

Lassen and Maidu Volcanic Centers

View looking north from Turner Mountain (Mineral quadrangle) towards Lassen Volcanic Center. Battle Creek Meadows, now filled with glacial outwash (unit Qou) marks the approximate core of the Maidu Volcanic Center. The forested hill in the right foreground consists of andesites of the Maidu Volcanic Center, Stage 1, undivided (unit ~2,150–2,375 ka), overlain to the east by dacites of the Maidu Volcanic Center, Stage 2, undivided (unit Tdm, 2,120±46 ka). The hills just beyond the town of Mineral are also andesites of the Maidu Volcanic Center, Stage 1, undivided, overlain by the andesite of Martin Creek (unit amr, ~1,100–1,300 ka), a regional calc-alkaline unit. The dacite domes of Plantation Gulch (unit dpq), Christie Hill (unit dch) and Morgan Mountain (unit dmm) are ~800-830 ka and are part of the Rockland caldera complex of the Lassen Volcanic Center. The dacite of Rocky Peak (unit drp, 803±27 ka, also part of the Rockland caldera complex) makes up Rocky Peak and a prominent outcrop in the left center of the photo. The skyline comprises Brokeoff Volcano and the Lassen Domefield. The eroded core of Brokeoff Volcano is composed of the andesites of Mill Canyon (unit amc, 590-470 ka). Mount Conard (also unit amc) marks the east rim of the erosional amphitheater in Brokeoff Volcano. The southwest rim is marked by Brokeoff Mountain, composed primarily of the dacite of Twin Meadows (unit dt, 470±10 ka, the uppermost unit of the Mill Canyon sequence) but capped on the west by the andesite of Mount Diller (unit amd, 387±10 ka, part of the Diller sequence). The northwest rim is marked by Mount Diller and Pilot Pinnacle, both composed of andesite of Mount Diller. More distal units of the Diller sequence include the andesite of Glassburner Meadows (unit ag, ~450 ka) at the left center and the andesite of Rice Creek (unit ar, 480±5 ka) at the far right. The basaltic andesite of Huckleberry Lake (unit mhl, ~300 ka) is a regional calc-alkaline unit that is younger than the Brokeoff Volcano. Mt. Helen (unit dh, 249±12 ka), Reading Peak (unit dr, 212±5 ka) and Bumpass Mountain (unit db, 232±8 ka) are domes of the Bumpass sequence of the Lassen domefield. Eagle Peak (unit re, 66±4 ka) and Lassen Peak (unit dl, 27±1 ka) are domes of the Eagle Peak sequence of the Lassen domefield. The dark, triangular mass on the west side of Lassen Peak is the west lobe of the dacite flow of May 19–20, 1915. Photograph by Michael A. Clynne.