Attachment 8

Report on Biology, Stock Status and Management of Southern Bluefin Tuna: 2026

The CCSBT Extended Scientific Committee (ESC) updated the stock assessment and conducted a review of fisheries indicators in 2026 to provide updated information on the status of the stock. The next stock assessment is scheduled in 2029. This report updates the description of fisheries and the state of stock as advised in 2026 by the ESC using the most recent information.

1. Biology

Southern bluefin tuna (*Thunnus maccoyii*) are found in the southern hemisphere, mainly in waters between 30° and 50° S, but only rarely in the eastern Pacific. The only known spawning area is in the Indian Ocean, south-east of Java, Indonesia. Spawning takes place from September to April in warm waters south of Java and juvenile SBT migrate south down the west coast of Australia. During the summer months (December-April), they tend to congregate near the surface in the coastal waters off the southern coast of Australia and spend their winters in deeper, temperate oceanic waters. Results from recaptured conventional and archival tags show that young SBT migrate seasonally between the south coast of Australia and the central Indian Ocean. After age 5 SBT are seldom found in nearshore surface waters, and their distribution extends over the southern circumpolar area throughout most of the Pacific, Indian and Atlantic Oceans.

SBT can attain a length of over 2m and a weight of over 200kg. Direct ageing using otoliths indicates that a substantial number of fish larger than 160cm are older than 25 years, and the maximum age obtained from otolith readings has been 42 years. Analysis of tag returns and otoliths indicate that, compared to the 1960s, growth rate has increased since about 1980 during the period when the stock was declining. There is some uncertainty about the size and age when SBT mature, but available data indicate that SBT do not mature younger than 8 years (155cm fork length), and perhaps as old as 15 years. SBT exhibit age-specific natural mortality, with M being higher for young fish and lower for old fish, increasing again prior to senescence.

Given that SBT have only one known spawning ground, and that no morphological differences have been found between fish from different areas, SBT are considered to constitute a single stock for management purposes.

2. Description of Fisheries

Reported catches of SBT up to the end of 2025 are shown in Figures 1 - 3. Note that a 2006 review of SBT data indicated that there may have been substantial under-reporting of SBT catches and surface fishery bias in the previous 10 - 20 year period, and there is currently substantial uncertainty regarding the true levels of total SBT catch over this period. The SBT stock has been exploited for more than 50 years, with total catches peaking at 81,750t in 1961 (Figures 1 - 3). Over the period 1952 - 2025, 76.6% of the reported catch was taken by longline, 10.6% using purse-seine, and

12.8% using other gears (Figure 1). The proportion of reported catch made by the purse seine fishery peaked at 48% in 2006, averaging 32.4% since 1996 (Figure 1). The Japanese longline fishery (taking a wide age range of fish) recorded its peak catch of 77,927t in 1961 (Figure 3). New Zealand, the Fishing Entity of Taiwan and Indonesia have also exploited southern bluefin tuna since the 1970s - 1980s, and Korea started a fishery in 1991.

On average, 78% of the SBT catch has been made in the Indian Ocean, 17% in the Pacific Ocean and 5% in the Atlantic Ocean (Figure 2). The reported annual Atlantic Ocean catch has varied widely between about 18t and 8,200t since 1968 (Figure 2), averaging 1,733t over the past two decades. This variation in catch reflects shifts in longline effort between the Atlantic and Indian Oceans. Fishing in the Atlantic occurs primarily off the southern tip of South Africa (Figure 4). Since 1968, the reported Indian Ocean catch has declined from about 45,000t to less than 10,000t, averaging 17,442t, and the reported Pacific Ocean catch has ranged from about 800t to 19,000t, averaging 4,989t over the same period[1].

3. Summary of Stock Status

Since 2017, CCSBT has measured reproductive capacity as Total Reproductive Output (TRO) rather than SSB. TRO is similar to SSB but takes account of higher reproductive output for older fish. The 2026 stock assessment indicated that the SBT TRO in 2026 is at 28% of its initial value and at 99% of the value that could produce maximum sustainable yield. The 2026 assessment indicated the stock has increased from a low of 10% of initial TRO in 2009. A new stock assessment is scheduled for 2029.

A review of indicators in 2026 shows little overall change since the previous review. Age 1 recruitment indices have decreased somewhat in recent years, but recruitment levels are above those experienced from 1980 to the early 2000s. Gene-tagging based estimates of age 2 recruitment have suggested good recruitment in recent years. There are consistent positive trends in the age-based longline CPUE estimates across a number of fleets. The detection rate of parent-offspring pairs from the most recent close-kin mark-recapture data is consistent with an increase in adult abundance.

4. Current Management Measures

Total Allowable Catch (TAC)

The primary conservation measure for management of the southern bluefin tuna stock is the TAC.

At its eighteenth annual meeting in 2011, the CCSBT agreed that a Management Procedure (MP) would be used to guide the setting of the SBT global total allowable catch (TAC) to ensure that the SBT spawning stock biomass achieves the interim rebuilding target of 20% of the initial spawning stock biomass. The CCSBT set TACs until 2020 based on the outcome of that MP. At its twenty sixth annual meeting in

[1] Note: a 2006 review of SBT data indicated that catches over the preceding 10 to 20 years may have been substantially under-reported.

2019, the CCSBT agreed a new MP tuned to achieve a 0.5 probability of achieving 30% of initial TRO by 2035.

In adopting the first MP in 2011, the CCSBT emphasised the need to take a precautionary approach to increase the likelihood of the spawning stock rebuilding in the short term and to provide industry with more stability in the TAC (i.e. to reduce the probability of future TAC decreases). Under the MP adopted, the TACs were set for three-year periods. The TACs for 2018 to 2020 were 17,647 tonnes, the TAC for 2021-2023 was also 17,647 tonnes , and the TAC for 2024 to 2026 is 20,647 tonnes.

The allocations of the TAC to Members of the CCSBT from 2018 to 2026 is summarised below. In addition, some flexibility is provided to Members for limited carry-forward of unfished allocations between quota years.

Current Allocations to Members (tonnes)

	2018-2020[2]	2021-2023[3]	2024-2026[4]
Japan	6,117	6,197.4	7,247
Australia	6,165	6,238.4	7,295
Republic of Korea	1,240.5	1,256.8	1,468
Fishing Entity of Taiwan	1,240.5	1,256.8	1,468
New Zealand	1,088	1,102.5	1,288
Indonesia	1,023	1,122.8	1,336[5]
European Union	11	11	13
South Africa	450	455.3	527

Monitoring, Control and Surveillance

The CCSBT has adopted a Compliance Plan that supports its Strategic Plan and provides a framework for the CCSBT, Members and Cooperating Non-Members to improve compliance, and over time achieve full compliance with CCSBT's conservation and management measures. The Compliance Plan also includes a three-year action plan to address priority compliance risks. The action plan will be reviewed

[2] These figures reflect the voluntary transfers of 21t that Japan provided to Indonesia and 27t that Japan provided to South Africa for the 2018 to 2020 quota block.
[3] These figures reflect: (1) voluntary transfers of 21t that Japan is providing to Indonesia and 27t that Japan is providing to South Africa for the 2021 to 2023 quota block; (2) a voluntary transfer of 7t that Australia is providing to Indonesia for the 2021 to 2023 quota block; and (3) a special temporary allowance of 80t to Indonesia for 2021.
[4] Includes voluntary transfers to Indonesia of 21t from Japan and a special temporary allowance of 130 t. It also includes a voluntary transfer of 27t to South Africa from Japan.
[5] Does not include 91.3t to be repaid by Indonesia every year until 2026 as part of an agreed Payback Plan for a previous overcatch.

and confirmed or updated every year. The action plan is therefore a 'rolling' document and over time its emphasis will change.

The CCSBT has also adopted three Compliance Policy Guidelines, these being:

- Minimum performance requirements to meet CCSBT Obligations;
- Corrective actions policy; and
- MCS information collection and sharing

In addition, the CCSBT has implemented a Quality Assurance Review (QAR) program to provide independent reviews to help Members identify how well their management systems function with respect to their CCSBT obligations, and to provide recommendations on areas where improvement is needed. It is further intended that QARs will:

- Benefit the reviewed Member by giving them confidence in the integrity and robustness of their own monitoring and reporting systems;
- Promote confidence among all Members as to the quality of individual Member's performance reporting; and
- Further demonstrate the credibility and international reputation of the CCSBT as a responsible Regional Fisheries Management Organisation.

Individual MCS measures that have been established by the CCSBT include the following:

Catch Documentation Scheme

The CCSBT Catch Documentation Scheme (CDS) came into effect on 1 January 2010 and replaced the Statistical Document Programme (Trade Information Scheme) which had operated since 1 June 2000. The CDS provides for tracking and validation of legitimate SBT product flow from catch to the point of first sale on domestic or export markets. As part of the CDS, all transhipments, landings of domestic product, exports, imports and re-exports of SBT must be accompanied by the appropriate CCSBT CDS Document(s), which will include a Catch Monitoring Form and possibly a Re-Export/Export After Landing of Domestic Product Form. Similarly, transfers of SBT into and between farms must be documented on either a Farm Stocking Form or a Farm Transfer Form as appropriate. In addition, each whole SBT that is transhipped, landed as domestic product, exported, imported or re-exported must have a uniquely numbered tag attached to it and the tag numbers of all SBT (together with other details) are recorded on a Catch Tagging Form. Copies of all documents issued and received will be provided to the CCSBT Secretariat on a quarterly basis for compiling to an electronic database, analysis, identification of discrepancies, reconciliation and reporting.

Monitoring of SBT Transhipments

The CCSBT program for monitoring transhipments at sea came into effect on 1 April 2009. The program was revised to include requirements for monitoring transhipments in port from 1 January 2015.

Transhipments at sea from tuna longline fishing vessels with freezing capacity (referred to as "LSTLVs") require, amongst other things, carrier vessels that receive SBT transhipments at sea from LSTLVs to be authorised to receive such transhipments and for a CCSBT observer to be on board the carrier vessel during the transhipment. The CCSBT transhipment program is harmonised and operated in conjunction with those of ICCAT and IOTC to avoid duplication of the same measures. ICCAT or IOTC observers on a transhipment vessel that is authorised to receive SBT are deemed to be CCSBT observers provided that the CCSBT standards are met.

Transhipments in port must be to an authorised carrier vessel (container vessels are exempted) at designated foreign ports and, amongst other things, require prior notification to Port State authorities, notification to Flag States, and transmission of the CCSBT transhipment declaration to the Port State, the Flag State and the CCSBT Secretariat.

Port State Measures

The CCSBT adopted a Resolution for a CCSBT Scheme for Minimum Standards for Inspections in Port in October 2015. The Resolution entered into force on 1 January 2017. The scheme applies to foreign fishing vessels, including carrier vessels other than container vessels. Under this scheme, Members wishing to grant access to their ports to foreign fishing vessels shall, amongst other things:

- Designate a point of contact for the purposes of receiving notifications;
- Designate the ports to which foreign fishing vessels may request entry;
- Ensure that it has sufficient capacity to conduct inspections in every designated port;
- Require foreign fishing vessels seeking to use its ports for the purpose of landing and / or transhipment to provide certain required minimum information with at least 72 hours prior notification; and
- Inspect at least 5% of foreign fishing vessel landings in their designated ports each year.

List of Approved Vessels and Farms

The CCSBT has established records for:

- Authorised SBT vessels;
- Authorised SBT carrier vessels; and
- Authorised SBT farms.

Members and Cooperating Non-Members of the CCSBT will not allow the landing or trade etc. of SBT caught by fishing vessels and farms or transhipped to carrier vessels that are not on these lists.

List of Vessels Presumed to have carried out IUU Fishing Activities for SBT

The CCSBT has adopted a Resolution on Establishing a List of Vessels Presumed to have Carried Out Illegal, Unreported and Unregulated Fishing Activities for Southern Bluefin Tuna.

At each annual meeting, the CCSBT identifies those vessels which have engaged in fishing activities for SBT in a manner which has undermined the effectiveness of the Convention and the CCSBT measures in force.

Vessel Monitoring System

The CCSBT Vessel Monitoring System (VMS) came into effect immediately after the Fifteenth Annual Meeting of the Commission, on 17 October 2008. It requires CCSBT Members and Cooperating Non-Members to adopt and implement satellite-linked VMS for vessels fishing for SBT that complies with the IOTC, WCPFC, CCAMLR or ICCAT VMS requirements according to the respective convention area in which the SBT fishing is being conducted. For fishing outside of these areas, the IOTC VMS requirements must be followed.

5. Scientific Advice

At its 2022 meeting, the ESC used the newly adopted MP to calculate a recommended TAC for the period 2024-2026. The recommended TAC is 20,647 tonnes which is an increase of 3,000 tonnes, the maximum allowed under the MP adopted. At its 2023, 2024, and 2025 meetings, the ESC followed its process for examining exceptional circumstances and, finding none, confirmed its advice for the TAC for 2024-2026.

At its 2025 meeting, the ESC used the adopted MP to calculate a recommended TAC for the period 2027-2029. The recommended TAC is 23,647 tonnes which is again an increase of 3,000 tonnes, the maximum allowed under the MP. At its 2026 meeting, the ESC followed its process for examining exceptional circumstances and, finding none, confirmed its advice for the TAC for 2027-2029.

6. Biological State and Trends

The 2026 stock assessment indicated that the SBT TRO is at 28% of its initial level. This is very close (99%) to the level that could produce maximum sustainable yield. The stock is projected to reach the target level of 30% TRO with a probability of 0.7 in the target year, 2035.The next stock assessment will be carried out in 2029.

Exploitation rate: Moderate (Below F_{MSY})

Exploitation state: Overexploited

Abundance level: Low abundance

SOUTHERN BLUEFIN TUNA SUMMARY FROM ESC in 2026 (global stock)	
Reported (2025) Catch	19,488t
Current status relative to initial	
TRO	0.28 (0.21–0.37)
B10+	0.23 (0.17–0.31)
TRO (2026) Relative to TRO_{msy}	0.985 (0.63–1.59)
Maximum Sustainable Yield	32,529t (26,400-39,381)
Current (2026) biomass (B10+)	222,237t (185,188-267,283)
Fishing Mortality (2026) Relative to F_{msy}	0.55 (0.38–0.81)
Current Management Measures	Effective Catch Limit for Members and Cooperating Non-Members: 20,647t per year for the years 2024-2026

TRO is the total reproductive output summed over all age classes weighted by their relative individual contribution to reproduction.

B10+ is the biomass of fish aged 10 years and over.

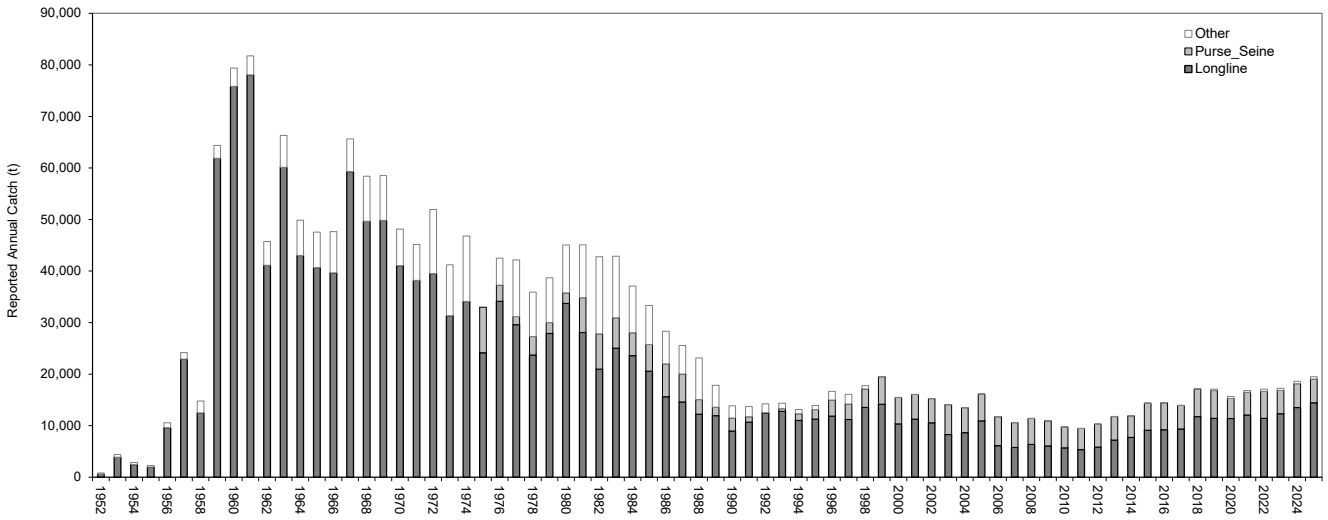

Figure 1: Reported southern bluefin tuna catches by fishing gear, 1952 to 2025. Note: a 2006 review of SBT data indicated that catches over the preceding 10 to 20 years may have been substantially under-reported.

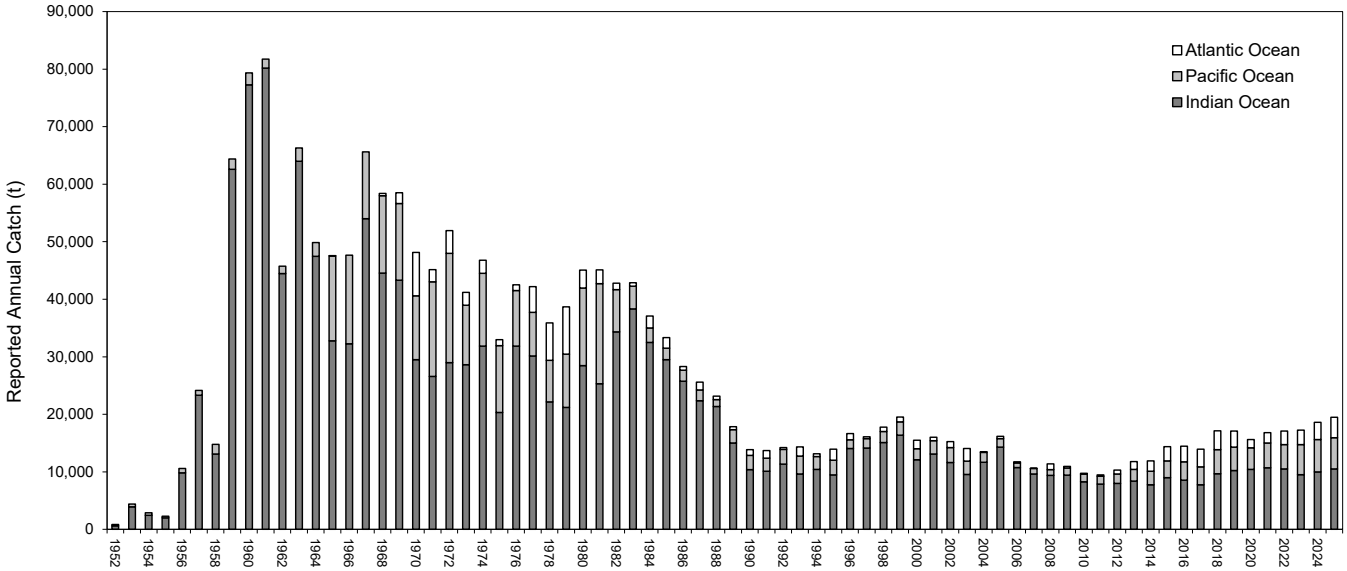

Figure 2: Reported southern bluefin tuna catches by ocean, 1952 to 2025. Note: a 2006 review of SBT data indicated that catches over the preceding 10 to 20 years may have been substantially under-reported.

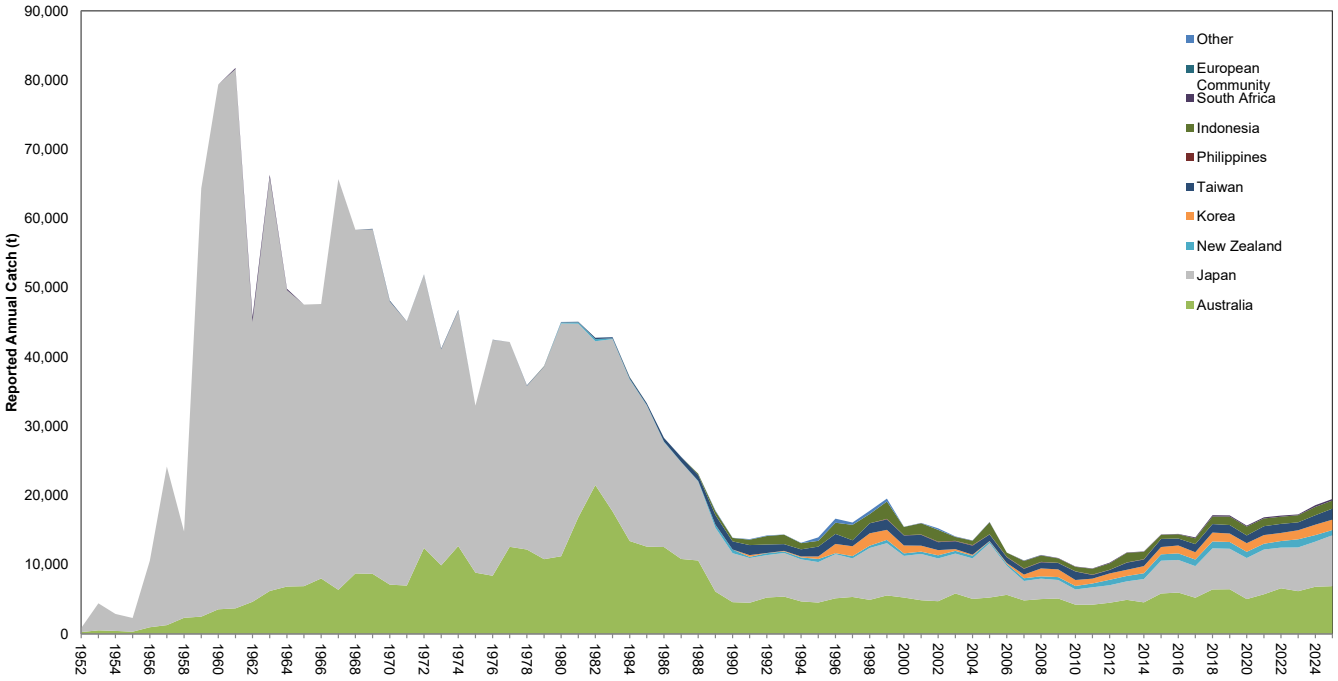

Figure 3: Reported southern bluefin tuna catches by flag, 1952 to 2025. Note: a 2006 review of SBT data indicated that catches over the preceding 10 to 20 years may have been substantially under-reported.

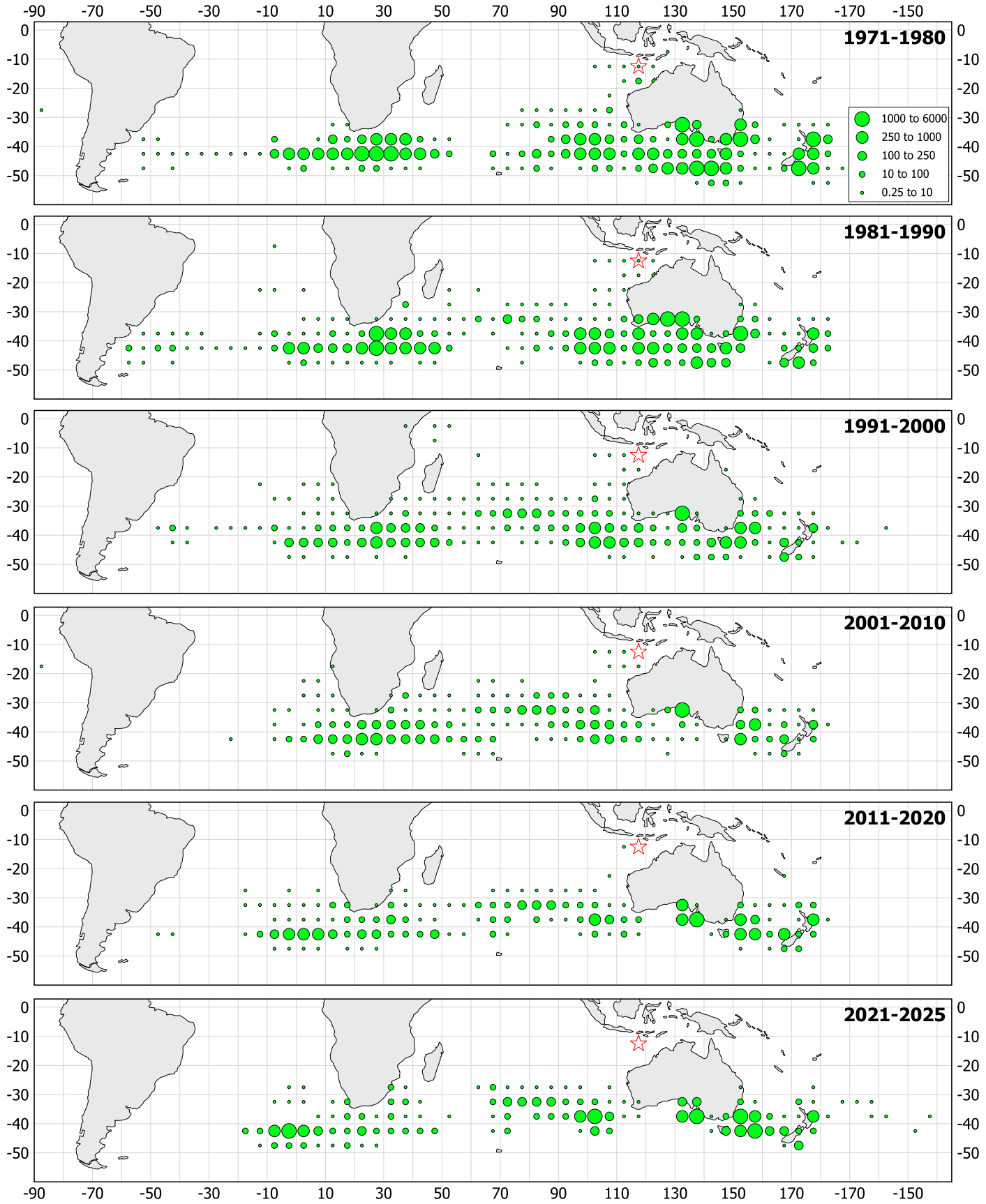

Figure 4: Geographical distribution of average annual reported southern bluefin tuna catches (t) by CCSBT members and cooperating non-members over the periods 1971-1980, 1981-1990, 1991-2000, 2001-2010, 2011-2020 and 2021-2025 per 5° block. The area marked with a star is an area of substantial catch in the breeding ground. Block catches averaging less than 0.25 tons per year are not shown. Note: This figure may be affected by past anomalies in catch.

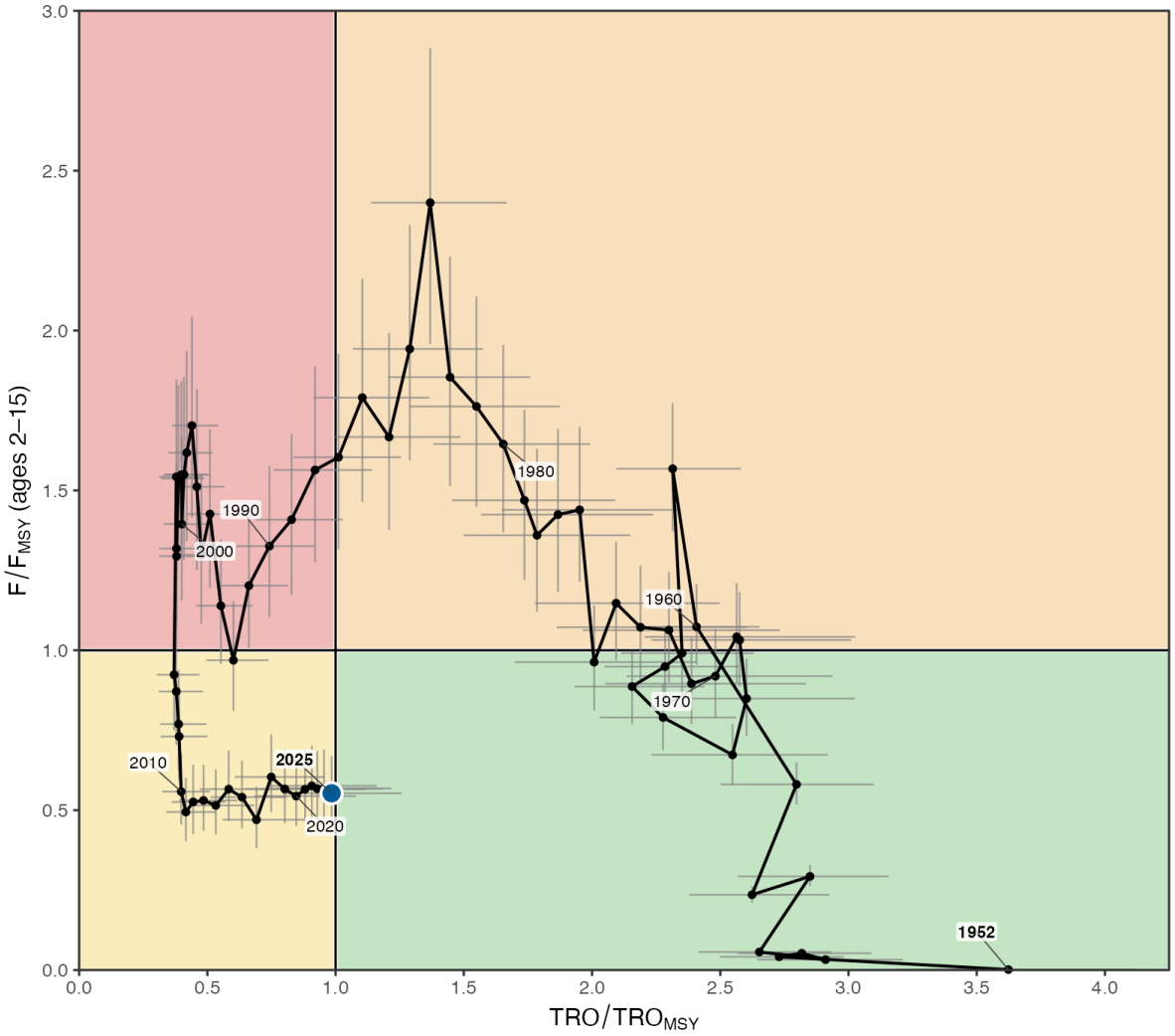

Figure 5. Time trajectory from 1952 to 2025 of median fishing mortality over the F_{MSY} (for ages 2-15) versus Total Reproductive Output (TRO) over TRO_{MSY}. The fishing mortality rates are based on biomass-weighted values and the relative fishery catch composition and mean SBT body weights in each year. Vertical and horizontal lines represent 25th-75th percentiles from the operating model grid.