Explanatory Document
-the necessity of changing the unit of $\alpha\epsilon^{2/3}$

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Dear Editors,

We admit that we have made a mistake in the unit of one parameter used in our paper. This parameter is denoted as $\alpha\epsilon^{2/3}$. In our paper, the wrong unit "ms^{-2}" was used, but the correct one should be "$\mathrm{m}^{4/3}\mathrm{s}^{-2}$". Details derivation below:

In Mann model [Man94], the Von Kármán [vK48] energy spectrum is used which has the following expression:

$$E(k) = \alpha\epsilon^{2/3}L^{5/3}\frac{(Lk)^4}{(1+(Lk)^2)^{17/6}}, \tag{1}$$

where L is the turbulence length scale with a unit in "m" and k is the wavenumber with a unit in "m^{-1}". Since the unit of the turbulent velocity energy spectrum $E(k)$ is "$\mathrm{m}^2\mathrm{s}^{-2}$ per m^{-1}" or "$\mathrm{m}^3\mathrm{s}^{-2}$". The unit of $\alpha\epsilon^{2/3}$ then must be

$$\frac{m^3s^{-2}}{m^{5/3}} = m^{4/3}s^{-2}. \tag{2}$$

We are sincerely sorry for this mistakes and for any inconvenience caused by this. We wish this could be corrected.

References

[Man94] Jakob Mann. The spatial structure of neutral atmospheric surface-layer turbulence. *Journal of fluid mechanics*, 273:141–168, 1994.

[vK48] T. von Kármán. Progress in the statistical theory of turbulence. *Proceedings of the National Academy of Sciences of the United States of America*, 34(11):530–539, 1948.