Reviewer #1

Comment 4: 4. p.20266, l.15: How do the authors explain that seed=0 is the most appropriate for all months? If no local minimum is found, the chosen seed should not influence your results (in general random seeds are chosen in classical PMF analyses).
Author response: The reviewer is right that random "seeds" are used to test the robustness of PMF analysis (Ulbrich et al.,
2009;Zhang et al., 2011). Figure R3 below shows an example of such test by using seed value from 0 to 100 with a step of 5. No local minima were shown, which indicates the results are insensitive to the choice of the seed value. Therefore, further analysis was proceeded with a seed value of 0 (Table 1 in Zhang et al., 2011).

Editor comment: I think it might be worthwhile to add a sentence in the manuscript (p. 9) about the fact that the results are insensitive to the choice of the seed value.

Comment 5. p.20267, l.8: please provide further explanations on how the output data of the WRF model were used to drive the HYSPLIT model.
When the WRF simulations are finished, the necessary parameters, including 14 surface and 5 upper-level variables, are extracted from hourly WRF outputs, and converted into the compatible format for HYSPLIT (Draxler et al., 2012).

Editor comment: This information should be briefly added on p. 9.