

Study Guide Questions

Lecture: Ocean Tides and their Impact on Shelves, Channels, and Estuaries

Reading:

p. 234-243 of Knauss (1997)

p. 219-222 of Knauss (1997)

p. 223-225 of Knauss (1997)

18. What is the effect of the earth's rotation on the tide generating force?

19. What is the effect of the vertical component of the tide generating force on ocean tides?

20. What is the effect of the horizontal component of the tide generating force on ocean tides?

21. Why are the tides in the Great Lakes hardly noticeable?

22. Does the tide generating force affect land masses?

23. Why do the largest tidal amplitudes almost always occur near the coast?

24. What could cause a tidal amphidromic system where the tidal sea level oscillation is zero? Would you expect large or small tidal currents under such a "node?"