Metadata Input Form   (* Mandatory fields)

Data Identification Information (Basic information about the data set)

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)
Aircraft data-2D analysis

How should the data be cited: *(As unpublished data or a journal reference)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)
provide 1-second temperature and aircraft data; 30-second averaged aircraft, LWC, temperature and FSSP data; 1-second and 30-second averaged FSSP 096 data; Summary of final analysis at 30, 60, 120 and 300-seconds; 1-second LWC data; 10-second raw and analysed latitude and longitude data; 1-second RID data;30-second FSSP, 2D, LWC, RID, aircraft data for in-cloud cases; Times of 30-second in-cloud periods; The 30-second averaged aircraft 2D data; PMS 2D imaging mono scale cloud probe with 25-800 micron range; PMS 2D imaging grey scale cloud probe with 25-1600 or 15-960 range;
PMS 2D imaging mono scale precipitation probe with 200-6400 micron range;
Liquid water content;
Ice water content

(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.)
The aircraft was equipped with meteorological instruments that measured temperature, humidity, 3-D winds and gusts, cloud microphysics fields (i.e. liquid & total water probes, icing probes, cloud particle spectrometers).
The intention was to collect internal storm measurements of cloud microphysics, thermodynamics, wind and the 4-D dynamic and precipitation structures of storms within a 500 km radius of Iqaluit. The aircraft enabled STAR to probe storm events as they approached the area, during their passage and departure over the study area. The aircraft also provided the only sensor validation flights for CloudSAT overpasses in the Arctic.
The final product of the 2D analysis are integrated 1D-2D spectras of both the drop and ice crystals data. It shows each spectra from a specified flight. It accesses multiple data files to enter various analysis information that are displayed on the plot.

The complite description and 2D analysis data summary is presented in the file: Project_STAR_Data_Summary_March2009.doc

(Maximum characters: 1500, including spaces)

Data Originators: *(e.g. name of data collector(s))
(Do not enter duplicate originators)
Ron Stewart, University of Manitoba CEOS, Winnipeg, MB

John Hanesiak,University of Manitoba CEOS, Winnipeg, MB

Kent Moore, 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
As needed

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):   69˚03.07'

South (latitude N):   53˚19.38'

West (longitude W):   66˚27.38'

East (longitude W):   61˚59.63'

Time Period (covered by the data set)

Start Year:* 2007   End Year:*2007
Start Month:*Nov   End Month:*Nov
Start Day:* 05   End Day:*28

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:*2D analysis

Keyword 2:*1-second temperature and aircraft data for each flight
Keyword 3:*30-second averaged aircraft, LWC, temperature and FSSP data for each flight
Keyword 4:*Summary of final analysis for each flight at 30, 60, 120 and 300-seconds
Keyword 5:*1-second LWC data for each flight
Keyword 6: 10-second raw and analysed latitude and longitude data for each flight
Keyword 7: 1-second RID data for each flight
Keyword 8: 30-second FSSP, 2D, LWC, RID, aircraft data for in-cloud cases for each flight
Keyword 9: Times of 30-second in-cloud periods for each flight
Keyword 10:The 30-second averaged aircraft 2D data for each flight

Security

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