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

January 2010

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 |

Friday, January 1, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | 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

Cold front passage early AM hours.

Saturday, January 2, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | | Recovered | Sensors Affected | Comments |
|-----------|--------|----------------------|-------|----------------|-------------------|---|
| Tower A | ERR | 0900-0945, 1100-1445 | 71.0 | 60-min 71.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | |
| 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 %Data Recovered Cause/Repair None

Special Notes

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

Weather Notes

High temperature remained below freezing; dusting of snow AM hours.

Sunday, January 3, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | 0900-1645 | 67.0 | 67.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | • |
| 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 | ERR | 0400-0445 | 96.0 | 96.0 | All | Missing data (Y12 network error?) |

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

High temperature remained below freezing.

Monday, January 4, 2010

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 | 0900-1545 | 71.0 71.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | C |
| 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 | %Data Recovered | Cause/Repair |
|------------------|------------|------------------------|--|
| Tower C | 1920-2345 | 100.0% (60 and 15-min) | Sluggish/locked up internet communications with Tower C; |
| | | | Tower C data logger seems to be responsible (cold weather issues?) |

Special Notes

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

Weather Notes

High temperature remained below freezing; trace of snowfall observed.

Tuesday, January 5, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | / | Recovered 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-------|---------------------|-------------------|---|
| Tower A | ERR | 0900-1945 | 54.0 | 54.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | |
| Tower B | OK | | 100.0 | 100.0 | | |
| Tower C | OK | | 100.0 | 100.0 | | Light bulbs placed in Tower C white box to provide heat for logger and converter. |
| 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 | 0000-1730 | 100.0% (60 and 15-min) | Sluggish/locked up internet communications with Tower C; |
| | | | Tower C data logger seems to be responsible (cold weather issues?) |

Special Notes

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

Weather Notes

High temperature remained below freezing (4th day in a row)

Wednesday, January 6, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered | Sensors Affected | Comments |
|-----------|--------|------------|----------------------------|-------------------|---|
| Tower A | ERR | 0900-1845 | 15-min 60-min 60.0 60.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); |
| | | | | - | Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | |
| 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 %Data Recovered Cause/Repair None

Special Notes

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

Weather Notes

Thursday, January 7, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered 15-min 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-----------------------------------|-------------------|--|
| Tower A | ERR | 1200-2145 | 60.0 60.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | Ç |
| 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 | %Data Recovered | Cause/Repair |
|------------------|------------|-----------------|--------------|
| None | | | |

Special Notes

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

Weather Notes

Arctic cold frontal passage around 1800 hrs; 0.6 inches of snowfall measured by midnight.; temperature remained below freezing all day

Friday, January 8, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered 15-min 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-----------------------------------|-------------------|--|
| Tower A | ERR | 1500-1745 | 88.0 88.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | - |
| 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 | ERR | 1030 | 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 Recovered Cause/Repair None

Special Notes

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

Weather Notes

Trace of snowfall; temperatures remained below freezing all day.

Saturday, January 9, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered 15-min 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-----------------------------------|-------------------|--|
| Tower A | ERR | 1200-1945 | 67.0 67.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | Ç |
| 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 | %Data Recovered | Cause/Repair |
|------------------|------------|-----------------|--------------|
| None | | | |

Special Notes

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

Weather Notes

0.2 inches of snowfall (mostly in early evening); temperatures remained below freezing all day

Mountain-wave induced snowband appeared to form around 1830-2000 hrs moving from N to S from the Cumberland Mts; snow band affected Oak Ridge and Oak Ridge Reservation.

Sunday, January 10, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered | Sensors Affected | Comments |
|-----------|--------|------------|------------------|-------------------|---|
| Тоттон А | EDD | 0800-1945 | 15-min 60-min | Tomm10 | 10 m Tomm values are anomalously (high 0.5.1.0C). |
| Tower A | ERR | 0800-1943 | 50.0 50.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | • |
| 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 %Data Recovered Cause/Repair None

Special Notes

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

Weather Notes

Trace of snowfall (morning); temperatures remained below freezing all day

Monday, January 11, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered 15-min 60-min | Sensors Affected |
|-----------|--------|------------|-----------------------------------|-------------------|
| Tower A | ERR | 0900-2245 | 40.0 40.0 | Temp10 |
| | | | | |
| | | | | Precip |
| | OK | | 100.0 100.0 | All Other Sensors |
| 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 | |

Comments

10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values

Newly installed rain gauge tested by Shaw Env.

Temp sensor tested 1400-1545 hrs.

and programmed by KR Birdwell.

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

Trace of snowfall (evening).

Tuesday, January 12, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered 15-min 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-----------------------------------|-------------------|---|
| Tower A | ERR | 0100-2345 | 4.0 4.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | • |
| 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 | ERR | 1130, 1700 | 98.0 100.0 | All | Missing 15-min data (Y12 network error) |
| Tower Y | ERR | 1130, 1700 | 98.0 100.0 | All | Missing 15-min data (Y12 network error) |

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

Trace of snowfall (morning); temperature remained below freezing entire day

Wednesday, January 13, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data I 15-min | Recovered 60-min | Sensors Affected | Comments |
|-----------|--------|------------|--------------------|---------------------|-------------------|--|
| Tower A | ERR | 0900-1745 | 64.0 | 64.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | - |
| 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 | ERR | 1100-1130 | 97.0 | 96.0 | All | Missing 15-min data (Y12 network error) |

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

Thursday, January 14, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | , , = | Recovered 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-------|---------------------|-------------------|--|
| Tower A | ERR | 0900-1745 | 64.0 | 64.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | • |
| 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 | ERR | 1100-1130 | 97.0 | 96.0 | All | Missing 15-min data (Y12 network error) |

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

Friday, January 15, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | | Recovered 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-------|---------------------|-------------------|--|
| Tower A | ERR | 0800-1645 | 64.0 | 64.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | - |
| 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 %Data Recovered Cause/Repair None

Special Notes

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

Weather Notes

Saturday, January 16, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | | Recovered | Sensors Affected | Comments |
|-----------|--------|------------|-------|----------------|-------------------|---|
| Tower A | ERR | 0700-1645 | 60.0 | 60-min 60.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | <u> </u> |
| 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 | ERR | 1600-1945 | 80.0 | 80.0 | All Sensors | Missing data (communication errors) |
| 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

Sunday, January 17, 2010

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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 | 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

Monday, January 18, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | | Recovered 60-min | Sensors Affected | Comments |
|-----------|--------|------------|-------|---------------------|-------------------|---|
| Tower A | ERR | 1000-1645 | 71.0 | 71.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 | 100.0 | All Other Sensors | • |
| 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 %Data Recovered Cause/Repair None

Special Notes

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

Weather Notes

Tuesday, January 19, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recovered | Sensors Affected | Comments |
|-----------|--------|------------|------------------|-------------------|--|
| | | | 15-min 60-min | | |
| Tower A | ERR | 1000-1345 | 84.0 84.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | |
| 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 | ERR | 2245 | 99.0 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Wednesday, January 20, 2010

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SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | | Recovered 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 | ERR | 0800-1000 | 91.0 | 92.0 | All | Missing data (power failure?) |
| 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

Stationary front straddled east-west across area.

Thursday, January 21, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data Recover | ed 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 | ERR | 1845-2145 | 87.0 88.0 | All | Missing data (Lightning-related power failure) |
| Tower L | ERR | 0000-1100 | 53.0 54.0 | TM10 | Temp 10 values corrected. |
| | OK | | 100.0 100.0 | Other | |
| Tower M | OK | | 100.0 100.0 | | |
| Tower W | OK | | 100.0 100.0 | | |
| Tower Y | ERR | 2115 | 99.0 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Thunderstorms crossed area from SW to NE from 1830-2000 hrs.

Friday, January 22, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, Pager 865.873.7149

SITE STATUS (Instrumentation, 15-Minute Data Collection)

| Site Name | Status | Time Range | % Data R | ecovered | Sensors Affected | Comments |
|-----------|--------|------------|----------|----------|------------------|--|
| | | | 15-min 6 | 60-min | | |
| Tower A | OK | | 100.0 1 | 0.00 | | |
| Tower B | OK | | 100.0 1 | 0.00 | | |
| Tower C | OK | | 100.0 1 | 0.00 | | |
| Tower K | OK | | 100.0 1 | 0.00 | | |
| Tower L | ERR | 0400-0945 | 75.0 | 75.0 | TM10 | Temp 10 values corrected. |
| | OK | | 100.0 1 | 0.00 | Other | |
| Tower M | OK | | 100.0 1 | 0.00 | | |
| Tower W | OK | | 100.0 1 | 0.00 | | |
| Tower Y | ERR | 2045 | 99.0 1 | 0.00 | All | Missing 15-min data (Y-12 network timing error?) |

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

Saturday, January 23, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | 1100-1345 | 88.0 88.0 | Temp10 | 10-m Temp values are anamolously (high 0.5-1.0C); |
| | | | | | Values corrected using Tower B/C DT values |
| | OK | | 100.0 100.0 | All Other Sensors | |
| 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 | ERR | 2345 | 99.0 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 2345 | 99.0 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Sunday, January 24, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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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 | OK | | 100.0 | 100.0 | | |
| Tower M | OK | | 100.0 | 100.0 | | |
| Tower W | ERR | 0615 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 0615 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Thundershowers crossed ORR area from SW to NE around 0800 hrs.

Monday, January 25, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

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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 | 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

Cold front passage approx. 0600-0900 hours.

Tuesday, January 26, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | OK | | 100.0 | 100.0 | | |
| Tower M | OK | | 100.0 | 100.0 | | |
| Tower W | ERR | 1300 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 1300 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Snow showers observed mid-late morning.

Wednesday, January 27, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | OK | | 100.0 | 100.0 | | |
| Tower M | OK | | 100.0 | 100.0 | | |
| Tower W | ERR | 1030 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 1030 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Thursday, January 28, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | OK | | 100.0 | 100.0 | | |
| Tower M | OK | | 100.0 | 100.0 | | |
| Tower W | ERR | 2230 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 2230 | 99.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Cold front passage during early-mid afternoon.

Friday, January 29, 2010

Compiled by KR Birdwell, MS6418, CSM/CSED, ORNL, Phone 865.576.2308

Email birdwellkr@ornl.gov, 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 | OK | | 100.0 | 100.0 | | |
| Tower M | OK | | 100.0 | 100.0 | | |
| Tower W | ERR | 1030, 1100-1115 | 97.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 1030, 1100-1115 | 97.0 | 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

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

Snowfall began mid-afternoon, mixed with freezing rain and sleet during the late evening; approx. 3.0 inches fell by midnight.

Saturday, January 30, 2010

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 | | a Recovered | Sensors Affected | Comments |
|-----------|--------|------------|-------|-------------|-------------------|--|
| | | | | 1 60-min | | |
| Tower A | ERR | 0400-1345 | 60.0 | 60.0 | Wspd 10 | 10-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | ERR | 0400-2345 | 12.0 | 12.0 | Wspd 30 | 30-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 | 100.0 | Other Instruments | * * |
| Tower B | OK | | 100.0 | 100.0 | | |
| Tower C | ERR | 0200-1345 | 44.0 | 44.0 | Wspd 10 | 10-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | ERR | 0400-1145 | 64.0 | 64.0 | Wspd 30 | 30-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | ERR | 0200-2345 | 8.0 | 8.0 | Wspd 100 | 100-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 | 100.0 | Other Instruments | |
| Tower K | ERR | 0200-2345 | 8.0 | 8.0 | Wspd 10 | 10-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | ERR | 0300-2345 | 12.0 | 12.0 | Wspd 60 | 60-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 | 100.0 | Other Instruments | * * |
| Tower L | OK | | 100.0 | 100.0 | | |
| Tower M | ERR | 0600-1345 | 67.0 | 67.0 | Wspd 10 | 10-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 | 100.0 | Other Instruments | |
| 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 | | | |

Weather Notes

Moderate freezing rain and rain 0000-0200 hours; snow, sleet and freezing rain after about 0200 hrs; Snowfall after midnight (including during the daytime hours) totaled about 0.8 inch.

Sunday, January 31, 2010

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 | 0000-1345 | 40.0 40.0 | Wspd 30 | 30-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 100.0 | Other Instruments | |
| Tower B | OK | | 100.0 100.0 | | |
| Tower C | ERR | 0000-1645 | 29.0 29.0 | Wspd 100 | 100-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 100.0 | Other Instruments | |
| Tower K | ERR | 0000-1345 | 40.0 40.0 | Wspd 10 | 10-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | ERR | 0000-1445 | 36.0 36.0 | Wspd 60 | 60-meter wind speed values in error (due to ice frozen to wind monitor propeller mechanism) |
| | OK | | 100.0 100.0 | Other Instruments | |
| Tower L | OK | | 100.0 100.0 | | |
| Tower M | OK | | 100.0 100.0 | | |
| Tower W | ERR | 1415 | 99.0 100.0 | All | Missing 15-min data (Y-12 network timing error?) |
| Tower Y | ERR | 1415 | 99.0 100.0 | All | Missing 15-min data (Y-12 network timing error?) |

NETWORK INTERRUPTIONS

Affected Systems Time Range %Data Recovered Cause/Repair None

Weather Notes

Snow remains on the ground (affected the vertical temperature gradient near the ground)