



Supplementary Figure S2: Bar diagrams of *pmoA*-based T-RFLP fingerprint patterns obtained from 17 subsamples representing 10 different glacier forefields. The T-RFLP patterns were generated using the primer set A189f-A682r. The percentage abundance of 5 distinguishable T-RFs are indicated by different colors. The T-RF labeled “Others” refers to the sum of three minor T-RFs. In principle, the composition of the T-RF patterns showed a similar trend as those obtained by nested PCR (Fig. 4). Common to the patterns of both T-RFLP datasets is the dominant presence of either the combination of the 241-bp and 339-bp T-RFs, or the 243-bp T-RF. Discrepancies can be explained by different primer selectivity. The missing *pmoA*2-assigned 350-bp T-RF is amplified only by the primer set *pmoA*206f-mb661r and not by A189f-682r. *In silico* analysis suggests that the 111-bp T-RF represents *Nitrosospira*-like *amoA* that is efficiently detected by A189f-682r, but not by *pmoA*206f-mb661. The 75-bp T-RF may represent *pmoA* of Cluster 1 as mentioned above or *Methylocaldum*-related *pmoA* as suggested by *in silico* analysis, or a combination of both methanotroph groups. The *pmoA* of *Methylocaldum*, a Type Ib methanotroph, is efficiently detected by the primer set A189f-682r, but not by *pmoA*206f-mb661.