

Supplementary Material to:

Microbial dynamics in shallow CO₂ seeps system off Panarea Island (Italy)

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Table: S1 Sampling depth, coordinates and dates. Bold fonts indicate samples where 16S rRNA gene amplicon sequencing analysis was performed.

Station	Date	Longitude [°E]	Latitude [°N]	Bottom Depth [m]	Sampling Depth [m]
P0	2011-07-28	15.05645	38.71890	1558	1
P0	2011-07-28	15.05645	38.71890	1558	50
P15	2011-07-29	15.13242	38.65890	393	3
P15	2011-07-29	15.13242	38.65890	393	40
P19	2011-07-29	15.11997	38.64882	70	3
P19	2011-07-29	15.11997	38.64882	70	45
P19	2011-07-29	15.11997	38.64882	70	69
P23	2011-07-29	15.11780	38.64592	61	3
P23	2011-07-29	15.11780	38.64592	61	30
P23	2011-07-29	15.11780	38.64592	61	53
P23	2011-07-29	15.11780	38.64592	61	61
P25	2011-07-29	15.11564	38.64345	51	3
P25	2011-07-29	15.11564	38.64345	51	28
P25	2011-07-29	15.11564	38.64345	51	45
P26	2011-07-29	15.09982	38.63067	53	3
P26	2011-07-29	15.09982	38.63067	53	30
P26	2011-07-29	15.09982	38.63067	53	51
P30	2011-07-30	15.11177	38.64153	26	3
P30	2011-07-30	15.11177	38.64153	26	21
P31	2011-07-30	15.09607	38.62801	71	3
P31	2011-07-30	15.09607	38.62801	71	54
P31	2011-07-30	15.09607	38.62801	71	67
P33	2011-07-30	15.08747	38.62140	77	3
P33	2011-07-30	15.08747	38.62140	77	40
P33	2011-07-30	15.08747	38.62140	77	73
P35	2011-07-30	15.10467	38.63900	26	2
P35	2011-07-30	15.10467	38.63900	26	20
P35	2011-07-30	15.10467	38.63900	26	23

Table S2: Water column data at station P0 (control). DIC = Dissolved Inorganic Carbon; POC = Particulate Organic Carbon; PN = Particulate Nitrogen; DIN = Dissolved Inorganic Nitrogen; BGLU = beta-glucosidase activity; APA = alkaline phosphatase activity; AMA = leucine aminopeptidase activity; PCP = Prokaryotic Carbon Production; HP = Heterotrophic Prokaryote abundance; SYN = *Synechococcus* abundance

Parameter	Station P0	
Depth (m)	1.00	50.00
Temperature (°C)	26.09	15.67
Salinity	37.88	37.82
Dissolved Oxygen ($\mu\text{mol L}^{-1}$)	197.52	257.68
Chlorophyll <i>a</i> ($\mu\text{g L}^{-1}$)	0.04	0.16
pH _T	8.00	8.13
DIC (mg L^{-1})	33.21	33.46
POC ($\mu\text{g C L}^{-1}$)	60.32	61.81
PN ($\mu\text{g N L}^{-1}$)	7.31	8.66
DIN ($\mu\text{mol L}^{-1}$)	0.96	1.27
PO ₄ ($\mu\text{mol L}^{-1}$)	0.06	0.07
BGLU (nM h^{-1})	3.04	0.82
APA (nM h^{-1})	10.46	12.10
AMA (nM h^{-1})	4.12	8.37
PCP ($\text{ng C L}^{-1} \text{h}^{-1}$)	48.00	45.21
HP (cell L^{-1})	5.07×10^8	8.65×10^8
SYN (cell L^{-1})	1.19×10^7	6.02×10^6

Figure S1: Rarefaction curves constructed on the number of reads (sample size) and the number of ASVs (species) in each sample

