

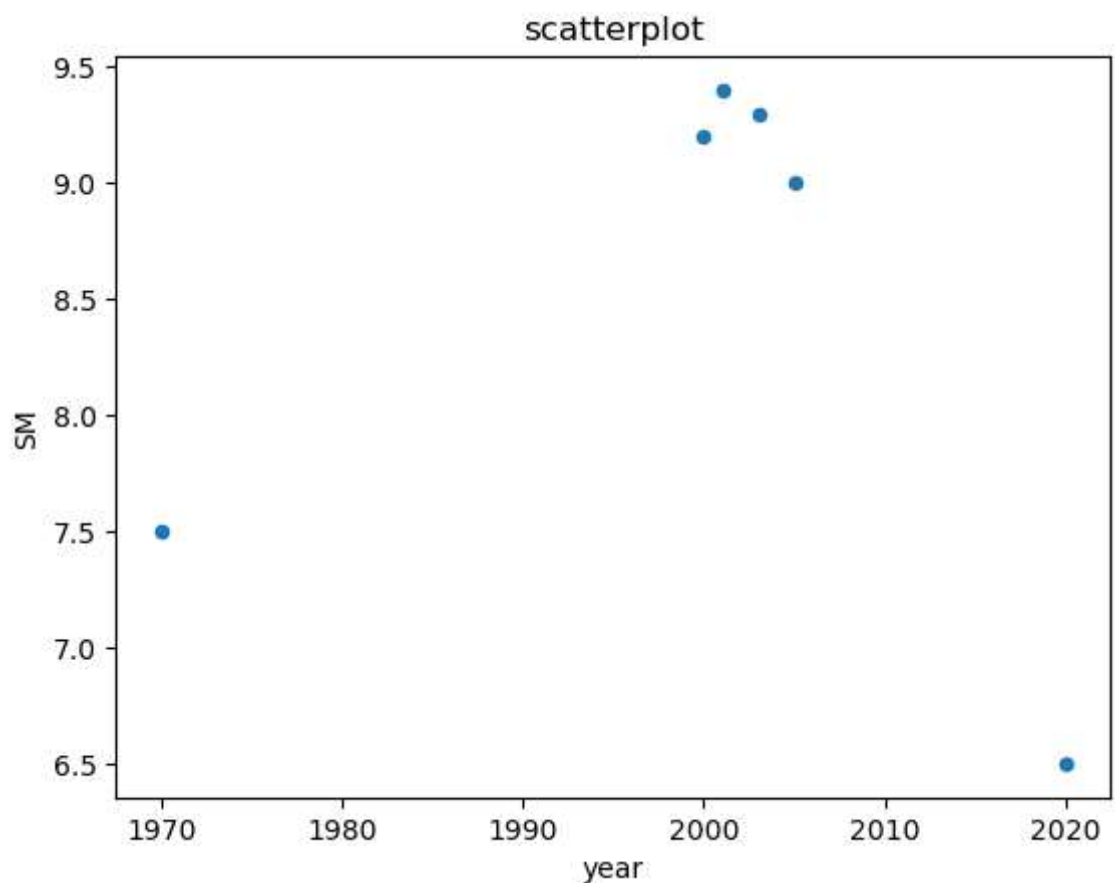
```
In [2]: import numpy as np
import pandas as pd
data={
    'year':[1970,2000,2001,2003,2005,2020],
    'SM':[7.5,9.2,9.4,9.3,9.0,6.5]}
dataframe=pd.DataFrame(data)
dataframe.head()
```

Out[2]:

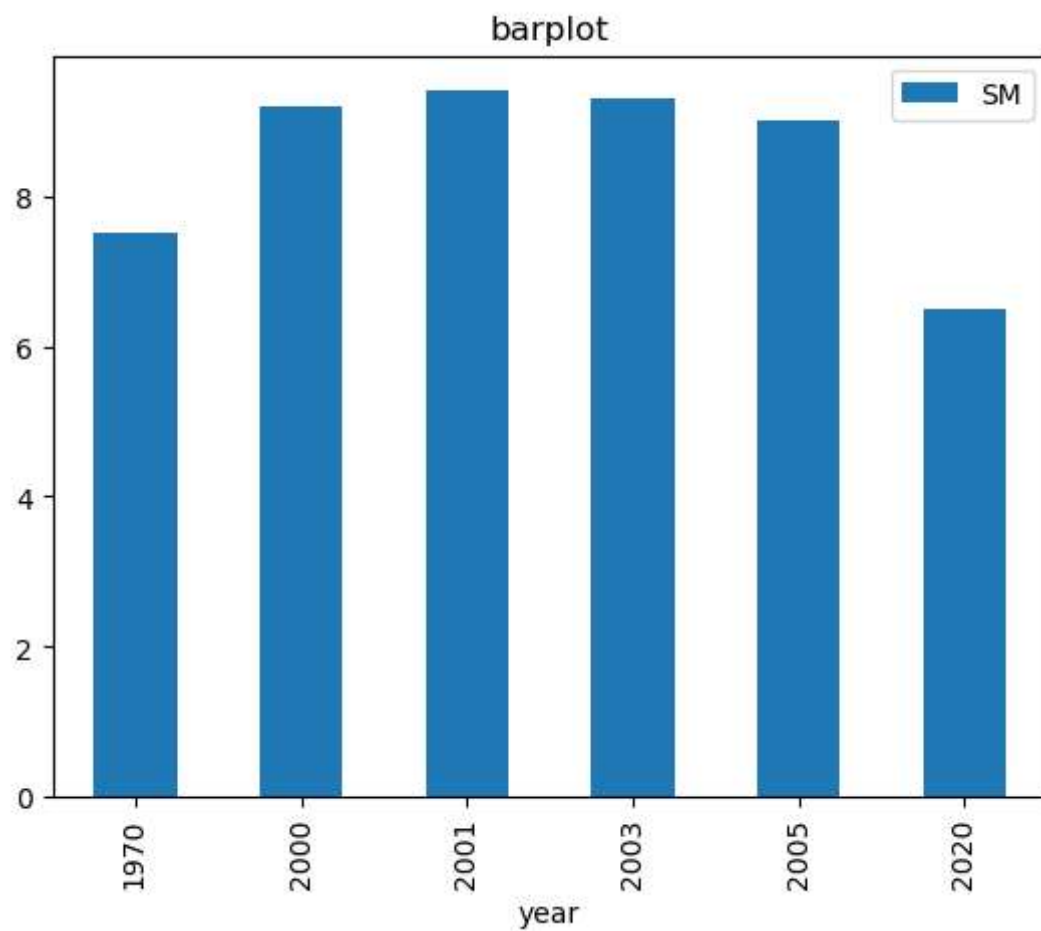
	year	SM
0	1970	7.5
1	2000	9.2
2	2001	9.4
3	2003	9.3
4	2005	9.0
5	2020	6.5

```
In [3]: import matplotlib.pyplot as plt
```

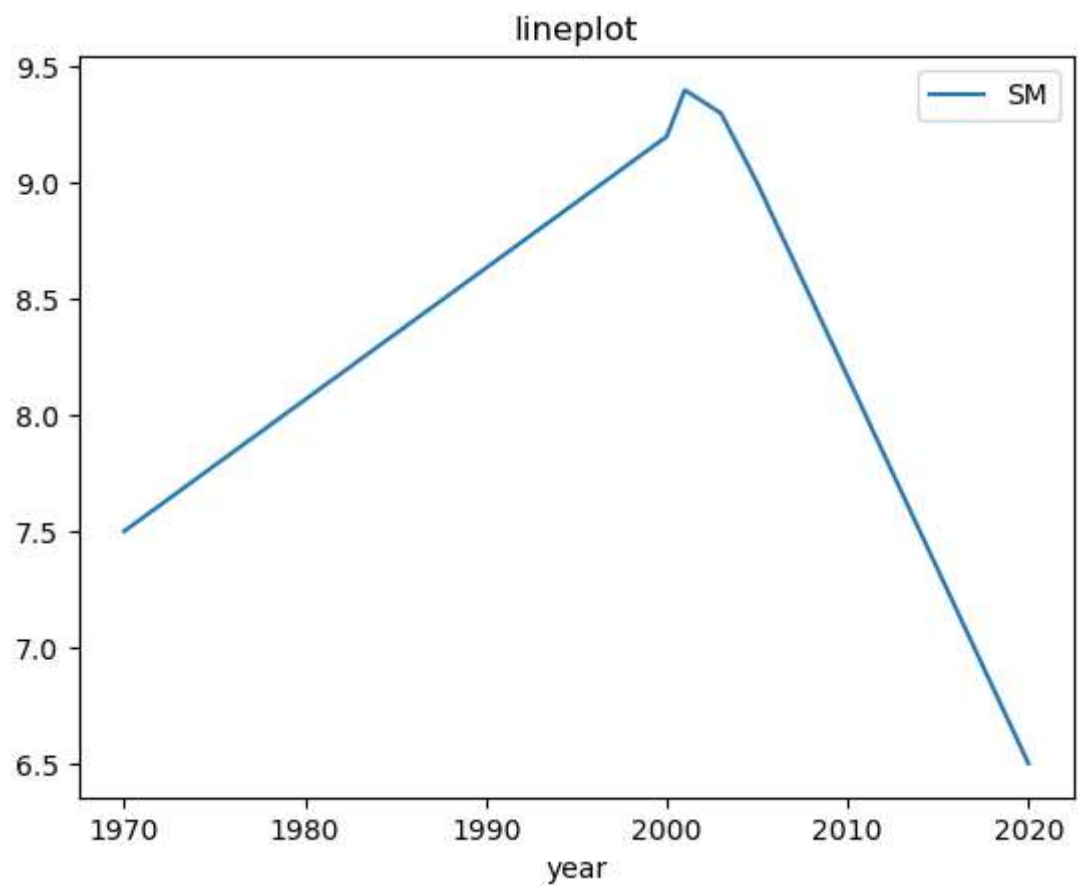
```
In [9]: dataframe.plot(kind='scatter',
                        x='year',
                        y='SM',)
plt.title('scatterplot')
plt.show()
```



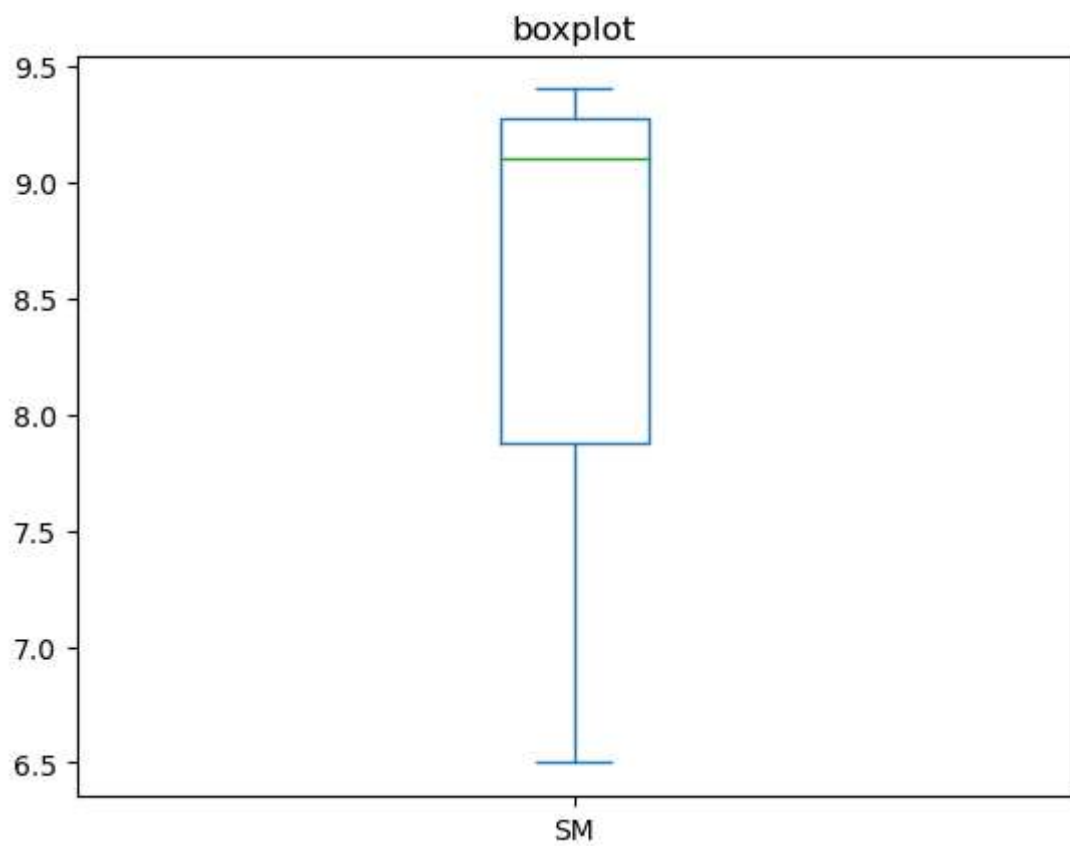
```
In [11]: dataframe.plot(kind='bar',  
                        x='year',  
                        y='SM',)  
plt.title('barplot')  
plt.show()
```



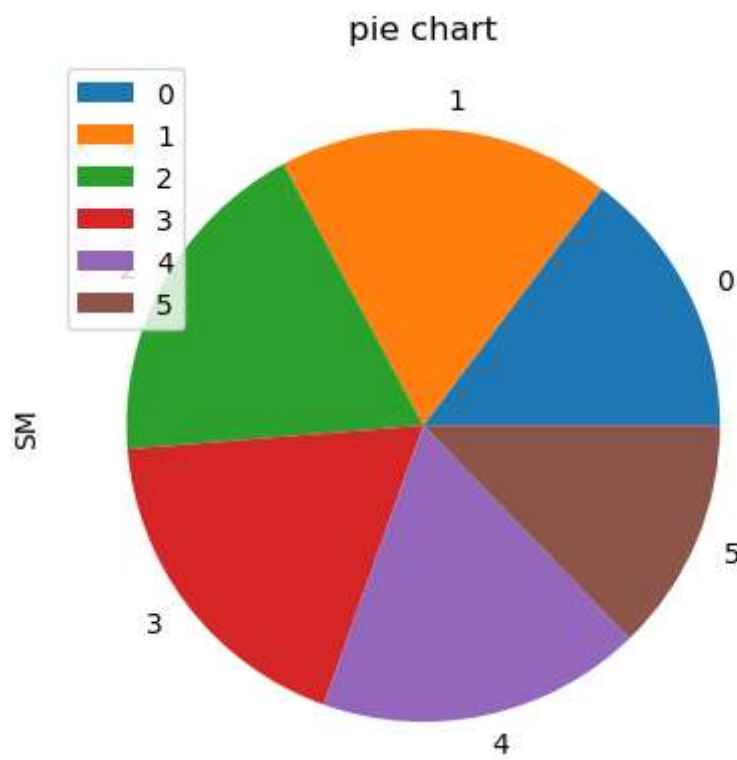
```
In [13]: dataframe.plot(kind='line',  
                        x='year',  
                        y='SM',)  
plt.title('lineplot')  
plt.show()
```



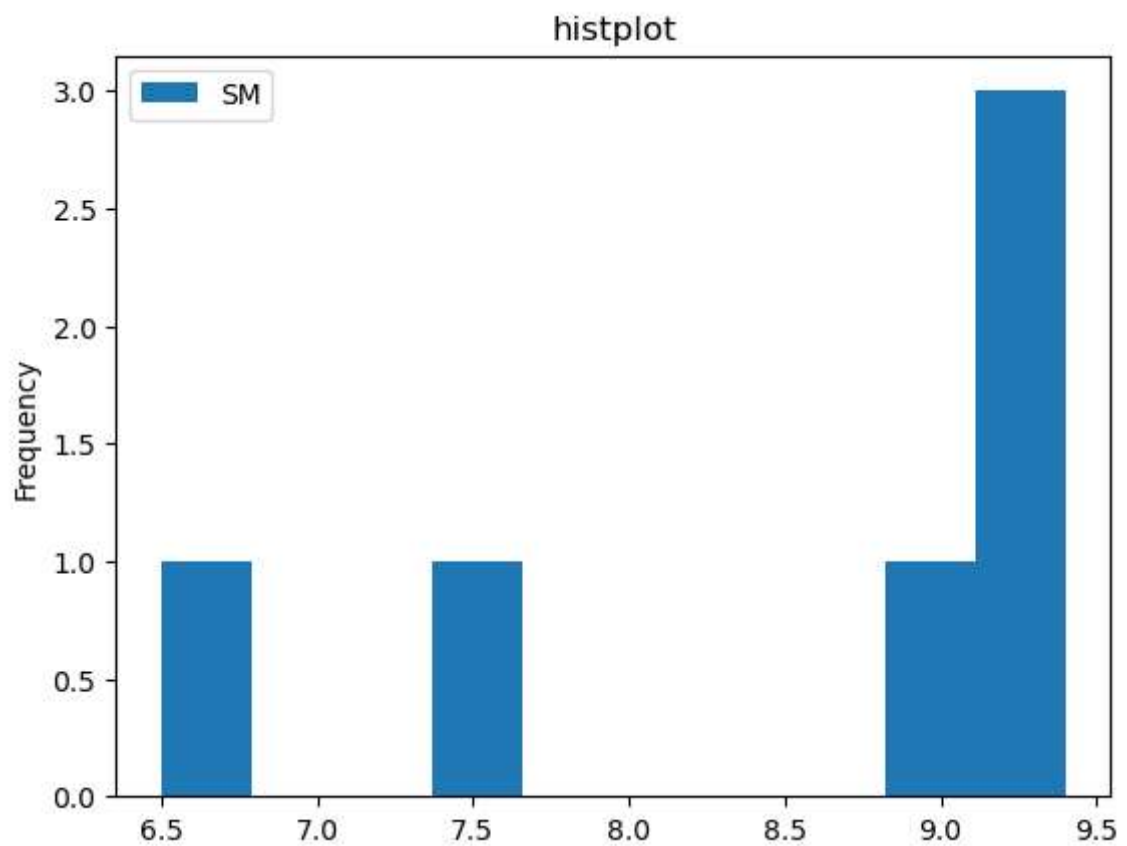
```
In [14]: dataframe.plot(kind='box',  
                        x='year',  
                        y='SM',)  
plt.title('boxplot')  
plt.show()
```



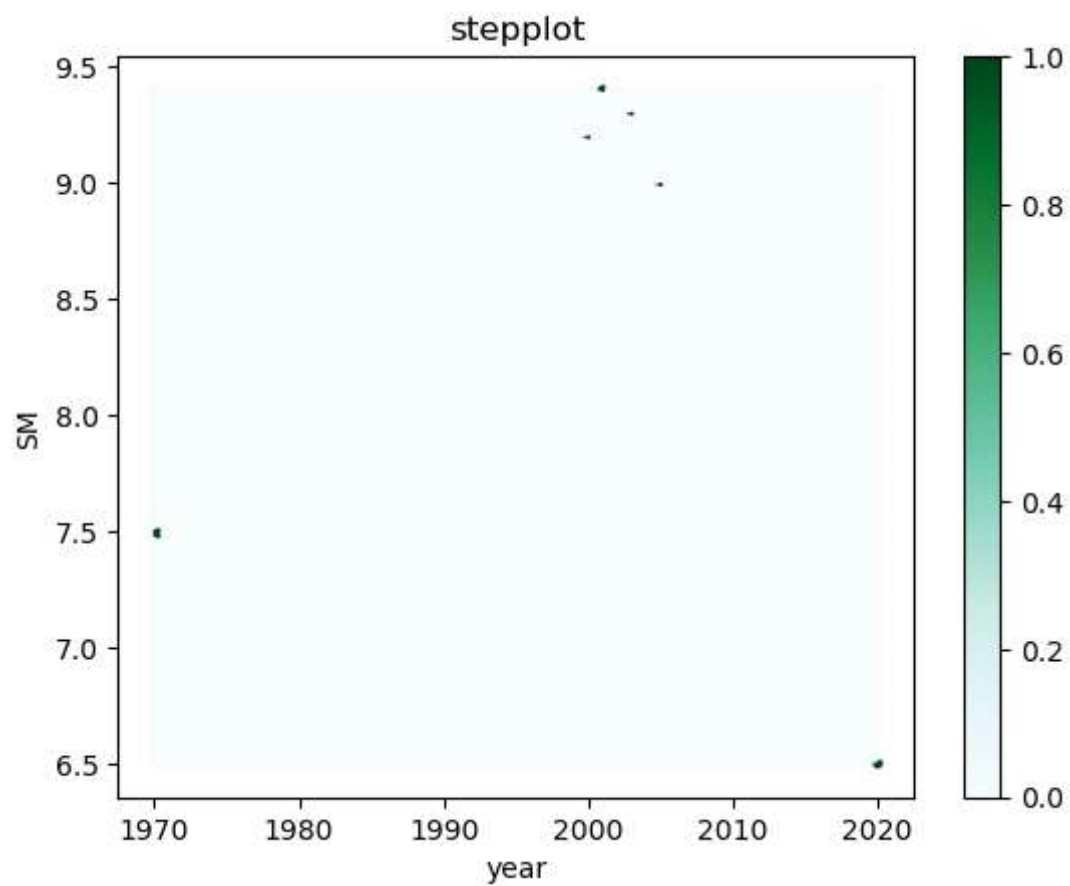
```
In [17]: dataframe.plot(kind='pie',  
                      x='year',  
                      y='SM',)  
plt.title('pie chart')  
plt.show()
```



```
In [23]: dataframe.plot(kind='hist',  
                        x='year',  
                        y='SM',)  
plt.title('histplot')  
plt.show()
```

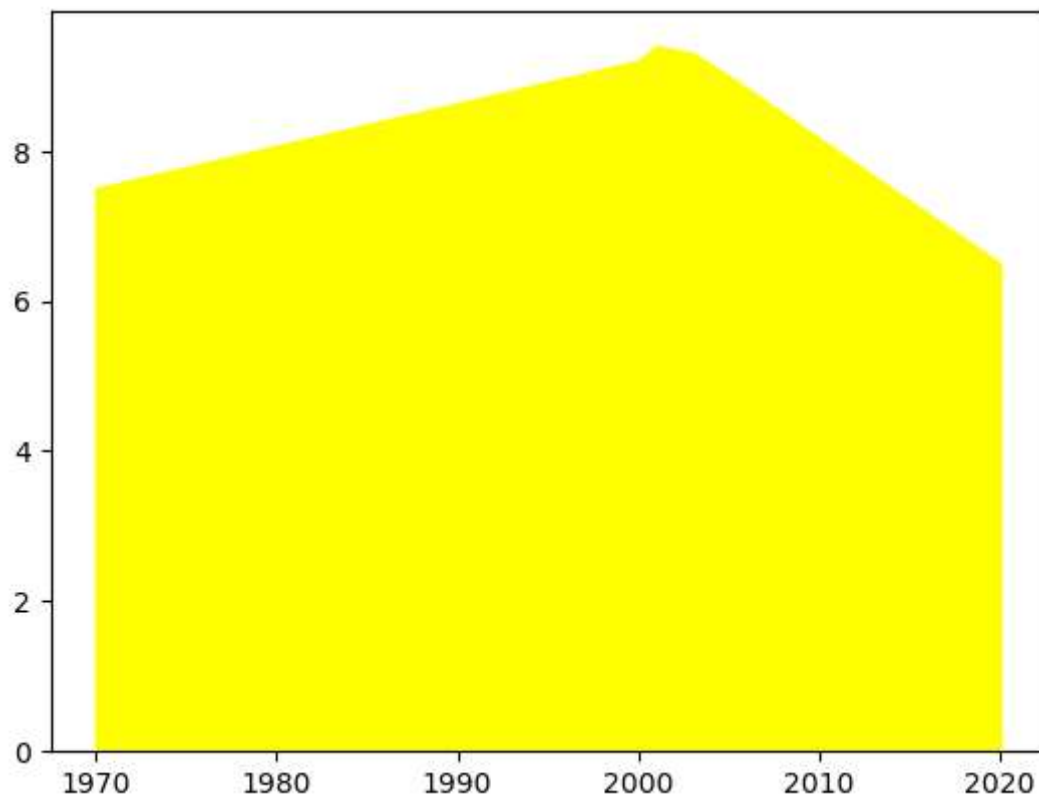


```
In [31]: dataframe.plot(kind='hexbin',  
                        x='year',  
                        y='SM',)  
plt.title('hexbin')  
plt.show()
```



```
In [32]: plt.stackplot(dataframe["year"],dataframe["SM"],color='yellow')
```

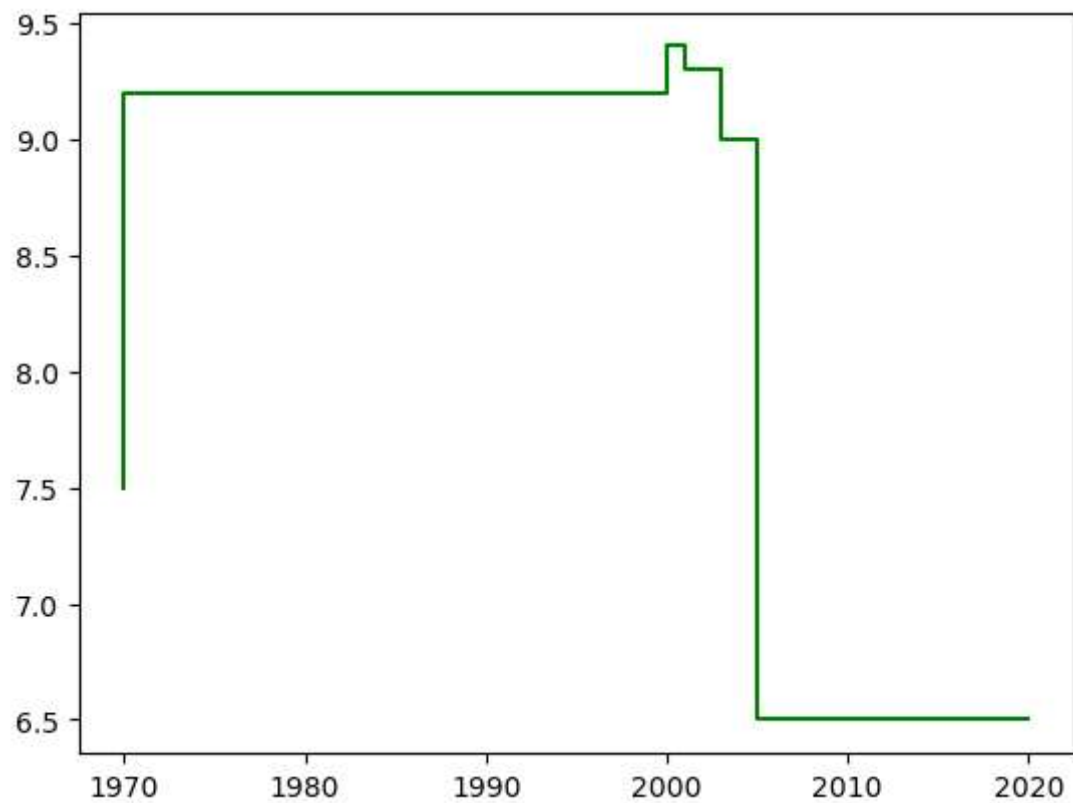
```
Out[32]: [<matplotlib.collections.PolyCollection at 0x1ac20aecb50>]
```





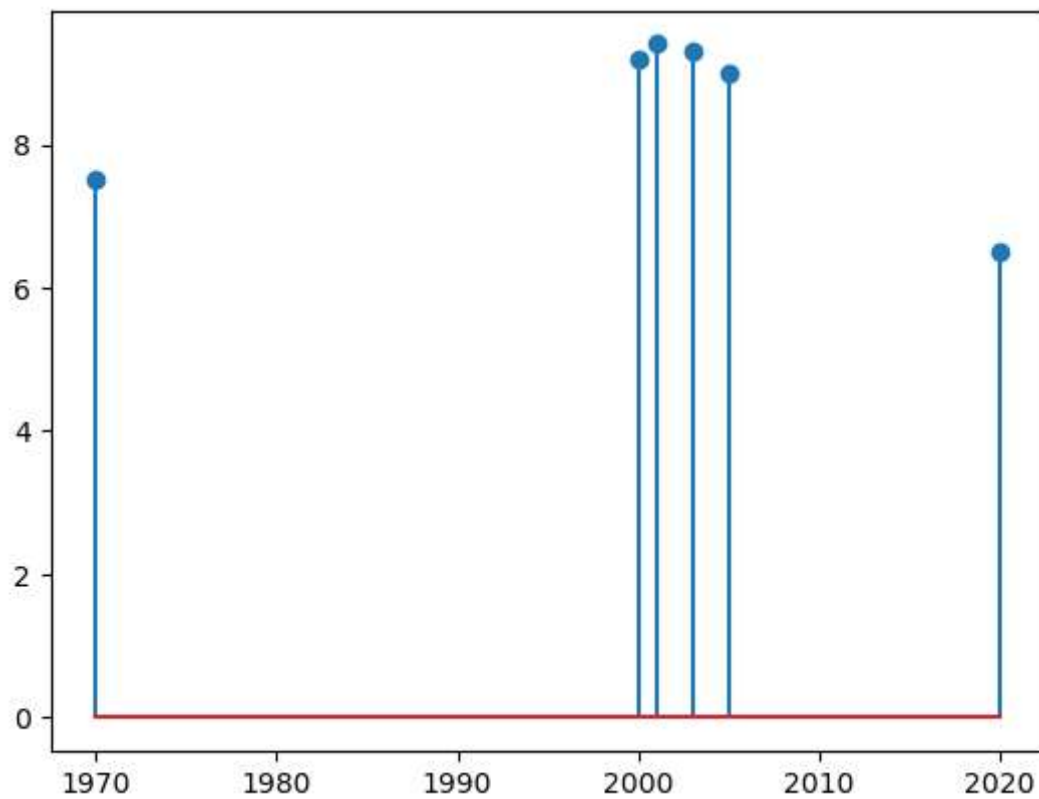
```
In [33]: plt.step(dataframe["year"],dataframe["SM"],color="green")
```

```
Out[33]: [<matplotlib.lines.Line2D at 0x1ac20b32a10>]
```



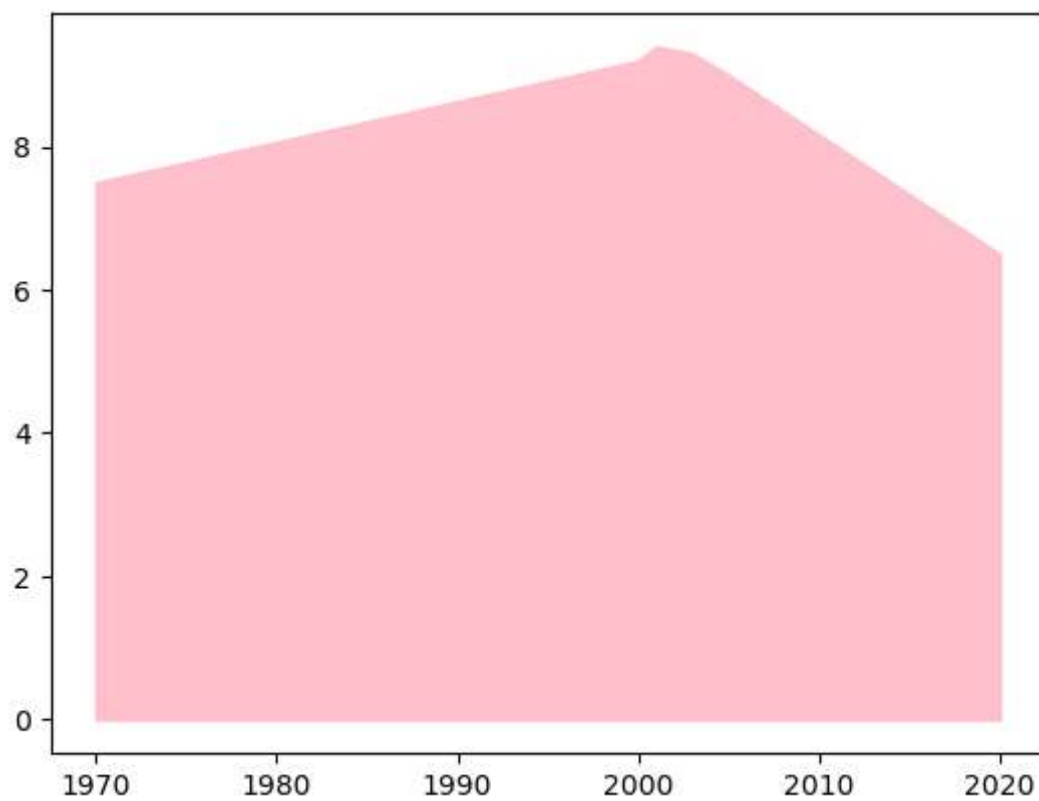
```
In [35]: plt.stem(dataframe["year"],dataframe["SM"],)
```

```
Out[35]: <StemContainer object of 3 artists>
```



```
In [36]: plt.fill_between(dataframe["year"],dataframe["SM"],color="pink")
```

```
Out[36]: <matplotlib.collections.PolyCollection at 0x1ac20d9f070>
```



```
In [83]: dataframe.plot(kind='area',  
                        x='year',  
                        y='SM',)  
plt.title('areachart')  
plt.show()
```

