The following supplement accompanies the article

Associative behavior of yellowfin *Thunnus albacares*, skipjack *Katsuwonus pelamis* and bigeye tuna *Thunnus obesus* at fish aggregating devices (FADs) off the coast of Mauritius

P. Rodriguez-Tress*, M. Capello, F. Forget, M. Soria, S. P. Beeharry, N. Dussooa, L. Dagorn

*Corresponding author: paco.rodrigueztress@gmail.com

Marine Ecology Progress Series 570: 213–222 (2017)

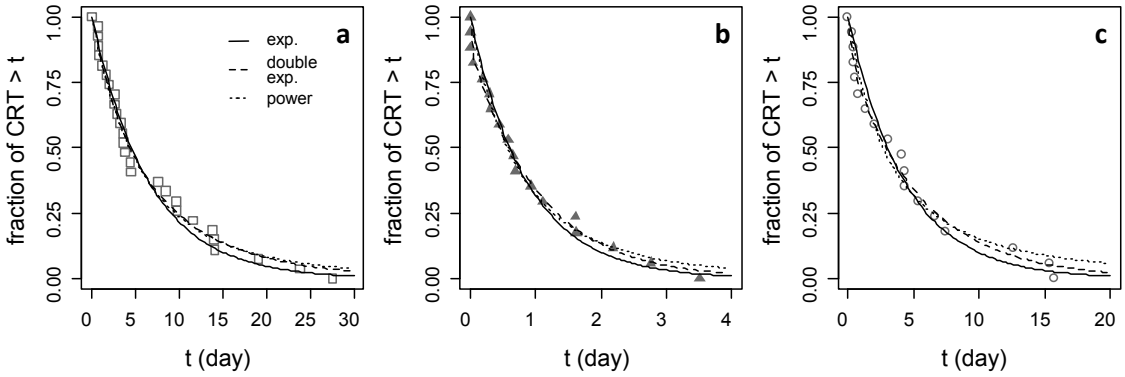

Fig. S1: Fits of the survival curves of continuous residence times recorded at FAD 6 for yellowfin (a) skipjack (b) and bigeye tuna (c). The continuous lines represent the single exponential model. Dashed lines indicate the double exponential model, and dotted lines denote the power law model.

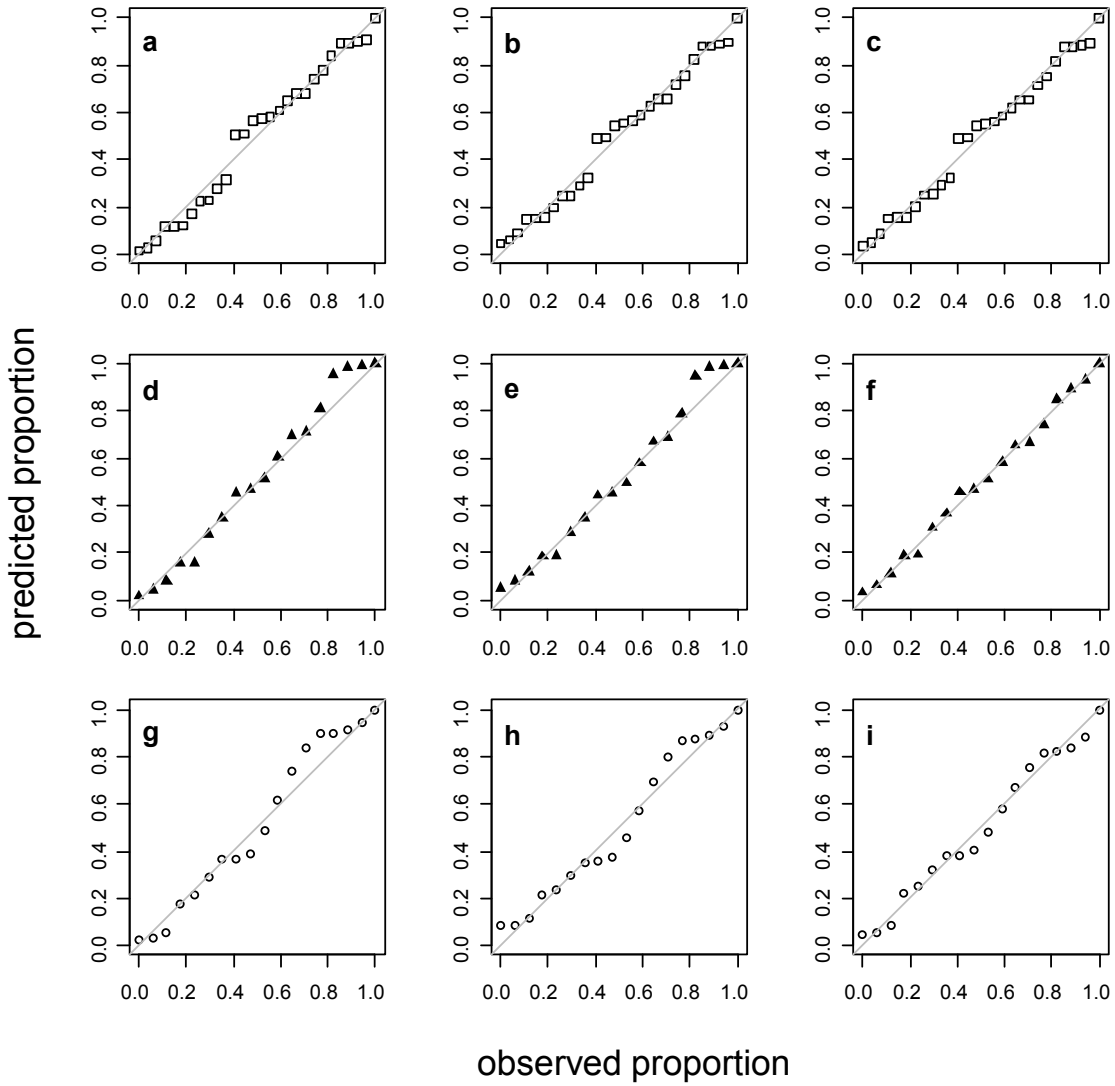

Fig. S2: Quantile-quantile plots of the exponential (left column), power law (center) and double exponential models (right column) fitting the survival curves of CRTs recorded at FAD 6 for yellowfin (upper row), skipjack (central row) and bigeye tuna (lower row)

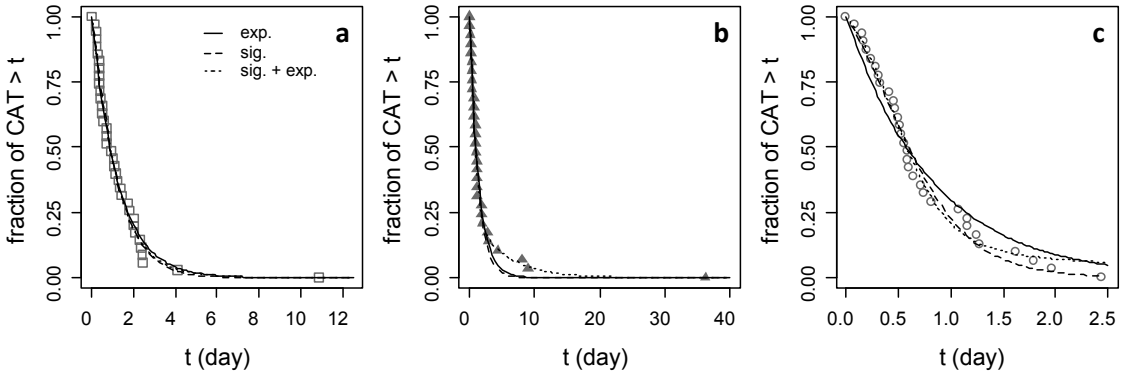

Fig. S3: Fit of the survival curves of CAT for yellowfin (a) skipjack (b) and bigeye tuna (c). The continuous lines represent the single exponential model, dashed lines indicate the sigmoidal fit, and dotted lines denote the sigmoidal + exponential model.

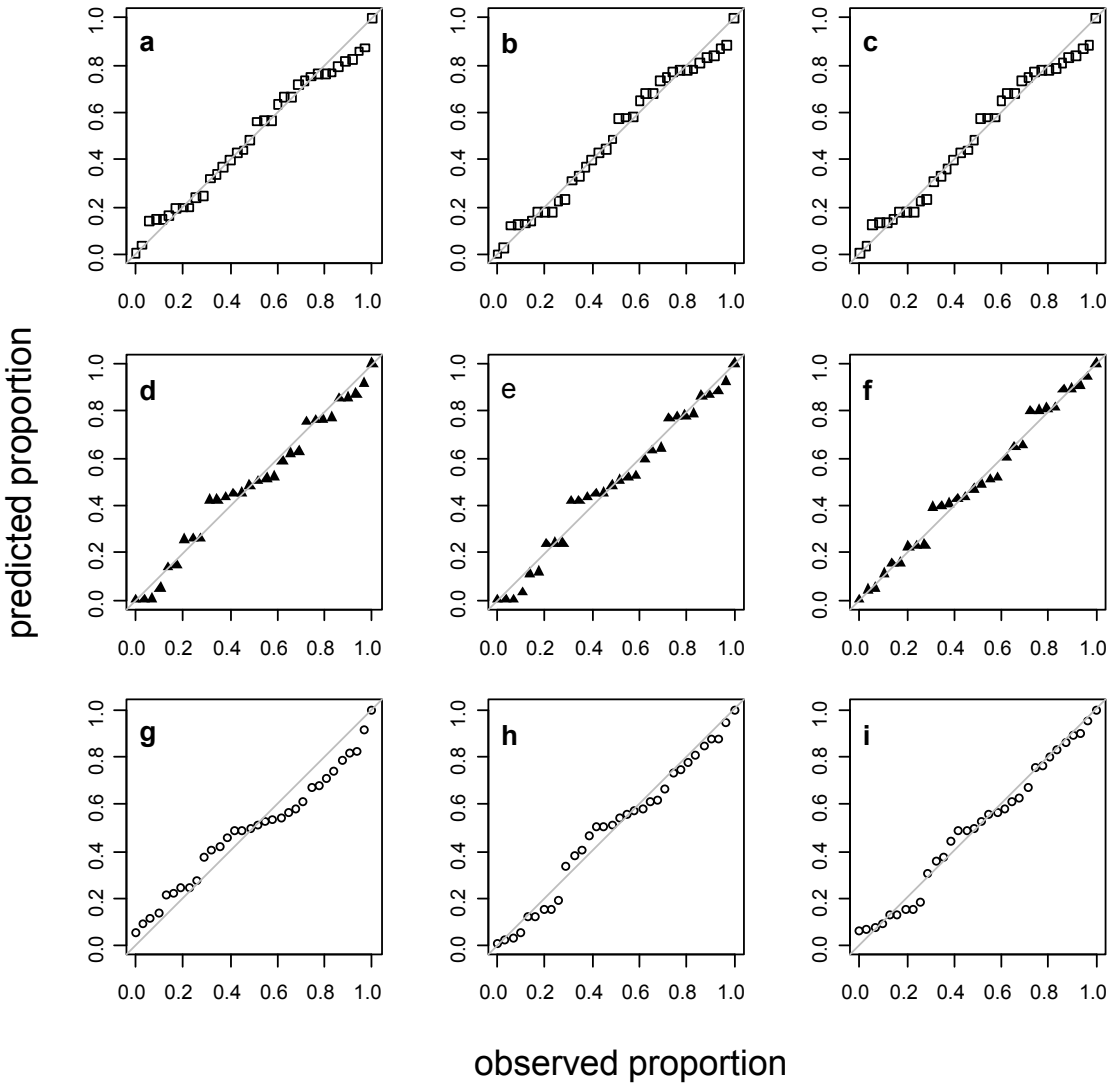

Fig. S4: Quantile-quantile plots obtained for the exponential (left column), sigmoidal (center) and sigmoidal + exponential (right column) fits of the survival curves of CATs for yellowfin (upper row), skipjack (central row) and bigeye tuna (lower row)

Table S1: Metadata of tagging experiments

Date and time of tagging	ID	Species	FL (mm)	Tag type	FAD ID of tagging
01/10/2010 07:21	YFT 1	YFT	780	V13P	FAD 3
01/10/2010 09:35	Only 1 detection	SKJ	470	V13	FAD 5
01/10/2010 10:37	YFT 2	YFT	530	V13	FAD 5
04/10/2010 06:30	SKJ 1	SKJ	470	V13P	FAD 3
04/10/2010 06:40	SKJ 2	SKJ	470	V13P	FAD 3
04/10/2010 06:50	SKJ 3	SKJ	500	V13P	FAD 3
04/10/2010 07:05	SKJ 4	SKJ	540	V13P	FAD 3
04/10/2010 07:35	SKJ 5	SKJ	460	V13P	FAD 3
04/10/2010 07:45	SKJ 6	SKJ	590	V13P	FAD 3
04/10/2010 08:20	SKJ 7	SKJ	430	V13P	FAD 3
04/10/2010 08:30	SKJ 8	SKJ	570	V13P	FAD 3
04/10/2010 10:50	SKJ 9	SKJ	570	V13P	FAD 6
04/10/2010 10:55	YFT 3	YFT	530	V13P	FAD 6
04/10/2010 11:30	BET 1	BET	520	V13	FAD 6
04/10/2010 11:35	YFT 4	YFT	500	V13	FAD 6
04/10/2010 11:45	YFT 5	YFT	530	V13	FAD 6
04/10/2010 11:50	BET 2	BET	510	V13	FAD 6
04/10/2010 11:55	BET 3	BET	530	V13	FAD 6
04/10/2010 12:00	BET 4	BET	520	V13	FAD 6
04/10/2010 12:10	SKJ 10	SKJ	490	V13	FAD 6
04/10/2010 12:40	YFT 6	YFT	600	V13	FAD 5
04/10/2010 12:45	YFT 7	YFT	710	V13	FAD 5
05/10/2010 07:06	YFT 8	YFT	490	V13P	FAD 1
05/10/2010 07:20	No detection	SKJ	450	V9P	FAD 1
05/10/2010 07:25	No detection	SKJ	440	V9P	FAD 1
05/10/2010 07:41	SKJ 11	SKJ	450	V9P	FAD 1
05/10/2010 07:48	YFT 9	YFT	490	V13P	FAD 1
05/10/2010 08:10	YFT 10	YFT	630	V13P	FAD 1
05/10/2010 08:50	YFT 11	YFT	520	V13P	FAD 1
05/10/2010 09:45	YFT 12	YFT	640	V13P	FAD 1
05/10/2010 09:53	YFT 13	YFT	540	V13P	FAD 1
05/10/2010 10:00	YFT 14	YFT	610	V13P	FAD 1
05/10/2010 10:10	SKJ 12	SKJ	410	V9P	FAD 1
05/10/2010 10:13	YFT 15	YFT	460	V13P	FAD 1
05/10/2010 10:20	YFT 16	YFT	810	V13P	FAD 1
05/10/2010 10:33	YFT 17	YFT	480	V13P	FAD 1
05/10/2010 10:40	YFT 18	YFT	640	V13P	FAD 1
06/10/2010 07:23	SKJ 13	SKJ	460	V9P	FAD 6
06/10/2010 07:39	SKJ 14	SKJ	440	V9P	FAD 6
06/10/2010 07:43	SKJ 15	SKJ	450	V9P	FAD 6
06/10/2010 07:47	No detection	SKJ	440	V9P	FAD 6
06/10/2010 08:07	YFT 19	YFT	730	V13P	FAD 6
06/10/2010 08:24	YFT 20	YFT	670	V13P	FAD 6
06/10/2010 08:32	YFT 21	YFT	700	V13P	FAD 6
06/10/2010 08:36	YFT 22	YFT	650	V13P	FAD 6
06/10/2010 09:17	YFT 23	YFT	690	V13P	FAD 6
06/10/2010 11:53	YFT 24	YFT	670	V13P	FAD 3
06/10/2010 12:36	YFT 25	YFT	670	V13P	FAD 3
08/10/2010 09:45	BET 5	BET	480	V13P	FAD 7
08/10/2010 10:05	YFT 26	YFT	570	V13P	FAD 7
08/10/2010 10:15	BET 6	BET	600	V13P	FAD 7
08/10/2010 10:40	BET 7	BET	550	V13P	FAD 7

Table S2: Number of CRTs per FAD recorded for each species

	YFT	SKJ	BET
FAD 1	14	4	0
FAD 2	0	0	0
FAD 3	5	10	2
FAD 4	2	0	1
FAD 5	11	3	6
FAD 6	**27**	**17**	**17**
FAD 7	2	10	12
Total	**61**	**44**	**38**

Table S3: p-values of the logrank test for the pairwise comparison of survival curves for the CRTs of the three species that were recorded over the whole array (first column); CRTs recorded at FAD 6 are in the second column and for CATs for the three species are in third column

	CRT full array	CRT FAD 6	CAT
YFT-SKJ	3.1E-06	2.4E-07	0.400
YFT-BET	0.026	0.242	0.033
SKJ-BET	0.020	7.3E-04	0.010