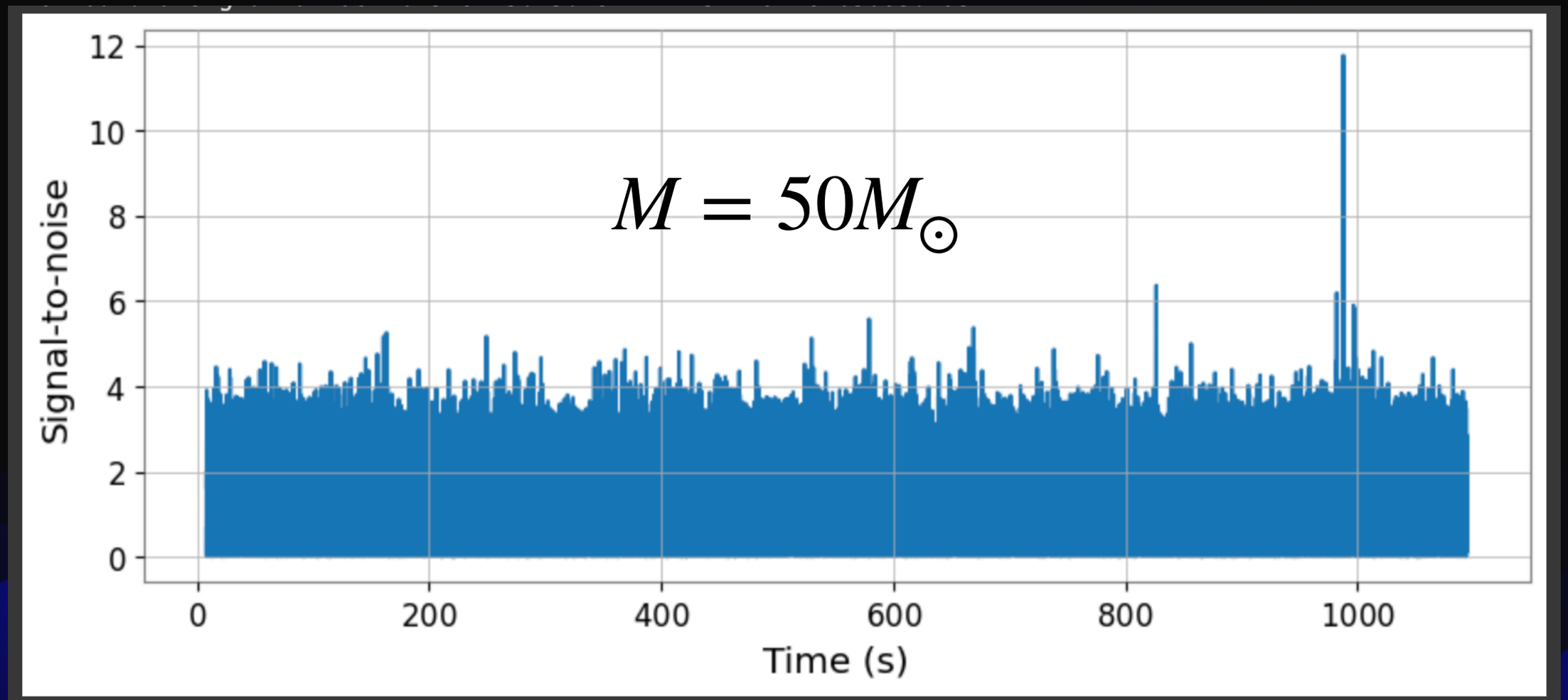
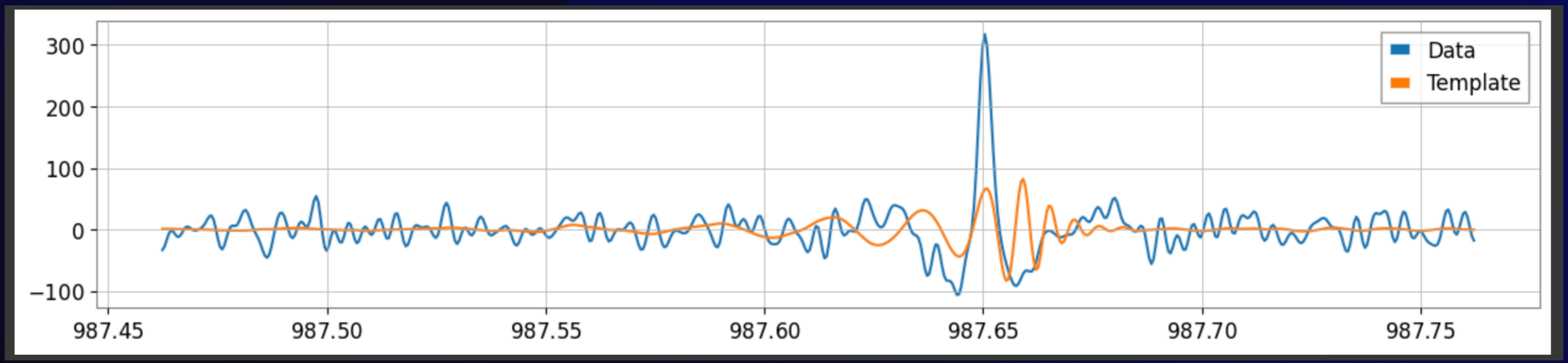
# Project Solutions

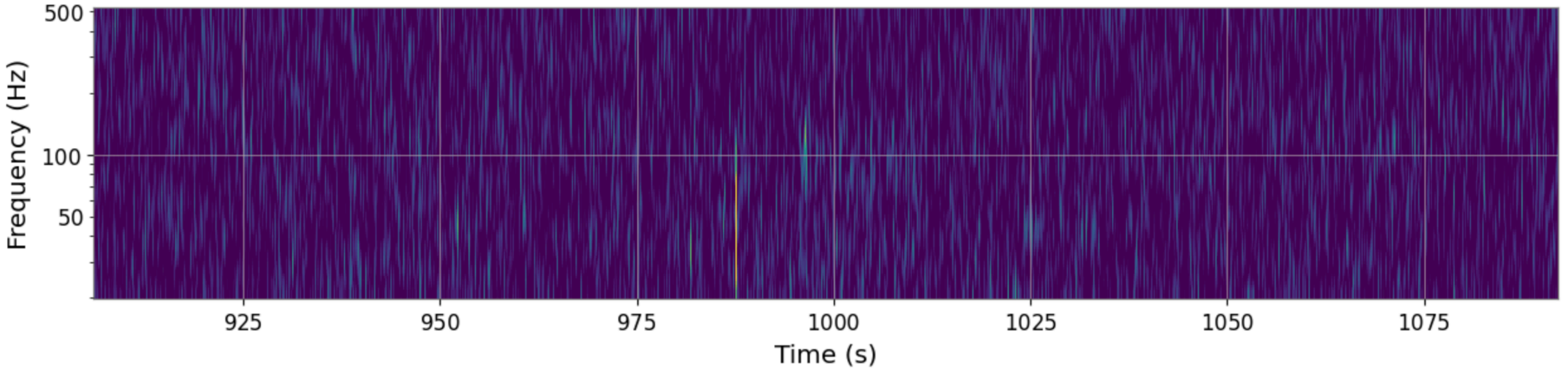
Firstly, I divide the 4000 seconds into 4 parts and do a matched filtering on each part.

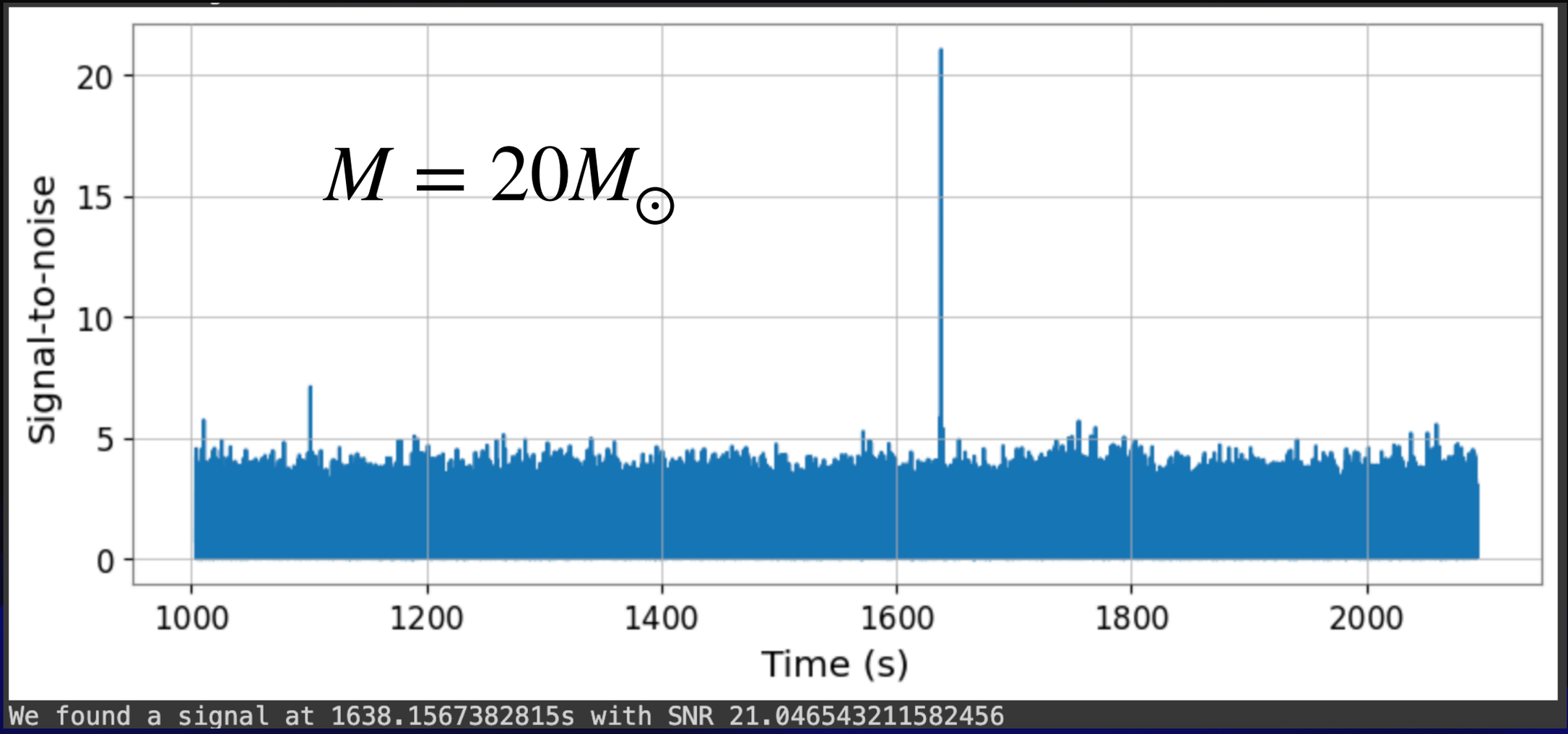



```
We found a signal at 987.6625976565002s with SNR 11.755672872340684
```

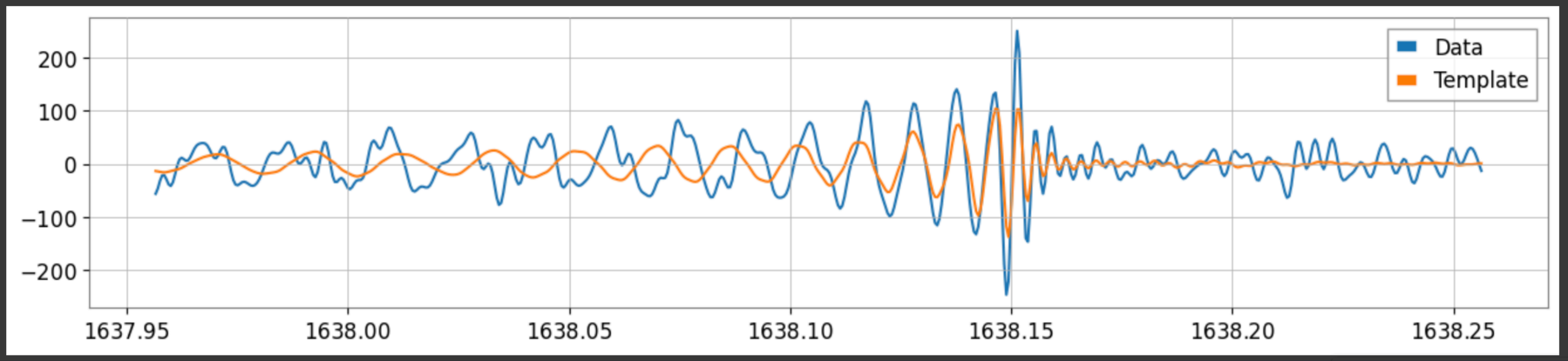
# It should be glitch!

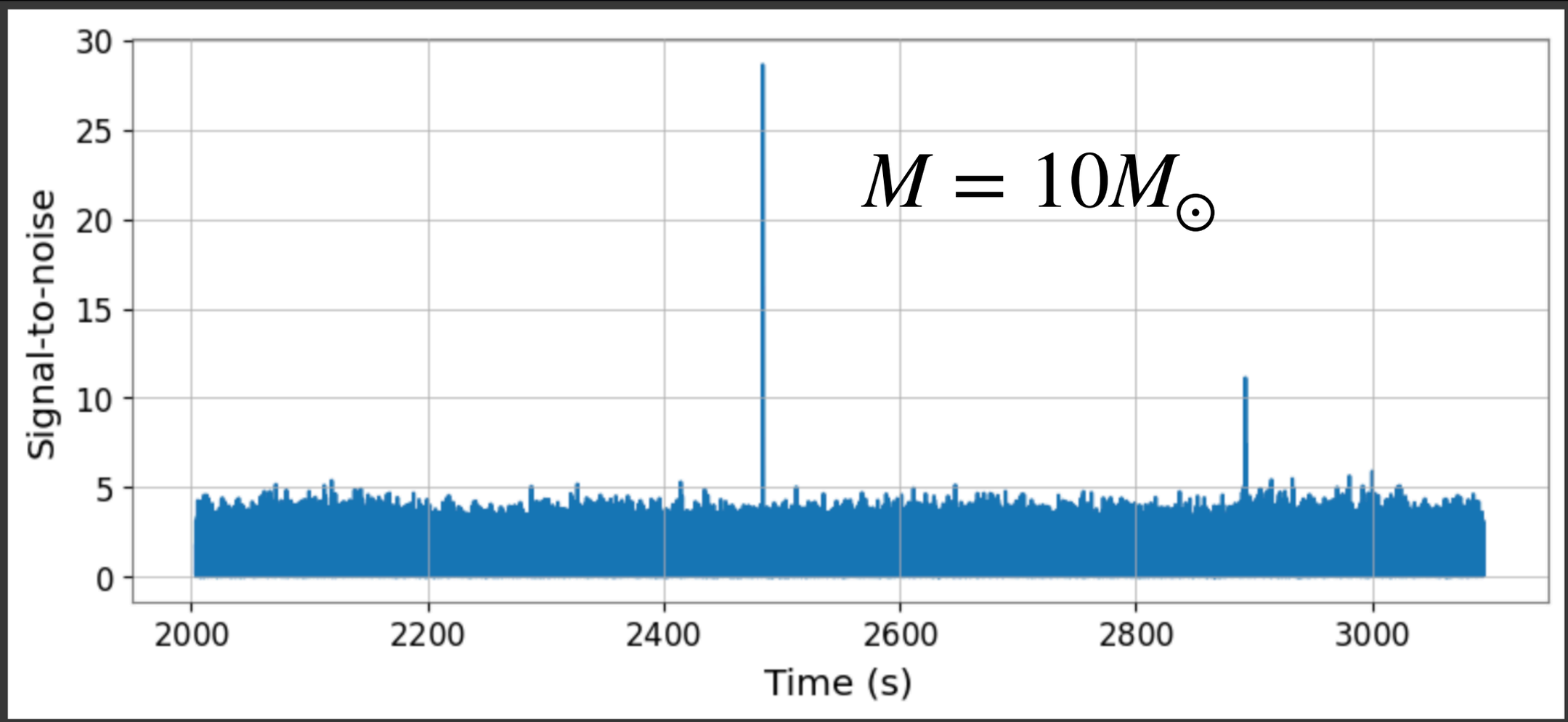



500
100
50
Frequency (Hz)
925
950
975
1000
1025
1050
1075
Time (s)



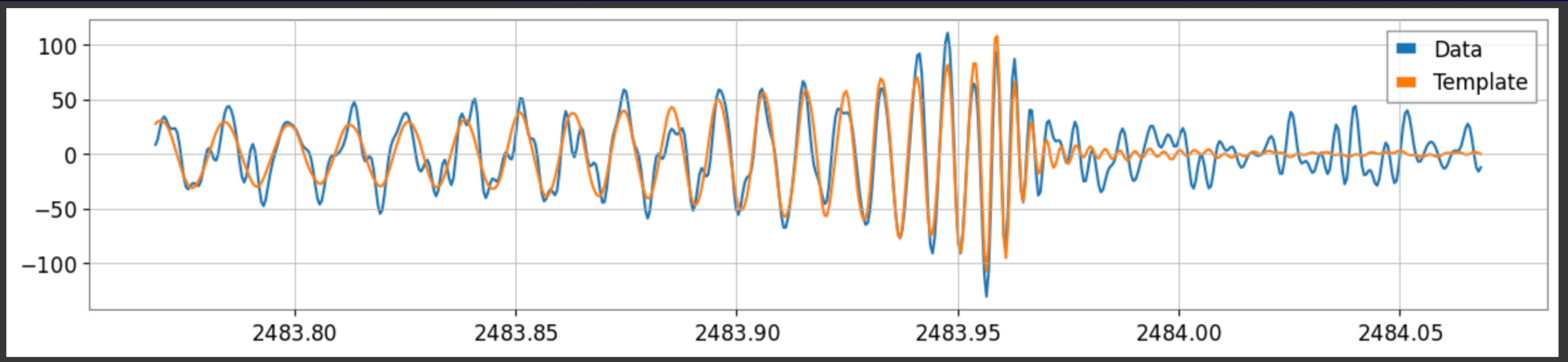

# The same signal was detected by 30, 40, 50 but with lower SNRs

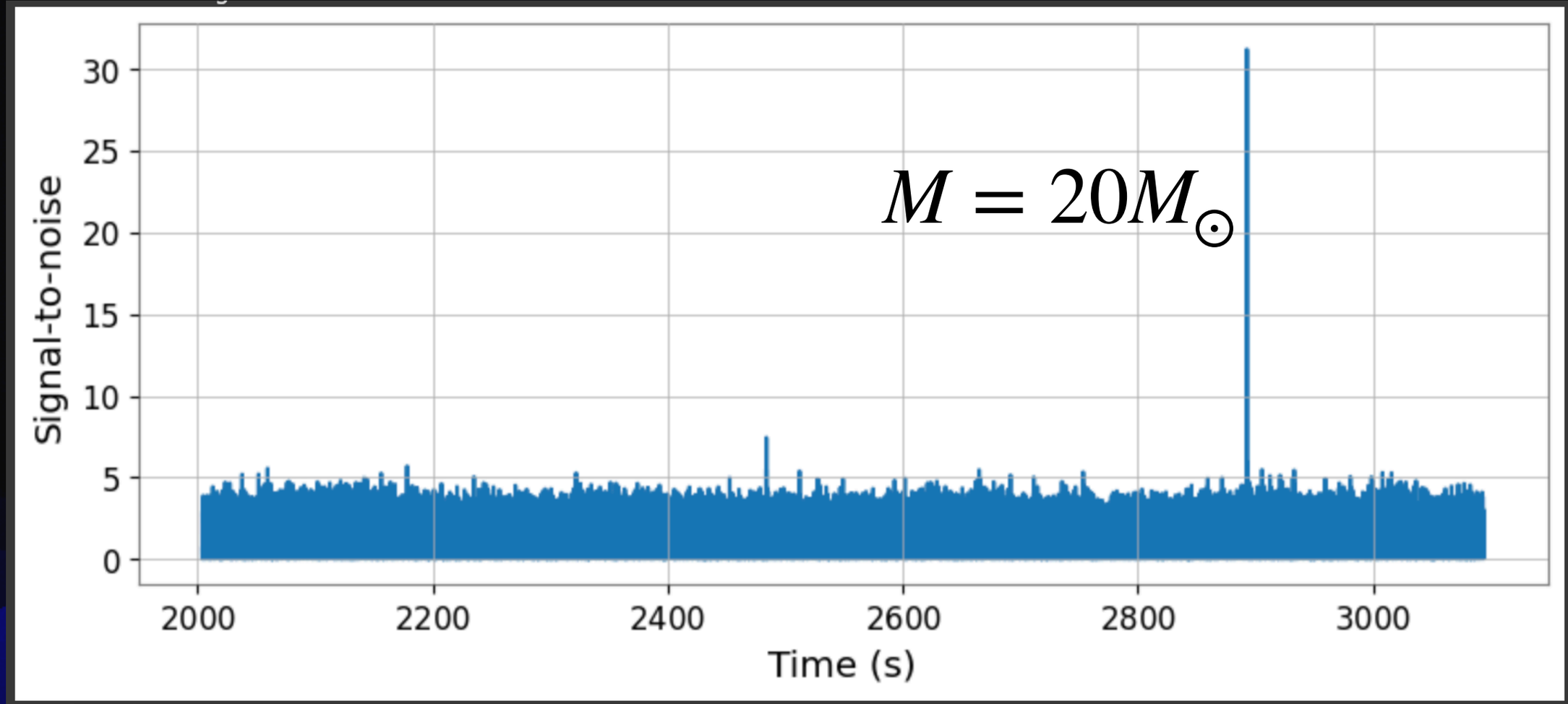





```
We found a signal at 2483.96875000025s with SNR 28.618375052922357
```

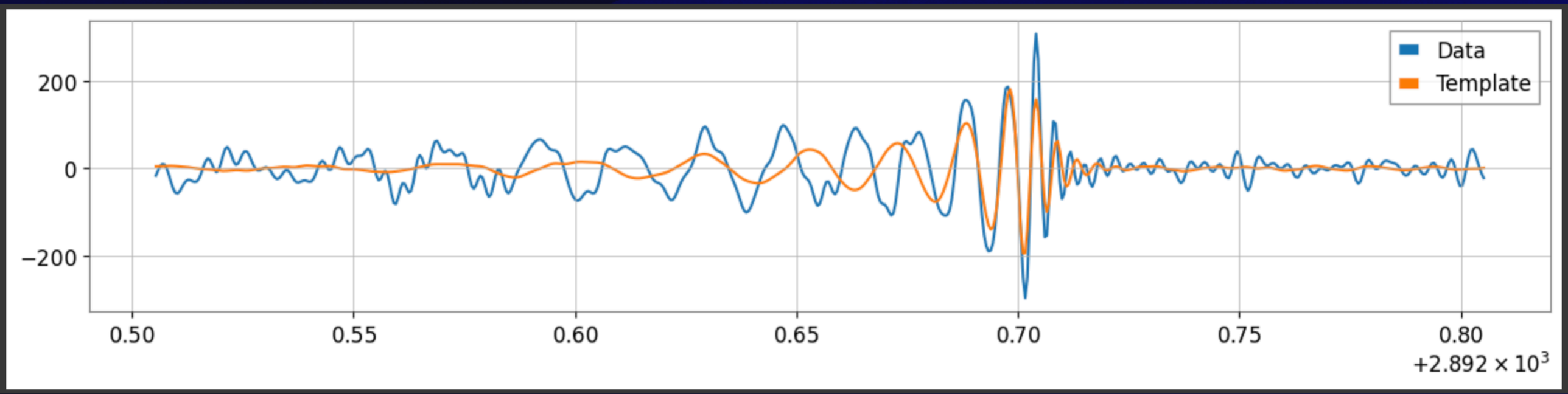
# It should be signal!

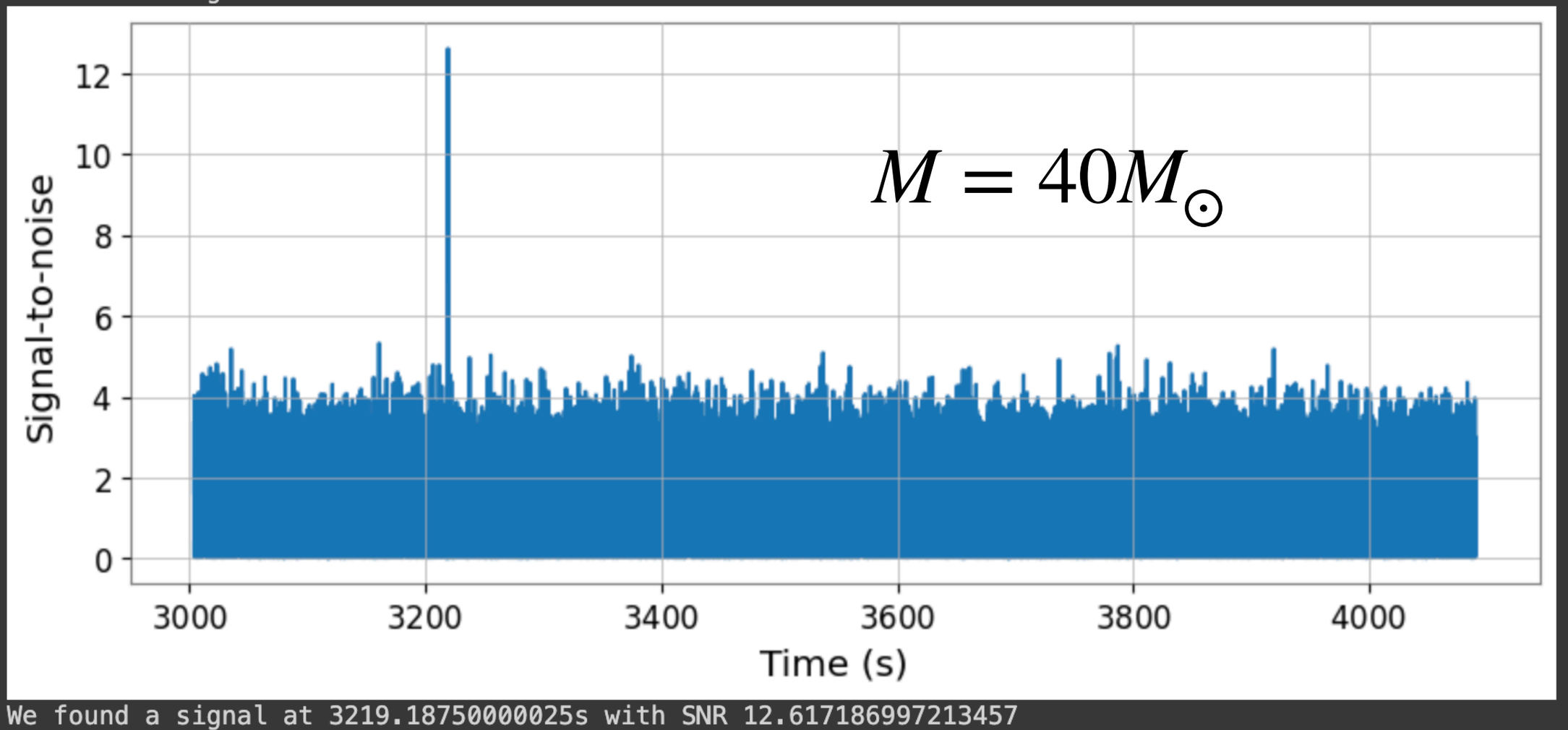




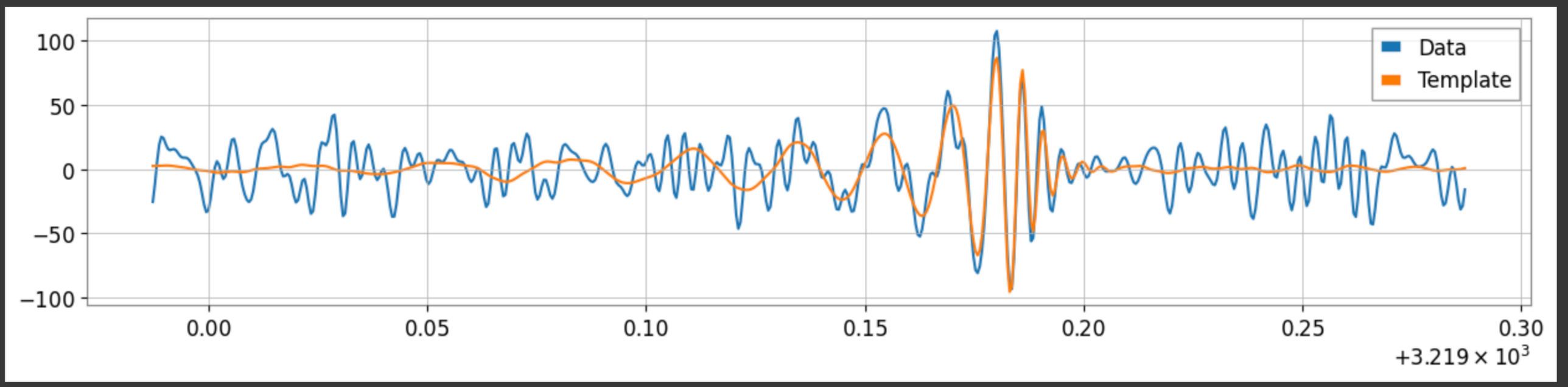

```
We found a signal at 2892.7114257815s with SNR 31.177523031447556
```

# The same signal was detected by 30, 40, 50 but with lower SNRs






```
We found a signal at 3219.18750000025s with SNR 12.617186997213457
```



# Bilby Estimation

$$t = 2892.71142578150 06$$

$$M_1 = M_2 = 21.778610619672 04$$

# Bilby Estimation

$$t = 1638.1567382815$$

$$M_1 = M_2 = 17.853808962290117$$