

## PM<sub>2.5</sub> Data Advisory

(Posted August 26, 2024)

On May 16, 2024, the EPA published a Notice (<https://www.regulations.gov/document/EPA-HQ-OAR-2023-0642-0031>) which describes a retroactive update of the Teledyne Advanced Pollution Instrumentation Model T640 particulate matter (PM) mass monitor including the 640X option (hereafter T640 and T640X) PM<sub>2.5</sub> concentration data in the EPA's Air Quality System (AQS). In the Supplement to that Notice (<https://www.regulations.gov/document/EPA-HQ-OAR-2023-0642-0033>), the EPA described how the original T640 (method code = 236) and T640X data (method code = 238) PM<sub>2.5</sub> concentration data beginning in 2017 would be retained in AQS and the updated data would be added to AQS under the same 88101 Parameter Code but with a new 3-digit numeric AQS Method Code (736 for the T640 and 738 for the T640X as shown in Table below). This retroactive update is intended to most closely replicate the methodology of the Network Data Alignment equation used in the updated FEM designation (method codes 636 for the T640 and 638 for the T640X) and is expected to result in a much higher number of PM<sub>2.5</sub> monitoring sites using these methods meeting their bias measurement quality objectives.

### Recommended Data Usage

The EPA recommends that data users utilize the data with method codes 636 and 638 along with the updated T640 and T640X PM<sub>2.5</sub> data with method codes 736 and 738 and exclude the original 236 and 238 data.

- In the pre-generated **annual files**, the “Parameter Code” column at field position 4 and “Method Name” column at field position 13 can be used to exclude the appropriate data (parameter code = 88101 and method name = “Teledyne T640 at 5.0 LPM” or “Teledyne T640X at 16.67 LPM”). The T640 and T640X PM<sub>2.5</sub> data with parameter code 88101 and method names “Teledyne T640 at 5.0 LPM w/Network Data Alignment enabled” and “Teledyne T640X at 16.67 LPM w/Network Data Alignment enabled” represent the updated FEM designation and should be used when available.
- In the pre-generated **daily files**, the “Method Code” column at field position 21 can be used to exclude the 236 and 238 data. The T640 and T640X data with method codes 636 and 638 represent the updated FEM designation and should be used when available.
- In the pre-generated **hourly files**, the “Method Code” column at field position 20 can be used to exclude the 236 and 238 data. The T640 and T640X data with method codes 636 and 638 represent the updated FEM designation and should be used when available.

Method Code	Method Name
236	Teledyne T640 at 5.0 LPM
238	Teledyne T640X at 16.67 LPM
636	Teledyne T640 at 5.0 LPM w/Network Data Alignment enabled
638	Teledyne T640X at 16.67 LPM w/Network Data Alignment enabled
736	Teledyne T640 at 5.0 LPM (Corrected)
738	Teledyne T640X at 16.67 LPM (Corrected)