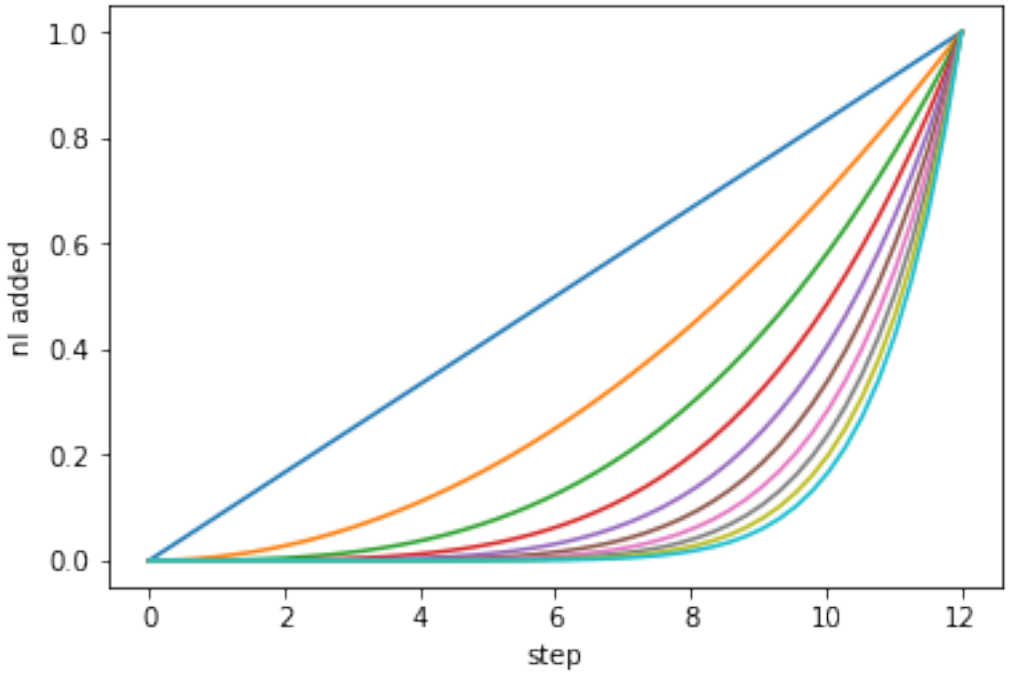
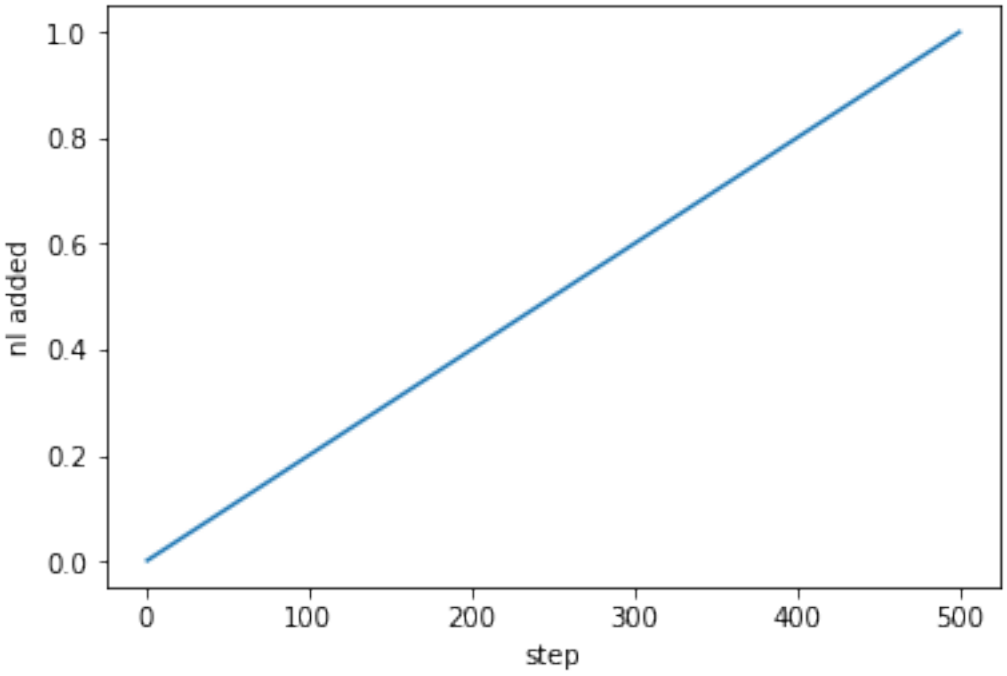
20180913-Distribution functions

September 8, 2024

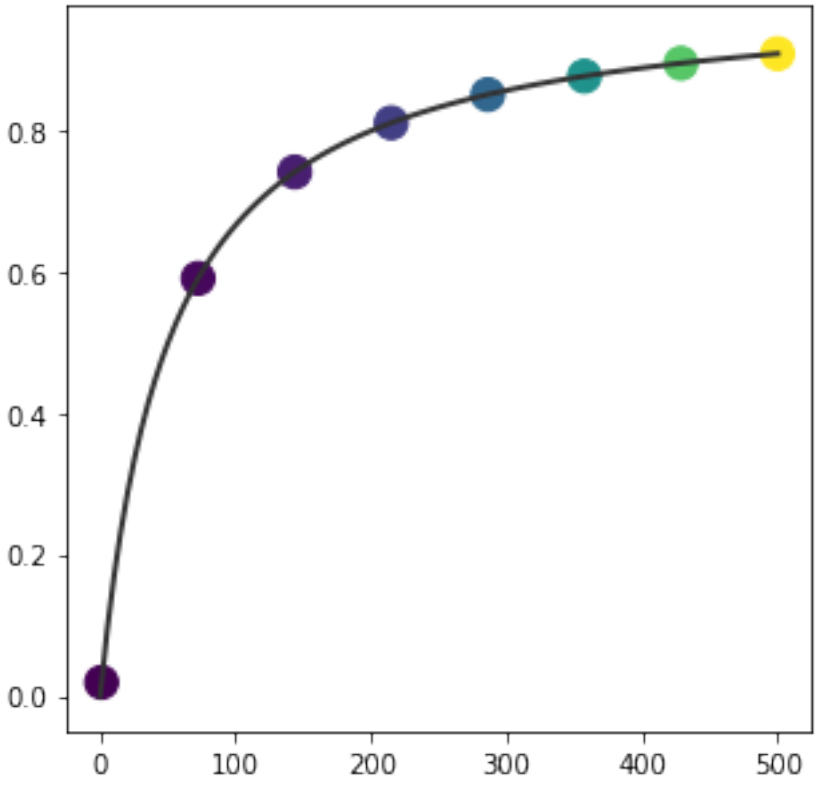
In [53]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

step = 2.5 # nl
maximum = 0.05 # v/v

x = np.linspace(0,12,50)
for i in np.linspace(1,10,10):
    y = np.power(x,i)
    y= y/y.max()
    plt.plot(x,y)
plt.xlabel('step')
plt.ylabel('nl added')

plt.show()

#2500 is max well
```




```
In [52]: y = np.power(x,1)
         y=y/y.max()

         plt.plot(x,y)
         plt.xlabel('step')
         plt.ylabel('nl added')

         plt.show()
```




```
In [51]: vmax = 1
         km = 50
         fig = plt.subplots(figsize=(5,5))
         x = np.linspace(1,500, 8)
         x = np.power(x,1)
         x=x/x.max()*500
         y = (vmax*x)/(km + x)
         plt.scatter(x,y,
                 s = 150,
                    c = x**2)
         x2 = np.linspace(0,500, 100)
         y2 = (vmax*x2)/(km + x2)
         plt.plot(x2,y2,
                 color = '0.2',
                 lw = 2)
         #plt.axis('off')
         plt.show()
```


0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500