Agricultural Science Center at Clovis
College of Agricultural, Consumer and Environmental Sciences

New Mexico State University
Agricultural Science Center at Clovis, NM
Wind Monitoring Project

MONTHLY WIND PERFORMANCE REPORT
February 2012

Site Location: Clovis, New Mexico
Coordinates: Degree, Decimal
Latitude: 34.606075 ° N
Longitude: -103.301602 ° W
Altitude: 1363 meter

New Mexico State University
Agricultural Science Center at Clovis

Wind Monitoring Project
Monthly Performance Report
February 2012

Prepared for:

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TABLE OF CONTENTS
Wind Monitoring Report
50 Meter Tower

	Page
Executive Summary	**1**
Wind Monitoring Method Description	**2**
Summary Report	**3**
Monitoring at 50 meters	
Frequency Distribution 1 (50m)	**4**
Wind Speed 1 – 50m Hourly Average Graph 1	**5**
Wind Speed 1 – 50m Hourly Average Table 1	**6**
Frequency Distribution 2 (50m)	**7**
Wind Speed 2 – 50m Hourly Average Graph 2	**8**
Wind Speed 2 – 50m Hourly Average Table 2	**9**
Wind Direction Rose Graph (50m)	**10**
Monitoring at 40 meters	
Frequency Distribution 3 (40m)	**11**
Wind Speed – 40m Hourly Average Graph 3	**12**
Wind Speed – 40m Hourly Average Table 3	**13**
Wind Direction Rose Graph (40m)	**14**
Monitoring at 30 meters	
Frequency Distribution 4 (30m)	**15**
Wind Speed – 30m Hourly Average Graph 4	**16**
Wind Speed – 30m Hourly Average Table 4	**17**
Temperature Monitoring	
Hourly Average Graph (Ambient Temperature C°)	**18**
Hourly Average Table (Ambient Temperature C°)	**19**
Estimated Energy Production	**20**

Executive Summary

This report provides the monthly wind performance summary for **February 2012** of the 50m Wind Met-Tower at the New Mexico State University Agricultural Science Center at Clovis. The site is located right at the Center's facility area which has flat agricultural landscape that includes grass, crops, and lose soil. The wind met-tower is installed at coordinates 34.606075° N and -103.301602° W altitude of 1363 meters.

Wind speed and direction monitoring are being done at three heights 50m, 40m, and 30m. The **average wind speed** for the month of **February** at the highest level (50m height) was found to be **8.95 m/s** with **average temperatures** around **4.5° C** while the predominant **wind direction** was from the **West.**

Based on the average wind speed results, an approximation of energy production is done using a GE1.5 MW wind turbine for the sole purpose of getting an idea of how much energy the site would yield if a turbine were to be installed. Any other turbine size and manufacturer could have been selected depending on preference and appropriateness. The **estimated energy production** for the month of **February** was approximately **641,466 kWh**. Power output were approximated based on the manufacturer's turbine power curve at 65m hub height.

Graphs and figures in this report are for **29** day periods from **February 1-29, 2012**

Wind Monitoring Method description

The NRG Symphonie data logger is an internet ready, ultra-low power microprocessor-controlled data logging system specifically designed for the wind energy industry. The Symphonie logger has a fixed averaging interval of 10 minutes. Each of the 12 channels' averages, standard deviations, minimum and maximum values are calculated from continuous 2 second data samples. Data intervals are calculated every 10 minutes, time stamped with the beginning time of each interval and written to the MultiMedia Card (MMC) at the top of each hour. Symphonie Data Retriever (SDR) software is then used to process raw data files stored on the computer from an MMC.

Dates of the performance of the monitoring:

February, 1-29 2012

Test description page(s):

Description of wind monitoring items: The 50-m met tower has four "1900 NRG #40C Calibrated Anemometers;" at 50, 40, and 30 meters; two "1904 NRG #200P Wind Direction Vane 10K" at 50 and 40 meters, as well as one "1906-NRG #110S Temperature Sensor with Radiation Shield". Data Symphonie NRG Logger.
Mnfg: NGR Systems Models: Anemometers: 1900-NRG #40 Wind Direction Vane: 1904-NRG #200P Temperature Sensor: 1906-NRG #110S Data logger: Symphonie NRG Logger
Conditions of the wind monitoring items: ***Working as specified***
Monitoring dates: February, 1-29 2012
Location of Monitoring: The place is an open space of about 2 acres located approximately 200 yards to the south from the Agricultural Science Center at Clovis's main building complex. There are obstacles (buildings, trees, etc) which can affect both, wind speed or wind direction sampling.
Monitoring Plan Description: The Symphonie logger has a fixed averaging interval of 10 minutes. Each of the 12 channels' averages, standard deviations, minimum and maximum values are calculated from continuous 2 second data samples. Data intervals are calculated every 10 minutes, time stamped with the beginning time of each interval and written to the MultiMedia Card (MMC) at the top of each hour.

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor Information:

1 wind speed 1 50m, m/
2 wind speed 2 50m, m/
3 wind speed 3 40m m/s
4 windspeed 4 30m, m/s
5 No Sensor
6 No Sensor
7 #200P Wind Vane
8 #200P Wind Vane
9 NRG 110S Temp, C
10 No Sensor
11 No Sensor
12 No Sensor

February 2012

Summary Report

SITE 0001

NMSU ASC at Clovis

Channel	1	2	3	4			7	8	9			
Height	50 m	50m	40m	40 m			50 m	40 m	3 m			
Units	m/s	m/s	m/s	m/s			deg	deg	C			
Intervals with Valid Data	4176	4176	4176	4176			4176	4176	4176			
Average Filtered Data	9.07	8.78	8.63	8.23			250.23	243.79	4.47			
Average for All Data	9.07	8.78	8.63	8.23			250.23	243.79	4.47			
Min Interval Average	0.4	0.4	0.4	0.4					-10.2			
Date of Min Interval	2/7/2012	2/7/2012	2/7/2012	2/8/2012					2/8/2012			
Time of Min Interval	9:00:00 PM	9:00:00 PM	9:00:00 PM	2:30:00 AM					3:40:00 AM			
Max Interval Average	24	22.5	23.2	22.7					22.6			
Date of Max Interval	2/20/2012	2/28/2012	2/20/2012	2/20/2012					2/22/2012			
Time of Max Interval	10:20:00 AM	1:30:00 PM	9:30:00 AM	10:20:00 AM					1:50:00 PM			
Average Interval SD	0.75	0.78	0.78	0.8			5.93	5.93	0.07			
Min Sample	0.4	0.4	0.4	0.4					-10.4			
Date of Min Sample	2/1/2012	2/1/2012	2/1/2012	2/1/2012					2/8/2012			
Time of Min Sample	3:00:00 PM	1:50:00 PM	12:50:00 AM	3:10:00 PM					2:30:00 AM			
Max Sample	29.5	28.8	28.4	27.7					23.1			
Date of Max Sample	2/20/2012	2/28/2012	2/20/2012	2/20/2012					2/22/2012			
Time of Max Sample	10:10:00 AM	1:40:00 PM	10:10:00 AM	10:10:00 AM					1:50:00 PM			
Average Interval TI	0.1	0.1	0.1	0.11								
Wind Speed Direction							W	W				

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 1:

wind speed 1 50m, m/

Height: 50 m

Serial #: 51179

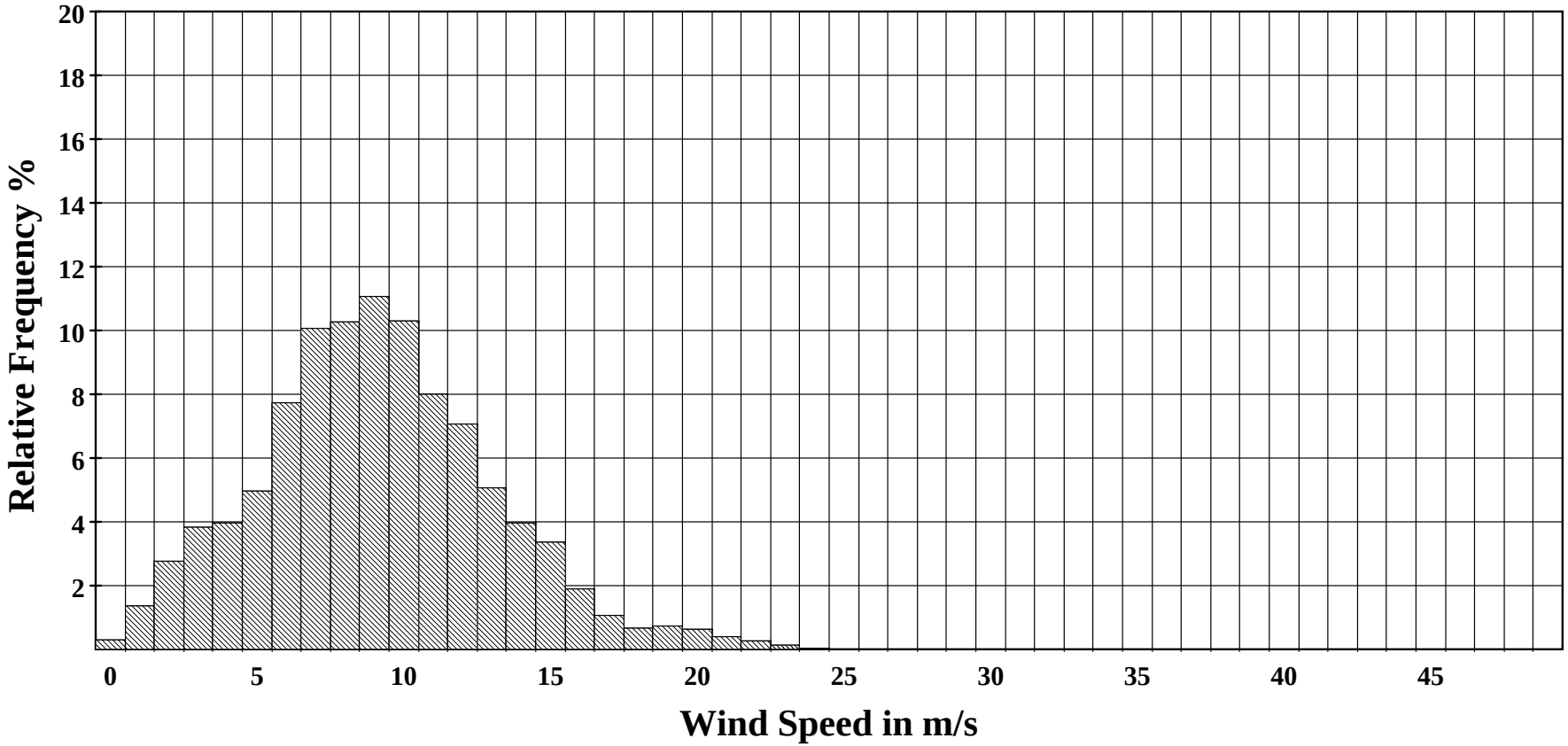
February 2012

Frequency Distribution Ch 1

SITE 0001

NMSU ASC at Clovis

Frequency Distribution



Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 1:

wind speed 1 50m, m/

Height: 50 m

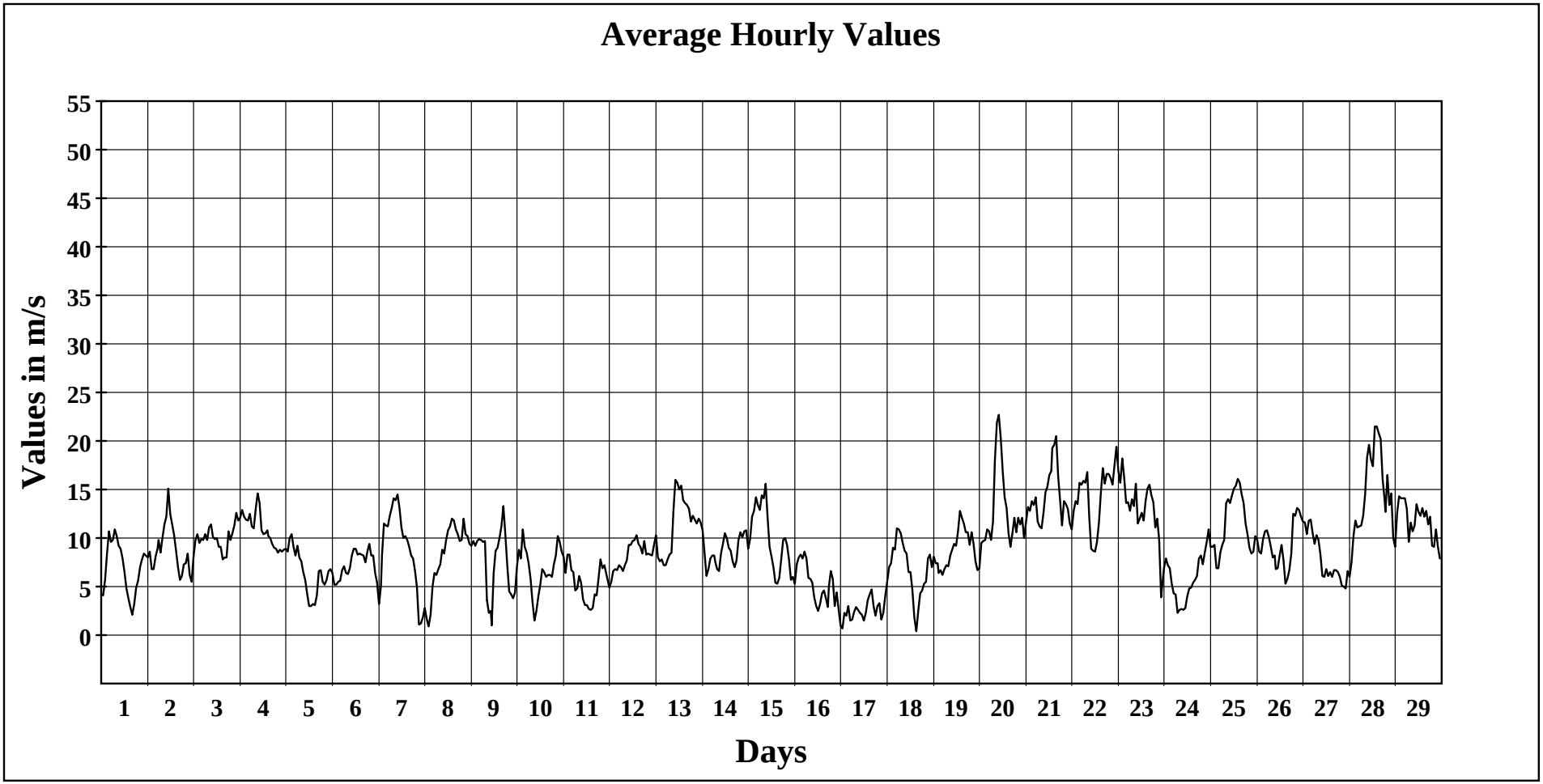
Serial #: 51179

February 2012

Hourly Averages Graph Ch 1

SITE 0001

NMSU ASC at Clovis



Average Value: 9.1

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 1:

wind speed 1 50m, m/

Height: 50 m Units: m/s

Serial #: 51179

February 2012

Hourly Averages Table Ch 1

SITE 0001

NMSU ASC at Clovis

	Hour																							
Day	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**AVG**
1	4.2	4.1	5.7	8.4	10.7	9.6	9.8	10.9	10.2	9.2	8.9	7.9	6.5	4.8	3.8	2.9	2.1	3.2	4.9	5.6	7.0	7.8	8.4	8.3	6.9
2	8.0	8.6	6.8	6.8	8.1	8.9	9.8	8.5	10.0	11.4	12.2	15.1	12.5	11.4	10.3	8.7	7.0	5.7	6.1	7.3	7.4	8.4	6.2	5.5	8.8
3	8.1	9.8	10.4	9.5	9.9	9.8	10.4	9.8	11.1	11.4	10.1	9.9	10.0	9.1	9.1	7.8	8.0	8.0	10.7	9.8	10.5	11.3	12.6	11.8	10.0
4	12.1	12.9	12.3	11.9	11.8	12.5	11.2	11.0	13.0	14.6	13.6	10.8	10.4	10.5	10.8	10.2	10.0	9.4	9.0	8.9	8.5	8.8	8.6	8.8	10.9
5	8.9	8.6	10.0	10.4	9.1	8.2	9.2	8.0	7.6	6.5	5.7	4.3	3.0	3.0	3.2	3.1	4.1	6.6	6.7	5.5	5.2	5.7	6.6	6.8	6.5
6	6.4	5.2	5.2	5.5	5.6	6.7	7.1	6.4	6.3	6.9	8.2	8.9	8.9	8.3	8.4	8.3	8.2	7.5	8.6	9.4	8.2	8.2	6.4	5.4	7.2
7	3.2	5.1	8.2	11.5	11.3	11.2	12.3	13.1	14.1	13.9	14.5	13.1	11.1	10.0	10.2	9.8	9.1	8.2	7.9	6.6	4.9	1.1	1.2	1.8	8.9
8	2.8	1.7	0.9	2.1	5.0	6.4	6.2	6.8	7.3	8.8	8.4	9.8	10.8	11.2	12.0	11.8	10.9	10.4	9.7	9.8	12.0	10.4	10.3	9.4	8.1
9	9.2	9.7	9.2	9.7	9.9	9.8	9.6	9.7	3.6	2.3	2.5	1.0	6.4	8.7	9.0	10.0	11.2	13.3	10.4	7.2	4.5	4.2	3.8	4.4	7.5
10	7.1	8.8	7.9	10.9	9.1	8.5	7.4	5.8	3.4	1.5	2.5	4.0	5.2	6.8	6.5	6.0	6.3	6.2	6.0	7.3	8.2	10.2	9.6	8.6	6.8
11	8.1	6.4	8.3	8.3	6.7	6.5	4.6	4.8	6.1	5.4	3.7	3.1	3.1	2.7	2.6	2.8	4.2	4.1	5.9	7.8	6.9	7.2	6.7	5.8	5.5
12	4.9	5.5	6.6	6.8	6.7	7.2	7.0	6.6	7.2	7.7	9.3	9.3	9.7	9.8	10.3	9.4	9.1	8.4	9.7	8.3	8.4	8.3	8.2	9.3	8.1
13	10.3	8.0	7.6	7.8	7.3	7.2	7.8	8.3	8.5	12.8	16.0	15.7	15.0	15.4	13.9	13.6	13.4	13.0	11.7	12.3	11.9	11.5	12.0	11.6	11.4
14	10.8	8.5	6.1	6.8	7.9	8.2	8.2	7.6	6.8	6.6	8.4	9.4	10.5	10.0	9.0	8.7	7.6	7.0	7.7	9.8	10.6	10.1	10.7	10.8	8.7
15	8.9	9.9	12.2	12.8	14.2	13.4	12.9	14.4	14.1	15.6	12.1	9.1	8.1	7.0	5.4	5.3	5.9	7.8	9.8	10.0	9.3	7.8	5.7	6.0	9.9
16	5.3	7.3	8.0	8.3	7.9	8.6	7.9	5.9	5.8	5.4	3.9	3.0	2.5	3.2	4.3	4.6	3.8	2.9	5.0	6.6	5.8	3.0	4.4	2.7	5.2
17	1.0	0.7	2.3	2.0	3.0	1.5	1.6	2.4	2.9	2.6	2.3	2.1	1.5	2.3	3.6	4.3	4.7	3.0	2.0	3.0	3.3	1.6	2.3	4.0	2.5
18	5.5	7.0	7.4	9.0	8.8	11.0	10.9	10.5	9.5	8.7	8.4	6.5	6.5	4.6	1.8	0.4	2.5	4.3	4.6	5.3	5.5	7.9	8.3	7.0	6.8
19	8.1	7.4	7.4	6.4	6.7	6.2	6.8	7.2	7.1	8.2	8.8	9.4	9.2	10.7	12.8	12.1	11.5	10.6	10.6	9.3	10.6	9.4	7.6	6.7	8.8
20	6.9	9.5	9.7	9.8	10.9	10.7	9.8	11.7	18.1	21.9	22.7	20.3	16.9	14.2	13.1	10.5	9.1	10.5	12.1	10.6	12.1	11.4	12.1	10.0	12.7
21	11.6	13.2	12.8	13.8	13.4	14.3	11.7	11.2	11.0	12.6	14.7	15.3	16.5	16.9	19.3	19.6	20.5	16.4	13.9	11.3	13.8	13.5	13.0	11.5	14.2
22	10.9	12.8	13.8	13.5	15.7	15.5	15.9	15.7	16.8	12.2	8.9	8.7	8.6	9.6	11.6	14.7	17.2	15.6	16.6	16.6	16.2	15.5	17.5	19.4	14.1
23	16.9	15.7	18.2	16.2	13.6	13.7	12.8	14.0	13.3	15.6	11.5	12.0	12.6	11.8	13.8	15.1	15.5	14.4	13.7	11.1	12.0	9.8	3.9	4.9	13.0
24	6.9	7.9	7.2	6.9	5.3	4.3	4.2	2.3	2.6	2.7	2.6	2.8	4.0	4.8	4.9	5.4	5.7	6.1	7.9	8.2	7.3	8.5	9.6	10.9	5.8
25	9.1	9.1	9.3	6.9	6.9	8.5	9.3	9.8	13.6	14.0	13.6	14.4	15.1	15.4	16.1	15.7	14.5	13.6	11.5	10.4	9.0	8.4	8.6	10.3	11.4
26	9.8	8.6	8.4	9.9	10.7	10.8	10.1	9.1	8.0	8.2	6.8	6.9	8.2	9.3	7.7	5.3	5.8	6.7	8.4	12.5	12.3	13.1	12.9	12.2	9.2
27	11.7	11.6	10.4	11.8	11.9	10.5	9.4	10.3	9.8	8.3	6.1	6.0	6.8	6.1	6.5	6.0	6.7	6.7	6.5	6.0	5.1	5.0	4.8	6.6	7.9
28	6.0	7.5	10.2	11.8	11.1	11.2	11.3	12.3	14.5	18.3	19.6	18.1	17.4	21.5	21.5	20.8	20.2	16.1	14.0	12.7	16.5	13.4	14.6	10.0	14.6
29	9.1	12.6	14.3	14.1	14.1	14.1	13.0	9.6	11.6	10.7	11.3	13.5	12.7	12.3	13.1	12.2	12.8	11.4	12.2	9.2	9.1	10.9	9.1	7.9	11.7
AVG	8.0	8.4	8.8	9.3	9.4	9.5	9.2	9.1	9.4	9.8	9.6	9.3	9.3	9.4	9.5	9.1	9.2	8.9	9.1	8.9	9.0	8.7	8.5	8.2	9.1

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 2:

wind speed 2 50m, m/

Height: 50m

Serial #: 51163

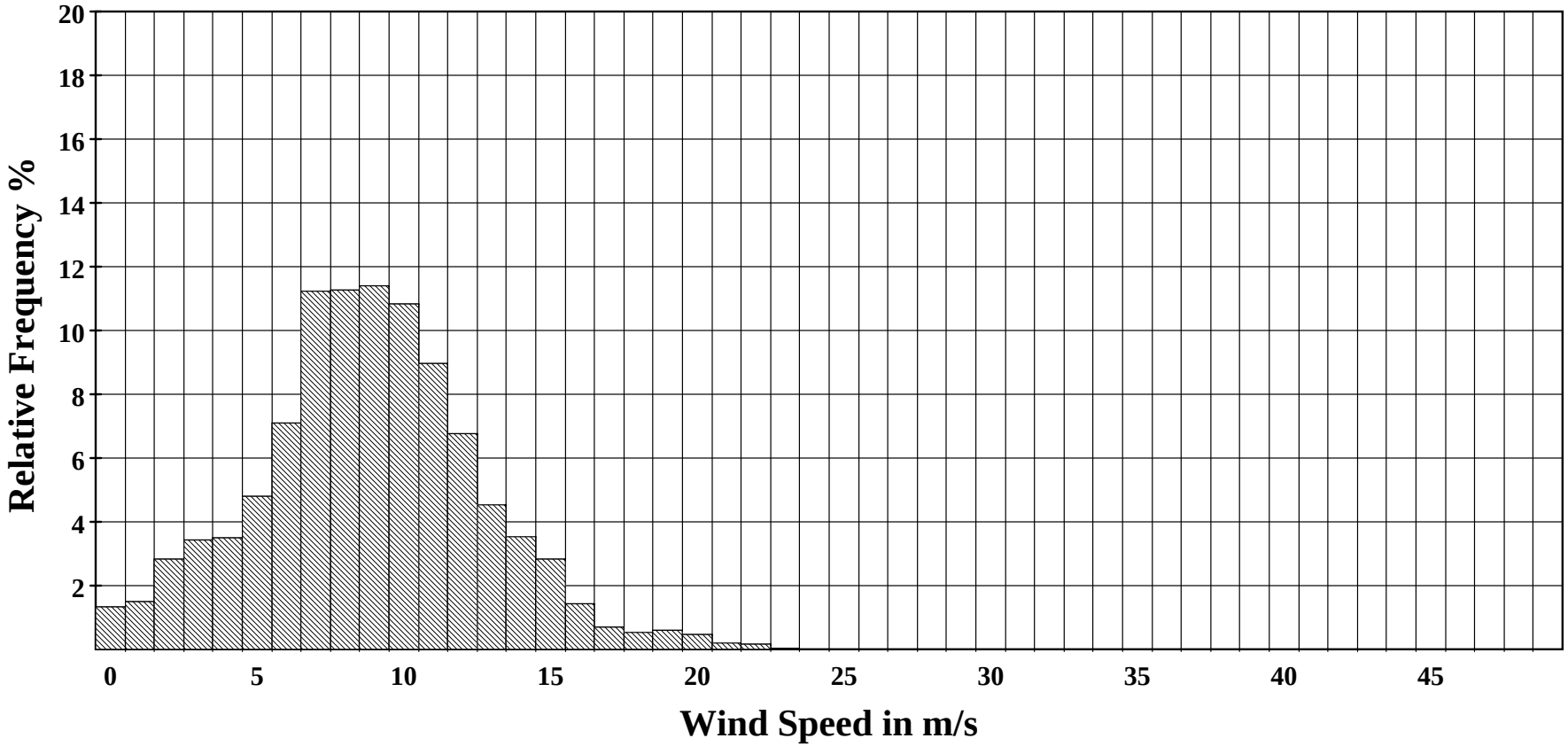
February 2012

Frequency Distribution Ch 2

SITE 0001

NMSU ASC at Clovis

Frequency Distribution



Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 2:

wind speed 2 50m, m/

Height: 50m

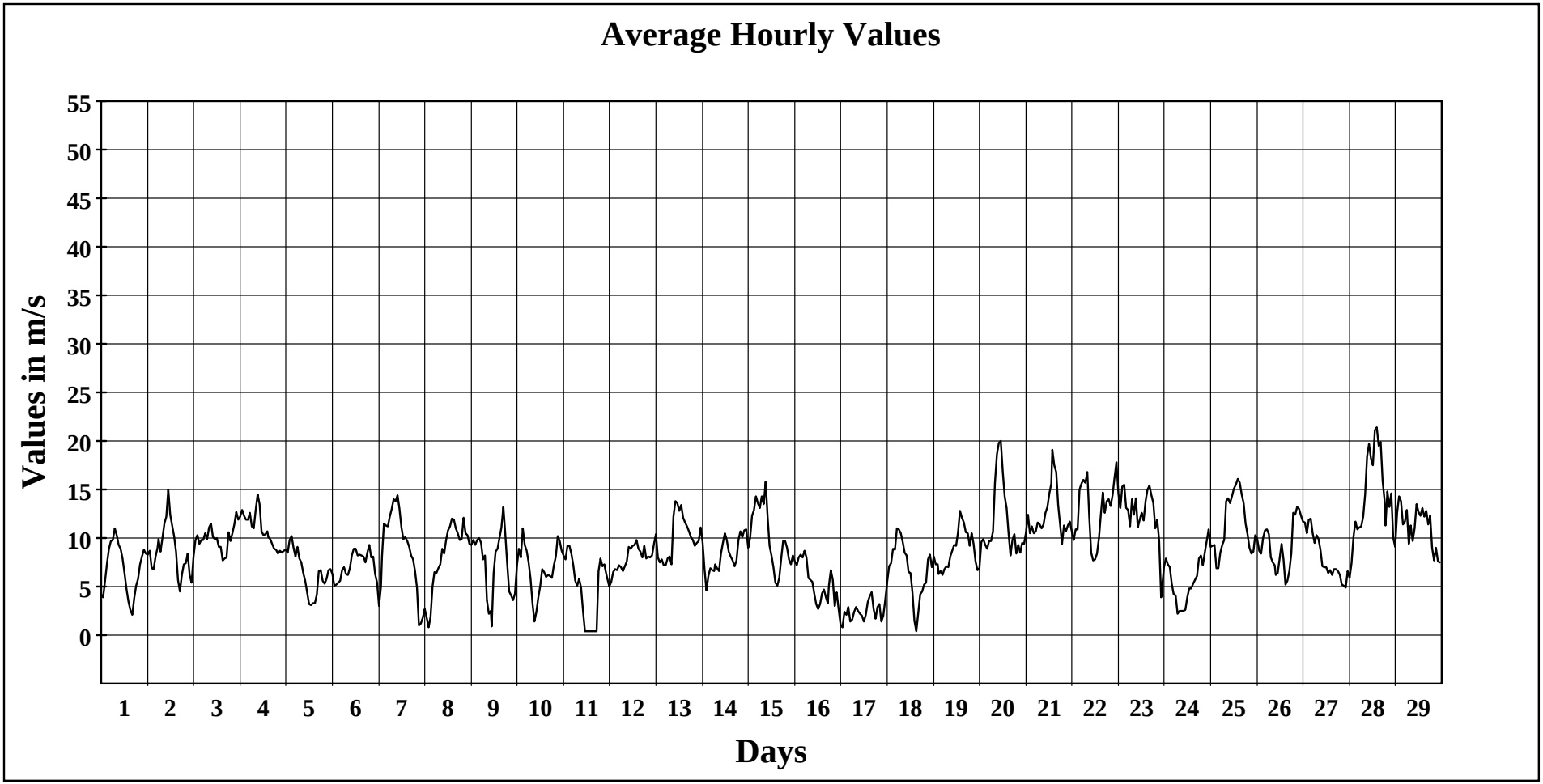
Serial #: 51163

February 2012

Hourly Averages Graph Ch 2

SITE 0001

NMSU ASC at Clovis



Average Value: 8.8

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 2:

wind speed 2 50m, m/

Height: 50m Units: m/s

Serial #: 51163

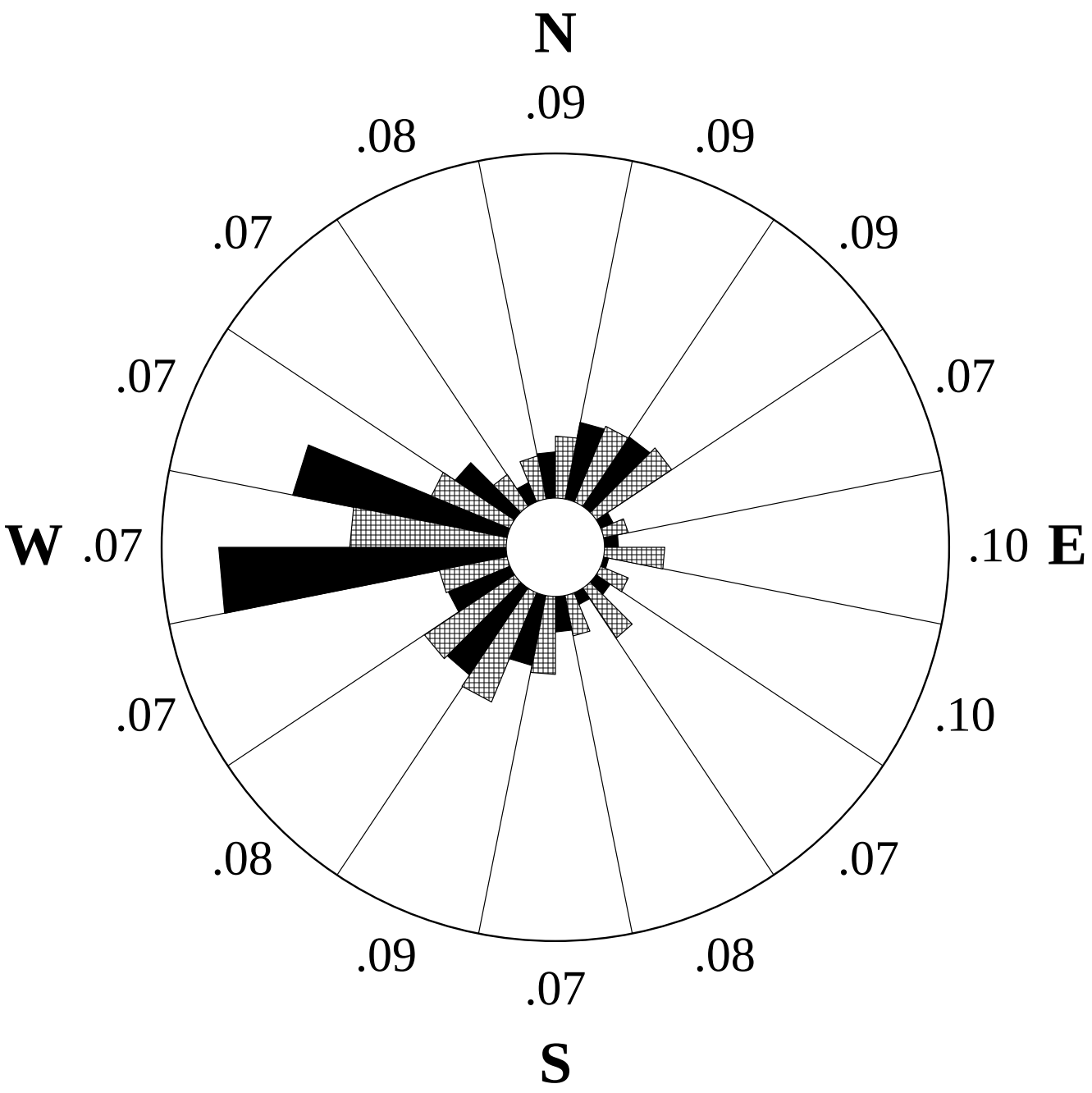
February 2012

Hourly Averages Table Ch 2

SITE 0001

NMSU ASC at Clovis

	Hour																							
Day	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**AVG**
1	4.2	3.9	5.6	7.4	8.9	9.7	9.8	11.0	10.3	9.3	8.9	7.9	6.4	4.8	3.5	2.6	2.1	3.8	5.1	5.8	7.3	8.1	8.8	8.4	6.8
2	8.3	8.7	6.9	6.8	8.1	9.0	9.9	8.6	10.0	11.5	12.2	15.0	12.4	11.3	10.2	8.6	5.7	4.5	6.2	7.3	7.4	8.4	6.2	5.4	8.7
3	8.1	9.8	10.3	9.4	9.8	9.8	10.5	9.9	11.1	11.5	10.1	9.9	10.0	9.1	9.1	7.7	7.9	8.0	10.6	9.7	10.5	11.4	12.7	11.9	9.9
4	12.2	12.9	12.3	11.9	11.9	12.6	11.2	11.0	12.9	14.5	13.5	10.7	10.3	10.4	10.7	10.1	9.9	9.4	8.9	8.8	8.4	8.7	8.5	8.7	10.9
5	8.8	8.5	9.8	10.2	9.0	8.1	9.1	7.9	7.5	6.4	5.6	4.4	3.2	3.1	3.3	3.3	4.2	6.6	6.7	5.6	5.3	5.8	6.7	6.8	6.5
6	6.3	5.1	5.2	5.4	5.6	6.7	7.0	6.3	6.2	6.9	8.2	8.9	8.9	8.2	8.3	8.2	8.1	7.5	8.5	9.3	8.0	8.1	6.3	5.4	7.2
7	3.0	5.0	8.1	11.5	11.3	11.2	12.3	13.0	14.0	13.8	14.4	13.0	11.1	9.9	10.1	9.7	9.1	8.2	7.8	6.6	4.9	1.0	1.2	1.8	8.8
8	2.7	1.8	0.8	1.9	5.0	6.5	6.4	6.9	7.3	8.9	8.4	9.8	10.8	11.2	12.0	11.9	11.0	10.5	9.8	9.9	12.1	10.5	10.3	9.4	8.2
9	9.3	9.8	9.3	9.8	10.0	9.5	7.8	8.2	3.6	2.2	2.5	0.9	6.4	8.6	8.9	10.0	11.1	13.2	10.4	7.3	4.5	4.1	3.6	4.3	7.3
10	7.2	8.9	8.0	11.0	9.3	8.7	7.5	5.8	3.3	1.4	2.4	3.9	5.1	6.8	6.5	6.0	6.2	6.1	5.9	7.2	8.1	10.2	9.7	8.7	6.8
11	8.2	7.8	9.3	9.2	8.4	7.2	5.6	5.1	5.8	4.9	2.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	6.6	7.9	7.1	7.3	6.7	5.8	4.9
12	5.0	5.5	6.5	6.8	6.7	7.2	7.0	6.6	7.1	7.6	9.1	8.9	9.2	9.3	9.8	8.9	8.6	8.0	9.2	7.9	8.1	8.0	8.2	9.4	7.9
13	10.4	8.0	7.5	7.8	7.3	7.2	7.9	8.1	7.3	12.2	13.8	13.6	12.8	13.4	12.1	11.6	11.2	10.7	10.1	9.8	9.2	9.5	9.7	11.1	10.1
14	9.6	6.8	4.6	6.1	6.9	6.7	6.6	7.3	6.9	6.6	8.4	9.5	10.5	9.8	8.6	8.1	7.7	7.1	7.7	9.8	10.7	10.1	10.8	10.9	8.2
15	9.0	10.0	12.3	12.9	14.3	13.6	13.1	14.3	13.5	15.8	12.2	9.2	8.2	7.0	5.4	5.1	5.9	7.9	9.7	9.7	9.0	7.8	7.3	8.2	10.0
16	7.6	7.2	8.0	8.3	8.0	8.7	8.0	5.9	5.7	5.5	4.3	3.2	2.7	3.3	4.3	4.7	3.9	3.3	5.1	6.7	5.7	3.0	4.4	2.7	5.4
17	1.1	0.8	2.4	2.1	2.9	1.4	1.6	2.4	2.9	2.5	2.2	2.0	1.4	2.1	3.4	4.0	4.4	2.7	1.7	2.9	3.2	1.4	2.0	3.6	2.4
18	5.5	7.1	7.4	8.9	8.8	11.0	10.9	10.5	9.6	8.5	8.2	6.5	6.4	4.4	1.5	0.4	2.3	4.2	4.5	5.2	5.4	7.8	8.3	7.0	6.7
19	8.1	7.3	7.3	6.3	6.6	6.2	6.8	7.1	7.0	8.1	8.7	9.3	9.2	10.6	12.8	12.1	11.6	10.6	10.5	9.2	10.5	9.4	7.6	6.7	8.7
20	6.9	9.6	9.9	9.3	8.9	9.7	9.7	10.7	15.7	18.6	19.8	20.0	16.9	14.3	13.1	10.5	8.2	9.8	10.4	8.4	9.3	8.5	9.5	9.4	11.5
21	10.6	12.4	10.5	11.2	10.5	10.7	11.6	11.4	11.0	11.4	12.6	13.2	14.6	15.6	19.1	17.5	16.8	13.4	11.4	9.4	11.3	10.7	11.3	11.7	12.5
22	10.7	9.8	10.9	10.9	15.0	15.6	16.0	15.7	16.8	12.2	8.5	7.7	7.8	8.4	10.0	12.5	14.7	12.6	13.8	14.0	13.3	14.4	16.2	17.8	12.7
23	14.6	13.1	15.3	15.5	13.1	12.9	11.2	14.0	12.4	14.1	11.1	11.9	12.6	11.8	13.8	15.0	15.4	14.4	13.6	11.0	11.9	9.7	3.9	4.9	12.4
24	7.0	7.9	7.3	7.0	5.3	4.3	4.1	2.2	2.5	2.5	2.5	2.6	3.9	4.8	4.8	5.3	5.7	6.1	7.9	8.2	7.2	8.5	9.7	10.9	5.8
25	9.1	9.2	9.3	6.9	6.9	8.5	9.3	9.8	13.8	14.1	13.6	14.3	15.1	15.5	16.1	15.7	14.5	13.6	11.5	10.4	9.0	8.4	8.6	10.3	11.4
26	9.9	8.7	8.4	10.0	10.8	10.9	10.4	8.0	7.5	7.2	6.2	6.4	7.9	9.4	7.8	5.2	5.6	6.6	8.4	12.6	12.4	13.2	13.0	12.3	9.1
27	11.7	11.6	10.5	11.9	12.0	10.5	9.5	10.3	9.9	8.8	7.1	7.0	7.0	6.4	6.7	6.2	6.8	6.8	6.6	6.2	5.2	5.1	4.9	6.6	8.1
28	5.9	7.4	10.1	11.7	10.9	11.1	11.2	12.3	14.5	18.4	19.7	18.2	17.5	21.1	21.4	19.5	19.9	15.9	13.9	11.3	14.8	13.2	14.6	10.0	14.4
29	9.1	12.6	14.3	13.8	11.4	11.7	12.9	9.4	11.3	9.7	11.0	13.5	12.7	12.3	13.1	12.2	12.8	11.4	12.3	9.0	7.7	9.0	7.6	7.5	11.2
AVG	7.9	8.2	8.6	9.0	9.1	9.2	9.1	9.0	9.2	9.5	9.2	9.0	9.0	9.1	9.2	8.7	8.7	8.4	8.8	8.5	8.5	8.3	8.2	8.2	8.8



February 2012

Wind Rose Ch 1, 7

SITE 0001

NMSU ASC at Clovis

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Anemometer on channel 1:

wind speed 1 50m, m/

Height: 50 m

Serial #: 51179

Vane on channel 7:

#200P Wind Vane

Height: 50 m

Serial #:

Outer Numbers are Average TIs for speeds greater than 4.5 m/s

Inner Circle = 0%

Outer Circle = 30%

Percent of Total Wind Energy

Percent of Total Time

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 3:

wind speed 3 40m m/s

Height: 40m

Serial #: 51187

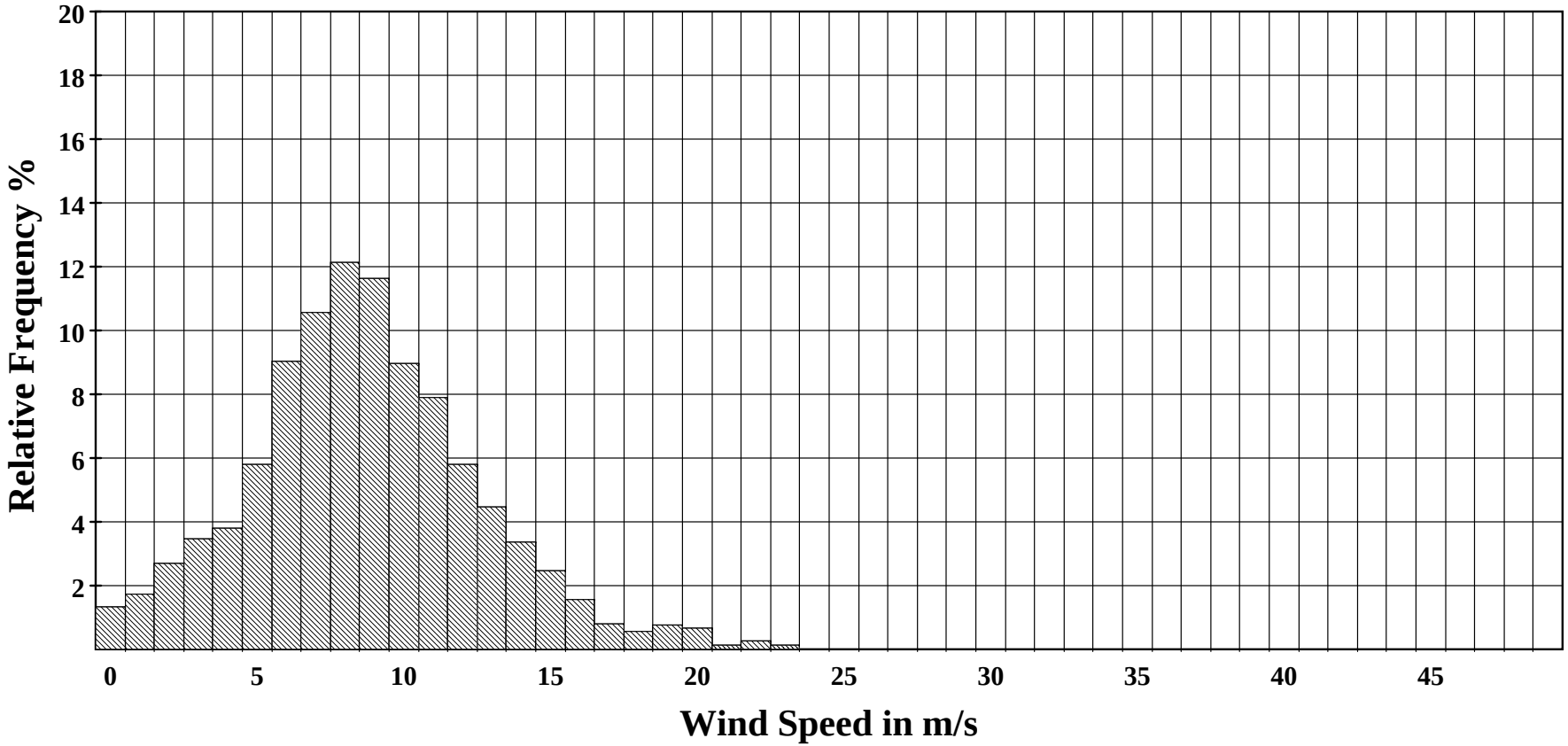
February 2012

Frequency Distribution Ch 3

SITE 0001

NMSU ASC at Clovis

Frequency Distribution



Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 3:

wind speed 3 40m m/s

Height: 40m

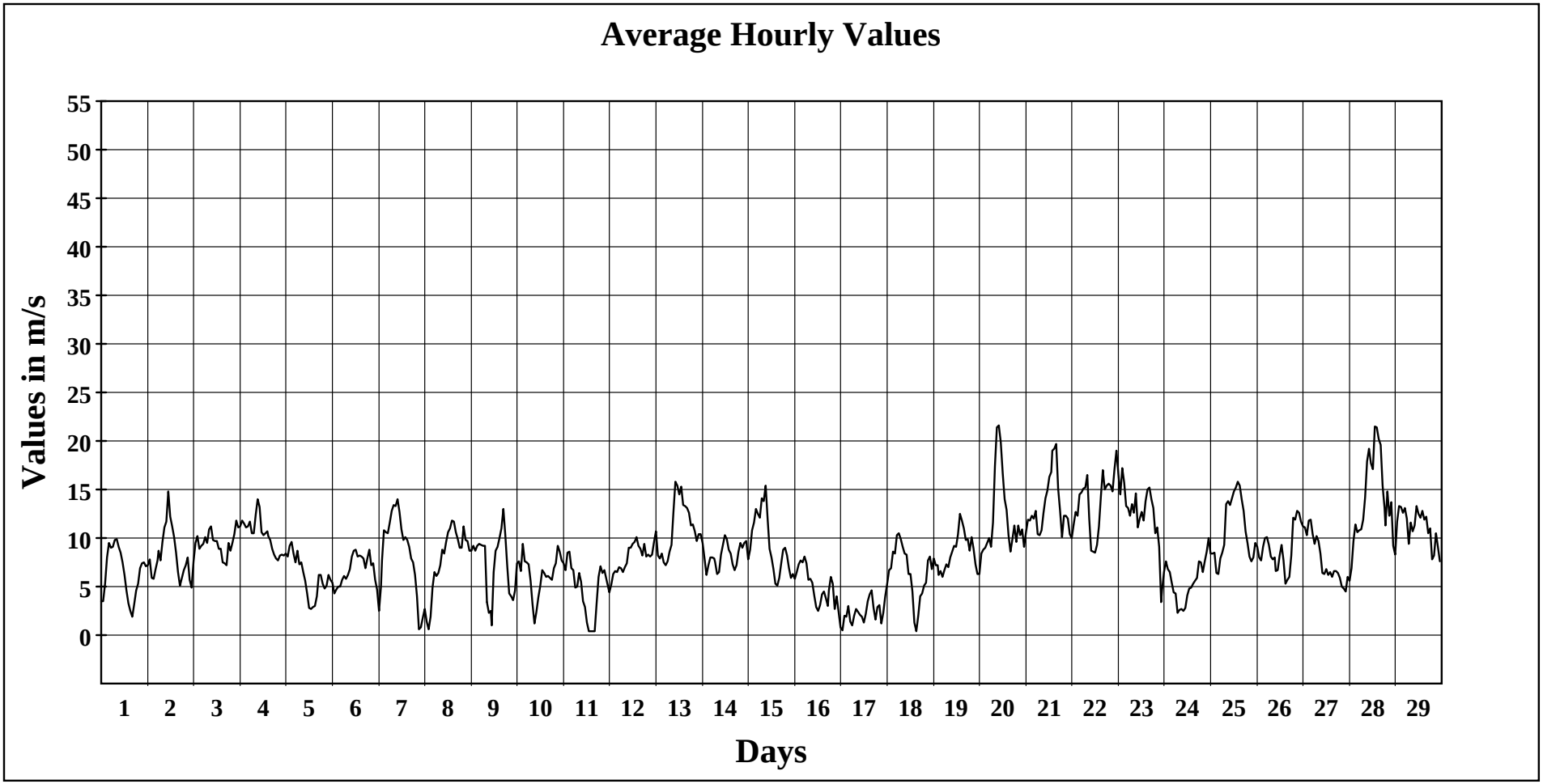
Serial #: 51187

February 2012

Hourly Averages Graph Ch 3

SITE 0001

NMSU ASC at Clovis



Average Value: 8.6

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 3:

wind speed 3 40m m/s

Height: 40m Units: m/s

Serial #: 51187

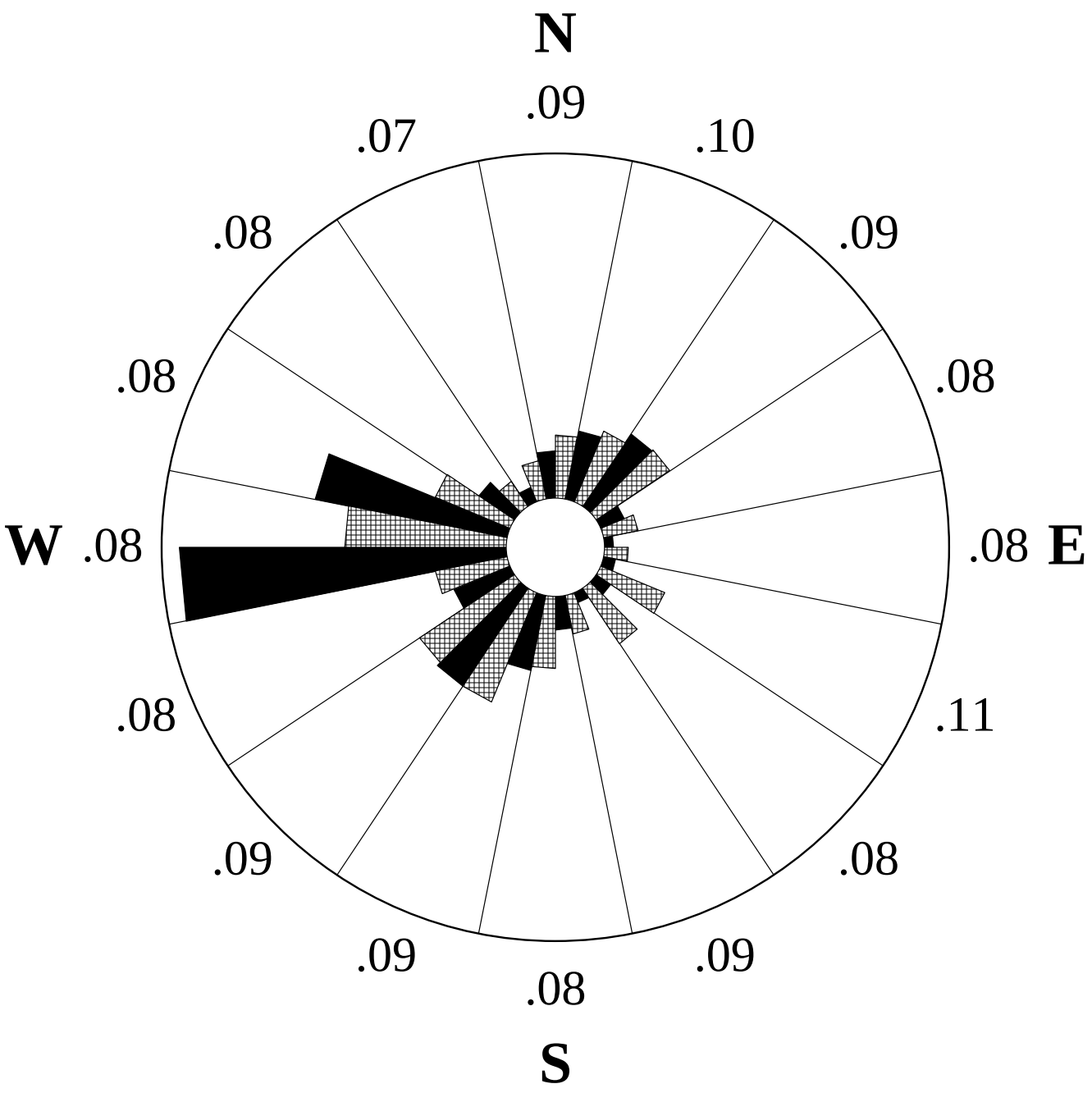
February 2012

Hourly Averages Table Ch 3

SITE 0001

NMSU ASC at Clovis

	Hour																							
Day	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**AVG**
1	3.5	3.5	5.3	8.0	9.5	9.0	9.1	9.8	9.9	9.1	8.5	7.5	6.2	4.6	3.3	2.5	1.9	3.2	4.6	5.3	6.9	7.4	7.5	7.1	6.4
2	7.2	7.8	5.9	5.8	6.8	7.7	8.7	7.7	9.6	11.1	11.7	14.8	12.2	11.2	10.1	8.5	6.5	5.1	5.9	6.7	7.2	8.0	5.7	4.9	8.2
3	7.6	9.5	10.2	8.9	9.2	9.4	10.1	9.5	10.9	11.2	9.8	9.7	9.7	8.9	8.9	7.5	7.4	7.2	9.5	8.7	9.5	10.4	11.8	11.1	9.4
4	11.2	11.8	11.5	11.1	11.2	11.7	10.5	10.5	12.4	14.0	13.3	10.6	10.3	10.5	10.7	10.2	9.8	8.9	8.3	7.9	7.7	8.3	8.3	8.2	10.4
5	8.4	8.1	9.2	9.6	8.4	7.5	8.7	7.3	7.5	6.5	5.6	4.3	2.8	2.7	2.9	3.0	4.0	6.2	6.3	5.3	4.8	5.1	6.2	5.7	6.1
6	5.4	4.3	4.7	5.0	5.0	5.7	6.1	5.8	6.2	6.8	8.1	8.7	8.8	8.1	8.2	8.1	7.9	6.9	7.9	8.8	7.2	7.4	5.7	4.7	6.7
7	2.5	5.0	7.7	10.8	10.6	10.5	11.6	12.8	13.4	13.3	14.0	12.7	10.9	9.8	10.1	9.8	9.1	7.9	7.5	6.2	4.0	0.6	0.8	1.8	8.5
8	2.7	1.4	0.6	1.9	4.9	6.5	6.1	6.4	7.2	8.8	8.4	9.6	10.6	11.0	11.8	11.7	10.6	9.9	9.0	9.0	11.2	9.8	9.7	8.7	7.8
9	8.7	9.2	8.7	9.2	9.4	9.3	9.2	9.2	3.4	2.3	2.5	1.0	6.5	8.7	9.1	10.0	11.0	13.0	10.3	7.1	4.3	4.0	3.6	4.6	7.3
10	7.4	7.6	6.6	9.4	7.6	7.5	7.3	5.6	3.2	1.2	2.4	3.9	5.1	6.7	6.4	6.0	6.1	5.9	5.7	6.9	7.4	9.2	8.6	7.7	6.3
11	7.4	6.7	8.5	8.6	6.9	6.7	4.9	5.0	6.4	5.5	3.5	2.9	1.3	0.4	0.4	0.4	0.4	3.3	6.0	7.1	6.4	6.7	6.3	5.3	4.9
12	4.4	5.2	6.3	6.6	6.5	7.0	6.9	6.5	7.0	7.4	9.0	9.0	9.4	9.6	10.1	9.2	8.9	8.2	9.4	8.1	8.3	8.1	8.3	9.6	7.9
13	10.7	8.2	7.9	8.4	7.5	7.2	7.6	8.6	9.3	12.7	15.8	15.4	14.5	15.3	13.4	13.3	13.1	12.6	11.3	11.4	10.7	9.7	10.4	10.4	11.1
14	9.5	7.9	6.2	7.2	8.0	8.0	7.9	7.5	6.3	6.5	8.3	9.3	10.3	9.9	8.8	8.4	7.3	6.7	7.2	8.6	9.5	9.0	9.5	9.7	8.2
15	7.8	8.8	10.8	11.6	13.0	12.5	12.1	14.1	13.8	15.4	12.0	8.9	8.0	6.8	5.3	5.1	5.9	7.4	8.8	9.0	8.2	6.9	5.9	6.3	9.3
16	5.8	6.5	7.3	7.7	7.5	8.1	7.4	5.7	5.8	5.4	4.1	2.9	2.5	3.1	4.2	4.5	3.8	3.0	4.6	6.0	5.3	2.7	4.0	2.4	5.0
17	0.8	0.5	2.0	1.9	3.0	1.4	1.0	2.0	2.7	2.4	2.1	1.9	1.3	2.2	3.5	4.2	4.6	2.8	1.6	2.9	3.1	1.2	2.3	4.0	2.3
18	5.3	6.7	6.9	8.6	8.4	10.3	10.5	9.9	9.1	8.4	8.3	6.3	6.3	4.5	1.3	0.4	2.0	4.0	4.3	5.1	5.4	7.7	8.1	6.8	6.4
19	7.9	7.2	7.2	6.2	6.6	6.0	6.7	7.3	7.0	8.0	8.6	9.2	9.1	10.4	12.5	11.8	11.0	9.8	9.9	8.7	10.1	8.9	7.3	6.3	8.5
20	6.3	8.4	8.8	9.0	9.5	10.0	9.1	11.6	17.4	21.4	21.6	19.9	16.7	14.0	12.9	10.3	8.6	9.9	11.3	9.6	11.3	10.3	10.9	9.1	12.0
21	10.6	11.9	11.8	12.3	12.0	12.8	10.4	10.3	10.8	12.6	14.1	14.9	16.3	16.8	19.0	19.2	19.7	15.1	12.8	10.1	12.3	12.3	12.0	10.4	13.4
22	10.0	11.4	12.7	12.3	14.5	14.7	15.1	15.2	16.5	12.0	8.7	8.6	8.5	9.3	11.3	14.3	17.0	15.0	15.4	15.6	15.4	14.8	17.1	19.0	13.5
23	16.6	14.5	17.2	15.7	13.3	13.1	12.3	13.5	12.6	14.6	11.1	12.0	12.7	11.8	13.8	15.0	15.3	14.0	13.1	10.5	11.1	9.1	3.4	4.6	12.5
24	6.5	7.6	6.8	6.5	5.4	4.4	4.3	2.3	2.6	2.7	2.5	2.8	4.1	4.8	4.9	5.3	5.6	5.9	7.6	7.5	6.5	7.6	8.6	10.0	5.5
25	8.4	8.4	8.5	6.4	6.3	7.9	8.5	9.3	13.5	13.8	13.4	14.1	14.8	15.3	15.8	15.4	14.0	12.8	10.7	9.5	8.1	7.6	8.0	9.5	10.8
26	9.1	8.0	7.7	9.1	10.0	10.1	9.3	8.1	7.8	8.0	6.6	6.7	8.2	9.3	7.7	5.3	5.7	6.0	8.2	12.1	11.9	12.8	12.6	11.7	8.8
27	11.2	11.1	10.3	11.8	11.9	10.4	9.4	10.2	9.7	8.4	6.4	6.3	6.8	6.2	6.5	6.0	6.6	6.6	6.4	5.9	5.0	4.8	4.5	6.0	7.9
28	5.6	6.9	9.7	11.4	10.6	10.8	10.9	11.9	14.2	17.9	19.2	17.7	17.1	21.5	21.4	20.2	19.6	15.4	13.1	11.3	14.8	12.3	13.7	9.3	14.0
29	8.3	11.7	13.3	13.2	12.6	13.1	12.0	9.4	11.6	10.7	11.3	13.3	12.5	12.1	12.8	11.9	12.3	10.5	11.0	7.8	8.2	10.5	9.1	7.6	11.1
AVG	7.5	7.8	8.3	8.8	8.8	8.9	8.7	8.7	9.2	9.6	9.3	9.1	9.1	9.1	9.2	8.9	8.8	8.4	8.5	8.2	8.3	8.1	7.9	7.7	8.6



February 2012

Wind Rose Ch 3, 8

SITE 0001

NMSU ASC at Clovis

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Anemometer on channel 3:

wind speed 3 40m m/s

Height: 40m

Serial #: 51187

Vane on channel 8:

#200P Wind Vane

Height: 40 m

Serial #:

Outer Numbers are Average TIs for speeds greater than 4.5 m/s

Inner Circle = 0%

Outer Circle = 30%

Percent of Total Wind Energy

Percent of Total Time

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 4:

windspeed 4 30m, m/s

Height: 40 m

Serial #: 51180

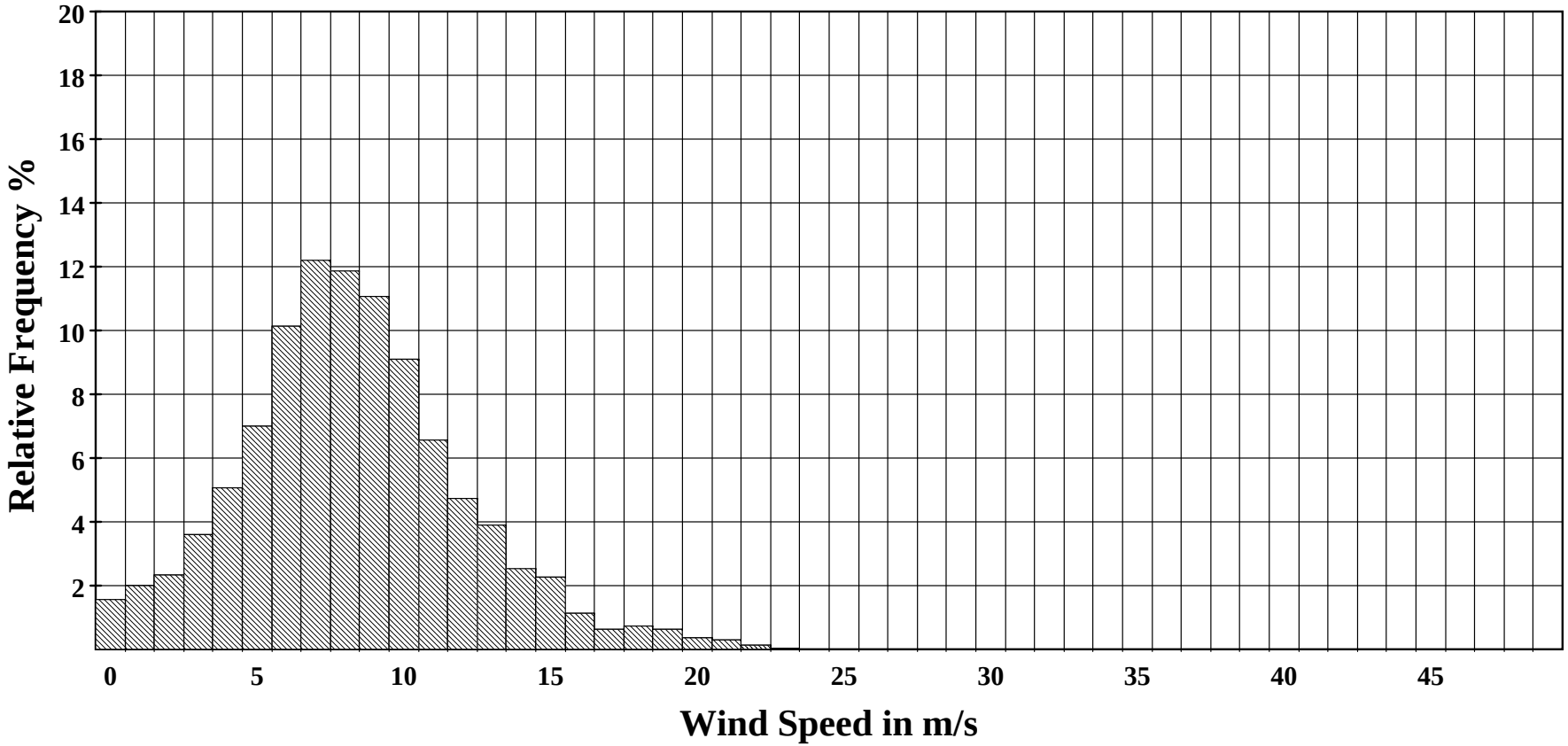
February 2012

Frequency Distribution Ch 4

SITE 0001

NMSU ASC at Clovis

Frequency Distribution



Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 4:

windspeed 4 30m, m/s

Height: 40 m

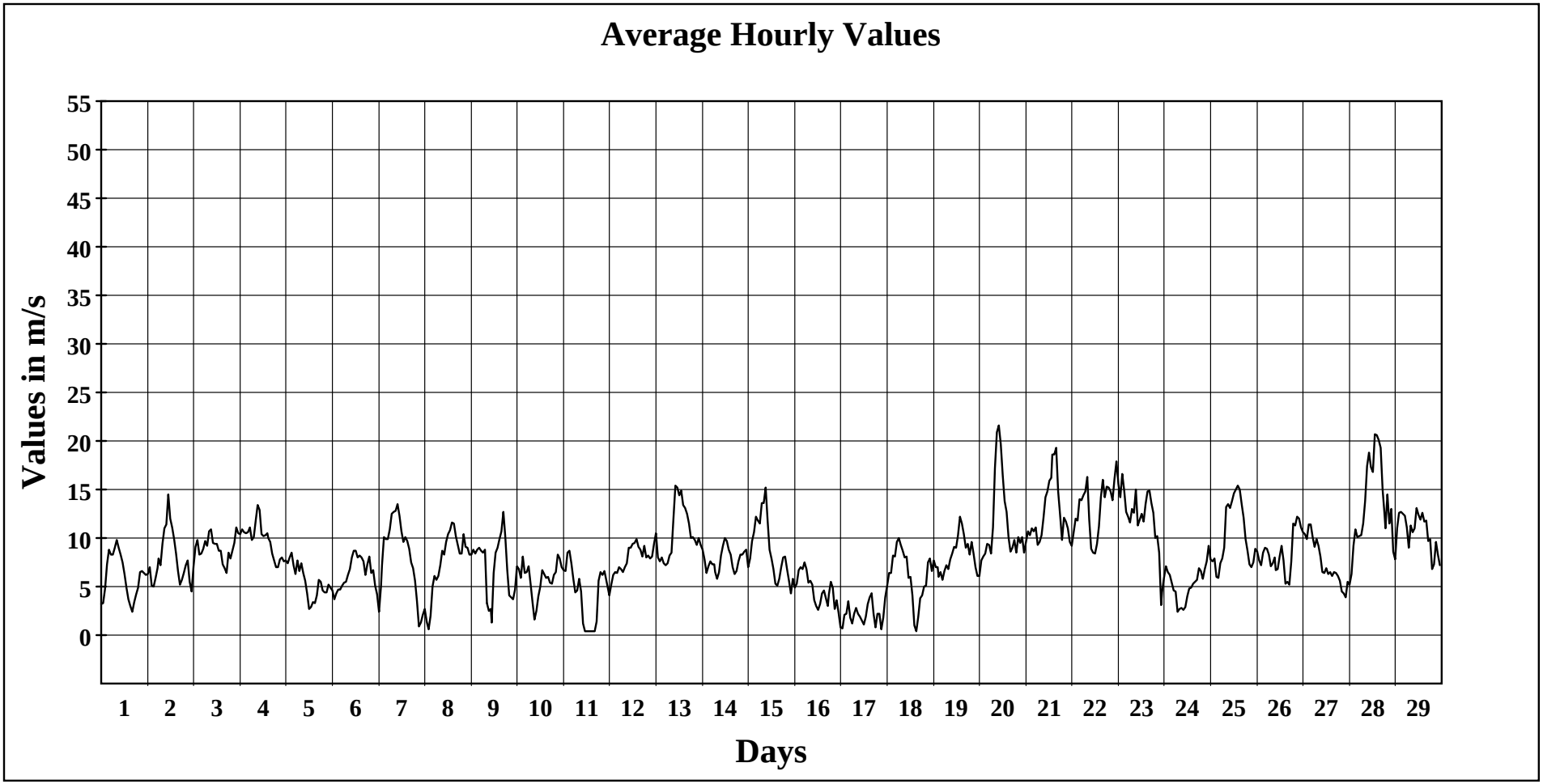
Serial #: 51180

February 2012

Hourly Averages Graph Ch 4

SITE 0001

NMSU ASC at Clovis



Average Value: 8.2

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 4:

windspeed 4 30m, m/s

Height: 40 m Units: m/s

Serial #: 51180

February 2012

Hourly Averages Table Ch 4

SITE 0001

NMSU ASC at Clovis

	Hour																							
Day	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**AVG**
1	3.2	3.3	4.8	7.3	8.8	8.3	8.3	9.0	9.8	9.0	8.3	7.5	6.3	4.9	3.7	3.0	2.4	3.4	4.2	4.9	6.5	6.6	6.4	6.2	6.1
2	6.3	7.0	5.1	5.0	5.9	6.9	7.9	7.2	9.4	11.0	11.4	14.5	12.0	11.1	9.9	8.4	6.6	5.2	5.7	6.4	7.2	7.7	5.5	4.5	7.8
3	7.1	9.1	9.8	8.3	8.4	8.9	9.7	9.2	10.7	10.9	9.5	9.4	9.4	8.7	8.7	7.3	6.9	6.4	8.5	7.9	8.7	9.5	11.1	10.5	8.9
4	10.4	10.9	10.6	10.5	10.6	11.1	9.8	10.1	11.8	13.4	12.9	10.4	10.2	10.3	10.5	10.0	9.6	8.4	7.7	7.0	7.0	7.8	8.0	7.6	9.9
5	7.7	7.4	8.0	8.5	7.2	6.3	7.7	6.6	7.4	6.4	5.6	4.3	2.7	2.9	3.4	3.3	4.1	5.7	5.5	4.6	4.4	4.4	5.2	4.9	5.6
6	4.6	3.7	4.3	4.7	4.7	5.1	5.4	5.5	6.2	6.8	8.0	8.7	8.7	8.0	8.2	8.0	7.6	6.2	7.3	8.1	6.4	6.7	5.1	4.2	6.3
7	2.4	5.0	7.2	10.1	9.9	9.9	10.9	12.5	12.7	12.8	13.5	12.3	10.7	9.6	10.1	9.7	8.9	7.5	6.9	5.6	3.5	0.9	1.3	2.1	8.2
8	2.7	1.4	0.6	2.0	5.0	6.1	5.7	6.1	7.2	8.7	8.3	9.6	10.4	10.8	11.6	11.5	10.2	9.3	8.4	8.4	10.4	9.1	9.0	8.3	7.5
9	8.3	8.8	8.4	8.8	9.0	8.7	8.5	8.8	3.3	2.5	2.7	1.3	6.4	8.5	9.0	9.9	10.7	12.7	10.1	6.7	4.1	3.9	3.7	4.7	7.1
10	7.1	6.8	5.9	8.1	6.4	6.5	7.1	5.3	3.4	1.6	2.5	4.0	5.0	6.7	6.3	5.9	6.0	5.4	5.3	6.2	6.5	8.3	7.9	7.0	5.9
11	6.7	6.6	8.5	8.7	7.4	5.8	4.4	4.6	5.8	4.5	1.2	0.4	0.4	0.4	0.4	0.4	0.4	1.4	5.6	6.5	6.2	6.6	6.1	5.1	4.3
12	4.1	5.2	6.2	6.5	6.4	7.0	6.8	6.5	7.0	7.4	9.0	9.0	9.4	9.5	9.9	9.1	8.8	8.1	9.2	8.0	8.2	7.9	8.1	9.4	7.8
13	10.5	8.0	7.6	8.0	7.4	7.2	7.4	8.2	8.5	12.0	15.4	15.2	14.4	14.9	13.4	13.1	12.5	11.5	10.0	10.1	9.8	9.3	10.0	9.3	10.6
14	8.8	7.8	6.4	7.1	7.6	7.3	7.3	6.5	5.8	6.5	8.2	9.2	10.0	9.7	8.8	8.3	7.0	6.3	6.6	7.6	8.3	8.3	8.6	8.8	7.8
15	7.0	7.9	9.7	10.6	12.2	11.8	11.5	13.6	13.6	15.2	11.8	8.8	7.9	6.8	5.3	5.1	5.8	7.0	8.0	8.1	6.8	5.6	4.3	5.8	8.8
16	4.9	5.3	6.7	7.0	6.8	7.5	6.8	5.4	5.6	5.3	3.6	3.0	2.6	3.2	4.3	4.6	3.8	3.0	4.2	5.5	4.9	2.7	3.6	2.3	4.7
17	0.8	0.7	2.1	2.2	3.5	1.8	1.2	2.2	2.8	2.2	1.9	1.5	1.1	1.9	3.2	3.9	4.3	2.2	0.8	2.2	2.2	0.6	1.8	3.9	2.1
18	5.1	6.4	6.4	8.2	8.1	9.6	10.0	9.3	8.7	8.0	8.1	5.9	6.0	4.1	1.0	0.4	1.9	3.8	4.1	5.0	5.1	7.5	7.9	6.6	6.1
19	7.7	7.0	7.0	6.0	6.5	5.7	6.6	7.2	6.8	7.8	8.4	9.1	9.0	10.3	12.2	11.5	10.4	9.0	9.4	8.3	9.6	8.4	7.0	6.1	8.2
20	6.1	7.7	8.1	8.4	9.4	9.3	8.4	11.1	17.2	20.9	21.6	19.7	16.5	13.8	12.7	10.1	8.6	9.0	9.8	8.5	10.1	9.5	10.1	8.5	11.5
21	9.6	10.7	10.3	11.0	10.7	11.1	9.3	9.6	10.3	12.1	14.2	14.8	15.9	16.3	18.6	18.6	19.3	14.8	12.4	9.8	12.1	11.7	11.0	9.6	12.7
22	9.2	10.6	12.0	11.8	14.0	13.9	14.4	14.8	16.3	11.9	8.9	8.5	8.4	9.4	11.3	14.2	16.0	14.2	15.3	15.2	14.8	13.9	16.1	17.9	13.1
23	15.6	14.2	16.6	14.9	12.7	12.2	11.6	13.0	12.6	15.0	11.3	11.9	12.5	11.7	13.5	14.8	14.9	13.6	12.6	10.0	10.3	8.5	3.1	4.4	12.1
24	5.9	7.1	6.5	6.2	5.4	4.6	4.5	2.4	2.7	2.8	2.6	2.9	4.0	4.8	4.9	5.3	5.5	5.7	6.9	6.6	5.8	6.8	7.6	9.2	5.3
25	7.8	7.6	7.9	6.0	5.9	7.4	7.9	9.0	13.2	13.5	13.1	13.8	14.6	15.0	15.4	15.0	13.5	12.1	9.9	8.7	7.3	7.0	7.5	8.9	10.3
26	8.6	7.7	7.2	8.5	9.0	8.9	8.3	7.1	7.4	8.0	6.7	6.8	8.1	9.2	7.7	5.3	5.5	5.2	7.6	11.5	11.3	12.2	12.0	11.1	8.4
27	10.6	10.4	9.9	11.4	11.4	10.1	9.1	9.9	9.2	8.1	6.5	6.4	6.9	6.3	6.5	6.1	6.5	6.4	6.1	5.6	4.5	4.3	3.9	5.5	7.6
28	5.2	6.3	9.2	10.9	10.1	10.2	10.3	11.5	13.8	17.4	18.8	17.3	16.8	20.7	20.6	20.1	19.3	15.0	12.4	11.0	14.5	11.5	13.0	8.6	13.5
29	7.8	11.0	12.6	12.7	12.5	12.3	11.1	9.0	11.3	10.6	11.0	13.1	12.4	11.9	12.6	11.7	11.8	9.7	9.9	6.8	7.3	9.6	8.3	7.2	10.6
AVG	7.0	7.3	7.8	8.2	8.4	8.3	8.2	8.3	9.0	9.4	9.1	8.9	8.9	9.0	9.1	8.8	8.6	7.9	7.9	7.6	7.7	7.5	7.4	7.2	8.2

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 9:

NRG 110S Temp, C

Height: 3 m

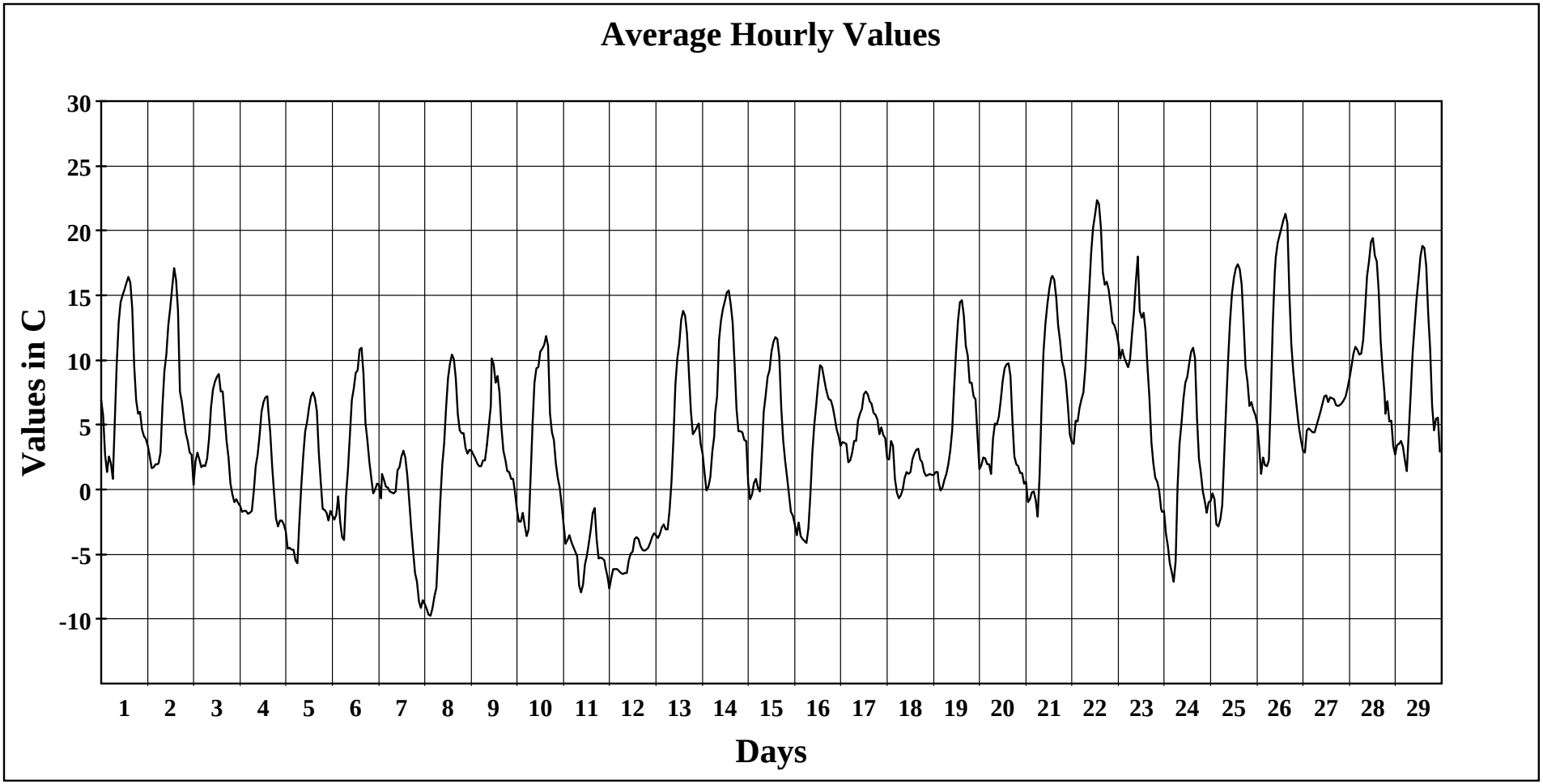
Serial #:

February 2012

Hourly Averages Graph Ch 9

SITE 0001

NMSU ASC at Clovis



Average Value: 4.5

Site Information:

Project: wind monitoring

Location: clovis nm

Elevation: 1365 m

Sensor on channel 9:

NRG 110S Temp, C

Height: 3 m Units: C

Serial #:

February 2012

Hourly Averages Table Ch 9

SITE 0001

NMSU ASC at Clovis

	Hour																							
Day	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**AVG**
1	6.9	5.7	2.7	1.4	2.5	2.0	0.8	5.3	9.7	12.9	14.5	15.0	15.5	16.0	16.4	16.0	14.0	9.6	6.9	5.9	6.0	4.6	4.1	3.9	8.3
2	3.3	2.5	1.7	1.8	1.9	1.9	2.0	2.8	6.4	9.2	10.4	12.6	14.0	15.6	17.1	16.2	13.8	7.6	6.7	5.5	4.3	3.8	2.9	2.7	7.0
3	0.4	2.2	2.8	2.3	1.8	1.9	1.8	2.4	4.0	6.4	7.8	8.3	8.7	8.9	7.6	7.6	5.7	3.8	2.4	0.4	-0.4	-0.9	-0.8	-1.0	3.5
4	-1.3	-1.8	-1.6	-1.6	-1.9	-1.8	-1.7	-0.1	1.8	2.7	4.2	6.0	6.7	7.1	7.2	6.2	4.5	1.8	-0.3	-2.3	-2.8	-2.4	-2.4	-2.7	1.0
5	-3.2	-4.6	-4.5	-4.7	-4.6	-5.5	-5.7	-2.5	0.3	2.6	4.5	5.2	6.4	7.2	7.5	7.1	6.1	2.9	0.6	-1.5	-1.6	-1.8	-2.4	-1.6	0.3
6	-2.0	-2.3	-1.9	-0.5	-2.5	-3.6	-3.9	-0.5	1.5	4.2	6.9	7.8	9.0	9.3	10.8	10.9	8.9	5.2	3.8	2.2	0.9	-0.3	0.0	0.5	2.7
7	0.4	-0.7	1.2	0.7	0.3	0.1	-0.2	-0.3	-0.3	-0.1	1.5	1.7	2.6	3.0	2.5	1.1	-0.8	-2.9	-4.8	-6.4	-7.1	-8.6	-9.1	-8.6	-1.4
8	-8.8	-9.2	-9.7	-9.8	-9.2	-8.3	-7.6	-4.3	-0.9	1.9	3.6	6.4	8.6	9.8	10.4	10.0	8.5	5.8	4.6	4.3	4.3	3.2	2.7	3.1	0.8
9	3.0	2.7	2.4	2.0	1.8	1.8	2.2	2.3	3.5	4.9	6.4	10.1	9.7	8.3	8.8	7.5	4.8	3.0	2.3	1.4	1.3	0.8	0.8	-0.2	3.8
10	-1.6	-2.5	-2.5	-1.8	-2.8	-3.6	-3.1	0.9	5.0	8.2	9.4	9.4	10.7	10.9	11.2	11.9	11.1	5.8	4.4	3.9	2.0	0.9	0.2	-1.2	3.6
11	-2.7	-4.2	-3.9	-3.5	-4.0	-4.4	-4.8	-5.1	-7.4	-7.9	-7.3	-5.7	-5.1	-4.1	-3.1	-1.8	-1.4	-3.8	-5.3	-5.3	-5.3	-5.5	-6.0	-6.7	-4.8
12	-7.7	-6.8	-6.2	-6.1	-6.1	-6.3	-6.5	-6.5	-6.4	-6.5	-5.5	-4.9	-4.8	-3.9	-3.7	-3.8	-4.4	-4.7	-4.7	-4.6	-4.5	-4.1	-3.6	-3.4	-5.2
13	-3.6	-3.8	-3.4	-2.9	-2.7	-3.0	-3.1	-1.5	0.6	3.9	8.1	10.1	11.3	13.1	13.8	13.4	12.0	8.9	6.0	4.3	4.5	4.8	5.1	3.5	4.1
14	2.8	1.3	-0.1	0.2	1.0	2.9	4.1	5.9	7.2	11.6	13.0	14.0	14.6	15.2	15.4	14.3	12.9	9.8	6.2	4.5	4.5	4.4	3.8	3.7	7.2
15	0.5	-0.8	-0.4	0.6	0.8	0.2	-0.1	2.8	6.0	7.3	8.7	9.2	10.6	11.4	11.8	11.6	10.3	6.4	3.8	2.2	1.0	-0.4	-1.7	-2.0	4.2
16	-2.7	-3.5	-2.5	-3.6	-3.9	-3.9	-4.2	-3.0	-0.5	2.8	5.0	6.5	8.2	9.6	9.4	8.6	7.8	7.2	7.0	6.9	6.3	5.6	4.6	4.1	3.0
17	3.4	3.7	3.6	3.5	2.1	2.3	2.8	3.8	3.7	5.3	5.8	6.2	7.3	7.6	7.3	6.8	6.6	5.9	5.8	5.4	4.3	4.8	4.2	3.9	4.8
18	2.4	2.3	3.7	3.4	0.8	-0.2	-0.7	-0.4	0.0	0.9	1.3	1.2	1.3	2.3	2.8	3.1	3.1	2.3	2.1	1.3	1.1	1.2	1.2	1.1	1.6
19	1.1	1.3	1.3	0.6	-0.1	0.2	0.7	1.2	2.0	3.0	4.6	7.9	10.8	13.0	14.5	14.6	13.4	11.1	10.3	8.2	8.3	7.2	7.0	4.2	6.1
20	1.6	1.9	2.5	2.4	1.9	1.9	1.2	3.9	5.1	5.0	5.6	6.9	8.4	9.4	9.7	9.8	8.8	5.3	2.6	1.9	1.8	1.3	1.3	0.5	4.2
21	0.6	-1.0	-0.7	-0.2	-0.2	-0.8	-2.1	1.1	6.5	10.7	12.8	14.3	15.5	16.4	16.5	16.2	14.8	12.7	11.5	9.9	9.3	8.3	6.6	4.3	7.6
22	3.7	3.5	5.3	5.3	6.3	7.0	7.5	9.4	12.4	15.4	18.3	20.3	21.2	22.3	22.0	20.2	16.8	15.8	16.0	15.5	14.2	12.9	12.7	12.2	13.2
23	11.3	10.1	10.8	10.2	9.8	9.5	10.1	12.0	13.7	16.1	18.0	13.8	13.3	13.7	12.2	9.4	7.1	3.7	2.0	0.9	0.6	-0.1	-1.5	-1.7	8.5
24	-1.6	-3.3	-4.3	-5.7	-6.4	-7.1	-5.5	0.2	3.5	5.1	7.0	8.2	8.7	9.7	10.6	10.9	10.1	5.6	2.4	1.3	-0.2	-0.9	-1.8	-1.0	1.9
25	-0.9	-0.3	-0.8	-2.7	-2.9	-2.3	-1.2	2.6	6.4	9.9	13.0	15.1	16.4	17.1	17.4	17.0	15.8	12.8	9.4	8.4	6.5	6.7	6.2	5.8	7.3
26	5.1	3.3	1.2	2.5	1.9	1.8	2.3	7.2	12.8	16.6	17.9	19.1	19.6	20.3	20.8	21.3	20.5	15.2	11.3	9.2	7.5	6.1	4.7	3.8	10.5
27	3.0	2.8	4.6	4.8	4.6	4.4	4.4	4.9	5.5	6.0	6.6	7.2	7.3	6.8	7.1	7.0	7.0	6.5	6.5	6.5	6.7	6.9	7.2	7.9	5.9
28	8.6	9.5	10.5	11.0	10.8	10.4	10.5	11.5	14.0	16.5	17.6	19.1	19.4	18.1	17.7	15.3	11.5	9.2	7.4	5.9	6.8	5.3	5.3	3.3	11.5
29	2.7	3.5	3.5	3.7	3.3	2.2	1.4	4.4	7.4	10.6	12.6	14.7	16.3	18.0	18.8	18.6	17.3	13.6	10.8	6.6	4.6	5.5	5.6	2.9	8.7
AVG	0.9	0.4	0.5	0.5	0.2	0.0	0.1	2.1	4.2	6.4	8.0	9.2	10.1	10.8	11.1	10.6	9.2	6.4	4.8	3.5	2.9	2.4	2.0	1.4	4.5

Energy production estimated for February 2012 at the Agricultural Science Center at Clovis

Wind Speed (m/s)	# of hours at given wind speed	Power Curve [1] (kW)	Energy Production (kWh)
0	0	0	0
1	8	0	0
2	12	0	0
3	26	12	319
4	28	77	2,176
5	30	150	4,536
6	45	288	12,943
7	67	457	30,692
8	64	682	43,769
9	83	971	80,083
10	71	1,234	87,623
11	65	1,470	95,825
12	49	1,500	73,950
13	42	1,500	88,500
14	30	1,500	45,000
15	27	1,500	40,800
16	17	1,500	25,800
17	9	1,500	13,200
18	6	1,500	8,250
19	5	1,500	6,750
20	5	1,500	7,200
Total	689		641,466
		February 2012 Monthly Capacity Factor	**61.40%**

These results are only estimates, therefore should not be considered as a feasibility analysis nor be intended as a wind farm development analysis.

[1] Power Curve approximated for a GE 1.5 MW Wind Turbine @ 65 m hub height.