Thank you for the comments. I changed the manuscript accordingly.

## **Reviewer comments:**

## Report #1

I changed "Rayleigh clear and Mie cloudy winds have the best quality of the four different wind products. Even though Mie cloudy winds have smaller random errors than Rayleigh clear winds (Rennie et al. 2021), they are rare above the upper troposphere where the atmosphere is stably stratified and therefore suitable for gravity wave analyses." to "Rayleigh clear and Mie cloudy winds have smaller random errors than Rayleigh clear winds (Rennie et al. 2021), they of the four different wind products. Even though Mie cloudy winds have smaller random errors than Rayleigh clear winds (Rennie et al. 2021), they are rare above the upper troposphere. Especially the stratosphere is very suitable for gravity waves analysis as it is stably stratified. Therefore, Rayleigh clear winds are preferable to Mie cloudy winds for gravity wave analysis."

## Report #2

I changed

"to high" to "too high" (formerly I. 102) and

"In this case, Aeolus is also superior to ground-based and balloon-based wind measurements, as these are generally not carried out over the Atlantic and therefore not in the geographical area where streamers form." to "In this case, Aeolus is also superior to ground-based and balloon-based wind measurements, as these are generally not carried out over the Atlantic, one of the regions where streamers preferentially form." (formerly I. 105).

Reading the whole manuscript again, I found some further technical issues, which I corrected (line numbers refer to version with marked changes):

Figure 2 caption: westward  $\rightarrow$  eastward (the streamer moved eastward in time, as mentioned for case 1 in figure 1, too)

I. 226: inserted "wind" after hlos

I. 246: in  $\rightarrow$  is

I. 299: removed "generated"

I. 448: Figure 2  $\rightarrow$  Figure 3

I. 488: the  $\rightarrow$  this

I. 518: E\_kin  $\rightarrow E_{kin}$ 

And finally, I added the reviewers to the acknowledgement.