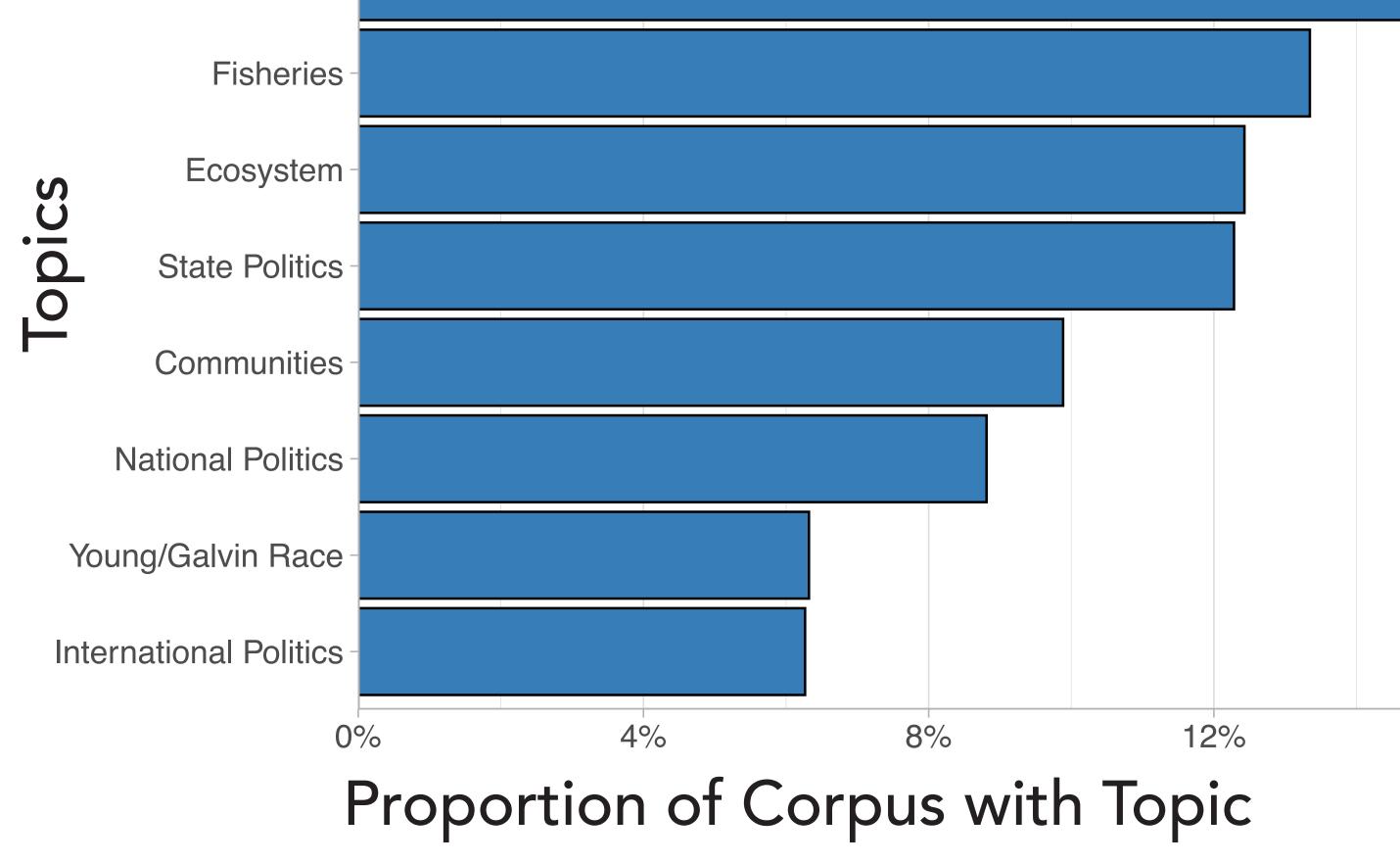
Climate Change in the Eyes of Alaska's Media

For science and policy issues that are contentious, abstract, or otherwise difficult to understand, the media play an important role in mediating how people think about an issue.

Topics in all 2018 Alaska media coverage of "climate change" and "global warming"



STM estimated 9 "topics" within the corpus of text. The highest probability words and words most exclusive to each topic (FREX) are shown below.



Based on sample of 298 news and opinion articles harvested from Lexis Nexis and directly from the news websites. Sample includes primarily print and online news papers, but also text from online TV and radio news.

Sea Ice/Marine: ice, sea, year, arctic, chang, alaska, ocean FREX: oyster, reef, whale, studi, pollock, ice, spawn Energy: climat, chang, energi, state, emiss, alaska, will FREX: emiss, carbon, youth, greenhous, coal, plaintiff, fossil Fisheries: alaska, fish, salmon, oil, will, state, develop FREX: salmon, hatcheri, habitat, oil, ballot, fisheri, drill Ecosystem: can, one, like, plant, year, tree, will FREX: tree, beetl, garden, spruce, snow, plant, soil State Politics: alaska, state, dunleavi, anchorag, governor, school, chang FREX: noorvik, homeless, dunleavi, mccain, crime, governor, kotzebu Communities: villag, communiti, alaska, will, citi, year, road FREX: villag, site, eros, nevada, permafrost, road, highway National Politics: bag, trump, plastic, nation, presid, one, can FREX: plastic, zink, bag, ban, murkowski, kavanaugh, pruitt Young/Galvin Race: alaska, young, sitka, galvin, year, one, thank FREX: tongass, galvin, sitka, kelp, quota, roadless, herring International Politics: trump, arctic, presid, protest, state, will, year FREX: macron, griswold-tergi, riot, protest, bison, emmanuel, franc

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Media Framing Processes

Media frames define and diagnose conditions, identify causes, evaluate or convey moral judgment, and define or endorse particular solutions (Entman, 1993).

Frames define what is at issue in public debates and the solutions to collective problems, such as climate change.

Highlighting one problem, cause, or solution over another could mean increased benefits or risks for distinct populations; frames are not inherently neutral.

By selecting what aspects of issues to present over others, the media play an important role in defining issues within the complex social and political information system (McQuail, 2010).

Climate change has been called a contested framing space, because there is a lot of competition amongst political elites, industry, NGOs, and other stakeholders to define what it at issue and set the frame (Schäfer & O'Neill, 2016).

Murkowski splits with Trump on climate change

FAIRBANKS — Alaska Republican Sen. Lisa Murkowski is no stranger to differing

opinions with President Trump. This time, the split is on the recently released U.S. National Climate Assessment outlining impending global challenges associated wit the effects of climate change

he report was released the day after Thanksgiving without flourish or announcemer but gained attention the following Monday when Trump told press he didn't believe the

"Climate change is real," Murkowski said. "We see and feel the impacts in our state

Murkowski, on the other hand, says the effects are very real

Murkowski said she is actively reading and reviewing the report, specifically the entire section on effects of climate change in Alaska

"Its findings are concerning," Murkowski said, "But not surprising

Murkowski noted that the debate should no longer be revolving around wheth climate change exists

The debate really is about how we address these changes," Murkowski said, noting legislative work in that direction. "There are areas of bipartisan support that we have been working on to reduce greenhouse gas emissions and promote sustainability suc as innovation, efficiency and adaptation

The 1,500-page two-part congressionally mandated report separated its focus of different regions of the country, singling Alaska out as a particular area of concer

Alaska has warmed twice as fast as the rest of the nation, bringing widesprea impacts," the report reads. "Sea ice is rapidly receding and glaciers are shrinking awing permafrost is leading to more wildfire, and affecting infrastructure and wildlif habitat. Rising ocean temperatures and acidification will alter valuable marine

Each of the concerns specifically related to were separated into five key sections isappearing sea ice, shrinking glaciers, thawing permafrost, changing ocear emperatures and chemistry, and Native communities

he report noted that significant climate change effects can already be observed in Alaska, noting that Alaska has warmed twice as fast as the rest of the United States over the past 60 years with state-wide average annual air temperature increasing by rees and average winter temperature by 6 degrees

Because of its cold-adapted features and rapid warming, climate change impacts o Alaska are already pronounced, including earlier spring snowmelt, reduced sea ice. widespread glacier retreat, warmer permafrost, drier landscapes, and more extensi insect outbreaks and wildfire," the report reads

The report projected that annual temperatures in Alaska will rise by an additional 2degrees by 2050

"If global emissions continue to increase during this century, temperatures can be expected to rise 10°F to 12°F in the north, 8°F to 10°F in the Interior, and 6°F to 8°F in the rest of the state." the report reads. "Even with substantial emissions reductions Alaska is projected to warm by 6°F to 8°F in the north and 4°F to 6°F in the rest of the state by the end of the century

The report also identified precipitation concern

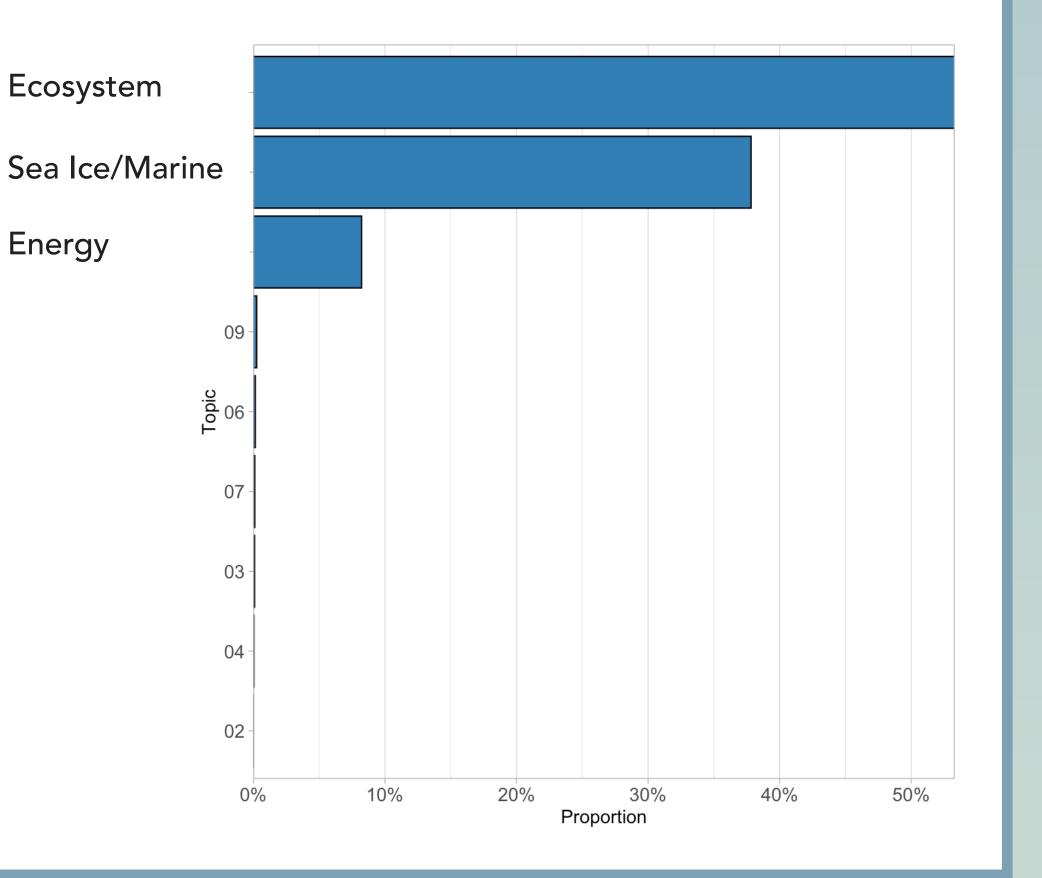
nnual precipitation is projected to increase, especially in northwestern Alaska, as part of the broad pattern of increases projected for high northern latitudes," the repor reads. "Annual precipitation increases of about 15 percent to 30 percent are projected for the region by late this century if global emissions continue to increase. All model project increases in all four seasons.

The report noted that increases in evaporation due to higher air temperatures and longer growing seasons are expected to reduce water availability across the state

The length of the growing season in Interior Alaska has increased 45 percent over th last century and that trend is projected to continue," the report reads

While this would improve conditions for agriculture, it will increase water shortage a well as increasing the risks of longer wildfire seasons

Example: Topics present in one article about Senator Murkowski's statements about the November 2018 National Climate Assessment.



The implication of framing is that audiences "see" climate change a particular way in the news they digest. Frames can increase/reduce polarization or cause people to distance themselves from the issue (Bolsen & Shapiro, 2018).

Changes in dates of snowmelt and freeze-up would influence seasonal migration birds and other animals, increase the likelihood and rate of northerly range expansion of native and non-native species, alter the habitats of both ecologically important and endangered species, and affect ocean currents," the report reads.

This is not the first time that Alaska has been singled out as ground zero for climate change. Alaska Gov. Bill Walker created a task force specifically to study the effects of climate change within the state and to compile a game plan and list of possible actions and policy changes to help mitigate such effects and address causes

One of the central focuses of the task force, which was also one of six central subject outlined in the Alaska section of the climate assessment report, was the increasing emergency for many of Alaska's coastal villages of receding coastline and increase

Several Alaska villages, including the Northwest coastal village of Shishmaref, have had to consider, or are in the process of, relocating the entire village because of coastline erosion

Alaska Republican Sen. Dan Sullivan was unable to be reached for comment on the matter. A spokesman for Sullivan said the senator is reviewing the document.

This and several other issues, including subsistence hunting challenges associated with dwindling levels of sea ice, have gained national attention as Alaska is the only Arctic state in the United States

Alaska Republican Rep. Don Young did not respond to a request for comment

Contact staff writer Erin McGroarty at 459-7544. Follow her on Twitter: @FDNMPolitie

Analysis was conducted using stm: R Package for Structural Topic Models by Margaret E. Roberts, Brandon M. Stewart, and Dustin Tingley. More information available at https://www.structuraltopicmodel.com/.

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