

Siberian air Will Blow to U.S. as Polar Vortex Breaks Down & Jet Stream Crosses North Pole

(/stories/2016/12/2/1606465/--Siberian-air-Will-Blow-to-U-S-as-Polar-Vortex-Breaks-Down-Jet-Stream-Crosses-North-Pole)



By FishOutOfWater (/user/FishOutOfWater)

Friday Dec 02, 2016 · 2:06 PM EST

233 Comments



381



(https://twitter.com/intent/tweet?url=http%3A%

(http://www.dailykos.com/story/2016/12/2/1606465/--Siberian-air-Will-Blow-to-U-S-as-Polar-Vortex-Breaks-Down-Jet-Stream-Crosses-North-Pole#comments)

2Fwww.dailykos.com%2Fstory%2F2016%2F12%2F2%2F1606465%2F--Sibeair-Will-Blow-to-U-S-as-Polar-Vortex-Breaks-Down-Jet-Stream-Crosses-NrPole&text=Siberian+air+Will+Blow+to+U.S.+as+Polar+Vortex+Breaks+Dow26+Jet+Stream+Crosses+North+I

RSS (/user/FishOutOfWater/rss.xml)

TAGS

#Arctic (/news/Arctic)

#arcticseice (/news/arcticseice)

#Climate (/news/Climate)

#ClimateChange (/news/ClimateChange)

#Environment (/news/Environment)

#Recommended (/news/Recommended)

#Science (/news/Science)

Something is wrong in the Arctic. Winter just can't establish itself over the Arctic ocean. In late November cold air finally started to build up over the American side of the Arctic ocean but now crazy jet stream winds are blowing all the way from subtropical waters east of Japan across Siberia, cross the Arctic ocean and into western north America. The Arctic just can't hold in its cold air in this fall.

The polar vortex that had strengthened over the Arctic ocean north of Alaska is going to be replaced by a dome of warm air that will be almost summer-like for the Arctic. As the polar air dives down the Rockies, the polar vortex will begin to reform near the U.S. Canadian border. The ridiculously warm temperatures that much of the U.S. has enjoyed will end shockingly with the southward and eastward advance of the Siberian air. Arctic air outbreaks are common in early December but they usually involve air from western Canada and Alaska. Alaska normally warms up as the cold air comes down the Rockies to the lower 48. Midweek, in this outbreak, the cold air will extend all the way from Texas to Alaska. And if

#Sealce
(/news/Sealce)

#Weather
(/news/Weather)

#Winter
(/news/Winter)

#PolarVortex
(/news/PolarVortex)

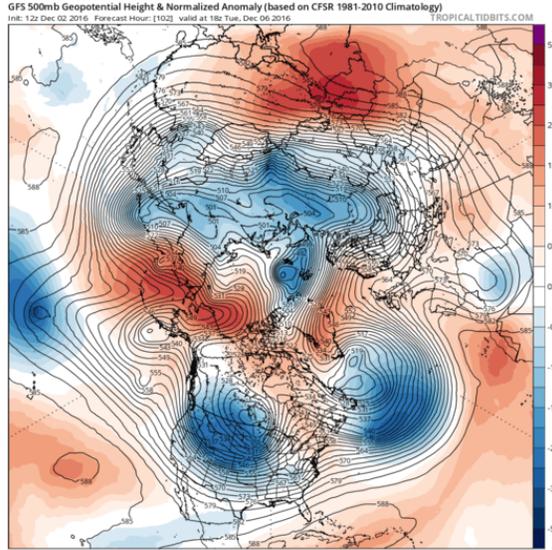
#SeaSurfaceTemper...
(/news/SeaSurfaceTem...)

Share this
article



Will-Blow-to-U-S-as-Polar-Vortex-Bre

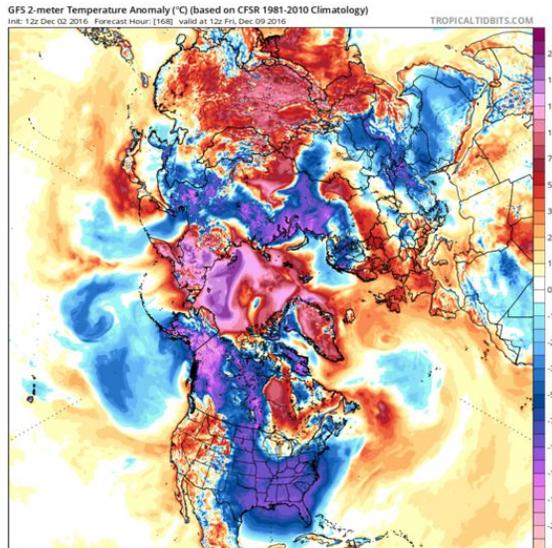
the polar vortex begins to reform along the Canadian border, brutal winds will drive down the wind chill making temperatures in the northern plains feel like the Arctic.



to+U.S.+as+Polar+Vortex+Breaks+Down+%26+Jet+Stream+Cros

Strong winds at mid-atmospheric levels are blowing warm air from the subtropical Pacific east of Japan towards the north pole. Then the winds bend down from the pole back towards Alaska and western north America. This extreme blocking high pattern will heat up Siberian and polar temperatures while brutalizing north America with Siberian and polar air.

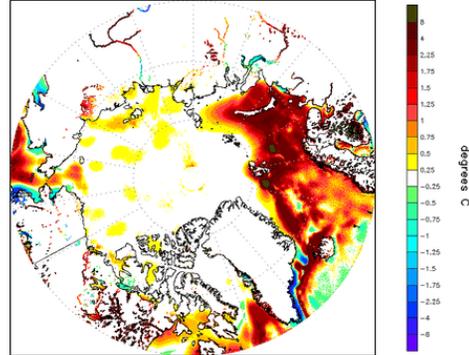
The brutal chill will spread all the way from Anchorage, Alaska to Jacksonville Florida by next Friday while the Pacific coast warm up. Extremely unseasonable warmth will continue in easternmost Siberia and the central Arctic. This is an absolutely bizarre weather pattern, with the kind of exaggerated waviness that Dr. Jennifer Francis and other scientists have linked to Arctic sea ice loss. This is an extreme example of the warm Arctic / cold continents pattern that Dr. Francis has written about in peer reviewed reports. The weather I am writing about this week direct follows the story I wrote 10 days ago about how warm water in the Barents and Kara seas, where sea ice used to be found this time of year, has destabilized the atmospheric circulation. [www.dailykos.com/...](http://www.dailykos.com/story/2016/11/16/1600223/-Arctic-Sea-Ice-Collapse-Has-Destabilized-the-Stratospheric-Lower-Atmospheric-Circulations) (<http://www.dailykos.com/story/2016/11/16/1600223/-Arctic-Sea-Ice-Collapse-Has-Destabilized-the-Stratospheric-Lower-Atmospheric-Circulations>)



The brutal polar chill will spread all the way from Anchorage, Alaska to Jacksonville Florida by next Friday while the Pacific coast warm up. Extremely unseasonable warmth will continue in easternmost Siberia and the central Arctic.

A recently published paper shows how warm water replacing sea ice on the Atlantic side of the Arctic ocean has displaced the polar vortex (in February) towards Siberia. With Arctic sea ice at a record minimum for this date this displacement appears to have taken place much earlier this year.

NOAA/NWS/NCEP/EMC Marine Modeling and Analysis Branch Oper H.R.
RTG_SST_HR Anomaly (0.083 deg X 0.083 deg) for 01 Dec 2016



09:32:29 FRI DEC 2 2016

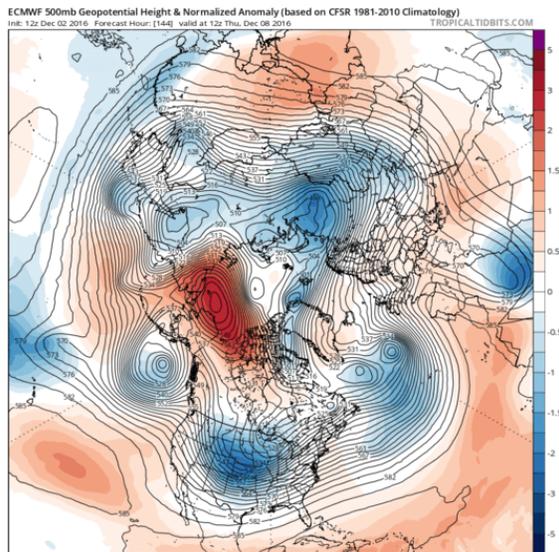
Sea surface temperatures in the seas surrounding the Arctic are much above normal. Warm Atlantic water is found in the Kara and Barents seas where sea ice would normally be found. These warm waters are destabilizing the northern hemisphere's atmospheric circulation.

Persistent shift of the Arctic polar vortex towards the Eurasian continent in recent decades Jiankai Zhang¹, Wenshou Tian^{1*}, Martyn P. Chipperfield², Fei Xie³ and Jinlong Huang¹
[www.nature.com/...](http://www.nature.com/)
(<http://www.nature.com/nclimate/journal/v6/n12/full/nclimate3136.html>)

The wintertime Arctic stratospheric polar vortex has weakened over the past three decades, and consequently cold surface air from high latitudes is now more likely to move into the middle latitudes¹⁻⁵. However, it is not known if the location of the polar vortex has also experienced a persistent change in response to Arctic climate change and whether any changes in the vortex position have implications for the climate system.

Here, through the analysis of various data sets and model simulations, we show that the Arctic polar vortex shifted persistently towards the Eurasian continent and away from North America in February over the past three decades. This shift is found to be closely related to the enhanced zonal wavenumber-1 waves in response to Arctic sea-ice loss, particularly over the Barents–Kara seas (BKS). Increased snow cover over the Eurasian continent may also have contributed to the shift.

The European model is very similar to the American GFS model bringing strong winds aloft across the Arctic ocean from Siberia to north America. The details are slightly different but the models are in very good agreement about the extreme blocking high over the Alaskan side of the Arctic ocean and the outbreak of Siberian air into north America. Here's the ECMWF forecast for Thursday morning, December 8.



The development of an extremely intense blocking high over the Alaska side of the Arctic ocean will bring Siberian air to north America and unusual warmth to the Arctic.

233 COMMENTS

[Comment Settings](#)

(f) Recommend (r) Reply (p) Parent (o) Open/Close (j) Next Unread (k) Prev Unread [More hints...](#)

© Kos Media, LLC
Site content may be used for any purpose without explicit permission unless otherwise specified. "Kos" and "Daily Kos" are registered trademarks of Kos Media, LLC.
Site content may be used for any purpose without explicit permission unless otherwise specified. "Kos" and "Daily Kos" are registered trademarks of Kos Media, LLC.

[Privacy Policy \(http://www.dailykos.com/privacy\)](http://www.dailykos.com/privacy)

- Daily Kos
- Front Page (/)
- Elections (<http://elections.dailykos.com/>)
- Labor (<http://labor.dailykos.com/>)
- Radio (<http://www.dailykos.com/blog/dailykosradio/>)
- Comics (<http://comics.dailykos.com/>)
- RSS (<http://feeds.feedburner.com/DailyKosBlog/>)
- DMCA Copyright Notice (</dmca-copyright-notice/>)
- Endorsements (<https://secure.actblue.com/contribute/page/dk2016?refcode=footer&tandembox=show>)
- Privacy (<http://www.dailykos.com/privacy>)
- Merchandise
- Shirts (<http://dailykos.merchtable.com/>)
- About
- Masthead (<http://dailykos.com/masthead/>)
- History (<http://www.dailykos.com/masthead/history/>)
- Writers (<http://www.dailykos.com/masthead/writers/>)
- Media Inquiries (<http://www.dailykos.com/terms/>)
- Rules of the Road (</rules-of-the-road/>)
- DMCA Copyright Notice (</dmca-copyright-notice/>)
- Endorsements (<https://secure.actblue.com/contribute/page/dk2016?refcode=footer&tandembox=show>)
- Privacy (<http://www.dailykos.com/privacy>)
- Advertising
- Advertising Overview (<http://www.dailykos.com/special/advertising/>)
- Stats for advertisers (<http://www.dailykos.com/special/advertising/stats/>)
- Media Inquiries (<http://www.dailykos.com/terms/>)
- General Inquiries (<http://www.dailykos.com/contactus/>)
- Jobs (<http://www.dailykos.com/jobs/>)