

File Names

File #	Original File Name
1	PAC2001_SMMT_R-M_GAS-CARBONYLS_HPLC_20010818D14_V1.csv

Dataset Key Phrases

Data Exchange Standard Version	Principal Investigator Name--last first	Principal Investigator Affiliation	File Contents Description--short long	Sampling Interval As Reported in Main Table	Sampling Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name	Data Usage Acknowledgement	Study Or Network Acronym	Study Or Network Name	Country Code
NARSTO 2002/05/28 (2.301)	McLaren ; Dr. Robert	Centre for Atmospheric Chemistry, York University	gas_carbonyls ; gas phase organic carbonyls: formaldehyde, acetaldehyde, acetone, glyoxal, methylglyoxal, biacetyl.	4 hour	Same as sampling interval	1	YORKU	York University	Robert McLaren, Centre for Atmospheric Chemistry, York University	PAC2001	Pacific 2001	CA (CANADA)

Dataset Key Phrases

State Or Province Code	Principal Investigator Contact Information	Co-investigator Name--last first	Co-investigator Affiliation	Name And Affiliation Of Person Who Generated This File	Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File	Companion File Name format And Version	Date This File Generated archive Version Number
BC	Centre for Atmospheric Chemistry, York University, 4700 Keele St., Toronto M3J 1P3; 416-736-2100 x30675; rmclaren@yorku.ca	Liggio ; John	Centre for Atmospheric Chemistry, York University	Robert McLaren, Centre for Atmospheric Chemistry, York University	2002/07/25	MS Excel/2000	None ; Not applicable	2004/10/15 ; 1

Dataset Key Phrases

Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values	Table Explanation Of Reported Uncertainty	Table User Note
<p>Zero and negative values are present in this table, they have not been removed or modified, but have been flagged with the V1 flag, as have been all below detection limit estimates. The negative values exist exclusively for methylglyoxal, for which blank signals have been subtracted resulting in negative values that are statistically equal to zero within the confidence interval. Zero values exist in a few cases where there was no observable integrable peak...ie- zero signal was apparent in the chromatogram. These few points have also been flagged V1.</p>	<p>Values below the detection limit, positive, zero, or negative, are reported as such and are flagged as V1</p>	<p>A propagation of the uncertainty associated with the measurement of the various species by this automated instrument indicate that the uncertainty in the accuracy of a single data point should be $\sim \pm 20\%$. The precision is $\pm 4.2\%$, and thus relative comparisons within the data set are much less uncertain than any single point. Despite this, the uncertainty in the intercomparisons with formaldehyde measured by a different method show deviations much higher than 20% (see QAPjP report), this issue remains unresolved at the moment.</p>	

Dataset Key Phrases

Table User Note2	Table User Note3	Table User Note4	Table Name	Table Focus
			Gas_Carbonyls	Surface--fixed

Site Information

Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)	Site land use	Site location setting	Measurement start date	Measurement end date	Co-incident measurements	Study site ID	Lat lon accuracy
PC01CABCMMT	Sumas	BC	49.05166	-122.24666	4.0	305.0	Forest	Rural	2001/08/18	2001/08/31			15

NARSTO Standard Flags

Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
M1	Missing value because no value is available
	Missing value because no value is available
	Missing value because no value is available
M2	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
V0	Valid value
	Valid value
	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
	Valid estimated value
	Valid estimated value
V3	Valid interpolated value
	Valid interpolated value
	Valid interpolated value
V4	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)

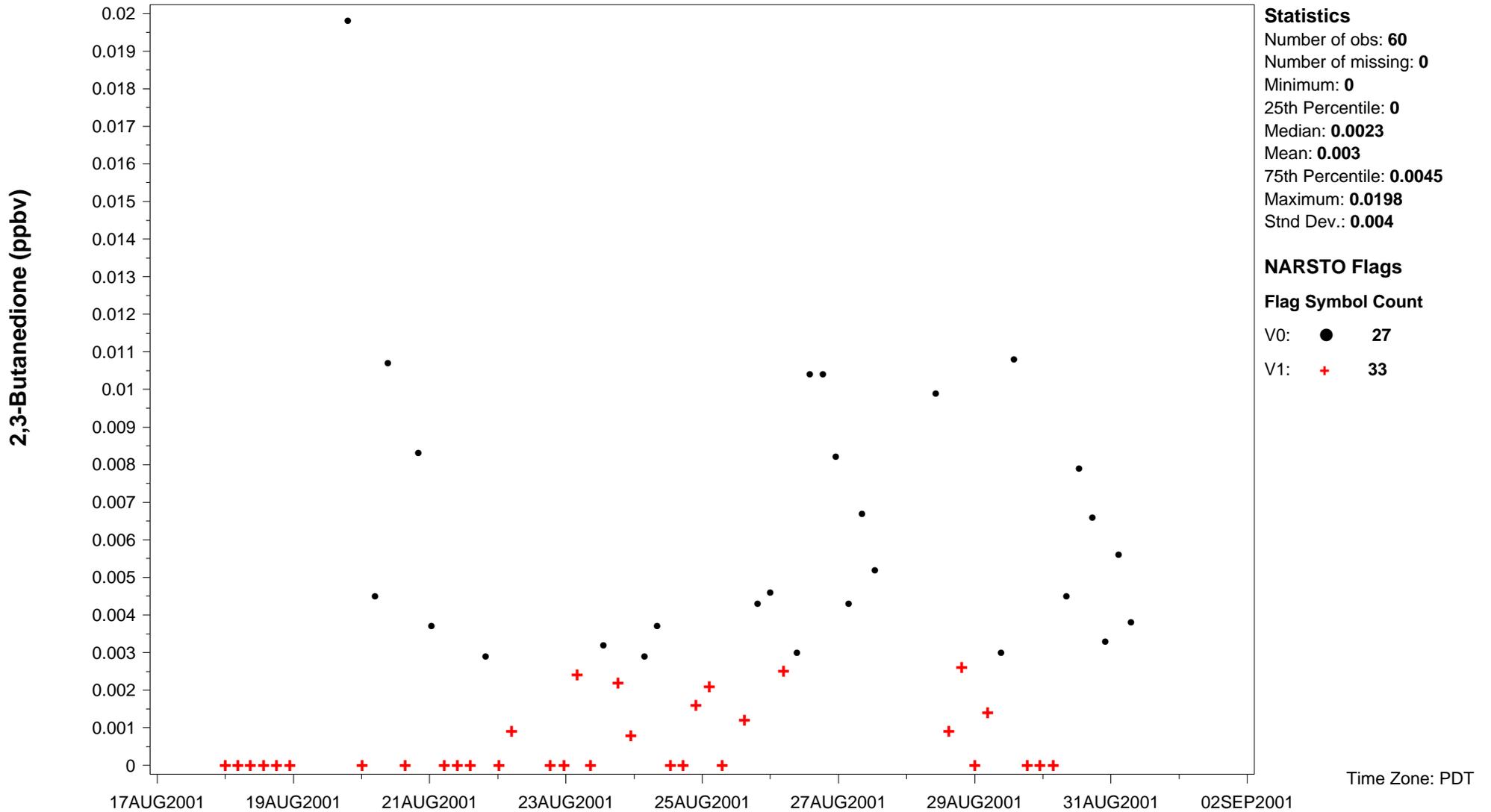
NARSTO Standard Flags

Flag: NARSTO	Description
V7	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **2,3-Butanedione** Common Name: **2-3 butanedione** Units: **ppbv** Sampling interval: **4 hour**
 Sampling frequency: **Same as sampling interval** CAS ID: **C431-03-8** Observation type: **Gas**
 Field sampling or measurement principle: **Cartridge+scrubber+ultraviolet absorption** Medium: **Silica** Coating or absorbing solution/media: **DNPH**
 Inlet type: **Filter in front of sampling line** Blank Correction: **Not blank corrected** Sampling Height above ground (m): **4**
 Wavelength--lower bound (NM): **292** Wavelength--upper bound (NM): **472** Instrument name and model number: **Research Instrument** Detection Limit: **0.0028**
 Site Name: **Sumas, British Columbia** Latitude: **49.05166 deg.** Longitude: **-122.24666 deg.** Start Date: **2001-08-18** End Date: **2001-08-31**



NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **2-Propanone** Common Name: **Acetone** Units: **ppbv** Sampling interval: **4 hour**

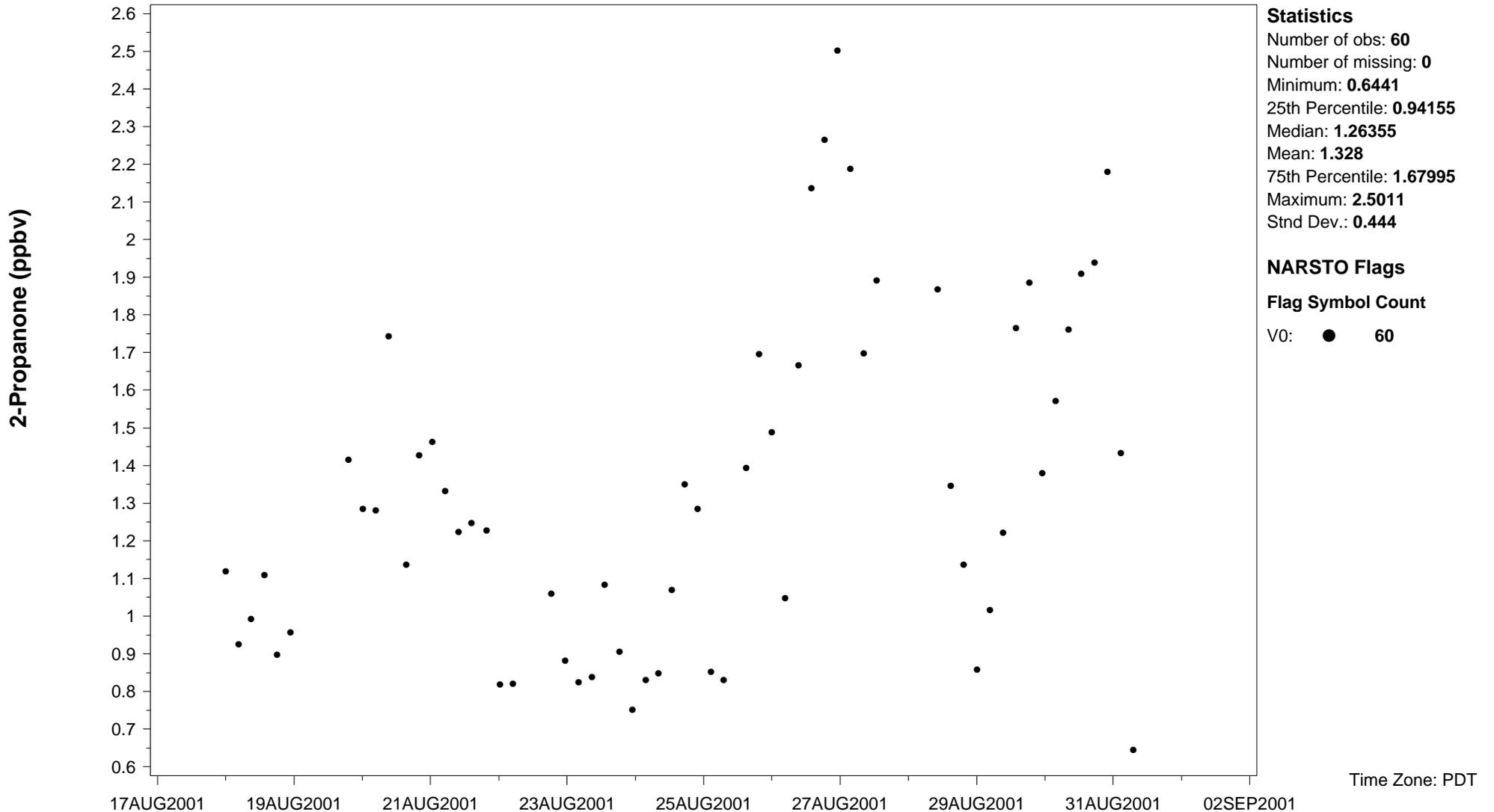
Sampling frequency: **Same as sampling interval** CAS ID: **C67-64-1** Observation type: **Gas**

Field sampling or measurement principle: **Cartridge+scrubber+ultraviolet absorption** Medium: **Silica** Coating or absorbing solution/media: **DNPH**

Inlet type: **Filter in front of sampling line** Blank Correction: **Not blank corrected** Sampling Height above ground (m): **4**

Wavelength--lower bound (NM): **292** Wavelength--upper bound (NM): **472** Instrument name and model number: **Research Instrument** Detection Limit: **0.034**

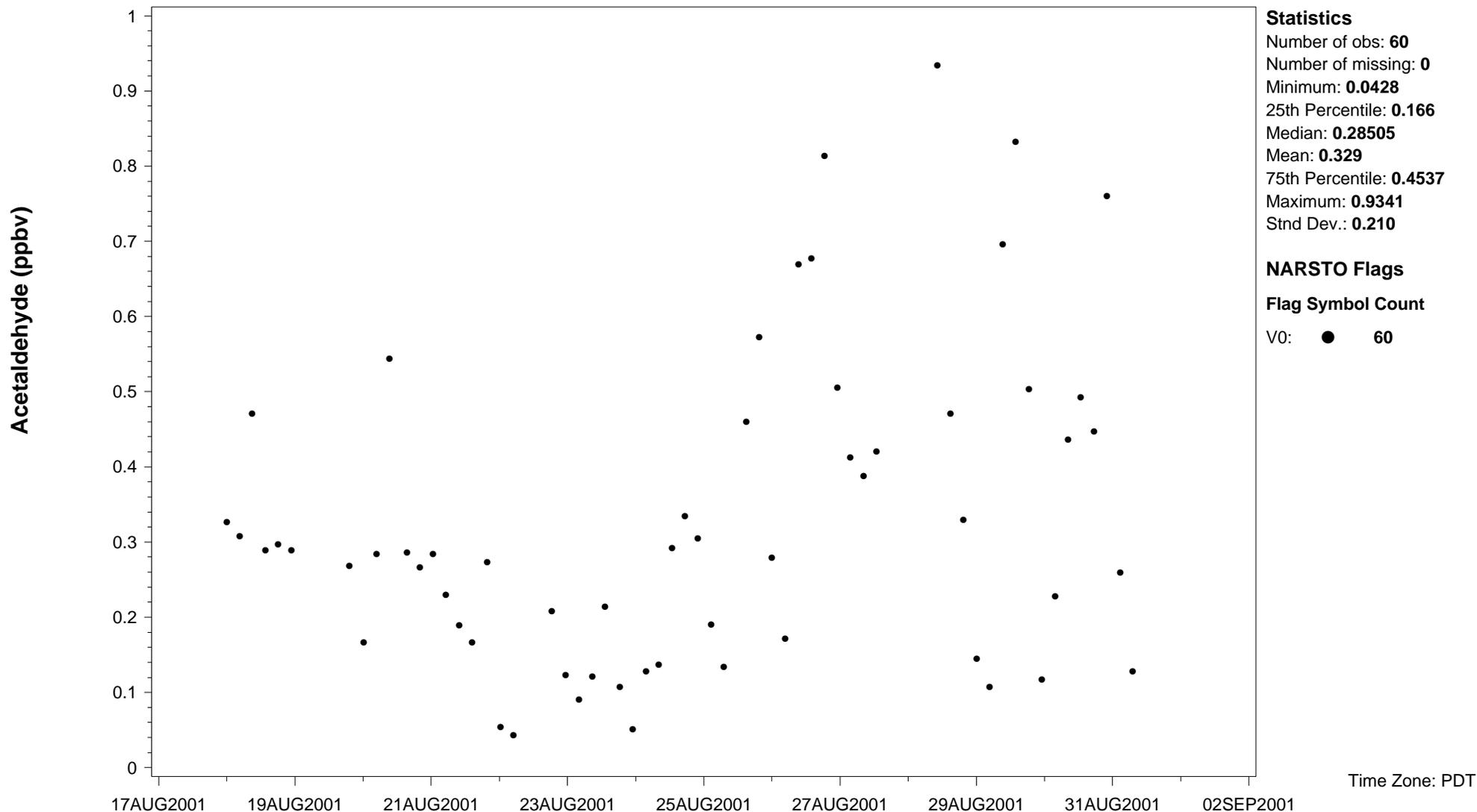
Site Name: **Sumas, British Columbia** Latitude: **49.05166 deg.** Longitude: **-122.24666 deg.** Start Date: **2001-08-18** End Date: **2001-08-31**



NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Acetaldehyde** Common Name: **Acetaldehyde** Units: **ppbv** Sampling interval: **4 hour**
 Sampling frequency: **Same as sampling interval** CAS ID: **C75-07-0** Observation type: **Gas**
 Field sampling or measurement principle: **Cartridge+scrubber+ultraviolet absorption** Medium: **Silica** Coating or absorbing solution/media: **DNPH**
 Inlet type: **Filter in front of sampling line** Blank Correction: **Not blank corrected** Sampling Height above ground (m): **4**
 Wavelength--lower bound (NM): **292** Wavelength--upper bound (NM): **472** Instrument name and model number: **Research Instrument** Detection Limit: **0.0069**
 Site Name: **Sumas, British Columbia** Latitude: **49.05166 deg.** Longitude: **-122.24666 deg.** Start Date: **2001-08-18** End Date: **2001-08-31**



NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Ethanedial** Common Name: **Glyoxal** Units: **ppbv** Sampling interval: **4 hour**

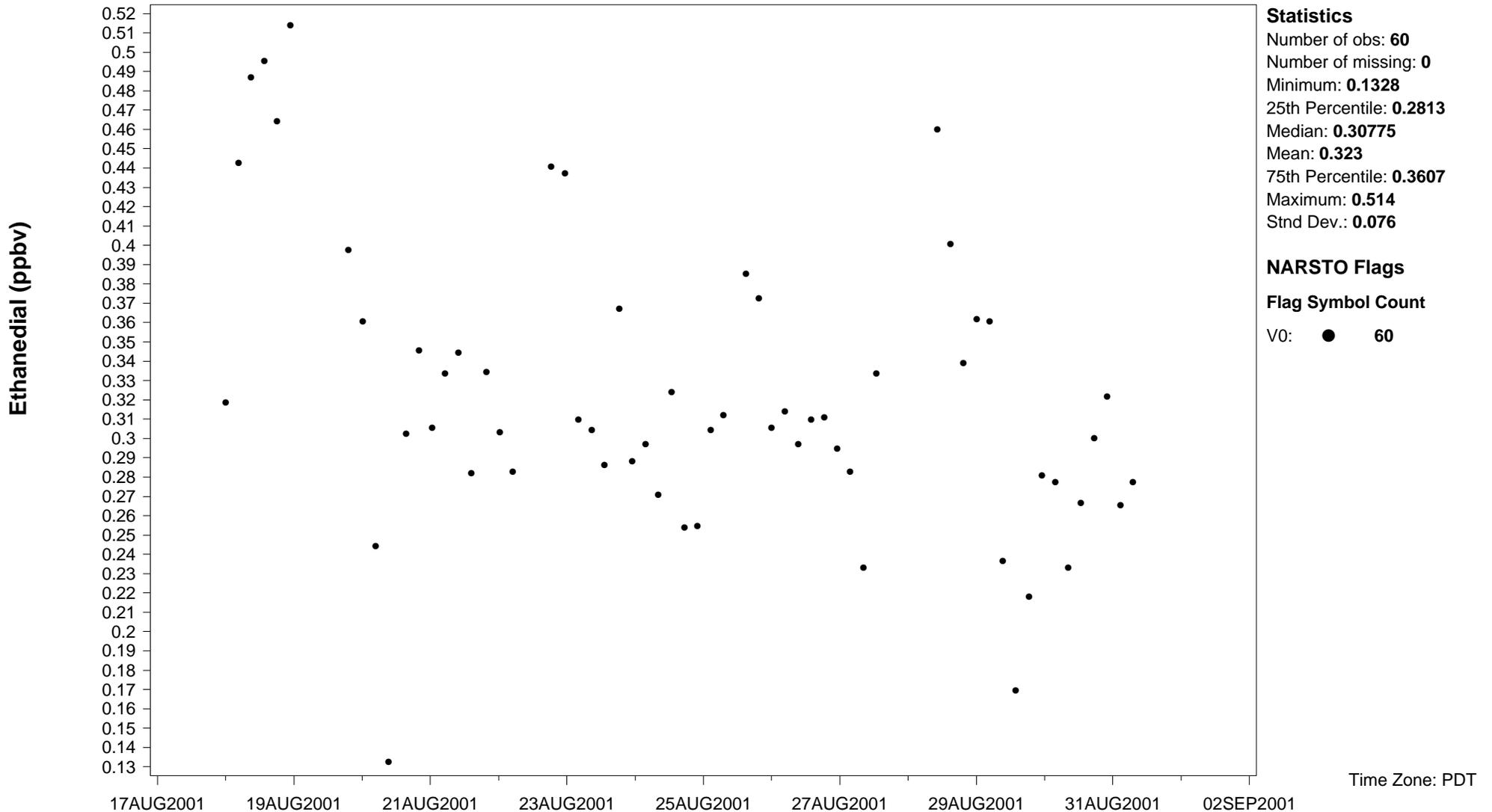
Sampling frequency: **Same as sampling interval** CAS ID: **C107-22-2** Observation type: **Gas**

Field sampling or measurement principle: **Cartridge+scrubber+ultraviolet absorption** Medium: **Silica** Coating or absorbing solution/media: **DNPH**

Inlet type: **Filter in front of sampling line** Blank Correction: **Not blank corrected** Sampling Height above ground (m): **4**

Wavelength--lower bound (NM): **292** Wavelength--upper bound (NM): **472** Instrument name and model number: **Research Instrument** Detection Limit: **0.026**

Site Name: **Sumas, British Columbia** Latitude: **49.05166 deg.** Longitude: **-122.24666 deg.** Start Date: **2001-08-18** End Date: **2001-08-31**

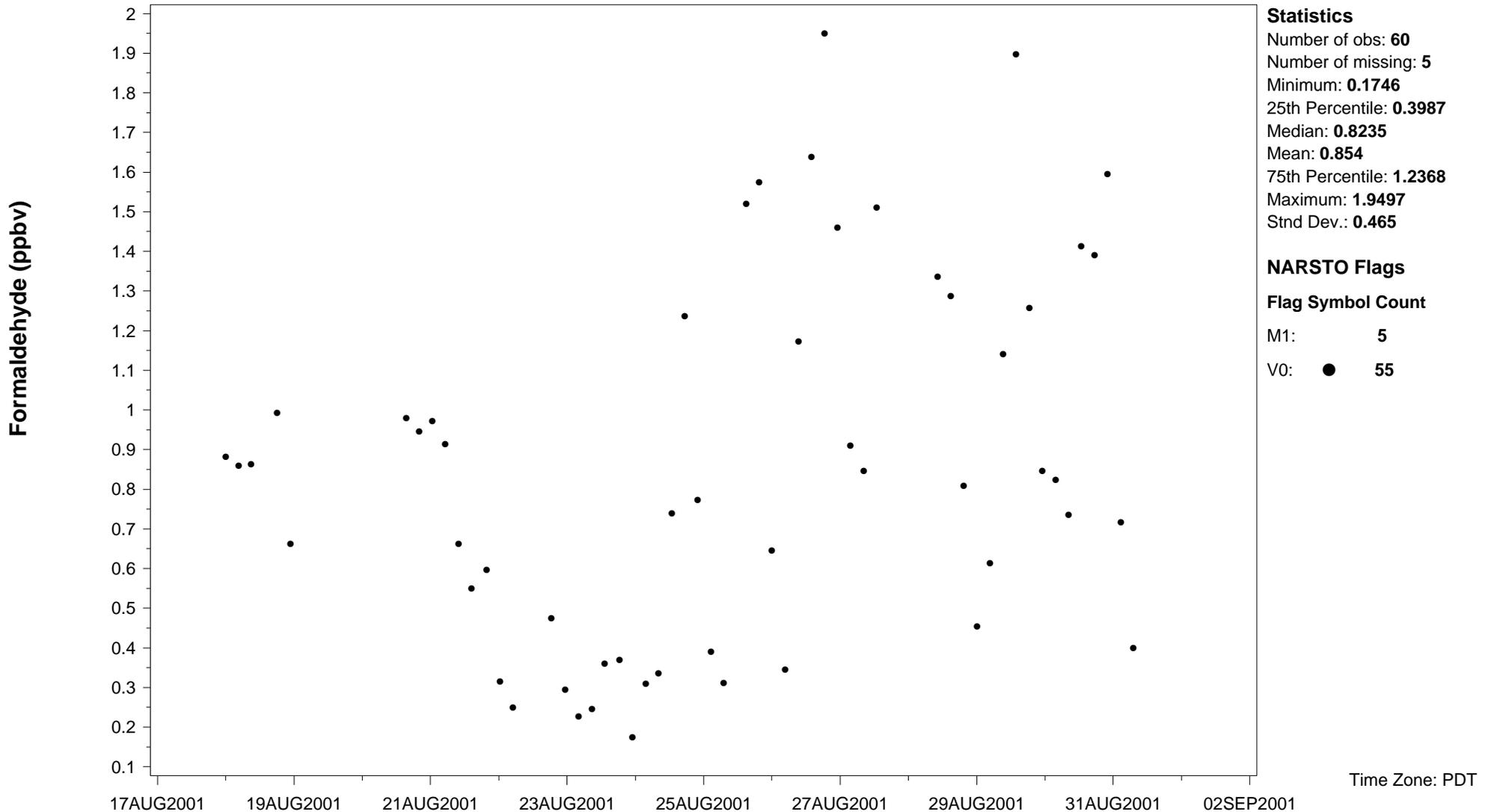


NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Formaldehyde** Units: **ppbv** Sampling interval: **4 hour** Sampling frequency: **Same as sampling interval** CAS ID: **C50-00-0**
 Observation type: **Gas** Field sampling or measurement principle: **Cartridge+scrubber+ultraviolet absorption** Medium: **Silica**
 Coating or absorbing solution/media: **DNPH** Inlet type: **Filter in front of sampling line** Blank Correction: **Not blank corrected**
 Sampling Height above ground (m): **4** Wavelength--lower bound (NM): **292** Wavelength--upper bound (NM): **472**
 Instrument name and model number: **Research Instrument** Detection Limit: **0.0075**

Site Name: **Sumas, British Columbia** Latitude: **49.05166 deg.** Longitude: **-122.24666 deg.** Start Date: **2001-08-18** End Date: **2001-08-31**



NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Propanal, 2-oxo-** Common Name: **Methylglyoxal** Units: **ppbv** Sampling interval: **4 hour**
 Sampling frequency: **Same as sampling interval** CAS ID: **C78-98-8** Observation type: **Gas**
 Field sampling or measurement principle: **Cartridge+scrubber+ultraviolet absorption** Medium: **Silica** Coating or absorbing solution/media: **DNPH**
 Inlet type: **Filter in front of sampling line** Blank Correction: **Blank corrected** Sampling Height above ground (m): **4** Wavelength--lower bound (NM): **292**
 Wavelength--upper bound (NM): **472** Instrument name and model number: **Research Instrument** Detection Limit: **0.0061**
 Site Name: **Sumas, British Columbia** Latitude: **49.05166 deg.** Longitude: **-122.24666 deg.** Start Date: **2001-08-18** End Date: **2001-08-31**

