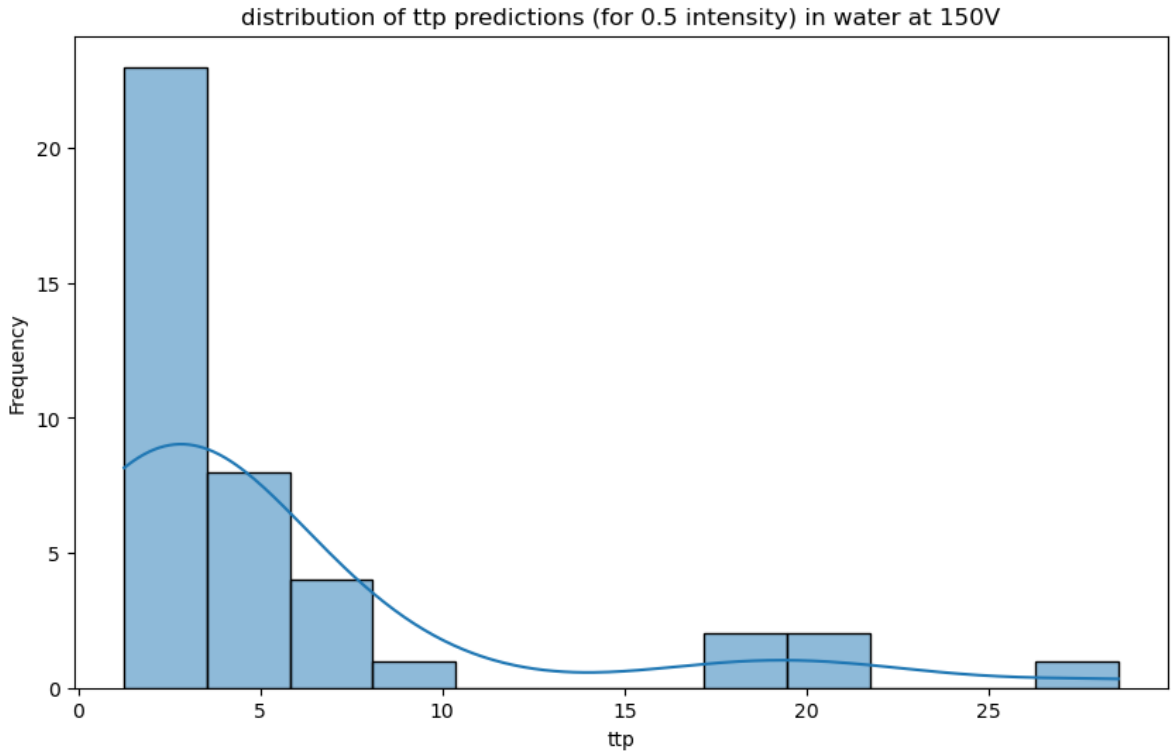
```
import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
from collections import Counter
import numpy as np
```

```
from water150ttp import values

num_values = []
for v in values:
    try:
        num_values.append(float(v))
    except ValueError:
        continue

plt.figure(figsize=(10, 6))
sns.histplot(num_values, kde=True)
plt.title("distribution of ttp predictions (for 0.5 intensity) in water at 150V")
plt.xlabel("ttp")
plt.ylabel("Frequency")
plt.show()
```




```
from water150ttp import values

total = len(values)
good_prediction_count = 0
error_counter = Counter()

for v in values:
    try:
        float(v)
        good_prediction_count += 1
    except ValueError:
        error_counter[v] += 1

table_data = [{'Text': text, 'Percent': (count / total) * 100} for text, count in error_count
table_data.append({'Text': 'good prediction', 'Percent': (good_prediction_count / total) * 1

print("Summary of errors for water at 150V")
df = pd.DataFrame(table_data)
print(df)
```

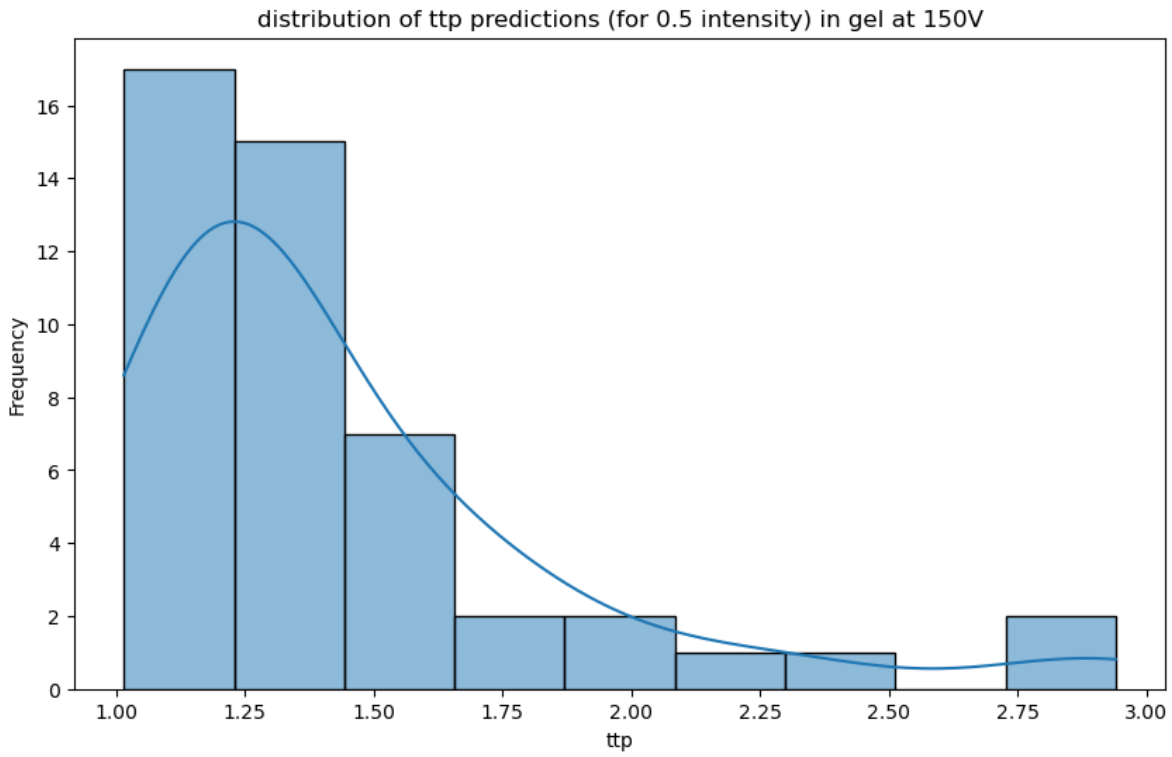
```
Summary of errors for water at 150V
                     Text    Percent
0         Error: poor fit  39.130435
1  Error: ttp is too long   1.449275
2         good prediction  59.420290
```

```
from water0 import values

total = len(values)
good_prediction_count = 0
error_counter = Counter()

for v in values:
    try:
        float(v)
        good_prediction_count += 1
    except ValueError:
        error_counter[v] += 1

table_data = [{'Text': text, 'Percent': (count / total) * 100} for text, count in error_count
table_data.append({'Text': 'good prediction', 'Percent': (good_prediction_count / total) * 1

df = pd.DataFrame(table_data)
print("Summary of errors for water at 0V")
print("Water at 0V:")
print(df)
print("Note: poor fit here was R^2 worse than 0.01")
```

```
Summary of errors for water at 0V
Water at 0V:
              Text  Percent
0  Error: poor fit    100.0
1  good prediction      0.0
Note: poor fit here was R^2 worse than 0.01
```

```
from gel150ttp import values

num_values = []
for v in values:
    try:
        num_values.append(float(v))
    except ValueError:
```

```
        continue

plt.figure(figsize=(10, 6))
sns.histplot(num_values, kde=True)
plt.title("distribution of ttp predictions (for 0.5 intensity) in gel at 150V")
plt.xlabel("ttp")
plt.ylabel("Frequency")
plt.show()
```

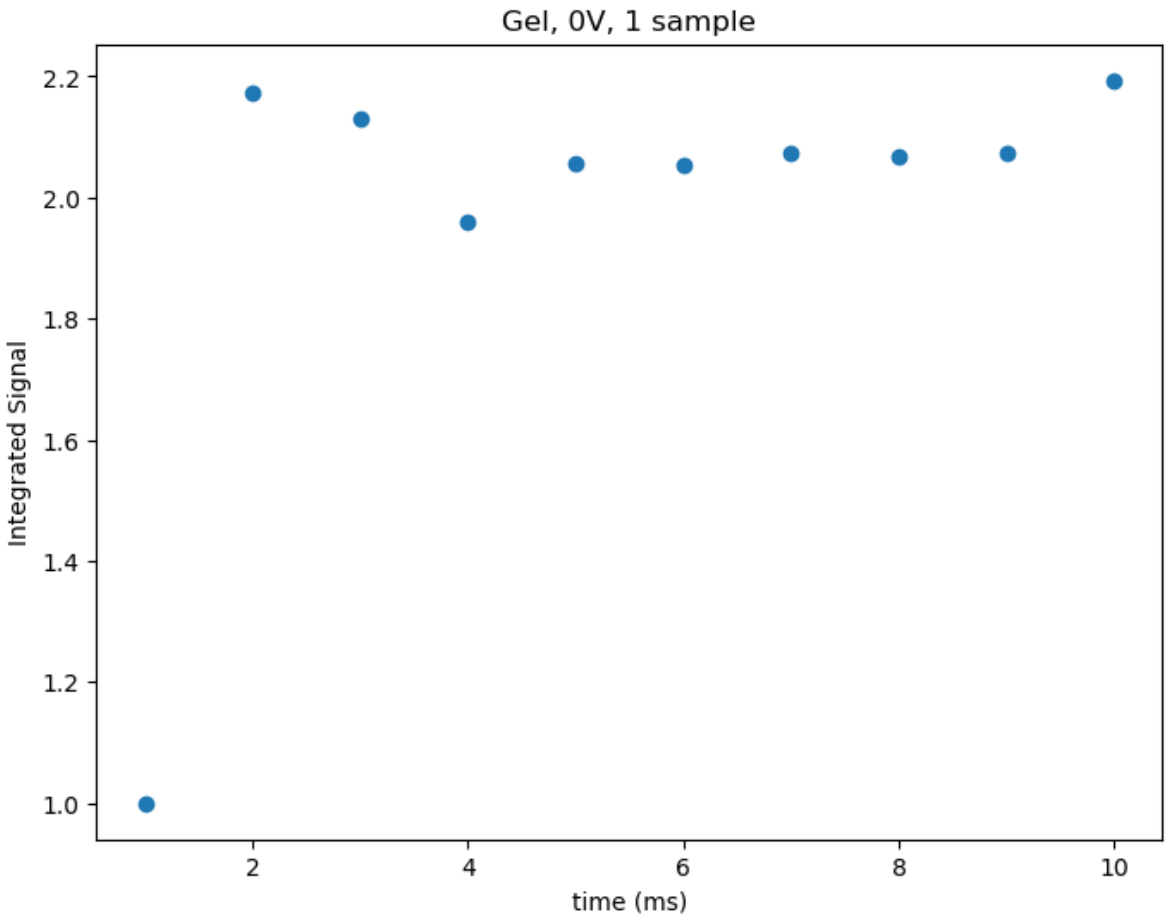



```
from gel150ttp import values

total = len(values)
good_prediction_count = 0
error_counter = Counter()

for v in values:
    try:
        float(v)
        good_prediction_count += 1
    except ValueError:
```

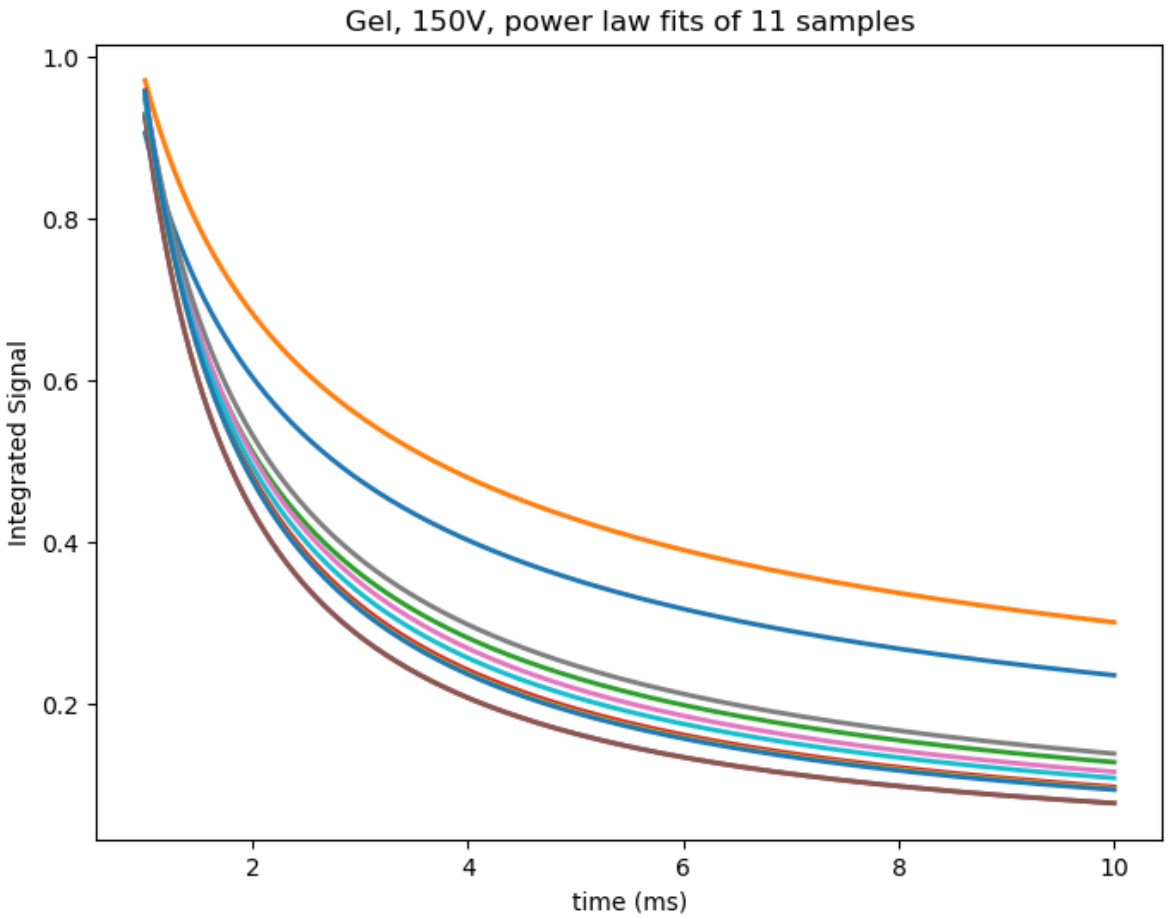
```
        error_counter[v] += 1

table_data = [{'Text': text, 'Percent': (count / total) * 100} for text, count in error_count
table_data.append({'Text': 'good prediction', 'Percent': (good_prediction_count / total) * 1

df = pd.DataFrame(table_data)

print("Summary of errors for gel at 150V")
print(df)
```

```
Summary of errors for gel at 150V
                      Text    Percent
0  Error: ttp is too short   2.083333
1           good prediction  97.916667
```

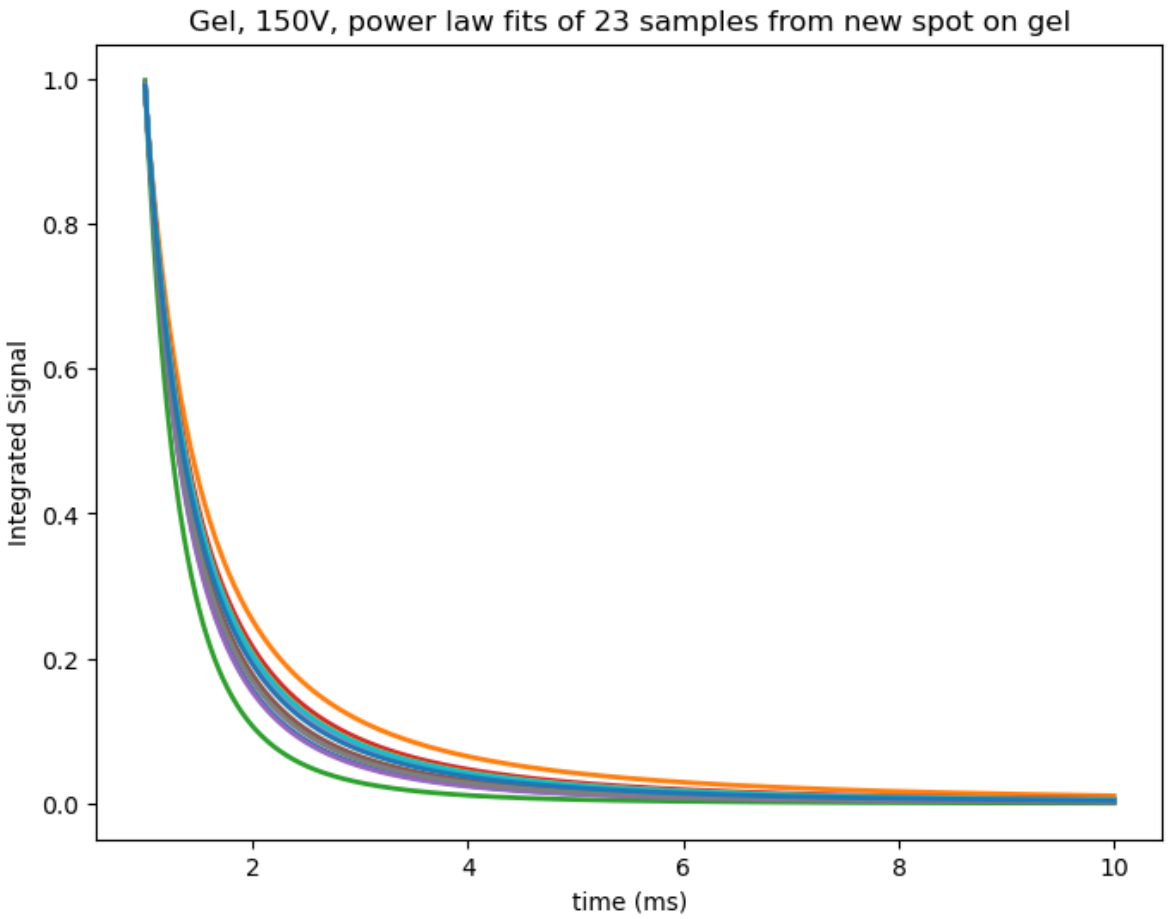
```
from gel0int import ttp

x = list(range(1, 11))

plt.figure(figsize=(8, 6))
plt.scatter(x, ttp, marker='o')
plt.xlabel("time (ms)")
plt.ylabel("Integrated Signal")
plt.title("Gel, 0V, 1 sample")
plt.show()
```




```
from gel150Aint import powerlaw_fits

plt.figure(figsize=(8, 6))
x = np.linspace(1, 10, 1000)

for i in range(1, 12):
    a, b = powerlaw_fits[f"IntSig{i}"]
    fit_curve = a * (x ** b)
    plt.plot(x, fit_curve, '-', linewidth=2)

plt.xlabel("time (ms)")
plt.ylabel("Integrated Signal")
plt.title("Gel, 150V, power law fits of 11 samples")
plt.show()
```




```
from gel150Bint import powerlaw_fits

plt.figure(figsize=(8, 6))
x = np.linspace(1, 10, 1000)

for i in range(1, 12):
    a, b = powerlaw_fits[f"IntSig{i}"]
    fit_curve = a * (x ** b)
    plt.plot(x, fit_curve, '-', linewidth=2)

plt.xlabel("time (ms)")
plt.ylabel("Integrated Signal")
plt.title("Gel, 150V, power law fits of 23 samples from new spot on gel")
plt.show()
```


Gel, 150V, power law fits of 23 samples from new spot on gel
Integrated Signal
1.0
0.8
0.6
0.4
0.2
0.0
2
4
6
8
10
time (ms)