

30 YEARS OF SPACE WEATHER MONITORING

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SuperDARN Canada is in a collaboration with over 15 institutions in 10 countries to form a global network of around 40 radars

SUPERDARN??

Super Dual Auroral Radar Network is an international network of high-frequency radars. SuperDARN's goal is to study plasma in the near-Earth space environment, how it interacts with the Earth's atmosphere and how this effects human infrastructure such as communications, energy and transportation.



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SuperDARN Canada operates 5 radars in:
Rankin Inlet NU
Clyde River NU
Inuvik NT
Saskatoon SK
Prince George BC

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SuperDARN Canada facilitates around 70 publications with 250 authors per year Enabling science research in more than 100 institutions and 15 research labs in over 25 countries

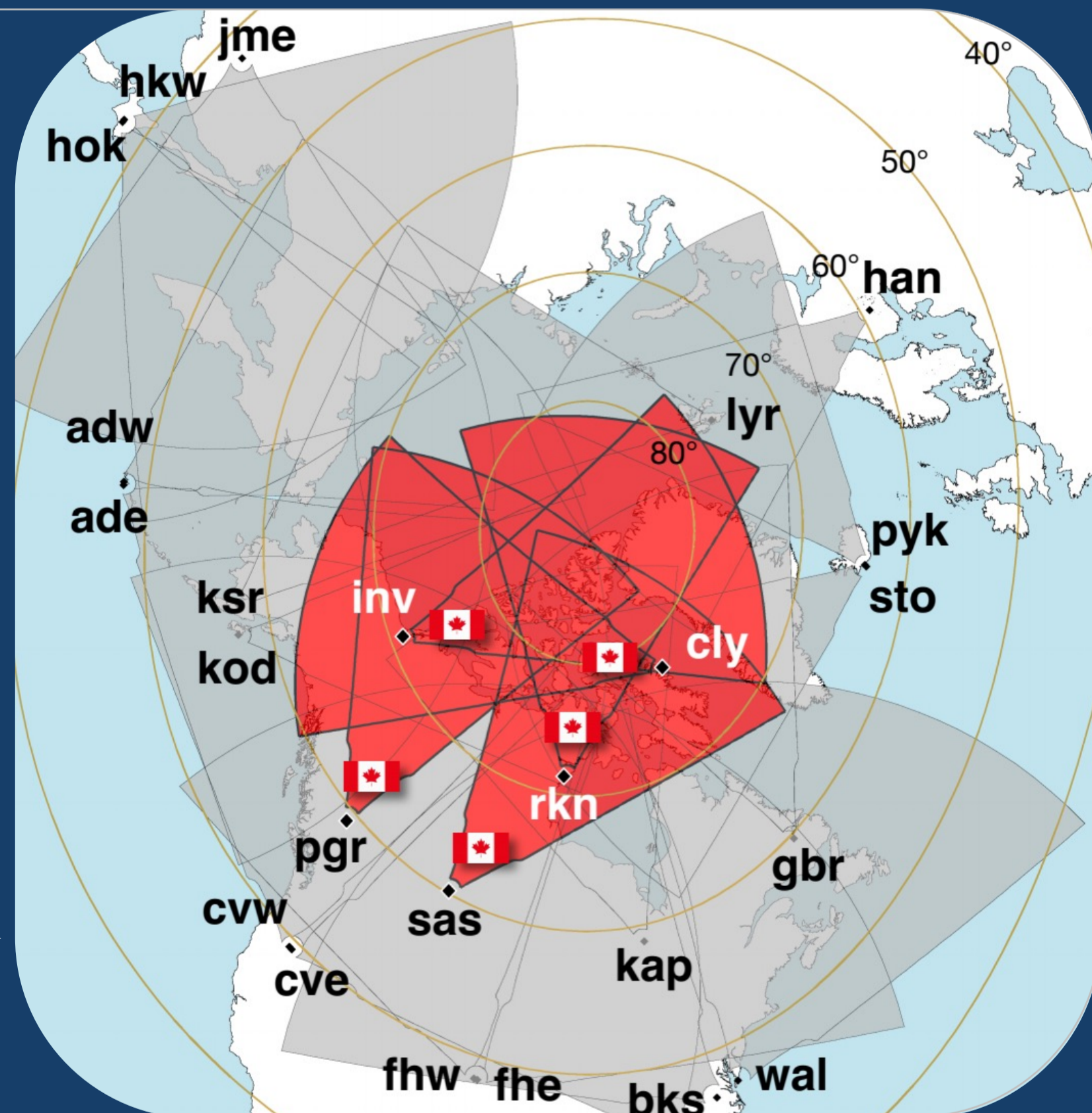


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After 30 years of near continuous operation since 1993, we replaced the original antenna towers in Summer 2023

CANADA'S ROLE

Canada is a founding member of the SuperDARN program and as such plays an essential role in the network, providing coverage of the High Arctic
Our 5 radars frequently contribute over 1/3 of all data points from the Northern hemisphere radar network shown here on the right



IMPORTANCE

Our technology dependent modern world is vulnerable to space weather. Canada as an arctic nation lies below a high activity region and is at risk from space weather effects such as:

- Pipeline corrosion
- Damage to the electrical grid
- Degradation of GPS accuracy
- Loss of radio communications
- Damage to telecoms satellites

This can lead to disruption of our tech-based daily lives, loss of business and even loss of life in extreme situations



Understanding, predicting and mitigating space weather is the fundamental objective of space weather scientists to protect our modern society

SUPERDARN CANADA IS THE KEY!

FOR MORE INFO CHECK OUT: superdarn.ca

