



Corrigendum

Corrigenda to “Re-polarization of elastic waves at a frictional contact interface – I. Incidence of an SH wave; II. Incidence of an P or SV wave” [International Journal of Solids and Structures 35 (16) (1998) 2001–2021; 36 (30) (1999) 4563–4586] [☆]

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The discussion of the special case, $A_0 = 0$, in part II of the above referenced series paper (page 4570) involves a mistake. In this case, separation zone may occur although the incident wave does not generate normal interface traction. Set

$$\tilde{V}_2 = \frac{\mu B_0^{-1}}{c_L a} V_2. \quad (1)$$

The solution in the separation zones may be written as

$$\tilde{V}_2(\eta) = -a^{-1}(\lambda_2 p_0/B_0 + \lambda_1 q_0/B_0) - a^{-1} \lambda_1 \sin \eta, \quad (2)$$

$$\bar{U}_1 - \bar{V}_1(\eta) = -a^{-1}(\lambda_1 p_0/B_0 - \lambda_3 q_0/B_0) - a^{-1} \lambda_3 \sin \eta, \quad (3)$$

$$\bar{U}_3 - \bar{V}_3(\eta) = -\alpha^{-1} \tau_0/B_0. \quad (4)$$

In the slip zones, Eqs. (55) and (56) still hold. Fortunately this mistake has no influence on the numerical results presented in the paper. It is noted that $\lambda_1 = 0$, and therefore $N(\eta) = -p_0$ along the whole interface for the case of identical materials. This implies that no local separation takes place.

A mistake occurs in writing expressions of the corrective solutions (Eq. (25) in parts I and II). The term $\{U_1 t, 0, U_3 t\}$ should be excluded from these expressions. It should be added to the total displacement fields, $\sum_{n=3,4,4'} \bar{\mathbf{u}}^{(n)}$, of the upper half space. This is only a writing error which has no influence on the following derivation.

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There are two typing errors in part II:

- (1) In item (ii) below Eq. (84), “ $\textcircled{H}^+ \leq 1$ or $\textcircled{H} \leq 1$ ” should be “ $\textcircled{H}^+ \leq -1$ or $\textcircled{H} \leq -1$ ”;
- (2) In Eq. (76), a plus sign “+” should be inserted between “ \overline{U}_1 ” and “ $\sin \eta$ ”.