

Geology of the Lassen Volcanic Center

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This trip, which features overviews and outcrops of the Lassen Volcanic Center in Lassen Volcanic National Park (LVNP), will follow a route from CA Highway 36 from Red Bluff to Mineral and through Lassen Volcanic National Park on CA Highway 89 to Manzanita Lake. The return will be via CA Highway 44.

Volcanism in the Lassen area has produced hundreds of small volume ($<10 \text{ km}^3$), short-lived ($< \text{a few } 10\text{s ka}$), mafic to intermediate volcanoes that coalesce to form a broad platform. Superimposed on the regional platform are a few large volume ($100\text{--}200 \text{ km}^3$) long-lived (1Ma) volcanic centers dominated by intermediate to silicic compositions. The Lassen Volcanic Center (LVC) has been active for the last 825 ka, and is the southernmost active volcanic center in the Cascade arc. Fieldtrip stops and discussions will consider the eruptive history and petrologic evolution of the Lassen Volcanic Center, culminating with a stop at the Devastated Area to discuss the 1914-1917 eruption of Lassen Peak.