

Where is it published?

Website: arctic-rcc.org

The screenshot shows the homepage of the Arctic Regional Climate Centre Network. At the top, there is a header with the UN logo and the text "ARCTIC REGIONAL CLIMATE CENTRE NETWORK (IN DEMONSTRATION PHASE)". A search bar is located in the top right. Below the header is a large banner image of a snowy mountain range. A navigation bar contains several menu items: "Climate Monitoring", "Long-Range Forecasting", "Data access", "Regional services", "About us", "Arctic Climate Forum", and "Training". The "Arctic Climate Forum" menu is open, showing a list of options: "Arctic Climate Forum", "Consensus statements", "ACF Fall 2021", "ACF Spring 2021", "ACF Fall 2020", "ACF Spring 2020", and "Older ACFs". Below the navigation bar, there are several content tiles: "UPCOMING ARCTIC CLIMATE FORUM ACF Arctic Climate Forum", "CLIMATE MONITORING Latest seasonal summary product", "LONG-RANGE FORECASTING Latest seasonal outlooks", "DATA ACCESS Search different data repositories", "CONSENSUS STATEMENTS Consensus Statement for the Arctic Summer 2018 Season Outlook", and "ABOUT US". On the right side, there is a news section titled "Arctic Climate Forum 8" with a "Read more" link.



ACF

Arctic Climate Forum

HIGHLIGHTS ACF8

HIGHLIGHTS

The combination of Arctic meridional and zonal atmospheric circulations (north-south and west-east respectively) and lower surface heating compared to 2020 this summer (JJA: June, July, August 2021) was the main driver of this past season's temperature, precipitation and sea ice anomalies. Above normal temperatures forecast for all Arctic regions next season (November 2021 to January 2022) will continue to have implications for sea-ice over that time period.

Temperature: The summer 2021 average surface air temperatures were above normal (1961-1990) for most of the Arctic domain, with Eastern Siberia observing record-breaking temperatures. Slightly below normal temperatures were observed in parts of Chukchi Sea and Canadian Arctic. In the Arctic seas, the highest positive anomalies were for the northern part of the Greenland and Norwegian Seas, as well as in the Asian sector - the Laptev and East Siberian seas. In the Laptev Sea area, the anomaly was equal to 2.6C and was the second highest since 1936.

Above normal temperatures are expected to continue across the majority of the Arctic this winter.

Precipitation: On average, precipitation for the Arctic region was equal to 99.1% of normal (1961-1990) during summer 2021. The least amount of precipitation was for the Eastern Siberia and American regions with more abundant precipitation observed in the Nordic region. Impacts of precipitation and evaporation included lesser drainage than normal (1991-2020) for practically all Great Arctic rivers with more significant negative anomalies for Lena for all months. Greater drainage was seen in some months for Anadyr and Enisey.

Wetter than normal conditions are expected across the majority of the Arctic region this winter.

Sea-ice: The Northern Hemisphere September 2021 minimum sea-ice extent was the 12th lowest since 1979. While Barents, Laptev seas were completely ice free in advance of this date, the ice conditions in parts of Kara, Eastern Siberian, Beaufort Seas, parts of Canadian archipelago were close to 40 years normal with both the NW passage and the NSR remaining blocked in the transit straits which is opposite to last 5 years period. Area and thickness of both residual and second year ice in September this year for the Arctic Basin was much greater than that for 2019 or 2020.

Later than normal fall freeze-up is expected for Baffin Bay, East Siberia, and the Kara, Labrador, and Laptev Seas; near normal to early freeze-up is expected for all other regions. Below to near normal 2021 maximum sea ice extent are forecast for the majority of the Arctic.