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Corrigendum to "On a continuum-mechanical theory for turbulence"

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The paper referenced above contains several errors. Said errors should be corrected as indicated below.

(1) The representations $(14)_1$ for the traction $\mathbf{t}_{\mathcal{S}}$ and $(14)_2$ for the hypertraction $\mathbf{m}_{\mathcal{S}}$ exerted on a surface $\mathcal{S}$ with unit normal $\mathbf{n}$ should be replaced by

$$\mathbf{t}_{\mathcal{S}} = \mathbf{T}\mathbf{n} - \operatorname{div}_{\mathcal{S}}(\mathbf{G}\mathbf{n}\times) + \mathbf{n}\times(\operatorname{div}\mathbf{G} + 2H\mathbf{G}\mathbf{n}), \tag{C1}$$

and

$$\mathbf{m}_{\mathcal{S}} = (\mathbf{G}\mathbf{n})\times\mathbf{n}. \tag{C2}$$

(2) The free-surface condition $(30)_1$ should be replaced by

$$\mathbf{T}\mathbf{n} - \operatorname{div}_{\mathcal{S}}(\mathbf{G}\mathbf{n}\times) + \mathbf{n}\times\operatorname{div}\mathbf{G} = 2\sigma H\mathbf{n}, \tag{C3}$$

while the supplemental condition (32) on a fixed surface without slip should be replaced by

$$(\mathbf{G}\mathbf{n})\times\mathbf{n} = \mathbf{m}^{\mathrm{env}}_{\partial B}. \tag{C4}$$

(3) Consistent with (C4), the wall-eddy condition (34) should be replaced by

$$(\mathbf{G}\mathbf{n} - \mu\ell\boldsymbol{\omega})\times\mathbf{n} = \mathbf{0}. \tag{C5}$$