

In this revision, we have spent considerable time reviewing the clarity of the manuscript. There was a particular focus on the usefulness of the UMAP diagram with comparison to more traditional methods of data visualisation.

Names of reference materials have been altered to ensure they conform to official naming.

Mathematical formulae have been reviewed for accuracy and clarity. Several errors had occurred in the original conversion from word to the copernicus word template and there were some typographic errors. The manuscript has since been moved to LaTeX and all equations have been checked for accuracy.

The underlying code has been updated to further improve the numeric stability of the algorithm, but this has not affected the results and interpretations presented in the original manuscript.

Other revisions according to the replies to each reviewer have been implemented.