

Interactive comment on “Quantitative evaluation of numerical integration schemes for Lagrangian particle dispersion models” by H. Mohd. Ramli and J. G. Esler

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Thank you for the encouraging and positive review. A point-by-point response follows:

1. **Pg. 4. Typo.** Fixed, thank you.
2. **Pg. 4. Definition of ω .** After equation (3) we have added the sentence ‘Explicitly here $\omega = w/\sigma_w$.’
3. **Pg. 5. I. 16 Re: Explicit statement of initial conditions:** We have added an equation at this point explicitly stating the initial conditions.

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4. **Pg. 6 Equation (16) Re: Random walk model:** We have added a comment in the text after equation 16:
‘Note that the RDM model can be derived formally from the LPDM in the distinguished limit of short decorrelation time, $\sigma_w \rightarrow \infty$, $\tau \rightarrow 0$ with $\sigma_w^2 \tau = \kappa$ finite (see sec. 6.3 of Rodean, 1996).’
5. **Pg. 9 I. 23 and Fig 5 typos..** Fixed, thanks.
6. **Appendix A, integral identity.** We have added the sentence and equation ‘Notice that a special case of (A3), for $j = 0$, is the integral identity $\int_{-\infty}^{\infty} \text{He}_k(\omega) e^{-\omega^2/2} d\omega = 0$, ($k \geq 1$).’
7. **Failure to reference Fig. 1 .** Thank you for spotting this! We have added to the sentence on pg. 3. I. 29.
‘The details of the profiles used are given in Table 1 and are plotted in Fig. 1.’