ERRATUM

Earthquake Ground-Motion Prediction Equations for Eastern North America

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In our recent ground-motion article (Atkinson and Boore, 2006), equation (6) describes an adjustment factor that can be applied to our ground-motion prediction equations to accommodate a factor of 2 difference in stress drop from our preferred value of 140 bars. The text following this equation describes how the factor may be scaled to accommodate other stress parameter values. This allows the user to adjust the equations for any arbitrary stress parameter of their choosing (within the tested range from 35 to 560 bars). The descriptive text of how the scaling should work is in error. The scale factor that multiplies $\log SF_2$ should be as follows:

$$\text{Scale factor} = \log(\text{stress}/140) / \log(2).$$

Thus the scale factor by which we multiply $\log SF_2$ (where $\log SF_2$ is as given in equation 6) has a value of 0 for stress $= 140$, a value of $+1$ for stress $= 280$, and a value of -1 for stress $= 70$. For the example given in the text of a desired stress of 210 bars, the factor is $\log(210/140)/\log(2) = 0.58$. In this case, we would add $0.58 \log SF_2$ to the predicted log PSA values.

Acknowledgments

References

Atkinson, G., and D. Boore (2006). Ground motion prediction equations for earthquakes in eastern North America, *Bull. Seism. Soc. Am.* **96,** 2181–2205.