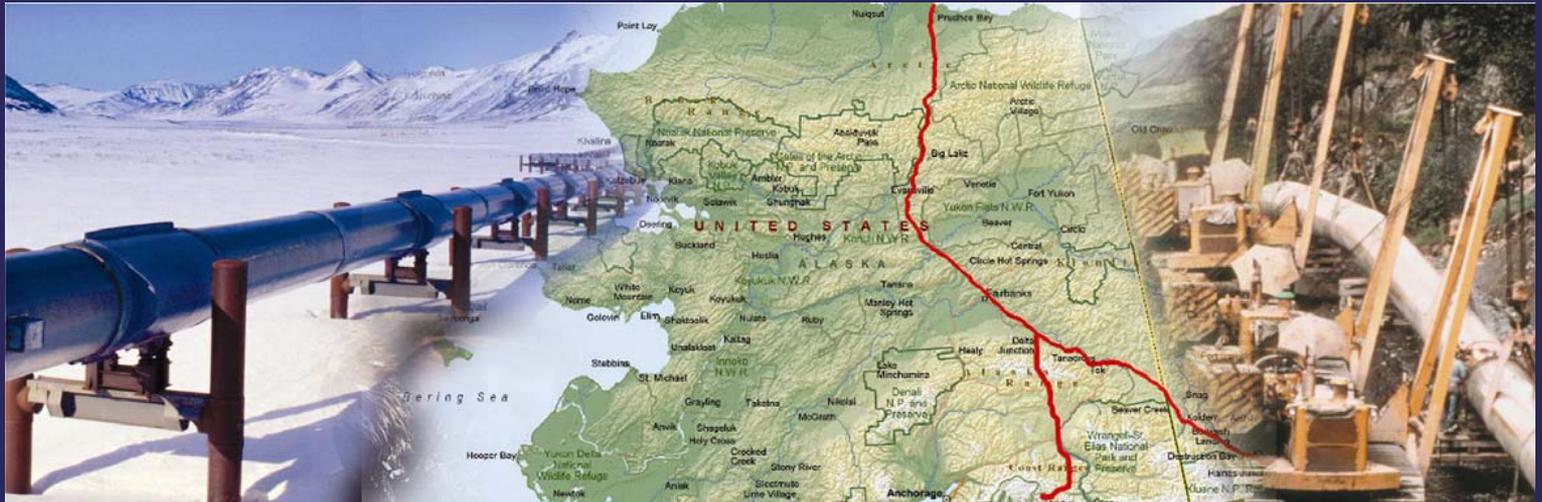


Alaska's Natural Gas Pipeline: A Federal Update



Drue Pearce
Federal Coordinator
Office of the Federal Coordinator for
Alaska Natural Gas Transportation Projects
Tanana Chiefs Conference Annual Convention
March 18, 2009

Pipeline Projects

- ❖ Past
 - ❖ ANGTA
- ❖ Present
 - ❖ ANGPA

ANGTA



ANGPA



Planned Pipeline Projects

- ❖ Denali
 - ❖ Pre-filed with FERC, filed BLM ROW application
 - ❖ Planning open houses in 2009
- ❖ TransCanada Alaska
 - ❖ AGIA licensee
 - ❖ Begun engagement with federal agencies
- ❖ ANGDA
 - ❖ Army Corps of Engineers (ACE) is EIS lead
 - ❖ Finished scoping meeting
- ❖ Enstar
 - ❖ ACE is EIS lead
 - ❖ Working with DOI regarding access in Denali NP

Infrastructure Needs

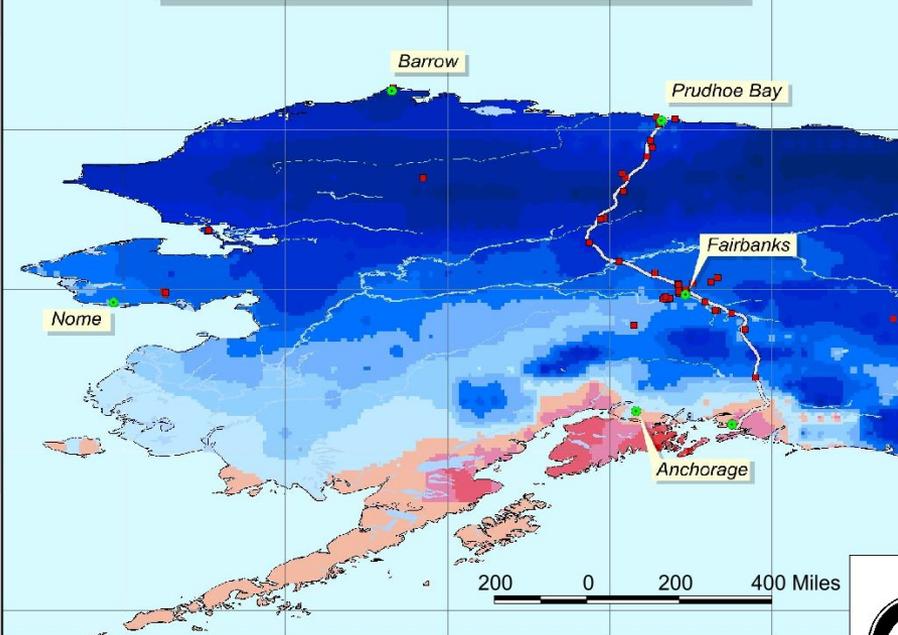
- ❖ Approximately \$1 Billion in Alaska Projects to improve safety and drivability and maintainability
 - ❖ 52 Highway Projects
 - ❖ 6 Airports
 - ❖ 14 Bridges
 - ❖ 15 Facilities

Technical

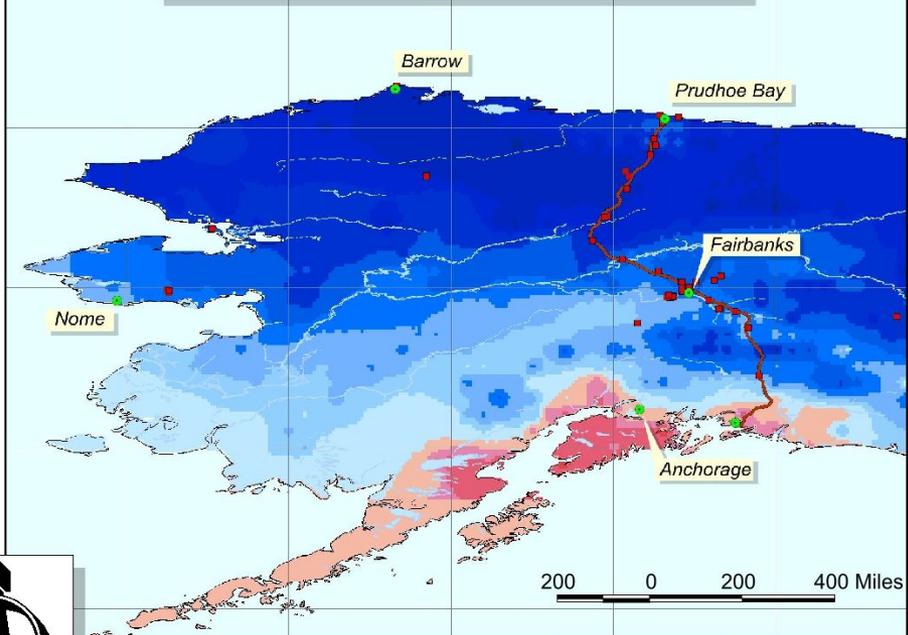
- ❖ Construction in Permafrost
- ❖ Arctic Construction
- ❖ High Pressure/Large Diameter Pipelines
- ❖ Pipeline Design
- ❖ Climate Change



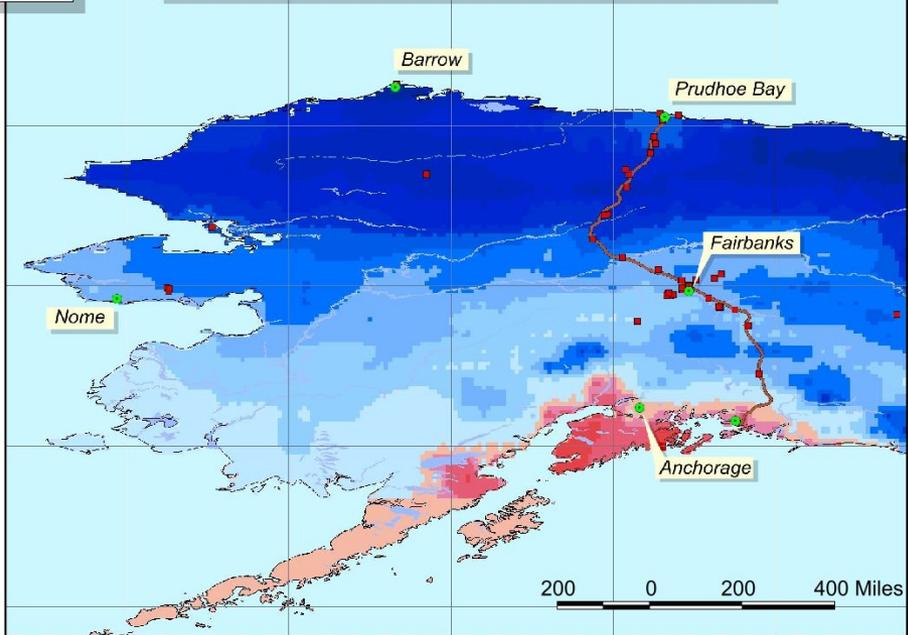
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

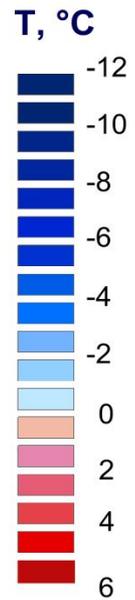


Mean Annual Temperature at 20 m Depth

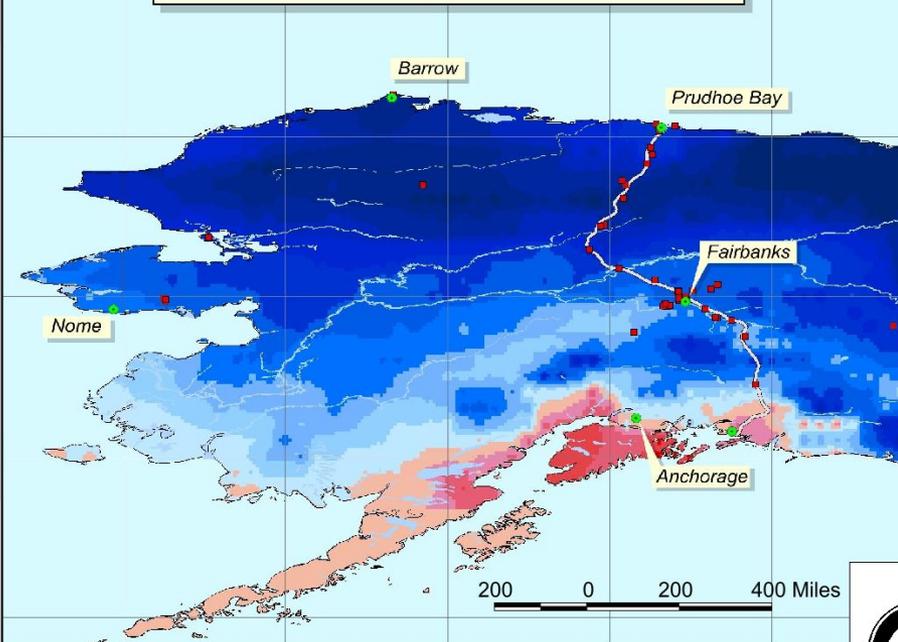


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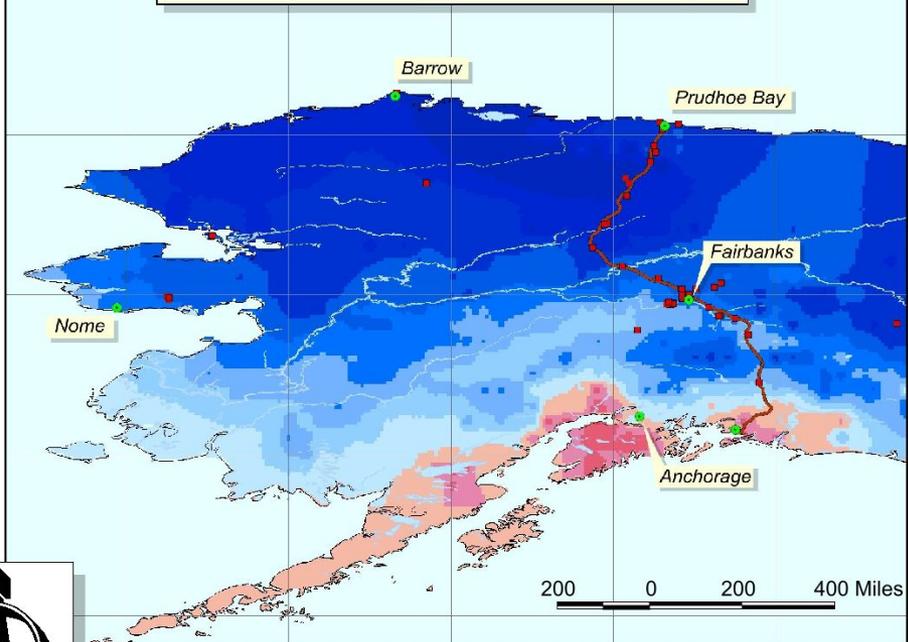
Spatially Distributed Model of Permafrost Dynamics in Alaska



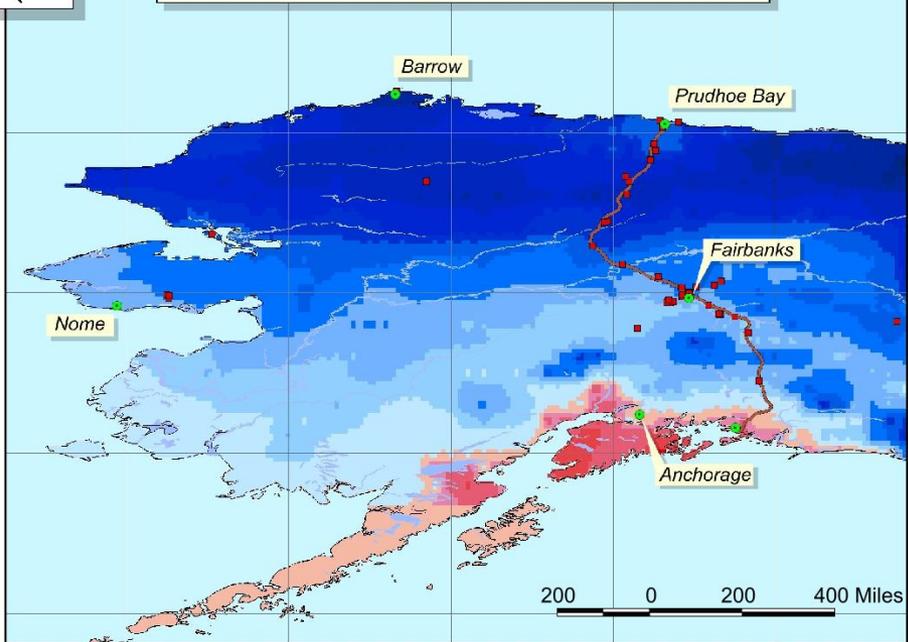
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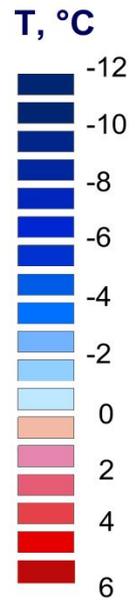


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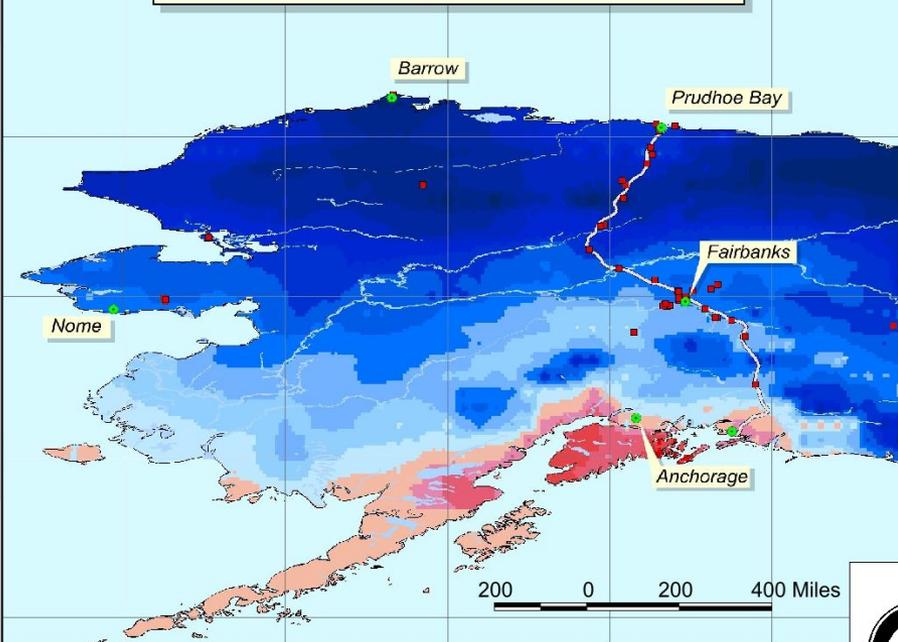


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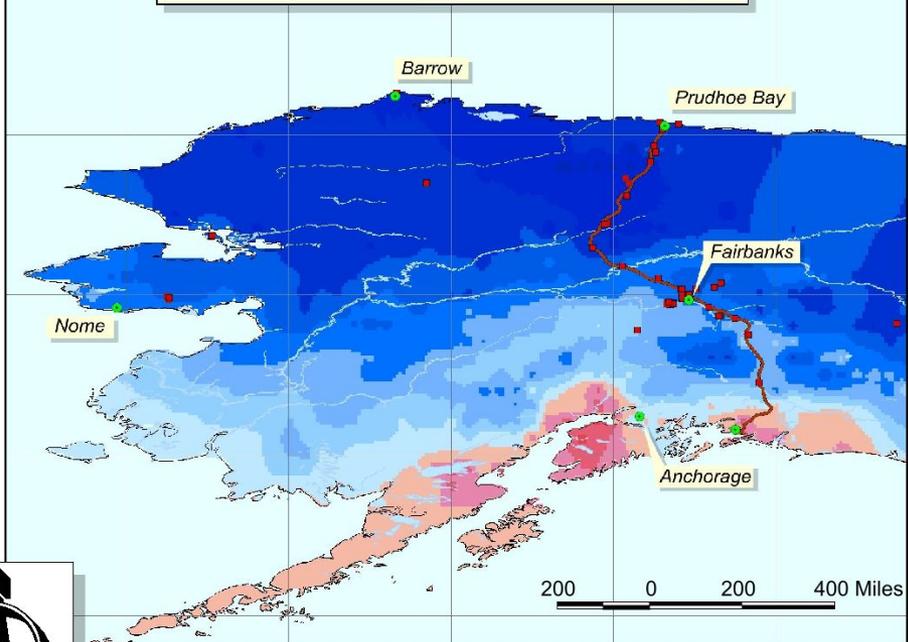
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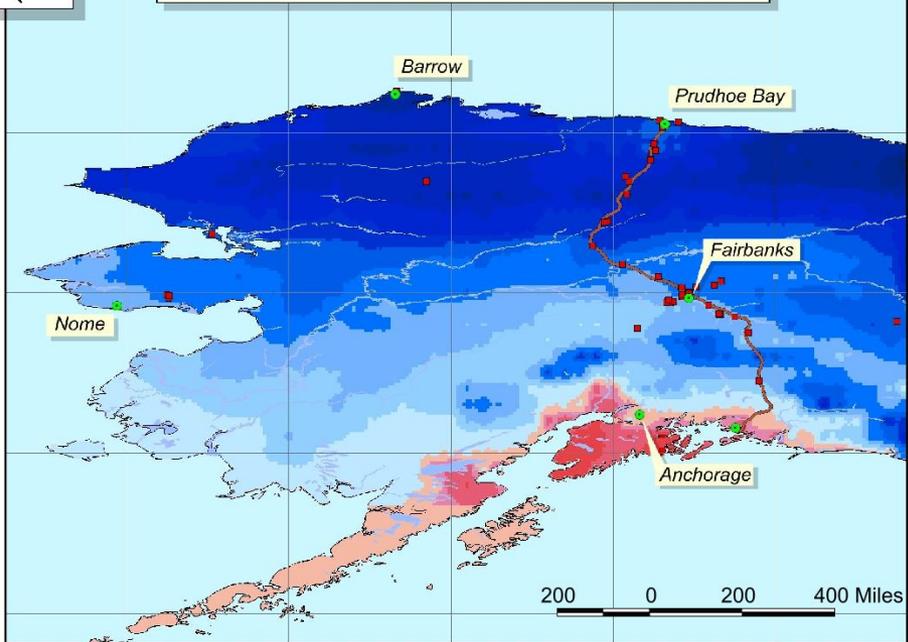
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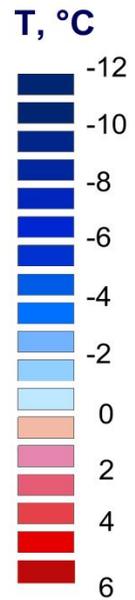


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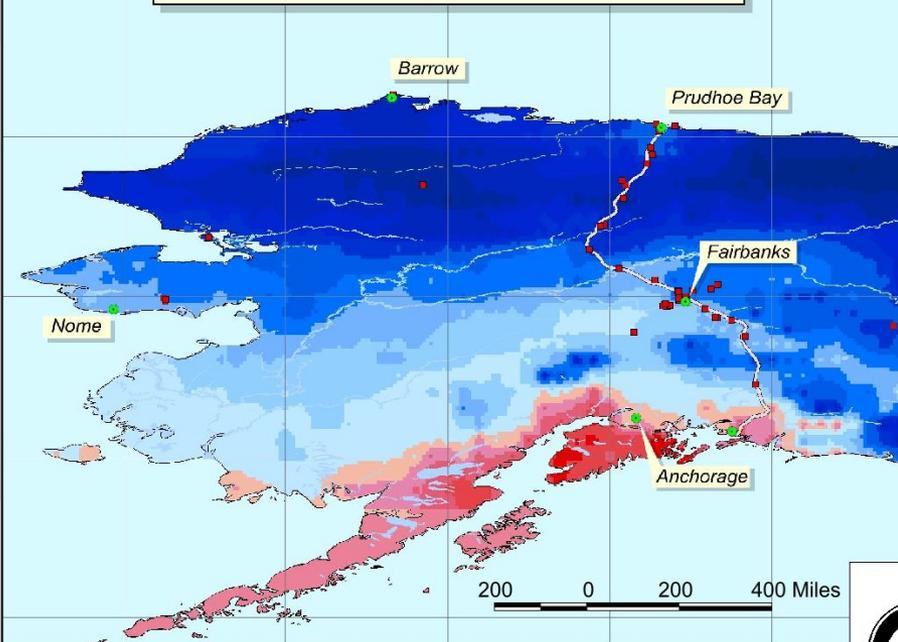


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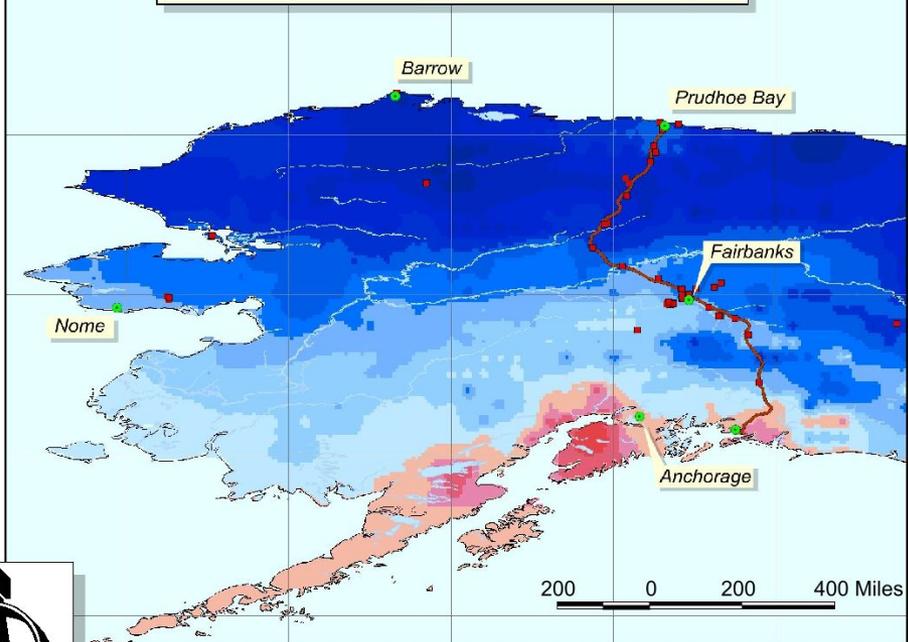
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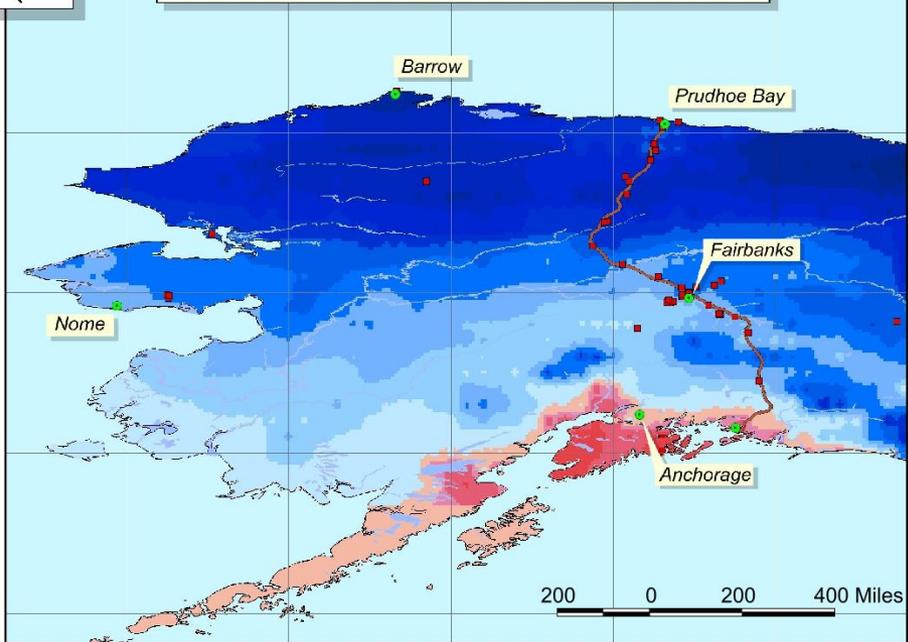
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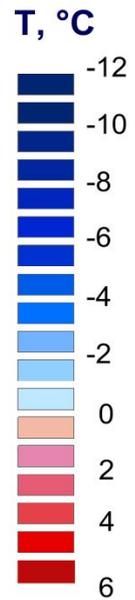


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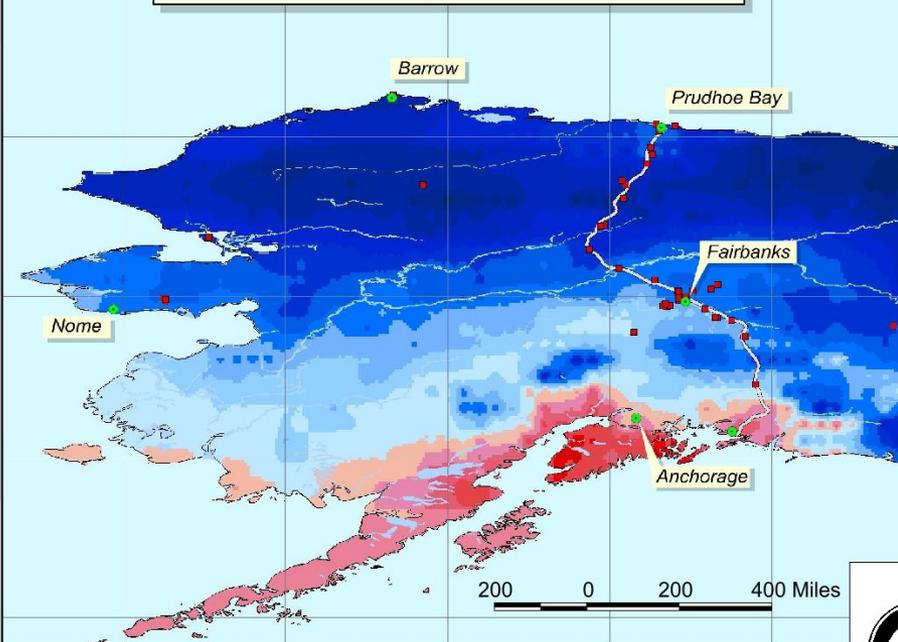


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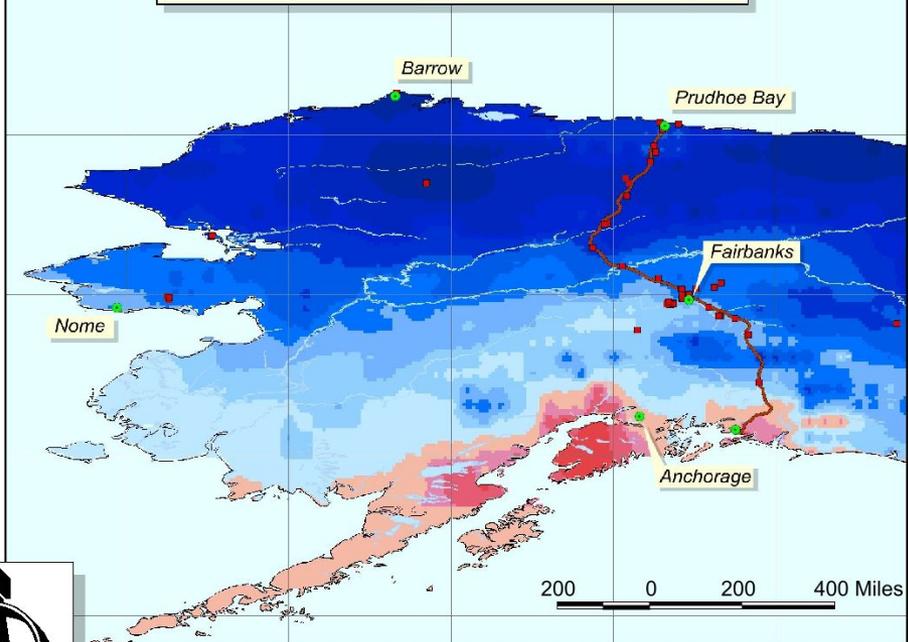
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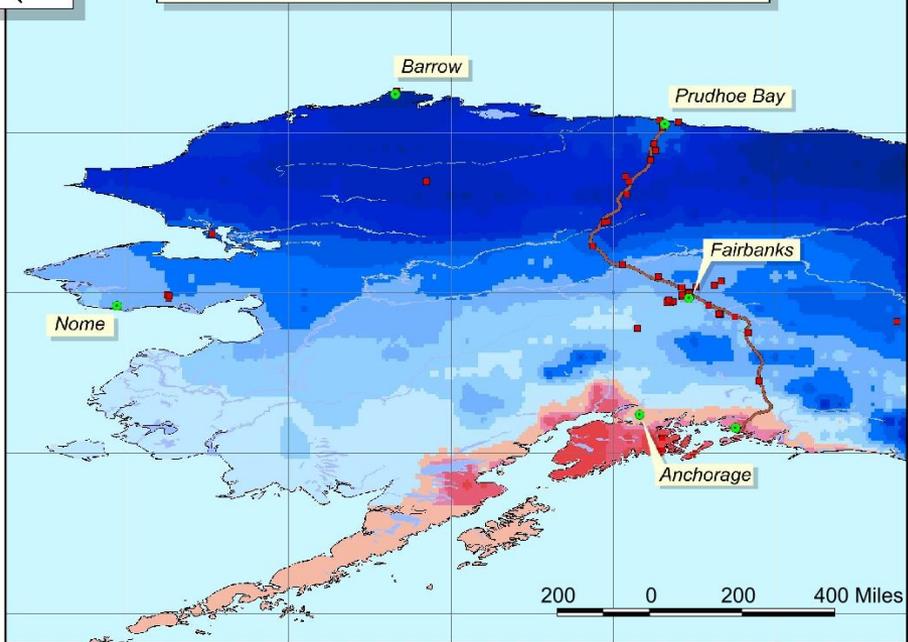
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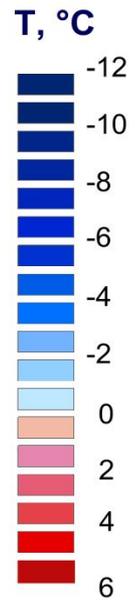


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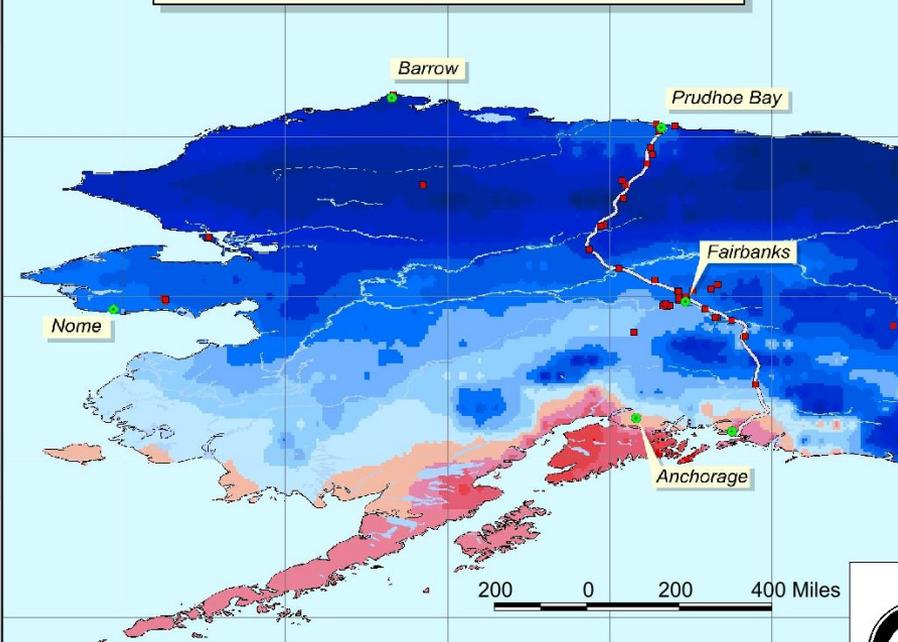


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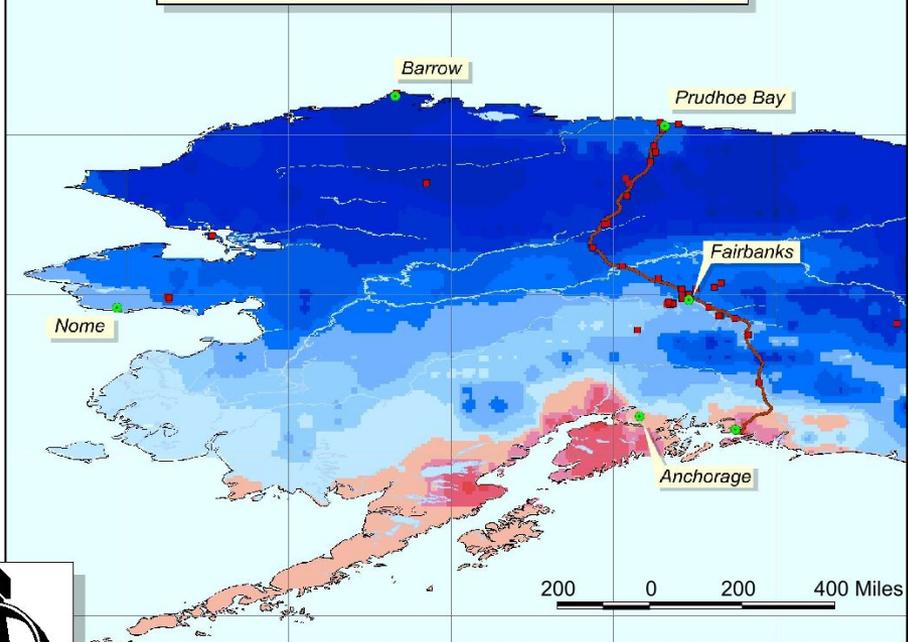
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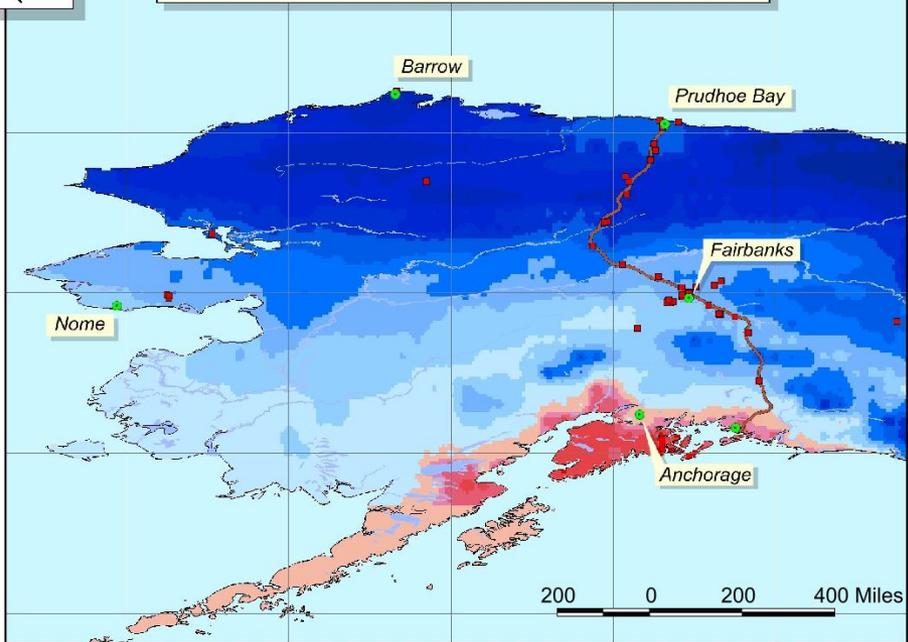
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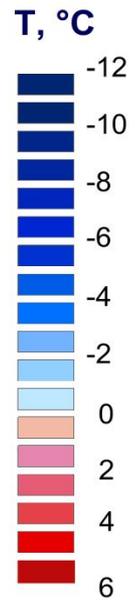


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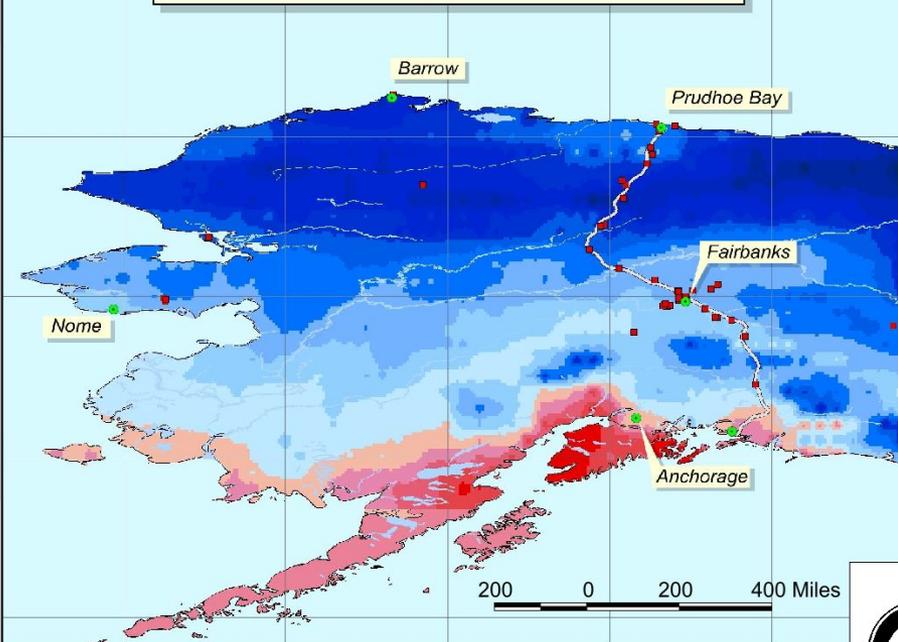


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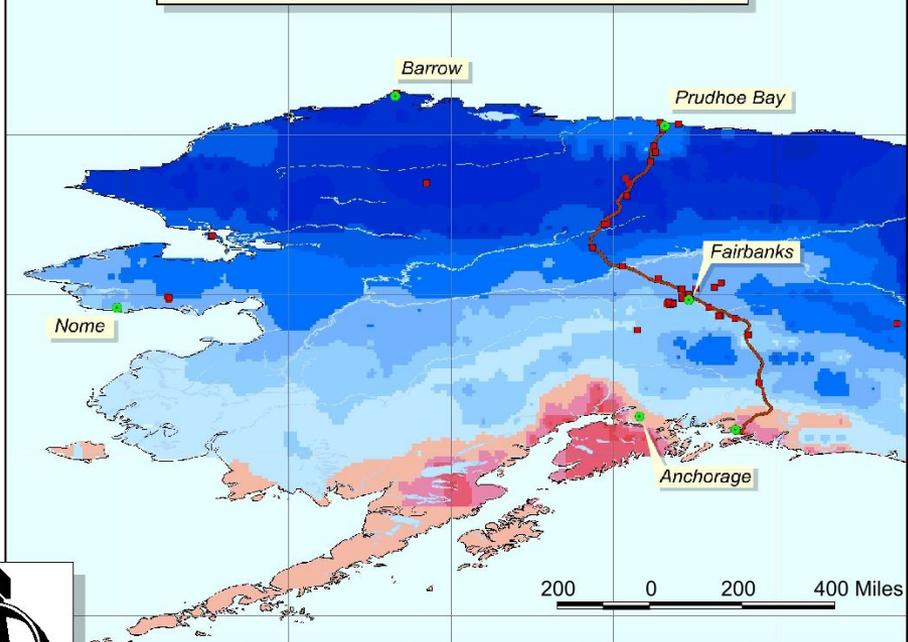
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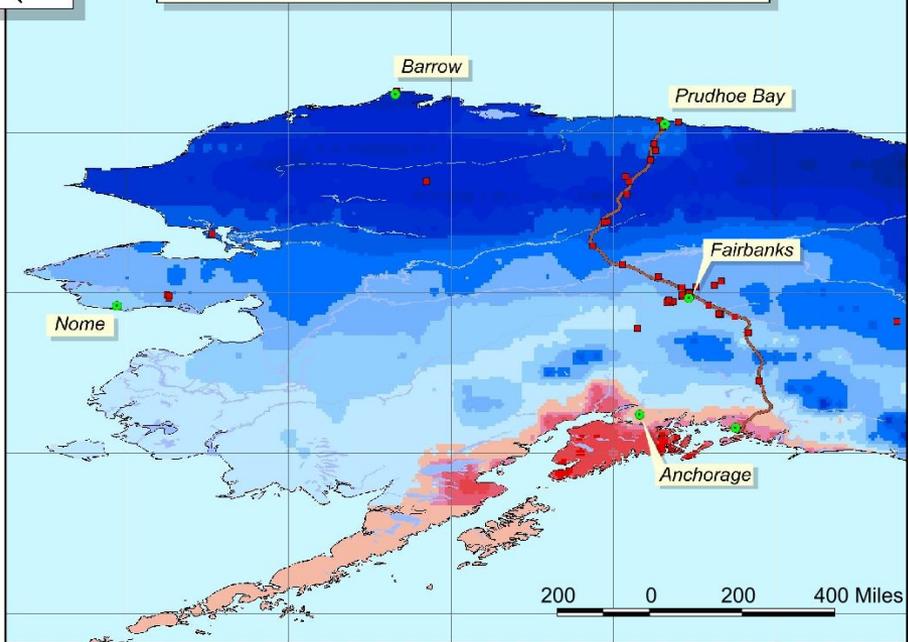
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

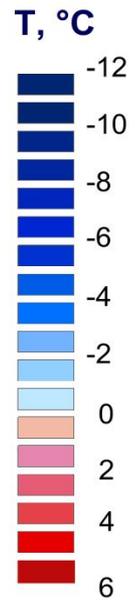


Mean Annual Temperature at 20 m Depth

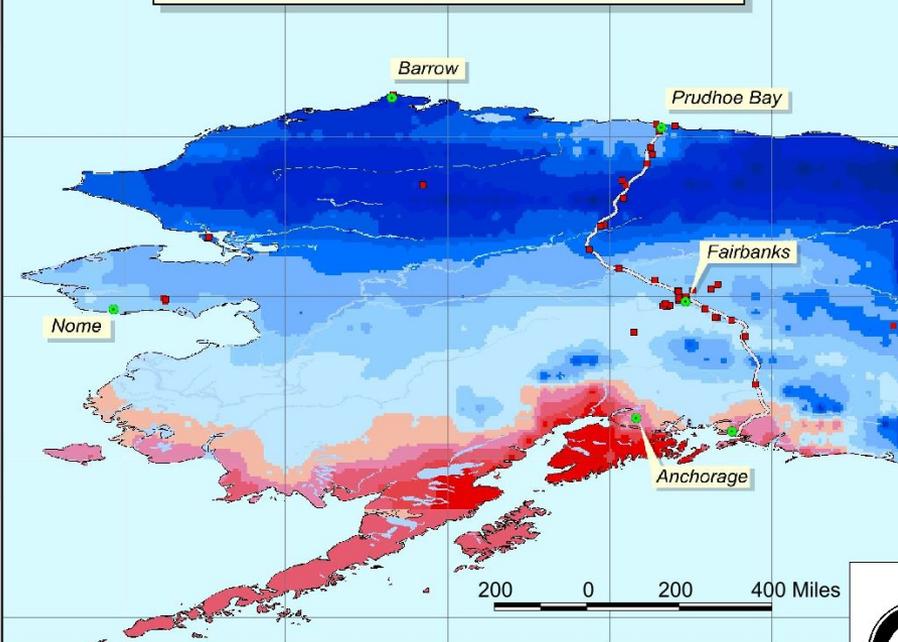


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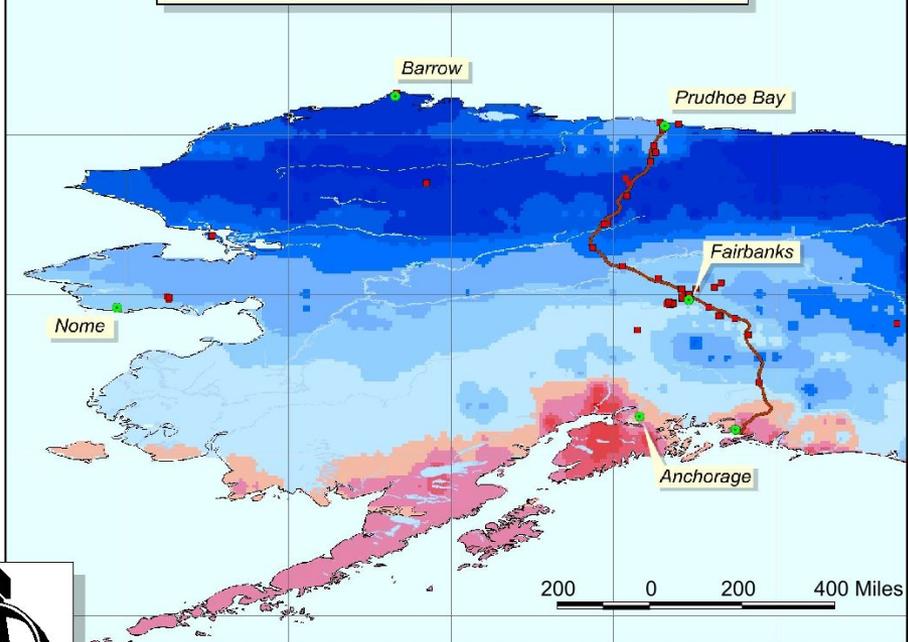
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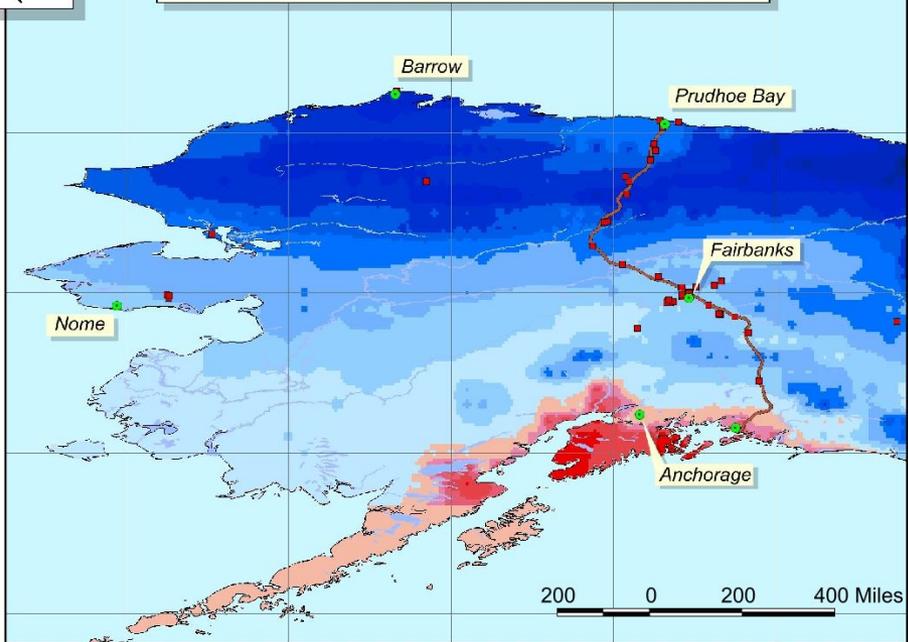
Mean Annual Temperature at 2 m Depth



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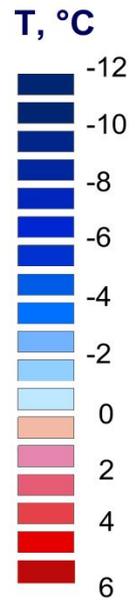


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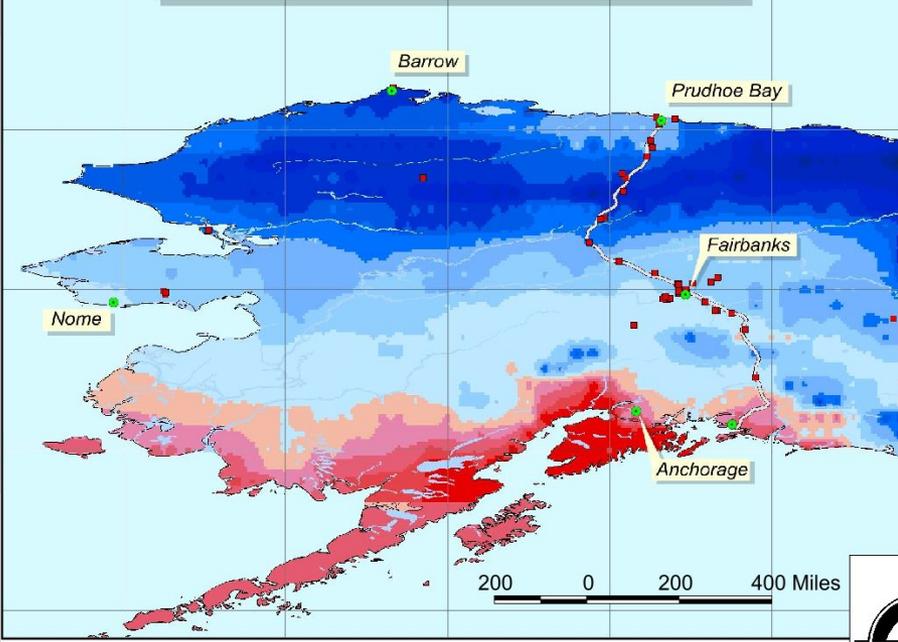


2020

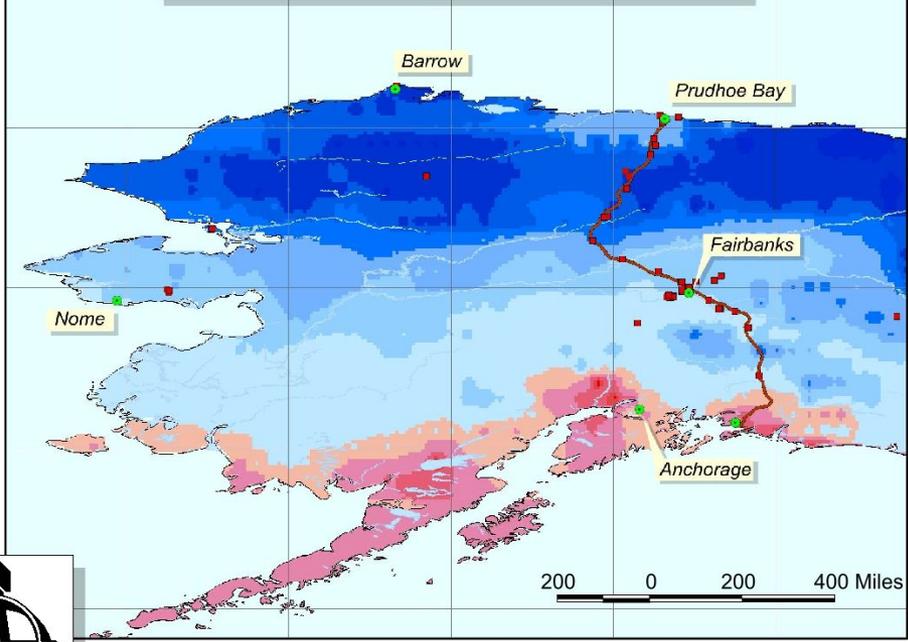
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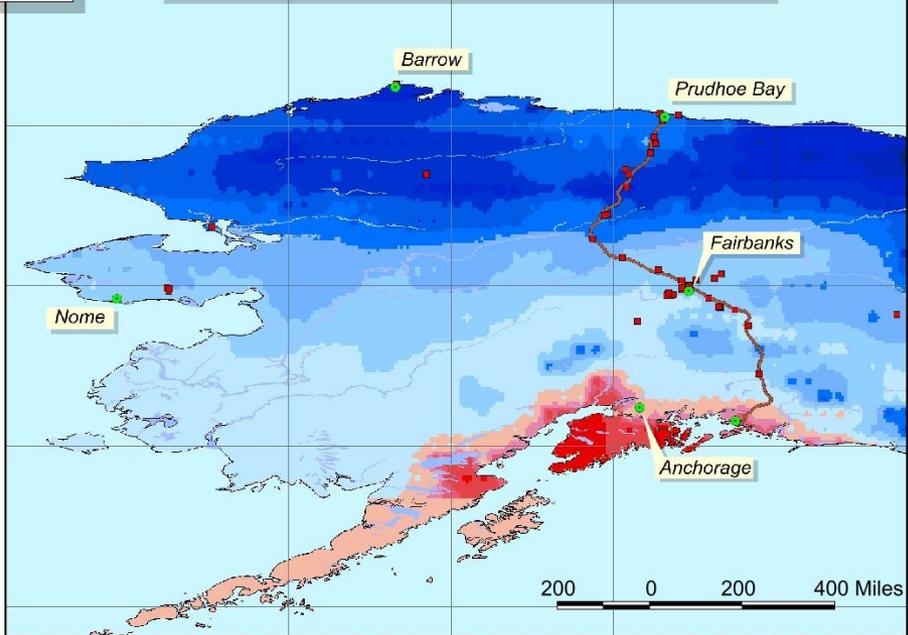
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

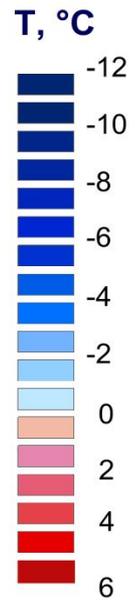


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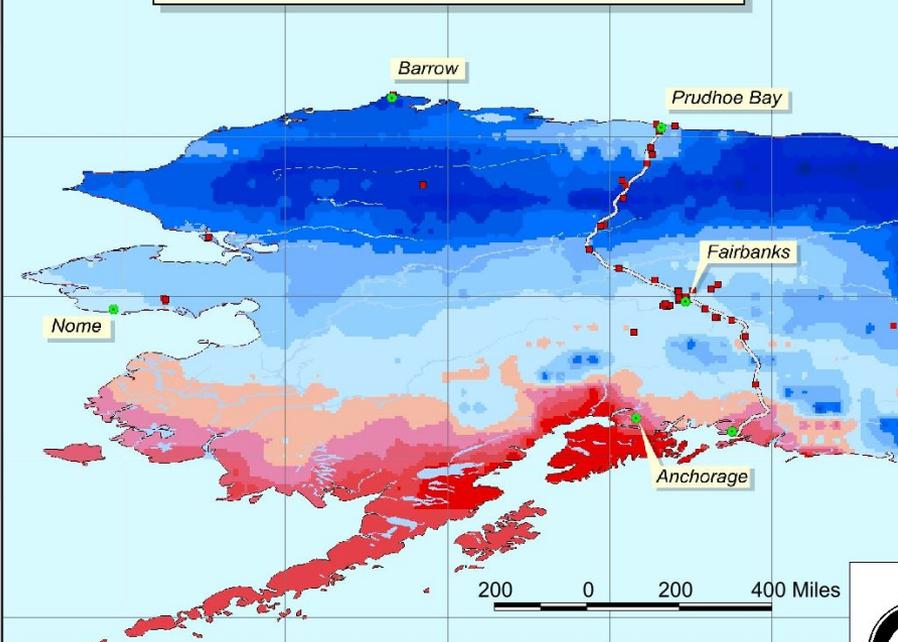


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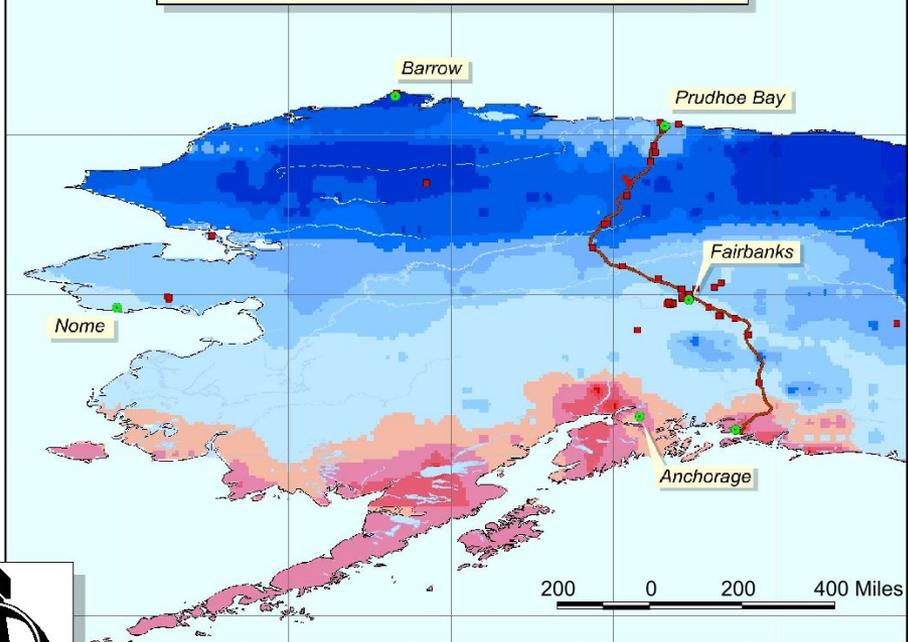
Spatially Distributed Model of Permafrost Dynamics in Alaska



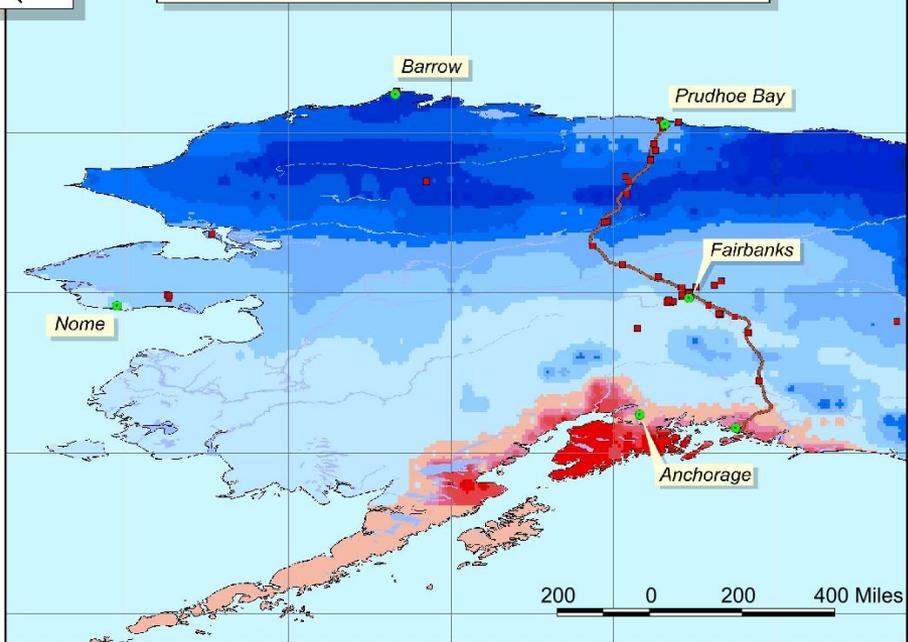
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

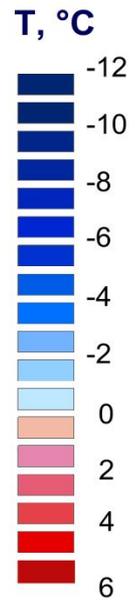


Mean Annual Temperature at 20 m Depth



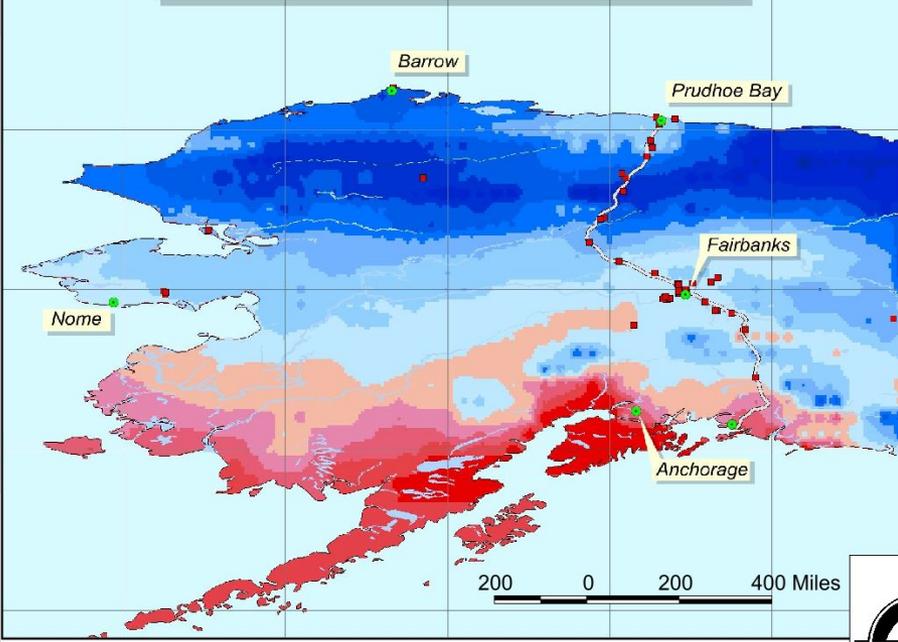
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Spatially Distributed Model of Permafrost Dynamics in Alaska

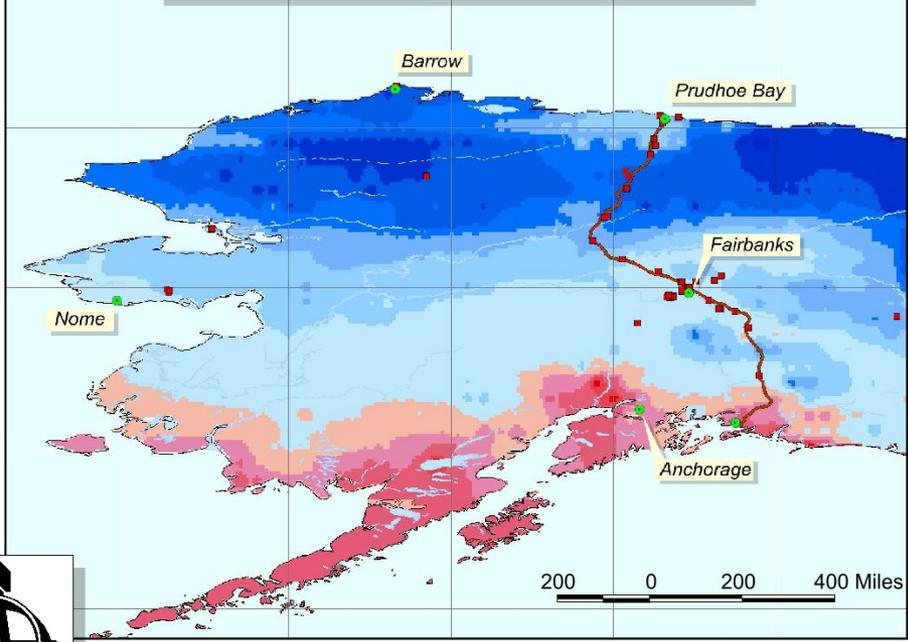


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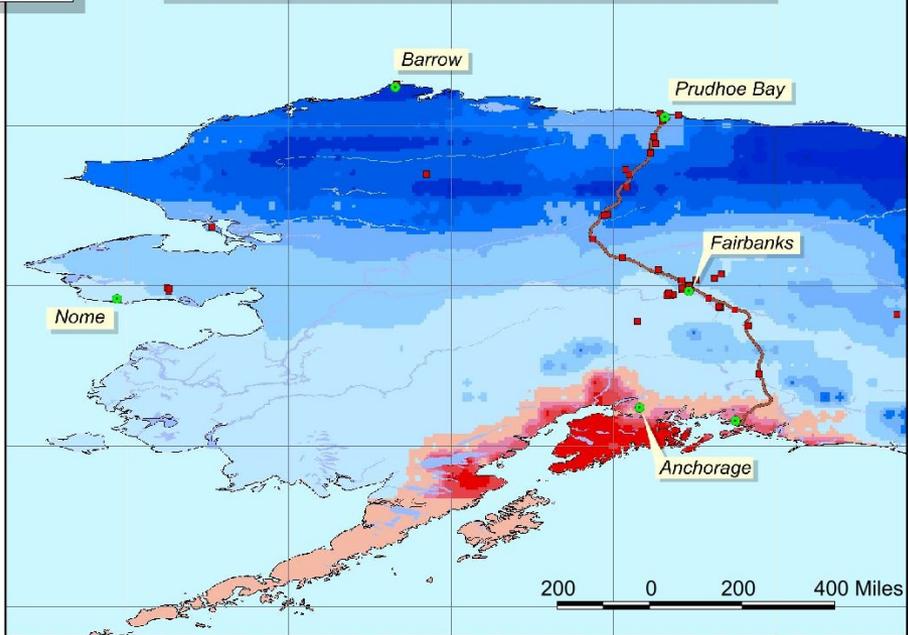
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

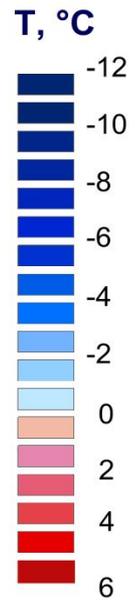


Mean Annual Temperature at 20 m Depth



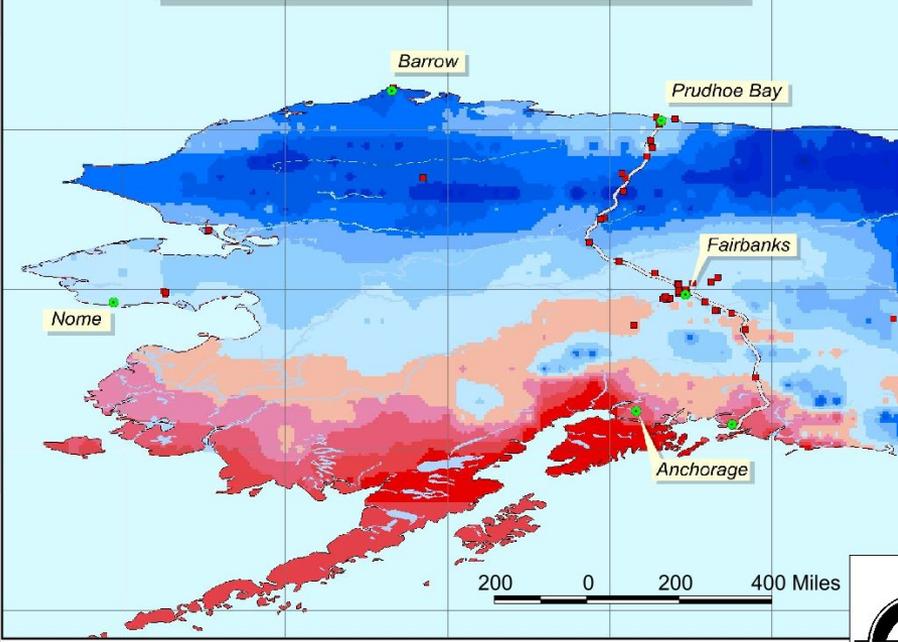
2050

Spatially Distributed Model of Permafrost Dynamics in Alaska

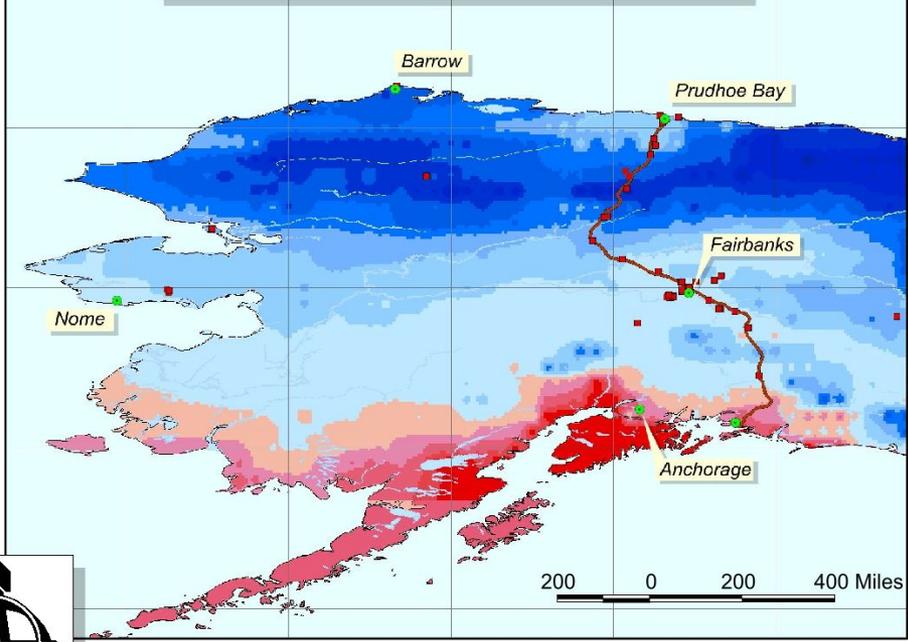


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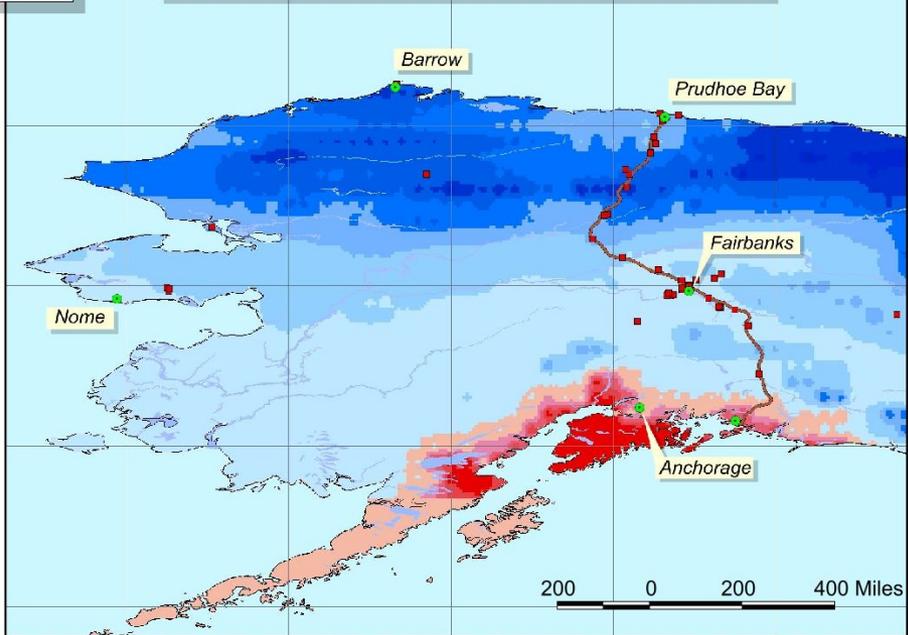
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

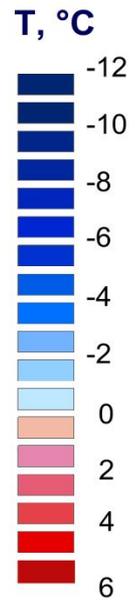


Mean Annual Temperature at 20 m Depth

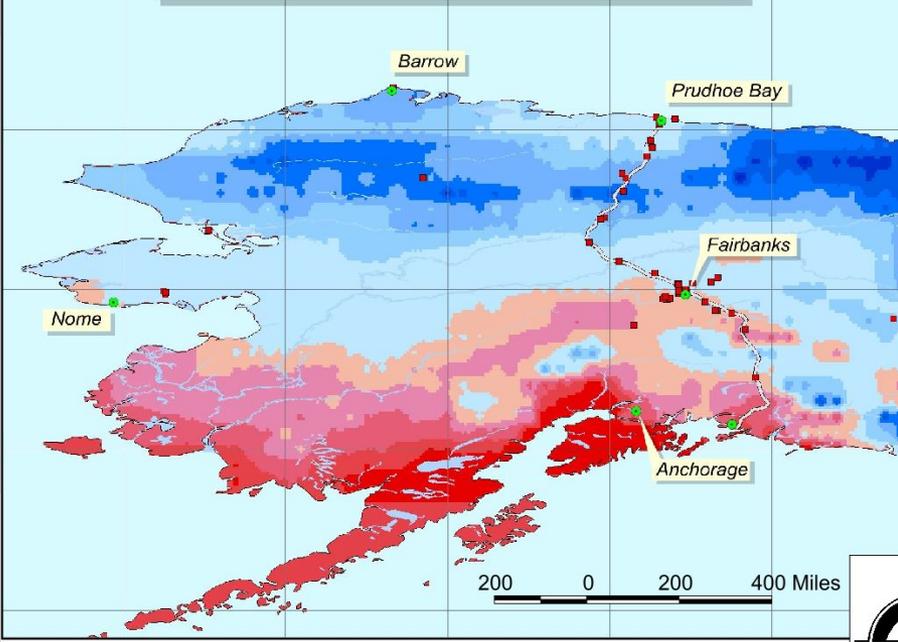


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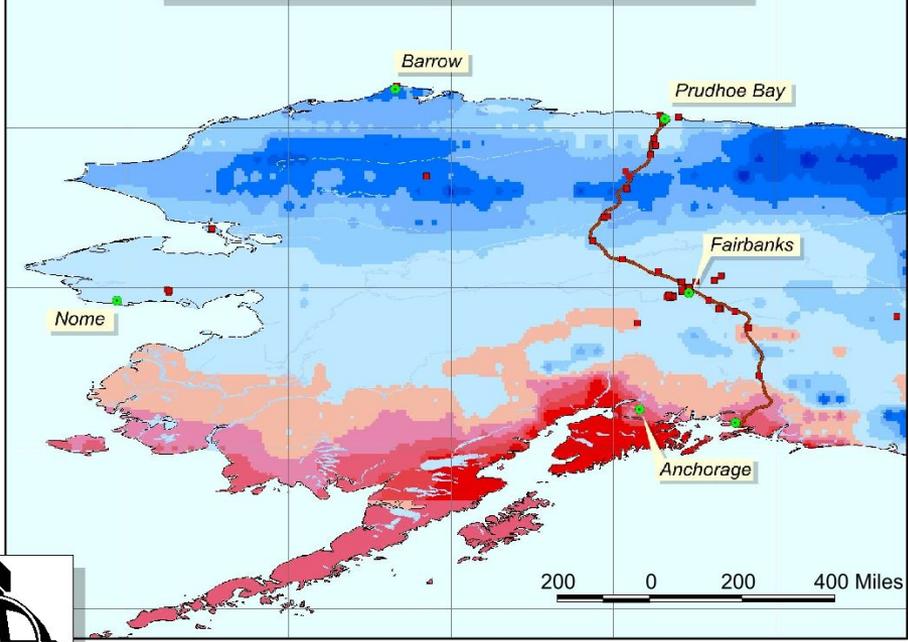
Spatially Distributed Model of Permafrost Dynamics in Alaska



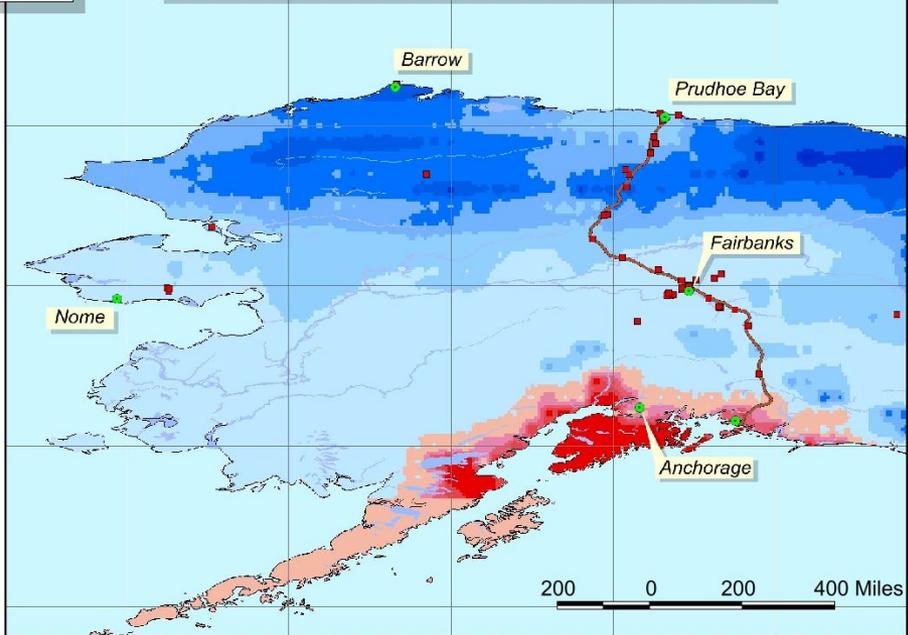
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

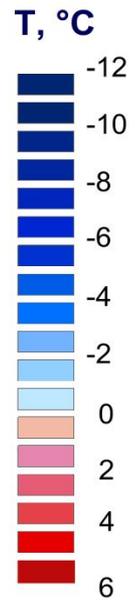


Mean Annual Temperature at 20 m Depth

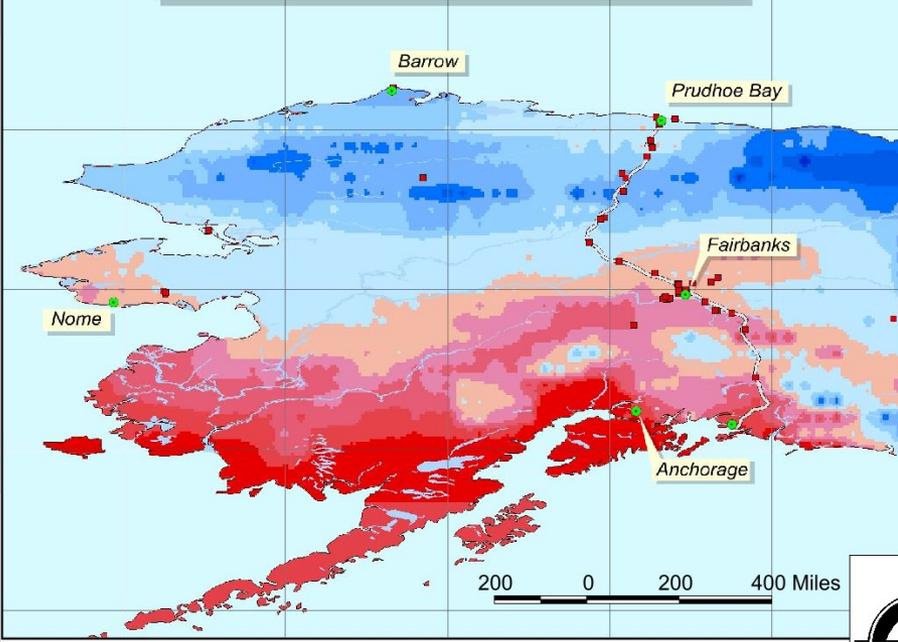


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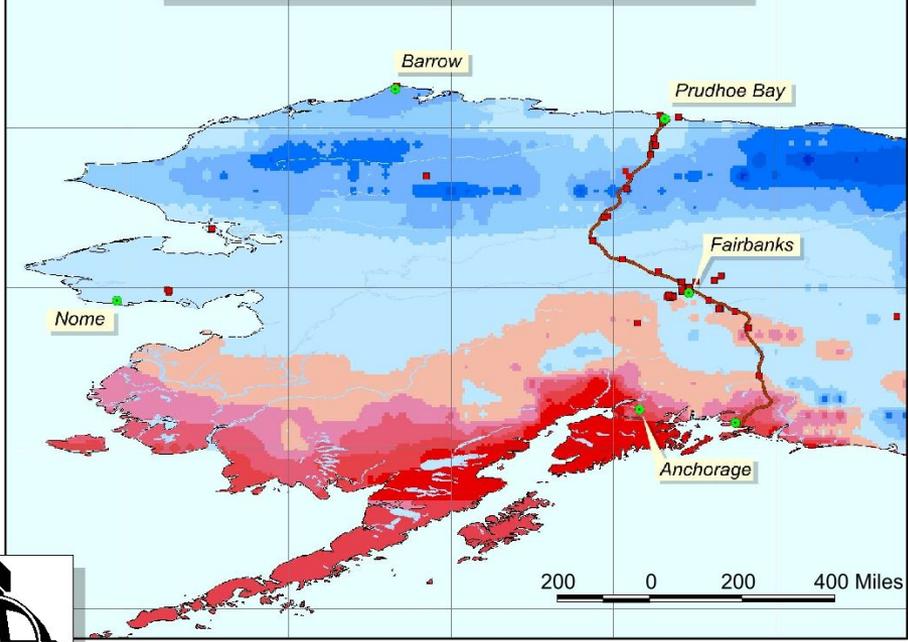
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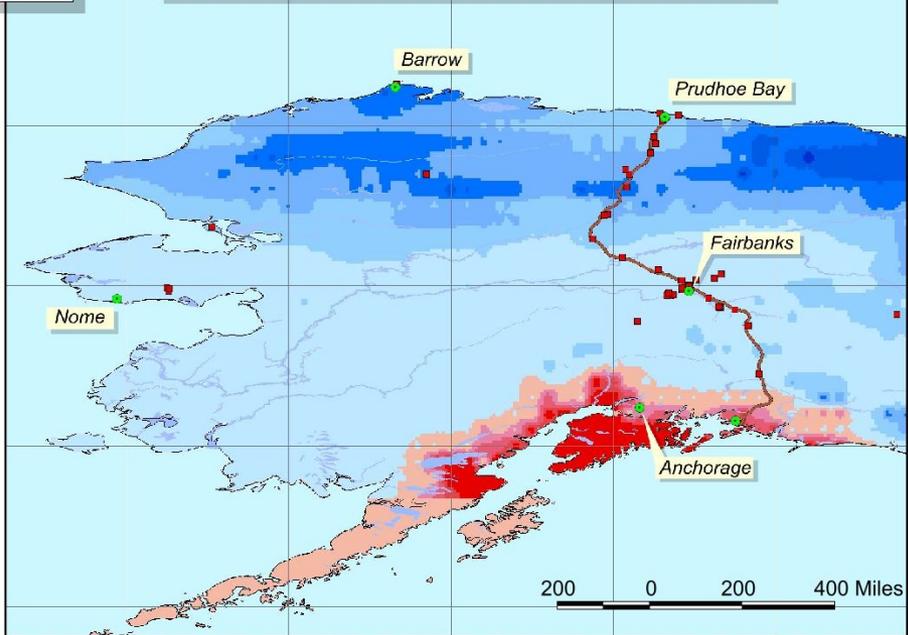
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Mean Annual Temperature at 5 m Depth

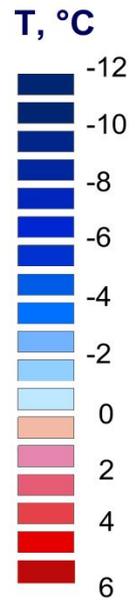


Mean Annual Temperature at 20 m Depth

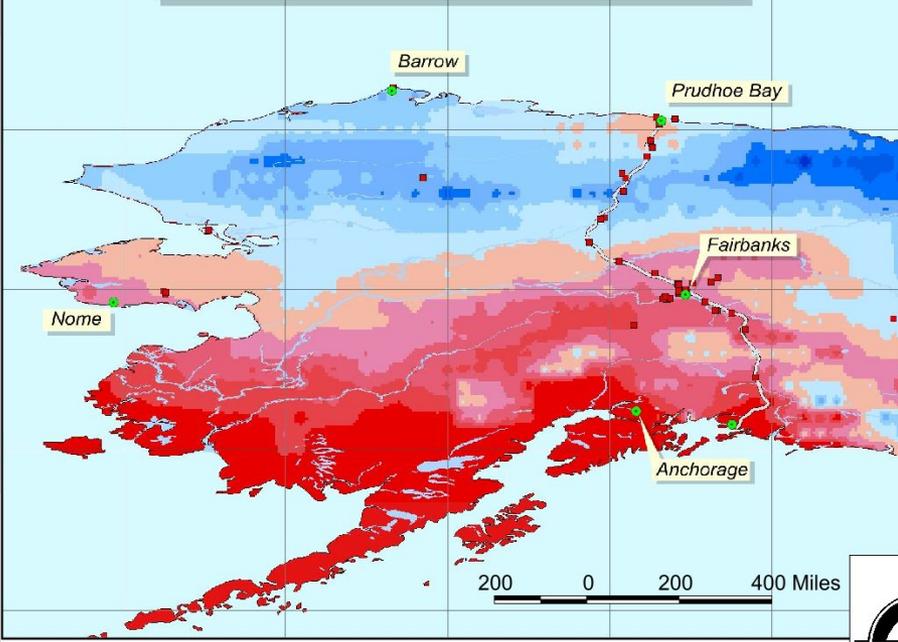


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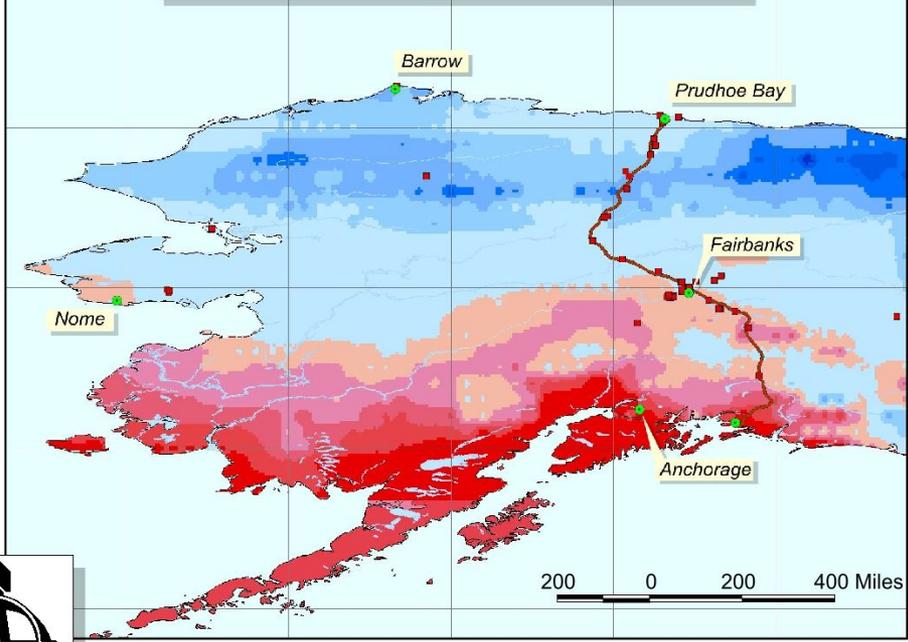
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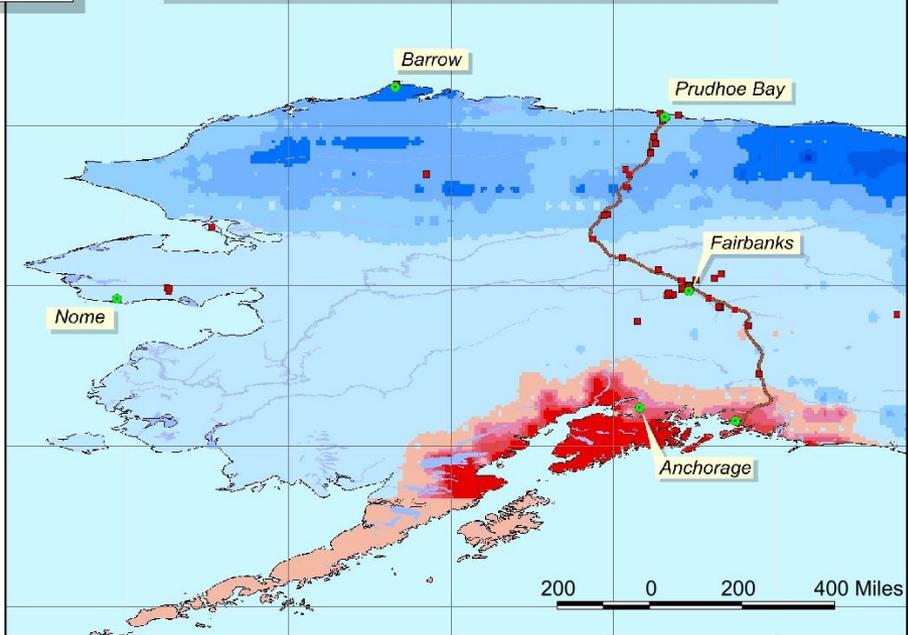
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Mean Annual Temperature at 5 m Depth

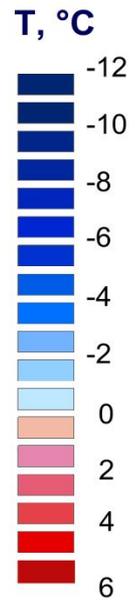


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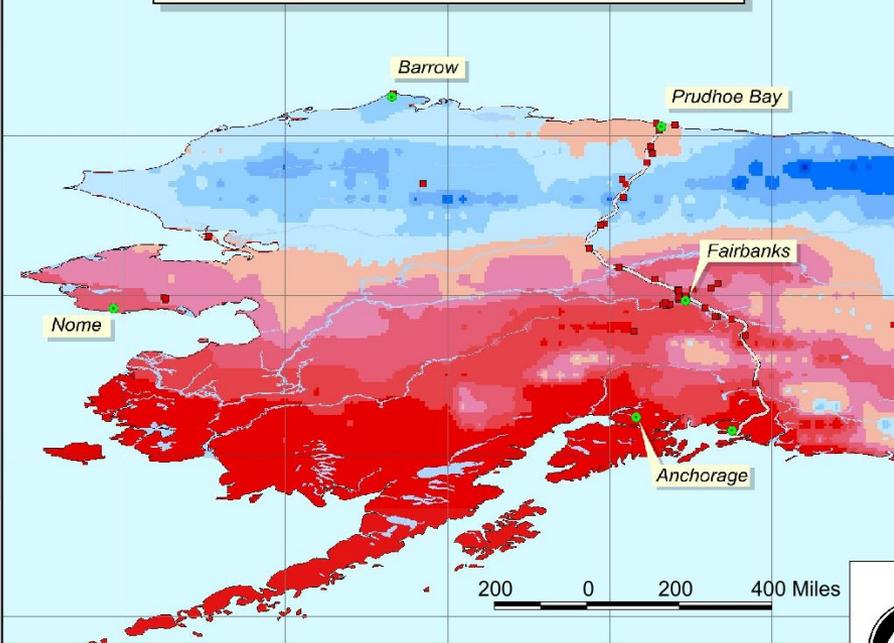


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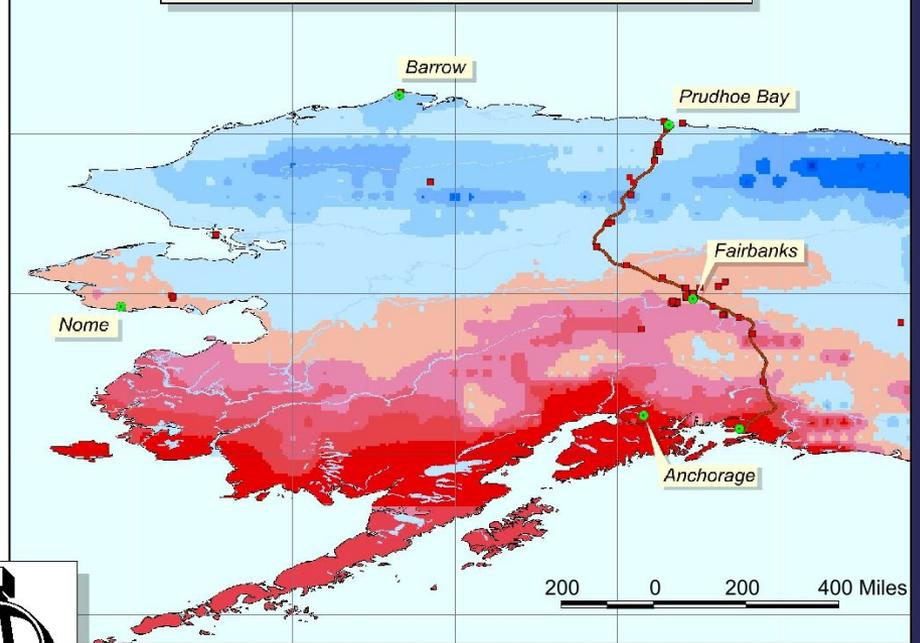
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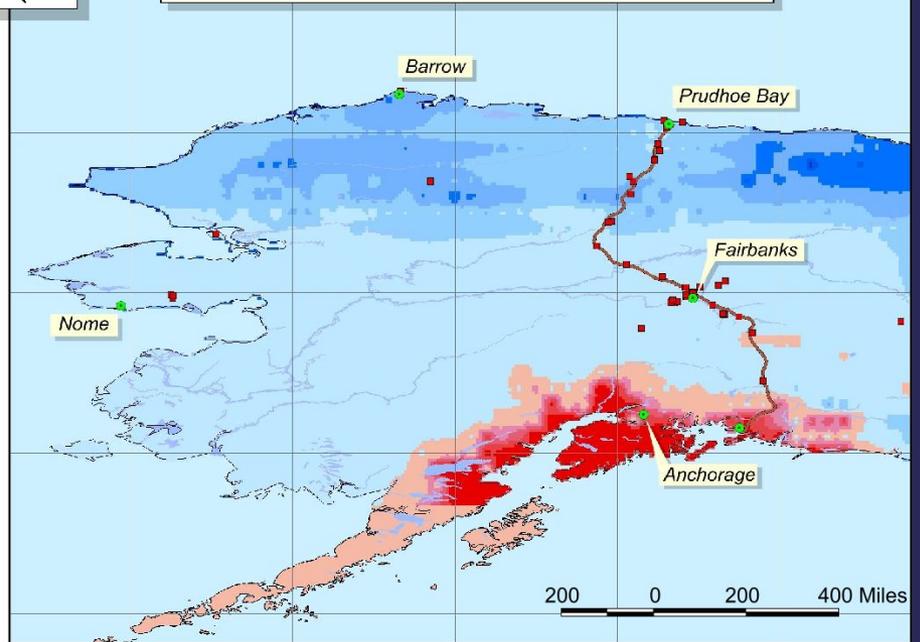
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

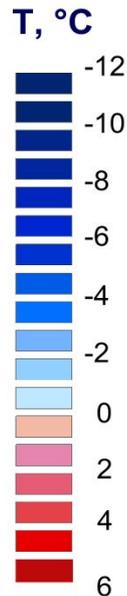


Mean Annual Temperature at 20 m Depth

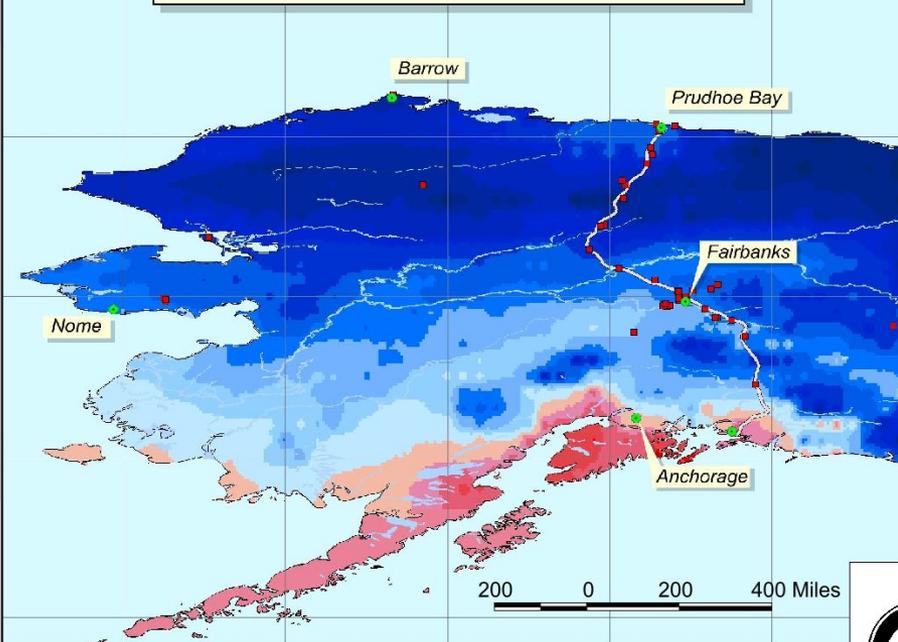


2100

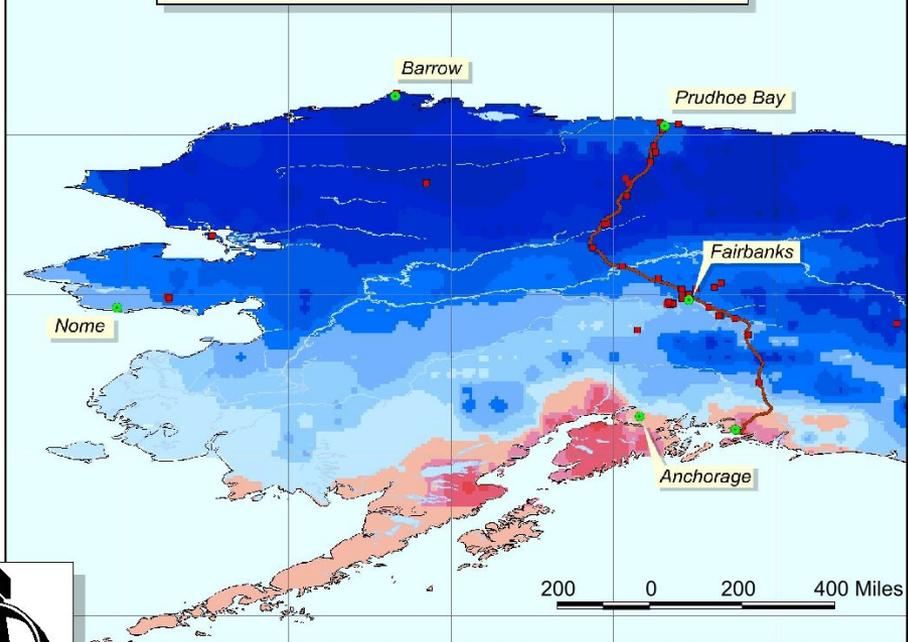
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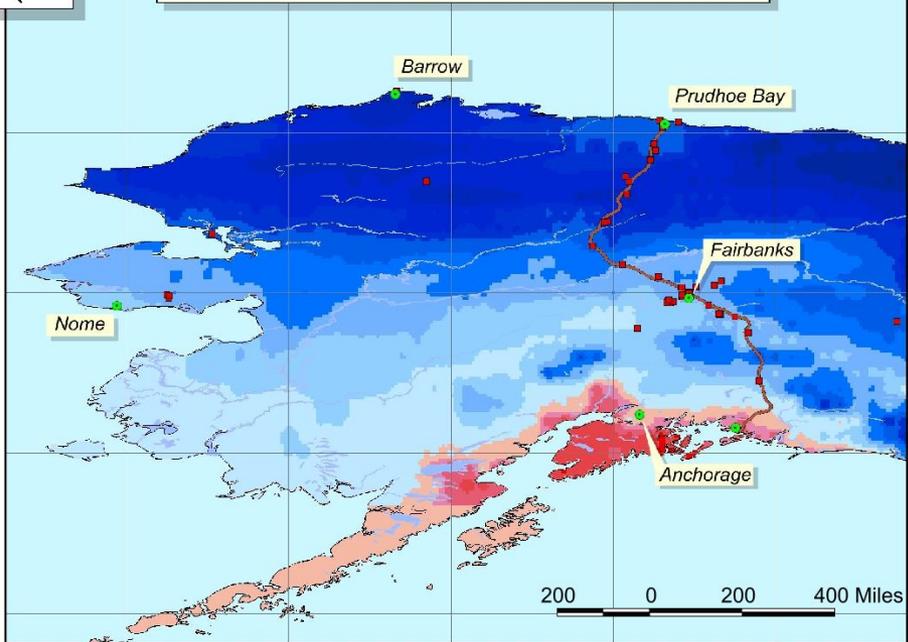
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Mean Annual Temperature at 5 m Depth

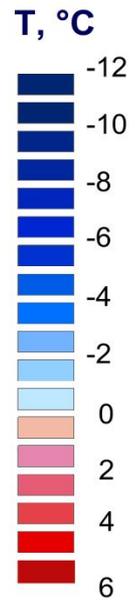


Mean Annual Temperature at 20 m Depth



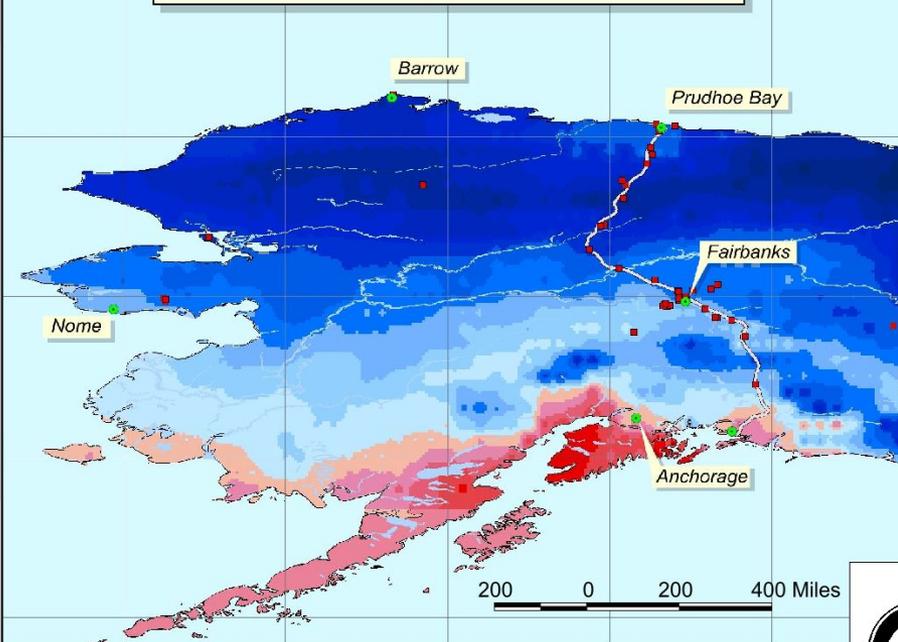
2000

Spatially Distributed Model of Permafrost Dynamics in Alaska

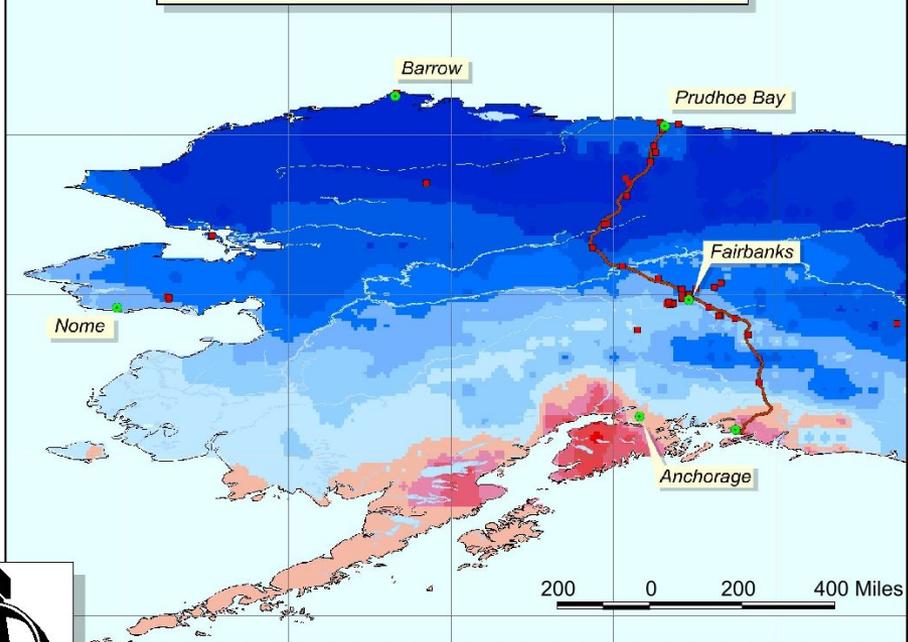


200 0 200 400 Miles

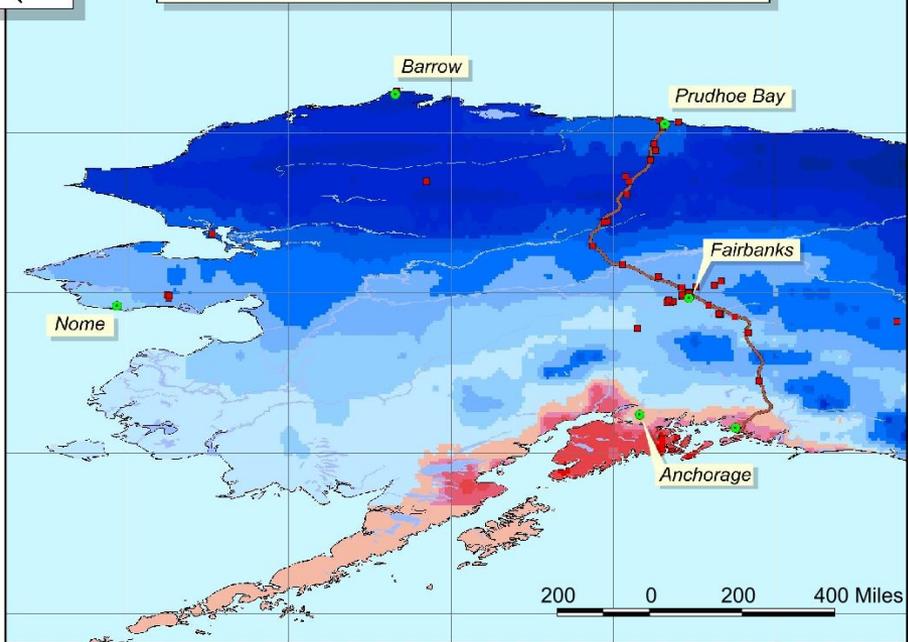
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

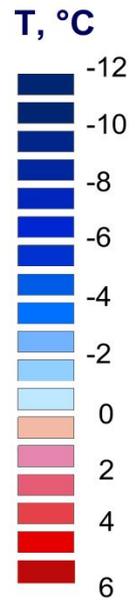


Mean Annual Temperature at 20 m Depth

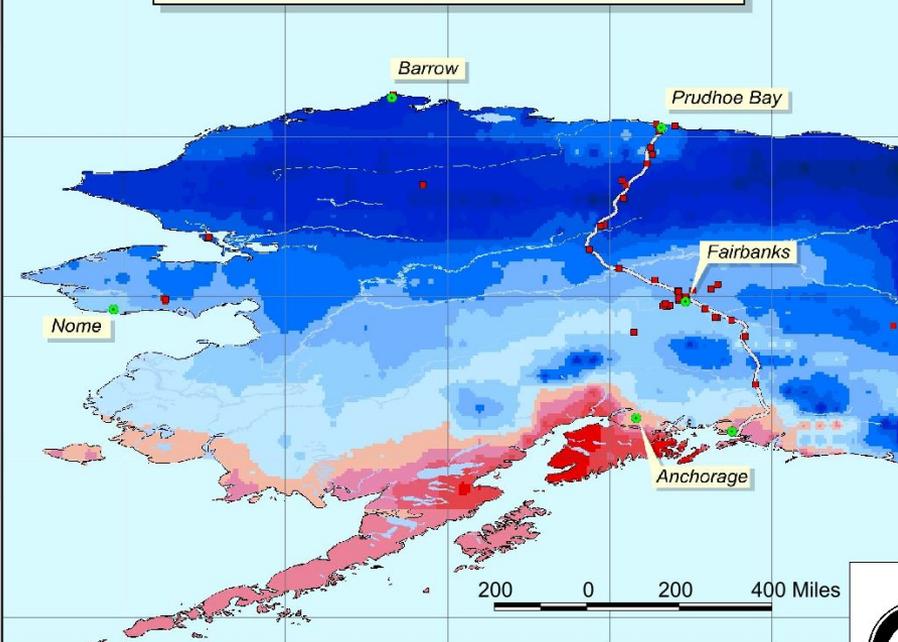


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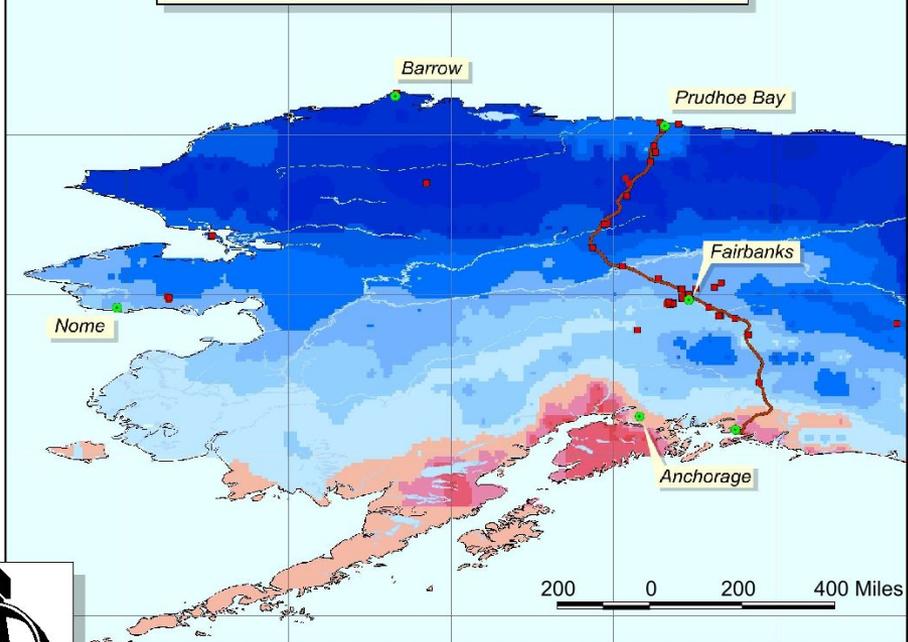
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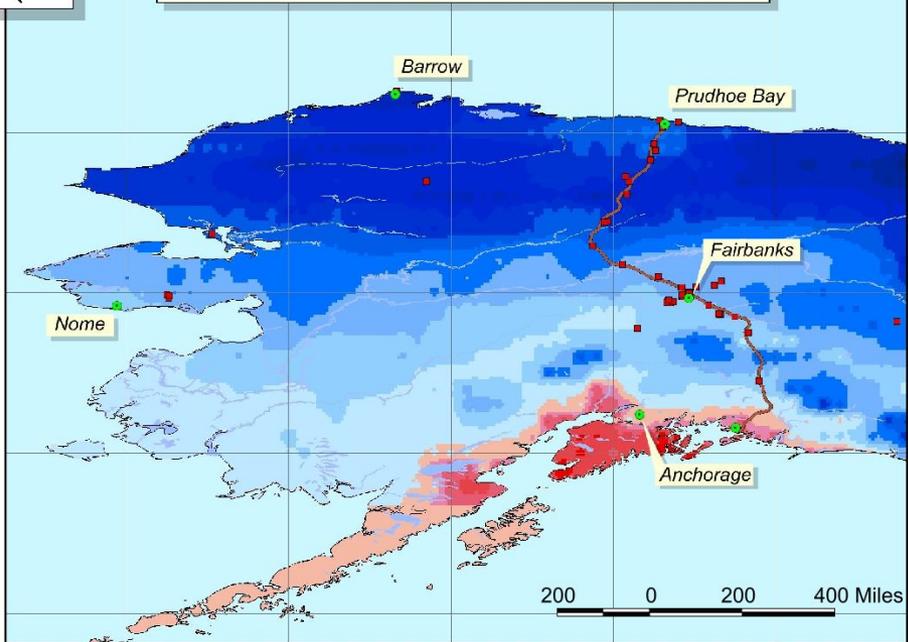
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Mean Annual Temperature at 5 m Depth

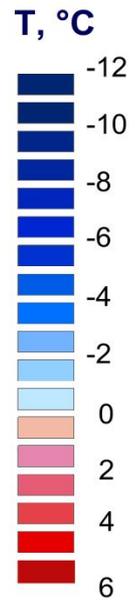


Mean Annual Temperature at 20 m Depth

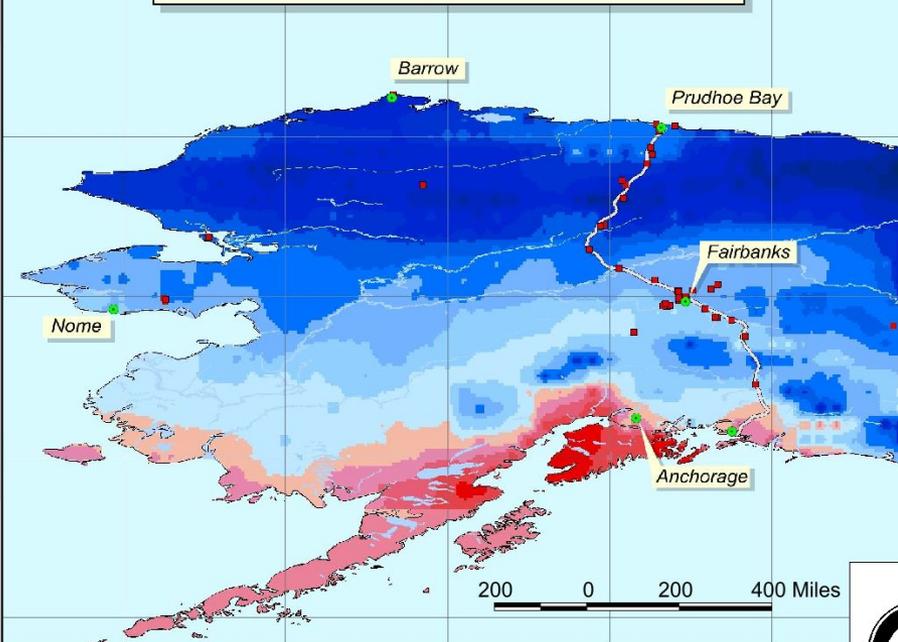


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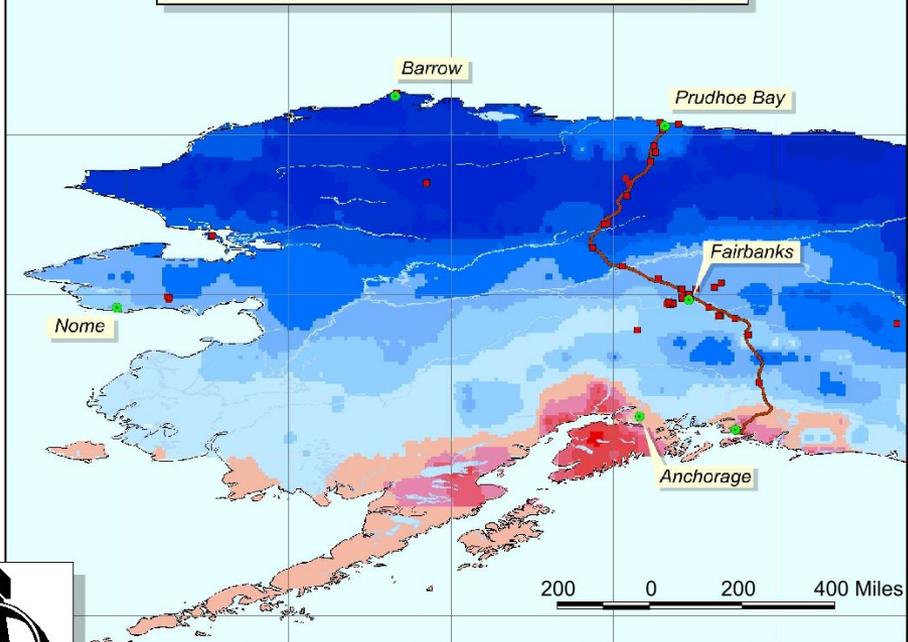
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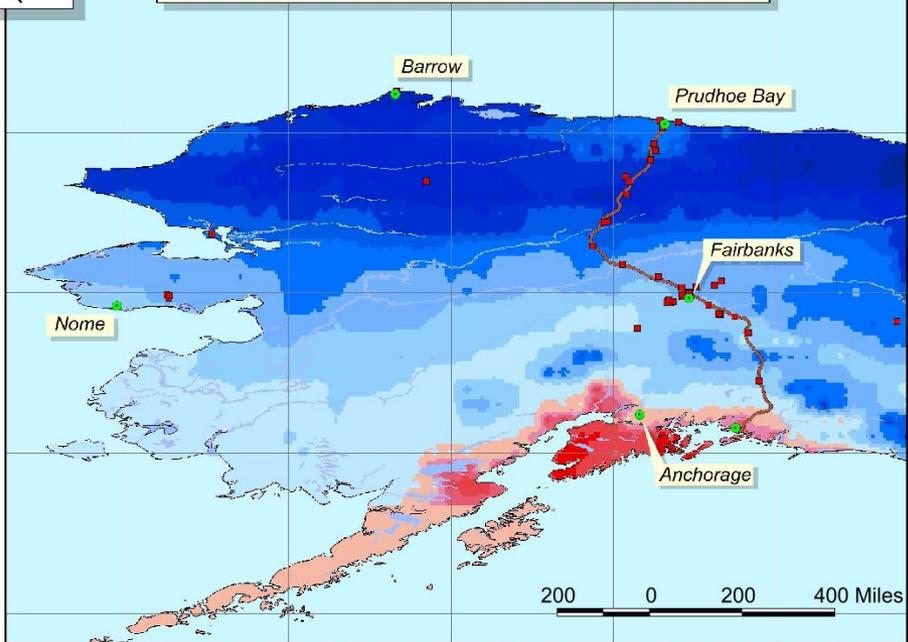
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

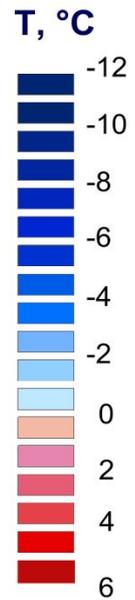


Mean Annual Temperature at 20 m Depth

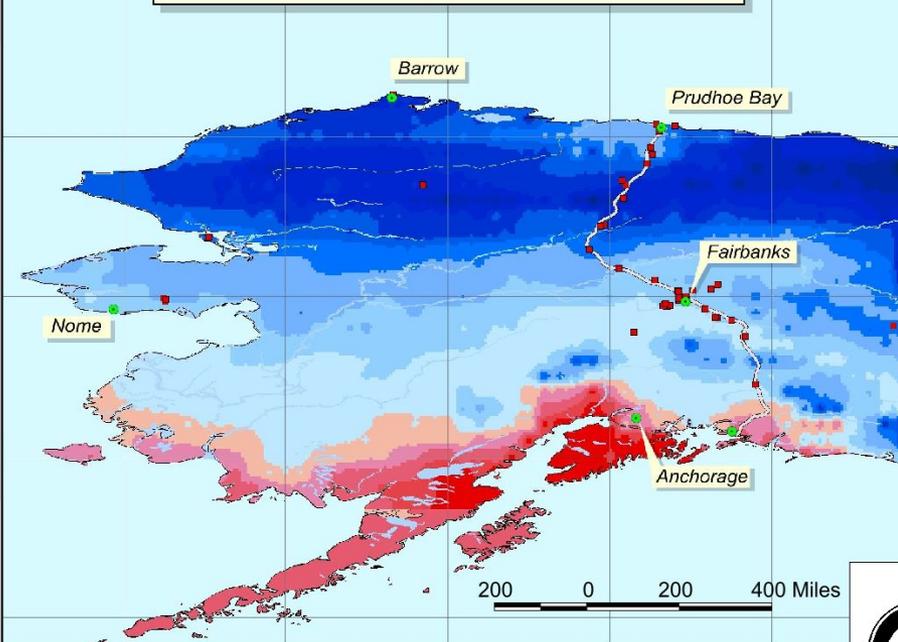


2015

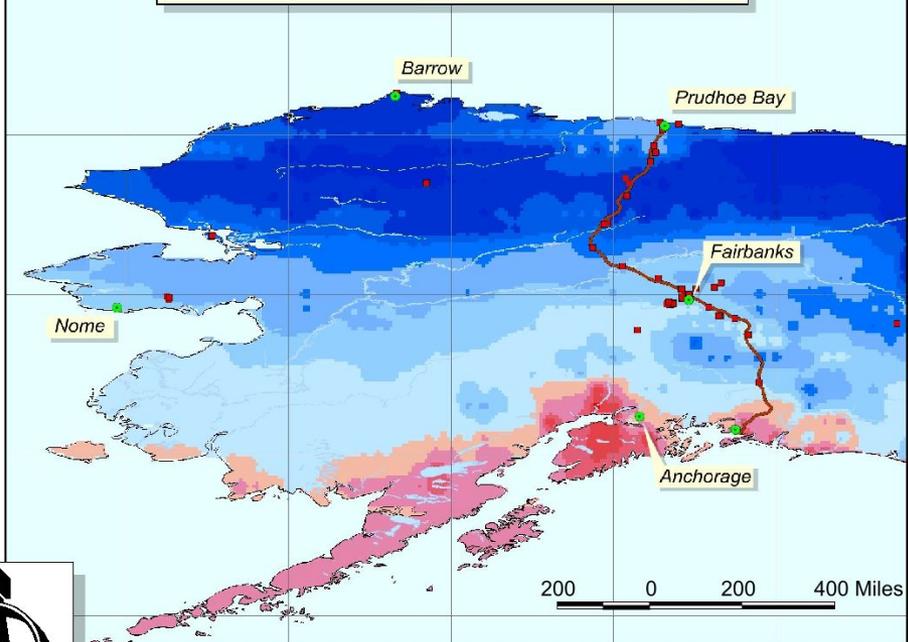
Spatially Distributed Model of Permafrost Dynamics in Alaska



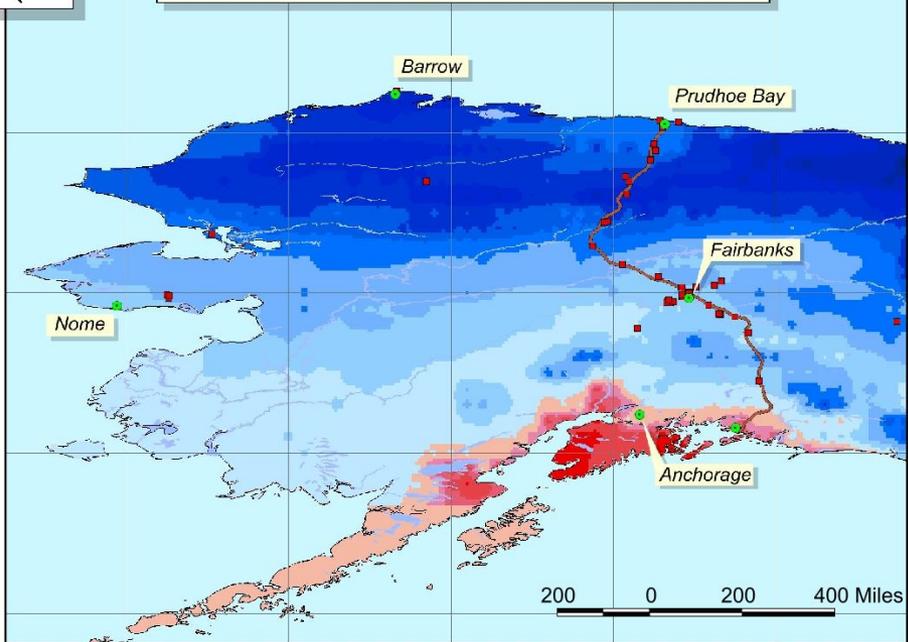
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

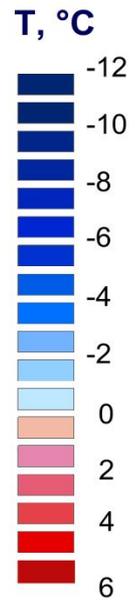


Mean Annual Temperature at 20 m Depth

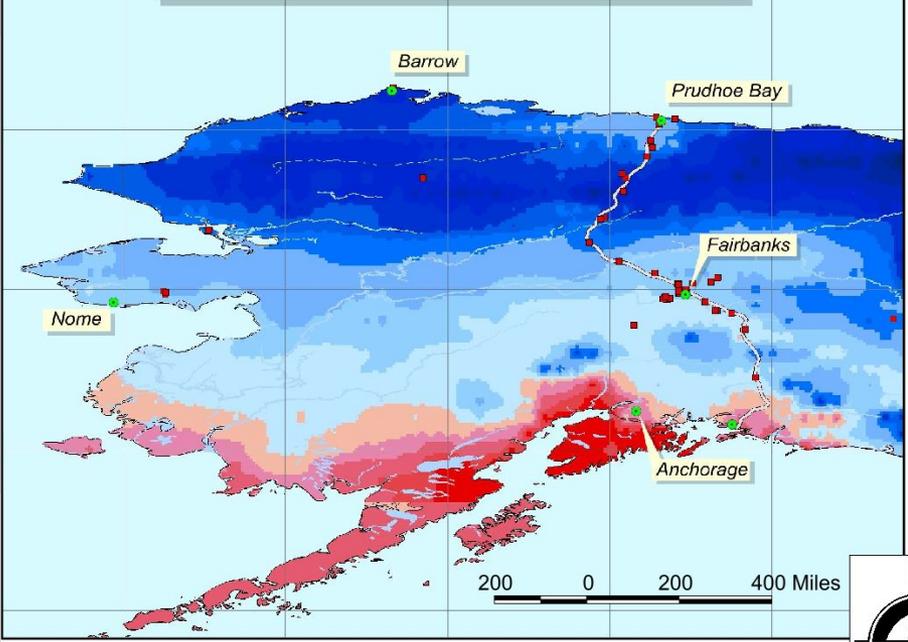


2020

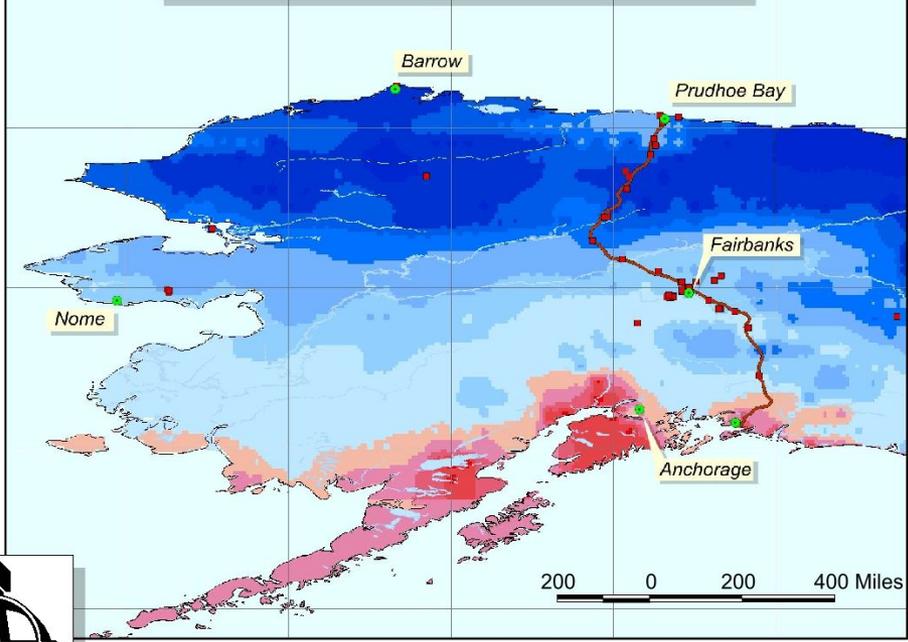
Spatially Distributed Model of Permafrost Dynamics in Alaska



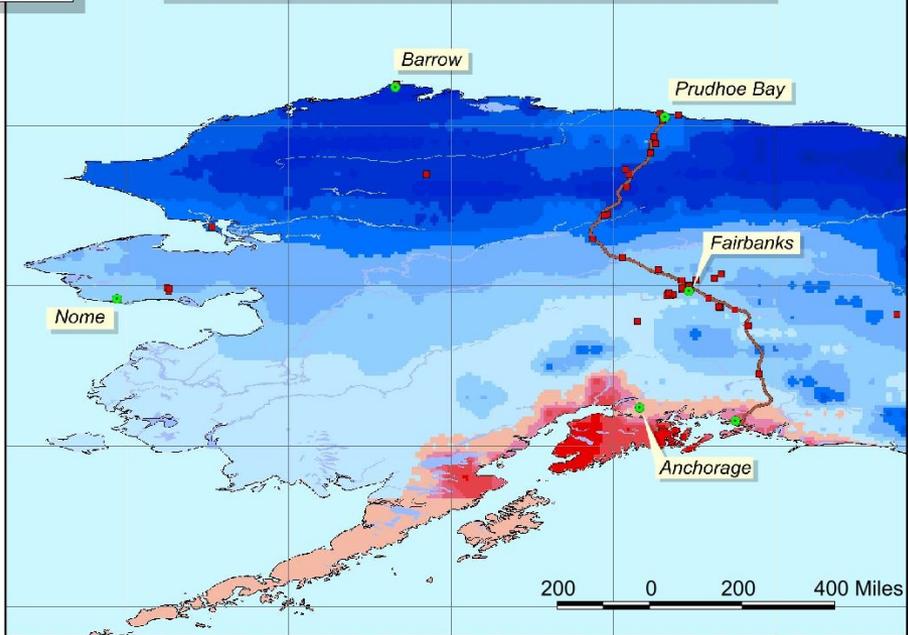
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

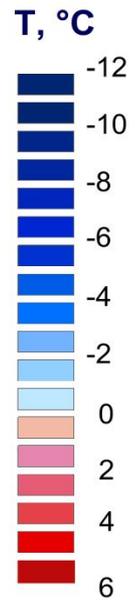


Mean Annual Temperature at 20 m Depth

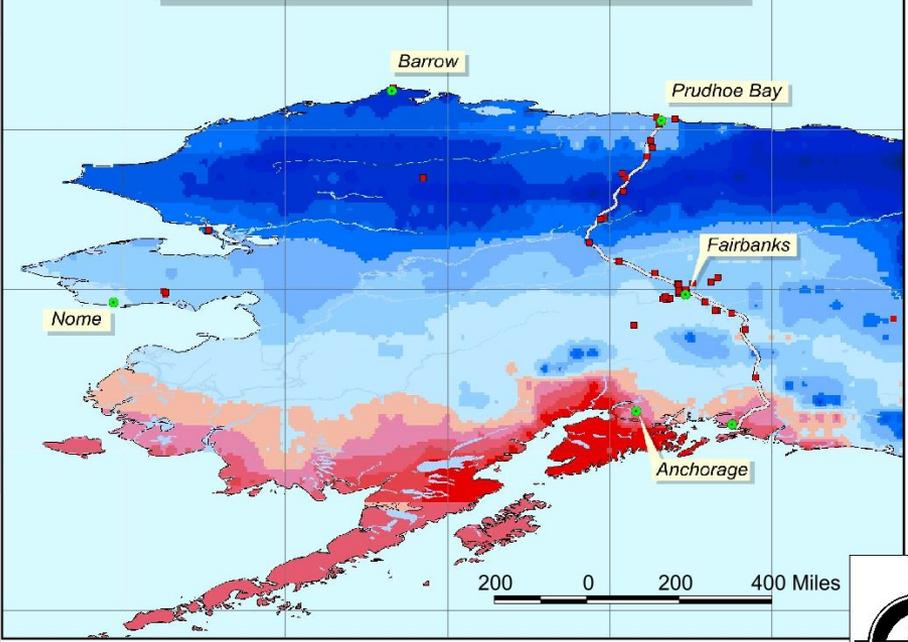


2025

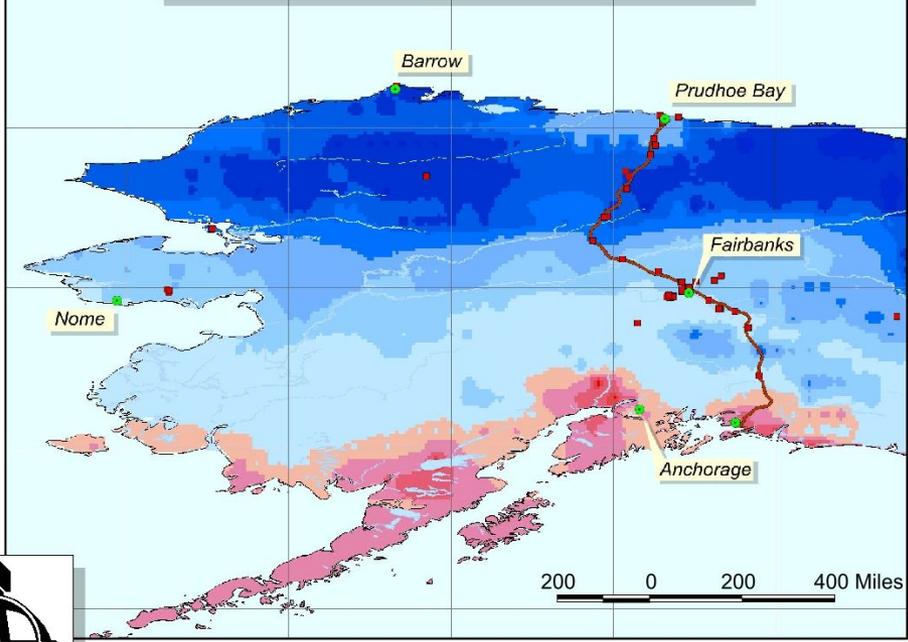
Spatially Distributed Model of Permafrost Dynamics in Alaska



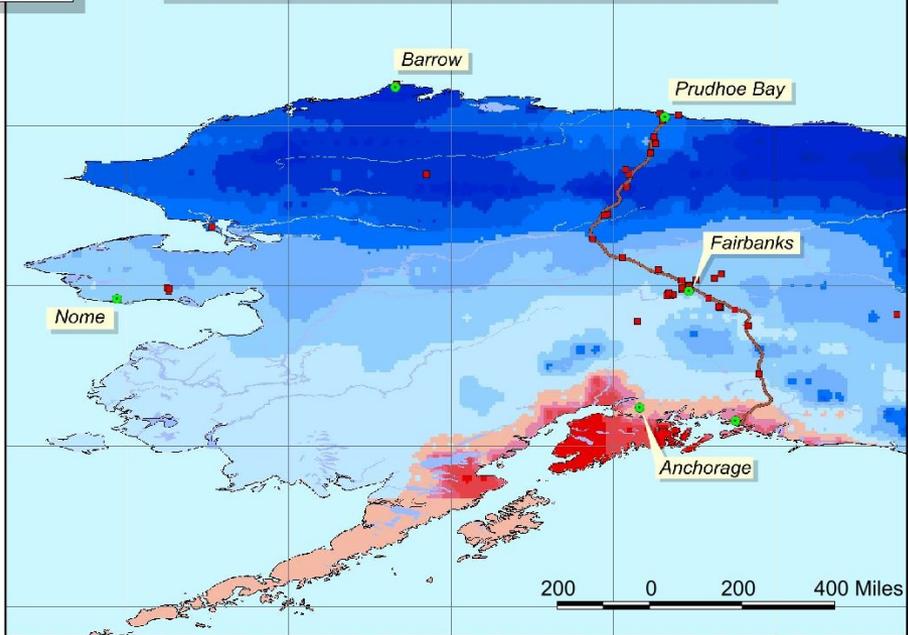
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

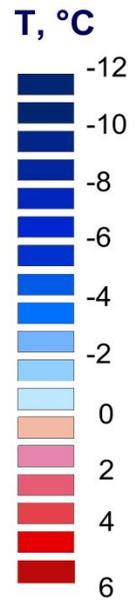


Mean Annual Temperature at 20 m Depth

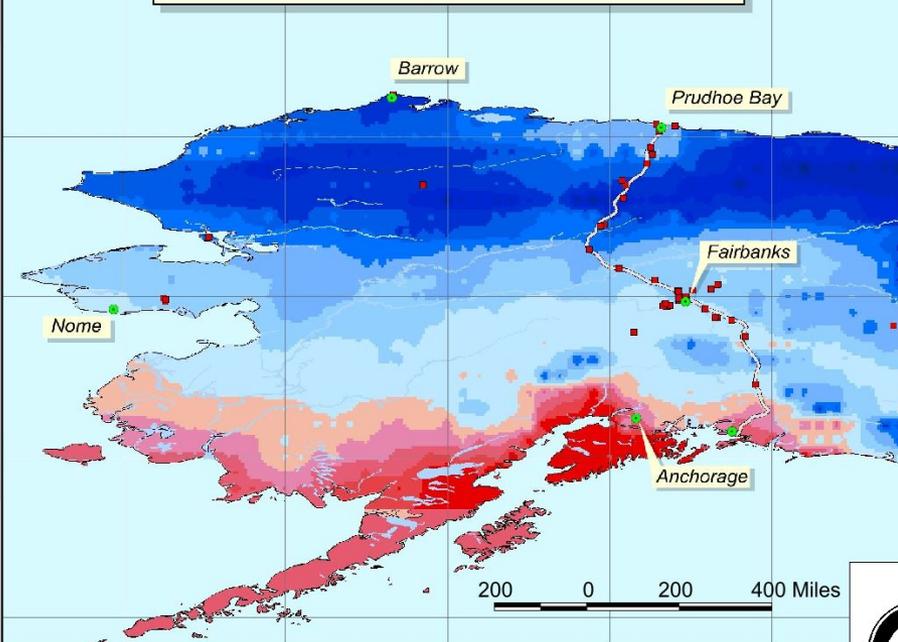


2030

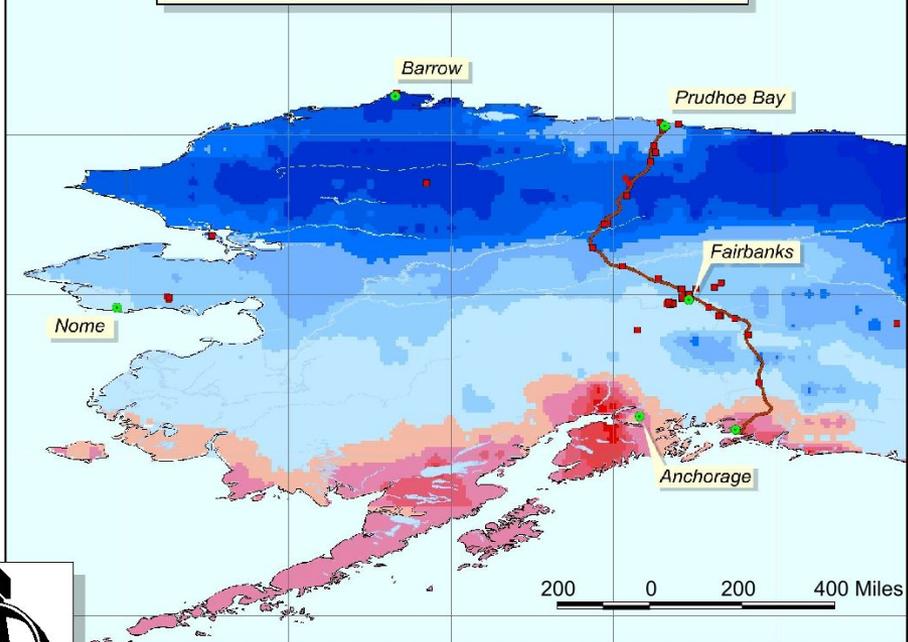
Spatially Distributed Model of Permafrost Dynamics in Alaska



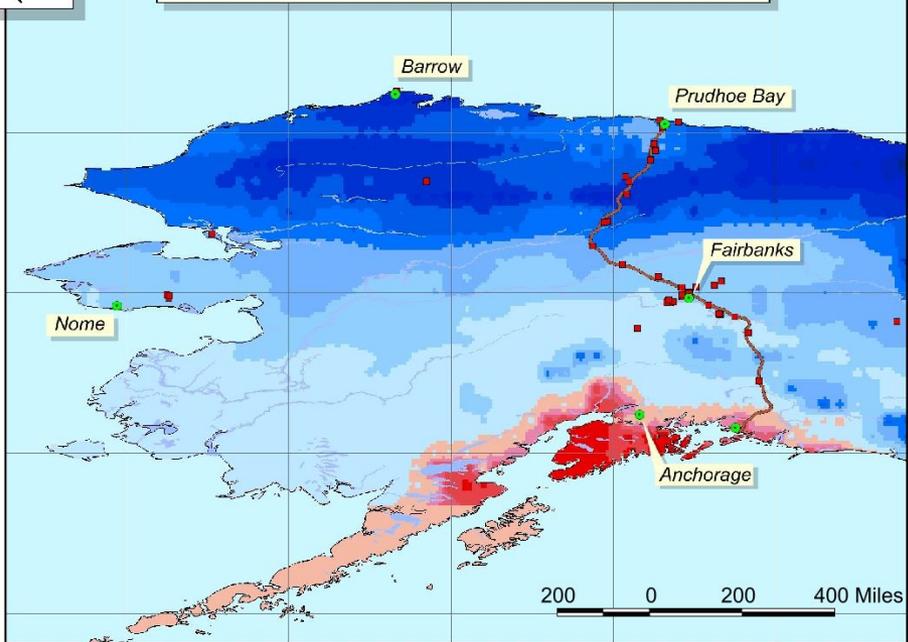
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

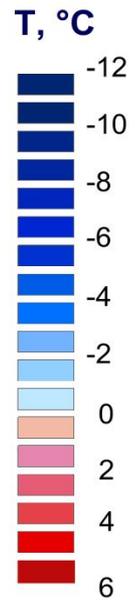


Mean Annual Temperature at 20 m Depth

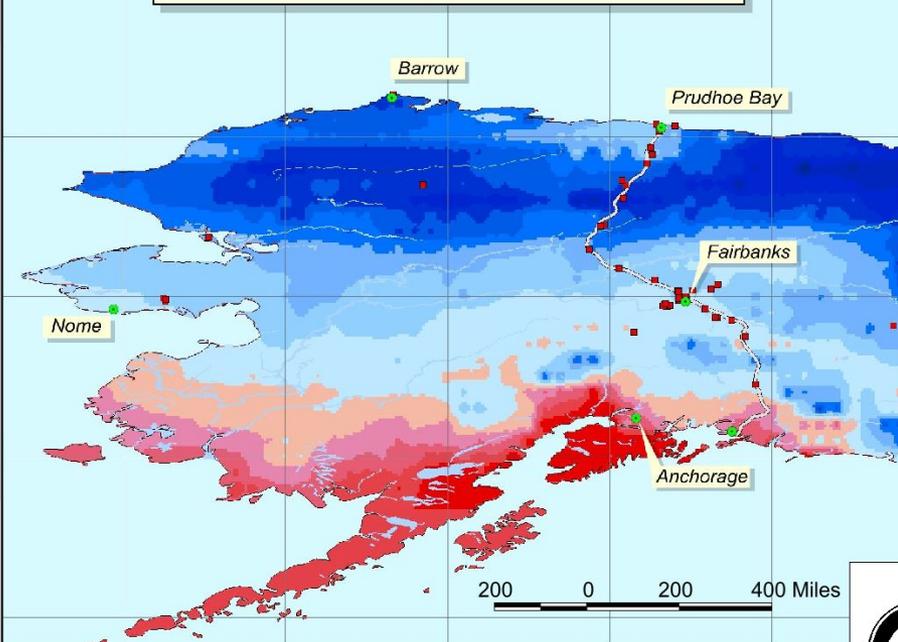


2035

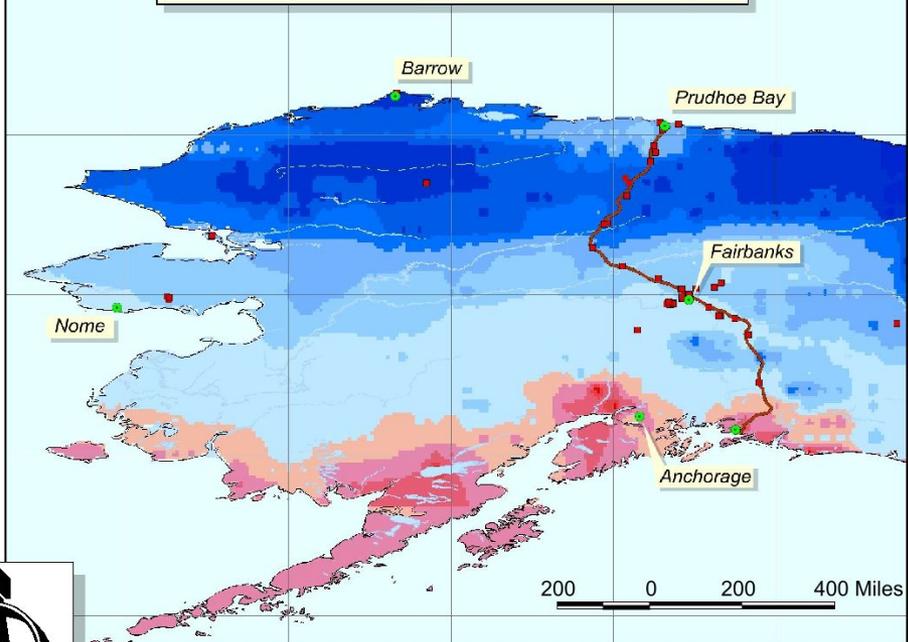
Spatially Distributed Model of Permafrost Dynamics in Alaska



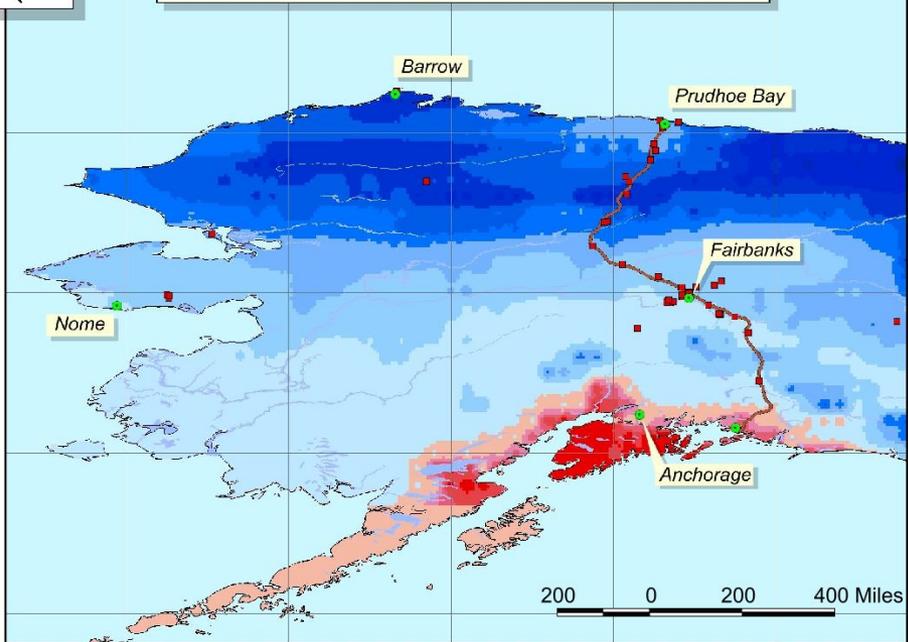
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

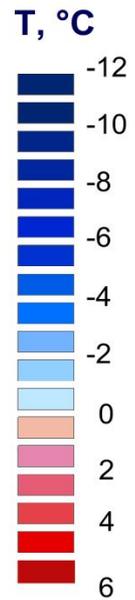


Mean Annual Temperature at 20 m Depth



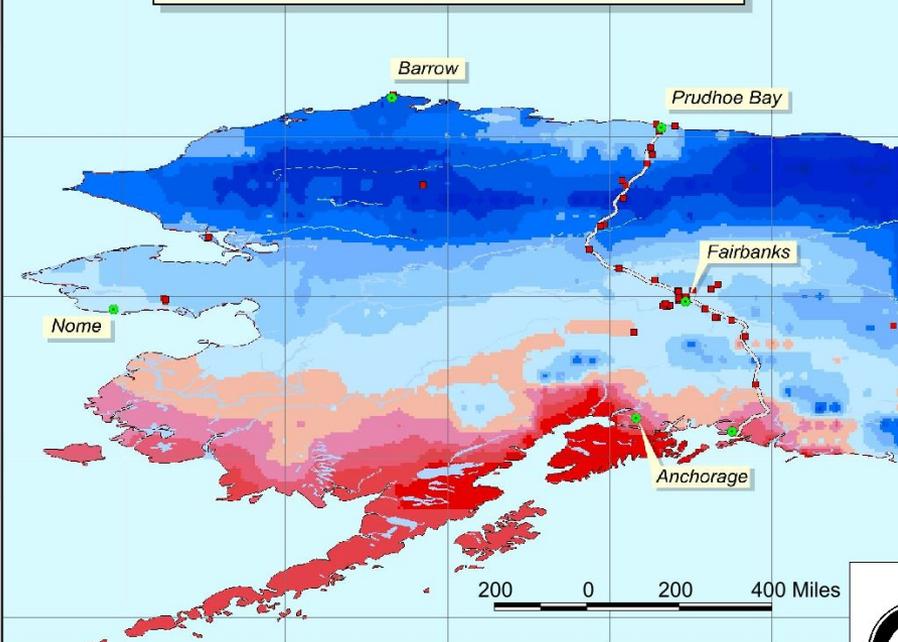
2040

Spatially Distributed Model of Permafrost Dynamics in Alaska

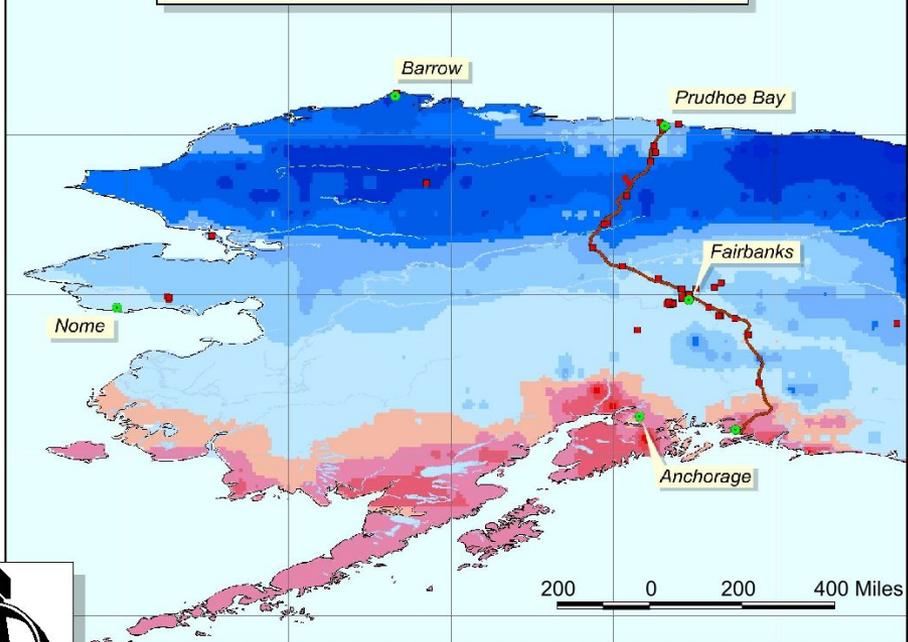


200 0 200 400 Miles

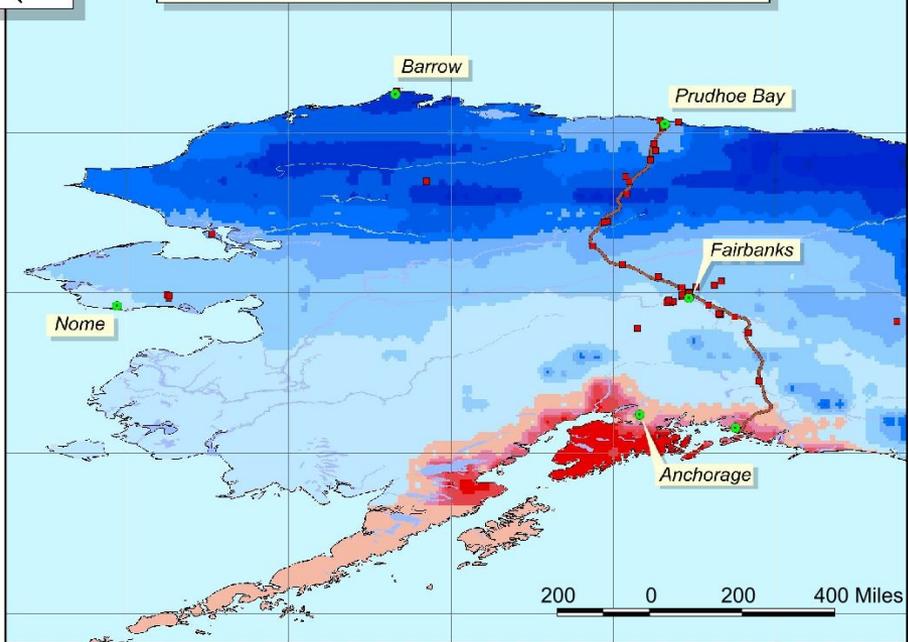
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

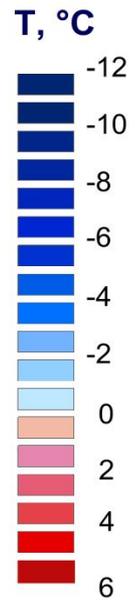


Mean Annual Temperature at 20 m Depth

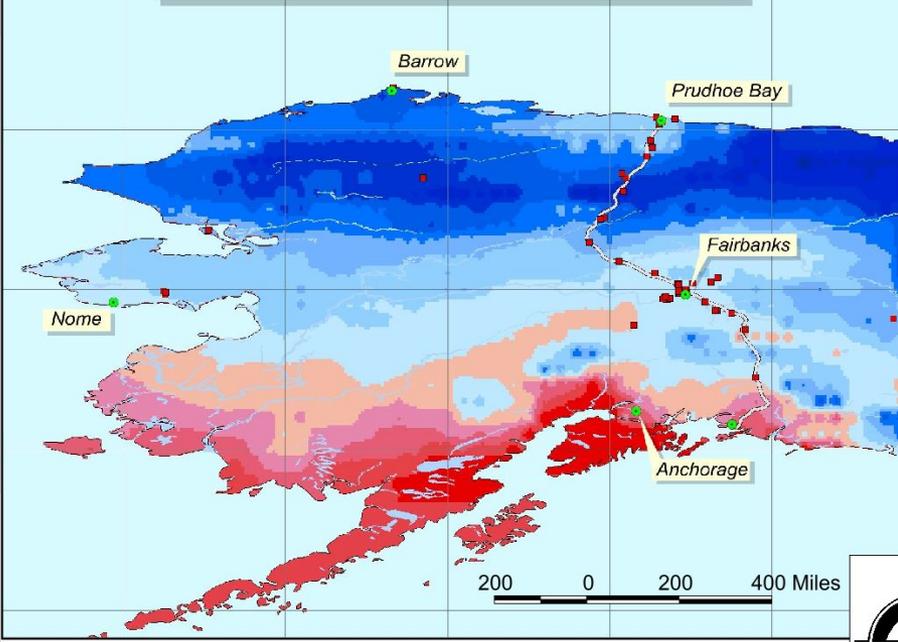


2045

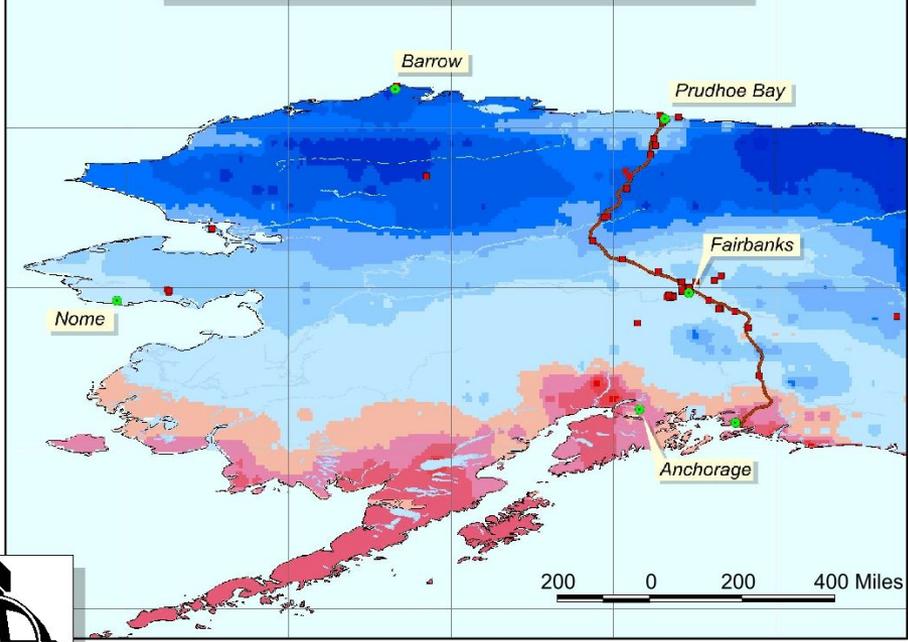
Spatially Distributed Model of Permafrost Dynamics in Alaska



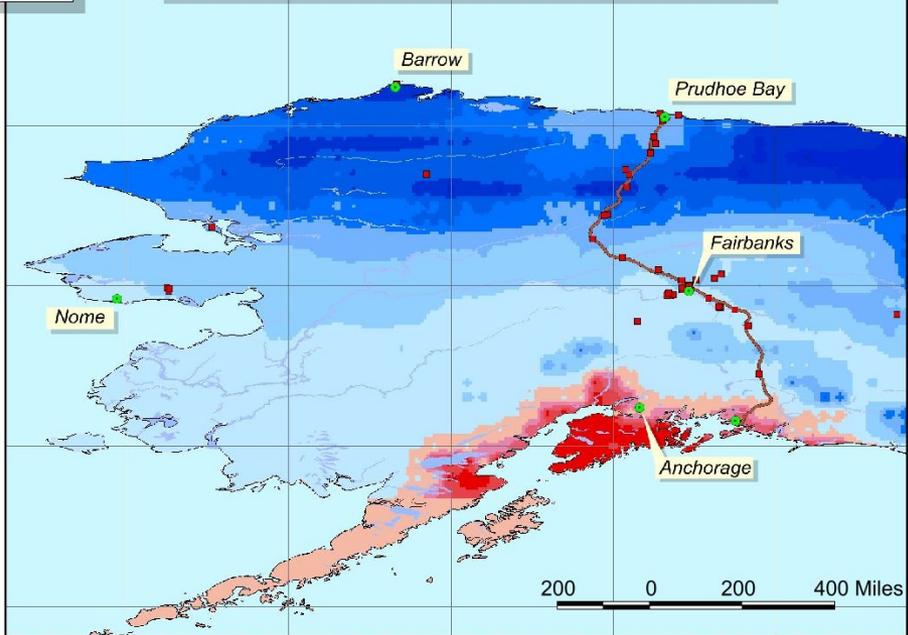
Mean Annual Temperature at 2 m Depth



Mean Annual Temperature at 5 m Depth

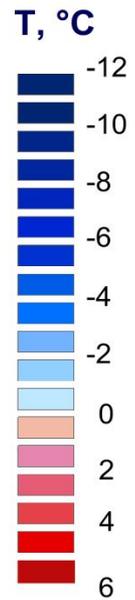


Mean Annual Temperature at 20 m Depth



2050

Spatially Distributed Model of Permafrost Dynamics in Alaska



200 0 200 400 Miles

Administration Transition

❖ Pre-Election

"Over the next five years, we should also lease more of the National Petroleum Reserve in Alaska for oil and gas production. And we should also tap more of our substantial natural gas reserves and work with the Canadian government to finally build the Alaska Natural Gas Pipeline, delivering clean natural gas and creating good jobs in the process."

Obama Campaign, Lansing, MI, August 4, 2008

❖ Post Election

"Prioritize the Construction of the Alaska Natural Gas Pipeline"
White House Agenda – Energy and the Environment

What is the Role of the OFC?

- ❖ Coordination
- ❖ Compliance and Oversight
- ❖ Information Dissemination

U.S. Federal Agencies

- **Office of Federal Coordinator**
- **Council on Environmental Quality**
- **Federal Energy Regulatory Commission**
- **Department of Interior**
 - Bureau of Land Management
 - Bureau of Indian Affairs
 - U.S. Fish and Wildlife Service
 - Minerals Management Service
 - National Park Service
 - U.S. Geological Service
- **Department of Energy**
- **Department of Transportation**
 - FHWA
 - PHMSA
 - FAA
- **Department of Treasury**
- **Department of State**
- **Department of Defense**
 - U.S. Army Corps of Engineers
- **Department of Commerce**
 - NOAA
 - NMFS
- **Department of Homeland Security**
 - CBP
 - TSA
 - U.S. Coast Guard
- **Department of Labor**
- **Environmental Protection Agency**
- **Department of Agriculture**
- **Advisory Council on Historic Preservation**
- **Department of Justice**
- **Federal Communications Commission**

FERC Pre-Filing Environmental Review Process

Applicant Process

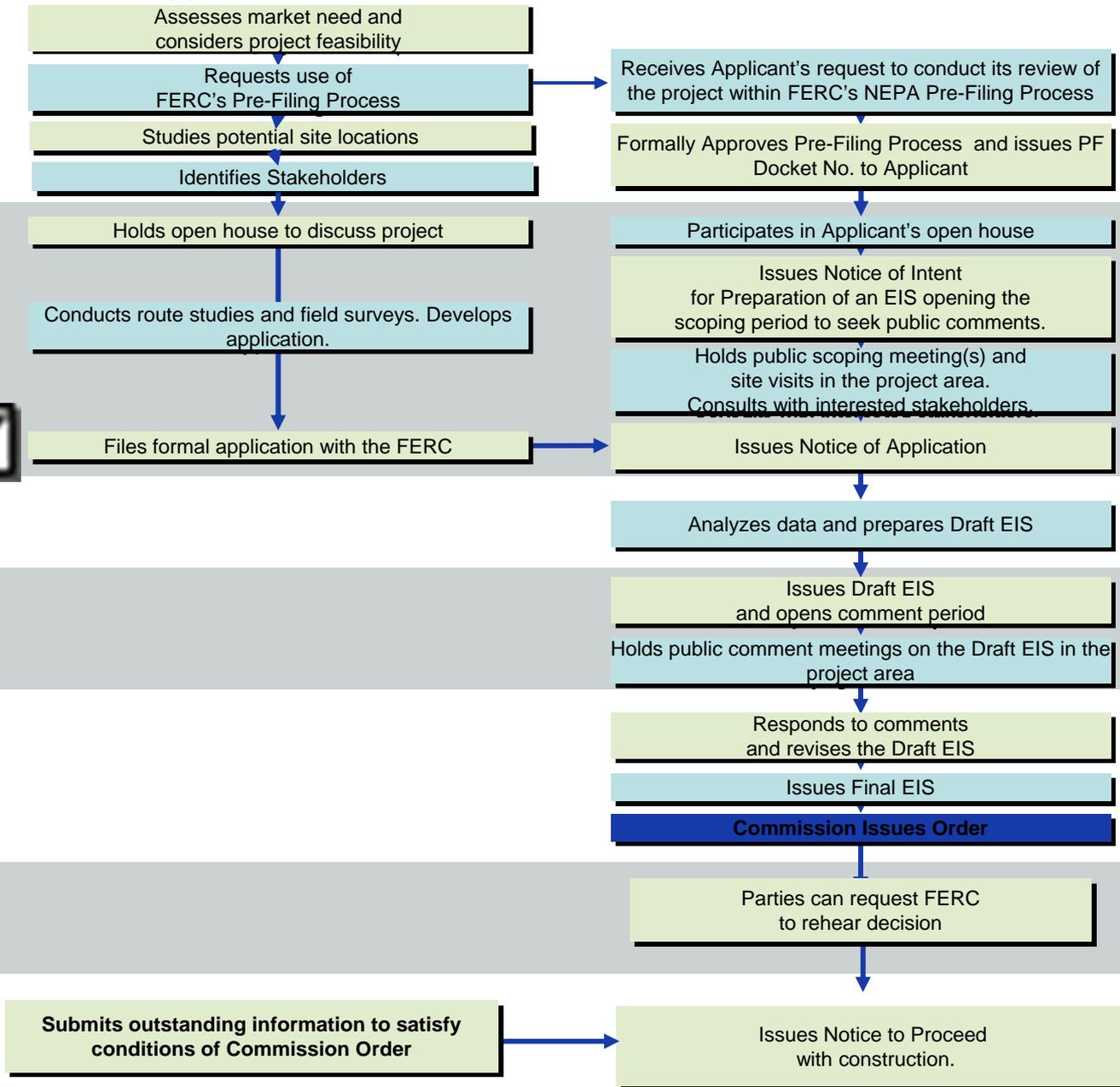
FERC Process

Public
Input
Opportunities



Public
Input
Opportunities

Public
Input
Opportunities



Process: FERC Resource Reports

- 1) General Project Description
- 2) Water Use and Quality
- 3) Fish, Wildlife and Vegetation
- 4) Cultural Resources
- 5) Socioeconomics
- 6) Geological Resources
- 7) Soils
- 8) Land Use, Recreation and Aesthetics
- 9) Air and Noise Quality
- 10) Alternatives
- 11) Reliability and Safety

For more information on each report, you can find the FERC regulations at http://edocket.access.gpo.gov/cfr_2005/aprqtr/pdf/18cfr380.12.pdf

Native Stakeholders

- ❖ 229 Federally Recognized Tribes
- ❖ ANCSA
 - ❖ 13 Regional Alaska Native Corporations
 - ❖ Over 200 Village Corporations
- ❖ Native Organizations
 - ❖ TCC, AFN, ICAS, etc.

Government-to-Government Consultation

- ❖ FERC will seek the participation of federally recognized Tribes in Alaska
- ❖ Consultation Goal
 - ❖ Provide the Alaska Native tribes with opportunities for meaningful participation



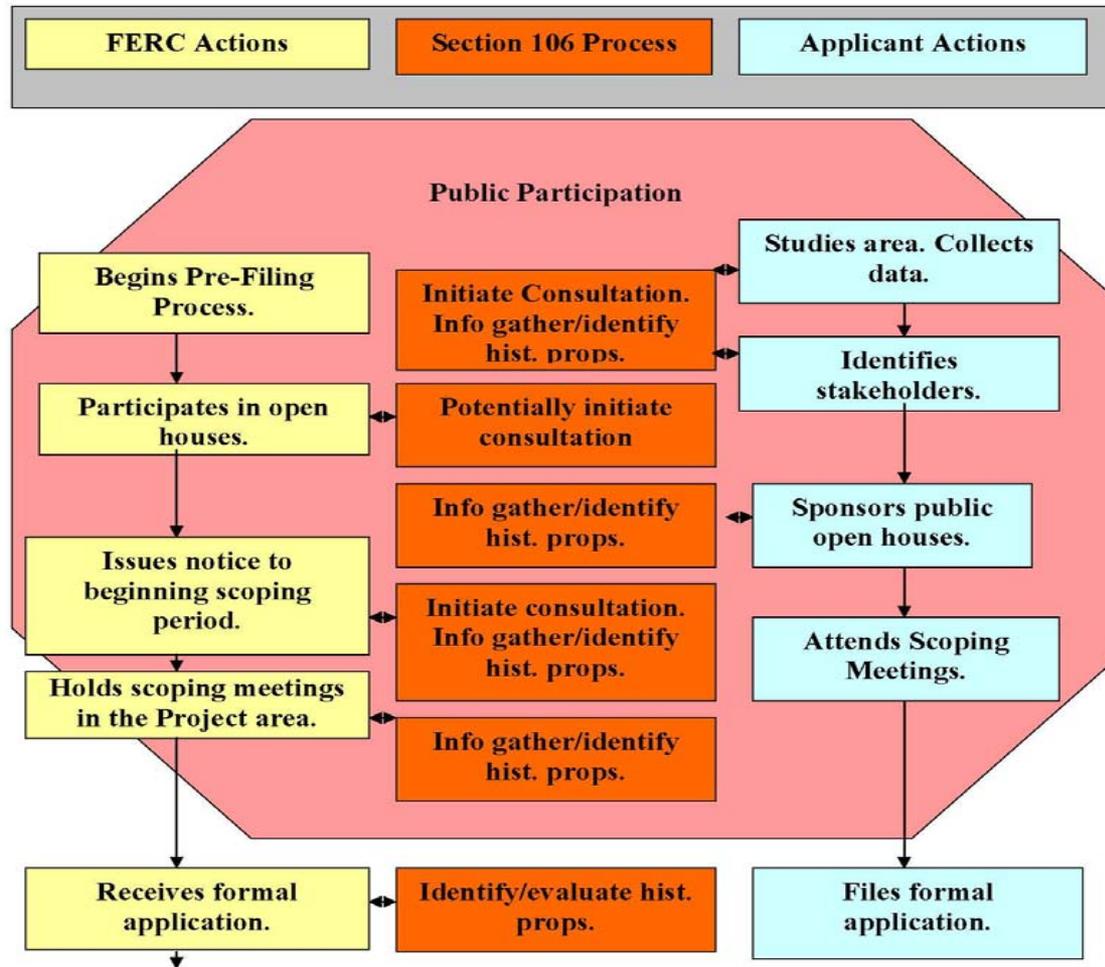
Section 106 Consultations

- ❖ Cultural and Historic Sites
 - ❖ National Historic Preservation Act, Section 106





Federal Energy Regulatory Commission Environmental Review Process Before Filing



Local Training and Hiring

Early training is the best way to ensure locals are qualified & hired

Establish a way to provide fair market wages



Determine existing local skill sets

Prepare and anticipate for new challenges



**Office of the Federal Coordinator
Alaska Natural Gas Transportation Projects**

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(202) 756-4955**

**Anchorage, AK Location:
411 W 4th Ave. 2nd Floor
Anchorage, Alaska 99501
(907) 257-1364**

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