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# Publisher Correction: Projected poleward migration of the Southern Ocean CO<sub>2</sub> sink region under high emissions

Check for updates

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Correction to: *Communications Earth & Environment* <https://doi.org/10.1038/s43247-024-01382-y>, published online 02 May 2024

The original version of this article omitted one of the affiliations of the corresponding author “Precious Mongwe”. The missing affiliation “National Institute for Theoretical and Computational Sciences (Nitec), Cape Town, South Africa” has been added.

In the original version of this article, several reference numbers were incorrect. Specifically:

In the section “Results”, subsection “Mechanisms of air-sea CO<sub>2</sub> fluxes in the present climate”, third paragraph, references in the sentence starting “Some studies have linked this temperature bias to discrepancies”, were incorrectly given as “40,41”, whereas “40” is correct.

In the section “Discussion”, second paragraph, references in the sentence starting “Relatively low model skill” were incorrectly given as “35, 47–49” following “biases in sea ice” whereas “36, 47–49” is correct; as “38,40” following “impact on heat fluxes”, whereas “38,40” is correct; and as “37,50” following “the AMOC”, whereas “37” is correct.

In the section “Discussion”, last paragraph, the reference in the sentence starting “On the other hand, anthropogenic ice sheet melt in Antarctica” was incorrectly given as “41”, whereas “58” is correct. In the following sentence, starting “Moreover, ice sheet melt”, references were incorrectly given as “38,41”, whereas “58,59” is correct.

In the section “Methods”, subsection “Earth System Models”, first sentence, the reference following “climate scenario” was incorrectly given as “59”, whereas “60” is correct.

In the section “Methods”, subsection “Observation-based pCO<sub>2</sub> -products”, first sentence, the reference following “Sea-Flux dataset” was incorrectly given as “60”, whereas “61” is correct; in the following sentence, references were incorrectly given as “61” following “CMEMS-LSCE-FFNN”, whereas “62” is correct; as “63” following “CSIR-ML6”, whereas “63” is correct; as “63” following “Jena-MLS”, whereas “64” is correct; as “64” following “JMA-MLR”, whereas “59” is correct; as “65” following “MPI-SOMFFN” whereas “65” is correct; and as “66” following “NIES-FNN” whereas “67” is correct. In the sentence starting “All methods use”, the reference following “SOCAT version 2020 or later” was incorrectly given as “66” whereas 68 is correct. In the sentence starting “Further, we use”, the reference following “World Ocean Atlas” was incorrectly given as “67”, whereas “69” is correct. In the next sentence starting “We use a monthly”, the references following “mixed layer depth by” were incorrectly given as “68,69”, whereas just “70” is correct. In the next sentence starting “Lastly, we use DIC”, the reference following “dissolved inorganic carbon dataset” was incorrectly given as “41”, whereas “71” is correct.

In the section “Methods”, subsection “DIC decomposition”, first sentence, references following “(i.e., primary production and respiration)” were incorrectly given as “70,71”, whereas “72,73” is correct; in the next sentence starting “DIC is consumed”, references following “as regenerated DIC” were incorrectly given as “70,72”, whereas “72,74” is correct; in the sentence starting “In this study, we decompose”, references following “regenerated following” were incorrectly given as “70,72”, whereas “72,74” is correct; in the following sentence starting “Regenerated DIC”, the reference following “(Eq. 8)” was incorrectly given as “72”, whereas “73” is correct; in the following sentence starting “Since our analysis is focussed”, references following “air-sea exchange is complete (C<sup>dis</sup>)” were incorrectly given as “70,73–75”, whereas “72,74–75” is correct.

These reference errors have been corrected in the HTML and PDF versions of the article.

In addition, the original version of this Article omitted a reference Olsen, A. et al. *GLODAPv2.2019*—an update of *GLODAPv2. Earth Syst. Sci. Data* **11**, 1437–1461, <https://doi.org/10.5194/essd-11-1437-2019> (2019). This has been added as reference 77.

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