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CORRECTION

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Correction to: Comparison between thick level set (TLS) and cohesive zone models

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Correction

In the publication of this article [1], there was an error in some equations.

- Equation (37) should instead read:

$$\hat{\sigma} = F(\lambda I \hat{\sigma}) \quad \text{and} \quad \int_{\tilde{\phi}=0}^{\hat{\ell}} h(\tilde{\phi}) d\tilde{\phi} = -g'_{\text{dam}}(0) \frac{1 - g_{\text{dam}}(d(\hat{\ell}))}{g_{\text{dam}}(d(\hat{\ell}))} \hat{\sigma}^2 \quad (1)$$

- Equation (38) should instead read:

$$\hat{\sigma} = F(\lambda I \hat{\sigma}) \quad \text{and} \quad \int_0^{\hat{\phi}} h(\tilde{\phi}) d\tilde{\phi} = -g'_{\text{dam}}(0) \frac{1 - g_{\text{dam}}(d(\hat{\phi}))}{g_{\text{dam}}(d(\hat{\phi}))} \hat{\sigma}^2 \quad (2)$$

- Equation (45) should instead read:

$$\hat{\sigma} = F(\lambda I \hat{\sigma}) \quad \text{and} \quad \int_0^{\hat{\phi}} h(\tilde{\phi}) d\tilde{\phi} = \frac{d(\hat{\phi})}{1 - d(\hat{\phi})} \hat{\sigma}^2 \quad (3)$$

- Equation (49) should instead read:

$$\hat{\sigma} = F\left(\lambda \frac{\hat{\phi}^2}{1 - \hat{\phi}} \hat{\sigma}\right) \quad \text{and} \quad \int_0^{\hat{\phi}} h(\tilde{\phi}) d\tilde{\phi} = \frac{2\hat{\phi} - \hat{\phi}^2}{(\hat{\phi} - 1)^2} \hat{\sigma}^2 \quad (4)$$

- Equation (50) should instead read:

$$\hat{\sigma}(\hat{\phi}) = \frac{1 - \hat{\phi}}{1 - \hat{\phi} + \lambda \hat{\phi}^2} \quad \text{and} \quad \int_0^{\hat{\phi}} h(\tilde{\phi}) d\tilde{\phi} = \frac{2\hat{\phi} - \hat{\phi}^2}{(1 - \hat{\phi} + \lambda \hat{\phi}^2)^2} \quad (5)$$

- Equation (63) should instead read:

$$H(\hat{\phi}) = \int_0^{\hat{\phi}} h(\tilde{\phi}) d\tilde{\phi} \quad (6)$$

- Equation (65) should instead read:

$$\lambda \leq \frac{1}{2} \quad (7)$$

- Equation (70) should instead read:

$$\mu_n = \min_{\Gamma} \sqrt{\frac{(h(d)Y_c)_n}{\bar{Y}_n}} \quad (8)$$

- In Eq. (75), the expression of β_n should instead read:

$$\beta_n = Y_c \frac{\int_{\phi=0}^{\ell} h'(d) \left(\frac{d'(\phi/\ell_c)}{\ell_c} \right)^2 \left(1 - \frac{\phi}{\rho(s)} \right) d\phi}{\int_{\phi=0}^{\ell} \frac{d'(\phi/\ell_c)}{\ell_c} \left(1 - \frac{\phi}{\rho(s)} \right) d\phi} \quad (9)$$

- Equation (76) should instead read:

$$\Delta\mu_n^{\text{pred}} < \frac{\Delta\phi_{\max}\beta_n - f_n}{\alpha_n} \quad (10)$$

- Equation (77) should instead read:

$$\Delta\mu_n^{\text{pred}} = \min_{\Gamma} \frac{\Delta\phi_{\max}\beta_n - f_n}{\alpha_n} \quad (11)$$

- Equation (78) should instead read:

$$\mu^{\text{corr}} = \sqrt{\frac{(h(d)Y_c)_n}{\bar{Y}_n}} \Big|_{\arg \min_{\Gamma} \frac{\Delta\phi_{\max}\beta_n - f_n}{\alpha_n}} \quad (12)$$

This has now been included in this erratum.

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Reference

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