

File Names

16:51 Thursday, December 9, 2004 1

| File # | Original File Name |
|--------|--|
| 1 | ENVCAN_SHEMP_VAN_JRB_ORG+INORG_VAPS_2000_2002_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 |
|--------------------------------|---|--|---|---|
| NARSTO 2002/05/28 (2.301) | Brook ; Jeffrey | Environment Canada, Meteorological Service of Canada | air-filter-meas ; Air filter measurements | 24 hour |

| Sampling Frequency Of Data in Main Table | Quality Control Level | Organization Acronym | Organization Name | Data Usage Acknowledgement | Study Or Network Acronym |
|--|-----------------------|----------------------|--|--|--------------------------|
| Every day | 1 | ENVCAN_MSC | Environment Canada--Meteorological Service of Canada | Environment Canada, Meteorological Service of Canada, 4905 Dufferin St., Toronto, Ont. M3H 5T4 | ENVCAN_SHEMP |

| Study Or Network Name | Country Code | State Or Province Code | Principal Investigator Contact Information | Co-investigator Name--last first | Co-investigator Affiliation |
|--|--------------|------------------------|--|----------------------------------|-----------------------------|
| Environment Canada--Study of the Health Effects of the Mix of Urban Air Pollutants | CA | BC | Environment Canada, Meteorological Service of Canada, 4905 Dufferin St., Toronto, Ont. M3H 5T4 | None ; None | None |

| 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 |
|--|---|---|
| Bill Sukloff, Environment Canada (MSC) | 2003/02/10 | MS Excel/2002 |

| Companion File Name format And Version | Date This File Generated archive Version Number | Table Explanation Of Zero Or Negative Values | Table Explanation Of Reported Detection Limit Values |
|--|---|---|---|
| None ; None | 2004/11/26 ; 1 | Zero and negative values are reported and reflect actual laboratory analysis results with blank correction, if required, and are flagged as BDL | Detection limits determined as 3SD of field blanks divided mean sample volume and are reported with each measurement. |

| Table Explanation Of Reported Uncertainty | Table User Note | Table User Note2 | Table User Note3 | Table User Note4 | Table Name | Table Focus |
|---|-----------------|------------------|------------------|------------------|-----------------|----------------|
| no uncertainty reported | None | None | | | air_filter_meas | 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 |
|--------------|-----------|------------------------|--------------------------|---------------------------|-------------------------------------|---|---------------|
| SHEMCABCVAN_ | Vancouver | BC | 49.21556 | -121.98250 | 10.7 | 145.0 | Residential |

| Site ID | Site location setting | Measurement start date | Measurement end date | Co-incident measurements | Study site ID | Lat lon accuracy |
|--------------|-----------------------|------------------------|----------------------|-----------------------------|---------------|---------------------|
| SHEMCABCVAN_ | Suburban | 2000/02/14 | 2002/06/19 | None | | . |

NARSTO Standard Flags

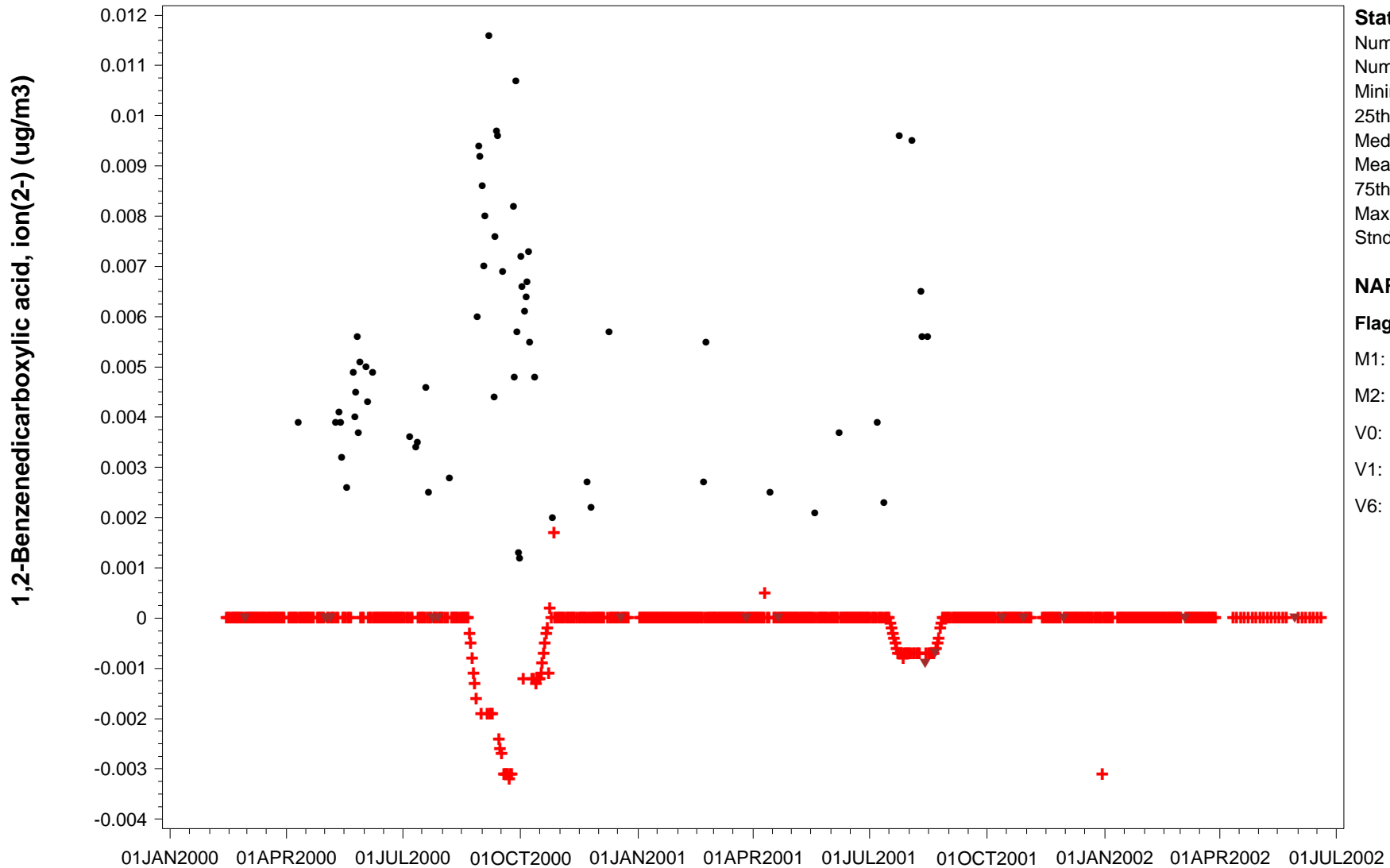
| Flag: NARSTO | Description |
|--------------|---|
| M1 | Missing value because no value is available |
| M2 | Missing value because invalidated by Data Originator |
| V0 | Valid value |
| V1 | Valid value but comprised wholly or partially of below detection limit data |
| V6 | Valid value but qualified due to non-standard sampling conditions |

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **1,2-Benzenedicarboxylic acid, ion(2-)** Common Name: **Phthalic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C3198-29-6** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **IC** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.0032**
 25th Percentile: **0**
 Median: **0**
 Mean: **0.000**
 75th Percentile: **0**
 Maximum: **0.0116**
 Stnd Dev.: **0.002**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 63 |
| V1: | + | 663 |
| V6: | ▼ | 16 |

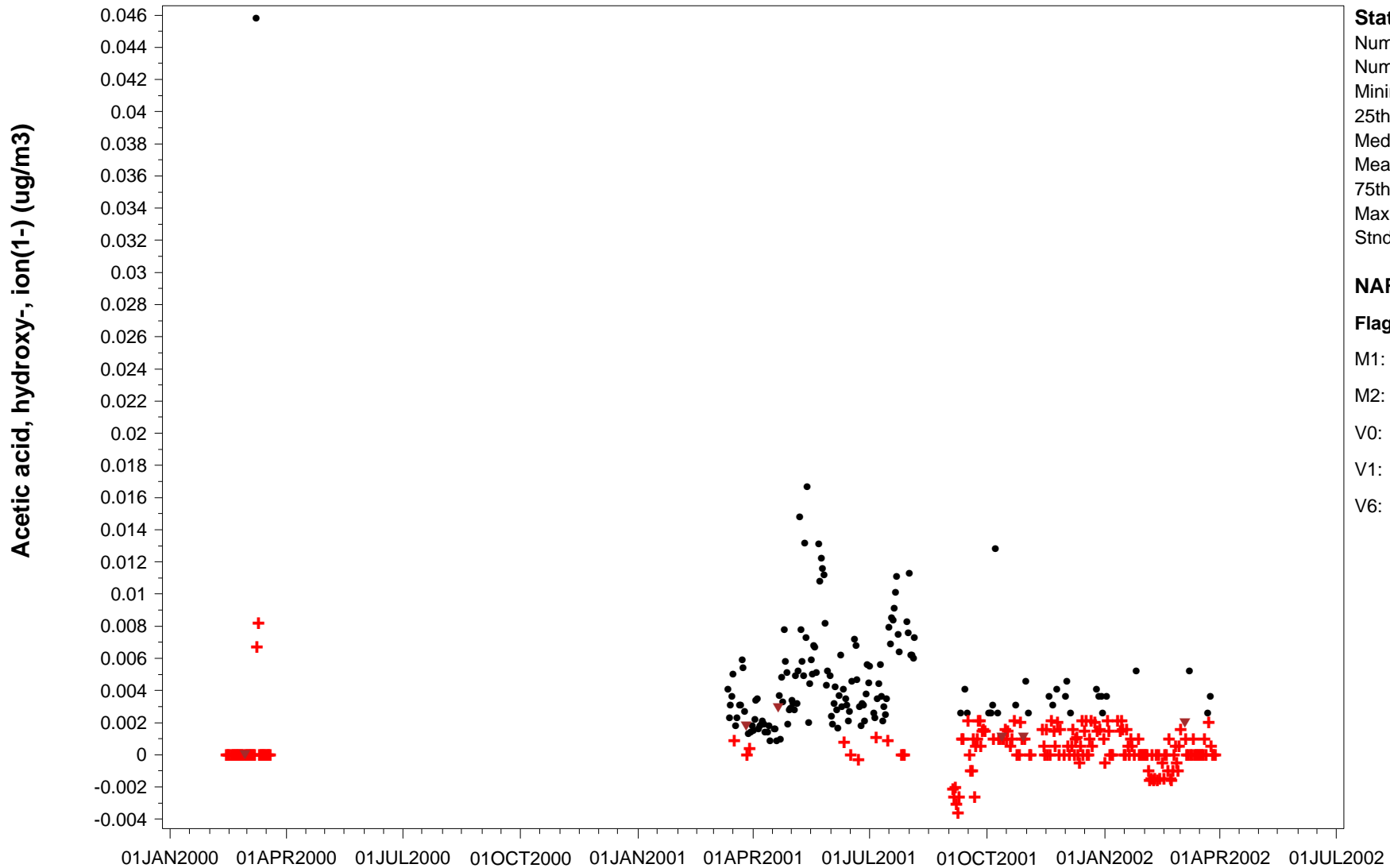
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Acetic acid, hydroxy-, ion(1-)** Common Name: **Glycolic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C666-14-8** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Not blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **409**
 Minimum: **-0.0036**
 25th Percentile: **0**
 Median: **0.0015**
 Mean: **0.002**
 75th Percentile: **0.0034**
 Maximum: **0.0458**
 Stnd Dev.: **0.004**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 408 |
| M2: | | 1 |
| V0: | ● | 151 |
| V1: | + | 191 |
| V6: | ▼ | 6 |

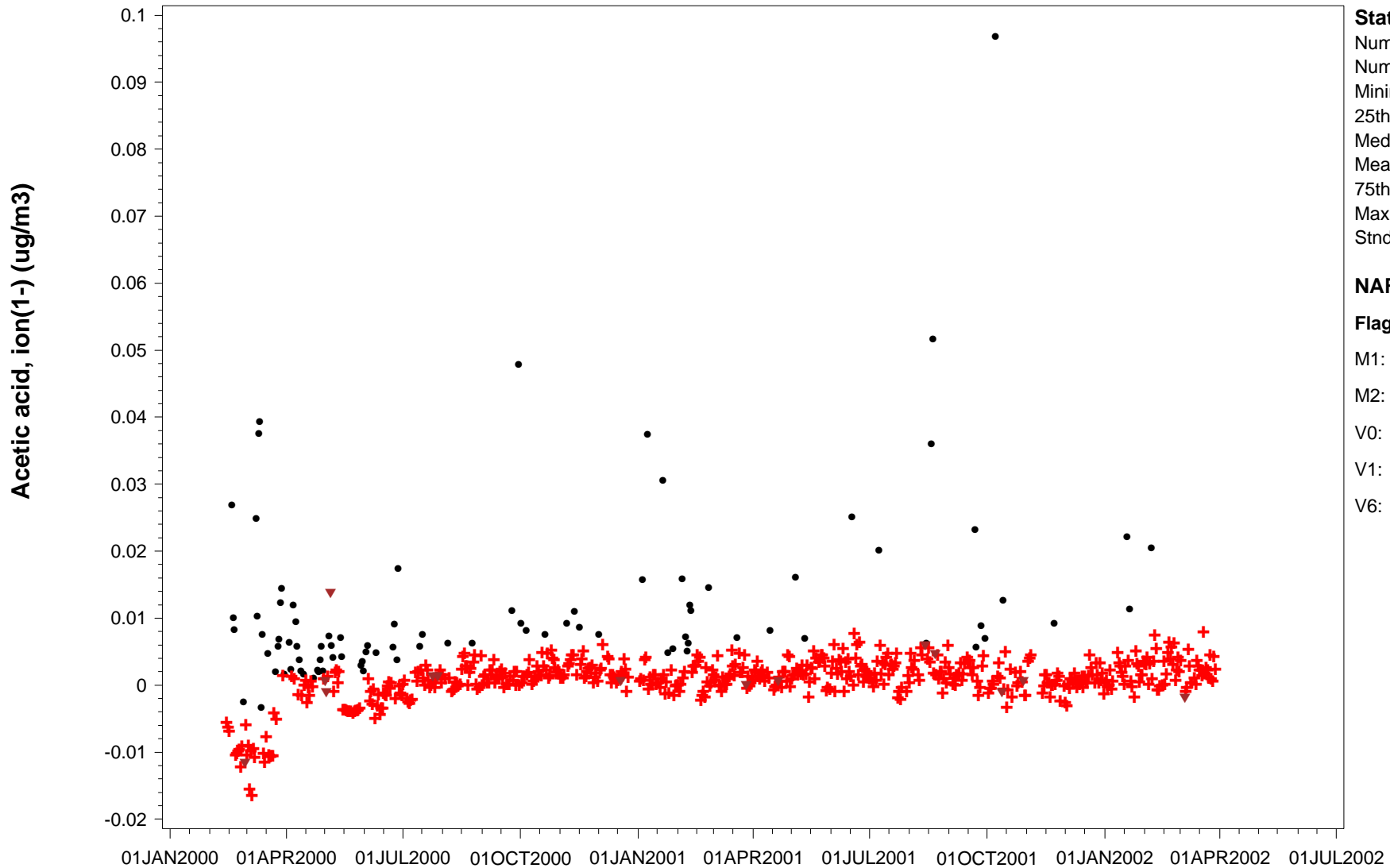
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Acetic acid, ion(1-)** Common Name: **Acetate** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C71-50-1** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics
 Number of obs: **757**
 Number of missing: **59**
 Minimum: **-0.0165**
 25th Percentile: **0.0001**
 Median: **0.0015**
 Mean: **0.002**
 75th Percentile: **0.0034**
 Maximum: **0.0968**
 Stnd Dev.: **0.007**

NARSTO Flags
Flag Symbol Count
 M1: **51**
 M2: **8**
 V0: ● **90**
 V1: + **594**
 V6: ▼ **14**

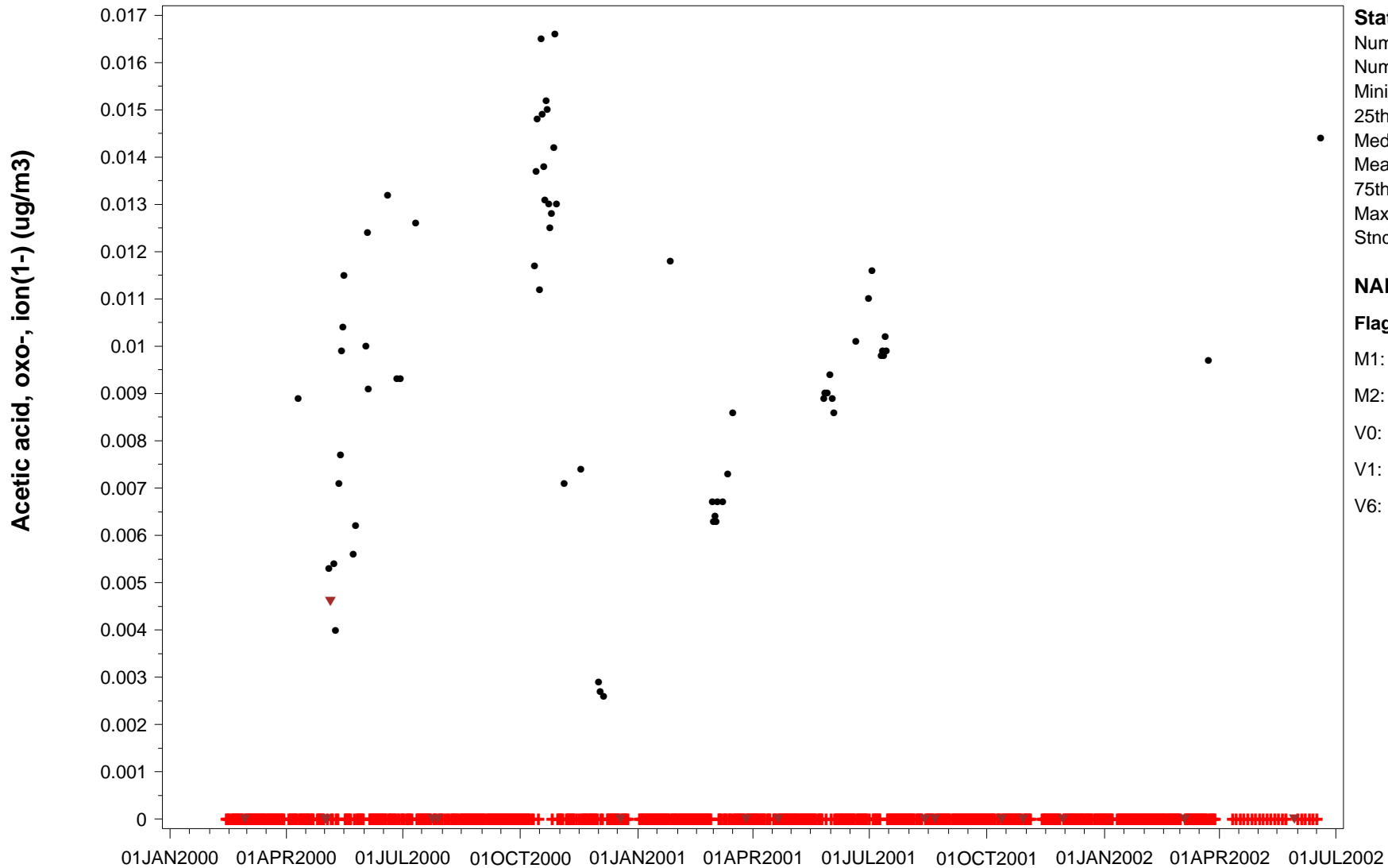
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Acetic acid, oxo-, ion(1-)** Common Name: **Glyoxylic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C430-75-1** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **IC** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



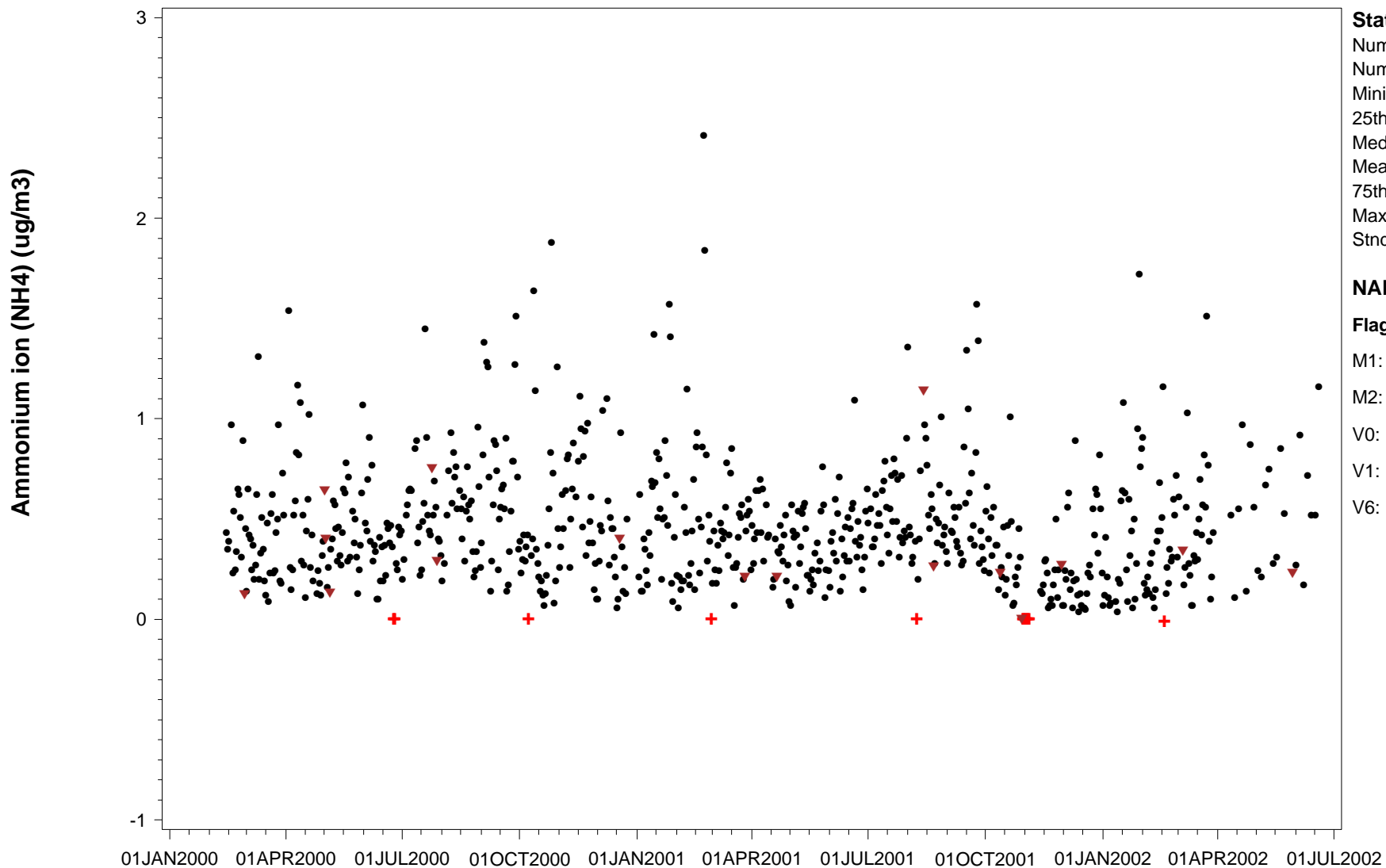
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Ammonium ion (NH4)** Common Name: **NH4+** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day**
 CAS ID: **C14798-03-9** Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Not blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.01**
 25th Percentile: **0.24**
 Median: **0.4**
 Mean: **0.456**
 75th Percentile: **0.58**
 Maximum: **2.41**
 Stnd Dev.: **0.309**

NARSTO Flags

Flag Symbol Count

| | |
|-------|-----|
| M1: | 7 |
| M2: | 8 |
| V0: ● | 714 |
| V1: + | 12 |
| V6: ▼ | 16 |

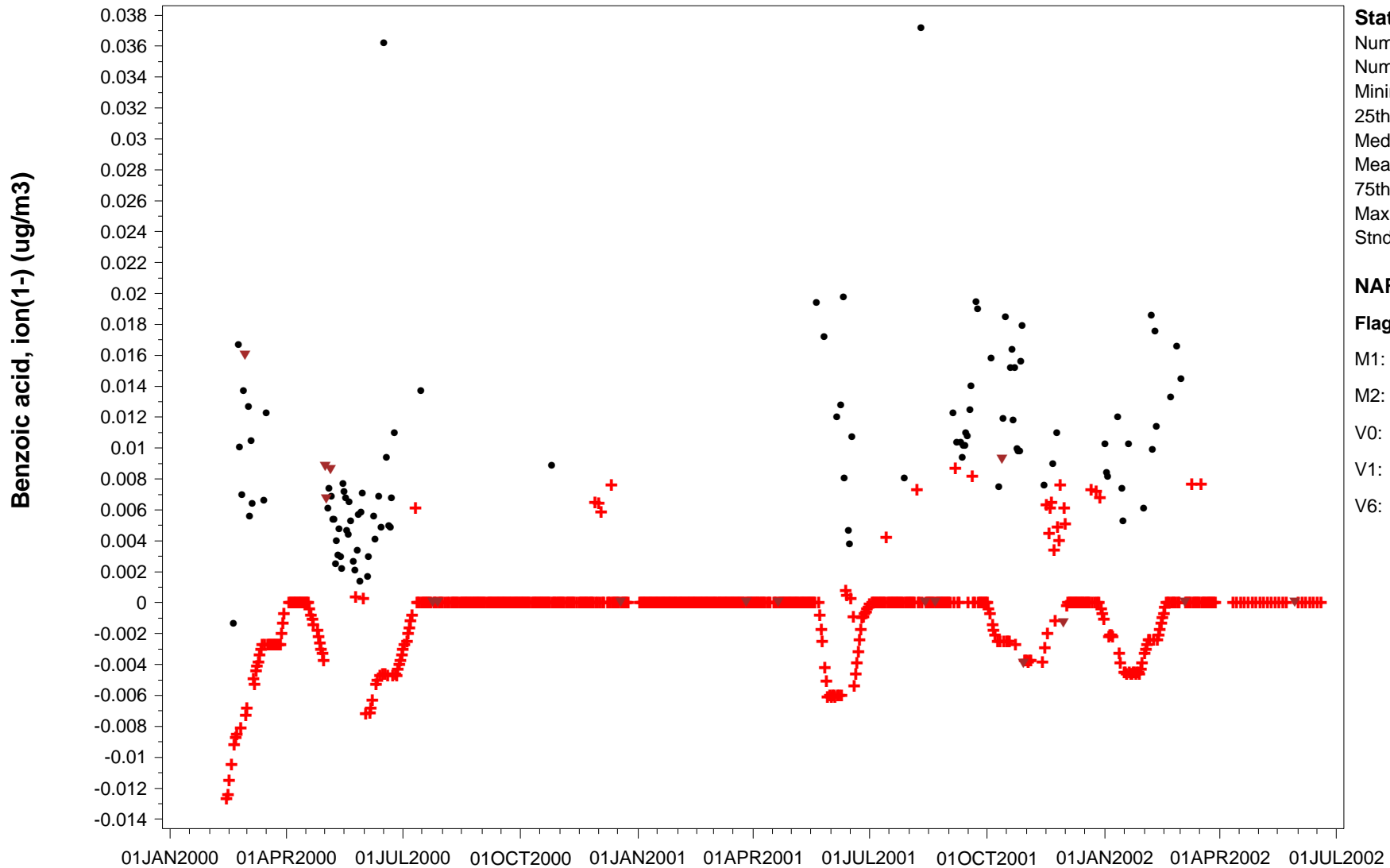
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Benzoic acid, ion(1-)** Common Name: **benzoic acid anion** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C766-76-7** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **IC** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name:**Vancouver, British Columbia** Latitude:**49.21556 deg.** Longitude:**-121.9825 deg.** Start Date:**2000-02-14** End Date:**2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.0127**
 25th Percentile: **0**
 Median: **0**
 Mean: **0.001**
 75th Percentile: **0**
 Maximum: **0.0372**
 Stnd Dev.: **0.005**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 104 |
| V1: | + | 622 |
| V6: | ▼ | 16 |

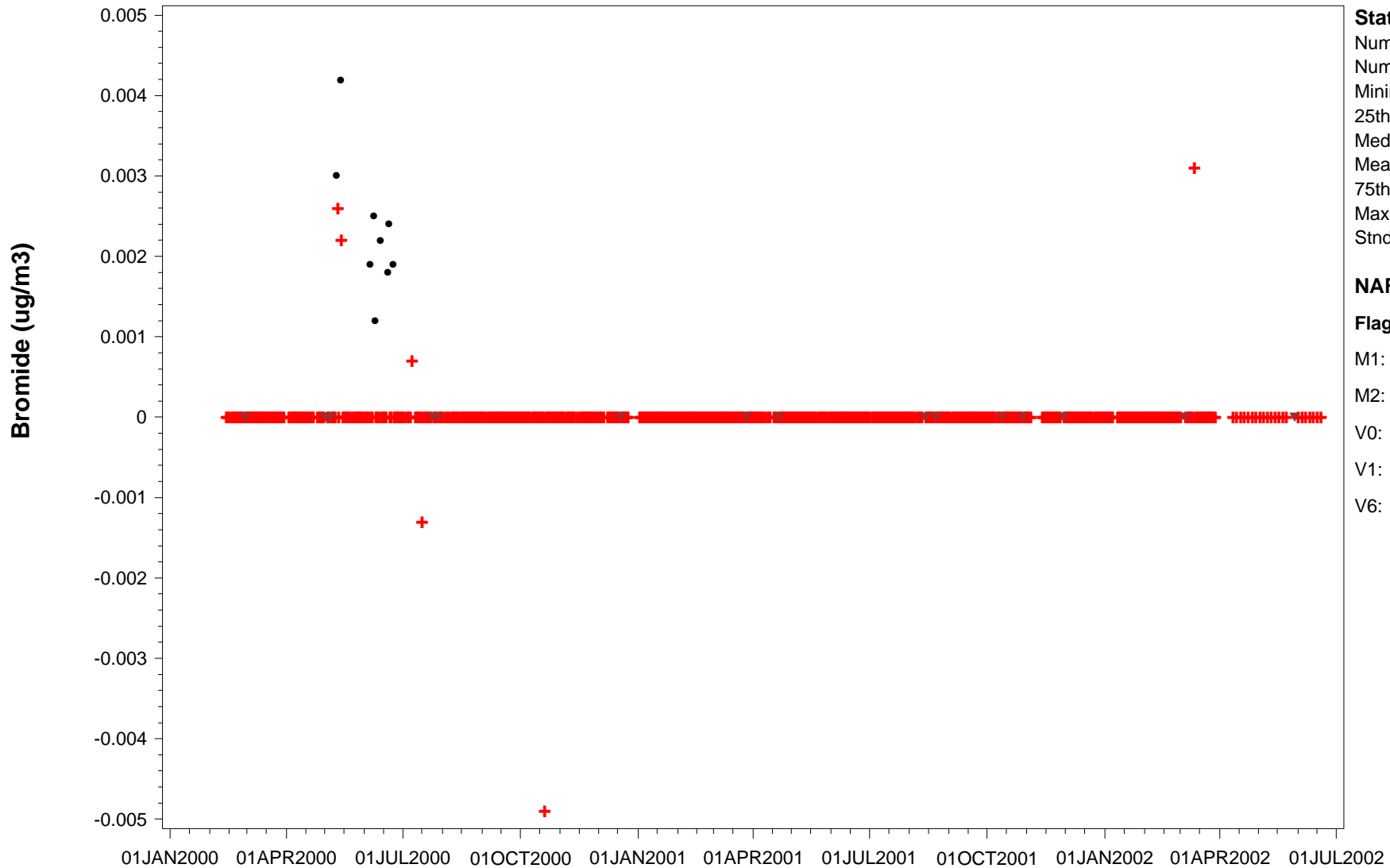
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Bromide** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C24959-67-9**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Not blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



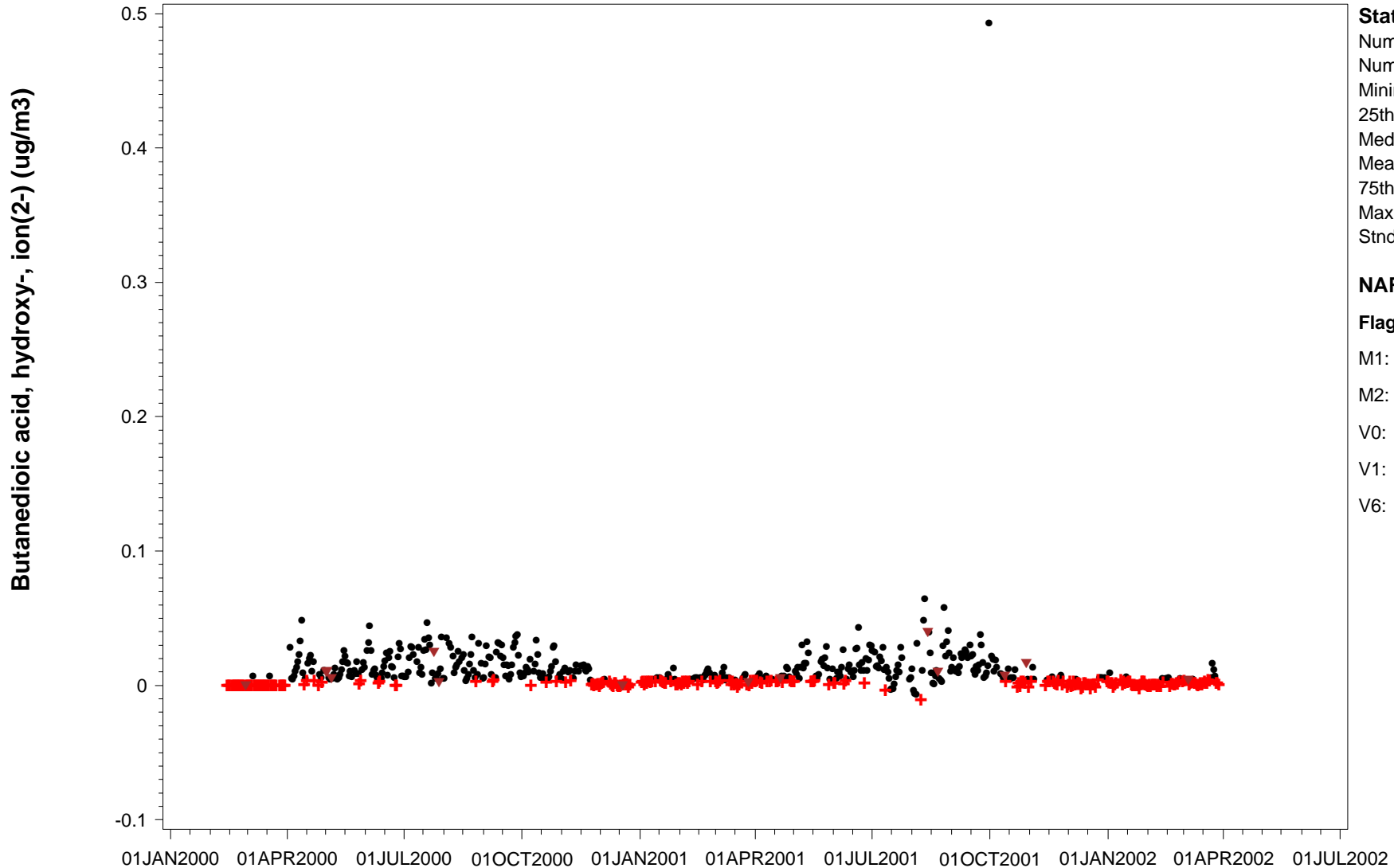
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Butanedioic acid, hydroxy-, ion(2-)** Common Name: **Malic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C149-61-1** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **62**
 Minimum: **-0.0105**
 25th Percentile: **0.0018**
 Median: **0.0055**
 Mean: **0.010**
 75th Percentile: **0.013**
 Maximum: **0.4929**
 Stnd Dev.: **0.021**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 54 |
| M2: | | 8 |
| V0: | ● | 411 |
| V1: | + | 270 |
| V6: | ▼ | 14 |

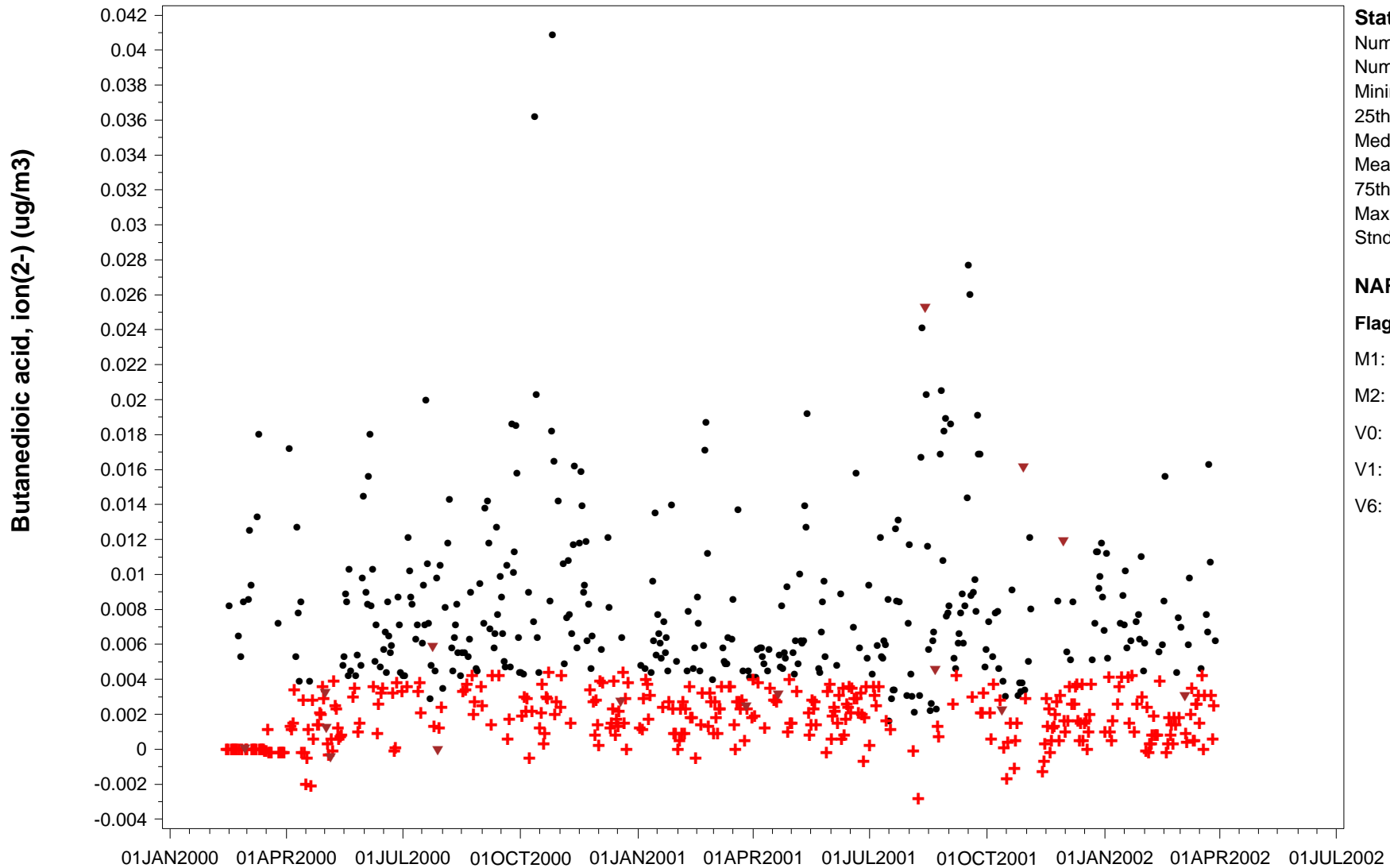
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Butanedioic acid, ion(2-)** Common Name: **Succinic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C56-14-4** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **59**
 Minimum: **-0.0028**
 25th Percentile: **0.0018**
 Median: **0.0039**
 Mean: **0.005**
 75th Percentile: **0.0071**
 Maximum: **0.0409**
 Stnd Dev.: **0.005**

NARSTO Flags

Flag Symbol Count

| | |
|-----|--------------|
| M1: | 51 |
| M2: | 8 |
| V0: | ● 345 |
| V1: | + 338 |
| V6: | ▼ 15 |

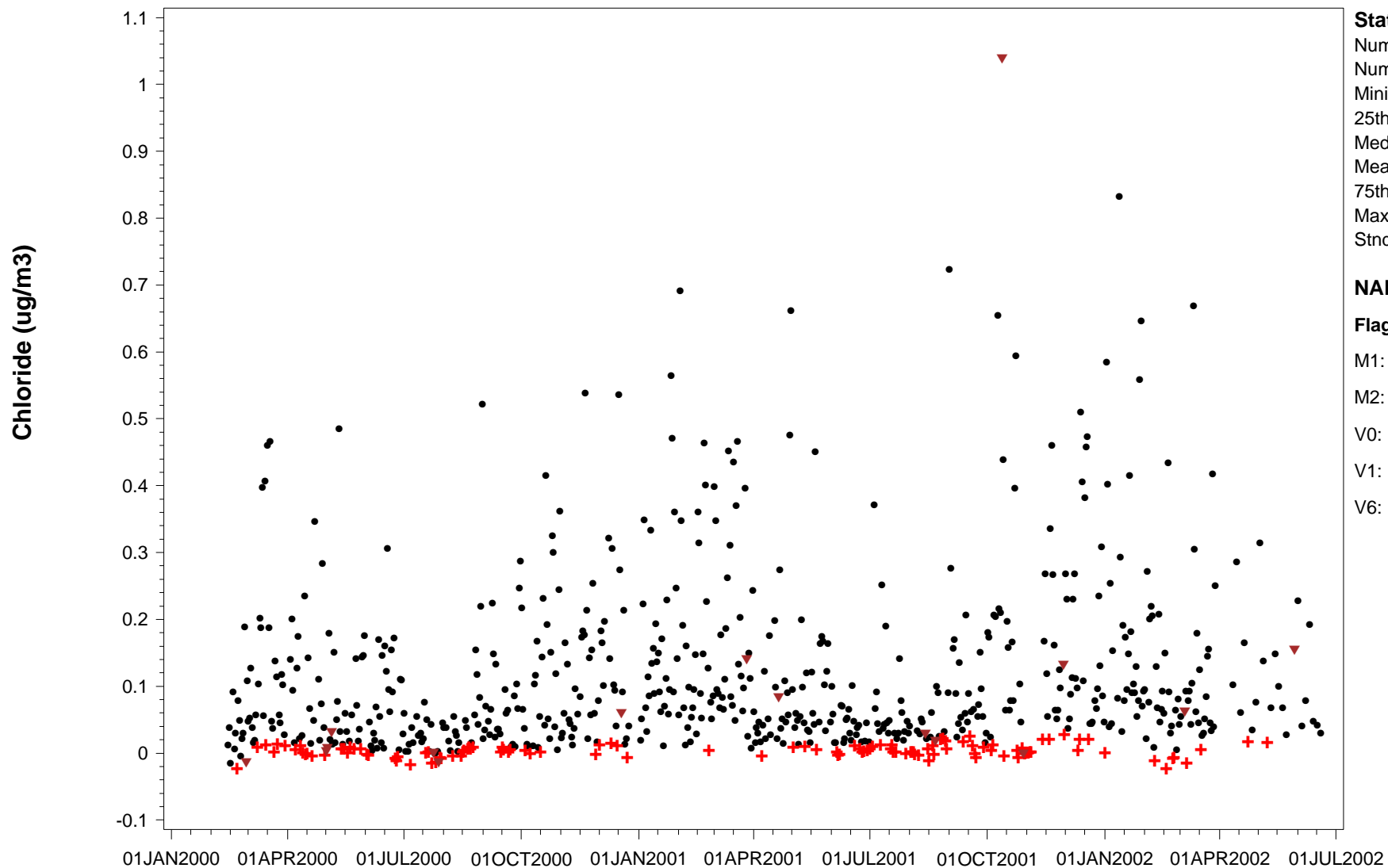
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Chloride** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C16887-00-6**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.0236**
 25th Percentile: **0.0203**
 Median: **0.0579**
 Mean: **0.104**
 75th Percentile: **0.142**
 Maximum: **1.0385**
 Stnd Dev.: **0.133**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 607 |
| V1: | + | 119 |
| V6: | ▼ | 16 |

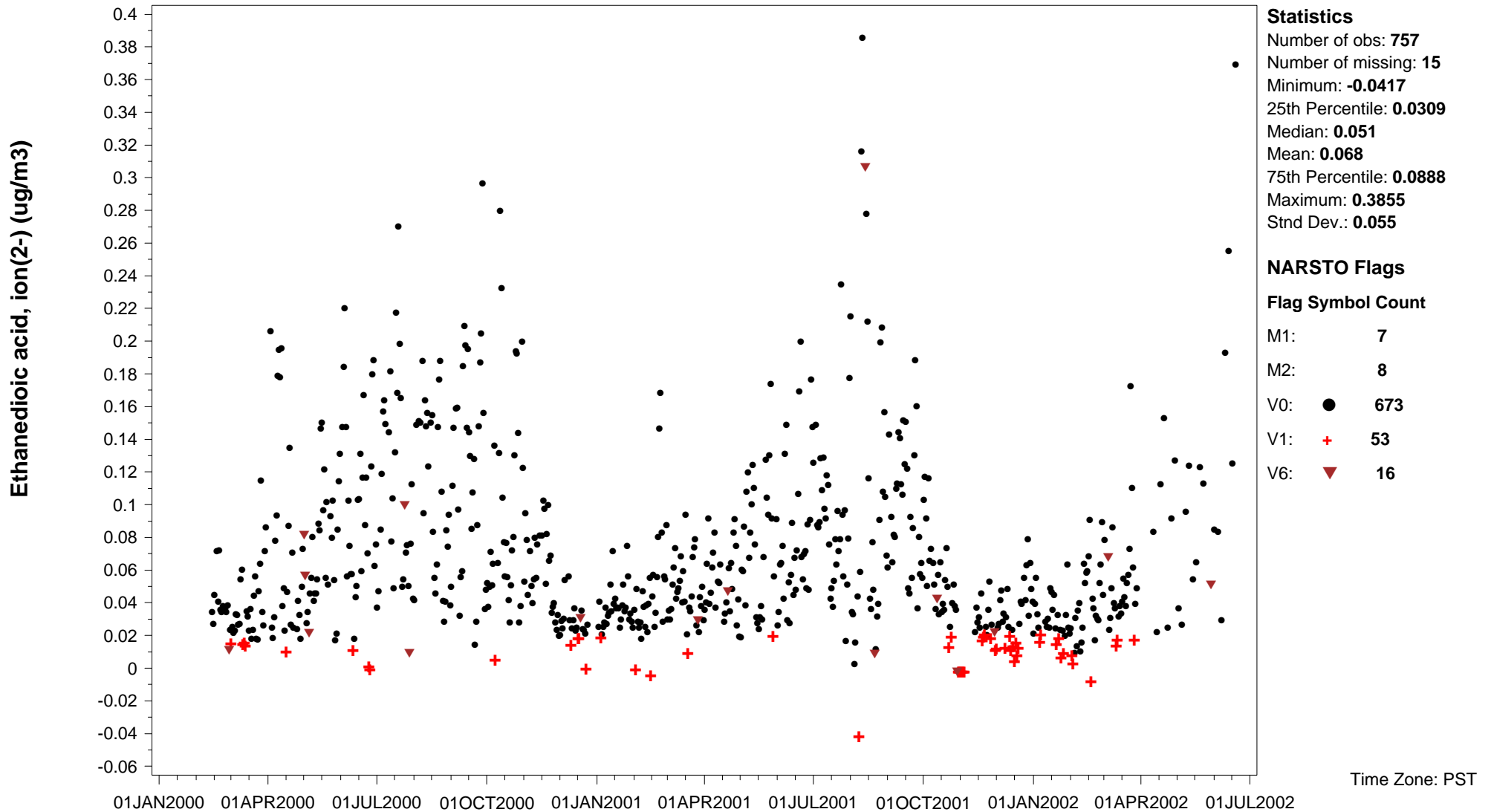
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Ethanedioic acid, ion(2-)** Common Name: **Oxalic acid, ion** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C338-70-5** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **IC** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**

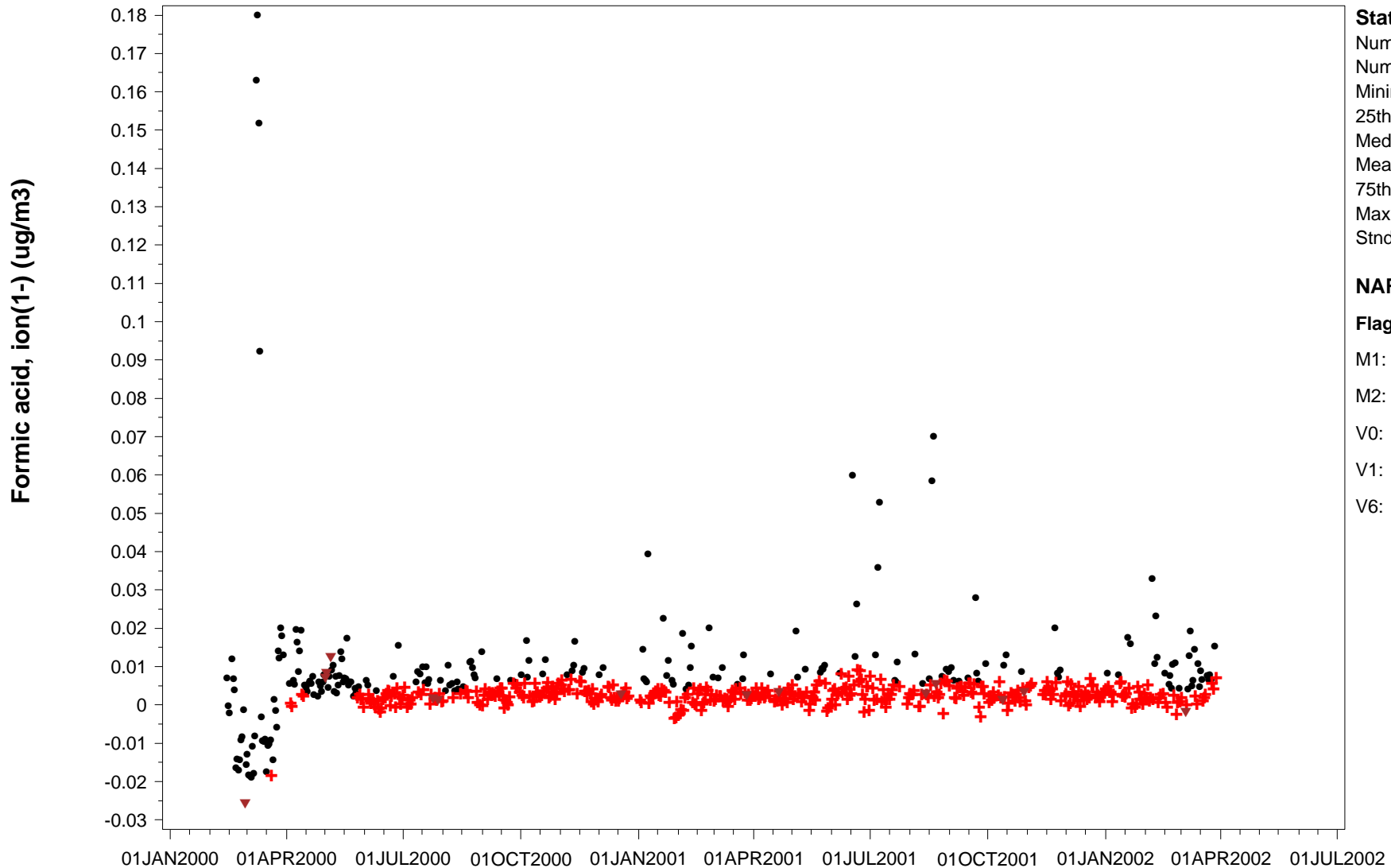


NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Formic acid, ion(1-)** Common Name: **Formate** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C71-47-6** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **65**
 Minimum: **-0.0257**
 25th Percentile: **0.0016**
 Median: **0.00325**
 Mean: **0.005**
 75th Percentile: **0.0059**
 Maximum: **0.18**
 Stnd Dev.: **0.013**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 57 |
| M2: | | 8 |
| V0: | ● | 227 |
| V1: | + | 451 |
| V6: | ▼ | 14 |

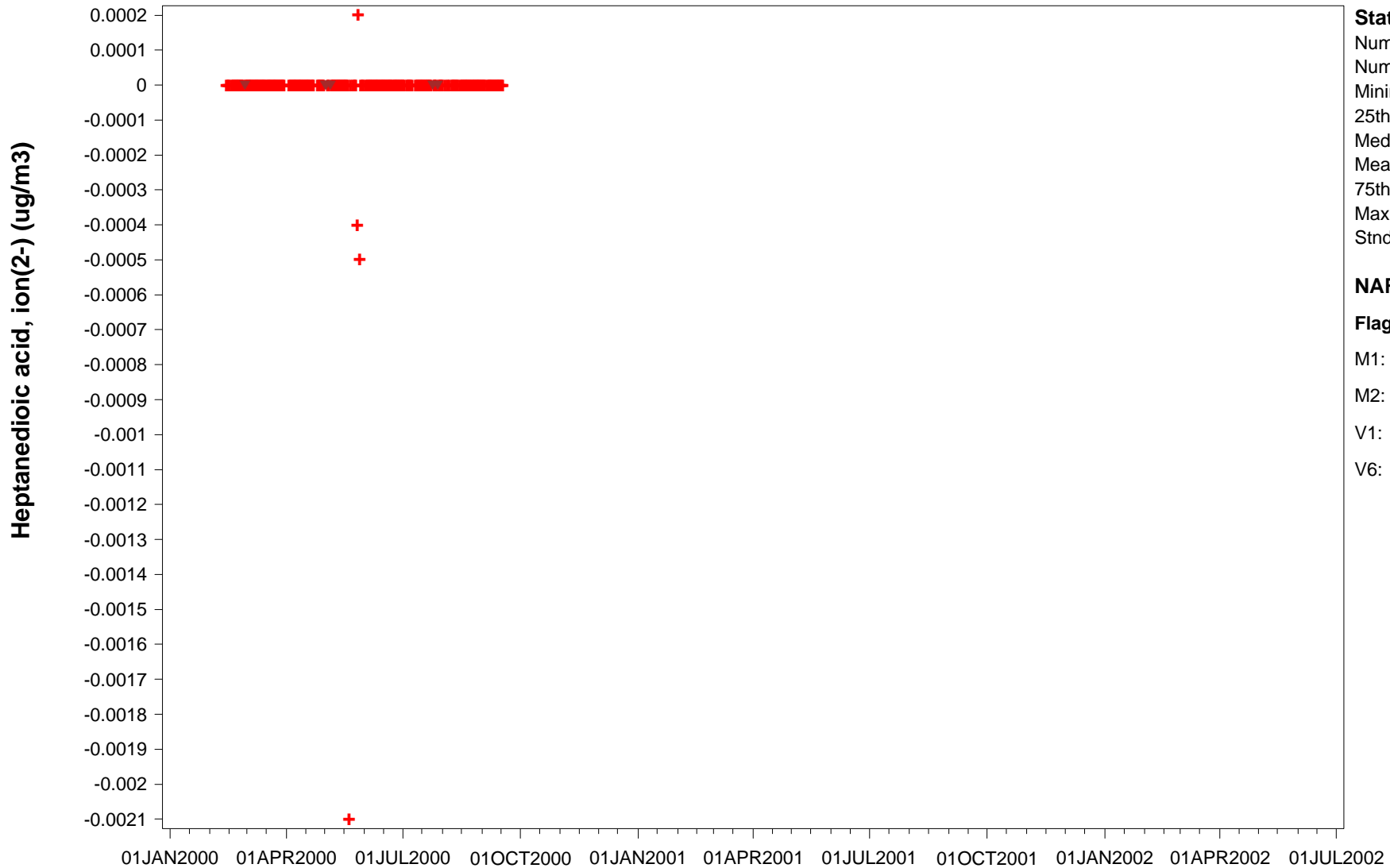
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Heptanedioic acid, ion(2-)** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day**
 CAS ID: **C764-54-5** Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction** Blank Correction: **Not blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **556**
 Minimum: **-0.0021**
 25th Percentile: **0**
 Median: **0**
 Mean: **-0.000**
 75th Percentile: **0**
 Maximum: **0.0002**
 Stnd Dev.: **0.000**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|----------|------------|
| M1: | | 551 |
| M2: | | 5 |
| V1: | + | 195 |
| V6: | ▼ | 6 |

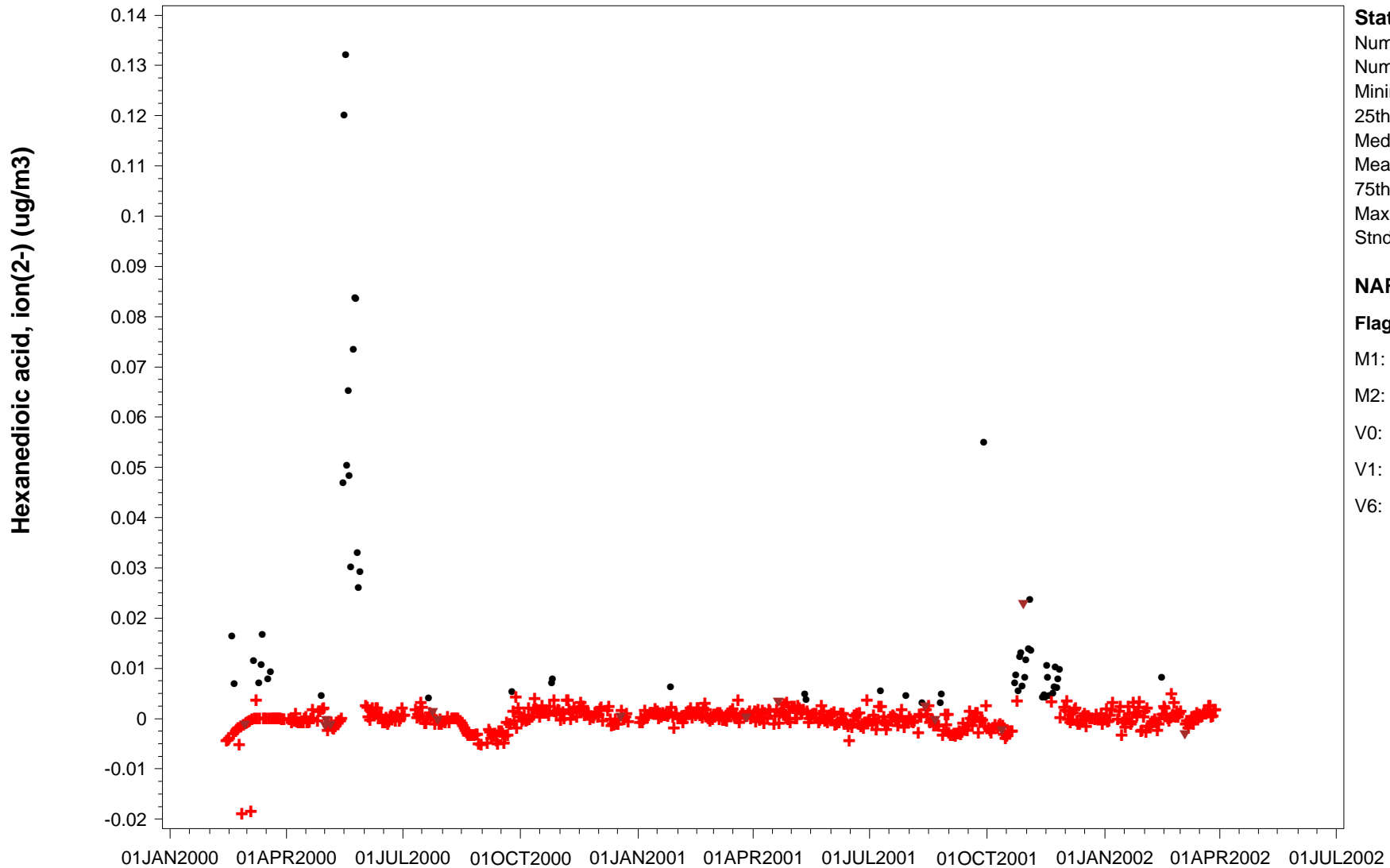
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Hexanedioic acid, ion(2-)** Common Name: **Adipic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C764-65-8** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics
 Number of obs: **757**
 Number of missing: **60**
 Minimum: **-0.0189**
 25th Percentile: **-0.0007**
 Median: **0.0002**
 Mean: **0.002**
 75th Percentile: **0.0014**
 Maximum: **0.1322**
 Stnd Dev.: **0.010**

NARSTO Flags
Flag Symbol Count
 M1: **55**
 M2: **5**
 V0: ● **59**
 V1: + **624**
 V6: ▼ **14**

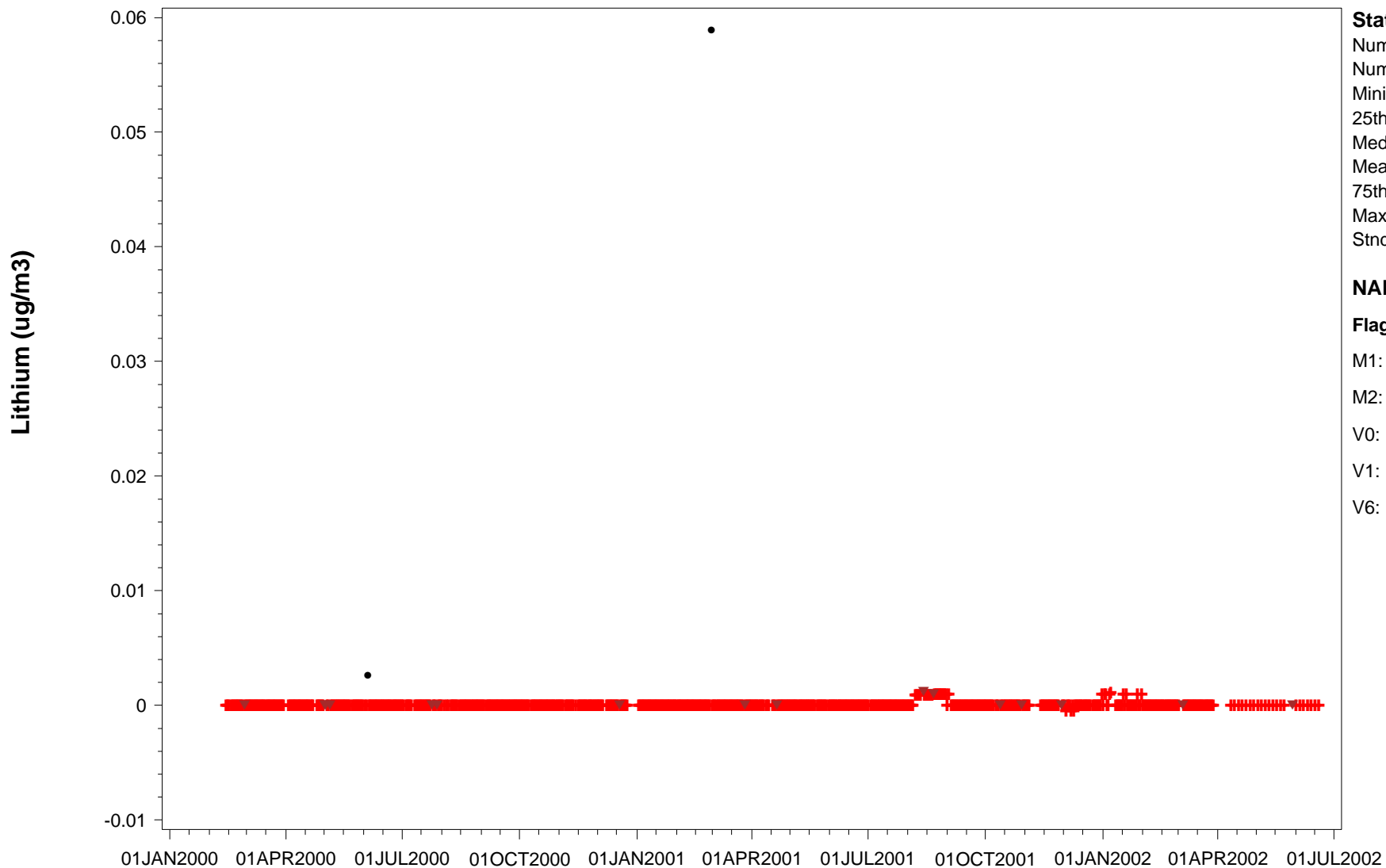
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Lithium** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C7439-93-2**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Not blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.0005**
 25th Percentile: **0**
 Median: **0**
 Mean: **0.000**
 75th Percentile: **0**
 Maximum: **0.0589**
 Stnd Dev.: **0.002**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 2 |
| V1: | + | 724 |
| V6: | ▼ | 16 |

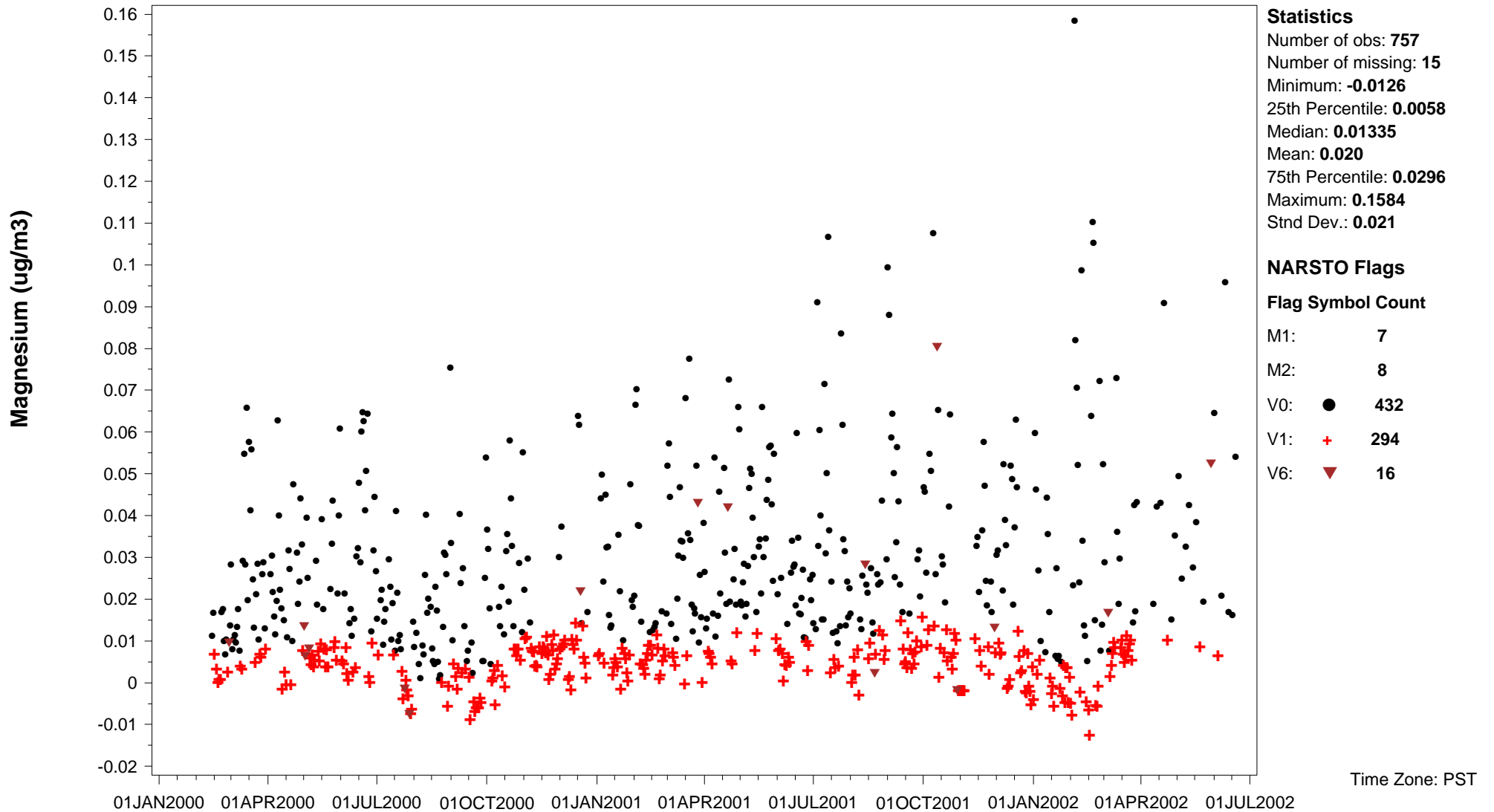
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Magnesium** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C7439-95-4**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**

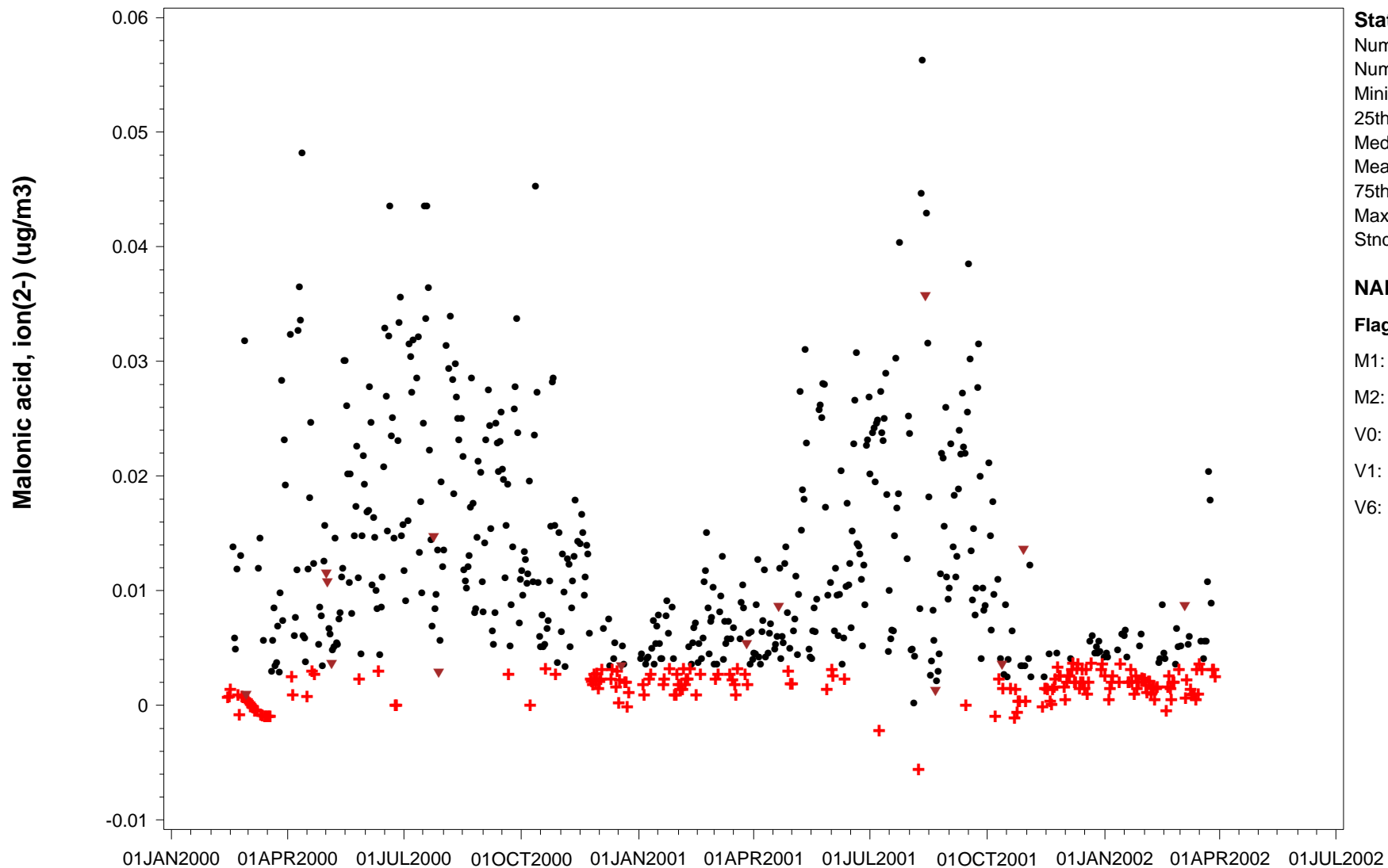


NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Malonic acid, ion(2-)** Common Name: **Malonic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C156-80-9** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **58**
 Minimum: **-0.0056**
 25th Percentile: **0.003**
 Median: **0.0065**
 Mean: **0.010**
 75th Percentile: **0.0146**
 Maximum: **0.0563**
 Stnd Dev.: **0.010**

NARSTO Flags

Flag Symbol Count

| | |
|-----|--------------|
| M1: | 50 |
| M2: | 8 |
| V0: | ● 495 |
| V1: | + 190 |
| V6: | ▼ 14 |

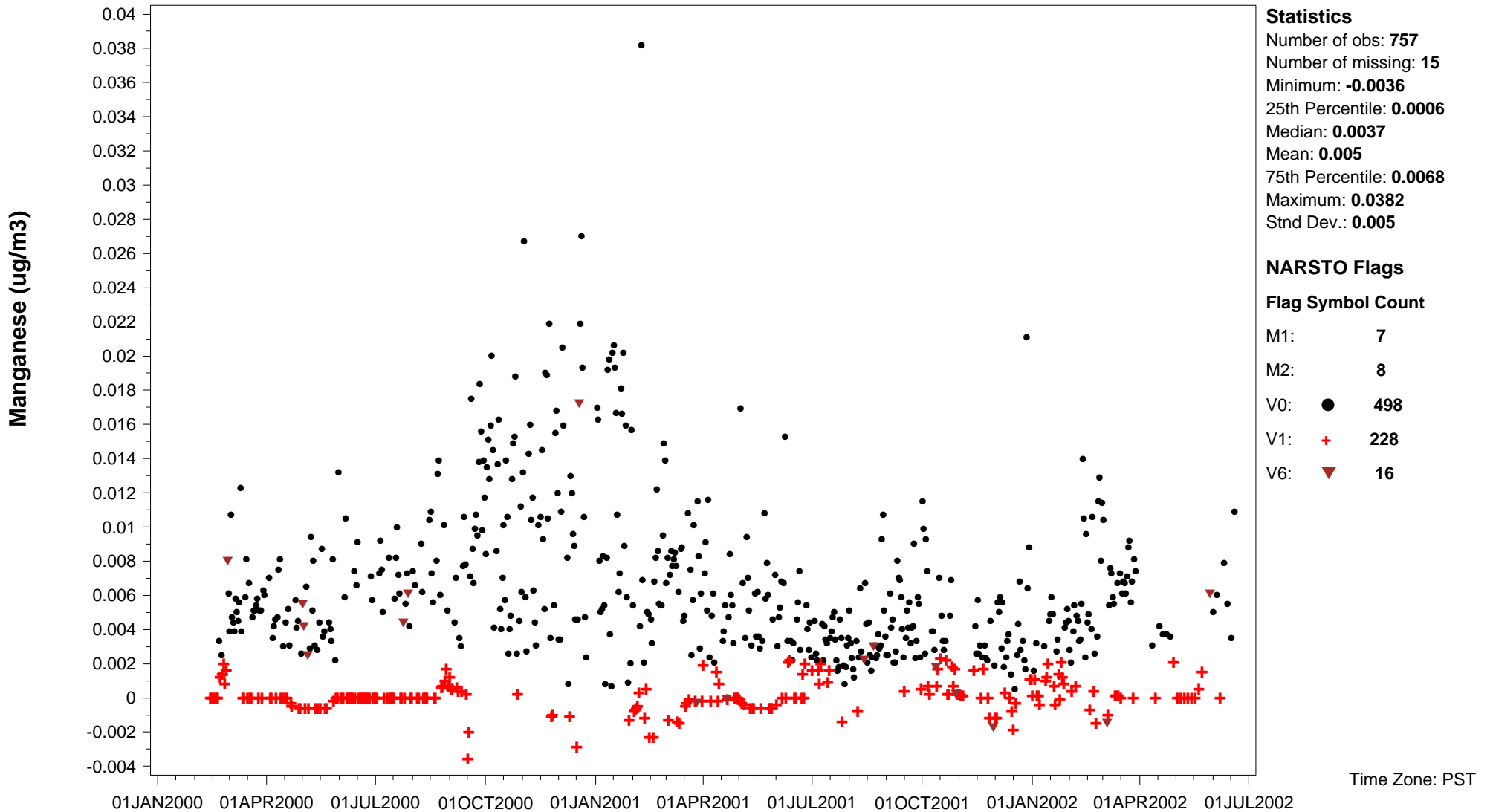
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Manganese** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C7439-96-5**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**

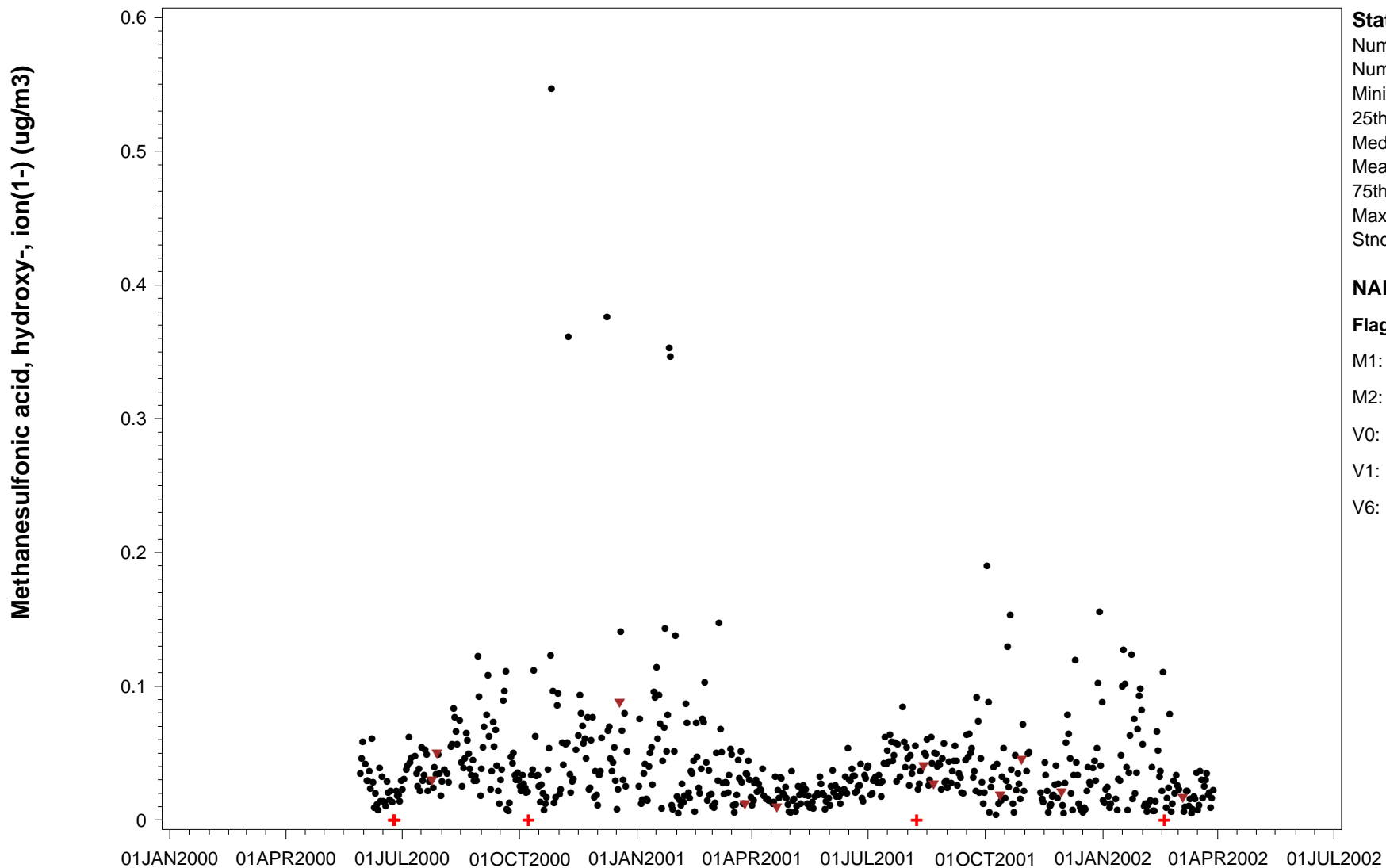


NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Methanesulfonic acid, hydroxy-, ion(1-)** Common Name: **HMSA** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C7494-19-1** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Not blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **142**
 Minimum: **0**
 25th Percentile: **0.0183**
 Median: **0.0298**
 Mean: **0.040**
 75th Percentile: **0.048**
 Maximum: **0.5467**
 Stnd Dev.: **0.043**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 135 |
| M2: | | 7 |
| V0: | ● | 599 |
| V1: | + | 5 |
| V6: | ▼ | 11 |

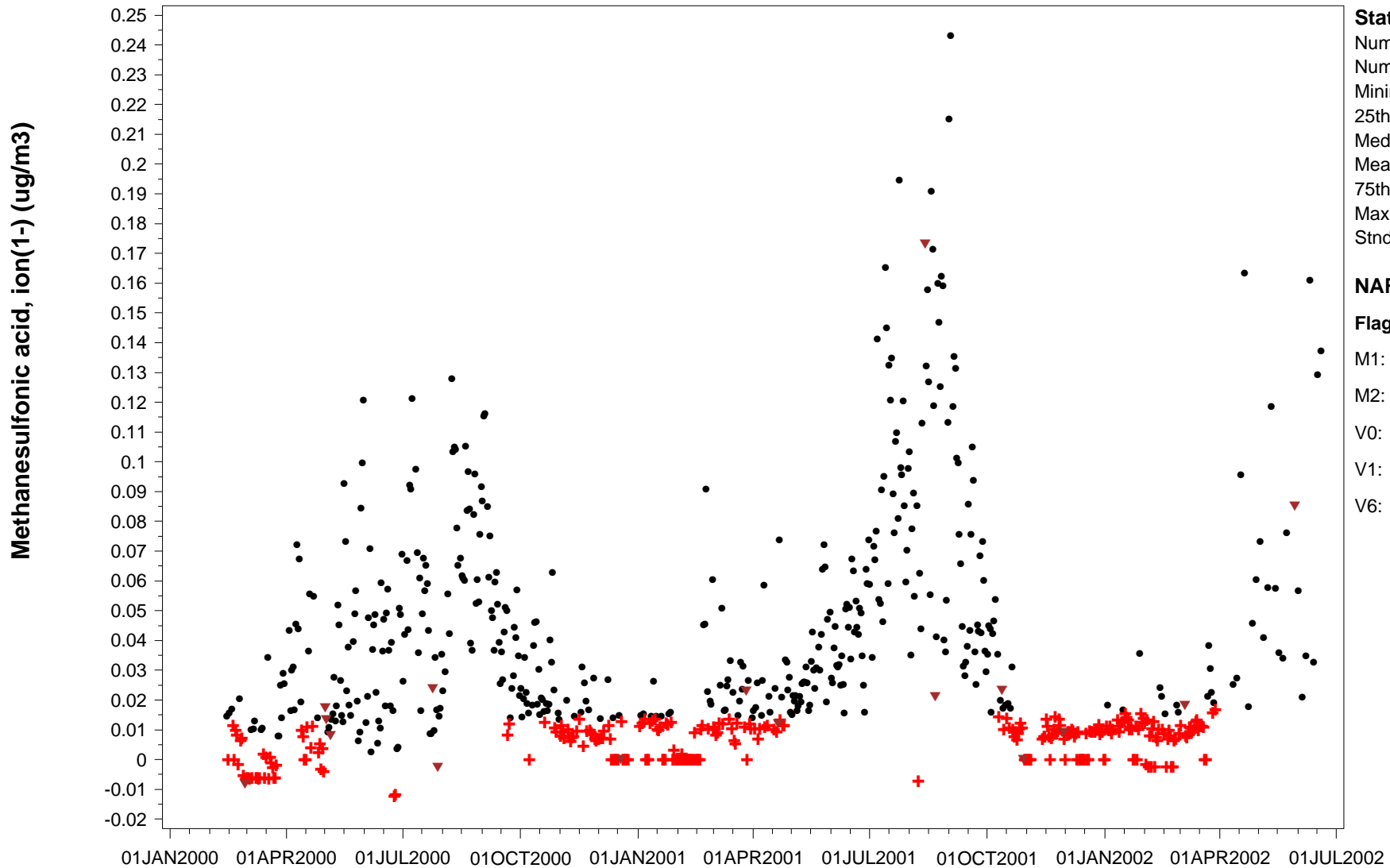
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Methanesulfonic acid, ion(1-)** Common Name: **MSA** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C16053-58-0** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **IC** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics
 Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.0123**
 25th Percentile: **0.0094**
 Median: **0.0172**
 Mean: **0.032**
 75th Percentile: **0.0446**
 Maximum: **0.2432**
 Stnd Dev.: **0.037**

NARSTO Flags
Flag Symbol Count
 M1: **7**
 M2: **8**
 V0: ● **441**
 V1: + **285**
 V6: ▼ **16**

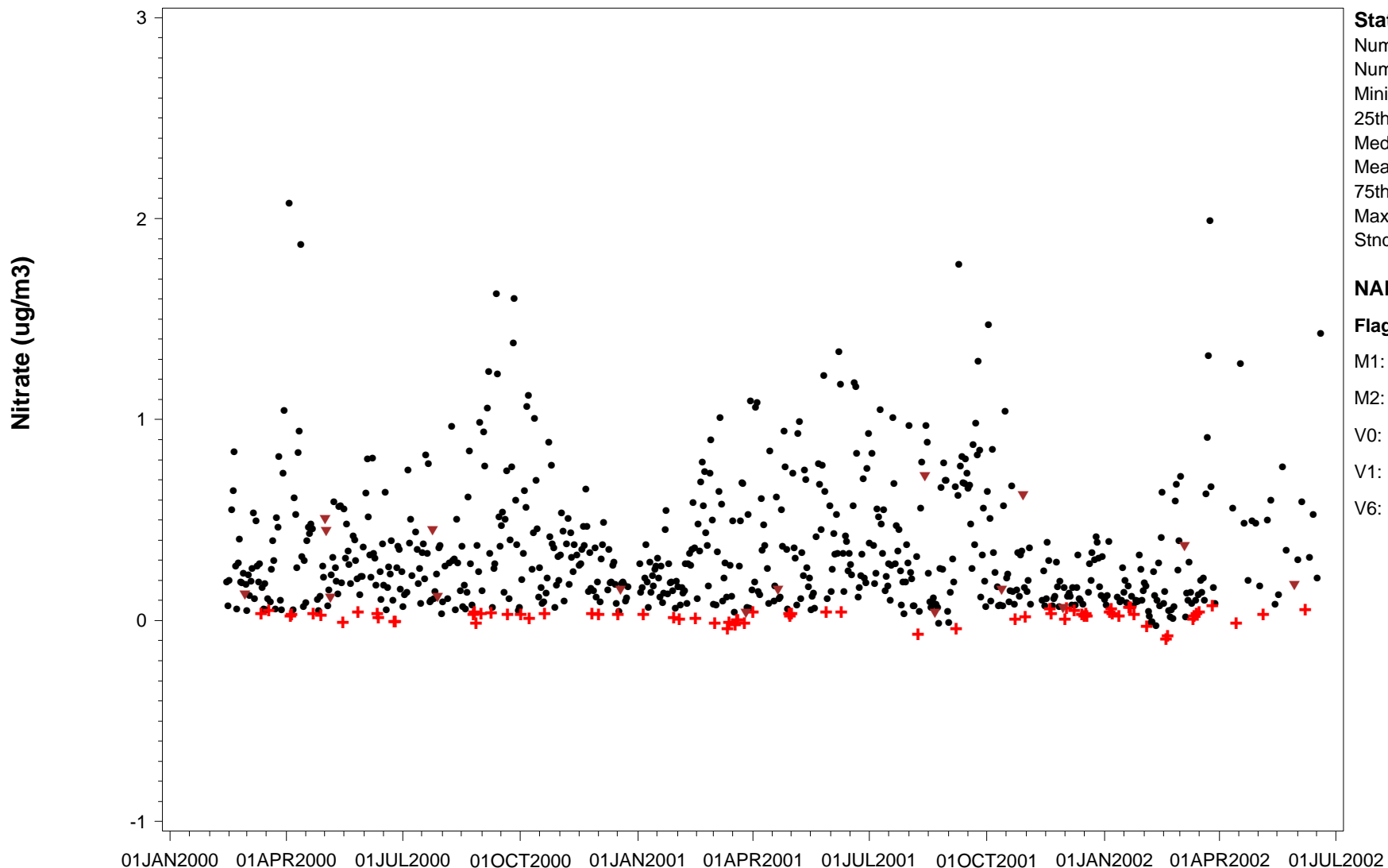
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Nitrate** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C14797-55-8**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Nylon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.093**
 25th Percentile: **0.103**
 Median: **0.2315**
 Mean: **0.325**
 75th Percentile: **0.452**
 Maximum: **2.078**
 Stnd Dev.: **0.314**

NARSTO Flags

Flag Symbol Count

| | |
|-----|-----|
| M1: | 7 |
| M2: | 8 |
| V0: | 654 |
| V1: | 72 |
| V6: | 16 |

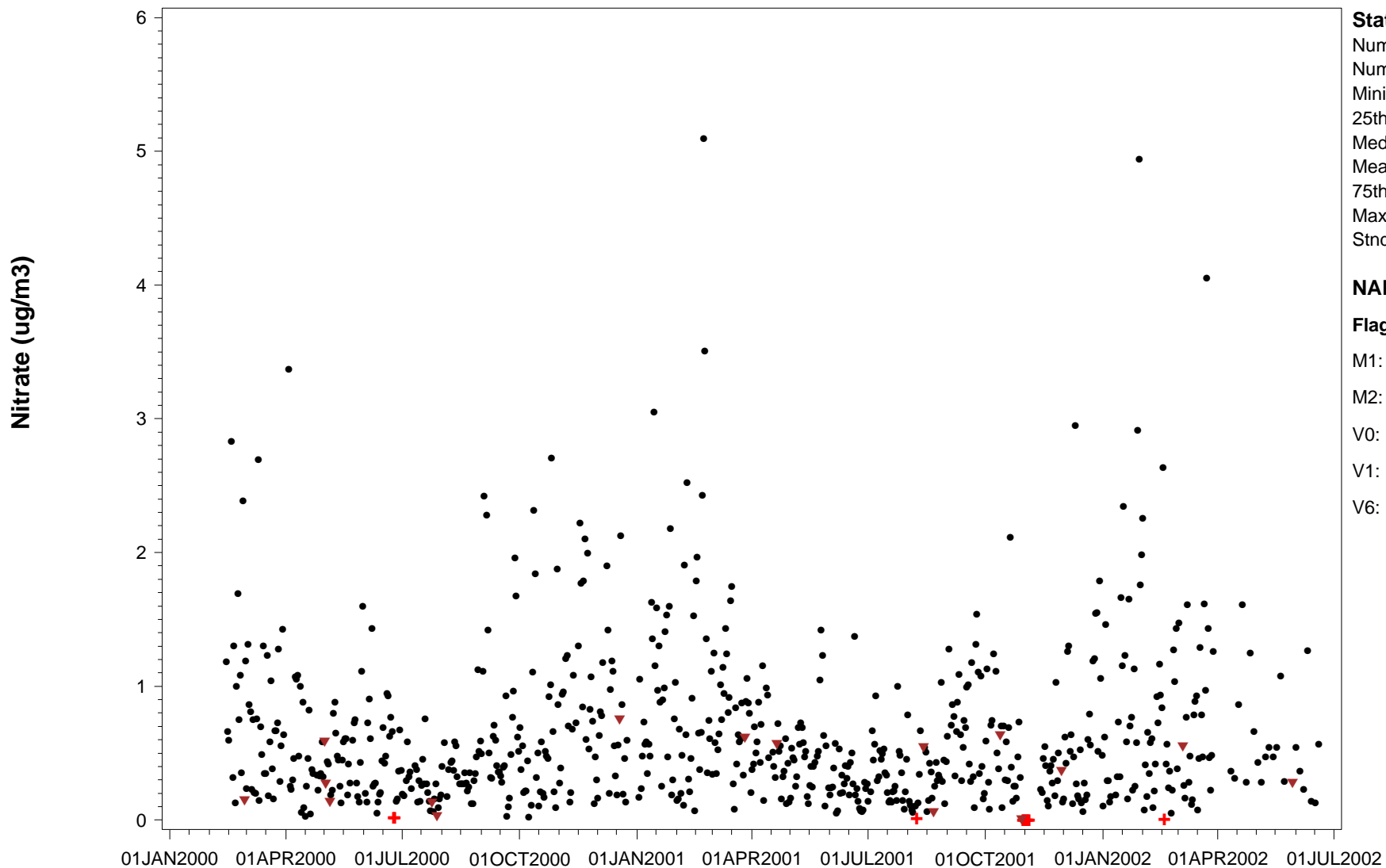
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Nitrate** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C14797-55-8**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Not blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **0**
 25th Percentile: **0.248**
 Median: **0.468**
 Mean: **0.632**
 75th Percentile: **0.797**
 Maximum: **5.096**
 Stnd Dev.: **0.600**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
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| M2: | | 8 |
| V0: | ● | 716 |
| V1: | + | 10 |
| V6: | ▼ | 16 |

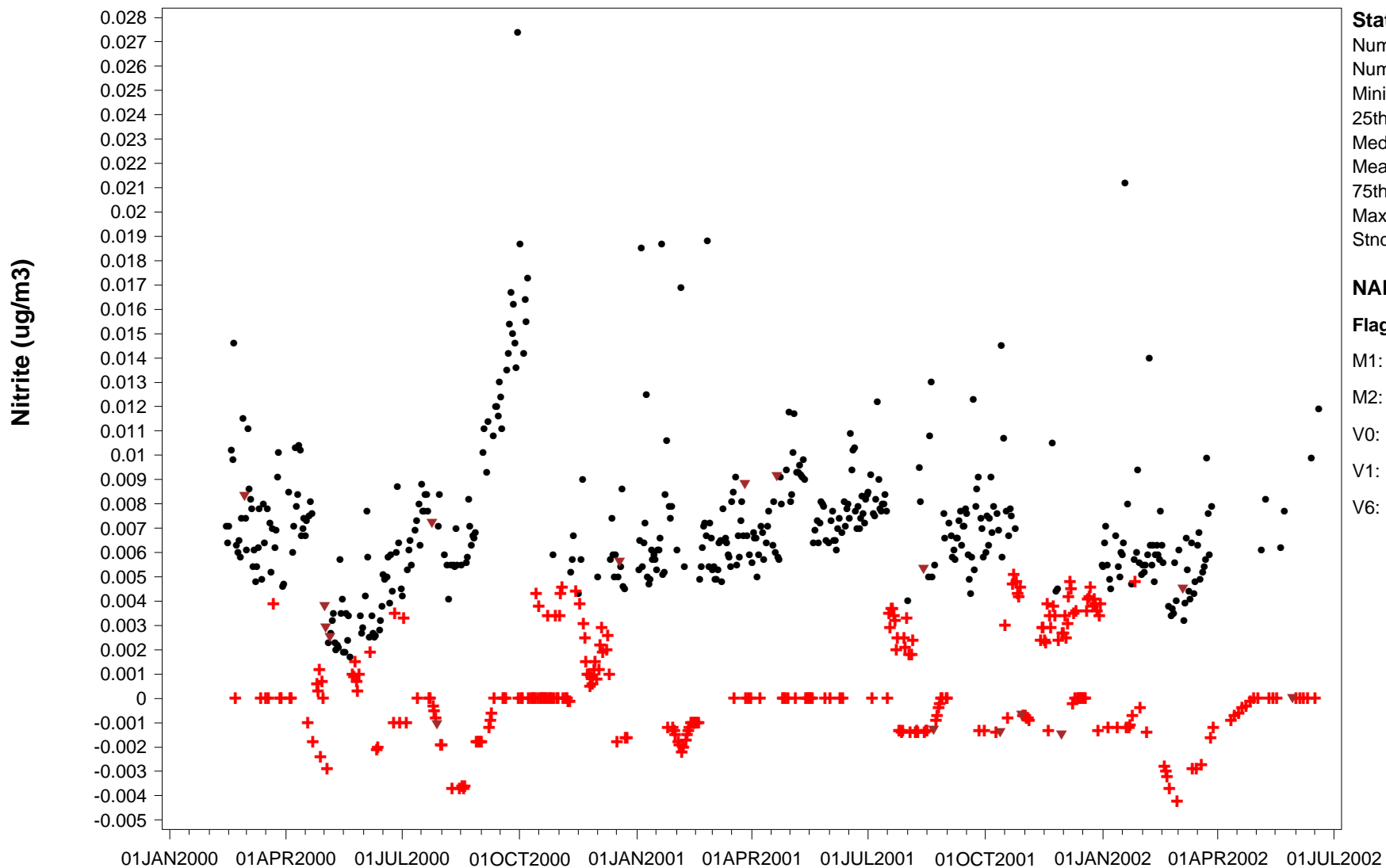
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Nitrite** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C14797-65-0**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.0042**
 25th Percentile: **0**
 Median: **0.0051**
 Mean: **0.005**
 75th Percentile: **0.0071**
 Maximum: **0.0274**
 Stnd Dev.: **0.004**

NARSTO Flags

Flag Symbol Count

| | |
|-----|--------------|
| M1: | 7 |
| M2: | 8 |
| V0: | ● 445 |
| V1: | + 281 |
| V6: | ▼ 16 |

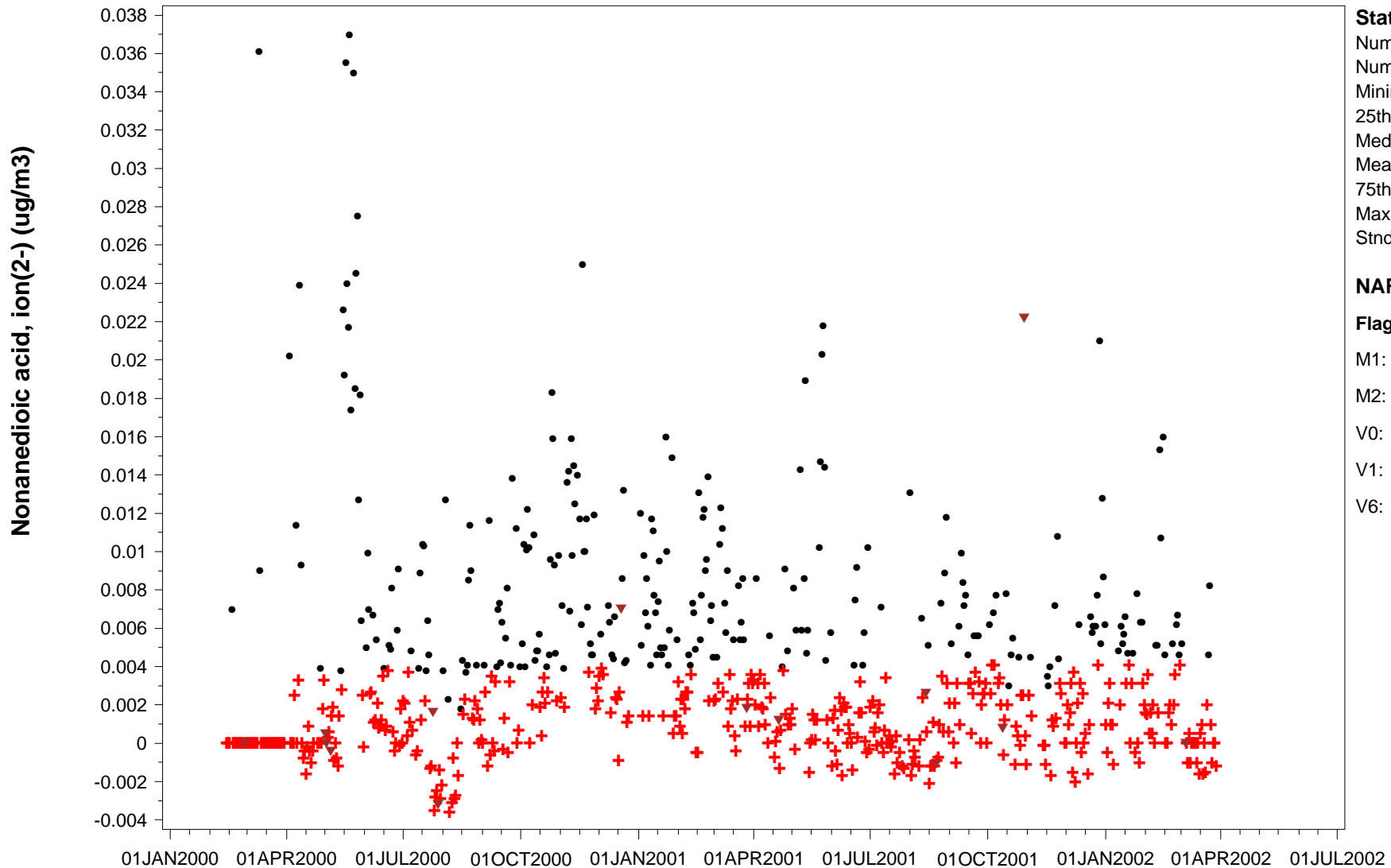
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Nonanedioic acid, ion(2-)** Common Name: **Azelaic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C13479-16-8** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **63**
 Minimum: **-0.0036**
 25th Percentile: **0**
 Median: **0.0023**
 Mean: **0.004**
 75th Percentile: **0.0056**
 Maximum: **0.037**
 Stnd Dev.: **0.005**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 55 |
| M2: | | 8 |
| V0: | ● | 260 |
| V1: | + | 420 |
| V6: | ▼ | 14 |

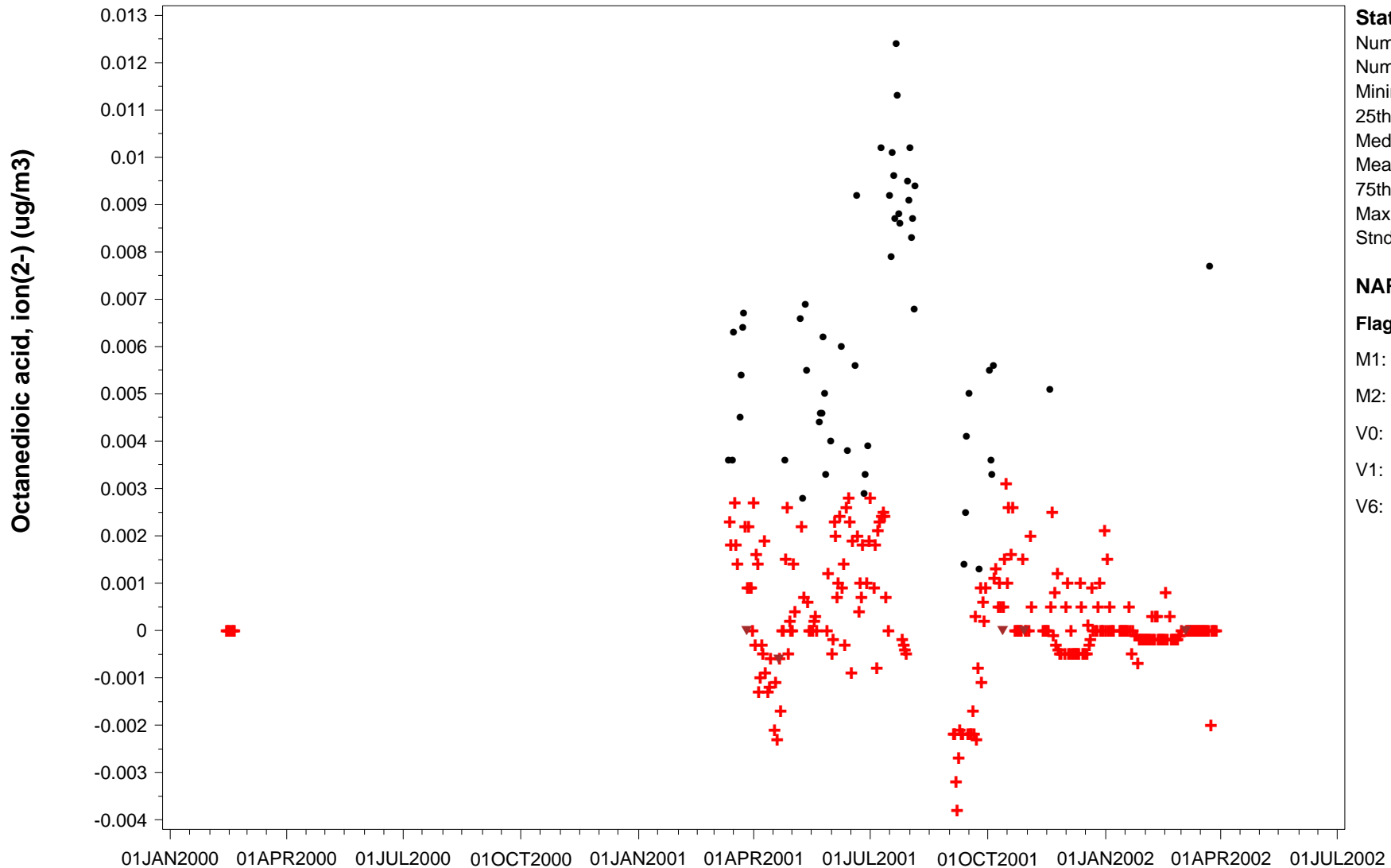
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Octanedioic acid, ion(2-)** Common Name: **Suberic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C764-55-6** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **437**
 Minimum: **-0.0038**
 25th Percentile: **-0.0002**
 Median: **0**
 Mean: **0.001**
 75th Percentile: **0.0019**
 Maximum: **0.0124**
 Stnd Dev.: **0.003**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 435 |
| M2: | | 2 |
| V0: | ● | 54 |
| V1: | + | 261 |
| V6: | ▼ | 5 |

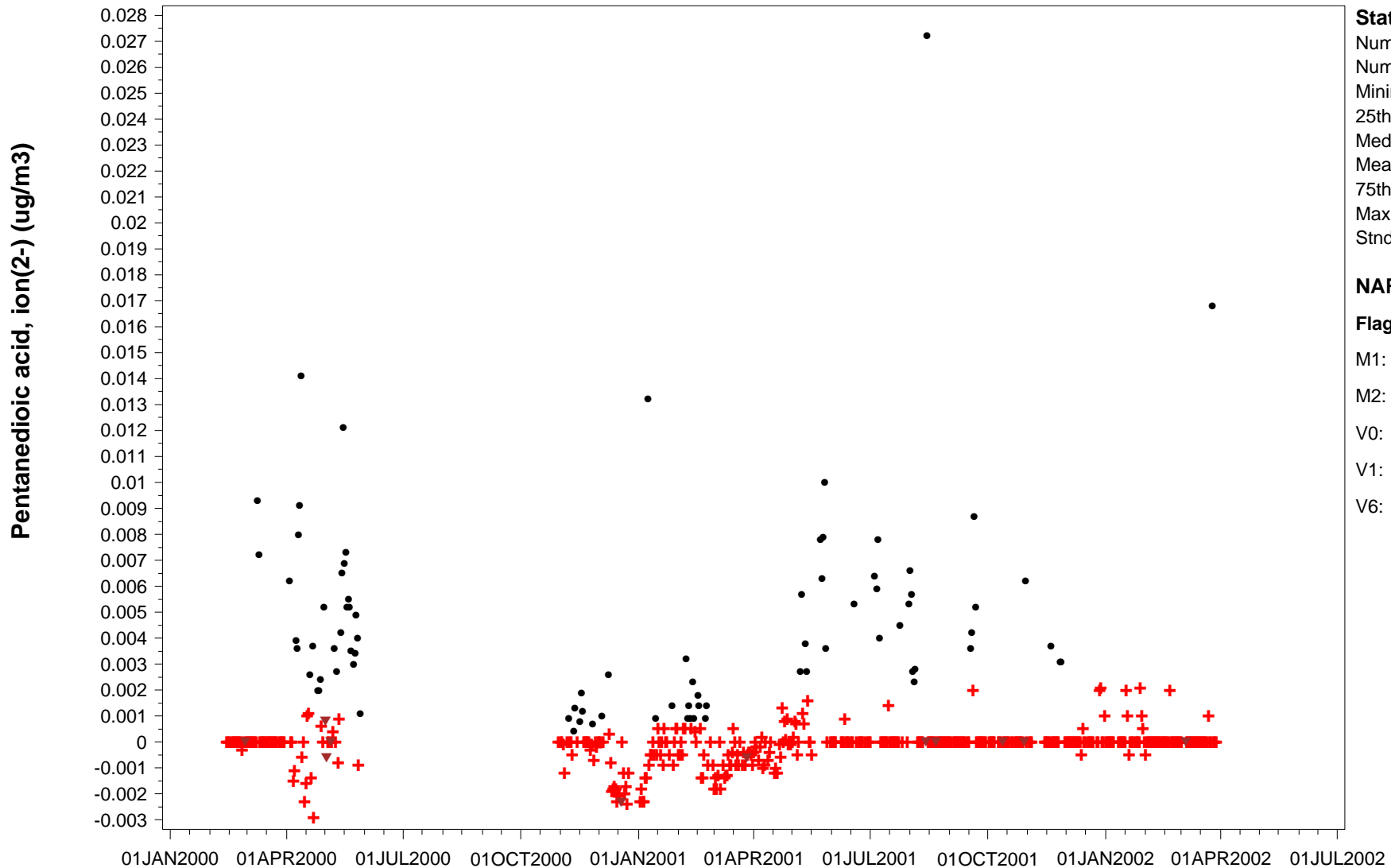
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Pentanedioic acid, ion(2-)** Common Name: **Glutaric** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C56-16-6** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Not blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **226**
 Minimum: **-0.0029**
 25th Percentile: **0**
 Median: **0**
 Mean: **0.001**
 75th Percentile: **0**
 Maximum: **0.0272**
 Stnd Dev.: **0.002**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 222 |
| M2: | | 4 |
| V0: | ● | 83 |
| V1: | + | 437 |
| V6: | ▼ | 11 |

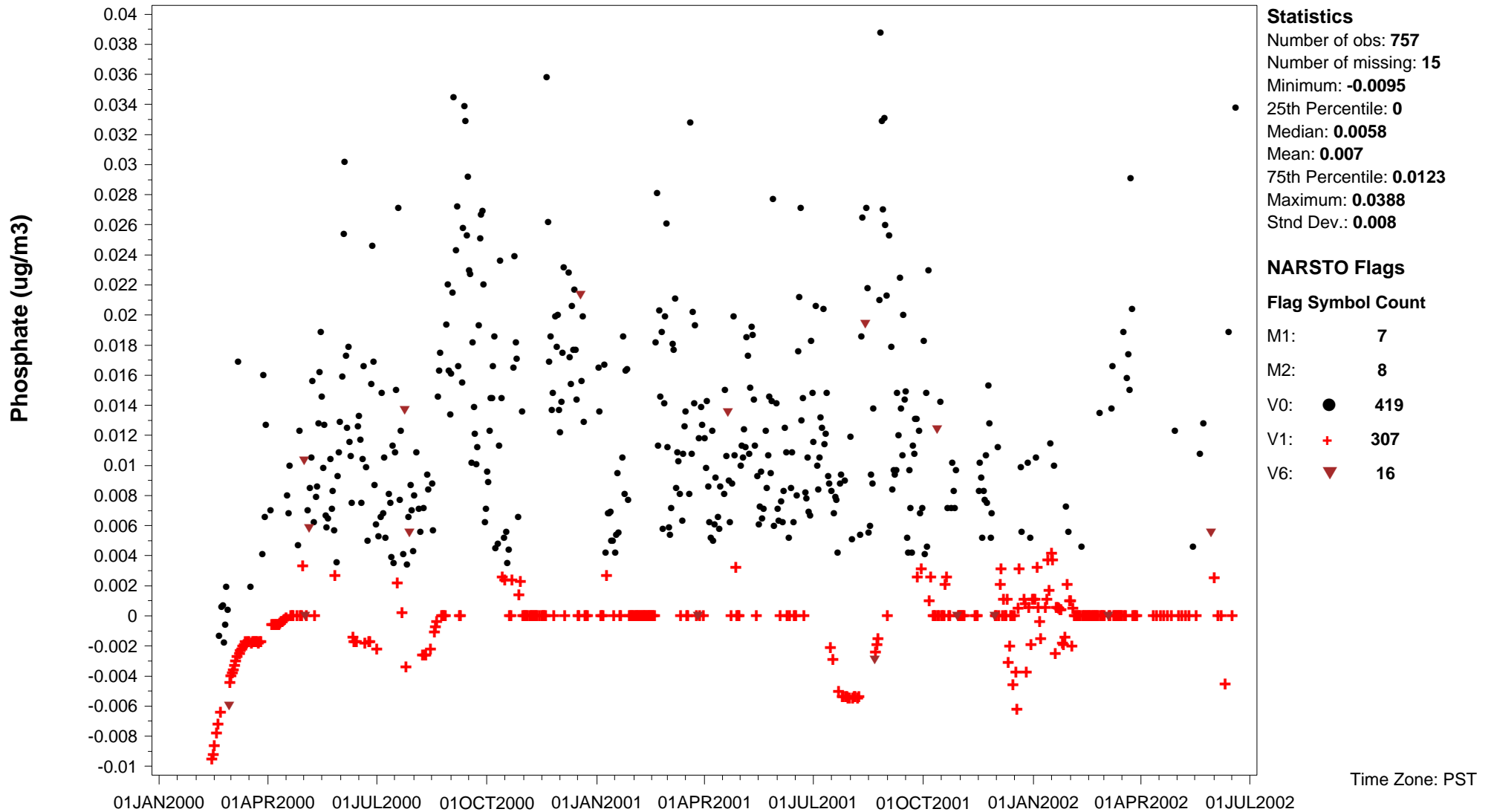
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Phosphate** Common Name: **Phosphate** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day**
 CAS ID: **C14265-44-2** Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**

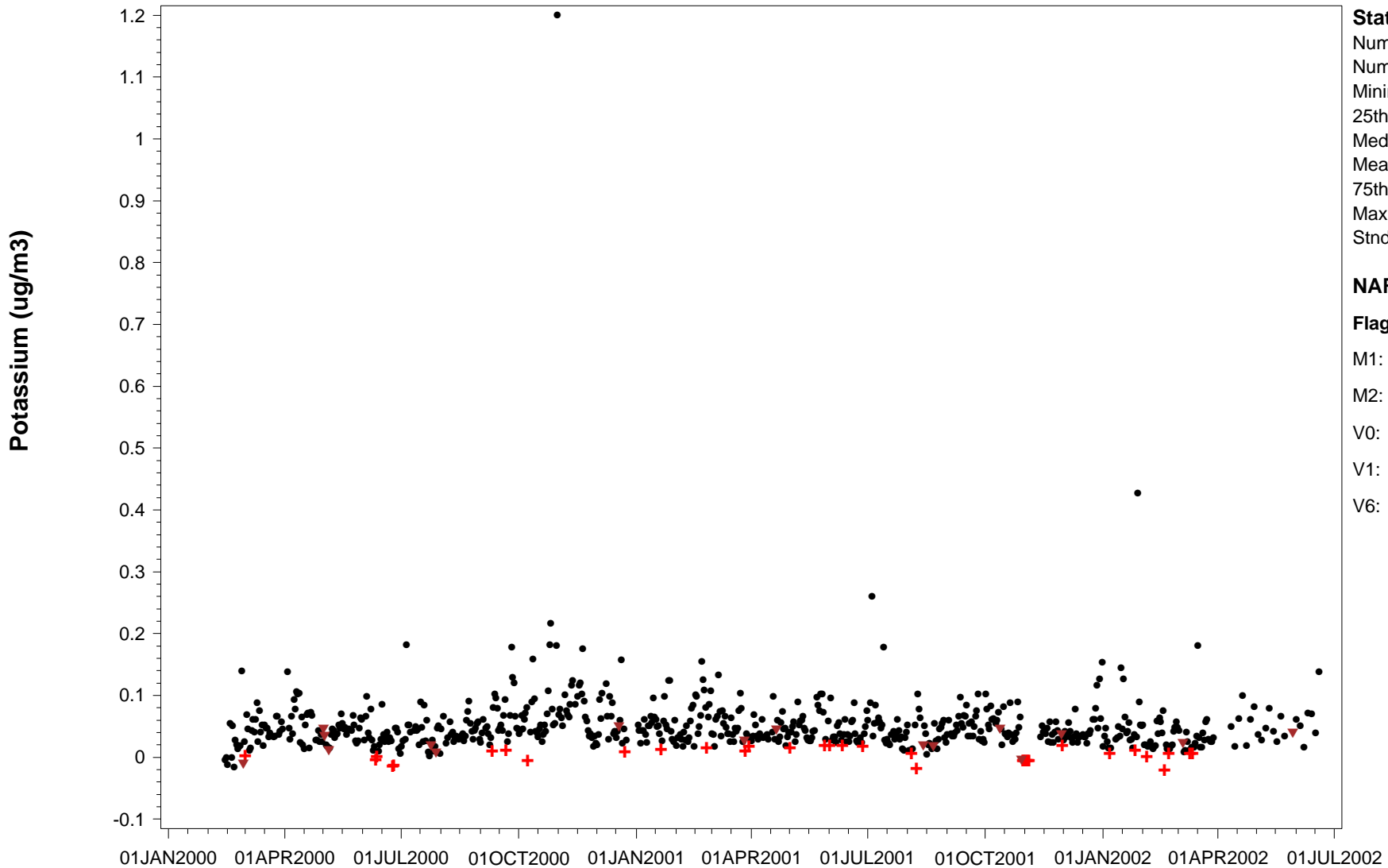


NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Potassium** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C7440-09-7**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.021**
 25th Percentile: **0.028**
 Median: **0.041**
 Mean: **0.050**
 75th Percentile: **0.061**
 Maximum: **1.2**
 Stnd Dev.: **0.055**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 692 |
| V1: | + | 34 |
| V6: | ▼ | 16 |

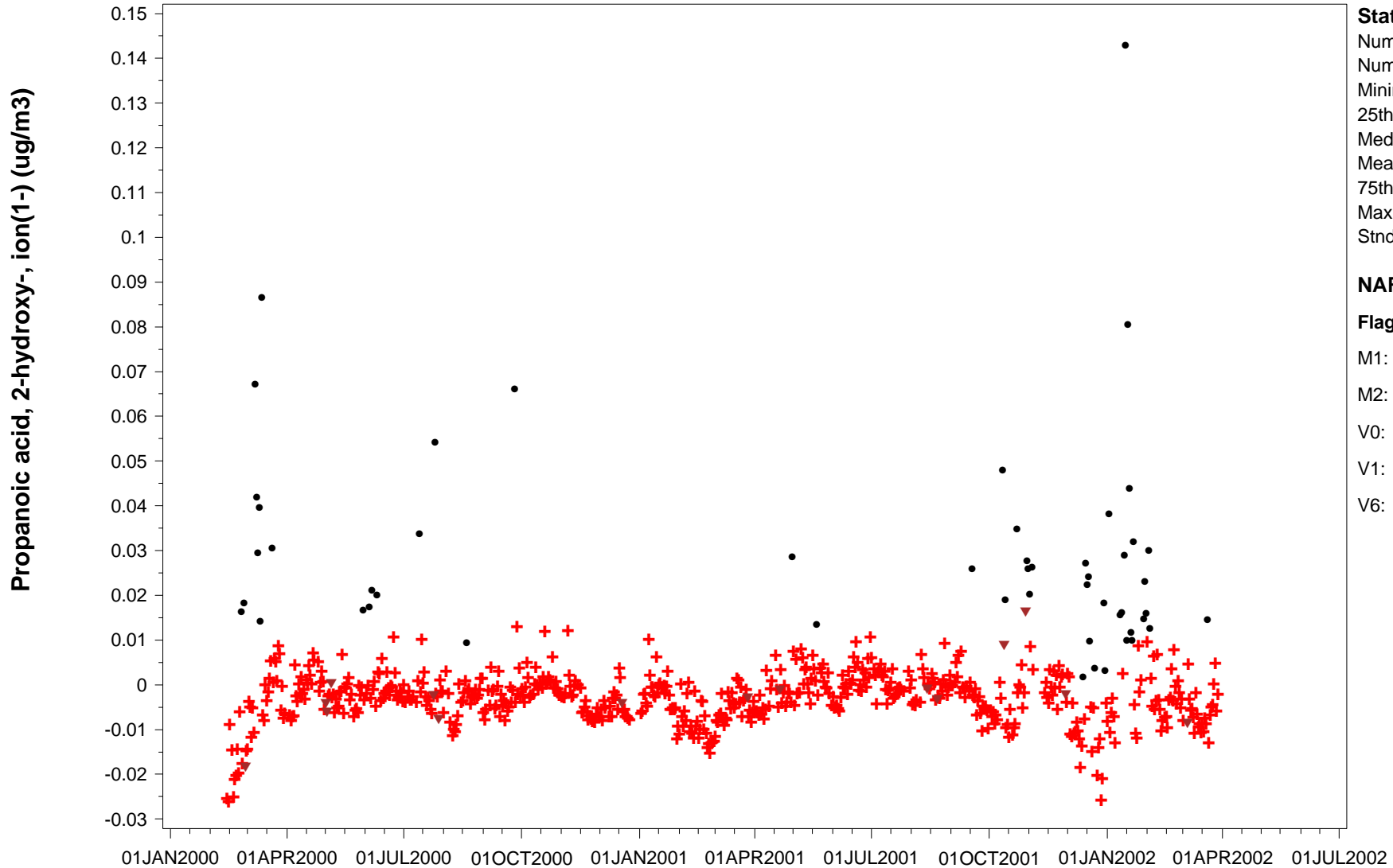
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Propanoic acid, 2-hydroxy-, ion(1-)** Common Name: **Lactic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C113-21-3** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics
 Number of obs: **757**
 Number of missing: **48**
 Minimum: **-0.0262**
 25th Percentile: **-0.0056**
 Median: **-0.0021**
 Mean: **-0.001**
 75th Percentile: **0.001**
 Maximum: **0.1429**
 Stnd Dev.: **0.012**

NARSTO Flags
Flag Symbol Count
 M1: **40**
 M2: **8**
 V0: ● **52**
 V1: + **642**
 V6: ▼ **15**

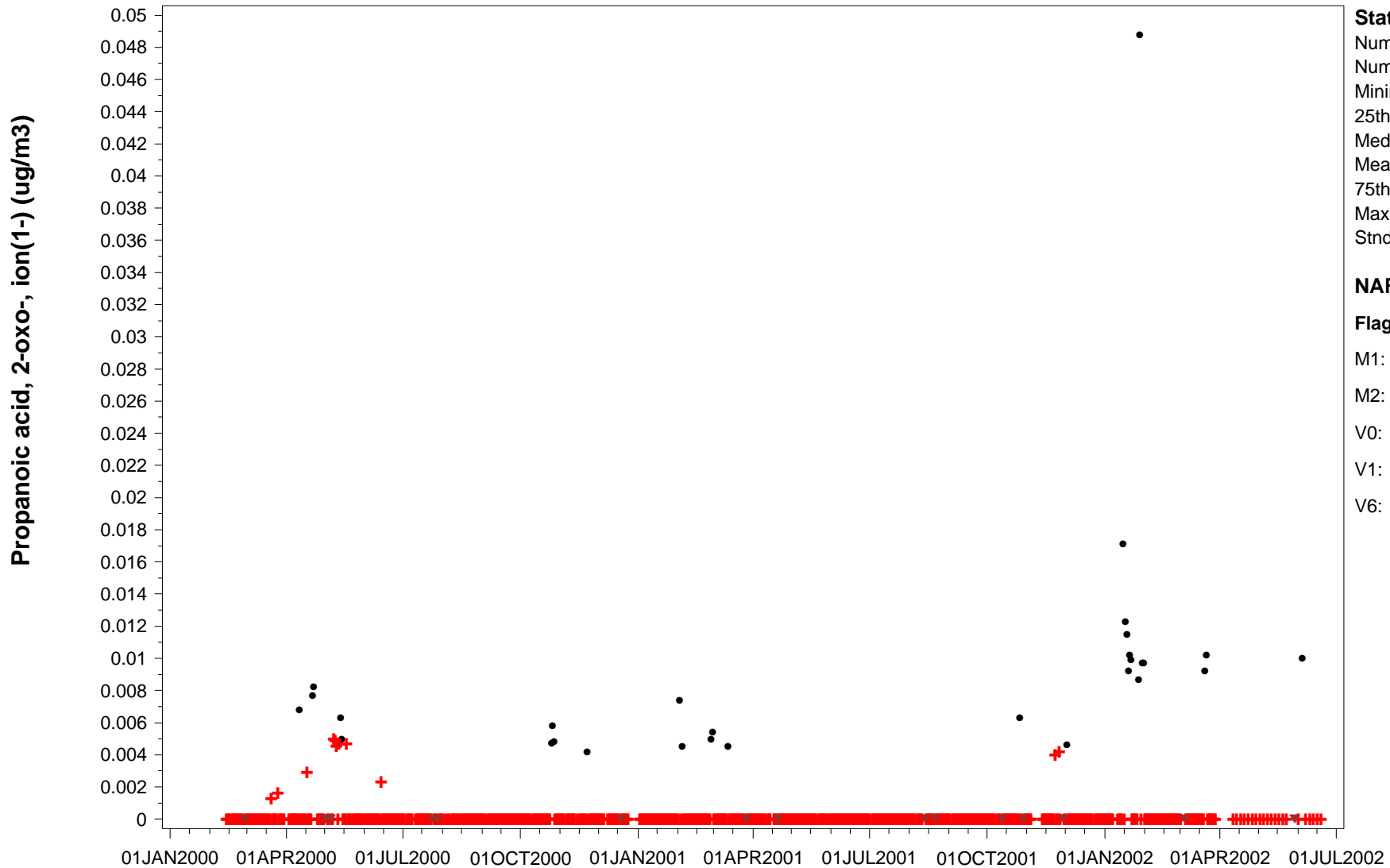
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Propanoic acid, 2-oxo-, ion(1-)** Common Name: **Pyruvic** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C57-60-3** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **IC** Sample preparation: **Water extraction**
 Blank Correction: **Not blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **15**
 Minimum: **0**
 25th Percentile: **0**
 Median: **0**
 Mean: **0.000**
 75th Percentile: **0**
 Maximum: **0.0488**
 Stnd Dev.: **0.002**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 29 |
| V1: | + | 697 |
| V6: | ▼ | 16 |

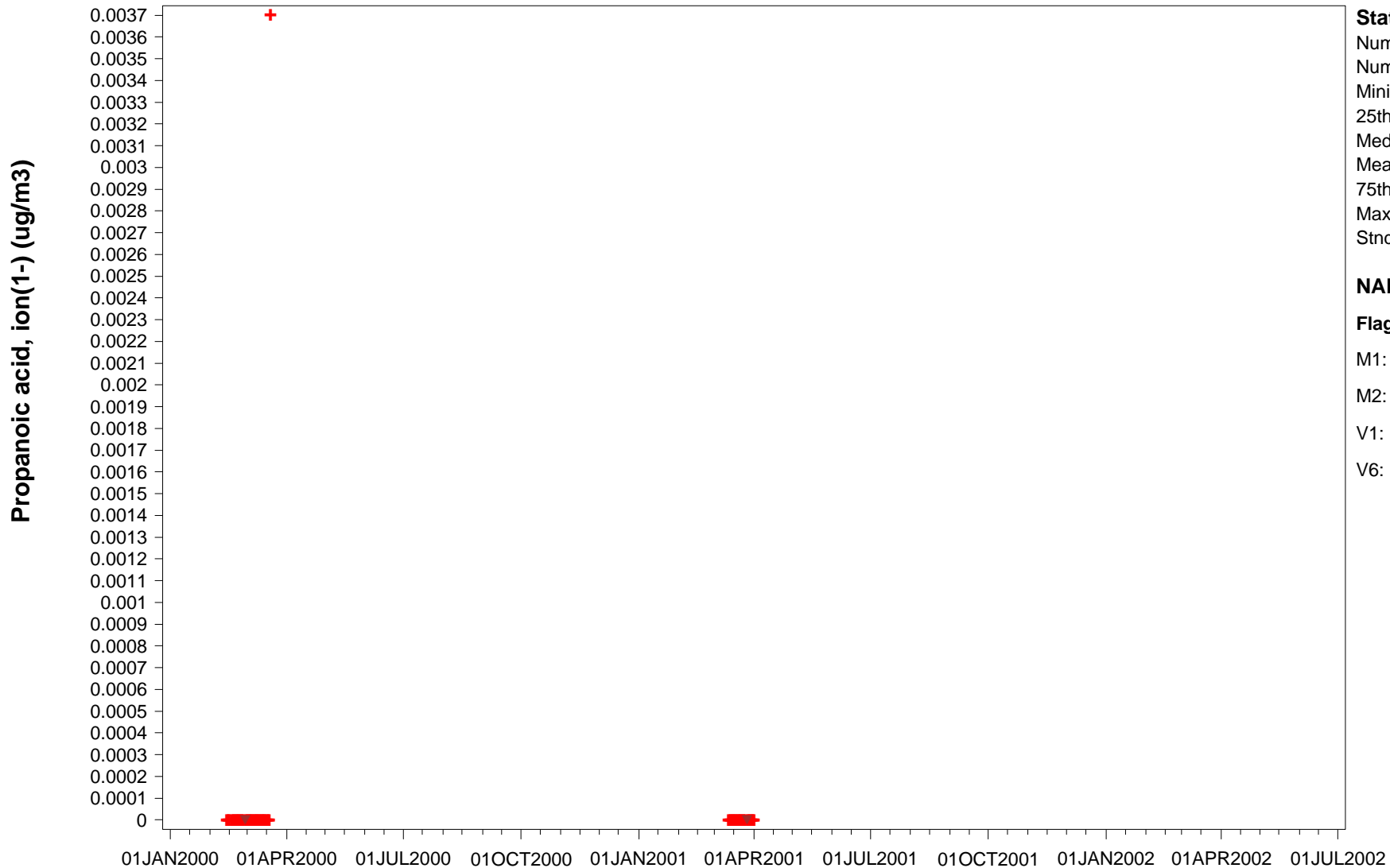
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Propanoic acid, ion(1-)** Common Name: **Propionate** Units: **ug/m3** Sampling interval: **24 hour**
 Sampling frequency: **Every day** CAS ID: **C72-03-7** Observation type: **Particles** Particle diameter--lower bound (UM): **0**
 Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Single filter** Medium: **Teflon**
 Inlet type: **Impactor--virtual/concentrator** Laboratory analytical method: **Capillary electrophoresis** Sample preparation: **Water extraction**
 Blank Correction: **Not blank corrected** Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics

Number of obs: **757**
 Number of missing: **702**
 Minimum: **0**
 25th Percentile: **0**
 Median: **0**
 Mean: **0.000**
 75th Percentile: **0**
 Maximum: **0.0037**
 Stnd Dev.: **0.000**

NARSTO Flags

Flag Symbol Count

| | | |
|-----|----------|------------|
| M1: | | 701 |
| M2: | | 1 |
| V1: | + | 53 |
| V6: | ▼ | 2 |

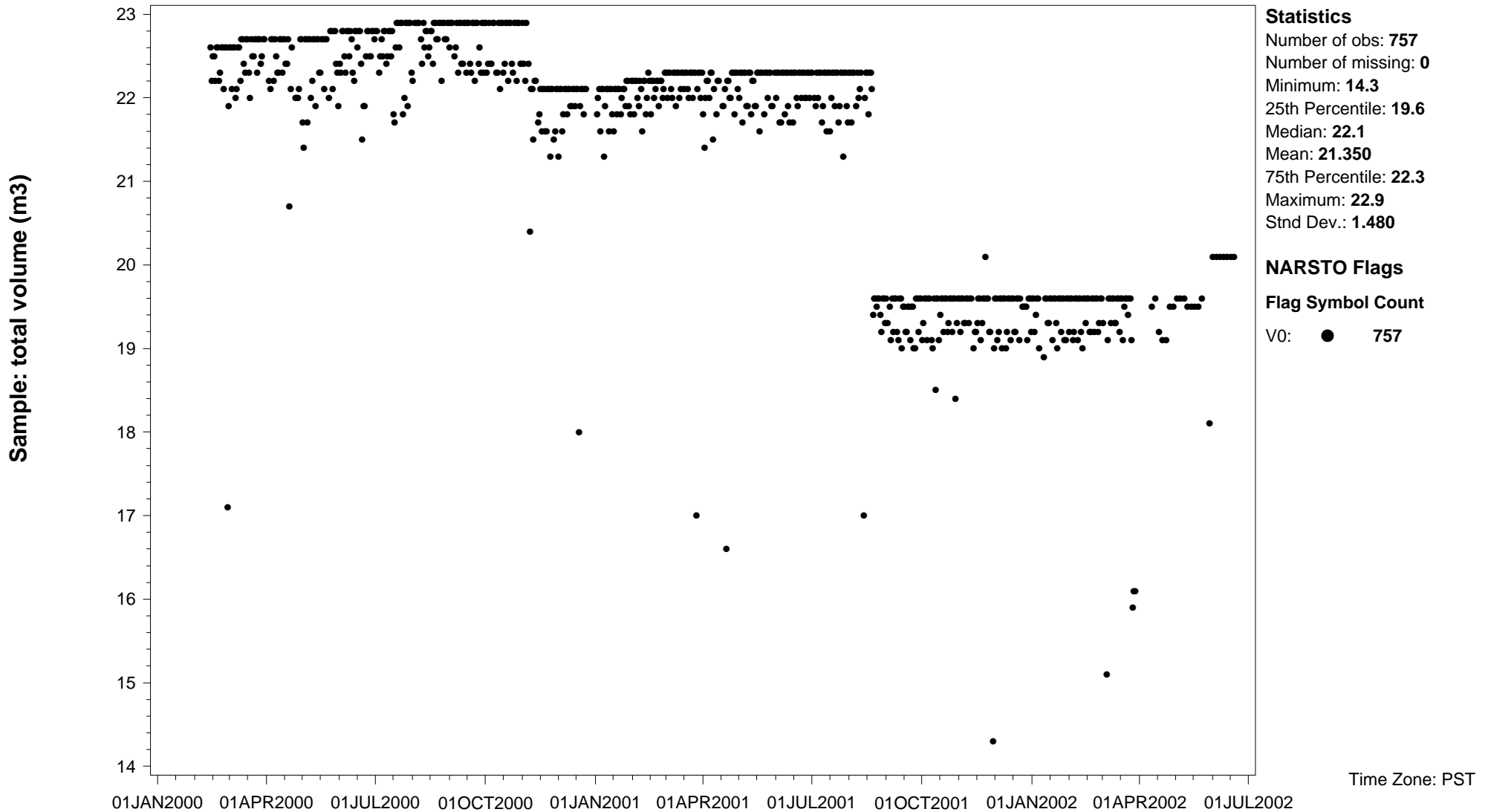
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Sample: total volume** Units: **m3** Sampling interval: **24 hour** Sampling frequency: **Every day**
 Observation type: **Flow** Field sampling or measurement principle: **Mass flow controller** Inlet type: **Impactor--virtual/concentrator**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**

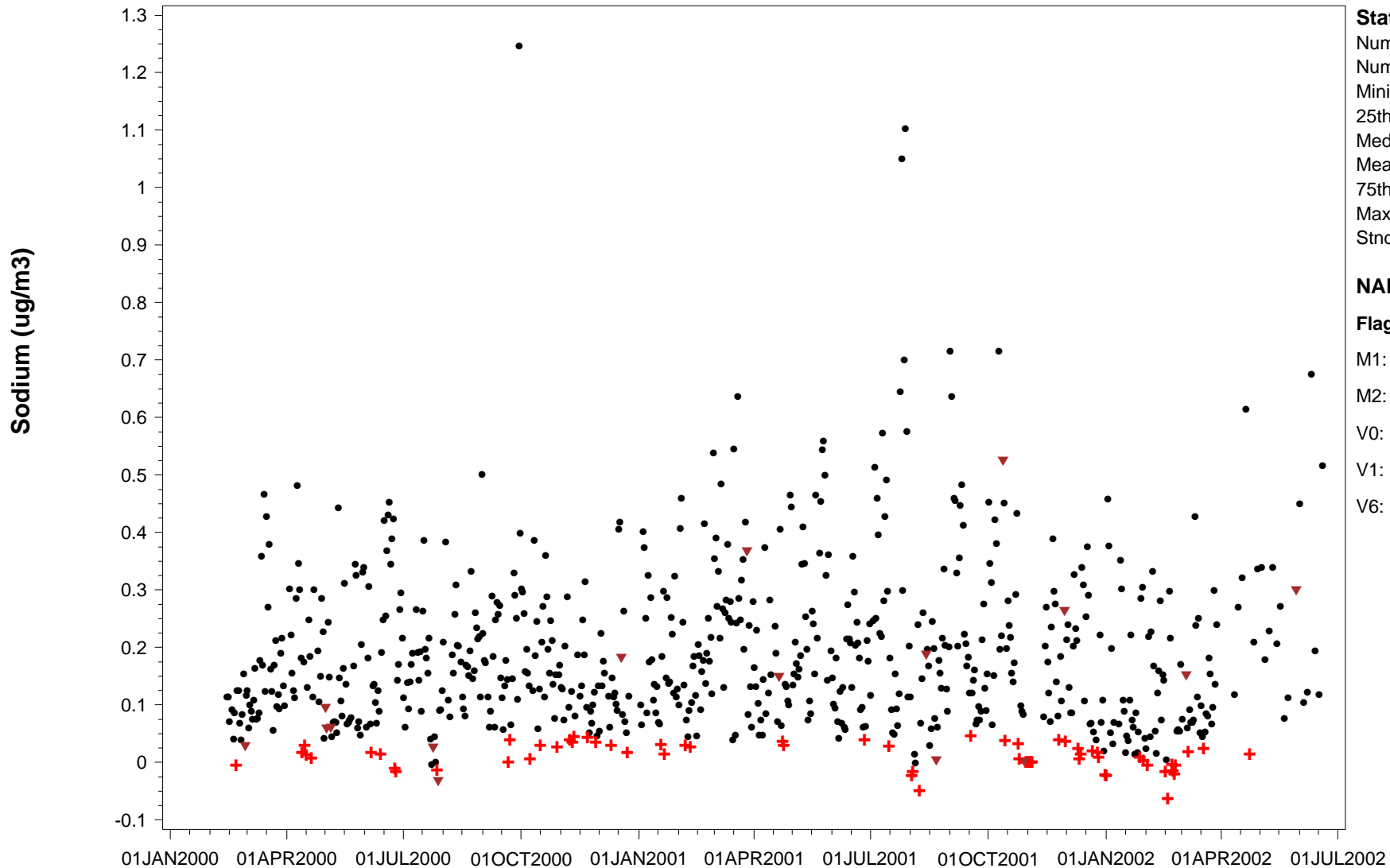


NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Sodium** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C7440-23-5**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



Statistics
 Number of obs: **757**
 Number of missing: **15**
 Minimum: **-0.063**
 25th Percentile: **0.075**
 Median: **0.1485**
 Mean: **0.181**
 75th Percentile: **0.249**
 Maximum: **1.247**
 Stnd Dev.: **0.147**

NARSTO Flags
Flag Symbol Count

| | | |
|-----|---|------------|
| M1: | | 7 |
| M2: | | 8 |
| V0: | ● | 661 |
| V1: | + | 65 |
| V6: | ▼ | 16 |

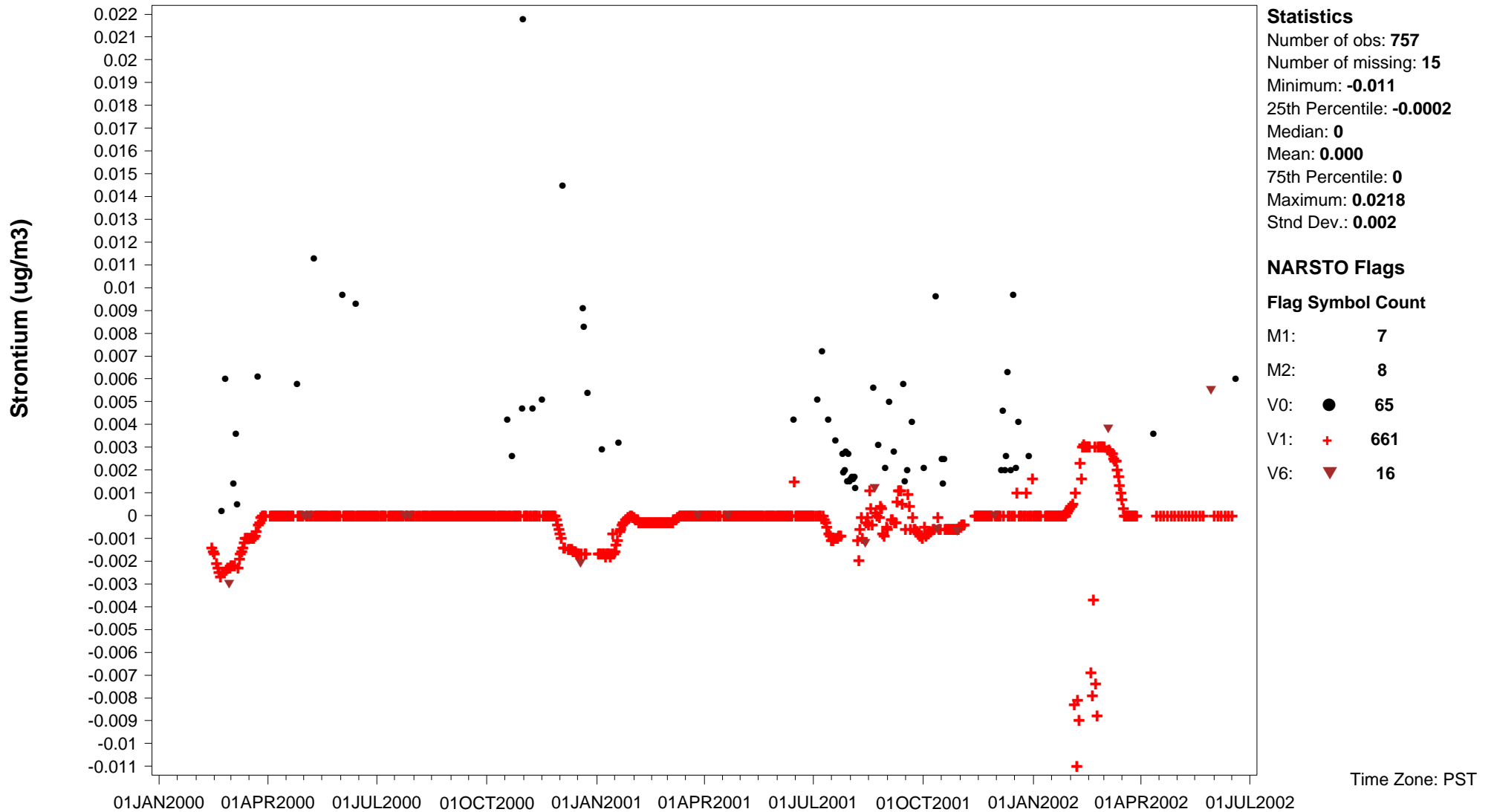
Time Zone: PST

NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Strontium** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day** CAS ID: **C7440-24-6**
 Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**



NAtChem Time Series Plot

09DEC2004

Site ID: **SHEMCABCVAN_** Variable name: **Sulfate** Common Name: **Sulphate** Units: **ug/m3** Sampling interval: **24 hour** Sampling frequency: **Every day**
 CAS ID: **C14808-79-8** Observation type: **Particles** Particle diameter--lower bound (UM): **0** Particle diameter--upper bound (UM): **2.5**
 Field sampling or measurement principle: **Single filter** Medium: **Teflon** Inlet type: **Impactor--virtual/concentrator**
 Laboratory analytical method: **IC** Sample preparation: **Water extraction** Blank Correction: **Not blank corrected**
 Volume standardization: **0 deg. C; 1 atmosphere** Sampling Height above ground (m): **2**
 Instrument name and model number: **University Research Glassware Versatile Air Pollutant Sampler**
 Measurement principal investigator: **Jeffrey Brook** Detection Limit: **Varies--see Detection lim**

Site Name: **Vancouver, British Columbia** Latitude: **49.21556 deg.** Longitude: **-121.9825 deg.** Start Date: **2000-02-14** End Date: **2002-06-19**

