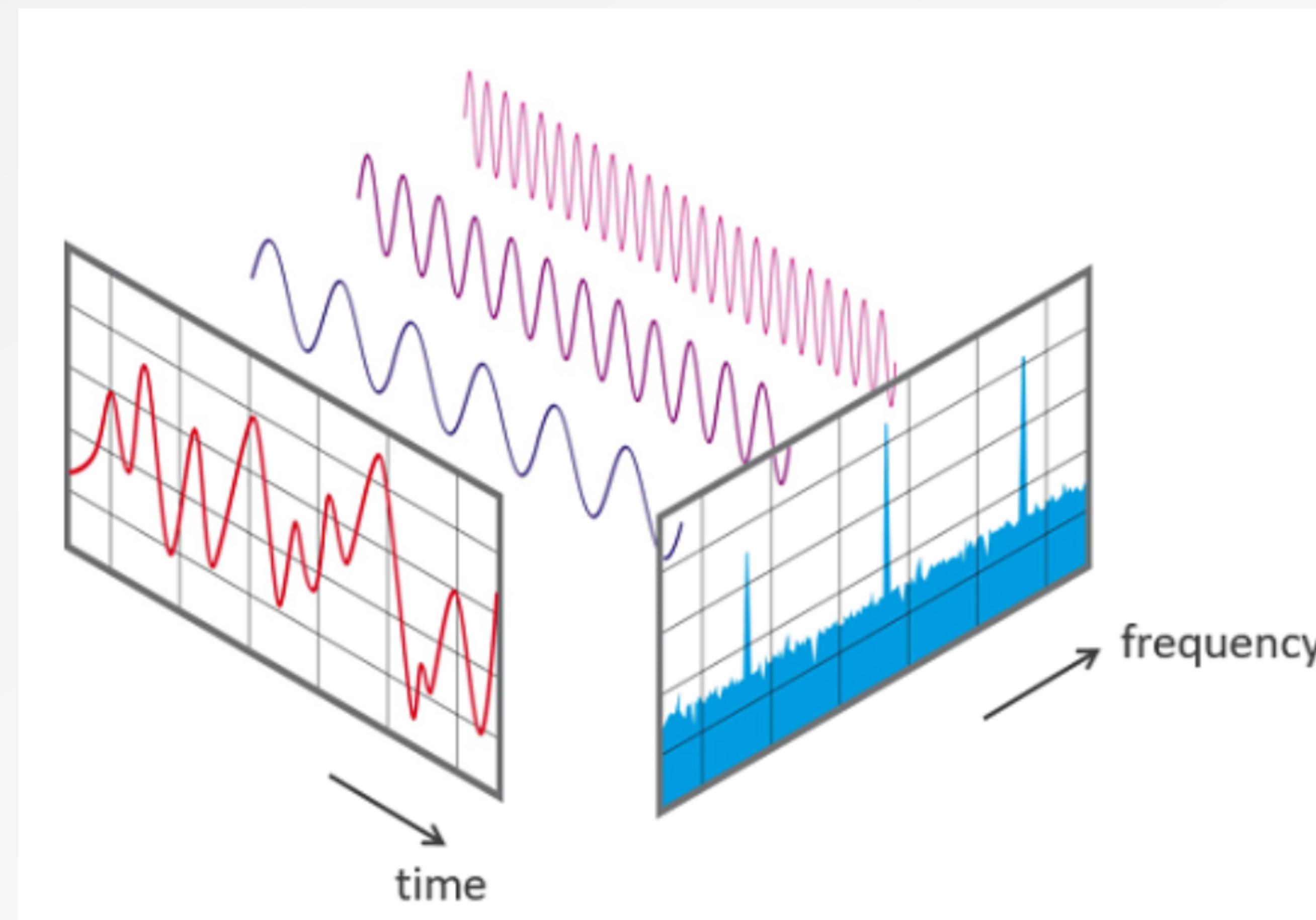
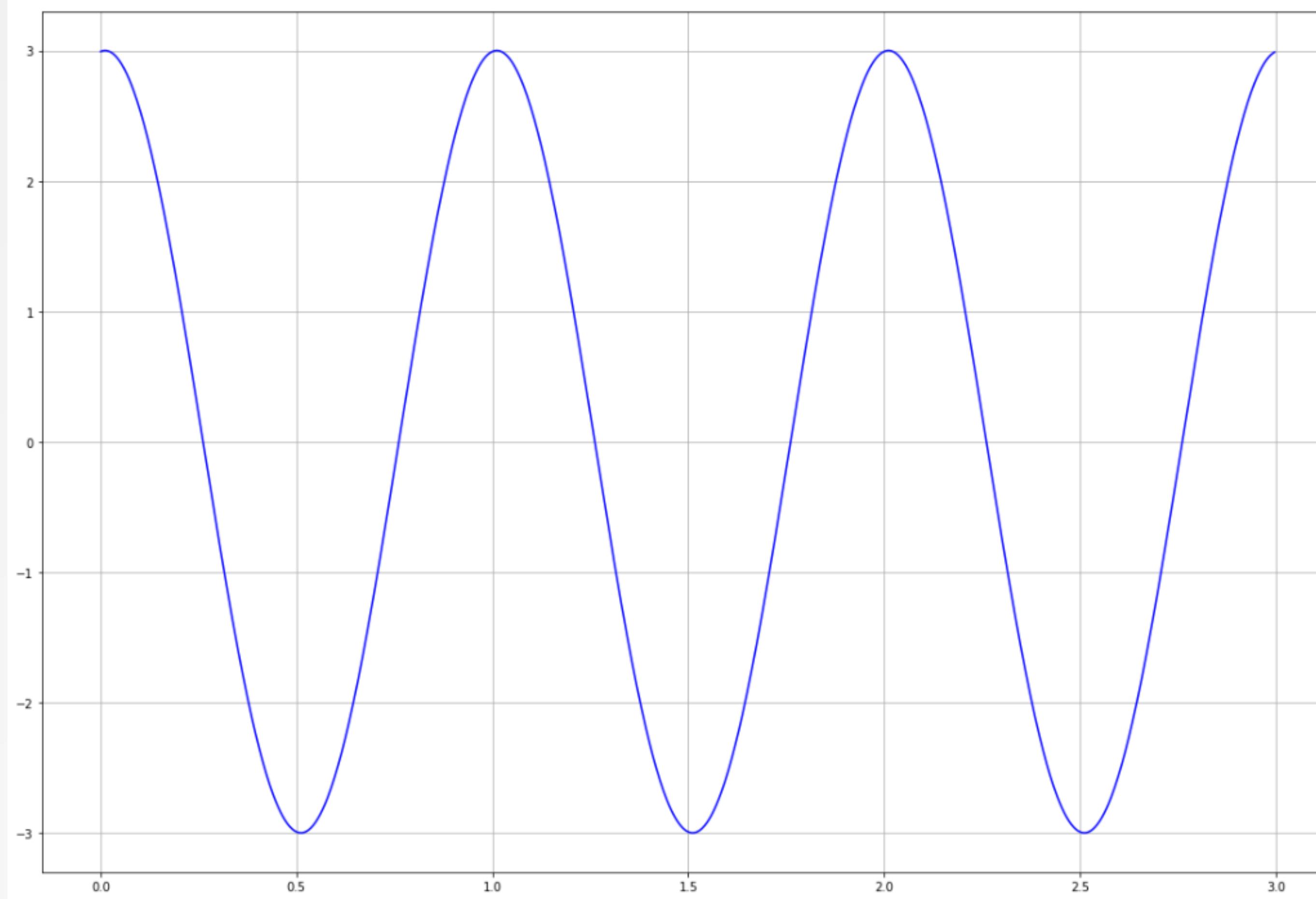
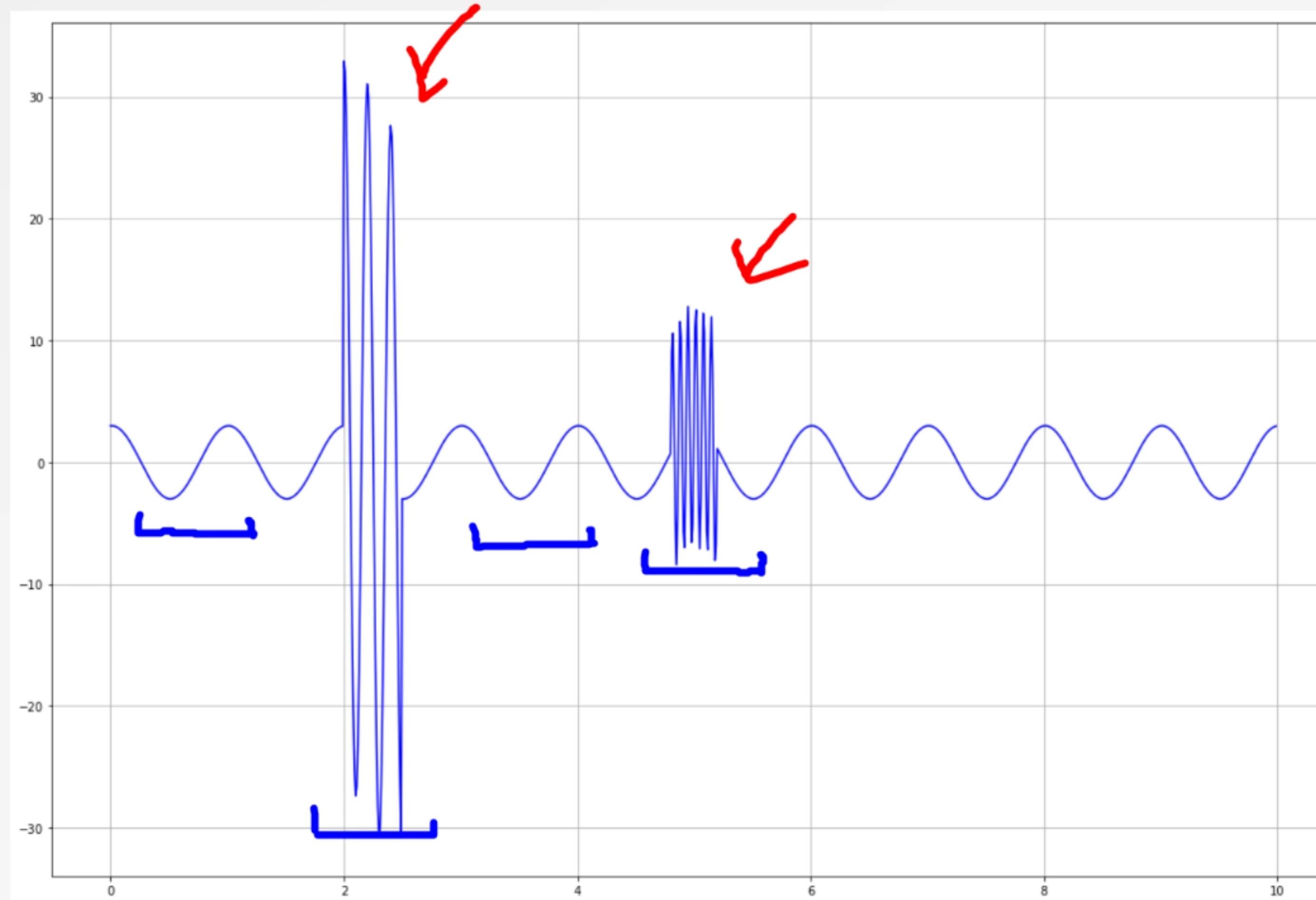


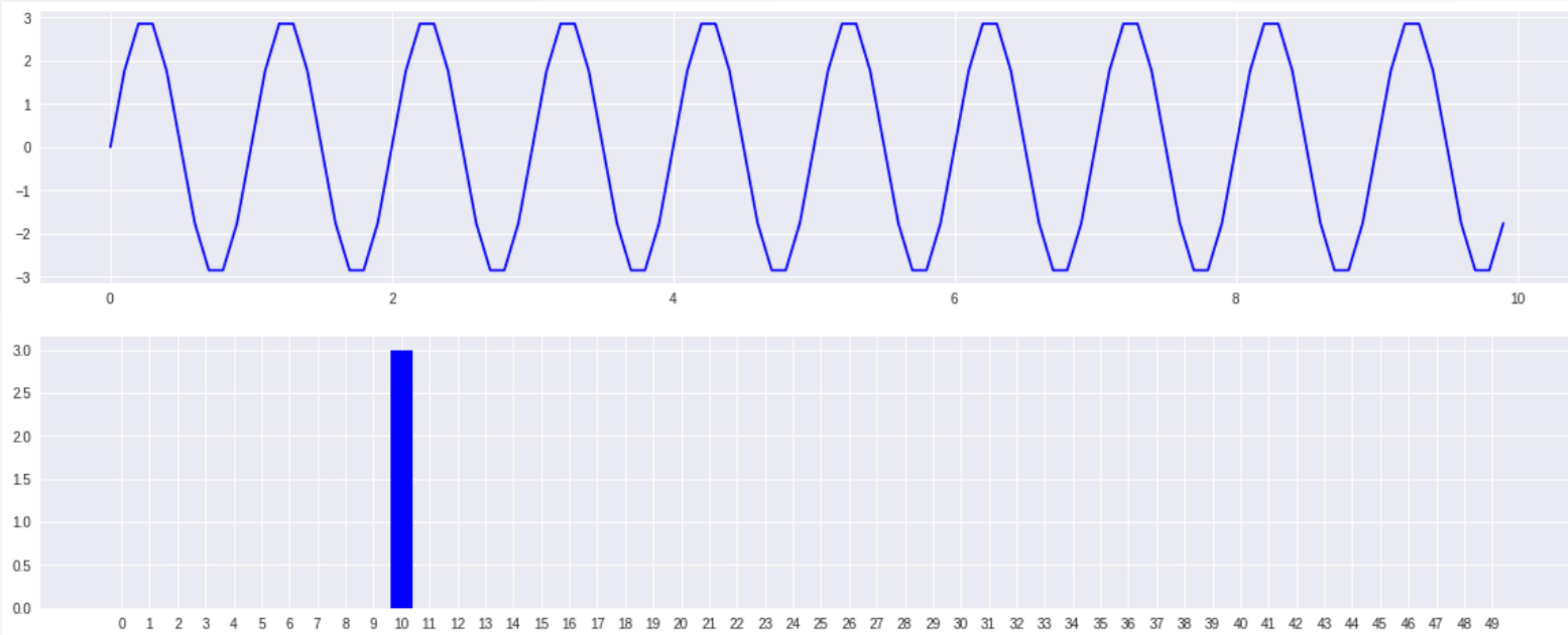
Wavelets





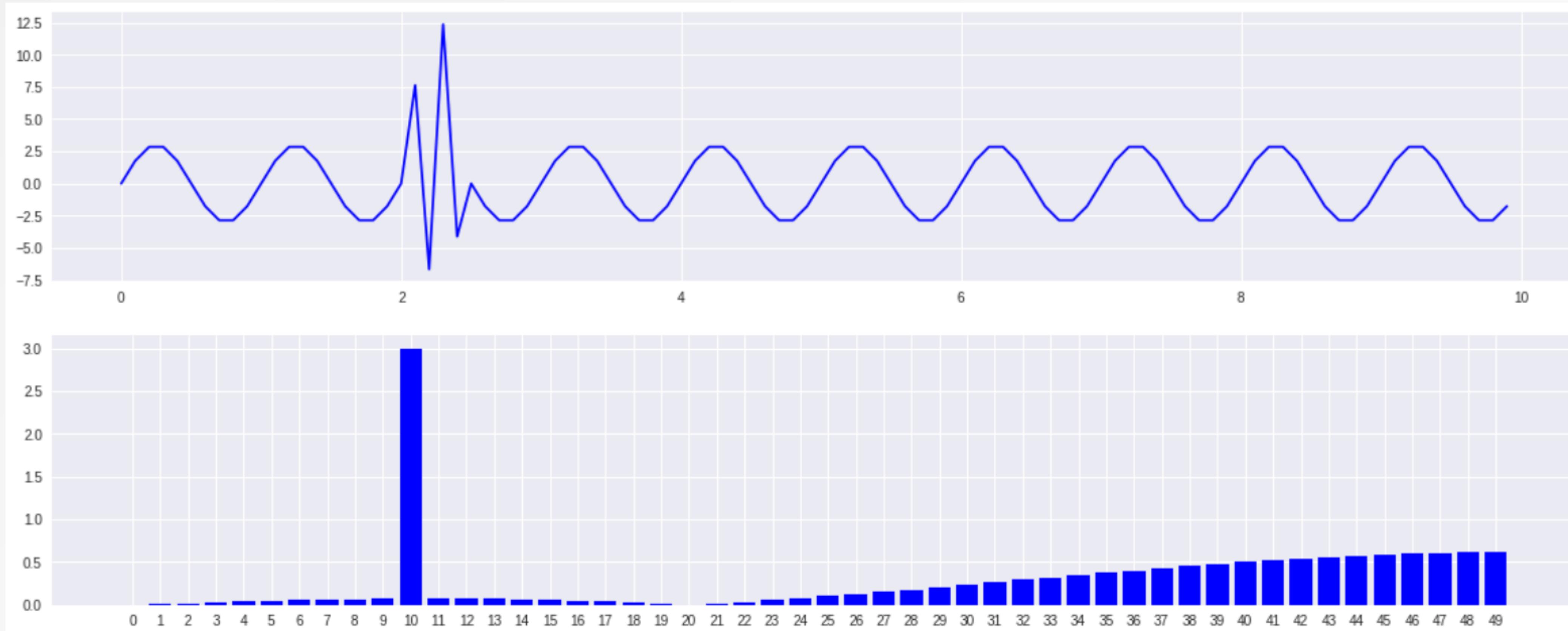


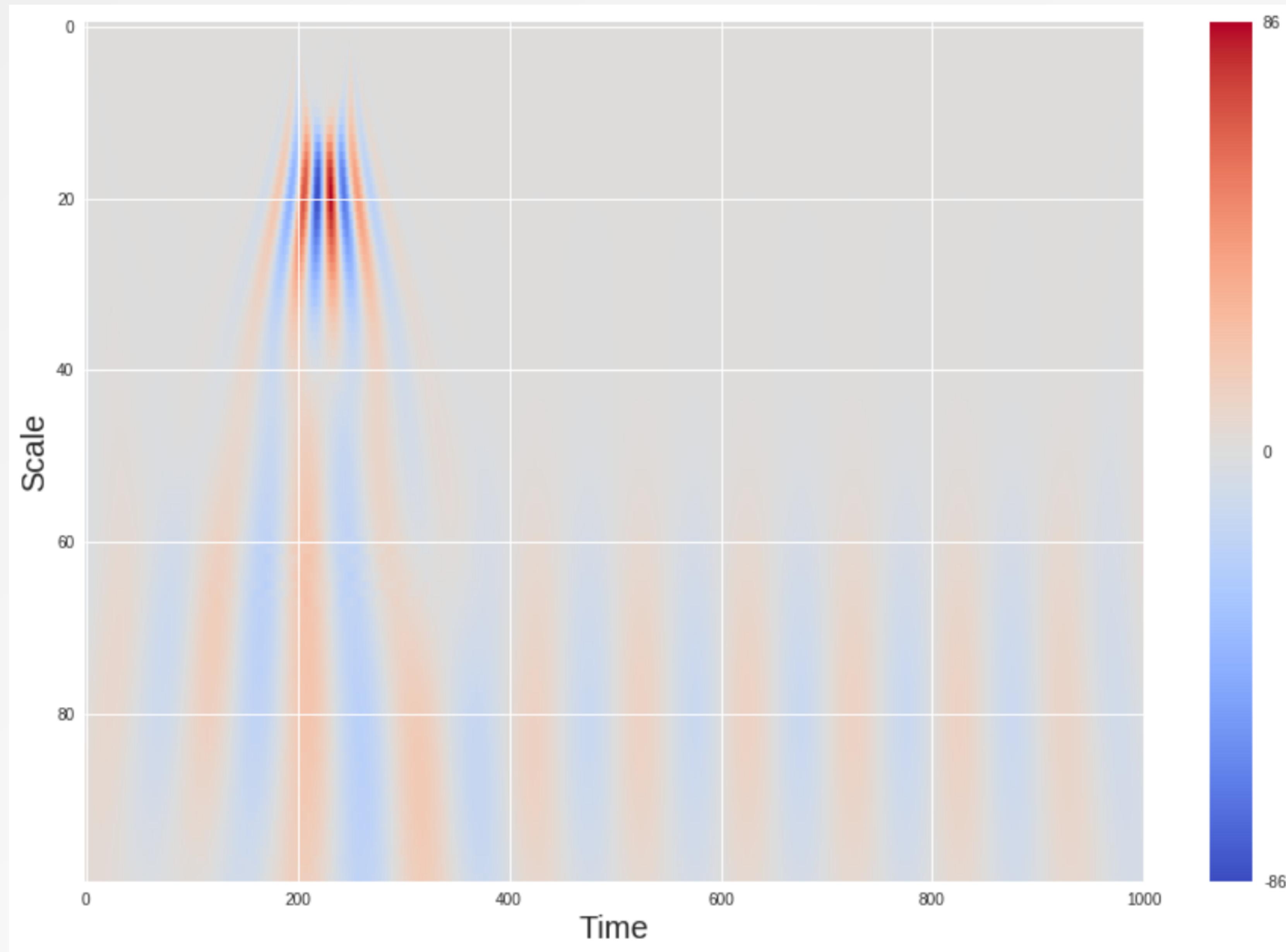
$(f = 1, A = 3, T = 10, \varphi = 0)$

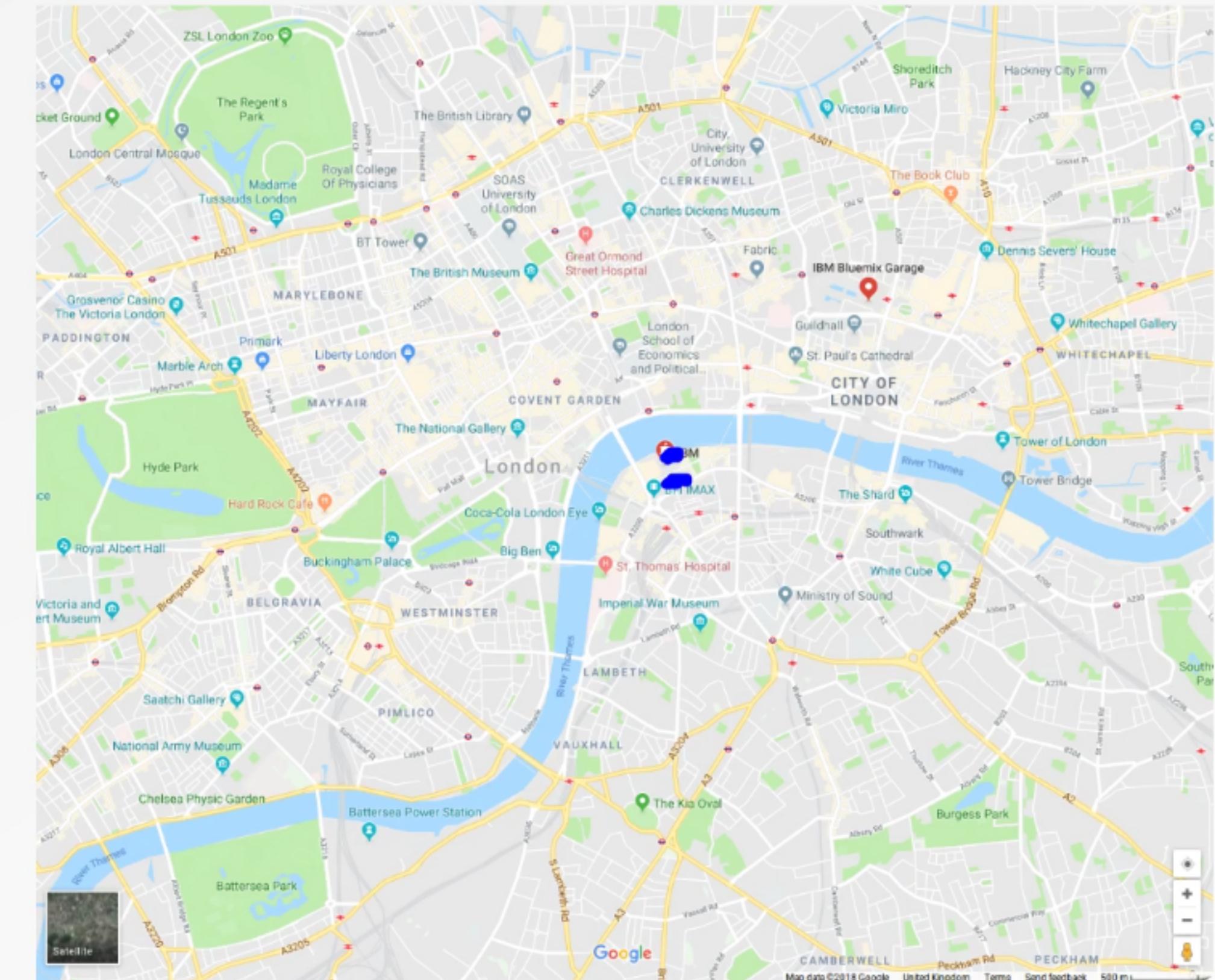
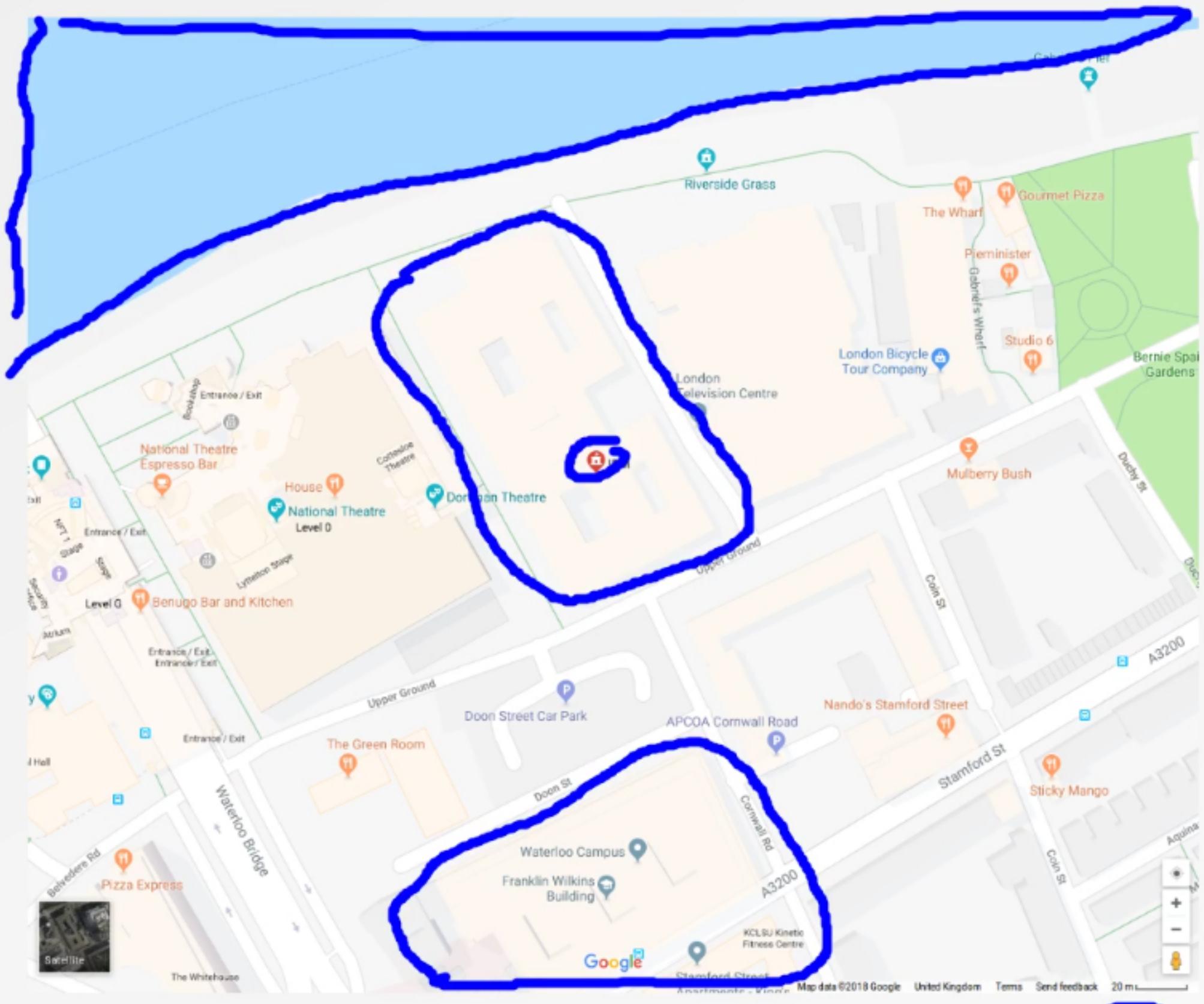


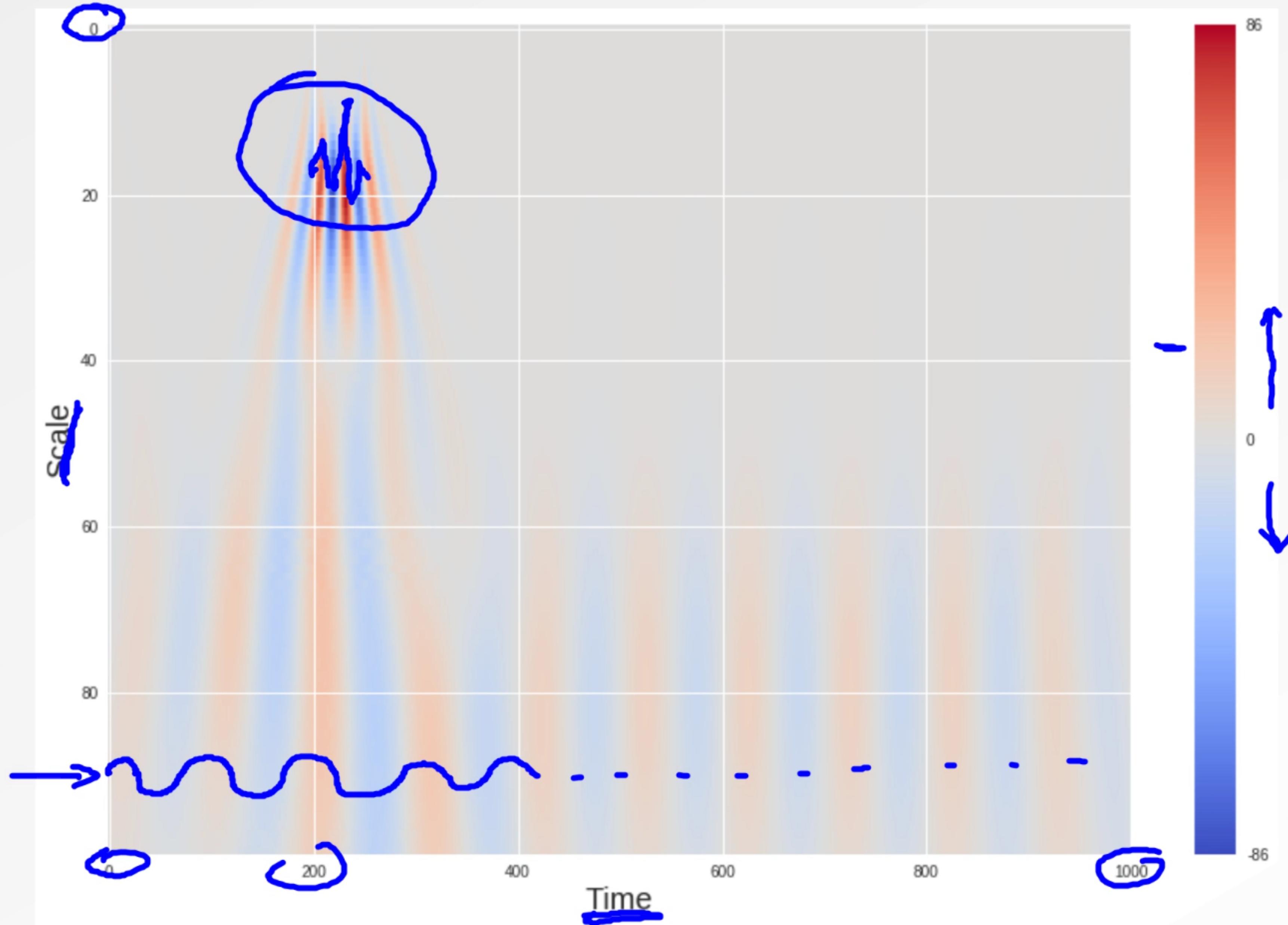
$(f = 1, A = 3, \tau = 10, \varphi = 0) +$

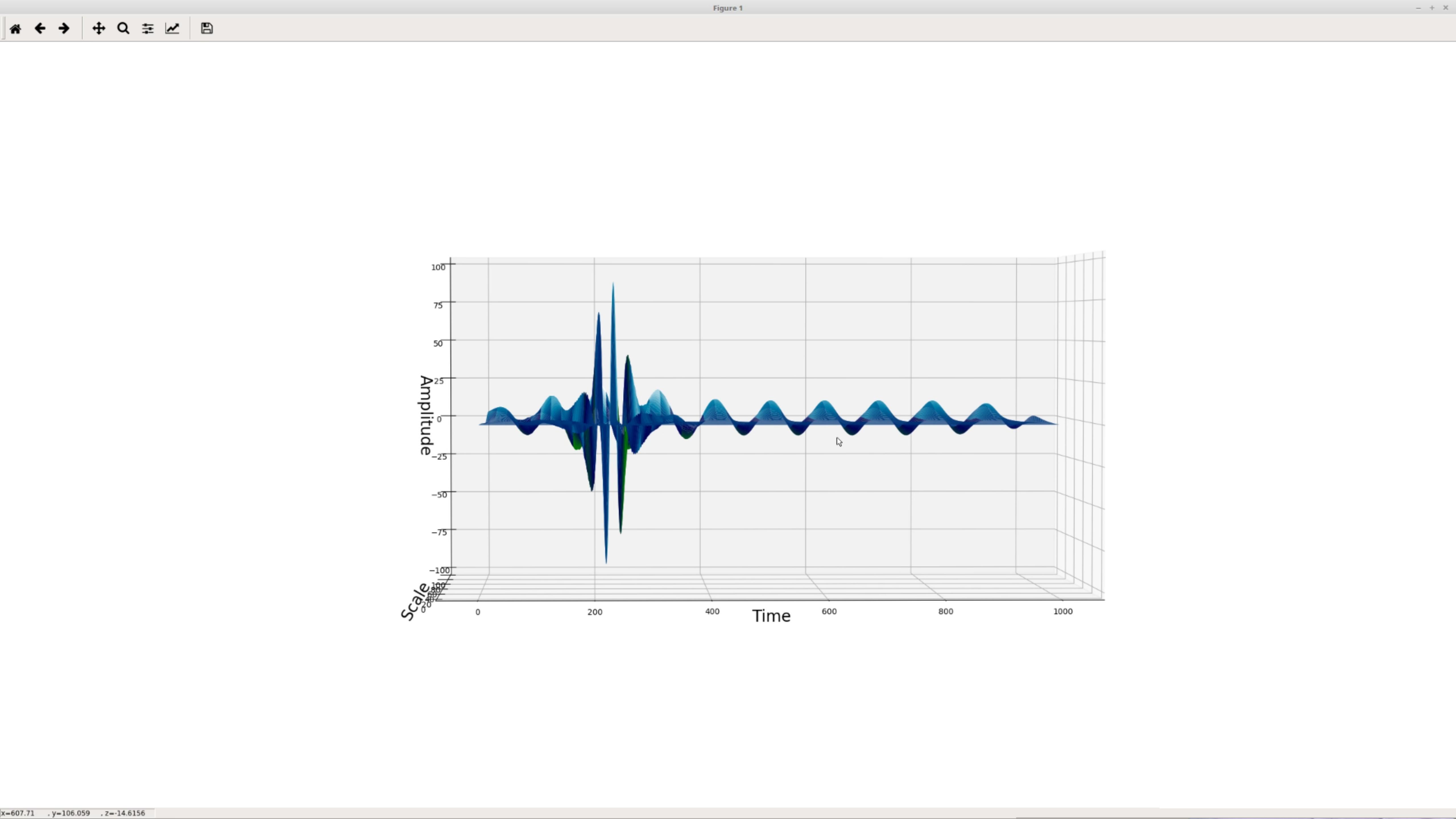
$(f = 4, A = 20, \tau = 10, \varphi = 0) @ \tau=2$











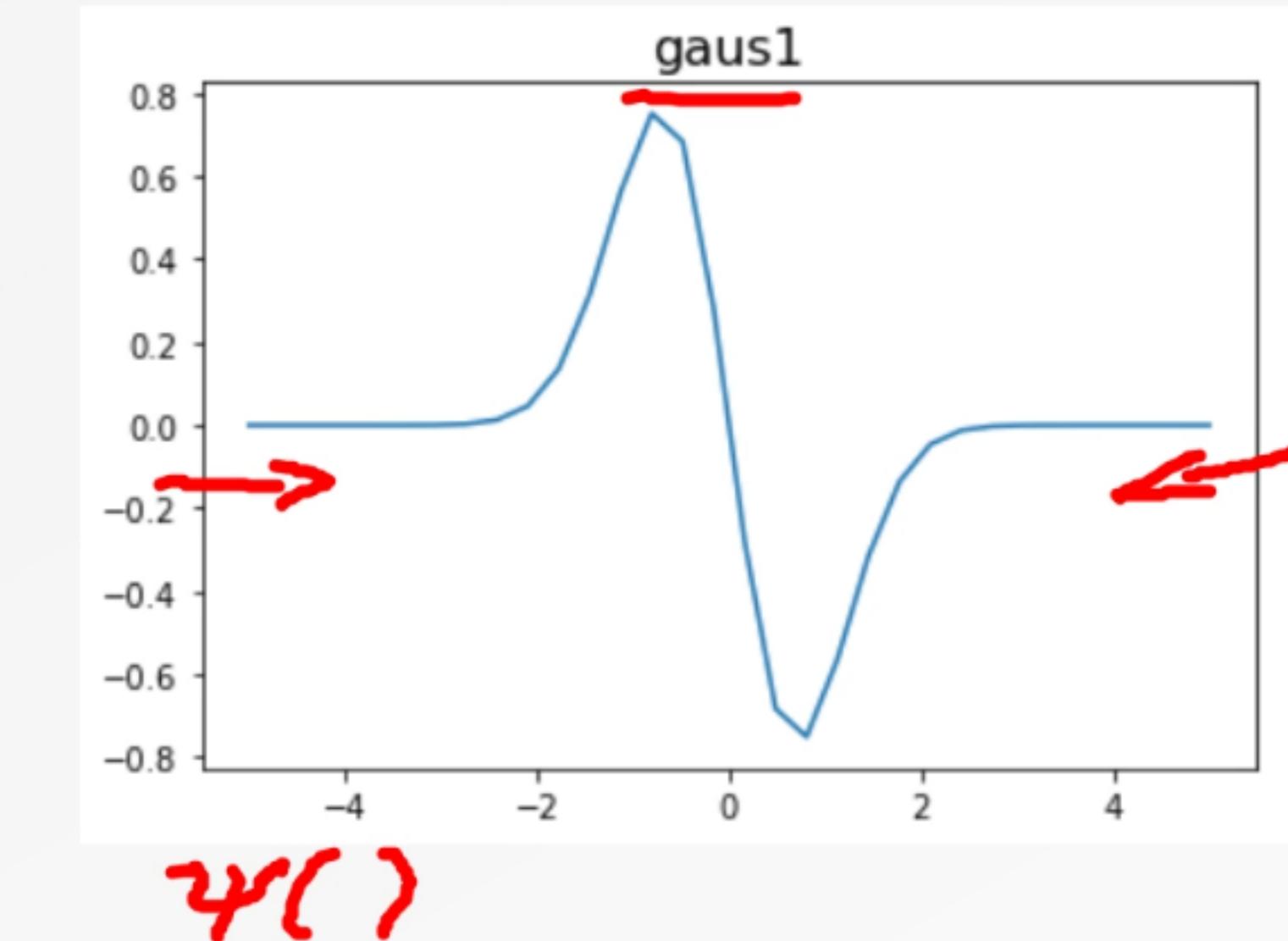
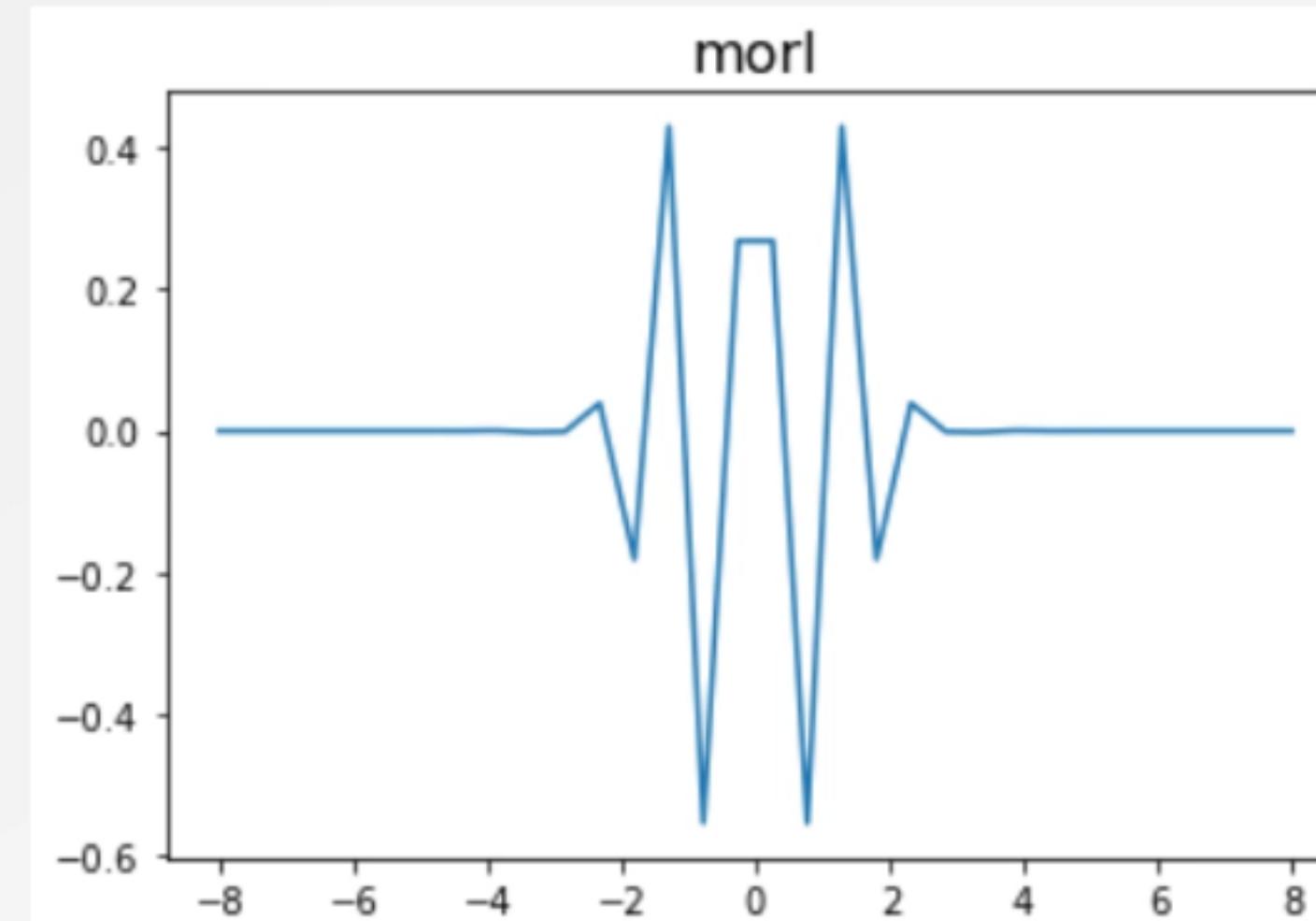
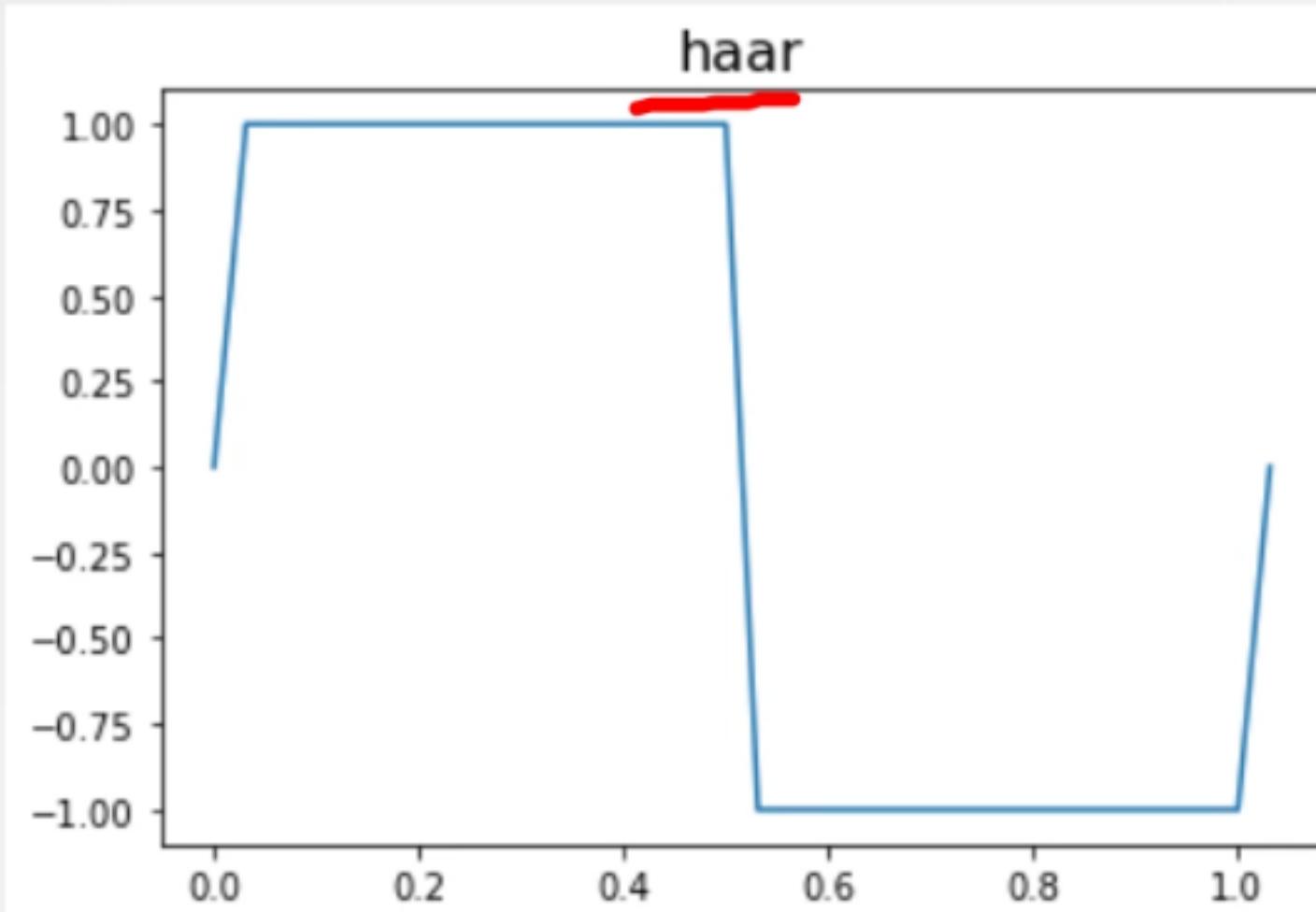
x=607.71 , y=106.059 , z=-14.6156

Continuous Wavelet Transform

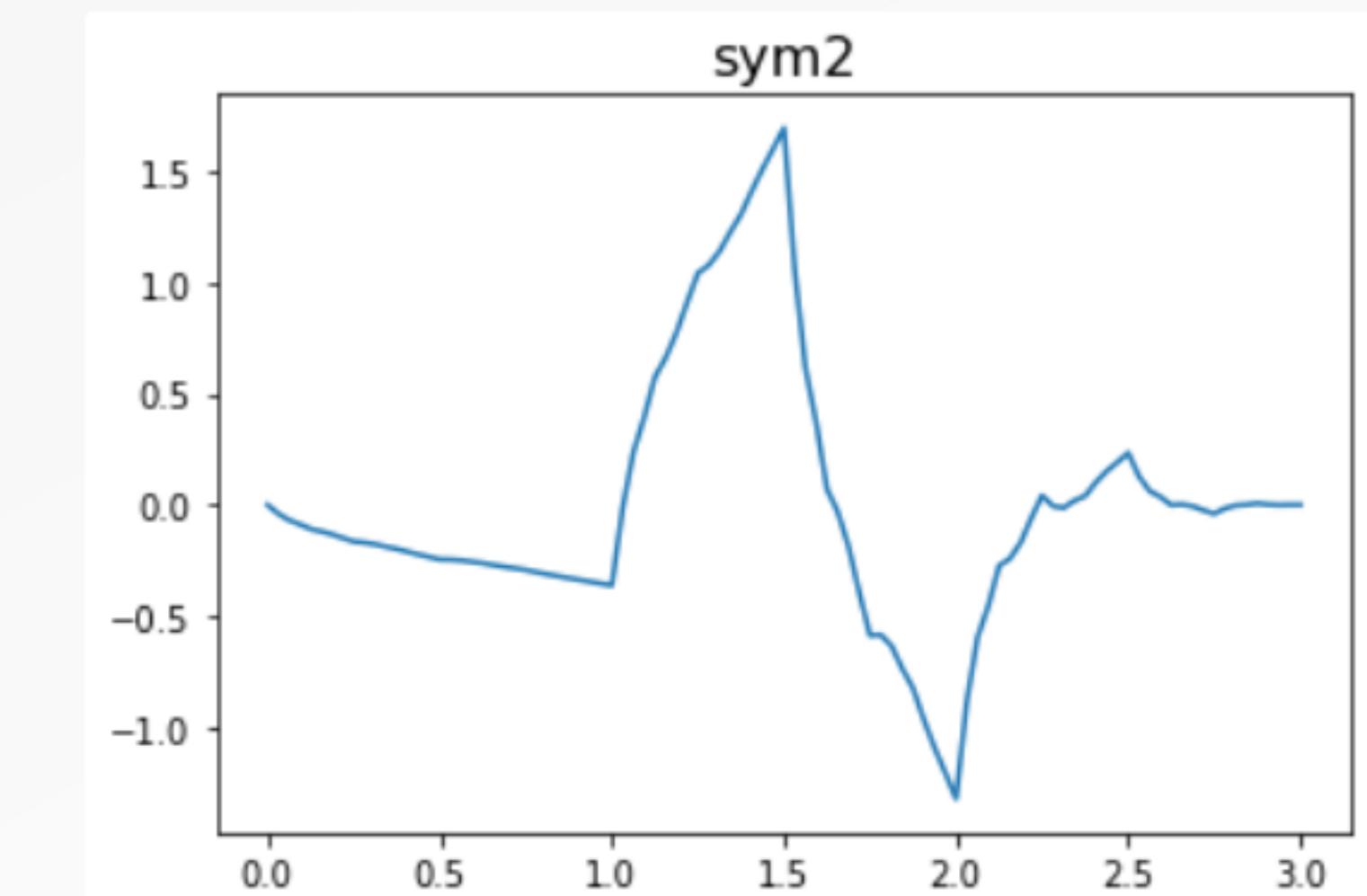
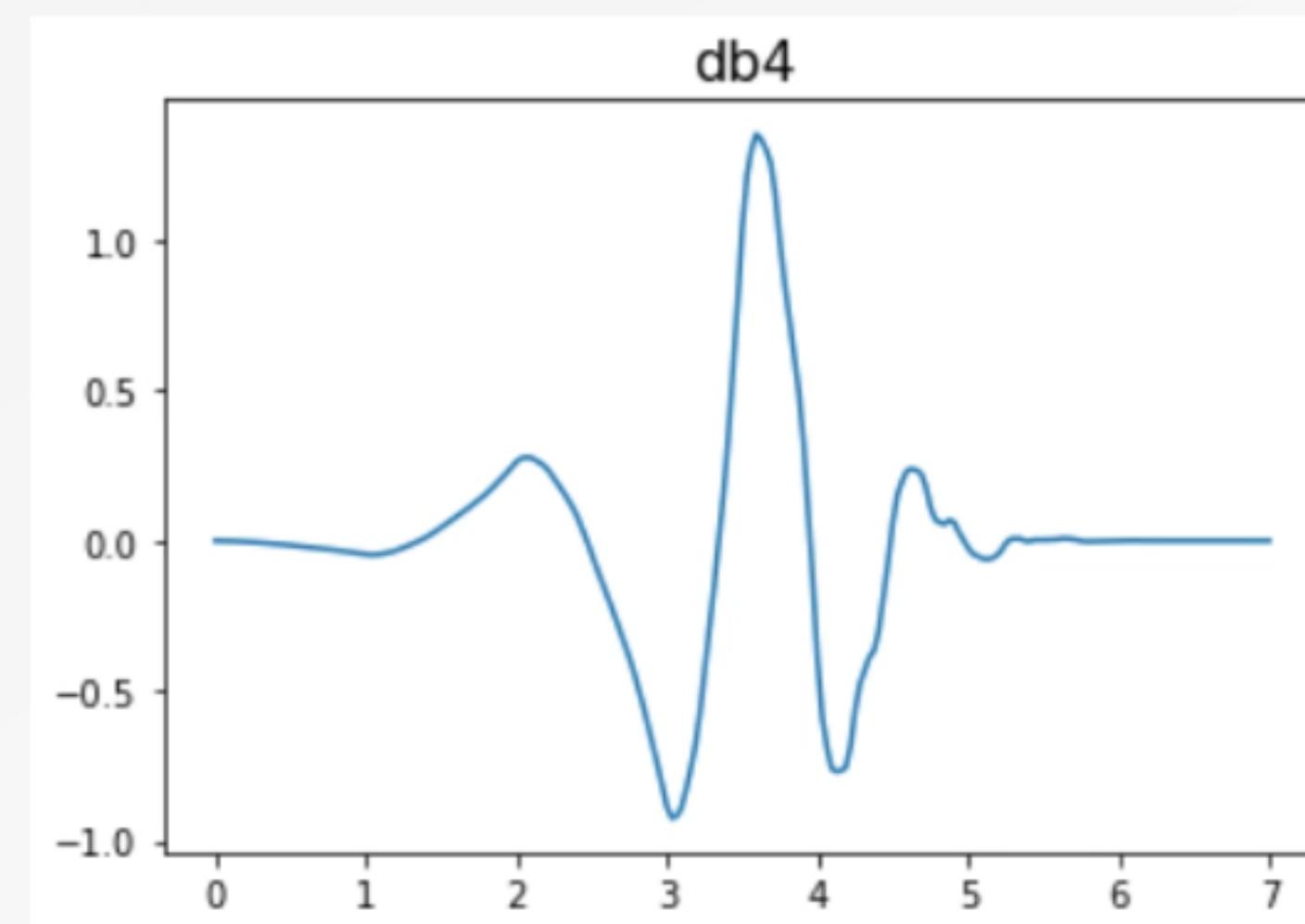
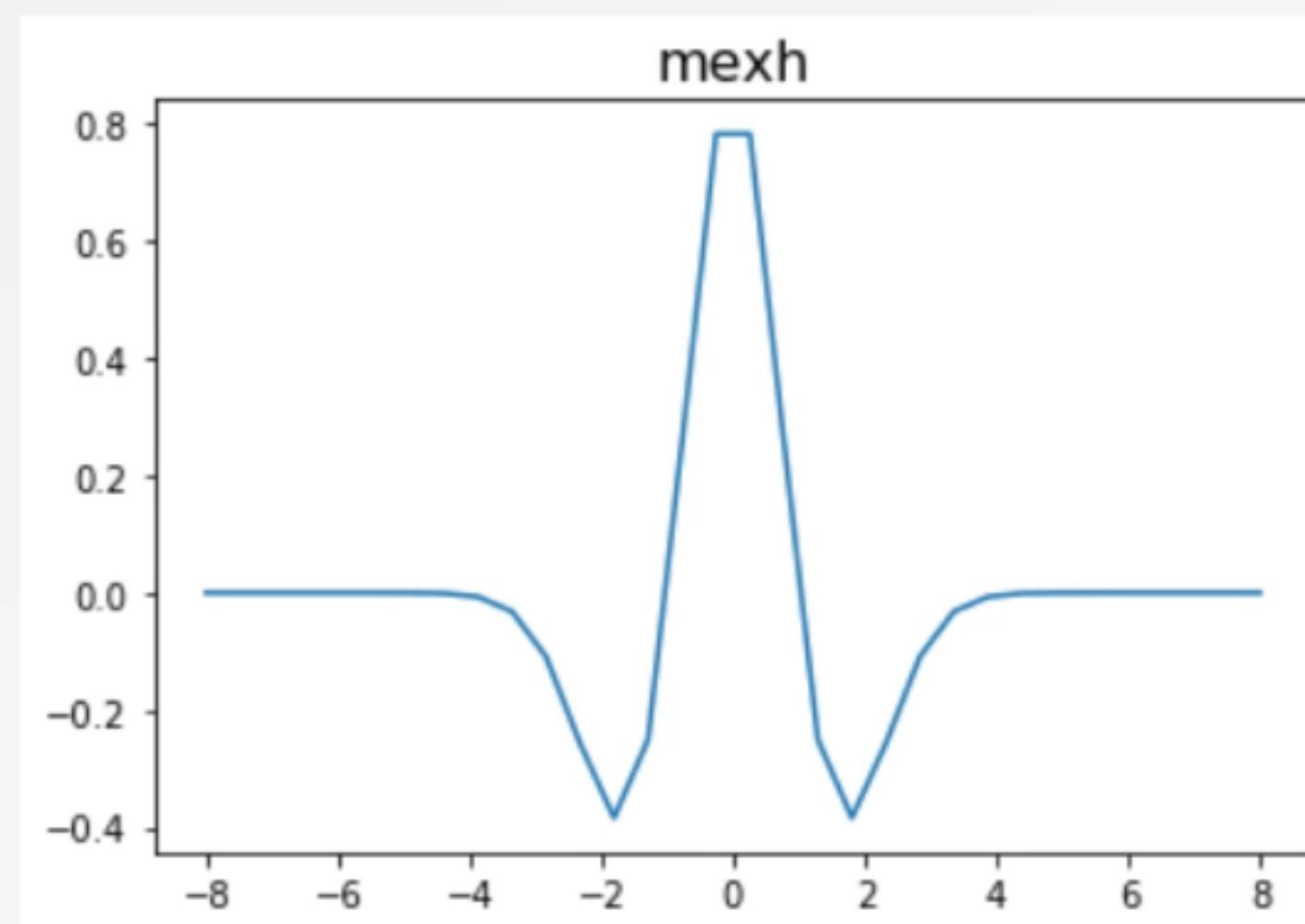
$$CWT(\tau, s) = \frac{1}{\sqrt{|s|}} \int_{-\infty}^{+\infty} x(t) \overline{\psi\left(\frac{t-\tau}{s}\right)} dt$$

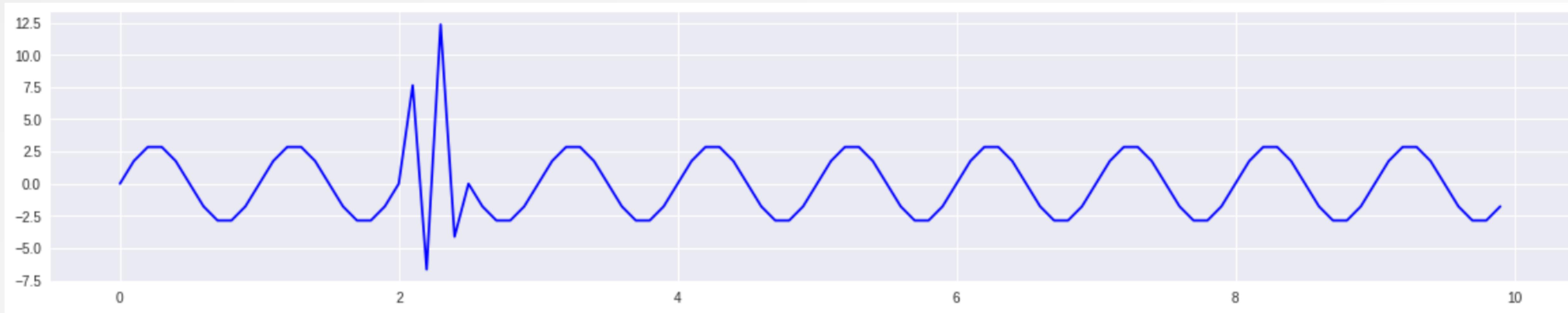
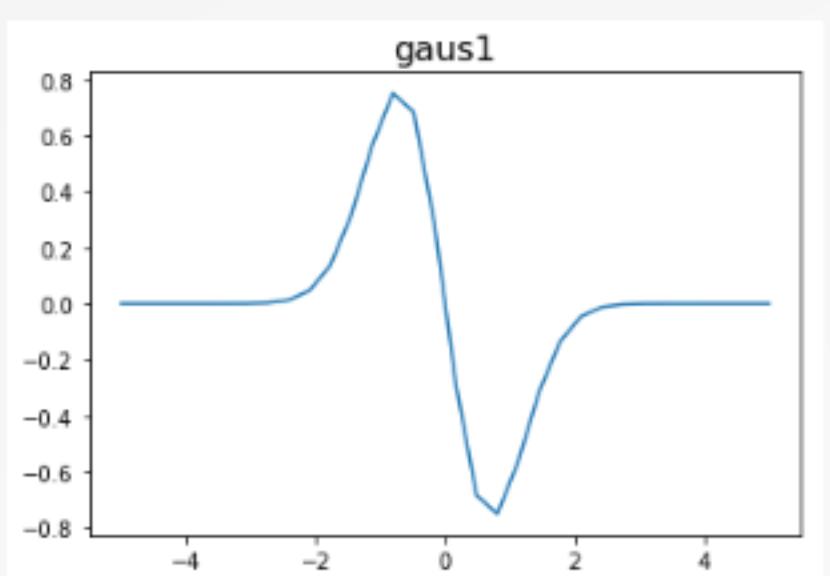
translation *scale*

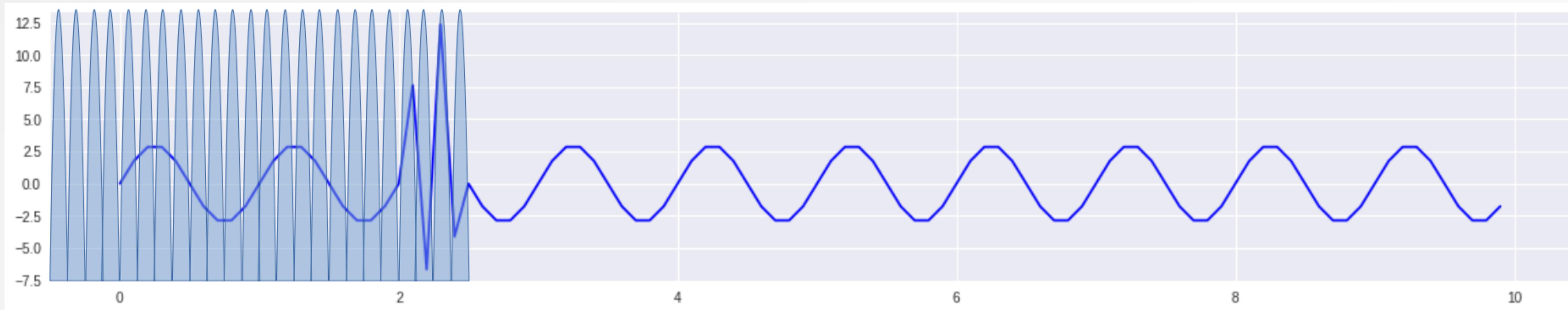
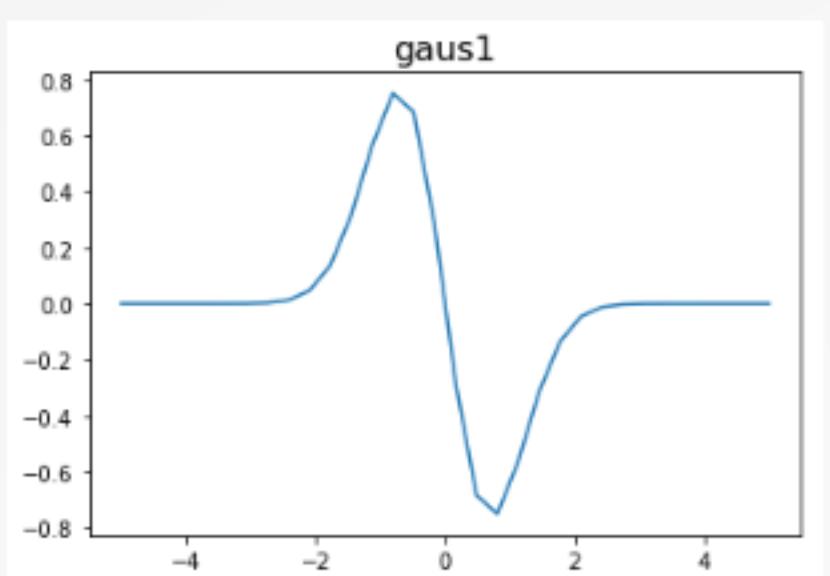
$\psi(t)$

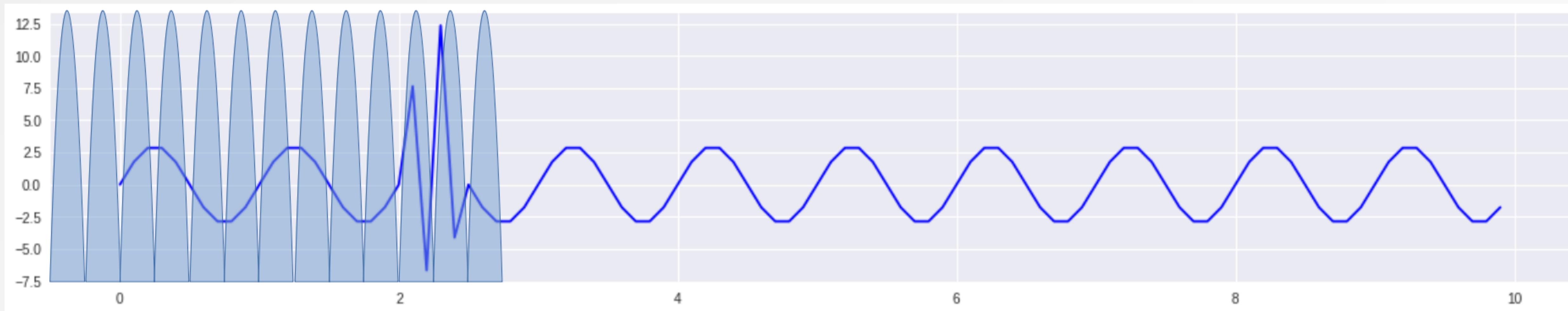
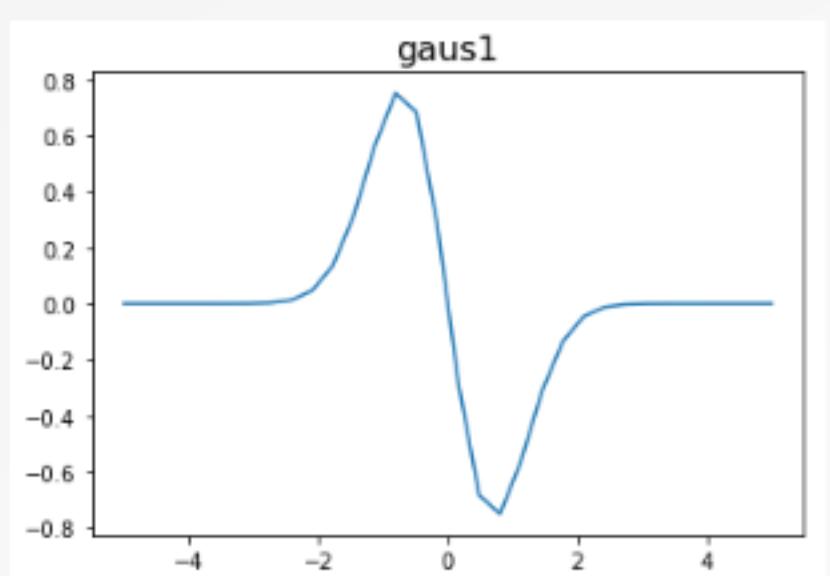


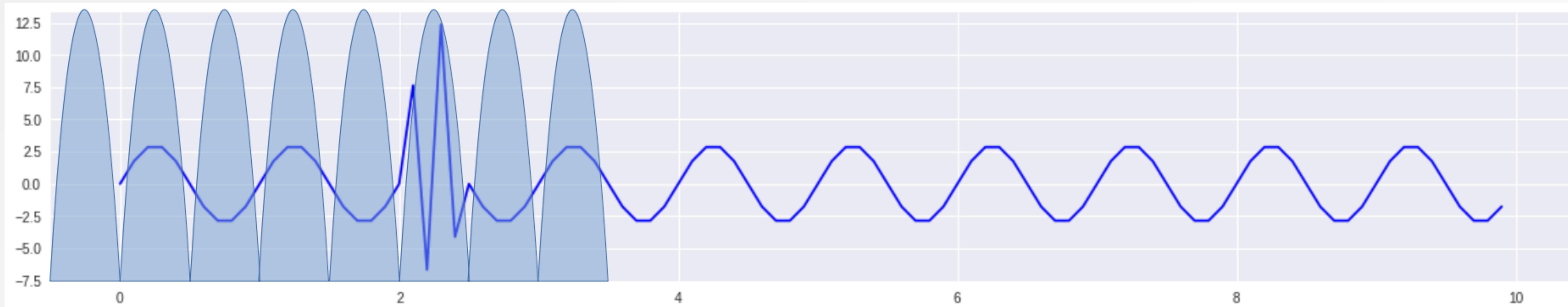
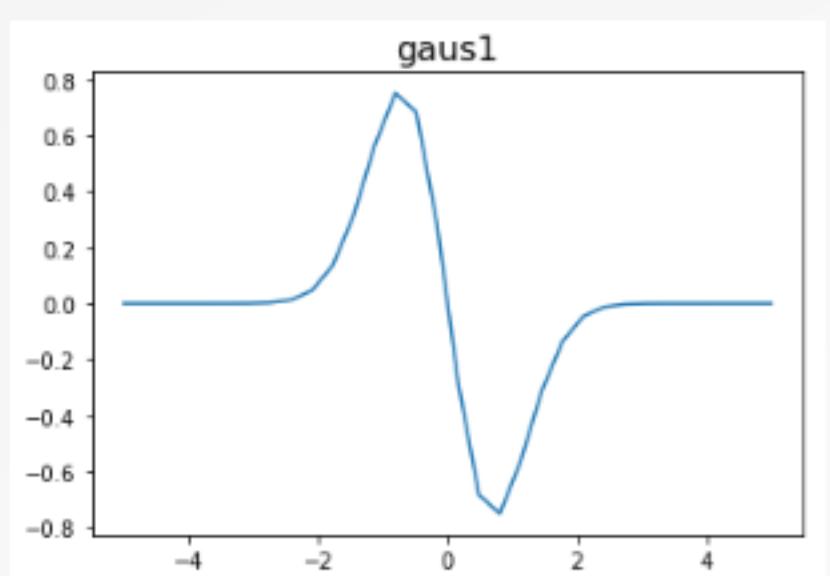
$\psi(\cdot)$











- Continuous Wavelet Transform
 - - Time-frequency analysis
- Discrete Wavelet Transform
 - - Data compression
 - - Noise reduction

0-1'000
0 - 100
100'000

