

## Errata sheet

This errata sheet lists errors and their corrections for the doctoral thesis of Johan Fries, titled "Mixing and Evaporation at the Cloud Edge and Angular Dynamics of Small Crystals in Viscous Flow", University of Gothenburg, 2022. ISBN: 978-91-8009-628-7.

- In the Abstract "... analyze of the multiscale ..." should be replaced by "... analyze the multiscale ...".
- The reference to my licentiate thesis in the preface section "Already published material in this thesis" is missing. The reference is: Fries, J 2021 *Droplets and Crystals in Inhomogeneous Flow*. Licentiate thesis, University of Gothenburg.
- On page 44 "... variance of a passive-scalar variance ..." should be replaced by "variance of a passive scalar".
- On page 45 "It gives the exponential decay  $\sigma^2(t) \sim e^{-C_\phi t}$  ..." should be replaced by "It gives the exponential decay  $\sigma^2(t) \sim e^{-C_\phi \frac{\epsilon}{\Gamma \kappa E} t}$  ...".
- On page 51 the sentence "The factor  $\kappa J(t)^2$  in Eqs. (3.14) and (3.15) is given by Eq. (3.5), where the supersaturation dissipation rate  $\varepsilon_s(t)$  ..." should be replaced by "The factor  $\kappa J(t)^2$  in Eqs. (3.14) and (3.15) is given by Eq. (3.5), where the mapping  $X(\eta, t)$  is replaced by the mapping  $X_0(\eta, t)$  for a passive scalar [evaluated using Eq. (3.15) with  $A_2 = 0$ ], and the supersaturation dissipation rate  $\varepsilon_s(t)$  ...". All statistical-model simulations in Section 3.2.5 are for factors  $\kappa J(t)^2$  computed in this way.
- Eq. (3.16e) should be replaced by:

$$\langle C_d(t) | s = X \rangle = X \frac{\chi}{f_s(X; t)} \int R \mathcal{F}_{sr^2}(X, R^2; t) dR^2. \quad (\text{E.1})$$

- In the caption of Fig. (3.3) "... simulations with  $\text{Da}_s > 0$ ." should be replaced by "... simulation with  $\text{Da}_s > 0$ ."
- The thick opaque lines in Fig. (3.4a) are not described in the caption of Fig. (3.4). "Also shown is  $\mathcal{F}_s(S; t)$  for a passive scalar (thick opaque lines), obtained at  $\text{Da}_s = 0$  and  $\text{Da}_d = 0.75$ ." should be inserted before "(b) Steady-state ..." in caption of Fig. (3.4).
- On page 58 "...  $\langle C(t) | s(\mathbf{x}, t) = S \rangle$  ..." should be replaced by "...  $\langle C_d(t) | s = S \rangle$  ...".
- On page 77 "... like Eq. (2.1) for supersaturation ..." should be replaced by "... like Eq. (2.1c) for supersaturation ...".
- On page 78 "...  $\langle C(t) | s = S \rangle$  ..." should be replaced by "...  $\langle C_d(t) | s = S \rangle$  ...".