

10th Annual Meeting of the Scientific Committee (SC10)

Concarneau, France, 17-26 March 2025

SC-10-54

Scientific fisheries survey report in SIOFA convention area from China in 2023-2024 cruise

Delegation of China

Document type	Working paper ✓
	Information paper
Distribution	Public
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	Closed session document 2 \square
Abstract	

From November 2023 to March 2024, two Chinese fisheries scientific research vessels, "Lanhai 101" and "Lanhai 201", conducted comprehensive fisheries resource surveys in the South Indian Ocean Fisheries Agreement (SIOFA) area, covering waters between 59°-68°E and 4°S-9°N. The survey involved mid-water trawling, squid jigging, and tuna longlining to study fisheries resources, as well as the distribution of plankton and fish eggs and larvae, and measurements of oceanographic physical characteristics. A total of 145 stations were surveyed to analyze biological community structures, resource distributions, and the relationship between environmental factors and fishing ground formation. Initial findings revealed a high density of fish eggs in the northern waters, indicating potential spawning grounds, and significantly enriched plankton communities during nighttime. In the southern waters, relatively higher temperatures and dissolved oxygen levels were observed, suggesting favorable habitats for midwater fisheries and potential migration pathways. Economically important species, such as yellowfin tuna (Thunnus albacares), purpleback flying squid (Sthenoteuthis oualaniensis), and bigeye tuna (Thunnus obesus), were identified, with their distributions closely linked to hydrological conditions, offering insights into ecosystem and population dynamics. This survey provides a scientific foundation for stock assessment and sustainable management in the region.

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² Documents available only to members invited to closed sessions.

Recommendations

It is recommended that the MoP:

- understand the purpose and plan of China's fishery independent surveys in the high seas of the SIOFA area, which is to collect scientific data for the research of SIOFA species and its environment and marine ecosystems.
 - **note** on the draft plan on the research cruise.

