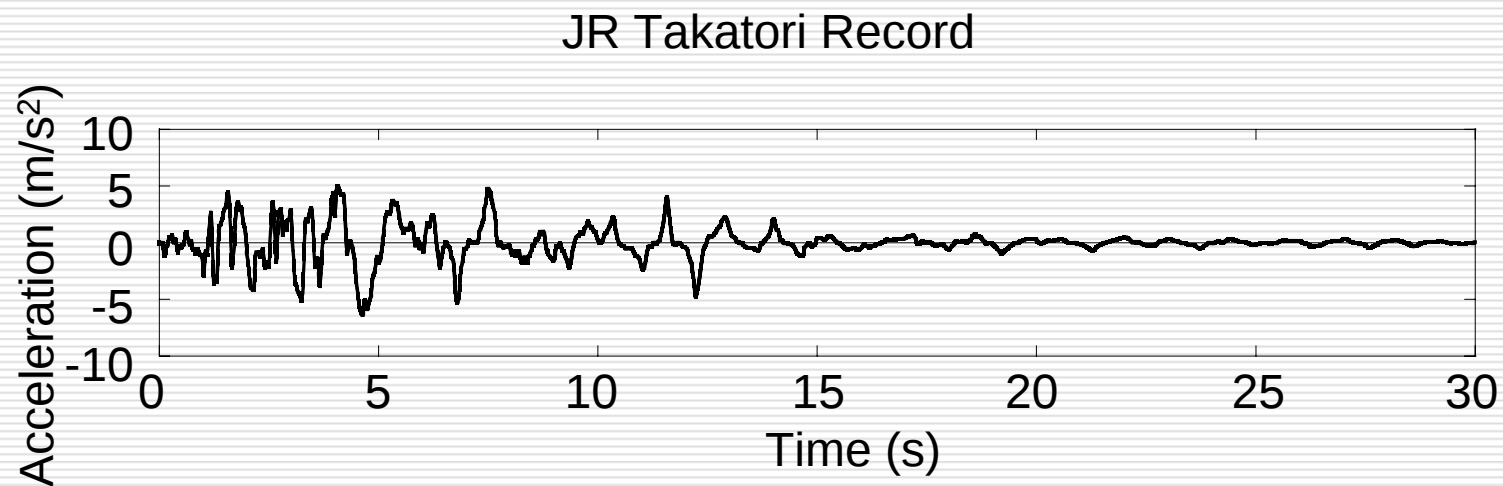
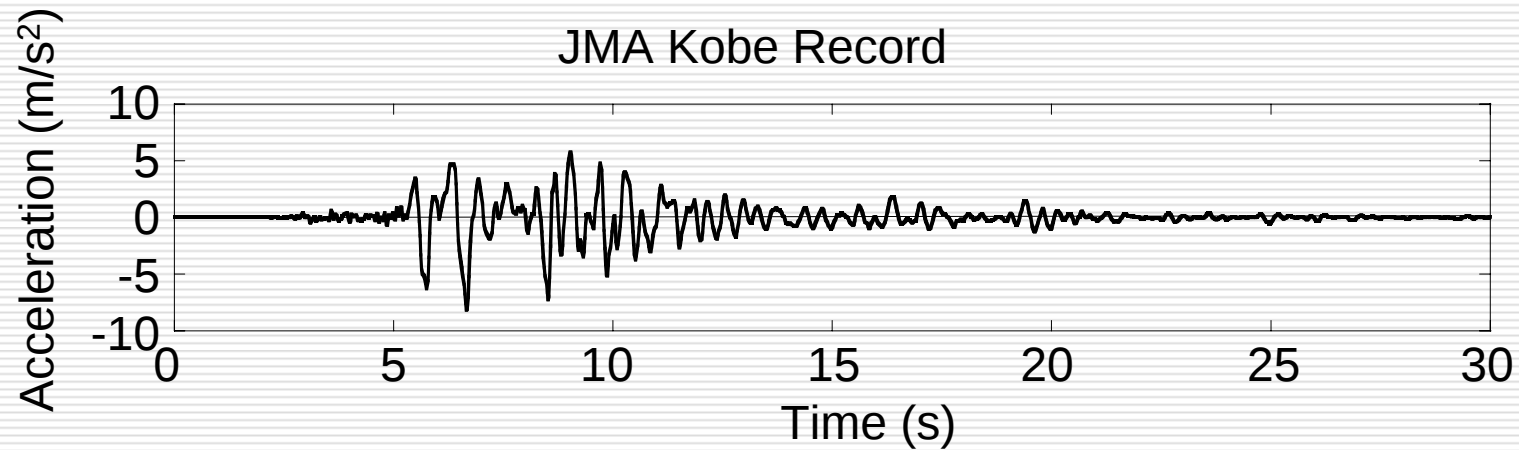


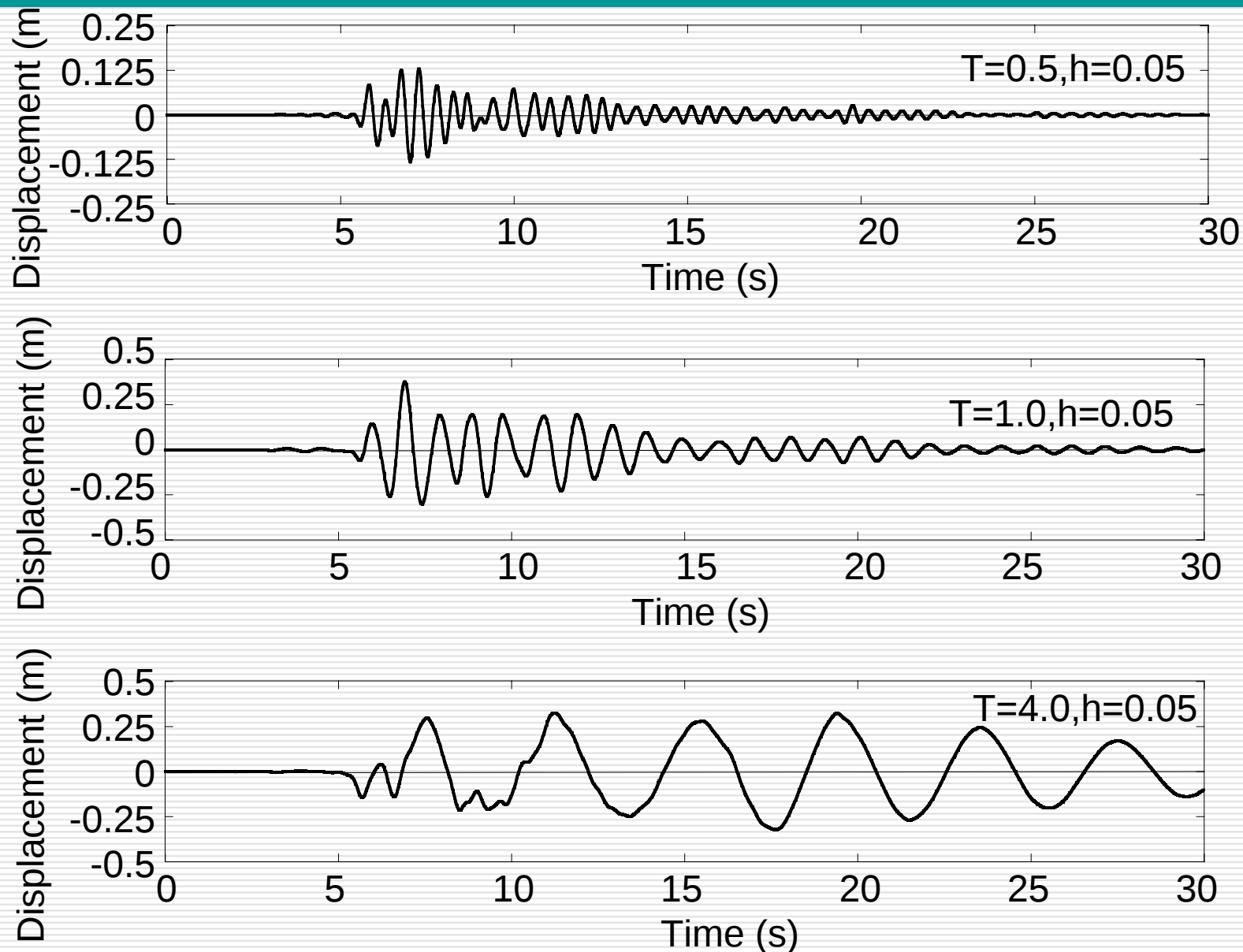
Appendix of Chapter 3
Example of Seismic Response of Single-
Degree-of-Freedom System

1. How does oscillation change by varying the natural period?

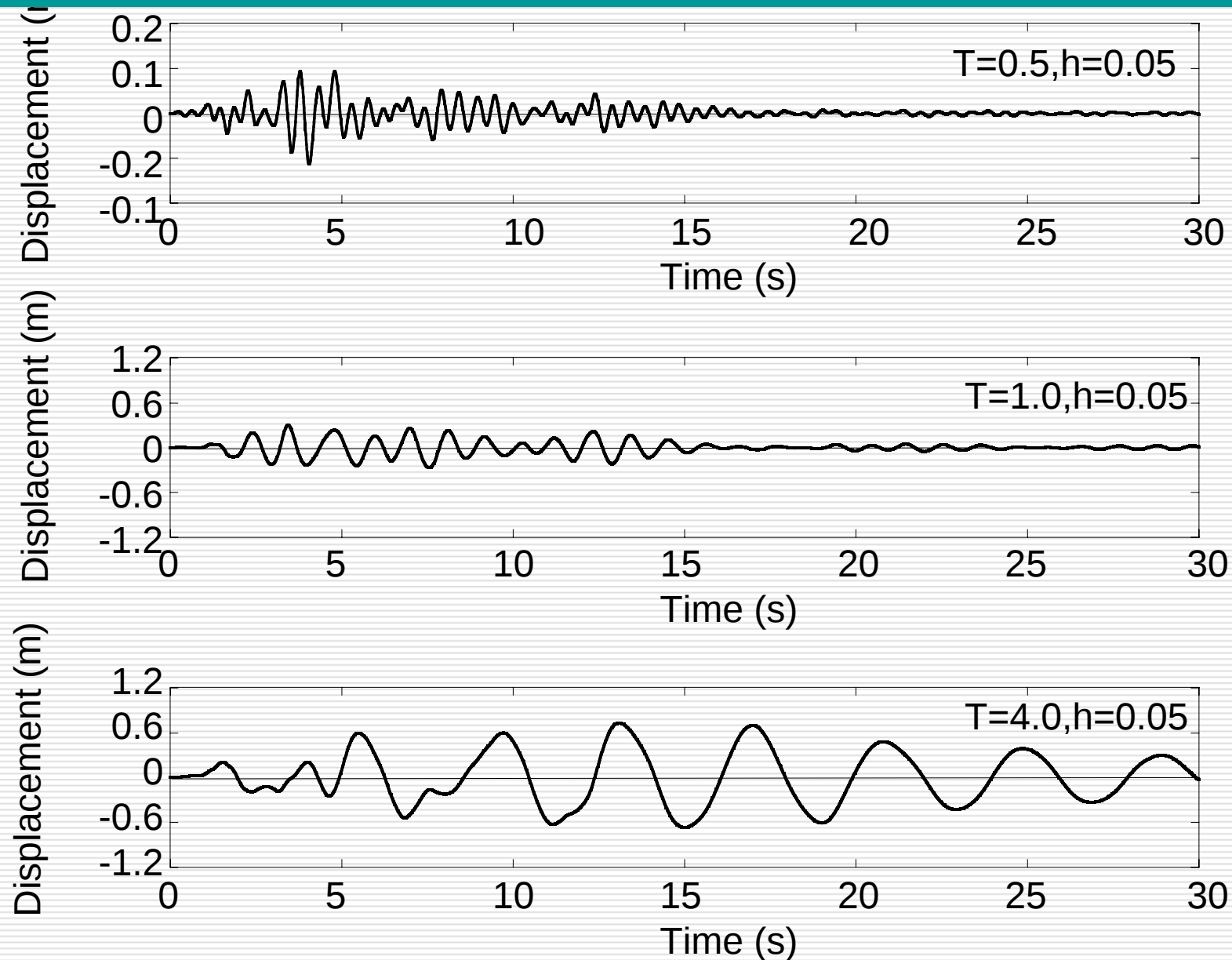
Near-field ground motions recorded during the 1995 Kobe, Japan earthquake



Response Displacement of SDOF System with 0.05 Damping Ratio under JMA Kobe Record

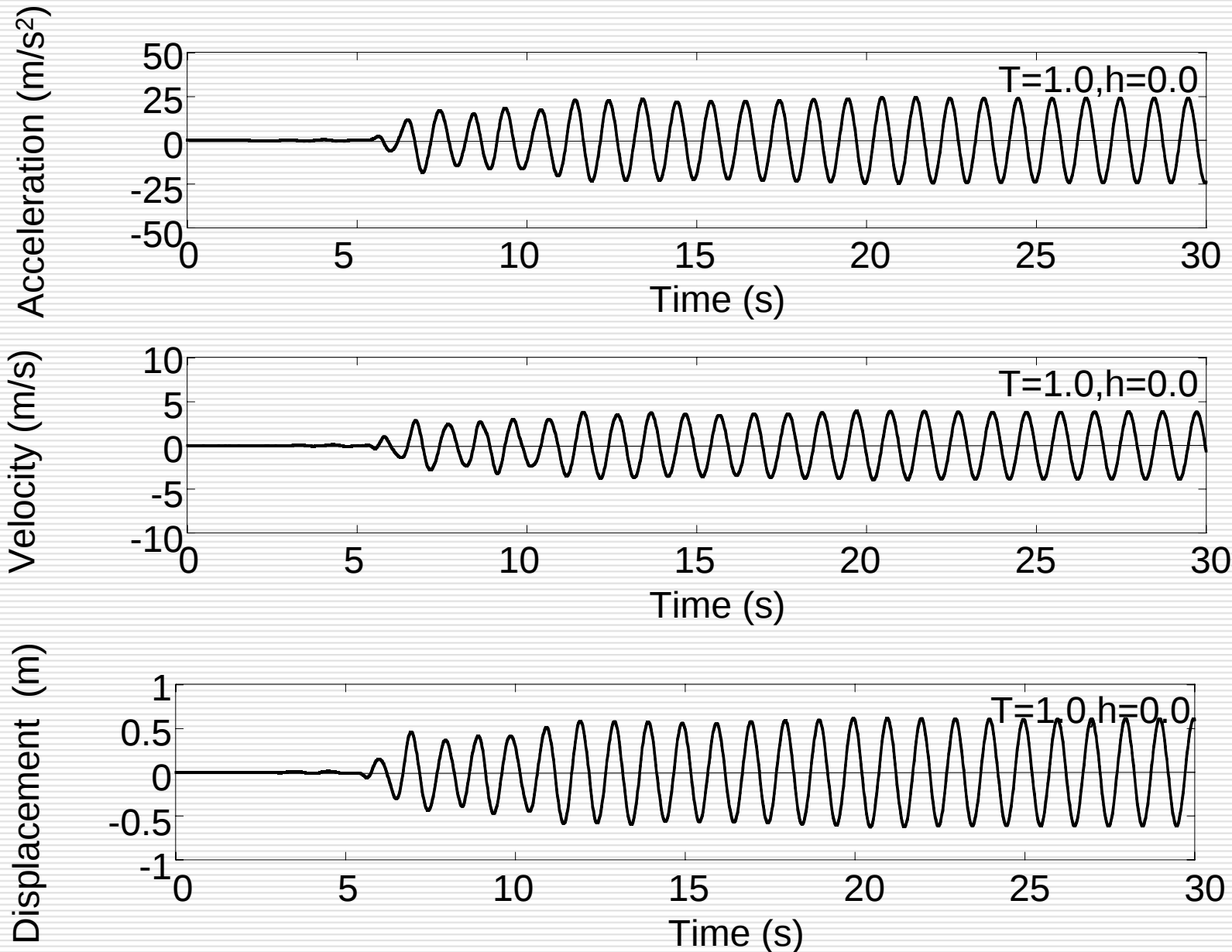


Response Displacement of SDOF System with 0.05 Damping Ratio under JR Takatori Record

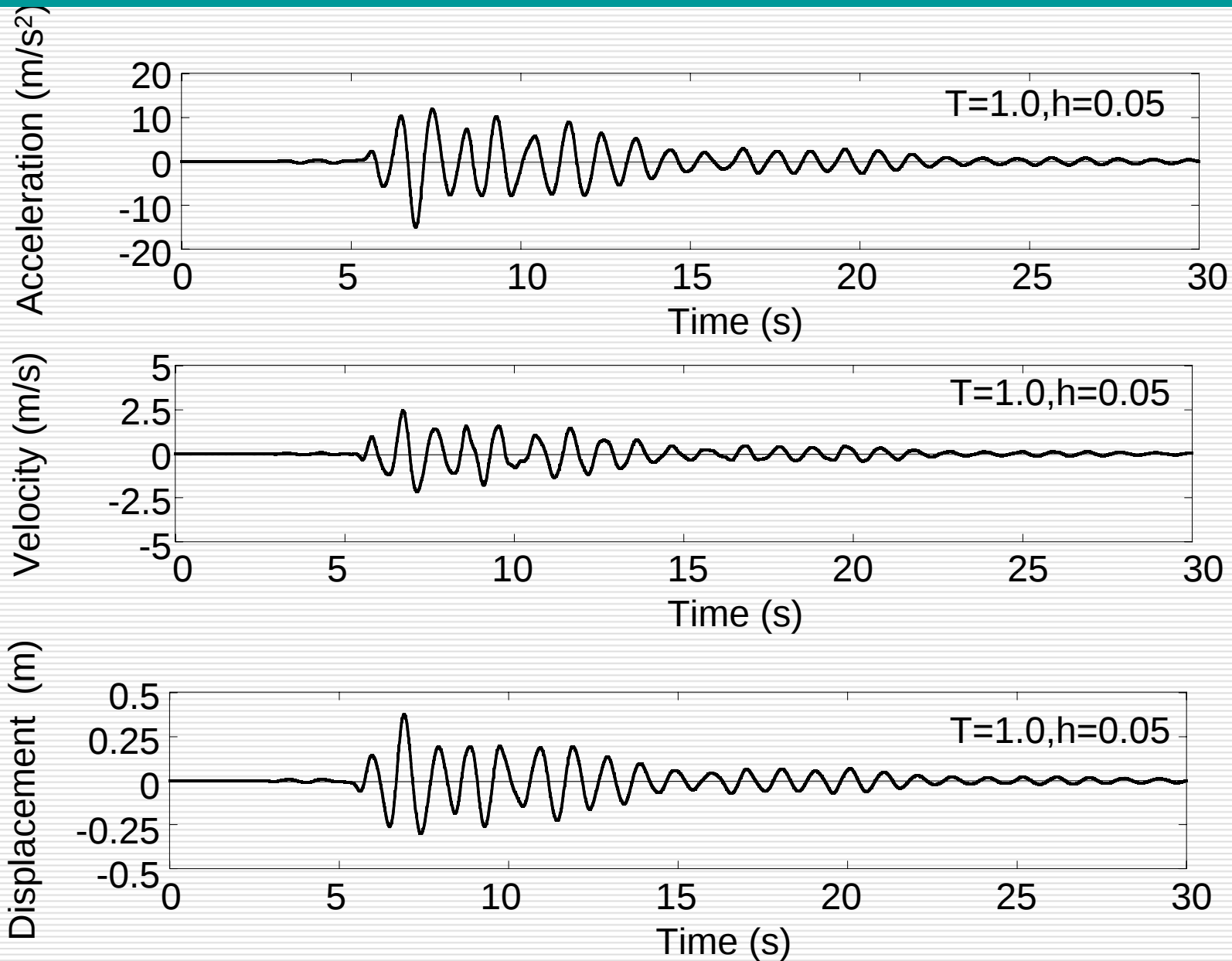


2. Response Acceleration, Velocity and Displacement of SDOF System with $T=1$ s and Various Damping Ratios under JMA Kobe Record

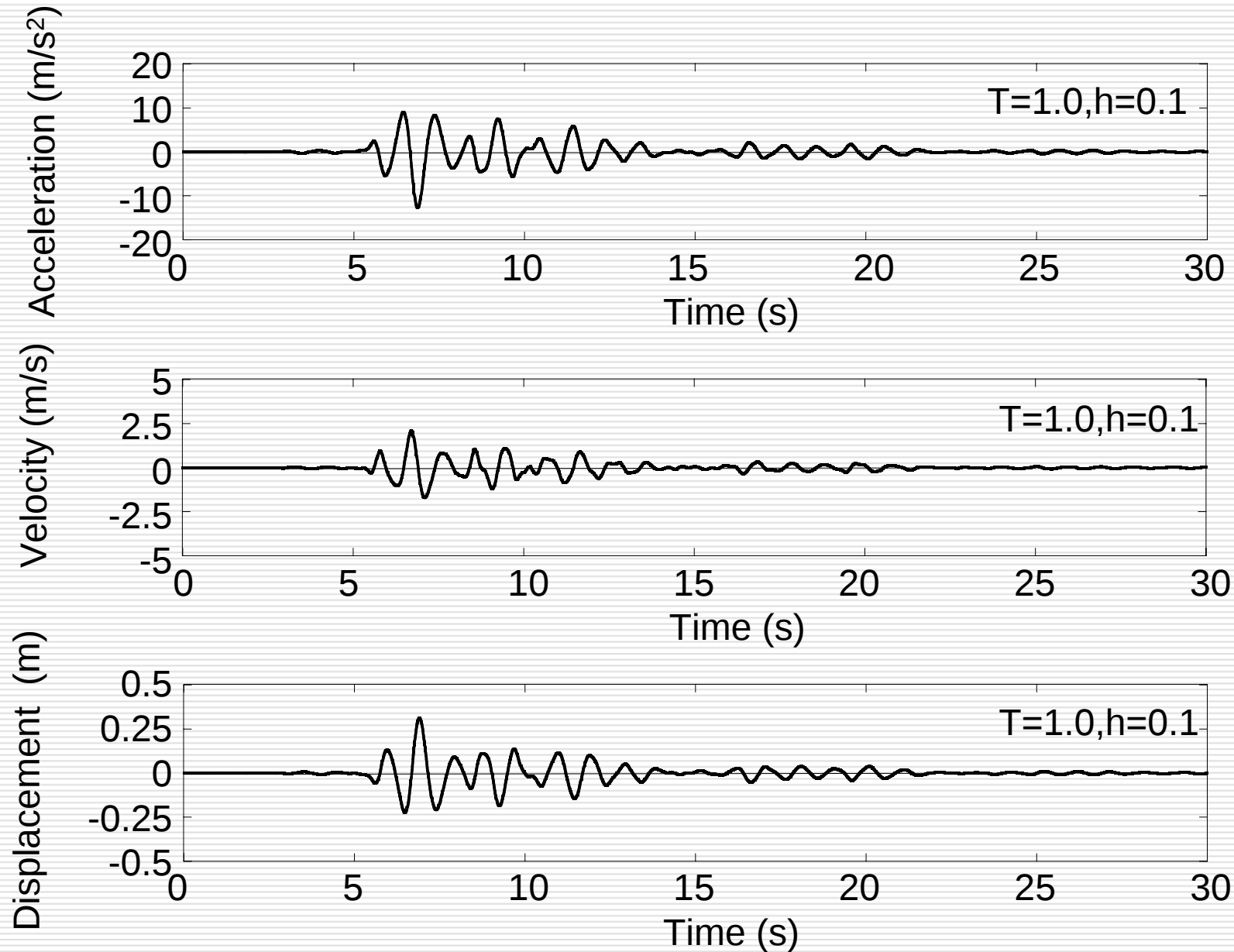
Response of SDOF System with $T=1$ s and Zero Damping Ratio under JMA Kobe Record



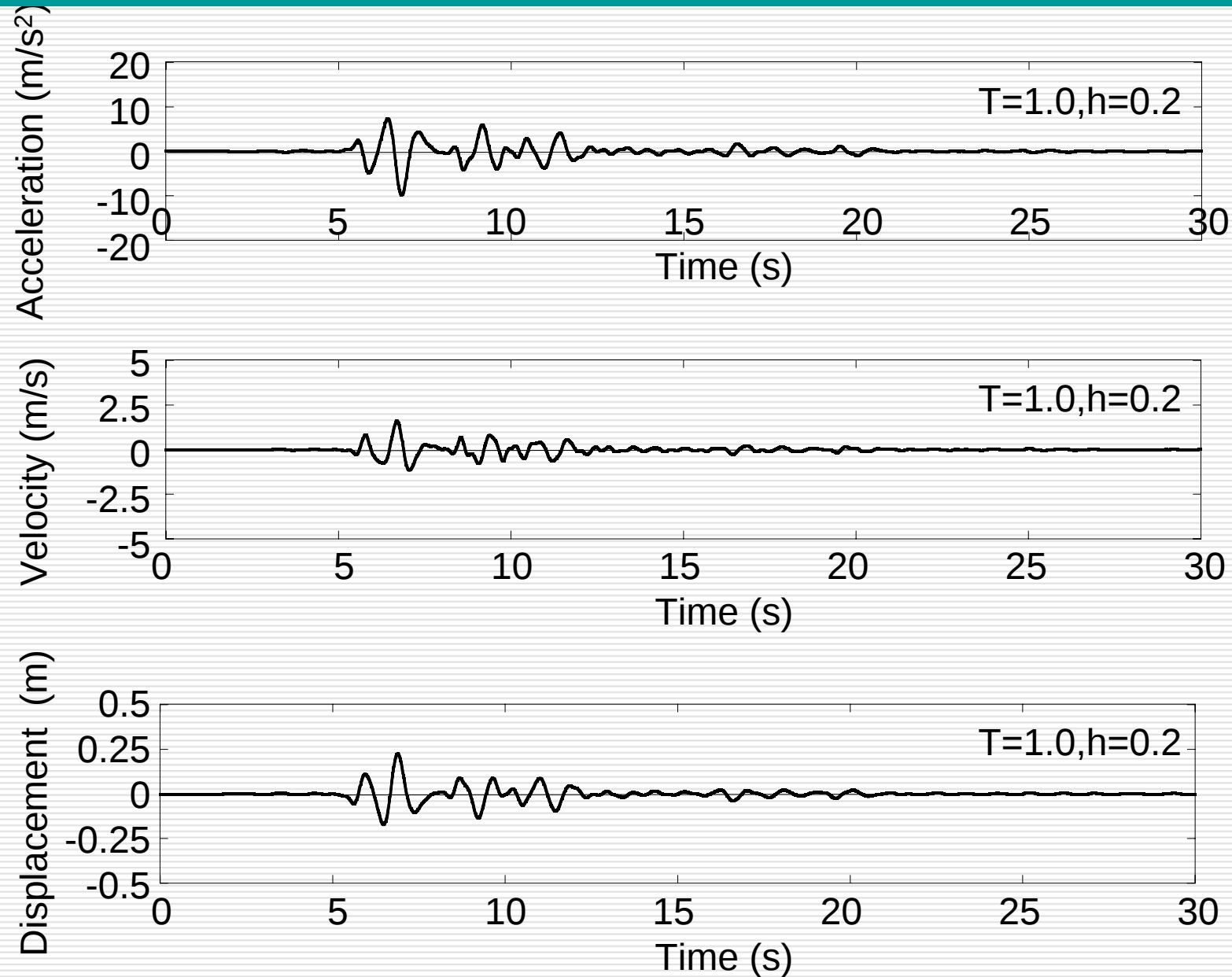
Response of SDOF System with $T=1$ s and 0.05 Damping Ratio under JMA Kobe Record



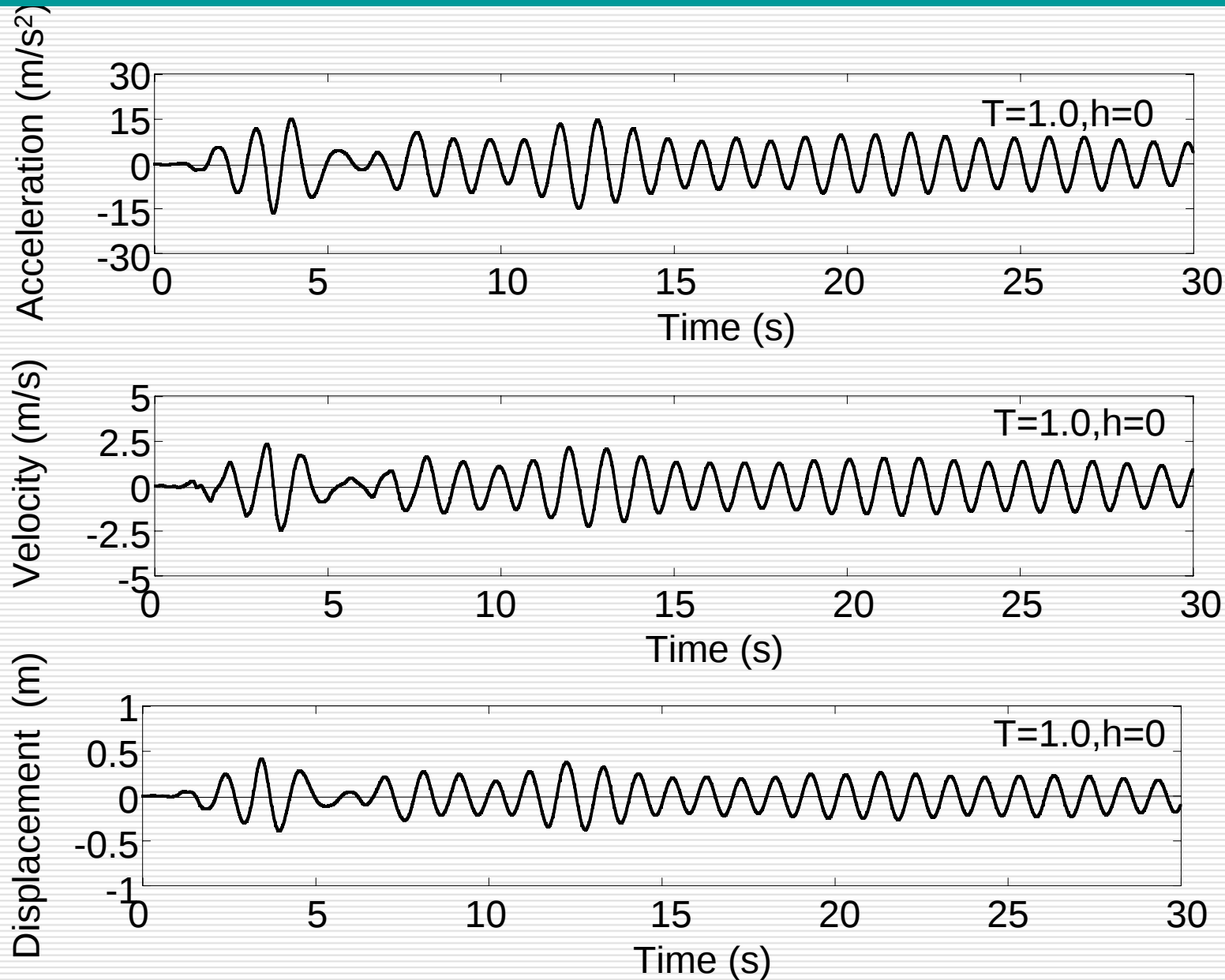
Response of SDOF System with $T=1$ s and 0.1 Damping Ratio under JMA Kobe Record



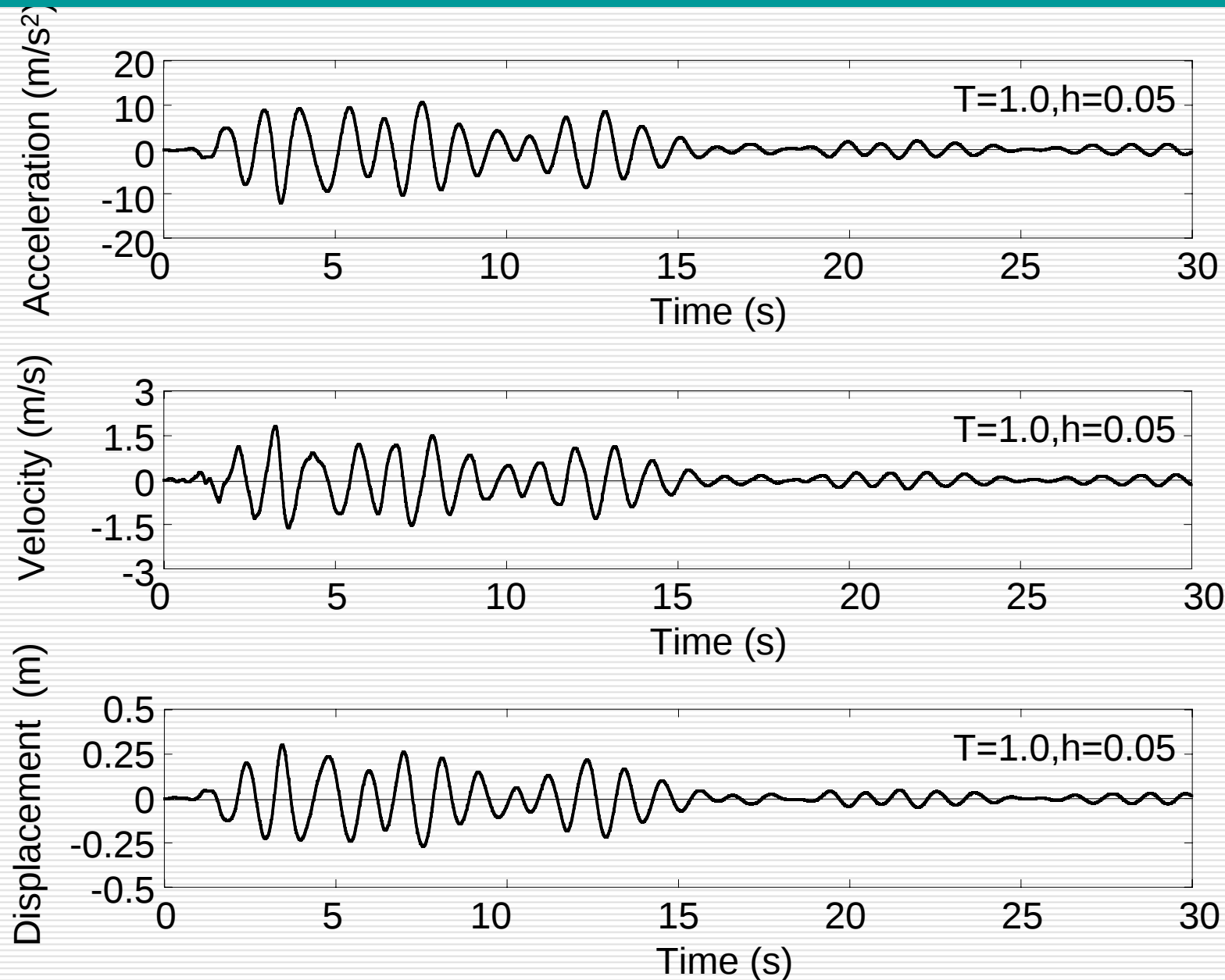
Response of SDOF System with $T=1$ s and 0.2 Damping Ratio under JMA Kobe Record



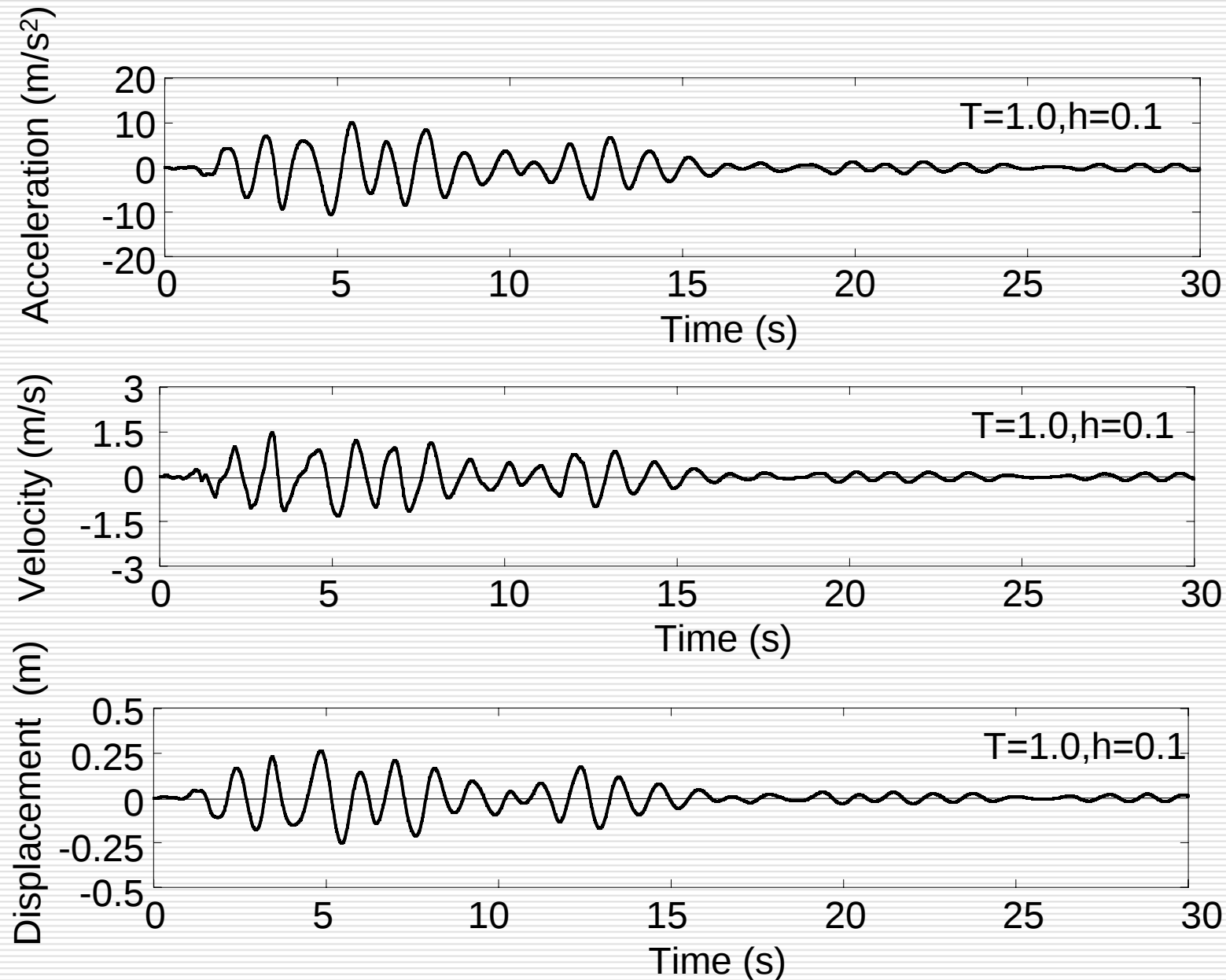
Response of SDOF System with $T=1$ s and Zero Damping Ratio under JR Takatori Record



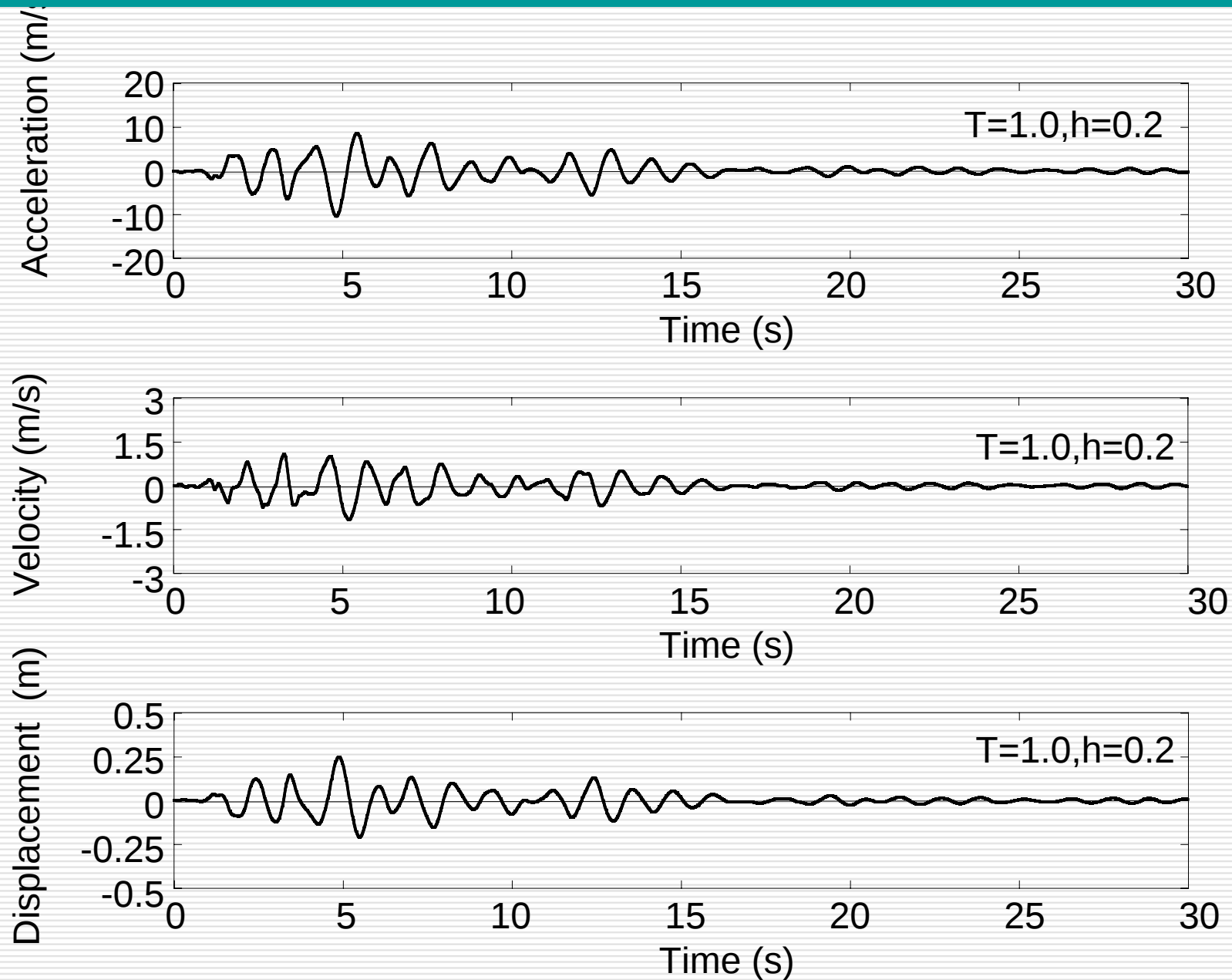
Response of SDOF System with $T=1$ s and 0.05 Damping Ratio under JR Takatori Record



Response of SDOF System with $T=1$ s and 0.1 Damping Ratio under JR Takatori Record



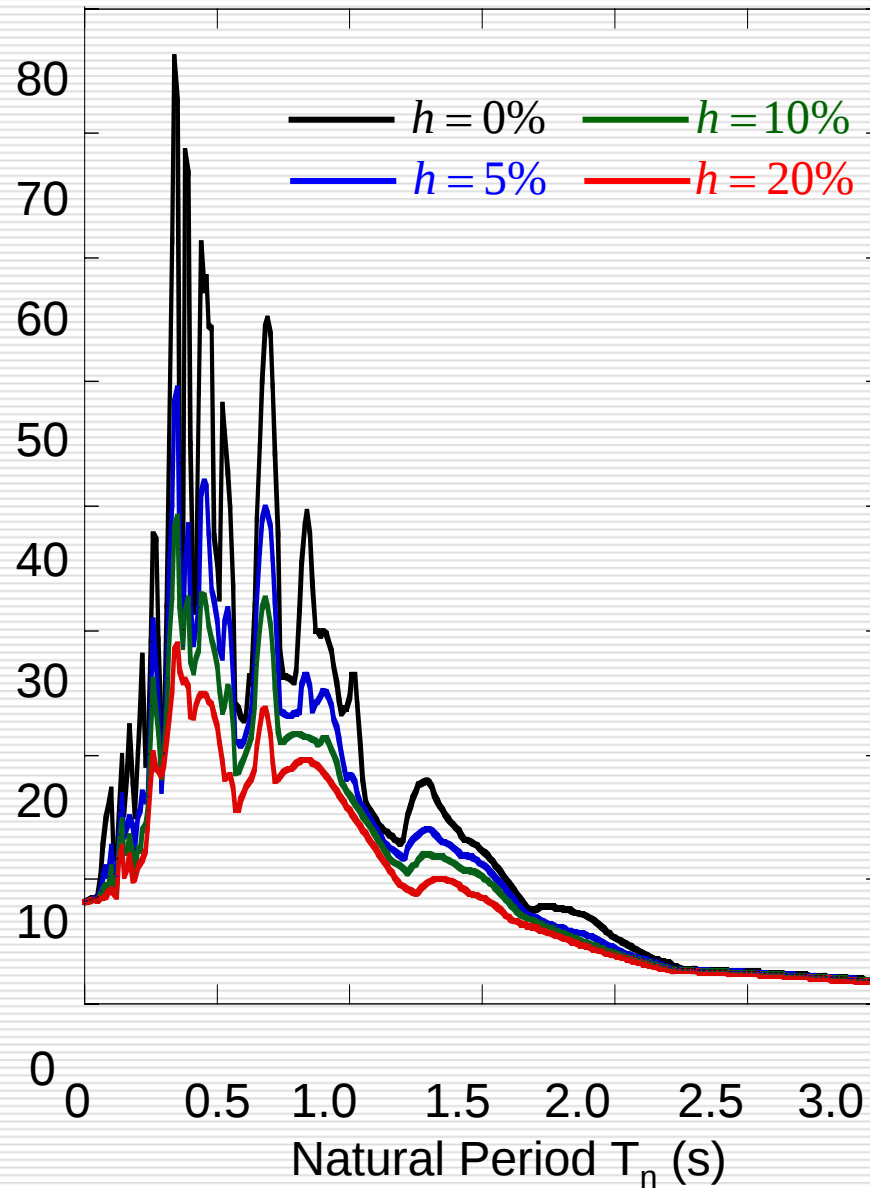
Response of SDOF System with $T=1$ s and 0.2 Damping Ratio under JR Takatori Record



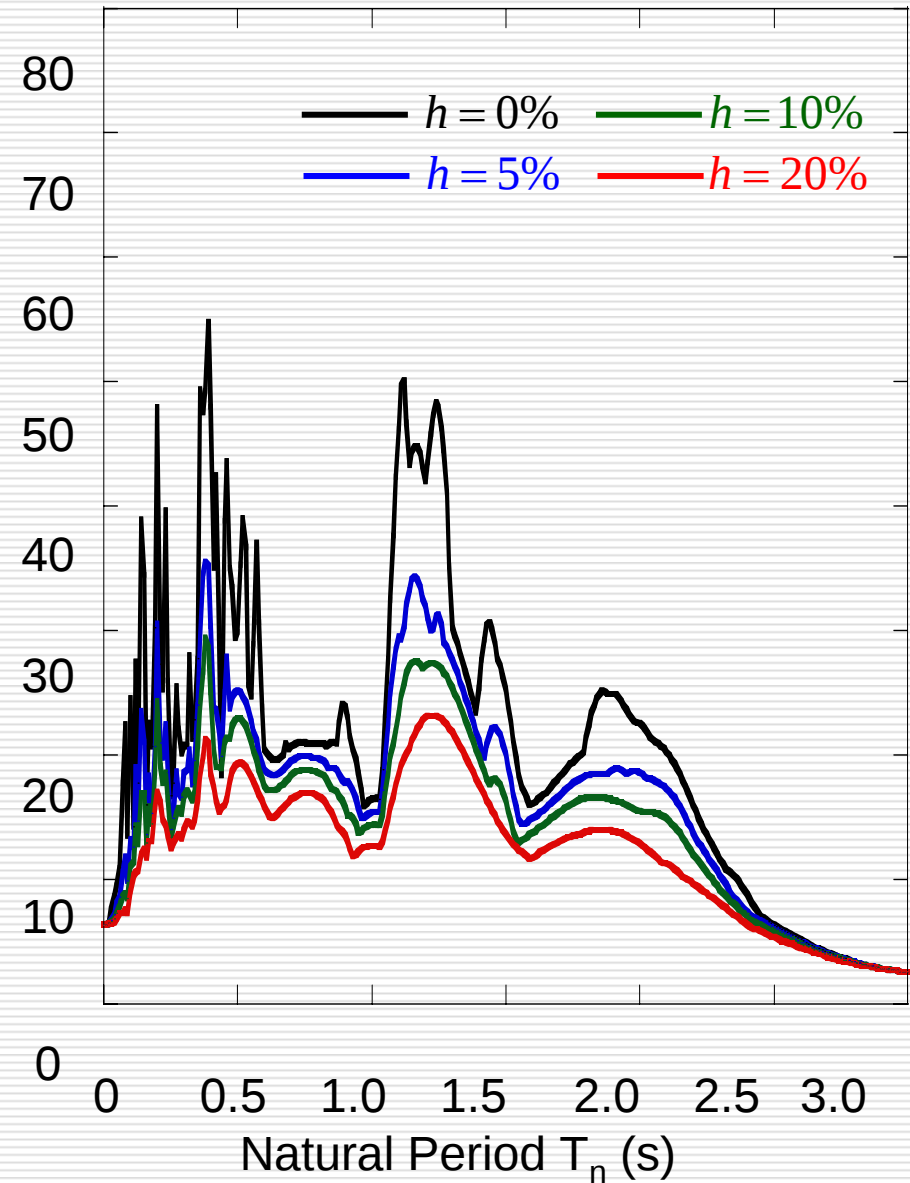
3. Response Acceleration, Velocity and Displacement Spectra for JMA Kobe and JR Takatori Records

Acceleration Response Spectra (m/s^2)

JMA Kobe

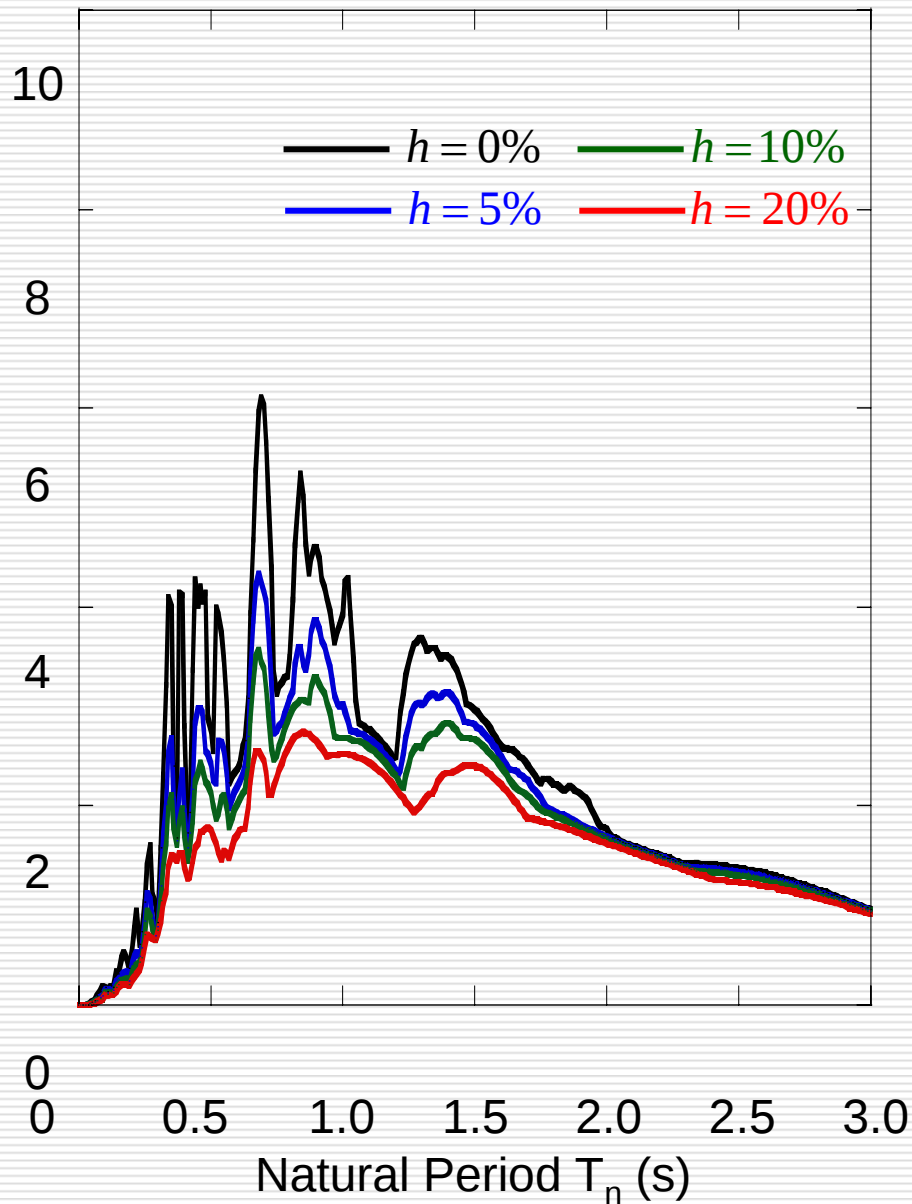


JR Takatori

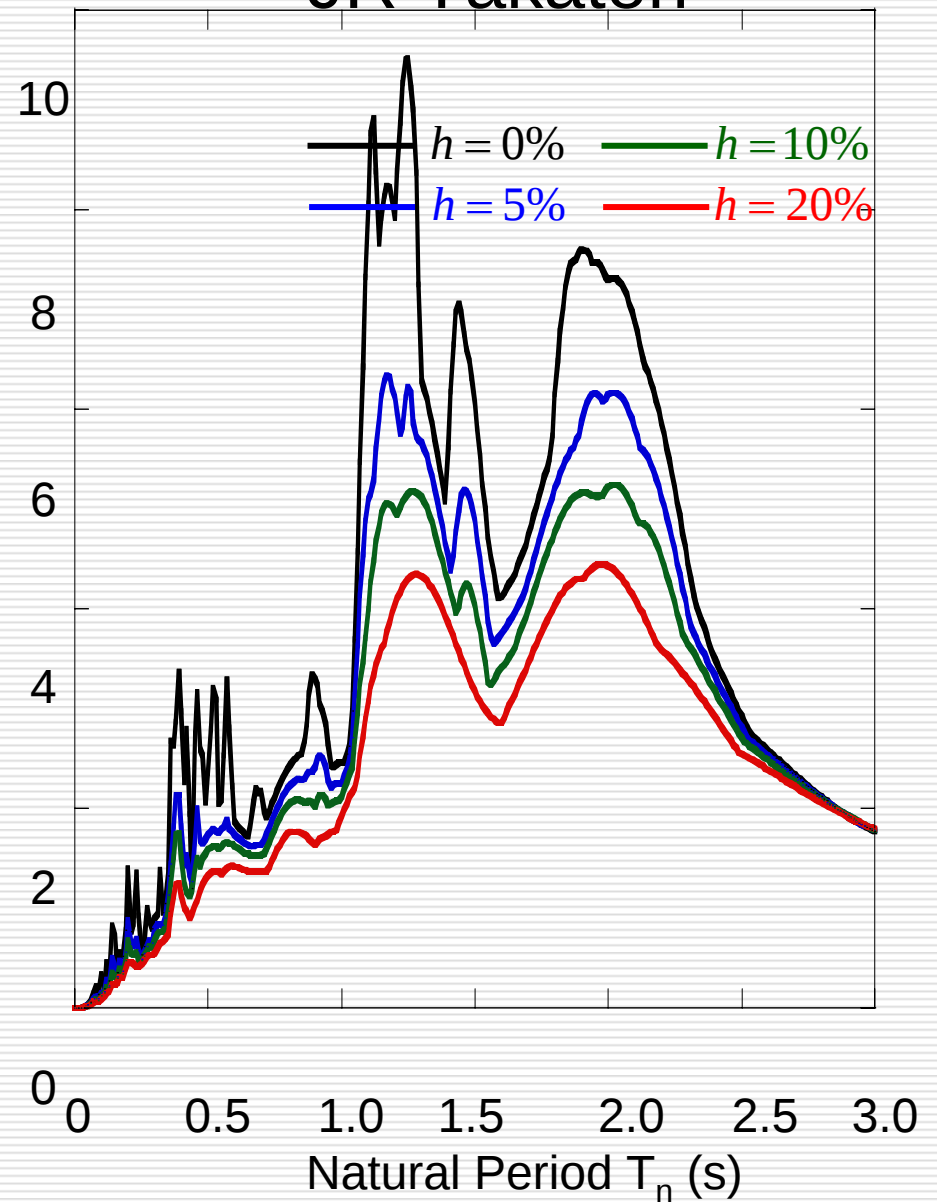


Velocity Response Spectra (m/s)

JMA Kobe

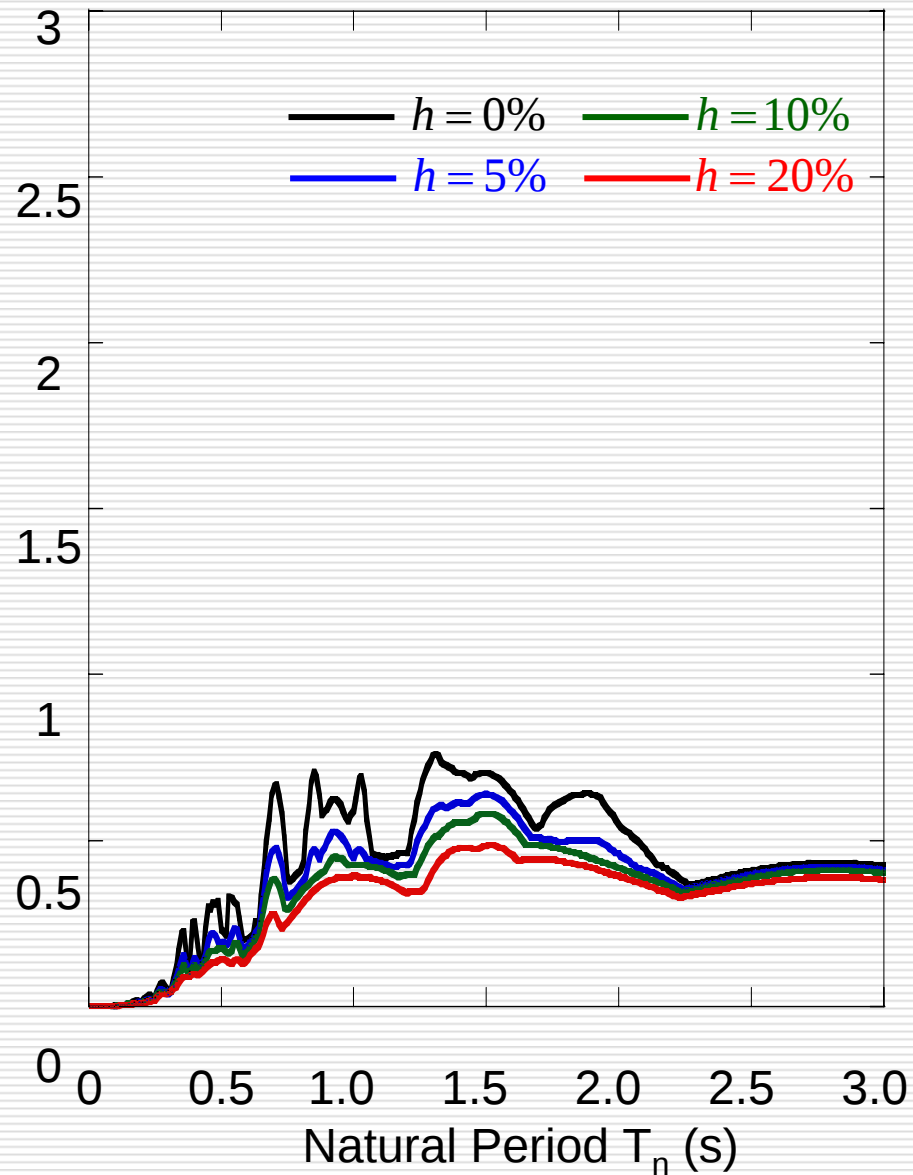


JR Takatori



Displacement Response Spectra

JMA Kobe



JR Takatori

