

Was the record warm winter 2016 another Arctic Surprise?

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YouTube Video: <https://youtu.be/LCyoabJHOEM>

Website: <http://www.pmel.noaa.gov/arctic>

NOTE: Unfortunately, recording starts about 30 seconds after Jim started speaking.

ABSTRACT:

There were extensive record Arctic temperature extremes in January and February 2016 that continued into April. For January, the Arctic-wide averaged temperature anomaly was 2.0 °C above the previous record of 3.0 °C based on four Reanalysis products.

Two regions of low geopotential height were seen as a major split in the tropospheric polar vortex over the Arctic. Warm air advection north of Alaska and central Eurasia reinforced the ridge that split the flow near the North Pole and contributed to the persistence. 2016 shows that there can be major Arctic contributions from midlatitudes.

Whether Arctic amplification feedbacks are accelerated by the combination of recent thinner, more mobile Arctic sea ice and occasional extreme atmospheric circulation events from midlatitudes is an interesting conjecture.