Interactive Web Access –
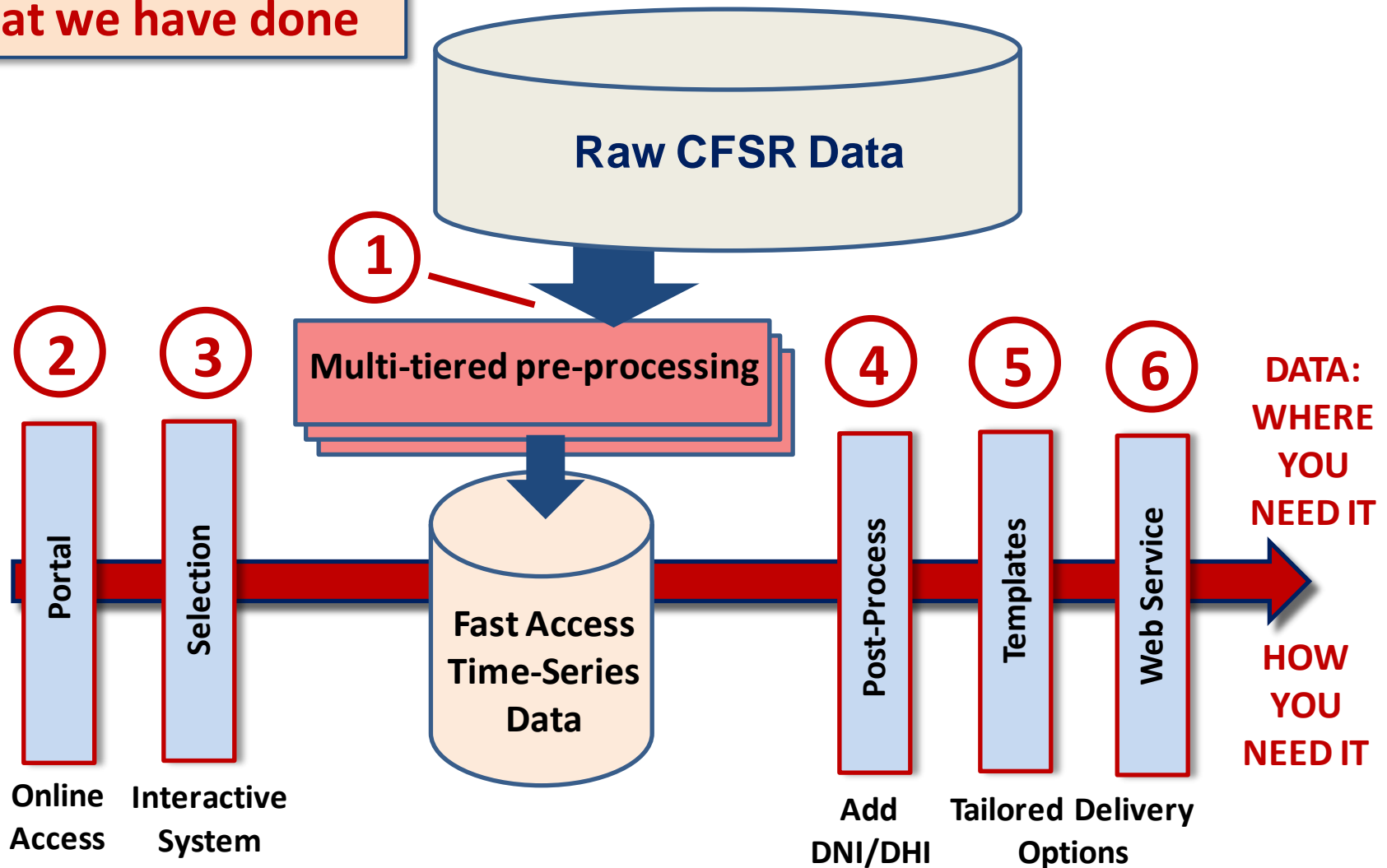# Current Conditions, Forecast, History,
& Climate Data
Anywhere in the World

AMS 2011
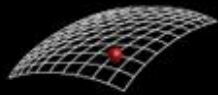
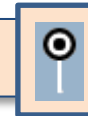**Reliable Sources of 30 year Observation data** ➡
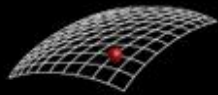
Weather Analytics
Your environment, precisely

Now – **Direct Access to 30 yr Data in __Every__ Grid Tile**
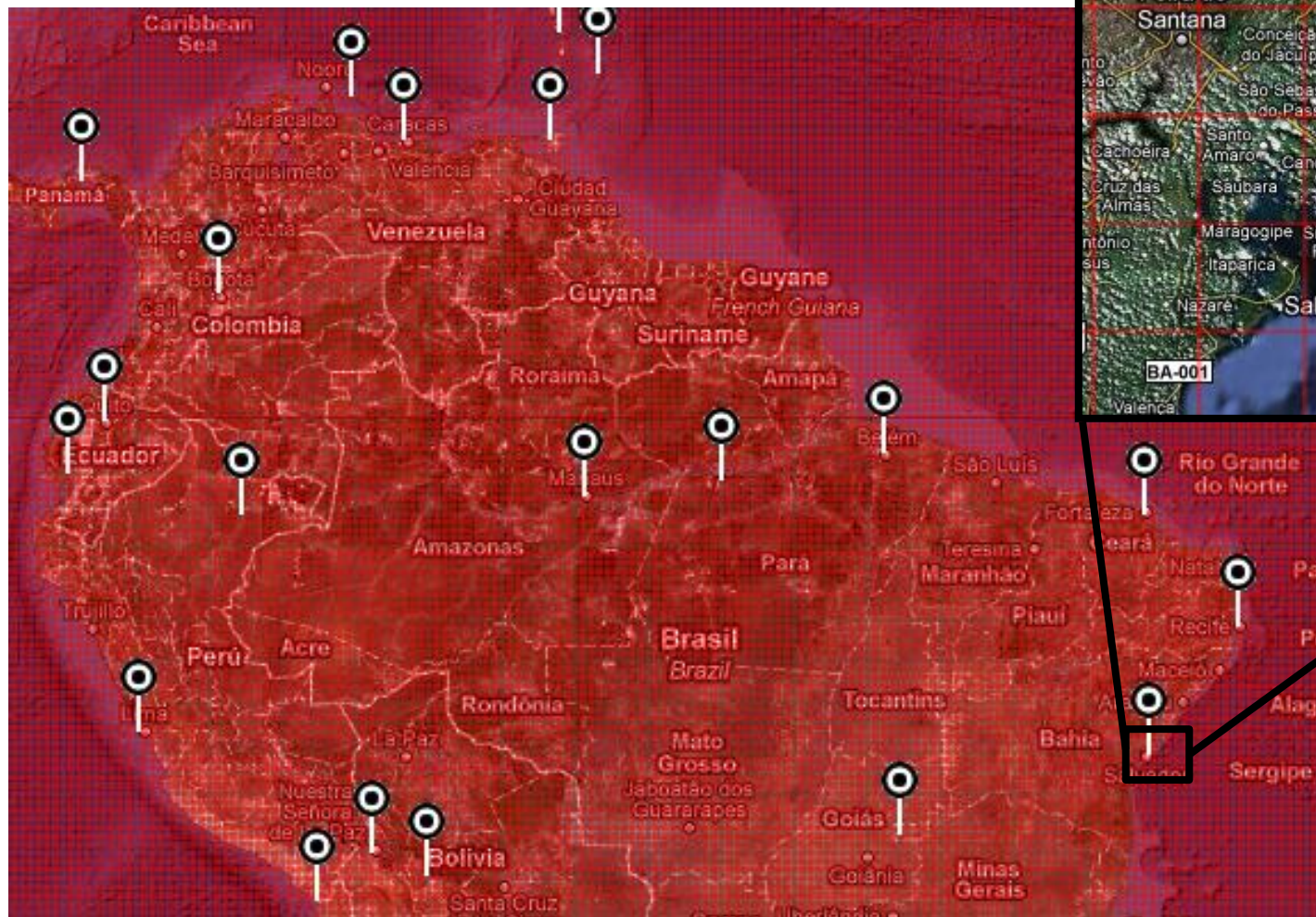
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How it Works: What Need

Step 1 – What do you need?

What weather data do you need?
(Your selections below will apply to all of the sites you select in the next step)

☐ Current conditions & 7-day forecasts (updated hourly – requires subscription)

☐ Historical data, select either:

Specific month or time period

Most current: ◎ 1 mo   ◎ 3 mos   ◎ 6 mos   ◎ 9 mos

or From: _____ To: _____ (mm/dd/yyyy)

Full years of history data for modeling or analysis (1978 - 2009)

Most current: ◎ 1 year   ◎ 3 yrs   ◎ 5 yrs   ◎ 10 yrs   ◎ 30 yrs

☐ Typical Meteorological Year (TMY) Building Energy Model input
- Uses most current 30 yrs, includes TM2, EPW, CSV, and .STAT output files

☐ Actual Meteorological Year (AMY) Building Energy Model input
- Available for 31+ individual years, includes TM2, EPW, CSV, and .STAT files

Select your weather variables:

◎ Standard Variables   ◎ Standard + Specialized Variables
View list of Std Variables   View list of Available Specialized Variables

Proceed to Select Sites

How it Works: Where Need It

Step 2 – Select your Sites

Place your virtual weather stations anywhere you like using any /all of the options below and click "Finished" when you are done.

◎   Enter by address, or

◎   Enter by Latitude / Longitude (3 decimals or more of precision preferred), or

Use our interactive map to: (*Requires pop-ups be allowed*)

◎   Place your own sites exactly where you need the data, or

◎   Select your 35-km weather data grid tiles for area or route analysis

> Note: For a large number of sites you may also submit a list. Please Contact Us

Select New Site or Sites

Finished Site Selections
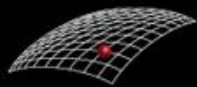
Weather Analytics
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Interactive Map: Point Site Select

- To position either:
  - enter a city, place or address:

    Taj MaHal, Agra India [Go]

  - or click the top (locus) map,
  - or move the top map marker
- Double-click lower map to select a site, right click to remove
- Sites can be moved but are fixed on Submit
- Enter your reference name for each site in the text box provided (required)
- Click Submit when completed

	Your Site Name	Lat, Long
1.	Taj MaHal	27.173, 78.042

VIRTUAL SENSOR STATION ™

27.128, 77.941

Full Screen | Map | Satellite | **Hybrid** | Terrain

Weather Analytics
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Interactive Map: Area Select

- To position either:
  - enter a city, place or address:

    Mali [Go]

  - or click the top (locus) map,
  - or move the top map marker
- Double-click tile to select, right click to remove
- Tiles can be set and removed only when visible
- Enter your reference name for each tile in the text box provided (required)
- Click Submit when completed

	Your Site Name	Lat, Long
1.	Mali 1	16.703, -3.437
2.	Mali 2	17.015, -3.125
3.	Mali 3	17.015, -2.812
4.	Mali 4	17.015, -2.5
5.	Mali 5	17.015, -2.187
6.	Mali 6	17.327, -1.875

VIRTUAL SENSOR STATIONS ™

Full Screen | Map | Satellite | **Hybrid** | Terrain

16.109, -3.42

POWERED BY Google

Terms of Use

Data Delivery: 1 mo – 30+ yrs

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Site Name	View Chart	Downloads	View Chart	Downloads
Taj Mahal - India		TMY Download	Historical Chart	Historical Download
Burns Airport, Oregon USA			Historical Chart	Historical Download
O... Eu...			Historical Chart	Historical Download

ProdSetTB_HEADER-KEY - Notepad

File Edit Format View Help

```
|---------------------------------------------------------------
HEADER-KEY for Sensor Point System(SM) variables and parameters in Historical

SPtMasterTable_550815_19791231_20100101.csv

Except where otherwise indicated, all values are near-surface and hourly aver

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Weather Analytics Data Use License Agreement which may be viewed at
http://www.wxaglobal.com/License/License.html

http://www.wxaglobal.com/License/License.html
|---------------------------------------------------------------
Number  Name            Description
1       DateHrGmt       - Date and hour string in GMT [YYYY-MM-DD-HH]
2       DateHrLwt       - Date and hour string in LWT [YYYY-MM-DD-HH]
3       FcastHr         - Forecast hour (from initialization time)
4       Tsfc_F          - Air temperature [Fahrenheit]
5       TmaxPrevHr_F    - Maximum air temperature within the last hour [
6       TminPrevHr_F    - Minimum air temperature within the last hour [
7       Tdew_F          - Dew point temperature [Fahrenheit]
8       Twet_F          - wet bulb temperature [Fahrenheit]
9       Rh_PCT          - Relative humidity [Percent]
10      Psfc_MB         - Surface air pressure [Millibars]
11      CldCov_PCT      - Cloud cover [Percent]
12      DegHrs_F        - Degree hours (use to calculate heating/cooling
13      Thi_F           - Heat index [Fahrenheit]
```
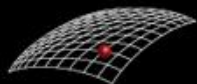
B	C							N	O	P	Q	R	S	T
SiteId	DateHrGmt	Dat...						...C	Twet_C	Tapp_C	PcpPrevHi	Spd_KPH	Psfc_KPA	Thi_F
Taj Mahal -	1980-01-01	198...						13.1	6	11.7	0	15	99.2	55.6
Taj Mahal -	1980-01-01	198...						13.6	7	12.1	0	19	99.1	56.5
Taj Mahal -	1980-01-01	198...						13.5	7.1	11.9	5	19	99.1	56.3
Taj Mahal -	1980-01-01	198...						15.7	8.1	15.7	8	20	99.1	60.3
Taj Mahal -	1980-01-01	198...						18.8	9.4	18.8	8	20	99.1	65.9
Taj Mahal -	1980-01-01	198...						20.7	10.4	20.7	0	19	99.2	69.2
Taj Mahal -	1980-01-01	198...						22.3	11.3	23.8	0.03	13	99.2	74.9
Taj Mahal -	1980-01-01	198...						22.6	11.7	24	0.03	7	99.2	75.2
Taj Mahal -	1980-01-01	1980-01-01-	71.1	991	44.8	42	4	230	0.01	53.8	75.3	21.7	12.1	24.1	0.03	7	99.1	75.3
Taj Mahal -	1980-01-01	1980-01-01-	68.7	990.5	47.1	49	5	230	0.01	54.2	68.7	20.4	12.3	20.4	0.03	9	99.1	68.7
Taj Mahal -	1980-01-01	1980-01-01-	68.1	990.1	48.9	52	4	220	0	54.6	68.1	20.1	12.6	20.1	0	7	99	68.1
Taj Mahal -	1980-01-01	1980-01-01-	66	989.8	49.9	59	3	210	0	54.8	66	18.9	12.7	18.9	0	6	99	66
Taj Mahal -	1980-01-01	1980-01-01-	59.6	989.8	51.1	71	1	210	0	52.6	59.6	15.3	11.4	15.3	0	2	99	59.6
Taj Mahal -	1980-01-01	1980-01-01-	54.1	989.8	50.2	84	1	340	0	50.5	54.1	12.3	10.3	12.3	0	2	99	54.1
Taj Mahal -	1980-01-01	1980-01-01-	53.1	990.3	49.2	84	2	0	0	49.5	53.1	11.7	9.7	11.7	0	4	99	53.1
Taj Mahal -	1980-01-01	1980-01-01-	55.5	990.8	48.2	75	4	10	0	49.7	54.8	13.1	9.8	12.7	0	7	99.1	55.5
Taj Mahal -	1980-01-01	1980-01-01-	59.9	991.5	47.5	60	6	20	0	50	59.1	15.5	10	15.1	0	11	99.2	59.9
Taj Mahal -	1980-01-01	1980-01-01-	60.5	992	45.9	54	7	30	0	48.9	60.5	15.8	9.4	15.8	0	13	99.2	60.5
Taj Mahal -	1980-01-01	1980-01-01-	60.8	992.3	43.8	49	7	40	0	47.8	60.8	16	8.8	16	0	13	99.2	60.8

Weather Analytics
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HOW TO USE   NEW REQUEST   MY SITES   DOWNLOADS   SITE ADMIN   MY PROFILE   LOGOUT

Site Name	View Chart	Downloads	View Chart	Downloads
Taj Mahal - India		TMY Download	Historical Chart	Historical Download
Burns Airport - Oregon USA			Historical Chart	Historical Download
OR Univ Solar Energy Center - Eugene OR			Historical Chart	Historical Download

Site: Taj Mahal - India

Hourly data available from   **Jan 01 1979 09:00 AM**   to   **Jan 01 2010 05:00 AM**
Data currently displayed from   **Jan 1, 2003**   to   **Jan 1, 2008, every () hours**
[All data displayed in Local Standard Time (LST)]

Select variables to chart: Temperature   Precipitation   Wind   Humidity/Cloud   Solar   Pressure
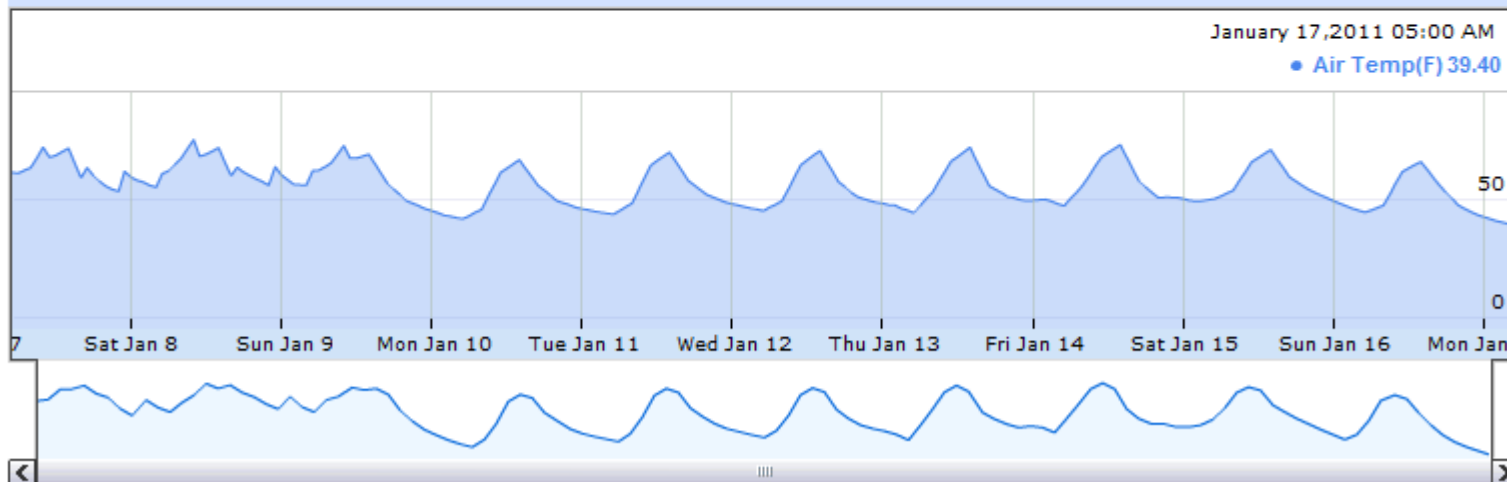I want to view ⊙ 10d ⊙ 1m ⊙ 3m ⊙ 6m ⊙ 1y ⦿ 5y ⊙ All available data starting with Jan ▾ 2003 ▾

Also show:

☑ Air temp ☐ Wet bulb ☐ Dew point ☐ Apparent temp ☐ Wind chill   Refresh Chart

January 01,2008 04:00 AM
• Air Temp(F) 44.30

100

50

0

2003   2004   2005   2006   2007

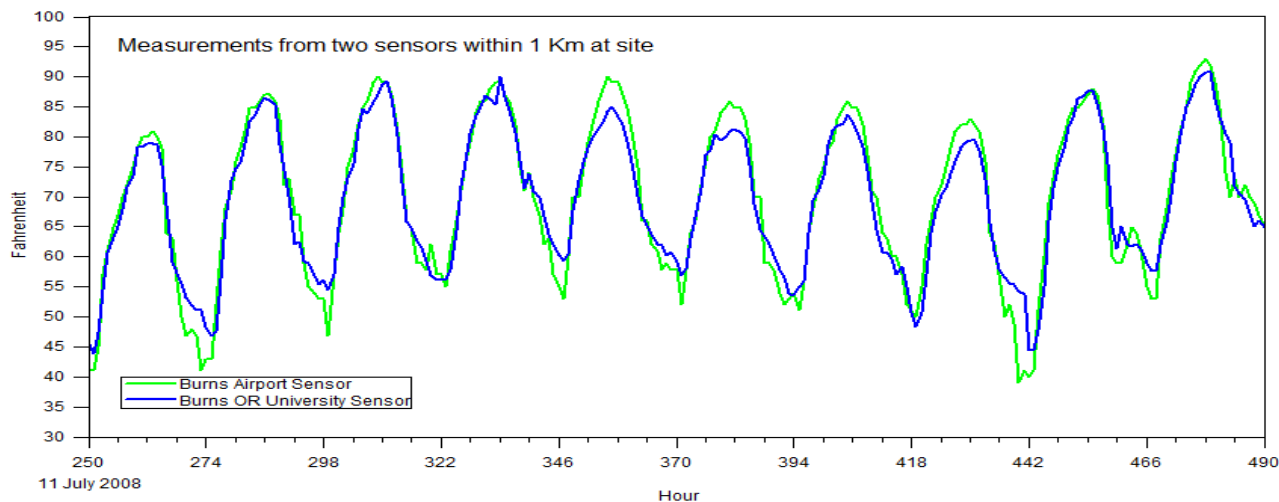2003   2004   2005   2006   2007   2
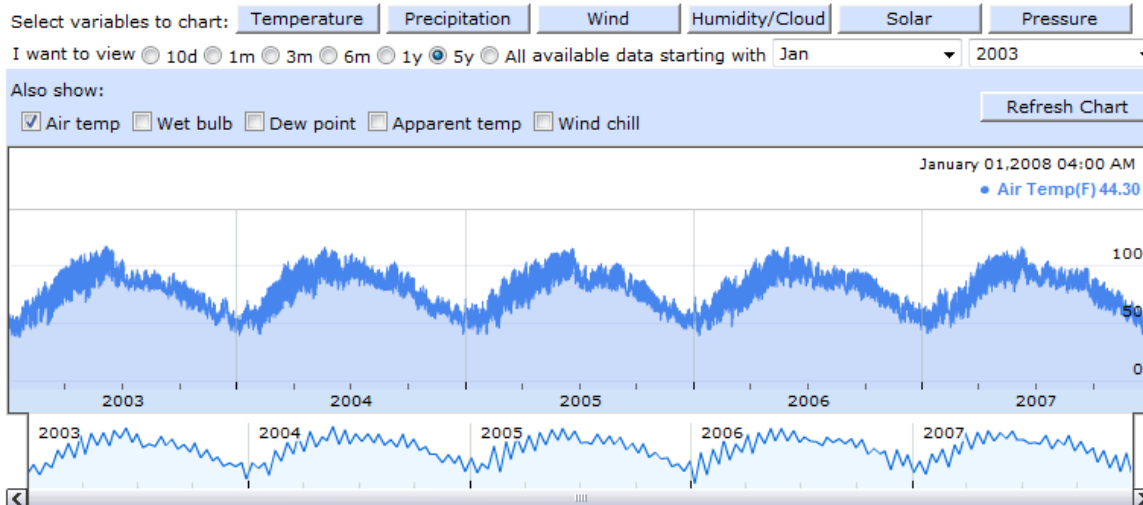
Data graphed in bottom zoom-frame is **Air temp** for full display period selected. Adjust sides of slide-bar to zoom.

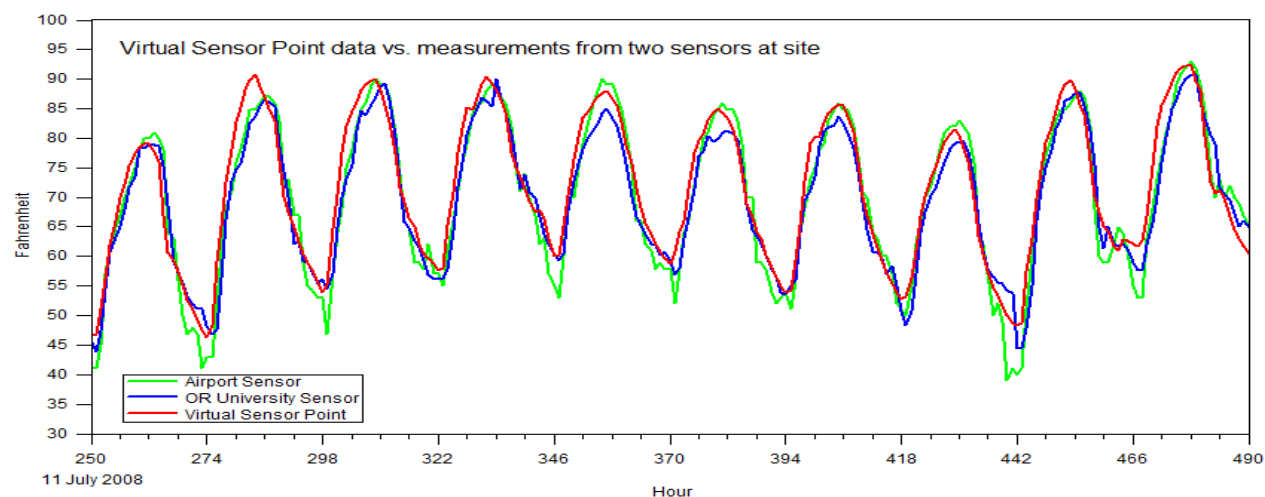# Output Comparisons: Temp

Surface Temperature Observations
Two On-Site Sensors
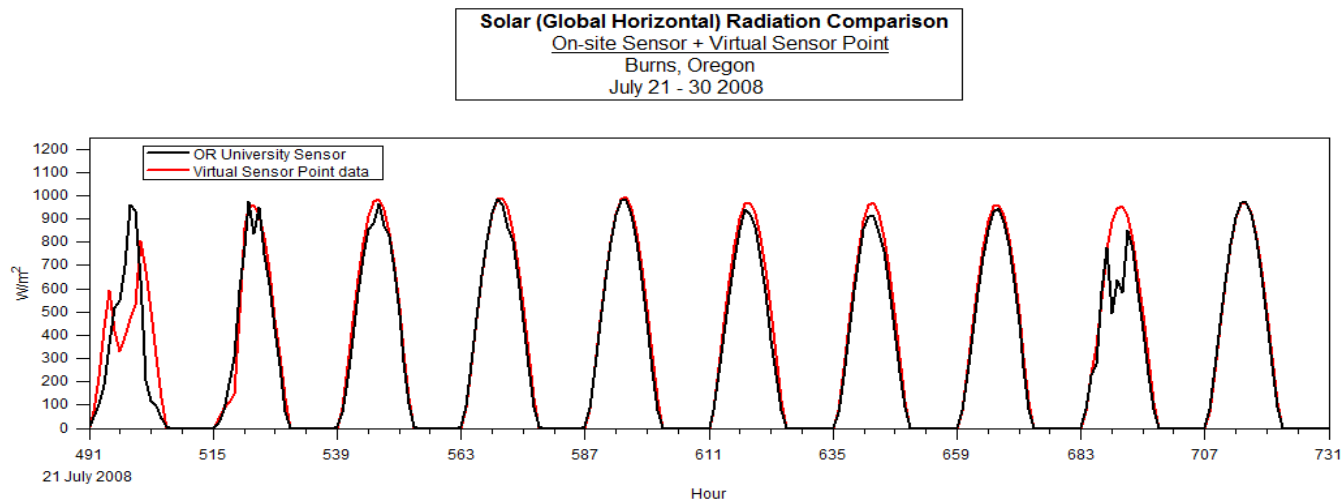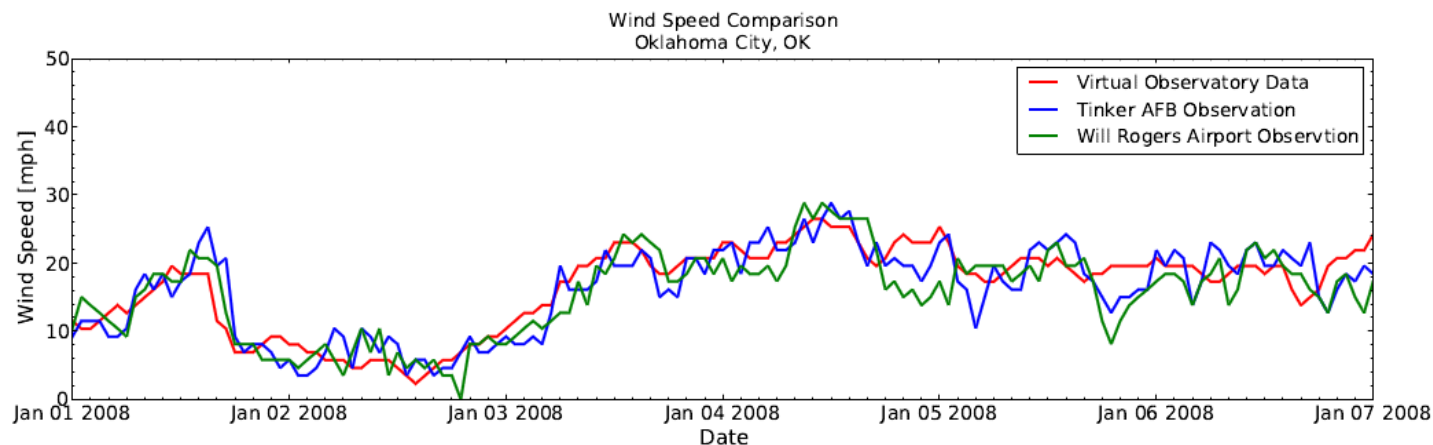Burns Airport, Oregon
July 11 - 20 2008

Measurements from two sensors within 1 Km at site

- Burns Airport Sensor
- Burns OR University Sensor

11 July 2008

Hour

Surface Temperature Comparisons
On-Site Sensors +Virtual Sensor Point
Burns Airport, Oregon
July 11 - 20 2008

Virtual Sensor Point data vs. measurements from two sensors at site

- Airport Sensor
- OR University Sensor
- Virtual Sensor Point

11 July 2008

Hour

Output Comparisons: Wind & GHI

Wind Speed Comparison
Oklahoma City, OK

Legend:
- Virtual Observatory Data (red)
- Tinker AFB Observation (blue)
- Will Rogers Airport Observtion (green)

Solar (Global Horizontal) Radiation Comparison
On-site Sensor + Virtual Sensor Point
Burns, Oregon
July 21 - 30 2008

Legend:
- OR University Sensor
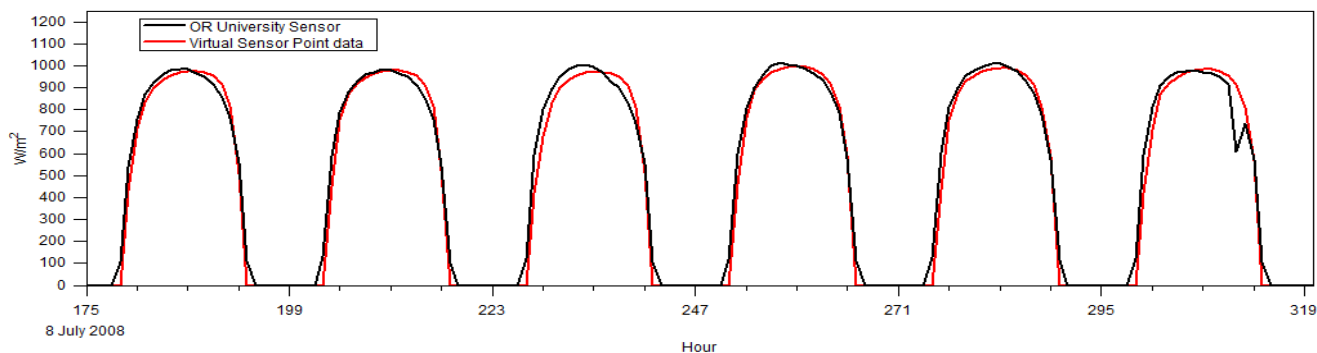- Virtual Sensor Point data

Output Comparisons: DNI

Direct Normal Radiation Comparison
- Clear Days -
On-site Sensor + Virtual Sensor Point
Burns, Oregon
July 8 - 12 2008

Direct Normal Radiation Comparison
- Cloudy Days -
On-site Sensor + Virtual Sensor Point
Burns, Oregon
July 1 - 7 2008