

Table 1

Sequential list of all MOCNESS mesozooplankton tows conducted in 2004 and 2005 with notation of day (1000–1200 h) or night (2200–0200 h), eddy identification number (see McGillicuddy et al., 2007), and location

Date	Time	Eddy	Location	Latitude	Longitude	Distance from center (km)	Biomass 0–150 m (g dry wt m ⁻²)	Biomass 0–700 m (g dry wt m ⁻²)	RANK
15 June 04	Night	A1	Center	33 1.57	63 21.38	N/A	0.297	0.545	44
19 June 04	Night	C2	Center	31 14.56	59 36.80	N/A	1.198	1.647	2
22 June 04	Night	C1	Center	30 30.05	64 54.59	22.3	0.351	0.645	41
24 June 04	Night	C1	Periphery (SW)	29 46.51	65 45.48	123.0	0.733	1.261	11
24 June 04	Day	C1	Periphery (SW)	29 46.51	65 45.48	125.6	0.470	0.800	31
26 June 04	Night	C1	Center	30 29.94	64 53.84	15.1	0.627	1.120	18
26 June 04	Day	C1	Center	30 29.94	64 53.84	15.1	0.473	0.911	23
28 June 04	Night	C1	Out (northwest)	31 12.941	66 10.95	128.6	0.339	0.535	45
26 July 04	Day	C1	Center	30 41.481	65 19.27	6.7	0.352	0.765	36
27 July 04	Night	C1	Center	30 41.481	65 19.27	8.3	0.502	0.808	29
29 July 04	Night	C1	Periphery (NW)	31 24.142	66 10.87	101.1	0.715	1.311	7
29 July 04	Day	C1	Periphery (NW)	31 24.142	66 10.87	101.1	0.579	1.210	13
2 August 04	Night	C1	Out (N)	31 45.487	65 45.54	110.4	0.412	0.821	22
2 August 04	Day	C1	Out (N)	31 45.487	65 45.54	110.4	0.397	0.916	28
4 August 04	Night	C1	Periphery (SW)	29 57.42	66 35.90	124.2	0.674	1.156	15
4 August 04	Day	C1	Center	30 40.51	65 45.31	14.7	0.330	0.695	39
5 August 04	Night	C1	Center	30 40.49	65 45.31	14.7	0.567	0.855	25
9 August 04	Night	C2	Center	30 30.55	60 17.95	N/A	1.015	1.512	4
9 August 04	Day	C2	Center	30 30.31	60 17.56	N/A	0.667	1.272	10
10 August 04	Night	C2	Out (E)	30 8.41	60 17.63	N/A	0.593	0.961	20
11 August 04	Night	C2	Periphery (SE)	30 8.38	59 52.46	N/A	0.921	1.308	8
23 June 05	Night	C5	Periphery (NW)	33 3.224	66 29.56	N/A	0.374	0.641	42
24 June 05	Night	C5	Center	32 52.911	65 52.296	N/A	0.498	0.719	38
25 June 05	Night	A4	Center	31 05.106	65 40.005	16.8	0.635	0.904	24
29 June 05	Night	C3	Center	28 44.472	65 14.940	N/A	0.276	0.443	48
30 June 05	Night	BATS	BATS	31 39.812	64 09.995	194.0	0.402	0.786	34
2 July 05	Night	A5	Center	32 42.023	62 44.81	N/A	0.848	1.387	5
4 July 05	Night	A4	Center	30 53.809	66 17.35	7.7	0.580	0.824	27
4 July 05	Day	A4	Center	30 53.551	66 17.15	20.0	0.188	0.236	49
5 July 05	Night	A4	Center	30 54.296	66 17.613	20.0	0.824	1.220	12
6 July 05	Night	A4	Out (NE)	31 37.351	67 7.390	112.0	0.653	1.135	16
7 July 05	Night	A4	Out (SE)	30 10.451	66 17.78	77.1	0.660	1.163	14
8 July 05	Day	A4	Center	30 53.906	66 17.195	33.9	0.551	0.792	33
9 July 05	Night	A4	Center	30 54.082	66 17.436	19.8	0.837	1.123	17
9 July 05	Day	A4	Out (NW)	31 37.174	67 07.325	102.2	0.379	0.794	32
11 July 05	Night	C5	Center	33 25.567	66 42.46	N/A	0.646	0.776	35
12 July 05	Day	A4	Out (SE)	29 59.283	66 29.599	82.3	0.349	0.664	40
9 August 05	Day	A4	Center	30 11.364	68 09.442	12.0	0.437	0.939	21
10 August 05	Night	A4	Center	30 10.433	68 09.593	8.9	0.305	0.502	47
11 August 05	Night	A4	Center	30 16.090	68 03.523	20.1	0.423	0.583	43
14 August 05	Night	A4	Center	33 03.691	64 12.30	N/A	0.802	1.292	9
19 August 05	Night	A4	Center	30 10.463	68 34.225	4.8	0.846	1.580	3
19 August 05	Day	A4	Center	30 11.472	68 34.29	4.2	0.398	0.743	37
20 August 05	Day	A4	Out (NE)	30 53.977	67 44.48	129.7	0.512	0.805	30
21 August 05	Night	A4	Center	30 10.560	68 34.52	21.8	1.077	1.854	1
21 August 05	Day	A4	Out (SW)	29 27.440	69 24.33	92.2	0.322	0.511	46
23 August 05	Day	A4	Center	29 56.439	68 56.13	8.4	0.721	1.314	6
23 August 05	Night	A4	Out (SE)	29 17.119	67 56.85	119.7	0.544	0.835	26
25 August 05	Night	A4	Out (NW)	30 32.700	69 24.34	75.7	0.623	1.039	19

Latitude and longitude denote where the MOCNESS was deployed. During a typical 2.5-h tow the vessel traveled 5–15 km from the starting location. Distance from eddy center refers to the relevant eddy, i.e. eddy C1 in 2004 and eddy A4 in 2005. Zooplankton biomass integrated from 0 to 150 m and 0 to 700 m is shown, with 0 to 700 m biomass rank values listed from highest to lowest.

Upon recovery nets were rinsed with seawater and the cod-ends were removed. A subset of animals was picked from surface (0–100 m) samples for gut content analysis (see below). The contents of each net were split using a

Folsom plankton splitter with half preserved in 4% borax buffered formaldehyde for analyses of community structure (Eden et al. in prep.), and the other half size-fractionated for biomass using a series of five nested sieves