

CLIMATE CHANGE

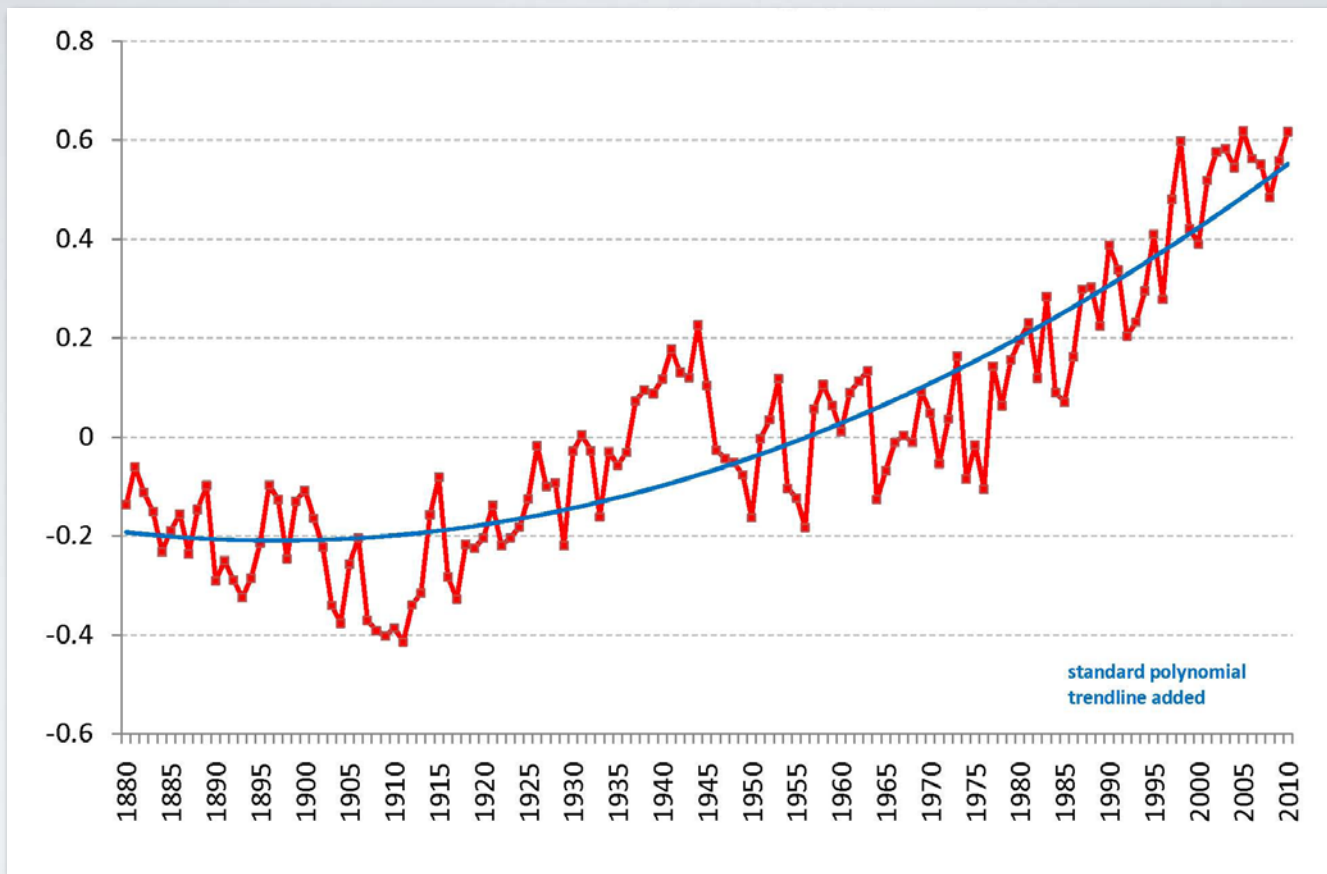
SHANGHAI, CHINA



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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

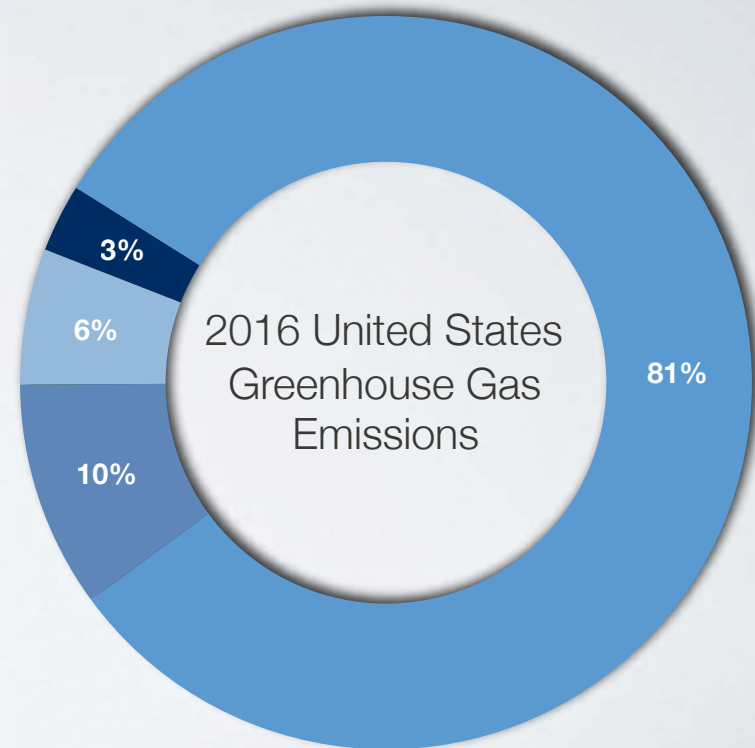
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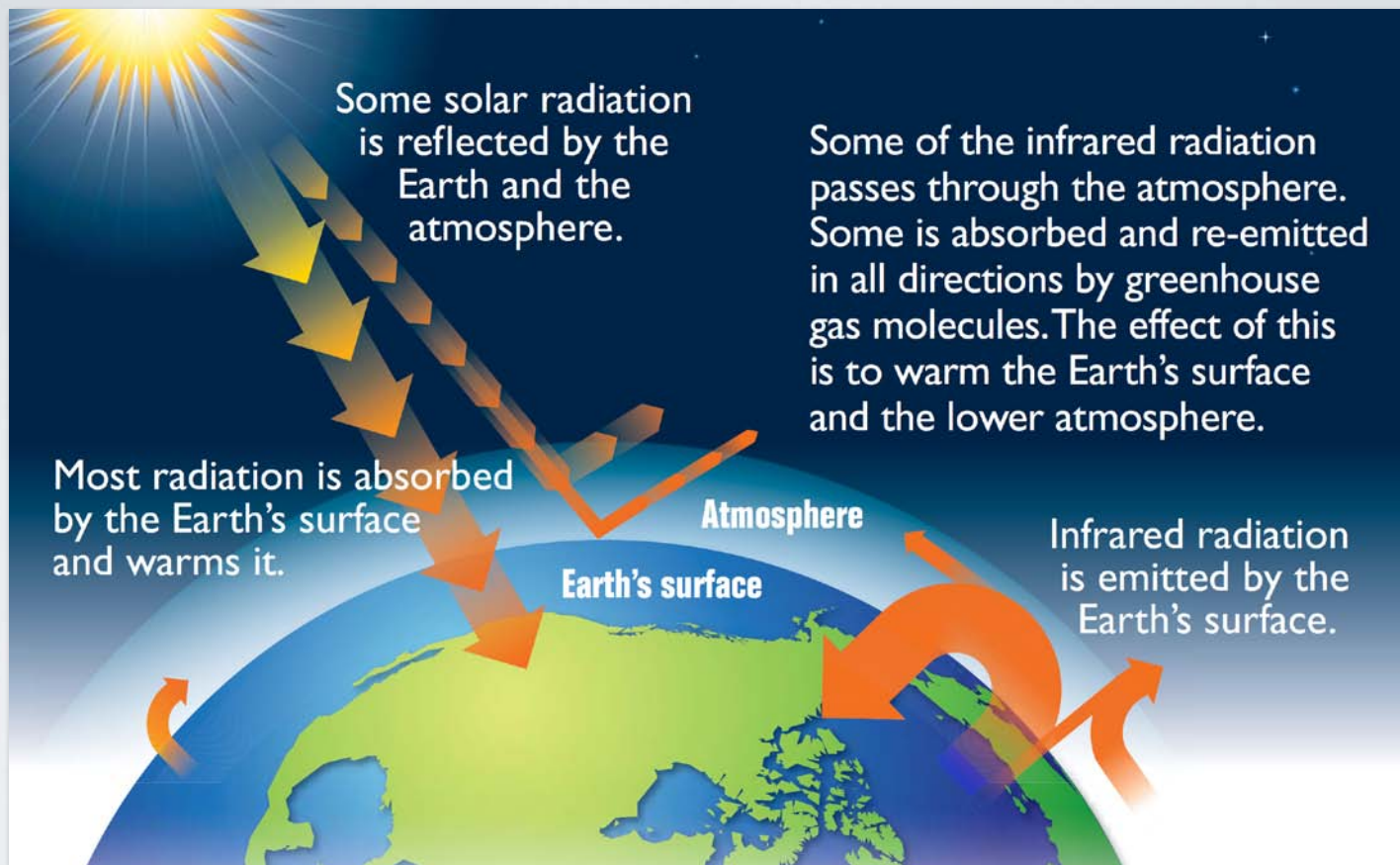
- Greenhouse Effect - increased gas levels in lower atmosphere that trap in heat energy



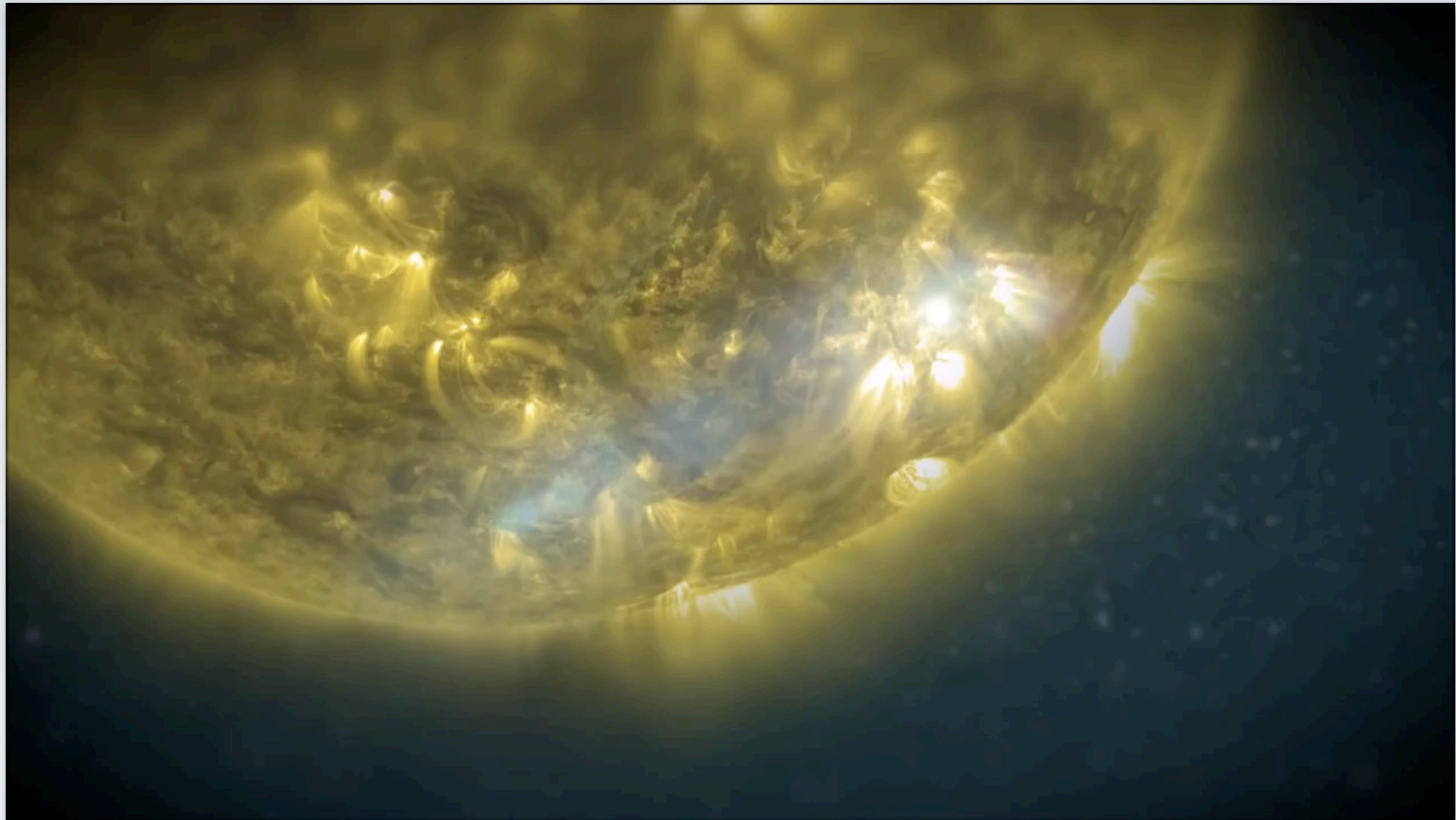
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- Greenhouse Gases:
 - Carbon Dioxide - 81%
 - Methane - 10%
 - Nitrous Oxide - 6%
 - Chlorofluorocarbons 3%

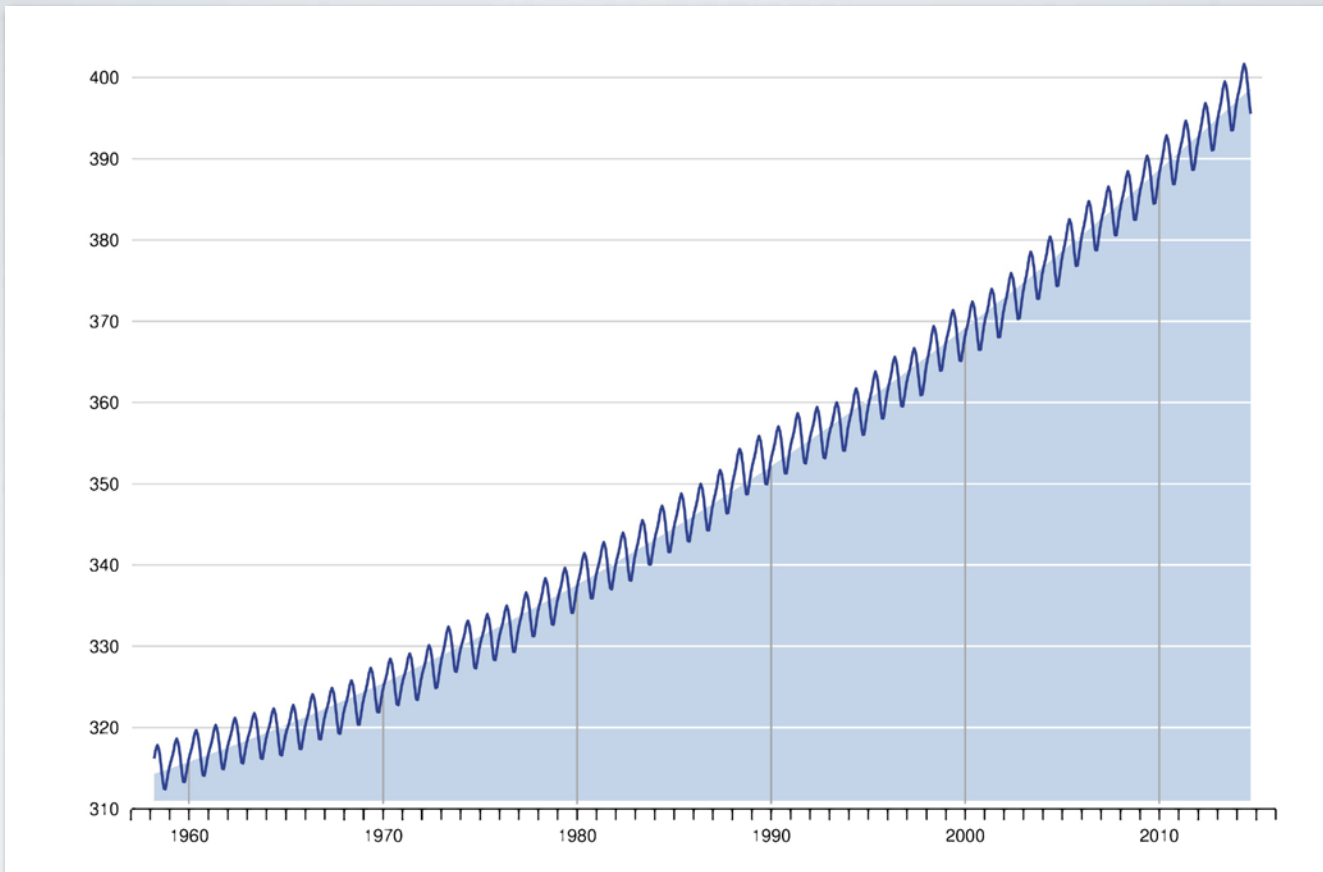




The Greenhouse Effect



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



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



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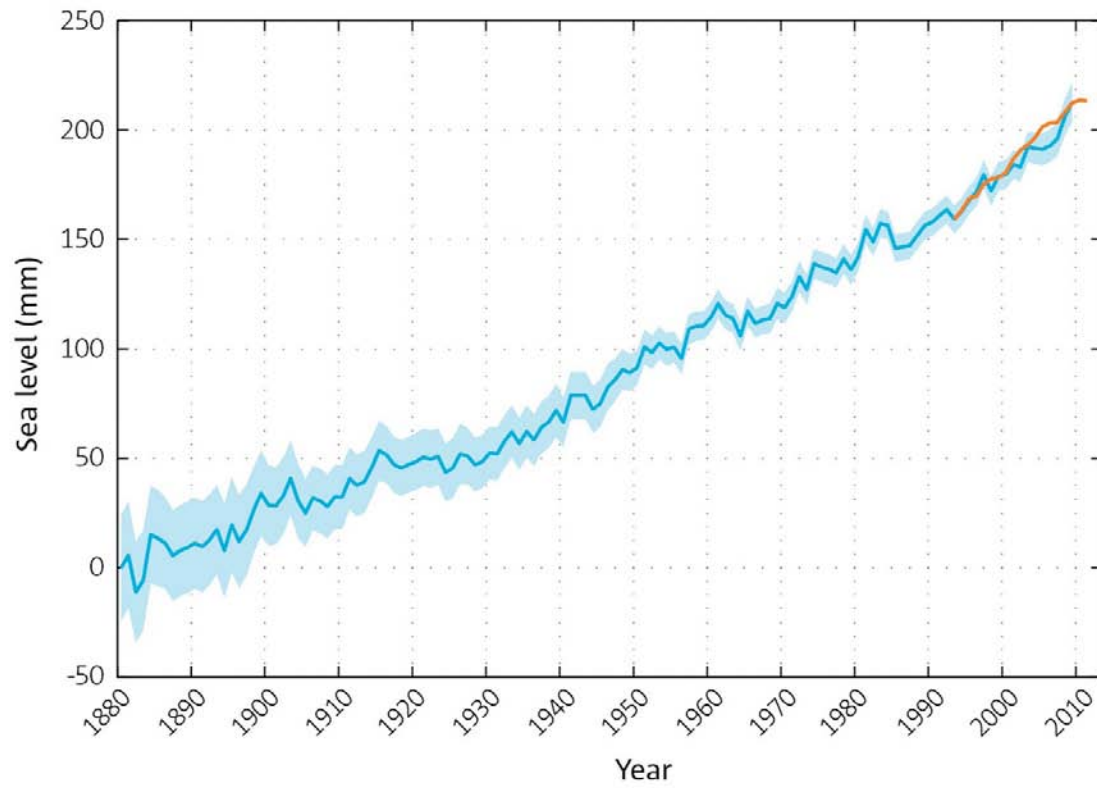
- Potential Effects: [continued]
 3. Massive crop failures
 4. Widespread extinctions
 5. Loss of coral reefs



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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

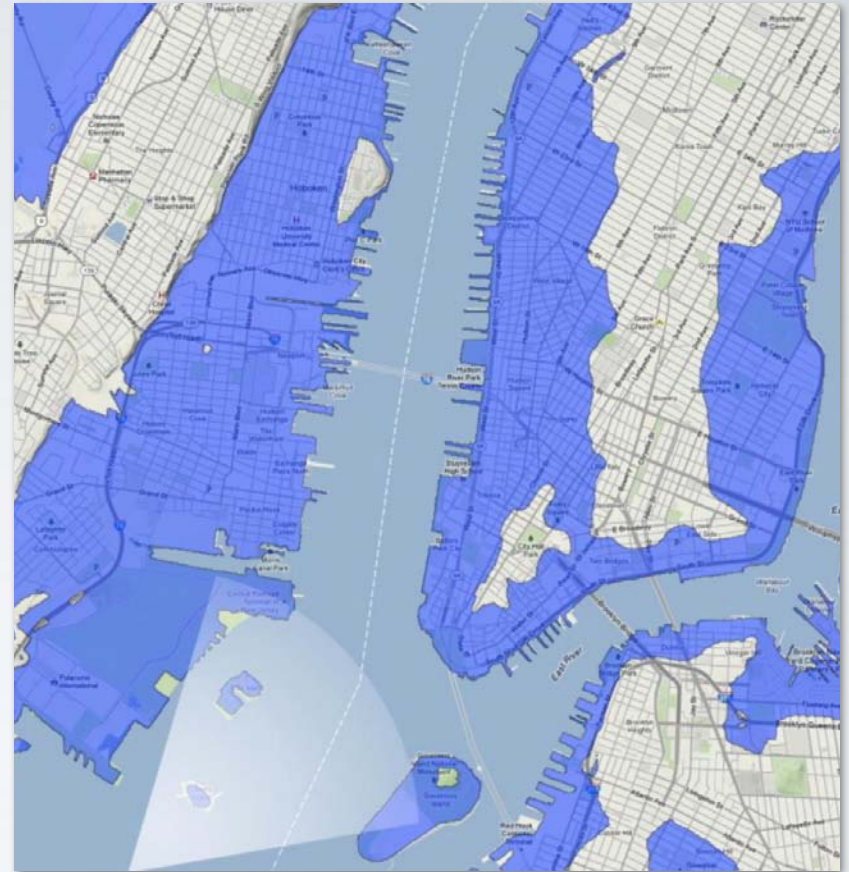
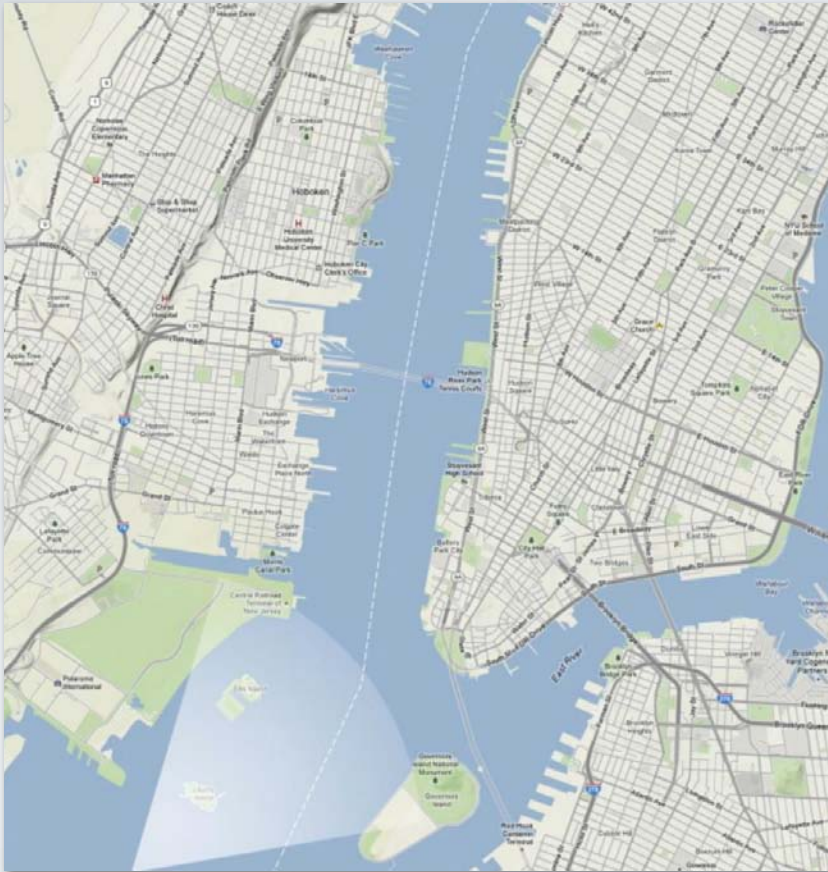




Global Sea Level Rise (mm)



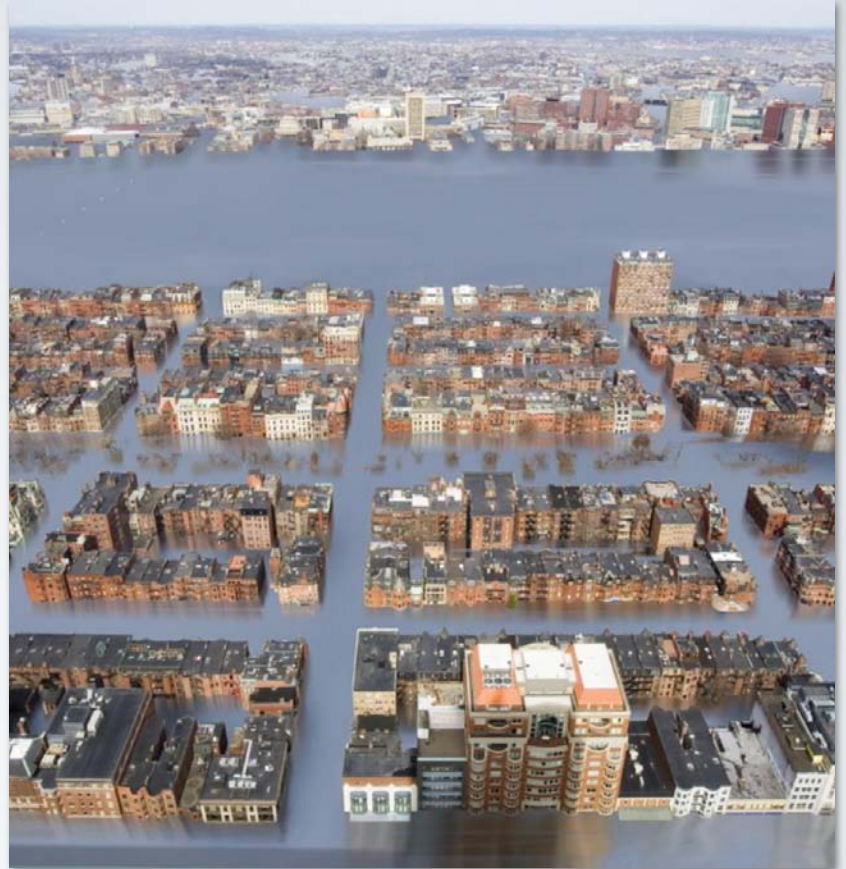
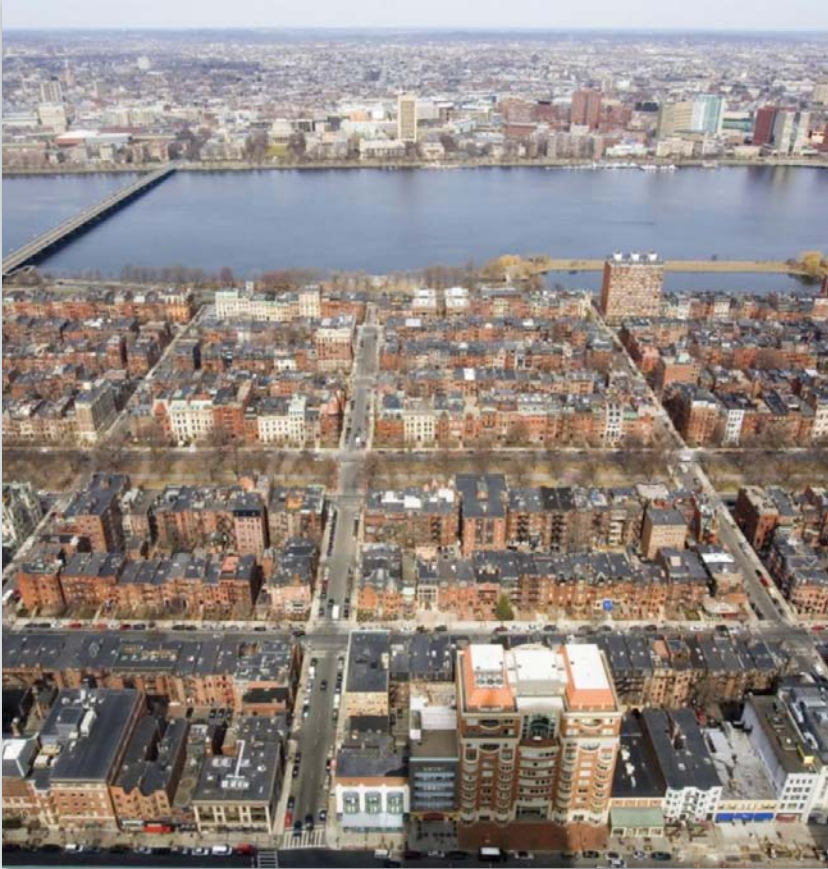
New York Sea Level Rise - 25 feet



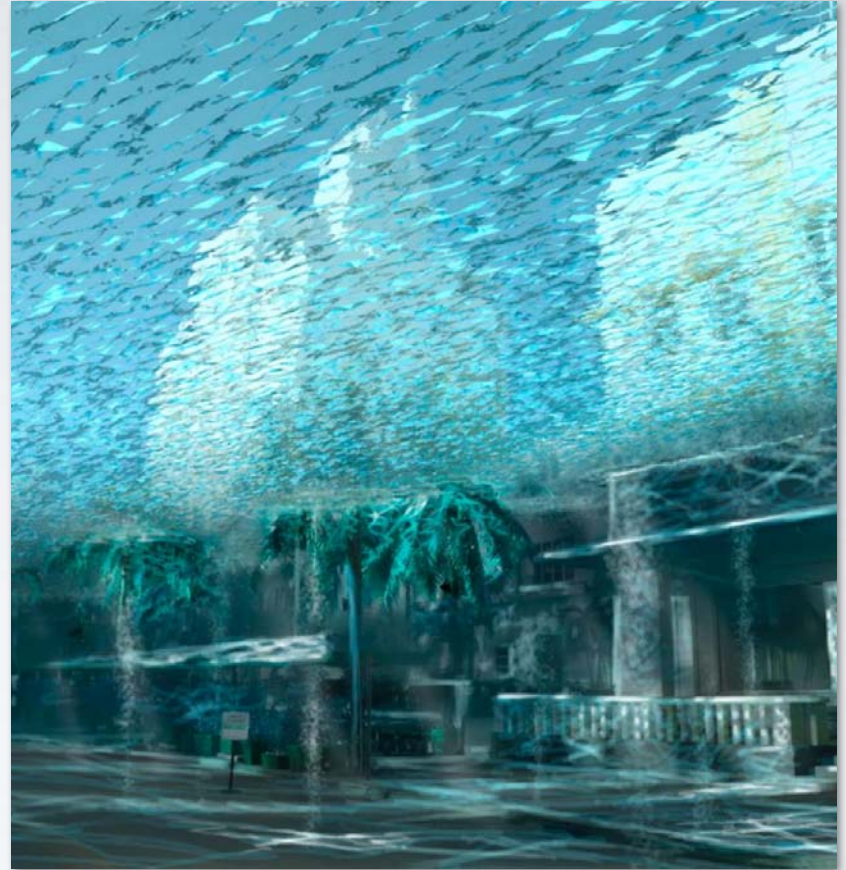
New York Sea Level Rise - 25 feet



Boston Sea Level Rise - 25 feet



Boston Sea Level Rise - 25 feet



Miami Sea Level Rise - 25 feet