

Figure 2.5-20 – Deaggregation of USGS 2008 PSHA Model for 2,475-Year Return Period PGA

PSH Deaggregation on NEHRP BC rock

Janesville Site 89.025° W, 42.624 N.

Peak Horiz. Ground Accel. ≥ 0.05015 g

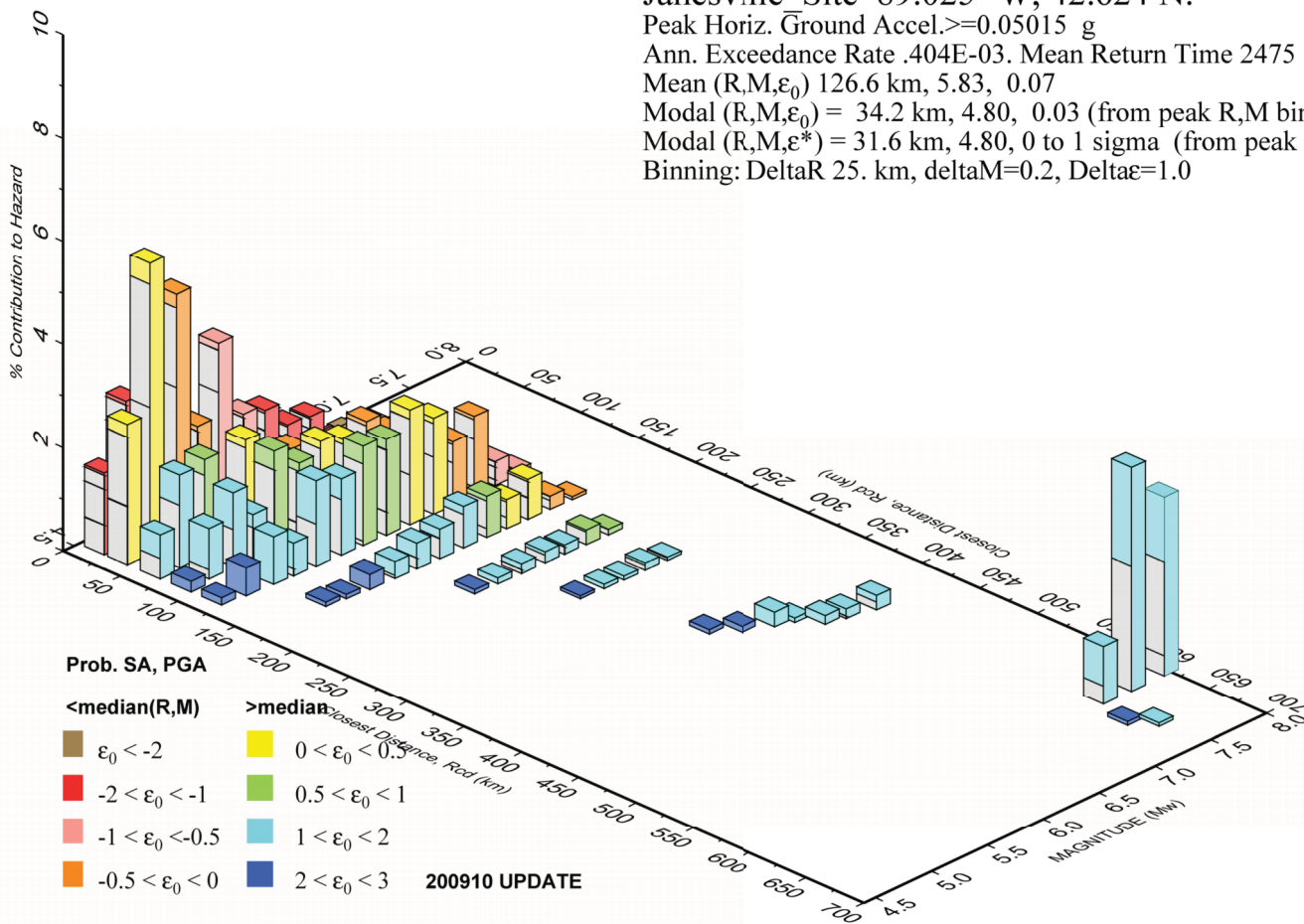
Ann. Exceedance Rate .404E-03. Mean Return Time 2475 years

Mean (R,M, ϵ_0) 126.6 km, 5.83, 0.07

Modal (R,M, ϵ_0) = 34.2 km, 4.80, 0.03 (from peak R,M bin)

Modal (R,M, ϵ^*) = 31.6 km, 4.80, 0 to 1 sigma (from peak R,M, ϵ bin)

Binning: DeltaR 25. km, deltaM=0.2, Delta ϵ =1.0



Distance (R), magnitude (M), epsilon (E0,E) deaggregation for a site on rock with average $v_s = 760$ m/s top 30 m.

USGS CGHT PSHA2008 UPDATE Bins with lt 0.05% contrib. omitted

NOTE

1.) CALCULATION FOR SHINE SITE (42.624°N, 89.025°W) FROM THE 2008 USGS NATIONAL PSHA ($V_s^{30} = 760$ m/s, SITE CLASS BC).

REFERENCE

1.) USGS, 2012a.