



**Photo Credit:**

Paul Loewen, 2007

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**Link for High-Resolution Photo:**

<http://www.candac.ca/candac/Links/Media/Images/PL-2007-OPAL.jpg>

**Caption:**

The Zero altitude PEARL Auxilliary Laboratory (ØPAL) at Eureka, Nunavut Territory. PEARL, the Polar Environment Atmospheric Research Laboratory, is managed by the Canadian Network for the Detection of Atmospheric Change (CANDAC).

**Summary:**

The Polar Environment Atmospheric Research Laboratory (PEARL) is a unique national and international resource. It is located on Ellesmere Island at Eureka, Nunavut (80N, 86W). It was built in 1993 by Environment Canada and operated as the Arctic Stratospheric Ozone observatory until 2002 when it was mothballed due to lack of funding. It was revitalized in its present form when a collaboration between university researchers and government departments, the Canadian Network for the Detection of Atmospheric Change (CANDAC), undertook its operation in 2005. PEARL is situated about 15km from the Eureka weather station. PEARL contains instrumentation to study the atmosphere from the ground to about 100 km. Since the laboratory is at 600 m above sea level, an additional site – the Zero altitude PEARL Auxiliary Laboratory (ØPAL) - was established beside the Environment Canada weatherstation at approximately sea level. In addition, the Surface Atmospheric Flux and Irradiance Remote Extension (SAFIRE) site, established for instruments that require a degree of isolation, is located near the Eureka runway.

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