

## Anexo1. Tablas de Resumen de estadísticos a lo largo del año 2021

En este documento se presentan los resúmenes estadísticos mensuales de los datos de material particulado y gases monitoreados por la Red de Monitoreo de Calidad del Aire del Valle de Aburrá. Los resultados para todas las variables son reportados en  $\mu g/m^3$ , en condiciones de referencia; a excepción del  $NO_x$  se reporta en ppm.

Para el cálculo de excedencias, se consideran los niveles máximos permisibles establecidos en la Resolución 2254 de 2017 publicada por el Ministerio de Ambiente y Desarrollo Sostenible.

En las tablas presentadas se utilizan las siguientes convenciones:

- N.A: No Aplica. Corresponde a estaciones en las que no se obtuvo el 75 % de datos válidos para calcular los valores promedios correspondientes, o estaciones que no estaban operando durante el mes en consideración.
- CMD: Cantidad de muestras diarias.
- NEND: Número de excedencias a la norma diaria (PM10, PM2.5 y  $SO_2$ ).
- NEN1H: Número de excedencias a la norma horaria ( $SO_2$ ,  $NO_2$  y CO).
- NEN8H: Número de excedencias a la norma octohoraria ( $O_3$ ).
- MAX, MEAN, MIN seguidos por -1H, -8H, -D: Valores máximos, medios y mínimos calculados para cada variable con diferente periodicidad(horaria, octohoraria y diaria); de acuerdo a lo establecido en el Protocolo para el Monitoreo y Seguimiento de la Calidad del Aire del Ministerio de Ambiente, Vivienda y Desarrollo Territorial.

Considerando los procedimientos propios del proceso de validación de datos establecidos dentro del sistema de gestión de calidad de la red de monitoreo, es posible que los resultados presentados en este informe varíen respecto a los reportados en meses anteriores.

# 1. Resumen Estadísticos 2021 para PM25

## 1.1. Resumen Estadísticos para estaciones en el municipio de Medellín

	CEN-TRAF	MED-LAYE	MED-ALTA	MED-VILL	MED-BEME	MED-TESO	MED-SCRI	MED-ARAN	MED-SELE	MED-FISC
<b>Enero 2021</b>										
CMD	23	31	31	30	31	31	30	30	31	31
MAX-D	28.8	23.6	25.9	37.5	25	22.3	20.2	25.6	15.1	22.3
MEAN-D	N.A	15.9	19	16.1	18.2	15.1	14.8	16.9	9.3	16.5
MIN-D	10.3	7.6	10.1	8.7	11	8.3	7.5	8	2.3	5.7
NEND	0	0	0	1	0	0	0	0	0	0
<b>Febrero 2021</b>										
CMD	28	28	28	28	25	28	28	28	28	28
MAX-D	34.4	25.2	27.4	25.8	31.5	23.4	21.1	23.6	22.3	24.7
MEAN-D	25.7	19.2	21.8	18	21	17.7	16.3	19.2	11.5	19.2
MIN-D	17.6	12.8	15.9	14.2	12	12.9	10.8	15	7.4	12.4
NEND	0	0	0	0	0	0	0	0	0	0
<b>Marzo 2021</b>										
CMD	29	31	31	31	30	31	31	30	30	31
MAX-D	58.1	42.2	37.4	47.2	36.5	45.3	34.6	49.7	27.1	44.7
MEAN-D	29.1	18.6	22.9	20.2	22.8	18.4	17.5	22	12	22.4
MIN-D	16.4	8.4	14.3	8.9	11.4	8.2	9.4	11.6	5.4	10.6
NEND	4	1	1	2	0	1	0	1	0	1
<b>Abril 2021</b>										
CMD	29	30	26	25	29	30	30	29	29	30
MAX-D	34	24.1	28.3	28.2	34.5	23.9	22.8	26.2	15.5	29.6
MEAN-D	21.1	15.7	18.7	14.9	18.3	14	13.9	15.9	8.2	17.5
MIN-D	10.3	8.6	12.1	9.1	11	8.9	8.3	9.3	3.6	10

	CEN-TRAF	MED-LAYE	MED-ALTA	MED-VILL	MED-BEME	MED-TESO	MED-SCRI	MED-ARAN	MED-SELE	MED-FISC
NEND	0	0	0	0	0	0	0	0	0	0
<b>Mayo 2021</b>										
CMD	24	31	31	31	27	27	27	31	31	31
MAX-D	31.2	23.3	31.5	20.3	28.9	17.6	24.3	25.7	10.5	26.4
MEAN-D	21.9	15.8	17.2	14	16.7	11.9	12.5	14.8	6.4	16.6
MIN-D	15	10.2	11.1	8.8	9.6	7.4	7.5	10.2	2.8	10.5
NEND	0	0	0	0	0	0	0	0	0	0
<b>Junio 2021</b>										
CMD	28	28	30	30	30	29	30	30	30	26
MAX-D	37	28.2	19.8	23.3	25.2	18.4	19.3	24.6	12.8	28
MEAN-D	25.4	17	15.6	14.6	17.9	12.7	12.5	15.8	6.8	20.8
MIN-D	13.2	9.1	8.2	8.4	6.6	7.5	7.9	9.2	2.9	13.3
NEND	0	0	0	0	0	0	0	0	0	0
<b>Julio 2021</b>										
CMD	29	31	31	31	30	30	31	31	30	29
MAX-D	33.8	25.8	26.6	18.9	32.1	20.6	23.5	23.7	14	29.2
MEAN-D	24.1	16.2	15.1	12.4	18.4	11.8	12.2	14.3	6.9	18.9
MIN-D	16.8	10	7	4.5	12.3	6	6.3	8.7	3.5	11.5
NEND	0	0	0	0	0	0	0	0	0	0
<b>Agosto 2021</b>										
CMD	31	31	31	30	31	31	31	30	31	31
MAX-D	34.6	30.8	27.6	23	33.2	22.8	20.6	25.9	21.8	31.8
MEAN-D	25	19.1	18.4	15.1	20.1	14.1	13.7	16.8	8.5	20.5
MIN-D	15.9	10.4	12.2	8.9	8	5.6	7.8	10.1	3	12.9
NEND	0	0	0	0	0	0	0	0	0	0
<b>Septiembre 2021</b>										
CMD	29	25	28	29	30	30	30	25	30	30

	CEN-TRAF	MED-LAYE	MED-ALTA	MED-VILL	MED-BEME	MED-TESO	MED-SCRI	MED-ARAN	MED-SELE	MED-FISC
MAX-D	36.5	21.7	29.8	23.4	31.6	20.4	21.4	28.6	12.7	32.4
MEAN-D	24.9	16.8	18.4	15.2	20.2	14.4	14	18.4	7.5	20.9
MIN-D	15.8	7.1	12.5	9.4	12.9	9.5	9.1	12.9	3.9	12.2
NEND	0	0	0	0	0	0	0	0	0	0

**Octubre 2021**

CMD	31	30	31	31	31	31	31	30	31	31
MAX-D	43.5	23.5	28.6	25.8	40.8	22.6	23.4	30.3	14.6	34.2
MEAN-D	25.7	15.4	19.8	17.3	21.6	15.3	15.6	19.6	7.8	21.8
MIN-D	15.9	9	11.7	10.2	10.5	9	10.9	12.7	4.3	12.7
NEND	1	0	0	0	1	0	0	0	0	0

**Noviembre 2021**

CMD	30	30	28	30	30	30	27	30	29	29
MAX-D	36.3	28.8	25.5	27.2	31	26.7	27.3	27.8	14.6	30.6
MEAN-D	27.8	17.7	19.3	17.9	23.7	16.5	16.8	20.6	9.1	23.4
MIN-D	19	12.9	13.5	13.4	15	12	12.3	13.3	5.1	14.7
NEND	0	0	0	0	0	0	0	0	0	0

## 1.2. Resumen Estadísticos para estaciones en los municipios del Valle, diferentes a Medellín

	ITA-CJUS	CAL-LASA	ITA-CONC	SUR-TRAF	CAL-JOAR	EST-HOSP	BAR-TORR	COP-CVID	BEL-FEVE	ENV-HOSP	SAB-RAME	GIR-EPM	GIR-TEMP
<b>Enero 2021</b>													
CMD	31	31	31	30	27	31	30	31	29	30	27	29	26
MAX-D	26.9	31	22.5	32.2	28.2	22.3	19.1	19.8	21.9	23.7	23	23.5	20.9
MEAN-D	20.5	21.6	15.9	22.6	19.1	15.5	12	13	13.6	15.1	16.6	14.1	14.5
MIN-D	10	9.4	7.9	12.2	9.4	5.1	5.4	5.3	6.2	5.4	8.3	7.5	7.9

	ITA-CJUS	CAL-LASA	ITA-CONC	SUR-TRAF	CAL-JOAR	EST-HOSP	BAR-TORR	COP-CVID	BEL-FEVE	ENV-HOSP	SAB-RAME	GIR-EPM	GIR-TEMP
NEND	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Febrero 2021</b>													
CMD	28	27	28	28	28	28	28	28	28	24	28	28	28
MAX-D	30.9	30.3	23.9	39.7	28.3	22.5	19	20.5	23.2	22.3	25.5	22.1	22.5
MEAN-D	22.1	22.3	16.9	25.7	20.5	17.4	14.3	15	15.5	17.1	17.8	17	17.5
MIN-D	15	14.5	11.3	15.5	12.1	10.8	10.3	10.1	9.5	12.1	11.8	12.2	12.2
NEND	0	0	0	2	0	0	0	0	0	0	0	0	0
<b>Marzo 2021</b>													
CMD	31	28	31	31	31	31	31	31	30	31	31	31	25
MAX-D	46.9	47.2	38	45.4	42.7	41.9	43.9	45.2	41.7	46	41	46.4	46.7
MEAN-D	24.3	21.5	18.7	27.3	20.4	18.5	15.3	17.2	17.2	17.7	18.3	18.9	19.1
MIN-D	13.8	7.7	9	12.7	6.7	8.9	5.1	8.6	9.1	9.2	6.9	10.3	10.8
NEND	2	2	1	2	1	1	1	1	1	1	1	1	1
<b>Abril 2021</b>													
CMD	30	30	30	29	30	26	29	30	30	30	28	30	2
MAX-D	41.1	28.4	24.1	52.1	26.5	26.1	19.3	20.3	20.8	23.6	27.6	23.6	16.1
MEAN-D	20.2	17.9	15.5	23.4	16	16.2	10.7	12.3	12.4	14	15	14.1	N.A
MIN-D	11.8	8.3	9.8	12	7.9	11.2	4.5	6.7	6.3	8.9	8.1	7	12.2
NEND	1	0	0	1	0	0	0	0	0	0	0	0	0
<b>Mayo 2021</b>													
CMD	31	31	31	31	31	31	30	26	31	29	31	31	N.A
MAX-D	29.5	30.8	24.7	31.7	22.4	24.5	12.2	18.2	18.9	17.6	19.8	21.5	N.A
MEAN-D	18.5	16.3	15.1	20.4	13.6	14.1	7.4	9.6	10.3	11.7	13.4	12.1	N.A
MIN-D	11.7	7.3	8.6	8.7	6.5	8.3	4.5	6.2	6.3	7.3	7.3	8.6	N.A
NEND	0	0	0	0	0	0	0	0	0	0	0	0	N.A
<b>Junio 2021</b>													
CMD	30	30	30	30	28	30	29	30	30	30	30	30	N.A

	ITA-CJUS	CAL-LASA	ITA-CONC	SUR-TRAF	CAL-JOAR	EST-HOSP	BAR-TORR	COP-CVID	BEL-FEVE	ENV-HOSP	SAB-RAME	GIR-EPM	GIR-TEMP
MAX-D	30.1	25.9	19.3	30.8	18.7	19.2	12.4	18	19.4	17.4	20.3	17.3	N.A
MEAN-D	20.2	15.9	15.2	22.8	13.4	14.1	7.9	9.9	10.3	12.1	13.5	11.9	N.A
MIN-D	10.2	8.2	8.9	10.6	6.7	9	4.3	5	4.5	6.2	7.5	6.8	N.A
NEND	0	0	0	0	0	0	0	0	0	0	0	0	N.A

**Julio 2021**

CMD	27	31	31	9	30	31	29	31	31	31	31	31	N.A
MAX-D	28.4	26.5	21.9	30.5	22.6	20.8	17.1	22.4	23.2	19.7	21.1	29.2	N.A
MEAN-D	18.5	17.7	14.9	N.A	15.7	13.8	8.8	10.6	10.9	12.2	14.1	13.3	N.A
MIN-D	11.5	10.5	6.8	14.8	8	7	4.2	4.9	5	6.4	6.4	7.1	N.A
NEND	0	0	0	0	0	0	0	0	0	0	0	0	N.A

**Agosto 2021**

CMD	31	31	29	7	31	31	29	31	31	31	31	31	N.A
MAX-D	36.4	33.3	24.8	32.4	28.6	24.6	17.4	19.5	18.4	22.8	28	25.2	N.A
MEAN-D	21.4	16.9	14.7	N.A	14.6	15.6	9.6	11.2	11.8	13.6	15	14.2	N.A
MIN-D	13.5	6.8	7.1	20	6.2	7.4	4	6.1	7.7	6.8	6.1	7.6	N.A
NEND	0	0	0	0	0	0	0	0	0	0	0	0	N.A

**Septiembre 2021**

CMD	30	26	29	29	28	30	26	30	26	30	26	30	N.A
MAX-D	27.4	25.2	23.3	39.5	23.4	17.3	17.1	20.6	17.3	18.5	21	21.8	N.A
MEAN-D	20.1	17.4	15.8	29	16.3	12.1	8.8	12.1	11.9	13.5	14.9	13.7	N.A
MIN-D	13.2	10.8	10.1	17.6	9.9	7.7	4.1	7.1	7.7	8.8	9.5	8.6	N.A
NEND	0	0	0	2	0	0	0	0	0	0	0	0	N.A

**Octubre 2021**

CMD	31	31	31	30	31	31	30	31	31	31	31	31	N.A
MAX-D	40.5	22.8	30.3	38.2	23.8	21.4	17	23.3	22.2	20.3	25.7	24.4	N.A
MEAN-D	22.6	15.7	19.2	30.2	15.5	12.8	9.2	12.2	13.2	14.2	15.2	13.5	N.A
MIN-D	13	6.1	11.2	12.1	7.3	5.4	4.5	7.2	6.8	8	7.6	7.3	N.A

	ITA- CJUS	CAL- LASA	ITA- CONC	SUR- TRAF	CAL- JOAR	EST- HOSP	BAR- TORR	COP- CVID	BEL- FEVE	ENV- HOSP	SAB- RAME	GIR- EPM	GIR- TEMP
NEND	1	0	0	3	0	0	0	0	0	0	0	0	N.A
<b>Noviembre 2021</b>													
CMD	29	29	30	23	30	30	25	30	28	30	29	27	N.A
MAX-D	31.3	24.7	29.2	41.6	24.2	27.4	17.3	18.5	19.3	24	26.6	20.5	N.A
MEAN-D	22.1	16.4	19.2	27.3	15.3	15	9	12.8	14.5	15.5	17.2	14.9	N.A
MIN-D	14.8	6.4	13.1	14.6	5.7	7.7	4	7.7	8.2	9.7	9.5	10	N.A
NEND	0	0	0	2	0	0	0	0	0	0	0	0	N.A

### 1.3. Resumen Estadísticos para estaciones manuales

	BEL- JEGA	MED- PJIC
<b>Enero 2021</b>		
CMD	10	11
MAX-D	27.4	26.7
MEAN-D	14.1	15.4
MIN-D	6.1	7.8
NEND	0	0
<b>Febrero 2021</b>		
CMD	10	8
MAX-D	38.8	39.6
MEAN-D	19.4	22.4
MIN-D	10.9	10.8
NEND	1	1
<b>Marzo 2021</b>		
CMD	11	5
MAX-D	50.6	31.1

	BEL- JEGA	MED- PJIC
MEAN-D	25.3	N.A
MIN-D	7.1	7.4
NEND	3	0

**Abril 2021**

CMD	10	7
MAX-D	46	31.2
MEAN-D	29.6	N.A
MIN-D	16.6	12.6
NEND	2	0

**Mayo 2021**

CMD	11	6
MAX-D	43.7	18.2
MEAN-D	24.3	N.A
MIN-D	10.2	5.2
NEND	3	0

**Junio 2021**

CMD	10	8
MAX-D	28.8	30.3
MEAN-D	20.1	22.8
MIN-D	4.2	14.4
NEND	0	0

**Julio 2021**

CMD	10	11
MAX-D	22.2	26.2
MEAN-D	14.6	18.7
MIN-D	9.9	7.9
NEND	0	0



	BEL- JEGA	MED- PJIC
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**Agosto 2021**

CMD	10	10
MAX-D	24.3	37.4
MEAN-D	17.2	25.7
MIN-D	11.2	16.2
NEND	0	2

**Septiembre 2021**

CMD	11	10
MAX-D	24.6	34.3
MEAN-D	17.6	23.8
MIN-D	12	16.1
NEND	0	0

**Octubre 2021**

CMD	10	9
MAX-D	21.3	30.2
MEAN-D	14.3	22.3
MIN-D	9.1	16.7
NEND	0	0

**Noviembre 2021**

CMD	11	10
MAX-D	22.7	35
MEAN-D	16.7	23.9
MIN-D	9.7	16.2
NEND	0	0

## 2. Resumen Estadísticos 2021 para PM10

	MED- PJIC	CEN- TRAF	BEL- USBV	ITA- CONC	MED- EXSA	SUR- TRAF	MED- ITMR	ITA- POGO	GIR- EPM
<b>Enero 2021</b>									
CMD	28	27	31	31	31	29	31	31	29
MAX-D	45.8	72.6	44.4	51.8	54.6	57	46.5	54.2	44.9
MEAN-D	29.8	48.7	34.3	33.4	39.2	40.7	33.7	39.4	31.5
MIN-D	12.7	18.7	24.4	16	16.9	21.5	18.2	19.6	19.9
NEND	0	0	0	0	0	0	0	0	0
<b>Febrero 2021</b>									
CMD	27	28	28	27	27	28	28	28	27
MAX-D	43.6	75.3	45.5	48.4	57.5	62.8	50.6	64.5	48.7
MEAN-D	33.1	57.3	36.2	33.3	45.6	44.7	40.3	46.1	36.2
MIN-D	19.7	35.8	27.7	19.5	32.2	28.6	29	33	23.3
NEND	0	1	0	0	0	0	0	0	0
<b>Marzo 2021</b>									
CMD	31	29	31	31	29	31	29	31	30
MAX-D	57.6	89.2	67.8	52.2	75.4	59.8	64.5	76.1	68.8
MEAN-D	34.2	52.8	39.9	31.1	48.7	46.1	42.1	52.8	39.4
MIN-D	17.2	25.2	27.7	15.4	26.2	24.1	25.2	30.7	22.4
NEND	0	2	0	0	1	0	0	1	0
<b>Abril 2021</b>									
CMD	28	25	30	29	30	29	30	29	28
MAX-D	54.7	64.6	45.5	42.5	64.3	79.4	55.2	101	48.8
MEAN-D	30.2	40.5	34.4	28	38.7	44.2	36.6	51.7	34.5
MIN-D	14.3	24.7	24.3	17.5	22.1	25	24.1	30.8	21.8
NEND	0	0	0	0	0	1	0	4	0
<b>Mayo 2021</b>									

	MED- PJIC	CEN- TRAF	BEL- USBV	ITA- CONC	MED- EXSA	SUR- TRAF	MED- ITMR	ITA- POGO	GIR- EPM
CMD	28	26	31	31	31	28	23	29	30
MAX-D	40.1	53.6	49.2	42.9	55.9	52.6	50.1	86.4	58.3
MEAN-D	29.2	38.8	33.2	29.1	40.4	41.6	N.A	59.7	34.1
MIN-D	17.2	24	24.7	20.2	26.3	26.5	24.9	37.2	18.8
NEND	0	0	0	0	0	0	0	5	0

**Junio 2021**

CMD	30	28	30	30	30	29	27	30	27
MAX-D	47.3	85.1	48.2	37.5	65.2	71.8	48.1	96.2	53.5
MEAN-D	34.6	45.6	37.1	29.3	45	46.7	37.3	59.9	36
MIN-D	21.1	21.8	27.9	19.4	23.8	30.1	21	24.9	17.8
NEND	0	1	0	0	0	0	0	2	0

**Julio 2021**

CMD	26	29	30	25	29	8	30	30	24
MAX-D	44.4	56.8	44.5	45.8	52.9	59.1	52.3	102	55.8
MEAN-D	33.2	43.1	34.4	29.3	40.9	N.A	33.2	54.7	35.6
MIN-D	15.6	22.6	23	17.1	23.7	35.2	20.9	30	18.5
NEND	0	0	0	0	0	0	0	3	0

**Agosto 2021**

CMD	29	30	28	28	30	N.A	23	31	25
MAX-D	63	59.6	44	45.6	58.3	N.A	51.7	98.3	57.2
MEAN-D	33.7	42.9	29.7	32.3	42.8	N.A	N.A	60.9	34.7
MIN-D	17.8	27.2	19.7	21.4	26.9	N.A	23.6	40	22.6
NEND	0	0	0	0	0	N.A	0	5	0

**Septiembre 2021**

CMD	26	28	28	28	23	N.A	24	27	29
MAX-D	55	66.5	39.2	41.5	68.3	N.A	55.6	98.6	70
MEAN-D	33.8	44.5	28.9	32	44.8	N.A	36.8	61.2	36.9

	MED- PJIC	CEN- TRAF	BEL- USBV	ITA- CONC	MED- EXSA	SUR- TRAF	MED- ITMR	ITA- POGO	GIR- EPM
MIN-D	19.8	26.3	19.8	18.5	26.9	N.A	24.3	37.4	21.4
NEND	0	0	0	0	0	N.A	0	6	0
<b>Octubre 2021</b>									
CMD	29	31	29	31	31	N.A	31	30	29
MAX-D	53.4	76.1	46.5	52.2	64	N.A	62.8	103.1	69.3
MEAN-D	34.6	47.2	30.2	32.9	44.8	N.A	40.2	68.8	35.5
MIN-D	16.8	26.6	21	20	29.3	N.A	22.8	38.9	20.5
NEND	0	1	0	0	0	N.A	0	11	0
<b>Noviembre 2021</b>									
CMD	28	30	28	30	26	N.A	26	27	27
MAX-D	46.9	67.7	40.9	45.1	64.1	N.A	52	77.9	58.2
MEAN-D	35.5	49.4	31.1	33.1	47.7	N.A	38.6	56.9	37.4
MIN-D	20.9	32.8	24	23.9	32.7	N.A	29	35.9	25.9
NEND	0	0	0	0	0	N.A	0	1	0

## 2.1. Resumen Estadísticos para estaciones manuales

	BAR- HSVP	CAL- JOAR	COP- HSMA	EST- MAGO	ITA- POGO	ITA- PTAR	MED- CORA	MED- MIRA	MED- PJIC	SUR- TRAF
<b>Enero 2021</b>										
CMD	9	11	10	11	11	11	10	11	11	11
MAX-D	30.4	44.5	36.1	48.5	51.2	35.1	36.7	20.7	39.1	67
MEAN-D	21	31.3	23.1	35.2	35.2	25.3	25	13.6	29.5	42.1
MIN-D	11.5	10.7	16.4	9.4	13.4	6.3	13.6	8	12.5	12.9
NEND	0	0	0	0	0	0	0	0	0	0
<b>Febrero 2021</b>										
CMD	10	9	10	7	10	10	9	10	10	10

	BAR- HSVP	CAL- JOAR	COP- HSMA	EST- MAGO	ITA- POGO	ITA- PTAR	MED- CORA	MED- MIRA	MED- PJC	SUR- TRAF
MAX-D	35.2	36.8	34.5	60.1	59.6	50.3	36.1	27.5	46.8	67.6
MEAN-D	21	29.3	22.7	N.A	42.3	27.7	25.4	15	31.1	42.7
MIN-D	12.9	11.4	13.8	27.6	28.1	13.8	10.7	7.9	23.3	27.9
NEND	0	0	0	0	0	0	0	0	0	0

**Marzo 2021**

CMD	11	11	11	11	11	11	10	11	11	10
MAX-D	38.6	45.2	48.5	47.7	66.6	41.7	45.8	33	53.8	54.5
MEAN-D	23.7	30.1	26.3	36.3	47.6	31.7	32.3	24.9	33.2	41.8
MIN-D	9.7	18.9	14.1	25.7	28.9	22.1	15.5	12.3	22.9	30.3
NEND	0	0	0	0	0	0	0	0	0	0

**Abril 2021**

CMD	10	9	10	10	10	10	9	10	10	10
MAX-D	27.4	46.8	36	50.2	58.2	42.8	40	40.6	48	54.7
MEAN-D	17	30.3	25.1	31.4	36.9	26.6	22.4	20.1	32.3	37.8
MIN-D	9.9	17.9	13.6	18.2	20.3	16.2	8.5	9.3	18.2	17.6
NEND	0	0	0	0	0	0	0	0	0	0

**Mayo 2021**

CMD	10	11	10	11	11	11	11	10	11	11
MAX-D	30.5	31.6	33.4	36	63.6	29.3	33.2	24.5	37.8	46.5
MEAN-D	14.8	21.8	18.8	27.5	46.1	20.1	23.1	18.1	26.2	31
MIN-D	5.1	6.6	7.8	16.4	32.2	7.9	10.9	12.4	16.8	19
NEND	0	0	0	0	0	0	0	0	0	0

**Junio 2021**

CMD	10	10	10	10	10	10	10	9	10	10
MAX-D	21.9	31.6	29.8	38.5	62.2	36.1	33.7	22.7	42.7	51.4
MEAN-D	13.6	22.8	19	29	38.3	23.1	21.4	14.5	31.3	36.1
MIN-D	5.3	16.5	13.5	18.1	13.8	14.2	11.2	8.5	20.4	16.6

	BAR- HSVP	CAL- JOAR	COP- HSMA	EST- MAGO	ITA- POGO	ITA- PTAR	MED- CORA	MED- MIRA	MED- PJC	SUR- TRAF
NEND	0	0	0	0	0	0	0	0	0	0
<b>Julio 2021</b>										
CMD	11	10	11	11	11	11	11	10	10	10
MAX-D	31.9	43.2	35.2	52	56.5	62.4	33	27.4	45.2	65.8
MEAN-D	16.3	29.9	23.3	33.1	40.5	29.1	23.1	15.2	33.6	42.2
MIN-D	5.7	19.2	8.6	10	23	17.4	12.1	10	22.5	26.6
NEND	0	0	0	0	0	0	0	0	0	0
<b>Agosto 2021</b>										
CMD	10	10	10	10	10	10	10	10	10	10
MAX-D	32.3	36.7	36.7	41.7	84.5	48.3	39.7	25.2	57.3	64.3
MEAN-D	16.6	27.4	22.8	32.8	50.8	31.9	27.1	17.7	40	41.2
MIN-D	8.1	17.4	6.6	19.3	29.3	19.4	17.3	8.8	24.5	16.9
NEND	0	0	0	0	1	0	0	0	0	0
<b>Septiembre 2021</b>										
CMD	10	11	11	11	11	11	11	11	10	11
MAX-D	27.6	42.7	40.6	51.9	68.5	40.8	48.9	28	50.8	70.9
MEAN-D	16.9	29.9	25.6	37.9	43.2	31.1	29.5	18.2	38.2	48.4
MIN-D	8.4	16.8	8.8	18.4	11.1	19.9	13.1	7.9	28.1	20
NEND	0	0	0	0	0	0	0	0	0	0
<b>Octubre 2021</b>										
CMD	9	9	9	10	10	10	10	10	9	10
MAX-D	28.2	57.5	36.6	51.2	78.3	50.1	52.2	25.9	54.4	72.3
MEAN-D	15.9	32.2	23	33.3	54	28.2	30.9	18.3	35.8	46
MIN-D	6.3	20.2	9.5	13.7	30.4	11	15.3	8	23.1	18.9
NEND	0	0	0	0	1	0	0	0	0	0
<b>Noviembre 2021</b>										
CMD	11	11	10	11	11	11	11	11	10	11

	BAR- HSVP	CAL- JOAR	COP- HSMA	EST- MAGO	ITA- POGO	ITA- PTAR	MED- CORA	MED- MIRA	MED- PJC	SUR- TRAF
MAX-D	29.1	38.9	45.7	40.4	58.8	38.5	42	26	47.8	69.6
MEAN-D	16.1	26.4	25.2	34.3	45.3	31.2	29.7	18.3	36.3	50.1
MIN-D	9.4	17.1	10.5	19.3	26.1	16.1	14	12.9	19.6	24.8
NEND	0	0	0	0	0	0	0	0	0	0

### 3. Resumen Estadísticos 2021 para CO

	MED- PJC	GIR- EPM
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#### Enero 2021

CMD	31	3
MAX-1H	4204	599.8
MEAN-1H	1355.4	250.2
MIN-1H	369.6	33.4
NEN1H	0	0
MAX-8H	2521	383.7
MEAN-8H	1354.6	269.9
MIN-8H	531.9	60.8
NEN8H	0	0

MED- PJC	GIR- EPM
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**Febrero 2021**

CMD	28	21
MAX-1H	5020.3	933.6
MEAN-1H	1694.4	359.5
MIN-1H	518.6	46.5
NEN1H	0	0
MAX-8H	2893.8	603
MEAN-8H	1695	365.9
MIN-8H	783.2	126.9
NEN8H	0	0

**Marzo 2021**

CMD	31	19
MAX-1H	5230.9	1658.4
MEAN-1H	1788	349.5
MIN-1H	456	76.2



	MED- PJC	GIR- EPM
NEN1H	0	0
MAX-8H	3646.6	993.5
MEAN-8H	1791.3	354
MIN-8H	818.1	129.4
NEN8H	0	0

**Abril 2021**

CMD	29	27
MAX-1H	5005.4	1717.1
MEAN-1H	1505.6	330
MIN-1H	12.5	49.2
NEN1H	0	0
MAX-8H	3828	1155
MEAN-8H	1508.6	330.7
MIN-8H	447.1	81.2
NEN8H	0	0

**Mayo 2021**

CMD	27	31
MAX-1H	4454.7	3054.9
MEAN-1H	1688.7	315.8
MIN-1H	118	50.2
NEN1H	0	0
MAX-8H	3351.7	1192.4
MEAN-8H	1684	315.3
MIN-8H	781.1	80
NEN8H	0	0

**Junio 2021**

CMD	30	30
MAX-1H	4762.7	1161.3
MEAN-1H	2013.3	334.3

	MED- PJC	GIR- EPM
MIN-1H	379.3	61.8
NEN1H	0	0
MAX-8H	3356.9	710.6
MEAN-8H	2008.7	334.5
MIN-8H	874.3	106.1
NEN8H	0	0

**Julio 2021**

CMD	27	30
MAX-1H	4706.6	2311.9
MEAN-1H	1863.2	367.3
MIN-1H	60.7	39.6
NEN1H	0	0
MAX-8H	3371.4	1766.5
MEAN-8H	1863.7	362.5
MIN-8H	321.3	89.6

	MED- PJC	GIR- EPM
NEN8H	0	0

**Agosto 2021**

CMD	27	21
MAX-1H	4554.3	1430.2
MEAN-1H	1821.9	407.2
MIN-1H	226.3	102.4
NEN1H	0	0
MAX-8H	3714.1	891.8
MEAN-8H	1818.5	407.3
MIN-8H	540.3	132.5
NEN8H	0	0

**Septiembre 2021**

CMD	22	26
MAX-1H	4879.5	2323.6
MEAN-1H	2050	406.6

	MED- PJC	GIR- EPM
MIN-1H	408.4	48
NEN1H	0	0
MAX-8H	3699.2	1500.4
MEAN-8H	2043.5	406.2
MIN-8H	866.5	85.3
NEN8H	0	0

**Octubre 2021**

CMD	30	25
MAX-1H	5264.1	2064
MEAN-1H	1996.7	420
MIN-1H	23.1	59.4
NEN1H	0	0
MAX-8H	4212.9	1554.4
MEAN-8H	1995.2	419.9
MIN-8H	581.2	110.4

	MED- PJC	GIR- EPM
NEN8H	0	0

**Noviembre 2021**

CMD	28	11
MAX-1H	6988.1	1388
MEAN-1H	1875.9	376.5
MIN-1H	321.9	24.8
NEN1H	0	0
MAX-8H	4700.8	743.1
MEAN-8H	1869.4	382.1
MIN-8H	620	69.7
NEN8H	0	0

#### 4. Resumen Estadísticos 2021 para Ozono

	CAL- LASA	BEL- USBV	ITA- CONC	BAR- PDLA	MED- UDEM	MED- MIRA	MED- LAYE	MED- FISC	GIR- EPM
<b>Enero 2021</b>									
CMD	31	15	31	31	31	31	31	31	31

	CAL-LASA	BEL-USBV	ITA-CONC	BAR-PDLA	MED-UDEM	MED-MIRA	MED-LAYE	MED-FISC	GIR-EPM
MAX-8H	99.9	62.3	114.3	65.3	63.5	90.6	97.3	86.1	71.6
MEAN-8H	35.4	21.1	41.6	26.6	22.5	29.9	27.8	26.4	28.2
MIN-8H	4.6	0.3	4.3	1.9	2.3	2.3	1.9	4.1	3
NEN8H	0	0	12	0	0	0	0	0	0

**Febrero 2021**

CMD	28	28	28	28	28	28	28	28	28
MAX-8H	104.4	63.5	112.1	61	70.8	117.3	109.4	96.8	71.8
MEAN-8H	33.9	22.9	35.3	28.4	22.5	30.7	28.2	27.9	30.5
MIN-8H	3.9	0.2	4	3.5	1.7	1.9	1.1	5.2	3.2
NEN8H	2	0	16	0	0	11	4	0	0

**Marzo 2021**

CMD	31	31	31	31	31	31	31	29	31
MAX-8H	102.8	94.6	112.2	87.7	76.2	109.7	77.7	114.4	99.6
MEAN-8H	31.2	23.8	28.6	30.4	21.1	30	27.1	28.8	32.1
MIN-8H	3.9	0	3.3	3.8	2	2.1	1.9	3.7	2.9
NEN8H	2	0	5	0	0	9	0	6	0

**Abril 2021**

CMD	30	30	30	30	30	30	30	30	30
MAX-8H	88	81.6	88.8	62.7	66.5	97.5	94.8	81.8	77.7
MEAN-8H	26.6	23.3	26.5	25.9	19.9	29.1	27.7	27.5	26.8
MIN-8H	3.1	0.1	4	4	1.8	1.9	0.1	3.8	1.4
NEN8H	0	0	0	0	0	0	0	0	0

**Mayo 2021**

CMD	30	31	31	31	31	31	31	31	31
MAX-8H	81.7	78.6	86.3	54.8	58.6	105.7	82.3	97.5	58.1
MEAN-8H	23.8	18.4	22.5	23	16.1	23	24.1	23	20.6
MIN-8H	2.9	0.1	4.5	4.4	1.7	2.1	0	5	0.7

	CAL- LASA	BEL- USBV	ITA- CONC	BAR- PDLA	MED- UDEM	MED- MIRA	MED- LAYE	MED- FISC	GIR- EPM
NEN8H	0	0	0	0	0	3	0	0	0
<b>Junio 2021</b>									
CMD	17	28	30	30	23	30	17	30	30
MAX-8H	79.4	71.3	101.8	61	113.7	126	86.9	92	63.6
MEAN-8H	23.4	18.7	26.3	23.7	24.5	25.9	23.7	23.6	20.4
MIN-8H	0.1	0	4.6	4.4	1.1	1.8	1.4	4.2	0.9
NEN8H	0	0	2	0	4	7	0	0	0
<b>Julio 2021</b>									
CMD	31	31	29	31	31	31	31	29	31
MAX-8H	87.8	71.8	63.7	63.7	93.3	98.9	86.3	78.5	66.1
MEAN-8H	28	22.3	21.8	26.2	29.4	26.3	29.9	24	27.8
MIN-8H	2	0.6	4.3	3.9	5.4	0	1.2	1.7	2.1
NEN8H	0	0	0	0	0	0	0	0	0
<b>Agosto 2021</b>									
CMD	30	31	25	30	30	30	30	30	27
MAX-8H	99.5	72.3	89.6	75.4	115.5	98.3	104.2	108.7	101.2
MEAN-8H	29.2	24.3	31.1	29.3	32.3	27.3	31.3	26.1	32.7
MIN-8H	2.6	0.5	5.8	3.3	6.9	0	1.2	2.3	3.4
NEN8H	0	0	0	0	5	0	3	3	1
<b>Septiembre 2021</b>									
CMD	29	30	28	29	29	26	29	29	27
MAX-8H	94.6	75.8	64.8	85.6	71.9	100.3	96.7	93.7	86.3
MEAN-8H	31.7	26	19.6	31.6	21.8	30.7	32.1	26.3	34.4
MIN-8H	2.2	0.5	4	3.2	6.6	0	0.2	2.1	3.1
NEN8H	0	0	0	0	0	1	0	0	0
<b>Octubre 2021</b>									
CMD	25	31	31	31	31	31	31	31	31



	CAL- LASA	BEL- USBV	ITA- CONC	BAR- PDLA	MED- UDEM	MED- MIRA	MED- LAYE	MED- FISC	GIR- EPM
MAX-8H	100.7	81.7	93.1	67.8	75.1	112.2	112	93.4	76.2
MEAN-8H	29.1	22.8	28	25.7	24.5	28	28.5	24.9	28.3
MIN-8H	2	0.6	5.4	2.9	6.7	0	0	2.3	2.9
NEN8H	2	0	0	0	0	6	8	0	0
<b>Noviembre 2021</b>									
CMD	21	30	30	30	N.A	30	27	29	28
MAX-8H	88.4	83	94.2	64.4	N.A	97.8	98.8	98.3	71.9
MEAN-8H	24.8	17.4	29.3	21.3	N.A	18.6	25	21	21.4
MIN-8H	0.2	0.4	5.3	3.6	N.A	0	0.9	2.1	2
NEN8H	0	0	0	0	N.A	0	0	0	0

## 5. Resumen Estadísticos 2021 para SO2

	CEN- TRAF	GIR- EPM
<b>Enero 2021</b>		
CMD	N.A	31
MAX-1H	N.A	165.8
MEAN-1H	N.A	25.9
MIN-1H	N.A	0.5
NEN1H	N.A	13
MAX-D	N.A	41
MEAN-D	N.A	25.9
MIN-D	N.A	10.7
NEND	N.A	0
<b>Febrero 2021</b>		

	CEN-TRAF	GIR-EPM
CMD	N.A	25
MAX-1H	N.A	152.4
MEAN-1H	N.A	27.5
MIN-1H	N.A	1.6
NEN1H	N.A	15
MAX-D	N.A	40.5
MEAN-D	N.A	27.5
MIN-D	N.A	18.1
NEND	N.A	0

**Marzo 2021**

CMD	8	2
MAX-1H	55.5	136.2
MEAN-1H	9.6	21.7
MIN-1H	0.2	0.5
NEN1H	0	1
MAX-D	20.4	21.4
MEAN-D	N.A	N.A
MIN-D	3.6	16.8
NEND	0	0

**Abril 2021**

CMD	28	21
MAX-1H	46.6	123.3
MEAN-1H	7.9	24.2
MIN-1H	0.2	0
NEN1H	0	6
MAX-D	17.2	41.5

	CEN- TRAF	GIR- EPM
MEAN-D	7.8	N.A
MIN-D	2.2	7.8
NEND	0	0

**Mayo 2021**

CMD	14	31
MAX-1H	67.2	150.8
MEAN-1H	9.9	22.9
MIN-1H	1.2	0
NEN1H	0	7
MAX-D	17.7	43.6
MEAN-D	N.A	22.8
MIN-D	3.8	12.3
NEND	0	0

**Junio 2021**

CMD	26	30
MAX-1H	78.1	176
MEAN-1H	15.5	25.1
MIN-1H	1.3	0
NEN1H	0	13
MAX-D	29.4	40.2
MEAN-D	15.7	25.2
MIN-D	6.3	13
NEND	0	0

**Julio 2021**

CMD	24	29
MAX-1H	81.6	169.2
MEAN-1H	14.3	15.5

	CEN- TRAF	GIR- EPM
MIN-1H	1.7	0
NEN1H	0	4
MAX-D	26.7	41.4
MEAN-D	14.1	15.6
MIN-D	5.7	6.3
NEND	0	0

**Agosto 2021**

CMD	29	26
MAX-1H	74	146.1
MEAN-1H	13.7	22
MIN-1H	2.5	0
NEN1H	0	9
MAX-D	27.1	46.3
MEAN-D	13.8	22
MIN-D	7.2	8.5
NEND	0	0

**Septiembre 2021**

CMD	28	29
MAX-1H	70.5	194.6
MEAN-1H	15.1	26.8
MIN-1H	2	1
NEN1H	0	13
MAX-D	22.2	44.8
MEAN-D	15.2	26.8
MIN-D	6.8	15.8
NEND	0	0

**Octubre 2021**

	CEN- TRAF	GIR- EPM
CMD	31	23
MAX-1H	91.8	281.2
MEAN-1H	18.1	28.2
MIN-1H	0.3	0.5
NEN1H	0	7
MAX-D	36.3	38.3
MEAN-D	18.2	N.A
MIN-D	8	13.5
NEND	0	0

**Noviembre 2021**

CMD	21	10
MAX-1H	73.4	105.3
MEAN-1H	16.4	19.4
MIN-1H	0.4	0
NEN1H	0	1
MAX-D	32	30.4
MEAN-D	N.A	N.A
MIN-D	6.9	12.8
NEND	0	0

## 6. Resumen Estadísticos 2021 para NO2

	MED- PJC	CEN- TRAF	ITA- CJUS	SUR- TRAF	MED- ITMR	MED- FISC	GIR- EPM
<b>Enero 2021</b>							
CMD	31	21	20	30	31	30	13

	MED- PJIC	CEN- TRAF	ITA- CJUS	SUR- TRAF	MED- ITMR	MED- FISC	GIR- EPM
MAX-1H	81.7	87.1	60.2	87.2	89.6	70	43.7
MEAN-1H	28.8	29.5	23.6	29.5	20.6	31.5	15.8
MIN-1H	0.7	0.2	0.1	0.5	0	0.1	0.1
NEN1H	0	0	0	0	0	0	0

**Febrero 2021**

CMD	28	28	N.A	28	21	28	26
MAX-1H	142.1	80.5	N.A	89.7	76.3	86.2	92.5
MEAN-1H	33.1	33.6	N.A	35	26.7	33.3	17.2
MIN-1H	6.4	6.8	N.A	8.7	3.2	1.2	0.8
NEN1H	0	0	N.A	0	0	0	0

**Marzo 2021**

CMD	31	31	N.A	31	20	23	31
MAX-1H	140.5	106.6	N.A	93.9	111.4	116	54.3
MEAN-1H	44.2	43	N.A	37	34.7	35.6	17
MIN-1H	6.3	9.6	N.A	1	4.2	0.5	0.1
NEN1H	0	0	N.A	0	0	0	0

**Abril 2021**

CMD	28	29	23	24	9	30	30
MAX-1H	123	106.4	61	105.8	101.3	114.2	66.9
MEAN-1H	31.6	28.1	8.7	31.4	33.7	26.8	16.6
MIN-1H	5.7	2.3	0.1	1.4	8.9	0.2	0
NEN1H	0	0	0	0	0	0	0

**Mayo 2021**

CMD	27	29	30	28	25	31	30
MAX-1H	108.6	141.2	46.7	107.4	92.3	161.2	50.6
MEAN-1H	31.1	28.7	7.9	30	26.9	40.6	15.9
MIN-1H	0.4	0	0	2.8	3.8	1.2	1.2

	MED- PJIC	CEN- TRAF	ITA- CJUS	SUR- TRAF	MED- ITMR	MED- FISC	GIR- EPM
NEN1H	0	0	0	0	0	0	0
<b>Junio 2021</b>							
CMD	30	28	N.A	30	27	30	30
MAX-1H	109.6	138.2	N.A	93.6	118.9	198.8	60.5
MEAN-1H	37.2	44.9	N.A	33.3	31.5	69.5	18.3
MIN-1H	2.2	0	N.A	4.7	4.2	31.3	0.4
NEN1H	0	0	N.A	0	0	0	0
<b>Julio 2021</b>							
CMD	19	31	22	9	22	30	29
MAX-1H	115.4	118.5	65.3	70.6	98.8	176.7	85
MEAN-1H	28.7	42.1	22.2	30.8	24.6	64.3	17.9
MIN-1H	3.7	0	0.5	5.1	0	20.5	0.1
NEN1H	0	0	0	0	0	0	0
<b>Agosto 2021</b>							
CMD	17	31	29	N.A	29	30	26
MAX-1H	143.4	219.5	73.6	N.A	106.8	158.6	72.8
MEAN-1H	50.6	50.6	21.1	N.A	35.5	67.3	21.7
MIN-1H	10.8	4.1	0.1	N.A	4.2	18.9	2.2
NEN1H	0	1	0	N.A	0	0	0
<b>Septiembre 2021</b>							
CMD	30	27	28	N.A	29	29	29
MAX-1H	100.9	150.5	102.7	N.A	108.7	167	86.1
MEAN-1H	38.6	50.4	32.7	N.A	37	59.4	23
MIN-1H	0	13.5	0.4	N.A	8	15.1	2.6
NEN1H	0	0	0	N.A	0	0	0
<b>Octubre 2021</b>							
CMD	22	26	31	N.A	31	31	28

	MED- PJIC	CEN- TRAF	ITA- CJUS	SUR- TRAF	MED- ITMR	MED- FISC	GIR- EPM
MAX-1H	107.6	145.7	108.3	N.A	116	147.9	121.4
MEAN-1H	45.7	40	38.9	N.A	38.3	56.7	24.7
MIN-1H	11.2	0	9.2	N.A	8.3	8.2	2
NEN1H	0	0	0	N.A	0	0	0

**Noviembre 2021**

CMD	28	30	29	11	28	29	28
MAX-1H	108	146.8	95.9	115.6	110.4	134.3	113.3
MEAN-1H	39.3	43.3	37.7	46.3	34.3	46	20.8
MIN-1H	8.3	0	9.3	0.7	7.5	7.5	0.9
NEN1H	0	0	0	0	0	0	0