

**Response to Editor's comments to the Author:**

Thank for using ESSD, for many positive and helpful responses to reviewer comment, and for extreme patience.

Because ESSD publishes descriptions of many open active databases (e.g. soliciting new contributions from the community at any time), please clarify that gVOD represents a static one-time (extensive!) compilation. Impressive but not open nor actively seeking new contributions. Perhaps mention some future update?

**Response:** Thanks for your suggestion. We clarified in the revised manuscript “The gVOD is a compilation of all the available data, to our best knowledge, by 2019. We plan to update the database every 5 years.” (Line 74)

Because Copernicus (publisher) does not archive supplements, some of this supplementary material might in the future become separated from the VOD description? Consider options of what to include with manuscript as appendices (e.g. which will get archived), what to include with the gVOD product at PANGAEA, etc. Supplement okay so long as you accept what you might lose in the future?

**Response:** Thanks for reminding. All the supplementary tables and figures in previous supplementary have been integrated as appendices of the revised manuscript. We also decided to keep the MATLAB code package for calculating the total number of viruses in supplementary materials, as the package includes associated MATLAB datasets that cannot be appended in the manuscript, and meanwhile remind the readers they can also request the codes from us: “The MATLAB codes for calculating the total number of viruses can be found in the supplementary materials or be obtained by requesting the corresponding authors.” (Line 220)