

Sampling parameters									
Sample ID	PAC1	PAC2	BAL1	BAL2	BAL3	BAL4	BAL5	BAL6	BAL7
Location	22.75° N 158.00° W	22.75° N 158.00° W	54.32° N 11.55° E	54.11° N 11.18° E	55.25° N 15.98° E	55.30° N 15.80° E	55.30° N 15.80° E	54.47° N 12.21° E	54.47° N 12.21° E
Location name	Station ALOHA	Station ALOHA	TF012	TF022	TF213	TF212	TF212	TF046a	TF046a
Sampling date	24 Feb 2017	24 Feb 2017	16 Oct 2016	17 Oct 2016	18 Oct 2016	19 Oct 2016	20 Oct 2016	21 Oct 2016	21 Oct 2016
Sampling depth (m)	25	700	3	22	3	92	71	3	21
Seawater temperature (°C)	23.6	5.1	12.0	13.6	12.2	6.6	6.7	11.8	13.4
Salinity	34.97	34.23	13.85	17.37	7.87	18.40	18.08	8.81	17.65
Density (kg m ⁻³)	1024	1027	1010	1013	1006	1014	1014	1006	1013
Nitrous oxide									
Number of datasets	13	13	12	13	12	13	12	13	12
Outliers	0	1	2	1	1	0	1	2	2
Median N ₂ O conc. (nmol kg ⁻¹)	42.4	7.0	11.0	9.4	11.1	3.4	40.2	11.0	9.6
Mean N ₂ O conc. (nmol kg ⁻¹)	41.3	7.0	11.1	9.2	11.0	3.4	39.0	10.8	9.5
Range	34.3–45.8	5.9–7.6	10.1–12.7	7.7–11.0	9.6–11.6	2.1–5.5	30.1–45.9	9.5–11.5	8.0–10.4
Average coeff. variation (%)	2.8	4.4	4.5	4.2	2.7	7.5	4.0	2.6	4.4
Methane									
Number of datasets	12	12	11	11	11	11	11	11	11
Outliers	0	1	0	0	0	1	1	0	0
Median CH ₄ conc. (nmol kg ⁻¹)	0.9	2.3	5.7	60.3	4.1	31.3	18.8	5.0	35.2
Mean CH ₄ conc. (nmol kg ⁻¹)	1.8	2.6	5.8	58.6	4.4	31.1	18.8	5.4	35.4
Range	0.6–3.1	1.9–3.8	2.9–8.9	45.2–67.2	2.5–6.5	26.9–35.3	16.5–20.7	3.8–6.8	30.1–42.1
Average coeff. variation (%)	10.9	7.2	8.6	2.1	4.3	3.5	4.2	6.5	3.5