Interactive comment on “Intercomparison of FY-3 and AIRS Gravity Wave Parameter Extraction Based on Three Methods” by Shujie Chang et al.

Anonymous Referee #2

Received and published: 10 October 2019

This paper introduced gravity wave extractions from temperature profiles of three measurements, AIRS, GNOS, VASS. Three methods were employed: vertical sliding average, double-filter and single-filter.

Overall, the English in the paper is not accurate and scientific at all, making the review task very difficult. The context does not warrant a publication in AG with little physics or any new insights on gravity waves. The filtering and background removing are very common techniques to analyze GWs in temperature profiles. Unfortunately, I would recommend rejection of this paper.

Some detailed comments:

1. line 24: "the GNOS temperature profile product performs better..." What does "bet-
2. How the weighting function of AIRS impacts the vertical resolution of temperature profiles?

3. Is GNOS radio occultation? If so, would COSMIC a better validation?