

Episode 56QQ February 10, 2024. Auto-calculation of PM2.5 level using RAWSEP Excel template.

Slide 1. Click on 9 Humboldt County California PurpleAir PM2.5 monitors in a row. The data from each monitor for the last 3-days will appear on a chart. Click on the 3 horizontal lines in the Upper right-hand side of the chart to download the CSV file. Save the file to your hard drive.

Slide 2: This is what the unedited PurpleAir CSV file for 9 monitors in Humboldt County looks like for 2/10/2024 (top, row1 of file down)

Slide 3: This is what the unedited PurpleAir CSV file for Humboldt County looks like for 2/10/2024 (bottom, down to row 434 of file)

Slide 4: This is what the edited PurpleAir CSV file for Humboldt County looks like for 2/10/2024. The average column and the B monitors columns have been deleted.

Slide 5) This is what the Top of the empty Excel RAWSEP template for multiple monitor auto-calculation looks like for under 10 monitors. There are 9 monitors for Humboldt County in the CSV download. Notice that N2 is the auto-calculation referring to B2, $=IF(D18<>"", (D18*0.514)+1.8304, "")$ This calculation changes the Downloaded PurpleAir data for the first 10 minutes of a 3-day period to data correlated to EPA AirNow Maps of Smoke & Fire. This calculation continues down all 434 rows on the sheet for column N, and continues across all columns to Column V. This auto-calculation is for N2:V434

Slide 6. Copy and paste the CSV file into the yellow area of the demonstration picture. This is how the top of the Excel RAWSEP auto-calculates $(Pa * 0.514) + 1.8304$ to correlate to the EPA standard in cells N2:V434

Slide 7: This is how the Excel RAWSEP Template auto-calculates average for each of the 9 monitors in this partial snapshot of Humboldt County, California PurpleAir PM2.5 monitors, and % of time at or above 9, 15, 25, 35, 45, 55, 65, and 75 micrograms per cubic meter in a 3-day period in cells M447:V458 .

Slide 8: Here is a larger view of the data correlated to EPA AirNow Maps of Smoke and Fire standards and with auto-calculation of average for each monitor over 3-days and % at or over 9, 15, 25, 35, 45, 55, 65, 75 micrograms per cubic meter in a 3-day period.