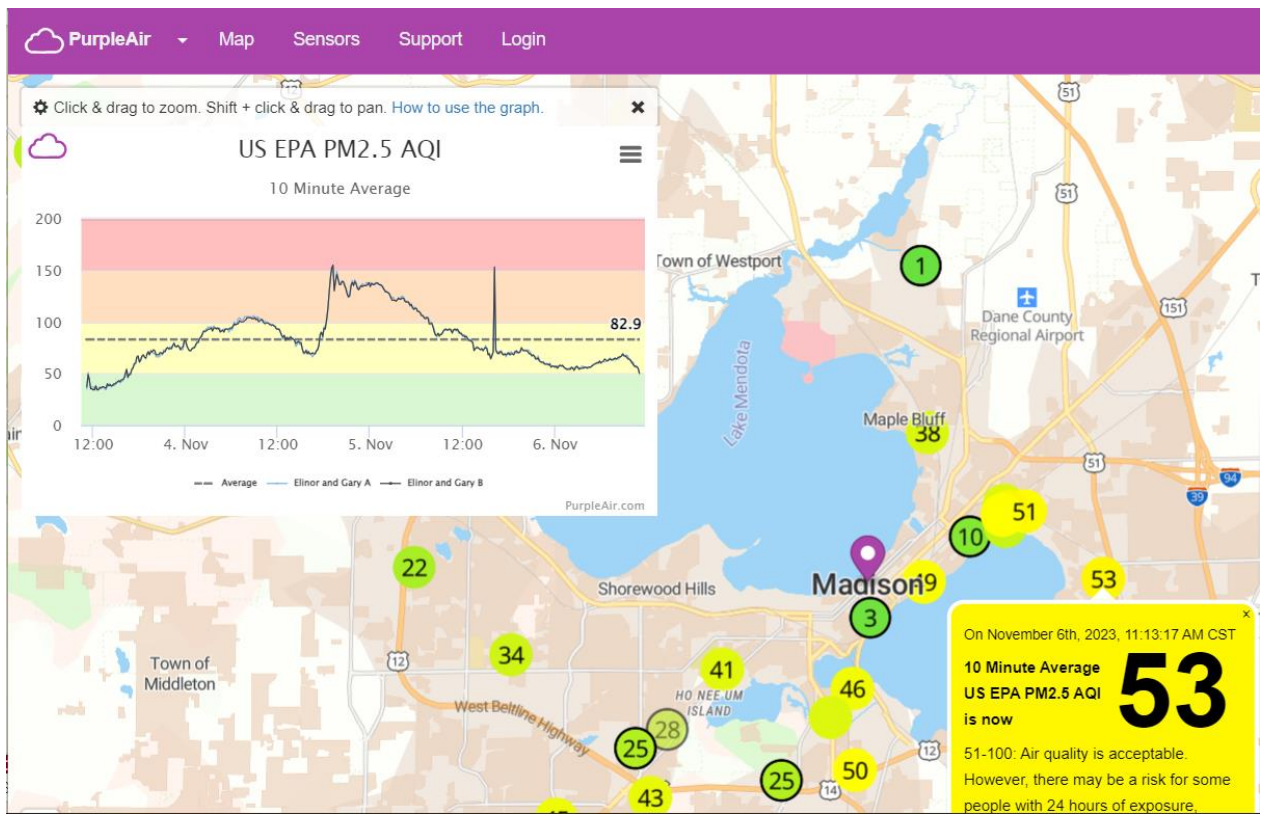


Episode 56LC November 6, 2023. Making Coast to Coast PM2.5 above NAAQS 12, 25 and or 35 ug/m3, % over 3 days, XL statistics for an individual Resident-owned Hyper-localized PurpleAir Monitor.

Step 1: Using the Google Search Engine, Open PurpleAir Maps type your monitor location in the Search Box, click on your monitor to create a chart of the last 3 days, click on the 3 bars on the top right and download a CSV file of 3 days of statistics. Save the CSV file to your computer, open the file and highlight all cells A1:D433, copy.



| | A | B | C | D |
|----|-----------------|---------|-------------------|-------------------|
| 1 | DateTime | Average | Elinor and Gary A | Elinor and Gary B |
| 2 | 11/3/2023 11:10 | 82.9 | 35 | 37 |
| 3 | 11/3/2023 11:20 | | 51 | 49 |
| 4 | 11/3/2023 11:30 | | 42 | 44 |
| 5 | 11/3/2023 11:40 | | 36 | 35 |
| 6 | 11/3/2023 11:50 | | 37 | 35 |
| 7 | 11/3/2023 12:00 | | 37 | 34 |
| 8 | 11/3/2023 12:10 | | 34 | 34 |
| 9 | 11/3/2023 12:20 | | 37 | 38 |
| 10 | 11/3/2023 12:30 | | 34 | 34 |
| 11 | 11/3/2023 12:40 | | 35 | 34 |
| 12 | 11/3/2023 12:50 | | 37 | 36 |
| 13 | 11/3/2023 13:00 | | 35 | 36 |
| 14 | 11/3/2023 13:10 | | 37 | 37 |

Step 2: You have highlighted all cells A1:D433 in CSV file, now click copy. Exit the CSV file, not saving, but clicking the box to agree to save all the cells you have saved, to copy to the RAWSEP % calculation TEMPLATE. Open the RAWSEP % calculation Template and **paste 123** (what you have saved) into the TEMPLATE A3:D435. **Change H5 to your own monitor city & state.**

| | A | B | C | D | E | F | G | H | I | J |
|----|-------------------|----------|------------|------------|----------------------|------------|---------|---|-------|-------------------|
| 1 | % 3 days >NAAQS | 98.38% | 40.05% | 6.02% | PA x 0.5140 + 1.8304 | conversion | PA | | 0.514 | 1.8304 |
| 2 | Elinor and Gary A | 12 ug/m3 | 25 ug/m3 | 35 ug/m3 | 425 | 173 | 26 | no. 10 minute periods in 72 hours, 3 sheets | | |
| 3 | DateTime | Average | Elinor and | Elinor and | above12 | above25 | above35 | 12,25,35 micrograms per cubic meter PM2.5 | | |
| 4 | 10/31/2023 6:50 | 43.2 | 62 | 60 | 33.6984 | 33.6984 | 33.6984 | Wisconsin, Madison | | Elinor and Gary A |
| 5 | 10/31/2023 7:00 | | 59 | 59 | 32.1564 | 32.1564 | 32.1564 | 10/31/2023 6:50 | to | 11/3/2023 6:40 |
| 6 | 10/31/2023 7:10 | | 59 | 60 | 32.1564 | 32.1564 | 32.1564 | Above 12 micrograms per cubic meter PM2.5? | | |
| 7 | 10/31/2023 7:20 | | 59 | 58 | 32.1564 | 32.1564 | 32.1564 | 425 | 10 | 4250 |
| 8 | 10/31/2023 7:30 | | 57 | 55 | 31.1284 | 31.1284 | 31.1284 | data periods of 10 minutes equals periods x 10 | | |
| 9 | 10/31/2023 7:40 | | 56 | 55 | 30.6144 | 30.6144 | 30.6144 | 4250 | 60 | 70.83333333 |
| 10 | 10/31/2023 7:50 | | 58 | 56 | 31.6424 | 31.6424 | 31.6424 | minutes divided by 60= hours in 3 days 72 hours | | |
| 11 | 10/31/2023 8:00 | | 59 | 57 | 32.1564 | 32.1564 | 32.1564 | 70.83333333 | 72 | 98.38% |
| 12 | 10/31/2023 8:10 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 | hours divided by 72 = % days > 12ug/m3 PM2.5 | | |
| 13 | 10/31/2023 8:20 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 | Above 25 micrograms per cubic meter PM2.5? | | |
| 14 | 10/31/2023 8:30 | | 57 | 56 | 31.1284 | 31.1284 | 31.1284 | 173 | 10 | 1730 |
| 15 | 10/31/2023 8:40 | | 56 | 56 | 30.6144 | 30.6144 | 30.6144 | data periods of 10 minutes equals periods x 10 | | |
| 16 | 10/31/2023 8:50 | | 55 | 54 | 30.1004 | 30.1004 | 30.1004 | 1730 | 60 | 28.83333333 |
| 17 | 10/31/2023 9:00 | | 54 | 54 | 29.5864 | 29.5864 | 29.5864 | minutes divided by 60= hours in 3 days 72 hours | | |
| 18 | 10/31/2023 9:10 | | 49 | 49 | 27.0164 | 27.0164 | 27.0164 | 28.83333333 | 72 | 40.05% |

Step 3: Copy from the **MAIN PAGE** of the **TEMPLATE A:4:G435**.
Paste 123 this copy, to **YELLOW, ORANGE, & RED** Sheets, at **A1**
on each sheet. Save.

| | A | B | C | D | E | F | G |
|----|-----------------|------|----|----|---------|---------|---------|
| 1 | 10/31/2023 6:50 | 43.2 | 62 | 60 | 33.6984 | 33.6984 | 33.6984 |
| 2 | 10/31/2023 7:00 | | 59 | 59 | 32.1564 | 32.1564 | 32.1564 |
| 3 | 10/31/2023 7:10 | | 59 | 60 | 32.1564 | 32.1564 | 32.1564 |
| 4 | 10/31/2023 7:20 | | 59 | 58 | 32.1564 | 32.1564 | 32.1564 |
| 5 | 10/31/2023 7:30 | | 57 | 55 | 31.1284 | 31.1284 | 31.1284 |
| 6 | 10/31/2023 7:40 | | 56 | 55 | 30.6144 | 30.6144 | 30.6144 |
| 7 | 10/31/2023 7:50 | | 58 | 56 | 31.6424 | 31.6424 | 31.6424 |
| 8 | 10/31/2023 8:00 | | 59 | 57 | 32.1564 | 32.1564 | 32.1564 |
| 9 | 10/31/2023 8:10 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 |
| 10 | 10/31/2023 8:20 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 |
| 11 | 10/31/2023 8:30 | | 57 | 56 | 31.1284 | 31.1284 | 31.1284 |
| 12 | 10/31/2023 8:40 | | 56 | 56 | 30.6144 | 30.6144 | 30.6144 |
| 13 | 10/31/2023 8:50 | | 55 | 54 | 30.1004 | 30.1004 | 30.1004 |
| 14 | 10/31/2023 9:00 | | 54 | 54 | 29.5864 | 29.5864 | 29.5864 |
| 15 | 10/31/2023 9:10 | | 49 | 49 | 27.0164 | 27.0164 | 27.0164 |
| 16 | 10/31/2023 9:20 | | 43 | 44 | 23.9324 | 23.9324 | 23.9324 |
| 17 | 10/31/2023 9:30 | | 36 | 36 | 20.3344 | 20.3344 | 20.3344 |
| 18 | 10/31/2023 9:40 | | 31 | 30 | 17.7644 | 17.7644 | 17.7644 |
| 19 | 10/31/2023 9:50 | | 26 | 25 | 15.1944 | 15.1944 | 15.1944 |

| | A | B | C | D | E | F | G | H | I |
|----|------------------|------|----|----|---------|---------|---------|---|---|
| 1 | 10/31/2023 6:50 | 43.2 | 62 | 60 | 33.6984 | 33.6984 | 33.6984 | | |
| 2 | 10/31/2023 7:00 | | 59 | 59 | 32.1564 | 32.1564 | 32.1564 | | |
| 3 | 10/31/2023 7:10 | | 59 | 60 | 32.1564 | 32.1564 | 32.1564 | | |
| 4 | 10/31/2023 7:20 | | 59 | 58 | 32.1564 | 32.1564 | 32.1564 | | |
| 5 | 10/31/2023 7:30 | | 57 | 55 | 31.1284 | 31.1284 | 31.1284 | | |
| 6 | 10/31/2023 7:40 | | 56 | 55 | 30.6144 | 30.6144 | 30.6144 | | |
| 7 | 10/31/2023 7:50 | | 58 | 56 | 31.6424 | 31.6424 | 31.6424 | | |
| 8 | 10/31/2023 8:00 | | 59 | 57 | 32.1564 | 32.1564 | 32.1564 | | |
| 9 | 10/31/2023 8:10 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 | | |
| 10 | 10/31/2023 8:20 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 | | |
| 11 | 10/31/2023 8:30 | | 57 | 56 | 31.1284 | 31.1284 | 31.1284 | | |
| 12 | 10/31/2023 8:40 | | 56 | 56 | 30.6144 | 30.6144 | 30.6144 | | |
| 13 | 10/31/2023 8:50 | | 55 | 54 | 30.1004 | 30.1004 | 30.1004 | | |
| 14 | 10/31/2023 9:00 | | 54 | 54 | 29.5864 | 29.5864 | 29.5864 | | |
| 15 | 10/31/2023 9:10 | | 49 | 49 | 27.0164 | 27.0164 | 27.0164 | | |
| 16 | 10/31/2023 12:20 | | 46 | 46 | 25.4744 | 25.4744 | 25.4744 | | |
| 17 | 10/31/2023 12:40 | | 46 | 47 | 25.4744 | 25.4744 | 25.4744 | | |
| 18 | 10/31/2023 12:50 | | 46 | 49 | 25.4744 | 25.4744 | 25.4744 | | |
| 19 | 10/31/2023 13:00 | | 60 | 57 | 32.6704 | 32.6704 | 32.6704 | | |

| | A | B | C | D | E | F | G | H |
|----|------------------|---|-----|-----|---------|---------|---------|---|
| 1 | 10/31/2023 13:10 | | 65 | 64 | 35.2404 | 35.2404 | 35.2404 | |
| 2 | 10/31/2023 13:20 | | 71 | 68 | 38.3244 | 38.3244 | 38.3244 | |
| 3 | 10/31/2023 13:30 | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 | |
| 4 | 10/31/2023 14:40 | | 65 | 64 | 35.2404 | 35.2404 | 35.2404 | |
| 5 | 10/31/2023 14:50 | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 | |
| 6 | 10/31/2023 15:00 | | 66 | 66 | 35.7544 | 35.7544 | 35.7544 | |
| 7 | 10/31/2023 15:10 | | 67 | 65 | 36.2684 | 36.2684 | 36.2684 | |
| 8 | 10/31/2023 15:30 | | 68 | 64 | 36.7824 | 36.7824 | 36.7824 | |
| 9 | 11/1/2023 3:00 | | 148 | 146 | 77.9024 | 77.9024 | 77.9024 | |
| 10 | 11/1/2023 3:10 | | 116 | 114 | 61.4544 | 61.4544 | 61.4544 | |
| 11 | 11/1/2023 16:20 | | 77 | 72 | 41.4084 | 41.4084 | 41.4084 | |
| 12 | 11/1/2023 21:40 | | 73 | 75 | 39.3524 | 39.3524 | 39.3524 | |
| 13 | 11/2/2023 20:20 | | 65 | 66 | 35.2404 | 35.2404 | 35.2404 | |
| 14 | 11/2/2023 20:30 | | 66 | 65 | 35.7544 | 35.7544 | 35.7544 | |
| 15 | 11/2/2023 20:40 | | 66 | 63 | 35.7544 | 35.7544 | 35.7544 | |
| 16 | 11/2/2023 20:50 | | 65 | 62 | 35.2404 | 35.2404 | 35.2404 | |
| 17 | 11/2/2023 21:30 | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 | |
| 18 | 11/2/2023 21:40 | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 | |
| 19 | 11/2/2023 21:50 | | 69 | 68 | 37.2964 | 37.2964 | 37.2964 | |

Step 4: Sort YELLOW, ORANGE, & RED Sheets, highlighting the sheet, then using Custom Sort by Cell Color at top, Yellow for YELLOW sheet, Orange for ORANGE sheet, and Red for RED sheet. note the number of the last row of color for each sheet and type the row number in the MAIN Sheet E2 for Yellow (425), F2 for Orange(173), G2 for Red(26). See the percentage for 3 days populate in the left blue box. (See Slide 1) Save naming the file your own monitor name and date.

| | A | B | C | D | E | F | G |
|----|-----------------|------|----|----|---------|---------|---------|
| 1 | 10/31/2023 6:50 | 43.2 | 62 | 60 | 33.6984 | 33.6984 | 33.6984 |
| 2 | 10/31/2023 7:00 | | 59 | 59 | 32.1564 | 32.1564 | 32.1564 |
| 3 | 10/31/2023 7:10 | | 59 | 60 | 32.1564 | 32.1564 | 32.1564 |
| 4 | 10/31/2023 7:20 | | 59 | 58 | 32.1564 | 32.1564 | 32.1564 |
| 5 | 10/31/2023 7:30 | | 57 | 55 | 31.1284 | 31.1284 | 31.1284 |
| 6 | 10/31/2023 7:40 | | 56 | 55 | 30.6144 | 30.6144 | 30.6144 |
| 7 | 10/31/2023 7:50 | | 58 | 56 | 31.6424 | 31.6424 | 31.6424 |
| 8 | 10/31/2023 8:00 | | 59 | 57 | 32.1564 | 32.1564 | 32.1564 |
| 9 | 10/31/2023 8:10 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 |
| 10 | 10/31/2023 8:20 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 |
| 11 | 10/31/2023 8:30 | | 57 | 56 | 31.1284 | 31.1284 | 31.1284 |
| 12 | 10/31/2023 8:40 | | 56 | 56 | 30.6144 | 30.6144 | 30.6144 |
| 13 | 10/31/2023 8:50 | | 55 | 54 | 30.1004 | 30.1004 | 30.1004 |
| 14 | 10/31/2023 9:00 | | 54 | 54 | 29.5864 | 29.5864 | 29.5864 |
| 15 | 10/31/2023 9:10 | | 49 | 49 | 27.0164 | 27.0164 | 27.0164 |
| 16 | 10/31/2023 9:20 | | 43 | 44 | 23.9324 | 23.9324 | 23.9324 |
| 17 | 10/31/2023 9:30 | | 36 | 36 | 20.3344 | 20.3344 | 20.3344 |
| 18 | 10/31/2023 9:40 | | 31 | 30 | 17.7644 | 17.7644 | 17.7644 |
| 19 | 10/31/2023 9:50 | | 26 | 25 | 15.1944 | 15.1944 | 15.1944 |

| | A | B | C | D | E | F | G | H | I |
|----|------------------|------|----|----|---------|---------|---------|---|---|
| 1 | 10/31/2023 6:50 | 43.2 | 62 | 60 | 33.6984 | 33.6984 | 33.6984 | | |
| 2 | 10/31/2023 7:00 | | 59 | 59 | 32.1564 | 32.1564 | 32.1564 | | |
| 3 | 10/31/2023 7:10 | | 59 | 60 | 32.1564 | 32.1564 | 32.1564 | | |
| 4 | 10/31/2023 7:20 | | 59 | 58 | 32.1564 | 32.1564 | 32.1564 | | |
| 5 | 10/31/2023 7:30 | | 57 | 55 | 31.1284 | 31.1284 | 31.1284 | | |
| 6 | 10/31/2023 7:40 | | 56 | 55 | 30.6144 | 30.6144 | 30.6144 | | |
| 7 | 10/31/2023 7:50 | | 58 | 56 | 31.6424 | 31.6424 | 31.6424 | | |
| 8 | 10/31/2023 8:00 | | 59 | 57 | 32.1564 | 32.1564 | 32.1564 | | |
| 9 | 10/31/2023 8:10 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 | | |
| 10 | 10/31/2023 8:20 | | 56 | 57 | 30.6144 | 30.6144 | 30.6144 | | |
| 11 | 10/31/2023 8:30 | | 57 | 56 | 31.1284 | 31.1284 | 31.1284 | | |
| 12 | 10/31/2023 8:40 | | 56 | 56 | 30.6144 | 30.6144 | 30.6144 | | |
| 13 | 10/31/2023 8:50 | | 55 | 54 | 30.1004 | 30.1004 | 30.1004 | | |
| 14 | 10/31/2023 9:00 | | 54 | 54 | 29.5864 | 29.5864 | 29.5864 | | |
| 15 | 10/31/2023 9:10 | | 49 | 49 | 27.0164 | 27.0164 | 27.0164 | | |
| 16 | 10/31/2023 12:20 | | 46 | 46 | 25.4744 | 25.4744 | 25.4744 | | |
| 17 | 10/31/2023 12:40 | | 46 | 47 | 25.4744 | 25.4744 | 25.4744 | | |
| 18 | 10/31/2023 12:50 | | 46 | 49 | 25.4744 | 25.4744 | 25.4744 | | |
| 19 | 10/31/2023 13:00 | | 60 | 57 | 32.6704 | 32.6704 | 32.6704 | | |

| | A | B | C | D | E | F | G | H |
|----|------------------|---|---|-----|-----|---------|---------|---------|
| 1 | 10/31/2023 13:10 | | | 65 | 64 | 35.2404 | 35.2404 | 35.2404 |
| 2 | 10/31/2023 13:20 | | | 71 | 68 | 38.3244 | 38.3244 | 38.3244 |
| 3 | 10/31/2023 13:30 | | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 |
| 4 | 10/31/2023 14:40 | | | 65 | 64 | 35.2404 | 35.2404 | 35.2404 |
| 5 | 10/31/2023 14:50 | | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 |
| 6 | 10/31/2023 15:00 | | | 66 | 66 | 35.7544 | 35.7544 | 35.7544 |
| 7 | 10/31/2023 15:10 | | | 67 | 65 | 36.2684 | 36.2684 | 36.2684 |
| 8 | 10/31/2023 15:30 | | | 68 | 64 | 36.7824 | 36.7824 | 36.7824 |
| 9 | 11/1/2023 3:00 | | | 148 | 146 | 77.9024 | 77.9024 | 77.9024 |
| 10 | 11/1/2023 3:10 | | | 116 | 114 | 61.4544 | 61.4544 | 61.4544 |
| 11 | 11/1/2023 16:20 | | | 77 | 72 | 41.4084 | 41.4084 | 41.4084 |
| 12 | 11/1/2023 21:40 | | | 73 | 75 | 39.3524 | 39.3524 | 39.3524 |
| 13 | 11/2/2023 20:20 | | | 65 | 66 | 35.2404 | 35.2404 | 35.2404 |
| 14 | 11/2/2023 20:30 | | | 66 | 65 | 35.7544 | 35.7544 | 35.7544 |
| 15 | 11/2/2023 20:40 | | | 66 | 63 | 35.7544 | 35.7544 | 35.7544 |
| 16 | 11/2/2023 20:50 | | | 65 | 62 | 35.2404 | 35.2404 | 35.2404 |
| 17 | 11/2/2023 21:30 | | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 |
| 18 | 11/2/2023 21:40 | | | 65 | 65 | 35.2404 | 35.2404 | 35.2404 |
| 19 | 11/2/2023 21:50 | | | 69 | 68 | 37.2964 | 37.2964 | 37.2964 |

YELLOW 12 sort ORANGE 25 sort RED 35 sort

us-epa-pm25-aqi YELLOW 12 sort ORANGE 25 sort