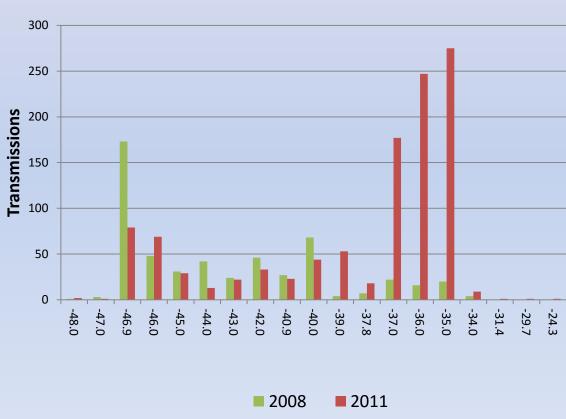
Breeding cycle of Indian Yellow-nosed Albatross



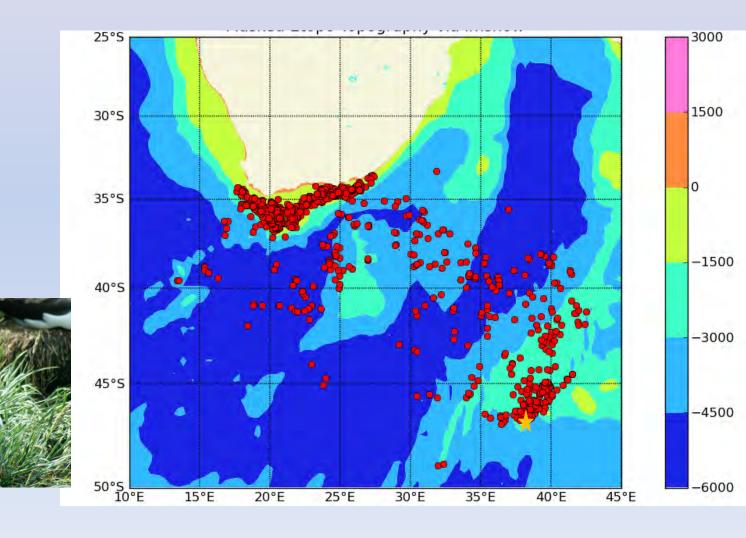


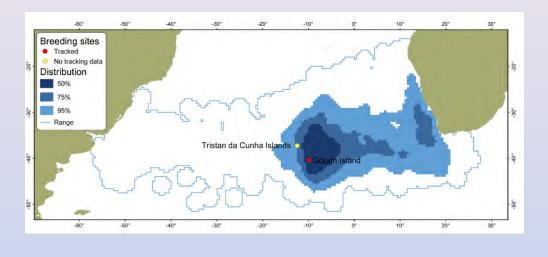
Latitudinal distributions of transmissions for deployments in 2008 (December) and 2011 (March)

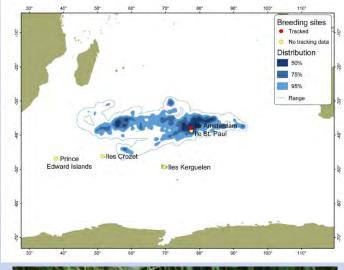


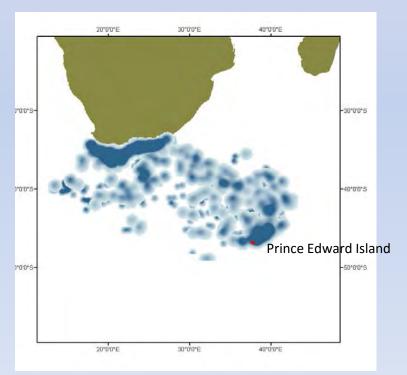


Distribution of Indian Yellow-nosed Albatrosses in relation to bathymetry









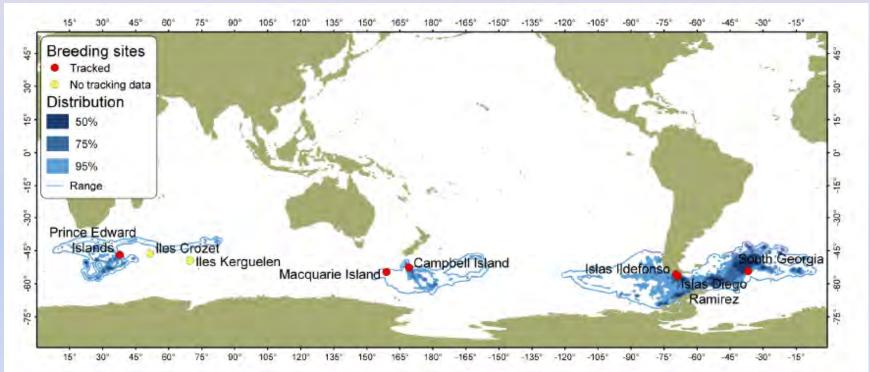


Distributions of Yellow-nosed Albatrosses suggest partitioning of feeding grounds during breeding (information for Gough and Amsterdam islands from Agreement on the Conservation of Albatrosses and Petrels 2009)

Grey-headed Albatross T. chrysostoma

at-sea distributions of breeders

(from Agreement on the Conservation of Albatroses and Petrels (2009)



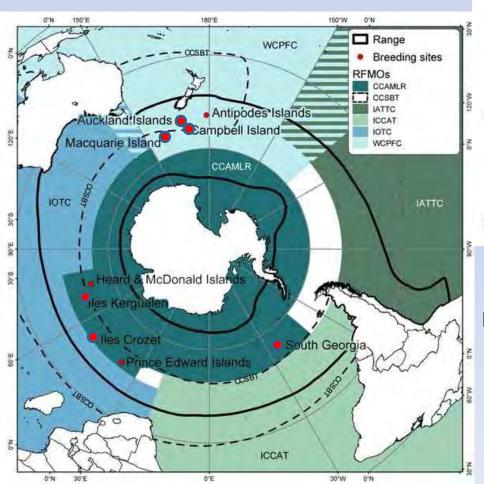
For Marion Island from Nel et al. (2001).

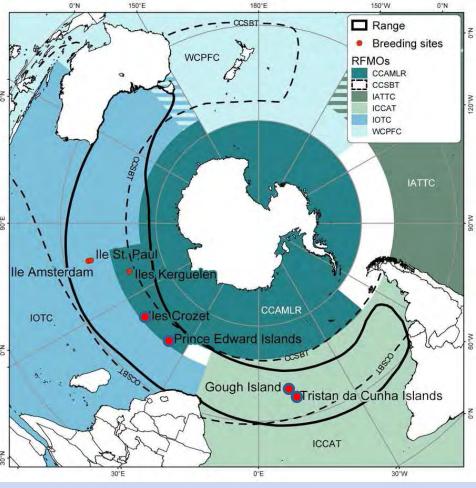
Marion birds feed south of Indian Yellownosed Albatrosses from Prince Edward Island



Breeding localities of Phoebetria albatrosses

Right: Sooty Albatross P. fusca





Left: Light-mantled Albatross P. palpebrata

from Agreement on the Conservation of Albatrosses (2009)

Numbers at localities

(north to south) updated from Tickell (2000) using Agreement on the Conservation of Albatrosses and Petrels (2009) and Ryan et al. (2009)



| Island group | Degrees | Sooty | Light-mantled |
|--------------------------|---------|-----------|---------------|
| | S | Albatross | Albatross |
| | | (pairs) | (pairs) |
| Tristan da Cunha Islands | 37 | 3188 | |
| Ile Amsterdam | 38 | 474 | |
| lle St Paul | 39 | 13 | |
| Gough Island | 40 | 5000 | |
| lle Crozet | 46 | 2095 | 2298 |
| Prince Edward Islands | 47 | 2800 | 800 |
| lles Kerguelen | 49 | 4 | 4000 |
| Antipodes Islands | 50 | | 250 |
| Auckland Islands | 51 | | 5000 |
| Campbell Island | 53 | | 1600 |
| Heard Island | 53 | | 350 |
| South Georgia | 54 | | 5000 |
| Macquarie Island | 55 | | 1281 |
| Total | | 13573 | 20579 |



Seasonal distribution of transmissions

With thanks to:

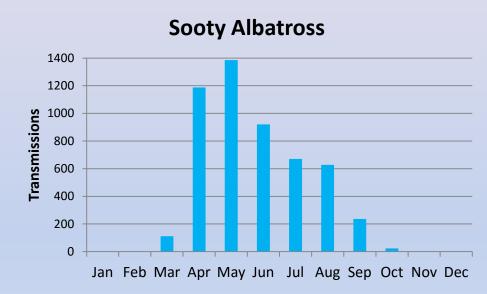
BirdLife International. 2010. The Global Procellariiform Tracking Database.

www.seabirdtracking.org

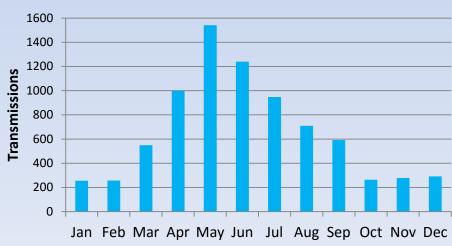
David and Lucille Packard Foundation

| | N | Mean duration per bird (days) | Mean number transmissions per bird |
|-------------------------|----|--|------------------------------------|
| Sooty Albatross | 11 | 114 ± 45 | 474 ± 224 |
| Light-mantled Albatross | 9 | 132 ± 73 | 846 ± 612 |









Sooty and Light-mantled Albatrosses Breeding cycles

From Agreement on the Conservation of Albatrosses and Petrels (2009)

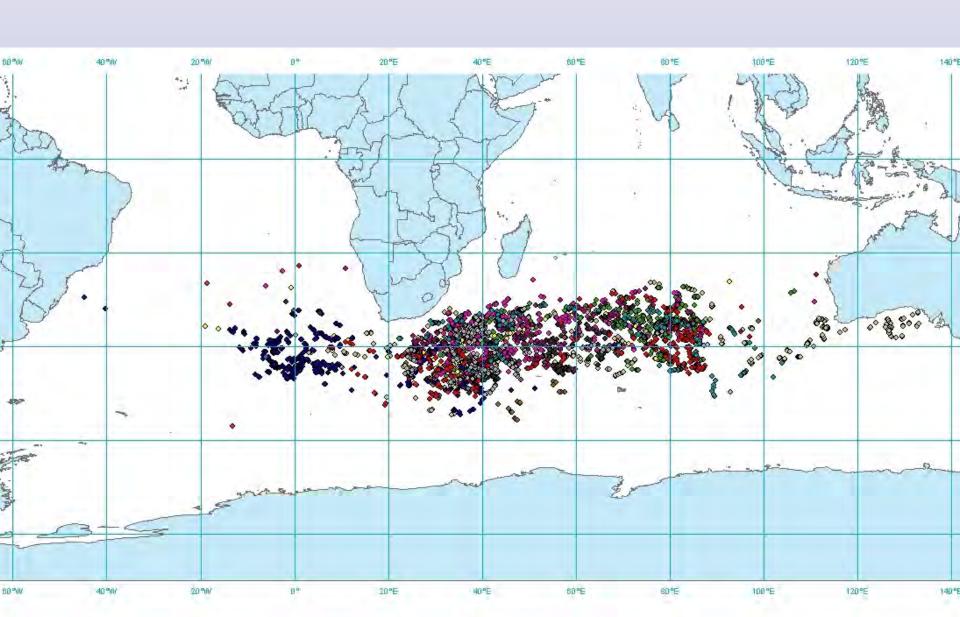
Sooty Albatross

| | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| At colonies | | | | | | | | | | | | |
| Egg laying | | | | | | | | | | | | |
| Incubating | | | | | | | | | | | | |
| Chick provisioning | | | | | | | | | | | | |
| Chick providening | | | | | | | | | | | | |

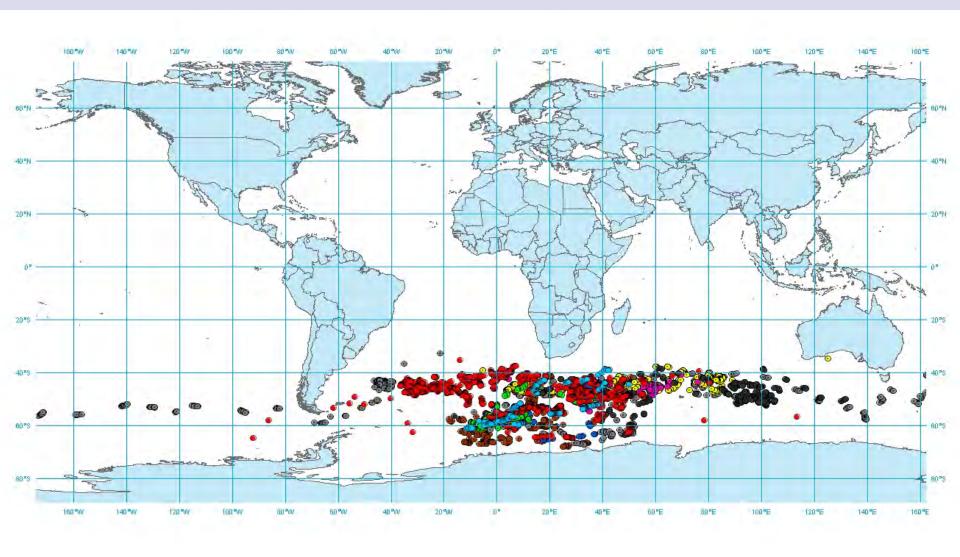
Light-mantled Albatross

| | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| At colonies | | | | | | | | | | | | |
| Egg laying | | | | | | | | | | | | |
| Incubating | | | | | | | | | | | | |
| Chick provisioning | | | | | | | | | | | | |
| | | | | | | | | | | | | |

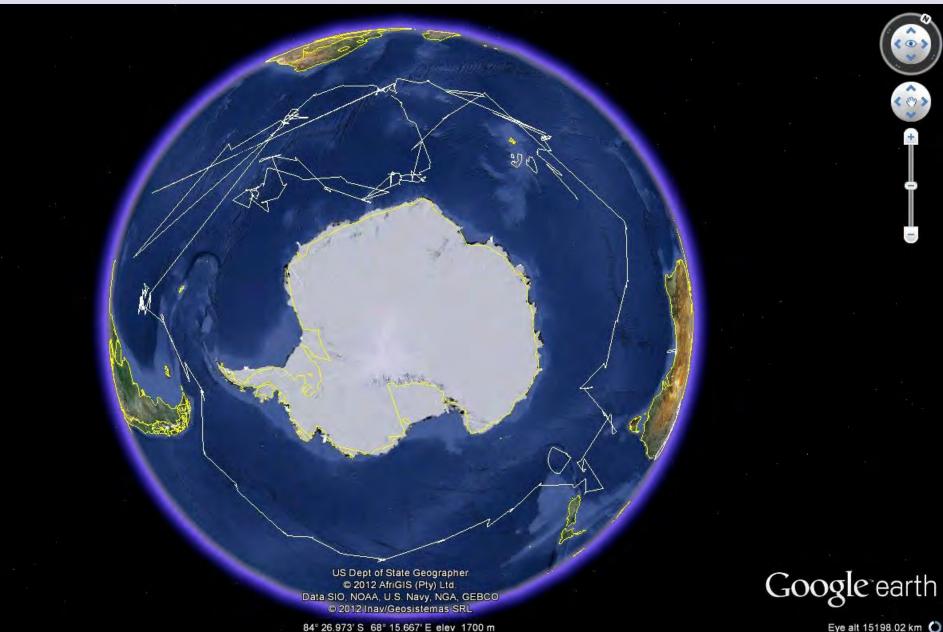
Sooty Albatross



Light-mantled Albatross

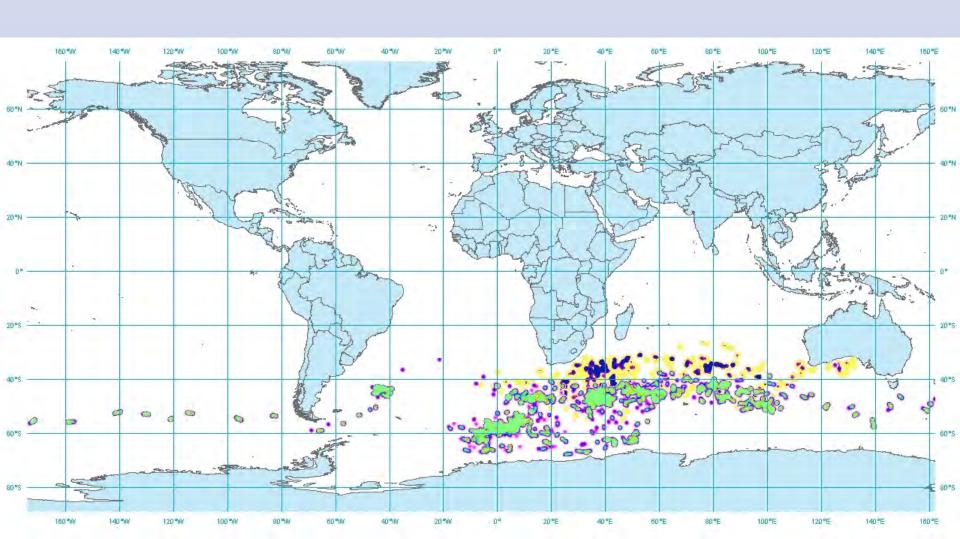


Light-mantled Albatross 98026 circumnavigation of Antarctica



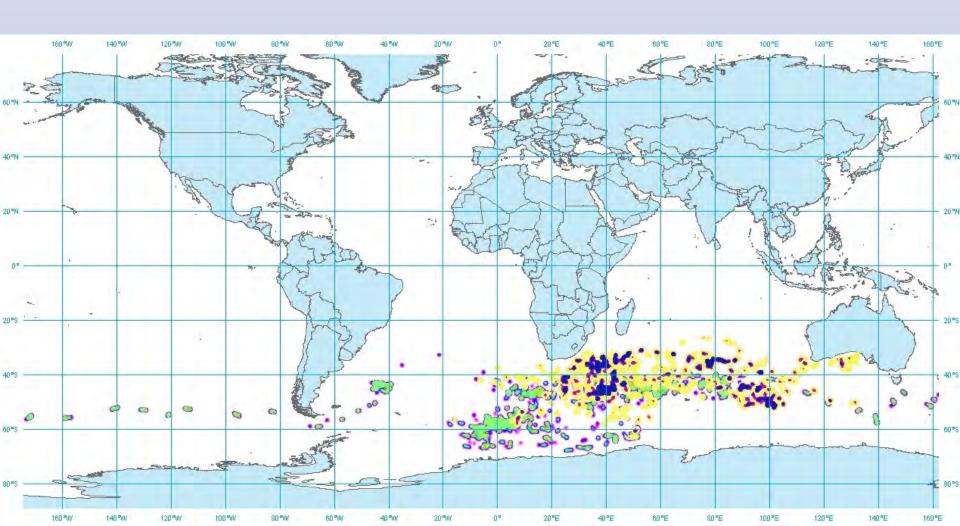
Sooty and Light-mantled Albatrosses from Prince Edward Islands

kernel densities of probabilities Sooty Albatross yellow to blue; Light-mantled Albatross purple to green



Sooty and Light-mantled Albatrosses from Prince Edward Islands

kernel densities of probabilities Sooty Albatross yellow to blue; Light-mantled Albatross purple to green

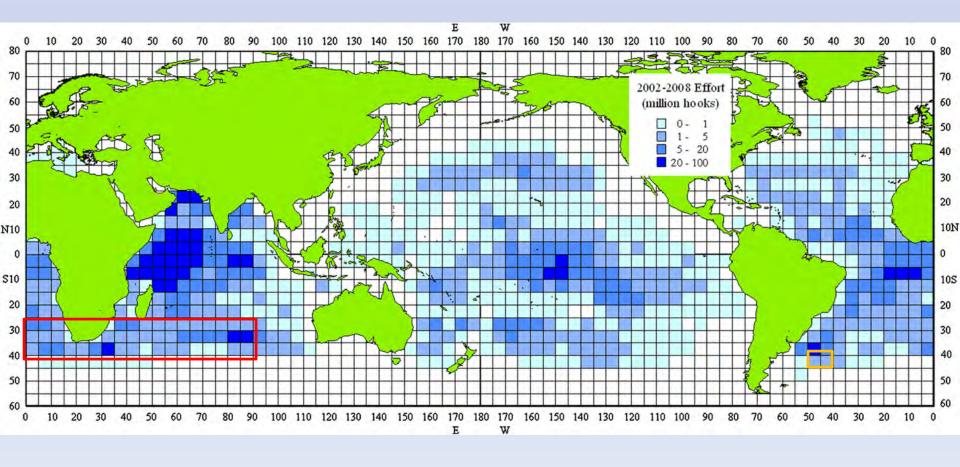


Distribution of effort in the Taiwanese tuna longline fleets, 2002–2008

from Huang (2011)



overlap of distribution of adult Light-mantled Albatross overlap of distribution of adult Sooty Albatross

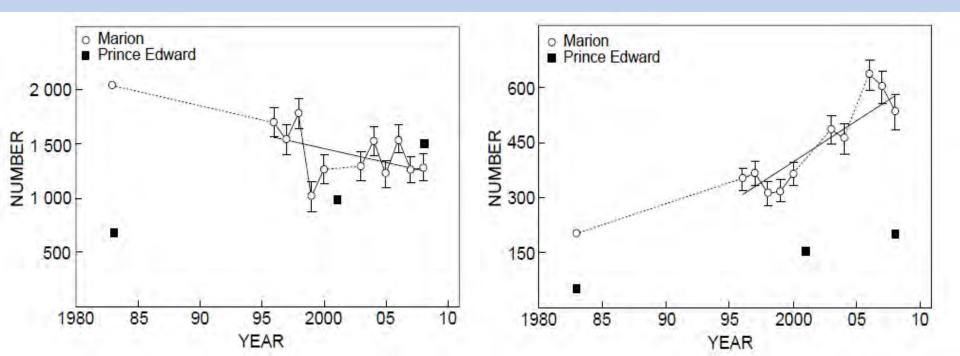


Trends in populations at Marion Island

Ryan et al. (2009)

Sooty Albatross Marion: – 2% p.a. since 1996

Light-mantled Albatross Marion: + 6% p.a. since 1996



Thank you

