Logic Tree of PhiSS Node for Subduction Source
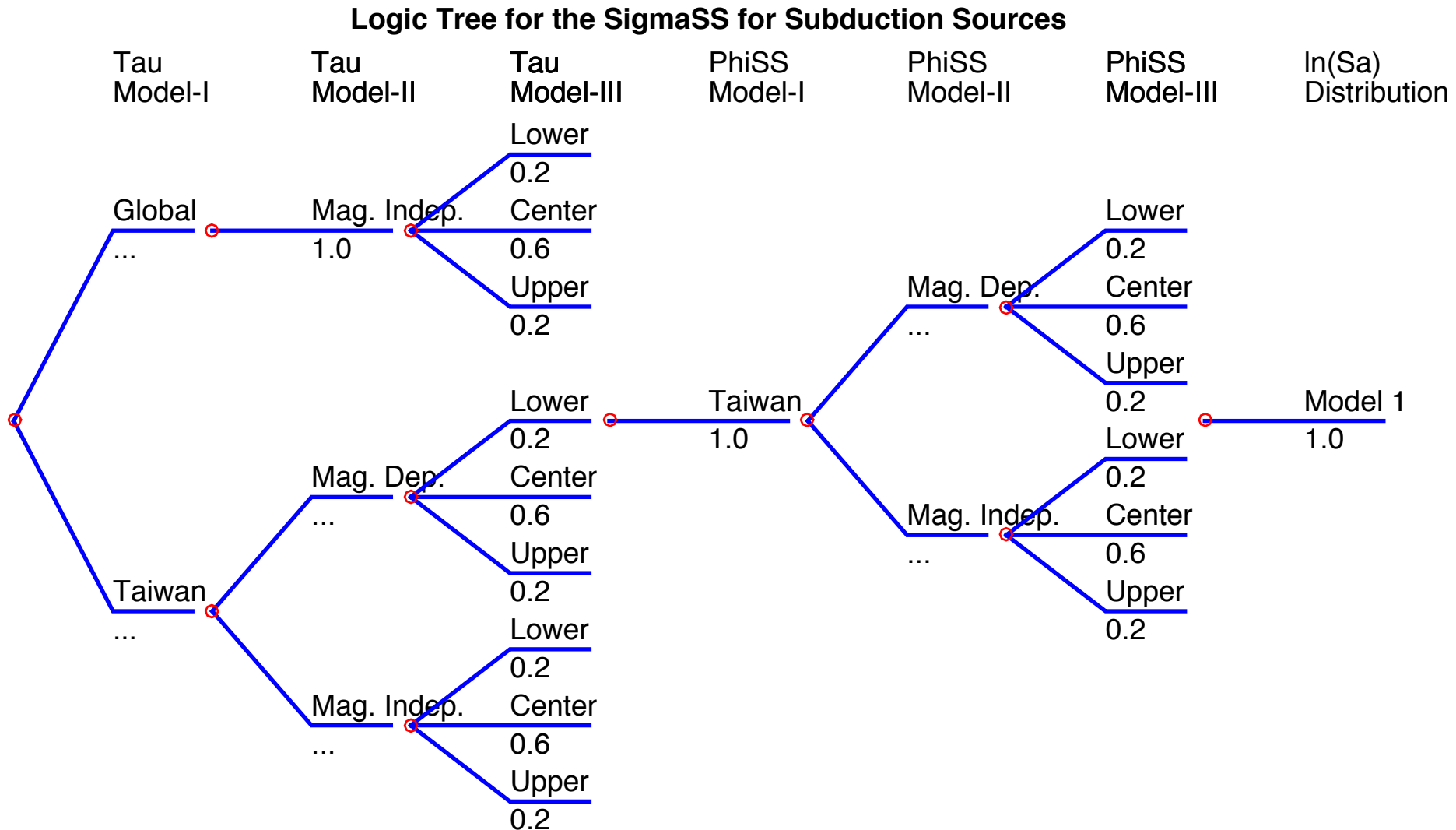
Y.N. Huang

GMC TI

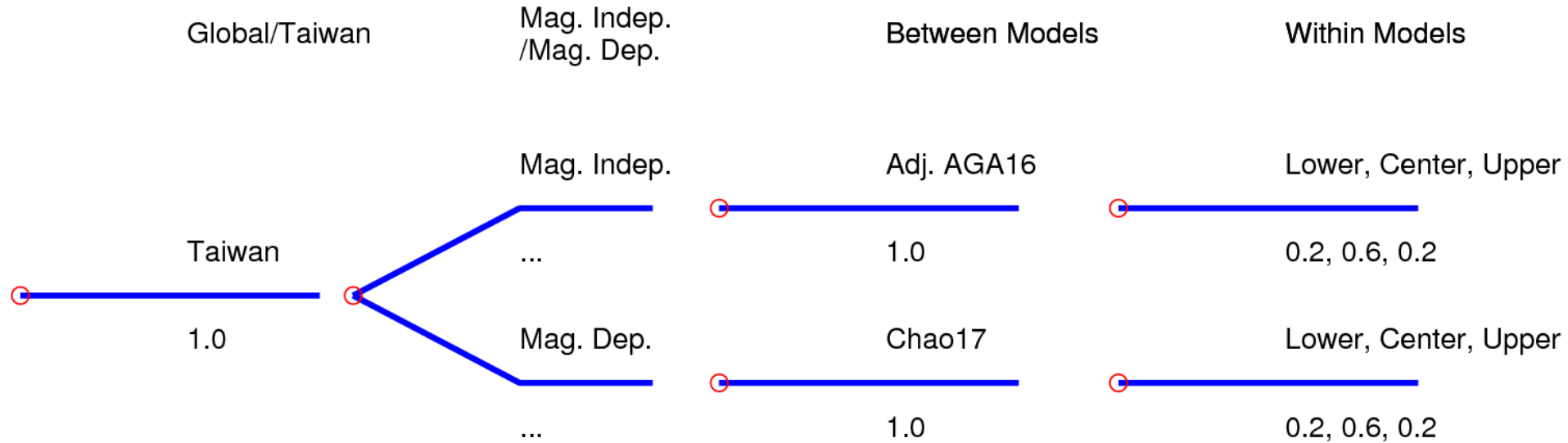**Taiwan SSHAC Level 3 PSHA Study**

Taipei, Taiwan

Content

- **Logic Tree of PhiSS Node for Subduction Sources**

- **List of PhiSS Models with TDIs for Subduction Sources**

- **Develop Logic Tree of PhiSS Models for Subduction Sources**

- **Comparison of PhiSS Models for Subduction Sources**

Logic Tree of the SigmaSS for Subduction Source


Logic Tree for the SigmaSS for Subduction Sources

Logic Tree of PhiSS Node for Subduction Event

Logic Tree of Phiss Node for Subduction Event

Global/Taiwan	Mag. Indep. /Mag. Dep.	Between Models	Within Models
	Mag. Indep.	Adj. AGA16	Lower, Center, Upper
Taiwan	...	1.0	0.2, 0.6, 0.2
1.0	Mag. Dep.	Chao17	Lower, Center, Upper
	...	1.0	0.2, 0.6, 0.2

List of PhiSS Models with TDIs for Subduction Sources

- **Taiwan PhiSS models**
  - Magnitude -Independent
    - Adj-AGA16
  - Magnitude –dependent
    - Chao17

Develop the Magnitude-Independent PhiSS Models for Subduction Event – Taiwan Branch
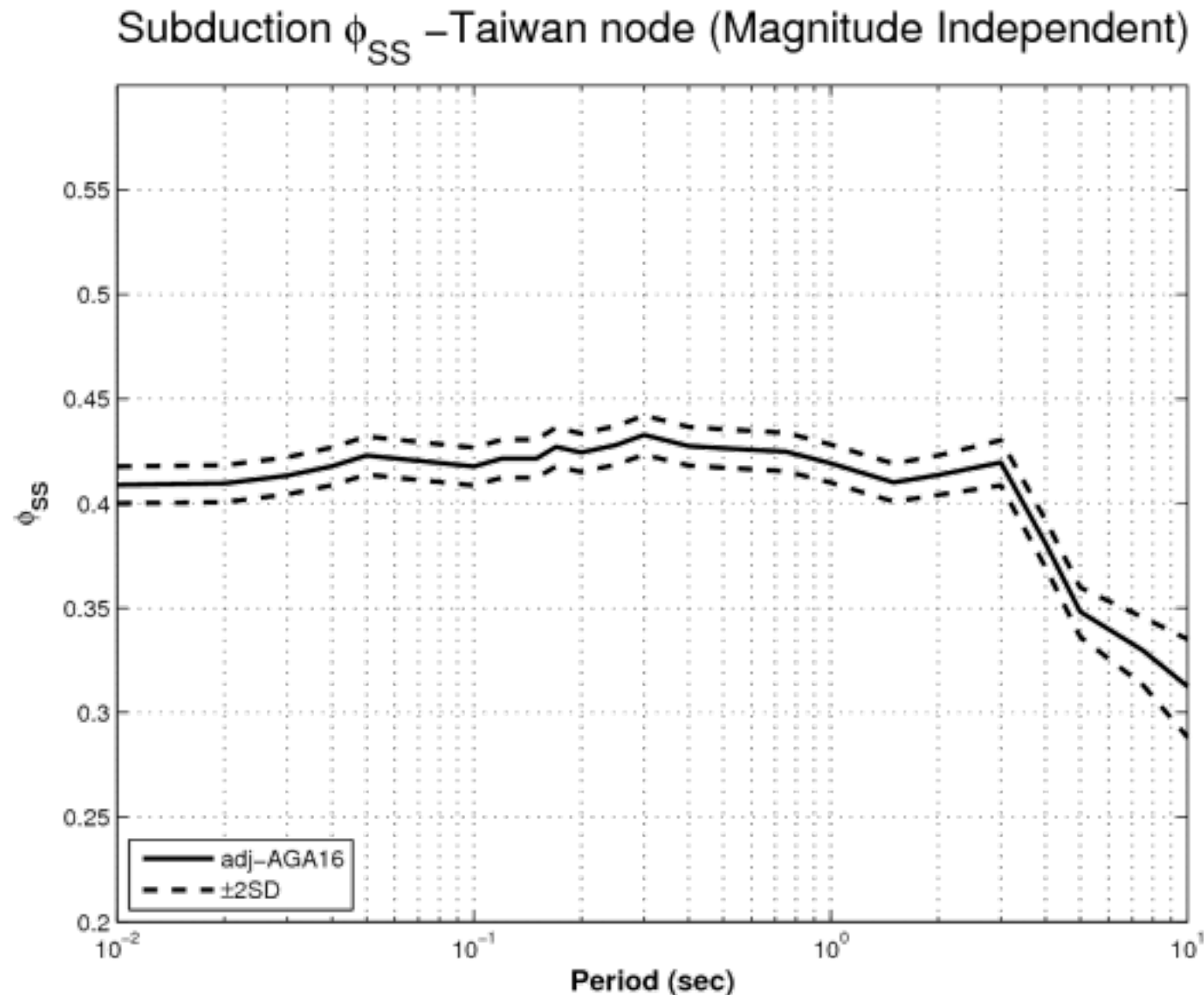
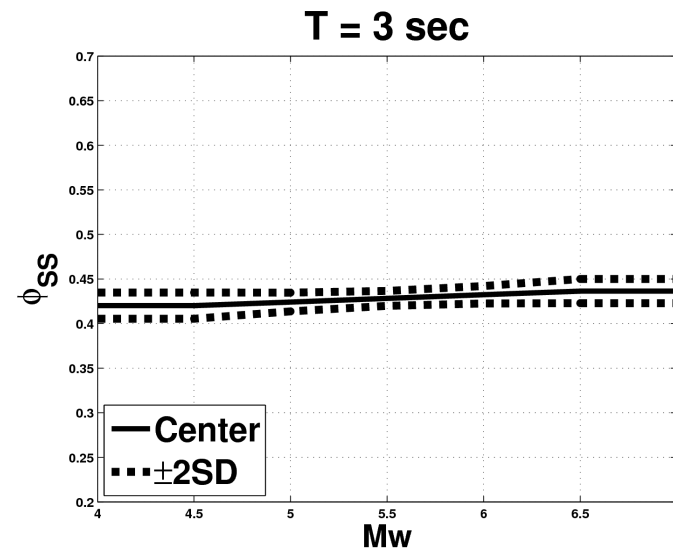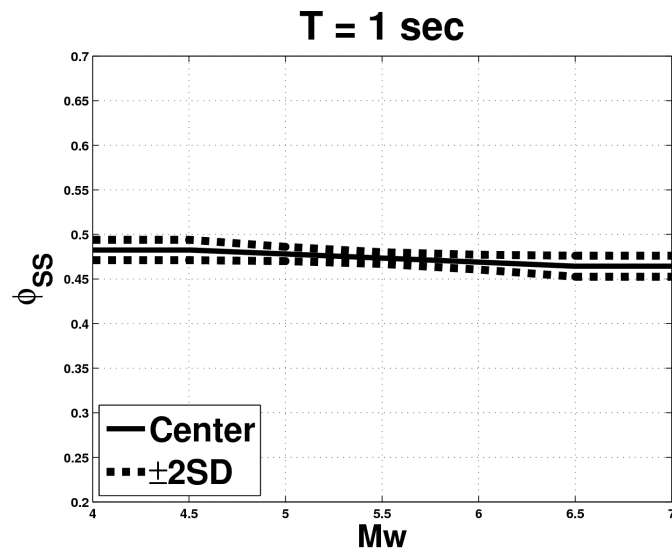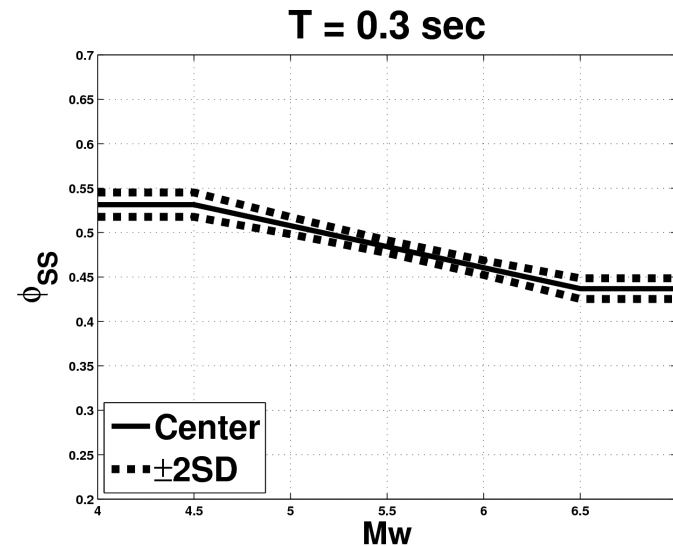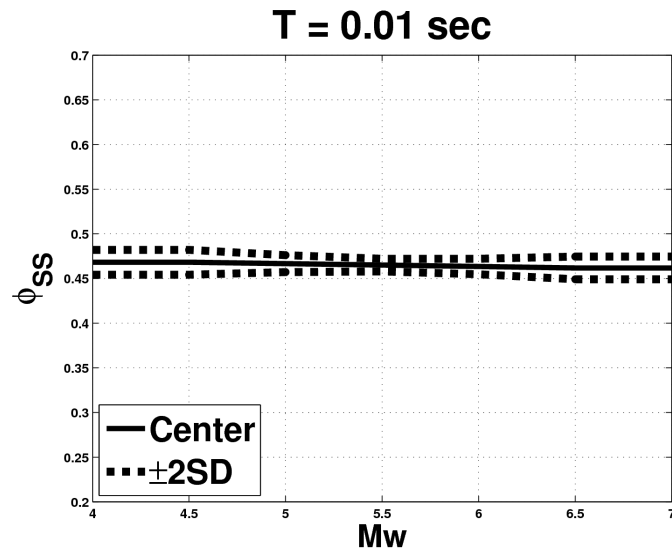Subduction ϕ_{SS} –Taiwan node (Magnitude Independent)

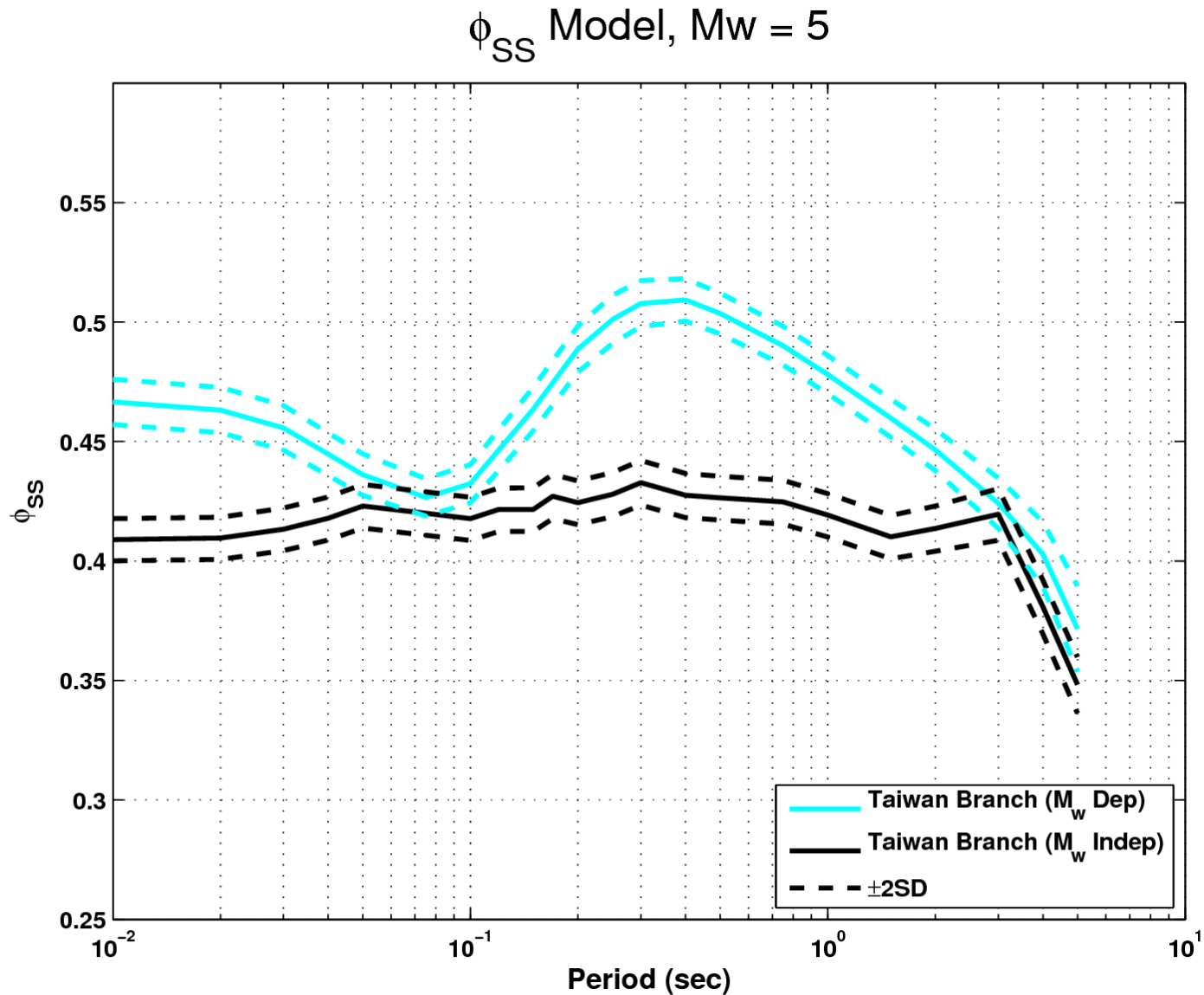# Develop the Magnitude-Dependent PhiSS Models for Subduction Event – Taiwan Branch

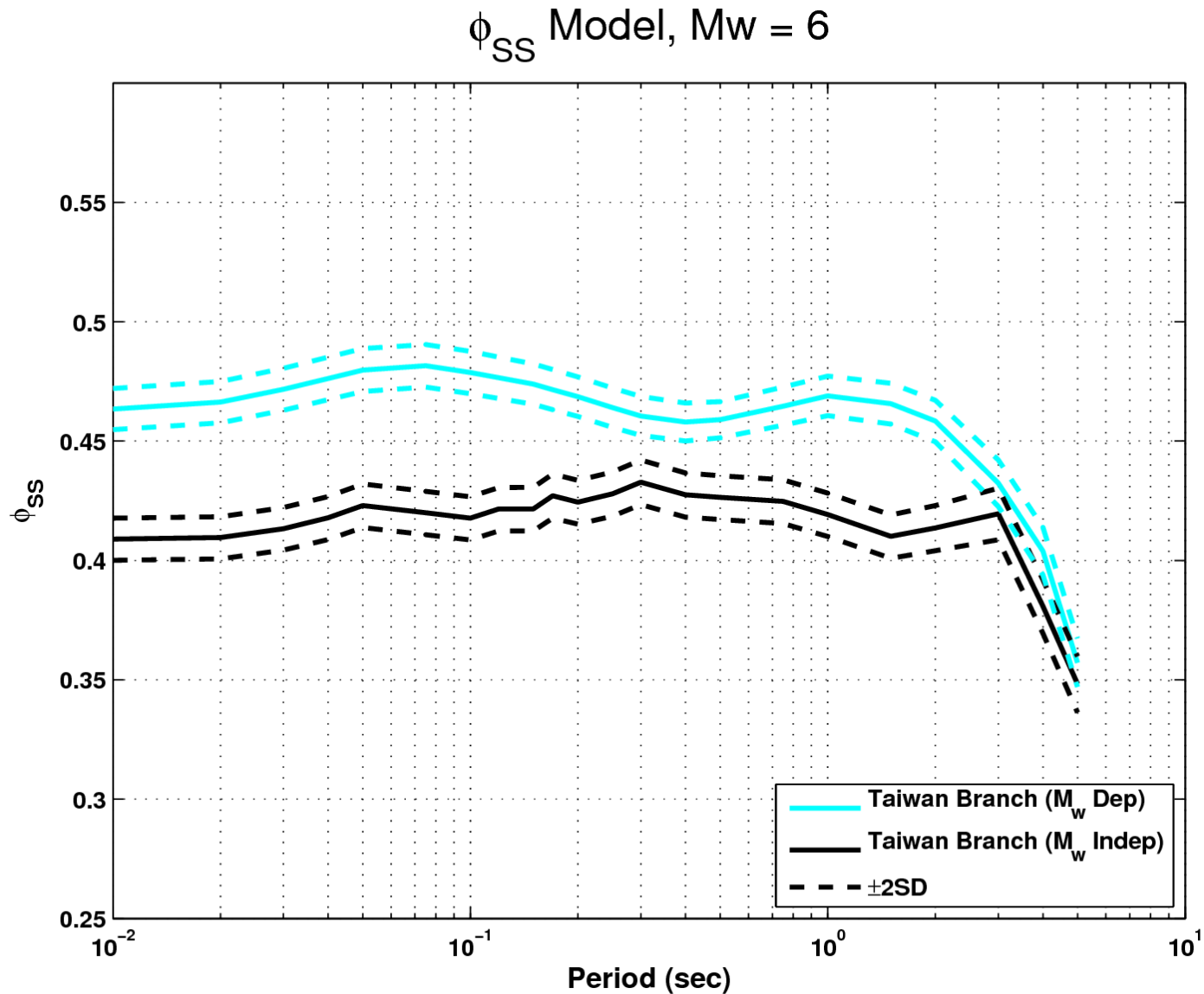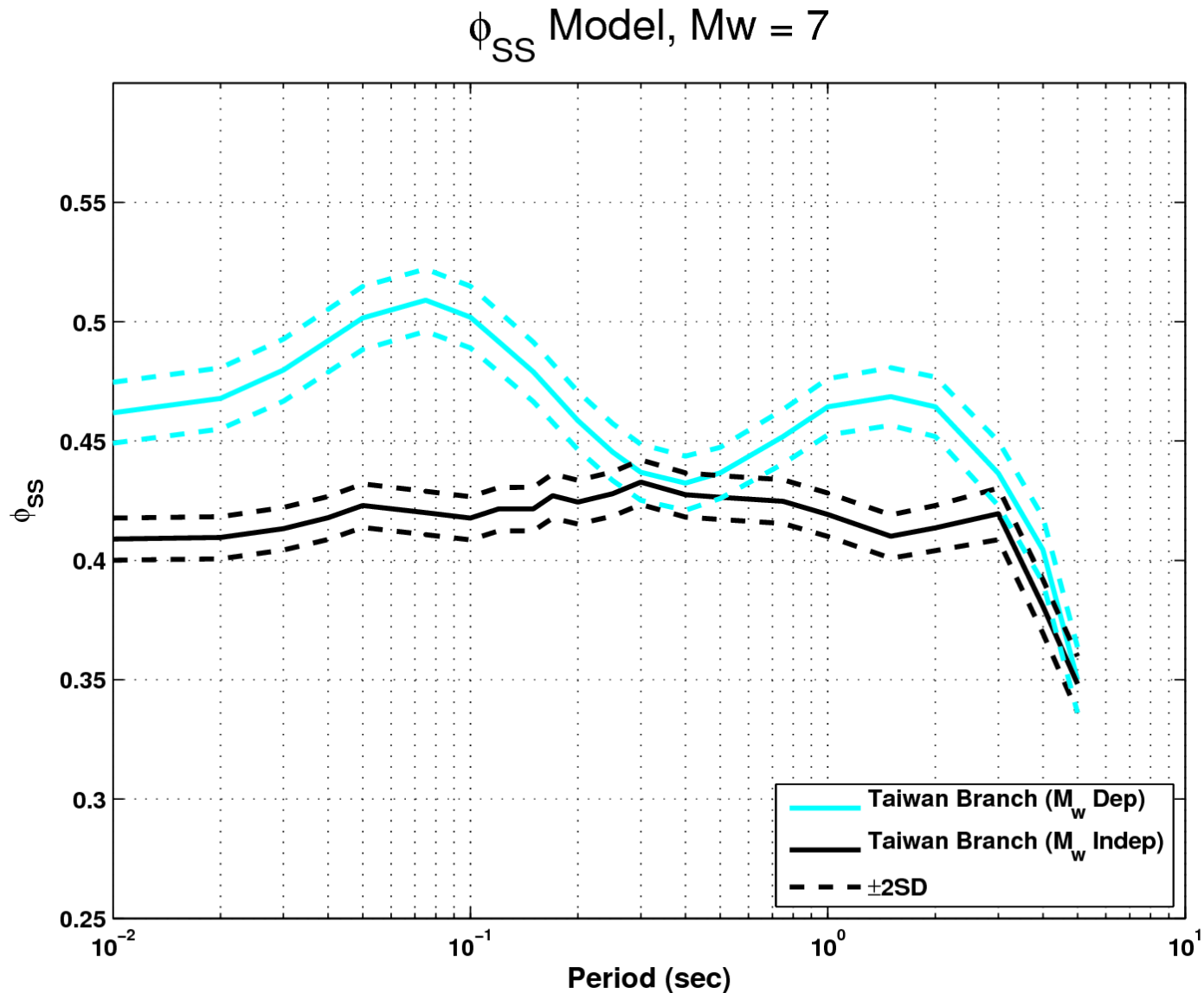Subduction ϕ_{SS} –Taiwan node (Magnitude Dependent)
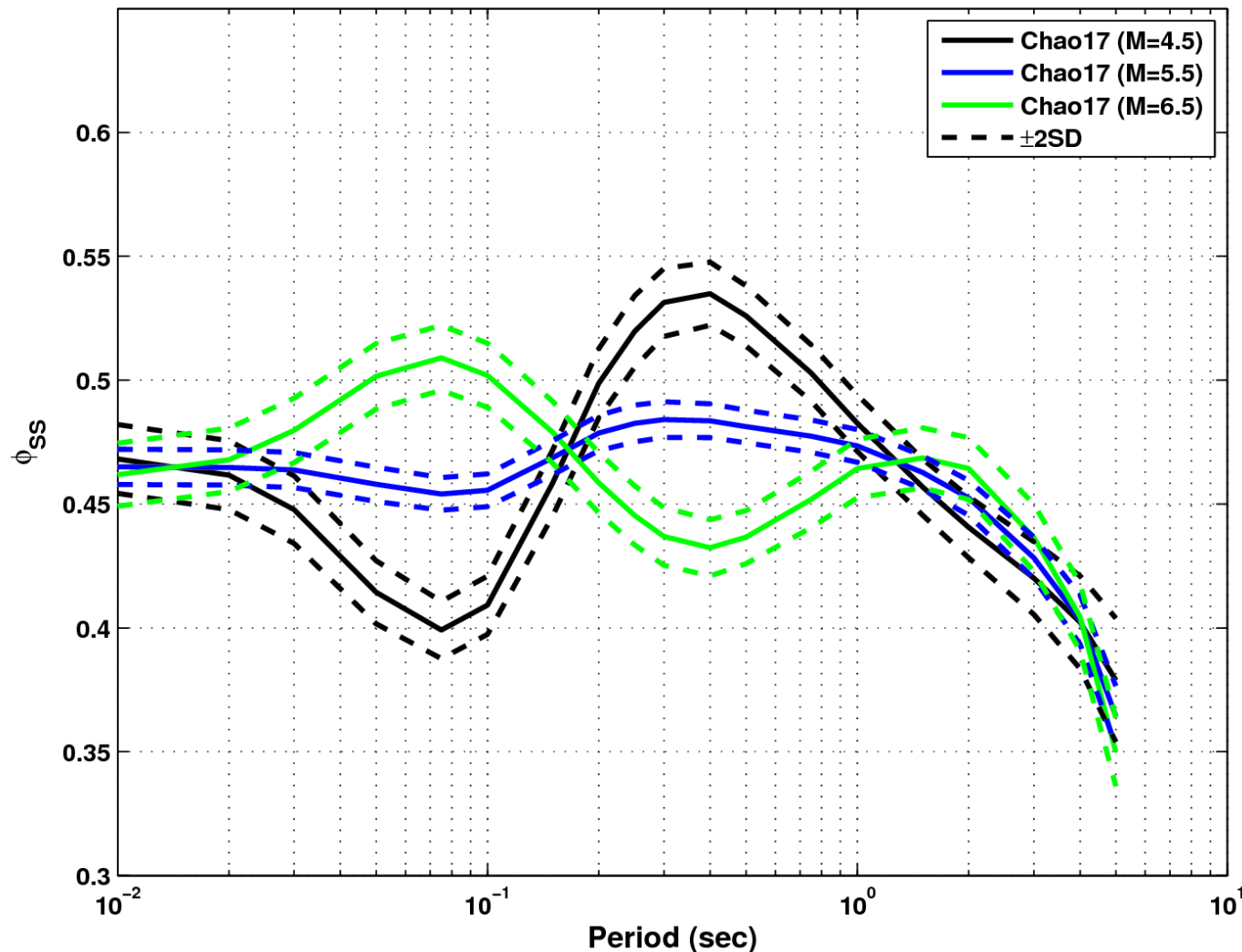
Develop the Magnitude-Dependent PhiSS Models for Subduction Event
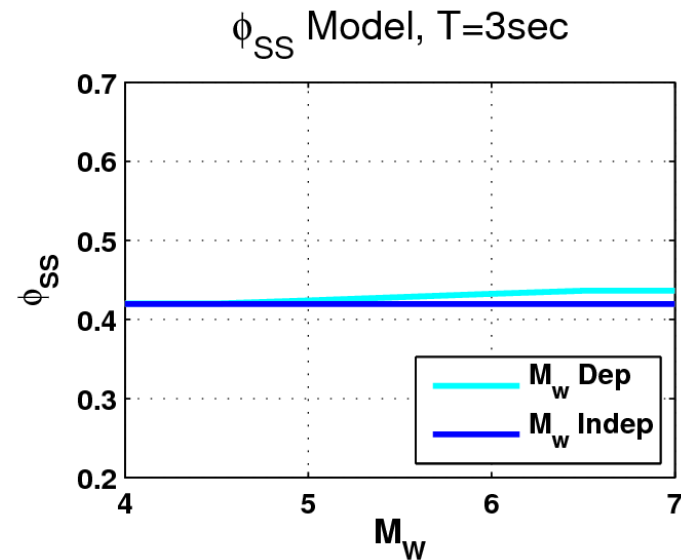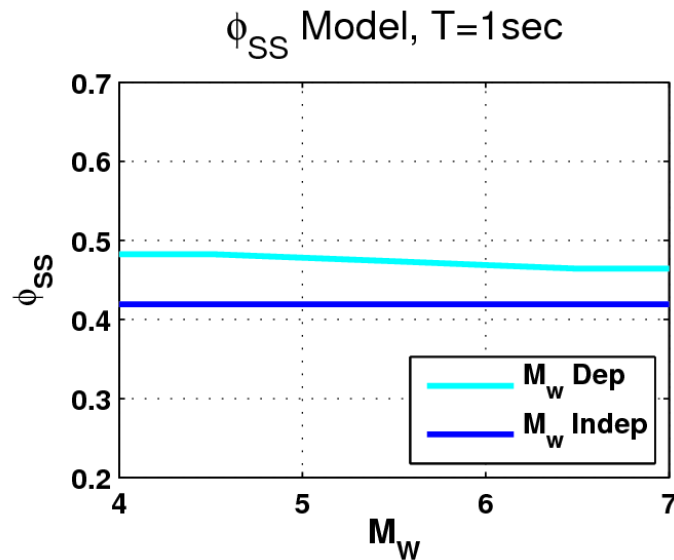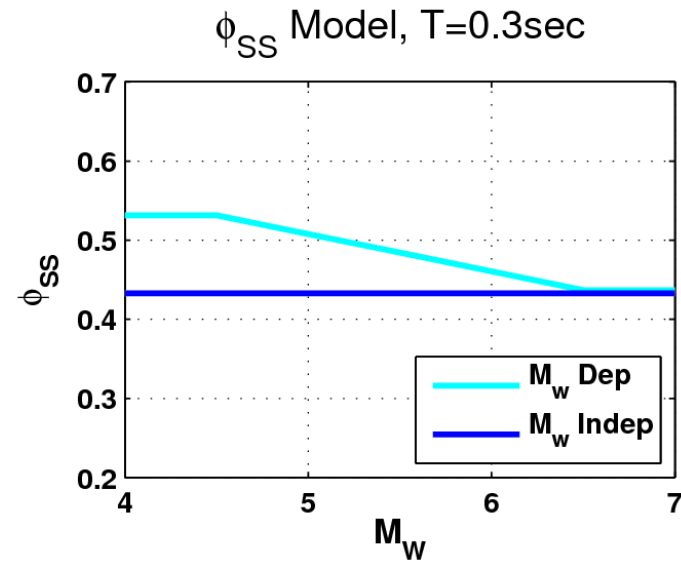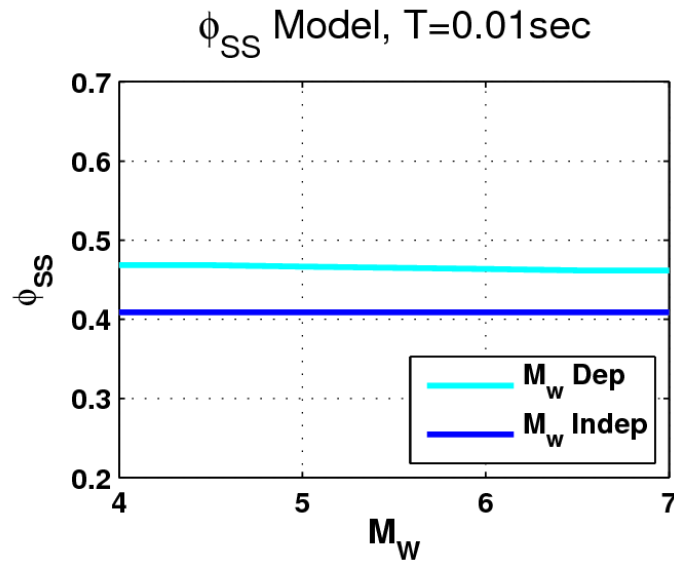
Comparison PhiSS Models for Mw=5

ϕ_{SS} Model, Mw = 5

Comparison PhiSS Models for Mw=6

ϕ_{SS} Model, Mw = 6

Comparison PhiSS Models for Mw=7

ϕ_{SS} Model, Mw = 7

Comparison PhiSS Models

ϕ_{SS} Model, T=0.01sec

ϕ_{SS} Model, T=0.3sec

ϕ_{SS} Model, T=1sec

ϕ_{SS} Model, T=3sec

Comparison Total SD of PhiSS Models
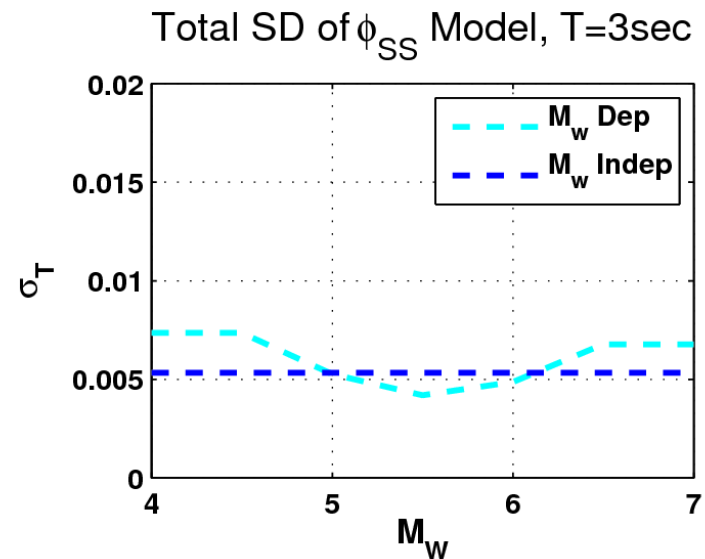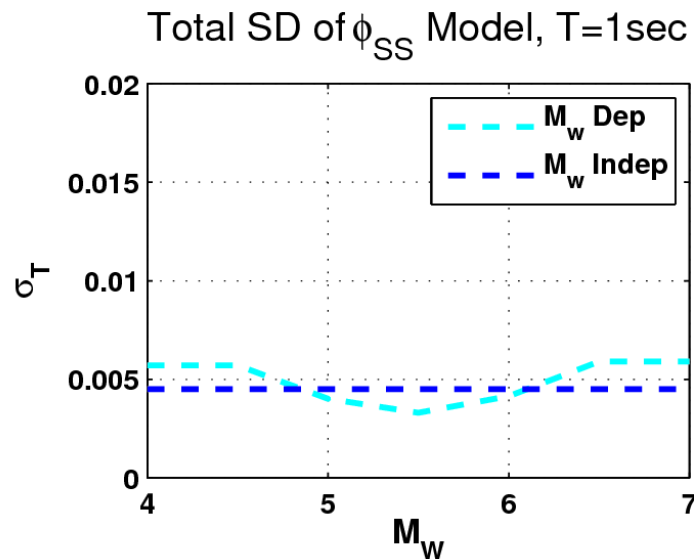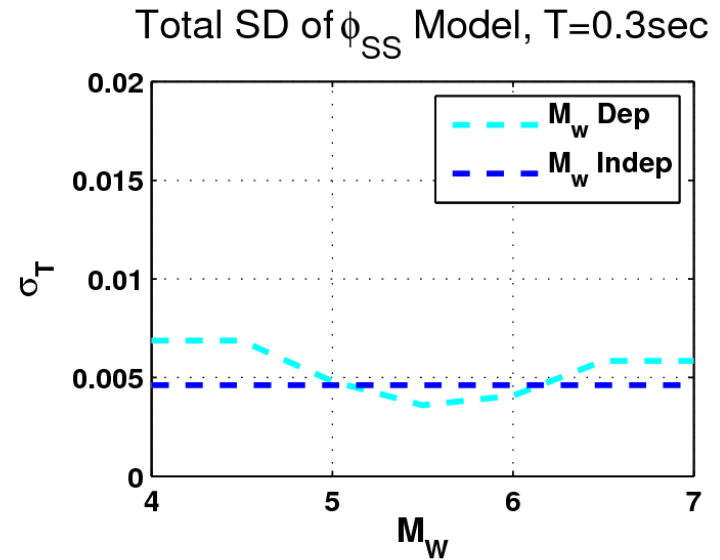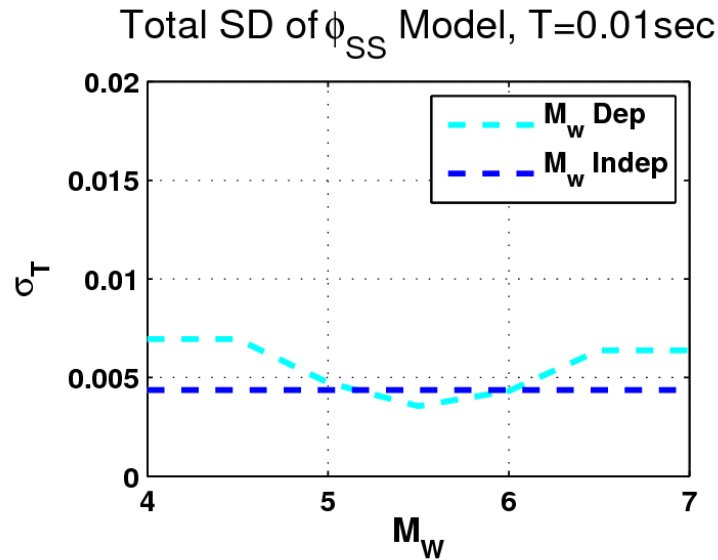
Thank You for Your Attention !!

Questions ?