

**Supplementary Table 3.** The following table reports the integrated carbon (C) biomass (mg C m<sup>-2</sup>) of each functional plankton group encountered (from pico- to microplankton) and their relative contribution to total C biomass at the eight studied stations within the euphotic layer and the sub-euphotic layer (defined as the layer extending 100 m below the euphotic depth).

Integrated C biomass (mg C m <sup>-2</sup> )											
Stations	Integrated layer (m)	Heterotrophic bacteria	Autotrophic picoprokaryotes ( <i>Synechococcus</i> )	Autotrophic picoeukaryotes	Autotrophic nanoeukaryotes	Heterotrophic nanoflagellates	Dinoflagellates	Ciliates	Tintinnids	Silicoflagellates	Diatoms
A3-2	0 - 38	128.8	3.1	5.2	362.8	163.8	396.4	43.7	18.0	7.1	3140.9
	38 - 138	413.4	10.5	18.8	1156.9	381.5	743.9	79.9	35.6	283.2	4252.5
E-4W	0 - 40	307.1	7.0	40.2	854.9	85.7	226.6	17.1	14.4	114.0	3184.2
	40 - 140	643.2	16.3	84.9	1855.8	161.7	382.1	56.9	18.2	216.0	4466.1
F-L	0 - 35	259.4	13.1	77.7	1658.3	227.1	153.0	17.1	8.0	27.6	6373.6
	35 - 135	638.9	32.6	142.3	2819.3	285.4	279.4	89.2	11.3	30.0	6030.8
R-2	0 - 100	334.6	32.7	391.5	2724.8	77.4	94.3	32.3	13.6	194.4	293.5
	100- 200	312.6	17.9	112.5	937.6	112.2	121.3	88.3	9.5	305.7	322.6
E-1	0 - 64	341.4	12.9	237.8	3364.7	117.8	90.4	21.4	13.0	50.7	1418.1
	64 - 164	483.6	13.7	131.2	2287.0	140.2	111.6	47.7	17.4	64.0	2484.9
E-3	0 - 70	439.5	11.8	224.6	2879.5	181.6	103.0	51.8	13.7	49.4	1616.1
	70 - 170	531.9	12.0	92.4	1386.3	171.9	71.6	18.9	7.8	7.3	1409.6
E-5	0 - 55	312.6	5.4	222.5	2642.9	230.3	183.0	42.1	80.0	26.0	2238.5
	55 - 155	537.0	9.7	154.3	2315.0	266.6	253.0	121.8	52.3	13.8	1952.0
E-4E	0 - 50	352.1	7.1	89.3	1357.8	135.4	346.1	31.8	28.2	31.4	2223.9
	50 - 150	546.2	9.9	96.1	1511.7	171.2	281.2	95.7	37.3	4.1	1505.0
Relative contribution to total C biomass (%)											
Stations	Integrated layer (m)	Heterotrophic bacteria	Autotrophic picoprokaryotes ( <i>Synechococcus</i> )	Autotrophic picoeukaryotes	Autotrophic nanoeukaryotes	Heterotrophic nanoflagellates	Dinoflagellates	Ciliates	Tintinnids	Silicoflagellates	Diatoms

<b>A3-2</b>	0 - 38	3.0	0.1	0.1	8.5	3.8	9.3	1.0	0.4	0.2	73.6
	38 - 138	5.6	0.1	0.3	15.7	5.2	10.1	1.1	0.5	3.8	57.7
<b>E-4W</b>	0 - 40	6.3	0.1	0.8	17.6	1.8	4.7	0.4	0.3	2.4	65.6
	40 - 140	8.1	0.2	1.1	23.5	2.0	4.8	0.7	0.2	2.7	56.5
<b>F-L</b>	0 - 35	2.9	0.1	0.9	18.8	2.6	1.7	0.2	0.1	0.3	72.3
	35 - 135	6.2	0.3	1.4	27.2	2.8	2.7	0.9	0.1	0.3	58.2
<b>R-2</b>	0 - 100	8.0	0.8	9.3	65.0	1.8	2.3	0.8	0.3	4.6	7.0
	100- 200	13.4	0.8	4.8	40.1	4.8	5.2	3.8	0.4	13.1	13.8
<b>E-1</b>	0 - 64	6.0	0.2	4.2	59.4	2.1	1.6	0.4	0.2	0.9	25.0
	64 - 164	8.4	0.2	2.3	39.6	2.4	1.9	0.8	0.3	1.1	43.0
<b>E-3</b>	0 - 70	7.9	0.2	4.0	51.7	3.3	1.8	0.9	0.2	0.9	29.0
	70 - 170	14.3	0.3	2.5	37.4	4.6	1.9	0.5	0.2	0.2	38.0
<b>E-5</b>	0 - 55	5.2	0.1	3.7	44.2	3.8	3.1	0.7	1.3	0.4	37.4
	55 - 155	9.5	0.2	2.7	40.8	4.7	4.5	2.1	0.9	0.2	34.4
<b>E-4E</b>	0 - 50	7.6	0.2	1.9	29.5	2.9	7.5	0.7	0.6	0.7	48.3
	50 - 150	12.8	0.2	2.3	35.5	4.0	6.6	2.2	0.9	0.1	35.3