

NASA QUEST CHALLENGE: MT. TAKAHE AND MT. TERROR



By *Edward* and Jake Edward and Jake

Location: Mt. Takahe Latitude: 76.2° S Longitude: 112° W Image:



Location: Mt. Terror Latitude: 77°31' S Longitude: 168°32' E Image:



Report:

The volcanoes named Mt. Takahe and Mt. Terror is scientifically interesting to visit because it is an Antarctic volcano. What would happen if the volcano were to erupt? Wouldn't the area melt? Also, how did it end up there? How could it be on the ice? Apparently, there are a lot of questions about this area. See why this is a good place to excavate?

We hypothesize that Mt. Takahe got there because it used to be an underwater volcano. Yet it may have broken though the Antarctic ice. When the volcano erupted, the lava cooled quicker that usual because of the cool water around it. As the volcano grew, due to the eruptions, the ice thawed and the volcano reached the surface. As the ice refroze it filled in the cracks that the volcano made when it breached the surface. This is how we hypothesize how Mt. Takahe came to be dormant today.

We hypothesize that Mt. Terror got to be a volcano by being a mountain at first. Maybe because of all the near volcanoes, cracks in Mt. Terror might have collected lava flow. This would have caused its first eruption. This is how we hypothesize how Mt. Terror came to be extinct today.

A small amount of scientific benefits for exploring Mt. Takahe and Mt. Terror will help learn in more specific details about what Antarctica was like in the time these volcanoes were born. It can tell us about the birth of these volcanoes. By examining the volcanoes we may be able to determine when they erupted. If we dig into the ice we may be able to tell how thick the ice is along with the size to the volcanoes. Also, they can tell about life in the past. Lastly, they may not be dormant or extinct, so scientists can tell if they are active. If they are active, scientists can figure out when they will erupt.

By our research, we have noticed a lot about volcanoes in the western part of Antarctica. There has been a recent eruption of an undersea volcano under the Western Antarctica ice cap. We think that most of the lava melted the ice above it therefore creating volcanoes. As this volcano erupts, it refuels the other volcanoes of western Antarctica. That is what we expect about the western Antarctic volcanoes.

This was an exceedingly interesting project. We did our best and hope you enjoy it.