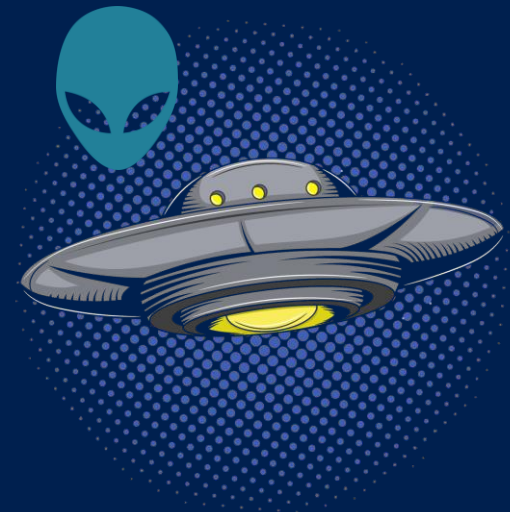


# Projeto 1:

# UFO SIGHTINGS

Linguagem de Programação  
Aplicada à Automação (LPAA)

Prof. Emmanuel Andrade



Leandro Dantas Lima – [ldl@poli.br](mailto:ldl@poli.br)

Projeto 1:

# UFO SIGHTINGS



**UFO SIGHTINGS**

# Dados analisados

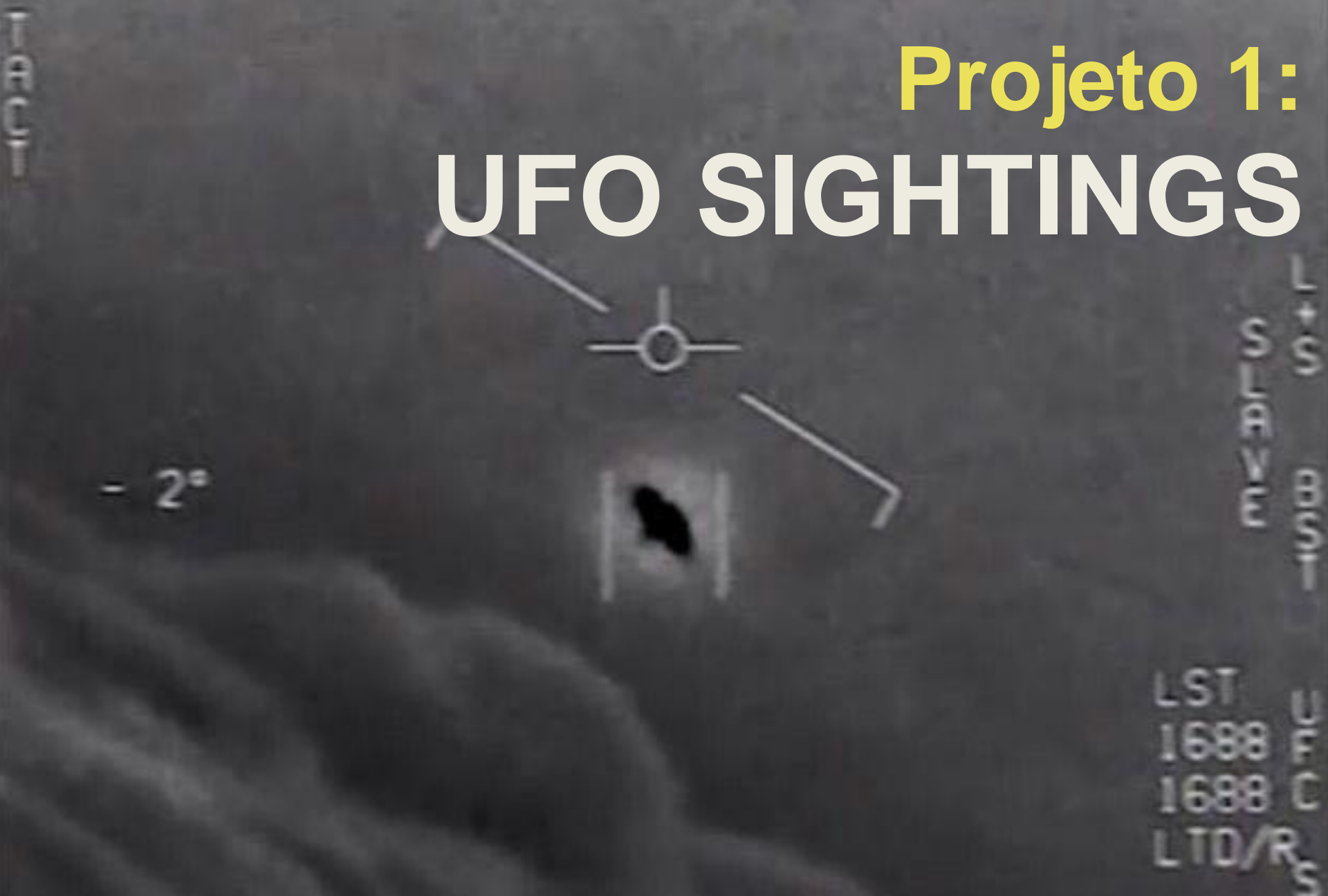
	datetime	city	state	country	shape	duration (seconds)	duration (hours/min)
0	10/10/1949 20:30	san marcos	tx	us	cylinder	2700	45 minutes
1	10/10/1949 21:00	lackland afb	tx	NaN	light	7200	1-2 hrs
2	10/10/1955 17:00	chester (uk/england)	NaN	gb	circle	20	20 seconds

comments	date posted	latitude	longitude
This event took place in early fall around 194...	4/27/2004	29.8830556	-97.941111
1949 Lackland AFB&#44 TX. Lights racing acros...	12/16/2005	29.38421	-98.581082
Green/Orange circular disc over Chester&#44 En...	1/21/2008	53.2	-2.916667

Scrubbed.csv (80332, 11) [\[1\]](#)

**UFO SIGHTINGS**

# Projeto 1: UFO SIGHTINGS



UFO SIGHTINGS

# Dados ausentes

## ORIGINAIS

datetime	0
city	0
state	5797
country	9670
shape	1932
duration (seconds)	0
duration (hours/min)	0
comments	15
date posted	0
latitude	0
longitude	0
dtype: int64	



## TRATADOS

datetime	0
city	0
state	0
country	0
shape	0
duration (seconds)	0
duration (hours/min)	0
comments	0
date posted	0
latitude	0
longitude	0
dtype: int64	



# TIPOS DE DADOS

## ORIGINAIS

Column	Non-Null Count	Dtype
-----	-----	-----
datetime	80332 non-null	object
city	80332 non-null	object
state	74535 non-null	object
country	70662 non-null	object
shape	78400 non-null	object
duration (seconds)	80332 non-null	object
duration (hours/min)	80332 non-null	object
comments	80317 non-null	object
date posted	80332 non-null	object
latitude	80332 non-null	object
longitude	80332 non-null	float64

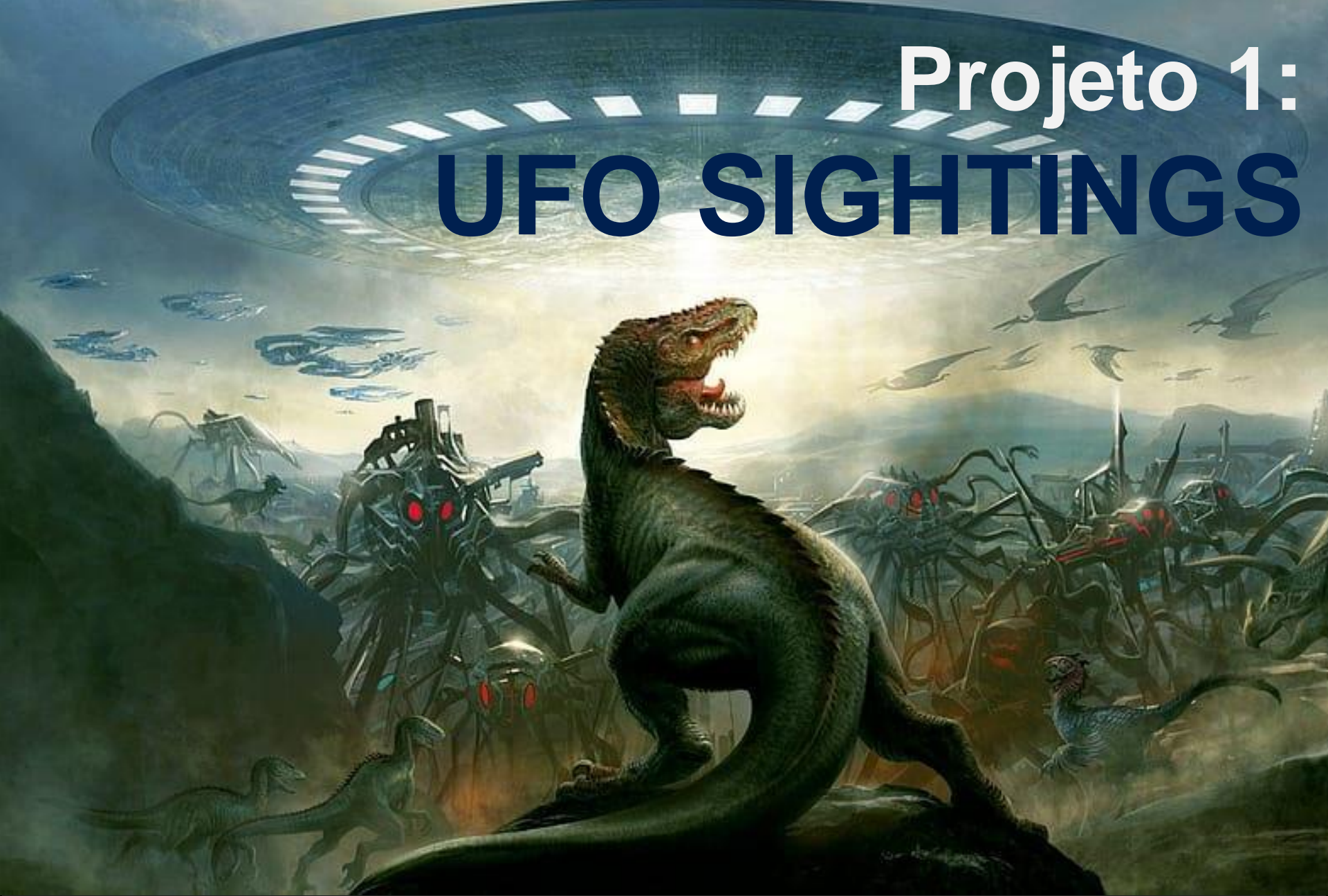
## TRATADOS

Column	Non-Null Count	Dtype
-----	-----	-----
datetime	51249 non-null	object
year_sight	51249 non-null	int32
duration (seconds)	51249 non-null	float64
country	51249 non-null	object
state	51249 non-null	object
city	51249 non-null	object
latitude	51249 non-null	float64
longitude	51249 non-null	float64
shape	51249 non-null	object

Obs.: quando não consegue definir um único tipo de dado numa coluna, define como object

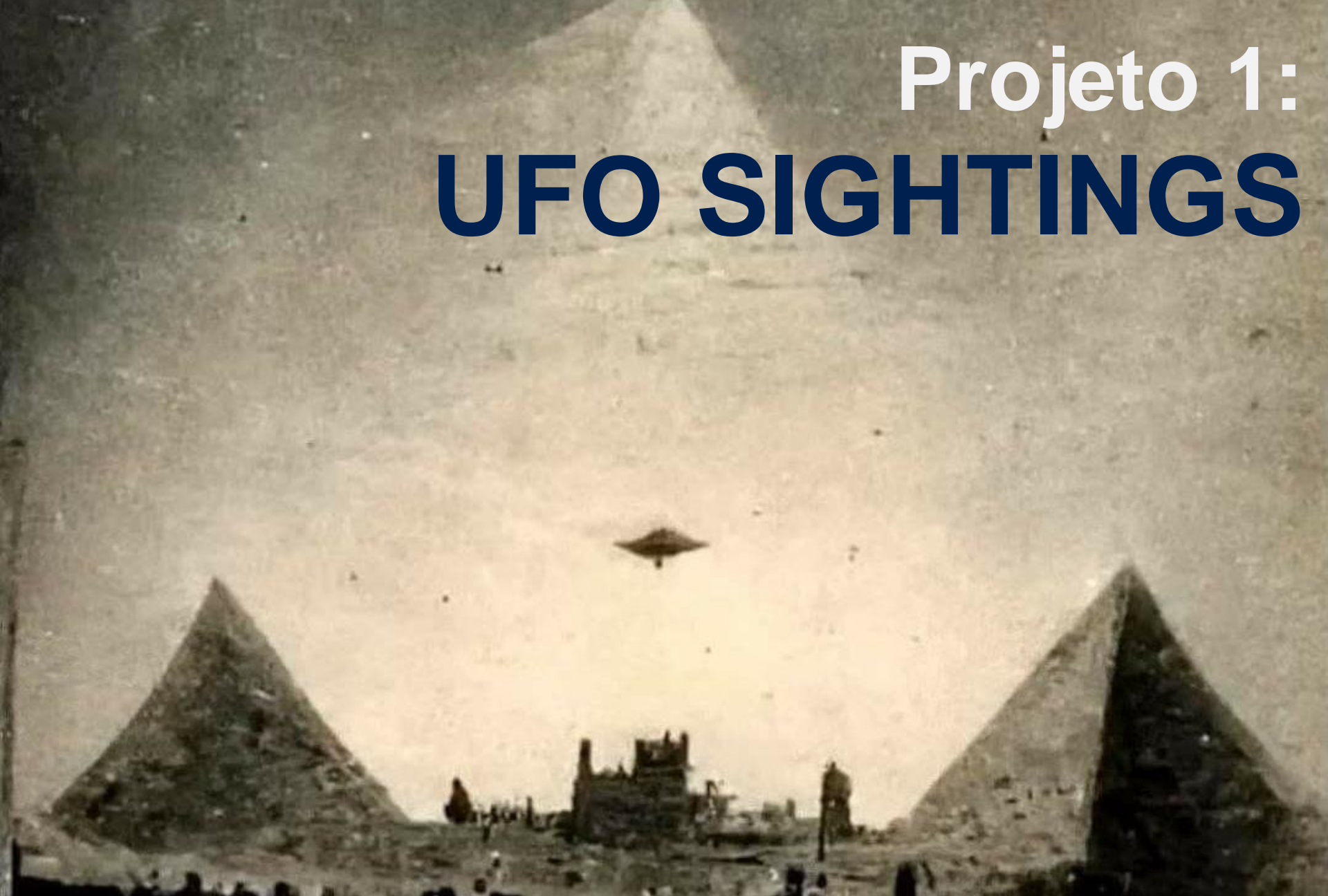


# Projeto 1: **UFO SIGHTINGS**



**UFO SIGHTINGS**

# Projeto 1: **UFO SIGHTINGS**



**UFO SIGHTINGS**



# Projeto 1: UFO SIGHTINGS



UFO SIGHTINGS

# LINHA DO TEMPO



Os relatos de avistamentos  
datam de 1910 até 2014

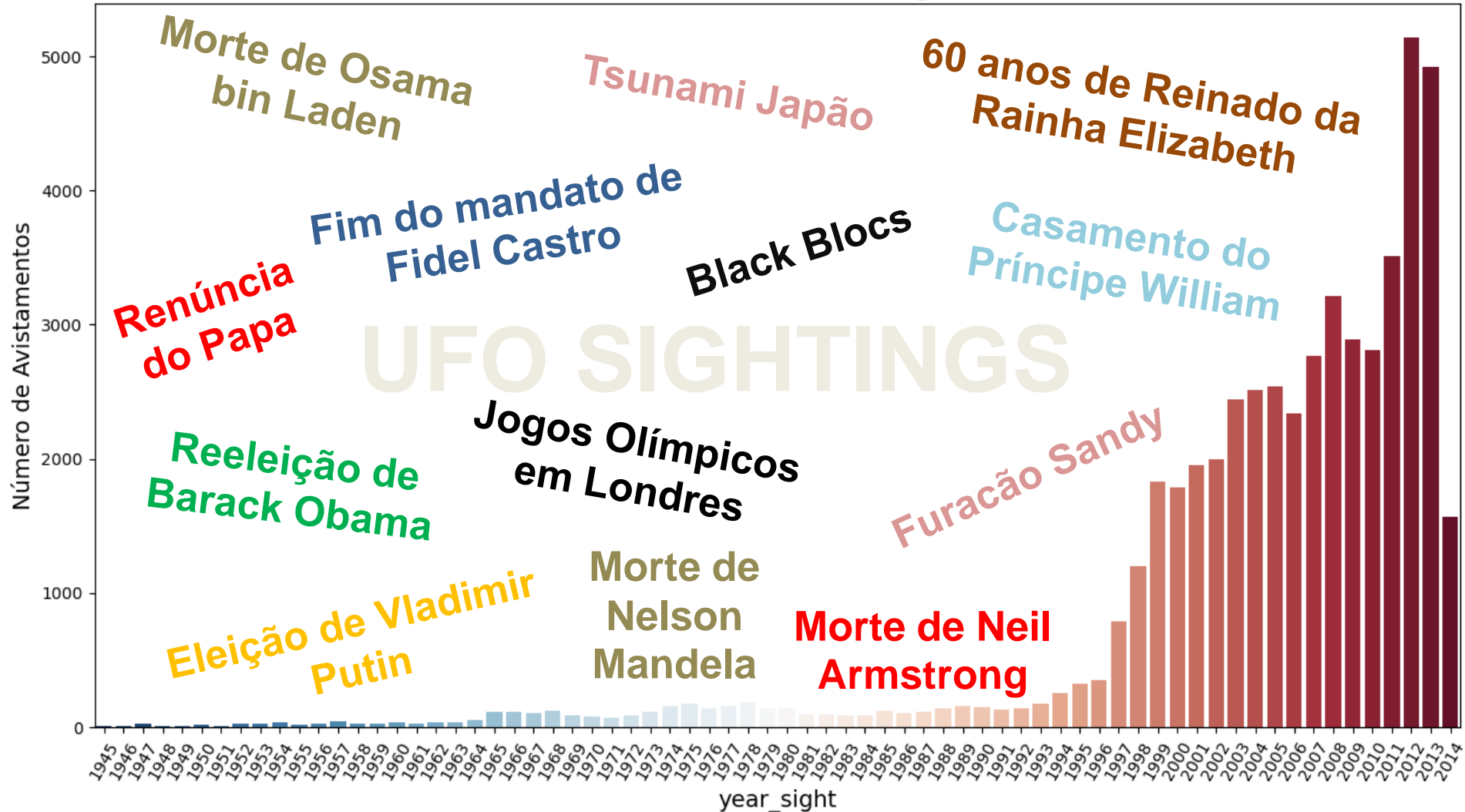
```
count      51249.000000  
mean       2004.461960  
std         10.025378  
min        1910.000000  
25%        2002.000000  
50%        2007.000000  
75%        2011.000000  
max        2014.000000  
Name: year_sight, dtype: float64
```

**UFO SIGHTINGS**

ldl@poli.br



Avistamentos de OVNI's ao longo dos anos

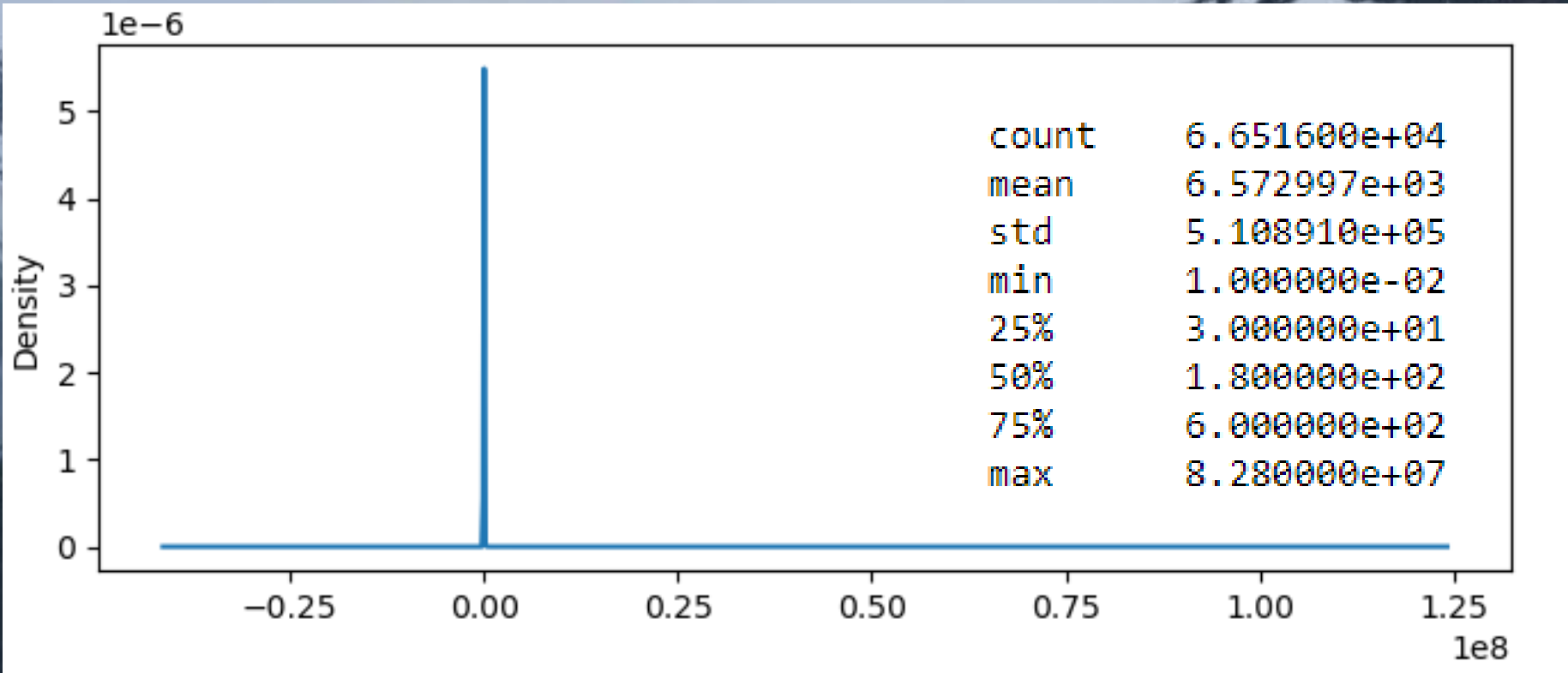


**UFO SIGHTINGS**



# DURAÇÃO DOS AVISTAMENTOS

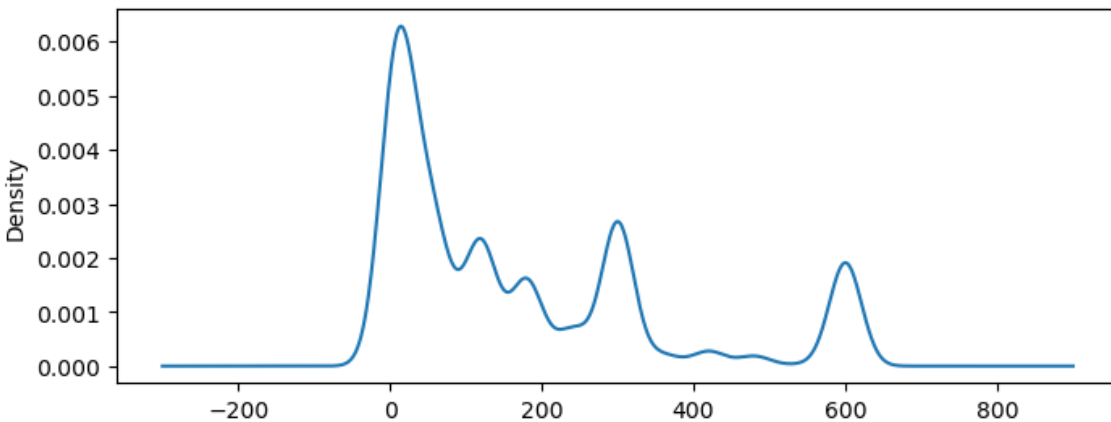
(segundos)



UFO SIGHTINGS

# Duração

(segundos)

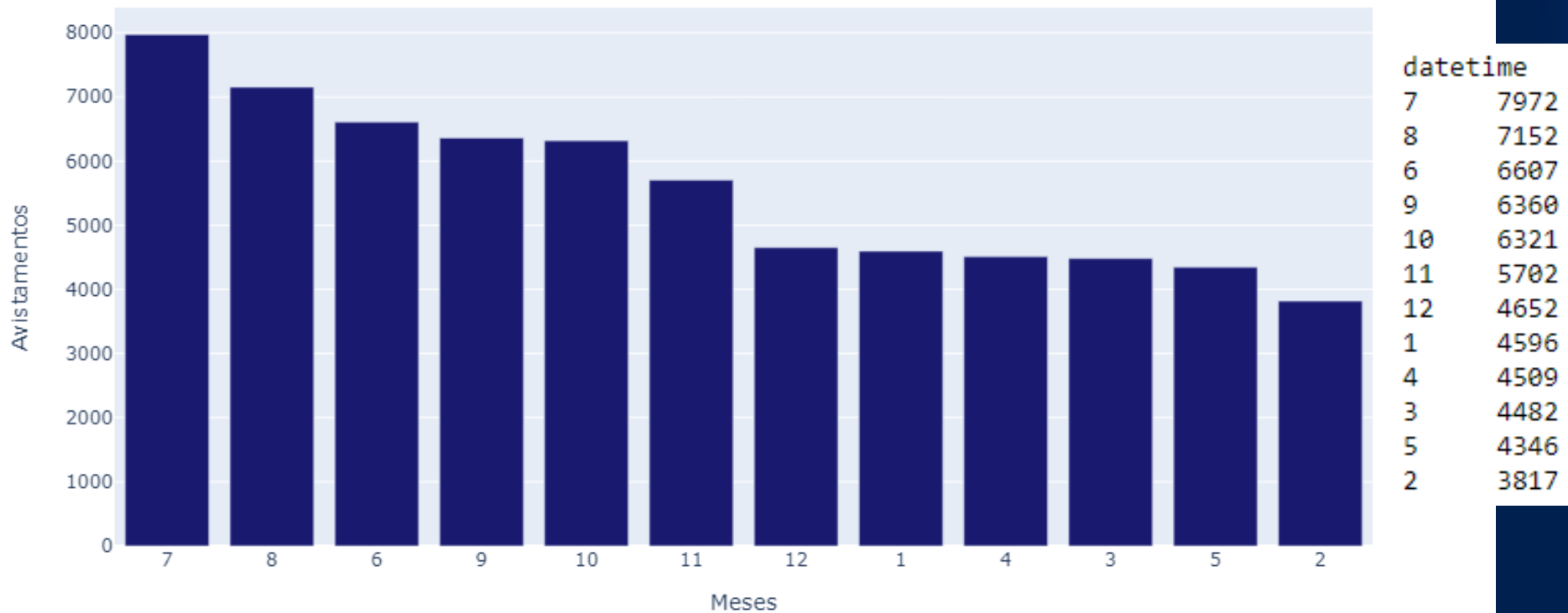


count	51513.000000
mean	168.461289
std	185.567019
min	0.010000
25%	15.000000
50%	120.000000
75%	300.000000
max	600.000000

**UFO SIGHTINGS**

# Avistamentos por Meses do Ano

Avistamentos por Meses do ano

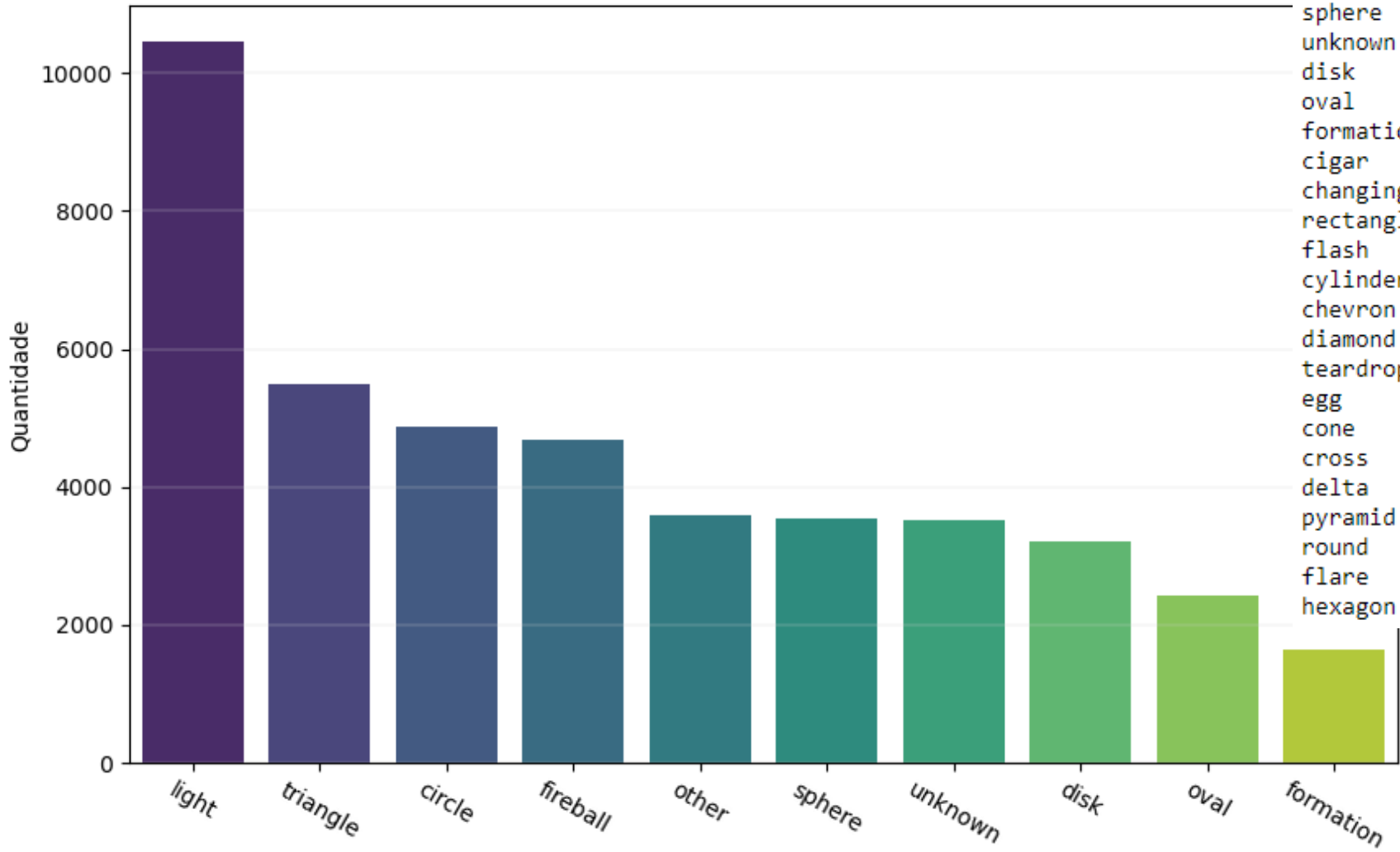


**UFO SIGHTINGS**



# Formatos Relatados

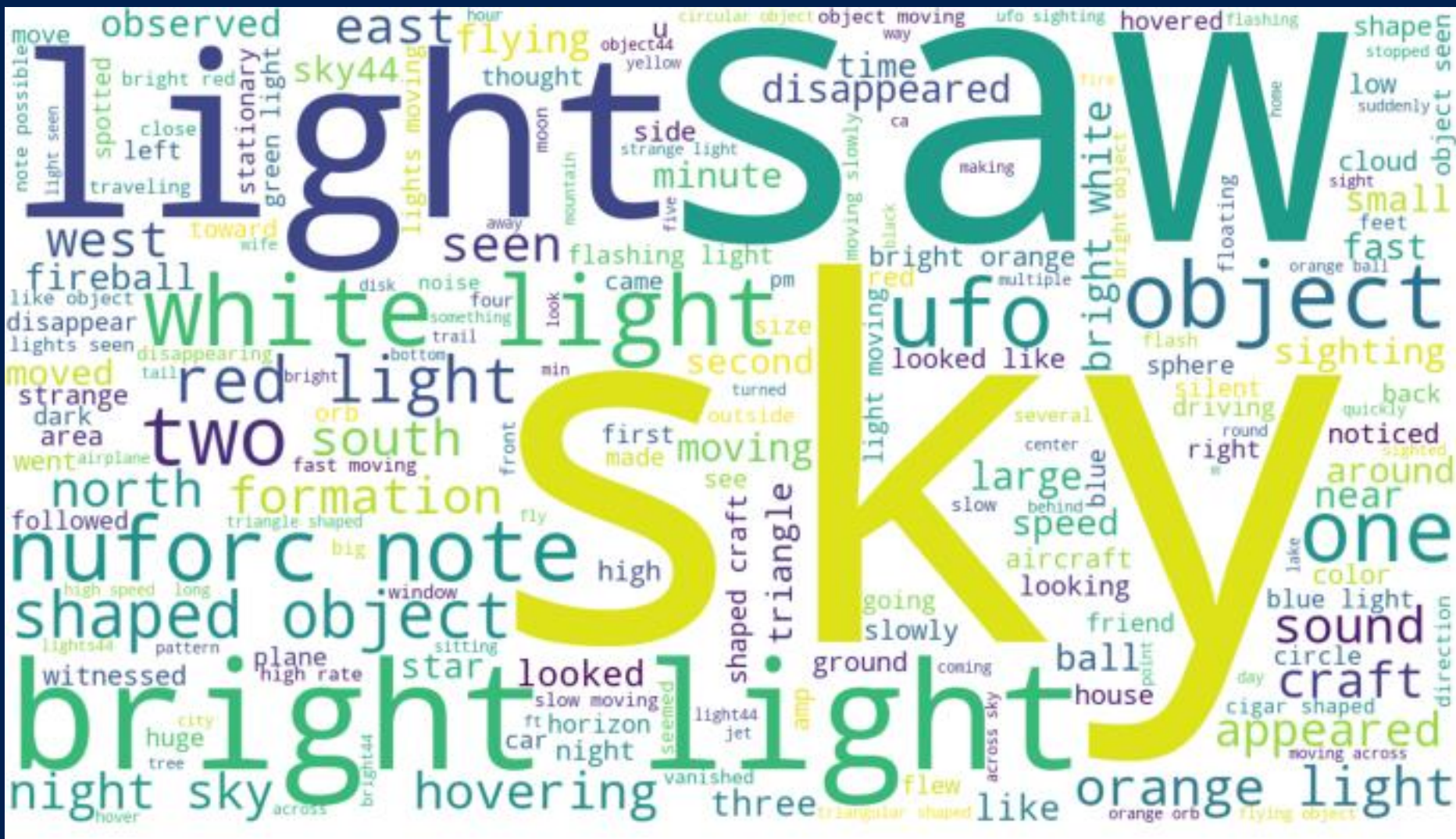
Top 10 Formatos Mais Avistados



shape	
light	10460
triangle	5503
circle	4875
fireball	4680
other	3600
sphere	3551
unknown	3527
disk	3202
oval	2414
formation	1649
cigar	1397
changing	987
rectangle	924
flash	900
cylinder	855
chevron	723
diamond	689
teardrop	503
egg	480
cone	179
cross	142
delta	5
pyramid	1
round	1
flare	1
hexagon	1

UFO SIGHTINGS

# Formatos Relacionados

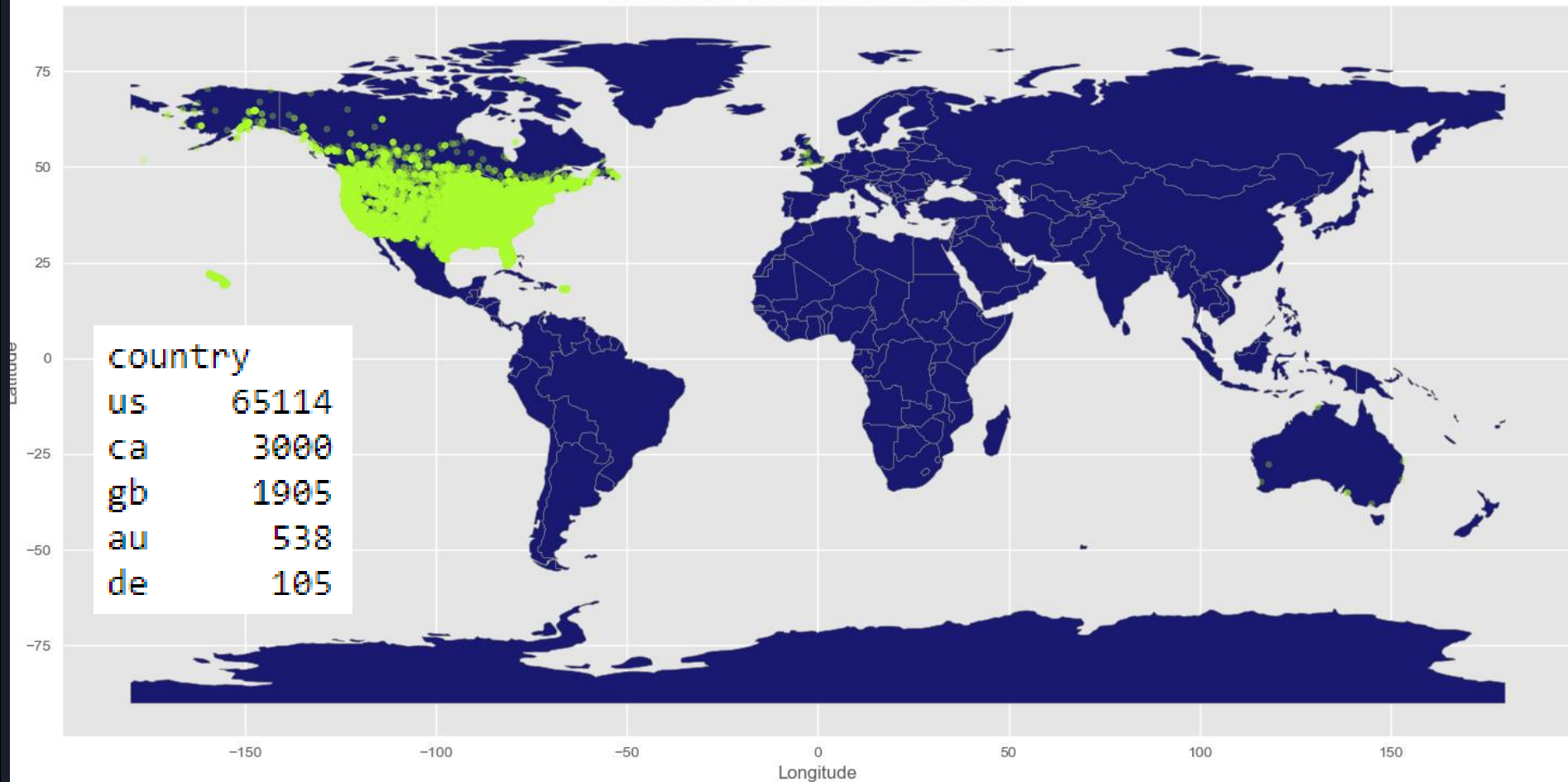


# UFO SIGHTINGS



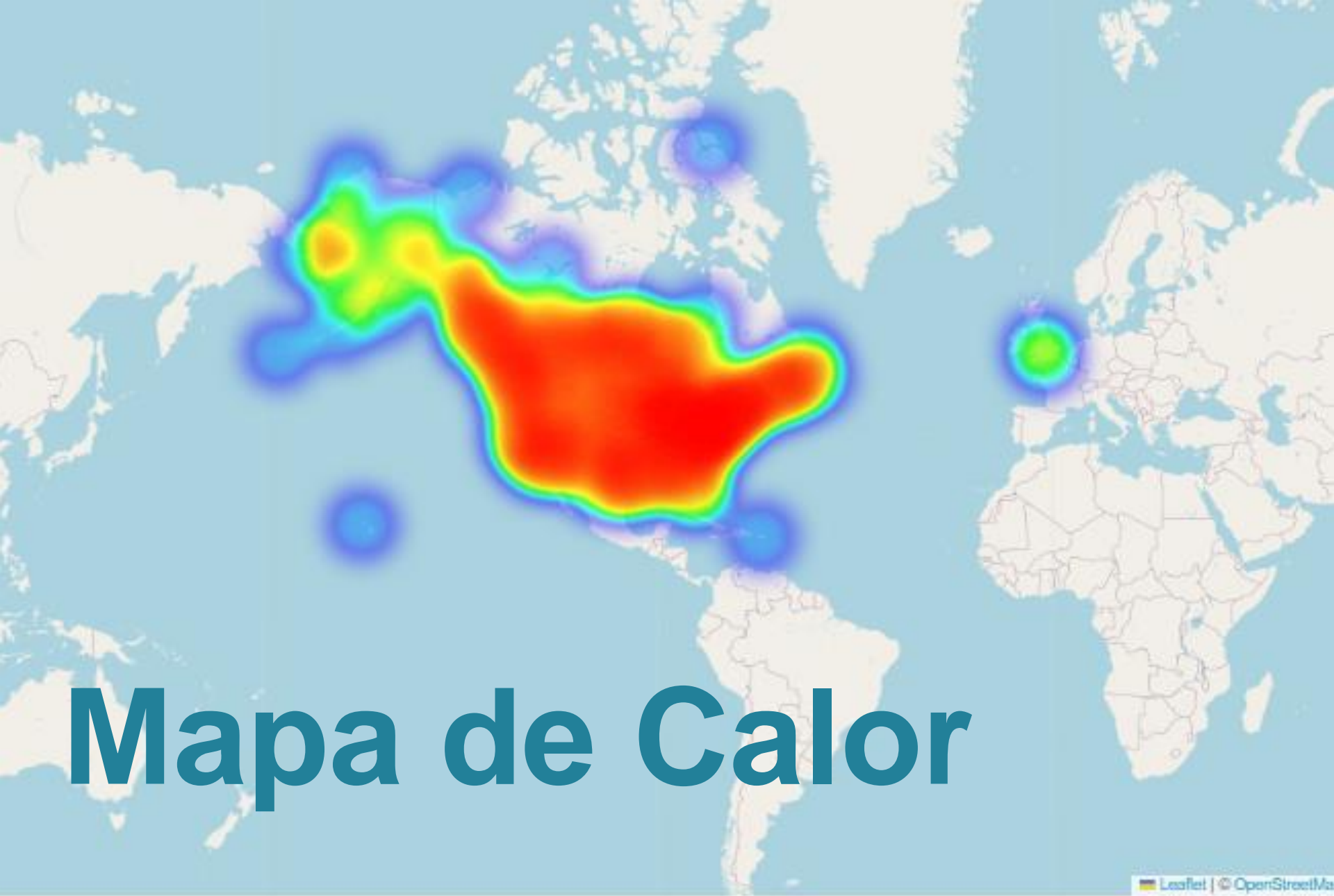
# AVISTAMENTOS PELO MUNDO

Avistamentos de OVNI's ao redor do Mundo



UFO SIGHTINGS

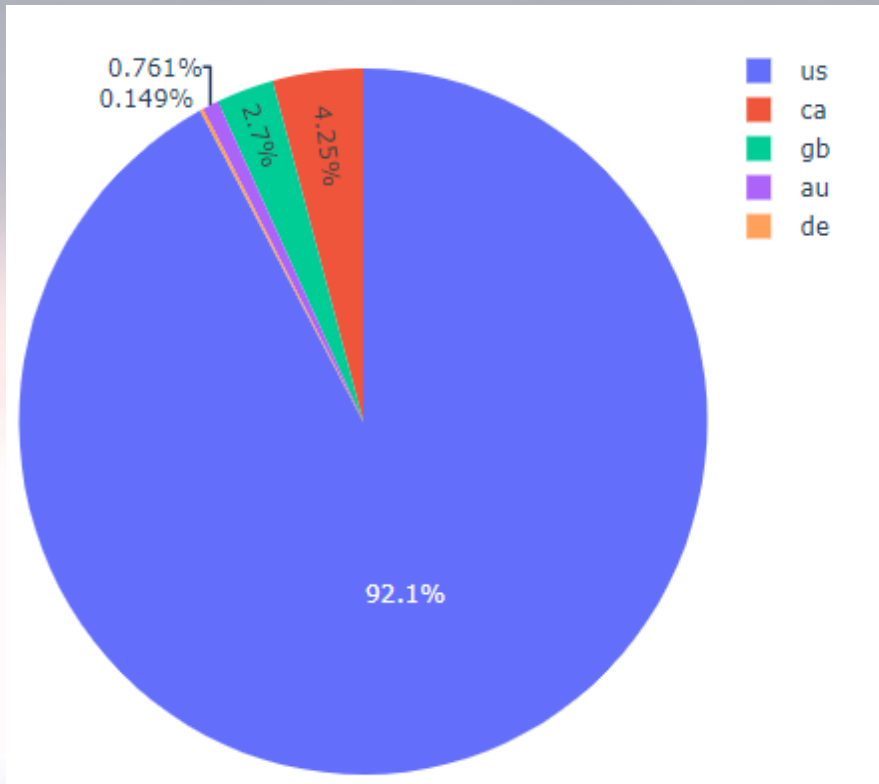




# Mapa de Calor

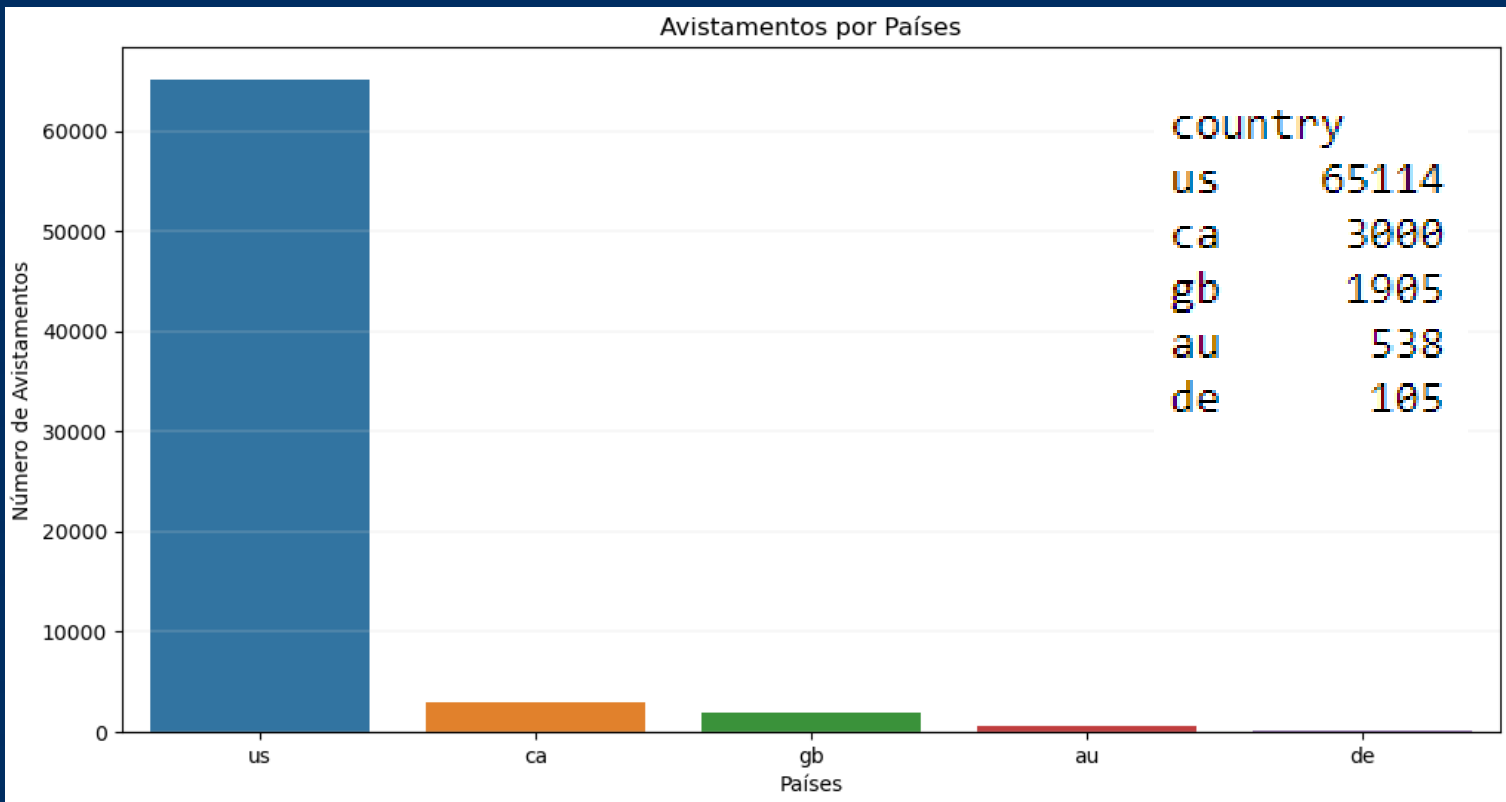
**UFO SIGHTINGS**

# Avistamentos pelo Mundo



**UFO SIGHTINGS**

# Avistamentos pelo Mundo

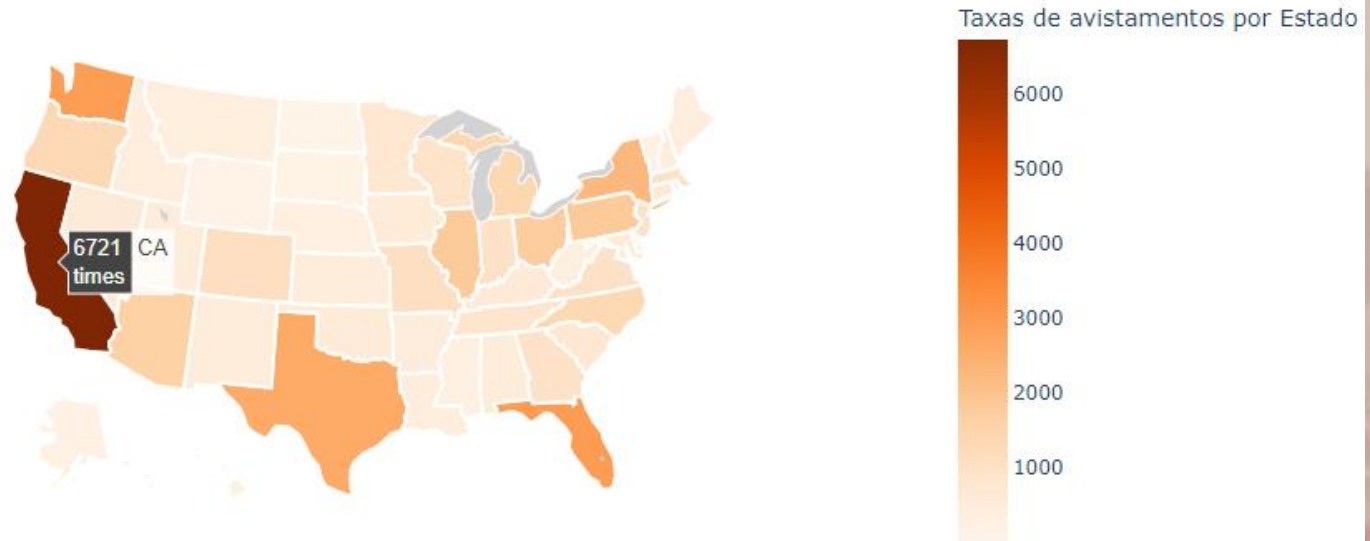


**UFO SIGHTINGS**



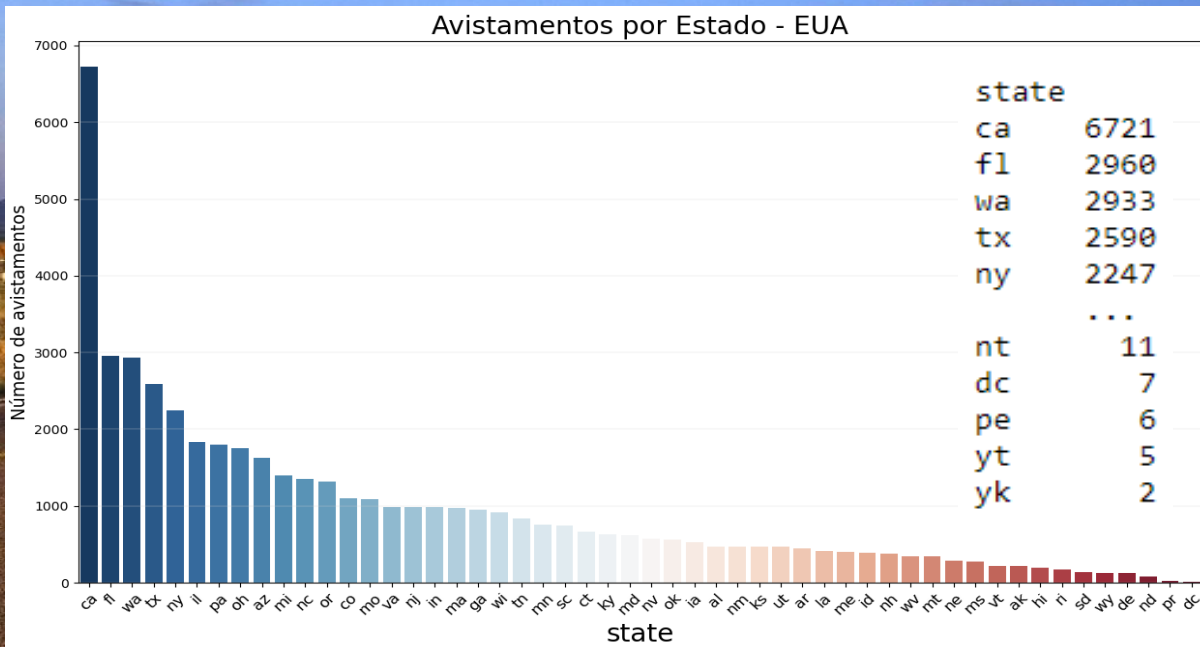
# AVISTAMENTOS - EUA

Taxas de avistamentos de OVNI's nos EUA



**UFO SIGHTINGS**

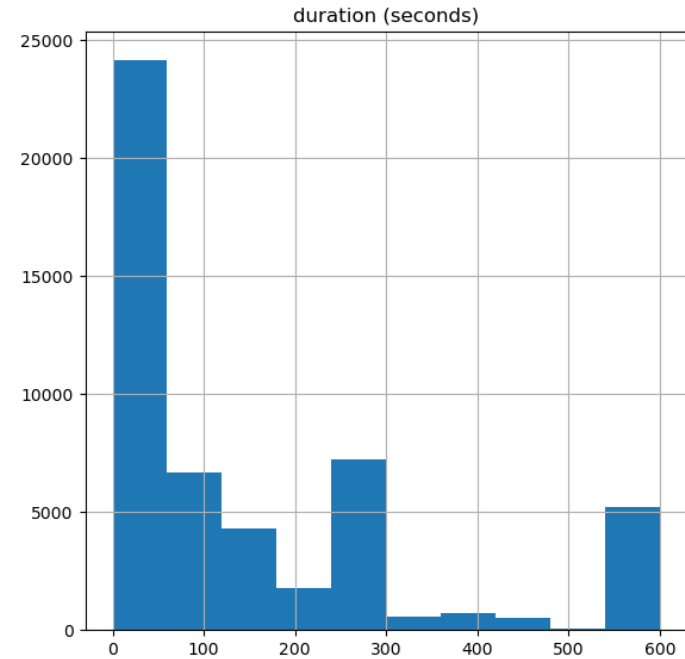
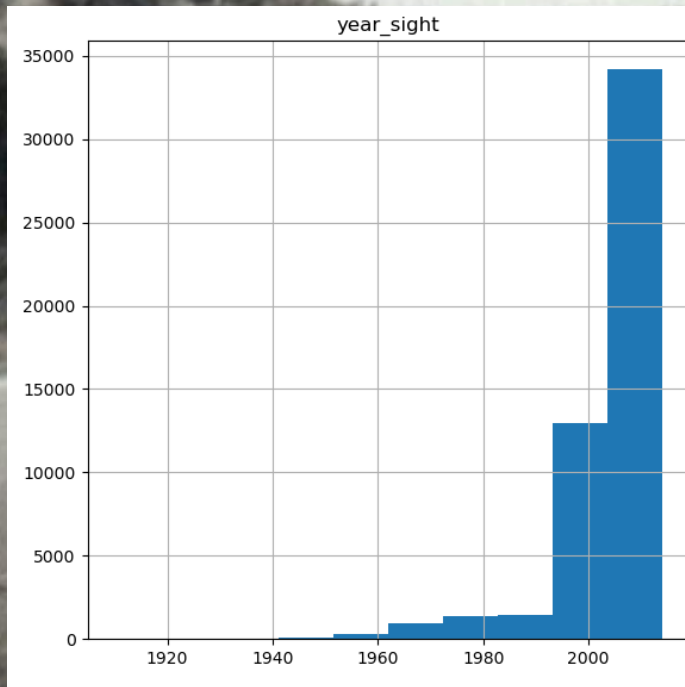
# Avistamentos por Estados (EUA)



city	
seattle	525
phoenix	454
portland	374
las vegas	368
los angeles	353
...	
playa del cura (grand canaria island)	1
livermore/pleasonton (area)	1
hamburg (germany)	1
cole camp	1
hamstead (hollyridge)	1

**UFO SIGHTINGS**

# Estatísticas



**UFO SIGHTINGS**




# Estatísticas



	count	mean	std	min	25%	50%	75%	max
year_sight	51249.0	2004.461960	10.025378	1910.000000	2002.000000	2007.000000	2011.000000	2014.000000
duration (seconds)	51249.0	168.285477	185.475368	0.010000	15.000000	120.000000	300.000000	600.000000
latitude	51249.0	38.747070	5.834198	-34.928661	34.256944	39.326944	42.381111	72.700000
longitude	51249.0	-95.177920	18.535220	-176.658056	-114.321667	-89.401111	-80.280000	153.099533

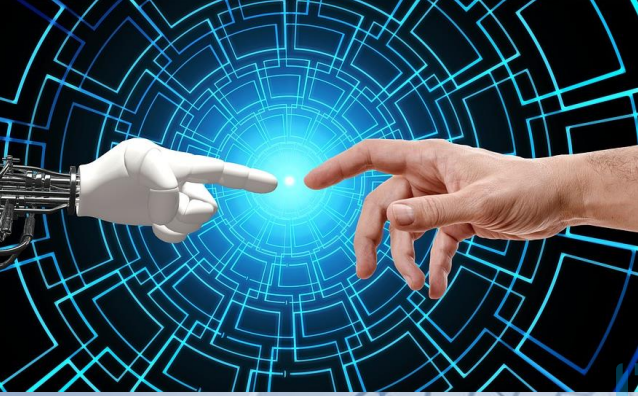
**UFO SIGHTINGS**

# Referências



**[1]** KAGGLE. UFO Sighting Data Analysis and Visualization  
Disponível em: <https://www.kaggle.com/datasets/NUFORC/ufo-sightings>  
Acesso em 19/12/2023





**Obrigado pela Atenção!**

