

6. Hourly Data Files

6.1. Content

These files contain the hourly data (sometimes called measurements, samples, etc). These files are separated by parameter (or parameter group) to make the sizes more manageable.

EPA does get sample data reported at durations other than hourly. For example, some SO₂ is reported as 5-minute samples and some toxic substances are reported as 3-hour samples (and most PM speciation data is reported as 24-hour samples). These samples have not been included in these hourly files but their aggregates are included in the daily files, and the sample data is available on request.

If a particular file is empty (record count = 0) that means that no hourly data was collected for that parameter or group.

To keep the size of the raw data files smaller, less geographic descriptive information has been included. If you need the Local Site Name, CBSA, etc. you can find that in the Annual Summary file for the same monitor.

6.2. Format

The file is comma separated variables (CSV) with a header row.

Field Position	Field Name	Description
1	State Code	The FIPS code of the state in which the monitor resides.
2	County Code	The FIPS code of the county in which the monitor resides.
3	Site Num	A unique number within the county identifying the site.
4	Parameter Code	The AQS code corresponding to the parameter measured by the monitor.
5	POC	This is the "Parameter Occurrence Code" used to distinguish different instruments that measure the same parameter at the same site.
6	Latitude	The monitoring site's angular distance north of the equator measured in decimal degrees.
7	Longitude	The monitoring site's angular distance east of the prime meridian measured in decimal degrees.
8	Datum	The Datum associated with the Latitude and Longitude measures.
9	Parameter Name	The name or description assigned in AQS to the parameter measured by the monitor. Parameters may be pollutants or non-pollutants.

Field Position	Field Name	Description
10	Date Local	The calendar date of the sample in Local Standard Time at the monitor.
11	Time Local	The time of day that sampling began on a 24-hour clock in Local Standard Time.
12	Date GMT	The calendar date of the sample in Greenwich Mean Time.
13	Time GMT	The time of day that sampling began on a 24-hour clock in Greenwich Mean Time.
14	Sample Measurement	The measured value in the standard units of measure for the parameter.
15	Units of Measure	The unit of measure for the parameter. QAD always returns data in the standard units for the parameter. Submitters are allowed to report data in any unit and EPA converts to a standard unit so that we may use the data in calculations.
16	MDL	The Method Detection Limit. The minimum sample concentration detectable for the monitor and method. Note: if samples are reported below this level, they may have been replaced by 1/2 the MDL.
17	Uncertainty	The total measurement uncertainty associated with a reported measurement as indicated by the reporting agency.
18	Qualifier	Sample values may have qualifiers that indicate why they are missing or that they are out of the ordinary. Types of qualifiers are: null data, exceptional event, natural events, and quality assurance. The highest ranking qualifier, if any, is described in this field.
19	Method Type	An indication of whether the method used to collect the data is a federal reference method (FRM), equivalent to a federal reference method, an approved regional method, or none of the above (non-federal reference method).
20	Method Code	An internal system code indicating the method (processes, equipment, and protocols) used in gathering and measuring the sample. The method name is in the next column.
21	Method Name	A short description of the processes, equipment, and protocols used in gathering and measuring the sample.
22	State Name	The name of the state where the monitoring site is located.
23	County Name	The name of the county where the monitoring site is located.
24	Date of Last Change	The date the last time any numeric values in this record were updated in the AQS data system.