

```
In [2]: import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
%matplotlib inline
```

```
In [3]: df = pd.read_csv("myFile.txt",header = None)
```

```
In [4]: df.drop([0], axis=1,inplace = True)
```

```
In [5]: df.head(10)
```

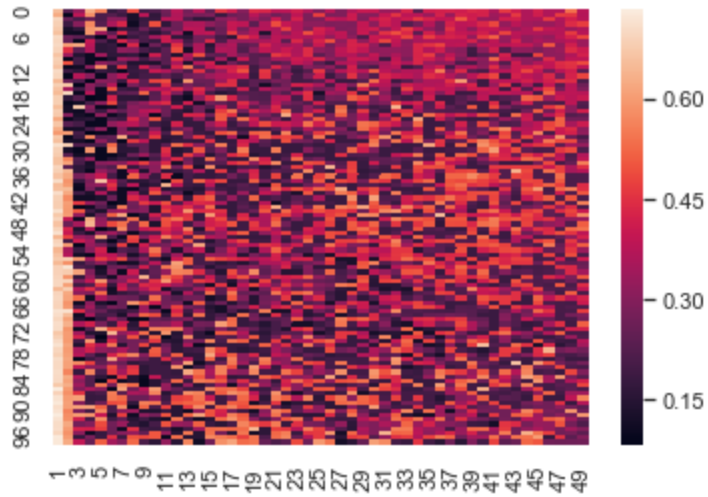
Out[5]:

	1	2	3	4	5	6	7	8	9	10	...	40	41	42	43	
0	0.65154	0.225050	0.322140	0.62432	0.558980	0.176040	0.21325	0.48730	0.19964	0.21688	...	0.42650	0.35935	0.46189	0.41379	C
1	0.62432	0.095281	0.383850	0.58348	0.211430	0.224140	0.18875	0.12976	0.38294	0.16697	...	0.42468	0.33757	0.36207	0.46098	C
2	0.69510	0.251360	0.203270	0.25953	0.211430	0.310340	0.30672	0.12976	0.17967	0.17423	...	0.33212	0.33122	0.41561	0.41833	C
3	0.68512	0.184210	0.304900	0.57169	0.226860	0.354810	0.43103	0.10799	0.19056	0.49274	...	0.43285	0.48276	0.32305	0.38022	C
4	0.67604	0.127040	0.166060	0.59437	0.613430	0.096189	0.17423	0.17060	0.26044	0.19238	...	0.39927	0.39837	0.36388	0.32668	C
5	0.65880	0.112520	0.107990	0.59165	0.338480	0.236840	0.43466	0.21416	0.19328	0.14610	...	0.41742	0.36751	0.47731	0.38294	C
6	0.70054	0.261340	0.235030	0.19419	0.094374	0.328490	0.11525	0.17786	0.21143	0.34846	...	0.46370	0.51452	0.32759	0.37659	C
7	0.69510	0.245010	0.099819	0.39927	0.216880	0.142470	0.43194	0.31579	0.20599	0.17695	...	0.31488	0.38838	0.32214	0.42468	C
8	0.70145	0.600730	0.617060	0.37931	0.159710	0.174230	0.10163	0.43376	0.10254	0.26497	...	0.38838	0.37931	0.37750	0.39564	C
9	0.68966	0.447370	0.235930	0.36570	0.159710	0.169690	0.31851	0.30581	0.20599	0.17514	...	0.31307	0.41742	0.21960	0.31670	C

10 rows × 49 columns

heatmap of missrate

```
In [6]: import seaborn as sns; sns.set()  
ax = sns.heatmap(df)
```



```
In [7]: df.describe()
```

Out[7]:

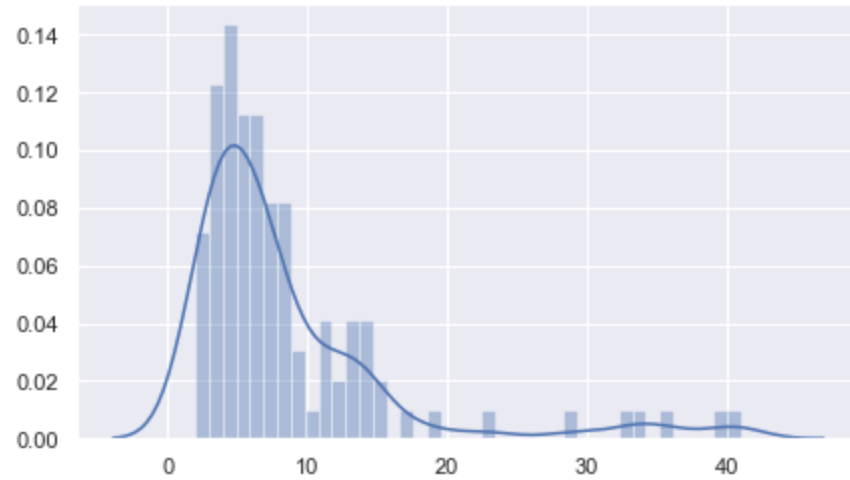
	1	2	3	4	5	6	7	8	9	10	...	
count	100.000000	100.000000	100.000000	100.000000	100.000000	100.000000	100.000000	100.000000	100.000000	100.000000	...	100.000000
mean	0.685027	0.470064	0.262741	0.288784	0.277287	0.280935	0.285944	0.277967	0.275871	0.304229	...	0.304229
std	0.025436	0.203976	0.150361	0.154659	0.152538	0.142155	0.145984	0.130362	0.125997	0.137216	...	0.137216
min	0.596190	0.094374	0.091652	0.082577	0.084392	0.090744	0.094374	0.098004	0.096189	0.104360	...	0.104360
25%	0.669693	0.258392	0.141108	0.171960	0.159710	0.168330	0.171277	0.167880	0.181718	0.182847	...	0.182847
50%	0.689205	0.589835	0.204630	0.286300	0.250910	0.260890	0.258620	0.263615	0.245460	0.272235	...	0.272235
75%	0.702360	0.610255	0.356625	0.355943	0.339387	0.374318	0.367058	0.370915	0.355720	0.417652	...	0.417652
max	0.732300	0.716880	0.669690	0.639750	0.661520	0.641560	0.622500	0.588020	0.634300	0.598910	...	0.598910

8 rows × 49 columns

```
In [9]: a4_dims = (7, 4)
```

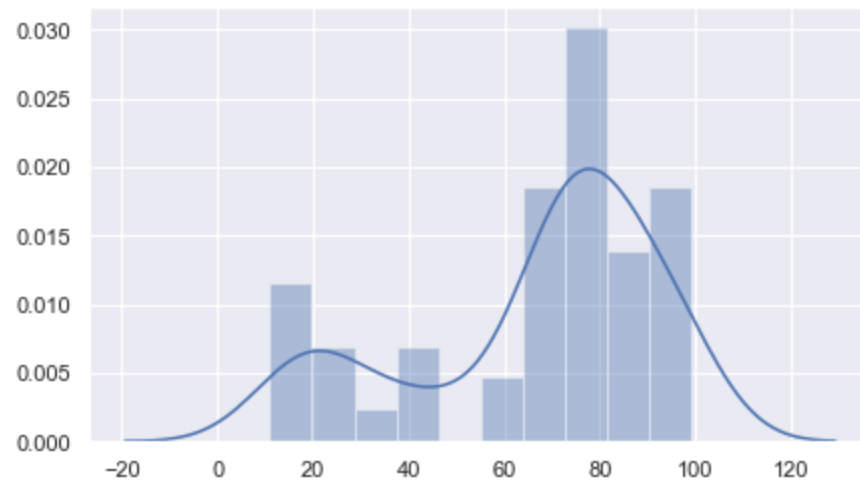
histogram of k that generate minimum missrate

```
In [10]: fig, ax = plt.subplots(figsize=a4_dims)
fig=sns.distplot(df.idxmin(axis = 1),bins=40)
```



histogram of gamma that generate minimum missrate

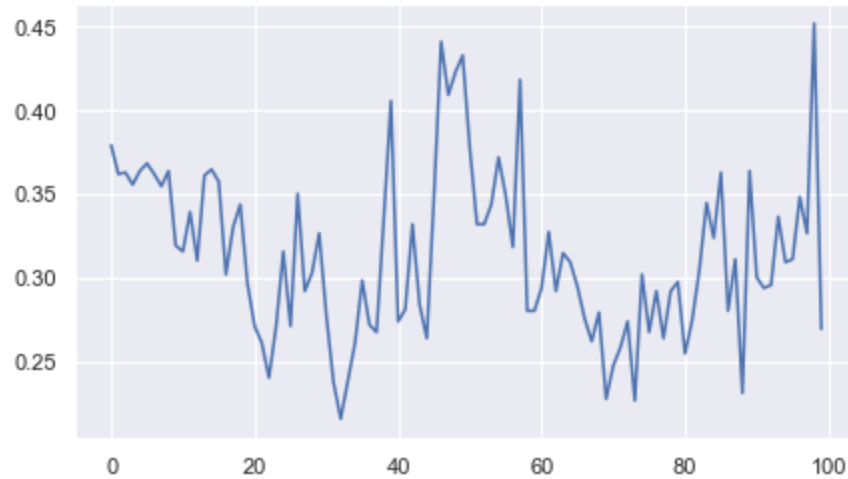
```
In [11]: fig, ax = plt.subplots(figsize=a4_dims)
fig=sns.distplot(df.idxmin(axis = 0),bins=10)
```



median of missrate w.r.t. gamma

```
In [12]: ax = plt.subplots(figsize=a4_dims)
sns.lineplot(data = df.median(axis = 1))
```

```
Out[12]: <matplotlib.axes._subplots.AxesSubplot at 0x1a18ad4438>
```



median of missrate w.r.t. k

```
In [13]: ax = plt.subplots(figsize=a4_dims)
sns.lineplot(data = df.median(axis = 0))
```

```
Out[13]: <matplotlib.axes._subplots.AxesSubplot at 0x1a18bbc898>
```

