

Topic 07: Sea Level Change

Provide and explain the three major means by which “zero” has been defined for sea level historically and today

Explain the nine ways in which eustatic sea level can change. Be sure to explain how the process works and how it increases or decreases sea level

Explain the six ways in which relative/apparent sea level can change locally. Why is this knowledge so important?

What are six variables of “background noise” that long-term sea level records have to statistically remove?

What are the five ways in which we have measured sea level along our shores? Also explain how a transducer gauge works

Why is the satellite measurement of sea level rise different from that of tidal gauges?

Why are the tidal gauge measurements along the shores of NC different?

What are the three major contributors to sea level change in the last three decades?

How much did sea level change in the 20th century?

Explain why a linear projection of sea level rise for the 21st century is not a good way to make projections

What is the current projection of sea level rise by 2100?

By how much would global sea level rise if the Greenland Ice Sheet melted? Antarctic Ice Sheet?