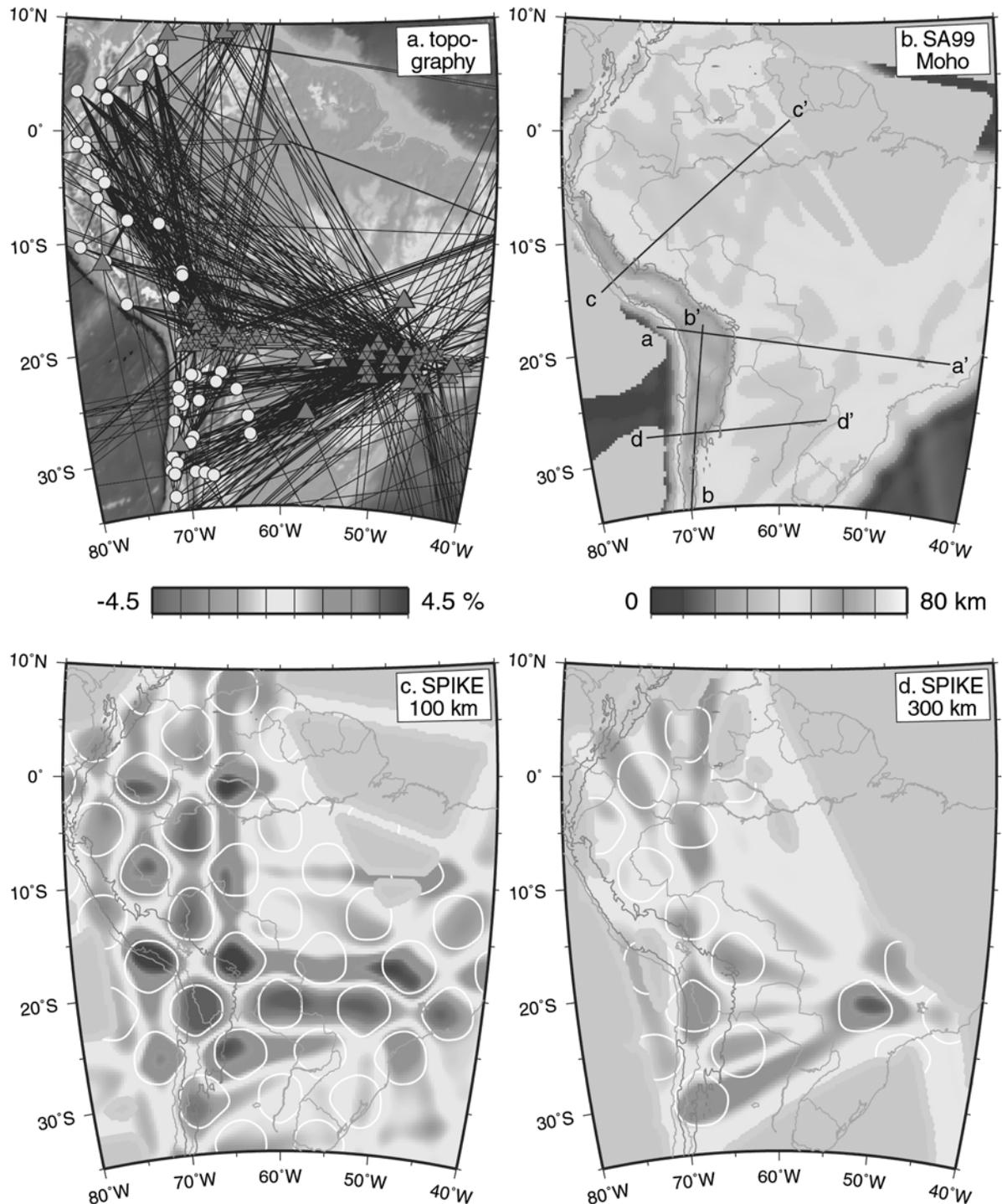


**Correction to “Upper mantle  $S$  velocity structure of central and western South America,”  
by Suzan van der Lee, David James, and Paul Silver**

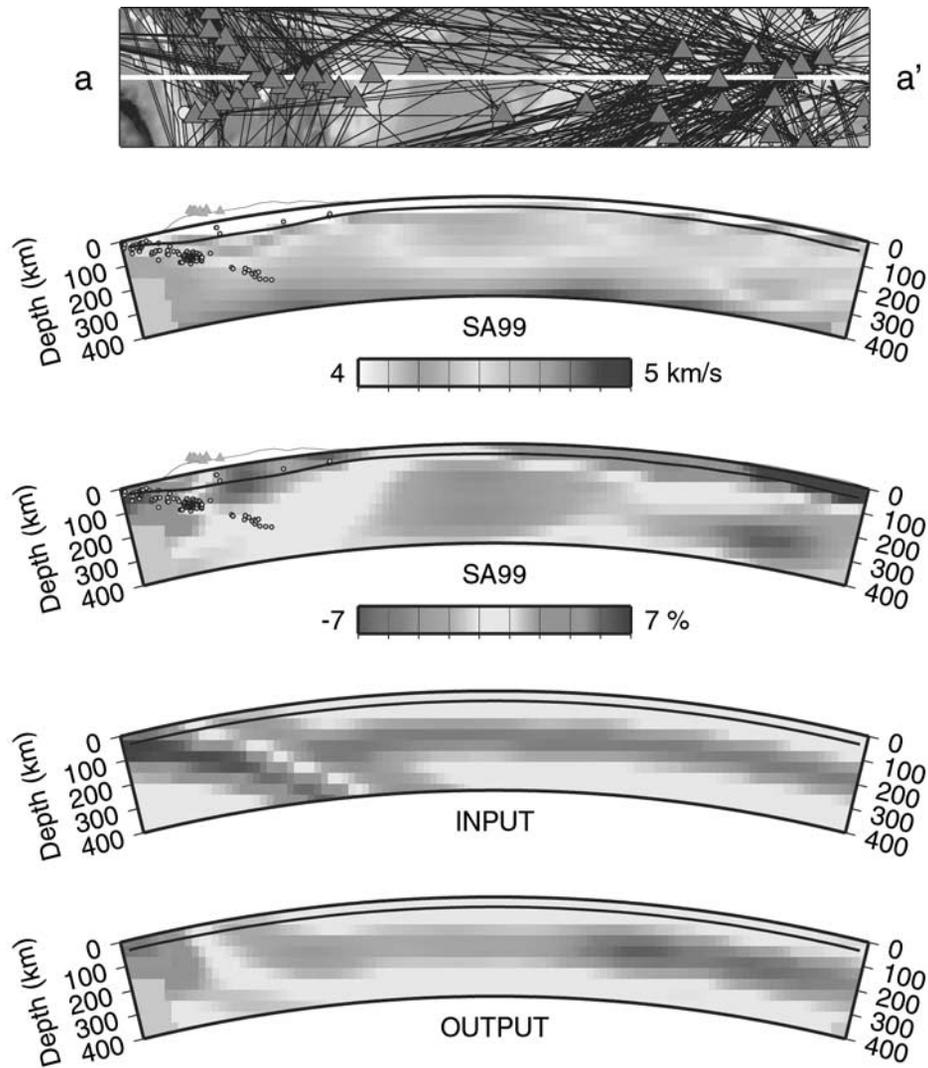
Received 22 March 2002; published 25 May 2002.

*INDEX TERM:* 9900 Corrections

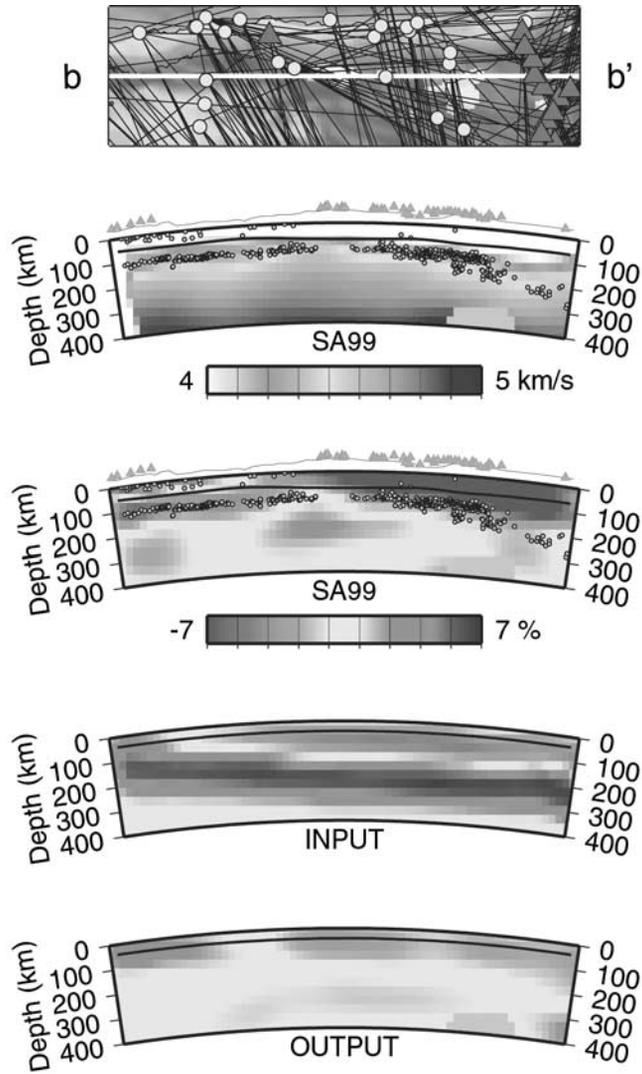
[1] In the paper “Upper mantle  $S$  velocity structure of central and western South America” by Suzan van der Lee, David James, and Paul Silver (*Journal of Geophysical Research*, 106(B12), 30,821–30,834, 2001), Plates 1–3 and Figure 3 were incorrect. The correct plates and figure are published here.



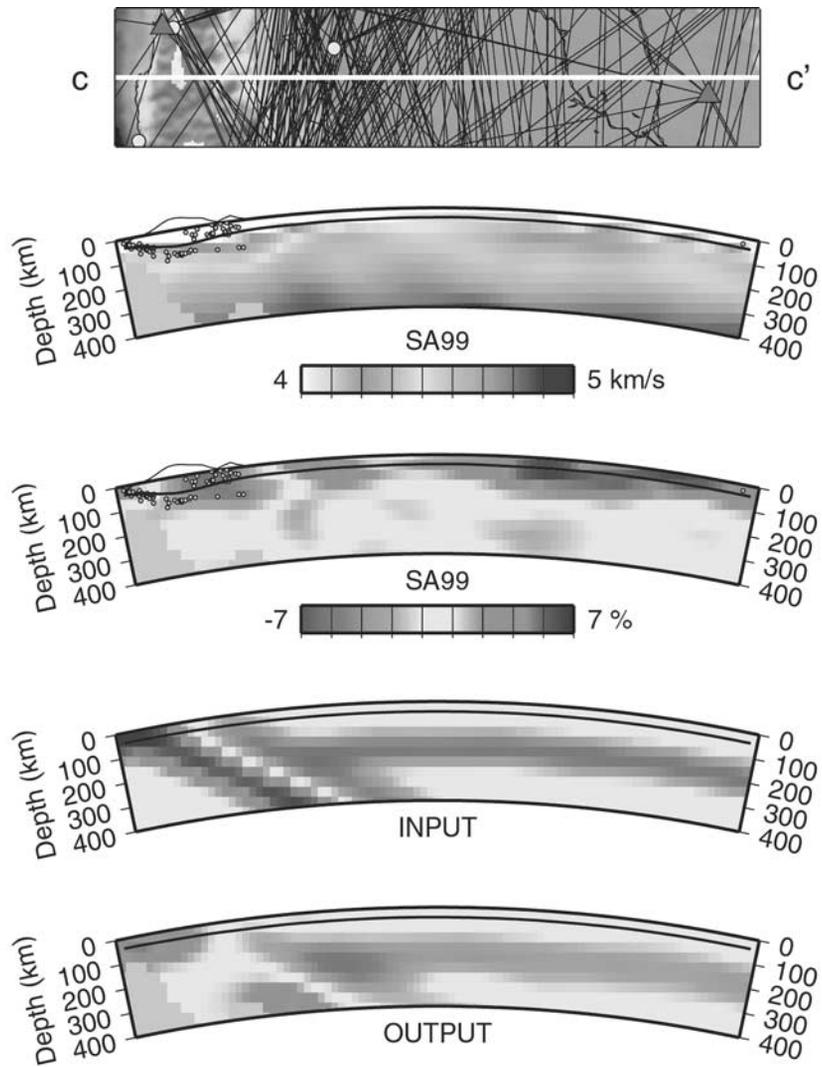
**Plate 1.** (a) Topographic map of South America with the events (yellow circles), stations (red triangles), wave paths (black lines), and receiver function locations (small inverted red triangles) used in the inversion for SA99. (b) Depth to the Mohorovičić (Moho) discontinuity in SA99. The cross sections shown in Plate 2 are taken along the black great circle segments shown on this map. The darker gray contour represents the 2-km elevation contour. (c) Spike resolution test results at 100 km. The input model is represented by the white contours at  $\pm 3.5\%$ . (d) As Plate 1c but at a depth of 300 km and with fewer spikes. See color version of this figure at back of this issue.



**Plate 2a.** Vertical cross section aa' through SA99 and a resolution test, taken along a great circle segment. First panel is a map astride the great circle segment, keyed to the segments mapped in Plate 1b; second panel is a cross section through the absolute  $S$  velocity of SA99; third panel is a cross section through the SA99 anomalous  $S$  velocity relative to iasp91 (the color scale is saturated); fourth panel is a cross section through the input model of the resolution test with a hypothetical mantle structure (which is not designed to imitate SA99 but simply represents one possible concept of realistic mantle structure); and fifth panel is a cross section through the results of this resolution test (resolution does not depend on the sign of the anomaly). The thick black lines represent the Moho. In the second and third panels the thin black line and the gray-lined small orange triangles represent 10 times exaggerated topography and volcanoes, respectively. The gray dots are hypocenters [Engdahl *et al.*, 1998] within  $1^\circ$  of the profile. See color version of this figure at back of this issue.



**Plate 2b.** Same as Plate 2a but for cross section bb'. See color version of this figure at back of this issue.



**Plate 2c.** Same as Plate 2a but for cross section  $cc'$ . See color version of this figure at back of this issue.

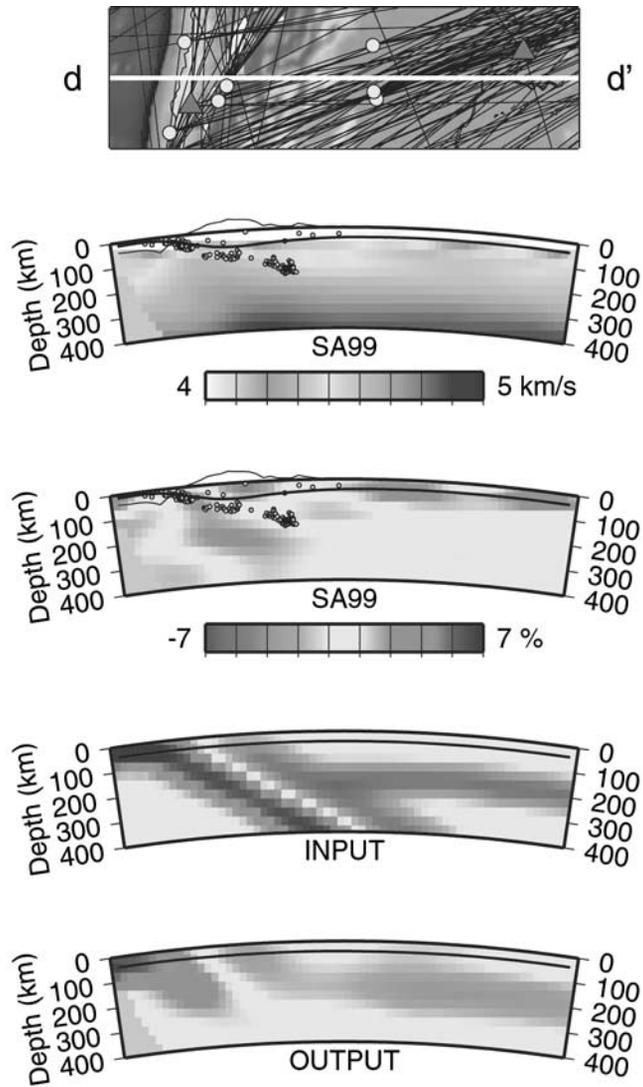
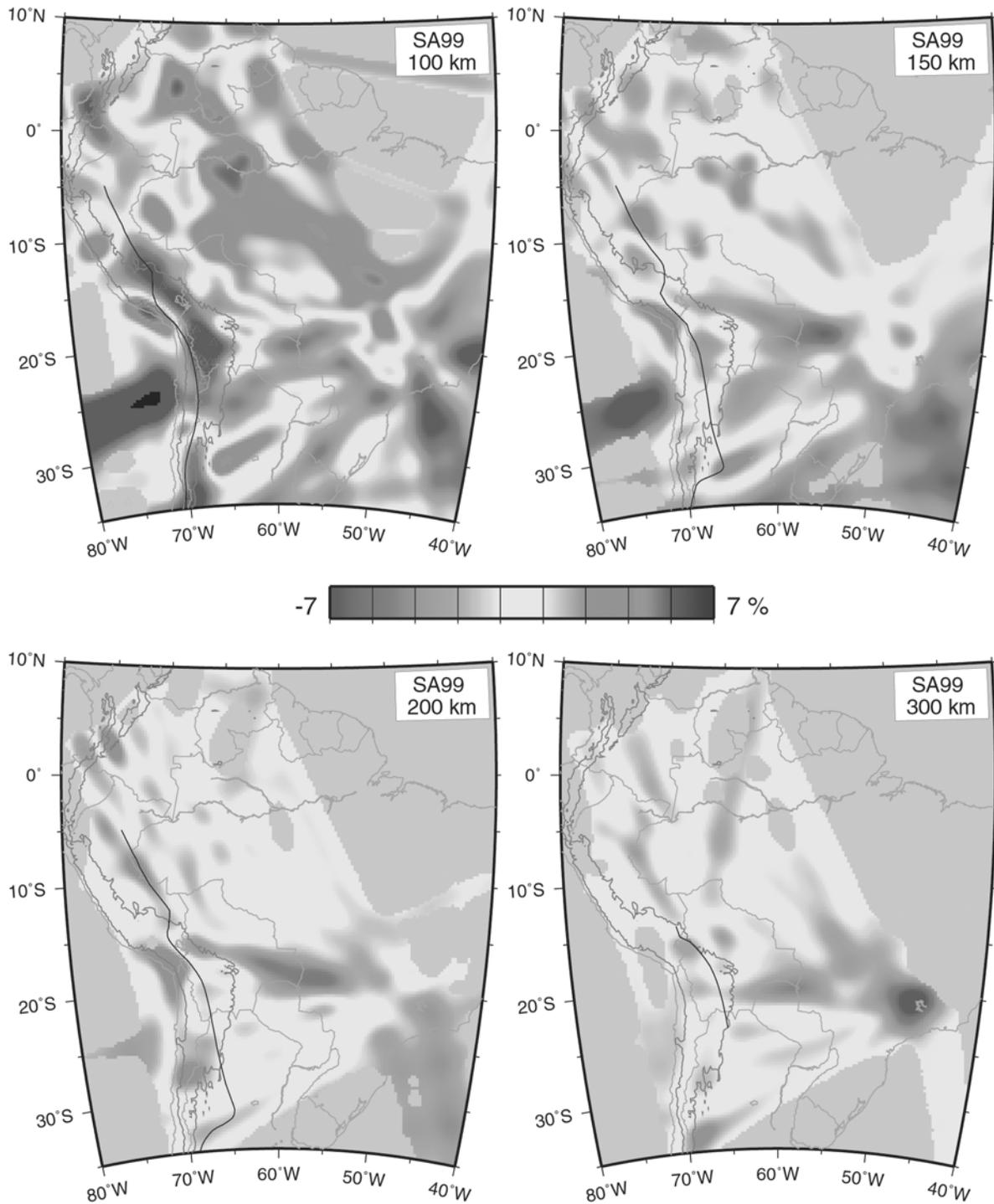
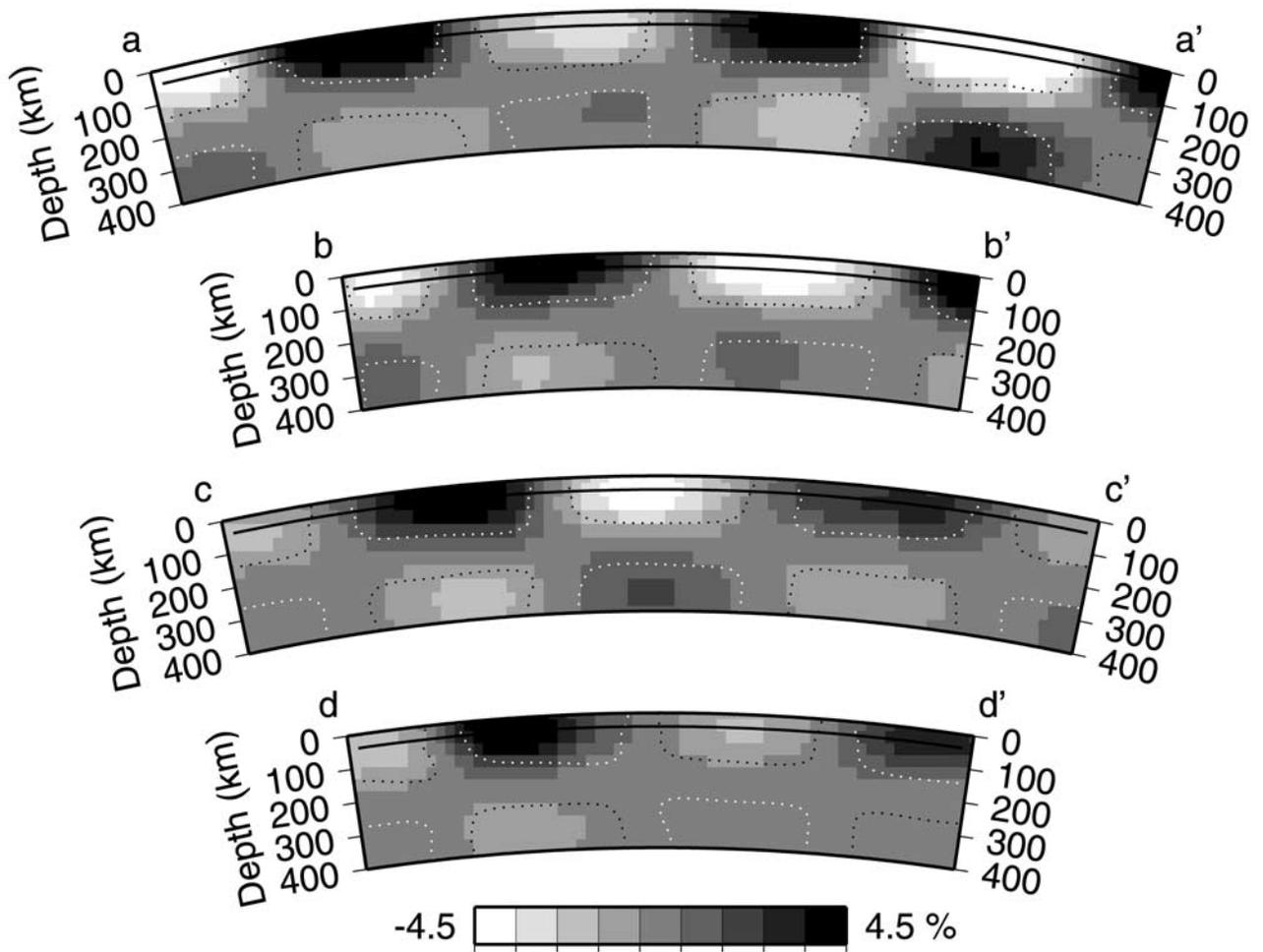


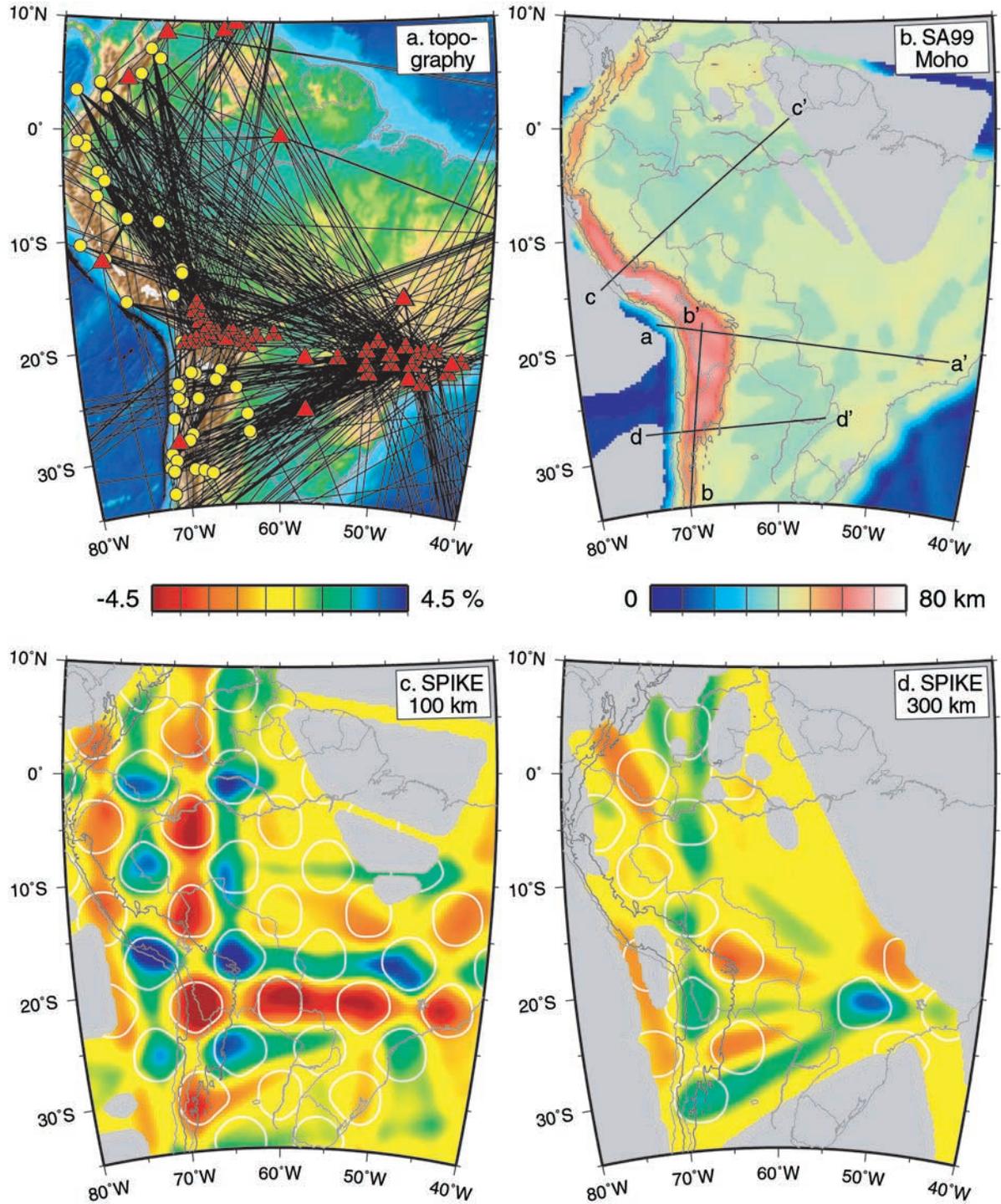
Plate 2d. Same as Plate 2a but for cross section dd'. See color version of this figure at back of this issue.



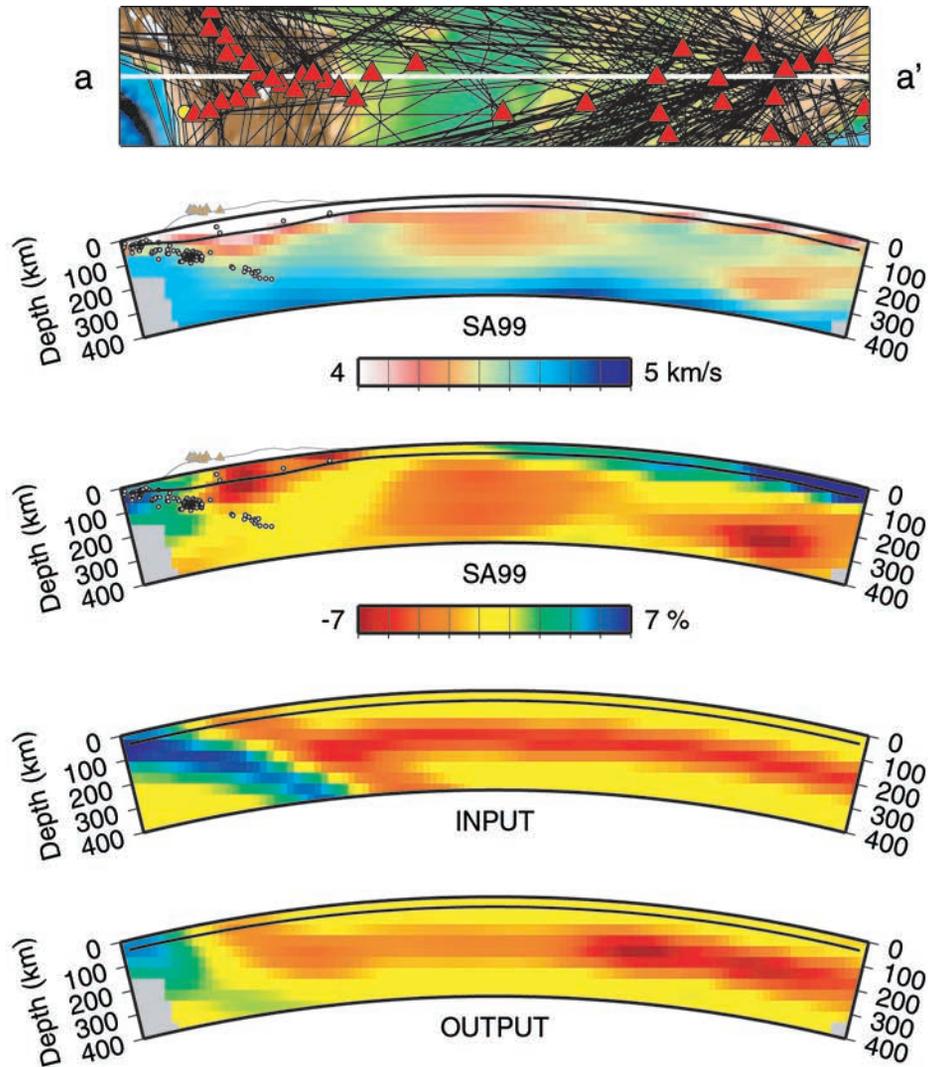
**Plate 3.** SA99 at depths of 100, 150, 200, and 300 km. The 2-km elevation and seismicity [Hagesawa and Sacks, 1981; Cahill and Isacks, 1992] are contoured with thick gray and black lines, respectively. Historical and active volcanoes are represented by a light gray triangles [James and Sacks, 2000]. Areas where our data have negligible sensitivity are gray. The color scale is saturated. Resolution varies laterally (see Plates 1 and 2 and Figure 3). See color version of this figure at back of this issue.



**Figure 3.** The same four vertical cross sections as in Plate 2 but showing the results of a series of spike resolution tests. The  $-3.5\%$  and  $+3.5\%$  levels of the anomalies in the input model are indicated by the white and black dotted contours, respectively. The anomalies of the output model are shaded.



**Plate 1.** (a) Topographic map of South America with the events (yellow circles), stations (red triangles), wave paths (black lines), and receiver function locations (small inverted red triangles) used in the inversion for SA99. (b) Depth to the Mohorovičić (Moho) discontinuity in SA99. The cross sections shown in Plate 2 are taken along the black great circle segments shown on this map. The darker gray contour represents the 2-km elevation contour. (c) Spike resolution test results at 100 km. The input model is represented by the white contours at  $\pm 3.5\%$ . (d) As Plate 1c but at a depth of 300 km and with fewer spikes.



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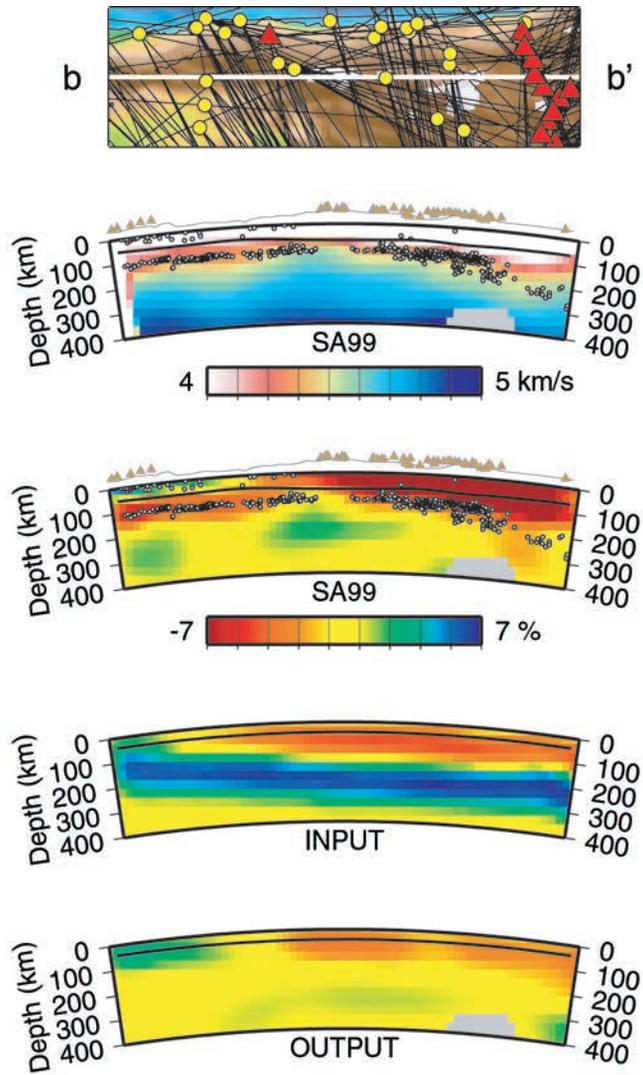


Plate 2b. Same as Plate 2a but for cross section bb'.

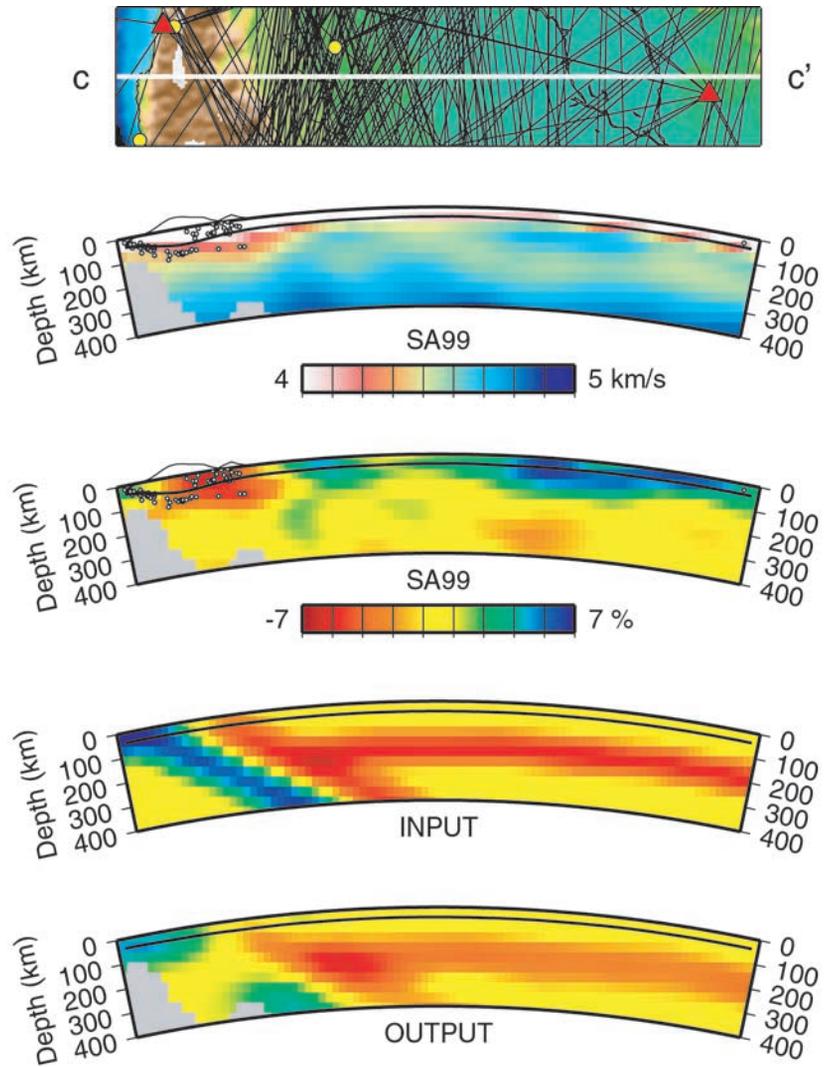


Plate 2c. Same as Plate 2a but for cross section  $cc'$ .

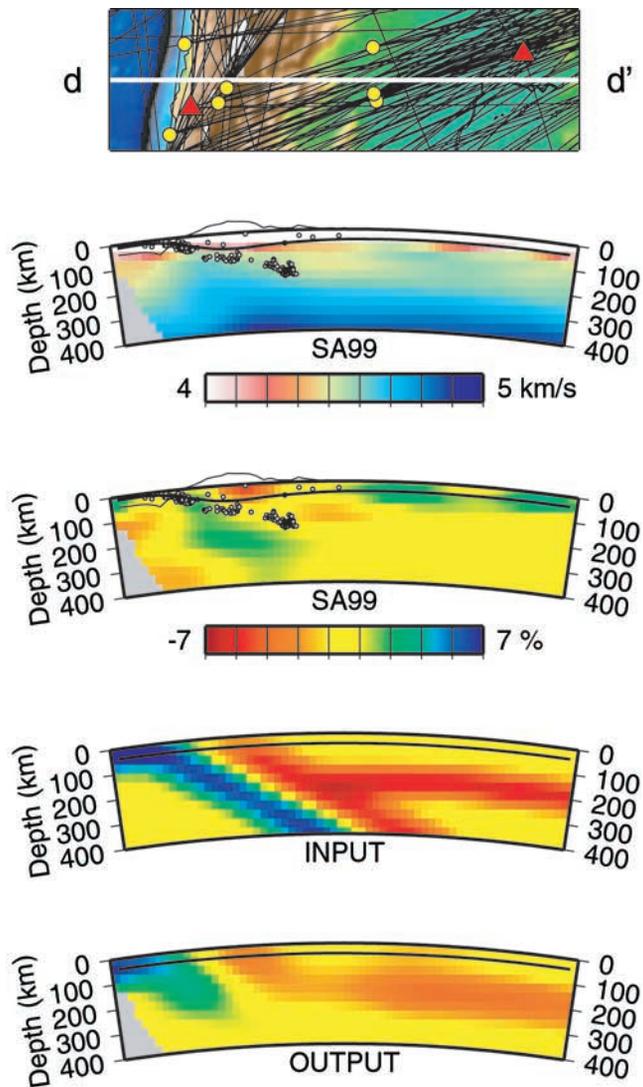
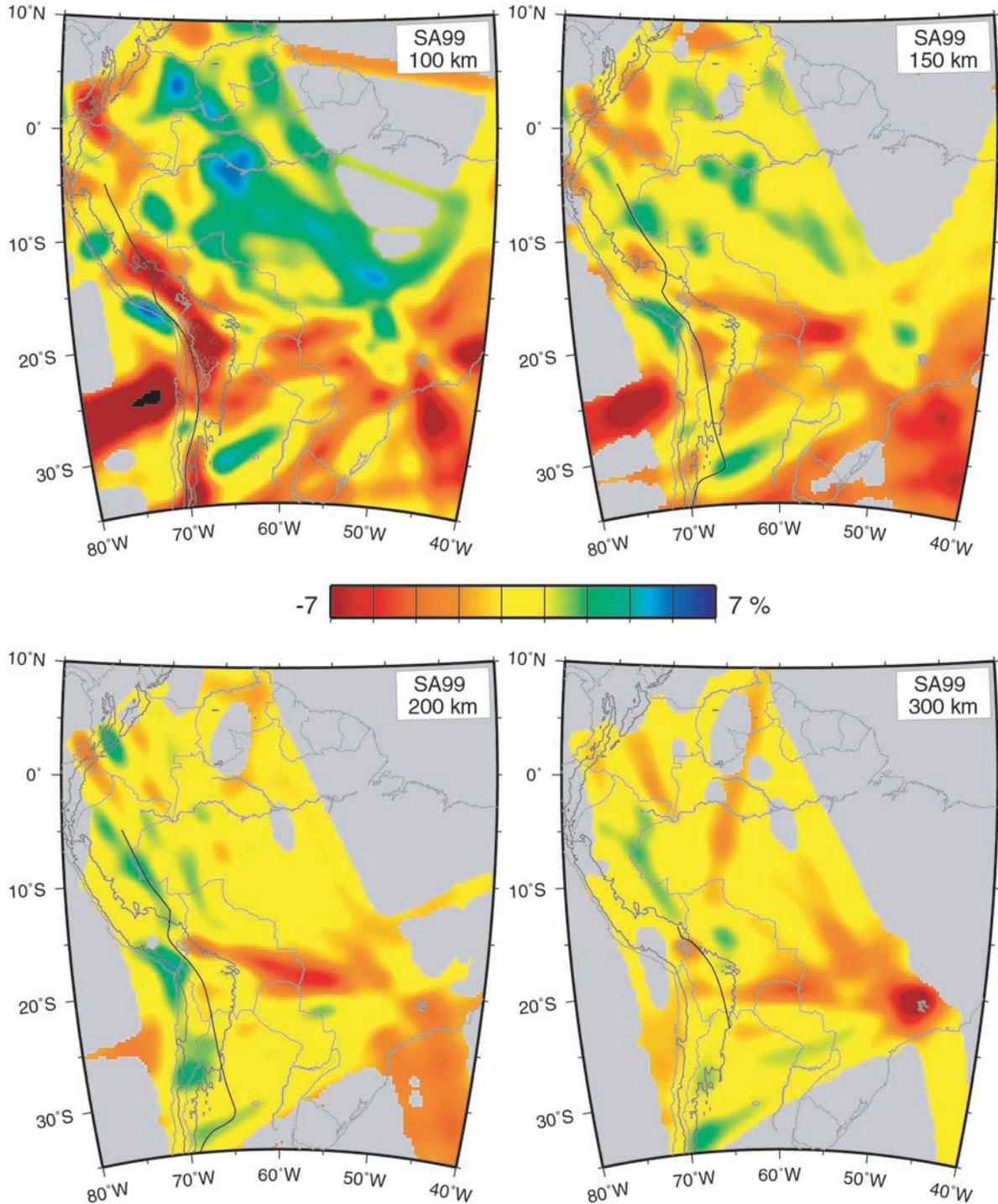


Plate 2d. Same as Plate 2a but for cross section dd'.



**Plate 3.** SA99 at depths of 100, 150, 200, and 300 km. The 2-km elevation and seismicity [Hagesawa and Sacks, 1981; Cahill and Isacks, 1992] are contoured with thick gray and black lines, respectively. Historical and active volcanoes are represented by a light gray triangles [James and Sacks, 2000]. Areas where our data have negligible sensitivity are gray. The color scale is saturated. Resolution varies laterally (see Plates 1 and 2 and Figure 3).