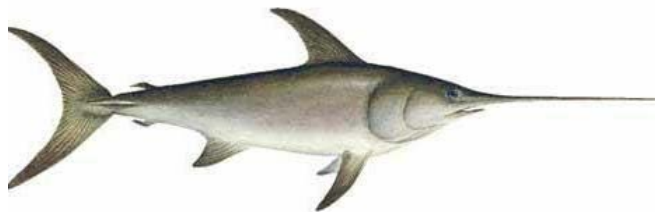




Blue Marlin Catches in the North and South Pacific from WCPFC Data¹

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Abstract

This working paper presents catch summaries and distribution plots of blue marlin in the North Pacific and South Pacific from non-ISC member countries. The data was provided by the WCPFC for longline catches of blue marlin only. The purpose was to provide the ISC Billfish Working Group with billfish catch data not available in the ISC or ISC Working Groups data holdings. This represents the first time this blue marlin catch data has been made available to the ISC for stock assessment purposes.

WCPFC Data Holdings

The Western and Central Pacific Fisheries Commission (WCPFC) was established by the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) in June 2004. The WCPFC has 25 member countries, 7 Participating Territories, and 7 Cooperating Non-Members.

Japan, Chinese Taipei, Korea, and U.S.A. are member countries of both the ISC and the WCPFC. Many other WCPFC member countries fish in the North Pacific but are not members of the ISC.

The WCPFC provided to the ISC Billfish Working Group historical longline catch data for blue marlin (*Makaira nigricans*) in the North and South Pacific. These are presented in Table 1 by country for cumulative catch in metric tons, total years, and catch per year.

For comparison, blue marlin longline catches from the WCPFC database are also presented for ISC countries Japan, Chinese Taipei, Korea, and U.S.A. The total catch of blue marlin for ISC members for all years of the WCPFC longline data is 534,642 metric tons. About 51% of that total is produced by Japan, and about 35% is produced by Chinese Taipei. Japan reported peak catches in 1962 (13,569 mt), 1963 (10,892 mt), and 1964 (9,287 mt), but thereafter catches have declined steadily to less than 3000 mt in 2010. Chinese Taipei catches ranged from 1000 to 7000 mt since 1964, but peaked in 2003 (11,503 mt), 2004 (10,899 mt), and 2005 (8,503 mt).

The total catch of blue marlin for non-ISC members for all years of the WCPFC longline data is 60,401 metric tons. About 34% of that total is produced by Indonesia, and about 32% is produced by China. From 2003-2010 China produced annual catches from 1000-2000 metric tons. Of the 24 WCPFC member countries who caught blue marlin, over 91% of the total catch was made by Indonesia, China, French Polynesia, Philippines, Fiji, Vanuatu, and Federated States of Micronesia.

Distribution of Blue Marlin Longline Catch

Figure 1 displays the distribution of blue marlin longline catches in the North Pacific by ISC and WCPFC member countries (I = ISC, W = WCPFC). Here ISC member countries are Japan, Chinese Taipei, Korea, and USA.

Figure 2 displays the distribution of blue marlin longline catch and effort in the North and South Pacific for USA for all years (1991-2010). Note that the catch totals are in numbers caught, not weight landed; effort is in 1000 hooks.

Figure 3 displays the distribution of blue marlin longline catch and effort in the North and South Pacific for Japan for all years (1950-2010). Note that the catch totals are in numbers caught, not weight landed; effort is in 1000 hooks.

Figure 4 displays the distribution of blue marlin longline catches in the North and South Pacific for Chinese Taipei for all years (1958-2010). Note that the catch totals are in numbers caught, not weight landed; effort is in 1000 hooks.

Figure 5 displays the distribution of blue marlin longline catches in the North and South Pacific for Korea for all years (1963-2010). Note that the catch totals are in numbers caught, not weight landed; effort is in 1000 hooks.

Figure 6 displays the distribution of blue marlin longline catches in the North and South Pacific for China for all years (1990-2010). Note that the catch totals are in numbers caught, not weight landed; effort is in 1000 hooks.

Table 1 – Blue marlin longline cumulative catch (mt) by country from WCPFC database.

ISC Countries	Total Catch (mt)	Total Years	Catch per Year	First Year	Last Year
UNITED STATES OF AMERICA	9,354.00	20	467.70	1991	2010
REPUBLIC OF KOREA	67,451.00	48	1405.20	1963	2010
CHINESE TAIPEI	186,809.00	53	3524.70	1958	2010
JAPAN	271,028.00	61	4443.10	1950	2010
totals	534,642.00	182	9840.70		

WCPFC Countries	Total Catch (mt)	Total Years	Catch per Year	First Year	Last Year
NAURU	0.00	5	0.00	2000	2004
PALAU	0.00	9	0.00	1992	2004
NEW ZEALAND	2.00	24	0.08	1987	2010
KIRIBATI	6.00	7	0.86	1995	2010
SENEGAL	7.00	3	2.33	2005	2007
NIUE	16.00	6	2.67	2005	2010
BELIZE	118.00	16	7.38	1995	2010
SPAIN	177.00	7	25.29	2004	2010
MARSHALL ISLANDS	182.00	9	20.22	1992	2010
VIETNAM	230.00	1	230.00	2010	2010
TONGA	354.00	29	12.21	1982	2010
COOK ISLANDS	466.00	13	35.85	1994	2010
SAMOA (WESTERN)	481.00	18	26.72	1993	2010
AUSTRALIA	652.00	26	25.08	1985	2010
NEW CALEDONIA	667.00	28	23.82	1983	2010
SOLOMON ISLANDS	876.00	23	38.09	1973	2010
PAPUAL NEW GUINEA	968.00	18	53.78	1993	2010
FEDERATED STATES OF MICRONESIA	1,288.00	20	64.40	1991	2010
VANUATU	1,936.00	14	138.29	1995	2010
FJIJ	3,362.00	22	152.82	1989	2010
PHILIPPINES	3,904.00	41	95.22	1970	2010
FRENCH POLYNESIA	5,372.00	21	255.81	1990	2010
CHINA	19,065.00	21	907.90	1990	2010
INDONESIA	20,272.00	33	614.30	1978	2010
totals	60,401.00	414	2733.10		

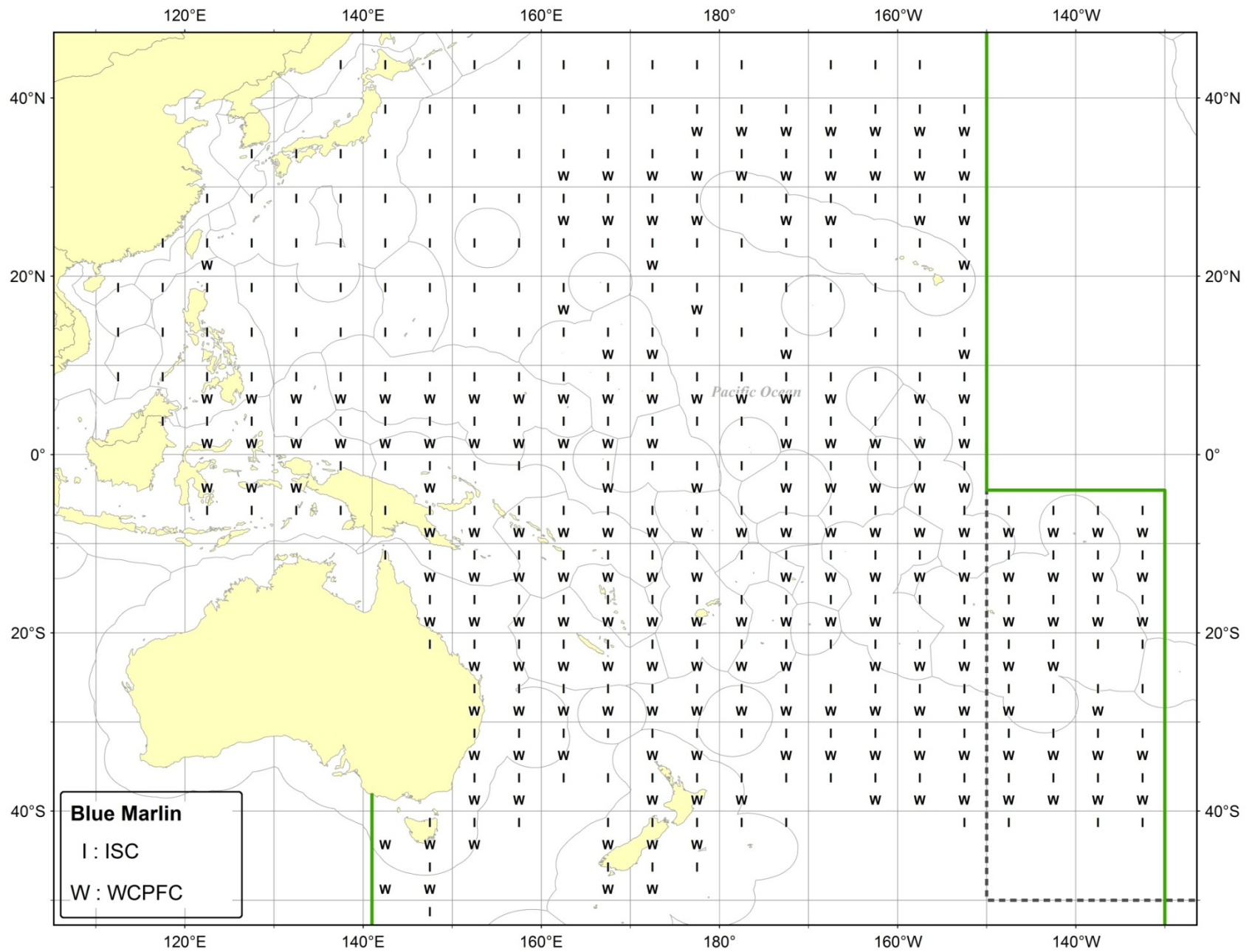


Figure 1

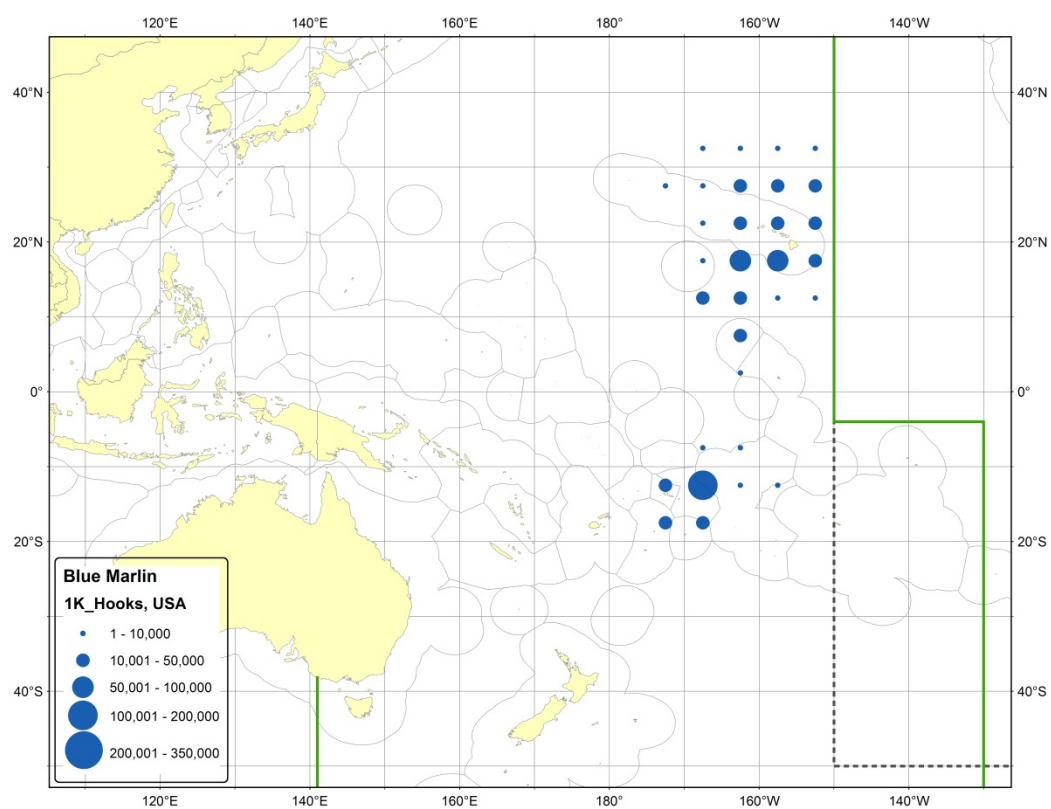
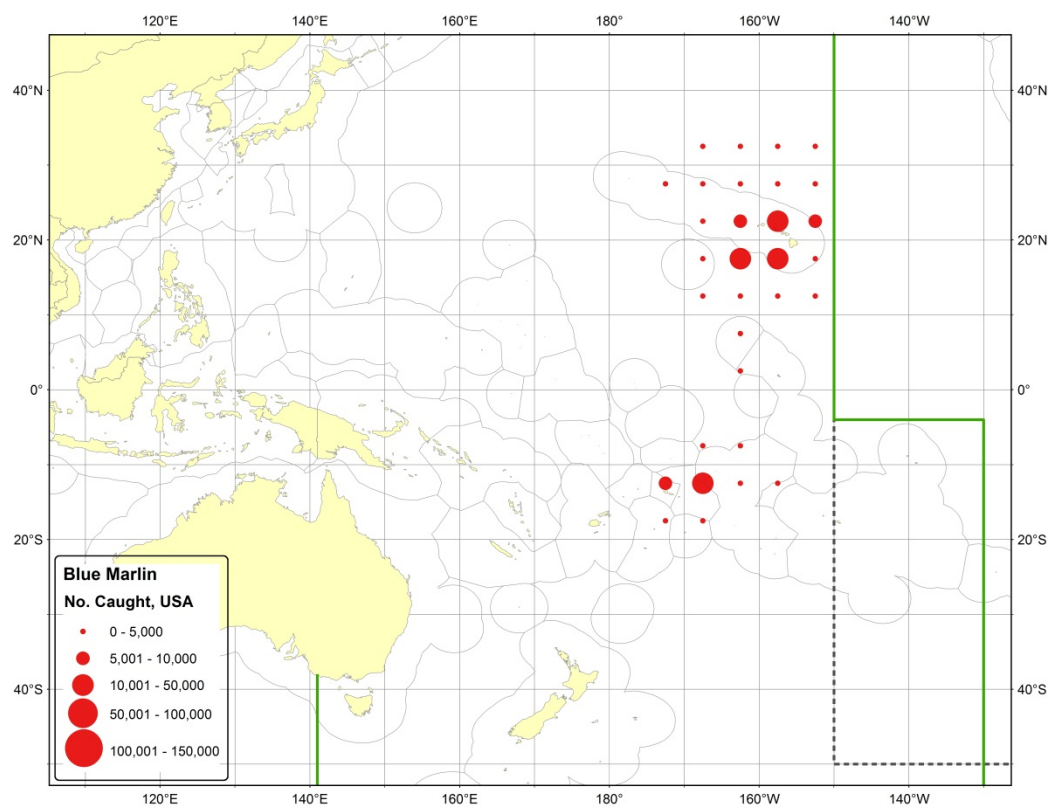


Figure 2. USA

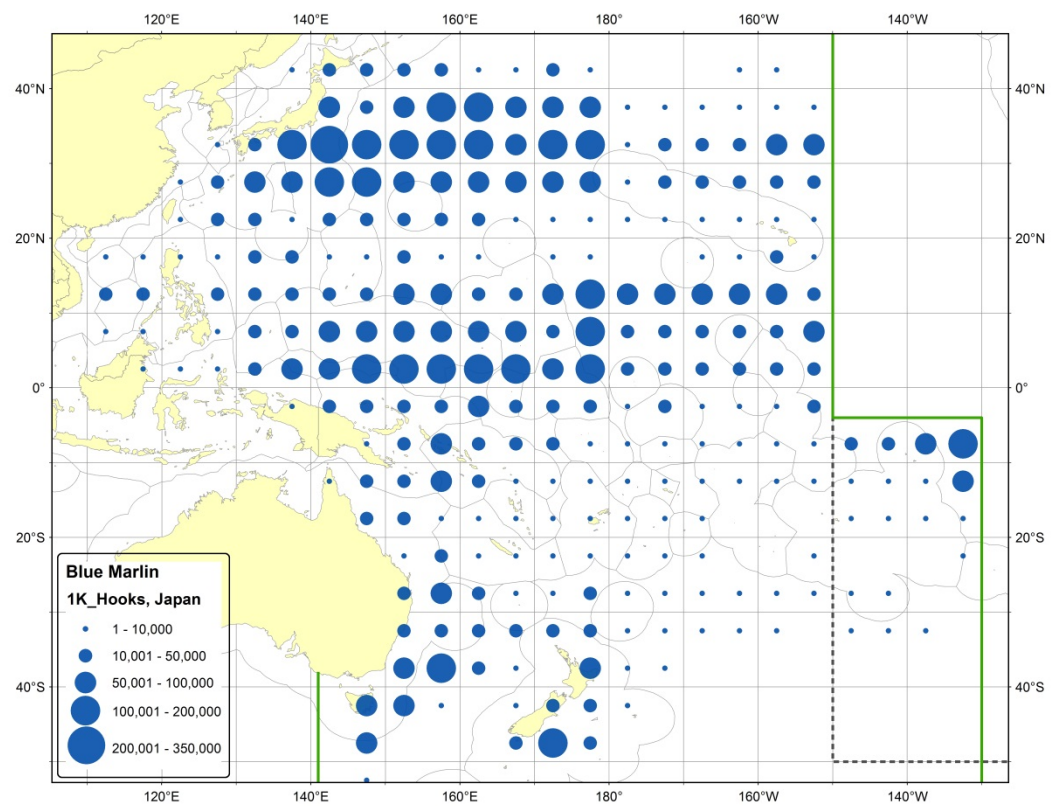
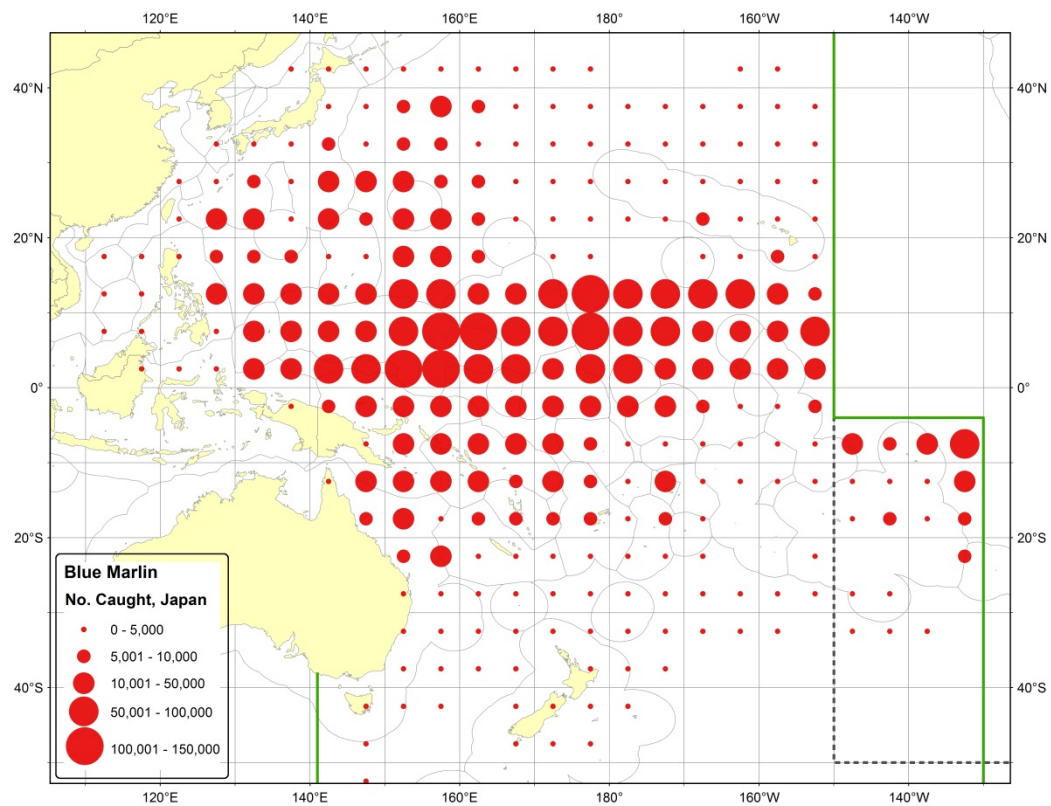


Figure 3. Japan

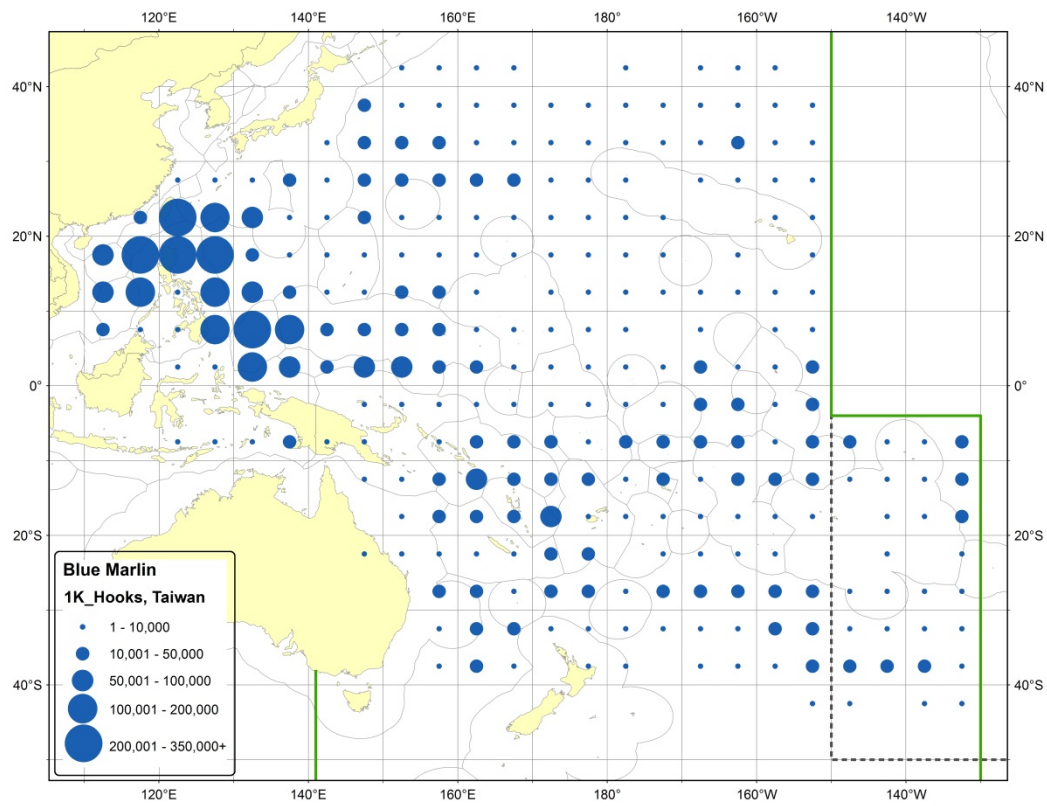
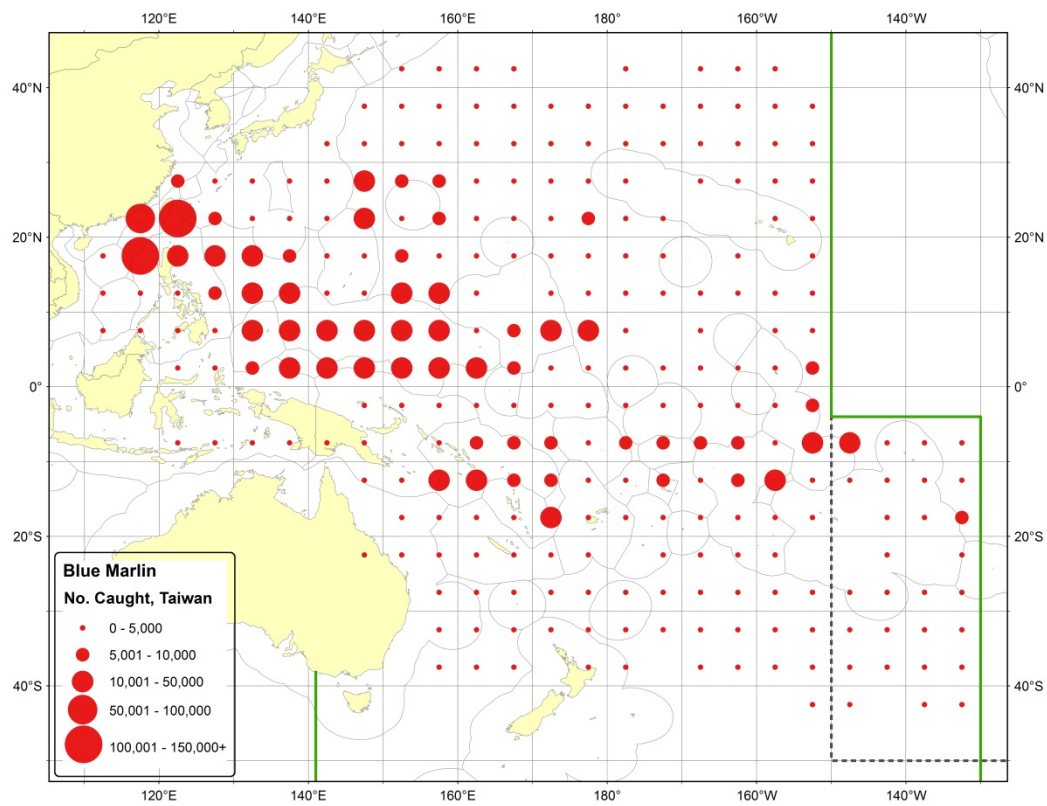


Figure 4. Chinese Taipei

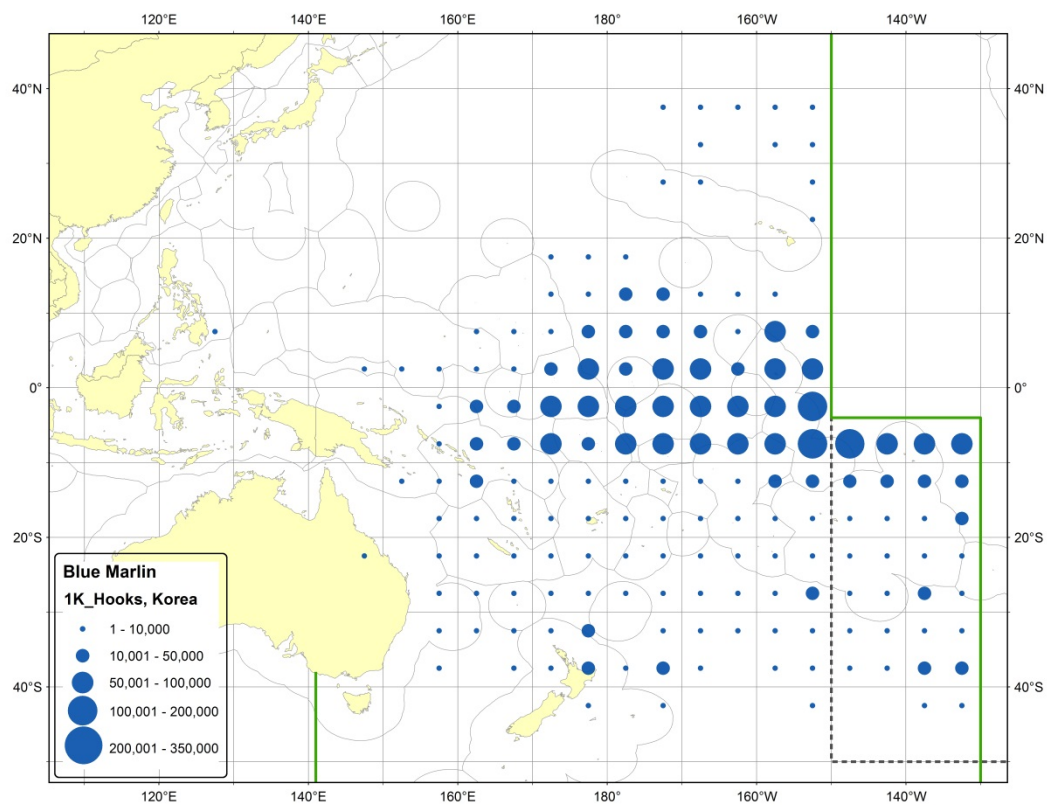
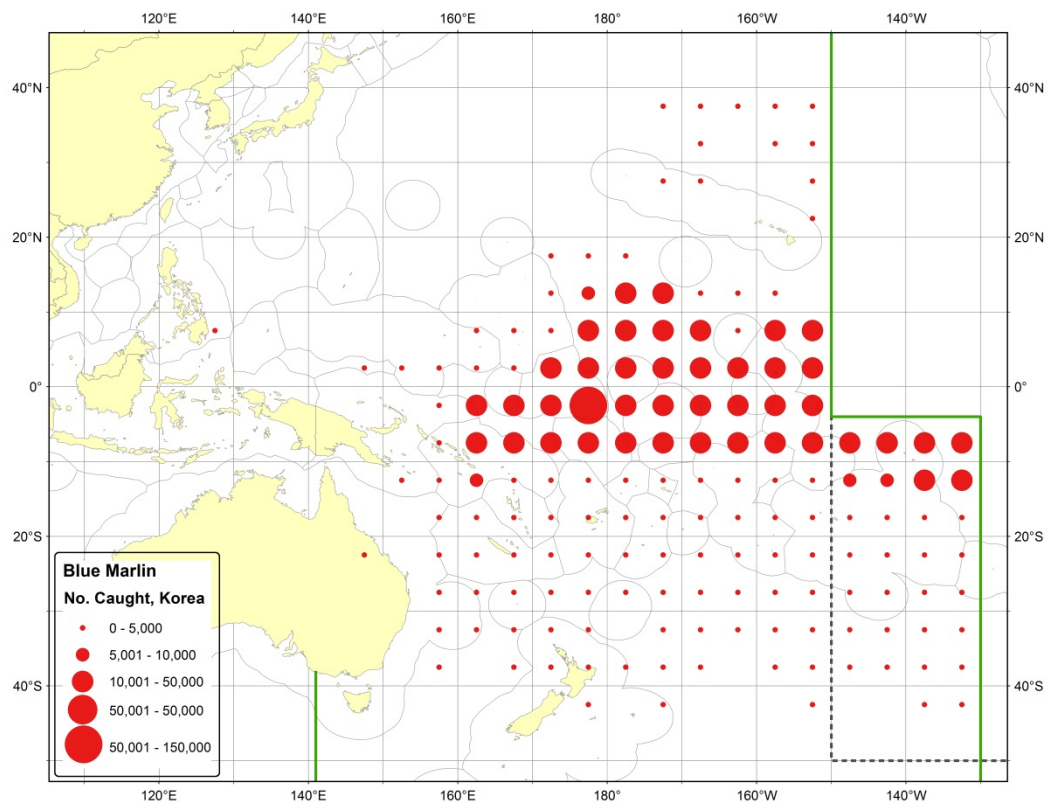


Figure 5. Korea

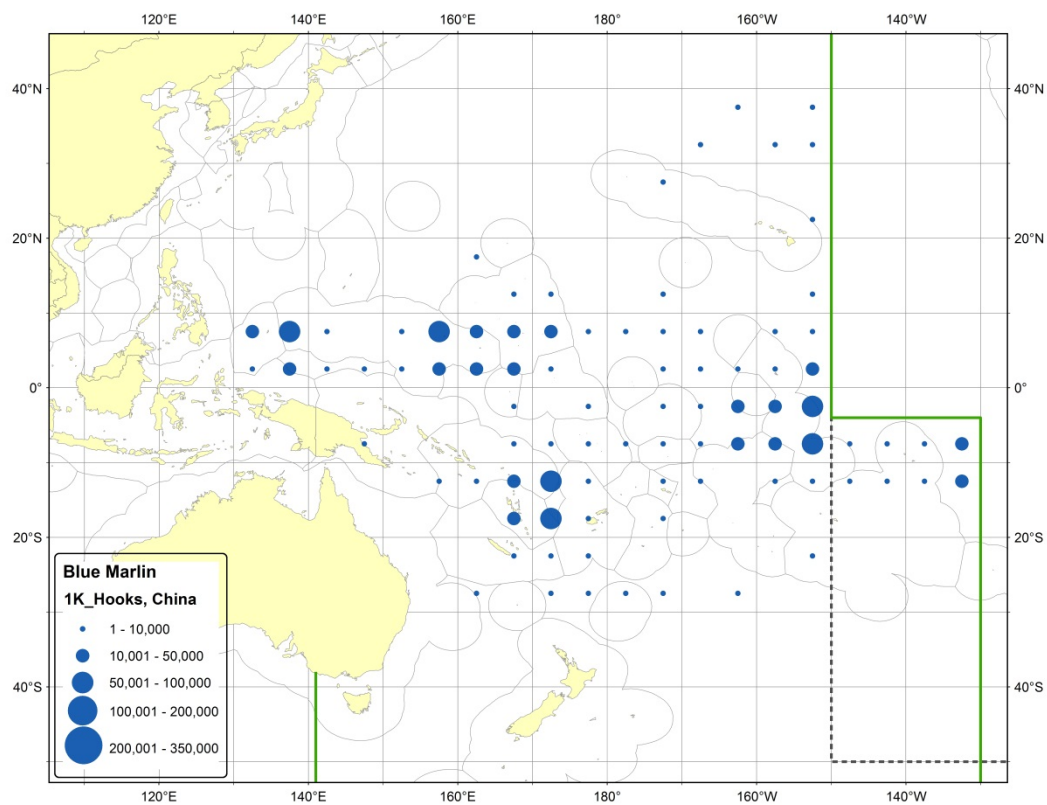
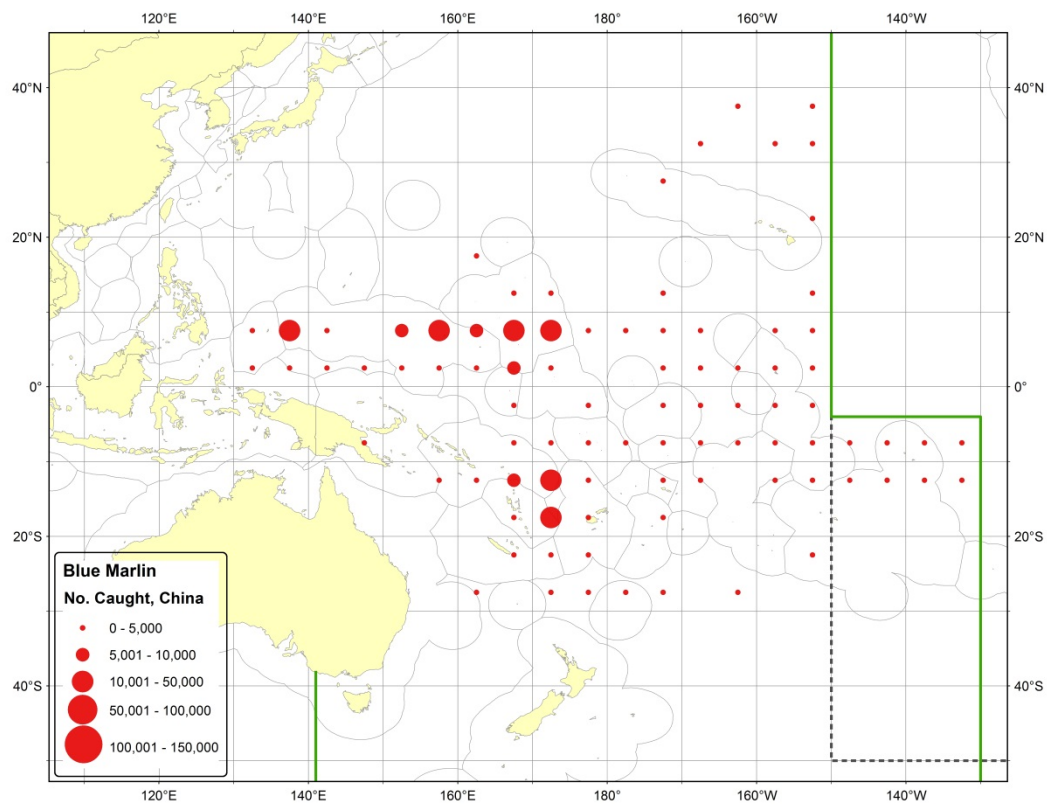


Figure 6. China