

Updates on GWG Linear Model

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CENA Site Amplification Workshop
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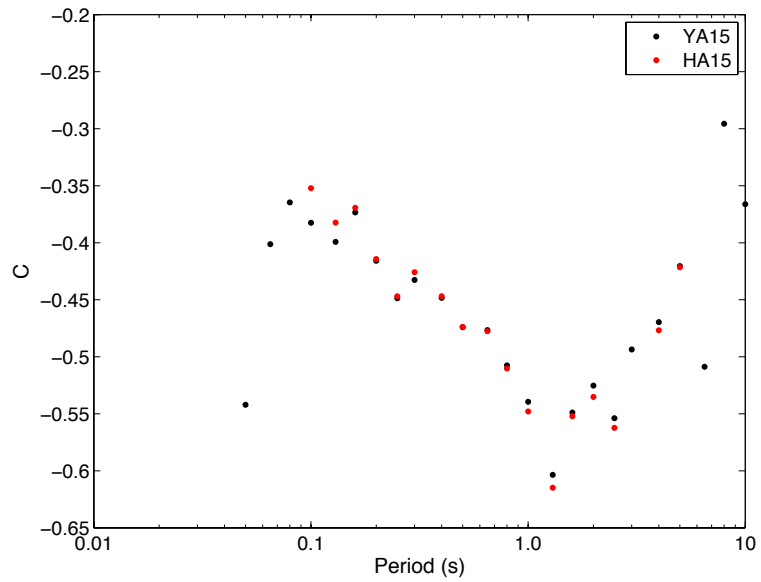
Outline

1. Duplicity between HA15- and YA15-based models
2. Coefficient smoothing
3. Results and residuals

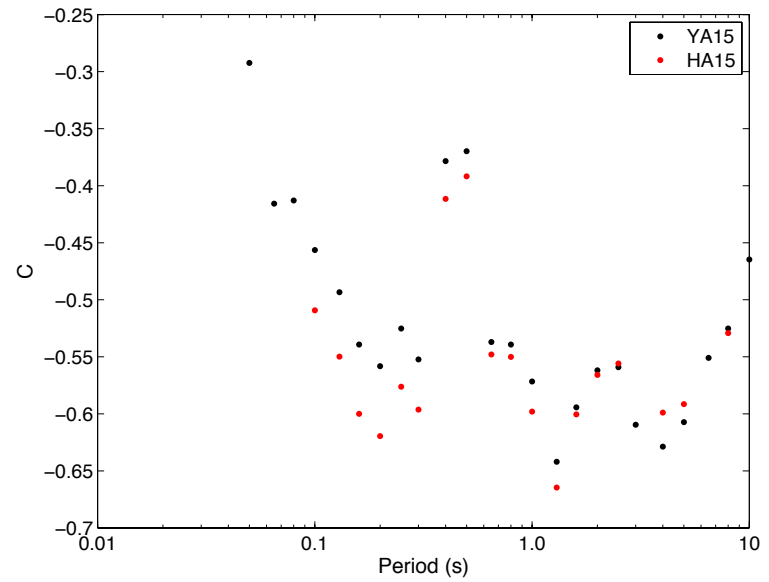
2. Duplicity between models based on different GMMs

Straight Line

Glaciated

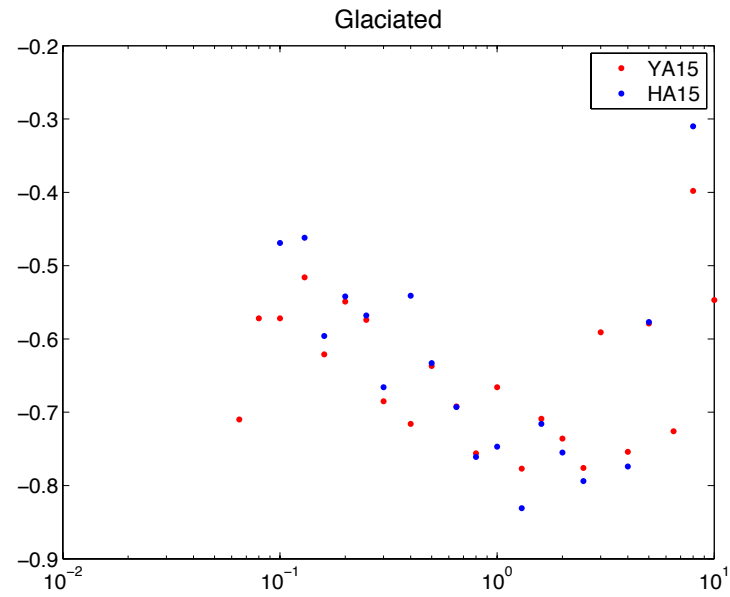


Non-Glaciated

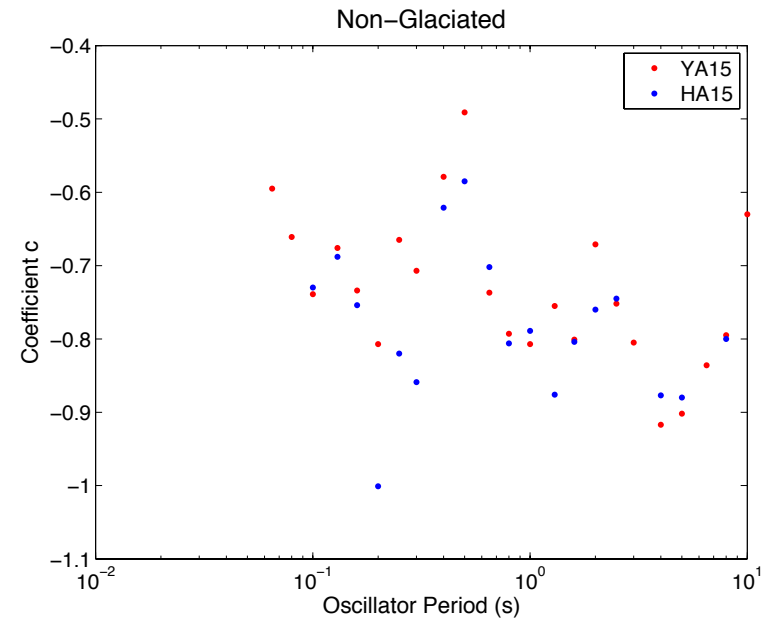


After Imposing V1 & V1

Glaciated



Non-Glaciaded



Final Model Coefficients

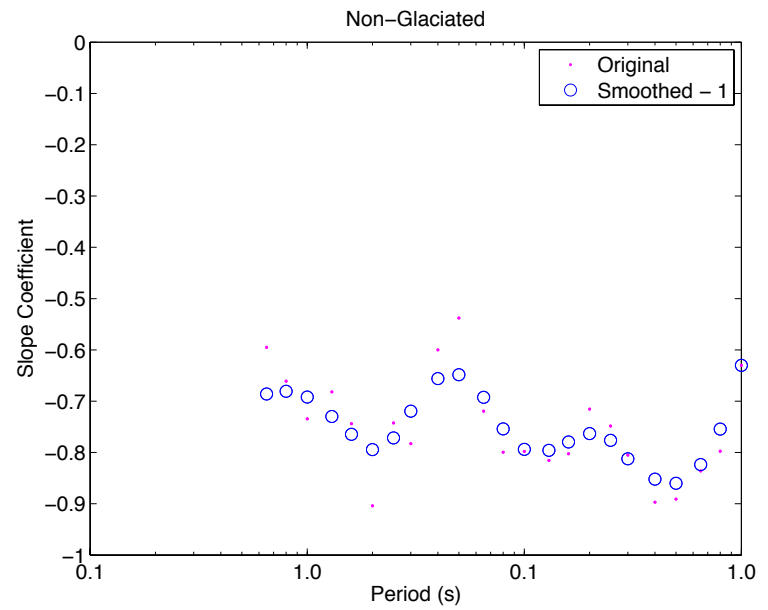
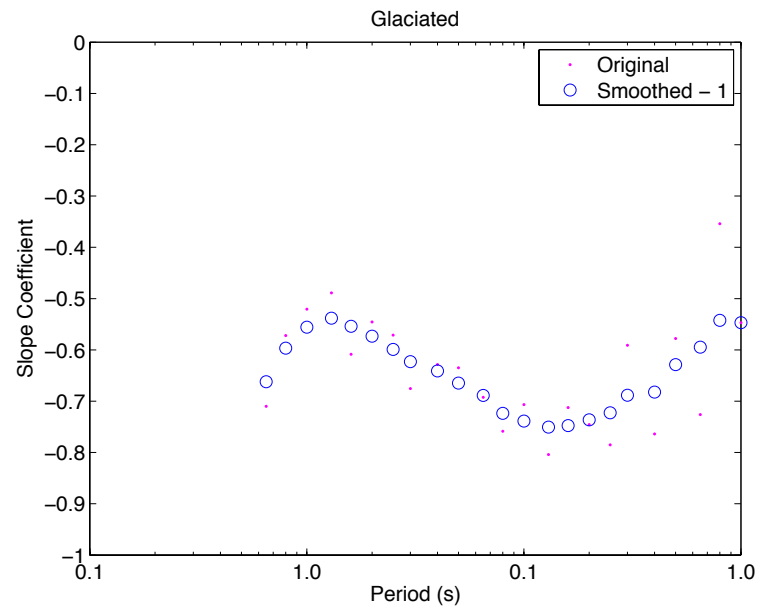
- Taken as the average of the YA15- and HA15-based model coefficients and then smoothed
- PSA oscillator periods with only one model (e.g. YA15 OR HA15) were kept without any averaging

2. Coefficient Smoothing

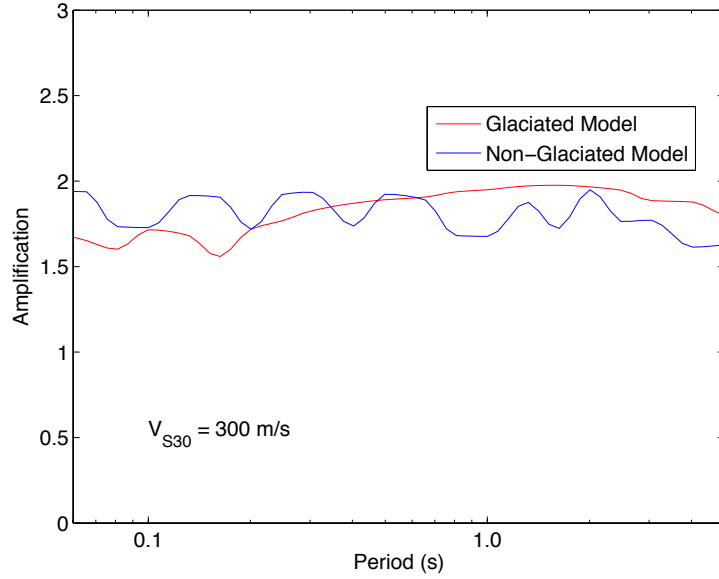
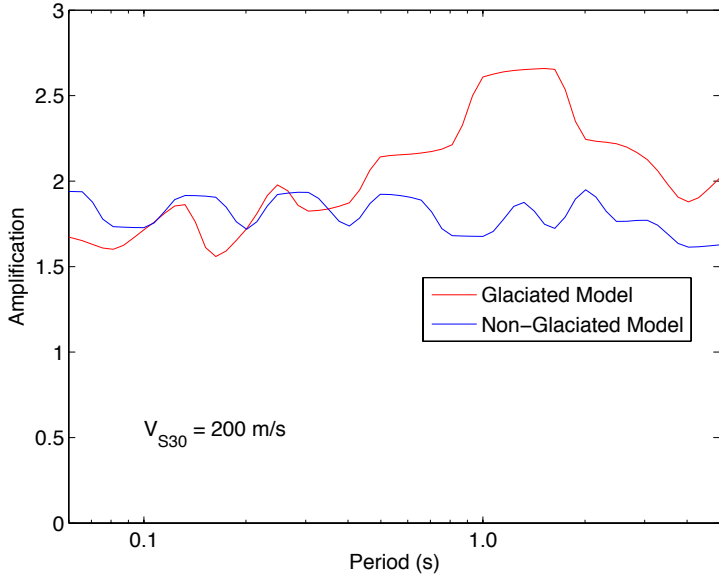
Slope Coefficient Smoothing

- BSSA14
 - Moving mean
 - Adjusted by eye
- GWG liner empirical model
 - Weighted moving mean
 - Window $n = 5$
 - Weights $1/9, 2/9, 3/9, 2/9, 1/9$
 - End points unchanged

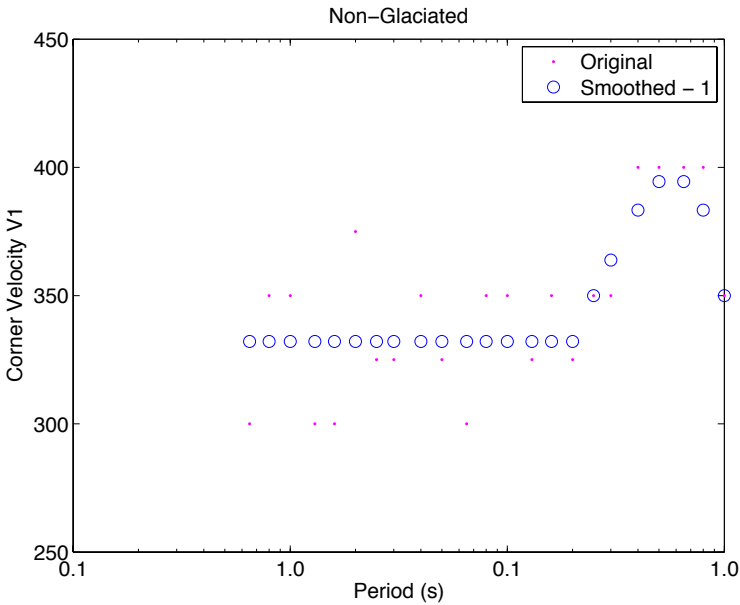
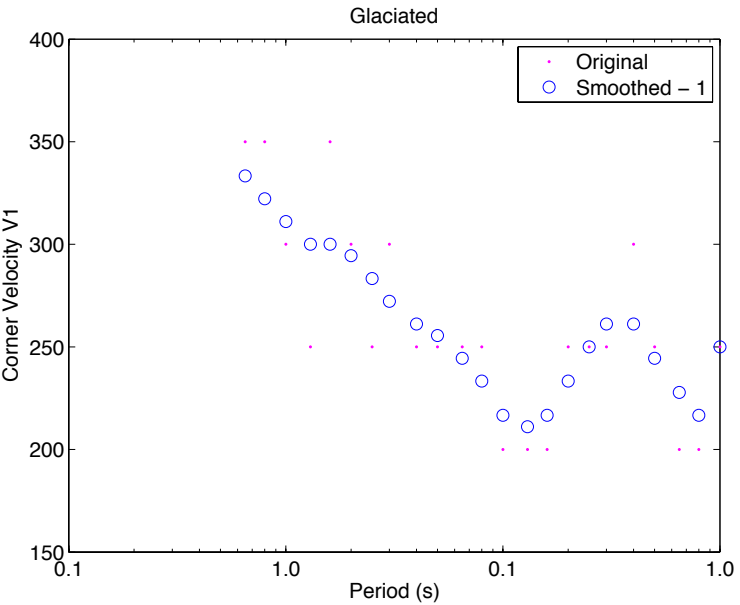
Slope Coefficient



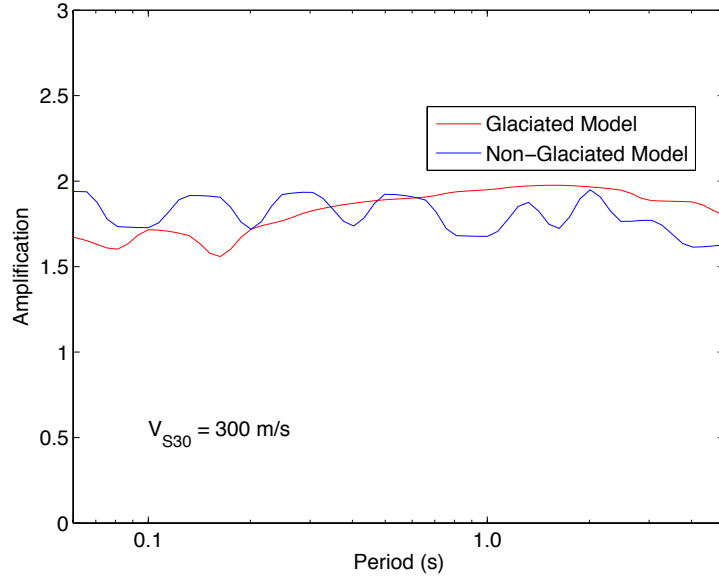
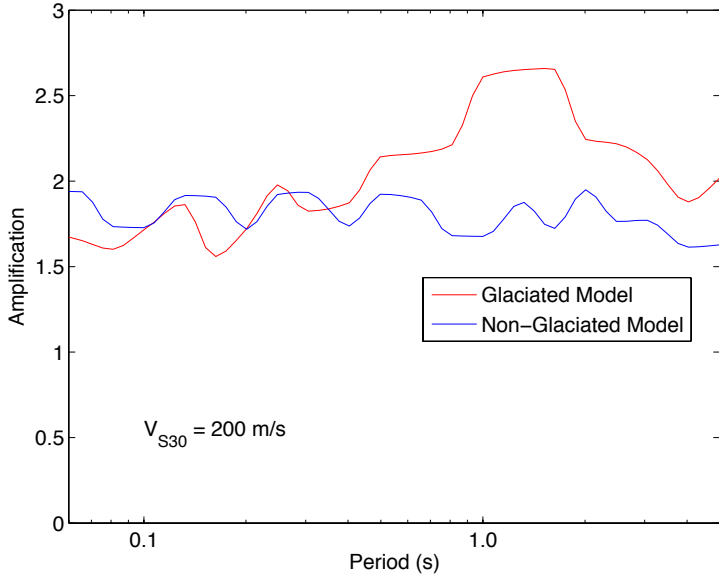
YA15 - Corner Velocity Smoothing



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