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| [picture]  Phytoplankton | [picture]  Zooplankton = Krill |
| [picture]  Adelie Penguins | [picture]  Gliders |
| [picture]  HF Radar | [picture]  Tagging |
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| *Zooplankton = Krill*   * Small (1cm to 15cm) shrimp-like creatures. * Provides food source for most of the other life forms, such as penguins. * Sometimes found in groups called swarms. * Due to a low Reynolds number, the krill mostly move with the currents but can also move freely. | *Phytoplankton*   * Phytoplankton are microscopic plants that are the major producers of the Antarctic. * This organism is a food source for zooplankton, such as krill. * Due to an extremely low Reynold’s number, the phytoplankton move with the currents. |
| *Gliders*   * The Slocum Glider is a uniquely mobile network component capable of moving to specific locations and depths and occupying controlled spatial and temporal grids. Driven in a sawtooth vertical profile by variable buoyancy, the glider moves both horizontally and vertically. * Carrying a wide variety of sensors, they can be programmed to patrol for weeks at a time, surfacing to transmit their data to shore while downloading new instructions. | *Penguins*   * A flightless bird, "wings" adapted to be effective paddles for swimming. * Have no predators on land. * Feed on fish and krill. * Is preyed on by leopard seals and killer whales. * Six types are found in Antarctica, including the Emperor and Adelie. |
| *Tagging*   * Used to track the movement and foraging patterns of penguins. * Attached to the back of the penguins using duct tape. * After 3-5 days the tags are manually removed from the penguins by the scientists. | *HF Radar*   * Data from the surface of the water is collected using the high frequency (Hf) radar system that measures from (0-1m). * Oceanographers determine surface currents, wave heights and frequency using this data. |
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