

Table S1. Cesium-137 and Cesium-134 activities in ocean

Table updated Oct. 2, 2012

F# ID	Sta. ID	Event #	Coll. date	local time	depth (m)	Cast #	Bot #	Lat. °N (dec.deg)	Long. °E (dec.deg)
111	1	11157-2204	6/6/2011	22:04	20	2	21,23	33.995	146.987
112	1	11157-2204	6/6/2011	22:04	50	2	19,20	33.995	146.987
113	1	11157-2204	6/6/2011	22:04	100	2	13,14	33.995	146.987
115	1	11157-2204	6/6/2011	22:04	447	2	8	33.995	146.987
116	1	11157-2204	6/6/2011	22:04	575	2	3,4	33.995	146.987
122	2	11158-0632	6/7/2011	6:35	surf			34.498	147.000
144	3	11158_1448	6/7/2011	14:48	20	5	22,24	34.971	147.022
145	3	11158_1448	6/7/2011	14:48	50	5	16,17	34.971	147.022
146	3	11158_1448	6/7/2011	14:48	100	5	10,11	34.971	147.022
147	3	11158_1448	6/7/2011	14:48	200	5	4,5	34.971	147.022
148	3	11158_2010	6/7/2011	20:10	400	6	14,15	34.971	147.022
149	3	11158_2010	6/7/2011	20:10	500	6	10,11	34.971	147.022
150	3	11158_2010	6/7/2011	20:10	750	6	7,8	34.971	147.022
151	3	11158_2010	6/7/2011	20:10	1000	6	2,3	34.971	147.022
167	4	1159_0645	6/8/2011	6:45	surf			35.502	146.999
173	5	1159_1220	6/8/2011	12:20	surf			35.993	147.016
174	5	1159_1253	6/8/2011	15:53	20	8	21,22	35.993	147.016
175	5	1159_1253	6/8/2011	15:53	50	8	16,17	35.993	147.016
176	5	1159_1253	6/8/2011	15:53	100	8	11,12	35.993	147.016
178	5	1159_1253	6/8/2011	15:53	160	8	9	35.993	147.016
185	6	1159_1855	6/8/2011	20:09	20	9	21,22	36.500	147.011
186	6	1159_1855	6/8/2011	20:09	50	9	17,18	36.500	147.011
187	6	1159_1855	6/8/2011	20:09	100	9	14,15	36.500	147.011
188	6	1159_1855	6/8/2011	20:09	200	9	10,11	36.500	147.011
198	7	11160_0038	6/9/2011	0:38	surf			36.991	147.000
194	7	11160_0045	6/9/2011	0:45	20	10	20,21	37.003	147.000
195	7	11160_0045	6/9/2011	0:45	50	10	16,17	37.003	147.000
196	7	11160_0045	6/9/2011	0:45	100	10	11,12	37.003	147.000
204	8	11160_0722	6/9/2011	0:45	surf			37.502	147.000
205	9	11160_1335	6/9/2011	13:35	surf			37.984	147.021
211	9	11160_1325	6/9/2011	13:25	20	12	20,21	37.984	147.021
212	9	11160_1325	6/9/2011	13:25	50	12	16,17	37.984	147.021
213	9	11160_1325	6/9/2011	13:25	100	12	11,12	37.984	147.021
215	9	11160_1325	6/9/2011	13:25	300	12	7,8	37.984	147.021
216	9.1	11160_1928	6/9/2011	19:28	surf			37.998	146.308
217	9.2	11161_0002	6/10/2011	0:02	surf			38.000	145.317
218	9.3	11161_0411	6/10/2011	4:11	surf			38.001	144.417
219	10	11161_0623	6/10/2011	6:23	surf			37.998	143.996
225	10	11161_0659	6/10/2011	6:59	20	13	21,22	37.998	143.996
226	10	11161_0659	6/10/2011	6:59	50	13	16,17	37.998	143.996
227	10	11161_0659	6/10/2011	6:59	100	13	11,12	37.998	143.996
229	11	11161_1330	6/10/2011	13:30	surf			37.511	144.003

235	12	11161_1822	6/10/2011	18:22	surf			36.996	144.004
241	12	11161_1808	6/10/2011	19:55	20	15	21,22	36.996	144.004
242	12	11161_1808	6/10/2011	19:55	50	15	15,16	36.996	144.004
243	12	11161_1808	6/10/2011	19:55	100	15	11,12	36.996	144.004
255	13	11162_0012	6/11/2011	0:12	20	16	22,23	36.487	144.024
256	13	11162_0012	6/11/2011	0:12	50	16	20,21	36.487	144.024
257	13	11162_0012	6/11/2011	0:12	100	16	18,19	36.487	144.024
258	13	11162_0012	6/11/2011	0:12	200	16	15,17	36.487	144.024
251	13	11162_0012	6/11/2011	0:12	430	16	9,11	36.487	144.024
252	13	11162_0012	6/11/2011	0:12	500	16	7,8	36.487	144.024
253	13	11162_0012	6/11/2011	0:12	720	16	3,4	36.487	144.024
245	14	11162_0547	6/11/2011	5:47	surf			35.996	144.006
262	14	11162_0544	6/11/2011	5:44	20	17	21,22	35.996	144.006
260	14	11162_0544	6/11/2011	5:44	50	17	16,17	35.996	144.006
261	14	11162_0544	6/11/2011	5:44	100	17	11,12	35.996	144.006
267	17	11163_0456	6/12/2011	4:56	surf			36.504	143.010
274	17	11163_0443	6/12/2011	4:56	20	18	21,22	36.504	143.010
275	17	11163_0443	6/12/2011	4:56	50	18	16,17	36.504	143.010
276	17	11163_0443	6/12/2011	4:56	100	18	11,12	36.504	143.010
277	14.1	1162_1756	6/11/2011	17:56	surf			35.566	143.949
278	14.2	11162_2207	6/11/2011	22:07	surf			35.936	143.725
279	14.3	11163_0154	6/12/2011	1:54	surf			36.288	143.358
284	18	11163_1115	6/12/2011	11:15	surf			36.999	143.000
290	19	11163_1635	6/12/2011	16:35	surf			37.505	142.995
296	19	11163_1615	6/12/2011	16:15	20	20	22,23	37.505	142.995
297	19	11163_1615	6/12/2011	16:15	50	20	16,17	37.505	142.995
298	19	11163_1615	6/12/2011	16:15	100	20	10,11	37.505	142.995
299	19	11163_1615	6/12/2011	16:15	200	20	4,5	37.505	142.995
304	19	11163_2135	6/12/2011	21:35	500	21	12,13	37.505	142.995
305	19	11163_2135	6/12/2011	21:35	750	21	8,9	37.505	142.995
306	19	11163_2135	6/12/2011	21:35	1000	21	4,5	37.505	142.995
333	20	11164_0350	6/13/2011	3:50	surf			38.000	143.003
339	21	11164_1035	6/13/2011	10:35	surf			37.501	142.486
360	21	11164_0950	6/13/2011	9:50	20	23	22,23	37.501	142.486
361	21	11164_0950	6/13/2011	9:50	50	23	16,17	37.501	142.486
362	21	11164_0950	6/13/2011	9:50	100	23	10,11	37.501	142.486
363	21	11164_0950	6/13/2011	9:50	200	23	4,5	37.501	142.486
368	21	11164_1742	6/13/2011	17:42	400	25	15,16	37.501	142.486
369	21	11164_1742	6/13/2011	17:42	500	25	10,11	37.501	142.486
370	21	11164_1742	6/13/2011	17:42	750	25	7,8	37.501	142.486
371	21	11164_1742	6/13/2011	17:42	1000	25	1,2	37.501	142.486
373	22	11164_2213	6/13/2011	22:13	surf			38.000	142.501
381	22.5	11165_0202	6/14/2011	2:02	surf			37.767	142.261
407	23	11165_0601	6/14/2011	6:01	10	27	22,23	37.496	142.000
408	23	11165_0601	6/14/2011	6:01	20	27	16,17	37.496	142.000
409	23	11165_0601	6/14/2011	6:01	50	27	10,11	37.496	142.000
410	23	11165_0601	6/14/2011	6:01	100	27	4,5	37.496	142.000

415	23	11165_1203	6/14/2011	12:03	170	28	10,11	37.496	142.000
416	23	11165_1203	6/14/2011	12:03	300	28	6,7	37.496	142.000
417	23	11165_1203	6/14/2011	12:03	500	28	2,3	37.496	142.000
420	23	11165_0442	6/14/2011	4:42	surf			37.496	142.000
421	23.5	11165_1435	6/14/2011	14:35	surf			37.733	142.026
422	24	11165_1647	6/14/2011	16:47	surf			38.001	141.997
428	24	11165_1644	6/14/2011	16:44	20	29	18,19	38.001	141.997
429	24	11165_1644	6/14/2011	16:44	50	29	14,15	38.001	141.997
430	24	11165_1644	6/14/2011	16:44	100	29	8,9	38.001	141.997
435	24.5	11165_2055	6/14/2011	20:55	surf			37.757	141.708
436	25	11166_0025	6/15/2011	0:25	surf			37.531	141.446
442	25	11166_0409	6/15/2011	4:09	10	30	22,23	37.531	141.446
443	25	11166_0409	6/15/2011	4:09	20	30	16,17	37.531	141.446
444	25	11166_0409	6/15/2011	4:09	50	30	10,11	37.531	141.446
445	25	11166_0409	6/15/2011	4:09	90	30	4,5	37.531	141.446
450	25	11166_1100	6/15/2011	11:00	100	31	12,13	37.531	141.446
451	25	11166_1100	6/15/2011	11:00	120	31	5,6	37.531	141.446
474	25.5	11166_1420	6/15/2011	14:20	surf			37.333	141.424
475	26	11166_1612	6/15/2011	16:08	surf			36.998	141.400
483	26	11166_1608	6/15/2011	16:12	20	33	18,19	36.998	141.400
482	26	11166_1608	6/15/2011	16:12	50	33	13,14	36.998	141.400
481	26	11166_1608	6/15/2011	16:12	100	33	6,7	36.998	141.400
488	26.5	11166_1915	6/15/2011	19:15	surf			36.745	141.404
489	27	11166_2100	6/15/2011	21:00	10	34	22,23	36.497	141.398
490	27	11166_2100	6/15/2011	21:00	20	34	16,17	36.497	141.398
491	27	11166_2100	6/15/2011	21:00	50	34	10,11	36.497	141.398
492	27	11166_2100	6/15/2011	21:00	100	34	4,5	36.497	141.398
497	27	11167_0517	6/16/2011	5:17	200	35	10,11	36.497	141.398
498	27	11167_0517	6/16/2011	5:17	500	35	6,7	36.497	141.398
499	27	11167_0517	6/16/2011	5:17	1000	35	2,3	36.497	141.398
527	27	11166_2130	6/15/2011	21:30	surf			36.497	141.398
528	27.5	11167_0952	6/16/2011	9:52	surf			36.250	141.402
529	28	11167_1159	6/16/2011	11:59	surf			36.006	141.399
536	28.5	11167_1600	6/16/2011	16:00	surf			36.244	141.717
563	29.1	11167_1756	6/16/2011	17:56	surf			36.455	141.948
537	29	11167_1850	6/16/2011	18:50	surf			36.498	142.010
564	29	11167_1823	6/16/2011	18:23	10	37	22,23	36.498	142.010
565	29	11167_1823	6/16/2011	18:23	20	37	16,17	36.498	142.010
566	29	11167_1823	6/16/2011	18:23	50	37	10,11	36.498	142.010
567	29	11167_1823	6/16/2011	18:23	100	37	4,5	36.498	142.010
572	29	11168_0530	6/17/2011	5:30	200	38	10,11	36.498	142.010
573	29	11168_0530	6/17/2011	5:30	500	38	6,7	36.498	142.010
574	29	11168_0530	6/17/2011	5:30	1000	38	2,3	36.498	142.010
577	29	11167_1851	6/16/2011	18:51	surf			36.455	141.948
578	30	11168_1050	6/17/2011	10:50	surf			36.496	142.495
584	30	11168_1037	6/17/2011	10:37	20	39	18,19	36.496	142.495
585	30	11168_1037	6/17/2011	10:37	50	39	15,16	36.496	142.495

587	31	11168_1625	6/17/2011	16:25	surf				36.999	142.500
593	31	11168_1613	6/17/2011	16:13	20	40	18,19		36.999	142.500
594	31	11168_1613	6/17/2011	16:13	50	40	14,15		36.999	142.500
595	32	11168_2115	6/17/2011	21:15	surf				36.998	142.001
601	32	11168_2108	6/17/2011	21:08	20	41	18,19		36.998	142.001
602	32	11168_2108	6/17/2011	21:08	50	41	14,15		36.998	142.001
604	32.1	11169_0418	6/18/2011	4:18	surf				37.247	141.698
605	32.2	11169_0555	6/18/2011	5:55	surf				36.988	141.699
606	32.3	11169_0704	6/18/2011	7:04	surf				36.834	141.702
607	32.4	11169_0958	6/18/2011	9:58	surf				36.406	141.641
608	32.5	11169_1313	6/18/2011	13:13	surf				35.991	141.693
609	32.6	11169_1517	6/18/2011	15:17	surf				35.788	141.534

bd=below detection (<0.001 counts per second or equivalent to 1.0 Bq m-3 for 137Cs and <1.5 Bq m-3 for 134Cs with average counting

surf=approx. 2m (from ship's underway system or pump and hose deployed off deck)

err=error propagated from counting statistics and average recovery error

event #, CTD # and bottle # correspond to K-O-K cruise and are available at WHOI BCO-DMO.

multiple bottle #'s indicates that Cs sample, typically 20 L, was taken from more than one bottle.

137Cs (Bq m-3)	±	err	134Cs (Bq m-3)	±	err	134Cs/137Cs (Bq/Bq)	±	err
3.3	±	0.2	2.4	±	0.3	1.37	±	0.18
3.0	±	0.2	0.0					
9.2	±	0.3	11.0	±	0.7	0.84	±	0.06
14	±	0.7	11.0	±	0.7	1.28	±	0.10
1.1	±	0.3	bd					
2.6	±	0.6	1.7	±	0.5	1.53	±	0.57
1.7	±	0.3	bd					
1.8	±	0.2	bd					
2.1	±	0.2	bd					
2.5	±	0.2	bd					
8.5	±	0.9	bd	±	0.7	0.00	±	0.00
2.0	±	0.3	bd					
0.5	±	0.2	bd					
0.3	±	0.1	bd	±	0.0	0.00	±	0.00
317	±	10	315	±	9	1.01	±	0.04
25	±	1	23	±	1	1.08	±	0.04
1.9	±	0.3	bd					
52	±	1	51	±	1	1.02	±	0.03
2.9	±	0.3	1.2	±	0.2	2.31	±	0.47
15	±	0	14.1					
5.7	±	0.3	4.3	±	0.3	1.32	±	0.11
2.8			bd					
2.0			bd					
13	±	0.9	10.3	±	0.8	1.22	±	0.13
202	±	5	203	±	4	0.99	±	0.03
180	±	4	185	±	2	0.97	±	0.02
204	±	6	206	±	5	0.99	±	0.04
24	±	1	22	±	1	1.12	±	0.10
336	±	8	334	±	7	1.01	±	0.03
71	±	2	70	±	2	1.02	±	0.04
29	±	1	29	±	1	0.98	±	0.03
27	±	1	25	±	1	1.06	±	0.05
37	±	1	35	±	1	1.06	±	0.03
1.0	±	0.1	bd					
204.7	±	5.3	199.2	±	4.2	1.03	±	0.03
92.3	±	3.8	90.7	±	3.8	1.02	±	0.06
99.9	±	3.5	104.2	±	3.4	0.96	±	0.05
166.2	±	5.2	167.3	±	4.8	0.99	±	0.04
61.9	±	1.7	60.9	±	1.5	1.02	±	0.04
57.0	±	2.5	57.4	±	2.7	0.99	±	0.06
31.9	±	1.2	30.9	±	1.3	1.03	±	0.06
99.5	±	3.1	104.1	±	2.9	0.96	±	0.04

89.1	±	2.0	85.8	±	1.4	1.04	±	0.03
20.9	±	0.5	19.8	±	0.5	1.05	±	0.04
123.3	±	4.5	121.8	±	4.4	1.01	±	0.05
23.8	±	0.5	21.6	±	0.3	1.10	±	0.03
2.6	±	0.2	1.2	±	0.1	2.20	±	0.26
2.1	±	0.3	bd					
3.4	±	0.4	1.6	±	0.4	2.14	±	0.55
1.6	±	0.1	bd					
1.4	±	0.2	bd					
1.2	±	0.1	bd	±	0.0	0.00	±	0.00
0.7	±	0.1	bd	±	0.0	0.00	±	0.00
2.3	±	0.4	1.1	±	0.6	2.08	±	1.11
2.1	±	0.6	bd					
2.8	±	0.4	1.2	±	0.2	2.39	±	0.57
2.4	±	0.3	bd					
3.3	±	0.2	1.5	±	0.2	2.17	±	0.33
9.1	±	0.6	7.3	±	0.6	1.25	±	0.13
2.3	±	0.3	bd					
1.9	±	0.4	bd					
2.0	±	0.2	bd					
2.0	±	0.2	bd					
1.8	±	0.3	bd					
204	±	5	204	±	3	1.00	±	0.03
236	±	5	244	±	4	0.96	±	0.03
289	±	6	287	±	4	1.01	±	0.03
190	±	6	186	±	5	1.02	±	0.04
19	±	1	18	±	1	1.07	±	0.05
3.0	±	0.3	1.8	±	0.3	1.69	±	0.31
2.1	±	0.2	1.5	±	0.3	1.43	±	0.30
10.9	±	0.6	9.9	±	0.6	1.11	±	0.09
0.9	±	0.1	0.7	±	0.1	1.26	±	0.31
22	±	1	22	±	1	1.01	±	0.04
211	±	6	223	±	5	0.95	±	0.03
252	±	6	247	±	4	1.02	±	0.03
129	±	4	126	±	4	1.02	±	0.05
51	±	2	47	±	1	1.09	±	0.04
2.0	±	0.1	bd					
2.2	±	0.3	1.2	±	0.5	1.81	±	0.73
0.8	±	0.1	bd					
0.9	±	0.3	bd					
1.0	±	0.2	bd					
211	±	6	216	±	5	0.98	±	0.04
388	±	8	396	±	5	0.98	±	0.02
920	±	19	896	±	11	1.03	±	0.02
993	±	23	972	±	16	1.02	±	0.03
992	±	20	1000	±	11	0.99	±	0.02
107	±	2	107	±	1	1.00	±	0.02

3.0	±	0.2	1.6	±	0.2	1.90	±	0.23
1.9	±	0.2	bd					
1.1	±	0.1	bd					
822	±	18	834	±	11	0.99	±	0.02
475	±	12	476	±	9	1.00	±	0.03
43	±	1	42	±	1	1.02	±	0.04
196	±	5	196	±	4	1.00	±	0.03
16	±	1	15	±	1	1.07	±	0.07
43	±	1	41	±	1	1.04	±	0.03
380	±	11	403	±	9	0.94	±	0.03
582	±	14	595	±	10	0.98	±	0.03
193	±	5	200	±	4	0.97	±	0.03
202	±	7	216	±	6	0.94	±	0.04
117	±	3	125	±	2	0.94	±	0.02
76	±	2	74	±	2	1.03	±	0.04
78	±	2	82	±	2	0.96	±	0.03
41	±	1	40	±	1	1.01	±	0.04
749	±	19	773	±	16	0.97	±	0.03
460	±	11	465	±	8	0.99	±	0.03
290	±	7	307	±	6	0.95	±	0.03
239	±	10	231	±	4	1.04	±	0.05
63	±	2	61	±	1	1.02	±	0.04
537	±	14	556	±	11	0.97	±	0.03
499	±	11	518	±	7	0.96	±	0.02
425	±	11	415	±	9	1.02	±	0.03
290	±	7	294	±	5	0.99	±	0.03
36	±	1	34	±	1	1.05	±	0.05
8.5	±	0.5	6.8	±	0.5	1.24	±	0.12
2.2	±	0.2	1.7	±	0.3	1.31	±	0.24
1.7	±	0.3	1.6	±	0.3	1.10	±	0.30
717	±	20	753	±	17	0.95	±	0.03
539	±	12	551	±	7	0.98	±	0.02
7.9	±	0.6	6.5	±	0.6	1.21	±	0.15
1622	±	39	1705	±	31	0.95	±	0.03
2651	±	55	2758	±	32	0.96	±	0.02
3477	±	70	3565	±	37	0.98	±	0.02
391	±	8	390	±	5	1.00	±	0.02
314	±	7	333	±	5	0.94	±	0.03
113	±	2	117	±	2	0.96	±	0.03
31	±	1	29	±	1	1.06	±	0.06
13	±	0	12	±	0	1.06	±	0.05
1.2	±	0.1	bd					
0.3			bd					
4497	±	106	4575	±	77	0.98	±	0.03
720	±	17	738	±	13	0.98	±	0.03
383	±	9	398	±	6	0.96	±	0.03
448	±	9	453	±	5	0.99	±	0.02

440	±	11	453	±	9	0.97	±	0.03
408	±	8	445	±	5	0.92	±	0.02
449	±	9	451	±	5	0.99	±	0.02
327	±	8	332	±	6	0.98	±	0.03
509	±	12	545	±	8	0.93	±	0.03
158	±	4	157	±	3	1.01	±	0.03
417	±	11	418	±	9	1.00	±	0.03
250	±	9	248	±	9	1.01	±	0.05
371	±	8	371	±	6	1.00	±	0.03
1863	±	42	1849	±	28	1.01	±	0.03
2.3	±	0.2	bd					
1.7	±	0.2	bd					

times)