Comment on gmd-2021-12
Samuel Shen (Referee)

Referee comment on "AstroGeoVis v1.0: Astronomical Visualizations and Scientific Computing for Earth Science Education" by Tihomir S. Kostadinov, Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-12-RC1, 2021

This paper provides an array of Matlab codes useful for teaching. Some of them, such as the example shown in Fig. 7, have research values. The significance of the paper is its innovation for teaching.

The presentation of the paper needs some improvements. Section 2 may include a list of the codes and datasets (i.e., Table of contents). It is also helpful to include a section or subsection to show how the codes are used in classroom teaching. Although the codes are available freely on GitHub, the figures and other outputs of the codes should also be made available, except those included in the paper for the sake of copyright. These outputs will help students learn.

Most examples in the paper are not scientifically new. Detailed credits (with proper references) and some historical introduction should be provided.

The abstract and conclusion should have a clear description on the contribution of this paper. Make it clear about the contributions to the instructional tools.

Discuss the possibility of R version and Python version of the codes. Also discuss the possibility of a website for the codes and outputs in the future.