Jellies as Drifters Objectives

Students will be able to:

- interpret real time wave height, directional flow and sea surface temperature data
- predict where jellies might be lurking in the ocean

Materials

Computer with Internet access Student worksheet

Background

Jellies are drifters, meaning that their movement is largely at the mercy of the tides and currents in the water.

Procedure

Today, a large group of moon jellies (sting) was found at 39:30 N 74:00 W.

Concentrations of moon jellies are usually found in the temperature range of $9 - 19^{\circ}$ C (but they can withstand temperatures as low as -6 and as high as 31° C).

1) Access the Coolroom Sea Surface Temperature data (<u>http://www.thecoolroom.org/boaters/boat_sst.htm</u>) and determine if the temperature of the water might effect the moon jellies?

2) Access the Coolroom CODAR data

(<u>http://www.thecoolroom.org/boaters/boat_codar.htm</u>) and determine where the jellies might move.

Extensions

Build your own Jelly	Discovery Channel – Science of the
NY Aquarium Jellies Exhibit	Deep - Movie – Salps – Mid Water
http://www.alienstingers.com	Mysteries

1) Record the current sea surface temperature at 39:30 N 74:00 W.

2) Using Coolroom CODAR data, record the direction and speed of the surface water around the area of 39:30 N 74:00 W.

3) Is the water temperature in the area within the range which moon jellies prefer?

4) How do you think the moon jellies might be affected by the water temperature?

5) Based on the CODAR data, where might the jellies move or drift?

6) Would it be a good idea to hit the beach to swim (safe from jellies)?

7) What factors influence the presence of jellyfish?