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Review of the paper “Fine-scale
behaviour and population estimates
suggest low exposure but do
not exclude high sensitivity to bycatch for
Endangered sooty albatrosses”

Delegation of France Overseas Territories

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Abstract	
<p>This paper to be published by A. Fromant et al., investigates the trajectories followed by endangered sooty albatrosses from Crozet islands population while foraging during breeding season. The authors find that the feeding grounds of the 12 birds monitored are located within SIOFA waters and do overlap with fishing activities, but that the encounter and interaction rates were low. They stress however that even a low individual risk like observed here can present a threat for this small population of biennial breeders.</p>	

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² Documents available only to members invited to closed sessions.

Recommendations
That the SIOFA SC: <ul style="list-style-type: none">• Takes into account the information provided in this paper on the regular occurrence of endangered bird species within the SIOFA area to consider updating the conservation measures in place to prevent bird bycatch in the area

Review of the paper “Fine-scale behaviour and population estimates suggest low exposure but do not exclude high sensitivity to bycatch for Endangered sooty albatrosses”

This paper presents a summary of the following paper :

Fromant et al. (2024). Fine-scale behaviour and population estimates suggest low exposure but do not exclude high sensitivity to bycatch for Endangered sooty albatrosses. *bioRxiv preprint* - April 2024

Background

Sooty albatross *Phoebastria fusca* is listed as endangered by the IUCN. The poor status of *P. fusca* is due to the important population decline observed in the recent years at all the monitored breeding sites. Namely, the number of breeding pairs in the Crozet archipelago has declined by more than 81 % since 1980. Fisheries bycatch mortality could contribute to this multidecade population decrease.

Methods

For this study, 12 sooty albatrosses have been successfully equipped with GPS and boat radar detection devices during breeding season (December) in the Crozet archipelago, to monitor their trajectories and the feeding areas used during the relatively short trips performed during the incubation period, as well as their overlap with fishing activities.

Key Findings

All individuals travelled further than the extent of the EEZ of Crozet Islands, foraging mostly north of the Sub-Antarctic and Sub-tropical fronts, in SIOFA waters. The data indicate low encounter and interaction rates with fishing boats, but an overlap of the feeding grounds with longline and trawl fisheries, some of which have reported bycatch before.

Discussion

The authors have extrapolated the probability of interaction rate observed in the study (0.09 per day and individual) for the whole Crozet Islands population, currently estimated at 444 breeding pairs. They calculated that between two and three individuals of the Crozet population are likely to be within 5 km of a fishing vessel each day during the 70 days of the incubation period. This number might rise to 20-25 individuals per day in winter (June-September), when sooty albatrosses from the Crozet Islands spend more time in sub-tropical waters and fishing activity is higher.

The authors stress that even a low individual risk may have a significant impact on such small populations. Indeed, for a biennially-breeding species, mortalities from all sources (including bycatch) should not exceed 0.015 times the number of breeding pairs to maintain a population viable, which corresponds to 6.7 individuals per year for the sooty albatross population from Crozet.