

Arctic Security

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Arctic Security

Moderator:

Dr. John M. Lanicci, Embry-Riddle Aeronautical Univ.

Panelists:

Dr. Martin Jeffries, White House Office of Science and Technology Policy

Dr. David Kennedy, National Oceanic and Atmospheric Administration

Dr. Noor Johnson, Smithsonian Institution

Dr. Adrianna Muir, Department of State

Arctic Security

Motivation:

- The Arctic is one of the focal points for Environmental Security
 - Rapid climate change
 - Potential economic benefits for shipping, energy exploration
 - Lots of issues and unknowns that will be addressed by our panelists this morning

Arctic Security

Motivation:

- What is Environmental Security?
 - A general ES definition from Ramsay and Klitz (2014):
...an interdisciplinary study of the effects of extreme environmental or climatic events that can act locally or transnationally to destabilize countries or regions of the world, resulting in geopolitical instability, resource conflicts, vulnerabilities in critical infrastructure, or some combination of these impacts. (pp. 118-119)

Critical Issues in Homeland Security: A Case Book, J.D. Ramsay and L. Klitz, Eds. Westview Press, Boulder, CO

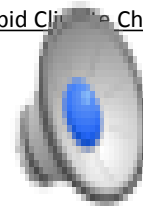
Arctic Security

Motivation:

- Interestingly, ES could potentially present itself differently in the arctic
 - Will climate change destabilize the countries that border the arctic? What about the indigenous peoples who reside there?
 - Will arctic climate change result in resource conflicts?
 - Will arctic climate change expose critical U.S. infrastructure vulnerabilities (e.g., military operating capabilities)?

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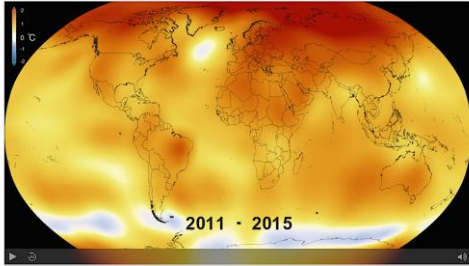
Rapid Climate Change



<http://data.giss.nasa.gov/gistemp/animations/>

Five-Year Global Temperature Anomalies from 1880 to 2015

Visualizations by Lori Perkins on January 20, 2016



This color-coded map in Robinson projection displays a progression of changing global surface temperature anomalies from 1880 through 2015. Higher than normal temperatures are shown in red and lower than normal temperatures are shown in blue. The final frame represents the global temperatures 5-year averaged from 2011 through 2015. Scale in degree Celsius.