

Responses to the Editor

Thank you very much for your significant and useful comments on the paper “Diurnal, seasonal, and interannual variations in $\delta(^{18}\text{O})$ of atmospheric O_2 and its application to evaluate natural/anthropogenic changes in oxygen, carbon, and water cycles” by Ishidoya et al. We have revised the manuscript, considering your comments and suggestions. Details of our revision are as follows. The line numbers denote those of the revised manuscript.

I am pleased to accept the manuscript subject to an outstanding technical correction, i.e., the deposition of the full data set with the WDCGG data centre and provision of a DOI (digital object identifier). In addition to monthly averages, please include the full resolution dataset prior to any averaging. I understand you obtain a measurement every 62 s, so I'd expect to see data points at roughly 1 minute intervals. The full dataset is required for reproducing the derived results shown in the figures.

We have deposited full dataset in Zenodo which contains not only averaged data but also the raw data before averaging, following your comments. Therefore, we have revised the sentence of “Data availability” as “The observational data are available through Zenodo at <https://zenodo.org/records/14221768>”. We have also checked the averaged data carefully and revised the figures very slightly in the revised manuscript. Nothing has changed in the conclusions.