

Supplementary Table 1 Summary of raw, hSSM, and KDE metadata. Tracking period includes cumulative number of transmission days in parentheses. Residency dates determined using hSSM *b* values > 1.50 with number of days in residence indicated within parentheses. For migratory turtles, days in residence includes percent of total track duration in parentheses. Seagrass density percent cover represents total seagrass within 50% and 95% contours in US waters only (data unavailable for Mexico).

Turtle ID	Bay	SCL (cm)	Tracking Period (No. days)	Residency Season	Residency Dates (from hSSM)	Days in Residence [‡]	50% (95%) KDE Contour (km ²)	50% (95%) Seagrass Density (%)
<i>No migratory phase detected</i>								
RRC645	LM	68.6	06/20/06-07/31/06 (42)	Summer	06/20/06-07/31/06	42	3 (14)	68.8 (37.0)
RRC663 ^a	AB	48.2	07/25/06-10/05/06 (73)	Summer	07/25/06-10/05/06	73	10 (40)	5.1 (14.9)
RRV274 ^a	MB	48.1	08/01/06-12/25/06 (147)	Summer	08/01/06-12/25/06	147	116 (557)	30.8 (9.5)
RRA985	AB	43.5	08/07/06-11/29/06 (115)	Summer	08/07/06-11/29/06	115	7 (35)	9.5 (23.0)
TTX906	LM	55.0	05/17/07-09/22/07 (129)	Summer	05/17/07-09/22/07	129	14 (78)	29.6 (31.2)
TTX914	AB	45.4	05/21/07-08/01/07 (73)	Summer	05/21/07-08/01/07	73	65 (292)	14.3 (11.8)
YYG710	MB	61.3	06/15/07-08/10/07 (57)	Summer	06/15/07-08/10/07	57	9 (56)	14.9 (7.7)
YYG718	LM	43.4	06/26/07-08/08/07 (44)	Summer	06/26/07-08/08/07	44	11 (52)	65.0 (52.4)
YYG742	AB	57.5	07/30/07-09/08/07 (41)	Summer	07/30/07-09/08/07	41	14 (93)	11.8 (15.6)
YYS894	LM	52.5	08/14/09-08/29/09 (16)	Summer	08/14/09-08/29/09	16	16 (84)	60.2 (54.6)
<i>Migratory phase detected</i>								
RRC667	LM	47.1	08/03/06-02/26/07 (208)	Summer	08/03/06-01/18/07	169 (81.3)	186 (1161)	34.6 (9.4)
				Winter	01/23/07-02/13/07 & 02/16/07-02/26/07	33 (15.9)	0 (1457)	--
RRC669 ^b	LM	40.0	08/03/06-07/12/07 (344)	Summer	08/03/06-01/14/07 & 03/25/07-07/12/07	275 (79.9)	81 (458)	43.9 (19.6)
				Winter	02/14/07-02/19/07	6 (1.7)	0 (1175)	--
YYS870	LM	69.2	08/10/09-04/30/10 (264)	Summer	08/10/09-12/22/09 & 03/17/10-04/30/10	180 (68.2)	286 (773)	51.6 (25.9)
				Winter	12/29/09-03/14/10	76 (28.8)	6 (1573)	--
UUS938 ^b	LM	52.5	11/08/09-05/20/10 (194)	Summer	11/08/09-12/03/09 & 04/27/10-05/20/10	50 (25.8)	574 (3468)	21.7 (20.9)
				Winter	01/30/10-03/20/10	50 (25.8)	1,284 (3912)	--
UUN701 ^{a,c}	LM	64.8	10/02/10-04/01/11 (182)	Summer	10/02/10-12/09/10 & 03/16/11-03/31/11	85 (46.7)	489 (995)	24.1 (18.7)
				Winter	12/11/10-03/10/11	90 (49.5)	82 (2817)	--

^a Rehabilitated turtle

^b Exhibited indirect movements with short migrations prior to winter and second summer residency migrations

^c Equipped with KiwiSat 101 transmitter; all others equipped with KiwiSat 202 transmitters

[‡] Percentage of total track duration indicated in parentheses