## **Mount Erebus**

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The longitude and latitude of Mt Erebus is 77.53° south and 167.17° east. Its average temperature in the winter is -50° Celsius and in the summer it is -20° Celsius. The height of this volcano is 3,795 meters high. Mount Erebus is located on the Ross Islands in the Ross Sea. It was discovered in 1841 by James Ross and his crew. Mt. Erebus is the southern-most historically active volcano. It is noted for its convecting anorthocalse phonolite lava lake. Strombolian eruptions occur at the surface of the lake. The lava activity is between the low level of the Erta Ale and the high activity at the Ambrym. Mt. Erebus' volcanic activity has been interesting to scientist ever since Shackleton's men scaled the peak on Mt. Erebus, which were first discovered in March of 1908.

Some thing we think is interesting about Mt. Erebus is that the temperature in Antarctica is so cold but the lava is so hot. It is interesting to see how an active volcano reacts in a cold atmosphere. We also think it should be researched because it is one of the loftiest volcanoes in the world. Another reason it should be researched out of the four volcanoes on Ross Island is because it is the only active one left.



If we were able to go to Mt. Erebus, some things we would like to research and measure would be the heat to ice ratio. We would also like to find out if the lava would turn the ice into glass or if it would just melt. We would like to figure out what the difference is between the lava in the volcano and the ice around it and why it doesn't all melt when the volcano is active. To determine if the activity of Mt. Erebus was increasing or decreasing, we would look at the history of the volcano. We would also look at the changes that have occurred at Mt. Erebus through the last couple of years. Some things that we would look at would be the changes in the ice and in the lava of the volcano. We think it is the last volcano on Ross Island, because it is one of the largest volcanoes left on the Antarctic continent. So it would take a long time to become non-active.

The benefit of further investigating Mt. Erebus is finding more information about why it is the only active volcano left on Ross Island. You may also get more information about the larger volcanoes in the Antarctic region. This is why we think Mt. Erebus should be researched. We hope you will consider accepting our proposal and to further investigate Mt. Erebus.

## Bibliography

http://commons.wikimedia.org/wiki/Image:Mt\_erebus.jpg

http://antarticconection.com/antartic/mterebus.shtml

http://www.encyclopedia.com/doc/1E1-erebus-M.html

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http://www.volcano.si.edu/world/volcano.cfm?vnum=1900-02