

6. The Rise in Sea Level

What are the origins and effects of sea level rise?

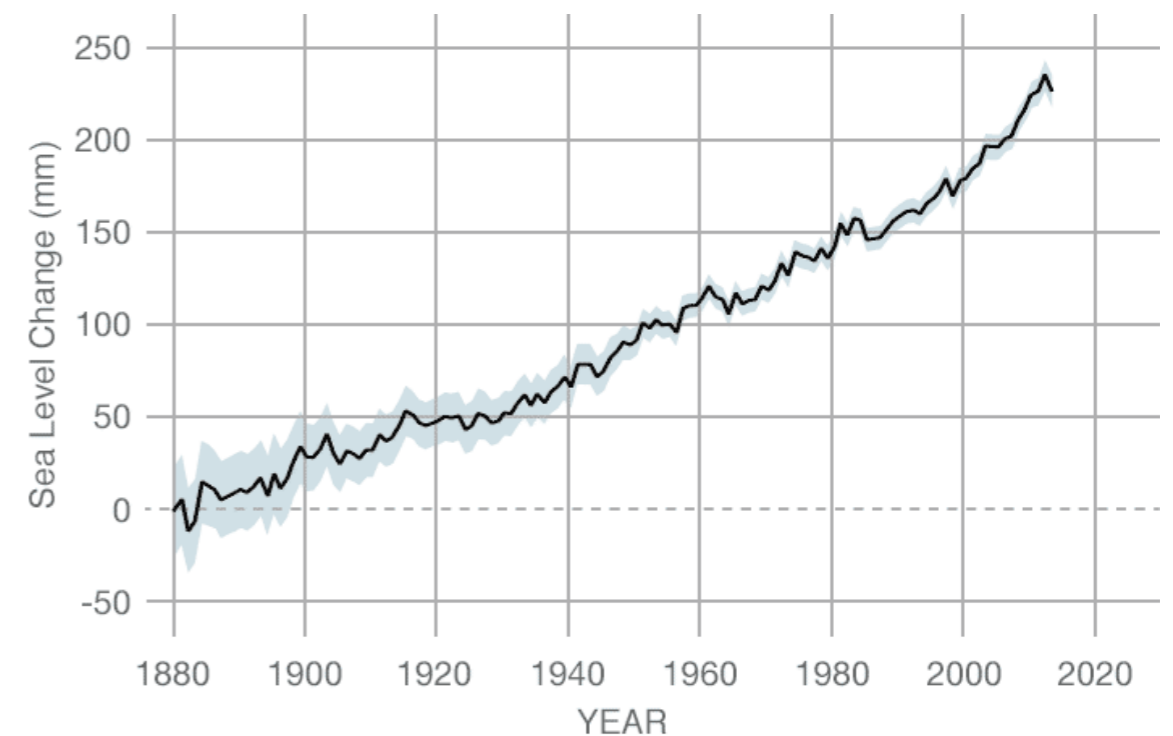
Background:

Due to global warming, large masses of ice are currently melting on land, such as the Greenland ice sheet or glaciers in the Alps. The water temperature of the oceans is also rising. This also means that icebergs floating in the water are melting faster.



The image shows the extent of Arctic sea ice today (white area) and 30 years ago (yellow outline).

In a special report, the Intergovernmental Panel on Climate Change expects sea levels to rise by up to 110 cm by the year 2100 and by up to 5.4 m in 2300!



During a storm surge, the sea rises several meters above the mean water level, which continues to rise due to melting continental ice masses. Such extreme weather events are becoming more frequent due to climate change. In the short term, the land can be protected by raising the height of the seawalls.