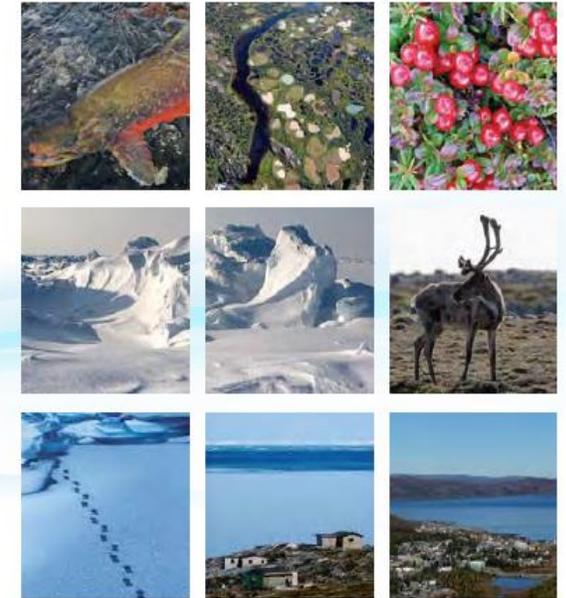


Updated climate information: Nunavik and Nunatsiavut IRIS region

C. Barrette¹, R. Brown² and R. Way³ and many collaborators

1. Centre d'études nordiques, Université Laval
2. Environment and Climate Change Canada @ Ouranos
3. Queen's University, Ontario, Canada

ArcticNet
ᐃᐅᐃᖃᑦᑕᖃᑕᓯᖃ ᑕᐅᓯᓂᐃᖃᑕᓯᖃ



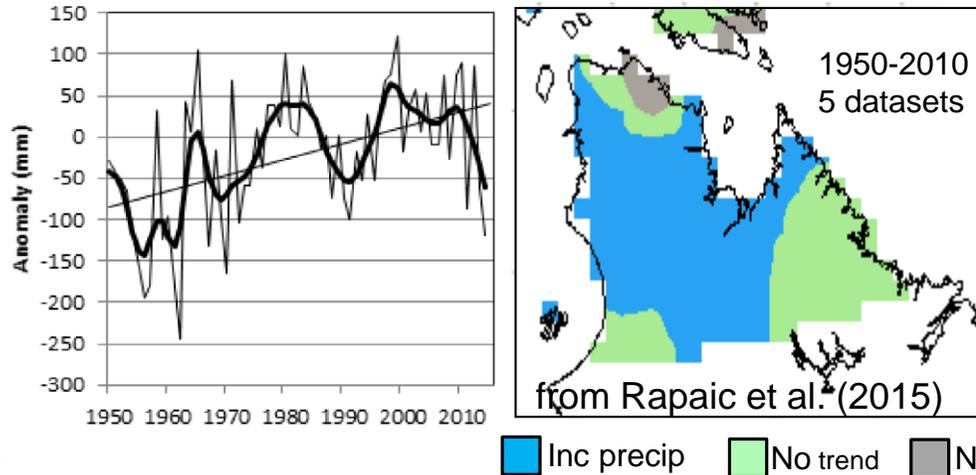
NUNAVIK AND NUNATSIAVUT: FROM SCIENCE TO POLICY

AN INTEGRATED REGIONAL IMPACT STUDY (IRIS)
OF CLIMATE CHANGE AND MODERNIZATION

CHIEF EDITORS : MICHEL ALLARD AND MICKAËL LEMAY

Precipitation related indices | observations

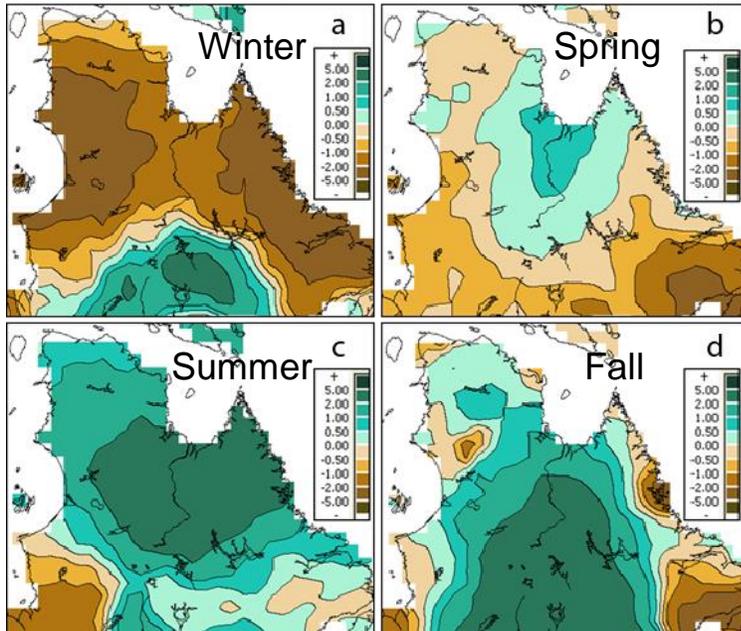
10 station precipitation anomaly



Results:

- Multi-dataset evidence for long-term increases (2-3%/decade) in annual total precip. over most of region since 1950
- Less evidence of trends in precipitation in the period since 1980 apart from increases over central region

Seasonal precipitation trend (CANGRD)



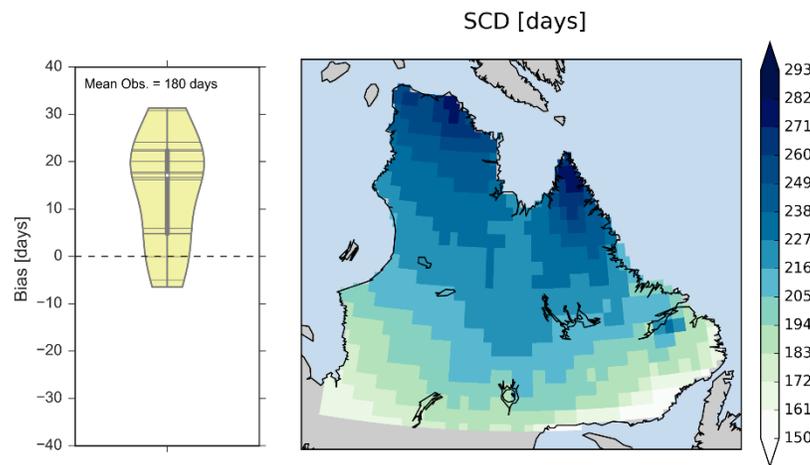
Results:

- Winter precip is characterized by widespread decreases
- Increases in annual total precipitation are mainly driven by summer and fall seasons precip (>60% of total)
- Ungava Bay shows increasing precipitation in all seasons except winter

Snow cover related indices | projections

Reference climate for snow cover duration (1981-2004):

- Mean regional annual avg = 180 days
- Based on MERRA2



Projected changes in snow cover duration for H50 and H85, RCP 8.5:

- Mean regional annual avg change = -31 to -64 days
- Strong impact due to decreasing number of days with $T < 0^{\circ}\text{C}$
- Decreasing fraction of solid precipitation

