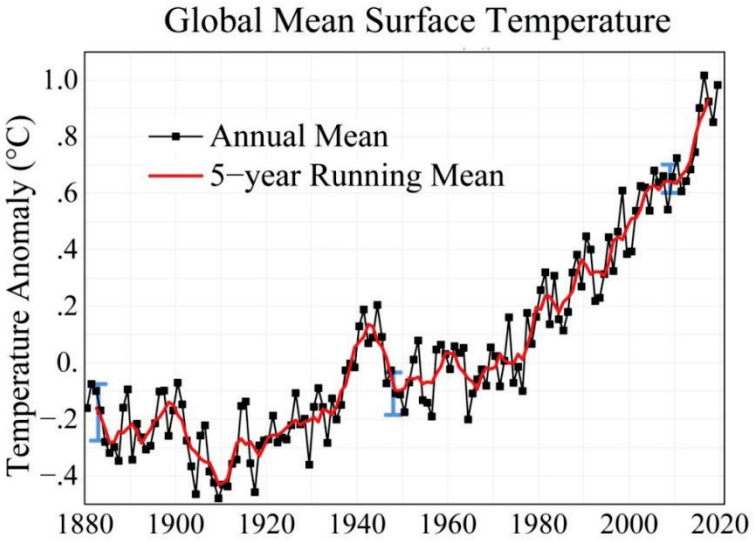
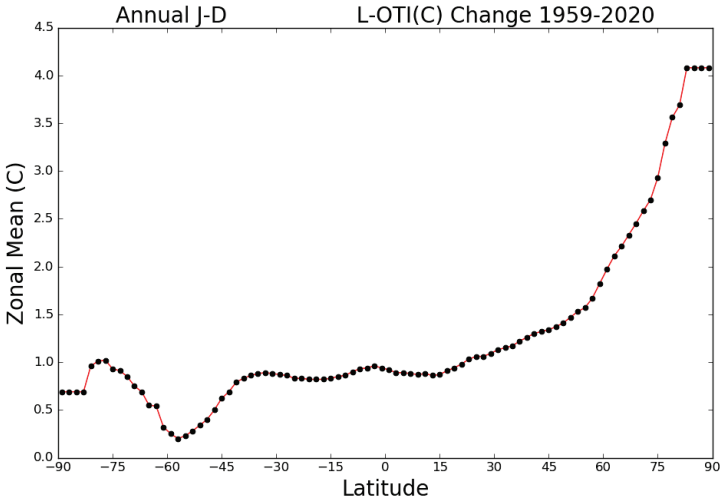
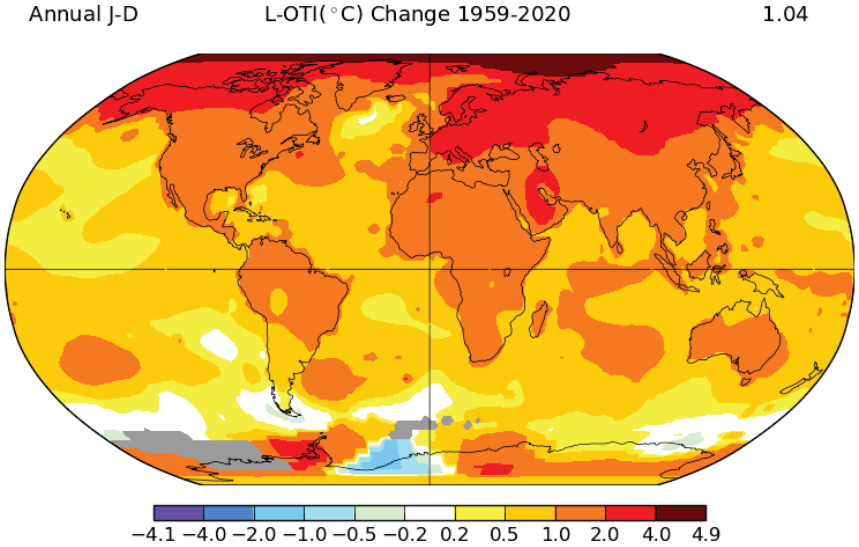
Considerable Arctic Sea ice loss as a factor of heavy April snowfalls in Europe

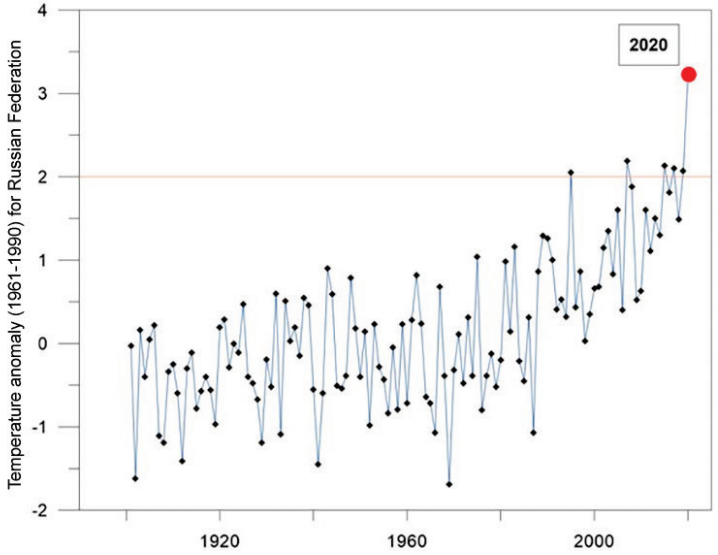
Frolov D. M., MSU named after M. V. Lomonosov

Anomalies and trends of the average annual air temperature on the planet and in Russia



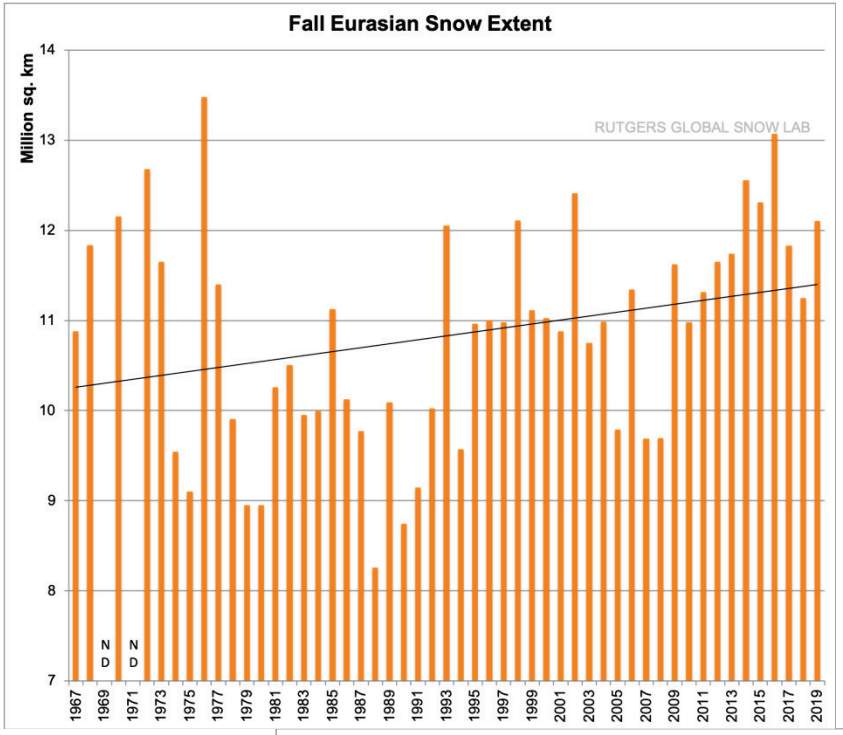






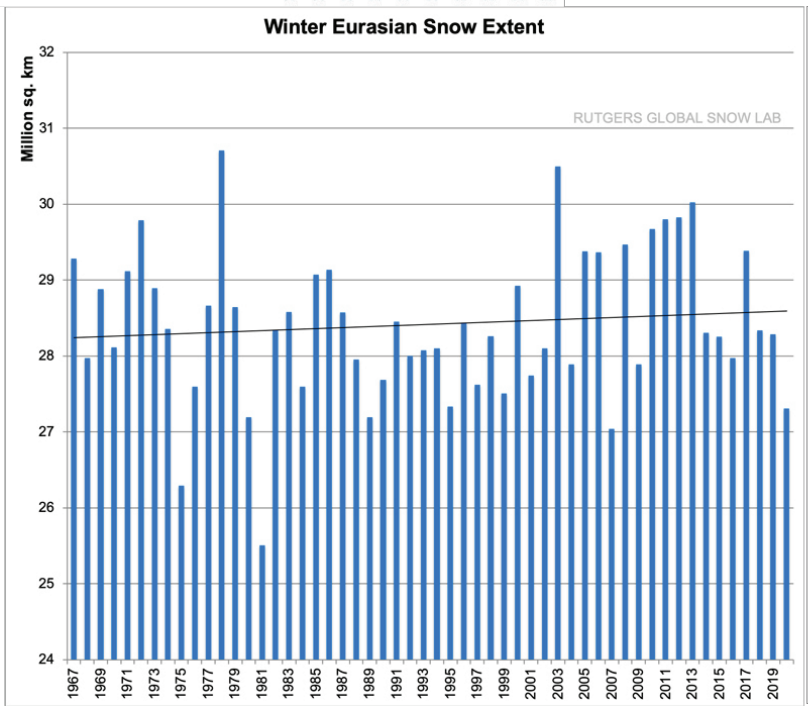
https://data.giss.nasa.gov/gistemp/

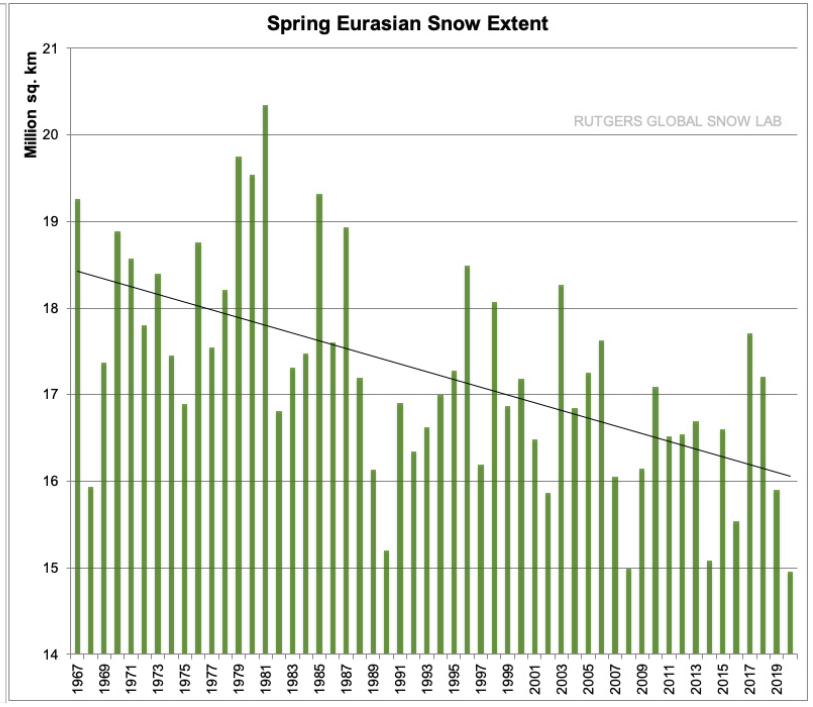
https://meteoinfo.ru/novosti/17710-2020-god-samyj-teplyj-v-meteorologicheskoj-letopisi-rossii



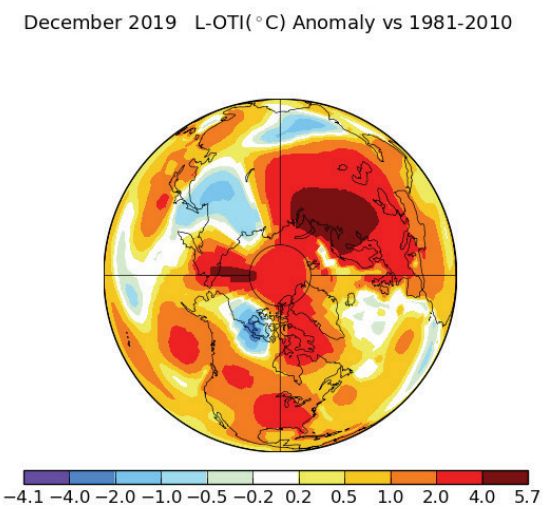
Changes in the area of snow cover distribution in the autumn, winter and spring periods in Eurasia according to the data of Rutgers University

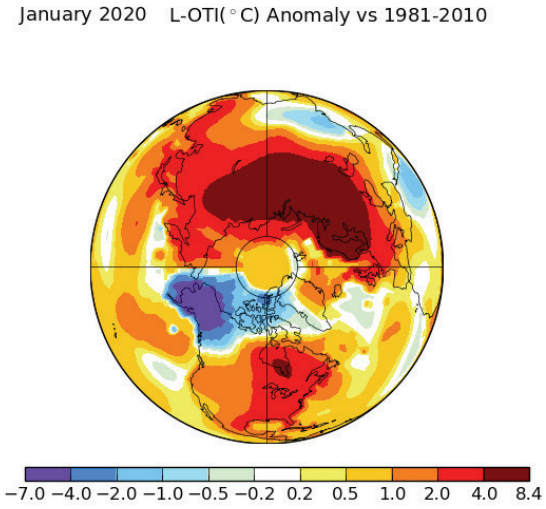
https://climate.rutgers.edu/snowcover/

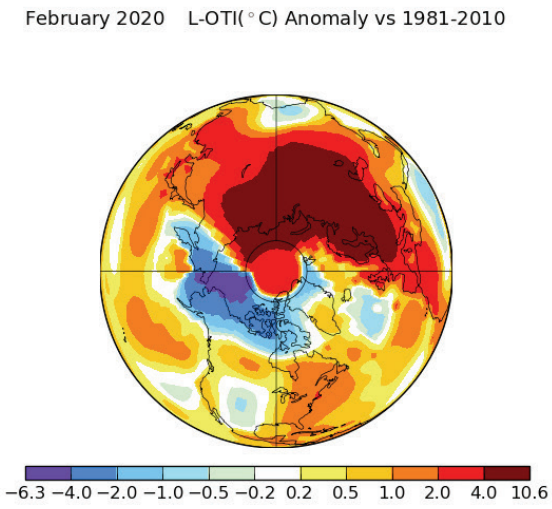


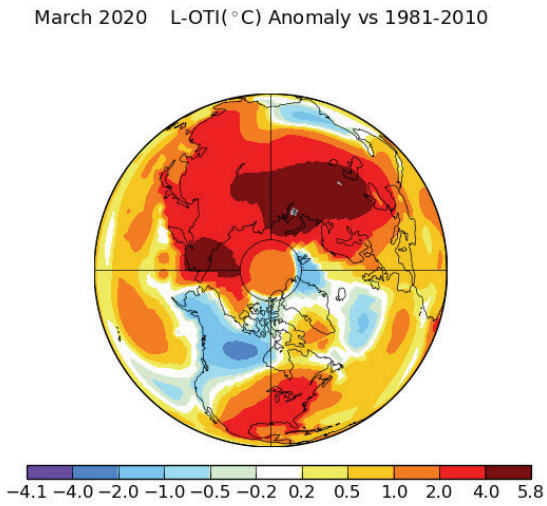


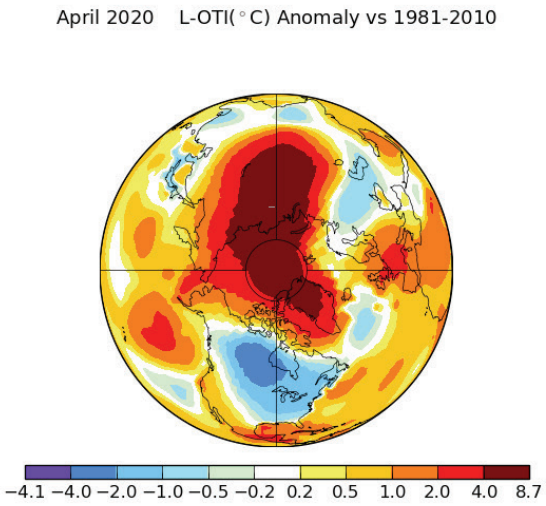
Air temperature anomalies in the Northern Hemisphere at the end of 2019 and the first half of 2020 relative to the long-term average values for 1981-2010.

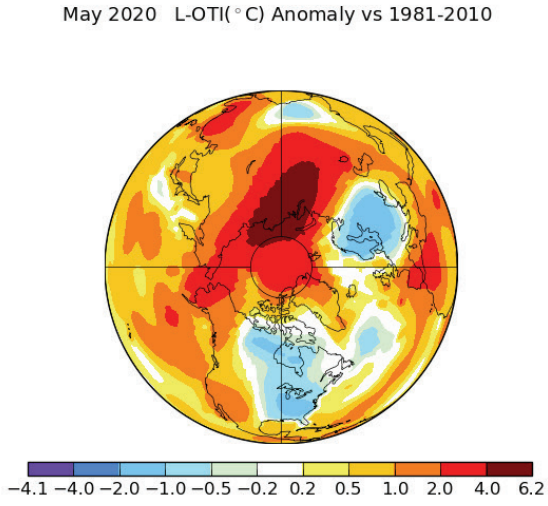






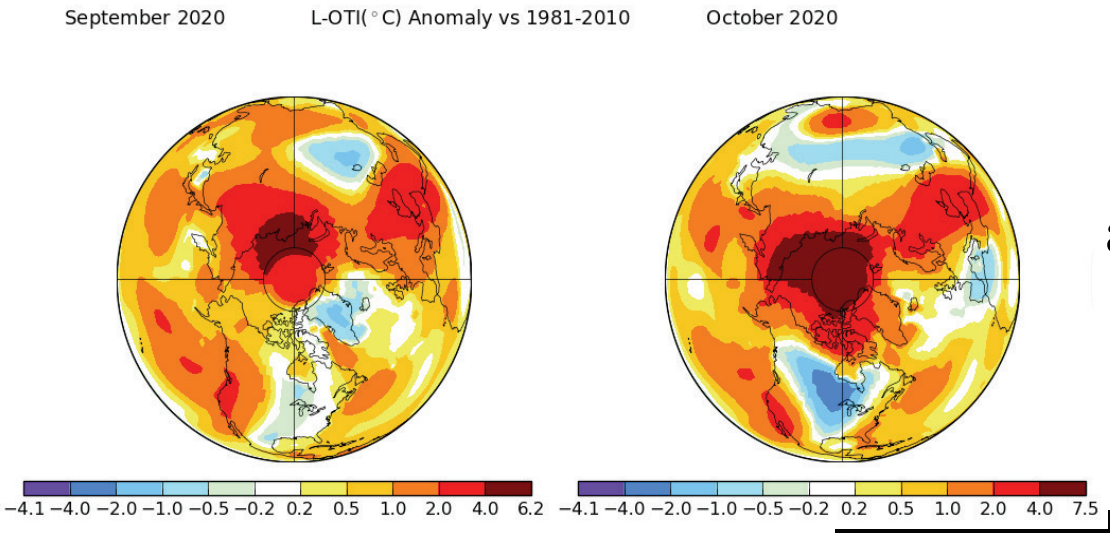






https://data.giss.nasa.gov/gistemp/

Northern Hemisphere air temperature anomalies in September and October 2020 and changes in the area of sea ice in the seas of the Russian Arctic



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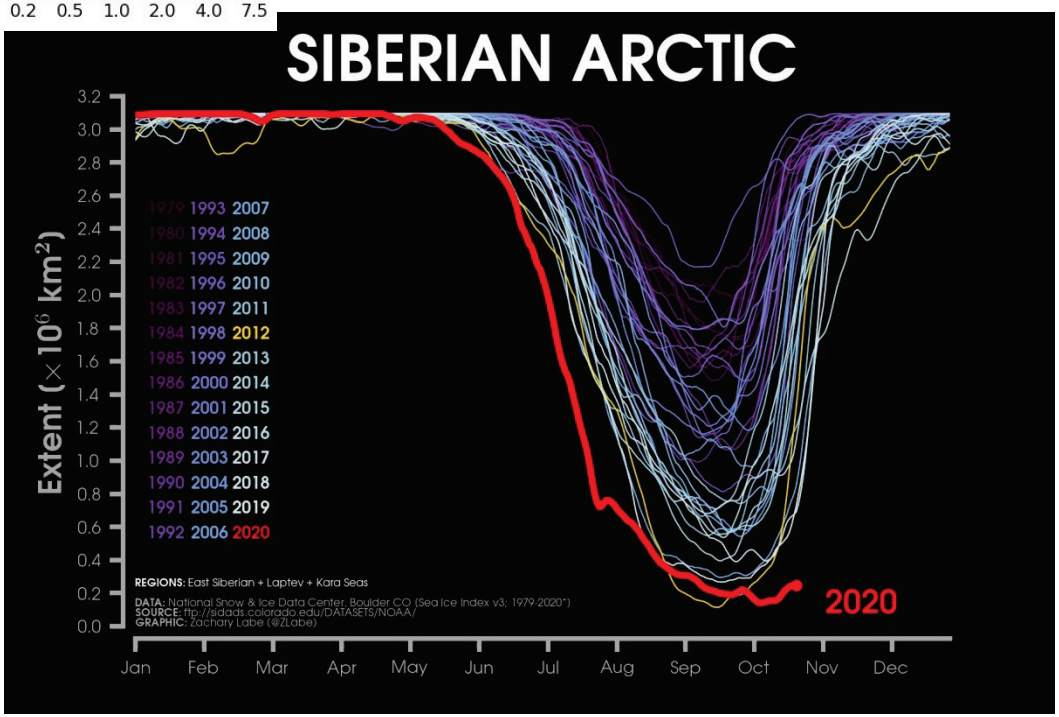
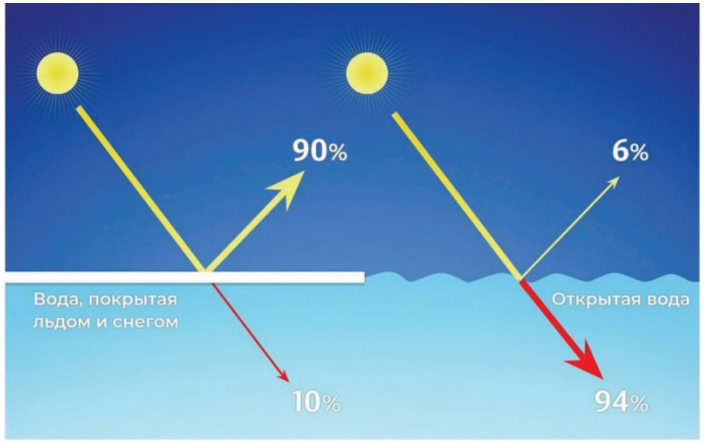


Wegmann M., et al Arctic moisture source for Eurasian snow cover variations in autumn // Environ. Res. Lett. – 2015 – Vol. 10, N 054015

Bailey, H., Hubbard, A., Klein, E.S. et al. Arctic sea-ice loss fuels extreme European snowfall. Nat. Geosci. (2021). https://doi.org/10.1038/s41561-021-00719-y

Some extra evaporation and water vapor atmosphere saturation and due to atmosphere circulation extreme temperature anomalies and heavy snowfalls in the following winter season in the higher latitudes. This was observed in the winter season 2020/21 in Northern Eurasia. These low temperature anomalies and heavy snowfalls brought difficult consequences for economics and for living there people.

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Thanks for your attention