

Growing-Season Ozone Monitoring at the VMC Site

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Air Quality monitoring at the Underhill, VT VMC site includes an ozone monitoring station in the EPA SLAMS network (State and Local Air Monitoring Sites), operated by the Vermont Division of Air Pollution Control. Beginning in 1989, hourly ozone concentrations have been measured during the warm season (April 1 - October 31) using EPA Reference Methods (UV Photometry). Similar methods are employed at a southern Vermont site in Bennington, as well as at numerous other EPA sites in the U.S. The monitoring objective is to determine compliance with the 1 hour ozone national ambient air quality standard (120 ppb).

Quality-assured data are stored in the EPA AIRS database (Aerometric Information Retrieval Service) within 45 days of the end of each seasonal sampling quarter, and can be obtained through VTDAPC (contact: Janice Lemieux (802) 244-8731).

Summer, 1991 VT Ozone Summary

Monitor Site	# of hrs. ≥ 60 ppb	# of hrs. ≥ 80 ppb	Max. 1 hr.	Date of Max. 1 hr.	# of Episodes
Underhill	366	42	93 ppb	5/24	3
Bennington	419	104	126 ppb	8/17	6

Episode = 2 consecutive days when $O_3 \geq 80$ ppb for 2 hrs

Selected ozone data from VT and other NE sites are also being converted in Voyager format and will be processed into various biologically relevant indices as part of the VMC Data Integration Pilot Project (contact Rich Poirot: (802) 244-8731). The fine time resolution, standard methods and Voyager formatting allow detailed evaluation of spatial and temporal patterns, as illustrated below.

