

Supplementary Information

Table S4. Average mass loss (mg) for calcite and dolomite chips in reactive and sterile *in situ* microcosms. The results from at least ~11 chips for reactive microcosms and ~6 chips for sterile microcosms were averaged per analysis.

Well	Calcite			Dolomite		
	Avg. mass change ¹	Avg. percent loss	Pre- and post-weight <i>P</i> values ²	Avg. mass change ¹	Avg. percent loss	Pre- and Post-weight <i>P</i> values ²
Girl Scout Deep						
Sterile	-8.93	0.28	0.01	-46.13	1.62	0.01
Reactive	-6.13	0.13	0.01	-12.63	0.30	0.01
Reactive	-66.77	0.99	0.01	-6.50	0.13	0.02
Girl Scout Shallow						
Sterile	-4.40	0.20	0.05	+0.50	0.02	0.89
Reactive	-450.67	4.93	0.01	-50.90	1.12	0.01
Reactive	-13.53	0.27	0.01	-15.73	0.32	0.01
LCRA Deep						
Sterile	-9.13	0.33	0.06	-1.27	0.04	0.59
Reactive	-49.23	0.57	0.01	-4.73	0.12	0.04
Reactive	-30.90	0.43	0.01	-4.83	0.10	0.33
LCRA Shallow						
Sterile	-1.13	0.05	0.24	+1.87	0.07	0.62
Reactive	-8.13	0.10	0.04	-3.80	0.09	0.26
Reactive	-17.97	0.21	0.03	-7.23	0.13	0.01
Paradise Alley Deep						
Sterile	-4.73	0.18	0.01	+1.80	0.07	0.06
Sterile	-1.53	0.08	0.21	+0.93	0.04	0.45
Reactive	-6.43	0.08	0.01	-1.93	0.11	0.29
Reactive	-12.20	0.20	0.01	-9.87	0.44	0.16
Paradise Alley Shallow						
Sterile	-5.10	0.23	0.08	-7.80	0.37	0.18
Sterile	-10.70	0.39	0.02	-9.13	0.46	0.02
Reactive	-23.03	0.29	0.02	-0.00	0.00	1.00
Reactive	-24.33	0.32	0.08	-5.50	0.25	0.02
Controls						
Sterile	+1.13	0.01	0.26	-1.72	0.01	0.35
Reactive	+0.01	0.01	0.23	+0.01	0.01	0.57

¹Negative values indicate mass loss, and positive values indicate gain.

²Significance was evaluated from unpaired Student's *t*-tests, with *P*-values ≤0.05 being considered significant.