

Figure S1. Concentrations of TN and TP in the sediments. (A) TN and TP concentration of GC and TGC: GC: samples of the Gaochun District before sediment improvement; TGC: samples of the Gaochun District after sediment improvement; (B) TN and TP concentration of PK and TPK: PK: samples of the Pukou District before sediment improvement; TPK: samples of the Pukou District after sediment improvement; average: the average of GC, TGC PK and TPK. Values were given as mean \pm SD, and different letters in the upper (a, b, c, d) indicate a significant difference ($p < 0.05$) before and after sediment improvement based on the analysis of variance.

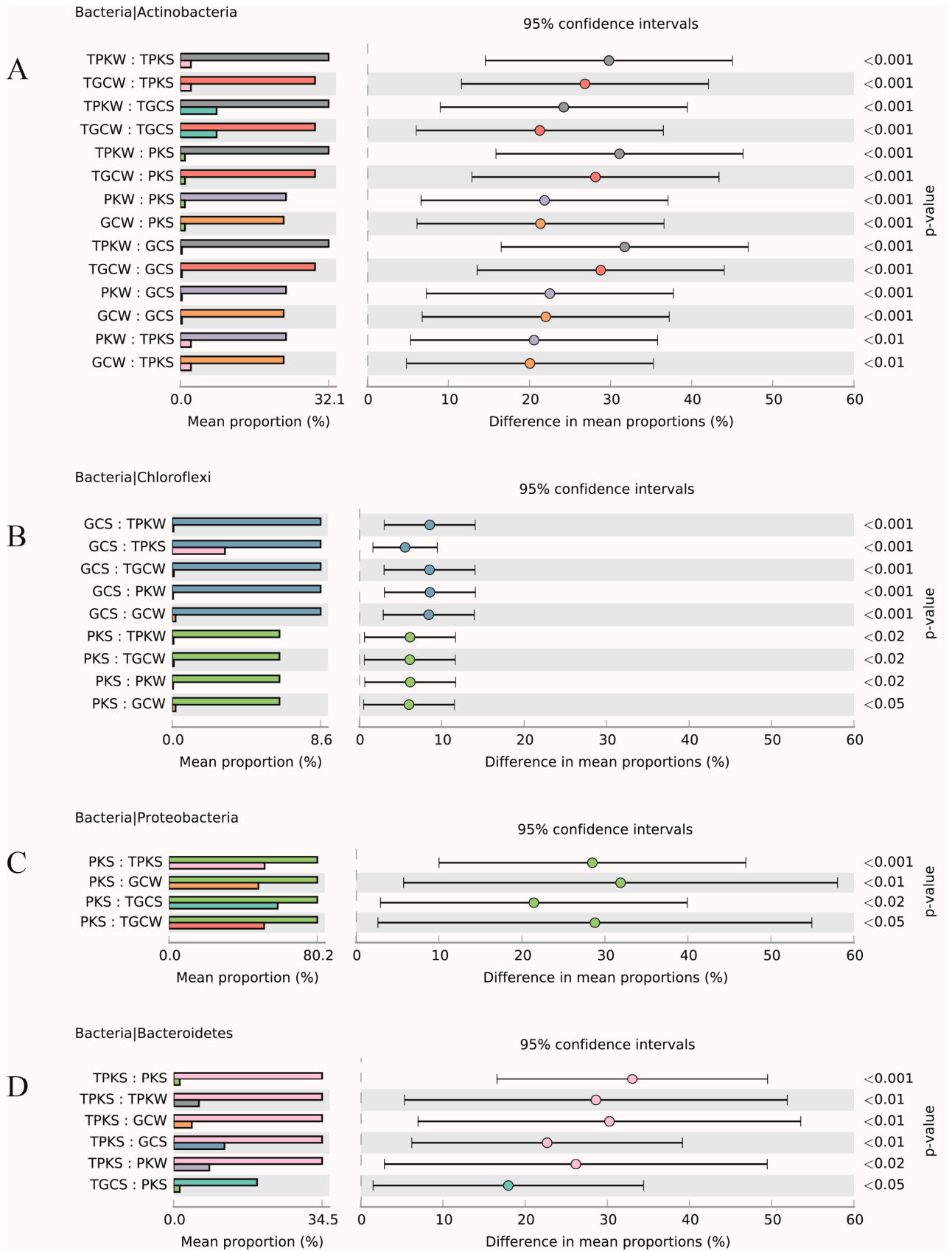


Figure S2. Intergroup comparison of dominant phylum. (A)Actinobacteria; (B)Chloroflexi; (C)Proteobacteria; (D)Bacteroidetes.

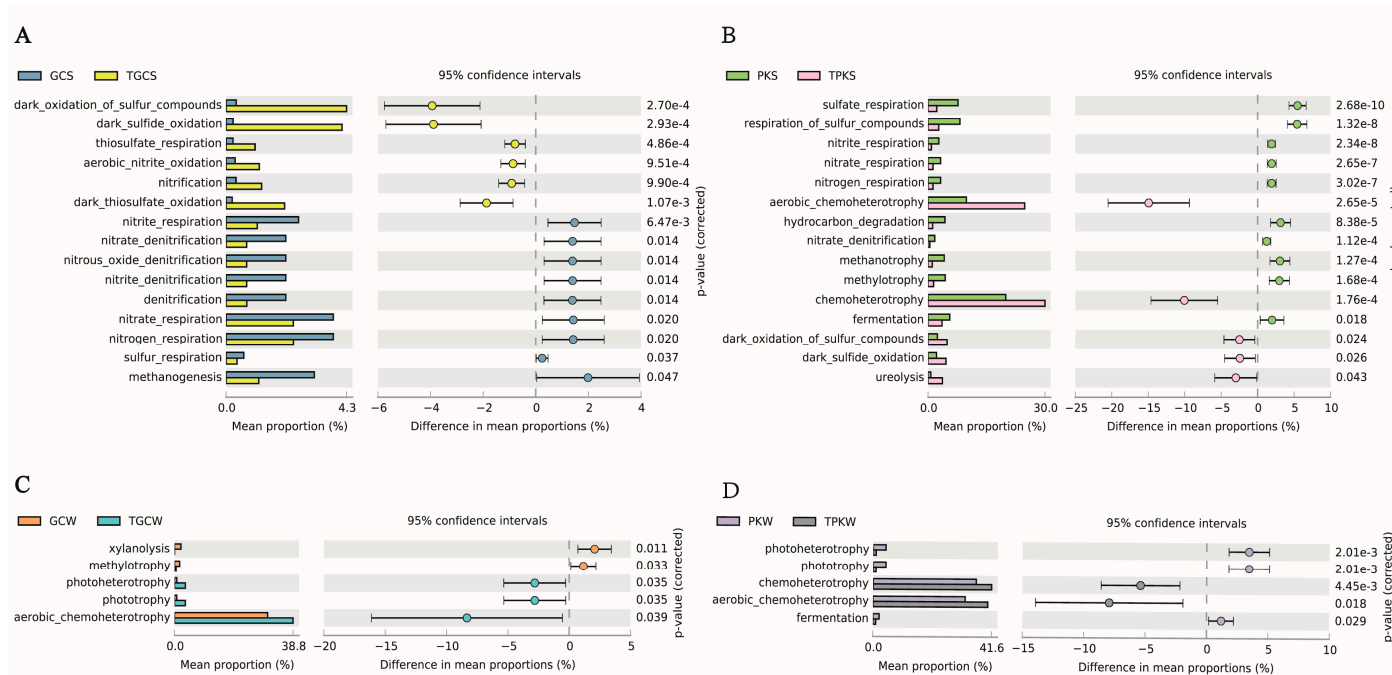


Figure S3. Comparison of functional abundances of different groups involved in C, N and S metabolism. (A)GCS and TGCS; (B)PKS and TPKS; (C)GCW and TGCW; (D)PKW and TPKW.