

## File Names

09:53 Monday, March 21, 2005 1

File #	Original File Name
1	PAC2001_LNEL_ALN_S+O-ISOT-PM2.5_HIVOL_20010814D16_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)	Norman ; Dr. Ann-Lise	Department of Physics & Astronomy, University of Calgary	PM_2.5_S+O_isot ; Particulate Matter <2.5 micrometers in diameter: S and O isotope composition	8 h day/12 h night	Variable frequency	1	U of C	University of Calgary	Dr. A.L. Norman, Physics & Astronomy, University of Calgary	PAC2001	Pacific 2001	CA (CANADA)

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	Table Explanation Of Zero Or Negative Values
AB	Dr. A.L. Norman, Physics & Astronomy, University of Calgary, AB, T2N 1N4, Canada annlisen@phas.ucalgary.ca	None ; None	None	Dr. A.L. Norman, Physics & Astronomy, University of Calgary	2002/06/20	MS Excel/97	None ; 0	2002-11-08 ; 2	No zero values or negative values appear in the data in this file.

Table Explanation Of Reported Detection Limit Values	Table Explanation Of Reported Uncertainty	Table User Note	Table User Note2	Table User Note3	Table User Note4	Table Name	Table Focus
All valid measurements are reported. Detection limits are based on the standard deviation for replicate measurements of a sample. Peak areas <20 % of a benchmark defined by a standard analyzed on the same day are used to identify samples below detection limits and these samples are flagged V1. The standard deviation for replicate measurements of a sample below detection limits are plus/minus 1 permil for S isotopes and plus/minus 2 permil for Oxygen. Results for sampled which registered less than 10% of the peak area for the benchmark are not reported.	Unknown	Humidity control: manual control < 98 % RH (the site operator was instructed to turn off the High Vol in the event or mist or rain [>98%RH]).	None			S+O Isotopes PM 2.5: day_night	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
PC01CABCLNEL	Langley	BC	49.028900	-122.602500	2.0	94.0	Agricultural	Rural	2001/08/14	2001/08/31	Temperature, wind direction, wind speed, relative humidity		.

## NARSTO Standard Flags

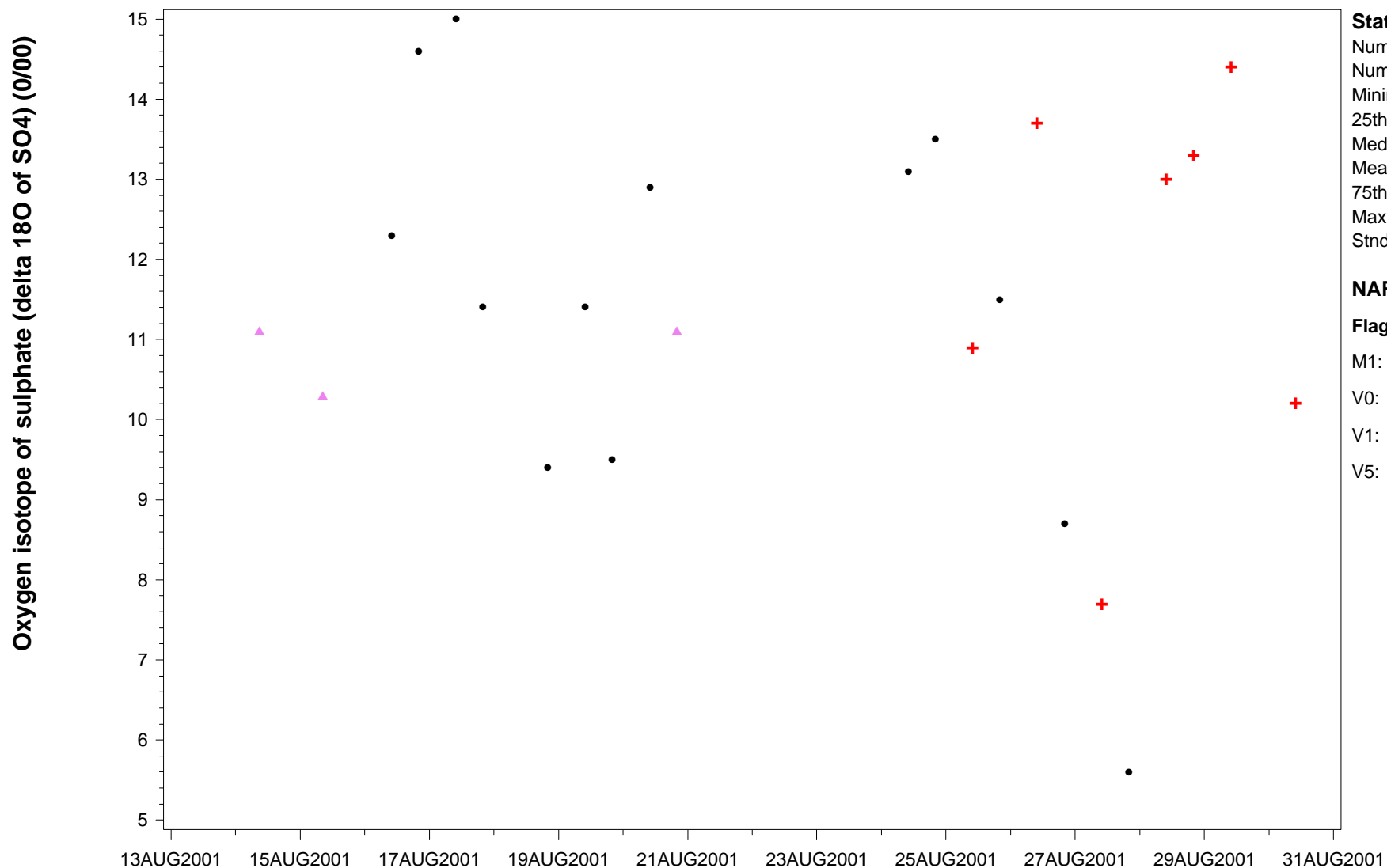
Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
M1	Missing value because no value is available
M2	Missing value because invalidated by data originator
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
V3	Valid interpolated value
V4	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)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
V7	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: **PC01CABLNEL** Variable name: **Oxygen isotope of sulphate (delta 18O of SO4)** Units: **0/00** Sampling interval: **8 h day/12 h night**  
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.03**  
 Particle diameter--upper bound (UM): **2.5** Particle diameter--median (UM): **Undetermined** Field sampling or measurement principle: **Single filter**  
 Medium: **Glass fiber** Inlet type: **Hat or hood** Sampling humidity or temperature control: **Other** Laboratory analytical method: **IRMS**  
 Sample preparation: **Water extraction** Blank Correction: **Blank corrected** Volume standardization: **25 deg. C; 1 atmosphere**  
 Sampling Height above ground (m): **2** Instrument name and model number: **WSAG1200.2.5-Sierra Miscu** Detection Limit: **1**

Site Name: **Langley, British Columbia** Latitude: **49.0289 deg.** Longitude: **-122.6025 deg.** Start Date: **2001-08-14** End Date: **2001-08-31**



**Statistics**

Number of obs: **32**  
 Number of missing: **9**  
 Minimum: **5.6**  
 25th Percentile: **10.2**  
 Median: **11.4**  
 Mean: **11.504**  
 75th Percentile: **13.3**  
 Maximum: **15**  
 Stnd Dev.: **2.327**

**NARSTO Flags**

**Flag Symbol Count**

M1: **9**  
 V0: ● **13**  
 V1: + **7**  
 V5: ▲ **3**

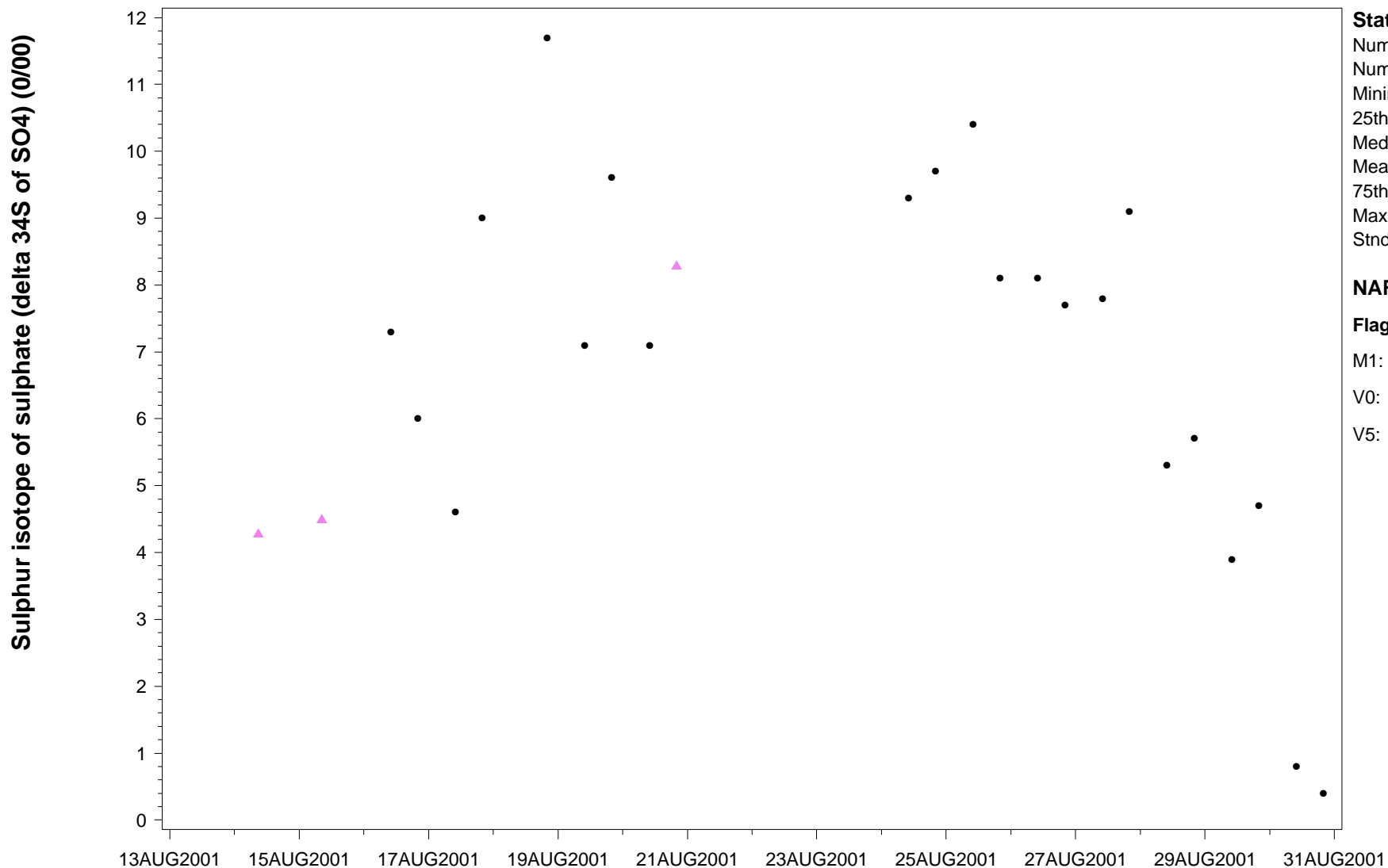
Time Zone: PDT

NAtChem Time Series Plot

21MAR2005

Site ID: **PC01CABLNEL** Variable name: **Sulphur isotope of sulphate (delta 34S of SO4)** Units: **0/00** Sampling interval: **8 h day/12 h night**  
 Sampling frequency: **Variable frequency** Observation type: **Particles** Particle diameter--lower bound (UM): **0.03**  
 Particle diameter--upper bound (UM): **2.5** Particle diameter--median (UM): **Undetermined** Field sampling or measurement principle: **Single filter**  
 Medium: **Glass fiber** Inlet type: **Hat or hood** Sampling humidity or temperature control: **Other** Laboratory analytical method: **IRMS**  
 Sample preparation: **Water extraction** Blank Correction: **Blank corrected** Volume standardization: **25 deg. C; 1 atmosphere**  
 Sampling Height above ground (m): **2** Instrument name and model number: **WSAG1200.2.5-Sierra Miscu** Detection Limit: **0.5**

Site Name: **Langley, British Columbia** Latitude: **49.0289 deg.** Longitude: **-122.6025 deg.** Start Date: **2001-08-14** End Date: **2001-08-31**



**Statistics**

Number of obs: **32**  
 Number of missing: **7**  
 Minimum: **0.4**  
 25th Percentile: **4.7**  
 Median: **7.3**  
 Mean: **6.820**  
 75th Percentile: **9**  
 Maximum: **11.7**  
 Stnd Dev.: **2.797**

**NARSTO Flags**

**Flag Symbol Count**

M1: **7**  
 V0: **22**  
 V5: **3**