

Erratum to “impact of burner plenum acoustics on the sound emission of a turbulent lean premixed open flame”

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In the above-referenced article, the correct version of the equations (2), (7), (8), (9), (15), (16), (17), (18), and (20) are below:

$$\underline{\mathbf{H}} = \underline{\mathbf{H}}^i - \underline{\mathbf{H}}^v = \begin{pmatrix} \rho \mathbf{v} \\ \rho \mathbf{v} \mathbf{v} \\ \mathbf{v}(\rho E + p) \\ \rho \mathbf{v} c \end{pmatrix} + \frac{1}{Re_0} \begin{pmatrix} 0 \\ \underline{\boldsymbol{\tau}} \\ \underline{\boldsymbol{\tau}} \mathbf{v} + \mathbf{q} \\ \mathbf{J}_c \end{pmatrix} \quad (2)$$

$$\dot{\mathbf{W}} = (0, \mathbf{0}, \mathcal{Q}\overline{\omega}_c, \overline{\omega}_c)^T \quad (7)$$

$$\frac{\partial \check{G}}{\partial t} + \left(\tilde{\mathbf{v}} + \frac{\rho_{\infty, u}}{\bar{\rho}} \hat{s}_{t, u} \check{\mathbf{n}} \right) \cdot \nabla \check{G} = 0 \quad (8)$$

$$\check{\mathbf{n}} = -\frac{1}{|\nabla \check{G}|} (\partial \check{G} / \partial x, \partial \check{G} / \partial y, \partial \check{G} / \partial z)^T \quad (9)$$

$$\frac{\partial p^a}{\partial t} + \overline{a^2} \nabla \cdot \left(\bar{\rho} \mathbf{v}^a + \bar{\nabla} \frac{p^a}{a^2} \right) = \overline{a^2} q_c + q_e - \underbrace{\overline{a^2} \nabla \cdot (\bar{\nabla} \rho_e)}_{q_{c\&e}} \quad (15)$$

$$\frac{\partial \mathbf{v}^a}{\partial t} + \nabla (\bar{\nabla} \cdot \mathbf{v}^a) + \nabla \left(\frac{p^a}{\bar{\rho}} \right) = \mathbf{q}_m \quad (16)$$

$$q_c = -\nabla \cdot (\rho' \mathbf{v}')' \quad (17)$$

$$q_e = \frac{\partial p'}{\partial t} - \overline{a^2} \frac{\partial \rho'}{\partial t} \quad (18)$$

$$\mathbf{q}_m = (\boldsymbol{\omega} \times \mathbf{v})' - \nabla k' + \nabla \left(\frac{p'}{\bar{\rho}} \right) - \left(\frac{\nabla p}{\bar{\rho}} \right)' + \left(\frac{\nabla \cdot \underline{\boldsymbol{\tau}}}{\bar{\rho}} \right)' \quad (20)$$