Comments on 'Quantitative evaluation of numerical integration schemes for Lagrangian particle dispersion models'

This is a well written and informative paper concerning the numerical integration of a class of stochastic differential equations commonly used in atmospheric dispersion models using different numerical methods. These methods are compared both with each other and the results of the corresponding Fokker-Planck equation and the numerical solution of an appropriate diffusion equation (or random walk model). The authors' results provide a useful benchmark for selecting an appropriate numerical method and as such are likely to have widespread application. I have a few minor comments.

Minor comments

p.4 End of first line of §2.2 (l.6): delete extra 'the'.

p.4 Beginning of §2.2: it would be useful to define ω.

p.5 l.16: I think it would be useful to state explicitly what the initial conditions for C_k are.

p.6 Regarding equation (6) and the preceding text: the random walk model or diffusion equation is only a well-justified approximation of a Lagrangian particle dispersion model (equation (1)) for small τ.

p.9 Line 23 and again in the caption to figure 5: is it necessary to include '1' in $t = 1h/u_*$?

p.11 Appendix A: you may wish to consider quoting the result for $\int_{-\infty}^{\infty} \mathrm{e}^{-\omega^2/2}\mathrm{He}_k(\omega)\,\mathrm{d}\omega$ which I found useful.

Fig. 1 Fig. 1 is not referred to until p. 10 (l. 3). Did the authors mean to refer to the figure earlier in the study?