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ASCOT Meteorological Towers

K. Patrick Ellis

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ASCOT

(Atmospheric Studies in Complex Terrain)

METEOROLOGICAL TOWERS

Review of LLNL's Participation in 1991 ASCOT/Winter Validation Study

K. Patrick Ellis

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Review of LLNL's Participation in 1991 ASCOT/Winter Validation Study*

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Introduction

During the winter of 1991, LLNL participated in a series of field experiments near the Rocky Flats Plant south of Boulder, Colorado. These experiments were made in conjunction with the winter validation studies being managed by Rocky Flats personnel. This is a review of the tethersonde data taken during the period of January 28, 1991 through February 8, 1991.

Location

The LLNL Tethersonde experimental site was located at the Coal Creek Canyon outlet of the front range of the Rockies. The site was approximately 2.5 kilometers west of Highway 93, and 150 meters south of Highway 72. UTM coordinates are 476.305 E, and 4413.984 N, Meridian is 105 W, magnetic declination of 12 degrees east at an altitude of 2003.75 meters MSL.

Tethersonde

A.I.R. Tethersonde equipment was used. The ADAS was an A.I.R. 3C. The sonde was equipped with an anemometer set, wet and dry bulb thermistors, an altimeter, and was attached to a 3.25 m³ tethered balloon. The assigned sonde frequency was 404.2 MHz. All systems had been calibrated in January 1991 by A.I.R. The compass error corrections are shown in Fig. 1. The only notable problem is on the night of February 6/7. The relative humidities are too high, probably caused by a dried out wet bulb. (See Appendix A for instrument specifications and Appendix B for Tethersonde data.)

Towers

Meteorological data were collected by a network of eight towers. Seven of them with two levels of instrumentation. Four of these, in addition to wind speed, wind direction, and temperature sensors, were equipped with net radiometers. One tower was instrumented at only one level. Five of the towers were located along the front range near Rocky Flats, one was located up Coal Creek Canyon, and one west of Standley Lake (see Fig. 2 for these 7 locations); one tower was located at Tolland, west of the Town of Rollinsville. Table 1 summarizes the locations of these towers and their instrumentation. (See Appendix C and D.)

* Work performed under the auspices of the U.S. Department of Energy by the Lawrence Livermore National Laboratory under Contract No. W-7405-Eng-48.

Figure 1.

404.2 MHZ
 #2 SONDE

Tower Instrumentation

Each tower is instrumented with a Handar 540 Data Collection Platform (DCP), Wind Speed (w/s), Wind Direction (w/d), and Temperature Sensors. Four of the towers have Net Radiation Sensors. Each tower has two solar panels to provide power and a Yagi antenna for data transmission.

Data Collection Platform

The DCP is manufactured by Handar Corporation in Sunnyvale, California. It has a specially designed Panel for ASCOT operations. The firmware (4.Q) was developed for ASCOT use. There is a met card for each level of instrumentation. These DCPs are mounted on the tower at varying heights. The criteria for determining the mounting location is a projection of snow depth during the winter months, or, if an anti-climbing device is installed. Programming of the DCP is done with a handar 545C programing set in the field. The specific commands for each sensor as well as other criteria is shown.

Figure 2.

Sensors

The wind speed/wind direction (ws/wd) crossarm assembly is mounted on the tower above ground level as shown. This is also true of the temperature sensors. The cables from these sensors are then run down the tower and attached to the bottom of the DCP to the panel as shown in Fig. 3. All sensors have been refurbished and calibrated at the Bureau of Land Management (BLM) Maintenance Depot in Boise, Idaho. Their standards meet or exceed the manufacturer's design specifications. (See Appendix A.)

- A. The w/s sensor is a Handar 430A. Two sizes of ice skirts were manufactured, we have both in use. The 2" sensor has a frequency velocity factor of 00.586. The 1-3/4" sensor has a frequency velocity factor of 00.626 (see Fig. 4 for which tower has which sensor). After the w/s sensor is inserted in the ws/wd cross arm assembly and attached to DCP, it is checked against a hand-held Davis Turbo Wind Meter for comparison.
- B. The w/d sensor is a Handar 431A. After inserting this sensor in the ws/wd cross arm assembly, it is aligned by two individuals, one on the tower to make adjustments, and one on the ground sighting in the alignment. A hand-held SUUNTO KB-14/360 compass is used. The alignment is to True North, and the magnetic declination is arrived at by using the GEOMAG computer program. By adding or subtracting the declination, the vane is aligned and tightened by set screws. Several scans using the 545C program set are done to confirm readings. The vane alignment is accurate to $\pm 2^\circ$.
- C. The temperature sensor is a Handar 432B. It is attached to the tower just below the ws/wd crossarm. After connecting the sensor to the DCP, its readings are checked against a thermometer.
- D. Two solar panels are attached to the tower and aimed in a southerly direction at approximately 45° above the horizon. The larger panel is an ARCO M-65 and is connected to the DCP to keep the internal DCP battery charged. An ARCO M-86 solar panel is attached to the tower in the same manner but is connected to a 12-volt battery in a insulated box; then, in turn, this battery is attached to the DCP to provide backup power in case of extended cloud cover or damage to the other panel.
- E. A Yagi antenna is mounted within 3 feet of the DCP, and is attached to it by a coaxial cable. It is aimed at about 35° above the horizon and at an angle of approximately 204° magnetic (towards the GOES satellite).
- F. A Radiation and Energy Balance Q*6 Net Radiometer is attached to the tower 10 feet above ground level on four of the towers. These units are used to measure the net radiation (this is the energy retained by the surface for heating soil and air). These radiometers are calibrated by the manufacturer, and we, in turn, program other calculations that will give us the W/m^2 that we desire in our computer programs (see Fig. 5).

ASCOT

Figure 3.

COLORADO ASCOT TOWERS MAGNETIC DECLINATION degrees E (12) Meridian 10SW									
Linda's Ranch Paul's Peak Rex Ranch Tolland Rim Rock Pats Flat Lois Ranch Jim's Ranch Bartlett Ranch									
ID	CA701280	CA70271A	CA70346C	CA7042FC	CA70518A	CA706410	CA707766	CA709494	CA70A10E
TIME	H + 29	H + 31	H + 35	H + 37	H + 39	H + 41	H + 43	H + 45	H + 46
ELEVATION	6574 /2003.75m	8112 /2472.54m	5595 /1705m	8883 /2707.54m	7645 /2330.20m	6150 /1874.52m	6875 /2095.50m	6658 /2029.36m	5468 /1666.65m
UTMS (E)	476.305E	474.593 E	477.969E	449.997E	470.722E	479.698 E	477.022 E	477.392E	487.350 E
UTMS N	4413.984 N	4413.253 N	4420.892N	4417.630N	4416.921 N	4412.128 N	4415.373N	4416.742N	4412.897 N
UPPER SENSOR/ABGL	58' /17.68 m		50' /15.24m	58' /17.68m	58' /17.68 m	58' /17.68 m	58' /17.68 m	58' /17.68 m	58' /17.68 m
LOWER SENSOR/ABGL	20' /6.1m	29' /8.83m	20' /6.1m	20' /6.1m	20' /6.1m	20' /6.1m	20' /6.1m	20' /6.1m	20' /6.1m
UPPER WS SN	1097 (13/4)		193 (1 3/4)	1086 (13/4)	775 (13/4)	471 (2)	772 (2)	680 (13/4)	770 (13/4)
UPPER WD SN	626		712	465	625	661	714	117	1048
UPPER TEMP SN	500		110	244	408	241	108	505	405
LOWER WS SN	776 (1 3/4)	1077 (1 3/4)	451 (1 3/4)	771 (1 3/4)	774 (1 3/4)	463 (2)	709 (2)	773 (1 3/4)	1203 (1 3/4)
LOWER WD SN	456	119	463	1050	711	461	102	707	1049
LOWER TEMP SN	243	397	506	403	407	409	109	242	499
SOLAR RAD SN	90137				90135			90134	90136
SOLAR RAD HT /ABGL	10' /3.1m				10' /3.1m			10' /3.1m	10' /3.1m
SOLAR RAD CAL (mv w-1m2)	13.2/06188				13.7/06422			13.3/06234	13.5/06328
REVISION	4.Q	4.Q	4.Q	4.Q	4.Q	4.Q	4.Q	4.Q	4.Q
BOX#	759	121	1296	758	753	123	1013	119	1297
DOE#	4334093	4551036	4896454	4334109	4334166	4551063	3344468	4550149	4896461
NEW BATTERY	9/90	7/87	9/90	12/90	9/90	9/90	9/90	3/91	9/90
[CA708762 - NOT INSTALLED]									

Revised 5/91

Figure 4.

Net Radiation Calibrations

To determine the W/m^2 that is the designed parameters for data reporting. The Radiation and Energy Balance Systems, Inc. (REBS) net radiometer is designed to work on a system that has a 10 microvolt resolution and range of -10 to +75 millivolts. This signal must be reduced as the Handar 540 is designed to operate at a -25 mV to a +25 mV. To do this three 100,000 ohm resistors in series are installed. See Fig 1.

To compute the net radiation information W/m^2 it is necessary to do the following, example REBS gives a calibration factor of $13.5 W/m^2 mV$, it must be multiplied by three (because that is a result of the three 100 kilohm registers) this equals 40.5 multiply this number by 25 mV (full scale) = 1012.5 then divide by 16000 counts (This is 0 scale) so one count is number .06328 W/m^2 to find the W/m^2 for any particular time of day it takes the counts reported by the Handar subtract 16000 and multiply by the calibration factor of .06328.

Figure 5.

Table 1

Site	Instrumentation	UTM Coordinates	Elevation
1. Bartlett Ranch	1,3	487.350E 4412.897N	1666.65 m
2. Pat's Flat	1	479.698E 4412.128N	1874.52 m
3. Jim's Ranch	1,3	477.392E 4415.742N	2029.36 m
4. Lois' Ranch	1	477.002E 4415.373N	2095.50 m
5. Linda's Ranch	1,3	476.305E 4413.984N	2003.75 m
6. Paul's Peak	2	474.593E 4413.253N	2472.54 m
7. Rim Rock	1,3	470.722E 4416.921N	2330.20 m
8. Tolland	1	449.997E 4417.630N	2707.54 m

- (1) 2 levels wind speed, wind direction, σ_θ , temperature and ΔT . Instrument levels are 6.1 m and 17.68 m.
- (2) 1 level wind speed, wind direction, σ_θ , and temperature. Instrument level is 8.83 m
- (3) Net radiometer

These towers provided a continuous set of hourly averaged data for the experimental period except for the following: all data for all towers was lost from February 6, 1991, 1100 LST until February 8, 1991, 1100 LST due to data collection problems at LLNL where transmissions from the tower instruments through the satellite and satellite receiver at Whollups Island, Virginia, to LLNL were temporarily interrupted. In addition to the above data loss, data from Jim's Ranch is missing from January 28 until January 31, 1991, 1400 LST and from February 6, 1991, 1100 LST on. See Appendix A. for instrument specifications.

The quality of all data is very good.

The Experiments

The experimental plan called for balloon ascents to start on the hour commencing at 2000 (8:00 pm) local standard time and continuing each hour with the final launch at 0500 local standard time. This schedule was changed when weather or equipment malfunctions made it unsafe or impossible to launch.

Summary for Each Evening

January 28

No experiment scheduled this evening. Equipment was set up and tested.

January 29

The weather did not cooperate at all this evening. Although the sky was clear to start with, the temperature was cold and winds were 5-10 m/s at ground level. As evening progressed the sky became more clouded and winds became stronger. No runs were attempted. Decided to terminate at approximately 2300 (11:00 pm L.S.T.)

January 30

No experiment scheduled this evening.

January 31

Temperature cold and the sky to the west was clear; however, above and to the east, the clouds were scattered with about 50% coverage. The surface winds, 0-10 meters ABGL, varied from about 3 m/s to 6 m/s down the canyon, approximately 270°. Above that elevation, the wind increased to speeds of up to 15 m/s. On the early runs, the winds were from the west to southwest but later on they became quite variable coming from all directions.

MST Time	Max. W/S in M/S	Max. Height in M. ABGL	Height of Winds at Max. Speed in M. ABGL	Height of Inversion in M. ABGL
2000	Did not run—Too windy			
2100	8.3	268	45	172
2200	8.3	510	45	180
2300	16.0	260	260	200
0000	15.8	211	200	180
0100	Did not run—Too windy			
0200	Did not run—Too windy			
0300	Did not run—Too windy			
0400	Did not run—Too windy			
0500	Did not run—Too windy			

February 1

The temperatures were a little warmer this evening, the sky was about 80% covered above and to the west. As evening progressed, sky cover reduced to about 10%, then increased again to about 40-50%. The surface winds 0-10 m ABGL were 2-6 m/s; then a shallow drainage setup about 50-60 m deep. A full moon was evident as the evening progressed. The wind speed increased enough to cause launching problems. The sonde was blown off and the balloon was punctured. Did not attempt any runs after 2:00 am.

MST Time	Max. W/S in M/S	Max. Height in M. ABGL	Height of Winds at Max. Speed in M. ABGL	Height of Inversion in M. ABGL
1800	6.9	589	60	170
1900	11.5	589	45	170
2000	10.6	621	45	160
2100	10.7	621	50	140
2200	Did not run—Tether problems			
2300	11.4	25	Sonde blew off	
0000	10.0	474	70	205
0100	12.2	321	70	200
0200	Did not run rest of night—Too windy			
0300	and attempted to patch balloon			
0400				
0500				

February 2

No experiment scheduled for this evening

February 3

This evening's experiments were hampered greatly by strong surface winds in the evening and early night; however, around 2300 (11:00 pm) everything seemed to quiet down and we were able to start our experiments. The winds remained uniform all the way up during each run; however, during each run the wind speed increased until it was unsafe to make the 0300 (3:00 am) run—no drainage was observed, and winds were steady out of the west to the northwest.

MST Time	Max. W/S in M/S	Max. Height in M. ABGL	Height of Winds at Max. Speed in M. ABGL	Height of Inversion in M. ABGL
2000	No run—Too windy			
2100	No run—Too windy			
2200	No run—Too windy			
2300	3.5	608	40	95
0000	4.5	610	65	100
0100	8.5	433	100	170
0200	9.6	181	110	105
0300	Did not run—Too windy			
0400	Did not run—Too windy			
0500	Did not run—Too windy			

February 4

Early indications such as temperature changes and low-surface wind speeds indicated that this night would provide drainages of a sort. This happened—drainages set up early and stayed all evening. They varied in depth. The jets were in the 6–7 m/s range.

MST Time	Max. W/S in M/S	Max. Height in M. ABGL	Height of Winds at Max. Speed in M. ABGL	Height of Inversion in M. ABGL
2000	6.4	590	60	125
2100	7.0	630	55	155
2200	6.8	698	55	135
2300	7.0	601	50	185
0000	7.6	631	65	140
0100	7.3	656	70	160
0200	8.3	591	60	155
0300	7.4	580	80	205
0400	7.2	419	55	170
0500	Did not run—Tether line destroyed			

February 5

No experiments scheduled this evening.

February 6

The chance for drainages this experimental evening again looked good as the sky was clear, temperature was cold, and surface wind speeds were calm. Drainage did indeed set up early and lasted all night with a jet of 6-8 m/s at 60 to 90 meters above the ground. A nice temperature inversion appeared at about the 15-meter Height. All the profiles were very similar.

MST Time	Max. W/S in M/S	Max. Height in M. ABGL	Height of Winds at Max. Speed in M. ABGL	Height of Inversion in M. ABGL
2000	No run—Winch broke			
2100	No run—Winch repair			
2200	6.8	509	60	180
2300	7.8	506	55	150
0000	8.1	523	60	130
0100	7.3	559	55	120
0200	7.6	555	50	120
0300	7.8	493	50	125
0400	6.7	572	50	140
0500	7.4	539	55	200

February 7

This night's experiments and tether sonde profiles were almost a duplicate of the previous night's experiments. The same wind speeds, directions, jets, inversions, and drainage flows occurred at approximately the same elevations. The sky was clear and the temperatures were somewhat warmer. No problems occurred and all runs were completed.

MST Time	Max. W/S in M/S	Max. Height in M. ABGL	Height of Winds at Max. Speed in M. ABGL	Height of Inversion in M. ABGL
2000	7.7	352	60/350	160
2100	8.7	471	80	225
2200	7.4	414	55	195
2300	7.0	574	45	250
0000	8.6	538	40	255
0100	6.5	456	45	375
0200	8.4	525	50	270
0300	7.2	424	45	200
0400	6.9	516	55	450
0500	7.1	419	65	410

Summary

The early experiments were of great value as the winds were strong (5-6 m/s) near ground level and got stronger with Height. There were changes in wind directions as the balloon arose above the influence of the surrounding hills. At the latter part of the experimental period, good drainages set up and remained throughout the night. The jets were well defined as were the temperature inversions. The data from the meterological tower, Rich Coulters SODAR, and the Dopler Lidar all seem to be consistent with the Tethersonde Data.

APPENDIX A

ADAS™

ATMOSPHERIC DATA ACQUISITION SYSTEM

MODEL AIR-3C (MULTISONDE™ ADAS)

Multiple Airsonde®/Tethersonde® Ground Station. The AIR Atmospheric Data Acquisition System (ADAS) is a complete upper air ground station for receiving and processing telemetered data from balloon borne meteorological sensor packages. Model AIR-3C is designed to receive and process data from up to 3 separate sensor packages at the same time. It can also perform all the functions of the Model AIR-3A for upper air soundings with automatic wind computation. It can be used with both free and tethered balloon systems. This model is capable of computing over 50 meteorological variables in real-time from telemetered Tethersonde or Airsonde data.

The AIR-3C ADAS consists of a 400-410 Mhz crystal controlled receiver, a Z-80 microcomputer, software in ROM, LED displays, a key pad, a paper tape reader, a theodolite angle interface, an IEEE-488 (GPIB) interface, a serial output port, a cassette tape recorder interface, and rechargeable internal battery pack.

Real-time digital data. The AIR-3C receives data sequentially from up to three Airsondes and Tethersondes in any combination. The internal microcomputer converts it into digital meteorological data. The data is then sent in real-time to the output ports in digital format where it can be printed, recorded on cassette, or used by additional data processing equipment. Cassette recorded data can be read back through the AIR-3C at a later time and directed to the display, serial port or GPIB.

Automatic upper air soundings are possible when the AIR-3C is used with an AIR Airsonde and optical or radio theodolite. The AIR-3C can receive angle data through the theodolite interface. The interface works with AIR designed shaft encoder assemblies that can be attached to optical or radio theodolites. The AIR-3C generates an audible tone to signal the optical theodolite operator when the angles are being read.

When making upper air soundings, the AIR-3C can compute time, pressure, height, temperatures, humidity (from wet/dry-bulb or carbon hygistor), balloon speed and direction, and dozens of additional meteorological variables. A complete set of Airsonde data is output every 5-6 seconds; balloon speed and direction can be automatically averaged over a specified number of readings before output.

FEATURES

- ☐ **Receives and processes telemetered data from up to three Airsondes® and Tethersondes® with a single unit**
- ☐ **Real-time digital data output in meteorological units**
- ☐ **Computes over 50 meteorological variables in real-time**
- ☐ **Interfaces to radio or optical theodolite for automatic wind computation**
- ☐ **Optional internal 400-410 Mhz receiver**
- ☐ **Outputs to serial port, IEEE-488, cassette recorder, and integral display**
- ☐ **Key pad and paper tape reader for command and data entry**
- ☐ **Automatic operation reduces operator training, eliminates analog data reduction, and improves data quality**
- ☐ **Portable—smaller than a briefcase, internal battery power**
- ☐ **Internal battery automatically takes over during power failure**
- ☐ **Only system capable of multiple sonde data acquisition**

APPLICATIONS

- ☐ Simultaneous data from 3 levels in the atmosphere
- ☐ Measurements from up to 3 Tethersondes separated horizontally by up to 20 km
- ☐ Research and operational rawinsonde soundings
- ☐ Boundary layer research
- ☐ Air pollution studies—yields accurate wind and stability profiles
- ☐ Noise propagation studies
- ☐ Sea breeze studies
- ☐ Mountain valley studies
- ☐ Comparison data for acoustic and FM-CW boundary layer radars

For the Tethersonde, the AIR-3C can compute time, pressure, height, temperature, humidity, wind speed and direction, plus many more meteorological variables. All in a variety of selectable units. A complete set of Tethersonde data is output every 10-12 seconds.

The AIR-3C performs nearly automatically from the time the power is turned on. Commands and data are entered through the labeled key pad and paper tape reader. The paper tape reader is used primarily to enter calibration data from the tape that accompanies each AIR sonde.

Completely portable. Small size, together with internal battery power, makes the AIR-3C a completely portable unit. When used with a battery powered cassette recorder, the system can acquire and record data in the field without external power.

ADAS SPECIFICATIONS MODEL AIR-3C (MULTISONDE™ ADAS)

Receiver

Frequencies: Crystal controlled, 3 frequencies within 400-410Mhz range

Bandwidth: 15 KHz

AFC Capture Range: ± 50 KHz

AFC Tracking: ± 60 KHz

Sensitivity: 0.25 μ V

Audio Frequency Input (From external receiver)

Connector: BNC

Signal Level: 1 Vpp (nominal)

Data Processing

Microprocessor: Z-80 with ROM firmware

Computed Values Include (each sonde):

Dry-bulb Temperature	Time	Azimuth Angle
Wet-bulb Temperature	Date	Elevation Angle
Wet-bulb Depression	Pressure	Wind Speed
Relative Humidity	Height ASL	Wind Direction
Dew Point	Height AGL	Potential Temperature
Mixing Ratio	Ascent Rate	Enthalpy
Saturation Vapor Pressure	Distance	Refractivity

Theodolite Interface

Shaft Encoder Assemblies: GMD uses AIR-3A-1EG
RD-65 uses AIR-3A-1ER
Optical theodolite uses AIR-3A-2E

Key Pad: 25-keys, labeled & color coded

Paper Tape Reader

Tape type: Black ISO-standardized
1 in. wide

Punch format: 8 track ISO standard, ASCII

Operating Temperature: 5° C to 40° C

Output

Displays (LED): 6 digit data
5 character data units
10 bar tuning meter

Ports: IEEE-488 (GPIB)
RS-232C/20 ma TTY
Baud rates: 150, 300, 600, 1200, 2400, 4800, or 9600
Format: ASCII character
Cassette Tape Recorder (Send/Receive)
Baud rates: 300 or 1200

Frequency: Airsonde—New data every 5-6 sec.
Tethersonde—New data every 10-12 sec.

Dimensions and Mass

Length: 31.1 cm (12.25 in.)

Width: 22.2 cm (8.75 in.)

Height: 8.9 cm (3.5 in.)

Mass: 5.3 kg (11.7 lb.)

Power

Line: 115/220V AC 47-63 Hz 12 W

Internal Battery (Std.): Automatic switch-over if line voltage falls
Type: Rechargeable
Operating time: 3 hours
Recharge time: 18 hours

External Battery (Opt.): 12V DC 10 W

ATMOSPHERIC INSTRUMENTATION RESEARCH, INC.

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5801 Lee Highway, Arlington, VA 22207 U.S.A. • (703) 538-4000 • TWX: 64100 SOLIDSTA • FAX: 7035333190

AIR

HEAVY-DUTY WINCH

For rapid retrieval. The TS-3AW heavy-duty winch is designed for rapid retrieval of a tethered balloon or kite under heavy wind loading. The winch features reversible, variable speeds controlled through a hand-held selector. The high-torque drive train guarantees minimal speed variations under changing loads.

Long-term reliability and ruggedness. The Winch is constructed of quality materials for rugged use and long-term reliability in severe environments. Machined parts are made from stainless steel and aluminum using precision N/C machines. Wear is minimized through the use of ceramic and hardened steel line guides and an all ball bearing drive train.

The winch drum and level-wind are driven by a single ½ HP high-torque industrial motor. The drum is rotated through a toothed belt drive and worm gear transmission.

Safety and ease of use. An emergency stop switch immediately halts the winch operation. A level-winding mechanism causes even line distribution on the drum preventing line abrasion and assuring smooth line feed. Drum flange guards prevent line fouling. Overload and overheat circuitry protects the winch. The self-braking worm gear drive assures line feed control even during loss of power. External drive take-off permits retrieval during electrical power failure.

The compact design with no protrusions permits easy transporting. The winch reduces to a volume of about one cubic foot. The remote control and power cord are stored in an integral compartment. The line guides slide into the body of the winch.

- ☐ High torque at high speeds for fast retrieval under heavy loads
- ☐ ½ HP industrial motor and control circuitry provide long-term reliability
- ☐ Stainless steel and anodized aluminum construction resists corrosion
- ☐ Variable speed
- ☐ Reversible
- ☐ Remote control for ease of use
- ☐ Self-braking worm gear drive for safe and reliable control
- ☐ Automatic level-winding system for even line distribution on drum
- ☐ Clean, compact design for easy transport

HEAVY-DUTY WINCH TS-3AW SPECIFICATIONS

Speed:	Variable 0-5.8 ft/s (0-1.8 m/s) @75 lbs. (34 kg) load		
Maximum Load:	100 lbs. (45 kg)	(Higher torque available with optional gearing)	
Drum Capacity:	6 in. (15.2 cm) diameter, 5.5 in. (14.0 cm) wide drum with 9 in. (22.9 cm) diameter flange		
Max. Line Lengths:	10,000 ft (3 km) 160 lbs. (74 kg) test line 7,000 ft (2 km) 240 lbs. (110 kg) test line		
Drive Train:	½ HP dc motor with 20:1 worm drive		
Ambient Operating Temperature:	+ 32 °F to + 122 °F (0 °C to + 50 °C) (Std) - 22 °F to + 122 °F (- 30 °C to + 50 °C) (Opt)		
Power Requirements:	95-135 VAC	50-60 Hz	10 Amps max. (Std)
	195-260 VAC	50-60 Hz	5 Amps max. (Opt)
Dimensions:	13.7 in. width, 13.5 in. depth, 11.75 in. height (34.8 cm width, 34.3 cm depth, 29.8 cm height)		
Weight:	61 lbs. (27.7 kg)

ATMOSPHERIC INSTRUMENTATION RESEARCH, INC.
1880 South Flatiron Court, Boulder, CO 80301 • (303) 443-7187 • TWX: 910-940-5904 AIRBLDR

AIR

TETHERED BALLOONS

TS-1BR SERIES

Proven reliability. The AIR Tethered Balloon was developed specifically to serve as a vehicle for the AIR Tethersonde® atmospheric sounding probe. With years of proven field research, from the Arctic to the Antarctic, from the Sahara Desert to tropical rain forests, the AIR Tethered Balloon has proven its reliability and endurance.

It is used in a variety of applications including portable meteorological towers, air pollution sensor platforms, boundary layer research, radar target platforms, and point source (stack) aerosol simulation.

Superior payload to volume ratio. The Tethered Balloon is fabricated with 1.5 mil (0.038 mm) urethane plastic. This material has several times the shear and tear strength of standard balloon polyethylene. Very thin and strong, this material gives AIR's Tethered Balloon its high lift to volume ratio. Payload to volume ratio is about four times that obtained with conventional rubberized nylon or dacron tethered balloon material. Handling problems in turbulent launch and recovery situations are greatly diminished. The Tethered Balloon can easily pay for itself in reduced helium or hydrogen use and associated transportation costs of heavy cylinders.

Automatic pressure compensation. The balloon is designed to automatically compensate for changes in external pressure during ascent and descent. Its unique internal stretch cord and expansion slots allow the balloon to maintain the aerodynamic shape and present a low drag coefficient at any rated altitude and load.

Convenient inflation and deflation. The inflation tube is mounted in the nose of the balloon. This allows an operator to inflate and deflate while controlling the tether point in the prevailing wind—a decided advantage for one person operation in gusty turbulent winds.

FEATURES

- ☐ Economical
- ☐ Rugged-Durable
- ☐ Wide operating temperature range
- ☐ Very high payload lift to volume ratio
- ☐ Portable—1-2 Kg mass
- ☐ Aerodynamic stability
- ☐ High altitude—1.5 KM
- ☐ Highly visible—International orange color

APPLICATIONS

- ☐ Portable meteorological tower
- ☐ Air pollution sensor platform
- ☐ Radar target platform
- ☐ Point source (stack) aerosol simulation
- ☐ Boundary layer research

BALLOON PERFORMANCE

Graph to derate for
non-sea level
launch conditions.

Free lift of A.I.R. Inc. Balloons when
properly inflated for launch as a
function of air density (left) or height
in the U.S. Standard atmosphere
(right)

BALLOON DATA TS-1BR-SERIES

PART NO.	VOL.		LENGTH		DIAMETER		MASS kg	FREELIFT*	
	M ³	ft ³	M	ft.	M	ft.		kg	lb
TS-1BR-0†	2.25	77	3.5	11.6	1.2	3.8	1.1	1.2	2.6
TS-1BR-1†	3.25	115	4.9	16.0	1.1	3.6	1.6	1.8	4.0
TS-1BR-2	4.25	150	5.2	17.1	1.5	4.9	1.7	2.8	6.2
TS-1BR-3	5.25	185	5.9	19.4	1.6	5.2	1.9	3.6	7.9
TS-1BR-4	7.50	265	6.6	21.6	1.8	5.9	2.2	5.7	12.5

* The free lift is the mass, exclusive of the balloon, that the balloon will lift. The free lift values in this table are for sea level in the U.S. Standard atmosphere, 1962. † These balloons are below 115ft.³ in volume and 6ft. in diameter; therefore federal Aviation Regulation, Part 101 is not applicable, according to Article 101.1 of Part 101.

ATMOSPHERIC INSTRUMENTATION RESEARCH, INC.

1880 South Flatiron Court, Boulder, CO 80301 • (303) 443-7187 • TWX: 910-940-5904 AIRBLDR

AIR

TETHERSONDE®

ATMOSPHERIC SOUNDING PROBE

MODEL TS-3A-SP SERIES

A unique boundary layer probe. The AIR Tethersonde meteorological sounding sensor package is designed for use in boundary layer measurements. It accurately measures pressure, temperature, humidity, wind speed and direction.

While suspended below a gas-filled, blimp-shaped tethered balloon (TS-1BR) or specially designed kite, the Tethersonde system operates effectively at altitudes up to 3 km above the surface. Altitude of the tethered balloon or kite is controlled by AIR's Heavy-Duty Winch (TS-3AW).

All calibration information is contained on a punched paper tape—no baseline is required. All electronics are integrated on a single printed circuit board. The housing is lightweight molded polystyrene. Power is provided by a sealed 9V alkaline battery.

Nine data channels every 8 to 10 seconds. In addition to five standard sensors, the Tethersonde has four spare analog channels available for additional sensors. The Tethersonde's CMOS Integrated circuitry time-multiplexes data transmission. Five standard data channels (T, Tw or RH, P, Ws, Wd) plus 4 spare channels are scanned and transmitted every 8-10 seconds. The transmitted information permits automatic synchronization and calibration by the ADAS ground station.

Dry and wet bulb temperatures are measured by model AS-3A-SP. Two carefully matched thermistors assure performance comparable to a good Assmann psychrometer. A shield prevents radiation errors and protects the thermistors from damage. Aspiration is produced by a small fan and the water reservoir is sufficient for several hours of operation. At temperatures below 0° C, the frozen wick continues to provide humidity information by measuring the evaporation with respect to ice to as low as -25° C.

Humidity is computed by the ADAS ground station from the dry and wet bulb temperatures for model AS-3A-SP or from the dry bulb temperature and resistance of the carbon hygistor for model AS-3A-SPH. The carbon hygistor replaces the wet bulb in this model.

Pressure is measured by a patented electronic aneroid capacitance pressure sensor. The sensor is mounted internally for protection against thermal transients and mechanical stress. Temperature data for compensation is provided by a thermistor attached to the sensor.

Wind speed is measured with a patented three-cup anemometer and a light-chopper tachometer. The design features very low starting speed and excellent sensitivity. The individual cups are easily replaced and are manufactured from a single mold for near perfect balance and match.

Wind direction is measured with a small electronically controlled magnetic compass. Wind direction detection relies on the aerodynamic balloon or kite serving as a wind vane to orient the Tethersonde and compass.

FEATURES

- ☐ Precision sensors:
Thermistor dry & wet bulbs ($\pm 0.5^\circ \text{C}$)
Humidity ($\pm 5\%$)
Aneroid pressure cell ($\pm 1 \text{ mb}$)
Wind Speed ($\pm 0.25 \text{ m/s}$)
Wind Direction ($\pm 5 \text{ deg}$)
- ☐ High resolution: (0.01°C , $0.1\% \text{ RH}$, 0.1 mb , 0.1 m/s , 1 deg .)
- ☐ Fast response
- ☐ Extensive individual testing and calibration
- ☐ Lightweight (225 g , 8 oz) allows use of small balloon (2.25 m^3)
- ☐ Reliable, rugged construction
- ☐ Operational simplicity—no technical training necessary
- ☐ Crystal controlled transmitter—no RF tuning
- ☐ Economical

APPLICATIONS

- ☐ Meteorological research
- ☐ Air pollution studies, EPA Impact Statements
- ☐ Mountain valley and sea breeze studies
- ☐ Atmospheric (Heimholtz) wave studies
- ☐ Radio propagation and refractive index studies
- ☐ Agricultural and forestry research
- ☐ Sound propagation studies

High stability, narrow band transmission. The Tethersonde telemeters its data to the AIR Atmospheric Data Acquisition System (ADAS), an automatic, digital output ground station. A crystal controlled FM transmitter produces high stability, narrow band transmissions which allow communication at distances up to 20 km with only 10 mw of power.

Crystal control eliminates RF tuning problems and insures reliable noise-free data. It also permits a number of Tethersondes to operate in close proximity without interference.

GENERAL DESCRIPTION

Construction: Body molded of expanded polystyrene. A single printed circuit card contains all electronics.
Power: Sealed 9V alkaline transistor radio battery
Operating time: 6-8 hours
Size: Fits into 30cm x 30cm x 10cm volume
Weight: 225 grams (8 oz.)

ORDERING INFORMATION

Specify transmission frequency if other than 403.5 Mhz.

Model TS-3A-SP Dry bulb and wet bulb humidity measurement

Model TS-3A-SPH Dry bulb and carbon hygistor humidity measurement

TETHERSONDE SPECIFICATIONS MODEL TS-3A-SP and TS-3A-SPH

The following are performance specifications when used with an AIR ground station in a field environment including all sources of error for digital, non-baselined data.

SENSORS

Temperature (Wet and Dry Bulb)

Range: +50°C to -70°C
Precision: 0.5°C for +40°C to -40°C
 1.0°C for +50°C to -70°C
Thermistor Match: 0.1°C for +35°C to -20°C
Resolution: 0.01°C
RMS Noise Equivalent: 0.04°C
Response Time: Dry bulb: 3 sec., Wet bulb: 12 sec.

Humidity (TS-3A-SP, from psychrometric equation)

Range: 3% to 100%
Precision: 3% for 0°C to 50°C
 5% for -10°C to 0°C
 10% for -25°C to -10°C
Resolution: 0.1% RH

Humidity (TS-3A-SPH, using carbon hygistor)

Range: 20% to 100% RH
Precision: 5% RH, +40°C to -40°C
Resolution: 0.1% RH

Pressure (Absolute Barometric)

Range: 1050 to 600 mb
Accuracy: 5 mb
Precision: 1 mb
Resolution: 0.1 mb
Temperature Compensation: Computed by AIR ground station

Wind Speed

Range: 0-20 m/s
Precision: 0.25 m/s
Resolution: 0.1 m/s

Wind Direction

Range: 2-358 (4 deadband)
Precision: 5
Resolution: 1

Spare Inputs (4 each)

Range: 0 - 100%
Precision: 1%
Resolution: 0.1%

TRANSMITTER

Carrier Frequency: 403.5 Mhz (std), 400-410 Mhz (optional)
Modulation: FM, narrow band
Audio Modulation: 1.5 KHz to 3.5 KHz
Transmitter Type: Crystal VCXO with 9x multiplication
Stability: 0.02% (+50°C to -70°C)
Deviation: ±5 KHz

Tuning: ±20 KHz
Sidebands: 35 dB down
Transmitter Power: 10 milliwatts
Telemetry Range (nominal): 20 km
Antenna: ¼ wave vertical monopole
RF Polarization: linear, vertical

ATMOSPHERIC INSTRUMENTATION RESEARCH, INC.

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431A Specifications

The Handar 431A Wind Direction Sensor is designed for remote and unattended applications where extremes in environmental conditions are encountered. Precision heavy-duty construction using corrosion resistant aluminum and stainless steel ensure operation in high winds and heavy icing conditions. The sensor is finished with matt-black epoxy paint which provides de-icing in the presence of solar radiation.

The 431A uses a precision wire-wound potentiometer with a narrow gap. The wire-wound potentiometer has excellent linearity and low rotational torque. The vane is supported with a stainless steel shaft turning in shielded instrument grade, stainless steel grade bearings. Once the instrument is mounted and aligned, it may be removed and replaced in the field while maintaining its original orientation using an alignment sleeve.

SENSOR TYPE	Vane/Potentiometer
VANE MATERIAL	Aluminum
TURNING RADIUS	13.5 Inches
SLEEVE DIAMETER	1.315 Inches
WEIGHT	2 Pounds
RANGE	0-360°
THRESHOLD	1 mph
DISTANT CONSTANT	15 Feet
MAXIMUM WIND SPEED	150 mph
ACCURACY	2°
ICE LOAD	2 Inches
ELECTRICAL	
Resistance	1000 Ohms
POT Gap	10°
MATING CONNECTOR	MS 3106A-14S-6S
MOUNTING	¼ Inch IPS Nipple

Fig. 6

432A/B TEMPERATURE SENSOR

The HANDAR 432A/B is a temperature sensor designed for use with HANDAR Data Loggers and Data Logging Systems. The sensor is provided in two configurations. The "A" model uses a single thermistor type sensor and the "B" model uses a composite thermoliner network to provide a linear voltage vs temperature output. The resistor compensation network for the B model is included within the sensor housing.

The 432A/B is a waterproof sensor and is intended for use in measuring air and water temperatures. For air temperatures the 434A Vane Aspirated Shield or 442A naturally aspirated parallel plate shield should be used. Water temperatures can be measured by immersing the sensor directly in the liquid.

SPECIFICATIONS

432A

Maximum operating temp: -50°C to $+50^{\circ}\text{C}$
Storage temperature: -80°C to $+120^{\circ}\text{C}$
Maximum error from -20°C to $+50^{\circ}\text{C}$ is 0.1°C
Maximum error from -50°C to -20°C is 0.3°C

432B

Maximum operating temp: -50°C to $+50^{\circ}\text{C}$
Time Constant: 15 seconds
Storage temperature: 75°C maximum

Maximum error from -50°C to $+50^{\circ}\text{C}$ is 0.1°C

Size:

Sensor element: 6" in length x 0.5" diameter
Cable: 10' length submersable, w/rodent shield
Connector: 520-0086 connector
520-0091 cable clamp
HPN520-0092 Boot

Or Pigtail

Weight: 0.9 lbs. (including cable)

Fig. 7

430A Specifications

The Handar 430A Wind Speed Sensor is designed for remote and unattended applications where extremes in environmental conditions are encountered. Precision heavy-duty construction from aluminum and stainless steel ensure operation in high winds and heavy icing conditions. The sensor is finished with matt-black epoxy paint which provides de-icing in the presence of solar radiation.

The 430A uses a rotating magnetic field in proximity to a solid-state Hall Effect device to provide a pulse output proportional to wind speed. The Hall Effect Transducer provides stable operation over large temperature and voltage variations and consumes less than 2.0 MA current. The electrical characteristics of the 430A are ideal for remote solar and battery powered installations where low-current consumption is a necessity.

SENSOR TYPE	3-Cup Annemometer
CUP SIZE	2.130 Inches
CUP MATERIAL	Aluminum
MATERIAL HOUSING	Aluminum
FINISH	Black Epoxy Paint
TURNING RADIUS	3.920 Inches
WEIGHT	16 Ounces
TRANSDUCER TYPE	Hall Effect
Input Voltage	10-15 Volts
Current	2.0 MA @ 12.5V Typ
Output Voltage (10K Load)	10V - 7.0/.65 Typ
Pulse Type	15V - 11.5/.65 Typ
RANGE	0-150 mph
STARTING THRESHOLD	1 mph
ACCURACY	±.25 mph or 2%
DISTANCE CONSTANT	15 Feet
TEMPERATURE/OPERATING	-40°C to +70°C
ICE LOAD	2 Inches
OUTPUT FREQUENCY	
VELOCITY CONSTANT	0.279 Hz/mph
MATING CONNECTOR	MS 3106A 14S-6S
MOUNTING	1/2 Inch IPS Nipple

Fig. 8

APPENDIX B

COAL CREEK CANYON TSONDE 01/31/91 BEGIN=2059 TOP=2117 END=2125 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 01/31/91 BEGIN=2059 TOP=2117 END=2125 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 01/31/91

BEGIN=2202 TOP=2240 END=2244 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 01/31/91 BEGIN=2202 TOP=2240 END=2244 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 01/31/91 BEGIN=2301 TOP=2316 END=2317 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 01/31/91 BEGIN=2301 TOP=2316 END=2317 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 01/31/91 BEGIN=2358 TOP=0007 END=0021 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

01/31/91 BEGIN=2358 TOP=0007 END=0021 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/01/91

BEGIN=1806 TOP=1833 END=1845 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/01/91 BEGIN=1806 TOP=1833 END=1845 MST

— ASCENT
••••• DESCENT

COAL CREEK CANYON TSONDE 02/01/91 BEGIN=1859 TOP=1922 END=1932 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/01/91 BEGIN=1859 TOP=1922 END=1932 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/01/91 BEGIN=1959 TOP=2029 END=2041 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/01/91 BEGIN=1959 TOP=2029 END=2041 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/01/91

BEGIN=2101 TOP=2135 END=2145 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/01/91 BEGIN=2101 TOP=2135 END=2145 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/02/91 BEGIN=0008 TOP=0035 END=0046 MST

— ASCENT
*** DESCENT

COAL CREEK CANYON TSONDE

02/02/91 BEGIN=0008 TOP=0035 END=0046 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/02/91 BEGIN=0158 TOP=0209 END=0213 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/02/91 BEGIN=0158 TOP=0209 END=0213 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/03/91 BEGIN=2300 TOP=2320 END=2341 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/03/91 BEGIN=2300 TOP=2320 END=2341 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE

02/03/91

BEGIN=2359

TOP=0023

END=0049 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/03/91 BEGIN=2359 TOP=0023 END=0049 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=0104 TOP=0121 END=0138 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=0104 TOP=0121 END=0138 MST

— ASCENT
*** DESCENT

COAL CREEK CANYON

TSONDE 02/04/91

BEGIN=0205 TOP=0215 END=0222 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/04/91 BEGIN=0205 TOP=0215 END=0222 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/04/91

BEGIN=2110 TOP=2133 END=2154 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=2110 TOP=2133 END=2154 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=2206 TOP=2231 END=2254 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=2206 TOP=2231 END=2254 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=2259 TOP=2319 END=2338 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/04/91 BEGIN=2259 TOP=2319 END=2338 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/05/91 BEGIN=0000 TOP=0020 END=0041 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0000 TOP=0020 END=0041 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0056 TOP=0118 END=0142 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0056 TOP=0118 END=0142 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0157 TOP=0220 END=0245 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0157 TOP=0220 END=0245 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0301 TOP=0326 END=0353 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0301 TOP=0326 END=0353 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/05/91

BEGIN=0359 TOP=0416 END=0453 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/05/91 BEGIN=0359 TOP=0416 END=0453 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/06/91

BEGIN=1959 TOP=2005 END=2009 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/06/91 BEGIN=1959 TOP=2005 END=2009 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/06/91

BEGIN=2159 TOP=2221 END=2233 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/06/91 BEGIN=2159 TOP=2221 END=2233 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/06/91

BEGIN=2303 TOP=2324 END=2336 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/06/91 BEGIN=2303 TOP=2324 END=2336 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2359 TOP=0021 END=0032 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=2359 TOP=0021 END=0032 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE

02/07/91

BEGIN=0059

TOP=0117

END=0127 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=0059 TOP=0117 END=0127 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/07/91

BEGIN=0200 TOP=0219 END=0230 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=0200 TOP=0219 END=0230 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=0300 TOP=0322 END=0331 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=0300 TOP=0322 END=0331 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE

02/07/91

BEGIN=0400

TOP=0424

END=0436 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=0400 TOP=0424 END=0436 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE

02/07/91

BEGIN=0459

TOP=0517

END=0527 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=0459 TOP=0517 END=0527 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/07/91

BEGIN=2001 TOP=2016 END=2028 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2001 TOP=2016 END=2028 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2059 TOP=2112 END=2128 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2059 TOP=2112 END=2128 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/07/91

BEGIN=2159 TOP=2213 END=2227 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=2159 TOP=2213 END=2227 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2259 TOP=2318 END=2334 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2259 TOP=2318 END=2334 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/07/91 BEGIN=2359 TOP=0014 END=0030 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/07/91 BEGIN=2359 TOP=0014 END=0030 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/08/91 BEGIN=0059 TOP=0113 END=0128 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/08/91 BEGIN=0059 TOP=0113 END=0128 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/08/91 BEGIN=0159 TOP=0215 END=0232 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/08/91 BEGIN=0159 TOP=0215 END=0232 MST

— ASCENT
••••• DESCENT

COAL CREEK CANYON

TSONDE 02/08/91

BEGIN=0259 TOP=0311 END=0325 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/08/91 BEGIN=0259 TOP=0311 END=0325 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/08/91

BEGIN=0359 TOP=0413 END=0429 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE 02/08/91 BEGIN=0359 TOP=0413 END=0429 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON

TSONDE 02/08/91

BEGIN=0459 TOP=0510 END=0518 MST

— ASCENT
***** DESCENT

COAL CREEK CANYON TSONDE

02/08/91 BEGIN=0459 TOP=0510 END=0518 MST

— ASCENT
***** DESCENT

APPENDIX C

DATE 3-17-1977 RANGE-

TIME 437.3535 UTM 4412.897N ELE 77m (ASL) 5498.00

DATE	TIME	TIME	DBS	WIND	WIND	SIGMA	TEMP	DELTA	NET
	STRT	STOP	HT	SPEED	DIR	THETA		TEMP	RAD
			(m/AGL)	(m/s)	(deg)	(deg)	(deg C)	(deg C)	
910112	0	100	6.10	3.7	103.0	34.9	-1.3		
910112	0	100	17.68	4.5	104.0	18.7	-0.2	1.1	-50.4
910112	100	100	6.10	3.1	7.0	80.0	0.1		
910112	100	100	17.68	3.3	338.0	75.4	0.6	0.5	-49.2
910112	100	200	6.10	3.4	243.0	49.9	0.3		
910112	100	200	17.68	4.0	248.0	37.9	1.1	0.3	-38.5
910112	200	300	6.10	2.9	274.0	35.9	0.9		
910112	200	300	17.68	3.6	273.0	31.0	1.5	0.6	-40.2
910112	300	300	6.10	2.6	243.0	18.2	0.6		
910112	300	300	17.68	3.2	241.0	16.7	1.5	0.9	-40.3
910112	300	400	6.10	2.4	208.0	72.2	0.6		
910112	300	400	17.68	4.1	206.0	68.2	1.2	0.6	-45.8
910112	400	500	6.10	5.2	203.0	31.6	0.9		
910112	400	500	17.68	5.1	195.0	30.2	1.4	0.5	-52.1
910112	500	600	6.10	4.1	192.0	42.6	0.6		
910112	500	600	17.68	4.7	186.0	44.5	1.0	0.4	-43.6
910112	600	700	6.10	3.0	271.0	11.6	2.7		
910112	600	700	17.68	9.4	269.0	10.0	2.9	0.2	20.2
910112	700	800	6.10	10.4	276.0	13.9	3.0		
910112	700	800	17.68	12.1	271.0	12.3	3.3	0.3	35.2
910112	800	900	6.10	9.6	312.0	9.1	4.2		
910112	800	900	17.68	10.6	303.0	7.7	4.3	0.1	198.0
910112	900	1000	6.10	8.4	334.0	10.8	4.8		
910112	900	1000	17.68	9.2	323.0	9.8	4.9	0.1	243.3
910112	1000	1100	6.10	5.2	31.0	25.9	1.8		
910112	1000	1100	17.68	5.7	26.0	28.3	1.8	0.0	223.4
910112	1100	1200	6.10	1.9	31.0	38.9	1.8		
910112	1100	1200	17.68	2.3	30.0	33.0	1.8	0.0	152.4
910112	1200	1300	6.10	2.5	2.0	17.2	0.4		
910112	1200	1300	17.68	2.6	354.0	17.9	0.5	0.1	111.8
910112	1300	1400	6.10	2.5	20.0	11.2	-0.8		
910112	1300	1400	17.68	2.5	14.0	12.0	-0.8	0.0	36.2
910112	1400	1500	6.10	5.6	349.0	11.5	-1.5		
910112	1400	1500	17.68	6.4	339.0	11.0	-1.4	0.1	-10.9
910112	1500	1600	6.10	8.9	355.0	12.3	-4.1		
910112	1500	1600	17.68	10.0	345.0	6.9	-4.2	-0.1	-14.2
910112	1600	1700	6.10	8.4	8.0	10.8	-5.8		
910112	1600	1700	17.68	8.4	2.0	11.9	-5.9	-0.1	-6.5
910112	1700	1800	6.10	7.5	29.0	6.5	-7.9		
910112	1700	1800	17.68	8.1	25.0	5.8	-8.0	-0.1	-4.2
910112	1800	1900	6.10	6.2	26.0	9.2	-10.2		
910112	1800	1900	17.68	6.3	22.0	8.7	-10.3	-0.1	-0.7
910112	1900	2000	6.10	6.2	19.0	8.8	-12.2		
910112	1900	2000	17.68	6.2	15.0	9.4	-12.3	-0.1	0.1
910112	2000	2100	6.10	6.1	11.0	7.0	-13.5		
910112	2000	2100	17.68	5.6	6.0	7.8	-13.6	-0.1	0.0
910112	2100	2200	6.10	5.5	13.0	8.8	-14.2		
910112	2100	2200	17.68	5.2	8.0	10.5	-14.3	-0.1	0.3

SITE GASTLETT SAND-
 LMK 487.330E UTMV 4412.897N ELEV(m/ASL) 5468.00

DATE	TIME START	TIME STOP	DSB HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910129	0	100	6.10	4.1	29.0	9.7	-14.8		
910129	0	100	17.68	4.3	24.0	9.5	-15.0	-0.2	-1.2
910129	100	200	6.10	3.7	22.0	10.4	-16.3		
910129	100	200	17.68	3.8	19.0	10.7	-16.4	-0.1	-8.3
910129	200	300	6.10	1.4	38.0	14.2	-17.1		
910129	200	300	17.68	2.1	36.0	9.1	-17.1	0.0	-8.0
910129	300	400	6.10	2.5	32.0	12.5	-16.8		
910129	300	400	17.68	2.7	28.0	12.1	-17.0	-0.2	-1.1
910129	400	500	6.10	2.7	60.0	13.3	-17.5		
910129	400	500	17.68	3.1	56.0	14.3	-17.6	-0.1	0.3
910129	500	600	6.10	0.8	65.0	17.3	-18.0		
910129	500	600	17.68	1.2	70.0	9.5	-18.1	-0.1	-2.8
910129	600	700	6.10	0.0	59.0	21.9	-18.4		
910129	600	700	17.68	0.5	45.0	9.4	-18.4	0.0	-9.2
910129	700	800	6.10	0.2	141.0	81.3	-19.7		
910129	700	800	17.68	0.2	38.0	24.6	-18.9	0.8	-17.5
910129	800	900	6.10	0.1	249.0	27.8	-18.2		
910129	800	900	17.68	0.5	309.0	1.4	-17.0	1.2	-5.5
910129	900	1000	6.10	0.0	286.0	46.1	-12.7		
910129	900	1000	17.68	0.4	315.0	12.2	-13.6	-0.9	6.1
910129	1000	1100	6.10	0.2	319.0	26.3	-12.6		
910129	1000	1100	17.68	0.6	318.0	15.8	-12.3	0.3	15.8
910129	1100	1200	6.10	0.1	9.0	38.1	-9.9		
910129	1100	1200	17.68	0.6	359.0	42.7	-9.3	0.6	36.3
910129	1200	1300	6.10	0.1	9.0	14.2	-12.4		
910129	1200	1300	17.68	1.5	5.0	13.2	-11.6	0.8	44.4
910129	1300	1400	6.10	1.1	10.0	17.4	-12.2		
910129	1300	1400	17.68	1.1	4.0	6.3	-11.6	0.6	40.9
910129	1400	1500	6.10	0.0	14.0	19.4	-6.3		
910129	1400	1500	17.68	0.0	16.0	14.0	-4.6	2.2	19.0
910129	1500	1600	6.10	1.5	194.0	20.4	-10.0		
910129	1500	1600	17.68	2.0	181.0	14.8	-9.8	0.2	-9.0
910129	1600	1700	6.10	0.9	199.0	23.6	-10.1		
910129	1600	1700	17.68	1.5	183.0	23.3	-10.2	-0.1	-36.3
910129	1700	1800	6.10	1.1	236.0	19.8	-14.5		
910129	1700	1800	17.68	1.2	229.0	24.4	-12.6	1.9	-36.4
910129	1800	1900	6.10	0.8	233.0	38.2	-16.0		
910129	1800	1900	17.68	1.2	261.0	34.2	-13.3	2.7	-29.3
910129	1900	2000	6.10	0.3	197.0	58.0	-15.9		
910129	1900	2000	17.68	0.5	145.0	65.1	-14.7	1.2	-23.8
910129	2000	2100	6.10	0.8	237.0	41.0	-14.3		
910129	2000	2100	17.68	1.1	232.0	44.6	-12.6	1.7	-8.5
910129	2100	2200	6.10	0.9	154.0	85.4	-11.3		
910129	2100	2200	17.68	1.4	179.0	73.6	-9.9	1.4	-5.1
910129	2200	2300	6.10	0.9	234.0	85.9	-10.8		
910129	2200	2300	17.68	0.9	325.0	90.4	-7.9	2.9	-13.5
910129	2300	0	6.10	2.8	235.0	56.1	-3.6		
910129	2300	0	17.68	3.6	288.0	62.5	-2.2	1.4	-25.9

SITE BARTLETT RANCH-
 JTM 487.3513 JTM 4412.3574 ELEV(m) ABL 5483.00

DATE	TIME START	TIME STOP	SSS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910130	0	100	6.10	6.0	281.0	21.1	-1.2		
910130	0	100	17.68	7.6	278.0	16.9	-0.2	1.0	-47.5
910130	100	200	6.10	7.3	320.0	13.7	-1.0		
910130	100	200	17.68	8.6	310.0	19.0	0.0	1.0	-50.5
910130	200	300	6.10	2.4	137.0	45.9	-1.5		
910130	200	300	17.68	2.5	129.0	43.5	-0.5	0.9	-45.4
910130	300	400	6.10	2.7	90.0	92.6	-2.6		
910130	300	400	17.68	3.2	44.0	85.0	-1.7	0.9	-47.1
910130	400	500	6.10	2.8	317.0	63.9	-1.8		
910130	400	500	17.68	3.6	311.0	41.1	-0.9	0.9	-48.1
910130	500	600	6.10	3.2	257.0	41.1	-1.8		
910130	500	600	17.68	2.8	263.0	35.3	-0.5	1.3	-46.5
910130	600	700	6.10	4.3	299.0	30.1	-0.7		
910130	600	700	17.68	5.1	359.0	23.8	-0.2	0.5	-54.1
910130	700	800	6.10	7.5	283.0	10.8	-0.9		
910130	700	800	17.68	9.1	280.0	8.5	-0.3	0.6	-55.2
910130	800	900	6.10	8.5	281.0	22.6	0.7		
910130	800	900	17.68	10.2	276.0	23.6	1.3	0.6	-30.9
910130	900	1000	6.10	5.7	259.0	36.0	3.6		
910130	900	1000	17.68	6.5	255.0	33.3	3.7	0.1	14.2
910130	1000	1100	6.10	6.9	274.0	12.7	4.1		
910130	1000	1100	17.68	8.4	271.0	10.7	4.2	0.1	49.5
910130	1100	1200	6.10	5.8	289.0	64.8	5.9		
910130	1100	1200	17.68	6.5	279.0	66.7	6.0	0.1	77.7
910130	1200	1300	6.10	3.4	296.0	72.6	7.9		
910130	1200	1300	17.68	4.0	292.0	65.6	7.8	-0.1	108.8
910130	1300	1400	6.10	6.7	309.0	11.8	6.8		
910130	1300	1400	17.68	7.5	302.0	10.3	6.9	0.1	121.2
910130	1400	1500	6.10	7.6	287.0	15.7	7.9		
910130	1400	1500	17.68	8.4	281.0	13.9	8.0	0.1	95.9
910130	1500	1600	6.10	6.2	273.0	12.4	7.7		
910130	1500	1600	17.68	7.2	269.0	10.6	7.9	0.2	24.4
910130	1600	1700	6.10	5.8	280.0	11.2	5.9		
910130	1600	1700	17.68	7.0	278.0	9.1	6.7	0.8	-41.7
910130	1700	1800	6.10	7.6	279.0	10.7	5.2		
910130	1700	1800	17.68	9.1	276.0	9.9	5.9	0.7	-51.2
910130	1800	1900	6.10	7.6	286.0	12.8	5.5		
910130	1800	1900	17.68	8.7	281.0	10.7	6.2	0.7	-52.6
910130	1900	2000	6.10	5.3	294.0	18.1	5.2		
910130	1900	2000	17.68	6.2	288.0	16.6	6.2	1.0	-50.9
910130	2000	2100	6.10	7.4	264.0	10.4	5.4		
910130	2000	2100	17.68	9.0	260.0	9.4	6.1	0.7	-47.7
910130	2100	2200	6.10	10.1	265.0	8.9	6.2		
910130	2100	2200	17.68	11.7	261.0	7.3	6.7	0.5	-40.2
910130	2200	2300	6.10	5.9	263.0	14.1	6.4		
910130	2200	2300	17.68	7.0	261.0	13.0	6.9	0.5	-42.5
910130	2300	0	6.10	5.2	292.0	38.6	6.3		
910130	2300	0	17.68	6.0	285.0	32.3	7.1	0.8	-53.6

SITE SARTTLETT SAND-
 UTMX 487.351E UTM Y 1412.357N ELEV(m/AGL) 54-3.00

DATE	TIME START	TIME STOP	DIS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910201	0	100	6.10	8.2	192.0	11.3	9.3		
910201	0	100	17.68	10.2	286.0	9.2	11.2	1.5	-44.3
910201	100	200	6.10	8.5	280.0	11.7	9.3		
910201	100	200	17.68	10.5	276.0	9.5	11.0	1.2	-41.9
910201	200	300	6.10	7.4	269.0	10.5	9.5		
910201	200	300	17.68	9.1	264.0	9.2	10.3	0.9	-38.5
910201	300	400	6.10	7.1	253.0	10.2	9.3		
910201	300	400	17.68	8.5	251.0	9.5	10.2	0.4	-37.4
910201	400	500	6.10	4.9	254.0	20.9	9.7		
910201	400	500	17.68	5.3	259.0	15.2	10.2	0.5	-33.9
910201	500	600	6.10	2.4	272.0	90.4	9.1		
910201	500	600	17.68	4.3	273.0	82.2	9.7	0.6	-35.6
910201	600	700	6.10	2.8	220.0	93.1	9.4		
910201	600	700	17.68	3.0	137.0	95.7	9.9	0.5	-34.2
910201	700	800	6.10	4.0	275.0	14.4	9.5		
910201	700	800	17.68	5.1	272.0	12.1	10.7	1.2	-28.2
910201	800	900	6.10	2.0	74.0	75.4	7.9		
910201	800	900	17.68	2.6	18.0	69.5	9.0	1.1	-1.9
910201	900	1000	6.10	1.4	172.0	69.2	5.4		
910201	900	1000	17.68	2.0	127.0	54.4	6.3	0.9	44.2
910201	1000	1100	6.10	2.6	183.0	32.1	6.3		
910201	1000	1100	17.68	3.3	168.0	20.6	7.1	0.8	132.8
910201	1100	1200	6.10	2.0	174.0	46.4	9.4		
910201	1100	1200	17.68	2.9	161.0	39.3	9.8	0.4	191.4
910201	1200	1300	6.10	1.0	41.0	70.1	12.3		
910201	1200	1300	17.68	1.5	65.0	61.5	12.7	0.4	308.9
910201	1300	1400	6.10	1.9	167.0	17.8	15.5		
910201	1300	1400	17.68	2.4	159.0	13.9	15.4	-0.1	303.6
910201	1400	1500	6.10	2.4	86.0	77.8	14.7		
910201	1400	1500	17.68	2.9	90.0	77.8	14.8	0.1	206.1
910201	1500	1600	6.10	3.0	1.0	17.0	11.4		
910201	1500	1600	17.68	3.3	352.0	18.0	11.6	0.2	118.1
910201	1600	1700	6.10	3.0	319.0	11.0	8.7		
910201	1600	1700	17.68	4.2	313.0	7.4	9.5	0.8	-5.7
910201	1700	1800	6.10	2.2	275.0	26.9	5.4		
910201	1700	1800	17.68	4.0	293.0	10.9	7.5	2.1	-53.0
910201	1800	1900	6.10	1.8	247.0	12.6	4.0		
910201	1800	1900	17.68	2.8	272.0	16.8	6.1	2.1	-53.9
910201	1900	2000	6.10	1.9	245.0	12.0	3.9		
910201	1900	2000	17.68	2.3	258.0	9.6	4.8	0.9	-56.2
910201	2000	2100	6.10	2.3	244.0	12.4	3.8		
910201	2000	2100	17.68	3.1	256.0	10.5	4.9	1.1	-50.2
910201	2100	2200	6.10	1.9	248.0	16.6	3.7		
910201	2100	2200	17.68	3.0	259.0	10.2	5.0	1.3	-50.1
910201	2200	2300	6.10	0.8	213.0	20.4	2.4		
910201	2200	2300	17.68	1.9	235.0	16.0	4.0	1.6	-58.9
910201	2300	0	6.10	0.7	226.0	15.1	2.5		
910201	2300	0	17.68	1.5	237.0	16.4	4.4	1.9	-59.7

SITE BARTLETT RANCH
 UTMX 487.350E UTMX 4412.377N ELEV(m/ASL) 5463.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910101	0	100	6.10	0.4	230.0	33.4	-0.2		
910101	0	100	17.68	0.5	235.0	30.2	1.8	2.0	-60.2
910101	100	100	6.10	1.2	208.0	22.4	0.4		
910101	100	200	17.68	1.7	191.0	27.2	3.0	2.6	-57.2
910101	200	200	6.10	0.9	243.0	25.1	0.8		
910101	200	300	17.68	1.7	232.0	29.5	2.4	1.6	-52.2
910101	300	400	6.10	1.3	242.0	20.5	-0.8		
910101	400	400	17.68	1.3	237.0	16.6	2.0	2.3	-46.0
910101	400	500	6.10	1.5	240.0	11.5	0.6		
910101	500	500	17.68	1.9	258.0	11.1	3.3	2.7	-38.3
910202	500	600	6.10	1.6	236.0	10.6	0.2		
910202	600	600	17.68	1.4	264.0	14.5	3.1	2.9	-42.8
910202	600	700	6.10	1.3	239.0	27.3	-1.0		
910202	600	700	17.68	1.5	250.0	10.6	3.2	4.2	-49.5
910202	700	800	6.10	1.1	227.0	26.7	-0.3		
910202	700	800	17.68	1.0	240.0	16.3	3.3	3.6	-27.7
910202	800	900	6.10	0.5	222.0	43.0	2.6		
910202	800	900	17.68	0.6	227.0	10.9	5.3	2.7	40.2
910202	900	1000	6.10	0.0	185.0	70.9	8.2		
910202	900	1000	17.68	0.4	192.0	22.4	9.3	1.1	126.8
910202	1000	1100	6.10	0.6	189.0	18.9	9.3		
910202	1000	1100	17.68	1.0	180.0	10.3	9.8	0.5	256.0
910202	1100	1200	6.10	1.1	180.0	33.0	12.3		
910202	1100	1200	17.68	1.4	166.0	27.8	12.2	-0.1	349.4
910202	1200	1300	6.10	0.9	178.0	26.9	14.1		
910202	1200	1300	17.68	1.4	172.0	17.9	13.9	-0.2	359.3
910202	1300	1400	6.10	1.4	64.0	18.5	14.5		
910202	1300	1400	17.68	1.9	63.0	21.0	14.2	-0.3	320.0
910202	1400	1500	6.10	1.7	82.0	13.8	13.0		
910202	1400	1500	17.68	2.1	71.0	12.3	12.5	-0.5	228.6
910202	1500	1600	6.10	1.2	84.0	13.2	11.3		
910202	1500	1600	17.68	1.8	63.0	14.7	11.2	-0.1	115.7
910202	1600	1700	6.10	0.3	89.0	17.2	11.2		
910202	1600	1700	17.68	1.1	64.0	13.0	11.3	0.1	1.5
910202	1700	1800	6.10	1.3	243.0	41.6	5.1		
910202	1700	1800	17.68	1.6	274.0	58.1	7.4	2.3	-59.7
910202	1800	1900	6.10	1.8	232.0	11.3	3.9		
910202	1800	1900	17.68	2.1	252.0	11.9	6.5	2.6	-65.6
910202	1900	2000	6.10	1.1	210.0	70.5	2.6		
910202	1900	2000	17.68	1.5	201.0	25.9	6.2	3.6	-67.1
910202	2000	2100	6.10	1.5	231.0	32.7	1.1		
910202	2000	2100	17.68	1.5	232.0	41.4	4.5	3.4	-69.0
910202	2100	2200	6.10	1.1	250.0	38.5	0.2		
910202	2100	2200	17.68	1.2	243.0	58.5	3.5	3.3	-67.8
910202	2200	2300	6.10	1.6	232.0	17.8	1.0		
910202	2200	2300	17.68	1.8	243.0	20.2	5.1	4.1	-64.0
910202	2300	0	6.10	3.7	266.0	27.4	7.4		
910202	2300	0	17.68	4.9	269.0	17.5	9.2	1.8	-68.6

DATE 01/10/2011 TIME 1412.277N ELEV(m) AGL 5468.00

DATE	TIME START	TIME STOP	DBB HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAI
910203	0	100	6.10	2.5	254.0	42.6	6.3		
910203	0	100	17.68	3.4	255.0	41.2	8.9	2.1	-62.9
910203	100	200	6.10	0.5	221.0	74.4	3.7		
910203	100	200	17.68	1.2	208.0	70.2	5.3	2.6	-66.3
910203	200	300	6.10	1.0	224.0	53.2	1.5		
910203	200	300	17.68	1.2	227.0	62.3	4.2	2.7	-64.2
910203	300	400	6.10	0.5	169.0	73.3	2.1		
910203	300	400	17.68	1.3	104.0	70.0	5.3	3.2	-63.3
910203	400	500	6.10	0.5	230.0	13.5	0.8		
910203	400	500	17.68	0.5	259.0	39.0	2.8	2.0	-59.7
910203	500	600	6.10	0.8	238.0	59.0	0.8		
910203	500	600	17.68	1.3	228.0	61.8	3.3	2.5	-57.3
910203	600	700	6.10	1.2	230.0	35.2	1.9		
910203	600	700	17.68	0.8	247.0	13.8	4.5	2.6	-55.4
910203	700	800	6.10	1.6	214.0	34.2	5.3		
910203	700	800	17.68	2.0	214.0	25.2	7.3	2.0	-39.0
910203	800	900	6.10	1.5	90.0	24.4	6.2		
910203	800	900	17.68	2.2	71.0	21.6	7.6	1.4	68.2
910203	900	1000	6.10	1.3	93.0	39.9	8.4		
910203	900	1000	17.68	1.7	94.0	21.3	8.2	-0.2	198.6
910203	1000	1100	6.10	0.8	84.0	18.4	10.8		
910203	1000	1100	17.68	1.2	87.0	17.1	10.3	-0.5	300.2
910203	1100	1200	6.10	1.2	124.0	57.4	13.1		
910203	1100	1200	17.68	1.7	114.0	56.0	12.9	-0.2	343.9
910203	1200	1300	6.10	1.6	171.0	25.6	13.3		
910203	1200	1300	17.68	2.0	163.0	17.1	13.1	-0.2	323.7
910203	1200	1400	6.10	1.0	54.0	42.6	14.5		
910203	1300	1400	17.68	1.3	82.0	34.3	14.3	-0.2	242.3
910203	1400	1500	6.10	4.7	319.0	13.5	13.8		
910203	1400	1500	17.68	5.1	310.0	11.6	13.7	-0.1	257.4
910203	1500	1600	6.10	5.6	306.0	10.6	12.3		
910203	1500	1600	17.68	6.5	297.0	9.1	12.4	0.1	103.6
910203	1600	1700	6.10	5.1	306.0	7.1	9.8		
910203	1600	1700	17.68	6.4	299.0	5.0	10.3	0.5	10.4
910203	1700	1800	6.10	4.0	272.0	38.4	7.8		
910203	1700	1800	17.68	5.0	272.0	37.2	8.6	0.8	-45.1
910203	1800	1900	6.10	2.0	208.0	34.5	7.0		
910203	1800	1900	17.68	2.3	215.0	41.4	7.4	0.4	-52.6
910203	1900	2000	6.10	2.0	195.0	28.1	6.6		
910203	1900	2000	17.68	2.4	193.0	24.5	6.9	0.3	-53.9
910203	2000	2100	6.10	1.9	137.0	56.5	4.1		
910203	2000	2100	17.68	3.1	127.0	45.4	4.7	0.6	-46.0
910203	2100	2200	6.10	0.2	254.0	37.9	1.8		
910203	2100	2200	17.68	0.5	199.0	63.2	2.7	0.9	-39.1
910203	2200	2300	6.10	0.6	253.0	32.8	0.7		
910203	2200	2300	17.68	1.0	217.0	72.3	2.3	1.6	-36.4
910203	2300	0	6.10	1.6	248.0	12.9	0.3		
910203	2300	0	17.68	2.3	248.0	14.0	1.8	1.5	-43.0

SITE BAFTLETT FARM
 UTM 497.350E UTM 4412.897N ELEV(m/AGL) 5458.00

DATE	TIME START	TIME STOP	SSS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910204	0	100	6.10	1.7	239.0	12.7	-0.1		
910204	0	100	17.68	2.1	218.0	15.1	0.9	1.1	-42.0
910204	100	200	6.10	1.7	218.0	10.6	1.0		
910204	100	200	17.68	2.1	212.0	15.5	1.9	0.9	-33.5
910204	200	300	6.10	0.5	218.0	12.1	0.4		
910204	200	300	17.68	1.1	243.0	15.2	2.8	2.4	-50.4
910204	300	400	6.10	0.9	221.0	34.8	1.9		
910204	300	400	17.68	1.1	299.0	34.3	2.9	1.0	-51.9
910204	400	500	6.10	1.4	188.0	92.8	2.2		
910204	400	500	17.68	2.3	9.0	92.9	2.9	0.7	-52.5
910204	500	600	6.10	0.2	181.0	47.3	0.6		
910204	500	600	17.68	1.0	104.0	16.2	2.2	1.6	-52.5
910204	600	700	6.10	0.7	212.0	36.0	-1.0		
910204	600	700	17.68	1.3	169.0	25.2	1.1	2.1	-50.3
910204	700	800	6.10	0.8	225.0	15.5	-0.9		
910204	700	800	17.68	1.0	219.0	25.9	1.2	2.1	-31.4
910204	800	900	6.10	0.5	283.0	61.1	4.2		
910204	800	900	17.68	1.0	254.0	49.3	4.5	0.3	76.4
910204	900	1000	6.10	3.0	67.0	27.7	8.4		
910204	900	1000	17.68	0.6	52.0	27.4	8.1	-0.3	202.6
910204	1000	1100	6.10	1.0	178.0	29.1	9.3		
910204	1000	1100	17.68	1.4	162.0	35.5	9.2	-0.1	296.4
910204	1100	1200	6.10	2.0	81.0	68.7	9.4		
910204	1100	1200	17.68	2.3	82.0	67.8	9.2	-0.2	348.1
910204	1200	1200	6.10	3.2	48.0	10.3	8.7		
910204	1200	1200	17.68	3.5	44.0	9.3	8.4	-0.3	349.4
910204	1300	1400	6.10	3.3	27.0	21.6	8.8		
910204	1300	1400	17.68	3.5	23.0	21.4	8.5	-0.3	310.5
910204	1400	1500	6.10	3.3	14.0	11.8	8.4		
910204	1400	1500	17.68	3.2	10.0	13.5	8.4	0.0	230.1
910204	1500	1600	6.10	3.3	8.0	9.1	8.3		
910204	1500	1600	17.68	3.2	3.0	11.5	8.4	0.1	121.1
910204	1600	1700	6.10	2.2	347.0	10.3	7.5		
910204	1600	1700	17.68	2.8	338.0	9.0	7.6	0.1	8.7
910204	1700	1800	6.10	1.2	260.0	34.6	4.0		
910204	1700	1800	17.68	1.8	280.0	32.9	4.5	0.5	-50.5
910204	1800	1900	6.10	1.3	237.0	10.1	1.0		
910204	1800	1900	17.68	1.7	254.0	8.8	2.6	1.6	-53.3
910204	1900	2000	6.10	0.7	235.0	9.1	-0.4		
910204	1900	2000	17.68	0.8	225.0	8.9	3.1	3.5	-53.2
910204	2000	2100	6.10	0.9	242.0	12.8	-0.7		
910204	2000	2100	17.68	0.9	256.0	13.5	1.9	2.6	-52.5
910204	2100	2200	6.10	1.4	236.0	6.7	-1.3		
910204	2100	2200	17.68	1.2	254.0	5.9	1.6	2.9	-50.9
910204	2200	2300	6.10	1.7	234.0	6.6	-1.6		
910204	2200	2300	17.68	1.5	251.0	6.4	1.6	3.2	-51.7
910204	2300	0	6.10	0.7	224.0	14.2	-1.8		
910204	2300	0	17.68	1.1	225.0	16.3	0.1	1.9	-55.1

STATION NAME: 4810, 3536, 0412, 997N ELEV (M/ASL): 5453.00

DATE	TIME	TIME	DES	WIND	WIND	STORM	TEMP	DELTA	NET
	LEFT	STOP	HT	DIR	DIR	FT	(DEG C)	TEMP	WIND
			(M/ASL)	(M/S)	(DEG)	(DEG)		(DEG C)	(DEG C)
910208	1100	1200	6.10	0.6	33.0	10.2	12.1	-0.3	168.3
910208	1100	1200	17.68	1.0	33.0	11.4	7.8	-0.3	168.3
910208	1100	1200	6.10	2.1	34.0	17.3	11.0	-0.3	226.4
910208	1100	1200	17.68	2.1	35.0	23.3	10.5	-0.3	226.4
910208	1100	1200	6.10	1.3	35.0	16.6	11.0	-0.4	193.5
910208	1100	1200	17.68	2.1	35.0	19.7	11.1	-0.4	193.5
910208	1100	1200	6.10	2.1	39.0	17.4	10.9	-0.2	197.9
910208	1100	1200	17.68	2.1	41.0	15.8	10.9	-0.2	197.9
910208	1100	1200	6.10	2.1	7.0	8.1	10.2	0.0	55.5
910208	1100	1200	17.68	2.1	11.0	8.3	9.2	0.0	55.5
910208	1100	1200	6.10	2.1	7.0	6.5	9.4	0.2	24.0
910208	1100	1200	17.68	2.1	27.0	39.0	5.7	1.1	-27.7
910208	1100	1200	6.10	1.0	341.0	15.4	6.8	1.1	-27.7
910208	1100	1200	17.68	0.0	263.0	16.4	5.6	1.5	-33.8
910208	1100	1200	6.10	1.5	310.0	3.8	5.1	1.5	-33.8
910208	1100	1200	17.68	2.4	306.0	7.6	4.5	1.3	-18.7
910208	1100	1200	6.10	3.8	309.0	5.4	5.8	1.3	-18.7
910208	1100	1200	17.68	2.5	317.0	9.8	5.5	1.2	-17.6
910208	1100	1200	6.10	4.1	315.0	7.2	6.7	1.2	-17.6
910208	1100	1200	17.68	1.9	329.0	10.2	5.2	1.5	-14.9
910208	1100	1200	6.10	3.4	331.0	7.0	6.7	1.5	-14.9
910208	1100	1200	17.68	3.5	336.0	11.0	5.6	0.9	-29.9
910208	1100	1200	6.10	3.1	329.0	8.6	5.0	0.9	-29.9
910208	1100	1200	17.68	3.7	336.0	7.9	5.0	1.3	-46.1
910208	1100	1200	6.10	5.4	330.0	6.4	6.3	1.3	-46.1

SITE JIMB RANCH-
 .TMX 473.214E UTMV 4415.842N ELEV(m) ABL 6639.00

DATE	TIME START	TIME STOP	DBE HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910131	1400	1500	6.10	3.9	293.0	52.1	13.5		
910131	1400	1500	17.68	4.4	285.0	49.6	13.1	-0.4	228.4
910131	1500	1600	6.10	4.4	301.0	22.4	12.4		
910131	1500	1600	17.68	5.4	293.0	24.5	12.2	-0.2	111.8
910131	1600	1700	6.10	5.1	301.0	12.8	10.9		
910131	1600	1700	17.68	5.2	296.0	10.3	10.3	-0.1	-34.5
910131	1700	1800	6.10	5.2	284.0	3.8	9.5		
910131	1700	1800	17.68	5.2	281.0	7.9	9.6	0.1	-82.5
910131	1800	1900	6.10	5.0	283.0	8.3	10.2		
910131	1800	1900	17.68	5.0	273.0	8.6	10.2	0.0	-89.4
910131	1900	2000	6.10	6.5	283.0	10.7	9.5		
910131	1900	2000	17.68	6.8	279.0	9.8	9.6	0.1	-91.1
910131	2000	2100	6.10	5.1	289.0	9.3	8.9		
910131	2000	2100	17.68	5.3	286.0	9.9	9.2	0.3	-83.7
910131	2100	2200	6.10	4.2	286.0	12.2	8.8		
910131	2100	2200	17.68	4.4	283.0	13.0	9.1	0.3	-76.6
910131	2200	2300	6.10	3.3	285.0	20.7	8.4		
910131	2200	2300	17.68	3.7	280.0	22.1	9.0	0.6	-67.4
910131	2300	0	6.10	4.4	268.0	18.8	9.2		
910131	2300	0	17.68	4.9	261.0	18.6	9.2	0.0	-72.8

SITE TIME 0400-
 JTM: 473.115 JTM: 4415.542N ELEV(m.ASL): 8653.00

DATE	TIME START	TIME STOP	DES HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910201	0	100	6.10	4.5	261.0	17.9	8.3		
910201	0	100	17.68	5.1	255.0	18.2	8.7	-0.1	-72.4
910201	100	200	6.10	3.5	275.0	29.4	8.5		
910201	100	200	17.68	4.1	269.0	26.4	8.4	-0.1	-68.3
910201	100	300	6.10	5.3	275.0	24.0	8.3		
910201	100	300	17.68	5.9	269.0	22.5	8.7	-0.1	-68.1
910201	300	400	6.10	8.0	274.0	11.8	9.1		
910201	300	400	17.68	8.4	269.0	11.6	9.0	-0.1	-63.9
910201	400	500	6.10	9.8	273.0	10.1	9.6		
910201	400	500	17.68	10.1	272.0	9.3	9.4	-0.2	-58.7
910201	500	600	6.10	10.3	281.0	11.0	9.7		
910201	500	600	17.68	10.7	276.0	10.2	9.5	-0.2	-61.5
910201	600	700	6.10	7.1	295.0	10.9	10.1		
910201	600	700	17.68	8.1	289.0	10.7	10.0	-0.1	-59.2
910201	700	800	6.10	8.7	283.0	11.7	10.2		
910201	700	800	17.68	8.9	278.0	11.1	10.1	-0.1	-51.4
910201	800	900	6.10	5.8	294.0	16.1	10.4		
910201	800	900	17.68	6.6	289.0	15.6	10.3	-0.1	-26.1
910201	900	1000	6.10	6.4	287.0	13.3	10.6		
910201	900	1000	17.68	6.9	281.0	12.9	10.5	-0.1	15.0
910201	1000	1100	6.10	3.8	283.0	21.0	12.1		
910201	1000	1100	17.68	4.2	278.0	21.5	11.9	-0.2	99.8
910201	1100	1200	6.10	2.5	23.0	81.5	13.3		
910201	1100	1200	17.68	2.8	14.0	80.7	13.0	-0.3	147.6
910201	1200	1300	6.10	2.6	198.0	67.1	13.2		
910201	1200	1300	17.68	3.0	188.0	64.3	12.9	-0.3	182.6
910201	1300	1400	6.10	2.0	156.0	29.9	13.2		
910201	1300	1400	17.68	2.4	154.0	28.7	12.7	-0.5	221.2
910201	1400	1500	6.10	1.7	356.0	57.1	13.0		
910201	1400	1500	17.68	2.0	349.0	46.9	12.4	-0.6	143.4
910201	1500	1600	6.10	2.0	352.0	30.1	11.4		
910201	1500	1600	17.68	2.3	350.0	24.1	10.8	-0.6	63.4
910201	1600	1700	6.10	1.8	288.0	9.9	9.3		
910201	1600	1700	17.68	1.7	299.0	15.6	9.4	0.1	-57.5
910201	1700	1800	6.10	2.3	284.0	7.6	8.5		
910201	1700	1800	17.68	2.1	290.0	11.3	9.0	0.5	-71.9
910201	1800	1900	6.10	2.5	271.0	9.8	9.4		
910201	1800	1900	17.68	2.2	280.0	11.9	9.8	0.4	-73.4
910201	1900	2000	6.10	2.7	271.0	10.8	9.4		
910201	1900	2000	17.68	2.3	272.0	15.5	9.8	0.4	-71.1
910201	2000	2100	6.10	3.6	279.0	8.2	8.3		
910201	2000	2100	17.68	3.9	280.0	5.8	8.9	0.6	-65.0
910201	2100	2200	6.10	3.6	271.0	7.7	8.6		
910201	2100	2200	17.68	3.8	276.0	6.3	9.2	0.6	-64.0
910201	2200	2300	6.10	3.9	265.0	5.2	9.1		
910201	2200	2300	17.68	3.8	269.0	8.4	9.8	0.7	-72.8
910201	2300	0	6.10	1.6	246.0	24.7	9.2		
910201	2300	0	17.68	0.8	230.0	62.7	9.7	0.5	-75.3

SITE JIMS RANCH
 UTMX 473.214E UTM Y 4416.542N ELEV(m/ASL) 6658.00

DATE	TIME START	TIME STOP	SBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910201	0	100	6.10	1.6	233.0	16.2	3.2		
910201	0	100	17.68	0.7	206.0	43.6	3.2	0.1	-79.1
910201	100	200	6.10	1.6	233.0	8.9	3.5		
910201	100	200	17.68	0.6	206.0	22.1	3.5	0.0	-77.4
910201	200	300	6.10	1.7	273.0	35.3	7.2		
910201	200	300	17.68	1.1	273.0	53.4	3.2	1.0	-72.6
910201	300	400	6.10	1.1	255.0	29.0	5.9		
910201	300	400	17.68	0.8	247.0	73.1	6.9	1.0	-68.1
910201	400	500	6.10	0.9	256.0	30.1	6.5		
910201	400	500	17.68	0.2	288.0	64.7	6.9	0.3	-59.5
910201	500	600	6.10	0.9	250.0	22.1	7.3		
910201	500	600	17.68	0.0	257.0	54.0	7.4	0.1	-61.6
910201	600	700	6.10	1.4	249.0	38.1	8.6		
910201	600	700	17.68	1.1	230.0	76.6	8.9	0.3	-69.4
910201	700	800	6.10	3.7	281.0	59.1	10.9		
910201	700	800	17.68	4.4	277.0	56.4	11.2	0.3	-59.3
910201	800	900	6.10	4.2	306.0	51.2	11.4		
910201	800	900	17.68	5.2	298.0	45.5	11.5	0.1	-18.5
910201	900	1000	6.10	3.7	305.0	15.6	13.5		
910201	900	1000	17.68	4.7	300.0	14.2	13.3	-0.2	90.1
910201	1000	1100	6.10	2.0	121.0	74.8	13.8		
910201	1000	1100	17.68	2.3	127.0	80.1	13.6	-0.2	240.0
910201	1100	1200	6.10	2.4	172.0	20.2	13.6		
910201	1100	1200	17.68	2.7	168.0	17.1	13.1	-0.5	284.7
910201	1200	1300	6.10	2.2	131.0	28.1	15.0		
910201	1200	1300	17.68	2.4	131.0	25.5	14.1	-0.9	315.6
910201	1300	1400	6.10	2.0	73.0	43.1	14.5		
910201	1300	1400	17.68	2.2	67.0	46.7	13.4	-1.1	270.4
910201	1400	1500	6.10	1.0	101.0	40.3	15.2		
910201	1400	1500	17.68	1.1	108.0	45.8	14.7	-0.5	180.8
910201	1500	1600	6.10	1.1	107.0	67.5	13.0		
910201	1500	1600	17.68	1.0	112.0	73.2	12.7	-0.3	45.4
910201	1600	1700	6.10	1.5	278.0	41.1	10.1		
910201	1600	1700	17.68	1.5	271.0	67.5	10.7	0.6	-77.7
910201	1700	1800	6.10	1.5	260.0	75.8	10.0		
910201	1700	1800	17.68	1.9	242.0	97.6	10.6	0.6	-93.1
910201	1800	1900	6.10	4.9	299.0	20.0	11.1		
910201	1800	1900	17.68	6.2	294.0	21.9	11.2	0.1	-102.5
910201	1900	2000	6.10	5.7	294.0	41.2	11.4		
910201	1900	2000	17.68	6.8	289.0	36.5	11.3	-0.1	-110.6
910201	2000	2100	6.10	5.7	294.0	17.3	10.8		
910201	2000	2100	17.68	6.7	289.0	15.5	10.8	0.0	-105.7
910201	2100	2200	6.10	5.9	297.0	11.7	10.0		
910201	2100	2200	17.68	7.1	291.0	10.7	10.0	0.0	-102.4
910201	2200	2300	6.10	8.3	292.0	14.3	9.9		
910201	2200	2300	17.68	9.2	287.0	13.8	9.8	-0.1	-105.7
910201	2300	0	6.10	10.1	288.0	14.1	10.2		
910201	2300	0	17.68	10.9	283.0	13.3	10.0	-0.2	-111.7

FILE 1005 2000-
 STATION 475.00000-0000 44:5.542N ELEV(m) 5652.00

DATE	TIME	TIME STOP	DEG HT	WIND SPEED	WIND DIR	SEA AREA	TEMP	DEPTH	REF
			(M/AGL)	(M/S)	(DEG)	(DEG)	(DEG C)	(DEG C)	(M)
910203	1000		6.10	8.5	285.0	11.8	10.5	-0.2	-110.2
910203	1000		17.58	9.9	286.0	11.8	10.3	-0.2	-110.2
910203	1000		6.10	6.9	286.0	11.8	10.1	-0.1	-104.5
910203	1000		17.58	6.3	285.0	11.7	10.0	-0.1	-104.5
910203	1000		6.10	7.4	285.0	11.7	9.4	-0.1	-100.7
910203	1000		17.58	6.3	284.0	10.8	9.2	-0.1	-100.7
910203	1000		6.10	7.3	287.0	10.0	9.0	-0.1	-101.5
910203	1000		17.58	3.7	282.0	8.9	8.7	-0.1	-101.5
910203	1000		6.10	9.1	284.0	10.5	8.9	-0.1	-101.5
910203	1000		17.58	10.1	289.0	9.8	8.9	-0.1	-101.5
910203	1000		6.10	3.4	284.0	11.0	8.4	-0.1	-101.5
910203	1000		17.58	3.0	285.0	10.2	8.3	-0.1	-101.5
910203	1000		6.10	3.3	281.0	13.0	8.2	-0.1	-99.4
910203	1000		17.58	9.1	285.0	12.8	8.1	-0.1	-99.4
910203	1000		6.10	8.5	287.0	13.1	8.3	-0.2	-84.3
910203	1000		17.58	9.0	281.0	12.3	8.1	-0.2	-84.3
910203	1000		6.10	6.8	287.0	15.1	9.4	-0.3	27.2
910203	1000		17.68	7.4	281.0	15.8	9.1	-0.3	27.2
910203	1000		6.10	2.9	281.0	95.4	10.9	-0.5	147.2
910203	1000		17.68	3.2	211.0	96.2	10.3	-0.5	147.2
910203	1000		6.10	6.7	287.0	18.5	10.5	-0.5	255.6
910203	1000		17.68	7.3	282.0	17.2	10.0	-0.5	255.6
910203	1100		6.10	4.9	289.0	15.4	11.3	-0.5	261.0
910203	1100		17.68	5.4	284.0	15.2	10.8	-0.5	261.0
910203	1200		6.10	4.0	288.0	14.8	11.6	-0.5	203.3
910203	1200		17.68	4.4	283.0	13.9	11.1	-0.5	203.3
910203	1200		6.10	5.9	290.0	13.8	11.0	-0.4	203.3
910203	1200		17.68	6.5	285.0	13.2	10.6	-0.4	203.3
910203	1400		6.10	6.7	285.0	13.7	10.9	-0.4	198.9
910203	1400		17.68	7.1	281.0	12.8	10.5	-0.4	198.9
910203	1500		6.10	8.6	286.0	12.1	9.5	-0.3	55.6
910203	1500		17.68	9.1	281.0	11.9	9.2	-0.3	55.6
910203	1600		6.10	9.3	291.0	11.9	8.3	-0.3	-44.0
910203	1600		17.68	10.1	286.0	11.4	8.0	-0.3	-44.0
910203	1700		6.10	8.1	284.0	13.1	7.5	-0.2	-74.7
910203	1700		17.68	8.5	280.0	12.5	7.3	-0.2	-74.7
910203	1800		6.10	6.3	288.0	13.0	6.9	-0.2	-80.7
910203	1800		17.68	6.8	283.0	13.0	6.7	-0.2	-80.7
910203	1900		6.10	7.2	293.0	10.6	6.5	-0.2	-79.3
910203	1900		17.68	7.8	288.0	9.5	6.3	-0.2	-79.3
910203	2000		6.10	4.7	293.0	52.6	5.9	-0.2	-64.6
910203	2000		17.68	5.1	291.0	50.8	5.7	-0.2	-64.6
910203	2100		6.10	1.7	229.0	53.4	3.2	-0.1	-55.0
910203	2100		17.68	1.8	205.0	63.3	3.3	-0.1	-55.0
910203	2200		6.10	1.2	249.0	40.3	2.3	-0.2	-54.8
910203	2200		17.68	1.0	221.0	71.3	2.5	-0.2	-54.8
910203	2300		6.10	1.9	253.0	18.4	2.8	-0.0	-57.2
910203	2300		17.68	1.3	250.0	31.0	2.8	-0.0	-57.2

DATE: 11-11-1974
 TIME: 14:34 IN
 ELEV (M/ASL): 6529.00

DATE	TIME	TIME	DEP	WIND	WIND	FORMA	TEMP	DELTA	NET
	HT	HT		SPEED	DIR	THETA		TEMP	RAD
		(M/45GL)		(M/3)	(DEG)	(DEG)	(DEG C)	(DEG C)	
910204	0	100	6.10	2.0	267.0	31.5	0.3		
910204	0	100	17.68	2.1	264.0	29.5	0.2	-57.6	
910204	0	200	6.10	4.0	264.0	29.5	4.7		
910204	0	200	17.68	5.0	276.0	29.5	4.6	-0.1	-65.1
910204	0	200	6.10	6.7	261.0	10.3	3.0		
910204	0	200	17.68	4.0	275.0	9.6	4.9	-0.2	-74.1
910204	0	200	6.10	7.9	270.0	10.9	4.7		
910204	0	200	17.68	8.0	270.0	9.9	4.3	-0.2	-77.7
910204	0	200	6.10	8.0	278.0	12.2	4.3		
910204	0	200	17.68	8.5	275.0	11.7	4.3	-0.2	-77.3
910204	0	200	6.10	8.8	276.0	10.0	4.3		
910204	0	200	17.68	7.1	270.0	10.0	4.2	-0.3	-78.7
910204	0	200	6.10	5.5	271.0	9.9	3.9		
910204	0	200	17.68	4.0	265.0	10.1	3.9	-0.3	-73.6
910204	0	200	6.10	0.9	178.0	84.5	3.2	0.0	
910204	0	200	17.68	1.0	107.0	93.9	3.4	0.2	-55.5
910204	0	200	6.10	1.1	154.0	17.5	5.6		
910204	0	200	17.68	1.2	153.0	17.5	5.3	-0.3	35.5
910204	0	200	6.10	1.2	101.0	28.9	7.4		
910204	0	200	17.68	1.3	95.0	35.4	7.0	-0.4	150.6
910204	0	200	6.10	2.2	114.0	25.3	7.9		
910204	0	200	17.68	2.4	111.0	24.3	7.2	-0.7	243.3
910204	0	200	6.10	2.7	81.0	51.8	7.8		
910204	0	200	17.68	3.0	77.0	55.9	6.9	-0.9	296.9
910204	0	200	6.10	1.6	39.0	32.6	7.7		
910204	0	200	17.68	1.8	26.0	26.9	6.1	-1.6	294.6
910204	0	200	6.10	1.5	52.0	23.5	8.3		
910204	0	200	17.68	1.6	39.0	24.5	6.8	-1.5	253.6
910204	0	200	6.10	1.9	55.0	19.2	7.8		
910204	0	200	17.68	2.1	45.0	18.6	6.7	-1.1	181.2
910204	0	200	6.10	1.1	19.0	31.7	7.9		
910204	0	200	17.68	1.3	12.0	29.2	6.9	-1.0	61.8
910204	0	200	6.10	1.1	262.0	26.4	4.5		
910204	0	200	17.68	0.5	267.0	28.5	4.7	0.2	-63.8
910204	0	200	6.10	1.1	260.0	22.5	3.6		
910204	0	200	17.68	0.8	250.0	40.7	3.8	0.2	-71.6
910204	0	200	6.10	1.7	240.0	10.1	4.7		
910204	0	200	17.68	2.3	219.0	10.7	5.0	0.3	-73.7
910204	0	200	6.10	0.9	261.0	33.9	3.6		
910204	0	200	17.68	1.2	249.0	52.6	4.0	0.4	-72.0
910204	0	200	6.10	1.9	271.0	20.8	3.4		
910204	0	200	17.68	1.8	272.0	35.4	3.6	0.2	-72.1
910204	0	200	6.10	1.6	264.0	14.6	4.0		
910204	0	200	17.68	1.1	270.0	15.0	3.9	-0.1	-71.2
910204	0	200	6.10	1.3	276.0	9.4	3.9		
910204	0	200	17.68	0.8	283.0	10.4	3.7	-0.2	-71.1
910204	0	200	6.10	1.1	286.0	8.4	3.1		
910204	0	200	17.68	0.7	316.0	15.3	3.3	0.2	-72.8

SITE NAME RANCO-
 UTMX 473.114E UTMN 4416.542N ELEV(M/ASL) 6658.00

DATE	TIME START	TIME STOP	DBE HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAI
910215	0	100	6.10	1.3	263.0	22.3	4.3		
910215	0	100	17.68	1.1	261.0	11.4	4.3	0.0	-73.6
910215	100	200	6.10	0.9	261.0	35.7	3.7		
910215	100	200	17.68	0.2	262.0	58.9	3.3	-0.4	-75.6
910215	200	300	6.10	1.2	267.0	24.1	3.1		
910215	200	300	17.68	0.2	260.0	48.4	2.8	-0.3	-74.8
910215	300	400	6.10	1.3	274.0	19.2	4.0		
910215	300	400	17.68	1.4	284.0	37.7	4.2	0.2	-74.7
910215	400	500	6.10	1.4	262.0	31.0	3.6		
910215	400	500	17.68	1.5	231.0	25.3	5.1	1.5	-74.3
910215	500	600	6.10	2.6	236.0	5.7	4.4		
910215	500	600	17.68	2.3	296.0	9.6	5.1	0.7	-74.6
910215	600	700	6.10	1.8	252.0	29.8	5.7		
910215	600	700	17.68	1.2	247.0	52.4	5.7	0.0	-73.6
910215	700	800	6.10	0.5	279.0	12.2	6.0		
910215	700	800	17.68	0.2	291.0	37.7	6.1	0.1	-60.7
910215	800	900	6.10	0.4	58.0	95.4	9.4		
910215	800	900	17.68	0.0	51.0	82.8	9.7	0.3	39.2
910215	900	1000	6.10	1.1	145.0	30.4	10.7		
910215	900	1000	17.68	1.2	146.0	32.1	10.3	-0.4	159.5
910215	1000	1100	6.10	2.5	153.0	15.3	10.8		
910215	1000	1100	17.68	2.9	152.0	12.5	10.1	-0.7	254.8
910215	1100	1200	6.10	3.6	149.0	15.5	10.8		
910215	1100	1200	17.68	4.2	148.0	12.1	10.0	-0.8	310.7
910215	1200	1300	6.10	4.2	140.0	13.1	11.2		
910215	1200	1300	17.68	4.3	140.0	10.9	10.1	-1.1	319.9
910215	1300	1400	6.10	3.7	158.0	14.7	11.8		
910215	1300	1400	17.68	4.4	156.0	11.3	10.8	-1.0	281.0
910215	1400	1500	6.10	3.1	152.0	14.4	12.4		
910215	1400	1500	17.68	3.7	151.0	11.3	11.7	-0.7	199.4
910215	1500	1600	6.10	2.4	146.0	15.6	12.4		
910215	1500	1600	17.68	2.9	145.0	12.5	11.8	-0.6	76.4
910215	1600	1700	6.10	2.1	234.0	7.1	9.7		
910215	1600	1700	17.68	2.1	205.0	9.1	9.9	0.2	-68.4
910215	1700	1800	6.10	2.7	242.0	4.8	9.1		
910215	1700	1800	17.68	2.6	217.0	6.6	9.6	0.5	-75.4
910215	1800	1900	6.10	1.9	255.0	27.2	8.6		
910215	1800	1900	17.68	1.6	233.0	36.6	9.1	0.5	-73.5
910215	1900	2000	6.10	1.1	258.0	19.9	7.2		
910215	1900	2000	17.68	0.4	301.0	26.7	7.0	-0.2	-69.5
910215	2000	2100	6.10	1.2	258.0	19.9	6.9		
910215	2000	2100	17.68	0.7	270.0	28.8	7.3	0.4	-67.5
910215	2100	2200	6.10	1.4	258.0	13.7	7.6		
910215	2100	2200	17.68	0.8	261.0	16.4	7.4	-0.2	-64.6
910215	2200	2300	6.10	1.7	268.0	18.4	7.6		
910215	2200	2300	17.68	0.9	264.0	30.0	7.5	-0.1	-64.2
910215	2300	0	6.10	1.2	262.0	28.9	6.8		
910215	2300	0	17.68	0.5	248.0	48.1	6.8	0.0	-64.1

SITE TIME 3441-
 JTM: 473.114E JTM: 1416.542N ELEV: m/AGL 6531.00

DATE	TIME START	TIME STOP	CSS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR deg.	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910206	0	100	6.10	1.5	289.0	14.7	5.3		
910206	0	100	17.68	1.2	309.0	22.0	5.4	0.6	-64.1
910206	100	200	6.10	2.1	193.0	18.1	7.3		
910206	100	200	17.68	1.7	193.0	24.9	7.7	0.4	-62.5
910206	100	300	6.10	1.4	254.0	42.2	5.9		
910206	100	300	17.68	1.2	257.0	30.9	7.0	0.2	-62.9
910206	200	400	6.10	1.2	280.0	34.5	5.1		
910206	200	400	17.68	1.0	301.0	64.0	8.5	0.4	-61.7
910206	400	500	6.10	1.8	300.0	14.8	6.7		
910206	400	500	17.68	2.1	316.0	32.8	7.3	0.6	-61.3
910206	500	600	6.10	1.2	298.0	48.8	4.9		
910206	500	600	17.68	1.5	331.0	59.1	5.2	0.4	-62.1
910206	600	700	6.10	1.5	302.0	22.7	4.9		
910206	600	700	17.68	1.5	322.0	31.9	4.8	0.3	-62.7
910206	700	800	6.10	0.5	316.0	30.0	4.5		
910206	700	800	17.68	0.5	346.0	44.7	4.4	-0.1	-50.7
910206	800	900	6.10	1.5	17.0	42.3	6.1		
910206	800	900	17.68	1.7	4.0	44.1	5.4	-0.7	49.6
910206	900	1000	6.10	2.8	20.0	15.6	5.8		
910206	900	1000	17.68	3.3	14.0	12.0	4.8	-1.0	149.1
910206	1000	1100	6.10	3.2	24.0	19.4	5.5		
910206	1000	1100	17.68	3.7	18.0	16.4	4.6	-0.9	191.2

SITE 111111 111111
 STATION 4711.1111 0711 1111.1111 ELEV(m/ASL) 6574.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910129	0	100	6.10	1.4	105.0	30.2	-15.3		
910129	0	100	17.68	1.3	95.0	70.9	-15.3	0.1	-7.5
910129	100	200	6.10	1.5	115.0	51.5	-15.3		
910129	100	200	17.68	1.3	105.0	54.2	-15.3	0.1	-15.6
910129	200	300	6.10	2.8	108.0	22.1	-15.2		
910129	200	300	17.68	1.1	101.0	25.4	-15.0	0.2	-11.5
910129	300	400	6.10	1.3	124.0	37.9	-15.1		
910129	300	400	17.68	1.1	120.0	59.7	-15.0	0.1	-8.0
910129	400	500	6.10	1.3	97.0	28.2	-15.5		
910129	400	500	17.68	1.5	95.0	26.7	-15.4	0.1	-7.5
910129	500	600	6.10	0.8	90.0	21.7	-20.1		
910129	500	600	17.68	1.1	98.0	22.0	-20.0	0.1	-11.4
910129	600	700	6.10	0.0	112.0	29.6	-20.7		
910129	600	700	17.68	0.0	113.0	28.6	-20.5	0.2	-14.7
910129	700	800	6.10	0.4	290.0	11.3	-21.6		
910129	700	800	17.68	0.7	291.0	15.0	-20.9	0.7	-30.0
910129	800	900	6.10	0.3	320.0	56.3	-18.5		
910129	800	900	17.68	0.5	320.0	75.9	-18.9	-0.4	-64.1
910129	900	1000	6.10	1.0	99.0	26.8	-16.0		
910129	900	1000	17.68	1.0	108.0	23.1	-16.2	-0.2	-46.8
910129	1000	1100	6.10	1.7	86.0	16.7	-16.0		
910129	1000	1100	17.68	1.9	93.0	14.6	-16.3	-0.3	16.5
910129	1100	1200	6.10	1.7	87.0	20.2	-15.2		
910129	1100	1200	17.68	2.0	94.0	17.1	-15.6	-0.4	46.4
910129	1200	1300	6.10	1.5	94.0	22.6	-13.6		
910129	1200	1300	17.68	1.7	101.0	20.1	-14.3	-0.7	56.9
910129	1300	1400	6.10	1.5	102.0	27.1	-13.1		
910129	1300	1400	17.68	1.7	109.0	22.0	-13.6	-0.5	55.7
910129	1400	1500	6.10	1.3	95.0	41.1	-12.9		
910129	1400	1500	17.68	1.5	112.0	46.1	-13.1	-0.2	37.3
910129	1500	1600	6.10	1.8	104.0	71.8	-11.0		
910129	1500	1600	17.68	2.5	97.0	74.1	-10.9	0.1	7.9
910129	1600	1700	6.10	3.8	260.0	18.8	-3.5		
910129	1600	1700	17.68	4.9	266.0	20.2	-3.0	0.5	-60.3
910129	1700	1800	6.10	4.1	283.0	20.5	-3.1		
910129	1700	1800	17.68	6.1	288.0	17.5	-2.7	0.4	-63.1
910129	1800	1900	6.10	5.9	289.0	18.2	-2.8		
910129	1800	1900	17.68	8.9	293.0	15.4	-2.5	0.3	-65.0
910129	1900	2000	6.10	5.6	270.0	20.4	-2.4		
910129	1900	2000	17.68	7.7	276.0	20.2	-2.1	0.3	-61.4
910129	2000	2100	6.10	6.5	269.0	26.3	-2.2		
910129	2000	2100	17.68	8.9	270.0	27.1	-1.9	0.3	-40.8
910129	2100	2200	6.10	7.7	298.0	18.0	-2.0		
910129	2100	2200	17.68	11.1	298.0	14.0	-1.7	0.3	-29.9
910129	2200	2300	6.10	7.2	294.0	18.2	-1.4		
910129	2200	2300	17.68	10.6	295.0	14.5	-1.1	0.3	-34.4
910129	2300	0	6.10	7.5	292.0	18.6	-2.0		
910129	2300	0	17.68	11.0	293.0	15.2	-1.8	0.2	-48.8

SITE LINDAS BALC-
 TMA 175.201E UTMX 4413.534N ELEV(m/ASL) 6574.00

DATE	TIME START	TIME STOP	DBB HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910130	0	100	6.10	7.5	294.0	17.4	-2.1		
910130	0	100	17.68	11.0	295.0	16.2	-1.2	0.3	-55.9
910130	100	200	6.10	8.7	291.0	18.0	-2.0		
910130	100	200	17.68	10.7	292.0	14.5	-1.7	0.3	-69.4
910130	200	300	6.10	8.8	290.0	18.6	-1.4		
910130	200	300	17.68	11.4	292.0	14.3	-1.1	0.3	-74.9
910130	300	400	6.10	9.4	294.0	18.4	-1.7		
910130	300	400	17.68	14.0	295.0	14.0	-1.4	0.3	-79.4
910130	400	500	6.10	7.4	290.0	20.8	-0.7		
910130	400	500	17.68	10.8	291.0	16.4	-0.4	0.3	-77.8
910130	500	600	6.10	7.9	292.0	19.2	-1.4		
910130	500	600	17.68	11.4	293.0	15.5	-1.2	0.2	-76.7
910130	600	700	6.10	8.4	292.0	18.4	-2.0		
910130	600	700	17.68	12.0	293.0	14.6	-1.7	0.3	-74.3
910130	700	800	6.10	8.4	292.0	20.4	-1.3		
910130	700	800	17.68	12.1	293.0	16.3	-1.0	0.3	-69.3
910130	800	900	6.10	8.7	290.0	21.1	0.7		
910130	800	900	17.68	12.5	292.0	16.8	0.7	0.0	-36.4
910130	900	1000	6.10	9.2	291.0	18.7	1.1		
910130	900	1000	17.68	13.3	293.0	15.2	1.1	0.0	25.9
910130	1000	1100	6.10	8.4	292.0	18.9	2.5		
910130	1000	1100	17.68	12.0	293.0	15.3	2.4	-0.1	85.0
910130	1100	1200	6.10	8.7	294.0	18.7	3.4		
910130	1100	1200	17.68	12.4	295.0	14.9	3.4	0.0	124.6
910130	1200	1300	6.10	7.9	288.0	21.2	4.4		
910130	1200	1300	17.68	11.4	291.0	17.9	4.3	-0.1	148.8
910130	1300	1400	6.10	5.4	294.0	43.0	5.7		
910130	1300	1400	17.68	7.5	296.0	38.5	5.6	-0.1	154.2
910130	1400	1500	6.10	2.9	269.0	64.2	6.1		
910130	1400	1500	17.68	3.7	272.0	58.7	5.9	-0.2	101.2
910130	1500	1600	6.10	3.6	301.0	65.3	4.9		
910130	1500	1600	17.68	4.7	291.0	61.0	5.1	0.2	-8.6
910130	1600	1700	6.10	6.0	293.0	28.1	4.0		
910130	1600	1700	17.68	8.4	294.0	22.2	4.2	0.2	-56.1
910130	1700	1800	6.10	7.7	276.0	20.7	3.4		
910130	1700	1800	17.68	10.9	279.0	18.0	3.6	0.2	-62.3
910130	1800	1900	6.10	6.5	293.0	27.8	3.6		
910130	1800	1900	17.68	9.1	295.0	23.2	3.9	0.3	-64.4
910130	1900	2000	6.10	3.2	259.0	76.1	3.8		
910130	1900	2000	17.68	4.1	260.0	67.9	4.0	0.2	-62.5
910130	2000	2100	6.10	4.8	264.0	40.3	3.8		
910130	2000	2100	17.68	6.4	263.0	36.5	4.0	0.2	-46.4
910130	2100	2200	6.10	3.8	273.0	65.8	3.7		
910130	2100	2200	17.68	4.9	269.0	61.0	3.9	0.2	-36.2
910130	2200	2300	6.10	5.6	273.0	32.9	4.4		
910130	2200	2300	17.68	7.7	276.0	27.4	4.6	0.2	-44.5
910130	2300	0	6.10	8.7	296.0	22.0	5.2		
910130	2300	0	17.68	12.2	297.0	18.2	5.4	0.2	-66.9

SITE LINCOLN RA-10-
 JTM 475.0000 UTM 4413.0000 ELEV(m/ABL) 6574.00

DATE	TIME START	TIME STOP	DBE HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910131	0	100	6.10	9.3	293.0	19.5	4.8		
910131	0	100	17.68	13.4	293.0	15.3	5.0	0.2	-62.4
910131	100	100	6.10	8.8	293.0	18.9	5.1		
910131	100	200	17.68	12.6	295.0	14.7	5.4	0.3	-55.1
910131	100	300	6.10	9.0	288.0	21.1	5.5		
910131	100	300	17.68	12.8	291.0	17.2	5.8	0.3	-43.9
910131	200	400	6.10	8.8	288.0	20.8	5.5		
910131	200	400	17.68	12.2	291.0	17.5	5.7	0.2	-37.7
910131	400	500	6.10	7.8	288.0	22.2	4.6		
910131	400	500	17.68	11.3	290.0	18.5	4.8	0.2	-45.0
910131	500	500	6.10	6.3	294.0	23.6	4.6		
910131	500	500	17.68	8.8	295.0	18.9	4.8	0.2	-46.0
910131	500	700	6.10	6.1	284.0	23.5	5.1		
910131	500	700	17.68	8.7	288.0	19.2	5.3	0.2	-42.5
910131	700	800	6.10	5.8	281.0	19.7	5.1		
910131	700	800	17.68	8.6	286.0	16.9	5.4	0.3	-41.7
910131	800	900	6.10	5.2	284.0	17.9	5.7		
910131	800	900	17.68	7.8	289.0	15.2	5.9	0.2	-11.9
910131	900	1000	6.10	4.2	277.0	18.5	7.3		
910131	900	1000	17.68	6.2	282.0	15.9	7.6	0.3	17.2
910131	1000	1100	6.10	5.7	298.0	21.5	8.2		
910131	1000	1100	17.68	8.1	298.0	17.1	8.3	0.1	63.0
910131	1100	1200	6.10	6.1	294.0	20.2	9.8		
910131	1100	1200	17.68	8.6	295.0	15.6	9.8	0.0	229.7
910131	1200	1300	6.10	5.8	294.0	18.6	11.3		
910131	1200	1300	17.68	8.3	295.0	14.3	11.3	0.0	264.5
910131	1300	1400	6.10	4.0	310.0	26.4	11.9		
910131	1300	1400	17.68	5.4	309.0	22.8	11.9	0.0	240.2
910131	1400	1500	6.10	4.4	284.0	25.1	13.0		
910131	1400	1500	17.68	6.1	289.0	21.3	13.0	0.0	291.1
910131	1500	1600	6.10	2.8	288.0	24.3	12.6		
910131	1500	1600	17.68	4.2	293.0	19.9	12.7	0.1	104.6
910131	1600	1700	6.10	2.4	277.0	20.8	10.6		
910131	1600	1700	17.68	3.6	288.0	16.5	11.1	0.5	-33.8
910131	1700	1800	6.10	2.9	278.0	11.2	7.0		
910131	1700	1800	17.68	5.3	281.0	7.7	7.9	0.9	-75.1
910131	1800	1900	6.10	3.8	283.0	12.4	5.6		
910131	1800	1900	17.68	6.5	286.0	8.9	6.3	0.7	-78.1
910131	1900	2000	6.10	3.9	281.0	12.1	4.7		
910131	1900	2000	17.68	6.8	284.0	8.4	5.5	0.8	-78.6
910131	2000	2100	6.10	3.7	282.0	13.0	3.4		
910131	2000	2100	17.68	6.5	283.0	9.1	4.0	0.6	-74.4
910131	2100	2200	6.10	3.1	280.0	15.2	3.3		
910131	2100	2200	17.68	5.6	282.0	10.2	3.9	0.6	-69.7
910131	2200	2300	6.10	2.3	280.0	17.8	3.0		
910131	2200	2300	17.68	4.0	281.0	13.0	4.1	1.1	-60.9
910131	2300	0	6.10	2.5	284.0	18.8	5.8		
910131	2300	0	17.68	3.9	288.0	19.4	7.1	1.3	-63.4

SITE 11048 RAIN
 LAT 47.3052 UTM 4413.884V ELEV(m/ASL) 6574.00

DATE	TIME START	TIME STOP	DB HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910201	0	100	6.10	4.3	279.0	21.1	8.0		
910201	0	100	17.68	5.4	284.0	13.5	8.4	0.4	-68.9
910201	100	200	6.10	3.2	272.0	13.9	7.9		
910201	100	200	17.68	5.5	280.0	16.9	8.3	0.4	-65.7
910201	200	300	6.10	2.0	275.0	21.4	7.7		
910201	200	300	17.68	4.4	281.0	19.7	8.1	0.4	-61.6
910201	300	400	6.10	3.4	287.0	26.8	7.9		
910201	300	400	17.68	1.8	283.0	22.5	8.4	0.5	-56.1
910201	400	500	6.10	4.6	259.0	14.8	8.1		
910201	400	500	17.68	5.8	274.0	13.2	8.5	0.4	-52.8
910201	500	600	6.10	4.8	276.0	16.2	8.1		
910201	500	600	17.68	7.3	281.0	13.9	8.5	0.4	-53.5
910201	600	700	6.10	4.3	277.0	18.0	8.3		
910201	600	700	17.68	6.5	282.0	15.8	8.6	0.3	-52.4
910201	700	800	6.10	3.5	252.0	19.6	8.2		
910201	700	800	17.68	4.4	249.0	20.0	8.6	0.4	-42.0
910201	800	900	6.10	4.1	273.0	22.8	9.1		
910201	800	900	17.68	5.7	280.0	20.2	9.5	0.4	-23.1
910201	900	1000	6.10	4.0	293.0	18.2	10.0		
910201	900	1000	17.68	5.9	296.0	14.2	10.3	0.3	14.4
910201	1000	1100	6.10	2.9	267.0	17.6	11.1		
910201	1000	1100	17.68	3.9	270.0	17.6	11.3	0.2	90.5
910201	1100	1200	6.10	4.4	260.0	16.1	12.7		
910201	1100	1200	17.68	5.3	262.0	17.1	12.8	0.1	140.2
910201	1200	1300	6.10	1.8	206.0	68.0	13.9		
910201	1200	1300	17.68	2.4	207.0	62.8	14.1	0.2	175.9
910201	1300	1400	6.10	1.8	111.0	44.4	13.7		
910201	1300	1400	17.68	2.3	123.0	39.8	13.6	-0.1	206.6
910201	1400	1500	6.10	1.3	72.0	35.7	13.4		
910201	1400	1500	17.68	1.5	76.0	36.3	13.6	0.2	160.1
910201	1500	1600	6.10	2.2	44.0	71.4	12.1		
910201	1500	1600	17.68	2.4	49.0	70.4	12.3	0.2	100.1
910201	1600	1700	6.10	1.4	276.0	21.4	6.8		
910201	1600	1700	17.68	2.2	269.0	21.5	7.9	1.1	-43.7
910201	1700	1800	6.10	1.6	290.0	25.8	4.9		
910201	1700	1800	17.68	2.9	282.0	19.1	5.7	0.8	-64.7
910201	1800	1900	6.10	3.0	286.0	18.7	4.5		
910201	1800	1900	17.68	5.3	283.0	13.7	5.1	0.6	-70.1
910201	1900	2000	6.10	3.7	284.0	16.2	3.9		
910201	1900	2000	17.68	6.3	283.0	11.8	4.3	0.4	-69.7
910201	2000	2100	6.10	3.9	283.0	14.8	3.7		
910201	2000	2100	17.68	6.5	283.0	10.4	4.1	0.4	-62.9
910201	2100	2200	6.10	3.9	284.0	14.5	3.6		
910201	2100	2200	17.68	6.7	284.0	10.1	4.0	0.4	-62.4
910201	2200	2300	6.10	4.1	279.0	14.4	3.5		
910201	2200	2300	17.68	7.1	281.0	10.4	3.9	0.4	-70.7
910201	2300	0	6.10	4.2	280.0	15.1	3.1		
910201	2300	0	17.68	7.1	281.0	11.3	3.5	0.4	-75.8

SITE LINCOLN RA 0-
 LTM: 475.2055 UTM: 4-13, P34N ELE: 1m/ABL 6574.00

DATE	TIME START	TIME STOP	DOB HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910203	0	100	6.10	4.4	269.0	19.0	9.2		
910203	0	100	17.68	6.2	275.0	18.2	9.6	0.4	-97.0
910203	100	200	6.10	4.8	261.0	15.6	9.0		
910203	100	200	17.68	6.2	268.0	15.5	9.4	0.4	-94.8
910203	200	300	6.10	4.3	269.0	17.0	8.3		
910203	200	300	17.68	6.0	275.0	15.2	8.6	0.3	-90.5
910203	300	400	6.10	4.2	270.0	15.4	7.8		
910203	300	400	17.68	6.2	278.0	15.3	8.2	0.4	-89.7
910203	400	500	6.10	4.7	269.0	17.0	7.6		
910203	400	500	17.68	6.5	275.0	16.2	7.8	0.3	-89.3
910203	500	600	6.10	4.8	261.0	15.4	7.1		
910203	500	600	17.68	6.1	269.0	15.9	7.4	0.3	-88.9
910203	600	700	6.10	4.4	263.0	16.9	6.7		
910203	600	700	17.68	5.7	271.0	17.4	7.1	0.4	-87.1
910203	700	800	6.10	4.2	273.0	19.6	6.6		
910203	700	800	17.68	6.1	280.0	18.8	6.9	0.3	-74.9
910203	800	900	6.10	4.1	259.0	17.2	7.8		
910203	800	900	17.68	5.2	260.0	18.0	7.8	0.0	36.0
910203	900	1000	6.10	4.0	260.0	19.3	9.0		
910203	900	1000	17.68	5.1	263.0	20.2	8.9	-0.1	164.0
910203	1000	1100	6.10	4.2	278.0	21.5	10.0		
910203	1000	1100	17.68	6.0	284.0	17.9	9.8	-0.2	268.9
910203	1100	1200	6.10	3.5	275.0	19.1	10.8		
910203	1100	1200	17.68	4.9	281.0	16.9	10.7	-0.1	287.1
910203	1200	1300	6.10	2.5	286.0	23.7	11.6		
910203	1200	1300	17.68	3.6	291.0	18.3	11.4	-0.2	241.7
910203	1300	1400	6.10	3.5	281.0	17.6	10.8		
910203	1300	1400	17.68	5.2	285.0	14.1	10.7	-0.1	213.4
910203	1400	1500	6.10	4.2	284.0	18.2	10.7		
910203	1400	1500	17.68	6.4	287.0	14.4	10.5	-0.2	214.2
910203	1500	1600	6.10	5.0	282.0	18.2	9.2		
910203	1500	1600	17.68	7.7	286.0	14.3	9.2	0.0	76.1
910203	1600	1700	6.10	4.2	277.0	19.5	7.7		
910203	1600	1700	17.68	6.3	282.0	15.9	7.9	0.2	-23.8
910203	1700	1800	6.10	4.7	268.0	17.6	6.6		
910203	1700	1800	17.68	6.4	274.0	15.5	6.8	0.2	-62.0
910203	1800	1900	6.10	4.1	266.0	15.3	5.8		
910203	1800	1900	17.68	5.7	272.0	14.9	6.0	0.2	-70.4
910203	1900	2000	6.10	4.6	266.0	15.3	5.2		
910203	1900	2000	17.68	6.1	269.0	14.6	5.4	0.2	-68.5
910203	2000	2100	6.10	3.4	277.0	47.2	4.4		
910203	2000	2100	17.68	4.7	275.0	46.9	4.7	0.3	-57.2
910203	2100	2200	6.10	0.8	285.0	34.5	1.3		
910203	2100	2200	17.68	1.2	270.0	45.9	2.0	0.7	-46.4
910203	2200	2300	6.10	1.0	289.0	42.9	1.0		
910203	2200	2300	17.68	1.4	292.0	52.2	2.0	1.0	-46.8
910203	2300	0	6.10	1.2	281.0	13.3	-0.7		
910203	2300	0	17.68	2.2	276.0	16.8	0.2	0.9	-51.4

[illegible]

SITE LINDAB RANCH
 TIME 475.2055 UTM 4413.824N ELEV(m/ASL) 6574.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910215	0	100	6.10	2.3	282.0	20.0	-0.1		
910215	0	100	17.68	3.9	280.0	18.4	0.4	0.5	-73.3
910215	100	200	6.10	2.2	278.0	18.7	-0.1		
910215	100	200	17.68	3.8	280.0	18.3	0.3	0.4	-73.4
910215	200	300	6.10	2.2	281.0	20.4	-0.4		
910215	200	300	17.68	3.4	277.0	18.8	0.1	0.5	-73.8
910215	300	400	6.10	2.6	275.0	18.6	-0.1		
910215	300	400	17.68	3.9	274.0	18.6	0.3	0.4	-74.3
910215	400	500	6.10	3.1	273.0	18.7	0.2		
910215	400	500	17.68	4.8	274.0	13.2	0.6	0.4	-75.1
910215	500	600	6.10	2.3	291.0	17.9	-0.1		
910215	500	600	17.68	5.5	285.0	13.0	0.4	0.5	-75.1
910215	600	700	6.10	3.4	289.0	17.3	0.1		
910215	600	700	17.68	5.8	285.0	12.1	0.6	0.5	-74.0
910215	700	800	6.10	2.9	286.0	18.0	0.6		
910215	700	800	17.68	5.2	284.0	13.1	1.1	0.5	-59.0
910215	800	900	6.10	2.7	281.0	16.4	3.1		
910215	800	900	17.68	4.5	281.0	11.9	3.1	0.0	52.7
910215	900	1000	6.10	1.2	248.0	68.9	7.9		
910215	900	1000	17.68	1.7	249.0	68.3	7.8	-0.1	173.1
910215	1000	1100	6.10	2.3	114.0	17.8	10.3		
910215	1000	1100	17.68	2.7	121.0	14.2	9.9	-0.4	272.0
910215	1100	1200	6.10	3.1	124.0	15.1	10.7		
910215	1100	1200	17.68	3.9	132.0	11.7	10.2	-0.5	324.9
910215	1200	1300	6.10	3.4	120.0	15.9	10.9		
910215	1200	1300	17.68	4.3	129.0	12.4	10.4	-0.5	334.5
910215	1300	1400	6.10	3.1	126.0	16.4	11.5		
910215	1300	1400	17.68	3.9	135.0	12.9	11.0	-0.5	301.5
910215	1400	1500	6.10	2.7	125.0	14.2	12.1		
910215	1400	1500	17.68	3.4	133.0	10.7	11.7	-0.4	217.4
910215	1500	1600	6.10	1.9	163.0	58.9	11.6		
910215	1500	1600	17.68	2.3	166.0	47.8	11.5	-0.1	114.5
910215	1600	1700	6.10	1.3	285.0	13.1	5.9		
910215	1600	1700	17.68	1.8	264.0	14.4	7.3	1.4	-42.1
910215	1700	1800	6.10	1.9	269.0	14.9	4.4		
910215	1700	1800	17.68	3.3	270.0	12.4	5.1	0.7	-64.1
910215	1800	1900	6.10	2.5	272.0	17.4	4.8		
910215	1800	1900	17.68	3.9	274.0	15.2	5.2	0.4	-68.9
910215	1900	2000	6.10	2.7	284.0	21.6	3.8		
910215	1900	2000	17.68	4.5	282.0	15.5	4.2	0.4	-68.6
910215	2000	2100	6.10	2.7	287.0	19.4	2.9		
910215	2000	2100	17.68	4.6	284.0	14.9	3.4	0.5	-67.4
910215	2100	2200	6.10	2.8	284.0	19.3	2.6		
910215	2100	2200	17.68	4.8	282.0	13.9	2.9	0.3	-66.4
910215	2200	2300	6.10	3.3	277.0	18.3	2.6		
910215	2200	2300	17.68	5.4	278.0	13.9	2.9	0.3	-66.8
910215	2300	0	6.10	2.9	277.0	19.6	2.4		
910215	2300	0	17.68	4.9	278.0	15.5	2.7	0.3	-66.1

SITE LINZAB FANCH
 JTM# 479.0000 JTM# 4413.934N ELE 71m/ABL 6574.00

DATE	TIME START	TIME STOP	DIB HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910210	0	100	6.10	3.3	179.0	19.3	2.4		
910210	0	100	17.68	5.5	179.0	15.1	2.7	0.3	-66.0
910210	100	200	6.10	3.5	261.0	17.1	2.5		
910210	100	200	17.68	6.0	261.0	12.7	2.9	0.4	-65.2
910210	200	300	6.10	2.8	265.0	11.1	1.5		
910210	200	300	17.68	4.7	262.0	16.7	1.9	0.4	-63.9
910210	300	400	6.10	3.4	289.0	17.8	2.2		
910210	300	400	17.68	5.7	285.0	12.0	2.7	0.5	-63.1
910210	400	500	6.10	3.3	283.0	17.3	2.5		
910210	400	500	17.68	5.5	283.0	10.5	3.1	0.6	-61.2
910210	500	600	6.10	2.4	294.0	22.4	1.5		
910210	500	600	17.68	3.7	287.0	16.3	2.3	0.8	-60.5
910210	600	700	6.10	2.1	296.0	16.8	0.3		
910210	600	700	17.68	3.2	291.0	11.6	1.0	0.7	-58.2
910210	700	800	6.10	2.0	287.0	16.6	0.2		
910210	700	800	17.68	2.9	286.0	17.2	0.9	0.7	-44.4
910210	800	900	6.10	1.7	151.0	85.8	3.9		
910210	800	900	17.68	1.9	143.0	76.9	3.9	0.0	59.9
910210	900	1000	6.10	2.4	107.0	55.8	5.1		
910210	900	1000	17.68	2.9	103.0	51.0	4.7	-0.4	133.8
910210	1000	1100	6.10	2.1	102.0	76.7	5.2		
910210	1000	1100	17.68	2.5	99.0	66.5	5.1	-0.1	184.5

DATE 11/03/84 TIME 4413.334N ELEV (M/ASL) 4574.00
LAT 4413.334N LONG 12205.000E

DATE	TIME	DEG	WIND	WIND	DIR	TEMP	DELTA	NET
TIME	DIR	HT	SPEED	DIR	THETA	TEMP	TEMP	RED
		(M/ASL)	(M/S)	(DEG)	(DEG)	(DEG C)	(DEG C)	
11/03/84	1100	6.10	1.5	101.0	12.0	5.3	-0.0	148.0
11/03/84	1100	17.58	1.7	98.0	10.9	5.0	-0.0	148.0
11/03/84	1100	6.10	1.7	45.0	06.0	10.0	-0.0	148.0
11/03/84	1100	17.58	1.7	45.0	04.0	8.9	-0.1	147.5
11/03/84	1100	6.10	1.7	81.0	17.3	5.3	-0.1	173.5
11/03/84	1100	17.58	1.7	87.0	14.4	5.7	-0.1	173.5
11/03/84	1100	6.10	1.7	71.0	48.4	5.7	-0.2	173.5
11/03/84	1100	17.58	1.7	71.0	41.4	5.7	-0.2	173.5
11/03/84	1100	6.10	1.7	37.0	04.4	5.3	-0.1	52.0
11/03/84	1100	17.58	1.7	44.0	35.4	5.7	-0.1	52.0
11/03/84	1100	6.10	1.4	46.0	68.9	7.3	0.2	14.0
11/03/84	1100	17.58	0.7	28.0	55.4	5.2	0.6	-28.5
11/03/84	1100	6.10	0.9	27.0	46.7	5.8	0.6	-28.5
11/03/84	1100	17.58	1.0	28.0	49.7	4.8	1.5	-45.7
11/03/84	1100	6.10	1.2	314.0	57.0	6.1	0.9	-37.6
11/03/84	1100	17.58	1.3	322.0	27.2	6.0	0.9	-37.6
11/03/84	1100	6.10	1.2	332.0	38.4	6.7	0.6	-26.7
11/03/84	1100	17.58	1.1	334.0	31.1	7.5	0.4	-21.3
11/03/84	1100	6.10	1.5	343.0	44.0	7.2	0.4	-21.3
11/03/84	1100	17.58	1.7	341.0	53.1	6.2	0.2	-33.6
11/03/84	1100	6.10	1.6	331.0	44.4	6.4	0.2	-33.6
11/03/84	1100	17.58	2.0	330.0	32.3	5.6	0.4	-53.2

SITE 1012 FAND-
 JTMX 477.0012 JTMX 4413.072N 112.774W PBL 6875.00

DATE	TIME START	TIME STOP	DEE HT (m/PBL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	BELTA TEMP (deg C)
910128	0	100	6.10	4.8	71.0	63.6	-0.7	
910128	0	100	17.68	5.0	79.0	61.5	-0.5	0.2
910128	100	100	6.10	3.7	10.0	62.3	-1.6	
910128	100	100	17.68	3.8	12.0	55.1	-1.4	0.2
910128	110	100	6.10	5.4	6.0	75.2	-0.1	
910128	110	110	17.68	5.3	4.0	76.7	-0.7	0.1
910128	310	400	6.10	3.1	20.0	48.6	-1.2	
910128	300	400	17.68	3.1	31.0	48.2	-1.1	0.2
910128	400	510	6.10	5.7	211.0	52.8	-0.9	
910128	400	500	17.68	5.0	213.0	48.7	-0.7	0.2
910128	500	600	6.10	6.0	238.0	37.4	-0.6	
910128	510	600	17.68	6.0	247.0	36.0	-0.5	0.1
910128	610	700	6.10	8.4	253.0	28.2	0.4	
910128	600	700	17.68	9.7	262.0	28.4	0.5	0.1
910128	700	800	6.10	4.0	293.0	77.2	0.3	
910128	700	800	17.68	4.1	299.0	73.2	0.4	0.1
910128	800	900	6.10	6.5	269.0	36.2	0.9	
910128	800	900	17.68	6.8	278.0	33.4	0.9	0.0
910128	900	1000	6.10	5.4	287.0	36.5	0.9	
910128	900	1000	17.68	5.7	293.0	31.5	0.9	0.0
910128	1000	1100	6.10	7.0	292.0	28.6	3.1	
910128	1000	1100	17.68	7.2	301.0	24.1	3.1	0.0
910128	1100	1200	6.10	5.7	298.0	26.2	4.1	
910128	1100	1200	17.68	6.0	305.0	22.4	4.1	0.0
910128	1200	1300	6.10	3.3	179.0	71.5	4.6	
910128	1200	1300	17.68	4.2	185.0	73.5	4.6	0.0
910128	1300	1400	6.10	1.8	146.0	62.9	3.5	
910128	1300	1400	17.68	2.0	158.0	60.9	3.8	0.3
910128	1400	1500	6.10	1.1	22.0	49.8	1.3	
910128	1400	1500	17.68	0.0	32.0	54.8	1.7	0.4
910128	1500	1600	6.10	2.8	354.0	17.2	-2.1	
910128	1500	1600	17.68	1.7	0.0	15.7	-2.1	0.0
910128	1600	1700	6.10	6.2	352.0	11.9	-3.1	
910128	1600	1700	17.68	6.4	0.0	11.0	-3.1	0.0
910128	1700	1800	6.10	7.1	0.0	11.5	-6.2	
910128	1700	1800	17.68	7.2	8.0	9.8	-6.3	-0.1
910128	1800	1900	6.10	6.3	1.0	10.1	-7.9	
910128	1800	1900	17.68	6.4	9.0	9.8	-8.0	-0.1
910128	1900	2000	6.10	5.6	13.0	10.0	-9.3	
910128	1900	2000	17.68	5.3	21.0	9.4	-9.4	-0.1
910128	2000	2100	6.10	5.1	10.0	7.6	-11.6	
910128	2000	2100	17.68	5.2	19.0	7.4	-11.6	0.0
910128	2100	2200	6.10	5.5	7.0	7.4	-14.2	
910128	2100	2200	17.68	5.6	15.0	7.2	-14.2	0.0
910128	2200	2300	6.10	5.4	5.0	8.3	-15.6	
910128	2200	2300	17.68	5.5	13.0	7.7	-15.7	-0.1
910128	2300	0	6.10	4.5	359.0	9.4	-16.5	
910128	2300	0	17.68	4.6	6.0	8.7	-16.6	-0.1

DATE TIME 1-40-
 STATION 477011E 0774 4415.072N ELEV(m/ASL) 6875.00

DATE	TIME START	TIME STOP	DEP HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910129	0	100	6.10	3.7	13.0	13.6	-15.7	
910129	0	100	17.68	3.2	15.0	13.7	-17.0	-0.1
910129	100	200	6.10	3.6	11.0	9.0	-13.3	
910129	100	200	17.68	3.6	20.0	8.9	-13.4	-0.1
910129	100	300	6.10	1.5	3.0	6.2	-13.0	
910129	100	300	17.68	1.5	13.0	7.0	-13.0	0.0
910129	300	400	6.10	2.9	9.0	7.6	-13.0	
910129	300	400	17.68	2.9	16.0	7.7	-13.1	-0.1
910129	400	500	6.10	1.5	21.0	26.3	-13.5	
910129	400	500	17.68	1.2	30.0	29.2	-13.5	0.0
910129	500	600	6.10	0.9	111.0	42.2	-20.1	
910129	500	600	17.68	0.0	124.0	45.8	-20.1	0.0
910129	600	700	6.10	1.3	173.0	8.1	-20.4	
910129	600	700	17.68	0.0	179.0	8.0	-20.4	0.0
910129	700	800	6.10	2.4	123.0	10.7	-20.4	
910129	700	800	17.68	0.0	123.0	8.2	-20.2	0.2
910129	800	900	6.10	1.5	123.0	11.9	-18.4	
910129	800	900	17.68	0.0	126.0	11.6	-18.3	0.1
910129	900	1000	6.10	1.5	124.0	12.8	-15.2	
910129	900	1000	17.68	0.3	192.0	17.1	-16.3	-0.1
910129	1000	1100	6.10	1.4	148.0	20.7	-14.9	
910129	1000	1100	17.68	0.0	158.0	19.5	-15.0	-0.1
910129	1100	1200	6.10	1.0	151.0	17.6	-13.3	
910129	1100	1200	17.68	0.0	159.0	18.0	-13.5	-0.2
910129	1200	1300	6.10	1.1	154.0	13.1	-13.0	
910129	1200	1300	17.68	0.0	162.0	12.4	-13.1	-0.1
910129	1300	1400	6.10	1.2	150.0	14.7	-12.3	
910129	1300	1400	17.68	0.0	160.0	14.5	-12.4	-0.1
910129	1400	1500	6.10	3.4	175.0	12.1	-15.2	
910129	1400	1500	17.68	0.0	181.0	12.1	-15.1	0.1
910129	1500	1600	6.10	2.8	167.0	42.6	-12.5	
910129	1500	1600	17.68	2.4	177.0	54.5	-11.3	1.2
910129	1600	1700	6.10	3.9	286.0	89.9	-4.6	
910129	1600	1700	17.68	4.2	282.0	80.6	-4.2	0.4
910129	1700	1800	6.10	7.7	271.0	13.7	-2.9	
910129	1700	1800	17.68	8.1	281.0	12.8	-2.6	0.3
910129	1800	1900	6.10	10.9	272.0	10.8	-2.6	
910129	1800	1900	17.68	11.4	282.0	10.0	-2.4	0.2
910129	1900	2000	6.10	8.2	275.0	17.7	-2.0	
910129	1900	2000	17.68	8.7	284.0	14.6	-1.8	0.2
910129	2000	2100	6.10	10.1	272.0	12.6	-1.5	
910129	2000	2100	17.68	10.7	281.0	11.7	-1.3	0.2
910129	2100	2200	6.10	12.5	270.0	10.9	-1.9	
910129	2100	2200	17.68	13.0	280.0	9.6	-1.7	0.2
910129	2200	2300	6.10	12.4	269.0	11.5	-1.1	
910129	2200	2300	17.68	13.0	278.0	10.3	-0.8	0.3
910129	2300	0	6.10	13.8	276.0	11.7	-2.4	
910129	2300	0	17.68	14.4	285.0	10.3	-2.2	0.2

SITE 1113 RANCH
 UTM 477.000E UTM 4413.070N ELEVATION ABL 6875.00

DATE	TIME START	TIME STOP	DBB HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910130	0	100	6.10	13.5	230.0	12.8	-1.7	
910130	0	100	17.68	14.2	238.0	11.2	-1.6	0.2
910130	100	200	6.10	14.3	279.0	12.0	-1.4	
910130	100	200	17.68	15.1	237.0	10.7	-1.1	0.3
910130	200	300	6.10	14.8	277.0	11.9	-1.2	
910130	200	300	17.68	15.6	235.0	10.6	-0.8	0.4
910130	300	400	6.10	13.7	270.0	13.4	-0.6	
910130	300	400	17.68	14.2	280.0	12.2	-0.3	0.3
910130	400	500	6.10	9.1	279.0	23.5	-0.5	
910130	400	500	17.68	8.6	236.0	21.2	-0.3	0.2
910130	500	600	6.10	10.9	275.0	17.1	-1.1	
910130	500	600	17.68	11.4	233.0	16.5	-0.9	0.2
910130	600	700	6.10	12.1	269.0	15.4	-1.4	
910130	600	700	17.68	12.5	276.0	14.5	-1.3	0.1
910130	700	800	6.10	13.0	276.0	14.6	-1.6	
910130	700	800	17.68	13.7	235.0	13.3	-1.5	0.1
910130	800	900	6.10	12.4	235.0	19.9	-0.2	
910130	800	900	17.68	13.0	293.0	18.2	-0.1	0.1
910130	900	1000	6.10	13.4	269.0	18.0	1.1	
910130	900	1000	17.68	14.1	276.0	16.7	1.3	0.2
910130	1000	1100	6.10	12.8	266.0	18.9	2.6	
910130	1000	1100	17.68	13.6	274.0	17.5	2.8	0.2
910130	1100	1200	6.10	13.8	260.0	18.3	3.4	
910130	1100	1200	17.68	14.4	269.0	17.1	3.5	0.1
910130	1200	1300	6.10	11.2	270.0	19.2	3.8	
910130	1200	1300	17.68	11.8	279.0	18.2	3.9	0.1
910130	1300	1400	6.10	6.4	278.0	73.6	5.2	
910130	1300	1400	17.68	6.6	285.0	73.3	5.3	0.1
910130	1400	1500	6.10	4.5	220.0	65.1	5.3	
910130	1400	1500	17.68	4.7	230.0	60.4	5.5	0.2
910130	1500	1600	6.10	2.7	236.0	100.1	4.6	
910130	1500	1600	17.68	2.8	203.0	95.2	4.6	0.0
910130	1600	1700	6.10	5.4	287.0	63.8	3.6	
910130	1600	1700	17.68	5.6	293.0	59.5	3.7	0.1
910130	1700	1800	6.10	10.7	262.0	18.1	3.5	
910130	1700	1800	17.68	11.3	270.0	16.1	3.6	0.1
910130	1800	1900	6.10	8.2	282.0	28.6	3.5	
910130	1800	1900	17.68	8.7	289.0	27.4	3.6	0.1
910130	1900	2000	6.10	4.7	310.0	89.7	3.4	
910130	1900	2000	17.68	4.9	312.0	90.6	3.6	0.2
910130	2000	2100	6.10	3.9	195.0	73.7	3.5	
910130	2000	2100	17.68	4.1	209.0	74.0	3.7	0.2
910130	2100	2200	6.10	4.1	159.0	75.3	3.6	
910130	2100	2200	17.68	4.1	174.0	71.7	3.6	0.0
910130	2200	2300	6.10	7.8	259.0	40.0	4.2	
910130	2200	2300	17.68	8.2	268.0	38.8	4.4	0.2
910130	2300	0	6.10	12.3	258.0	19.3	4.7	
910130	2300	0	17.68	12.9	267.0	17.6	4.9	0.2

SITE 0113 R-NC-
 UTMX 477.021E UTMN 4415.373N ELEV(m/ASL) 6875.00

DATE	TIME START	TIME STOP	DJB HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910131	0	100	6.10	17.1	262.0	16.7	5.0	
910131	0	100	17.68	17.7	270.0	16.1	5.2	0.2
910131	100	100	6.10	15.2	260.0	17.1	5.2	
910131	100	200	17.68	15.9	269.0	15.7	5.3	0.1
910131	200	200	6.10	16.1	258.0	15.4	5.6	
910131	200	300	17.68	15.9	267.0	14.0	5.8	0.2
910131	300	400	6.10	13.2	269.0	17.6	5.3	
910131	300	400	17.68	13.9	277.0	16.8	5.5	0.2
910131	400	500	6.10	10.3	285.0	20.5	4.4	
910131	400	500	17.68	10.8	293.0	18.6	4.5	0.1
910131	500	600	6.10	7.8	276.0	26.3	4.5	
910131	500	600	17.68	8.2	286.0	24.8	4.6	0.1
910131	600	700	6.10	9.7	267.0	18.1	5.0	
910131	600	700	17.68	10.2	275.0	16.7	5.1	0.1
910131	700	800	6.10	10.2	259.0	12.9	5.4	
910131	700	800	17.68	10.6	269.0	11.9	5.5	0.1
910131	800	900	6.10	10.1	262.0	11.3	6.0	
910131	800	900	17.68	10.7	269.0	10.5	6.2	0.2
910131	900	1000	6.10	8.1	263.0	11.6	7.6	
910131	900	1000	17.68	8.4	272.0	10.8	7.8	0.2
910131	1000	1100	6.10	6.8	280.0	14.5	8.4	
910131	1000	1100	17.68	7.1	288.0	13.2	8.6	0.2
910131	1100	1200	6.10	7.4	269.0	17.6	9.8	
910131	1100	1200	17.68	7.7	278.0	16.5	9.9	0.1
910131	1200	1300	6.10	8.8	260.0	16.4	10.9	
910131	1200	1300	17.68	9.2	269.0	15.1	11.0	0.1
910131	1300	1400	6.10	5.4	304.0	49.0	11.4	
910131	1300	1400	17.68	5.6	312.0	46.0	11.4	0.0
910131	1400	1500	6.10	3.9	288.0	60.1	13.0	
910131	1400	1500	17.68	4.1	291.0	56.1	13.0	0.0
910131	1500	1600	6.10	5.4	301.0	14.9	11.8	
910131	1500	1600	17.68	5.7	308.0	13.9	11.7	-0.1
910131	1600	1700	6.10	5.0	297.0	11.6	10.1	
910131	1600	1700	17.68	5.4	306.0	9.5	10.4	0.3
910131	1700	1800	6.10	4.9	278.0	8.6	9.3	
910131	1700	1800	17.68	5.5	287.0	7.5	10.0	0.7
910131	1800	1900	6.10	5.1	273.0	8.5	9.6	
910131	1800	1900	17.68	5.5	282.0	7.1	10.2	0.6
910131	1900	2000	6.10	4.9	264.0	9.5	9.7	
910131	1900	2000	17.68	5.2	271.0	9.1	10.2	0.5
910131	2000	2100	6.10	4.3	272.0	8.2	9.0	
910131	2000	2100	17.68	4.7	281.0	7.0	9.6	0.6
910131	2100	2200	6.10	3.4	266.0	16.6	8.7	
910131	2100	2200	17.68	3.4	276.0	14.9	9.3	0.6
910131	2200	2300	6.10	2.5	264.0	31.3	8.4	
910131	2200	2300	17.68	2.5	275.0	34.5	8.9	0.5
910131	2300	0	6.10	6.4	258.0	18.3	9.1	
910131	2300	0	17.68	6.7	268.0	16.3	9.2	0.1

SITE 0018 RANCH
 JTMK 477.021E UTMV 4415.373N ELEV(m/ASL) 6875.00

DATE	TIME STRT	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910201	0	100	6.10	6.8	247.0	14.8	8.5	
910201	0	100	17.68	7.0	256.0	14.0	8.6	0.1
910201	100	200	6.10	6.7	247.0	15.7	8.2	
910201	100	200	17.68	7.1	256.0	15.2	8.4	0.1
910201	100	200	6.10	6.1	253.0	20.0	8.2	
910201	100	200	17.68	6.4	251.0	18.7	8.4	0.1
910201	200	400	6.10	7.2	259.0	13.7	8.5	
910201	200	400	17.68	7.4	269.0	13.1	8.6	0.1
910201	400	500	6.10	8.2	260.0	11.4	8.7	
910201	400	500	17.68	8.7	269.0	10.5	8.8	0.1
910201	500	600	6.10	8.9	266.0	11.0	8.7	
910201	500	600	17.68	9.3	275.0	10.3	8.8	0.1
910201	600	700	6.10	8.6	266.0	11.7	8.9	
910201	600	700	17.68	7.1	275.0	11.0	9.1	0.2
910201	700	800	6.10	7.5	258.0	13.5	9.4	
910201	700	800	17.68	7.8	268.0	12.8	9.5	0.1
910201	800	900	6.10	5.4	278.0	22.2	9.6	
910201	800	900	17.68	5.6	287.0	22.7	9.8	0.2
910201	900	1000	6.10	5.9	285.0	15.7	10.1	
910201	900	1000	17.68	6.2	294.0	14.6	10.3	0.2
910201	1000	1100	6.10	3.8	269.0	17.4	11.6	
910201	1000	1100	17.68	4.1	276.0	16.9	11.7	0.1
910201	1100	1200	6.10	4.1	250.0	27.2	13.3	
910201	1100	1200	17.68	4.3	259.0	24.9	13.2	-0.1
910201	1200	1300	6.10	3.3	192.0	35.1	13.4	
910201	1200	1300	17.68	3.4	202.0	32.0	13.3	-0.1
910201	1300	1400	6.10	2.4	148.0	22.2	12.9	
910201	1300	1400	17.68	2.5	159.0	23.5	12.8	-0.1
910201	1400	1500	6.10	1.7	33.0	67.9	12.7	
910201	1400	1500	17.68	1.6	33.0	66.4	12.7	0.0
910201	1500	1600	6.10	2.3	350.0	28.3	11.0	
910201	1500	1600	17.68	2.4	358.0	24.8	10.8	-0.2
910201	1600	1700	6.10	1.8	306.0	18.5	9.2	
910201	1600	1700	17.68	1.6	335.0	20.8	9.8	0.6
910201	1700	1800	6.10	1.6	303.0	21.4	9.1	
910201	1700	1800	17.68	1.6	330.0	26.9	9.7	0.6
910201	1800	1900	6.10	1.7	272.0	26.0	8.9	
910201	1800	1900	17.68	1.0	297.0	36.7	9.3	0.4
910201	1900	2000	6.10	2.2	280.0	10.0	8.9	
910201	1900	2000	17.68	1.3	305.0	17.2	9.2	0.3
910201	2000	2100	6.10	3.7	277.0	5.9	8.1	
910201	2000	2100	17.68	3.6	297.0	8.8	9.3	1.2
910201	2100	2200	6.10	3.4	275.0	6.3	8.8	
910201	2100	2200	17.68	3.4	293.0	7.7	9.8	1.0
910201	2200	2300	6.10	2.3	273.0	6.5	9.1	
910201	2200	2300	17.68	2.1	276.0	20.0	9.8	0.7
910201	2300	0	6.10	0.9	287.0	21.6	8.9	
910201	2300	0	17.68	0.2	345.0	43.7	8.9	0.0

SITE 0013 RANC-
 UTMX 477.0213 JIMY 4415.373N ELEV(m/ABL) 5875.00

DATE	TIME START	TIME STOP	DBS HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910202	0	100	6.10	1.2	275.0	30.4	7.3	
910202	0	100	17.68	0.4	312.0	60.0	3.0	0.2
910202	100	200	6.10	1.2	240.0	13.2	7.7	
910202	100	200	17.68	0.3	218.0	17.0	7.3	-0.1
910202	100	200	6.10	0.9	290.0	45.1	7.8	
910202	100	200	17.68	0.9	338.0	88.5	8.3	0.7
910202	200	400	6.10	1.0	239.0	16.8	7.4	
910202	200	400	17.68	0.4	212.0	57.4	7.5	0.1
910202	400	600	6.10	0.8	300.0	15.5	7.7	
910202	400	600	17.68	0.0	245.0	51.6	7.9	0.2
910202	600	800	6.10	1.7	285.0	20.3	8.5	
910202	600	800	17.68	0.5	309.0	24.8	8.9	0.4
910202	800	1000	6.10	1.3	254.0	43.8	9.3	
910202	800	1000	17.68	0.6	264.0	83.3	8.9	0.1
910202	1000	1200	6.10	1.1	190.0	82.6	8.7	
910202	1000	1200	17.68	1.2	123.0	67.8	9.0	0.3
910202	1200	1400	6.10	6.2	284.0	21.5	11.7	
910202	1200	1400	17.68	6.8	292.0	17.0	11.9	0.2
910202	1400	1600	6.10	5.0	282.0	16.1	13.1	
910202	1400	1600	17.68	5.3	291.0	14.5	13.0	-0.1
910202	1600	1800	6.10	2.6	211.0	82.7	14.4	
910202	1600	1800	17.68	2.8	225.0	82.6	14.4	0.0
910202	1800	2000	6.10	2.3	168.0	16.3	13.2	
910202	1800	2000	17.68	2.6	176.0	18.9	13.1	-0.1
910202	2000	2200	6.10	2.3	140.0	23.7	14.6	
910202	2000	2200	17.68	2.4	149.0	21.6	14.4	-0.2
910202	2200	2400	6.10	2.3	95.0	48.0	14.3	
910202	2200	2400	17.68	2.2	106.0	49.4	14.0	-0.3
910202	2400	2600	6.10	1.4	109.0	44.0	14.5	
910202	2400	2600	17.68	1.3	127.0	42.5	14.5	0.0
910202	2600	2800	6.10	1.2	128.0	60.2	12.9	
910202	2600	2800	17.68	0.7	152.0	50.5	12.5	-0.4
910202	2800	3000	6.10	2.4	247.0	33.3	12.0	
910202	2800	3000	17.68	1.6	252.0	36.9	12.3	0.3
910202	3000	3200	6.10	2.3	229.0	56.9	11.2	
910202	3000	3200	17.68	2.7	231.0	62.4	11.8	0.6
910202	3200	3400	6.10	5.0	270.0	19.6	10.9	
910202	3200	3400	17.68	5.2	281.0	18.6	11.2	0.3
910202	3400	3600	6.10	3.4	269.0	53.3	10.6	
910202	3400	3600	17.68	3.7	281.0	48.7	10.9	0.3
910202	3600	3800	6.10	1.8	232.0	73.5	9.1	
910202	3600	3800	17.68	1.7	236.0	83.5	9.7	0.6
910202	3800	4000	6.10	3.1	264.0	38.3	9.1	
910202	3800	4000	17.68	3.3	276.0	38.8	9.5	0.4
910202	4000	4200	6.10	8.2	269.0	39.0	8.9	
910202	4000	4200	17.68	8.5	276.0	40.9	9.2	0.3
910202	4200	4400	6.10	11.1	266.0	12.8	9.6	
910202	4200	4400	17.68	11.7	274.0	11.7	9.7	0.1

SITE 1018 4440-
 JTM: 477.0215 UT-V 4415.173N ELEV(m/ABL) 6875.00

DATE	TIME START	TIME STOP	CEB HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910203	0	100	6.10	9.2	267.0	12.5	10.2	
910203	0	100	17.68	9.7	275.0	11.3	10.1	0.1
910203	100	200	6.10	7.5	271.0	10.3	9.3	
910203	100	200	17.68	8.0	281.0	11.9	9.7	0.2
910203	100	300	6.10	7.2	270.0	12.5	8.7	
910203	100	300	17.68	7.7	283.0	11.2	8.5	0.2
910203	200	400	6.10	7.4	270.0	10.1	8.5	
910203	200	400	17.68	7.9	282.0	8.8	8.5	0.1
910203	300	500	6.10	8.5	271.0	11.1	8.1	
910203	300	500	17.68	9.0	281.0	9.5	8.3	0.2
910203	500	600	6.10	8.0	273.0	11.7	7.7	
910203	500	600	17.68	8.4	283.0	10.5	7.8	0.1
910203	600	700	6.10	7.8	270.0	11.6	7.4	
910203	600	700	17.68	8.3	281.0	9.9	7.5	0.1
910203	700	800	6.10	8.4	271.0	11.1	7.5	
910203	700	800	17.68	8.9	281.0	9.7	7.7	0.2
910203	800	900	6.10	6.2	259.0	16.6	9.0	
910203	800	900	17.68	6.6	269.0	15.1	8.9	-0.1
910203	900	1000	6.10	3.4	313.0	84.2	10.5	
910203	900	1000	17.68	3.5	315.0	84.5	10.2	-0.3
910203	1000	1100	6.10	6.8	274.0	15.9	10.2	
910203	1000	1100	17.68	7.2	283.0	13.8	9.9	-0.3
910203	1100	1200	6.10	4.7	290.0	16.1	11.2	
910203	1100	1200	17.68	4.9	297.0	14.6	10.9	-0.3
910203	1200	1300	6.10	3.8	290.0	16.0	11.5	
910203	1200	1300	17.68	4.0	297.0	14.0	11.2	-0.3
910203	1300	1400	6.10	5.4	286.0	14.9	10.9	
910203	1300	1400	17.68	5.6	294.0	12.4	10.6	-0.3
910203	1400	1500	6.10	6.3	273.0	12.8	10.6	
910203	1400	1500	17.68	6.6	283.0	11.6	10.5	-0.1
910203	1500	1600	6.10	8.5	274.0	12.7	9.1	
910203	1500	1600	17.68	8.8	282.0	11.2	8.9	-0.2
910203	1600	1700	6.10	8.5	273.0	11.2	7.7	
910203	1600	1700	17.68	8.9	283.0	9.9	7.7	0.0
910203	1700	1800	6.10	7.8	269.0	11.0	6.8	
910203	1700	1800	17.68	8.3	279.0	9.8	6.8	0.0
910203	1800	1900	6.10	6.9	269.0	10.3	6.1	
910203	1800	1900	17.68	7.3	277.0	8.9	6.3	0.2
910203	1900	2000	6.10	5.2	269.0	11.7	5.8	
910203	1900	2000	17.68	5.5	279.0	11.2	6.0	0.2
910203	2000	2100	6.10	4.1	284.0	54.6	5.3	
910203	2000	2100	17.68	4.5	296.0	53.8	5.5	0.2
910203	2100	2200	6.10	2.0	214.0	66.5	3.0	
910203	2100	2200	17.68	1.9	198.0	58.1	3.4	0.4
910203	2200	2300	6.10	1.1	259.0	59.4	2.3	
910203	2200	2300	17.68	0.9	300.0	86.0	2.6	0.3
910203	2300	0	6.10	1.7	256.0	27.2	2.3	
910203	2300	0	17.68	0.0	264.0	44.5	2.5	0.2

DATE 1010 1-40-
 JTMX 47.111E 07N 441E.373N ELEV.M.ASL 5875.00

DATE	TIME START	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR deg	SIGMA THETA deg	TEMP (deg C)	DELTA TEMP (deg C)
910204	0	100	6.10	2.7	151.0	25.6	3.1	
910204	0	100	17.68	1.5	159.0	18.8	3.6	0.4
910204	100	200	6.10	3.9	275.0	9.0	3.9	
910204	100	200	17.68	4.0	286.0	7.1	4.3	0.4
910204	100	200	6.10	5.7	167.0	10.2	4.0	
910204	100	200	17.68	6.1	176.0	8.9	4.2	0.2
910204	200	300	6.10	7.6	225.0	11.2	3.8	
910204	200	300	17.68	7.9	175.0	9.8	3.9	0.1
910204	300	400	6.10	6.6	253.0	10.1	3.6	
910204	300	400	17.68	6.9	264.0	9.6	3.7	0.1
910204	400	500	6.10	6.1	256.0	11.1	3.5	
910204	400	500	17.68	6.5	266.0	10.3	3.7	0.2
910204	500	600	6.10	3.2	252.0	20.1	3.3	
910204	500	600	17.68	3.3	260.0	19.6	3.8	0.5
910204	600	700	6.10	1.5	266.0	74.4	3.4	
910204	600	700	17.68	1.4	334.0	84.5	3.9	0.5
910204	800	900	6.10	1.0	132.0	12.8	5.9	
910204	800	900	17.68	1.0	144.0	14.5	5.8	-0.1
910204	900	1000	6.10	1.5	93.0	29.0	7.3	
910204	900	1000	17.68	1.4	103.0	31.0	7.1	-0.2
910204	1000	1100	6.10	2.4	105.0	34.6	7.5	
910204	1000	1100	17.68	2.4	115.0	36.1	7.1	-0.4
910204	1100	1200	6.10	3.4	108.0	46.5	7.3	
910204	1100	1200	17.68	3.3	118.0	44.9	7.0	-0.3
910204	1200	1300	6.10	2.1	25.0	29.5	6.7	
910204	1200	1300	17.68	1.9	32.0	28.0	6.3	-0.4
910204	1300	1400	6.10	1.7	60.0	36.9	7.6	
910204	1300	1400	17.68	1.6	65.0	37.4	7.3	-0.3
910204	1400	1500	6.10	2.1	52.0	23.8	7.0	
910204	1400	1500	17.68	1.9	58.0	21.9	6.8	-0.2
910204	1500	1600	6.10	1.5	10.0	28.8	6.7	
910204	1500	1600	17.68	1.4	19.0	25.9	6.1	-0.6
910204	1600	1700	6.10	0.5	272.0	13.0	4.4	
910204	1600	1700	17.68	0.1	346.0	19.8	4.3	-0.1
910204	1700	1800	6.10	1.6	234.0	17.0	3.5	
910204	1700	1800	17.68	0.0	195.0	69.2	3.7	0.2
910204	1800	1900	6.10	3.7	217.0	7.3	4.7	
910204	1800	1900	17.68	0.0	224.0	6.9	5.2	0.5
910204	1900	2000	6.10	3.2	202.0	12.6	4.2	
910204	1900	2000	17.68	2.4	210.0	15.0	4.7	0.5
910204	2000	2100	6.10	2.6	257.0	46.0	3.3	
910204	2000	2100	17.68	1.3	259.0	65.7	4.2	0.9
910204	2100	2200	6.10	1.6	290.0	11.6	3.3	
910204	2100	2200	17.68	0.0	320.0	15.0	3.7	0.4
910204	2200	2300	6.10	0.8	291.0	13.7	3.1	
910204	2200	2300	17.68	0.0	318.0	16.9	2.9	-0.2
910204	2300	0	6.10	0.7	298.0	14.8	2.8	
910204	2300	0	17.68	0.0	332.0	16.9	2.6	-0.2

SITE 1015 FAND-
 UTMA 477.0215 UTMA -415.373N'ELEV(m/ASL) 6875.00

DATE	TIME START	TIME STOP	OBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP deg C	DELTA TEMP (deg C)
910215	0	100	6.10	1.3	261.0	20.7	3.6	
910215	0	100	17.68	0.0	315.0	24.9	3.8	0.3
910215	100	200	6.10	0.6	240.0	12.7	3.1	
910215	100	200	17.68	0.0	227.0	17.2	2.8	-0.3
910215	200	300	6.10	0.8	281.0	25.1	3.5	
910215	200	300	17.68	0.1	297.0	50.9	3.7	0.2
910215	300	400	6.10	1.9	275.0	40.1	3.9	
910215	300	400	17.68	0.9	293.0	60.4	4.2	0.3
910215	400	500	6.10	3.4	225.0	13.2	4.9	
910215	400	500	17.68	3.4	228.0	12.2	5.7	0.8
910215	500	600	6.10	2.6	293.0	10.8	4.8	
910215	500	600	17.68	2.2	318.0	13.6	5.6	0.8
910215	600	700	6.10	1.3	273.0	22.1	5.2	
910215	600	700	17.68	0.5	307.0	64.1	5.6	0.4
910215	700	800	6.10	0.5	251.0	16.7	7.3	
910215	700	800	17.68	0.0	250.0	47.1	7.4	0.1
910215	800	900	6.10	0.4	44.0	72.3	11.1	
910215	800	900	17.68	0.0	24.0	61.8	11.5	0.4
910215	900	1000	6.10	1.2	133.0	42.0	11.5	
910215	900	1000	17.68	1.1	139.0	36.7	11.4	-0.1
910215	1000	1100	6.10	2.5	154.0	13.9	10.2	
910215	1000	1100	17.68	3.0	161.0	13.2	9.9	-0.3
910215	1100	1200	6.10	3.4	152.0	11.0	10.3	
910215	1100	1200	17.68	4.2	158.0	9.8	9.8	-0.5
910215	1200	1300	6.10	4.4	143.0	10.2	10.4	
910215	1200	1300	17.68	4.8	150.0	8.6	10.0	-0.4
910215	1200	1400	6.10	3.7	158.0	12.1	11.1	
910215	1300	1400	17.68	4.8	165.0	10.8	10.7	-0.4
910215	1400	1500	6.10	3.1	152.0	11.7	11.6	
910215	1400	1500	17.68	3.8	159.0	10.8	11.4	-0.2
910215	1500	1600	6.10	2.5	155.0	17.8	11.6	
910215	1500	1600	17.68	2.9	162.0	16.4	11.2	-0.4
910215	1600	1700	6.10	2.3	213.0	14.4	9.4	
910215	1600	1700	17.68	2.1	205.0	12.7	9.7	0.3
910215	1700	1800	6.10	3.0	223.0	7.0	8.8	
910215	1700	1800	17.68	2.7	221.0	7.1	9.4	0.6
910215	1800	1900	6.10	2.0	237.0	19.7	8.4	
910215	1800	1900	17.68	1.8	236.0	23.1	9.0	0.6
910215	1900	2000	6.10	0.6	283.0	17.6	7.3	
910215	1900	2000	17.68	0.1	345.0	42.4	7.4	0.1
910215	2000	2100	6.10	0.8	292.0	14.4	6.9	
910215	2000	2100	17.68	0.0	331.0	24.7	7.0	0.1
910215	2100	2200	6.10	0.9	273.0	17.3	6.7	
910215	2100	2200	17.68	0.0	283.0	37.3	6.4	-0.3
910215	2200	2300	6.10	1.3	250.0	26.0	6.8	
910215	2200	2300	17.68	0.0	232.0	45.9	6.9	0.1
910215	2300	0	6.10	1.3	275.0	35.5	6.5	
910215	2300	0	17.68	0.0	297.0	59.9	6.7	0.2

SITE 0018 PAND-
 UTMX 477.021E UTM Y 4415.372N ELEV(m,ASL) 5875.00

DATE	TIME START	TIME STOP	DEB HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910206	0	100	6.10	1.8	300.0	16.8	6.5	
910206	0	100	17.68	1.3	313.0	34.0	7.0	0.5
910206	100	200	6.10	2.6	178.0	7.0	7.6	
910206	100	200	17.68	1.3	293.0	11.0	8.2	0.6
910206	100	300	6.10	1.4	285.0	70.5	8.2	
910206	100	300	17.68	1.2	324.0	89.2	7.0	0.5
910206	300	400	6.10	1.9	293.0	29.8	6.1	
910206	300	400	17.68	2.0	309.0	20.2	6.6	0.5
910206	400	500	6.10	2.8	301.0	34.1	6.8	
910206	400	500	17.68	3.0	324.0	30.1	7.6	0.8
910206	500	600	6.10	1.6	314.0	68.8	5.3	
910206	500	600	17.68	1.7	328.0	64.8	5.7	0.4
910206	600	700	6.10	1.8	322.0	24.7	4.3	
910206	600	700	17.68	2.0	356.0	28.6	4.9	0.6
910206	700	800	6.10	1.1	357.0	30.6	3.9	
910206	700	800	17.68	1.1	20.0	26.2	4.2	0.3
910206	800	900	6.10	3.1	5.0	17.3	4.9	
910206	800	900	17.68	2.8	9.0	19.7	4.7	-0.2
910206	900	1000	6.10	4.7	12.0	10.7	4.6	
910206	900	1000	17.68	4.6	20.0	9.8	4.3	-0.3
910206	1000	1100	6.10	4.6	14.0	15.5	4.7	
910206	1000	1100	17.68	4.6	22.0	14.3	4.2	-0.5

SITE 1015 88V0-
 JTMX 477.021E UTMX 4418.272N ELEV:M/ASL 6875.00

DATE	TIME STRT	TIME STOP	CSB HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA ALPHA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910208	1100	1200	6.10	2.1	19.0	13.0	8.5	
910208	1100	1200	17.68	2.0	24.0	14.0	8.2	-0.3
910208	1200	1300	6.10	3.1	0.0	11.0	9.2	
910208	1200	1300	17.68	3.4	9.0	10.2	9.1	-0.2
910208	1300	1400	6.10	3.6	14.0	11.2	9.4	
910208	1300	1400	17.68	3.4	12.0	9.7	9.1	-0.3
910208	1400	1500	6.10	3.7	14.0	11.1	9.2	
910208	1400	1500	17.68	3.8	20.0	10.4	8.8	-0.4
910208	1500	1600	6.10	3.0	6.0	8.3	8.0	
910208	1500	1600	17.68	3.1	12.0	8.9	7.8	-0.2
910208	1600	1700	6.10	2.4	347.0	12.4	7.1	
910208	1600	1700	17.68	2.6	355.0	11.0	7.1	0.0
910208	1700	1800	6.10	2.4	349.0	13.4	7.0	
910208	1700	1800	17.68	2.9	359.0	12.6	7.3	0.3
910208	1800	1900	6.10	2.4	331.0	12.1	6.7	
910208	1800	1900	17.68	2.9	348.0	10.4	7.2	0.5
910208	1900	2000	6.10	2.7	324.0	12.0	6.7	
910208	1900	2000	17.68	3.2	336.0	10.6	7.1	0.4
910208	2000	2100	6.10	3.1	325.0	14.9	7.1	
910208	2000	2100	17.68	3.5	333.0	13.4	7.3	0.2
910208	2100	2200	6.10	3.3	342.0	11.7	6.9	
910208	2100	2200	17.68	3.7	350.0	10.4	7.0	0.1
910208	2200	2300	6.10	3.9	341.0	12.0	5.8	
910208	2200	2300	17.68	4.2	350.0	10.4	6.0	0.2
910208	2300	0	6.10	3.1	328.0	12.5	5.1	
910208	2300	0	17.68	3.5	338.0	11.3	5.3	0.2

SITE DATA PLAT
 STMA 477.593E STMA 4412.123N ELEV(M/ASL) 2150.00

DATE	TIME START	TIME STOP	DBB HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA WETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910128	0	100	6.10	3.8	125.0	42.3	-0.1	
910128	0	100	17.68	3.7	123.0	43.1	0.1	0.2
910128	100	200	6.10	4.0	89.0	55.5	-1.0	
910128	100	200	17.68	4.2	71.0	54.5	-0.7	0.5
910128	200	300	6.10	7.4	270.0	28.2	0.2	
910128	200	300	17.68	7.4	272.0	27.3	0.4	0.2
910128	300	400	6.10	5.9	259.0	28.9	0.2	
910128	300	400	17.68	5.0	251.0	27.2	0.4	0.2
910128	400	500	6.10	3.5	238.0	48.1	-0.1	
910128	400	500	17.68	3.4	238.0	44.2	0.0	0.1
910128	500	600	6.10	5.9	300.0	76.2	-0.1	
910128	500	600	17.68	5.9	298.0	77.1	0.3	0.4
910128	600	700	6.10	11.1	259.0	14.9	1.3	
910128	600	700	17.68	11.6	261.0	13.1	1.7	0.4
910128	700	800	6.10	9.8	263.0	15.4	1.0	
910128	700	800	17.68	10.0	264.0	13.8	1.2	0.2
910128	800	900	6.10	11.1	263.0	14.8	1.3	
910128	800	900	17.68	11.2	266.0	13.6	1.4	0.1
910128	900	1000	6.10	7.7	319.0	17.0	1.1	
910128	900	1000	17.68	7.5	317.0	15.7	1.4	0.3
910128	1000	1100	6.10	11.0	314.0	13.5	2.7	
910128	1000	1100	17.68	10.8	312.0	12.3	2.8	0.1
910128	1100	1200	6.10	8.5	287.0	49.0	3.5	
910128	1100	1200	17.68	8.3	285.0	47.6	3.5	0.0
910128	1200	1300	6.10	4.7	160.0	41.9	4.2	
910128	1200	1300	17.68	4.6	158.0	40.9	3.6	-0.6
910128	1300	1400	6.10	2.0	12.0	46.1	1.6	
910128	1300	1400	17.68	1.6	21.0	60.3	1.7	0.1
910128	1400	1500	6.10	2.6	20.0	15.2	0.9	
910128	1400	1500	17.68	0.0	18.0	14.5	0.8	-0.1
910128	1500	1600	6.10	4.1	1.0	10.9	-1.2	
910128	1500	1600	17.68	3.6	0.0	9.3	-1.3	-0.1
910128	1600	1700	6.10	7.3	3.0	7.6	-2.6	
910128	1600	1700	17.68	7.3	0.0	7.1	-2.6	0.0
910128	1700	1800	6.10	10.5	5.0	6.6	-5.5	
910128	1700	1800	17.68	10.5	2.0	7.3	-5.6	-0.1
910128	1800	1900	6.10	9.6	10.0	11.4	-7.1	
910128	1800	1900	17.68	9.3	7.0	9.5	-7.3	-0.2
910128	1900	2000	6.10	8.3	27.0	7.8	-8.7	
910128	1900	2000	17.68	7.5	23.0	7.7	-8.8	-0.1
910128	2000	2100	6.10	7.4	27.0	7.4	-11.2	
910128	2000	2100	17.68	6.7	24.0	7.0	-11.3	-0.1
910128	2100	2200	6.10	7.7	21.0	6.8	-13.6	
910128	2100	2200	17.68	7.2	17.0	6.7	-13.7	-0.1
910128	2200	2300	6.10	7.8	16.0	5.7	-15.1	
910128	2200	2300	17.68	7.4	12.0	4.8	-15.2	-0.1
910128	2300	0	6.10	6.7	13.0	6.7	-15.9	
910128	2300	0	17.68	6.3	9.0	5.6	-16.0	-0.1

SITE DATA FILE

JTM 477.691E JTM 4412.112N ELEV(m/ASL) 6150.00

DATE	TIME START	TIME STOP	DBB HT m/ASL	WIND SPEED (m/s)	WIND DIR deg	SIGMA THETA deg	TEMP (deg C)	DELTA TEMP (deg C)
910129	0	100	6.10	5.4	13.0	10.8	-16.3	
910129	0	100	17.68	4.9	13.0	10.9	-16.4	-0.1
910129	100	200	6.10	5.1	14.0	7.0	-17.9	
910129	100	200	17.68	4.6	12.0	6.3	-17.9	0.0
910129	100	200	6.10	2.1	0.0	19.5	-18.2	
910129	100	200	17.68	2.0	5.0	17.7	-18.7	0.1
910129	100	400	6.10	3.2	14.0	12.4	-18.5	
910129	200	400	17.68	2.8	12.0	11.2	-18.5	0.0
910129	400	500	6.10	3.5	61.0	17.1	-18.9	
910129	400	500	17.68	2.0	60.0	16.3	-18.9	0.0
910129	500	600	6.10	1.2	97.0	35.4	-19.5	
910129	500	600	17.68	1.2	96.0	33.2	-19.6	-0.1
910129	600	700	6.10	0.6	146.0	44.5	-19.9	
910129	600	700	17.68	0.0	155.0	33.7	-19.8	0.1
910129	700	800	6.10	0.8	192.0	39.7	-20.0	
910129	700	800	17.68	0.0	178.0	23.8	-19.9	0.1
910129	800	900	6.10	0.5	233.0	43.0	-17.2	
910129	800	900	17.68	0.0	204.0	21.8	-17.9	-0.7
910129	900	1000	6.10	1.3	157.0	33.0	-15.4	
910129	900	1000	17.68	0.0	149.0	26.5	-16.7	-1.3
910129	1000	1100	6.10	1.4	170.0	45.6	-13.9	
910129	1000	1100	17.68	0.0	164.0	38.6	-14.9	-1.0
910129	1100	1200	6.10	1.6	138.0	31.4	-13.4	
910129	1100	1200	17.68	0.9	136.0	30.2	-14.4	-1.0
910129	1200	1300	6.10	1.3	173.0	30.8	-11.4	
910129	1200	1300	17.68	0.4	165.0	27.8	-12.7	-1.3
910129	1300	1400	6.10	1.4	110.0	59.4	-10.8	
910129	1300	1400	17.68	0.5	108.0	46.2	-11.8	-1.0
910129	1400	1500	6.10	3.5	171.0	9.4	-13.7	
910129	1400	1500	17.68	3.3	168.0	8.2	-14.6	-0.9
910129	1500	1600	6.10	3.6	173.0	13.4	-13.0	
910129	1500	1600	17.68	3.5	170.0	11.6	-13.6	-0.6
910129	1600	1700	6.10	2.5	162.0	36.9	-12.9	
910129	1600	1700	17.68	2.5	162.0	25.9	-13.0	-0.1
910129	1700	1800	6.10	4.6	281.0	46.7	-5.9	
910129	1700	1800	17.68	4.8	277.0	35.9	-4.7	1.2
910129	1800	1900	6.10	5.8	261.0	30.0	-2.7	
910129	1800	1900	17.68	5.8	261.0	30.9	-2.5	0.2
910129	1900	2000	6.10	9.5	285.0	16.0	-2.4	
910129	1900	2000	17.68	9.4	285.0	14.2	-2.0	0.4
910129	2000	2100	6.10	9.4	281.0	15.5	-1.9	
910129	2000	2100	17.68	9.5	281.0	14.0	-1.4	0.5
910129	2100	2200	6.10	10.5	265.0	15.7	-1.8	
910129	2100	2200	17.68	11.1	267.0	13.9	-1.3	0.5
910129	2200	2300	6.10	11.7	270.0	15.4	-0.9	
910129	2200	2300	17.68	12.1	272.0	13.0	-0.3	0.6
910129	2300	0	6.10	10.8	280.0	20.6	-1.3	
910129	2300	0	17.68	11.0	280.0	21.5	-0.5	0.8

SITE NAME PLAT
 UTM: 475,695 UTM: 4412.113N ELEV(m/ABL): 6150.00

DATE	TIME START	TIME STOP	DBS HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA INETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910130	0	100	6.10	7.0	103.0	13.9	-1.4	
910130	0	100	17.68	6.7	107.0	13.9	-1.0	0.4
910130	100	200	6.10	2.8	125.0	52.9	-1.7	
910130	100	200	17.68	2.7	145.0	58.6	-1.4	0.3
910130	200	300	6.10	4.3	78.0	66.5	-0.9	
910130	200	300	17.68	4.2	82.0	63.5	-0.6	0.3
910130	300	400	6.10	2.7	107.0	50.5	-0.4	
910130	300	400	17.68	4.1	105.0	47.6	-0.2	0.2
910130	400	500	6.10	2.6	125.0	46.1	-2.3	
910130	400	500	17.68	3.8	118.0	44.9	-1.8	0.5
910130	500	600	6.10	7.0	255.0	92.0	-1.3	
910130	500	600	17.68	7.0	258.0	93.9	-0.9	0.4
910130	600	700	6.10	18.4	287.0	7.8	-1.1	
910130	600	700	17.68	18.7	288.0	6.5	0.1	1.2
910130	700	800	6.10	18.1	295.0	8.3	-0.6	
910130	700	800	17.68	18.4	295.0	7.0	0.5	1.1
910130	800	900	6.10	16.9	299.0	9.3	1.0	
910130	800	900	17.68	17.0	299.0	8.1	2.0	1.0
910130	900	1000	6.10	17.7	288.0	8.3	2.2	
910130	900	1000	17.68	17.9	289.0	6.8	2.8	0.6
910130	1000	1100	6.10	17.7	284.0	9.1	3.7	
910130	1000	1100	17.68	18.1	285.0	7.3	4.0	0.3
910130	1100	1200	6.10	16.5	276.0	10.9	4.5	
910130	1100	1200	17.68	17.0	278.0	8.6	4.7	0.2
910130	1200	1300	6.10	15.0	266.0	12.2	4.8	
910130	1200	1300	17.68	15.4	269.0	10.9	4.8	0.0
910130	1300	1400	6.10	10.7	274.0	29.0	6.0	
910130	1300	1400	17.68	10.8	276.0	28.2	6.0	0.0
910130	1400	1500	6.10	6.9	253.0	26.7	6.7	
910130	1400	1500	17.68	6.8	254.0	25.1	6.6	-0.1
910130	1500	1600	6.10	7.0	269.0	36.1	6.0	
910130	1500	1600	17.68	6.9	270.0	33.4	5.9	-0.1
910130	1600	1700	6.10	7.3	280.0	31.2	5.4	
910130	1600	1700	17.68	7.4	282.0	30.1	5.5	0.1
910130	1700	1800	6.10	13.9	286.0	10.7	4.6	
910130	1700	1800	17.68	14.3	287.0	9.3	5.0	0.4
910130	1800	1900	6.10	6.2	241.0	55.4	4.5	
910130	1800	1900	17.68	6.2	240.0	57.4	4.7	0.2
910130	1900	2000	6.10	4.4	240.0	66.7	4.5	
910130	1900	2000	17.68	4.4	240.0	67.5	4.7	0.2
910130	2000	2100	6.10	5.8	247.0	27.2	4.5	
910130	2000	2100	17.68	6.1	248.0	26.0	4.8	0.3
910130	2100	2200	6.10	4.4	263.0	62.7	4.7	
910130	2100	2200	17.68	4.4	259.0	63.8	4.8	0.1
910130	2200	2300	6.10	6.7	223.0	54.9	5.2	
910130	2200	2300	17.68	6.7	223.0	50.3	5.4	0.2
910130	2300	0	6.10	7.2	266.0	80.6	5.5	
910130	2300	0	17.68	7.5	254.0	82.9	5.8	0.3

SITE DATE FLAT
 JTM: 479.851E UTMX 4+12.129N ELEV(m/ASL) 6150.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910131	0	100	6.10	19.1	277.0	11.5	6.2	
910131	0	100	17.68	20.0	278.0	9.1	6.7	0.5
910131	100	100	6.10	18.8	269.0	10.9	6.2	
910131	100	100	17.68	18.8	272.0	8.9	6.3	0.3
910131	100	200	6.10	18.8	271.0	11.2	6.3	
910131	100	200	17.68	18.2	272.0	9.2	7.2	0.4
910131	200	400	6.10	10.8	255.0	26.5	6.4	
910131	200	400	17.68	11.2	259.0	25.2	6.6	0.2
910131	400	500	6.10	7.8	283.0	65.8	5.7	
910131	400	500	17.68	7.7	283.0	69.1	5.9	0.2
910131	500	600	6.10	12.5	274.0	13.3	5.7	
910131	500	600	17.68	12.7	276.0	11.9	6.0	0.3
910131	600	700	6.10	10.5	269.0	13.5	5.9	
910131	600	700	17.68	10.8	270.0	11.8	6.3	0.4
910131	700	800	6.10	12.5	269.0	13.1	6.2	
910131	700	800	17.68	13.2	270.0	11.2	6.7	0.5
910131	800	900	6.10	11.7	271.0	11.2	6.7	
910131	800	900	17.68	12.1	272.0	8.8	7.0	0.3
910131	900	1000	6.10	10.8	265.0	10.2	8.3	
910131	900	1000	17.68	11.0	266.0	8.4	8.6	0.3
910131	1000	1100	6.10	11.3	259.0	10.9	8.3	
910131	1000	1100	17.68	11.5	260.0	9.2	8.5	0.2
910131	1100	1200	6.10	10.9	258.0	14.7	10.5	
910131	1100	1200	17.68	11.3	260.0	11.9	10.4	-0.1
910131	1200	1300	6.10	8.5	269.0	15.1	12.2	
910131	1200	1300	17.68	8.7	270.0	13.7	12.1	-0.1
910131	1300	1400	6.10	6.7	304.0	27.8	11.4	
910131	1300	1400	17.68	6.8	302.0	25.9	11.8	0.4
910131	1400	1500	6.10	3.0	311.0	55.1	15.2	
910131	1400	1500	17.68	2.9	306.0	62.0	14.7	-0.5
910131	1500	1600	6.10	5.0	303.0	31.3	13.0	
910131	1500	1600	17.68	5.0	300.0	33.9	13.1	0.1
910131	1600	1700	6.10	2.3	283.0	31.8	11.3	
910131	1600	1700	17.68	2.5	269.0	37.1	11.6	0.3
910131	1700	1800	6.10	1.1	220.0	55.3	8.1	
910131	1700	1800	17.68	1.3	189.0	35.6	8.8	0.7
910131	1800	1900	6.10	1.9	296.0	40.8	8.8	
910131	1800	1900	17.68	1.4	281.0	47.4	9.1	0.3
910131	1900	2000	6.10	6.1	282.0	18.9	8.2	
910131	1900	2000	17.68	6.6	276.0	19.5	9.2	1.0
910131	2000	2100	6.10	7.6	294.0	11.0	7.2	
910131	2000	2100	17.68	7.2	286.0	9.0	9.9	2.7
910131	2100	2200	6.10	6.3	293.0	10.5	7.6	
910131	2100	2200	17.68	5.6	280.0	10.8	9.5	1.9
910131	2200	2300	6.10	5.1	290.0	17.1	8.1	
910131	2200	2300	17.68	4.4	285.0	18.3	9.9	1.8
910131	2300	0	6.10	4.8	302.0	12.4	9.2	
910131	2300	0	17.68	3.9	299.0	13.3	10.1	0.9

SITE 8473 FLAT
 UTM 472.691E UTM 4412.123N ELEVATION AGL 6150.00

DATE	TIME START	TIME STOP	DIB HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910201	0	100	6.10	4.3	274.0	19.3	9.0	
910201	0	100	17.68	4.1	273.0	19.7	9.0	0.0
910201	100	200	6.10	7.6	274.0	20.1	9.1	
910201	100	200	17.68	7.7	273.0	19.8	9.7	0.6
910201	200	300	6.10	2.9	268.0	12.8	9.6	
910201	200	300	17.68	9.0	269.0	11.0	10.0	0.4
910201	300	400	6.10	9.1	254.0	9.9	9.0	
910201	300	400	17.68	9.5	261.0	8.8	9.6	0.6
910201	400	500	6.10	7.8	271.0	12.1	9.6	
910201	400	500	17.68	8.1	272.0	10.1	10.0	0.4
910201	500	600	6.10	4.9	265.0	18.1	9.8	
910201	500	600	17.68	5.1	268.0	17.3	10.1	0.3
910201	600	700	6.10	5.5	248.0	14.3	9.4	
910201	600	700	17.68	7.5	249.0	11.7	10.0	0.6
910201	700	800	6.10	9.6	263.0	15.2	10.0	
910201	700	800	17.68	10.3	263.0	12.8	10.6	0.6
910201	800	900	6.10	7.9	278.0	10.9	10.2	
910201	800	900	17.68	8.4	278.0	8.5	10.8	0.6
910201	900	1000	6.10	3.3	311.0	57.4	10.5	
910201	900	1000	17.68	3.4	308.0	59.9	10.8	0.3
910201	1000	1100	6.10	7.2	270.0	10.7	11.9	
910201	1000	1100	17.68	7.4	271.0	8.0	12.0	0.1
910201	1100	1200	6.10	3.3	182.0	90.6	12.1	
910201	1100	1200	17.68	3.5	175.0	82.6	12.1	0.0
910201	1200	1300	6.10	2.7	151.0	51.5	12.4	
910201	1200	1300	17.68	2.5	152.0	49.9	12.1	-0.3
910201	1300	1400	6.10	2.9	132.0	37.5	13.7	
910201	1300	1400	17.68	2.6	130.0	34.8	13.3	-0.4
910201	1400	1500	6.10	2.5	342.0	91.5	13.9	
910201	1400	1500	17.68	1.9	51.0	91.9	13.4	-0.5
910201	1500	1600	6.10	4.6	355.0	11.3	11.2	
910201	1500	1600	17.68	4.4	355.0	9.1	11.0	-0.2
910201	1600	1700	6.10	4.4	336.0	7.8	9.9	
910201	1600	1700	17.68	3.8	341.0	4.1	10.6	0.7
910201	1700	1800	6.10	5.2	328.0	7.5	9.3	
910201	1700	1800	17.68	4.3	331.0	7.6	9.9	0.6
910201	1800	1900	6.10	5.1	310.0	4.7	8.4	
910201	1800	1900	17.68	3.6	312.0	8.2	10.3	1.9
910201	1900	2000	6.10	5.8	309.0	3.6	7.2	
910201	1900	2000	17.68	3.9	309.0	6.1	10.1	2.9
910201	2000	2100	6.10	6.2	304.0	4.5	5.8	
910201	2000	2100	17.68	4.8	299.0	5.4	9.3	3.5
910201	2100	2200	6.10	6.0	301.0	4.1	6.6	
910201	2100	2200	17.68	4.7	293.0	4.7	8.8	2.2
910201	2200	2300	6.10	6.0	298.0	6.3	7.1	
910201	2200	2300	17.68	5.3	289.0	6.3	8.6	1.5
910201	2300	0	6.10	4.4	294.0	13.4	8.2	
910201	2300	0	17.68	3.7	285.0	18.7	9.1	0.9

SITE 0173 FLAT
 UTM 478.593E UTM 4412.123N ELEV(m/ASL) 2150.00

DATE	TIME STRT	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910211	0	100	6.10	5.6	308.0	4.7	6.1	
910212	0	100	17.68	4.1	303.0	5.8	8.5	2.4
910212	100	200	6.10	2.3	283.0	34.9	5.0	
910212	100	200	17.68	1.7	230.0	45.9	6.4	1.4
910212	100	300	6.10	2.2	307.0	11.9	6.5	
910212	100	300	17.68	0.9	299.0	20.5	8.5	2.0
910212	100	400	6.10	4.7	311.0	7.2	6.2	
910212	300	400	17.68	2.9	308.0	12.9	8.2	1.9
910212	400	500	6.10	4.4	308.0	8.2	6.5	
910212	400	500	17.68	2.9	300.0	12.2	8.5	2.0
910212	500	600	6.10	2.8	297.0	7.7	7.3	
910212	500	600	17.68	2.2	286.0	13.0	8.3	1.0
910212	600	700	6.10	3.3	301.0	17.1	8.3	
910212	600	700	17.68	1.9	300.0	17.4	9.4	1.1
910212	700	800	6.10	1.5	215.0	29.6	7.6	
910212	700	800	17.68	1.7	211.0	26.7	8.8	1.2
910212	800	900	6.10	3.3	300.0	40.2	10.8	
910212	800	900	17.68	3.2	294.0	35.3	11.3	0.5
910212	900	1000	6.10	2.9	309.0	86.3	11.7	
910212	900	1000	17.68	2.9	326.0	85.8	11.8	0.1
910212	1000	1100	6.10	2.2	172.0	18.3	10.9	
910212	1000	1100	17.68	1.9	170.0	17.7	10.3	-0.6
910212	1100	1200	6.10	2.2	170.0	20.6	13.0	
910212	1100	1200	17.68	2.0	168.0	18.6	12.3	-0.7
910212	1200	1300	6.10	2.6	166.0	20.5	14.6	
910212	1200	1300	17.68	2.3	164.0	19.8	13.8	-0.8
910212	1300	1400	6.10	2.2	147.0	43.2	15.4	
910212	1300	1400	17.68	2.0	142.0	41.0	14.7	-0.7
910212	1400	1500	6.10	1.7	159.0	29.2	15.9	
910212	1400	1500	17.68	1.5	154.0	25.2	15.1	-0.8
910212	1500	1600	6.10	1.9	80.0	69.3	13.5	
910212	1500	1600	17.68	1.7	85.0	67.0	13.0	-0.5
910212	1600	1700	6.10	1.7	315.0	32.1	12.0	
910212	1600	1700	17.68	0.7	311.0	32.6	12.0	0.0
910212	1700	1800	6.10	1.2	315.0	47.5	9.2	
910212	1700	1800	17.68	0.2	298.0	78.1	9.6	0.4
910212	1800	1900	6.10	2.0	256.0	43.6	10.1	
910212	1800	1900	17.68	1.4	258.0	45.9	10.6	0.5
910212	1900	2000	6.10	1.8	212.0	35.7	9.9	
910212	1900	2000	17.68	1.7	209.0	31.1	10.4	0.5
910212	2000	2100	6.10	1.3	343.0	67.4	8.6	
910212	2000	2100	17.68	0.1	33.0	88.9	9.0	0.4
910212	2100	2200	6.10	2.7	269.0	16.7	9.3	
910212	2100	2200	17.68	2.6	265.0	21.9	9.6	0.3
910212	2200	2300	6.10	6.1	272.0	14.9	9.0	
910212	2200	2300	17.68	6.4	270.0	14.1	9.5	0.5
910212	2300	0	6.10	10.8	266.0	12.1	10.1	
910212	2300	0	17.68	11.0	269.0	10.3	10.5	0.4

SITE 9478 FLAT
 JTMX 479.5355 JTMX 4412.113N ELEV(m)ASL 5150.00

DATE	TIME START	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910212	0	100	6.10	10.4	268.0	9.9	10.1	
910212	0	100	17.68	10.7	268.0	8.9	10.5	0.4
910212	100	200	6.10	8.1	269.0	11.3	9.8	
910212	100	200	17.68	8.5	271.0	9.7	10.4	0.5
910212	200	300	6.10	9.7	274.0	10.2	9.2	
910212	200	300	17.68	10.0	274.0	7.2	9.7	0.3
910212	300	400	6.10	9.6	272.0	8.2	8.6	
910212	300	400	17.68	9.9	273.0	6.4	9.1	0.3
910212	400	500	6.10	9.0	275.0	9.9	8.2	
910212	400	500	17.68	9.4	275.0	7.4	8.3	0.6
910212	500	600	6.10	10.0	274.0	9.9	7.7	
910212	500	600	17.68	10.4	275.0	7.2	8.1	0.4
910212	600	700	6.10	9.1	276.0	10.0	7.0	
910212	600	700	17.68	9.6	275.0	6.7	7.5	0.5
910212	700	800	6.10	9.3	277.0	9.4	7.1	
910212	700	800	17.68	10.3	277.0	6.3	7.5	0.4
910212	800	900	6.10	10.0	271.0	11.3	8.3	
910212	800	900	17.68	10.3	271.0	8.7	8.3	0.0
910212	900	1000	6.10	9.2	269.0	11.1	9.6	
910212	900	1000	17.68	9.3	269.0	8.5	9.3	-0.3
910212	1000	1100	6.10	5.3	289.0	55.9	10.9	
910212	1000	1100	17.68	5.3	288.0	55.8	10.5	-0.4
910212	1100	1200	6.10	5.3	289.0	17.1	12.2	
910212	1100	1200	17.68	5.1	290.0	15.2	11.7	-0.5
910212	1200	1300	6.10	2.7	289.0	56.7	13.2	
910212	1200	1300	17.68	2.5	287.0	61.1	12.8	-0.4
910212	1300	1400	6.10	4.9	281.0	34.5	12.6	
910212	1300	1400	17.68	4.6	281.0	36.9	12.1	-0.5
910212	1400	1500	6.10	6.9	295.0	11.2	12.1	
910212	1400	1500	17.68	6.6	295.0	9.8	11.7	-0.4
910212	1500	1600	6.10	8.2	287.0	8.8	10.6	
910212	1500	1600	17.68	8.2	287.0	6.7	10.4	-0.2
910212	1600	1700	6.10	7.1	286.0	9.4	9.2	
910212	1600	1700	17.68	7.3	286.0	7.7	9.3	0.1
910212	1700	1800	6.10	8.3	277.0	11.2	7.7	
910212	1700	1800	17.68	8.5	277.0	9.2	7.9	0.2
910212	1800	1900	6.10	7.6	277.0	11.0	6.9	
910212	1800	1900	17.68	7.9	278.0	8.5	7.3	0.4
910212	1900	2000	6.10	7.5	278.0	10.0	6.1	
910212	1900	2000	17.68	7.8	278.0	6.6	6.5	0.4
910212	2000	2100	6.10	5.4	289.0	85.1	5.1	
910212	2000	2100	17.68	5.5	298.0	84.4	5.4	0.3
910212	2100	2200	6.10	1.7	13.0	60.6	2.8	
910212	2100	2200	17.68	0.8	34.0	71.0	3.1	0.3
910212	2200	2300	6.10	1.8	353.0	23.1	2.1	
910212	2200	2300	17.68	0.2	6.0	32.9	2.3	0.2
910212	2300	0	6.10	2.1	318.0	22.7	2.8	
910212	2300	0	17.68	0.0	320.0	29.1	2.9	0.1

[illegible]

DATE 01-03-84 TIME 14:42:22M ELEV (m AGL) 5150.00
LAT 47.8333N LONG 122.1000W

DATE	TIME	DES	WIND	WIND	WIND	TEMP	DELT
START	STOP	HT	DIR	DIR	DIR	REF	TEMP
		(m/AGL)	(m/s)	(deg)	(deg)	(C)	(deg C)
910205	0	6.10	5.1	311.0	31.4	4.3	
910205	100	17.58	3.3	308.0	4.7	4.3	7.3
910205	100	5.10	1.3	327.0	13.3	3.4	
910205	100	17.58	0.3	323.0	31.0	3.3	1.1
910205	100	5.10	0.3	331.0	13.4	3.1	
910205	100	17.58	0.4	323.0	13.3	2.3	0.3
910205	100	5.10	1.4	321.0	13.7	2.3	
910205	100	17.48	0.3	329.0	13.3	2.3	-0.1
910205	100	5.10	1.7	330.0	13.3	2.3	
910205	100	17.58	0.3	321.0	31.4	3.9	-0.1
910205	100	5.10	4.1	325.0	13.3	4.9	
910205	100	17.58	3.1	330.0	14.8	4.1	1.2
910205	100	5.10	4.3	313.0	12.3	4.3	
910205	100	17.68	3.2	313.0	13.7	4.3	1.7
910205	100	5.10	1.3	314.0	30.3	4.2	
910205	100	17.68	1.2	323.0	34.9	4.3	0.4
910205	100	5.10	1.3	223.0	13.9	3.3	
910205	100	17.68	1.3	218.0	13.3	3.3	-0.5
910205	100	5.10	1.3	191.0	17.2	7.9	
910205	100	17.68	1.5	186.0	16.3	7.2	-0.7
910205	100	5.10	2.3	172.0	13.9	10.1	
910205	100	17.68	2.3	159.0	12.1	9.3	-0.3
910205	100	5.10	3.4	165.0	13.2	11.1	
910205	100	17.68	3.2	162.0	12.0	10.2	-0.9
910205	100	5.10	3.7	162.0	17.9	11.7	
910205	100	17.68	3.5	157.0	16.3	10.3	-0.9
910205	100	5.10	3.7	163.0	16.3	12.4	
910205	100	17.68	3.6	160.0	14.3	11.6	-0.3
910205	100	5.10	3.4	163.0	16.1	13.0	
910205	100	17.68	3.1	165.0	14.3	12.2	-0.3
910205	100	5.10	2.6	167.0	17.9	13.3	
910205	100	17.68	2.5	162.0	15.8	12.6	-0.7
910205	100	5.10	1.8	205.0	42.9	12.3	
910205	100	17.68	1.6	188.0	32.9	11.7	-0.6
910205	100	5.10	1.5	269.0	11.2	9.3	
910205	100	17.68	0.9	249.0	10.6	9.3	0.0
910205	100	5.10	3.3	292.0	12.2	8.6	
910205	100	17.68	2.4	273.0	16.7	9.3	0.7
910205	100	5.10	4.9	323.0	13.7	6.7	
910205	100	17.68	3.5	324.0	13.3	8.2	1.5
910205	100	5.10	4.9	315.0	3.3	6.9	
910205	100	17.68	3.2	320.0	5.7	8.2	1.3
910205	100	5.10	4.9	309.0	5.3	6.2	
910205	100	17.68	2.9	309.0	7.6	7.8	1.6
910205	100	5.10	4.7	302.0	9.5	5.2	
910205	100	17.68	3.0	295.0	14.2	7.5	2.3
910205	100	5.10	2.8	288.0	24.8	5.9	
910205	100	17.68	1.5	269.0	33.9	6.8	0.9

SITE PATH FLAT
 TIME 479.5933 UTMX 4412.113N ELEV(m) 6150.00

DATE	TIME START	TIME STOP	DBE HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910206	0	100	6.10	2.9	308.0	7.3	5.8	
910206	0	100	17.68	1.5	308.0	18.2	5.2	0.5
910206	100	200	6.10	2.8	301.0	11.3	4.7	
910206	100	200	17.68	2.3	287.0	38.0	5.9	2.2
910206	200	300	6.10	1.9	305.0	17.9	5.8	
910206	200	300	17.68	1.7	271.0	52.5	5.6	-0.2
910206	300	400	6.10	5.1	323.0	7.0	4.7	
910206	300	400	17.68	4.2	327.0	18.3	6.7	2.0
910206	400	500	6.10	3.0	300.0	41.4	5.6	
910206	400	500	17.68	2.5	309.0	61.0	7.2	1.6
910206	500	600	6.10	1.8	298.0	48.6	4.9	
910206	500	600	17.68	3.9	279.0	63.5	5.2	0.4
910206	600	700	6.10	3.4	326.0	20.4	4.7	
910206	600	700	17.68	2.8	335.0	23.4	5.4	0.7
910206	700	800	6.10	3.2	4.0	14.1	3.9	
910206	700	800	17.68	3.2	12.0	10.7	4.2	0.3
910206	800	900	6.10	3.6	357.0	14.7	4.7	
910206	800	900	17.68	3.4	356.0	13.1	4.4	-0.3
910206	900	1000	6.10	5.9	18.0	9.5	5.3	
910206	900	1000	17.68	5.5	14.0	8.3	4.9	-0.4
910206	1000	1100	6.10	5.6	24.0	10.5	5.1	
910206	1000	1100	17.68	5.1	20.0	9.6	4.8	-0.3

SITE NAME PLAT
 JTMX 478.593E UTMX 4412.112N ELEV(m/ASL) 6150.00

DATE	TIME START	TIME STOP	OBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910218	1100	1200	6.10	2.8	4.0	29.7	9.8	
910218	1100	1200	17.68	2.8	3.0	29.7	9.5	-0.3
910218	1200	1300	6.10	4.7	14.0	10.2	9.8	
910218	1200	1300	17.68	4.3	359.0	8.6	9.6	-0.3
910218	1300	1400	6.10	4.2	28.0	8.4	10.3	
910218	1300	1400	17.68	3.8	24.0	7.7	9.9	-0.4
910218	1400	1500	6.10	4.1	19.0	13.0	10.1	
910218	1400	1500	17.68	3.6	15.0	11.1	9.8	-0.3
910218	1500	1600	6.10	3.6	21.0	7.8	8.9	
910218	1500	1600	17.68	3.3	16.0	6.4	8.5	-0.3
910218	1600	1700	6.10	4.3	2.0	7.8	7.8	
910218	1600	1700	17.68	4.3	0.0	6.5	7.6	-0.2
910218	1700	1800	6.10	5.0	1.0	4.4	6.3	
910218	1700	1800	17.68	5.6	0.0	4.7	7.4	1.1
910218	1800	1900	6.10	5.1	351.0	9.1	5.9	
910218	1800	1900	17.68	5.2	356.0	4.4	7.6	1.7
910218	1900	2000	6.10	5.0	348.0	5.9	5.5	
910218	1900	2000	17.68	5.5	352.0	4.0	7.5	2.0
910218	2000	2100	6.10	5.2	347.0	9.2	6.1	
910218	2000	2100	17.68	5.6	348.0	8.5	7.8	1.7
910218	2100	2200	6.10	4.8	355.0	7.8	6.6	
910218	2100	2200	17.68	5.2	356.0	4.5	7.8	1.2
910218	2200	2300	6.10	5.3	353.0	7.0	5.6	
910218	2200	2300	17.68	5.9	353.0	4.3	6.5	0.9
910218	2300	0	6.10	5.4	346.0	5.5	4.5	
910218	2300	0	17.68	5.7	349.0	4.2	6.0	1.5

SITE RAJLS REA-
 UTMX 474,593E UTMX 4413.153N ELEV(m/ASL) 2112.00

DATE	TIME START	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910128	0	100	10.10	1.9	119.0	68.7	-4.7	
910128	100	200	10.10	4.8	130.0	25.2	-4.3	
910128	200	300	10.10	6.8	277.0	15.6	-4.6	
910128	300	400	10.10	4.3	274.0	17.4	-5.1	
910128	400	500	10.10	5.0	275.0	17.1	-4.8	
910128	500	600	10.10	3.5	292.0	20.4	-4.1	
910128	600	700	10.10	7.6	233.0	10.6	-3.6	
910128	700	800	10.10	8.2	232.0	10.1	-4.2	
910128	800	900	10.10	4.6	292.0	16.4	-4.2	
910128	900	1000	10.10	6.2	287.0	13.6	-2.8	
910128	1000	1100	10.10	4.9	296.0	15.0	-1.9	
910128	1100	1200	10.10	2.9	239.0	68.0	-0.5	
910128	1200	1300	10.10	1.9	163.0	18.4	-1.0	
910128	1300	1400	10.10	1.3	131.0	22.7	-0.6	
910128	1400	1500	10.10	0.4	140.0	42.5	-0.3	
910128	1500	1600	10.10	0.9	94.0	46.7	-4.1	
910128	1600	1700	10.10	1.7	23.0	25.2	-7.2	
910128	1700	1800	10.10	1.9	8.0	20.7	-9.8	
910128	1800	1900	10.10	1.1	32.0	27.0	-10.9	
910128	1900	2000	10.10	0.8	55.0	20.8	-13.0	
910128	2000	2100	10.10	0.7	52.0	22.0	-15.7	
910128	2100	2200	10.10	0.8	47.0	22.1	-18.1	
910128	2200	2300	10.10	0.4	27.0	29.7	-19.3	
910128	2300	0	10.10	0.5	47.0	21.3	-20.3	

SITE 81123 REA
 TIME 477.500E 0700 4413.1E0N 3127.0m ASL 8112.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910112	0	100	10.10	0.6	72.0	20.6	-21.1	
910112	100	200	10.10	0.3	56.0	17.5	-22.2	
910112	200	300	10.10	0.1	72.0	15.8	-22.7	
910112	300	400	10.10	0.1	90.0	15.8	-21.6	
910112	400	500	10.10	0.6	123.0	24.6	-23.2	
910112	500	600	10.10	0.1	175.0	30.6	-23.7	
910112	600	700	10.10	0.2	183.0	12.2	-23.6	
910112	700	800	10.10	0.0	179.0	76.8	-21.2	
910112	800	900	10.10	0.0	281.0	37.4	-18.2	
910112	900	1000	10.10	0.1	192.0	74.5	-13.4	
910112	1100	1200	10.10	1.5	269.0	28.1	-10.6	
910112	1200	1300	10.10	2.3	239.0	18.0	-7.7	
910112	1300	1400	10.10	3.5	298.0	15.1	-5.7	
910112	1400	1500	10.10	2.5	290.0	18.6	-5.4	
910112	1500	1600	10.10	4.3	283.0	12.0	-5.6	
910112	1600	1700	10.10	3.8	275.0	16.1	-5.9	
910112	1700	1800	10.10	3.6	292.0	16.1	-6.4	
910112	1800	1900	10.10	4.3	295.0	9.5	-6.4	
910112	1900	2000	10.10	4.7	301.0	12.0	-5.9	
910112	2000	2100	10.10	4.9	260.0	13.2	-6.8	
910112	2100	2200	10.10	5.2	301.0	13.0	-5.4	
910112	2200	2300	10.10	6.0	294.0	12.4	-5.2	
910112	2300	2400	10.10	6.1	293.0	16.6	-5.3	
910112	2400	0	10.10	5.7	299.0	13.4	-6.1	

SITE PAULS FEA-
 LTM: 474.593E LTMV 4413.263N ELEV(m/ASL): 8112.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910130	0	100	10.10	6.4	305.0	11.6	-5.4	
910130	100	200	10.10	5.9	307.0	13.6	-5.4	
910130	200	300	10.10	5.6	099.0	13.5	-5.1	
910130	300	400	10.10	5.5	304.0	15.9	-4.4	
910130	400	500	10.10	5.4	194.0	14.1	-4.6	
910130	500	600	10.10	5.8	038.0	12.0	-5.5	
910130	600	700	10.10	5.1	296.0	14.5	-5.4	
910130	700	800	10.10	4.5	306.0	15.2	-3.5	
910130	800	900	10.10	5.7	097.0	14.9	-3.0	
910130	900	1000	10.10	5.5	291.0	14.7	-2.1	
910130	1100	1130	10.10	7.3	186.0	13.2	-1.1	
910130	1130	1200	10.10	6.7	281.0	13.9	-0.8	
910130	1200	1200	10.10	7.9	281.0	13.3	0.0	
910130	1200	1400	10.10	5.6	274.0	21.6	0.9	
910130	1400	1500	10.10	5.9	274.0	19.9	0.4	
910130	1500	1600	10.10	5.2	282.0	17.0	0.1	
910130	1600	1700	10.10	8.9	282.0	10.4	-0.1	
910130	1700	1800	10.10	3.7	284.0	10.1	-0.5	
910130	1800	1900	10.10	6.5	284.0	16.0	-0.2	
910130	1900	2000	10.10	3.8	281.0	27.0	-0.4	
910130	2000	2100	10.10	5.3	278.0	17.0	-0.4	
910130	2100	2200	10.10	4.6	274.0	21.5	0.0	
910130	2200	2300	10.10	9.5	283.0	11.8	1.1	
910130	2300	0	10.10	9.2	285.0	12.1	1.5	

SITE FILE #84
 JTMX 474,5925 JTMX 4413,152N ELE (m)ASL 2112.00

DATE	TIME START	TIME STOP	DISE HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910201	0	100	10.10	6.5	134.0	8.3	4.7	
910201	100	200	10.10	6.7	132.0	7.5	4.6	
910201	200	300	10.10	4.8	137.0	14.3	4.4	
910201	300	400	10.10	3.5	131.0	12.0	4.5	
910201	400	500	10.10	5.3	133.0	11.0	5.0	
910201	500	600	10.10	5.1	134.0	8.9	5.1	
910201	600	700	10.10	4.2	135.0	10.5	5.1	
910201	700	800	10.10	3.4	133.0	14.9	5.3	
910201	800	900	10.10	3.7	139.0	18.9	6.2	
910201	900	1000	10.10	3.2	137.0	22.0	6.5	
910201	1000	1100	10.10	4.1	250.0	14.1	7.7	
910201	1100	1200	10.10	3.4	253.0	11.7	9.1	
910201	1200	1300	10.10	1.5	185.0	36.5	10.5	
910201	1300	1400	10.10	0.7	143.0	51.0	11.2	
910201	1400	1500	10.10	0.8	71.0	28.2	10.1	
910201	1500	1600	10.10	0.3	100.0	45.9	8.6	
910201	1600	1700	10.10	0.6	68.0	17.8	7.0	
910201	1700	1800	10.10	1.0	79.0	12.5	6.5	
910201	1800	1900	10.10	0.3	59.0	43.3	5.7	
910201	1900	2000	10.10	0.7	293.0	17.2	4.9	
910201	2000	2100	10.10	1.5	277.0	7.6	4.8	
910201	2100	2200	10.10	1.3	269.0	13.0	5.3	
910201	2200	2300	10.10	2.0	255.0	8.2	5.6	
910201	2300	0	10.10	1.6	257.0	12.5	6.2	

SITE 64113 BEAM
 UTMX 4711.5722 UTMX 4413.2534 ELEV(M) ABL 3112.00

DATE	TIME START	TIME STOP	SSS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910211	0	100	10.10	0.4	321.0	51.0	5.7	
910212	100	200	10.10	1.2	133.0	14.9	5.0	
910213	100	300	10.10	1.4	139.0	10.1	5.7	
910214	300	400	10.10	2.0	143.0	8.8	7.0	
910215	400	500	10.10	0.2	246.0	48.2	7.6	
910216	500	600	10.10	1.6	274.0	11.5	7.1	
910217	600	700	10.10	3.1	276.0	11.7	6.7	
910218	700	800	10.10	3.2	282.0	18.4	7.1	
910219	800	900	10.10	2.7	280.0	12.8	7.5	
910220	900	1000	10.10	3.0	273.0	13.7	9.1	
910221	1100	1100	10.10	2.3	294.0	18.6	11.1	
910222	1100	1200	10.10	1.0	111.0	83.1	12.5	
910223	1200	1300	10.10	0.9	115.0	35.6	11.6	
910224	1300	1400	10.10	0.7	138.0	44.1	11.6	
910225	1400	1500	10.10	1.0	305.0	81.9	11.7	
910226	1500	1600	10.10	0.9	181.0	53.8	10.2	
910227	1600	1700	10.10	1.2	275.0	29.6	9.6	
910228	1700	1800	10.10	2.9	269.0	12.4	7.2	
910229	1800	1900	10.10	2.6	282.0	16.6	7.1	
910230	1900	2000	10.10	2.4	287.0	12.6	6.5	
910231	2000	2100	10.10	2.4	284.0	10.0	5.8	
910232	2100	2200	10.10	3.1	282.0	12.6	5.1	
910233	2200	2300	10.10	5.3	265.0	10.0	4.4	
910234	2300	0	10.10	4.9	274.0	13.5	5.0	

SITE 51013 REAR
 UTM 474.593E UTM 4413.253N ELEV(M)/ASL 8112.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA INETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910203	0	100	10.10	5.1	282.0	10.7	5.1	
910203	100	200	10.10	3.6	283.0	17.5	5.0	
910203	200	300	10.10	3.7	293.0	10.9	4.4	
910203	300	400	10.10	3.4	291.0	13.7	3.9	
910203	400	500	10.10	3.7	289.0	12.5	3.5	
910203	500	600	10.10	3.1	280.0	19.2	2.8	
910203	600	700	10.10	1.9	287.0	20.7	1.8	
910203	700	800	10.10	3.8	284.0	20.6	2.0	
910203	800	900	10.10	3.5	247.0	13.0	2.8	
910203	900	1000	10.10	3.9	269.0	22.2	5.0	
910203	1000	1100	10.10	2.5	292.0	17.2	6.1	
910203	1100	1200	10.10	2.2	300.0	15.9	6.6	
910203	1200	1300	10.10	2.2	303.0	15.1	6.8	
910203	1300	1400	10.10	3.2	301.0	11.4	6.2	
910203	1400	1500	10.10	3.3	301.0	12.6	5.7	
910203	1500	1600	10.10	4.0	298.0	12.3	4.2	
910203	1600	1700	10.10	3.9	293.0	10.6	3.3	
910203	1700	1800	10.10	3.3	284.0	16.2	2.3	
910203	1800	1900	10.10	3.2	271.0	14.4	1.2	
910203	1900	2000	10.10	3.8	267.0	11.0	0.7	
910203	2000	2100	10.10	1.7	285.0	37.2	0.6	
910203	2100	2200	10.10	2.3	269.0	12.2	0.4	
910203	2200	2300	10.10	0.2	206.0	75.0	-0.3	
910203	2300	0	10.10	1.1	244.0	20.8	-0.3	

SITE PALE PEA-
 LTMX 474.593E UTMX 4413.253N ELEV(m/ASL) 3112.00

DATE	TIME START	TIME STOP	OBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910204	0	100	10.10	1.9	286.0	13.5	-0.3	
910204	100	200	10.10	2.5	273.0	10.7	-0.6	
910204	200	300	10.10	2.9	258.0	9.0	-1.1	
910204	300	400	10.10	2.8	271.0	11.2	-1.3	
910204	400	500	10.10	2.4	268.0	10.1	-1.5	
910204	500	600	10.10	2.5	251.0	8.2	-1.3	
910204	600	700	10.10	3.4	269.0	7.9	-1.6	
910204	700	800	10.10	2.3	269.0	10.5	-0.7	
910204	800	900	10.10	3.2	230.0	67.1	2.2	
910204	900	1000	10.10	0.9	111.0	25.1	3.2	
910204	1000	1100	10.10	1.6	119.0	20.7	3.2	
910204	1100	1200	10.10	1.9	105.0	16.6	3.1	
910204	1200	1300	10.10	1.5	110.0	21.2	2.9	
910204	1300	1400	10.10	1.3	113.0	21.8	3.2	
910204	1400	1500	10.10	0.9	119.0	21.5	3.1	
910204	1500	1600	10.10	0.7	149.0	28.1	3.0	
910204	1600	1700	10.10	0.9	159.0	16.1	2.1	
910204	1700	1800	10.10	1.5	190.0	12.8	1.2	
910204	1800	1900	10.10	2.1	208.0	11.2	1.0	
910204	1900	2000	10.10	2.0	229.0	16.6	1.0	
910204	2000	2100	10.10	1.1	263.0	11.8	0.9	
910204	2100	2200	10.10	1.5	265.0	8.8	0.9	
910204	2200	2300	10.10	1.4	248.0	10.2	1.4	
910204	2300	0	10.10	0.2	269.0	25.2	1.9	

[illegible]

SITE FILE HEAD
 STN 47-1932 UT 47-113.153N ELEV (m/ASL) 2112.00

DATE	TIME START	TIME STOP	SEB HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
810215	0	100	10.10	3.1	321.0	80.1	4.8	
810215	100	200	10.10	3.2	305.0	48.8	4.3	
810215	200	300	10.10	0.2	310.0	38.8	4.1	
810215	300	400	10.10	2.0	347.0	18.4	2.6	
810215	400	500	10.10	1.2	359.0	12.3	2.2	
810215	500	600	10.10	1.7	30.0	28.9	2.8	
810215	600	700	10.10	1.2	34.0	19.7	1.0	
810215	700	800	10.10	1.6	52.0	30.0	0.6	
810215	800	900	10.10	1.6	35.0	37.5	0.6	
810215	900	1000	10.10	2.3	49.0	27.7	0.3	
810215	1000	1100	10.10	2.0	50.0	20.7	0.0	

SITE 24.12 25A
 LTM 474.5938 UTM 4413.253N ELEV(m/ASL) 8112.00

DATE	TIME START	TIME STOP	QQS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910218	1100	1200	10.10	1.4	342.0	3.5	5.9	
910218	1100	1300	10.10	0.8	30.0	57.6	7.8	
910218	1300	1400	10.10	0.4	106.0	28.7	7.1	
910218	1400	1500	10.10	0.7	97.0	25.1	5.2	
910218	1500	1600	10.10	0.6	70.0	15.8	5.3	
910218	1600	1700	10.10	1.2	338.0	24.5	5.3	
910218	1700	1800	10.10	1.8	325.0	16.2	4.5	
910218	1800	1900	10.10	1.3	341.0	14.7	3.8	
910218	1900	2000	10.10	2.9	351.0	10.4	3.7	
910218	2000	2100	10.10	2.6	352.0	12.1	3.6	
910218	2100	2200	10.10	2.4	359.0	16.7	2.9	
910218	2200	2300	10.10	3.1	347.0	10.9	2.0	
910218	2300	0	10.10	2.4	356.0	11.9	1.5	

SITE 81M 8004
 JTM(470.433E JTMV 4418.921N ELEV(M/ABL) 7543.00

DATE	TIME START	TIME STOP	DBB HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910128	0	100	6.10	8.1	76.0	37.9	-4.3		
910128	0	100	17.68	7.8	31.0	46.1	-1.1	-0.1	-72.2
910128	100	200	6.10	7.6	44.0	43.5	-4.2		
910128	100	200	17.68	7.0	38.0	54.8	-4.4	0.0	-71.3
910128	110	200	6.10	6.2	30.0	44.0	-4.2		
910128	110	200	17.68	6.4	45.0	57.2	-4.2	0.0	-68.1
910128	210	410	6.10	5.6	43.0	44.4	-4.1		
910128	200	400	17.68	5.2	34.0	55.0	-4.1	0.0	-68.3
910128	410	500	6.10	4.3	20.0	40.3	-4.1		
910128	400	500	17.68	4.0	10.0	46.0	-4.1	0.0	-64.0
910128	500	600	6.10	3.5	38.0	50.6	-4.2		
910128	510	600	17.68	3.3	28.0	63.4	-4.2	0.0	-64.9
910128	600	700	6.10	2.4	153.0	65.6	-3.7		
910128	600	700	17.68	2.5	172.0	64.0	-3.5	0.2	-62.0
910128	700	800	6.10	3.2	95.0	66.0	-3.8		
910128	700	800	17.68	3.1	139.0	81.4	-3.8	0.0	-53.7
910128	800	900	6.10	4.0	40.0	43.5	-3.4		
910128	800	900	17.68	3.8	32.0	54.8	-3.4	0.0	-5.8
910128	900	1000	6.10	3.9	14.0	35.9	-2.0		
910128	900	1000	17.68	3.8	1.0	37.7	-2.1	-0.1	136.7
910128	1000	1100	6.10	4.5	10.0	38.1	-0.5		
910128	1000	1100	17.68	4.5	0.0	39.4	-0.6	-0.1	231.8
910128	1100	1200	6.10	2.7	7.0	46.9	1.2		
910128	1100	1200	17.68	2.7	5.0	49.0	1.0	-0.2	270.2
910128	1200	1300	6.10	4.1	6.0	29.6	1.3		
910128	1200	1300	17.68	4.1	3.0	24.9	1.1	-0.2	203.3
910128	1300	1400	6.10	3.2	148.0	67.0	1.6		
910128	1300	1400	17.68	3.6	148.0	66.1	1.4	-0.2	213.9
910128	1400	1500	6.10	3.1	166.0	33.7	0.8		
910128	1400	1500	17.68	3.5	167.0	35.5	0.8	0.0	122.7
910128	1500	1600	6.10	2.9	167.0	26.5	-0.4		
910128	1500	1600	17.68	3.2	167.0	26.4	-0.5	-0.1	3.3
910128	1600	1700	6.10	2.6	335.0	27.1	-3.7		
910128	1600	1700	17.68	3.0	347.0	18.6	-3.8	-0.1	-21.8
910128	1700	1800	6.10	3.6	337.0	17.6	-7.6		
910128	1700	1800	17.68	4.0	347.0	14.6	-7.8	-0.2	-20.2
910128	1800	1900	6.10	2.4	340.0	20.4	-9.4		
910128	1800	1900	17.68	2.7	349.0	16.8	-9.6	-0.2	-13.7
910128	1900	2000	6.10	1.9	344.0	31.9	-10.4		
910128	1900	2000	17.68	2.0	359.0	33.0	-10.6	-0.2	-12.1
910128	2000	2100	6.10	1.9	342.0	21.9	-12.4		
910128	2000	2100	17.68	2.0	1.0	20.7	-12.6	-0.2	-10.4
910128	2100	2200	6.10	2.4	347.0	21.2	-15.2		
910128	2100	2200	17.68	2.5	359.0	18.4	-15.4	-0.2	-7.1
910128	2200	2300	6.10	2.4	339.0	16.9	-17.2		
910128	2200	2300	17.68	2.8	348.0	15.7	-17.4	-0.2	-7.6
910128	2300	0	6.10	2.3	337.0	15.0	-18.7		
910128	2300	0	17.68	2.6	347.0	12.9	-18.9	-0.2	-7.8

SITE 314 4100
 UTM 471.4318 UTM 44.2.9114 ELEV(m)ASL 7545.00

DATE	TIME START	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET SAD
910129	0	100	6.10	1.0	346.0	15.4	-19.1		
910129	0	100	17.68	1.2	355.0	17.4	-19.2	-0.2	-9.2
910129	100	200	6.10	1.5	340.0	21.4	-20.1		
910129	100	200	17.68	1.5	359.0	21.9	-20.3	-0.2	-10.3
910129	200	300	6.10	0.9	351.0	19.2	-21.1		
910129	200	300	17.68	0.9	359.0	18.7	-21.3	-0.2	-10.1
910129	300	400	6.10	1.2	343.0	15.2	-21.3		
910129	300	400	17.68	1.7	348.0	14.2	-21.4	-0.1	-8.2
910129	400	500	6.10	0.5	347.0	42.9	-21.5		
910129	400	500	17.68	0.5	359.0	46.2	-21.7	-0.2	-9.2
910129	500	600	6.10	1.7	170.0	14.3	-21.8		
910129	500	600	17.68	1.3	168.0	14.0	-21.9	-0.1	-3.0
910129	600	700	6.10	1.7	164.0	10.2	-22.2		
910129	600	700	17.68	1.9	162.0	9.2	-22.3	-0.1	-3.0
910129	700	800	6.10	0.7	229.0	75.8	-22.8		
910129	700	800	17.68	0.6	165.0	80.5	-22.8	0.0	-12.6
910129	800	900	6.10	0.4	3.0	47.5	-22.0		
910129	800	900	17.68	0.3	28.0	54.3	-21.5	0.5	-40.7
910129	900	1000	6.10	0.6	116.0	60.0	-13.7		
910129	900	1000	17.68	0.6	131.0	59.5	-14.1	-0.4	132.9
910129	1000	1100	6.10	2.7	167.0	17.9	-13.0		
910129	1000	1100	17.68	2.6	164.0	20.5	-13.2	-0.2	179.2
910129	1100	1200	6.10	2.8	90.0	86.6	-5.0		
910129	1100	1200	17.68	2.2	37.0	92.9	-5.5	-0.5	-97.2
910129	1200	1300	6.10	4.5	16.0	37.0	-4.5		
910129	1200	1300	17.68	4.5	7.0	39.5	-4.9	-0.4	12.2
910129	1300	1400	6.10	4.6	12.0	38.0	-4.3		
910129	1300	1400	17.68	4.5	8.0	37.1	-4.5	-0.2	31.5
910129	1400	1500	6.10	4.2	35.0	43.1	-4.5		
910129	1400	1500	17.68	3.9	29.0	52.4	-4.6	-0.1	71.9
910129	1500	1600	6.10	4.8	31.0	41.3	-5.2		
910129	1500	1600	17.68	4.6	23.0	47.3	-5.2	0.0	6.0
910129	1600	1700	6.10	5.0	26.0	28.3	-6.4		
910129	1600	1700	17.68	4.8	20.0	33.7	-6.3	0.1	-65.8
910129	1700	1800	6.10	4.8	26.0	40.5	-6.7		
910129	1700	1800	17.68	4.5	20.0	45.3	-6.7	0.0	-69.3
910129	1800	1900	6.10	5.4	34.0	33.0	-6.9		
910129	1800	1900	17.68	5.1	32.0	45.4	-6.9	0.0	-67.9
910129	1900	2000	6.10	5.0	27.0	29.7	-6.5		
910129	1900	2000	17.68	4.8	23.0	38.1	-6.5	0.0	-65.4
910129	2000	2100	6.10	6.2	29.0	32.8	-6.0		
910129	2000	2100	17.68	5.7	25.0	42.9	-6.1	-0.1	-38.3
910129	2100	2200	6.10	5.8	38.0	38.6	-6.5		
910129	2100	2200	17.68	5.4	34.0	46.2	-6.5	0.0	-28.3
910129	2200	2300	6.10	4.5	36.0	46.1	-5.9		
910129	2200	2300	17.68	4.3	31.0	52.8	-6.0	-0.1	-36.0
910129	2300	0	6.10	6.1	23.0	40.2	-6.5		
910129	2300	0	17.68	5.9	17.0	43.5	-6.6	-0.1	-51.3

SITE 814-820A
 UTM 470.432E UTM 4416.811N ELEV(m,ASL) 7645.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910130	0	100	6.10	8.2	17.0	31.4	-5.8		
910130	0	100	17.68	7.9	22.0	35.6	-5.8	0.0	-66.1
910130	100	200	6.10	8.2	17.0	30.8	-5.8		
910130	100	200	17.68	7.8	12.0	37.3	-5.7	-0.1	-68.8
910130	200	300	6.10	7.2	14.0	33.2	-5.4		
910130	200	300	17.68	5.7	31.0	42.4	-5.5	-0.1	-74.1
910130	300	400	6.10	6.2	38.0	35.9	-5.2		
910130	300	400	17.68	6.2	34.0	46.1	-5.3	-0.1	-78.1
910130	400	500	6.10	6.0	32.0	34.8	-5.7		
910130	400	500	17.68	5.7	19.0	46.7	-5.7	0.0	-77.0
910130	500	600	6.10	4.9	33.0	35.9	-6.1		
910130	500	600	17.68	4.7	33.0	43.4	-6.1	0.0	-75.5
910130	600	700	6.10	4.3	54.0	49.8	-6.5		
910130	600	700	17.68	4.2	52.0	58.5	-6.5	0.0	-71.6
910130	700	800	6.10	5.7	25.0	36.6	-6.0		
910130	700	800	17.68	5.7	15.0	40.5	-6.1	-0.1	-40.4
910130	800	900	6.10	6.8	16.0	33.4	-4.8		
910130	800	900	17.68	6.5	19.0	39.9	-4.8	0.0	6.7
910130	900	1000	6.10	6.1	27.0	37.9	-3.5		
910130	900	1000	17.68	5.9	17.0	44.7	-3.6	-0.1	123.6
910130	1000	1100	6.10	6.1	26.0	38.1	-1.9		
910130	1000	1100	17.68	5.8	21.0	44.8	-2.0	-0.1	207.2
910130	1100	1200	6.10	6.2	22.0	39.9	-0.5		
910130	1100	1200	17.68	5.9	17.0	43.5	-0.6	-0.1	264.1
910130	1200	1300	6.10	7.1	20.0	40.5	0.2		
910130	1200	1300	17.68	6.6	11.0	44.6	0.2	0.0	291.3
910130	1300	1400	6.10	6.4	34.0	50.1	1.3		
910130	1300	1400	17.68	6.1	23.0	55.0	1.2	-0.1	265.9
910130	1400	1500	6.10	6.0	23.0	42.7	1.2		
910130	1400	1500	17.68	5.7	17.0	49.3	1.1	-0.1	171.7
910130	1500	1600	6.10	5.3	41.0	44.0	0.5		
910130	1500	1600	17.68	5.1	33.0	55.9	0.4	-0.1	-45.8
910130	1600	1700	6.10	4.2	37.0	58.4	0.3		
910130	1600	1700	17.68	4.0	24.0	70.0	0.4	0.1	-54.8
910130	1700	1800	6.10	3.2	107.0	71.4	-0.3		
910130	1700	1800	17.68	3.1	154.0	83.5	-0.3	0.0	-68.9
910130	1800	1900	6.10	5.0	61.0	60.4	-0.1		
910130	1800	1900	17.68	4.6	62.0	77.5	-0.1	0.0	-66.8
910130	1900	2000	6.10	7.6	29.0	32.6	0.2		
910130	1900	2000	17.68	7.0	22.0	40.0	0.1	-0.1	-66.3
910130	2000	2100	6.10	8.5	20.0	26.6	0.4		
910130	2000	2100	17.68	7.9	12.0	28.0	0.4	0.0	-47.7
910130	2100	2200	6.10	8.2	20.0	28.6	0.3		
910130	2100	2200	17.68	7.7	11.0	30.7	0.2	-0.1	-39.0
910130	2200	2300	6.10	6.5	40.0	49.0	0.8		
910130	2200	2300	17.68	6.2	32.0	59.9	0.7	-0.1	-49.7
910130	2300	0	6.10	6.1	53.0	52.4	0.7		
910130	2300	0	17.68	5.5	46.0	66.1	0.6	-0.1	-69.6

SITE: 411111
 LAT: 47.4333E LONG: 4416.511N ELEV(m AGL): 7545.00

DATE	TIME START	TIME STOP	DIS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910131	0	100	6.10	7.5	23.0	30.6	0.2		
910131	0	100	17.68	7.1	21.0	37.0	0.2	-0.1	-63.3
910131	100	170	6.10	7.1	16.0	23.2	0.7		
910131	170	270	17.68	6.8	18.0	41.0	0.6	-0.1	-49.1
910131	200	270	6.10	6.7	10.0	46.3	1.2		
910131	270	300	17.68	6.2	23.0	52.8	1.4	0.0	-43.5
910131	300	310	6.10	5.3	29.0	55.5	1.1		
910131	300	300	17.68	5.0	31.0	66.6	1.1	0.0	-42.0
910131	310	330	6.10	4.7	44.0	68.7	0.7		
910131	330	330	17.68	4.7	15.0	82.8	0.7	0.0	-52.0
910131	330	300	6.10	4.5	18.0	41.0	0.6		
910131	330	300	17.68	4.3	6.0	43.2	0.6	0.0	-48.0
910131	300	700	6.10	4.8	40.0	36.3	0.8		
910131	300	700	17.68	4.4	36.0	47.5	0.8	0.0	-45.6
910131	700	300	6.10	3.3	71.0	46.7	0.8		
910131	700	300	17.68	3.1	75.0	57.7	0.9	0.1	-35.1
910131	300	500	6.10	2.5	115.0	60.7	1.8		
910131	300	500	17.68	2.6	142.0	66.2	1.8	0.0	-8.0
910131	500	1100	6.10	2.1	46.0	76.7	3.9		
910131	500	1300	17.68	2.1	35.0	84.6	4.1	0.2	27.0
910131	1300	1100	6.10	3.9	65.0	65.1	4.1		
910131	1600	1100	17.68	3.7	61.0	83.6	4.1	0.0	70.1
910131	1100	1200	6.10	5.3	14.0	36.0	5.4		
910131	1100	1200	17.68	5.0	8.0	37.1	5.4	0.0	299.1
910131	1200	1300	6.10	3.9	30.0	50.9	8.2		
910131	1200	1300	17.68	3.8	23.0	56.4	8.0	-0.2	414.6
910131	1300	1400	6.10	5.6	19.0	34.9	8.4		
910131	1300	1400	17.68	5.1	9.0	38.2	8.3	-0.1	339.1
910131	1400	1500	6.10	4.9	3.0	29.8	9.0		
910131	1400	1500	17.68	4.8	1.0	23.2	8.9	-0.1	252.0
910131	1500	1600	6.10	4.6	4.0	28.2	8.6		
910131	1500	1600	17.68	4.4	1.0	20.4	8.6	0.0	76.2
910131	1600	1700	6.10	3.3	10.0	22.3	7.1		
910131	1600	1700	17.68	3.2	10.0	19.1	7.2	0.1	-51.1
910131	1700	1800	6.10	0.7	337.0	57.4	1.0		
910131	1700	1800	17.68	0.7	352.0	75.0	1.9	0.9	-82.3
910131	1800	1900	6.10	0.9	357.0	27.1	-3.2		
910131	1800	1900	17.68	0.9	1.0	22.9	-2.6	0.6	-78.5
910131	1900	2000	6.10	1.0	348.0	28.6	-4.5		
910131	1900	2000	17.68	1.0	356.0	23.3	-3.7	0.8	-77.7
910131	2000	2100	6.10	1.1	346.0	31.9	-5.6		
910131	2000	2100	17.68	1.0	1.0	22.1	-4.2	1.4	-73.9
910131	2100	2200	6.10	1.7	5.0	84.5	-0.6		
910131	2100	2200	17.68	1.9	34.0	77.1	2.1	2.7	-69.9
910131	2200	2300	6.10	1.8	359.0	69.5	-1.2		
910131	2200	2300	17.68	1.7	19.0	65.1	0.6	1.8	-65.1
910131	2300	0	6.10	2.5	10.0	37.2	4.3		
910131	2300	0	17.68	2.5	11.0	36.2	4.6	0.3	-70.5

SITE 91W 800K
 TMA 470.431E UTM 4419.921N ELEV(M)AGL 7645.00

DATE	TIME START	TIME STOP	DSE HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910201	0	100	6.10	2.2	81.0	46.3	2.9		
910201	0	100	17.68	2.3	8.0	45.1	4.2	0.3	-70.9
910201	100	200	6.10	2.7	11.0	39.6	4.0		
910201	100	200	17.68	2.5	10.0	40.2	4.2	0.2	-72.0
910201	200	300	6.10	2.4	12.0	27.4	2.8		
910201	200	300	17.68	2.5	17.0	28.1	2.4	0.9	-70.4
910201	300	400	6.10	2.5	26.0	25.9	3.1		
910201	300	400	17.68	2.5	32.0	25.1	3.6	0.5	-65.6
910201	400	500	6.10	1.3	21.0	57.9	2.2		
910201	400	500	17.68	1.6	61.0	53.1	2.3	1.1	-57.0
910201	500	600	6.10	2.4	28.0	30.6	4.2		
910201	500	600	17.68	2.4	28.0	32.8	4.5	0.3	-53.2
910201	600	700	6.10	2.0	28.0	37.3	4.3		
910201	600	700	17.68	1.9	28.0	45.3	4.6	0.3	-48.9
910201	700	800	6.10	0.7	192.0	56.9	0.6		
910201	700	800	17.68	1.0	162.0	50.5	2.0	1.4	-34.7
910201	800	900	6.10	1.0	136.0	73.3	0.8		
910201	800	900	17.68	1.3	165.0	58.6	2.3	1.5	-13.0
910201	900	1000	6.10	2.3	54.0	48.6	5.9		
910201	900	1000	17.68	2.3	56.0	53.3	6.1	0.2	10.3
910201	1000	1100	6.10	1.4	143.0	84.9	7.1		
910201	1000	1100	17.68	1.4	176.0	65.9	7.4	0.3	76.2
910201	1100	1200	6.10	2.2	140.0	53.3	9.7		
910201	1100	1200	17.68	2.5	179.0	47.2	9.7	0.0	131.6
910201	1200	1300	6.10	2.1	135.0	52.2	11.5		
910201	1200	1300	17.68	2.4	163.0	49.8	11.4	-0.1	165.5
910201	1300	1400	6.10	1.5	106.0	83.8	13.3		
910201	1300	1400	17.68	1.6	168.0	86.7	13.2	-0.1	217.2
910201	1400	1500	6.10	2.5	16.0	40.2	12.7		
910201	1400	1500	17.68	2.4	9.0	40.3	12.7	0.0	136.9
910201	1500	1600	6.10	2.5	352.0	49.3	11.7		
910201	1500	1600	17.68	2.7	10.0	45.3	11.7	0.0	75.8
910201	1600	1700	6.10	0.8	340.0	76.8	6.0		
910201	1600	1700	17.68	0.7	358.0	87.7	7.4	1.4	-57.2
910201	1700	1800	6.10	0.9	358.0	12.8	0.5		
910201	1700	1800	17.68	0.9	0.0	13.8	1.3	0.8	-73.0
910201	1800	1900	6.10	1.0	357.0	12.2	-2.7		
910201	1800	1900	17.68	1.0	353.0	13.7	-2.2	0.5	-71.0
910201	1900	2000	6.10	1.2	356.0	13.2	-3.9		
910201	1900	2000	17.68	1.2	354.0	13.5	-3.2	0.7	-66.1
910201	2000	2100	6.10	1.4	358.0	10.7	-4.8		
910201	2000	2100	17.68	1.3	353.0	11.0	-3.8	1.0	-58.6
910201	2100	2200	6.10	1.2	357.0	11.2	-5.4		
910201	2100	2200	17.68	1.1	356.0	10.6	-4.5	0.9	-56.8
910201	2200	2300	6.10	1.4	355.0	12.4	-6.1		
910201	2200	2300	17.68	1.3	359.0	9.7	-5.1	1.0	-62.8
910201	2300	0	6.10	1.4	357.0	13.6	-7.0		
910201	2300	0	17.68	1.4	359.0	8.0	-5.7	1.3	-67.6

SITE 314 3000
 STN 471-314 STN 4418.5114 ELEV 41m AGL 7545.00

DATE	TIME START	TIME STOP	DEP HT (m/AGL)	WIND SPEED (m/sec)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910202	0	100	6.10	1.5	351.0	13.9	-7.3		
910202	0	100	17.68	1.2	357.0	10.3	-8.5	1.3	-67.3
910202	100	200	6.10	1.6	353.0	13.7	-8.5		
910202	100	200	17.68	1.2	355.0	7.5	-6.9	1.6	-67.5
910202	100	300	6.10	1.5	356.0	11.5	-8.9		
910202	100	300	17.68	1.0	356.0	2.2	-7.3	1.6	-62.5
910202	300	400	6.10	1.7	357.0	12.2	-2.2		
910202	300	400	17.68	1.5	356.0	8.5	-7.1	1.7	-58.3
910202	400	500	6.10	1.5	355.0	14.0	-3.4		
910202	400	500	17.68	1.4	358.0	9.3	-6.8	1.5	-49.9
910202	500	600	6.10	1.4	354.0	30.6	-7.5		
910202	500	600	17.68	1.3	4.0	37.0	-6.0	1.5	-51.2
910202	600	700	6.10	0.8	351.0	75.8	-6.3		
910202	600	700	17.68	0.8	4.0	83.3	-5.0	1.3	-55.6
910202	700	800	6.10	1.3	145.0	86.6	-2.3		
910202	700	800	17.68	1.5	102.0	75.8	0.9	3.2	-40.7
910202	800	900	6.10	2.3	24.0	34.2	6.9		
910202	800	900	17.68	2.4	22.0	37.5	7.3	0.4	19.5
910202	900	1000	6.10	2.9	18.0	29.5	9.6		
910202	900	1000	17.68	2.9	10.0	35.1	9.6	0.0	105.2
910202	1000	1100	6.10	2.6	43.0	68.2	12.0		
910202	1000	1100	17.68	2.5	25.0	76.5	11.9	-0.1	236.4
910202	1100	1200	6.10	2.4	38.0	54.8	13.8		
910202	1100	1200	17.68	2.3	31.0	64.7	13.7	-0.1	291.1
910202	1200	1300	6.10	2.9	23.0	52.0	14.1		
910202	1200	1300	17.68	2.7	12.0	56.4	14.0	-0.1	307.2
910202	1300	1400	6.10	2.8	29.0	55.0	14.6		
910202	1300	1400	17.68	2.6	15.0	63.4	14.4	-0.2	269.1
910202	1400	1500	6.10	3.0	27.0	47.4	13.8		
910202	1400	1500	17.68	2.7	16.0	53.5	13.8	0.0	203.8
910202	1500	1600	6.10	2.9	23.0	33.1	12.7		
910202	1500	1600	17.68	2.7	13.0	43.8	12.8	0.1	71.9
910202	1600	1700	6.10	3.3	35.0	29.0	10.2		
910202	1600	1700	17.68	3.1	29.0	36.2	10.5	0.3	-84.3
910202	1700	1800	6.10	1.8	56.0	85.0	6.8		
910202	1700	1800	17.68	1.8	42.0	69.7	7.6	0.8	-94.8
910202	1800	1900	6.10	3.1	24.0	39.7	6.2		
910202	1800	1900	17.68	3.0	21.0	39.3	6.9	0.7	-94.0
910202	1900	2000	6.10	3.4	36.0	48.8	6.8		
910202	1900	2000	17.68	3.1	32.0	53.2	6.9	0.1	-95.0
910202	2000	2100	6.10	2.5	66.0	56.4	6.0		
910202	2000	2100	17.68	2.4	68.0	60.5	6.2	0.2	-88.0
910202	2100	2200	6.10	2.2	90.0	73.3	4.3		
910202	2100	2200	17.68	2.2	94.0	76.6	5.1	0.8	-86.7
910202	2200	2300	6.10	5.3	23.0	29.5	5.2		
910202	2200	2300	17.68	5.0	17.0	36.9	5.2	0.0	-95.3
910202	2300	0	6.10	4.4	25.0	30.5	5.4		
910202	2300	0	17.68	4.1	20.0	38.1	5.4	0.0	-95.1

SITE FIM FICH
 TMR 470.432E UTM 4416.911N ELEV(m/ASL) 7648.00

DATE	TIME START	TIME STOP	DTS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910213	0	100	6.10	4.4	31.0	31.0	5.8		
910213	0	100	17.68	4.1	29.0	29.4	5.8	0.0	-94.2
910213	100	200	6.10	4.7	37.0	28.8	5.4		
910213	100	200	17.68	4.4	21.0	35.4	5.4	0.0	-92.7
910213	200	300	6.10	5.1	17.0	18.7	4.4		
910213	200	300	17.68	4.7	13.0	33.7	4.4	0.0	-89.1
910213	300	400	6.10	5.4	23.0	28.2	4.0		
910213	300	400	17.68	4.9	19.0	35.2	4.0	0.0	-87.2
910213	400	500	6.10	5.6	23.0	31.4	3.7		
910213	400	500	17.68	5.2	15.0	37.7	3.7	0.0	-87.7
910213	500	600	6.10	5.9	24.0	29.6	3.2		
910213	500	600	17.68	5.5	19.0	33.6	3.2	0.0	-83.7
910213	600	700	6.10	5.4	27.0	27.7	2.9		
910213	600	700	17.68	5.1	24.0	34.5	2.9	0.0	-86.8
910213	700	800	6.10	5.3	25.0	32.5	2.6		
910213	700	800	17.68	4.9	21.0	39.0	2.6	0.0	-78.5
910213	800	900	6.10	5.8	23.0	33.6	3.6		
910213	800	900	17.68	5.4	22.0	36.5	3.6	0.0	0.7
910213	900	1000	6.10	5.2	26.0	37.0	5.0		
910213	900	1000	17.68	4.8	21.0	43.9	4.9	-0.1	165.7
910213	1000	1100	6.10	5.3	19.0	35.8	5.9		
910213	1000	1100	17.68	4.9	14.0	39.3	5.7	-0.2	261.9
910213	1100	1200	6.10	4.3	15.0	35.0	6.9		
910213	1100	1200	17.68	4.1	9.0	36.6	6.7	-0.2	246.1
910213	1200	1300	6.10	3.9	20.0	30.3	7.1		
910213	1200	1300	17.68	3.6	16.0	34.9	6.9	-0.2	195.7
910213	1300	1400	6.10	4.6	22.0	34.9	7.0		
910213	1300	1400	17.68	4.3	15.0	39.1	6.8	-0.2	268.1
910213	1400	1500	6.10	4.4	21.0	32.6	7.0		
910213	1400	1500	17.68	4.0	17.0	38.2	6.8	-0.2	212.8
910213	1500	1600	6.10	4.0	14.0	36.4	5.7		
910213	1500	1600	17.68	3.9	8.0	41.5	5.6	-0.1	67.9
910213	1600	1700	6.10	5.1	24.0	32.7	4.1		
910213	1600	1700	17.68	4.7	17.0	38.5	4.1	0.0	-31.8
910213	1700	1800	6.10	4.5	23.0	30.3	2.8		
910213	1700	1800	17.68	4.1	20.0	37.1	2.7	-0.1	-61.4
910213	1800	1900	6.10	4.3	29.0	24.2	1.8		
910213	1800	1900	17.68	3.9	28.0	31.4	1.8	0.0	-71.3
910213	1900	2000	6.10	2.8	32.0	30.3	1.2		
910213	1900	2000	17.68	2.6	32.0	43.3	1.2	0.0	-64.9
910213	2000	2100	6.10	1.5	123.0	67.4	0.3		
910213	2000	2100	17.68	1.5	131.0	78.5	0.6	0.3	-55.0
910213	2100	2200	6.10	1.4	73.0	82.6	0.0		
910213	2100	2200	17.68	1.4	80.0	84.0	0.6	0.6	-50.2
910213	2200	2300	6.10	2.2	43.0	37.9	0.9		
910213	2200	2300	17.68	2.1	42.0	38.0	1.0	0.1	-56.1
910213	2300	0	6.10	1.7	57.0	55.1	0.2		
910213	2300	0	17.68	1.6	42.0	61.9	0.5	0.3	-58.5

NOTE: 810 8014
 TIME: 17.14318 UTCN 1415.811N 1513.00E 1513.00E 1513.00E 1513.00E

DATE	TIME START	TIME STOP	DBE AT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET 881
910204	0	100	6.10	0.5	153.0	96.1	-3.0		
910204	0	100	17.68	0.5	153.0	90.0	-2.5	0.5	-57.0
910204	100	200	6.10	1.4	107.0	72.0	-2.4		
910204	100	200	17.68	1.5	93.0	72.0	-1.5	0.3	-59.9
910204	200	300	6.10	3.7	19.0	35.0	-0.1		
910204	200	300	17.68	3.5	16.0	41.9	-0.1	0.0	-65.0
910204	300	400	6.10	3.7	23.0	31.6	-0.2		
910204	300	400	17.68	3.4	25.0	37.6	-0.2	0.0	-68.0
910204	400	500	6.10	3.8	22.0	27.7	-0.4		
910204	400	500	17.68	3.6	20.0	32.6	-0.5	-0.1	-68.3
910204	500	600	6.10	3.5	27.0	30.5	-0.7		
910204	500	600	17.68	3.4	26.0	33.7	-0.7	0.0	-70.0
910204	600	700	6.10	2.1	70.0	61.9	-0.8		
910204	600	700	17.68	2.1	75.0	60.7	-0.6	0.2	-69.6
910204	700	800	6.10	1.1	349.0	53.1	-3.3		
910204	700	800	17.68	0.8	11.0	55.4	-2.5	0.8	-59.1
910204	800	900	6.10	0.8	2.0	14.9	-2.8		
910204	800	900	17.68	0.4	14.0	45.9	-1.2	1.6	22.6
910204	900	1000	6.10	1.3	97.0	101.6	3.4		
910204	900	1000	17.68	1.4	145.0	55.4	4.3	0.9	169.9
910204	1000	1100	6.10	3.7	174.0	17.6	4.2		
910204	1000	1100	17.68	4.2	172.0	16.6	3.9	-0.3	260.2
910204	1100	1200	6.10	4.1	179.0	16.4	4.4		
910204	1100	1200	17.68	4.5	174.0	15.6	4.1	-0.3	312.6
910204	1200	1300	6.10	4.6	173.0	18.7	4.5		
910204	1200	1300	17.68	5.2	170.0	16.0	4.2	-0.3	324.2
910204	1300	1400	6.10	5.2	167.0	14.7	4.2		
910204	1300	1400	17.68	5.9	165.0	13.2	3.9	-0.3	289.4
910204	1400	1500	6.10	5.4	163.0	12.1	4.2		
910204	1400	1500	17.68	6.0	162.0	9.1	4.0	-0.2	223.0
910204	1500	1600	6.10	4.0	164.0	13.1	4.0		
910204	1500	1600	17.68	4.4	162.0	11.5	4.0	0.0	101.5
910204	1600	1700	6.10	3.7	160.0	12.3	2.8		
910204	1600	1700	17.68	4.2	159.0	9.7	3.0	0.2	-58.9
910204	1700	1800	6.10	0.5	123.0	86.3	-0.5		
910204	1700	1800	17.68	0.7	111.0	83.9	0.1	0.6	-73.5
910204	1800	1900	6.10	0.5	359.0	14.1	-3.5		
910204	1800	1900	17.68	0.5	9.0	23.4	-3.0	0.5	-72.8
910204	1900	2000	6.10	0.5	352.0	22.6	-4.8		
910204	1900	2000	17.68	0.4	3.0	16.4	-4.2	0.6	-72.2
910204	2000	2100	6.10	0.6	350.0	22.0	-5.7		
910204	2000	2100	17.68	0.7	7.0	23.0	-5.2	0.5	-71.7
910204	2100	2200	6.10	0.6	347.0	31.0	-6.7		
910204	2100	2200	17.68	0.6	359.0	28.1	-6.1	0.6	-70.6
910204	2200	2300	6.10	0.6	350.0	19.4	-7.3		
910204	2200	2300	17.68	0.4	358.0	17.7	-6.7	0.6	-70.8
910204	2300	0	6.10	1.0	347.0	15.6	-7.6		
910204	2300	0	17.68	0.7	358.0	15.7	-6.8	0.8	-71.3

DATE 8-14-80
 STATION 470.4333 STATION 4418.9214 ELEVATION/ASL 7645.00

DATE	TIME START	TIME STOP	DBB HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910205	0	100	6.10	0.7	346.0	24.9	-7.9		
910205	0	100	17.68	0.6	350.0	24.2	-6.9	1.0	-72.4
910205	100	200	6.10	0.6	350.0	29.0	-2.0		
910205	100	200	17.68	0.7	350.0	32.5	-5.8	1.2	-72.1
910205	200	300	6.10	0.4	350.0	51.1	-2.2		
910205	200	300	17.68	0.2	350.0	42.7	-7.2	1.1	-71.7
910205	300	400	6.10	0.4	349.0	43.4	-3.8		
910205	300	400	17.68	0.2	350.0	28.2	-7.8	1.0	-69.9
910205	400	500	6.10	0.5	341.0	44.2	-8.9		
910205	400	500	17.68	0.6	350.0	21.9	-7.7	1.2	-67.9
910205	500	600	6.10	0.6	347.0	39.3	-8.4		
910205	500	600	17.68	0.5	350.0	28.6	-7.1	1.3	-65.8
910205	600	700	6.10	0.6	347.0	43.0	-8.5		
910205	600	700	17.68	0.5	349.0	34.9	-7.4	1.1	-64.3
910205	700	800	6.10	0.5	346.0	43.8	-8.3		
910205	700	800	17.68	0.4	350.0	34.4	-7.1	1.2	-53.2
910205	800	900	6.10	0.3	350.0	25.0	-4.8		
910205	800	900	17.68	0.2	340.0	48.8	-2.9	1.9	33.5
910205	900	1000	6.10	1.3	121.0	65.6	4.8		
910205	900	1000	17.68	1.6	143.0	40.1	5.7	0.9	185.3
910205	1000	1100	6.10	3.8	155.0	9.1	8.5		
910205	1000	1100	17.68	4.1	157.0	5.1	8.2	-0.3	270.0
910205	1100	1200	6.10	4.2	158.0	10.3	8.7		
910205	1100	1200	17.68	4.8	159.0	4.5	8.2	-0.5	320.7
910205	1200	1300	6.10	3.9	159.0	11.0	9.1		
910205	1200	1300	17.68	4.4	159.0	5.9	8.6	-0.5	327.9
910205	1300	1400	6.10	4.2	158.0	10.4	8.9		
910205	1300	1400	17.68	4.7	159.0	5.2	8.4	-0.5	291.8
910205	1400	1500	6.10	3.8	156.0	9.8	9.4		
910205	1400	1500	17.68	4.3	157.0	5.2	9.1	-0.3	222.1
910205	1500	1600	6.10	4.4	159.0	10.2	8.8		
910205	1500	1600	17.68	5.0	158.0	5.4	8.7	-0.1	104.8
910205	1600	1700	6.10	3.1	170.0	17.4	6.9		
910205	1600	1700	17.68	3.9	165.0	11.5	7.3	0.4	-64.4
910205	1700	1800	6.10	0.6	150.0	45.9	1.9		
910205	1700	1800	17.68	0.8	7.0	48.9	2.3	0.4	-74.2
910205	1800	1900	6.10	1.1	359.0	12.3	-2.3		
910205	1800	1900	17.68	1.0	357.0	13.2	-1.8	0.5	-71.0
910205	1900	2000	6.10	1.1	355.0	10.9	-3.5		
910205	1900	2000	17.68	1.2	351.0	8.9	-3.0	0.5	-67.4
910205	2000	2100	6.10	1.2	359.0	9.9	-4.4		
910205	2000	2100	17.68	1.2	353.0	7.6	-3.5	0.9	-65.2
910205	2100	2200	6.10	1.1	358.0	10.7	-5.3		
910205	2100	2200	17.68	1.1	358.0	11.2	-4.4	0.9	-63.4
910205	2200	2300	6.10	1.2	357.0	13.5	-5.9		
910205	2200	2300	17.68	1.1	359.0	9.3	-5.1	0.8	-62.0
910205	2300	0	6.10	1.3	356.0	12.2	-6.5		
910205	2300	0	17.68	1.2	357.0	7.6	-5.7	0.8	-60.3

SITE A14 8004
 UTM 471133E UTM 4416.921N ELEV(m/AGL) 7648.00

DATE	TIME START	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910206	0	100	6.10	1.3	355.0	11.3	-6.3		
910206	0	100	17.68	1.2	358.0	9.4	-5.9	0.9	-59.3
910206	100	200	6.10	1.4	357.0	13.3	-6.3		
910206	100	200	17.68	1.2	356.0	15.9	-5.9	0.9	-57.3
910206	200	300	6.10	1.3	358.0	14.0	-7.2		
910206	200	300	17.68	1.3	359.0	7.8	-6.1	1.1	-57.0
910206	300	400	6.10	1.2	356.0	11.5	-7.4		
910206	300	400	17.68	1.2	356.0	8.9	-6.3	1.1	-55.5
910206	400	500	6.10	1.3	355.0	12.7	-7.4		
910206	400	500	17.68	1.2	358.0	7.9	-6.4	1.0	-53.2
910206	500	600	6.10	1.2	353.0	14.2	-7.6		
910206	500	600	17.68	1.1	359.0	9.9	-6.5	1.0	-54.2
910206	600	700	6.10	1.3	351.0	19.3	-7.6		
910206	600	700	17.68	1.1	355.0	15.6	-6.5	1.1	-54.5
910206	700	800	6.10	1.3	353.0	12.5	-7.5		
910206	700	800	17.68	1.0	355.0	11.5	-6.6	0.9	-45.1
910206	800	900	6.10	0.8	357.0	54.8	-4.5		
910206	800	900	17.68	0.6	5.0	63.5	-3.0	1.5	38.0
910206	900	1000	6.10	2.4	345.0	37.4	2.6		
910206	900	1000	17.68	2.8	6.0	30.0	2.3	-0.3	202.7
910206	1000	1100	6.10	2.4	347.0	51.5	3.3		
910206	1000	1100	17.68	2.6	8.0	36.3	2.8	-0.5	265.9

SITE RIM ROCK
 JTMX 470.4332 UTMX 4416.911N ELEV(M/ASL) 7643.00

DATE	TIME START	TIME STOP	DIR HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)	NET RAD
910212	1100	1200	6.10	2.0	349.0	31.1	3.2		
910212	1100	1200	17.68	2.2	359.0	15.9	3.1	-0.1	147.1
910212	1200	1300	6.10	1.6	352.0	23.6	3.2		
910212	1200	1300	17.68	1.8	6.0	19.9	3.5	-0.3	178.1
910212	1300	1400	6.10	1.9	345.0	27.1	3.0		
910212	1300	1400	17.68	2.0	359.0	31.7	3.7	-0.3	141.2
910212	1400	1500	6.10	2.2	351.0	28.2	3.0		
910212	1400	1500	17.68	2.5	3.0	24.9	3.7	-0.3	200.8
910212	1500	1600	6.10	2.0	343.0	22.9	7.8		
910212	1500	1600	17.68	2.2	355.0	19.2	7.6	-0.2	57.2
910212	1600	1700	6.10	1.5	333.0	20.5	5.6		
910212	1600	1700	17.68	1.8	345.0	15.2	5.6	0.0	3.1
910212	1700	1800	6.10	0.8	347.0	20.3	3.7		
910212	1700	1800	17.68	0.7	353.0	18.9	4.1	0.4	-37.1
910212	1800	1900	6.10	1.0	355.0	9.5	0.6		
910212	1800	1900	17.68	1.0	350.0	10.3	1.0	0.4	-51.6
910212	1900	2000	6.10	1.1	353.0	10.1	-1.8		
910212	1900	2100	17.68	1.2	347.0	9.6	-1.3	0.5	-49.9
910212	2000	2100	6.10	0.6	355.0	8.7	-1.9		
910212	2000	2100	17.68	0.4	0.0	11.0	-1.6	0.3	-30.5
910212	2100	2200	6.10	0.6	349.0	7.6	-1.8		
910212	2100	2200	17.68	0.4	355.0	10.3	-1.5	0.3	-23.5
910212	2200	2300	6.10	0.3	348.0	10.4	-1.7		
910212	2200	2300	17.68	0.3	356.0	14.6	-1.3	0.4	-34.7
910212	2300	0	6.10	0.5	349.0	6.4	-2.6		
910212	2300	0	17.68	0.4	1.0	9.7	-2.2	0.4	-46.5

SITE TELLAND
 TMY 143.997E UTM 4417.630N ELE 70m AGL 8301.00

DATE	TIME START	TIME STOP	DBS HT (m/AGL)	WIND SPEED (m/s)	WIND DIR deg	PICHA HETA deg	TEMP (deg C)	DELTA TEMP (deg C)
910118	0	100	6.10	12.3	268.0	9.7	-8.7	
910118	0	100	17.68	14.2	269.0	11.2	-8.5	0.2
910118	100	200	6.10	12.3	267.0	10.1	-8.2	
910118	100	200	17.68	14.1	268.0	10.9	-8.7	0.1
910118	200	300	6.10	11.5	271.0	9.9	-8.5	
910118	200	300	17.68	12.0	271.0	14.7	-8.3	0.2
910118	300	400	6.10	12.5	275.0	10.2	-8.5	
910118	300	400	17.68	14.2	274.0	14.3	-8.2	0.3
910118	400	500	6.10	15.1	271.0	10.5	-8.5	
910118	400	500	17.68	18.4	271.0	14.0	-8.2	0.4
910118	500	600	6.10	20.3	266.0	8.3	-8.3	
910118	500	600	17.68	23.4	266.0	14.0	-7.9	0.4
910118	600	700	6.10	9.2	268.0	42.6	-8.6	
910118	600	700	17.68	10.8	269.0	38.8	-8.4	0.2
910118	700	800	6.10	3.9	111.0	43.7	-9.0	
910118	700	800	17.68	4.5	115.0	42.5	-8.9	-0.1
910118	800	900	6.10	4.3	122.0	23.9	-7.3	
910118	800	900	17.68	5.0	122.0	24.2	-7.5	-0.2
910118	900	1000	6.10	3.2	221.0	79.6	-5.1	
910118	900	1000	17.68	3.8	222.0	78.5	-5.6	-0.5
910118	1000	1100	6.10	4.6	235.0	22.5	-4.4	
910118	1000	1100	17.68	5.5	241.0	21.4	-4.7	-0.3
910118	1100	1200	6.10	5.6	243.0	18.2	-3.4	
910118	1100	1200	17.68	6.6	248.0	17.5	-3.7	-0.3
910118	1200	1300	6.10	5.7	246.0	20.5	-2.3	
910118	1200	1300	17.68	6.6	250.0	19.0	-2.5	-0.2
910118	1300	1400	6.10	6.5	256.0	17.9	-2.4	
910118	1300	1400	17.68	7.6	260.0	16.9	-2.6	-0.2
910118	1400	1500	6.10	5.8	270.0	21.9	-1.4	
910118	1400	1500	17.68	6.6	274.0	20.6	-1.6	-0.2
910118	1500	1600	6.10	3.8	270.0	22.5	-3.2	
910118	1500	1600	17.68	4.5	274.0	21.8	-3.2	0.0
910118	1600	1700	6.10	1.8	259.0	18.3	-4.1	
910118	1600	1700	17.68	2.4	258.0	14.3	-0.3	3.8
910118	1700	1800	6.10	3.3	81.0	72.4	-6.8	
910118	1700	1800	17.68	4.3	87.0	75.4	-6.7	0.1
910118	1800	1900	6.10	2.5	101.0	10.4	-9.6	
910118	1800	1900	17.68	3.1	101.0	8.6	-9.7	-0.1
910118	1900	2000	6.10	3.2	104.0	7.4	-10.9	
910118	1900	2000	17.68	3.7	102.0	5.9	-11.0	-0.1
910118	2000	2100	6.10	3.2	102.0	8.0	-12.3	
910118	2000	2100	17.68	3.8	102.0	5.9	-12.4	-0.1
910118	2100	2200	6.10	3.1	103.0	7.9	-14.6	
910118	2100	2200	17.68	3.7	103.0	6.3	-14.7	-0.1
910118	2200	2300	6.10	2.8	99.0	8.2	-17.8	
910118	2200	2300	17.68	3.5	100.0	6.3	-17.9	-0.1
910118	2300	0	6.10	2.4	99.0	9.5	-19.5	
910118	2300	0	17.68	3.1	100.0	7.2	-19.7	-0.2

DATE 10-11-10
 JTMX 441.997E UTMX 4417.530N ELEV(m/ASL) 8823.00

DATE	TIME START	TIME STOP	DBE HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910129	0	100	6.10	2.4	103.0	8.3	-20.6	
910129	0	100	17.68	2.9	103.0	8.6	-21.1	-0.2
910129	100	200	6.10	1.8	99.0	8.2	-22.0	
910129	100	200	17.68	2.5	100.0	8.2	-22.1	-0.1
910129	200	300	6.10	2.3	105.0	8.4	-22.1	
910129	200	300	17.68	2.7	105.0	8.7	-22.5	-0.1
910129	300	400	6.10	1.9	105.0	10.1	-23.4	
910129	300	400	17.68	2.1	105.0	9.4	-23.5	-0.1
910129	400	500	6.10	0.1	88.0	24.8	-23.3	
910129	400	500	17.68	0.2	93.0	29.1	-23.4	-0.1
910129	500	600	6.10	0.2	339.0	61.1	-23.6	
910129	500	600	17.68	0.2	45.0	35.0	-23.7	-0.1
910129	600	700	6.10	0.0	320.0	75.5	-23.3	
910129	600	700	17.68	0.0	269.0	51.6	-23.4	-0.1
910129	700	800	6.10	0.7	23.0	59.4	-22.6	
910129	700	800	17.68	0.8	264.0	82.6	-21.1	1.5
910129	800	900	6.10	6.8	258.0	9.3	-13.2	
910129	800	900	17.68	7.9	261.0	9.3	-13.1	0.1
910129	900	1000	6.10	3.8	246.0	23.1	-10.8	
910129	900	1000	17.68	4.4	250.0	21.1	-11.1	-0.3
910129	1000	1100	6.10	5.7	235.0	18.8	-10.6	
910129	1000	1100	17.68	6.7	241.0	17.0	-10.9	-0.3
910129	1100	1200	6.10	6.2	250.0	31.7	-9.5	
910129	1100	1200	17.68	7.1	254.0	30.0	-9.8	-0.3
910129	1200	1300	6.10	7.4	250.0	21.3	-9.8	
910129	1200	1300	17.68	8.7	253.0	19.7	-10.1	-0.3
910129	1300	1400	6.10	6.2	255.0	19.6	-9.4	
910129	1300	1400	17.68	7.2	259.0	19.2	-9.6	-0.2
910129	1400	1500	6.10	6.2	247.0	21.7	-9.3	
910129	1400	1500	17.68	7.3	250.0	19.8	-9.6	-0.3
910129	1500	1600	6.10	5.3	244.0	26.5	-9.3	
910129	1500	1600	17.68	6.3	247.0	23.6	-9.5	-0.2
910129	1600	1700	6.10	6.7	262.0	18.8	-10.4	
910129	1600	1700	17.68	7.8	262.0	18.2	-10.4	0.0
910129	1700	1800	6.10	9.2	262.0	18.1	-11.2	
910129	1700	1800	17.68	10.6	262.0	18.0	-11.0	0.2
910129	1800	1900	6.10	11.0	265.0	10.5	-11.9	
910129	1800	1900	17.68	12.7	263.0	14.8	-11.7	0.2
910129	1900	2000	6.10	8.2	248.0	22.0	-12.0	
910129	1900	2000	17.68	9.9	251.0	21.1	-11.9	0.1
910129	2000	2100	6.10	13.5	263.0	9.7	-11.7	
910129	2000	2100	17.68	15.7	262.0	14.7	-11.5	0.2
910129	2100	2200	6.10	13.6	262.0	12.7	-11.5	
910129	2100	2200	17.68	15.8	261.0	17.3	-11.3	0.2
910129	2200	2300	6.10	17.5	265.0	7.6	-11.0	
910129	2200	2300	17.68	19.9	261.0	17.7	-10.9	0.1
910129	2300	0	6.10	11.5	270.0	11.0	-11.2	
910129	2300	0	17.68	13.2	264.0	22.9	-11.1	0.1

DATE 10-11-40
TIME 440.9978 UTM 4417.5304 ELEV(m) ASL 2883.00

DATE	TIME START	TIME STOP	DEP HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910130	0	100	6.10	11.1	270.0	13.5	-11.5	
910130	0	100	17.68	12.6	267.0	21.7	-11.4	0.1
910130	100	200	6.10	9.0	263.0	15.7	-11.2	
910130	100	200	17.68	9.5	265.0	20.3	-11.1	0.1
910130	200	300	6.10	8.0	244.0	24.8	-11.5	
910130	200	300	17.68	7.1	247.0	20.1	-11.4	0.1
910130	300	400	6.10	5.2	236.0	26.5	-11.7	
910130	300	400	17.68	5.2	242.0	24.3	-11.6	0.1
910130	400	500	6.10	10.9	260.0	17.1	-10.7	
910130	400	500	17.68	12.6	259.0	20.1	-10.6	0.1
910130	500	600	6.10	14.8	265.0	9.0	-10.5	
910130	500	600	17.68	15.9	261.0	19.8	-10.4	0.1
910130	600	700	6.10	13.1	266.0	8.7	-10.5	
910130	600	700	17.68	14.9	263.0	17.9	-10.4	0.1
910130	700	800	6.10	9.3	268.0	11.5	-10.4	
910130	700	800	17.68	10.5	266.0	18.7	-10.3	0.1
910130	800	900	6.10	8.4	255.0	12.0	-9.6	
910130	800	900	17.68	9.8	257.0	13.9	-9.5	0.1
910130	900	1000	6.10	8.5	253.0	15.1	-8.7	
910130	900	1000	17.68	10.0	255.0	14.8	-8.7	0.0
910130	1000	1100	6.10	7.8	246.0	16.7	-7.2	
910130	1000	1100	17.68	9.2	249.0	15.8	-7.3	-0.1
910130	1100	1200	6.10	11.2	257.0	12.4	-6.0	
910130	1100	1200	17.68	13.0	259.0	12.6	-6.0	0.0
910130	1200	1300	6.10	11.4	260.0	13.5	-5.5	
910130	1200	1300	17.68	13.4	261.0	15.3	-5.5	0.0
910130	1300	1400	6.10	14.4	262.0	11.2	-4.1	
910130	1300	1400	17.68	16.7	263.0	13.3	-4.2	-0.1
910130	1400	1500	6.10	11.3	261.0	14.3	-3.4	
910130	1400	1500	17.68	13.1	262.0	14.4	-3.5	-0.1
910130	1500	1600	6.10	12.1	262.0	14.6	-3.0	
910130	1500	1600	17.68	14.1	264.0	14.8	-3.1	-0.1
910130	1600	1700	6.10	8.5	261.0	30.0	-3.8	
910130	1600	1700	17.68	10.0	262.0	27.6	-3.7	0.1
910130	1700	1800	6.10	3.4	151.0	59.2	-4.5	
910130	1700	1800	17.68	3.8	155.0	59.1	-4.5	0.0
910130	1800	1900	6.10	3.3	165.0	42.9	-4.7	
910130	1800	1900	17.68	3.6	175.0	45.2	-4.7	0.0
910130	1900	2000	6.10	4.3	124.0	43.8	-4.8	
910130	1900	2000	17.68	4.6	130.0	43.7	-4.7	0.1
910130	2000	2100	6.10	3.6	134.0	37.8	-4.7	
910130	2000	2100	17.68	3.9	138.0	38.5	-4.6	0.1
910130	2100	2200	6.10	4.2	107.0	54.7	-4.7	
910130	2100	2200	17.68	4.6	114.0	53.5	-4.6	0.1
910130	2200	2300	6.10	4.4	93.0	53.5	-4.4	
910130	2200	2300	17.68	5.3	96.0	57.0	-4.2	0.2
910130	2300	0	6.10	2.4	121.0	63.3	-5.4	
910130	2300	0	17.68	2.9	139.0	59.8	-4.9	0.5

SITE TILLAGE
 STA: 447.377E UTM: 4417.530N ELEV(m/ASL) 3883.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910131	0	100	6.10	1.2	284.0	85.0	-7.7	
910131	0	100	17.68	1.6	220.0	77.5	-8.6	1.1
910131	100	200	6.10	2.1	181.0	75.7	-8.7	
910131	100	200	17.68	2.4	178.0	69.4	-8.0	0.7
910131	200	300	6.10	3.9	210.0	37.5	-5.5	
910131	200	300	17.68	4.5	218.0	35.7	-5.2	0.2
910131	300	400	6.10	4.4	187.0	46.1	-5.0	
910131	300	400	17.68	4.9	185.0	44.2	-4.9	0.1
910131	400	500	6.10	4.8	200.0	41.0	-5.3	
910131	400	500	17.68	5.8	236.0	35.9	-5.1	0.2
910131	500	600	6.10	9.5	257.0	13.9	-4.9	
910131	500	600	17.68	11.4	259.0	13.9	-4.7	0.2
910131	600	700	6.10	5.8	257.0	18.1	-4.5	
910131	600	700	17.68	7.0	260.0	17.5	-4.3	0.2
910131	700	800	6.10	5.0	254.0	24.1	-4.5	
910131	700	800	17.68	6.1	257.0	20.5	-4.3	0.2
910131	800	900	6.10	5.2	230.0	50.2	-4.0	
910131	800	900	17.68	6.2	235.0	48.8	-3.8	0.2
910131	900	1000	6.10	4.1	184.0	32.5	-3.3	
910131	900	1000	17.68	4.5	192.0	30.3	-3.3	0.0
910131	1000	1100	6.10	3.0	252.0	39.0	-0.5	
910131	1000	1100	17.68	3.5	254.0	36.4	-0.7	-0.2
910131	1100	1200	6.10	1.6	317.0	67.5	3.6	
910131	1100	1200	17.68	1.8	312.0	56.5	3.0	-0.6
910131	1200	1300	6.10	2.1	195.0	61.5	5.4	
910131	1200	1300	17.68	2.2	205.0	61.5	4.9	-0.5
910131	1300	1400	6.10	3.9	230.0	25.2	4.9	
910131	1300	1400	17.68	4.6	237.0	23.2	4.4	-0.5
910131	1400	1500	6.10	4.1	219.0	23.9	4.5	
910131	1400	1500	17.68	4.8	227.0	21.1	4.3	-0.2
910131	1500	1600	6.10	3.8	208.0	21.0	4.1	
910131	1500	1600	17.68	4.5	216.0	20.9	3.9	-0.2
910131	1600	1700	6.10	2.4	193.0	43.1	3.3	
910131	1600	1700	17.68	2.8	201.0	39.3	3.3	0.0
910131	1700	1800	6.10	1.6	141.0	69.6	0.1	
910131	1700	1800	17.68	2.1	175.0	47.5	1.0	0.9
910131	1800	1900	6.10	1.3	206.0	92.4	-1.8	
910131	1800	1900	17.68	1.9	183.0	73.9	-0.5	1.3
910131	1900	2000	6.10	1.1	56.0	92.8	-4.2	
910131	1900	2000	17.68	1.5	159.0	98.9	-2.4	1.8
910131	2000	2100	6.10	1.9	121.0	50.5	-2.6	
910131	2000	2100	17.68	2.3	142.0	50.9	-1.4	1.2
910131	2100	2200	6.10	5.3	244.0	25.1	-1.0	
910131	2100	2200	17.68	6.6	249.0	21.2	-0.6	0.4
910131	2200	2300	6.10	9.2	254.0	11.8	-0.7	
910131	2200	2300	17.68	11.1	257.0	11.3	-0.4	0.3
910131	2300	0	6.10	10.1	255.0	11.8	-0.4	
910131	2300	0	17.68	12.1	259.0	10.8	-0.2	0.2

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SITE TOLLAND
 UTMX 44P, PRTE UTMX 4417.63DN ELEV(m/ASL) 2883.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910202	0	100	6.10	0.4	304.0	47.3	-12.3	
910202	0	100	17.68	0.2	192.0	30.8	-10.5	1.8
910202	100	200	6.10	0.3	309.0	27.6	-13.2	
910202	100	200	17.68	0.4	287.0	18.7	-11.2	2.0
910202	200	300	6.10	0.5	296.0	33.0	-13.6	
910202	200	300	17.68	0.5	229.0	27.1	-11.6	2.0
910202	300	400	6.10	1.5	304.0	46.7	-14.0	
910202	300	400	17.68	0.3	286.0	21.5	-11.9	2.1
910202	400	500	6.10	0.4	285.0	33.7	-14.3	
910202	400	500	17.68	0.2	282.0	20.8	-12.1	2.2
910202	500	600	6.10	0.4	309.0	61.3	-13.5	
910202	500	600	17.68	0.5	293.0	48.4	-11.4	2.1
910202	600	700	6.10	0.7	320.0	68.5	-13.3	
910202	600	700	17.68	0.6	336.0	73.3	-10.4	2.9
910202	700	800	6.10	0.8	318.0	66.1	-11.2	
910202	700	800	17.68	0.6	353.0	76.3	-7.1	4.1
910202	800	900	6.10	3.6	278.0	76.5	-1.4	
910202	800	900	17.68	4.3	263.0	75.6	1.1	2.5
910202	900	1000	6.10	7.8	253.0	10.3	5.5	
910202	900	1000	17.68	9.5	258.0	9.2	5.7	0.2
910202	1000	1100	6.10	5.1	242.0	14.9	6.9	
910202	1000	1100	17.68	6.3	245.0	13.9	6.9	0.0
910202	1100	1200	6.10	6.0	242.0	13.4	8.4	
910202	1100	1200	17.68	7.3	246.0	12.3	8.3	-0.1
910202	1200	1300	6.10	7.8	249.0	10.5	8.7	
910202	1200	1300	17.68	9.3	253.0	9.0	8.6	-0.1
910202	1300	1400	6.10	8.0	247.0	9.5	8.5	
910202	1300	1400	17.68	9.7	252.0	8.6	8.4	-0.1
910202	1400	1500	6.10	7.7	250.0	8.9	7.7	
910202	1400	1500	17.68	9.3	254.0	7.5	7.7	0.0
910202	1500	1600	6.10	6.0	246.0	11.2	7.2	
910202	1500	1600	17.68	7.4	250.0	10.1	7.2	0.0
910202	1600	1700	6.10	3.6	241.0	22.3	5.7	
910202	1600	1700	17.68	4.5	243.0	19.1	5.9	0.2
910202	1700	1800	6.10	1.0	302.0	36.9	0.2	
910202	1700	1800	17.68	1.8	283.0	37.1	1.8	1.6
910202	1800	1900	6.10	0.5	34.0	70.9	-3.7	
910202	1800	1900	17.68	0.5	303.0	87.1	-2.2	1.5
910202	1900	2000	6.10	0.7	359.0	53.4	-5.2	
910202	1900	2000	17.68	0.5	338.0	51.5	-2.6	2.6
910202	2000	2100	6.10	0.9	24.0	44.4	-4.3	
910202	2000	2100	17.68	0.4	53.0	90.9	-1.6	2.7
910202	2100	2200	6.10	0.9	354.0	46.0	-5.1	
910202	2100	2200	17.68	1.2	309.0	54.2	-2.4	2.7
910202	2200	2300	6.10	4.9	283.0	26.4	-0.7	
910202	2200	2300	17.68	6.1	281.0	21.8	0.3	1.0
910202	2300	0	6.10	5.3	271.0	24.3	0.3	
910202	2300	0	17.68	6.6	269.0	18.5	0.8	0.5

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DATE 73-11-20
 TIME 415.3775 UTM 4417.500N ELEV(M/ASL) 2833.00

DATE	TIME START	TIME STOP	GBS HT (M/ASL)	WIND SPEED (M/S)	WIND DIR Deg	SIGMA THETA Deg	TEMP (deg C)	DELTA TEMP (deg C)
910204	0	100	6.10	5.6	183.0	11.3	-3.4	
910204	0	100	17.68	6.5	185.0	12.6	-3.2	0.1
910204	100	200	6.10	5.7	185.0	13.6	-3.8	
910204	100	200	17.68	6.5	187.0	14.2	-3.6	0.2
910204	200	300	6.10	5.2	183.0	14.6	-3.9	
910204	200	300	17.68	6.0	184.0	14.2	-3.8	0.1
910204	300	400	6.10	5.2	176.0	17.1	-4.3	
910204	300	400	17.68	6.0	178.0	15.8	-4.1	0.2
910204	400	500	6.10	5.2	173.0	13.3	-4.6	
910204	400	500	17.68	6.0	176.0	12.2	-4.4	0.2
910204	500	600	6.10	2.5	305.0	24.7	-4.7	
910204	500	600	17.68	4.1	303.0	22.7	-4.6	0.1
910204	600	700	6.10	5.4	278.0	15.6	-4.8	
910204	600	700	17.68	6.4	280.0	15.5	-4.6	0.2
910204	700	800	6.10	2.5	368.0	72.5	-5.3	
910204	700	800	17.68	3.0	278.0	65.9	-4.9	0.4
910204	800	900	6.10	1.0	104.0	17.0	-3.9	
910204	800	900	17.68	1.0	96.0	22.0	-3.4	0.5
910204	900	1000	6.10	0.7	215.0	54.8	1.7	
910204	900	1000	17.68	0.7	222.0	40.6	1.2	-0.5
910204	1000	1100	6.10	2.2	226.0	22.9	2.8	
910204	1000	1100	17.68	2.6	232.0	20.6	2.4	-0.4
910204	1100	1200	6.10	4.7	250.0	11.8	2.4	
910204	1100	1200	17.68	5.5	255.0	10.6	2.2	-0.2
910204	1200	1300	6.10	7.4	247.0	9.7	1.4	
910204	1200	1300	17.68	9.0	253.0	8.5	1.1	-0.3
910204	1300	1400	6.10	6.4	251.0	11.8	1.6	
910204	1300	1400	17.68	7.6	256.0	10.6	1.3	-0.3
910204	1400	1500	6.10	5.4	254.0	17.7	2.0	
910204	1400	1500	17.68	6.3	258.0	16.2	1.8	-0.2
910204	1500	1600	6.10	5.8	252.0	11.1	1.7	
910204	1500	1600	17.68	7.0	257.0	9.9	1.5	-0.2
910204	1600	1700	6.10	5.0	254.0	11.0	0.9	
910204	1600	1700	17.68	6.1	258.0	9.2	1.0	0.1
910204	1700	1800	6.10	4.8	273.0	12.1	-1.3	
910204	1700	1800	17.68	5.9	273.0	10.6	-0.6	0.7
910204	1800	1900	6.10	2.7	286.0	14.4	-1.9	
910204	1800	1900	17.68	3.5	281.0	12.2	-1.3	0.6
910204	1900	2000	6.10	1.4	323.0	28.7	-3.1	
910204	1900	2000	17.68	2.1	299.0	24.3	-2.2	0.9
910204	2000	2100	6.10	0.7	338.0	33.8	-4.9	
910204	2000	2100	17.68	1.1	305.0	29.1	-3.4	1.5
910204	2100	2200	6.10	0.5	18.0	53.9	-7.1	
910204	2100	2200	17.68	0.6	0.0	56.9	-5.0	2.1
910204	2200	2300	6.10	0.5	40.0	48.8	-8.5	
910204	2200	2300	17.68	0.6	83.0	50.0	-6.9	1.6
910204	2300	0	6.10	0.5	44.0	59.6	-9.2	
910204	2300	0	17.68	0.6	51.0	73.5	-6.9	2.3

SITE TELLAR
 JTMX 447.997E JTMX 4417.630N ELEV(M. ABL) 3823.00

DATE	TIME START	TIME STOP	OBS HT (m/ABL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910205	0	100	6.10	1.1	310.0	54.2	-0.7	
910205	0	100	17.68	1.9	302.0	39.7	-1.7	0.0
910205	100	200	6.10	2.1	310.0	31.0	-1.7	
910205	100	200	17.68	2.3	296.0	24.0	-0.7	1.0
910205	100	200	6.10	2.1	317.0	24.0	-1.4	
910205	100	200	17.68	2.9	312.0	19.3	-0.6	0.8
910205	100	200	6.10	1.2	354.0	22.6	-3.3	
910205	200	400	17.68	1.8	328.0	43.3	-1.6	1.9
910205	400	500	6.10	0.8	35.0	52.6	-5.5	
910205	400	500	17.68	1.0	9.0	50.0	-2.0	3.2
910205	500	600	6.10	1.1	8.0	51.8	-5.7	
910205	500	600	17.68	1.2	353.0	50.5	-2.1	2.6
910205	600	700	6.10	0.8	40.0	57.6	-3.9	
910205	600	700	17.68	0.9	23.0	58.7	-2.4	3.5
910205	700	800	6.10	0.8	75.0	38.8	-5.2	
910205	700	800	17.68	1.0	65.0	45.4	-1.7	3.5
910205	800	900	6.10	2.1	239.0	81.3	2.1	
910205	800	900	17.68	2.7	235.0	54.9	2.7	0.6
910205	900	1000	6.10	4.5	247.0	15.5	4.4	
910205	900	1000	17.68	5.3	252.0	14.6	4.3	-0.1
910205	1000	1100	6.10	6.3	253.0	11.4	5.3	
910205	1000	1100	17.68	7.5	259.0	10.0	5.2	-0.1
910205	1100	1200	6.10	7.1	253.0	11.2	6.0	
910205	1100	1200	17.68	8.6	258.0	10.0	5.9	-0.1
910205	1200	1300	6.10	7.8	251.0	9.1	6.4	
910205	1200	1300	17.68	9.5	257.0	7.7	6.3	-0.1
910205	1300	1400	6.10	8.0	259.0	9.7	6.5	
910205	1300	1400	17.68	9.4	263.0	8.6	6.4	-0.1
910205	1400	1500	6.10	8.0	258.0	9.8	6.4	
910205	1400	1500	17.68	9.6	263.0	8.2	6.4	0.0
910205	1500	1600	6.10	5.9	253.0	10.2	6.6	
910205	1500	1600	17.68	7.1	257.0	8.8	6.6	0.0
910205	1600	1700	6.10	3.1	263.0	19.6	6.0	
910205	1600	1700	17.68	3.9	264.0	16.5	6.1	0.1
910205	1700	1800	6.10	0.3	334.0	65.1	0.7	
910205	1700	1800	17.68	0.4	303.0	92.5	2.1	1.4
910205	1800	1900	6.10	0.3	0.0	42.1	-3.6	
910205	1800	1900	17.68	0.4	314.0	74.8	-2.3	1.3
910205	1900	2000	6.10	0.3	289.0	38.3	-5.6	
910205	1900	2000	17.68	0.2	292.0	34.5	-4.6	1.0
910205	2000	2100	6.10	0.4	285.0	27.0	-6.9	
910205	2000	2100	17.68	0.3	282.0	23.2	-5.6	1.3
910205	2100	2200	6.10	0.5	284.0	28.5	-7.8	
910205	2100	2200	17.68	0.4	296.0	23.2	-6.5	1.3
910205	2200	2300	6.10	0.2	290.0	39.2	-8.8	
910205	2200	2300	17.68	0.3	291.0	15.5	-7.2	1.6
910205	2300	0	6.10	0.3	286.0	20.5	-9.5	
910205	2300	0	17.68	0.2	297.0	21.8	-8.1	1.4

SITE 10-1401
 LTMA 44.897E UTM 4417.53DN ELEV(m) ASL 8823.00

DATE	TIME START	TIME STOP	DBS HT (m/ASL)	WIND SPEED (m/s)	WIND DIR (deg)	SIGMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910215	0	100	6.10	0.4	307.0	40.0	-10.1	
910215	0	100	17.68	0.5	285.0	17.3	-8.5	1.6
910215	100	200	6.10	0.5	299.0	47.2	-10.7	
910215	100	200	17.68	0.5	290.0	40.7	-8.8	1.9
910215	100	300	6.10	0.3	295.0	43.5	-10.5	
910215	100	300	17.68	0.4	295.0	29.8	-8.5	2.0
910215	100	400	6.10	0.5	294.0	33.4	-10.8	
910215	100	400	17.68	0.5	290.0	24.9	-9.3	1.5
910215	400	500	6.10	0.3	312.0	44.8	-11.4	
910215	400	500	17.68	0.3	305.0	26.6	-9.7	1.7
910215	500	600	6.10	0.2	285.0	18.1	-11.9	
910215	500	600	17.68	0.5	281.0	10.8	-10.4	1.5
910215	600	700	6.10	0.5	295.0	43.3	-12.3	
910215	600	700	17.68	0.5	285.0	42.1	-10.8	1.5
910215	700	800	6.10	0.3	318.0	86.7	-12.0	
910215	700	800	17.68	0.4	13.0	91.1	-10.0	2.0
910215	800	900	6.10	0.6	255.0	18.4	-6.5	
910215	800	900	17.68	0.7	262.0	17.4	-5.5	1.0
910215	900	1000	6.10	2.4	174.0	94.6	-0.8	
910215	900	1000	17.68	2.8	152.0	95.1	-1.0	-0.2
910215	1000	1100	6.10	5.1	104.0	10.8	0.5	
910215	1000	1100	17.68	6.0	105.0	8.3	0.0	-0.5

FILE 11-1-70
 DATE 11-1-70 TIME 1417.53N ELEV(m/ASL) 3335.00

DATE	TIME SET STOP	DES HT (m/AGL)	WIND SPEED (m/s)	WIND DIR (deg)	ECMA THETA (deg)	TEMP (deg C)	DELTA TEMP (deg C)
910208	1100	6.10	1.3	103.0	36.2	5.1	
910208	1100	17.68	1.7	107.0	79.3	5.1	0.0
910208	1100	5.10	3.2	113.0	11.1	5.3	
910208	1100	17.68	3.5	115.0	9.7	5.3	-0.3
910208	1100	5.10	3.6	112.0	11.0	5.4	
910208	1100	5.10	4.3	111.0	9.7	5.0	-0.4
910208	1100	17.68	3.0	104.0	10.2	5.3	
910208	1100	5.10	4.0	108.0	12.0	5.4	-0.4
910208	1100	17.68	4.6	109.0	10.4	5.0	-0.4
910208	1100	5.10	5.1	103.0	10.6	5.4	
910208	1100	17.68	3.7	106.0	9.4	5.2	-0.2
910208	1100	5.10	0.9	96.0	22.1	3.1	
910208	1100	17.68	1.6	104.0	13.9	3.3	0.2
910208	1100	5.10	0.5	8.0	51.1	-0.2	
910208	1100	17.68	0.5	38.0	32.8	0.5	0.7
910208	1100	5.10	0.3	47.0	54.8	-2.6	
910208	1100	17.68	0.2	61.0	74.2	-2.1	0.5
910208	1100	5.10	0.4	291.0	62.2	-2.5	
910208	1100	17.68	0.5	269.0	29.1	-2.4	0.5
910208	1100	5.10	0.5	44.0	57.5	-3.0	
910208	1100	17.68	0.7	51.0	75.2	-2.3	0.7
910208	1100	5.10	0.4	302.0	59.5	-4.2	
910208	1100	17.68	0.4	278.0	57.5	-3.4	0.8
910208	1100	5.10	0.5	325.0	54.5	-5.1	
910208	1100	17.68	0.6	335.0	56.8	-4.3	0.8

APPENDIX D

LLNL Tower, LINDAS RANCH Jan, 1991
 476.30 km E, 4413.98 km N, Zone 13; Elev. 2003.8 m MSL

LLNL Tower, PAULS PEAK Jan, 1991
474.59 km E, 4413.25 km N, Zone 13; Elev. 2472.5 m MSL

LLNL Tower, TOLLAND Jan, 1991
450.00 km E, 4417.63 km N, Zone 13; Elev. 2707.5 m MSL

LLNL Tower, RIM ROCK Jan, 1991
 470.44 km E, 4416.92 km N, Zone 13; Elev. 2330.0 m MSL

Rftowers 07/29/91

LLNL Tower, PATS FLAT Jan, 1991
479.70 km E, 4412.13 km N, Zone 13; Elev. 1874.5 m MSL

LLNL Tower, LOIS RANCH Jan, 1991
 477.02 km E, 4415.37 km N, Zone 13; Elev. 2095.5 m MSL

LLNL Tower, JIMS RANCH Jan, 1991
473.21 km E, 4416.54 km N, Zone 13; Elev. 2029.4 m MSL

Rftowers 07/29/91

LLNL Tower, BARTLETT RANCH Jan, 1991
 487.35 km E, 4412.90 km N, Zone 13; Elev. 1666.7 m MSL

LLNL Tower, LINDAS RANCH Feb, 1991
476.30 km E, 4413.98 km N, Zone 13; Elev. 2003.8 m MSL

LLNL Tower, PAULS PEAK Feb, 1991
474.59 km E, 4413.25 km N, Zone 13; Elev. 2472.5 m MSL

LLNL Tower, TOLLAND Feb, 1991
 450.00 km E, 4417.63 km N, Zone 13; Elev. 2707.5 m MSL

LLNL Tower, RIM ROCK Feb, 1991
470.44 km E, 4416.92 km N, Zone 13; Elev. 2330.0 m MSL

LLNL Tower, PATS FLAT Feb, 1991
 479.70 km E, 4412.13 km N, Zone 13; Elev. 1874.5 m MSL

LLNL Tower, LOIS RANCH Feb, 1991
477.02 km E, 4415.37 km N, Zone 13; Elev. 2095.5 m MSL

LLNL Tower, JIMS RANCH Feb, 1991
473.21 km E, 4416.54 km N, Zone 13; Elev. 2029.4 m MSL

LLNL Tower, BARTILLET RANCH Feb, 1991
 487.35 km E, 4412.90 km N, Zone 13; Elev. 1356.7 m MSL

Rftowers 07/29/91