



Icelandic Met Office



Norwegian Meteorological Institute



Environment and Climate Change Canada

# Introducing the Arctic Regional Climate Centre Network (ArcRCC-N)

<https://www.arctic-rcc.org>



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Photo: Helge Tangen



**ACF**

Arctic Climate Forum



FINNISH METEOROLOGICAL INSTITUTE



# Welcome to Arctic Climate Forum number 9

## ACF-9

- A forum for Arctic Regional Climate Centre Network to meet stakeholders and users
- Usually: Every spring a face-to-face meeting
- Every fall a virtual meeting - like this one



**ACF**





# What's the difference?

## Weather



- Conditions of the atmosphere over a short period of time
- Reported in terms of hours and days for a city, town, region

### It answers these questions

- *What is the temperature right now?*
- *Will I need a coat this afternoon?*
- *Will it rain this weekend?*

## Climate



- Average weather of a place over period of many years
- Tells us what's normal for an area.

### It answers these questions

- *What is an average winter like in Reykjavik?*
- *Was 2015 the warmest summer on record?*
- *Will Tromsø have above normal temperatures this summer?*

**Climate is what you expect, weather is what you get**

*(sources: NOAA, NSIDC and WMO and websites)*

# 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		<b>Arctic Regional Climate Centre</b> 		Satellite and in-situ monitoring	Climate Change Models	
Geographic Scale	Local				filling this gap		
Sources of Information	National Meteorological Services				<ul style="list-style-type: none"> <li>National Meteorological Services</li> <li>Arctic Report Card</li> </ul>	<ul style="list-style-type: none"> <li>IPCC assessments</li> <li>AC Working Group assessments</li> </ul>	

ArcRCC products are filling the seasonal gap using

- State of the art modeling 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
  - October for the Arctic Winter season



# The Arctic Regional Climate Centre

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

**Collaboration/Networking across Arctic regional nodes and Meteorological Organizations**



# Status for ArcRCC-Network

- An activity started and supported by the World Meteorological Organization (WMO)
- Entered Demonstration Phase in 2018 and held the first ACF that year
- ArcRCC-N is in the process of seeking designation, meaning obtaining a “stamp” from WMO as a fully operational Regional Climate Centre



# ArcRCC Products

## produced each May and October

### 1. Arctic Consensus Statement:

Text and graphics that summarize the temperature, precipitation and sea-ice climate trends for the past season and forecasts for the upcoming season. A collaborate 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 regions and with added information about potential impacts to regional users.



# How is this information different than?

The Arctic Council's Arctic Monitoring and Assessment Programme (AMAP)

- i.e. the Snow Water Ice and Permafrost Assessment (SWIPA) report discusses trends and future predictions, updated once every 5-6 years
- Status report on climate extremes, impact on Arctic societies etc, every 2 years

National Snow and Ice Data Centre –Arctic Report Card

- Annual Summary of the Arctic climate over the past year

**ArcRCC products are ongoing operational Arctic climate summaries and forecast products that are updated every Winter and Summer**





**World  
Meteorological  
Organization**

Weather · Climate · Water

Thank you!