

First in-situ measurements of plume chemistry at Mount Garet volcano, island of Gaua (Vanuatu)

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Supplementary materials

S1. Specifications on Multi-GAS infrared (IR) and electrochemical sensors and gas standards used for instrument calibration

Sensor type	Gas specie	Manufacture model	Technical Specifications			Calibration		
			Measurement range (in ppm)	Resolution (in ppm)	Repeatability (% of signal)	Reference gas (+ residual)	Effective concentration (in ppm)	±
IR Spectrometer	CO ₂	Gascard NG	0 - 3000	0.10	1.5%	CO ₂ (20% O ₂ -N ₂)	293.7 – 2920.0	3.0 - 30
Electrochemical	SO ₂	T3STF CiTiceL®	0 - 200	0.50	1.0%	SO ₂ (20% O ₂ -N ₂)	0 – 100.7	1.0
Electrochemical	H ₂ S	T3H CiTiceL®	0 - 50	0.25	1.0%	H ₂ S (20% O ₂ -N ₂)	0 – 38.0	2.3
Electrochemical	H ₂	T3HYT CiTiceL®	0 - 200	2.00	2.0%	H ₂ (20% O ₂ -N ₂)	0 – 10.0	1.0