**Supplementary Table 2:** T4-like Mantel Rho statistic for combinations of taxa and environmental parameters observed. The first value (preceding the comma) in each cell are the Mantel Rho values for the column header variable vs the ASVs of the row-header denoted dataset, and the second value are the rho values for the column header versus the OTU-types for the row header dataset. All values are significant (p < 0.05).

	T4-like (ASV)	T4-like (OTU)
>1 µm Prok (ASV, OTU)	0.67,0.64	0.67,0.64
0.22-1 μm Prokaryote (ASV, OTU)	0.56,0.53	0.56,0.53
Phytoplankton(ASV, OTU)	0.53,0.47	0.53,0.47
T4-like (OTU)	0.9999	
Environmental	0.31	0.31
SAR11 via 16S(ASV, OTU)	0.25,0.25	0.26,0.24
SAR11 via ITS(ASV, OTU)	0.49,0.27	0.49,0.27