

# Monitor Layer for Google Earth (AKA “KML Files”)\*

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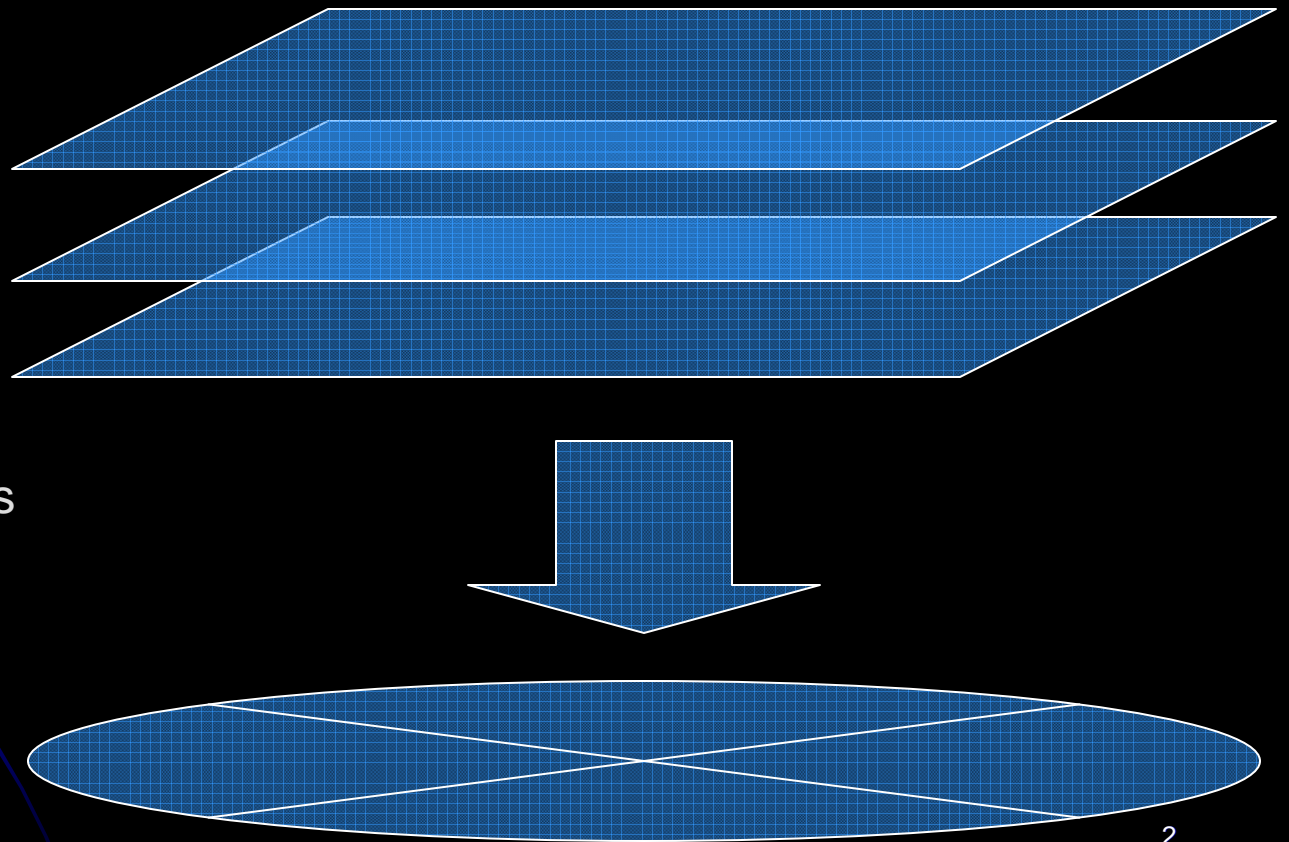
\*Note: EPA does not endorse Google, Google Earth, computer usage in any form, sunlight, or any other activity or product.

# How Mapping Software Works

**Layers of information**  
(roads, images, topo,  
AQ sites, etc.)

**Processing / Functions**  
(display, format, directions  
via network analysis,  
HTML, etc.)

**Base Map**  
(model of the earth)



# Layers for AQ Sites

- Available at:  
[http://www.epa.gov/airexplorer/monitor\\_kml.htm](http://www.epa.gov/airexplorer/monitor_kml.htm)
- Site Locations for Key Networks
  - CSN (PM2.5), NATTS, IMPROVE, HAPS
  - Data fields: state name, county name, metropolitan area name, AQS site ID, local site name, address, lat/lon, datum, elevation
- Monitor Locations for Criteria pollutants
  - Ozone, PM2.5, PM10, CO, Lead, NO2, SO2
  - Data fields, above plus: parameter name, sampling frequency, monitor type, measurement scale, monitor objective, reporting organization, plus those listed below
- Years of Available Data
  - Link to download

# Demonstration

The screenshot displays a web application for air quality monitoring. On the left, a sidebar contains navigation and map controls. The top section has a search bar with the text "To Find Businesses" and "Directions", and a coordinate input field showing "to e.g., 37 25.818' N, 122 05.38' W". Below this is a "Places" section with a tree view showing "My Places", "Sightseeing", "Ozone" (checked), and "Temporary Places". The "Layers" section at the bottom lists map features: "Primary Database", "Geographic Web", "Roads", "3D Buildings", "Street View", "Borders and Labels" (checked), and "Traffic".

The main content area is divided into two panels. The left panel shows a satellite map of a wooded area with several red pin markers. The right panel displays detailed information for a selected monitoring point:

- Parameter Name: Ozone
- Monitor Start Date: 15APR87
- Last Sample Date: 15OCT00
- Measurement Scale: NEIGHBORHOOD
- Measurement Scale Definition: 500 M TO 4KM
- Sample Duration: 1 HOUR
- Sample Collection Frequency:
- Sample Collection Method: INSTRUMENTAL
- Sample Analysis Method: ULTRA VIOLET ABSORPTION
- Method Reference ID: EQOA-0992-087
- FRM / FEM: Yes
- Monitor Objective: POPULATION EXPOSURE
- Monitor Type: SLAMS
- Reporting Agency: Wisconsin Dept Of Natural Resources, Air Monitoring Section

Below the information panel is a "Download Site Data" section with two data availability options:

- Annual: [1990](#), [1991](#), [1992](#), [1993](#), [1994](#), [1995](#), [1996](#), [1997](#), [1998](#), [1999](#), [2000](#)
- Daily: [1990](#), [1991](#), [1992](#), [1993](#), [1994](#), [1995](#), [1996](#), [1997](#), [1998](#), [1999](#), [2000](#)

On the far right, a larger map shows the Milwaukee area with a yellow line indicating a monitoring route or boundary. Red pin markers are placed along this line, with labels for "Milwaukee", "Racine", and "Kenosha".

# Don't Panic



- A monitor is shown in the middle of the road!!!!!!
- Lat / Lon, like any other measurement, has uncertainties
  - Method
  - Datum (Google Earth, Virtual Earth use WGS84)
- This does make your data more visible
  - But people have been getting and using it all along
- You're certainly welcome to make any corrections you feel are necessary
  - Including updating the "Horizontal Accuracy"
  - AQS Memo 8/28/07 for Datum Conversion
  - Site terminated / monitor sampling period end date