Metadata Input Form   (* Mandatory fields)

Please use this template and save in your files as a backup of your metadata. Simply copy/paste information onto website.

Click on grey rectangles to type text

Title of data: :*(e.g. Climate data in Northern Québec)
Doppler Sodar data in Iqaluit, NU - STAR project

How should the data be cited: *(As unpublished data or a journal reference)

(Maximum characters: 500, including spaces)

Study Site:*
Environment Canada Weather Office in Iqaluit, NU

Purpose:* (A summary of the intentions with which the data set was developed)
- wind profile measurements over study area
- boundary layer evolution measurements
- validation and parameterization data for improvements of GEM-LAM
- data will be compared against upper air soundings, and aircraft measurements to assess accuracy of atmospheric wind profile measurements
(Maximum characters: 1500, including spaces)

Abstract:* (description of methodology and data type, e.g., interviews, physical and chemical variables, imagery, recordings, maps and other spatial data, profile, etc.)
An acoustic Doppler SODAR system (Remtech PA1-NT) was also used to assess the three component winds between 0 – 1.2 km AGL with a 30 m vertical resolution every 30 minutes. The sodar has a horizontal wind speed range of 30 m/s with an accuracy of 0.2 m/s and a 3° horizontal direction accuracy for winds faster than 2 m/s/ Its vertical speed range is -4 to +4 m/s, with and accuracy of 5 cm/s or better.
The sodar was only operational during the fall field campaign. Sodar data was recorded to daily data files in a *.dat format. Sodar data was recorded to a PC located in the AWS building near the intrument. Data files were backed up daily by STAR personal. Original files were kept on the sodar PC during the project, while back-up files were saved to the STAR PC located in the iqaluit weather office building. There were intervals were data was not collected because the GPA window was accidentally closed, or the system needed to be rebooted. Rebooted: 19:30 Nov 14, Rebooted: 18:45 Nov 15 (UTC date = 319).
During the field project, snowfall accumulation on the sodar was major concern with respect to data quality. Regular checks and maintenance were conducted on the instruments during this research project to maximize data quality. Refer to the STAR data report for reference to the sodar field notes.

(Maximum characters: 1500, including spaces)

Data Originators: *(e.g. name of data collector(s))

(Do not enter duplicate originators)
John Hanesiak,University of Manitoba CEOS, Winnipeg, MB

Ron Stewart, University of Manitoba CEOS, Winnipeg, MB

Kent Morre, University of Toronto, Toronto, ON

Peter Taylor, York University, Toronto, ON

Walter Strapp, Cloud Physics and Severe Weather Division, Environment Canada, Ottawa, ON

Mengistu Wolde, Flight Research Laboratory, National Research Council of Canada, Ottawa, ON

Links to data (if available, enter NI Email address if direct link is not yet available):

Status of data:* Click on grey rectangle to view scroll down menu
Completed

Maintenance and update frequency:* Click on grey rectangle to view scroll down menu
Daily

Geographic Coordinates (in decimal format)

Research Area *
Coordinates should be in the range of -90.0000 to 90.0000 for the latitude and -180.0000 to 180.0000 for the longitude

North (latitude N):   63 deg 44.86 min

South (latitude N):

West (longitude W):   - 68 deg 32.698 min

East (longitude W):

Time Period (covered by the data set)

* Select entry from scroll down menu on website

Start Year:* 2007   End Year:*2007
Start Month:*September   End Month:*Nov
Start Day:* 23   End Day:*30

Keywords   (see Keywords Library)

(e.g., Air, temperature, Precipitation, Photosynthesis, Ocean, Soil, Bacterial production, Climate, Land, Policy, Charr)

* Select entry from the scroll down menu on the website or consult the Keywords Library

Keyword 1:*Atmospheric Wind Profile
Keyword 2:*
Keyword 3:*
Keyword 4:*
Keyword 5:*
Keyword 6:
Keyword 7:
Keyword 8:
Keyword 9:
Keyword 10:

Security

Access: * Click on grey rectangle to view scroll down menu
Public