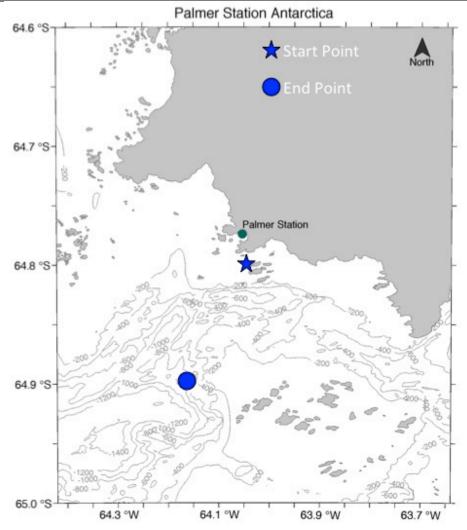
11/4/14 Project CONVERGE

Investigating Why Penguins Forage There: Piloting Gliders - Worksheet

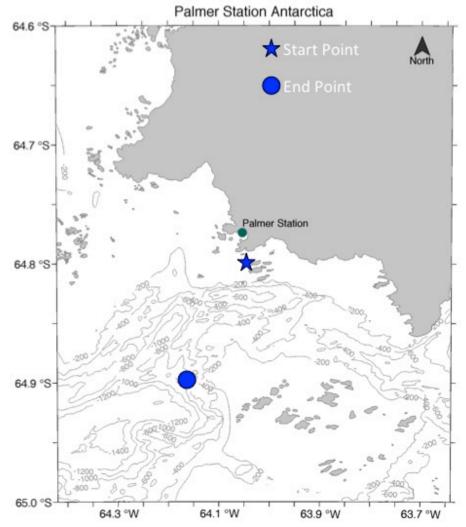
| Name: | Date: |
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Team _____ Waypoints



Explain why you drew your proposed glider path this way.

The location of the waypoints will vary by group.



Explain why the class decided on this proposed glider path.

The location of the waypoints will vary by how the class chooses the waypoints.

Scientific Explanation: What factors influence where the penguins are foraging?

Evidence: Provide scientific data from the Penguin Habitat Use map and the Surface Currents & Convergence Zone map to support what patterns you observe where penguins forage. Use appropriate and sufficient data.

There are specific areas that have higher and lower concentrations of penguins using the habitat between the start and stop waypoints of the glider.

There are a couple areas of convergence zones to the east and southeast of the end waypoint of the glider.

** The students should also mention something about how these data influenced their choices in directing the glider to sample the water where they did.

Reasoning: Use your evidence to show how your data result in your claim. Also, tell why your data count as evidence to support your claim by using scientific principles. Remember, reasoning is the process where you apply your science knowledge to answer the question.

The penguins most likely forage the in the areas of habitat that they use the most, as their primary purpose for ocean travel is to forage for food.

The strength and direction of the surface currents determines the location of convergence zones, which in turn is a factor in determining where food sources are concentrated. However, other ocean conditions also influence where food is concentrated and thriving, which can be determined from other data not included in this lesson.

Claim: Write a statement that responds to the above driving question.

To be most successful and expend the least amount of energy possible, penguins ideally forage in areas with higher food concentrations.

What new questions do you have?