

**INTER-AMERICAN TROPICAL TUNA COMMISSION**

**SCIENTIFIC ADVISORY COMMITTEE**

**TENTH MEETING**

**San Diego, California (USA)**

**13-17 May 2019**

**DOCUMENT SAC-10 INF-A(h)**

**Report of Japan's scientific observer program for tuna longline fishery  
in the convention area of Inter-American Tropical Tuna Commission  
in 2017 calendar year**

Japan Fisheries Agency

1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8111, Japan

National Research Institute of Far Seas Fisheries, FRA

5-7-1, Orido, Shimizu, Shizuoka, 424-8633, Japan

**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 2017 calendar year. In 2017 calendar year, 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 2017 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) Observer trip number, observed fishing operations and observer coverage**

In 2017 calendar year, 17 observer trips were conducted on Japanese tuna longline vessels. Total number of observed fishing operations of the 17 trips was 920 sets. Information on the 17 trips are shown in Table 1. The observer coverage rate was calculated to be 8.5% (920/10,852).

**ii) Catch records, including bycatch data**

Observers recorded every item 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.

The list of species from these trips was shown in Table 2. In relation to paragraph 3 of Resolution C-11-10, fifty-seven interactions of oceanic whitetip shark were recorded by observers in 8 trips (Table 2). Twenty-seven whitetip sharks were dead discarded and others were released alive. In relation to paragraph 4 of Resolution C-15-04, twenty-two interactions of mobulid ray were recorded by observers in 6 trips (Table 2). In relation to paragraph 4.a of Resolution C-04-05, nineteen interactions of sea turtles were recorded by observers in 10 trips (Table 2), and all of them were released.

**Table 1. Information on the trip of the scientific observer for Japanese tuna longline in the convention areas of Inter-American Tropical Tuna Commission during 2017 calendar year.**

Trip ID	Range of latitude	Range of longitude	Start date of operation	End date of operation	Number of operations	Number of hooks
Trip 1	10.1-14.0S	105.9-111.9W	2017/1/1	2017/1/26	23	55,200
Trip 2	7.9-13.4S	107.2-111.6W	2017/1/1	2017/1/30	28	73,440
Trip 3	7.0-13.7S	106.7-117.8W	2017/2/4	2017/4/17	67	171,520
Trip 4	3.1N-8.8S	124.6-136.0W	2017/4/4	2017/5/24	46	122,310
Trip 5	14.3-18.0S	108.1-114.6W	2017/6/22	2017/9/1	69	166,800
Trip 6	5.8N-18.7S	112.7-137.8W	2017/7/12	2017/9/4	46	111,775
Trip 7	16.3-21.3S	79.3-86.2W	2017/6/26	2017/8/12	47	145,644
Trip 8	5.4-13.0S	110.6-134.4W	2017/7/28	2017/10/26	87	282,500
Trip 9	7.0-18.8S	117.9-123.3W	2017/7/26	2017/11/2	93	237,920
Trip 10	16.9-17.9S	86.3-87.1W	2017/8/25	2017/9/13	19	60,469
Trip 11	7.1-14.5S	116.2-130.3W	2017/9/1	2017/12/31	110	360,005
Trip 12	6.0-12.9S	114.1-122.5W	2017/10/13	2017/12/24	70	166,617
Trip 13	9.1-14.3S	102.5-111.3W	2017/10/8	2017/12/11	59	141,120
Trip 14	9.5-13.0S	110.5-112.6W	2017/12/3	2017/12/31	27	68,510
Trip 15	7.3-13.1S	112.7-123.2W	2017/10/5	2017/12/31	81	194,400
Trip 16	7.2-9.3S	120.2-123.9W	2017/12/15	2017/12/31	16	40,420
Trip 17	6.7-12.1S	107.9-118.1W	2017/11/26	2017/12/31	32	80,410
Total	—	—	—	—	920	2,479,060

**Table 2. List of species recorded by scientific observer on longline fishery in the Convention Area in 2017 calendar year (Unit: Number of individuals).**

Trip	1	2	3	4	5	6	7	8	9
Species									
Albacore	10	33	33	90	1337	586	1700	138	544
Yellowfin tuna	32	36	60	204	223	83	80	317	439
Bigeye tuna	168	232	566	557	621	564	629	822	775
Skipjack tuna	11	6	41	41	45	14	10	47	62
Sailfish	0	2	3	1	0	4	0	0	0
Black marlin	0	0	0	0	1	1	0	1	0
Blue marlin	7	12	26	39	3	14	1	25	16
Spearfishes	27	9	20	42	144	69	2	111	187
Striped marlin	3	5	12	5	25	25	1	15	27
Sword fish	24	120	129	127	154	121	219	145	261
Other teleosts	63	281	363	270	1295	598	1425	936	1195
Thresher sharks	0	23	96	32	11	13	10	96	63
Shortfin mako	0	3	1	4	5	7	1	9	25
Blue shark	26	101	305	78	90	46	143	127	270
Oceanic whitetip shark	0	0	28	8	0	2	0	6	7
Other Sharks	20	410	375	231	81	30	78	417	576
Sting ray	38	208	229	255	90	14	76	123	621
Mobulid Rays	0	0	0	0	0	0	0	4	6
Other Rays	0	0	1	0	0	0	0	0	0
Sea Birds	0	0	0	0	5	0	22	0	0
Sea Turtles	1	0	0	0	0	1	1	1	4
Mammals	0	0	0	0	2	0	2	0	0
Unidentified	0	0	0	0	2	0	0	0	0
Total	430	1481	2288	1984	4134	2192	4400	3340	5078
Trip	10	11	12	13	14	15	16	17	Total
Species									
Albacore	368	257	18	28	2	44	0	0	5188
Yellowfin tuna	140	150	130	293	141	144	7	36	2515
Bigeye tuna	250	1130	607	522	268	621	114	230	8676
Skipjack tuna	0	19	19	22	2	10	1	13	363
Sailfish	0	1	3	0	1	0	0	0	15
Black marlin	0	2	2	1	0	1	0	1	10
Blue marlin	0	26	28	24	17	17	4	6	265
Spearfishes	0	100	41	87	28	53	2	27	949
Striped marlin	0	19	35	33	20	34	12	17	288
Sword fish	61	468	281	86	59	694	76	136	3161
Other teleosts	467	2422	629	926	109	851	103	318	12251
Thresher sharks	0	40	12	71	27	28	5	14	541
Shortfin mako	3	12	5	10	0	6	0	0	91
Blue shark	44	246	236	135	68	170	29	48	2162
Oceanic whitetip shark	0	3	0	0	0	2	0	1	57
Other Sharks	19	387	509	329	180	725	82	233	4682
Sting ray	14	286	563	263	41	627	105	104	3657
Mobulid Rays	0	3	2	0	1	0	0	6	22
Other Rays	0	0	0	0	0	8	0	1	10
Sea Birds	4	0	0	0	0	0	0	0	31
Sea Turtles	0	2	0	4	1	3	0	1	19
Mammals	0	2	6	0	0	0	0	1	13
Unidentified	0	0	0	0	0	0	0	0	2
Total	1370	5575	3126	2834	965	4038	540	1193	44968

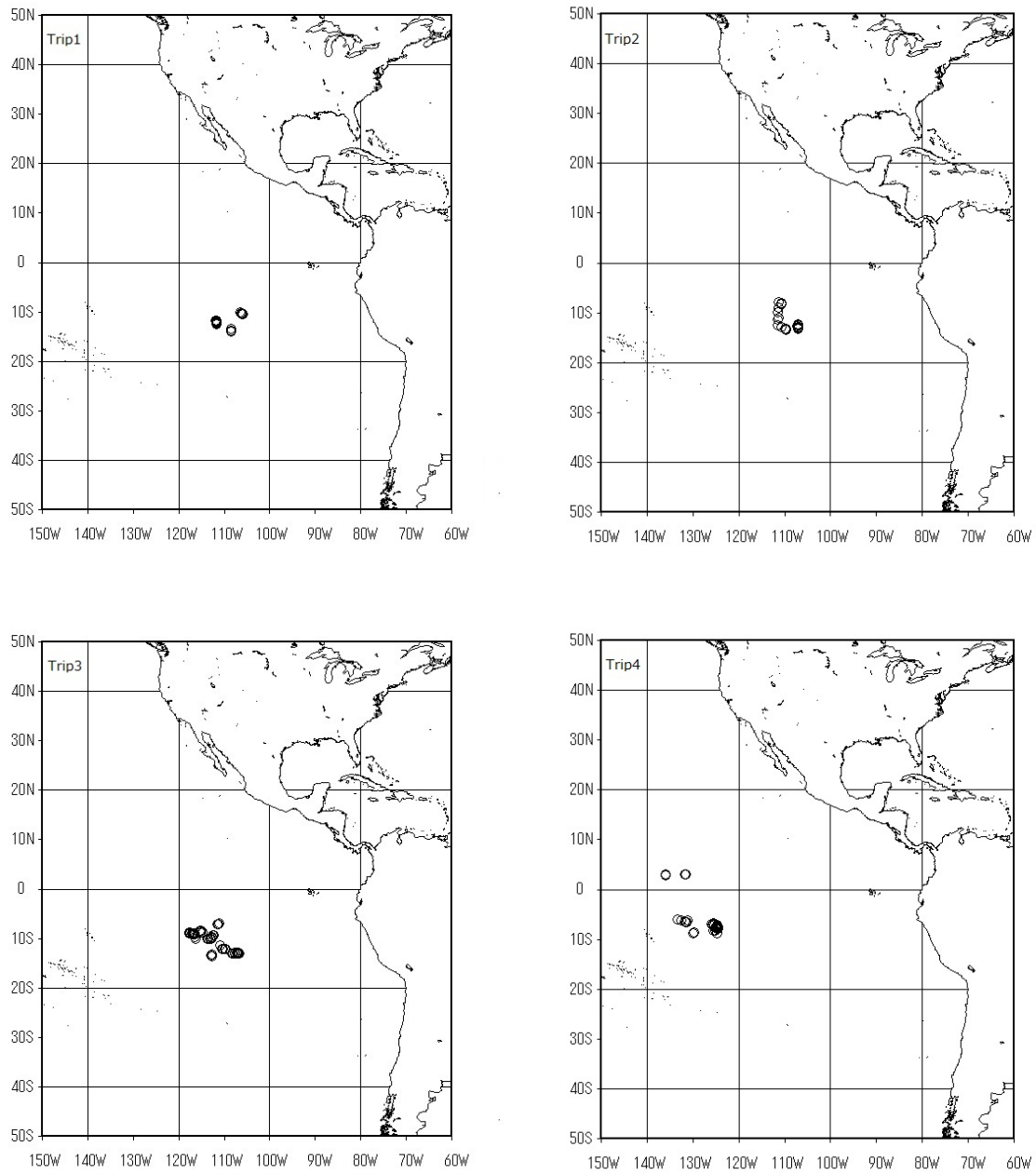


Fig 1. Line setting locations of Japanese tuna longline for the trips with the scientific observer onboard in the convention areas of Inter-American Tropical Tuna Commission during 2017 calendar year

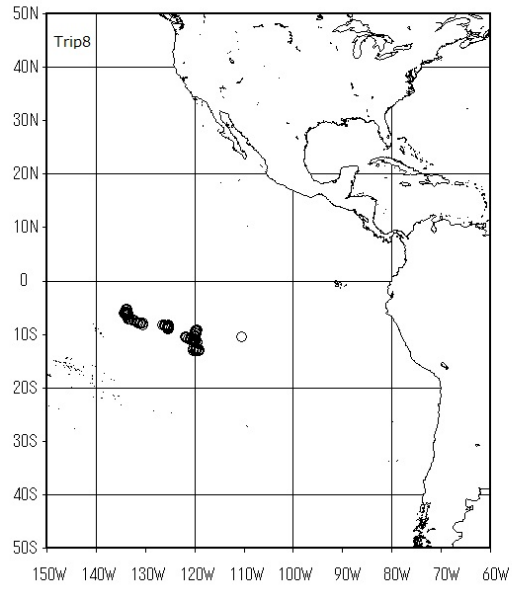
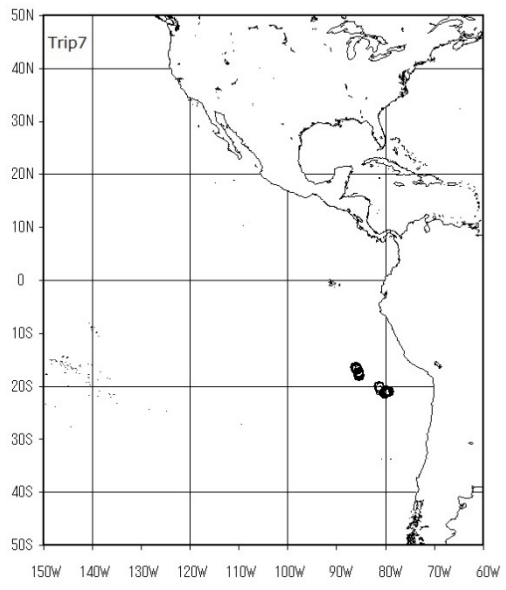
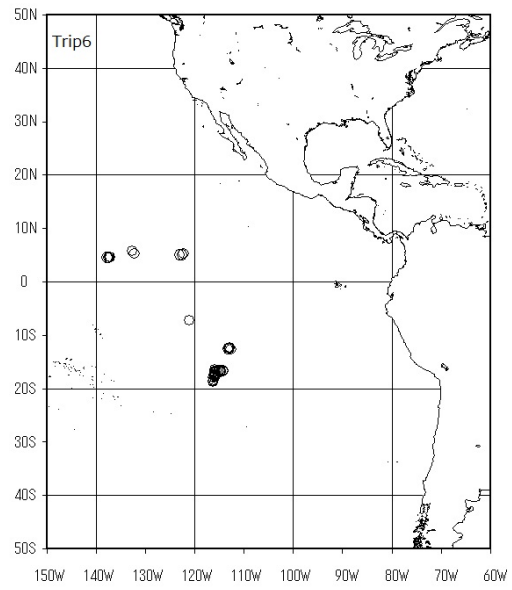
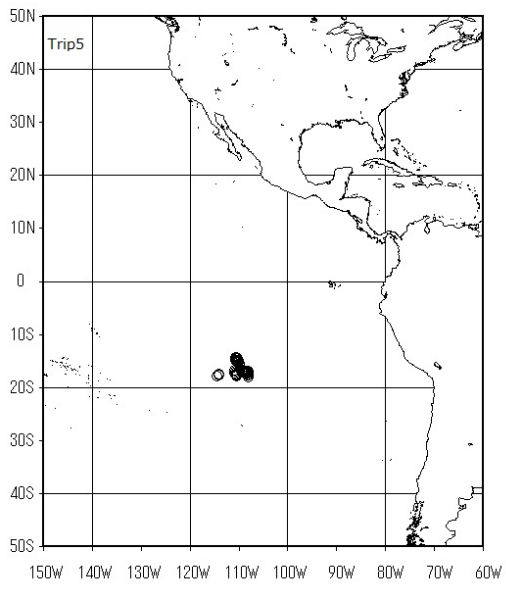


Fig 1. *Continued.*

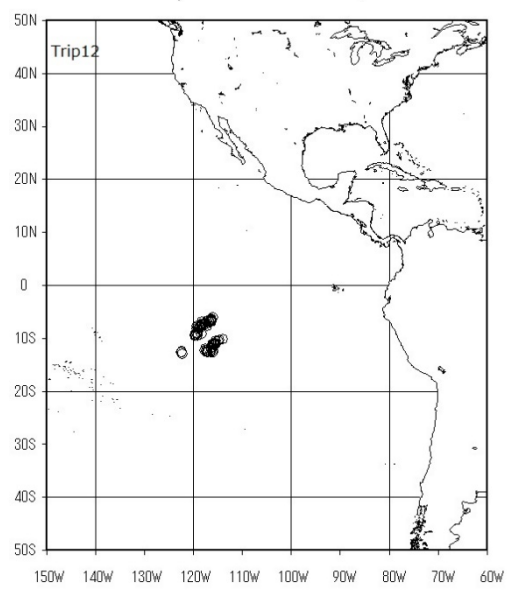
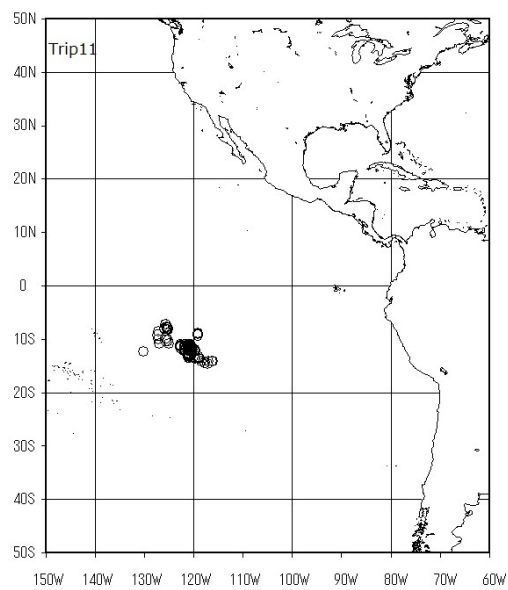
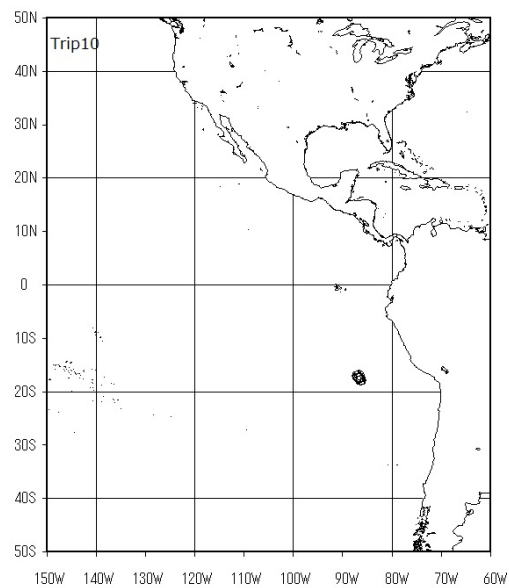
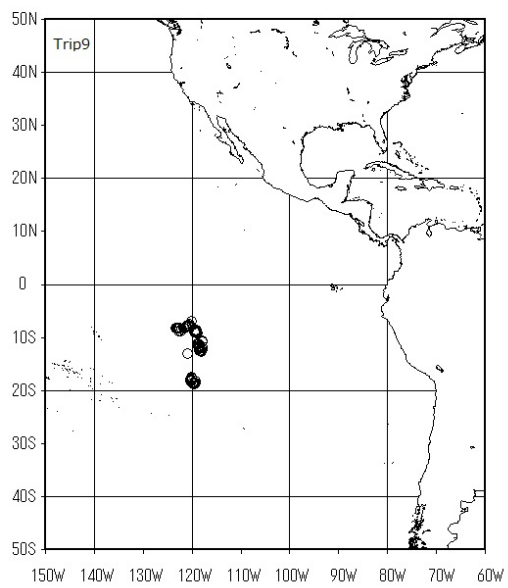


Fig 1. *Continued.*

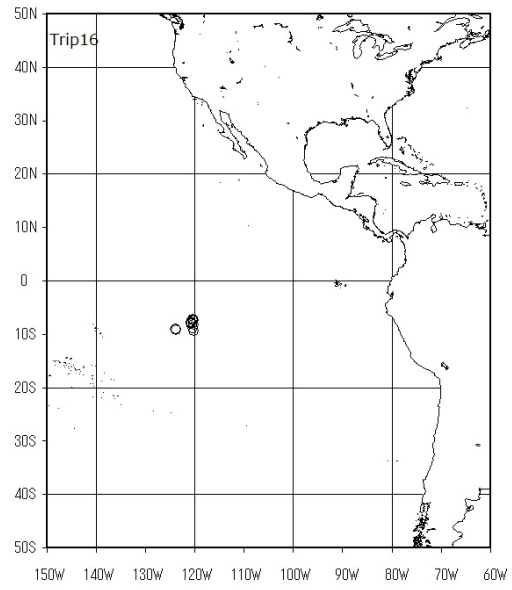
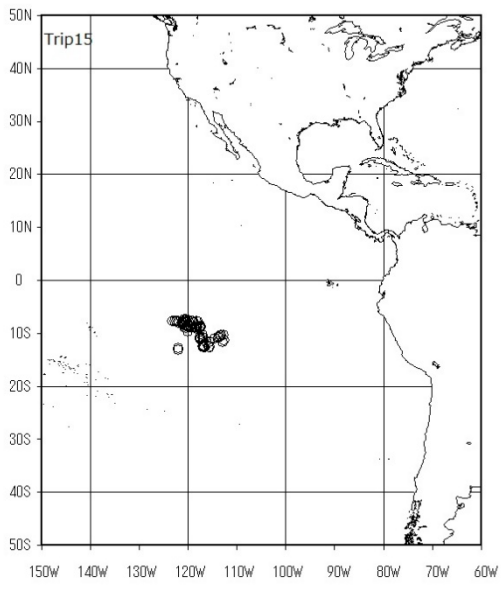
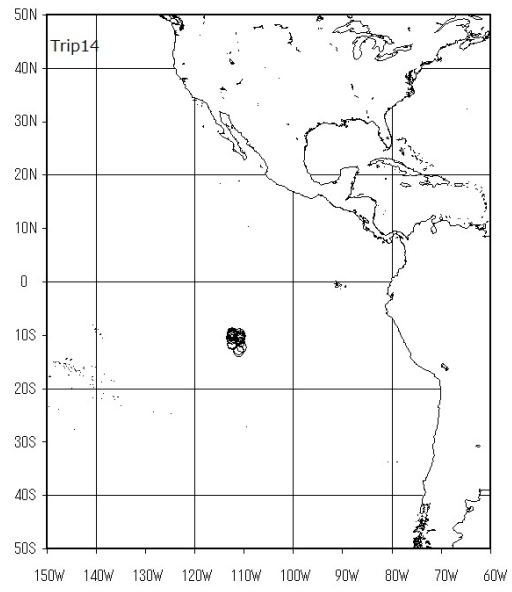
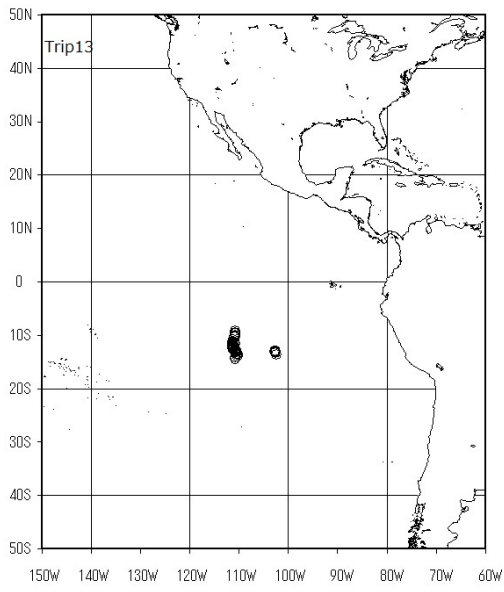


Fig 1. *Continued.*



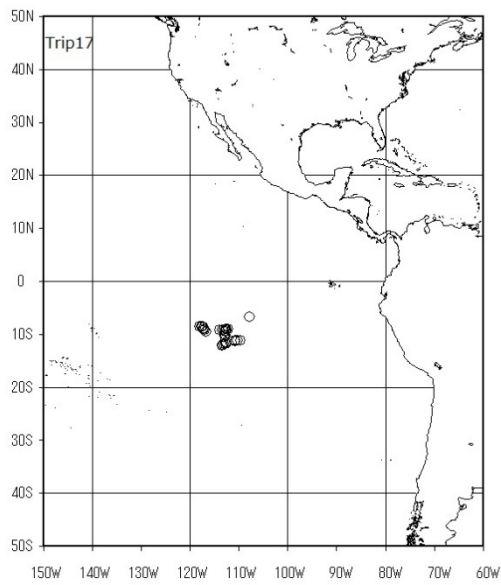


Fig 1. *Continued.*

### **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.