

Progress Reporting from Set net Team

15-26 Dec. 2012



Set-net technology transfer and Area Capability

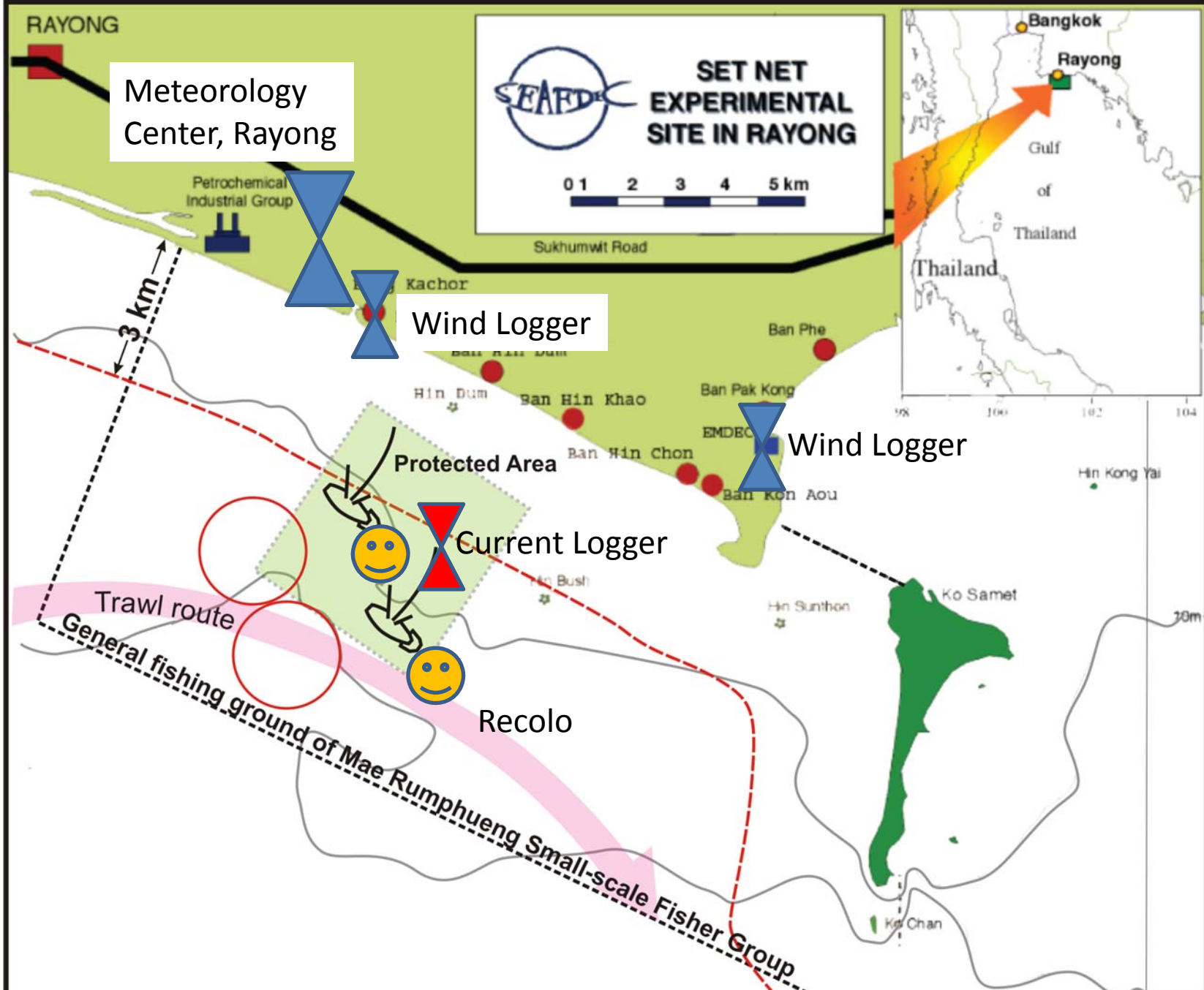
- What is the output for community empowerment ?
- Ownership and Sustainability ?
 - End of the project; End of the output....?
 - Supporting the Gear and Boat from Japan ?
- Available local Gear and Boat
- Initial Cost against the Expected Set-net Profit
- Special Needs for Unique Aspects of Set-net
 - Fishing Ground Allocation for set-net
 - Super fresh / live fish marketing
 - Catch amount fluctuation : Marketing / Processing

C6 Set-net Team Task & Goal

- Monitoring of set-net catch / sales record
 - Cost-Profit analysis for income simulation
 - Fish accumulation performance of chamber net
 - Unit price analysis with size frequency data
 - Long-term trend of catch composition with trophic level analysis, as stomach contents and stable-isotope analysis
 - Catch competition with other coastal and commercial fishing gear
- Monitoring of extension phase to other region
- Technical & Management Manual of set-net technology transfer

Continuous Monitoring for understanding the catch patterns

- Daily Catch / Sales Record
- Size frequency of main catch species
- **Current logger** : direction / speed
- **Depth logger** for gear shape evaluation
- **Wind logger** : direction / speed
- **Interval Video Recorder** (Recolo) : fishing activities around set-net



Setting locations for current logger and wind loggers, with Recolo recording.

Data file from Rayong Meteorology Center

stn_name	stncode	year	month	dday	maxtmp	mintmp	rain	avgrh	meantemp
Rayong*	478201	2010	10	9	31.8	28.8	5.6	79	29.7
Rayong*	478201	2010	10	10	32.2	25.7	23.8	81	28.9
Rayong*	478201	2010	10	11	32	25	11	82	27.6
Rayong*	478201	2010	10	12	29.5	25	0.6	83	27.6
Rayong*	478201	2010	10	13	30.7	24.8	15.1	79	27.8
Rayong*	478201	2010	10	14	29.7	24.6	15.9	88	26.8
Rayong*	478201	2010	10	15	29.2	24.3	0.7	86	26.2
Rayong*	478201	2010	10	16	29	24.1	13.3	87	25.9
Rayong*	478201	2010	10	17	29.8	24.5	4.4	82	27.3
Rayong*	478201	2010	10	18	30.6	28	0	74	29.1
Rayong*	478201	2010	10	19	31	27	0	73	29

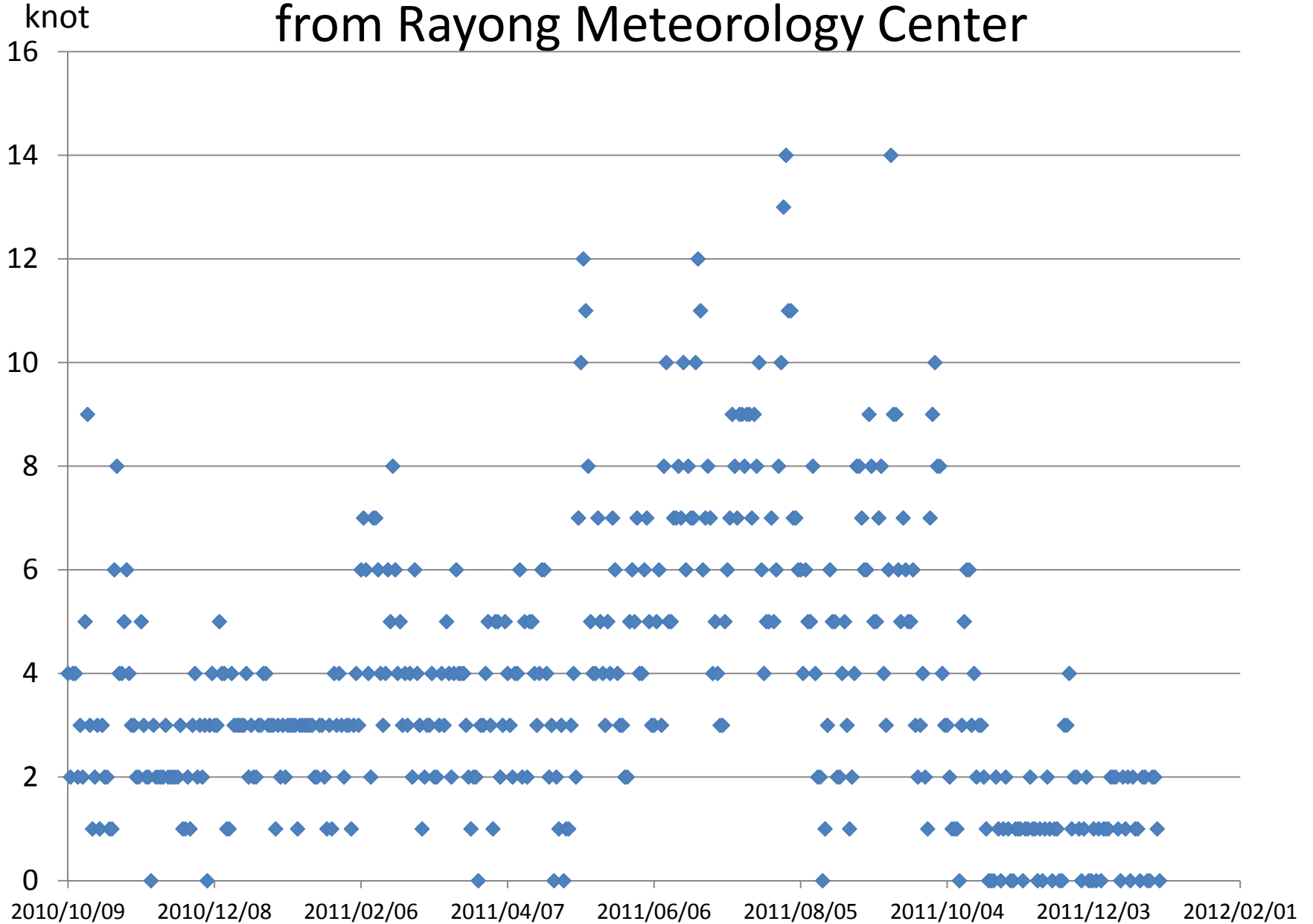
Air pressure at sea level (Hextopascal) from Rayong Meteorology Center

stn_name	stncode	Date/month/Year	Time								Average
			01:00	04:00	07:00	10:00	13:00	16:00	19:00	22:00	
Rayong*	478201	2010/10/9	1008.85	1007.79	1008.45	1010.13	1007.95	1005.74	1006.82	1009.2	1008.12
Rayong*	478201	2010/10/10	1009	1005.94	1007.08	1008.29	1006.42	1004.46	1005.32	1008.35	1006.86
Rayong*	478201	2010/10/11	1007.89	1007.52	1009.11	1010.77	1008.59	1006.55	1007.51	1009.49	1008.43
Rayong*	478201	2010/10/12	1008.31	1007.29	1008.88	1010.34	1007.56	1006.7	1008.21	1009.2	1008.31
Rayong*	478201	2010/10/13	1008.49	1008.22	1008.3	1009.48	1007.02	1005.37	1006.27	1007.96	1007.64
Rayong*	478201	2010/10/14	1007.3	1005.95	1007.15	1009.08	1008.03	1004.26	1006.11	1007.82	1006.96
Rayong*	478201	2010/10/15	1006.39	1005.97	1007.07	1008.16	1006.03	1005.49	1006.8	1007.99	1006.74
Rayong*	478201	2010/10/16	1006.94	1005.17	1006.32	1006.96	1005.02	1003.36	1006.06	1006.71	1005.82
Rayong*	478201	2010/10/17	1005.71	1005.08	1006.8	1008.38	1006.31	1005.21	1007.87	1008.4	1006.72
Rayong*	478201	2010/10/18	1008.27	1006.44	1008.18	1009.57	1007.63	1005.64	1007.25	1009.02	1007.75
Rayong*	478201	2010/10/19	1008.62	1007.99	1009.38	1010.77	1008.95	1006.96	1008.04	1010.29	1008.88

Wind speed data file from Rayong Meteorology Center

stn_name	stncode	Date/month/Year	Time								Average
			01:00	04:00	07:00	10:00	13:00	16:00	19:00	22:00	
Rayong*478201		2010/10/9	4	5	5	5	8	4	4	0	4
Rayong*478201		2010/10/10	0	0	2	8	6	9	3	0	4
Rayong*478201		2010/10/11	10	0	0	5	0	0	0	0	2
Rayong*478201		2010/10/12	0	5	2	4	6	4	7	5	4
Rayong*478201		2010/10/13	0	0	2	4	6	6	3	7	4
Rayong*478201		2010/10/14	5	0	0	0	3	4	0	4	2
Rayong*478201		2010/10/15	2	0	6	3	3	3	3	2	3
Rayong*478201		2010/10/16	0	4	5	5	0	0	0	5	2
Rayong*478201		2010/10/17	0	2	0	4	5	5	10	12	5
Rayong*478201		2010/10/18	12	7	6	10	10	9	10	10	9
Rayong*478201		2010/10/19	5	4	0	4	3	5	3	3	3

Daily average wind speed from Rayong Meteorology Center





EMDEC Aquarium roof



Wind Logger Setting



Leader's House with pole set





Device
TUMSAT1

Device Clock
2012/12/21 - 11:38

Device Memory

Used: 1%

Battery Voltage
4.4 V

Wind Gust

8800

Wind Speed

8832

Wind Direction

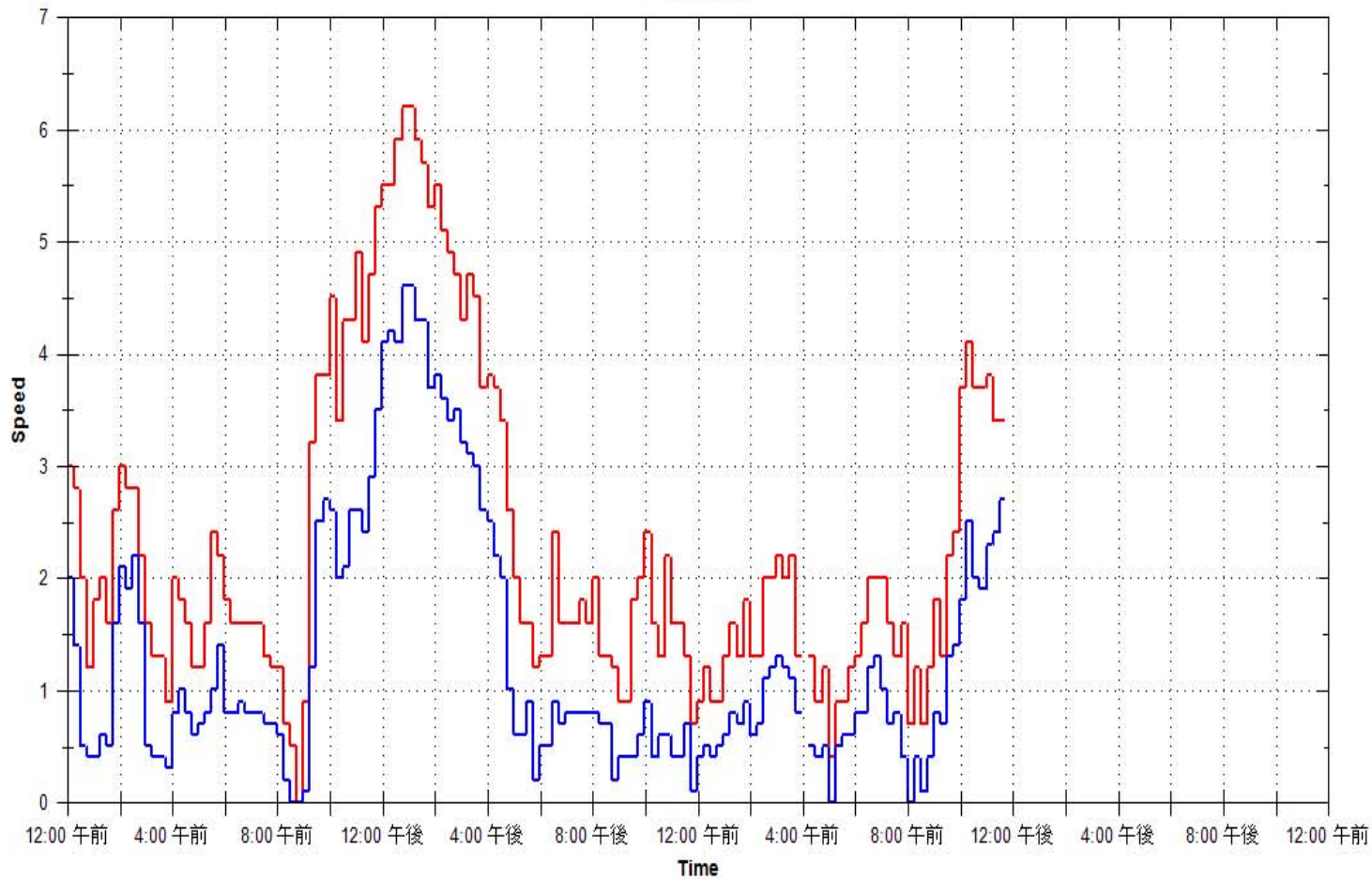
8835

Active Database
TUMSAT

Trend Graph History Last Download

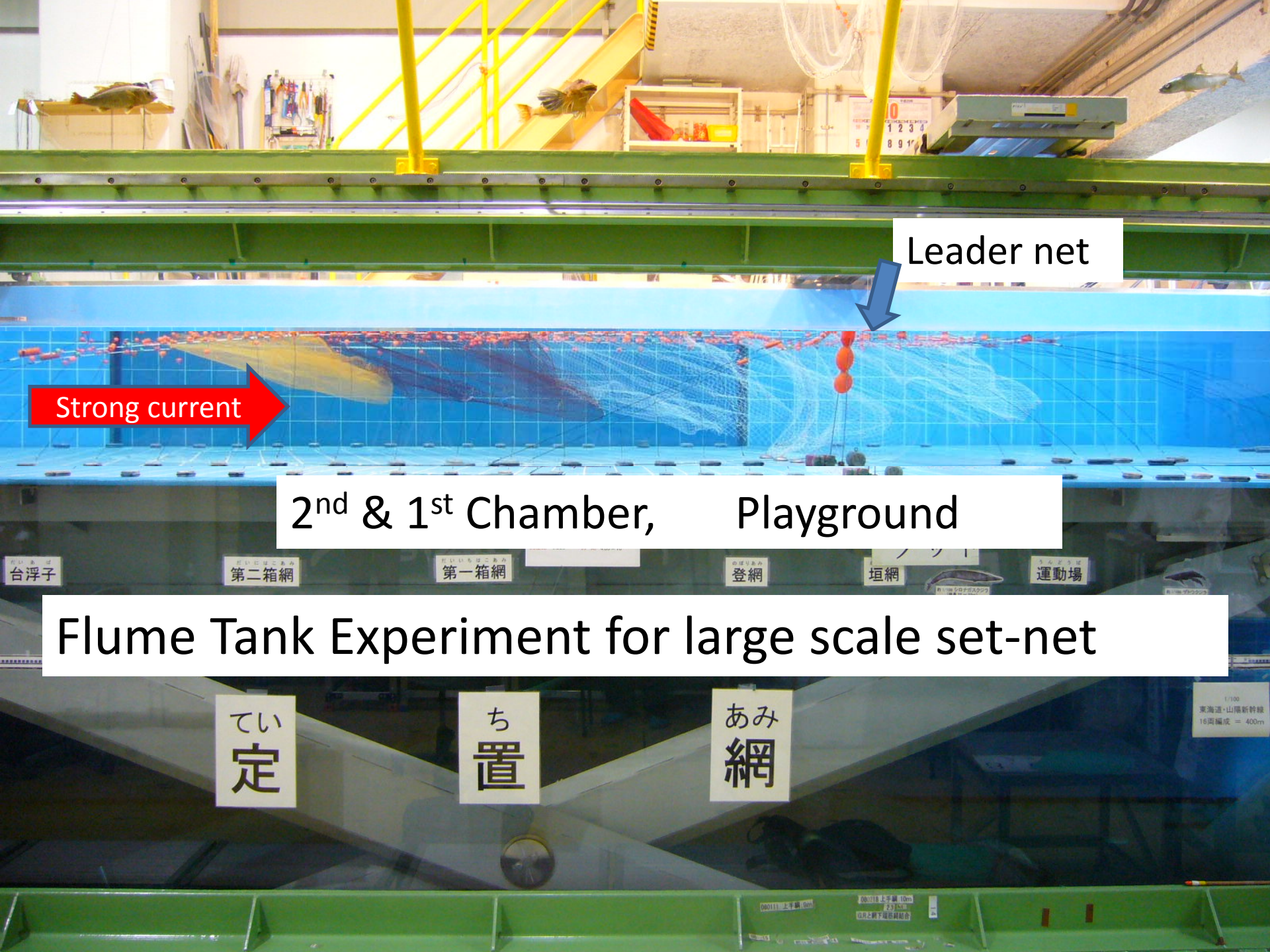
Begin 2012/12/20 End 2012/12/21

Wind Speed



Current Logger setting





Leader net

Strong current

2nd & 1st Chamber, Playground

Flume Tank Experiment for large scale set-net

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台浮子 第二箱網 第一箱網 登網 垣網 運動場

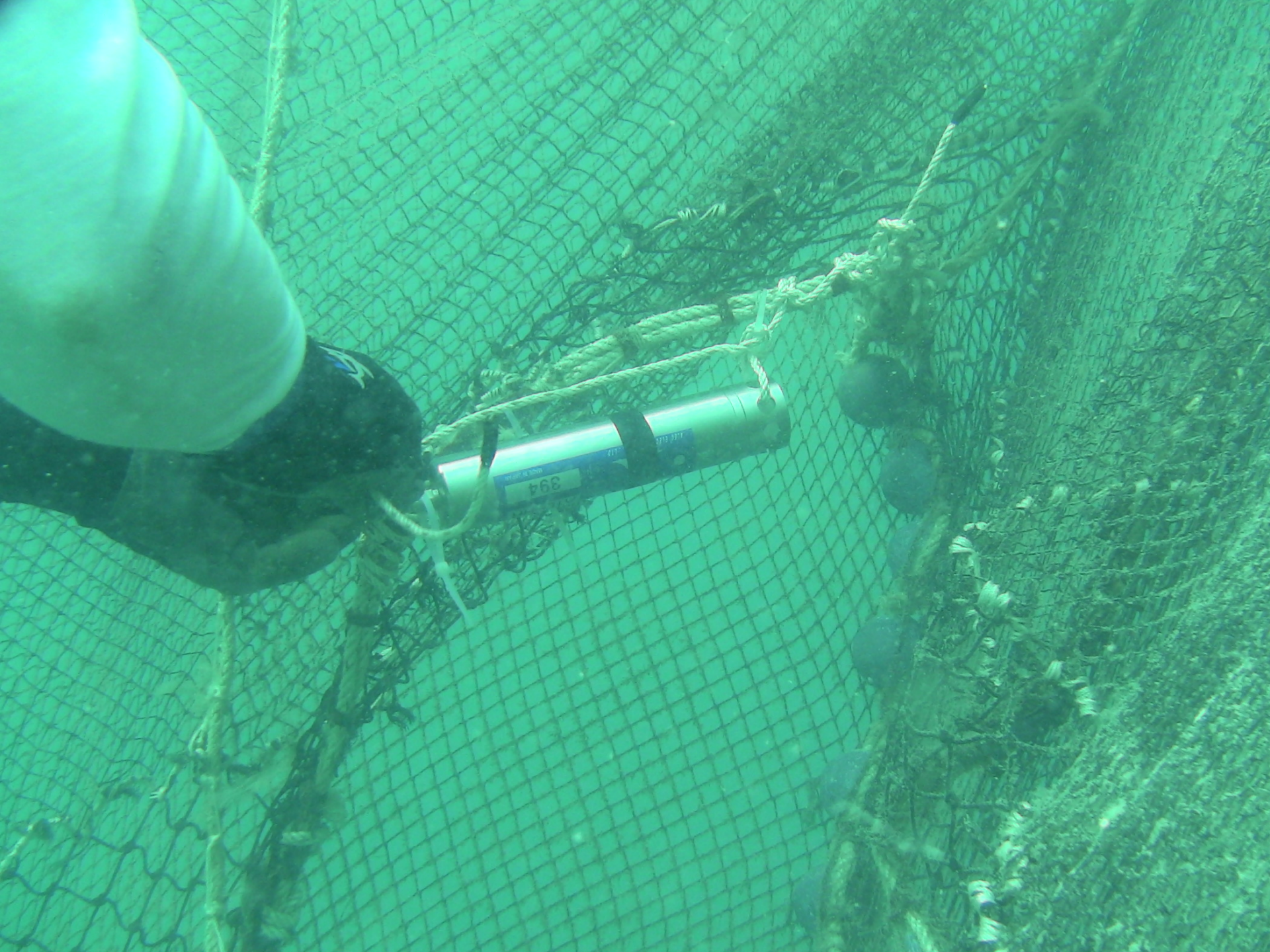
1/100 東海道・山陽新幹線 16両編成 = 400m

00111 上子網 10m 00112 上子網 10m 00113 上子網 10m 00114 上子網 10m 00115 上子網 10m 00116 上子網 10m 00117 上子網 10m 00118 上子網 10m 00119 上子網 10m 00120 上子網 10m 00121 上子網 10m 00122 上子網 10m 00123 上子網 10m 00124 上子網 10m 00125 上子網 10m 00126 上子網 10m 00127 上子網 10m 00128 上子網 10m 00129 上子網 10m 00130 上子網 10m 00131 上子網 10m 00132 上子網 10m 00133 上子網 10m 00134 上子網 10m 00135 上子網 10m 00136 上子網 10m 00137 上子網 10m 00138 上子網 10m 00139 上子網 10m 00140 上子網 10m 00141 上子網 10m 00142 上子網 10m 00143 上子網 10m 00144 上子網 10m 00145 上子網 10m 00146 上子網 10m 00147 上子網 10m 00148 上子網 10m 00149 上子網 10m 00150 上子網 10m 00151 上子網 10m 00152 上子網 10m 00153 上子網 10m 00154 上子網 10m 00155 上子網 10m 00156 上子網 10m 00157 上子網 10m 00158 上子網 10m 00159 上子網 10m 00160 上子網 10m 00161 上子網 10m 00162 上子網 10m 00163 上子網 10m 00164 上子網 10m 00165 上子網 10m 00166 上子網 10m 00167 上子網 10m 00168 上子網 10m 00169 上子網 10m 00170 上子網 10m 00171 上子網 10m 00172 上子網 10m 00173 上子網 10m 00174 上子網 10m 00175 上子網 10m 00176 上子網 10m 00177 上子網 10m 00178 上子網 10m 00179 上子網 10m 00180 上子網 10m 00181 上子網 10m 00182 上子網 10m 00183 上子網 10m 00184 上子網 10m 00185 上子網 10m 00186 上子網 10m 00187 上子網 10m 00188 上子網 10m 00189 上子網 10m 00190 上子網 10m 00191 上子網 10m 00192 上子網 10m 00193 上子網 10m 00194 上子網 10m 00195 上子網 10m 00196 上子網 10m 00197 上子網 10m 00198 上子網 10m 00199 上子網 10m 00200 上子網 10m

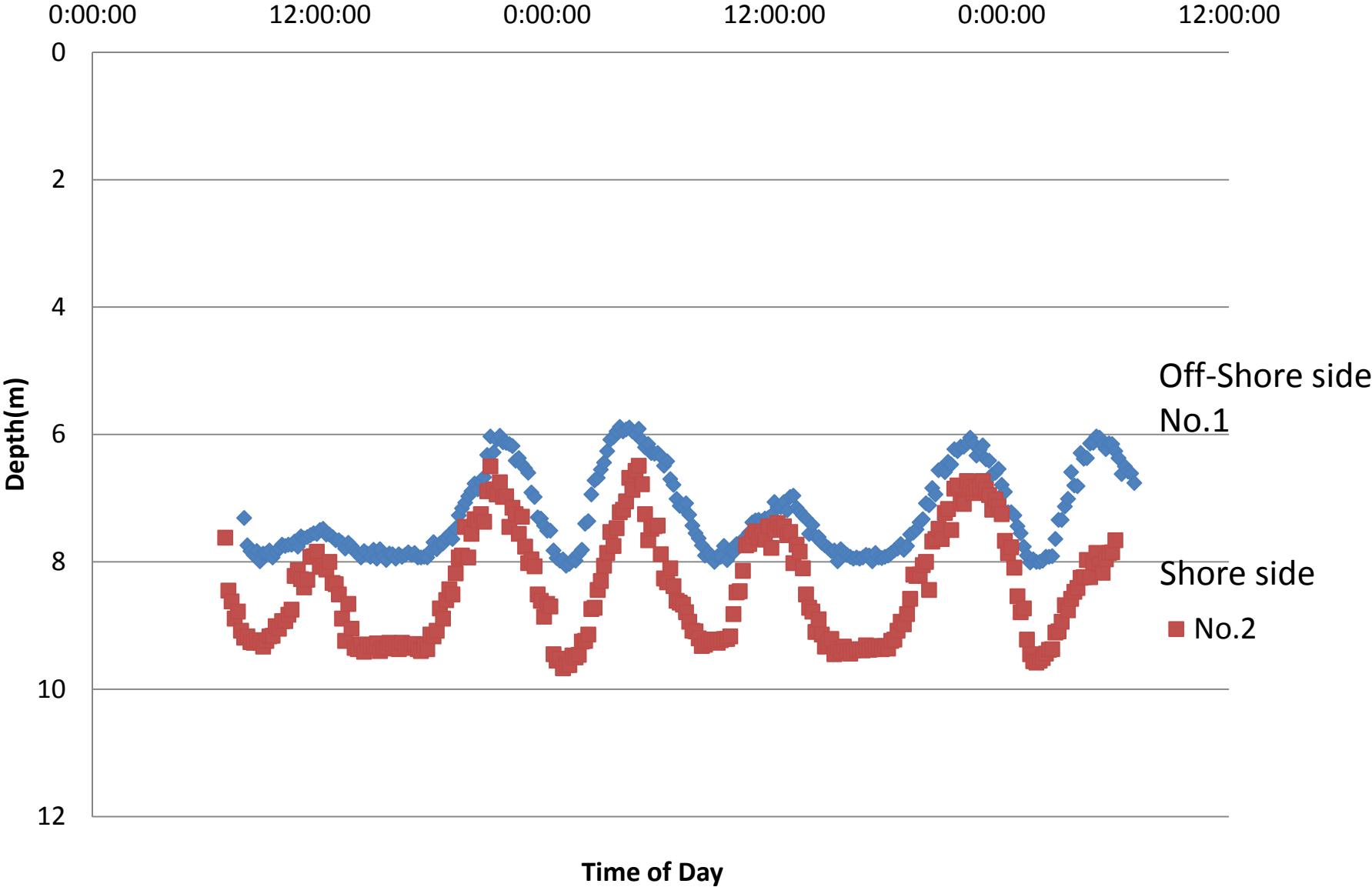
Depth Logger setting

At the bottom side of
tip entrance of slope net





Records of Depth Logger



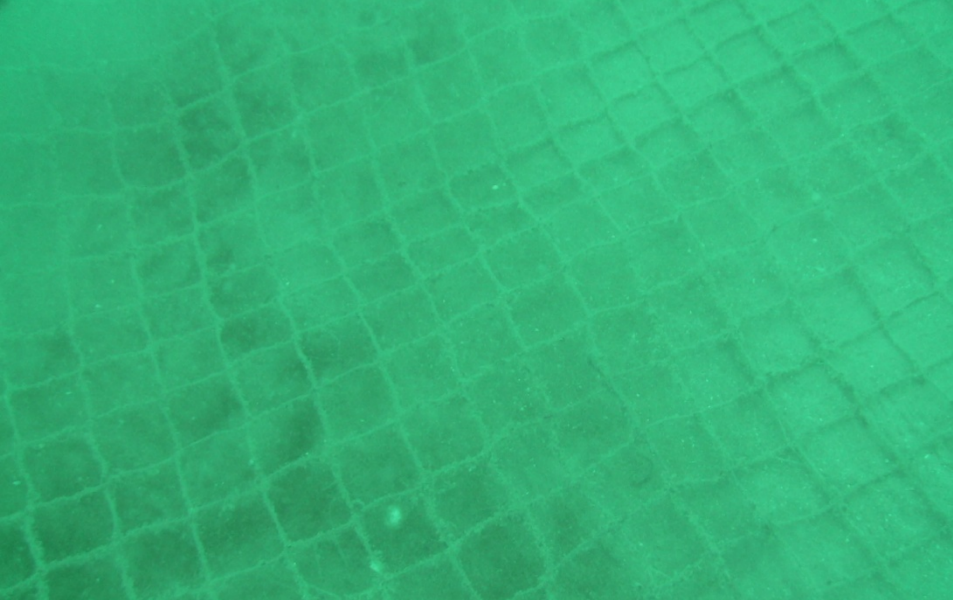


Interval Video Recorder
for monitoring fishing activities
around set-net

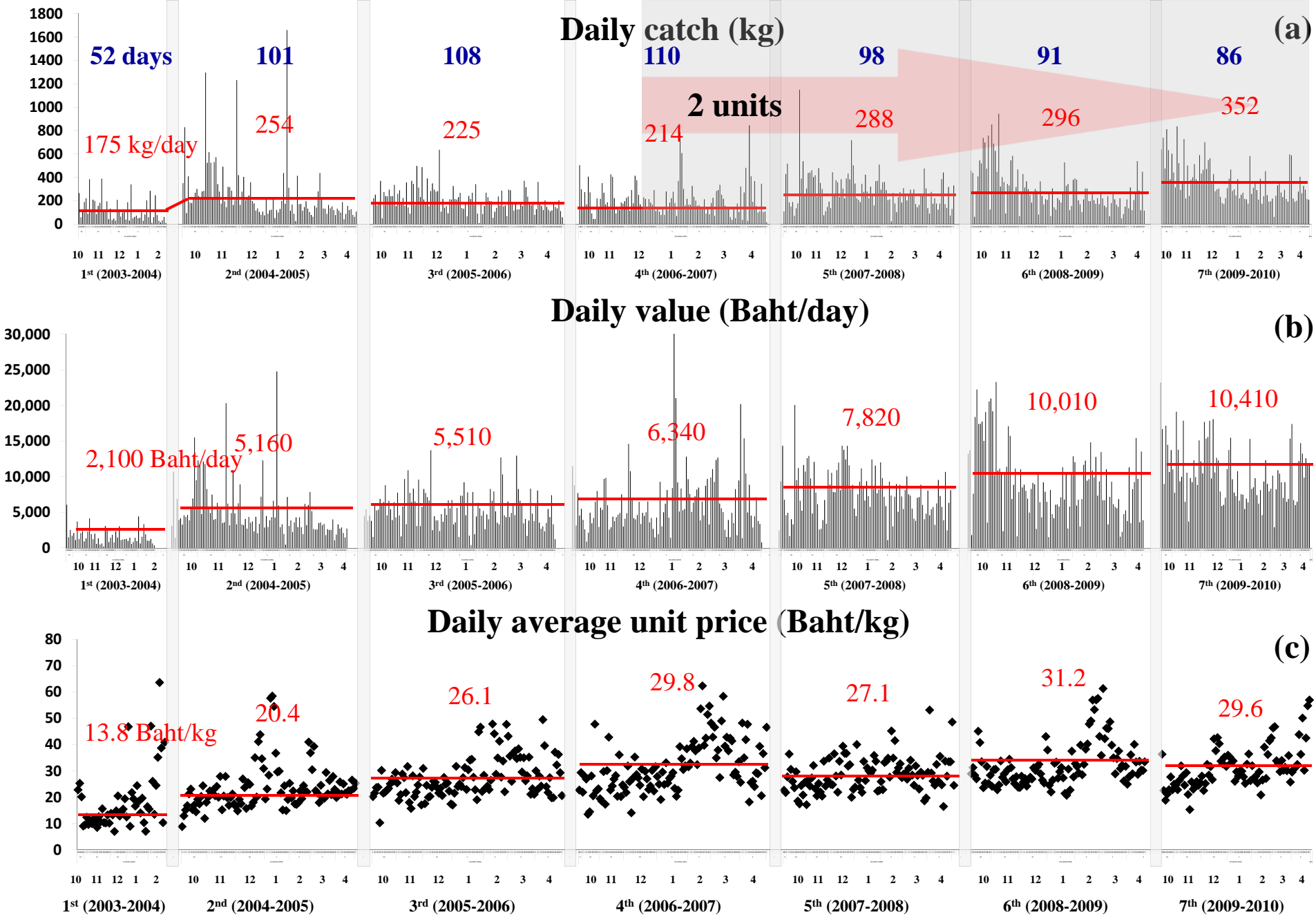


Interval video recorder for monitoring the fishing activities around set-net





Underwater observation of set-net on Dec 21, by TD set-net team



7 years record of daily total catch (a), total value (b) and average unit price (c)

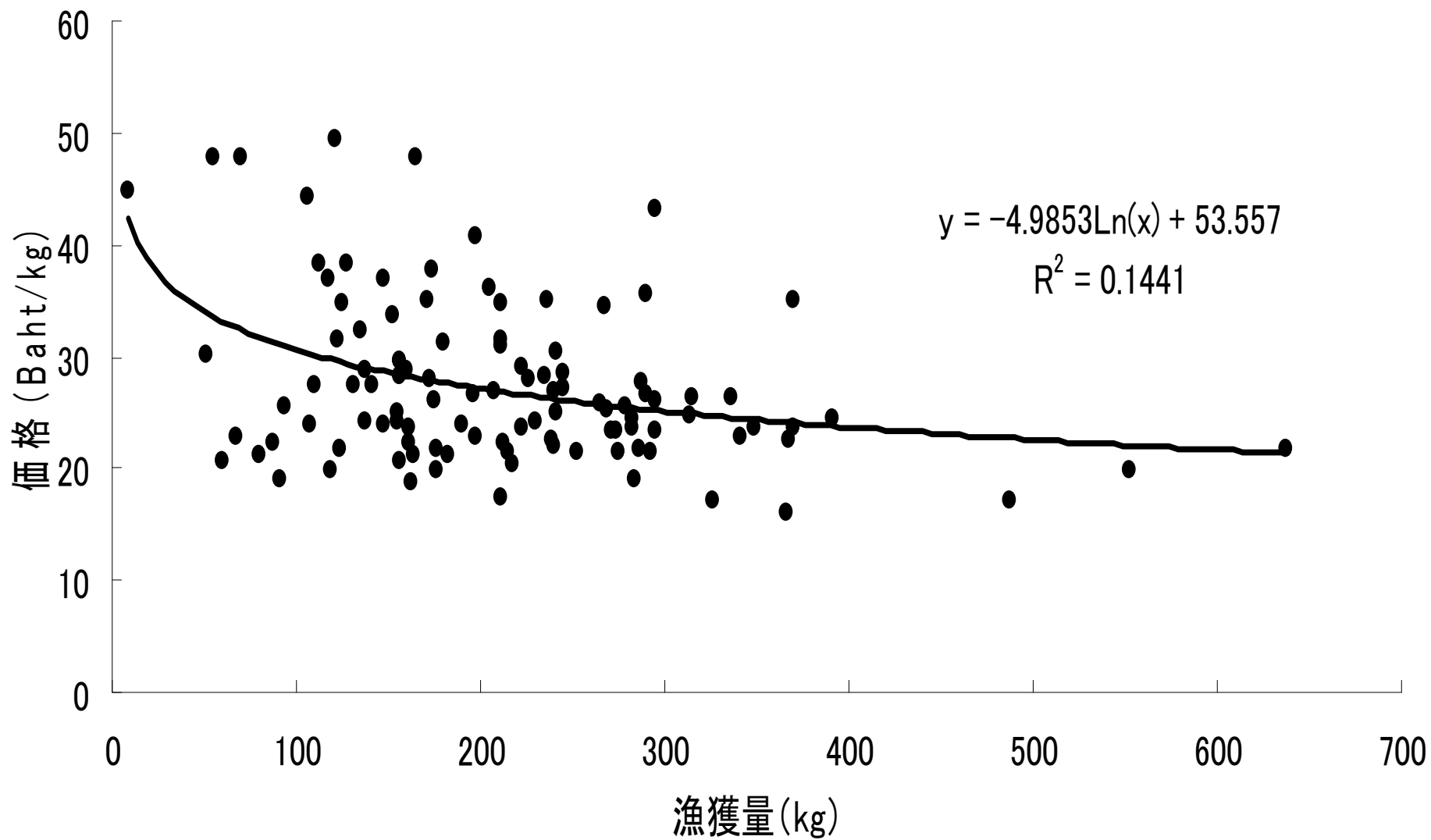
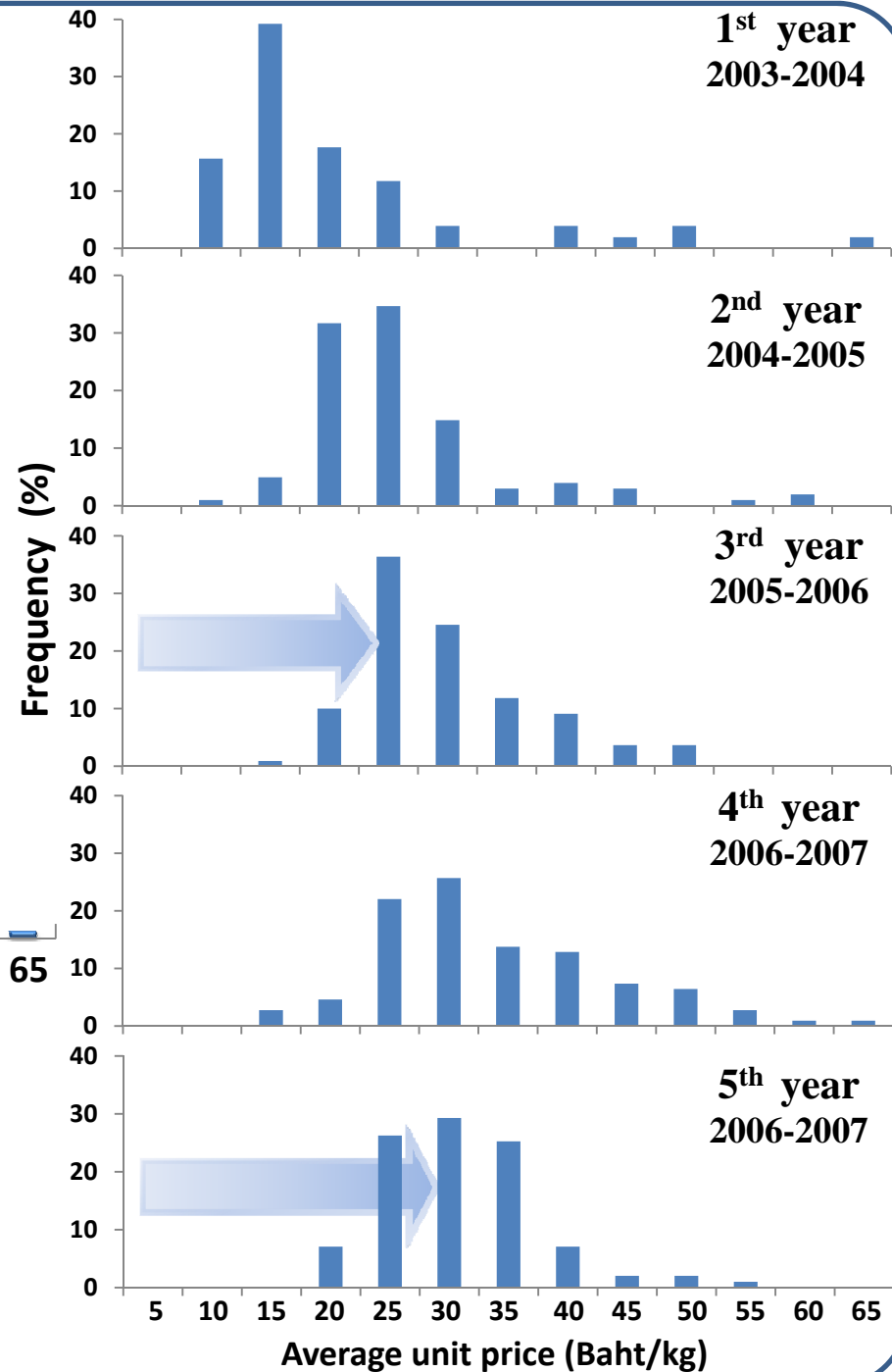
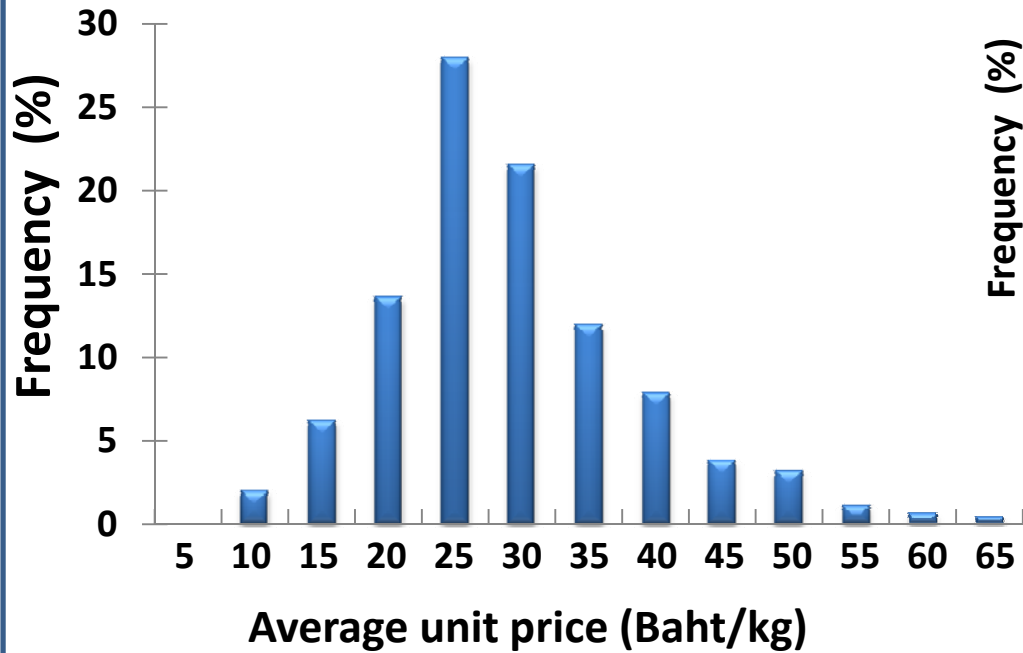
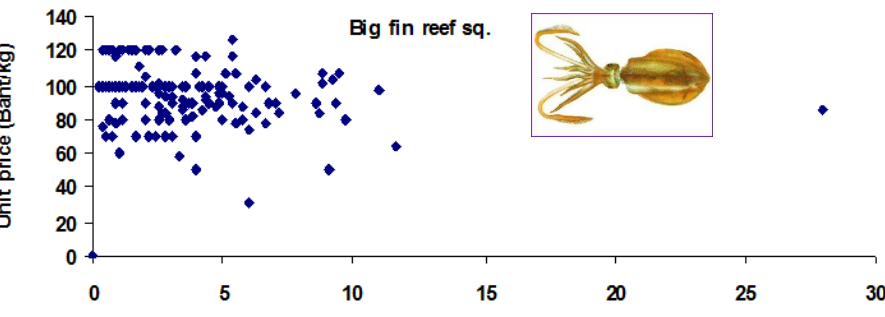
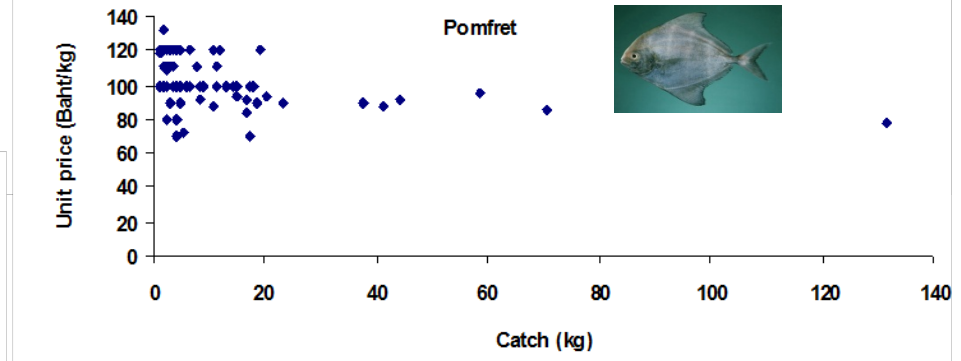
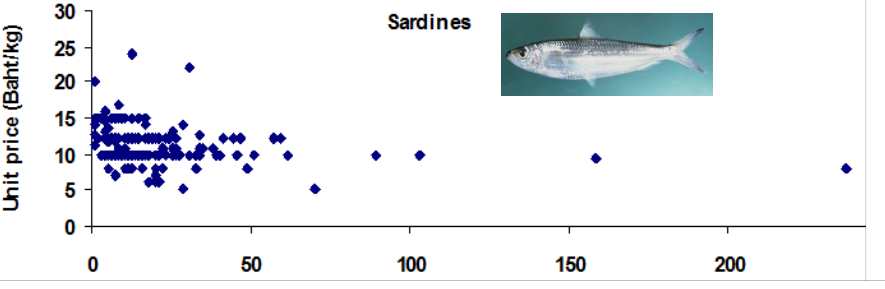
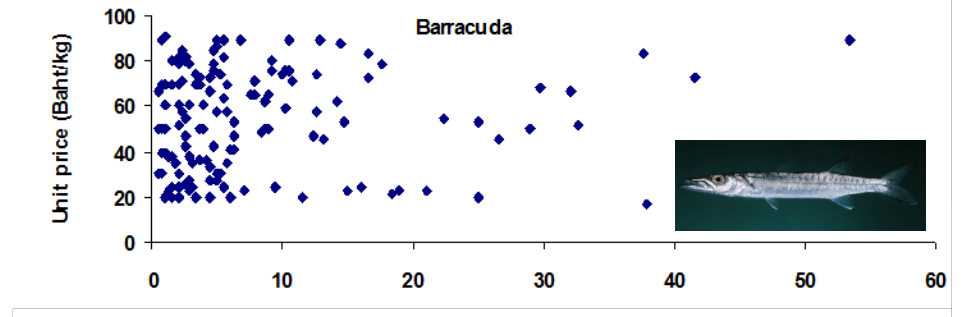
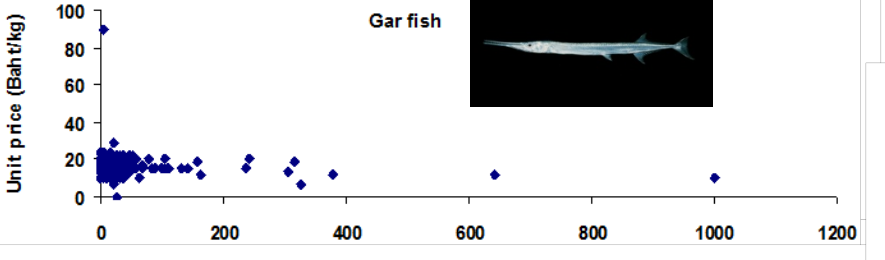
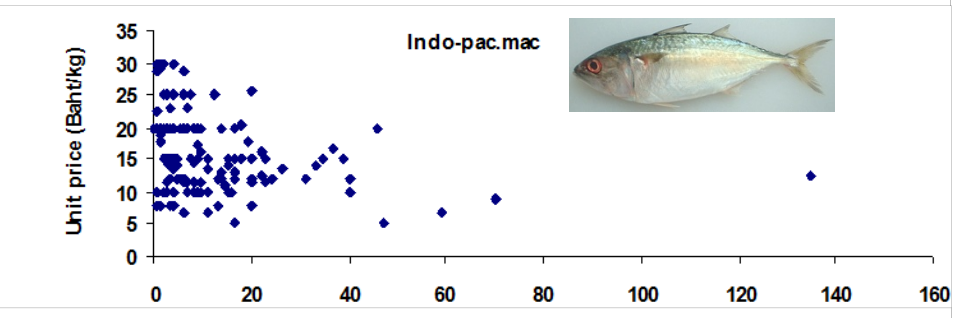
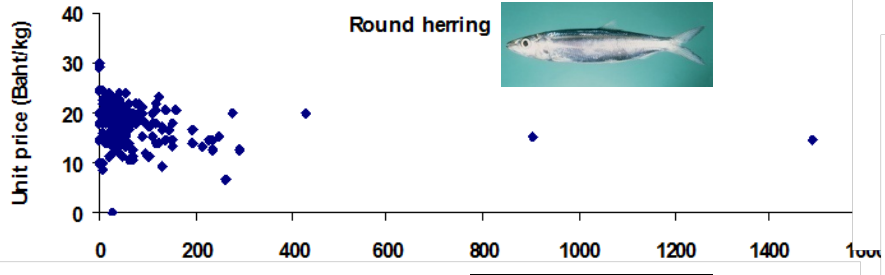
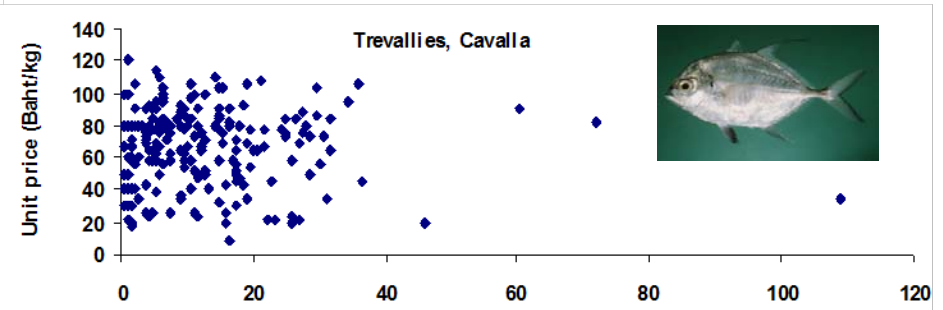
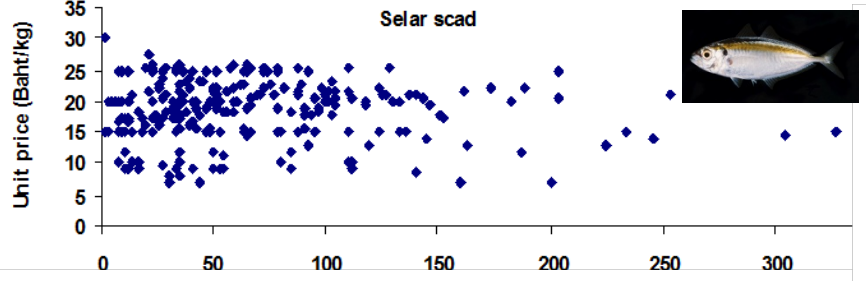


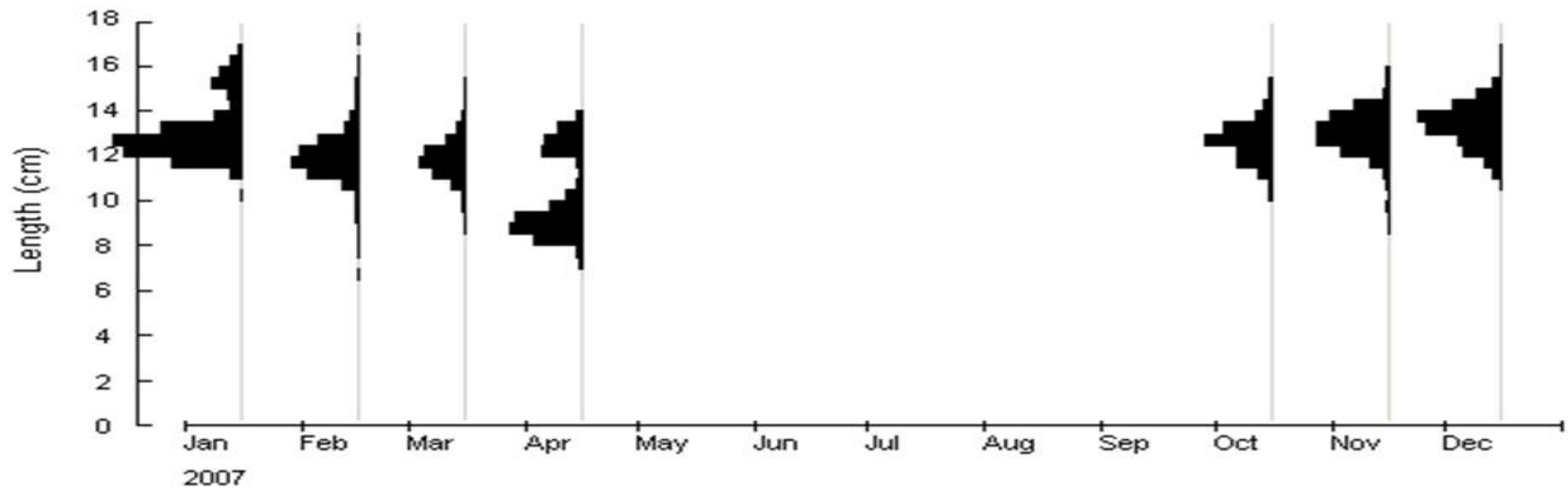
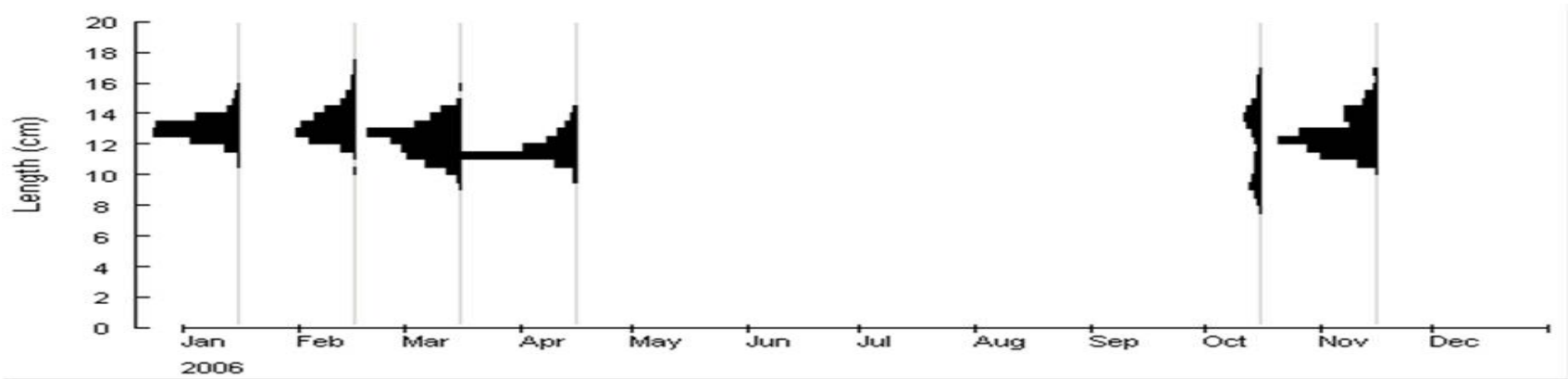
図 漁獲量と価格の関係

Unit price analysis 5 years 2003-2008

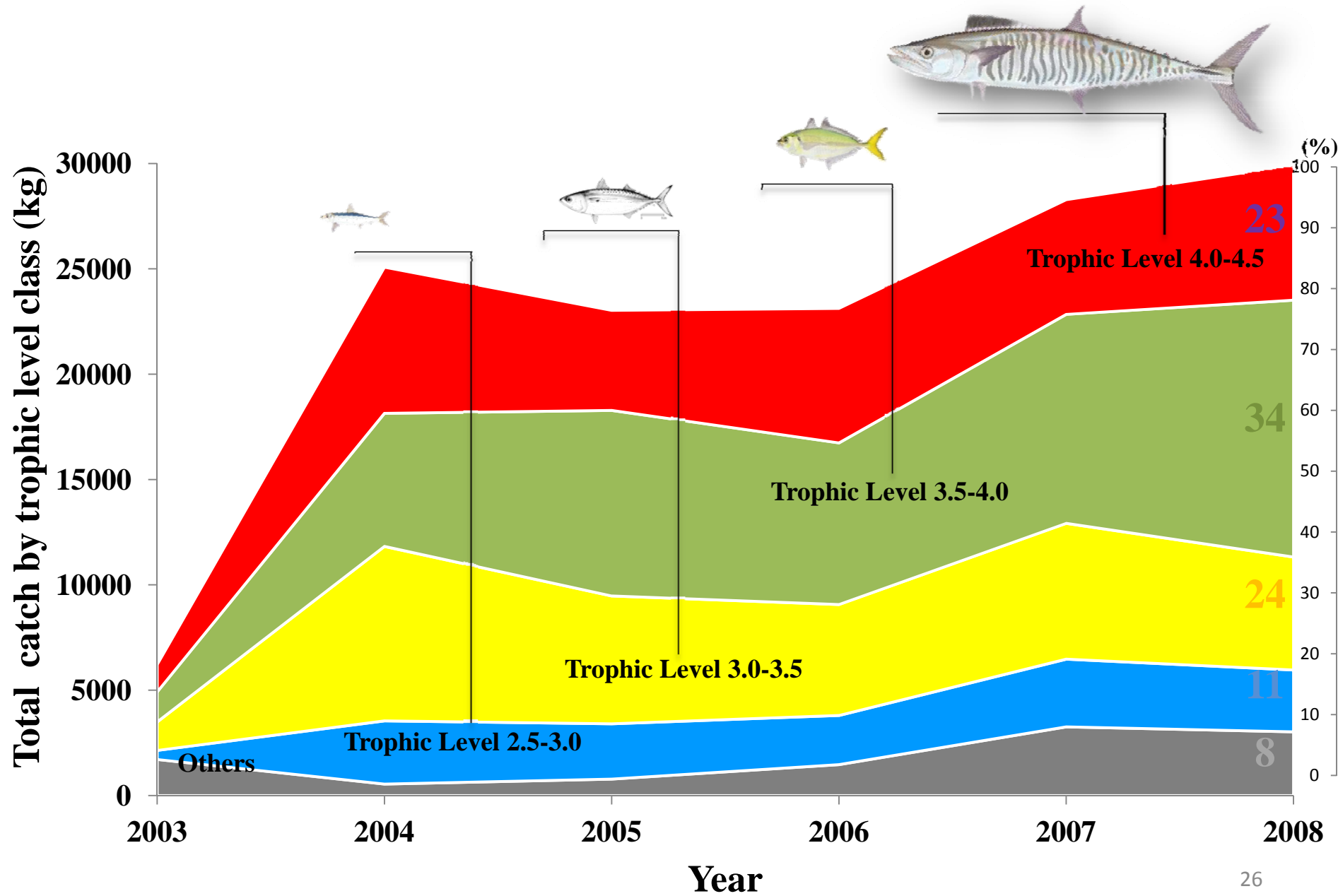




Example of Yearly/monthly size frequency of Yellowstripe Scad for relating to the unit price analysis



Changes in fish catches grouped by Trophic Level Class



Next activity

- 13-18 March, 2013
- together with Fishing Gear and Acoustics teams
- Retrieving of Logger data, and re-setting on site
- Data analysis
- Discussion meeting for research task sharing