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Corrigendum

Dynamic Point Sources in laminated media via the thin layer method by E. Kausel, International Journal of Solids and Structures 36 (1999) 4725-4742

The paper contains a conceptual error that affects some equations, but not the results, tables or examples. The central issue is that in a laminated medium, the Green's functions do not solely depend on the relative position $\mathbf{r}-\mathbf{r}_0$ of the receiver and the source, but on their absolute position. Hence, the expressions given for the dipoles necessitate an extra parameter, which is the location of the point source. Let \mathbf{r} , \mathbf{r}_0 be the position vectors for the receiver and the source, respectively. Eqs. (5) and (6) then change into

$$\mathbf{u} = P[\mathbf{g}(\mathbf{r}, \mathbf{r}_0 - \mathbf{a}) - \mathbf{g}(\mathbf{r}, \mathbf{r}_0 + \mathbf{a})]$$
(5')

$$\mathbf{g}(\mathbf{r}, \mathbf{r}_0 + \mathbf{a}) = \mathbf{g}(\mathbf{r}, \mathbf{r}_0) + \mathbf{a} \cdot \nabla \mathbf{g} + O(a^2). \tag{6'}$$

In the second expression, the gradient operator entails differentiation with respect to the spatial coordinates (x',y',z') of the source, not the receiver. However, since the paper dealt with horizontally laminated media that are laterally homogeneous, only the derivatives with respect to the vertical direction are affected. This in turn requires replacing z by z' in Eqs. (12) and (13), and vice versa in Eq. (14).

Admittedly, this error was known to the author before publication, and indeed the test program and the examples presented were free of this problem. The author regrets this oversight when preparing the final copy.

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