Evaluación de Incertidumbre

May 8, 2020

[1]:
```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
#%matplotlib auto
```

[2]:
```
dataset = pd.read_excel("minimos_cuadrados.xlsx",sheet_name='Hoja2')
```

[3]:
```
dataset.shape
```

[3]:
```
(8, 2)
```

[4]:
```
dataset.describe()
```

[4]:

	Temperatura[°C]	Densidad[g/mL]
count	8.000000	8.000000
mean	45.000000	1.062375
std	24.494897	0.011999
min	10.000000	1.047000
25%	27.500000	1.053750
50%	45.000000	1.061000
75%	62.500000	1.071250
max	80.000000	1.080000

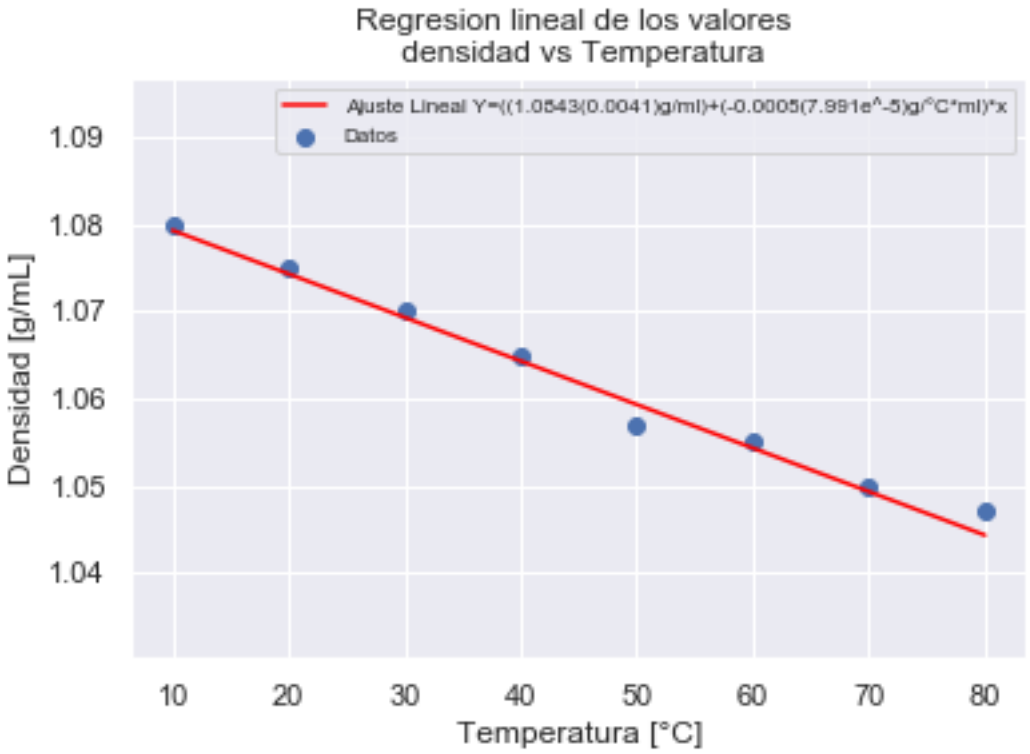
[5]:
```
dataset.head()
```

[5]:

	Temperatura[°C]	Densidad[g/mL]
0	10	1.080
1	20	1.075
2	30	1.070
3	40	1.065
4	50	1.057

[6]:
```
x = dataset["Temperatura[°C]"]
y = dataset["Densidad[g/mL]"]
```

[8]:
```
plt.scatter(x,y,label='Datos')
plt.plot(x,(1.0843)+(-0.0005)*x,color='red',label = 'Ajuste Lineal')
plt.title('Regresion lineal de los valores \n densidad vs Temperatura')
plt.xlabel("Temperatura [°C]")
plt.ylabel("Densidad [g/mL]")
plt.legend(['Ajuste Lineal Y=((1.0843(0.0041)g/ml)+(-0.0005(7.991e^-5)g/
 ↪°C*ml)*x','Datos'],loc=1,prop={'size': 8})
sns.set()
plt.show()
```



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