

Dear Heini,

Thank you very much for your quick feedback and for your additional comments.

- 1) The confusing sentence has been deleted, the beginning of the paragraph now reads:

“In this section, we assume that the monthly average isotopic composition above the CAR in summer is the result of mixing between upper tropospheric air and boundary layer air, the control of the ratio of the number of the western air-masses to the eastern airmasses can thus be understood in terms of the mixing fraction of the humid source (f in equations 2 and 3) in a mixing model.”

- 2) We now added reference on the aerosol transport studied by the aerosol community in section 3.2:

*“As the warm and dry air moves off the African coast, the SABL rises and becomes the Saharan Air Layer (SAL) undercut by the cool and moist marine boundary layer. **The SAL contributes to important dust transport over the Atlantic (e.g. Prospero and Carlson 1972) and has been widely studied by the aerosol community (e.g. Ben-Ami et al. 2009; Rodríguez et al. 2011).**”*

Best regards,

Jean-Lionel Lacour