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REPORT OF JAPAN'S SCIENTIFIC OBSERVER PROGRAM FOR TUNA LONGLINE FISHERY IN THE CONVENTION AREA OF INTER-AMERICAN TROPICAL TUNA COMMISSION IN 2014 CALENDAR YEAR

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SUMMARY

In accordance with Resolution C-11-08, Japan commenced its scientific observer program for longline fishery in the convention area of Inter-American Tropical Tuna Commission (IATTC) from 1 January 2013. This document provides the scientific observers' information in 2014 calendar year. In 2014 calendar year, seventeen (17) observer trips were conducted on Japanese tuna longline vessels in the Convention Area.

KEYWORDS

Longline, Japan, Scientific observer, Tuna fisheries

INTRODUCTION

In accordance with Resolution C-11-08, Japan commenced its scientific observer program for longline fishery in the convention area of Inter-American Tropical Tuna Commission (IATTC) from 1 January 2013. This document provides the scientific observers' information in 2014 calendar year.

TRAINING OF THE SCIENTIFIC OBSERVER

In principal, all scientific observers attend a training class held by Overseas Fishery Cooperation Foundation of Japan (OFCF) and Japan NUS (JANUS) under Japan's observer program before their departure for the cruise. The National Research Institute of Far Seas Fisheries (NRIFSF) provides an observer manual and supervises the training course. Under the course scientific observers are trained in skills necessary for conduct its part, including species identification, data recording protocols *etc*.

RESULTS

i) Number of observer trip and its coverage

In 2014 calendar year, seventeen (17) observer trips were conducted on Japanese tuna longline vessels.

Information of those trips is shown in Table1. The observer coverage in this year was 5.6% (874/15,507) by number of fishing operations.

ii) Catch records, including bycatch data

Observers recorded every items taken on deck and identified the species by themselves. Observers also collected bycatch data. They took photo of bycatch species according to the procedures given in the observer manual made by NRIFSF scientists. Bycatch experts in NRIFSF identified species using these photos.

All observer trip was compiled for analyze catch record. The list of species recorded by scientific observer on longline fishery in 2014 was shown in Table 2.

Table 1. Information on the trip of the scientific observer for Japanese tuna longline in the conventionareas of Inter-American Tropical Tuna Commission during 2014 calendar year.

Trip ID	Range of latitude	Range of longitude	Start date of operation	End date of operation	Number of operation	Number of hooks
trip1	8.4-12.3S	114.3-119.2W	2014/1/1	2014/1/15	13	33,150
trip2	10.7-13.4S	108.1-110.1W	2014/1/1	2014/1/25	24	70,176
trip3	10.0-15.6S	104.7-110.4W	2014/1/1	2014/2/10	37	88,320
trip4	9.7-14.5S	108.9-121.9W	2014/1/1	2014/2/14	38	109,447
trip5	7.4-15.1S	111.9-129.6W	2014/1/1	2014/3/7	60	147,390
trip6	6.4-12.4S	107.3-115.0W	2014/1/31	2014/4/6	61	159,426
trip7	5.2-2.2N	120.4-139.4W	2014/5/28	2014/7/26	56	151,200
trip8	9.9-15.0S	111.3-117.5W	2014/11/30	2014/12/31	29	76,767
trip9	11.1-14.5S	116.0-119.0W	2014/12/6	2014/12/30	23	66,623
trip10	10.7-15.1S	89.5-106.1W	2014/4/7	2014/7/30	105	252,075
trip11	7.4-15.6S	122.1-129.9W	2014/8/31	2014/12/6	94	205,440
trip12	8.0-14.5S	116.8-124.6W	2014/8/31	2014/11/29	80	207,485
trip13	3.1N-9.8S	126.3-141.1W	2014/7/4	2014/9/10	63	201,910
trip14	4.8N-11.5S	121.8-146.3W	2014/7/30	2014/10/15	69	206,780
trip15	10.9-15.2S	123.6-125.0W	2014/12/8	2014/12/31	23	50,150
trip16	4.1-14.4S	126.3-148.7W	2014/8/24	2014/12/28	82	227,200
trip17	8.5-12.6S	124.4-127.8W	2014/12/13	2014/12/31	17	51,400
Total					874	2,304,939

Table 2. List of species recorded by scientific observer on longline fishery in the Convention Area in 2014 calendar year

Cruises	- 1	2	3	4	5	6	7	8	9	10
Species Albacore	12	0	1	57	46	93	2	174	18	271
	12	84	68	182		53	_	51		371
Yellowfin tuna				252	85		171		23	134
Bigeye tuna	54	286	203		304	742	488	329	158	545
Skipjack tuna	9	1	22	7	12	21	34	38	1	52
Sailfish	0	5	0	0	0	0	1	0	0	0
Black marlin	0	1	0	0	1	0	0	0	0	6
Blue marlin	2	35	2	20	6	22	30	12	10	38
Spearfishes	25	26	82	124	214	135	117	83	21	68
Striped marlin	2	28	11	7	12	18	35	3	4	380
Sword fish	11	84	100	71	196	364	253	113	61	458
Other teleosts	39	227	129	115	387	571	247	627	252	886
Thresher sharks	0	86	23	19	41	85	62	15	3	40
Shortfin mako	1	0	1	0	0	3	0	3	1	116
Blue shark	7	83	72	71	106	202	21	158	69	136
Oceanic whitetip shark	0	14	0	0	0	0	4	0	0	11
Other Sharks	5	93	57	28	162	371	69	323	1	91
Sting ray	23	81	37	19	333	202	67	193	80	274
Other Rays	0	3	1	0	4	0	0	0	0	0
Sea Birds	0	0	0	0	0	0	0	0	0	0
Sea Turtles	0	8	1	0	0	0	1	0	0	7
Mammals	0	° 1	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	-		0
Unidentified	-	-	-	-			-	0	0 702	0 3,613
Total	209	1,146	810	972	1,909	2,882	1,602	2,122	702	5,015
	209	1,146	810	912	1,909	2,882	1,002	2,122	702	5,015
Cruises	209	1,146	13	14	1,909	16	1,002	Total	, 02	5,015
Cruises Species	- 11	12	13	14	15	16	17	Total		5,015
Cruises Species Albacore	- 11 196	12	13 205	14 165	15	16 96	17	Total 1,607		5,015
Cruises Species Albacore Yellowfin tuna	- 11 196 86	12 104 134	13 205 430	14 165 237	15 63 7	16 96 74	17 4 3	Total 1,607 1,841		5,015
Cruises Species Albacore Yellowfin tuna Bigeye tuna	- 11 196 86 1071	12 104 134 722	13 205 430 746	14 165 237 667	15 63 7 279	16 96 74 604	17 4 3 176	Total 1,607 1,841 7,626		2,012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna	- 11 196 86 1071 20	12 104 134 722 64	13 205 430 746 11	14 165 237 667 31	15 63 7 279 0	16 96 74 604 4	17 4 3 176 0	Total 1,607 1,841 7,626 327	102	
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish	- 11 196 86 1071 20 0	12 104 134 722 64 0	13 205 430 746 11 1	14 165 237 667 31 0	15 63 7 279 0 0	16 96 74 604 4 2	17 4 3 176 0 0	Total 1,607 1,841 7,626 327 9		2,012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin	- 11 196 86 1071 20	12 104 134 722 64	13 205 430 746 11	14 165 237 667 31	15 63 7 279 0	16 96 74 604 4	17 4 3 176 0	Total 1,607 1,841 7,626 327 9 9		2,012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin	- 11 196 86 1071 20 0	12 104 134 722 64 0	13 205 430 746 11 1 1 32	14 165 237 667 31 0	15 63 7 279 0 0	16 96 74 604 4 2	17 4 3 176 0 0	Total 1,607 1,841 7,626 327 9 9 332		2,012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin	- 11 196 86 1071 20 0 0	12 104 134 722 64 0 0	13 205 430 746 11 1 1	14 165 237 667 31 0 0	15 63 7 279 0 0 0	16 96 74 604 4 2 0	17 4 3 176 0 0 0	Total 1,607 1,841 7,626 327 9 9	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2,012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin	- 11 196 86 1071 20 0 0 13	12 104 134 722 64 0 0 15	13 205 430 746 11 1 1 32	14 165 237 667 31 0 0 35	15 63 7 279 0 0 0 0 4	16 96 74 604 4 2 0 46	17 4 3 176 0 0 0 10	Total 1,607 1,841 7,626 327 9 9 332	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes	- 11 196 86 1071 20 0 0 13 80	12 104 134 722 64 0 0 15 298	13 205 430 746 11 1 1 32 114	14 165 237 667 31 0 0 35 236	15 63 7 279 0 0 0 0 4 3	16 96 74 604 4 2 0 46 14	17 4 3 176 0 0 0 10 14	Total 1,607 1,841 7,626 327 9 9 332 1,654		21012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin	- 11 196 86 1071 20 0 0 13 80 11	12 104 134 722 64 0 0 15 298 32	13 205 430 746 11 1 1 32 114 18	14 165 237 667 31 0 0 35 236 24	15 63 7 279 0 0 0 0 4 3 3	16 96 74 604 4 2 0 46 14 13	17 4 3 176 0 0 0 10 14 3	Total 1,607 1,841 7,626 327 9 9 332 1,654 604		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish	- 11 196 86 1071 20 0 0 13 80 11 272	12 104 134 722 64 0 0 15 298 32 98	13 205 430 746 11 1 1 32 114 18 82	14 165 237 667 31 0 0 35 236 24 141	15 63 7 279 0 0 0 0 4 3 3 28	16 96 74 604 4 2 0 46 14 13 114	17 4 3 176 0 0 0 10 14 3 37	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts	- 11 196 86 1071 20 0 0 13 80 11 272 977	12 104 134 722 64 0 0 15 298 32 98 638	13 205 430 746 11 1 1 1 32 114 18 82 417	14 165 237 667 31 0 0 0 35 236 24 141 943	15 63 7 279 0 0 0 0 4 3 3 28 92	16 96 74 604 4 2 0 46 14 13 114 594	17 4 3 176 0 0 0 10 14 3 37 55	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks	- 11 196 86 1071 20 0 0 13 80 11 272 977 79	12 104 134 722 64 0 0 15 298 32 98 638 40	13 205 430 746 11 1 1 1 32 114 18 82 417 11 2	14 165 237 667 31 0 0 35 236 24 141 943 40	15 63 7 279 0 0 0 0 4 3 3 28 92 16 0	16 96 74 604 4 2 0 46 14 13 114 594 14 2	17 4 3 176 0 0 0 0 10 14 3 37 55 5 0	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80	13 205 430 746 11 1 1 1 32 114 18 82 417 11 2 16	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74	15 63 7 279 0 0 0 0 4 3 3 28 92 16 0 52	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78	17 4 3 176 0 0 0 0 0 10 14 3 37 55 5 0 33	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153 1,317		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Dceanic whitetip shark	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6	12 104 134 722 64 0 0 15 298 32 98 638 40 14	13 205 430 746 11 1 1 1 32 114 18 82 417 11 2	14 165 237 667 31 0 0 35 236 24 141 943 40 4	15 63 7 279 0 0 0 0 4 3 3 28 92 16 0	16 96 74 604 4 2 0 46 14 13 114 594 14 2	17 4 3 176 0 0 0 0 10 14 3 37 55 5 0	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Dceanic whitetip shark Other Sharks	11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59 0 249	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80 0 83	13 205 430 746 11 1 1 32 114 18 82 417 11 2 16 1 44	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74 17 240	15 63 7 279 0 0 0 4 3 3 28 92 16 0 52 0 4	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78 0 25	17 4 3 176 0 0 0 0 10 14 3 37 55 5 0 33 0 7	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153 1,317 47 1,852		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Oceanic whitetip shark Other Sharks Sting ray	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59 0 249 135	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80 0 83 45	13 205 430 746 11 1 1 32 114 18 82 417 11 2 16 1 44 31	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74 17 240 54	15 63 7 279 0 0 0 0 4 3 3 28 92 16 0 52 0 4 25	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78 0 25 48	17 4 3 176 0 0 0 10 14 3 37 55 5 0 33 0 7 21	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153 1,317 47 1,852 1,668		21012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Oceanic whitetip shark Other Sharks Sting ray Other Rays	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59 0 249 135 0	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80 0 83 45 0	13 205 430 746 11 1 1 32 114 18 82 417 11 2 16 1 44 31 0	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74 17 240 54 5	15 63 7 279 0 0 0 4 3 3 28 92 16 0 52 0 4 25 0	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78 0 25 48 1	17 4 3 176 0 0 10 14 3 37 55 5 0 33 0 7 21 3	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 1,53 1,317 47 1,852 1,668 17		21012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Dceanic whitetip shark Other Sharks Sting ray Other Rays Sea Birds	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59 0 249 135 0 0 0	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80 0 83 45 0 0 0	13 205 430 746 11 1 1 32 114 18 82 417 11 2 16 1 44 31 0 0 0	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74 17 240 54 5 0	15 63 7 279 0 0 0 4 3 3 28 92 16 0 52 0 4 25 0 0 0	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78 0 25 48 1 0	17 4 3 176 0 0 0 10 14 3 37 55 5 0 33 0 7 21 3 0	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153 1,317 47 1,852 1,668 17 0		
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Other Sharks Sting ray Other Rays Sea Birds Sea Turtles	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59 0 249 135 0 0 0 0 0 0 0 0 0 0 0 0 0	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80 0 83 45 0 0 0 0 0	13 205 430 746 11 1 1 32 114 18 82 417 11 2 16 1 44 31 0 0 1	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74 17 240 54 5 0 0 0	15 63 7 279 0 0 0 4 3 3 28 92 16 0 52 0 4 25 0 0 0 0 0	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78 0 25 48 1 0 0 0	17 4 3 176 0 0 0 10 14 3 37 55 5 0 33 0 7 21 3 0 0 0	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153 1,317 47 1,852 1,668 17 0 18		2,012
Cruises Species Albacore Yellowfin tuna Bigeye tuna Skipjack tuna Sailfish Black marlin Blue marlin Spearfishes Striped marlin Sword fish Other teleosts Thresher sharks Shortfin mako Blue shark Oceanic whitetip shark Other Sharks Sting ray Other Rays Sea Birds	- 11 196 86 1071 20 0 0 13 80 11 272 977 79 6 59 0 249 135 0 0 0	12 104 134 722 64 0 0 15 298 32 98 638 40 14 80 0 83 45 0 0 0	13 205 430 746 11 1 1 32 114 18 82 417 11 2 16 1 44 31 0 0 0	14 165 237 667 31 0 0 35 236 24 141 943 40 4 74 17 240 54 5 0	15 63 7 279 0 0 0 4 3 3 28 92 16 0 52 0 4 25 0 0 0	16 96 74 604 4 2 0 46 14 13 114 594 14 2 78 0 25 48 1 0	17 4 3 176 0 0 0 10 14 3 37 55 5 0 33 0 7 21 3 0	Total 1,607 1,841 7,626 327 9 9 332 1,654 604 2,483 7,196 579 153 1,317 47 1,852 1,668 17 0		2,012

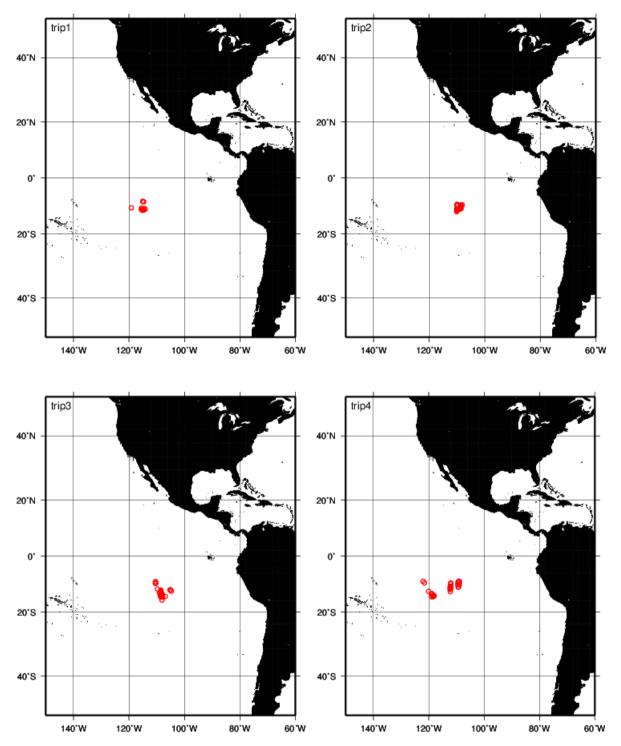


Fig 1. Line setting locations of Japanese tuna longline for the trips with the scientific observer onboard in the convention areas of Inter-American Tropical Tuna Commission during 2013 calendar year.

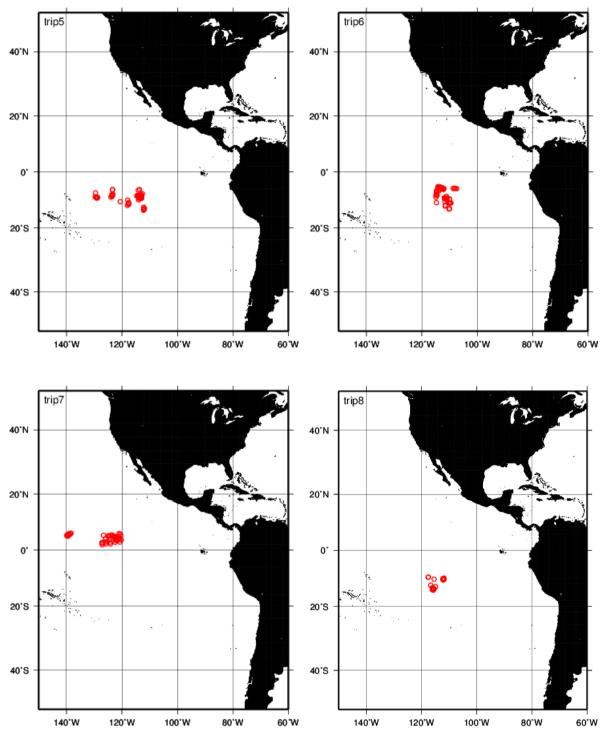


Fig 1. cont.

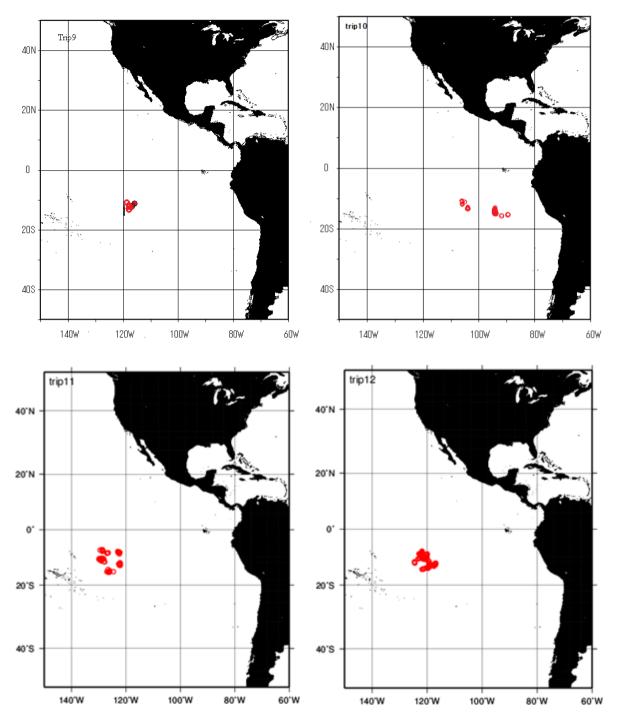


Fig 1. cont.

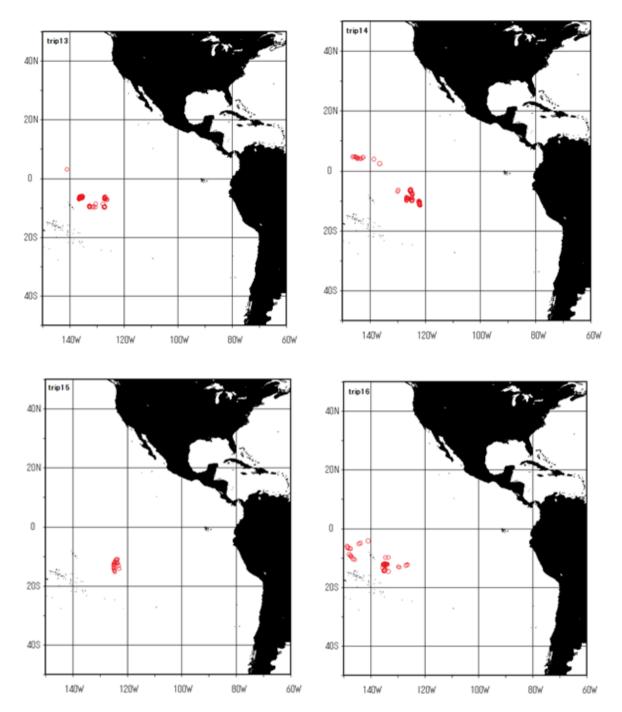


Fig 1. cont.

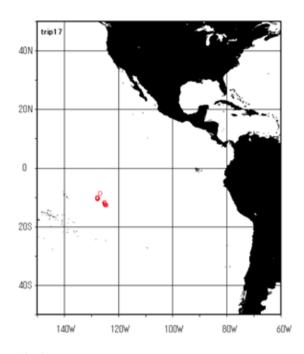


Fig 1. cont.

Acknowledgement

We greatly appreciate all scientific observers for their efforts in order to collect valuable data and samples on the Japanese longline vessels. We would also like to express special thanks to all crews of the longline vessels for their understanding and cooperation to the observer program.