Review "JAXA Level 2 cloud and ..." by Kaori Sato et al.

The paper provides a high-level summary of JAXA level 2 cloud and precipitation microphysical property products, which can help users effectively select suitable products for research and application in the future. The paper is well organized and presented. However, as I commented below, a few aspects could be improved.

Major issues:
1. EarthCARE radar provides Doppler velocity measurements, the sum of hydrometer falling speed and air vertical velocity. The potential of providing air vertical velocity estimation in convective clouds is exciting. The paper used several names to discuss air vertical velocity. For example, in the first paragraph, 'vertical velocity' and 'air motion' refer to the same parameter (to my understanding). But we think about 'air motion' in 3-D. In Table 1, you list the "Cloud air velocity" product, better called "Air vertical velocity." It will be great to use a consistent statement for retrieved air vertical velocity in the paper.

2. It would be beneficial to provide a paragraph or two in section 2.1 to place JAXA level 2 cloud products in the context of space-based multi-sensor cloud remote sensing and the reasoning for three cloud products. Although it is not possible to go into details of each algorithm, it could be helpful to provide a high-level summary of available information and challenges, general approaches, and additional information used to constrain retrievals to help readers better understand uncertainties in the products.

3. About processing flow (Section 2.2): The processing flow given in Fig. 1 is helpful in understanding the relationships among the three products. However, parameters under the two horizontal arrows could be better described in the text and positioned in the figure. In the summary, three processing chains (L2a, L2b, L2c) are mentioned but could be discussed in this section.

Minor issues:
1. Line 24: add " and cloud dynamics" after "hydrometer formation"
2. Line 42: Does "the EarthCARE L2" mean JAXA L2 here?
3. Line 102-104: This sentence could be incorrectly stated. Do you mean that ATLID-based results are used to train a CPR-based algorithm to provide retrievals in regions with CPR only measurements?
4. Line 129: "Eight frames" and "15 frames" are inconsistent here. One of the "frames" needs to be replaced with a different word.
5. In Figure 3, there are fewer clouds horizontally in simulated ATLID measurements, which is puzzling because ATLID should be more sensitive to CPR in cloud detection.
6. Figure 3 caption: add "(left column)" after "Ze measurements" and "(right column)" afte "product" to better separate CPR and ATLID measurements.
7. The layout of different panels between simulations and retrieval for Fig. 6 differs from Figs. 4 and 5. It would be better if they were consistent.
8. Line 182: Fig. 7b and Fig. 7c should be switched.
9. Line 218: change "Doppler information" to "radar Doppler velocity measurements".