

Dear editor,

We thank you for this feedback and we submit a new revised version with the following modifications.

Line 616 : « This is consistent with SO2 trends »

Please put 2 in SO2 as a subscript, please verify also elsewhere.

OK, this has been done (line 601 in this new version)

Line 716 : I would put « Clouds » as a generic form.

The title of subsection 6.3 is now “Clouds” (“Cloud” in the precedent version). Please tell us if we did not well understand this request.

Line 1488 : analysis shown that => analysis HAS shown that

OK, this has been corrected (line 1454 in this new version)

*Line 1525 : Figure C.1: « Logarithm of the number of back-trajectories points arriving at the summit of the PUY station for the 2015-2016 whole period. The white circle has a radius of 20 km and illustrates the category "Near" of Table C1, and the black lines separates the different sectors. »
black lines separate without « s »*

OK, this has been corrected (line 1491 in this new version)

the logarithmic scale is not entirely clear . Is it decadal or natural logarithme ? In the first case , on would have 0 exp10 data points. How many data points are there in total.

We used the matlab log function which is the natural logarithm.

The total number of back-trajectory points is $6.3 \cdot 10^6$ and the largest number of points in a 0.5° square is $4.2 \cdot 10^5$. The upper limit of the colorbar (red) is fixed with this last value.

The caption has been completed with this information.

$\log(4.2 \cdot 10^5) = 12.937$, and $\exp(12.937) = 4.4 \cdot 10^5$

Thank you again for your work to process this paper. We are very pleased with this happy end after a long process!

Best regards,

Jean-Luc Baray and Laurent Deguillaume