

Metadata: Regional Meteorological and Terrain Data for Air Dispersion Modelling

Title	Regional Meteorological and Terrain Data for Air Dispersion Modelling
Abstract	<p>The MOECC has prepared regional meteorological data sets for use in Tier 2 modelling as described in the MOE Air Dispersion Modelling Guideline for Ontario (AMDGO). The MOECC has also developed terrain data (DEM tiles) for air dispersion modelling in an appropriate format for use with the AERMOD dispersion model.</p> <p>Six data sets were developed to conservatively represent the typical meteorological conditions within the 8 regions of Ontario. Surface and upper air data for the 5 year period from 1996 to 2000 were processed using AERMET for three separate types of land use classifications: CROPS, FOREST and URBAN. The surface data were obtained from Toronto (Pearson Airport), London, Sudbury and Ottawa along with International Falls, MN and Massena, NY were used for the following meteorological elements: ceiling height, wind speed (10 meters), wind direction, air temperature, total cloud opacity and total cloud amount. Upper air data were obtained from stations at Maniwaki, QU, White Lake, MI, Buffalo, NY, Albany, NY and International Falls, MN.</p> <p>The terrain files have been converted from digital elevation model data (DEM data) from files developed as part of the Water Resources Information Project: Provincial Watershed Project made available to the MOE through the Provincial Geomatics Service Centre. The original DEM tiles were not in a suitable format for use with AERMAP, and were converted using the Lakes Environmental CANTView software. The tiles are in USGS (7.5' 30 m format), and were updated in November 2004.</p>
Status	Completed
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Geographical Bounds	<p>West bound: -95.134766</p> <p>East bound: -74.041016</p> <p>South bound: 41.441406</p> <p>North bound: 51.460938</p>
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