

Primaria Sanmihaiu Roman

MONTHLY AIR-QUALITY REPORT

Timp de la: 01/11/2025, 00:00

Timp până la: 30/11/2025, 23:59

Numele dispozitivului: Primaria Sanmihaiu Roman

Locația dispozitivului: DJ591C 81a, Sânmihaiu Român 307382, Romania

Parametrii: EAQI, NO₂, O₃, SO₂, PM_{2.5}, PM₁₀, Wind Speed, Wind Direction, CO, R. Humidity, PM₁, PM₁₀₀, Pressure, Temperature



Media indicelui de calitate al aerului (ICA): 343

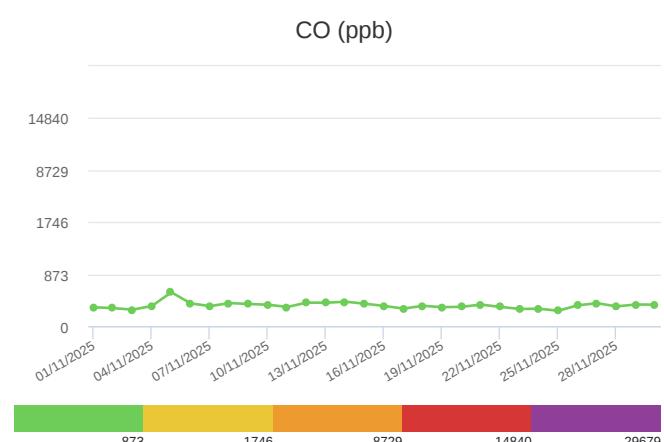
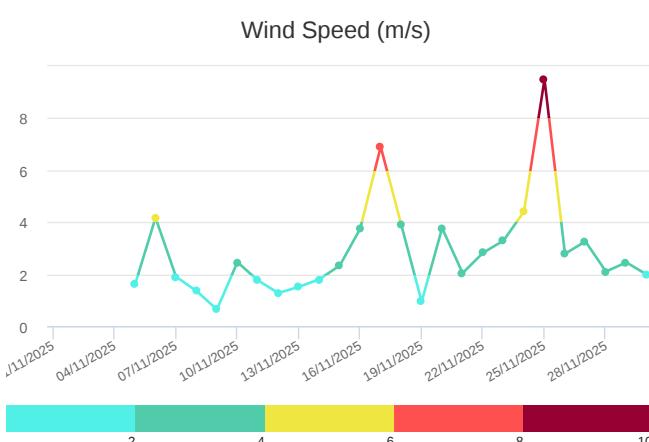
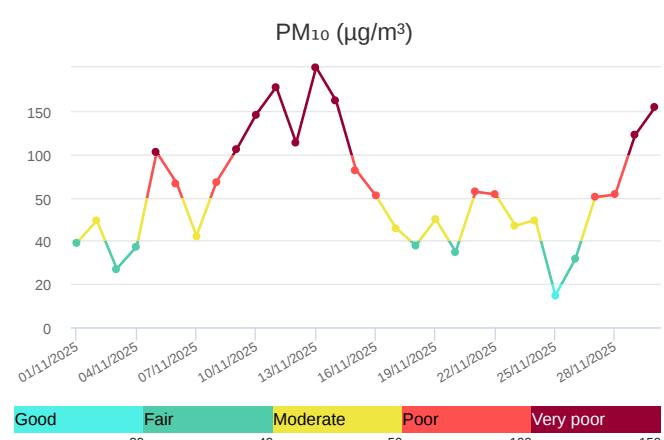
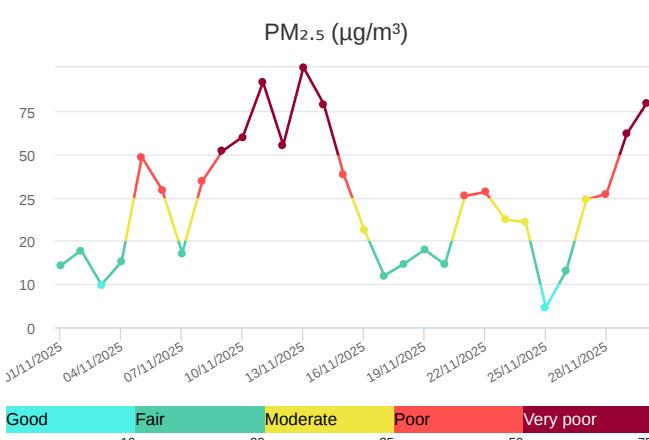
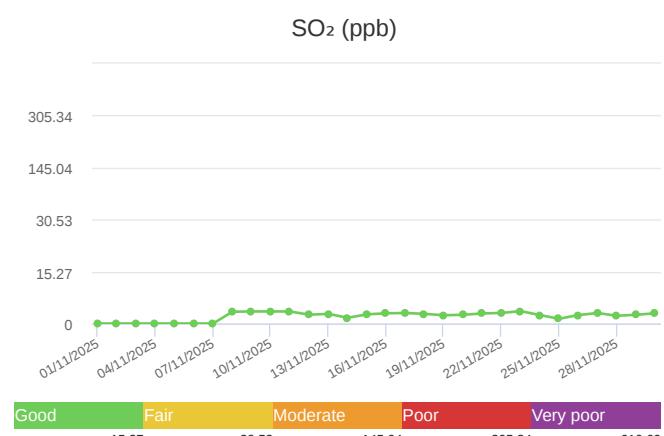
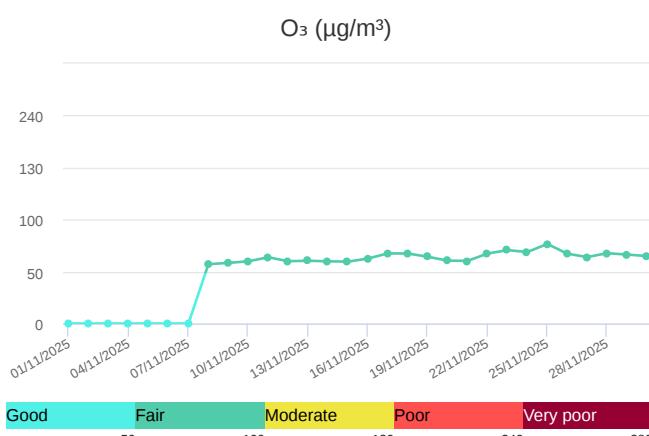
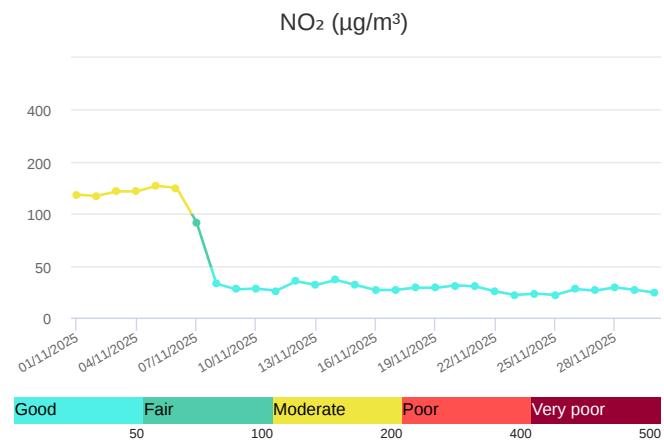
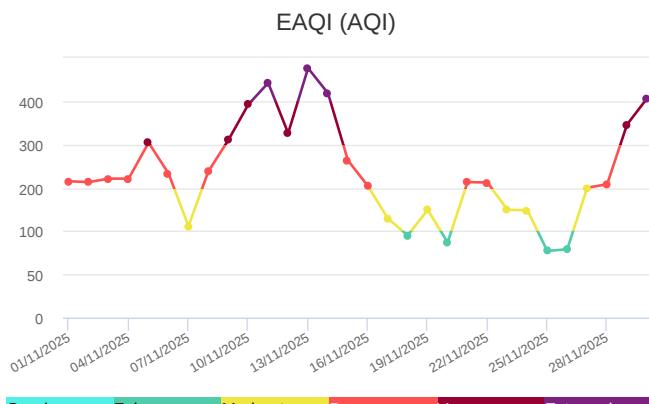
Prezentare generală zilnică: Parametrii indicelui de calitate al aerului (ICA)

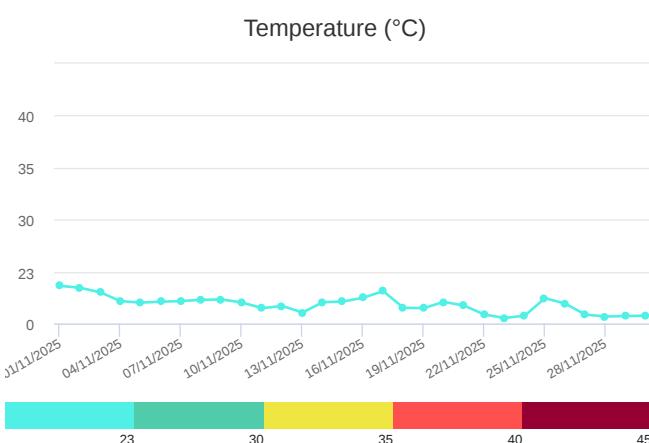
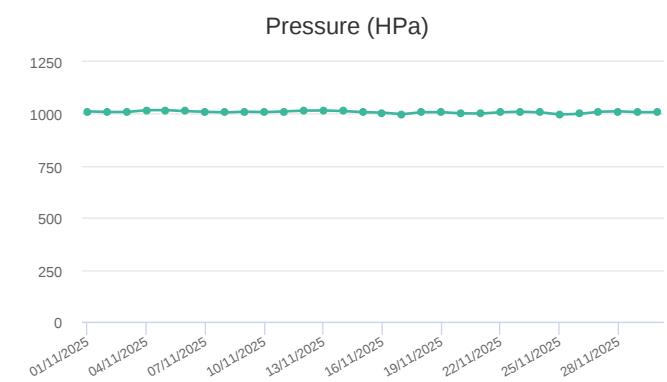
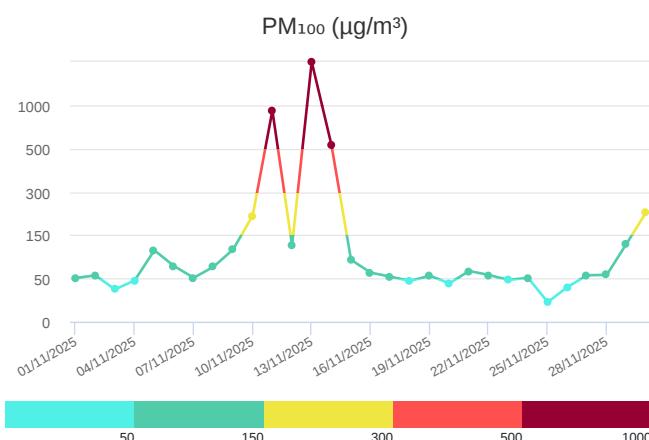
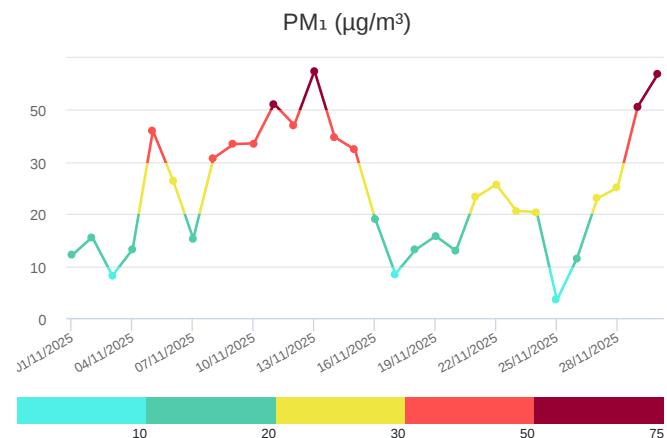
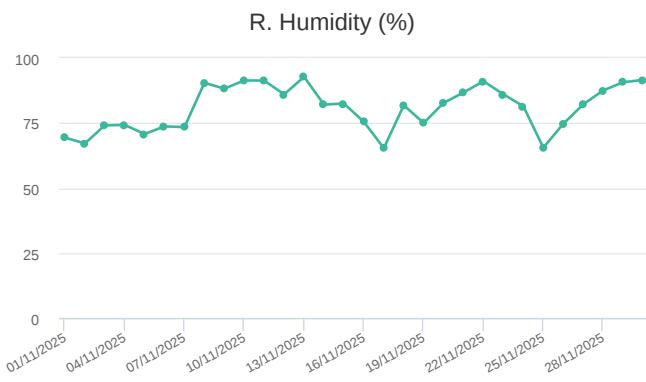
	EAQI AQI	NO ₂ µg/m ³	O ₃ µg/m ³	SO ₂ ppb	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³
Average	343	53.27	22.6	0	45.17	121.37
Maximum	476	153.58	76.51	3.63	252.27	951.85
Date	13/11/2025	05/11/2025	25/11/2025	23/11/2025	13/11/2025	13/11/2025
Minimum	77	21.84	0	0	4.57	14.79
Date	25/11/2025	25/11/2025	01/11/2025	01/11/2025	25/11/2025	25/11/2025

Prezentare generală zilnică: Alți parametri

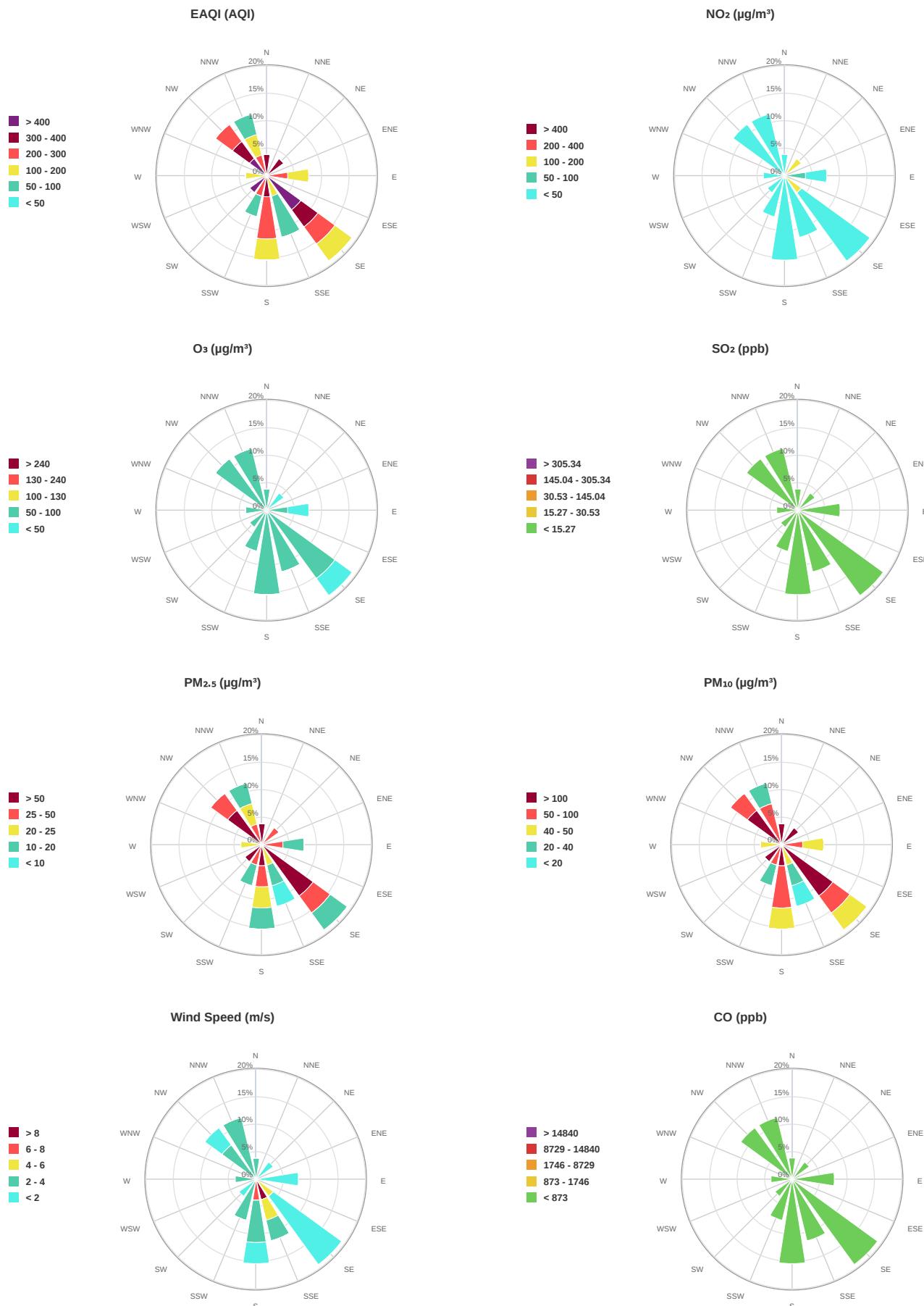
	Wind Speed m/s	Wind Direction degree	Battery %	CO ppb	R. Humidity %	PM1 µg/m³	PM100 µg/m³	Pressure HPa	Temperature °C
Average	1.04	178.87	100	348.22	80.84	27.33	178.46	1008.57	8.5
Maximum	9.49	161.82	100	567.9	92.76	68.83	1778.36	1017.73	16.67
Date	25/11/2025	25/11/2025	01/11/2025	05/11/2025	13/11/2025	13/11/2025	13/11/2025	04/11/2025	01/11/2025
Minimum	0.64	181.7	100	258.34	65.31	3.44	22.65	996.97	2.46
Date	09/11/2025	09/11/2025	01/11/2025	25/11/2025	17/11/2025	25/11/2025	25/11/2025	25/11/2025	23/11/2025

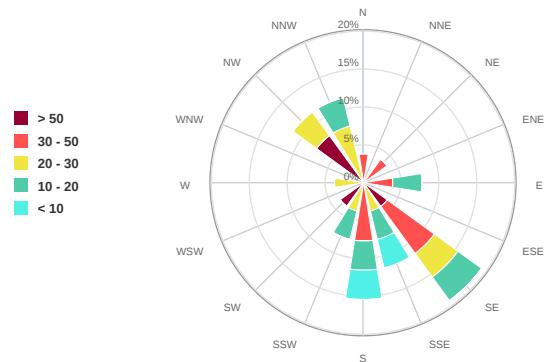
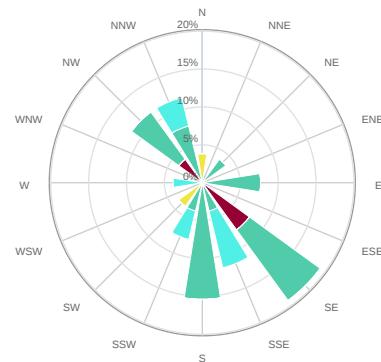
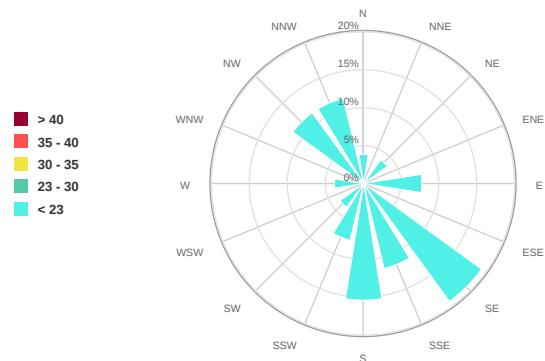
Weekly Average





Weekly Average



PM1 ($\mu\text{g}/\text{m}^3$)

PM100 ($\mu\text{g}/\text{m}^3$)

Temperature (°C)


Alerte

No alerts for the selected date and time range

Insights

- 30/11/2025, 23:59 **EAQI exceeded 'Very Poor' levels for 13 out of 30 days:** The Environmental Air Quality Index (EAQI) reached 'Very Poor' or 'Extremely Poor' levels on 13 out of the 30 days, indicating significant air pollution concerns. Maximum EAQI was observed on 2025-11-13.
- 30/11/2025, 23:59 **NO₂ levels frequently exceeded safe limits:** NO₂ concentrations frequently exceeded the 'Good' and 'Fair' ranges, often falling within the 'Poor' range. The maximum level recorded was 289.01 µg/m³, indicating a significant pollution source.
- 30/11/2025, 23:59 **Ozone levels peaked mid-month:** Ozone (O₃) levels were mostly within safe limits, but show a period increase and peak in the middle of the month, before dropping again. High of 150.2 µg/m³ on 2025-11-25.
- 30/11/2025, 23:59 **SO₂ levels remained consistently low:** Sulfur Dioxide (SO₂) levels remained consistently within the 'Good' range throughout the entire month, suggesting minimal impact from SO₂ pollution sources.
- 30/11/2025, 23:59 **PM_{2.5} exceeded 'Poor' levels frequently:** PM_{2.5} concentrations often exceeded the 'Poor' range, with a maximum of 252.27 µg/m³, indicating a significant health risk associated with fine particulate matter.
- 30/11/2025, 23:59 **PM₁₀ levels hit 'Extremely Poor' levels:** PM₁₀ concentrations reached 'Extremely Poor' levels, peaking at 951.85 µg/m³, indicating severe dust or industrial pollution events. On 2025-11-13
- 30/11/2025, 23:59 **Humidity levels consistently high:** Relative humidity remained consistently high throughout the month, generally above 65%, potentially influencing the dispersion and reactivity of pollutants.
- 30/11/2025, 23:59 **Temperature fluctuations observed:** Temperature varied between 2.46°C and 16.67°C. The lowest temperature recorded on 2025-11-23 and the highest on 2025-11-01. Air quality seems to degrade as temperature decreases.
- 30/11/2025, 23:59 **Pressure relatively stable:** Atmospheric pressure remained relatively stable, ranging between 996.97 HPa and 1017.73 HPa, with no apparent direct correlation to air quality fluctuations.
- 05/11/2025, 23:59 **Highest CO level observed on 2025-11-05:** Carbon Monoxide (CO) reached the highest level of 567.9 ppb on 2025-11-05, which coincides with high EAQI of 354. This indicates the significant contribution of CO towards air pollution.
- 30/11/2025, 23:59 **PM₁ correlated with PM_{2.5}:** PM₁ values appear to correlate positively with PM_{2.5}, suggesting a common source or formation mechanism for these fine particulate pollutants. Peaks align.
- 13/11/2025, 23:59 **Significant PM₁₀₀ spikes on 2025-11-11 and 2025-11-13:** There are substantial spikes in PM₁₀₀ levels on 2025-11-11 and 2025-11-13 with 937.71 µg/m³ and 1778.36 µg/m³ respectively, correlating with extremely poor EAQI and PM₁₀ values.
- 30/11/2025, 23:59 **Wind Speed variation and Air Quality:** Wind speed varied significantly throughout the month (0.64 to 9.49 m/s). It seems lower wind speeds correlated with worse air quality due to less dispersion of pollutants.
- 13/11/2025, 23:59 **Elevated PM_{2.5} levels on 2025-11-13:** The PM_{2.5} reached 252.27 µg/m³ on 2025-11-13 placing it in 'Extremely poor' category, contributing to the highest EAQI value for the time period.
- 15/11/2025, 23:59 **Lowest Air Quality observed in the first half of month:** Air quality was generally worse in the first half of the month, with more frequent occurrences of 'Very Poor' and 'Extremely Poor' EAQI readings. Likely due to PM₁₀ and PM_{2.5}.
- 07/11/2025, 23:59 **NO₂ levels High During First Week of November:** NO₂ levels were particularly high during the first week of November, consistently falling within the 'Very poor' and 'Extremely Poor' category, contributing to high EAQI values.
- 30/11/2025, 23:59 **Correlation between CO and PM_{2.5}:** There is a possible correlation between CO and PM_{2.5} levels. Elevated CO levels frequently co-occur with elevated PM_{2.5}, suggesting related combustion sources.
- 30/11/2025, 23:59 **Impact of Wind Direction on Pollution Levels:** Analyzing the association between wind direction and air quality is difficult due to missing values. Having directional data will help identify source locations.
- 30/11/2025, 23:59 **High Humidity effect on PM:** High humidity may contribute to the increased PM levels by promoting the absorption of water by particulate matter, leading to increased size and mass.
- 25/11/2025, 23:59 **2025-11-25 registered best PM_{2.5} level:** On 2025-11-25 PM_{2.5} concentration reached the lowest value of 4.57 µg/m³ falling in 'Good' category with humidity of 65.5%.
- 03/11/2025, 23:59 **Moderate PM₁₀ during 2025-11-03:** Relatively moderate PM₁₀ concentration of 27.09 µg/m³ ('Fair' category) was recorded on 2025-11-03, however, the overall EAQI was still 'Very Poor' due to other pollutants.
- 30/11/2025, 23:59 **O₃ often in Good levels:** Ozone concentration remains frequently in the good levels, meaning O₃ is unlikely to be a driver for the high EAQI readings during the month.
- 30/11/2025, 23:59 **EAQI driven by PM_{2.5}, PM₁₀ and NO₂:** EAQI levels were mainly driven by PM_{2.5}, PM₁₀, and NO₂ concentrations, rather than SO₂ or O₃. Elevated levels of these pollutants resulted in 'Very Poor' and 'Extremely Poor' air quality.
- 30/11/2025, 23:59 **Air quality variation within a single day:** Data is recorded at the same time daily (21:59:59), so it is not possible to infer the air quality variation within a single day.
- 30/11/2025, 23:59 **Industrial activity correlation with pollution:** Further investigation is needed to determine if there is a correlation between specific industrial activities in the area and the spikes in PM and NO₂ levels.
- 30/11/2025, 23:59 **Impact of local events on air quality:** Further research is needed to determine the local events or activities that could have contributed to the consistently elevated pollution levels. More details regarding events are needed.
- 30/11/2025, 23:59 **Source of PM₁ needs further study:** Analysis of PM₁ origin is needed to find the source; as those are inhalable deep into lungs.

- 30/11/2025, 23:59 **Lowest AQI Category was Moderate:** The AQI Category was never in the Good or Fair states, and it remained at best as Moderate. A lot of days fell in the Poor/Very Poor/Extremely Poor category.
- 30/11/2025, 23:59 **Battery status is always full:** The battery percentage is reported as 100% for all entries, suggesting an external power source or potentially unreliable data. Device monitoring should be checked.
- 30/11/2025, 23:59 **SO₂ remains at good levels:** SO₂ concentration is always in 'Good' levels and remains consistently low. SO₂ is unlikely to be a driver for the high EAQI readings during the month.

Parametrii indicelui de calitate al aerului (ICA)

Weekly Average

To Date	EAQI AQI	NO ₂ µg/m ³	O ₃ µg/m ³	SO ₂ ppb	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³
01/11/2025, 23:59	215	136.63	0	0	14.27	39.08
02/11/2025, 23:59	213	134.33	0	0	17.77	44.63
03/11/2025, 23:59	221	142.78	0	0	9.87	27.09
04/11/2025, 23:59	221	143.14	0	0	15.13	37.29
05/11/2025, 23:59	304	153.58	0	0	48.2	102.03
06/11/2025, 23:59	233	149.81	0	0	29.45	66.69
07/11/2025, 23:59	111	91.95	0	0	17.17	41.12
08/11/2025, 23:59	238	32.64	57.04	3.45	34.56	67.8
09/11/2025, 23:59	310	27.28	58.28	3.54	51.75	104.89
10/11/2025, 23:59	392	28	59.82	3.55	59.99	145.86
11/11/2025, 23:59	442	25.94	63.7	3.52	191.43	588.82
12/11/2025, 23:59	326	35.03	59.92	2.58	55.23	112.91
13/11/2025, 23:59	476	31.49	60.34	2.82	252.27	951.85
14/11/2025, 23:59	418	36.23	59.8	1.68	103.37	335.29
15/11/2025, 23:59	263	31.42	59.49	2.68	37.98	81.63
16/11/2025, 23:59	204	26.56	62.47	3	21.32	51.82
17/11/2025, 23:59	129	26.73	67.39	3.09	11.91	42.93
18/11/2025, 23:59	95	28.88	67.28	2.82	14.72	37.82
19/11/2025, 23:59	149	28.72	64.2	2.43	17.9	44.93
20/11/2025, 23:59	87	31.05	60.43	2.55	14.51	34.91
21/11/2025, 23:59	213	30.11	60.25	2.95	25.81	56.4
22/11/2025, 23:59	212	25.26	67.26	3.1	28.05	53.46
23/11/2025, 23:59	149	21.86	70.56	3.63	22.43	43.43
24/11/2025, 23:59	148	23.21	68.76	2.47	22.14	44.81
25/11/2025, 23:59	77	21.84	76.51	1.39	4.57	14.79
26/11/2025, 23:59	79	27.48	67.13	2.48	12.96	31.45
27/11/2025, 23:59	200	26.03	63.91	3.09	24.7	50.24
28/11/2025, 23:59	208	29.16	67.58	2.26	27.11	53.09
29/11/2025, 23:59	346	26.77	66.29	2.56	61.56	121.78
30/11/2025, 23:59	406	24.21	64.87	3	106.97	212.31

Altı parametri

Weekly Average

To Date	Wind Speed m/s	Wind Direction degree	Battery %	CO ppb	R. Humidity %	PM ₁ µg/m ³	PM ₁₀₀ µg/m ³	Pressure HPa	Temperature °C
01/11/2025, 23:59			100	315.9	69.41	12.07	51.3	1011.67	16.67
02/11/2025, 23:59			100	302.31	67.1	15.55	56.75	1008.77	15.82
03/11/2025, 23:59			100	275.66	74.08	8.12	37.34	1008.51	13.79
04/11/2025, 23:59			100	338.05	74.25	13.22	47.68	1017.73	9.89
05/11/2025, 23:59	1.6	55.87	100	567.9	70.77	42.03	114.86	1017.67	9.27
06/11/2025, 23:59	4.17	145.62	100	381.33	73.69	26.48	78.56	1012.52	9.66
07/11/2025, 23:59	1.9	86.98	100	335.15	73.42	15.25	51.54	1009.74	9.97
08/11/2025, 23:59	1.35	84.93	100	386.95	90.43	31.45	76.6	1006.75	10.48
09/11/2025, 23:59	0.64	181.7	100	371.43	88.24	36.88	116.62	1010.18	10.66
10/11/2025, 23:59	2.46	357.91	100	358.65	91.36	37.18	217.58	1008.09	9.31
11/11/2025, 23:59	1.76	309.21	100	320.91	91.32	52.95	937.71	1011.61	6.82
12/11/2025, 23:59	1.27	142.24	100	394.28	86.02	44.23	126.22	1015.38	7.75
13/11/2025, 23:59	1.51	132.9	100	391.88	92.76	68.83	1778.36	1016.07	4.92
14/11/2025, 23:59	1.8	132.86	100	409.61	82.08	39.53	543.56	1013.1	9.4
15/11/2025, 23:59	2.33	175.4	100	376.66	82.48	34.77	92.89	1007.94	9.76
16/11/2025, 23:59	3.75	175.42	100	337.5	75.44	19.1	63.31	1005.51	11.4
17/11/2025, 23:59	6.9	187.16	100	293.92	65.31	8.48	54.15	998.3	14.32
18/11/2025, 23:59	3.91	337	100	340.86	81.81	13.12	47.04	1007.85	6.95
19/11/2025, 23:59	0.94	124.83	100	318.08	75.01	15.75	56.27	1007.77	6.82
20/11/2025, 23:59	3.77	156.09	100	323.76	82.74	12.91	44.3	1002.19	9.59
21/11/2025, 23:59	2.04	209.29	100	360.93	86.73	23.26	67.19	1001.44	7.93
22/11/2025, 23:59	2.82	322.49	100	321.78	91.08	25.66	58.05	1007.54	4
23/11/2025, 23:59	3.29	266.97	100	288.23	86.02	20.57	48.31	1010.06	2.46
24/11/2025, 23:59	4.41	165.64	100	290.55	81.43	20.37	51.33	1007.06	3.48
25/11/2025, 23:59	9.49	161.82	100	258.34	65.5	3.44	22.65	996.97	11.22
26/11/2025, 23:59	2.78	197	100	349.43	74.68	11.53	40.05	999.56	8.85
27/11/2025, 23:59	3.26	328.98	100	384.34	82.16	23.02	57.27	1009.86	3.95
28/11/2025, 23:59	2.1	331.73	100	330.67	87.51	25.06	58.16	1011.94	3.13
29/11/2025, 23:59	2.45	307.55	100	361.99	90.67	51.64	129.63	1007.92	3.31
30/11/2025, 23:59	1.98	214.84	100	359.66	91.58	67.33	228.55	1007.54	3.53

Oizom will not be responsible for Environmental Data accuracy once Validated