

Future of the Cryosphere

PART A: Sea Level Rise

1: Make a prediction. Which type of ice (sea ice or land ice) do you think poses a larger threat to sea level rise if large-scale melting due to climate change were to occur? Explain.

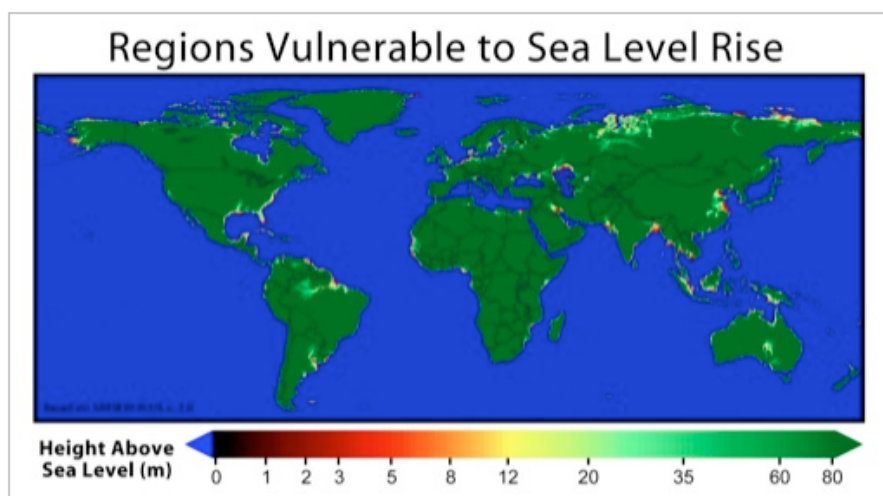


Image source: [Global Warming Art](#). Click image for larger view.

2: According to the map, what areas of the world will be most threatened if sea level rises by a few meters? Visit this [web site](#) to look at additional close-up regions of areas at risk. Would large-scale melting of ice sheets only impact countries at high latitudes? Explain.

3: The plot above only shows coastal areas that are at or near current sea level. There are also island nations at risk of entirely disappearing as a result of sea level rise. Do an Internet search to find at least one example. Then answer the following questions:

- What is the name of the island nation?
- What is the nation's average elevation?
- What is the nation's population?
- How soon does this nation expect to be affected by sea level rise?

4: Describe the consequences the United States may face if sea level rises by just a few meters. Give specific examples of coastlines, cities, industries, and habitats that would be impacted.