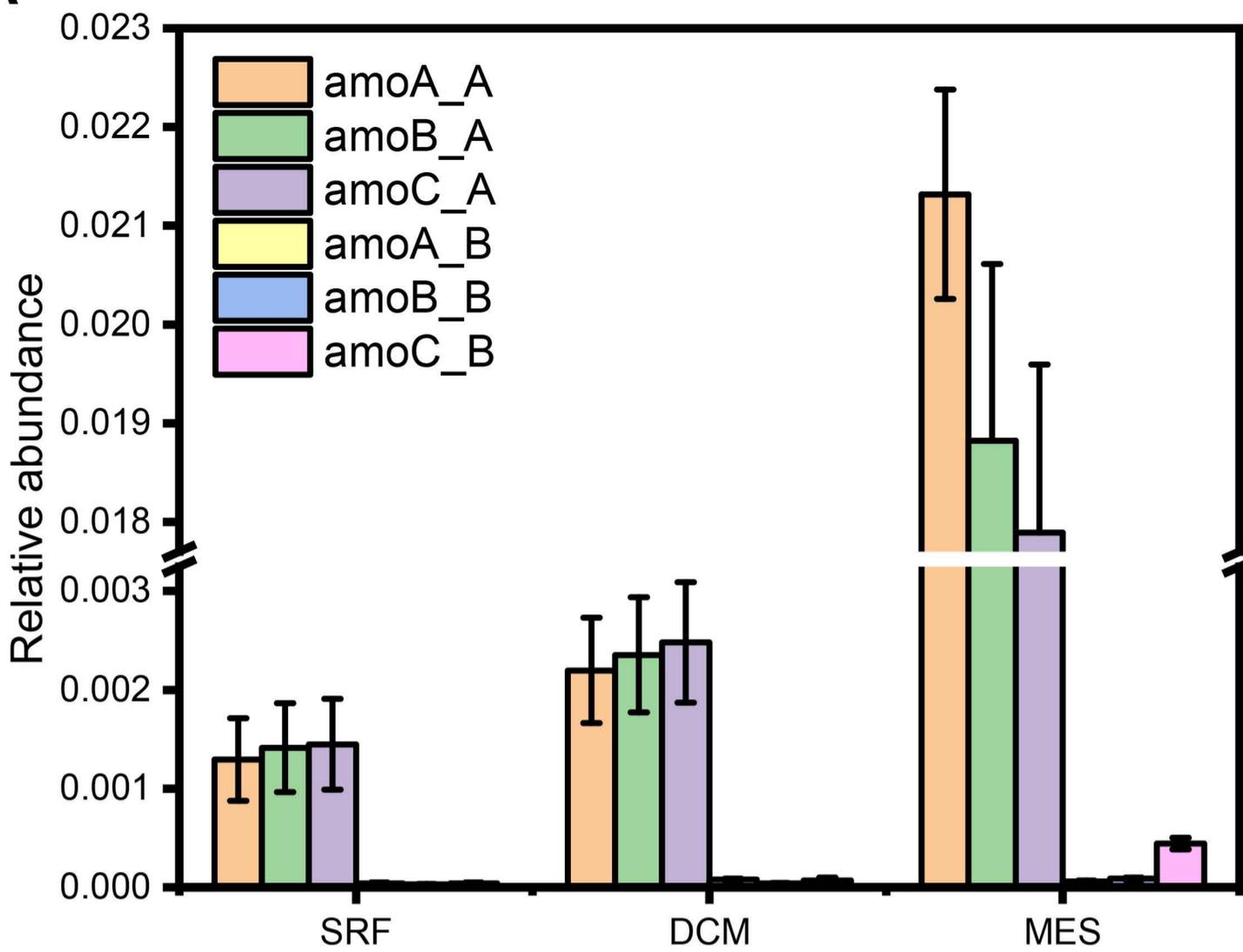
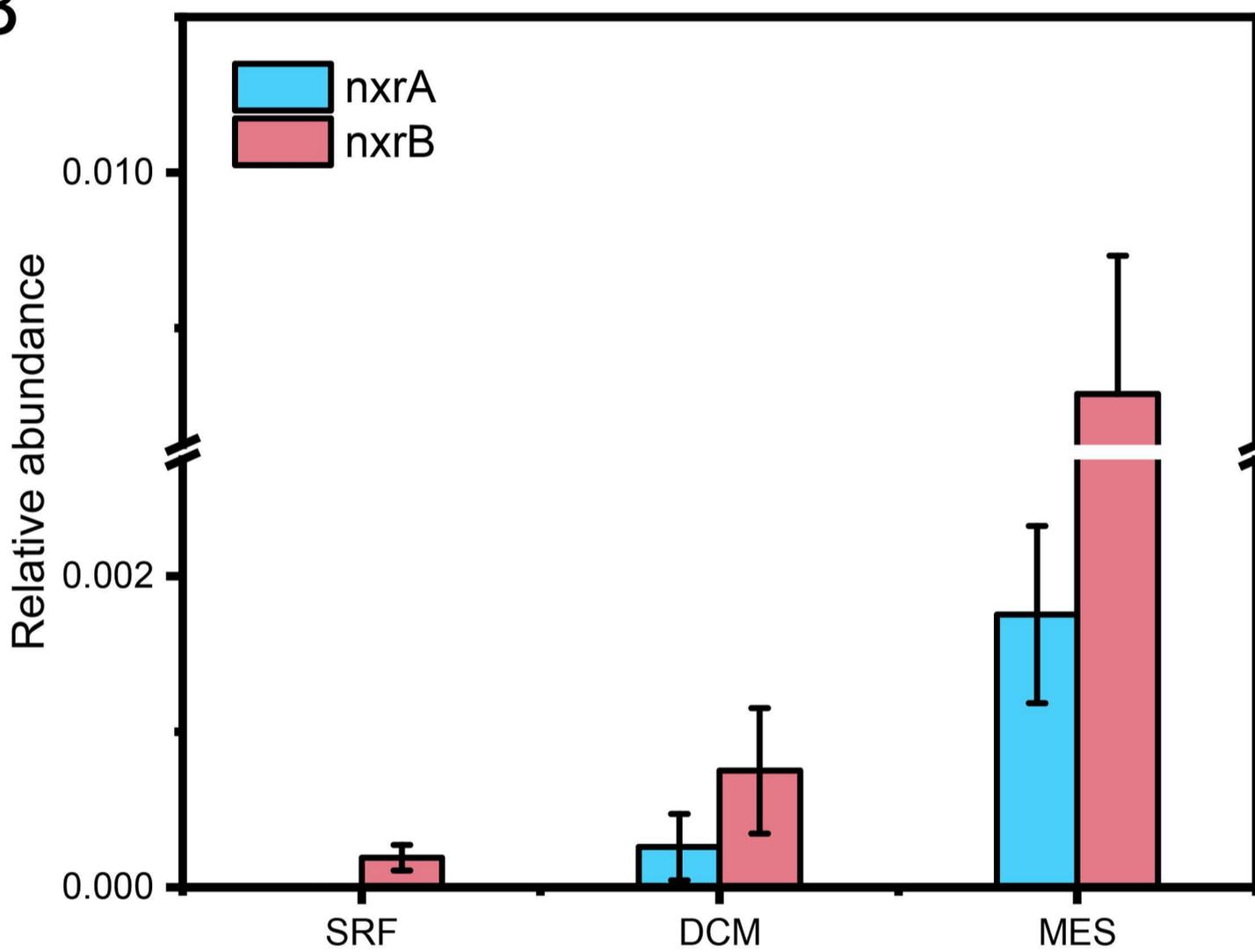
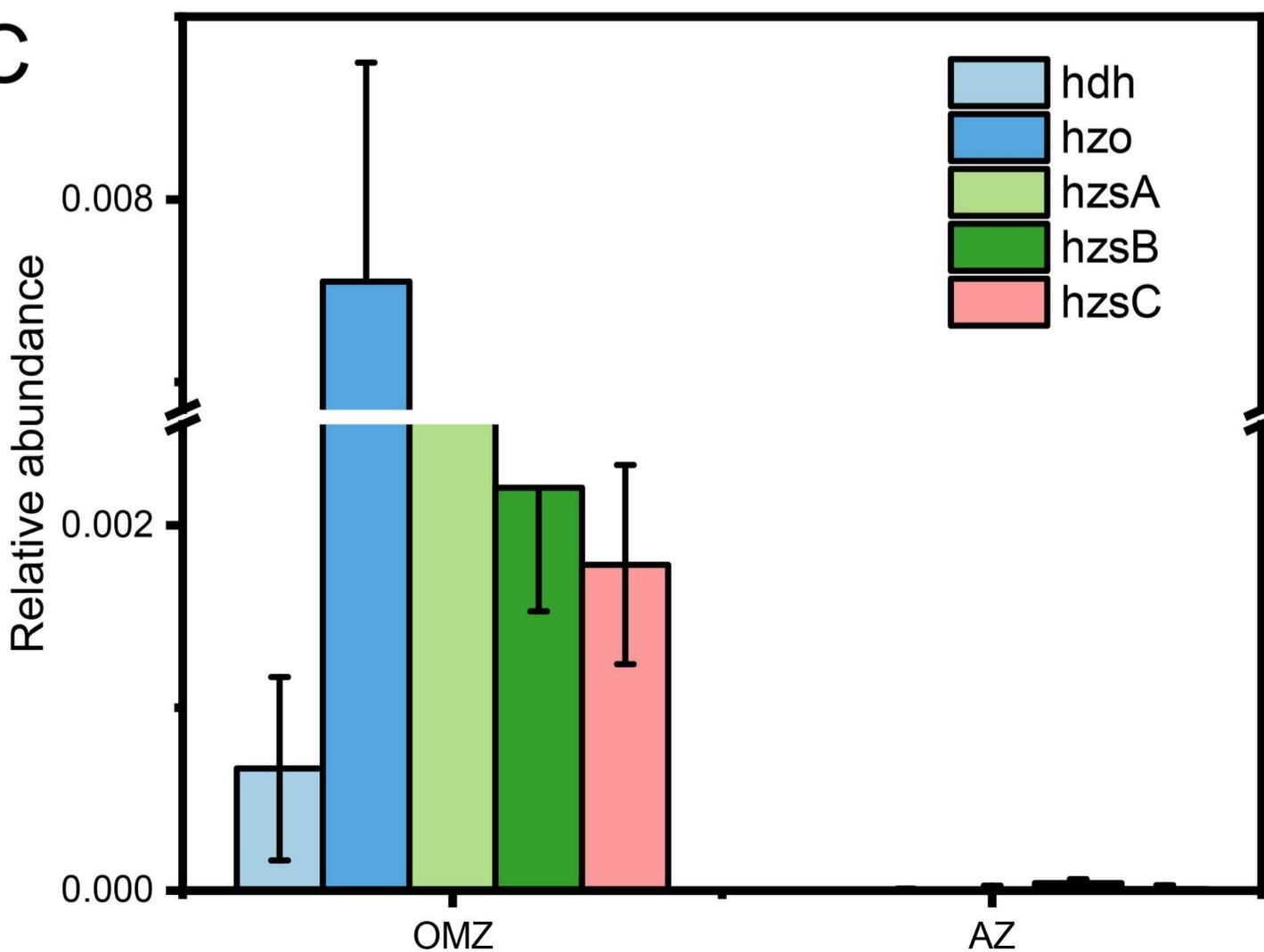
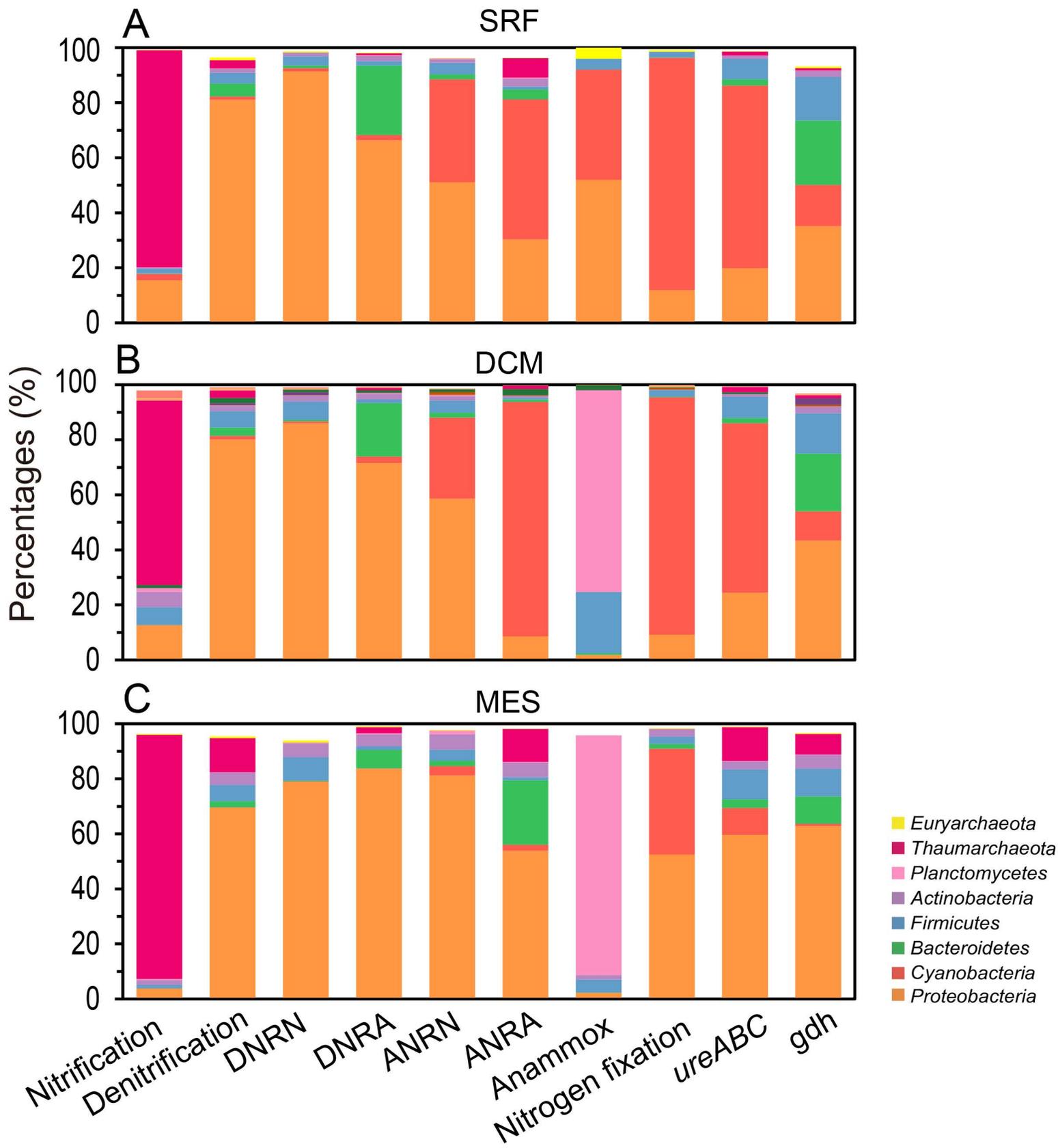
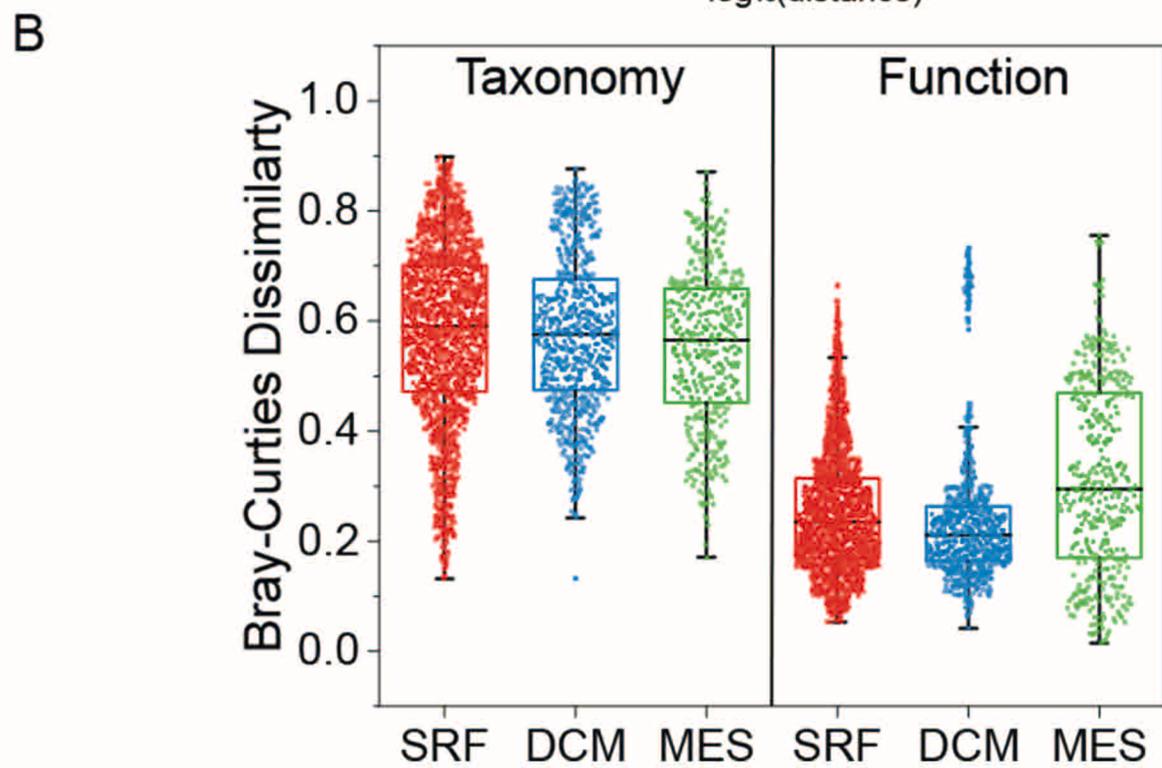
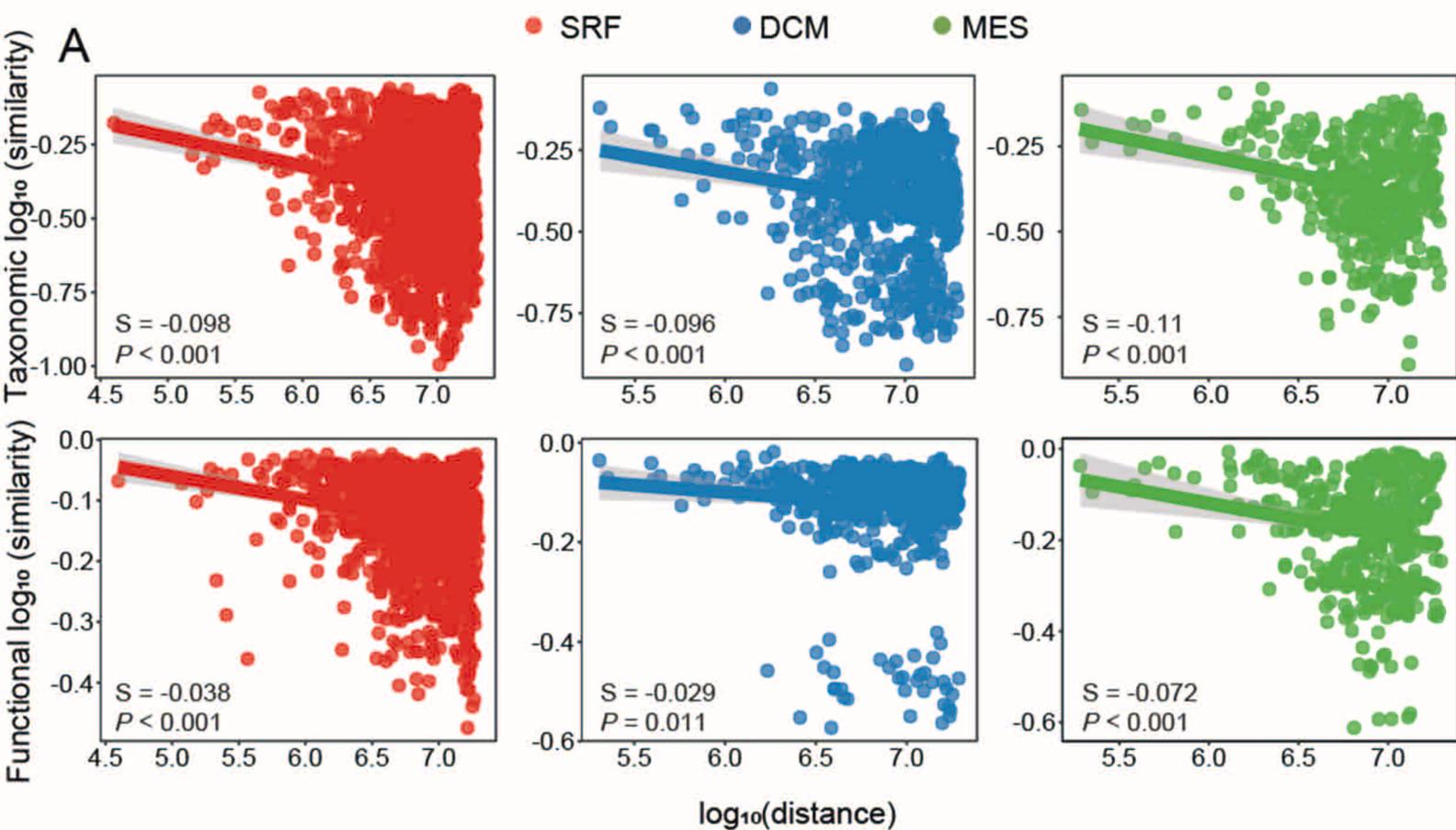
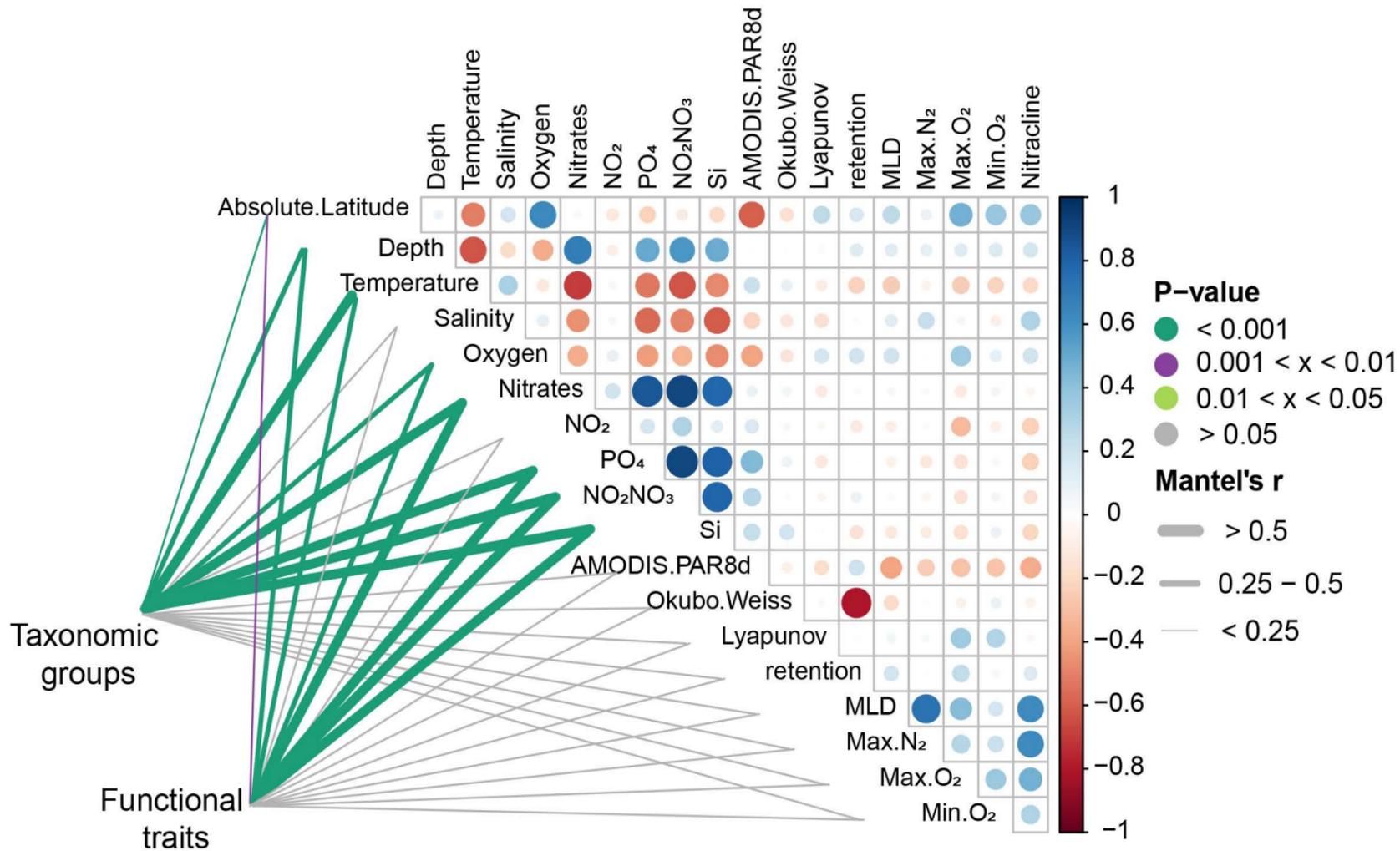
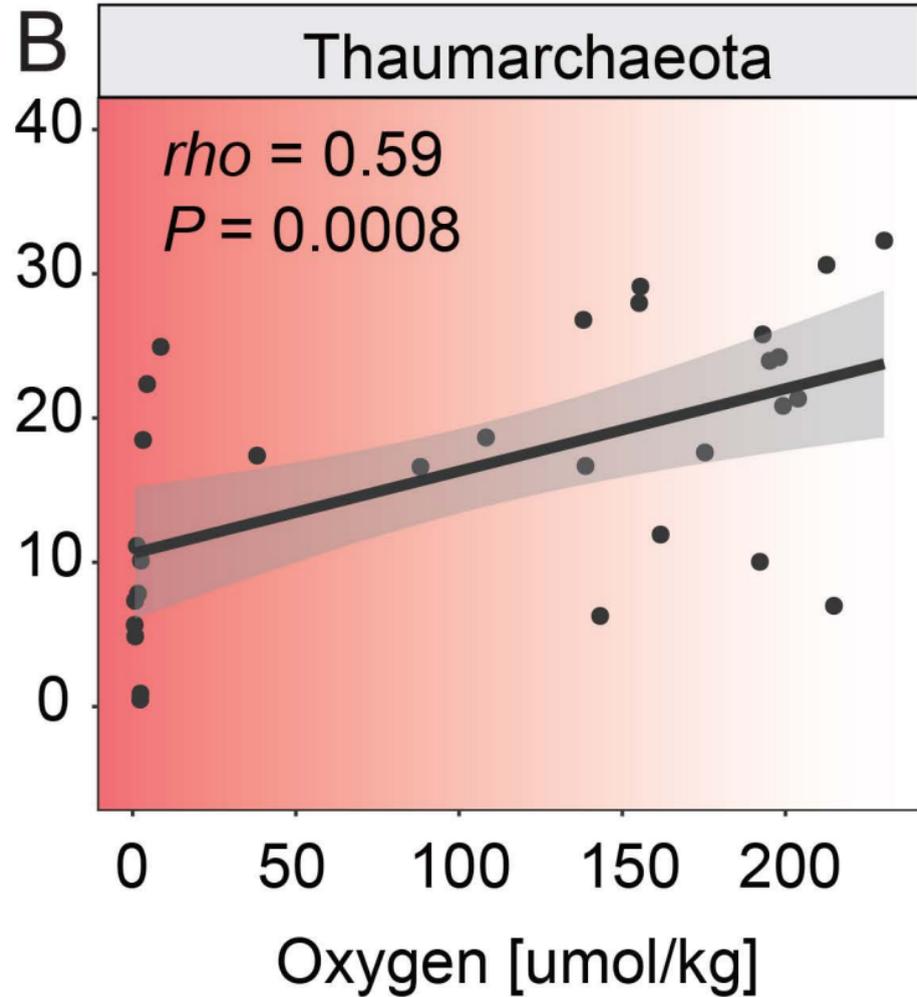
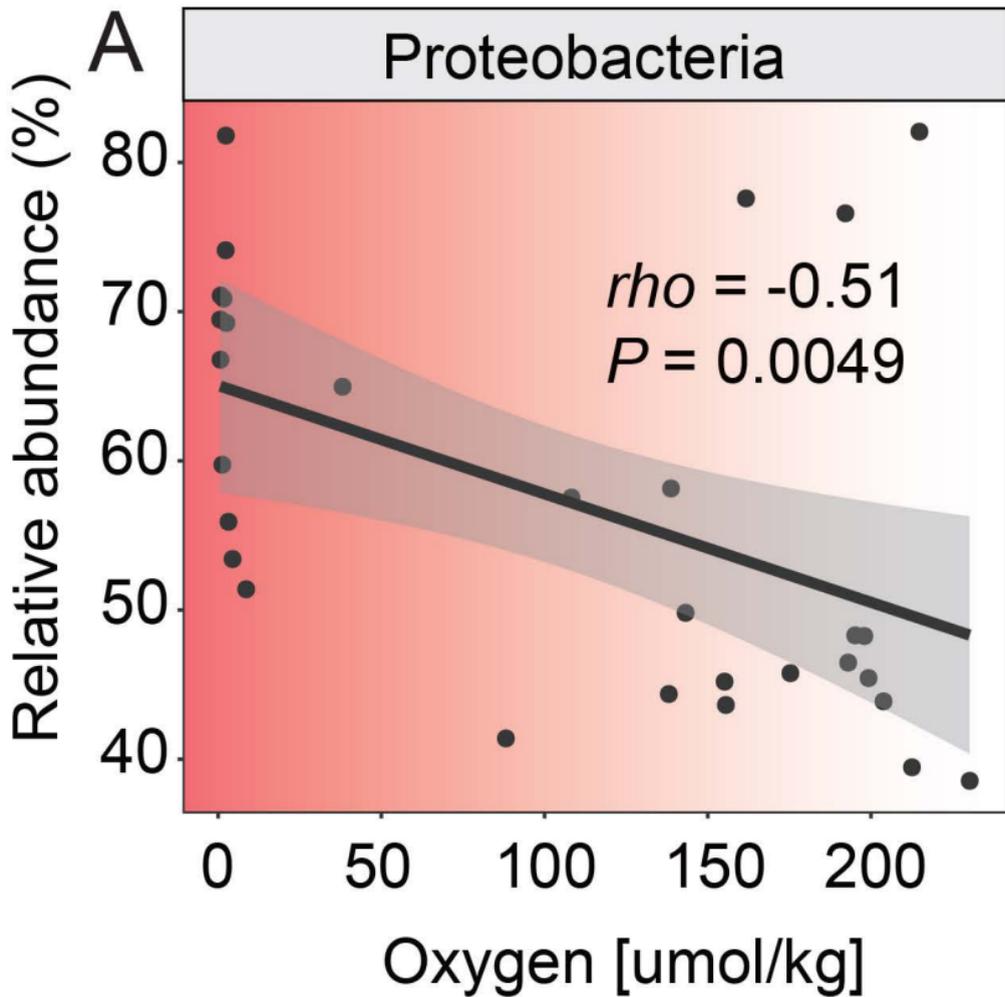


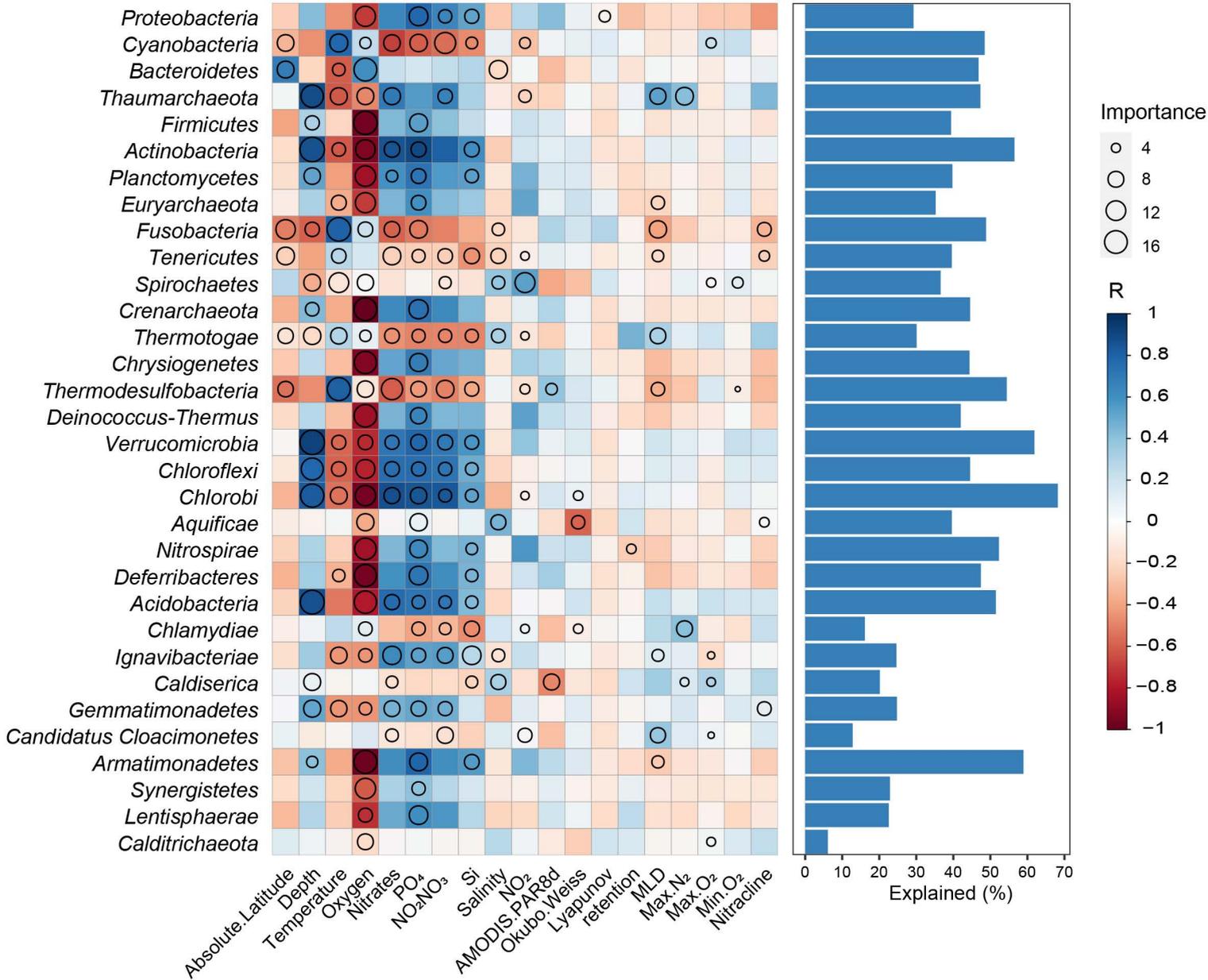
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Supplementary Table 1. Statistical analysis of the compositional differences between epipelagic (MES and DCM) and mesopelagic (MES) layers. Three non-parametric statistical approaches, including permutational multivariate analysis of variance (PERMANOVA), analysis of similarity (ANOSIM), and multiple response permutation procedure (MRPP), were carried out based on Bray-Curtis dissimilarity distance matrices. Both compositions for taxonomic groups and functional traits were analyzed.

	PERMANOVA				ANOSIM				MRPP			
	Taxonomic		Functional		Taxonomic		Functional		Taxonomic		Functional	
	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>R</i>	<i>P</i>	<i>R</i>	<i>P</i>	δ	<i>P</i>	δ	<i>P</i>
SRF vs DCM	2.678	0.012	3.709	0.004	0.038	0.076	0.034	0.112	0.584	0.005	0.249	0.004
SRF vs MES	33.088	0.001	48.991	0.001	0.776	0.001	0.685	0.001	0.668	0.001	0.346	0.001
DCM vs MES	24.631	0.001	30.422	0.001	0.723	0.001	0.601	0.001	0.659	0.001	0.334	0.001