U.S. EPA Quick Reference Guide to T640/T640X Data
May 13, 2024

Because of the dynamic nature of ambient air monitoring data, the U.S. Environmental Protection Agency (EPA) recommends accessing raw and updated T640/T640X $PM_{2.5}$ data through either EPA's Air Quality System (AQS) or EPA's public Air Data website (Table 1).

Table 1. EPA $PM_{2.5}$ Raw Data Sources

Platform	Available to	Notes
AQS	Registered State, Local, or Tribal Air Agency Users Only	• Available at *https://www.epa.gov/aqs* • Access the hourly and daily $PM_{2.5}$ data via the AMP501 and AMP435 reports, respectively
Air Data	Public Users	• Available at *https://www.epa.gov/outdoor-air-quality-data* • Download daily $PM_{2.5}$ data via the "Download Daily Data" report • In the "Download Daily Data" report output, T640/T640X monitors are identified by both the Method Code in column M and the associated Method Description in column N (see Table 2)

Regardless of the platform, users may encounter different versions of the T640/T640X $PM_{2.5}$ data on the same date/time because of the different AQS method codes (Table 2). EPA has preserved both the unaligned and aligned concentrations in AQS to enable a transparent evaluation of the data update. Monitoring sites reporting the aligned/updated $PM_{2.5}$ data under AQS Method Codes 636, 638, 736, or 738 are more likely to meet the bias measurement quality objectives (MQOs) found at 40 CFR part 58, Appendix A, section 2.3.1.1.

Table 2. AQS Method Codes for the T640/T640X Monitors

AQS Method Code	Method Description	Notes
236	Teledyne T640 at 5.0 LPM	• Raw, unaligned T640/T640X data • Data likely collected between 2017 and 2023
238	Teledyne T640X at 16.67 LPM	
636	Teledyne T640 at 5.0 LPM w/Network Data Alignment enabled	• Appropriate reporting method once users update the firmware on the T640/T640X and enable the "Network Data Alignment" option • Data not affected by the retroactive data update because the firmware update had already been installed on the instrument at the time of collection • Data likely collected starting in mid-2023
638	Teledyne T640X at 16.67 LPM w/Network Data Alignment enabled	

AQS Method Code	Method Description	Notes
736	Teledyne T640 at 5.0 LPM (Corrected)	• AQS retroactive application of the Network Data Alignment for data previously collected under methods 236 and 238 • Aligns data likely collected between 2017 and 2023
738	Teledyne T640X at 16.67 LPM (Corrected)	