

**ALBACORE DATA SUBSTITUTIONS AND RAISING MADE FOR 1991 SCRS**

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The catch-at-size data base created in the past has been updated, accounting for changes in the Task I catch as well as including any new size data.

The data base was created for 1990 fisheries for the North Atlantic and for longline for the South Atlantic. There have been no improvements in size data for the surface fisheries in the South Atlantic or for the Mediterranean fisheries. Therefore, those catches were not matched with size data.

Among the major fisheries, France, Spain and Taiwan have provided raised catch-at-size data and Canada, Portugal (Azores), U.S.A. and Venezuela provided some size data (not raised). Those were used for sizing all national catches of the North Atlantic. The data substitutions and raising proposed are listed in Table 1.

The Taiwanese data were supposedly raised to the total catches. However, the weight estimated from the catch-at-size is far less than the total Task I catch (nominal catch in weight). Therefore, they were re-raised by raising factors (Task I / estimated weight). The U.S. size data were in weight (round or gilled and gutted). For time being, these weight frequencies were raised to the total catches but not converted to length.

**Level of sampling**

In spite of the SCRS recommendations, some of the countries still have not reported the number of fish actually measured. Unless such information is sent together with the catch-at-size data, it would be impossible to evaluate the adequacy of sampling. However, among the total west Atlantic albacore catches of 38,309 MT, only 884 MT were not sampled. Even of this unsampled 884 MT, 764 MT from Japanese catches have most likely been sampled (but the data have not yet been made available).

**Date of sample and date of catch**

A minor change has been introduced into the data base format by adding an extra field for time of samples. In the past, there have been discussions as to whether the time of the catch should be assigned to a catch-at-size or the time from which the sample came. This is a problem only when size data from a time stratum different than the catch is used in substitution. The arguments were that for the growth studies, the time of the original size is more appropriate, but for the cohort studies, it is more appropriate to use the time of the catch.

In order to give an alternative for the scientists, depending on the analysis being carried out, both times are now kept in the base. However, it is not done retroactively.

Table 1. Proposed data substitution and raisings of Atlantic albacore, for 1991 SCRS.

AREACOUNTRY	GEAR	YR	TM	CATCH		R.F.	AREACOUNTRY	GEAR	YR	TM	SAMPLE		REMARKS		
				NEW	OLD						KG	#			
<b>Update of existing data base</b>															
3	BRAS.	JPN	LL	86	0	436	114	3.81850	3	BRAS.	JPN	LL	86	0	RE-RAISED TASKI/TASKI
2	VENEZUELA	PS	88	0	97	22	4.40909	2	VENEZUELA	LL	88	0	0	SUB & RSED TASKI/TASKI	
4	BRASIL	SURF	88	0	9	1								NOTHING DONE	
4	ARGENTINA	UNCL	89	0	354	344	1.02907	4	ARGENTINA	SURF	89	0		RE-RAISED TASKI/TASKI	
4	S.AFRICA	BB	89	0	3499	3449								NOTHING DONE	
1	CANADA	LL	89	0	22	33	0.66667	1	CANADA	LL	89	0		NOTHING DONE	
4	BRASIL	SURF	89	0	9	1								NOTHING DONE	
2	SI. LEONE	UNCL	89	0	10	53	0.18868	2	KOREA	LL	89	0		SUB & RSED TASKI/TASKI	
2	VENEZUELA	PS	89	0	12	2	6.00000	2	VENEZUELA	PS	89	0		RE-RAISED TASKI/TASKI	
<b>North Atlantic - 1990</b>															
1	CHI-TAI	LL	90	0	1806	1289	1.40076							RE-RAISED C/SIZE TASKI/EST.WGT	
2	CUBA	LL	90	0	1	1289	0.00078	1	CHI-TAI	LL	90	0		SUB & RSED TASKI/EST.WGT	
1	FRANCE	GILL	90	0	2268	0	1.00000				23704	3860		RAISED BY NAT. SCIENT	
1	FRANCE	MWTD	90	0	1032	0	1.00000	1			18647	2467		RAISED BY NAT. SCIENT	
1	JAPAN	LL	90	0	764	1289	0.59270	1	CHI-TAI	LL	90	0		RAISED TASKI/EST.WGHT	
1	KOREA	LL	90	0	34	1289	0.02637	1	CHI-TAI	LL	90	0		RAISED TASKI/EST.WGHT	
1	PORT-AZO	BB	90	4	12	3	3.63792	1	PORT-AZO	BB	90	7		SUB & RSED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	5	6	3	1.74253	1	PORT-AZO	BB	90	7		SUB & RSED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	7	51	3	15.59109				3271	151		RAISED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	8	683	28	24.34680				28069	1092		RAISED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	9	533	25	21.09761				25273	965		RAISED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	10	1244	28	45.09412				27593	1080		RAISED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	11	582	13	44.76578				12994	507		RAISED TASKII/EST.WGHT	
1	PORT-AZO	BB	90	12	24	2	10.37720				2322	107		RAISED TASKII/EST.WGHT	
2	PORT-MDR	BB	90	1	20	2	8.56872	1	PORT-AZO	BB	90	12		SUB & RSED TASKII/TASKII	
2	PORT-MDR	BB	90	2	20	2	8.78402	1	PORT-AZO	BB	90	12		SUB & RSED TASKII/TASKII	
2	PORT-MDR	BB	90	3	1	2	0.51671	1	PORT-AZO	BB	90	12		SUB & RSED TASKII/TASKII	
2	PORT-MDR	BB	90	10	5	28	0.19207	1	PORT-AZO	BB	90	10		SUB & RSED TASKII/TASKII	
1	PORTUGAL	SURF	90	11	3	13	0.23087	1	PORT-AZO	BB	90	11		SUB & RSED TASKII/TASKII	
1	ESPAÑA	LL	90	0	8	1281	0.00624	2	SPN-AZOR	BBF	90	0		SUB & RSED TASKI/TASKII	
1	ESPAÑA	BB	90	0	14023	0	1.00000				18105823402			RAISED BY NAT. SCIENT	
2	SPN-AZOR	BBF	90	0	1281	0	1.00000				42085	1715		RAISED BY NAT. SCIENT	
1	ESPAÑA	TROL	90	0	10342	0	1.00000				20845030948			RAISED BY NAT. SCIENT	
2	SPN-CANR	BB	90	4	138	56	2.46918				3100	25		PARTLY RSED BY NAT. SCIENT	
1	CANADA	LLHB	90	0	6	3	2.10062				1838	125		RAISED TASKII/EST.WGHT	
1	USA	TROL	90	0	8	63	0.12744	1	USA-NW	LL	90	0		WT FREQ.SUB & RSED TASKI/EST.W	
1	USA	GILL	90	0	19	7	2.66742				7123	436		WT FREQ. RSED TASKI/EST.WGHT	
1	USA	HAND	90	0	6	63	0.09558	1	USA-NW	LL	90	0		WT FREQ.SUB & RSED TASKI/EST.W	
2	USA-CARR.	LL	90	0	9	1	15.95745				564	32		WT FREQ. RSED TASKI/EST.WGHT	
2	USA-GFM	LLHE	90	0	3	2	1.37049				2189	96		WT FREQ. RSED TASKI/EST.WGHT	
1	USA-NW	LL	90	0	134	0	2.13457				62776	3710		WT FREQ. RSED TASKI/EST.WGHT	
1	USA	RR	90	0	201	63	3.19047	1	USA-NW	LL	90	0		WT FREQ.SUB & RSED TASKI/EST.W	
1	USA	TRAW	90	0	1	63	0.01587	1	USA-NW	LL	90	0		WT FREQ.SUB & RSED TASKI/EST.W	
2	VENEZUELA	PS	90	0	1	1	1.77715	2	VENEZUELA	LL	90	0		WT FREQ.SUB & RSED TASKI/EST.W	
2	VENEZUELA	LL	90	0	93	1	165.27457				563	24		RAISED TASKI/EST.WGHT	
2	VENEZUELA	BB	90	0	1	1	1.77715	2	VENEZUELA	LL	90	0		SUB & RSED TASKI/EST.WGHT	
<b>South Atlantic - 1990</b>															
3	BRAS.-JPN	LL	90	0	356	19668	0.01812	4	CHI-TAI	LL	90	0		SUB & RSED TASKI/EST. WGHT	
3	BRASIL	LL	90	0	120	19668	0.00610	4	CHI-TAI	LL	90	0		SUB & RSED TASKI/EST. WGHT	
4	CHI-TAI	LL	90	0	23997	19668	1.22012							RE-RSED C/SIZE TASKI/EST.WGHT	
4	JAPAN	LL	90	0	450	19668	0.02288	4	CHI-TAI	LL	90	0		RAISED TASKI/EST.WGHT	
4	KOREA	LL	90	0	19	19668	0.00097	4	CHI-TAI	LL	90	0		RAISED TASKI/EST.WGHT	
4	URUGUAY	LL	90	0	55	19668	0.00280	4	CHI-TAI	LL	90	0		SUB & RSED TASKI/EST. WGHT	
3	BRAS.-JPN	BB	90		15									NOTHING DONE	
3	NEI	PS	90		4	0								NOTHING DONE	
3	BRASIL	SURF	90		9	0								NOTHING DONE	
4	S.AFRICA	BB	90		4169	0								NOTHING DONE	
4	S.AFRICA	SPOR	90		46	0								NOTHING DONE	
3	S.HELENA	RR	90		1	0								NOTHING DONE	
3	ARGENTINA	UNCL	90		151	0								NOTHING DONE	
<b>Mediterranean - 1990</b>															
47	ESPAÑA	BB	90		83	83	1.00000							RAISED BY NAT. SCIENT	
47	ESPAÑA	TRAP	90		1	0								NOTHING DONE	
47	FRANCE	PSM	90		16	0								NOTHING DONE	
47	FRANCE	SPOR	90		15	0								NOTHING DONE	
47	GREECE	UNCL	90		500	0								NOTHING DONE	
47	ITALY	UNCL	90		925	0								NOTHING DONE	

Table 2. Sampling level for north Atlantic albacore, 1990

COUNTRY	GEAR	CATCH			SAMPLE	
		MT	KG	#		
CHI-TAI	LL	1806	???	???		
CUBA	LL	1				
FRANCE	GILL	2268	23704	3860		
FRANCE	MWTD	1032	18647	2467		
JAPAN	LL	764				
KOREA	LL	34				
PORT-AZORES	BB	3135	99524	3902		
PORT-MDR	BB	46				
PORTUGAL	SURF	3				
ESPANA	LL	8				
ESPANA	BB	14023	181058	23402		
SPN-AZOR	BBF	1281	42085	1715		
ESPANA	TROL	10342	208450	30948		
SPN-CANR	BB	138	3100	25		
CANADA	LLHB	6	1838	125		
USA	TROL	8				
USA	GILL	19	7123	436		
USA	HAND	6				
USA-CARR.	LL	9	564	32		
USA-GFM	LLHB	3	2189	96		
USA-NW	LL	134	62776	3710		
USA	RR	6				
USA	TRAW	6				
VENEZUELA	PS	1				
VENEZUELA	LL	93	563	24		
VENEZUELA	BB	1				
<b>TOTAL</b>		<b>38309</b>	<b>751144</b>	<b>74644</b>		