

1 Methods

Over the course of 4 tagging seasons, 79 pop-up satellite archival tags were deployed by researchers, commercial fishermen and fishery observers. Combined these tracking data cover 9578 turtle-days (Figure 3). A range of Wildlife Computing PAT, SPLASH 323-B and MinPAT tags were used (Table 1).

	2011	2012	2014	2015
MinPAT	0	0	0	20
PAT	1	36	2	2
SPLASH 323-B	0	0	17	1

Table 1: The types of tags deployed over the 4 tagging seasons

Tag data was [[MIKE: DOWNLOADED FROM WC WEBSITE]] and processed using WC-DAP v3.0.369. Status messages and the minimum and maximum depths reported by WC-DAP were used to infer turtle fate. The tags were programmed to release after a set period (between 150–500 days after deployment), after a prolonged period (4–8 days) at a constant depth or reaching a maximum depth threshold of 1700 meters [[MIKE: Did 2015 tags have this threshold? I don’t see annotated anywhere?]].

2 Results

Turtle fate:

PTT	Hook	Deploy date	Deployer	Deploy length	Fate
109813	Light	2011-08-27	Observer/researcher	5.25	Lost
109810	Deep	2012-05-01	Observer/researcher	142.50	Float
109817	Deep	2012-05-01	Observer/researcher	151.50	Lost
109820	Deep	2012-05-01	Observer/researcher	357.25	Broken
109809	Deep	2012-05-02	Observer/researcher	108.75	Constant Depth
109818	Light	2012-05-02	Observer/researcher	250.00	Lost
109819	Deep	2012-05-04	Observer/researcher	240.50	Unknown
109814	Deep	2012-05-07	Observer/researcher	24.50	Lost
109811	Light	2012-05-08	Observer/researcher	364.75	Scheduled
109812	Light	2012-05-08	Observer/researcher	357.75	Lost
120011	Deep	2012-06-14	Fisherman	120.00	Broken
117631	Deep	2012-06-14	Fisherman	2.25	Lost
120012	Deep	2012-06-14	Fisherman	357.50	Scheduled
117637	Light	2012-06-24	Observer/researcher	191.25	Lost
117636	Light	2012-07-09	Fisherman	61.50	Broken
109816	Deep	2012-07-25	Observer/researcher	71.50	Constant Depth
109815	Light	2012-07-27	Observer/researcher	205.75	Float
120015	Deep	2012-07-30	Observer/researcher	365.00	Scheduled
117630	Light	2012-08-01	Observer/researcher	66.00	Broken

117633	Deep	2012-08-01	Observer/researcher	79.50	Float
120020	Deep	2012-08-09	Fisherman	144.75	Lost
117635	Light	2012-08-09	Observer/researcher	183.50	Float
117629	Deep	2012-08-10	Fisherman	111.75	Lost
120017	Light	2012-08-20	Observer/researcher	42.00	Lost
120019	Light	2012-08-21	Observer/researcher	70.25	Lost
120018	Light	2012-08-21	Observer/researcher	359.25	Scheduled
120013	Light	2012-08-21	Observer/researcher	299.75	Scheduled
117632	Deep	2012-08-22	Fisherman	105.75	Too Deep
120014	Light	2012-08-22	Observer/researcher	269.00	Unknown
120016	Deep	2012-08-22	Observer/researcher	22.00	Too Deep
117634	Deep	2012-08-23	Fisherman	364.50	Scheduled
121237	Deep	2012-08-24	Observer/researcher	37.75	Lost
121236	Deep	2012-08-24	Observer/researcher	98.75	Lost
121240	Deep	2012-10-04	Observer/researcher	58.75	Lost
121241	Deep	2012-10-04	Observer/researcher	58.25	Lost
121238	Deep	2012-10-06	Observer/researcher	364.50	Scheduled
121239	Light	2012-10-06	Observer/researcher	363.50	Scheduled
139184	Deep	2014-07-09	Observer/researcher	21.75	Float
139182	Deep	2014-07-10	Observer/researcher	8.00	Float
139194	Deep	2014-07-12	Observer/researcher	72.25	Float
139180	Deep	2014-07-13	Observer/researcher	11.75	Float
139191	Deep	2014-07-13	Observer/researcher	0.50	Float
139188	Deep	2014-07-14	Observer/researcher	42.75	Float
137768	No Hook	2014-07-15	Observer/researcher	28.75	Float
137773	Light	2014-07-16	Observer/researcher	22.75	Float
137769	No Hook	2014-07-17	Observer/researcher	14.00	Float
139185	Light	2014-07-17	Observer/researcher	82.25	Float
137770	Deep	2014-07-18	Observer/researcher	5.75	Float
139190	Deep	2014-07-19	Observer/researcher	4.00	Float
139181	Light	2014-07-19	Observer/researcher	17.00	Float
139192	Deep	2014-07-20	Observer/researcher	50.50	Float
137771	No Hook	2014-08-01	Fisherman	13.00	Float
137766	No Hook	2014-08-03	Fisherman	19.75	Float
137772	Deep	2014-08-08	Fisherman	12.00	Float
129588	Light	2014-08-25	Fisherman	181.50	Scheduled
129589		2014-08-25	Fisherman	55.75	Float
149018	Deep	2015-08-21	Fisherman	148.00	Scheduled
149004	Deep	2015-09-24	Fisherman	126.00	Broken
148992	Light	2015-09-06	Observer/researcher	145.00	Scheduled
148984	Deep	2015-08-08	Observer/researcher	147.50	Scheduled
152567	No Hook	2015-08-09	Observer/researcher	0.00	Lost
148983	Deep	2015-06-26	Fisherman	150.50	Scheduled
148976	Deep	2015-06-25	Fisherman	150.75	Scheduled
148991	Light	2015-06-25	Fisherman	122.50	Float

148986	Light	2015-06-24	Fisherman	138.50	Scheduled
148996	Light	2015-06-24	Fisherman	20.75	Float
148988	Light	2015-06-25	Fisherman	79.50	Too Deep
148999	Light	2015-06-26	Fisherman	58.75	Float
148987	Light	2015-06-26	Fisherman	0.00	Lost
148985	Light	2015-06-25	Fisherman	147.25	Scheduled
148982	Light	2015-06-26	Fisherman	110.50	Float
148980	Light	2015-06-25	Fisherman	107.25	Too Deep
149014	No Hook	2015-08-22	Fisherman	149.75	Scheduled
149012	Light	2015-08-23	Fisherman	9.00	Lost
149010	Light	2015-08-30	Fisherman	27.00	Float
149008	No Hook	2015-08-20	Fisherman	149.75	Scheduled
149002	Light	2015-08-20	Fisherman	149.75	Scheduled
149015	Deep	2015-07-23	Fisherman	149.75	Scheduled
149011	No Hook	2015-08-30	Fisherman	149.75	Scheduled

Table 2: PTT tag IDs, hooking location, deployment date, deployment length and inferred fate for all turtles in the study

	2011	2012	2014	2015
Broken	0	4	0	1
ConstantDepth	0	2	0	0
Float	0	4	18	5
Lost	1	14	0	3
Scheduled	0	8	1	12
TooDeep	0	2	0	2
Unknown	0	2	0	0

3 Conclusions

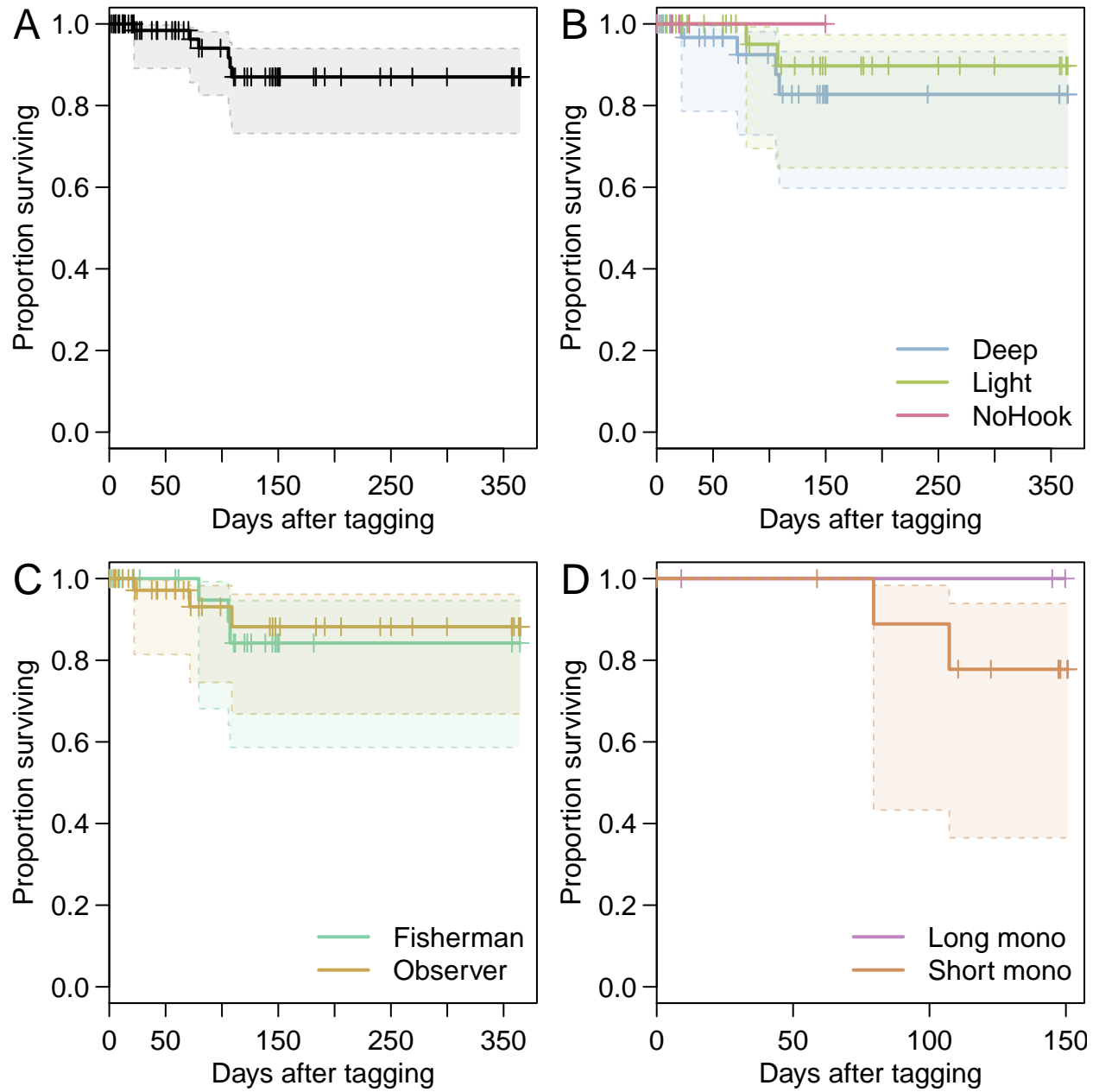


Figure 1: Kaplan-Meier curves showing the estimated proportion of turtles surviving over time for all turtles (A); deep, light or no hook turtles (B); observer or fisherman tagged turtles (C) and turtles with long (> 30 cm) or short pieces of monofilament left attached to hooks (D). Shaded regions indicate 95% confidence intervals.

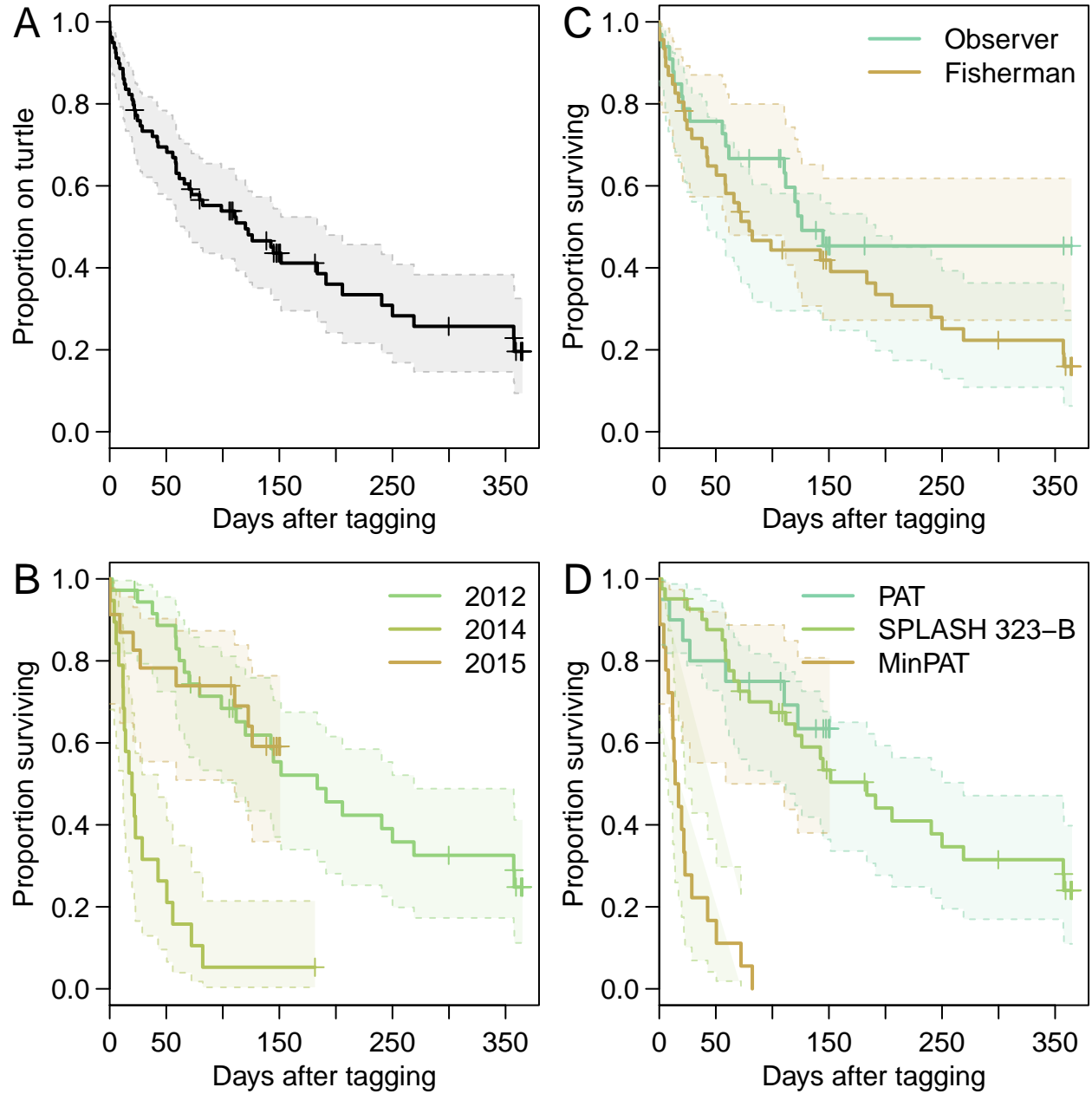


Figure 2: Kaplan-Meier curves showing the estimated proportion of tags remaining on turtles. Maximum depth, constant depth and scheduled released are counted as censored observations.

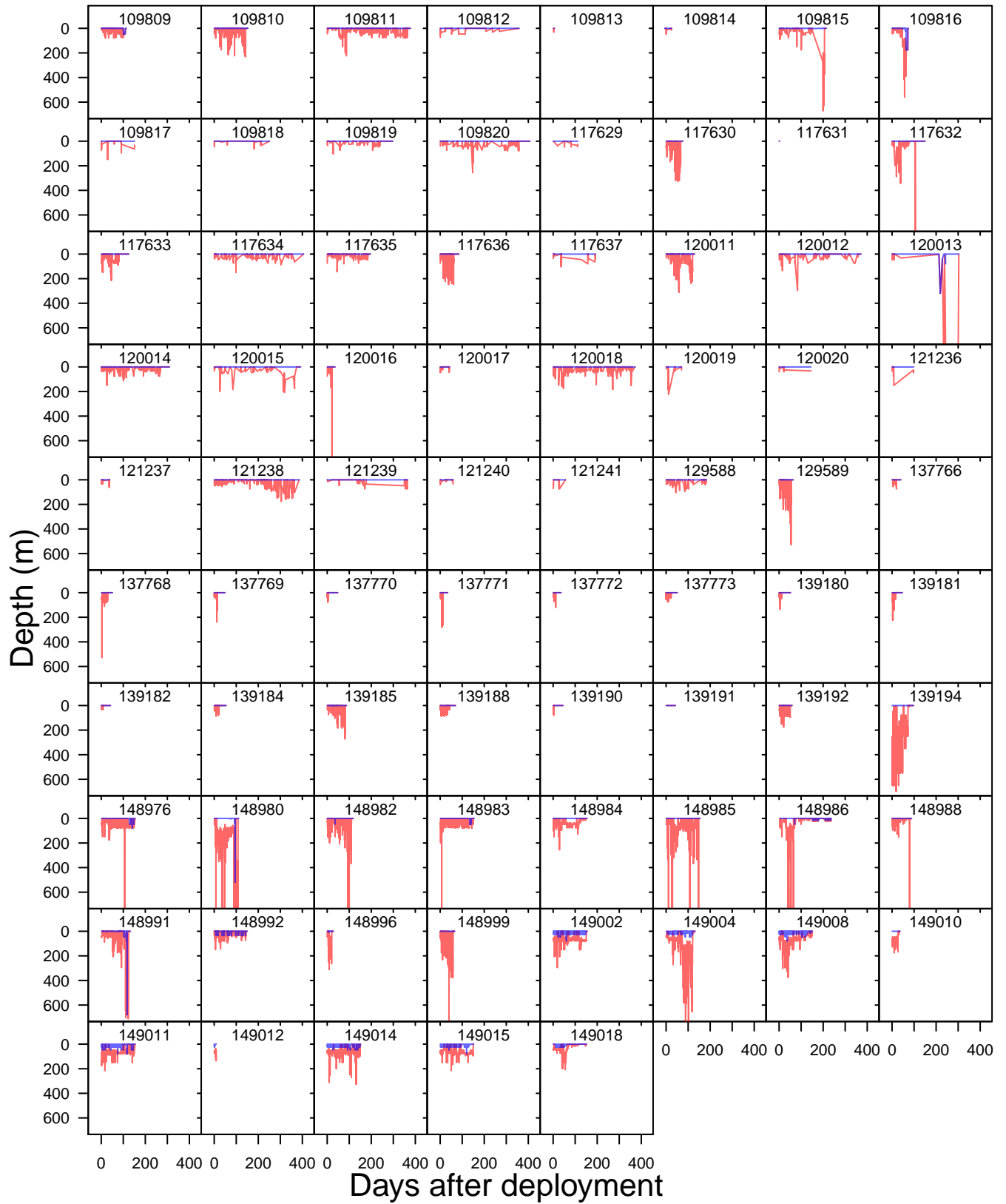


Figure 3: Minimum and maximum depth reports for all turtles in the study

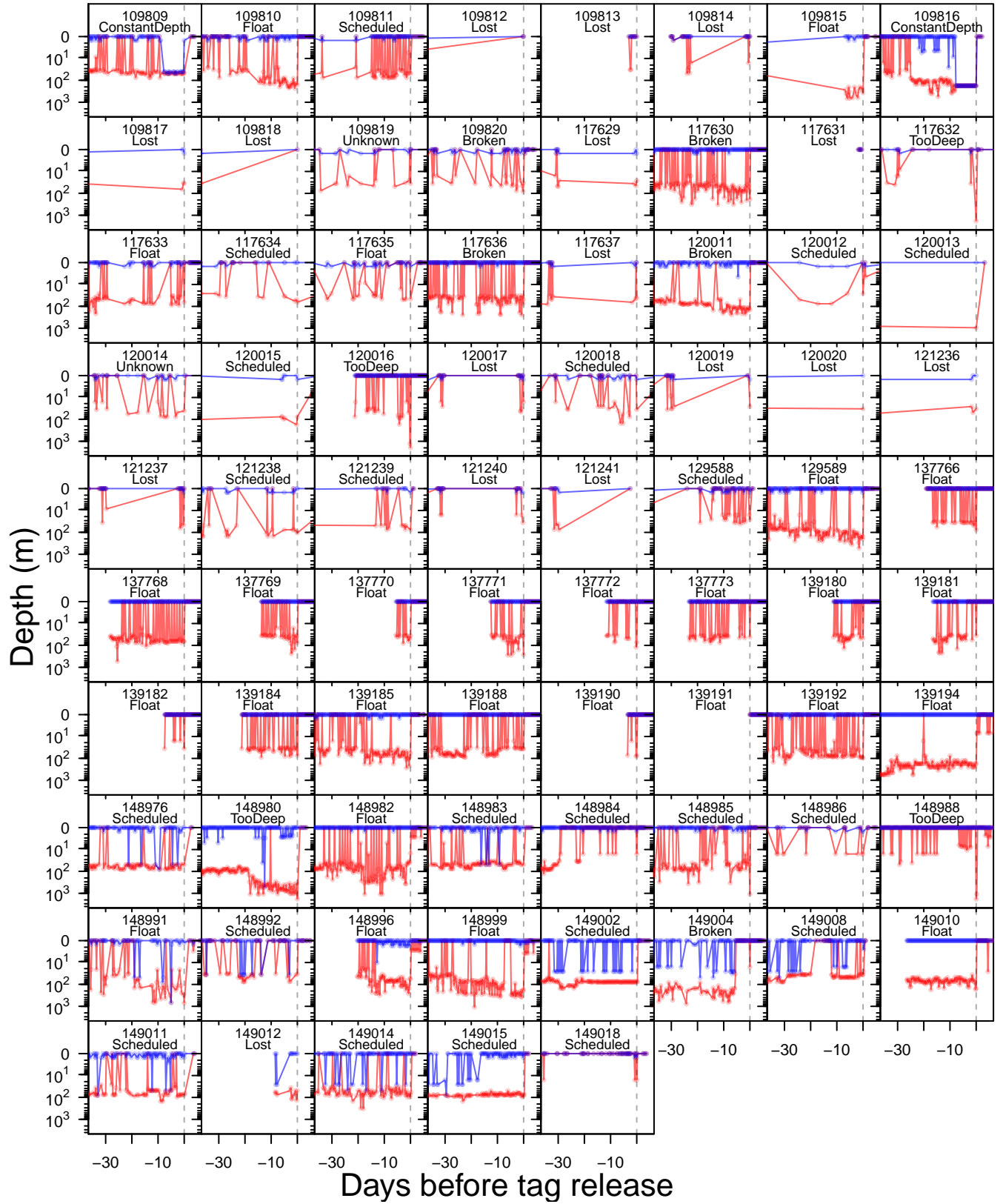


Figure 4: Minimum and maximum depth reports for all turtles in the study in the month prior to release