**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 | 0.38 | 0.27 | 0.38 | 0.23 |
| SE | 0.10 | 0.07 | 0.10 | 0.06 |
| Shetland Island | **Mean** | **4.19** | **5.08** | **5.38** | **5.51** |
| SD | 0.43 | 0.28 | 0.12 | 0.12 |
| SE | 0,11 | 0.07 | 0.03 | 0.03 |
| Antarctic Peninsula | **Mean** | **3.90** | **6.11** | **6.99** | **7.12** |
| SD | 0.34 | 0.37 | 0.54 | 0.31 |
| SE | 0.09 | 0.10 | 0.14 | 0.08 |