

NOAA Data Retrieval Problems

Your name: _____

1. Recreational fishermen along the U.S. Atlantic coast often find that they are most successful when they fish near the entrance to tidal creeks on a falling (ebb) tide. Suppose you are fishing in the upper portions of the Chesapeake Bay near Chesapeake City on July 3, 2004. When will there be an ebb tide during daylight hours? [Note: Chesapeake City is near Havre de Grace near the Maryland/Delaware border]

GMT - 4 am - 8 am or 4 pm - 10:00 pm
LST - 12 pm - 4 am or 12 pm - 6:00 pm

2. The Bay of Fundy is famous for its extreme tides, which expose large tidal flats that are the preferred habitat for softshell clams. Suppose you want to collect some clams for Christmas dinner near Eastport, ME, on December 23 or 24, 2005. For safety reasons (you don't want to get caught by the rising tide) you decide to limit your clamming to a four hour period spanning two hours before and after low tide. What times on December 23 and 24 would correspond to this interval?

23rd low tide 11 am LST
Clam 8 am - 12 pm

24th
Clam 9 am - 1 pm

3. On the east coast of Florida, inlets connecting the Intracoastal Waterway with the Atlantic Ocean are notoriously dangerous, particularly when an ebb tide coincides with winds blowing toward the shore, since these conditions cause water to "pile up" in narrow inlets. Suppose you are contacted by a recreational boater who wants to go through one of these inlets on April 12, 2006 at 11:30 am (EDT). Using data from Trident Pier, FL, what advice would you offer? Why?

11:30 GMT = Ebb tide
Wind speed = 17.106
Direction = 53.00° coming from NE
No pick another date and time