

Title	CANDAC/PEARL DataSet - BRUKER LEVEL 2 METADATA
Responsible Parties	James Drummond, principalInvestigator Kimberly Strong, Originator
Recommended Citation	Strong, K(2014). PEARL/CANDAC BRUKER LEVEL 2 DATASET. CANDAC (http://www.candac.ca/candac/Data/DataInventory.php).
Purpose	These data were collected as part of the ongoing program of the Polar Environment Atmospheric Research Laboratory (PEARL) at Eureka, Nunavut (80N, 86.4W). PEARL is operated by the Canadian Network for the Detection of Atmospheric Change (CANDAC). The mission of PEARL is to characterize the atmosphere in the altitude range of 0-100km and provide data for studies of air quality, ozone and climate change.
Abstract	A Bruker 125HR Fourier Transform Infra-red (FTIR) spectrometer has been operated at the CANDAC Polar Environment Atmospheric Research Laboratory (PEARL) at Eureka during the sunlit part of the year since August 2006. The FTS is operated in solar absorption geometry at its maximum optical path difference of 257 cm corresponding to a spectral resolution of 0.0035 cm ⁻¹ . The Bruker 125HR is equipped with three detectors: InSb and MCT for the middle infrared, and an InGaAs detector for the near infrared. It is also equipped with KBr and CaF ₂ beamsplitters. Combined, these resources cover the middle infrared from about 650 to 6600 cm ⁻¹ and the near infrared from 5000 to 15000 cm ⁻¹ . The optical filters used are those recommended by the NDACC Infrared Working Group and are listed in the table below.
Supplemental Information	Summary: Not Applicable. Research Program(s): IPY-CANDAC/PEARL. Study site: PEARL Observatory, Eureka, Nunavut. For further information: http://www.candac.ca , Prof. Kimberly Strong (principal researcher) strong@atmosph.physics.utoronto.ca .
Topic Category	Environment
Keywords	Ellesmere Island (Geographic locations) Eureka Sound (Geographic locations) Atmosphere (Natural sciences) Greenhouse gas (Natural sciences) Remote sensing data (Natural sciences)

Gases (Natural sciences)
Monitoring (Natural sciences)
Observatory (Natural sciences)
Ozone (Natural sciences)
Infrared (Natural sciences)

Access
Constraints Public

Geographic Bounding
Box

West Bound
Longitude -86.4
East Bound
Longitude -86.4
North Bound
Latitude 80.0
South Bound
Latitude 80.0

Bounding Temporal
Extent

Begin Date 20060801
End Date Not
Defined

Maintenance
Frequency As Needed
