



Corrigendum

Corrigendum to “Highly branched isoprenoids reveal onset of deglaciation followed by dynamic sea-ice conditions in the western Amundsen Sea, Antarctica” [Quat. Sci. Rev. 228 (2020) 106103]



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After publication of the article, the authors noticed a mistake in the concentration calculations of the two biomarker lipids IPSO₂₅ and dinosterol. The volume of the internal standards 7-hexylnonadecane and 5 α -androstan-3-ol had incorrectly been calculated twice. Hence, the absolute concentrations of IPSO₂₅ are erroneously higher by factor 20 and the concentrations of dinosterol are erroneously higher by factor 60. The calculated P_DIPSO₂₅ index is not affected by these changes.

In 4.1.2. Unit B: Dynamic ice front

The value for IPSO₂₅ was reported as 4–8 $\mu\text{g}^*\text{g OC}^{-1}$, but should now be corrected to 0.2–0.4 $\mu\text{g}^*\text{g OC}^{-1}$.

The value for dinosterol was reported as 200–400 $\mu\text{g}^*\text{g OC}^{-1}$, but should now be corrected to ca 2–7 $\mu\text{g}^*\text{g OC}^{-1}$.

In 4.1.3. Unit C: Reduced sea-ice cover followed by sea-ice re-expansion

In subunit C1, the value for dinosterol was reported as 180 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to 3 $\mu\text{g}^*\text{g OC}^{-1}$.

In subunit C2, the value for IPSO₂₅ was reported as 6–16 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to 0.3–0.8 $\mu\text{g}^*\text{g OC}^{-1}$.

In subunit C2, the value for dinosterol was reported as 300–600 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to 5–10 $\mu\text{g}^*\text{g OC}^{-1}$.

In 4.1.4. Unit D: Seasonal sea-ice cover environment

In subunit D1, the value for IPSO₂₅ was reported as ca 1 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to ca 0.05 $\mu\text{g}^*\text{g OC}^{-1}$.

In subunit D1, the value for dinosterol was reported as 100–400 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to ca 1–7 $\mu\text{g}^*\text{g OC}^{-1}$.

In subunit D2, the value for IPSO₂₅ was reported as 0–12 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to 0–0.2 $\mu\text{g}^*\text{g OC}^{-1}$.

In subunit D2, the value for dinosterol was reported as 200–500 $\mu\text{g}^*\text{g OC}^{-1}$, but should be corrected to ca 3–8 $\mu\text{g}^*\text{g OC}^{-1}$.

Please note that the values of the IPSO₂₅ and dinosterol axes in Fig. 2. and the corresponding supplementary figure plotted versus age (printed below) are now corrected.

Datasets uploaded to PANGAEA Data Publisher for Earth & Environmental Science have also been corrected (<https://doi.org/10.1594/PANGAEA.904263>).

The changes have no impact on the scientific results and reasoning presented in the paper.

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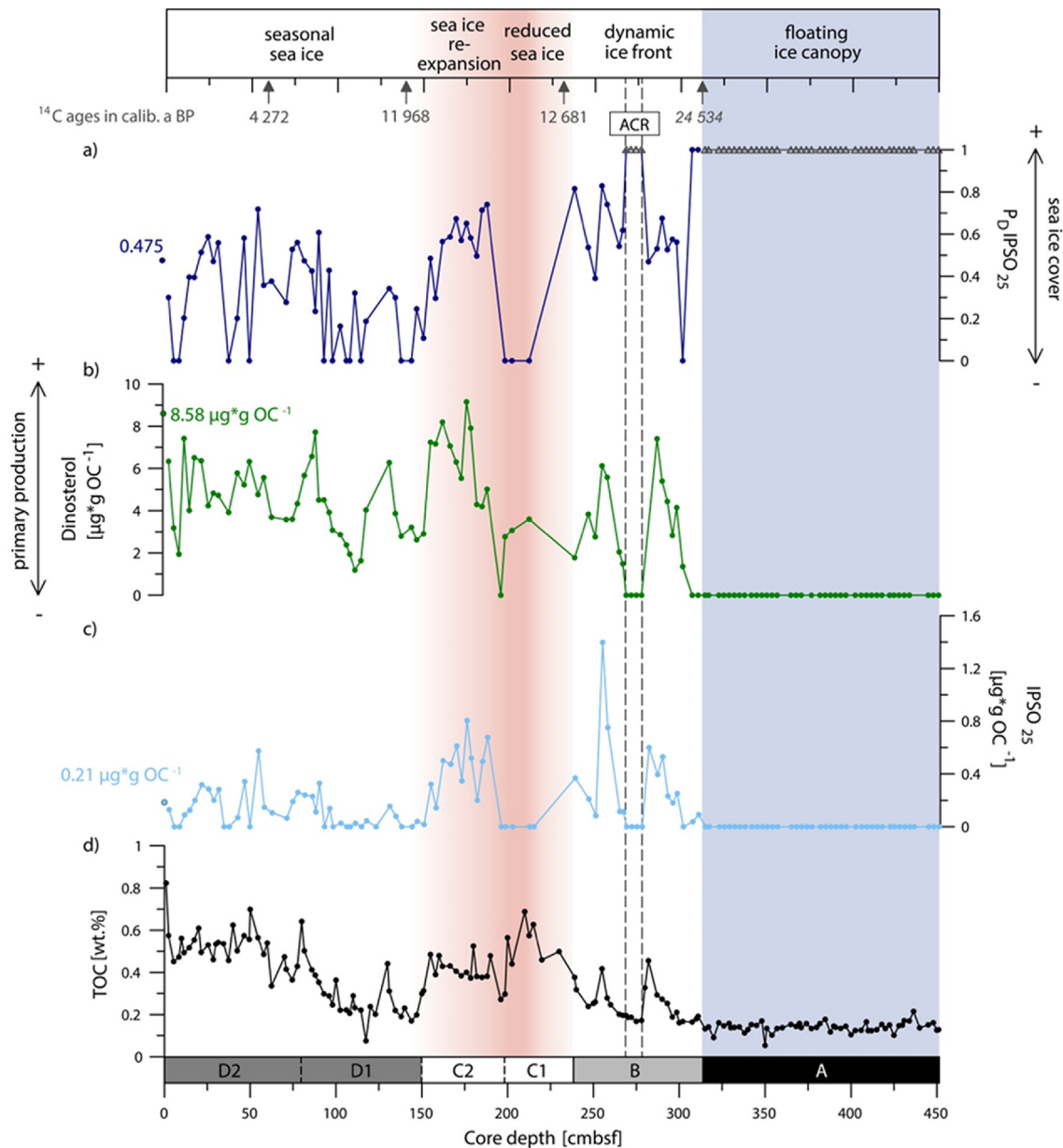


Fig. 2. Contents of $P_{DI}IPSO_{25}$ (a), dinosterol (b), $IPSO_{25}$ (c) and TOC (d) in sediment core PS69/274-1. AMS ^{14}C age constraints in calib. a before present (BP) in dark grey; unreliable age given in italics (Hillenbrand et al., 2010). Interval highlighted by dashed grey line marks the Antarctic Cold Reversal (ACR; Jouzel et al., 1995). Biomarker concentrations and calculated $P_{DI}IPSO_{25}$ value of the surface sample (box core PS69/275-2) indicated by dots with black circle and label in respective color. Triangles in $P_{DI}IPSO_{25}$ -curve: thick ice cover, maximum value of 1 assigned to these samples. Core is divided into four units as indicated in the lowermost and topmost bar: Unit A: floating ice canopy (blue shading), Unit B: dynamic ice front, Unit C: reduced sea ice/sea-ice re-expansion (red shading), Unit D: seasonal sea ice. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.quascirev.2019.106103>.