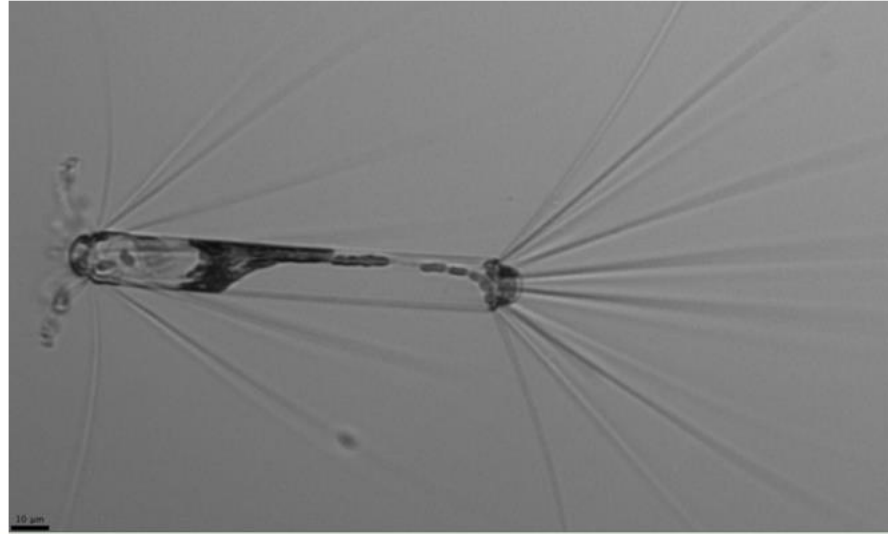
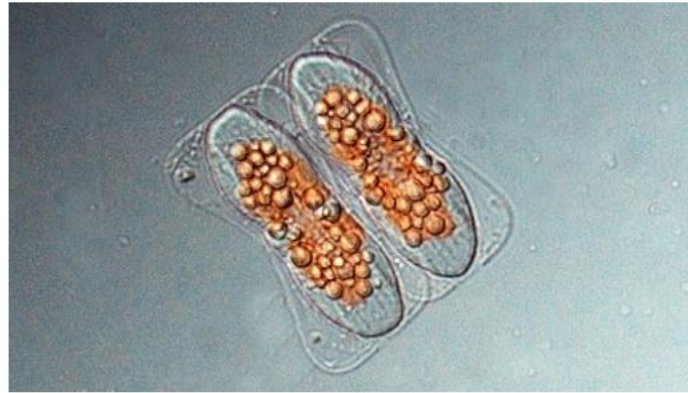


Phytoplankton



Corethron spp.



Amphiprora spp.

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.

Zooplankton/Krill



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.

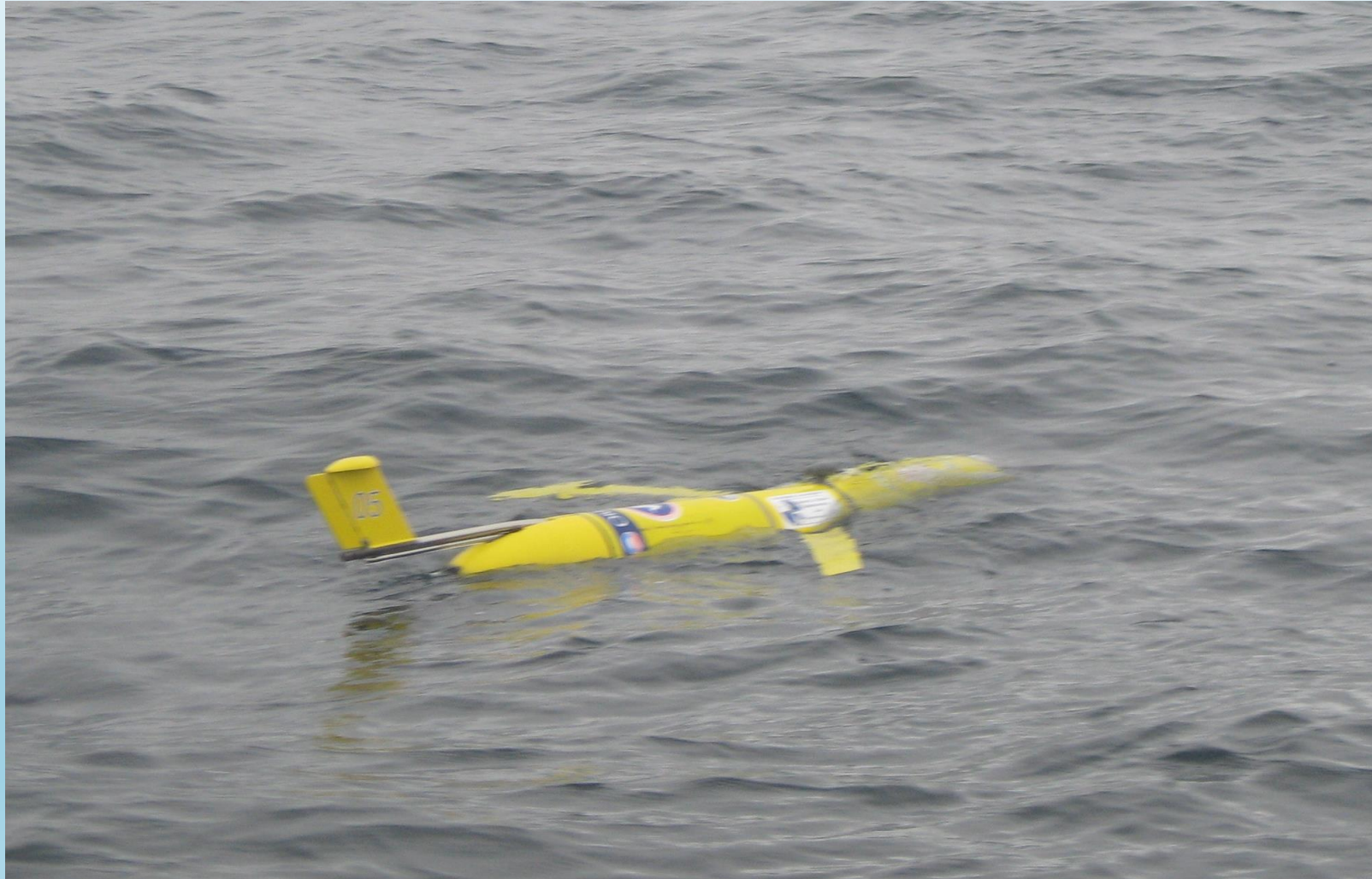
Adélie Penguins



Adélie 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 Adélie.

Gliders



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.

Tagging



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



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.