

Supplement of Atmos. Chem. Phys., 20, 3061–3078, 2020
<https://doi.org/10.5194/acp-20-3061-2020-supplement>
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Supplement of

Methanethiol, dimethyl sulfide and acetone over biologically productive waters in the southwest Pacific Ocean

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1 Supplementary information

2 Table S1. Measurement specifications for biogeochemical parameters

Parameter	Specification	Reference
salinity (psu)	accuracy of ± 0.1 , precision 0.01	Seabird thermosalinograph SBE-21 manual
sea temperature ($^{\circ}\text{C}$)	0.01 $^{\circ}\text{C}$ accuracy	Seabird thermosalinograph SBE-21 manual
beta -660 backscatter	Sensitivity $\sim 4 \times 10^{-6} \text{ m}^{-2} \text{ sr}^{-1}$	ECO triplet Users Guide
DMS _{sw} (nM)	Accuracy: $\pm 5\%$ standard error Precision: $< \pm 15\%$	Walker et al., (2016)
Chla (mg m^{-3})	Sensitivity $0.02 \mu\text{g L}^{-1} \sim \text{mg}$ m^{-3}	UMCES Tech Rep Ser. Ref [UMCES] CBL 06-053
particulate nitrogen (mg m^{-3})	2% precision	Nodder et al., (2016)
cryptophyte algae (cells mL^{-1})	n/a	Safi et al., (2007)
eukaryotic picoplankton (cells mL^{-1})	n/a	Safi et al., (2007)
DMSPt (nmol L^{-1})	Accuracy: $\pm 5\%$ standard error Precision: $< \pm 15\%$	Walker et al., (2016)
DMSPp (nmol L^{-1})	Accuracy: $\pm 5\%$ standard error Precision: $< \pm 15\%$	Walker et al., (2016)
CDOM (ppb)	Sensitivity ~ 0.2 ppb	Gall et al., (2013)
phosphate ($\mu\text{mol L}^{-1}$)	Precision: $0.48 \mu\text{mol L}^{-1} \pm$ $0.03 \mu\text{mol L}^{-1}$	Law et al., (2017)
nitrate ($\mu\text{mol L}^{-1}$)	Precision: $5.5 \mu\text{mol L}^{-1} \pm 0.2$ $\mu\text{mol L}^{-1}$	Law et al., (2017)
silicate ($\mu\text{mol L}^{-1}$)	Precision: $14.1 \mu\text{mol L}^{-1} \pm 0.6$ $\mu\text{mol L}^{-1}$	Law et al., (2017)

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