The manuscript presents a comprehensive dataset detailing land-atmosphere interactions over the Tibetan Plateau, derived from 12 field stations covering a range of landscapes. This dataset encompasses hourly measurements of surface energy balance components, soil hydrothermal properties, and near-surface micrometeorological conditions for up to 17 years (2005-2021). However, I have several major concerns that the authors should address.

1) Section 2 provides extensive detail on the observation infrastructure and data post-processing workflow, including data processing, quality control, gap filling, and archiving procedures. The authors should include more explicit information on the calibration of instruments across different stations and the rationale behind the selection of specific quality control algorithms. Comparisons with standard practices in the field could help in benchmarking the dataset's reliability.

2) The authors should provide a comprehensive and detailed explanation of the data collection methods and quality control procedures employed in their study. Instead of merely listing various methodologies, it is crucial to elaborate on how data was gathered, the criteria used for data selection, and the specific steps taken to ensure the integrity and accuracy of the data.

3) While the approach for handling missing data through linear temporal interpolation is mentioned in 2.3.3 Gap filling, a discussion on the impact of these interpolations on the dataset's overall quality and potential biases introduced should be mentioned. Including statistical metrics to quantify the robustness of the gap-filled data could enhance the dataset's credibility.

4) Section 3 on different datasets are well-detailed but the authors should add specific examples of data validation against external measurements or models, if available. This could include inter-comparison with satellite data, other observational networks, or model outputs to validate the spatial and temporal accuracy of the dataset.