

ADEC AERMET Data Summary

July 2001 – June 2002 KRU DS1F
April 2002 – March 2005 Nuiqsut
January – December 2013 Nuiqsut

Issue/Revision Date: August 27, 2018

The Alaska Department of Environmental Conservation (ADEC) is providing the following AERMOD-ready meteorological data files for general use. Applicants who use these files should state that they obtained them from ADEC's web-site. Applicants will still need to demonstrate that the data are representative of the transport conditions at their stationary source, but they will not need to provide quality assurance information or the supporting AERMET files.

Data Set: **Nuiqsut and Kuparuk Drill Site 1F (DS1F)**

Data Period: **As stated in title**

General Location: **Alaska North Slope – Nuiqsut and Kuparuk River Unit (KRU)**

Data Collected By: **ConocoPhillips Alaska, Inc. (CPAI)**

Data Processed By: **CPAI**

AERMET Version: **18018**

AERMINUTE Version: **N/A**

Anemometer Height (m): **10**

Wind Speed Threshold (m/s): **0.5**

Base Elevation (m): **17 (Nuiqsut); 20 (DS1F)**

Upper Air Station (Name/WBAN #): **Barrow (27502)**

Permit Record with Documentation: **Kuparuk Central Processing Facility #3 (Minor Permit AQ0171MSS02)**

Comments: The Department determined that either Nuiqsut or KRU DS1F meteorological data could be used to represent the surface meteorological conditions within Alpine and KRU. This data set includes four years of Nuiqsut data, and one year of DS1F data, that meet the quality assurance requirements of the Prevention of Significant Deterioration (PSD) program. Note: the Department generally allows North Slope applicants to use 10-meter surface data for representing the transport conditions in the ground to 50-meter range. Applicants with exhaust stacks that exceed 50-meters in height need to demonstrate that 10-meter data is still representative, or obtain stack-top meteorological data.

Revision Notes:

- August 17, 2015: ADEC posted a data set that was processed by CPAI using AERMET 15181. CPAI processed the data in support of an August 10, 2015 modeling protocol for the “Alpine Power Expansion Project.”
- April 18, 2018: ADEC posted an updated version that was generated by CPAI using AERMET 16216. CPAI submitted the reprocessed data in support of their minor permit application for the Greater Mooses Tooth 1 Project – Minor Permit AQ1484MSS01. CPAI did not use EPA’s newly developed algorithm for adjusting the surface friction velocity (u^*) since the surface data includes turbulence measurements.
- August 27, 2018: ADEC posted an updated version that was generated by CPAI using AERMET 18018. CPAI submitted the reprocessed data in support of a minor permit application for the Kupaṛuk Central Processing Project (CPF3) – Minor Permit Application AQ0171MSS02. CPAI did not use EPA’s algorithm for adjusting the surface friction velocity (u^*) since the surface data includes turbulence measurements.