



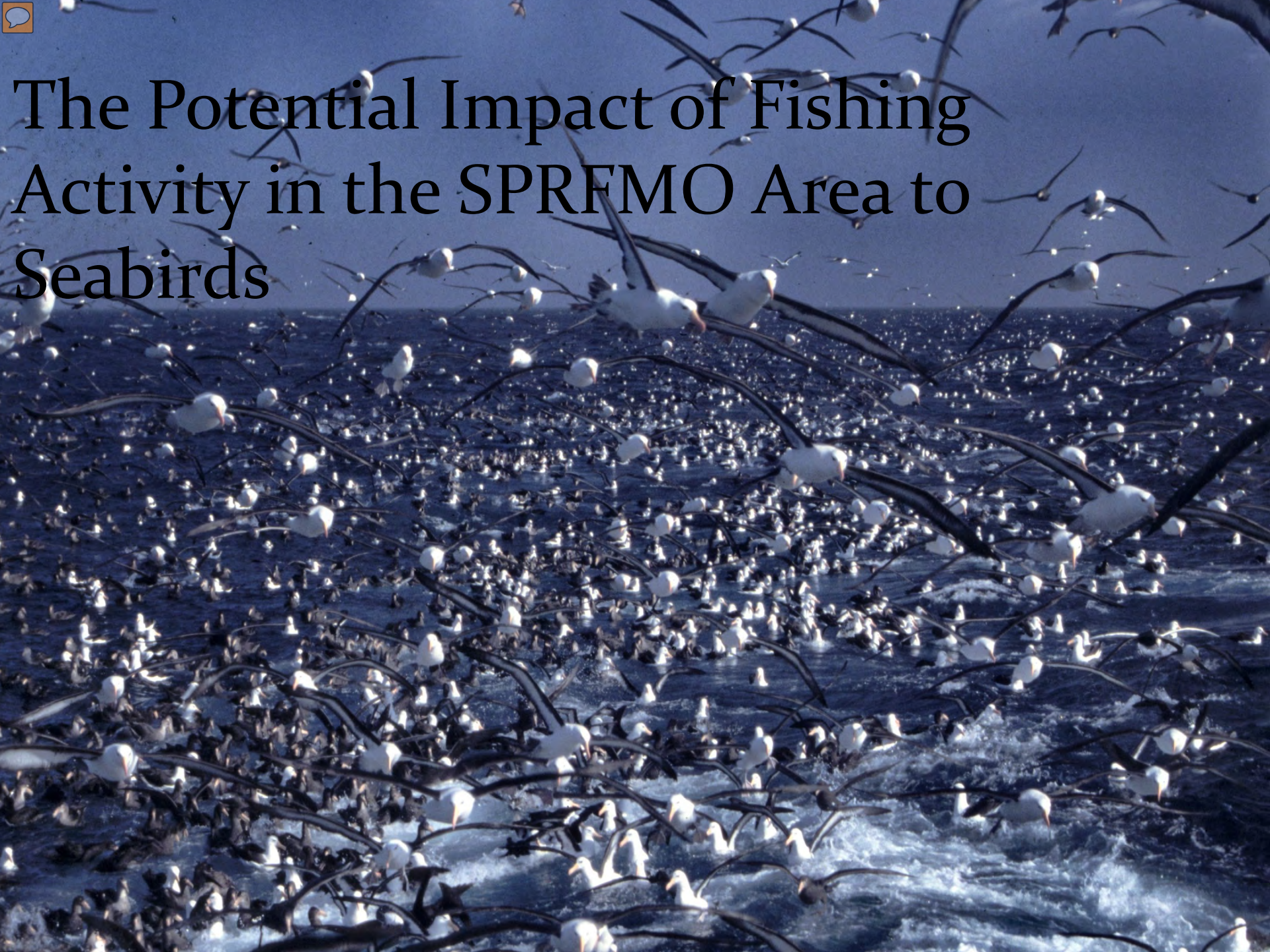
BirdLife International

Global Seabird Programme

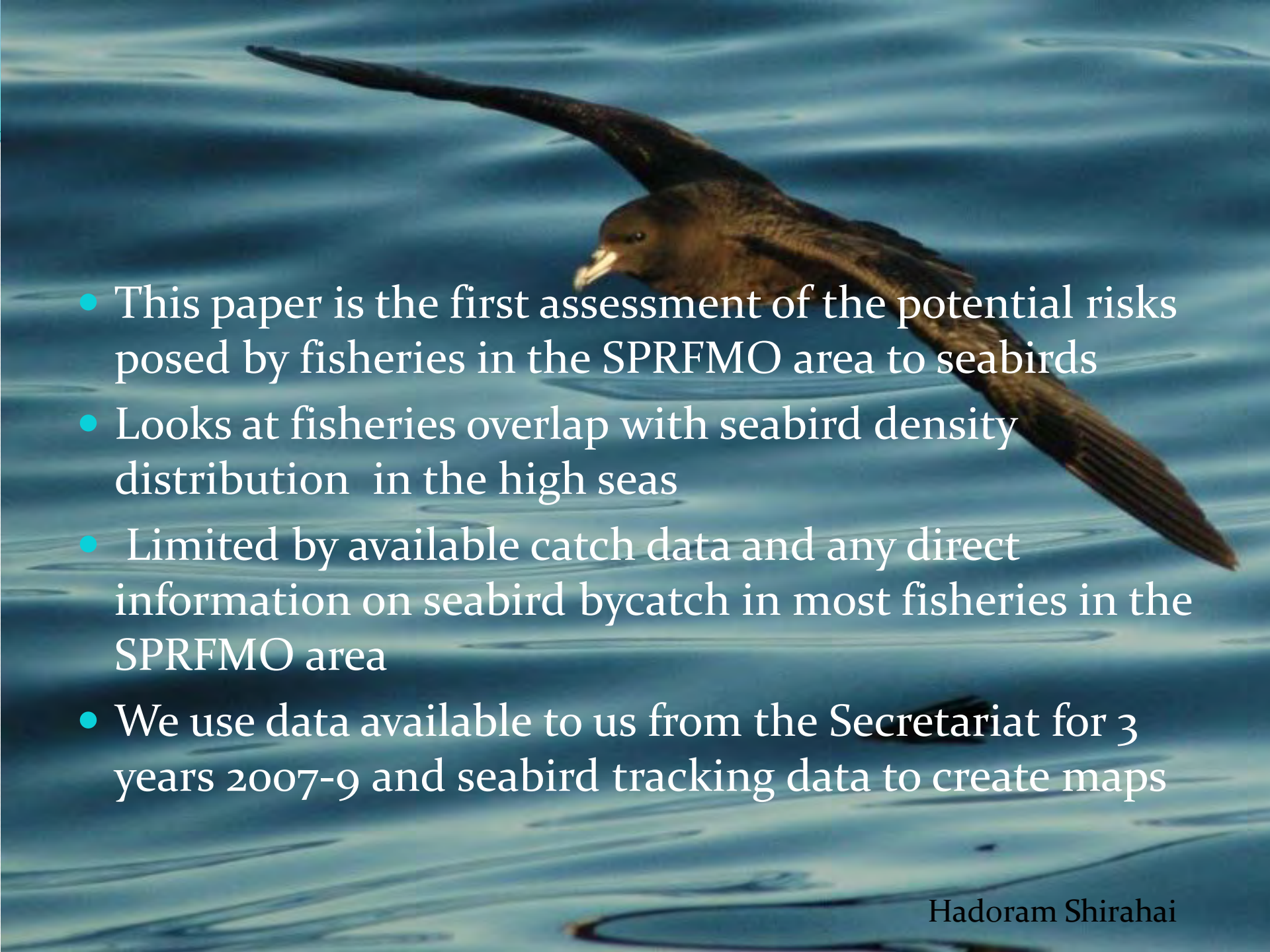
SEA CHANGE FOR SEABIRDS



The Potential Impact of Fishing Activity in the SPRFMO Area to Seabirds





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- A large seabird, possibly a booby, is shown in flight over a body of water. The bird is dark-colored with a long, pointed beak and its wings are spread wide. The water below is blue with some ripples. The text of the presentation is overlaid on the left side of the image.
- This paper is the first assessment of the potential risks posed by fisheries in the SPRFMO area to seabirds
 - Looks at fisheries overlap with seabird density distribution in the high seas
 - Limited by available catch data and any direct information on seabird bycatch in most fisheries in the SPRFMO area
 - We use data available to us from the Secretariat for 3 years 2007-9 and seabird tracking data to create maps

- Maps were created for breeding and non-breeding distributions for each South Pacific seabird species for which data are available - 22
- There is a standardised method for estimating density distribution – discussed in the paper
- Maps were also made for all species aggregated, which show the utilisation distributions illustrating the area in which the birds spend 50, 75, 95 and 99 % of their time at sea in the SPRFMO area.
- Not all likely affected species are included e.g. No tracking data for penguins, pelicans or for the Pink-footed Shearwater which is endemic to the coast of Chile.
- Catch data had to meet the 3 vessel rule and be in a form that the secretariat could extract so only 59-65% of reported catch for the period chosen was mapped.





Overlap between the management
area of the South Pacific Regional
Fisheries Management Organisation
and pelagic seabird species

All Species, Breeding

03/07/2012

Countries
SPRFMO Area
Regional EEZ

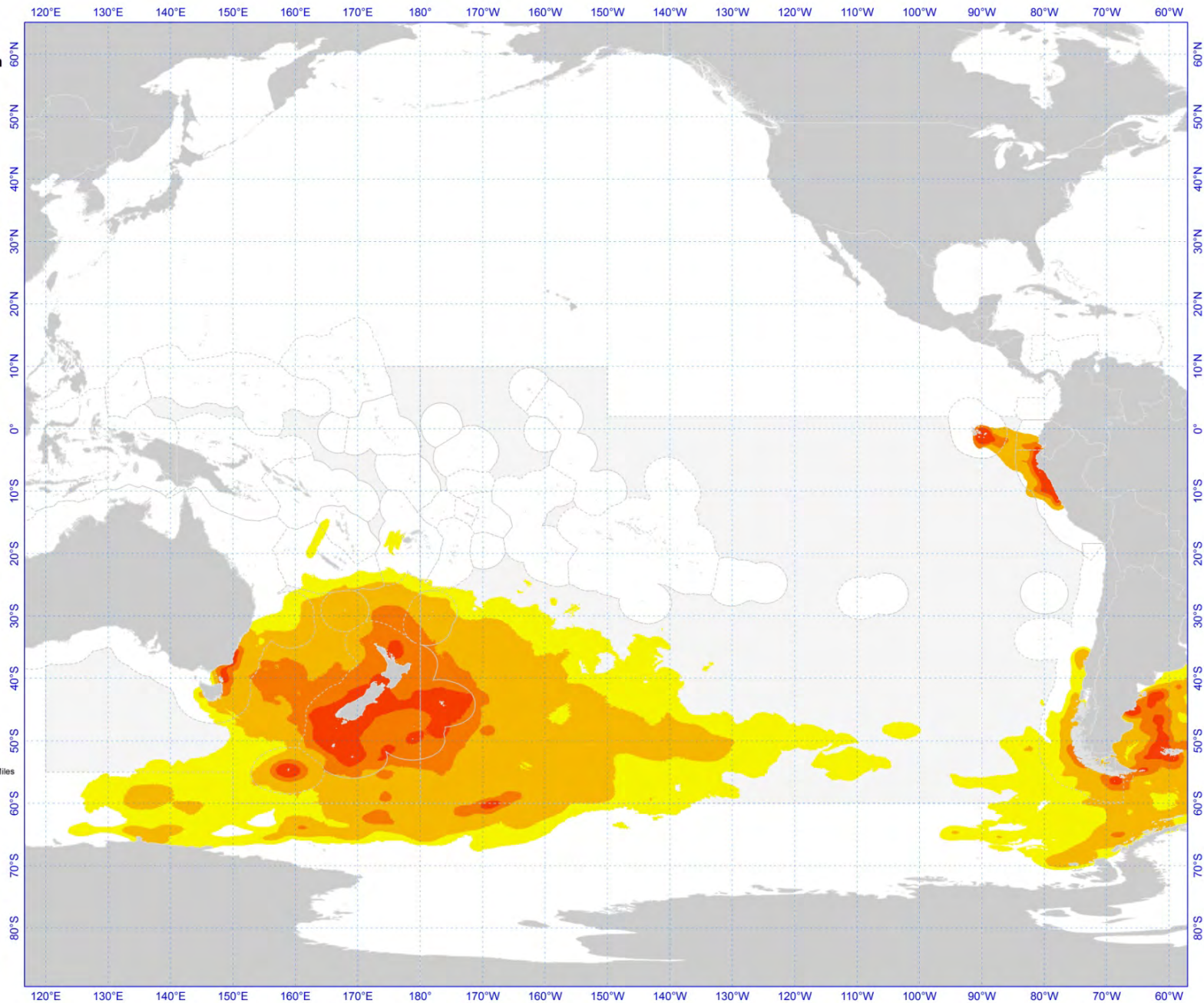
Probability contours

All Species - Breeding



0 255 510 1,020 1,530 2,040
Nautical Miles

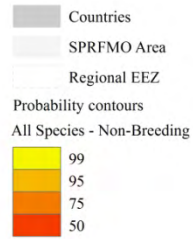
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Datum = WGS_1984



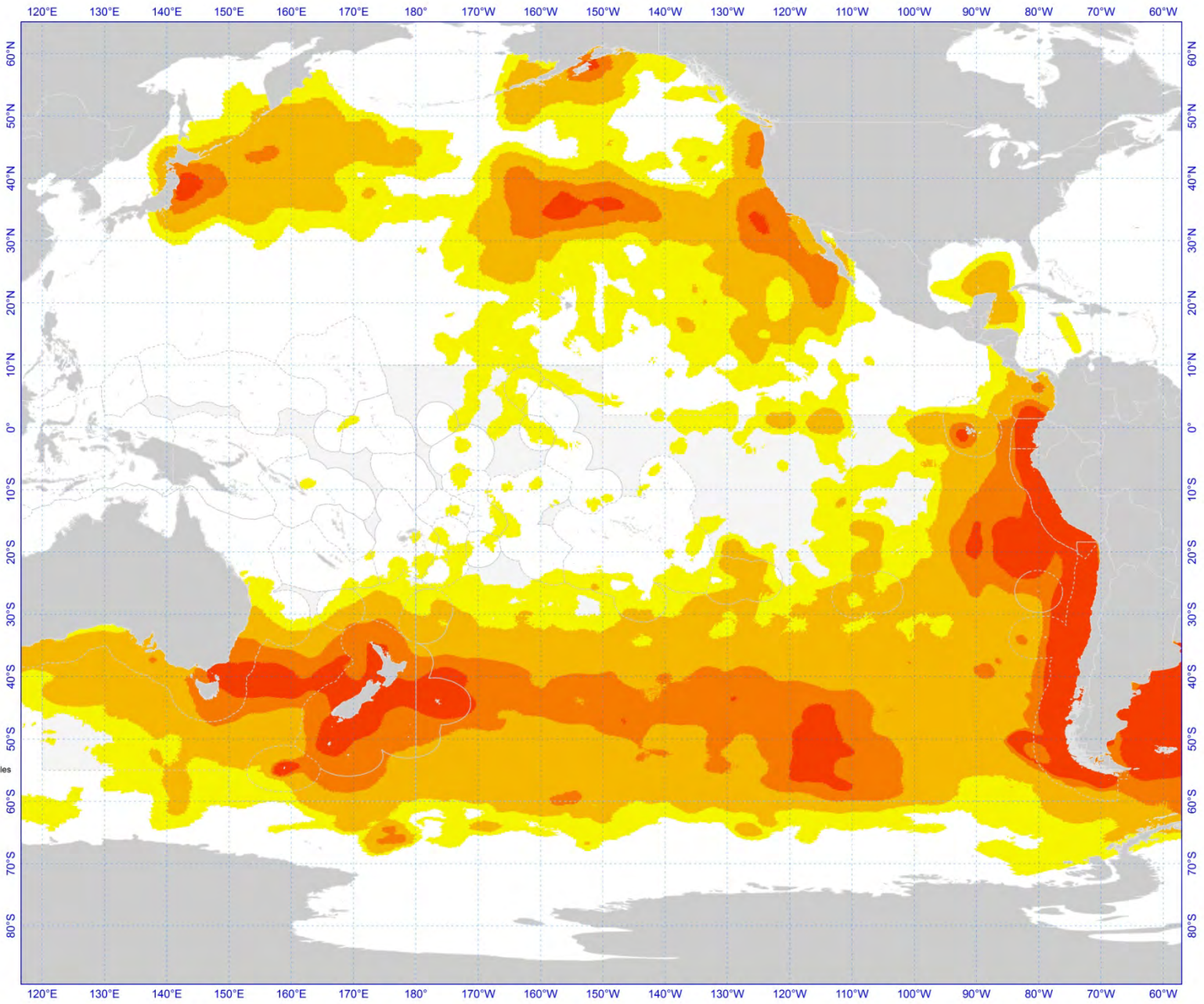
**Overlap between the management
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and pelagic seabird species**

All Species, Non-breeding

03/07/2012



Projection: Platte Carre, 180 Meridian
Datum = WGS_1984



Seabirds which spent more than 20% and up to 90% of their time in the SPRFMO area

Antipodean Albatross (VU)
Parkinson's Petrel (VU)
Buller's Albatross (NT)
Chatham Albatross (VU)
Chatham Petrel (EN)
Cook's Petrel (VU)
Grey Petrel (NT)
Salvin's Albatross (VU)
Sooty Shearwater (NT)



Kim Westerkov



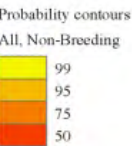
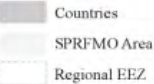
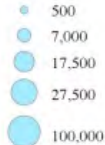
Overlap between the management area of the South Pacific Regional Fisheries Management Organisation and pelagic seabird species

All, Non-Breeding

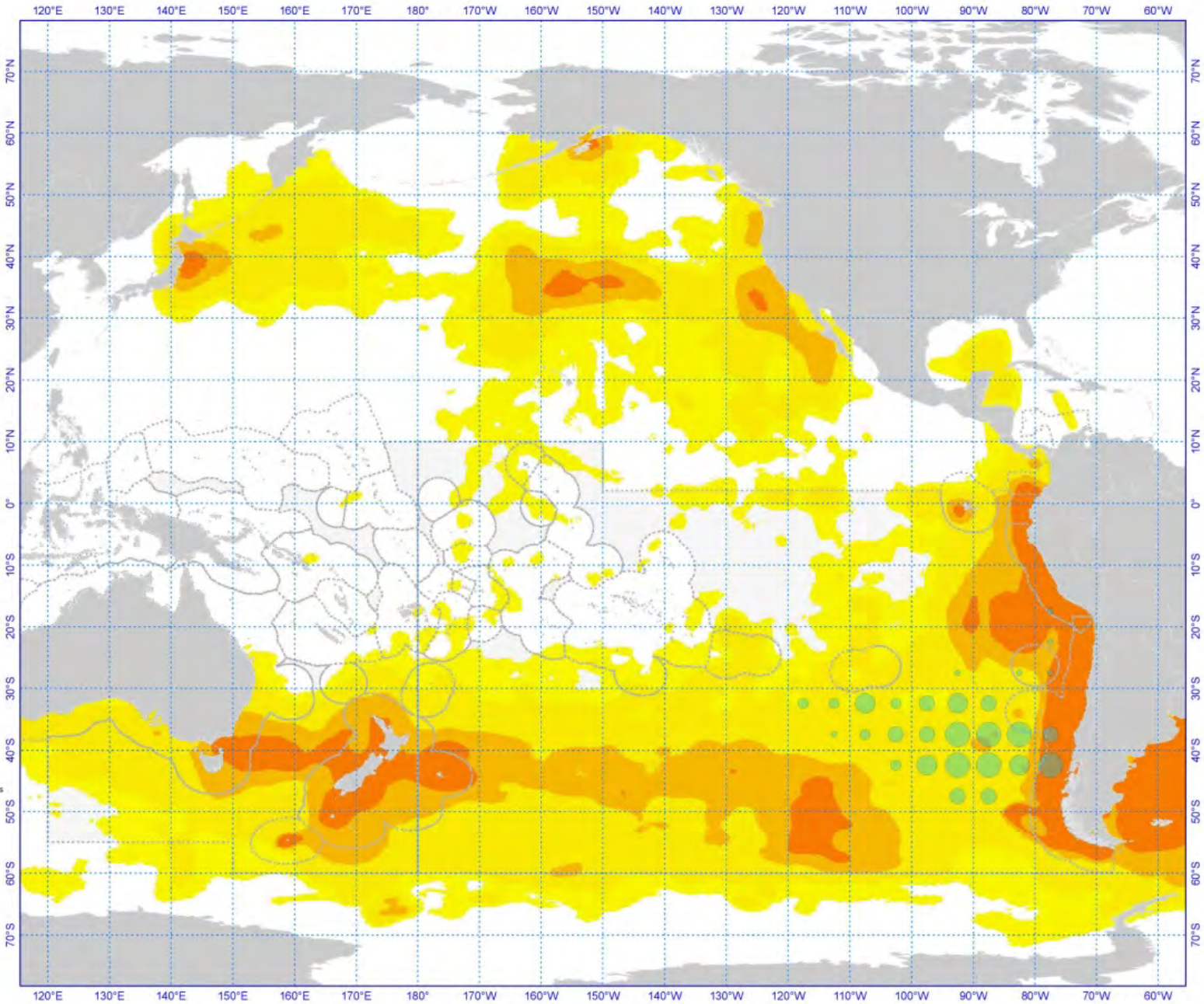
01/10/2012

Jack Mackerel Catch - 2007-09

(tons)



Projection: Platte Carre, 180 Meridian
Datum = WGS_1984



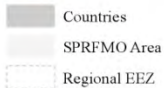
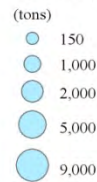


Overlap between the management area of the South Pacific Regional Fisheries Management Organisation and pelagic seabird species

All, Non-Breeding

01/10/2012

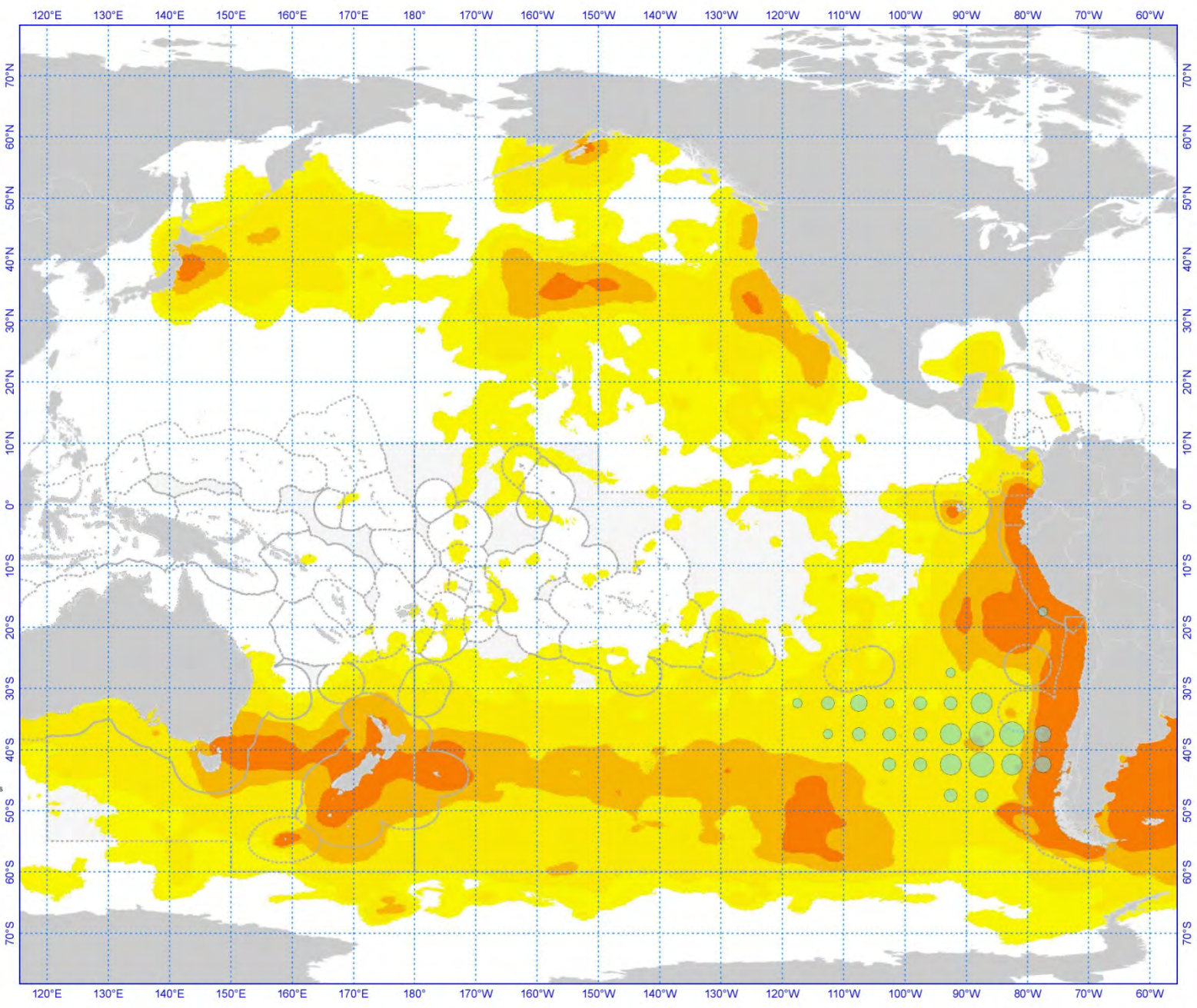
Chub Mackerel Catch - 2007-09



Probability contours
All, Non-Breeding



Projection: Platte Carre, 180 Meridian
Datum = WGS_1984





Chatham albatross



Frederic Pelsy

Buller's albatross



K. Baird

Species which indicate the most overlap with this fishery are non-breeding Black-browed, Buller's, Salvin's and Chatham Albatrosses. However another species potentially at risk is the Pink footed Shearwater for which we have no data.

Luis Cabezas, ATF



**Overlap between the management
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All, Non-Breeding

01/10/2012

Jumbo Squid Catch - 2007-09

(tons)



Countries

SPRFMO Area

Regional EEZ

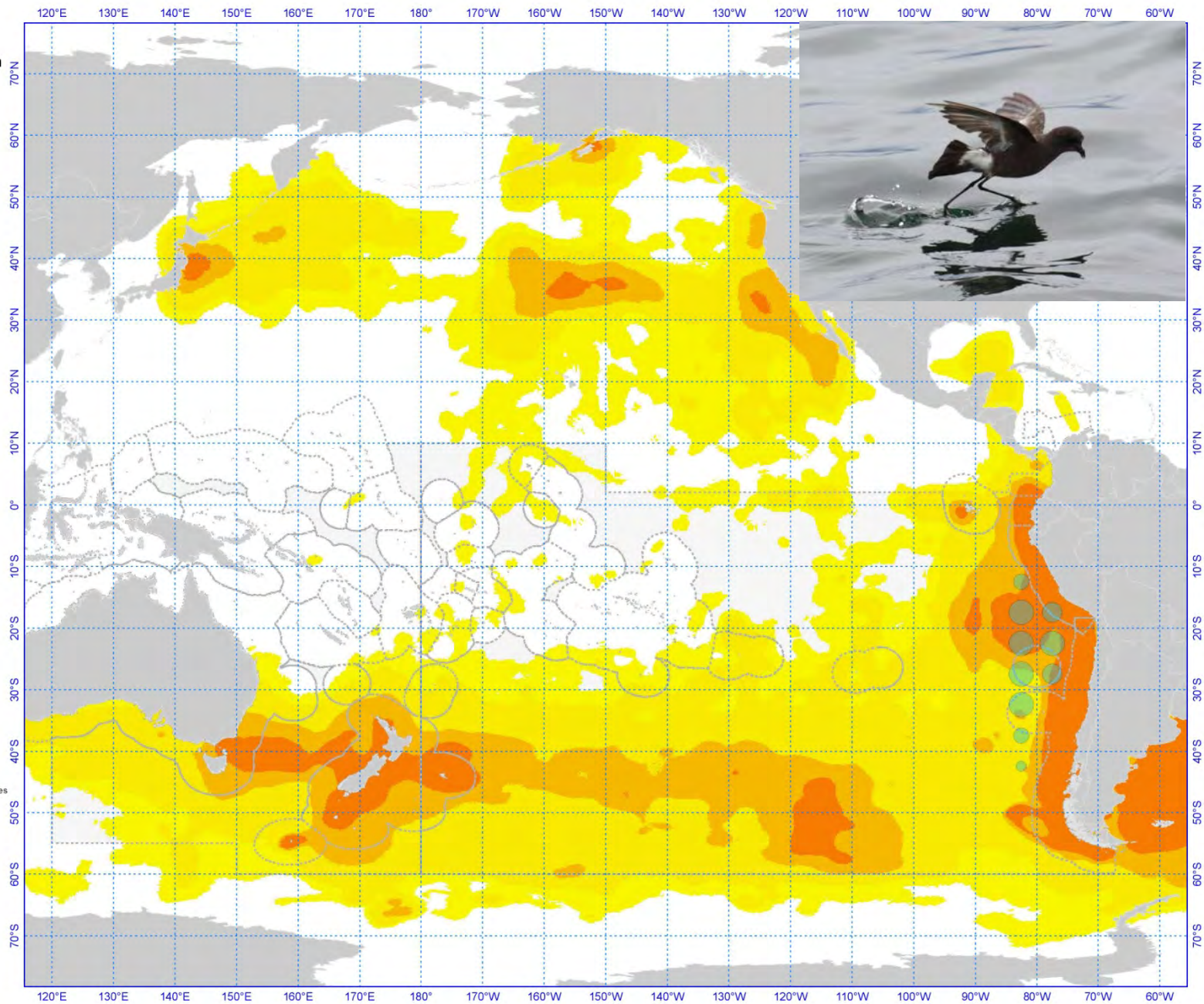
Probability contours

All, Non-Breeding



0 250 500 1,000 1,500 2,000
Nautical Miles

Projection: Platte Carre, 180 Meridian
Datum = WGS_1984

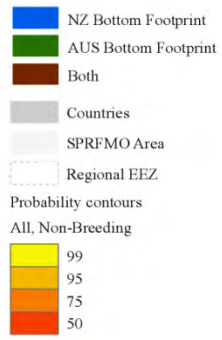




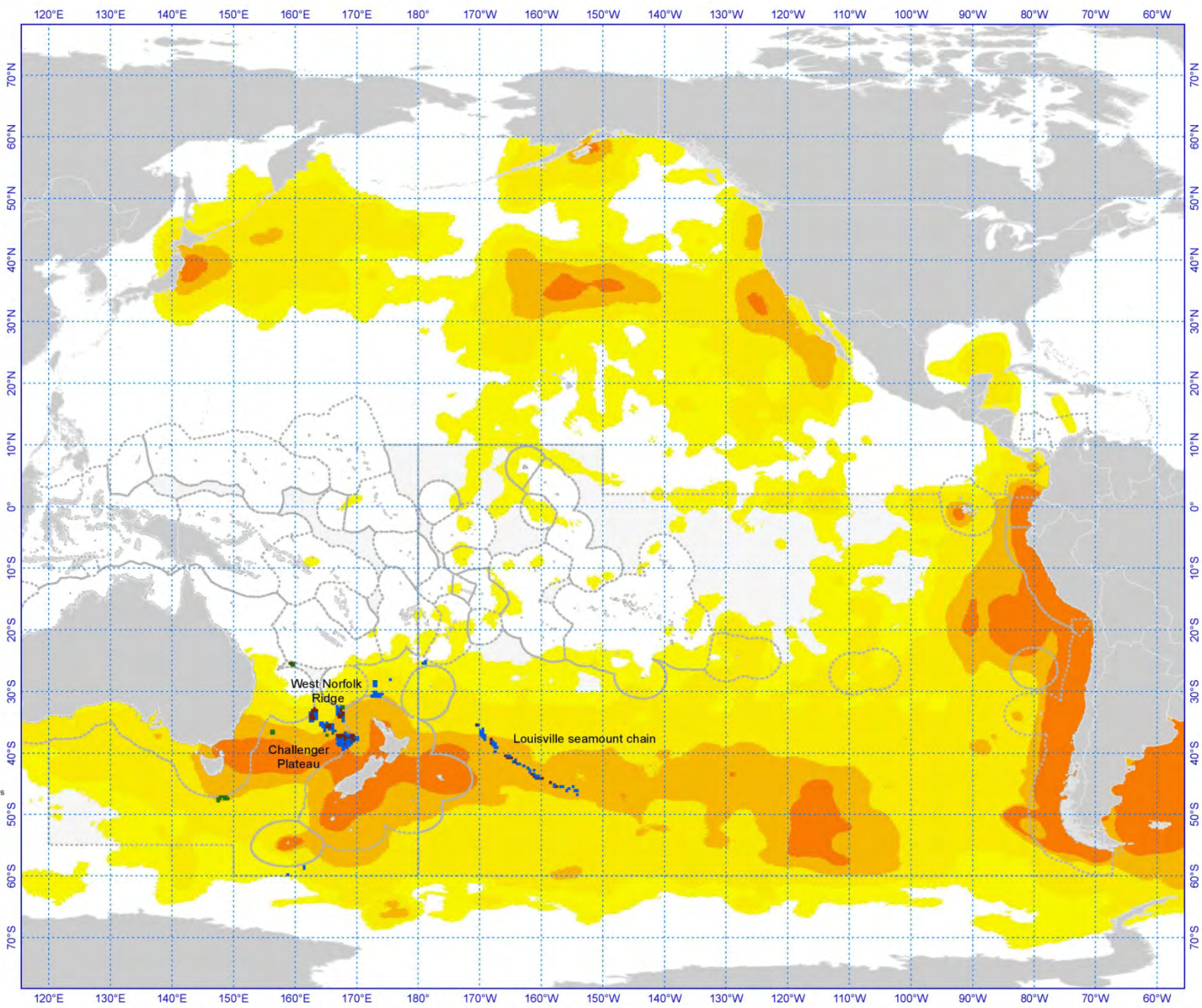
**Overlap between the management
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All, Non-Breeding

01/10/2012



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The background of the slide is a photograph of two Laysan Albatrosses swimming in the ocean. The birds have white heads and necks with a dark patch around the eye, and dark brown bodies. They have long, yellow beaks. The water is a deep blue-grey color with some ripples.

Other fisheries

- There are extensive industrial and artisanal small scale fisheries along the Pacific coast of South America and while most effort is likely to be inside EEZs, some appear to occur in the SPRFMO area.
- Seabirds likely to be at risk in these demersal and driftnet fisheries for hake include the critically endangered Waved Albatross and the Black Petrel.

Robert Medina, ATF

Main conclusions

- Significant data gaps in fisheries effort distribution and seabird interactions in target fisheries in the SPRFMO area
- High levels of overlap between the distribution of seabirds vulnerable to bycatch and mackerel and squid fisheries
- Bycatch data are needed for the mackerel trawl fisheries and information on likely interactions with purse seiners and squid fisheries
- Mitigation measures are well developed for trawlers and precautionary conservation measures could be developed for SPRFMO