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第二部 神鷹丸航海調査報告 第34次航海報告 期間
平成8年1月～平成8年3月 海域 ベンガル湾

メタデータ	言語: jpn 出版者: 公開日: 2008-04-10 キーワード (Ja): キーワード (En): 作成者: メールアドレス: 所属:
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2. 調查資料

2.1. ベンガル湾まぐろ漁業調査(1)

栗田嘉宥・林敏史・浜田浩明・高須康介

2.1.1 調査の概要

- (1) 調査期間：平成8年2月13日～2月19日
- (2) 調査海域：ベンガル湾中央部
- (3) 調査項目：CTDによる操業海域の水温・塩分測定、延縄漁具における漁獲位置（鉢番号、枝縄番号）、漁獲物名、漁獲物尾叉長・体重・雄雌別
- (4) 使用漁具等：延縄幹縄長280m、枝縄6本付け、枝縄長28m、浮縄長25m、使用餌（冷凍鯖）
- (5) 延縄操業回数：計7回（100鉢操業2回、150鉢操業5回）
- (6) CTD塩分データの校正

校正式： $S = -0.2.2 + 1.01 \times \text{表値}$ （ $R = 1$ ）

2.1.2 漁獲状況

資料2.6.からみると操業海域の南部のST1からST5まではキハダ・カジキ類が混獲されている。これにたいして北部のST6ではキハダは一尾のみでカジキ類16尾、ST7では全てカジキ類（11尾）が漁獲されている。平成7年2月の調査では両種を含めた漁獲と塩分躍層・水温躍層の構造の関係が示唆されているが（栗田ら、1997）、この時は北部のほうでもキハダ、カジキ類が混獲されているので両種の分布が南北にわかれていると単純にはいえない。種による塩分・水温躍層と漁獲の関係の差異はここではまだ判らない。今後の調査によって追求したい。

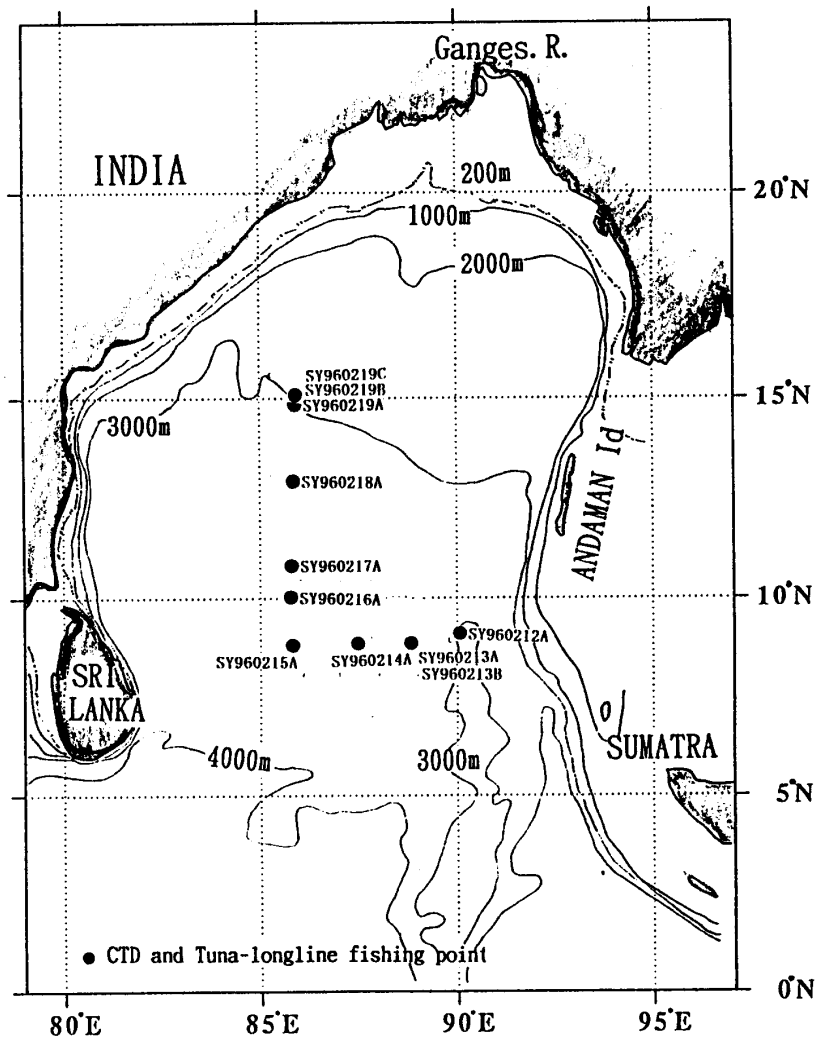
参考文献

栗田嘉宥・浜田浩明・高須康介・林敏史・高橋恵子. 1997. ベンガル湾まぐろ漁業調査、CRUISE REPORTS NO.6 PP.165-189

2.2. CTD 観測表 CTD Observation List

St. No.	Time (SMT)	Time (GMT)	Lat.	Long.	A. Temp	W. Temp	Depth	Wind Dir	Wind S.S.	Remarks
960212A	2/12 13:00	2/12 05:30	09 10.70N	090 09.30E	28.7℃	27.6℃	2900m	NE/E	6.3m/s	
960213A	2/13 06:06	2/12 22:36	08 53.45N	088 43.44E	26.9	27.2	3450	NNE	12.0	
960213B	2/13 07:03	2/12 23:33	08 53.14N	088 43.27E	26.9	27.1	3450	NE	11.0	
960214A	2/14 06:25	2/13 23:55	08 45.84N	087 40.67E	26.5	27.0	3530	NE	7.5	
960215A	2/15 06:20	2/15 00:20	08 44.66N	085 41.91E	26.0	26.9	3600	NE/E	6.5	
960216A	2/16 06:17	2/15 23:17	10 07.22N	085 43.45E	25.7	27.1	3500	N/E	5.0	
960217A	2/17 06:22	2/16 23:22	11 27.43N	085 42.00E	24.8	25.8	3300	NE	6.5	
960218A	2/18 06:24	2/17 23:24	13 14.32N	085 39.82E	24.8	25.6	3250	NE	9.2	
960219A	2/19 05:39	2/18 22:39	14 53.95N	085 45.61E	24.2	25.7	2360	E/NE	6.4	
960219B	2/19 06:26	2/18 23:26	14 54.40N	085 45.18E	24.3	25.6	2360	NE	7.0	
960219C	2/19 16:17	2/19 09:17	15 01.23N	085 59.47E	26.4	26.3	2880	NE	6.5	

2.3. 観測海域図 Observation Leg Chart



2.4. CTD 観測データ CTD Observation Data

STATION - SY960212A DEPTH - 002900 M
 DATE - 1996/02/12 POSITION LAT. - 09° 10.70 N
 TIME - 13:50 LONG. - 090° 09.30 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	27.482	32.979	21.045	4.58	4.17
1.0	27.464	32.986	21.056	4.59	3.66
2.0	27.478	32.977	21.045	4.59	4.69
3.0	27.468	32.977	21.048	4.59	4.72
4.0	27.466	32.977	21.048	4.59	4.64
5.0	27.468	32.977	21.048	4.59	4.77
10.0	27.455	32.978	21.053	4.59	4.81
15.0	27.432	32.979	21.061	4.59	4.76
20.0	27.410	32.982	21.070	4.59	4.81
25.0	27.409	32.988	21.075	4.59	4.83
30.0	27.406	32.998	21.083	4.59	4.81
40.0	27.378	33.044	21.127	4.59	4.77
50.0	27.358	33.140	21.206	4.59	4.53
75.0	26.202	34.107	22.299	4.65	3.38
100.0	22.322	34.537	23.777	4.96	1.55
125.0	18.194	34.752	25.036	5.35	1.07
150.0	15.975	34.836	25.628	5.58	0.41
200.0	13.606	34.933	26.219	5.85	0.35

STATION - SY960213B DEPTH - 003450 M
 DATE - 1996/02/13 POSITION LAT. - 08° 53.14 N
 TIME - 07:04 LONG. - 088° 43.27 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	27.355	32.926	21.046	4.60	4.10
1.0	27.390	32.921	21.031	4.59	4.57
2.0	27.395	32.917	21.026	4.59	4.62
3.0	27.409	32.916	21.021	4.59	4.68
4.0	27.419	32.918	21.019	4.59	4.65
5.0	27.399	32.913	21.022	4.59	4.78
10.0	27.390	32.914	21.026	4.59	4.83
15.0	27.395	32.913	21.023	4.59	4.82
20.0	27.400	32.914	21.022	4.59	4.85
25.0	27.401	32.915	21.023	4.59	4.80
30.0	27.400	32.914	21.022	4.59	4.85
40.0	27.407	33.073	21.140	4.59	4.87
50.0	27.324	33.243	21.294	4.59	4.69
75.0	26.691	34.331	22.314	4.61	3.30
100.0	22.795	34.633	23.716	4.92	1.66
125.0	19.725	34.855	24.725	5.20	0.42
150.0	17.375	34.867	25.324	5.43	0.49
200.0	13.652	34.949	26.221	5.85	0.24
250.0	12.210	34.959	26.517	6.02	0.55
300.0	11.458	34.982	26.678	6.12	0.52
400.0	10.674	34.988	26.826	6.23	0.53
500.0	9.756	34.981	26.979	6.35	0.51

STATION - SY960213A DEPTH - 003450 M
 DATE - 1996/02/13 POSITION LAT. - 08° 53.45 N
 TIME - 06:06 LONG. - 088° 43.44 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	27.382	32.804	20.946	4.60	4.10
1.0	27.384	32.806	20.947	4.60	4.15
2.0	27.392	32.806	20.943	4.60	4.53
3.0	27.400	32.812	20.945	4.60	4.48
4.0	27.400	32.830	20.959	4.59	4.50
5.0	27.393	32.856	20.981	4.59	4.52
10.0	27.395	32.889	21.005	4.59	4.63
15.0	27.397	32.896	21.010	4.59	4.61
20.0	27.400	32.901	21.013	4.59	4.70
25.0	27.408	32.906	21.013	4.59	4.80
30.0	27.409	32.907	21.014	4.59	4.78
40.0	27.423	33.021	21.095	4.59	4.81
50.0	27.354	33.179	21.236	4.59	4.81
75.0	26.857	34.111	22.095	4.60	3.34
100.0	23.782	34.332	23.202	4.84	2.27
125.0	20.174	34.830	24.588	5.15	0.46
150.0	17.433	34.864	25.307	5.43	0.50
200.0	13.745	34.928	26.186	5.84	0.32

STATION - SY960214A DEPTH - 003530 M
 DATE - 1996/02/14 POSITION LAT. - 08° 45.84 N
 TIME - 06:35 LONG. - 087° 40.67 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	27.209	33.497	21.522	4.59	4.89
1.0	27.205	33.528	21.547	4.59	4.98
2.0	27.211	33.494	21.519	4.59	4.74
3.0	27.211	33.526	21.543	4.59	4.76
4.0	27.216	33.528	21.543	4.59	4.61
5.0	27.217	33.527	21.542	4.59	4.69
10.0	27.211	33.526	21.543	4.59	4.73
15.0	27.227	33.532	21.542	4.59	4.80
20.0	27.233	33.535	21.543	4.59	4.77
25.0	27.235	33.530	21.538	4.59	4.75
30.0	27.239	33.537	21.542	4.59	4.74
40.0	27.494	33.786	21.648	4.56	4.76
50.0	27.632	33.971	21.743	4.55	4.63
75.0	26.569	34.207	22.259	4.62	3.44
100.0	22.920	34.636	23.682	4.91	1.62
125.0	20.054	34.862	24.644	5.16	0.74
150.0	17.200	34.839	25.344	5.45	0.51
200.0	14.153	34.937	26.107	5.79	0.47
250.0	12.438	34.979	26.489	6.00	0.38
300.0	11.439	34.989	26.687	6.12	0.46
400.0	10.451	34.990	26.866	6.26	0.46
499.9	9.628	34.978	26.998	6.37	0.61

塩分校正式: $Sal = -0.202 + 1.01 \times \text{表値} (R=1)$

STATION - SY960215A DEPTH - 003600 M
 DATE - 1996/02/15 POSITION LAT. - 08° 44.66 N
 TIME - 06:39 LONG. - 085° 41.91 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	27.112	33.486	21.545	4.60	3.94
1.0	27.121	33.481	21.538	4.60	4.01
2.0	27.145	33.466	21.519	4.60	4.66
3.0	27.136	33.463	21.520	4.60	4.68
4.0	27.140	33.466	21.520	4.60	4.69
5.0	27.144	33.465	21.518	4.60	4.73
10.0	27.153	33.465	21.516	4.60	4.81
15.0	27.148	33.464	21.516	4.60	4.82
20.0	27.158	33.465	21.514	4.60	4.76
25.0	27.157	33.465	21.515	4.60	4.88
30.0	27.162	33.470	21.516	4.60	4.81
40.0	27.185	33.503	21.534	4.59	4.88
50.0	27.263	34.321	22.125	4.57	4.83
75.0	27.300	34.630	22.345	4.56	4.73
100.0	27.268	34.705	22.412	4.56	4.56
125.0	22.893	34.697	23.736	4.91	1.21
150.0	19.933	34.863	24.676	5.18	0.81
200.0	15.023	34.881	25.876	5.69	0.44
250.0	12.892	34.958	26.382	5.94	0.33
300.0	11.719	34.992	26.637	6.09	0.29
400.0	10.500	34.991	26.859	6.25	0.40
500.0	9.656	34.985	26.999	6.37	0.44

STATION - SY960217A DEPTH - 003300 M
 DATE - 1996/02/17 POSITION LAT. - 11° 27.43 N
 TIME - 06:28 LONG. - 085° 42.00 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	26.438	32.186	20.778	4.69	5.09
1.0	26.443	32.203	20.789	4.69	5.06
2.0	26.459	32.225	20.801	4.68	5.15
3.0	26.460	32.227	20.803	4.68	4.90
4.0	26.451	32.229	20.807	4.68	4.87
5.0	26.458	32.233	20.807	4.68	4.97
10.0	26.469	32.232	20.803	4.68	4.94
15.0	26.523	32.266	20.812	4.68	4.97
20.0	26.591	32.304	20.819	4.67	5.01
25.0	27.347	32.941	21.060	4.60	4.95
30.0	27.093	33.425	21.505	4.60	4.96
40.0	27.067	33.626	21.664	4.60	4.81
50.0	27.062	33.857	21.839	4.59	4.73
75.0	27.028	34.590	22.403	4.58	4.47
100.0	22.464	34.689	23.852	4.95	1.19
125.0	19.275	34.841	24.830	5.24	0.15
150.0	16.661	34.888	25.510	5.51	0.19
200.0	14.501	34.973	26.061	5.75	0.36
250.0	13.073	34.994	26.374	5.92	0.36
300.0	11.831	34.997	26.620	6.07	0.31
400.0	10.705	34.995	26.825	6.22	0.33
500.0	9.982	34.987	26.945	6.32	0.45
600.0	9.260	34.971	27.054	6.42	0.55
700.0	8.559	34.954	27.153	6.53	0.73
800.0	7.946	34.940	27.235	6.62	0.81
900.0	7.340	34.921	27.309	6.71	0.98
999.7	6.716	34.898	27.378	6.81	1.13

STATION - SY960216A DEPTH - 003500 M
 DATE - 1996/02/16 POSITION LAT. - 10° 07.22 N
 TIME - 06:24 LONG. - 085° 43.45 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	27.192	33.875	21.812	4.58	4.71
1.0	27.196	33.867	21.805	4.58	4.69
2.0	27.220	33.978	21.880	4.58	4.76
3.0	27.254	34.000	21.886	4.58	4.67
4.0	27.243	34.002	21.891	4.58	4.75
5.0	27.243	34.001	21.890	4.58	4.72
10.0	27.240	34.006	21.895	4.58	4.75
15.0	27.244	34.009	21.896	4.58	4.83
20.0	27.255	34.019	21.900	4.58	4.92
25.0	27.280	34.031	21.901	4.57	4.92
30.0	27.322	34.060	21.909	4.57	4.85
40.0	27.361	34.092	21.921	4.57	4.86
50.0	27.352	34.131	21.953	4.57	4.95
75.0	27.515	34.969	22.531	4.53	4.36
100.0	24.982	35.265	23.549	4.72	3.02
125.0	19.993	34.993	24.760	5.17	1.02
150.0	18.026	34.933	25.216	5.36	0.70
200.0	15.023	34.983	25.955	5.68	0.44
250.0	13.291	34.984	26.323	5.89	0.33
300.0	12.226	34.997	26.544	6.02	0.36
400.0	10.888	35.002	26.798	6.20	0.40
500.0	9.933	34.982	26.950	6.33	0.56
600.0	9.253	34.971	27.055	6.42	0.62
700.0	8.490	34.951	27.161	6.54	0.76
800.0	7.750	34.929	27.255	6.65	0.95
900.0	7.123	34.909	27.330	6.74	1.15
1000.0	6.488	34.886	27.399	6.85	1.38

STATION - SY960218A DEPTH - 003250 M
 DATE - 1996/02/18 POSITION LAT. - 13° 14.32 N
 TIME - 06:26 LONG. - 085° 39.82 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	25.959	31.729	20.582	4.74	5.01
1.0	25.960	31.729	20.582	4.74	5.02
2.0	25.958	31.726	20.581	4.74	4.97
3.0	25.959	31.728	20.582	4.74	4.98
4.0	25.956	31.729	20.584	4.74	5.05
5.0	25.953	31.729	20.585	4.74	5.06
10.0	25.982	31.741	20.584	4.73	5.01
15.0	26.130	31.921	20.674	4.72	4.99
20.0	26.311	32.230	20.851	4.70	5.05
25.0	26.316	32.293	20.897	4.69	5.05
30.0	26.765	33.017	21.301	4.64	5.00
40.0	26.910	33.480	21.604	4.62	4.90
50.0	26.872	33.684	21.769	4.61	4.83
75.0	26.579	34.008	22.106	4.63	3.44
100.0	25.251	34.247	22.698	4.73	2.08
125.0	22.539	34.828	23.937	4.94	0.83
150.0	20.447	34.845	24.526	5.13	0.67
200.0	16.377	34.890	25.577	5.54	0.30
250.0	13.593	34.958	26.240	5.85	0.30
300.0	12.335	34.985	26.514	6.01	0.26
400.0	11.014	34.996	26.770	6.18	0.24
499.9	10.192	34.994	26.915	6.29	0.93

STATION - SY960219A DEPTH - 002360 M
 DATE - 1996/02/19 POSITION LAT. - 14° 53.95 N
 TIME - 05:42 LONG. - 085° 45.61 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	26.027	31.468	20.365	4.74	5.15
1.0	26.011	30.353	19.531	4.77	5.23
2.0	26.047	31.905	20.688	4.72	5.02
3.0	26.067	31.935	20.704	4.72	5.05
4.0	26.071	31.935	20.703	4.72	4.95
5.0	26.071	31.937	20.705	4.72	4.97
10.0	26.074	31.947	20.712	4.72	4.96
15.0	26.103	31.967	20.717	4.72	5.14
20.0	26.241	32.099	20.774	4.70	5.13
25.0	26.542	32.432	20.931	4.67	5.02
30.0	26.314	32.447	21.013	4.69	5.13
40.0	26.353	32.516	21.053	4.68	5.13
50.0	26.939	33.027	21.254	4.63	4.99
75.0	26.904	33.771	21.825	4.61	3.77
100.0	26.029	34.218	22.436	4.66	2.56
125.0	23.556	34.731	23.570	4.85	1.39
150.0	21.122	34.798	24.309	5.07	0.64
200.0	17.054	34.889	25.417	5.46	0.27

STATION - SY960219C DEPTH - 002360 M
 DATE - 1996/02/19 POSITION LAT. - 15° 01.23 N
 TIME - 16:17 LONG. - 085° 59.47 E

DATA TYPE = PROCESS

Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	26.185	31.865	20.615	4.71	5.08
1.0	26.185	31.861	20.612	4.71	5.11
2.0	26.183	31.873	20.622	4.71	5.05
3.0	26.187	31.873	20.620	4.71	5.01
4.0	26.181	31.874	20.623	4.71	4.95
5.0	26.178	31.873	20.623	4.71	5.00
10.0	26.079	31.874	20.655	4.72	4.88
15.0	26.062	31.888	20.670	4.72	5.04
20.0	26.063	31.897	20.677	4.72	5.16
25.0	26.292	32.277	20.892	4.70	5.04
30.0	27.010	32.945	21.170	4.62	4.92
40.0	26.836	33.321	21.508	4.63	4.86
50.0	26.669	33.665	21.819	4.63	5.00
75.0	26.539	33.877	22.020	4.63	4.82
100.0	26.579	34.054	22.141	4.63	4.47
125.0	24.275	34.492	23.177	4.80	1.46
150.0	21.873	34.759	24.072	5.00	0.24
200.0	17.125	34.883	25.395	5.46	0.15
250.0	14.644	34.931	25.997	5.73	0.15
300.0	12.748	34.971	26.421	5.96	0.12
400.0	11.166	34.991	26.739	6.16	0.14

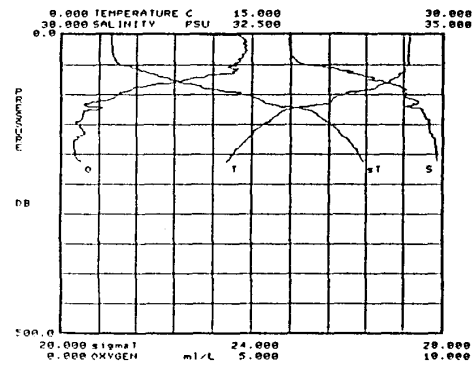
STATION - SY960219B DEPTH - 002360 M
 DATE - 1996/02/19 POSITION LAT. - 14° 54.40 N
 TIME - 06:26 LONG. - 085° 45.18 E

DATA TYPE = PROCESS

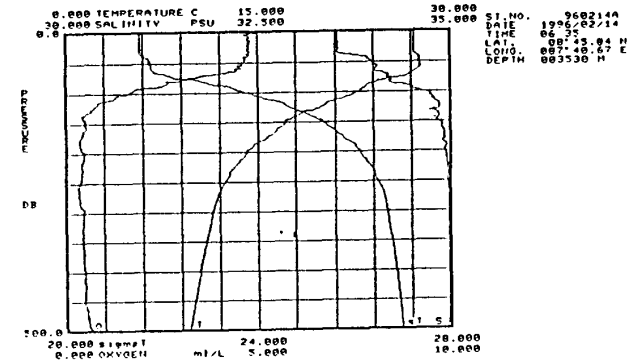
Press. (db)	Temp. (°C)	Sal. (PSU)	sigmaT	S-Oxy. (ml/L)	Oxy. (ml/L)
0.0	26.005	31.961	20.743	4.73	5.08
1.0	25.987	31.986	20.767	4.73	5.28
2.0	26.040	31.958	20.730	4.72	4.98
3.0	26.042	31.956	20.727	4.72	4.98
4.0	26.043	31.956	20.727	4.72	5.00
5.0	26.048	31.957	20.727	4.72	5.05
10.0	26.066	31.960	20.724	4.72	5.06
15.0	26.070	31.965	20.726	4.72	5.08
20.0	26.122	32.002	20.738	4.72	5.08
25.0	26.672	32.475	20.923	4.66	5.03
30.0	26.517	32.458	20.959	4.67	4.96
40.0	26.342	32.507	21.050	4.69	5.00
50.0	26.989	33.065	21.267	4.62	4.93
75.0	26.969	33.771	21.804	4.60	3.77
100.0	25.846	34.192	22.474	4.68	2.56
125.0	23.531	34.730	23.576	4.85	1.28
150.0	20.814	34.784	24.381	5.09	0.60
200.0	17.023	34.894	25.428	5.47	0.16
250.0	14.499	34.945	26.039	5.75	0.25
300.0	12.628	34.981	26.453	5.97	0.09
400.0	11.077	34.993	26.757	6.17	0.09
499.9	10.268	34.991	26.899	6.28	0.12

2.5. CTD 観測プロファイル CTD Profiles

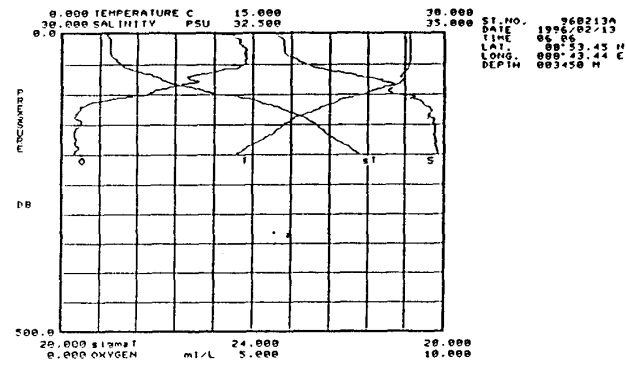
DATA TYPE = PROCESS DATA



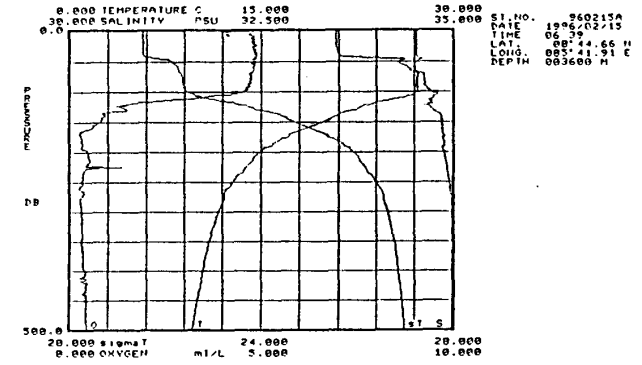
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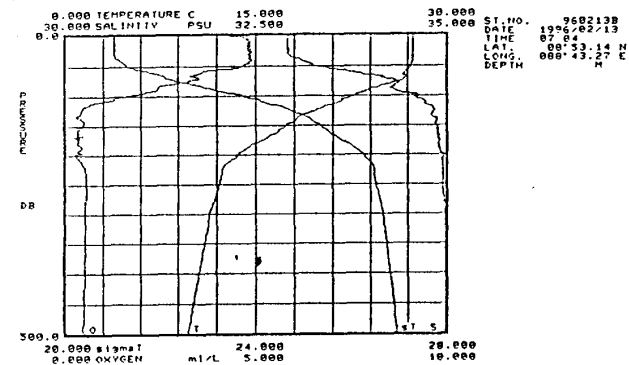
DATA TYPE = PROCESS DATA



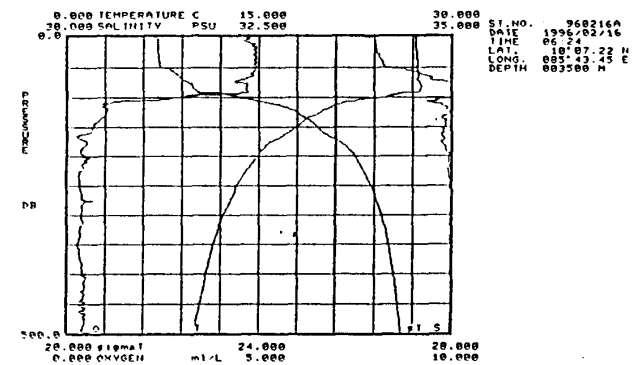
DATA TYPE = PROCESS DATA



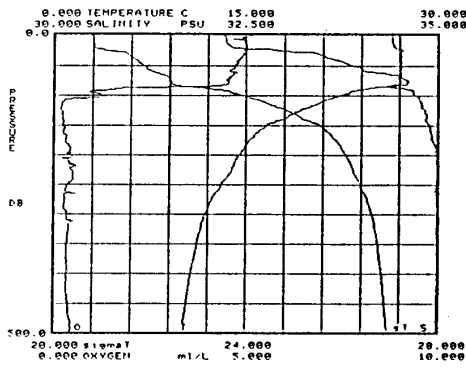
DATA TYPE = PROCESS DATA



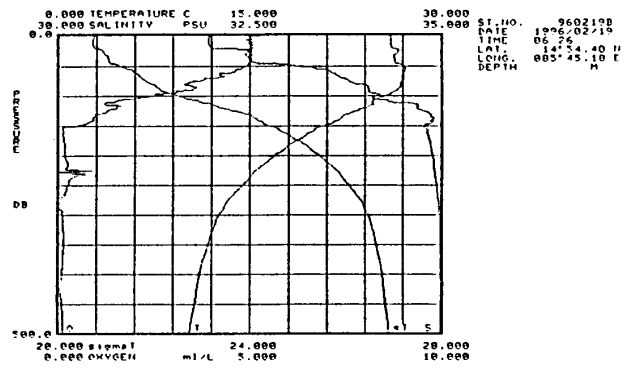
DATA TYPE = PROCESS DATA



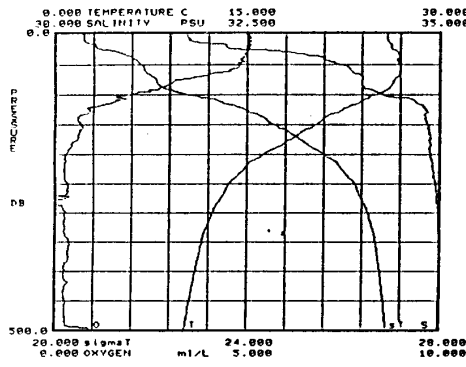
DATA TYPE = PROCESS DATA



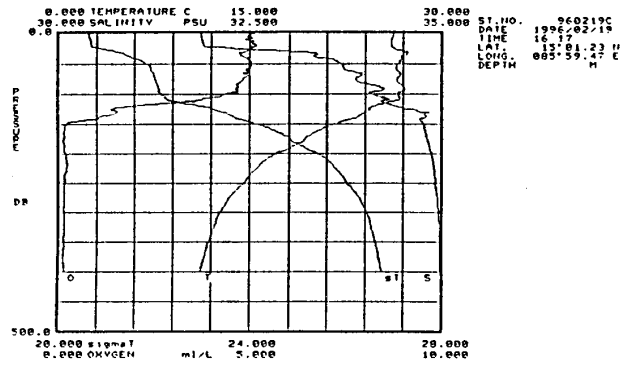
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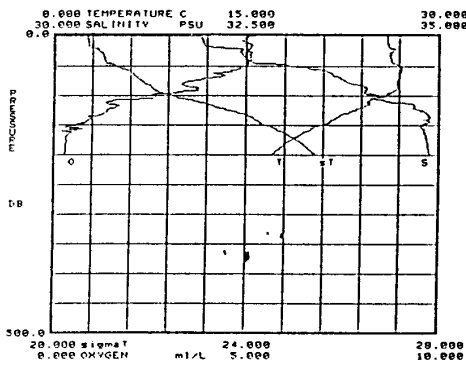
DATA TYPE = PROCESS DATA



DATA TYPE = PROCESS DATA



DATA TYPE = PROCESS DATA



2.6. 漁獲物測定表 Biological Data of Tuna and Billfish

(1)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
1	Feb. 13. 1996	08-58N, 88-59E	23	2	Indo Pacific Blue marlin	41.0	
			38	1	Striped marlin	33.7	
			66	2	Striped marlin	61.5	
			70	6	Yellowfin	39.7	
			91	1	Swordfish	13.5	
			95	5	Striped marlin	54.5	
2	Feb. 14. 1996	08-59N, 87-59E	71	4	Yellowfin	30.0	F
			127	3	Yellowfin	61.0	M
			136	1	Yellowfin	35.0	M
			137	5	Yellowfin	33.5	M
			143	5	Yellowfin	52.5	M
3							

(3)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
			53	3	Indo-Pacific sailfish	11.0	F
			63	6	Indo-Pacific blue marlin	107.0	M
			67	3	Indo-Pacific blue marlin	97.0	F
			71	5	Yellowfin	47.6	M
			86		Yellowfin	35.3	F
			87	1	Striped marlin	72.0	F
			88	3	Swordfish	-	-
			98	2	Striped marlin	64.0	M
			100	3	Striped marlin	55.0	F
			110	2	Yellowfin	51.0	F
			139	4	Yellowfin	53.0	M
			140	5	Yellowfin	39.2	M

(2)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
3	Feb. 15. 1996	09-00N, 85-59E	68	3	Bluefin(young)	1.3	M
			89	6	Indo-Pacific Blue marlin	49.5	M
			94	4	Yellowfin	67.5	M
			114	2	Indo-Pacific sailfish	23.0	M
			118	2	Indo-Pacific blue marlin	57.0	F
			125	2	Striped marlin	70.5	F
			126	2	Yellowfin	42.0	F
			149	3	Striped marlin	52.0	F
4	Feb. 16. 1996	10-42N, 86-00E	4	6	Yellowfin	32.6	M
			5	1	Yellowfin	36.4	M
			22	1	Striped marlin	57.3	F
			32	1	Yellowfin	36.0	F

(4)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
5	Feb. 17. 1996	11-44N, 85-59E	6	6	Indo-Pacific blue marlin	83.0	F
			18	5	Striped marlin	51.0	M
			34	2	Yellowfin	59.0	M
			92	2	Striped marlin	61.0	F
			126	1	Yellowfin	36.0	M
			133	4	Indo-Pacific blue marlin	70.0	M
			6	Feb. 18. 1996	13-31N, 86-00E	1	3
37	1	Indo-Pacific sailfish				17.0	F
37	2	Indo-Pacific sailfish				16.5	F
37	3	Indo-Pacific sailfish				23.0	F

(5)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
			58	6	Indo-Pacific sailfish	18.0	F
			71	3	Indo-Pacific sailfish	17.0	M
			96	4	Indo-Pacific blue marlin	101.0	M
			99	2	Yellowfin	75.0	M
			101	5	Striped marlin	55.0	F
			108	1	Indo-Pacific blue marlin	86.5	M
			121	1	Indo-Pacific sailfish	12.5	M
			122	2	Indo-Pacific sailfish	14.0	F
			122	3	Indo-Pacific sailfish	20.0	F

(7)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
			65	2	Indo-Pacific sailfish	21.0	M
			74	6	Striped marlin	90.0	F
			79	6	Indo-Pacific sailfish	21.0	M
			81	3	Indo-Pacific sailfish	23.0	F
			84	3	Indo-Pacific sailfish	21.0	F
			87	5	Indo-Pacific sailfish	19.0	M

(6)

ST No	Date	St. Position Lat. Long.	Basket No.	Branch Line No.	Species	Body weight (kg)	Sex
			123	4	Indo-Pacific sailfish	20.0	F
			123	5	Indo-Pacific sailfish	18.0	F
			137	3	Indo-Pacific sailfish	13.0	M
			139	4	Striped marlin	68.0	F
7	Feb. 19, 1996	14-59N, 85-59E	9	3	Indo-Pacific sailfish	17.2	M
			9	5	Indo-Pacific sailfish	18.8	M
			41	3	Indo-Pacific sailfish	17.5	-
			43	3	Indo-Pacific sailfish	12.5	F
			51	2	Indo-Pacific blue marlin	43.0	M