



# **AB 617 AIR MONITORING UPDATE**

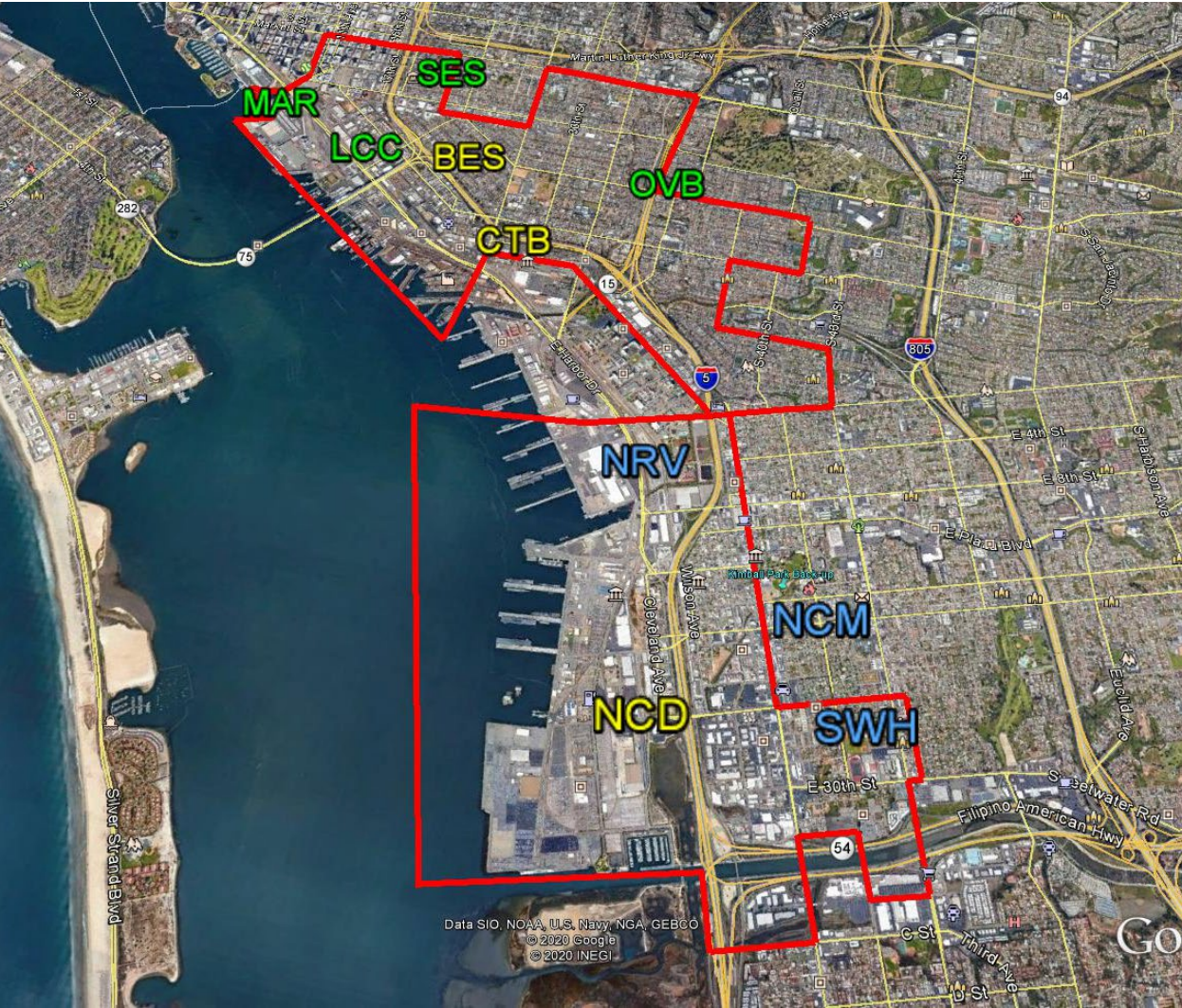
**January 19, 2021**

**ACTUALIZACIÓN  
DE MONITOREO DEL AIRE AB 617**

**19 de enero de 2021**

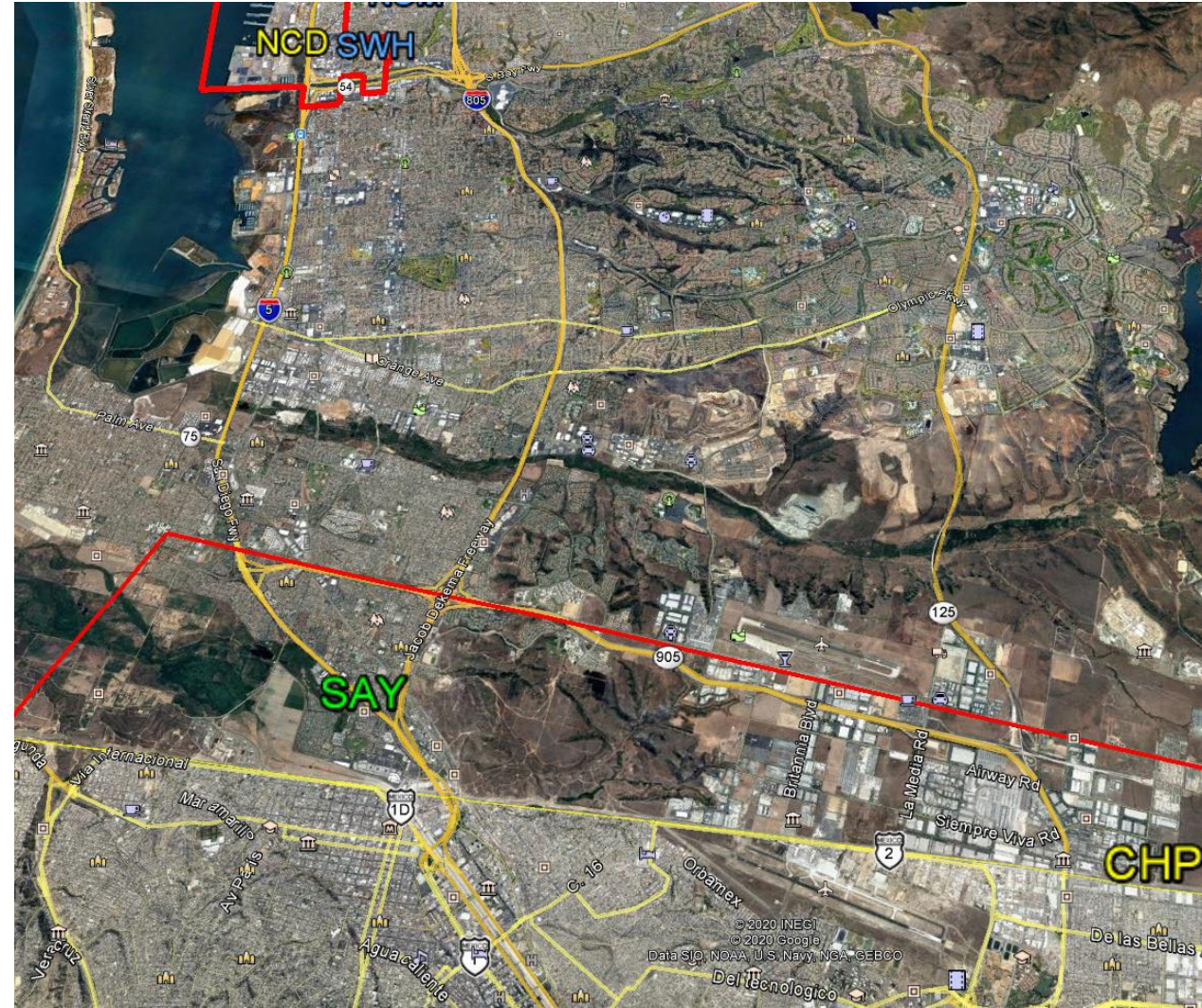
# Site Map (Portside)

## Mapa de Sitios (Portuarios)



# Site Map (South San Diego)

## Mapa de Sitios (San Diego Sur)



# Site Information

# Información de Sitios

	Site Name	Abbrev.	Address	Lat./Long.
Portside	Sherman Elementary School	SES	301 22nd St., San Diego, CA 92102	32°42'36.63"N 117° 8'33.59"W
	10th Avenue Marine Terminal	MAR	801 Terminal St., San Diego, CA 92101	32°42'2.56"N 117° 9'39.97"W
	Chicano Park	LCC	917-19 Cesar E Chavez Pkwy., San Diego, CA 92113	32°42'3.69"N 117° 8'40.11"W
	Ocean View Blvd	OVB	3434 Ocean View Blvd., San Diego, CA 92113	32°42'7.66"N 117° 7'10.69"W
	Caltrans at Boston Ave.	CTB	2898 1/3 Boston Ave., San Diego, CA 92113	32°41'38.82"N 117° 7'54.30"W
	Burbank Elementary School	BES	2146 Julian Ave., San Diego, CA 92113	32°42'4.24"N 117° 8'17.47"W
	National City Train Depot	NCD	922 West 23rd St., National City, CA 91950	32°39'34.30"N 117° 6'40.54"W
	Navy RV Parking Lot	NRV	none at this time	32°40'39.60"N 117° 6'55.96"W
	National City Middle School	NCM	none at this time	none at this time
	Sweetwater HS	SWH	none at this time	none at this time
South SD	San Ysidro Blvd	SAY	198 West San Ysidro Blvd., San Diego, CA 92173	32°33'10.04"N 117° 2'50.26"W
	CHP Safety Check Station	CHP	2335 Enrico Fermi Dr., San Diego, CA 92154	32°33'13.70"N 116°55'34.82"W

- **GREEN**= Operational
- **YELLOW**= Signed MOU
- **BLUE**= Undergoing talks

# How did we Determine the AB617 Sampling Locations?

1. In the early stages of the AB617 Steering Committee Meetings, the attendees were asked to list the areas they would like sampling- about 55 locations.
2. Aclima was hired to undertake mobile monitoring to get a pollutant snapshot of the Portside area.
3. We cross-referenced the Aclima data for pollutant hotspots with the Steering Committee suggestions, the availability of land, power, security, and access.
4. We contacted potential landlords- some requests were rejected, conditionally accepted, or accepted.

## ¿Cómo determinamos las ubicaciones de muestreo AB617?

1. En las primeras etapas de las reuniones del Comité Directivo de AB617, se pidió a los asistentes que enumeraran las áreas que les gustaría muestrear, alrededor de 55 ubicaciones..
2. Aclima fue contratada para realizar un monitoreo móvil para obtener una instantánea de los contaminantes del área Portuaria.
3. Hicimos una referencia cruzada de los datos de Aclima para los puntos críticos de contaminación con las sugerencias del Comité Directivo, la disponibilidad de tierra, energía, seguridad y acceso.
4. Contactamos posibles propietarios; algunas solicitudes fueron rechazadas, aceptadas condicionalmente o aceptadas..

# Where can I find the Real-time Black Carbon data

# ¿Dónde puedo encontrar los datos de Carbono Negro en tiempo real?

<https://www.sdapcd.org/>

**CURRENT SAN DIEGO COUNTY AIR QUALITY**

Enter your zip Code to display the air quality nearest to you

OR Search By

Air Quality Nearest Downtown San Diego(92101) [AQ Forecast](#)

Data from Jan 04 02:06 PM PST



Every breath you take outside is linked to the Air Pollution Control District. Our experts work to maintain and constantly improve our air quality. And you can breathe easier knowing it's the best it has been in the past six decades. There are many ways we achieve this. We ensure commercial, industrial, transportation and agricultural businesses are permitted and comply with air pollution control laws, and we incentivize cleaner technologies by offering grant funds. We monitor and record air quality using a network of equipment stationed around the county, and alert you to the conditions. Air samples are also tested in the field and labs.

Our field staff inspects both permitted and non-permitted sources of air contaminants and investigates citizen complaints on air quality matters.

We also work to help future generations have clean air through long-term regional plans to reduce unhealthful pollution levels and develop air quality rules.

As part of the [County's Land Use & Environment Group](#), we are here to help you thrive and look forward to serving you.



### Popular Services

- Air Quality Forecast
- Current Air Quality
- Air Quality Complaints
- Online Records
- Permits
- Employment
- Sign up for County News & Information
- More Services



**COVID-19 Contact Information**

**Our Plan to Attain Ozone Standards**

**Community Air Monitoring Program**

# Where can I find the Real-time Black Carbon data

¿Dónde puedo encontrar los datos de Carbono Negro en tiempo real?

The screenshot shows the homepage of the Air Pollution Control District. At the top, there is a navigation bar with a home icon, a search bar, and menu items: "I WANT TO ...", "GRANTS", "CITIZENS & BUSINESS", "PERMITS", "PROGRAMS", and "HELP". Below the navigation bar, the main content area is divided into several sections:

- Current Air Quality:** Includes a sub-header "Air Quality in your hands" with an image of a hand holding a cloud. Text describes air sampling in the western region of San Diego County.
- Forecasts:** Contains links for "Air Quality Forecast", "Pronóstico de la Calidad del Aire", and "Burn Decision".
- Current Pollution Data:** Contains links for "One Hour Pollutant Data", "Eight Hour Ozone Data", "Pollution Data Archive", and "Pollutant Data Definitions". A blue arrow points to this section.
- Monitoring Information:** Contains links for "Annual Network Plan - 2019", "Annual Network Plan - 2018", and "Air Quality Monitoring Network Assessment - 2020".
- Related Links:** Contains links for "Air Quality Index - A Guide to Air Quality and Your Health", "Our Nation's Air - Status and Trends Through 2019", "Air Quality Standards", "Air Quality Comparison", and "EPA AirData/Historical Air Quality Data".
- Pollution Maps:** Contains links for "AQI Map", "Current Hourly AQI", and "Today's AQI Animated".
- Popular Services:** A list of services including "Air Quality Forecast", "Current Air Quality", "Air Quality Complaints", "Online Records", "Permits", "Employment", "Sign up for County News & Information", and "More Services".
- APCD Logo:** "AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO".
- County Newscenter:** A section for news, with a partially visible link for "New Year Brings".

# Where can I find the Real-time Black Carbon data


# ¿Dónde puedo encontrar los datos de Carbono Negro en tiempo real?

16 AMBTEMP °F	KEARNY MESA	4.5	5.0	3.0	3.2	2.3	1.3	2.7	3.7	5.5	6.7	4.1	3.8	8.2	15.5																		5.0	15.5	13	
	OTAY MESA DVN							P	3.4	2.5	3.3	5.3	4.5	6.4	12.7																		5.4	12.7	13	
	PENDLETON	6.3	5.1	1.7	4.7	2.6	2.2	4.1	5.8	6.0	4.0	2.7	4.5	6.4	8.2																			4.6	8.2	13
	ALPINE	50.3	52.1	52.9	52.5	52.4	48.9	46.0	46.5	51.3	54.3	60.6	62.0	63.7	64.1																			54.1	64.1	13
	CARMEL MT RCH	46.9	45.7	45.3	45.3	45.7	45.8	46.8	46.2	51.0	54.8	58.6	62.2	64.1	60.3																			51.5	64.1	12
	CHULA VISTA	48.5	47.8	46.7	46.5	45.0	46.5	49.2	51.1	52.9	56.1	59.7	62.6	62.7	60.9																			52.6	62.7	12
	DOWNTOWN SE	50.6	49.6	48.5	47.6	47.7	47.7	50.1	51.9	54.9	58.3	60.4	62.8	62.0	60.3																			53.7	62.8	11

Current Date: 1/4/2021 2:09 PM

## Daily Parameter Report

Parameter	Site Name	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Summary								
																											Avg	Max	Hr. of					
17 RELHUM %	EL CAJON LES	45.1	44.0	43.0	42.0	41.5	41.4	43.2	45.3	47.6	51.1	58.1	63.2	67.8	67.3												50.0	67.8	12					
	KEARNY MESA	48.1	48.2	48.0	47.1	45.3	46.6	49.7	50.2	53.1	57.0	60.7	63.0	64.0	59.9												52.9	64.0	12					
	OTAY MESA DVN							P	48.2	52.3	55.1	59.8	63.8	65.6	62.1												58.1	65.6	12					
	PENDLETON	49.0	47.3	45.9	47.0	48.7	48.4	48.1	47.2	50.8	55.3	59.4	60.4	59.2	59.3												51.9	60.4	11					
18 PRES mmHg	ALPINE	60	57	52	50	49	58	70	67	57	54	44	38	35	39												52	70	06					
	EL CAJON LES	97	98	99	100	100	100	98	95	93	92	72	56	40	51												85	100	03					
	KEARNY MESA	95	96	92	93	95	94	95	97	91	80	69	60	62	72												85	97	07					
19 SOLAR W/M2	EL CAJON LES	753	753	753	753	753	754	754	755	755	754	754	753	752	751												753	755	07					
	KEARNY MESA	754	754	754	754	754	755	755	756	756	755	755	754	753	753												754	756	07					
25 NOY	EL CAJON LES	0	0	0	0	0	1	5	32	105	359	520	597	595	516												195	597	11					
	KEARNY MESA	0	0	0	0	0	0	1	2	35	178	428	542	610	600	505											207	610	11					
26 NOY-NO	EL CAJON LES	16.14	24.07	25.02	27.96	32.02	C	C	37.60	49.95	23.28	13.16	11.78	7.47	7.91												23.03	49.95	08					
27 NO Trace	EL CAJON LES	12.56	14.80	14.76	13.92	13.09	C	C	16.35	19.99	14.43	9.11	8.36	5.92	6.81												12.49	19.99	08					
28 SO2 Tr PPB	EL CAJON LES	3.58	9.27	10.25	14.03	18.93	C	C	21.24	29.96	8.85	4.05	3.42	1.55	1.30												10.53	29.96	08					
29 CO Tr PPB	EL CAJON LES	.0	.0	C	C	C	.1	.1	.1	.2	.1	.1	.1	.1													.0	.2	08					
BCarbon ug/m3	10TH AVE MARIN	435.9	516.3	C	C	C	555.0	547.0	594.2	733.3	443.0	364.6	340.5	264.0	273.1												460.6	733.3	08					
	ALPINE	1.69	2.22	1.97	1.38	1.28	1.38	1.15	1.25	1.27	.73	.71	1.83	.67													1.35	2.22	01					
	CHICANO PARK																																	
	DOWNTOWN SE	1.83	1.25	1.40	1.32	1.39	1.25	1.31	1.46	1.09	.76	.56	.77	.57														1.14	1.63	00				
	OCEANVIEW BLV	1.70	1.41	1.41	1.21	.99	1.23	1.36	1.35	.89	.51	.54	.67	.76														1.08	1.70	00				
	SAN YSIDRO	2.63	1.65	1.44	1.19	1.33	1.33	1.39	1.36	.74	.54	.54	.66	.70														1.19	2.63	00				
RAINFALL	EL CAJON LES	1.548	4.084	5.233	6.220	5.032	5.275	7.608	8.471	4.329	5.26	.780	.641	.677													3.878	8.471	07					
		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00													.00	.00	00					



# Where can I find the Archived Black Carbon data

¿Dónde puedo encontrar los datos archivados de Carbono Negro?

The screenshot shows the homepage of the Air Pollution Control District (APCD) website. At the top, there is a navigation bar with a home icon, a search bar labeled "ENHANCED BY Google", and menu items: "I WANT TO ...", "GRANTS", "CITIZENS & BUSINESS", "PERMITS", "PROGRAMS", and "HELP".

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On the right side, there is a sidebar with the APCD logo, social media icons (Twitter, mobile, email, YouTube, chat), and a "Popular Services" list:

- Air Quality Forecast
- Current Air Quality
- Air Quality Complaints
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- More Services

At the bottom of the sidebar is the "COUNTYNEWSCENTER" logo.



# Where can I find the Archived Black Carbon data

¿Dónde puedo encontrar los datos archivados de Carbono Negro?

## Index of /data

- [Parent Directory](#)
- [00 Disclaimer.html](#)
- [00 Information.html](#)
- [2012/](#)
- [2013/](#)
- [2014/](#)
- [2015/](#)
- [2016/](#)
- [2017/](#)
- [2018/](#)
- [2019/](#)
- [2020/](#)
- [8 current.CSV](#)
- [8 yesterday 20201002.CSV](#)
- [8 yesterday 20201003.CSV](#)
- [8 yesterday 20201004.CSV](#)
- [8 yesterday 20201005.CSV](#)
- [8 yesterday 20201006.CSV](#)
- [8 yesterday 20201007.CSV](#)
- [8 yesterday 20201008.CSV](#)
- [8 yesterday 20201009.CSV](#)
- [8 yesterday 20201010.CSV](#)
- [8 yesterday 20201011.CSV](#)
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- [8 yesterday 20201013.CSV](#)
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- [8 yesterday 20201019.CSV](#)
- [8 yesterday 20201020.CSV](#)
- [8 yesterday 20201021.CSV](#)
- [8 yesterday 20201022.CSV](#)
- [8 yesterday 20201023.CSV](#)
- [8 yesterday 20201024.CSV](#)
- [8 yesterday 20201025.CSV](#)
- [8 yesterday 20201026.CSV](#)
- [8 yesterday 20201027.CSV](#)
- [8 yesterday 20201028.CSV](#)
- [8 yesterday 20201029.CSV](#)
- [8 yesterday 20201030.CSV](#)

# Where can I find the Archived Black Carbon data

¿Dónde puedo encontrar los datos archivados de Carbono Negro?

Parameter	Site Name	0	1	2	3	4	5	6	7	8	9	10
01 OZONE PPM	ALPINE	0.046	0.047	C	C	0.047	0.047	0.044	0.041	0.045	0.046	0.045
	CHULA VISTA	0.011	0.013	C	C	0.02	0.019	0.008	0.006	0.013	0.016	M
	DOWNTOWN SES	0.006	0.006	C	C	0.013	0.01	0.003	0.007	0.008	0.01	0.027
	EL CAJON LES	0.002	0.001	C	C	C	0.002	0.002	0.003	0.009	0.01	0.021
	ESCONDIDO											
	KEARNY MESA	0.026	0.027	C	C	0.031	0.027	0.02	0.008	0.011	0.015	0.03
	OTAY MESA DVN	0.026	C	C	C	0.027	0.026	0.031	0.032	0.029	0.027	0.037
	PENDLETON	0.016	0.022	0.021	0.02	0.02	0.015	0.011	0.009	0.014	0.018	0.025
BCarbon ug/m3	10TH AVE MARINE TERM	1.91	1.63	0.94	0.8	1.06	0.86	1.4	2	1.59	2.66	2.86
	ALPINE	0.09	0.06	0.06	0.06	0.05	0.06	0.23	0.39	0.16	0.09	0.11
	CHICANO PARK	1.6	1.25	0.66	0.53	1.01	0.86	1.62	1.97	1.63	1.62	2.01
	DOWNTOWN SES	1.51	1.5	0.82	0.7	0.58	0.61	1	1.37	1.45	1.76	0.92
	OCEANVIEW BLVD	2.82	1.77	1.16	0.81	0.81	1.81	2.92	1.52	1.79	1.3	1.25
	SAN YSIDRO	5.702	6.138	6.29	6.629	7.002	6.259	5.524	4.63	5.633	7.683	1.92
RAINFALL	EL CAJON LES	0	0	0	0	0	0	0	0	0	0	0

# What is Black Carbon (BC)?

BC is a component of fine particulate matter (PM<sub>2.5</sub>).

Black Carbon is also a component of Diesel Particulate Matter (DPM).

Why do we measure for Black Carbon instead of DPM?

- There is no direct measurement of DPM, so Black Carbon is used as a surrogate for DPM.

Black Carbon is estimated to be 70% (based on published studies).

- 1 gram of Black Carbon ~ 1.3 gram of Diesel Particulate Matter

Black Carbon is formed by the incomplete combustion of fossil fuels, wood, and other fuels.

This incomplete combustion gives:

- Carbon dioxide (CO<sub>2</sub>).
- Volatile Organic Compounds (VOCs).
- Black Carbon (BC) and Organic Carbon (OC).

Citations

- <https://www.ccacoalition.org/en/slcp/ps/black-carbon>
- <https://www.sciencedirect.com/science/article/pii/S0269749113003266>

# ¿Que es el Carbono Negro (BC)?

El carbón negro (BC) es un componente de partículas finas (PM<sub>2.5</sub>).

El carbono negro también es un componente de la materia particulada diésel (DPM).

¿Por qué medimos el carbono negro en lugar de DPM?

- No hay una medición directa de DPM, por lo que el Carbon Negro se utiliza como sustituto de DPM.

Se estima que el carbono negro es del 70% (según estudios publicados).

- 1 gram of Black Carbon ~ 1.3 gram of Diesel Particulate Matter

El carbono negro se forma por la combustión incompleta de combustibles fósiles, madera y otros combustibles.

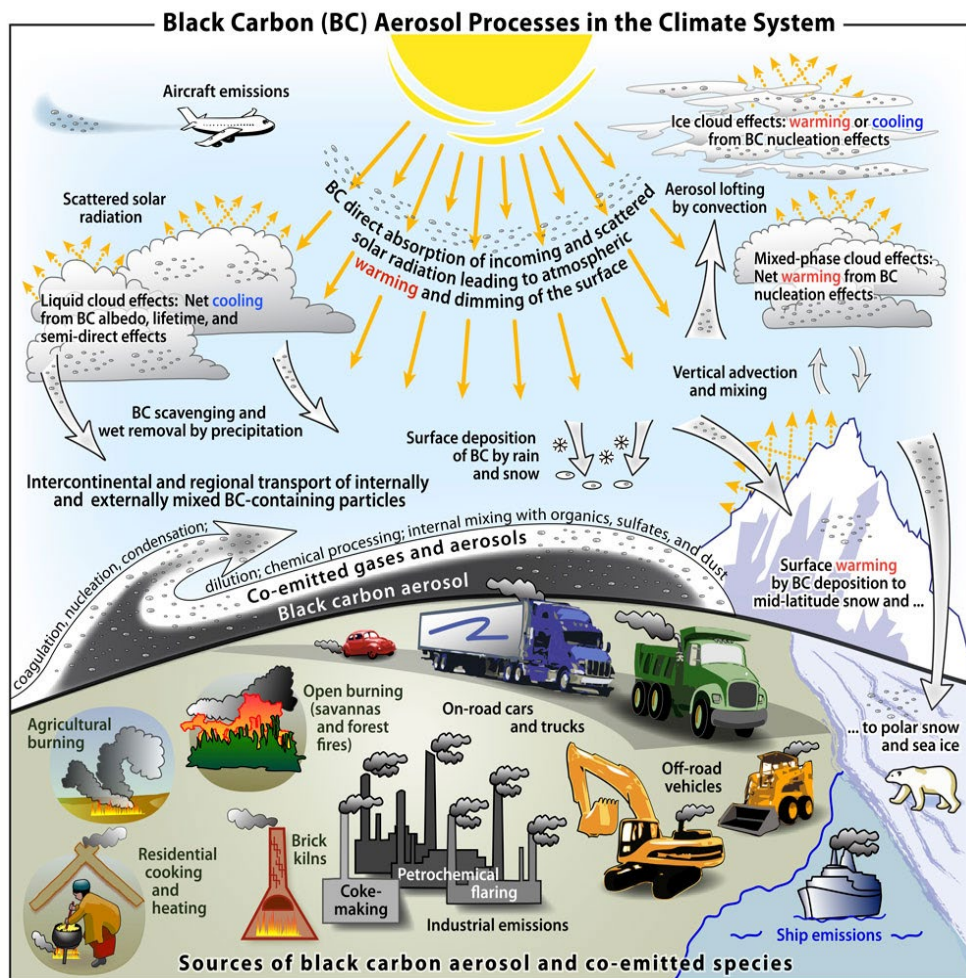
Esta combustión incompleta da:

- Dióxido de carbono (CO<sub>2</sub>).
- Compuestos orgánicos volátiles (COV).
- Carbón negro (BC) y Carbono orgánico (OC).

Citas

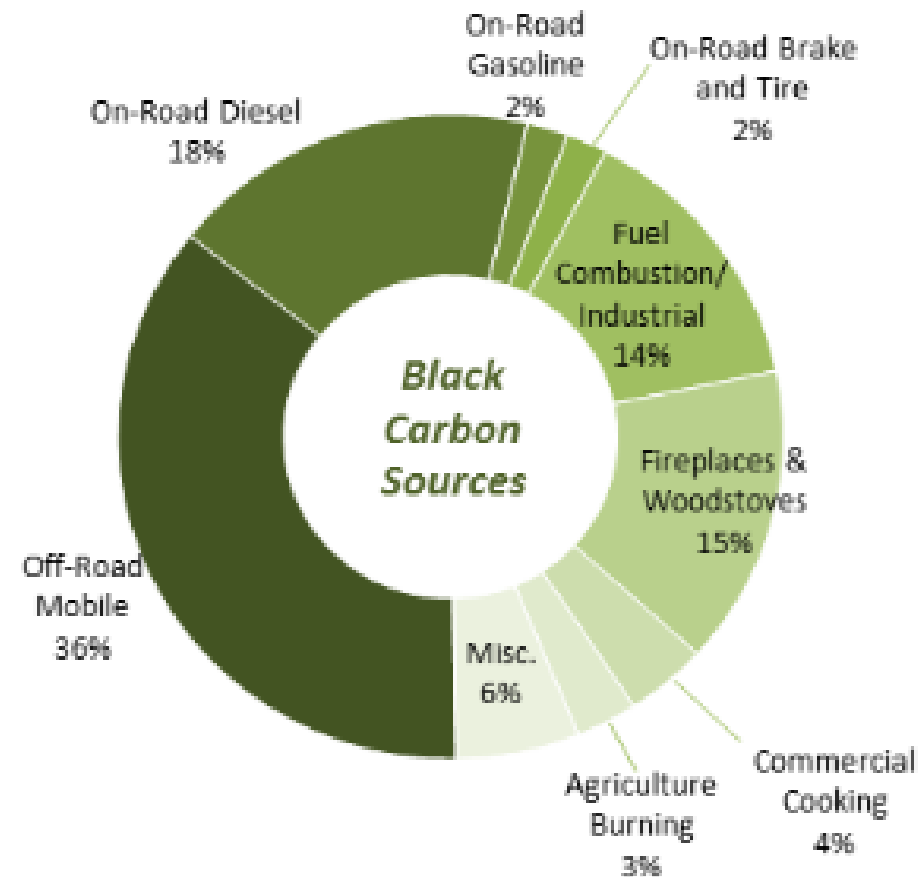
- <https://www.ccacoalition.org/en/slcp/ps/black-carbon>
- <https://www.sciencedirect.com/science/article/pii/S0269749113003266>

# Sources of Black Carbon?



<https://blog.nus.edu.sg/poisonair/2019/11/10/how-does-indoor-air-pollution-cause-climate-change/>

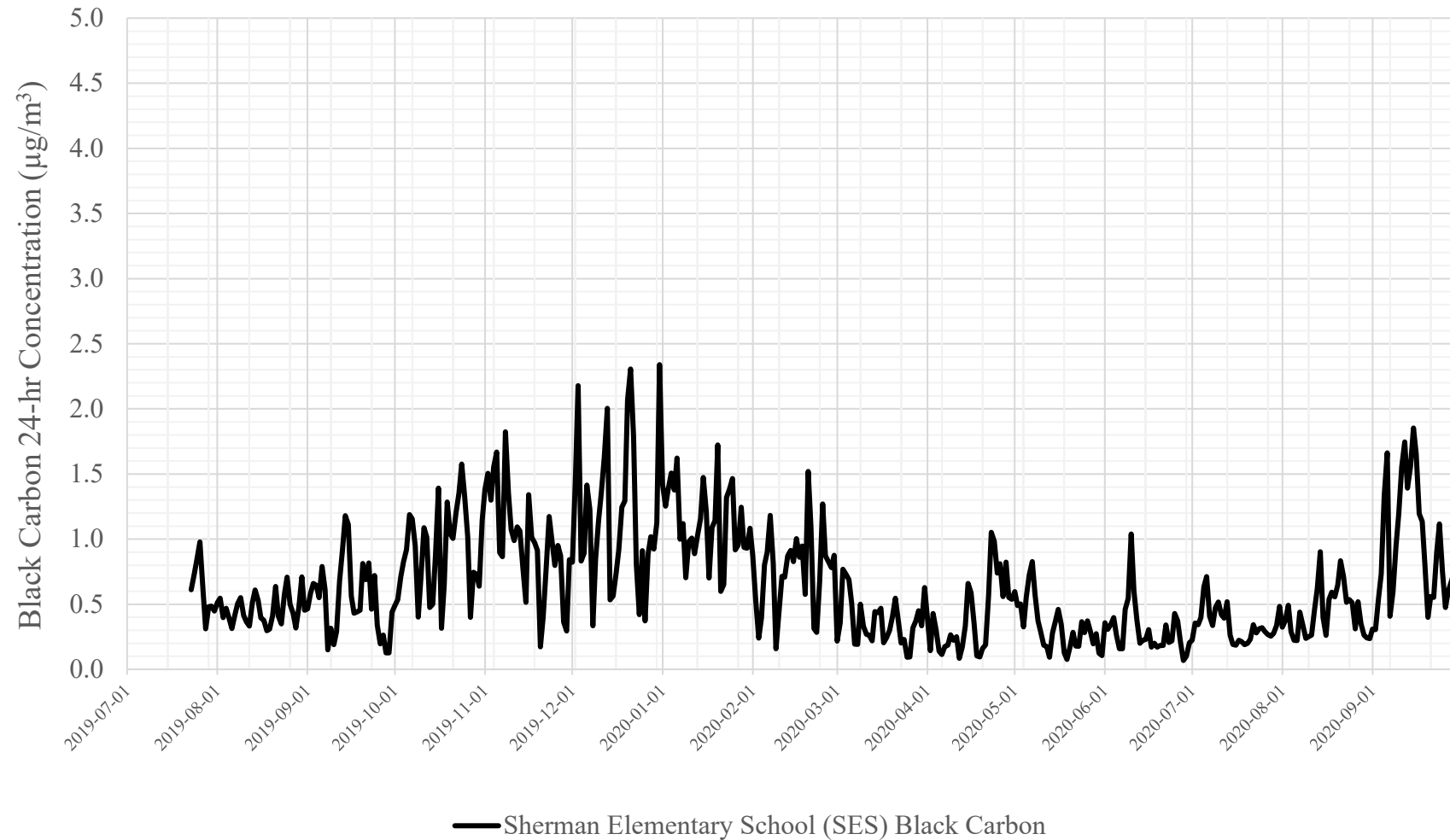
# Fuentes de Carbono Negro?



[https://oehha.ca.gov/media/epic/downloads/ccd\\_abcc2018.pdf](https://oehha.ca.gov/media/epic/downloads/ccd_abcc2018.pdf)

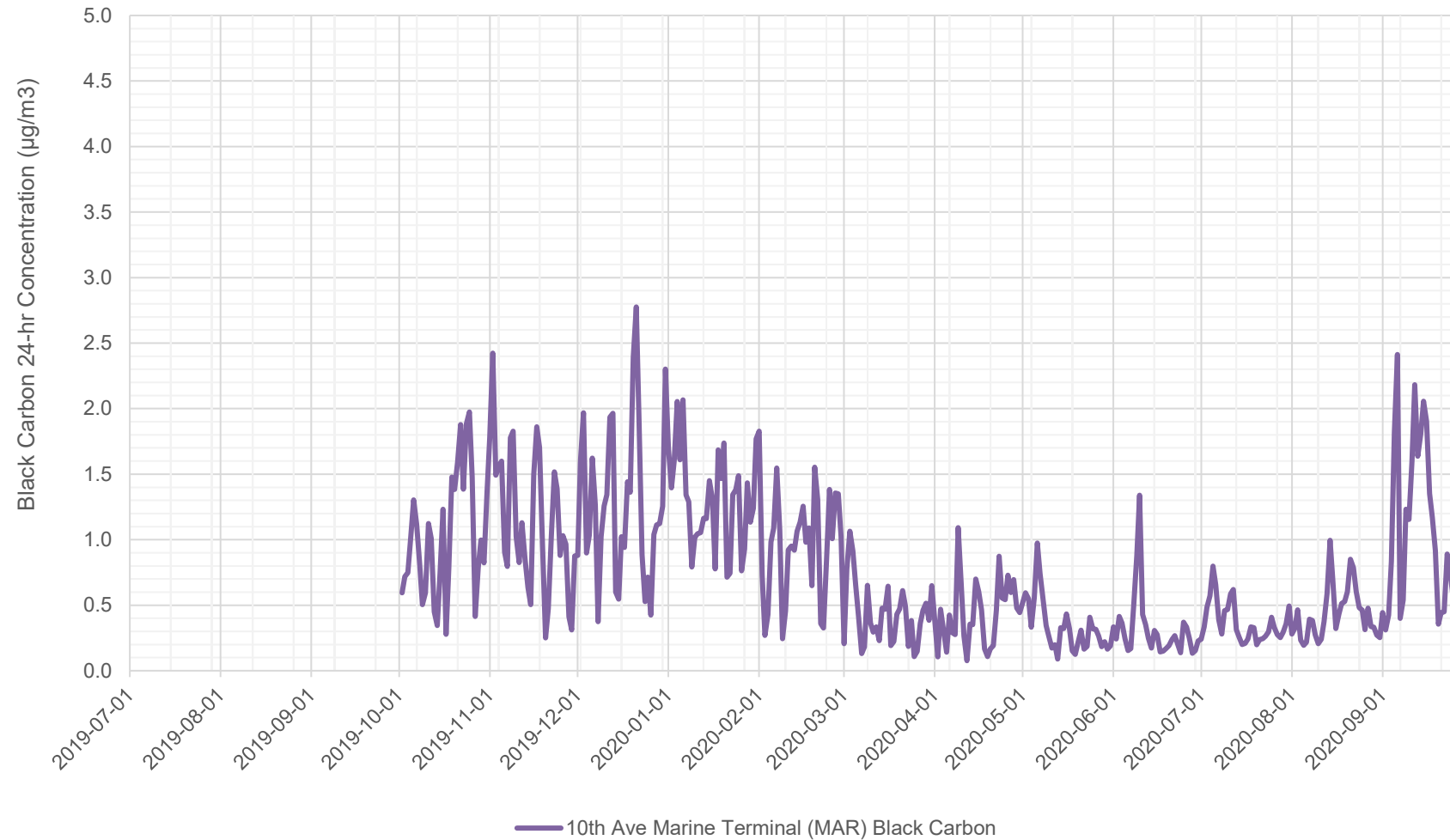
# Black Carbon Concentrations (Sherman)

BLACK CARBON CONCENTRATIONS (Sherman) 7/2019 - 9/2020



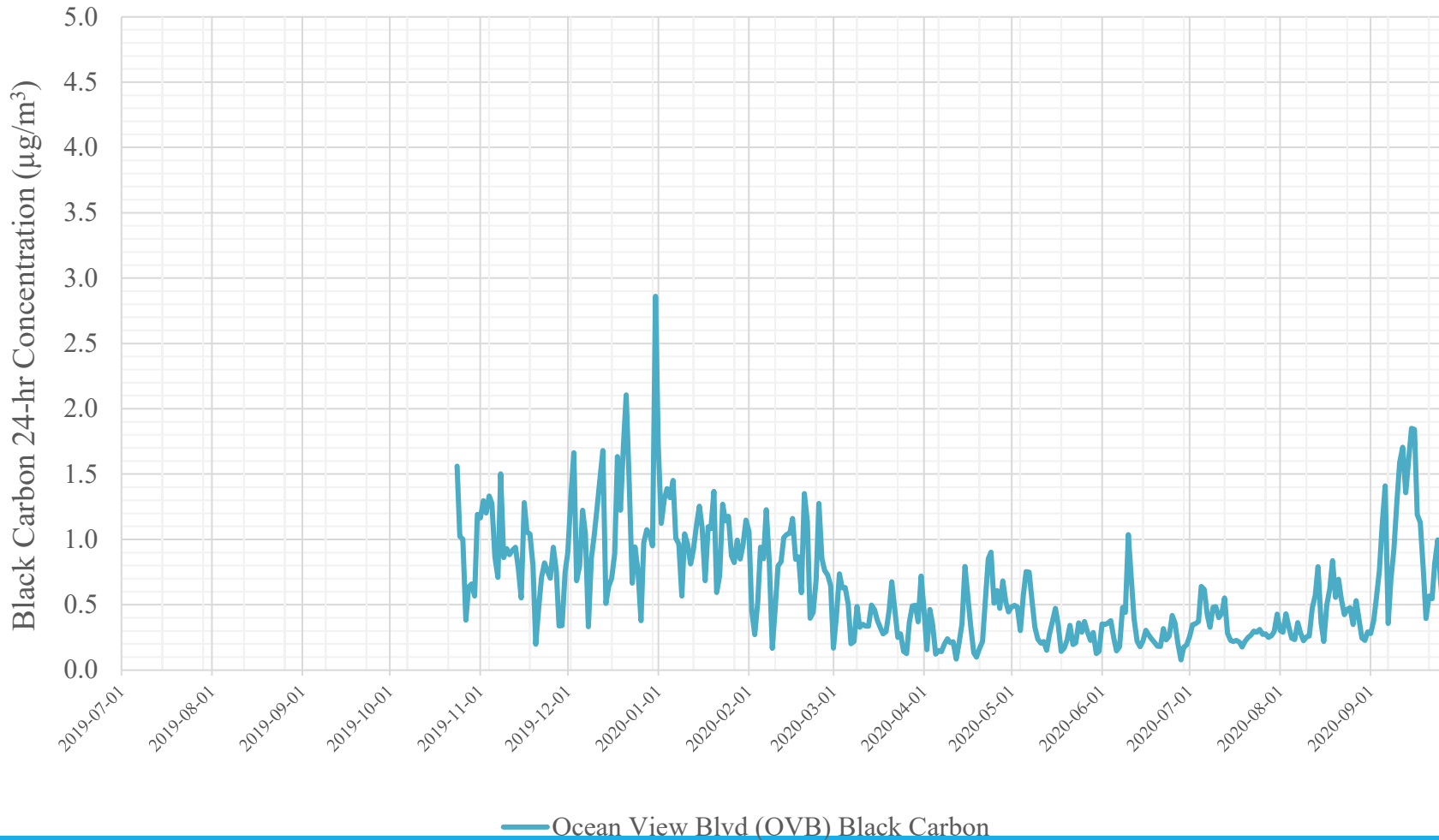
# Black Carbon Concentrations (Marine Terminal)

BLACK CARBON CONCENTRATIONS (Marine) 7/2019 - 9/2020



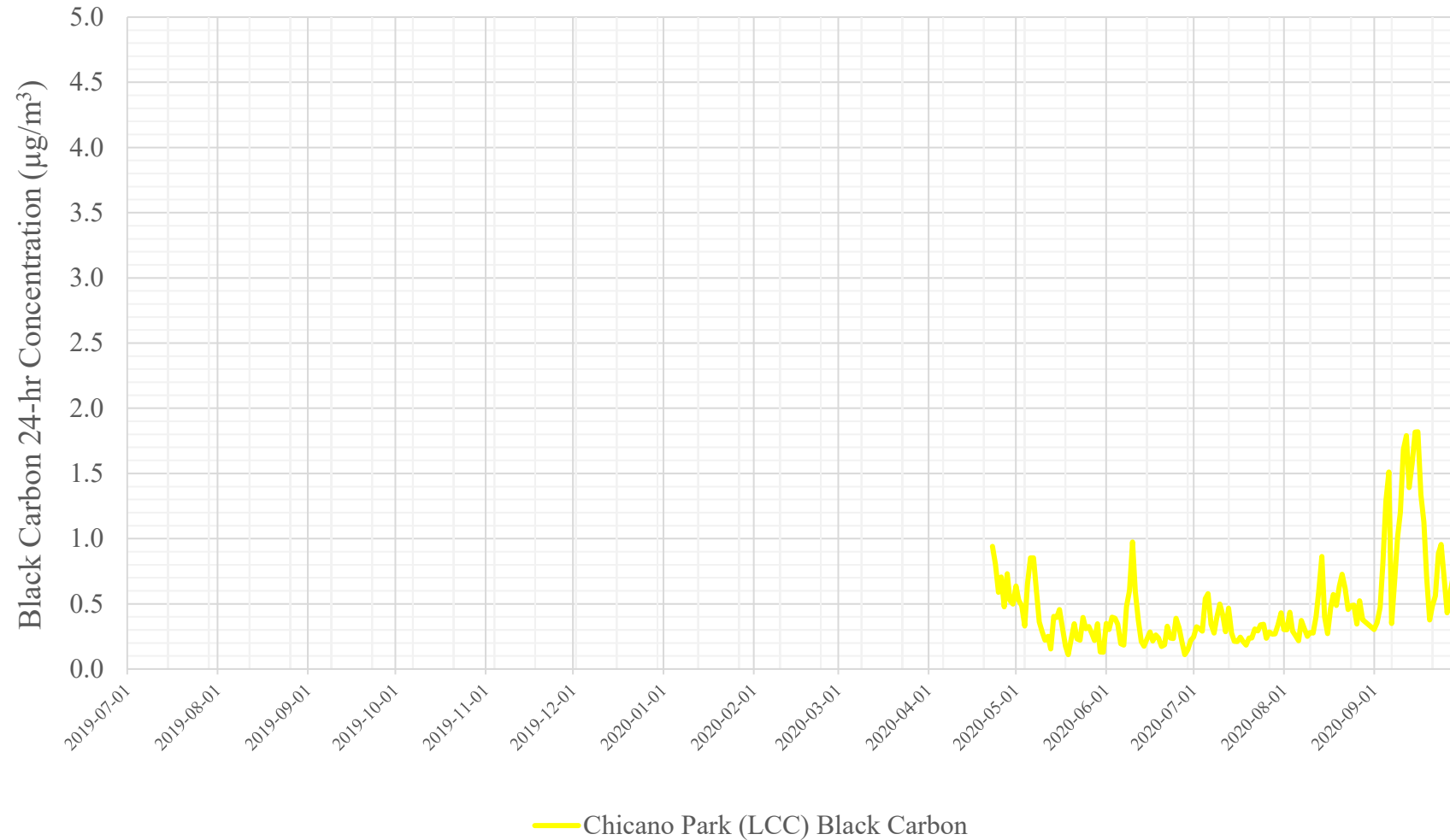
# Black Carbon Concentrations (Ocean View Blvd.)

BLACK CARBON CONCENTRATIONS (Ocean View) 7/2019 - 9/2020



# Black Carbon Concentrations (Chicano Park)

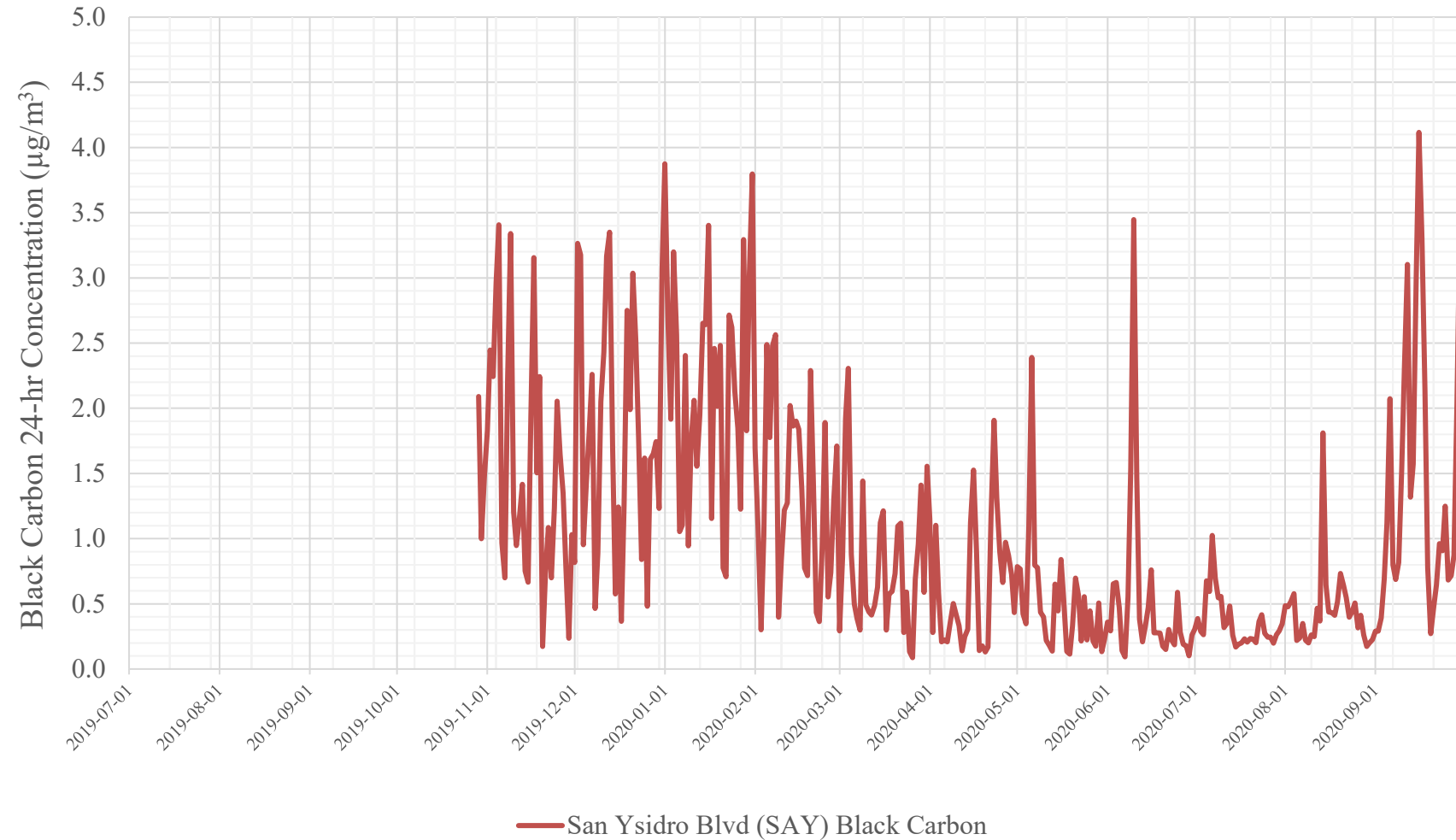
BLACK CARBON CONCENTRATIONS (Chicano Park) 7/2019 - 9/2020





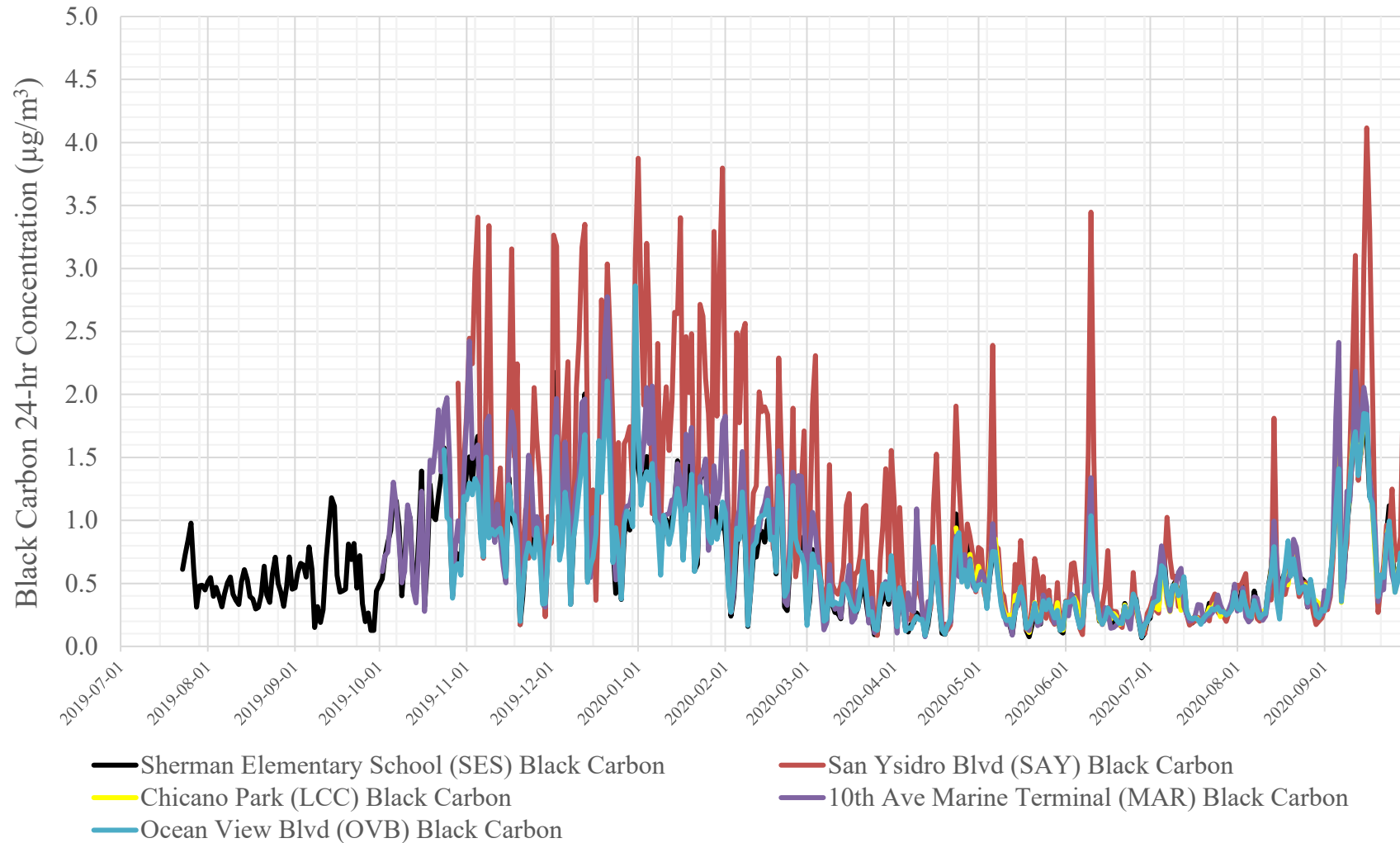
# Black Carbon Concentrations (San Ysidro)

BLACK CARBON CONCENTRATIONS (San Ysidro) 7/2019 - 9/2020

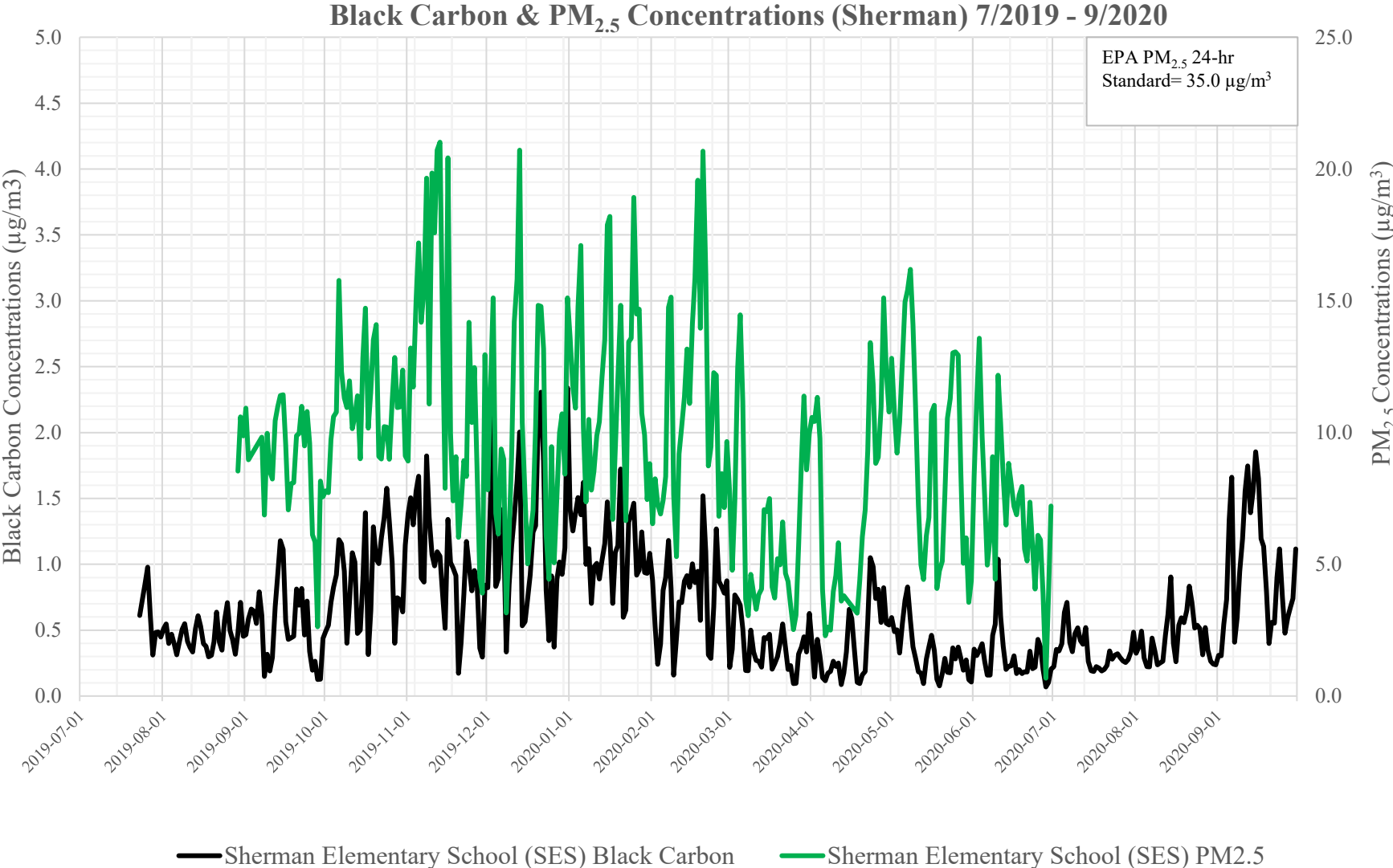


# Black Carbon Concentrations (Portside & South SD sites)

BLACK CARBON CONCENTRATIONS (Portside & South SD) 7/2019 - 9/2020



# Black Carbon & PM<sub>2.5</sub> Concentrations



# What Does These Data Tell Us?

Black Carbon across the greater Portside area tends to track each other, often times with identical concentrations.

- Meaning: The source of Black Carbon would be Portside-wide, with no localized hot spots.

The Marine Terminal occasionally exhibits spikes in Black Carbon concentrations not seen at the other Portside sites.

- Meaning: Marine Terminal measured emissions from a very local source; most likely maritime activity.

San Ysidro routinely measures higher concentration of Black Carbon than the other AB617 sites.

Black Carbon and PM<sub>2.5</sub> track each other at Sherman Elementary School, often exhibiting very similar concentration profiles.

- As stated earlier, Black Carbon is a component of PM<sub>2.5</sub>, so this tracking behavior is not unexpected.
- Black Carbon and PM<sub>2.5</sub> are from the same source when they track well.

Additional data (ions, metals, wind, etc.) need to be collected so that Source Apportionment can be done to determine what the sources are and their relative amounts in contributing to the PM pollution in this area

# ¿Qué nos dicen estos datos?

El carbono negro a lo largo de la zona de Portuaria tiende a seguirse entre sí, a menudo con concentraciones idénticas.

- Significado: La fuente de carbono negro sería en todo el puerto, sin puntos calientes localizados..

La Terminal Marina ocasionalmente exhibe picos en las concentraciones de carbono negro que no se ven en los otros sitios del puerto.

- Significado: Marine Terminal midió las emisiones de una fuente muy local; actividad marítima más probable.

San Ysidro mide habitualmente una mayor concentración de carbono negro que los otros sitios AB617.

Black Carbon y PM<sub>2.5</sub> se rastrean mutuamente en Sherman Elementary School, a menudo exhibiendo perfiles de concentración muy similares..

- Como se indicó anteriormente, Black Carbon es un componente de PM<sub>2.5</sub>, por lo que este comportamiento de seguimiento no es inesperado.
- Black Carbon y PM<sub>2.5</sub> provienen de la misma fuente cuando siguen bien.

Es necesario recopilar datos adicionales (iones, metales, viento, etc.) para que se pueda realizar el reparto de fuentes para determinar cuáles son las fuentes y sus cantidades relativas que contribuyen a la contaminación por partículas en esta área.

# Contact Information

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