

# Lesson Plans: Past Sea Level Data

## Objective

The objective of this activity is to feel the changes of sea level in the past.

## Materials

Each student or group of students will need the following:

- Graph paper
- Ruler
- Pen and pencil

## Important Points to Understand

- In the past the sea level has not always been the same.
- If climate changes caused by human activities do not exist, sea level changes by time is a kind of natural process.

## Preparation

Try to explain the information given in the following table, which lists the sea level for the last 250,000 years, as recorded by thorium/uranium dating of coral reefs off Papua New Guinea.

Thousand years before present	0	10	20	30	40	50	60	70	80
Meters below present sea level	0	23	119	54	44	72	55	71	22
Thousand years before present	90	100	110	120	130	140	150	160	170
Meters below present sea level	59	20	48	27	5	16	123	111	30
Thousand years before present	180	190	200	210	220	230	240	250	-
Meters below present sea level	57	87	46	32	7	25	12	32	-

## Procedure

1. Plot a time versus sea level graph. Time is on horizontal axis starting from 250,000 years before present and meters below present sea level on the vertical axis down from the horizontal.
2. Remember the time step (10 thousands years) and study the sea level relative to present level.

## Questions

1. How does the present-day sea level compare with that of the recent past?
2. What do you think of the present sea level? Is it alarming?