SUBLETTE COUNTY
AIR TOXICS INHALATION PROJECT

Final Data Submittal Report
February 3, 2009 – March 31, 2010

Prepared for

THE SUBLETTE COUNTY COMISSIONERS,
THE WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY,
AND THE WYOMING DEPARTMENT OF HEALTH

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF FIGURES (continued)

LIST OF TABLES

LIST OF TABLES (continued)

LIST OF TABLES (continued)

1.0 INTRODUCTION

This data submittal report, prepared by Air Resource Specialists, Inc. (ARS), presents data collected at the Sublette County air toxics monitoring sites for the study period that began in February 2009 and ran through March 2010. Validated data are provided on an accompanying CD.

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1.1 BACKGROUND

ARS was contracted jointly by the Sublette County Commissioners (SCC), the Wyoming Department of Environmental Quality Air Quality Division (WDEQ-AQD), and the Wyoming Department of Health (WDH) to provide air toxics monitoring data in Sublette County, Wyoming with a network of sites in Upper Green River Basin in southwest Wyoming. The intent of this sampling program was to collect samples sufficient to describe the exposure of the general population of Sublette County to toxic air pollutants and ozone (O_3). Fourteen (14) air toxics sampling sites, including two (2) collocated sites, were established in February 2009. Five (5) of the sites also include O_3 monitors. Continuous O_3 and meteorological monitoring began in early February, and air toxics sampling began at the sites every sixth day starting in March 2009.

Figure 1-1 presents an annotated map showing the locations of the Sublette County air toxics and O_3 air quality monitoring sites. Table 1-1 summarizes parameters monitored at these sites.

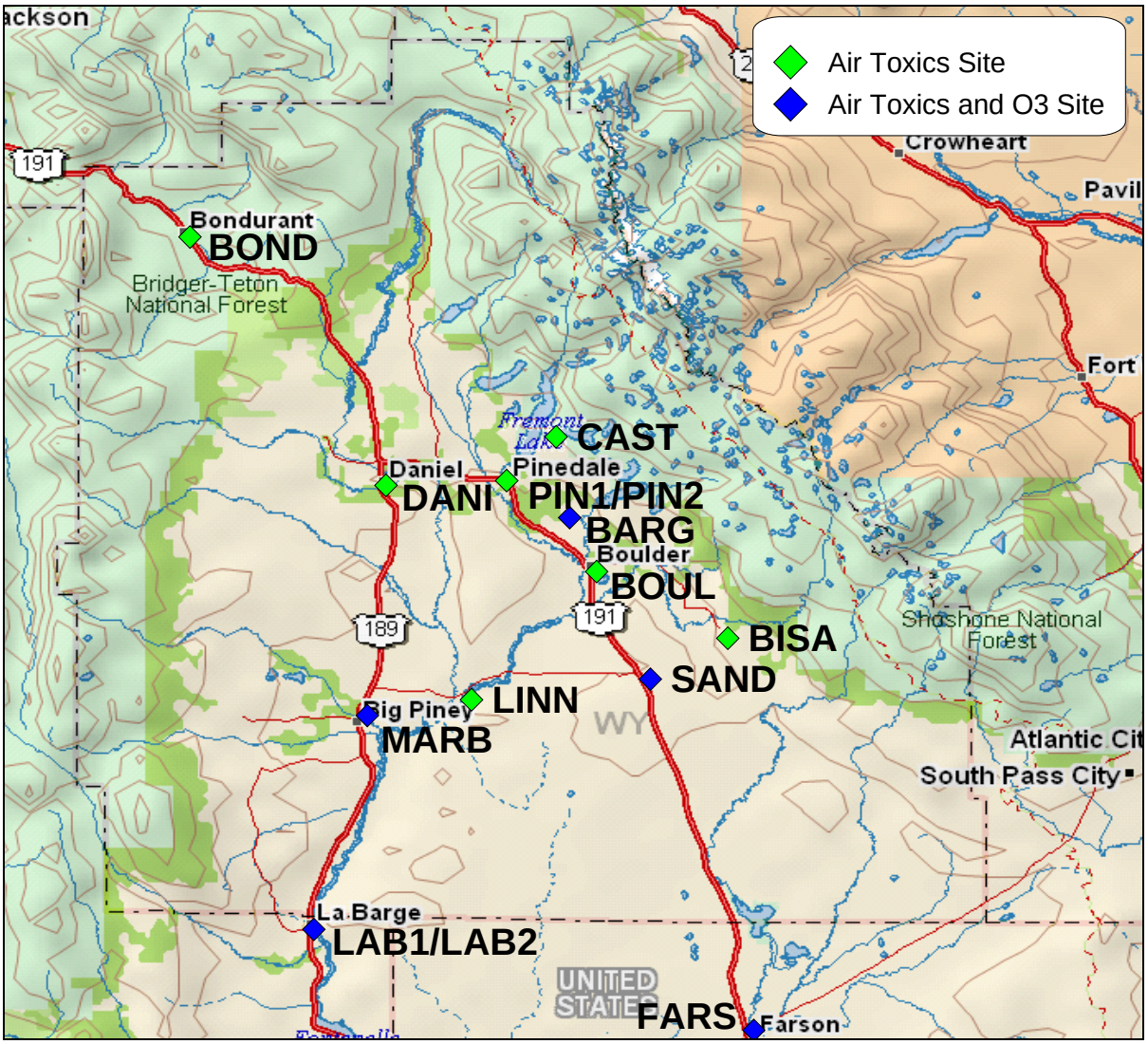

Figure 1-1. Southwest Wyoming Annotated with Sublette County Air Toxics and O_3 Monitoring Sites.

Table 1-1

Sublette County
Parameters Monitored by Site

Site Name and Abbreviation	Elevation (ft)	Latitude	Longitude
Air Toxics, Ozone, and Meteorology Monitoring Stations			
Bargerville (BARG)	7,292	42° 49’12”N	109° 45’55”W
Farson-Eden (FARS)	6,612	42° 7’6”N	109° 27’15”W
La Barge #1 (LAB1)	6,571	42° 15’51”N	110° 11’41”W
Marbleton/Big Piney (MARB)	6,862	42° 33’10”N	110° 6’18”W
Sand Draw (SADR)	7,215	42° 36’7”N	109° 37’46”W
Air Toxics and Meteorology Monitoring Stations			
Big Sandy (BISA)	7,193	42° 39’26”N	109° 29’58”W
Boulder (BOUL)	7,013	42° 44’50”N	109° 43’11”W
Bondurant (BOND)	6,631	43 11’56”N	110° 24’10”W
CASTNet Site (CAST)	7,858	42 55’45”N	109° 47’16”W
Daniel (DANI)	7,197	42 51’49”N	110° 4’25”W
La Barge #2 (LAB2)	6,571	42 15’51”N	110° 11’41”W
Marbleton East (LINN)	6,844	42 34’27”N	109° 55’48”W
Pinedale #1 and #2 (PIN1 and PIN2)	7,185	42 52’12”N	109° 52’15”W

2.0 MONITORING SPECIFICATIONS

Two (2) types of monitoring/sampling stations were deployed as part of the Sublette County Air Toxics Inhalation Project. All fourteen (14) sites were equipped with air toxics and meteorological monitoring, consisting of a tripod-mounted sampling box and metrological sensors. Five (5) of the sites were also equipped with EPA-equivalent method ozone analyzers. Site specifications, routine operation and data collection and validation procedures are summarized in this section.

2.1 SITE SPECIFICATIONS

Figure 2-1 presents a photograph of the air toxics monitoring enclosure and meteorological monitoring tripod at the Sand Draw (SADR) site and a photograph of an O_3 monitor. Air toxics monitoring includes both a canister sampling unit for most compounds, and a sorbent cartridge formaldehyde and acetaldehyde. Ozone monitors were mounted in inside existing buildings with inlets placed outdoors in accordance with EPA siting criteria. Specific instrumentation and sampling protocols are listed in Table 2-1.

Figure 2-1. Tripod with Air Toxics Canister and Sorbent Cartridge Media and Meteorological Monitoring Equipment (left) and an Ozone Monitor at an Interior Location Nearby (right).

Table 2-1

Sublette County Air Toxics Monitoring Network
Instrumentation and Sampling Protocols

Component	**Instrumentation**	**Sampling Frequency**	**Parameter**
Air Toxics	SUMMA® canister	1 every 6 days	24-hour integrated sample (EPA TO-15 method)
Air Toxics (Formaldehyde/ Acetaldehyde)	Sorbent cartridge	1 every 6 days	24-hour integrated sample (EPA TO-11A method)
Ozone	Thermo Electron 49*i* ozone analyzer	1-second samples	1-hour averages of ozone. Zero and span calibrations daily at 0% and 80% full scale. Precisions daily at 18% full scale.
Meteorology	Air temperature sensor	1-second samples	1-hour averages of air temperature
	Wind speed and wind direction sensor	1-second samples	1-hour averages of scalar wind speed, resultant wind speed, resultant wind direction, and standard deviation of wind direction

2.2 ROUTINE OPERATIONS

ARS was the primary contractor for this project and coordinated all aspects of the air toxics sampling and ozone and meteorological monitoring. Following data reduction, all data were provided to Sierra Research for a screening level risk assessment under a separate contract. Responsibilities for involved parties, including ARS, the analysis laboratory, and site operators, are summarized below:

- ARS installed the sites and performed semi-annual calibrations. ARS collected and validated ozone and meteorological data and received canisters and sorbent data reports from Air Toxics Ltd., the analysis laboratory that supported this effort. ARS reduced validated mass loading data from formaldehyde/acetaldehyde samples as provided by Air Toxics Ltd. to concentration data using flow conversions from measurements made on site.

- Air Toxics Ltd. supplied the air toxics canisters and sorbent cartridges, shipped sample media to the site operators, received and processed sample media shipped back from the field, provided laboratory analysis of the air samples, and validated all canister and sorbent tube data. Canister air toxics data are provided to ARS in concentration units ($\mu g/m^3$), and formaldehyde/acetaldehyde data from sorbent cartridges in units of mass loading (µg).

- Site operators followed protocols outlined in the *Sublette County Air Toxics Inhalation Project Operator's Logbook (Feb. 2009).* Operator site visits were conducted every sixth day to remove and replace canisters and filter cartridges, complete log sheets, and ship sampling media to Air Toxics Ltd. Operators also performed on-site station checks and station equipment adjustments as directed by ARS.

2.3 DATA COLLECTION

Continuous data from all stations were logged on Campbell Scientific CR850 dataloggers. The dataloggers were connected to a wireless or landline modem for data collection by ARS. Ozone data, meteorological data, and quality control indicators were collected and reviewed daily by ARS data analysts.

All air toxics sampling media were shipped to the analytical laboratory by traceable carrier in laboratory supplied containers that fully met sample handling and transport requirements. Chain-of-custody accounting was fully documented in shipping records, shipping logs, and field sampling log sheets.

Canister air toxics sampling was performed with 6-liter SUMMA® canisters to provide 24-hour samples. Collection occurred unattended and required only a clean, evacuated SUMMA® canister and a mass flow controller. The datalogger controlled a valve on the inlet manifold attached to the canister. The valve was opened at the start of the sampling period. At the end of the sample collection period, the valve was closed and the canister was sent back to

the laboratory for analysis. Samples were analyzed within 30 days of exposure. Site operators exchanged sample canisters between sample days and completed all sample-specific log sheets.

Formaldehyde and acetaldehyde air toxics samples were collected separately on DNPH-coated sorbent cartridges. The datalogger controlled the sample pump and recorded the cartridge temperature and pressure drop. After collection, samples were sent back to the laboratory at approximately 4°C, with a sample hold time of two (2) weeks. Site operators exchanged sample media between sample days and completed sample-specific log sheets.

2.4 DATA VALIDATION

Data validation for ozone and meteorological data followed National Park Service (NPS) Gaseous Pollutant Monitoring Program (GPMP) protocols, which are consistent with methods used for other WDEQ-AQD sites operated by ARS. Detailed procedures can be found in SOP 3450, *Ambient Air Quality and Meteorological Monitoring Data Validation* and SOP 3450, *Ambient Air Quality and Meteorological Monitoring Data Validation*.

Validated air toxics and formaldehyde/acetaldehyde data were provided by Air Toxics Ltd. Canister air toxics data are provided as concentrations (µg/m^3), and formaldehyde/acetaldehyde values are provided as mass loadings (µg). Laboratory analysis methods are detailed in the *Air Toxics Limited Methods Manual, Revision 16.1, 10/2007*, subsections TO-5/CARB 430, *Method* 0011, and TO-11A– *Aldehydes And Ketones* and TO-14A/TO-15 *Volatile Organic Compounds By* SIM.

Conversion of formaldehyde/acetaldehyde mass loadings to concentrations was performed at ARS by calculating a flow volume for the sorbent cartridge sample time from a measured hourly pressure drop. The flow volume was then used with the formaldehyde/acetaldehyde mass loadings provide by Air Toxics Ltd. to calculate final concentration values. Concentrations for total volumes less than 0.1 m^3 were flagged as invalid in reduced data files accompanying this report.

2.5 TIC ANALYSIS

The standard TO-15 canister analysis included analysis results for 63 individual compounds. Select canisters were also analyzed by Air Toxics Ltd. for Tentatively Identified Compounds (TICs). These analyses included canisters collected in September 2009, and January through March 2010 for 9 of the 14 sites. Unlike the primary analysis, concentrations of TICs were not determined using calibrated standards. TICs were identified as a possible match of a previously unidentified compound to a compound signature in a reference library. For each reported TIC a match quality value was reported by Air Toxics Ltd., where the match quality indicates how closely the gas chromatography signature matches a library reference. Because of the inherent uncertainty in TIC analysis, these compound identifications and reported concentrations are recommended only for general assessment of possible unknown compounds, and not defensible for use in risk analysis screening. Data files accompanying this report include both the reported concentration and the match quality number for each TIC.

3.0 OPERATIONAL SUMMARIES

Tables 3-1 through 3-14 present operational summaries describing events that affected data collection, such as site visits, instrument downtime, and calibrations. Routine operator site visits are listed below only when data were affected. These routine visits were conducted between samples that ran every sixth day, where operators removed and replaced canisters and filter cartridges, completed log sheets, and shipped sampling media to the Air Toxics Ltd. laboratories.

Table 3-1

Sublette County, Bargerville (BARG)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/5/09	O_3 data collection began at 0900. O_3 data invalid due to maintenance (1000-1100) and recorder failure (1200-1800). Meteorological data collection began at 1100. Temperature data invalid due to recorder failure (1200).
2/6/09	O_3 data invalid due to recorder failure (periodically throughout February).
2/13/09	O_3 data invalid due to maintenance (0900-1000). Meteorological data invalid due to recorder failure (0900-1400).
2/20/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
2/24/09	Temperature data invalid due to recorder failure (0000, 0800, 1100, 1300-1500).
2/25/09	Temperature data invalid due to an instrument malfunction (1000).
3/2/09	Temperature data invalid due to recorder failure (0000, 1000-2300).
3/3/09	Temperature data invalid due to recorder failure (0800).
3/4/09	Meteorological data invalid due to recorder failure (0000-1100).
5/2/09	Wind data invalid due to frozen sensors (5/2, 1800-5/3, 0800).
5/5/09	O_3 data invalid due to an instrument malfunction (1000).
6/6/06	High vacuum remaining in canister. Canister sample invalid.
6/7/09	O_3 data invalid due to power failure (0500-0600).
6/25/09	ARS on site. Flow calibration checked.
7/20/09	O_3 data invalid due to calibrations (0800).
7/24/09	Cartridge sample invalid due to suspect flow.
8/17/09	HAPS pressure, time and flow invalid due to instrument malfunction (0000-0600).
8/25/09	ARS site visit. O_3 data invalid due to calibrations (0900). Meteorological parameters and HAPS pressure invalid during maintenance (0900).

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Table 3-1 (continued)

Sublette County, Bargerville (BARG)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
8/29/09	No canister sample, the flow controller did not work properly.
9/10/09	No canister sample, the inlet tube was plugged.
10/9/09	O_3 data invalid due to recorder failure (1200).
11/2/09	O_3 data invalid due to recorder failure and instrument malfunction (0800-1000).
3/27/10	Canister did not sample. Sample invalid.

Note: Automated ozone calibrations occurred daily (2000-2100).

Table 3-2

Sublette County, Big Sandy (BISA)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/3/09	Meteorological data collection began at 1500.
2/6/09	Temperature data invalid due to recorder failure (0000, 1200-1500).
2/17/09	All meteorological data invalid due to recorder failure (0800-1500). Temperature data invalid due to recorder failure (1600-1700).
2/22/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
4/29/09	Wind data invalid due to frozen sensors (0200-0600).
5/2/09	Wind data invalid due to frozen sensors (5/2, 1900-5/3, 0100).
5/3/09	Wind data invalid due to frozen sensors (0300-0700).
6/6/09	Valve for canister sample would not open. No canister sample taken.
6/24/09	Canister did not sample. Sample invalid.
7/12/09	Canister delivery suspended. No sample taken.
7/18/09	Canister and cartridge delivery suspended. No samples taken.
8/24/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1500).

Table 3-3

Sublette County, Bondurant (BOND)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/4/09	Meteorological data collection began at 1000.
2/6/09	Temperature data invalid due to recorder failure (periodically throughout the month).
2/27/09	Operator site visit. The first air toxics canister was installed for sampling on 3/2.
3/2/09	Temperature data invalid due to recorder failure (periodically throughout the month).
3/29/09	Wind data invalid due to frozen sensors (0300-0600).
4/1/09	Temperature data invalid due to recorder failure (periodically throughout the quarter).
5/7/09	High vacuum remaining in canister. No canister sample taken.
6/26/09	ARS on site. Flow calibration checked. Temperature sensor removed. Temperature sensor from Daniel site installed.
7/12/09	Canister and cartridge delivery suspended. No samples taken.
7/18/09	Canister and cartridge delivery suspended. No samples taken.
8/25/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1300).
10/4/09	Wind data invalid due to frozen sensors (10/4, 2000 – 10/5, 0800)
12/12/09	Wind data invalid due to frozen sensors (0800-1200)
12/13/09	Wind data invalid due to frozen sensors (0600-1000)
1/19/10	Wind data invalid due to frozen sensors (0000-1000).
1/29/10	Wind data invalid due to frozen sensors (0500-0900).
2/7/10	Wind data invalid due to frozen sensors (0600-1000).
2/13/10	Canister did not sample. Sample invalid.
3/3/10	Wind data invalid due to frozen sensors (3/3, 2000-3/4, 0200).
3/7/10	Wind data invalid due to frozen sensors (3/7, 2000-3/8, 0900).
3/29/10	All data invalid due to recorder failure (3/29, 1300-3/31, 2300).

Table 3-4

Sublette County, Boulder (BOUL)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/18/09	Meteorological data collection began at 1800.
2/22/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
4/8/09	Wind data invalid due to frozen sensors (4/8, 1600-4/9, 0800).
4/29/09	Wind data invalid due to frozen sensors (0300-0700).
5/2/09	Wind data invalid due to frozen sensors (5/2, 1900-5/3, 0800).
6/26/09	ARS on site. Flow calibration checked.
8/24/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1800).
8/29/09	No canister sample, valve not opened.
2/19/10	Wind data invalid due to frozen sensors (0400-0700).

Table 3-5

Sublette County, CASTNet (CAST)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/19/09	Meteorological data collection began at 1100. All meteorological data invalid due to recorder failure (1300). Temperature data collection began at 1400.
2/23/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
2/24/09	Cartridge sample invalid due to suspect flow.
4/1/09	Cartridge sample invalid due to low flow.
5/2/09	Wind data invalid due to frozen sensors (1800-2100).
6/26/09	ARS on site. Flow calibration checked.
7/12/09	Canister and cartridge delivery suspended. No samples taken.
7/18/09	Canister and cartridge delivery suspended. No samples taken.
8/25/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1100).
8/29/09	Canister sample invalid due to high vacuum remaining in canister. Cartridge sample invalid due to suspect flow.
12/9/09	Canister did not sample. Sample invalid.
3/27/10	Canister did not sample. Sample invalid.

Table 3-6

Sublette County, Daniel (DANI)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/6/09	Meteorological data collection began at 0900. Temperature data invalid due to recorder failure (0900-1000).
2/18/09	All meteorological data invalid due to recorder failure (0100-1500).
2/20/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
5/19/09	Operator did not open canister for sample. No canister sample taken.
6/25/09	ARS on site. Flow calibration checked. Temperature sensor was removed from this site and installed at the Bondurant site. Temperature data invalid (6/25 1400 - 6/30 2300).
7/1/09	Temperature sensor was removed from this site and installed at the Bondurant site. Temperature data invalid (7/1, 0000 – 7/7, 1400).
8/25/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1400).
10/4/09	Wind data invalid due to frozen sensors (10/4, 1800 – 10/5, 0900)
12/13/09	Wind data invalid due to frozen sensors (0500-1100)
1/21/10	Wind data invalid due to frozen sensors (0700-1100).
2/19/10	Wind data invalid due to frozen sensors (0000-0300).
3/3/10	Canister did not sample. Sample invalid.

Table 3-7

Sublette County, Farson (FARS)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/6/09	Meteorological data collection began at 1500. Temperature data invalid due to recorder failure (1600-1800).
2/12/09	Temperature data invalid due to recorder failure (1400).
2/17/09	O3 data collection began at 1400. O3 data invalid due to recorder failure (1600-1700). Meteorological data invalid due to recorder failure (0100-1400). Temperature data invalid due to recorder failure (1500).
2/18/09	O3 data invalid due to recorder failure (0900-1600).
2/19/09	O3 data invalid due to recorder failure (0800-0900).
2/23/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.

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Table 3-7 (continued)

Sublette County, Farson (FARS)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/25/09	O3 data invalid due to an instrument malfunction, a tubing attachment was disconnected (2/25 1300 – 3/3/09 1000).
3/13/09	O3 data invalid due to an instrument calibration (1200).
3/26/09	Cartridge sample invalid due to low flow.
4/24/09	O_3 data invalid due to instrument malfunction and recorder failure (2200-2300).
4/25/09	O_3 data invalid due to instrument malfunction and recorder failure (0000, 0600-0900, 1200-1300). Canister sample invalid due to high vacuum remaining in canister. Cartridge sample invalid due to low flow.
5/1/09	Flow controller on canister malfunctioned. No canister sample taken.
6/1/09	O_3 data invalid due to calibrations (1100).
6/25/09	ARS on site. Flow calibration checked.
8/24/09	ARS site visit. O_3 data invalid due to calibrations (1200). Meteorological parameters and HAPS pressure invalid during maintenance (1400).
8/29/09	High vacuum remaining in canister. Canister sample invalid.
8/31/09	O_3 data invalid due to calibrations (1000).
9/1/09	O_3 data invalid due to instrument malfunction (0800).
11/29/09	Wind data invalid due to frozen sensors (0500-0900)
12/21/09	Canister did not sample. Sample invalid.

Note: Automated ozone calibrations occurred daily (2000-2100).

Table 3-8

Sublette County, La Barge #1 (LAB1)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/20/09	Operator site visit. O_3 and meteorological data collection began at 1600. The first air toxics canister was installed for sampling on 2/24.
3/3/09	O_3 data invalid due to an instrument calibration (1300).
3/8/09	Cartridge sample invalid due to low flow.
3/26/09	Cartridge sample invalid due to low flow.

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Table 3-8 (continued)

Sublette County, La Barge #1 (LAB1)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
6/25/09	ARS on site. Flow calibration checked.
8/25/09	ARS on site. O_3 data invalid due to calibrations and instrument malfunction (8/25, 1600 – 8/26, 1100). Meteorological parameters and HAPS pressure invalid during maintenance (1600).
10/4/09	Wind data invalid due to frozen sensors (10/4, 1800 – 10/5, 0900)
10/10/09	Canister did not sample. Sample invalid.
2/19/2010	Canister did not sample. Sample invalid.

Note: Automated ozone calibrations occurred daily (2000-2100).

Table 3-9

Sublette County, La Barge # 2 (LAB2)
Air Toxics Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/20/09	Operator site visit. Meteorological data collection began at 1600. The first air toxics canister was installed for sampling on 2/24.
6/25/09	ARS on site. Flow calibration checked.
7/12/09	Canister delivery suspended. No sample taken.
8/25/09	ARS on site. HAPS pressure invalid during maintenance (1600).
8/29/09	No canister sample, the flow controller did not work properly.
9/16/09	Cartridge sample invalid due to suspect flow.

Table 3-10

Sublette County, Marbleton East (LINN)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/6/09	Meteorological data collection began at 1200. Temperature data invalid due to recorder failure (1200-1400, 2300).
2/12/09	Temperature data invalid due to recorder failure (1100-1300, 1700, 2100).
2/18/09	All meteorological data invalid due to recorder failure (0100-1400)
2/23/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
3/8/09	No canister sample. Operator noted “canister too large”.
4/29/09	Wind data invalid due to frozen sensors (0000-0700).
6/25/09	ARS on site. Flow calibration checked.
7/12/09	Canister delivery suspended. No sample taken.
8/26/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1200).
11/23/09	All data invalid due to recorder failure (0600-0700).
12/10/09	All data invalid due to recorder failure (0300-0700).
12/25/09	All data invalid due to recorder failure (12/25, 2100 – 12/26, 0700).
12/26/09	All data invalid due to recorder failure (12/26, 1800 – 12/27, 0700).
1/24/10	All data invalid due to recorder failure (0600-0700).
1/29/10	All data invalid due to recorder failure (0700, 1/29, 1900-1/30, 0700).
1/31/10	All data invalid due to recorder failure (0100-0800).
2/6/10	All data invalid due to recorder failure (2/6, 2300-2/7, 0700).
2/14/10	All data invalid due to recorder failure (2/14, 2100-2/15, 0800).
2/16/10	All data invalid due to recorder failure (2/16, 2000-2/17, 0600).
2/19/10	All data invalid due to recorder failure (2/19, 2100-2/20, 0800).
3/10/10	All data invalid due to recorder failure (0400-0600).

Table 3-11

Sublette County, Marbleton (MARB)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/4/09	O3 data collection began at 1700. Meteorological data collection began at 1800.
2/5/09	O3 data invalid due to recorder failure (2/5 0800 – 2/9 0700 and periodically 2/9 – 2/18).
2/6/09	Temperature data invalid due to recorder failure (0000, 1000-1800).
2/12/09	Temperature data invalid due to recorder failure (0000, 1300-1400, 1600).
2/18/09	Meteorological data invalid due to recorder failure (0000-1400). Temperature data invalid due to recorder failure (1500).
2/20/09	Operator site visit. O3 data invalid due to an instrument malfunction (1200). The first air toxics canister was installed for sampling on 2/24.
2/24/09	Cartridge sample invalid due to suspect flow.
3/19/09	O3 data invalid due to an instrument calibration (1000).
5/25/09	Cartridge sample invalid due to low flow.
6/17/09	O_3 data invalid due to instrument malfunction and power failure (0500-0600).
6/25/09	ARS on site. Flow calibration checked.
7/13/09	O_3 data invalid due to calibrations (1200).
7/20/09	O_3 data invalid due to instrument malfunction, the analog output became loose during a site visit (7/20, 1200 – 7/21, 1100).
8/26/09	ARS on site. O_3 data invalid due to calibrations (1000). Meteorological parameters and HAPS pressure invalid during maintenance (0900).
8/31/09	O_3 data invalid due to calibrations (1200).
9/11/09	O_3 data invalid due to calibrations (1200).
9/23/09	O_3 data invalid due to calibrations (1200).
9/29/09	O_3 data invalid due to calibrations (1200).
10/4/09	Wind data invalid due to frozen sensors (10/4, 2100 – 10/5, 0900).
1/19/10	Wind data invalid due to frozen sensors (0400-0700).

Note: Automated ozone calibrations occurred daily (2000-2100).

Table 3-12

Sublette County, Pinedale #1 (PIN1)
Air Toxics and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/5/09	Meteorological data collection began at 1500. All meteorological data invalid due to recorder failure (1600).
2/6/09	Temperature data invalid due to recorder failure (0900-1700).
2/18/09	Temperature data invalid due to recorder failure (1100-1600).
2/19/09	All meteorological data invalid due to recorder failure (0100-1300).
2/20/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
2/24/09	Cartridge sample invalid due to low flow.
4/8/09	Wind data invalid due to frozen sensors (4/8, 1600-4/9, 0800).
5/2/09	Wind data invalid due to frozen sensors (5/2, 1800-5/3, 0700).
6/6/09	High vacuum remaining in canister. No canister sample taken.
6/18/09	Canister did not sample. Sample invalid.
6/26/09	ARS on site. Flow calibration checked.
8/25/09	ARS on site. Meteorological parameters and HAPS pressure invalid during maintenance (1200).
1/8/10	Canister did not sample. Sample invalid.

Table 3-13

Sublette County, Pinedale #2 (PIN2)
Air Toxics Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/5/09	Meteorological data collection began at 1500.
2/19/09	All meteorological data invalid due to recorder failure (0100-1300).
2/20/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
6/26/09	ARS on site. Flow calibration checked.
8/25/09	ARS on site. HAPS pressure invalid during maintenance (1200).
1/8/10	Canister did not sample. Sample invalid.

Table 3-14

Sublette County, Sand Draw (SADR)
Air Toxics, O_3, and Meteorological Systems Operational Timeline
February 2009 - March 2010

Date	Summary
2/3/09	Meteorological data collection began at 1300.
2/6/09	Temperature data invalid due to recorder failure (0000-0400, 0900-1000, 1300-2000, 2200-2300).
2/12/09	Temperature data invalid due to recorder failure (1100).
2/17/09	Meteorological data invalid due to recorder failure (0000-1500). Temperature data invalid due to recorder failure (0000-1600).
2/22/09	Operator site visit. The first air toxics canister was installed for sampling on 2/24.
2/23/09	O3 data collection began at 1600.
4/8/09	Wind data invalid due to frozen sensors (4/8, 1900-4/9, 0100).
4/20/09	O_3 data invalid due to calibrations (1100).
4/29/09	Wind data invalid due to frozen sensors (0000-0300 and 0500-0700).
6/12/09	High vacuum remaining in canister. No canister sample taken.
6/26/09	ARS on site. Flow calibration checked.
8/24/09	ARS on site. O_3 data invalid due to calibrations (1600-1700). Meteorological parameters and HAPS pressure invalid during maintenance (1600).
11/10/09	O_3 data invalid due to instrument malfunction (11/10, 1300 – 11/12, 0900).
12/13/09	Wind data invalid due to frozen sensors (0700-1100).
1/28/10	Wind data invalid due to frozen sensors (0300-0800).
1/29/10	Wind data invalid due to frozen sensors (0200-0900).
2/19/10	Wind data invalid due to frozen sensors (0300-0700).

Note: Automated ozone calibrations occurred daily (2000-2100).

4.0 DATA SUMMARIES

This section presents air toxics, ozone, and meteorological summary products for the period February 2009 through March 2010 for the Sublette County air toxics monitoring stations.

For the fourteen (14) air toxics sites, including two (2) collocated sites, canister, and cartridge data included 24-hour integrated filter samples collected every sixth day on the EPA sampling schedule. Hourly meteorological data were collected at all sites, and hourly ozone data were collected at five (5) of the sites. Data summaries for these sites are organized as follows:

4.1 Data Collection Statistics
4.2 Ozone (O_3) Summaries
4.3 Air Toxics Summaries

Additionally, Appendix A presents monthly time series plots for hourly data at each site, including all ozone and meteorological parameters collected during the quarter, and Appendix B presents wind roses for each site, which indicate predominant wind direction and associated wind speeds.

Data files accompanying this report include site specific files with hourly O_3 and meteorological measurements (YYY_QQ_SiteName_hrly.xls) date and method specific air toxics files as provided by the Air Toxics Ltd. Laboratory, and combined site files with reduced air toxics data (YYYY_QQ_TO11.xls and YYYY_QQ_TO15.xls). These reduced files include concentration calculations for formaldehyde/acetaldehyde, data flags for low flow measurements (formaldehyde/acetaldehyde only), and unit conversions (µg/m^3, ppbV, and ppbC).

4.1 DATA COLLECTION STATISTICS

Tables 4-1 through 4-14 present data collection statistics for the sites. The number possible for these measurements is dependent upon instrument start dates.

Table 4-1

Data Collection Statistics, Bargerville (BARG)
Air Toxics, O_3, and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	64	97.0	63	94.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	66	98.5
Ozone	hourly	10070	9978	99.1	9973	99.0
Ambient Temperature	hourly	10068	10026	99.6	10025	99.6
Vector Wind Direction	hourly	10068	10034	99.7	10034	99.7
Vector Wind Speed	hourly	10068	10034	99.7	10034	99.7

Table 4-2

Data Collection Statistics, Big Sandy (BISA)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	63	94.0	63	94.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	66	98.5	66	98.5
Ambient Temperature	hourly	10112	10096	99.8	10096	99.8
Vector Wind Direction	hourly	10112	10086	99.7	10086	99.7
Vector Wind Speed	hourly	10112	10086	99.7	10086	99.7

Table 4-3

Data Collection Statistics, Boulder (BOUL)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	66	98.5	66	98.5
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	67	100
Ambient Temperature	hourly	9749	9748	100	9748	100
Vector Wind Direction	hourly	9749	9708	99.6	9708	99.6
Vector Wind Speed	hourly	9749	9708	99.6	9708	99.6

Table 4-4

Data Collection Statistics, Bondurant (BOND)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	66	62	93.9	62	93.9
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	66	63	97.0	63	97.0
Ambient Temperature	hourly	10093	9803	97.1	9803	97.1
Vector Wind Direction	hourly	10093	9964	98.7	9964	98.7
Vector Wind Speed	hourly	10093	9964	98.7	9964	98.7

Table 4-5

Data Collection Statistics, CASTNet (CAST)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	62	92.5	62	92.5
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	65	97.0	62	92.5
Ambient Temperature	hourly	9730	9728	100	9728	100
Vector Wind Direction	hourly	9732	9726	99.9	9726	99.9
Vector Wind Speed	hourly	9732	9726	99.9	9726	99.9

Table 4-6

Data Collection Statistics, Daniel (DANI)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	65	97.0	65	97.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	67	100
Ambient Temperature	hourly	10047	9741	97.0	9741	97.0
Vector Wind Direction	hourly	10046	9994	99.5	9994	99.5
Vector Wind Speed	hourly	10046	9994	99.5	9994	99.5

Table 4-7

Data Collection Statistics, Farson (FARS)
Air Toxics, O_3, and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	63	94.0	63	94.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	65	97.0
Ozone	hourly	9777	9752	99.7	9606	98.3
Ambient Temperature	hourly	10040	10020	99.8	10020	99.8
Vector Wind Direction	hourly	10040	10020	99.8	10020	99.8
Vector Wind Speed	hourly	10040	10020	99.8	10020	99.8

Table 4-8

Data Collection Statistics, La Barge #1 (LAB1)
Air Toxics, O_3, and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	65	97.0	65	97.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	65	97.0
Ozone	hourly	9703	9701	100	9682	99.8
Ambient Temperature	hourly	9703	9702	100	9702	100
Vector Wind Direction	hourly	9703	9686	99.8	9686	99.8
Vector Wind Speed	hourly	9703	9686	99.8	9686	99.8

Table 4-9

Data Collection Statistics, La Barge #2 (LAB2)
Air Toxics Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	65	97.0	65	97.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	66	98.5

Table 4-10

Data Collection Statistics, Marbleton East (LINN)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	65	97.0	65	97.0
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	67	100
Ambient Temperature	hourly	10044	9917	98.7	9917	98.7
Vector Wind Direction	hourly	10043	9917	98.7	9917	98.7
Vector Wind Speed	hourly	10043	9917	98.7	9917	98.7

Table 4-11

Data Collection Statistics, Marbleton (MARB)
Air Toxics, O_3, and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	67	100	67	100
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	65	97.0
Ozone	hourly	10086	9912	98.3	9887	98.0
Ambient Temperature	hourly	10085	10054	99.7	10054	99.7
Vector Wind Direction	hourly	10085	10052	99.7	10052	99.7
Vector Wind Speed	hourly	10085	10052	99.7	10052	99.7

Table 4-12

Data Collection Statistics, Pinedale #1 (PIN1)
Air Toxics and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	64	95.5	14	93.3
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	66	98.5
Ambient Temperature	hourly	10064	10034	99.7	10034	99.7
Vector Wind Direction	hourly	10064	10018	99.5	10018	99.5
Vector Wind Speed	hourly	10064	10018	99.5	10018	99.5

Table 4-13

Data Collection Statistics, Pinedale #2 (PIN2)
Air Toxics Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	66	98.5	66	98.5
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	67	100

Table 4-14

Data Collection Statistics, Sand Draw (SADR)
Air Toxics, O_3, and Meteorological Systems
February 2009 - March 2010

Parameter	Interval	Data Recovery			Valid Data	
		No. Possible	No. Collected	% Collected	No. Valid	% Valid
Air Toxics Canisters	24-hour (1/6 day)	67	66	98.5	66	98.5
Formaldehyde/Acetaldehyde	24-hour (1/6 day)	67	67	100	67	100
Ozone	hourly	9631	9628	100	9583	99.5
Ambient Temperature	hourly	10114	10078	99.6	10078	99.6
Vector Wind Direction	hourly	10114	10059	99.5	10059	99.5
Vector Wind Speed	hourly	10114	10059	99.5	10059	99.5

4.2 OZONE SUMMARIES

Hourly O_3 values were measured using Thermo Electron 49*i* ozone analyzers. Hourly averages were collected from the instrument, and 8-hour averages were calculated if at least 6 of the 8 hours were valid, or if the 8-hour average exceeded the 75 ppb standard.

Table 4-15 presents the highest daily maximum 1-hour average O_3 concentrations, and Table 4-16 presents the highest daily maximum 8-hour averages at the O_3 sites during this period.

Figures 4-1 through 4-5 present monthly time series plots showing measurements of O_3 for all sites during this period.

Figures 4-6 through 4-10 present O_3 pollutant roses for each site, which indicate predominant wind direction for concentrations observed.

Figures 4-11 though 4-15 present diurnal averages for each site. These indicate average ozone measured by time of day for this period.

Tabular summaries of the highest daily maximum 1-hour averages for each site, for each day of the year are presented in Appendix C, and summaries of the highest daily 8-hour averages are presented in Appendix D.

Table 4-15

Highest Daily 1-Hour Average Ozone Concentrations
February 2009 - March 2010

Site	**1st Highest (Date)**	**2nd Highest (Date)**	**3rd Highest (Date)**	**4th Highest (Date)**	**5th Highest (Date)**
Bargerville (BARG)	77 (3/2/09)	75 (1/30/10)	74 (2/23/09)	73 (3/1/09)	73 (3/1/10)
Farson-Eden (FARS)	71 (3/29/09)	70 (4/30/09)	69 (5/16/09)	69 (5/10/09)	68 (3/12/09)
La Barge (LAB1)	62 (4/29/09)	61 (5/16/09)	61 (8/14/09)	60 (4/28/09)	60 (8/12/09)
Marbleton/ Big Piney (MARB)	75 (2/23/09)	68 (3/29/09)	65 (3/1/09)	64 (5/20/09)	64 (5/10/09)
Sand Draw (SAND)	101 (3/2/09)	80 (3/14/09)	80 (1/30/10)	77 (3/1/09)	76 (2/28/10)

Table 4-16

Highest Daily 8-Hour Average Ozone Concentrations
February 2009 - March 2010

Site	**1st Highest (Date)**	**2nd Highest (Date)**	**3rd Highest (Date)**	**4th Highest* (Date)**	**5th Highest (Date)**	**# Days w/ 8-Hour Average > 75 ppb***
Bargerville (BARG)	69 (2/23/09)	68 (1/30/10)	66 (3/1/09)	65 (5/1/09)	65 (5/20/09)	0
Farson-Eden (FARS)	65 (4/28/09)	65 (5/10/09)	64 (4/29/09)	64 (4/30/09)	64 (5/16/09)	0
La Barge (LAB1)	59 (4/29/09)	58 (4/28/09)	57 (5/10/09)	57 (5/16/09)	57 (6/23/09)	0
Marbleton/ Big Piney (MARB)	60 (2/23/09)	59 (4/28/09)	59 (5/10/09)	59 (5/16/09)	58 (4/29/09)	0
Sand Draw (SAND)	66 (3/2/09)	66 (3/14/09)	65 (6/23/09)	64 (4/28/09)	64 (5/1/09)	0

* The primary and secondary National Ambient Air Quality Standard is 0.075 ppm over and 8-hour period. An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than 75 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration exceeds 75 ppb.

Figure 4-1
Sublette County Ozone Time Series Plot Jan. - Mar. 2009

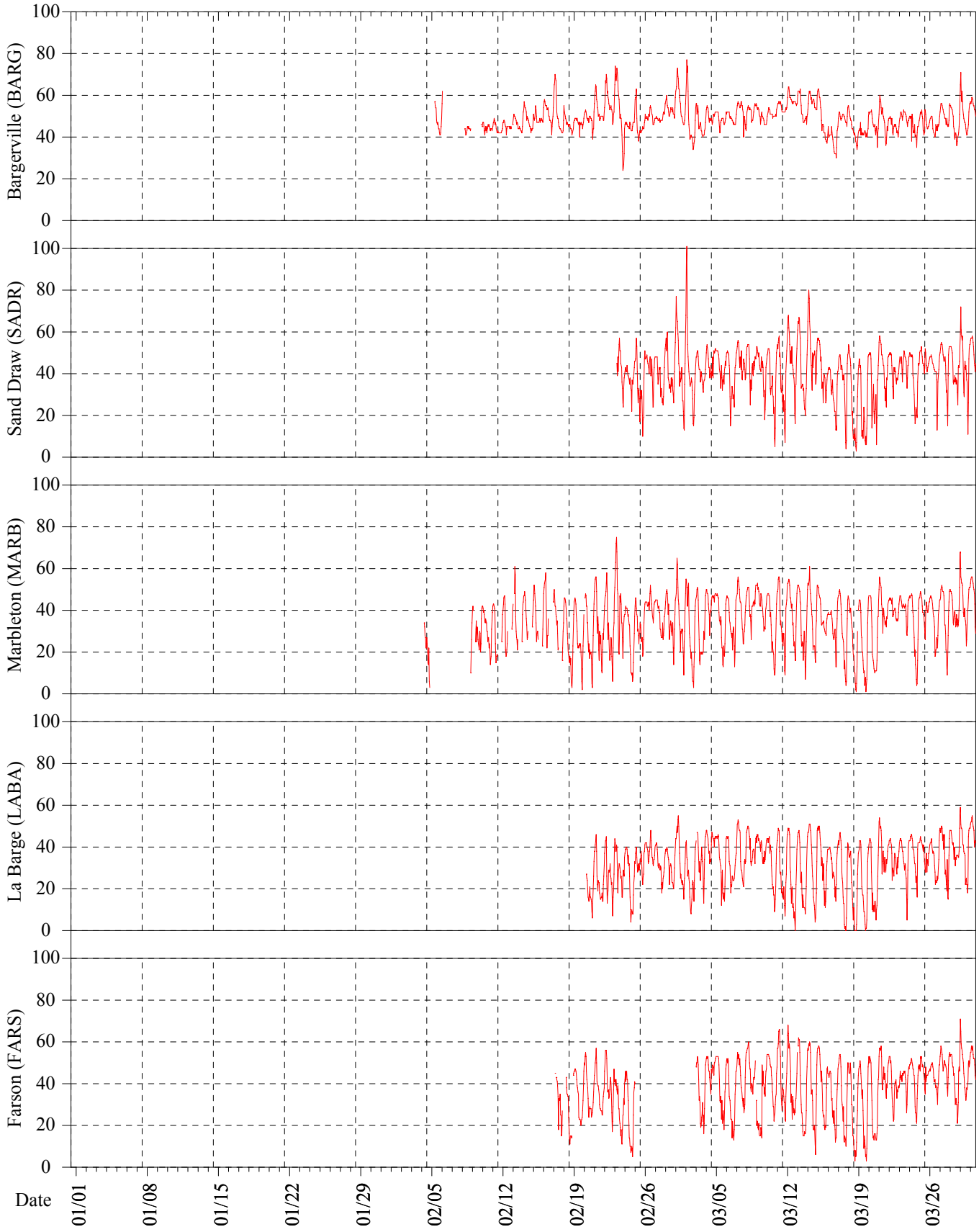


Figure 4-2
Sublette County Ozone Time Series Plot Apr. - Jun. 2009

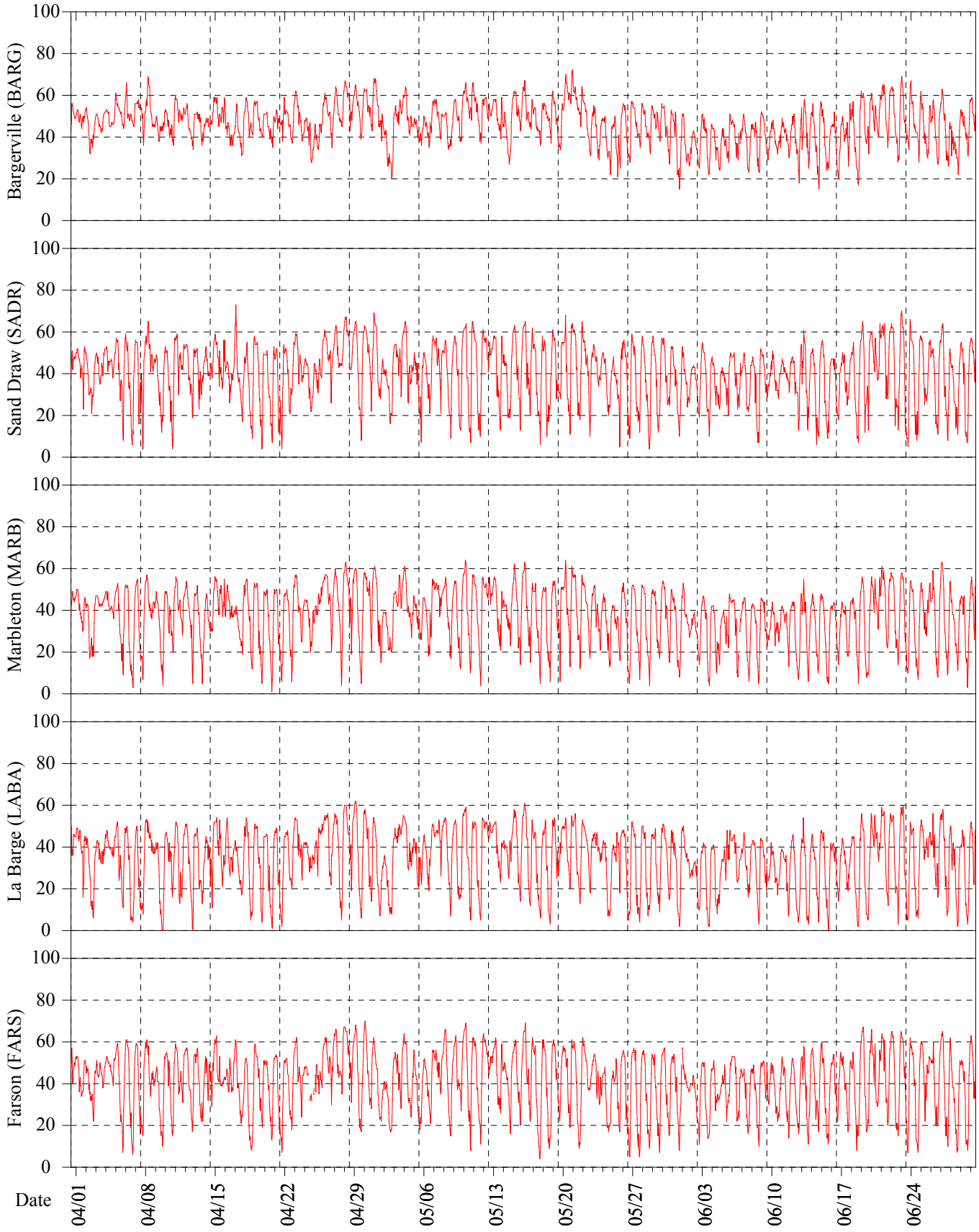


Figure 4-3
Sublette County Ozone Time Series Plot Jul. - Sep. 2009

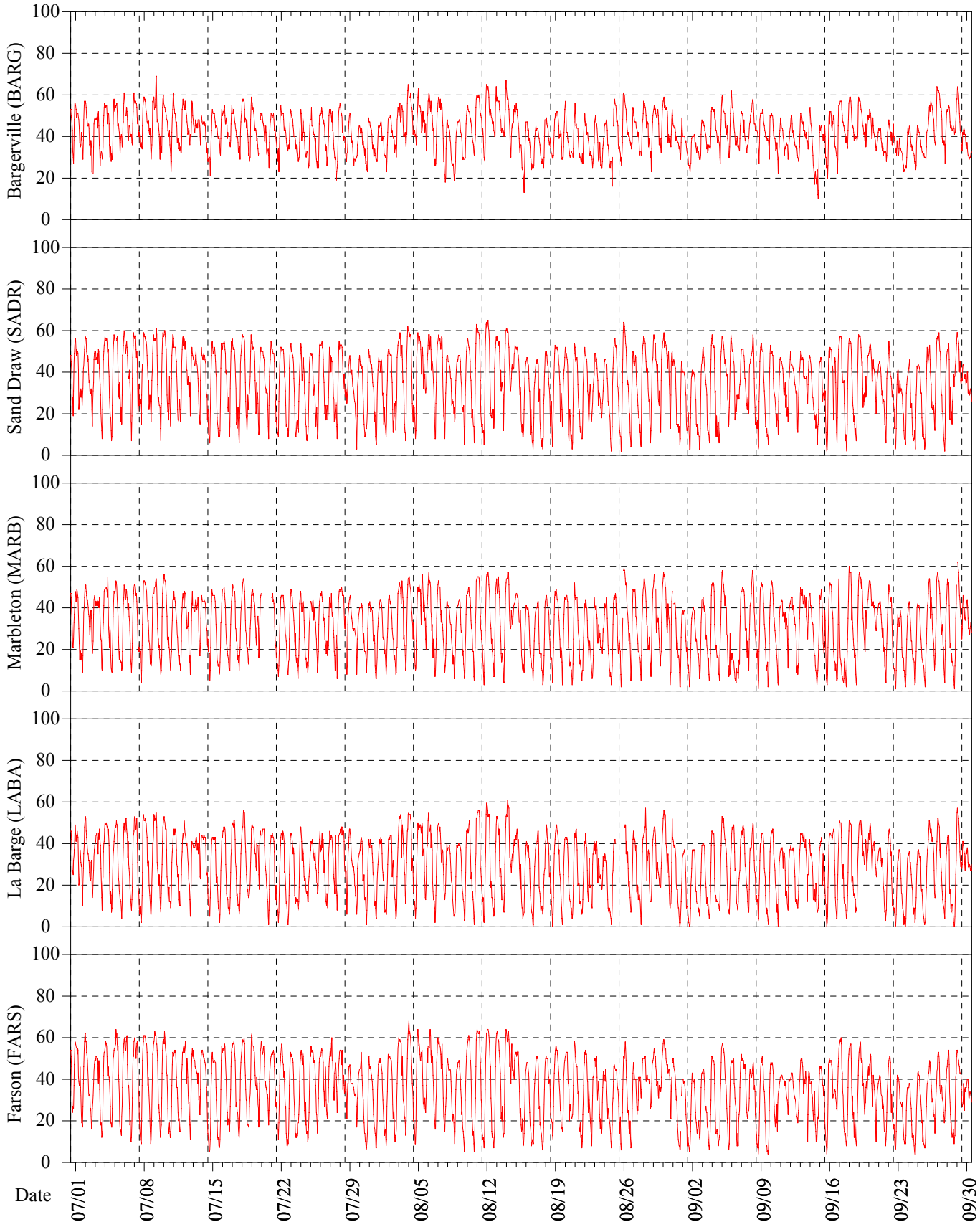


Figure 4-4
Sublette County Ozone Time Series Plot Oct. - Dec. 2009

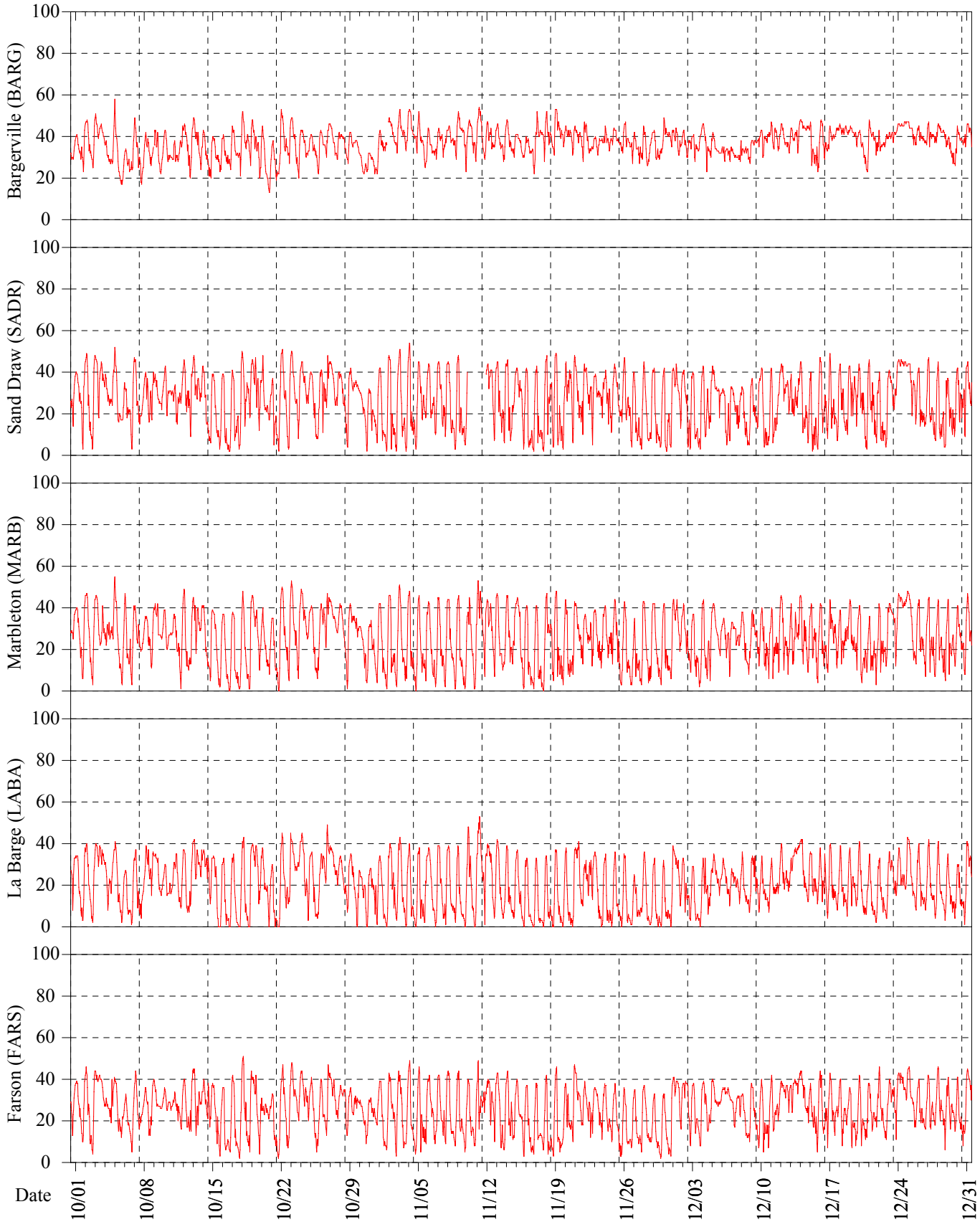


Figure 4-5
Sublette County Ozone Time Series Plot Jan. - Mar. 2010

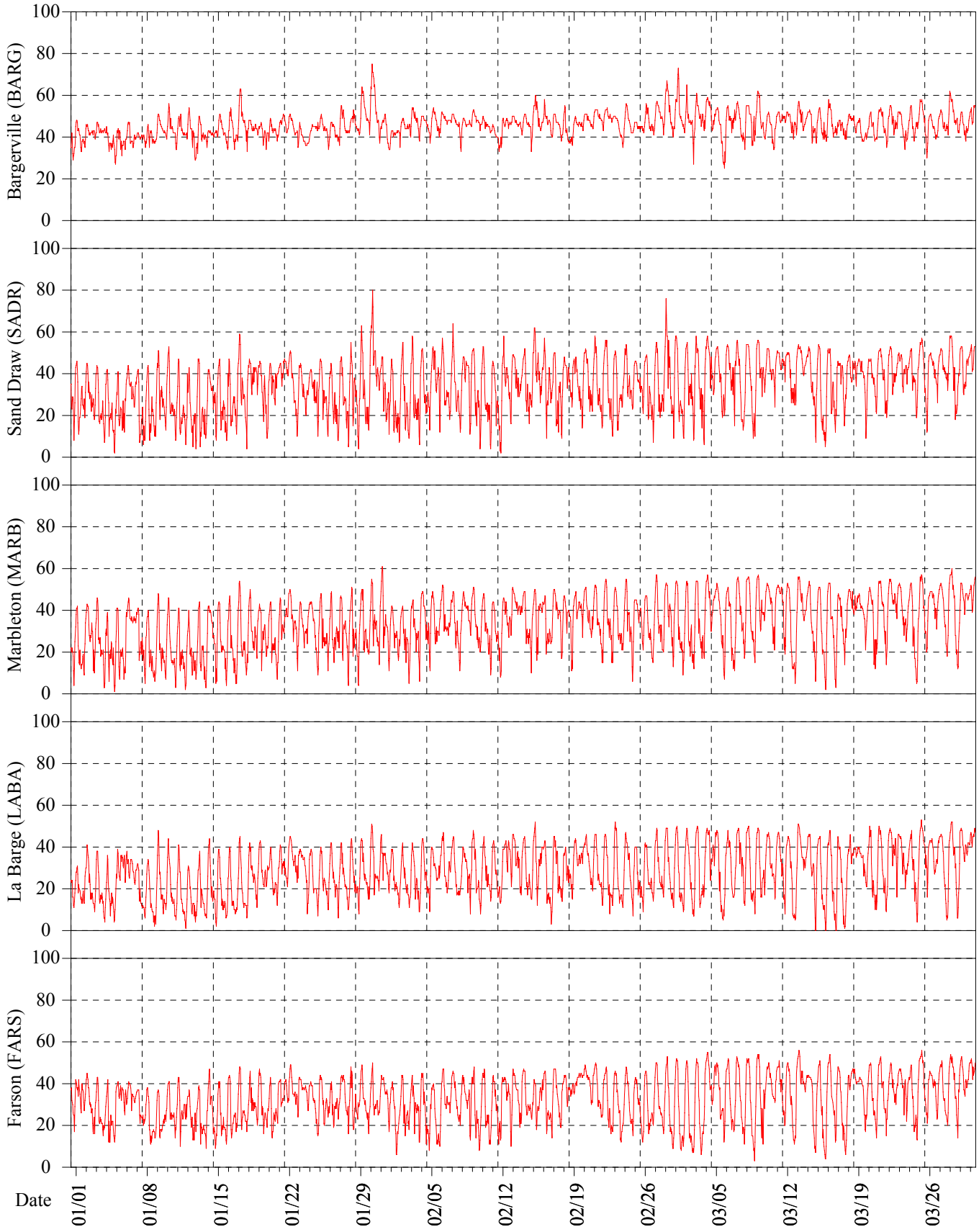
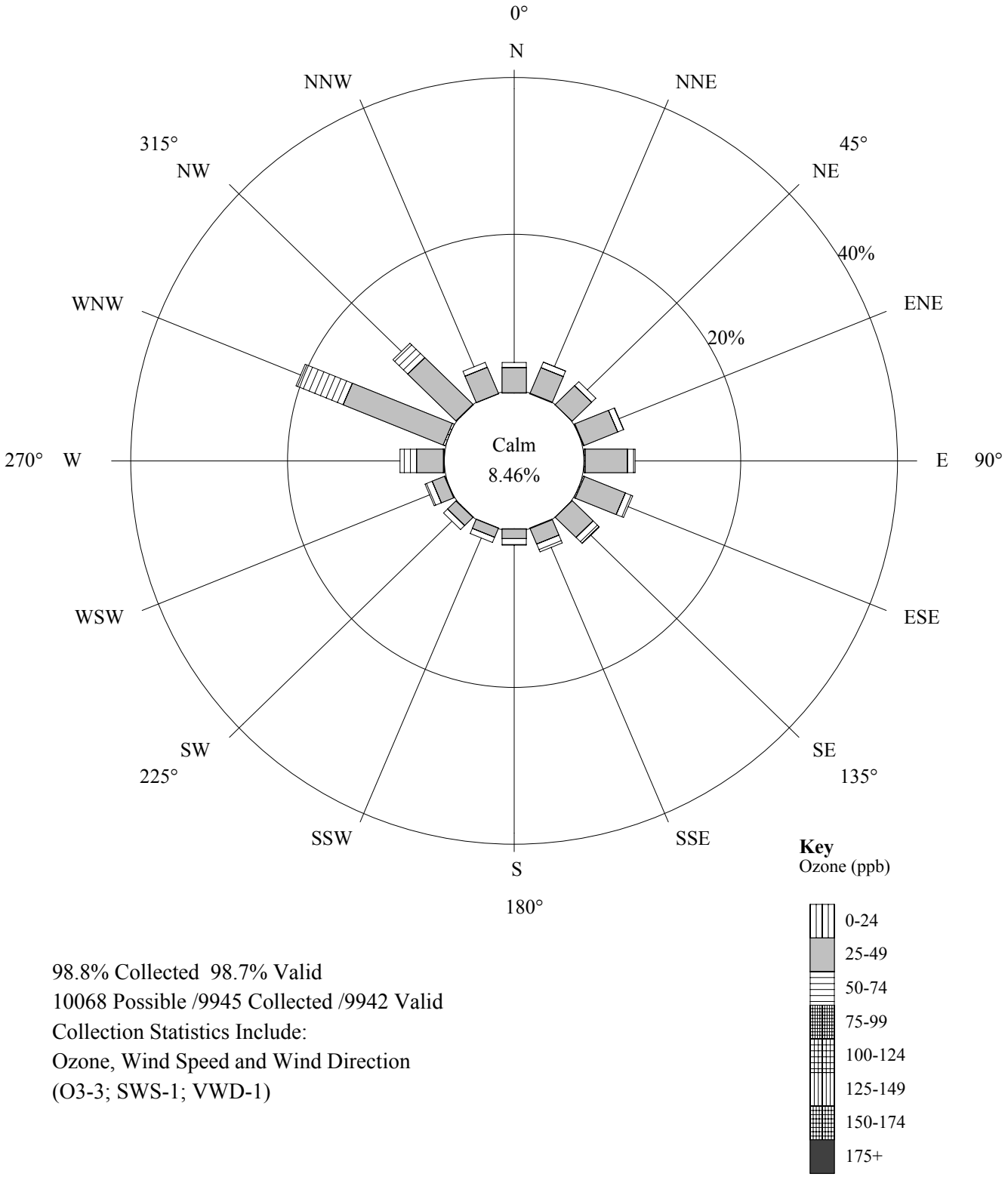


Figure 4-6

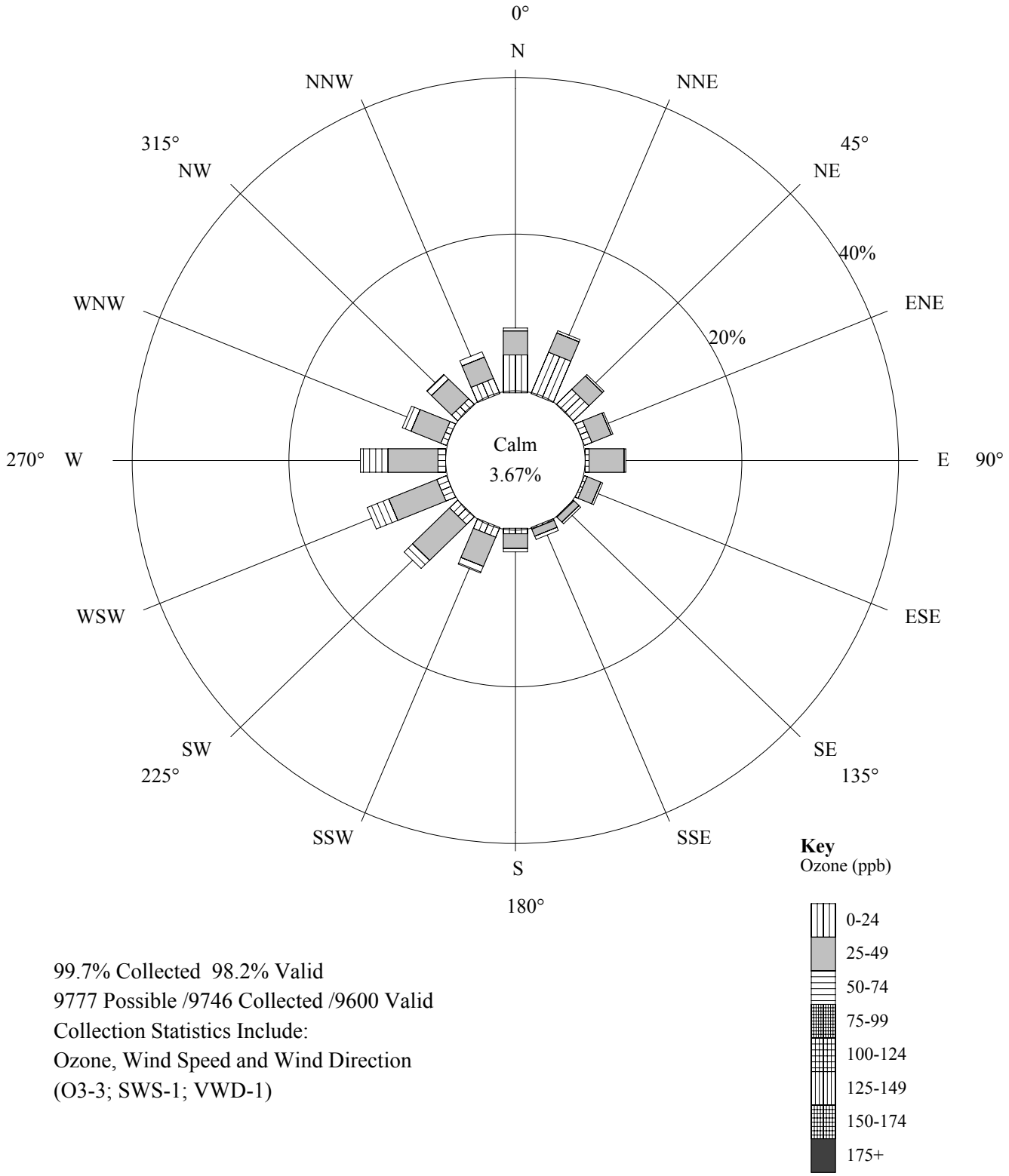
Bargerville - Sublette County - WY | Pollutant Rose Ozone | 02/05/2009 - 03/31/2010



98.8% Collected 98.7% Valid
10068 Possible /9945 Collected /9942 Valid
Collection Statistics Include:
Ozone, Wind Speed and Wind Direction
(O3-3; SWS-1; VWD-1)

Figure 4-7

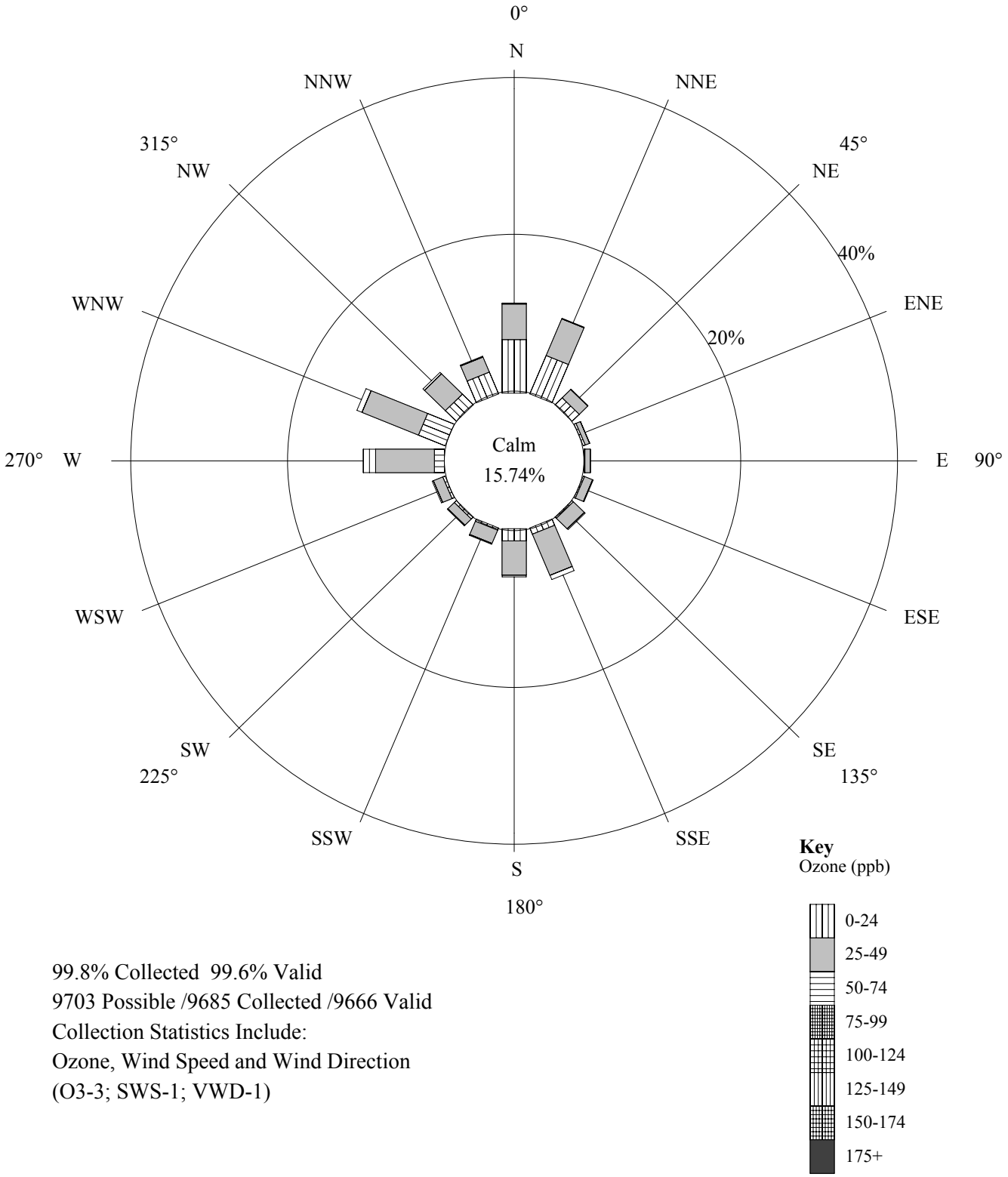
Farson - Sublette County - WY | Pollutant Rose Ozone | 02/17/2009 - 03/31/2010



99.7% Collected 98.2% Valid
9777 Possible /9746 Collected /9600 Valid
Collection Statistics Include:
Ozone, Wind Speed and Wind Direction
(O3-3; SWS-1; VWD-1)

Figure 4-8

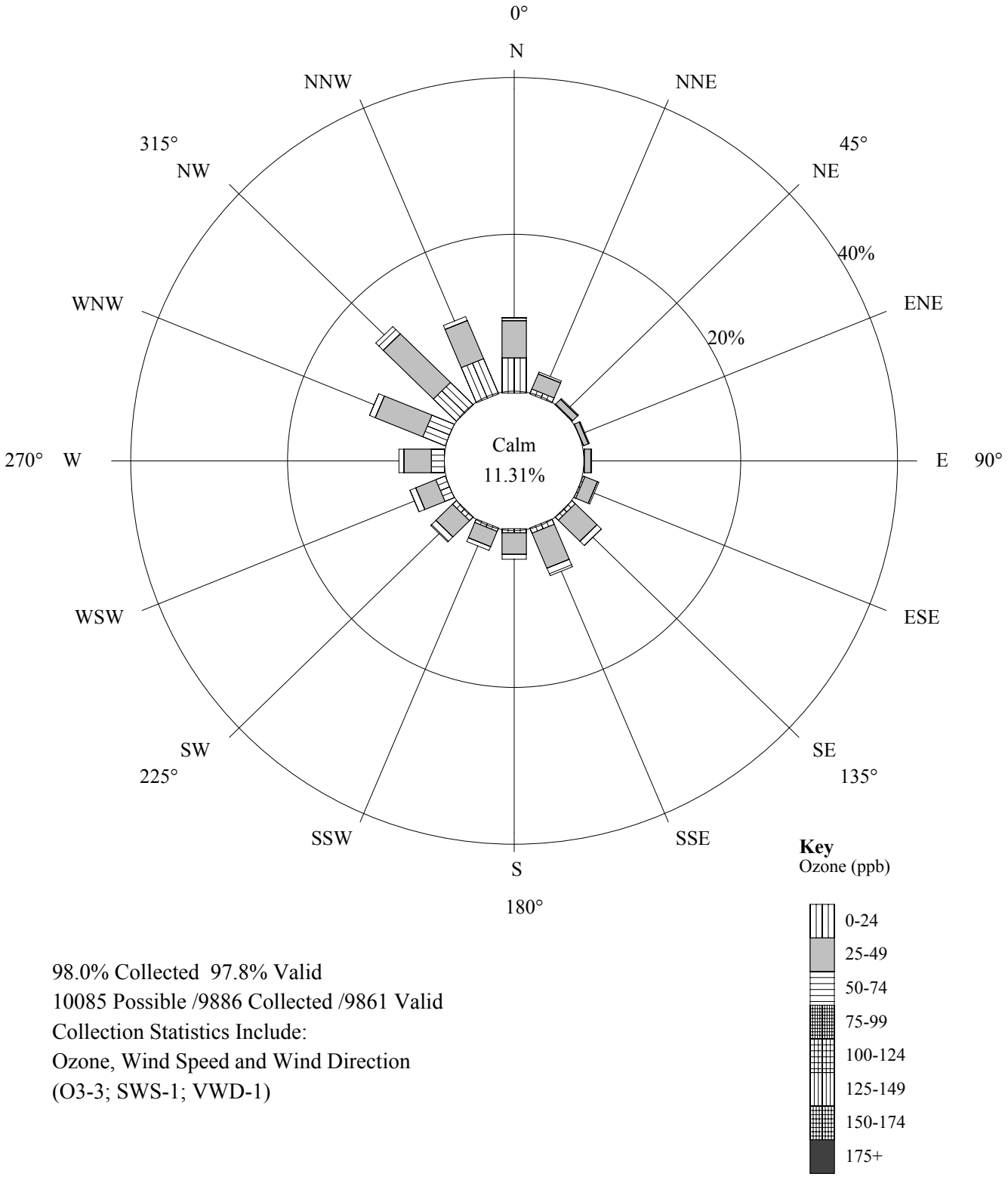
La Barge 1 - Sublette County - WY | Pollutant Rose Ozone | 02/20/2009 - 03/31/2010



99.8% Collected 99.6% Valid
9703 Possible /9685 Collected /9666 Valid
Collection Statistics Include:
Ozone, Wind Speed and Wind Direction
(O3-3; SWS-1; VWD-1)

Figure 4-9

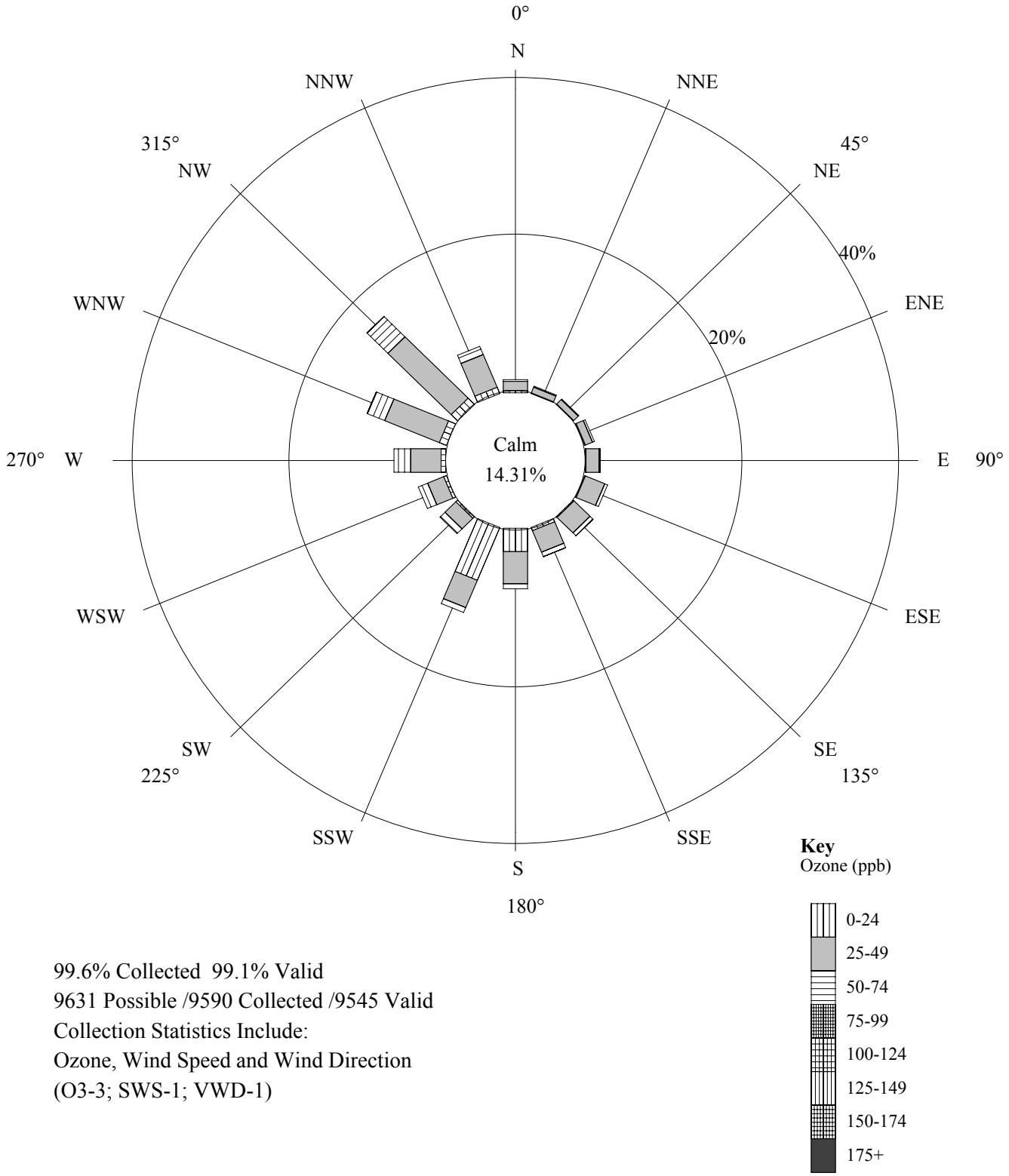
Marbleton - Sublette County - WY | Pollutant Rose Ozone | 02/04/2009 - 03/31/2010



98.0% Collected 97.8% Valid
10085 Possible /9886 Collected /9861 Valid
Collection Statistics Include:
Ozone, Wind Speed and Wind Direction
(O3-3; SWS-1; VWD-1)

Figure 4-10

Sand Draw - Sublette County - WY | Pollutant Rose Ozone | 02/23/2009 - 03/31/2010



99.6% Collected 99.1% Valid
9631 Possible /9590 Collected /9545 Valid
Collection Statistics Include:
Ozone, Wind Speed and Wind Direction
(O3-3; SWS-1; VWD-1)

Figure 4-11

Bargerville - Sublette County - WY | Diurnal Plot Ozone | 02/05/2009 - 03/31/2010

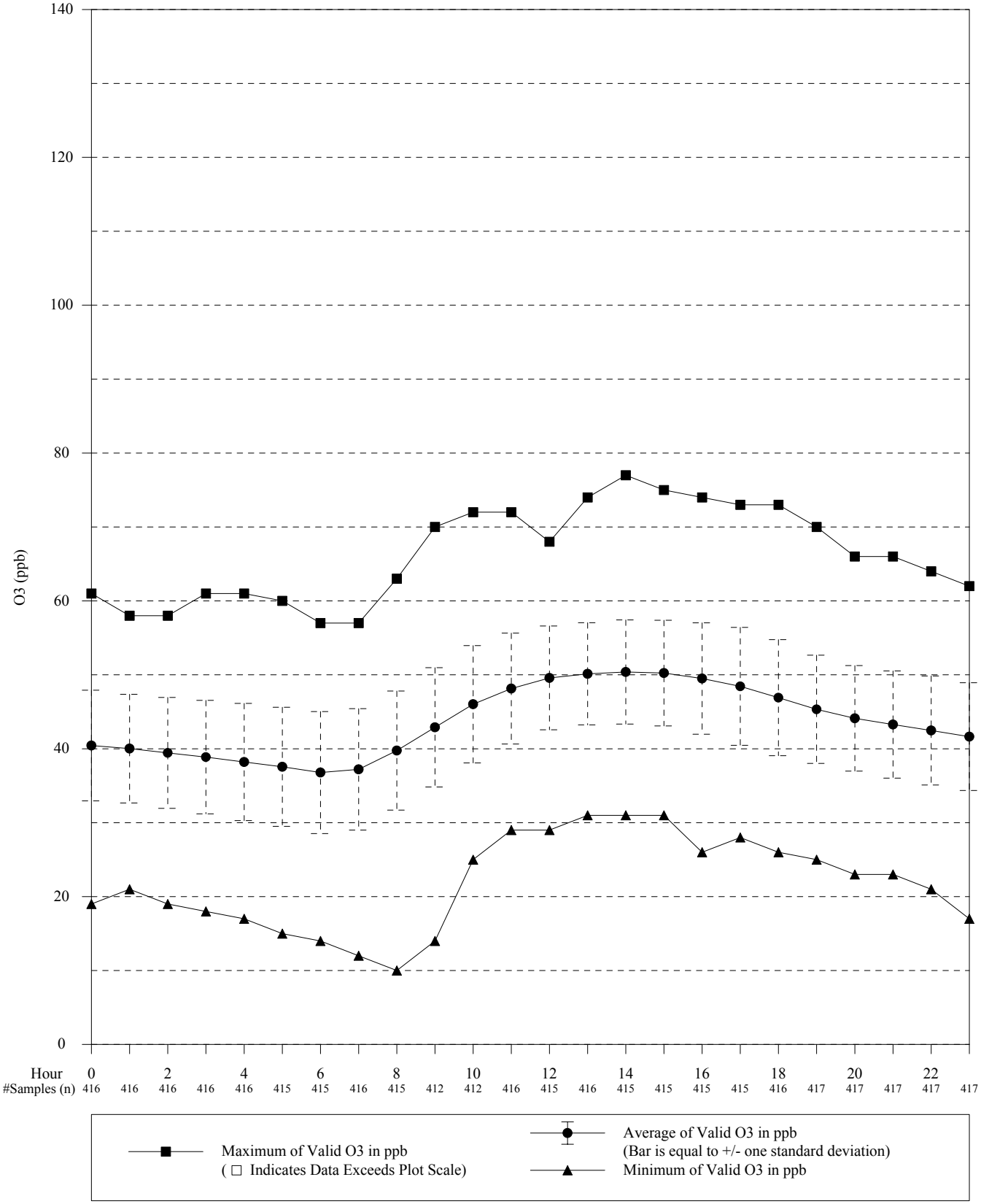


Figure 4-12

Farson - Sublette County - WY | Diurnal Plot Ozone | 02/17/2009 - 03/31/2010

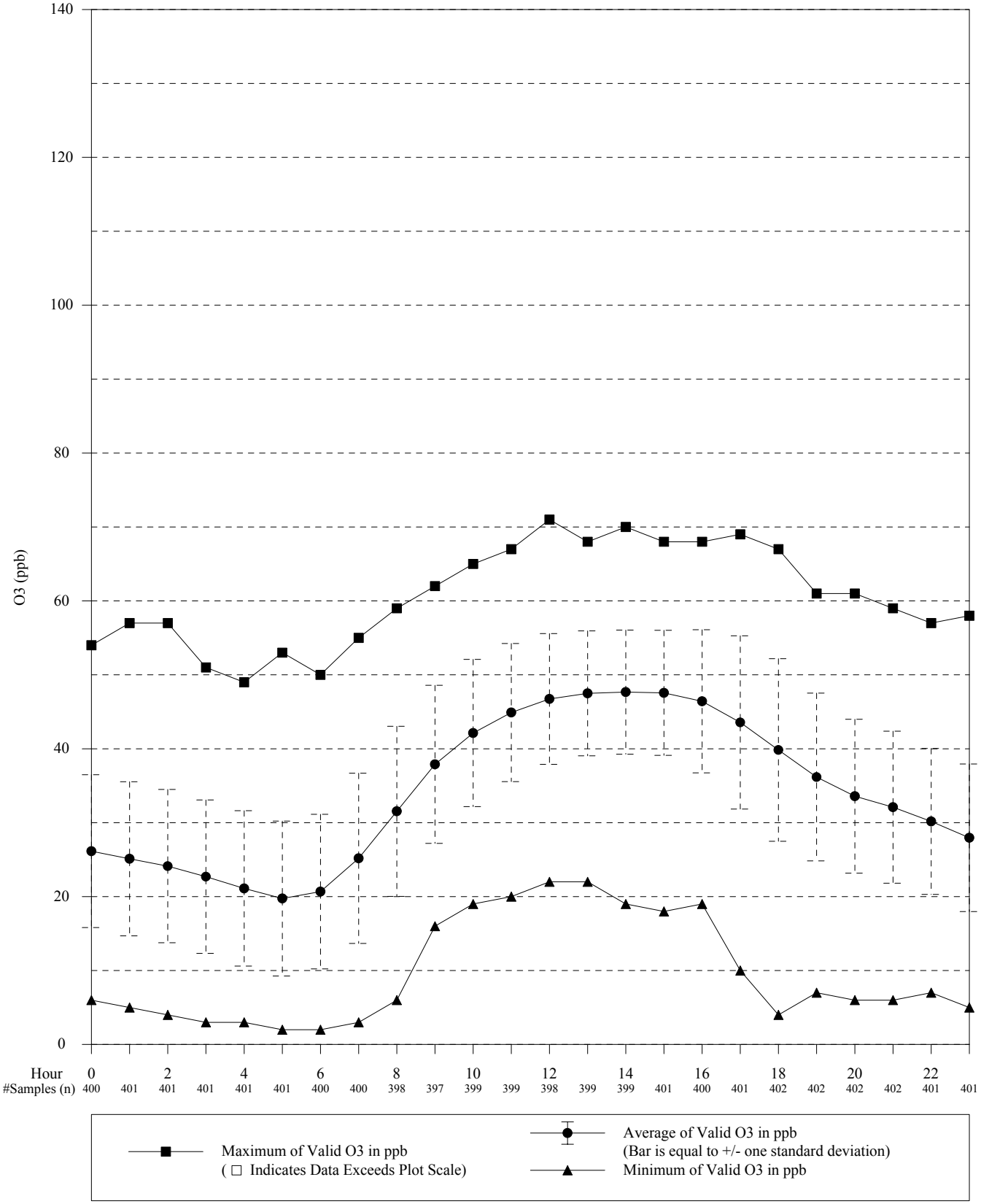


Figure 4-13

La Barge 1 - Sublette County - WY | Diurnal Plot Ozone | 02/20/2009 - 03/31/2010

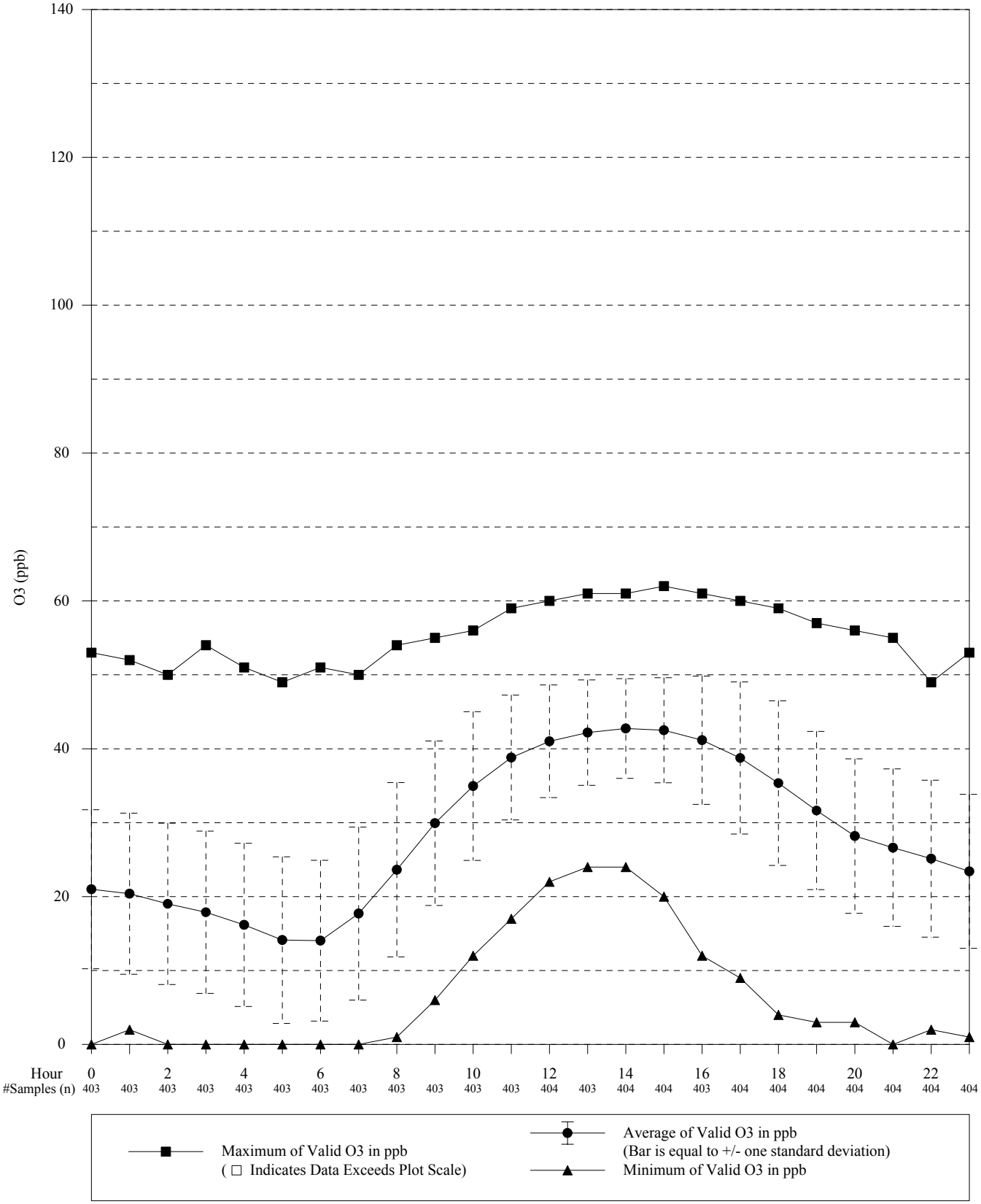
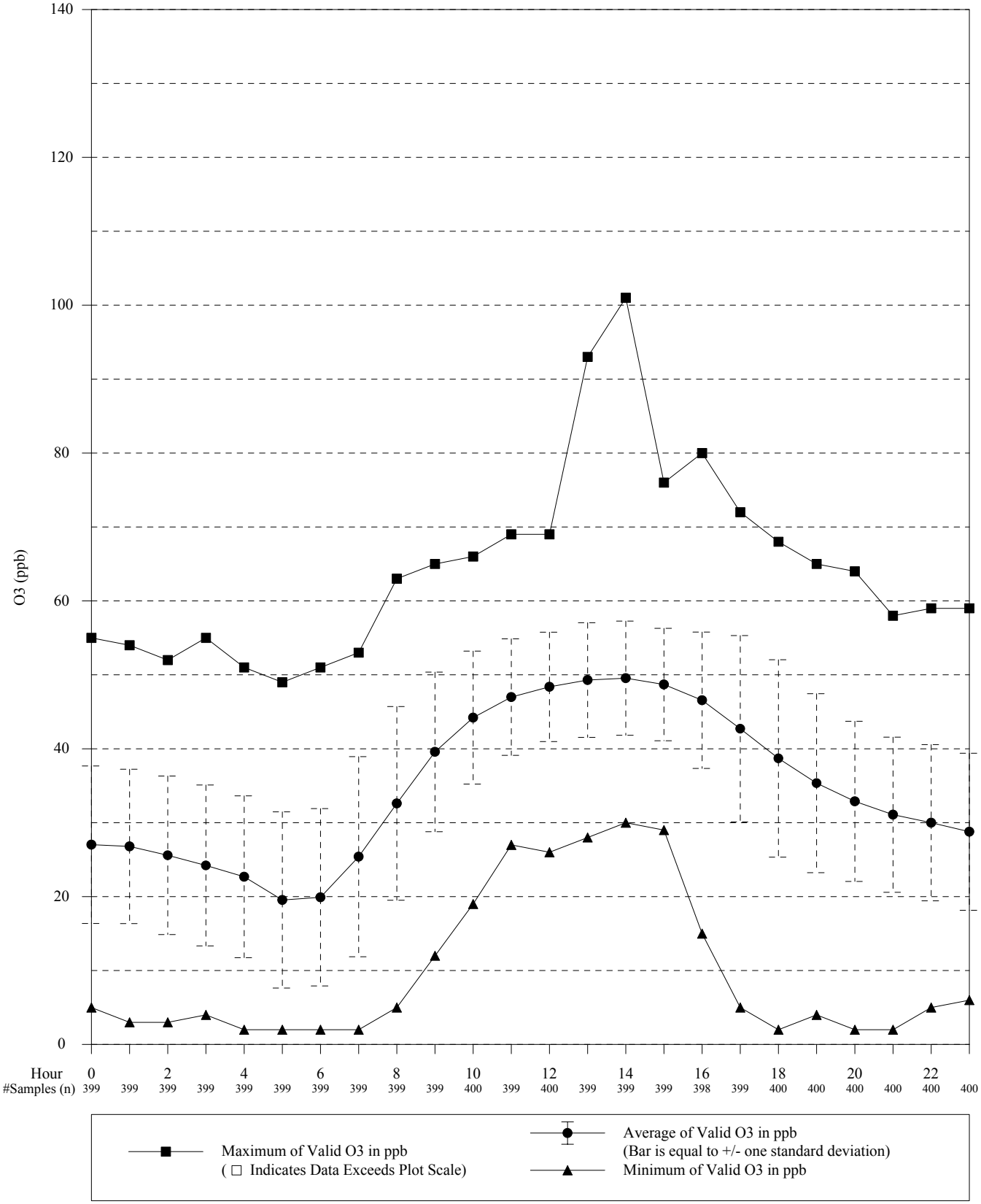


Figure 4-14

Marbleton - Sublette County - WY | Diurnal Plot Ozone | 02/04/2009 - 03/31/2010

Figure 4-15

Sand Draw - Sublette County - WY | Diurnal Plot Ozone | 02/23/2009 - 03/31/2010



4.3 TOXICS SUMMARIES

Air toxics sampling is performed with 6-liter SUMMA® canister and on DNPH-coated sorbent cartridges (for formaldehyde/acetaldehyde). Concentrations are reported as 24-hour samples every sixth day.

Figure 4-16 presents a time series of the sum of canister air toxics parameters, Figure 4-17 presents a time series plots for formaldehyde, and Figure 4-18 presents a time series plot for acetaldehyde.

Appendix E presents site specific summaries for all detected parameters, including number of samples, number of detections, and minimum, maximum and average concentrations by pollutant.

Figure 4-16
Sublette County
Sum of Measured Air Toxics (TO-15) Components by Site
February 2009 - March 2010

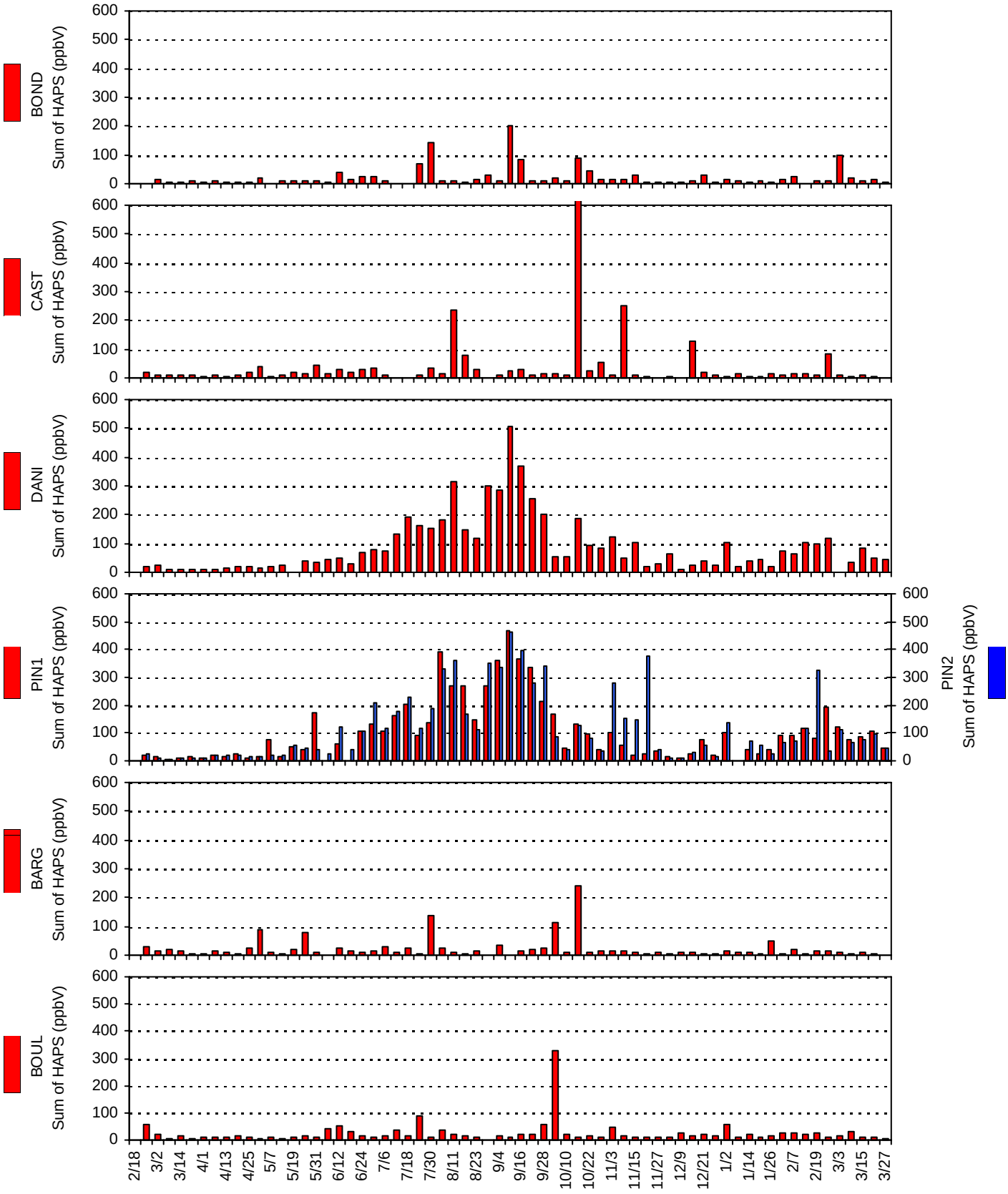


Figure 4-16 (continued)
Sublette County
Sum of Measured Air Toxics (TO-15) Components by Site
February 2009 - March 2010

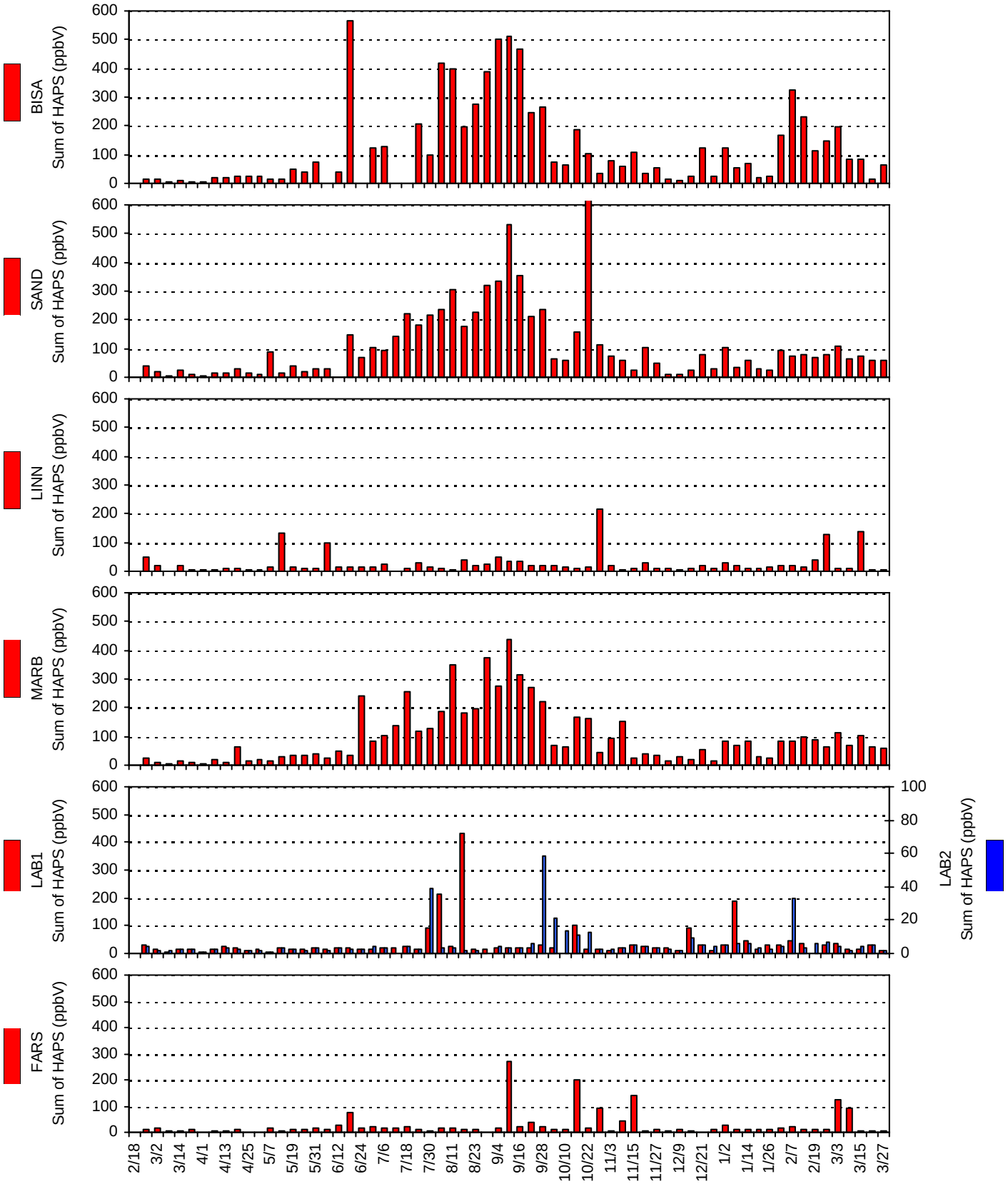


Figure 4-17
Sublette County
Formaldehyde Concentration by Site
February 2009 - March 2010

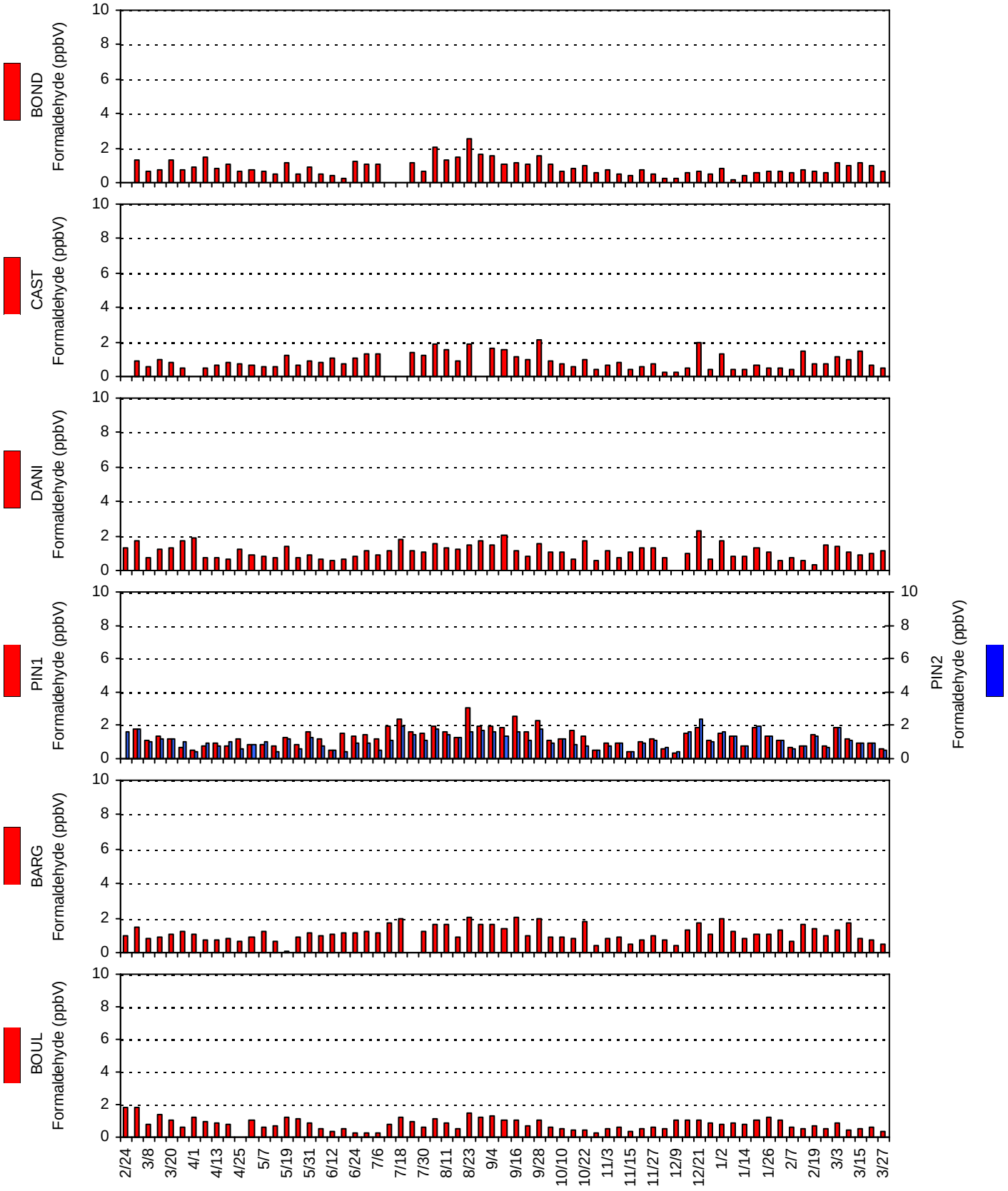


Figure 4-17 (continued)
Sublette County
Formaldehyde Concentration by Site
February 2009 - March 2010

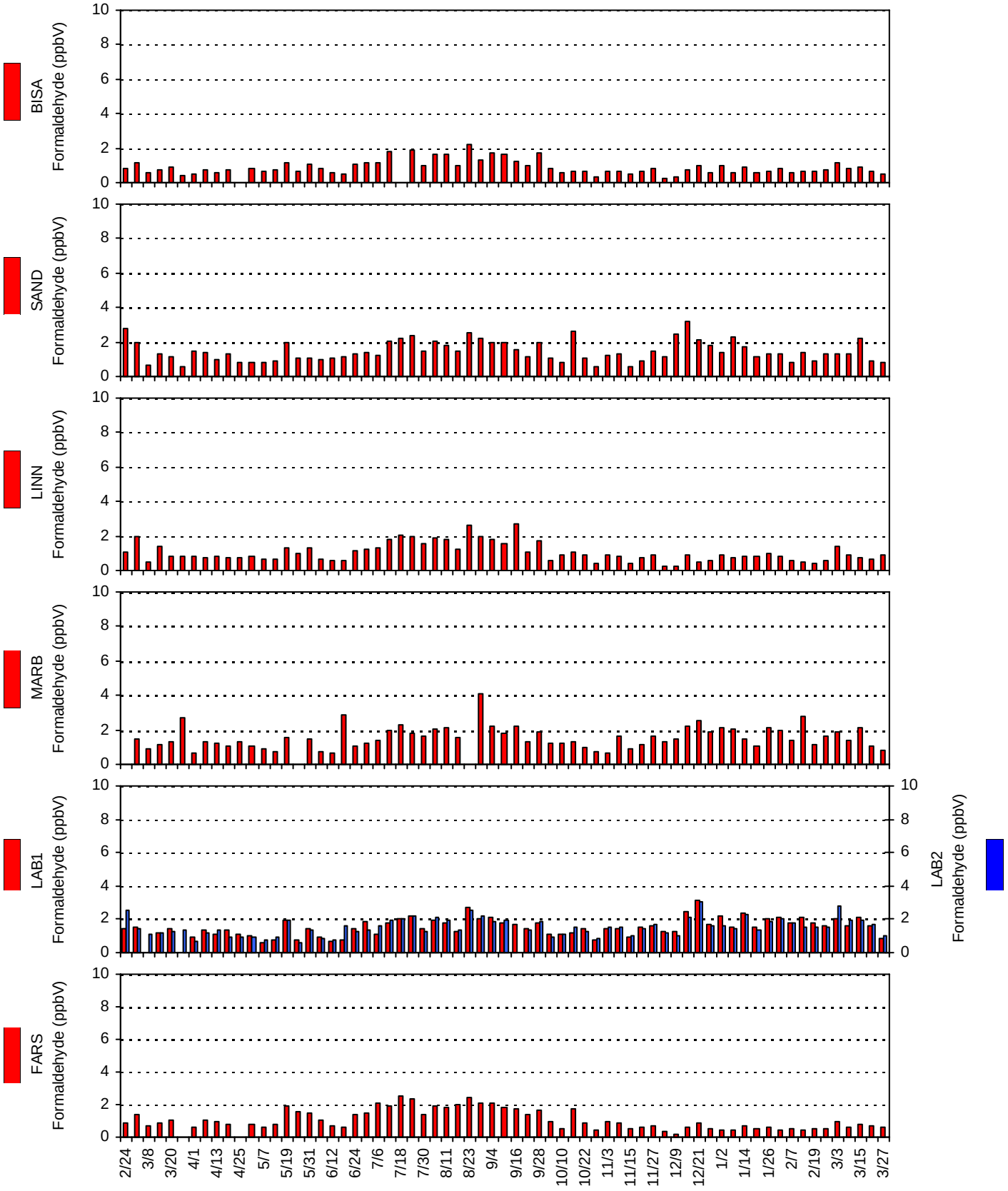


Figure 4-18
Sublette County
Acetaldehyde Concentration by Site
February 2009 - March 2010

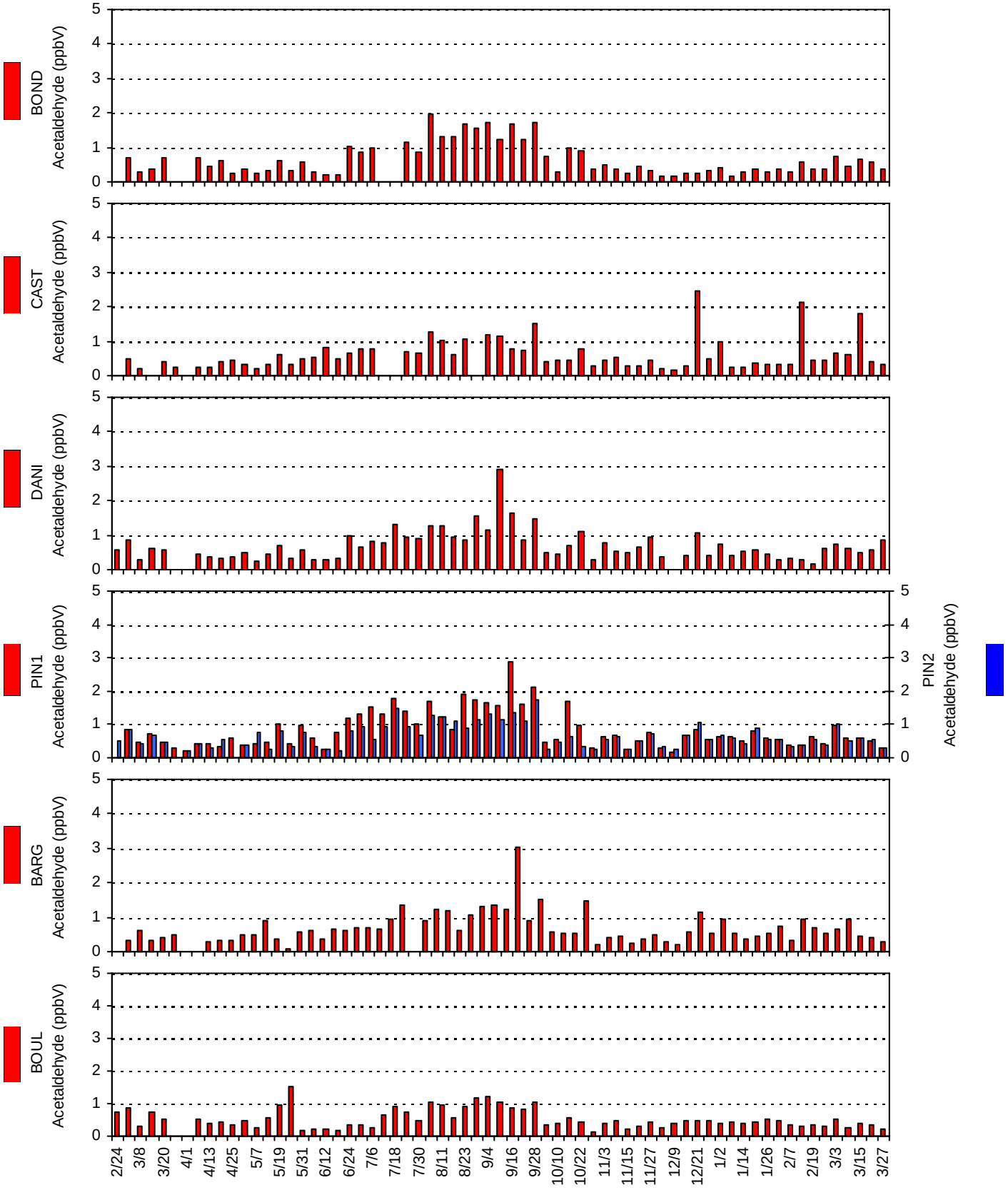
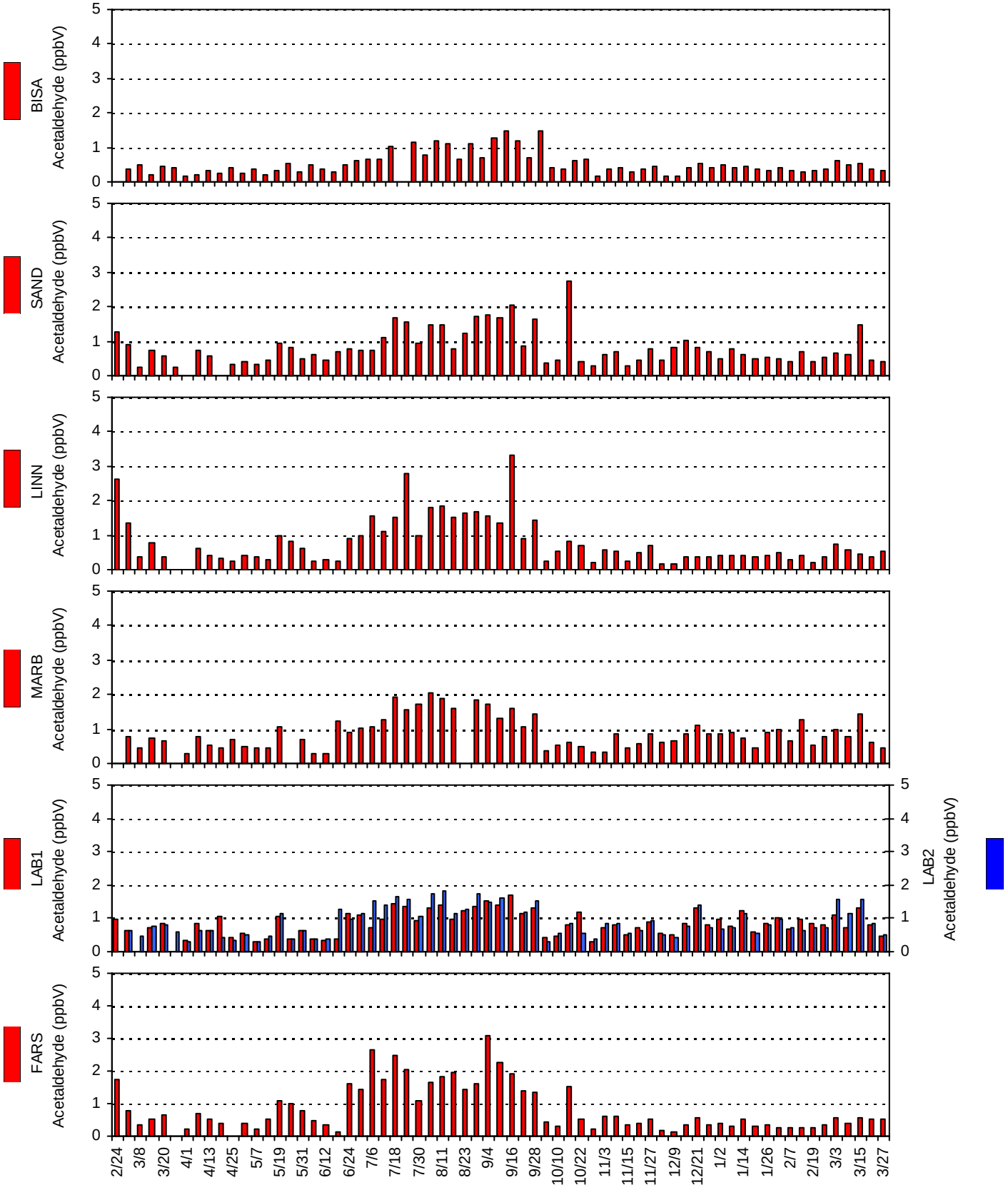


Figure 4-18 (continued)
Sublette County
Acetaldehyde Concentration by Site
February 2009 - March 2010



APPENDIX A

Ozone and Meteorological Time Series Plots

Figure A-1

Bargerville (BARG)
Ozone and Meteorological Data

Jan. - Mar. 2009

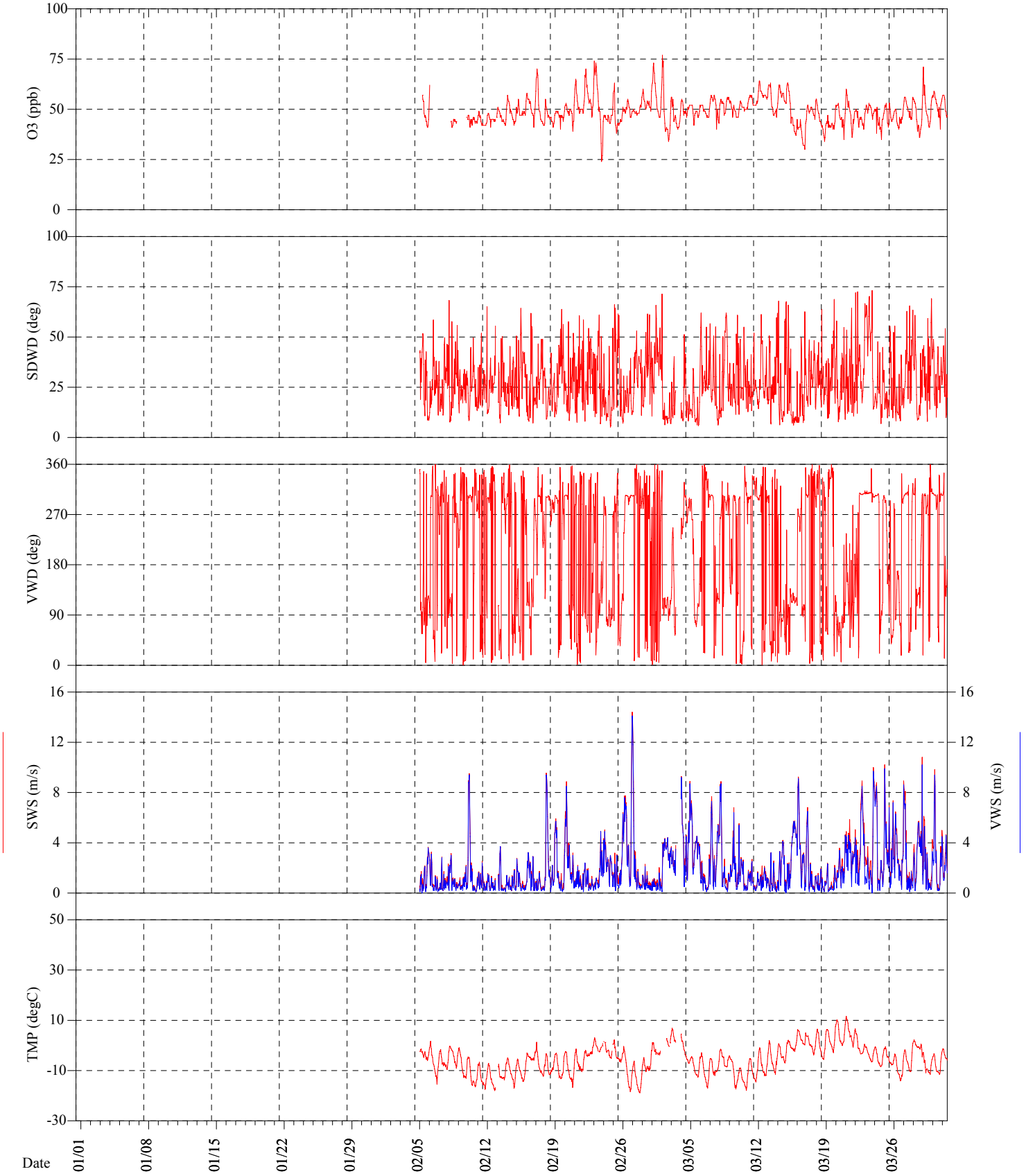


Figure A-2

Bargerville (BARG)
Ozone and Meteorological Data

Apr. - Jun. 2009

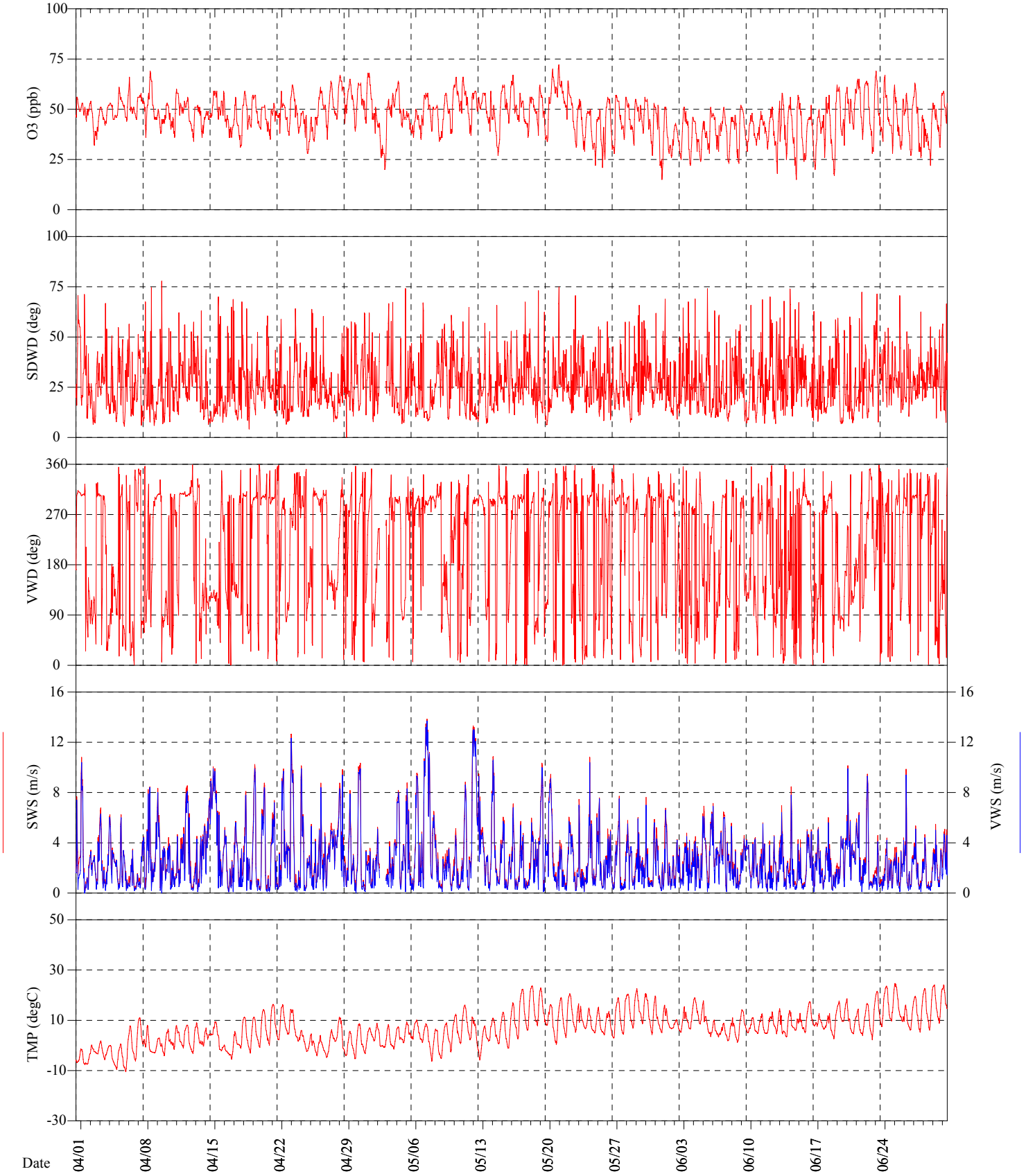


Figure A-3

Bargerville (BARG)
Ozone and Meteorological Data

Jul. - Sep. 2009

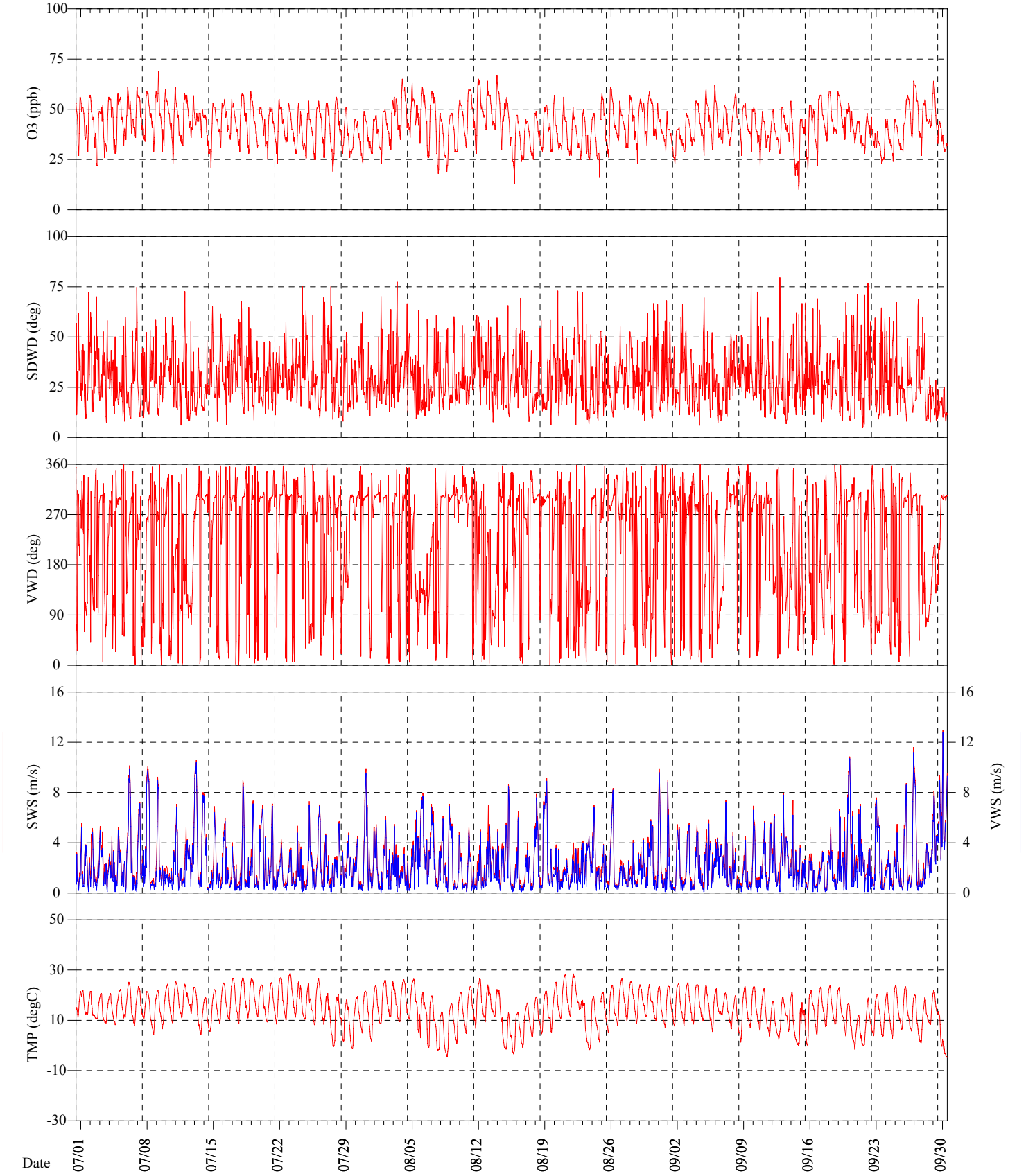


Figure A-4

Bargerville (BARG)
Ozone and Meteorological Data

Oct. - Dec. 2009

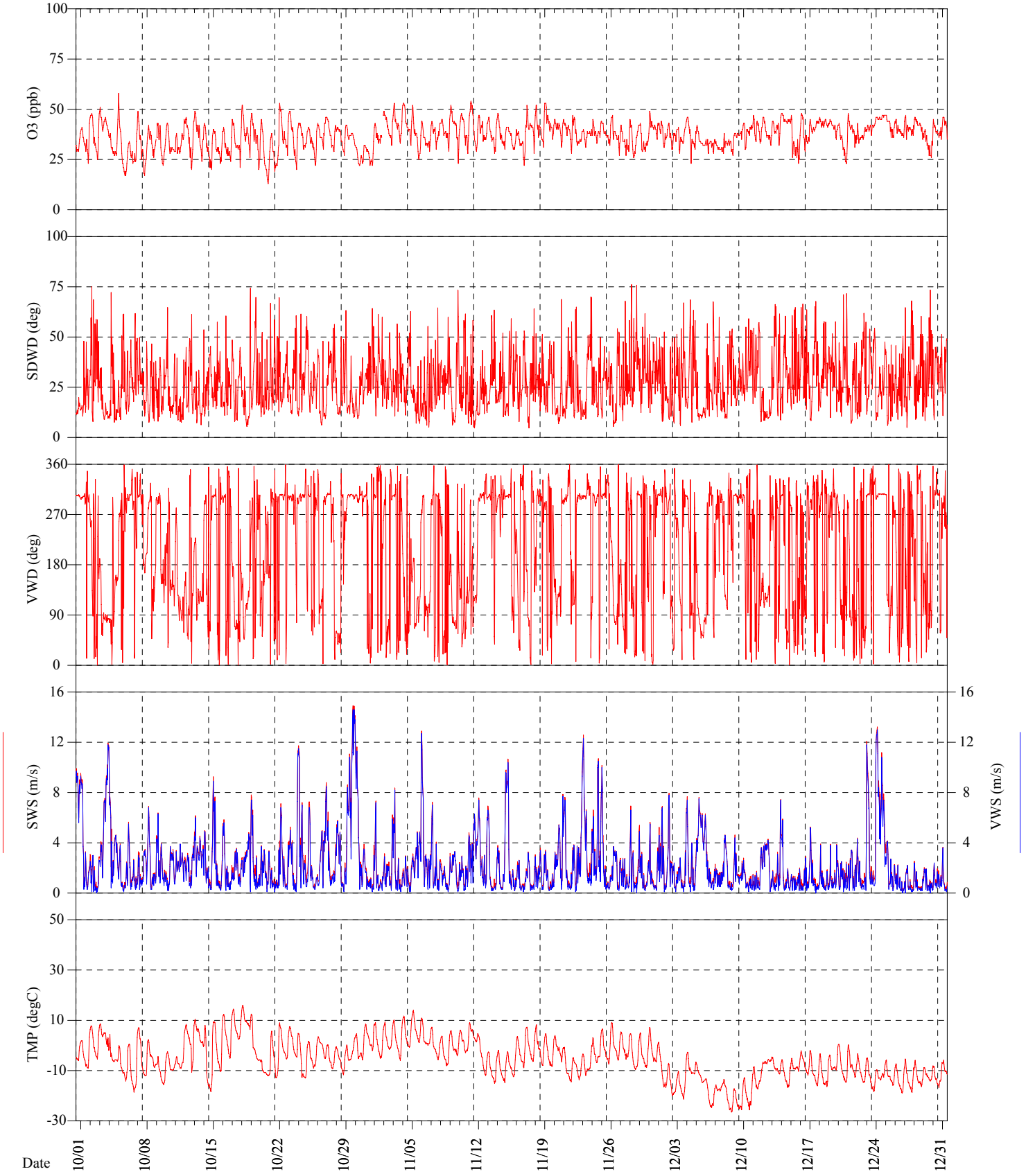


Figure A-5

Bargerville (BARG)
Ozone and Meteorological Data

Jan. - Mar. 2010

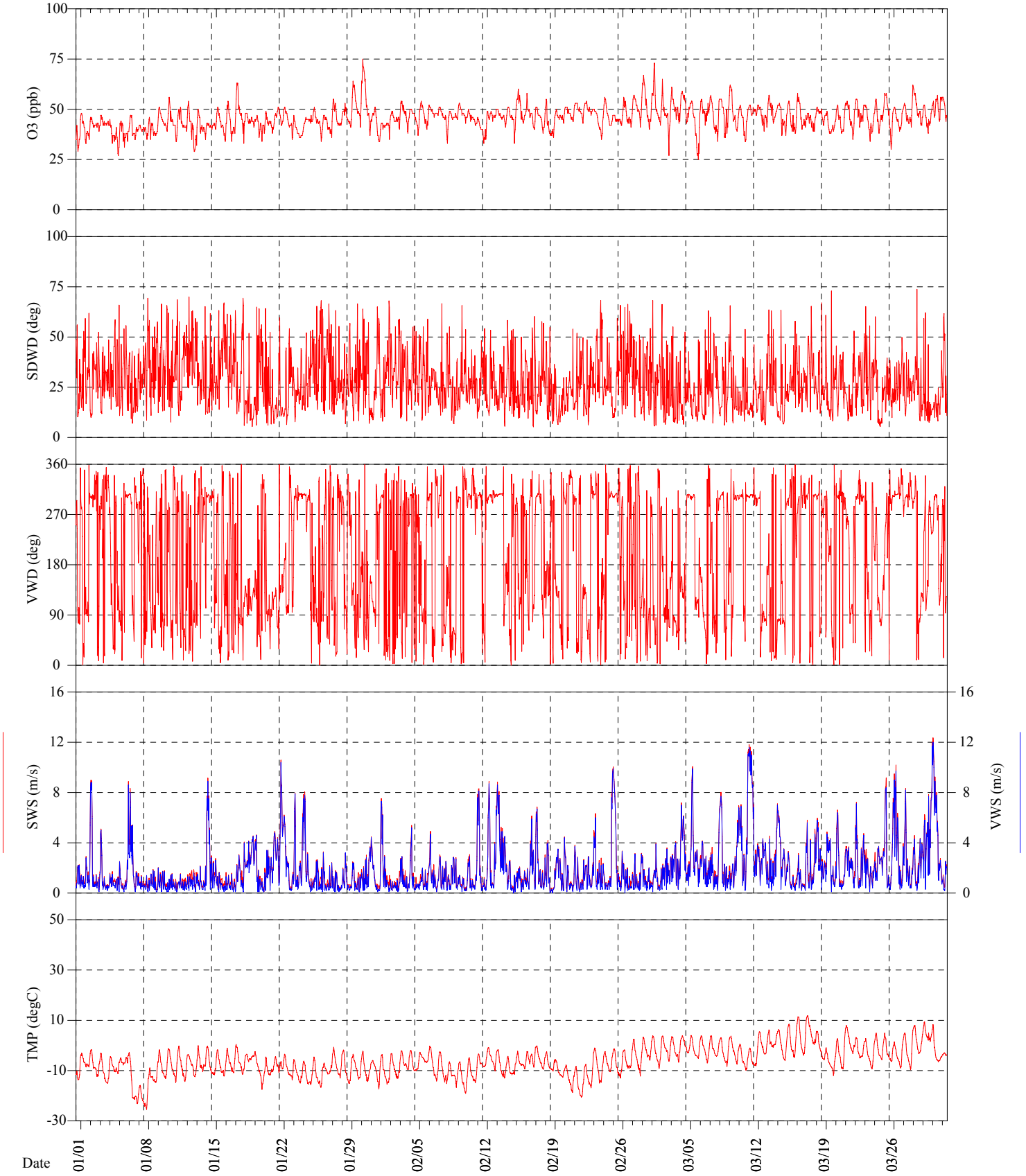


Figure A-6

Big Sandy (BISA)
Meteorological Data

Jan. - Mar. 2009

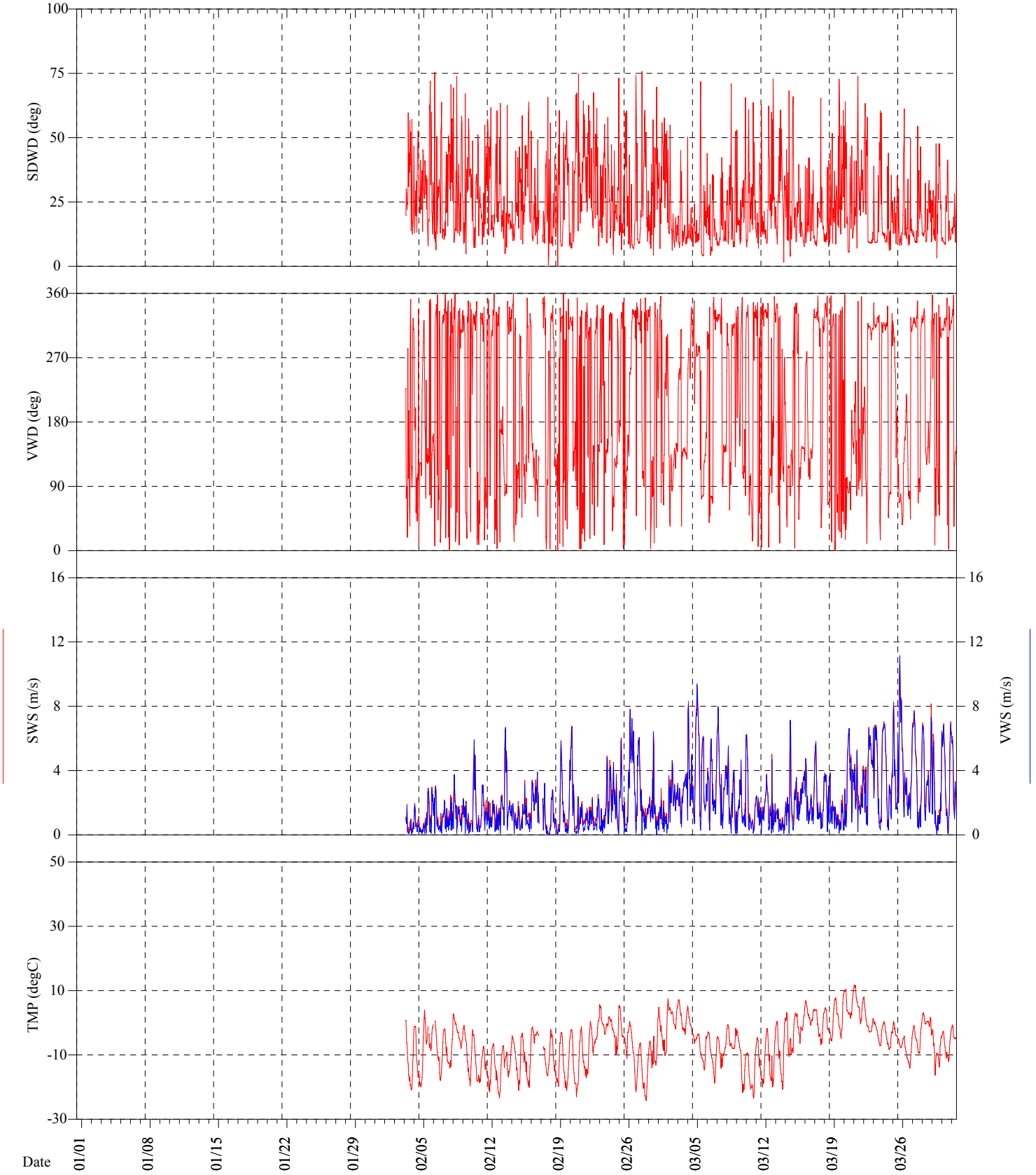


Figure A-7

Big Sandy (BISA)
Meteorological Data

Apr. - Jun. 2009

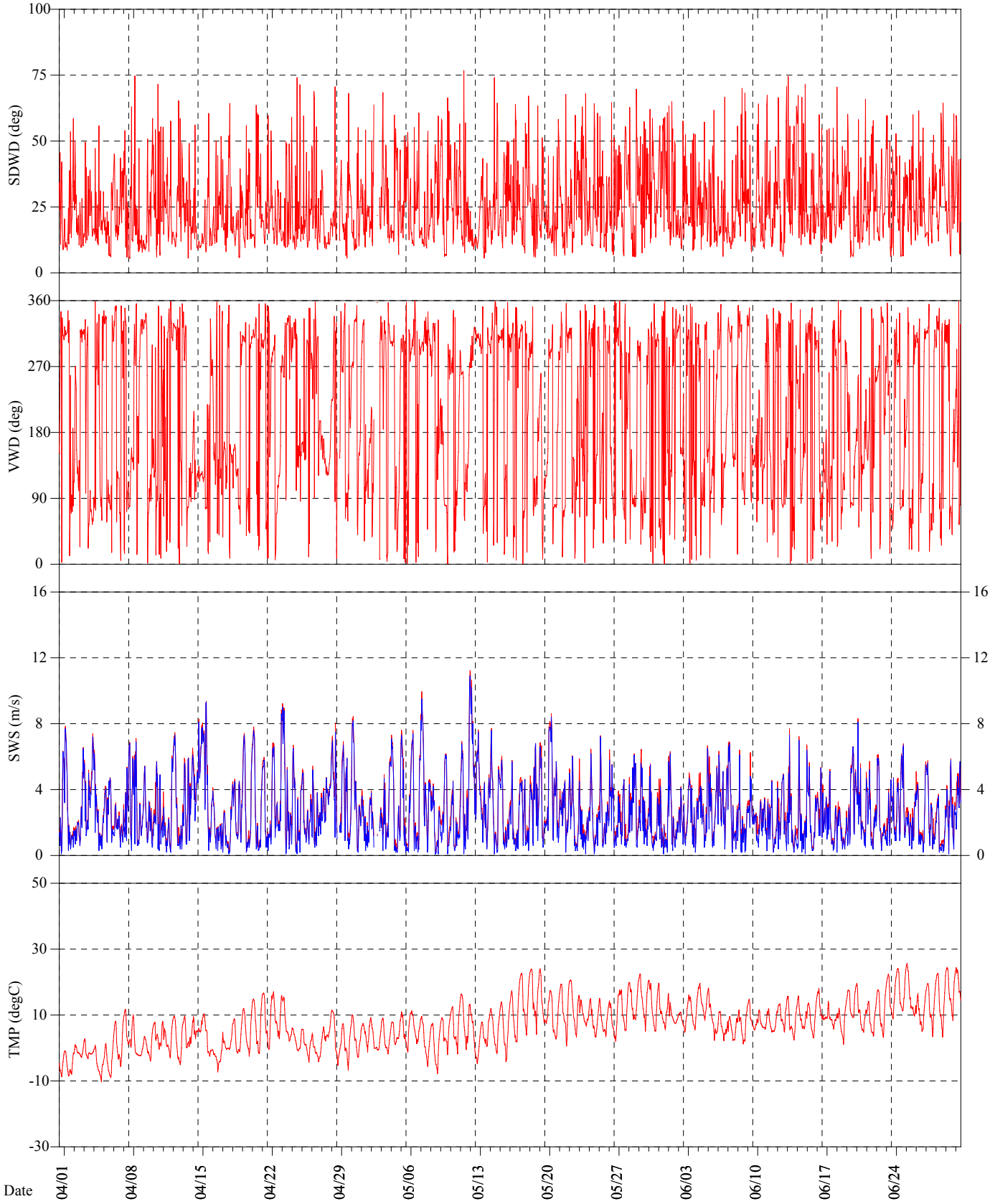


Figure A-8

Big Sandy (BISA)
Meteorological Data

Jul. - Sep. 2009

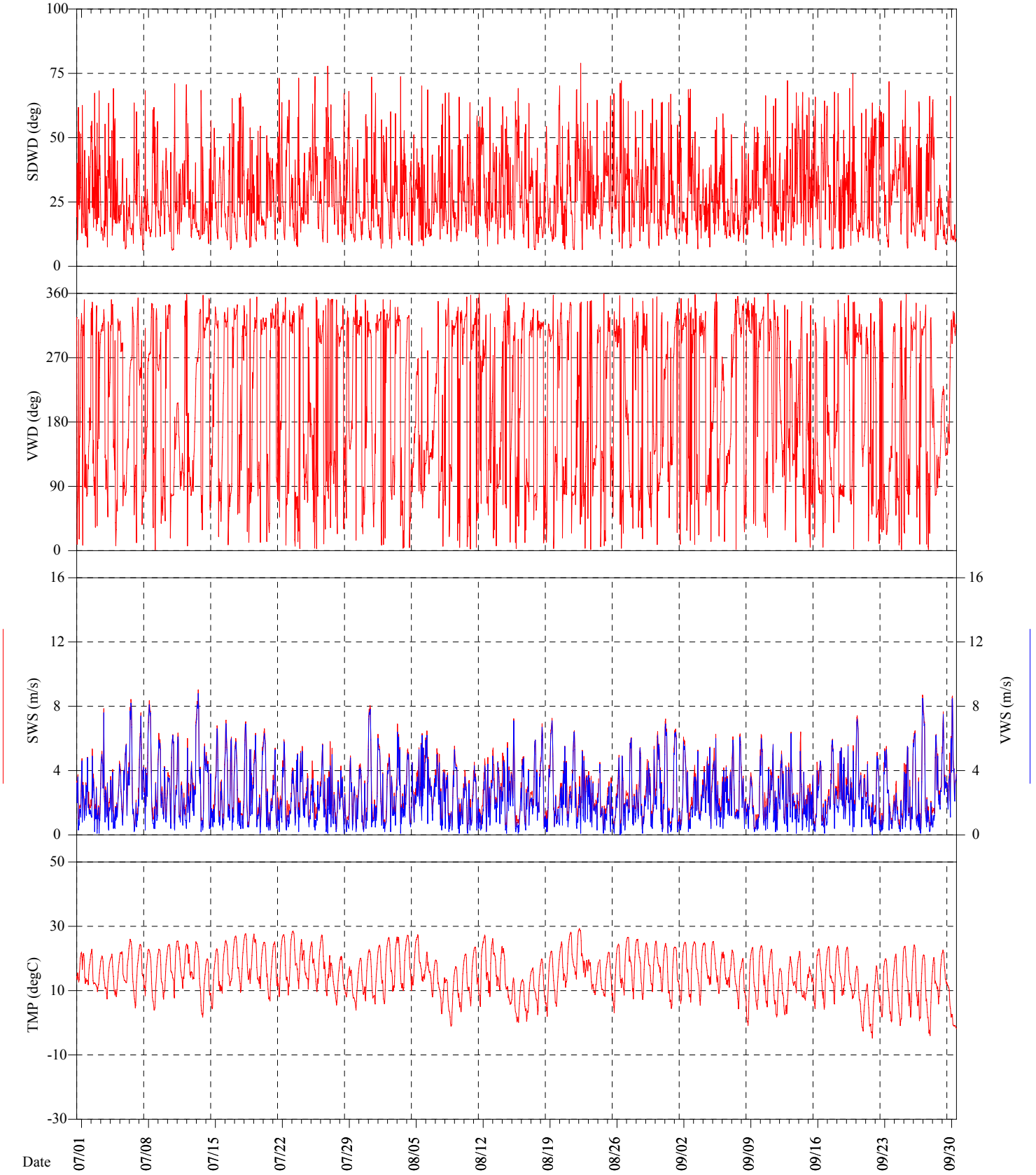


Figure A-9

Big Sandy (BISA)
Meteorological Data

Oct. - Dec. 2009

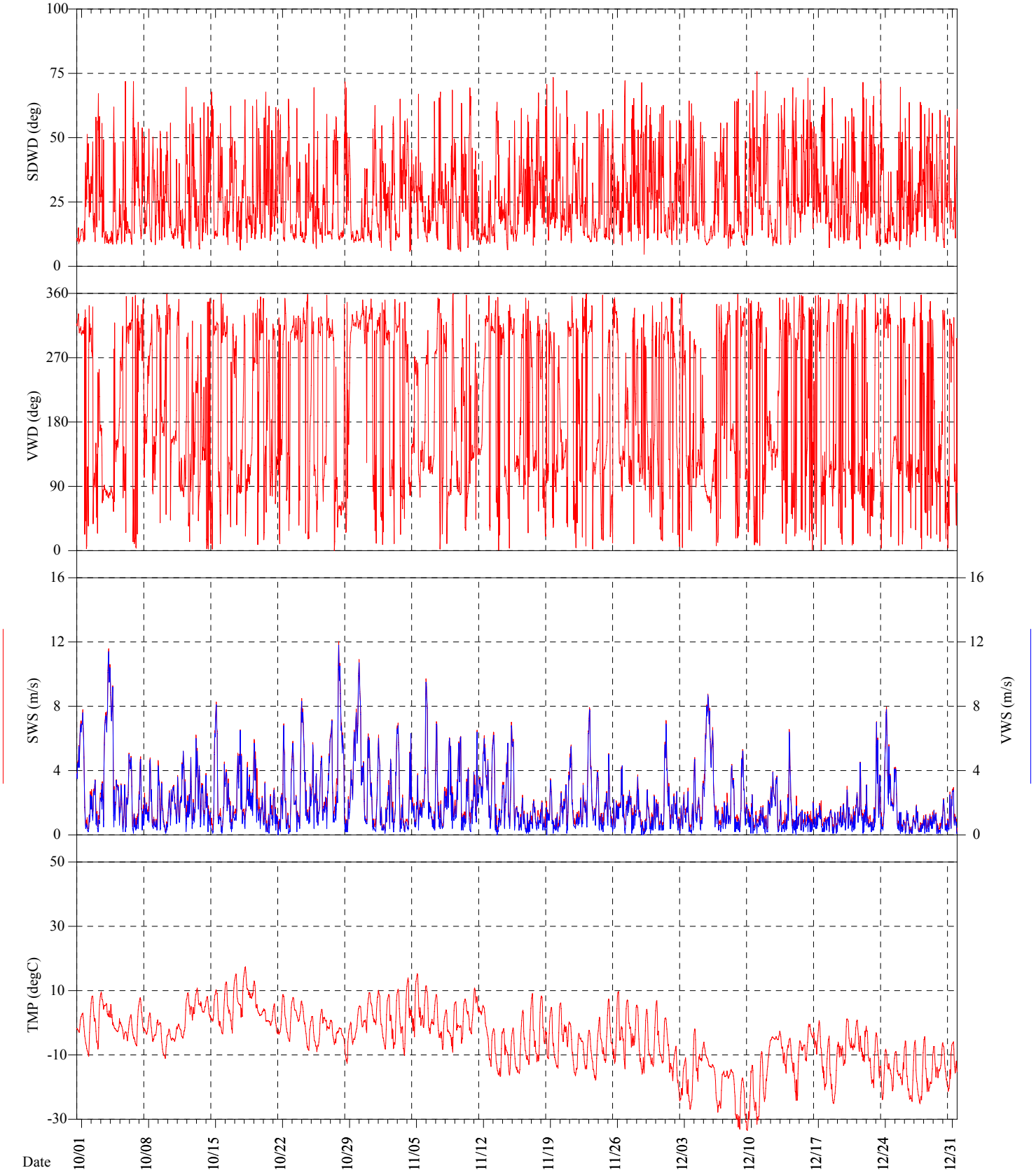


Figure A-10

Big Sandy (BISA)
Meteorological Data

Jan. - Mar. 2010

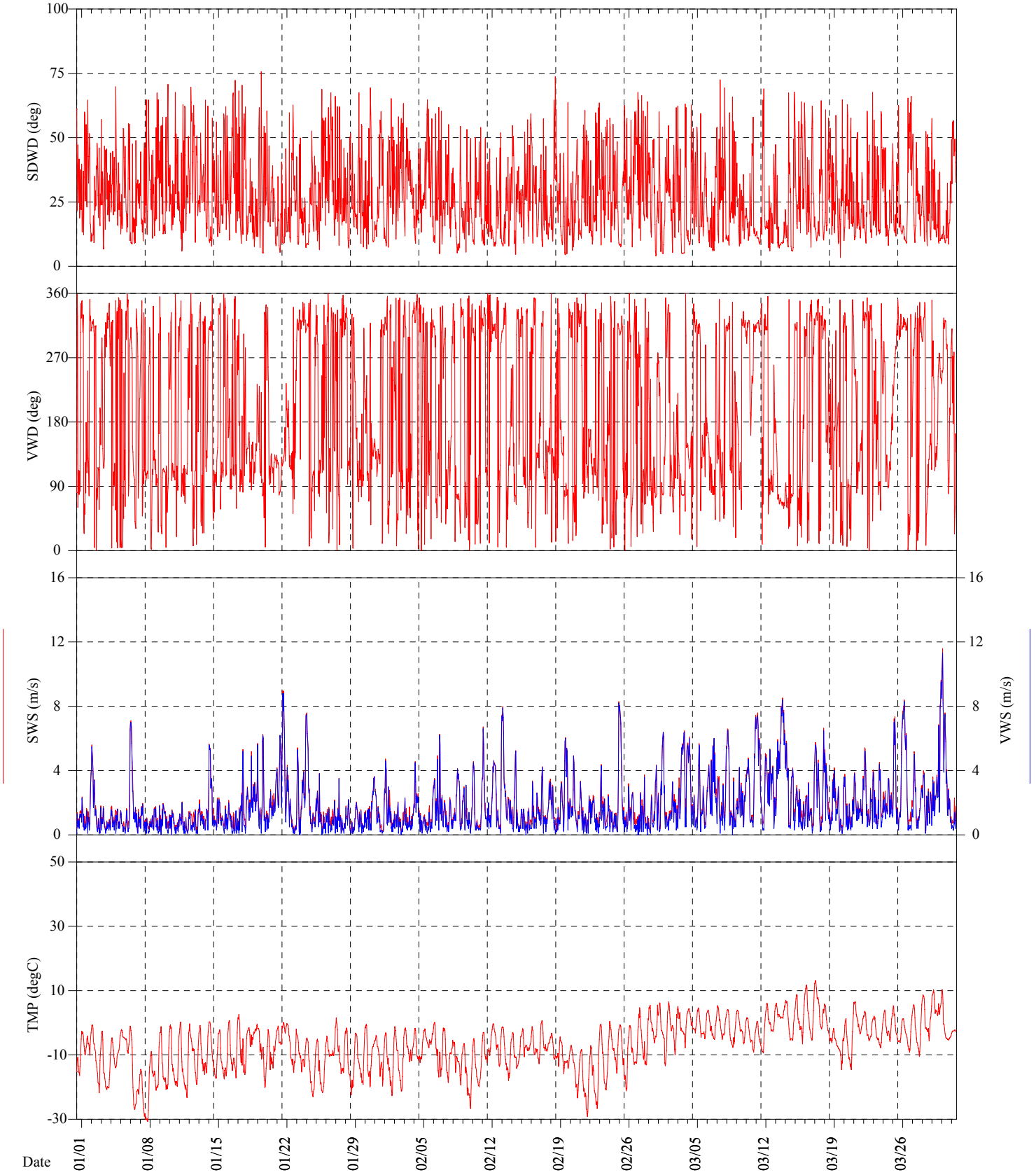


Figure A-11

Bondurant (BOND)
Meteorological Data

Jan. - Mar. 2009

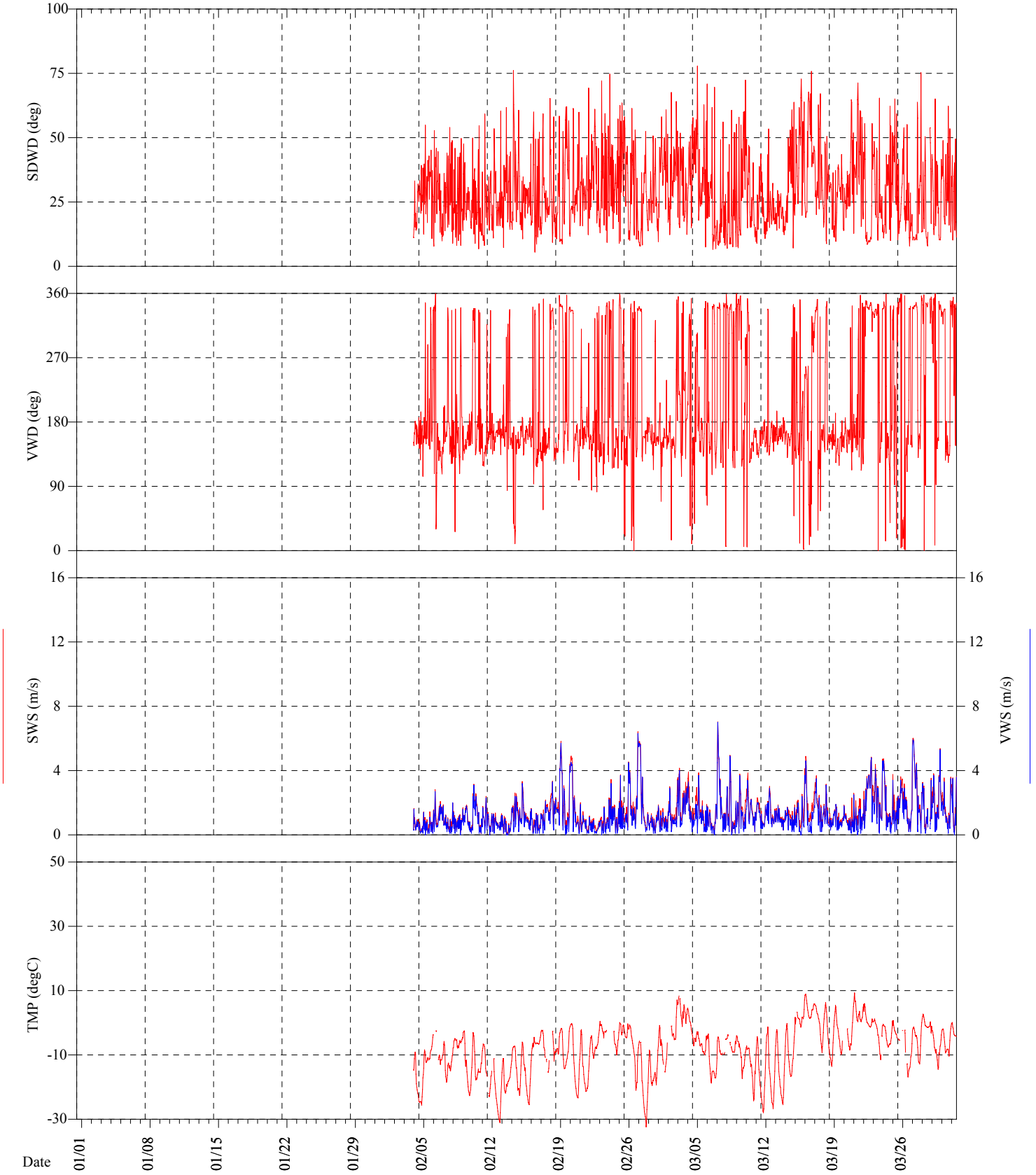


Figure A-12

Bondurant (BOND)
Meteorological Data

Apr. - Jun. 2009

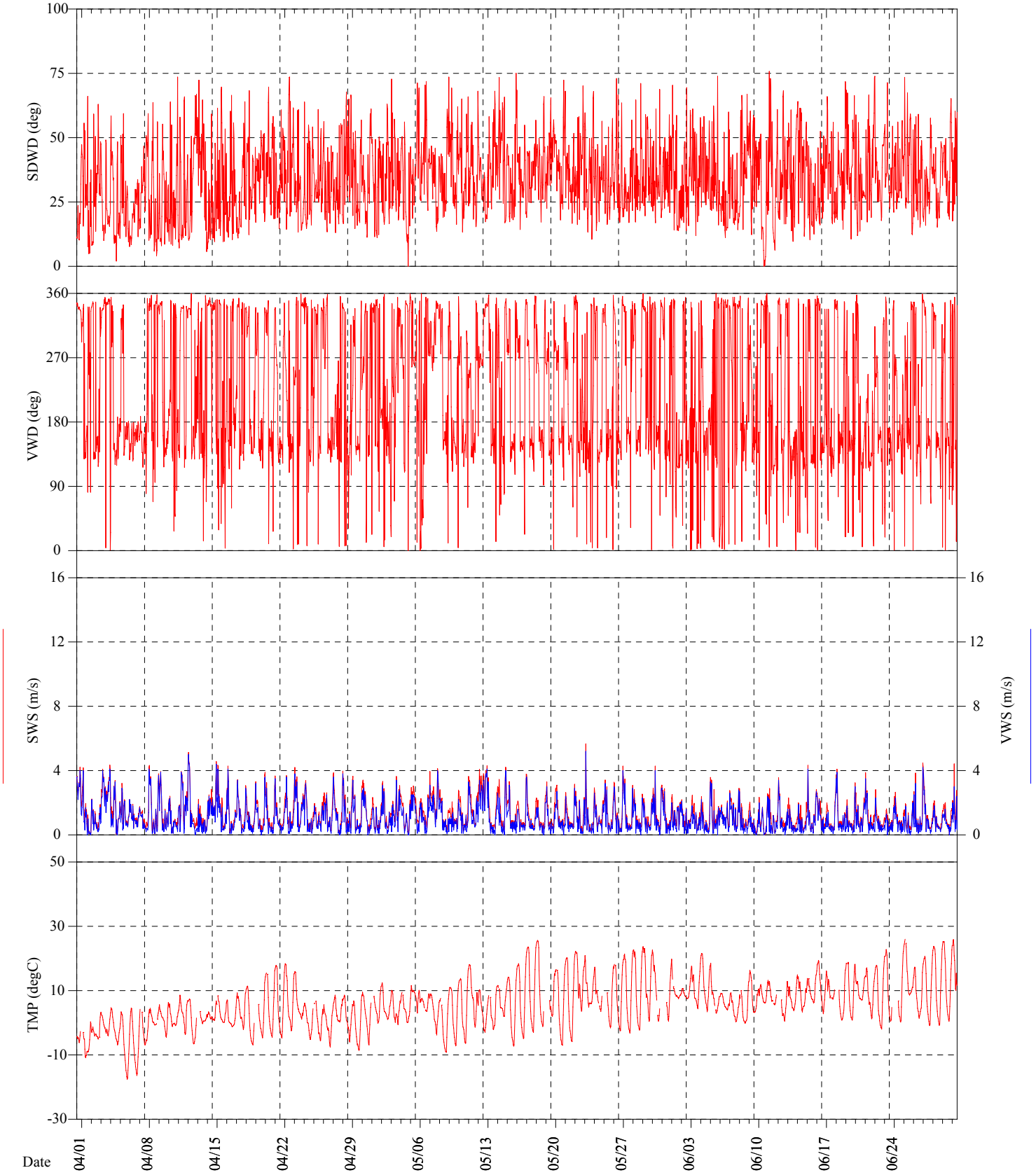


Figure A-13

Bondurant (BOND)
Meteorological Data

Jul. - Sep. 2009

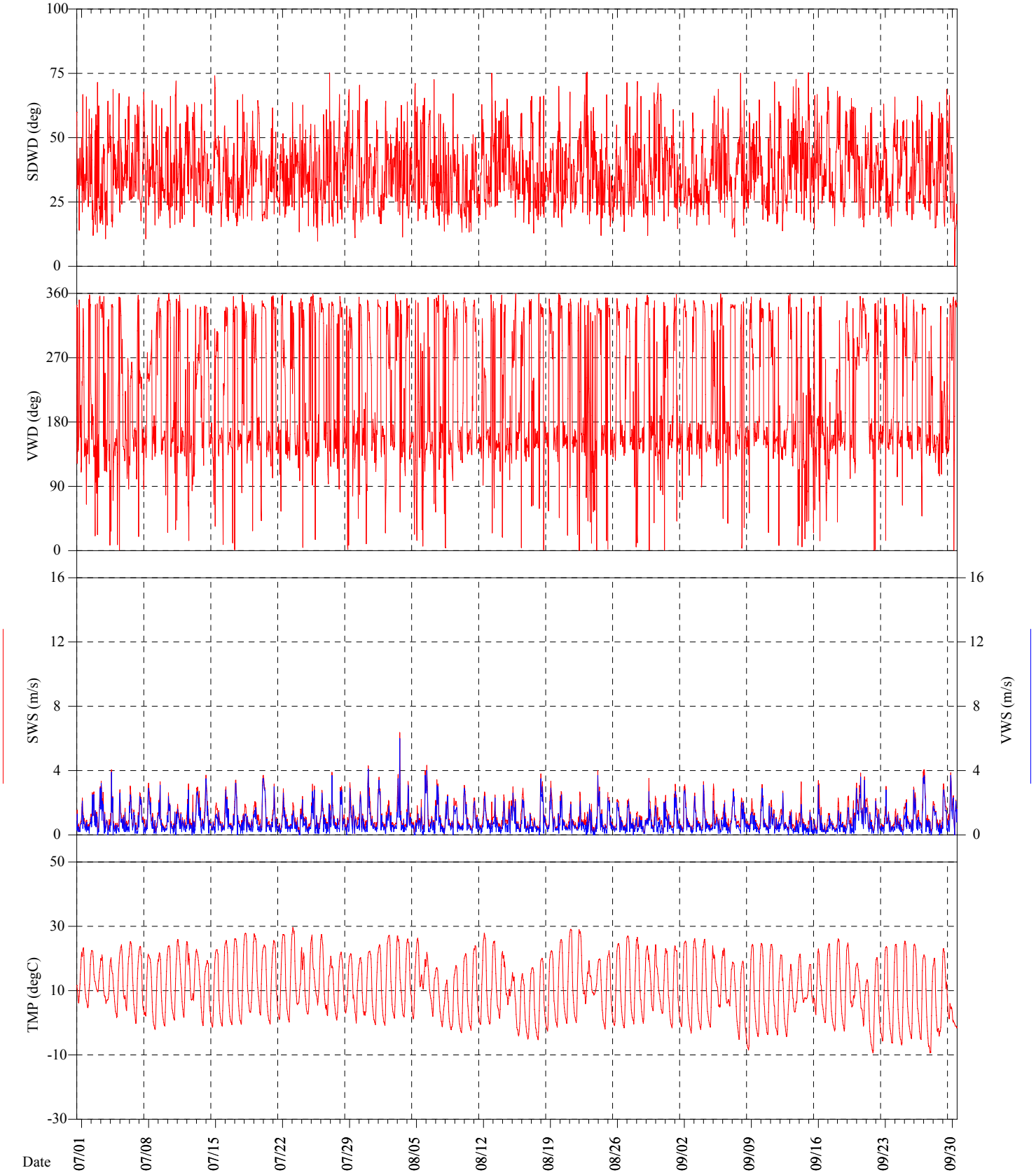


Figure A-14

Bondurant (BOND)
Meteorological Data

Oct. - Dec. 2009

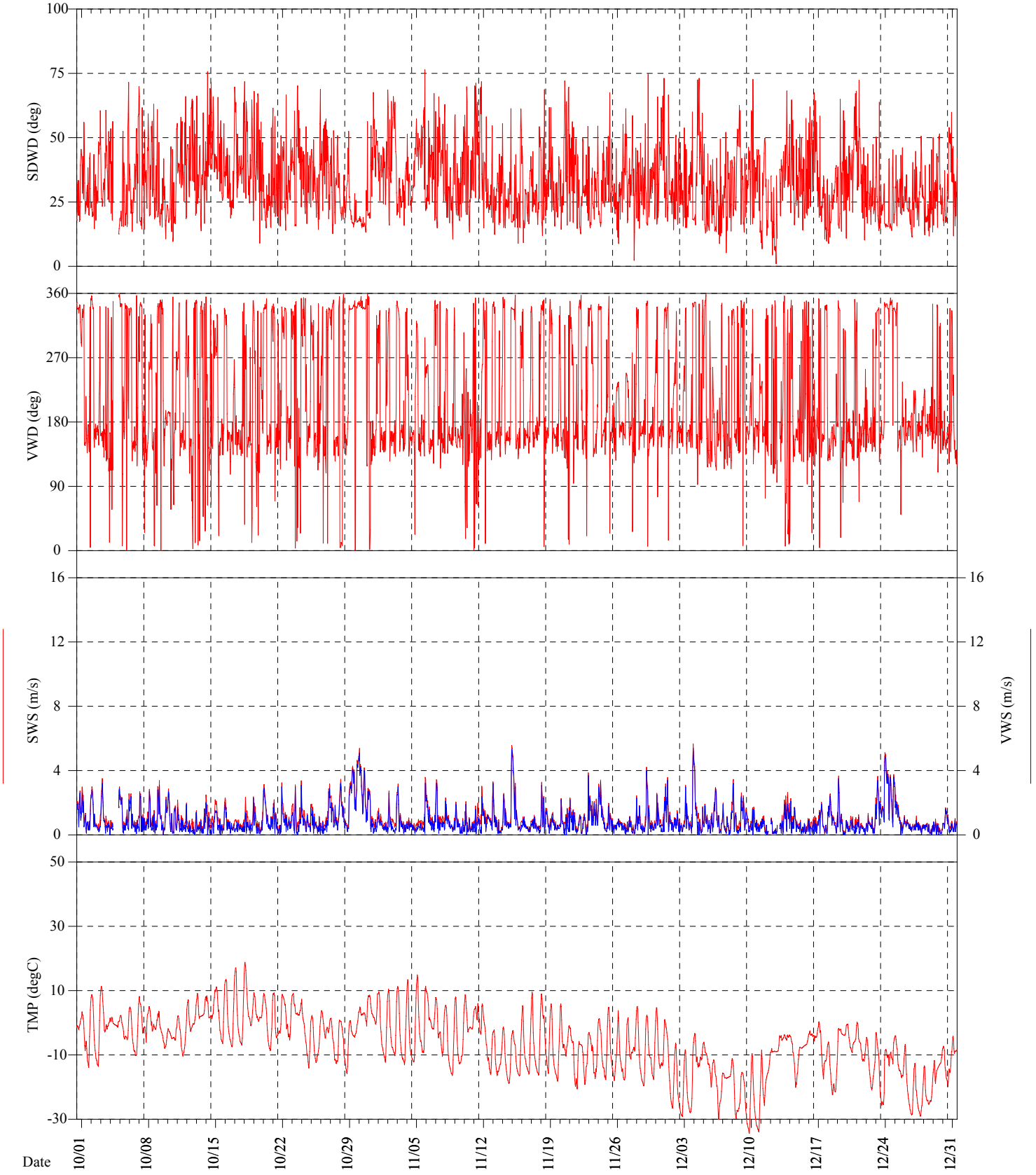


Figure A-15

Bondurant (BOND)
Meteorological Data

Jan. - Mar. 2010

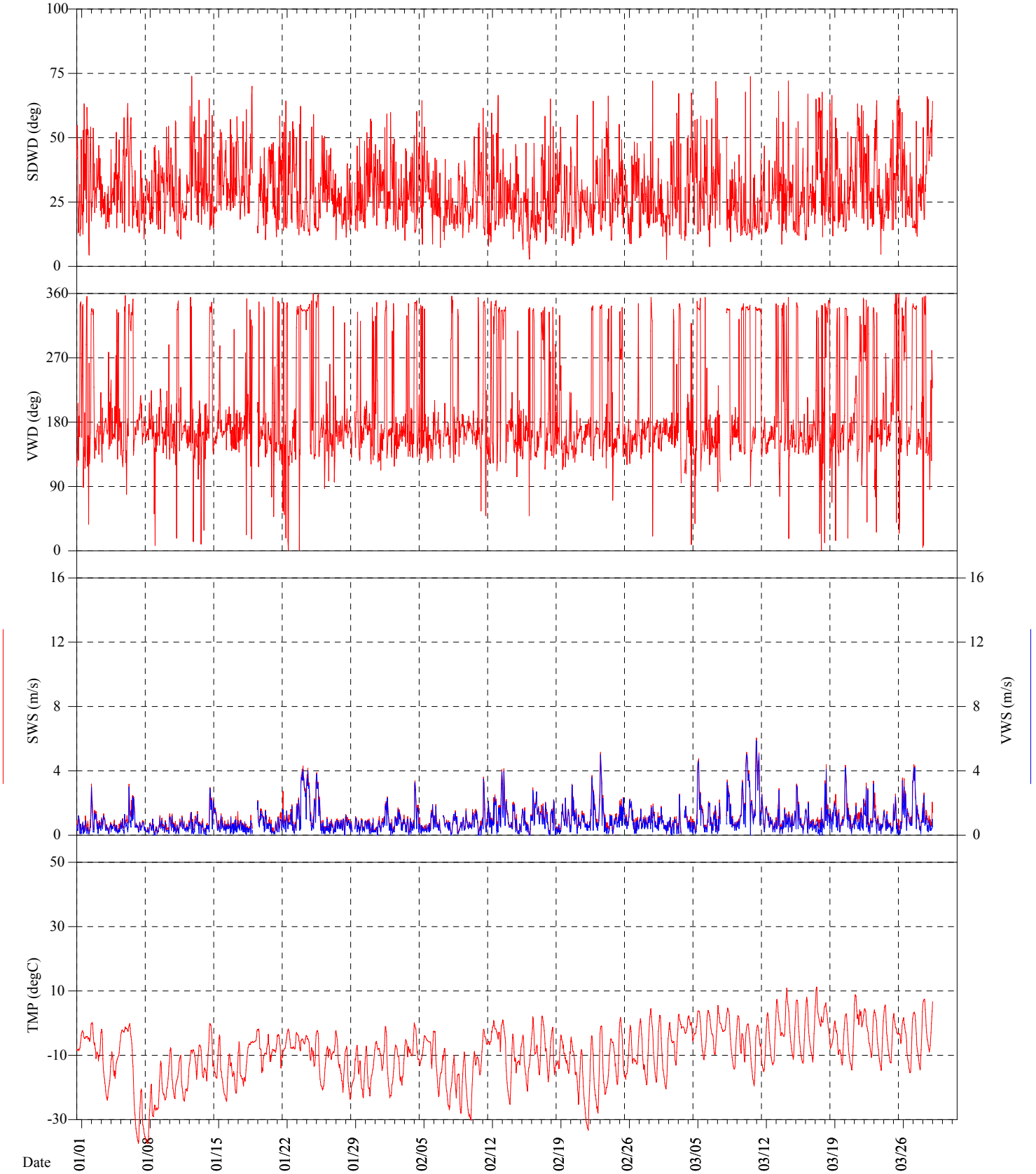


Figure A-16

Boulder (BOUL)
Meteorological Data

Jan. - Mar. 2009

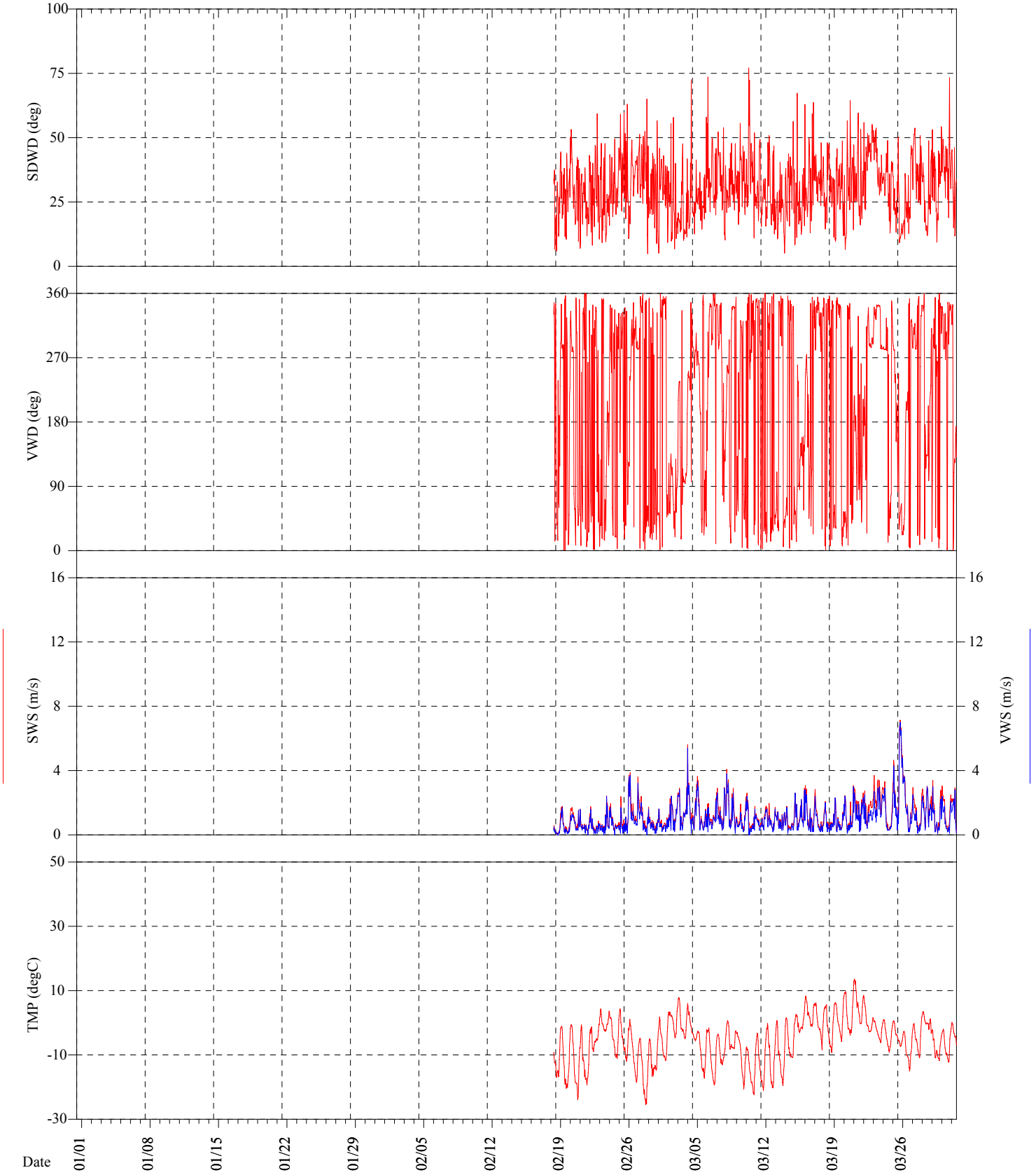


Figure A-17

Boulder (BOUL)
Meteorological Data

Apr. - Jun. 2009

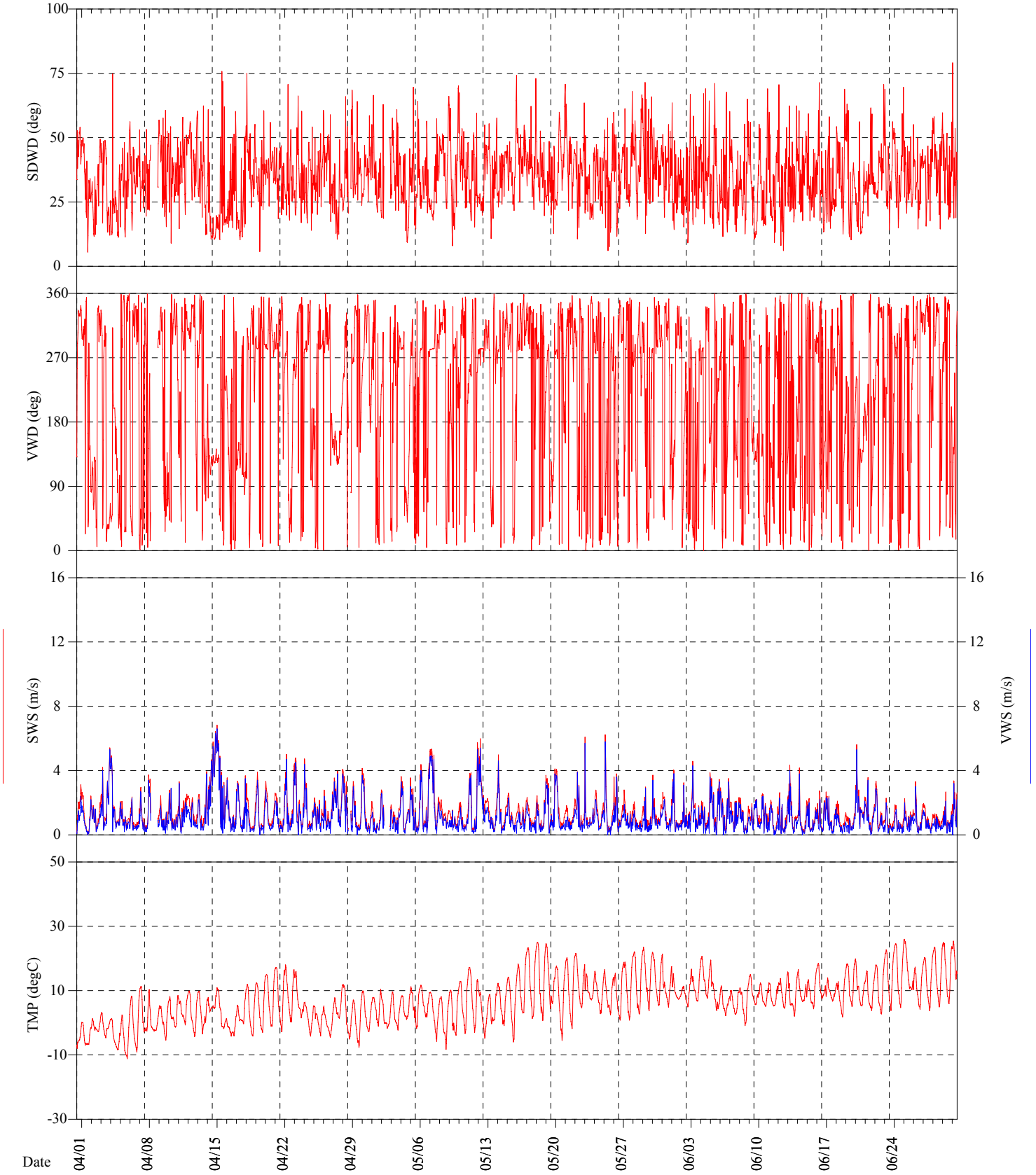


Figure A-18

Boulder (BOUL)
Meteorological Data

Jul. - Sep. 2009

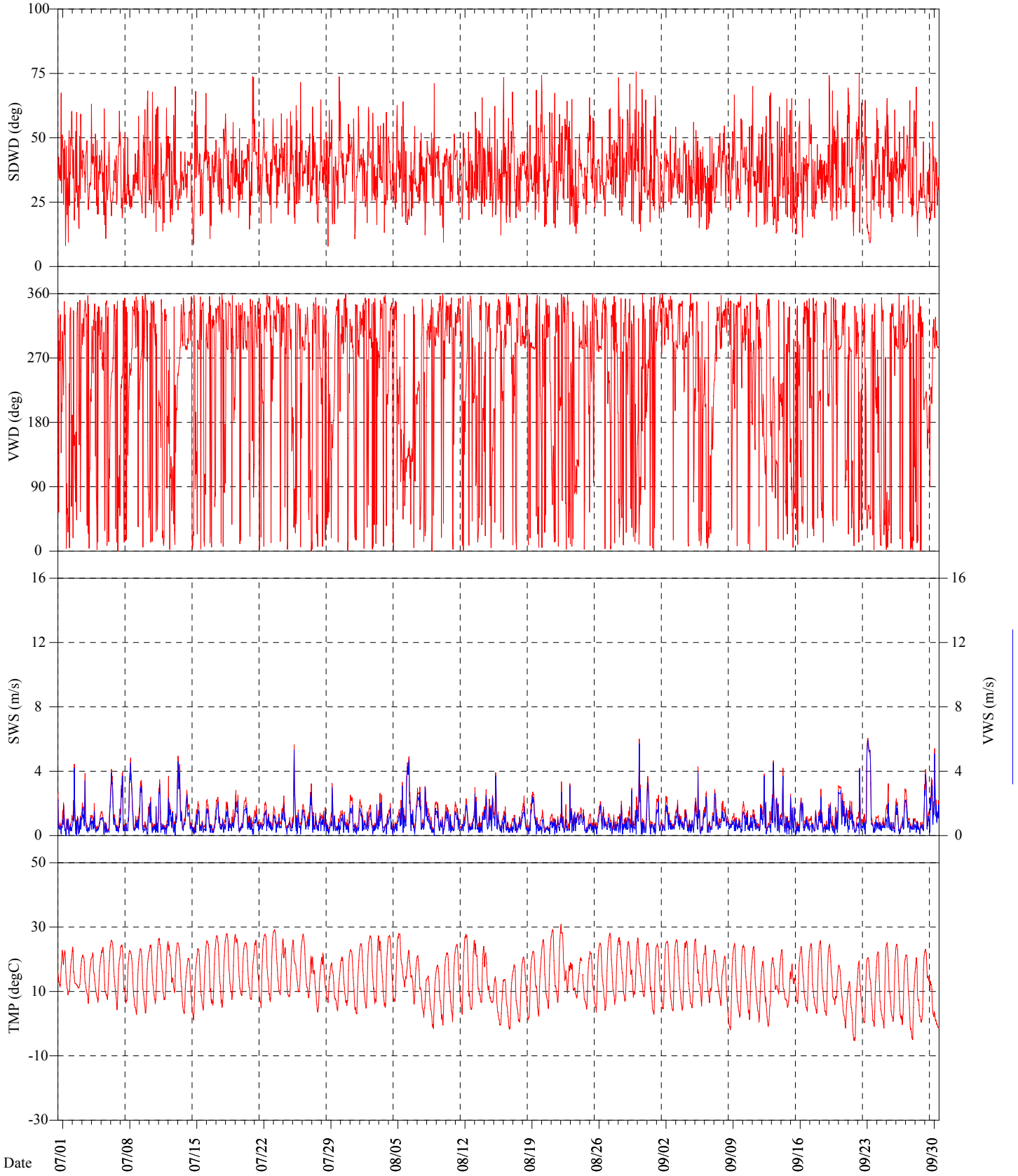


Figure A-19

Boulder (BOUL)
Meteorological Data

Oct. - Dec. 2009

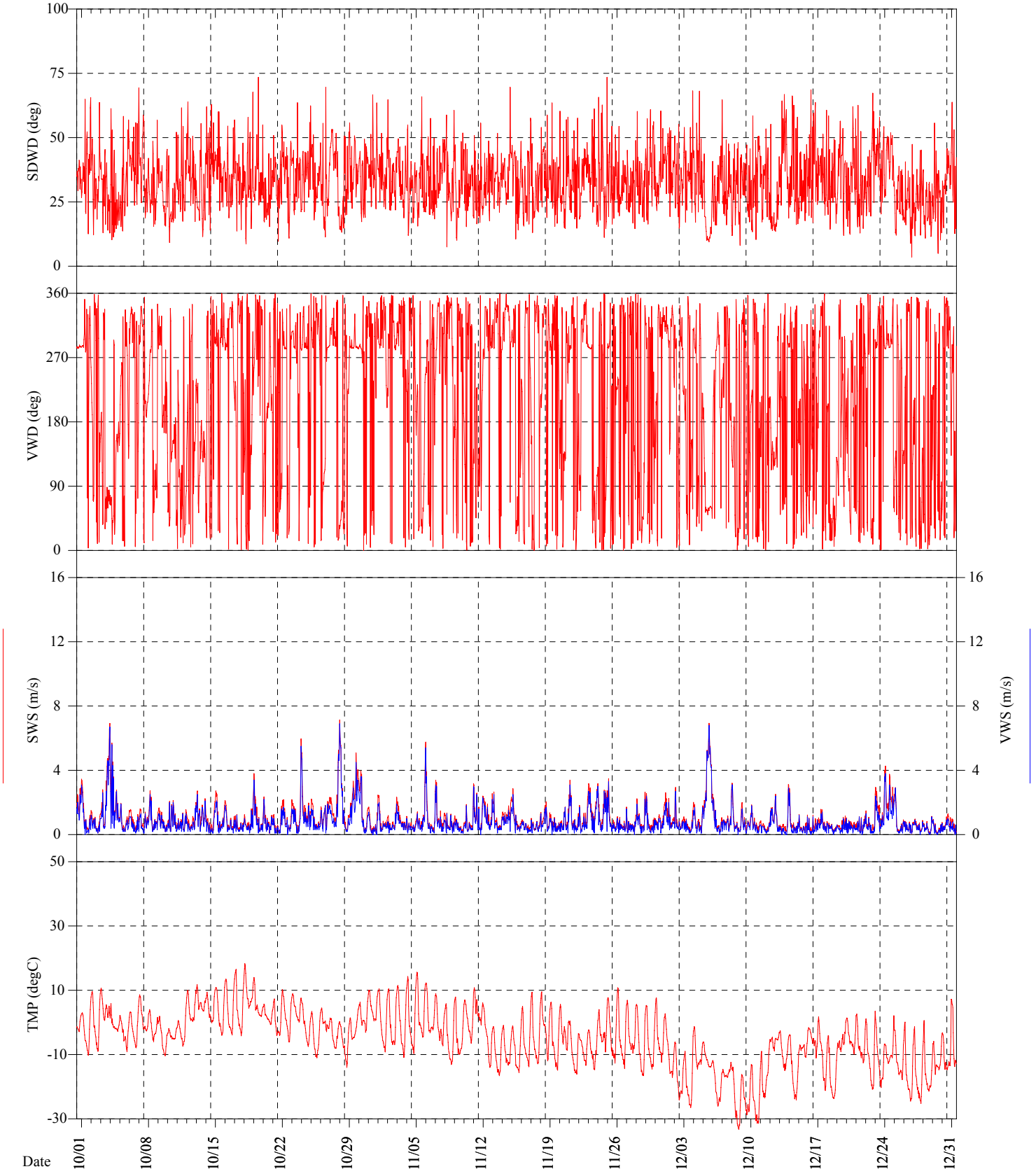


Figure A-20

Boulder (BOUL)
Meteorological Data

Jan. - Mar. 2010

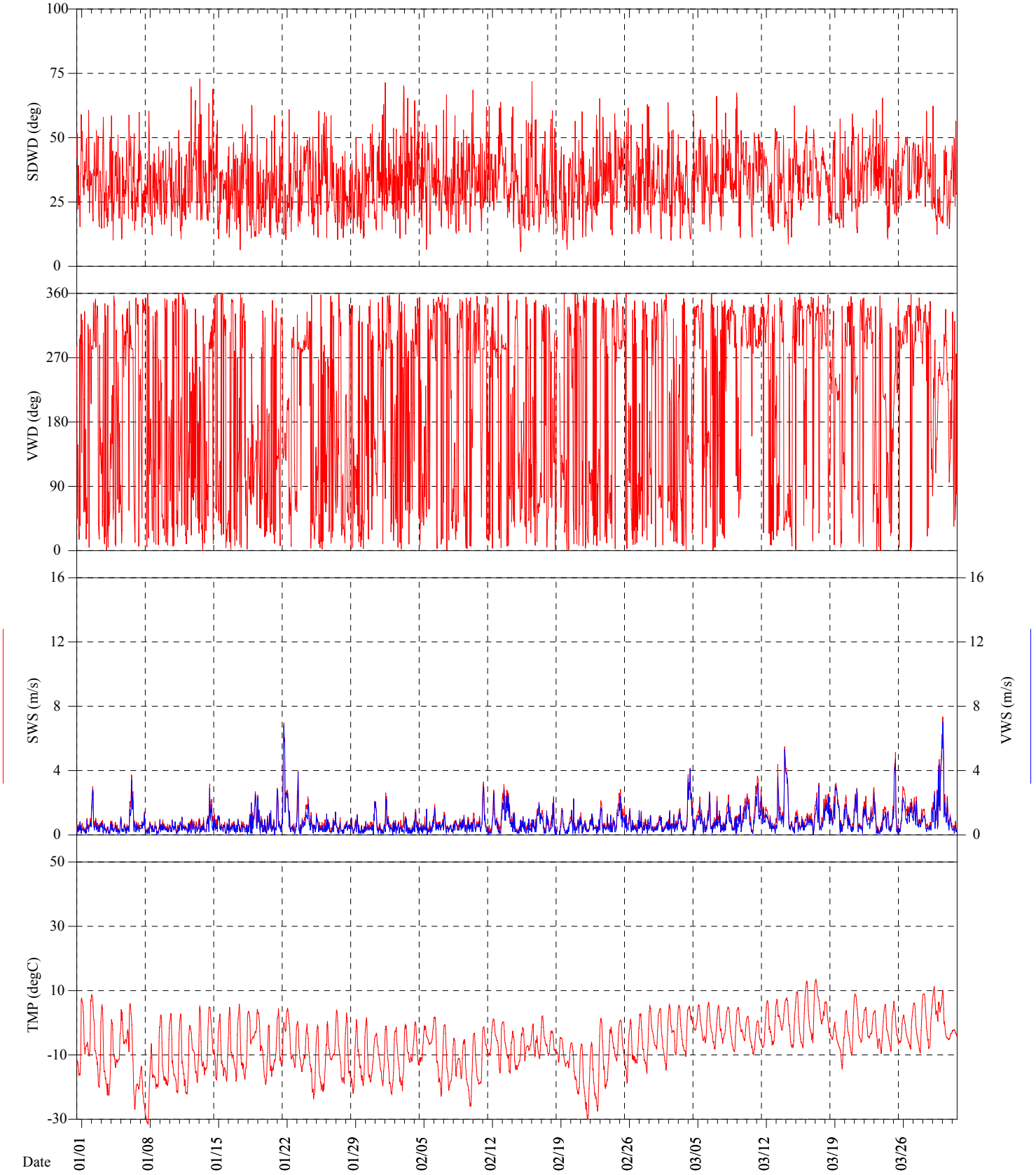


Figure A-21

CASTNet (CAST)
Meteorological Data

Jan. - Mar. 2009

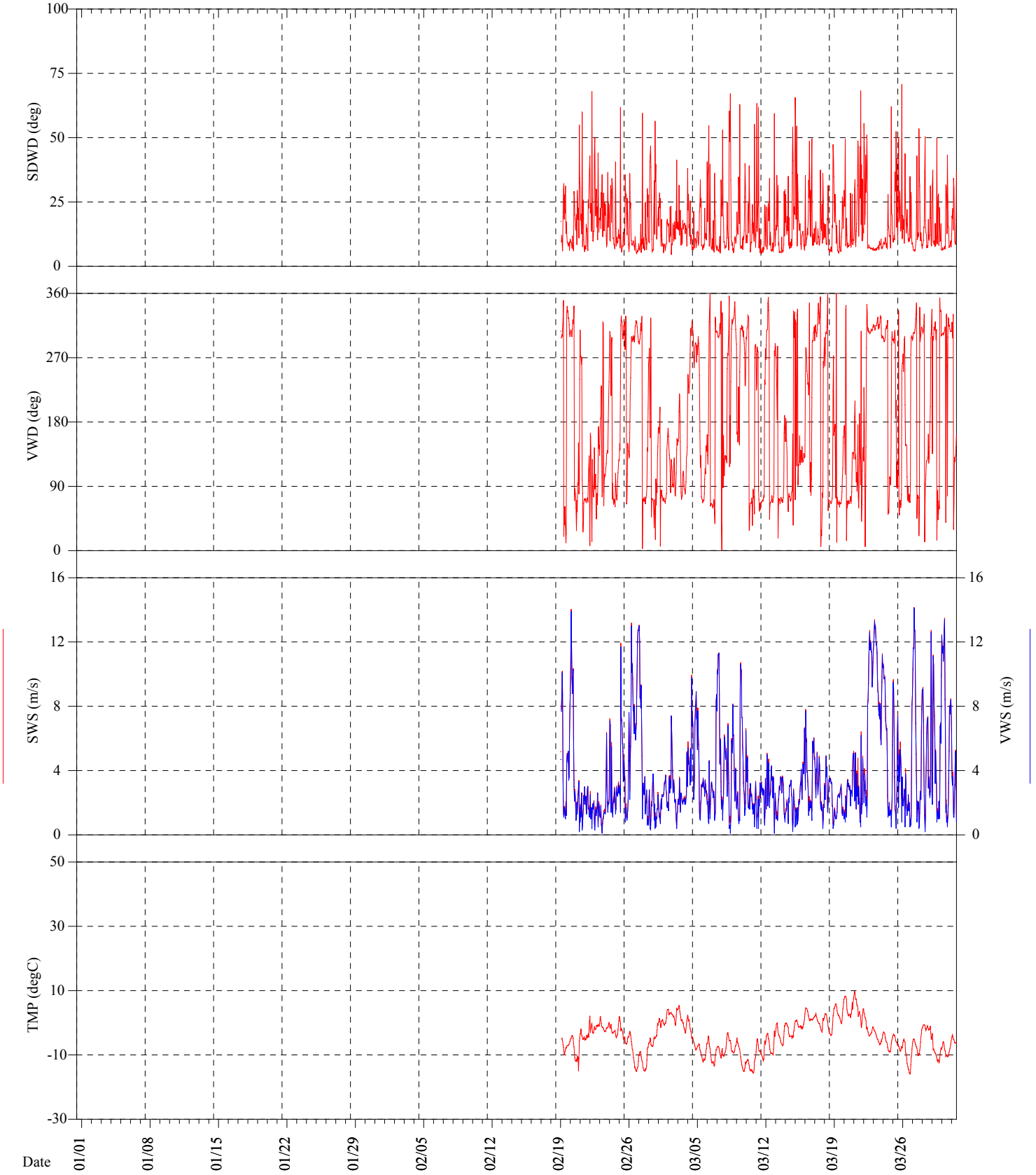


Figure A-22

CASTNet (CAST)
Meteorological Data

Apr. - Jun. 2009

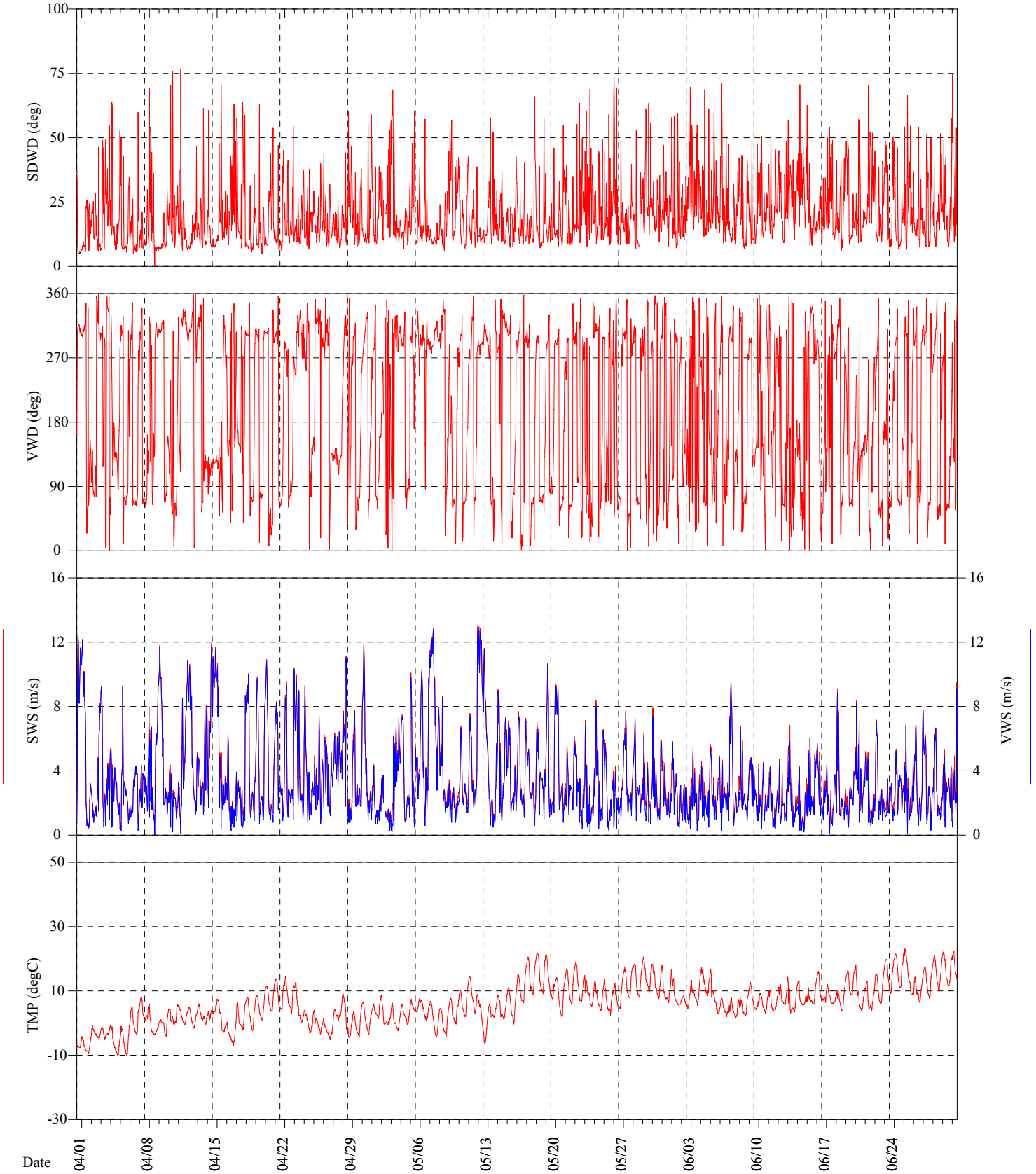


Figure A-23

CASTNet (CAST)
Meteorological Data

Jul. - Aug. 2009

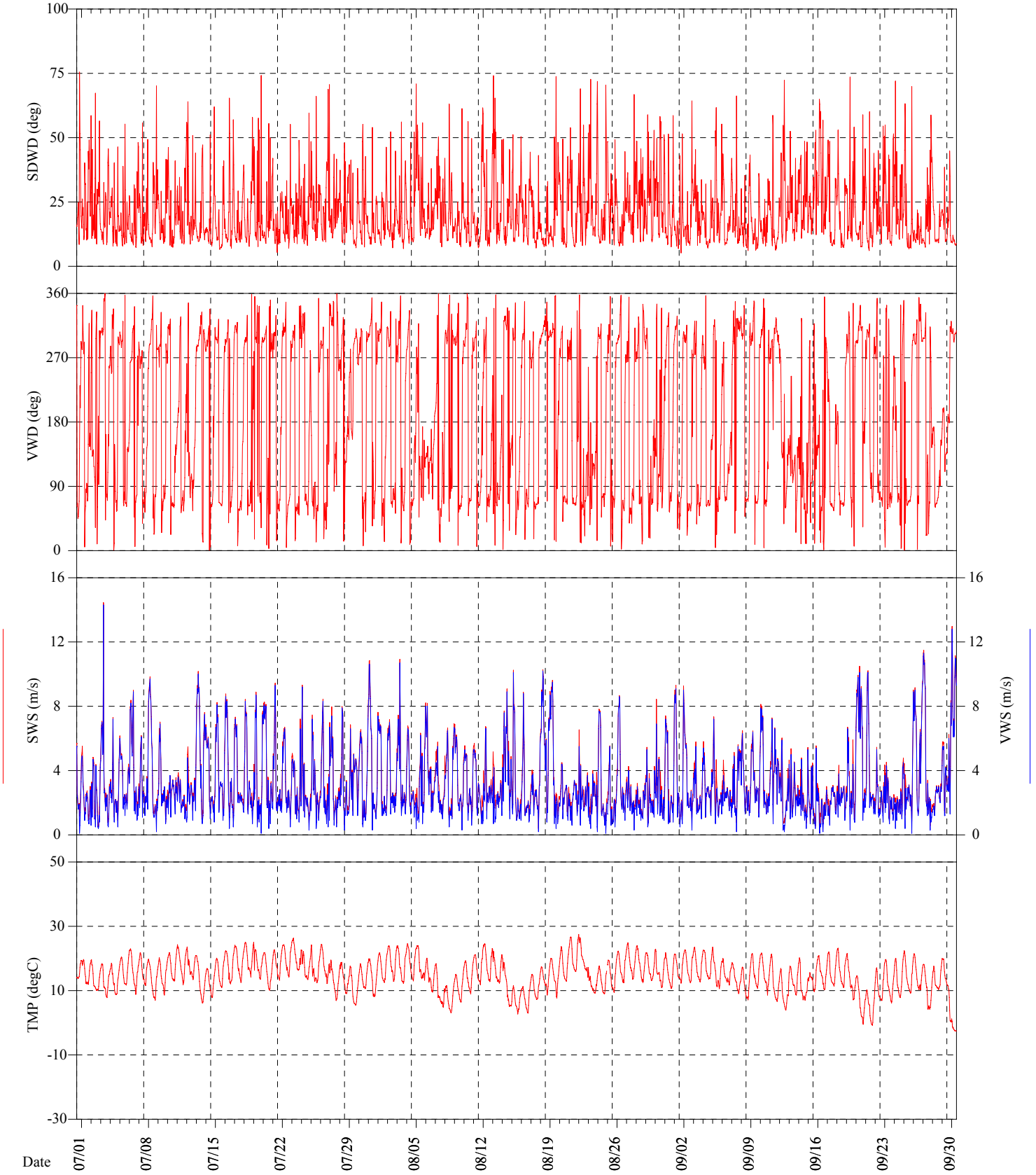


Figure A-24

CASTNet (CAST)
Meteorological Data

Oct. - Dec. 2009

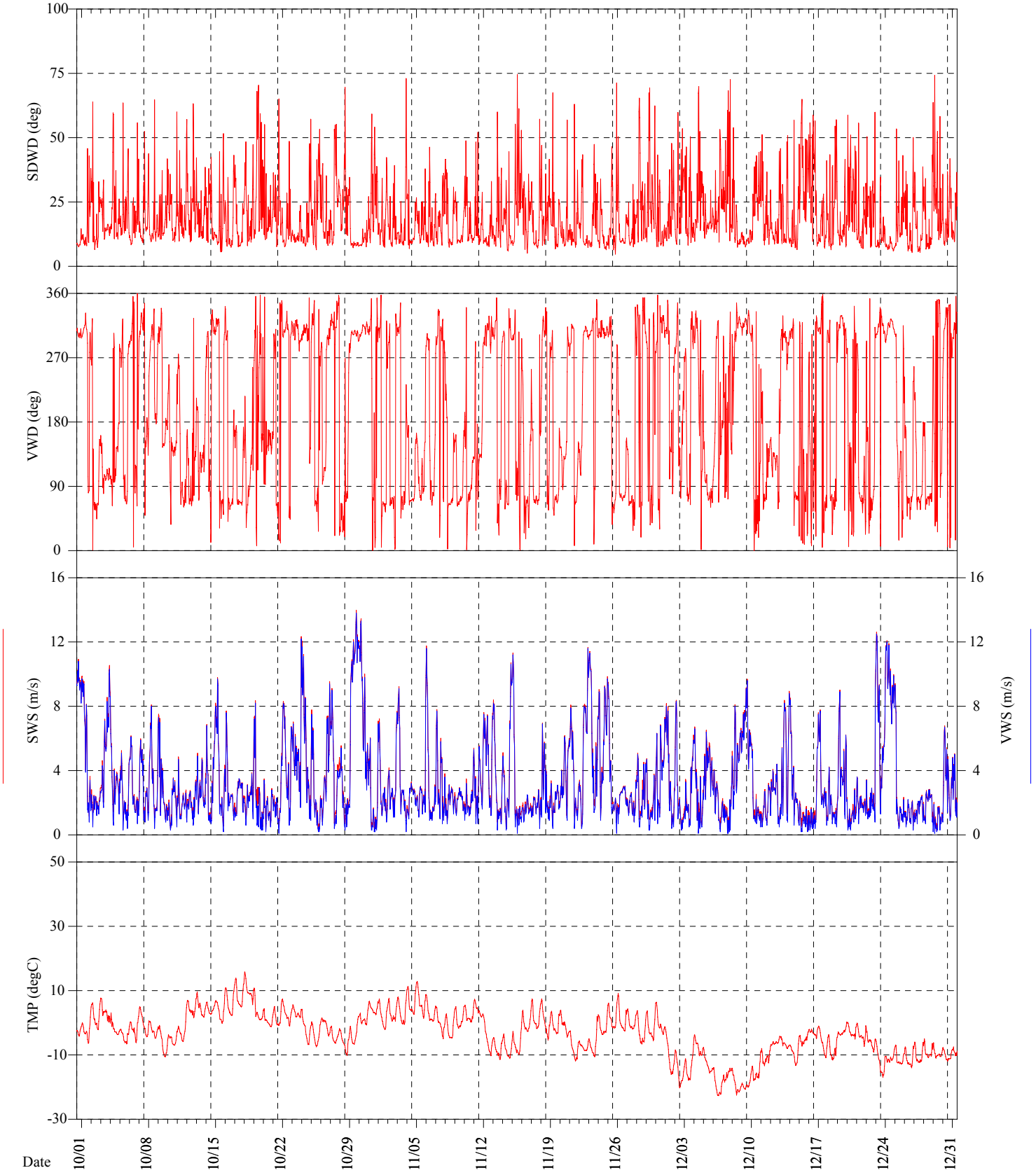


Figure A-25

CASTNet (CAST)
Meteorological Data

Jan. - Mar. 2010

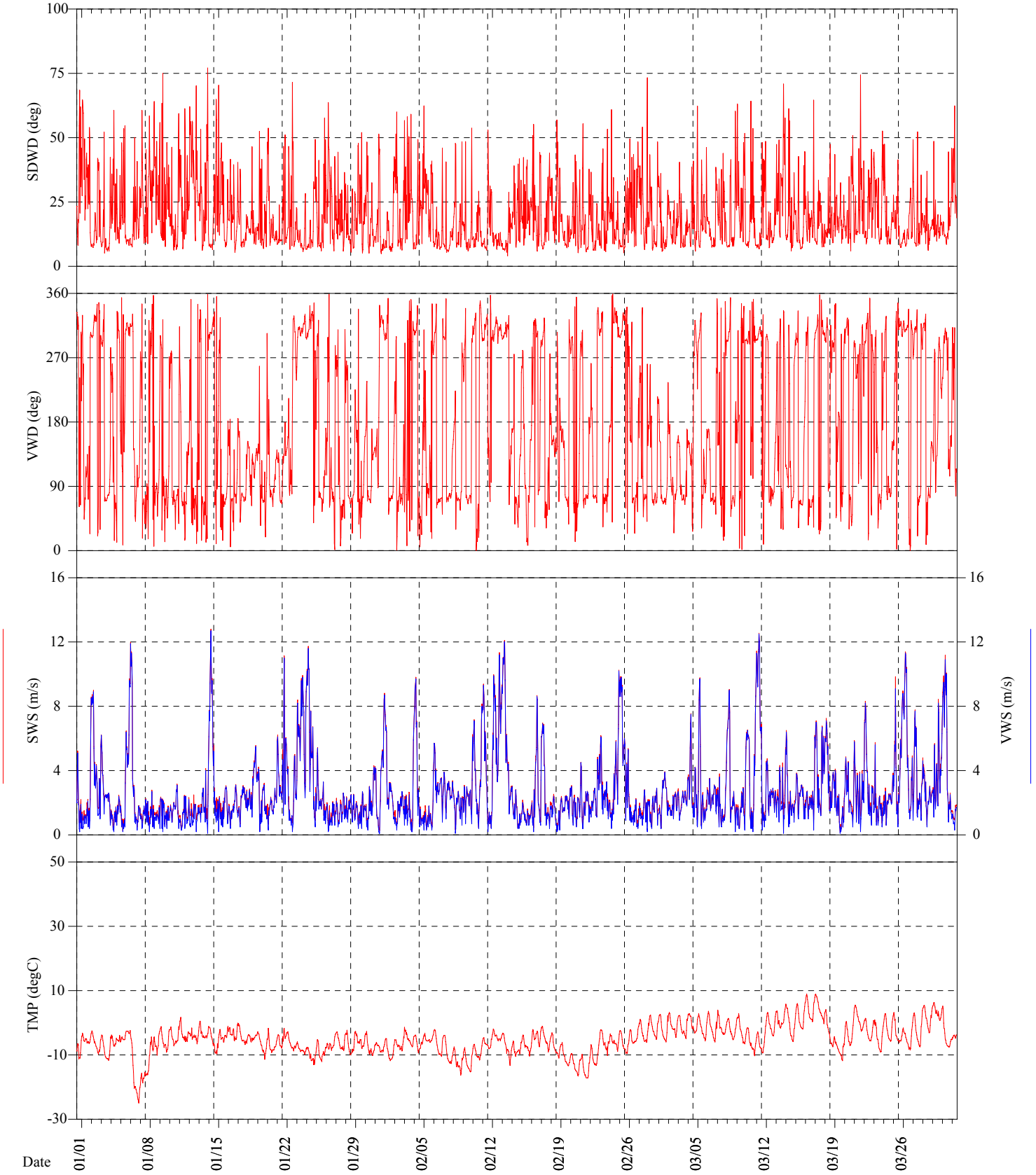


Figure A-26

Daniel (DANI)
Meteorological Data

Jan. - Mar. 2009

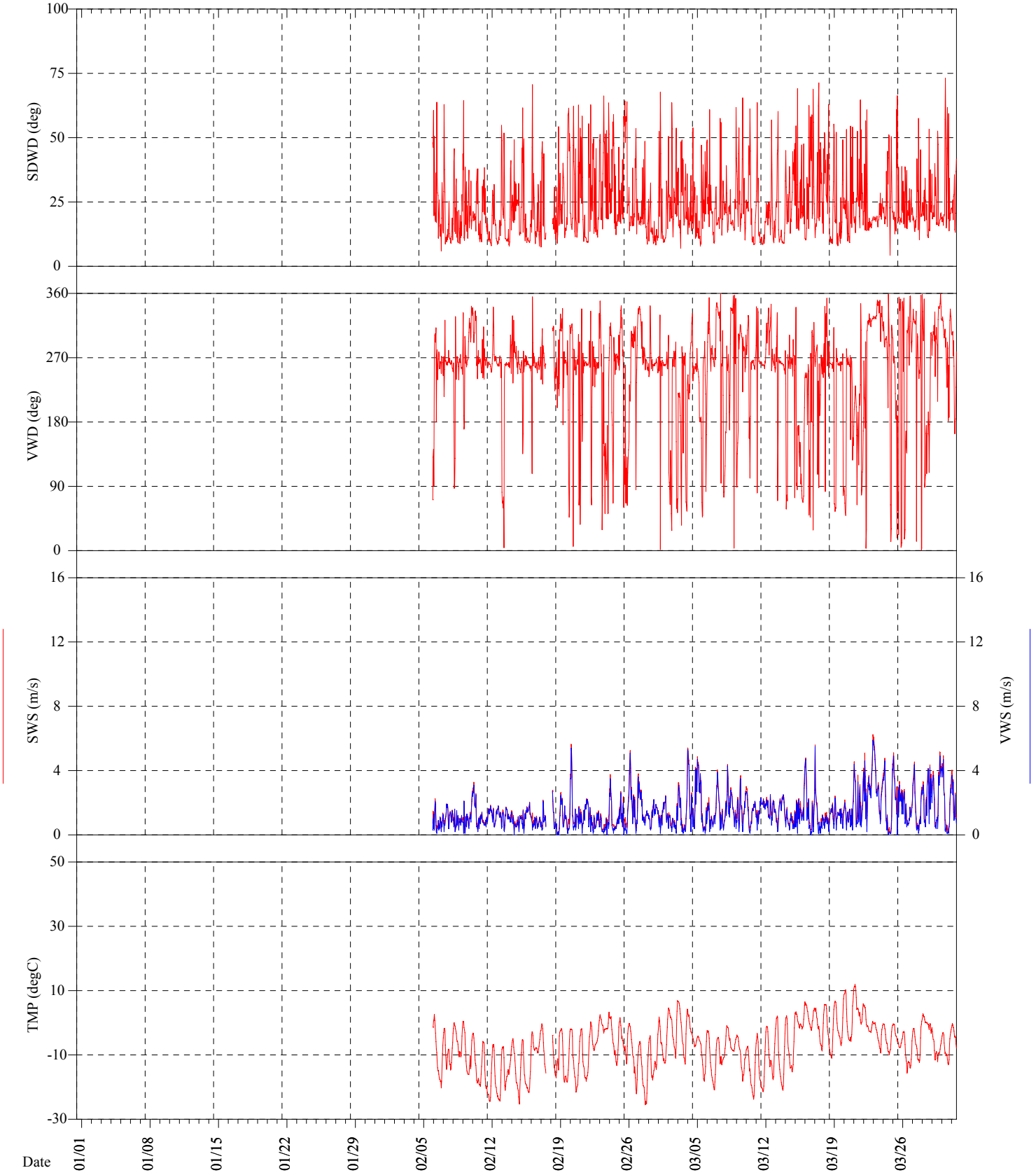


Figure A-27

Daniel (DANI)
Meteorological Data

Apr. - Jun. 2009

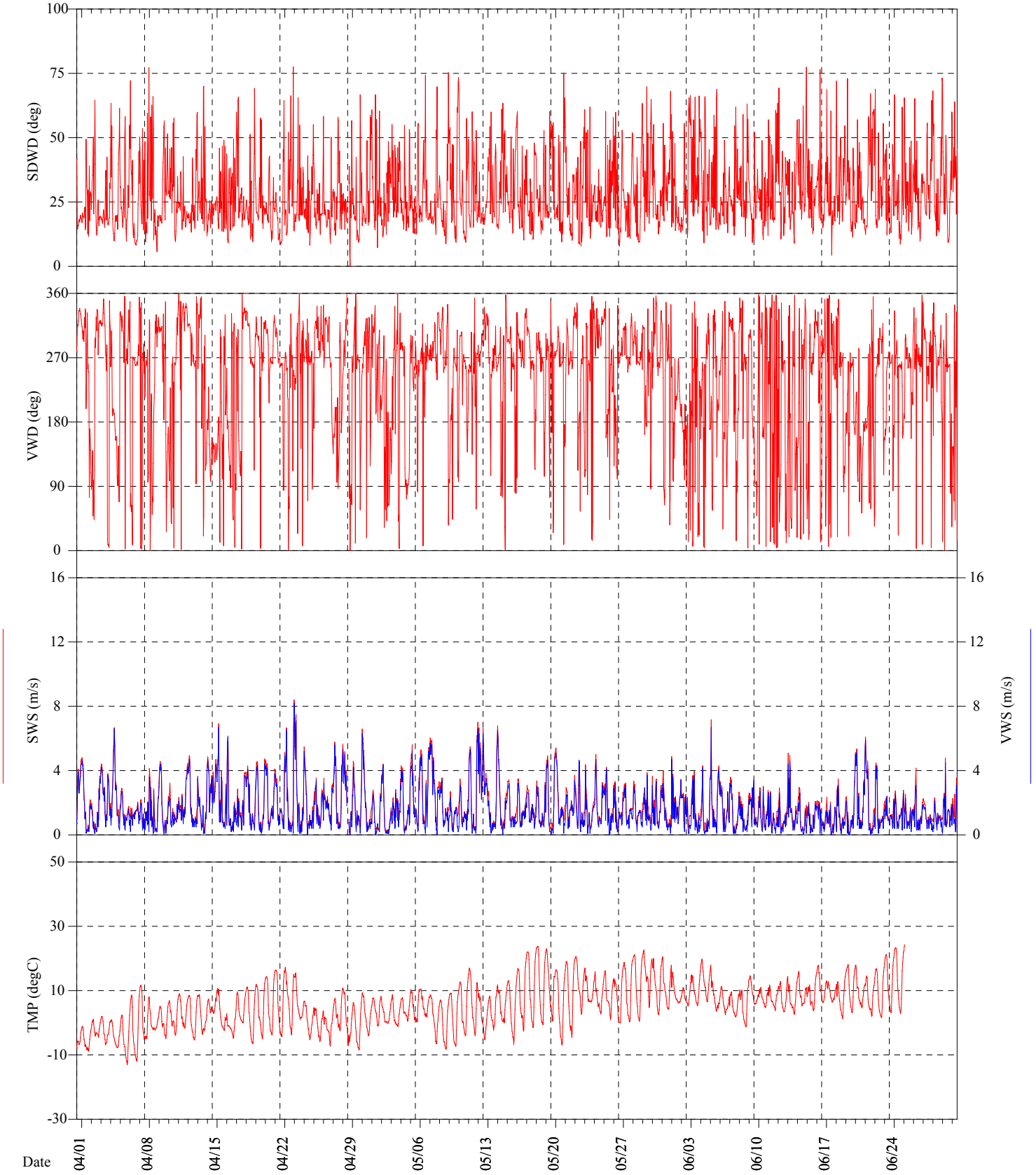


Figure A-28

Daniel (DANI)
Meteorological Data

Jul. - Sep. 2009

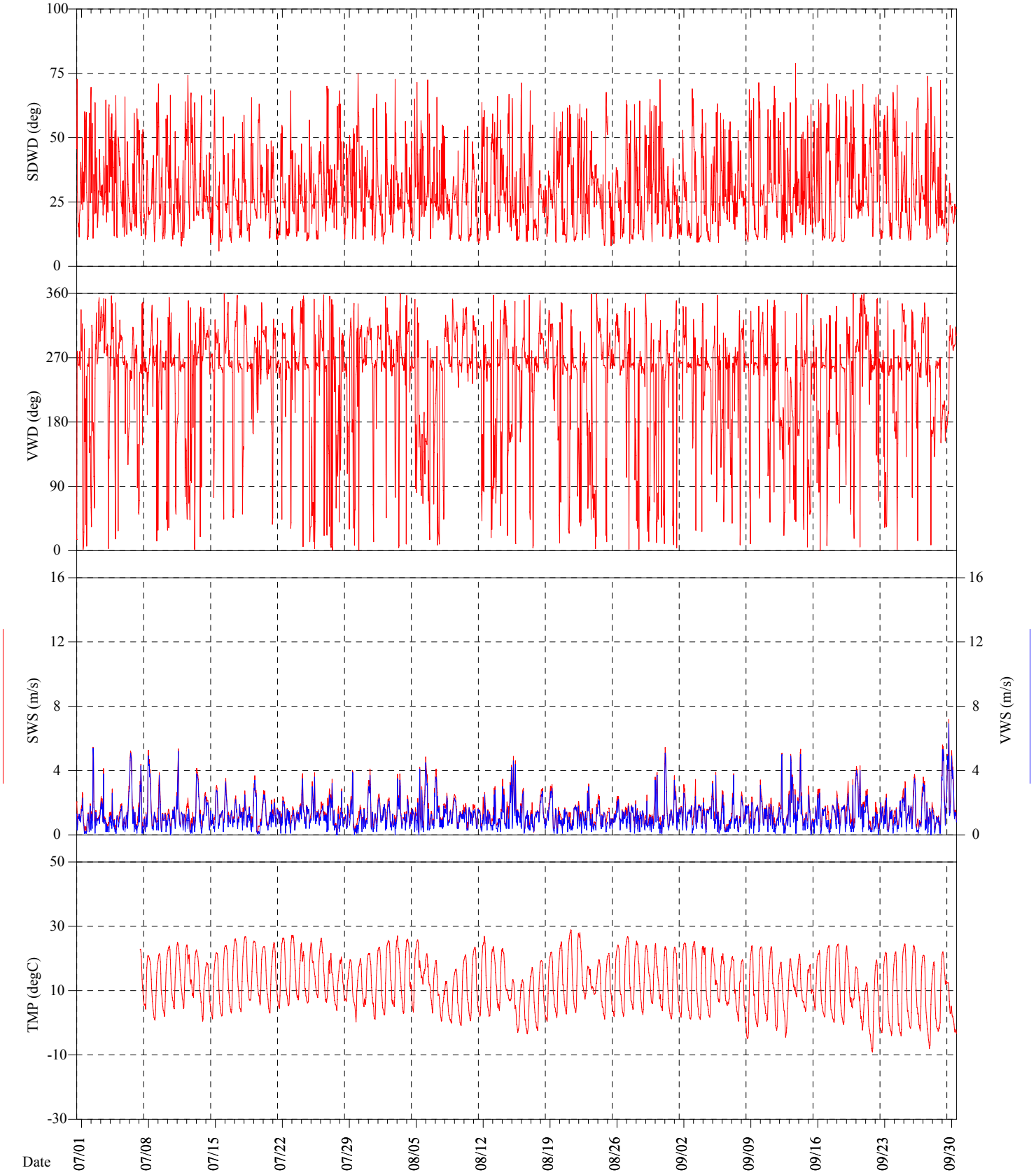


Figure A-29

Daniel (DANI)
Meteorological Data

Oct. - Dec. 2009

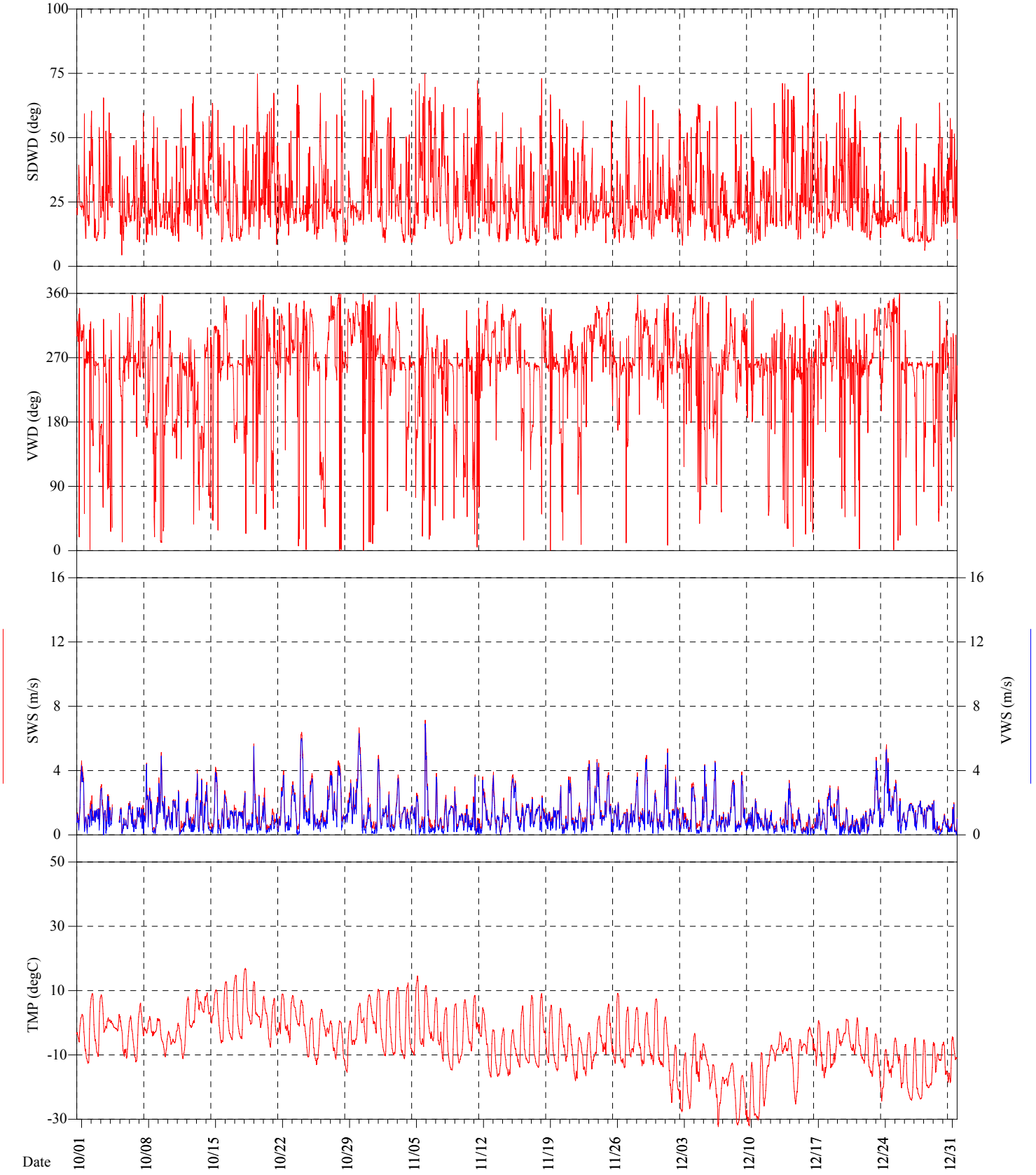


Figure A-30

Daniel (DANI)
Meteorological Data

Jan. - Mar. 2010

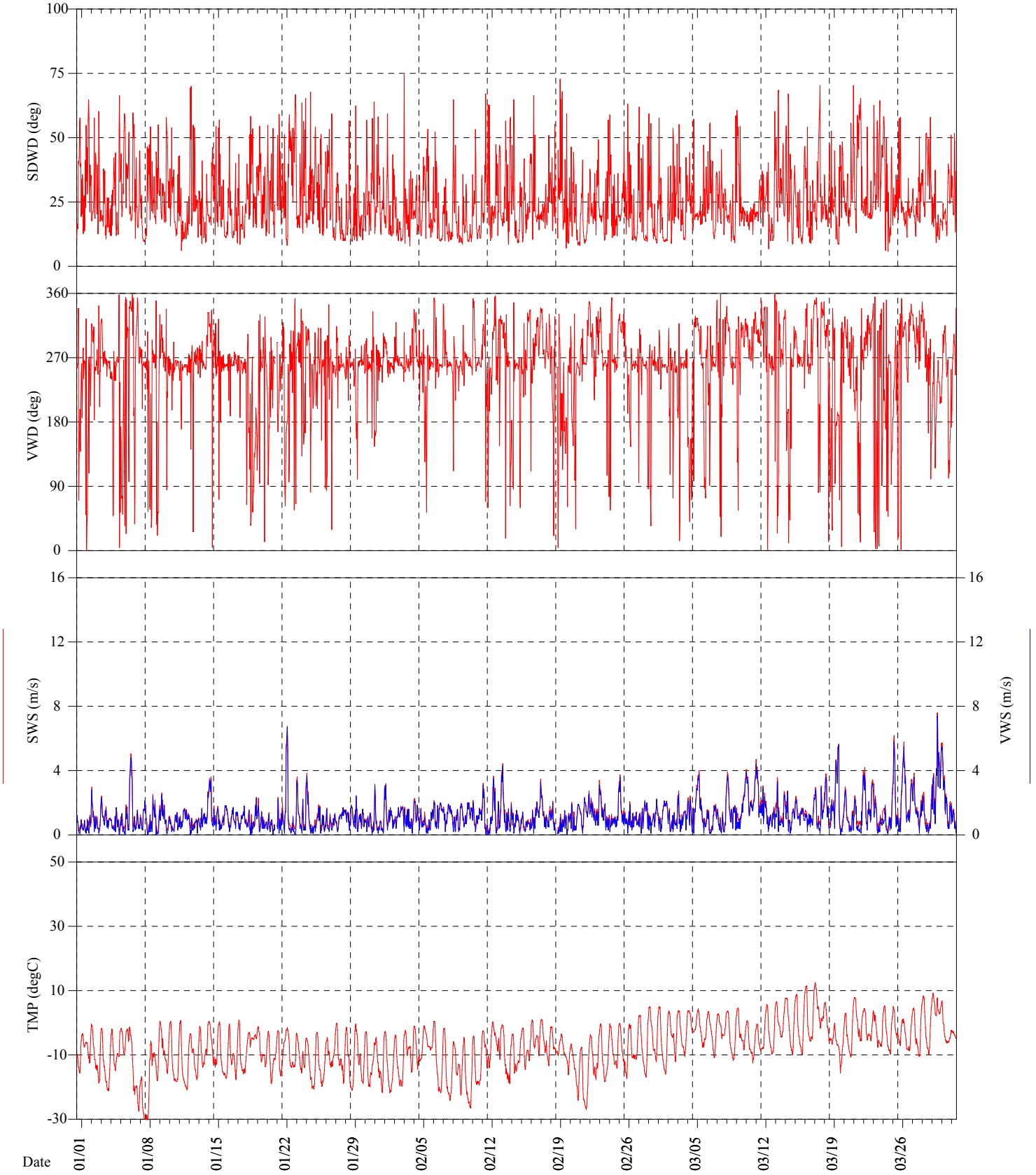


Figure A-31

Farson (FARS)
Ozone and Meteorological Data

Jan. - Mar. 2009

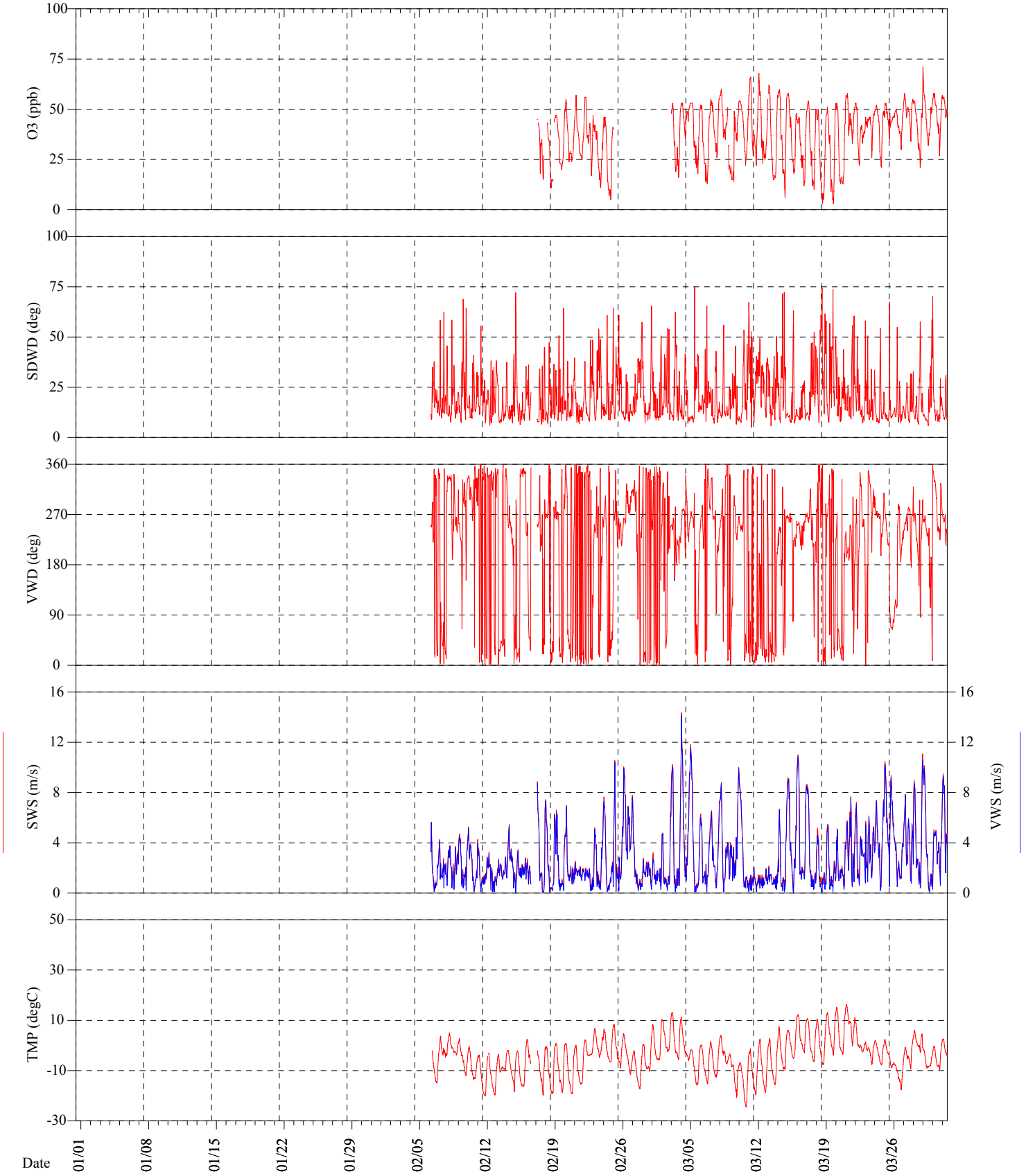


Figure A-32

Farson (FARS)
Ozone and Meteorological Data

Apr. - Jun. 2009

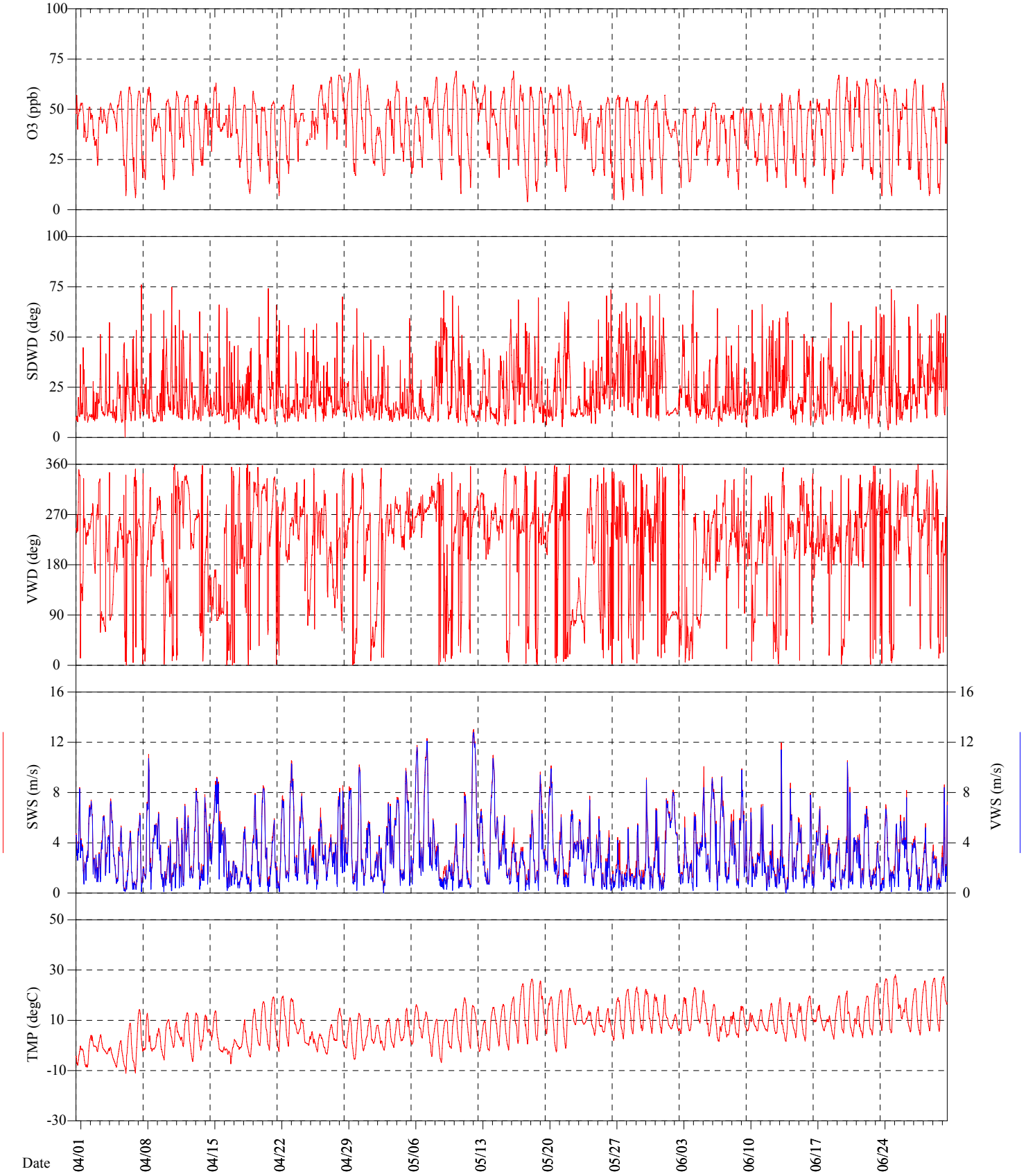


Figure A-33

Farson (FARS)
Ozone and Meteorological Data

Jul. - Sep. 2009

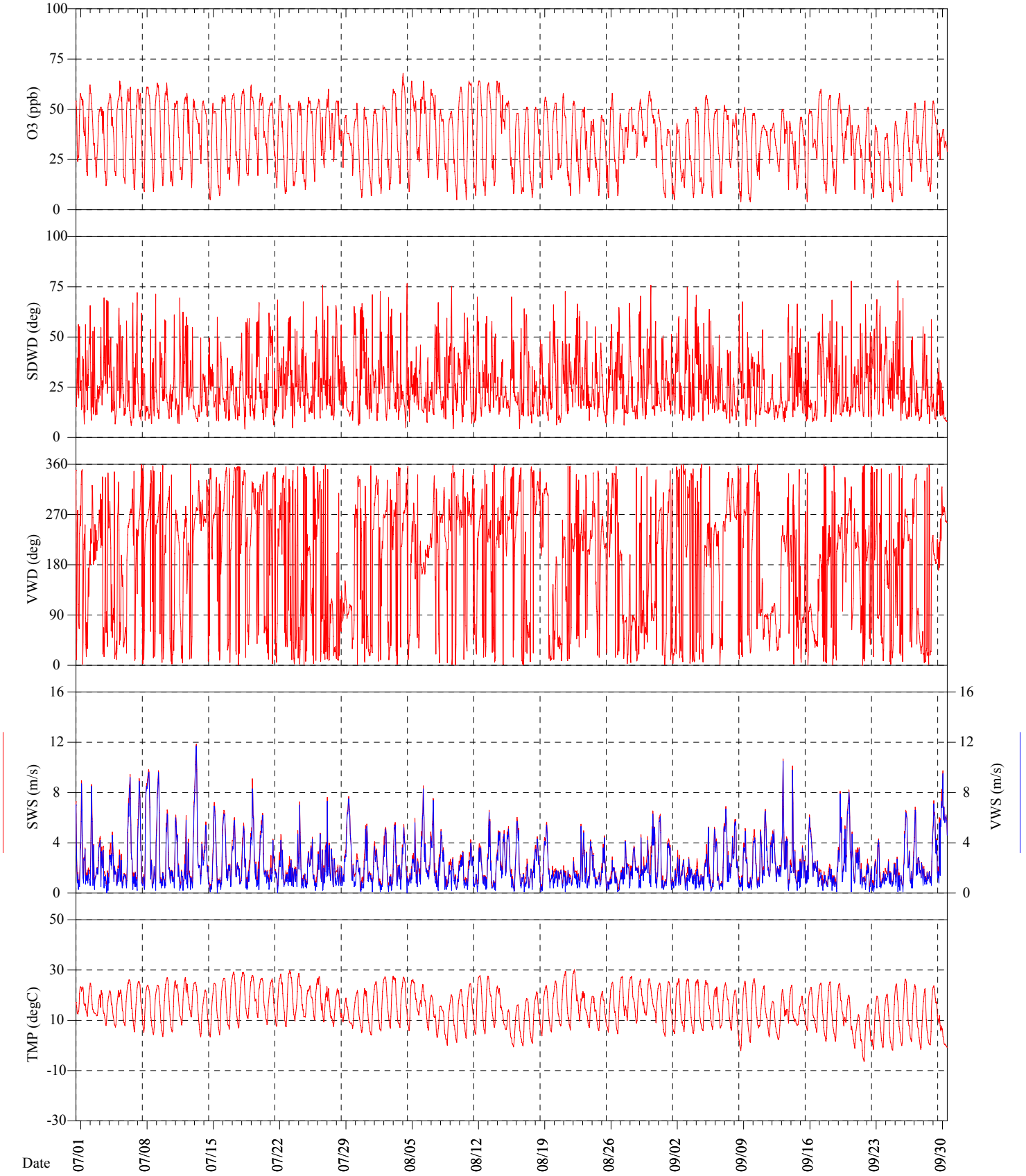


Figure A-34

Farson (FARS)
Ozone and Meteorological Data

Oct. - Dec. 2009

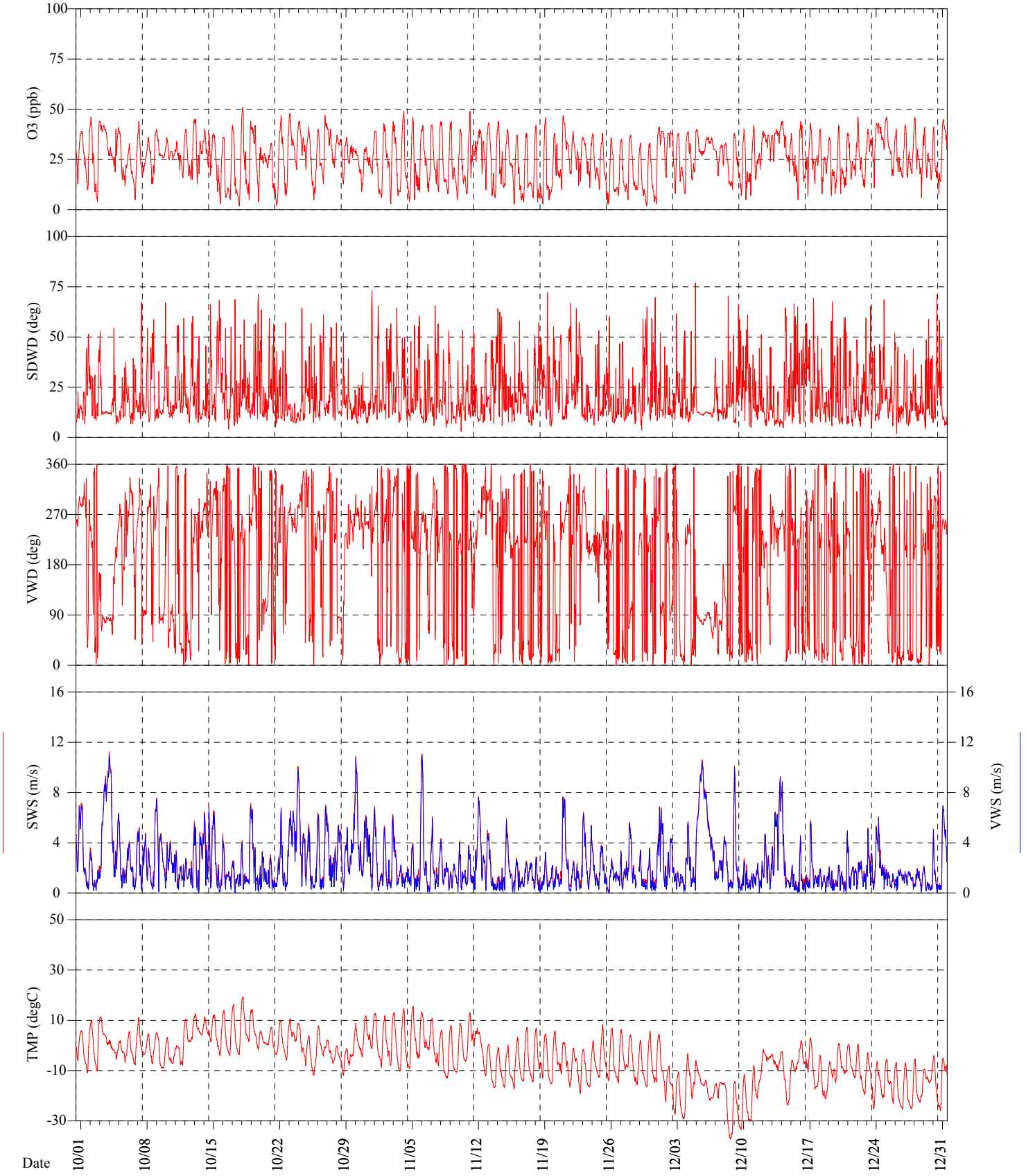


Figure A-35

Farson (FARS)
Ozone and Meteorological Data

Jan. - Mar. 2010

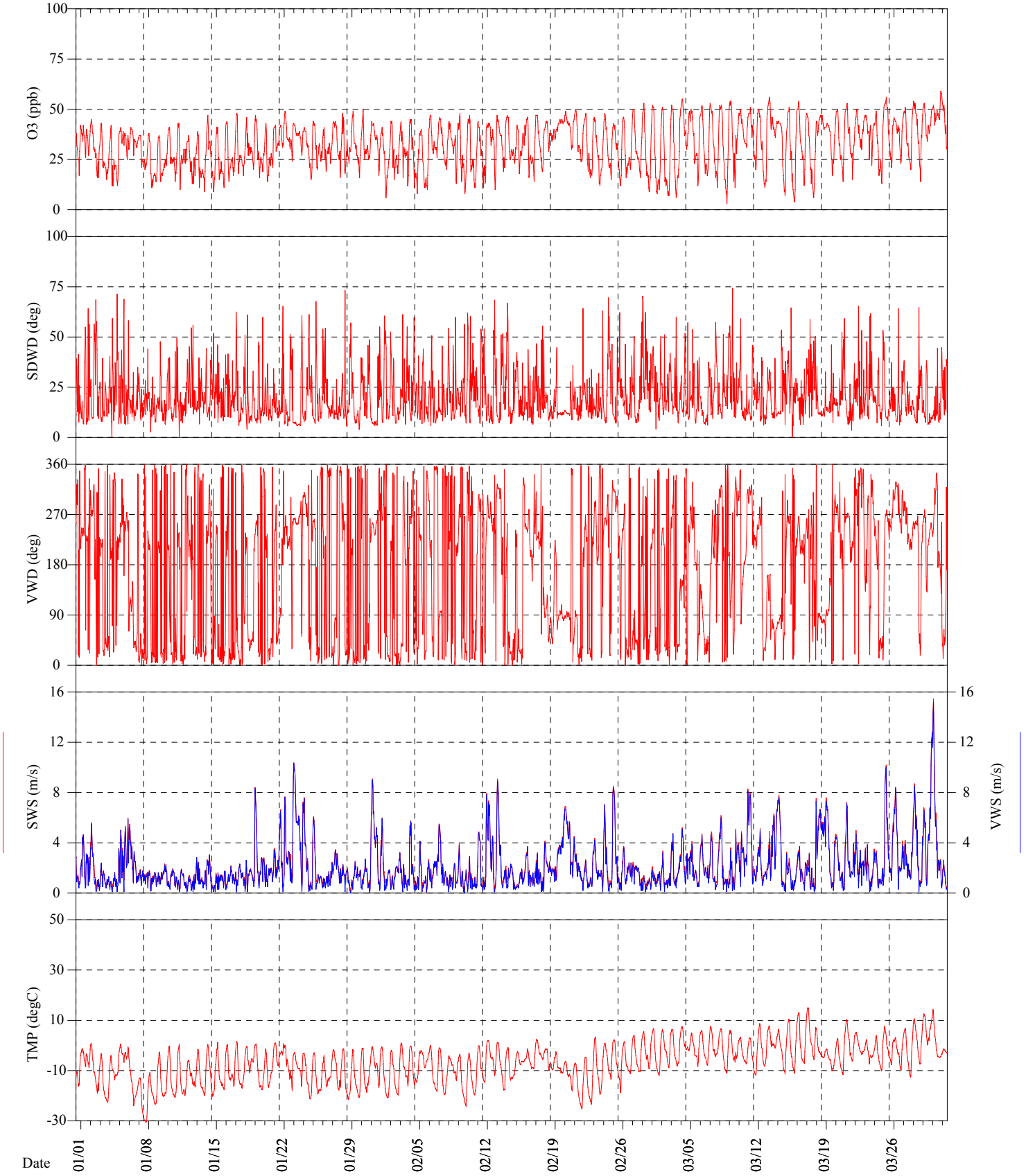


Figure A-36

La Barge #1 (LAB1)
Ozone and Meteorological Data

Jan. - Mar. 2009

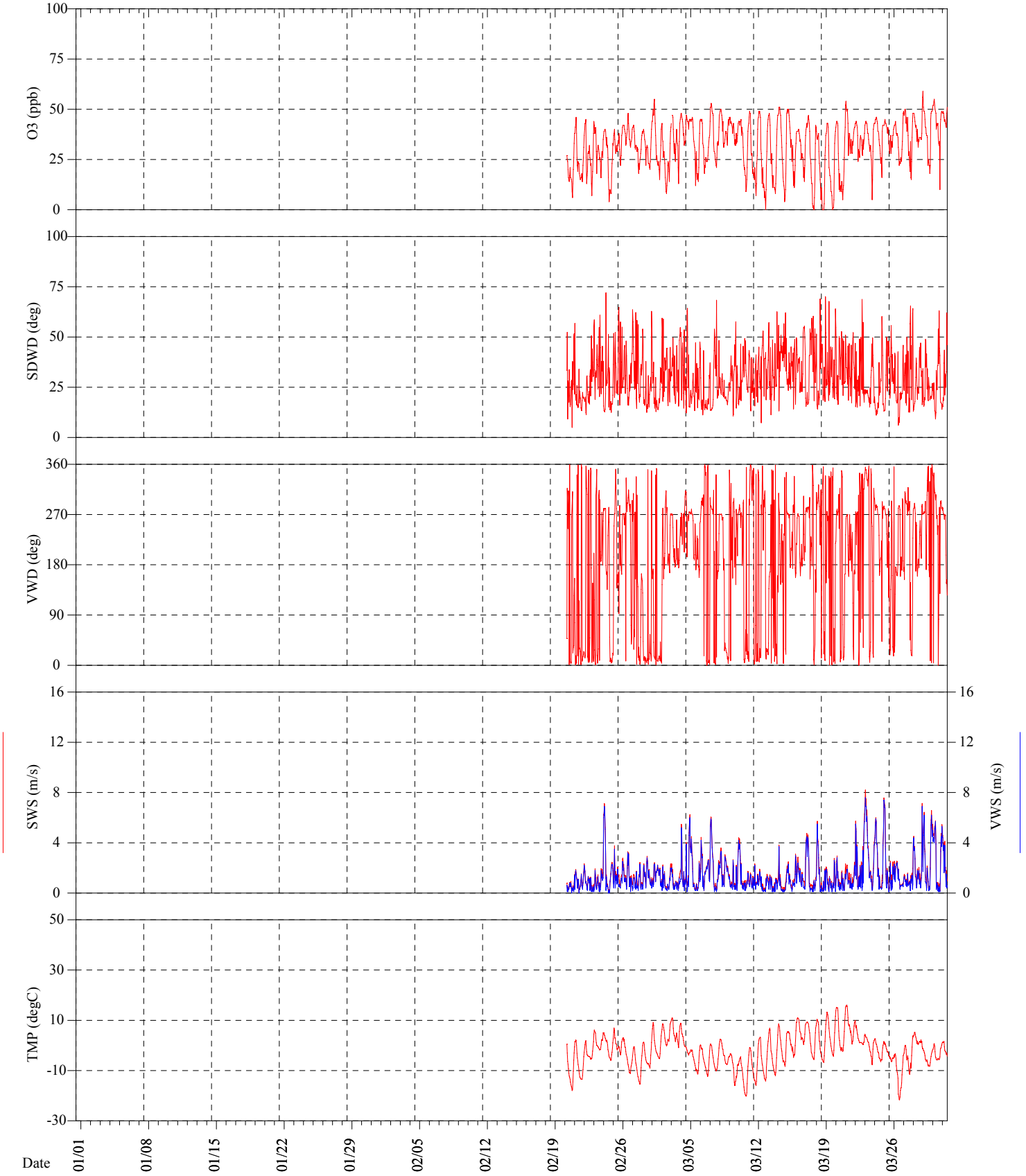


Figure A-37

La Barge #1 (LAB1)
Ozone and Meteorological Data

Apr. - Jun 2009

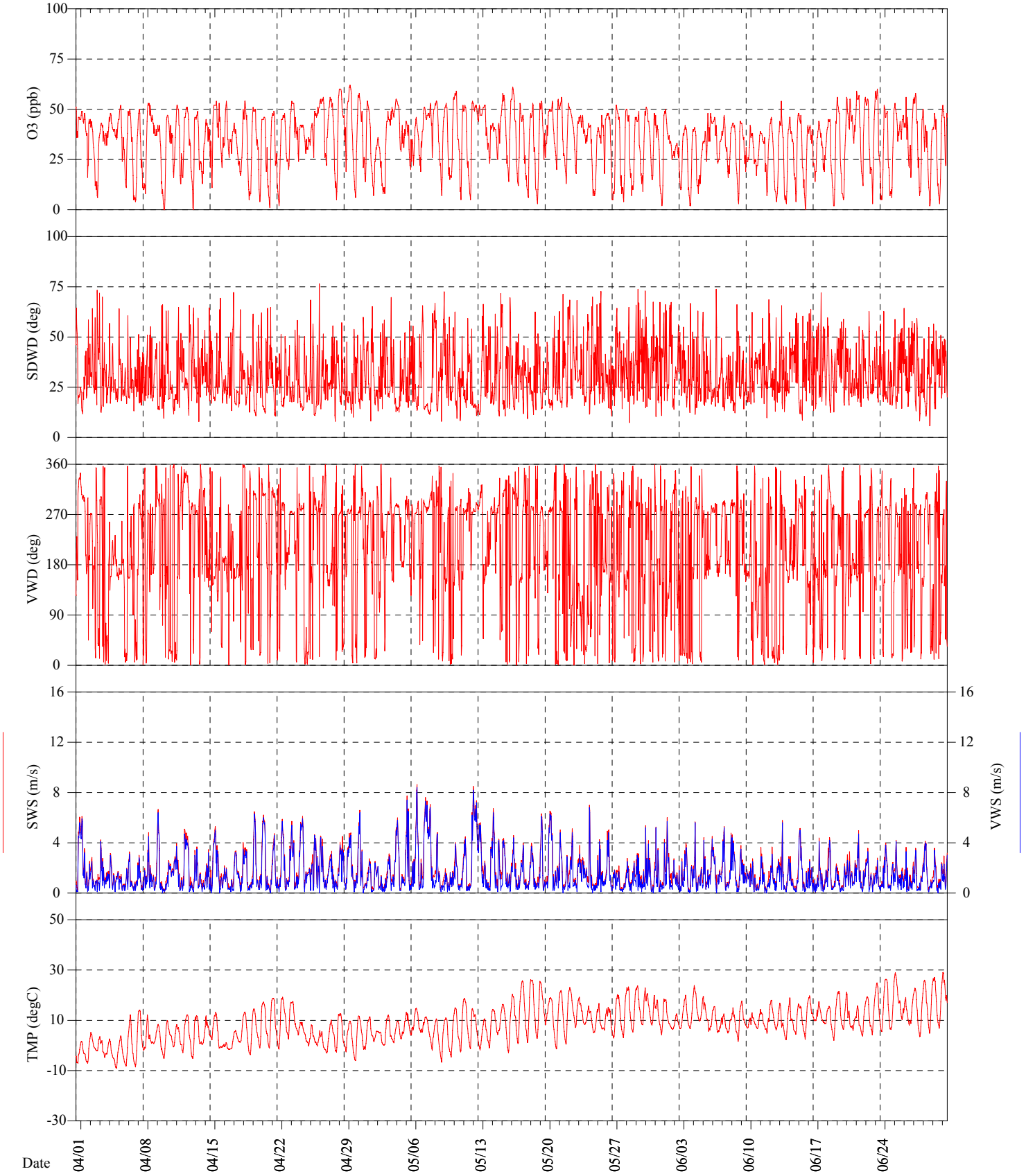


Figure A-38

La Barge #1 (LAB1)
Ozone and Meteorological Data

Jul. - Sep. 2009

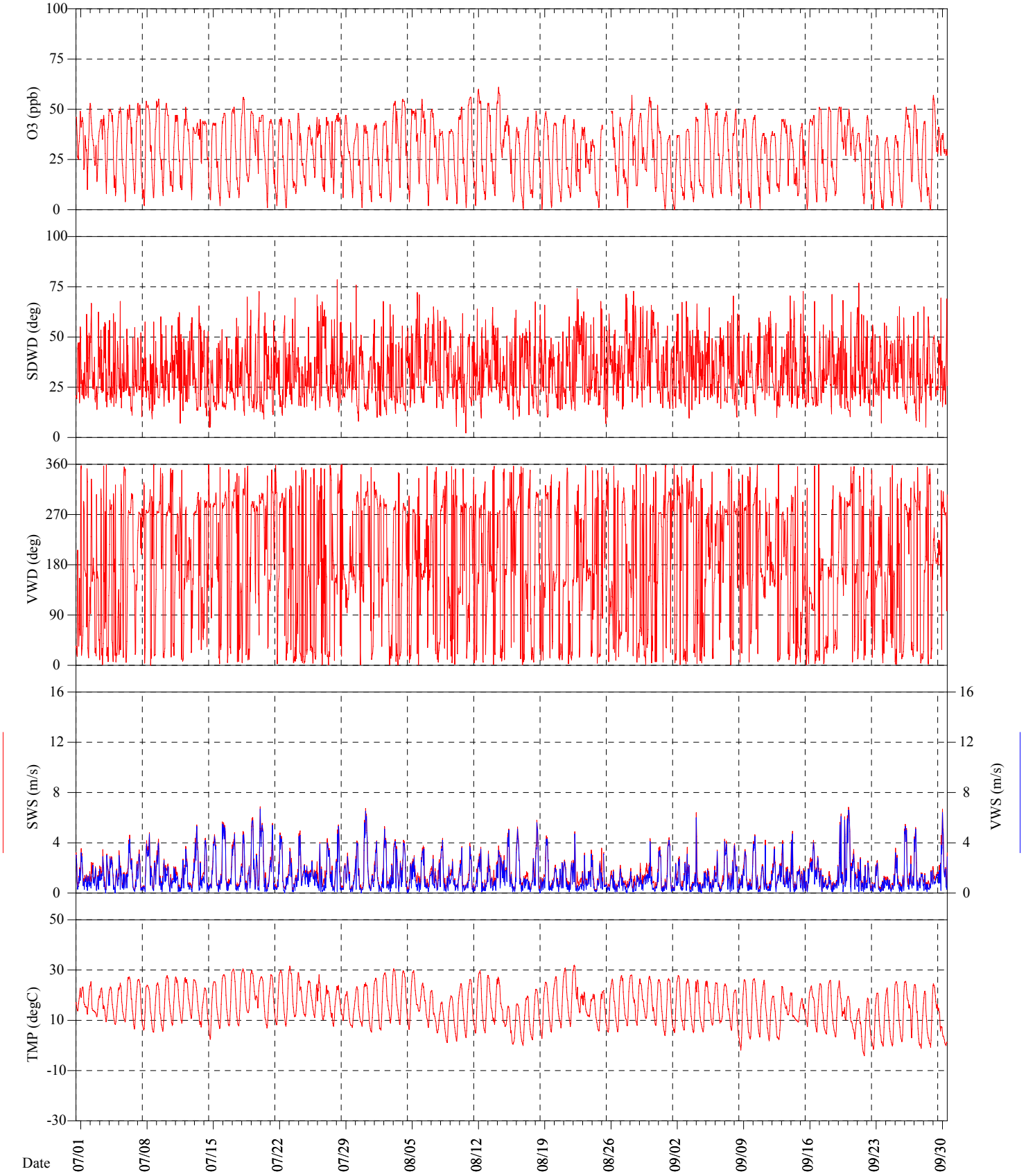


Figure A-39

La Barge #1 (LAB1)
Ozone and Meteorological Data

Oct. - Dec. 2009

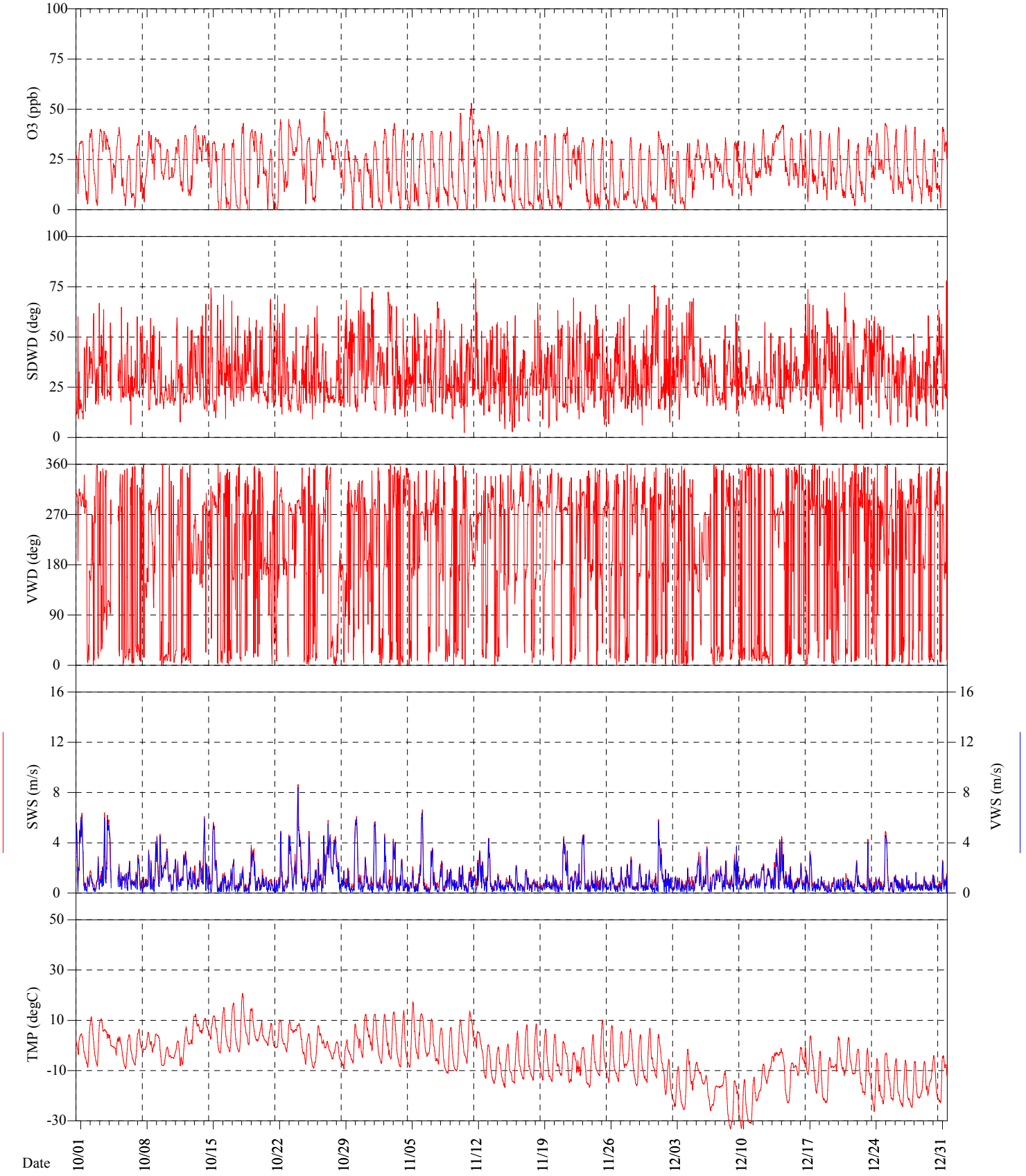


Figure A-40

La Barge #1 (LAB1)
Ozone and Meteorological Data

Jan. - Mar. 2010

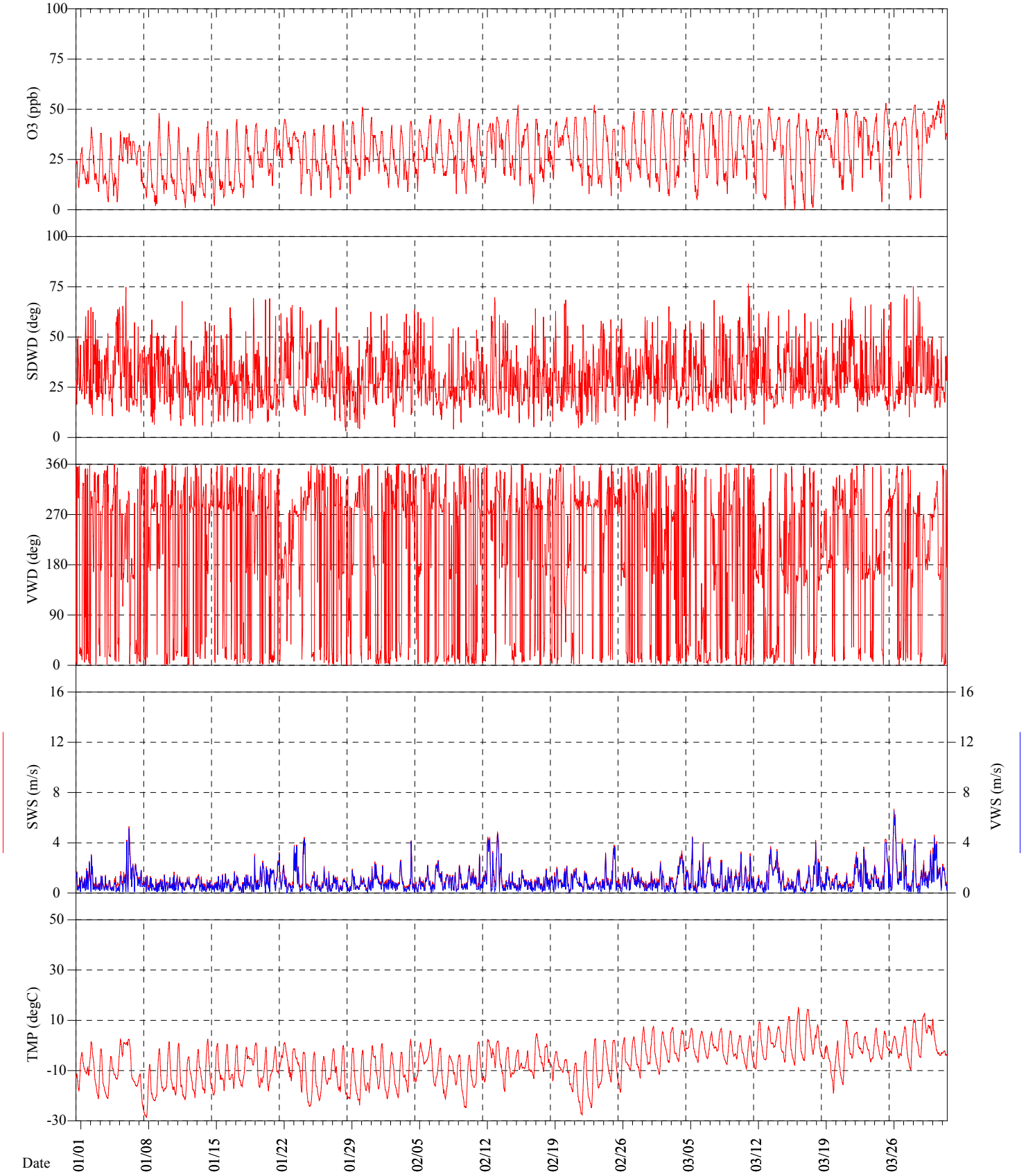


Figure A-41

Linn (LINN)
Meteorological Data

Jan. - Mar. 2009

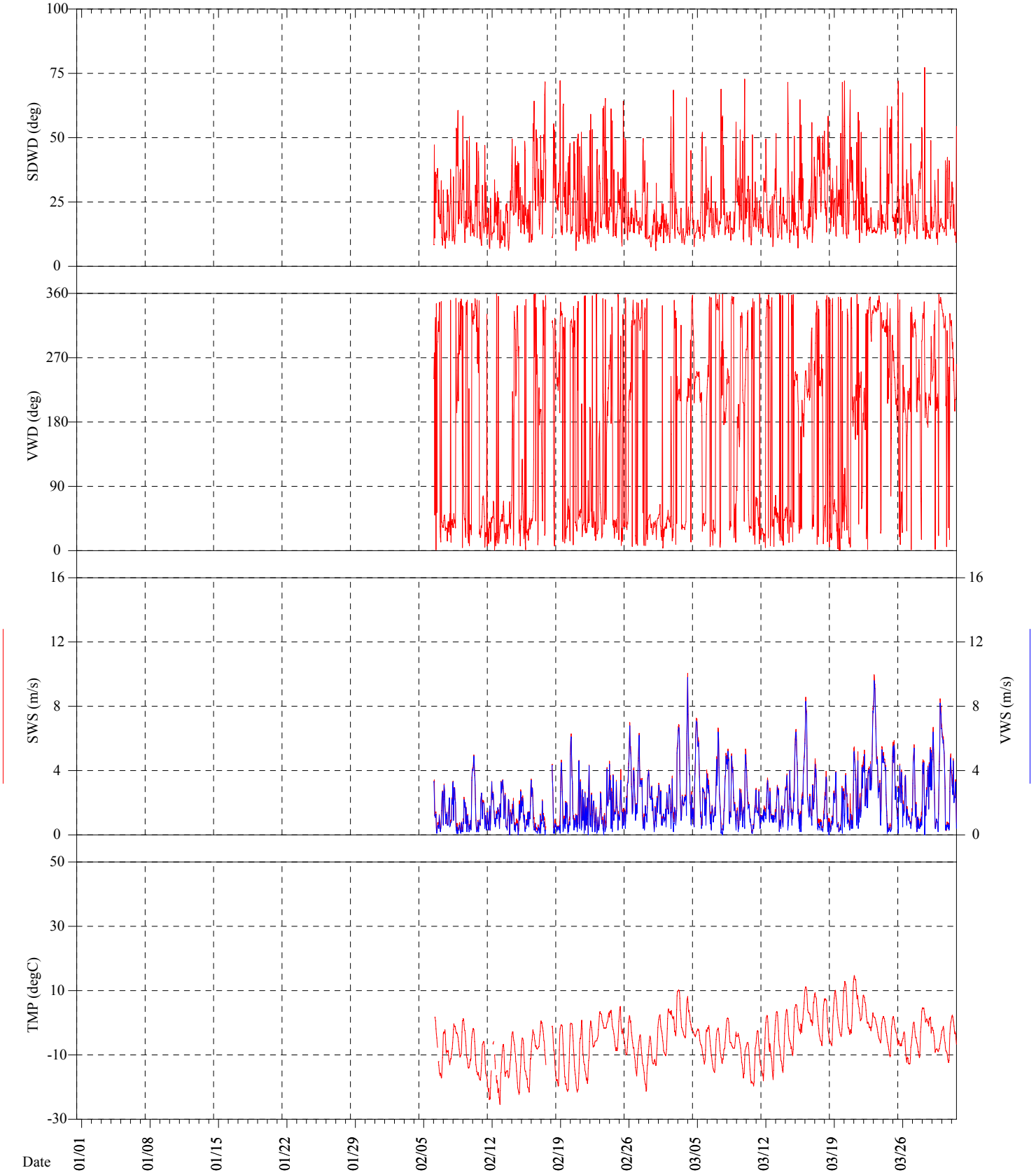


Figure A-42

Linn (LINN)
Meteorological Data

Apr. - Jun. 2009

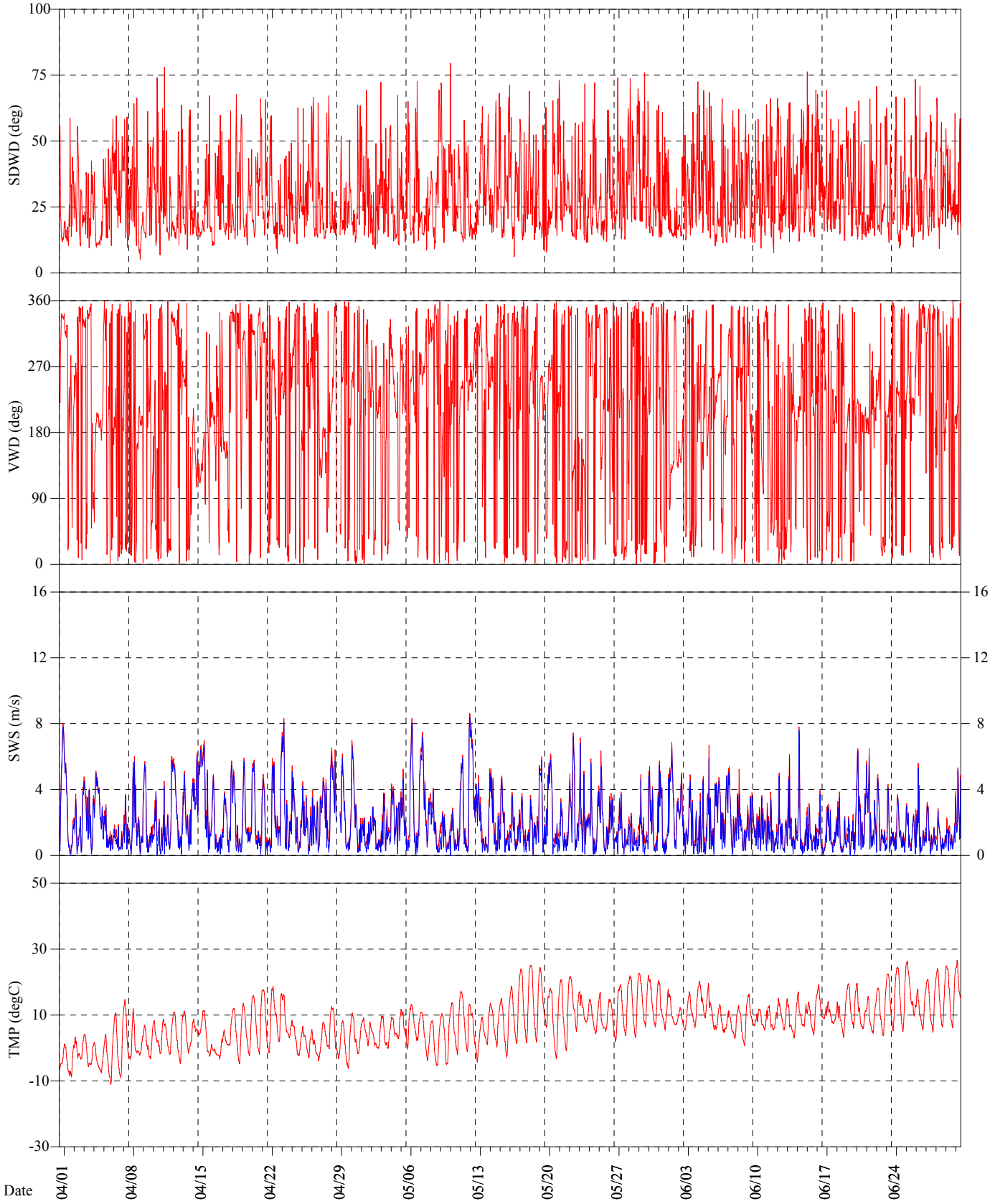


Figure A-43

Linn (LINN)
Meteorological Data

Jul. - Sep. 2009

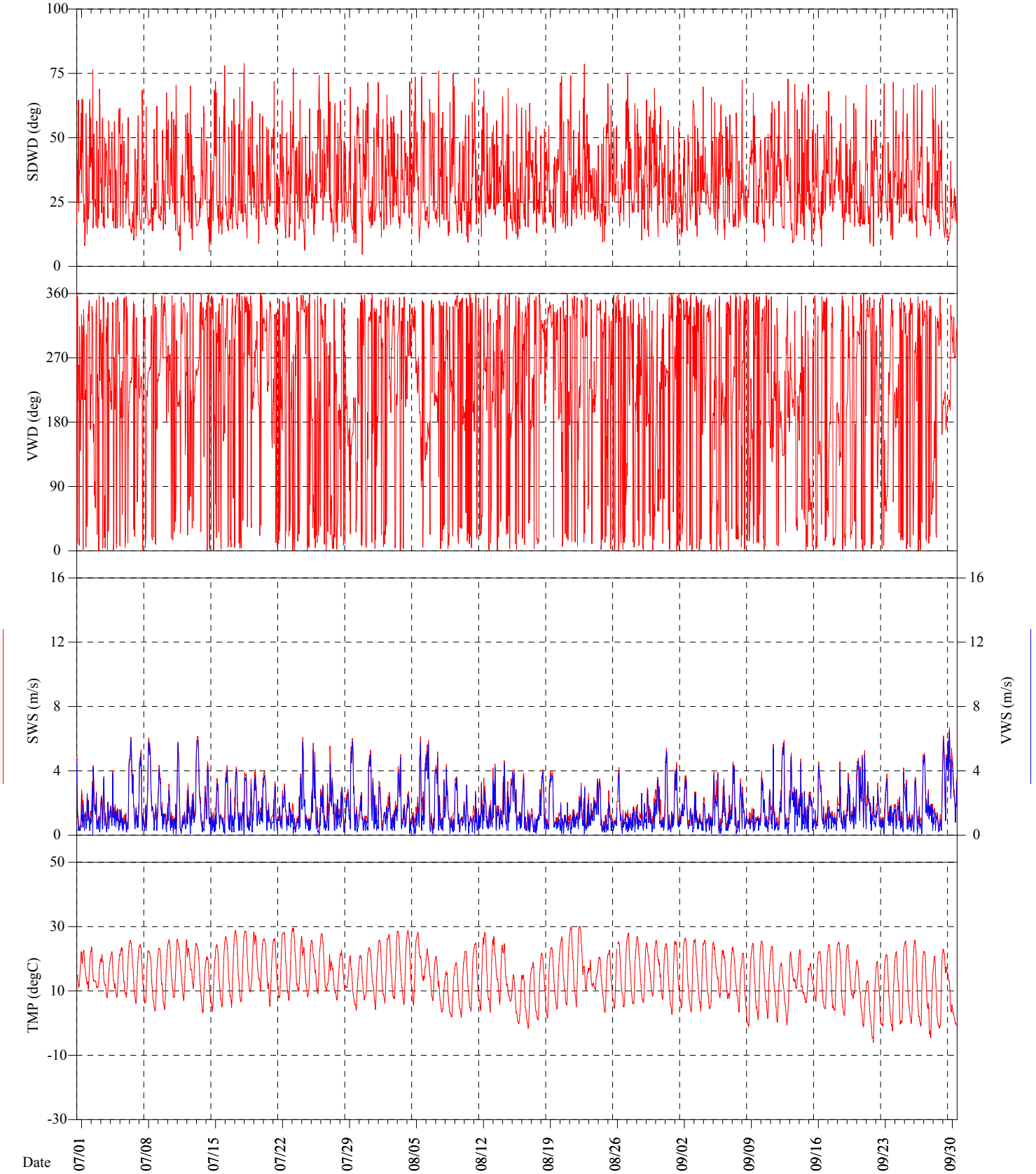


Figure A-44

Linn (LINN)
Meteorological Data

Oct. - Dec. 2009

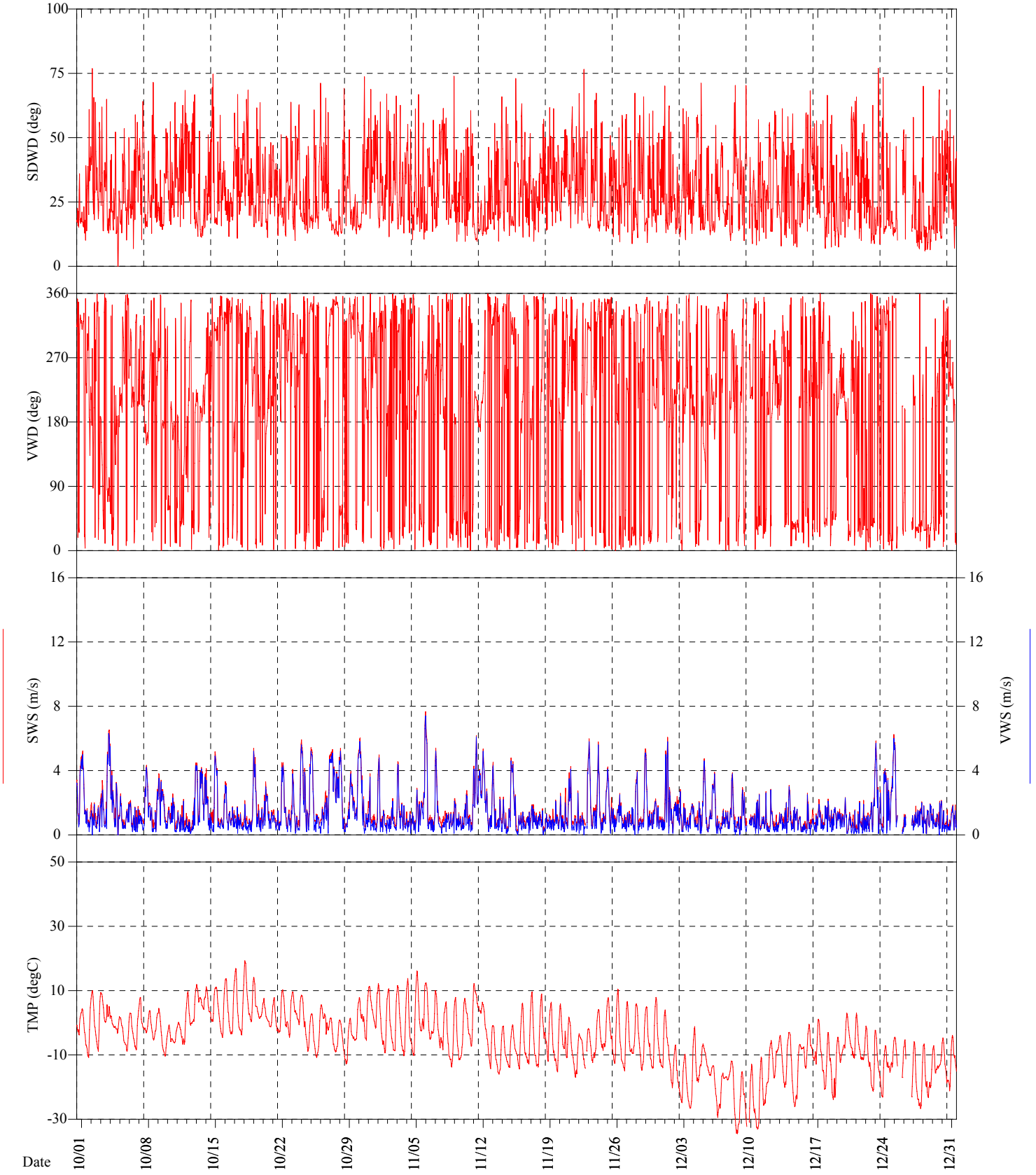


Figure A-45

Linn (LINN)
Meteorological Data

Jan. - Mar. 2010

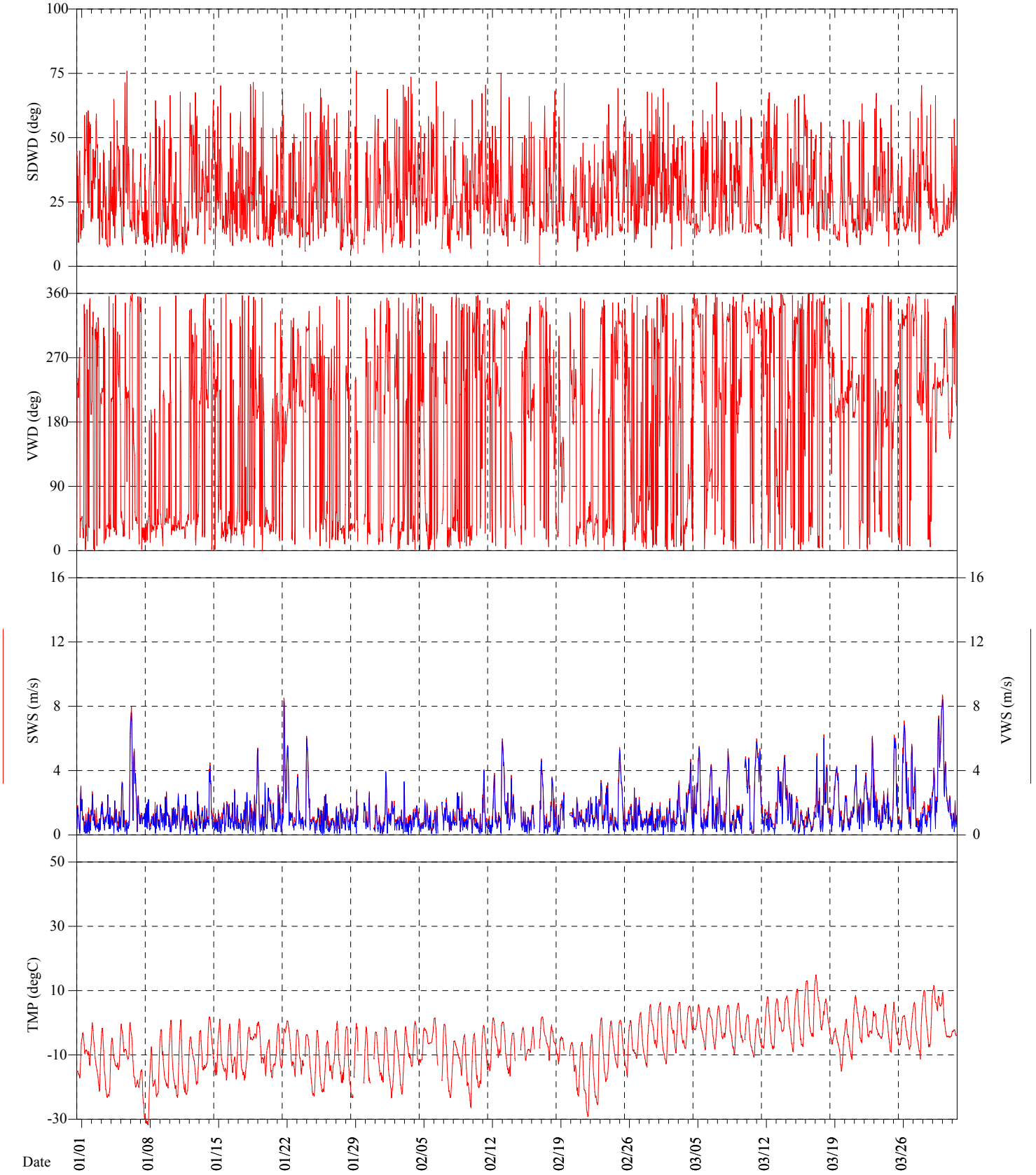


Figure A-46

Marbleton (MARB)
Ozone and Meteorological Data

Jan. - Mar. 2009

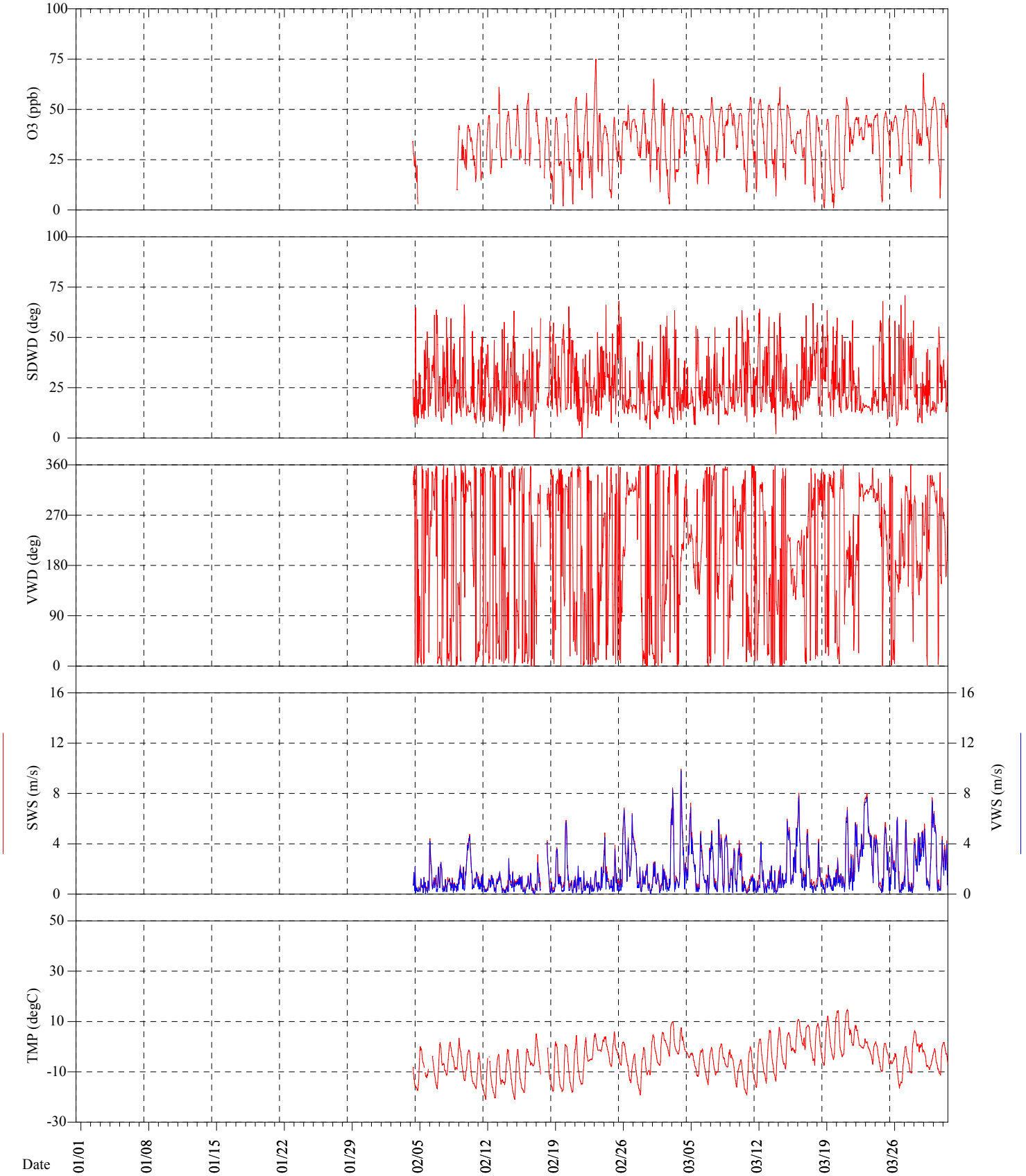


Figure A-47

Marbleton (MARB)
Ozone and Meteorological Data

Apr. - Jun. 2009

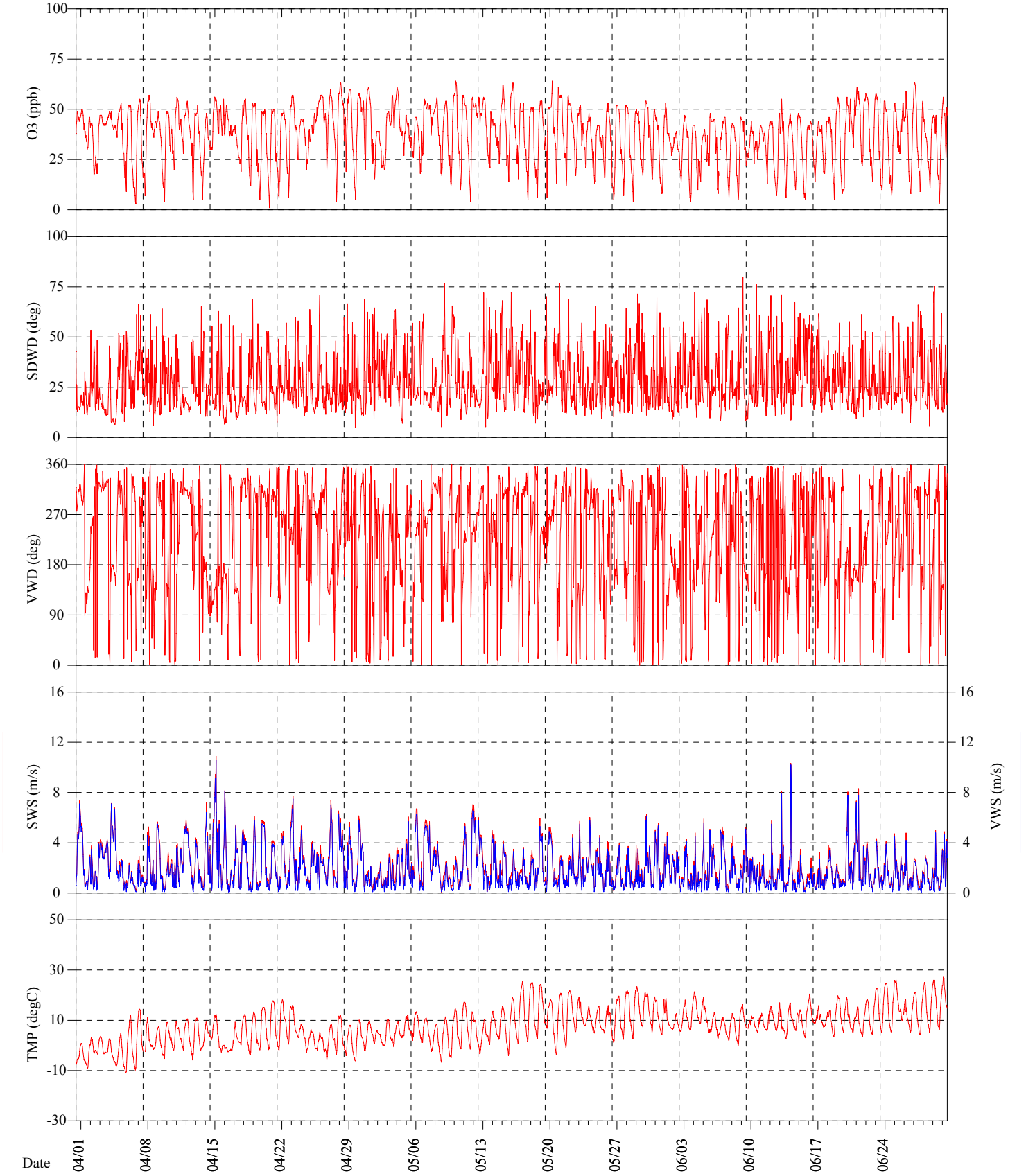


Figure A-48

Marbleton (MARB)
Ozone and Meteorological Data

Jul. - Sep. 2009

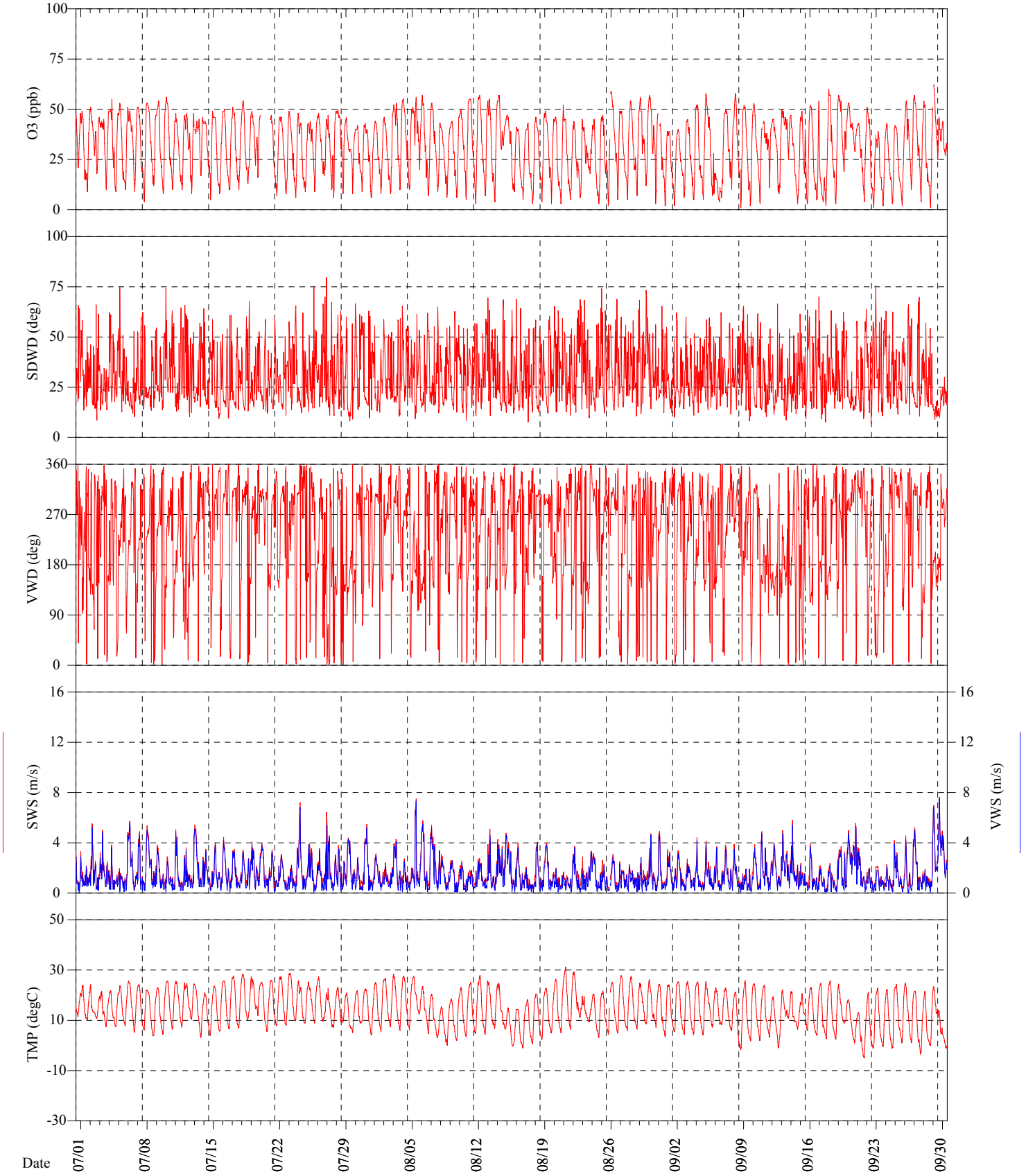


Figure A-49

Marbleton (MARB)
Ozone and Meteorological Data

Oct. - Dec. 2009

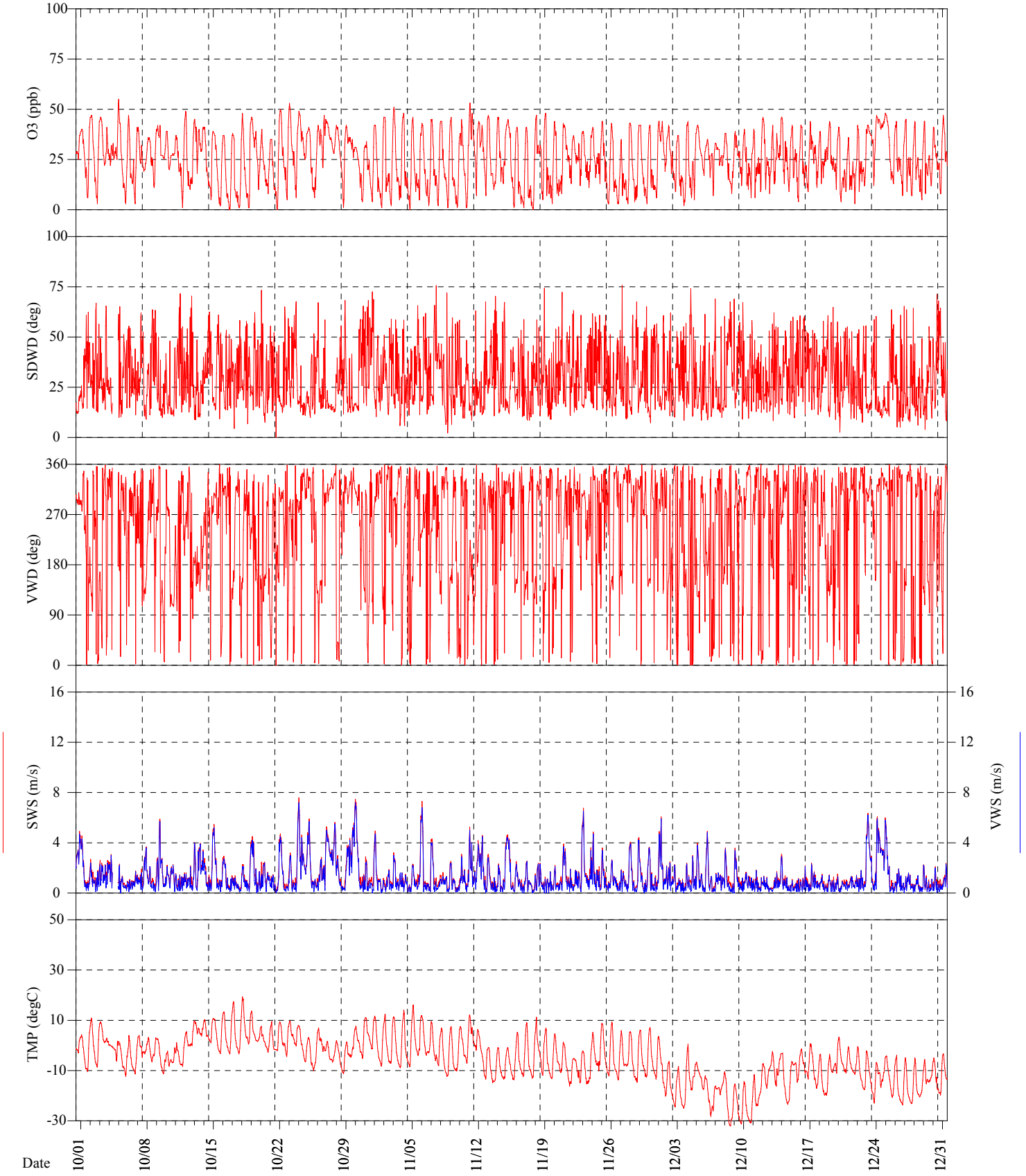


Figure A-50

Marbleton (MARB)
Ozone and Meteorological Data

Jan. - Mar. 2010

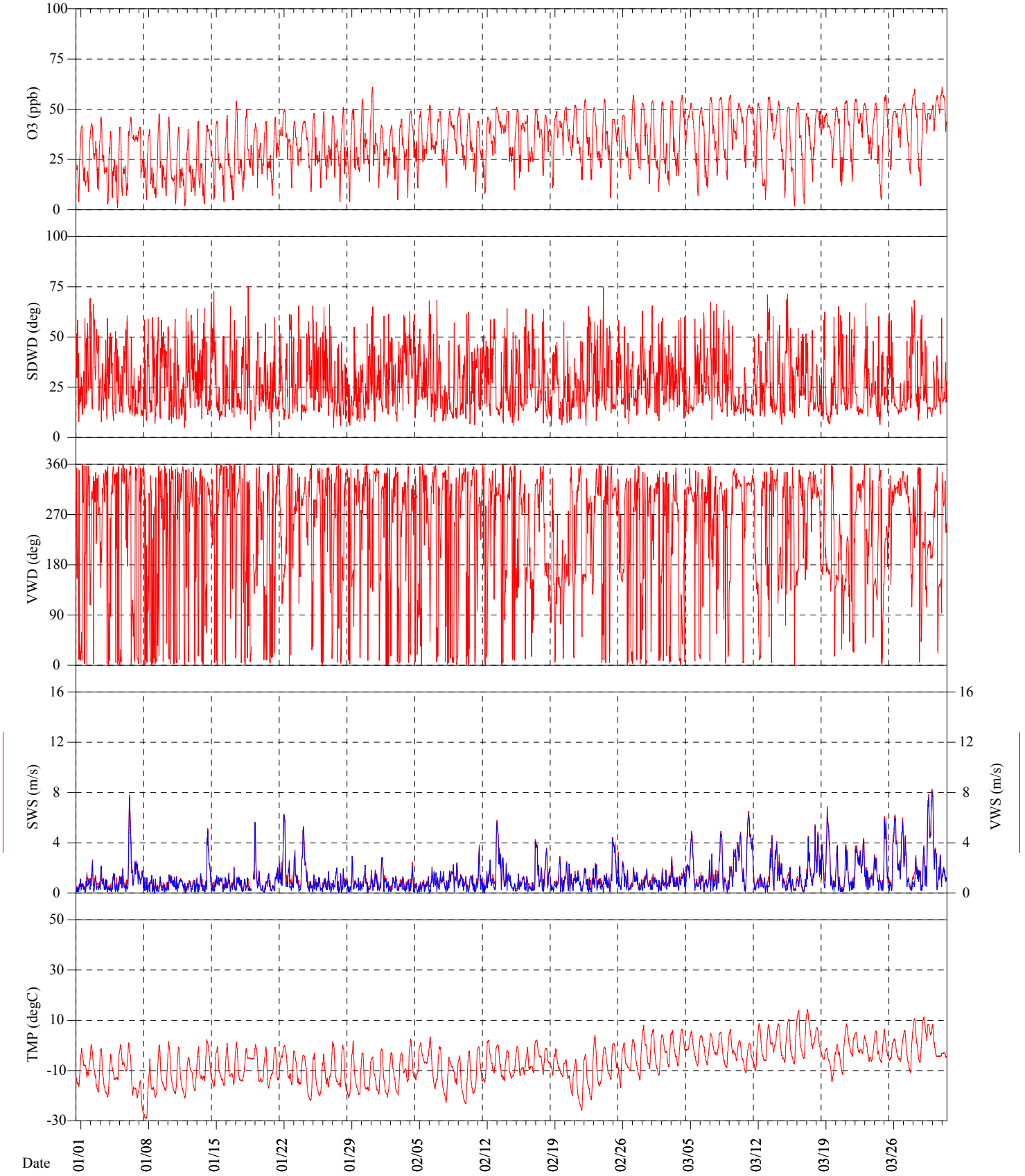


Figure A-51

Pinedale #1 (PIN1)
Meteorological Data

Jan. - Mar. 2010

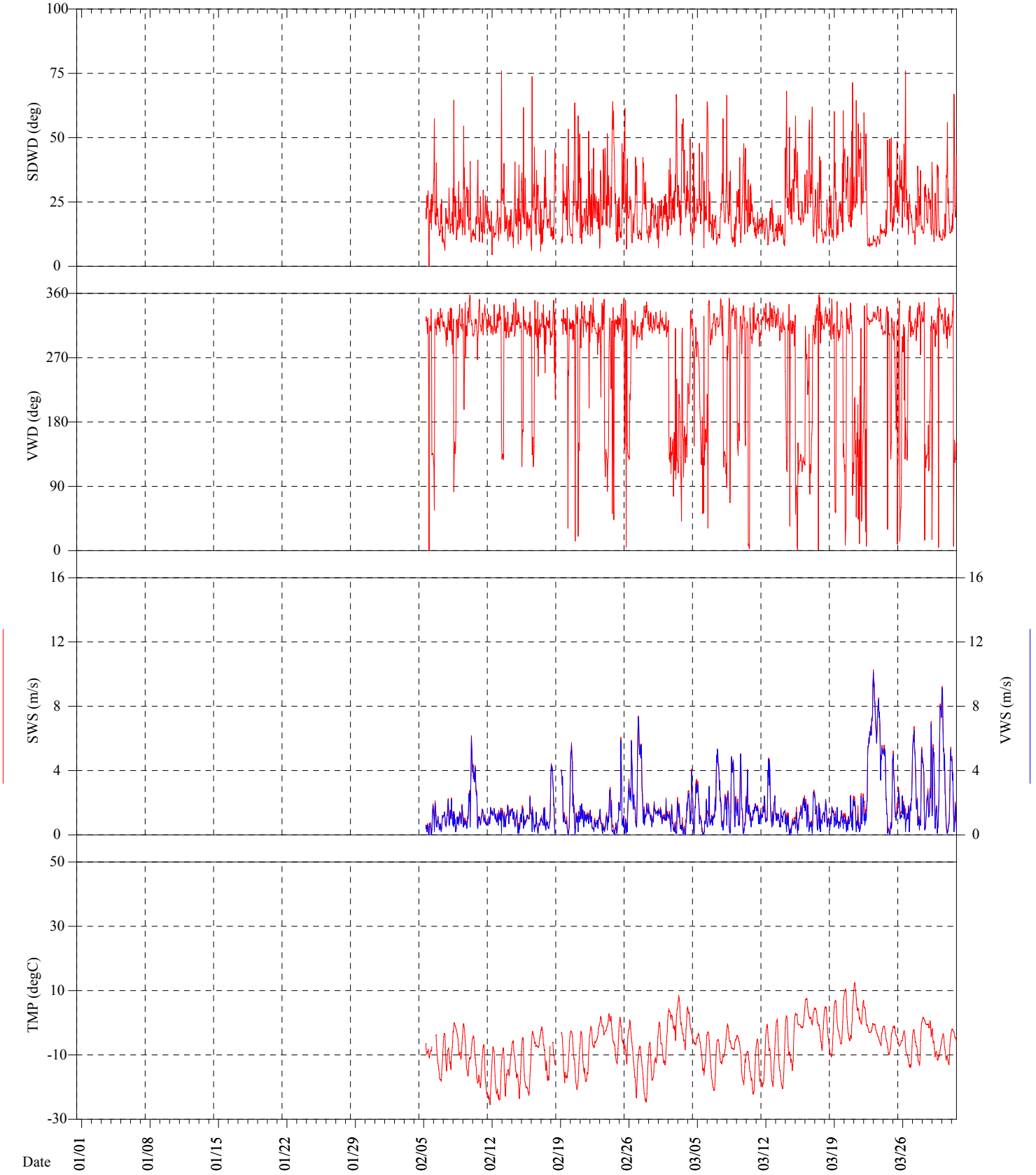


Figure A-52

Pinedale #1 (PIN1)
Meteorological Data

Apr. - Jun. 2009

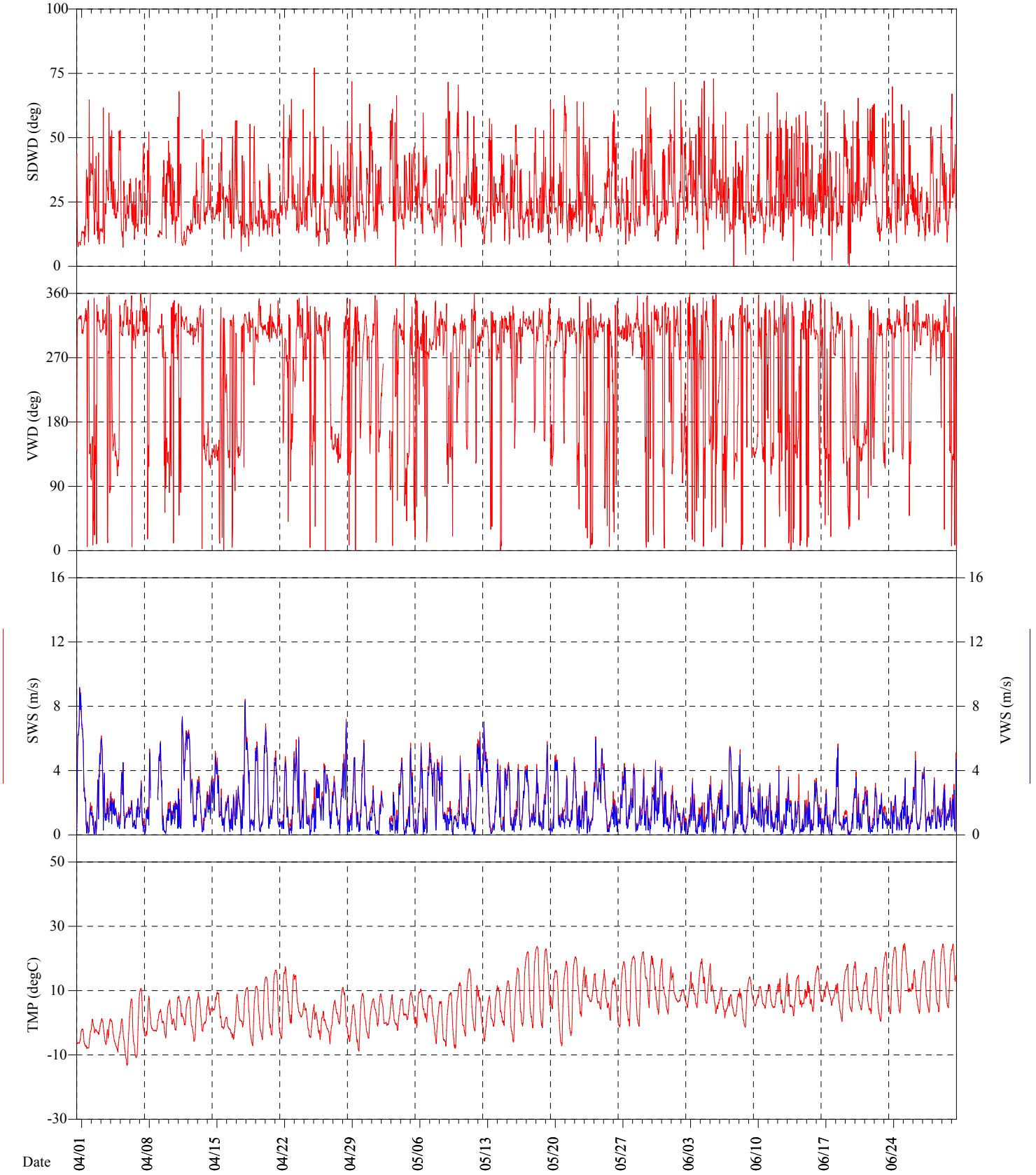


Figure A-53

Pinedale #1 (PIN1)
Meteorological Data

Jul. - Sep. 2009

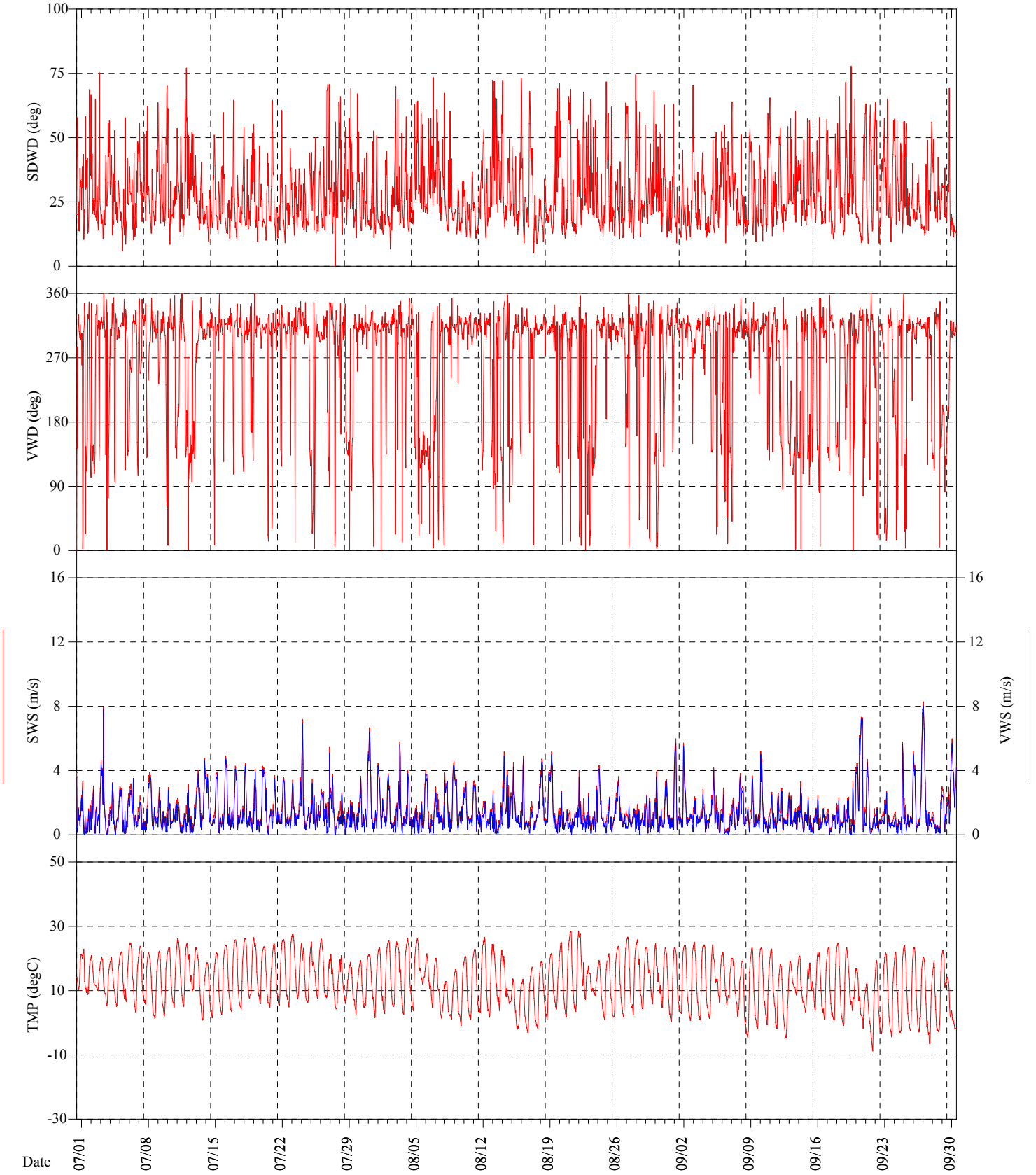


Figure A-54

Pinedale #1 (PIN1)
Meteorological Data

Oct. - Dec. 2009

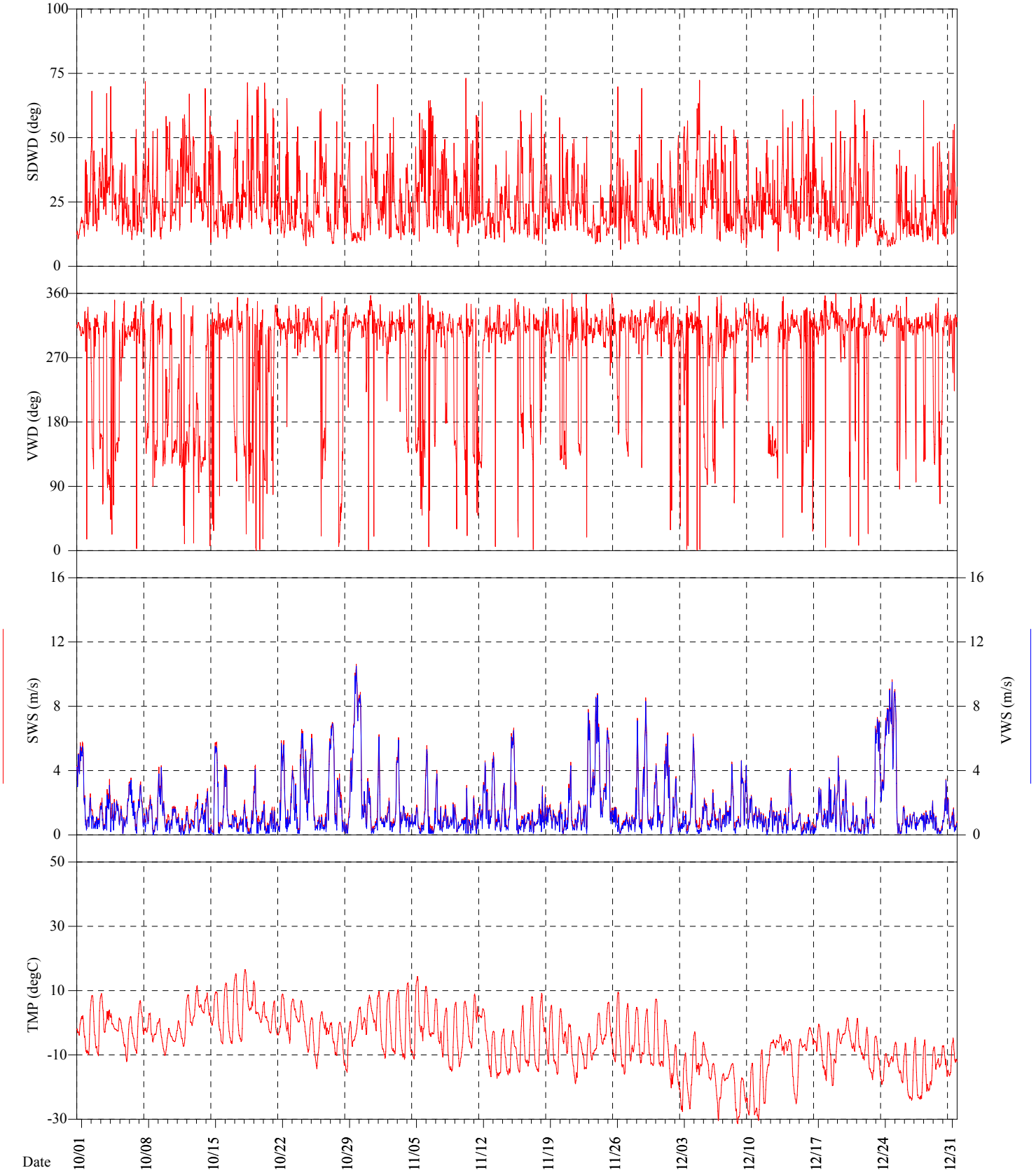


Figure A-55

Pinedale #1 (PIN1)
Meteorological Data

Jan. - Mar. 2010

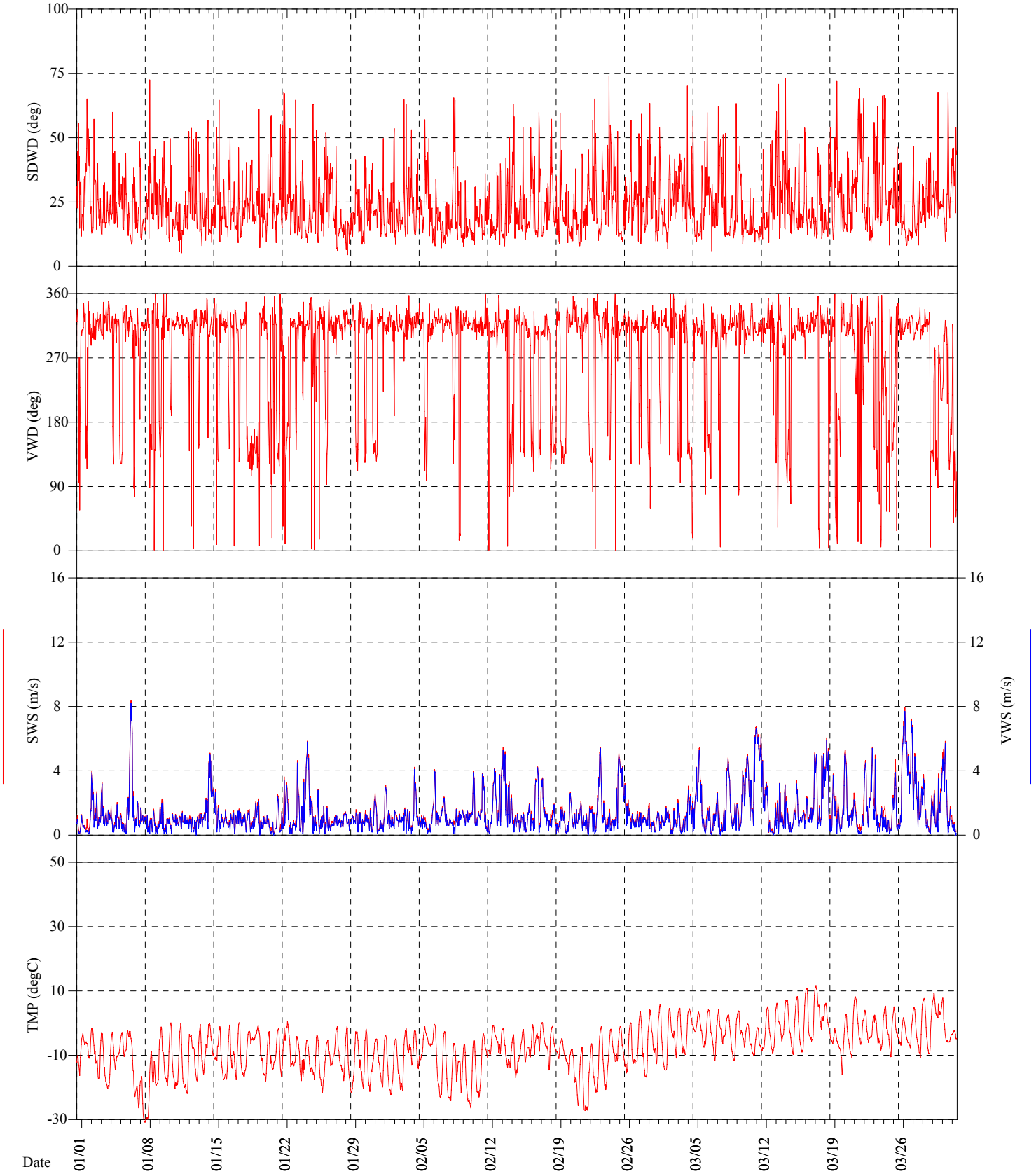


Figure A-56

Sand Draw (SADR)
Ozone and Meteorological Data

Jan. - Mar. 2009

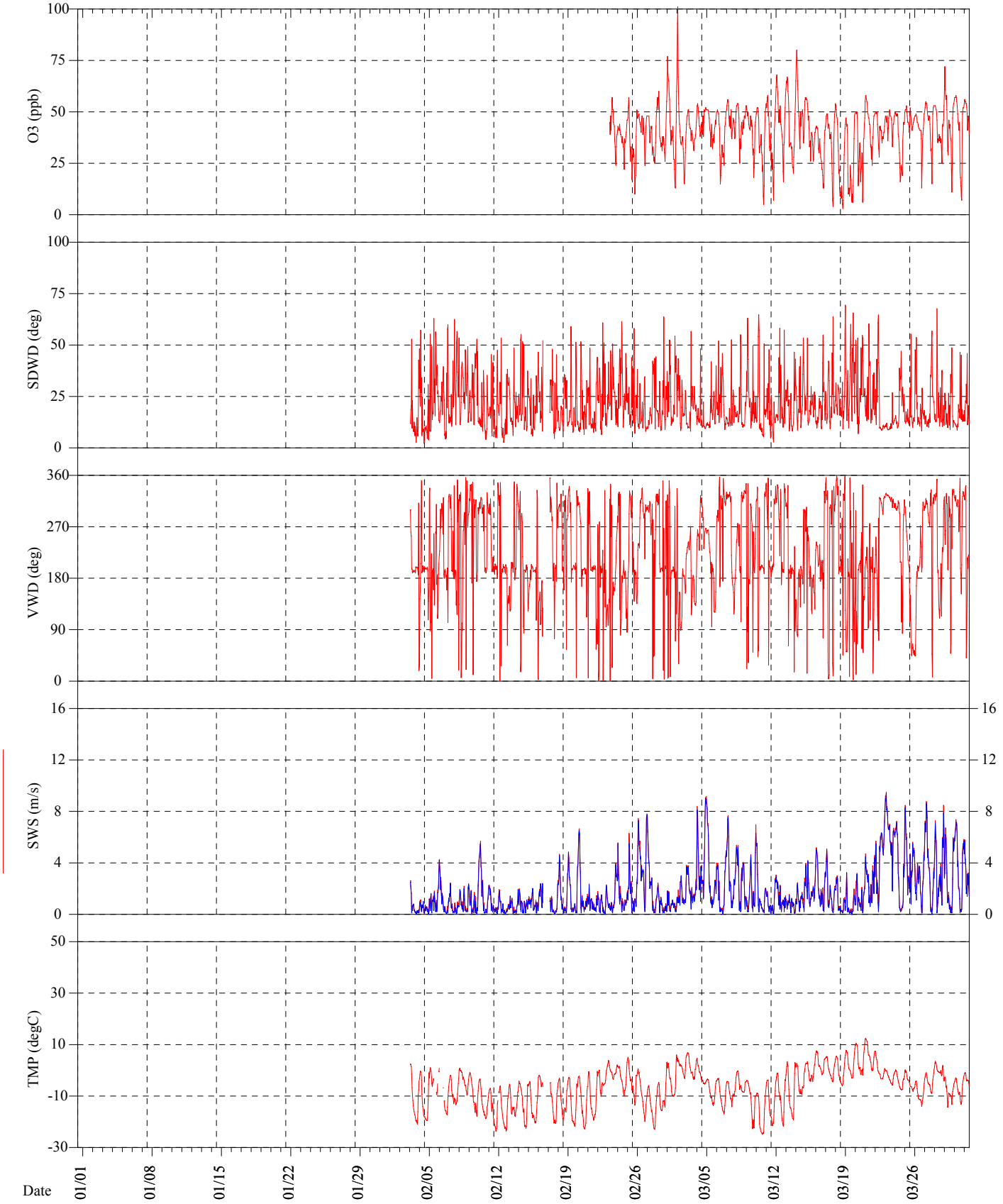


Figure A-57

Sand Draw (SADR)
Ozone and Meteorological Data

Apr. - Jun. 2009

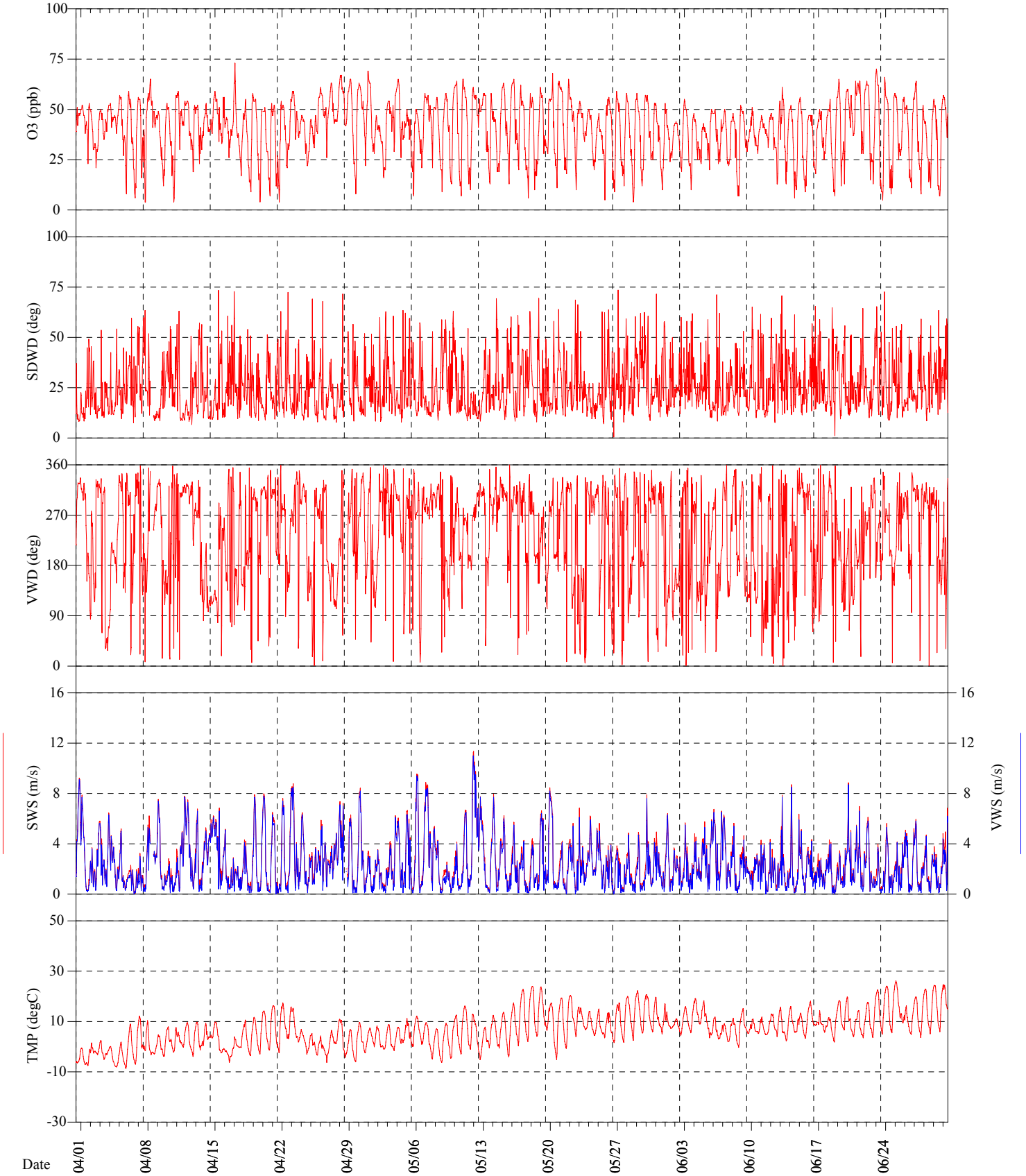


Figure A-58

Sand Draw (SADR)
Ozone and Meteorological Data

Jul. - Sep. 2009

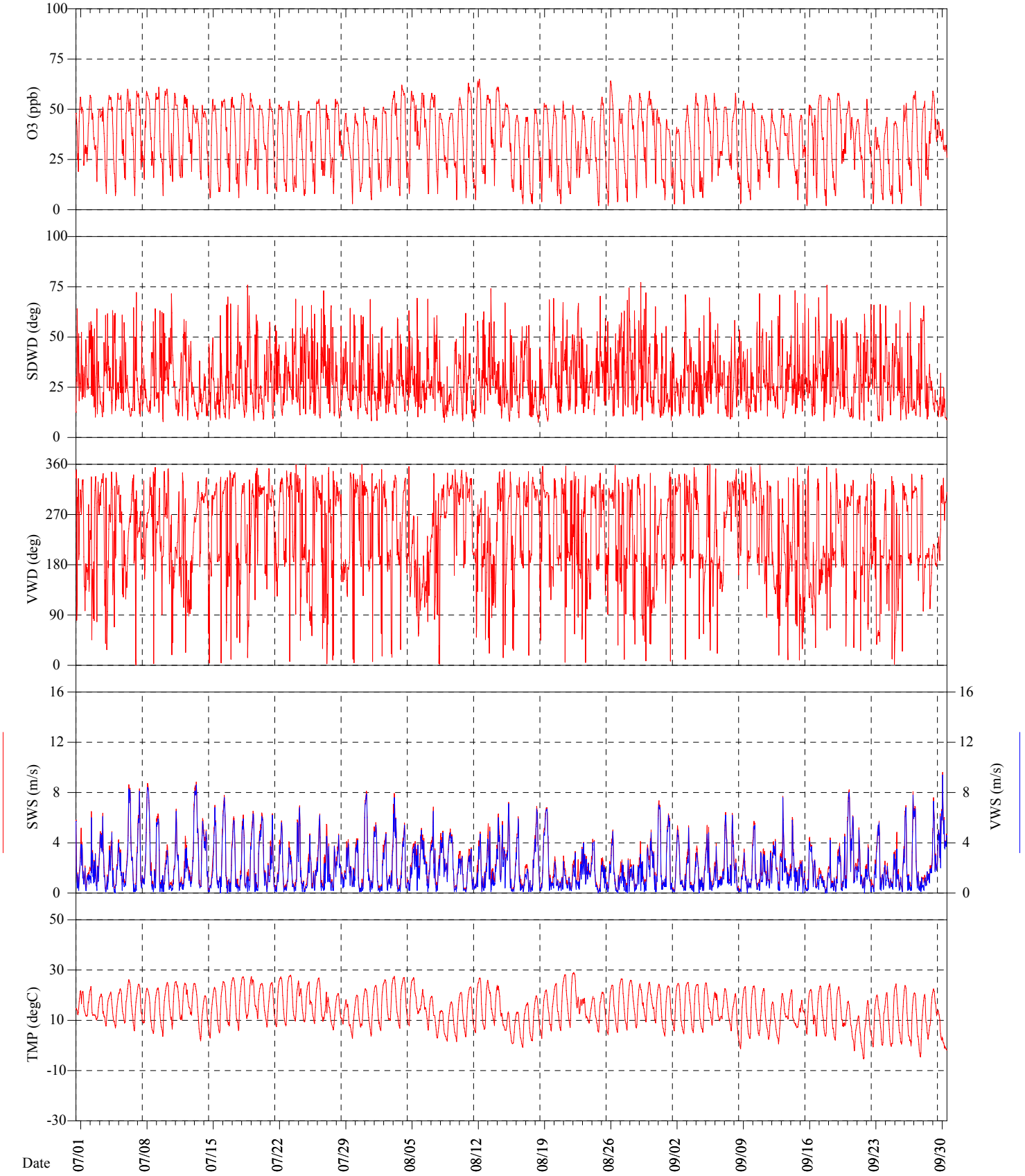


Figure A-59

Sand Draw (SADR)
Ozone and Meteorological Data

Oct. - Dec. 2009

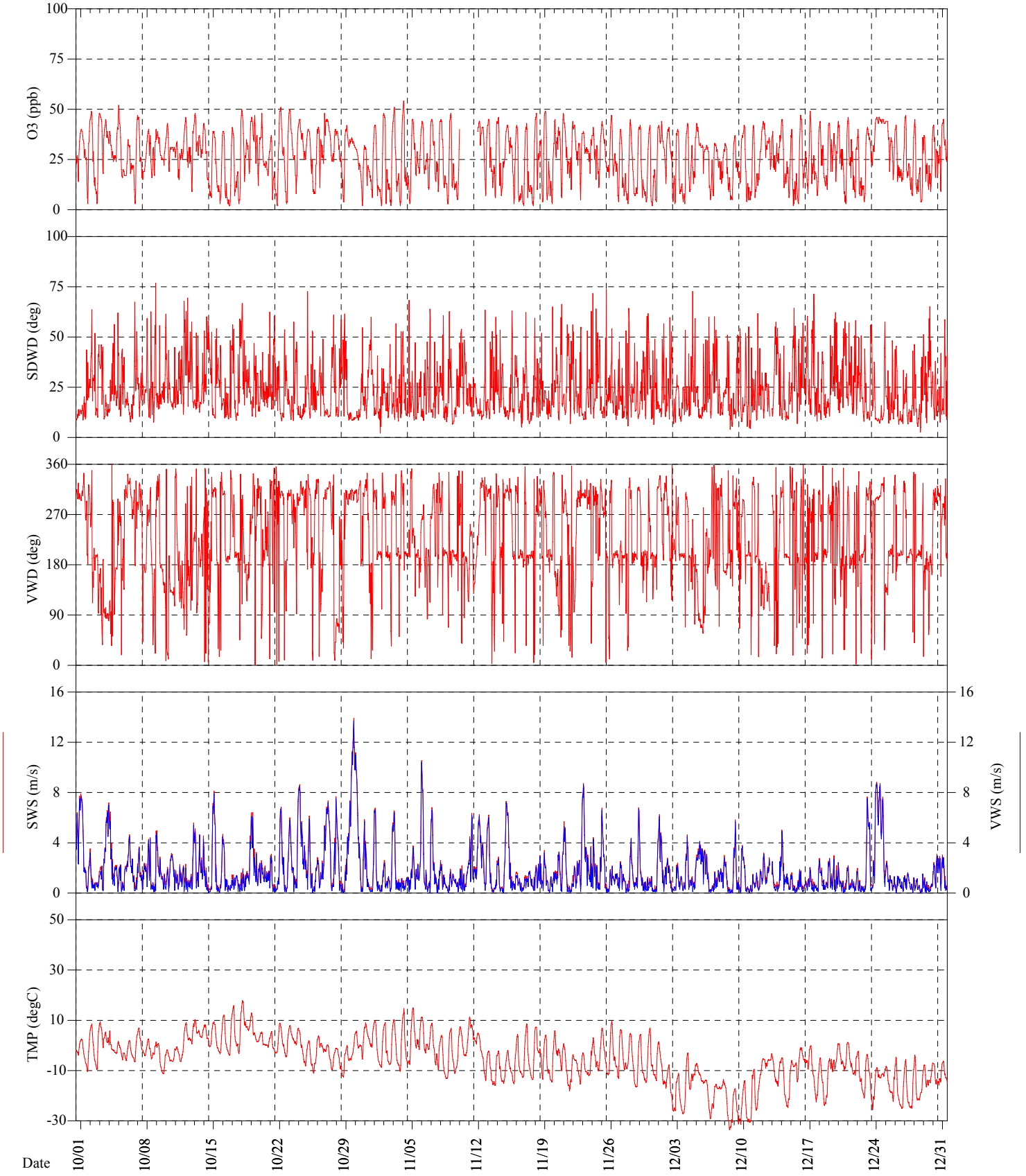
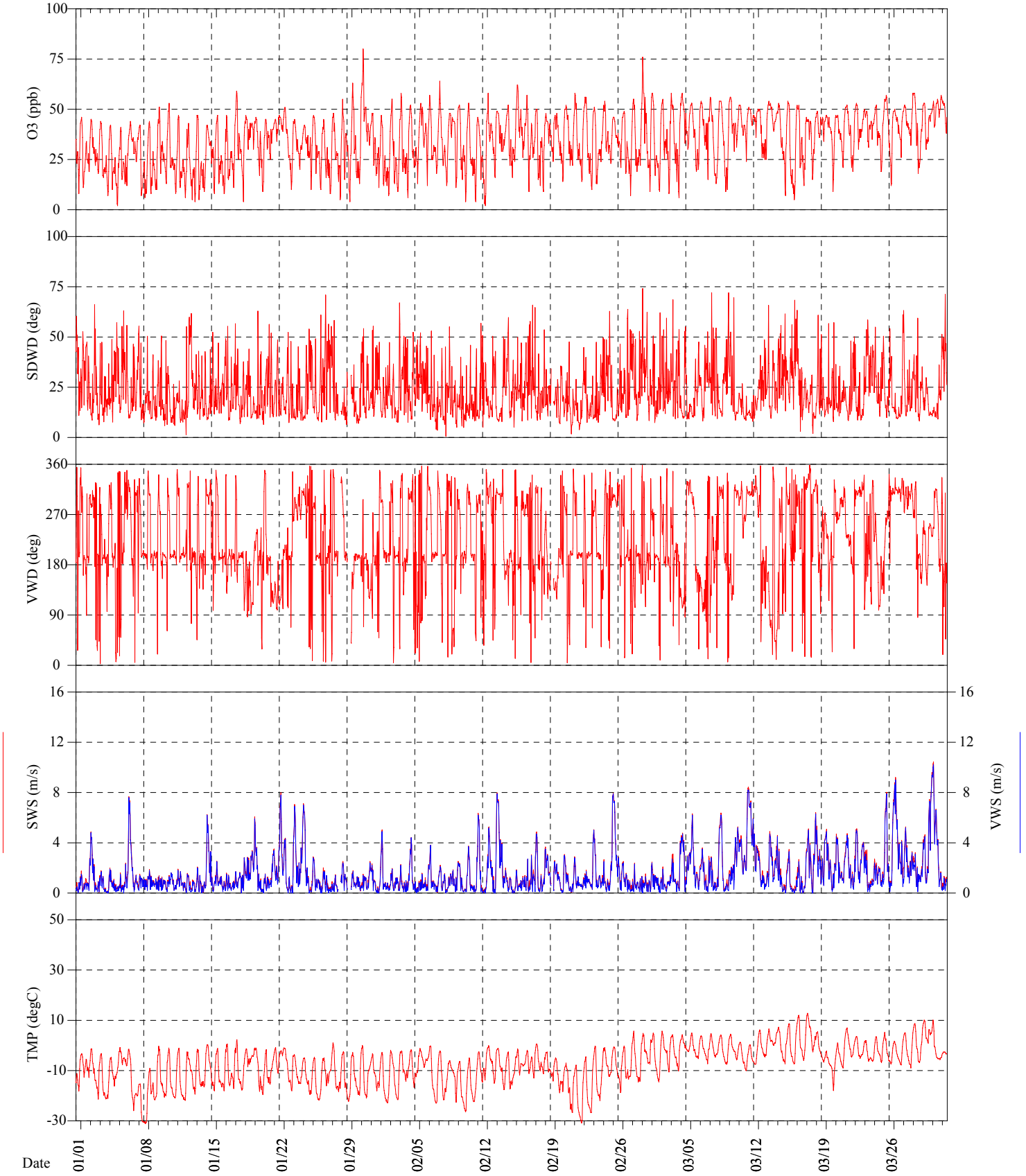


Figure A-60

Sand Draw (SADR)
Ozone and Meteorological Data

Jan. - Mar. 2010



APPENDIX B

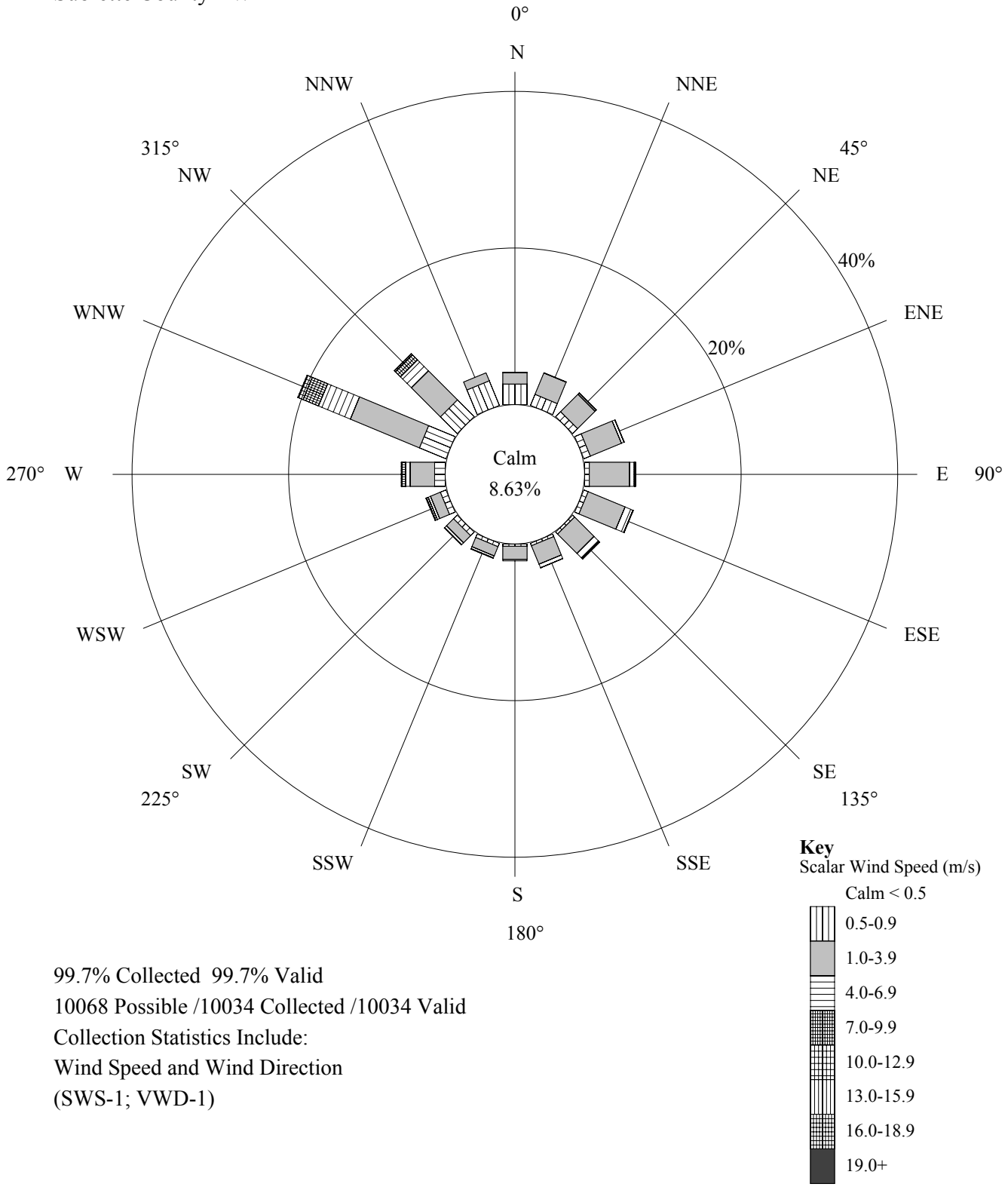
Wind Roses

Figure B-1

Bargerville - Sublette County - WY

Wind Rose

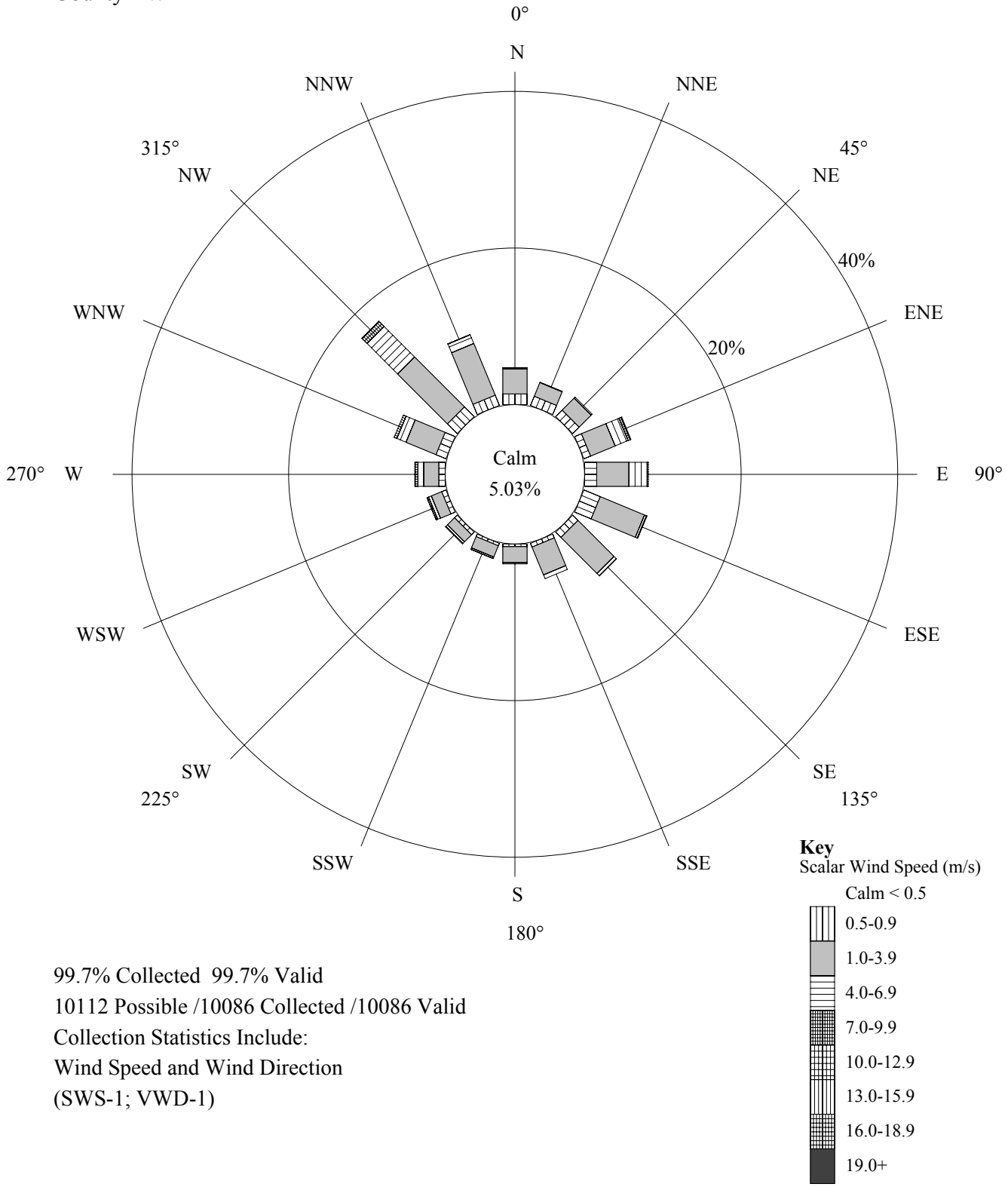
02/05/2009 - 03/31/2010



99.7% Collected 99.7% Valid
10068 Possible /10034 Collected /10034 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-2

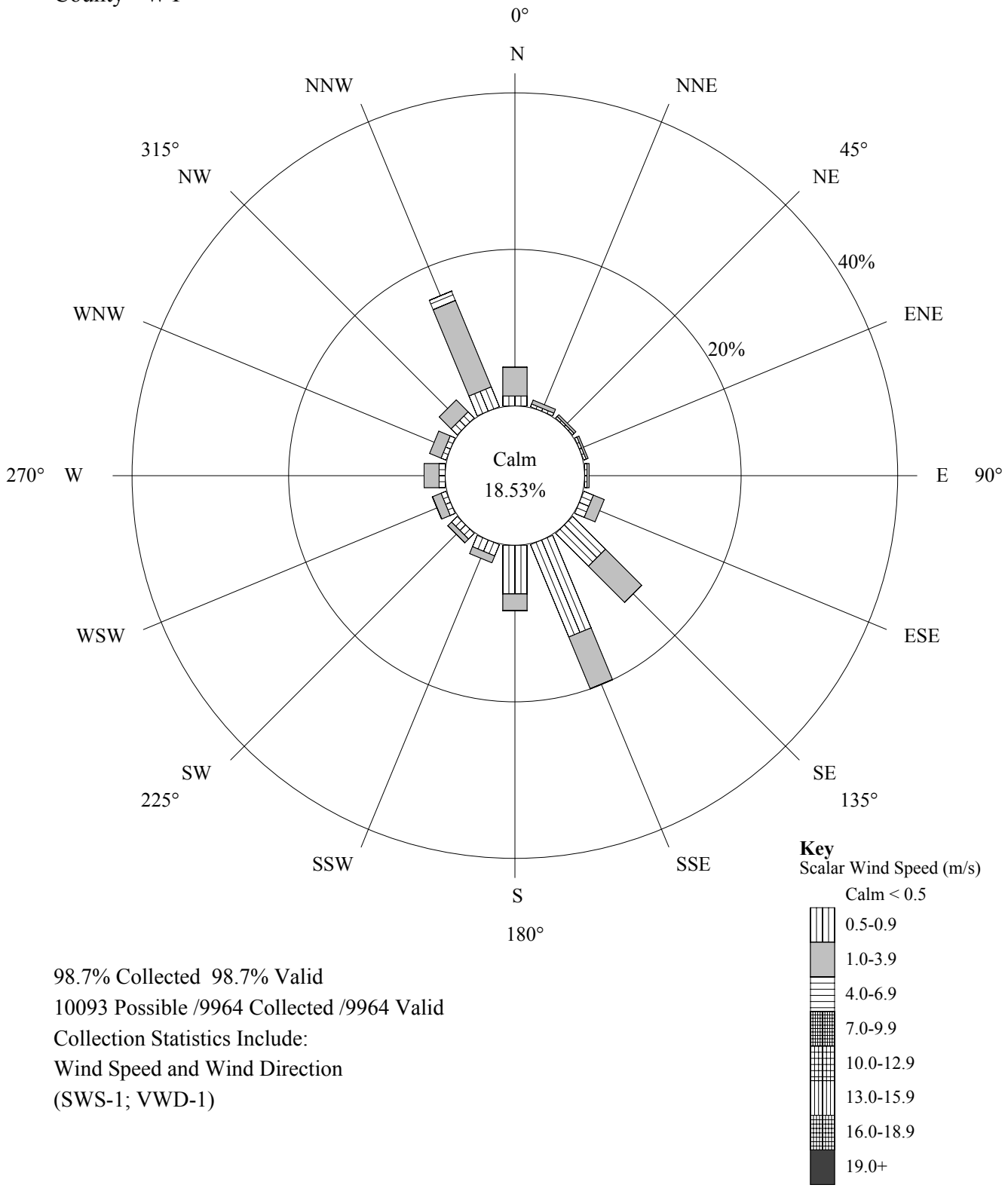
Big Sandy - Sublette County - WY | Wind Rose | 02/03/2009 - 03/31/2010



99.7% Collected 99.7% Valid
10112 Possible /10086 Collected /10086 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-3

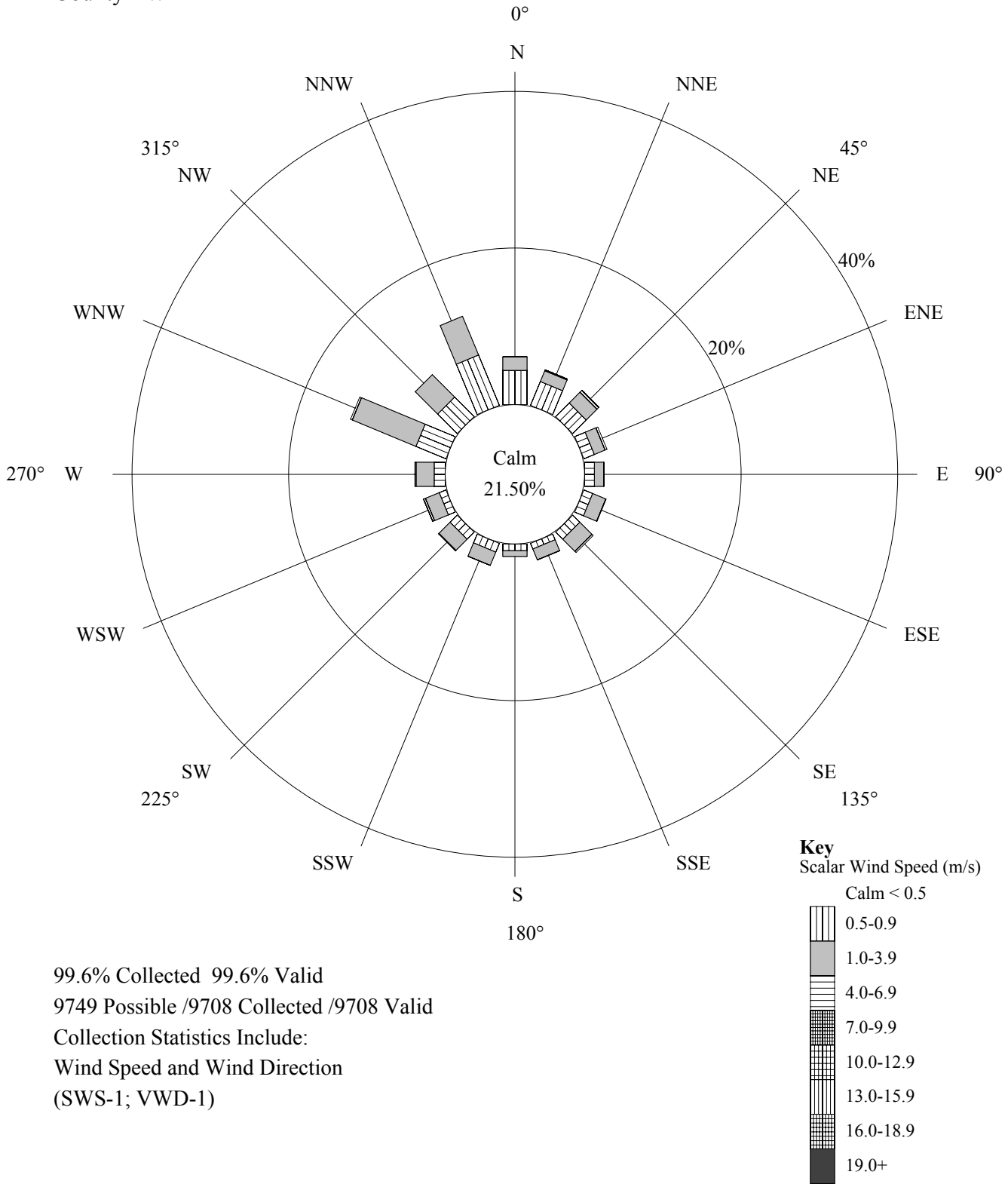
Bondurant - Sublette County - WY | Wind Rose | 02/04/2009 - 03/31/2010



98.7% Collected 98.7% Valid
10093 Possible /9964 Collected /9964 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-4

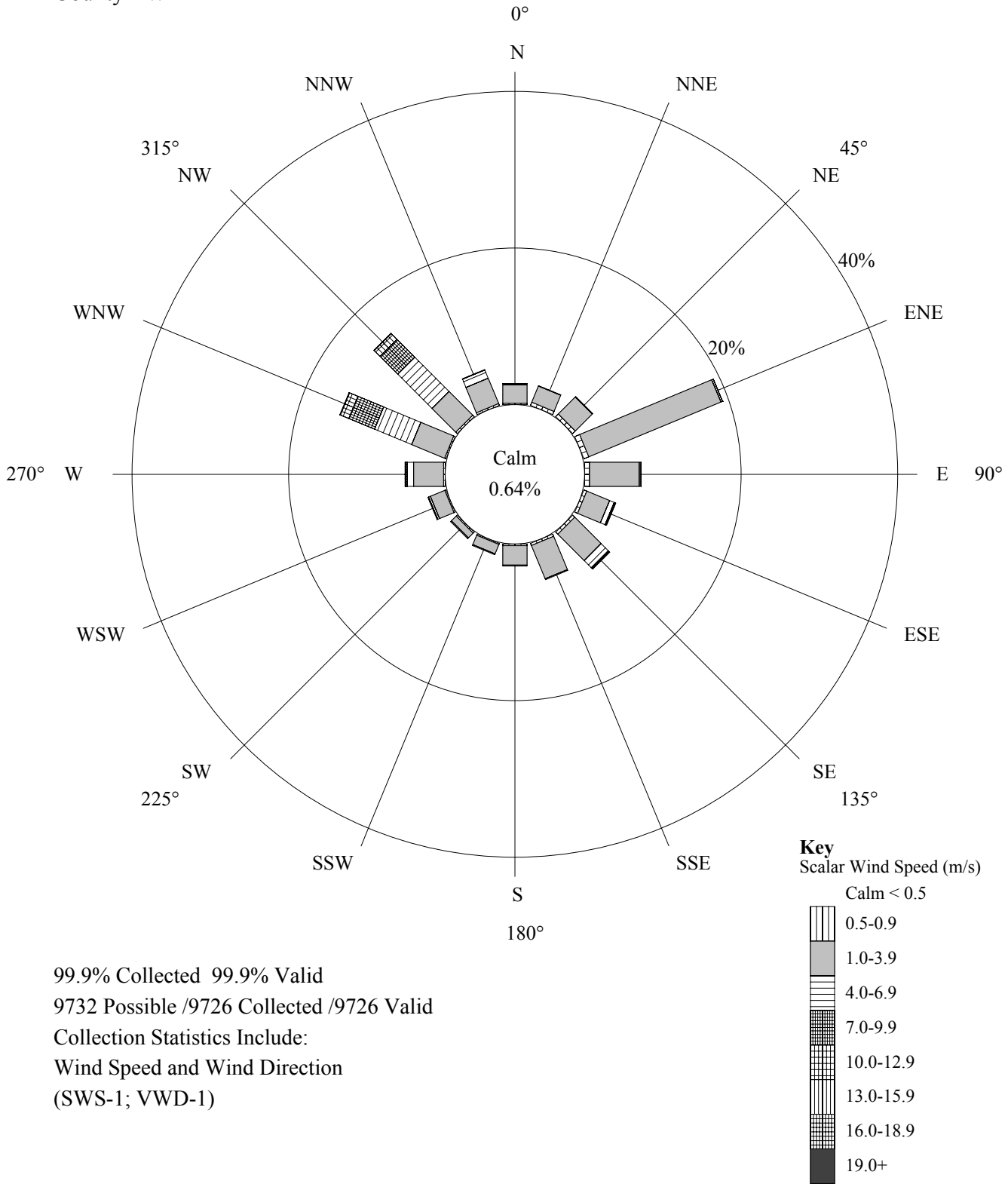
Boulder - Sublette County - WY | Wind Rose | 02/18/2009 - 03/31/2010



99.6% Collected 99.6% Valid
9749 Possible /9708 Collected /9708 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-5

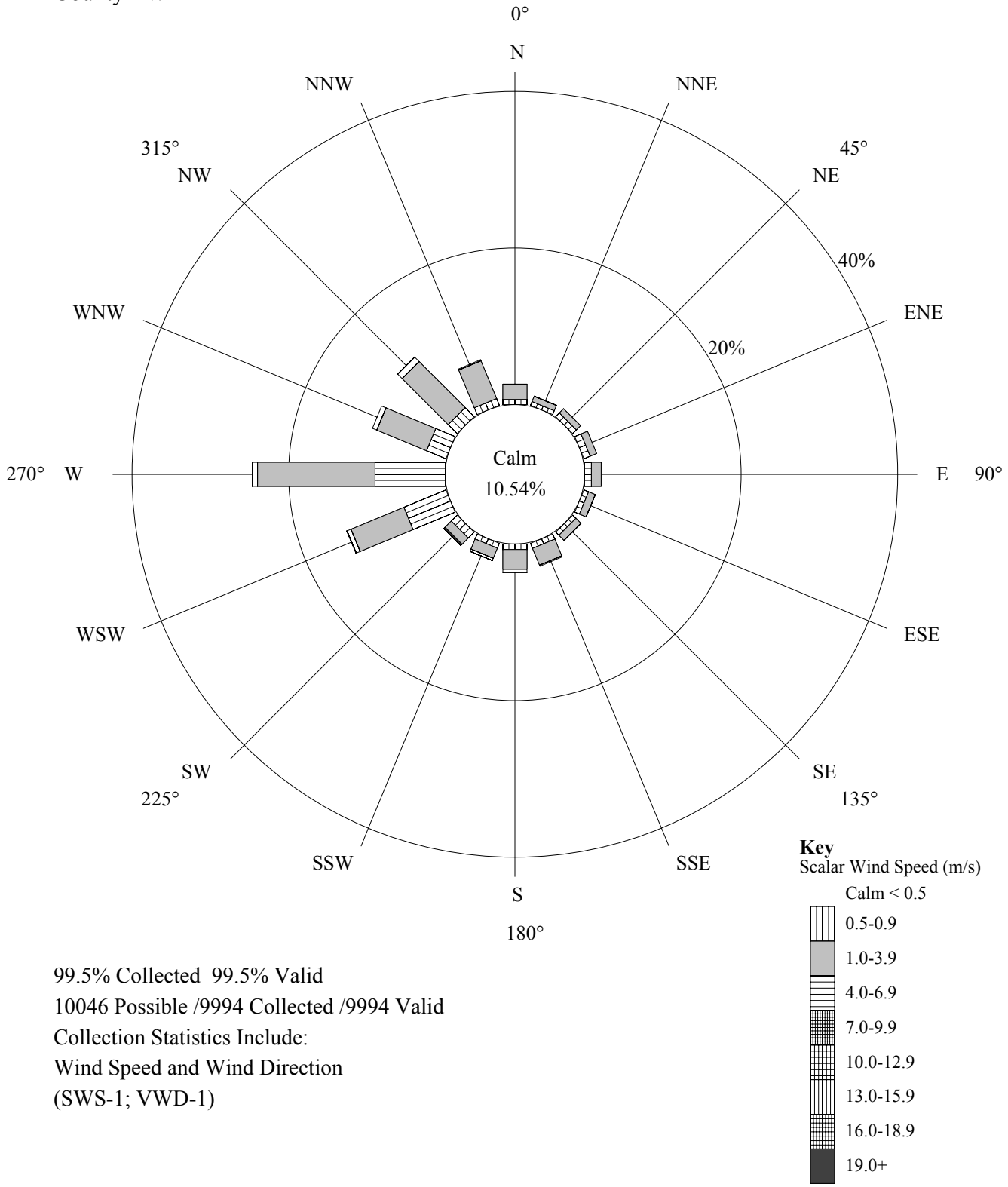
CASTNet - Sublette County - WY | Wind Rose | 02/19/2009 - 03/31/2010



99.9% Collected 99.9% Valid
9732 Possible /9726 Collected /9726 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-6

Daniel - Sublette County - WY | Wind Rose | 02/06/2009 - 03/31/2010



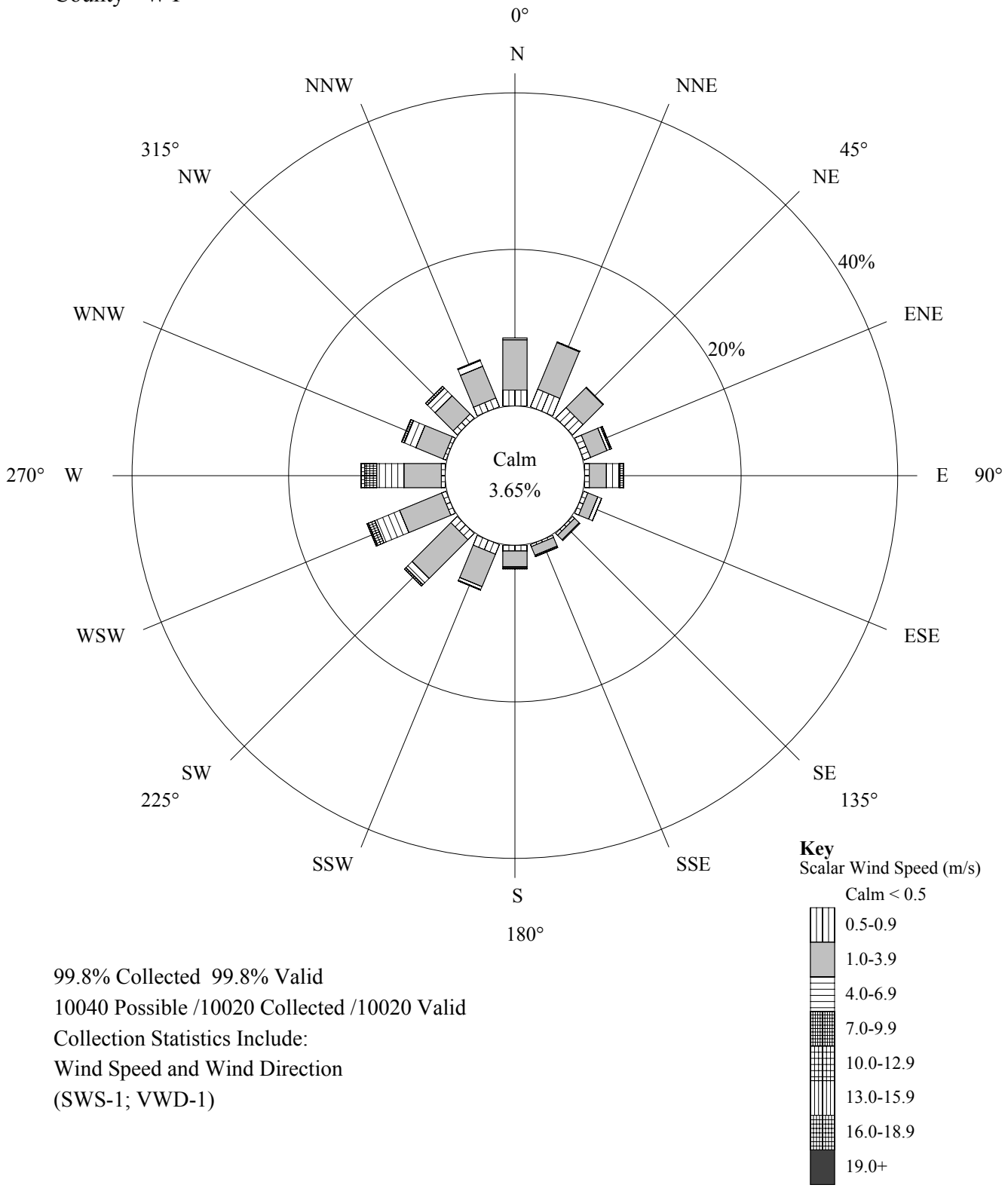
99.5% Collected 99.5% Valid
10046 Possible /9994 Collected /9994 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-7

Farson - Sublette County - WY

Wind Rose

02/06/2009 - 03/31/2010

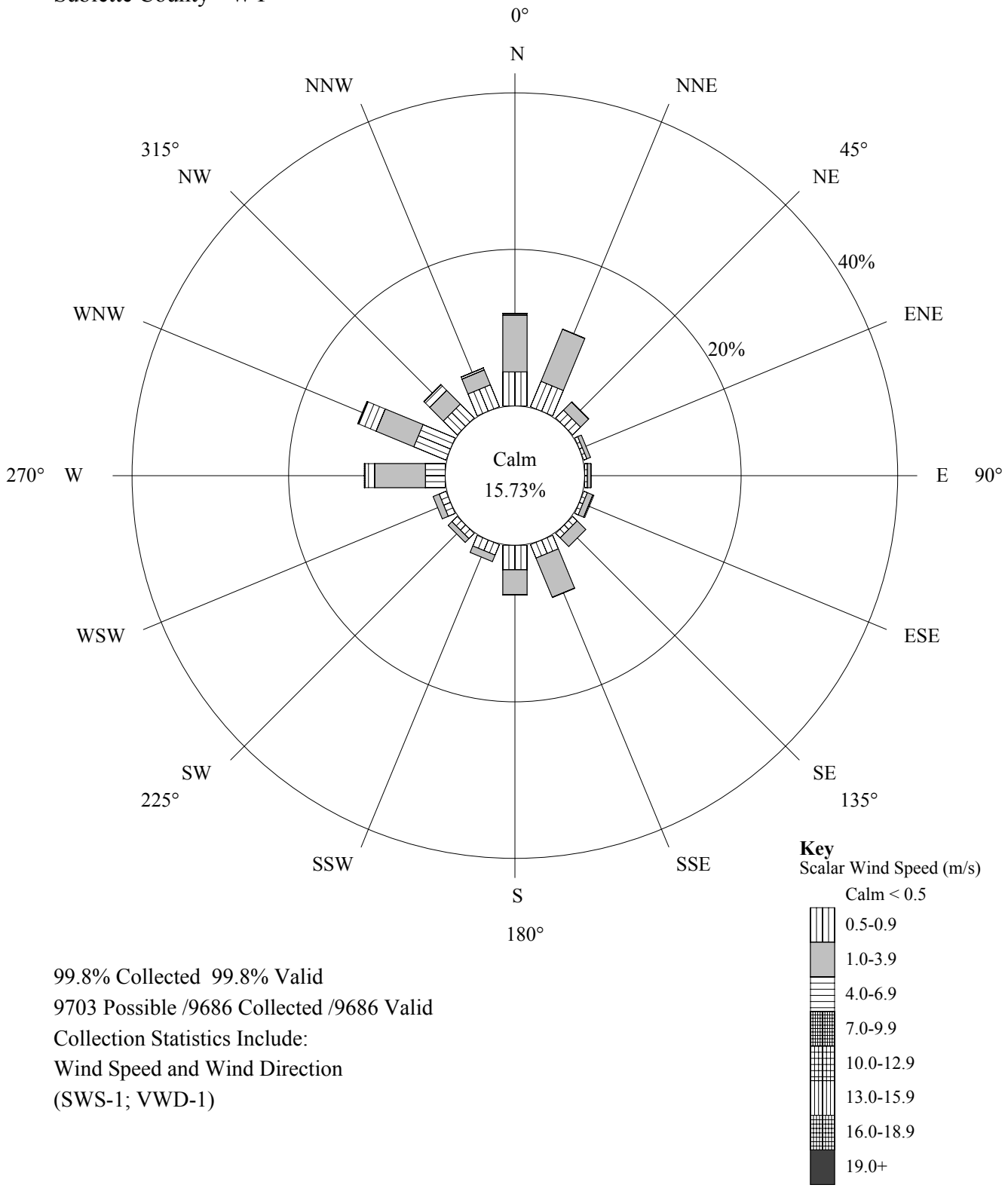


99.8% Collected 99.8% Valid
10040 Possible /10020 Collected /10020 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-8

La Barge 1 - Wind Rose 02/20/2009 - 03/31/2010

Sublette County - WY



99.8% Collected 99.8% Valid

9703 Possible /9686 Collected /9686 Valid

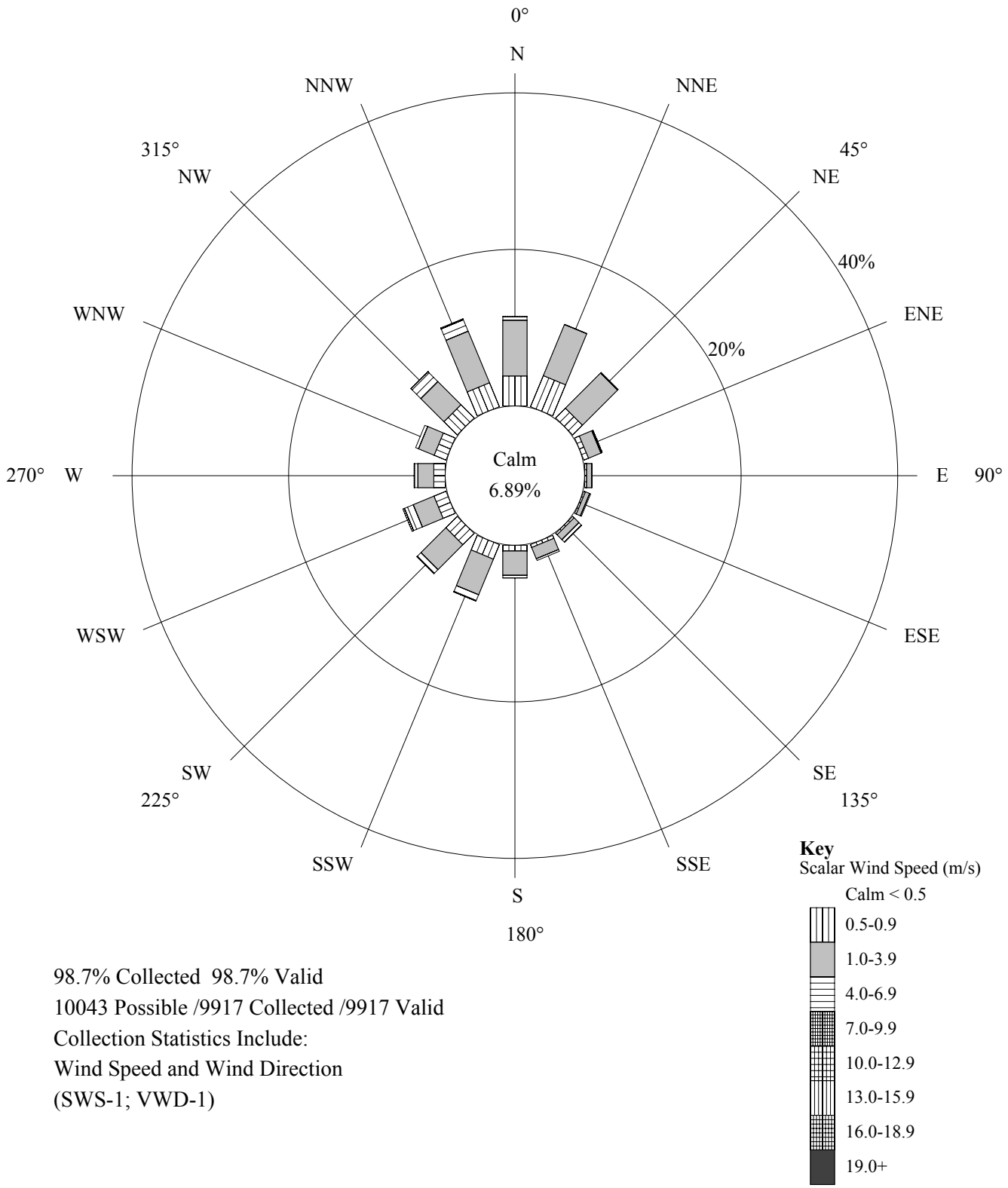
Collection Statistics Include:

Wind Speed and Wind Direction

(SWS-1; VWD-1)

Figure B-9

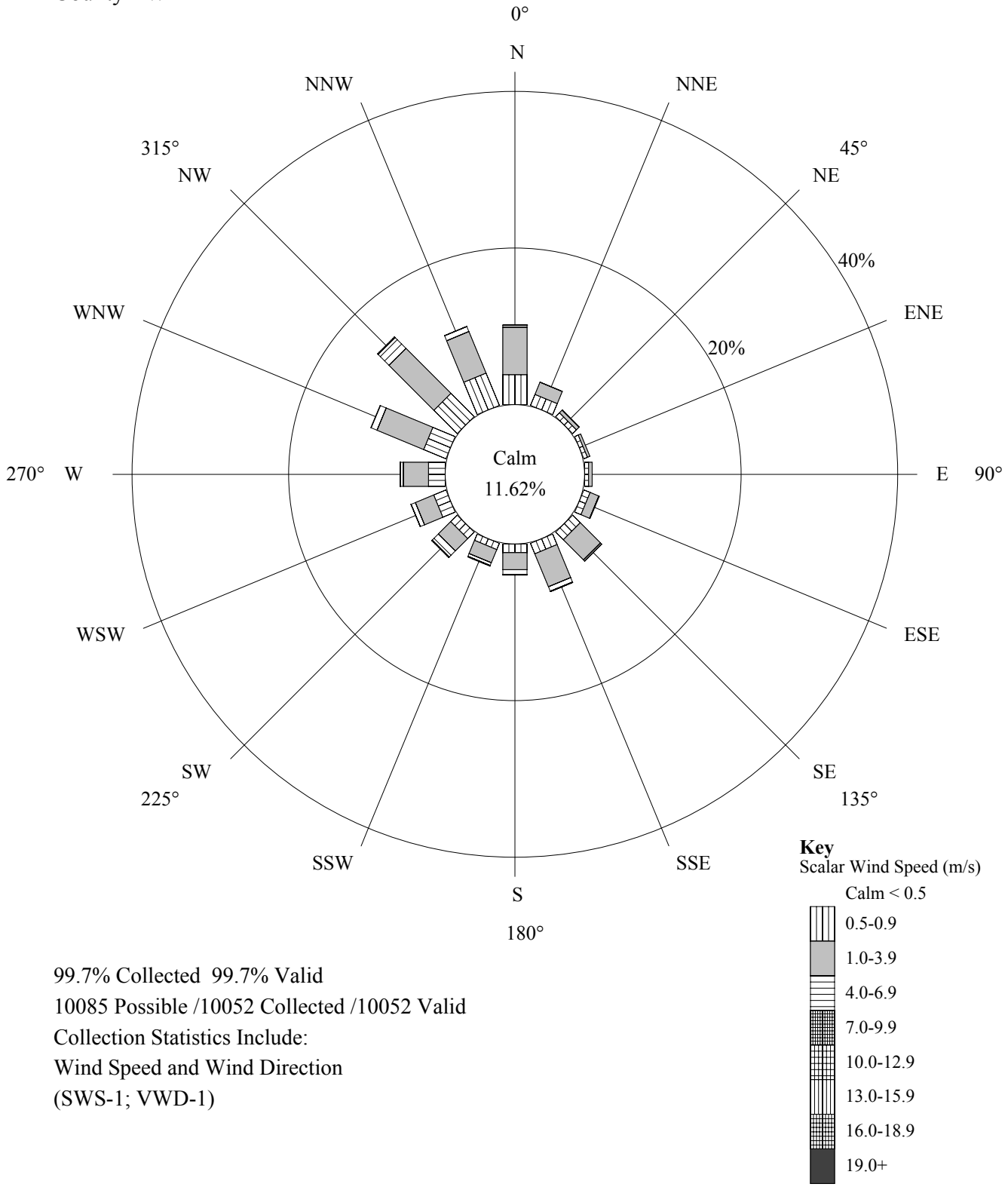
LINN - Sublette County - WY Wind Rose 02/06/2009 - 03/31/2010



98.7% Collected 98.7% Valid
10043 Possible /9917 Collected /9917 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-10

Marbleton - Sublette County - WY | Wind Rose | 02/04/2009 - 03/31/2010

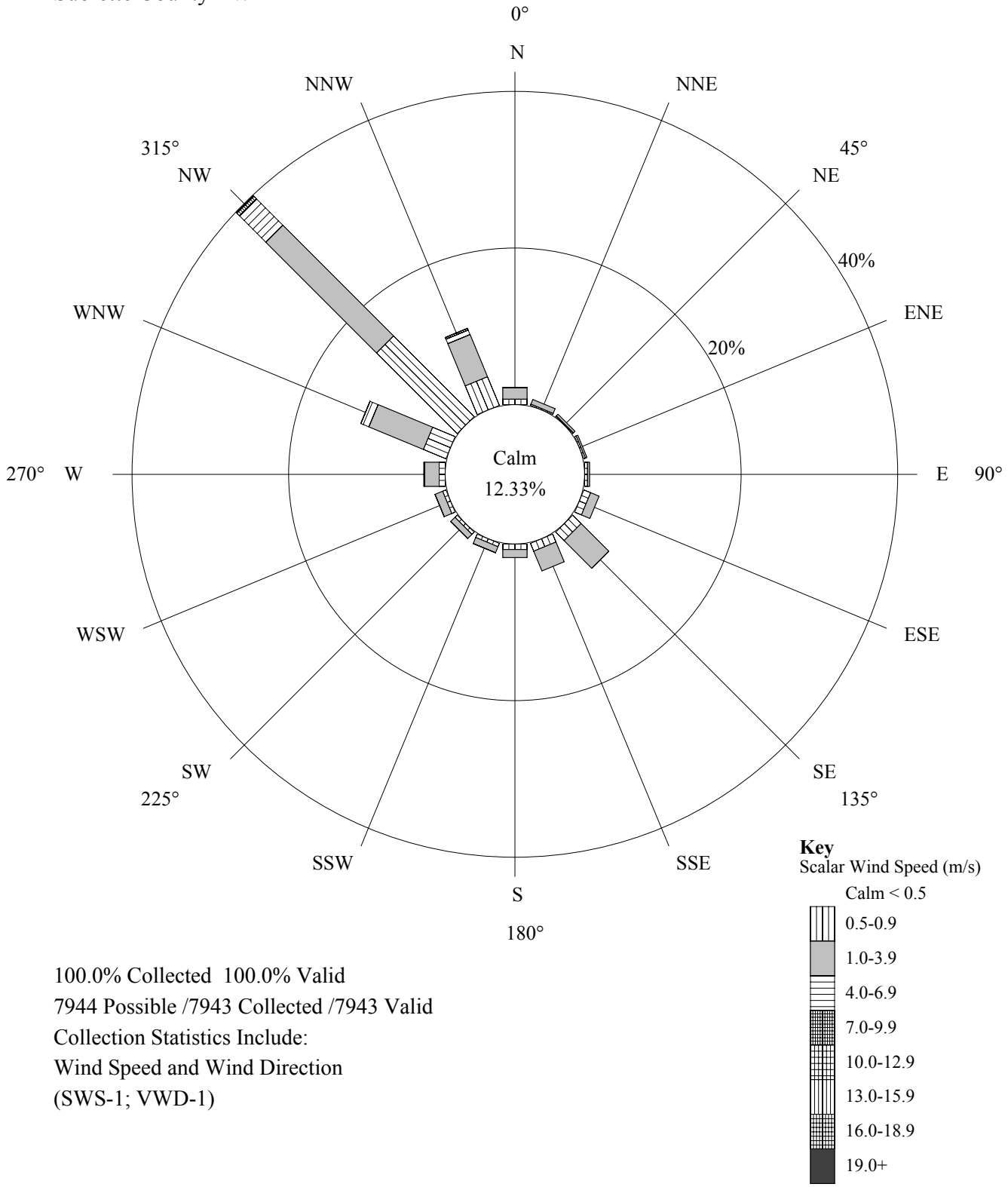


99.7% Collected 99.7% Valid
10085 Possible /10052 Collected /10052 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

Figure B-11

Pinedale 1 - Wind Rose 05/05/2009 - 03/31/2010

Sublette County - WY



100.0% Collected 100.0% Valid

7944 Possible /7943 Collected /7943 Valid

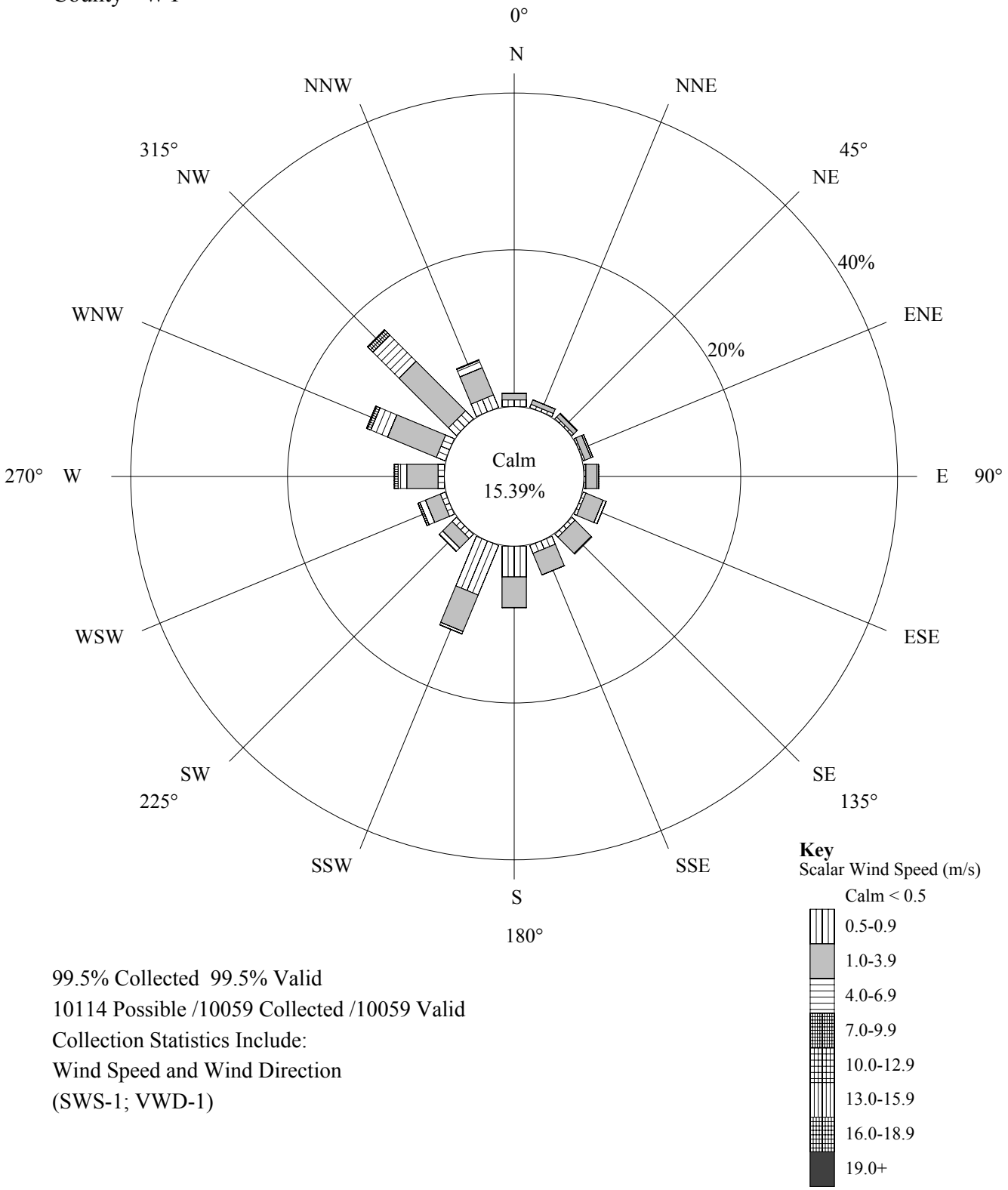
Collection Statistics Include:

Wind Speed and Wind Direction

(SWS-1; VWD-1)

Figure B-12

Sand Draw - Sublette County - WY | Wind Rose | 02/03/2009 - 03/31/2010



99.5% Collected 99.5% Valid
10114 Possible /10059 Collected /10059 Valid
Collection Statistics Include:
Wind Speed and Wind Direction
(SWS-1; VWD-1)

APPENDIX C

Daily Maximum 1-Hour Ozone Averages

Table C-1

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Bargerville - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1	T	S	73 S	56 W	68 F	51 M	56 W	47 S	49 T	41 T	43 S	44 T
2	F	M	77 M	54 T	51 S	43 T	57 T	50 S	41 W	48 F	49 M	43 W
3	S	T	56 T	51 F	55 S	51 W	52 F	56 M	48 T	51 S	53 T	41 T
4	S	W	55 W	53 S	64 M	46 T	56 S	65 T	54 F	46 S	53 W	46 F
5	M	T	52 T	61 S	50 T	44 F	58 S	63 W	60 S	58 M	52 T	42 S
6	T	F	52 F	66 M	50 W	51 S	61 M	61 T	62 S	34 T	44 F	35 S
7	W	S	57 S	58 T	58 T	51 S	61 T	59 F	52 M	49 W	44 S	35 M
8	T	S	55 S	69 W	52 F	47 M	59 W	48 S	58 T	42 T	45 S	38 T
9	F	M	56 M	52 T	58 S	52 T	69 T	48 S	53 W	43 F	52 M	38 W
10	S	T	54 T	53 F	66 S	48 W	60 F	55 M	51 T	43 S	48 T	43 T
11	S	49 W	57 W	60 S	66 M	49 T	61 S	60 T	49 F	38 S	54 W	47 F
12	M	48 T	64 T	56 S	59 T	51 F	58 S	65 W	50 S	46 M	47 T	46 S
13	T	51 F	63 F	52 M	58 W	58 S	57 M	64 T	51 S	49 T	46 F	44 S
14	W	57 S	62 S	49 T	59 T	56 S	50 T	67 F	54 M	43 W	48 S	48 M
15	T	55 S	63 S	59 W	62 F	57 M	53 W	56 S	45 T	40 T	41 S	47 T
16	F	58 M	46 M	59 T	67 S	52 T	55 T	47 S	52 W	41 F	40 M	48 W
17	S	70 T	52 T	56 F	58 S	50 W	55 F	45 M	57 T	45 S	52 T	45 T
18	S	55 W	55 W	59 S	56 M	57 T	58 S	49 T	59 F	52 S	52 W	46 F
19	M	49 T	47 T	57 S	62 T	62 F	59 S	52 W	59 S	48 M	53 T	45 S
20	T	53 F	53 F	52 M	70 W	61 S	51 M	57 T	53 S	45 T	45 F	43 S
21	W	65 S	60 S	53 T	72 T	65 S	51 T	56 F	44 M	38 W	45 S	48 M
22	T	70 S	50 S	59 W	64 F	64 M	55 W	51 S	48 T	53 T	47 S	43 T
23	F	74 M	53 M	62 T	55 S	69 T	53 T	50 S	46 W	49 F	40 M	42 W
24	S	51 T	52 T	52 F	50 S	67 W	53 F	48 M	45 T	43 S	45 T	46 T
25	S	63 W	53 W	47 S	50 M	62 T	54 S	58 T	45 F	41 S	44 W	47 F
26	M	54 T	53 T	61 S	56 T	58 F	54 S	61 W	57 S	43 M	47 T	45 S
27	T	55 F	56 F	64 M	57 W	63 S	53 M	54 T	64 S	46 T	42 F	47 S
28	W	60 S	56 S	67 T	56 T	47 S	56 T	57 F	55 M	42 W	45 S	46 M
29	T		71 S	65 W	55 F	53 M	51 W	55 S	64 T	42 T	43 S	43 T
30	F		59 M	63 T	56 S	59 T	45 T	59 S	44 W	38 F	49 M	45 W
31	S		57 T		53 S		49 F	53 M		32 S		46 T
Valid Days	0	18	31	30	31	30	31	31	30	31	30	31
Maximum	0	74	77	69	72	69	69	67	64	58	54	48
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7813 Total Samples
324 (88.8%) Valid Days

Table C-2

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Bargerville - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	48	F	46	M	73	M	55	T								
2	46	S	49	T	65	T	54	F								
3	47	S	54	W	61	W	55	S								
4	45	M	50	T	59	T	58	S								
5	44	T	54	F	54	F	65	M								
6	47	W	52	S	55	S	56	T								
7	42	T	51	S	57	S	59	W								
8	46	F	49	M	55	M	57	T								
9	51	S	53	T	62	T	80	F								
10	56	S	50	W	52	W	70	S								
11	51	M	46	T	52	T	65	S								
12	54	T	49	F	52	F	65	M								
13	50	W	50	S	57	S	58	T								
14	43	T	51	S	53	S	58	W								
15	51	F	60	M	54	M	66	T								
16	54	S	58	T	58	T	66	F								
17	63	S	51	W	48	W	72	S								
18	48	M	55	T	51	T	62	S								
19	47	T	50	F	50	F	65	M								
20	49	W	51	S	52	S	67	T								
21	51	T	53	S	54	S		W								
22	51	F	54	M	55	M		T								
23	47	S	51	T	52	T		F								
24	46	S	56	W	55	W		S								
25	51	M	47	T	58	T		S								
26	47	T	56	F	51	F		M								
27	55	W	57	S	53	S		T								
28	53	T	67	S	62	S		W								
29	64	F			52	M		T								
30	75	S			55	T		F								
31	52	S			57	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	75		67		73		80		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2657 Total Samples
110 (91.7%) Valid Days

Table C-3

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Farson - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1	T	S	S	57 W	62 F	57 M	58 W	50 S	40 T	39 T	39 S	41 T
2	F	M	M	51 T	41 S	44 T	62 T	52 S	43 W	46 F	43 M	39 W
3	S	T	T	51 F	55 S	50 W	51 F	60 M	45 T	44 S	44 T	38 T
4	S	W	53 W	53 S	64 M	51 T	58 S	68 T	51 F	40 S	49 W	39 F
5	M	T	53 T	59 S	56 T	49 F	64 S	64 W	57 S	41 M	46 T	40 S
6	T	F	52 F	61 M	52 W	53 S	61 M	64 T	50 S	33 T	42 F	36 S
7	W	S	55 S	59 T	56 T	47 S	60 T	60 F	52 M	44 W	42 S	36 M
8	T	S	60 S	61 W	66 F	49 M	61 W	50 S	48 T	36 T	44 S	33 T
9	F	M	51 M	48 T	63 S	51 T	63 T	49 S	51 W	40 F	44 M	38 W
10	S	T	54 T	55 F	69 S	50 W	63 F	61 M	48 T	36 S	40 T	40 T
11	S	W	66 W	59 S	62 M	53 T	54 S	64 T	42 F	34 S	49 W	42 F
12	M	T	68 T	57 S	64 T	52 F	58 S	64 W	43 S	40 M	40 T	39 S
13	T	F	62 F	57 M	62 W	58 S	55 M	63 T	50 S	45 T	43 F	40 S
14	W	S	60 S	53 T	59 T	57 S	54 T	64 F	44 M	40 W	44 S	44 M
15	T	S	58 S	63 W	61 F	60 M	53 W	57 S	46 T	38 T	40 S	38 T
16	F	M	48 M	52 T	69 S	54 T	57 T	48 S	50 W	36 F	37 M	44 W
17	S	T	54 T	61 F	62 S	55 W	58 F	51 M	60 T	42 S	38 T	43 T
18	S	W	50 W	52 S	61 M	55 T	60 S	51 T	57 F	51 S	42 W	40 F
19	M	47 T	51 T	59 S	61 T	67 F	62 S	56 W	58 S	44 M	46 T	36 S
20	T	55 F	53 F	51 M	58 W	66 S	58 M	53 T	52 S	31 T	38 F	42 S
21	W	57 S	58 S	54 T	61 T	64 S	54 T	58 F	42 M	33 W	47 S	38 M
22	T	56 S	53 S	52 W	62 F	65 M	57 W	54 S	51 T	47 T	39 S	46 T
23	F	47 M	46 M	62 T	54 S	65 T	53 T	51 S	42 W	48 F	36 M	40 W
24	S	46 T	52 T	48 F	48 S	62 W	54 F	45 M	38 T	44 S	38 T	43 T
25	S	W	53 W	S	52 M	60 T	56 S	47 T	44 F	41 S	38 W	46 F
26	M	T	50 T	62 S	56 T	60 F	55 S	58 W	49 S	40 M	36 T	40 S
27	T	F	58 F	66 M	57 W	65 S	60 M	48 T	53 S	47 T	35 F	42 S
28	W	S	55 S	67 T	56 T	62 S	54 T	51 F	54 M	37 W	37 S	46 M
29	T		71 S	68 W	54 F	51 M	47 W	55 S	54 T	36 T	33 S	41 T
30	F		58 M	70 T	57 S	63 T	53 T	59 S	40 W	32 F	33 M	41 W
31	S		57 T		54 S		51 F	50 M		31 S		45 T
Valid Days	0	6	28	29	31	30	31	31	30	31	30	31
Maximum	0	57	71	70	69	67	64	68	60	51	49	46
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7446 Total Samples
308 (84.4%) Valid Days

Table C-4

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Farson - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	42	F	41	M	52	M	54	T								
2	45	S	44	T	51	T	51	F								
3	43	S	44	W	52	W	53	S								
4	42	M	45	T	55	T	58	S								
5	41	T	40	F	50	F	56	M								
6	41	W	47	S	52	S	54	T								
7	37	T	46	S	53	S	54	W								
8	38	F	44	M	52	M	50	T								
9	37	S	48	T	54	T	70	F								
10	41	S	47	W	50	W	63	S								
11	43	M	44	T	51	T	61	S								
12	37	T	43	F	50	F	62	M								
13	39	W	47	S	56	S	57	T								
14	47	T	47	S	44	S	59	W								
15	41	F	42	M	51	M	64	T								
16	44	S	46	T	54	T	61	F								
17	48	S	47	W	48	W	64	S								
18	46	M	44	T	47	T	58	S								
19	47	T	44	F	47	F	58	M								
20	43	W	49	S	50	S	66	T								
21	42	T	50	S	53	S		W								
22	49	F	48	M	50	M		T								
23	43	S	46	T	47	T		F								
24	41	S	48	W	49	W		S								
25	44	M	43	T	56	T		S								
26	41	T	46	F	46	F		M								
27	44	W	50	S	51	S		T								
28	48	T	53	S	54	S		W								
29	49	F			53	M		T								
30	50	S			52	T		F								
31	44	S			59	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	50		53		59		70		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2653 Total Samples
110 (91.7%) Valid Days

Table C-5

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

La Barge 1 - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1		S	55 S	51 W	54 F	50 M	49 W	43 S	37 T	34 T	34 S	39 T
2		M	43 M	45 T	36 S	34 T	53 T	44 S	37 W	40 F	40 M	33 W
3		T	47 T	43 F	49 S	42 W	47 F	54 M	40 T	40 S	43 T	29 T
4		W	48 W	48 S	55 M	41 T	50 S	55 T	46 F	38 S	40 W	33 F
5		T	47 T	52 S	44 T	41 F	51 S	50 W	53 S	41 M	38 T	35 S
6		F	45 F	50 M	46 W	48 S	52 M	55 T	49 S	27 T	38 F	33 S
7		S	53 S	50 T	51 T	47 S	53 T	50 F	49 M	37 W	39 S	28 M
8		S	50 S	53 W	54 F	43 M	54 W	40 S	50 T	39 T	39 S	36 T
9		M	46 M	45 T	53 S	44 T	55 T	40 S	45 W	36 F	39 M	34 W
10		T	45 T	47 F	59 S	42 W	53 F	51 M	47 T	30 S	48 T	34 T
11		W	49 W	52 S	52 M	39 T	47 S	56 T	38 F	35 S	53 W	33 F
12		T	49 T	51 S	54 T	46 F	51 S	60 W	39 S	37 M	40 T	40 S
13		F	48 F	49 M	52 W	54 S	43 M	53 T	45 S	42 T	42 F	37 S
14		S	51 S	45 T	43 T	46 S	45 T	61 F	42 M	37 W	39 S	42 M
15		S	50 S	54 W	58 F	48 M	43 W	47 S	43 T	34 T	37 S	36 T
16		M	40 M	54 T	61 S	42 T	48 T	41 S	47 W	33 F	33 M	38 W
17		T	47 T	43 F	53 S	44 W	51 F	46 M	51 T	35 S	33 T	40 T
18		W	42 W	54 S	53 M	45 T	56 S	49 T	51 F	43 S	34 W	39 F
19		T	43 T	51 S	54 T	56 F	49 S	49 W	51 S	40 M	37 T	38 S
20		F	44 F	46 M	54 W	56 S	47 M	43 T	50 S	38 T	38 F	41 S
21		46 S	54 S	49 T	56 T	59 S	45 T	47 F	41 M	30 W	41 S	35 M
22		45 S	44 S	48 W	53 F	56 M	46 W	45 S	47 T	45 T	32 S	33 T
23		44 M	44 M	54 T	47 S	60 T	45 T	41 S	37 W	45 F	36 M	36 W
24		40 T	46 T	42 F	43 S	52 W	48 F	35 M	36 T	45 S	35 T	38 T
25		40 W	45 W	49 S	47 M	53 T	42 S	T	37 F	36 S	36 W	43 F
26		42 T	44 T	56 S	48 T	56 F	46 S	W	51 S	35 M	35 T	40 S
27		48 F	50 F	56 M	52 W	58 S	46 M	46 T	52 S	49 T	25 F	42 S
28		40 S	48 S	60 T	50 T	50 S	48 T	57 F	44 M	34 W	36 S	41 M
29			59 S	62 W	49 F	48 M	47 W	48 S	57 T	35 T	33 S	35 T
30			55 M	58 T	51 S	52 T	43 T	56 S	41 W	27 F	32 M	30 W
31			49 T		48 S		42 F	52 M		28 S		41 T
Valid Days	0	8	31	30	31	30	31	29	30	31	30	31
Maximum	0	48	59	62	61	60	56	61	57	49	53	43
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7522 Total Samples
312 (93.4%) Valid Days

Table C-6

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

La Barge 1 - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	31	F	39	M	50	M	50	T								
2	41	S	42	T	49	T	49	F								
3	38	S	42	W	50	W	51	S								
4	36	M	44	T	49	T	55	S								
5	39	T	40	F	48	F	58	M								
6	38	W	47	S	48	S	51	T								
7	33	T	45	S	49	S	57	W								
8	34	F	40	M	50	M	46	T								
9	48	S	48	T	49	T	71	F								
10	44	S	45	W	47	W	60	S								
11	41	M	43	T	47	T	59	S								
12	31	T	43	F	45	F	58	M								
13	38	W	46	S	51	S	53	T								
14	44	T	45	S	46	S	57	W								
15	39	F	52	M	45	M	58	T								
16	40	S	43	T	48	T	57	F								
17	45	S	45	W	45	W	59	S								
18	42	M	40	T	46	T	55	S								
19	43	T	44	F	40	F	57	M								
20	40	W	46	S	50	S	58	T								
21	41	T	46	S	50	S	47	W								
22	45	F	46	M	49	M		T								
23	39	S	52	T	46	T		F								
24	39	S	47	W	48	W		S								
25	40	M	40	T	53	T		S								
26	42	T	42	F	44	F		M								
27	42	W	49	S	46	S		T								
28	44	T	49	S	52	S		W								
29	44	F			49	M		T								
30	51	S			49	T		F								
31	46	S			55	W										
Valid Days	31		28		31		21		0	0	0	0	0	0	0	0
Maximum	51		52		55		71		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2667 Total Samples
111 (92.5%) Valid Days

Table C-7

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Marbleton - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1		S	65 S	50 W	61 F	53 M	49 W	44 S	39 T	40 T	42 S	44 T
2		M	55 M	46 T	39 S	39 T	51 T	46 S	40 W	47 F	46 M	42 W
3		T	51 T	47 F	49 S	47 W	46 F	53 M	45 T	46 S	51 T	37 T
4		W	50 W	49 S	61 M	42 T	55 S	55 T	52 F	41 S	48 W	44 F
5		T	48 T	53 S	47 T	40 F	53 S	56 W	58 S	55 M	46 T	42 S
6		F	47 F	52 M	46 W	48 S	51 M	57 T	28 S	47 T	43 F	35 S
7		S	56 S	55 T	55 T	46 S	51 T	53 F	50 M	41 W	45 S	33 M
8		S	51 S	57 W	56 F	43 M	53 W	43 S	58 T	36 T	44 S	38 T
9		M	53 M	49 T	54 S	46 T	54 T	44 S	52 W	42 F	46 M	39 W
10		42 T	48 T	49 F	64 S	44 W	56 F	50 M	53 T	39 S	45 T	40 T
11		43 W	56 W	56 S	57 M	42 T	48 S	55 T	44 F	37 S	53 W	40 F
12		T	55 T	54 S	56 T	44 F	48 S	57 W	45 S	49 M	44 T	46 S
13		F	52 F	52 M	56 W	55 S	48 M	55 T	50 S	45 T	47 F	42 S
14		S	61 S	48 T	49 T	48 S	46 T	57 F	47 M	41 W	46 S	46 M
15		S	52 S	56 W	62 F	48 M	49 W	47 S	49 T	39 T	45 S	42 T
16		M	40 M	55 T	63 S	44 T	50 T	41 S	52 W	37 F	41 M	42 W
17		T	50 T	42 F	53 S	44 W	51 F	43 M	54 T	38 S	41 T	44 T
18		W	47 W	55 S	51 M	46 T	54 S	46 T	60 F	48 S	47 W	39 F
19		46 T	45 T	53 S	54 T	56 F	49 S	49 W	57 S	46 M	48 T	44 S
20		48 F	47 F	50 M	64 W	56 S	M	46 T	53 S	40 T	44 F	41 S
21		56 S	56 S	50 T	61 T	61 S	T	52 F	43 M	35 W	43 S	36 M
22		58 S	46 S	50 W	57 F	58 M	46 W	44 S	51 T	50 T	37 S	42 T
23		75 M	47 M	57 T	52 S	58 T	49 T	45 S	39 W	53 F	39 M	42 W
24		48 T	48 T	45 F	48 S	54 W	48 F	45 M	43 T	49 S	41 T	47 T
25		46 W	49 W	48 S	42 M	53 T	44 S	47 T	42 F	41 S	44 W	48 F
26		48 T	47 T	57 S	53 T	59 F	48 S	59 W	54 S	42 M	43 T	44 S
27		52 F	52 F	60 M	52 W	63 S	47 M	49 T	57 S	47 T	35 F	45 S
28		50 S	50 S	63 T	52 T	54 S	50 T	54 F	54 M	42 W	43 S	44 M
29			68 S	60 W	50 F	47 M	46 W	56 S	62 T	42 T	42 S	44 T
30			56 M	58 T	54 S	56 T	42 T	57 S	46 W	35 F	42 M	41 W
31			53 T		50 S		43 F	48 M		34 S		47 T
Valid Days	0	12	31	30	31	30	29	31	30	31	30	31
Maximum	0	75	68	63	64	63	56	59	62	55	53	48
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7727 Total Samples
316 (94.6%) Valid Days

Table C-8

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Marbleton - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	42	F	42	M	54	M	54	T								
2	43	S	42	T	54	T	54	F								
3	46	S	45	W	54	W	55	S								
4	39	M	49	T	57	T	59	S								
5	41	T	49	F	53	F	64	M								
6	46	W	52	S	51	S	57	T								
7	41	T	49	S	56	S	59	W								
8	40	F	49	M	56	M	53	T								
9	48	S	51	T	57	T	81	F								
10	46	S	48	W	53	W	67	S								
11	41	M	44	T	52	T	65	S								
12	40	T	46	F	53	F	65	M								
13	44	W	51	S	56	S	56	T								
14	42	T	49	S	54	S	60	W								
15	44	F	50	M	51	M	64	T								
16	47	S	47	T	53	T	64	F								
17	54	S	50	W	48	W	68	S								
18	50	M	47	T	50	T	62	S								
19	43	T	49	F	48	F	63	M								
20	44	W	51	S	51	S	66	T								
21	46	T	52	S	54	S	52	W								
22	50	F	55	M	55	M		T								
23	44	S	51	T	53	T		F								
24	44	S	55	W	53	W		S								
25	48	M	45	T	57	T		S								
26	49	T	47	F	49	F		M								
27	47	W	57	S	53	S		T								
28	51	T	53	S	60	S		W								
29	50	F			53	M		T								
30	55	S			56	T		F								
31	61	S			61	W										
Valid Days	31		28		31		21		0	0	0	0	0	0	0	0
Maximum	61		57		61		81		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2671 Total Samples
111 (92.5%) Valid Days

Table C-9

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Sand Draw - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1	T	S	77 S	52 W	69 F	53 M	56 W	47 S	45 T	40 T	42 S	44 T
2	F	M	101 M	53 T	47 S	44 T	57 T	51 S	41 W	49 F	48 M	41 W
3	S	T	51 T	50 F	54 S	55 W	51 F	59 M	52 T	48 S	51 T	40 T
4	S	W	54 W	53 S	65 M	48 T	57 S	62 T	58 F	45 S	54 W	43 F
5	M	T	52 T	57 S	50 T	43 F	58 S	59 W	57 S	52 M	45 T	43 S
6	T	F	51 F	59 M	50 W	50 S	60 M	58 T	58 S	35 T	44 F	32 S
7	W	S	56 S	56 T	58 T	50 S	59 T	58 F	51 M	47 W	45 S	33 M
8	T	S	54 S	65 W	56 F	48 M	59 W	48 S	58 T	40 T	45 S	33 T
9	F	M	53 M	49 T	58 S	52 T	61 T	48 S	54 W	40 F	48 M	37 W
10	S	T	52 T	53 F	64 S	51 W	60 F	56 M	53 T	43 S	T	42 T
11	S	W	58 W	59 S	65 M	47 T	58 S	63 T	47 F	34 S	W	42 F
12	M	T	68 T	54 S	61 T	48 F	57 S	65 W	50 S	46 M	T	44 S
13	T	F	67 F	52 M	58 W	61 S	52 M	57 T	50 S	48 T	45 F	39 S
14	W	S	80 S	53 T	58 T	52 S	52 T	61 F	48 M	43 W	46 S	45 M
15	T	S	57 S	59 W	63 F	56 M	55 W	53 S	47 T	39 T	42 S	40 T
16	F	M	43 M	56 T	65 S	47 T	55 T	47 S	52 W	39 F	42 M	47 W
17	S	T	49 T	73 F	62 S	50 W	56 F	46 M	57 T	41 S	43 T	49 T
18	S	W	54 W	55 S	58 M	55 T	58 S	50 T	56 F	50 S	48 W	44 F
19	M	T	47 T	58 S	61 T	65 F	58 S	53 W	58 S	47 M	49 T	43 S
20	T	F	50 F	51 M	68 W	60 S	52 M	52 T	54 S	48 T	45 F	44 S
21	W	S	58 S	53 T	64 T	64 S	55 T	54 F	45 M	37 W	48 S	46 M
22	T	S	50 S	54 W	65 F	64 M	52 W	52 S	55 T	51 T	44 S	40 T
23	F	M	51 M	59 T	54 S	70 T	54 T	49 S	41 W	50 F	39 M	41 W
24	S	51 T	50 T	49 F	50 S	66 W	54 F	46 M	46 T	45 S	41 T	46 T
25	S	57 W	53 W	45 S	48 M	58 T	49 S	56 T	44 F	40 S	44 W	45 F
26	M	51 T	52 T	61 S	56 T	56 F	55 S	64 W	53 S	41 M	47 T	42 S
27	T	48 F	55 F	63 M	59 W	64 S	52 M	50 T	59 S	48 T	40 F	47 S
28	W	60 S	53 S	67 T	58 T	52 S	55 T	57 F	54 M	40 W	45 S	45 M
29	T		72 S	65 W	58 F	55 M	48 W	58 S	59 T	42 T	42 S	37 T
30	F		58 M	63 T	57 S	57 T	48 T	59 S	44 W	36 F	42 M	42 W
31	S		56 T		53 S		51 F	50 M		32 S		45 T
Valid Days	0	5	31	30	31	30	31	31	30	31	27	31
Maximum	0	60	101	73	69	70	61	65	59	52	54	49
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7423 Total Samples
308 (84.4%) Valid Days

Table C-10

Ozone Standards Report and
Daily Maximum 1-Hour Concentrations (ppb)

Sand Draw - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	46	F	47	M	58	M	54	T								
2	45	S	55	T	55	T	53	F								
3	44	S	58	W	58	W	53	S								
4	42	M	52	T	58	T	58	S								
5	41	T	53	F	53	F	61	M								
6	44	W	57	S	54	S	54	T								
7	42	T	64	S	56	S	56	W								
8	44	F	48	M	54	M	56	T								
9	51	S	52	T	56	T	77	F								
10	53	S	53	W	52	W	65	S								
11	47	M	46	T	51	T	63	S								
12	43	T	58	F	50	F	62	M								
13	47	W	49	S	54	S	57	T								
14	42	T	52	S	53	S	57	W								
15	47	F	62	M	54	M	63	T								
16	47	S	57	T	52	T	64	F								
17	59	S	50	W	46	W	70	S								
18	47	M	48	T	49	T	62	S								
19	46	T	48	F	47	F	62	M								
20	45	W	52	S	47	S	65	T								
21	46	T	58	S	52	S		W								
22	51	F	56	M	53	M		T								
23	45	S	51	T	50	T		F								
24	42	S	54	W	52	W		S								
25	47	M	46	T	57	T		S								
26	45	T	49	F	50	F		M								
27	48	W	55	S	52	S		T								
28	55	T	76	S	58	S		W								
29	63	F			53	M		T								
30	80	S			54	T		F								
31	48	S			57	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	80		76		58		77		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2656 Total Samples
110 (91.7%) Valid Days

APPENDIX D

Daily Maximum 8-Hour Ozone Averages

Table D-1

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Bargerville - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1	T	S	66 S	52 W	65 F	47 M	52 W	45 S	41 T	39 T	39 S	41 T
2	F	M	64 M	51 T	46 S	41 T	54 T	48 S	40 W	46 F	47 M	40 W
3	S	T	52 T	49 F	53 S	48 W	48 F	52 M	46 T	47 S	48 T	38 T
4	S	W	52 W	52 S	61 M	44 T	54 S	60 T	52 F	43 S	51 W	44 F
5	M	T	52 T	57 S	47 T	41 F	54 S	55 W	54 S	46 M	45 T	39 S
6	T	F	51 F	57 M	47 W	47 S	54 M	57 T	54 S	31 T	40 F	33 S
7	W	S	55 S	56 T	56 T	47 S	57 T	56 F	48 M	42 W	41 S	33 M
8	T	S	53 S	64 W	50 F	44 M	56 W	44 S	54 T	38 T	43 S	33 T
9	F	M	54 M	48 T	55 S	50 T	59 T	47 S	51 W	39 F	48 M	37 W
10	S	T	52 T	51 F	62 S	45 W	55 F	52 M	49 T	40 S	46 T	41 T
11	S	46 W	56 W	57 S	61 M	45 T	53 S	59 T	44 F	33 S	50 W	43 F
12	M	46 T	60 T	53 S	57 T	47 F	55 S	62 W	46 S	44 M	43 T	44 S
13	T	49 F	61 F	51 M	57 W	52 S	48 M	58 T	48 S	45 T	43 F	41 S
14	W	53 S	59 S	47 T	50 T	50 S	46 T	60 F	47 M	39 W	45 S	47 M
15	T	50 S	60 S	57 W	60 F	53 M	50 W	52 S	43 T	38 T	40 S	44 T
16	F	55 M	41 M	53 T	63 S	46 T	52 T	44 S	49 W	37 F	38 M	45 W
17	S	63 T	50 T	49 F	54 S	46 W	51 F	43 M	56 T	41 S	44 T	41 T
18	S	49 W	52 W	55 S	54 M	51 T	56 S	46 T	56 F	46 S	46 W	44 F
19	M	48 T	43 T	56 S	58 T	59 F	54 S	50 W	56 S	44 M	49 T	43 S
20	T	51 F	51 F	51 M	65 W	57 S	49 M	48 T	50 S	40 T	42 F	41 S
21	W	59 S	55 S	49 T	65 T	62 S	50 T	47 F	42 M	34 W	43 S	43 M
22	T	63 S	48 S	53 W	59 F	62 M	51 W	46 S	44 T	48 T	44 S	37 T
23	F	69 M	51 M	59 T	51 S	64 T	49 T	46 S	37 W	47 F	38 M	40 W
24	S	46 T	49 T	47 F	48 S	59 W	46 F	45 M	42 T	42 S	40 T	46 T
25	S	54 W	50 W	43 S	46 M	56 T	47 S	54 T	42 F	39 S	42 W	46 F
26	M	52 T	48 T	58 S	54 T	52 F	51 S	57 W	54 S	41 M	43 T	42 S
27	T	50 F	54 F	60 M	55 W	58 S	50 M	49 T	61 S	45 T	38 F	42 S
28	W	56 S	54 S	64 T	53 T	42 S	53 T	53 F	53 M	40 W	41 S	44 M
29	T		60 S	61 W	52 F	50 M	46 W	52 S	59 T	39 T	41 S	41 T
30	F		57 M	61 T	54 S	56 T	43 T	55 S	41 W	37 F	44 M	41 W
31	S		56 T		50 S		46 F	46 M		31 S		44 T
Valid Days	0	18	31	30	31	30	31	31	30	31	30	31
Maximum	0	69	66	64	65	64	59	62	61	48	51	47
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7814 Total Samples	0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
324 (88.8%) Valid Days	65 is the 4th highest daily maximum annual 8-hr concentration (05/20/2009)

Table D-2

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Bargerville - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	45	F	42	M	63	M	53	T								
2	44	S	47	T	54	T	53	F								
3	44	S	52	W	56	W	52	S								
4	42	M	49	T	57	T	55	S								
5	42	T	51	F	52	F	62	M								
6	44	W	50	S	51	S	55	T								
7	41	T	50	S	54	S	57	W								
8	41	F	48	M	54	M	52	T								
9	48	S	51	T	59	T	75	F								
10	49	S	48	W	50	W	67	S								
11	48	M	44	T	50	T	60	S								
12	48	T	47	F	51	F	62	M								
13	46	W	49	S	54	S	55	T								
14	42	T	49	S	51	S	56	W								
15	48	F	56	M	51	M	63	T								
16	50	S	51	T	54	T	63	F								
17	58	S	49	W	46	W	66	S								
18	46	M	48	T	49	T	60	S								
19	45	T	47	F	47	F	62	M								
20	46	W	50	S	48	S	64	T								
21	49	T	52	S	52	S		W								
22	49	F	52	M	52	M		T								
23	43	S	49	T	51	T		F								
24	45	S	53	W	51	W		S								
25	48	M	46	T	56	T		S								
26	46	T	52	F	49	F		M								
27	52	W	55	S	51	S		T								
28	49	T	62	S	58	S		W								
29	59	F			49	M		T								
30	68	S			53	T										
31	48	S			55	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	68		62		63		75		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2652 Total Samples
110 (92.4%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
66 is the 4th highest daily maximum annual 8-hr concentration (04/17/2010)

Table D-3

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Farson - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1	T	S	S	52 W	57 F	49 M	55 W	48 S	38 T	37 T	36 S	38 T
2	F	M	M	48 T	39 S	41 T	56 T	50 S	39 W	41 F	38 M	37 W
3	S	T	T	46 F	52 S	49 W	49 F	58 M	42 T	42 S	39 T	35 T
4	S	W	51 W	51 S	60 M	47 T	54 S	62 T	48 F	38 S	41 W	36 F
5	M	T	52 T	56 S	48 T	43 F	58 S	57 W	54 S	38 M	36 T	37 S
6	T	F	49 F	58 M	48 W	52 S	57 M	57 T	48 S	28 T	38 F	35 S
7	W	S	51 S	57 T	54 T	45 S	56 T	57 F	49 M	37 W	37 S	33 M
8	T	S	56 S	57 W	61 F	46 M	59 W	46 S	43 T	32 T	40 S	31 T
9	F	M	43 M	43 T	58 S	49 T	59 T	46 S	47 W	37 F	37 M	34 W
10	S	T	53 T	53 F	65 S	47 W	57 F	58 M	46 T	32 S	34 T	33 T
11	S	W	60 W	55 S	59 M	48 T	52 S	62 T	41 F	30 S	35 W	34 F
12	M	T	59 T	56 S	61 T	49 F	55 S	61 W	41 S	36 M	37 T	37 S
13	T	F	56 F	53 M	58 W	51 S	51 M	59 T	46 S	42 T	39 F	38 S
14	W	S	57 S	49 T	50 T	53 S	51 T	61 F	40 M	35 W	38 S	42 M
15	T	S	55 S	59 W	57 F	54 M	49 W	52 S	44 T	35 T	36 S	31 T
16	F	M	45 M	43 T	64 S	51 T	54 T	46 S	48 W	32 F	31 M	39 W
17	S	T	50 T	55 F	57 S	52 W	56 F	48 M	56 T	36 S	30 T	37 T
18	S	W	47 W	49 S	57 M	49 T	57 S	49 T	53 F	42 S	32 W	33 F
19	M	45 T	46 T	54 S	58 T	63 F	56 S	53 W	53 S	40 M	36 T	32 S
20	T	49 F	50 F	49 M	56 W	58 S	54 M	51 T	46 S	26 T	31 F	33 S
21	W	47 S	54 S	52 T	58 T	59 S	52 T	51 F	39 M	30 W	42 S	34 M
22	T	49 S	51 S	50 W	58 F	62 M	51 W	50 S	46 T	40 T	34 S	36 T
23	F	40 M	44 M	58 T	52 S	62 T	50 T	47 S	38 W	42 F	34 M	35 W
24	S	42 T	50 T	F	44 S	57 W	50 F	41 M	36 T	41 S	33 T	41 T
25	S	W	50 W	S	44 M	57 T	53 S	45 T	39 F	36 S	32 W	43 F
26	M	T	48 T	60 S	53 T	51 F	52 S	51 W	44 S	34 M	30 T	34 S
27	T	F	53 F	63 M	55 W	61 S	53 M	42 T	47 S	42 T	30 F	36 S
28	W	S	53 S	65 T	54 T	51 S	52 T	49 F	48 M	34 W	34 S	39 M
29	T		58 S	64 W	52 F	50 M	42 W	51 S	50 T	33 T	27 S	34 T
30	F		55 M	64 T	54 S	58 T	46 T	56 S	37 W	29 F	28 M	32 W
31	S		55 T		52 S		46 F	46 M		29 S		41 T
Valid Days	0	6	28	28	31	30	31	31	30	31	30	31
Maximum	0	49	60	65	65	63	59	62	56	42	42	43
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7443 Total Samples
307 (84.1%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
64 is the 4th highest daily maximum annual 8-hr concentration (04/30/2009)

Table D-4

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Farson - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	38	F	37	M	47	M	51	T								
2	41	S	38	T	45	T	49	F								
3	37	S	38	W	47	W	50	S								
4	33	M	40	T	52	T	56	S								
5	38	T	37	F	47	F	51	M								
6	38	W	42	S	48	S	50	T								
7	36	T	43	S	49	S	53	W								
8	34	F	40	M	50	M	45	T								
9	31	S	42	T	51	T	63	F								
10	36	S	42	W	47	W	61	S								
11	36	M	39	T	47	T	56	S								
12	33	T	42	F	47	F	59	M								
13	33	W	43	S	52	S	52	T								
14	38	T	45	S	43	S	56	W								
15	34	F	37	M	46	M	60	T								
16	38	S	42	T	50	T	57	F								
17	40	S	44	W	45	W	60	S								
18	36	M	42	T	46	T	57	S								
19	42	T	44	F	43	F	57	M								
20	34	W	46	S	47	S	62	T								
21	39	T	47	S	49	S		W								
22	44	F	44	M	46	M		T								
23	41	S	43	T	45	T		F								
24	39	S	43	W	45	W		S								
25	40	M	40	T	52	T		S								
26	34	T	42	F	44	F		M								
27	42	W	46	S	48	S		T								
28	39	T	46	S	51	S		W								
29	42	F			49	M		T								
30	40	S			50	T										
31	41	S			55	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	44		47		55		63		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2648 Total Samples
110 (92.4%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
60 is the 4th highest daily maximum annual 8-hr concentration (04/15/2010)

Table D-5

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

La Barge 1 - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1		S	48 S	46 W	50 F	47 M	44 W	40 S	34 T	33 T	30 S	35 T
2		M	34 M	43 T	33 S	30 T	46 T	43 S	36 W	37 F	36 M	27 W
3		T	43 T	41 F	48 S	39 W	42 F	51 M	38 T	37 S	38 T	24 T
4		W	45 W	45 S	53 M	39 T	48 S	53 T	43 F	34 S	33 W	26 F
5		T	44 T	48 S	41 T	40 F	47 S	48 W	49 S	37 M	29 T	31 S
6		F	43 F	47 M	42 W	44 S	48 M	48 T	45 S	24 T	35 F	29 S
7		S	49 S	44 T	48 T	41 S	49 T	47 F	46 M	32 W	34 S	24 M
8		S	48 S	51 W	52 F	42 M	51 W	37 S	43 T	35 T	35 S	28 T
9		M	44 M	40 T	50 S	42 T	52 T	38 S	42 W	34 F	29 M	31 W
10		T	43 T	44 F	57 S	37 W	49 F	47 M	44 T	26 S	37 T	25 T
11		W	44 W	48 S	50 M	37 T	45 S	54 T	36 F	31 S	47 W	25 F
12		T	46 T	49 S	51 T	42 F	45 S	55 W	37 S	34 M	37 T	33 S
13		F	44 F	46 M	51 W	44 S	40 M	49 T	43 S	38 T	37 F	36 S
14		S	48 S	41 T	41 T	41 S	43 T	56 F	36 M	35 W	31 S	40 M
15		S	48 S	52 W	55 F	46 M	42 W	42 S	38 T	32 T	32 S	32 T
16		M	38 M	45 T	57 S	40 T	46 T	37 S	44 W	28 F	28 M	28 W
17		T	43 T	40 F	47 S	40 W	49 F	41 M	47 T	29 S	26 T	32 T
18		W	37 W	49 S	48 M	43 T	51 S	43 T	48 F	36 S	25 W	29 F
19		T	39 T	49 S	50 T	50 F	47 S	45 W	49 S	37 M	30 T	29 S
20		F	41 F	45 M	50 W	48 S	45 M	42 T	44 S	33 T	29 F	33 S
21		37 S	48 S	47 T	52 T	55 S	43 T	43 F	36 M	25 W	37 S	26 M
22		36 S	42 S	46 W	50 F	54 M	44 W	39 S	42 T	37 T	27 S	26 T
23		38 M	42 M	52 T	44 S	57 T	41 T	39 S	33 W	40 F	33 M	31 W
24		37 T	44 T	41 F	41 S	48 W	41 F	32 M	33 T	41 S	28 T	33 T
25		34 W	42 W	47 S	40 M	49 T	39 S	T	34 F	33 S	28 W	40 F
26		40 T	41 T	54 S	47 T	44 F	40 S	W	47 S	33 M	27 T	32 S
27		39 F	47 F	53 M	48 W	55 S	42 M	41 T	47 S	40 T	20 F	33 S
28		38 S	45 S	58 T	47 T	42 S	45 T	47 F	40 M	31 W	29 S	32 M
29			50 S	59 W	45 F	43 M	42 W	44 S	50 T	32 T	25 S	26 T
30			51 M	54 T	49 S	48 T	39 T	52 S	35 W	24 F	22 M	25 W
31			48 T		42 S		39 F	41 M		25 S		36 T
Valid Days	0	8	31	30	31	30	31	29	30	31	30	31
Maximum	0	40	51	59	57	57	52	56	50	41	47	40
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7522 Total Samples
312 (93.4%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
57 is the 4th highest daily maximum annual 8-hr concentration (05/16/2009)

Table D-6

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

La Barge 1 - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	26	F	34	M	44	M		T								
2	34	S	34	T	43	T	46	F								
3	32	S	36	W	46	W	47	S								
4	24	M	39	T	47	T	51	S								
5	33	T	36	F	45	F	53	M								
6	33	W	41	S	43	S	48	T								
7	30	T	41	S	45	S	53	W								
8	28	F	36	M	47	M	42	T								
9	35	S	42	T	46	T	66	F								
10	35	S	38	W	44	W	56	S								
11	31	M	38	T	44	T	53	S								
12	26	T	40	F	42	F	54	M								
13	29	W	43	S	47	S	49	T								
14	34	T	41	S	44	S	52	W								
15	31	F	44	M	42	M	55	T								
16	31	S	40	T	43	T	54	F								
17	36	S	40	W	40	W	57	S								
18	35	M	36	T	40	T	53	S								
19	38	T	40	F	38	F	55	M								
20	34	W	42	S	44	S	56	T								
21	35	T	42	S	46	S	44	W								
22	42	F	42	M	46	M		T								
23	37	S	45	T	45	T		F								
24	36	S	42	W	42	W		S								
25	34	M	37	T	49	T		S								
26	36	T	38	F	42	F		M								
27	35	W	42	S	45	S		T								
28	37	T	45	S	48	S		W								
29	39	F			46	M		T								
30	43	S			50	T										
31	38	S			51	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	43		45		51		66		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2659 Total Samples
110 (92.4%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
56 is the 4th highest daily maximum annual 8-hr concentration (04/20/2010)

Table D-7

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Marbleton - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1		S	52 S	48 W	58 F	47 M	46 W	41 S	38 T	39 T	38 S	39 T
2		M	49 M	43 T	38 S	36 T	47 T	42 S	37 W	45 F	41 M	37 W
3		T	47 T	46 F	49 S	44 W	43 F	49 M	42 T	44 S	43 T	33 T
4		W	47 W	47 S	57 M	41 T	49 S	52 T	50 F	31 S	41 W	35 F
5		T	47 T	50 S	43 T	37 F	49 S	49 W	51 S	46 M	38 T	40 S
6		F	45 F	51 M	44 W	45 S	47 M	51 T	16 S	37 T	39 F	32 S
7		S	50 S	51 T	52 T	44 S	48 T	49 F	48 M	37 W	38 S	31 M
8		S	49 S	54 W	52 F	41 M	51 W	40 S	52 T	34 T	40 S	34 T
9		M	51 M	44 T	51 S	44 T	50 T	42 S	50 W	39 F	39 M	35 W
10		39 T	46 T	47 F	59 S	39 W	52 F	47 M	48 T	35 S	38 T	33 T
11		40 W	51 W	52 S	54 M	40 T	44 S	54 T	41 F	33 S	45 W	32 F
12		T	52 T	50 S	52 T	42 F	45 S	54 W	42 S	41 M	39 T	41 S
13		F	50 F	48 M	54 W	46 S	42 M	51 T	46 S	41 T	41 F	31 S
14		S	52 S	44 T	44 T	44 S	43 T	54 F	42 M	39 W	39 S	40 M
15		S	49 S	54 W	56 F	45 M	46 W	45 S	44 T	37 T	42 S	35 T
16		M	38 M	48 T	59 S	42 T	47 T	39 S	49 W	34 F	36 M	36 W
17		T	47 T	39 F	50 S	41 W	48 F	40 M	29 T	35 S	35 T	36 T
18		41 W	43 W	52 S	49 M	44 T	50 S	43 T	54 F	38 S	38 W	31 F
19		41 T	42 T	51 S	52 T	52 F	46 S	46 W	53 S	43 M	39 T	37 S
20		44 F	45 F	48 M	54 W	50 S	M	44 T	50 S	32 T	38 F	36 S
21		49 S	50 S	48 T	57 T	56 S	T	46 F	41 M	32 W	40 S	27 M
22		47 S	45 S	47 W	53 F	55 M	45 W	40 S	46 T	45 T	34 S	32 T
23		60 M	44 M	54 T	49 S	56 T	44 T	39 S	34 W	47 F	36 M	40 W
24		40 T	47 T	44 F	44 S	51 W	42 F	40 M	38 T	45 S	38 T	45 T
25		39 W	46 W	46 S	40 M	49 T	41 S	43 T	40 F	39 S	37 W	46 F
26		45 T	45 T	56 S	49 T	49 F	45 S	55 W	47 S	37 M	36 T	37 S
27		44 F	49 F	56 M	51 W	58 S	41 M	47 T	54 S	43 T	24 F	37 S
28		45 S	48 S	59 T	50 T	46 S	48 T	50 F	48 M	39 W	39 S	34 M
29			56 S	58 W	48 F	45 M	42 W	51 S	55 T	38 T	40 S	34 T
30			54 M	56 T	52 S	50 T	40 T	53 S	39 W	31 F	34 M	35 W
31			51 T		47 S		40 F	43 M		31 S		40 T
Valid Days	0	13	31	30	31	30	29	31	30	31	30	31
Maximum	0	60	56	59	59	58	52	55	55	47	45	46
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7709 Total Samples	0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
317 (94.9%) Valid Days	59 is the 4th highest daily maximum annual 8-hr concentration (05/16/2009)

Table D-8

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Marbleton - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	35	F	38	M	50	M	53	T								
2	39	S	37	T	47	T	52	F								
3	37	S	40	W	50	W	51	S								
4	29	M	46	T	53	T	57	S								
5	32	T	45	F	50	F	62	M								
6	41	W	47	S	47	S	54	T								
7	38	T	45	S	52	S	57	W								
8	34	F	45	M	54	M	50	T								
9	36	S	47	T	53	T	75	F								
10	36	S	43	W	51	W	64	S								
11	31	M	41	T	50	T	58	S								
12	29	T	43	F	50	F	61	M								
13	33	W	48	S	53	S	54	T								
14	40	T	45	S	50	S	57	W								
15	37	F	45	M	48	M	62	T								
16	37	S	43	T	51	T	61	F								
17	44	S	46	W	45	W	63	S								
18	41	M	43	T	48	T	61	S								
19	39	T	45	F	46	F	61	M								
20	38	W	47	S	48	S	63	T								
21	36	T	48	S	52	S	49	W								
22	47	F	49	M	52	M		T								
23	39	S	47	T	51	T		F								
24	43	S	48	W	49	W		S								
25	41	M	44	T	54	T		S								
26	38	T	44	F	48	F		M								
27	39	W	50	S	51	S		T								
28	41	T	50	S	56	S		W								
29	45	F			49	M		T								
30	45	S			54	T										
31	51	S			57	W										
Valid Days	31		28		31		21		0	0	0	0	0	0	0	0
Maximum	51		50		57		75		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2666 Total Samples
111 (93.3%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
63 is the 4th highest daily maximum annual 8-hr concentration (04/20/2010)

Table D-9

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Sand Draw - Sublette County - WY
01/01/2009 - 12/31/2009

Day	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
1	T	S	63 S	50 W	64 F	46 M	51 W	44 S	41 T	38 T	38 S	38 T
2	F	M	66 M	49 T	42 S	43 T	52 T	49 S	39 W	45 F	43 M	38 W
3	S	T	48 T	47 F	52 S	51 W	48 F	55 M	46 T	46 S	44 T	36 T
4	S	W	49 W	51 S	62 M	45 T	55 S	59 T	53 F	41 S	44 W	37 F
5	M	T	51 T	54 S	45 T	40 F	55 S	56 W	54 S	44 M	39 T	39 S
6	T	F	49 F	54 M	47 W	48 S	54 M	54 T	51 S	30 T	40 F	30 S
7	W	S	52 S	54 T	55 T	45 S	55 T	55 F	50 M	43 W	41 S	31 M
8	T	S	52 S	59 W	52 F	45 M	56 W	46 S	51 T	36 T	42 S	30 T
9	F	M	50 M	46 T	55 S	49 T	56 T	47 S	51 W	36 F	38 M	31 W
10	S	T	49 T	50 F	61 S	46 W	58 F	52 M	49 T	37 S	T	38 T
11	S	W	53 W	57 S	61 M	44 T	53 S	59 T	44 F	30 S	W	31 F
12	M	T	59 T	53 S	57 T	46 F	54 S	62 W	45 S	41 M	T	41 S
13	T	F	62 F	50 M	57 W	52 S	47 M	55 T	47 S	43 T	41 F	33 S
14	W	S	66 S	48 T	49 T	49 S	48 T	59 F	44 M	38 W	42 S	40 M
15	T	S	55 S	55 W	60 F	52 M	51 W	51 S	44 T	36 T	39 S	28 T
16	F	M	41 M	46 T	62 S	46 T	53 T	44 S	50 W	35 F	36 M	40 W
17	S	T	46 T	57 F	55 S	46 W	52 F	44 M	55 T	35 S	35 T	36 T
18	S	W	49 W	48 S	53 M	50 T	56 S	46 T	53 F	43 S	38 W	36 F
19	M	T	42 T	55 S	57 T	59 F	53 S	51 W	56 S	42 M	42 T	36 S
20	T	F	49 F	49 M	57 W	57 S	49 M	47 T	50 S	38 T	37 F	37 S
21	W	S	54 S	49 T	61 T	61 S	51 T	48 F	43 M	31 W	42 S	36 M
22	T	S	49 S	51 W	58 F	62 M	51 W	48 S	46 T	46 T	41 S	33 T
23	F	M	48 M	56 T	50 S	65 T	50 T	45 S	35 W	45 F	36 M	38 W
24	S	41 T	48 T	45 F	47 S	58 W	44 F	44 M	41 T	42 S	36 T	44 T
25	S	47 W	49 W	42 S	43 M	56 T	47 S	52 T	42 F	38 S	40 W	44 F
26	M	47 T	47 T	58 S	53 T	52 F	53 S	58 W	48 S	37 M	38 T	37 S
27	T	47 F	52 F	59 M	54 W	59 S	46 M	46 T	56 S	44 T	33 F	37 S
28	W	53 S	52 S	64 T	53 T	46 S	53 T	54 F	49 M	38 W	37 S	34 M
29	T		58 S	62 W	53 F	51 M	43 W	53 S	55 T	38 T	38 S	32 T
30	F		56 M	61 T	55 S	55 T	44 T	54 S	40 W	34 F	35 M	37 W
31	S		53 T		50 S		46 F	46 M		29 S		40 T
Valid Days	0	5	31	30	31	30	31	31	30	31	27	31
Maximum	0	53	66	64	64	65	58	62	56	46	44	44
Exceedances	0	0	0	0	0	0	0	0	0	0	0	0

7425 Total Samples
308 (84.4%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
64 is the 4th highest daily maximum annual 8-hr concentration (04/28/2009)

Table D-10

Ozone Standards Report and
Daily Maximum 8-Hour Concentrations (ppb)

Sand Draw - Sublette County - WY
01/01/2010 - 12/31/2010

Day	Jan-10		Feb-10		Mar-10		Apr-10		May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
1	40	F	38	M	53	M	52	T								
2	39	S	44	T	49	T	51	F								
3	38	S	45	W	51	W	51	S								
4	35	M	47	T	54	T	55	S								
5	31	T	49	F	50	F	59	M								
6	39	W	48	S	51	S	53	T								
7	38	T	49	S	50	S	55	W								
8	35	F	44	M	53	M	51	T								
9	41	S	48	T	53	T	70	F								
10	43	S	46	W	50	W	63	S								
11	35	M	42	T	49	T	59	S								
12	34	T	46	F	49	F	60	M								
13	36	W	47	S	52	S	54	T								
14	39	T	47	S	50	S	55	W								
15	40	F	53	M	49	M	61	T								
16	35	S	47	T	50	T	62	F								
17	48	S	44	W	44	W	65	S								
18	44	M	44	T	46	T	60	S								
19	43	T	45	F	45	F	61	M								
20	39	W	49	S	46	S	62	T								
21	45	T	50	S	50	S		W								
22	46	F	52	M	50	M		T								
23	42	S	47	T	48	T		F								
24	39	S	48	W	48	W		S								
25	42	M	44	T	54	T		S								
26	39	T	46	F	48	F		M								
27	42	W	49	S	50	S		T								
28	42	T	59	S	56	S		W								
29	48	F			50	M		T								
30	63	S			52	T										
31	43	S			54	W										
Valid Days	31		28		31		20		0	0	0	0	0	0	0	0
Maximum	63		59		56		70		0	0	0	0	0	0	0	0
Exceedances	0		0		0		0		0	0	0	0	0	0	0	0

2651 Total Samples
110 (92.4%) Valid Days

0 Daily-maxima exceeding the standard of .075 ppm (75 ppb) [*]
63 is the 4th highest daily maximum annual 8-hr concentration (04/10/2010)

APPENDIX E

Air Toxics Data Listings

Table E-1
Sublette County Air Toxics Monitoring
Bargerville (BARG)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	66	64	ND	5.57	1.22
Formaldehyde (50-00-0)	67	66	66	0.06	2.59	1.40
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	69	68	1	ND	1.89	0.03
1,1-Dichloroethene (75-35-4)	69	68	1	ND	0.09	0.00
1,2,4-Trimethylbenzene (95-63-6)	69	68	10	ND	18.99	0.56
1,2-Dichloroethane (107-06-2)	69	68	1	ND	0.19	0.00
1,2-Dichloropropane (78-87-5)	69	68	1	ND	0.94	0.01
1,3,5-Trimethylbenzene (108-67-8)	69	68	2	ND	4.90	0.09
2,2,4-Trimethylpentane (540-84-1)	68	67	2	ND	10.92	0.25
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	69	68	61	ND	21.58	2.50
2-Propanol (67-63-0)	69	68	33	ND	499.65	16.59
4-Ethyltoluene (622-96-8)	69	68	9	ND	15.99	0.45
4-Methyl-2-pentanone (108-10-1)	69	68	3	ND	1.37	0.04
Acetone (67-64-1)	69	68	64	ND	48.29	9.94
Benzene (71-43-2)	69	68	68	0.31	18.51	1.55
Bromomethane (74-83-9)	69	68	3	ND	1.58	0.05
Carbon Disulfide (75-15-0)	69	68	2	ND	24.06	0.50
Chloromethane (74-87-3)	69	68	66	ND	1.66	0.96
Cyclohexane (110-82-7)	69	68	14	ND	1.40	0.18
Ethanol (64-17-5)	69	68	63	ND	80.44	8.16
Ethyl Benzene (100-41-4)	69	68	53	ND	14.56	0.68
Freon 11 (75-69-4)	69	68	52	ND	1.83	0.93
Freon 12 (75-71-8)	69	68	67	ND	2.97	2.12
Heptane (142-82-5)	69	68	14	ND	6.25	0.36
Hexane (110-54-3)	69	68	23	ND	15.40	0.94
m,p-Xylene (108-38-3/106-42-3)	69	68	65	ND	61.79	2.96
Methylene Chloride (75-09-2)	69	68	9	ND	13.06	0.43
o-Xylene (95-47-6)	69	68	62	ND	18.10	0.87
Propylbenzene (103-65-1)	69	68	1	ND	3.25	0.05
Styrene (100-42-5)	69	68	4	ND	2.47	0.08
Tetrachloroethene (127-18-4)	69	68	5	ND	151.67	2.26
Tetrahydrofuran (109-99-9)	69	68	2	ND	7.49	0.15
Toluene (108-88-3)	69	68	68	0.38	65.12	4.91
Trichloroethene (79-01-6)	69	68	2	ND	1.20	0.02

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-2
Sublette County Air Toxics Monitoring
Big Sandy (BISA)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	66	66	66	0.30	2.70	0.96
Formaldehyde (50-00-0)	66	66	65	ND	2.77	1.09
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	68	68	2	ND	1.50	0.03
1,1,2-Trichloroethane (79-00-5)	68	68	17	ND	1.61	0.11
1,1-Dichloroethane (75-34-3)	68	68	41	ND	3.78	0.46
1,1-Dichloroethene (75-35-4)	68	68	11	ND	0.34	0.02
1,2,4-Trimethylbenzene (95-63-6)	68	68	14	ND	21.98	0.93
1,2-Dichloroethane (107-06-2)	68	68	49	ND	2.47	0.49
1,2-Dichloropropane (78-87-5)	68	68	5	ND	2.35	0.10
1,3,5-Trimethylbenzene (108-67-8)	68	68	5	ND	5.50	0.19
1,3-Butadiene (106-99-0)	68	68	6	ND	0.65	0.05
1,4-Dioxane (123-91-1)	68	68	1	ND	6.23	0.09
2,2,4-Trimethylpentane (540-84-1)	67	67	5	ND	26.12	0.96
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	68	68	67	ND	128.89	30.00
2-Hexanone (591-78-6)	68	68	7	ND	7.49	0.64
2-Propanol (67-63-0)	68	68	55	ND	399.72	18.30
4-Ethyltoluene (622-96-8)	68	68	11	ND	18.99	0.77
4-Methyl-2-pentanone (108-10-1)	68	68	29	ND	5.00	0.92
Acetone (67-64-1)	68	68	68	4.35	989.92	177.41
alpha-Chlorotoluene (100-44-7)	68	68	1	ND	7.37	0.11
Benzene (71-43-2)	68	68	67	ND	45.46	2.55
Bromomethane (74-83-9)	68	68	3	ND	1.50	0.05
Carbon Disulfide (75-15-0)	68	68	2	ND	4.43	0.12
Chloroethane (75-00-3)	68	68	57	ND	50.96	6.89
Chloroform (67-66-3)	68	68	1	ND	1.24	0.02
Chloromethane (74-87-3)	68	68	68	0.84	15.32	4.06
cis-1,2-Dichloroethene (156-59-2)	68	68	2	ND	0.44	0.01
Cumene (98-82-8)	68	68	1	ND	1.55	0.02
Cyclohexane (110-82-7)	68	68	13	ND	8.05	0.32
Ethanol (64-17-5)	68	68	68	1.67	187.68	20.23
Ethyl Benzene (100-41-4)	68	68	64	ND	44.13	1.46
Freon 11 (75-69-4)	68	68	55	ND	1.60	0.97
Freon 12 (75-71-8)	68	68	68	1.46	2.71	2.14
Heptane (142-82-5)	68	68	54	ND	36.24	4.15
Hexane (110-54-3)	68	68	46	ND	35.47	2.08
m,p-Xylene (108-38-3/106-42-3)	68	68	68	0.38	172.13	5.82
Methylene Chloride (75-09-2)	68	68	45	ND	98.86	3.28
o-Xylene (95-47-6)	68	68	66	ND	52.96	1.82
Propylbenzene (103-65-1)	68	68	4	ND	3.90	0.13
Styrene (100-42-5)	68	68	3	ND	9.09	0.17
Tetrachloroethene (127-18-4)	68	68	14	ND	3.24	0.22
Tetrahydrofuran (109-99-9)	68	68	1	ND	5.40	0.08
Toluene (108-88-3)	68	68	68	0.37	172.36	8.86
Trichloroethene (79-01-6)	68	68	4	ND	3.93	0.11
Vinyl Chloride (75-01-4)	68	68	62	ND	4.68	0.89

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-3
Sublette County Air Toxics Monitoring
Bondurant (BOND)
3/2/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	64	64	62	ND	3.57	1.14
Formaldehyde (50-00-0)	64	64	64	0.20	3.13	1.09
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	66	66	4	ND	7.21	0.17
1,1-Dichloroethane (75-34-3)	66	66	1	ND	0.36	0.01
1,1-Dichloroethene (75-35-4)	66	66	3	ND	1.85	0.04
1,2,4-Trimethylbenzene (95-63-6)	66	66	10	ND	7.99	0.43
1,2-Dichloroethane (107-06-2)	66	66	4	ND	1.85	0.07
1,2-Dichloropropane (78-87-5)	66	66	2	ND	2.11	0.06
1,3,5-Trimethylbenzene (108-67-8)	66	66	4	ND	2.05	0.09
1,4-Dichlorobenzene (106-46-7)	66	66	1	ND	2.20	0.03
1,4-Dioxane (123-91-1)	66	66	2	ND	1.57	0.05
2,2,4-Trimethylpentane (540-84-1)	66	66	1	ND	4.70	0.07
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	66	66	61	ND	23.38	2.53
2-Propanol (67-63-0)	66	66	32	ND	349.75	15.86
4-Ethyltoluene (622-96-8)	66	66	7	ND	7.00	0.33
4-Methyl-2-pentanone (108-10-1)	66	66	3	ND	8.74	0.16
Acetone (67-64-1)	66	66	66	2.25	195.57	12.56
Benzene (71-43-2)	66	66	64	ND	11.04	1.23
Bromomethane (74-83-9)	66	66	3	ND	1.38	0.05
Carbon Disulfide (75-15-0)	66	66	2	ND	18.68	0.43
Chloroethane (75-00-3)	66	66	1	ND	2.49	0.04
Chloromethane (74-87-3)	66	66	65	ND	3.78	1.01
Cyclohexane (110-82-7)	66	66	2	ND	0.80	0.02
Ethanol (64-17-5)	66	66	63	ND	49.79	7.64
Ethyl Benzene (100-41-4)	66	66	52	ND	8.39	0.62
Freon 11 (75-69-4)	66	66	55	ND	1.88	1.01
Freon 113 (76-13-1)	66	66	1	ND	3.35	0.05
Freon 12 (75-71-8)	66	66	66	1.56	3.22	2.24
Heptane (142-82-5)	66	66	5	ND	10.00	0.25
Hexane (110-54-3)	66	66	18	ND	9.31	0.59
m,p-Xylene (108-38-3/106-42-3)	66	66	60	ND	33.54	2.41
Methylene Chloride (75-09-2)	66	66	6	ND	9.18	0.41
o-Xylene (95-47-6)	66	66	57	ND	10.15	0.71
Propylbenzene (103-65-1)	66	66	3	ND	1.50	0.05
Styrene (100-42-5)	66	66	3	ND	2.64	0.07
Tetrachloroethene (127-18-4)	66	66	9	ND	2.27	0.12
Toluene (108-88-3)	66	66	66	0.14	191.52	6.20
Trichloroethene (79-01-6)	66	66	5	ND	3.39	0.12
Vinyl Chloride (75-01-4)	66	66	1	ND	0.49	0.01

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-4
Sublette County Air Toxics Monitoring
Boulder (BOUL)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	67	65	ND	2.77	0.94
Formaldehyde (50-00-0)	67	67	66	ND	2.26	0.99
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	71	71	2	ND	1.39	0.03
1,1-Dichloroethene (75-35-4)	71	71	1	ND	0.26	0.00
1,2,4-Trimethylbenzene (95-63-6)	71	71	19	ND	4.85	0.49
1,2-Dichloroethane (107-06-2)	71	71	1	ND	0.25	0.00
1,2-Dichloropropane (78-87-5)	71	71	1	ND	0.85	0.01
1,3,5-Trimethylbenzene (108-67-8)	71	71	3	ND	1.40	0.05
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	71	71	68	ND	17.99	2.63
2-Propanol (67-63-0)	71	71	36	ND	374.74	12.02
4-Ethyltoluene (622-96-8)	71	71	16	ND	4.60	0.40
4-Methyl-2-pentanone (108-10-1)	71	71	1	ND	2.00	0.03
Acetone (67-64-1)	71	71	69	ND	48.29	11.13
Benzene (71-43-2)	71	71	71	0.36	12.99	2.12
Bromomethane (74-83-9)	71	71	1	ND	1.14	0.02
Carbon Disulfide (75-15-0)	71	71	3	ND	5.38	0.18
Chlorobenzene (108-90-7)	71	71	1	ND	0.80	0.01
Chloromethane (74-87-3)	71	71	71	0.50	1.51	0.97
Cyclohexane (110-82-7)	71	71	24	ND	3.50	0.50
Ethanol (64-17-5)	71	71	64	ND	248.97	11.91
Ethyl Benzene (100-41-4)	71	71	68	ND	5.74	0.77
Freon 11 (75-69-4)	71	71	51	ND	1.66	0.88
Freon 12 (75-71-8)	71	71	69	ND	3.17	2.11
Heptane (142-82-5)	71	71	27	ND	5.00	0.58
Hexane (110-54-3)	71	71	41	ND	12.54	1.29
m,p-Xylene (108-38-3/106-42-3)	71	71	71	0.35	26.04	3.47
Methylene Chloride (75-09-2)	71	71	9	ND	16.24	0.65
o-Xylene (95-47-6)	71	71	71	0.14	7.50	0.99
Styrene (100-42-5)	71	71	10	ND	24.68	0.72
Tetrachloroethene (127-18-4)	71	71	17	ND	5.03	0.22
Toluene (108-88-3)	71	71	71	0.61	57.45	6.42
Trichloroethene (79-01-6)	71	71	4	ND	1.37	0.04

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-5
Sublette County Air Toxics Monitoring
CASTNet Site (CAST)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	65	62	61	ND	4.52	1.10
Formaldehyde (50-00-0)	65	62	62	0.28	2.61	1.12
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	67	67	5	ND	2.88	0.08
1,1-Dichloroethane (75-34-3)	67	67	1	ND	0.17	0.00
1,1-Dichloroethene (75-35-4)	67	67	2	ND	0.26	0.01
1,2,4-Trimethylbenzene (95-63-6)	67	67	11	ND	12.49	0.72
1,2-Dichloroethane (107-06-2)	67	67	3	ND	1.77	0.04
1,3,5-Trimethylbenzene (108-67-8)	67	67	4	ND	3.45	0.14
2,2,4-Trimethylpentane (540-84-1)	66	66	3	ND	11.40	0.35
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	67	67	57	ND	29.98	3.24
2-Propanol (67-63-0)	67	67	35	ND	4247.00	76.77
4-Ethyltoluene (622-96-8)	67	67	7	ND	12.99	0.56
4-Methyl-2-pentanone (108-10-1)	67	67	6	ND	2.91	0.14
Acetone (67-64-1)	67	67	64	ND	48.29	11.38
Benzene (71-43-2)	67	67	67	0.30	38.97	2.16
Bromomethane (74-83-9)	67	67	3	ND	1.46	0.05
Carbon Disulfide (75-15-0)	67	67	1	ND	3.13	0.05
Chloromethane (74-87-3)	67	67	66	ND	1.85	0.99
Cyclohexane (110-82-7)	67	67	4	ND	4.90	0.15
Ethanol (64-17-5)	67	67	62	ND	517.08	23.18
Ethyl Benzene (100-41-4)	67	67	56	ND	15.01	0.97
Freon 11 (75-69-4)	67	67	48	ND	1.83	0.91
Freon 12 (75-71-8)	67	67	66	ND	3.32	2.15
Heptane (142-82-5)	67	67	11	ND	12.91	0.49
Hexane (110-54-3)	67	67	22	ND	42.99	1.58
m,p-Xylene (108-38-3/106-42-3)	67	67	66	ND	66.20	4.26
Methylene Chloride (75-09-2)	67	67	8	ND	15.89	0.67
o-Xylene (95-47-6)	67	67	59	ND	18.54	1.18
Propylbenzene (103-65-1)	67	67	3	ND	1.70	0.06
Styrene (100-42-5)	67	67	12	ND	4.07	0.34
Tetrachloroethene (127-18-4)	67	67	6	ND	75.83	1.20
Toluene (108-88-3)	67	67	67	0.65	157.04	7.84
Trichloroethene (79-01-6)	67	67	6	ND	3.60	0.09

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-6
Sublette County Air Toxics Monitoring
Daniel (DANI)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	67	64	ND	5.33	1.22
Formaldehyde (50-00-0)	67	67	66	ND	2.85	1.37
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	70	70	2	ND	1.22	0.03
1,1,2,2-Tetrachloroethane (79-34-5)	70	70	1	ND	1.40	0.02
1,1,2-Trichloroethane (79-00-5)	70	70	1	ND	0.22	0.00
1,1-Dichloroethane (75-34-3)	70	70	28	ND	0.70	0.11
1,2,4-Trimethylbenzene (95-63-6)	70	70	8	ND	7.49	0.27
1,2-Dichloroethane (107-06-2)	70	70	36	ND	0.70	0.14
1,3,5-Trimethylbenzene (108-67-8)	70	70	2	ND	2.35	0.05
1,3-Butadiene (106-99-0)	70	70	2	ND	0.56	0.02
2,2,4-Trimethylpentane (540-84-1)	69	69	3	ND	8.55	0.26
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	70	70	70	1.17	74.94	15.86
2-Propanol (67-63-0)	70	70	42	ND	149.89	11.78
4-Ethyltoluene (622-96-8)	70	70	6	ND	7.00	0.21
4-Methyl-2-pentanone (108-10-1)	70	70	17	ND	2.75	0.40
Acetone (67-64-1)	70	70	70	8.93	1062.35	146.55
Benzene (71-43-2)	70	70	70	0.31	14.61	1.25
Bromomethane (74-83-9)	70	70	4	ND	1.85	0.07
Carbon Disulfide (75-15-0)	70	70	1	ND	3.80	0.05
Chloroethane (75-00-3)	70	70	53	ND	18.24	2.33
Chloromethane (74-87-3)	70	70	70	0.88	7.77	2.09
Cyclohexane (110-82-7)	70	70	8	ND	1.82	0.11
Ethanol (64-17-5)	70	70	67	ND	84.27	11.45
Ethyl Benzene (100-41-4)	70	70	53	ND	8.83	0.52
Freon 11 (75-69-4)	70	70	56	ND	1.94	0.99
Freon 12 (75-71-8)	70	70	70	1.46	2.92	2.17
Heptane (142-82-5)	70	70	41	ND	12.50	1.80
Hexane (110-54-3)	70	70	31	ND	12.18	0.81
m,p-Xylene (108-38-3/106-42-3)	70	70	65	ND	40.60	2.08
Methylene Chloride (75-09-2)	70	70	26	ND	12.36	0.83
o-Xylene (95-47-6)	70	70	60	ND	12.80	0.68
Propylbenzene (103-65-1)	70	70	1	ND	1.45	0.02
Styrene (100-42-5)	70	70	2	ND	1.26	0.03
Tetrachloroethene (127-18-4)	70	70	12	ND	2.55	0.13
Toluene (108-88-3)	70	70	70	0.24	91.93	4.30
Vinyl Chloride (75-01-4)	70	70	60	ND	1.90	0.31

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-7
Sublette County Air Toxics Monitoring
Farson-Eden (FARS)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	65	65	0.20	5.68	1.56
Formaldehyde (50-00-0)	67	65	65	0.23	3.16	1.34
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	68	68	5	ND	1.00	0.04
1,1-Dichloroethene (75-35-4)	68	68	1	ND	0.08	0.00
1,2,4-Trimethylbenzene (95-63-6)	68	68	12	ND	79.94	1.59
1,2-Dichloroethane (107-06-2)	68	68	1	ND	1.36	0.02
1,3,5-Trimethylbenzene (108-67-8)	68	68	5	ND	15.49	0.30
2,2,4-Trimethylpentane (540-84-1)	67	67	3	ND	7.12	0.29
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	68	68	64	ND	11.99	2.07
2-Propanol (67-63-0)	68	68	33	ND	524.63	20.08
4-Ethyltoluene (622-96-8)	68	68	11	ND	46.97	0.97
4-Methyl-2-pentanone (108-10-1)	68	68	1	ND	0.87	0.01
Acetone (67-64-1)	68	68	68	1.96	24.14	8.89
Benzene (71-43-2)	68	68	68	0.32	13.96	1.83
Bromomethane (74-83-9)	68	68	2	ND	1.58	0.03
Carbon Disulfide (75-15-0)	68	68	3	ND	10.13	0.35
Chloroethane (75-00-3)	68	68	1	ND	1.72	0.03
Chloromethane (74-87-3)	68	68	67	ND	2.73	0.99
Cyclohexane (110-82-7)	68	68	25	ND	3.22	0.43
Ethanol (64-17-5)	68	68	64	ND	157.04	12.53
Ethyl Benzene (100-41-4)	68	68	66	ND	6.62	0.80
Freon 11 (75-69-4)	68	68	54	ND	1.60	0.95
Freon 12 (75-71-8)	68	68	67	ND	3.02	2.12
Heptane (142-82-5)	68	68	22	ND	4.17	0.47
Hexane (110-54-3)	68	68	38	ND	10.75	1.24
m,p-Xylene (108-38-3/106-42-3)	68	68	68	0.53	52.96	3.99
Methyl tert-butyl ether (1634-04-4)	68	68	1	ND	2.49	0.04
Methylene Chloride (75-09-2)	68	68	8	ND	7.06	0.45
o-Xylene (95-47-6)	68	68	68	0.17	23.83	1.19
Propylbenzene (103-65-1)	68	68	3	ND	5.50	0.11
Styrene (100-42-5)	68	68	8	ND	3.77	0.22
Tetrachloroethene (127-18-4)	68	68	5	ND	14.48	0.26
Toluene (108-88-3)	68	68	68	0.80	61.29	6.07
Trichloroethene (79-01-6)	68	68	5	ND	1.15	0.04
Vinyl Chloride (75-01-4)	68	68	1	ND	0.04	0.00

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-8
Sublette County Air Toxics Monitoring
La Barge #1 (LAB1)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	65	65	0.51	3.08	1.57
Formaldehyde (50-00-0)	67	65	65	0.75	3.88	1.92
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	69	69	7	ND	1.66	0.06
1,1,2,2-Tetrachloroethane (79-34-5)	69	69	1	ND	0.35	0.01
1,1-Dichloroethene (75-35-4)	69	69	2	ND	0.16	0.00
1,2,4-Trimethylbenzene (95-63-6)	69	69	26	ND	25.98	1.22
1,2-Dichloroethane (107-06-2)	69	69	5	ND	1.28	0.03
1,3,5-Trimethylbenzene (108-67-8)	69	69	7	ND	7.49	0.25
1,4-Dioxane (123-91-1)	69	69	1	ND	1.65	0.02
2,2,4-Trimethylpentane (540-84-1)	68	68	5	ND	46.54	1.18
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	69	69	66	ND	25.18	2.59
2-Propanol (67-63-0)	69	69	33	ND	649.54	19.10
4-Ethyltoluene (622-96-8)	69	69	18	ND	26.48	1.05
4-Methyl-2-pentanone (108-10-1)	69	69	6	ND	1.62	0.11
Acetone (67-64-1)	69	69	69	2.20	65.19	9.93
Benzene (71-43-2)	69	69	69	0.71	18.18	3.74
Bromomethane (74-83-9)	69	69	2	ND	1.54	0.04
Carbon Disulfide (75-15-0)	69	69	1	ND	2.56	0.04
Chloromethane (74-87-3)	69	69	69	0.55	1.91	1.02
cis-1,2-Dichloroethene (156-59-2)	69	69	4	ND	0.69	0.03
Cumene (98-82-8)	69	69	1	ND	6.00	0.09
Cyclohexane (110-82-7)	69	69	63	ND	25.89	5.15
Ethanol (64-17-5)	69	69	68	ND	101.50	11.40
Ethyl Benzene (100-41-4)	69	69	68	ND	38.84	1.92
Freon 11 (75-69-4)	69	69	54	ND	1.71	1.01
Freon 12 (75-71-8)	69	69	69	1.21	3.17	2.19
Heptane (142-82-5)	69	69	60	ND	15.83	3.39
Hexane (110-54-3)	69	69	66	ND	24.36	5.83
m,p-Xylene (108-38-3/106-42-3)	69	69	68	ND	145.65	8.68
Methyl tert-butyl ether (1634-04-4)	69	69	1	ND	2.46	0.04
Methylene Chloride (75-09-2)	69	69	8	ND	7.77	0.39
o-Xylene (95-47-6)	69	69	68	ND	44.13	2.35
Propylbenzene (103-65-1)	69	69	5	ND	6.00	0.17
Styrene (100-42-5)	69	69	14	ND	7.36	0.46
Tetrachloroethene (127-18-4)	69	69	24	ND	2.69	0.26
Tetrahydrofuran (109-99-9)	69	69	1	ND	2.64	0.04
Toluene (108-88-3)	69	69	69	0.84	126.40	16.02
Trichloroethene (79-01-6)	69	69	8	ND	3.22	0.11

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-9
Sublette County Air Toxics Monitoring
La Barge #2 (LAB2)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	66	65	ND	3.37	1.59
Formaldehyde (50-00-0)	67	66	66	0.77	3.82	1.91
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	70	70	2	ND	0.45	0.01
1,1-Dichloroethene (75-35-4)	70	70	2	ND	0.11	0.00
1,2,4-Trimethylbenzene (95-63-6)	70	70	30	ND	14.49	0.79
1,2-Dichloroethane (107-06-2)	70	70	1	ND	0.58	0.01
1,3,5-Trimethylbenzene (108-67-8)	70	70	6	ND	4.00	0.14
1,4-Dioxane (123-91-1)	70	70	3	ND	3.52	0.10
2,2,4-Trimethylpentane (540-84-1)	69	69	4	ND	9.97	0.53
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	70	70	64	ND	9.29	1.77
2-Propanol (67-63-0)	70	70	37	ND	449.68	19.27
4-Ethyltoluene (622-96-8)	70	70	23	ND	13.49	0.66
4-Methyl-2-pentanone (108-10-1)	70	70	4	ND	4.16	0.13
Acetone (67-64-1)	70	70	67	ND	43.46	8.98
Benzene (71-43-2)	70	70	70	0.65	20.78	3.77
Bromomethane (74-83-9)	70	70	2	ND	1.89	0.05
Carbon Disulfide (75-15-0)	70	70	1	ND	2.60	0.04
Chloromethane (74-87-3)	70	70	69	ND	1.62	1.01
cis-1,2-Dichloroethene (156-59-2)	70	70	1	ND	0.23	0.00
Cyclohexane (110-82-7)	70	70	66	ND	25.89	5.28
Ethanol (64-17-5)	70	70	66	ND	210.66	14.35
Ethyl Benzene (100-41-4)	70	70	70	0.19	31.78	1.56
Freon 11 (75-69-4)	70	70	58	ND	1.71	1.02
Freon 12 (75-71-8)	70	70	70	1.46	2.87	2.20
Heptane (142-82-5)	70	70	66	ND	15.41	3.62
Hexane (110-54-3)	70	70	70	0.68	24.00	6.02
m,p-Xylene (108-38-3/106-42-3)	70	70	70	0.88	123.58	7.52
Methylene Chloride (75-09-2)	70	70	8	ND	13.77	0.39
o-Xylene (95-47-6)	70	70	70	0.29	29.13	1.83
Propylbenzene (103-65-1)	70	70	1	ND	2.65	0.04
Styrene (100-42-5)	70	70	18	ND	8.23	0.48
Tetrachloroethene (127-18-4)	70	70	21	ND	2.83	0.19
Tetrahydrofuran (109-99-9)	70	70	1	ND	3.60	0.05
Toluene (108-88-3)	70	70	70	1.84	88.10	14.70
Trichloroethene (79-01-6)	70	70	5	ND	1.20	0.04
Vinyl Chloride (75-01-4)	70	70	1	ND	0.19	0.00

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-10
Sublette County Air Toxics Monitoring
Marbleton East (LINN)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	67	65	ND	6.06	1.40
Formaldehyde (50-00-0)	67	67	67	0.26	3.41	1.29
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	70	70	4	ND	0.43	0.02
1,1-Dichloroethene (75-35-4)	70	70	1	ND	0.15	0.00
1,2,4-Trimethylbenzene (95-63-6)	70	70	13	ND	7.99	0.52
1,2-Dichloroethane (107-06-2)	70	70	1	ND	0.17	0.00
1,3,5-Trimethylbenzene (108-67-8)	70	70	5	ND	3.05	0.11
2,2,4-Trimethylpentane (540-84-1)	69	69	3	ND	9.02	0.32
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	70	70	67	ND	13.19	2.26
2-Propanol (67-63-0)	70	70	36	ND	399.72	14.81
4-Ethyltoluene (622-96-8)	70	70	10	ND	8.99	0.44
4-Methyl-2-pentanone (108-10-1)	70	70	2	ND	8.74	0.13
Acetone (67-64-1)	70	70	70	2.66	41.05	10.74
Benzene (71-43-2)	70	70	70	0.31	13.31	2.01
Bromomethane (74-83-9)	70	70	2	ND	1.22	0.03
Carbon Disulfide (75-15-0)	70	70	1	ND	2.60	0.04
Chloroform (67-66-3)	70	70	1	ND	0.84	0.01
Chloromethane (74-87-3)	70	70	69	ND	2.01	0.96
cis-1,2-Dichloroethene (156-59-2)	70	70	2	ND	0.56	0.01
Cumene (98-82-8)	70	70	1	ND	1.05	0.01
Cyclohexane (110-82-7)	70	70	33	ND	4.20	0.79
Ethanol (64-17-5)	70	70	62	ND	176.19	12.54
Ethyl Benzene (100-41-4)	70	70	61	ND	10.59	0.86
Freon 11 (75-69-4)	70	70	48	ND	1.77	0.85
Freon 12 (75-71-8)	70	70	70	1.61	3.07	2.17
Heptane (142-82-5)	70	70	33	ND	4.58	0.75
Hexane (110-54-3)	70	70	43	ND	42.99	2.00
m,p-Xylene (108-38-3/106-42-3)	70	70	69	ND	41.49	3.89
Methylene Chloride (75-09-2)	70	70	10	ND	6.36	0.41
o-Xylene (95-47-6)	70	70	64	ND	9.71	0.98
Propylbenzene (103-65-1)	70	70	3	ND	1.60	0.05
Styrene (100-42-5)	70	70	5	ND	3.55	0.18
Tetrachloroethene (127-18-4)	70	70	10	ND	2.55	0.15
Toluene (108-88-3)	70	70	70	0.31	72.78	7.11
Trichloroethene (79-01-6)	70	70	9	ND	3.93	0.12

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-11
Sublette County Air Toxics Monitoring
Marbleton/Big Piney (MARB)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	65	63	ND	3.77	1.58
Formaldehyde (50-00-0)	67	65	64	ND	5.16	1.91
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	72	72	1	ND	0.61	0.01
1,1,2-Trichloroethane (79-00-5)	72	72	1	ND	0.21	0.00
1,1-Dichloroethane (75-34-3)	72	72	31	ND	0.82	0.17
1,1-Dichloroethene (75-35-4)	72	72	2	ND	0.19	0.00
1,2,4-Trimethylbenzene (95-63-6)	72	72	16	ND	7.49	0.62
1,2-Dichloroethane (107-06-2)	72	72	48	ND	0.78	0.23
1,3,5-Trimethylbenzene (108-67-8)	72	72	4	ND	1.80	0.08
1,3-Butadiene (106-99-0)	72	72	1	ND	0.43	0.01
2,2,4-Trimethylpentane (540-84-1)	71	71	3	ND	6.17	0.21
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	72	72	72	1.26	80.93	19.67
2-Hexanone (591-78-6)	72	72	1	ND	4.16	0.06
2-Propanol (67-63-0)	72	72	44	ND	142.40	13.13
4-Ethyltoluene (622-96-8)	72	72	14	ND	4.75	0.48
4-Methyl-2-pentanone (108-10-1)	72	72	16	ND	2.08	0.32
Acetone (67-64-1)	72	72	72	6.04	917.48	151.13
Benzene (71-43-2)	72	72	72	0.32	8.12	1.51
Bromomethane (74-83-9)	72	72	6	ND	2.09	0.10
Carbon Disulfide (75-15-0)	72	72	1	ND	3.01	0.04
Chloroethane (75-00-3)	72	72	62	ND	14.75	3.73
Chloromethane (74-87-3)	72	72	72	0.86	6.09	2.35
cis-1,2-Dichloroethene (156-59-2)	72	72	2	ND	0.64	0.02
Cumene (98-82-8)	72	72	1	ND	1.00	0.01
Cyclohexane (110-82-7)	72	72	21	ND	5.95	0.32
Ethanol (64-17-5)	72	72	72	2.11	135.97	12.02
Ethyl Benzene (100-41-4)	72	72	70	ND	33.10	1.06
Freon 11 (75-69-4)	72	72	61	ND	1.66	1.03
Freon 12 (75-71-8)	72	72	72	1.51	2.97	2.15
Heptane (142-82-5)	72	72	66	ND	10.41	2.69
Hexane (110-54-3)	72	72	59	ND	8.96	1.31
m,p-Xylene (108-38-3/106-42-3)	72	72	72	0.35	114.75	4.01
Methylene Chloride (75-09-2)	72	72	26	ND	22.95	1.12
o-Xylene (95-47-6)	72	72	71	ND	25.60	1.17
Propylbenzene (103-65-1)	72	72	1	ND	1.25	0.02
Styrene (100-42-5)	72	72	1	ND	2.25	0.03
Tetrachloroethene (127-18-4)	72	72	24	ND	2.83	0.18
Tetrahydrofuran (109-99-9)	72	72	1	ND	9.29	0.13
Toluene (108-88-3)	72	72	72	0.50	37.15	5.06
Trichloroethene (79-01-6)	72	72	5	ND	4.26	0.14
Vinyl Chloride (75-01-4)	72	72	56	ND	1.74	0.46

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-12
Sublette County Air Toxics Monitoring
Pinedale #1 (PIN1)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	66	66	0.33	5.25	1.52
Formaldehyde (50-00-0)	67	66	66	0.38	3.84	1.59
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	68	68	1	ND	0.40	0.01
1,1,2,2-Tetrachloroethane (79-34-5)	68	68	2	ND	2.65	0.05
1,1,2-Trichloroethane (79-00-5)	68	68	11	ND	0.43	0.04
1,1-Dichloroethane (75-34-3)	68	68	44	ND	1.48	0.31
1,1-Dichloroethene (75-35-4)	68	68	3	ND	0.10	0.00
1,2,4-Trimethylbenzene (95-63-6)	68	68	24	ND	37.97	1.32
1,2-Dichloroethane (107-06-2)	68	68	47	ND	1.60	0.32
1,2-Dichloropropane (78-87-5)	68	68	2	ND	1.36	0.03
1,3,5-Trimethylbenzene (108-67-8)	68	68	6	ND	11.99	0.30
1,3-Butadiene (106-99-0)	68	68	3	ND	0.70	0.03
2,2,4-Trimethylpentane (540-84-1)	67	67	3	ND	8.07	0.32
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	68	68	68	0.84	92.92	20.38
2-Hexanone (591-78-6)	68	68	4	ND	5.83	0.31
2-Propanol (67-63-0)	68	68	48	ND	199.86	17.97
4-Ethyltoluene (622-96-8)	68	68	17	ND	30.48	1.04
4-Methyl-2-pentanone (108-10-1)	68	68	26	ND	5.00	0.73
Acetone (67-64-1)	68	68	68	7.00	917.48	158.32
Benzene (71-43-2)	68	68	68	0.29	20.13	2.13
Bromomethane (74-83-9)	68	68	2	ND	1.54	0.03
Carbon Disulfide (75-15-0)	68	68	4	ND	7.28	0.32
Carbon Tetrachloride (56-23-5)	68	68	1	ND	40.29	0.59
Chloroethane (75-00-3)	68	68	53	ND	50.96	5.66
Chloroform (67-66-3)	68	68	1	ND	10.42	0.15
Chloromethane (74-87-3)	68	68	68	0.61	13.01	3.29
cis-1,2-Dichloroethene (156-59-2)	68	68	1	ND	0.13	0.00
Cyclohexane (110-82-7)	68	68	11	ND	2.31	0.15
Ethanol (64-17-5)	68	68	65	ND	151.30	14.20
Ethyl Benzene (100-41-4)	68	68	65	ND	8.83	1.00
Freon 11 (75-69-4)	68	68	50	ND	1.66	0.89
Freon 12 (75-71-8)	68	68	68	1.56	2.92	2.14
Heptane (142-82-5)	68	68	56	ND	17.08	3.05
Hexane (110-54-3)	68	68	47	ND	20.78	1.47
m,p-Xylene (108-38-3/106-42-3)	68	68	65	ND	79.44	4.68
Methylene Chloride (75-09-2)	68	68	43	ND	10.95	1.75
o-Xylene (95-47-6)	68	68	66	ND	44.13	1.74
Propylbenzene (103-65-1)	68	68	3	ND	1.85	0.06
Styrene (100-42-5)	68	68	6	ND	19.92	0.85
Tetrachloroethene (127-18-4)	68	68	8	ND	2.76	0.10
Toluene (108-88-3)	68	68	68	0.61	80.44	6.50
Vinyl Chloride (75-01-4)	68	68	59	ND	3.12	0.65

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-13
Sublette County Air Toxics Monitoring
Pinedale #2 (PIN2)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	67	65	ND	3.22	1.17
Formaldehyde (50-00-0)	67	67	67	0.50	2.94	1.36
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	70	70	8	ND	2.11	0.05
1,1,2,2-Tetrachloroethane (79-34-5)	70	70	1	ND	1.05	0.01
1,1,2-Trichloroethane (79-00-5)	70	70	4	ND	0.24	0.01
1,1-Dichloroethane (75-34-3)	70	70	42	ND	0.78	0.23
1,1-Dichloroethene (75-35-4)	70	70	3	ND	0.27	0.01
1,2,4-Trimethylbenzene (95-63-6)	70	70	17	ND	5.00	0.58
1,2-Dichloroethane (107-06-2)	70	70	44	ND	1.97	0.25
1,3,5-Trimethylbenzene (108-67-8)	70	70	5	ND	1.70	0.10
1,3-Butadiene (106-99-0)	70	70	2	ND	0.58	0.01
2,2,4-Trimethylpentane (540-84-1)	69	69	5	ND	75.98	1.53
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	70	70	68	ND	95.92	22.15
2-Hexanone (591-78-6)	70	70	2	ND	5.00	0.14
2-Propanol (67-63-0)	70	70	45	ND	874.38	29.14
4-Ethyltoluene (622-96-8)	70	70	12	ND	4.75	0.46
4-Methyl-2-pentanone (108-10-1)	70	70	18	ND	9.16	0.55
Acetone (67-64-1)	70	70	70	7.00	893.34	161.88
Benzene (71-43-2)	70	70	69	ND	14.94	1.88
Bromomethane (74-83-9)	70	70	4	ND	3.04	0.08
Carbon Disulfide (75-15-0)	70	70	4	ND	6.01	0.21
Carbon Tetrachloride (56-23-5)	70	70	1	ND	3.71	0.05
Chloroethane (75-00-3)	70	70	58	ND	16.90	4.32
Chloromethane (74-87-3)	70	70	70	0.94	6.93	2.82
Cyclohexane (110-82-7)	70	70	12	ND	1.96	0.20
Ethanol (64-17-5)	70	70	69	ND	187.68	22.52
Ethyl Benzene (100-41-4)	70	70	65	ND	7.94	0.95
Freon 11 (75-69-4)	70	70	59	ND	1.83	0.99
Freon 12 (75-71-8)	70	70	70	1.46	3.17	2.12
Heptane (142-82-5)	70	70	63	ND	13.33	3.51
Hexane (110-54-3)	70	70	46	ND	12.18	1.58
m,p-Xylene (108-38-3/106-42-3)	70	70	68	ND	30.01	3.75
Methylene Chloride (75-09-2)	70	70	36	ND	49.43	1.93
o-Xylene (95-47-6)	70	70	67	ND	7.94	1.16
Propylbenzene (103-65-1)	70	70	5	ND	1.00	0.07
Styrene (100-42-5)	70	70	3	ND	1.86	0.05
Tetrachloroethene (127-18-4)	70	70	17	ND	2.48	0.17
Toluene (108-88-3)	70	70	69	ND	91.93	7.67
Trichloroethene (79-01-6)	70	70	9	ND	1.37	0.06
Vinyl Chloride (75-01-4)	70	70	62	ND	1.71	0.52

*Samples reported as non-detects (ND) are included in averages as zero values.

Table E-14
Sublette County Air Toxics Monitoring
Sand Draw (SADR)
2/24/09 - 3/27/10 (every sixth day)

Detected Chemical (CAS Number)	Sample Count			Concentration (µg/m³) - STP @ 20°C		
	# Samples	# Valid	# Detects	Minimum	Maximum	Average*
Method TO-11						
Acetaldehyde (75-07-0)	67	67	65	ND	5.02	1.45
Formaldehyde (50-00-0)	67	67	67	0.67	3.94	1.82
Method TO-15						
1,1,1-Trichloroethane (71-55-6)	71	71	4	ND	1.33	0.06
1,1,2,2-Tetrachloroethane (79-34-5)	71	71	1	ND	0.33	0.00
1,1,2-Trichloroethane (79-00-5)	71	71	1	ND	0.19	0.00
1,1-Dichloroethane (75-34-3)	71	71	40	ND	0.58	0.15
1,1-Dichloroethene (75-35-4)	71	71	4	ND	0.09	0.00
1,2,4-Trimethylbenzene (95-63-6)	71	71	25	ND	7.99	0.75
1,2-Dichloroethane (107-06-2)	71	71	48	ND	0.74	0.19
1,3,5-Trimethylbenzene (108-67-8)	71	71	6	ND	2.40	0.12
1,3-Butadiene (106-99-0)	71	71	3	ND	0.54	0.02
1,4-Dioxane (123-91-1)	71	71	1	ND	0.84	0.01
2,2,4-Trimethylpentane (540-84-1)	70	70	3	ND	7.60	0.28
2-Butanone (Methyl Ethyl Ketone) (78-93-3)	71	71	71	0.54	89.93	17.59
2-Hexanone (591-78-6)	71	71	2	ND	5.00	0.14
2-Propanol (67-63-0)	71	71	45	ND	1723.78	39.60
4-Ethyltoluene (622-96-8)	71	71	16	ND	7.99	0.55
4-Methyl-2-pentanone (108-10-1)	71	71	31	ND	4.16	0.72
Acetone (67-64-1)	71	71	71	6.04	820.91	152.69
Benzene (71-43-2)	71	71	70	ND	22.41	2.51
Bromomethane (74-83-9)	71	71	2	ND	1.38	0.04
Carbon Disulfide (75-15-0)	71	71	2	ND	3.17	0.09
Chloroethane (75-00-3)	71	71	57	ND	16.90	2.72
Chloromethane (74-87-3)	71	71	71	0.78	7.56	2.43
Cyclohexane (110-82-7)	71	71	41	ND	3.85	0.90
Ethanol (64-17-5)	71	71	69	ND	306.42	16.33
Ethyl Benzene (100-41-4)	71	71	69	ND	10.59	0.96
Freon 11 (75-69-4)	71	71	53	ND	1.77	0.91
Freon 12 (75-71-8)	71	71	71	1.46	2.97	2.13
Heptane (142-82-5)	71	71	67	ND	11.66	3.08
Hexane (110-54-3)	71	71	64	ND	23.29	2.27
m,p-Xylene (108-38-3/106-42-3)	71	71	71	0.71	40.16	4.45
Methylene Chloride (75-09-2)	71	71	30	ND	45.90	1.57
o-Xylene (95-47-6)	71	71	71	0.19	11.47	1.26
Propylbenzene (103-65-1)	71	71	4	ND	1.75	0.07
Styrene (100-42-5)	71	71	1	ND	1.04	0.01
Tetrachloroethene (127-18-4)	71	71	19	ND	10.34	0.41
Toluene (108-88-3)	71	71	71	1.07	91.93	8.22
Trichloroethene (79-01-6)	71	71	8	ND	0.87	0.06
Vinyl Chloride (75-01-4)	71	71	58	ND	1.79	0.38

*Samples reported as non-detects (ND) are included in averages as zero values.