

Mount Whitney is the tallest mountain in the contiguous United States and the Sierra Nevada, with an elevation of 14,505 feet. It is in East–Central California, on the boundary between California's Inyo and Tulare counties, 84.6 miles west-northwest of North America's lowest point, Badwater Basin in Death Valley National Park, at 282 ft below sea level. The mountain's west slope is in Sequoia National Park and the summit is the southern terminus of the John Muir Trail, which runs 211.9 mi from Happy Isles in Yosemite Valley. The eastern slopes are in Inyo National Forest in Inyo County.



Whitney's eastern slope is far steeper than its western slope because the Sierra Nevada is the result of a fault block that is analogous to a cellar door: the door is hinged on the west and is slowly rising on the east. The 1872 Lone Pine earthquake left a huge fault scarp.



The rise is caused by a fault system that runs along the Sierra's eastern base, below Mount Whitney. Thus, the granite that forms Whitney is the same as that which forms the Alabama Hills, thousands of feet lower down. The raising of Whitney (and the downdrop of the Owens Valley) is due to the same geological forces that cause the Basin and Range Province: the crust of much of the intermontane west is slowly being stretched.



The granite that forms Mount Whitney is part of the Sierra Nevada Batholith.[19] In Cretaceous time, masses of molten rock that originated from subduction rose underneath what is now Whitney and solidified underground to form large expanses of granite.[19] In the last 2 to 10 million years, the Sierra was pushed up, enabling glacial and river erosion to strip the upper layers of rock to reveal the resistant granite that makes up Mount Whitney today.

