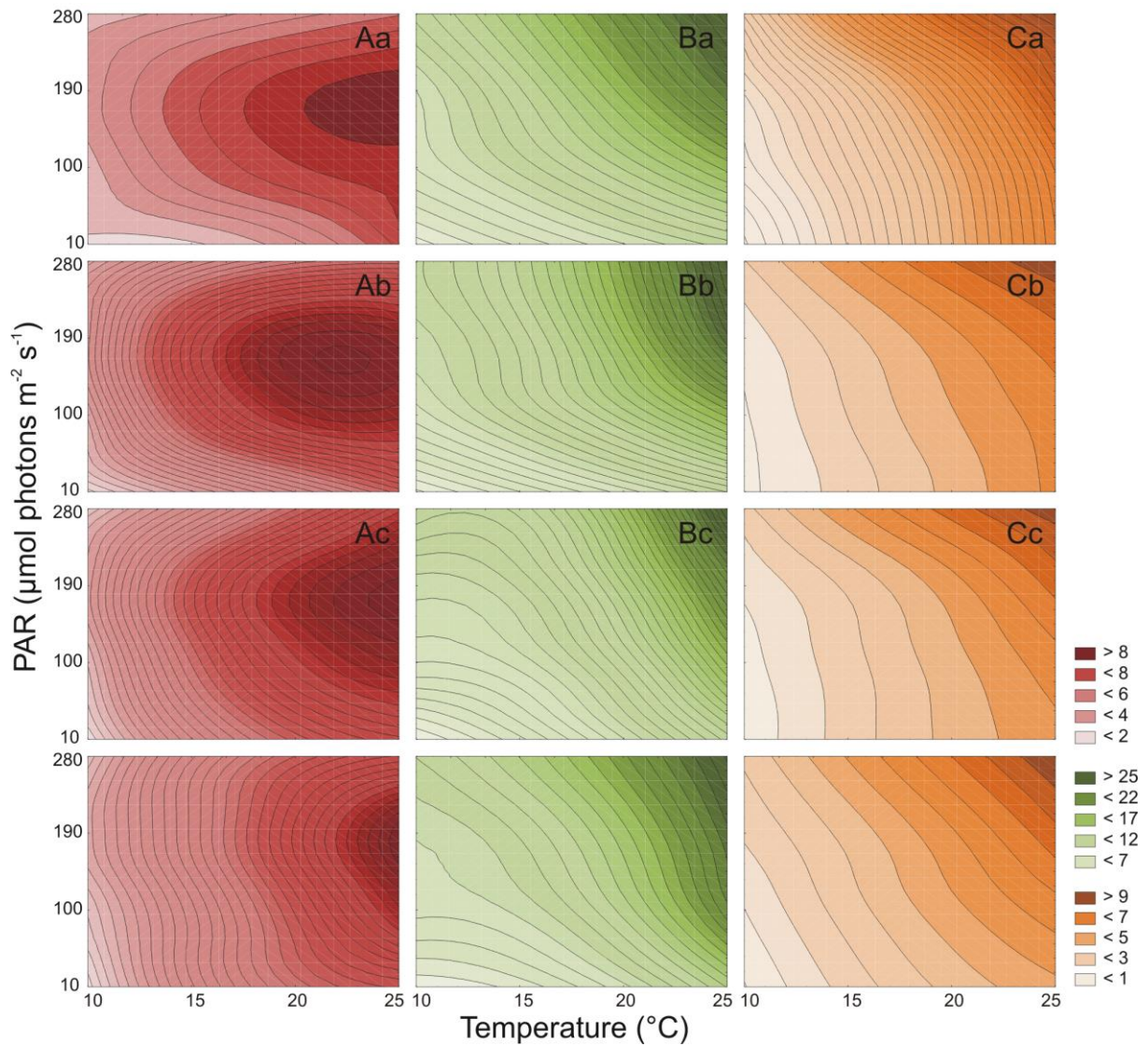
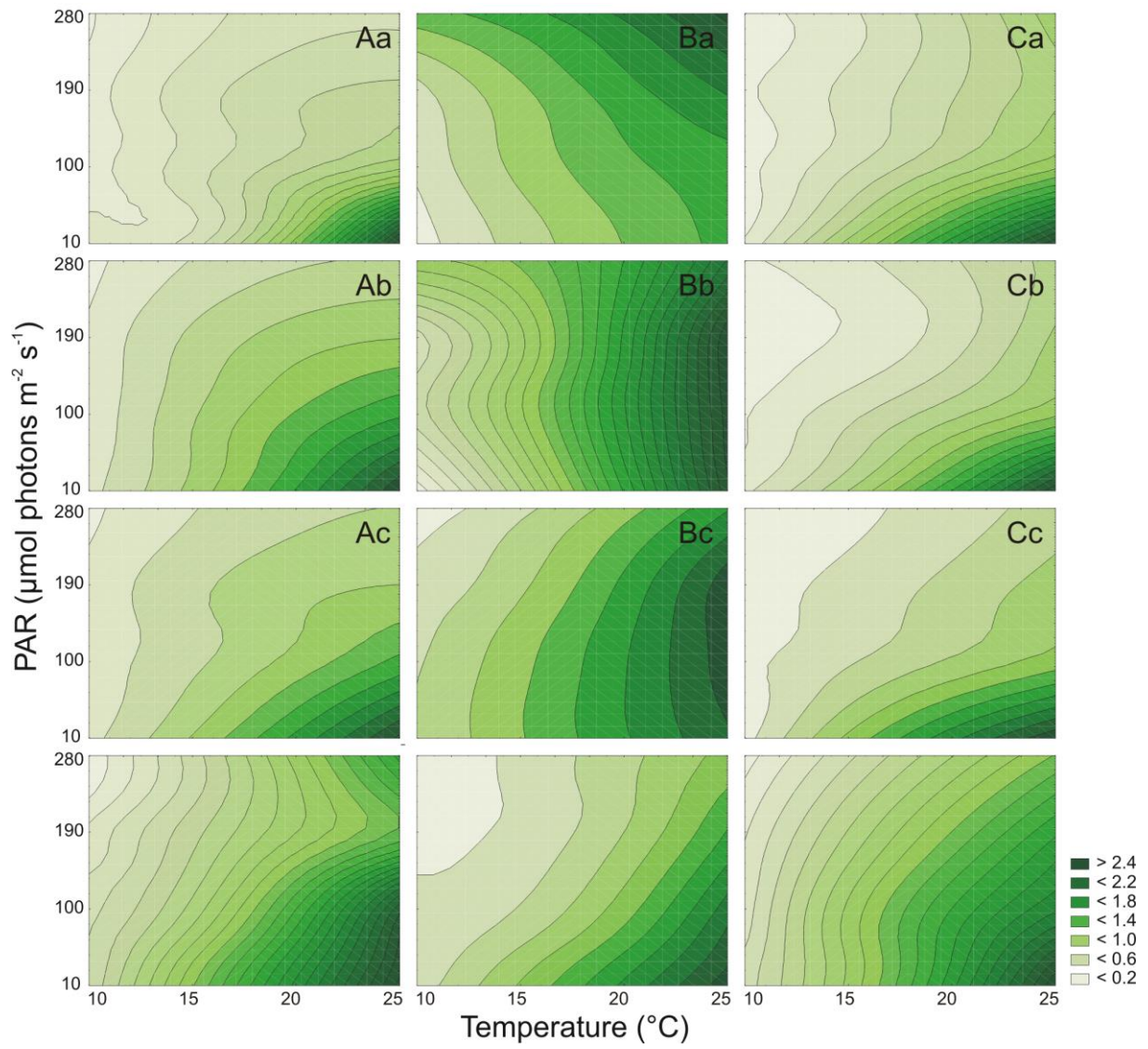


## Supplemental Material

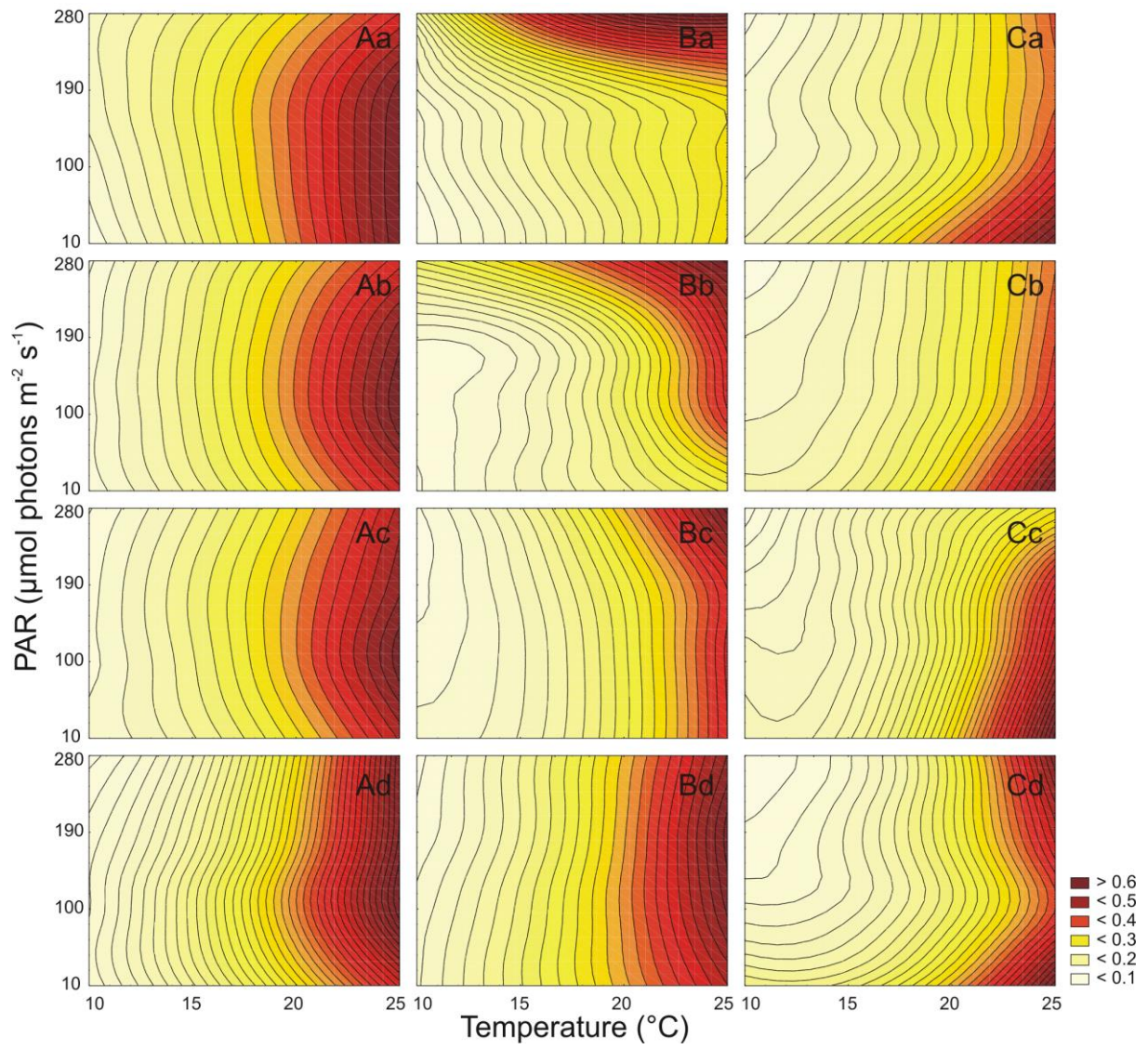


**Figure S1.** Cell number ( $10^8 \text{ cell ml}^{-1}$ ) of strains BA-120 (A), BA-124 (B) and BA-132 (C) under different environmental scenarios in 4 mediums: a) salinity – 3; b) salinity – 8; c) salinity – 13; d) – 18.

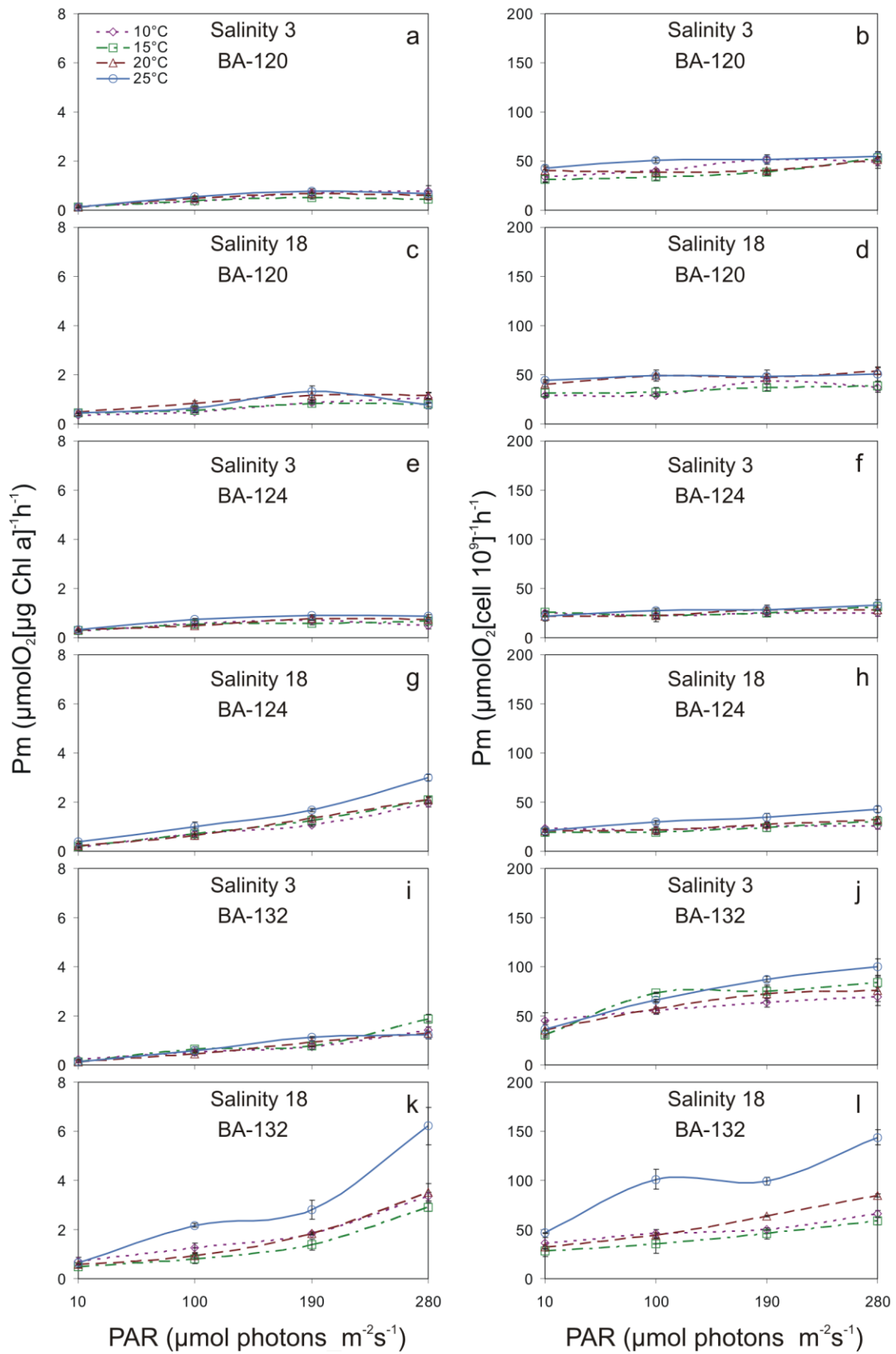


**Figure S2.** Chl *a* ( $\mu\text{g ml}^{-1}$ ) changes for BA-120 (A), BA-124 (B) and BA-132 (C) under different environmental scenarios in 4 mediums: a) salinity - 3; b) salinity - 8; c) salinity - 13; d) salinity - 18.

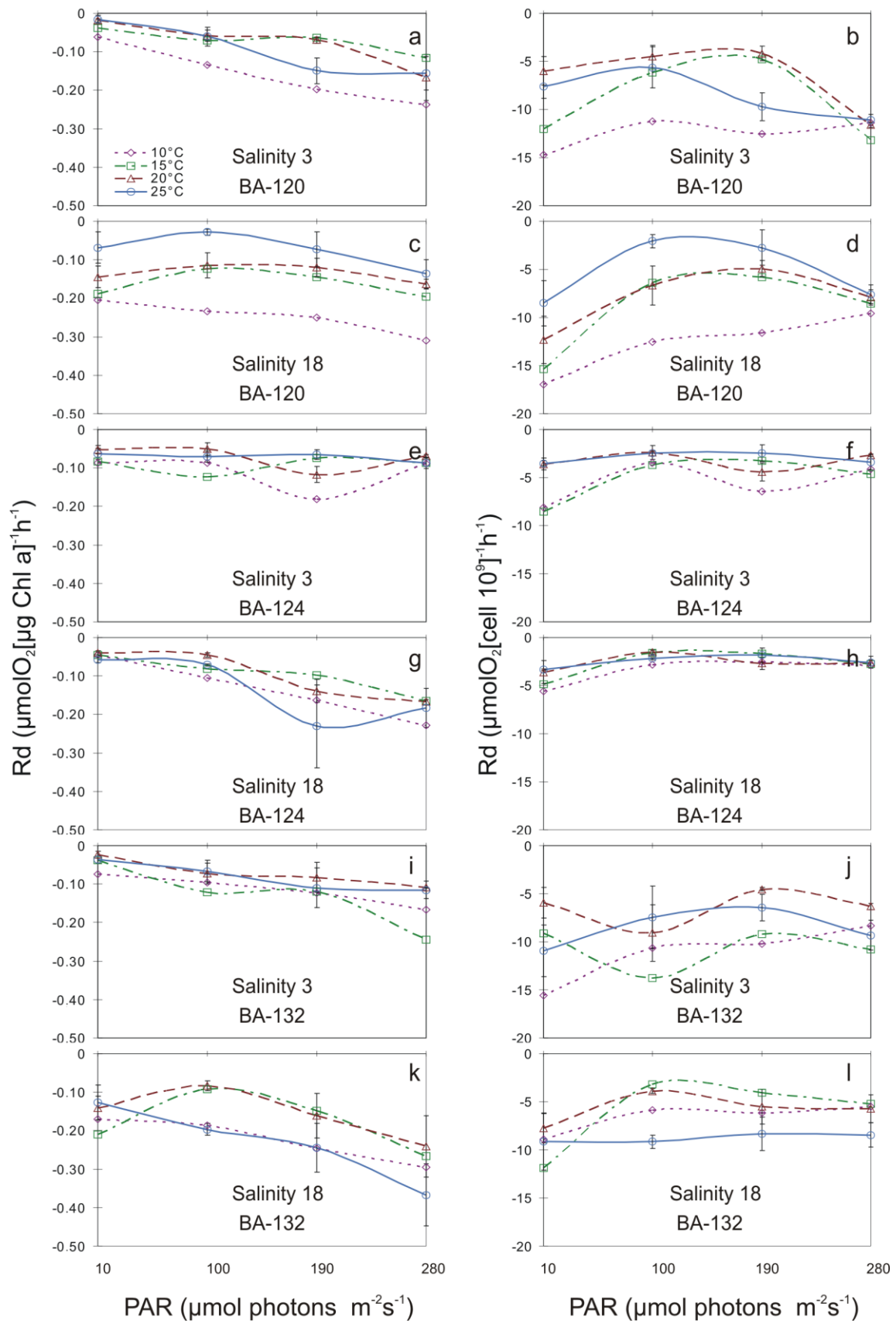




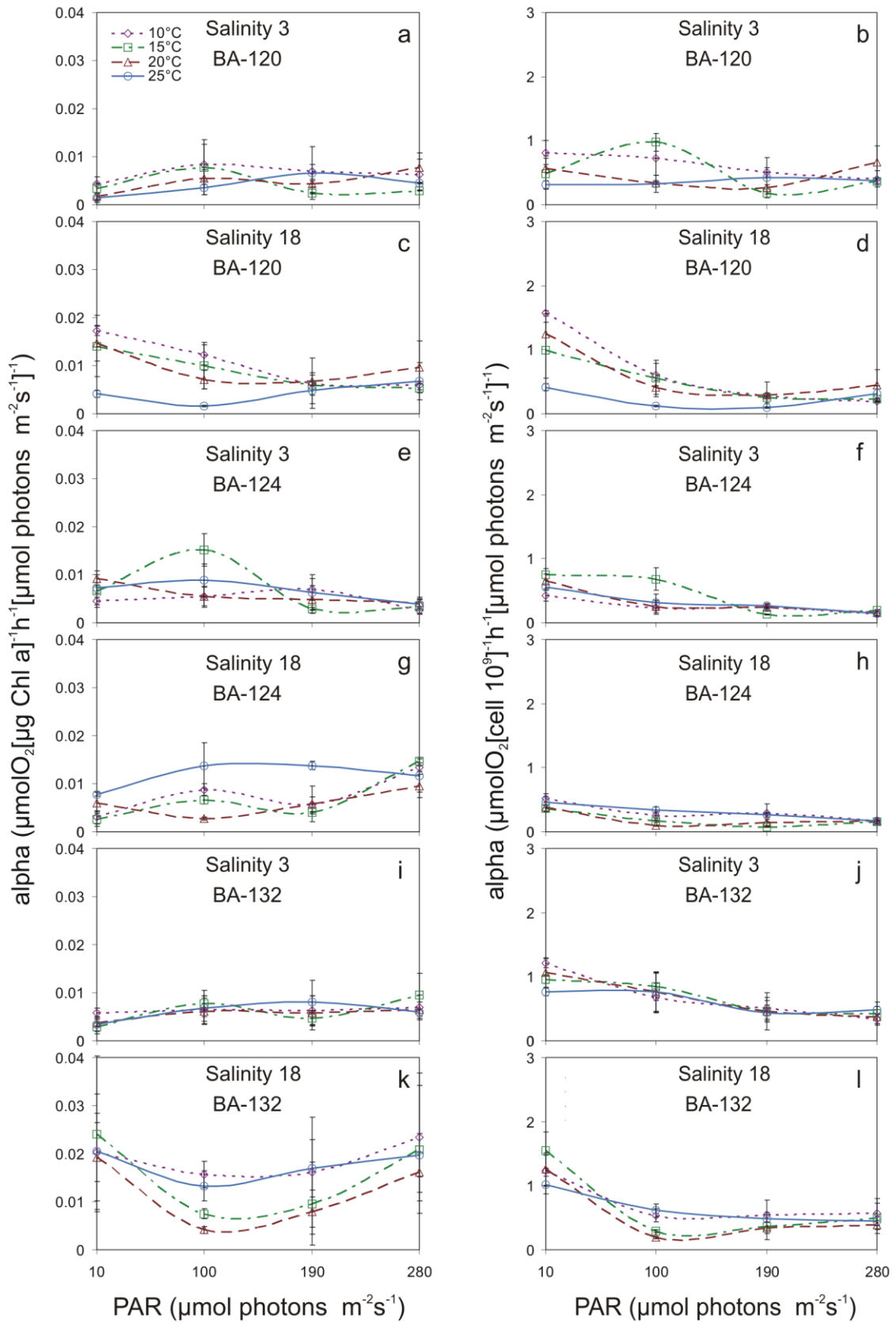
**Figure S3.** Car ( $\mu\text{g ml}^{-1}$ ) changes for BA-120 (A), BA-124 (B) and BA-132 (C) under different environmental scenarios in 4 mediums: a) salinity – 3; b) salinity – 8; c) salinity – 13; d) salinity – 18.



**Figure S4.** The Chl *a*-specific (left side panel) and cell-specific (right side panel) photosynthesis capacity ( $P_m$ ) at two extreme salinities (3 and 18) under different PAR and temperature conditions for BA-120 (a-d), BA-124 (e-h) and BA-132 (i-l).



**Figure S5.** The Chl *a*-specific (left side panel) and cell-specific (right side panel) dark respiration ( $R_d$ ) at two extreme salinities (3 and 18) under different PAR and temperature conditions for BA-120 (a-d), BA-124 (e-h) and BA-132 (i-l).



**Figure S6.** The Chl *a*-specific (left side panel) and cell-specific (right side panel) photosynthetic efficiency at limiting irradiance ( $\alpha$ ) at two extreme salinities (3 and 18) under different PAR and temperature conditions for BA-120 (a-d), BA-124 (e-h) and BA-132 (i-l).