CORRIGENDUM

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Earthquakes triggered by silent slip events on Kilauea volcano, Hawaii

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There was a plotting error in Fig. 1 that inadvertently displays earthquakes for the incorrect time interval. The location of earthquakes during the two-day-long slow-slip event of January 2005 are shown here in the corrected Fig. 1. Because the incorrect locations were also used in the Coulomb stress-change (CSC) calculation, the error could potentially have biased our interpretation of the depth of the slow-slip event, although in fact it did not. Because nearly all of the earthquakes, both background and triggered, are landward of the

Figure 1 | Displacements and inferred slip zones for four silent slip events. a, Map view. Vectors indicate displacements determined as the difference between mean position before and after the event. Ellipses represent 95% confidence intervals. Rectangles show surface projections of best-fitting dislocations found by nonlinear optimization, using a simulated annealing procedure. Asterisks represent earthquakes during the 2.2 days of the slow-slip event beginning 00 h UTC on 26 January 2005. b, Cross-section. Dashed lines represent dislocations from inversion of Global Positioning System (GPS)-derived displacements. The solid red line indicates the 2005 event with depth constrained by seismicity. GPS station location names are given by their abbreviations.

slow-slip event and at similar depths (6.5–8.5 km), the impact on the CSC calculations is negligible (Fig. 2; compare with Fig. 4 in original paper). The error does not alter our conclusion that the triggered events during the January 2005 slow-slip event were located on a subhorizontal plane at a depth of 7.5 ± 1 km. This is therefore the most likely depth of the slow-slip events. We thank Cecily J. Wolfe for pointing out the error in the original Fig. 1.

Figure 2 | Earthquake locations in relation to CSC due to fault slip. a, Triggered earthquakes for the 2.2-day event beginning 00 h UTC on 26 January 2005 and isosurface of constant CSC on horizontal planes. Outside the green surface the stress change encourages slip. For a dislocation surface at a depth of 4–5 km, a majority of the earthquakes fall within the zone of negative CSC. b, Fraction of earthquakes for which CSC < 0 as a function of the depth of the slow-slip event (shown in grey in the original paper, here shown in blue in the corrected figure). The minimum at a depth of 6.5–8.5 km indicates the preferred depth of the slow-slip zone.

CORRIGENDUM

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Atomic-resolution chemical analysis using a scanning transmission electron microscope

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In this Letter, we reported that it was possible to undertake chemical analysis with atomic resolution in a scanning transmission electron microscope—a capability that has subsequently been demonstrated in a variety of other contexts. We now realize that, in the course of revising the manuscript in response to reviewers' comments, errors were introduced into the paper, resulting in inconsistencies in the manner in which key data were presented. In particular, the electron energy-loss spectroscopy (EELS) data central to the work (Fig. 3b) were not subject to the background subtraction processes as described in the paper, despite assurances to the contrary that we offered at the time to both the referees and the *Nature* editors. Rather, we have now concluded that only spectra 5–7 were processed in the manner described; for spectra 1–4, owing to an error, the data were reproduced from ref. 7, where a standard exponential background subtraction was used. The exponential background subtraction method is widely used in the field and is an entirely acceptable method of analysis, and therefore this error in no way affects the key scientific claim of the paper, namely that it is possible to perform atomic-resolution chemical analysis in the scanning transmission electron microscope. We sincerely regret this error and any confusion that may have resulted.