Oak Ridge Reservation Quality Assurance Report for Meteorological Towers For Towers A, B, C, K, L, M, W, Y

Kevin R. Birdwell Computational Science and Engineering Division Oak Ridge National Laboratory

September 2009

Tower ID Summary:

Name	Alternate Names	ORR Site	Elevation (m)	Easting, Northing (m)	Measuring Hts
Tower A	MT4, 7571	ORNL	263	743179,3978105	10,30
Tower B	MT3, 6555, 07	ORNL	256	743398,3979683	10,30
Tower C	MT2, 1057, 03	ORNL	261	741423,3978768	10,30,100
Tower K	MT1, 1208	ETTP	253	735675,3979503	10,60
Tower L	MT7, 1209	ETTP	233	735110,3978654	10,30
Tower M	MT10, 208A	ETTP	237	735720,3976860	10
Tower W	MT6, Y12W, West	Y12	326	748890,3986700	10,60
Tower Y	MT9, PSS Tower	Y12	290	747926.3985859	15, 33

Tuesday, September 1, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

IS-min 60-min Tower A OK 100.0 100.0 Tower B OK 100.0 100.0	
Tower CERR0000-130538.040.0Wind Dir 100mWind direction values at 100 meters are s (correct by adding 50 degrees to hourly	- ·
ERR1305-142194.096.0Wind Spd 100mWind speed values at 100 meters in error to wind monitor by Shaw Environmenta	
OK 100.0 100.0 Other	
Tower K OK 100.0 100.0	
Tower L OK 100.0 100.0	
Tower M OK 100.0 100.0	
Tower W OK 100.0 100.0	
Tower Y OK 100.0 100.0	

NETWORK INTERRUPTIONS

Affected Systems Time Range	%Data Recovered	Cause/Repair
None		

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Easterly winds within Great Valley appear to aid cloud and shower formation along the Cumberland Escarpment (up and down the western length of the Great Valley).

Wednesday, September 2, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

<i>Site Name</i> Tower A	<i>Status</i> OK	Time Range		Recovered 60-min 100.0	Sensors Affected	Comments
Tower B	ERR	1414-2359	57.0	56.0	All 10-meter Level	10-meter level instruments taken offline by Shaw Environmental; instruments to be raised to 15-meter level (for better tree flow clearance). 30-meter sensors temporarily moved to 15-meters.
	OK		100.0	100.0	Other	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	OK		100.0	100.0		
Tower M	OK		100.0	100.0		
Tower W	OK		100.0	100.0		
Tower Y	OK		100.0	100.0		
NETWORK IN Affected Systen None	-		%Data Recovere	ed	Cause/Repair	

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Upper level low in area caused sporadic light sprinkles and rain showers during the day but especially early AM.

Thursday, September 3, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK		100.0 100.0		
Tower B	ERR	0000-1543	41.0 40.0	All 10-meter Level	10-meter level instruments taken offline by Shaw Environmental; instruments to be raised to 15-meter level (for better tree flow clearance). 30-meter sensors temporarily moved to 15-meters.
			0.0 0.0	Relative Humidity (15m)	Values in errors (program error?)
	OK		100.0 100.0	Other	
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	OK		100.0 100.0		
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None %Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Upper level low in area caused sporadic light sprinkles and rain showers during the day.

Friday, September 4, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data 15-min	n Recovered 60-min	Sensors Affected	Comments
Tower A	OK		100.0	100.0		
Tower B	ERR	0000-1104	52.0	52.0	RH at 15-meter Level	Values in error (programming error); repaired by Shaw Environmental at 1104 hrs.
	OK		100.0	100.0	Other	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	OK		100.0	100.0		
Tower M	OK		100.0	100.0		
Tower W	ERR	0700-0715, 1215-1430 2315	86.0	88.0	All	Missing data (Y-12 network errors)
Tower Y	ERR	0700-0715, 1215-1430 2315	86.0	88.0	All	Missing data (Y-12 network errors)

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Saturday, September 5, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	ОК	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	OK	100.0 100.0		
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	OK	100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None %Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Sunday, September 6, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	ОК	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	OK	100.0 100.0		
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	OK	100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Monday, September 7, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	ОК	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	OK	100.0 100.0		
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	OK	100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Light thundershowers moved W to E from Cumberland Plateau across Anderson Co.

Tuesday, September 8, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	ОК	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	OK	100.0 100.0		
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	ОК	100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None %Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Wednesday, September 9, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data 15-min	Recovered 60-min	Sensors Affected	Comments
Tower A	ERR	1000-1145, 1500-2345	54.0	54.0	10m Temperature	Values intermittently in error (unknown cause)
Tower B	OK OK		100.0 100.0	100.0 100.0	Other	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-2045	12.0	12.0	10m Temperature	Temperature sensor undergoing calibrations (values in error)
	OK		100.0	100.0	Other	
Tower M	OK		100.0	100.0		
Tower W	ERR	1230	99.0	100.0	All	Missing 15-min data (Y12 network error)
Tower Y	ERR	1230	99.0	100.0	All	Missing 15-min data (Y12 network error)
NETWORK I	NTERRUF	PTIONS				
Affected System			a Recovered	d	Cause/Repair	

Special Notes

None

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Thundershower development on eastern Cumberland Mts. and Plateau developed into mountain-wave storms/showers which affected parts of Anderson and Roane Counties from 1500-2200 hrs.

Thursday, September 10, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	/	Recovered	Sensors Affected	Comments
				60-min		
Tower A	OK		100.0	100.0		
Tower B	OK		100.0	100.0		
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0100-0545, 0800-1945	29.0	28.0	10m Temperature	Temperature sensor undergoing calibrations (values in error)
	OK		100.0	100.0	Other	
Tower M	ERR	1703-1849	92.0	92.0	All	Missing data (power failure)
Tower W	ERR	1015	99.0	100.0	All	Missing 15-min data (Y12 network error)
Tower Y	ERR	1015	99.0	100.0	All	Missing 15-min data (Y12 network error)

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Thundershowers developed during the evening over the Oak Ridge Reservation (after 2000 hrs).

Friday, September 11, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range		Recovered	Sensors Affected	Comments
			15-min	60-min		
Tower A	OK		100.0	100.0		
Tower B	OK		100.0	100.0		
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-0145, 0600-0745	36.0	36.0	10m Temperature	Temperature sensor undergoing calibrations (values
		1000-1545, 1900-2345				in error)
	OK		100.0	100.0	Other	
Tower M	OK		100.0	100.0		
Tower W	OK		100.0	100.0		
Tower Y	OK		100.0	100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Thundershowers crossed north Anderson Co. from NNW to SSE around 1800 hrs.

Saturday, September 12, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range		Recovered 60-min	Sensors Affected	Comments
Tower A	ERR OK	0500-1645, 2000-20		36.0 100.0	10m Temperature Other	Values intermittently in error (unknown cause)
Tower B	OK		100.0	100.0	Guler	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-0945	60.0	60.0	10m Temperature	Temperature sensor undergoing calibrations (values in error)
	OK		100.0	100.0	Other	,
Tower M	OK		100.0	100.0		
Tower W	ERR	0515	99.0	100.0	All	Missing 15-min data (Y12 network error)
Tower Y	ERR	0515	99.0	100.0	All	Missing 15-min data (Y12 network error)
NETWORK I	NTERRUF	TIONS				
Affected System None			Data Recovere	ed	Cause/Repair	

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Sunday, September 13, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	OK	100.0 100.0		
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	ОК	100.0 100.0		
	NTERRUPTIONS ems Time Range	%Data Recovered	Cause/Repair	

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Monday, September 14, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK		100.0 100.0		
Tower B	ERR	1252-1327	97.0 96.0	Temp 15m	All temperature channels at 15m reprogrammed to reflect move of sensors from 10m to 15m (9/2/09).
	ERR	1321-1411	97.0 96.0	Winds 15m	All wind channels at 15m reprogrammed to reflect move of sensors from 10m to 15m (9/2/09)
	OK		100.0 100.0	Other	
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	OK		100.0 100.0		
Tower M	OK		100.0 100.0		
Tower W	ERR	1100	99.0 100.0	All	Missing 15-min data (Y12 network errors)
Tower Y	ERR	1100	99.0 100.0	All	Missing 15-min data (Y12 network errors)

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Tuesday, September 15, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	ERR OK	0000-2159	8.0 8.0 100.0 100.0	Temp 10m Other	Temp values in
Tower B Tower C Tower K Tower L	ERR OK OK OK	0952-1112	94.0 96.0 100.0 100.0 100.0 100.0 100.0 100.0	All	Missing data (power failure)
Tower M Tower W Tower Y	OK OK OK		100.0100.0100.0100.0100.0100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range %Data None

%Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Wednesday, September 16, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	ОК	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	OK	100.0 100.0		
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	OK	100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None %Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Thursday, September 17, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered	Sensors Affected	Comments
			15-min 60-min		
Tower A	ERR	1000-1745	68.0 68.0	Temp 10	Temp values in error
	OK		100.0 100.0	All Other	
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	1500-2345	64.0 64.0	Precip	Precip gauge partially clogged; values substituted with K1208 values
	OK		100.0 100.0	All Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		
NETWORK I	NTERRUF	TIONS			
Affected Syste	ms Time R	lange	%Data Recovered	Cause/Repair	

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes None

None

Friday, September 18, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Reco 15-min 60-	JJ	ected Comments
Tower A	ERR	0900-1445 2100-2345	63.0 63	3.0 Temp 10	Temp values in error (likely humidity / condensation problem with circuit board)
	OK		100.0 100	0.0 All Other	•
Tower B	ERR	1500-2345	63.0 63	All 15m Se	nsors (TM, RH, WD) All 15-meter sensor values in error (likely voltage card failure; possible lightning surge)
	OK		100.0 100	0.0 All Other	
Tower C	OK		100.0 100).0	
Tower K	OK		100.0 100).0	
Tower L	ERR	0000-0845	64.0 64	4.0 Temp 10	Temp values undergoing adjustments
	OK		100.0 100	0.0 Other	Note: Precip gauge values corrected
Tower M	OK		100.0 100	0.0	
Tower W	OK		100.0 100	0.0	
Tower Y	OK		100.0 100).0	

NETWORK INTERRUPTIONS

Affected Systems Time Range None %Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Severe thunderstorm in Northern Anderson Co. including Norris around 1845-1945 hrs; Approx. 1.50 inches of rainfall; may have formed in near-stationary wave in lee side of mountain wave (approx. WSW-ENE flow across Cumberland Mts.); possible lighting/thunderstorm in area of ORNL around 1500 hrs.

Saturday, September 19, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	/ • = ••••	Recovered 60-min	Sensors Affected	Comments
Tower A	ERR	0000-2345	0.0	0.0	Temp 10	Temp values in error (likely humidity / condensation problem with circuit board)
	OK		100.0	100.0	All Other	
Tower B	ERR	0000-2345	0.0	0.0	All 15m Sensors (TM, RH, WD)	All 15-meter sensor values in error (likely voltage card failure; possible lightning surge)
	OK		100.0	100.0	All Other	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-0745	67.0	67.0	Temp 10	Temp values undergoing adjustments
	OK		100.0	100.0	Other	Note: Precip gauge values corrected
Tower M	OK		100.0	100.0		
Tower W	OK		100.0	100.0		
Tower Y	OK		100.0	100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Saturday, September 19, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range		Recovered 60-min	Sensors Affected	Comments
Tower A	ERR	0000-2345	0.0	0.0	Temp 10	Temp values in error (likely humidity / condensation problem with circuit board)
	OK		100.0	100.0	All Other	
Tower B	ERR	0000-2345	0.0	0.0	All 15m Sensors (TM, RH, WD)	All 15-meter sensor values in error (likely voltage card failure; possible lightning surge)
	OK		100.0	100.0	All Other	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-0745	67.0	67.0	Temp 10	Temp values undergoing adjustments
	OK		100.0	100.0	Other	Note: Precip gauge values corrected
Tower M	OK		100.0	100.0		
Tower W	OK		100.0	100.0		
Tower Y	OK		100.0	100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Sunday, September 20, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	15-min	Recovered 60-min	Sensors Affected	Comments
Tower A	OK		100.0	100.0		
Tower B	ERR	0000-2345	0.0	0.0	All 15m Sensors (TM, RH, WD)	All 15-meter sensor values in error (likely voltage card failure; possible lightning surge)
	OK		100.0	100.0	All Other	
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	2000-2345	67.0	67.0	Temp 10	Temp values undergoing adjustments
	OK		100.0	100.0	Other	Note: Precip gauge values corrected
Tower M	OK		100.0	100.0		
Tower W	OK		100.0	100.0		
Tower Y	OK		100.0	100.0		
NETWORK I Affected Syste None			%Data Recovere	ed	Cause/Repair	

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Monday, September 21, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range		Recovered	Sensors Affected	Comments
				60-min		
Tower A	OK		100.0	100.0		
Tower B	ERR	0000-2345	0.0	0.0	All 15m Sensors (TM, RH, WD)	All 15-meter sensor values in error (likely voltage card failure; possible lightning surge)
	ERR	1000-1145	88.0	88.0	All Other	Missing data (power failure)
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-1345, 1700-2345	12.0	12.0	Temp 10	Temp values undergoing adjustments
	OK		100.0	100.0	Other	Note: Precip gauge values corrected
Tower M	OK		100.0	100.0		
Tower W	OK		100.0	100.0		
Tower Y	OK		100.0	100.0		
NETWORK I	NTERRUP	TIONS				

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Tuesday, September 22, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	15-min	n Recovered 60-min	Sensors Affected	Comments
Tower A	OK		100.0	100.0		
Tower B	ERR	0000-1245	46.0	46.0	Temp 15m, Wind 15m	All 15-meter sensor values in error (likely voltage card failure; may be lightning related)
	ERR	1200-1245	96.0	96.0	All Other	Missing data (power failure – data lagger switched out by Shaw Environmental).
Tower C	OK		100.0	100.0		
Tower K	OK		100.0	100.0		
Tower L	ERR	0000-1045, 2000-2345	12.0	12.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0	100.0	Other	Precip gauge cleared at 0930 hrs
Tower M	OK		100.0	100.0		
Tower W	ERR	1530	99.0	100.0	All	Missing 15-min data (Y12 network error)
Tower Y	OK		100.0	100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range%Data RecoveredCause/RepairNone

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Wednesday, September 23, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK		100.0 100.0		Tower A guy wire truing performed by Shaw Environmental and UT-Battelle
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0000-1645	29.0 29.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems Time Range None

%Data Recovered

Cause/Repair

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Thursday, September 24, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Τ	OV				
Tower A	OK		100.0 100.0		
Tower B	OK		100.0 100.0		Tower B guy wire truing performed by Shaw Environmental
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0000-2345	29.0 29.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected System	s Time Range	%Data Recovered	Cause/Repair
Tower C	40% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes

Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Friday, September 25, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered	Sensors Affected	Comments
			15-min 60-min		
Tower A	OK		100.0 100.0		
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0000-0800	29.0 29.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems	Time Range	%Data Recovered	Cause/Repair
Tower C	80% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Thudershowers crossed Anderson Co. from SSW to NNE around 0700-0900 hrs.

Saturday, September 26, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK		100.0 100.0		
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0000-2345	29.0 29.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected System	s Time Range	%Data Recovered	Cause/Repair
Tower C	80% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Heavy rain occurred across area between 0600 and 1900 hrs (2.50 inches approx.); Occluded front passage during most of 24-hr period.

Sunday, September 27, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK		100.0 100.0		
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0000-2345	29.0 29.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems	Time Range	%Data Recovered	Cause/Repair
Tower C	80% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Monday, September 28, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovere	ed Sensors Affected	Comments
Tower A	EDD	1300-1745. 2200-2345	15-min 60-min 75.0 75.0	Town 10	Town values in amon (likely hymidity / condensation
Tower A	ERR	1500-1745, 2200-2545	75.0 75.0	Temp 10	Temp values in error (likely humidity / condensation problem with circuit board)
	OK		100.0 100.0	All Other	
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0000-0745	67.0 67.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected System	s Time Range	%Data Recovered	Cause/Repair
Tower C	80% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Weather Notes

Significant (temperature-wise) cold front passage around 0900-1300 hrs.

Tuesday, September 29, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status	Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK		100.0 100.0		
Tower B	OK		100.0 100.0		
Tower C	OK		100.0 100.0		
Tower K	OK		100.0 100.0		
Tower L	ERR	0400-0745	75.0 75.0	Temp 10	Temp values in undergoing adjustments
	OK		100.0 100.0	Other	
Tower M	OK		100.0 100.0		
Tower W	OK		100.0 100.0		
Tower Y	OK		100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems	Time Range	%Data Recovered	Cause/Repair
Tower C	80% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.

Wednesday, September 30, 2009 Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308 Email <u>birdwellkr@ornl.gov</u>, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

Site Name	Status Time Range	% Data Recovered 15-min 60-min	Sensors Affected	Comments
Tower A	OK	100.0 100.0		
Tower B	OK	100.0 100.0		
Tower C	ОК	100.0 100.0		Tower C guy wire truing performed by Shaw Environmental.
Tower K	OK	100.0 100.0		
Tower L	OK	100.0 100.0		
Tower M	OK	100.0 100.0		
Tower W	OK	100.0 100.0		
Tower Y	OK	100.0 100.0		

NETWORK INTERRUPTIONS

Affected Systems	Time Range	%Data Recovered	Cause/Repair
Tower C	85% Intermittent	100.0	E-Das ftp transfer program error (troubleshooting in progress)

Special Notes Wind speed threshold is 0.5 mph on all sites unless otherwise noted.