

MONTHLY AAQM DATA ALONG WITH AQI FOR 17 NAMP STATION

JULY 2024

About National Air Quality Index

1. Air Quality Index is a tool for effective communication of air quality status to people in terms, which are easy to understand. It transforms complex air quality data of various pollutants into a single number (index value), nomenclature and color.
2. There are six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe. Each of these categories is decided based on ambient concentration values of air pollutants and their likely health impacts (known as health breakpoints). AQ sub-index and health breakpoints are evolved for eight pollutants (PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃, and Pb) for which short-term (up to 24-hours) National Ambient Air Quality Standards are prescribed.
3. Based on the measured ambient concentrations of a pollutant, sub-index is calculated, which is a linear function of concentration (e.g. the sub-index for PM_{2.5} will be 51 at concentration 31 µg/m³, 100 at concentration 60 µg/m³, and 75 at concentration of 45 µg/m³). The worst sub-index determines the overall AQI. AQI categories and health breakpoints for the eight pollutants are as follow:

Table 1 : AQI Category, Pollutants and Health Breakpoints								
AQI Category (Range)	PM ₁₀ 24-hr	PM _{2.5} 24-hr	NO ₂ 24-hr	O ₃ 8-hr	CO 8-hr (mg/m ³)	SO ₂ 24-hr	NH ₃ 24-hr	Pb 24-hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5 –1.0
Moderate (101-200)	101-250	61-90	81-180	101-168	2.1- 10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very poor (301-400)	351-430	121-250	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5
Severe (401-500)	430 +	250+	400+	748+*	34+	1600+	1800+	3.5+

Table 2: AQI : Associated Health Impacts	
AQI	Associated Health Impacts
Severe (401-500)	SEVERE : May cause respiratory effects even on healthy people and serious health effect on people with lung/heart diseases
Very Poor (301–400)	VERY-POOR: May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Poor (201–300)	POOR : May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
Moderate (101–200)	MODERATE : May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease Children and older adults
Satisfactory (51–100)	SATISFACTORY : May cause minor breathing discomfort to sensitive people
Good (0–50)	GOOD : Minimal impact

Station: Near Old GSPCB office									City :Panaji	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	20	5	1	3	Not Monitored			20	Good
2	04-07-2024	17	6	2	3				17	Good
3	08-07-2024	22	11	1	4				22	Good
4	11-07-2024	32	12	2	5				32	Good
5	17-07-2024	34	13	6	6	0.46	2	0.004	34	Good
6	19-07-2024	32	12	5	5	0.69	2	0.004	35	Good
7	23-07-2024	30	14	7	7	0.25	3	0.004	30	Good
8	26-07-2024	30	16	7	7	0.51	4	0.003	30	Good
9	30-07-2024	33	17	8	8	0.62	2	0.005	33	Good

Station: Within the premises of Municipality building										City :Mapusa
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	30	9	2	4	Not Monitored			30	Good
2	04-07-2024	28	7	2	3				28	Good
3	08-07-2024	29	11	1	3				29	Good
4	11-07-2024	30	15	2	5				30	Good
5	17-07-2024	25	11	6	10	0.32	3	0.003	25	Good
6	19-07-2024	22	10	5	8	0.28	2	0.003	22	Good
7	23-07-2024	35	17	9	14	0.32	3	0.003	35	Good
8	26-07-2024	37	16	8	14	0.34	4	0.003	37	Good
9	30-07-2024	38	19	7	15	0.67	4	0.003	38	Good

Station: MPT Quarters							City: Baina	
Duration:- June-2024								
Sr.No		Time Weighted Average (TWA)					AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3						
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	NH ₃		
1	03-06-2024	128	19	2	5	10	119	Moderate
2	04-06-2024	56	16	2	5	10	56	Satisfactory
3	06-06-2024	94	18	2	5	10	94	Satisfactory
4	07-06-2024	28	9	2	12	10	28	Good
5	19-06-2024	337	22	16	10	10	287	Poor
6	21-06-2024	252	25	2	5	10	202	Poor
7	26-06-2024	152	27	2	5	10	135	Moderate
8	28-06-2024	83	41	2	5	10	83	Satisfactory

Station: Fuse Call Office							City: Vasco	
Duration:- July-2024								
Sr.No		Time Weighted Average (TWA)					AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3						
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	NH ₃		
1	03-07-2024	28	36	2	5	10	60	Satisfactory
2	05-07-2024	31	28	2	9	10	46	Good
3	10-07-2024	41	19	2	5	10	41	Good
4	17-07-2024	46	29	2	9	10	49	Good
5	24-07-2024	95	35	2	5	10	95	Satisfactory
6	26-07-2024	51	42	2	5	10	70	Satisfactory
7	31-07-2024	29	21	2	9	10	36	Good

Station: Roof top of Municipal market									City: Ponda	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	43	7	2	5	Not Monitored			43	Good
2	04-07-2024	34	9	2	3				34	Good
3	08-07-2024	39	10	2	4				39	Good
4	11-07-2024	39	10	2	5				39	Good
5	15-07-2024	34	15	4	11	0.52	2	0.003	34	Good
6	18-07-2024	35	17	6	12	0.47	2	0.002	35	Good
7	22-07-2024	30	15	7	15	0.48	2	0.005	30	Good
8	25-07-2024	32	17	7	13	0.69	2	0.004	35	Good
9	29-07-2024	27	14	6	11	0.48	3	0.003	27	Good

Station: Rooftop of Ravindra Bhavan Building									City:-Margao	
Duration:- July-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	37	6	2	4	Not monitored			37	Good
2	04-07-2024	29	6	3	3				29	Good
3	08-07-2024	28	9	2	3				28	Good
4	11-07-2024	23	3	2	4				23	Good
5	17-07-2024	20	10	5	9	0.37	2	0.004	20	Good
6	20-07-2024	19	10	5	9	0.17	1	0.005	19	Good
7	24-07-2024	21	14	7	10	0.33	1	0.006	23	Good
8	28-07-2024	24	14	6	14	0.71	3	0.007	36	Good
9	30-07-2024	22	13	6	10	0.42	2	0.006	22	Good

Station: Residence of Mr. Rama Naik, Assanora Junction									City: Assanora	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	33	6	1	4	Not Monitored			33	Good
2	04-07-2024	34	11	2	2				34	Good
3	08-07-2024	36	14	2	4				36	Good
4	11-07-2024	32	17	2	5				32	Good
5	17-07-2024	19	9	5	9	0.15	1	0.004	19	Good
6	19-07-2024	23	14	5	10	0.18	2	0.003	23	Good
7	23-07-2024	23	13	5	10	0.27	1	0.003	23	Good
8	26-07-2024	25	13	6	12	0.28	2	0.003	25	Good
9	30-07-2024	21	12	6	10	0.31	4	0.003	21	Good

Station: Residence of Mr. Sagun Ramkrishna Fadte									City: Amona	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	23	5	2	4	Not Monitored			23	Good
2	04-07-2024	24	5	1	2				24	Good
3	08-07-2024	27	9	2	5				27	Good
4	11-07-2024	24	12	2	4				24	Good
5	17-07-2024	27	13	5	11	0.32	1	0.003	27	Good
6	19-07-2024	23	12	6	8	0.17	1	0.003	23	Good
7	23-07-2024	36	14	7	14	0.55	2	0.004	36	Good
8	26-07-2024	40	21	8	18	0.68	5	0.003	40	Good
9	30-07-2024	37	16	7	16	0.55	4	0.005	37	Good

Station: Municipality Building									City: Bicholim	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	28	3	3	4	Not Monitored			28	Good
2	04-07-2024	26	6	1	3				26	Good
3	08-07-2024	31	8	1	4				31	Good
4	11-07-2024	29	9	2	5				29	Good
5	17-07-2024	24	13	6	12	0.51	2	0.005	26	Good
6	19-07-2024	27	15	7	13	0.49	2	0.004	27	Good
7	23-07-2024	26	12	6	13	0.34	2	0.002	26	Good
8	26-07-2024	28	14	8	13	0.41	3	0.005	28	Good
9	30-07-2024	27	12	7	12	0.37	4	0.003	27	Good

Station: Near Ajoba temple, Honda junction									City: Honda	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	25	6	3	5	Not Monitored			25	Good
2	04-07-2024	25	9	1	2				25	Good
3	08-07-2024	27	11	1	4				27	Good
4	11-07-2024	35	10	1	5				35	Good
5	15-07-2024	23	10	6	11	0.28	1	0.004	23	Good
6	18-07-2024	26	13	6	13	0.35	2	0.003	26	Good
7	22-07-2024	29	15	7	13	0.42	2	0.004	29	Good
8	25-07-2024	29	14	7	11	0.51	2	0.005	29	Good
9	29-07-2024	26	12	7	12	0.43	2	0.003	26	Good

Station:- Usgao Junction									City:-Usgao	
Duration:- July-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTy
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	38	5	2	5	Not Monitored			38	Good
2	04-07-2024	34	7	2	5				34	Good
3	08-07-2024	32	10	2	5				32	Good
4	11-07-2024	36	13	2	5				36	Good
5	17-07-2024	24	12	6	10	0.66	3.83	0.004	33	Good
6	20-07-2024	29	13	7	13	0.54	2.23	0.004	29	Good
7	24-07-2024	28	14	8	13	0.66	1.91	0.006	33	Good
8	28-07-2024	27	14	7	12	0.58	2.55	0.005	29	Good
9	30-07-2024	32	15	7	13	0.62	2.23	0.002	32	Good

Premises of Somnath English High School									City:-Codli	
Duration:- July-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	31	7	2	6	Not Monitored			31	Good
2	04-07-2024	32	8	2	5				32	Good
3	08-07-2024	34	12	2	5				34	Good
4	11-07-2024	32	9	2	5				32	Good
5	17-07-2024	23	13	7	12	0.16	2.23	0.004	23	Good
6	20-07-2024	22	11	6	10	0.28	1.91	0.004	22	Good
7	24-07-2024	25	12	6	10	0.38	2.23	0.005	25	Good
8	28-07-2024	27	14	6	13	0.53	2.87	0.004	27	Good
9	30-07-2024	30	15	7	13	0.46	3.51	0.003	30	Good

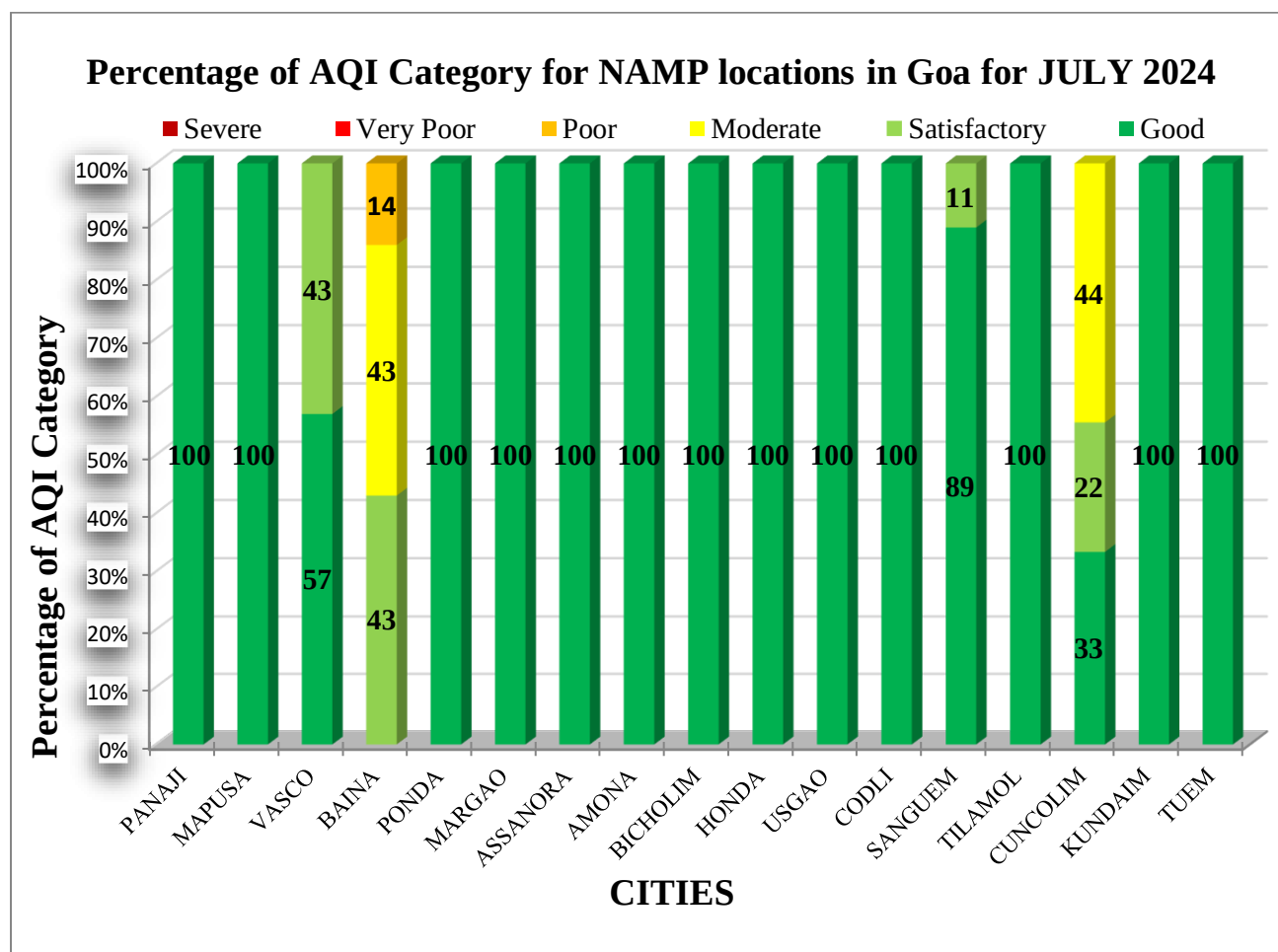
Station: Rooftop of Sanguem Municipality Building									City: Sanguem	
Duration:- July-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	27	3	2	5	Not Monitored			27	Good
2	04-07-2024	24	11	2	5				24	Good
3	08-07-2024	28	7	2	5				28	Good
4	11-07-2024	57	13	2	5				57	Satisfactory
5	17-07-2024	21	13	5	9	0.17	2.55	0.006	22	Good
6	20-07-2024	21	12	4	9	0.12	1.59	0.005	21	Good
7	24-07-2024	26	13	6	11	0.34	1.59	0.005	26	Good
8	28-07-2024	27	15	6	13	0.32	1.91	0.006	27	Good
9	30-07-2024	32	17	7	13	0.43	2.55	0.006	32	Good

Station: Tilamol Junction									City: Tilamol	
Duration:- July-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	21	5	2	5	Not monitored			21	Good
2	04-07-2024	24	6	2	5				24	Good
3	08-07-2024	33	13	2	5				33	Good
4	11-07-2024	47	9	2	5				47	Good
5	17-07-2024	36	16	8	14	0.56	1.9	0.003	36	Good
6	20-07-2024	34	15	8	13	0.71	2.2	0.007	36	Good
7	24-07-2024	38	17	8	14	0.68	1.9	0.004	38	Good
8	28-07-2024	40	21	7	14	0.46	3.8	0.006	40	Good
9	30-07-2024	34	18	8	13	0.52	2.9	0.006	34	Good

Station: Rooftop of Power Station, Cuncolim Ind Estate									City: Cuncolim	
Duration:- July-2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	228	27	2	12	Not Monitored			185	Moderate
2	04-07-2024	215	24	1	15				177	Moderate
3	08-07-2024	133	22	2	16				122	Moderate
4	11-07-2024	122	23	2	12				114	Moderate
5	17-07-2024	46	21	9	17	0.49	2.23	0.006	46	Good
6	20-07-2024	43	20	8	16	0.18	1.91	0.005	43	Good
7	24-07-2024	48	23	8	15	0.71	2.23	0.006	48	Good
8	28-07-2024	53	27	9	17	0.88	3.51	0.007	53	Satisfactory
9	30-07-2024	51	26	9	17	0.91	3.83	0.003	51	Satisfactory

Station: Near IDC Office										City: Kundaim	
Duration:-July - 2024											
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY	
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr			
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)									
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb			
1	01-07-2024	35	7	2	2	Not Monitored			35	Good	
2	04-07-2024	28	12	1	2				28	Good	
3	08-07-2024	35	12	3	4				35	Good	
4	11-07-2024	30	9	3	5				30	Good	
5	15-07-2024	39	13	8	11	0.12	3	0.003	39	Good	
6	18-07-2024	36	16	7	12	0.35	3	0.005	36	Good	
7	23-07-2024	27	14	7	11	0.59	4	0.005	30	Good	
8	25-07-2024	25	13	7	12	0.56	3	0.004	28	Good	
9	29-07-2024	25	14	6	11	0.43	3	0.002	25	Good	

Station: Near ESIC Hospital , Tuem Industrial Estate									City: Tuem	
Duration:-July - 2024										
Sr.No		Time Weighted Average (TWA)							AQI	AIR QLTY
		24-Hr	24-Hr	24-Hr	24-Hr	1-Hr	1-Hr	24-Hr		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
1	01-07-2024	37	10	1	3	Not Monitored			37	Good
2	04-07-2024	25	7	1	3				25	Good
3	08-07-2024	24	10	3	2				24	Good
4	11-07-2024	27	11	2	6				27	Good
5	17-07-2024	29	9	4	9	0.81	3	0.005	41	Good
6	19-07-2024	32	12	6	12	0.69	3	0.004	35	Good
7	23-07-2024	33	17	7	14	0.08	13	0.004	33	Good
8	26-07-2024	35	20	8	14	0.71	4	0.004	36	Good
9	30-07-2024	32	17	8	14	0.53	4	0.004	32	Good



Results and Interpretation:

It is seen that during the month of July 2024, out of 17 locations AQI is -

Dominantly Good at 14 locations namely – Panaji, Mapusa, Ponda, Margao, Assanora, Amona, Bicholim, Honda, Usgao, Codli, Sanguem, Tilamol, Kundaim and Tuem

Good to Satisfactory at 1 locations namely –Vasco

Good to Satisfactory to Moderate at 1 location namely – Cuncolim

Satisfactory to Moderate to Poor at 1 location namely –Baina

(Dominant refers to 75% and above)