

CORRIGENDUM

Direct numerical simulation of gaseous mixing layers laden with
multicomponent-liquid drops: liquid-specific effects

BY PATRICK C. LE CLERCQ AND JOSETTE BELLAN

Journal of Fluid Mechanics, vol. 533 (2005), pp. 57–94

The reader should be aware of the following typographical errors in equation (2.6):

1. The second component of vector $\Psi(\Phi)$ is $-p\delta_{ij} + \tau_{ij}$, not $p\delta_{ij} - \tau_{ij}$.
2. The third component of vector $\Psi(\Phi)$ is $-pu_j + u_i\tau_{ij} + \lambda\frac{\partial T}{\partial x_j} - \sum_{\zeta=1}^N J_{D\zeta,j}(h_\zeta - h_a)$
not $-u_i\tau_{ij} - \lambda\frac{\partial T}{\partial x_j} + \sum_{\zeta=1}^N J_{D\zeta,j}(h_\zeta - h_a)$.

Thus, the correct equation reads

$$\Psi(\Phi) = \left\{ cm\mathcal{D}\frac{\partial}{\partial x_j} \left[\frac{X_v}{m} \left(1 - \frac{\theta_v}{m_a} \right) \right], -p\delta_{ij} + \tau_{ij}, -pu_j + u_i\tau_{ij} + \lambda\frac{\partial T}{\partial x_j} \right. \\ \left. - \sum_{\zeta=1}^N J_{D\zeta,j}(h_\zeta - h_a), cm\mathcal{D}\frac{\partial}{\partial x_j} \left(\frac{X_v}{m} \right), cm\mathcal{D}\frac{\partial}{\partial x_j} \left(\frac{X_v\theta_v}{m} \right), cm\mathcal{D}\frac{\partial}{\partial x_j} \left(\frac{X_v\psi_v}{m} \right), \right. \\ \left. cm\mathcal{D}\frac{\partial}{\partial x_j} \left(\frac{X_v\xi_{3v}}{m} \right), cm\mathcal{D}\frac{\partial}{\partial x_j} \left(\frac{X_v\xi_{4v}}{m} \right) \right\}.$$

Also, the affiliation of the first author is Caltech, and of the second author is both JPL and Caltech.