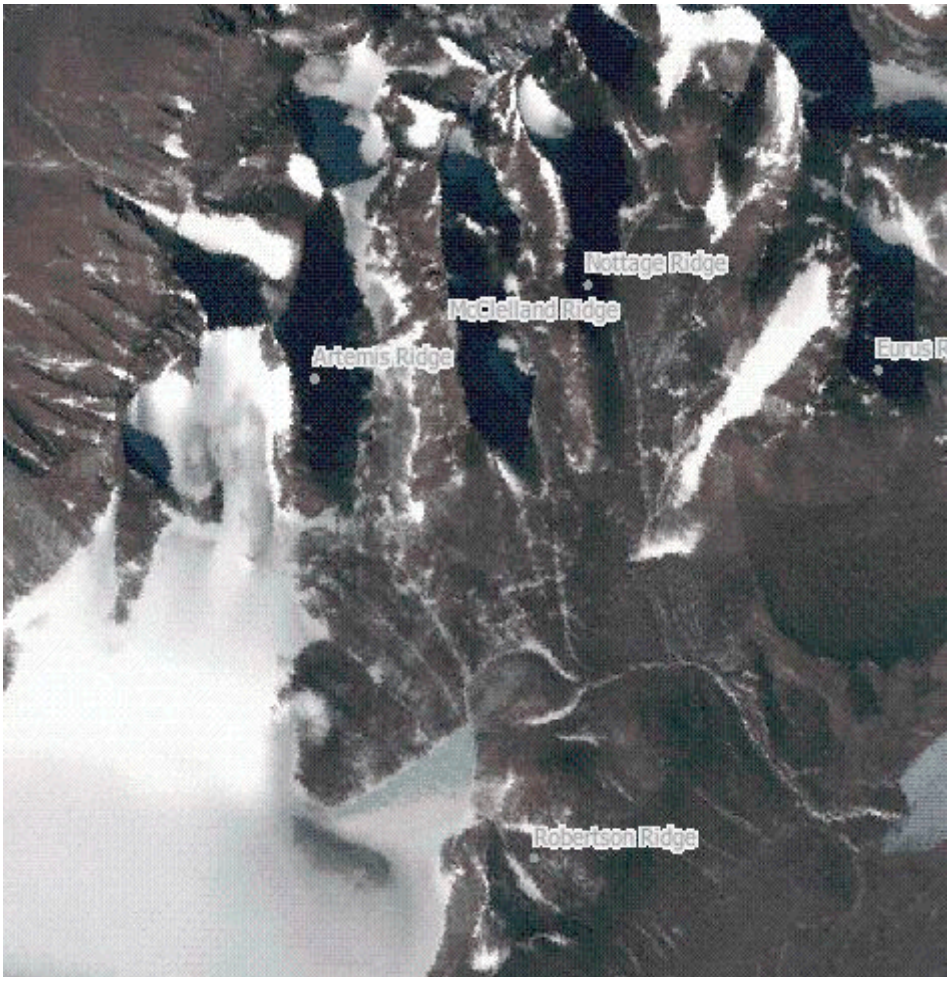
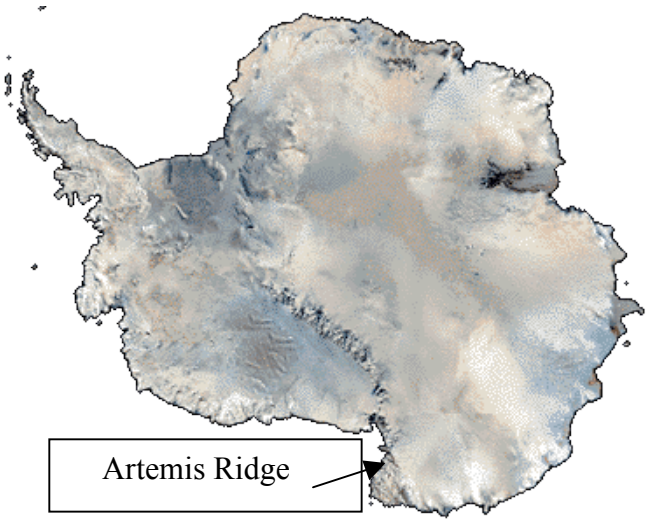
Team Member's Names: Rehanna & Nicole
School: Mount Vernon Middle School, Mount Vernon, IA
Teacher: Mrs. Scearce

Proposal:
Artemis Ridge is a ridge that is very: tall, enormous, and black. We were also learning about Greek mythology so that is how we chose it. The Lima description says:
A ridge, 1 mile long, rising to 1700 meters. between Thomas Valley and the SW part of Clark Glacier in Olympus Range, McMurdo Dry Valleys. In keeping with the names from Greek mythology grouped in this area, named by NZGB (1998) after a goddess associated with the moon.



latitude:77 south longitude:162 west

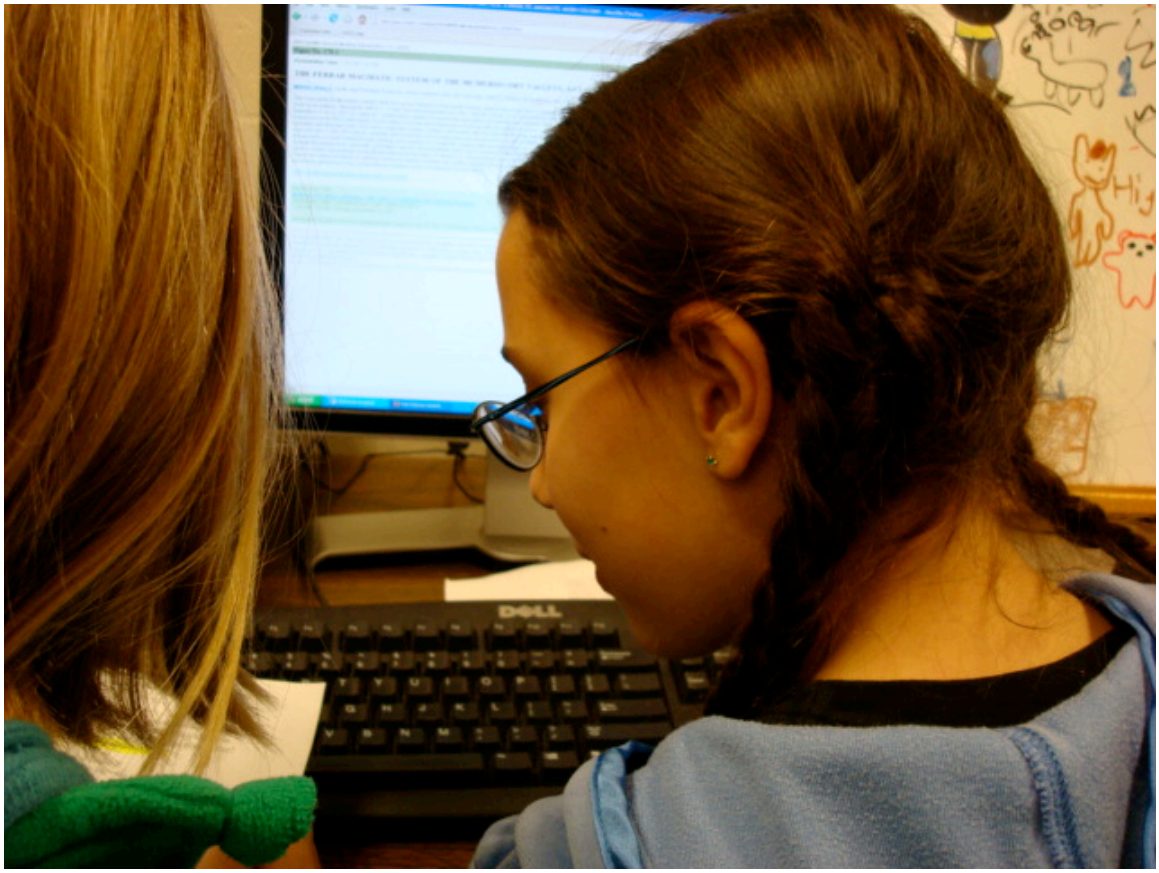


Artemis Ridge may have some interesting organisms that we have never seen before. We think that scientists have not explored it properly. From the webchat we learned that there have probably only been about 20 or 40 people who have traveled to Artemis Ridge. We have heard of variations of cryptoendolithic organisms, and we think that there might be some in the rocks.
We also know that lichen and fungi exist on the soil surface. These life forms exist downwind of a large snowfield and then when the weather warms up the snow melts and gives them their one well-needed drink for the year. This happens for just a few days in January. We think that the best area for finding the life forms is where the blue ice is in our picture. From the webchat we learned that no one knows how the lichen and fungi can stay alive during the harsh winter, and we believe that question should be researched. We hope to explore this area more thoroughly as it is probably very similar to the kind of environment found on other planets.

5. A paragraph hypothesizing what geologic processes you think are occurring to create this ice feature.

The geologic processes that contributed to this feature were probably plate tectonics and volcanoes. This created the mountains and Artemis ridge. We think that this process created the ridge because volcanic rock is black as well as the rocks in this figure. We also think that water and ice contributed to carving Artemis Ridge. From the webchat Ted, an Antarctic scientist, said that Artemis Ridge could have been formed by water erosion, ice erosion, wind erosion, or a combination. Or from a huge flash flood from under the ice like has happened on Mars before.

We think that we should be further funded to investigate this area because the dry valleys offer a lot of interesting possibilities. This includes the cryptoendolithic organisms that we mentioned earlier. Also many others reasons as well as extreme environments like on other planets.



Nicole (left) and Rehanna (right) working on their LIMA proposal.

Thanks for considering our proposal! We appreciate it a lot!

Thanks,

Rehanna&Nicole