

## **Response to Associate Editor Comment on “Sensitivity of Aeolus HLOS winds to temperature and pressure specification in the L2B processor”**

We are grateful for the additional comment from the Associate Editor.

### **Comment:**

*This paper provides a valuable assessment of the sensitivity of the Aeolus Level 2 horizontally projected line-of-sight (HLOS) wind accuracy to a priori temperature and pressure information. The authors have responded very well to the comments and requested updates by the reviewers. This paper is therefore recommended for publication subject to minor revisions, based on the following editorial comment:*

*In line 307-308, I propose to replace “... are rather similar to those represented by the EDA (in particular Fig. 5a of Isaksen et al. (2010)), comforting our assumptions.” with “... are relatively similar to those represented by the EDA temperature spread in Fig. 5a of Isaksen et al. (2010), supporting the experimental approach use in this paper. A qualitative comparison of the figures also show that the magnitude of the EDA temperature spread in Fig. 5a of Isaksen et al. (2010) is typically XX larger than the differences reported in Figure 5, with peak values of XX in xxx regions.” The second sentence can be reformulated as needed, and the authors are asked to fill in the XX and xxx according to their qualitative analysis. A further sentence should also be added commenting how this compares to the temperature errors used for the further analysis in this paper. The discussion in the paragraph from line 409-420 should also be updated accordingly.*

We thank the Associated Editor for this suggestion. This brings an additional level of information that better described the expected underestimations of the errors described in the paper. The suggested corrections have been implemented in the modified version of text (lines 304-311 and lines 419-420).