

— Test Cases —

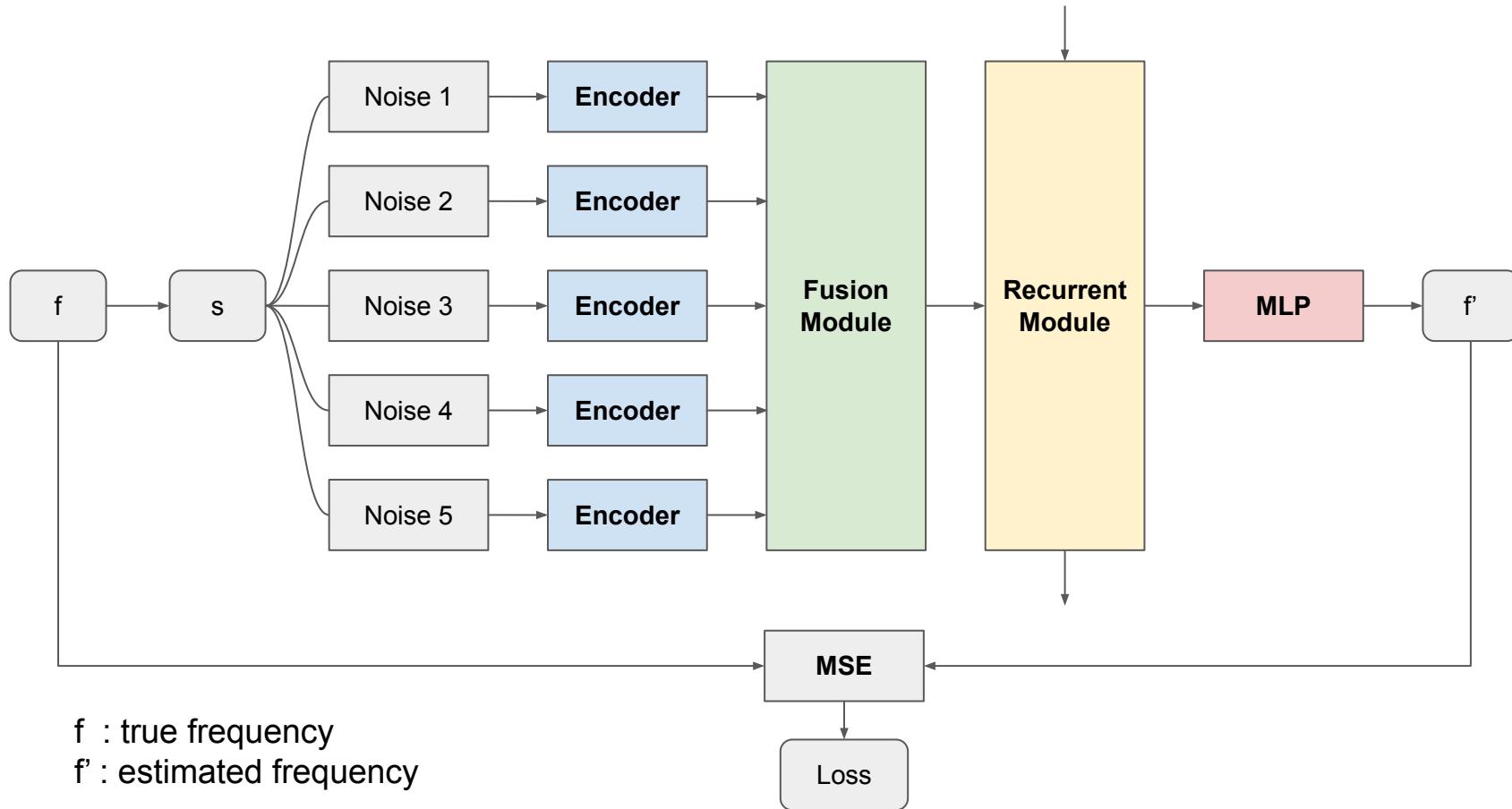
Multi-Sensor

Biosignal Processing

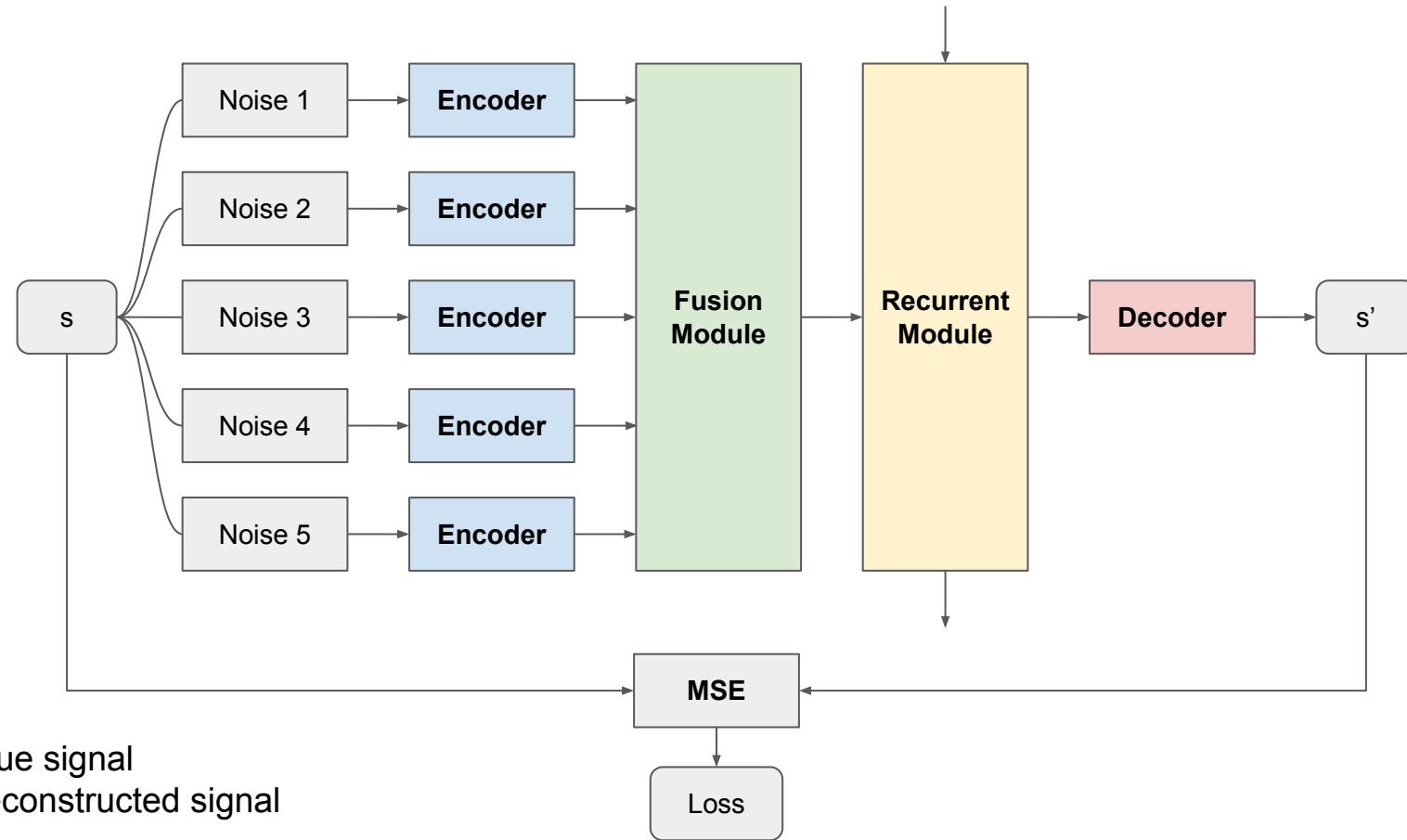
Frequency Estimation & Signal Reconstruction

Model Architecture

Training Flow — Frequency Estimation

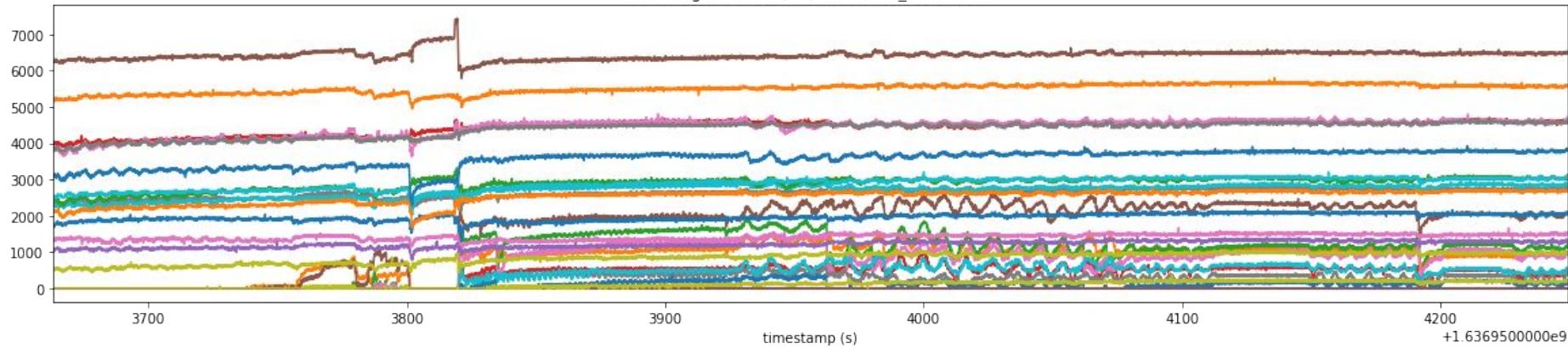


Training Flow — Signal Reconstruction

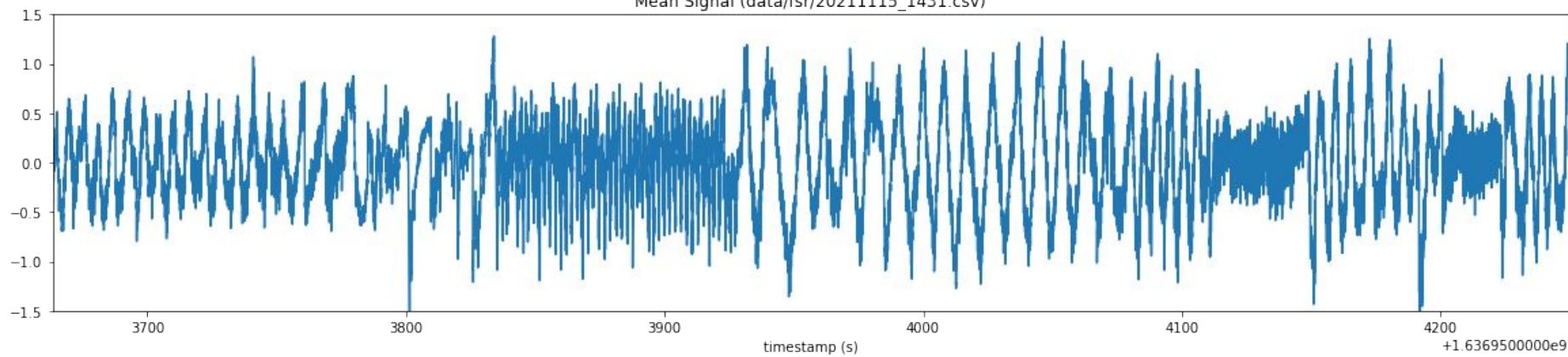


Test Case #1

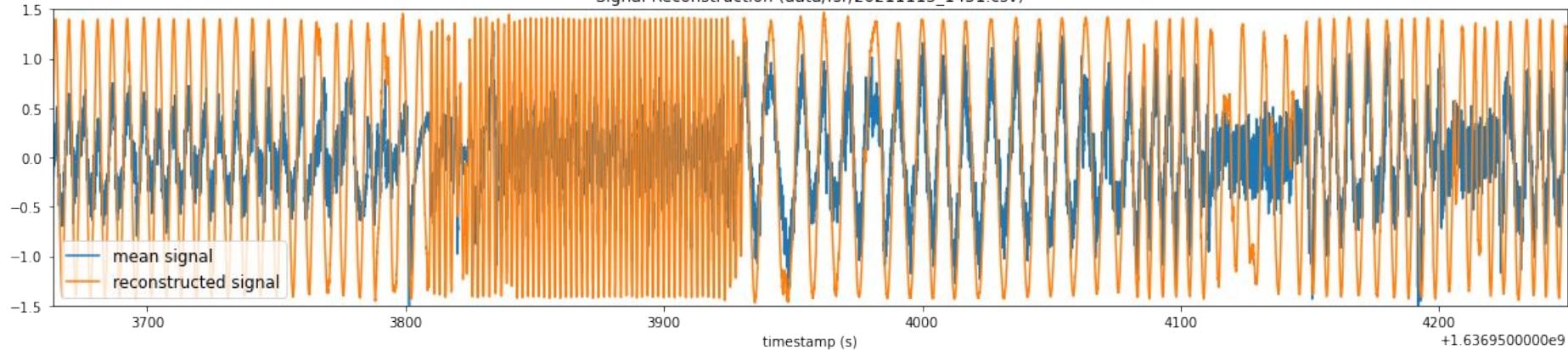
Raw Signals (data/fsr/20211115_1431.csv)



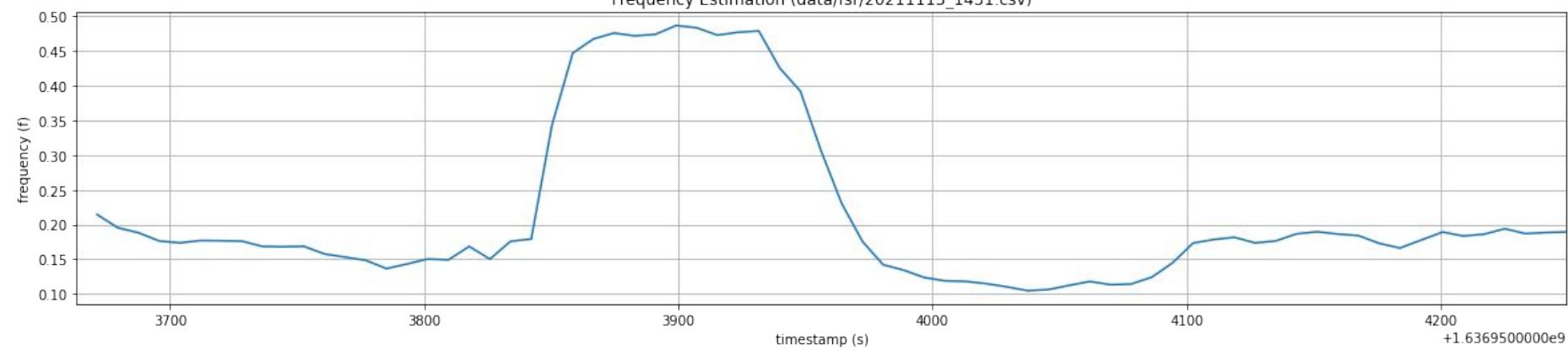
Mean Signal (data/fsr/20211115_1431.csv)



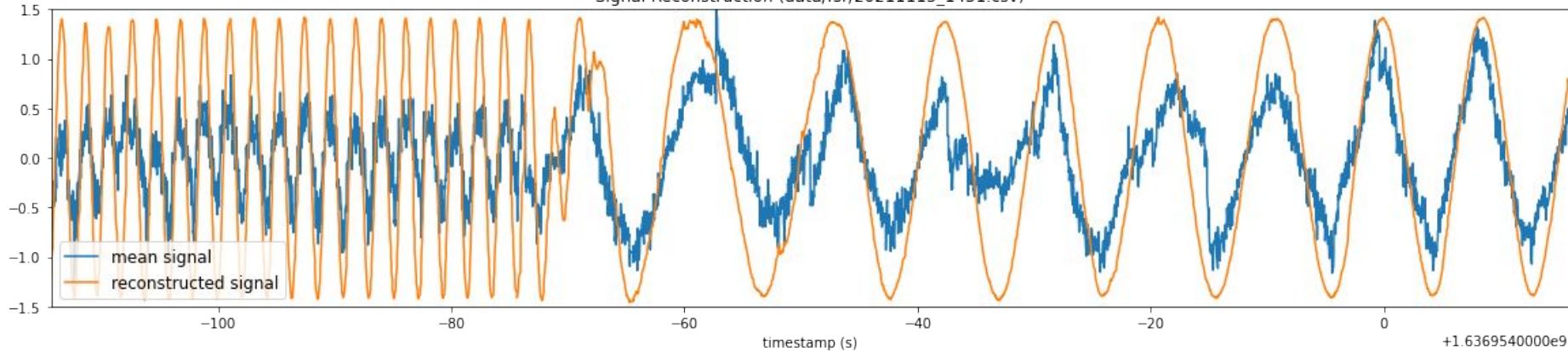
Signal Reconstruction (data/fsr/20211115_1431.csv)



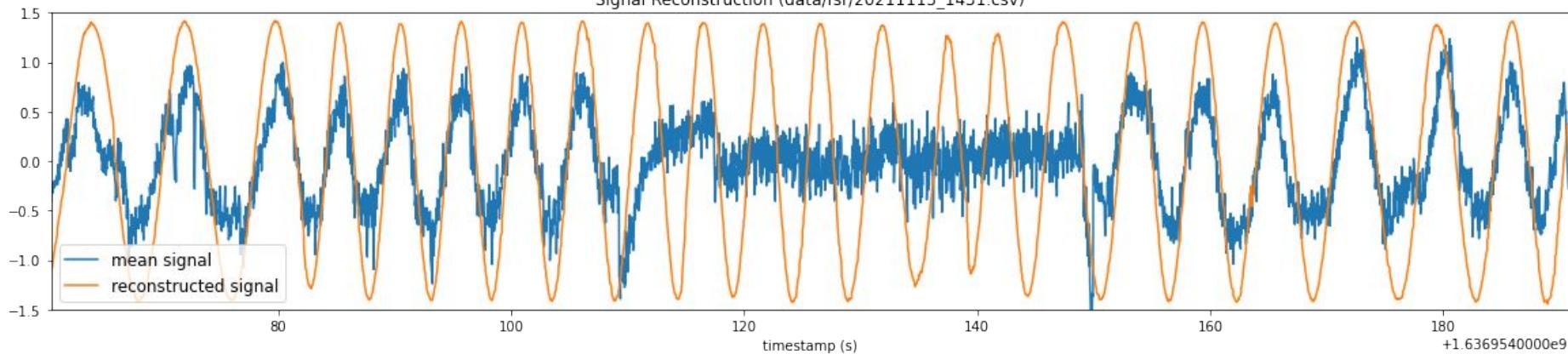
Frequency Estimation (data/fsr/20211115_1431.csv)



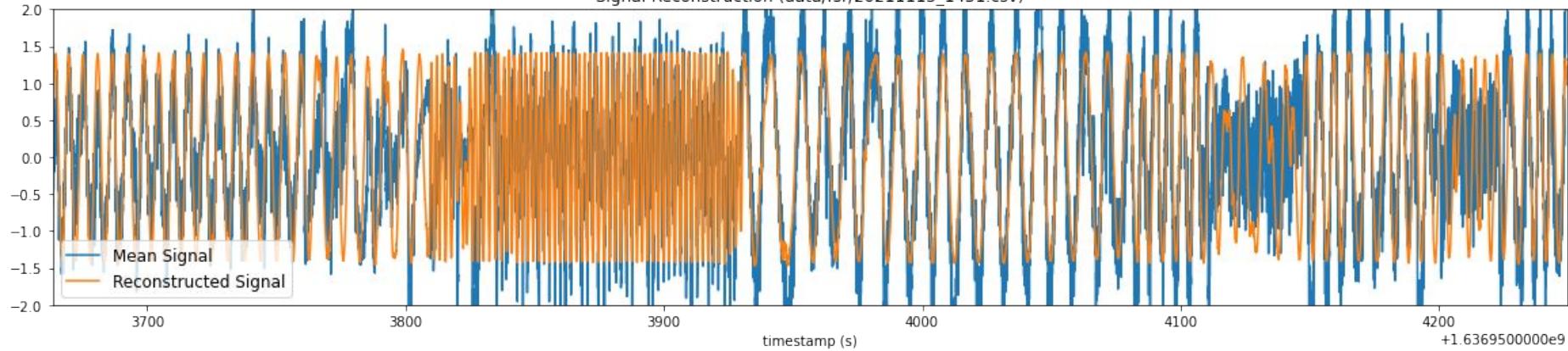
Signal Reconstruction (data/fsr/20211115_1431.csv)



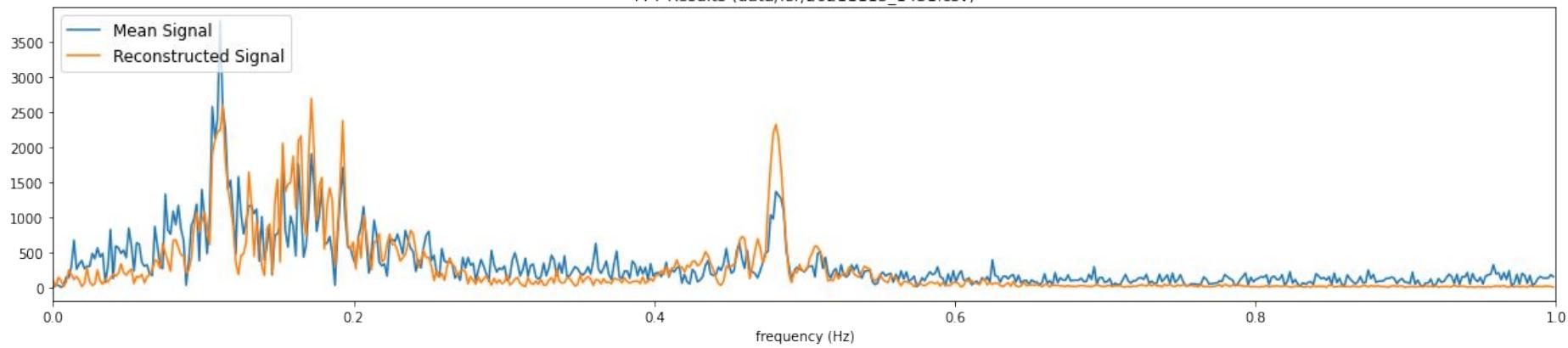
Signal Reconstruction (data/fsr/20211115_1431.csv)



Signal Reconstruction (data/fsr/20211115_1431.csv)

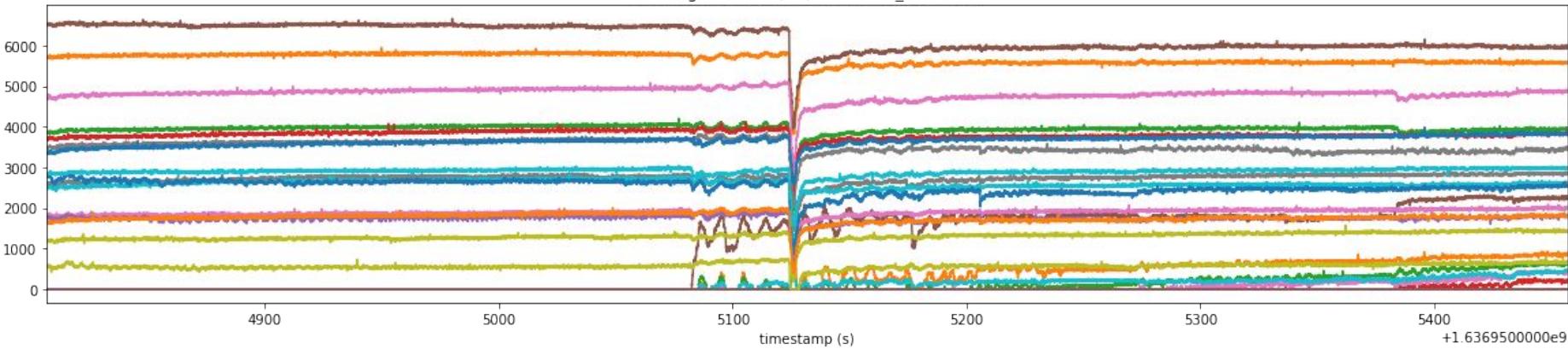


FFT Results (data/fsr/20211115_1431.csv)

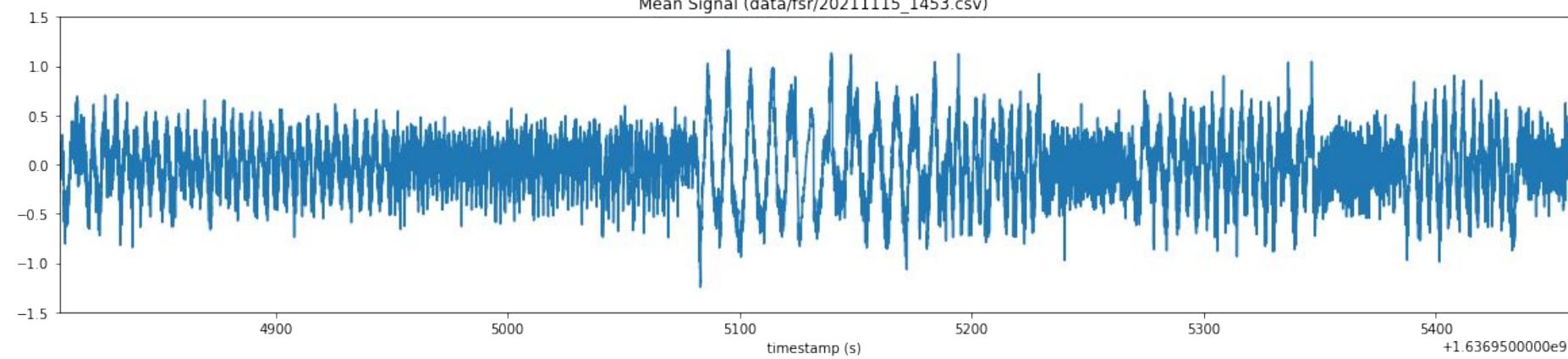


Test Case #2

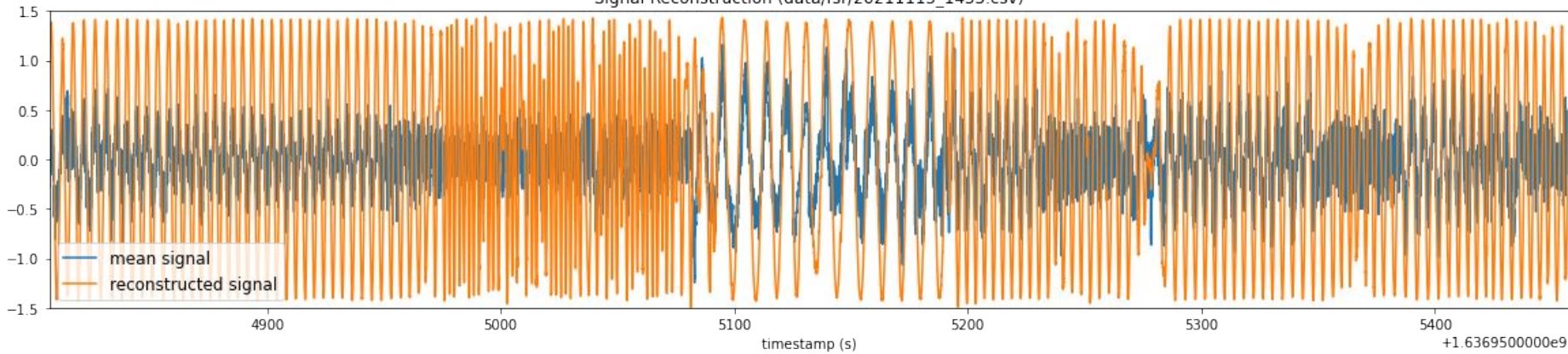
Raw Signals (data/fsr/20211115_1453.csv)



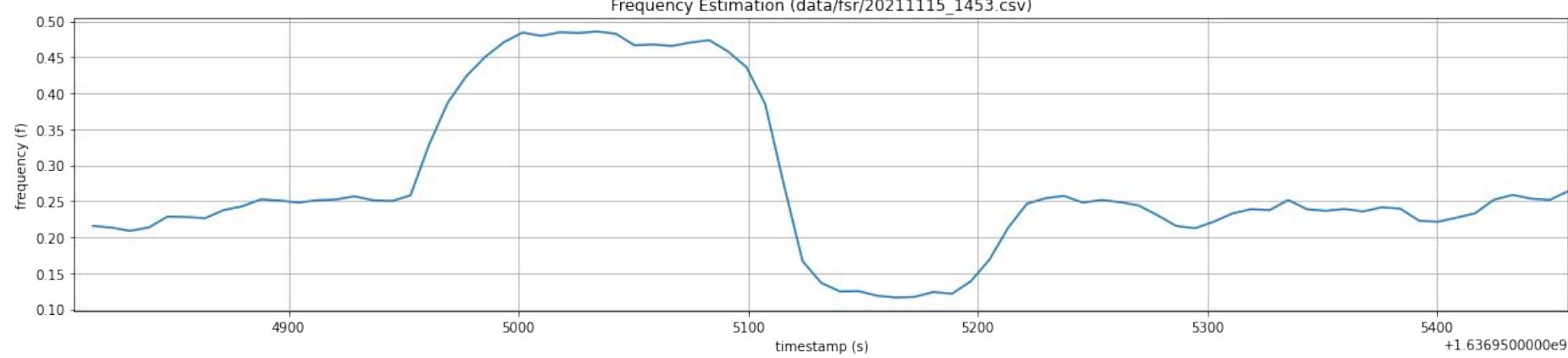
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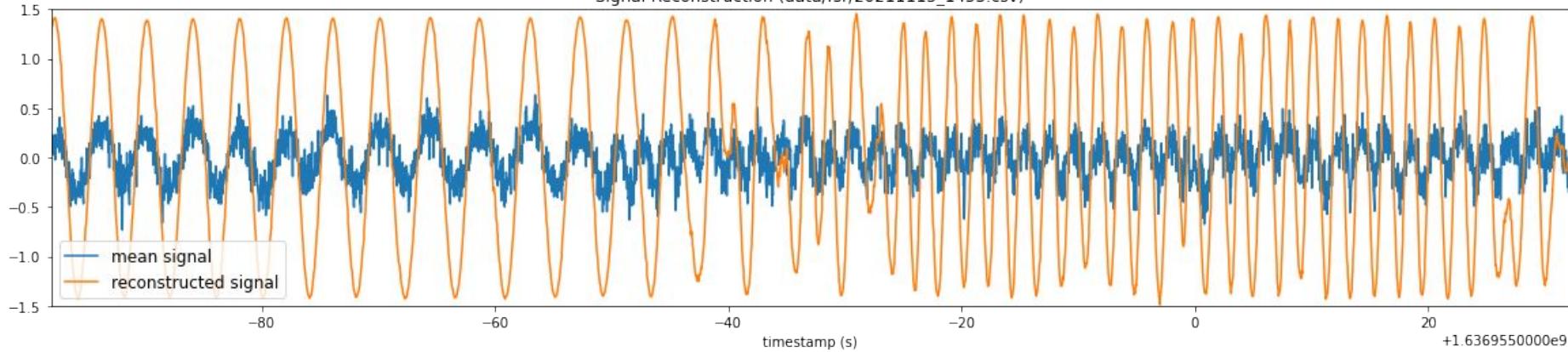
Signal Reconstruction (data/fsr/20211115_1453.csv)



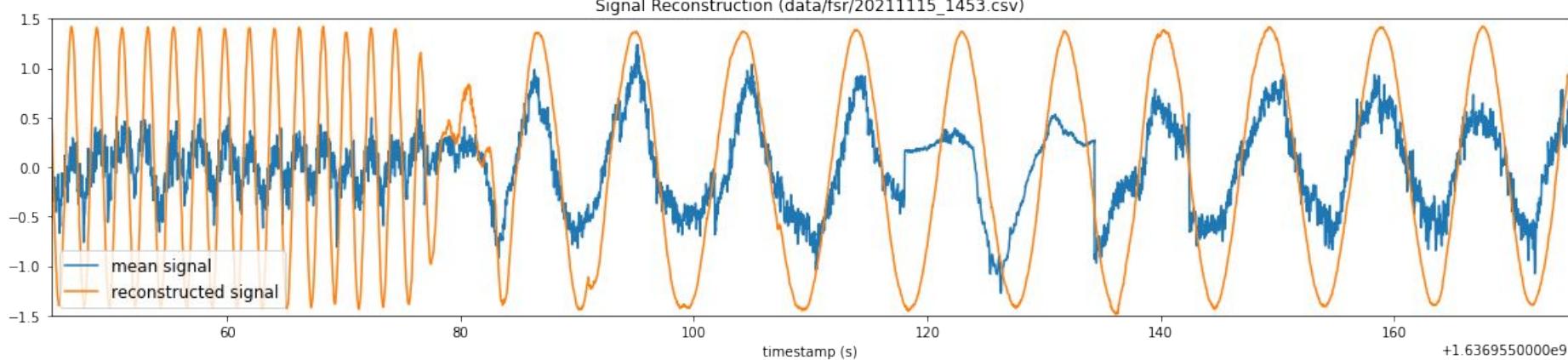
Frequency Estimation (data/fsr/20211115_1453.csv)



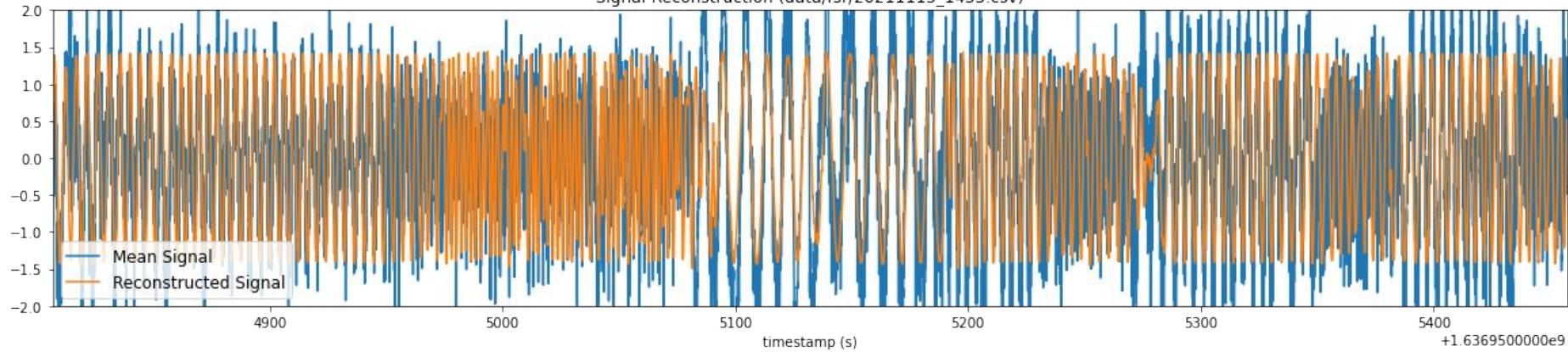
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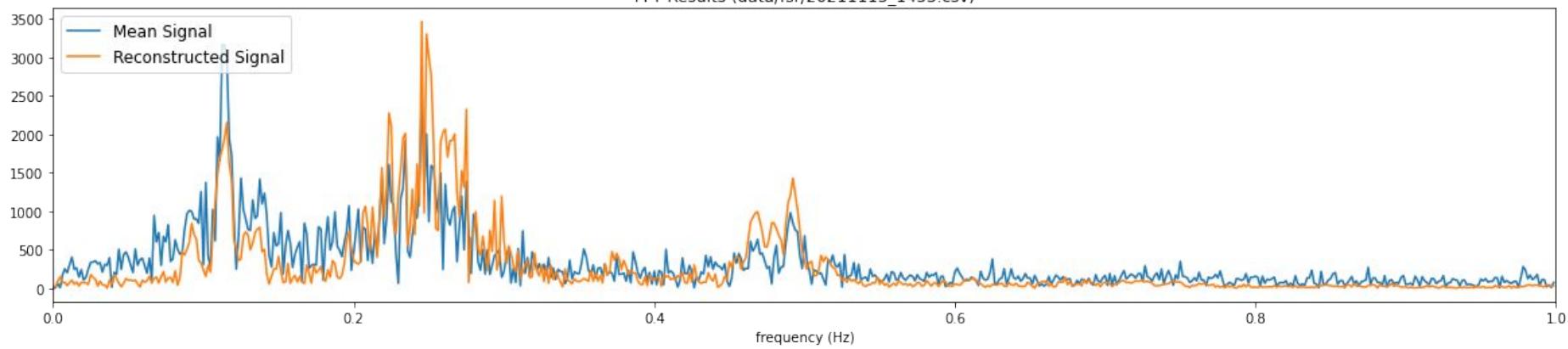
Signal Reconstruction (data/fsr/20211115_1453.csv)



Signal Reconstruction (data/fsr/20211115_1453.csv)

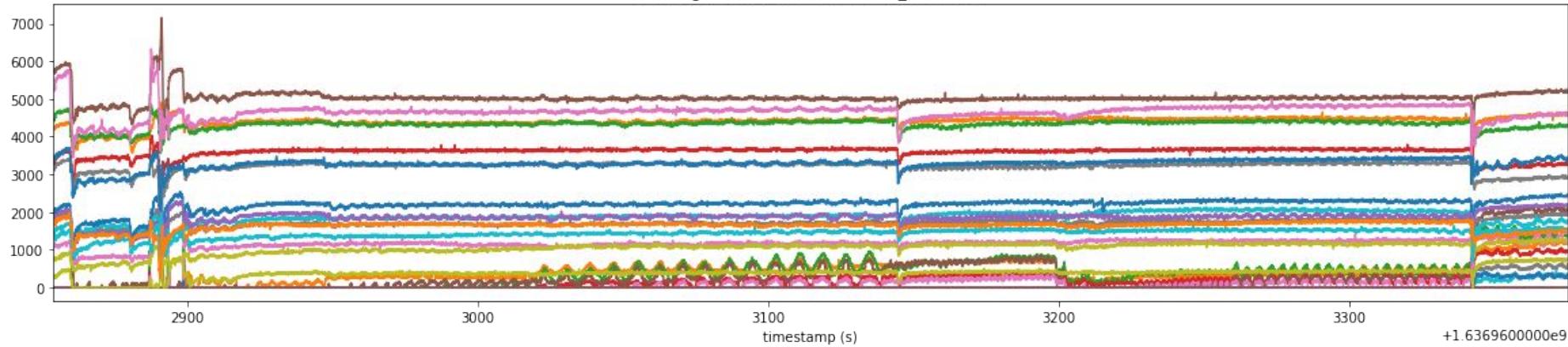


FFT Results (data/fsr/20211115_1453.csv)

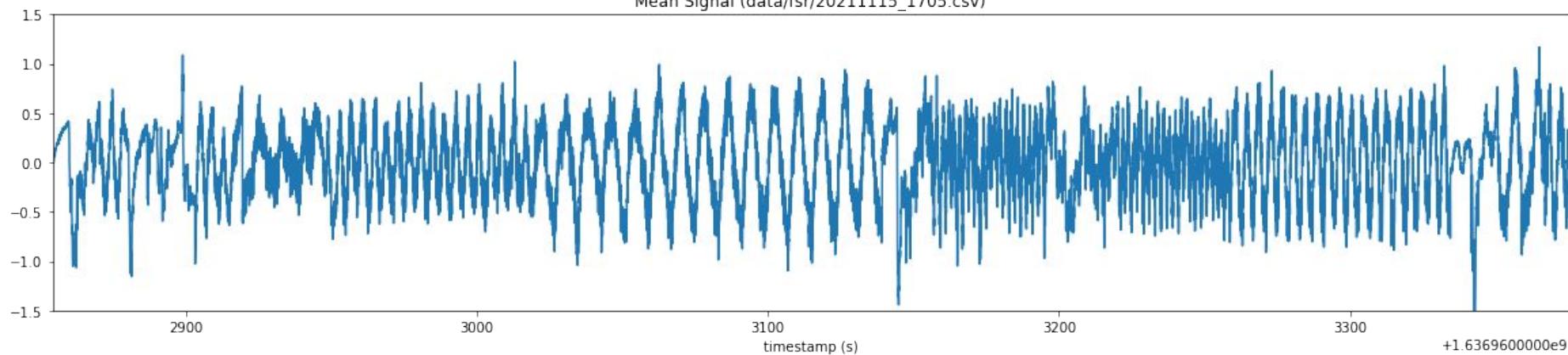


Test Case #3

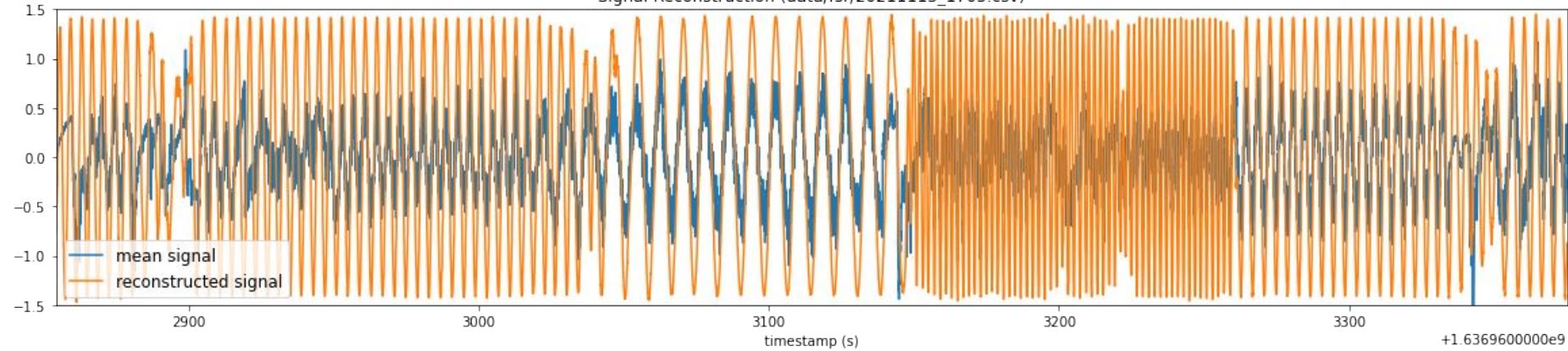
Raw Signals (data/fsr/20211115_1705.csv)



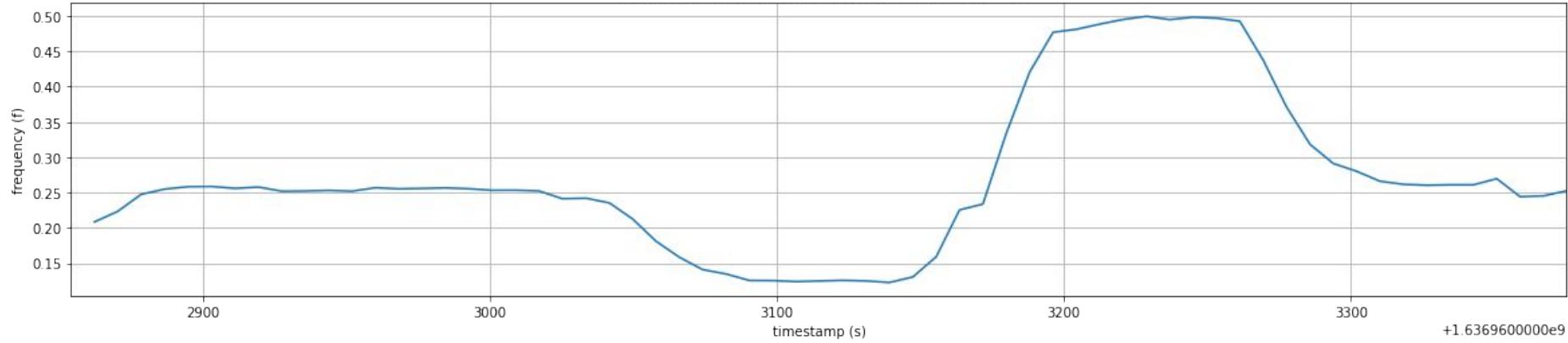
Mean Signal (data/fsr/20211115_1705.csv)



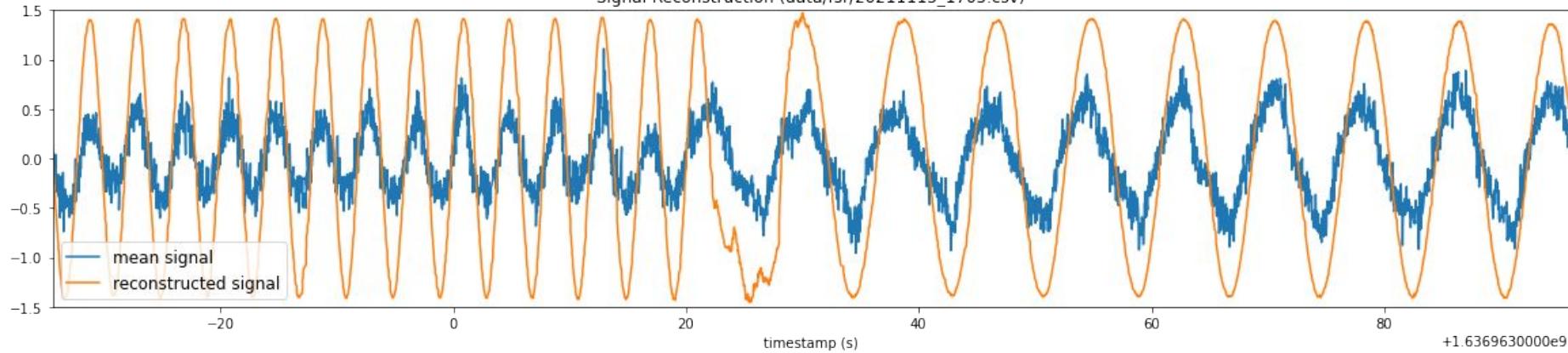
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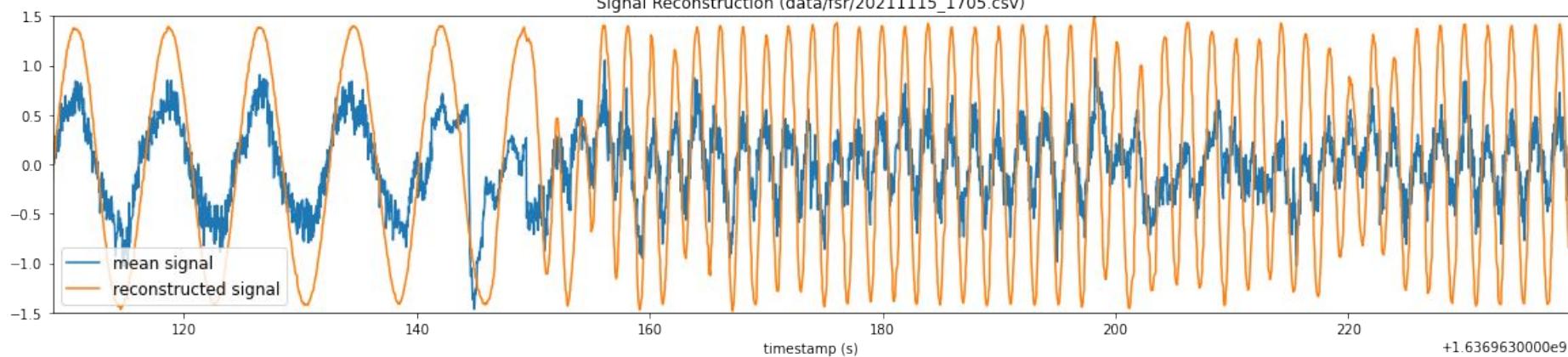
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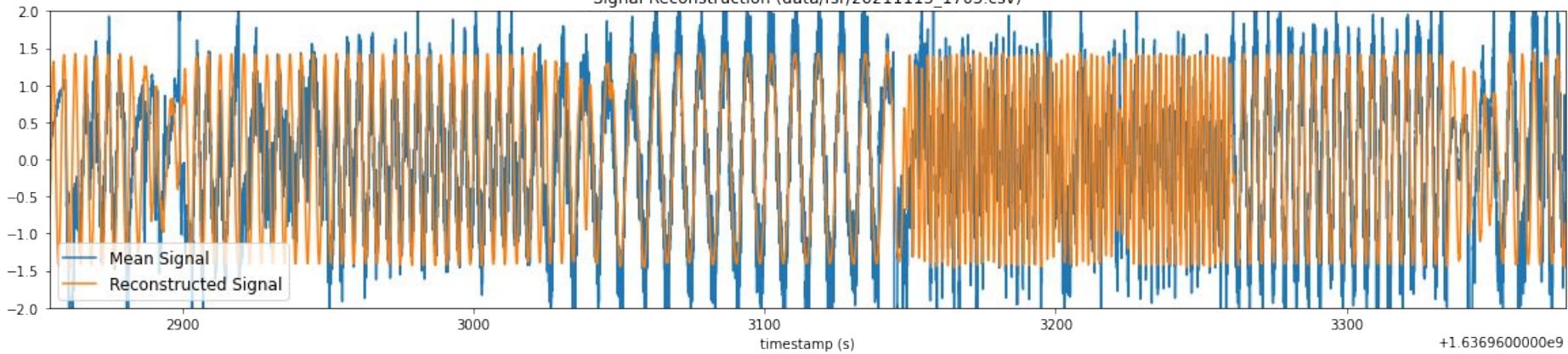
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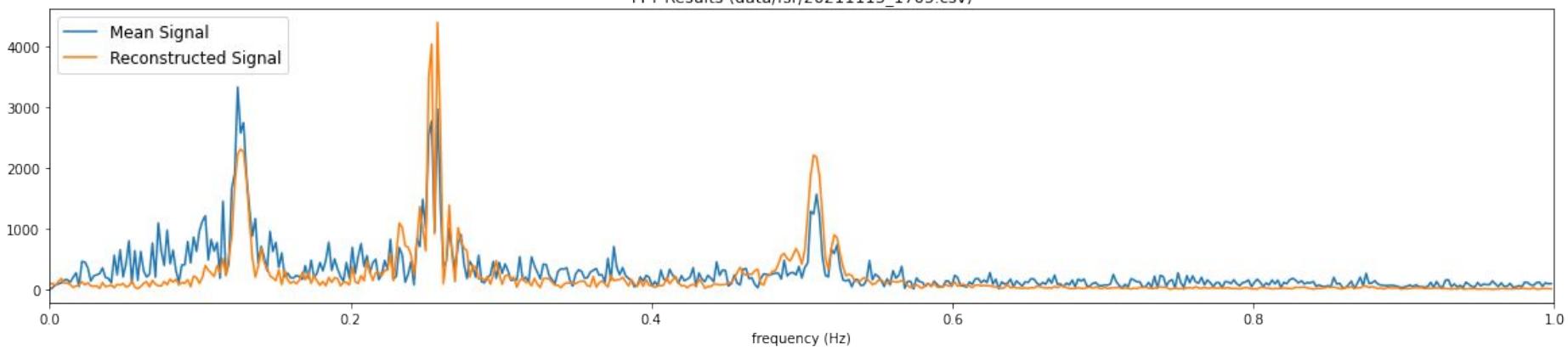
Signal Reconstruction (data/fsr/20211115_1705.csv)



Signal Reconstruction (data/fsr/20211115_1705.csv)

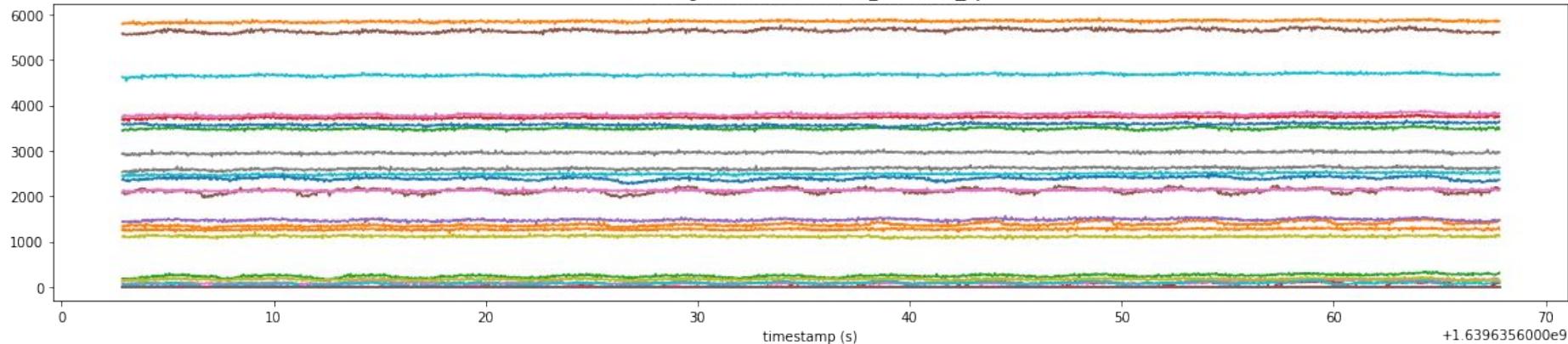


FFT Results (data/fsr/20211115_1705.csv)

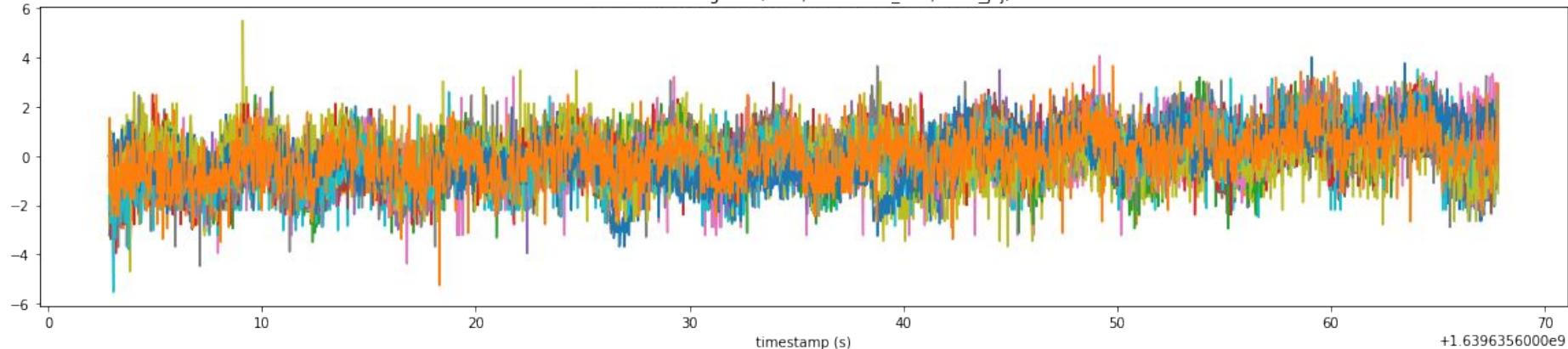


2021-12-16 Data
Signal Length: 2048 (64s)

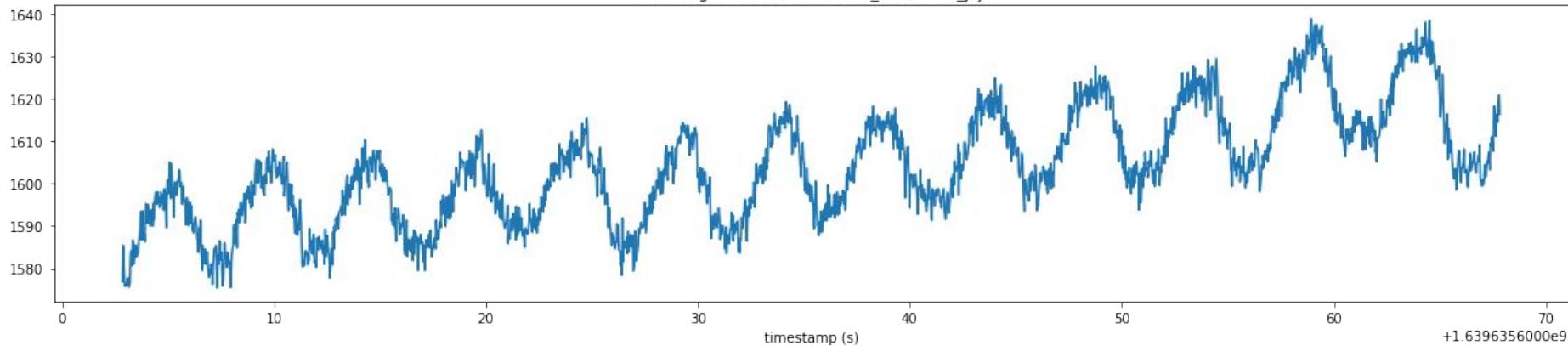
Raw Signals (data/20211216_test/1522_jsj)



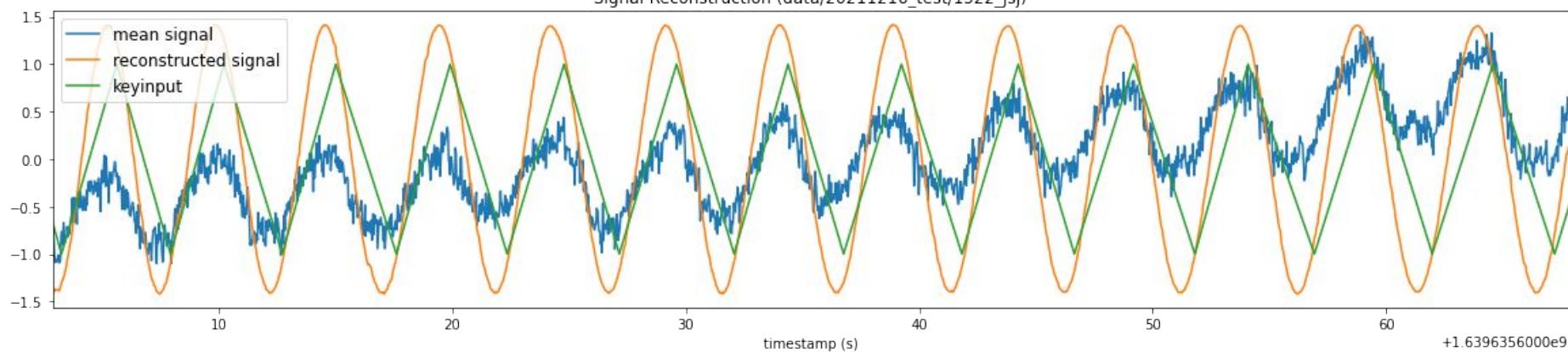
Normalized Signals (data/20211216_test/1522_jsj)



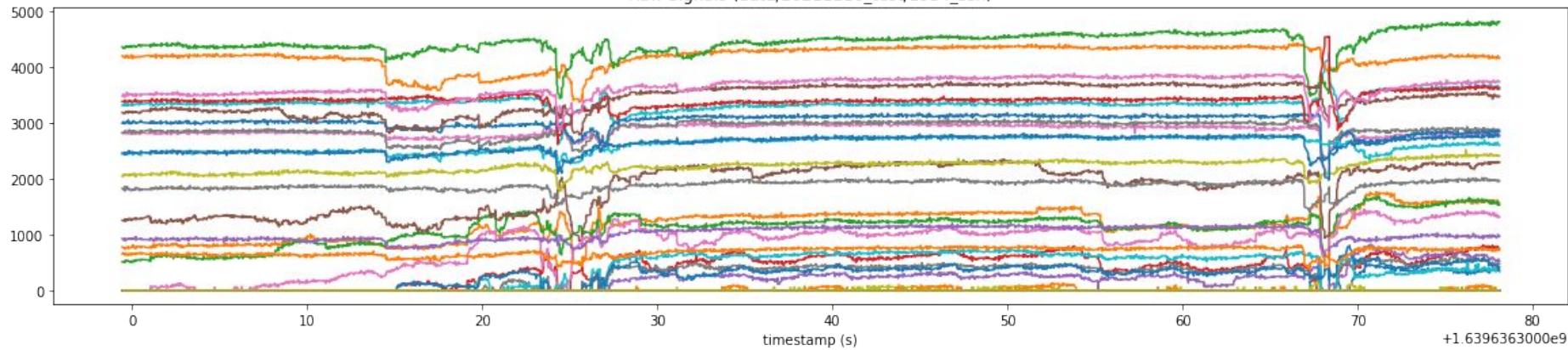
Mean Signal (data/20211216_test/1522_jsj)



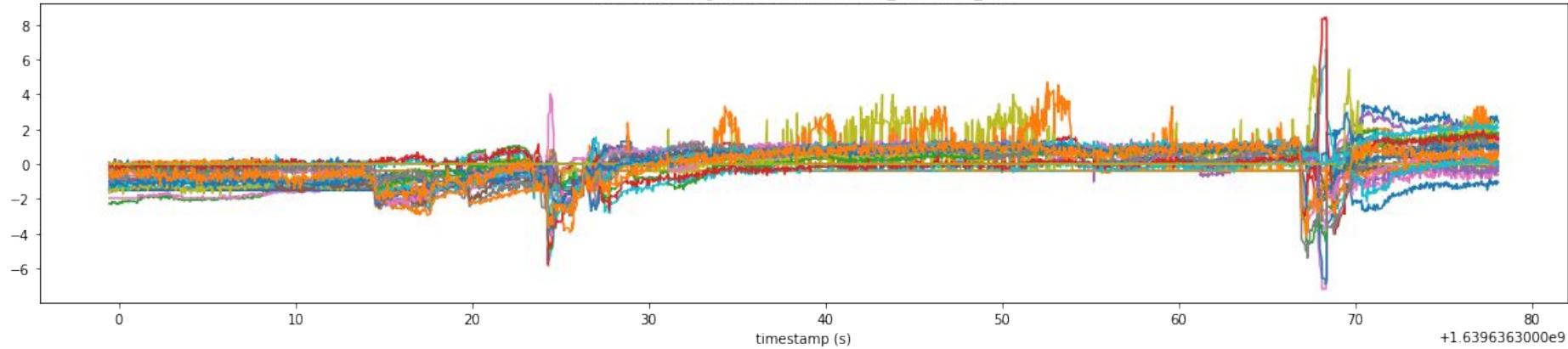
Signal Reconstruction (data/20211216_test/1522_jsj)



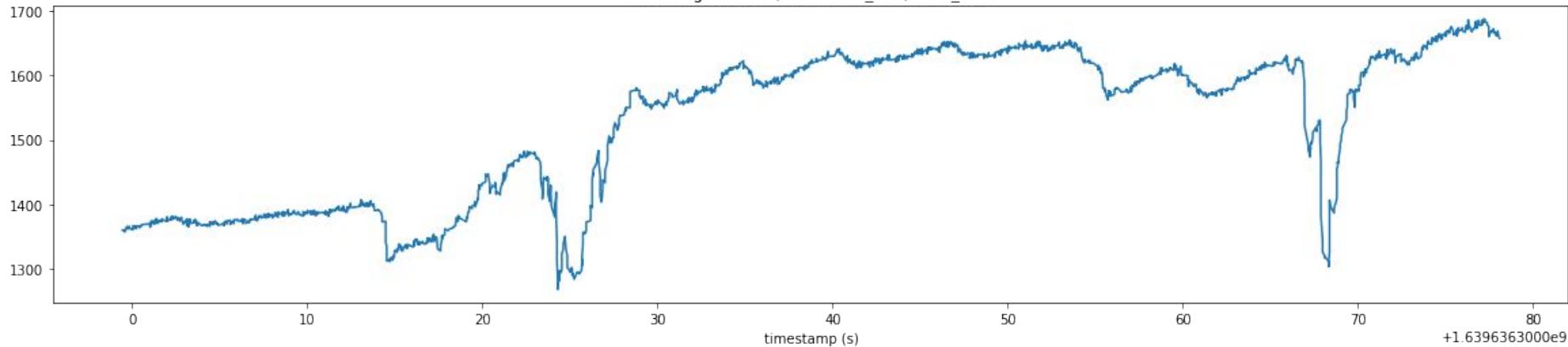
Raw Signals (data/20211216_test/1534_ssh)



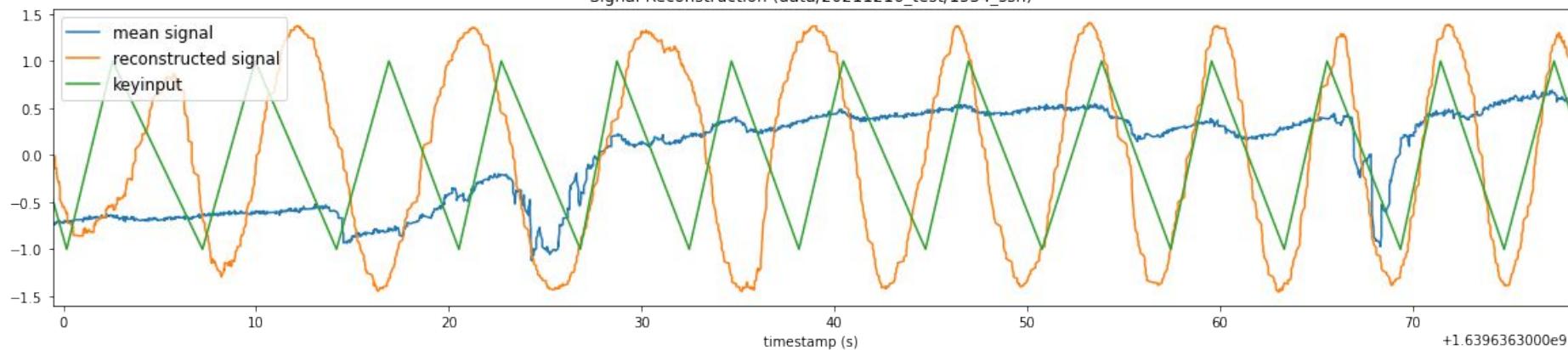
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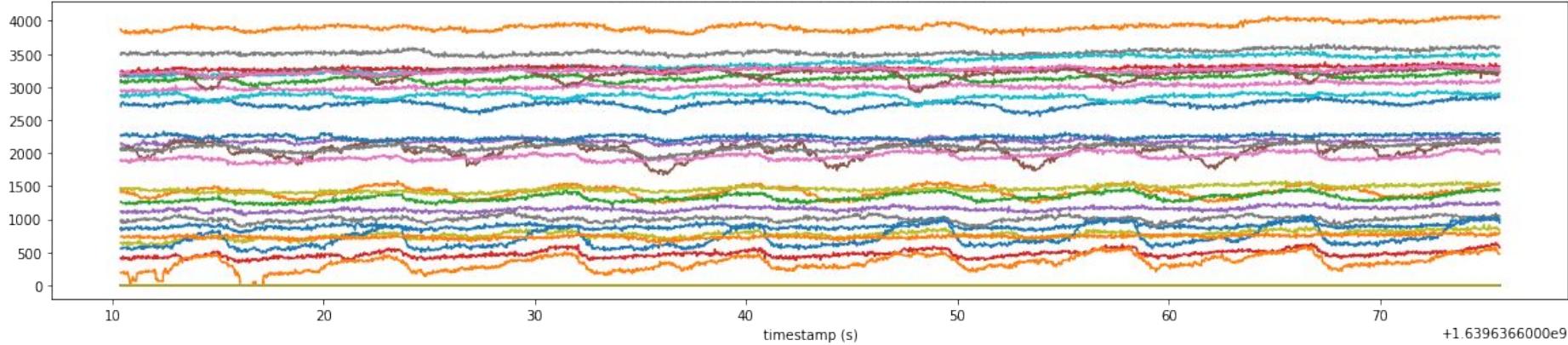
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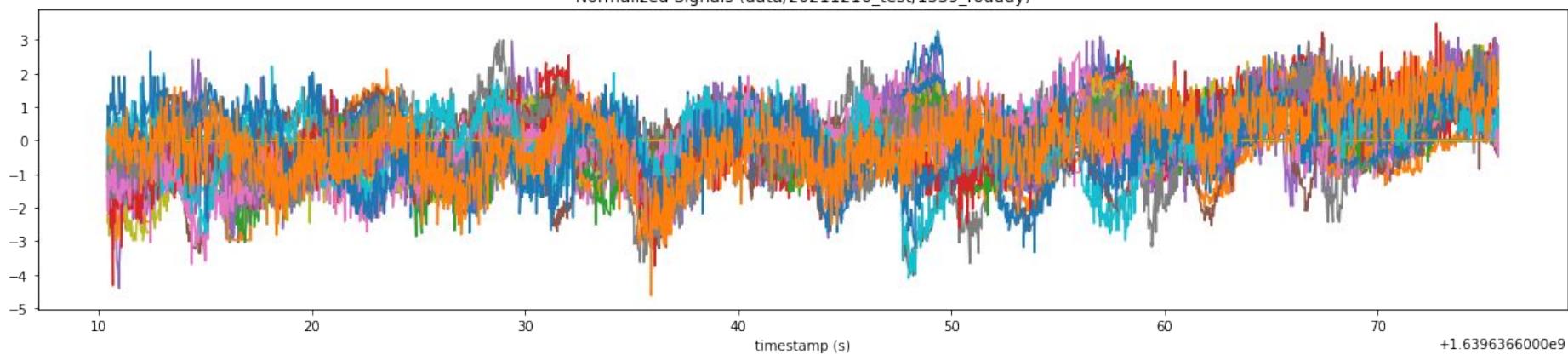
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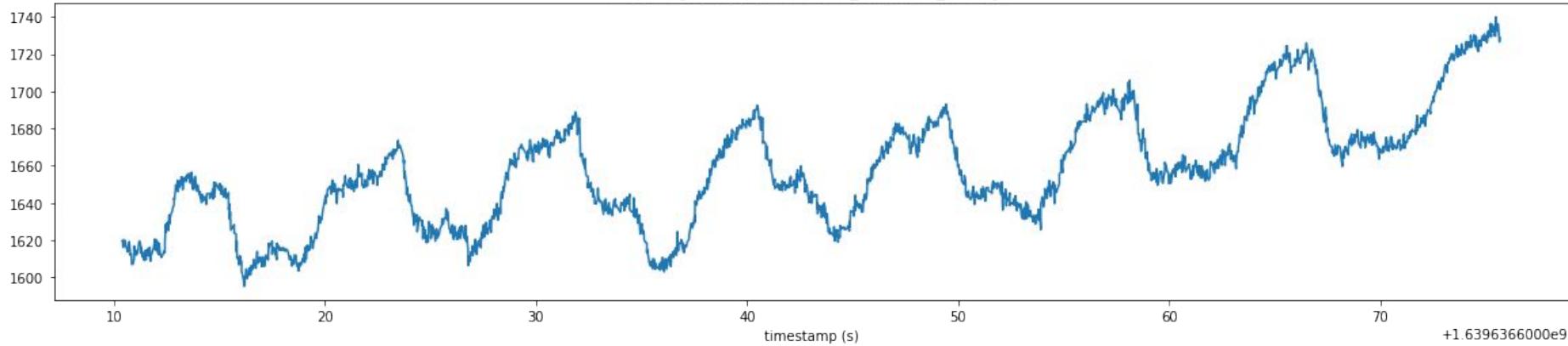
Raw Signals (data/20211216_test/1539_rouddy)



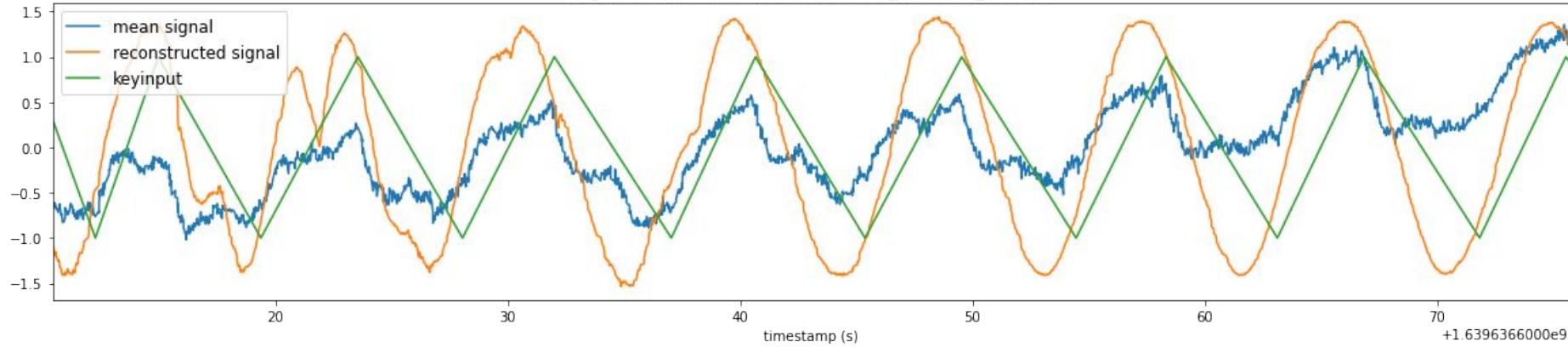
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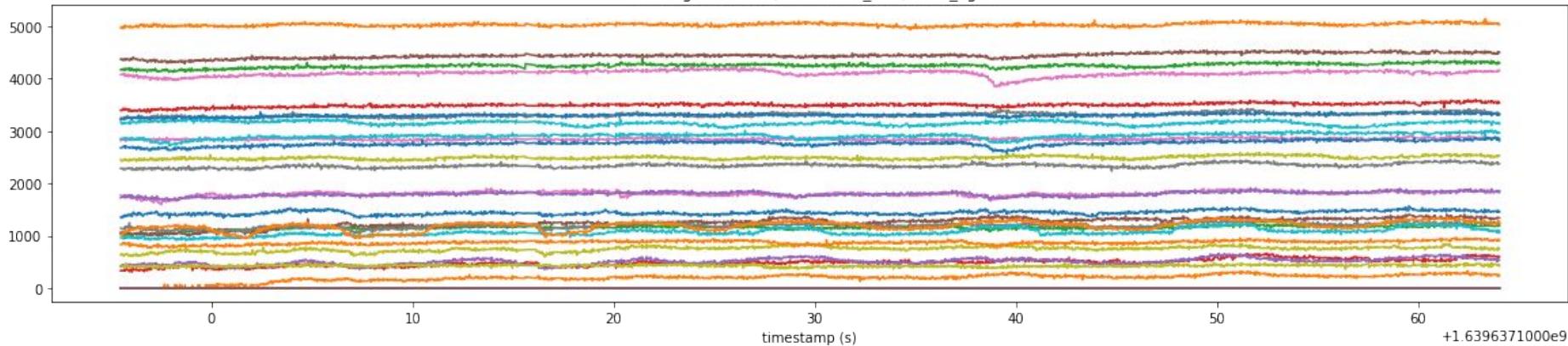
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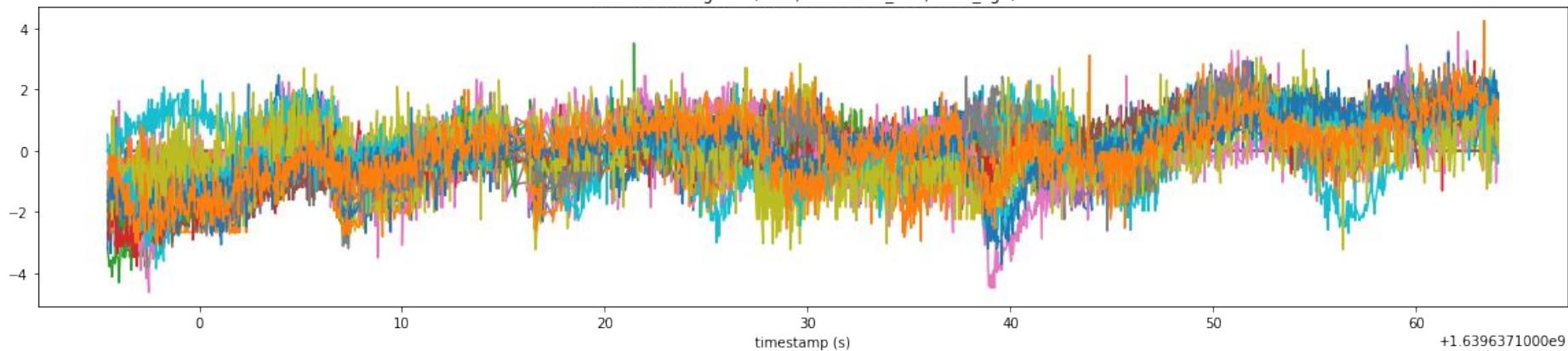
Signal Reconstruction (data/20211216_test/1539_rouddy)



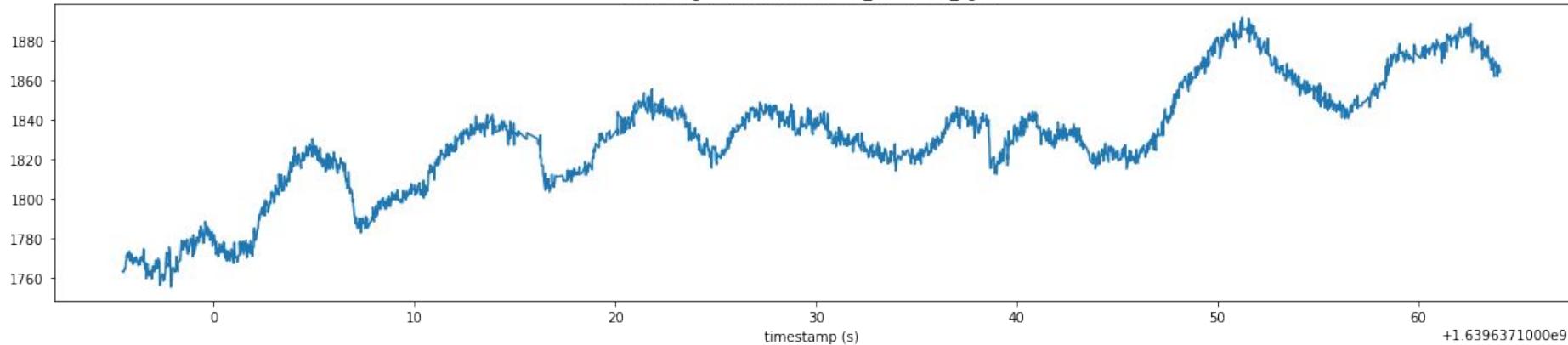
Raw Signals (data/20211216_test/1548_cgh)



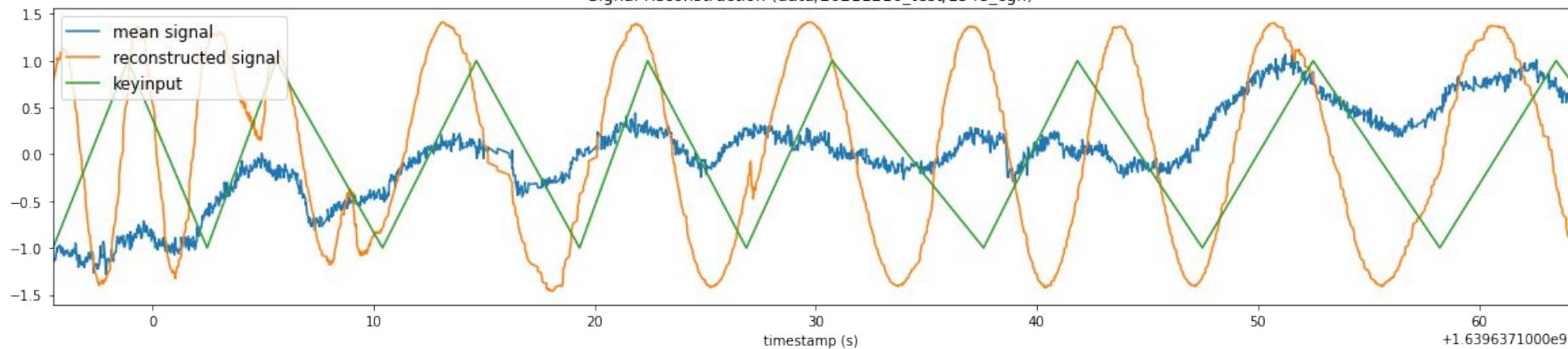
Normalized Signals (data/20211216_test/1548_cgh)



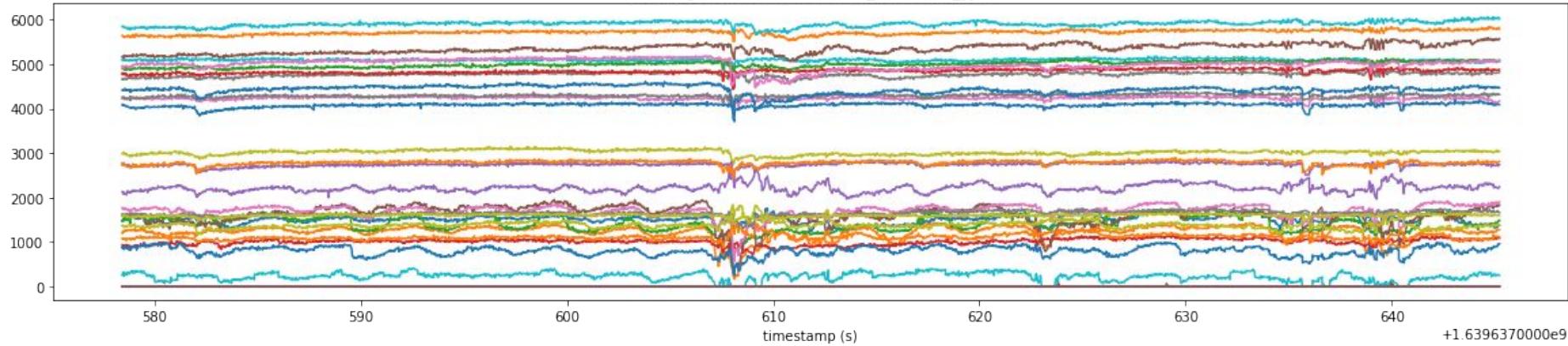
Mean Signal (data/20211216_test/1548_cgh)



Signal Reconstruction (data/20211216_test/1548_cgh)

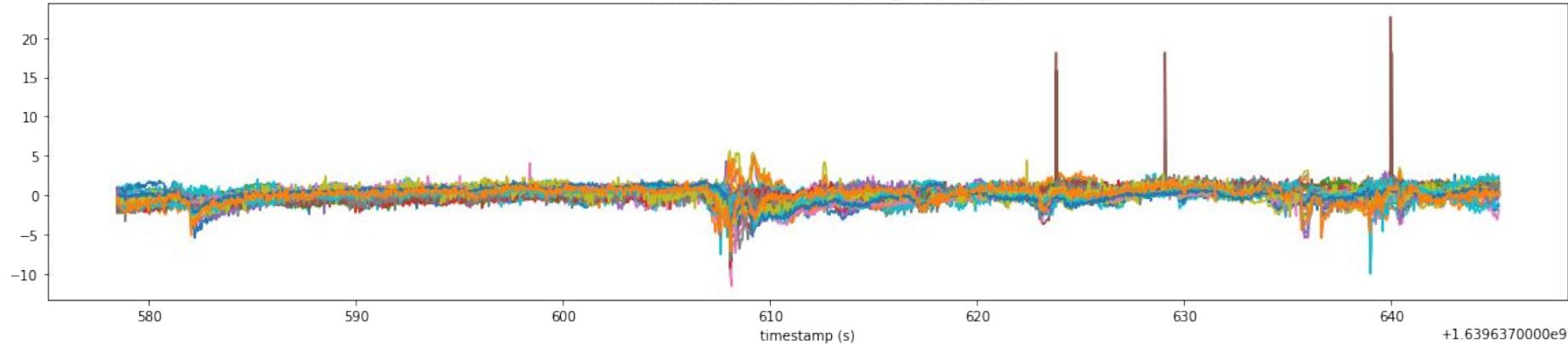


Raw Signals (data/20211216_test/1556_yjh)



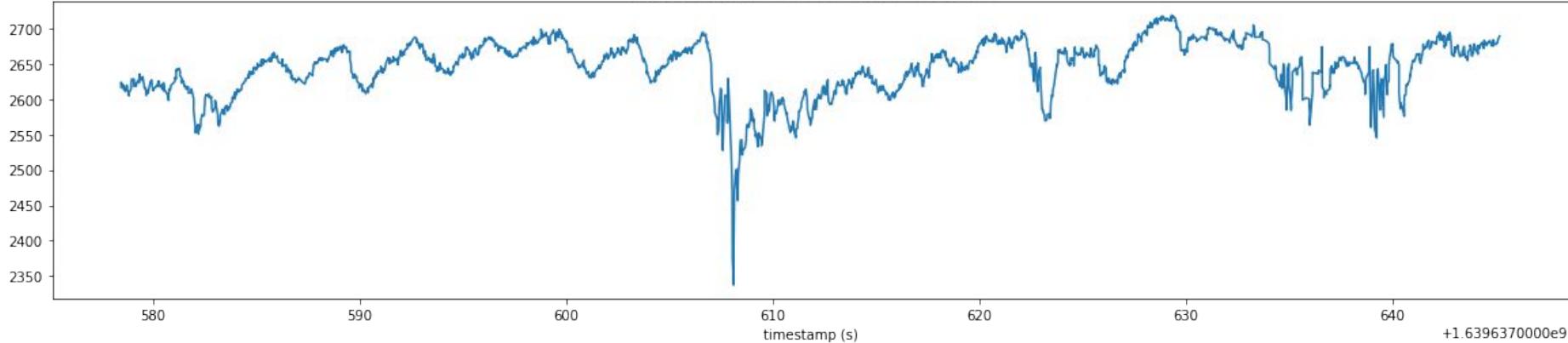
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Normalized Signals (data/20211216_test/1556_yjh)

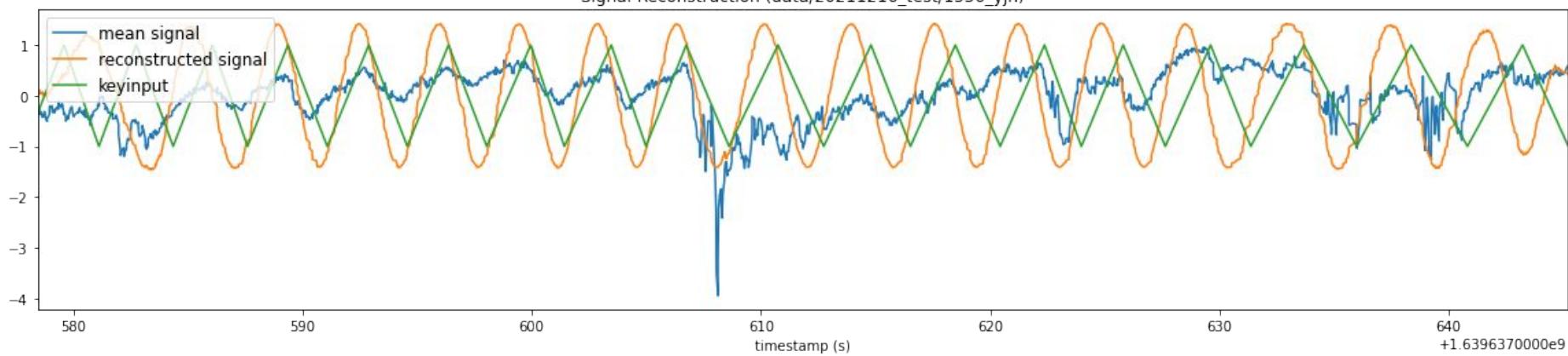


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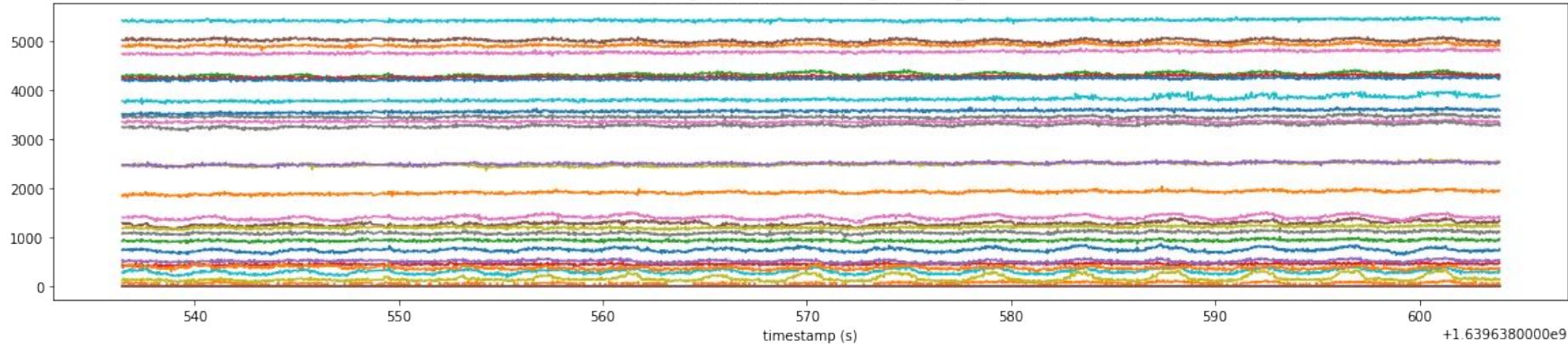
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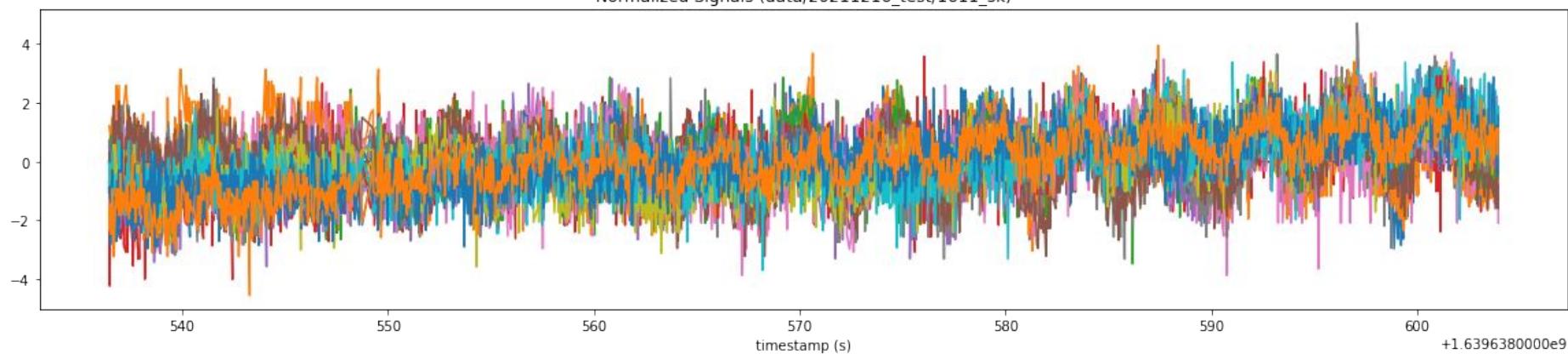
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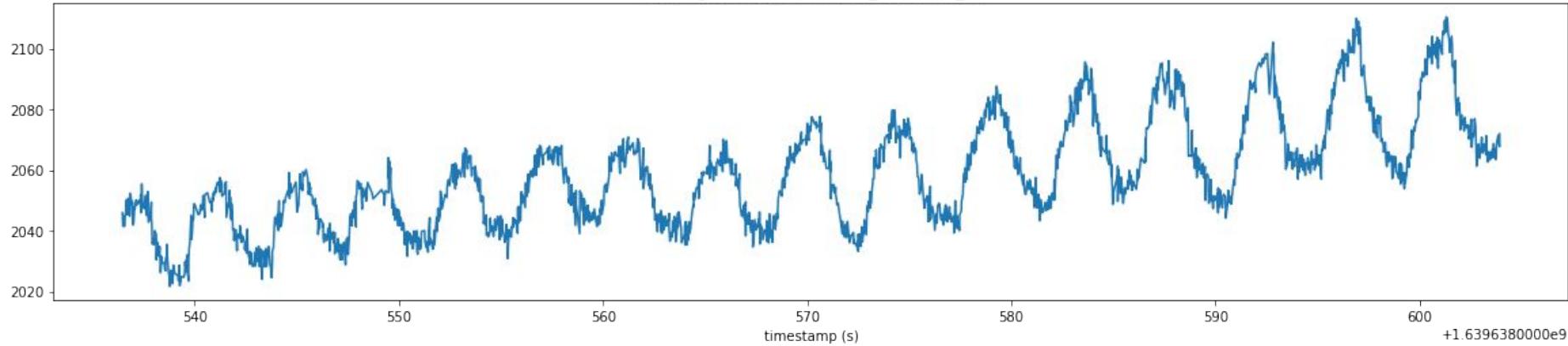
Raw Signals (data/20211216_test/1611_sk)



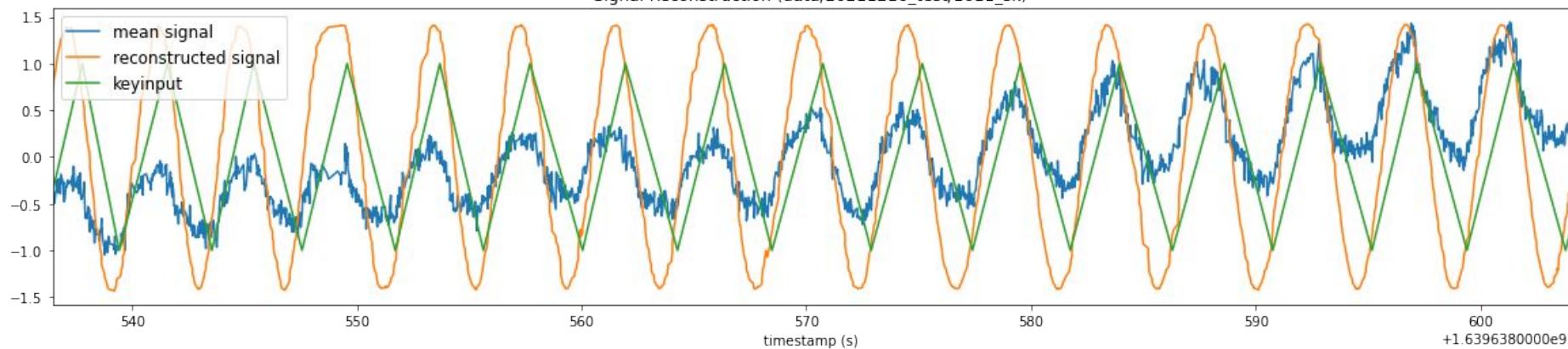
Normalized Signals (data/20211216_test/1611_sk)



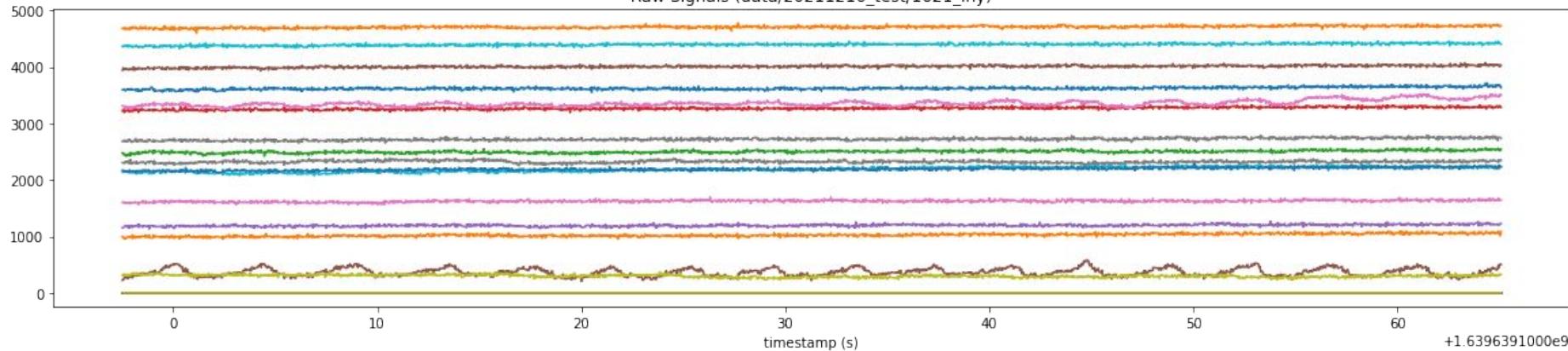
Mean Signal (data/20211216_test/1611_sk)



Signal Reconstruction (data/20211216_test/1611_sk)

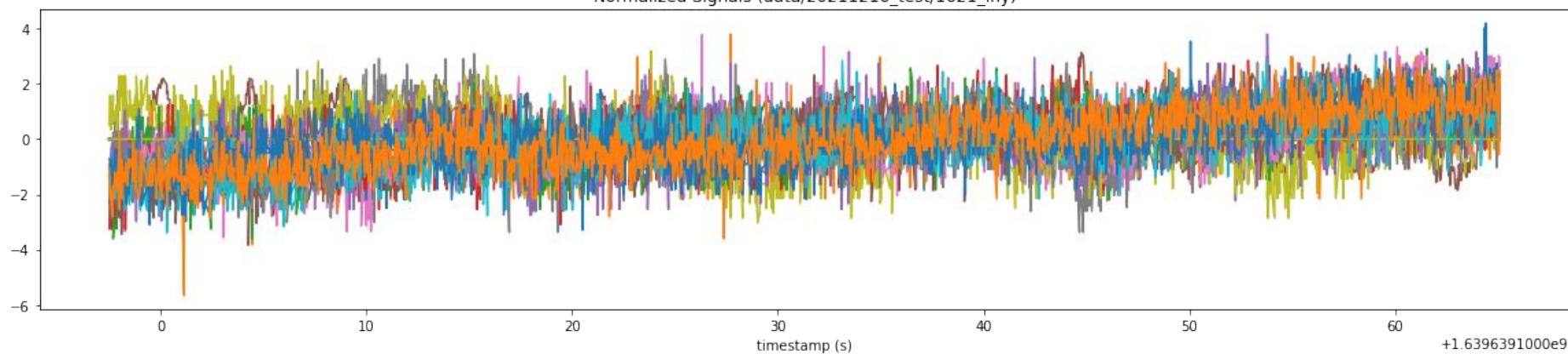


Raw Signals (data/20211216_test/1621_lhy)



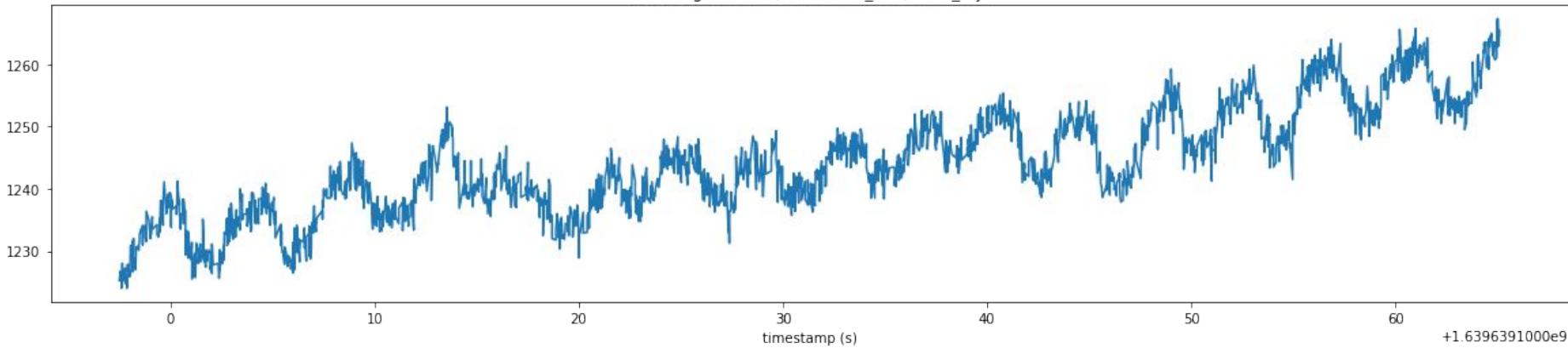
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Normalized Signals (data/20211216_test/1621_lhy)

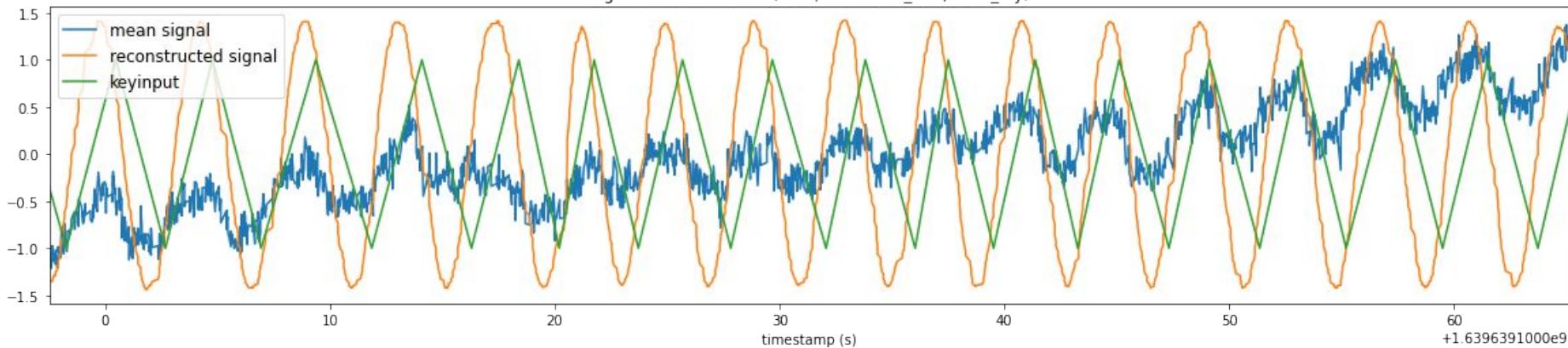


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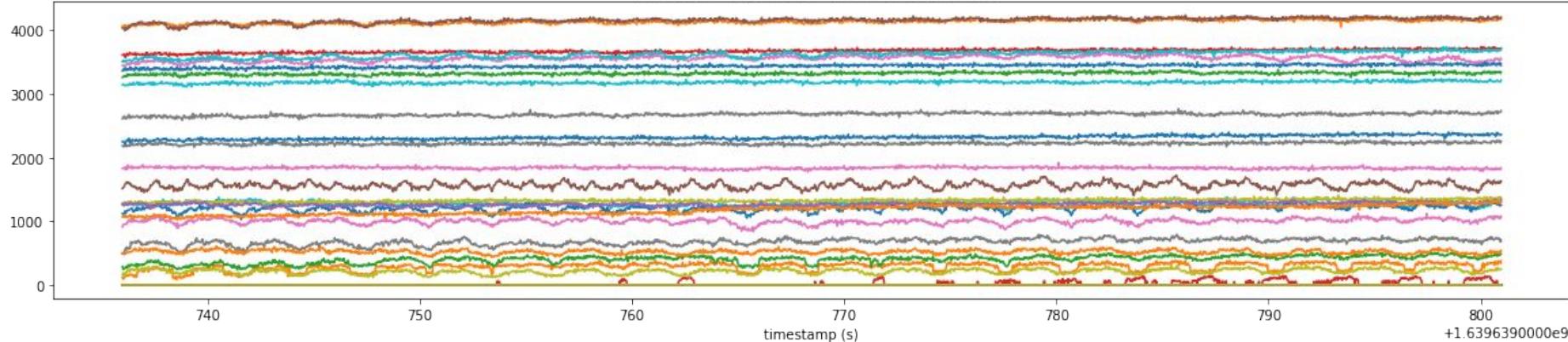
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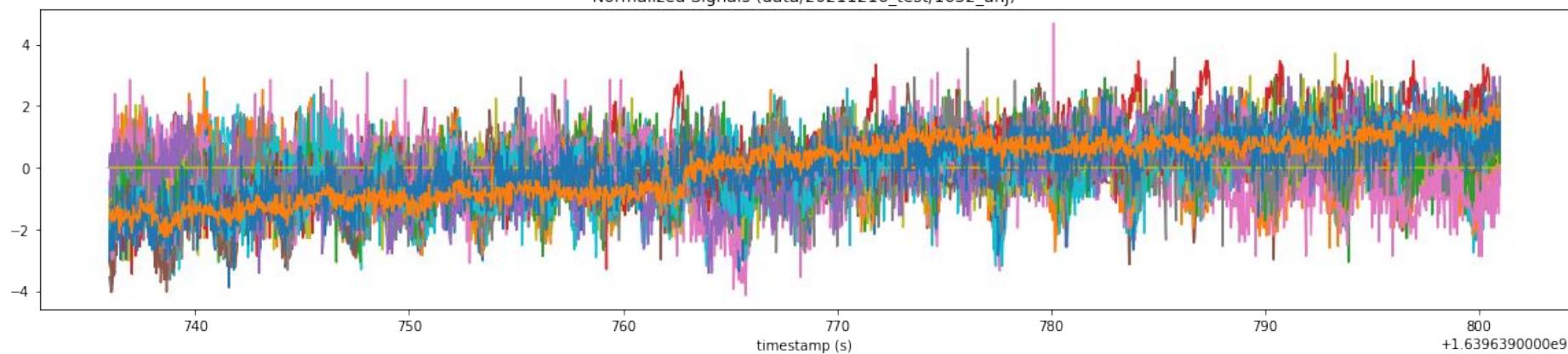
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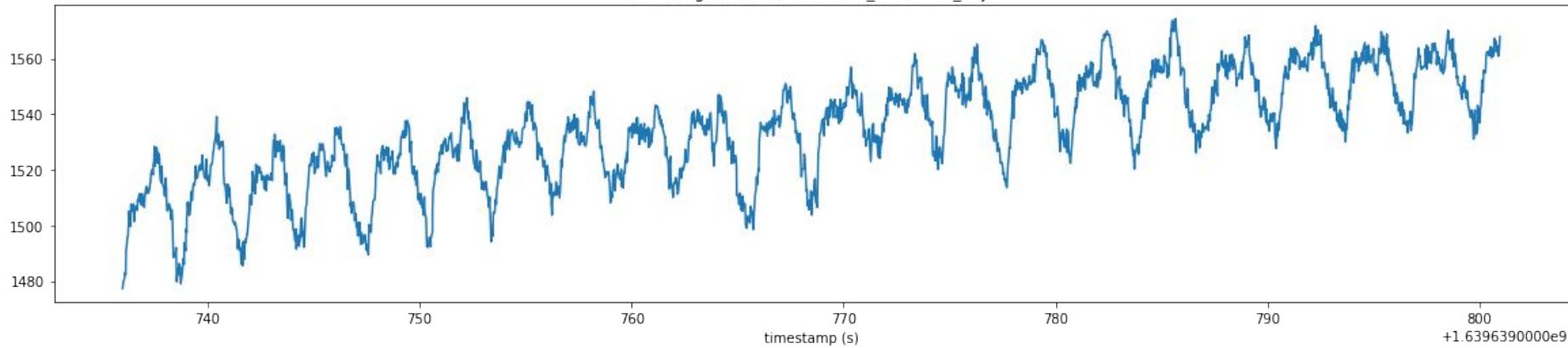
Raw Signals (data/20211216_test/1632_ahj)



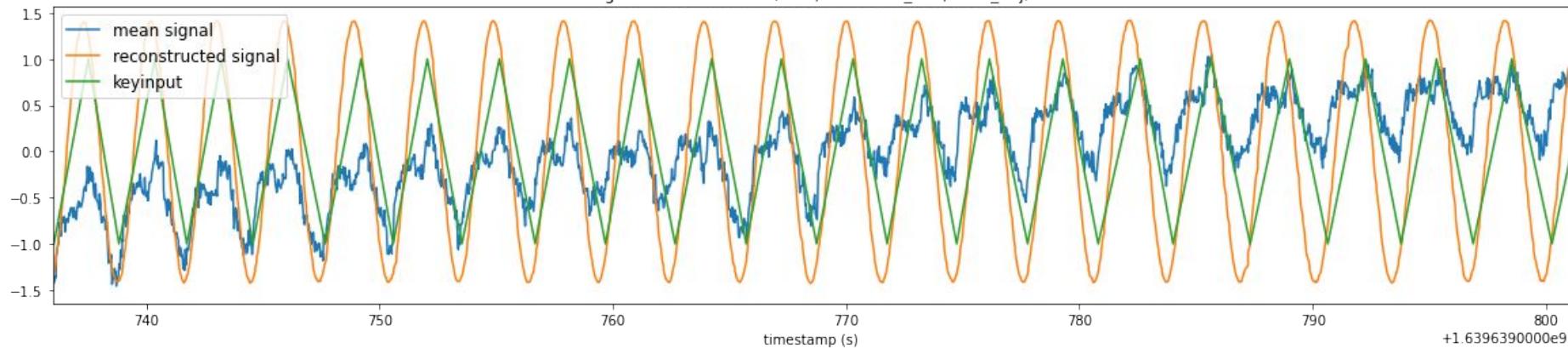
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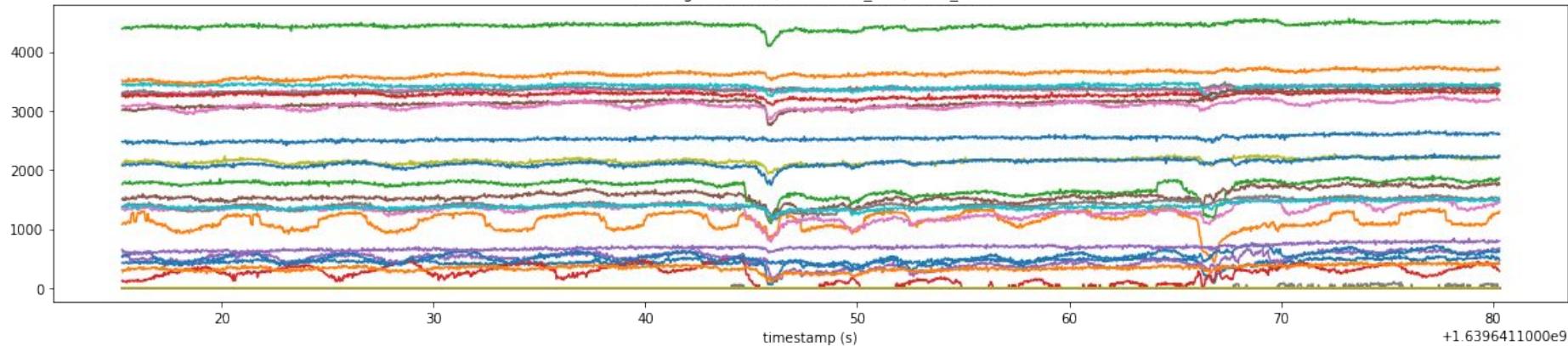
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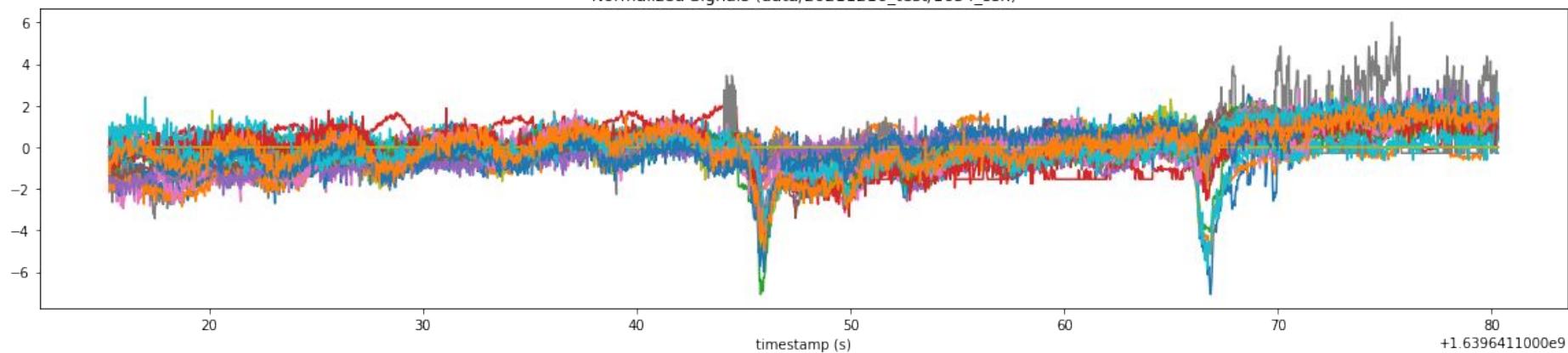
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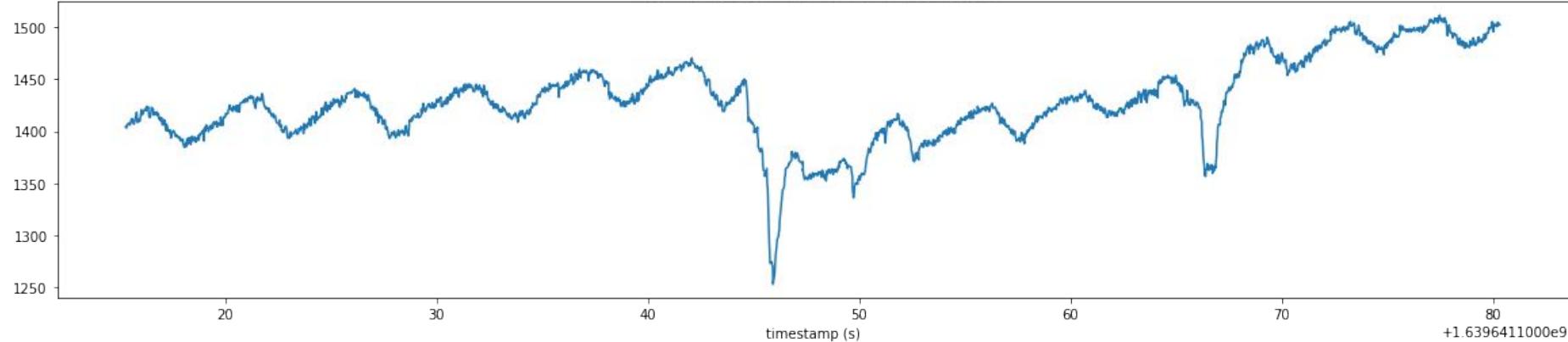
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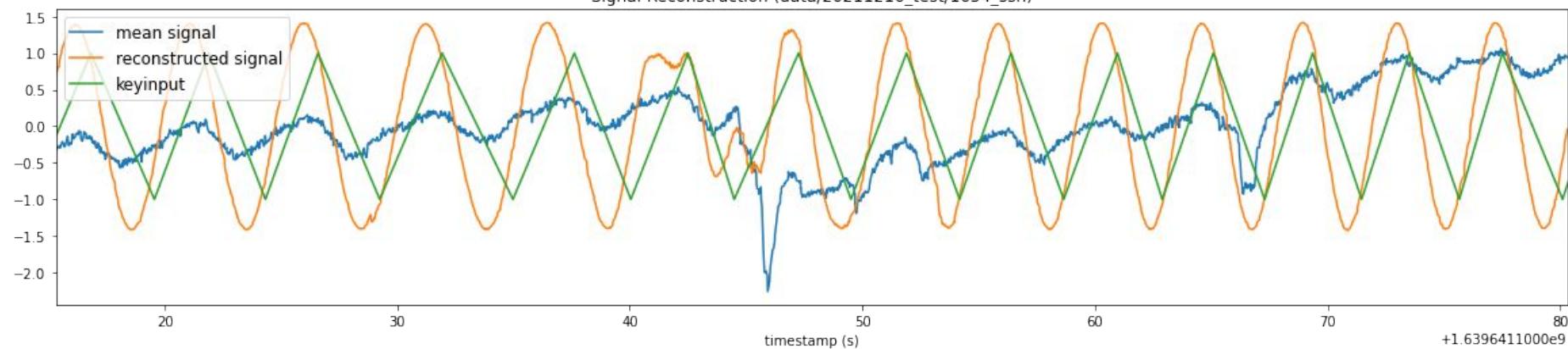
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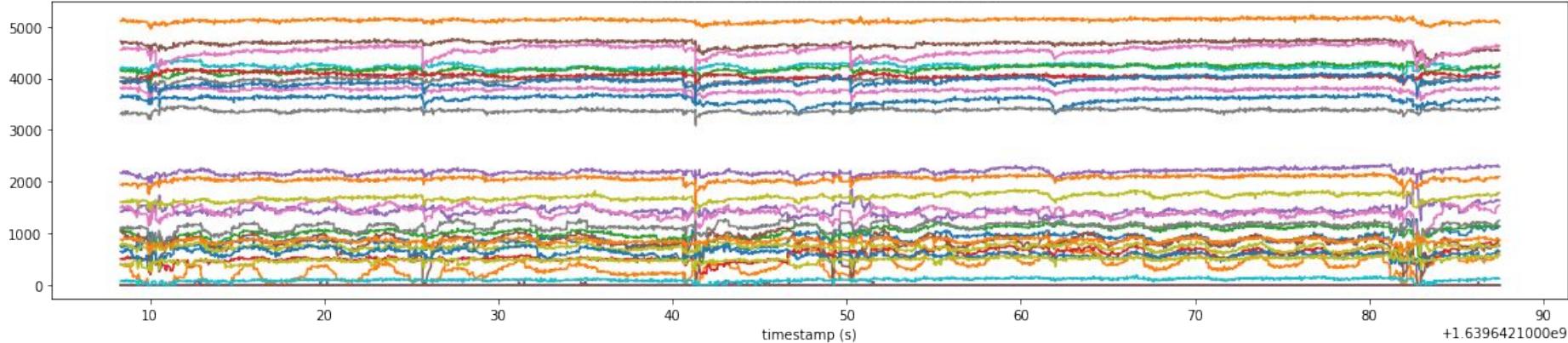
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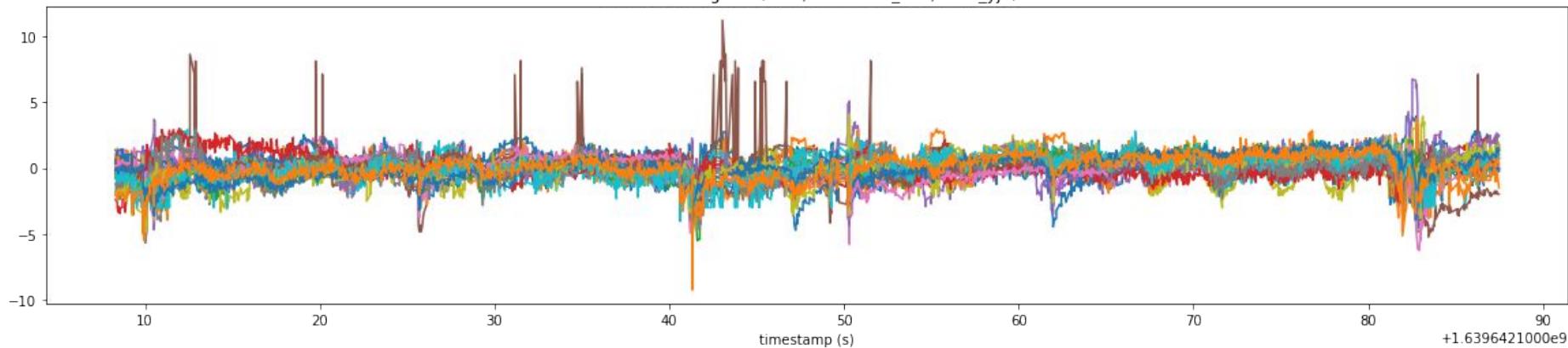
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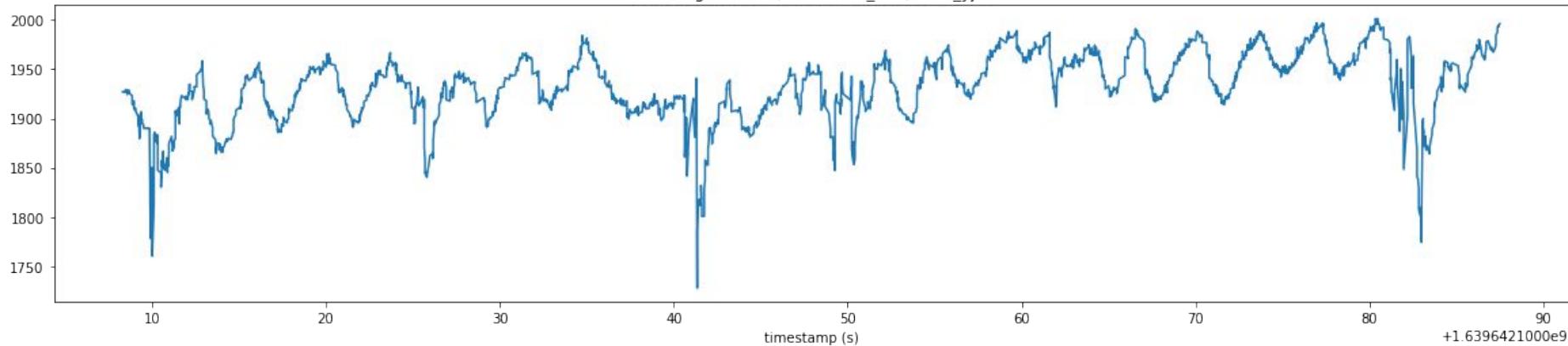
Raw Signals (data/20211216_test/1711_yjh)



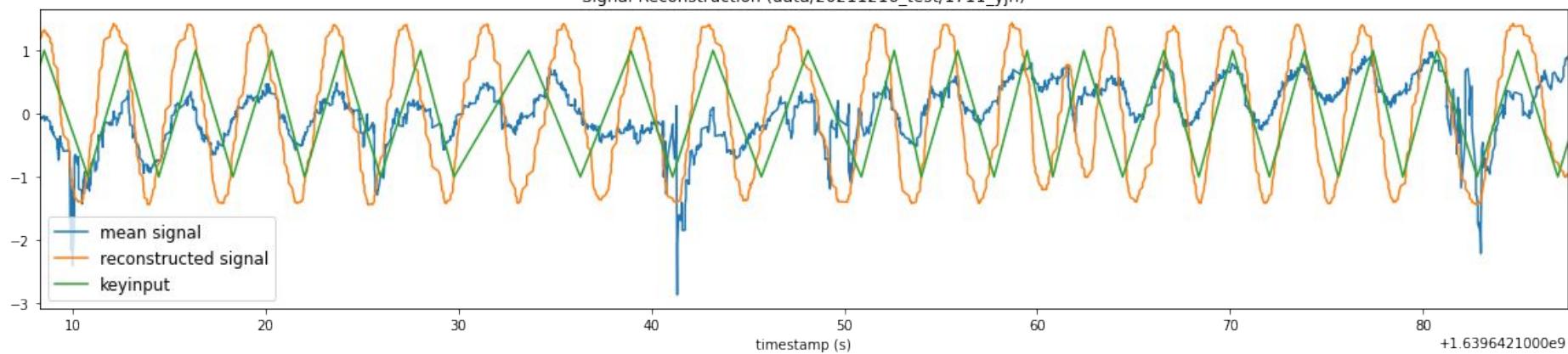
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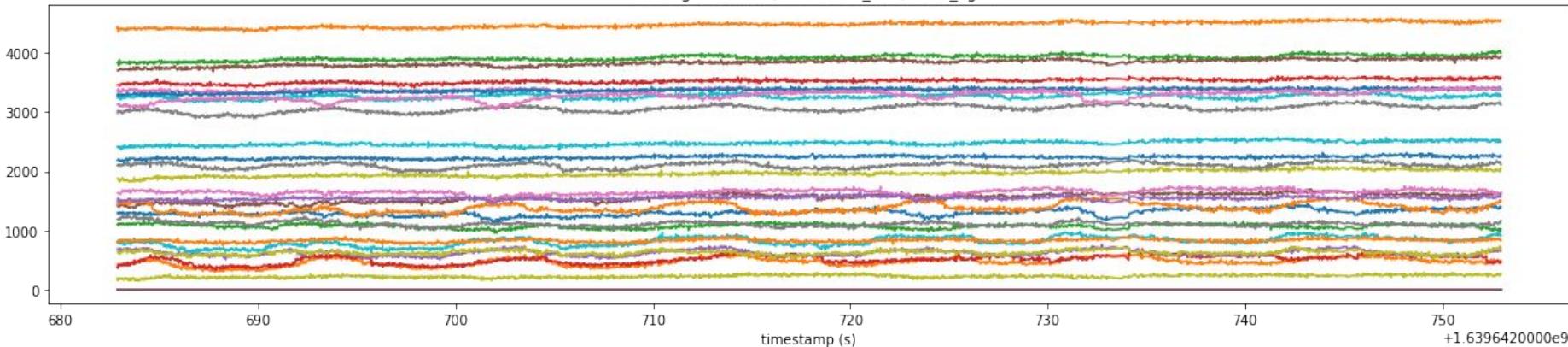
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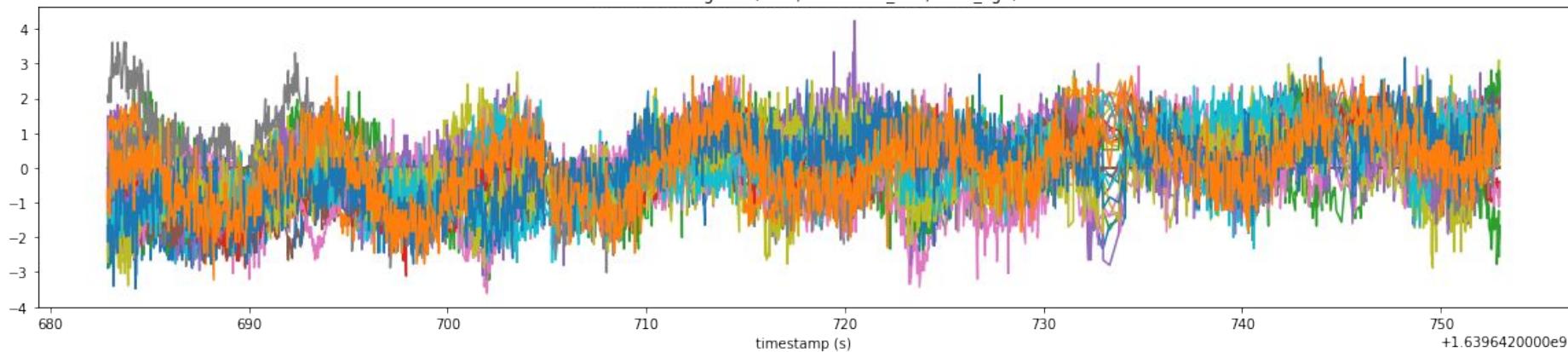
Signal Reconstruction (data/20211216_test/1711_yjh)



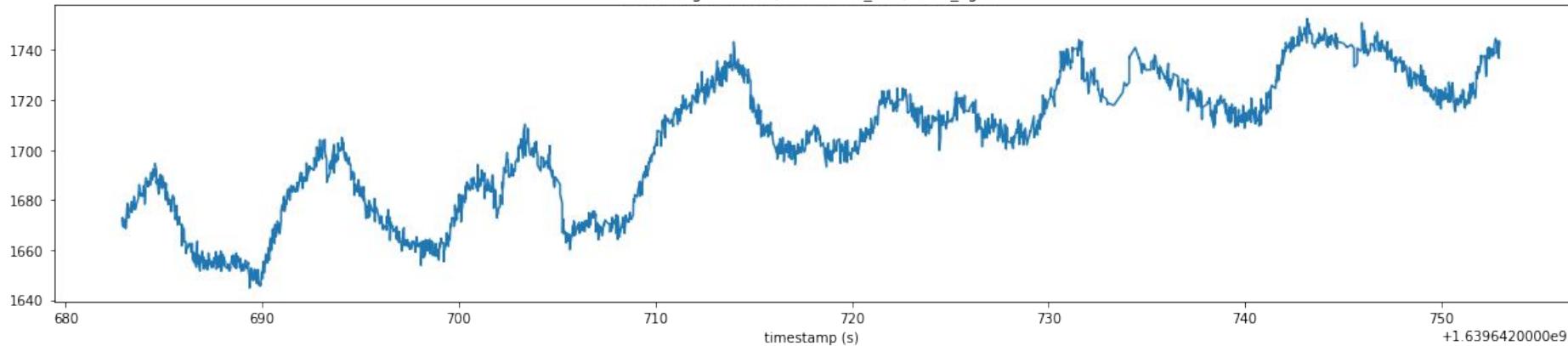
Raw Signals (data/20211216_test/1722_cgh)



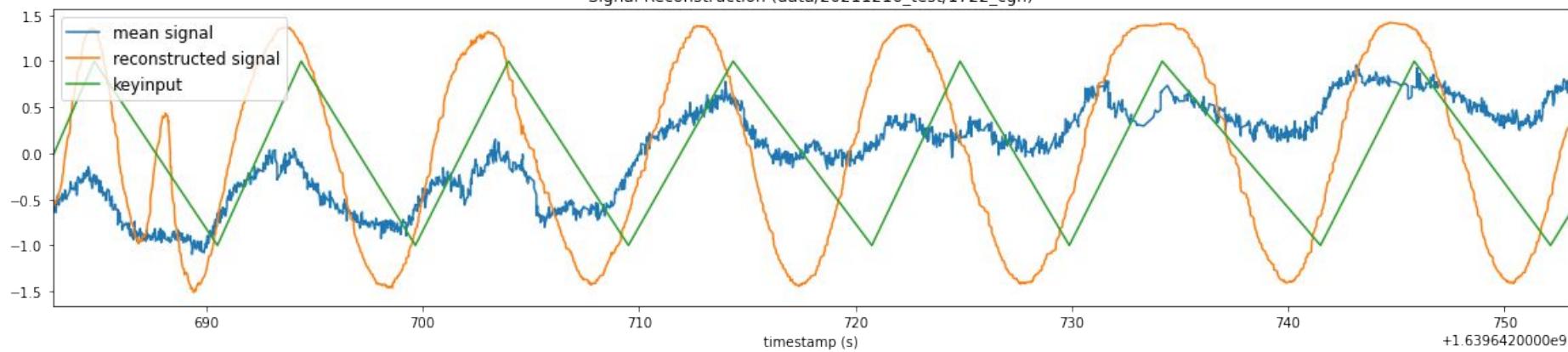
Normalized Signals (data/20211216_test/1722_cgh)



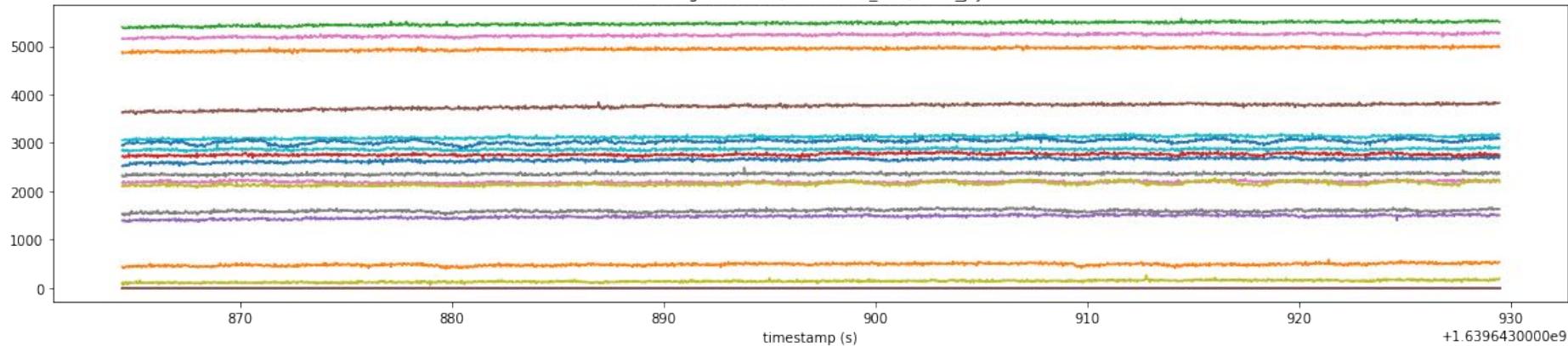
Mean Signal (data/20211216_test/1722_cgh)



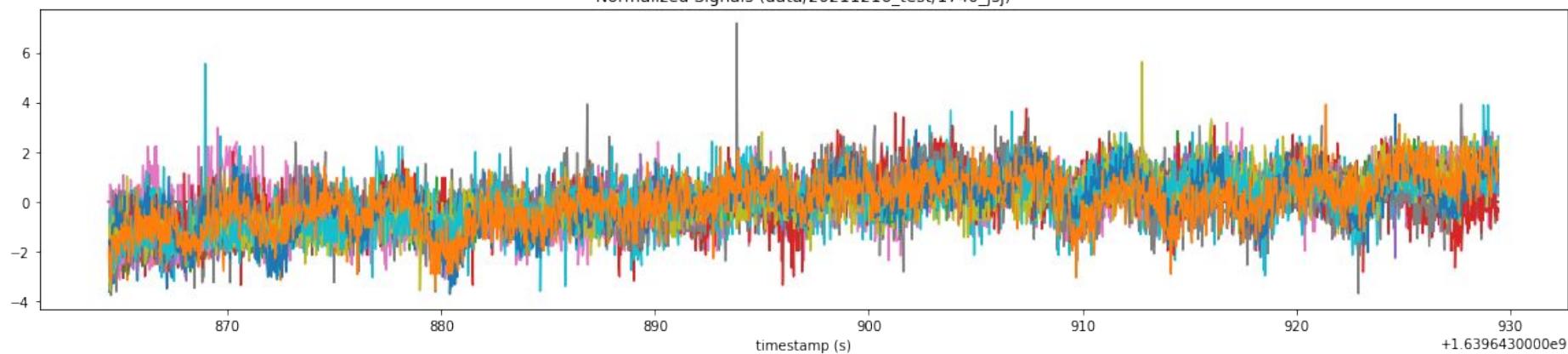
Signal Reconstruction (data/20211216_test/1722_cgh)



Raw Signals (data/20211216_test/1740_jsj)

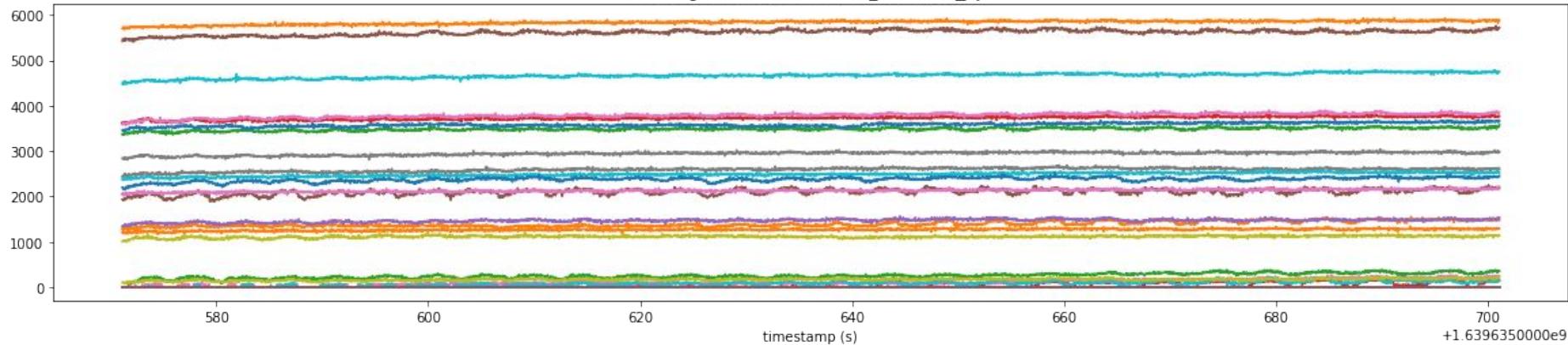


Normalized Signals (data/20211216_test/1740_jsj)

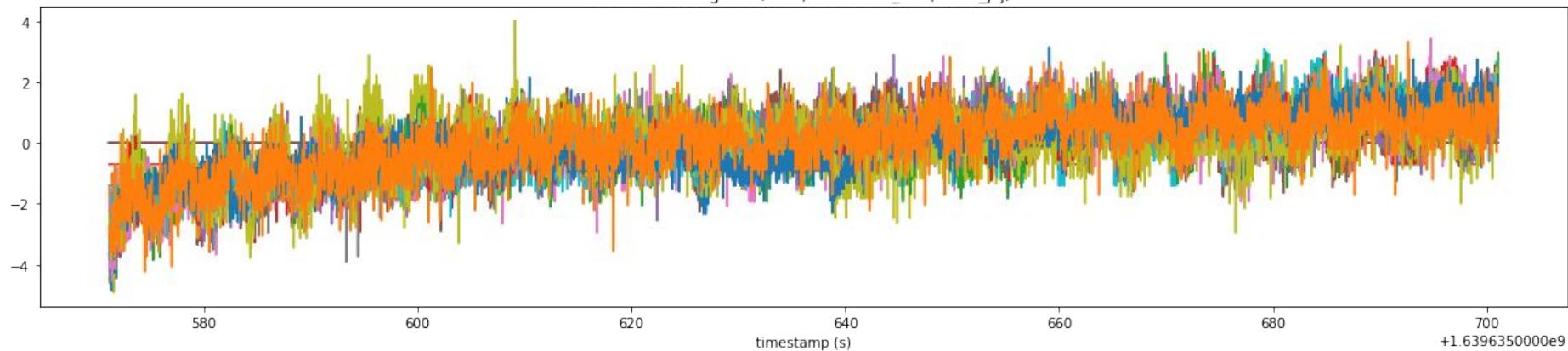


2021-12-16 Data
Signal Length: 4096 (128s)

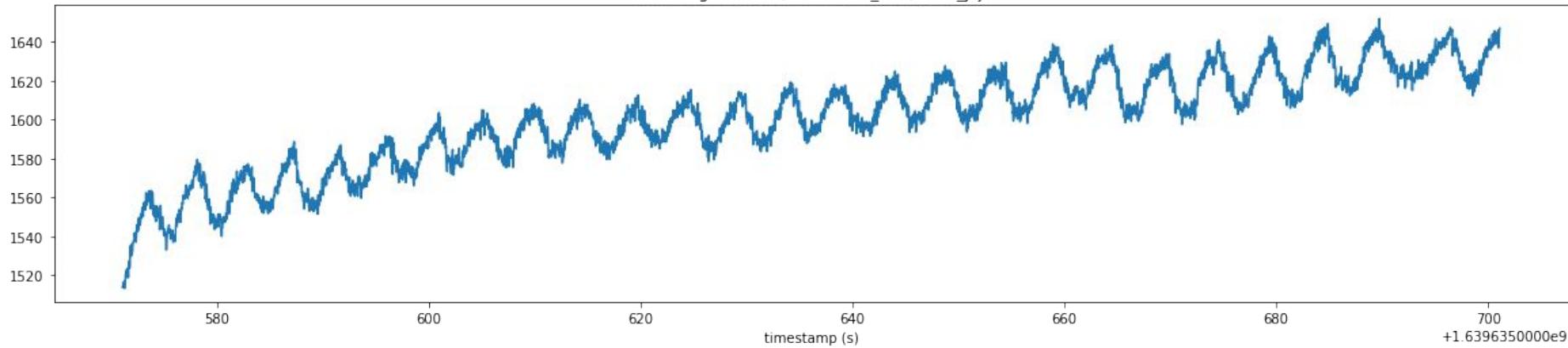
Raw Signals (data/20211216_test/1522_jsj)



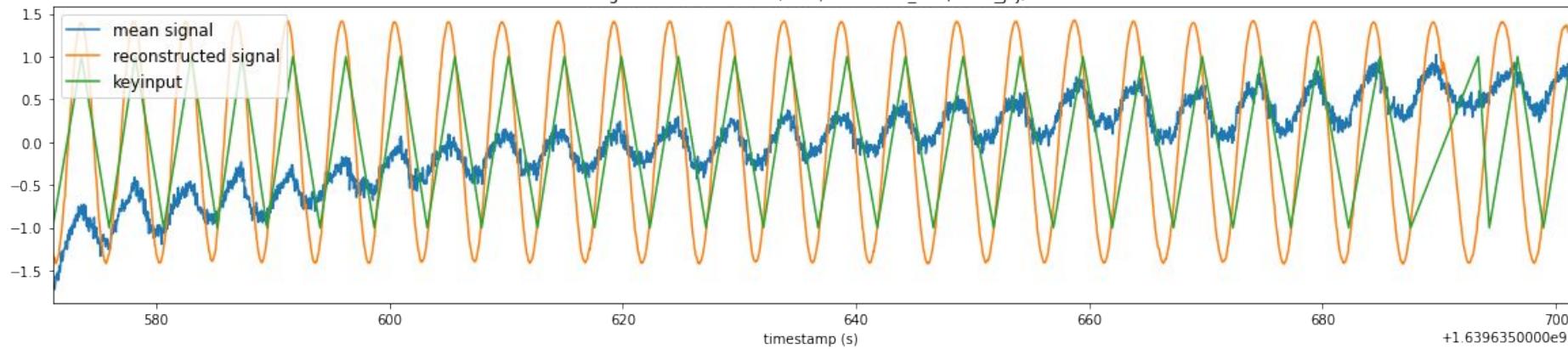
Normalized Signals (data/20211216_test/1522_jsj)



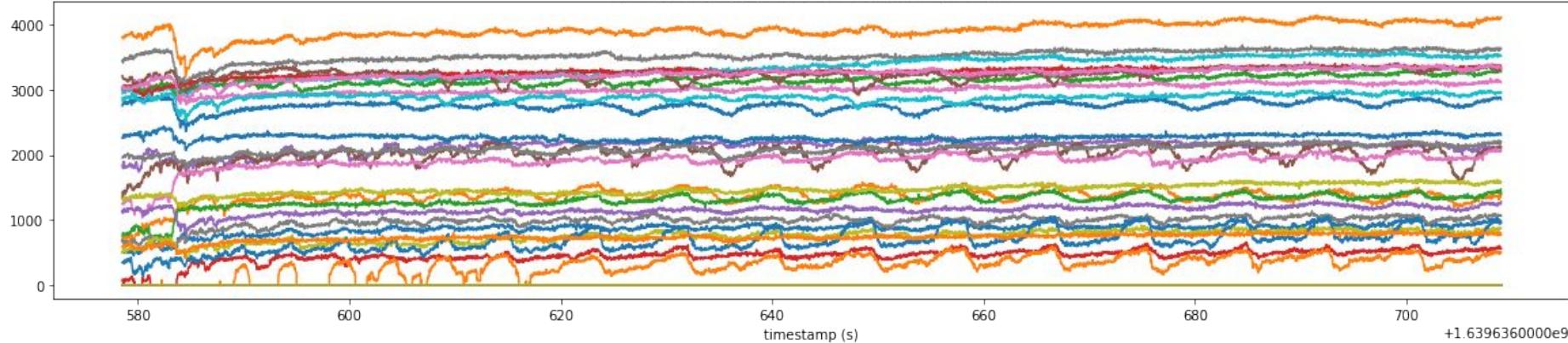
Mean Signal (data/20211216_test/1522_jsj)



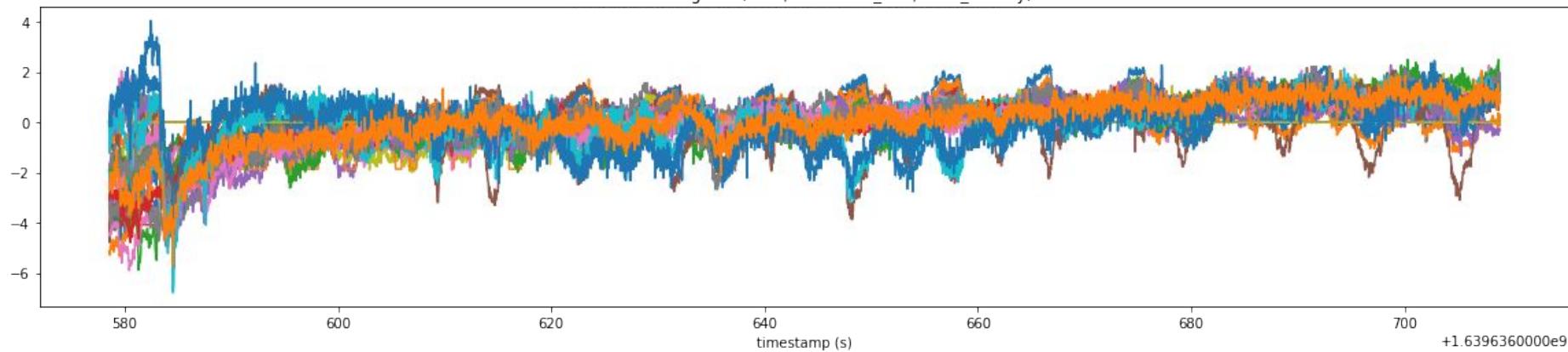
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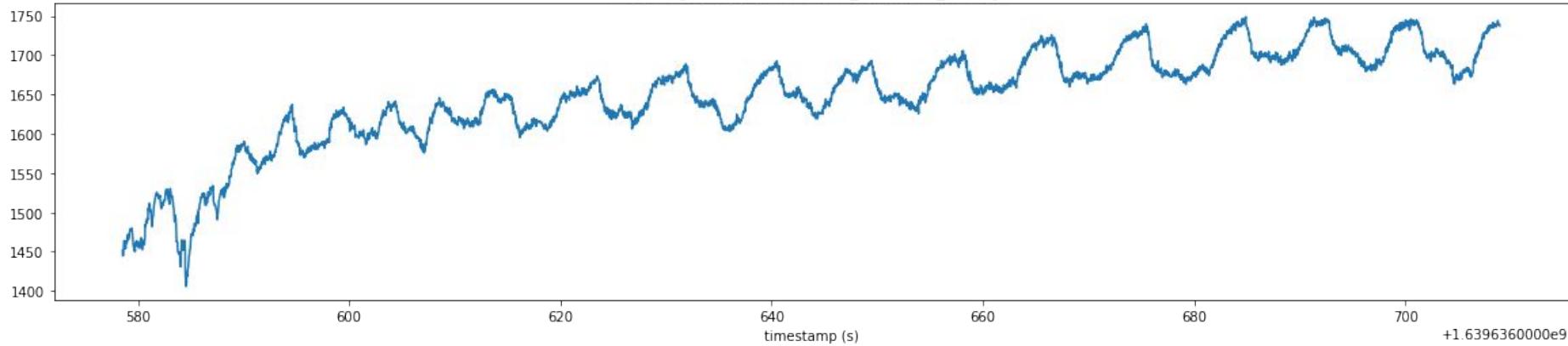
Raw Signals (data/20211216_test/1539_rouddy)



Normalized Signals (data/20211216_test/1539_rouddy)

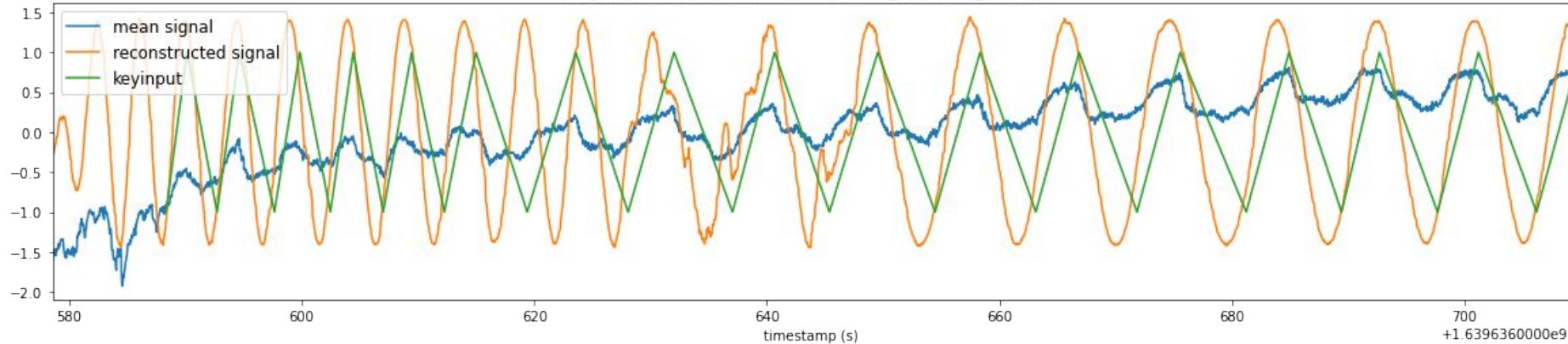


Mean Signal (data/20211216_test/1539_rouddy)

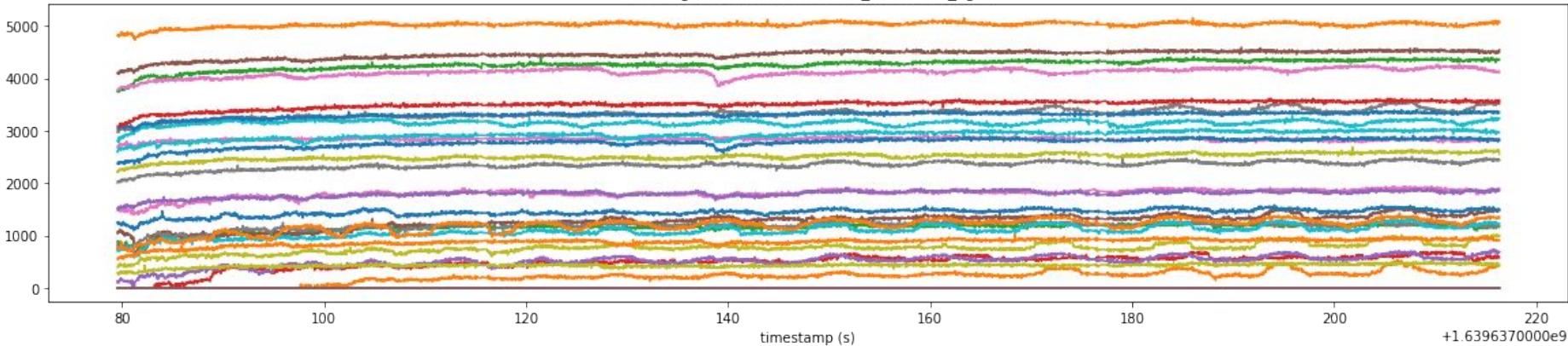


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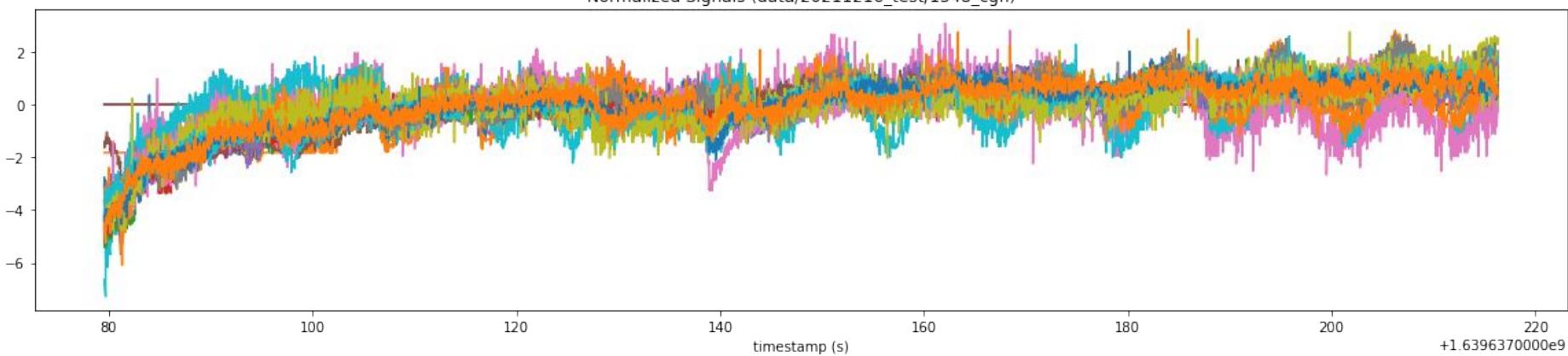
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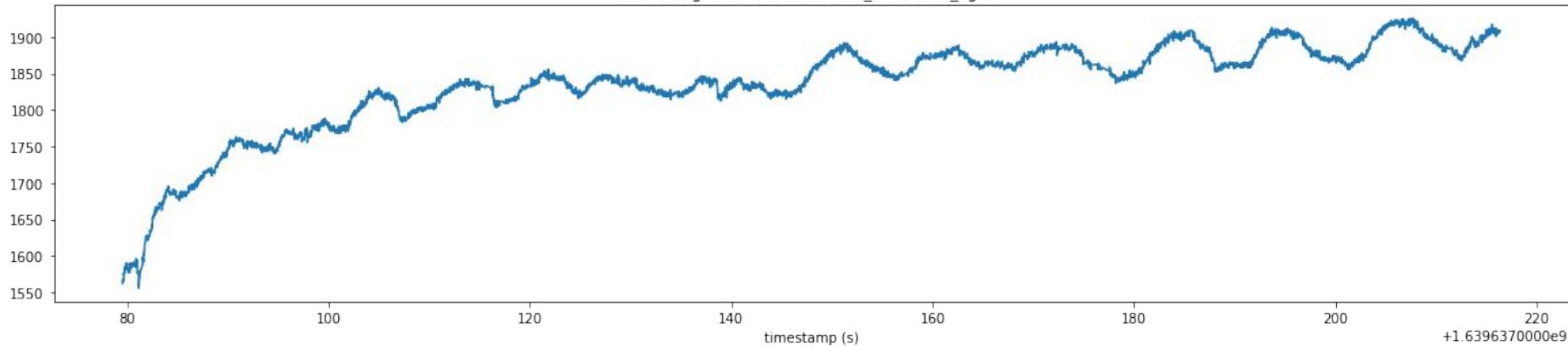
Raw Signals (data/20211216_test/1548_cgh)



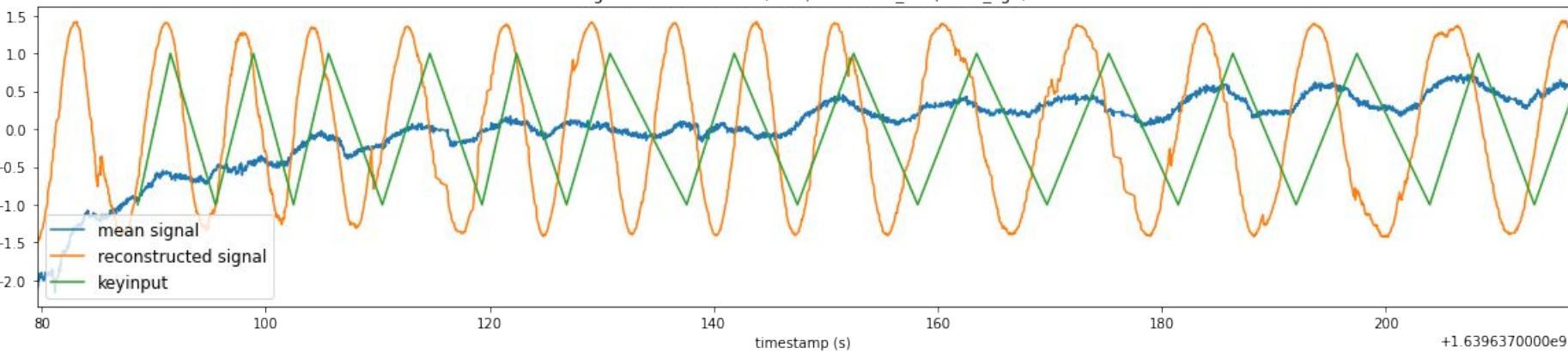
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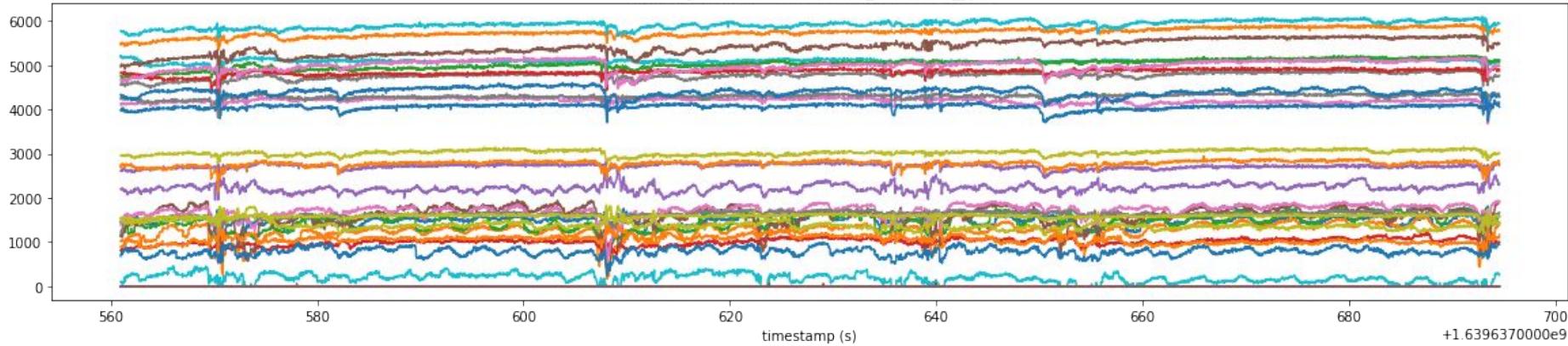
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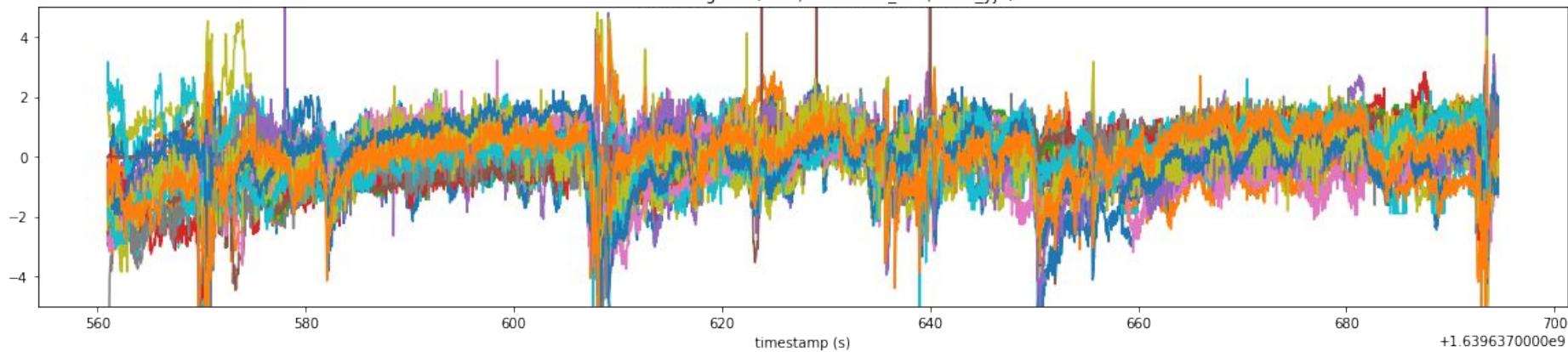
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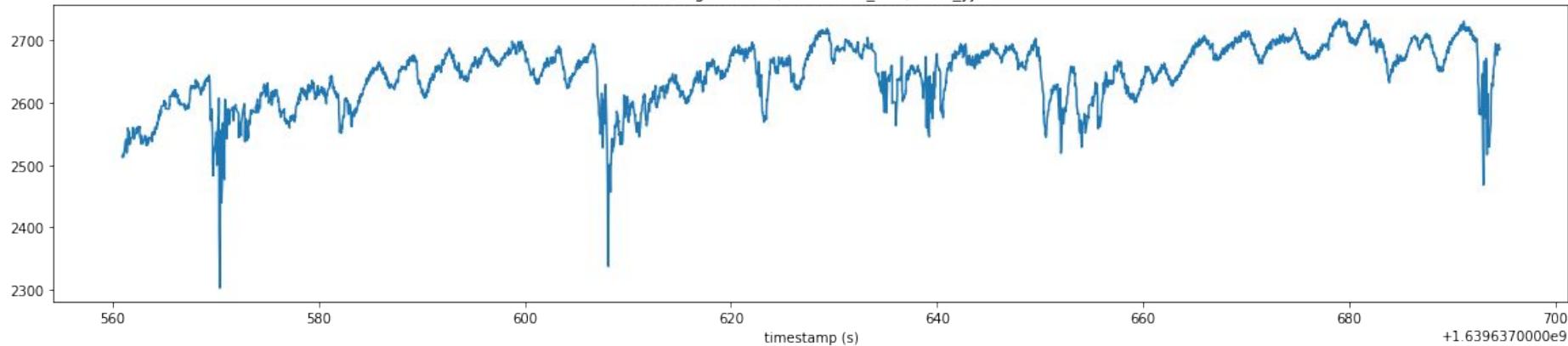
Raw Signals (data/20211216_test/1556_yjh)



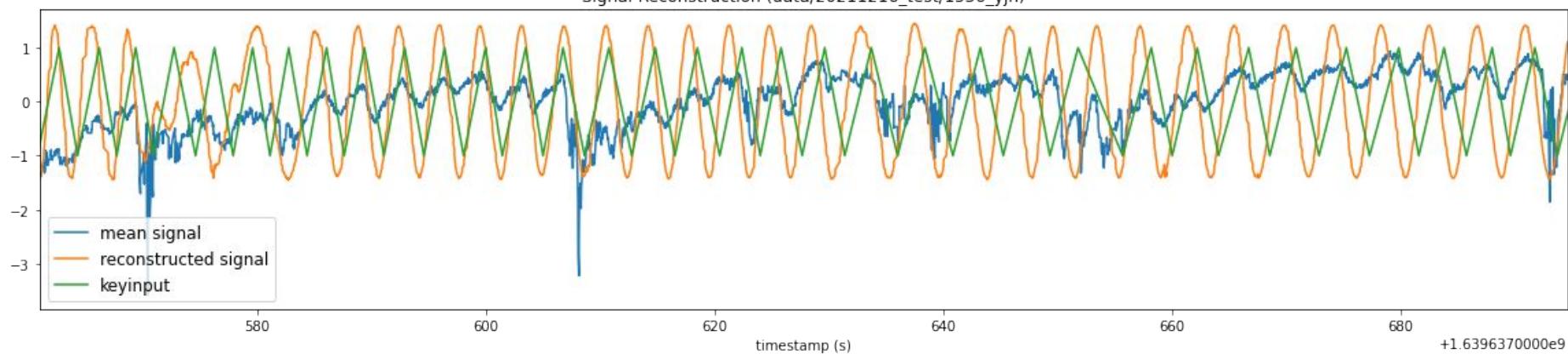
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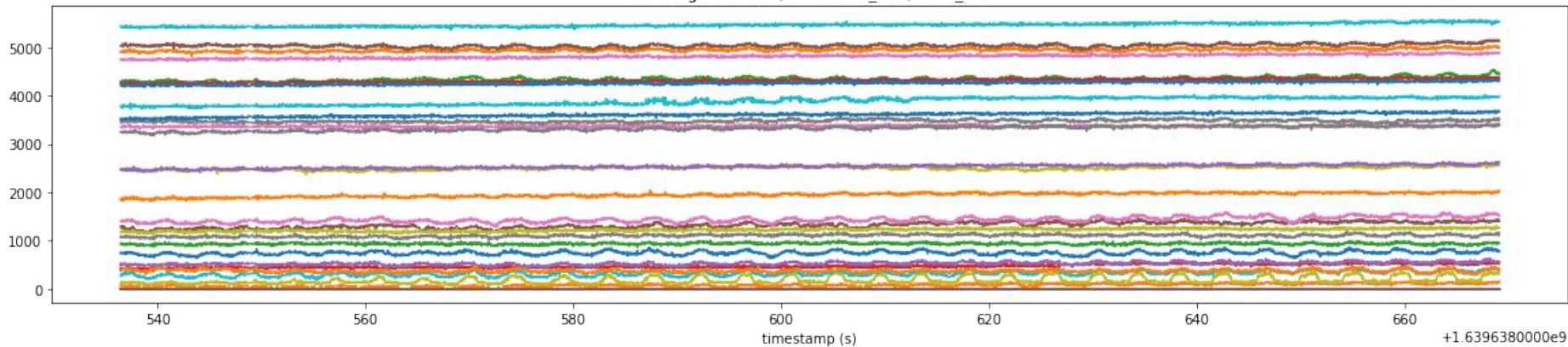
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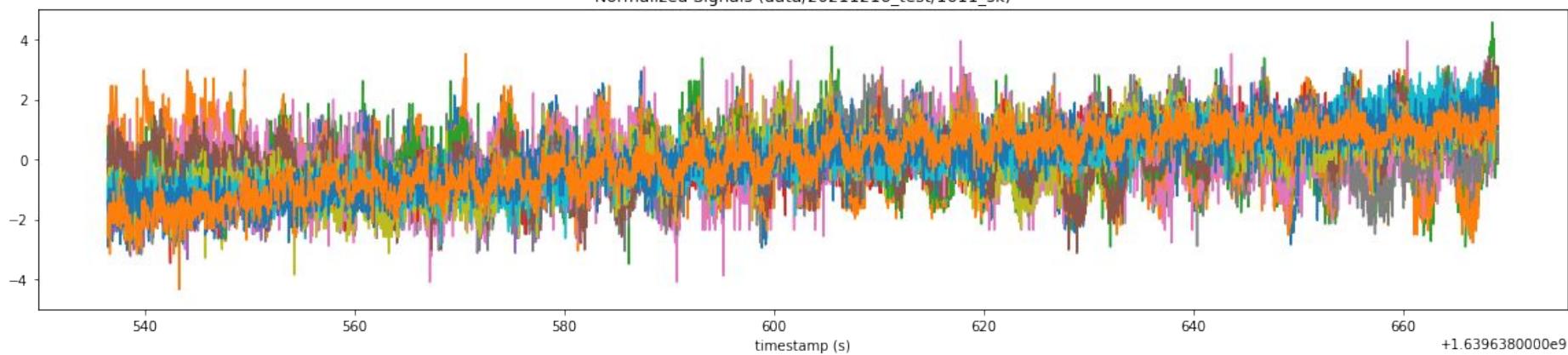
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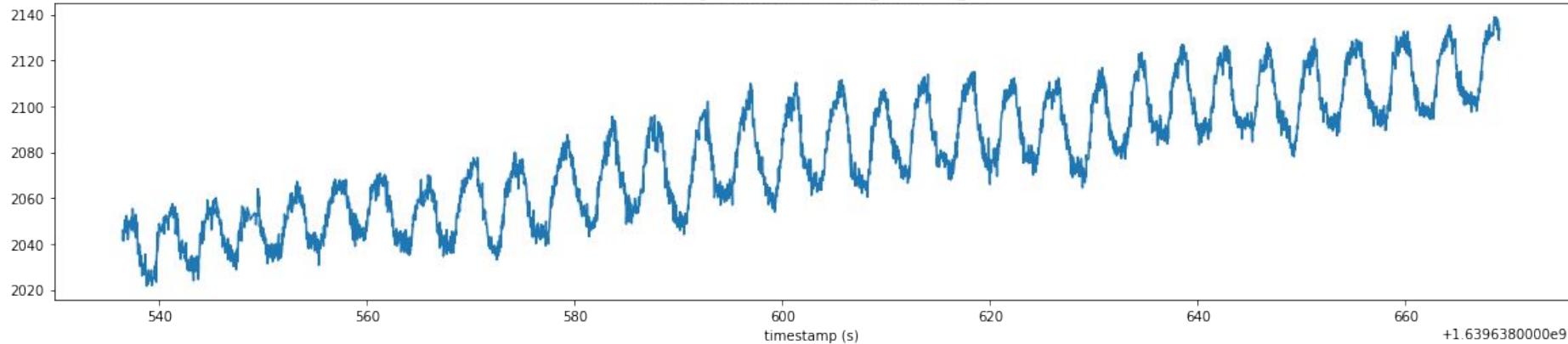
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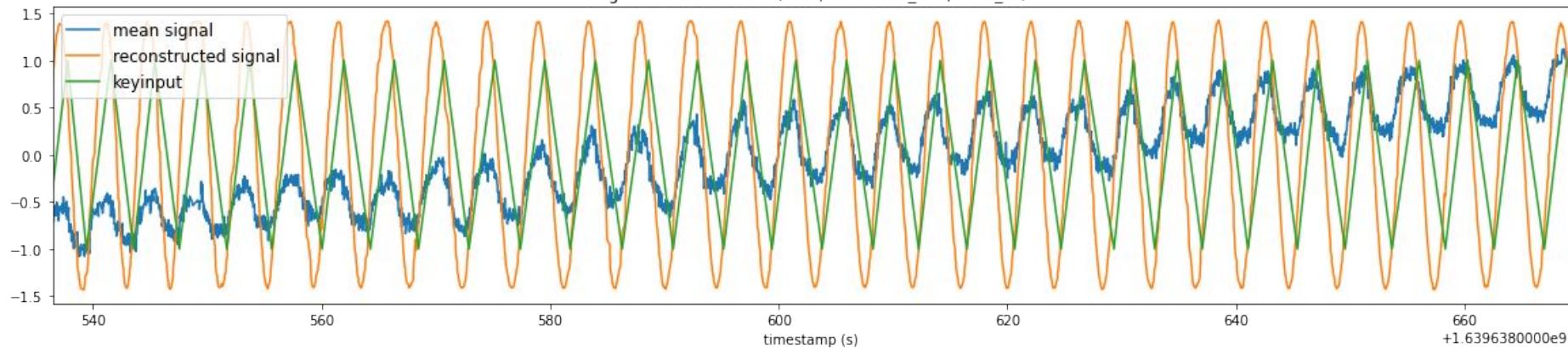
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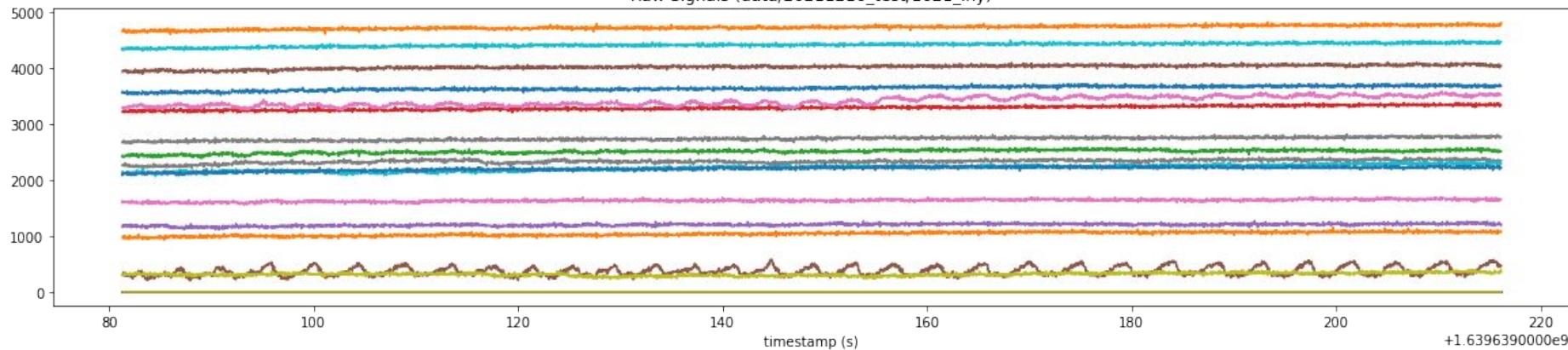
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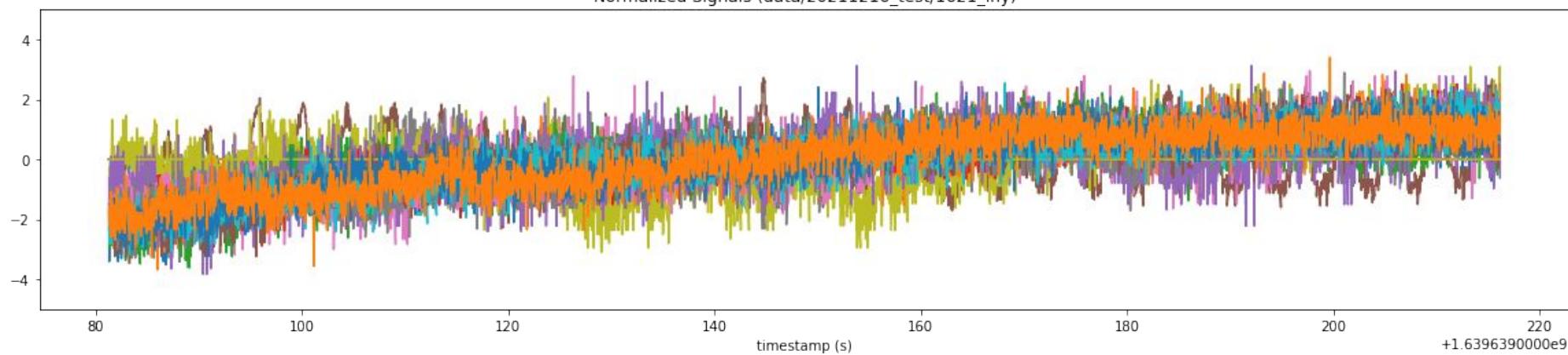
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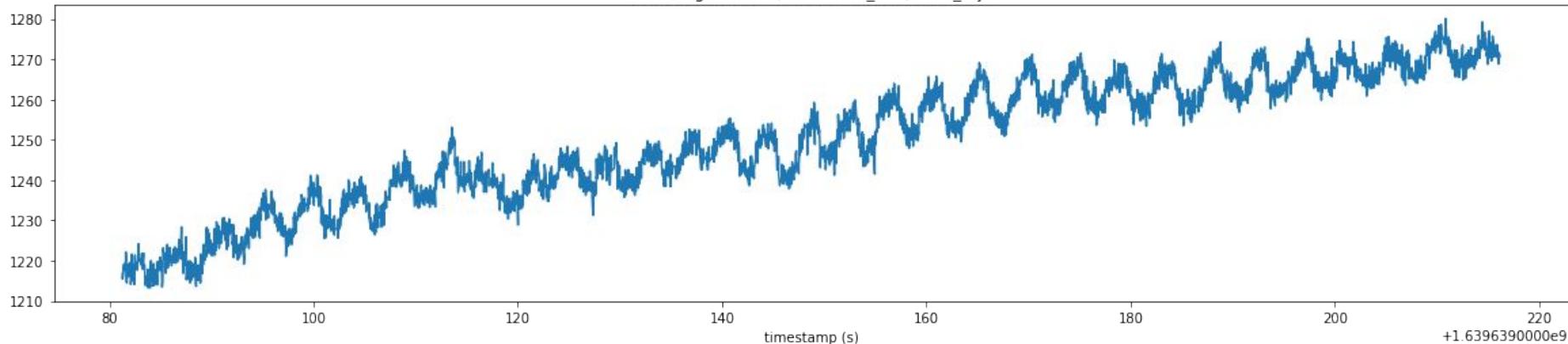
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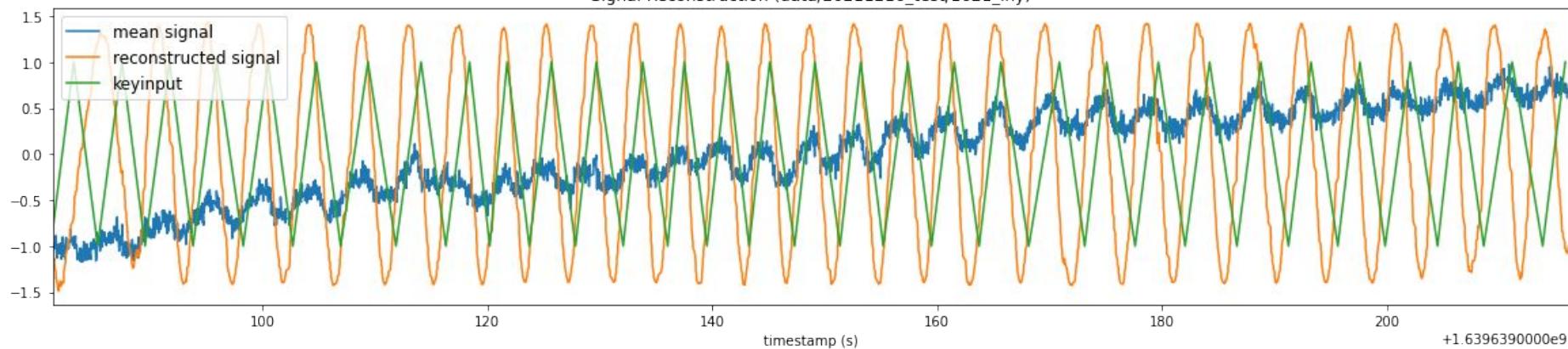
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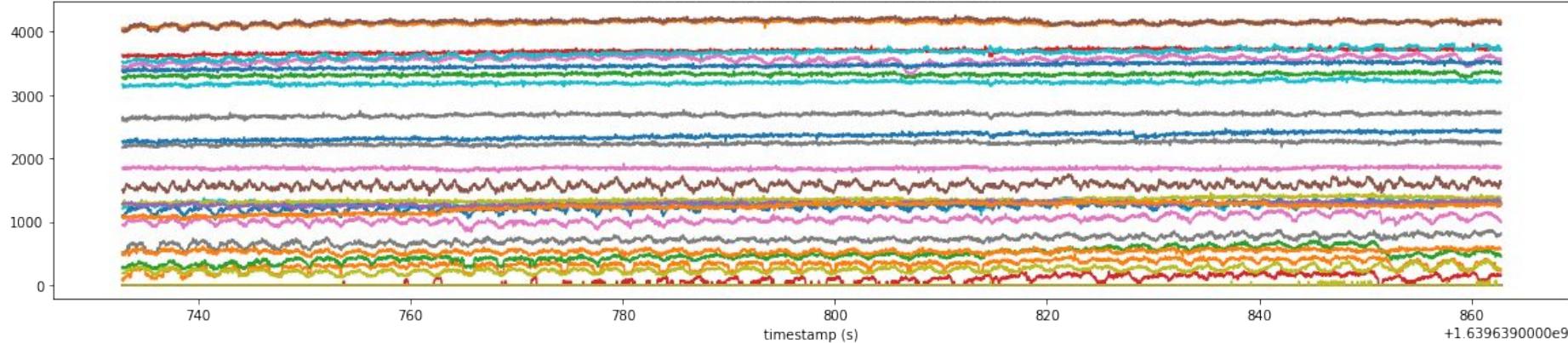
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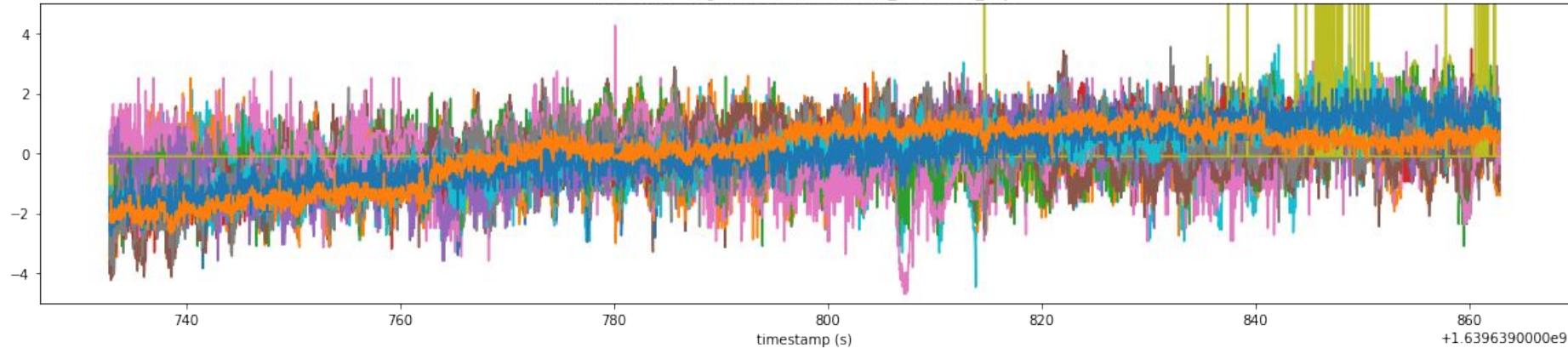
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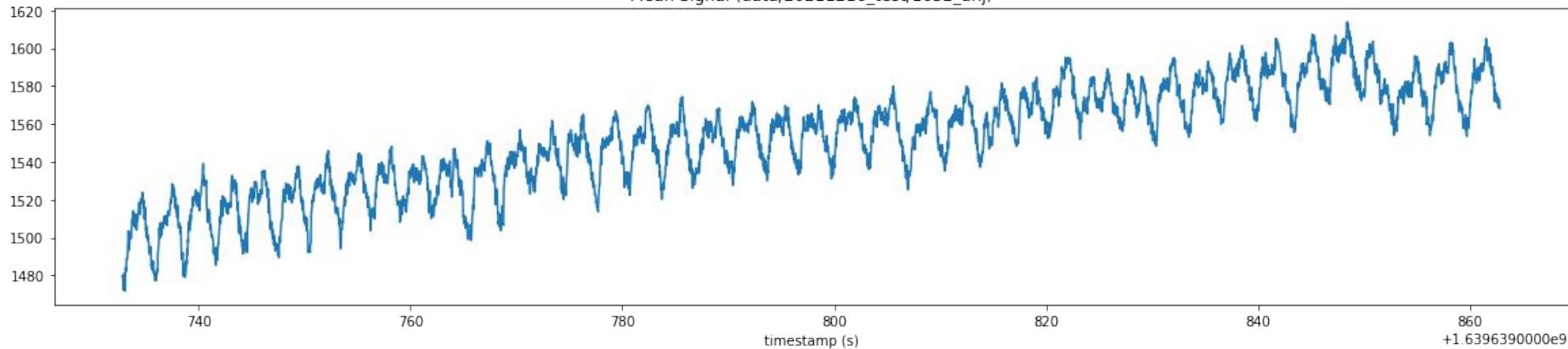
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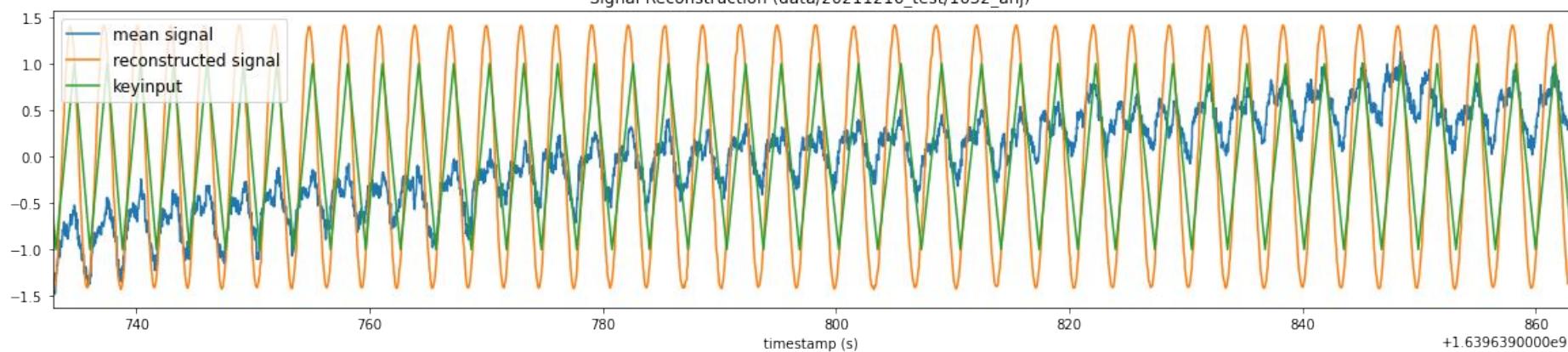
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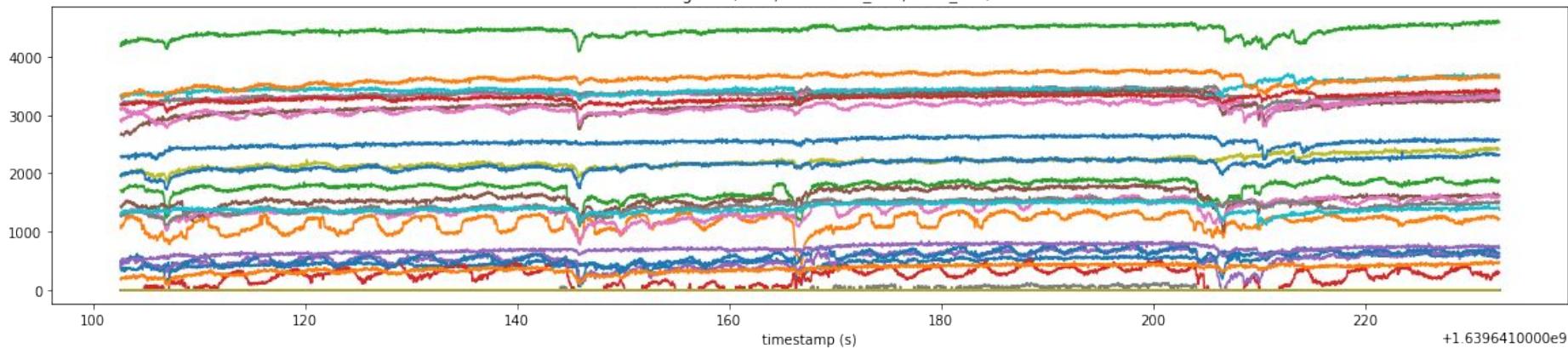
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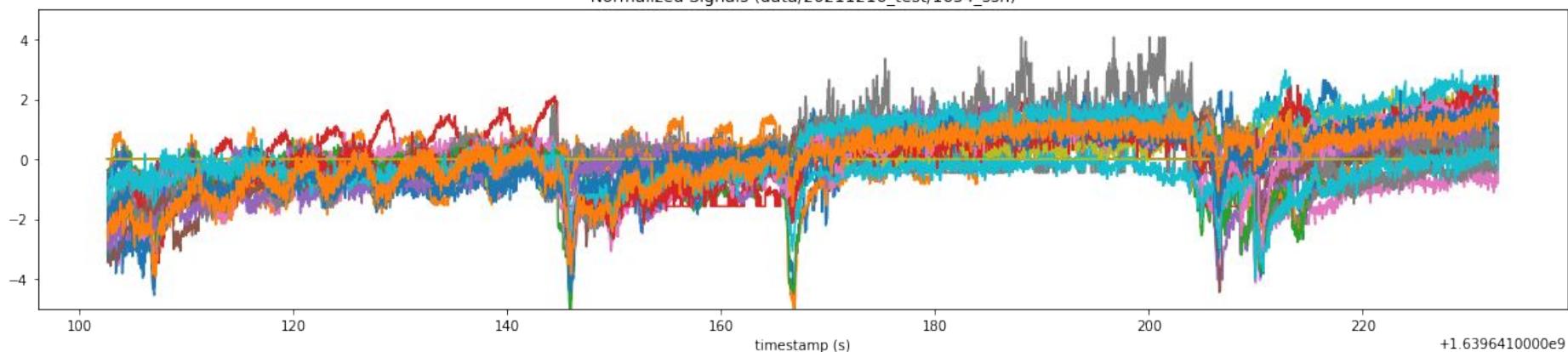
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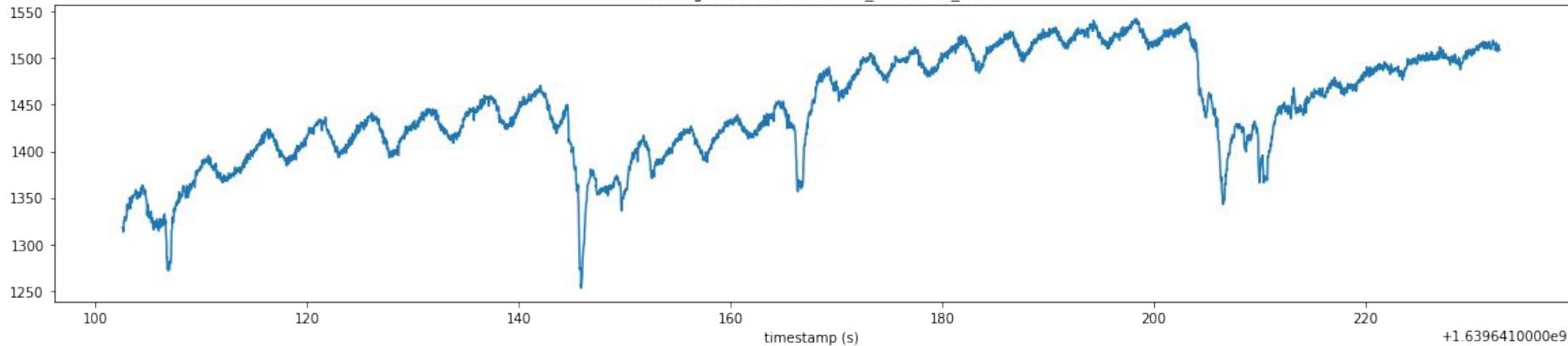
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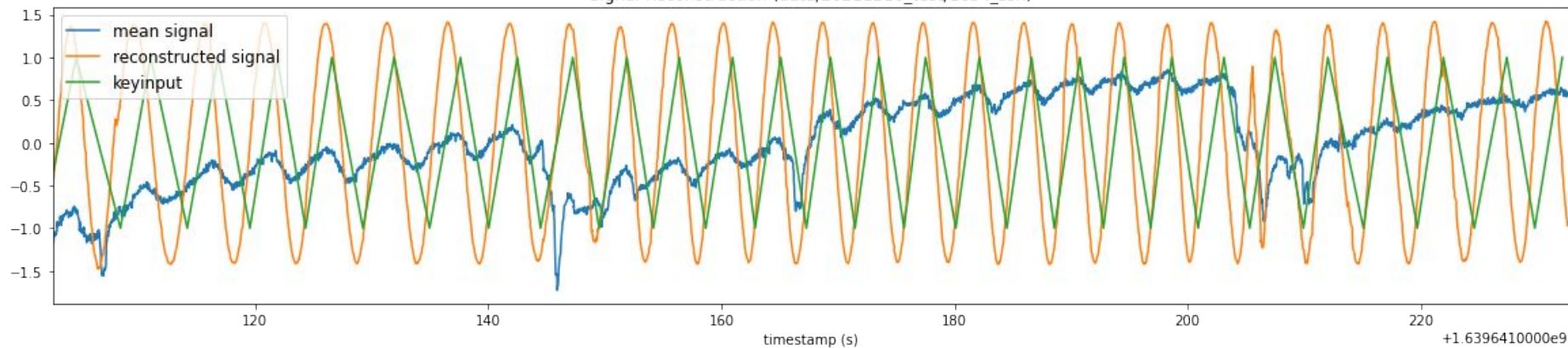
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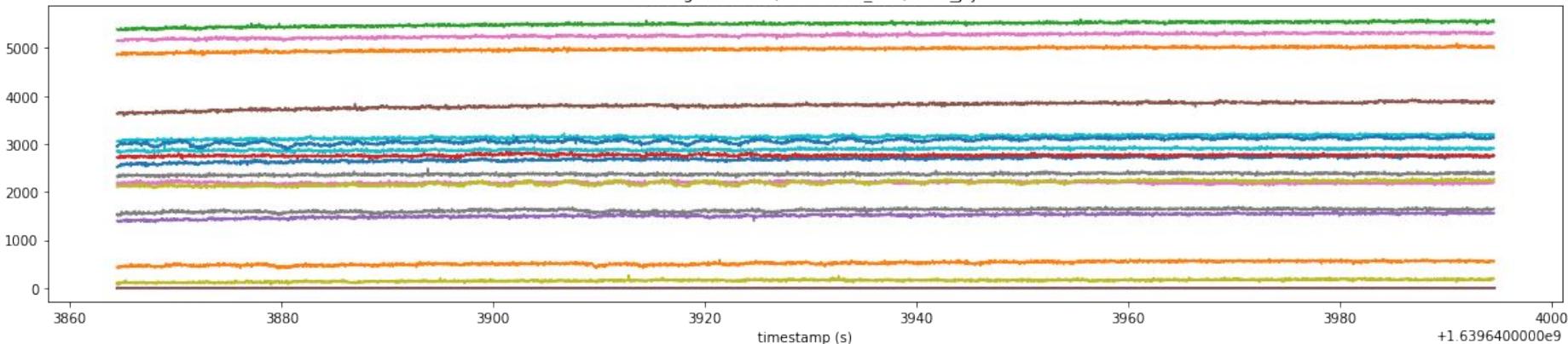
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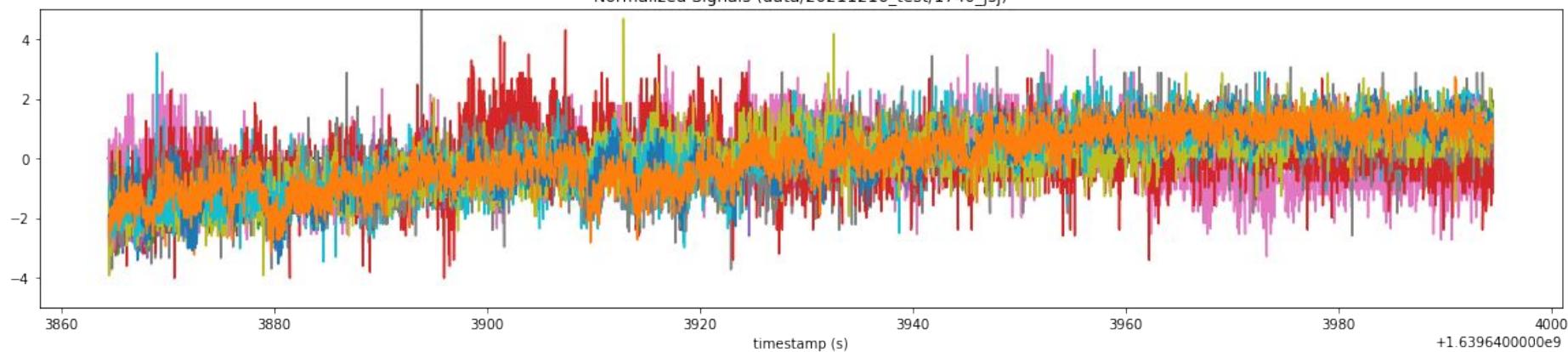
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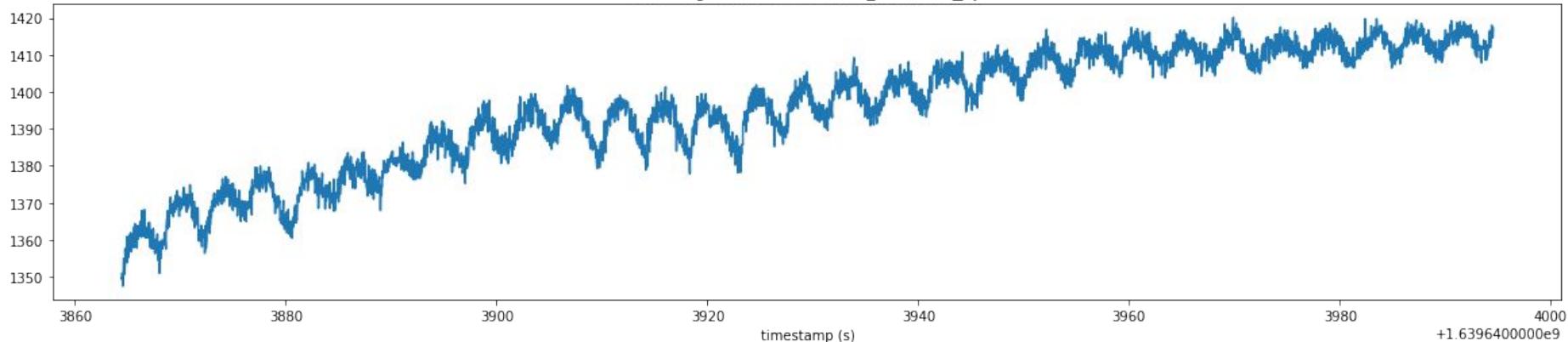
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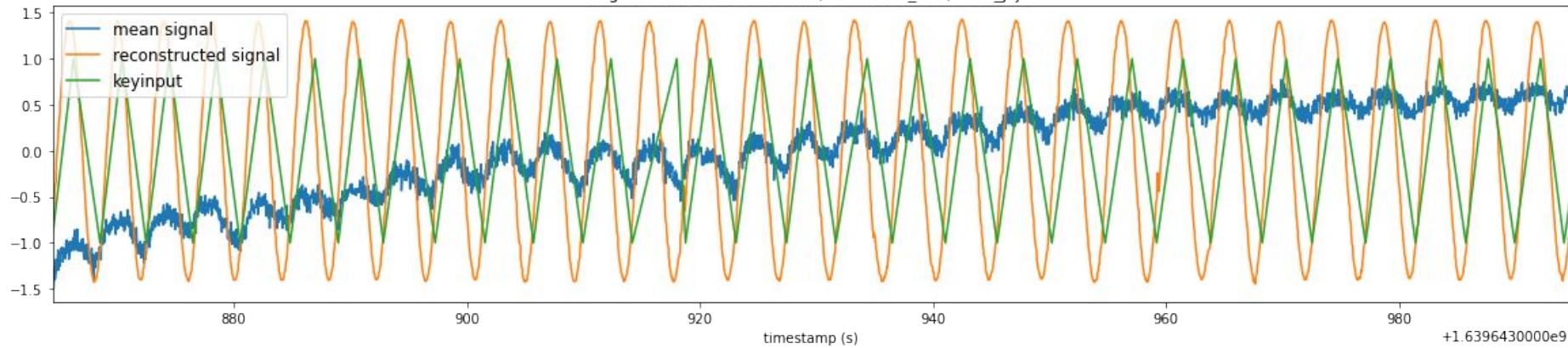
Normalized Signals (data/20211216_test/1740_jsj)



Mean Signal (data/20211216_test/1740_jsj)



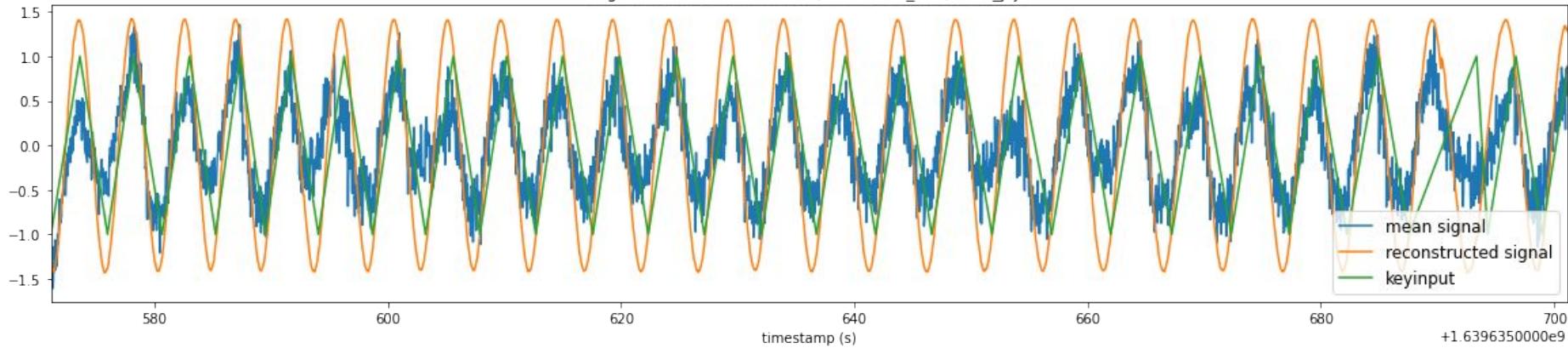
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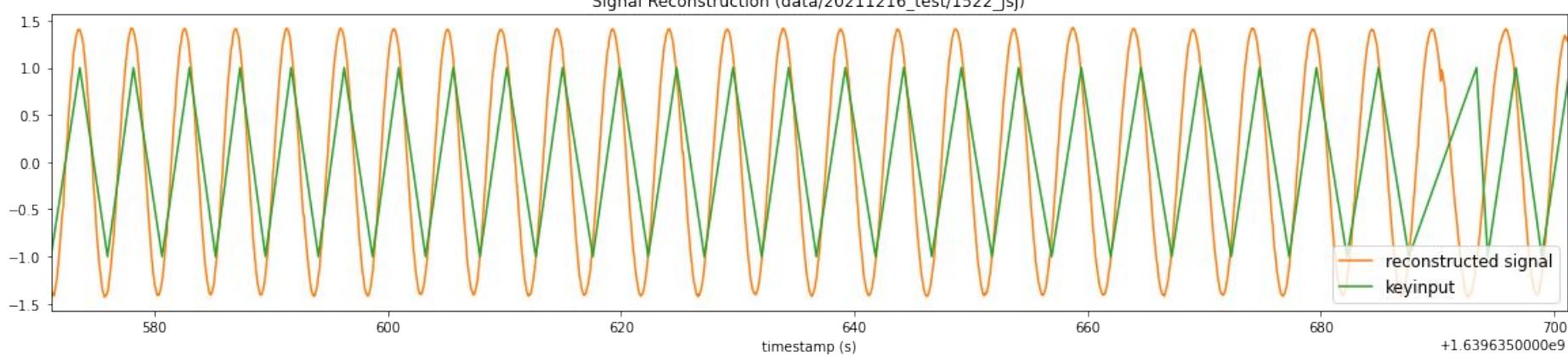
2021-12-16 Data

Signal Window Normalization

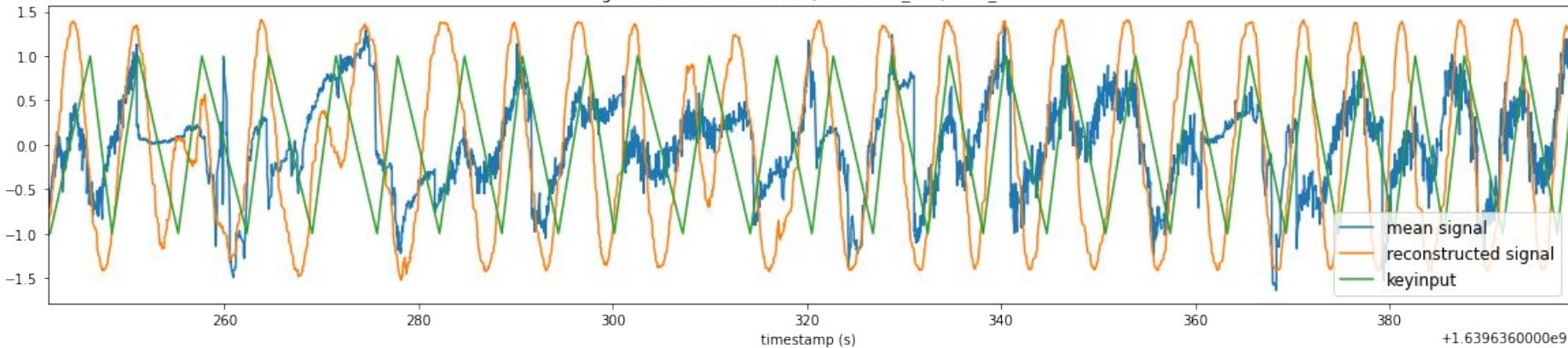
Signal Reconstruction (data/20211216_test/1522_jsj)



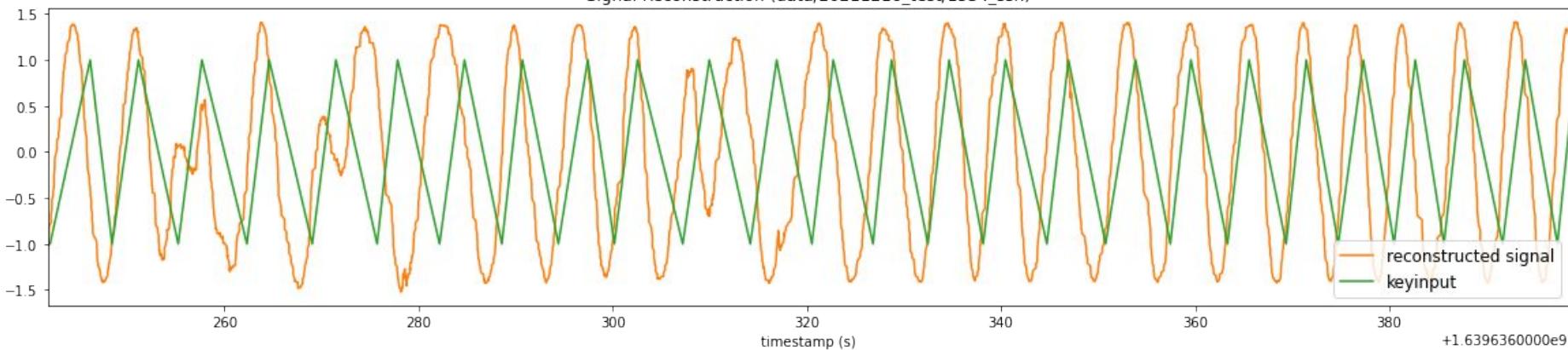
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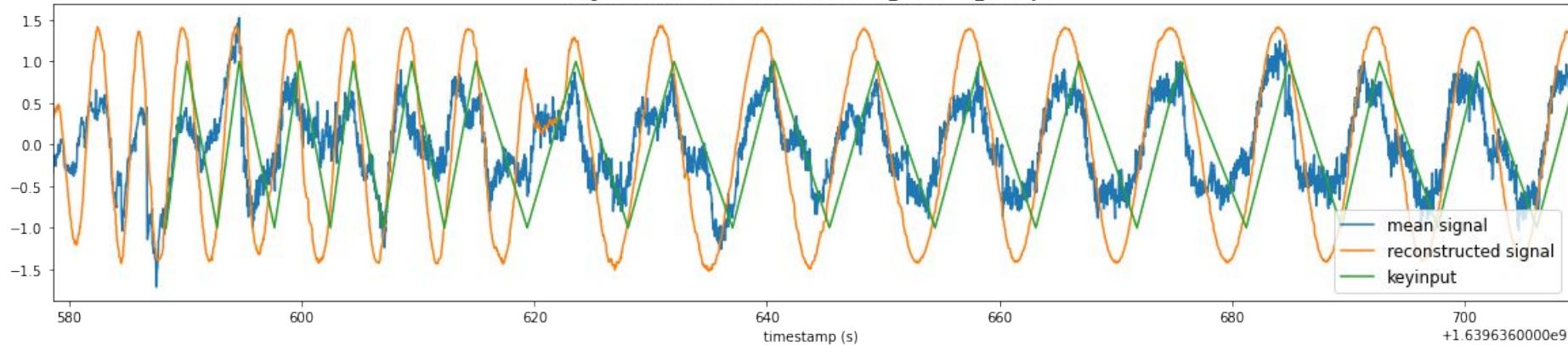
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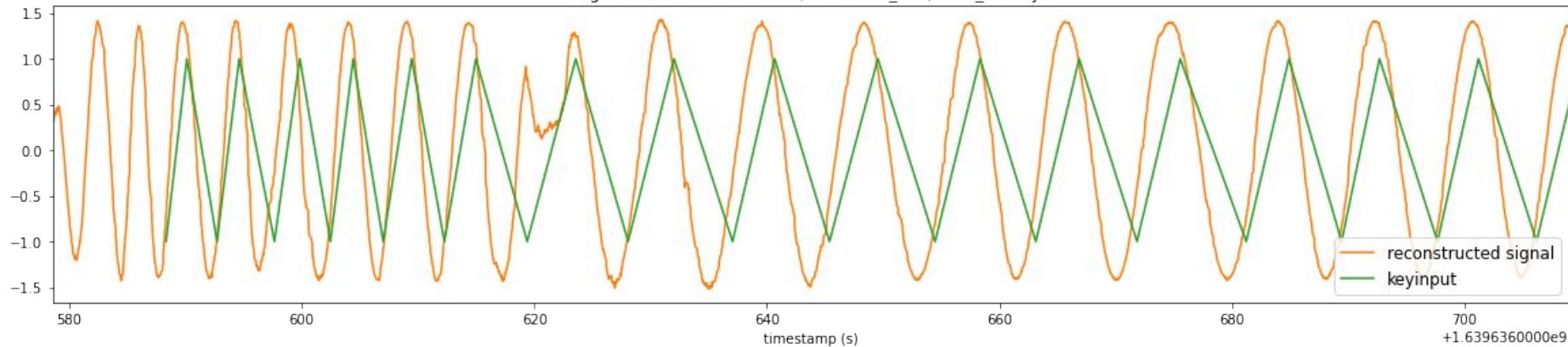
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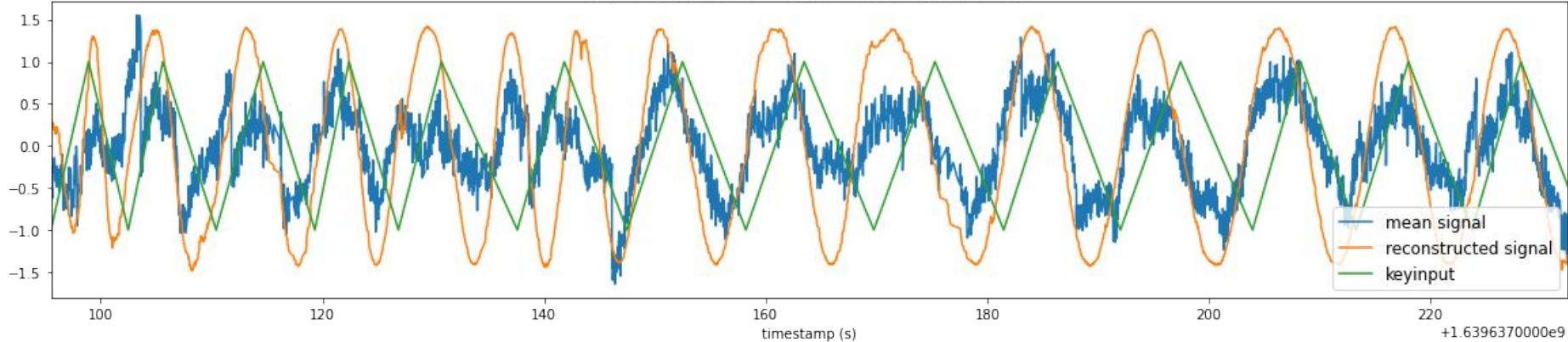
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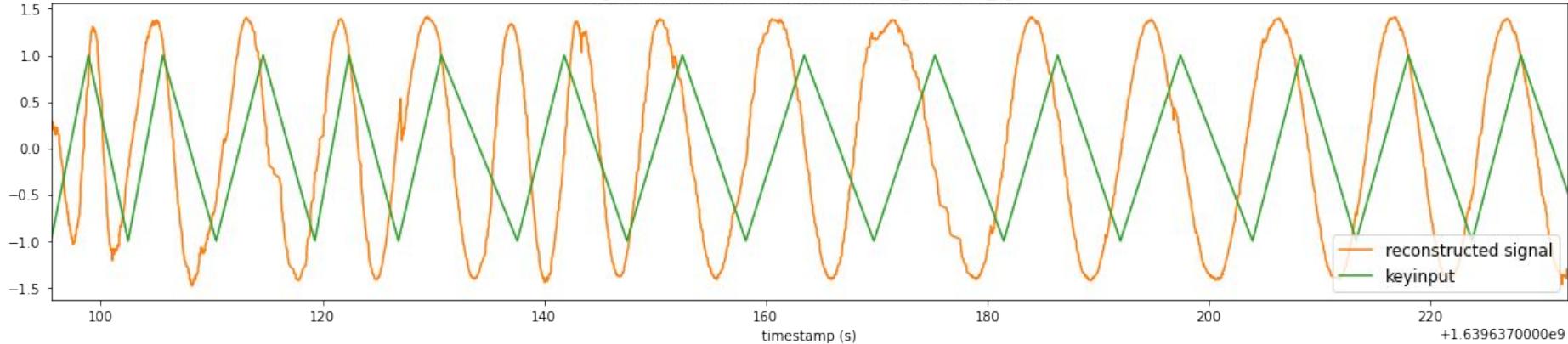
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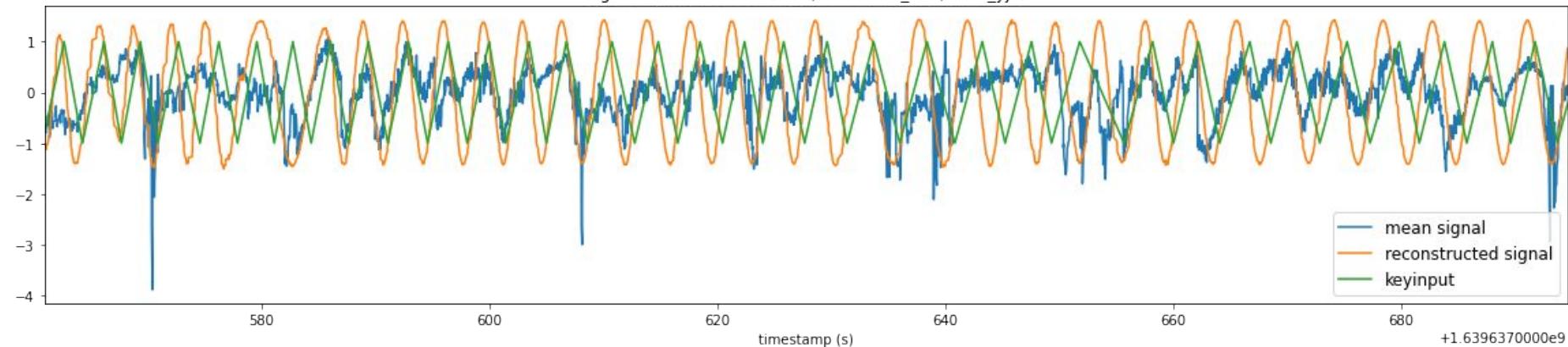
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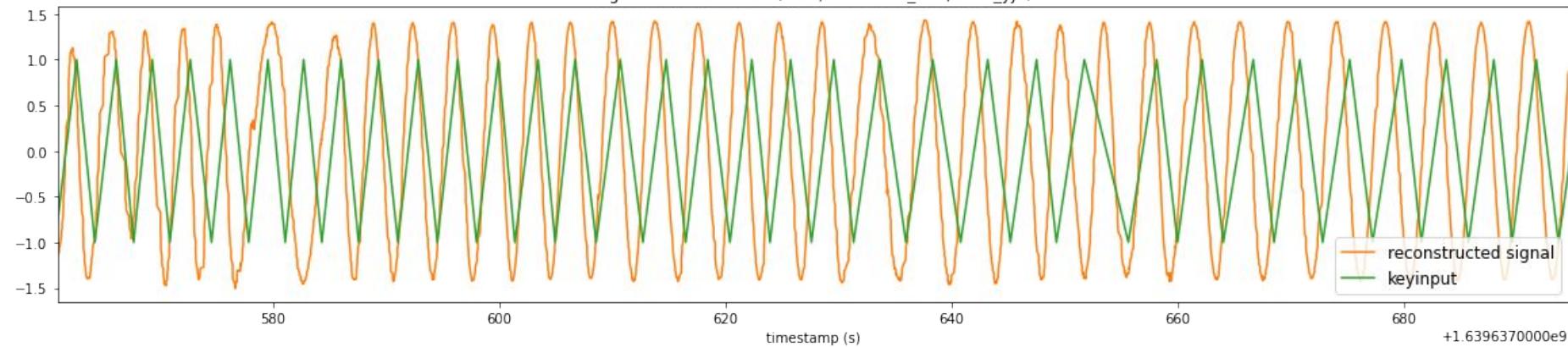
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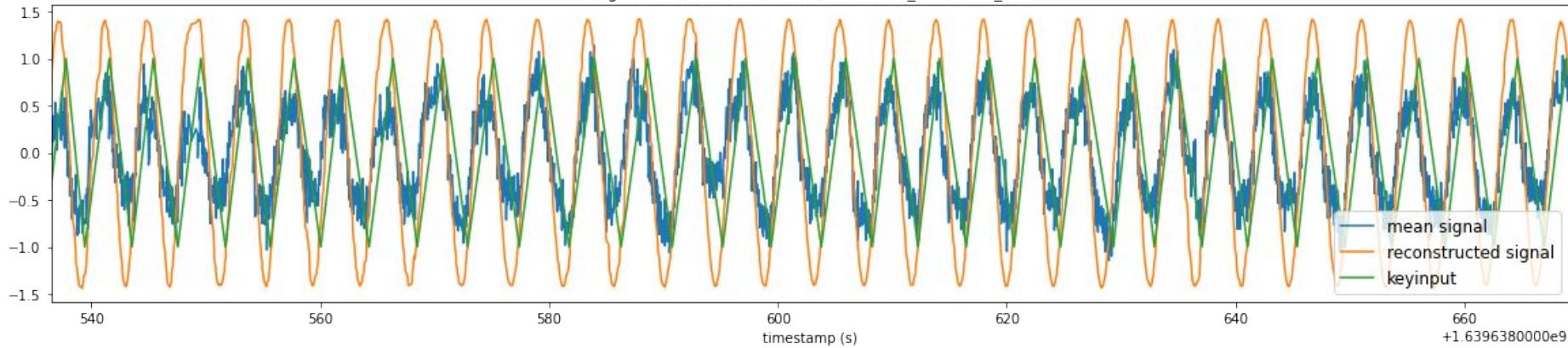
Signal Reconstruction (data/20211216_test/1556_yjh)



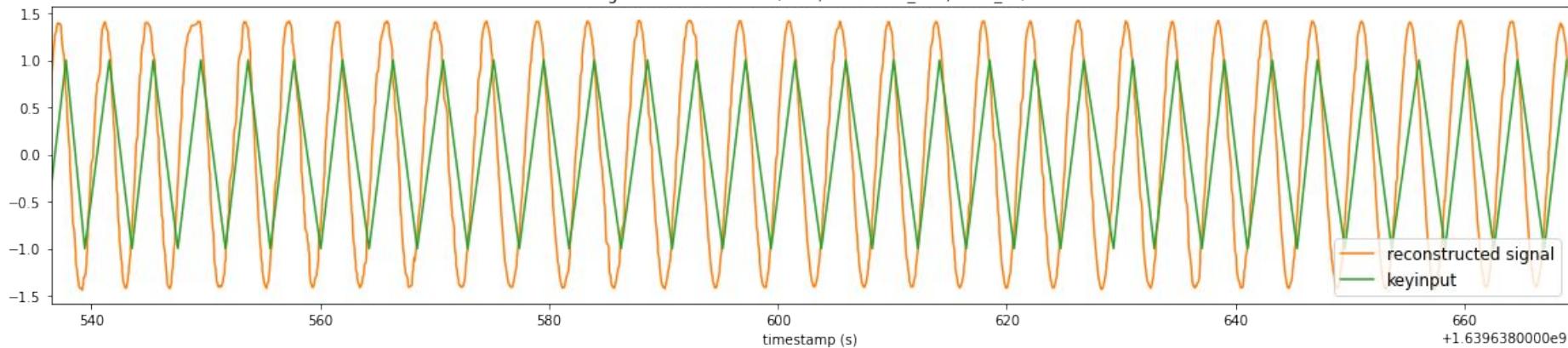
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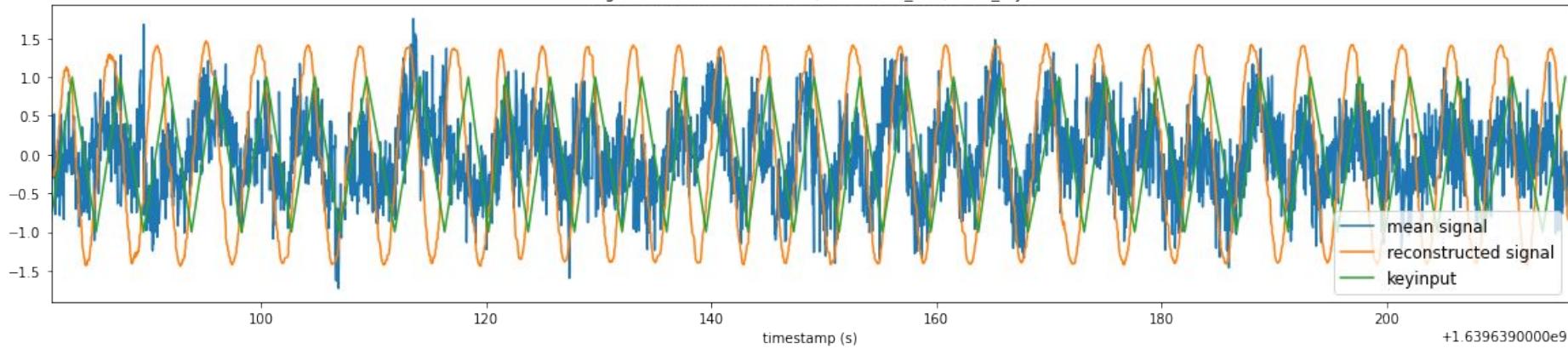
Signal Reconstruction (data/20211216_test/1611_sk)



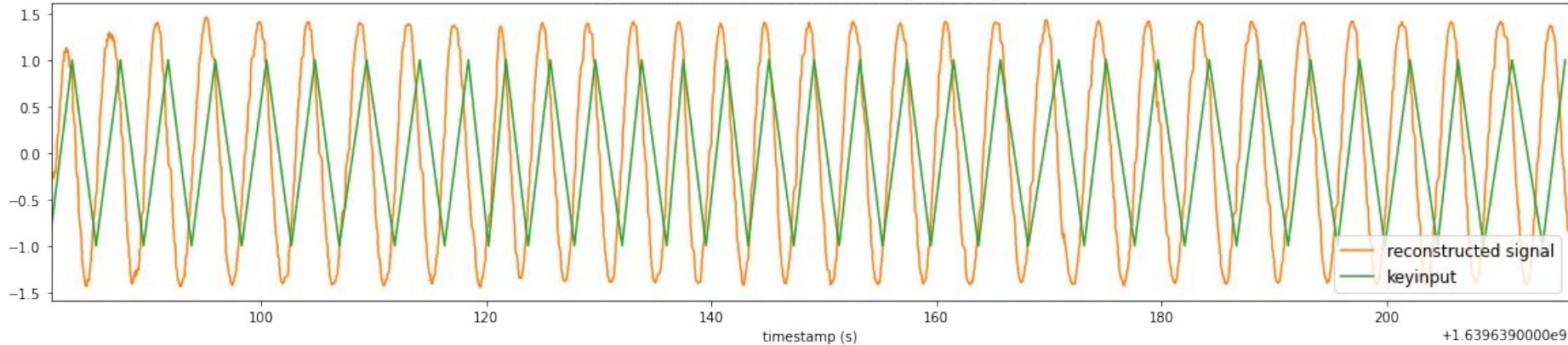
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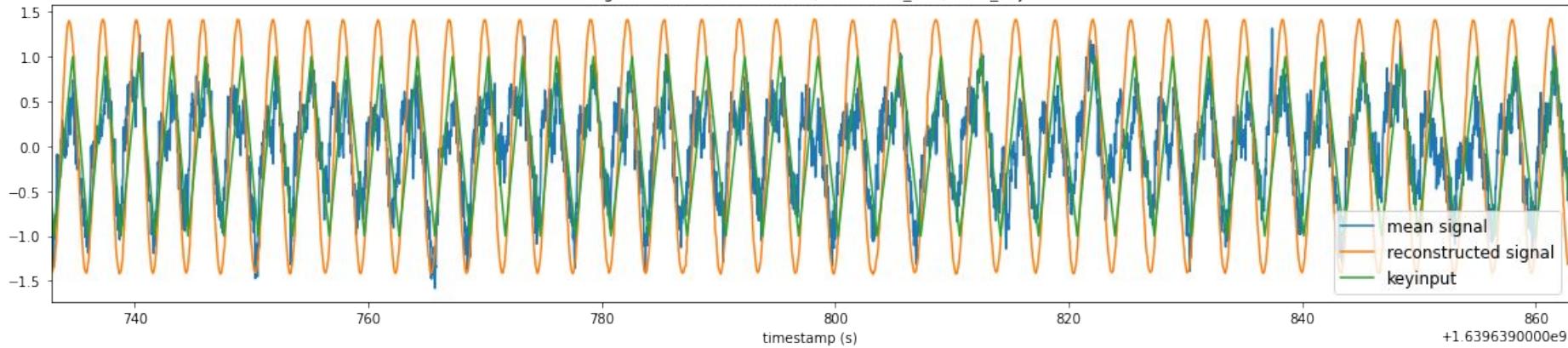
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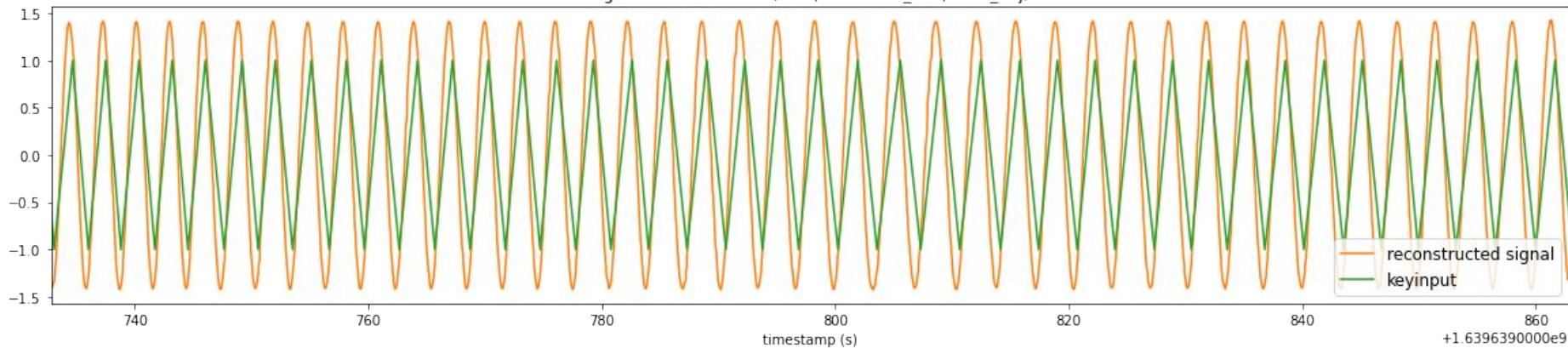
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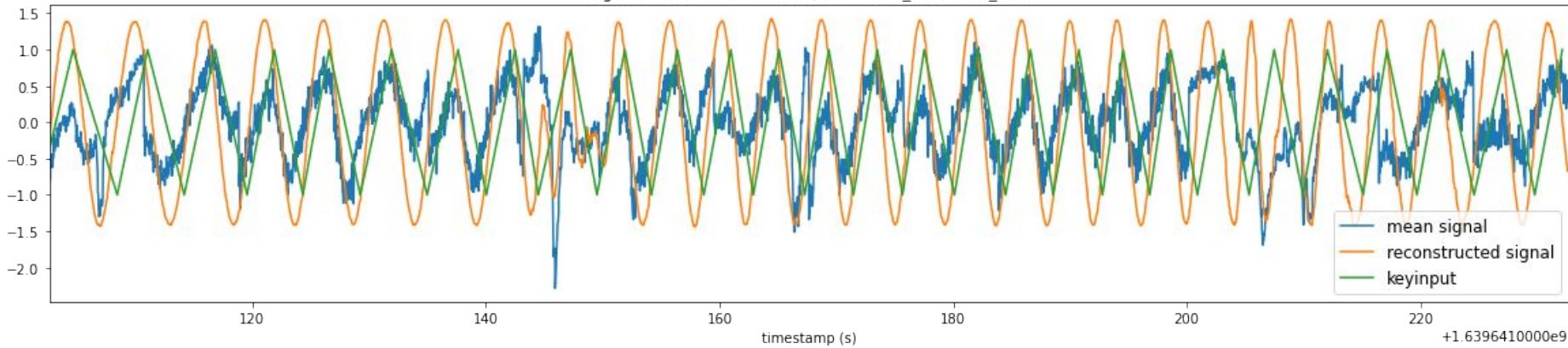
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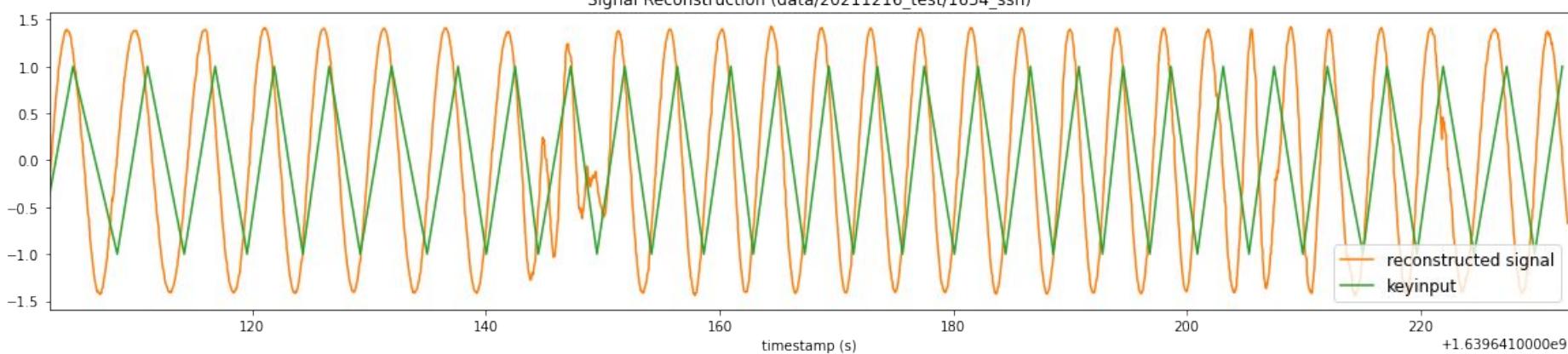
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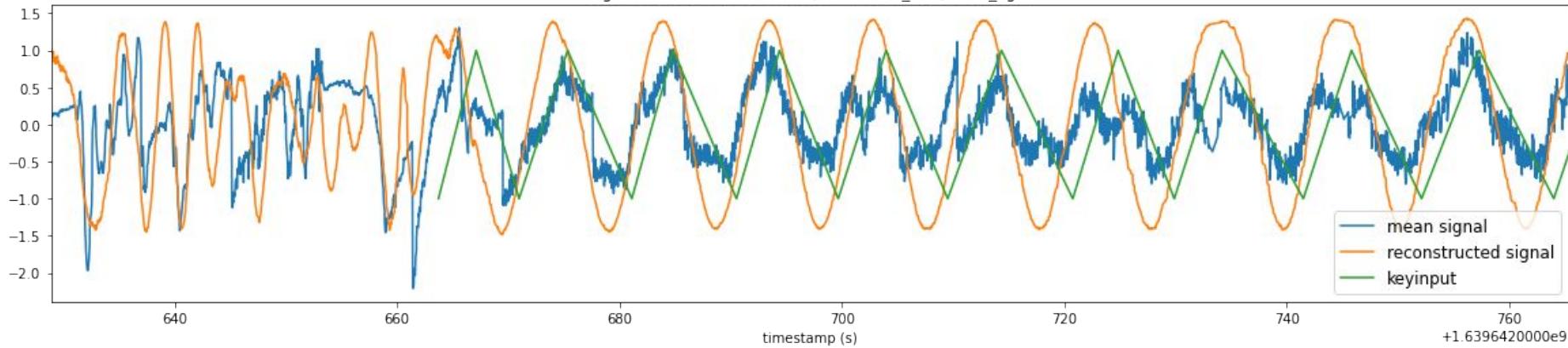
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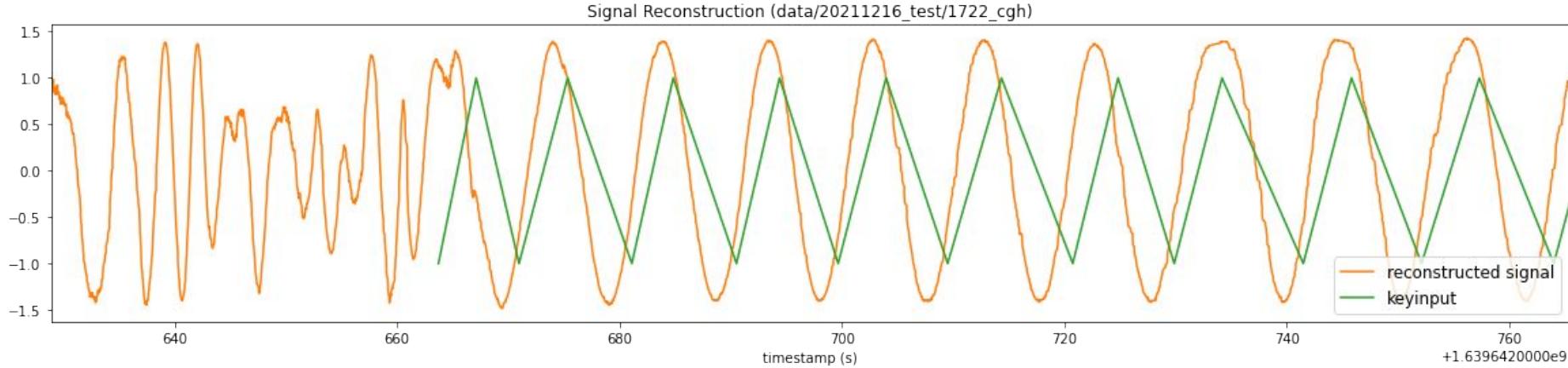
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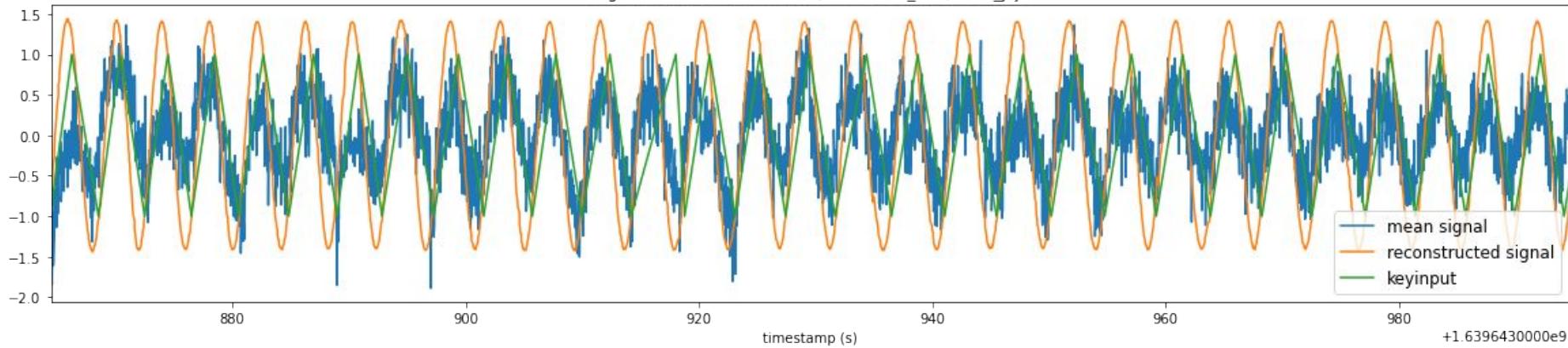
Signal Reconstruction (data/20211216_test/1722_cgh)



Signal Reconstruction (data/20211216_test/1722_cgh)



Signal Reconstruction (data/20211216_test/1740_jsj)



Signal Reconstruction (data/20211216_test/1740_jsj)

