Minor comments

page 5, line 11: "geomagnetic"
→ Corrected

page 8, line 12: "oxide aluminium" should be "oxidized aluminium" or "aluminium oxide".
→ Changed to aluminium oxide

page 13, line 8: "are" should be "as"?
→ Corrected

page 13, line 14: Instead of "... Lyman-alpha, where most of the O2 absorption occurs", I suppose it should read "... Lyman-alpha, where most of the O2 transmission occurs".
→ Not changed. O2 absorption band is around Lyman-alpha. The adjusted yield is larger at Lyman-alpha to compensate for the O2 absorption at this wavelength, hence increasing the photocurrent.

page 13, line 18: I do not find it motivated to specify the altitude-dependence of the residual in figure 12 as "sinusoidal".
→ Removed