

**Supplementary Table 2.** Correlation analysis (pearson's R) of abiotic factors with archaeal and bacteria subfamily richness.

	p-vals Archaeal subfamilies	Pearson's r	p-vals bacterial subfamilies	Pearson's r
T	<b>0.003</b>	<b>-0.958</b>	<b>0.007</b>	<b>-0.931</b>
pH	0.414	-0.414	0.513	-0.338
SO <sub>2</sub>	0.090	-0.910	0.184	-0.816
H <sub>2</sub> S	0.156	-0.844	0.295	-0.705
CO <sub>2</sub>	0.323	-0.874	0.495	-0.713