Atmos. Meas. Tech. Discuss., 5, C2651-C2652, 2012

www.atmos-meas-tech-discuss.net/5/C2651/2012/ © Author(s) 2012. This work is distributed under the Creative Commons Attribute 3.0 License.



Interactive comment on "Improved mixing height monitoring through a combination of lidar and radon measurements" by A. D. Griffiths et al.

Anonymous Referee #2

Received and published: 24 October 2012

This work is really interesting and it is really useful to get more information from two different system in order to complement them. I think it needs some corrections before to be pramt-2012-172esented. I found it quite difficult to read because many interesting concepts This work is really interesting and it is really useful to get more information from two different system in order to complement them. I think it needs some corrections before to be presented. I found it quite difficult to read because many interesting concepts are not properly explain and more reference are needed when some scientific sentences are pronounced.

1) The campaign was just in a Spring season period and this should be indicated some where for peculiar radon behaviour at each season.

C2651

- 2) You assume a initial constant radon flux around your site and you make a final nocturnal radon flux correction. I think it could be also interesting to measure the radon flux at that site by alphaGUARD monitor during diurnal and nocturnal hour in order to be compared with your results.
- 3) The Figure 3 is not really clear and it should be explained better because I did not understand the difference between upper part and bottom part. The upper atmospheric radon concentration seems to decrease between 22.00 and 2.00 gmt. it seems to be a bit strange because it should be included in the accumulation period. Any idea?
- 4) Fig 4 IN the panel B the scale seems to be too small are not properly explain and more reference are needed when some scientific sentences are pronounced.
- 1) The campaign was just in a Spring season period and this should be indicated some where for peculiar radon behaviour at each season.
- 2) You assume a initial constant radon flux around your site and you make a final nocturnal radon flux correction. I think it could be also interesting to measure the radon flux at that site by alphaGUARD monitor during diurnal and nocturnal hour in order to be compared with your results.
- 3) The Figure 3 is not really clear and it should be explained better because I did not understand the difference between upper part and bottom part. The upper atmospheric radon concentration seems to decrease between 22.00 and 2.00 gmt. it seems to be a bit strange because it should be included in the accumulation period. Any idea?
- 4) Fig 4 IN the panel B the scale seems to be too small

Please also note the supplement to this comment: http://www.atmos-meas-tech-discuss.net/5/C2651/2012/amtd-5-C2651-2012-supplement.pdf

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 6835, 2012.