Antarctica LIMA Proposal: Mount Erebus

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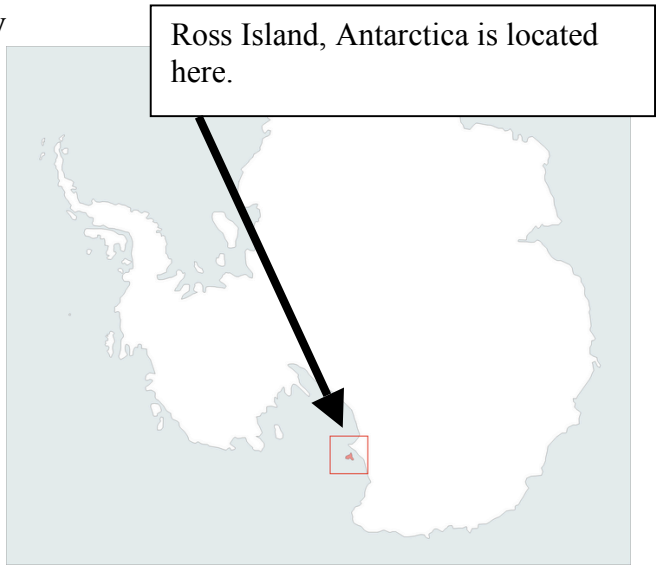
These crevasses near Mount Erebus, a known volcano in Antarctica, is my choice for my proposal for LIMA. Mt. Erebus' summit location is 77°32'S, 167°10'E.

My chosen ice feature is scientifically interesting because we don't know why these crevasses are there. These should be looked into because lots of scientific information could be taken about Earth around these features. Information about Mt. Erebus could be retrieved from the crevasses as well.



I think that this feature is being created by small earthquakes around Mt. Erebus. Meaning possibly it is becoming much more active and may possibly erupt. This could be dangerous, but if we know that Erebus will erupt we might know when and how to avoid it. Knowing the position volcanoes are in is very good to know and could save lives.

The benefits of exploring this feature are that we would know when, how, and where a volcano would erupt and be able to keep things safe. Also, having a volcano erupt could allow for more research to figure out why it erupted. Did an earthquake cause its eruption and the crevasses like I predicted, or did something else cause it to erupt?

Revisions

Reasons for the Crevasses

On the Mount Erebus Research Website (http://erebus.nmt.edu/), it says that explosive events occur under the ice tens of kilometers from the volcano, so the crevasses are not too far away to be caused by Erebus. These crevasses also could have been caused by the ice moving faster and weakening. These may be transverse crevasses where the glacier is accelerating as it moves down slope towards Erebus.

If I Had More Images I would…

I would look for more of the crevasses around Erebus to see if this is occurring in more than one place. I would look at a 10 kilometer radius around Erebus to find more of these crevasses. I would also look to see if Erebus was steaming more often and in larger amounts, indicating that it is becoming more and more aggressive. I would also look for the presence of sulfur; if it's there then that is a sign of the molten rock moving closer to the surface making Erebus seem more active and closer to eruption.

Citations

Crevasses Image
http://www.britannica.com/EBchecked/topic-art/394808/107439/Crevasses-near-Mount-Erebus-Ross-Island-Antarctica#tab=active~checked%2Citems~checked

Antarctica Image
http://upload.wikimedia.org/wikipedia/commons/5/53/RossIsland-pos.png

Latitude and Longitude
http://www.ees.nmt.edu/Geop/Erebus/erebus_info.html

General Erebus Info
http://erebus.nmt.edu/

Indications of Eruption
http://www.redorbit.com/news/science/330772/alaskan_volcano_showing_signs_of_erupting/