

Table S1: Total cell counts and relative abundance of methanotrophs at Hikurangi margin, Hydrate Ridge, Black Sea and Håkon Mosby mud volcano seep sites

	Total Cells ( $10^{10}$ cm $^3$ )	<i>Methylococcales</i>	ANME-1	ANME-2a/DSS Consortia	ANME-2c/DSS Consortia	ANME-3/DBB Consortia
Hikurangi <i>Ampharetdiae</i> (124)	0.15	+++	-	+++	+	n.a.#
Hikurangi <i>Ampharetdiae</i> (309)	0.2	+++	-	++	++	n.a.#
Hikurangi <i>Frenulata</i> (45)	0.13	+	-	+	-	+
Hikurangi SOB (315)	1	+	-	+++	+	n.a.#
Hydrate Ridge <i>Beggiatoa</i> site	4.2	n.a.	+	+++	+	-
Hydrate Ridge <i>Calyptogena</i> site	4.6	n.a.	+	+	+++	-
Black Sea sediment P817	2.7	n.a.	+	+ ##	+ ##	-
Black Sea P822 microbial mat, top part of chimney	30	n.a.	+	+++	+	-
Black Sea P822 microbial mat, inside of chimney	1.4	n.a.	+++	+	+	-
HMMV <i>Beggiatoa</i> site	1.9	+	-	- ##	- ##	+++
HMMV tubeworm site	0.33	-	+	++ ##	++ ##	++

+present in low proportions    ++high proportions    +++dominant type    n.a.: not assessed    #present as 16S rRNA gene    ## ANME-2/DSS

#### References:

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