The authors have done a thorough job in addressing the comments. They have clarified the methodology, as well as improved the description of the results. I suggest that this paper can be accepted as is, with a few suggested edits that can be completed during the galley proof stage:

- L38: Make note that "cold peaks in brightness temperature" is specific to passive satellite observations
- L162: "voxel" is a typo
- L228: remove extra comma
- L489: put "Deng et al. (2016)" reference in parentheses
- L513-514: Please refine the sentence—are you comparing the results to earlier months?