**Supplementary material**

**Table S3:** Descriptive statistic of net photosynthesis measured (mol CO2 m-2s-1) of each population under current (t0) and future conditions estimated during three simulated growing seasons (t1:t3). Mean, standard deviation (SD) and standard error (SE) are shown.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Population** | **Statistic** | **Current**  **t0** | **Future**  **t1** | **Future**  **t2** | **Future**  **t3** |
| South America | **Mean** | **7.03** | **7.92** | **8.11** | **8.07** |
| SD | 0.375 | 0.269 | 0.375 | 0.234 |
| SE | 0.096 | 0.069 | 0.096 | 0.060 |
| Shetland Island | **Mean** | **4.19** | **5.08** | **5.38** | **5.51** |
| SD | 0.425 | 0.279 | 0.122 | 0.124 |
| SE | 0,110 | 0.072 | 0.031 | 0.032 |
| Antarctic Peninsula | **Mean** | **3.90** | **6.11** | **6.99** | **7.12** |
| SD | 0.344 | 0.372 | 0.543 | 0.314 |
| SE | 0,089 | 0096 | 0.140 | 0.081 |