Review of: "A Robust Assessment of the Local Anisotropy of the Hubble Constant"

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Potential competing interests: No potential competing interests to declare.

Utilizing the Pantheon+ dataset, the paper explores cosmological models and searches for inhomogeneities. While the paper is interesting, its current state does not convincingly support a recommendation for publication. Additionally, a thorough proofreading is advised.

1. The title claims ‘robust assessment’; however, it doesn’t seem to be what is really obtained in the paper.

2. Abstract: “These results seem robust, since they are also obtained with a simple, single-parameter tired-light model”; however, there is no robust proof or quantitative estimation for this claim throughout the manuscript.

3. The statistical approach relies entirely on the Chi-squared estimate. This estimator is reliable only for an unbiased dataset of independent values influenced by noise following a well-established probability distribution. It is crucial to ascertain if this estimator is suitable for the Pantheon+ sample's supernova magnitudes, requiring a detailed explanation of the dataset. It would be useful to also provide the link to the GitHub web server instead of the date.

4. The acronym IQR should be spelled out upon its introduction.

5. Further elaboration on 'local probes' would enhance understanding.

6. In Figure 2, including a legend to describe different data points would improve clarity.

7. A sentence says ‘they also illustrate the main reason why supernovae at redshift 0.02-0.03 are nowadays not taken into account …’ but it doesn’t say clearly the reason. It seems unclear.

8. Avoid sentences like ‘backed by Nobel laureates’. Not appropriate.

9. Fig. 3: It would be better to use an arrow to display the direction of the dipole.

10. It would be helpful to give a more detailed discussion on the alignment of the supernovae m-z relation with the CMB dipole direction across redshifts.

11. Justification is needed for considering tired-light models, given their inconsistency with observed time dilation.