

**SECRETARIAT DATA PREPARATION FOR THE MEETING OF THE WORKING GROUP
ON WESTERN ATLANTIC TROPICAL TUNAS**

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INTRODUCTION

In order to facilitate the work of the "Working Group on Western Atlantic Tropical Tunas", the Secretariat tried to create the catch at size for the western Atlantic, as far as the data permits. The work could not be completed, since many data were missing (particularly size data), and there were uncertainties for various fisheries as to the type of fish being caught. Therefore, for those fisheries, size substitutions could not be done until the Working Group met. Also, some size files which could be used for other fisheries, such as U.S. Gulf fisheries, were only available in weight. As the national scientists are working on these files, the Secretariat did not make any effort to convert them to length, since it could produce two distinct size frequencies. Therefore, all the substitutions which can be made with these files should be made after the data prepared by the national scientists are complete.

Due to time constraints and the scarcity of data, as explained above, only catch-at-size tables for the following major fisheries (only since 1980) were created prior to the Working Group meeting:

- Brazil LL, BB
- Brazil-Japan LL, BB
- Brazil-Korea LL
- Brazil-Spain PS
- Canada LL, TDL
- China (Taiwan) LL
- Cuba LL
- Japan LL
- Korea LL
- Panama LL
- Venezuela LL, BB, PS
- Venezuela Foreign LL, BB, PS

LENGTH-WEIGHT RELATIONSHIP

At the 1990 SCRS Meeting, it was agreed that the length-weight relationship contained in Document SCRS/89/67 was to be used for small yellowfin, while that in SCRS/89/30 was to be used for large yellowfin. At that time, no one checked those papers or defined "large" fish and "small" fish.

Document SCRS/89/30 gave the equation as follows:

$$RDW = 8.9 \cdot 10^{-6} \cdot FL^{2.98} \quad (\text{where } FL = \text{mm } RDW = \text{lbs}) \quad (1)$$

This is based on samples from the sport and longline fisheries.

Document SCRS/89/67 gave an equation for LD1 to FL as follows:

$$\text{LOG}_{10} FL = 1.1649 \cdot \text{LOG}_{10} LD1 + 0.2948. \quad (FL, LD1 = \text{cm}) \quad (2)$$

However in this document, the length-weight relationship was not described, as the Group believed at the SCRS meeting.

The Secretariat contacted Mr. D. Gaertner, one of the co-authors of SCRS/89/67, and he provided the following equation for the length-weight relationship:

$$W = 3.322 \cdot 10^{-4} \cdot LD1^{3.2648} \quad (W = \text{kg}, LD1 = \text{cm}) \quad (3)$$

Equations (2) and (3) were combined to come up with a new formula:

$$W = 0.0003322 \cdot (10^{**}(\text{LOG}_{10} FL) / 1.1649 - 0.25307) ** 3.2648 \quad (4)$$

Later, we received another equation from Mr. Gaertner representing the relation between FL and round weight as follows:

$$W = 6.611 \cdot 10^{-5} \cdot LF^{2.7148} \quad (5)$$

In the attached Figure 2, the curves for equations (1), (4) and (5) are compared with the east Atlantic length-weight relationship (Caverivière, 1976) for two different ranges of FL. The curves (1) for large fish and (5) for small fish with fork length are very similar, while equation (4) for small fish using LD1 gives considerably more weight to the length, particularly for large fish.

Fish taken by the surface fishery mostly measure less than 80 cm, and at most, 100 cm FL, while in the longline catches there are some fish that measure 60 cm, with the majority between 80-120 cm FL, and some as high as 200 cm.

For purposes of estimating the weight of samples from the given length frequencies, equation (1) was used for longline, tended line, harpoon, rod and reel (unless coded as RRFS), sport handline and sport fisheries, and equation (5) for the rest

of the gears, rather than establishing size ranges for each equation. This is justified by the fact that equation (1) was calculated based on samples from the sport and longline fisheries, while equation (5) was estimated based on samples from the baitboat and purse seine fisheries.

One important possible source of error is that these equations are based on fish that are mostly from the Gulf and Caribbean regions. Application of the formula to fish from higher latitudes, such as the longline catches by Oriental vessels and Brazilian surface catches, may cause an unknown amount of bias.

CATCH BY AREA

The newly-established areas as shown in Figure 1 were used for all the data. They are a combination of ICCAT surface yellowfin areas and longline areas. The only problem was that the 30°W line which the SCRS agreed to use as the division line for the east and west, breaks through the conventional longline area 11. Otherwise the longline areas matched the surface areas.

The catches reported as Task I to the Commission were updated as of April 1, 1991, and used as the base. For some countries, these catches were reported by YFT areas and for some coastal fisheries, they were reported without area, but since the fishery occurs in only one area, the catch has been assigned to that area.

When the catches were reported only by the western Atlantic (defined as west of 30°W), e.g., some high-seas fisheries such as the Japanese, Taiwanese, Korean and Cuban longline fisheries, the Secretariat had to break the Task I catches down into finer time-area strata. In such cases, Task II catch and effort data were used. Since the Japanese catches were sized by their own national scientists, these data were excluded from this type of work.

Task II yellowfin catches were processed and summed by YFT areas newly adopted for the western Atlantic, and by quarters. The arithmetic proportions of the catches to the total western Atlantic catches by that fishery (% values) were used to break down the total western Atlantic catches (in weight).

The catches treated in this way include: CHI-TAIW LL, CUBA LL, KOREA LL, PANAMA LL, BRASIL BB, BRAS-JPN BB, BRAS-ESP PS, VENEZUELA BB, VENEZUELA PS, VEN-FOR BB, and VEN-FOR PS.

For Taiwanese longliners, the total catches are in weight, whereas the catches used for separation were in number of fish. No consideration was given to the average size of these fish by areas, due to time constraints and to the complexity of such calculations. Another source of error is that while the logbook coverage for the 1980's was at an acceptable level, that for earlier years was quite low.

For Venezuelan and Brazilian longliners, logbook information was available for some years and such separation was possible. However, as explained by individual fisheries in a later Section, the data were not broken down into finer time-area strata.

CATCH BY TIME

The data base was kept in the smallest time strata possible. The same procedure was applied to break down the annual reported catches into time period, as explained in the "catch by area" Section of this Report, using Task II data. However, for coastal longliners and some minor fisheries, Task I annual nominal catches were raised to the size samples using one raising factor for the whole year. In other words, it was assumed that the size samples were proportional to the monthly catches.

For most of the surface fisheries, the samples were left with the identification of the month; hence a monthly catch at size was created. For the long-distance longline fisheries, the quarter was used as the time strata, while for the coastal longline fisheries, for which monthly size data are available, the identification of the month was maintained.

DATA SUBSTITUTIONS

Size data substitutions were made in the following order of preference:

- LONGLINE FISHERY DATA

- 1) Same area, but from neighboring period (month or quarter) of the same year.
- 2) Same area-time stratum, but from neighboring year.
- 3) Same area, but from neighboring period (month or quarter) of the neighboring year.
- 4) Same stratum and year of another, similar fishery.

- SURFACE FISHERY DATA

- 1) Same area, but from neighboring period (month or quarter) of the same year.
- 2) From neighboring area, but the same period of the same year in case the areas are very close-by (between areas 5 and 2) and as far as caught by the same fishery.
- 3) Same area-time stratum, but from neighboring year.
- 4) Same area, but from neighboring period (month or quarter) of the neighboring year.
- 5) Same stratum and year of another, similar fishery.

DATA SUBSTITUTIONS AND RAISING FOR INDIVIDUAL FISHERIES

All the data substitutions and raising procedures (including those done during the meeting by a consensus of the Working Group) are reported in the Appendix Table. Specific notes are given here for some of the major fisheries; however, for the fisheries not listed herewith, please refer to the Report of the Working Group.

BRAZIL BB

In this category, all the catches of Brazil BB, SURF, SPORT, GILL were included. The annual catches were broken down, using Task II catch and effort data (in weight), into the month-area strata.

BRAZIL LL

The total annual catches were not further broken down by monthly catches, although Task II catch and effort data are available for such purposes. This was not done because of the limited time available, and because the sample size is large, but it does not cover the entire period. Therefore, if broken down, many substitutions would have to be made and the results would be the same as raising all the samples to the total catch, applying one raising factor for the entire year. The time and area identifications were maintained for the samples, unless they were substituted.

These fish are relatively small. The missing data since 1979 were substituted either by BRAS.JPN (which catches slightly larger fish, but not as large as those taken by the Japanese or Korean longliners), or between years of the same fishery. Surface catches are of small fish and could not be used for longline.

BRAZIL/JAPAN LL

Missing data were substituted by BRASIL, or by other years of BRAS.JPN. The Task I catches are all together, and these were divided between areas 2 and 3 by the sample weight from both areas.

CHINA-TAIWAN LL

Task I catches are reported for the eastern and western Atlantic, but without any further breakdown. Task II data were used, as explained in the Introduction, except for 1989. For 1989, neither Task II catch and effort nor size data were available. For 1988, size data were not available and therefore 1987 data and 1988 ICCAT port sampling data were used for substitution.

CUBA LL

Task I catches are for the eastern and western Atlantic, but without any further breakdown. Task II data were used as explained in the Introduction, except for 1989. The only size data available for Cuba are for 1986 from ICCAT port sampling. For all the

other years, Japanese size data were used for substitution. (During the Working Group, it was agreed that pooled size samples of all the longline fisheries should be used to size the Cuban catches and hence the substitutions and raising for this fleet were redone. For details, please refer to the Working Group Report.)

KOREA (including PANAMA) LL

Panamanian catches were added to the Korean catches and matched with size data. Since only western Atlantic catches were reported combined for the western Atlantic, the area break-down was made by Task II data, except for 1988 and 1989.

In principle, Korean national samples were used. However, for those strata which lacked national samples, the ICCAT port samples were used, when available. In the case that data substitutions were not possible, even from the neighboring years, Taiwanese or Japanese data were used.

VENEZUELA BB AND PS

Size data for recent years are available from two sources, from national sampling and from IATTC sampling. They were not taken from the same landings. Therefore, the raw size data from two sources were combined and arithmetically summed by sampling areas and month to obtain one frequency for each stratum. Also, in order to increase the time-area coverage and improve sample sizes, VEN.FOR samples were combined with Venezuelan samples. For 1980-1984, U.S. National Marine Fisheries samples were used. After the work was done, the Secretariat received a size file from Mr. Gaertner. A comparison of that data base with that of the Secretariat showed that the majority of the new data overlap with those from national sources. Some minor data were added to Gaertner's base, whereas some data received from national sources were missing from his file.

Due to the limited time available, the file which had been created from the national sources and IATTC was used. In the future, those data included in Gaertner's file, but missing from the ICCAT file, should be picked up and entered.

No biological samples were available for the baitboat fishery until 1986. Therefore, purse seine samples had to be used. Also, for area 2, samples were very scarce, for both baitboat and purse seine. For the catches in area 2 which lacked size data, area 5 data were used.

For 1980, 1981, 1988 and 1989, Task II catch data were not available and the size frequencies were raised to the corresponding annual catches, applying one raising factor for each year.

VENEZUELA LL

For those years for which Task II catch data were available, the Task I catch was divided between areas using those data. However, no monthly or quarterly breakdown was made, since the sample coverage is low, and if sub-divided by the period, then most of the periods would have had to be substituted by another period.

For those years where Task II catches were not available, but the size data were, the catch was subdivided among areas, assuming the catches were proportional to the sample weight among areas.

SAMPLING LEVELS

In Table 1, the number of fish and the weight of size samples used creating the catch-at-size data are compared with the total catch in weight. (The Table was updated after the Working Group meeting, to include all the information on sample sizes received from Japanese and U.S. scientists during and after the meeting.) This table gives some idea of the sampling coverage and the level of raising done in this work.

TABLE 1. Task I catches and length measurements* available for sizing these catches.

COUNTRY	GEAR	YR	CATCH MT	SIZE #	SAMPLE KG	COUNTRY	GEAR	YR	CATCH MT	SIZE #	SAMPLE KG
BARBADOS	UNCL	80	40			BARBADOS	UNCL	83	51		
BRAS. JPN	LLFB	80	283	604	18060	BERMUDA	UNCL	83	6		
BRAZIL	BB	80	487			BRAS. JPN	LLFB	83	505	581	13385
BRAZIL	LLHB	80	237			BRASIL	BB	83	1740		
CHINA-TAIW	LL	80	546	925	29764	BRASIL-ESP	PS	83	177		
CUBA	LL	80	689			BRASIL-JPN	BB	83	40		
GHANA	PS	80	265			BRAZIL	LLHB	83	337	176	4788
GRENADA	UNCL	80	487			CHINA-TAIW	LL	83	76		
JAPAN	LL	80	1117	14868		CUBA	LL	83	793		
KOREA+PANAMA	LL	80	2740	500	20277	GRENADA	UNCL	83	169		
MEXICO	UNCL	80	16			JAPAN	LL	83	1218	7690	
NLD. ANT	UNCL	80	173			KOREA+PANAMA	LL	83	1982	836	32869
ST. LUCIA	HAND	80	27			MEXICO	UNCL	83	612		
USA	HARP	80	3			NLD. ANT	UNCL	83	173		
USA	LL	80	24	1	36	SPAIN	PS	83	1957		
USA	PSG	80	473	680	28259	ST. LUCIA	HAND	83	23		
USA	TROL	80	3			TRINIDAD	UNCL	83	10		
VENEZUELA	LL	80	1000			URUGUAY	LLHB	83	357		
VENEZUELA	PS	80	4397	103	1281	USA	HAND	83	7		
1980 TOTAL			13008	17681	97677	USA	LL	83	76	5225	200863
ARGENTINA	LL	81	8			USA	PS	83	112		
BARBADOS	UNCL	81	30			USA	TRAW	83	0		
BRAS. JPN	LLFB	81	769	1198	24072	USA	TROL	83	31	1068	
BRAZIL	BB	81	914			VENEZUELA	BB	83	1825		
BRAZIL	LLHB	81	488			VENEZUELA	LL	83	1248		
CHINA-TAIW	LL	81	384	882	26243	VENEZUELA	PS	83	13677	501	8706
CUBA	LL	81	1997			VEN-FOR	PS	83	9826		
GRENADA	UNCL	81	64			1983 TOTAL			37028	16077	260611
JAPAN	LL	81	2983	14267		BARBADOS	UNCL	84	90		
KOREA+PANAMA	LL	81	3587	918	40756	BERMUDA	UNCL	84	6		
MEXICO	LL	81	42			BRAS. JPN	LLFB	84	132	181	4366
NLD. ANT	UNCL	81	173			BRAZIL	BB	84	1203	414	4560
ST. LUCIA	HAND	81	25			BRASIL-ESP	PS	84	333		
URUGUAY	LLHB	81	67			BRASIL-JPN	BB	84	129		
USA	HAND	81	27			BRAZIL	LLHB	84	344	511	8361
USA	LL	81	43	1099	38590	CHINA-TAIW	LL	84	495	5103	229433
USA	PS	81	37			CUBA	LL	84	2538		
USA	PSG	81	285	258	3576	GRENADA	UNCL	84	146		
USA	TROL	81	2			JAPAN	LL	84	1030	6966	
VENEZUELA	BB	81	1000			KOREA+PANAMA	LL	84	1235	1008	39518
VENEZUELA	LL	81	1000			MEXICO	UNCL	84	1059		
VENEZUELA	PS	81	2500	295	2733	NLD. ANT	UNCL	84	173		
1981 TOTAL			16425	18917	135970	SPAIN	PS	84	3976		
ARGENTINA	UNCL	82	7			ST. LUCIA	HAND	84	56		
BARBADOS	UNCL	82	36			TRINIDAD	UNCL	84	4		
BRAS. JPN	LLFB	82	718			URUGUAY	LLHB	84	368		
BRAZIL	BB	82	1035			USA	HAND	84	20	650	
BRAZIL-JPN	BB	82	7			USA	LL	84	113	5214	209119
BRAZIL-JPN	BB	82	2			USA	PS	84	11		
BRAZIL	LLHB	82	316			USA	PSG	84	1069	201	
CHINA-TAIW	LL	82	361	534	18435	USA	TROL	84	39		
CUBA	BB	82	22			VEN-FOR	BB	84	404		
CUBA	LL	82	1481			VEN-FOR	LL	84	7		
GRENADA	UNCL	82	59			VEN-FOR	PS	84	5041		
JAPAN	LL	82	3288	5261		VENEZUELA	BB	84	1996		
KOREA+PANAMA	LL	82	2924	1655	71382	VENEZUELA	LL	84	1658		
MEXICO	LL	82	128			VENEZUELA	PS	84	12773	686	7207
NLD. ANT	UNCL	82	173			1984 TOTAL			36448	20934	502564
ST. LUCIA	HAND	82	26			ARGENTINA	UNCL	82	7		
URUGUAY	LLHB	82	214			BARBADOS	UNCL	82	36		
USA	PSG	82	82	50		BRAS. JPN	LLFB	82	718		
USA	UNCL	82	165	2149	86690	BRAZIL	BB	82	1035		
VENEZUELA	BB	82	1912			BRAZIL-JPN	BB	82	7		
VENEZUELA	LL	82	484			BRAZIL-JPN	BB	82	2		
VENEZUELA	PS	82	12030	572	7147	BRAZIL	LLHB	82	316		
1982 TOTAL			25470	10221	183654	CHINA-TAIW	LL	82	361	534	18435

* Information on sample weight is not complete and therefore the total sample weight is partial.

COUNTRY	GEAR YR	CATCH MT	SIZE SAMPLE	
			#	KG
ARGENTINA	UNCL 85	44		
BARBADOS	UNCL 85	57		
BERMUDA	UNCL 85	42		
BRAS. JPN	LLFB 85	130	94	4089
BRAS. JPN	LLFB 85	146	239	4617
BRASIL	BB 85	2145	1657	16749
BRASIL-JPN	BB 85	286	1292	19121
BRAZIL	LLHB 85	174		
CHINA-TAIW	LL 85	644	6310	171786
CUBA	LL 85	1906		
GRENADA	UNCL 85	170		
JAPAN	LL 85	2169	10325	52027
KOREA+PANAMA	LL 85	1655	1274	
MEXICO	UNCL 85	562		
NLD. ANT	UNCL 85	150		
SPAIN	PS 85	1000		
ST. LUCIA	HAND 85	79		
URUGUAY	LLHB 85	354		
USA	GILL 85	1	12	517
USA	HAND 85	184		
USA	LL 85	1654	10016	424661
USA	PS 85	1		
USA	PSG 85	4386	550	5740
USA	R R 85	30	401	
USA	TRAW 85	3		
VEN-FOR	BB 85	405		
VEN-FOR	LL 85	20		
VEN-FOR	PS 85	2010		
VENEZUELA	BB 85	1671		
VENEZUELA	LL 85	1606		
VENEZUELA	PS 85	13583	1018	14527
1985 TOTAL		37269	33188	713834

ARGENTINA	UNCL 86	23		
BARBADOS	UNCL 86	39		
BERMUDA	UNCL 86	44		
BRAS. JPN	LLFB 86	15	23	905
BRAS. JPN	LLFB 86	662	1611	40926
BRASIL	BB 86	543		
BRASIL-JPN	BB 86	157	700	6688
BRAZIL	LLHB 86	157	125	3225
CAN. JPN	LL 86	2		
CHINA-TAIW	LL 86	1024	3191	86104
CUBA	LL 86	2081	272	12920
GRENADA	UNCL 86	506		
JAPAN	LL 86	2103	3290	
KOREA+PANAMA	LL 86	1172	542	21590
MEXICO	UNCL 86	658		
NLD. ANT	UNCL 86	150		
ST. LUCIA	HAND 86	125		
URUGUAY	LLHB 86	270		
USA	GILL 86	6	174	4994
USA	HAND 86	173		
USA	HARP 86	0	1	43
USA	LL 86	3784	20686	729449
USA	PS 86	33		
USA	PSG 86	614	199	2128
USA	R R 86	1163	344	
USA	TRAW 86	1		
VEN-FOR	BB 86	261		
VEN-FOR	LL 86	42		
VEN-FOR	PS 86	2010		
VENEZUELA	BB 86	1409	722	6225
VENEZUELA	LL 86	868	128	5286
VENEZUELA	PS 86	8161	498	4818
1986 TOTAL		28256	32506	925301

COUNTRY	GEAR YR	CATCH MT	SIZE SAMPLE	
			#	KG
ARGENTINA	UNCL 87	18		
BARBADOS	UNCL 87	57		
BERMUDA	UNCL 87	50		
BRAS. JPN	LLFB 87	409		
BRASIL	BB 87	1251	177	783
BRASIL-JPN	BB 87	141	447	3222
BRAZIL	LLHB 87	19		
CAN. JPN	LL 87	40	919	28137
CHINA-TAIW	LL 87	599	1934	48626
CUBA	LL 87	1062		
GRENADA	UNCL 87	186		
JAPAN	LL 87	1647	5682	
KOREA+PANAMA	LL 87	381	53	2309
MEXICO	UNCL 87	33		
NLD. ANT	UNCL 87	160		
ST. LUCIA	HAND 87	76		
URUGUAY	LLHB 87	109		
USA	GILL 87	1	10	415
USA	HAND 87	316		
USA	LL 87	4682	32779	1484155
USA	PS 87	61	150	1861
USA	PSG 87	21	50	388
USA	R R 87	1913	1206	
USA	TRAW 87	0		
USA	UNCL 87	0		
VENEZUELA	BB 87	2285	1502	13917
VENEZUELA	LL 87	646	40	1249
VENEZUELA	PS 87	8303	1250	15462
1987 TOTAL		24466	46199	1600524

ARGENTINA	UNCL 88	66		
BARBADOS	UNCL 88	3		
BERMUDA	UNCL 88	50		
BRAS. JPN	LLFB 88	408	2371	40506
BRASIL	BB 88	1463	138	1092
BRASIL-JPN	BB 88	149	449	4040
BRAZIL	LLHB 88	289		
CANADA	LL 88	30	963	30344
CHINA-TAIW	LL 88	1228	40	854
CUBA	LL 88	98		
GRENADA	UNCL 88	215		
JAPAN	LL 88	2395	12953	
KOREA+PANAMA	LL 88	120	45	2004
MEXICO	UNCL 88	283		
NLD. ANT	UNCL 88	170		
ST. LUCIA	HAND 88	97		
URUGUAY	LLHB 88	178		
USA	GILL 88	2	32	1162
USA	HAND 88	166	1	13
USA	LL 88	8418	79508	4044578
USA	R R 88	774	874	
USA	TRAW 88	0		
VEN-FOR	LL 88	193		
VENEZUELA	BB 88	1970	621	5742
VENEZUELA	LL 88	538	1086	44815
VENEZUELA	PS 88	6903	699	7067
1988 TOTAL		26208	99580	4182196

* Information on sample weight is not complete and therefore the total is partial.

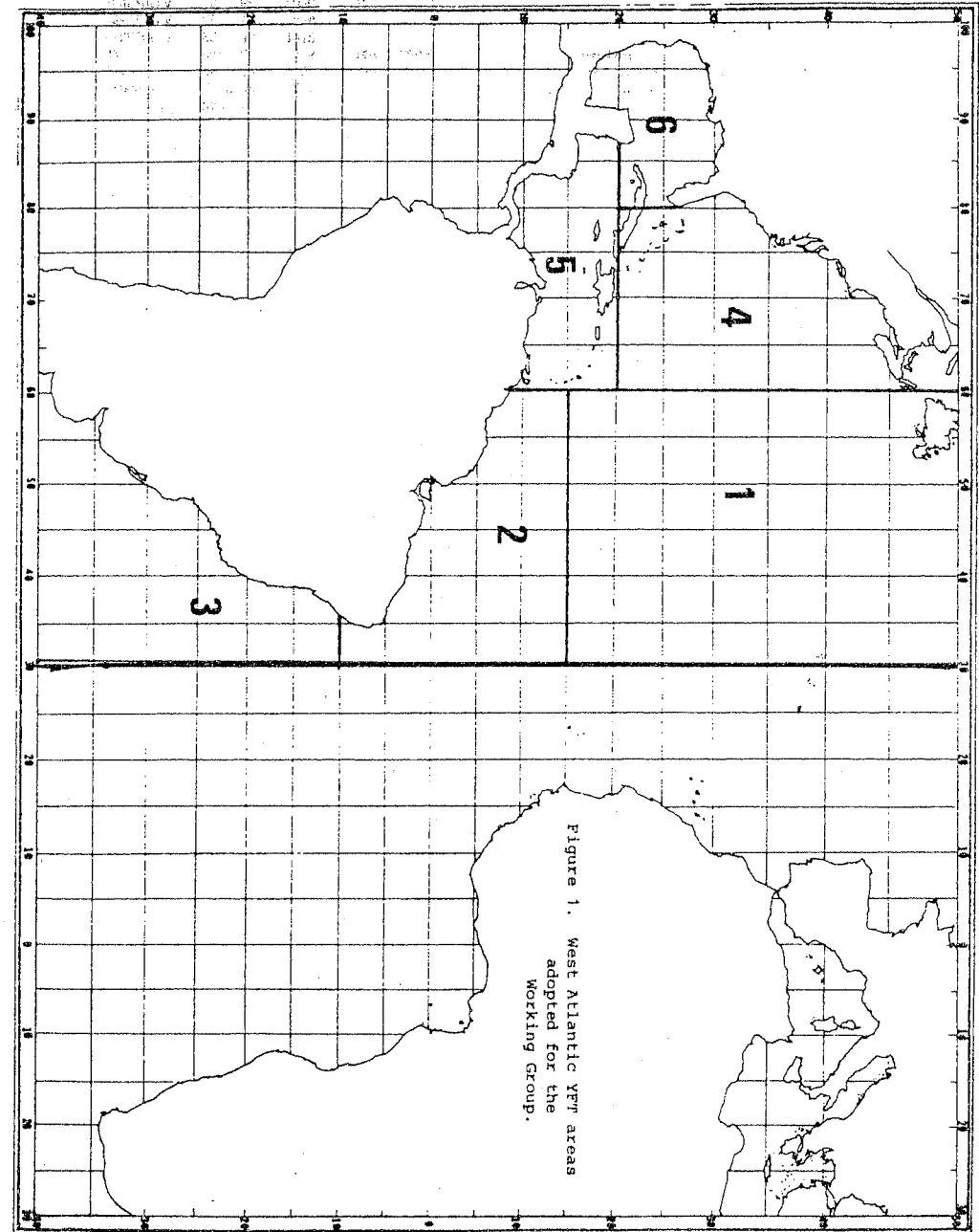


Figure 1. West Atlantic YFR areas adopted for the Working Group.

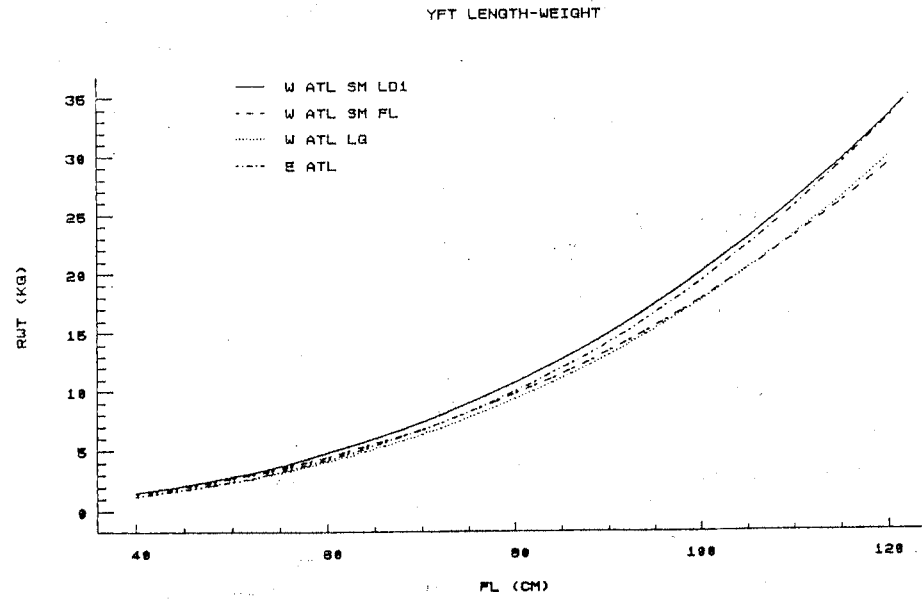
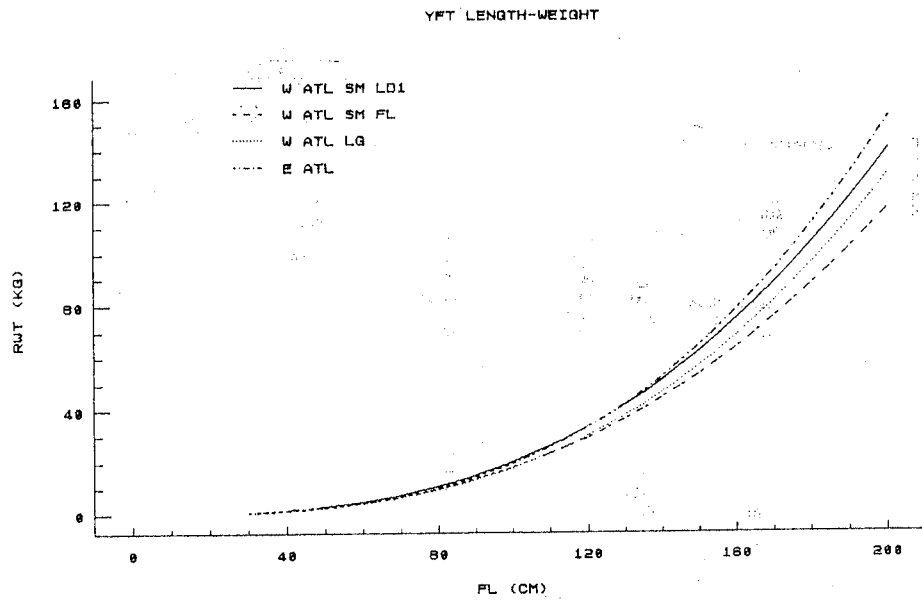


Figure 2. Length-weight relationships for various proposed equations for western Atlantic yellowfin compared to that for the eastern Atlantic.

Appendix Table

Substitutions and raising made before and during the
Working Group on Western Atlantic Tropical Tunas
to create
West Atlantic yellowfin catch at size

1980 - 1988

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TM	TASKI	R.F.	AR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
R					KG							#	KG	
3	ARGENTINA	LL	81	0	8000	0.332341	3	57	1	81	0			SUBST BY SEC. TASKI/SMPL WGT
3	ARGENTINA	LL	82	0	7000	0.290791	3	57	1	81	0			SUBST BY SEC. TASKI/SMPL WGT
3	ARGENTINA	LL	85	0	44000	9.531031	3	57	1	85	0			SUBST BY SEC. TASKI/SMPL WGT
3	ARGENTINA	LL	86	0	23000	0.561991	3	57	1	86	0			SUBST BY SEC. TASKI/SMPL WGT
3	ARGENTINA	LL	87	0	18000	0.439821	3	57	1	86	0			SUBST BY SEC. TASKI/SMPL WGT
3	ARGENTINA	LL	88	0	66000	1.629391	3	57	1	88	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	80	0	237000	13.122631	3	57	1	80	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	81	0	488000	20.272181	3	57	1	81	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	82	0	316000	65.992821	3	3	1	83	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	83	0	337000	70.378411	3	3	1	83	0	176	4788	RAISED BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	84	0	344000	41.144391	3	3	1	84	0	511	8361	RAISED BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	85	0	174000	37.690071	3	57	1	85	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	86	0	150000	48.682171	3	3	1	86	0	125	3225	RAISED BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	87	0	19000	5.891471	3	3	1	86	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAZIL	LL	88	0	289000	7.134751	3	57	1	88	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	80	0	283000	15.669641	3	57	1	80	0	604	18060	RAISED BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	81	0	769000	31.945301	3	57	1	81	0	1198	24072	RAISED BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	82	0	718000	29.826691	3	57	1	81	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	83	0	505000	37.729931	3	57	1	83	0	581	13385	RAISED BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	84	0	132000	30.231551	3	57	1	84	0	181	4366	RAISED BY SEC. TASKI/SMPL WGT
2	BRAS. JPN	LL	85	0	129628	31.705551	2	57	1	85	0	94	4089	RAISED BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	85	0	146372	31.705551	3	57	1	85	0	239	4617	RAISED BY SEC. TASKI/SMPL WGT
2	BRAS. JPN	LL	86	0	14640	16.184401	2	57	1	86	0	23	905	RAISED BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	86	0	662360	16.184401	3	57	1	86	0	1611	40926	RAISED BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	87	0	409000	9.993701	3	57	1	86	0			SUBST BY SEC. TASKI/SMPL WGT
3	BRAS. JPN	LL	88	0	408000	10.072581	3	57	1	88	0	2371	40506	RAISED BY SEC. TASKI/SMPL WGT
4	CANADA	LL	88	0	30000	1.000001	4	4	1	88	0	963	30344	ASSUMED 100% SAMPLE
4	CAN. JPN	LL	86	0	2000	0.071081	4	95	1	87	0			BY SECT. EST. CATCH/EST. SMPL. WGT
4	CAN. JPN	LL	87	0	40000	1.421601	4	95	1	87	0	919	28137	BY SECT. EST. CATCH/EST. SMPL. WGT
1	CHI-TAIW	LL	80	13	19000	110.465121	1	5	1	80	13	8	172	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	80	14	29000	7.518991	1	5	1	80	14	113	3857	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	80	15	48000	11.596721	1	5	1	80	15	106	4139	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	80	16	36000	8.697541	1	5	1	80	15			SUBST. BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	80	15	5000	7.118351	2	5	1	80	15	19	702	RAISED BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	80	16	1000	1.423691	2	5	1	80	15			SUBST. BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	80	13	14000	19.323671	3	5	1	80	13	39	725	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	80	14	12000	9.631591	3	5	1	80	14	32	1246	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	80	15	122000	43.091271	3	5	1	80	15	141	2831	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	80	16	43000	15.187911	3	5	1	80	15			SUBST. BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	80	13	69000	26.117571	4	5	1	80	13	64	2642	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	80	14	25000	8.388981	4	5	1	80	14	88	2980	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	80	15	20000	6.898691	4	5	1	80	15	80	2899	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	80	14	15000	5.915291	5	5	1	80	14	60	2536	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	80	15	56000	17.884521	5	5	1	80	15	110	3131	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	80	16	32000	16.805841	5	5	1	80	16	65	1904	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	81	13	57000	16.221751	1	5	1	81	13	90	3514	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	81	14	13000	4.087151	1	5	1	81	14	75	3181	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	81	15	28000	8.368201	1	5	1	81	15	94	3346	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	81	16	21000	12.163341	1	5	1	81	16	51	1727	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	81	13	4000	16.454131	3	5	1	81	13	11	243	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	81	14	12000	16.090101	3	5	1	81	14	35	746	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	81	15	30000	16.012811	3	5	1	81	15	79	1874	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	81	16	22000	9.818361	3	5	1	81	16	73	2241	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	81	13	124000	23.949321	4	5	1	81	13	234	5178	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	81	14	43000	22.379511	4	5	1	81	14	63	1921	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	81	15	4000	2.081821	4	5	1	81	14			SUBST. BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	81	14	13000	11.841871	5	5	1	81	14	31	1098	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	81	15	13000	8.806391	5	5	1	81	15	46	1476	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	82	13	37000	32.376621	1	5	1	82	13	26	1143	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	82	14	30000	4.670711	1	5	1	82	14	182	6423	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	82	15	52000	15.346931	1	5	1	82	15	93	3388	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	82	16	25000	171.939481	1	5	1	82	16	4	145	RAISED BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	82	13	3000	2.625131	1	5	1	82	13			SUBST BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	82	15	1000	0.295131	1	5	1	82	15			SUBST BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	82	13	34000	30.685921	3	5	1	82	16			SUBST BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	82	15	13000	6.180761	3	5	1	82	15	82	2103	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	82	16	8000	7.220221	3	5	1	82	16	35	1108	RAISED BY SECT. TASKI/SMPL WGT

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TM	TASKI	R.F.	AR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
R					KG							#	KG	
4	CHI-TAIW	LL	82	13	42000	73.121051	4	5	1	82	13	13	574	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	82	14	55000	16.253441	4	5	1	82	14	95	3384	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	82	15	6000	36.231881	4	5	1	82	15	4	166	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	82	14	29000	26.416471	5	5	1	81	14			SUBST BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	82	15	17000	11.516051	5	5	1	81	15			SUBST BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	82	16	9000	6.096731	5	5	1	81	15			SUBST BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	83	13	13000	1.000001	5	5	1	83	13			RAISED FILE BY NAT. SCI
1	CHI-TAIW	LL	83	14	12000	1.000001	1	5	1	83	14			RAISED FILE BY NAT. SCI
1	CHI-TAIW	LL	83	15	8000	1.000001	1	5	1	83	15			RAISED FILE BY NAT. SCI
1	CHI-TAIW	LL	83	16	13000	1.000001	1	5	1	83	16			RAISED FILE BY NAT. SCI
3	CHI-TAIW	LL	83	13	1000	1.000001	3	5	1	83	13			RAISED FILE BY NAT. SCI
3	CHI-TAIW	LL	83	15	8000	1.000001	3	5	1	83	15			RAISED FILE BY NAT. SCI
3	CHI-TAIW	LL	83	16	1000	1.000001	3	5	1	83	16			RAISED FILE BY NAT. SCI
4	CHI-TAIW	LL	83	13	11000	1.000001	4	5	1	83	13			RAISED FILE BY NAT. SCI
4	CHI-TAIW	LL	83	14	6000	1.000001	4	5	1	83	14			RAISED FILE BY NAT. SCI
4	CHI-TAIW	LL	83	15	1000	1.000001	4	5	1	83	15			RAISED FILE BY NAT. SCI
5	CHI-TAIW	LL	83	13	1000	1.000001	5	5	1	83	14			RAISED FILE BY NAT. SCI
5	CHI-TAIW	LL	83	14	1000	1.000001	5	5	1	83	15			RAISED FILE BY NAT. SCI
1	CHI-TAIW	LL	84	13	67000	4.500991	1	5	1	84	13	631	14886	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	84	14	60000	3.441551	1	5	1	84	14	697	17434	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	84	15	52000	3.758041	1	5	1	84	15	445	13837	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	84	16	47000	4.150111	1	5	1	84	16	562	11325	RAISED BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	84	15	3000	1.500901	2	5	1	84	15	41	1999	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	84	13	18000	1.821141	3	5	1	84	13	306	9884	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	84	15	46000	2.578711	3	5	1	84	15	659	17838	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	84	16	13000	6.323881	3	5	1	84	16	95	2056	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	84	13	144000	5.951841	4	5	1	84	13	1013	26194	RAISED BY SECT. TASKI/SMPL WGT

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TM	TASKI	R.F.	AR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
R					KG							#	KG	
5	CHI-TAIW	LL	86	14	7000	5.192491	5	5	1	86	14	53	1348	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	86	15	2000	68.728521	5	5	1	86	15	1	29	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	87	13	27000	4.347341	1	5	1	87	13	236	6211	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	87	14	35000	11.595931	1	5	1	87	14	146	3018	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	87	15	45000	18.354611	1	5	1	87	15	170	2452	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	87	16	2000	6.651151	1	5	1	87	16	21	301	RAISED BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	87	14	2000	2.247951	2	5	1	87	14	21	890	RAISED BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	87	15	7000	10.602851	2	5	1	87	15	15	660	RAISED BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	87	16	1000	13.003901	2	5	1	87	16	2	77	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	87	13	15000	7.010001	3	5	1	87	13	85	2140	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	87	14	175000	65.354601	3	5	1	87	14	135	2678	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	87	15	129000	23.094271	3	5	1	87	15	206	5586	RAISED BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	87	16	38000	6.859081	3	5	1	87	16	142	5540	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	87	13	89000	7.008651	4	5	1	87	13	433	12699	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	87	14	23000	5.123181	4	5	1	87	14	148	4489	RAISED BY SECT. TASKI/SMPL WGT
4	CHI-TAIW	LL	87	15	3000	4.314681	4	5	1	87	15	73	695	RAISED BY SECT. TASKI/SMPL WGT
5	CHI-TAIW	LL	87	14	8000	6.718741	5	5	1	87	14	101	1191	RAISED BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	88	14	1000	0.331311	1	5	1	87	14			SUBST. BY SECT. TASKI/SMPL WGT
1	CHI-TAIW	LL	88	15	1000	0.407881	1	5	1	87	15			SUBST. BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	88	13	2000	2.247951	2	5	1	87	14			SUBST. BY SECT. TASKI/SMPL WGT
2	CHI-TAIW	LL	88	16	3000	4.544081	2	5	1	87	15			SUBST. BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	88	13	32000	15.094341	3	5	4	88	13	80	2120	SUBST. BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	88	14	50000	23.584911	3	5	4	88	13			SUBST. BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	88	15	426000	200.943401	3	5	4	88	13			SUBST. BY SECT. TASKI/SMPL WGT
3	CHI-TAIW	LL	88	16	713000	336.320751	3	5	4	88	13			SUBST. BY SECT. TASKI/SMPL WGT
1	CUBA	LL	80	14	11885	3.081571	1	0	1	80	14			SUBST. BY SECT. DURING WG WATT
1	CUBA	LL	80	15	3307	0.798971	1	0	1	80	15			SUBST. BY SECT. DURING WG WATT
1	CUBA	LL	80	16	1006	0.382861	1	0	1	81	16			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	80	13	21318	16.034601	2	0	1	80	13			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	80	14	87214	24.570781	2	0	1	80	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	80	15	543008	147.268391	2	0	1	80	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	80	16	16653	2.312021	2	0	1	80	16			SUBST. BY SECT. DURING WG WATT
4	CUBA	LL	80	14	4616	1.548991	4	0	1	80	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	81	13	246230	32.966491	2	0	1	81	13			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	81	14	1027896	97.075721	2	0	1	81	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	81	15	149096	2.318401	2	0	1	81	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	81	16	560198	19.930341	2	0	1	81	16			SUBST. BY SECT. DURING WG WATT
4	CUBA	LL	81	14	4913	0.195841	4	0	1	81	14			SUBST. BY SECT. DURING WG WATT
5	CUBA	LL	81	15	2556	0.655151	5	0	1	81	15			SUBST. BY SECT. DURING WG WATT
5	CUBA	LL	81	16	979	0.514181	5	0	1	80	16			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	81	16	5132	0.109411	6	0	1	81	13			SUBST. BY SECT. DURING WG WATT
1	CUBA	LL	82	13	8486	7.426271	1	0	1	82	13			SUBST. BY SECT. DURING WG WATT
1	CUBA	LL	82	15	49717	13.066921	1	0	1	82	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	82	13	201697	194.388011	2	0	1	82	13			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	82	14	412799	8.272711	2	0	1	82	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	82	15	389814	8.600531	2	0	1	82	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	82	16	353781	12.698671	2	0	1	82	16			SUBST. BY SECT. DURING WG WATT
5	CUBA	LL	82	14	50073	9.776061	5	0	1	82	15			SUBST. BY SECT. DURING WG WATT
5	CUBA	LL	82	15	7568	1.477521	5	0	1	82	15			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	82	14	859	0.727721	6	25	1	82	4			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	82	14	0	0.727721	6	25	1	82	5			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	82	16	0	0.556111	6	25	1	82	11			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	82	16	0	0.556111	6	25	1	82	12			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	83	13	159472	14.726651	2	0	1	83	13			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	83	14	97174	13.114611	2	0	1	83	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	83	15	44376	2.295861	2	0	1	83	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	83	16	491977	11.957301	2	0	1	83	16			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	84	13	583131	254.898371	2	0	1	84	13			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	84	14	757974	33.606181	2	0	1	84	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	84	15	556253	44.698701	2	0	1	84	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	84	16	511661	5.981071	2	0	1	84	16			SUBST. BY SECT. DURING WG WATT
5	CUBA	LL	84	13	2766	2.672461	5	0	1	84	14			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	84	15	103068	1.465081	6	25	1	84	7			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	84	15	0	1.465081	6	25	1	84	8			SUBST. BY SECT. DURING WG WATT

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TM	TASKI	R.F.	AR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
R					KG							#	KG	
6	CUBA	LL	84	15	0	1.465081	6	25	1	84	9			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	84	16	23147	0.115381	6	25	1	84	10			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	84	16	0	0.115381	6	25	1	84	11			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	84	16	0	0.115381	6	25	1	84	12			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	85	13	161877	19.776311	2	0	1	85	13			SUBST. BY SECT. TASKI/RAISED WGH
2	CUBA	LL	85	14	231103	13.727041	2	0	1	85	14			SUBST. BY SECT. TASKI/RAISED WGH
2	CUBA	LL	85	15	720887	16.541241	2	0	1	85	15			SUBST. BY SECT. TASKI/RAISED WGH
2	CUBA	LL	85	16	368906	2.689311	2	0	1	85	16			SUBST. BY SECT. TASKI/RAISED WGH
6	CUBA	LL	85	14	28209	0.128411	6	25	1	85	4			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	14	0	0.128411	6	25	1	85	5			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	14	0	0.128411	6	25	1	85	6			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	15	341593	0.639541	6	25	1	85	7			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	15	0	0.639541	6	25	1	85	8			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	15	0	0.639541	6	25	1	85	9			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	16	53406	0.145911	6	25	1	85	10			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	16	0	0.145911	6	25	1	85	11			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	85	16	0	0.145911	6	25	1	85	12			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	86	13	260083	232.403721	2	0	1	86	13			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	86	14	555440	138.766331	2	0	1	86	14			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	86	15	343927	32.685531	2	0	1	86	15			SUBST. BY SECT. DURING WG WATT
2	CUBA	LL	86	16	614811	118.877571	2	0	1	86	16			SUBST. BY SECT. DURING WG WATT
4	CUBA	LL	86	13	7325	0.175791	4	0	1	86	13			SUBST. BY SECT. DURING WG WATT
4	CUBA	LL	86	14	10218	1.048291	4	0	1	86	14			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	13	9968	0.060361	6	25	1	86	1			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	13	0	0.060361	6	25	1	86	2			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	13	0	0.060361	6	25	1	86	3			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	14	33171	0.055311	6	25	1	86	4			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	14	0	0.055311	6	25	1	86	5			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	14	0	0.055311	6	25	1	86	6			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	15	134308	0.119971	6	25	1	86	7			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	15	0	0.119971	6	25	1	86	8			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	15	0	0.119971	6	25	1	86	9			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	16	111771	0.164171	6	25	1	86	10			SUBST. BY SECT. DURING WG WATT
6	CUBA	LL	86	16	0	0.164171	6	25	1					

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TM	TASKI	R.F.	AR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
R					KG							#	KG	
1	KOREA	LL	81	15	3700	1.136961	1	13	1	82	14			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	81	16	3500	1.075501	1	13	1	82	14			SUBST. BY SECT. TASKI/SMPL WGT
2	KOREA	LL	81	13	443300	59.349601	2	13	1	81	13	188	7469	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	81	14	707200	66.786921	2	13	1	81	14	239	10589	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	81	15	1083600	114.529721	2	13	1	81	15	237	9461	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	81	16	1196200	110.649631	2	13	1	81	16	198	10811	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	81	14	900	0.427901	3	5	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	81	15	6200	2.947751	3	5	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	81	16	13700	2.951821	4	13	1	82	13			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	81	14	31000	12.781401	5	13	1	81	15			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	81	15	74900	30.881501	5	13	1	81	15	56	2425	RAISED BY SECT. TASKI/SMPL WGT
5	KOREA	LL	81	16	22600	9.318051	5	13	1	81	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	82	14	78400	24.091201	1	13	1	82	14	60	3254	RAISED BY SECT. TASKI/SMPL WGT
1	KOREA	LL	82	15	137000	42.098151	1	13	1	82	14			SUBST. BY SECT. TASKI/SMPL WGT
2	KOREA	LL	82	13	181100	7.433041	2	13	1	82	14			SUBST. BY SECT. TASKI/SMPL WGT
2	KOREA	LL	82	14	998700	40.990471	2	13	1	82	14	592	24364	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	82	15	406400	30.551341	2	13	1	82	15	279	13302	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	82	16	773000	42.281791	2	13	1	82	16	425	18282	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	82	13	800	0.722021	3	5	1	82	16			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	82	14	1800	0.855801	3	5	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	82	15	10300	4.897071	3	5	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	82	16	4200	3.790611	3	5	1	82	16			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	82	13	51200	11.031631	4	13	1	82	13	122	4641	RAISED BY SECT. TASKI/SMPL WGT
4	KOREA	LL	82	14	32700	22.125991	4	13	1	82	14	30	1478	RAISED BY SECT. TASKI/SMPL WGT
4	KOREA	LL	82	15	63100	67.285141	4	13	1	82	15	30	938	RAISED BY SECT. TASKI/SMPL WGT
4	KOREA	LL	82	16	30400	32.416291	4	13	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	82	14	28800	5.622471	5	13	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	82	15	106600	20.810961	5	13	1	82	15	117	5122	RAISED BY SECT. TASKI/SMPL WGT
5	KOREA	LL	82	16	19500	3.806881	5	13	1	82	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	83	13	30000	15.283511	1	46	3	83	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	83	14	15900	8.100261	1	46	3	83	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	83	15	2000	1.018901	1	46	3	83	15	50	1963	SUBST. BY SECT. TASKI/SMPL WGT
2	KOREA	LL	83	13	407800	41.565171	2	13	1	83	13	231	9811	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	83	14	263400	38.222661	2	13	1	83	14	175	6891	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	83	15	608200	57.273081	2	13	1	83	15	277	10619	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	83	16	625000	179.990781	2	13	1	83	16	99	3472	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	83	15	2500	0.403961	3	5	1	83	15			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	83	16	700	0.236231	3	5	1	83	16			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	83	13	14400	3.102651	4	13	1	82	13			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	83	14	4900	3.315521	4	13	1	82	14			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	83	13	2500	22.261801	5	13	1	83	13	4	112	RAISED BY SECT. TASKI/SMPL WGT
5	KOREA	LL	83	14	4700	41.852181	5	13	1	83	13			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	84	13	400	0.125481	1	13	1	84	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	84	14	35400	11.104841	1	13	1	84	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	84	15	60700	19.041351	1	13	1	84	15	92	3188	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	84	13	86400	145.136911	2	13	1	84	13	20	595	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	84	14	293000	15.069461	2	13	1	84	14	480	19443	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	84	15	448500	42.935091	2	13	1	84	15	266	10446	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	84	16	287000	68.243971	2	13	1	84	16	104	4206	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	84	14	2100	5.981201	3	5	1	84	14			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	84	16	6900	3.356521	3	5	1	84	16			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	84	13	4700	6.322301	4	13	1	84	14			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	84	14	6200	8.340061	4	13	1	84	14	23	743	RAISED BY SECT. TASKI/SMPL WGT
4	KOREA	LL	84	15	600	0.807101	4	13	1	84	14			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	84	14	3300	3.681391	5	13	1	84	14	23	896	RAISED BY SECT. TASKI/SMPL WGT
1	KOREA	LL	85	14	4900	9.807851	1	13	1	85	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	85	15	3400	6.805441	1	13	1	85	15	13	500	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	85	13	46300	6.122071	2	13	1	85	13	171	7563	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	85	14	241100	19.176321	2	13	1	85	14	294	12573	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	85	15	129900	37.104741	2	13	1	85	15	92	3501	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	85	16	434000	31.641191	2	13	1	85	16	341	13716	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	85	13	3200	3.039801	3	13	1	86	13			SUBST. BY SECT. TASKI/SMPL WGT
3	KOREA	LL	85	16	14300	13.584121	3	13	1	86	13			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	85	13	4700	6.322301	4	13	1	84	14			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	85	14	1900	2.555821	4	13	1	84	14			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	85	15	800	1.076141	4	13	1	84	14			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	85	14	1500	0.105821	5	13	1	85	15			SUBST. BY SECT. TASKI/SMPL WGT

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TM	TASKI	R.F.	AR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
R					KG							#	KG	
5	KOREA	LL	85	15	763000	53.827541	5	13	1	85	15	363	14175	RAISED BY SECT. TASKI/SMPL WGT
5	KOREA	LL	85	16	6000	0.425281	5	13	1	85	15			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	86	13	3400	14.912281	1	13	1	86	14			SUBST. BY SECT. TASKI/SMPL WGT
1	KOREA	LL	86	14	5800	25.438601	1	13	1	86	14	5	228	RAISED BY SECT. TASKI/SMPL WGT
1	KOREA	LL	86	15	7300	8.477531	1	13	1	86	15	20	861	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	86	13	433900	613.112901	2	13	1	86	13	20	708	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	86	14	142800	36.085211	2	13	1	86	14	100	3957	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	86	15	177300	18.201231	2	13	1	86	15	239	9741	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	86	16	274100	81.195571	2	13	1	86	16	92	3376	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	86	13	41400	39.327441	3	13	1	86	13	27	1053	RAISED BY SECT. TASKI/SMPL WGT
3	KOREA	LL	86	16	4900	4.654701	3	13	1	86	13			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	86	13	50500	128.237681	4	13	1	86	14			SUBST. BY SECT. TASKI/SMPL WGT
4	KOREA	LL	86	14	10400	26.403941	4	13	1	86	14	9	394	RAISED BY SECT. TASKI/SMPL WGT
4	KOREA	LL	86	15	800	2.031491	4	13	1	86	14			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	86	13	1100	0.864711	5	13	1	86	14			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	86	14	7500	5.895761	5	13	1	86	14	30	1272	RAISED BY SECT. TASKI/SMPL WGT
5	KOREA	LL	86	15	4700	3.694681	5	13	1	86	14			SUBST. BY SECT. TASKI/SMPL WGT
5	KOREA	LL	86	16	6200	4.873831	5	13	1	86	14			SUBST. BY SECT. TASKI/SMPL WGT
2	KOREA	LL	87	0	381000	164.985061	2	13	1	87	0	53	2309	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	88	14	116100	97.440201	2	13	1	88	14	25	1192	RAISED BY SECT. TASKI/SMPL WGT
2	KOREA	LL	88	15	3900	4.802961	2	13	1	88	15	20	812	RAISED BY SECT. TASKI/SMPL WGT
6	MEXICO	LL	80	0	16000	3.467331	6	25	1	80	0			BY SECT. DURING WG WATT.
6	MEXICO	LL	81	0	42000	7.763981	6	25	1	81	0			BY SECT. DURING WG WATT.
6	MEXICO	LL	82	0	12800	6.981601	6	25	1	82	0			BY SECT. DURING WG WATT.
6	MEXICO	LL	83	0	612000	1.152191	6	25	1	83	0			BY SECT. DURING WG WATT.
6	MEXICO	LL	84	0	1059000	3.692621	6	25	1	84	0			BY SECT. DURING WG WATT.
6	MEXICO	LL	85	0	562000	0.474481	6	25	1	85	0			BY SECT. DURING WG WATT.
6	MEXICO	LL	86	0	686000	0.256501	6	25	1	86				

LONGLINE FISHERIES, 1980 - 1988

A	COUNTRY	GR	YR	TH	TASKI	R.F.	AR	CN	GR	YR	TH	SAMPLE	SAMPLE	REMARKS
R					KG	I						#	KG	
5	VENEZUELA	LL	82	0	259226	50.609231	5	0	1	82	0			BY SECT. DURING WGWATT
2	VENEZUELA	LL	83	13	106018	9.790371	2	0	1	83	13			BY SECT. DURING WGWATT
2	VENEZUELA	LL	83	14	149797	20.216611	2	0	1	83	14			BY SECT. DURING WGWATT
2	VENEZUELA	LL	83	15	265979	13.760831	2	0	1	83	15			BY SECT. DURING WGWATT
2	VENEZUELA	LL	83	16	134073	3.258591	2	0	1	83	16			BY SECT. DURING WGWATT
5	VENEZUELA	LL	83	0	592176	1083.975841	5	0	1	83	0			BY SECT. DURING WGWATT
1	VENEZUELA	LL	84	0	60152	0.871381	1	0	1	84	0			BY SECT. DURING WGWATT
2	VENEZUELA	LL	84	13	47750	20.872491	2	0	1	84	13			BY SECT. DURING WGWATT
2	VENEZUELA	LL	84	14	235469	10.439951	2	0	1	84	14			BY SECT. DURING WGWATT
2	VENEZUELA	LL	84	15	201663	16.204991	2	0	1	84	15			BY SECT. DURING WGWATT
2	VENEZUELA	LL	84	16	285690	3.339581	2	0	1	84	16			BY SECT. DURING WGWATT
4	VENEZUELA	LL	84	0	17210	0.318851	4	0	1	84	0			BY SECT. DURING WGWATT
5	VENEZUELA	LL	84	13	144627	139.736231	5	0	1	84	13			BY SECT. DURING WGWATT
5	VENEZUELA	LL	84	14	145705	140.777781	5	0	1	84	14			BY SECT. DURING WGWATT
5	VENEZUELA	LL	84	15	308620	114.831081	5	0	1	84	15			BY SECT. DURING WGWATT
5	VENEZUELA	LL	84	16	211130	47.489701	5	0	1	84	16			BY SECT. DURING WGWATT
1	VENEZUELA	LL	85	14	12591	0.871351	1	0	1	85	14			BY SECT. DURING WGWATT
2	VENEZUELA	LL	85	13	100504	12.278391	2	0	1	85	13			BY SECT. DURING WGWATT
2	VENEZUELA	LL	85	14	232709	13.822461	2	0	1	85	14			BY SECT. DURING WGWATT
2	VENEZUELA	LL	85	15	294862	6.765801	2	0	1	85	15			BY SECT. DURING WGWATT
2	VENEZUELA	LL	85	16	344407	2.510711	2	0	1	85	16			BY SECT. DURING WGWATT
3	VENEZUELA	LL	85	14	17393	9.048001	3	0	1	85	14			BY SECT. DURING WGWATT
4	VENEZUELA	LL	85	14	1317	0.095721	4	0	1	85	14			BY SECT. DURING WGWATT
5	VENEZUELA	LL	85	0	602218	9.942451	5	0	1	85	0			BY SECT. DURING WGWATT
2	VENEZUELA	LL	86	0	577055	179.549791	2	29	1	86	0	78	3214	BY SECT. TASKI/EST. SMPL WGHT
3	VENEZUELA	LL	86	0	8324	2.590041	2	29	1	86	0			BY SECT. TASKI/EST. SMPL WGHT
5	VENEZUELA	LL	86	0	282612	136.402391	5	29	1	86	0	50	2072	BY SECT. TASKI/EST. SMPL WGHT
2	VENEZUELA	LL	87	0	26027	20.841881	2	29	1	87	0			BY SECT. TASKI/EST. SMPL WGHT
5	VENEZUELA	LL	87	0	619973	496.454721	5	29	1	87	0	40	1249	BY SECT. TASKI/EST. SMPL WGHT
2	VENEZUELA	LL	88	0	192695	15.444731	2	29	1	88	0	302	12476	BY SECT. TASKI/EST. SMPL WGHT
5	VENEZUELA	LL	88	0	345305	10.677971	5	29	1	88	0	784	32338	BY SECT. TASKI/EST. SMPL WGHT
5	VEN-FOR	LL	84	0	7000	0.856961	5	0	1	84	0			BY SECT. DURING WGWATT
5	VEN-FOR	LL	85	0	20000	0.330191	5	0	1	85	0			BY SECT. DURING WGWATT
2	VEN-FOR	LL	86	0	9306	2.895401	2	29	1	86	0			BY SECT. TASKI/EST. SMPL WGHT
3	VEN-FOR	LL	86	0	10798	3.359841	2	29	1	86	0			BY SECT. TASKI/EST. SMPL WGHT
5	VEN-FOR	LL	86	0	21895	10.567591	5	29	1	86	0			BY SECT. TASKI/EST. SMPL WGHT
2	VEN-FOR	LL	88	0	193000	15.469211	2	29	1	88	0			BY SECT. TASKI/EST. SMPL WGHT

Country code 0 = Pooled sample of China-Taiwan, Japan and Korea.
Korea Task I catch includes estimated Panamanian catches.

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TH	TASKI	R.F.	AR	CN	GR	YR	TH	SAMPLE	SAMPLE	REMARKS
					KG	I						#	KG	
5	BARBADOS	UNCL	80	0	40000	1.104481	4	25	1	80	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	81	0	30000	0.956951	4	25	1	81	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	82	0	36000	0.910671	4	25	1	82	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	83	0	51000	0.526701	4	25	1	83	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	84	0	90000	0.473081	4	25	1	84	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	85	0	57000	17.452011	5	25	1	85	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	86	0	39000	0.730741	5	25	1	86	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	87	0	57000	0.516391	5	25	1	87	0			BY SECT. DURING WGWATT.
5	BARBADOS	UNCL	88	0	3000	0.017011	5	25	1	88	0			BY SECT. DURING WGWATT.
4	BERMUDA	UNCL	83	0	6000	0.061961	4	25	1	83	0			BY SECT. DURING WGWATT.
4	BERMUDA	UNCL	84	0	6000	0.031541	4	25	1	84	0			BY SECT. DURING WGWATT.
4	BERMUDA	UNCL	85	0	42000	0.237671	4	25	1	85	0			BY SECT. DURING WGWATT.
4	BERMUDA	UNCL	86	0	44000	0.106271	4	25	1	86	0			BY SECT. DURING WGWATT.
4	BERMUDA	UNCL	87	0	50000	0.108531	4	25	1	87	0			BY SECT. DURING WGWATT.
4	BERMUDA	UNCL	88	0	50000	0.096951	4	25	1	88	0			BY SECT. DURING WGWATT.
3	BRASIL	BB	80	0	487000	10.270401	3	3	17	80	0			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	3	211902	106.929281	3	3	17	80	3			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	4	105951	45.913881	3	3	17	80	4			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	5	667	0.077341	3	3	17	80	5			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	6	38891	13.297331	3	3	17	80	6			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	7	10063	2.768101	3	3	17	80	7			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	8	1344	0.295841	3	3	17	80	8			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	10	87177	71.182591	3	3	17	80	10			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	11	384246	87.835601	3	3	17	80	11			BY SECT. DURING WGWATT.
3	BRASIL	BB	81	12	67727	17.215471	3	3	17	80	12			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	1	69304	99.459821	3	3	17	80	1			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	2	29052	12.779861	3	3	17	80	2			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	3	111159	56.092751	3	3	17	80	3			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	4	167887	72.754101	3	3	17	80	4			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	5	121913	14.131201	3	3	17	80	5			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	6	193276	66.084011	3	3	17	80	6			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	7	158055	43.476611	3	3	17	80	7			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	8	18071	3.979021	3	3	17	80	8			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	9	21725	1.993801	3	3	17	80	9			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	10	38430	31.378751	3	3	17	80	10			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	11	59471	13.594641	3	3	17	80	11			BY SECT. DURING WGWATT.
3	BRASIL	BB	82	12	46658	11.859841	3	3	17	80	12			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	1	150823	216.451211	3	3	17	80	1			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	2	49138	21.615101	3	3	17	80	2			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	3	14877	7.507191	3	3	17	80	3			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	4	120425	52.186431	3	3	17	80	4			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	5	246680	28.593261	3	3	17	80	5			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	6	333314	113.965331	3	3	17	80	6			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	7	268456	73.899981	3	3	17	80	7			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	8	199317	43.886961	3	3	17	80	8			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	9	106523	9.776231	3	3	17	80	9			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	10	104905	85.657391	3	3	17	80	10			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	11	59003	13.487721	3	3	17	80	11			BY SECT. DURING WGWATT.
3	BRASIL	BB	83	12	86321	21.941841	3	3	17	80	12			BY SECT. DURING WGWATT.
3	BRASIL	BB	84	1	28307	40.623691	3	3	17	80	1			BY SECT. DURING WGWATT.
3	BRASIL	BB	84	2	132282	58.189361	3	3	17	80	2			BY SECT. DURING WGWATT.
3	BRASIL	BB	84	3	75091	37.892341	3	3	17	80	3			BY SECT. DURING WGWATT.
3	BRASIL	BB	84	4	135614	58.768501	3	3	17	80	4			BY SECT. DURING WGWATT.
3	BRASIL	BB	84	5	194669	362.108371	3	3	17	84	5	34	538	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	6	143987	157.897871	3	3	17	84	6	62	912	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	7	139945	119.774901	3	3	17	84	7	40	1168	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	8	46508	143.410361	3	3	17	84	8	48	324	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	9	117124	176.551221	3	3	17	84	9	70	663	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	10	83909	264.531051	3	3	17	84	10	45	317	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	11	62676	319.288331	3	3	17	84	11	39	196	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB	84	12	42887	97.249321	3	3	17	84	12	76	441	BY SECT. EST. CATCH/EST. SMPL. WGT
3	BRASIL	BB												

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TM	TASKI	R.F.IAR	CN	GR	YR	TM	SAMPLE #	SAMPLE KG	REMARKS
3	BRASIL	BB	85	7	219326	95.288811	3	3	17	85	7	146	2302 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	85	8	184213	43.680221	3	3	17	85	8	348	4217 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	85	9	78400	18.590031	3	3	17	85	8		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	85	10	206885	453.695721	3	3	17	85	10	97	456 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	85	11	174496	313.390361	3	3	17	85	11	93	557 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	85	12	260553	233.533341	3	3	17	85	12	222	1116 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	1	76579	109.901391	3	5	17	86	1		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	2	28231	17.202221	3	5	17	86	2		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	3	24880	17.542311	3	5	17	86	3		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	4	62526	70.891671	3	5	17	86	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	5	89595	101.581631	3	5	17	86	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	6	73484	83.315411	3	5	17	86	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	7	96171	109.037111	3	5	17	86	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	8	26042	57.679471	3	5	17	86	10		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	9	21915	48.539271	3	5	17	86	10		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	10	16757	37.114021	3	5	17	86	10		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	11	4768	5.322101	3	5	17	86	11		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	86	12	22046	31.408751	3	5	17	86	12		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	1	40257	99.646491	3	3	17	87	1	93	404 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	2	91173	349.723361	3	5	17	87	2		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	3	80164	104.136241	3	5	17	87	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	4	120609	156.675641	3	5	17	87	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	5	239767	632.296041	3	3	17	87	5	84	379 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	6	267214	313.006441	3	5	17	87	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	7	171512	200.904421	3	5	17	87	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	8	93700	109.757411	3	5	17	87	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	9	45311	53.076281	3	5	17	87	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	10	54519	67.792321	3	5	17	87	11		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	11	28886	35.918421	3	5	17	87	11		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	87	12	17877	33.514791	3	5	17	87	12		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	1	65659	48.165671	3	5	17	88	1		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	2	9071	33.657141	3	5	17	88	2		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	3	72141	434.581511	3	5	17	88	3		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	4	41461	32.138141	3	5	17	88	5		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	5	41943	325.101031	3	5	17	88	5		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	6	316622	332.971351	3	5	17	88	6		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	7	121370	148.085021	3	3	17	88	7	96	820 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	8	179686	219.235801	3	3	17	88	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	9	53999	65.884981	3	3	17	88	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	10	31528	115.570561	3	3	17	88	12		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	11	89843	329.335891	3	3	17	88	12		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL	BB	88	12	62207	228.030651	3	3	17	88	12	42	273 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	81	0	11000	0.231981	3	3	17	80	0		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	82	1	6529	9.370571	3	3	17	80	1		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	82	2	2471	1.084791	3	3	17	80	2		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	83	5	1719	0.199281	3	3	17	80	5		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	83	8	344	0.075741	3	3	17	80	8		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	83	9	11118	1.020331	3	3	17	80	9		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	83	10	17077	13.943991	3	3	17	80	10		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	83	11	917	0.209571	3	3	17	80	11		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	83	12	8825	2.243261	3	3	17	80	12		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	84	1	2251	3.230551	3	3	17	80	1		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	84	2	83073	36.543101	3	3	17	80	2		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	84	4	3602	1.560791	3	3	17	80	4		BY SECT. DURING WG WATT
3	BRASIL-JPN	BB	84	5	6754	12.564061	3	3	17	84	5		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	84	7	1576	1.349181	3	3	17	84	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	84	8	676	2.084371	3	3	17	84	8		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	84	9	15759	23.754361	3	3	17	84	9		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	84	11	9005	45.876161	3	3	17	84	11		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	84	12	6304	14.295311	3	3	17	84	12		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	1	53036	145.662841	3	5	17	85	3		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	2	20406	56.045321	3	5	17	85	3		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	3	32112	88.195771	3	5	17	85	3	46	364 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	4	43092	30.227011	3	5	17	85	4	130	1426 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	5	9738	5.627771	3	5	17	85	5	134	1730 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	6	3521	4.392041	3	5	17	85	6	55	802 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	7	103	0.622871	3	5	17	85	7	13	165 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	8	103	0.010061	3	5	17	85	9		BY SECT. EST. CATCH/EST. SMPLE. WGT

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AR	COUNTRY	GR	YR	TM	TASKI	R.F.IAR	CN	GR	YR	TM	SAMPLE #	SAMPLE KG	REMARKS
3	BRASIL-JPN	BB	85	9	88151	8.614631	3	5	17	85	9	589	10233 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	10	2485	0.242881	3	5	17	85	9		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	11	12638	4.636901	3	5	17	85	11	193	2726 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	85	12	20615	12.304451	3	5	17	85	12	132	1675 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	1	15169	21.770011	3	5	17	86	1	89	697 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	2	28430	17.323481	3	5	17	86	2	76	1641 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	3	7531	5.308211	3	5	17	86	3	74	1419 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	4	23657	26.821721	3	5	17	86	4	89	882 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	5	849	0.963001	3	5	17	86	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	6	2970	3.367851	3	5	17	86	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	9	2016	4.464851	3	5	17	86	10		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	10	4349	9.632121	3	5	17	86	10	75	452 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	11	15917	17.762841	3	5	17	86	11	155	896 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	86	12	56117	79.949441	3	5	17	86	12	142	702 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	1	13255	50.845451	3	5	17	87	2		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	2	25976	99.641081	3	5	17	87	2	69	261 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	3	3206	4.165161	3	5	17	87	4		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	4	27260	35.411181	3	5	17	87	4	137	770 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	6	3955	4.632831	3	5	17	87	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	7	22876	26.796111	3	5	17	87	7	43	854 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	8	1176	1.377461	3	5	17	87	7		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	10	2993	3.722251	3	5	17	87	11		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	11	14217	17.678481	3	5	17	87	11	96	804 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	87	12	26084	48.900621	3	5	17	87	12	102	533 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	1	35542	26.072811	3	5	17	88	1	206	1363 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	2	5078	18.842001	3	5	17	88	2	51	270 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	3	1489	8.966931	3	5	17	88	3	25	166 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	4	2977	17.933861	3	5	17	88	3		BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	5	33267	25.786551	3	5	17	88	5	117	1290 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	6	5516	5.800801	3	5	17	88	6	50	951 BY SECT. EST. CATCH/EST. SMPLE. WGT
3	BRASIL-JPN	BB	88	8	6653	6.996371	3	5	17	88	6		BY SECT

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TM	TASKI	R.F.IAR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
											#	KG	
5	NLD.ANT	UNCL	86	0	150000	2.810551	5	25	1	86	0		BY SECT. DURING WG WATT.
5	NLD.ANT	UNCL	87	0	160000	1.449511	5	25	1	87	0		BY SECT. DURING WG WATT.
5	NLD.ANT	UNCL	88	0	170000	0.963781	5	25	1	88	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	80	0	27000	0.745531	4	25	1	80	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	81	0	25000	0.797461	4	25	1	81	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	82	0	26000	0.657711	4	25	1	82	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	83	0	23000	0.237531	4	25	1	83	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	84	0	56000	0.294361	4	25	1	84	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	85	0	79000	24.187871	5	25	1	85	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	86	0	125000	2.342121	5	25	1	86	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	87	0	76000	0.688521	5	25	1	87	0		BY SECT. DURING WG WATT.
5	ST.LUCIA	HAND	88	0	97000	0.549921	5	25	1	88	0		BY SECT. DURING WG WATT.
5	SPAIN	PS	83	0	1957000	224.777181	5	29	6	83	0		BY SECT. DURING WG WATT.
5	SPAIN	PS	84	0	3976000	551.716481	5	29	6	84	0		BY SECT. DURING WG WATT.
5	SPAIN	PS	85	0	1000000	69.994681	5	29	6	85	0		BY SECT. DURING WG WATT.
5	TRINIDAD	UNCL	83	0	10000	0.103271	4	25	1	83	0		BY SECT. DURING WG WATT.
5	TRINIDAD	UNCL	84	0	4000	0.021031	4	25	1	84	0		BY SECT. DURING WG WATT.
4	USA	PSG	80	0	473000	01							
5	USA	PSG	80	0	0	1.000001	5	25	5	80	0		BY NATIONAL SCIENTISTS.
5	USA	PSG	81	0	285000	1.000001	5	25	5	81	0	258	3576 BY NATIONAL SCIENTISTS.
5	USA	PSG	82	0	82000	1.000001	5	25	5	82	0	50	BY NATIONAL SCIENTISTS.
5	USA	PSG	84	0	1069000	1.000001	5	25	5	84	0	201	BY NATIONAL SCIENTISTS.
5	USA	PSG	85	0	4386000	01							
5	USA	PSG	86	0	614000	1.000001	5	25	5	86	0	199	2128 BY NATIONAL SCIENTISTS.
5	USA	PSG	87	0	21000	1.000001	5	25	5	87	0	50	388 BY NATIONAL SCIENTISTS.
4	USA	PS	81	0	37000	1.000001	4	25	6	81	0		BY NATIONAL SCIENTISTS.
4	USA	PS	82	0	0	1.000001	4	25	6	82	0		BY NATIONAL SCIENTISTS.
4	USA	PS	83	0	112000	1.000001	4	25	6	83	0		BY NATIONAL SCIENTISTS.
4	USA	PS	84	0	11000	1.000001	4	25	6	84	0		BY NATIONAL SCIENTISTS.
4	USA	PS	85	0	1000	1.000001	4	25	6	85	0	550	5740 BY NATIONAL SCIENTISTS.
4	USA	PS	86	0	33000	1.000001	4	25	6	86	0		BY NATIONAL SCIENTISTS.
4	USA	PS	87	0	61000	1.000001	4	25	6	87	0	150	1861 BY NATIONAL SCIENTISTS.
4	USA	TROL	80	0	3000	01							
4	USA	TROL	81	0	2000	01							
4	USA	TROL	83	0	31000	01							
4	USA	TROL	84	0	39000	01							
4	USA	UNCL	82	0	162000	01							
6	USA	UNCL	82	0	3000	01							
4	USA	UNCL	85	0	0	01							
4	USA	UNCL	86	0	0	01							
4	USA	UNCL	87	0	0	01							
4	USA	TRAW	83	0	0	01							
4	USA	TRAW	85	0	3000	01							
4	USA	TRAW	86	0	1000	01							
4	USA	TRAW	87	0	0	01							
4	USA	TRAW	88	0	0	01							
4	USA	HARP	80	0	1000	1.000001	4	25	18	80	0	1	36 BY NATIONAL SCIENTISTS.
4	USA	HARP	84	0	0	1.000001	4	25	18	84	0		BY NATIONAL SCIENTISTS.
4	USA	HARP	86	0	0	1.000001	4	25	18	86	0	1	43 BY NATIONAL SCIENTISTS.
4	USA	HARP	88	0	0	1.000001	4	25	18	88	0	1	13 BY NATIONAL SCIENTISTS.
4	USA	HAND	80	0	3000	1.000001	4	25	19	80	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	81	0	27000	1.000001	4	25	19	81	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	82	0	0	1.000001	4	25	19	82	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	83	0	7000	1.000001	4	25	19	83	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	84	0	20000	1.000001	4	25	19	84	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	85	0	184000	1.000001	4	25	19	85	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	86	0	173000	1.000001	4	25	19	86	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	87	0	314000	1.000001	4	25	19	87	0		BY NATIONAL SCIENTISTS.
6	USA	HAND	87	0	2000	1.000001	6	25	19	87	0		BY NATIONAL SCIENTISTS.
4	USA	HAND	88	0	151000	1.000001	4	25	19	88	0		BY NATIONAL SCIENTISTS.
6	USA	HAND	88	0	15000	1.000001	6	25	19	88	0		BY NATIONAL SCIENTISTS.
4	USA	R R	80	0	0	1.000001	4	25	22	80	0		BY NATIONAL SCIENTISTS.
4	USA	R R	81	0	0	1.000001	4	25	22	81	0		BY NATIONAL SCIENTISTS.
4	USA	R R	82	0	0	1.000001	4	25	22	82	0		BY NATIONAL SCIENTISTS.
4	USA	R R	83	0	0	1.000001	4	25	22	83	0	1068	BY NATIONAL SCIENTISTS.
4	USA	R R	84	0	0	1.000001	4	25	22	84	0		BY NATIONAL SCIENTISTS.
4	USA	R R	85	0	30000	1.000001	4	25	22	85	0	401	BY NATIONAL SCIENTISTS.

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TM	TASKI	R.F.IAR	CN	GR	YR	TM	SAMPLE	SAMPLE	REMARKS
											#	KG	
4	USA	R R	86	0	1162000	1.000001	4	25	22	86	0	344	BY NATIONAL SCIENTISTS.
6	USA	R R	86	0	1000	1.000001	6	25	22	86	0		BY NATIONAL SCIENTISTS.
4	USA	R R	87	0	1913000	1.000001	4	25	22	87	0	1206	BY NATIONAL SCIENTISTS.
4	USA	R R	88	0	772000	1.000001	4	25	22	88	0	874	BY NATIONAL SCIENTISTS.
6	USA	R R	88	0	2000	1.000001	6	25	22	88	0		BY NATIONAL SCIENTISTS.
4	USA	GILL	83	0	0	1.000001	4	25	24	83	0		BY NATIONAL SCIENTISTS.
4	USA	GILL	85	0	1000	1.000001	4	25	24	85	0	12	517 BY NATIONAL SCIENTISTS.
4	USA	GILL	86	0	6000	1.000001	4	25	24	86	0	174	4994 BY NATIONAL SCIENTISTS.
4	USA	GILL	87	0	1000	1.000001	4	25	24	87	0	10	415 BY NATIONAL SCIENTISTS.
4	USA	GILL	88	0	2000	1.000001	4	25	24	88	0	32	1162 BY NATIONAL SCIENTISTS.
4	USA	GILL	89	0	14000	1.000001	4	25	24	89	0		BY NATIONAL SCIENTISTS.
5	VENEZUELA	BB	81	0	1000000	365.951841	5	29	6	81	0		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	82	2	6080	4.845521	5	29	6	82	5		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	82	8	7744	1.314281	5	29	6	82	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	82	11	17151	2.910881	5	29	6	82	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	82	2	28642	22.825761	5	29	6	82	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	82	5	601133	479.066621	5	29	6	82	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	82	8	703769	119.446861	5	29	6	82	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	82	11	544174	92.359731	5	29	6	82	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	82	12	3327	0.564651	5	29	6	82	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	1	9125	6.395881	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	2	25076	17.575871	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	3	19272	13.508101	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	4	22794	15.976901	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	6	1132	0.793091	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	7	2281	1.598971	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	9	2628	3.228501	5	29	6	83	9		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	83	10	20294	23.177251	5	29	6	83	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	1	146256	102.513141	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	2	106233	74.460821	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	3	49239	34.512161	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	4	192410	134.863501	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	5	155946	109.305571	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	6	143865	100.837421	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	7	199710	139.980201	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	8	207119	214.276071	5	29	6	83	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	9	213270	262.001841	5	29	6	83	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	10	148081	16.911891	5	29	6	83	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	11	80939	75.411121	5	29	6	83	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	83	12	79333	73.914801	5	29	6	83	11		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	84	1	67265	80.345441	5	29	6	84	1		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	84	2	1297	1.054371	5	29	6	84	2		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	84										

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TM	TASKI	R.F. IAR	CN	GR	YR	TM	SAMPLE #	SAMPLE KG	REMARKS
2	VENEZUELA	BB	85	8	6016	25.044131	2	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	1	102265	50.429111	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	2	67508	33.289811	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	3	126912	62.583191	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	4	53689	26.475281	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	5	33353	5.604351	5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	6	169673	28.510301	5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	7	255914	108.268241	5	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	8	155453	65.766861	5	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	9	218851	478.990741	5	29	6	85	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	10	88446	56.184751	5	29	6	85	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	11	194421	173.388791	5	29	6	85	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	85	12	83734	105.804661	5	29	6	85	12		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	86	1	19740	72.841661	2	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	86	2	9116	33.639231	2	29	17	86	3	50	271 BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	86	5	761	4.749441	2	29	17	86	5	50	160 BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	86	6	25827	161.217041	2	29	17	86	5		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	86	7	38283	193.443811	2	29	17	86	7	50	198 BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	86	8	6228	31.469331	2	29	17	86	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	1	162979	152.931431	5	29	17	86	12	98	1066 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	2	101166	95.828551	5	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	3	252451	239.130941	5	29	17	86	3	50	1056 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	4	222382	210.649301	5	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	5	75649	320.005121	5	29	17	86	5	50	236 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	6	27955	20.083741	5	29	17	86	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	7	248054	178.212841	5	29	17	86	7	128	1392 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	8	101927	55.209111	5	29	17	86	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	86	9	116510	63.108121	5	29	17	86	9	246	1846 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	2	9369	54.690601	5	29	17	87	2		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	BB	87	5	69	0.029811	5	29	17	87	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	1	135615	791.679801	5	29	17	87	2		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	2	119140	695.504381	5	29	17	87	2	50	171 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	3	125218	236.171261	5	29	17	87	3	100	530 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	4	37154	70.075631	5	29	17	87	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	5	22096	9.608191	5	29	17	87	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	6	30848	13.413711	5	29	17	87	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	7	66494	28.913991	5	29	17	87	7	226	2300 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	8	91880	19.353311	5	29	17	87	8	600	4748 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	9	373986	180.652091	5	29	17	87	9	226	2070 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	10	459514	633.986621	5	29	17	87	10	50	725 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	11	357968	195.301491	5	29	17	87	11	150	1833 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	87	12	455629	295.843781	5	29	17	87	12	100	1540 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	BB	88	0	4395000	765.466071	5	29	17	88	0	621	5742 BY SECT. DURING WGT
5	VENEZUELA	PS	80	0	4397000	3433.278681	5	29	6	80	0	103	1281 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	81	0	2500000	914.879601	5	29	6	81	0	295	2733 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	82	2	1084625	864.380621	5	29	6	82	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	82	5	1856710	1479.686171	5	29	6	82	5	47	1255 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	82	8	3330024	565.186831	5	29	6	82	8	525	5892 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	82	11	5758641	977.382631	5	29	6	82	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	83	3	46502	13.098361	5	29	6	83	18		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	83	9	71394	87.707541	5	29	6	83	9		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	83	10	70847	80.912361	5	29	6	83	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	1	866028	243.937701	5	29	6	83	18	149	3550 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	2	559526	157.604101	5	29	6	83	18		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	3	221704	62.448361	5	29	6	83	18		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	4	918137	643.538941	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	5	774392	542.785271	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	6	2537767	1778.767331	5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	7	1774864	1244.034691	5	29	6	83	7	100	1427 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	8	1365101	1412.271231	5	29	6	83	8	102	967 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	9	1389994	1707.608731	5	29	6	83	9	50	814 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	10	802156	916.121571	5	29	6	83	10	50	876 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	11	1276474	1189.298811	5	29	6	83	11	50	1073 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	83	12	1002114	933.675381	5	29	6	83	11		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	2	258653	210.201751	5	29	6	84	2		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	4	14178	30.050931	5	29	6	84	3		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	6	94392	244.097411	5	29	6	84	5		BY SECT. EST. CATCH/EST. SPL. WGT

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TM	TASKI	R.F. IAR	CN	GR	YR	TM	SAMPLE #	SAMPLE KG	REMARKS
2	VENEZUELA	PS	84	7	56584	148.049161	5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	8	7919	20.720201	5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	9	55052	44.605111	5	29	6	84	9		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	10	356878	595.988011	5	29	6	84	10		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	84	11	1075359	520.679261	5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	1	1613102	1926.782331	5	29	6	84	1	56	837 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	2	800228	650.327871	5	29	6	84	2	109	1231 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	3	63482	134.552371	5	29	6	84	3	50	472 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	4	354195	750.731861	5	29	6	84	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	5	693318	1792.910371	5	29	6	84	5	25	387 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	6	219951	568.789911	5	29	6	84	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	7	1997569	5226.503061	5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	8	887085	2320.996471	5	29	6	84	8	50	382 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	9	3063604	2482.258991	5	29	6	84	9	100	1234 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	10	724357	1209.680741	5	29	6	84	10	96	599 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	84	11	231064	111.878941	5	29	6	84	11	200	2065 BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	12	205901	99.695331	5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	1	50037	24.674271	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	3	8838	4.358231	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	5	53980	9.073001	5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	6	2176	9.057121	2	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	7	312323	1300.262661	2	29	6	85	7	57	240 BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	8	22571	93.967611	2	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	9	1224	2.678331	5	29	6	85	9		BY SECT. EST. CATCH/EST. SPL. WGT
2	VENEZUELA	PS	85	11	49085	43.775231	5	29	6	85	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	85	1	221495	109.223891	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	85	2	495611	244.396001	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	85	3	1305856	643.944911	5	29	6	85	3	50	2028 BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	85	4	672916	331.828751	5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VENEZUELA	PS	85	5	878094	147.							

SURFACE & UNCLASSIFIED FISHERIES, 1980-1988

AR	COUNTRY	GR	YR	TM	TASKI	R.F.	IAR	CN	GR	YR	TM	SAMPLE #	SAMPLE KG	REMARKS
5	VEN-FOR	BB	84	11	26959	13.053271		5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	84	12	24159	11.697671		5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	BB	85	8	3596	14.972521		2	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	1	46275	22.819321		5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	2	78060	38.492871		5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	3	64367	31.740541		5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	4	45878	22.623601		5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	5	16192	2.720731		5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	6	64966	10.916281		5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	7	30484	12.896881		5	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	8	1798	0.760761		5	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	9	25689	5.622491		5	29	6	85	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	10	2398	1.523061		5	29	6	85	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	11	20392	18.185811		5	29	6	85	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	85	12	4896	6.187071		5	29	6	85	12		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	1	14720	13.943731		5	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	2	33079	31.333841		5	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	3	87709	83.081421		5	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	4	32171	30.473491		5	29	17	86	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	5	10166	43.003171		5	29	17	86	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	6	7587	32.095051		5	29	17	86	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	7	52200	37.502691		5	29	17	86	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	8	14112	10.138851		5	29	17	86	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	BB	86	9	9258	5.014451		5	29	17	86	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	83	6	51980	36.433411		5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	83	7	550747	386.028811		5	29	6	83	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	83	8	244962	253.426631		5	29	6	83	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	83	10	78706	89.888371		5	29	6	83	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	83	11	7821299	7287.151291		5	29	6	83	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	83	12	1078404	303.758521		5	29	6	83	18		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	PS	84	2	129755	105.449281		5	29	6	84	2		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	PS	84	6	25255	65.310091		5	29	6	84	5		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	PS	84	7	3428	8.968811		5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	PS	84	8	2722	7.122291		5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	PS	84	10	185862	310.390231		5	29	6	84	10		BY SECT. EST. CATCH/EST. SPL. WGT
2	VEN-FOR	PS	84	11	338705	163.997861		5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	1	1145870	1368.692921		5	29	6	84	1		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	2	693793	563.830011		5	29	6	84	2		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	3	163883	347.356741		5	29	6	84	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	4	111305	235.916241		5	29	6	84	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	5	139283	360.183171		5	29	6	84	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	6	97644	252.506261		5	29	6	84	5		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	7	434988	1138.115881		5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	8	242422	634.279671		5	29	6	84	8		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	9	822036	666.047541		5	29	6	84	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	10	241716	403.667251		5	29	6	84	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	11	255377	123.651311		5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	84	12	6805	3.295091		5	29	6	84	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	1	22211	10.952461		5	29	6	85	3		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	5	47215	7.933541		5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	6	350383	58.875071		5	29	6	85	6		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	7	332977	140.870921		5	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	8	246245	104.177811		5	29	6	85	7		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	9	562840	1231.867371		5	29	6	85	9		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	10	275852	175.233391		5	29	6	85	10		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	11	23135	20.632391		5	29	6	85	11		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	85	12	149142	188.453371		5	29	6	85	12		BY SECT. EST. CATCH/EST. SPL. WGT
5	VEN-FOR	PS	86	0	1898000	213.748371		5	29	6	86	0		BY SECT. EST. CATCH/EST. SPL. WGT

Brasil BB Task I includes Brasil SURF Task I and GILL Task I.
 Brasil BB 1980 catch was sized by pooled size of Brasil + Brasil-Jpn BB 1984-86.
 Brasil-JPN BB Task I includes Brasil-ESP BB Task I.