



## The Regional Climate Outlook Forum for ArcRCC-Network

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ACF Arctic Climate Forum

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# **The Arctic Regional Climate Centre**

NATIONAL		REGIONAL		CIRCUMPOLAR
Countries	Meteorological Organizations	Regional Climate Centres (RCCs)		
United States	NOAA		Forecasting	Arctic Regional Climate Centre
Canada	ECCC	North American Node		
Denmark	DMI		Data Services	
Iceland	IMO			
Norway	NMI	Northern European Node		
Sweden	SMHI			
Finland	FMI			
Russia	AARI	Northern Eurasia Node	Monitoring	

Collaboration/Networking across Arctic regional nodes and Meteorological Organizations



## **Status of ACF**

The start of the Arctic Regional Climate Centre was in November 2017. An implementation plan was written and the first Pan-Arctic Regional Climate Outlook Forum (PARCOF-1) was held in Ottawa in May, 2018. The demonstration phase of ArcRCC-N was started at that event.

The name changed from PARCOF to Arctic Climate Forum (ACF)

ACF is held twice a year, in May and October Usually the May event is face-to-face, but this year.... This ACF is number 6



## **Geographical coverage**



Weather · Climate · Water

## Scale of Weather and Climate Information

Time Scale	Days	Weeks	Months (sub-seasonal)	Seasons (3 months)	Years	Decades	Centuries
Weather or Climate Information	Weather forecasting		Arctic Regional Climate Centre		Satellite and in-situ monitoring	Climate Change Models	
Geographic Scale	Local		is filling this gap			Global/Regional	
Sources of information	National Me Serv	eteorological vices	-			<ul> <li>IPCC As:</li> <li>AC Work</li> <li>WMO Le Annual-to Prediction</li> </ul>	sessments ing Group assessments ad Centre for p-Decadal Climate n

ArcRCC products are filling the seasonal gap using:

- State of the art modelling for temperature, precipitation and sea-ice
- Regional expertise at Meteorological organizations

By providing operational products for decision-makers every:

May for the Arctic summer season and October for the Arctic winter season

# Arctic Climate Forum (ACF)

- A forum for Arctic Regional Climate Centre Network to meet stakeholders and users
- Twice per year
- Seasonal outlooks and monitoring results are presented
- Consensus statement



## **ArcRCC Products**

# presented each May and October at ACF1. Arctic Consensus Statement:

Text and graphics that summarize the temperature, precipitation and sea-ice climate trends for the <u>past</u> season and forecasts for the <u>upcoming</u> season. A collaborative effort by the network in reviewing:

- Trends in the historical monitoring data
- Forecasts from the models
- Using Met/Ice climate expertise, fill gaps in the data

https://arctic-rcc.org/consensus-statements

## 2. Regional Summaries

 The same information that is in the consensus statement but organized by Arctic region and added information about potential impacts to regional users.

### Consensus statement Summary and highlights (1/2)

#### **Overall summary:**

*Summer 2020:* The combination of an Arctic meridional atmospheric circulation (north-south) and high ocean surface heating between June and August 2020 was the main driver of this past season's temperature, precipitation and sea ice anomalies

*Winter 2020-2021:* Above normal temperatures forecast for all Arctic regions between November 2020 and January 2021 will continue to have implications for sea-ice over that time period

Weather · Climate ·

#### Temperature highlights:

Summer 2020: Average surface air temperatures were above normal for most of the Arctic domain

- Eastern and Western Siberia experienced several heat waves
- Record high temperature of 38 °C at Verkhoyansk on 20 June

*Winter 2020-2021:* Above normal temperatures are expected to continue across the majority of the Arctic this winter (red areas on the figure)



## Consensus statement Summary and highlights (2/2)

#### Precipitation highlights:

- Summer 2020: Wetter than average conditions between June and August 2020 were observed over the Western Nordic, Alaska and Western Canada regions, while the Chukchi, Eastern and Western Siberia regions where drier than average.
- Winter 2020-2021: Wetter than normal conditions are expected across the majority of the Arctic region this winter.

### Sea-ice highlights:

- **Summer 2020:** The Northern Hemisphere September 2020 minimum sea-ice extent was the 2nd lowest since 1979, with varying ice cover across the Arctic:
  - Eurasian seas and the Northern Sea Route: completely ice free
  - Beaufort Sea and the Canadian Archipelago: near-normal conditions
- Winter 2020-2021: 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 majority of the Arctic.



## **Thank you!**

# ACF

Arctic Climate Forum

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