1. Find the optimal LPPL parameters, suppose tc in [1151,1166]

A = 4.590957870276358

B = -0.10735667370970817

C = 0.3790624109125155

tc= 1156

 β = 0.21114369501466276

Φ= 2.751580662381676

 ω = 6.715542521994134

2. Plot the synthetic signals and real time-series data with different colors in a figure

