

## APPENDICE 2

Trends emissivi Camini Area a caldo

Dati di produzione e emissioni diffuse totali nello stabilimento

**TAVOLA 1:** Cokerie (Camini E424, E425, E428, E435, E437)

**TAVOLA 2:** Agglomerato (E312, E314b, E315b, E324 e E325)

**TAVOLA 3:** Acciaierie (E525, E525b, E551b e E551c)

**TAVOLA 4:** Altoforni (E102b, E103b, E109, E111, E112, E114, E134, E 135 e E137)

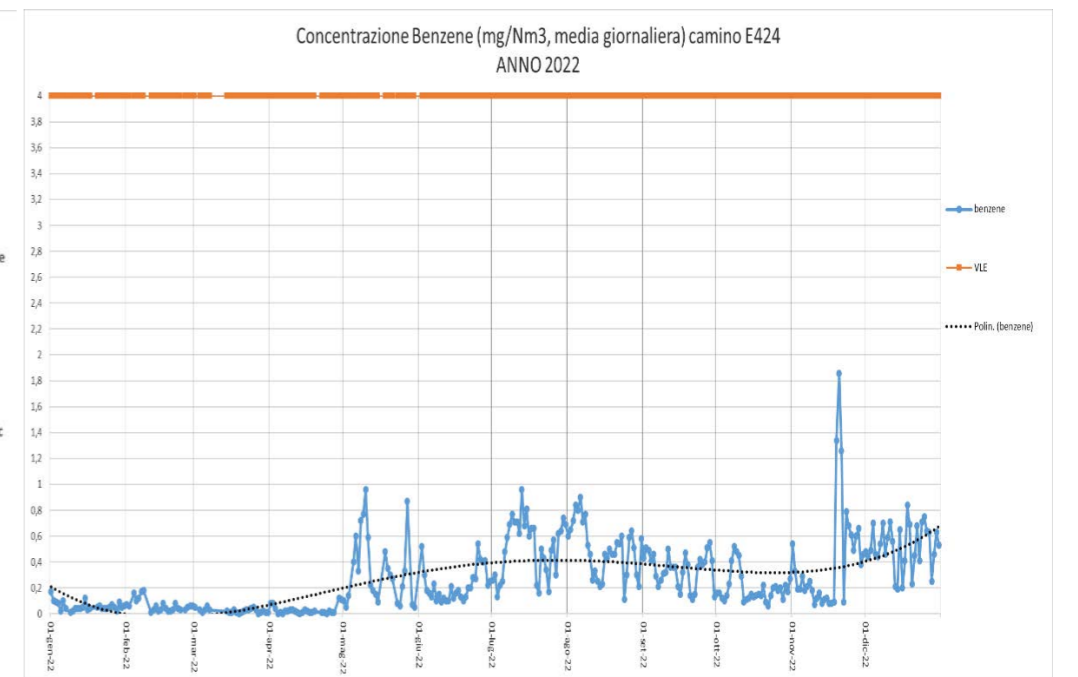
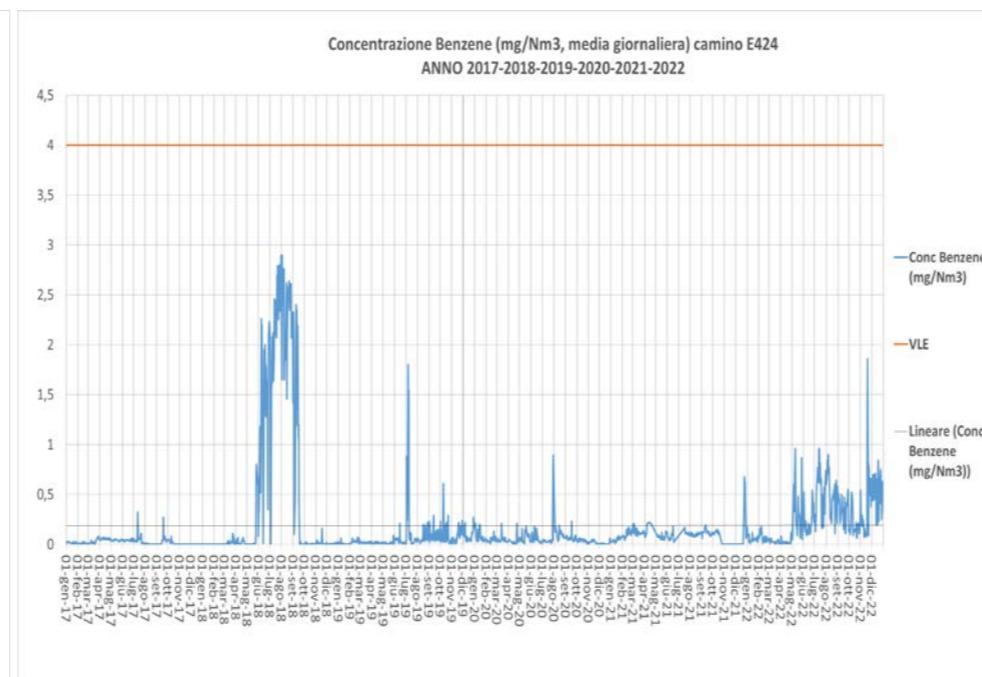
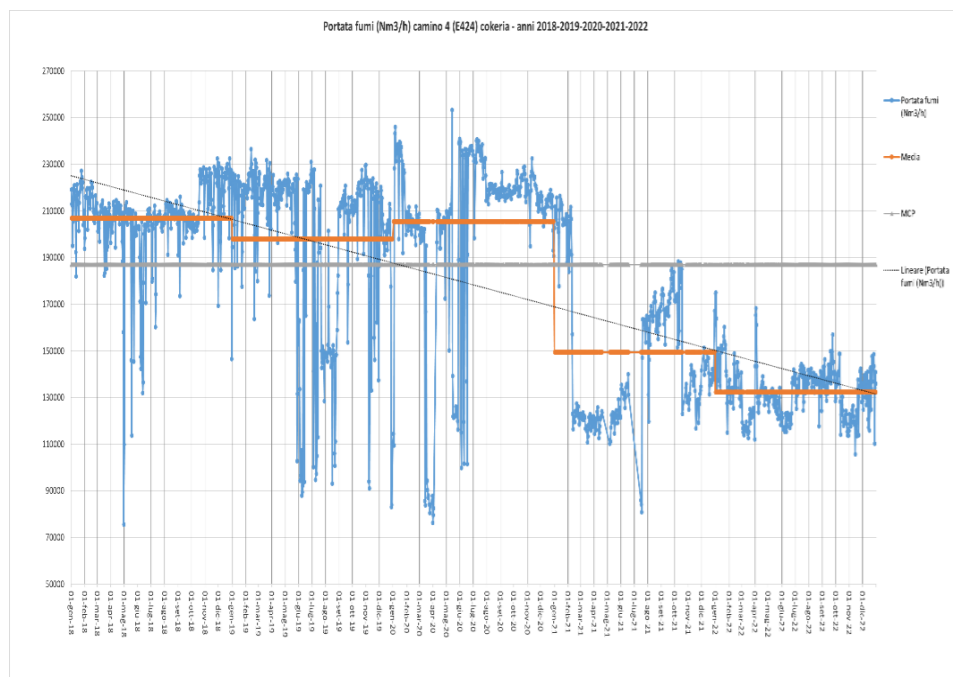
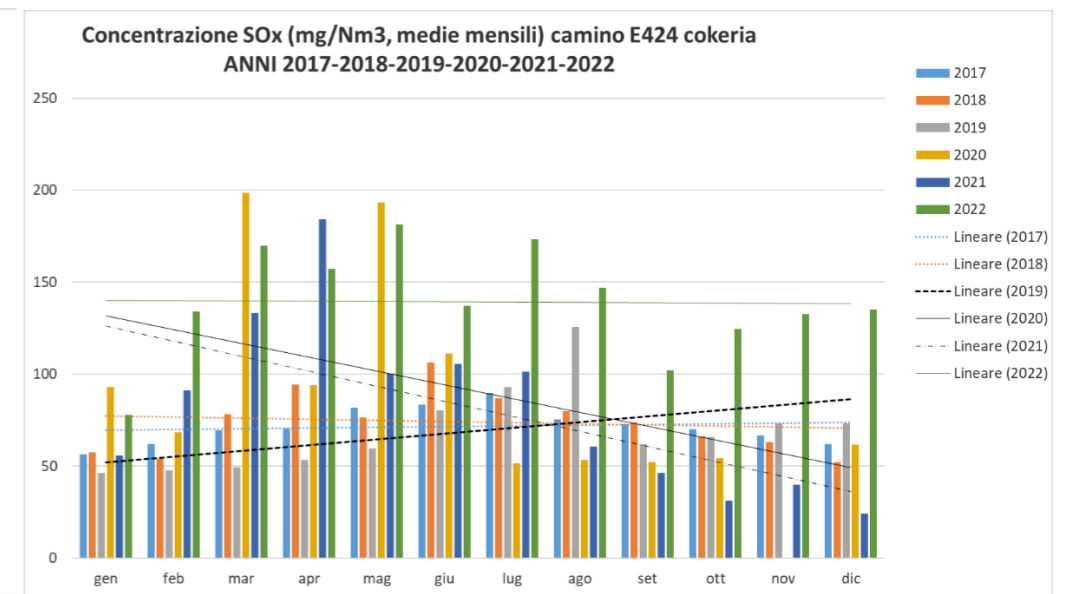
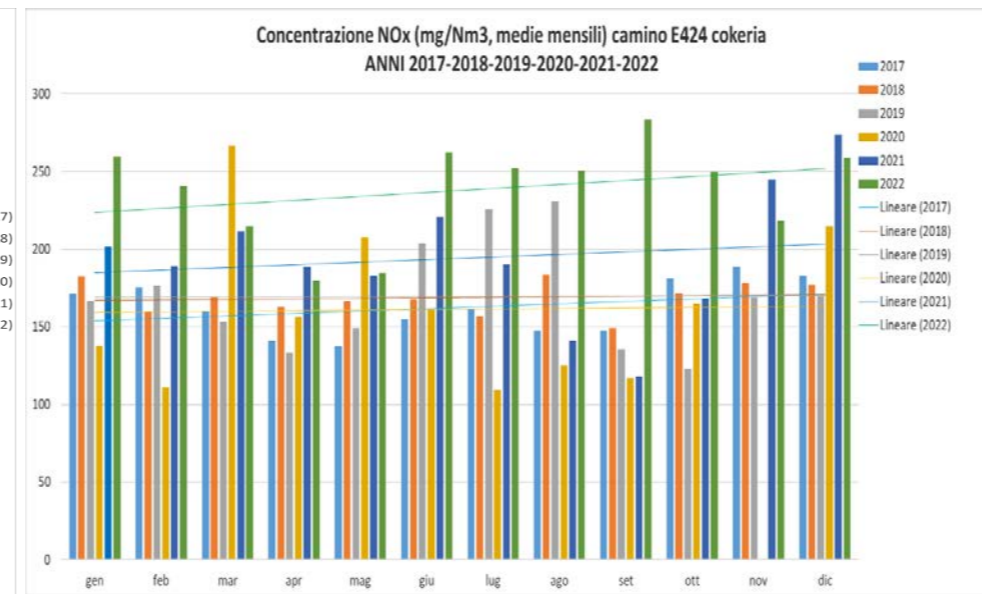
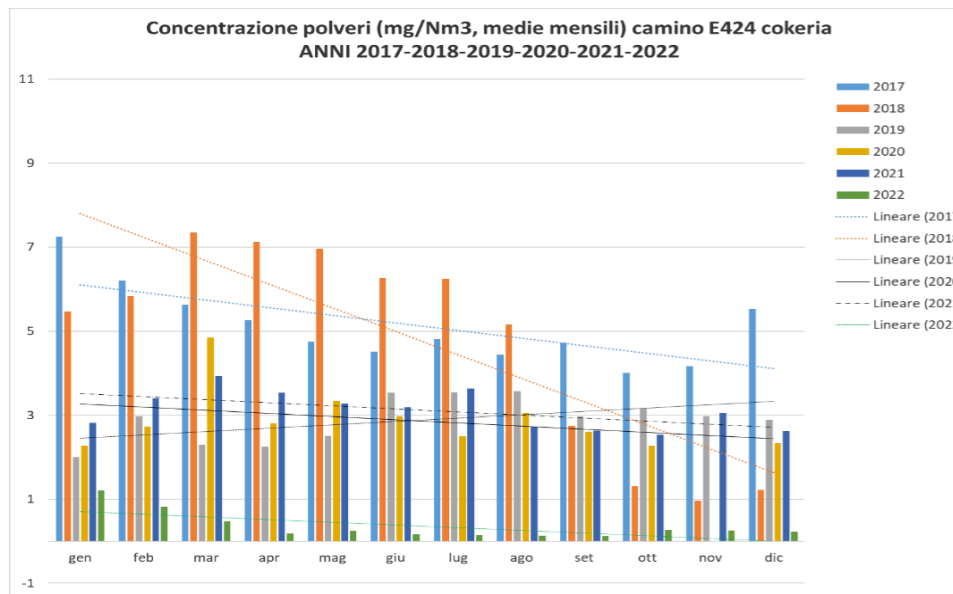
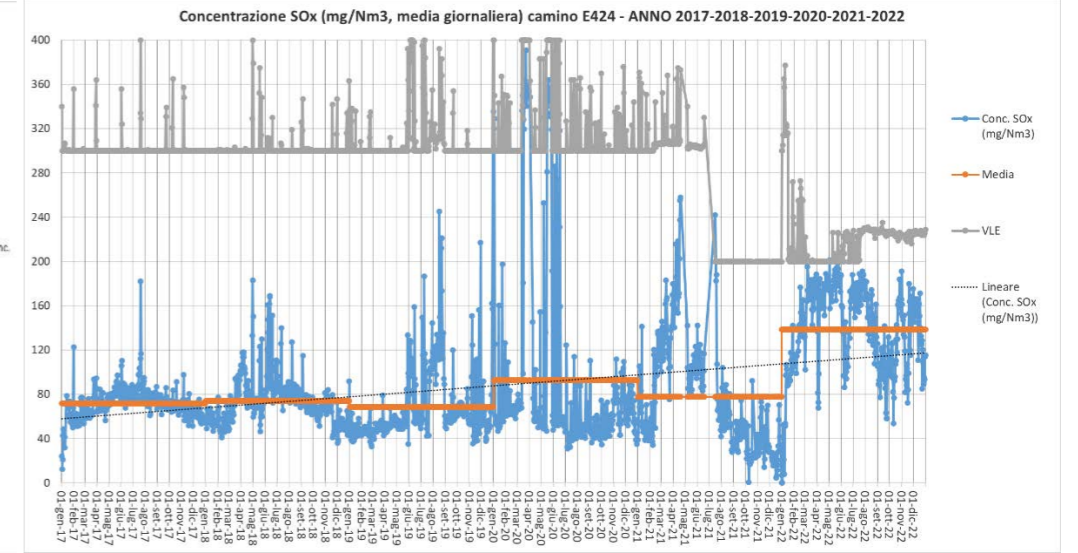
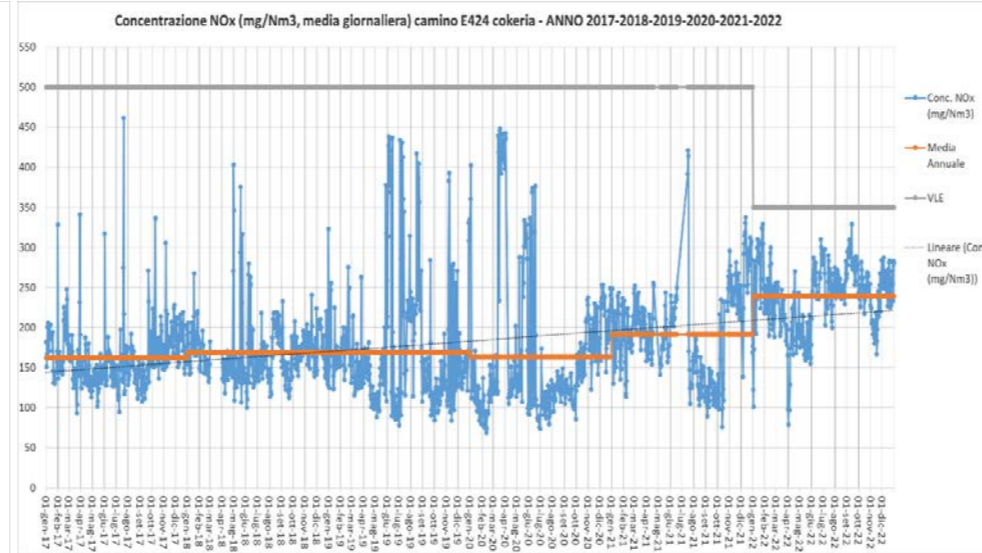
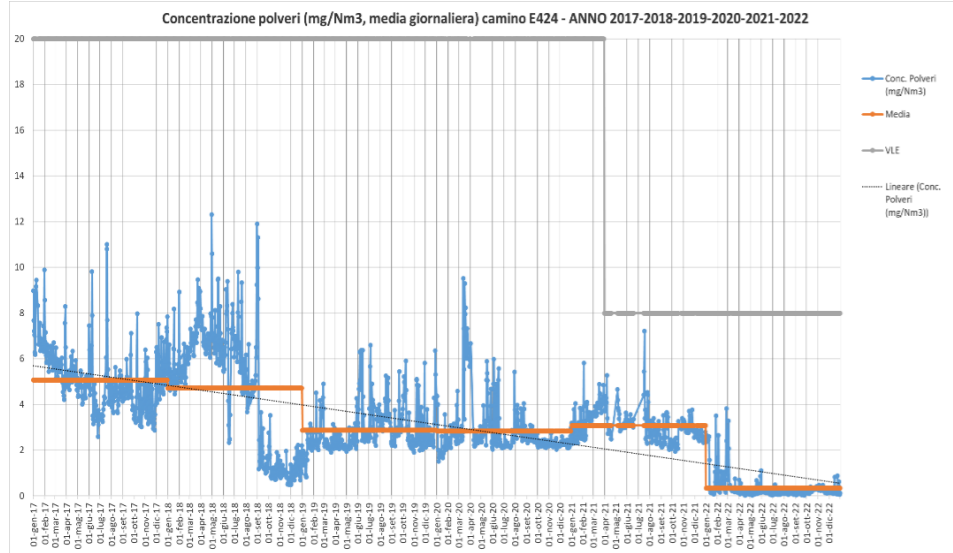
**TAVOLA 5:** Produzione di acciaio e emissioni diffuse totali nello stabilimento

**TAVOLA 6:** Produzione Agglomerato e Cokeria

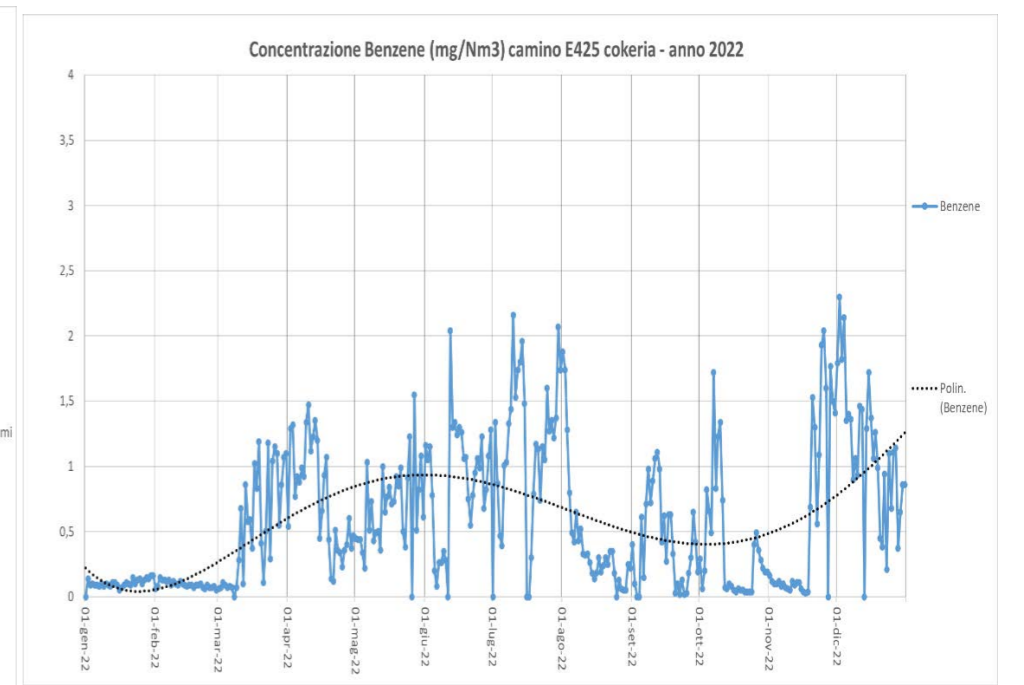
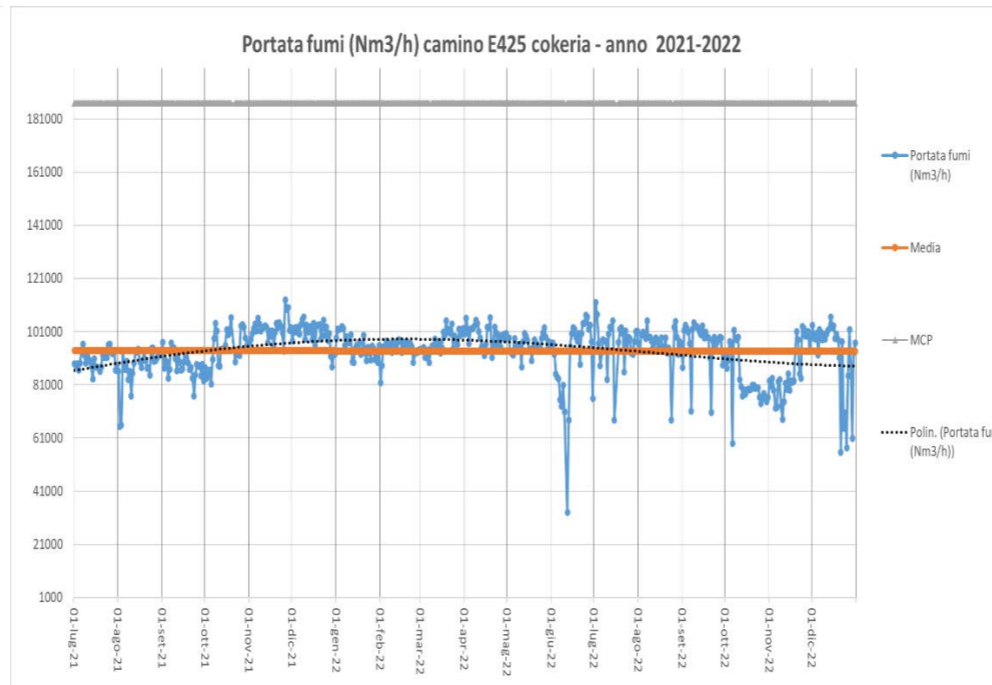
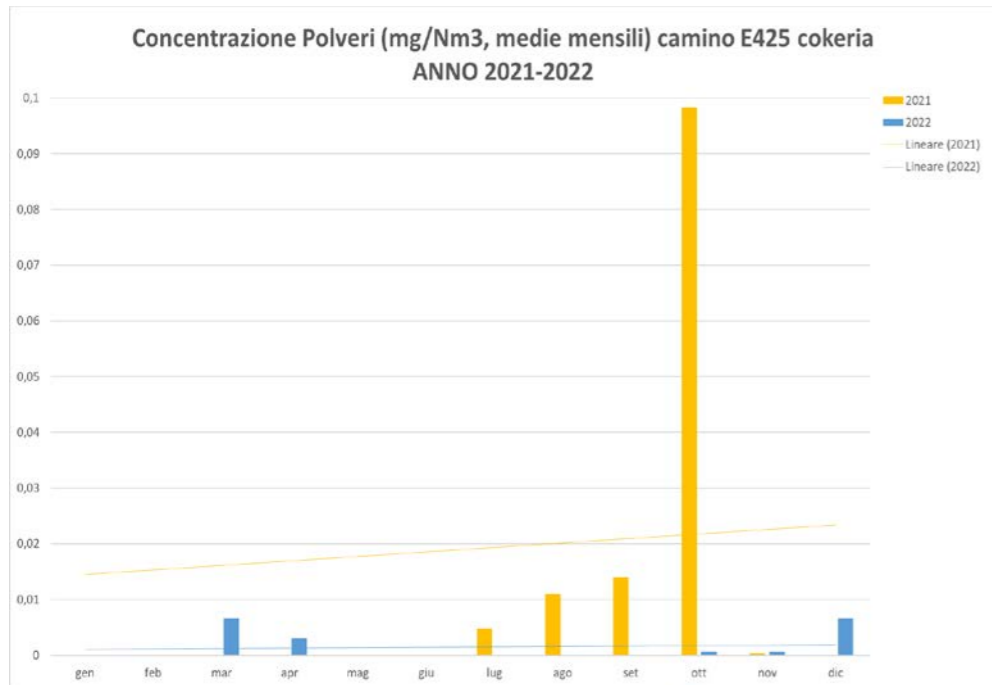
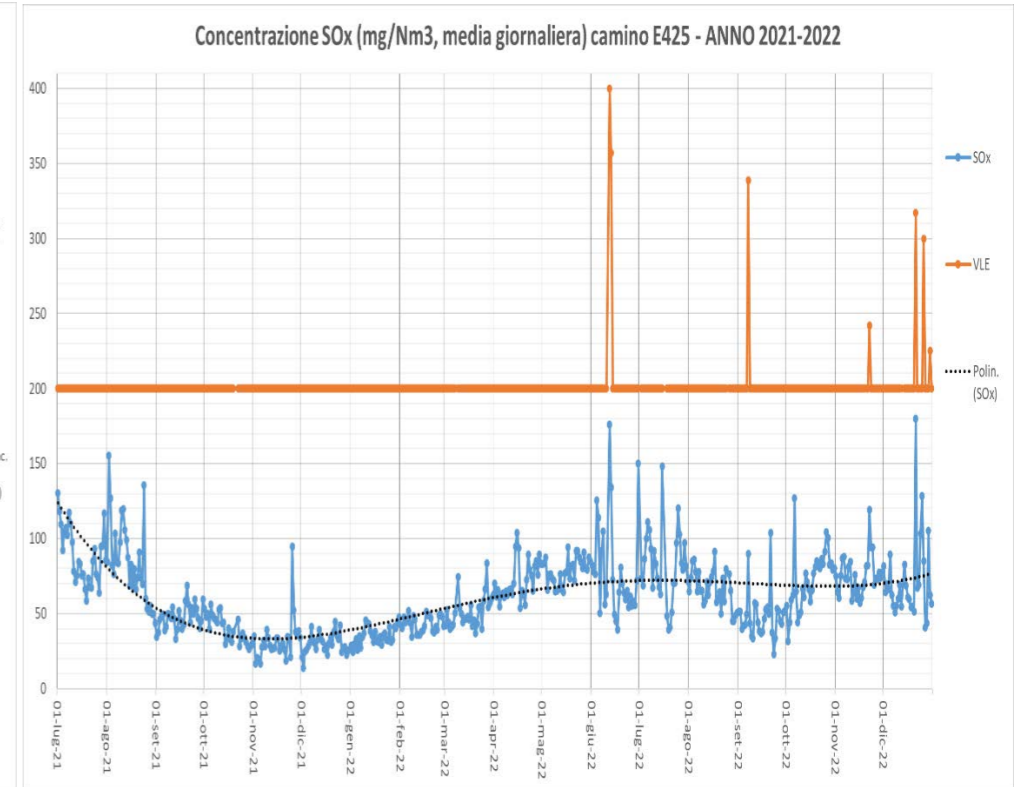
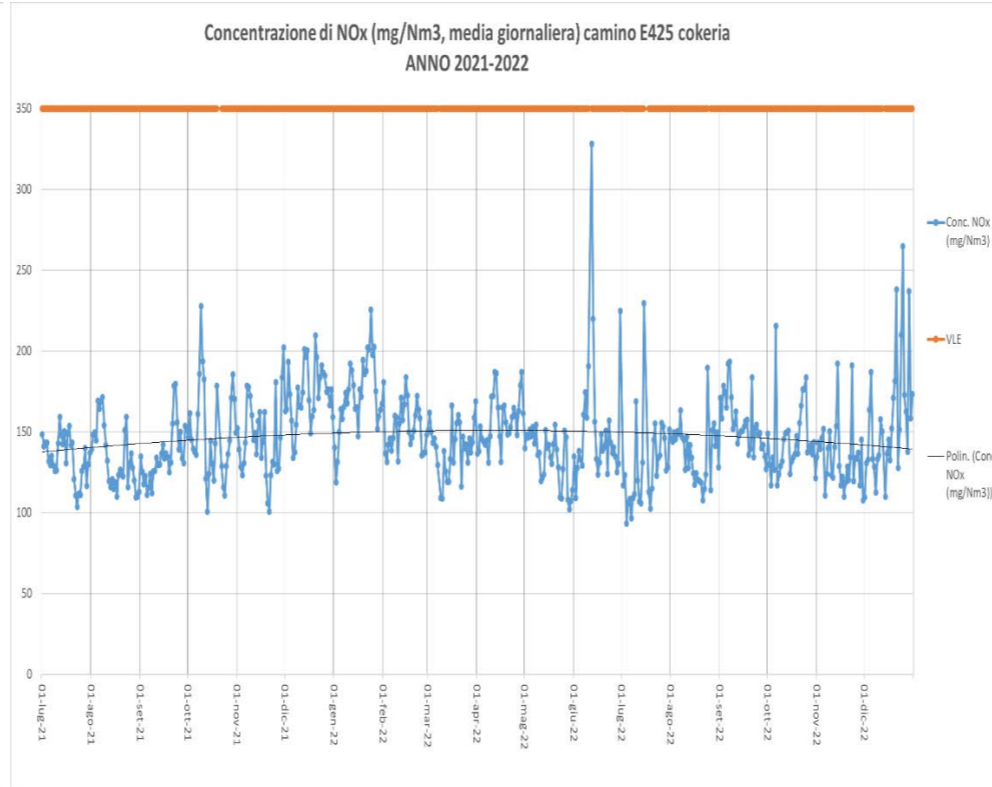
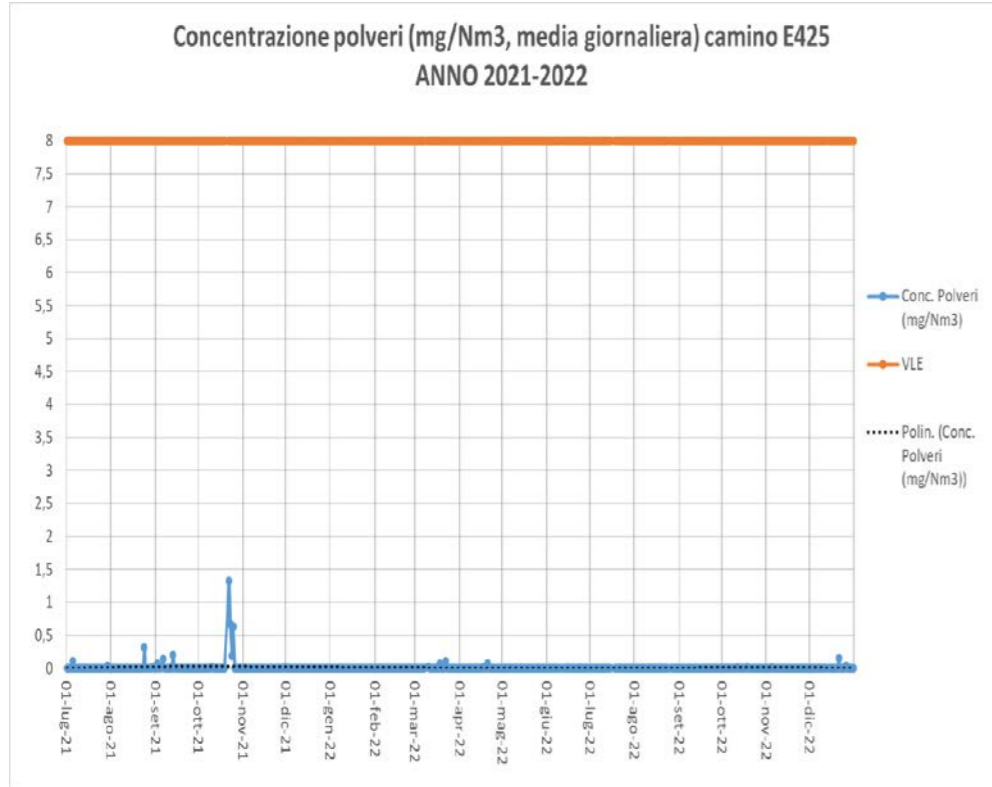
**TAVOLA 1 - Camini cokeria (COK)**

**E424, E425, E428, E435, E437**

# Camino E424

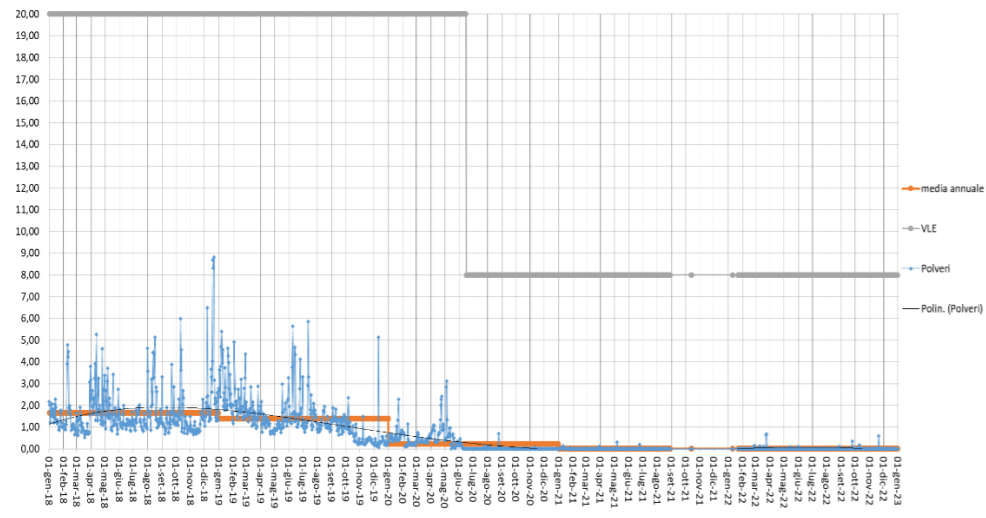


## Camino E425

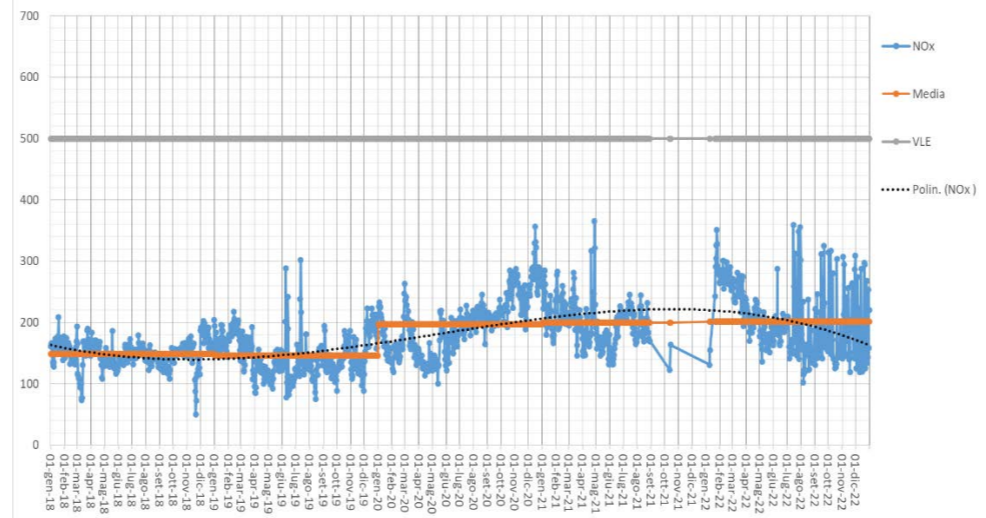


# Camino E428

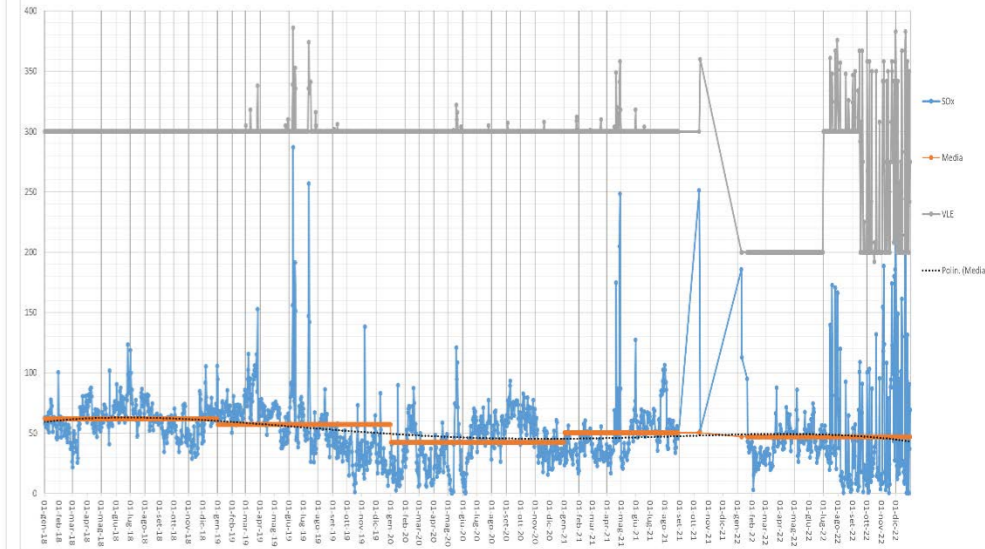
Concentrazione polveri (mg/Nm3, media giornaliera) camino E428 ANNO 2018-2019-2020-2021-2022



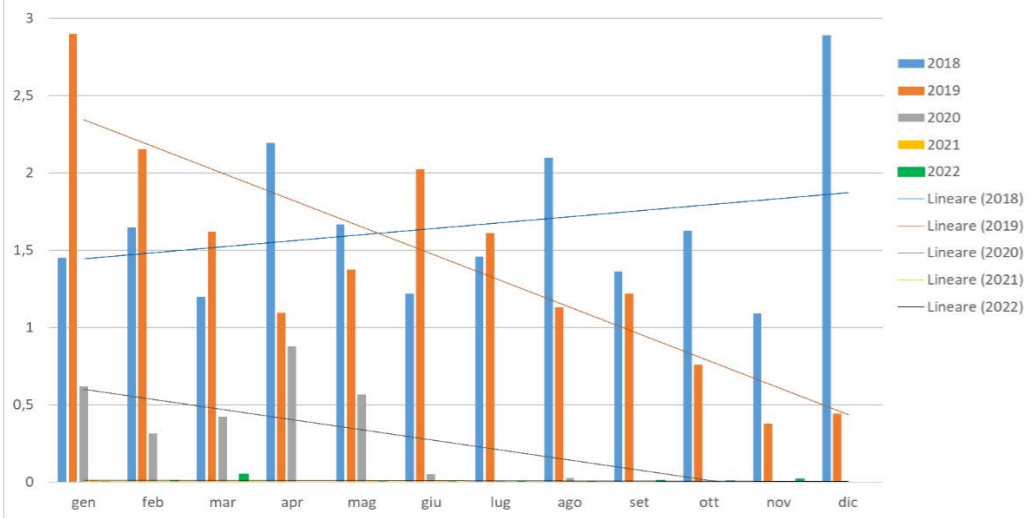
Concentrazione NOx (mg/Nm3, media giornaliera) camino E428 cokeria ANNO 2018-2019-2020-2021-2022



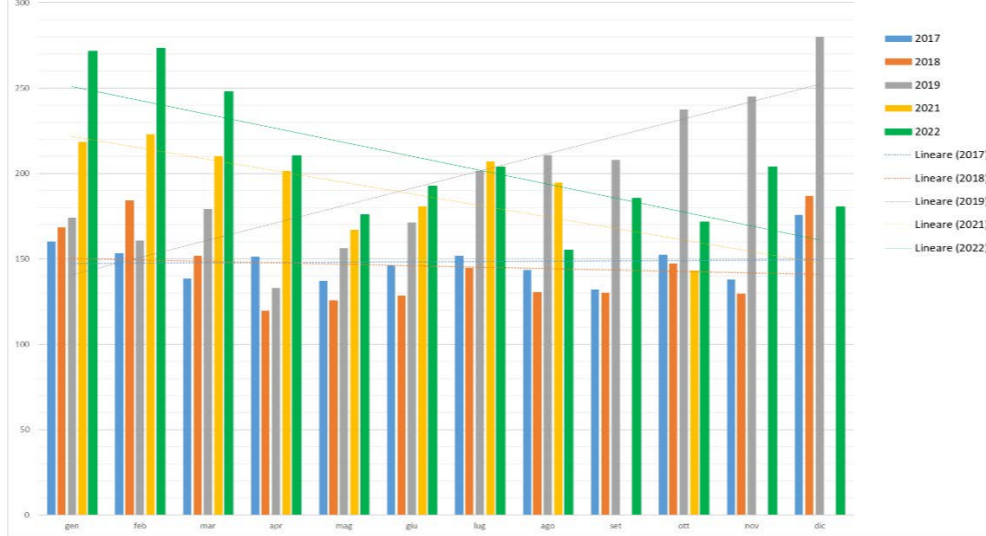
Concentrazione SOx (mg/Nm3, media giornaliera) camino E428 - ANNO 2018 - 2019 - 2020-2021-2022



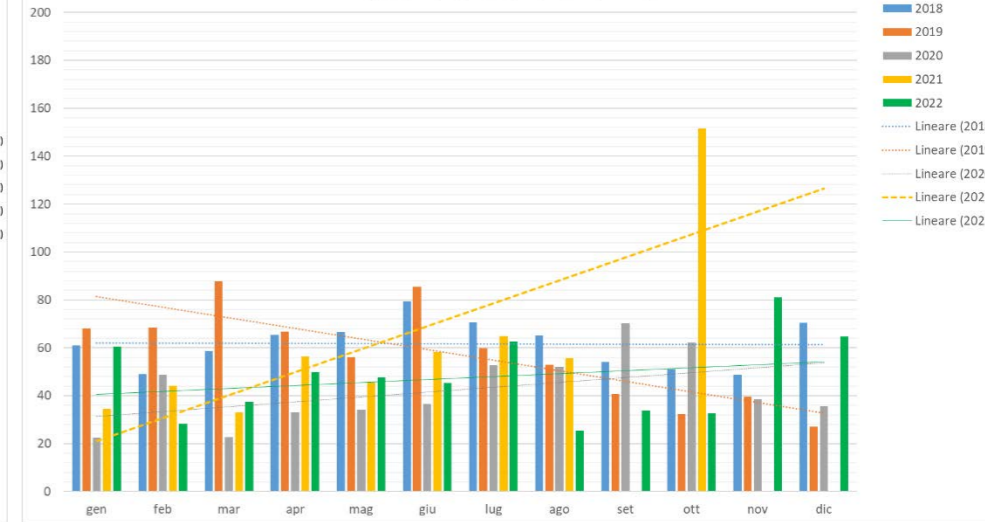
Concentrazione Polveri (mg/Nm3, medie mensili) camino E428 cokeria ANNI 2018-2019-2020-2021-2022



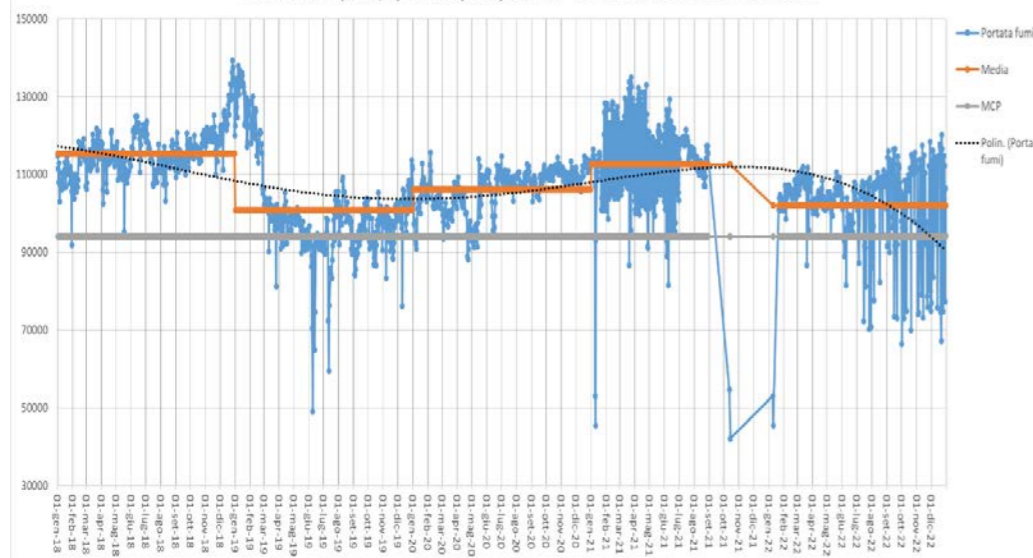
Concentrazione NOx (mg/Nm3, medie mensili) camino E428 cokeria ANNI 2018-2019-2020-2021-2022



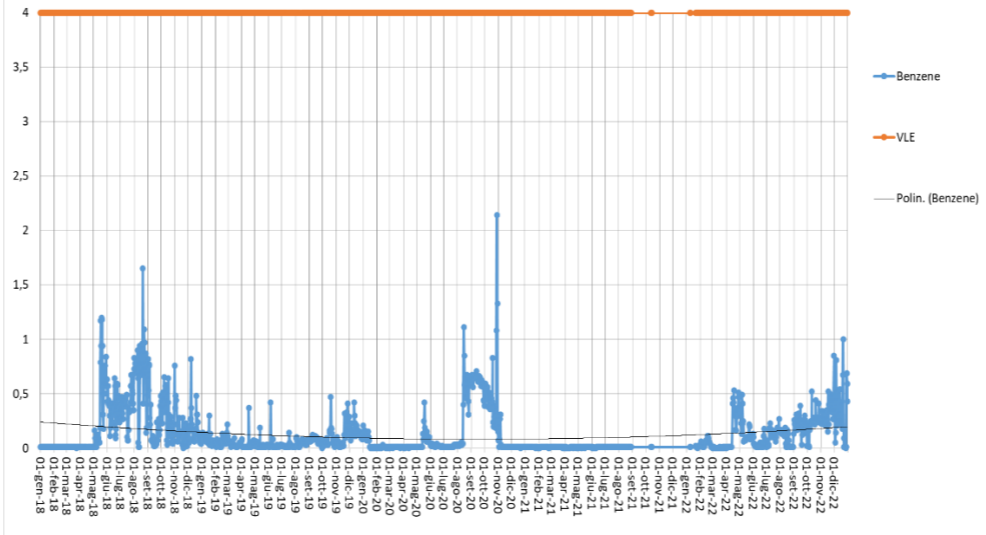
Concentrazione SOx (mg/Nm3, medie mensili) camino E428 cokeria ANNI 2018-2019-2020-2021-2022



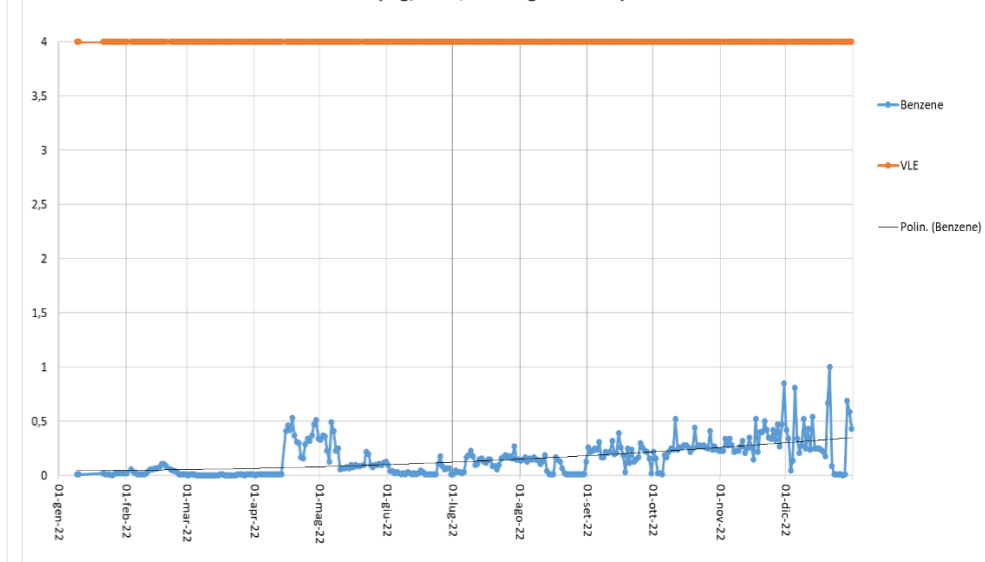
Portata fumi (Nm3/h) camino(E428) cokeria - anno 2018-2019-2020-2021-2022



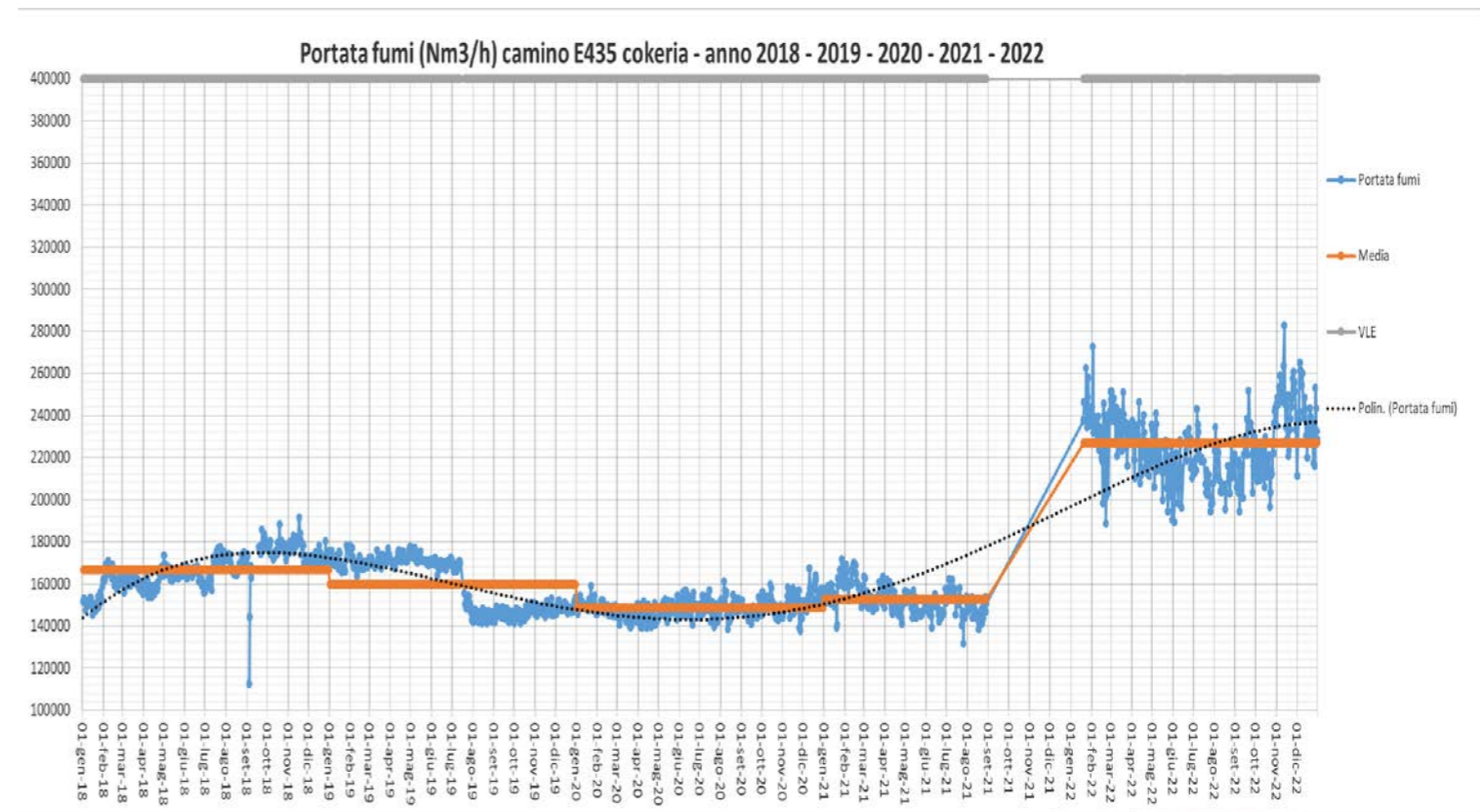
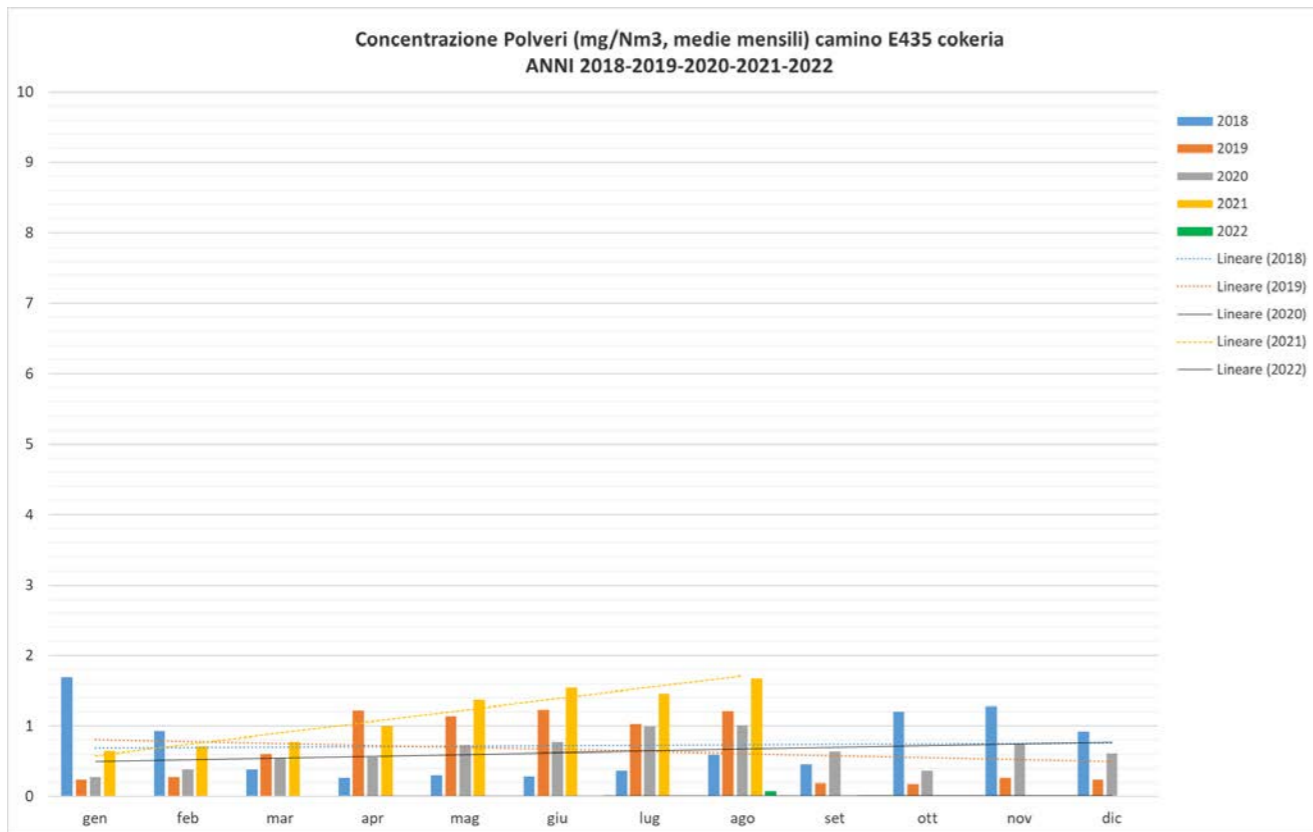
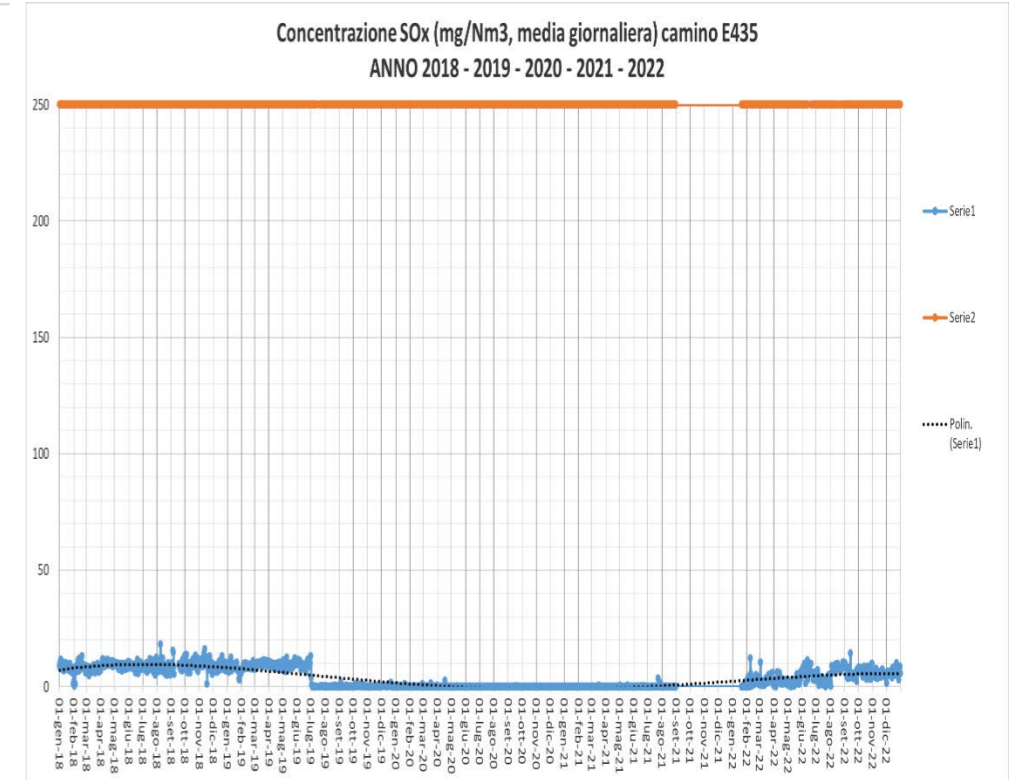
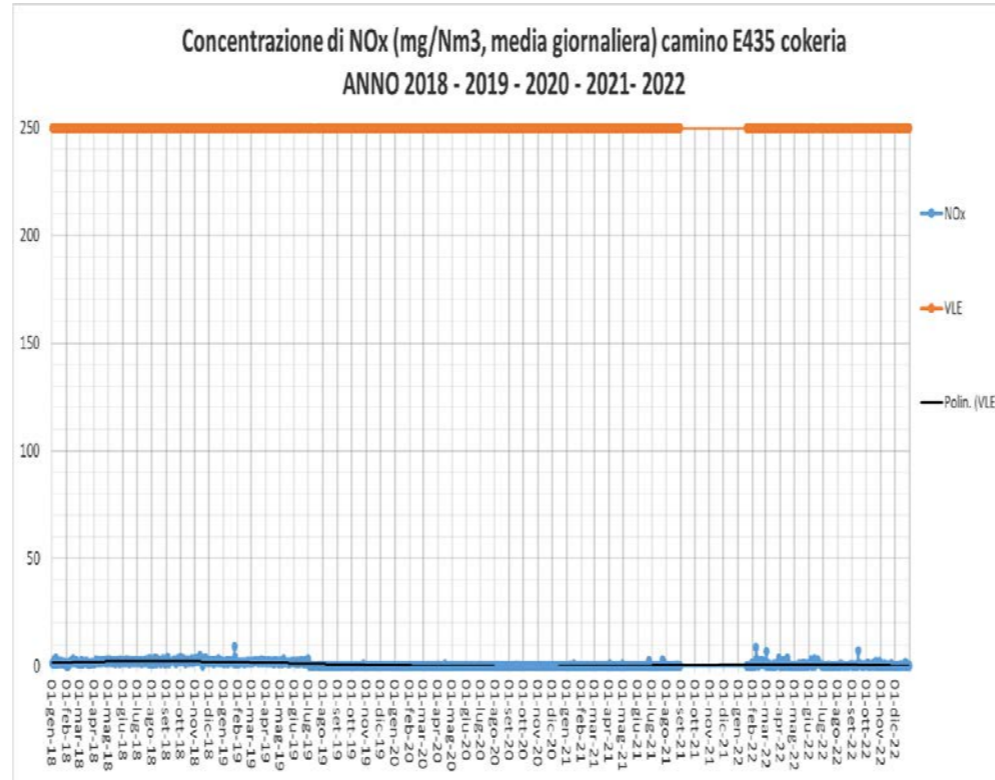
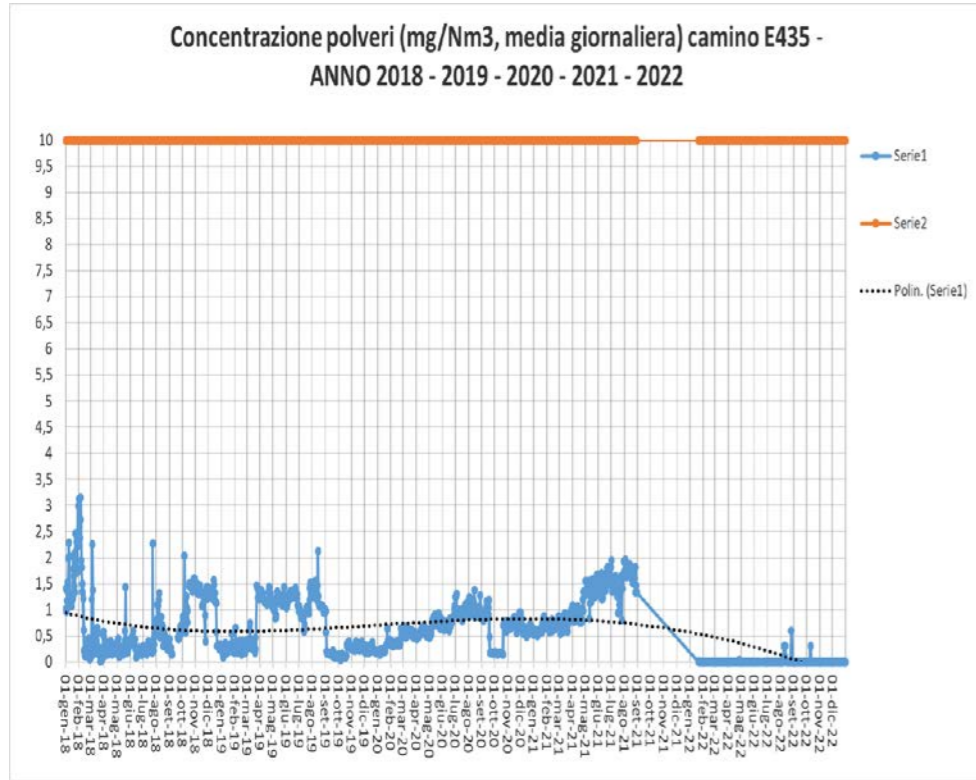
Concentrazione Benzene (mg/Nm3, media giornaliera) camino E428 ANNI 2018-2019-2020-2021-2022



Concentrazione Benzene (mg/Nm3, media giornaliera) camino E428 - ANNO 2022

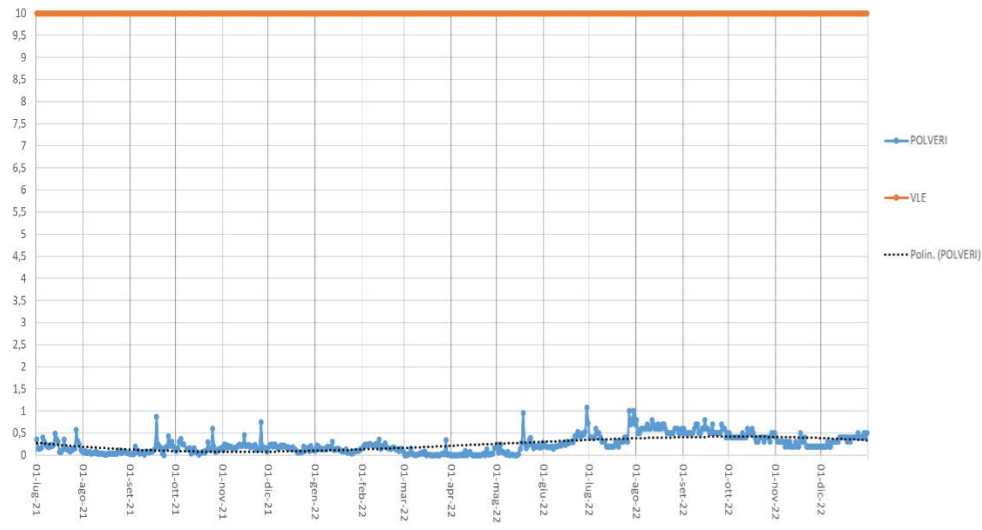


## Camino E435

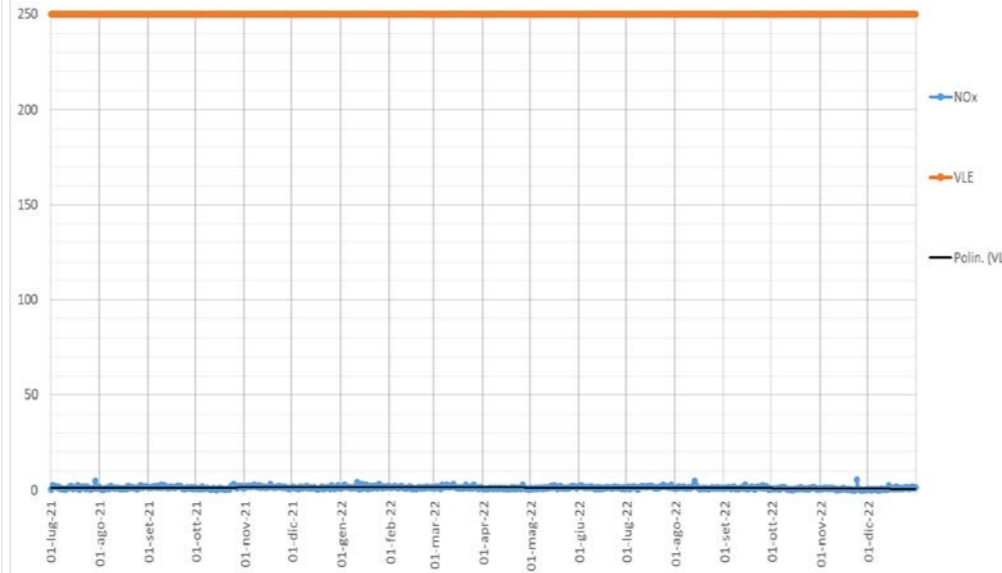


## Camino E437

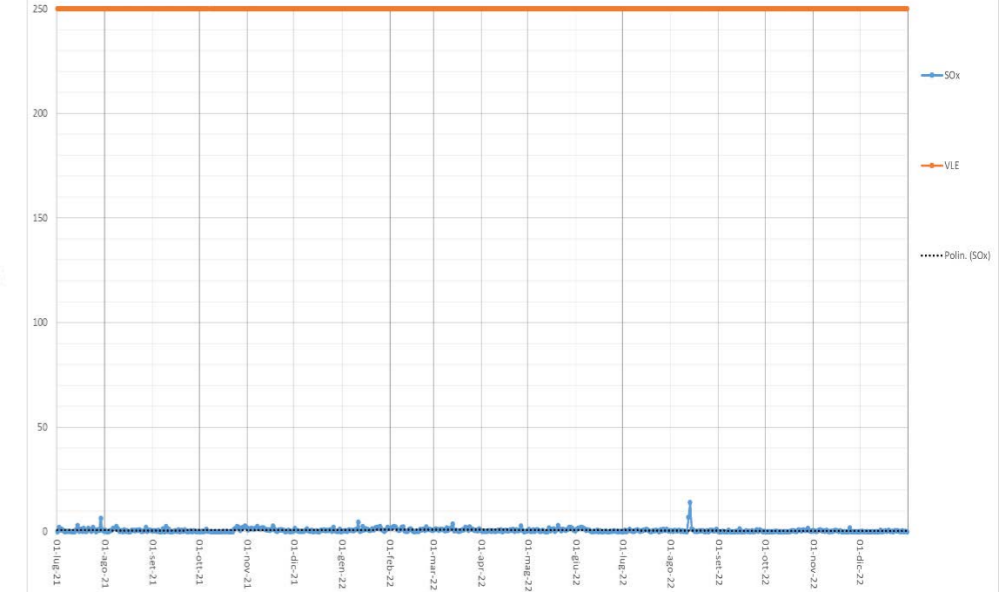
Concentrazione polveri (mg/Nm3, media giornaliera) camino E437  
ANNO 2021-2022



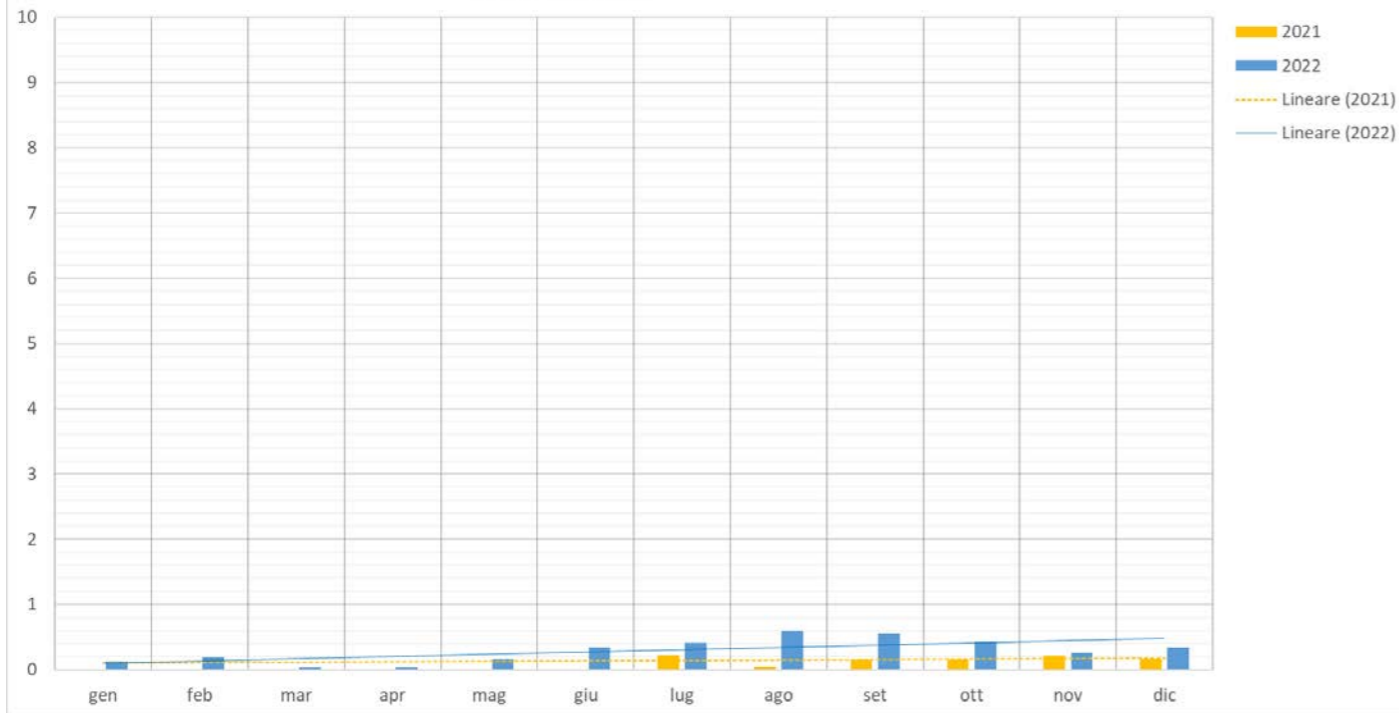
Concentrazione di NOx (mg/Nm3, media giornaliera) camino E437 cokeria  
ANNO 2021-2022



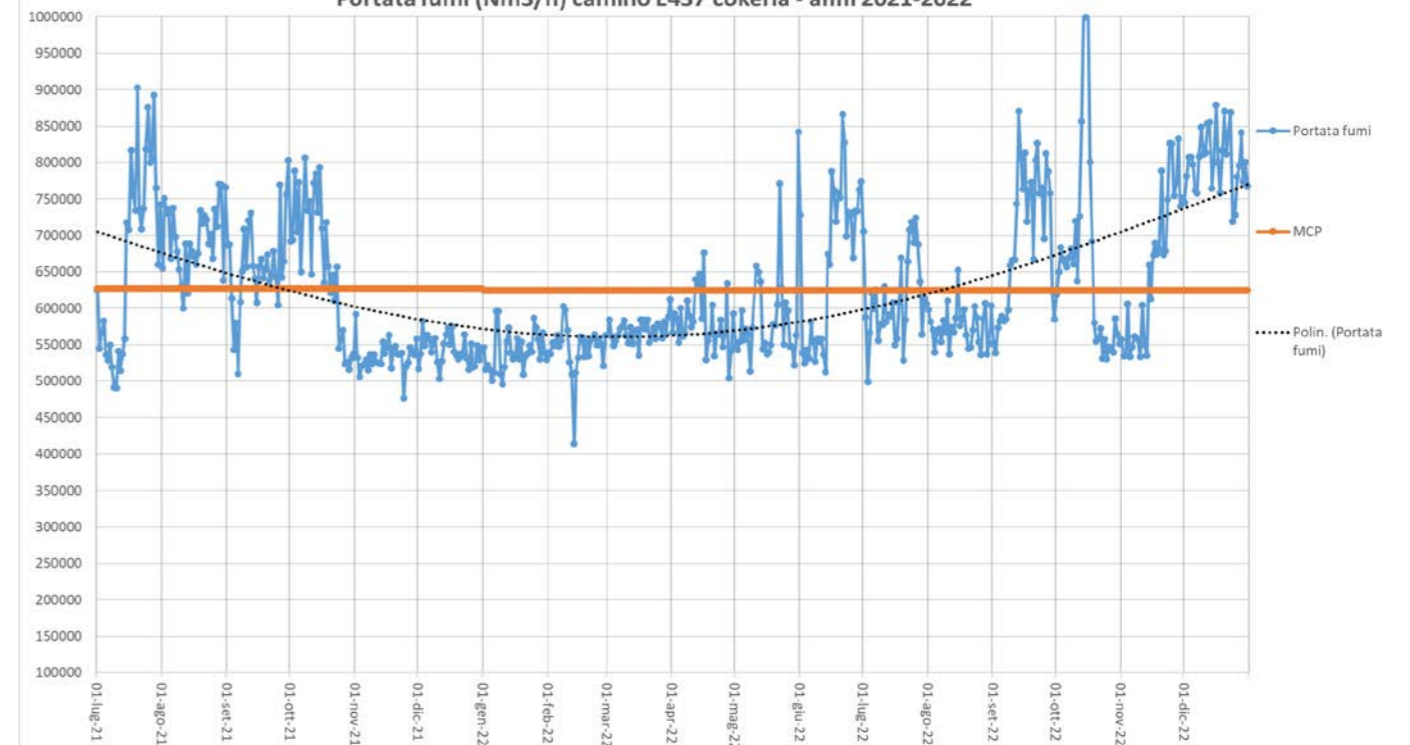
Concentrazione SOx (mg/Nm3, media giornaliera) camino E437  
ANNO 2021-2022



Concentrazione Polveri (mg/Nm3, medie mensili) camino E437 cokeria  
ANNI 2021-2022



Portata fumi (Nm3/h) camino E437 cokeria - anni 2021-2022

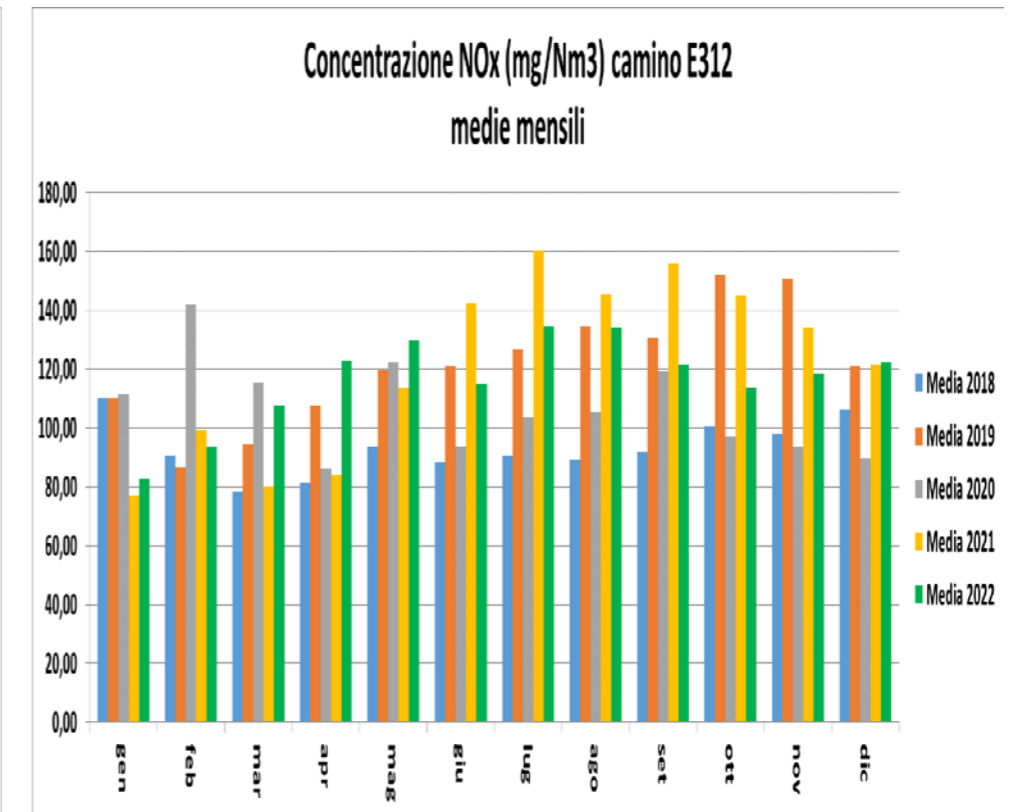
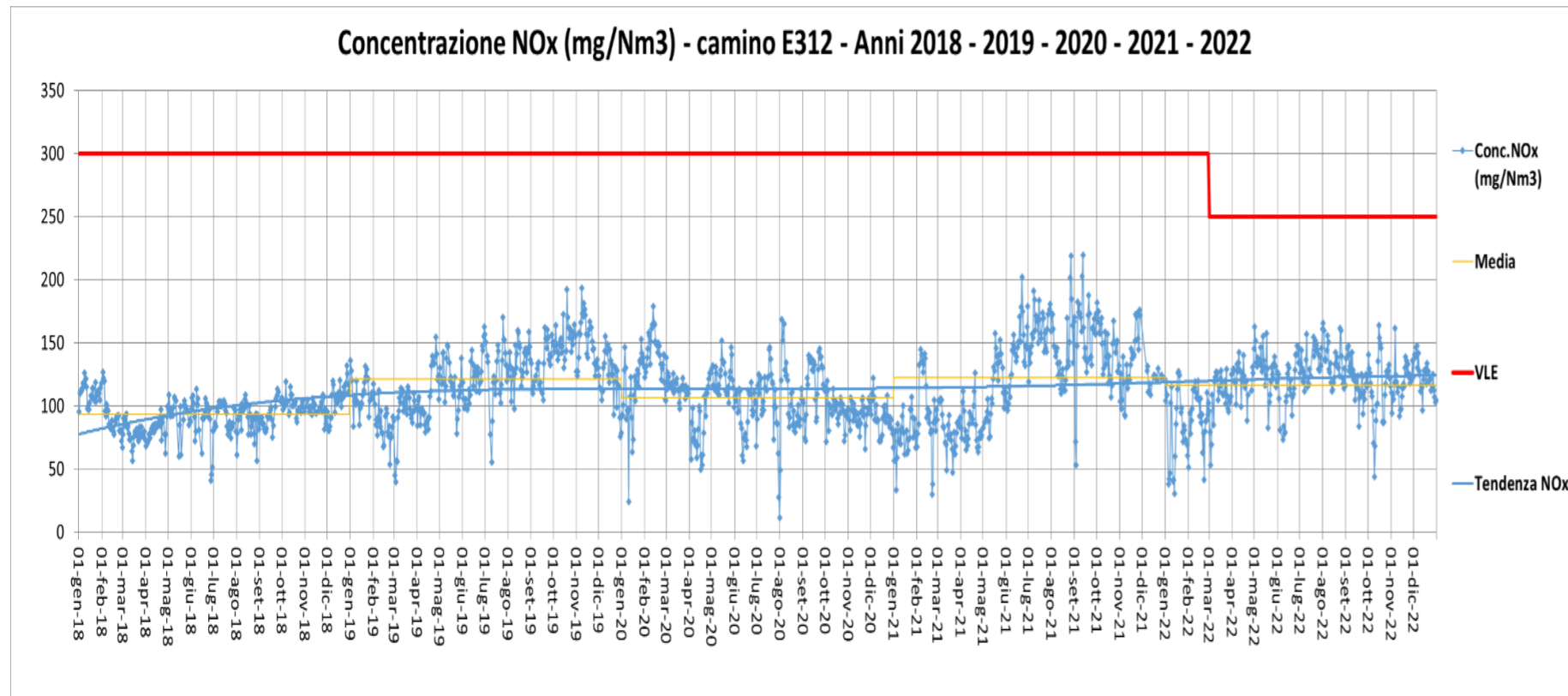
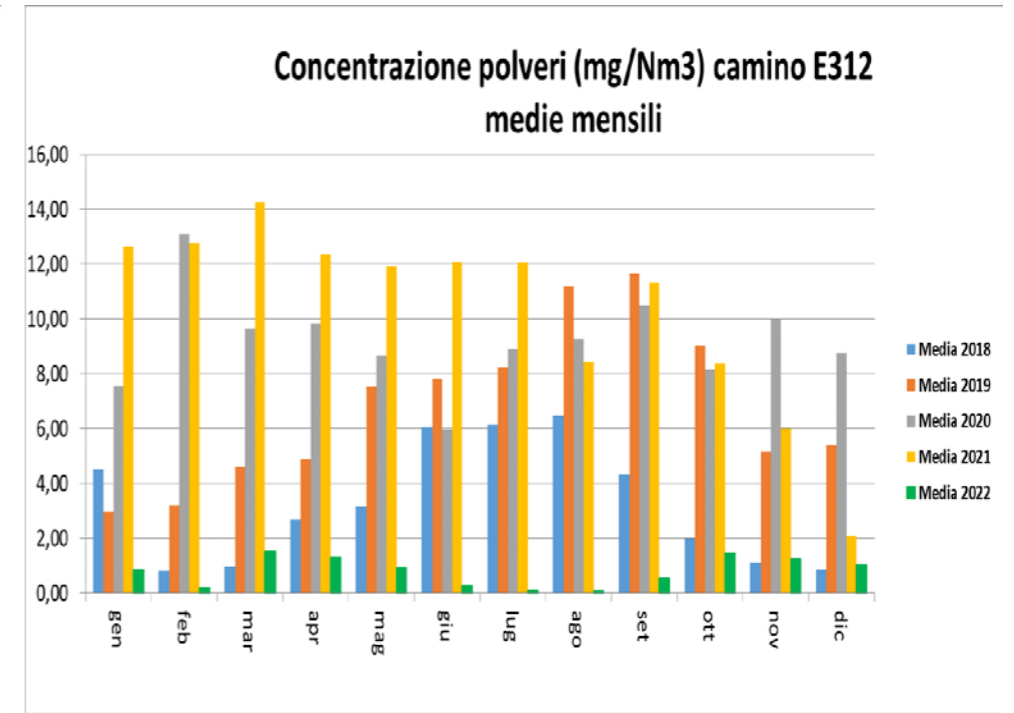
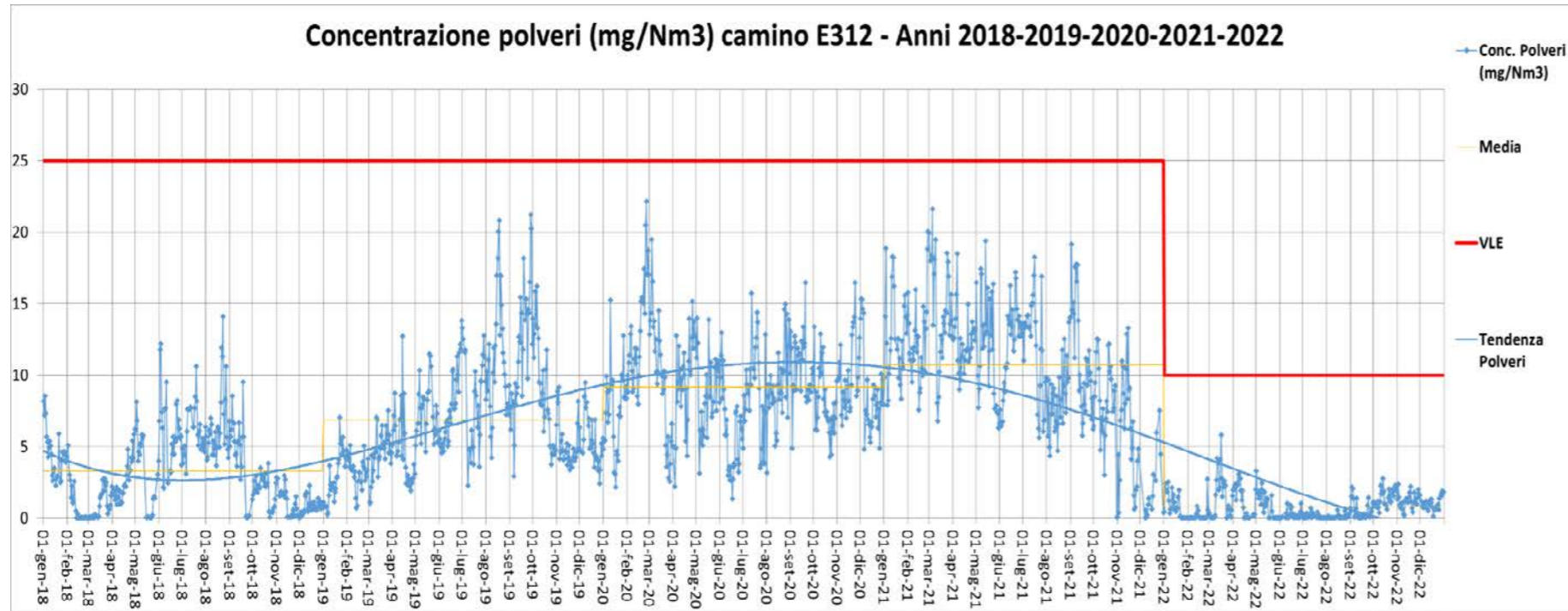


**TAVOLA 2 Camini area Agglomerato (AGL)**

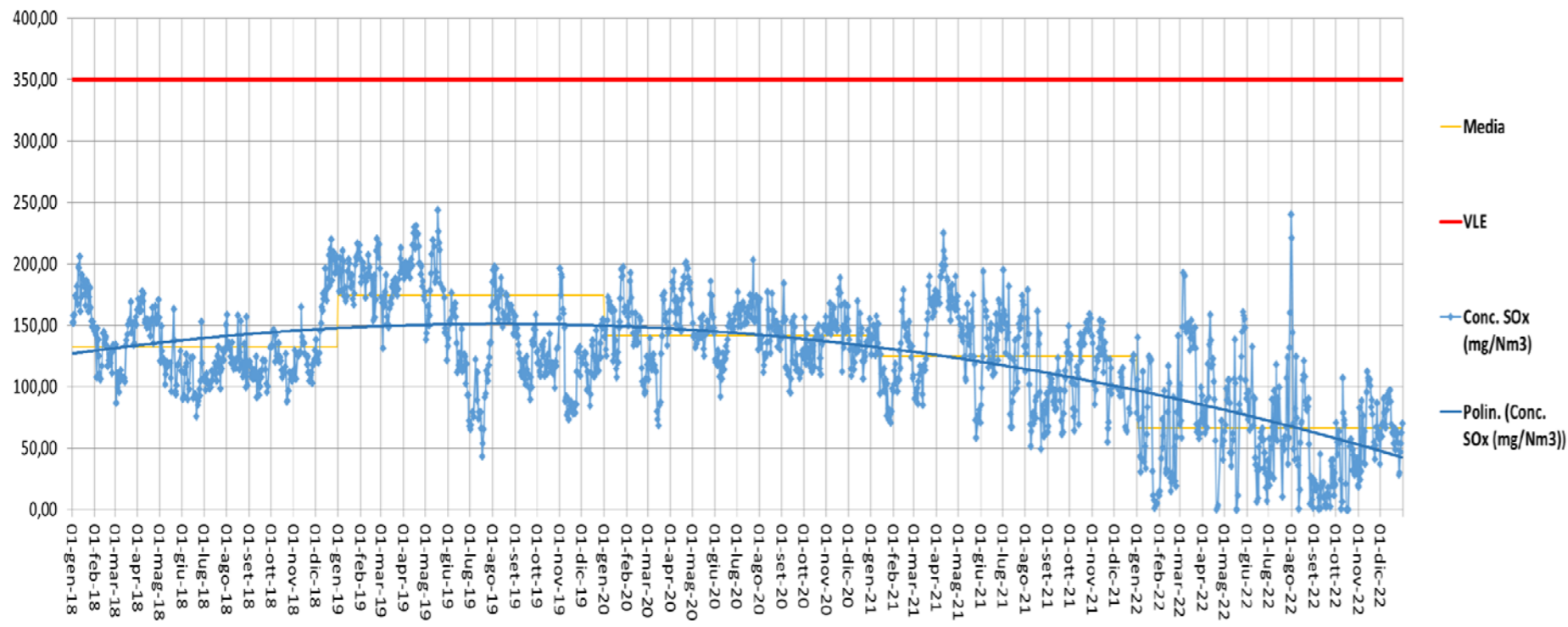
**E312, E314b, E315b, E324 e E325**



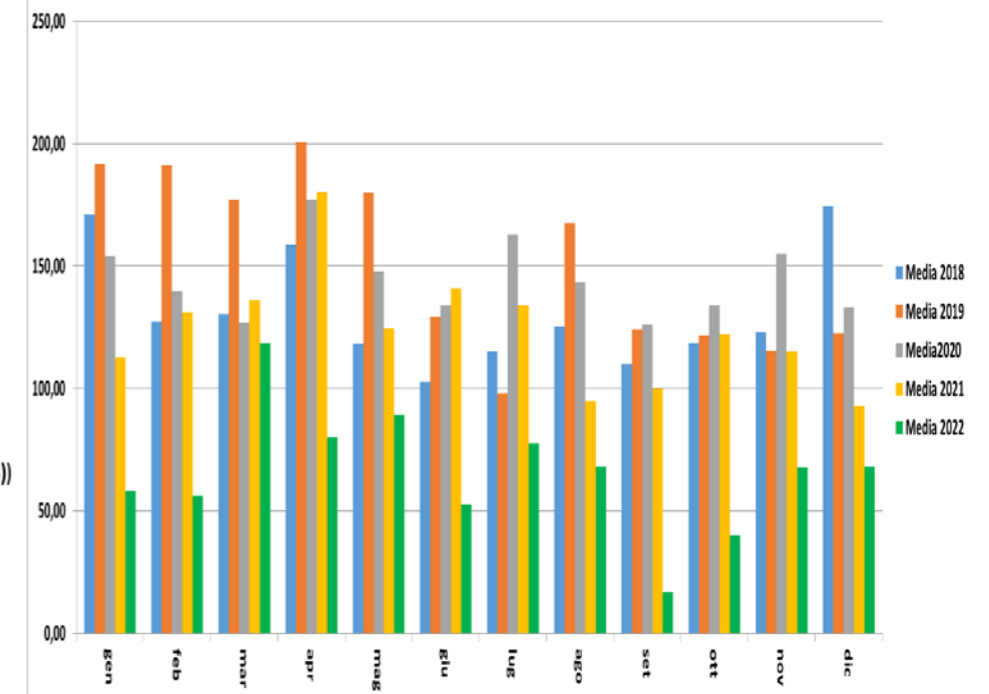
## Camino E312



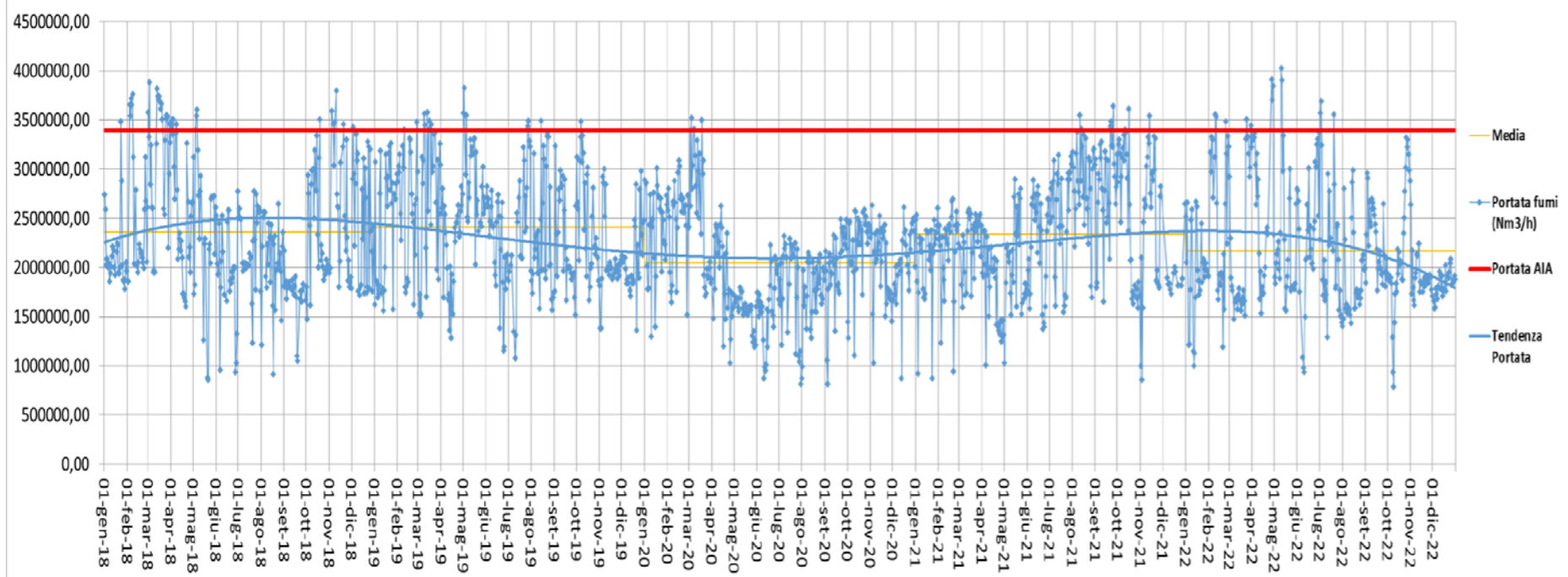
Concentrazione SOx (mg/Nm3) - Camino E312 - Anni 2018 - 2019 - 2020 - 2021 - 2022



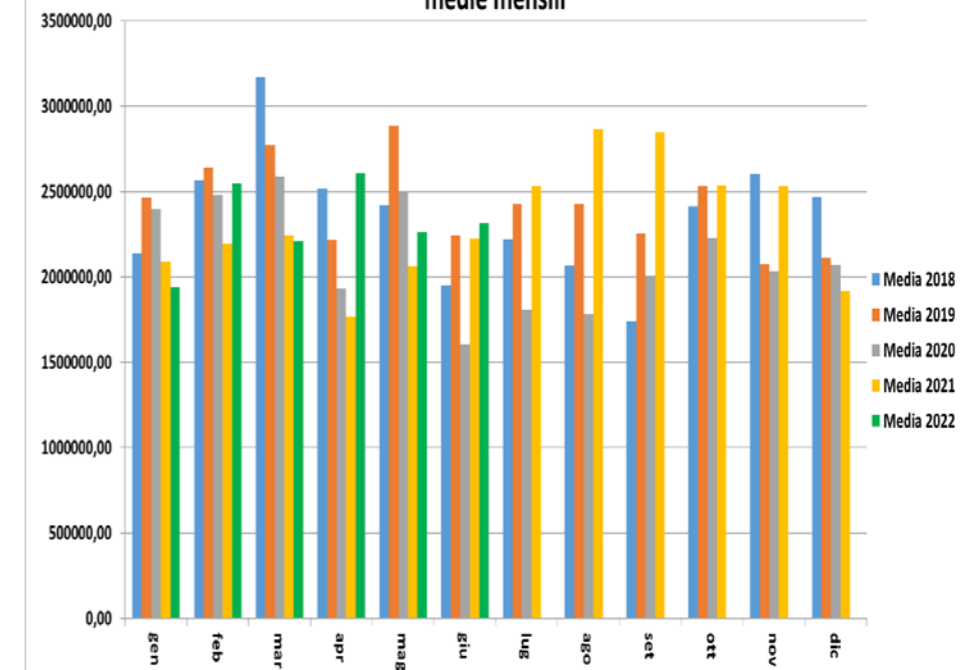
Concentrazione SOx (mg/Nm3) camino E312 medie mensili



Portata fumi (Nm3/h) - Camino E312 - Anni 2018 - 2019 - 2020 - 2021 - 2022

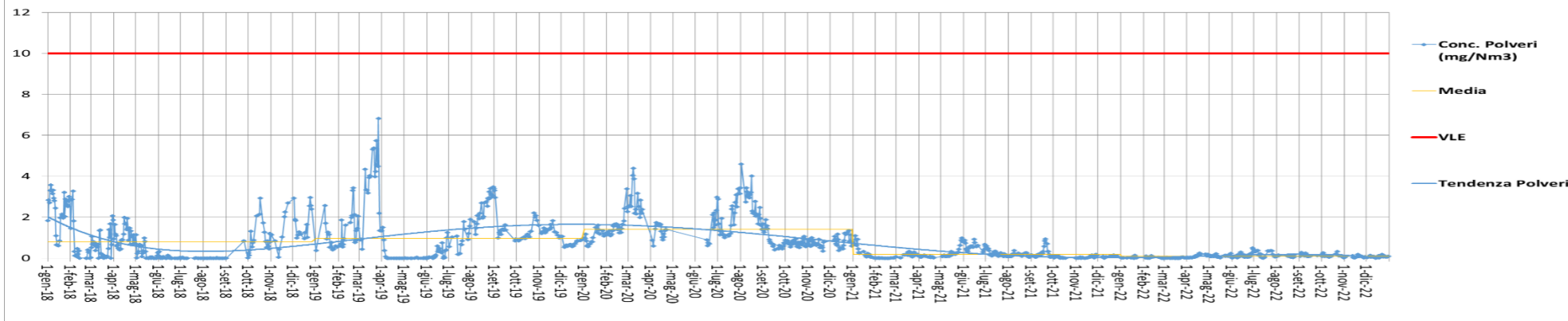


Portata fumi (Nm3/h) camino E312 medie mensili

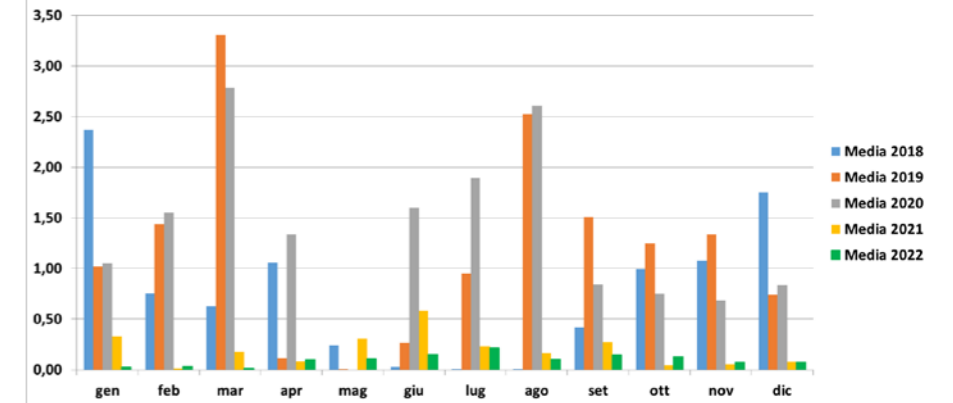


## Camino E314b

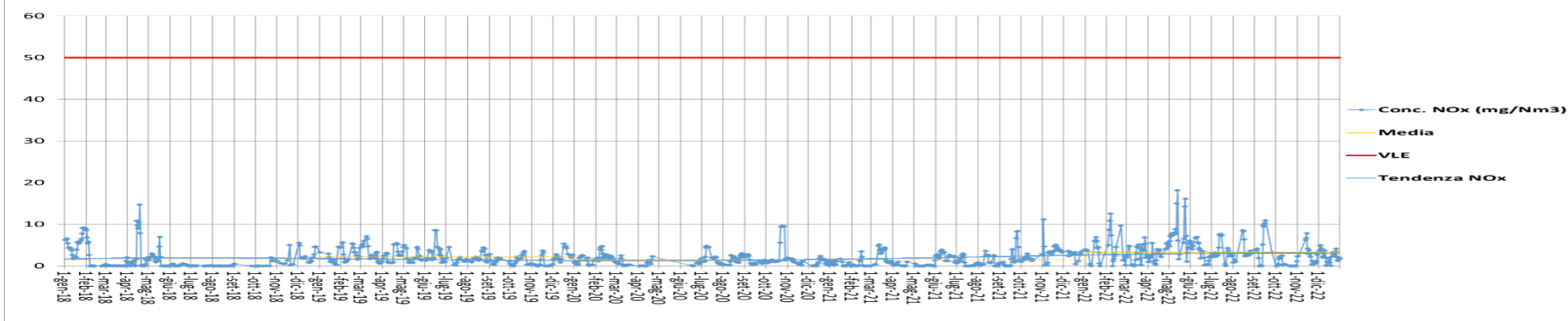
**Concentrazione polveri mg/Nm3 camino E314b - Anni 2018-2019-2020-2021-2022**



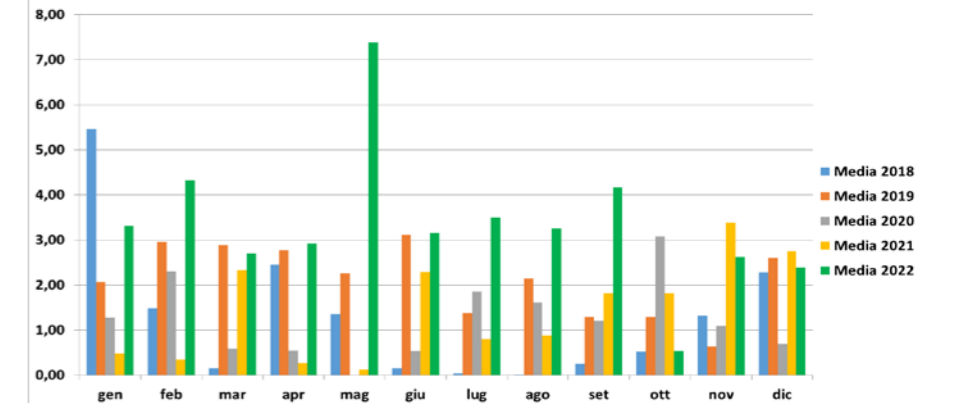
**Concentrazione polveri mg/Nm3 camino E314b**



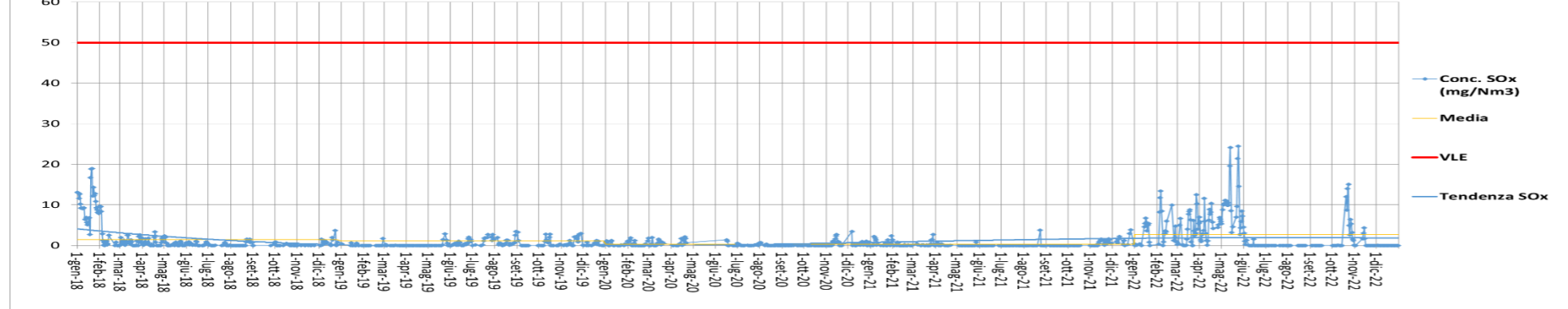
**Concentrazione NOx (mg/Nm3) camino E314b - Anni 2018-2019-2020-2021-2022**



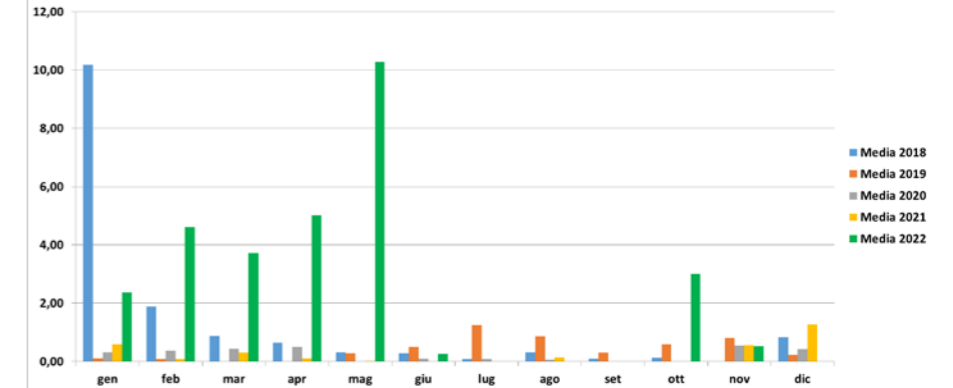
**Concentrazione NOx mg/Nm3 camino E314b**



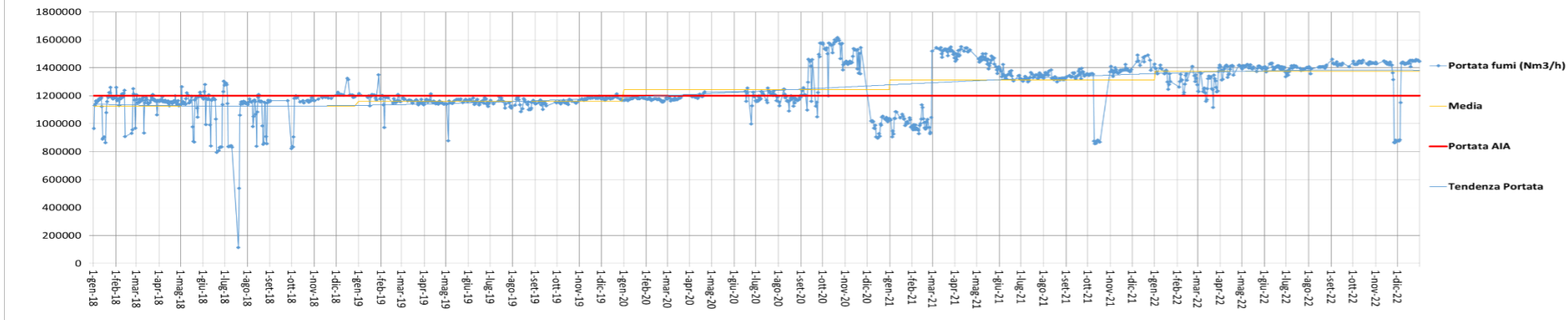
**Concentrazione SOx (mg/Nm3) camino E314b - Anni 2018-2019-2020-2021-2022**



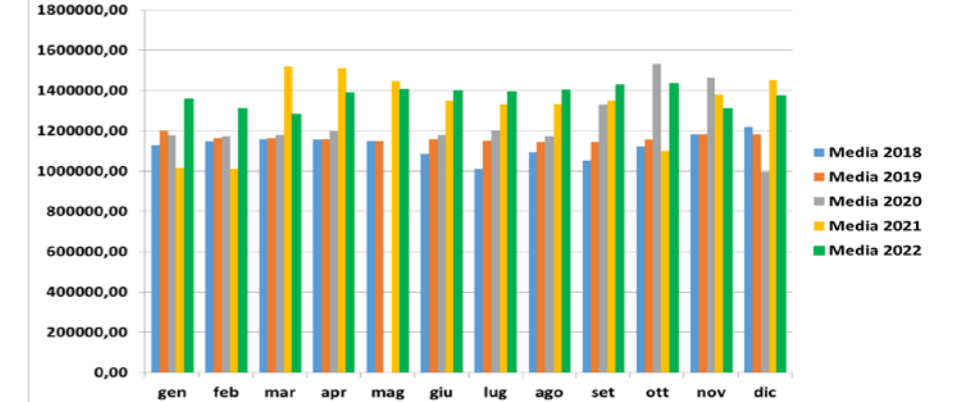
**Concentrazione SOx mg/Nm3 camino E314b**



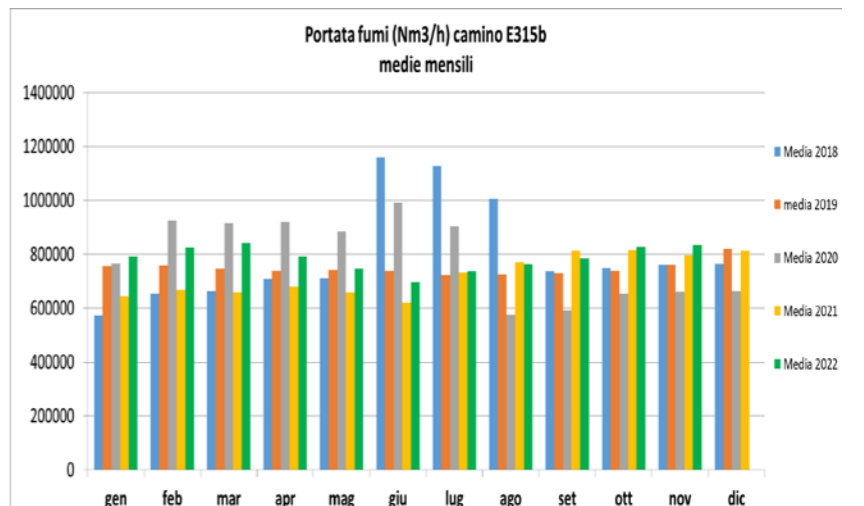
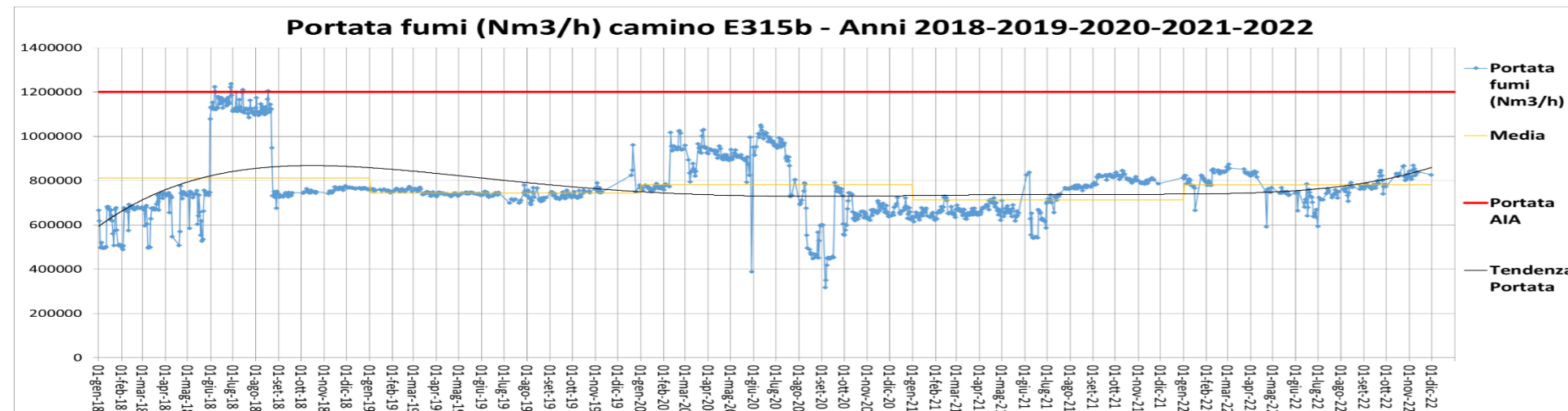
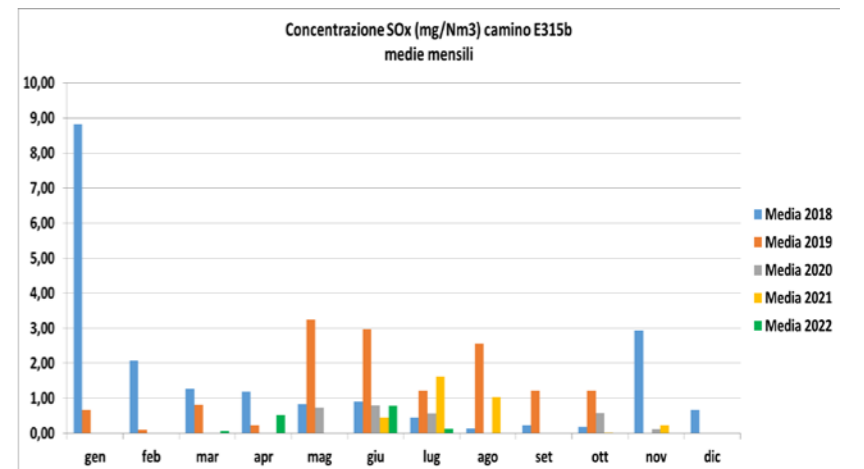
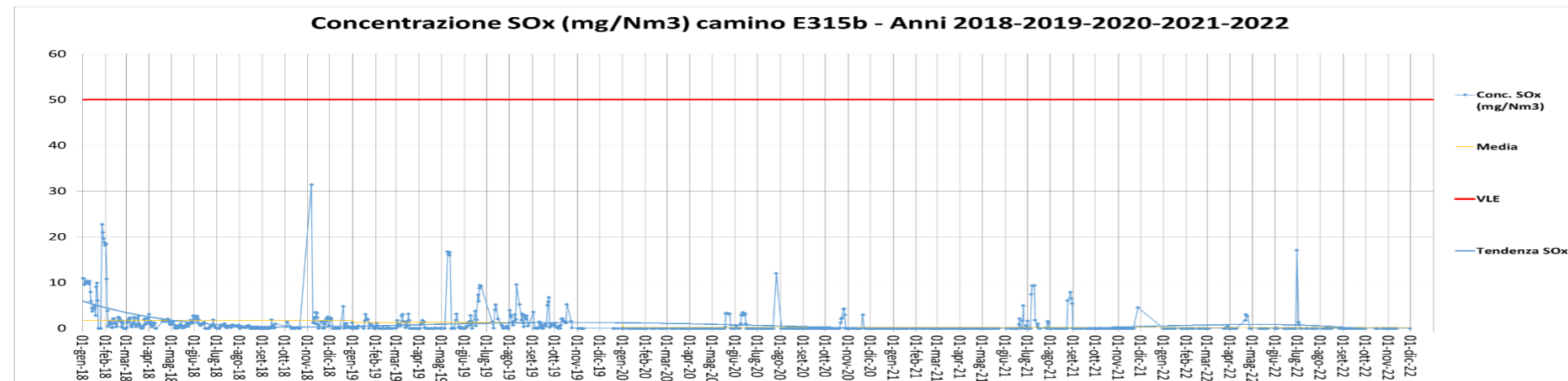
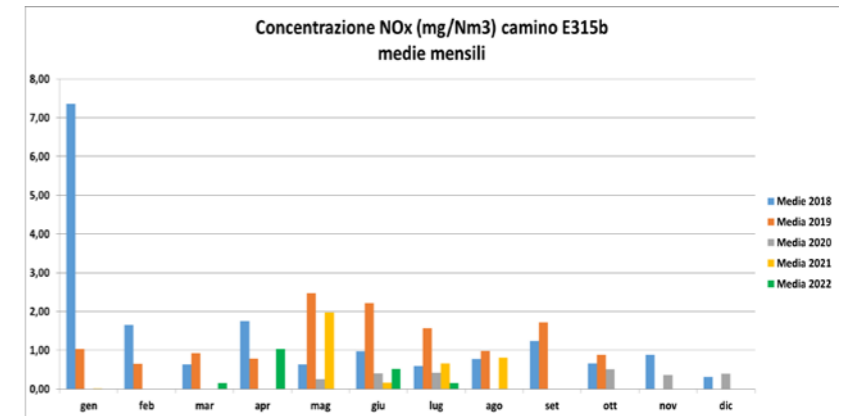
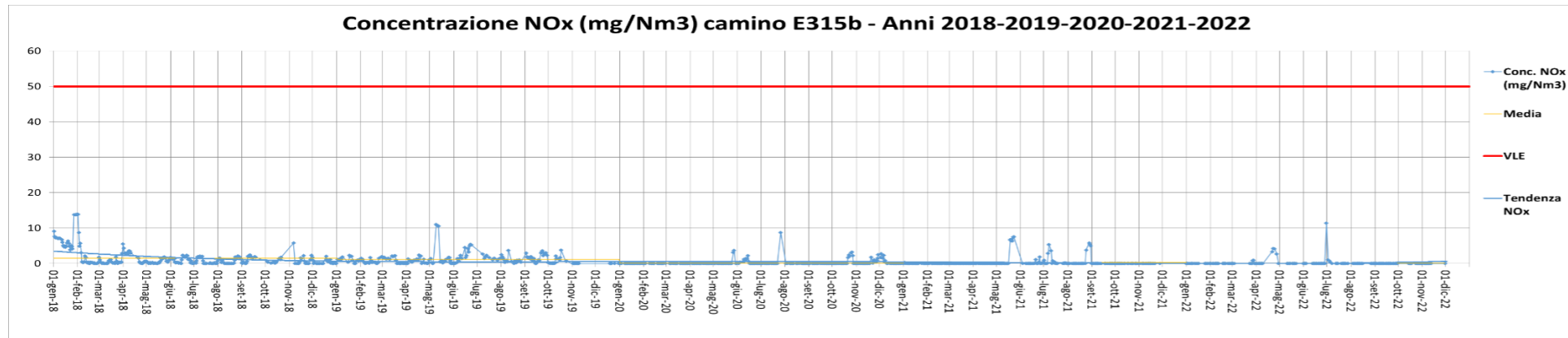
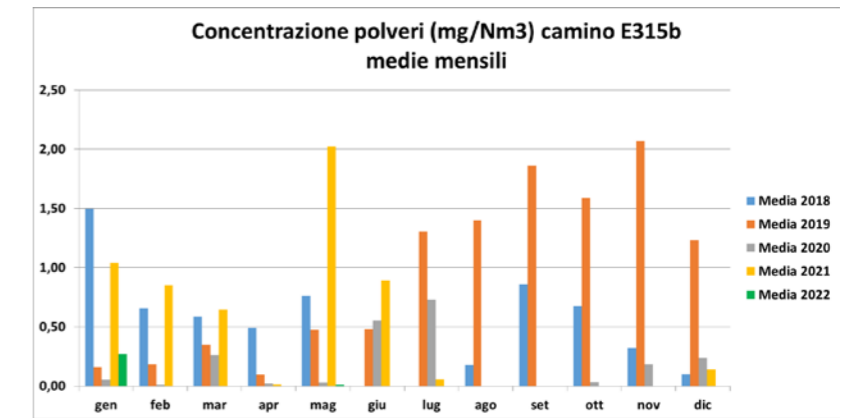
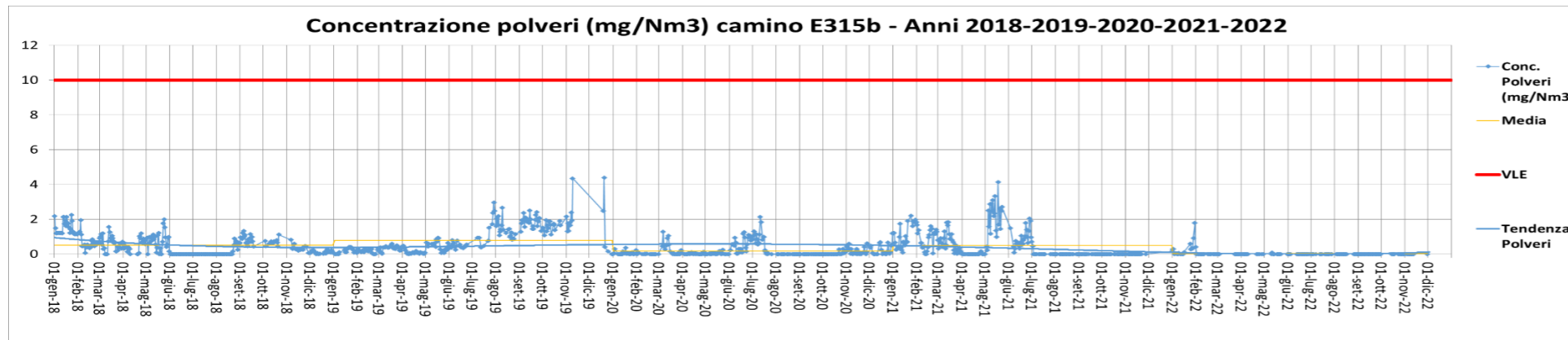
**Portata fumi Nm3/h camino E314b - Anni 2018-2019-2020-2021- 2022**



**Portata fumi Nm3/h camino E314b**

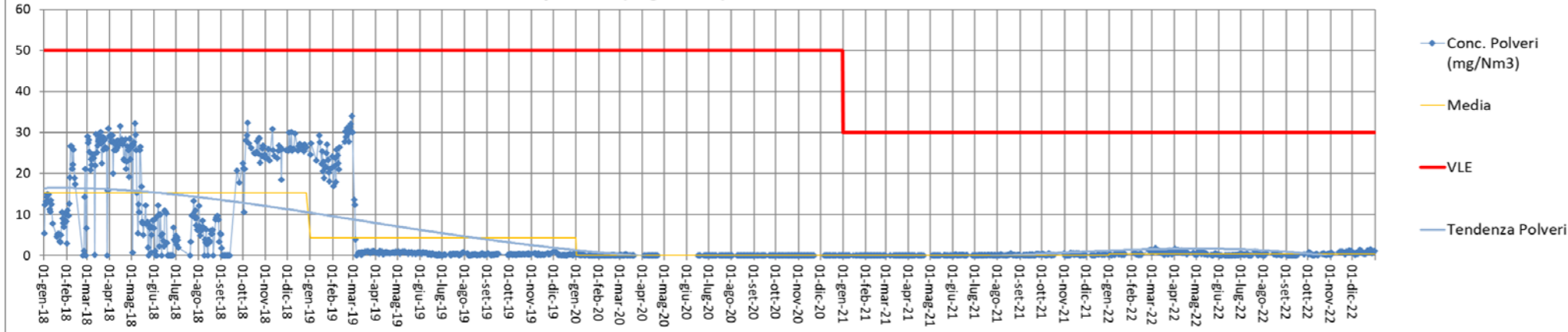


## Camino E315b

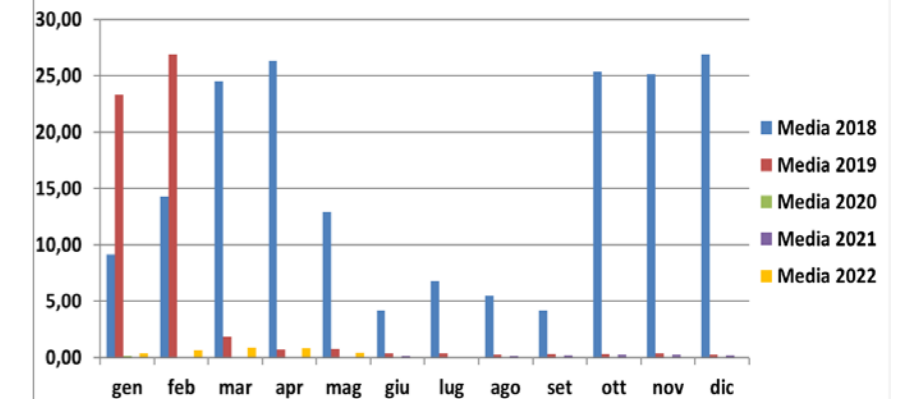


## Camino E324

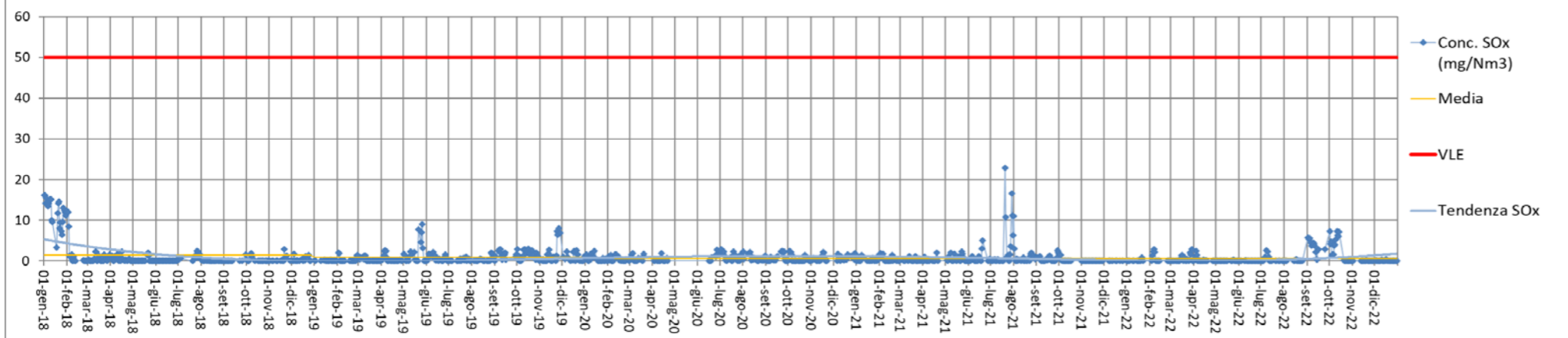
### Concentrazione polveri (mg/Nm3) camino E324 - Anni 2018-2019-2020-2021-2022



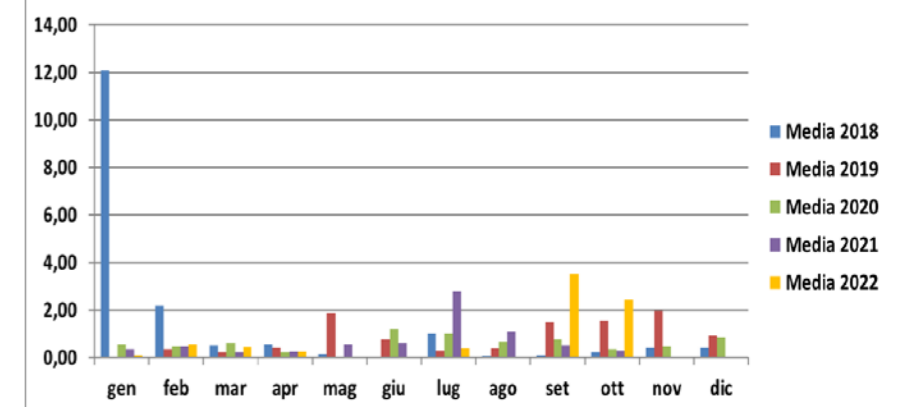
### Concentrazione polveri (mg/Nm3) camino E324 medie mensili



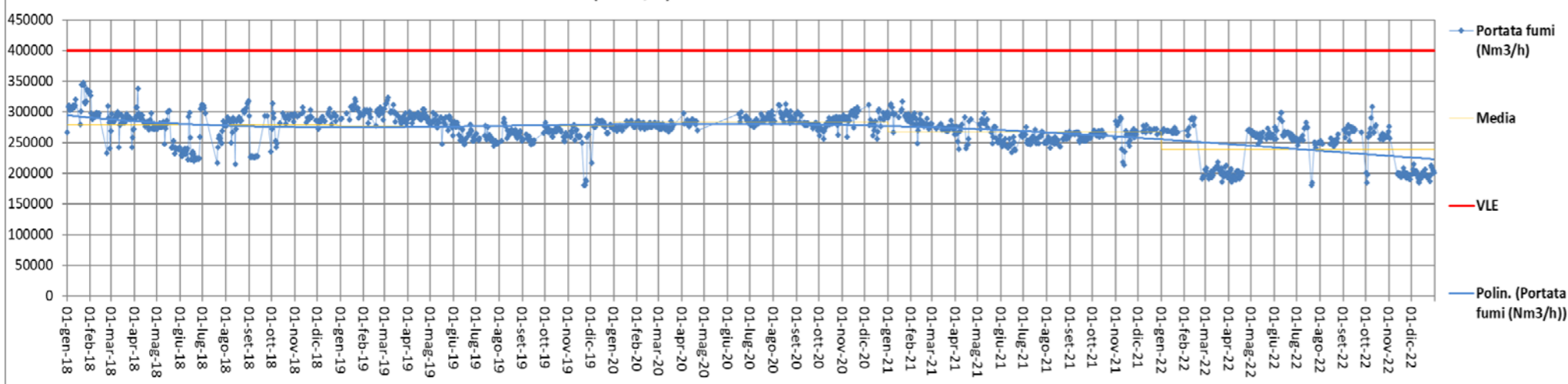
### Concentrazione SOx (mg/Nm3) camino E324 - Anni 2018-2019-2020-2021-2022



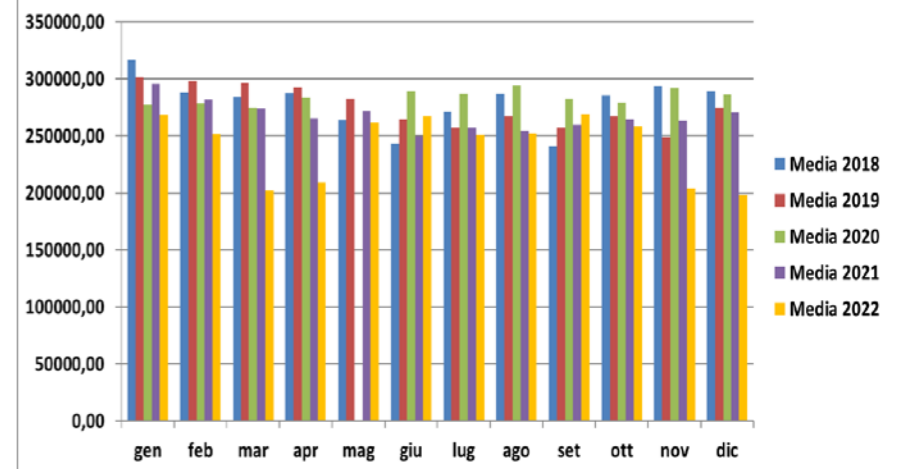
### Concentrazione SOx (mg/Nm3) camino E324 medie mensili



### Portata fumi (Nm3/h) camino E324 - Anni 2018-2019-2020-2021-2022

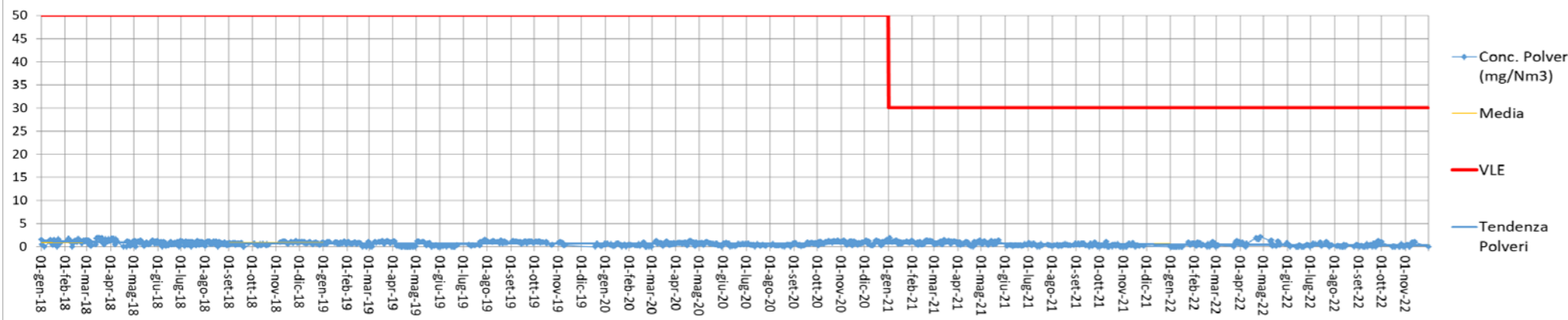


### Portata fumi (Nm3/h)camino E324 medie mensili

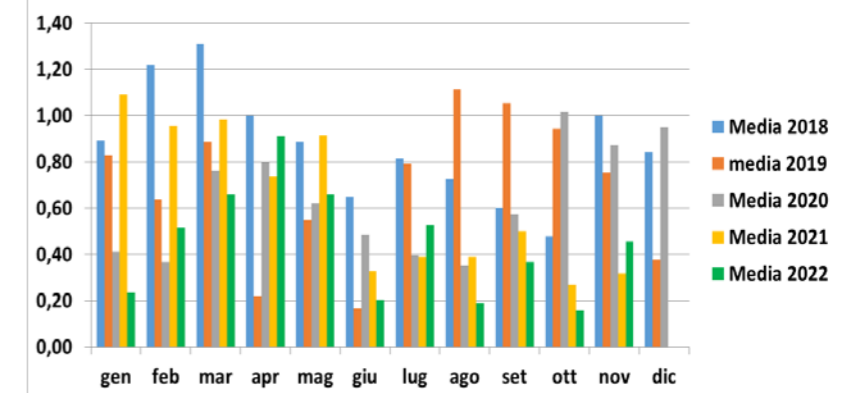


## Camino E325

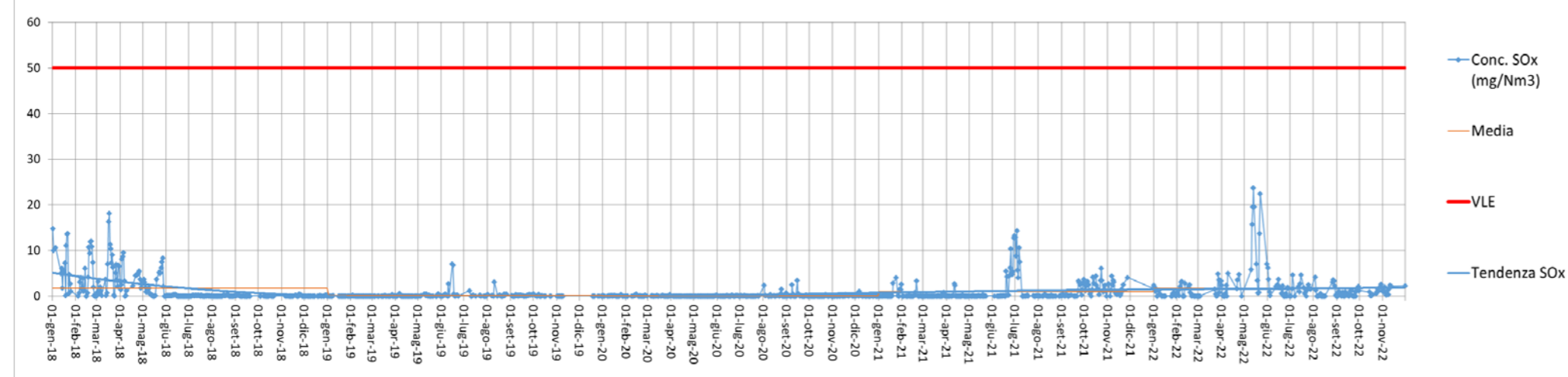
**Concentrazione polveri (mg/Nm3) camino E325 - Anni 2018-2019-2020-2021-2022**



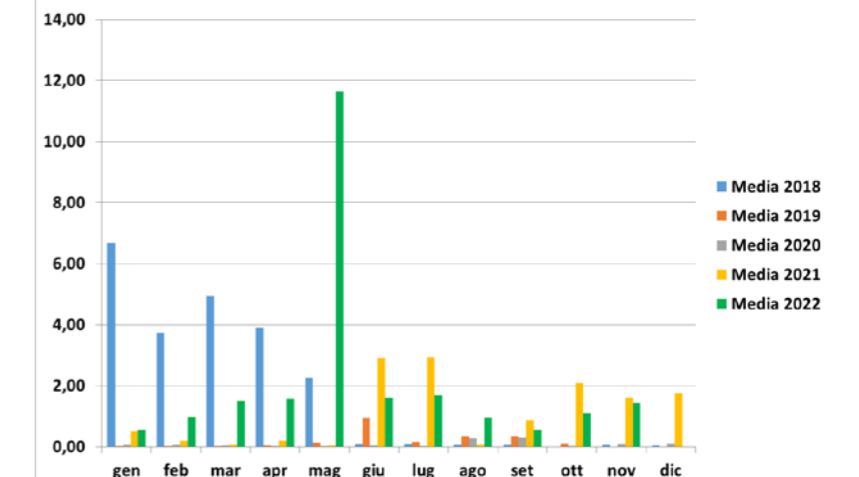
**Concentrazione polveri (mg/Nm3) camino E325 medie mensili**



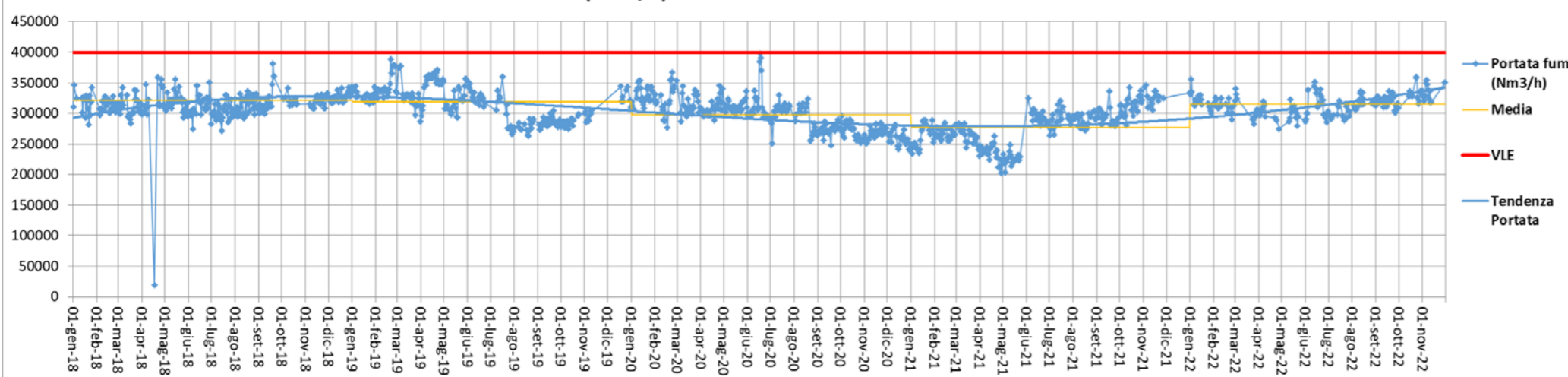
**Concentrazione SOx (mg/Nm3) camino E325 - Anni 2018-2019-2020-2021-2022**



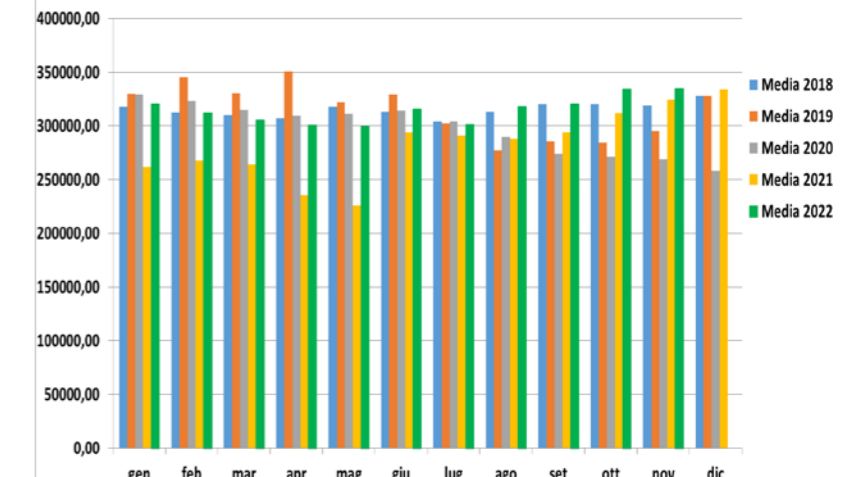
**Concentrazione SOx (mg/Nm3) camino E325 medie mensili**



**Portata fumi (Nm3/h) camino E325 - Anni 2018-2019-2020-2021-2022**



**Portata fumi (Nm3/h) camino E325 medie mensili**

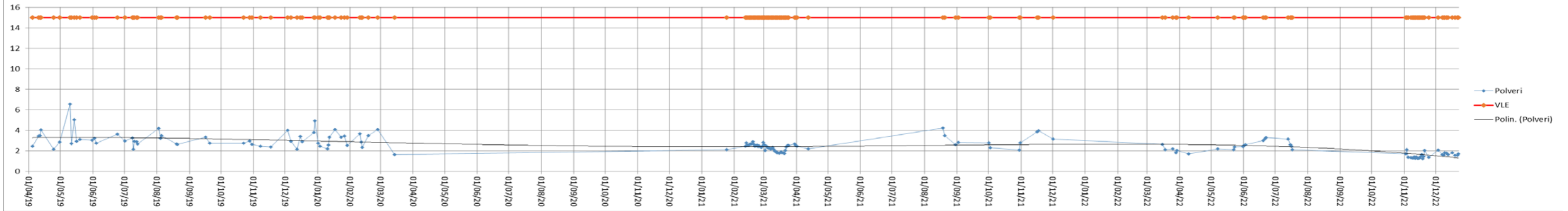


**TAVOLA 3 - Camini Acciaieria (ACC)**

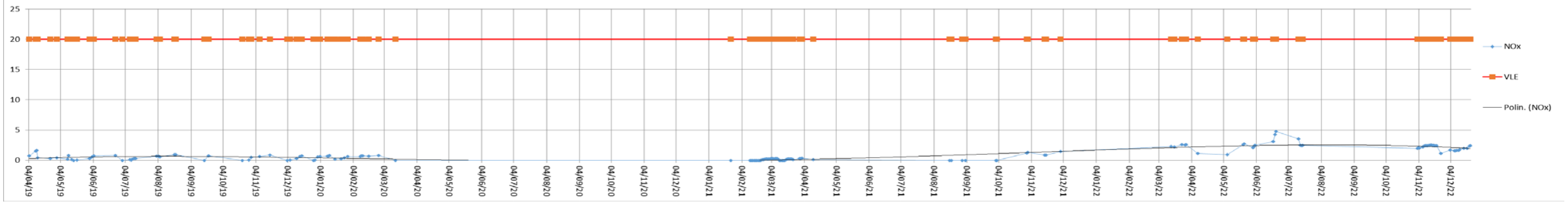
**E525, E525B, E551B, E551C**

## Camino E525

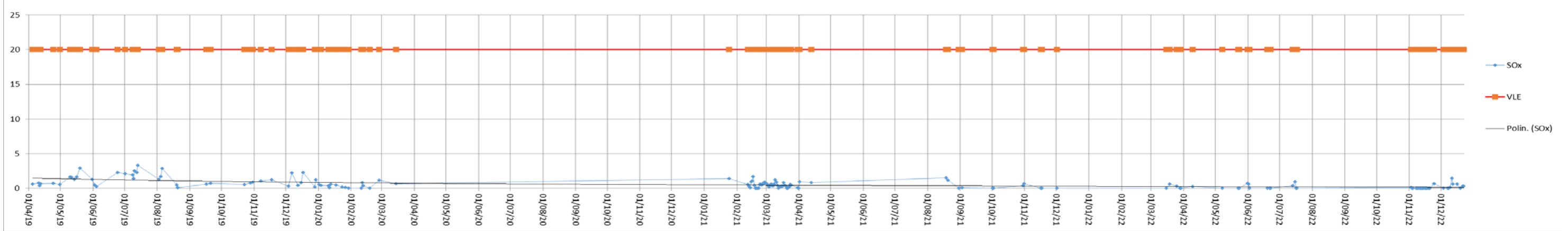
### Polveri (mg/Nm3) camino E525



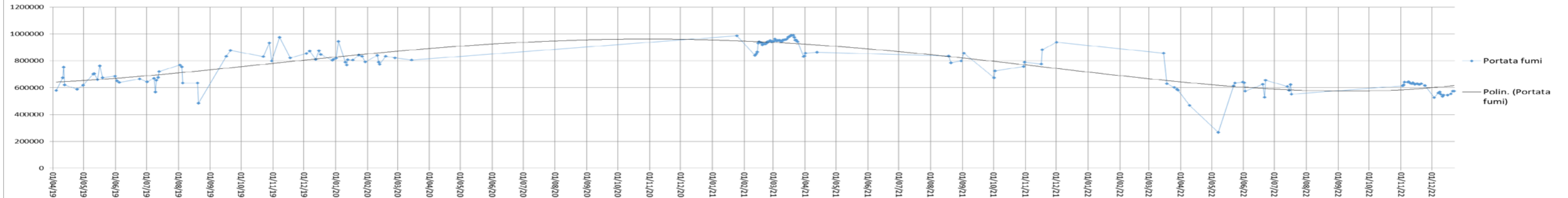
### NOx (mg/Nm3) camino E525



### SOx (mg/Nm3) camino E525



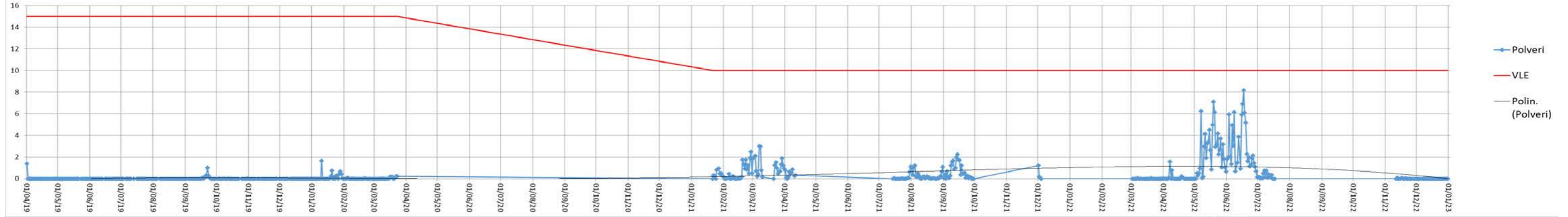
### Portata Fumi (Nm3/h) camino E525



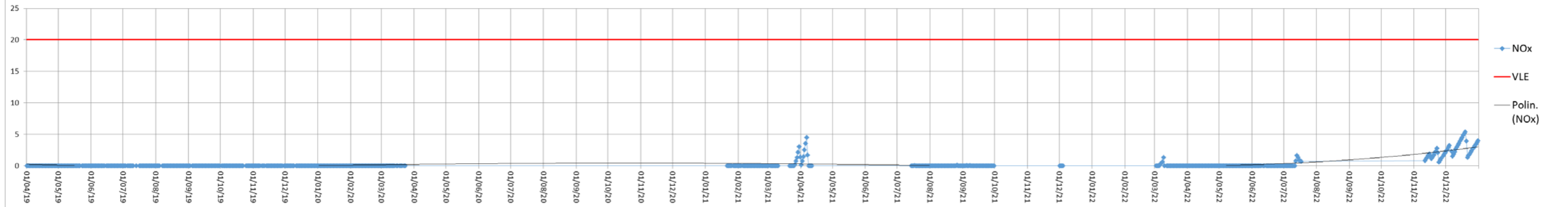


## Camino E525B

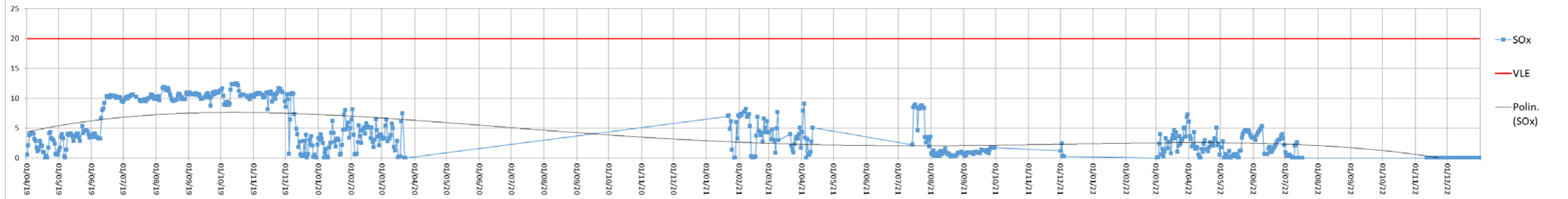
### Polveri (mg/Nm3) camino E525B



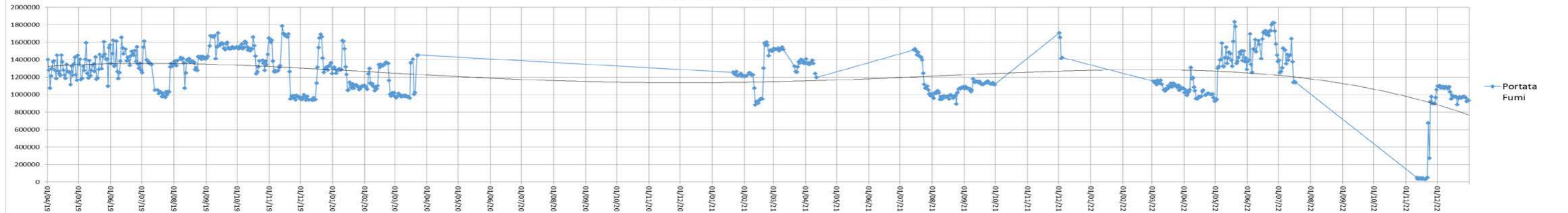
### NOx (mg/Nm3) camino E525B



### SOx (mg/Nm3) camino E525B

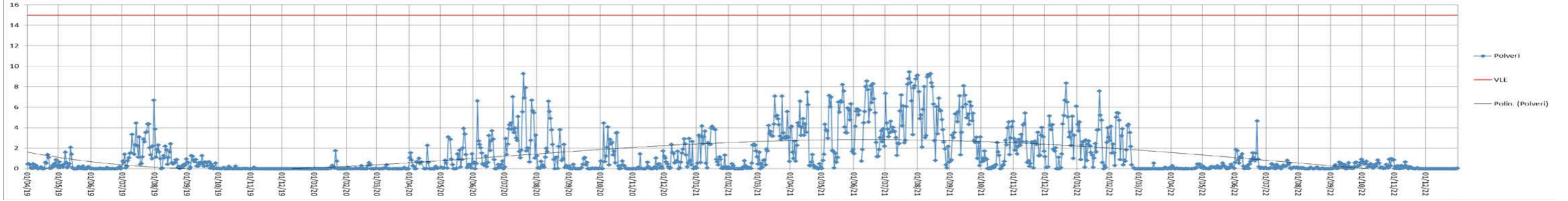


### Portata Fumi (Nm3/h) camino E525B

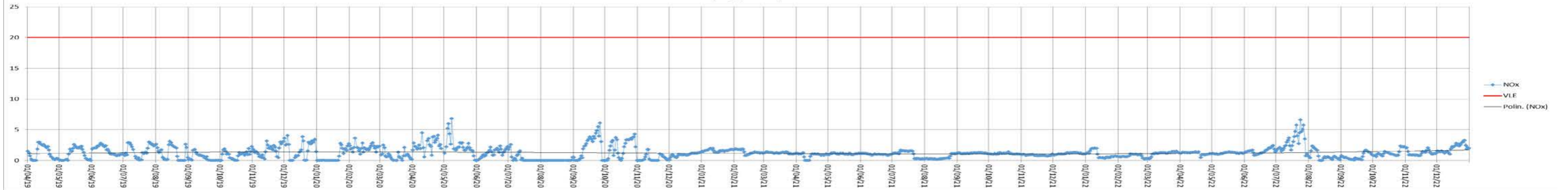


# Camino E551B

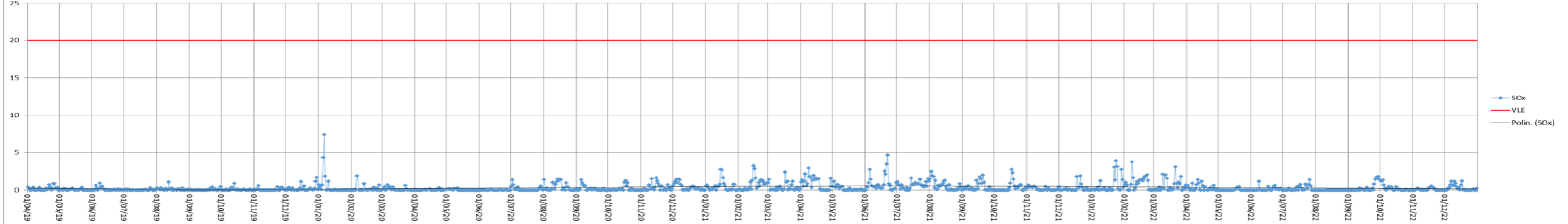
## Polveri (mg/Nm3) camino E551B



## NOx (mg/Nm3) camino E551B



## SOx (mg/Nm3) camino E551B

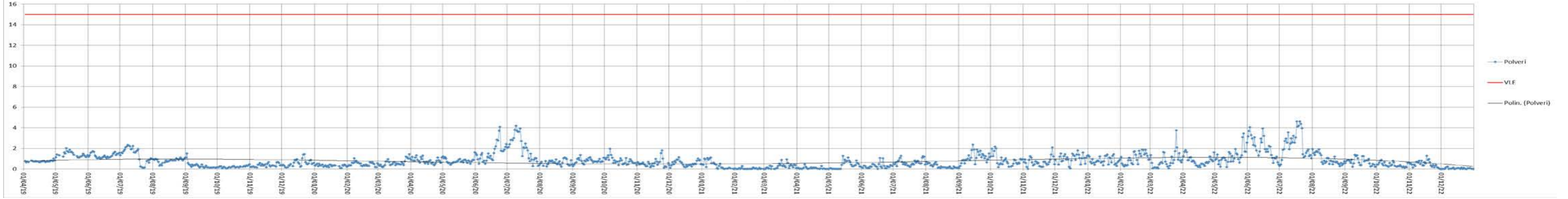


## Portata Fumi (Nm3/h) camino E551B

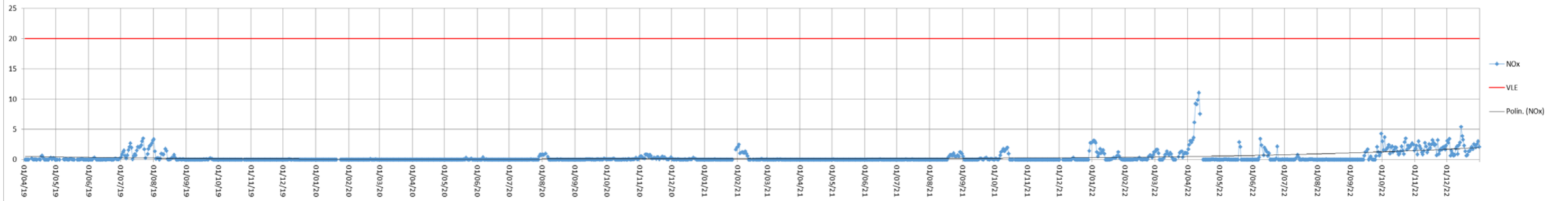


# Camino E551C

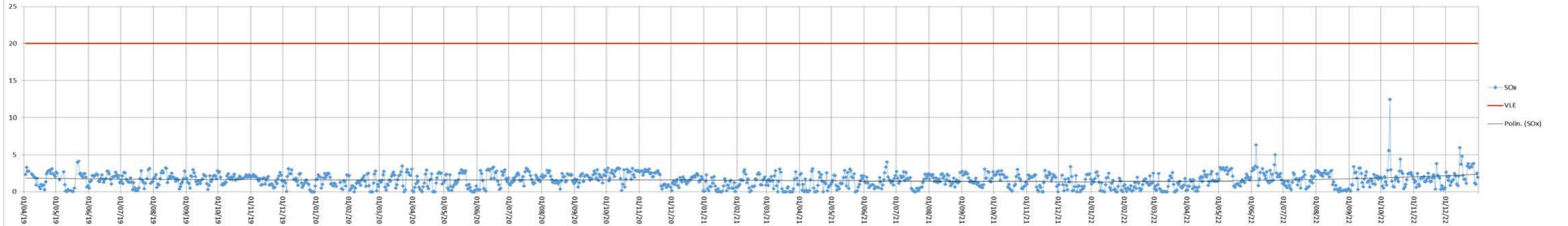
## Polveri (mg/Nm3) camino E551C



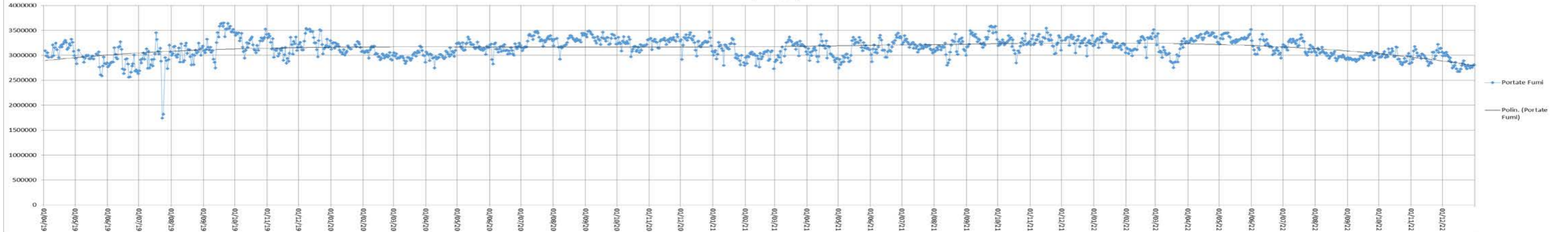
## NOx (mg/Nm3) camino E551C



## SOx (mg/Nm3) camino E551C



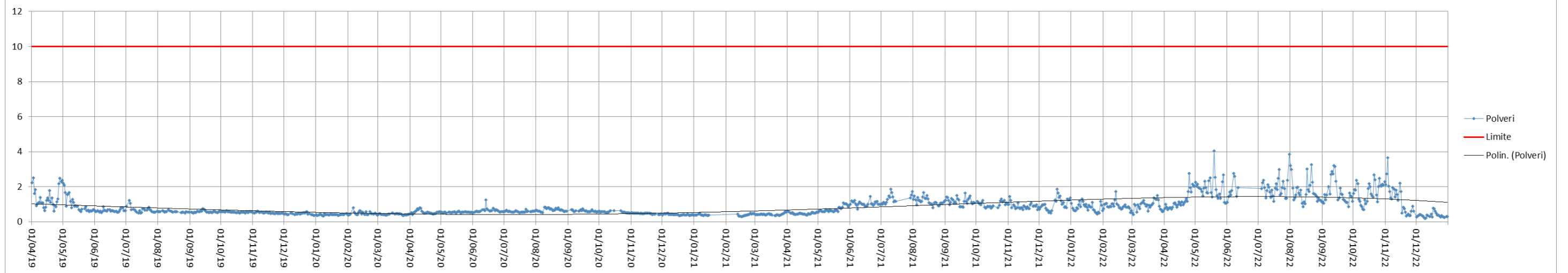
## Portata Fumi (Nm3/h) camino E551C



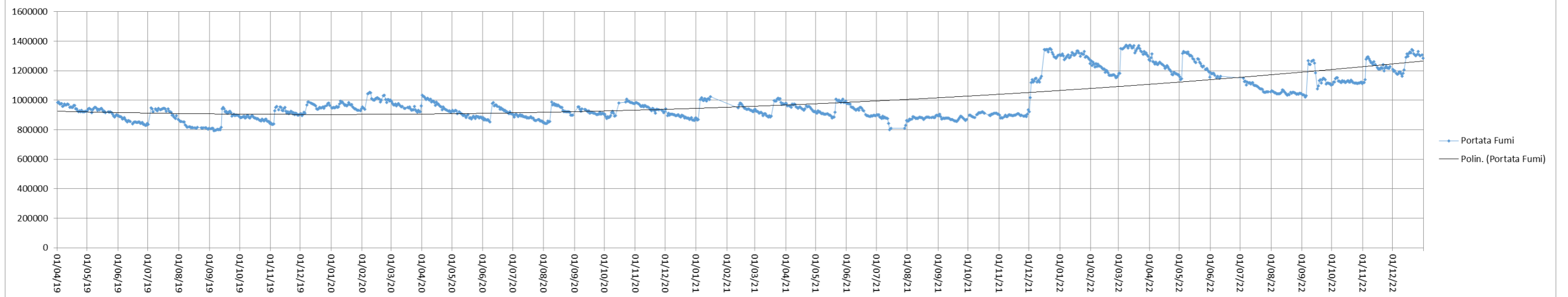
**TAVOLA 4 - Camini Altoforno (AFO)**  
**E102B, E103B, E109, E111, E112, E114, E134, E135, E137**

## Camino E102B

### Polveri (mg/Nm3) camino E102B

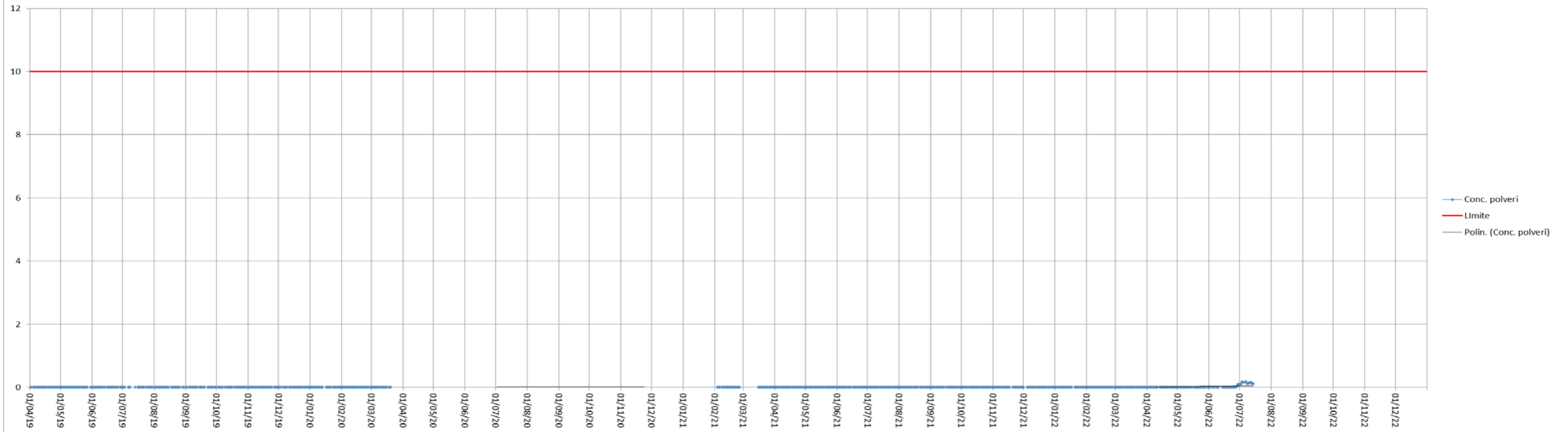


### Portata Fumi (Nm3/h) camino E102B

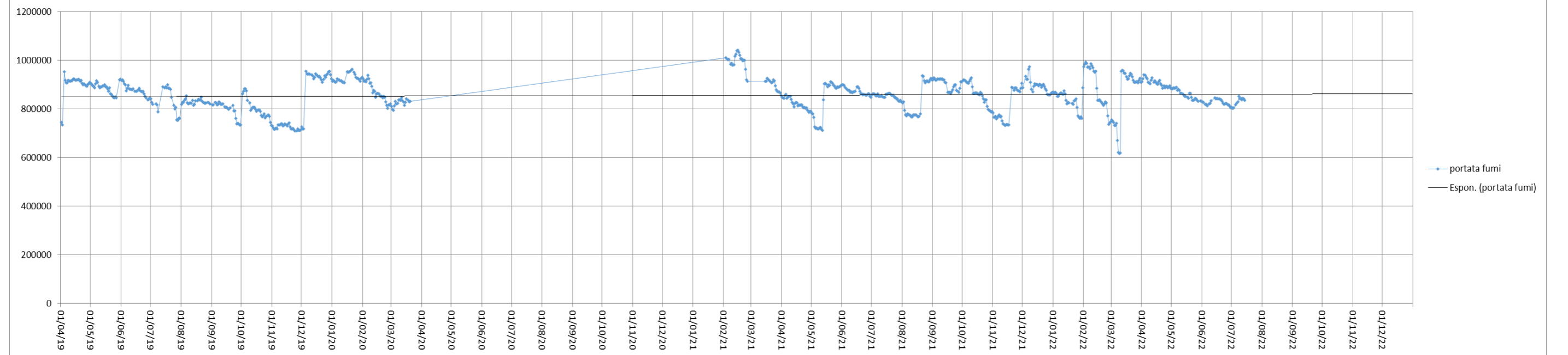


# Camino E103B

## Polveri (mg/Nm3) camino E103B

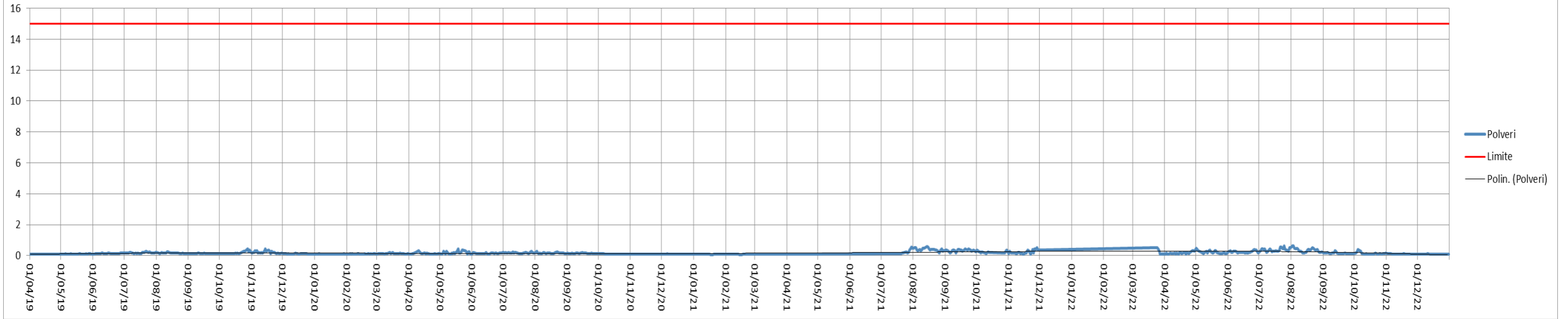


## Portata Fumi (Nm3/h) camino E103B

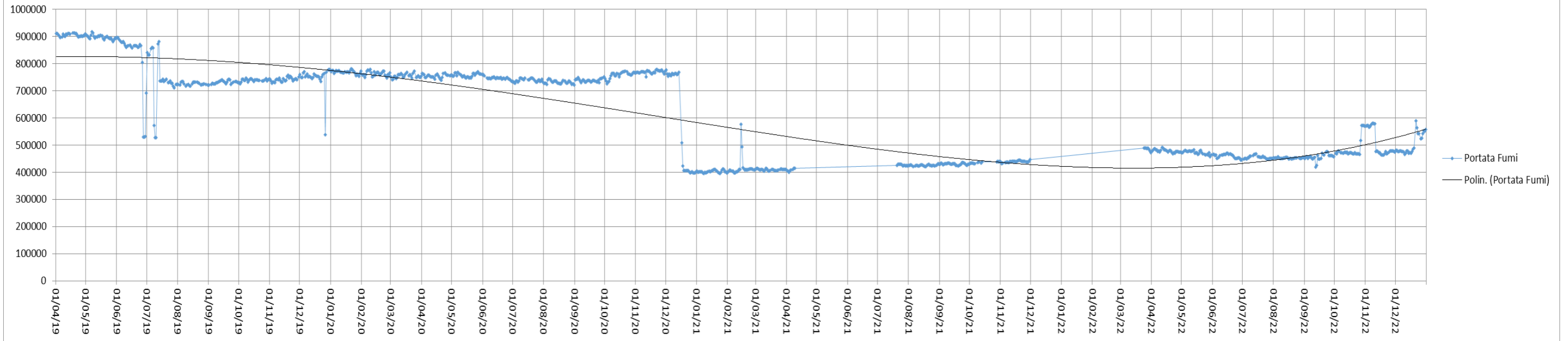


### Camino E109

#### Polveri (mg/Nm3) camino E109

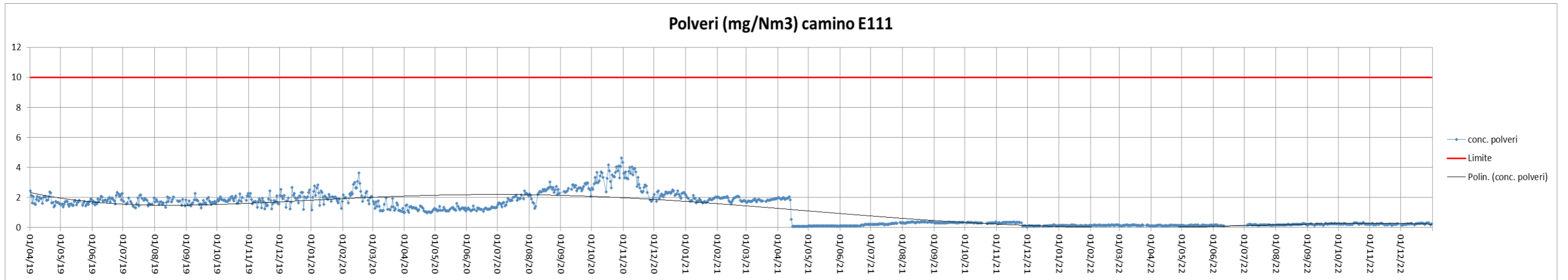


#### Portata Fumi (Nm3/h) camino E109

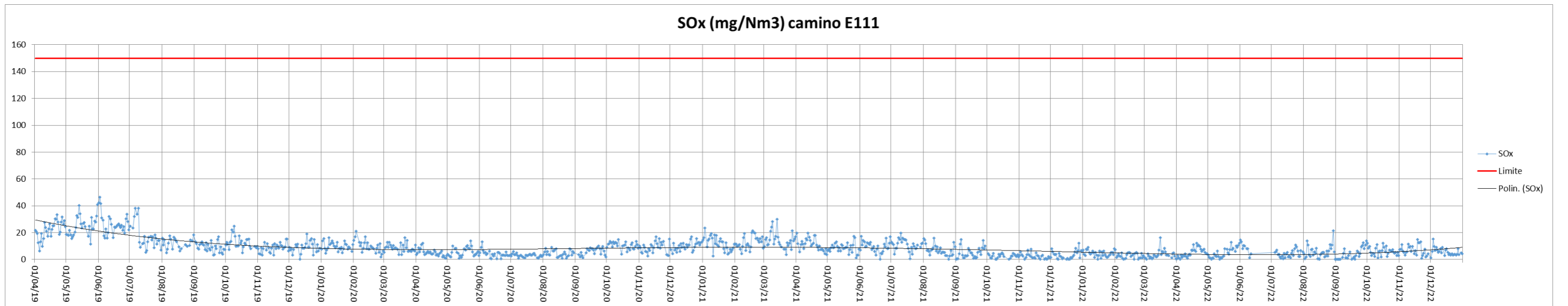


## Camino E111

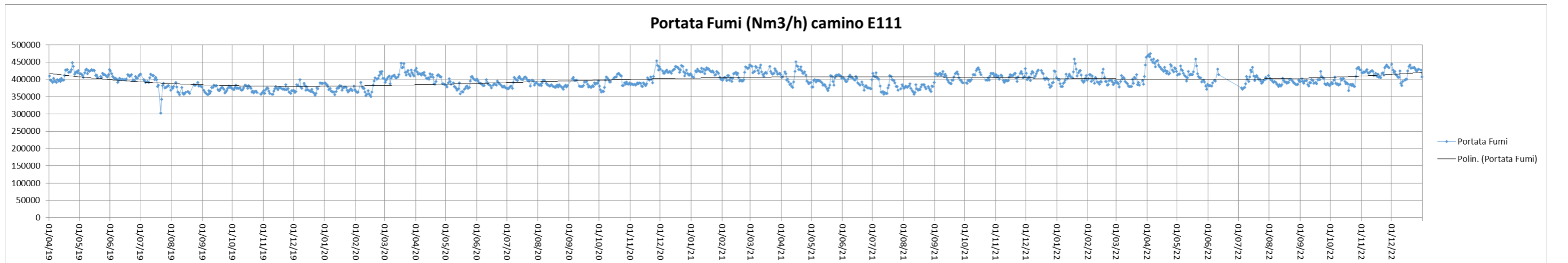
### Polveri (mg/Nm3) camino E111



### SOx (mg/Nm3) camino E111



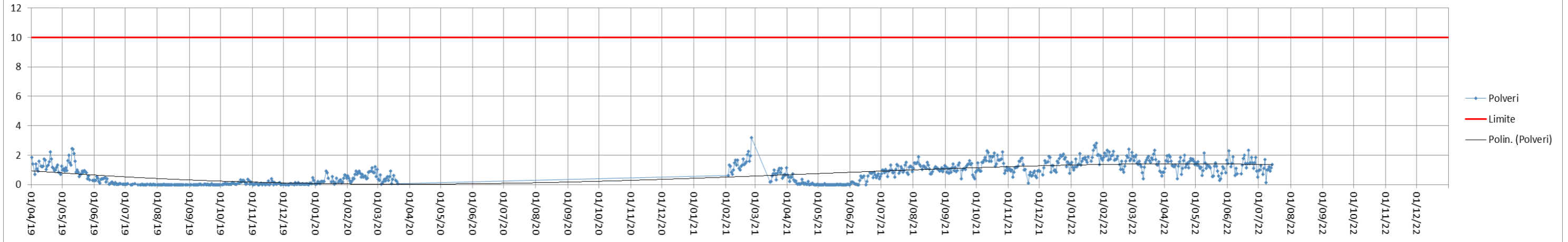
### Portata Fumi (Nm3/h) camino E111



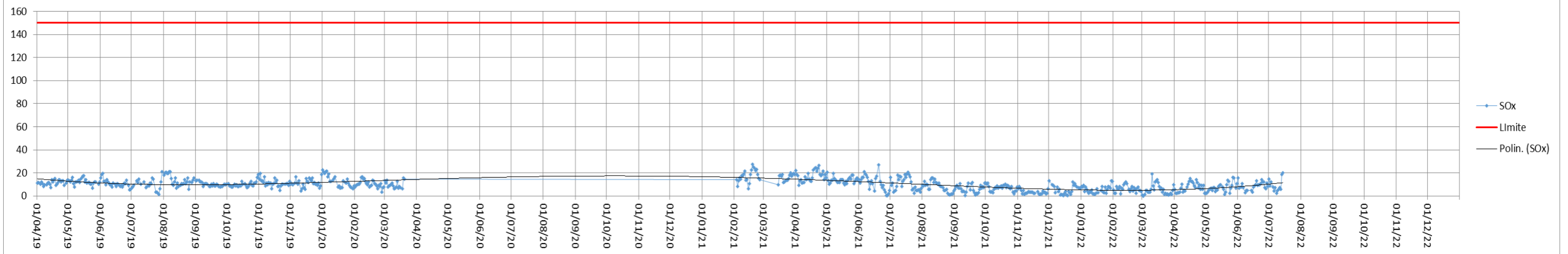


### Camino E112

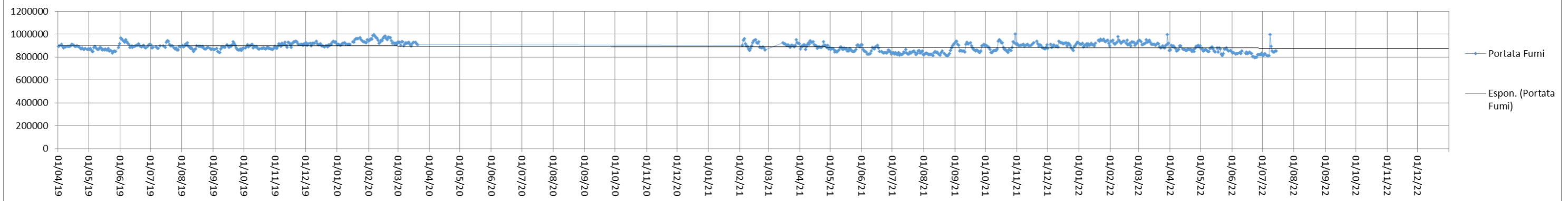
#### Polveri (mg/Nm3) camino E112



#### SOx (mg/Nm3) camino E112

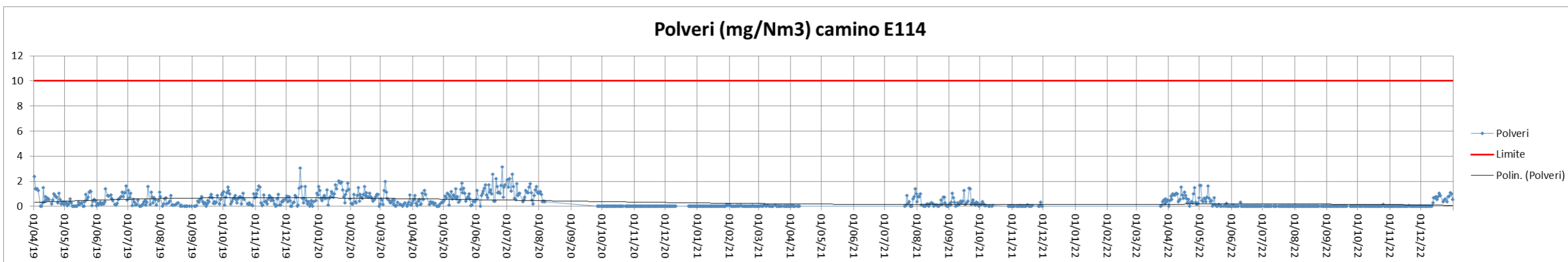


#### Portata Fumi (Nm3/h) camino E112

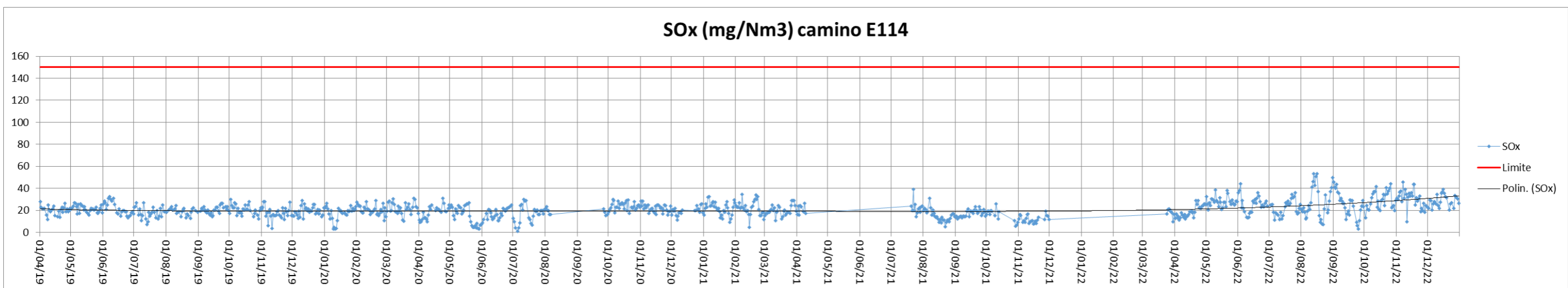


### Camino E114

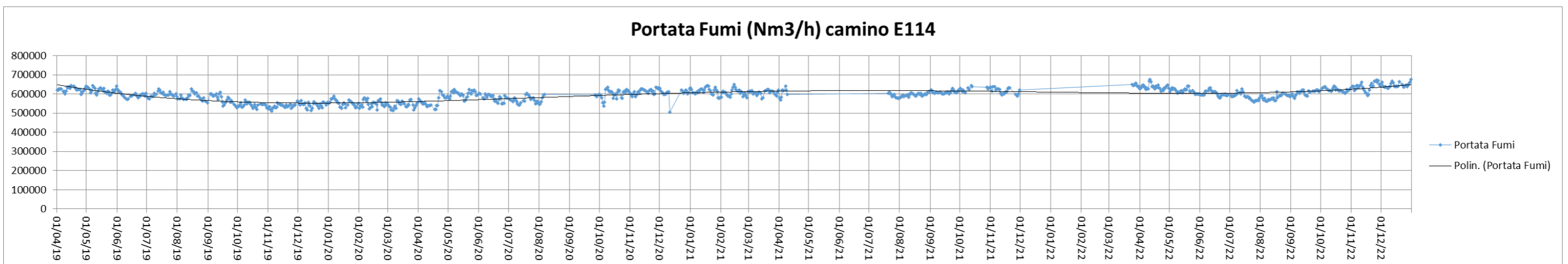
#### Polveri (mg/Nm3) camino E114



#### SOx (mg/Nm3) camino E114

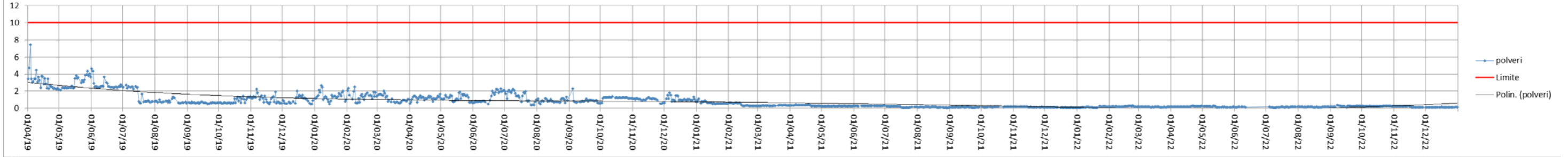


#### Portata Fumi (Nm3/h) camino E114

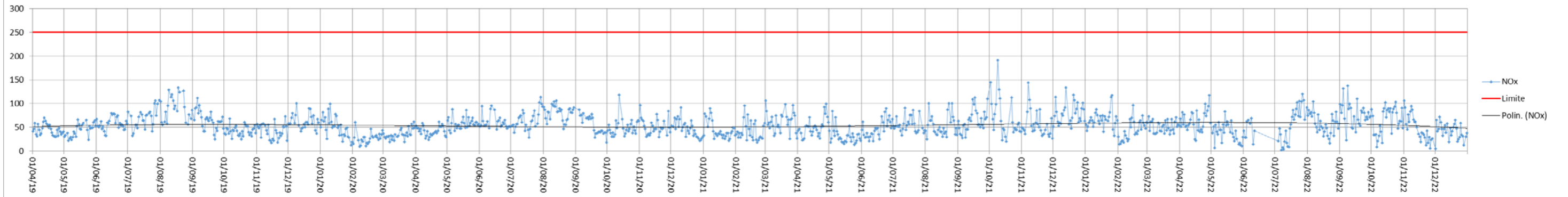


## Camino E134

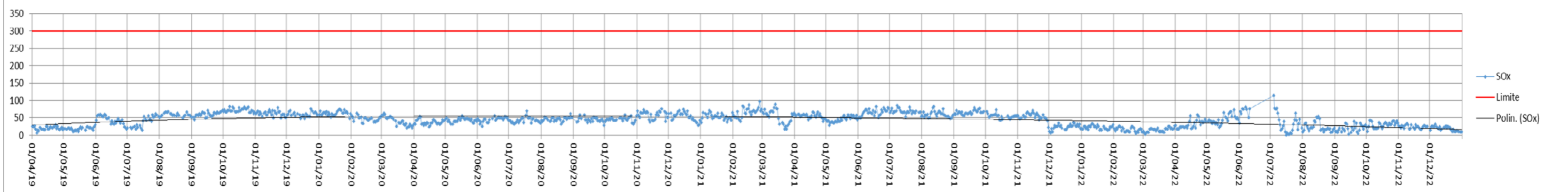
### Polveri (mg/Nm3) camino E134



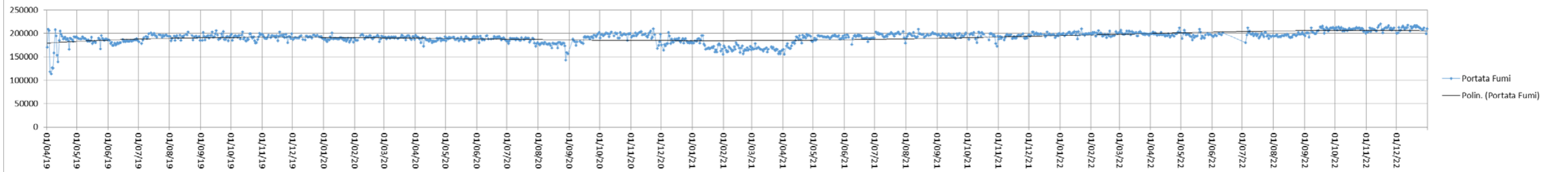
### NOx (mg/Nm3) camino E134



### SOx (mg/Nm3) camino E134

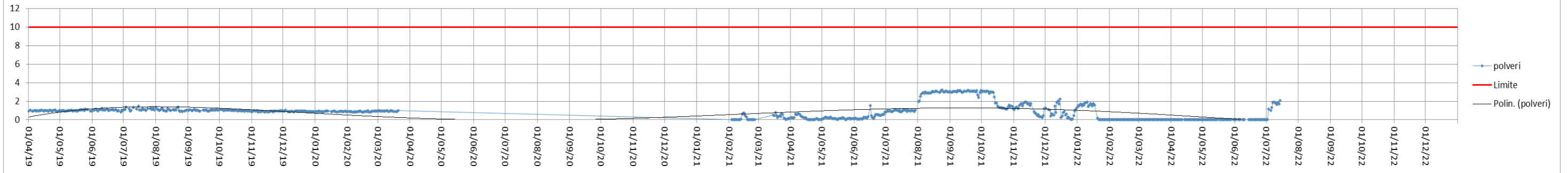


### Portata Fumi (Nm3/h) camino E134

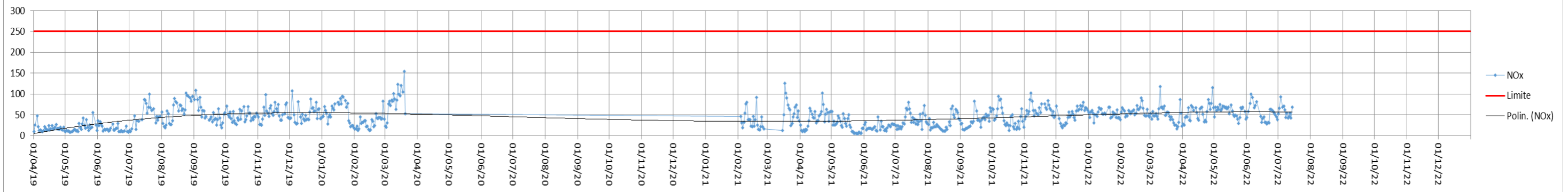


### Camino E135

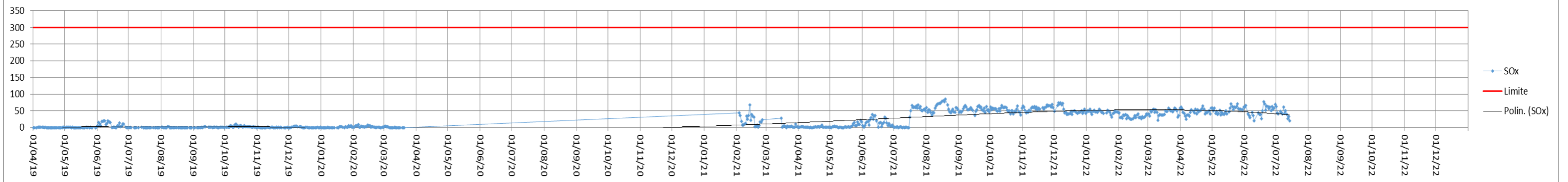
#### Polveri (mg/Nm3) camino E135



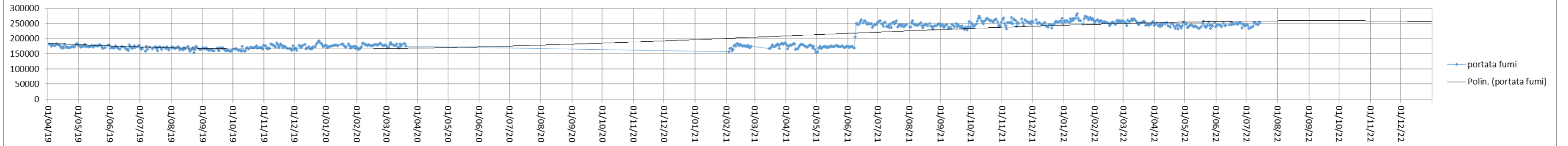
#### NOx (mg/Nm3) camino E135



#### SOx (mg/Nm3) camino E135

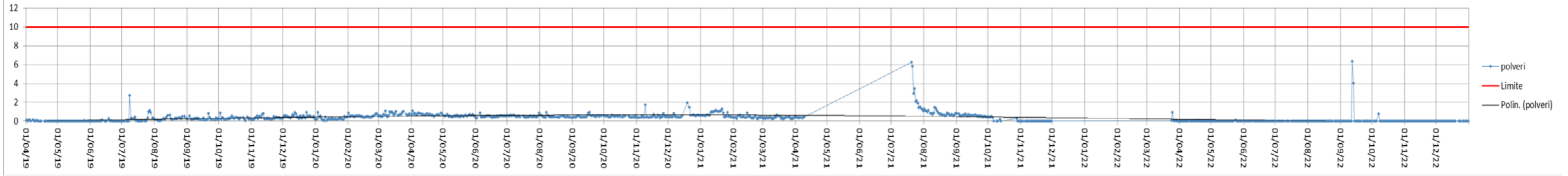


#### Portata Fumi (Nm3/h) camino E135

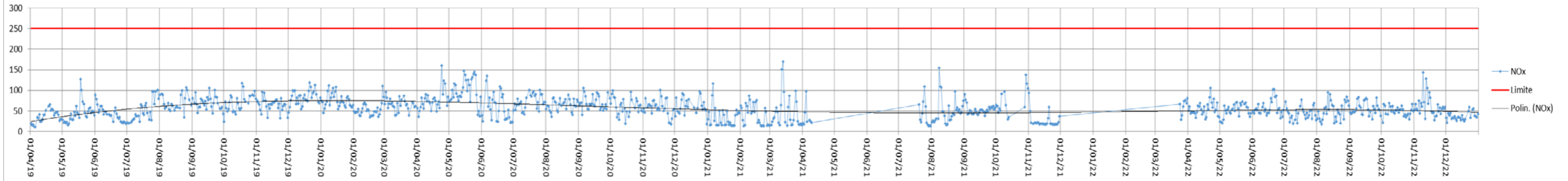


### Camino E137

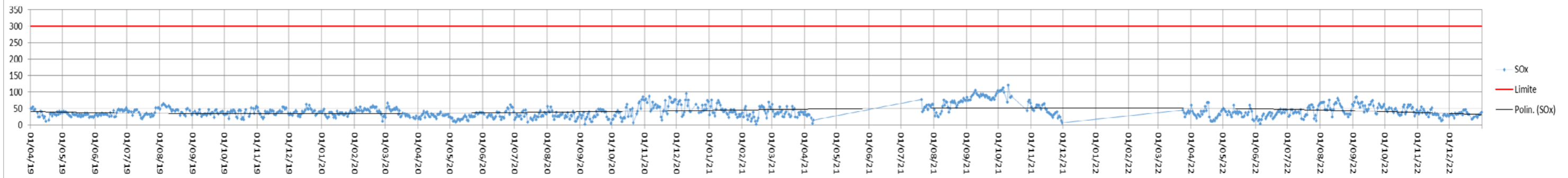
#### Polveri (mg/Nm3) camino E137



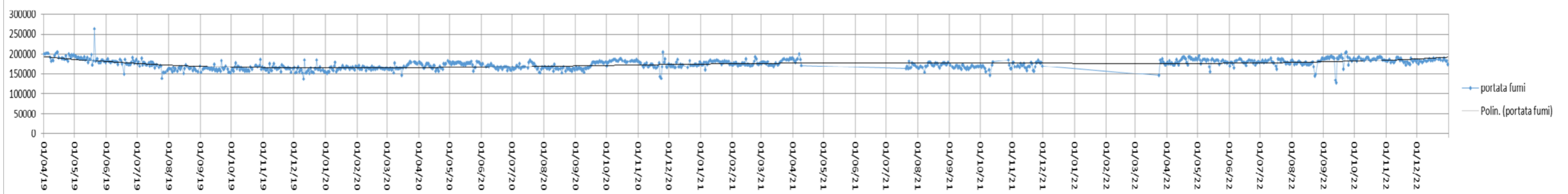
#### NOx (mg/Nm3) camino E137



#### SOx (mg/Nm3) camino E137



#### Portata Fumi (Nm3/h) camino E137



**TAVOLA 5- Produzione acciaio e emissioni diffuse totali nello stabilimento (Tabella e grafico degli andamenti)**

Dati relativi al 2° semestre 2022 in corso di elaborazione

Dati riepilogativi sulle stime delle emissioni diffuse in aria estratte dai rapporti annuali di esercizio 2017-2018-2019 trasmessi dal Gestore per i vari reparti dell'area a caldo																																				
Impianto/prodotto	Produzione (Ktonnellate/a)					Polveri (t/anno)					IPA (BaP) (Kg/anno)					Benzene (t/anno)					Stima emissione diffusa di PCDD/F g/anno					H <sub>2</sub> S (t/anno)					SO <sub>2</sub> (t/anno)					
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	
Cokeria (Batterie 7-8 e 9-12)/Coke m.	1234	1232	1181	992	1001,9	25,52	25,24	24,52	20,81	16,84	17,06	17,03	16,32	13,72	13,85	1,26	1,25	1,20	1,012	1,022																
Cokeria (Torri di spegnimento 4 e 7)/Coke m.						22,54	26,90	33,10	24,42	12,84																										
Agglomerato Agl.	5525	4901	4878	4132	4589	Depolverazione secondaria (parte non captata)	18,74	18,88	20,06	21,42	21,99											0,0044	0,0783	0,011	0,0171	0,0303										
						Raffreddatori	35,09	31,71	30,49	27,10	29,46											0,0060	0,0523	0,0081	0,0436	0,0516										
Altoforni 1, 2 e 4/Ghisa	4673	4430	4173	3313	3926	Colaggio	88,8	84,2	79,3	62,9	74																4,0	3,9	3,4	2,9	3,1	2,0	1,9	1,7	1,4	1,5
						Stock House	27,8	9,0	0	0	0																ND(SCVL)	35,4(SCVL)	53,8(SCVL)	29,1(SCVL)	56,4(SCVL)	ND(SCVL)	17,4(SCVL)	26,5(SCVL)	14,3(SCVL)	26,8(SCVL)
Acciaierie 1 e 2/Acciaio	4731	4520	4210	3371	4062	37,9	36,2	33,7	27	32,5																										
<b>TOTALE AREA A CALDO</b>						<b>256,39</b>	<b>232,13</b>	<b>221,71</b>	<b>183,65</b>	<b>187,63</b>	<b>17,06</b>	<b>17,03</b>	<b>16,32</b>	<b>13,72</b>	<b>13,85</b>	<b>1,26</b>	<b>1,25</b>	<b>1,20</b>	<b>1,012</b>	<b>1,022</b>	<b>0,010*</b>	<b>0,13**</b>	<b>0,019***</b>	<b>0,0607****</b>	<b>0,082</b>	<b>4,0</b>	<b>39,3</b>	<b>57,2</b>	<b>32,0</b>	<b>59,5</b>	<b>2,0</b>	<b>19,3</b>	<b>28,2</b>	<b>15,7</b>	<b>28,3</b>	
<b>TOTALE STABILIMENTO</b>						<b>307,5</b>	<b>290,5</b>	<b>257</b>	<b>225,4</b>	<b>206,4</b>	<b>17,06</b>	<b>17,03</b>	<b>16,32</b>	<b>13,72</b>	<b>13,85</b>	<b>1,26</b>	<b>1,25</b>	<b>1,20</b>	<b>1,012</b>	<b>1,022</b>	<b>0,010</b>	<b>0,13</b>	<b>0,019</b>	<b>0,0607</b>	<b>0,082</b>	<b>4</b>	<b>39,3</b>	<b>57,2</b>	<b>32,0</b>	<b>59,5</b>	<b>2,0</b>	<b>19,3</b>	<b>28,2</b>	<b>15,7</b>	<b>28,3</b>	

(\*) Fattore di emissione: 0,002

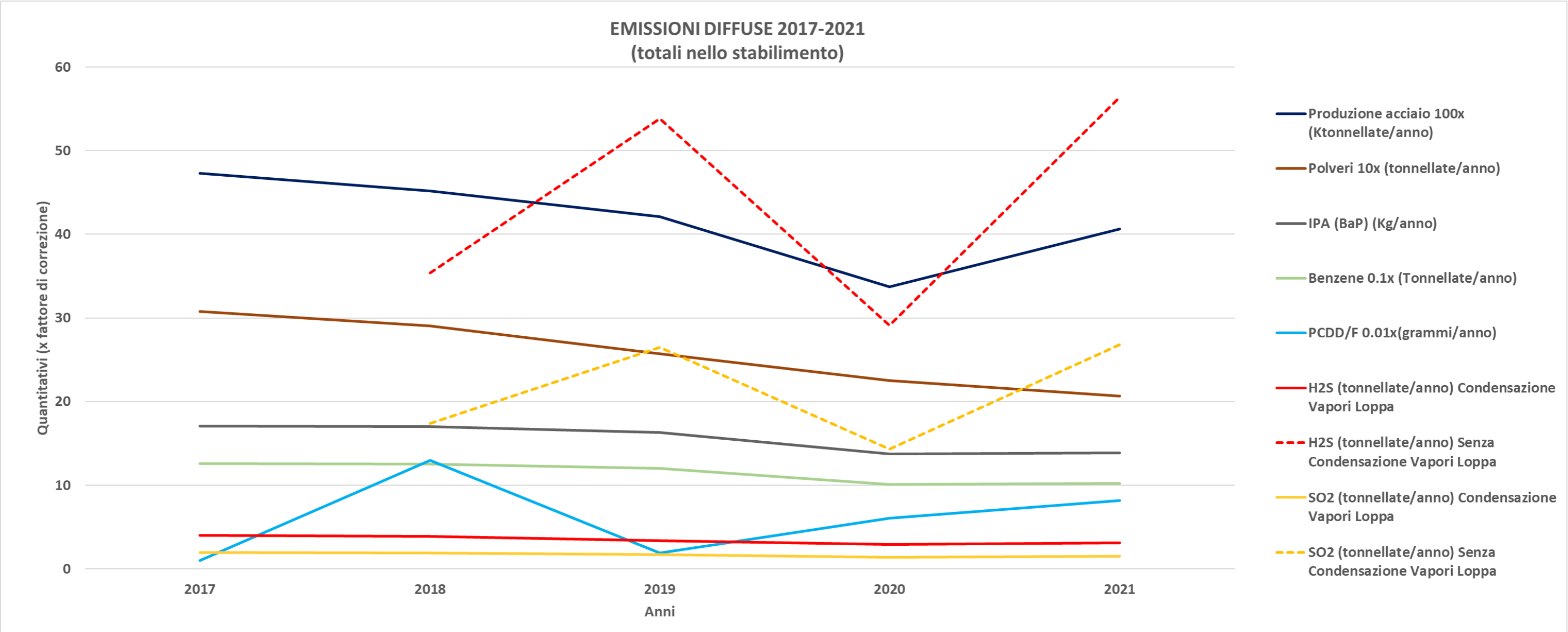
(\*\*) Fattore di emissione: 0,027

(\*\*\*) Fattore di emissione 0,004

(\*\*\*\*) Fattore di emissione 0,015

(SCVL) Senza Condensazione Vapori Loppa

Grafico degli andamenti dei valori di emissioni diffuse stimati per l'intero stabilimento estratte dai rapporti annuali di esercizio 2017-2018-2019-2020-2021

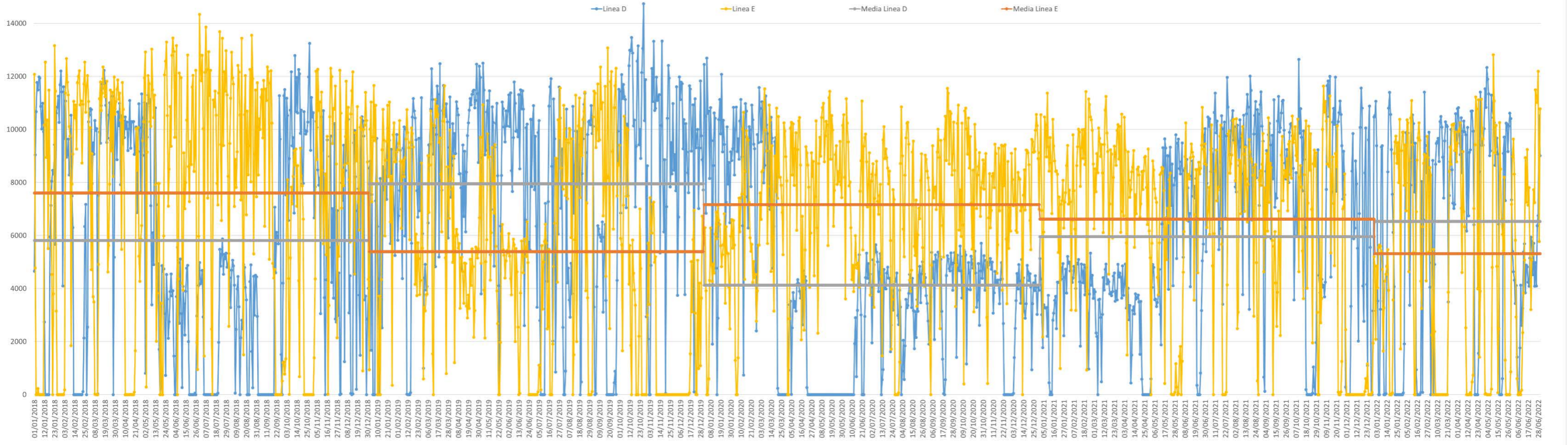




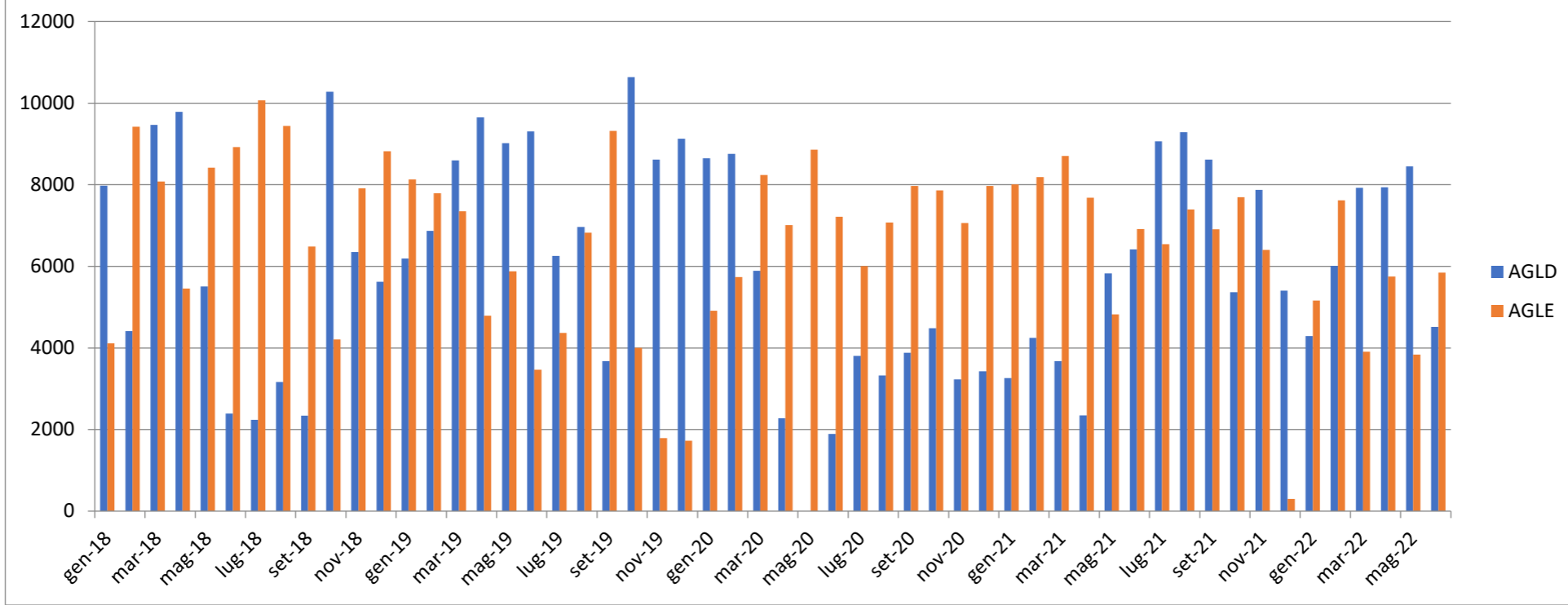
**TAVOLA 6: Produzione Agglomerato e Cokeria**

Dati relativi al 2° semestre 2022 in corso di elaborazione

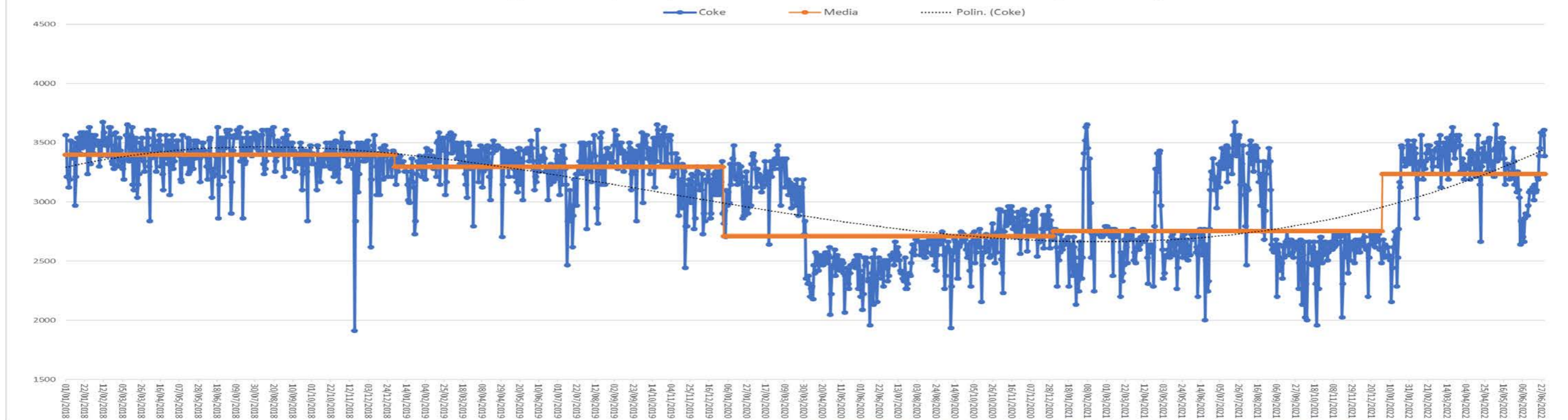
Produzione giornaliera agglomerato (tonnellate) anni 2018-2019-2020-2021-2022 (I semestre)



Produzione media mensile agglomerato (tonnellate)



Produzione giornaliera (tonns) cokeria anno 2018-2019-2020-2021-2022 (I semestre)



Produzione media mensile cokeria (tonns) anno 2018-2019-2020-2021-2022 (I semestre)

