We thank the Anonymous Reviewer for her/his helpful comments. Our responses appear in italics, below.

1. The description of the different trajectory cloud types (e.g., MPC, CIRRUS, WARM_HET: : :, etc) is essential for understanding the paper. While the types are shown schematically in Figure 4 and described in the main text, it would be helpful to have an additional table with the description of the different types for reference. This could be either an additional table, or table 2 could be expanded to include a short description of the different types.

We have expanded Table 2 to include a short description of the different cloud types.

2. Page 4029/4030: Replace 'lab' with 'laboratory'

Done.

3. Page 4031: As shown e.g. by Schepanski et al., 2007 (GRL) the West African desert is not necessary a major source region for dust emissions, but since high optical thickness values are found in this region it may still be a good starting point for trajectory studies.

Noted in manuscript, with reference added.

4. Page 4032: What is 'low altitude' and 'high altitude'?

"(< 3 km and > 5 km, respectively)" added in manuscript.

5. Page 4033: Please explain what is meant by the influence of the 'extreme topography' of the Tarim basin.

"…alternating between ~1 and ~4-5 km over less than 100 kilometers across parts of the Tian Shan mountain range, which forms the northern basin margin [see Fig. 1 of Wiacek and Peter, 2008]" added to manuscript.

6. Page 4050: The Bodele is most active in winter, spring and fall, not just spring and fall.

Noted in manuscript that while the Bodele is also active in the winter, our study shows the least cloud formation during this time (Fig. 6), indicating that air parcels remain as clear air through a lack of ascent or moisture or both.

7. Figure 1: The circle symbols are hard to see on the maps, they should maybe be larger.

Done.

8. Figure 8: The symbols should be larger.

Increased figure size.

9. Figure 13: The axis labeling is too small.

Increased figure size and labeling.