This work provides a dataset that includes features derived from two types of fittings applied to rain cells observed by TRMM PR, along with collocated VIRS and TMI brightness temperatures. This dataset has potential value for users who wish to extract horizontal and vertical geometric information of precipitation clusters from the extensive TRMM dataset. However, the publicly available data, as indicated by the URL provided by the authors, is currently limited in temporal coverage. As a result, users are unable to conduct long-term analyses of cloud clusters, which is likely one of their primary interests. Additionally, some expressions in the manuscript are potentially misleading to readers, and the description of the data processing methods is inadequate. For these reasons, there are critical issues that must be addressed before this manuscript can be considered for publication.

Major Comments:

1.
The data description paper should be published only after a sufficient amount of data is made available for users. Although the Abstract and Section 6 ("Data availability") refer to the data sources, only two days' worth of data are currently available. Since the extraction of rain cell features is primarily intended for statistical analyses, long-term data is essential. The currently provided data is insufficient for effectively utilizing the dataset. While it is understandable that the original TRMM precipitation and brightness temperature datasets are large in volume. However, at minimum, the data under the "Rain" node in the dataset should be made available for a longer period.

2.
The manuscript contains several instances where the description could mislead readers regarding the processing performed on the dataset. These should be corrected.
For example, in the Abstract, the following sentences appear (Lines 14–19):

"*In this study, based on the merged data of precipitation profile data, reflectivity and infrared data, and microwave brightness temperature data, …, rain cells were identified in the PR swath by two methods, the minimum bounding rectangle (MBR) method and the best fit ellipse (BFE) method. The geometric and physical parameters of rain cell were also defined.*"

This wording suggests that rain cell identification was performed based on merged data from three sensors. However, as described in Section 3, rain cell identification is determined solely based on the PR data, by checking whether four or more pixels are connected. The infrared

and microwave brightness temperature data are used only for deriving the physical parameters after the identification. Moreover, the MBR and BFE methods do not perform identification; they are fitting methods applied to already-identified rain cells.

Other instances with potentially misleading wording include:

- Lines 70–73 ("For the above...")
- Lines 134–135 ("To automatically...")
- Lines 301–304 ("By matching...")

Furthermore, many other parts of the manuscript incorrectly refer to MBR and BFE as identification methods. To avoid confusion, I recommend consistently referring to them as fitting methods.

3.
In Section 5.2, while the two case studies help contextualize the dataset, the findings primarily reflect well-established knowledge and do not seem to introduce new insights. Please clarify what new synergies are expected by incorporating VIRS and TMI data into the dataset alongside the fitting of rain cells using the MBR and BFE methods. Additionally, since Section 5.2 feels somewhat redundant, I suggest minimizing the description of well-known results and moving them to the Introduction.

Minor comments:

Sections 3 and 4
They currently describe the algorithm separately; however, it would be more organized to combine them into a single section, such as a unified "Methods" section.

Table 2
It should be clearly indicated which sensor each variable is derived from.

Table 3
Many values listed in Table 3 are not referenced in the main text. It would be better to remove unnecessary items. Regarding γmax and γavg, should these not differ between the MBR and BFE methods? Also, for parameters where the values are identical between MBR and BFE, combining them into a single column would improve readability.

Lines 193–203

The content described in this paragraph might be easier to understand if explained directly with reference to Figure 1. If the authors wish to present specific numbers, it would be sufficient to mention them within the text. Therefore, I would suggest that Table 4 may not be necessary.