

13.4 ALB-AT Atlantic albacore tuna (*Thunnus alalunga*)

Introduction

For the North Atlantic stock, a model-based Management Procedure (MP) is in place since 2021 (*Recommendation by ICCAT on conservation and management measures, including a Management Procedure and Exceptional Circumstances Protocol, for North Atlantic albacore (Rec. 21-04)*). A stock assessment was conducted for North Atlantic albacore tuna in 2023 using data through 1930-2021, applying both a stock synthesis (SS3) and a production model (*Anon., 2023a*). Both models provided similar results, and the Committee agreed to use the SS3 model to characterize stock status as well as to verify that catch projections are consistent with the catch advice provided by the MP. For the South Atlantic stock, the current status is based on the JABBA model stock assessment analyses conducted in 2020, utilizing fishery and survey data available up to 2018 (*Anon., 2020a*). A summary of the stock status is provided below (**Tables 1a and 1b**). **Table 2** and **Figures 1 and 2** provide estimated catches (landings and discards) by gear, for the period 2000-2024 for both stocks. The Kobe Phase Plot (**Figure 1**) illustrates the evolution of stock status and the uncertainty around the current stock status for both stocks.

Table 1a. North Atlantic albacore summary.

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY)	41,995 t (38,860-45,130) ¹	2021
TAC (2024)	47,251 t	
Current (2024) Yield	24,420 t ²	
Relative Spawning Biomass (SSB ₂₀₂₁ /SSB _{MSY})	2.19 (1.21 - 4.01) ¹	
Relative Fishing Mortality (F ₂₀₂₁ /F _{MSY})	0.45 (0.29 - 0.71) ¹	
Stock Status	Overfished: NO (0.4% probability of being overfished) ³ Overfishing: NO (<1% probability of overfishing) ³	
Management measures in effect	Rec. 98-08 , Rec. 21-04 and Rec. 23-05	
Recommended TAC for the period 2024-2026, as estimated following the MP adopted in Rec. 21-04 ⁴	47,251 t	

¹ Reference case model results (mean and 95% confidence intervals based on catch data from 1930-2021).

² Provisional and subject to revision as of 26 September 2025.

³ As estimated from the Kobe plot probability in each quadrant.

⁴ The recommended TAC is capped by the maximum allowed increase of 25%, since the TAC obtained when applying the MP equation resulted in a higher value ($F_{TAR} * B_{CUR} = 47,673.9$ t).

Table 1b. South Atlantic albacore summary table.

<i>Indicator</i>		<i>Stock Status</i>
Maximum Sustainable Yield (MSY)	27,264 t (23,734 - 31,567) ¹	2018
TAC (2024)	28,000 t	
Current (2024) Yield	20,694 t ²	
Relative Biomass (B_{2018}/B_{MSY})	1.58 (1.14 - 2.05) ¹	
Relative Fishing Mortality (F_{2018}/F_{MSY})	0.40 (0.28 - 0.59) ¹	
Stock Status	Overfished: NO (0.06% probability of being overfished) ³ Overfishing: NO (<1% probability of overfishing) ³	
Management measure in effect	Rec. 22-06	
TAC (2025)	28,000 t	

¹ Median and 95% credible interval (CRI) of the reference/base case model.

² Provisional and subject to revision as of 26 September 2025.

³ As estimated from the Kobe plot probability in each quadrant.

Table 2. Estimated catches (landings and discards, t) of North and South Atlantic albacore tuna by gear, for the period 2000-2024.

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
TOTAL		64511	85048	64462	53508	48501	54100	61416	42274	39350	37640	38636	44115	50704	44095	40301	44783	42299	46831	50400	49358	56323	55106	49786	45114			
	ATN	33123	26252	22716	25667	25957	35318	30963	21991	20483	19311	19411	19980	25432	24671	26638	25635	30400	28475	29786	34922	31274	31355	31601	28115	24240		
	ATS	31288	58795	41746	27841	22544	18182	24453	20283	18867	18329	19204	24135	25272	19424	13707	18548	14339	13867	17045	14678	18084	24068	23505	21677	20864		
Landings	ATN	11072	6123	6638	7840	8128	10458	14273	8496	7931	4994	6026	5530	8916	4975	9265	14455	12196	11330	12662	11855	11696	11069	12008	8140			
	Longline	7320	7372	6235	7826	7037	6911	5223	3237	2647	2619	3913	3666	3510	6298	3076	4541	5448	5025	4567	4758	5714	4834	4371	4438	4185		
	Other surf.	5971	2808	365	470	577	624	625	925	274	427	305	344	816	816	136	95	139	62	139	116	115	268	170	268	170		
	Purse seine	191	263	93	211	344	99	162	188	70	101	70	3	176	40	35	116	50	38	39	65	21	30	1	1	1		
	Trawl	3547	9374	5376	3846	2369	7001	6385	3429	4321	2811	2026	6892	6678	6558	9184	5771	6299	8611	8820	10816	9938	6260	6134	5596	4479		
	Trot	5023	4312	4009	5373	7561	10224	10286	6105	5239	4440	7146	5909	5891	6560	5891	6560	5891	6560	5891	6560	5891	6560	5891	6560	5891	6560	
	ATN	6815	10343	9710	6973	7475	5084	5876	3375	4350	7928	3748	5938	6931	5211	4765	4965	2949	1846	3228	2852	4297	4434	7014	3349	4567		
	Longline	24399	28039	21671	20626	14735	17740	15087	12977	11740	10587	12218	14771	16448	17846	13888	8907	10104	11243	11674	13743	12473	13747	20509	16264	18106	10990	
	Other surf.	116	980	325	86	390	323	395	1762	1219	2068	1138	1538	66	266	66	266	66	266	66	266	66	266	66	266	66	266	
	Purse seine	58	25	39	323	16	499	442	25	144	355	205	428	58	44	131	83	190	19	3	11	21	36	69	20	6		
	Trawl	65	0	64	12	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Trot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ATN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Longline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Other surf.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Trawl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Trot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ATN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Longline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Purse seine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Landings	ATN	CP	Barbados	0	2	5	8	10	13	9	7	7	4	6	4	20	22	13	16	38	32	15	7	10	13	12	14	
	Belize	0	0	0	0	0	0	0	0	0	22	26	39	496	314	155	230	79	1	399	448	385	216	326	201	212	381	323
	Brazil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Cabo Verde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Canada	122	91	113	56	27	52	27	25	33	11	14	28	34	32	47	32	20	17	26	31	12	40	27	25	19		
	China PR	16	57	196	155	32	112	202	59	24	27	142	101	21	81	35	21	103	124	124	129	208	291	240	191	279		
	Costa Rica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Cuba	0	0	1	322	435	424	527	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Curaçao	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Côte d'Ivoire	0	0	0	0	0	0	0	0	0	25	53	39	5	146	0	0	0	0	0	0	0	0	0	0	0	0	
	EU-España	16000	9177	8952	12530	15379	20447	24538	14582	12725	9617	12961	8357	13719	10502	11607	14126	17077	13964	15691	16536	16205	17408	16870	17293	14662		
	EU-France	5718	6005	4320	3456	2444	7266	6559	3179	3009	1139	1293	3352	3370	4625	6716	3441	4229	4191	5824	7881	4753	5397	9362	2889	3538		
	EU-Ireland	3464	2093	1190	795	175	366	521	596	1517	1997	786	3097	3076	2213	2485	2390	2337	2492	3102	3213	2938	2879	3374	3035	4003		
	EU-Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	EU-Portugal	278	1176	1963	553	513	556	119	184	614	108	202	1046	1231	567	2609	929	1111	2527	498	2493	1596	501	281	223	94		
	FR-Saint Pierre et Miquelon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Great Britain	15	0	0	0	0	0	6	19	30	50	67	118	57	50	133	136	31	0	1	0	0	0	0	0	0	0	
	Grenada	12	21	23	46	25	29	19	20	15	18	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Japan	688	1126	711	680	893	1336	781	288	402	288	525	336	400	1745	267	276	297	366	196	334	260	225	248	216	225		
	Korea Rep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Liberia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Maroc	0	0	55	81	120	178	98	96	99	130	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Panama	0	0	0	0	0	0	96	298	113	45	154	103	0	246	108	103	200	0	196	185	176	183	181	171	0	0	
	Philippines	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Senegal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sierra Leone	0	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	St Vincent and Grenadines	704	1370	300	1555	89	802	76	263	130	135	177	329	305	286	328	305	291	297	173	180	252	202	0	0	0.2		
	Trinidad and Tobago	2	11	9	12	12	9	12	13	32	17	17	23	67	71	85	71	48	33	47	16	27	22	17	42	10	10	
	UK-Bermuda	2	2	0.2	0.1	0.5	0.5	0	0.2	0.2	0.3	0.4	1	0.2	0.3	1	0.4	0.1	0.4	0.4	1	2	4	5	2	4	0	
	UK-Turks and Caicos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	USA	480	322	480	444	646	488	400	532	257	185	219	389	409	819	458	354	220	368	103	221	322	296	311	180	224	221	
	Venezuela	299	348	162	346	457	175	321	375	222	398	288	247	312	181	285	351	287	301	165	221	246	299	317	213	180	146	
	NCC	Chinese Taipei	5299	4399	4330	4557	4278	2540	2357	1297	1107	863	1187	1367	1180	2394	947	2857	3134	2385	2926	2770	3549	2896	2806	2782	2446	
	Guayana																											

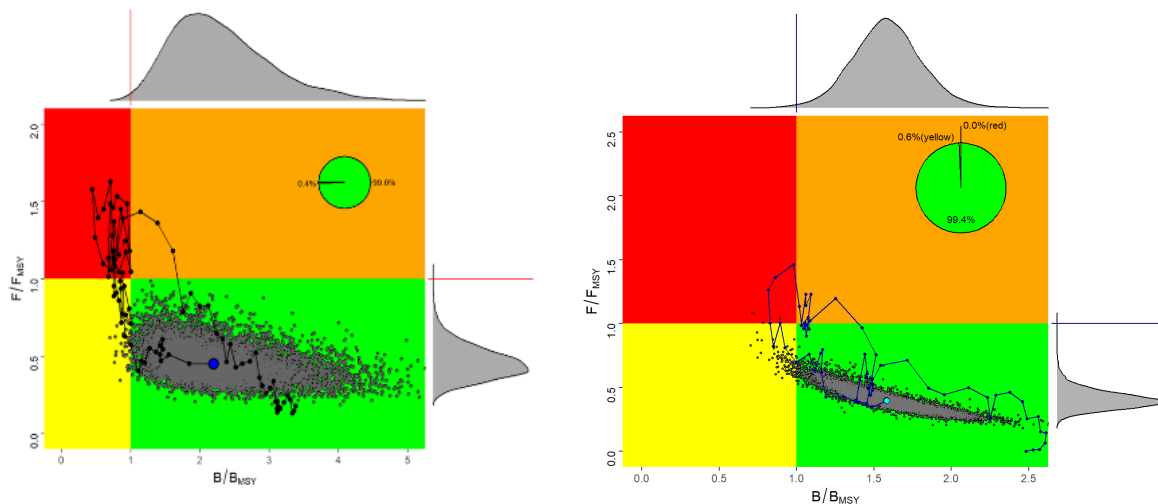


Figure 1. Kobe plot for the North (left) and South (right) Atlantic albacore tuna stock status in 2021 and 2018, respectively. The North Atlantic plot shows the stock status trajectory from 1930 to 2021, and the South Atlantic from 1958 to 2018, as estimated during the 2023 stock assessment (Anon., 2023a) and the 2020 stock assessment (Anon., 2020a), respectively. The line, in both plots, indicates the stock status trajectory starting in 1930 and 1958, respectively. The inserted pie chart indicates the probability of the stock being within each Kobe colour quadrant.

Outlook

North Atlantic

Abundance indices for the North stock showed an overall increasing trend during the last decades (Figure 4). Although highly uncertain, the 2021 spawning stock biomass was estimated to be well above SSB_{MSY} (not overfished), with fishing mortality well below F_{MSY} (no overfishing). The stock is in the green quadrant of the Kobe plot with 99.6% probability. The current high biomass supports catches above MSY in the short term, including at levels of the current total allowable catch (TAC) of 47,251 t.

South Atlantic

For the South Atlantic stock, the abundance indices indicate an increasing trend in recent decades (Figure 5) and the 2018 status shows that the stock is not overfished and not subject to overfishing with greater than 99% probability of being in the green quadrant of the Kobe plot. The Kobe matrix indicates that catches at the MSY level (~27,000 t) would likely keep biomass above B_{MSY} and fishing mortality below F_{MSY} (90% probability) through 2033 (Table 3c).

Management recommendation

North Atlantic

Rec. 21-04 outlines the adopted MP for the northern stock, which was chosen to achieve the management objective of maintaining the stock in the green area of the Kobe plot with at least 60% probability while maximizing long-term yield.

In the 2023 North Atlantic albacore stock assessment (Anon., 2023a), the Committee noted that the relative abundance of North Atlantic albacore has continued to increase over the last two decades and the stock was estimated to be in the green area of the Kobe plot with a greater than 99% probability. The Committee applied the MP to calculate the TAC for the 2024-2026 period. The TAC obtained by applying the MP was 47,251 t. Since no exceptional circumstances (ECs) were detected, the Committee recommended implementing this TAC.

South Atlantic

In 2022, the Commission adopted a total allowable catch (TAC) of 28,000 t for the South Atlantic albacore stock for the period 2023–2026, as established under *Recommendation by ICCAT on the southern Atlantic albacore catch limits for the period 2023-2026 (Rec. 22-06)*. The Committee noted that, based on the available data, reported catches have remained consistently below 28,000 t since 2004 (**Table 2**).

Table 3. South Atlantic albacore estimated probabilities (in %) based on Bayesian surplus production model that the fishing mortality is below or equal to F_{MSY} (a), biomass is above or equal to B_{MSY} (b) and both (c). Projections for constant catch levels (16,000 t to 34,000 t) are shown.

a) Probability that $F \leq F_{MSY}$

TAC Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
16000	100	100	100	100	100	100	100	100	100	100	100	100	100
18000	100	100	100	100	100	100	100	100	100	100	100	100	100
20000	100	100	100	100	100	100	100	100	100	100	100	100	100
21000	100	100	100	100	100	100	100	100	100	100	100	100	100
22000	100	100	100	100	100	100	100	100	100	100	99	99	99
23000	100	100	100	100	100	99	99	99	99	99	99	99	99
24000	100	100	100	99	99	99	99	99	99	99	99	98	98
25000	100	100	99	99	99	98	98	98	98	98	97	97	97
26000	99	99	99	99	98	98	97	97	96	95	95	94	94
27000	99	99	98	98	97	96	95	94	93	92	91	90	90
28000	99	98	98	97	96	95	93	92	91	89	87	86	84
29000	99	98	97	96	94	93	90	88	85	82	80	77	74
30000	98	97	96	94	91	89	85	81	78	73	70	65	62
32000	97	95	92	88	82	76	69	62	56	49	44	39	35
34000	95	91	85	77	67	57	48	40	32	27	22	19	16

b) Probability that $B \geq B_{MSY}$

TAC Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
16000	100	100	100	100	100	100	100	100	100	100	100	100	100
18000	100	100	100	100	100	100	100	100	100	100	100	100	100
20000	100	100	100	100	100	100	100	100	100	100	100	100	100
21000	100	100	100	99	99	99	99	99	99	99	99	99	99
22000	100	100	100	99	99	99	99	99	99	99	99	99	99
23000	100	100	100	99	99	99	99	99	99	99	99	99	99
24000	100	99	99	99	99	99	99	99	99	99	99	98	98
25000	100	100	99	99	99	99	99	98	98	98	98	97	97
26000	100	99	99	99	99	99	99	98	98	97	97	96	95
27000	100	99	99	99	98	98	97	97	96	95	94	93	92
28000	100	99	99	99	99	98	97	96	95	94	93	91	90
29000	100	99	99	98	98	97	96	94	92	90	88	85	83
30000	100	99	99	98	97	96	94	92	89	86	83	79	76
32000	100	99	99	98	96	93	89	85	80	74	68	62	56
34000	100	99	98	96	93	89	82	75	66	58	49	42	36

c) Probability that $F \leq F_{MSY}$ and $B \geq B_{MSY}$

TAC Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
16000	100	100	100	100	100	100	100	100	100	100	100	100	100
18000	100	100	100	100	100	100	100	100	100	100	100	100	100
20000	100	100	100	100	100	100	100	100	100	100	100	100	100
21000	100	100	100	99	99	99	99	99	99	99	99	99	99
22000	100	100	100	99	99	99	99	99	99	99	99	99	99
23000	100	100	99	99	99	99	99	99	99	99	99	98	98
24000	100	99	99	99	99	99	99	98	98	98	98	98	98
25000	100	99	99	99	99	98	98	98	98	97	97	97	96
26000	99	99	99	98	98	98	97	97	96	96	95	94	94
27000	99	99	98	98	97	97	96	95	94	93	92	91	90
28000	99	98	98	97	96	95	93	92	90	89	87	85	83
29000	99	98	97	96	94	93	90	88	85	82	79	77	74
30000	98	97	96	94	91	89	85	81	78	73	69	65	61
32000	97	95	92	88	82	76	69	62	56	49	44	39	35
34000	95	91	85	77	67	57	48	40	32	27	22	19	16

Additional supporting information

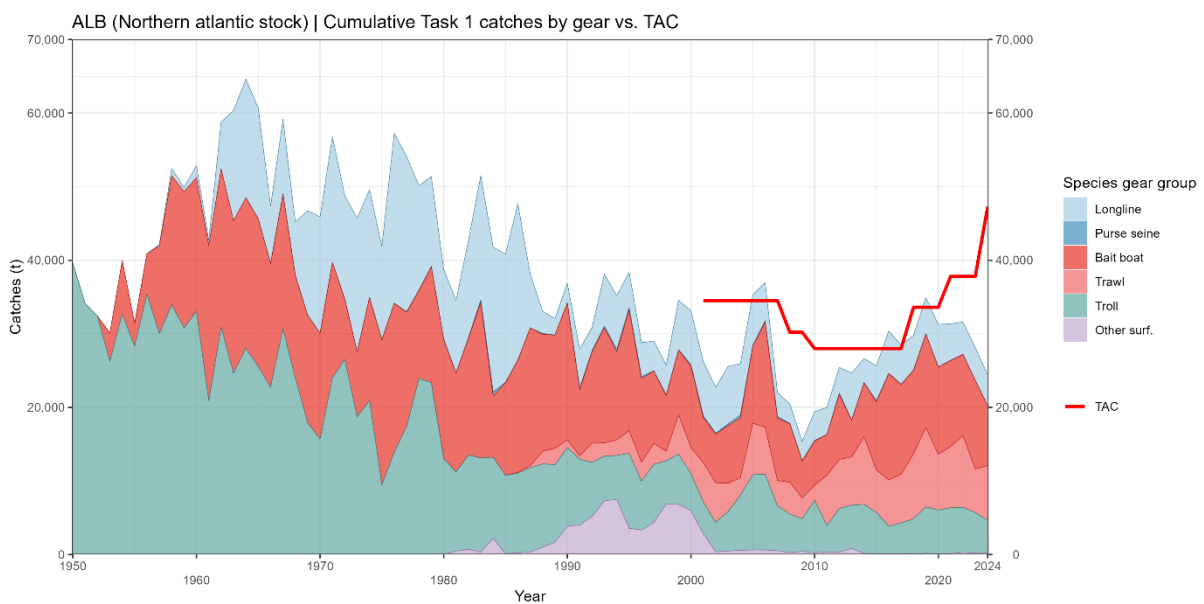


Figure 2. Total albacore catches (landings and dead discards, t) available in Task 1 nominal catches reported to ICCAT (Task 1) by main gear for the North Atlantic stock including TAC (red line).

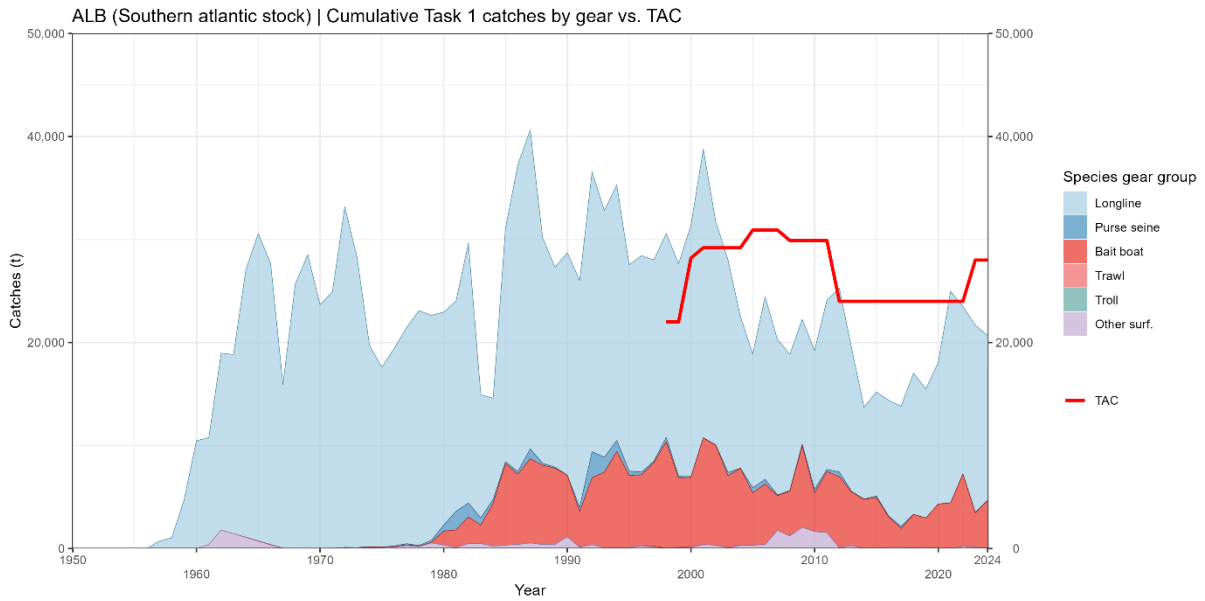


Figure 3. Total albacore catches (landings and dead discards, t) available in Task 1 nominal catches by main gear for the South Atlantic stock including TAC (solid line).

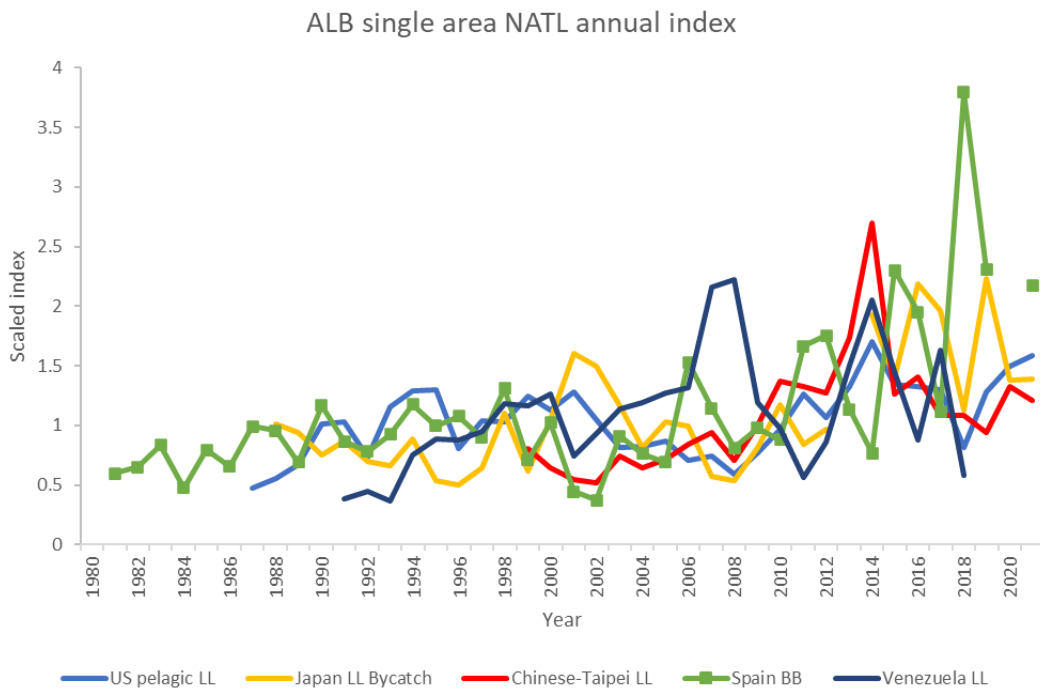


Figure 4. North Atlantic albacore standardized catch rate indices used in the 2023 stock assessment (Anon., 2023a) from the surface fishery (baitboat) which take mostly juvenile fish, and from the longline fisheries which take mostly adult fish.

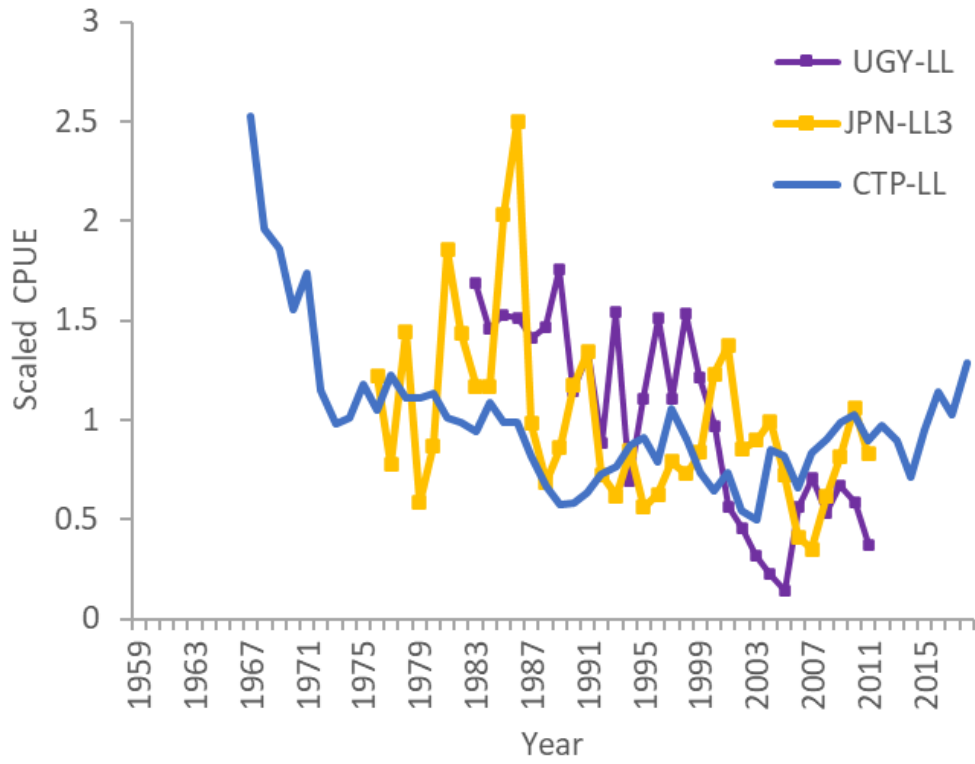


Figure 5. Standardized longline catch per unit effort (CPUE) indices for South Atlantic albacore used in the 2020 stock assessment.