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U.S. Geological Survey

Scientific Investigations Map 3417

Geologic Map of the San Antonio Mountain Area, Northern New Mexico and Southern Colorado

By
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2018

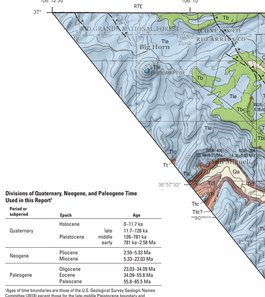

Figure 1. Shaded-relief index map of the southern and central parts of the San Luis Basin and adjacent areas showing the extent of the San Antonio Mountain area map boundary and the outline of Rio Grande del Norte National Monument. Abbreviations for labeled physiographic and volcanic features include: CA, Cerro del Aire; CD, Cerro de Ojito; CC, Cerro Chiflo; CM, Cerro Montoso; CT, Cerro de la Tarasca; SM, Sierra de Los Pinos; GUA, Guadalupita; ML, Los Mogotes; NA, No Agua Peaks; SM, San Antonio Mountain; TO, Tres Orejas; and UM, Ute Mountain.

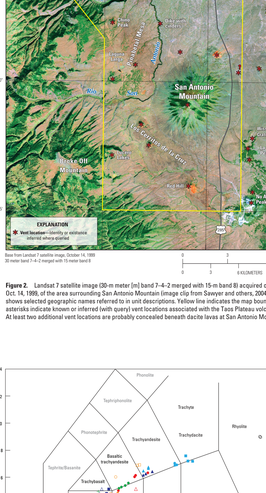

Figure 2. Landsat 7 satellite image (30-meter [m] band 7–4–2 merged with 15-m band 8) acquired on Oct. 14, 1999, of the area surrounding San Antonio Mountain and Cerro del Aire, Colfax County, northeast New Mexico. Image shows selected geographic names referred to in unit descriptions. Yellow line indicates the map boundary. Red asterisks indicate known or inferred (with queries) vent locations and vent-alignment trends. Vent-alignment trends are based on aeromagnetic data. At least two additional vent locations are probably concealed beneath dacite lavas at San Antonio Mountain.

Red Hill. View to west of the quarry at Red Hill where cinder deposits of basaltic trachyandesite of Red Hill (unit Tbrq) are being quarried. Photograph by K. Turner, May 3, 2016.

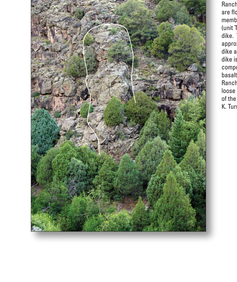
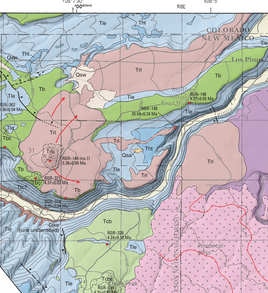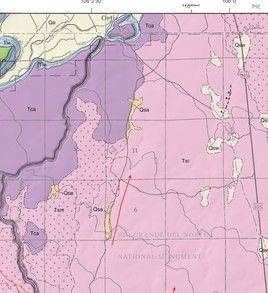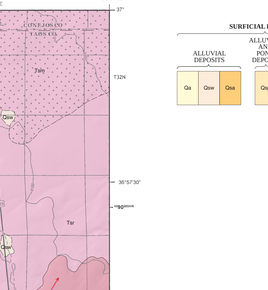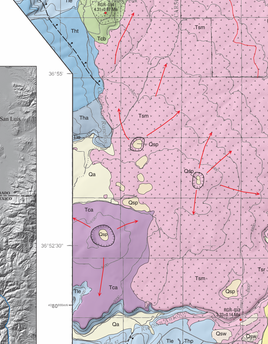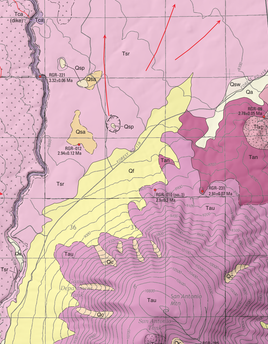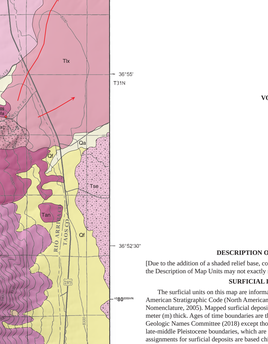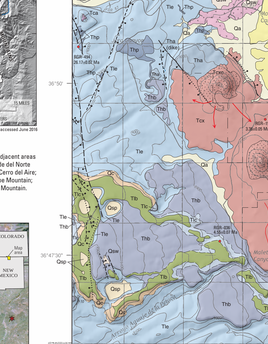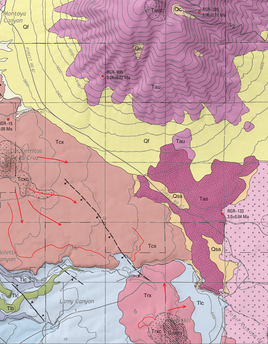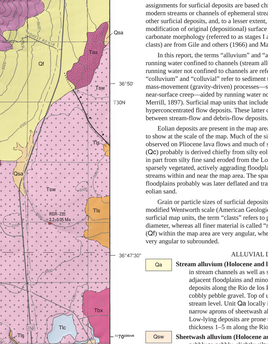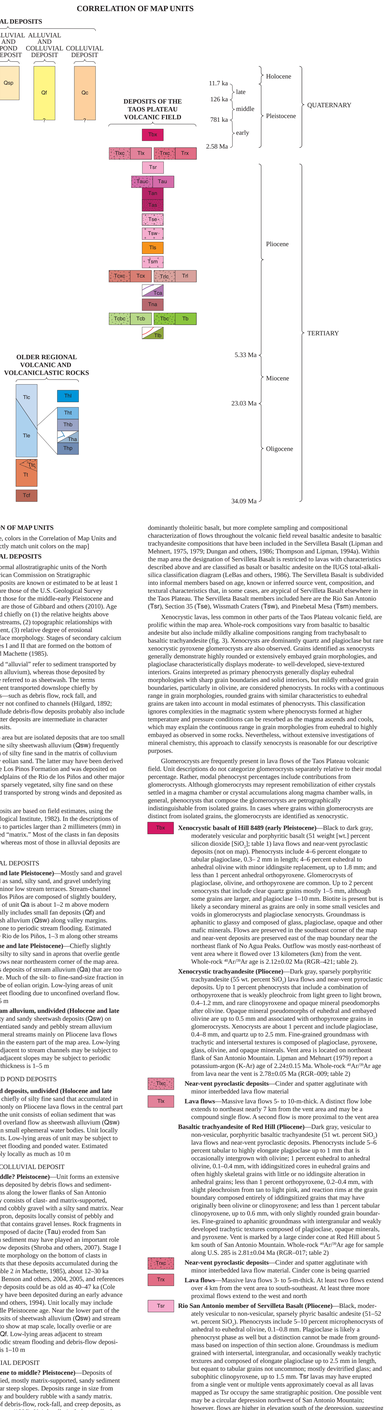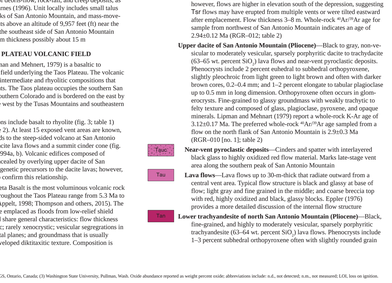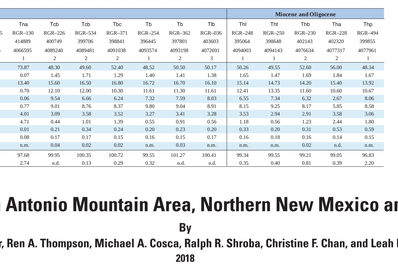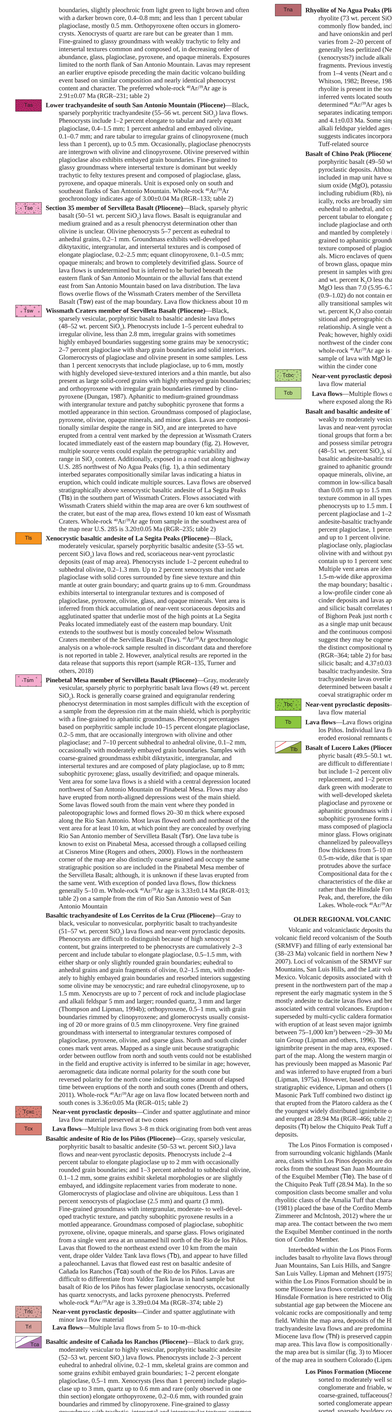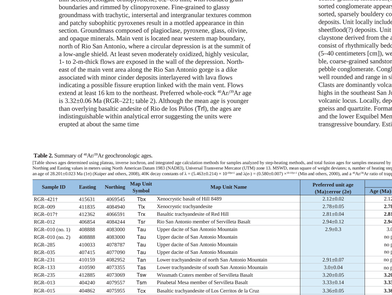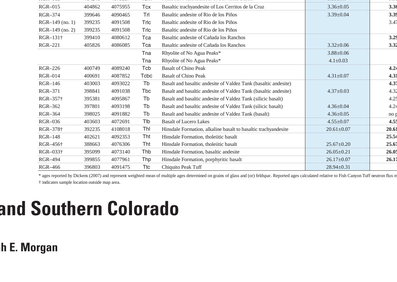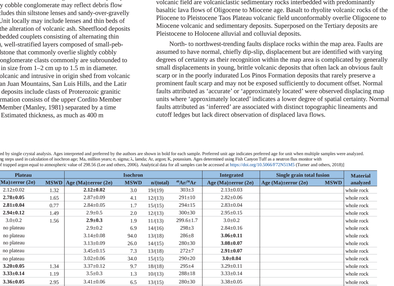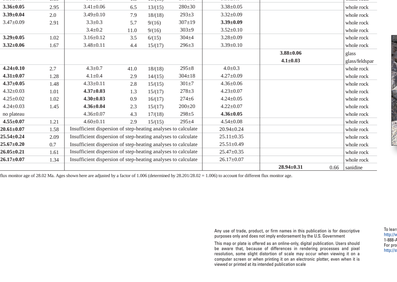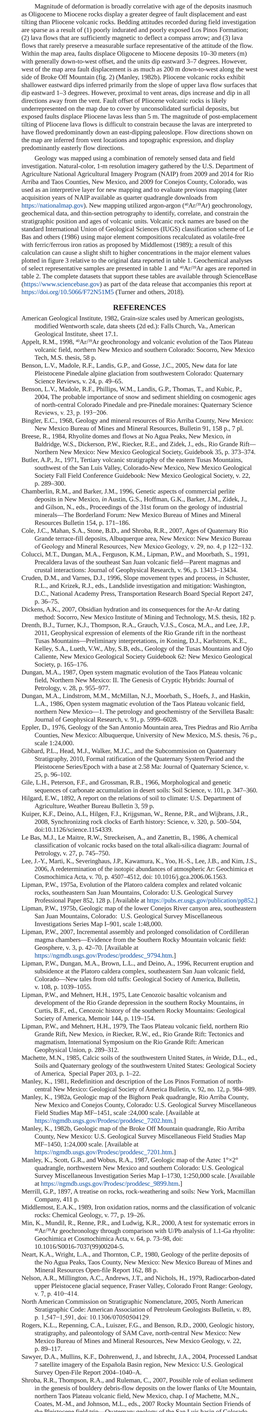
Figure 3. Total alkali–silica classification diagram of Le Bas and others (1986). Major element compositions are recalculated to volatile-free with iron ratios as proposed by Middlemost (1989). Grayed out field names did not have any rocks that fell within that respective category.