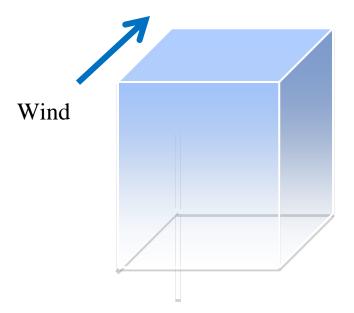
Round: 5B

- 1. Explain the fundamental differences between the Eulerian and Lagrangian approaches to determining current speed and direction. (6 pts)
- 2. What does ADCP stand for and how does it measure currents? (4 pts)
- 3. Assume you are in the Northern Hemisphere. Describe the causes of Ekman spiral and explain how the causes lead to different current directions and speeds at depth. Illustrate your explanation using the diagram below, labeling all relevant information. (6 pts)



4. How do seasonal winds and Ekman transport interact to produce coastal upwelling off of the California coast? (4 pts)