Supplementary material for

Bacterial communities of cryoconite holes of a temperate alpine glacier show both seasonal trends and year-to-year variability

Francesca PITTINO[1], Maurizio MAGLIO[1], Isabella GANDOLFI[1], Roberto Sergio AZZONI[2], Guglielmina DIOLAIUTI[2], Roberto AMBROSINI[1-2], Andrea FRANZETTI[1]

1 Department of Earth and Environmental Sciences (DISAT), University of Milano Bicocca, Piazza della Scienza, 1, I-20126 Milan, Italy.

2 Department of Environmental Science and Policy, University of Milan, via Celoria 2, I-20133 Milan, Italy.

Correspondence: Roberto Ambrosini <roberto.ambrosini@unimib.it>

Table S1. Year, sampling dates, day of the melting season in which samples have been collected, positive degree-days (DD) and cumulative short wave incoming radiation (SWIN) of the day in which samples have been collected.

YEAR	DAY OF SAMPLING	NUMBER OF SAMPLES	PROGRESSIVE DAY OF MELTING SEASON	DD (°C)	c-SWIN (W/m2)
2012	16-Jul	21	38	249.12	8911.80
2013	10-Jul	20	4	32.83	741.87
	28-Aug	20	53	391.77	11531.82
	25-Sep	20	81	507.48	16107.48
2015	1-Jul	21	18	85.80	4572.58
2016	5-Jul	20	12	93.34	2723.60
	19-Jul	10	26	180.39	6764.47
	2-Aug	10	40	283.66	9623.80
	16-Aug	10	54	362.24	12953.65
	2-Sep	10	71	492.79	16494.86

Table S2 (Excel file). OTU abundance for each sample normalized to 20,000 sequences per sample and the relative classification.

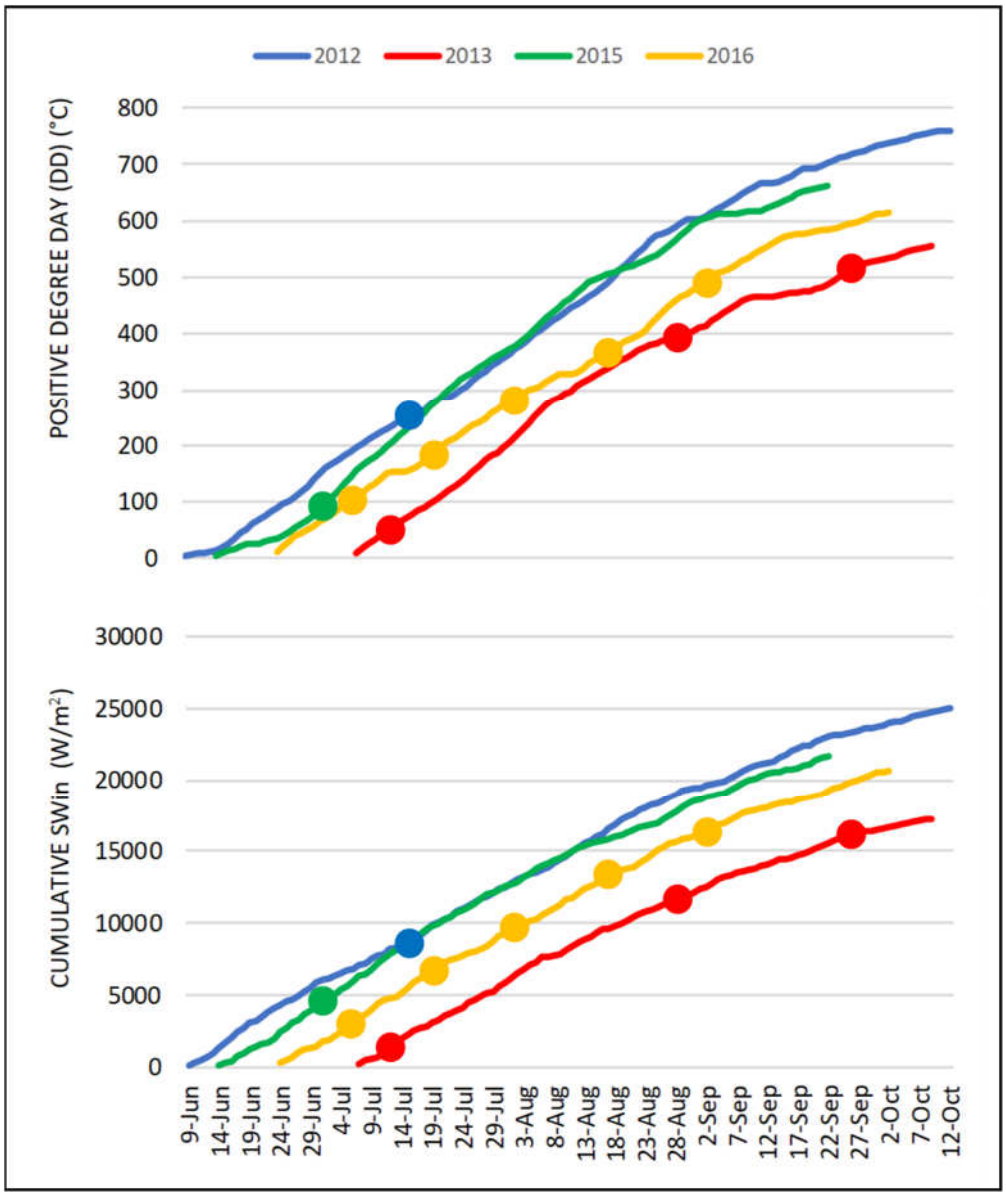

Fig. S1: Positive degree-days (DD) and cumulative incoming shortwave radiation (c-SWin) calculated for 2012 (blue), 2013 (red), 2015 (green) and 2016 (yellow) ablation season. Dots indicate sampling days.

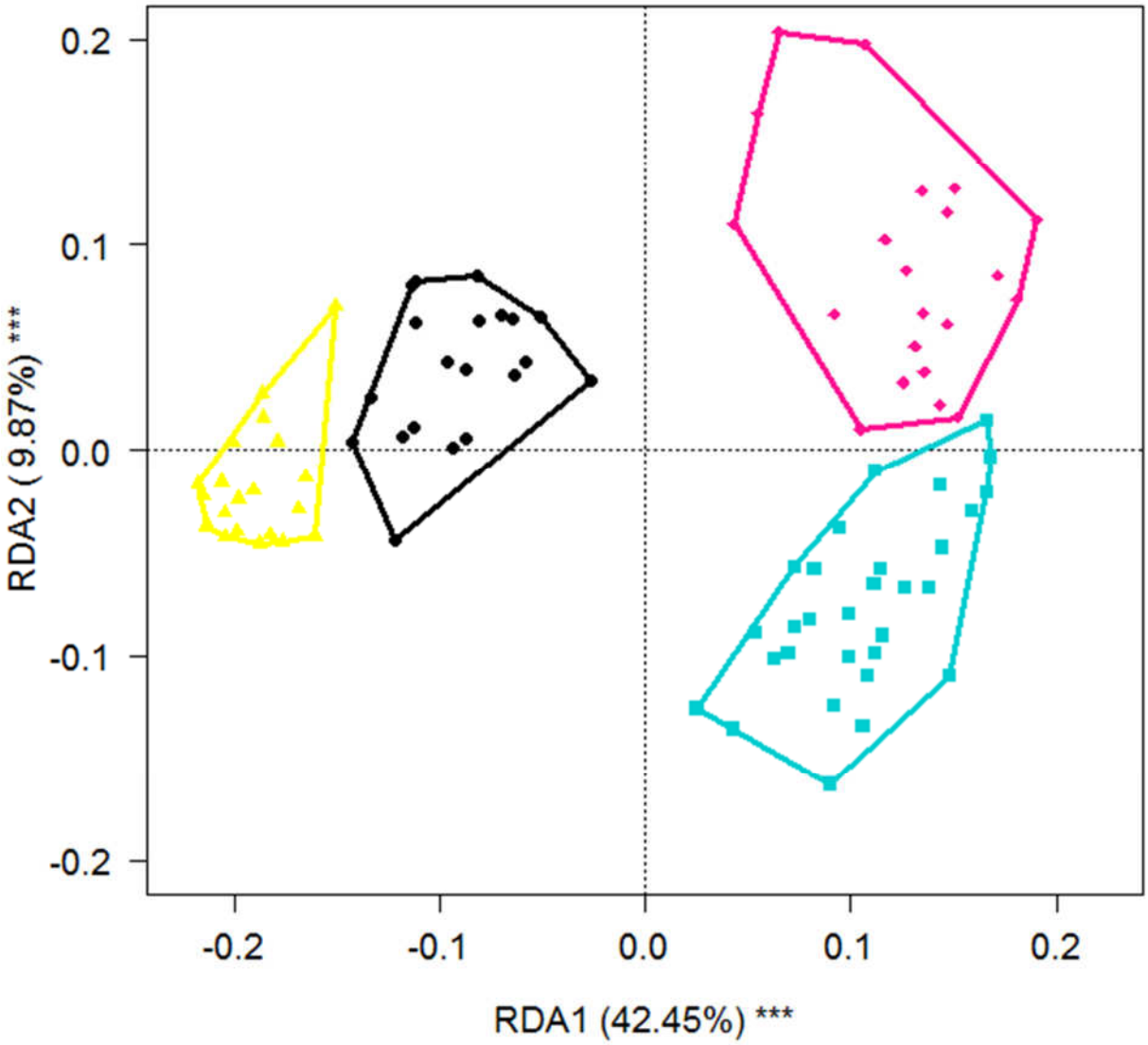

Fig. S2. RDA on all the samples of July, for every year of sampling. Yellow dots = 2012, black triangles = 2013, pink diamonds = 2015, turquoise squares = 2016.

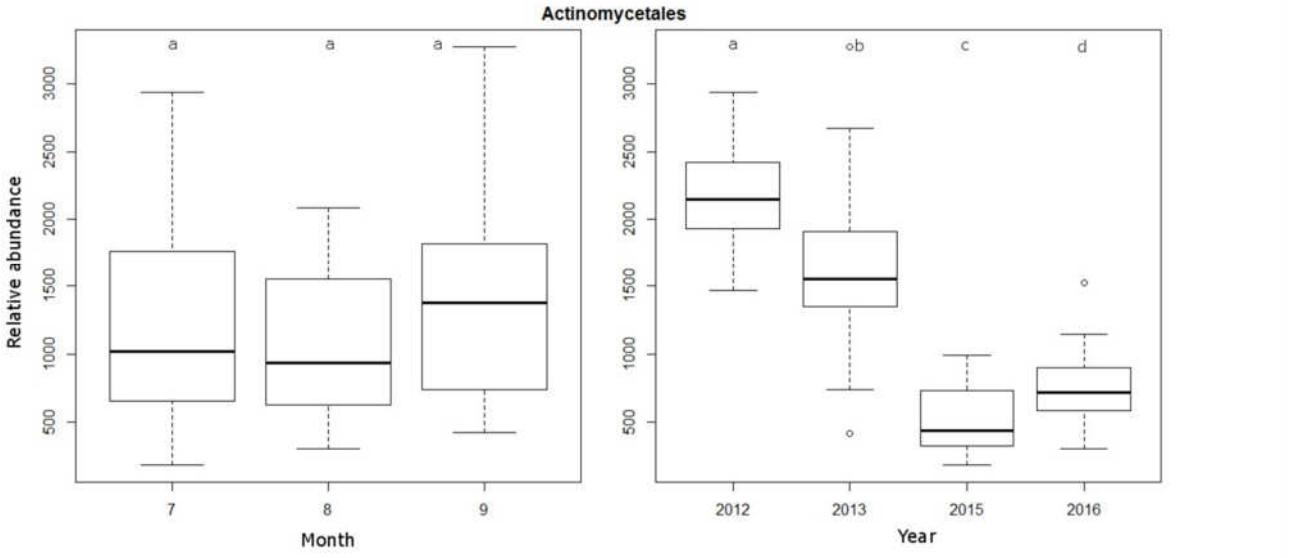

Fig. S3. Boxplots that represent Actinomycetales variation between years and between months.

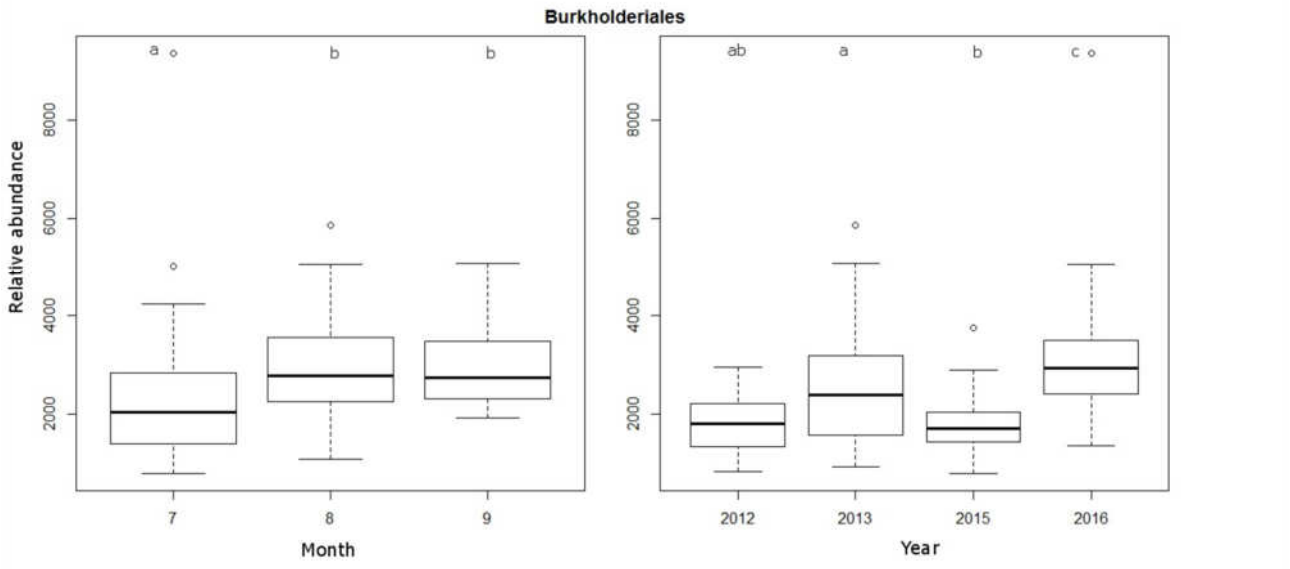

Fig. S4. Boxplots that represent Burkholderiales variation between years and between months.

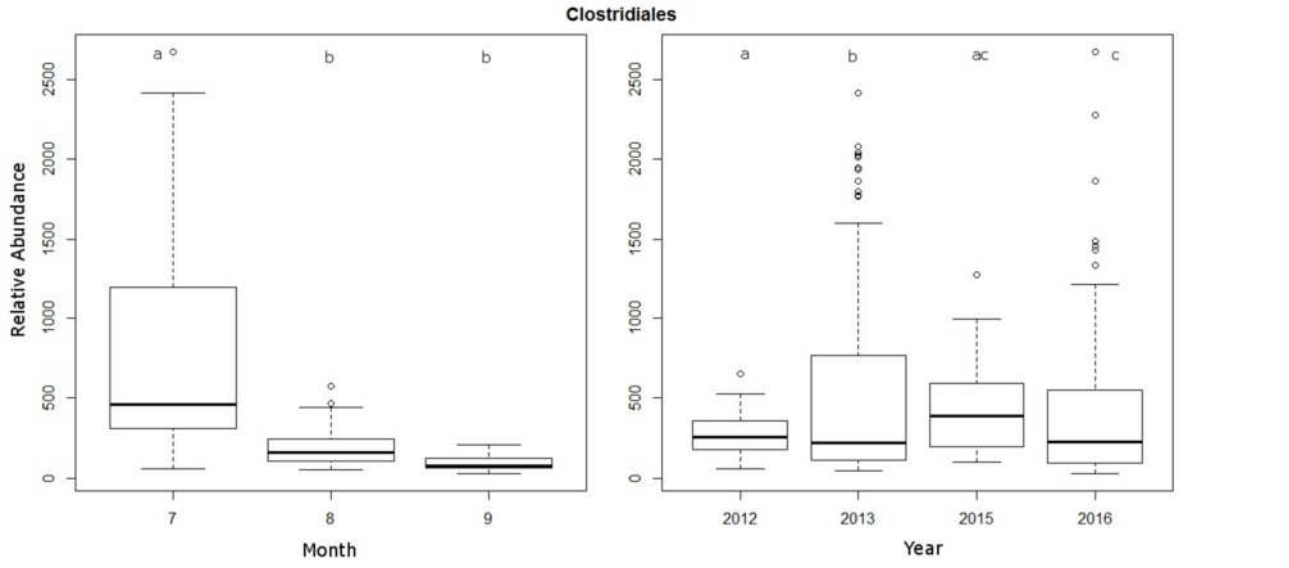

Fig. S5. Boxplots that represent Clostridiales variation between years and between months.

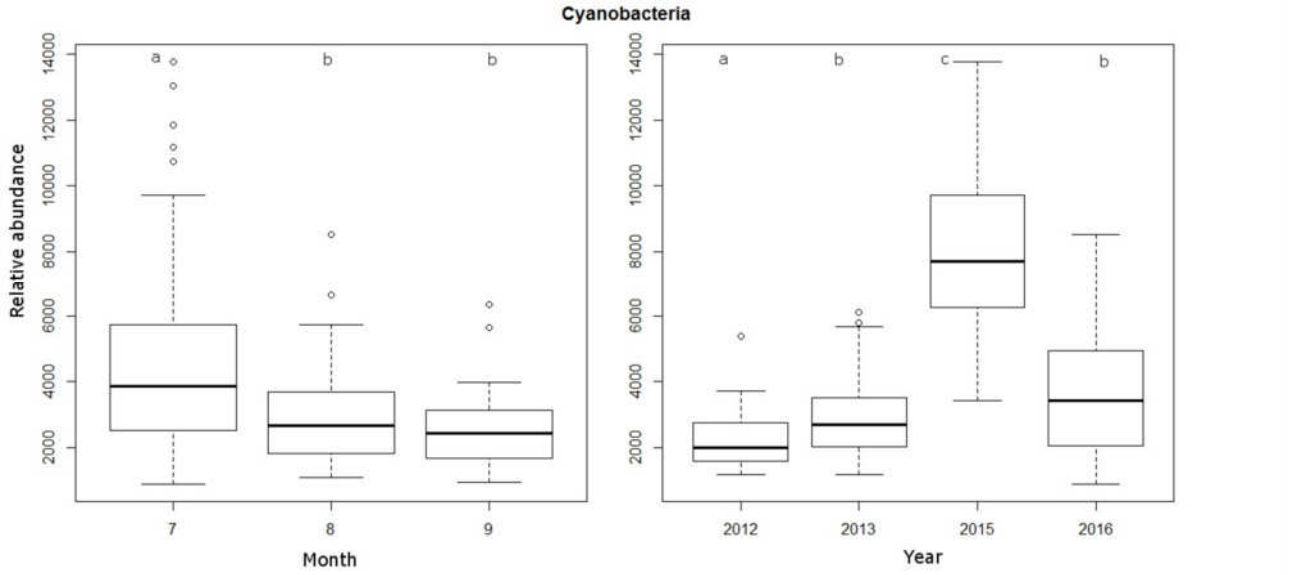

Fig. S6. Boxplots that represent Cyanobacteria variation between years and between months.

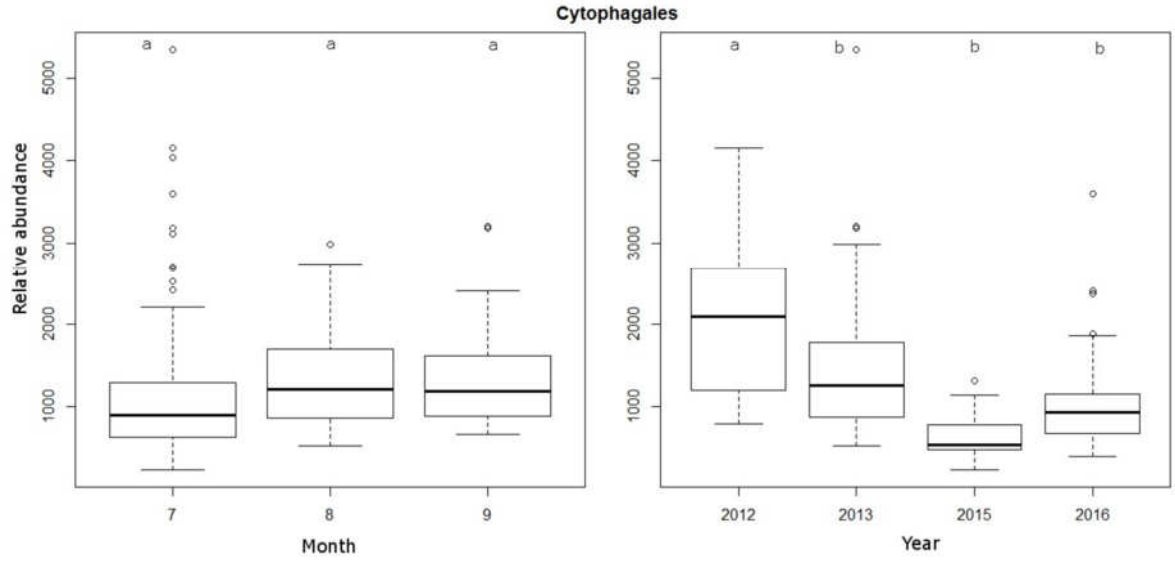

Fig. S7. Boxplots that represent Cytophagales variation between years and between months.

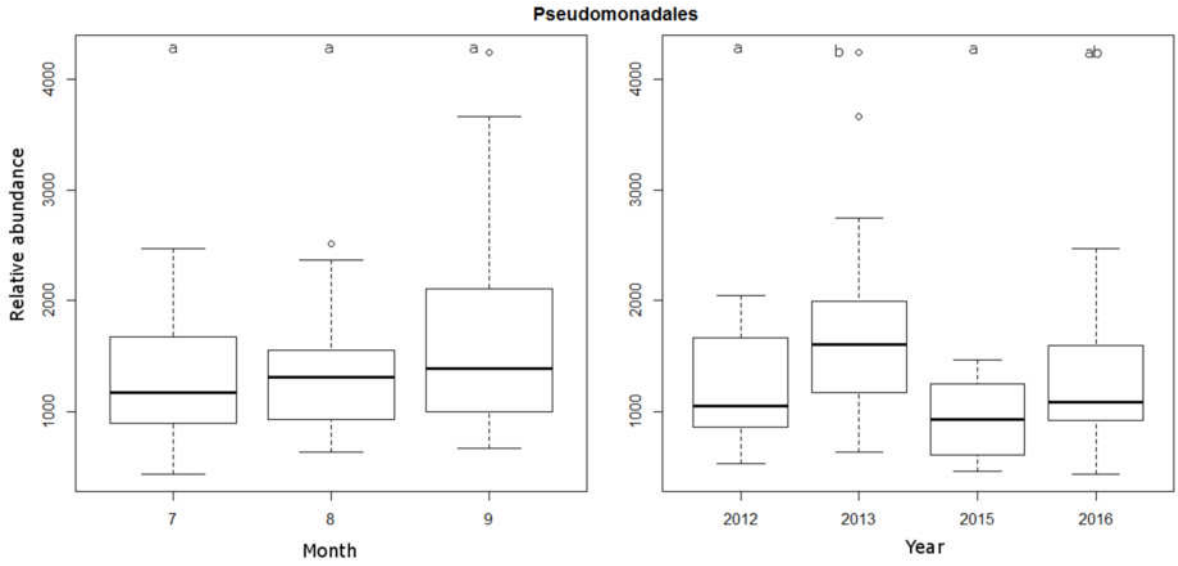

Fig. S8. Boxplots that represent Pseudomonadales variation between years and between months.

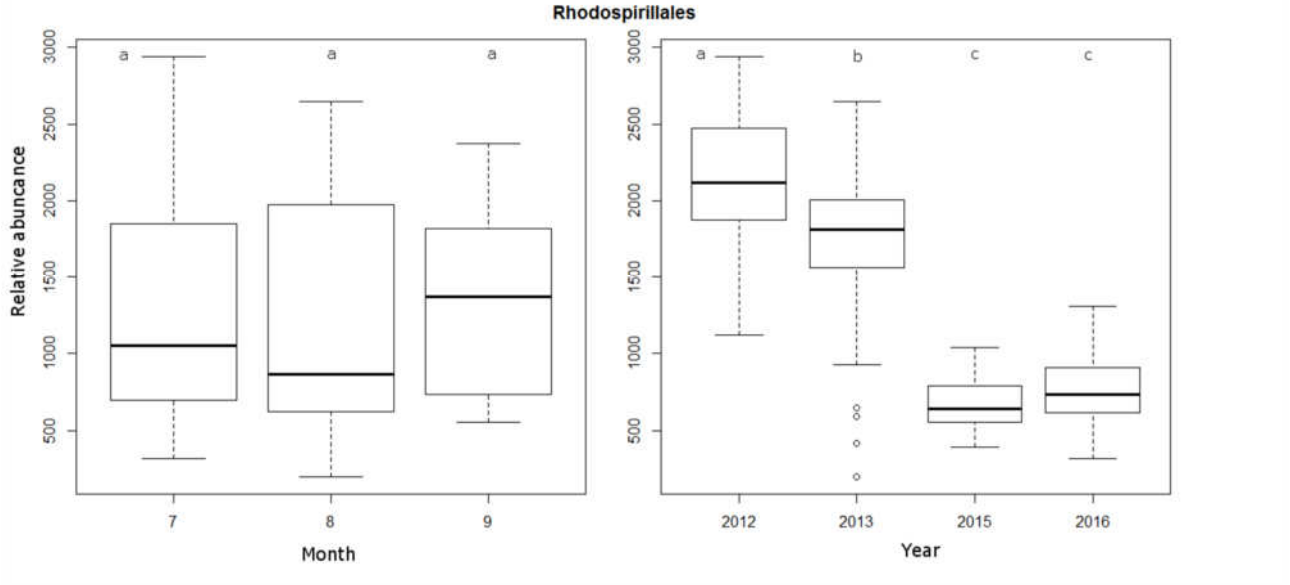

Fig. S9. Boxplots that represent Rhodospirillales variation between years and between months.

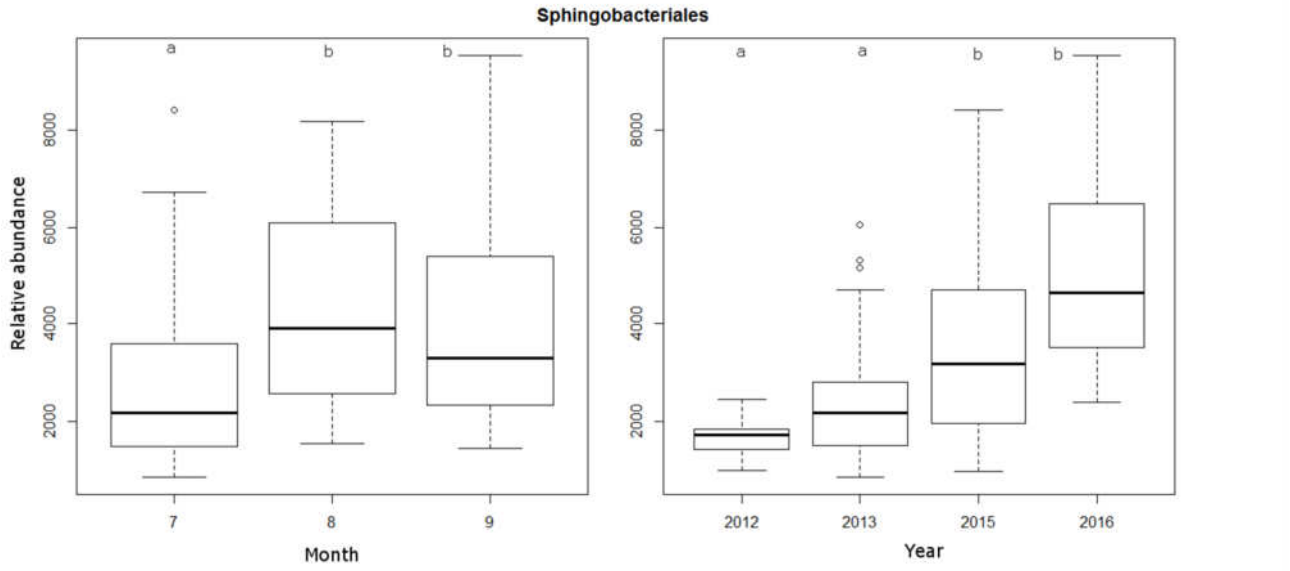

Fig. S10. Boxplots that represent Sphingobacteriales variation between years and between months.