

SC-04-21
**Jumbo flying squid datasets held by the Secretariat
 Secretariat**

Summary

Paper SC-04-21 identifies and describes Jumbo flying squid data sets held by the SPRFMO Secretariat. The Jumbo flying squid fishery is a large fishery that covers an extensive area of the Eastern Pacific Ocean. During 2015 there were 246 Chinese vessels, 9 Chinese Taipei vessels, 2 Korean vessels and 6 reefers operating in the SPRFMO Area as well as a large number of vessels (mainly artisanal) operating in the nearby EEZs and Territorial waters.

Annual Catch data

The annual catch data series for Jumbo flying squid held by the Secretariat begins in 1978 although it does have some significant gaps (refer Table 1). The Secretariat has also looked at the catch records for other squid species. Those records are dominated by EEZ captures with SPRFMO Area catches totalling 428 (t) from 6 events.

Fishing activity data

The secretariat holds Korean squid jigging data from 2012 until 2015. The Korean fishing activity data contains information on vessel, fishing date, start and end position, crew numbers, and number of jigging machines, lighting power, hours fished and catch weights (as per CMM 4.02 Annex 4). By contrast, the Secretariat holds aggregated catch and position data for activities by China and Chinese Taipei vessels. Aggregated catch data is often annual and occasionally contains measures of effort such as vessel days, fishing hours or number of vessels.

Year	Japan	China ¹	Chinese Taipei	Korea
2007	-		5*5 degree	-
2008	-	1*1 degree (Monthly)	5*5 degree	
2009	-		5*5 degree	-
2010	0.1*0.1 degree (by Trip)		5*5 degree	
2011	-		5*5 degree	
2012	-		5*5 degree	0.1*0.1 degree (Daily)
2013	-		5*5 degree	0.1*0.1 degree (Daily)
2014	-		5*5 degree	0.1*0.1 degree (Daily)
2015	-	1*1 degree (Monthly)	5*5 degree	0.1*0.1 degree (Daily)

Table 1: Resolution of the various types of fishing activity data held by the Secretariat
 A dash (-) indicates no reported catch for GIS during that year.

¹ China has submitted pre-2007 historic data (as per paragraph 4 CMM 4.02) for the years 2002-2006. The resolution for this data is 5*5 degrees by year.

Year	Chile			China	Ecuador	Korea		Chinese Taipei		Japan			Peru		Ukraine	Total
	EEZ-CHL	FAO87	HS-FAO87	HS-FAO87	FAO87	EEZ-PER	HS-FAO87	FAO87	HS-FAO87	EEZ-Other	FAO87	HS-FAO87	EEZ-PER	HS-FAO87	FAO87	
1978											7					7
1983											1					1
1984											9					9
1985											15 503					15 503
1986											94					94
1988										0		43				43
1989										0		14				14
1990										0		1 605	7 441		142	9 188
1991		445								2 173		50 432	81 655		398	84 721
1992		9 400						1 698		49 313		1 874	106 547		1	168 833
1993		7 442						0		52 221		3 579	140 355			203 597
1994		205						0		81 507		2 698	209 970			294 380
1995								0		36 478		37	109 155			145 670
1996		2						0		557		644	8 138			9 341
1997								0		12 924		297	16 061			29 282
1998		5						0	0	0	0	0	547			552
1999		6						0		6		40	54 652			54 704
2000		9						0		32 174		1 704	53 795			87 682
2001		3 476		17 770		5 797	0	0		71 069		1 132	71 834			171 078
2002		5 589		50 483		13 130	8 629	12 064		26 268		33 978	146 390			296 531
2003		15 191		81 000		1 681	3 041	23 009		22 549		4 510	153 727			304 708
2004		175 134		205 600		2 026	8 761	39 450		22 385		4 615	270 368			728 339
2005		296 953		86 000		2 519	0	15 976				1 633	291 140			694 221
2006		219 800		62 000		2 048	437	18 349				323	434 261			737 218
2007	124 389			46 400		0	0	14 750					427 591			613 130
2008	145 171			79 064		5 971	804	31 161					533 414			795 585
2009	56 337			70 000		7 221	0	12 319								145 877
2010	200 428			142 000		7 764	6 742	29 206				498				386 638
2011	163 450		45	250 000			7 410		35 418							456 323
2012	144 956		9	261 000			8 310		14 177							428 452
2013	105 905		22	264 000			6 034		7 759							383 719
2014	176 569		0	332 523			7 203		4 795				506 000	1 190		1 028 280
2015 (estimates)	143 688			323 636	1 500		4 263		10 072							

Table 1: Annual Catch weights (t) for Jumbo flying squid (GIS) as submitted to the SPRFMO Secretariat. 2015 figures are estimates (if available).