

CLIMATE CHANGE

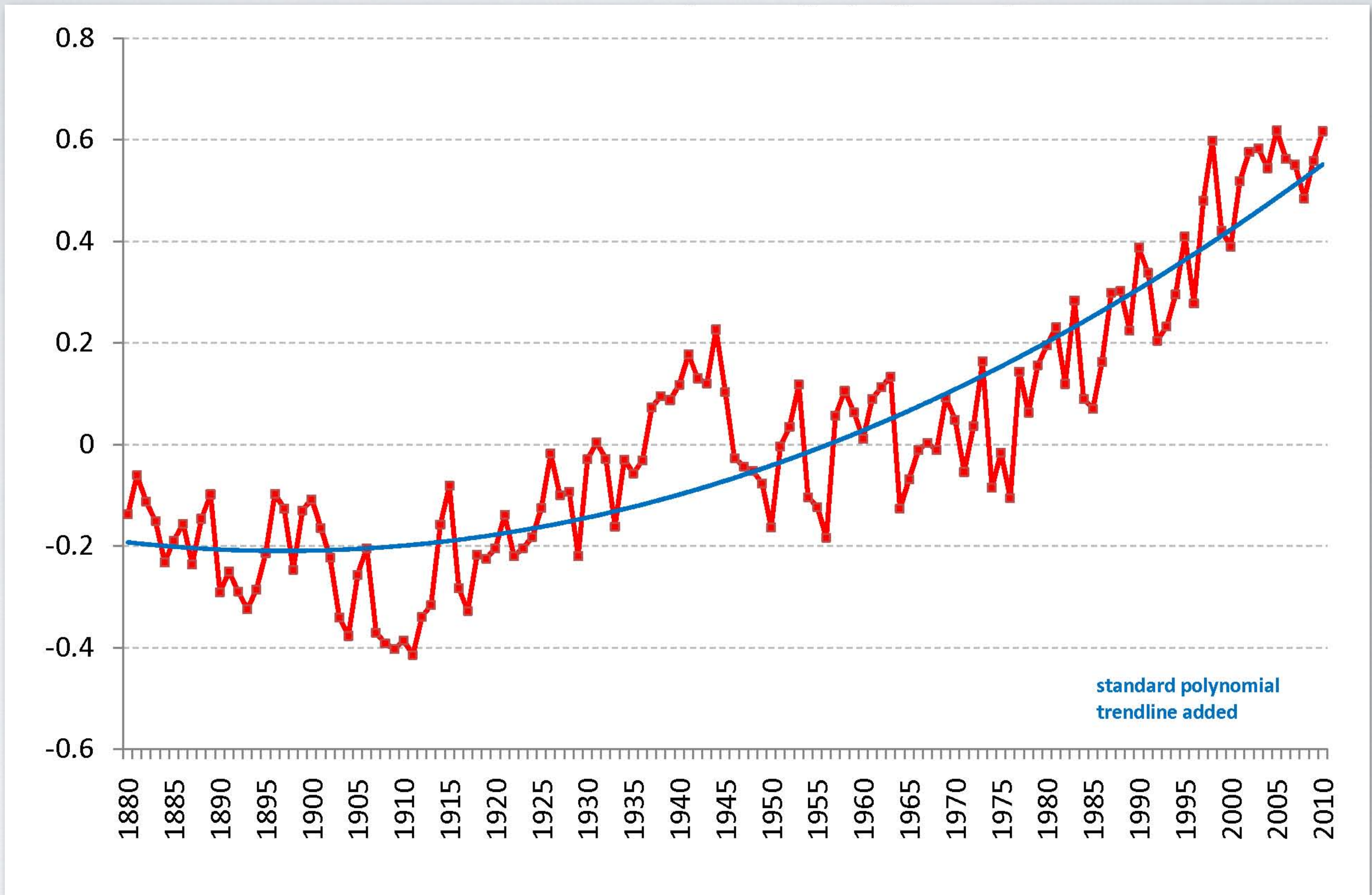


SHANGHAI, CHINA

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- Climate Change - a change in climate patterns attributed largely to the use of fossil fuels
- Global Warming - a gradual increase in the overall temperature of the earth's atmosphere attributed to the greenhouse effect





Global Temperature Change

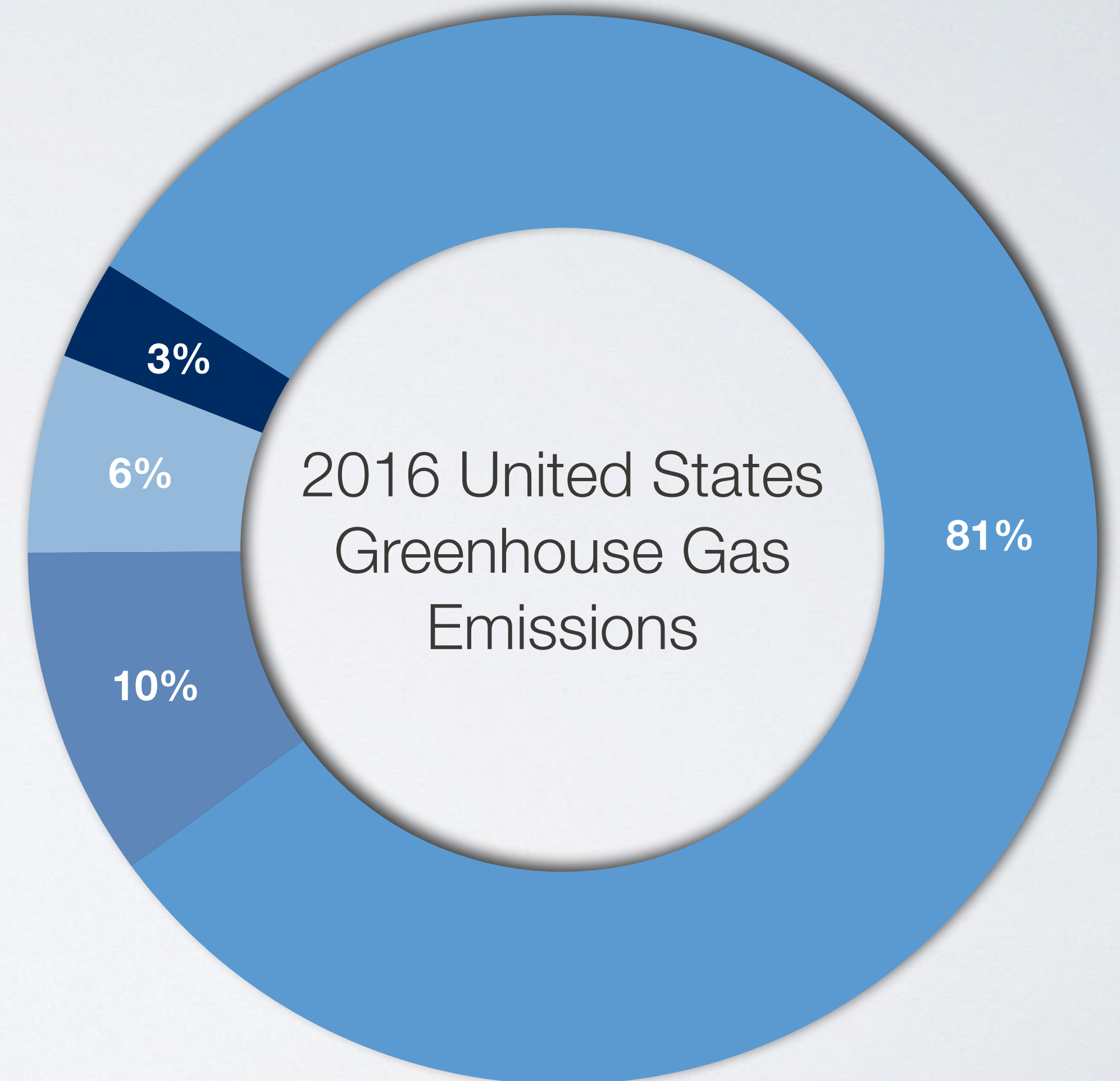
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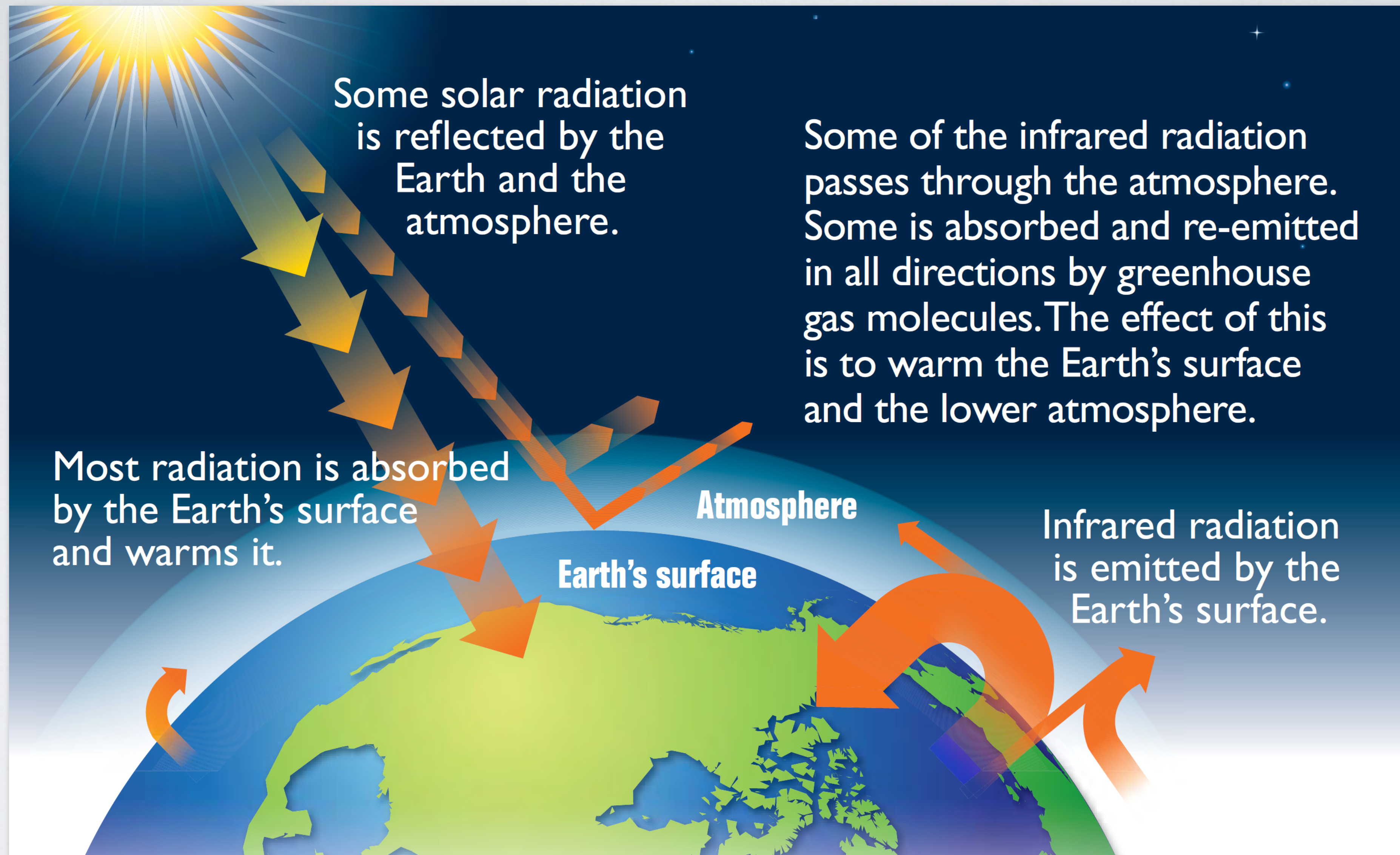
- Greenhouse Effect - increased gas levels in lower atmosphere that trap in heat energy



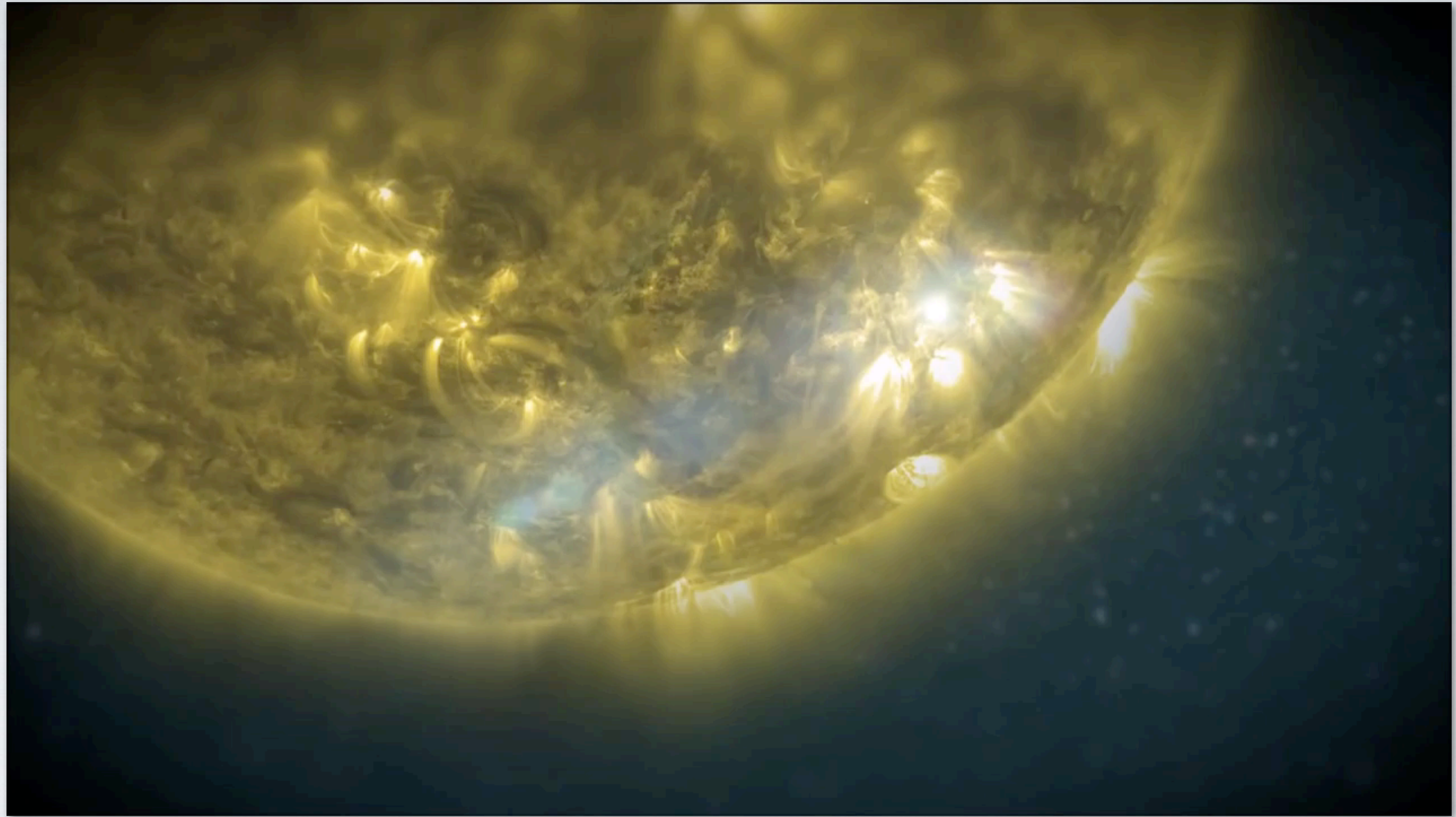
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- Greenhouse Gases:
 - Carbon Dioxide - 81%
 - Methane - 10%
 - Nitrous Oxide - 6%
 - Chlorofluorocarbons 3%



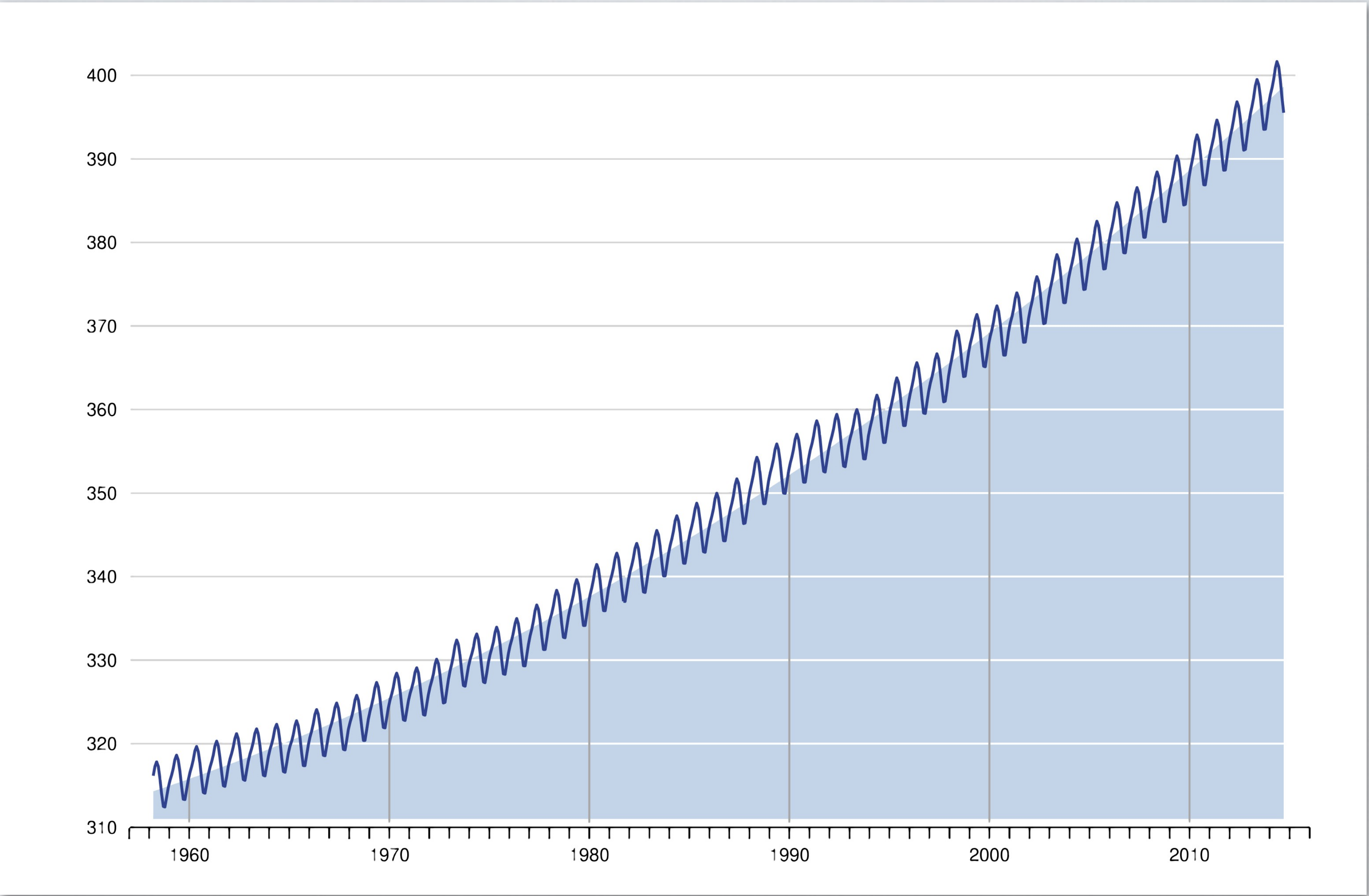


The Greenhouse Effect



The Greenhouse Effect





Carbon Dioxide Concentrations [ppm]

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- Contributing Factors:
 1. Fossil fuel burning power plants
 2. Burning of gasoline for transportation



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- Contributing Factors: [continued]
 3. Deforestation of the rainforests



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- Contributing Factors: [continued]
 4. Methane emissions from animals and agriculture





Contributing Factors



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- Potential Effects:
 1. Worldwide sea level rise from melting ice
 2. More frequent and intense storms



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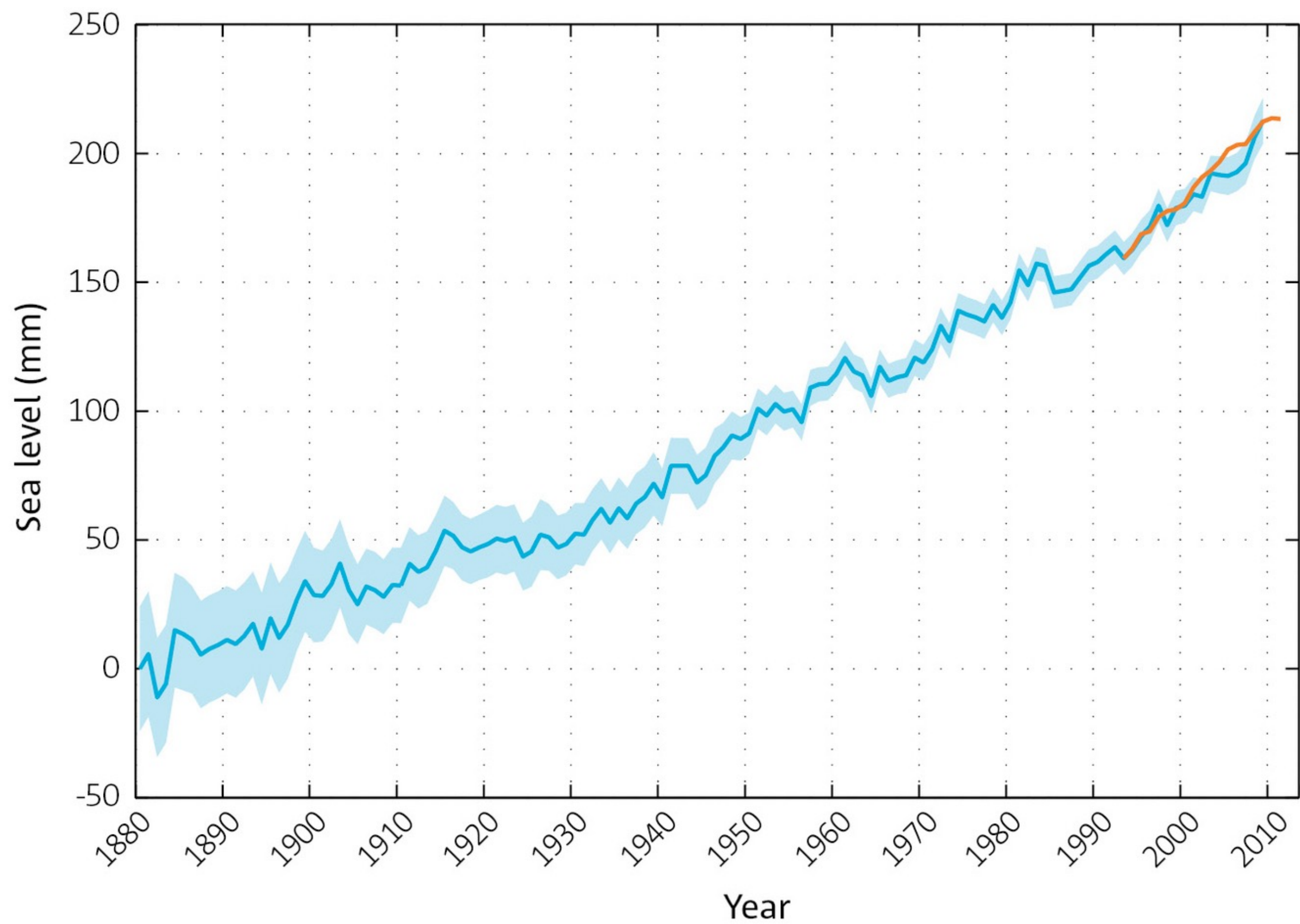
- Potential Effects: [continued]
 3. Massive crop failures
 4. Widespread extinctions
 5. Loss of coral reefs



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- 90% of the US population lives within 100 miles of the ocean and if sea level were to rise these areas would be inundated with water

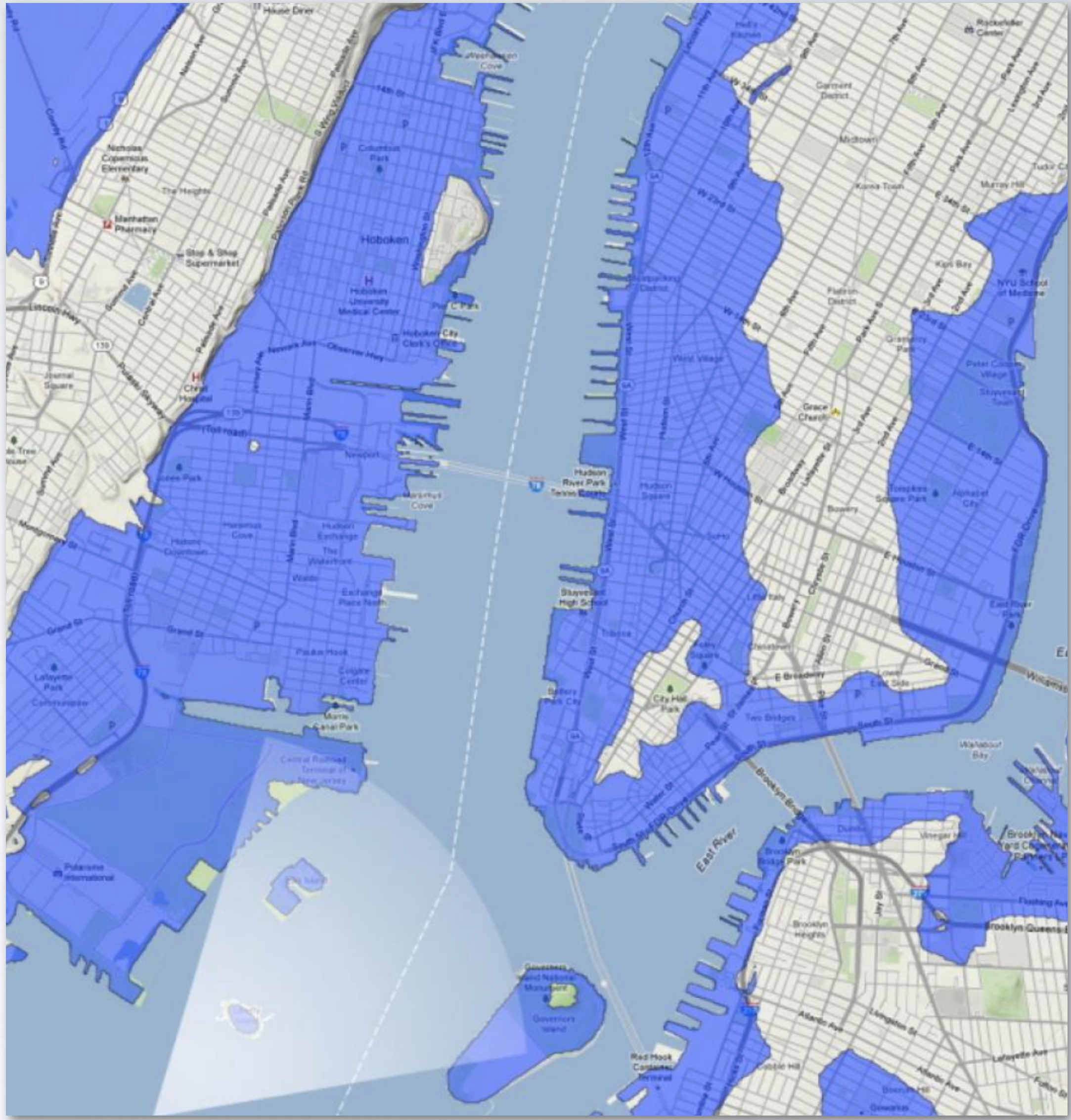
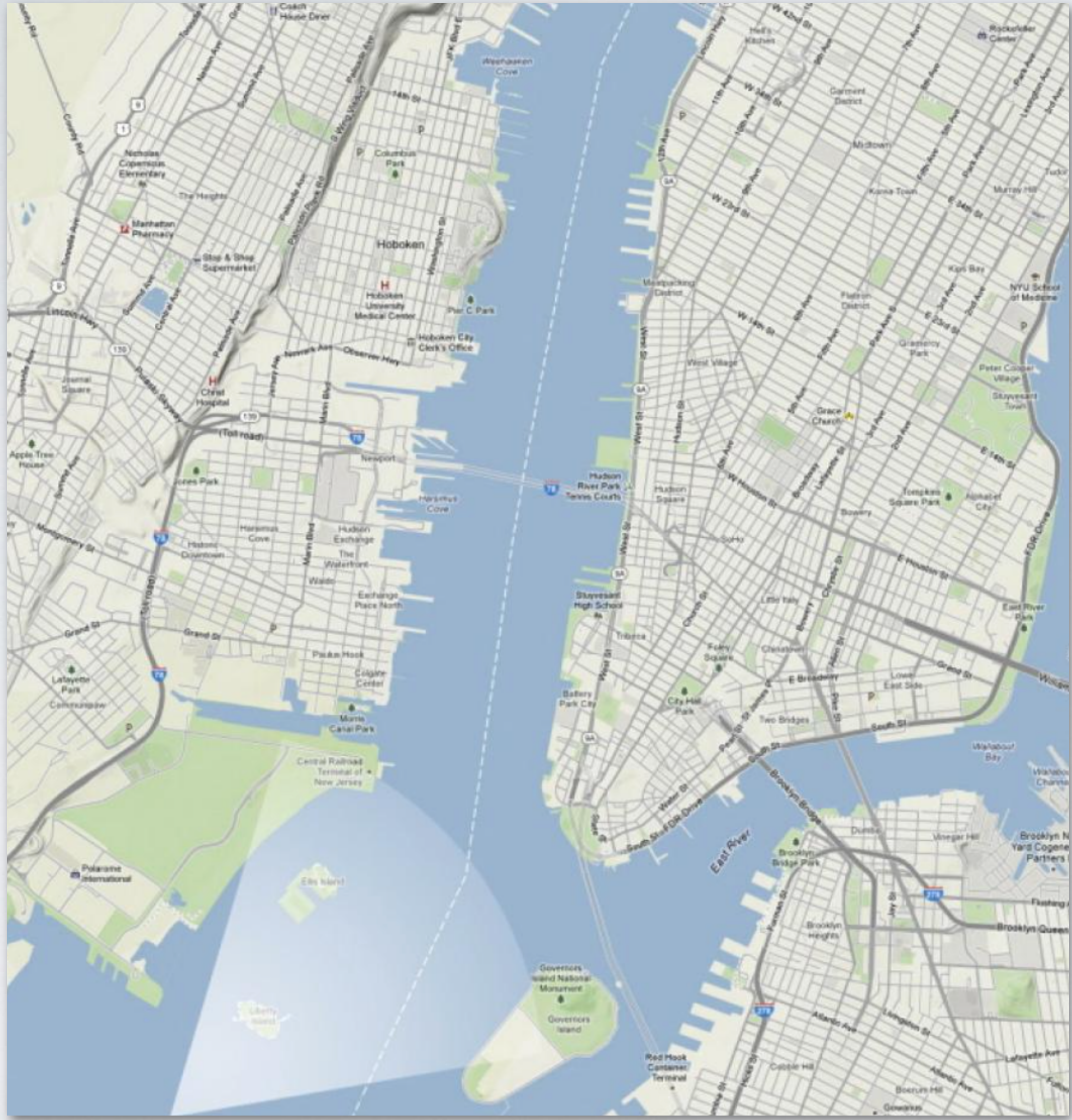




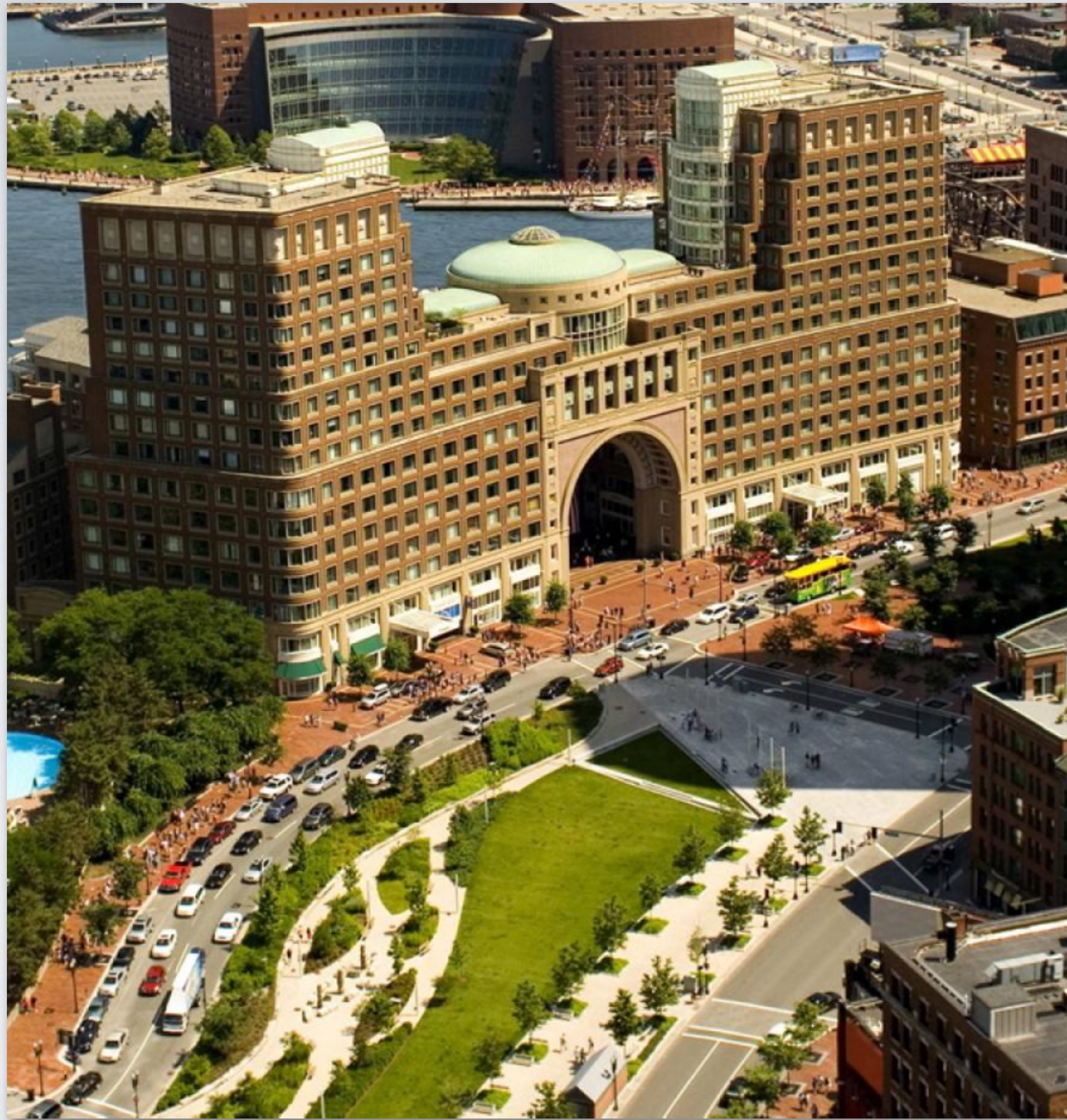
Global Sea Level Rise [mm]



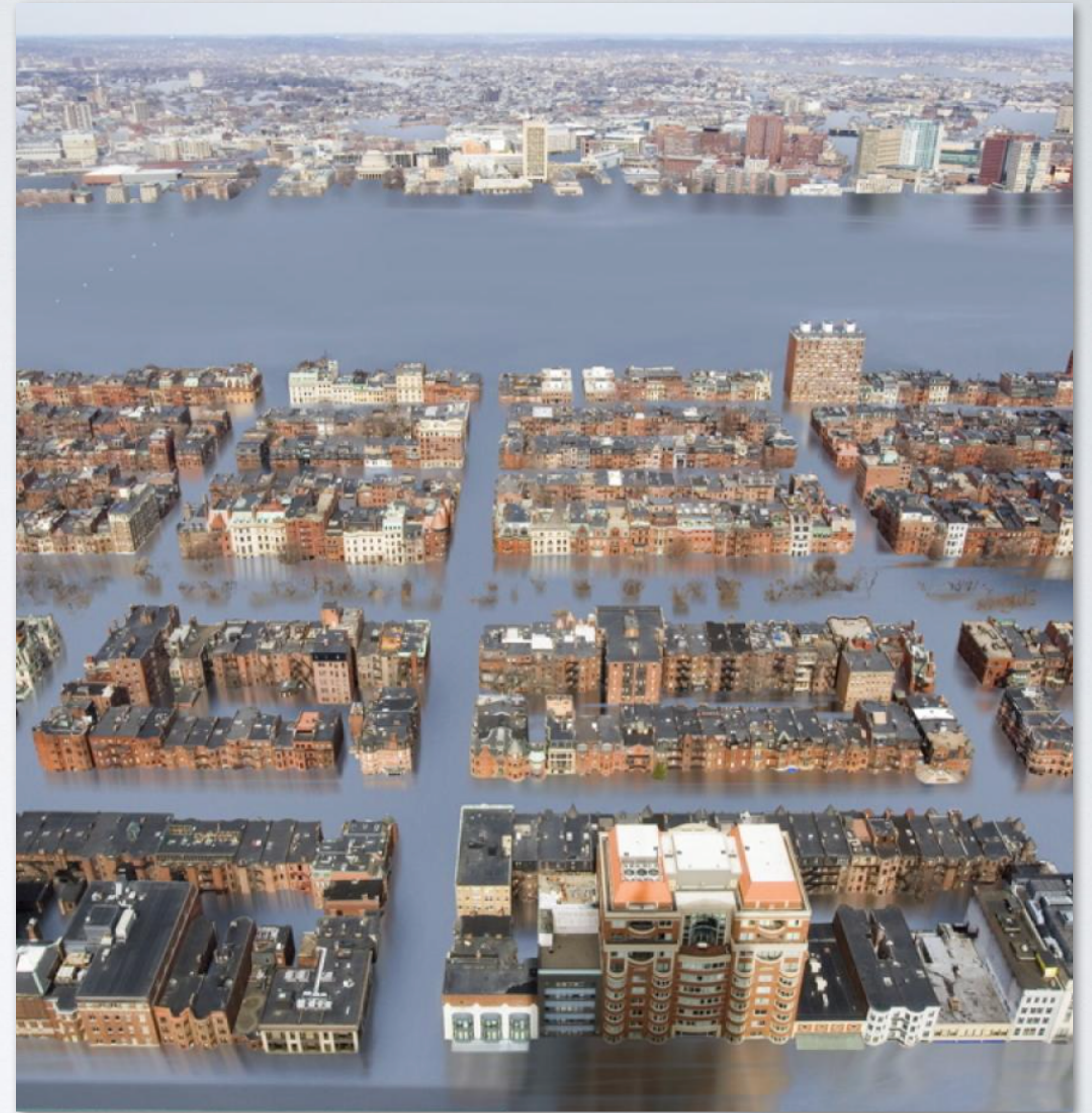
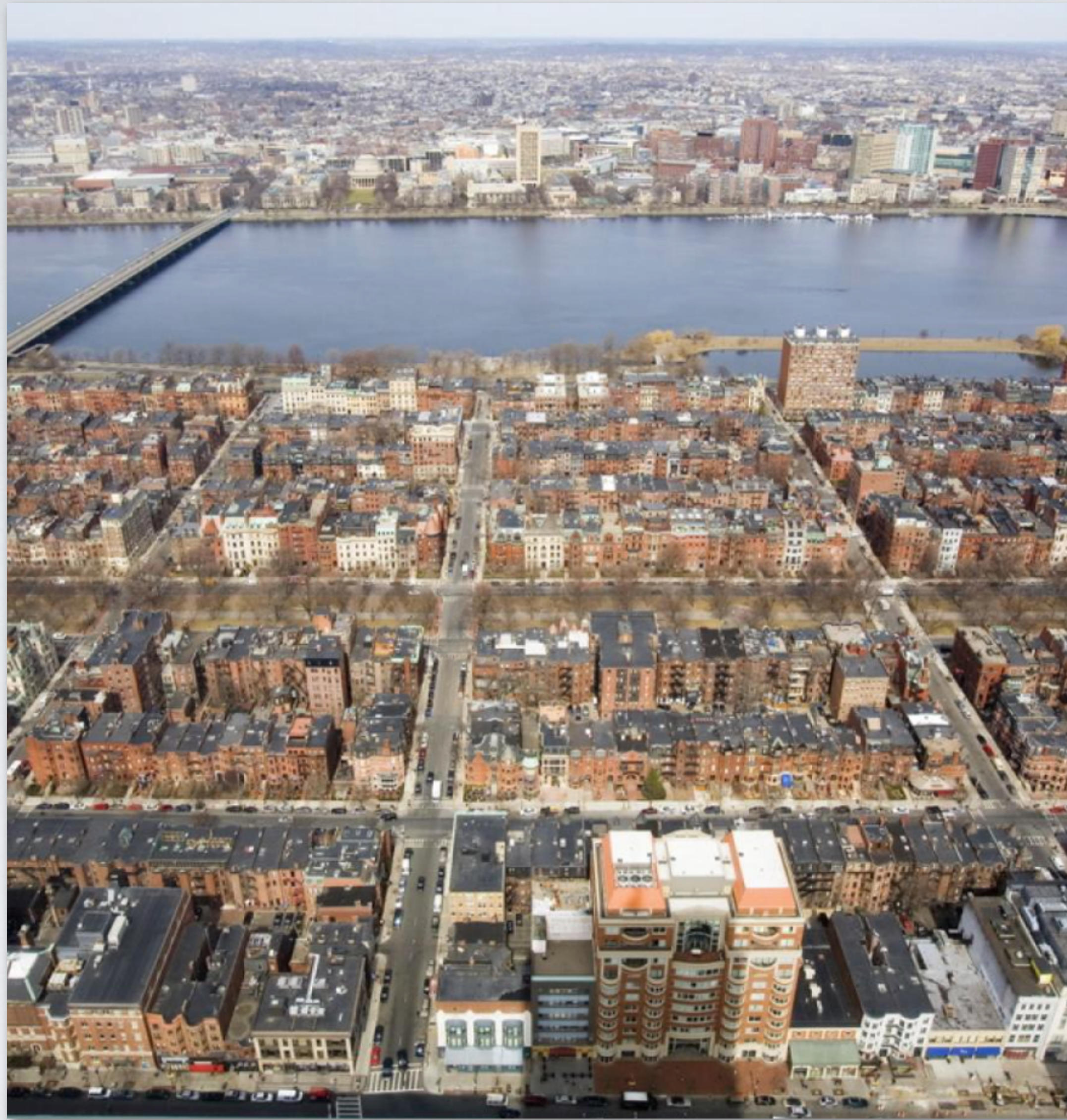
New York Sea Level Rise - 25 feet



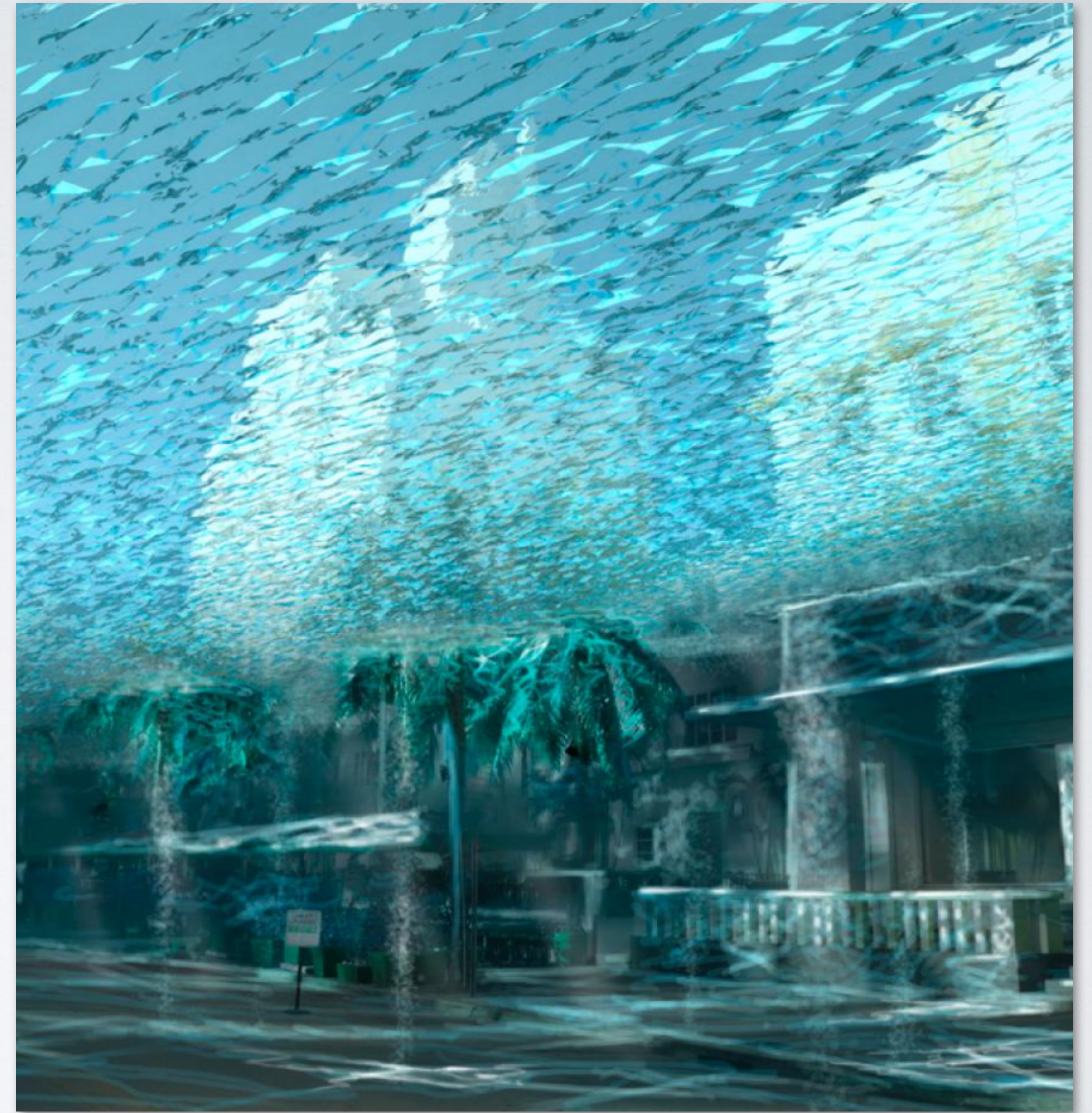
New York Sea Level Rise - 25 feet



Boston Sea Level Rise - 25 feet



Boston Sea Level Rise - 25 feet



Miami Sea Level Rise - 25 feet

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