Are you looking for a storyline to use with your students that features NASA data? Consider using the following resources in your classroom today!

Use these resources with your students to show how humans can impact the temperature of Earth’s surface through changing land cover. This storyline evidences the Urban Heat Islands created near the Great Lakes region by analyzing surface temperatures.

Document Resources

- Presentation
- Presentation Script
- Student Sheet
Grade Band

- 3-5
- 6-8
- 9-12

Supported NGSS Performance Expectations

- **4-ESS2-2**: Analyze and interpret data from maps to describe patterns of Earth’s features.
- **4-PS3-2**: Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
- **5-ESS2-1**: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- **MS-ESS2-1**: Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
- **MS-ESS3-2**: Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
- **MS-ESS3-5**: Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.
- **HS-ESS2-4**: Use a model to describe how variations in the flow of energy into and out of Earth’s systems result in changes in climate.

NGSS Disciplinary Core Ideas

- **PS3A**: Definitions of Energy
- **ESS2A**: Earth Materials and Systems
- **ESS3A**: Natural Resources

NGSS Science and Engineering Practices

- Developing and Using Models
- Analyzing and Interpreting Data
Crosscutting Concepts

- Cause and Effect
- Stability and Change