

= Amak Volcano =

Amak Volcano is a basaltic andesite stratovolcano in the Aleutian Islands of Alaska , USA , 618 miles (995 km) from Anchorage . It is located on the eponymous island , 31 miles (50 km) from Frosty Volcano and near the edge of the Alaskan Peninsula 's western flank . Only boats are allowed to access the island with a certain permit .

Blocky (dotted with flat blocks of minerals and crystals) lava flows stream from its summit to its flanks . Three historical eruptions have taken place ? two within the 18th century , the first from 1700 ? 1710 , and the latter in 1796 . The earliest prehistoric eruption was believed to have taken place between 3050 and 2050 BCE .

= = Accessibility = =

Cold Bay , the city nearest Amak , is easily accessible by plane . Amak is accessible only by boat ; airplanes are not permitted to land on the island . Private boat rides to Amak are available in Cold Bay , but for access to the Aleutian Islands , a permit is required from the United States Fish and Wildlife Service .

= = Geography and geology = =

Amak Island lies in the Bering Sea , north of the main archipelago of the Aleutians . It is one of two islands (along with Bogoslof Island) that are 31 miles (50 km) north of the main range .

The United States has the most active volcanoes in the world , many of them geologically young . In Alaska , at least 50 volcanoes , including those in the Aleutian archipelago , have erupted in historical time . The state accounts for ~ 80 % of the United States ' volcanoes , excluding the seamounts in the area , ~ 8 % of world volcanoes , and most of these are located among the Aleutian Islands . The Aleutian Islands arc serves as the northern boundary of the Pacific Ring of Fire , where tectonic activity generates earthquakes and volcanic eruptions in masses .

The volcano is basaltic @-@ andesitic in composition . It is a modest stratovolcano , rising no more than 1 @,@ 683 feet (513 m) above sea level . The volcanic crater is distinct , and has erupted in historical times , only " blocky " lava flows . Charles Wood and Jürgen Kienle , volcanologists , propose that earlier activity , 4 @,@ 000 ? 5 @,@ 000 years ago , consisted primarily of lavas of ethereal (fine) platy and thick andesite . Amak Volcano is unique in that its andesitic lavas , while composed the same as the other Aleutians , contain an abundance of potash . They also could contain more sodium carbonate and rare earth element deposits than the Aleutian norm . Between Bogoslof , the other Aleutian island north of the main arc , and Amak , Amak 's lavas are more alkalic and silicic .

Glaciation took place around the volcano roughly 6700 years BP , carving out U @-@ shaped valleys . At the southwest flank of the island , a crater , likely a maar , can be found amid an alluvial plain .

= = = Eruptive history = = =

The Amak Volcano has erupted three times in historical times : circa 2550 BC , from 1700 ? 1710 , and in 1796 ; the first of these events was identified with tephrochronology . Each eruption has been characterized by lava flows , and the two most recent eruptions included a crater eruption .