

# gestamp pp osc

December 10, 2020

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

```
[2]: data = pd.read_csv('pp_osc.txt')
```

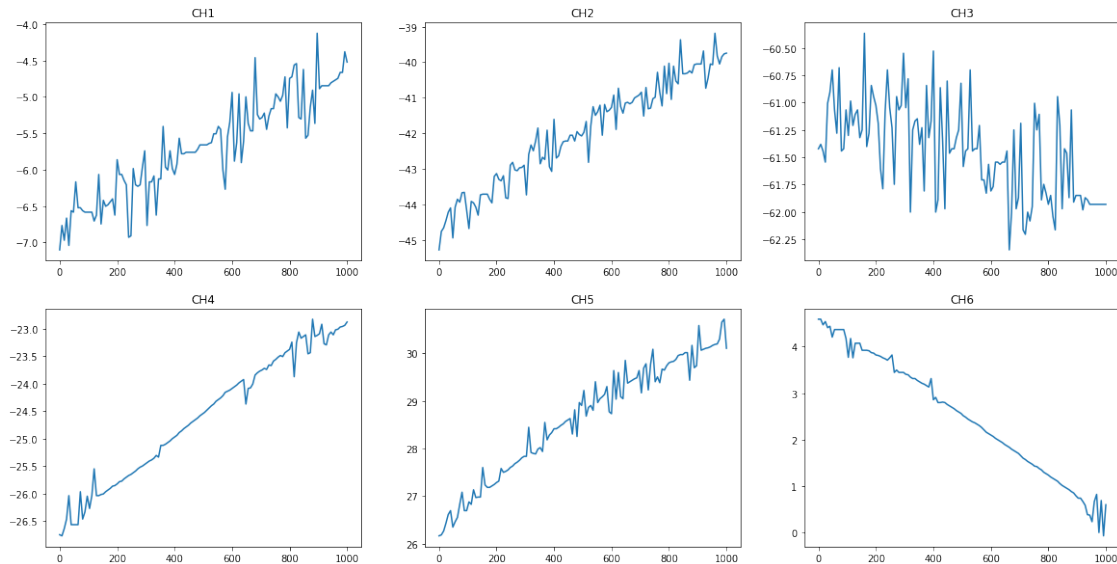
```
[3]: data = pd.DataFrame(data)
data.head()
```

```
[3]:
```

	Time	CH1	CH2	CH3	CH4	CH5	CH6
0	0.0	-7.103485	-45.273285	-61.421265	-26.747314	26.168859	4.593524
1	8.0	-6.768127	-44.755005	-61.380615	-26.767639	26.189184	4.593524
2	16.0	-6.971375	-44.653381	-61.441589	-26.635529	26.270485	4.471572
3	24.0	-6.666504	-44.450134	-61.543213	-26.462769	26.433088	4.542711
4	32.0	-7.042511	-44.216400	-61.004608	-26.035950	26.616016	4.410596

```
[4]: fig, axs = plt.subplots(2, 3, figsize=(20,10))
axs[0, 0].plot(data.loc[:, 'Time'], data.loc[:, 'CH1'])
axs[0, 0].set_title('CH1')
axs[0, 1].plot(data.loc[:, 'Time'], data.loc[:, 'CH2'])
axs[0, 1].set_title('CH2')
axs[0, 2].plot(data.loc[:, 'Time'], data.loc[:, 'CH3'])
axs[0, 2].set_title('CH3')
axs[1, 0].plot(data.loc[:, 'Time'], data.loc[:, 'CH4'])
axs[1, 0].set_title('CH4')
axs[1, 1].plot(data.loc[:, 'Time'], data.loc[:, 'CH5'])
axs[1, 1].set_title('CH5')
axs[1, 2].plot(data.loc[:, 'Time'], data.loc[:, 'CH6'])
axs[1, 2].set_title('CH6')
```

```
[4]: Text(0.5, 1.0, 'CH6')
```



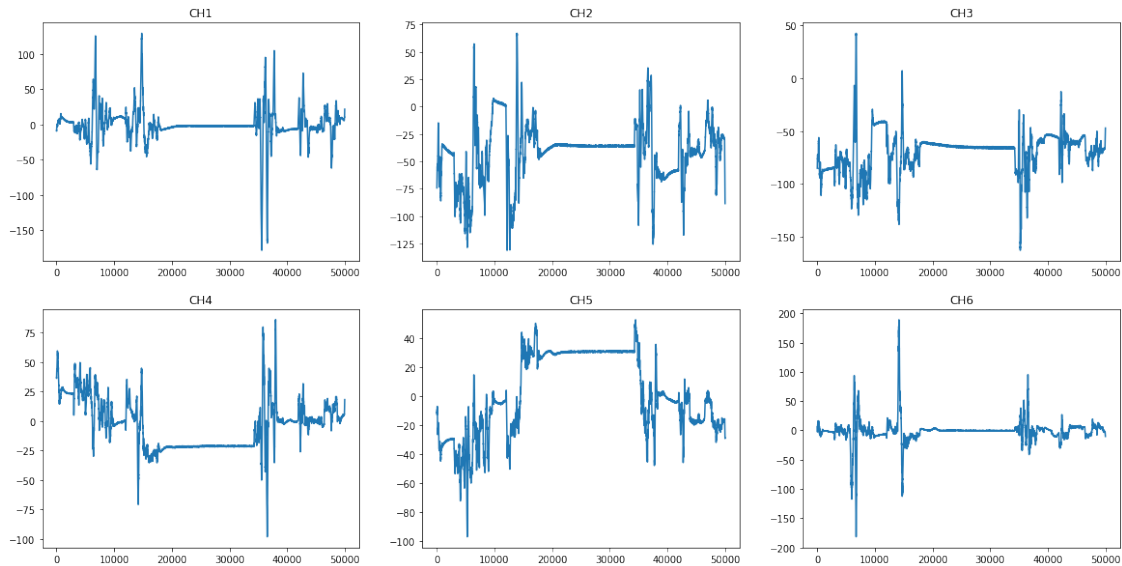
```
[5]: data2 = pd.read_csv('20200722_114606.csv')
data2 = pd.DataFrame(data2)
data2.head()
```

```
[5]:
```

	Time	CH1	CH2	CH3	CH4	CH5	CH6
0	0.0	-9.369690	-74.368103	-85.323120	36.605915	-9.837158	6.422803
1	4.0	-9.776184	-72.427094	-82.386200	36.036804	-10.131866	2.662618
2	8.0	-8.770111	-70.425110	-82.579285	37.144535	-11.270050	3.475631
3	12.0	-8.993683	-68.921082	-81.014282	38.343731	-12.377747	3.892300
4	16.0	-7.865662	-67.579651	-79.916748	38.658772	-13.048462	1.077242

```
[6]: fig2, axs2 = plt.subplots(2, 3, figsize=(20,10))
axs2[0, 0].plot(data2.loc[:, 'Time'], data2.loc[:, 'CH1'])
axs2[0, 0].set_title('CH1')
axs2[0, 1].plot(data2.loc[:, 'Time'], data2.loc[:, 'CH2'])
axs2[0, 1].set_title('CH2')
axs2[0, 2].plot(data2.loc[:, 'Time'], data2.loc[:, 'CH3'])
axs2[0, 2].set_title('CH3')
axs2[1, 0].plot(data2.loc[:, 'Time'], data2.loc[:, 'CH4'])
axs2[1, 0].set_title('CH4')
axs2[1, 1].plot(data2.loc[:, 'Time'], data2.loc[:, 'CH5'])
axs2[1, 1].set_title('CH5')
axs2[1, 2].plot(data2.loc[:, 'Time'], data2.loc[:, 'CH6'])
axs2[1, 2].set_title('CH6')
```

```
[6]: Text(0.5, 1.0, 'CH6')
```



## 1 10.12.2020 ten sam wykres co w pracy

```
[7]: data3 = pd.read_csv('20201210_084735.csv')
```

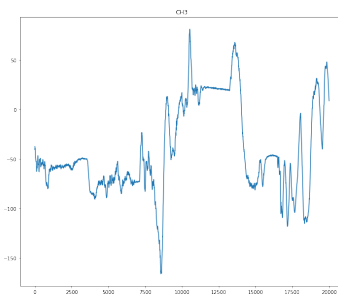
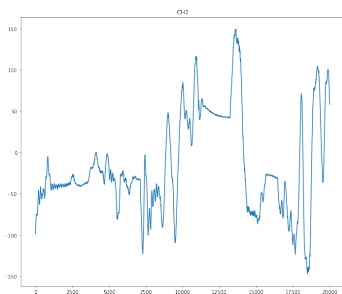
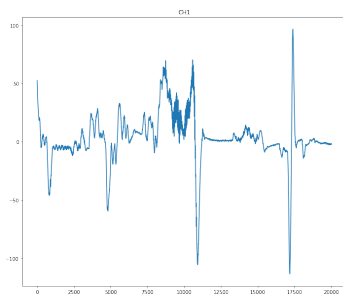
```
[8]: data3.head()
```

```
[8]:
```

	Time	CH1	CH2	CH3
0	0.0	52.510483	-98.412231	-37.621033
1	8.0	48.984039	-91.542480	-38.200287
2	16.0	44.217751	-88.432800	-40.944122
3	24.0	41.209602	-85.465393	-39.409607
4	32.0	38.364056	-81.197205	-43.169678

```
[10]: fig, axs = plt.subplots(1, 3, figsize=(40,10))
axs[0].plot(data3.loc[:, 'Time'], data3.loc[:, 'CH1'])
axs[0].set_title('CH1')
axs[1].plot(data3.loc[:, 'Time'], data3.loc[:, 'CH2'])
axs[1].set_title('CH2')
axs[2].plot(data3.loc[:, 'Time'], data3.loc[:, 'CH3'])
axs[2].set_title('CH3')
```

```
[10]: Text(0.5, 1.0, 'CH3')
```



[ ]: