



**SCIENTIFIC COMMITTEE
SIXTEENTH REGULAR SESSION**

ELECTRONIC MEETING
11-20 August 2020

**ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

WCPFC-SC16-AR/CCM-03 (Rev.01)

CHINA



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Annual Report to the Commission

Part 1: Information on Fisheries, Research and Statistics

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Part 1: Information on Fisheries, Research and Statistics

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Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2020
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YES

Summary

There are two types of tuna fisheries in the WCPFC Convention Areas: longline and purse seine fisheries. In 2019, 364 longliners and 15 purse seiners flying the Chinese flag (including 14 chartered and 1 unchartered vessels) operated in the WCPFC Convention Areas. The total catch of tuna and tuna-like species by longline fishery and purse seine fishery was estimated to be 45,292 MT and 6,518 MT (only for unchartered vessel), respectively. The catch of bigeye tuna, yellowfin tuna, and albacore by the longline fishery was 8,644 MT, 10,010 MT and 22,679 MT, respectively. The catch of skipjack, yellowfin tuna and bigeye tuna by the purse seine fishery were estimated 6,193 MT, 297 MT and 28 MT, respectively. Catch by Chinese deep-frozen longline fishery for bigeye is exported to Japan for sashimi and catch by fresh-tuna longline for albacore is sold for cannery products. Catch by the purse seine fishery for skipjack is also sold for cannery products. From January 2019 to March 2020, thirty-nine (39) scientific observers were trained and dispatched to the Chinese longline vessels in the Pacific Ocean. Fisheries and biological data were collected during the observer trips. Data coverage for catch and effort was 100%. The logbook coverage for the longline fishery has been improved, which greatly improves the quality of the data China has collected.

1. Introduction

China began to develop its oceanic tuna fisheries in 1988 in the Pacific Ocean and this region is one of the earliest fishing grounds for China tuna fishery. There are currently two types of tuna fisheries in the WCPFC Convention area: longline (LL) fishery and purse seine (PS) fishery. The catch of four main tuna species (skipjack, yellowfin tuna, bigeye tuna and albacore) by China in 2004 was 40,165 MT. Catch of the four species hit a historical record of 112,260 MT in 2009, but decreased to 81,938 MT in 2010. It should be noted that above-mentioned catch does not include the catch from overlapping areas (S04- S40, W130-W150). Catch of the four species was 91,302 MT in 2012 (including the catch from overlapping areas), which sharply decreased comparing to 2011. In 2019, the catch of the four species rebounded to 51,810 MT in the WCPFC Convention Areas.

2. Fleet structure

2.1 LL

All the Chinese LL vessels operated on the high seas and EEZs of Pacific Islands Countries (PIC). The number of LL fishing vessels has shown an increase trend since 2000. Table 1A shows the number of Chinese LL vessels operating in the WCPFC Convention Area in 2015-2019. The number of LL vessels was 448 in 2015, 418 in 2016, 362 in 2017, 364 in 2018 and 364 in 2019.

Size of the LL vessels ranged from 190 GT to 634 GT. There are three types of tuna longline vessels, namely frozen LL target albacore (FLL), deep frozen LL target tropical tuna (DFLL) and ice fresh LL vessel target tropical tuna (IFLL). Table 1B shows the China LL vessels information in convention area in 2019. The number of FLL, IFLL and DFLL vessel was 272, 21 and 71 respectively in 2019.

Most of the DFLL and FLL vessels operated on the high seas and the EEZs of PIC. The IFLL vessels mainly operated in the EEZs of PIC, especially of Solomon Islands, Marshall Islands etc.

2.2 PS

Chinese fleet entered the WCPFC tropical purse seine fishery in 2001, and it has become very important for the China tuna fishery. The number of PS vessels maintained in a steady level of 12-14 during 2009-2013. Several old purse seine vessels have been replaced by newly built vessels in the recent years. In 2019 there are 15 purse seiners flagged China fishing in the WCPFC Convention area. Table 1 shows the number of Chinese PS vessels operating in the WCPFC Convention area in 2015-2019.

3. Catch by species and fishery

3.1 LL

The total catch by Chinese LL in the WCPFC Convention area from 2015 to 2019 was shown in Table 2. The total catch of tuna and tuna-like species in the longline fishery was 45,291 MT in 2019. The catch mainly consists of ALB, BET and YFT. In 2019, the percentages of ALB, BET and YFT by LL were 50.1%, 19.1% and 22.1%, respectively.

Table 3 shows the catch of non-target species caught by Chinese LL in the WCPFC Convention Area from 2015 to 2019, mainly including three billfishes species (striped marlin, blue marlin, and black marlin) and two shark species (blue shark and shortfin mako).

3.2 PS

The total catch by Chinese PS (for one chartered vessel) in the WCPFC Convention area from 2015 to 2019 was shown in Table 2. The catch was 53,716 MT in 2010, increased to 77,551 MT in 2011, then sharply decreased to 49,148 MT in 2012. In 2019, the main catch species by the PS fishery were skipjack, yellowfin, and bigeye tuna. The catch of bigeye tuna (mainly juveniles) was estimated to 28 MT. The catch of yellowfin tuna was estimated to 297 MT. The catch of skipjack was estimated to 6,193 MT. The catch for the Chinese purse seine fleet are excluded those from the

chartered vessels during the chartered period. The total catch of Chinese PS fleets in 2019 (6,518 MT) increased by 2.3 times compared to the catch in 2018 (1,973 MT). Same as 2018, fourteen of the fifteen purse seiners flagged China were chartered to Pacific Islands countries in 2019. The chartering CCMs are responsible for reporting the catches for the fourteen fishing vessels.

4. Disposal of Catch

Bigeye tuna and yellowfin tuna caught by longline vessels operating in the Exclusive Economic Zone (EEZ) of Pacific Island Countries and on the high seas were exported to Japan sashimi market. Other species caught as by-catch are sold to local market of operating ports. Albacore catch was landed at Fiji for cannery. Catch in the PS fishery was mostly transshipped to Thailand for cannery as well.

5. Research and Statistics

5.1 Observer programme

In order to have a high standard of scientific observer program, scientific observers are rigorously trained for collecting the fishery data of tunas and other pelagic fish stocks, including size-frequency data of all pelagic fishes as well as sea turtle information. Six (6) observers were sent to the Chinese longline vessels on the high seas in 2011, and then eight (8) observers in 2012, nine (9) observers in 2013, six (6) in 2014, eight (8) in 2015, fifteen (15) in 2016, twenty-seven (27) in 2017 and twenty-two (22) in 2018. During 2019, thirty-nine (39) scientific observers were dispatched for the Pacific Ocean (Figure 1). Table 4 presents observer trip information on areas, time periods, total hooks and hooks per basket etc. Table 5 shows the observer coverage information.

5.2 Data collection system

The Ministry of Agriculture and Rural Affairs (MARA) of China, is leading and supervising the data collection of Chinese tuna fisheries. National-wide meetings on tuna data quality have been organized at least once a year in recent years. Participants included managers of tuna fishing companies and tuna-related fishery enterprises. Each vessel of every company engaged in tuna fishing is required to report fishery data (such as catch and effort by species, month, gear, area etc.) to China Overseas Fisheries Association (COFA). Data coverage of catch and effort is 100%. COFA and Shanghai Ocean University (SHOU) host and maintain the fishery and observer database for the tuna fisheries of China

Since 2008, each LL vessel is required by the Bureau of Fisheries (BOF) to use standard logbook which is modified frequently according to the latest applicable CMMs, and return it back to SHOU before the end of March the following year. The

data containing in the logbook are evaluated and audited to ensure the good quality for the data collected.

Another important way to collect size data is port sampling. Port-sampling program conducted in domestic ports aims at collecting length data of tunas and other species. Measurement is done when unloading from fishing vessels or in the processing plants.

6 Implementation of Conservation and Management Measures

6.1 CMM 2019-03

In accordance with CMM 2019-03, all CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore.

In 2019, the total catch of north Pacific albacore by the Chinese fishing fleet was 929.1 MT in the north Convention area, and 10 vessels (1249 vessel days) targeted at albacore in the North Pacific Ocean. Fishing effort in fishing days for North Pacific albacore was shown in Table 6.

6.2 CMM 2006-04

In accordance with CMM 2006-04, CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken striped marlin as bycatch as well as the number and catch levels of vessels fishing for striped marlin in the Convention Area south of 15 °S.

The bycatch of striped marlin in the Convention area south of 15 °S in 2019 is 66 MT. None of China's fishing vessels targets at striped marlin.

6.3 CMM 2009-03

In accordance with CMM 2009-03, the number of the fishing vessels for swordfish in the Convention Area south of 20 °S was limited to the number in any year during 2000-2005, and the catch of swordfish caught in the Convention Area south of 20 °S is limited to the amount caught in any year during the period 2000-2006.

China has no vessels targeting swordfish. The total catch on the stock south of 20 °S in 2019 in the Convention Area was 42.8 MT, which was reported to the Commission by April 30 2019.

6.4 CMM 2009-06

In accordance with CMM 2009-06, CCMs shall report on all transshipment activities (including transshipment activities that occur in ports or EEZs) in Part 1 of its Annual Report. The summary information of transshipment activities of our fishing fleets in 2019 was shown in Table 7.

6.5 CMM 2010-07

In accordance with CMM 2010-07, each CCM shall include key shark species, as identified by the Scientific Committee, in their annual reporting to the Commission of annual catch and fishing effort statistics by gear type, including available historical data, in accordance with the WCPF Convention and agreed reporting procedures.

Shark is one of the bycatch species for the longline fishing by Chinese vessel. Official document on tuna fishery was issued and distributed to each tuna fishing company every year by the MARA, where detailed requirements are clearly specified to the vessel owner. Such requirements include, for example, VMS, data collecting and reporting, observer, statistical document, seabird and sea turtle mitigation, and bycatch such as shark. In the Notification by General Office of MARA on Further Strictly Comply with International Tuna Measures issued on 7 January 2019, it requires that: (1) All tuna enterprises and fishing vessels shall, to the greatest possible, avoid or reduce catching sharks. Except the no retention shark species, fishing vessels fish for tunas shall fully utilize harvested sharks (i.e. keeping shark carcass and fin, excepting head, guts, and skins). The weight of shark fin on board shall not be over 5% of the weight of sharks on board up to the first point of landing. Fishing vessels are encouraged to take measures including shark fin and shark carcass naturally attached, fin and carcass binding together or using corresponding labels. (2) It shall prohibit retaining on board, transshipping and landing the following shark species: whitetip sharks and silky sharks in WCPFC Area. If fishing vessels caught the above shark species incidentally, the sharks shall be immediately released without further harm under the precondition of ensuring the safety of crew, and to record the details in the fishing log books accurately (with indication of status when releasing: dead/alive). (3) Prohibition of using “shark lines”: longline vessels operating in the Pacific Ocean shall be prohibited using “shark lines” (individual lines attached to the float line or to the floats directly, and used to target sharks).

Each tuna longline vessel, no matter of its fishing ground, is required to precisely record the shark as bycatch in the logbook. More than 20 species, including 9 shark species, are required to be recorded in the logbook. Failure to record accurately will lead to sanctions by the government, as China implements performance review on each fishing company on an annual basis. Pictures of major shark species are printed in the logbook to assist the fishermen to easily identify the shark caught in fishing operations.

Bycatch data, including those for shark, are collected on a monthly basis, though sometimes need to be verified, by the China Overseas Fisheries Association. Such data, together with other data on tuna species, are forwarded to the Consultant Team at Shanghai Ocean University for an evaluation of their quality. Fishing companies that fail to report accurate/reasonable data are reported to the fisheries authority of China by the Team for questioning and possible penalty, including suspension of fishing permits of the vessel in question.

Shark data are reported to the Commission before the deadline of data submission. In 2019, only two shark species were retained as bycatch in WCPFC by Chinese fishing fleet, most of which are blue sharks which constitutes almost 93% of the total retained bycatch of shark.

6.6 CMM 2011-03 and CMM 2012-04

In accordance with CMM 2011-03 and CMM 2012-04, CCMs shall advise in their Part 1 Annual Report of any instances in which cetaceans, mantas and ray whale sharks have been encircled by the purse seine nets of their flagged vessels, respectively.

In 2019, 30 events about cetaceans encircled by the purse seine nets reported to our official authority and eight vessels involved were XIN SHI JI 111, XIN SHI JI 112, XIANG FA 8, SHUN FA 8, JIN HUI 6, JIN HUI 8, JIN HUI 9, and JINHUI 18.

In 2019, 14 events about mantas and rays encircled by the purse seine nets reported to our official authority and vessel involved was only JIN HUI 8.

In 2019, 26 events about whale sharks encircled by the purse seine nets reported to our official authority and seven vessels involved were XIN SHI JI 111, XIN SHI JI 112, SHUN FA 8, JIN HUI 6, JIN HUI 7, JIN HUI 8 and JIN HUI 58.

The detailed event record regarding the two issues mentioned above can be found in the attachment Table 8a and 8b as well as Table 9.

6.7 CMM 2011-04

In accordance with CMM 2011-04, each CCM shall estimate, through data collected from observer programs and other means, the number of releases of oceanic whitetip shark, including the status upon release (dead or alive), and report this information to the WCPFC in Part 1 of their Annual Reports.

In 2019, our observers from longliners recorded 65 dead, 249 alive oceanic whitetip sharks in the WCPFC Convention Area, and we used this information to estimate the status of released oceanic whitetip shark captured by our entire longline fleets which was 1620 (335 dead, 1285 alive).

In 2019, 58 events about oceanic whitetip shark encircled by the Chinese purse seine fleets reported to our official authority, the detailed event record can be found in the attachment Table 10.

6.8 CMM 2018-03

In accordance with CMM 2018-03, CCMs shall annually provide to the Commission, in part 1 of their annual reports, all available information on interactions with seabirds

reported or collected by observers, including mitigation used, observed and reported species specific seabird bycatch rates and numbers, to enable the Scientific Committee to estimate seabird mortality in all fisheries to which the WCPFC Convention applies.

The fisheries authority of China required fishing vessels to take appropriate measures to mitigate incidental catch of seabirds, although China fishing vessels almost operate in the areas between 23 °N and 30 °S.

On May 29 of 2019, China Overseas Fisheries Association organized a training meeting on the bycatch mitigation of seabirds and sharks in Shenyang, Liaoning Province, China. Mitigation method was emphasized by experts from SHOU for the industry people, managers, and stakeholders. The information regarding interactions with seabirds reported by observers was shown in Table 11-13.

6.9 CMM 2013-08

In accordance with CMM 2013-08, CCMs shall estimate, through data collected from observer programs and other means, the number of releases of silky shark caught in the Convention Area, including the status upon release (dead or alive), and report this information to the WCPFC in Part 1 of their Annual Reports.

In 2019, there were 674 dead, 1810 alive of silky sharks recorded in our longline observer data in the WCPFC Convention Area. We estimated that there were 3623 (983 dead, 2640 alive) for the entire longline fleet based on the information by our observer data. All the alive silky sharks were released and the dead ones were discarded.

In 2019, 928 events about silky shark encircled by the Chinese purse seine fleets reported to our official authority, the detailed event record can be found in the attachment Table 14.

6.10 CMM 2015-02

In accordance with CMM 2015-02, CCMs shall report annually to the Commission the annual catch levels taken by each of their fishing vessels that has taken South Pacific albacore, as well as the number of vessels actively fishing for South Pacific albacore, in the Convention area south of 20 °S.

The catch of South Pacific albacore in the convention area south of 20 °S in 2019 by China fishery fleet was 4463.9 MT. There were 34 vessels actively fishing on the high sea and overlapping areas and 47 vessels actively fishing in the EEZ with fishing license of coastal states, in the Convention area south of 20 °S.

6.11 CMM 2010-10

According to the CMM 2010-10, Para 5c of the Measure stipulates that: 2013 and beyond: [20%] reduction of the highest catch between 2000 and 2003. Measures taken by China on the stock include:

- (1) the fisheries authority of China made an arrangement to observe the catch limit as decided by the CMM, and accordingly, we set catch limit of 137.6 MT in 2014;
- (2) the stock is included in the logbook for China longline fishery, and vessel master has to record the catch in the logbook correctly;
- (3) catch data by longline vessel are submitted to the fishery authority on a monthly basis;
- (4) fishing gear modification: vessels operating in the area applicable to the Measure are encouraged to use monofilament instead of wire leader to reduce the catch of such stock; and
- (5) vessels are encouraged not to operate in fishing grounds where a large amount of such stock may be harvested.

The catch by China for North Striped Marlin in the area applicable to the CMM is 55.4 MT in 2019. None of our fishing vessel targets for striped marlin.

6.12 Sea turtle information

For the longline fishing by Chinese vessel, sea turtle is one of the by-catch species that have to be accurately recorded in the logbook. The fisheries authority of China officially issued Logbook for Tuna Fisheries in 2008, and each tuna longline vessel, no matter of its fishing ground, is required to precisely record the sea turtle bycatch. Failure to doing so will lead to sanctions by the government, as China implements performance review on each fishing company on annual basis.

Booklets/posters on some sea turtles are printed and distributed to each longline vessel. Mitigation devices, such as de-hookers and cutters, and user manual are provided to each longline vessel since September 2009 free of charge by China Overseas Fisheries Association. All the devices were dispatched to all the longline vessels, including those operating in WCPFC area. Fishing companies are trained on proper treatment, including safe release, on sea turtle.

For purse seine fishery, there are thirty-one reports related to sea turtles to our official authority in 2019 and the detailed event record can be found in the attachment Table 15. Eighty-eight sea turtles (35 olive ridley turtles, 11 leatherback turtles, 1 hawksbill turtle, 32 green turtles, 7 loggerhead turtles and 2 unidentified individuals) were captured by China longline vessels according to the report of observers in 2019, and the specific information was reported in the China observer report.

Table 1A Number of Chinese tuna fishing vessels operating in the WCPFC Convention area in 2015-2019

Year	LL	PS	Total
2015	448	20	468
2016	418	16	434
2017	362	16	378
2018	364	15	379
2019	364	15	379

Note: Both LL vessels and PS vessels include chartered vessels

Table 1B China LL vessels operation in Convention Area in 2019

Metric Tons	Frozen LL target Albacore	Deep Frozen LL target tropical tuna	Ice Fresh LL vessel target Tropical Tuna
0-50	0	0	0
50-200	61	0	21
200-500	206	9	0
500	5	62	0
Total	272	71	21

Table 2 Nominal catch of tuna and tuna-like species by the Chinese tuna fishery in the WCPFC Convention area in 2015-2019

(Unit of catch: MT in round weight)

Year	Gear	ALB	BET	YFT	SKJ	SWO	BIL	OTH	Total
2015	LL	15122	8210	6226	0	2364	2268	935	35125
	PS	0	307	6969	35960	0	0	0	43236
	Total	15122	8517	13194	35960	2364	2268	935	78361
2016	LL	16175	8195	6559	0	1806	2095	895	35725
	PS	0	325	3805	13292	0	0	0	17422
	Total	16175	8520	10364	13292	1806	2095	895	53147
2017	LL	29252	7023	8526	0	1656	1714	614	48785
	PS	0	326	4254	10895	0	0	0	15475
	Total	29252	7349	12780	10895	1656	1714	614	64260
2018	LL	21295	8695	9031	0	2567	2024	682	44294
	PS	0	26	172	1775	0	0	0	1973
	Total	21295	8721	9203	1775	2567	2024	682	46267
2019	LL	22679	8644	10010	0	1571	1576	811	45291
	PS	0	28	297	6193	0	0	0	6518
	Total	22679	8672	10307	6193	1571	1576	811	51809

Note: BIL includes striped marlin, blue marlin and black marlin; OTH includes sharks and other species.

Table 3 Catch of non-target species by the Chinese LL tuna fishery in the WCPFC Convention Area from 2015 to 2019 (Unit of catch: MT)

Species	Billfish			Sharks		
	Striped marlin	Blue marlin	Black marlin	Blue shark	Shortfin mako	Oceanic Whitetip
2015	194	2025	49	372	50	33
2016	128	1892	75	261	23	/
2017	124	1571	19	/	/	/
2018	277	1724	23	/	/	/
2019	190	1375	11	/	/	/

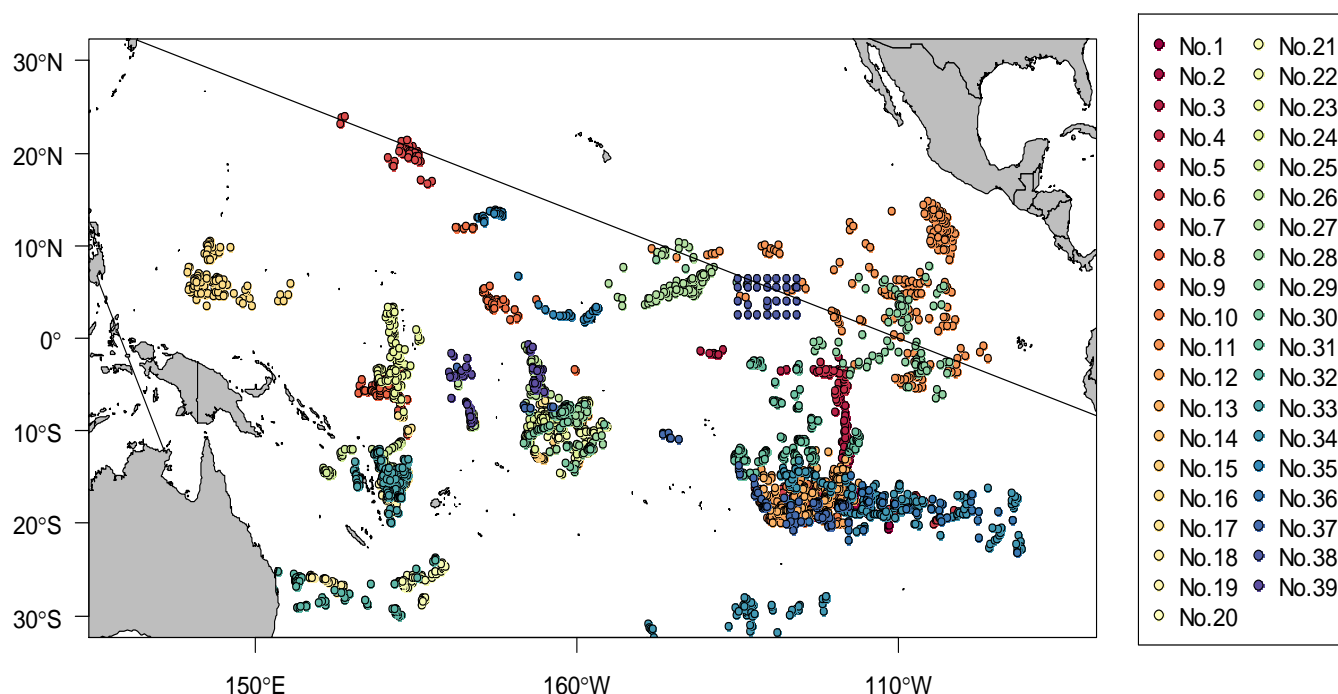


Figure 1 Position of Chinese scientific observer trip during 2019 in Pacific

Table 4 Trip information of Chinese scientific observer deployed in the Pacific Ocean during 2019

Trip	Fishing areas	Period	Set	Fishing days	Total hooks	HPB	Type
NO.1	S20°40'-S14°55', W130°8'-W111°30'	Jan.01, 2019-Mar.18, 2019	56	56	224028	28	F
NO.2	S5°40'-S14°17', W119°25'-W117°15'	Jan.01, 2019-Feb.03, 2019	26	26	71955	17	D
NO.3	S2°11'-S13°43', W141°9'-W119°05'	Jan.01, 2019-Mar.08, 2019	39	39	108919	17	D
NO.4	S3°30'-S7°20', W123°48'-W119°24'	Jan.01, 2019-Mar.21, 2019	29	29	93860	19	D
NO.5	S15°42'-S20°6', W132°24'-W101°0'	Jan.01, 2019-Mar.22, 2019	56	56	231068	27	F

NO.6	N16°42'-N23°56', E163°14'-E177°24'	Jan.01, 2019-Feb.28, 2019	37	37	140743	25	F
NO.7	S03°25'-S14°35', E166°09'-E173°36'	Jan.01, 2019-Apr.20, 2019	57	57	153552	28	F
NO.8	S3°35'-S15°11', E166°03'-E173°30'	Jan.01, 2019-Mar.15, 2019	55	55	151840	28	F
NO.9	N12°05'-S4°35', W178°57'-W160°13'	Jan.01, 2019-Apr.01, 2019	56	56	233877	21	D
NO.10	S13°36'-S20°16', W117°44'-W132°20'	Jun.15, 2019-Mar.18, 2020	150	150	645219	27	F
NO.11	N14°49'-S05°25', W148°29'-W96°08'	May 13, 2018-Jun.16, 2019	223	223	469112	14	F
NO.12	S13°51'-S20°21', W117°01'-W131°55'	Jun.14, 2019-Mar.18, 2020	162	162	658904	26	F
NO.13	S13°41'-S20°50', W117°41'-W132°54'	Jun.13, 2019-Mar.18, 2020	153	153	647302	27	F
NO.14	S7°32'-S14°17', W156°02'-W167°48'	Aug.18, 2019-Nov.09, 2019	56	56	197025	25	F
NO.15	S8°33'-S13°4', W159°31'-W166°46'	Aug.18, 2019-Oct.27, 2019	51	51	218280	28	F
NO.16	N3°28'-N10°33', E139°29'-E155°30'	Aug.17, 2019-Jan.18, 2020	112	112	385077	26	F
NO.17	S6°46'-S15°25', E172°10'-W165°0'	Apr.24, 2019-Jul.13, 2019	33	33	128639	31	F
NO.18	S25°35'-S27°30', E158°29'-E163°39'	Jul.13, 2019-Oct.21, 2019	53	53	205158	31	F
NO.19	S13°58'-S19°14', E169°07'-E173°01'	Jul.15, 2019-Dec.22, 2019	85	85	295600	31	F
NO.20	S07°51'-S12°56', W159°51'-W168°12'	Jul.12, 2019-Oct.18, 2019	81	81	321832	28	F
NO.21	S14°13'-S28°52', E171°29'-E179°34'	Aug.14, 2019-Jan.29, 2020	115	115	385270	26	F
NO.22	S6°42'-S14°38', W155°20'-W 166°43'	Jun.07, 2019-Oct.20, 2019	108	108	352640	26	F
NO.23	N3°22'-S7°55', E168°53'-E175°35'	Jul.01, 2019-Jan.07, 2020	93	93	268492	28	F
NO.24	S8°06'-S12°33', W159°52'-W167°55'	Jul.15, 2019-Nov.02, 2019	95	95	396719	29	F
NO.25	S11°S14°, E160°E173°	Aug.12, 2019-Oct.23, 2019	73	73	192416	28	F
NO.26	S00°45'-S09°30', W162°54'-W178°57'	Aug.21, 2019-Dec.22, 2019	72	72	246808	26	F
NO.27	N3°29'-N10°25', W138°46'-W155°04'	Aug.18, 2019-Jan.15, 2020	100	100	371250	27	F
NO.28	S7°13'-S14°28', W156°02'-W167°48'	Aug.26, 2019-Nov.09, 2019	56	56	202300	25	F
NO.29	N08°31'-S06°27', W102°11'-W147°47'	Aug.13, 2019-Mar.01, 2020	97	97	202524	14	F
NO.30	S7°8'-S14°8', W155°54'-W168°24'	Aug.14, 2019-Nov.08, 2019	69	69	279450	27	F
NO.31	S02°24'-S14°49', W116°08'-W135°33'	Jul.06, 2019-Mar.20, 2020	191	191	479360	16	D
NO.32	S23°42'-S29°59', E151°33'-E178°00'	Apr.01, 2019-Oct.02, 2019	132	132	471983	23	D
NO.33	S13°11'-S20°13', E165°16'-E173°43'	May 27, 2019-Jan.31, 2020	174	174	727170	30	F
NO.34	S13°15'-S33°42', W149°10'-W90°56'	Apr.02, 2019-Mar.20, 2020	266	266	1074228	27	F
NO.35	N13°52'-S10°11', W175°30'-W125°25'	Jul.24, 2019-Mar.12, 2020	167	167	670890	19	D
NO.36	S14°53'-S23°14', W123°58'-W91°35'	Aug.10, 2019-Jan.11, 2020	99	99	351000	24	F
NO.37	S3°06'-S20°42', W178°40'-W117°45'	Jul.19, 2019-Jan.22, 2020	104	104	340473	23	F
NO.38	N2°30'-N6°32', W135°05'-W126°00'	Nov.07, 2019-Jan.30, 2020	29	29	95950	19	D
NO.39	S0°40'-S9°12', W179°58'-W165°13'	Sept.08, 2019-Jan.27, 2020	67	67	203056	26	F

Note: HPB-Hook Per Basket. D- deep frozen tuna longline; F-frozen tuna longline

Table 5 Summary of longline observer coverage (by days fished) for 2019

CCM fleet	Fishery	Days fished			No. of hooks			days at sea			No. of trips		
		Total est.	Obs.	%	Total est.	Obs.	%	Total est.	Obs.	%	Total est.	Obs.	%
China	Distant-water	56261	3677	6.50									

Table 6 Average annual fishing effort for 2002-2004 and annual fishing effort for longline from 2015 to 2019 directed at North Pacific albacore. That was required by CMM 2019-03, Para 3

CCM	Area	Fishery	2002-04 Average		2015		2016		2017		2018		2019	
			No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days
China	N Pacific	LL	10	1,250	10	900	10	910	10	850	10	838	10	1249

Table 7 The summary of transshipment operations by fishery of 2019: (1) the total quantities, by weight (M.T.); (2) the number of transshipments

(1)

Offloaded and received	Transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction	Transhipped inside the Convention Area and transhipped outside the Convention Area	Caught inside the Convention Area and caught outside the Convention Area	Product Form	Fishing gear	Species										
						Total	BET	YFT	SWO	MLS	BUM	Shark	ALB	Oil	BLM	Others
offloaded	beyond EEZs	inside	inside (High Seas)	Frozen	Longliner	8101	3513	1018	306	47	74	123	2508	0	0	512
offloaded	beyond EEZs	inside	inside (EEZ)	Frozen	Longliner	2098	821	366	120	11	9	0	554	0	0	217
offloaded	beyond EEZs	inside	Inside (Overlap Area)	Frozen	Longliner	4809	1313	630	187	40	56	89	2169	0	2	323
offloaded	beyond EEZs	inside	outside (IATTC)	Frozen	Longliner	1525	449	67	202	79	35	39	518	0	3	132
offloaded	beyond EEZs	outside	inside (High Seas)	Frozen	Longliner	425	28	21	4	0	1	3	356	0	0	11
offloaded	beyond EEZs	outside	inside (EEZ)	Frozen	Longliner	16	0	0	0	0	0	0	3	0	0	13
offloaded	beyond EEZs	outside	Inside (Overlap Area)	Frozen	Longliner	1155	182	98	25	3	8	6	678	0	0	155
offloaded	beyond EEZs	outside	outside (IATTC)	Frozen	Longliner	2447	80	27	31	3	3	1	1916	0	0	385
offloaded	in EEZ	inside	inside (EEZ)	Frozen	Longliner	151	33	20	6	1	0	0	71	0	0	21
offloaded	in port	-	-	-	-	None	None	None	None	None	None	None	None	None	None	None
received	beyond EEZs	inside	inside (High Seas)	Frozen	Longliner	3250	479	227	33	30	3	0	2197	0	0	282
received	beyond EEZs	inside	inside (EEZ)	Frozen	Longliner	213	48	51	4	0	0	0	83	0	0	28
received	beyond EEZs	inside	Inside (Overlap Area)	Frozen	Longliner	1390	6	103	3	1	0	0	1214	0	0	63
received	beyond EEZs	inside	outside (IATTC)	Frozen	Longliner	210	1	7	0	0	0	0	182	0	0	20
received	beyond EEZs	outside	inside (High Seas)	Frozen	Longliner	353	5	8	0	0	0	0	336	0	0	3
received	beyond EEZs	outside	inside (EEZ)	Frozen	Longliner	16	0	0	0	0	0	0	3	0	0	13
received	beyond EEZs	outside	Inside (Overlap Area)	Frozen	Longliner	754	33	46	3	1	0	0	592	0	0	79
received	beyond EEZs	outside	outside (IATTC)	Frozen	Longliner	1853	27	15	14	3	0	0	1473	0	0	321
received	in port	-	-	-	-	None	None	None	None	None	None	None	None	None	None	None

*Catches from both inside and outside of the convention area involved in one transshipment event will be separated into two rows in this table.

(2)

Offloaded and received	Transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction	Transhipped inside the Convention Area and transhipped outside the Convention Area	Caught inside the Convention Area and caught outside the Convention Area	Fishing gear	Number of Transshipments
offloaded	beyond EEZs	inside	both inside and outside	Longliner	243
offloaded	beyond EEZs	outside	outside	Longliner	2
offloaded	in EEZs	inside	inside	Longliner	3
offloaded	beyond EEZs	outside	both inside and outside	Longliner	53
offloaded	beyond EEZs	outside	outside	Longliner	7
offloaded	in port	inside	inside	Longliner	0
received	beyond EEZs	inside	both inside and outside	Longliner	80
received	beyond EEZs	outside	both inside and outside	Longliner	37
received	beyond EEZs	outside	outside	Longliner	3

Table 8a Cetacean interactions in purse seine fishery for national fleet

Flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status (Dead/Alive)	Number of Individuals
CN	PS	XIN SHIJI 111	Brydes Whales	2019/6/29	00 42'S	172 00'E	KI	AL	1
CN	PS	XIN SHIJI 111	Blue whale	2019/7/21	00 08'N	176 09'E	KI	D	1
CN	PS	XIN SHIJI 111	Rough toothed dolphin	2019/7/24	00 31'N	177 00'E	KI	AL-4,D-3	7
CN	PS	XIN SHIJI 111	Striped dolphin	2019/10/25	01 17'S	172 42'E	KI	AL-1.D-5	6
CN	PS	XIN SHIJI 112	Pantropical spotted dolphin	2019/10/7	00 23'S	170 42'E	KI	AL	7
CN	PS	XIN SHIJI 112	False kill Whale	2019/2/3	03 30'S	169 24'E	KI	AL	1
CN	PS	XIN SHIJI 112	False kill whale	2019/2/3	03 30'S	169 24'E	KI	AL	1
CN	PS	XIN SHIJI 112	False kill whale	2019/5/21	00 42'S	171 24'E	KI	AL	2
CN	PS	XIN SHIJI 112	False kill whale	2019/6/15	00 24'S	170 36'E	KI	AL	1
CN	PS	XIN SHIJI 112	False kill whale	2019/9/22	00 47'N	176 13'E	KI	AL	7
CN	PS	XIN SHIJI 112	False kill whale	2019/8/11	02 23'S	171 15'E	KI	AL	1
CN	PS	XIN SHIJI 112	False kill whale	2019/9/23	00 39'N	176 03'E	KI	AL	1
CN	PS	XIN SHIJI 112	False kill whale	2019/7/6	00 40'S	171 18'E	KI	AL	1
CN	PS	XIANG FA 8	Dolphin	2019/4/8	00 12'N	170 14'E	KI	D	9
CN	PS	XIANG FA 8	Rough toothed dolphin	2019/1/13	03 46'N	169 50'E	KI	D	20
CN	PS	XIANG FA 8	Short finned pilot whale	2019/4/25	02 14'S	168 22'E	KI	D	1
CN	PS	SHUN FA 8	Spinner dolphin	2019/9/17	01 16'S	173 05'E	KI	D	2
CN	PS	SHUN FA 8	Common Bottle nose dolphin	2019/7/21	03 16'S	178 27'E	KI	D	1
CN	PS	SHUN FA 8	Indo-pacific bottle nose dolphins	2019/7/21	03 16'S	178 27'E	KI	D	1
CN	PS	JIN HUI 9	bottle nose dolphins	2019/4/22	02 02'S	166 54'E	NR	AL	1

CN	PS	JIN HUI 9	False kill whale	2019/8/6	04 °15'S	177 °33'W	KI	AL	1
CN	PS	JIN HUI 9	False kill whale	2019/9/24	01 °58'S	172 °38'E	KI	AL	1
CN	PS	JIN HUI 6	Rough toothed dolphin	2019/7/11	01 °36'S	178 °03'E	KI	AL	5
CN	PS	JIN HUI 6	Rough toothed dolphin	2019/5/30	00 °26'S	179 °22'E	KI	AL	6
CN	PS	JIN HUI 6	False kill whale	2019/7/30	03 °22'S	176 °52'E	KI	D	1
CN	PS	JIN HUI 8	Rough toothed dolphin	2019/2/8	01 °53'S	172 °12'E	KI	D	3
CN	PS	JIN HUI 18	Rough toothed dolphin	2019/7/21	02 °46'S	173 °14'E	KI	AL	3
CN	PS	JIN HUI 18	Rough toothed dolphin	2019/10/18	02 °05'S	173 °57'E	KI	AL	3
CN	PS	JIN HUI 18	Risso's dolphin	2019/10/18	02 °05'S	173 °57'E	KI	AL	2

Table 8b Manta and ray interactions in purse seine fishery for national fleet

CN	PS	JIN HUI 8	Devil rays	2019/3/3	01 °12'S	171 °35'E	KI	AL	1
CN	PS	JIN HUI 8	Giant manta	2019/3/16	02 °03'S	165 °15'E	KI	AL	1
CN	PS	JIN HUI 8	Giant manta	2019/4/6	01 °29'S	167 °06'E	NR	AL	2
CN	PS	JIN HUI 8	Giant manta	2019/4/29	00 °17'N	175 °59'E	KI	AL	3
CN	PS	JIN HUI 8	Devil rays	2019/9/23	00 °24'S	171 °10'E	KI	AL	2
CN	PS	JIN HUI 8	Devil rays	2019/9/28	00 °01'N	170 °50'E	KI	AL	3
CN	PS	JIN HUI 8	Devil rays	2019/9/17	00 °07'N	170 °48'E	KI	AL	1
CN	PS	JIN HUI 8	Devil rays	2019/9/16	00 °10'N	170 °49'E	KI	AL	4
CN	PS	JIN HUI 8	Giant manta	2019/10/9	00 °04'S	169 °48'E	KI	AL	10
CN	PS	JIN HUI 8	Giant manta	2019/10/8	00 °05'S	170 °17'E	KI	AL	1
CN	PS	JIN HUI 8	Giant manta	2019/10/22	01 °12'N	169 °55'E	KI	AL	2
CN	PS	JIN HUI 8	Giant manta	2019/11/24	00 °00'S	171 °20'E	KI	AL	3
CN	PS	JIN HUI 8	Giant manta	2019/11/27	00 °21'N	171 °49'E	KI	AL	1
CN	PS	JIN HUI 8	Giant manta	2019/12/29	00 °29'N	174 °53'E	KI	AL	4

Table 9 Whale shark (RHN) interactions in purse seine for national fleet

Flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status (Dead/Alive)	Number of Individuals
CN	PS	XIN SHIJI 111	RHN	2019/1/23	00 °44'S	170 °35'E	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/3/3	02 °09'S	170 °05'E	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/6/9	02 °04'S	168 °22'E	KI	AL	1

CN	PS	XIN SHIJI 111	RHN	2019/6/13	02 07'S	172 26'E	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/7/3	00 44'S	170 44'E	KI	AL	1
CN	PS	XIN SHIJI 112	RHN	2019/7/8	00 41'S	171 11'E	KI	AL	1
CN	PS	XIN SHIJI 112	RHN	2019/7/9	00 55'S	170 56'E	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/7/14	00 07'S	176 18'E	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/8/20	04 18'S	177 00'W	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/8/22	04 09'S	177 18'W	KI	AL	1
CN	PS	XIN SHIJI 111	RHN	2019/10/4	02 43'S	171 34'E	KI	AL	1
CN	PS	XIN SHIJI 112	RHN	2019/7/6	00 37'S	171 12'E	KI	AL	2
CN	PS	XIN SHIJI 112	RHN	2019/7/7	00 40'S	171 08'E	KI	AL	1
CN	PS	SHUN FA 8	RHN	2019/2/22	04 15'N	168 33'E	MH	AL	1
CN	PS	SHUN FA 8	RHN	2019/6/10	01 00'S	172 32'E	KI	AL	1
CN	PS	JIN HUI 6	RHN	2019/6/22	00 56'S	171 24'E	KI	AL	1
CN	PS	JIN HUI 6	RHN	2019/11/7	03 17'S	175 40'E	KI	AL	1
CN	PS	JIN HUI 6	RHN	2019/11/7	03 43'S	175 37'E	KI	D	1
CN	PS	XIANG FA 8	RHN	2019/7/24	02 41'S	179 39'E	KI	D	1
CN	PS	XIANG FA 8	RHN	2019/1/13	03 46'N	169 50'E	KI	AL	1
CN	PS	XIANG FA 8	RHN	2019/7/2	03 55'S	175 30'E	KI	AL	1
CN	PS	JIN HUI 7	RHN	2019/7/29	03 51'S	176 55'E	KI	AL	1
CN	PS	JIN HUI 6	RHN	2019/7/11	01 36'S	178 03'E	KI	AL	1
CN	PS	JIN HUI 8	RHN	2019/8/17	02 48'S	176 05'E	KI	AL	1
CN	PS	JIN HUI 8	RHN	2019/11/28	02 27'S	172 45'E	KI	AL	1
CN	PS	JIN HUI 8	RHN	2019/12/15	04 16'N	175 20'E	TV	AL	1
CN	PS	JIN HUI 58	RHN	2019/7/5	00 51'N	177 02'E	KI	AL	1
CN	PS	JIN HUI 58	RHN	2019/10/13	02 04'S	177 56'E	KI	AL	1

Table 10 Oceanic Whitetip shark (OCS) in purse seine for national fleet

Flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status (Dead/Alive)	Number of Individuals
CN	PS	XIN SHIJI 111	OCS	2019/7/18	01 °32'S	178 °02'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/7/19	00 °07'S	176 °36'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/7/20	00 °13'S	176 °53'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/7/21	00 °19'S	176 °50'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	OCS	2019/7/22	00 °22'N	176 °36'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/7/23	00 °26'N	176 °47'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/7/28	01 °50'S	178 °01'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/8/4	01 °25'S	171 °22'E	KI	AL	1
CN	PS	XIN SHIJI 111	OCS	2019/8/25	01 °28'S	179 °35'E	KI	AL	1
CN	PS	XIANG FA 8	OCS	2019/2/12	01 °58'S	165 °21'E	KI	D	1
CN	PS	XIANG FA 8	OCS	2019/2/19	01 °27'N	170 °05'E	KI	D	1
CN	PS	XIANG FA 8	OCS	2019/3/22	01 °14'N	170 °28'E	KI	D	1
CN	PS	XIANG FA 8	OCS	2019/1/3	00 °32'N	171 °38'E	KI	D	1
CN	PS	XIANG FA 8	OCS	2019/1/8	02 °38'N	171 °49'E	KI	D	3
CN	PS	XIANG FA 8	OCS	2019/4/9	01 °05'N	171 °50'E	KI	D	2
CN	PS	SHUN FA 8	OCS	2019/5/13	00 °20'N	171 °53'E	KI	D	3
CN	PS	SHUN FA 8	OCS	2019/4/10	02 °23'N	171 °32'E	KI	AL-2,D-1	3
CN	PS	SHUN FA 8	OCS	2019/4/23	02 °33'S	169 °52'E	KI	D	1
CN	PS	SHUN FA 8	OCS	2019/1/24	01 °48'S	169 °52'E	KI	AL	1
CN	PS	SHUN FA 8	OCS	2019/1/29	03 °09'S	170 °33'E	KI	D	1
CN	PS	SHUN FA 8	OCS	2019/2/12	03 °05'S	167 °38'E	KI	AL	1

CN	PS	SHUN FA 8	OCS	2019/2/16	00°38'N	169°50'E	KI	AL	1
CN	PS	SHUN FA 8	OCS	2019/2/18	01°11'N	170°23'E	KI	AL	1
CN	PS	SHUN FA 8	OCS	2019/2/25	01°16'N	171°04'E	KI	AL	1
CN	PS	SHUN FA 8	OCS	2019/3/21	00°24'N	170°34'E	KI	AL	1
CN	PS	SHUN FA 8	OCS	2019/3/23	01°26'N	167°24'E	NR	D	1
CN	PS	SHUN FA 8	OCS	2019/3/29	00°47'N	165°41'E	NR	AL	1
CN	PS	SHUN FA 8	OCS	2019/3/31	00°19'N	165°35'E	NR	D	5
CN	PS	JIN HUI 7	OCS	2019/11/9	00°41'N	166°28'E	NR	AL	1
CN	PS	JIN HUI 6	OCS	2019/1/17	01°11'S	173°07'E	KI	AL	1
CN	PS	JIN HUI 6	OCS	2019/1/19	01°12'S	173°09'E	KI	AL	1
CN	PS	JIN HUI 6	OCS	2019/2/24	02°13'S	171°48'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 6	OCS	2019/3/2	01°21'S	170°25'E	KI	AL	1
CN	PS	JIN HUI 6	OCS	2019/3/3	01°14'S	171°32'E	KI	AL	1
CN	PS	JIN HUI 6	OCS	2019/6/25	00°01'N	175°33'E	KI	AL	1
CN	PS	JIN HUI 6	OCS	2019/12/19	00°35'N	174°54'E	KI	AL	1
CN	PS	JIN HUI 8	OCS	2019/4/13	00°59'N	170°22'E	KI	AL	2
CN	PS	JIN HUI 8	OCS	2019/4/24	00°00'S	172°20'E	KI	AL	1
CN	PS	JIN HUI 8	OCS	2019/6/18	01°34'S	171°58'E	KI	AL	1
CN	PS	JIN HUI 8	OCS	2019/7/11	00°55'S	177°39'E	KI	AL	1
CN	PS	JIN HUI 8	OCS	2019/7/15	01°25'S	178°43'E	KI	AL	3
CN	PS	JIN HUI 8	OCS	2019/8/29	02°39'S	179°24'E	KI	AL	2
CN	PS	JIN HUI 8	OCS	2019/9/29	00°33'N	170°45'E	KI	AL	2
CN	PS	JIN HUI 8	OCS	2019/12/8	02°43'S	173°57'E	KI	AL	3
CN	PS	JIN HUI 18	OCS	2019/8/27	03°13'S	179°42'E	KI	AL	1
CN	PS	JIN HUI 18	OCS	2019/9/17	04°06'S	178°04'E	KI	AL	2
CN	PS	JIN HUI 58	OCS	2019/1/1	00°48'N	171°50'E	KI	AL	3
CN	PS	JIN HUI 58	OCS	2019/1/3	00°12'N	170°46'E	KI	AL	1

CN	PS	JIN HUI 58	OCS	2019/1/7	00°58'N	170°34'E	KI	AL	1
CN	PS	JIN HUI 58	OCS	2019/1/11	00°05'S	170°13'E	KI	AL	1
CN	PS	JIN HUI 58	OCS	2019/1/20	00°22'N	170°39'E	KI	D	2
CN	PS	JIN HUI 58	OCS	2019/1/22	00°28'N	170°05'E	KI	AL	2
CN	PS	JIN HUI 58	OCS	2019/1/26	00°20'N	168°41'E	KI	AL	1
CN	PS	JIN HUI 58	OCS	2019/3/28	01°27'N	168°36'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 58	OCS	2019/6/24	00°12'N	175°34'E	KI	AL	1
CN	PS	JIN HUI 58	OCS	2019/1/31	00°01'N	166°59'E	KI	AL	3
CN	PS	JIN HUI 58	OCS	2019/7/17	01°31'S	178°16'E	KI	AL	1
CN	PS	JIN HUI 58	OCS	2019/11/14	01°35'N	164°44'E	KI	AL	1
CN	PS	JIN HUI 58	OCS	2019/11/16	00°06'S	166°26'E	KI	AL	1

**Table 11 Effort, observed and estimated seabird captures by fishing year for
China**

a) South of 30°S

Year	Fishing effort (1000 hooks)				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
2015	25	7218	0	0	0	0
2016	27	5334	58	1.08	5	0.086
2017	35	5484	537	9.79	4	0.007
2018	19	5025	175	3.48	0	0
2019	22	2312	0	0	0	0

b) North of 23°N

Year	Fishing effort (1000 hooks)				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
2015	8	1971	0	0	0	0
2016	7	950	61	6.4	9	0.14
2017	7	1915	522	27.2	0	0
2018	10	779	118	15.15	6	0.0508
2019	9	144	12	8.33	0	0

c) 23°N - 30°S

Year	Fishing effort (1000 hooks)				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
2015	415	127668	1279	1.0	0	0
2016	384	103412	4268	4.1	0	0
2017	320	129971	7641	5.8	0	0
2018	335	140011	6430	4.59	1	0.00015
2019	339	159311	10040	6.3	6	0.0006

Table 12 Proportion of mitigation types¹ used by the fleet in 2019

	Combination of Mitigation Measures	Proportion of observed effort using mitigation measures			
		South of 30 °S	25 °S-30 °S	25 °S to 23 °N	North of 23 °N
	No mitigation measures	0%	0%	0%	0%
Options required south of 30 °S	TL + WB	100%			
Options required 25 °S-30 °S	TL + WB		100%		
Options required 25 °S to 23 °N	TL + WB			100%	
Options required north of 23 °N	TL + WB				100%
	Totals	100%	100%	100%	100%

¹ TL = tori line, WB = weighted branch lines.

Table 13 The number of observed seabird bycatch of longline fishery by species and by area in 2019

Year	Species	South of 30 °	North of 23 °N	23 °N-30 °S
2019	unidentified	0	0	6

Table 14 Silky shark (FAL) in purse seine for national fleet

Flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status (Dead/Alive)	Number of Individuals
CN	PS	XIN SHIJI 111	FAL	2019/6/9	01 °22'S	168 °05'E	NR	AL-9.D-4	13
CN	PS	XIN SHIJI 111	FAL	2019/6/10	01 °34'S	168 °22'E	KI	AL-4.D-1	5
CN	PS	XIN SHIJI 111	FAL	2019/6/13	02 °00'S	172 °40'E	KI	AL-12.D-3	14
CN	PS	XIN SHIJI 111	FAL	2019/6/13	02 °07'S	172 °26'E	KI	AL	2
CN	PS	XIN SHIJI 111	FAL	2019/6/14	01 °52'S	172 °36'E	KI	AL-3.D-7	10
CN	PS	XIN SHIJI 111	FAL	2019/6/16	02 °42'S	170 °44'E	KI	D	1
CN	PS	XIN SHIJI 111	FAL	2019/6/16	00 °54'S	170 °41'E	KI	AL-3.D-3	6
CN	PS	XIN SHIJI 111	FAL	2019/6/17	00 °50'S	170 °39'E	KI	AL-7.D-5	12
CN	PS	XIN SHIJI 111	FAL	2019/6/18	00 °43'S	171 °13'E	KI	AL-4.D-4	8
CN	PS	XIN SHIJI 111	FAL	2019/6/18	01 °46'S	170 °47'E	KI	AL-6.D-6	12
CN	PS	XIN SHIJI 111	FAL	2019/6/19	01 °02'S	170 °27'E	KI	AL-5.D-3	8
CN	PS	XIN SHIJI 111	FAL	2019/6/21	02 °13'S	167 °09'E	NR	AL-1.D-2	3
CN	PS	XIN SHIJI 111	FAL	2019/6/21	02 °14'S	167 °03'E	NR	AL-2.D-2	4
CN	PS	XIN SHIJI 111	FAL	2019/6/22	02 °15'S	167 °11'E	NR	D	1
CN	PS	XIN SHIJI 111	FAL	2019/6/24	02 °34'S	169 °41'E	KI	AL-5.D-3	8
CN	PS	XIN SHIJI 111	FAL	2019/6/25	02 °53'S	171 °17'E	KI	AL-4.D-3	7
CN	PS	XIN SHIJI 111	FAL	2019/6/26	02 °44'S	171 °33'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/6/26	02 °55'S	171 °09'E	KI	AL-10.D-8	18
CN	PS	XIN SHIJI 111	FAL	2019/6/27	02 °59'S	171 °18'E	KI	AL-7.D-4	11
CN	PS	XIN SHIJI 111	FAL	2019/6/28	00 °51'S	170 °30'E	KI	D	1
CN	PS	XIN SHIJI	FAL	2019/6/28	00 °45'S	170 °49'E	KI	AL-13.D-10	23

		111							
CN	PS	XIN SHIJI 111	FAL	2019/6/29	00 42'S	172 00'E	KI	AL	3
CN	PS	XIN SHIJI 111	FAL	2019/6/30	00 19'S	172 29'E	KI	D	1
CN	PS	XIN SHIJI 111	FAL	2019/7/1	00 32'N	170 41'E	KI	AL-6.D-4	10
CN	PS	XIN SHIJI 111	FAL	2019/7/2	00 01'N	170 39'E	KI	AL-3.D-1	4
CN	PS	XIN SHIJI 111	FAL	2019/7/3	00 16'S	170 43'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/7/3	00 44'S	170 44'E	KI	AL-9.D-6	15
CN	PS	XIN SHIJI 111	FAL	2019/7/10	00 42'S	171 05'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/11	01 01'S	171 06'E	KI	AL-7.D-3	10
CN	PS	XIN SHIJI 111	FAL	2019/7/12	01 24'S	171 25'E	KI	AL-5.D-3	8
CN	PS	XIN SHIJI 111	FAL	2019/7/13	00 06'S	176 26'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/7/13	00 14'S	176 34'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/14	00 07'S	176 18'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/7/14	00 11'S	176 13'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/7/14	00 20'S	176 01'E	KI	AL-5.D-3	8
CN	PS	XIN SHIJI 111	FAL	2019/7/15	00 00'S	177 16'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/7/16	00 10'S	177 11'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/18	01 10'S	178 11'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/19	00 07'S	176 36'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/7/20	00 13'S	176 53'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/7/21	00 19'S	176 50'E	KI	AL-5.D-2	7
CN	PS	XIN SHIJI 111	FAL	2019/7/21	00 08'N	176 09'E	KI	AL-4.D-2	6

CN	PS	XIN SHIJI 111	FAL	2019/7/21	00 07'S	176 05'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/7/22	00 22'N	176 36'E	KI	AL-3.D-1	4
CN	PS	XIN SHIJI 111	FAL	2019/7/22	00 19'S	176 35'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/22	00 19'N	176 35'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/23	00 26'N	176 47'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/23	00 27'N	176 49'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/7/23	00 17'N	176 38'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/7/24	00 32'N	176 57'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/7/28	01 50'S	178 01'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/7/30	01 45'S	173 08'E	KI	AL-12.D-6	18
CN	PS	XIN SHIJI 111	FAL	2019/7/31	01 42'S	172 44'E	KI	AL-3.D-7	20
CN	PS	XIN SHIJI 111	FAL	2019/8/2	00 59'S	171 43'E	KI	AL-8.D-5	13
CN	PS	XIN SHIJI 111	FAL	2019/8/3	01 16'S	171 54'E	KI	AL-20.D-10	30
CN	PS	XIN SHIJI 111	FAL	2019/8/4	01 25'S	171 22'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/8/11	02 01'S	170 57'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/8/13	02 09'S	169 58'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/8/14	01 26'S	171 26'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/8/15	02 14'S	170 16'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/8/18	02 26'S	173 43'E	KI	AL-3.D-1	4
CN	PS	XIN SHIJI 111	FAL	2019/8/20	04 18'S	177 00'W	KI	AL-1.D-3	4
CN	PS	XIN SHIJI 111	FAL	2019/8/21	04 27'S	177 07'W	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/8/21	04 19'S	177 10'W	KI	AL	1

CN	PS	XIN SHIJI 111	FAL	2019/8/22	04 09'S	177 18'W	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/8/25	01 36'S	179 32'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/8/30	03 29'S	178 57'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/8/31	03 04'S	178 56'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/9/1	03 57'S	178 32'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/2	03 36'S	177 05'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/4	02 43'S	171 51'E	KI	AL-12.D-8	20
CN	PS	XIN SHIJI 111	FAL	2019/9/5	01 50'S	172 40'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/9/5	02 42'S	173 18'E	KI	AL6.D-4	10
CN	PS	XIN SHIJI 111	FAL	2019/9/6	01 56'S	172 39'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/9/6	02 56'S	172 32'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/13	01 57'S	170 32'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/15	02 08'S	172 21'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/9/16	01 06'S	172 56'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/17	01 00'S	172 29'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/9/18	01 21'S	172 42'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/9/20	02 38'S	172 42'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/21	01 39'S	173 03'E	KI	AL-2.D-2	4
CN	PS	XIN SHIJI 111	FAL	2019/9/23	01 18'S	172 17'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/9/30	01 47'S	172 41'E	KI	AL-4.D-3	7
CN	PS	XIN SHIJI 111	FAL	2019/10/1	02 09'S	172 02'E	KI	AL-12.D-8	20
CN	PS	XIN SHIJI 111	FAL	2019/10/2	02 41'S	171 39'E	KI	AL-14.D-6	20

CN	PS	XIN SHIJI 111	FAL	2019/10/3	02 °37'S	171 °27'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/10/4	02 °43'S	171 °34'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/10/5	03 °44'S	173 °47'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/10/6	01 °39'S	173 °02'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/10/7	01 °20'S	172 °52'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/10/8	02 °09'S	171 °29'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/10/10	00 °16'S	176 °36'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/10/13	03 °39'S	173 °27'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/10/14	01 °22'S	172 °37'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/10/15	00 °42'S	172 °03'E	KI	AL-3.D-1	4
CN	PS	XIN SHIJI 111	FAL	2019/10/16	01 °08'S	172 °34'E	KI	AL-13.D-1	20
CN	PS	XIN SHIJI 111	FAL	2019/10/18	01 °13'S	171 °33'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/10/18	01 °22'S	171 °49'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/10/20	03 °08'S	170 °46'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/10/21	01 °53'S	170 °15'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/10/23	01 °44'S	170 °42'E	KI	AL-5.D-3	8
CN	PS	XIN SHIJI 111	FAL	2019/10/25	01 °17'S	172 °42'E	KI	AL-6.D-4	10
CN	PS	XIN SHIJI 111	FAL	2019/10/26	01 °54'S	173 °19'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/10/27	02 °30'S	173 °42'E	KI	AL-3.D-2	5
CN	PS	XIN SHIJI 111	FAL	2019/10/30	03 °40'S	174 °28'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/10/31	04 °05'S	174 °42'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/11/1	03 °54'S	175 °03'E	KI	AL-4.D-3	7

CN	PS	XIN SHIJI 111	FAL	2019/11/10	02 07'S	168 23'E	KI	AL-3.D-1	4
CN	PS	XIN SHIJI 111	FAL	2019/11/11	01 55'S	168 18'E	KI	AL-6.D-3	9
CN	PS	XIN SHIJI 111	FAL	2019/11/12	01 40'S	167 37'E	KI	AL-14.D-8	22
CN	PS	XIN SHIJI 111	FAL	2019/11/14	01 46'S	168 56'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/11/15	02 23'S	170 07'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/11/17	03 44'S	173 28'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/11/18	04 11'S	173 51'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/11/21	00 33'S	171 35'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/11/23	01 01'S	172 32'E	KI	AL-3.D-1	4
CN	PS	XIN SHIJI 111	FAL	2019/11/25	01 18'S	171 40'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/11/26	00 48'S	171 37'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/11/26	01 32'S	171 39'E	KI	AL-4.D-3	7
CN	PS	XIN SHIJI 111	FAL	2019/11/27	00 30'S	171 45'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/11/27	00 29'S	171 49'E	KI	AL-1.D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/11/27	00 28'S	171 45'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/11/29	02 52'S	172 11'E	KI	AL-7.D-5	12
CN	PS	XIN SHIJI 111	FAL	2019/12/3	02 57'S	166 37'E	KI	AL-8.D-2	10
CN	PS	XIN SHIJI 111	FAL	2019/12/6	08 06'S	165 41'E	KI	AL-10.D-5	15
CN	PS	XIN SHIJI 111	FAL	2019/12/7	07 58'S	165 35'E	KI	AL-4.D-2	6
CN	PS	XIN SHIJI 111	FAL	2019/12/9	08 12'S	163 15'E	KI	AL-2.D-1	3
CN	PS	XIN SHIJI 111	FAL	2019/12/11	07 04'S	163 14'E	SB	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/12/12	07 19'S	161 15'E	SB	AL-2,D-2	4

CN	PS	XIN SHIJI 111	FAL	2019/12/13	05 °28'S	161 °32'E	SB	AL-1,D-1	2
CN	PS	XIN SHIJI 111	FAL	2019/12/20	00 °09'S	177 °55'E	KI	AL	1
CN	PS	XIN SHIJI 111	FAL	2019/12/21	00 °39'S	178 °23'E	KI	AL-4,D-3	7
CN	PS	XIN SHIJI 111	FAL	2019/12/30	00 °45'N	176 °55'E	KI	AL-3,D-1	4
CN	PS	XIN SHIJI 112	FAL	2019/1/5	01 °55'N	171 °38'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/1/6	03 °05'N	171 °43'E	KI	AL-5,D-3	8
CN	PS	XIN SHIJI 112	FAL	2019/1/7	02 °56'N	171 °47'E	KI	AL-5,D-2	7
CN	PS	XIN SHIJI 112	FAL	2019/1/8	02 °55'N	171 °45'E	KI	AL-5,D-3	8
CN	PS	XIN SHIJI 112	FAL	2019/1/23	02 °38'N	174 °08'E	KI	AL-3,D-2	5
CN	PS	XIN SHIJI 112	FAL	2019/1/25	03 °03'S	171 °06'E	KI	AL	3
CN	PS	XIN SHIJI 112	FAL	2019/1/26	03 °12'S	170 °41'E	KI	AL-20,D-10	30
CN	PS	XIN SHIJI 112	FAL	2019/1/27	03 °15'S	170 °24'E	KI	AL-10,D-5	15
CN	PS	XIN SHIJI 112	FAL	2019/1/28	03 °25'S	169 °49'E	KI	AL-4,D-2	6
CN	PS	XIN SHIJI 112	FAL	2019/1/30	05 °45'S	175 °39'E	TV	AL-3,D-1	4
CN	PS	XIN SHIJI 112	FAL	2019/1/31	05 °19'S	175 °30'E	TV	AL-5,D-3	8
CN	PS	XIN SHIJI 112	FAL	2019/2/3	03 °30'S	169 °24'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/5/18	02 °26'S	165 °54'E	NR	AL	4
CN	PS	XIN SHIJI 112	FAL	2019/5/19	00 °16'N	168 °14'E	KI	AL	5
CN	PS	XIN SHIJI 112	FAL	2019/5/20	00 °13'S	170 °13'E	KI	AL-5,D-1	6
CN	PS	XIN SHIJI 112	FAL	2019/5/21	00 °42'S	170 °14'E	KI	AL-4,D-2	6
CN	PS	XIN SHIJI 112	FAL	2019/5/22	00 °52'S	171 °52'E	KI	AL-8,D-2	10
CN	PS	XIN SHIJI 112	FAL	2019/5/23	00 °35'N	175 °31'E	KI	AL-2,D-3	5

CN	PS	XIN SHIJI 112	FAL	2019/5/24	00 45'N	176 06'E	KI	AL-18,D-7	25
CN	PS	XIN SHIJI 112	FAL	2019/5/26	01 43'N	176 55'E	KI	AL-8,D-2	10
CN	PS	XIN SHIJI 112	FAL	2019/5/27	01 28'N	177 16'E	KI	AL-10,D-10	20
CN	PS	XIN SHIJI 112	FAL	2019/6/7	01 05'N	177 18'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/6/8	00 26'S	177 18'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/6/9	03 02'S	173 330'E	KI	AL-2,D-1	3
CN	PS	XIN SHIJI 112	FAL	2019/6/10	02 12'S	173 43'E	KI	AL-15,D-10	25
CN	PS	XIN SHIJI 112	FAL	2019/6/11	02 21'S	173 36'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/6/12	02 55'S	173 14'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/6/13	02 09'S	173 30'E	KI	AL-2,D-8	10
CN	PS	XIN SHIJI 112	FAL	2019/6/14	00 26'S	176 36'E	KI	AL-2,D-1	3
CN	PS	XIN SHIJI 112	FAL	2019/6/15	00 32'S	170 44'E	KI	AL-10,D-10	20
CN	PS	XIN SHIJI 112	FAL	2019/6/15	00 39'S	170 42'E	KI	AL	3
CN	PS	XIN SHIJI 112	FAL	2019/6/15	00 24'S	170 36'E	KI	AL	5
CN	PS	XIN SHIJI 112	FAL	2019/6/16	00 25'S	170 43'E	KI	AL	5
CN	PS	XIN SHIJI 112	FAL	2019/6/16	00 20'S	170 40'E	KI	AL-13,D-12	25
CN	PS	XIN SHIJI 112	FAL	2019/6/17	00 32'S	170 44'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/6/17	02 49'S	171 32'E	KI	AL-6,D-2	8
CN	PS	XIN SHIJI 112	FAL	2019/6/19	01 53'S	173 04'E	KI	AL	1
CN	PS	XIN SHIJI 112	FAL	2019/6/19	01 19'S	173 16'E	KI	AL-20,D-10	30
CN	PS	XIN SHIJI 112	FAL	2019/6/20	00 49'S	173 10'E	KI	AL	3
CN	PS	XIN SHIJI 112	FAL	2019/6/20	00 46'S	173 24'E	KI	AL-8,D-2	10

CN	PS	XIN SHIJI 112	FAL	2019/6/20	00 47'S	173 15'E	KI	AL	1
CN	PS	XIN SHIJI 112	FAL	2019/6/21	01 06'S	173 12'E	KI	AL-20,D-10	30
CN	PS	XIN SHIJI 112	FAL	2019/6/28	00 30'S	172 36'E	KI	AL-6,D-2	8
CN	PS	XIN SHIJI 112	FAL	2019/6/29	00 22'S	172 32'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/6/28	00 40'S	172 42'E	KI	AL-8,D-2	10
CN	PS	XIN SHIJI 112	FAL	2019/6/29	00 29'S	172 34'E	KI	AL-18,D-5	23
CN	PS	XIN SHIJI 112	FAL	2019/6/30	00 24'S	172 32'E	KI	AL-10,D-5	15
CN	PS	XIN SHIJI 112	FAL	2019/7/1	01 03'S	172 34'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/7/2	02 44'S	174 47'E	KI	AL-20,D-8	28
CN	PS	XIN SHIJI 112	FAL	2019/7/4	02 47'S	169 42'E	KI	AL	1
CN	PS	XIN SHIJI 112	FAL	2019/7/6	00 40'S	171 18'E	KI	AL-12,D-20	32
CN	PS	XIN SHIJI 112	FAL	2019/7/6	00 37'S	171 12'E	KI	AL-12,D-6	18
CN	PS	XIN SHIJI 112	FAL	2019/7/7	00 35'S	171 06'E	KI	AL	2
CN	PS	XIN SHIJI 112	FAL	2019/7/6	00 37'S	171 41'E	KI	AL-10,D-8	18
CN	PS	XIN SHIJI 112	FAL	2019/7/7	00 40'S	171 18'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/7/8	00 41'S	171 41'E	KI	AL-2,D-3	5
CN	PS	XIN SHIJI 112	FAL	2019/7/7	00 38'S	171 06'E	KI	AL-4,D-2	6
CN	PS	XIN SHIJI 112	FAL	2019/7/9	00 55'S	170 56'E	KI	AL-20,D-12	32
CN	PS	XIN SHIJI 112	FAL	2019/7/8	00 47'S	170 59'E	KI	AL-12,D-11	23
CN	PS	XIN SHIJI 112	FAL	2019/7/9	00 55'S	170 56'E	KI	AL-20,D-12	32
CN	PS	XIN SHIJI 112	FAL	2019/7/11	00 28'S	170 24'E	KI	AL-10,D-3	13
CN	PS	XIN SHIJI 112	FAL	2019/7/11	00 41'S	178 01'E	KI	AL-10,D-7	17

CN	PS	XIN SHIJI 112	FAL	2019/7/18	00 45'N	175 59'E	KI	AL	4
CN	PS	XIN SHIJI 112	FAL	2019/7/21	02 38'S	179 52'E	KI	AL-4,D-2	6
CN	PS	XIN SHIJI 112	FAL	2019/7/22	02 40'S	179 33'E	KI	AL	1
CN	PS	XIN SHIJI 112	FAL	2019/7/25	01 52'S	173 08'E	KI	AL-17,D-9	26
CN	PS	XIN SHIJI 112	FAL	2019/7/26	01 50'S	172 30'E	KI	AL-12,D-7	19
CN	PS	XIN SHIJI 112	FAL	2019/7/27	01 49'S	173 08'E	KI	AL-20,D-9	29
CN	PS	XIN SHIJI 112	FAL	2019/7/28	01 47'S	173 06'E	KI	AL-17,D-6	23
CN	PS	XIN SHIJI 112	FAL	2019/7/29	01 32'S	172 22'E	KI	AL-8,D-7	15
CN	PS	XIN SHIJI 112	FAL	2019/7/30	01 34'S	172 36'E	KI	AL-16,D-5	21
CN	PS	XIN SHIJI 112	FAL	2019/8/9	01 30'S	173 53'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/8/10	02 16'S	173 07'E	KI	AL-4,D-2	6
CN	PS	XIN SHIJI 112	FAL	2019/8/11	02 23'S	171 15'E	KI	AL-7,D-5	12
CN	PS	XIN SHIJI 112	FAL	2019/8/12	03 12'S	173 16'E	KI	AL	6
CN	PS	XIN SHIJI 112	FAL	2019/8/13	02 45'S	171 26'E	KI	AL	4
CN	PS	XIN SHIJI 112	FAL	2019/8/14	02 25'S	172 30'E	KI	AL-7,D-5	12
CN	PS	XIN SHIJI 112	FAL	2019/8/15	02 18'S	172 30'E	KI	AL-5,D-6	11
CN	PS	XIN SHIJI 112	FAL	2019/8/16	02 38'S	171 04'E	KI	AL	5
CN	PS	XIN SHIJI 112	FAL	2019/8/19	02 11'S	179 49'E	KI	AL	3
CN	PS	XIN SHIJI 112	FAL	2019/8/20	01 46'S	171 16'E	KI	AL-7,D-7	14
CN	PS	XIN SHIJI 112	FAL	2019/8/21	02 06'S	179 13'E	KI	AL	1
CN	PS	XIN SHIJI 112	FAL	2019/8/22	01 15'S	178 54'E	KI	AL	1
CN	PS	XIN SHIJI 112	FAL	2019/8/23	02 30'S	174 16'E	KI	AL	2

CN	PS	XIN SHIJI 112	FAL	2019/8/24	03 °32'S	170 °18'E	KI	AL-8,D-4	12
CN	PS	XIN SHIJI 112	FAL	2019/8/25	03 °36'S	170 °18'E	KI	AL-8,D-6	14
CN	PS	XIN SHIJI 112	FAL	2019/8/26	03 °28'S	169 °56'E	KI	AL-7,D-6	13
CN	PS	XIN SHIJI 112	FAL	2019/8/27	03 °28'S	170 °41'E	KI	AL-10,D-2	12
CN	PS	XIN SHIJI 112	FAL	2019/8/28	02 °38'S	173 °00'E	KI	AL-6,D-7	13
CN	PS	XIN SHIJI 112	FAL	2019/8/29	03 °27'S	173 °55'E	KI	AL-4,D-2	6
CN	PS	XIN SHIJI 112	FAL	2019/8/30	02 °21'S	173 °17'E	KI	AL-4,D-5	9
CN	PS	XIN SHIJI 112	FAL	2019/8/31	01 °48'S	173 °45'E	KI	AL-5,D-2	7
CN	PS	XIN SHIJI 112	FAL	2019/9/1	01 °35'S	173 °38'E	KI	AL	5
CN	PS	XIN SHIJI 112	FAL	2019/9/7	00 °10'S	173 °43'E	KI	AL-2,D-5	7
CN	PS	XIN SHIJI 112	FAL	2019/9/9	02 °19'S	171 °26'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/9/11	02 °28'S	174 °00'E	KI	AL-7,D-4	11
CN	PS	XIN SHIJI 112	FAL	2019/9/12	02 °51'S	174 °31'E	KI	AL-6,D-7	13
CN	PS	XIN SHIJI 112	FAL	2019/9/13	01 °44'S	172 °46'E	KI	AL-2,D-5	7
CN	PS	XIN SHIJI 112	FAL	2019/9/14	00 °53'S	172 °40'E	KI	AL-7,D-7	14
CN	PS	XIN SHIJI 112	FAL	2019/9/20	00 °45'N	176 °36'E	KI	AL	3
CN	PS	XIN SHIJI 112	FAL	2019/9/22	00 °47'N	176 °13'E	KI	AL-2,D-8	10
CN	PS	XIN SHIJI 112	FAL	2019/9/23	00 °41'N	176 °45'E	KI	AL	8
CN	PS	XIN SHIJI 112	FAL	2019/9/26	03 °23'S	179 °16'E	KI	AL	3
CN	PS	XIN SHIJI 112	FAL	2019/10/4	01 °20'S	171 °35'E	KI	AL-6,D-2	8
CN	PS	XIN SHIJI 112	FAL	2019/10/6	01 °25'S	171 °40'E	KI	AL-7,D-5	12
CN	PS	XIN SHIJI 112	FAL	2019/10/7	00 °23'S	170 °42'E	KI	AL-12,D-15	27

CN	PS	XIN SHIJI 112	FAL	2019/10/7	00 30'S	170 36'E	KI	AL-20,D-15	35
CN	PS	XIN SHIJI 112	FAL	2019/10/9	00 01'S	168 28'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/10/10	00 31'S	170 29'E	KI	AL-7,D-7	14
CN	PS	XIN SHIJI 112	FAL	2019/10/11	00 45'S	173 14'E	KI	AL-7,D-4	11
CN	PS	XIN SHIJI 112	FAL	2019/10/21	01 02'N	170 58'E	KI	AL-6,D-2	8
CN	PS	XIN SHIJI 112	FAL	2019/10/24	04 10'S	173 46'E	KI	AL-6,D-2	8
CN	PS	XIN SHIJI 112	FAL	2019/10/29	04 10'S	175 13'E	KI	AL	8
CN	PS	XIN SHIJI 112	FAL	2019/10/30	04 17'S	174 15'E	TV	AL-6,D-4	10
CN	PS	XIN SHIJI 112	FAL	2019/11/5	03 42'S	170 05'E	MH	AL	5
CN	PS	XIN SHIJI 112	FAL	2019/11/8	02 00'S	167 48'E	NR	AL	11
CN	PS	XIN SHIJI 112	FAL	2019/11/12	04 00'N	170 05'E	KI	AL	11
CN	PS	XIN SHIJI 112	FAL	2019/11/13	03 51'N	170 26'E	KI	AL-10,D-5	15
CN	PS	XIN SHIJI 112	FAL	2019/11/14	03 44'N	170 36'E	KI	AL	8
CN	PS	XIN SHIJI 112	FAL	2019/11/20	04 07'N	171 48'E	KI	AL	8
CN	PS	XIN SHIJI 112	FAL	2019/11/28	02 10'S	170 00'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/12/1	02 09'S	173 09'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/12/4	02 46'S	174 50'E	KI	AL	7
CN	PS	XIN SHIJI 112	FAL	2019/12/5	02 53'S	174 52'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/12/8	03 51'S	173 59'E	KI	AL	8
CN	PS	XIN SHIJI 112	FAL	2019/12/9	04 02'S	175 36'E	KI	AL	7
CN	PS	XIN SHIJI 112	FAL	2019/12/10	04 08'S	175 15'E	KI	AL-5,D-5	10
CN	PS	XIN SHIJI 112	FAL	2019/12/12	04 06'S	174 56'E	KI	AL-5,D-2	7

CN	PS	XIN SHIJI 112	FAL	2019/12/13	04 00'S	175 08'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/12/14	04 04'S	175 07'E	KI	AL-8,D-1	9
CN	PS	XIN SHIJI 112	FAL	2019/12/15	03 37'S	175 05'E	KI	AL	7
CN	PS	XIN SHIJI 112	FAL	2019/12/16	03 21'S	173 29'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/12/20	00 41'N	177 09'E	KI	AL-10,D-10	20
CN	PS	XIN SHIJI 112	FAL	2019/12/22	00 03'N	177 53'E	KI	AL-5,D-2	7
CN	PS	XIN SHIJI 112	FAL	2019/12/23	02 30'N	176 32'E	KI	AL-7,D-3	10
CN	PS	XIN SHIJI 112	FAL	2019/12/30	01 18'N	176 51'E	KI	AL-3,D-3	6
CN	PS	XIANG FA 8	FAL	2019/2/12	01 58'S	165 21'E	NR	D	2
CN	PS	XIANG FA 8	FAL	2019/2/19	01 27'N	170 05'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/1/6	02 04'N	171 43'E	KI	D	2
CN	PS	XIANG FA 8	FAL	2019/1/9	02 32'N	171 47'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/1/10	02 22'N	171 59'E	KI	D	3
CN	PS	XIANG FA 8	FAL	2019/1/12	03 34'N	169 09'E	KI	D	4
CN	PS	XIANG FA 8	FAL	2019/1/13	03 49'N	169 45'E	KI	D	3
CN	PS	XIANG FA 8	FAL	2019/1/16	00 39'N	169 44'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/1/18	00 45'S	170 32'E	KI	D	6
CN	PS	XIANG FA 8	FAL	2019/1/20	00 42'S	170 59'E	KI	D	6
CN	PS	XIANG FA 8	FAL	2019/1/27	01 32'S	170 46'E	KI	D	3
CN	PS	XIANG FA 8	FAL	2019/1/27	01 40'S	170 29'E	KI	D	8
CN	PS	XIANG FA 8	FAL	2019/1/28	03 12'S	170 25'E	KI	D	4
CN	PS	XIANG FA 8	FAL	2019/1/30	03 12'S	170 58'E	KI	D	1

CN	PS	XIANG FA 8	FAL	2019/1/31	03 °25'S	170 °11'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/2/1	03 °22'S	170 °35'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/2/2	02 °56'S	170 °52'E	KI	D	3
CN	PS	XIANG FA 8	FAL	2019/2/3	02 °47'S	170 °41'E	KI	D	12
CN	PS	XIANG FA 8	FAL	2019/2/4	02 °55'S	170 °30'E	KI	D	2
CN	PS	XIANG FA 8	FAL	2019/2/14	01 °38'S	167 °03'E	NR	D	10
CN	PS	XIANG FA 8	FAL	2019/2/15	01 °31'N	170 °05'E	KI	D	2
CN	PS	XIANG FA 8	FAL	2019/2/17	03 °34'N	174 °43'E	KI	D	3
CN	PS	XIANG FA 8	FAL	2019/2/20	01 °47'N	169 °51'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/2/22	00 °47'S	177 °28'E	KI	D	26
CN	PS	XIANG FA 8	FAL	2019/2/23	02 °00'S	171 °48'E	KI	D	11
CN	PS	XIANG FA 8	FAL	2019/2/24	01 °58'S	171 °42'E	KI	D	6
CN	PS	XIANG FA 8	FAL	2019/2/26	01 °24'N	169 °12'E	KI	D	9
CN	PS	XIANG FA 8	FAL	2019/2/27	02 °17'N	168 °06'E	MH	D	4
CN	PS	XIANG FA 8	FAL	2019/2/28	00 °04'S	168 °06'E	NR	D	3
CN	PS	XIANG FA 8	FAL	2019/3/3	01 °49'S	164 °44'E	NR	D	2
CN	PS	XIANG FA 8	FAL	2019/3/4	02 °07'S	164 °57'E	NR	D	2
CN	PS	XIANG FA 8	FAL	2019/3/5	02 °26'S	164 °39'E	NR	D	10
CN	PS	XIANG FA 8	FAL	2019/3/6	02 °28'S	164 °45'E	NR	D	9
CN	PS	XIANG FA 8	FAL	2019/3/6	02 °37'S	164 °23'E	NR	D	6
CN	PS	XIANG FA 8	FAL	2019/3/7	02 °30'S	164 °35'E	NR	D	8
CN	PS	XIANG FA 8	FAL	2019/3/8	02 °41'S	164 °30'E	NR	D	9

CN	PS	XIANG FA 8	FAL	2019/3/9	02 44'S	165 07'E	NR	D	5
CN	PS	XIANG FA 8	FAL	2019/3/11	02 19'S	165 19'E	NR	D	12
CN	PS	XIANG FA 8	FAL	2019/3/12	02 13'S	164 46'E	NR	D	2
CN	PS	XIANG FA 8	FAL	2019/3/13	01 54'S	165 37'E	NR	D	7
CN	PS	XIANG FA 8	FAL	2019/3/23	01 38'N	166 20'E	NR	D	2
CN	PS	XIANG FA 8	FAL	2019/3/24	03 49'N	168 39'E	MH	D	5
CN	PS	XIANG FA 8	FAL	2019/3/26	01 46'N	165 48'E	NR	D	3
CN	PS	XIANG FA 8	FAL	2019/3/30	00 10'S	164 18'E	NR	D	2
CN	PS	XIANG FA 8	FAL	2019/3/31	00 32'N	167 57'E	NR	D	8
CN	PS	XIANG FA 8	FAL	2019/4/1	01 20'S	167 21'E	NR	D	1
CN	PS	XIANG FA 8	FAL	2019/4/2	01 20'S	167 21'E	NR	D	1
CN	PS	XIANG FA 8	FAL	2019/4/3	01 21'S	167 09'E	NR	D	5
CN	PS	XIANG FA 8	FAL	2019/4/4	02 20'S	168 05'E	KI	D	2
CN	PS	XIANG FA 8	FAL	2019/4/5	02 24'S	167 53'E	NR	D	3
CN	PS	XIANG FA 8	FAL	2019/4/6	02 16'S	167 51'E	NR	D	1
CN	PS	XIANG FA 8	FAL	2019/4/5	02 22'S	167 59'E	NR	D	18
CN	PS	XIANG FA 8	FAL	2019/4/7	02 04'S	167 49'E	NR	D	4
CN	PS	XIANG FA 8	FAL	2019/4/8	00 12'N	170 14'E	KI	D	3
CN	PS	XIANG FA 8	FAL	2019/4/16	00 29'S	171 16'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/4/18	02 05'S	172 12'E	KI	D	17
CN	PS	XIANG FA 8	FAL	2019/4/20	01 59'S	172 08'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/4/21	02 09'S	169 51'E	KI	D	4

CN	PS	XIANG FA 8	FAL	2019/4/21	02 °08'S	170 °42'E	KI	D	6
CN	PS	XIANG FA 8	FAL	2019/4/22	02 °14'S	169 °36'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/4/22	01 °48'S	169 °35'E	KI	D	4
CN	PS	XIANG FA 8	FAL	2019/4/23	02 °14'S	169 °15'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/4/24	02 °09'S	168 °36'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/4/26	01 °06'S	167 °16'E	NR	D	13
CN	PS	XIANG FA 8	FAL	2019/4/28	00 °51'N	169 °11'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/4/30	00 °33'N	175 °04'E	KI	D	7
CN	PS	XIANG FA 8	FAL	2019/5/12	01 °17'S	170 °22'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/5/21	01 °03'N	175 °41'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/5/23	01 °02'N	176 °44'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/7/8	00 °45'S	171 °05'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/7/9	02 °08'S	171 °59'E	KI	D	2
CN	PS	XIANG FA 8	FAL	2019/7/25	02 °50'S	178 °58'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/7/29	01 °31'S	172 °57'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/7/30	01 °36'S	172 °35'E	KI	D	25
CN	PS	XIANG FA 8	FAL	2019/8/15	02 °58'S	171 °21'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/8/17	03 °00'S	170 °38'E	KI	D	7
CN	PS	XIANG FA 8	FAL	2019/8/19	02 °59'S	170 °16'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/8/23	02 °33'S	168 °58'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/8/25	03 °30'S	169 °13'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/8/26	03 °42'S	169 °20'E	KI	D	15

CN	PS	XIANG FA 8	FAL	2019/8/31	03 °11'S	173 °05'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/9/1	02 °47'S	173 °38'E	KI	D	40
CN	PS	XIANG FA 8	FAL	2019/9/2	02 °36'S	173 °20'E	KI	D	4
CN	PS	XIANG FA 8	FAL	2019/9/5	02 °02'S	173 °01'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/9/15	01 °56'S	172 °41'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/9/17	01 °25'S	173 °13'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/9/18	02 °29'S	172 °57'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/9/28	01 °57'S	172 °45'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/10/2	01 °16'S	172 °00'E	KI	D	1
CN	PS	XIANG FA 8	FAL	2019/10/12	00 °20'S	168 °18'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/10/13	01 °47'S	170 °15'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/10/14	00 °36'S	171 °36'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/10/15	00 °30'S	172 °06'E	KI	D	5
CN	PS	XIANG FA 8	FAL	2019/10/18	00 °16'N	171 °19'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/10/19	00 °35'S	171 °15'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/10/22	00 °28'S	170 °40'E	KI	D	7
CN	PS	XIANG FA 8	FAL	2019/10/26	02 °03'S	173 °45'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/10/27	02 °14'S	173 °10'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/11/8	00 °49'S	171 °56'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/11/8	00 °58'S	171 °38'E	KI	D	15
CN	PS	XIANG FA 8	FAL	2019/11/10	01 °00'S	171 °00'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/11/12	00 °43'S	170 °51'E	KI	D	7

CN	PS	XIANG FA 8	FAL	2019/11/13	00 52'S	170 36'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/11/17	04 06'S	168 12'E	MH	D	15
CN	PS	XIANG FA 8	FAL	2019/11/20	00 33'S	171 15'E	KI	D	20
CN	PS	XIANG FA 8	FAL	2019/1/8	02 38'N	171 49'E	KI	D	10
CN	PS	XIANG FA 8	FAL	2019/9/19	02 06'S	173 05'E	KI	D	10
CN	PS	SHUN FA 8	FAL	2019/1/9	01 53'S	156 14'E	PG	D	1
CN	PS	SHUN FA 8	FAL	2019/4/25	02 58'S	168 58'E	KI	AL	1
CN	PS	SHUN FA 8	FAL	2019/9/20	02 08'S	172 55'E	KI	AL-2,D-2	4
CN	PS	SHUN FA 8	FAL	2019/1/9	01 53'S	156 15'E	PG	AL	3
CN	PS	SHUN FA 8	FAL	2019/1/9	01 53'S	156 14'E	PG	D	1
CN	PS	SHUN FA 8	FAL	2019/1/18	02 43'S	170 18'E	KI	AL-15,D-15	30
CN	PS	SHUN FA 8	FAL	2019/1/14	03 15'N	169 20'E	MH	D	5
CN	PS	SHUN FA 8	FAL	2019/1/21	01 00'S	170 53'E	KI	AL	2
CN	PS	SHUN FA 8	FAL	2019/1/22	00 47'S	170 47'E	KI	AL	1
CN	PS	SHUN FA 8	FAL	2019/1/23	02 29'S	169 15'E	KI	AL-20,D-40	60
CN	PS	SHUN FA 8	FAL	2019/1/24	01 48'S	169 52'E	KI	AL-2,D-1	3
CN	PS	SHUN FA 8	FAL	2019/1/26	02 33'S	171 07'E	KI	AL	4
CN	PS	SHUN FA 8	FAL	2019/1/27	02 43'S	171 10'E	KI	AL	3
CN	PS	SHUN FA 8	FAL	2019/1/28	03 09'S	170 33'E	KI	AL	1
CN	PS	SHUN FA 8	FAL	2019/1/31	03 38'S	169 41'E	KI	AL-5,D-15	20
CN	PS	SHUN FA 8	FAL	2019/2/2	03 13'S	169 38'E	KI	D	5
CN	PS	SHUN FA 8	FAL	2019/2/16	00 38'N	169 50'E	KI	AL-2,D-2	4
CN	PS	SHUN FA 8	FAL	2019/2/18	01 12'N	170 22'E	KI	AL	1
CN	PS	SHUN FA 8	FAL	2019/2/19	01 42'N	170 07'E	KI	AL-1,D-1	2
CN	PS	SHUN FA 8	FAL	2019/2/24	01 19'N	170 47'E	KI	AL-3,D-2	5
CN	PS	SHUN FA 8	FAL	2019/2/25	01 16'N	171 04'E	KI	AL	5
CN	PS	SHUN FA 8	FAL	2019/2/26	02 41'N	171 47'E	KI	AL-3,D-7	10
CN	PS	SHUN FA 8	FAL	2019/3/2	03 15'S	166 23'E	NR	AL-1,D-3	4
CN	PS	SHUN FA 8	FAL	2019/3/4	02 46'S	166 11'E	NR	AL-1,D-3	4
CN	PS	SHUN FA 8	FAL	2019/3/6	02 40'S	165 09'E	NR	AL-2,D-4	6
CN	PS	SHUN FA 8	FAL	2019/3/7	02 33'S	164 48'E	NR	AL-5,D-15	20
CN	PS	SHUN FA 8	FAL	2019/3/8	03 00'S	164 47'E	NR	AL-10,D-20	30
CN	PS	SHUN FA 8	FAL	2019/3/9	03 02'S	164 54'E	NR	AL	4
CN	PS	SHUN FA 8	FAL	2019/3/10	02 59'S	165 18'E	NR	AL-5,D-5	10
CN	PS	SHUN FA 8	FAL	2019/3/11	02 18'S	165 04'E	NR	AL-3,D-1	4
CN	PS	SHUN FA 8	FAL	2019/3/13	02 20'S	164 46'E	NR	AL-5,D-15	20
CN	PS	SHUN FA 8	FAL	2019/3/21	00 22'S	170 44'E	KI	D	7
CN	PS	SHUN FA 8	FAL	2019/3/22	00 06'N	168 24'E	KI	AL	7

CN	PS	SHUN FA 8	FAL	2019/3/23	01 26'N	167 24'E	NR	D	4
CN	PS	SHUN FA 8	FAL	2019/3/24	03 13'N	166 18'E	MH	D	10
CN	PS	SHUN FA 8	FAL	2019/3/27	01 56'N	166 08'E	NR	D	2
CN	PS	SHUN FA 8	FAL	2019/3/28	01 38'N	167 18'E	NR	AL-3,D-3	6
CN	PS	SHUN FA 8	FAL	2019/3/29	00 47'N	165 41'E	NR	AL	2
CN	PS	SHUN FA 8	FAL	2019/3/31	00 19'N	165 35'E	NR	D	10
CN	PS	SHUN FA 8	FAL	2019/4/2	01 24'N	167 56'E	NR	AL-1,D-1	2
CN	PS	SHUN FA 8	FAL	2019/4/3	02 19'S	168 06'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/4/3	01 37'S	167 42'E	NR	AL-2,D-13	15
CN	PS	SHUN FA 8	FAL	2019/4/12	00 45'S	171 44'E	KI	AL-4,D-11	15
CN	PS	SHUN FA 8	FAL	2019/4/12	01 04'S	171 27'E	KI	D	2
CN	PS	SHUN FA 8	FAL	2019/4/12	01 05'S	171 21'E	KI	AL	2
CN	PS	SHUN FA 8	FAL	2019/4/15	03 02'S	172 48'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/4/16	02 55'S	172 45'E	KI	D	2
CN	PS	SHUN FA 8	FAL	2019/4/17	02 26'S	172 42'E	KI	D	2
CN	PS	SHUN FA 8	FAL	2019/4/20	01 47'S	172 47'E	KI	D	2
CN	PS	SHUN FA 8	FAL	2019/4/22	02 35'S	170 42'E	KI	D	20
CN	PS	SHUN FA 8	FAL	2019/4/22	02 32'S	170 15'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/4/23	02 33'S	169 52'E	KI	D	1
CN	PS	SHUN FA 8	FAL	2019/4/24	03 05'S	169 11'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/4/25	03 01'S	169 03'E	KI	D	20
CN	PS	SHUN FA 8	FAL	2019/4/28	00 19'S	172 19'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/4/28	00 11'S	172 14'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/5/5	00 00'N	175 58'E	KI	D	1
CN	PS	SHUN FA 8	FAL	2019/5/5	00 03'N	176 00'E	KI	D	10
CN	PS	SHUN FA 8	FAL	2019/5/7	01 10'S	172 31'E	KI	AL-2,D-13	15
CN	PS	SHUN FA 8	FAL	2019/5/10	00 38'S	172 57'E	KI	D	2
CN	PS	SHUN FA 8	FAL	2019/5/11	00 47'S	172 57'E	KI	D	1
CN	PS	SHUN FA 8	FAL	2019/5/13	00 26'N	172 00'E	KI	AL-5,D-45	50
CN	PS	SHUN FA 8	FAL	2019/5/13	00 19'N	172 10'E	KI	AL-5,D-20	25
CN	PS	SHUN FA 8	FAL	2019/5/20	00 45'S	171 53'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/5/30	00 26'N	177 56'E	KI	AL-6,D-3	9
CN	PS	SHUN FA 8	FAL	2019/6/11	01 06'S	172 35'E	KI	AL-3,D-7	10
CN	PS	SHUN FA 8	FAL	2019/6/11	00 56'S	172 48'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/6/13	00 59'S	171 45'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/6/18	01 04'S	171 08'E	KI	D	6
CN	PS	SHUN FA 8	FAL	2019/6/20	01 09'S	170 54'E	KI	D	8
CN	PS	SHUN FA 8	FAL	2019/6/21	01 05'S	170 56'E	KI	D	7
CN	PS	SHUN FA 8	FAL	2019/6/27	01 44'S	168 51'E	KI	D	10
CN	PS	SHUN FA 8	FAL	2019/7/10	02 26'S	168 36'E	KI	D	8
CN	PS	SHUN FA 8	FAL	2019/7/18	03 26'S	178 43'E	KI	D	1
CN	PS	SHUN FA 8	FAL	2019/7/27	03 42'S	178 26'E	KI	D	5
CN	PS	SHUN FA 8	FAL	2019/7/31	01 22'S	172 29'E	KI	D	5

CN	PS	SHUN FA 8	FAL	2019/8/3	02 06'S	168 21'E	KI	D	15
CN	PS	SHUN FA 8	FAL	2019/8/5	03 31'S	170 00'E	KI	D	8
CN	PS	SHUN FA 8	FAL	2019/8/6	03 35'S	170 00'E	KI	D	5
CN	PS	SHUN FA 8	FAL	2019/8/11	03 22'S	170 53'E	KI	D	5
CN	PS	SHUN FA 8	FAL	2019/8/13	02 47'S	169 46'E	KI	AL	3
CN	PS	SHUN FA 8	FAL	2019/8/27	01 33'S	179 26'E	KI	D	5
CN	PS	SHUN FA 8	FAL	2019/9/3	03 01'S	174 25'E	KI	AL-2,D-2	4
CN	PS	SHUN FA 8	FAL	2019/9/5	02 27'S	172 16'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/9/6	02 08'S	172 44'E	KI	AL	3
CN	PS	SHUN FA 8	FAL	2019/9/7	02 26'S	172 17'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/9/7	02 57'S	172 20'E	KI	AL	1
CN	PS	SHUN FA 8	FAL	2019/9/8	03 00'S	172 03'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/9/18	01 17'S	172 59'E	KI	AL	3
CN	PS	SHUN FA 8	FAL	2019/9/19	01 38'S	172 47'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/9/22	01 58'S	173 02'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/9/23	01 57'S	173 51'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/9/24	02 25'S	173 27'E	KI	D	7
CN	PS	SHUN FA 8	FAL	2019/6/24	01 47'S	171 04'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/6/23	01 03'S	170 38'E	KI	D	3
CN	PS	SHUN FA 8	FAL	2019/9/10	02 31'S	171 56'E	KI	D	4
CN	PS	SHUN FA 8	FAL	2019/9/17	01 16'S	173 05'E	KI	D	1
CN	PS	JIN HUI 9	FAL	2019/1/14	00 23'S	171 17'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/1/19	02 40'S	174 58'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/1/20	03 21'S	173 25'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/1/29	05 07'S	175 08'E	TV	AL	1
CN	PS	JIN HUI 9	FAL	2019/2/24	02 30'S	168 26'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/2/25	02 25'S	167 36'E	NR	AL	1
CN	PS	JIN HUI 9	FAL	2019/2/27	03 14'S	168 23'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/3/1	03 25'S	168 10'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/5/31	01 21'N	176 35'E	KI	AL	6
CN	PS	JIN HUI 9	FAL	2019/5/30	01 16'N	176 00'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/4/2	01 29'S	168 42'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/4/3	02 12'S	168 14'E	KI	AL	3
CN	PS	JIN HUI 9	FAL	2019/4/7	01 53'S	167 53'E	NR	AL	3
CN	PS	JIN HUI 9	FAL	2019/4/15	02 29'S	168 11'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/4/16	02 47'S	168 13'E	KI	AL	3
CN	PS	JIN HUI 9	FAL	2019/4/18	01 45'S	167 03'E	NR	AL	3
CN	PS	JIN HUI 9	FAL	2019/4/19	02 02'S	165 43'E	NR	AL	2
CN	PS	JIN HUI 9	FAL	2019/4/24	01 39'S	166 30'E	NR	AL	2
CN	PS	JIN HUI 9	FAL	2019/4/28	01 19'S	167 29'E	NR	AL	2
CN	PS	JIN HUI 9	FAL	2019/6/16	00 00'N	175 56'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/3/2	03 03'S	167 39'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/3/6	01 36'S	166 50'E	NR	AL	2

CN	PS	JIN HUI 9	FAL	2019/3/8	02 06'S	165 26'E	NR	AL	3
CN	PS	JIN HUI 9	FAL	2019/3/23	01 22'S	172 11'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/3/26	01 05'S	172 04'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/9/9	00 51'S	173 05'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/9/15	02 56'S	175 01'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/3/30	00 03'S	172 24'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/7/15	01 07'S	178 00'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/8/18	00 00'N	177 27'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/8/26	02 54'S	179 56'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/9/30	00 13'N	170 41'E	KI	AL	20
CN	PS	JIN HUI 9	FAL	2019/10/3	01 10'N	170 09'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/8/28	00 39'S	179 11'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/8/29	02 59'S	179 56'E	KI	AL	3
CN	PS	JIN HUI 9	FAL	2019/8/31	02 43'S	179 19'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/9/1	03 37'S	179 01'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/9/2	03 38'S	178 56'E	KI	AL	3
CN	PS	JIN HUI 9	FAL	2019/9/18	02 22'S	171 55'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/9/19	02 25'S	171 38'E	KI	AL	6
CN	PS	JIN HUI 9	FAL	2019/9/22	02 20'S	173 00'E	KI	AL	4
CN	PS	JIN HUI 9	FAL	2019/9/23	02 18'S	172 54'E	KI	AL	4
CN	PS	JIN HUI 9	FAL	2019/10/28	04 05'S	177 25'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/10/29	04 14'S	177 19'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/10/30	04 07'S	176 41'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/10/7	00 37'N	169 46'E	KI	AL	2
CN	PS	JIN HUI 9	FAL	2019/10/10	01 57'S	169 40'E	KI	AL	13
CN	PS	JIN HUI 9	FAL	2019/10/11	00 19'N	169 26'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/10/14	04 36'S	175 03'E	TV	AL	4
CN	PS	JIN HUI 9	FAL	2019/10/15	04 34'S	174 52'E	TV	AL	3
CN	PS	JIN HUI 9	FAL	2019/12/1	03 31'S	167 46'E	NR	AL	4
CN	PS	JIN HUI 9	FAL	2019/12/2	03 02'S	167 31'E	NR	AL	1
CN	PS	JIN HUI 9	FAL	2019/12/4	03 22'S	166 32'E	NR	AL	6
CN	PS	JIN HUI 9	FAL	2019/12/8	03 18'S	165 45'E	NR	AL	10
CN	PS	JIN HUI 9	FAL	2019/12/18	04 04'S	174 50'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/10/16	04 35'S	174 44'E	TV	AL	2
CN	PS	JIN HUI 9	FAL	2019/10/17	04 26'S	174 28'E	TV	AL	6
CN	PS	JIN HUI 9	FAL	2019/10/18	04 12'S	174 12'E	TV	AL	3
CN	PS	JIN HUI 9	FAL	2019/10/31	04 13'S	177 00'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/11/14	01 57'S	167 32'E	NR	AL	5
CN	PS	JIN HUI 9	FAL	2019/11/2	03 50'S	174 42'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/11/3	04 03'S	174 19'E	KI	AL	1
CN	PS	JIN HUI 9	FAL	2019/11/11	04 16'S	174 14'E	TV	AL	3
CN	PS	JIN HUI 9	FAL	2019/12/30	01 21'N	171 23'E	KI	AL	5
CN	PS	JIN HUI 9	FAL	2019/12/31	00 42'N	170 37'E	KI	AL	6

CN	PS	JIN HUI 9	FAL	2019/12/31	00 41'N	171 50'E	KI	AL	1
CN	PS	JIN HUI 7	FAL	2019/8/2	40 30'S	177 01'E	KI	D	1
CN	PS	JIN HUI 7	FAL	2019/9/9	03 24'S	173 53'E	KI	AL	29
CN	PS	JIN HUI 7	FAL	2019/9/15	02 54'S	179 54'E	KI	AL	3
CN	PS	JIN HUI 7	FAL	2019/9/21	03 16'S	178 39'E	KI	AL	2
CN	PS	JIN HUI 7	FAL	2019/10/2	00 51'N	167 40'E	NR	AL	27
CN	PS	JIN HUI 7	FAL	2019/10/3	00 48'N	166 01'E	NR	AL	1
CN	PS	JIN HUI 7	FAL	2019/10/5	01 42'S	170 58'E	KI	AL	11
CN	PS	JIN HUI 7	FAL	2019/10/10	02 50'S	172 18'E	KI	AL	5
CN	PS	JIN HUI 7	FAL	2019/10/14	00 45'S	166 01'E	NR	AL	2
CN	PS	JIN HUI 7	FAL	2019/10/20	04 08'S	174 15'E	KI	AL	8
CN	PS	JIN HUI 7	FAL	2019/10/26	01 19'S	179 50'E	KI	AL	13
CN	PS	JIN HUI 7	FAL	2019/11/10	00 39'N	164 40'E	NR	AL	1
CN	PS	JIN HUI 7	FAL	2019/11/11	00 10'N	164 42'E	NR	AL	18
CN	PS	JIN HUI 7	FAL	2019/12/8	05 15'S	177 04'E	TV	AL	3
CN	PS	JIN HUI 7	FAL	2019/11/15	00 10'N	170 28'E	KI	AL	11
CN	PS	JIN HUI 7	FAL	2019/11/17	00 39'S	167 44'E	NR	AL	11
CN	PS	JIN HUI 7	FAL	2019/11/20	04 36'S	175 39'E	TV	AL	4
CN	PS	JIN HUI 7	FAL	2019/12/14	03 32'S	177 19'E	KI	AL	3
CN	PS	JIN HUI 7	FAL	2019/11/21	03 29'S	174 24'E	KI	AL	9
CN	PS	JIN HUI 7	FAL	2019/11/22	03 51'S	175 54'E	KI	AL	4
CN	PS	JIN HUI 7	FAL	2019/11/24	03 03'S	177 55'E	KI	AL	3
CN	PS	JIN HUI 7	FAL	2019/12/13	03 55'S	177 04'E	KI	AL	3
CN	PS	JIN HUI 7	FAL	2019/12/16	03 33'S	176 48'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/1/14	00 35'S	172 05'E	KI	AL-11,D-1	12
CN	PS	JIN HUI 6	FAL	2019/1/16	01 08'S	173 09'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 6	FAL	2019/1/21	01 29'S	172 54'E	KI	AL-7,D-1	8
CN	PS	JIN HUI 6	FAL	2019/1/22	01 40'S	173 19'E	KI	AL	6
CN	PS	JIN HUI 6	FAL	2019/2/10	00 10'N	171 48'E	KI	AL-2,D-1	3
CN	PS	JIN HUI 6	FAL	2019/2/24	02 13'S	171 48'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/4/9	04 03'S	175 08'E	KI	AL	8
CN	PS	JIN HUI 6	FAL	2019/4/12	01 39'S	172 50'E	KI	AL	4
CN	PS	JIN HUI 6	FAL	2019/2/27	00 46'S	168 39'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/3/1	02 27'S	168 10'E	KI	AL	6
CN	PS	JIN HUI 6	FAL	2019/4/18	03 17'S	175 35'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/4/30	01 33'N	174 24'E	KI	AL	4
CN	PS	JIN HUI 6	FAL	2019/3/21	01 33'S	168 20'E	KI	AL	1
CN	PS	JIN HUI 6	FAL	2019/3/22	02 00'S	170 49'E	KI	AL	5
CN	PS	JIN HUI 6	FAL	2019/6/44	00 19'N	178 14'E	KI	AL	6
CN	PS	JIN HUI 6	FAL	2019/3/25	01 56'S	171 03'E	KI	AL-4,D-1	5
CN	PS	JIN HUI 6	FAL	2019/4/4	01 05'S	179 30'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/6/25	00 01'N	175 33'E	KI	AL-20,D-41	61
CN	PS	JIN HUI 6	FAL	2019/6/26	00 50'N	177 24'E	KI	AL	3

CN	PS	JIN HUI 6	FAL	2019/4/7	03°59'S	176°02'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/5/4	00°54'N	178°41'E	KI	AL	4
CN	PS	JIN HUI 6	FAL	2019/7/9	02°18'S	173°20'E	KI	AL	8
CN	PS	JIN HUI 6	FAL	2019/7/11	01°36'S	178°03'E	KI	D	3
CN	PS	JIN HUI 6	FAL	2019/5/16	00°29'N	177°58'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/5/18	01°14'N	177°12'E	KI	AL	1
CN	PS	JIN HUI 6	FAL	2019/5/25	00°54'N	176°37'E	KI	AL	8
CN	PS	JIN HUI 6	FAL	2019/5/31	00°38'S	179°18'E	KI	AL	5
CN	PS	JIN HUI 6	FAL	2019/6/11	00°19'S	176°26'E	KI	AL	3
CN	PS	JIN HUI 6	FAL	2019/8/14	00°55'S	177°38'E	KI	AL-5,D-4	9
CN	PS	JIN HUI 6	FAL	2019/6/21	00°46'S	171°45'E	KI	AL-2,D-16	18
CN	PS	JIN HUI 6	FAL	2019/8/17	02°55'S	176°27'E	KI	D	3
CN	PS	JIN HUI 6	FAL	2019/11/5	03°48'S	175°38'E	KI	AL	6
CN	PS	JIN HUI 6	FAL	2019/6/22	00°56'S	171°24'E	KI	D	4
CN	PS	JIN HUI 6	FAL	2019/7/30	03°22'S	176°52'E	KI	D	2
CN	PS	JIN HUI 6	FAL	2019/8/2	03°02'S	176°53'E	KI	D	2
CN	PS	JIN HUI 6	FAL	2019/6/27	00°19'S	176°40'E	KI	AL	1
CN	PS	JIN HUI 6	FAL	2019/11/21	02°45'S	178°21'E	KI	D	2
CN	PS	JIN HUI 6	FAL	2019/7/7	00°19'S	170°08'E	KI	AL-3,D-1	4
CN	PS	JIN HUI 6	FAL	2019/12/7	02°33'S	169°14'E	KI	AL-7,D-4	11
CN	PS	JIN HUI 6	FAL	2019/7/8	00°43'S	171°12'E	KI	AL-22,D-18	40
CN	PS	JIN HUI 6	FAL	2019/12/8	02°47'S	169°44'E	KI	AL	1
CN	PS	JIN HUI 6	FAL	2019/7/15	01°27'S	178°16'E	KI	D	3
CN	PS	JIN HUI 6	FAL	2019/7/24	00°17'S	175°57'E	KI	AL-2,D-4	6
CN	PS	JIN HUI 6	FAL	2019/7/25	01°22'S	178°48'E	KI	D	10
CN	PS	JIN HUI 6	FAL	2019/8/10	00°30'S	172°51'E	KI	D	5
CN	PS	JIN HUI 6	FAL	2019/8/12	00°08'S	175°41'E	KI	AL-27,D-40	60
CN	PS	JIN HUI 6	FAL	2019/11/12	01°28'S	179°23'E	KI	AL	4
CN	PS	JIN HUI 6	FAL	2019/12/2	00°08'S	169°01'E	KI	D	2
CN	PS	JIN HUI 6	FAL	2019/11/9	03°27'S	175°49'E	KI	AL-13,D-4	17
CN	PS	JIN HUI 6	FAL	2019/12/3	01°49'N	167°30'E	KI	AL-8,D-8	16
CN	PS	JIN HUI 6	FAL	2019/11/11	03°40'S	178°19'E	KI	AL	3
CN	PS	JIN HUI 6	FAL	2019/11/15	02°46'S	178°07'E	KI	AL-1,D-2	3
CN	PS	JIN HUI 6	FAL	2019/11/22	02°49'S	178°03'E	KI	AL-1,D-3	4
CN	PS	JIN HUI 6	FAL	2019/11/23	02°01'S	178°03'E	KI	AL	2
CN	PS	JIN HUI 6	FAL	2019/12/10	02°58'S	170°12'E	KI	AL	5
CN	PS	JIN HUI 6	FAL	2019/12/20	00°03'N	175°33'E	KI	AL-2,D-5	7
CN	PS	JIN HUI 6	FAL	2019/12/12	02°45'S	169°20'E	KI	AL-2,D-2	4
CN	PS	JIN HUI 6	FAL	2019/12/22	00°25'S	176°47'E	KI	AL-1,D-4	5
CN	PS	JIN HUI 6	FAL	2019/12/13	03°39'S	169°25'E	KI	AL-5,D-11	16
CN	PS	JIN HUI 6	FAL	2019/12/28	02°06'N	171°54'E	KI	AL	4
CN	PS	JIN HUI 6	FAL	2019/12/16	03°47'S	173°04'E	KI	AL-3,D-1	4
CN	PS	JIN HUI 6	FAL	2019/12/18	00°57'S	172°53'E	KI	AL-2,D-4	6

CN	PS	JIN HUI 6	FAL	2019/12/25	03 05'N	175 50'E	KI	AL	5
CN	PS	JIN HUI 6	FAL	2019/12/26	03 43'N	173 55'E	KI	AL-10,D-5	15
CN	PS	JIN HUI 6	FAL	2019/12/30	01 55'S	170 29'E	KI	AL	1
CN	PS	JIN HUI 8	FAL	2019/1/9	00 06'N	170 21'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/1/12	00 34'S	171 39'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/1/18	01 04'S	172 41'E	KI	AL-4,D-1	5
CN	PS	JIN HUI 8	FAL	2019/2/8	01 53'S	172 12'E	KI	AL	6
CN	PS	JIN HUI 8	FAL	2019/2/19	02 10'S	171 06'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/3/3	01 12'S	171 35'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/3/5	01 25'S	170 49'E	KI	AL	6
CN	PS	JIN HUI 8	FAL	2019/3/6	01 44'S	170 49'E	KI	AL	3
CN	PS	JIN HUI 8	FAL	2019/3/16	02 03'S	165 15'E	KI	AL	4
CN	PS	JIN HUI 8	FAL	2019/4/6	01 29'S	167 06'E	NR	AL	3
CN	PS	JIN HUI 8	FAL	2019/4/13	00 59'N	170 22'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/6/12	00 33'S	176 46'E	KI	AL	7
CN	PS	JIN HUI 8	FAL	2019/8/17	02 48'S	176 05'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/4/18	03 01'S	176 18'E	KI	AL	4
CN	PS	JIN HUI 8	FAL	2019/8/26	03 21'S	177 09'E	KI	AL	9
CN	PS	JIN HUI 8	FAL	2019/8/28	02 34'S	179 39'E	KI	AL	10
CN	PS	JIN HUI 8	FAL	2019/5/8	00 32'N	174 57'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/5/16	00 09'S	172 25'E	KI	AL	7
CN	PS	JIN HUI 8	FAL	2019/6/28	02 12'S	173 05'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/7/11	00 55'S	177 39'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/7/15	01 25'S	178 43'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/9/5	00 27'N	171 44'E	KI	AL	4
CN	PS	JIN HUI 8	FAL	2019/9/7	02 34'S	171 36'E	KI	AL	6
CN	PS	JIN HUI 8	FAL	2019/7/28	00 07'N	172 43'E	KI	AL	3
CN	PS	JIN HUI 8	FAL	2019/8/3	02 53'S	176 44'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/9/23	00 24'S	171 10'E	KI	AL	12
CN	PS	JIN HUI 8	FAL	2019/8/4	02 50'S	176 17'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/9/28	00 01'N	170 50'E	KI	AL	7
CN	PS	JIN HUI 8	FAL	2019/9/11	03 45'S	174 16'E	KI	AL	7
CN	PS	JIN HUI 8	FAL	2019/9/17	00 07'N	170 48'E	KI	AL	9
CN	PS	JIN HUI 8	FAL	2019/9/13	02 42'S	174 55'E	KI	AL	10
CN	PS	JIN HUI 8	FAL	2019/9/16	00 10'N	170 49'E	KI	AL	10
CN	PS	JIN HUI 8	FAL	2019/10/9	00 04'S	169 48'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/9/25	00 20'S	171 03'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/9/29	00 33'N	170 45'E	KI	AL	13
CN	PS	JIN HUI 8	FAL	2019/10/7	00 01'S	170 21'E	KI	AL	14
CN	PS	JIN HUI 8	FAL	2019/10/8	00 05'S	170 17'E	KI	AL	35
CN	PS	JIN HUI 8	FAL	2019/11/3	03 35'S	176 42'E	KI	AL-3,D-3	6
CN	PS	JIN HUI 8	FAL	2019/10/22	01 12'N	169 55'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/11/26	00 28'S	171 50'E	KI	AL	3

CN	PS	JIN HUI 8	FAL	2019/10/28	03 49'N	175 06'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/10/31	03 30'S	175 29'E	KI	AL	4
CN	PS	JIN HUI 8	FAL	2019/11/1	03 36'S	174 59'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/11/4	03 26'S	176 16'E	KI	AL	4
CN	PS	JIN HUI 8	FAL	2019/11/5	03 22'S	175 48'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/11/6	03 23'S	175 55'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/11/9	03 06'S	175 06'E	KI	AL	1
CN	PS	JIN HUI 8	FAL	2019/11/7	03 19'S	175 46'E	KI	AL	6
CN	PS	JIN HUI 8	FAL	2019/12/3	01 04'N	164 42'E	NR	AL	1
CN	PS	JIN HUI 8	FAL	2019/12/6	01 28'S	170 59'E	KI	AL	5
CN	PS	JIN HUI 8	FAL	2019/12/4	00 24'N	164 42'E	NR	AL	1
CN	PS	JIN HUI 8	FAL	2019/10/30	03 02'S	177 43'E	KI	D	2
CN	PS	JIN HUI 8	FAL	2019/12/7	02 01'S	170 46'E	KI	AL	3
CN	PS	JIN HUI 8	FAL	2019/12/5	02 16'S	167 42'E	NR	AL-5,D-5	10
CN	PS	JIN HUI 8	FAL	2019/12/29	00 29'N	174 53'E	KI	AL	3
CN	PS	JIN HUI 8	FAL	2019/12/9	03 35'S	176 16'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/12/19	00 06'S	172 33'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/12/11	02 21'S	173 11'E	KI	AL	3
CN	PS	JIN HUI 8	FAL	2019/12/30	00 29'N	175 22'E	KI	AL	2
CN	PS	JIN HUI 8	FAL	2019/12/17	00 39'S	172 24'E	KI	AL	2
CN	PS	JIN HUI 18	FAL	2019/1/18	00 01'N	170 08'E	KI	AL	2
CN	PS	JIN HUI 18	FAL	2019/1/27	00 20'S	168 13'E	KI	AL	3
CN	PS	JIN HUI 18	FAL	2019/2/23	01 25'S	165 10'E	NR	AL-5,D-2	7
CN	PS	JIN HUI 18	FAL	2019/2/24	01 27'S	163 45'E	NR	AL-5,D-2	7
CN	PS	JIN HUI 18	FAL	2019/3/31	03 47'S	178 59'E	KI	AL	3
CN	PS	JIN HUI 18	FAL	2019/5/14	00 13'S	171 08'E	KI	AL-3,D-1	4
CN	PS	JIN HUI 18	FAL	2019/5/25	00 32'N	176 20'E	KI	AL	4
CN	PS	JIN HUI 18	FAL	2019/5/27	01 12'N	176 57'E	KI	AL-17,D-4	21
CN	PS	JIN HUI 18	FAL	2019/6/1	00 16'N	179 05'E	KI	AL-4,D-1	5
CN	PS	JIN HUI 18	FAL	2019/6/5	00 20'S	176 50'E	KI	AL	5
CN	PS	JIN HUI 18	FAL	2019/6/8	00 18'S	176 53'E	KI	AL-32,D-3	35
CN	PS	JIN HUI 18	FAL	2019/6/17	02 25'S	168 46'E	KI	AL-7,D-3	10
CN	PS	JIN HUI 18	FAL	2019/6/19	02 39'S	168 42'E	KI	AL	6
CN	PS	JIN HUI 18	FAL	2019/6/20	02 42'S	167 56'E	NR	AL-14,D-1	15
CN	PS	JIN HUI 18	FAL	2019/6/22	02 23'S	167 57'E	NR	AL-9,D-3	12
CN	PS	JIN HUI 18	FAL	2019/7/1	01 04'N	176 19'E	KI	AL-44,D-33	77
CN	PS	JIN HUI 18	FAL	2019/7/8	00 41'S	171 06'E	KI	AL	1
CN	PS	JIN HUI 18	FAL	2019/7/21	02 46'S	173 14'E	KI	AL-5,D-2	7
CN	PS	JIN HUI 18	FAL	2019/7/12	00 58'S	177 26'E	KI	AL	2
CN	PS	JIN HUI 18	FAL	2019/7/23	02 12'S	173 46'E	KI	AL-1,D-4	15
CN	PS	JIN HUI 18	FAL	2019/7/24	00 20'S	175 57'E	KI	AL-2,D-1	3
CN	PS	JIN HUI 18	FAL	2019/8/18	02 31'S	179 53'E	KI	AL-6,D-1	7
CN	PS	JIN HUI 18	FAL	2019/8/25	03 13'S	177 20'E	KI	AL	2

CN	PS	JIN HUI 18	FAL	2019/8/27	03 °13'S	179 °42'E	KI	AL-4,D-9	13
CN	PS	JIN HUI 18	FAL	2019/9/7	01 °39'N	176 °24'E	KI	AL	4
CN	PS	JIN HUI 18	FAL	2019/9/16	02 °54'S	178 °11'E	KI	AL-3,D-2	5
CN	PS	JIN HUI 18	FAL	2019/9/17	04 °06'S	178 °04'E	KI	AL-3,D-9	12
CN	PS	JIN HUI 18	FAL	2019/9/24	03 °28'S	178 °08'E	KI	AL-1,D-8	9
CN	PS	JIN HUI 18	FAL	2019/10/3	03 °02'S	175 °17'E	KI	AL-2,D-1	3
CN	PS	JIN HUI 18	FAL	2019/10/18	02 °05'S	173 °57'E	KI	AL	4
CN	PS	JIN HUI 18	FAL	2019/10/30	04 °18'S	174 °38'E	TV	AL-2,D-2	4
CN	PS	JIN HUI 18	FAL	2019/11/10	03 °40'S	175 °42'E	KI	AL-4,D-3	7
CN	PS	JIN HUI 18	FAL	2019/11/15	01 °18'S	177 °36'E	KI	AL-1,D-2	3
CN	PS	JIN HUI 18	FAL	2019/11/29	02 °06'S	172 °42'E	KI	AL-4,D-9	13
CN	PS	JIN HUI 18	FAL	2019/12/21	00 °34'S	178 °17'E	KI	AL-3,D-7	10
CN	PS	JIN HUI 58	FAL	2019/1/1	00 °48'N	171 °50'E	KI	AL	4
CN	PS	JIN HUI 58	FAL	2019/1/5	01 °36'N	171 °41'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/1/6	01 °43'N	170 °51'E	KI	AL-10,D-6	16
CN	PS	JIN HUI 58	FAL	2019/1/8	00 °18'N	170 °02'E	KI	D	6
CN	PS	JIN HUI 58	FAL	2019/7/3	01 °02'N	176 °36'E	KI	AL	8
CN	PS	JIN HUI 58	FAL	2019/7/2	01 °08'N	176 °34'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/1/20	00 °22'N	170 °39'E	KI	AL-4,D-1	5
CN	PS	JIN HUI 58	FAL	2019/1/21	00 °18'N	170 °27'E	KI	AL-6,D-5	11
CN	PS	JIN HUI 58	FAL	2019/2/12	00 °12'N	170 °00'E	KI	AL-5,D-3	8
CN	PS	JIN HUI 58	FAL	2019/2/17	00 °32'N	169 °49'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/7/7	00 °04'S	178 °00'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/1/22	00 °28'N	170 °05'E	KI	AL-6,D-10	16
CN	PS	JIN HUI 58	FAL	2019/2/22	02 °07'S	172 °00'E	KI	AL-1,D-4	5
CN	PS	JIN HUI 58	FAL	2019/1/24	01 °36'S	172 °37'E	KI	AL-4,D-2	6
CN	PS	JIN HUI 58	FAL	2019/2/1	00 °31'N	169 °32'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 58	FAL	2019/7/9	01 °21'S	177 °53'E	KI	AL	5
CN	PS	JIN HUI 58	FAL	2019/1/25	00 °18'N	169 °25'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/6/21	00 °44'S	171 °25'E	KI	AL	6
CN	PS	JIN HUI 58	FAL	2019/6/22	00 °33'S	171 °22'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/1/26	00 °20'N	168 °41'E	KI	AL-1,D-9	10
CN	PS	JIN HUI 58	FAL	2019/3/17	01 °54'S	167 °29'E	KI	AL-12,D-22	34
CN	PS	JIN HUI 58	FAL	2019/6/16	05 °27'N	155 °58'E	FSM	AL	2
CN	PS	JIN HUI 58	FAL	2019/6/24	00 °12'N	175 °34'E	KI	AL-4,D-24	28
CN	PS	JIN HUI 58	FAL	2019/1/30	00 °06'S	167 °13'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/3/14	02 °26'S	166 °15'E	KI	AL-2,D-3	5
CN	PS	JIN HUI 58	FAL	2019/6/24	00 °23'S	171 °03'E	KI	AL	10
CN	PS	JIN HUI 58	FAL	2019/6/18	04 °09'N	164 °17'E	FSM	AL	6
CN	PS	JIN HUI 58	FAL	2019/6/28	02 °47'S	178 °18'E	KI	AL	4
CN	PS	JIN HUI 58	FAL	2019/2/2	00 °01'N	172 °09'E	KI	D	5
CN	PS	JIN HUI 58	FAL	2019/3/8	03 °24'S	178 °48'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 58	FAL	2019/6/20	00 °51'S	171 °27'E	KI	AL	2

CN	PS	JIN HUI 58	FAL	2019/6/23	00 32'S	171 23'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/6/29	01 47'S	179 37'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/7/3	01 02'N	176 36'E	KI	AL	8
CN	PS	JIN HUI 58	FAL	2019/7/21	00 34'S	178 38'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/7/24	00 48'S	172 34'E	KI	AL	6
CN	PS	JIN HUI 58	FAL	2019/7/5	00 51'N	177 02'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/7/5	01 11'S	178 27'E	KI	AL	7
CN	PS	JIN HUI 58	FAL	2019/7/20	01 53'S	179 00'E	KI	AL-4,D-8	12
CN	PS	JIN HUI 58	FAL	2019/8/19	00 47'S	173 20'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/7/27	00 06'N	172 25'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 58	FAL	2019/7/28	00 36'S	169 24'E	KI	AL	30
CN	PS	JIN HUI 58	FAL	2019/8/26	02 32'N	175 38'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/8/27	02 10'N	175 46'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/8/1	02 44'S	176 24'E	KI	AL-2,D-5	7
CN	PS	JIN HUI 58	FAL	2019/3/11	00 15'S	168 11'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/8/15	03 17'S	174 02'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/9/2	01 37'S	177 55'E	KI	D	2
CN	PS	JIN HUI 58	FAL	2019/9/15	00 15'N	170 43'E	KI	D	6
CN	PS	JIN HUI 58	FAL	2019/9/16	00 36'S	172 22'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/8/3	02 42'S	176 26'E	KI	D	6
CN	PS	JIN HUI 58	FAL	2019/8/28	02 05'N	175 35'E	KI	AL-2,D-2	4
CN	PS	JIN HUI 58	FAL	2019/9/1	01 07'S	178 07'E	KI	AL-1,D-1	2
CN	PS	JIN HUI 58	FAL	2019/8/4	02 40'S	176 31'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/3/27	01 37'N	168 32'E	KI	AL-2,D-2	4
CN	PS	JIN HUI 58	FAL	2019/8/13	00 02'S	172 16'E	KI	AL-3,D-1	4
CN	PS	JIN HUI 58	FAL	2019/8/23	00 04'N	178 37'E	KI	AL-1,D-6	7
CN	PS	JIN HUI 58	FAL	2019/8/24	03 25'N	174 55'E	KI	D	4
CN	PS	JIN HUI 58	FAL	2019/10/1	00 34'S	170 37'E	KI	AL-5,D-5	10
CN	PS	JIN HUI 58	FAL	2019/10/7	00 55'S	172 11'E	KI	AL-3,D-6	9
CN	PS	JIN HUI 58	FAL	2019/8/30	02 55'S	179 53'E	KI	D	2
CN	PS	JIN HUI 58	FAL	2019/10/7	00 17'S	171 58'E	KI	AL-3,D-2	5
CN	PS	JIN HUI 58	FAL	2019/9/12	00 00'N	170 27'E	KI	AL-2,D-1	3
CN	PS	JIN HUI 58	FAL	2019/10/15	03 59'S	179 06'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/10/3	03 01'S	172 43'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/10/25	01 20'S	171 11'E	KI	AL	5
CN	PS	JIN HUI 58	FAL	2019/11/6	00 03'N	164 40'E	KI	D	2
CN	PS	JIN HUI 58	FAL	2019/10/27	03 54'N	175 32'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/10/16	03 56'S	174 57'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/11/9	00 22'N	166 38'E	KI	D	3
CN	PS	JIN HUI 58	FAL	2019/10/22	01 53'S	173 25'E	KI	AL-3,D-13	16
CN	PS	JIN HUI 58	FAL	2019/11/5	01 14'N	168 04'E	KI	D	4
CN	PS	JIN HUI 58	FAL	2019/11/10	00 22'N	166 24'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/11/13	02 31'N	164 26'E	KI	AL-1,D-1	2

CN	PS	JIN HUI 58	FAL	2019/11/11	01 22'N	164 32'E	KI	AL	1
CN	PS	JIN HUI 58	FAL	2019/11/30	00 36'N	171 51'E	KI	D	3
CN	PS	JIN HUI 58	FAL	2019/12/3	00 33'N	167 50'E	KI	AL-2,D-5	7
CN	PS	JIN HUI 58	FAL	2019/11/12	02 25'N	163 56'E	KI	D	3
CN	PS	JIN HUI 58	FAL	2019/11/18	00 52'S	165 11'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/11/14	01 35'N	164 44'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/11/20	01 47'S	170 06'E	KI	D	4
CN	PS	JIN HUI 58	FAL	2019/11/21	01 58'S	170 33'E	KI	AL	2
CN	PS	JIN HUI 58	FAL	2019/11/23	01 19'N	170 28'E	KI	AL	3
CN	PS	JIN HUI 58	FAL	2019/12/5	00 55'N	168 24'E	KI	AL-2,D-9	11
CN	PS	JIN HUI 58	FAL	2019/12/10	00 30'N	170 50'E	KI	D	15
CN	PS	JIN HUI 58	FAL	2019/12/12	00 31'N	167 34'E	NR	D	6
CN	PS	JIN HUI 58	FAL	2019/12/15	01 28'S	172 45'E	KI	AL-2,D-1	3
CN	PS	JIN HUI 58	FAL	2019/11/15	00 16'N	164 04'E	KI	D	4
CN	PS	JIN HUI 58	FAL	2019/12/14	03 39'S	169 17'E	KI	AL-5,D-8	13
CN	PS	JIN HUI 58	FAL	2019/11/19	01 37'S	166 58'E	KI	D	6
CN	PS	JIN HUI 58	FAL	2019/12/18	00 25'N	170 27'E	KI	D	4
CN	PS	JIN HUI 58	FAL	2019/12/20	00 11'N	171 42'E	KI	D	3
CN	PS	JIN HUI 58	FAL	2019/12/26	01 14'N	172 02'E	KI	D	2
CN	PS	JIN HUI 58	FAL	2019/12/28	00 48'N	170 27'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/12/2	00 17'N	170 52'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/12/31	00 00'S	177 03'E	KI	D	1
CN	PS	JIN HUI 58	FAL	2019/12/16	00 39'N	170 36'E	KI	D	9
CN	PS	JIN HUI 58	FAL	2019/12/25	03 27'N	175 21'E	KI	D	3

Table 15 Sea turtle interactions in purse seine for national fleet

Flag	Gear	Vessel Name	species	date	latitude	longitude	EEZ	Life Status (Dead/Alive)	Number of Individuals
CN	PS	XIN SHIJI 111	Turtle	2019/7/17	01 05'S	178 05'E	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/8/21	04 05'S	177 32'W	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/8/25	01 36'S	179 25'E	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/8/28	01 57'S	179 33'E	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/9/28	00 22'S	176 38'W	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/9/30	01 47'S	172 41'E	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/10/8	02 09'S	171 29'E	KI	AL	1

CN	PS	XIN SHIJI 111	Turtle	2019/10/17	01 °15'S	171 °55'E	KI	AL	1
CN	PS	XIN SHIJI 111	Turtle	2019/12/11	07 °05'S	163 °05'E	SB	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/7/18	00 °47'S	170 °59'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/7/18	00 °45'N	175 °59'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/8/19	02 °11'S	179 °49'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/8/31	01 °48'S	173 °45'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/11/24	00 °28'S	171 °23'E	KI	AL	3
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/12/1	02 °12'S	173 °24'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/12/10	04 °08'S	175 °45'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/1/27	01 °15'S	170 °24'E	KI	AL	1
CN	PS	XIN SHIJI 112	Green Turtle (TUG)	2019/1/13	02 °29'N	173 °30'E	KI	AL	1
CN	PS	JIN HUI 9	Loggerhead turtle (TTL)	2019/2/1	03 °10'S	171 °23'E	KI	AL	1
CN	PS	JIN HUI 9	Loggerhead turtle (TTL)	2019/7/9	01 °26'S	178 °16'E	KI	AL	1
CN	PS	JIN HUI 9	Olive ridley turtle (LKV)	2019/7/9	01 °26'S	178 °16'E	KI	AL	1
CN	PS	JIN HUI 9	Flatback turtle (FBT)	2019/9/12	01 °08'S	171 °48'E	KI	AL	1
CN	PS	JIN HUI 9	Flatback turtle (FBT)	2019/10/4	01 °08'N	169 °55'E	KI	AL	1
CN	PS	JIN HUI 9	Loggerhead turtle (TTL)	2019/12/17	04 °05'S	175 °08'E	KI	AL	1
CN	PS	JIN HUI 9	Flatback turtle (FBT)	2019/11/30	02 °07'S	170 °22'E	KI	AL	1
CN	PS	JIN HUI 8	Loggerhead turtle (TTL)	2019/11/19	00 °31'N	170 °57'E	KI	AL	2
CN	PS	JIN HUI 18	Loggerhead turtle (TTL)	2019/10/3	03 °02'S	175 °17'E	KI	AL	1
CN	PS	JIN HUI 58	Olive ridley turtle (LKV)	2019/1/3	00 °12'N	170 °46'E	KI	AL	1
CN	PS	JIN HUI 58	Green Turtle (TUG)	2019/7/19	03 °08'S	179 °51'E	KI	AL	1

CN	PS	JIN HUI 58	Green Turtle (TUG)	2019/7/19	02°39'S	179°46'E	KI	AL	1
CN	PS	JIN HUI 58	Green Turtle (TUG)	2019/9/21	01°59'S	179°26'E	KI	AL	2