

SEISMOGRAPH

Verification Examples (C3)

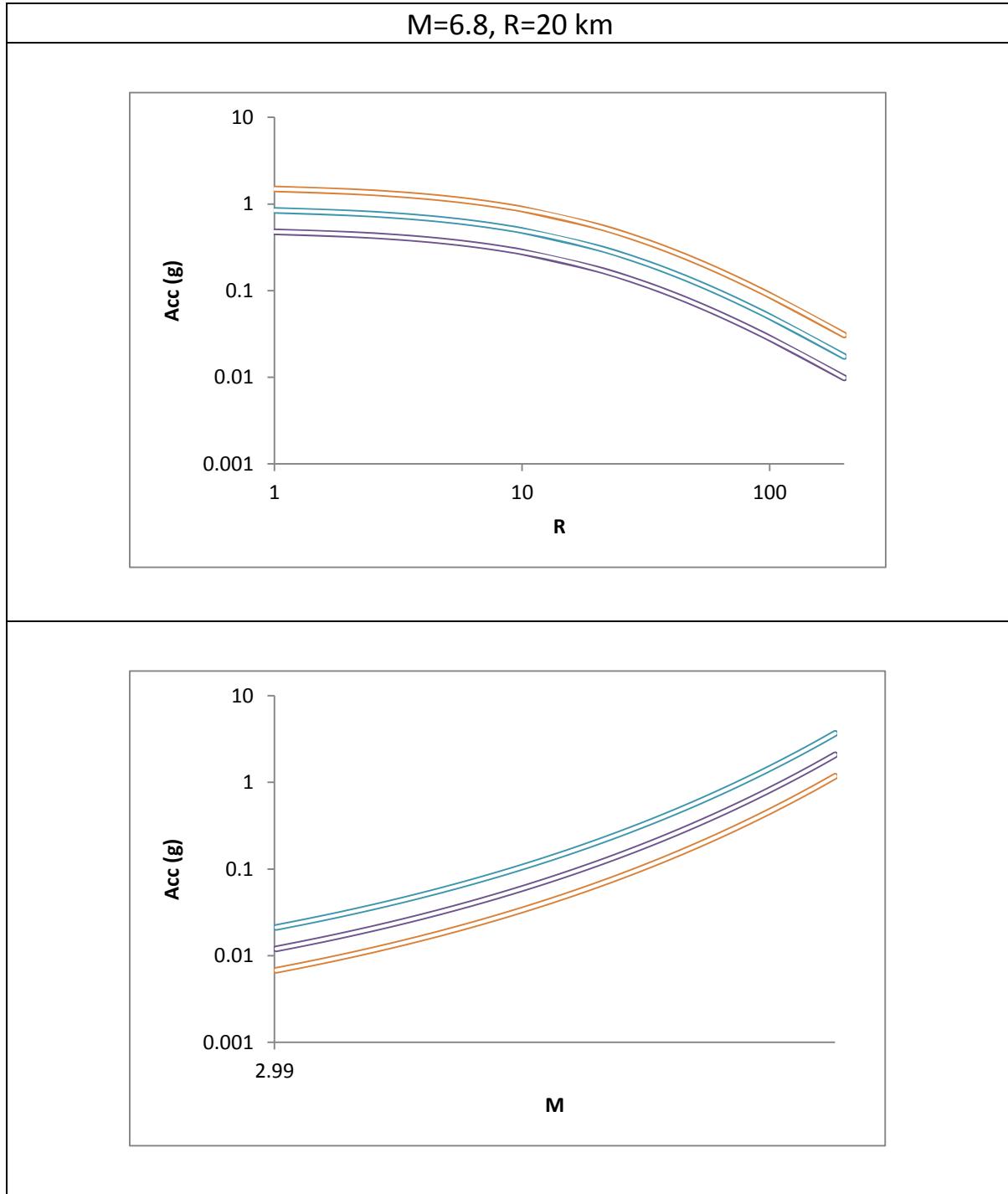
PSHA Tool: Attenuation Models Verifications

Attenuation Models Verifications

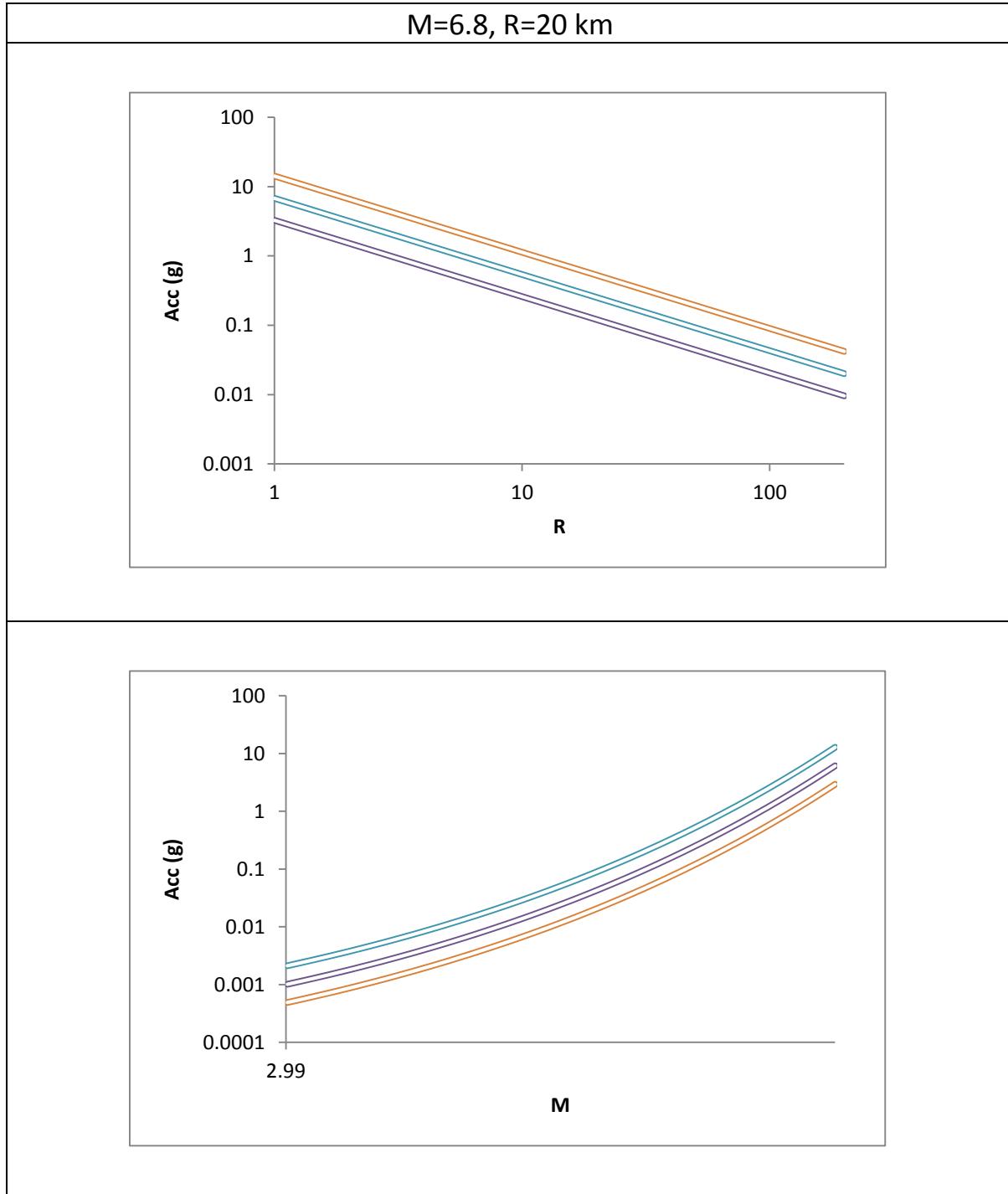
Examples of Attenuation Models of the SEISMOGRAPH have been illustrated in the next pages, as outlined in the table below. White Lines indicate the SEISMOGRAPH results (See: *GMPEs.xlsx* and *NGA GMPEs 2.xlsx* files and NGA14 Folder).

1	Cornell et al. (1979)
2	Amberseys (1975)
3	Amberseys (1990)
4	Campbell (1989)
5	Joyner & Boore (1981)
6	Joyner & Boore (1988)
7	Campbell (1997)
8	Campbell & Bozorgnia (2003)
9	Campbell & Bozorgnia (2008)
10	Abrahamson & Silva (1993)
11	Abrahamson & Silva (2008)
12	Sadigh et al. (1997)
13	Boore et al. (1997)
14	Boore & Atkinson (2008)
15	Zare et al. (1999)
16	Zare & Sabzali (2006)
17	Ghodrati Amiri et al. (2007)
18	Ghodrati Amiri et al. (2010)
19	Ghasemi et al. (2009)
20	Youngs et al. (1988)
21	Chiou & Youngs (2008)
22	Idriss (1993)
23	Abrahamson et al. (2014)
24	Campbell & Bozorgnia (2014)
25	Chiou & Youngs (2014)
26	Boore et al. (2014)
27	Idriss (2014)
28	Bindi et al. (2011)
29	Lanzano et al. (2019)

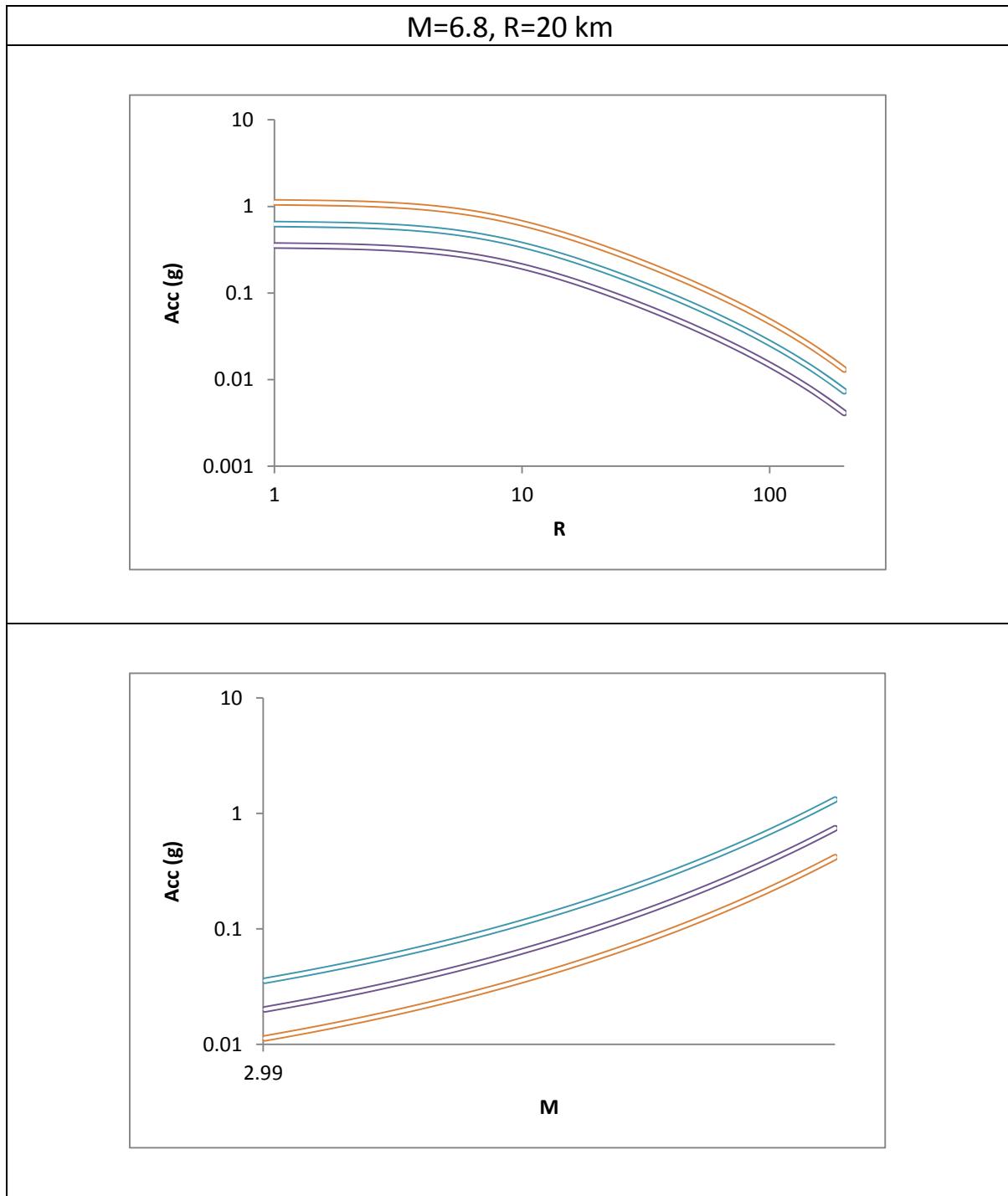
1. Cornell et al. (1979)



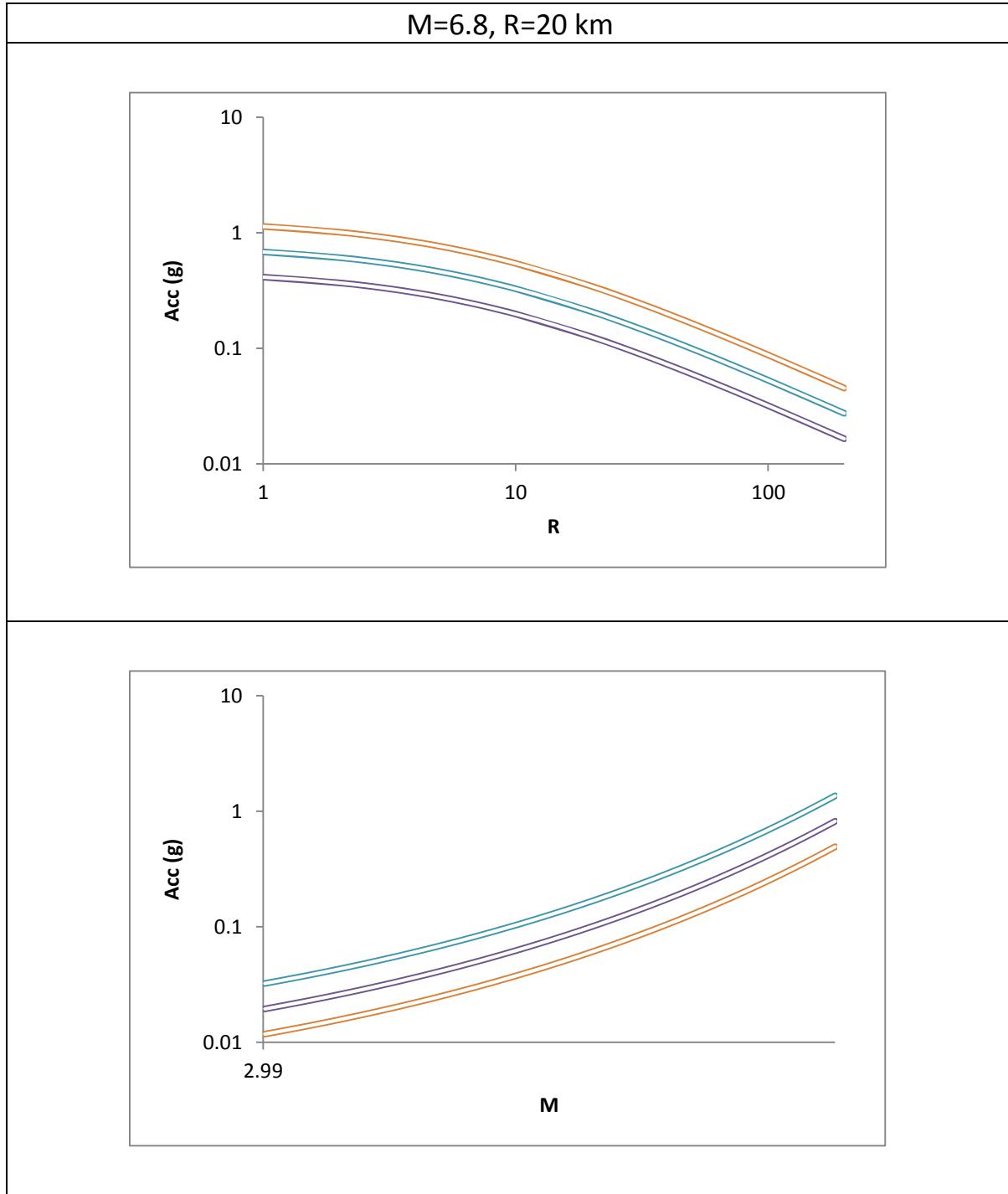
2. Ambraseys (1975)



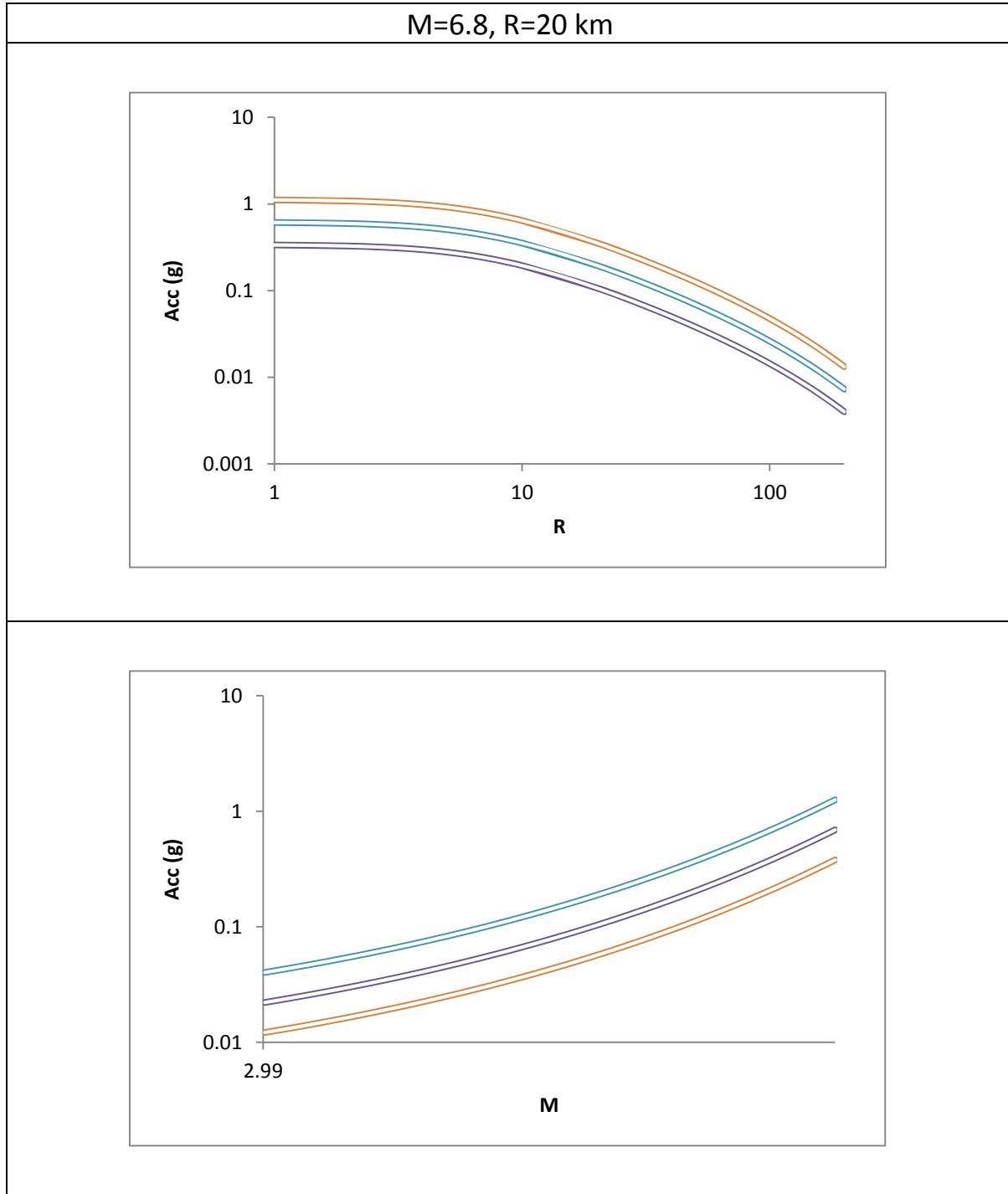
3. Ambraseys (1990)



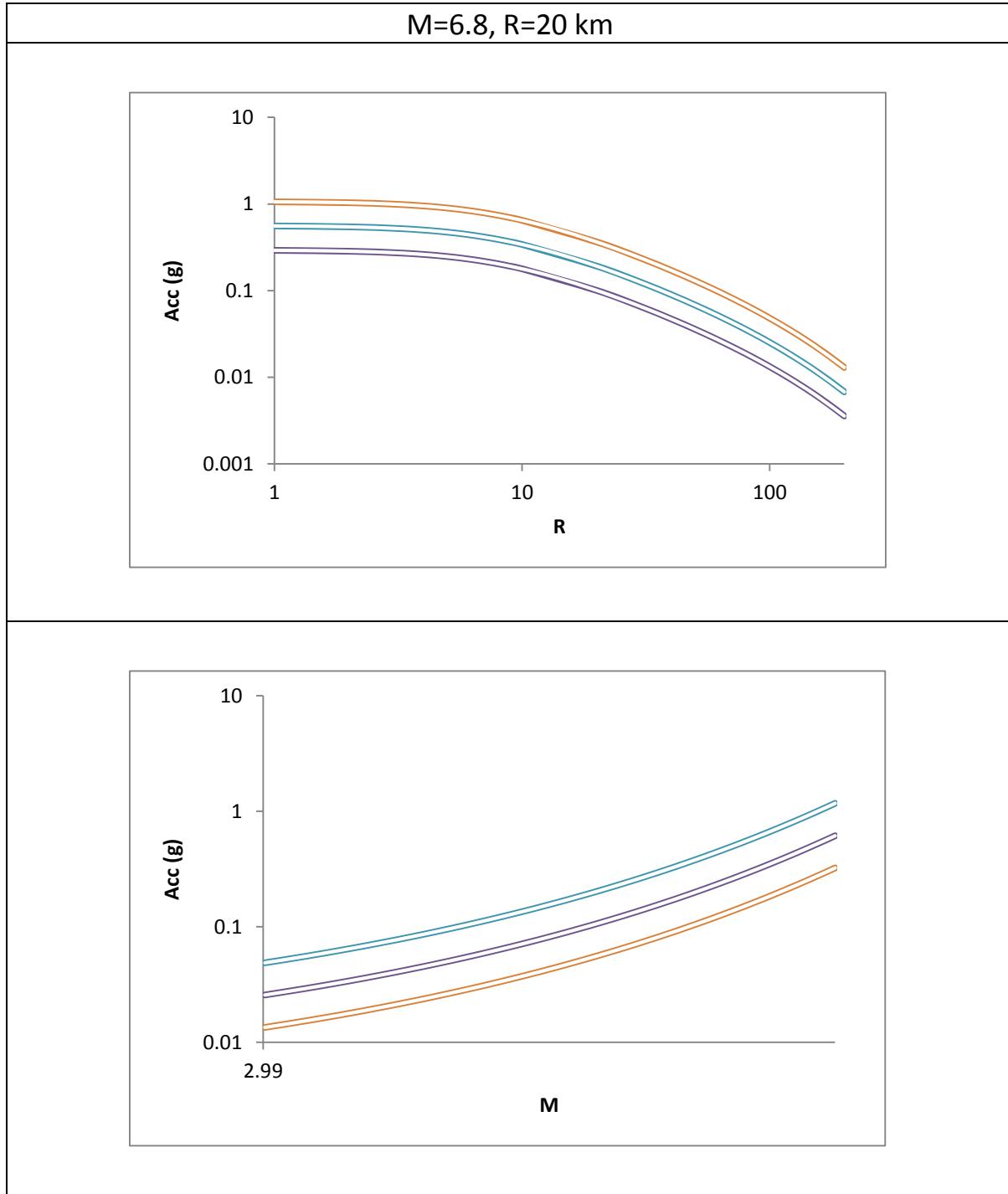
4. Campbell (1989)



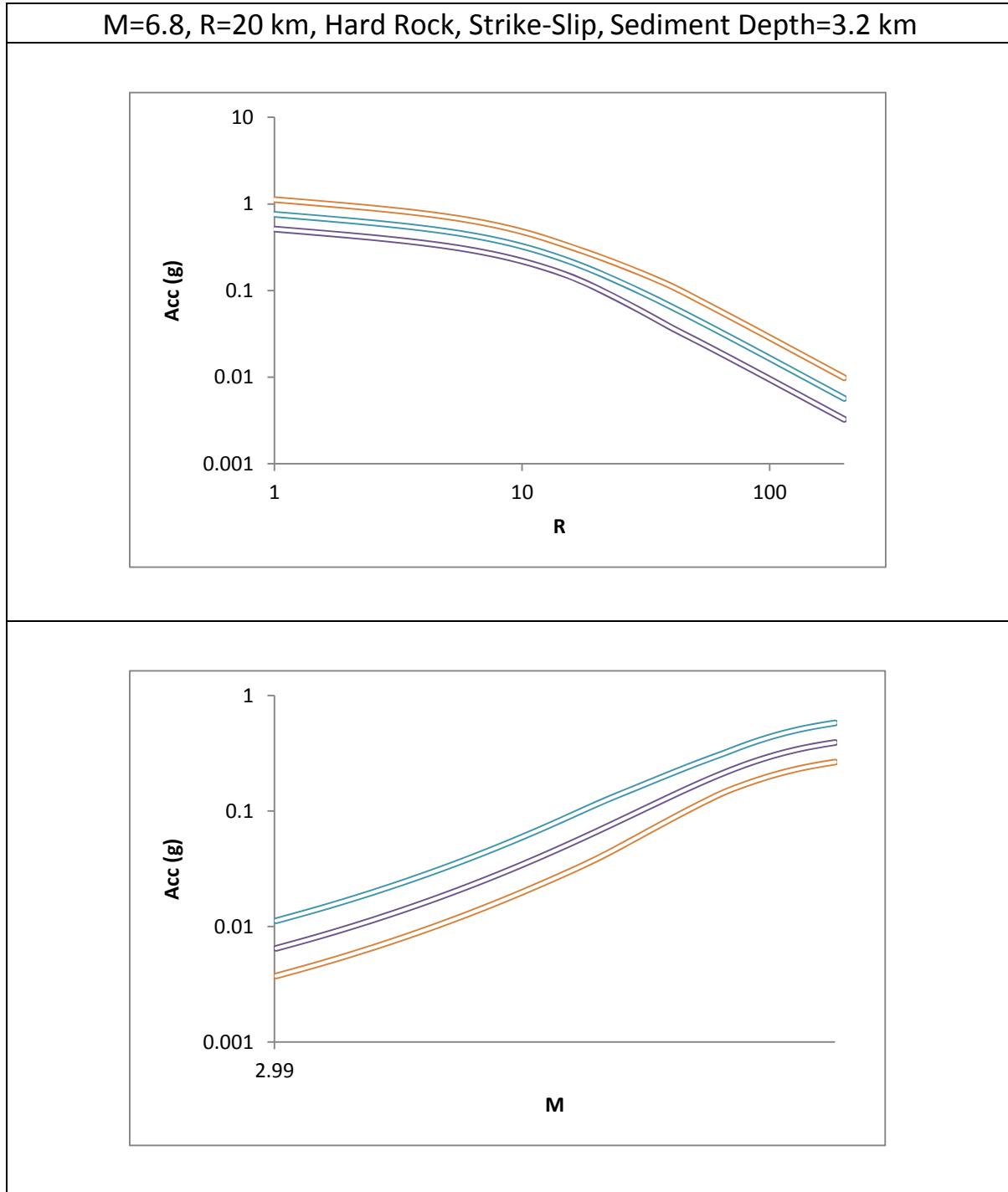
5. Joyner & Boore (1981)



6. Joyner & Boore (1988)

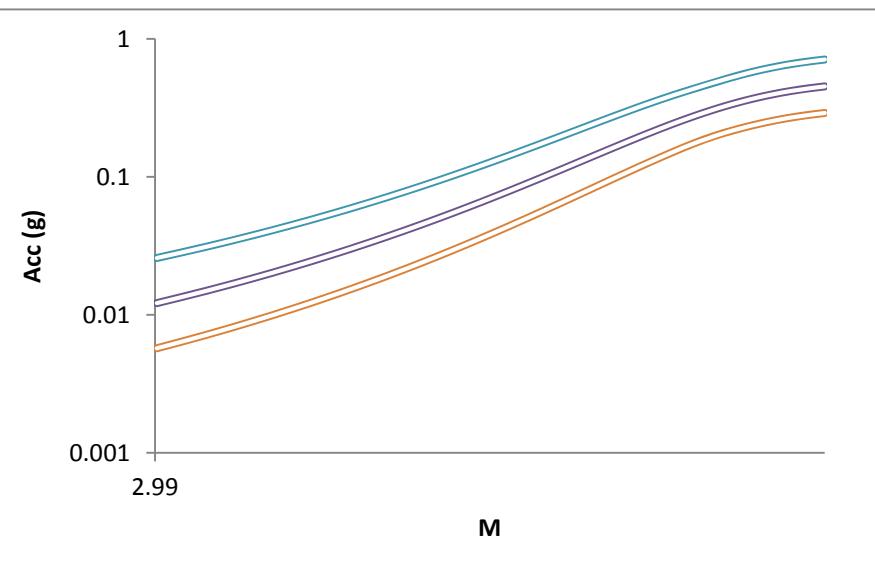
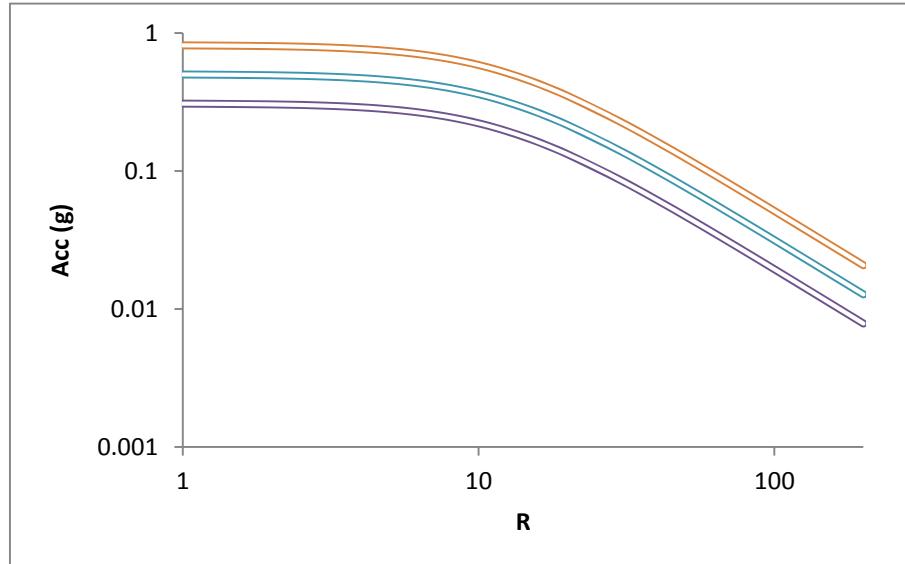


7. Campbell (1997)

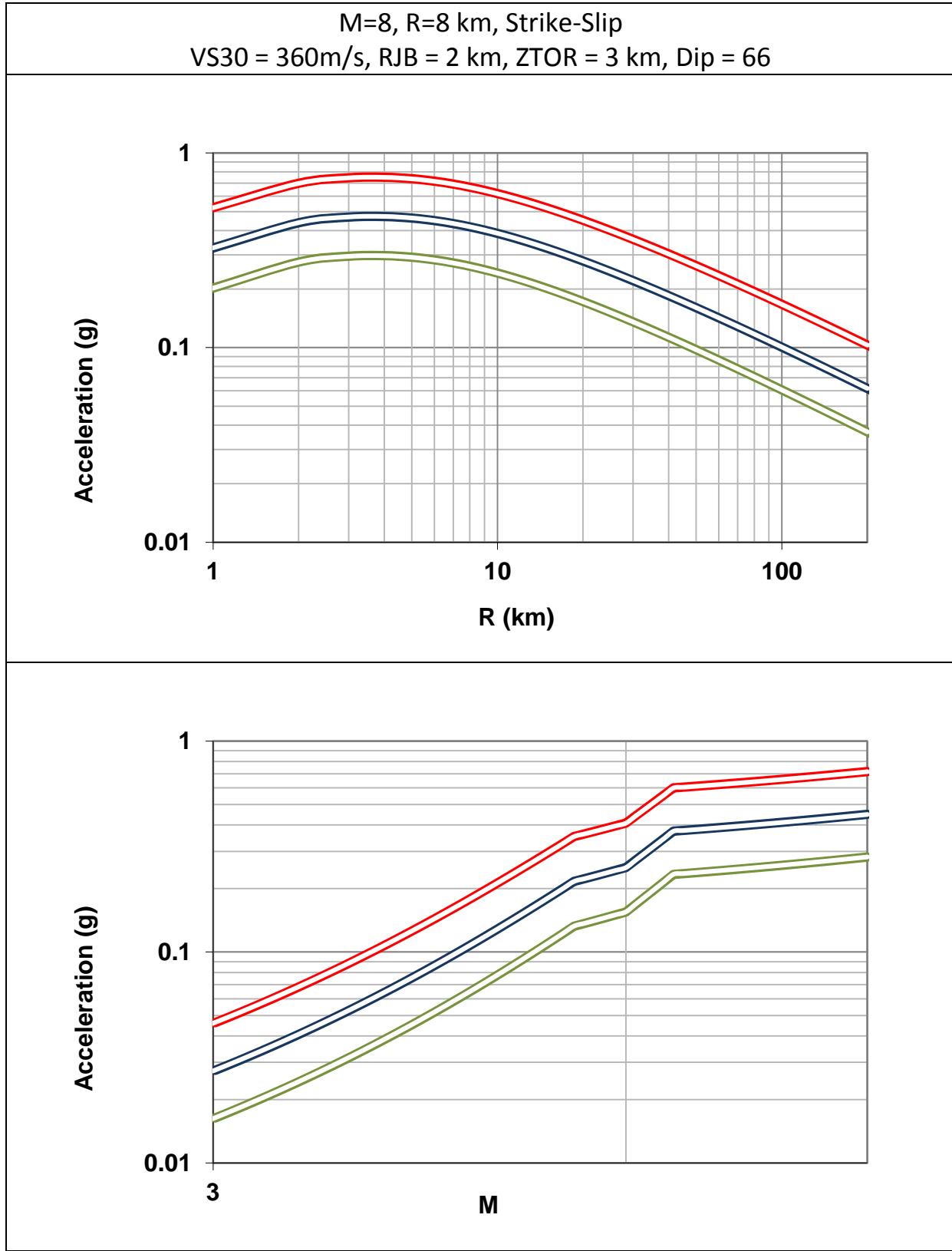


8. Campbell & Bozorgnia (2003)

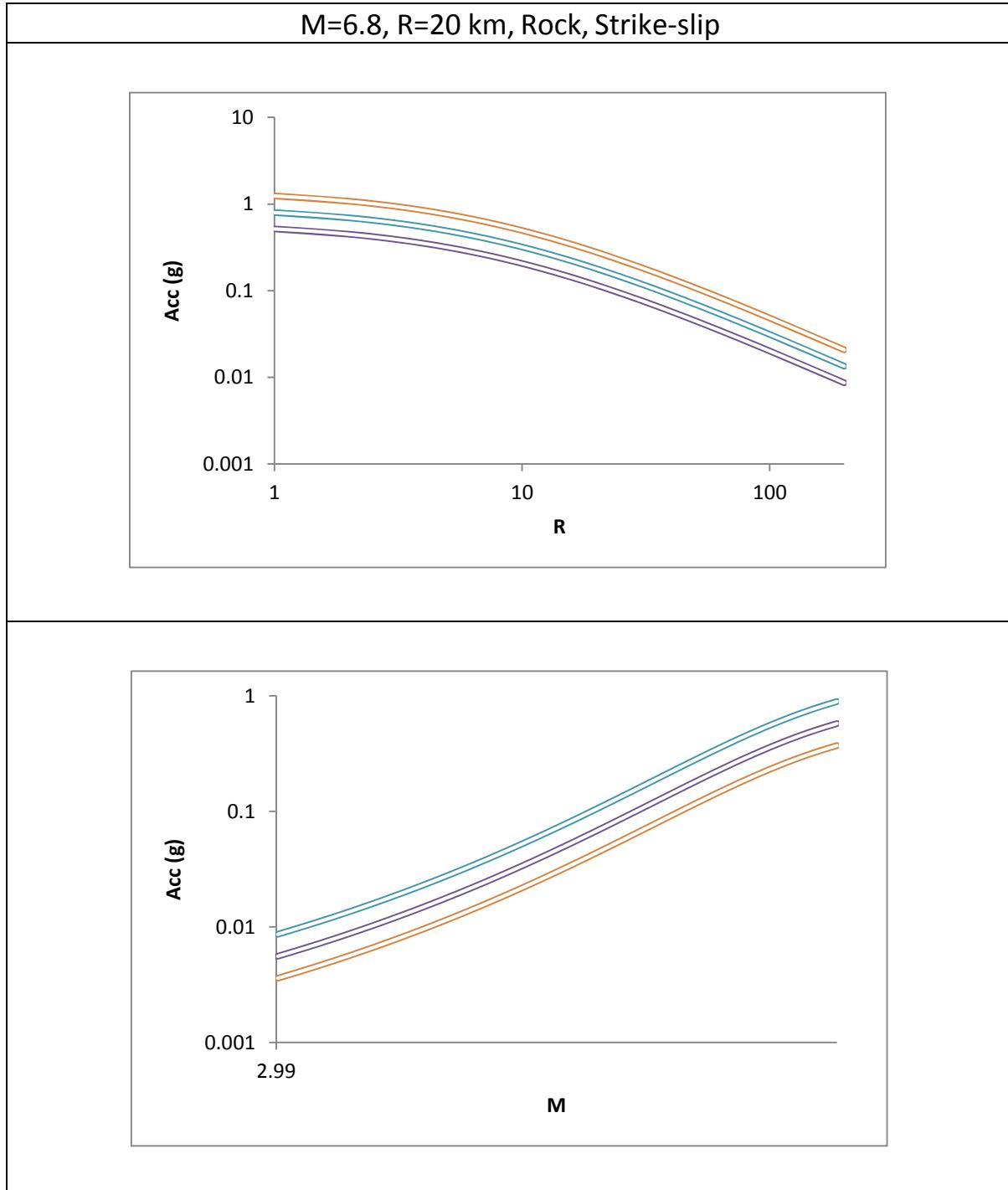
M=6.8, R=20 km, Firm soil, Strike-slip, Uncorrected, Dip=90



9. Campbell & Bozorgnia (2008)

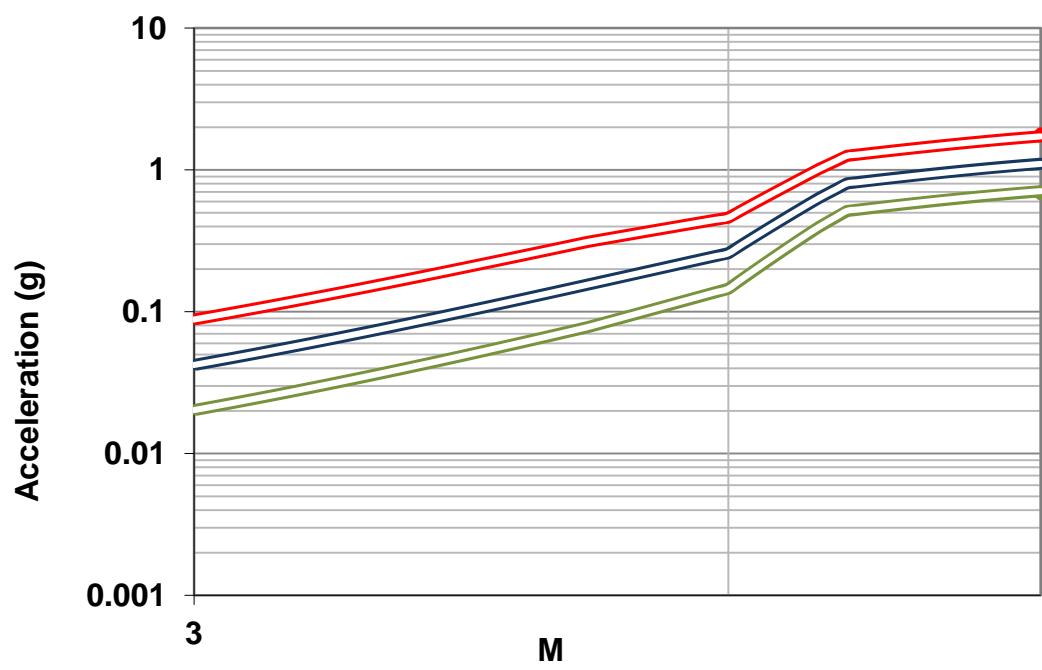
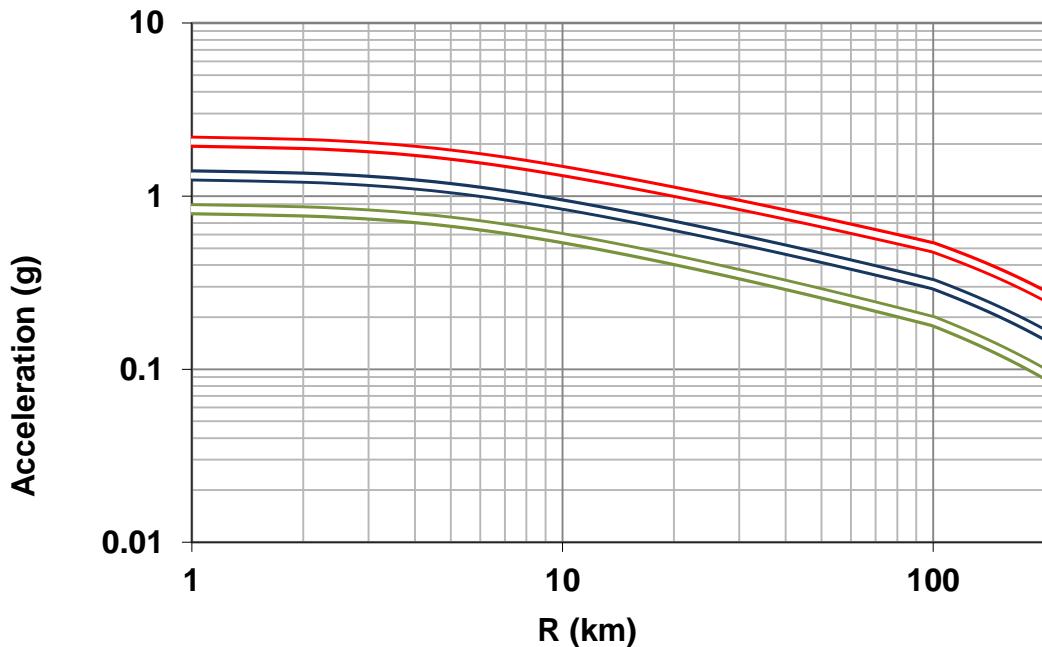


10. Abrahamson & Silva (1993)

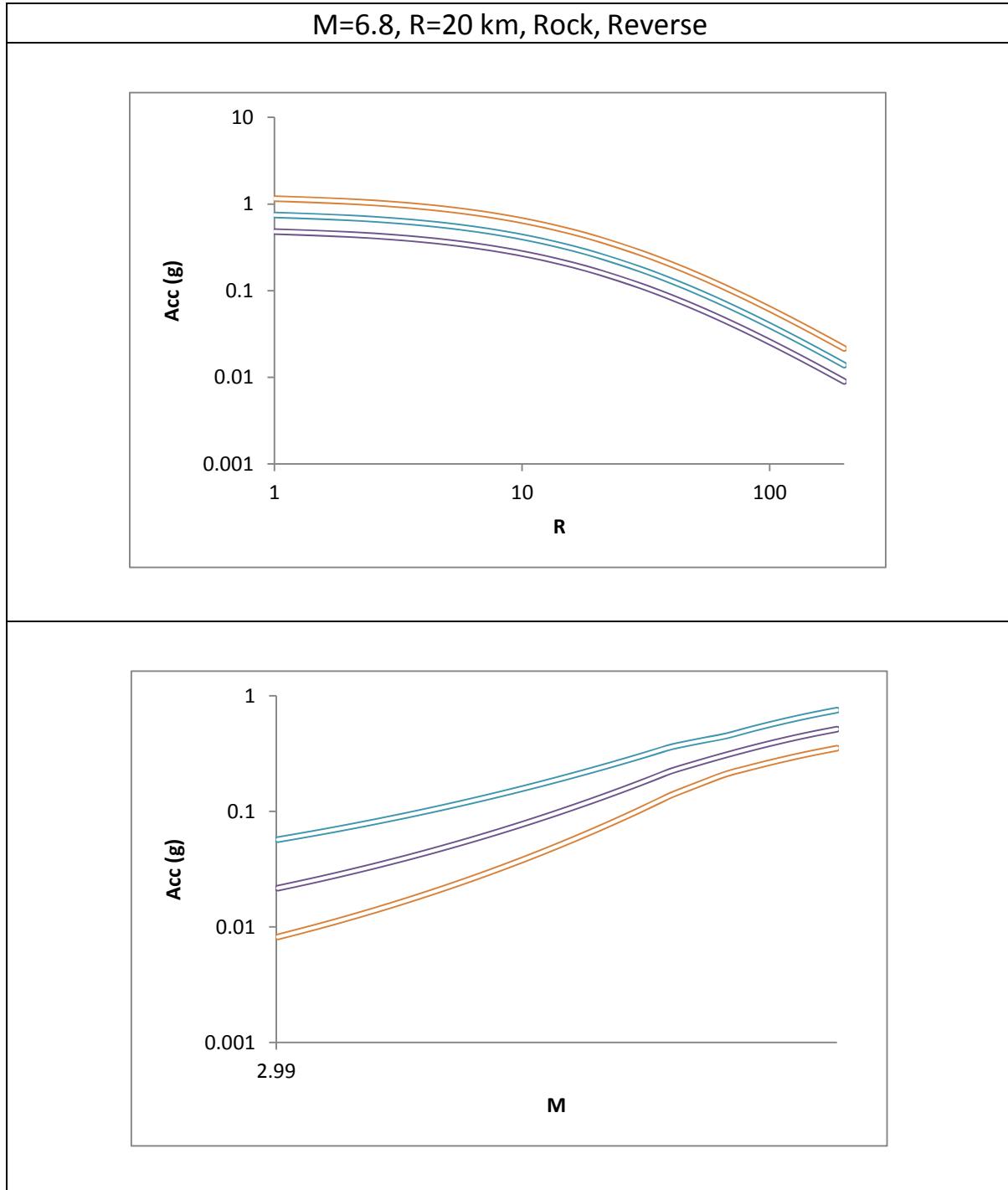


11. Abrahamson & Silva (2008)

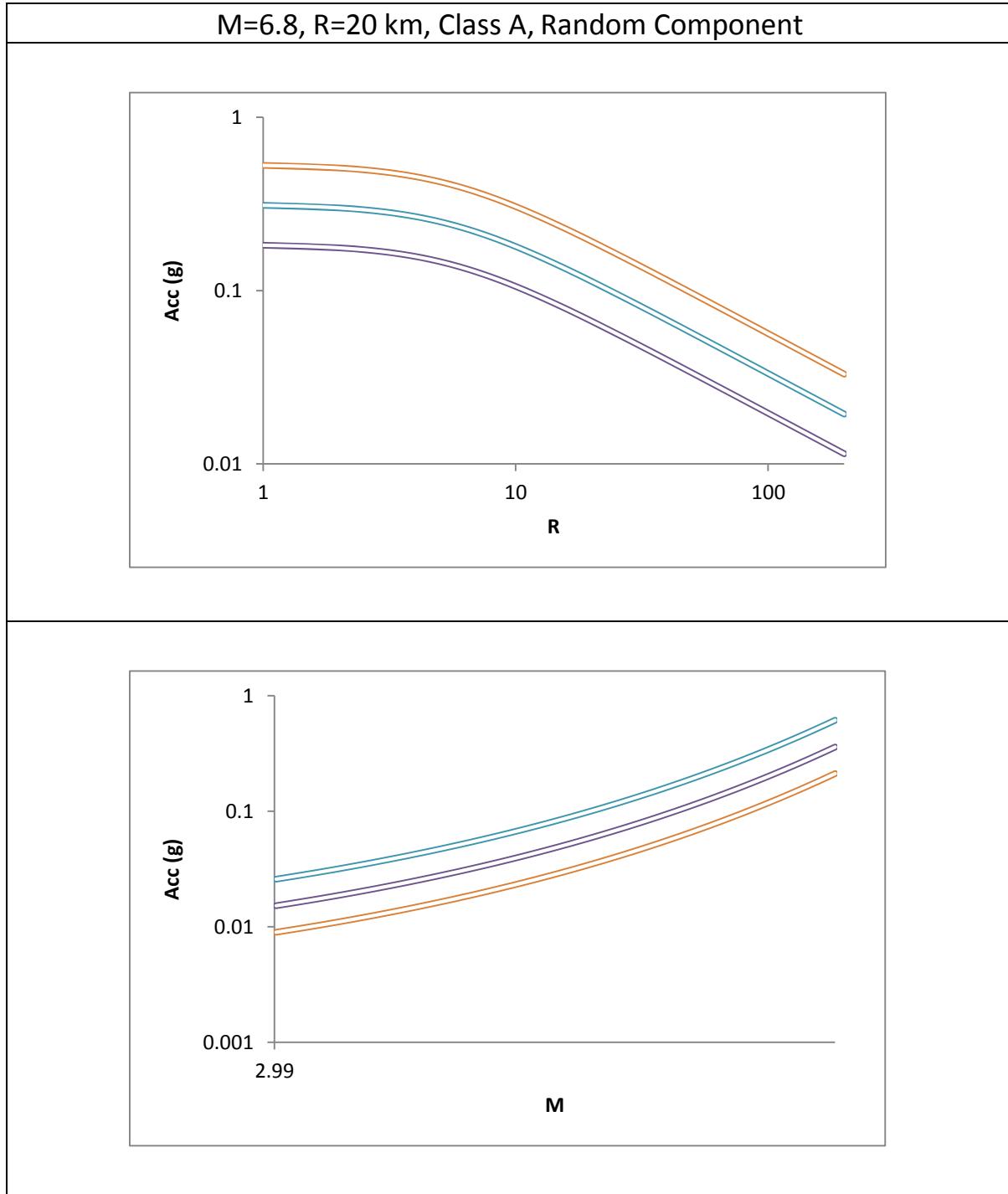
M=8, R=8 km, Reverse, MainShock, Estimated
VS30 = 360m/s, RJB = 2 km, RX=10 km, ZTOR = 3 km, Dip = 66, W = 20 km



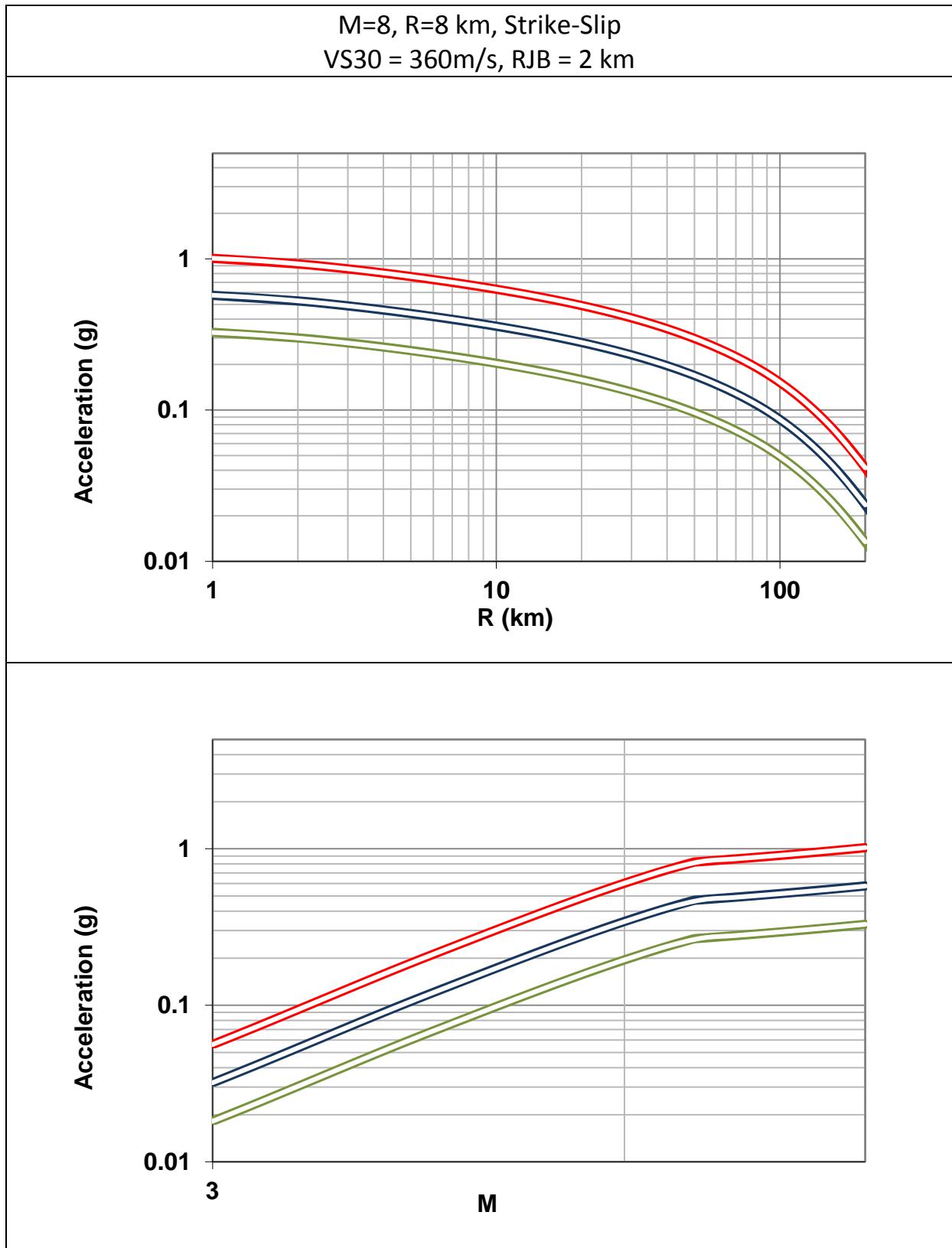
12. Sadigh et al. (1997)



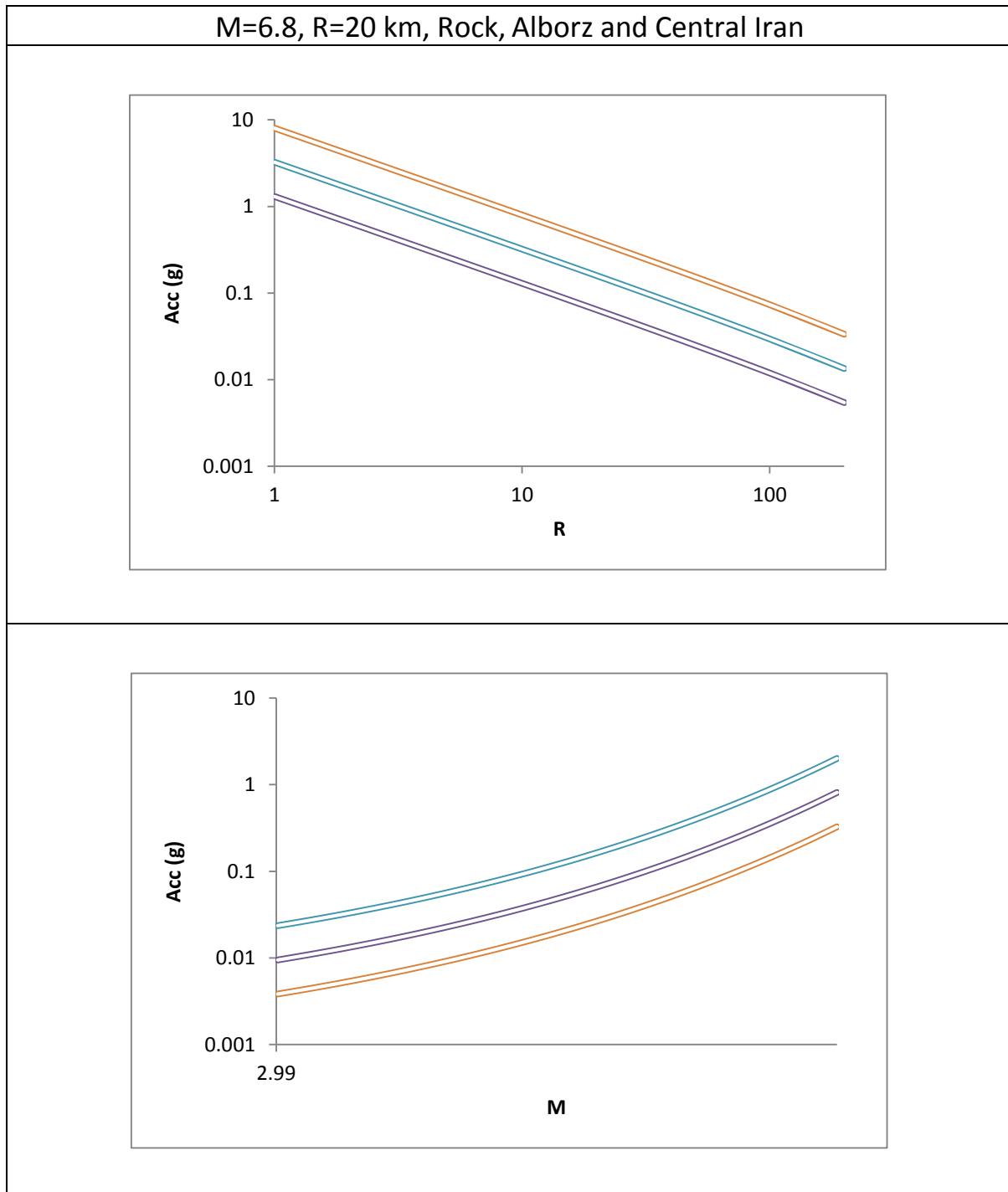
13. Boore et al. (1997)



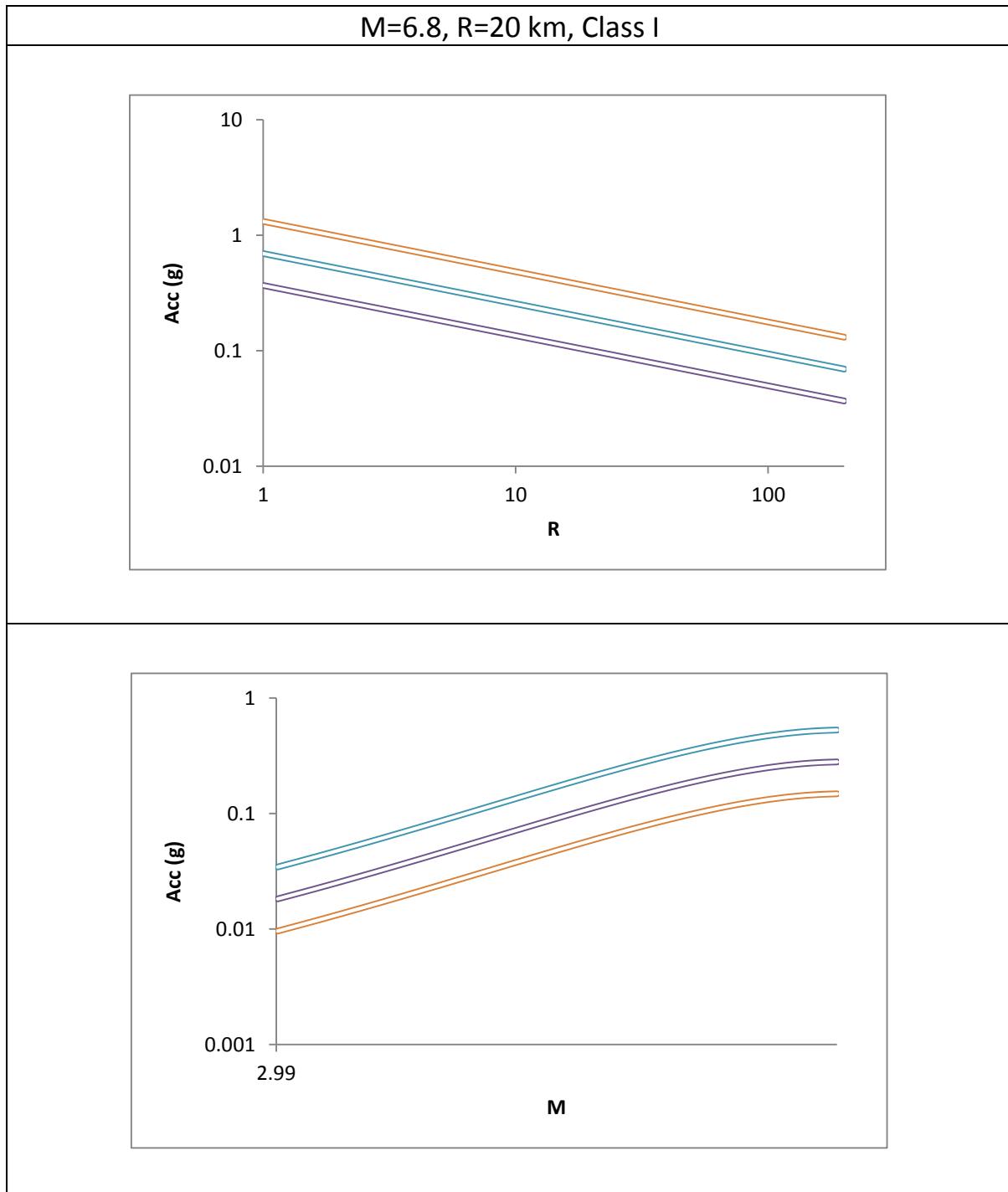
14. Boore & Atkinson (2008)



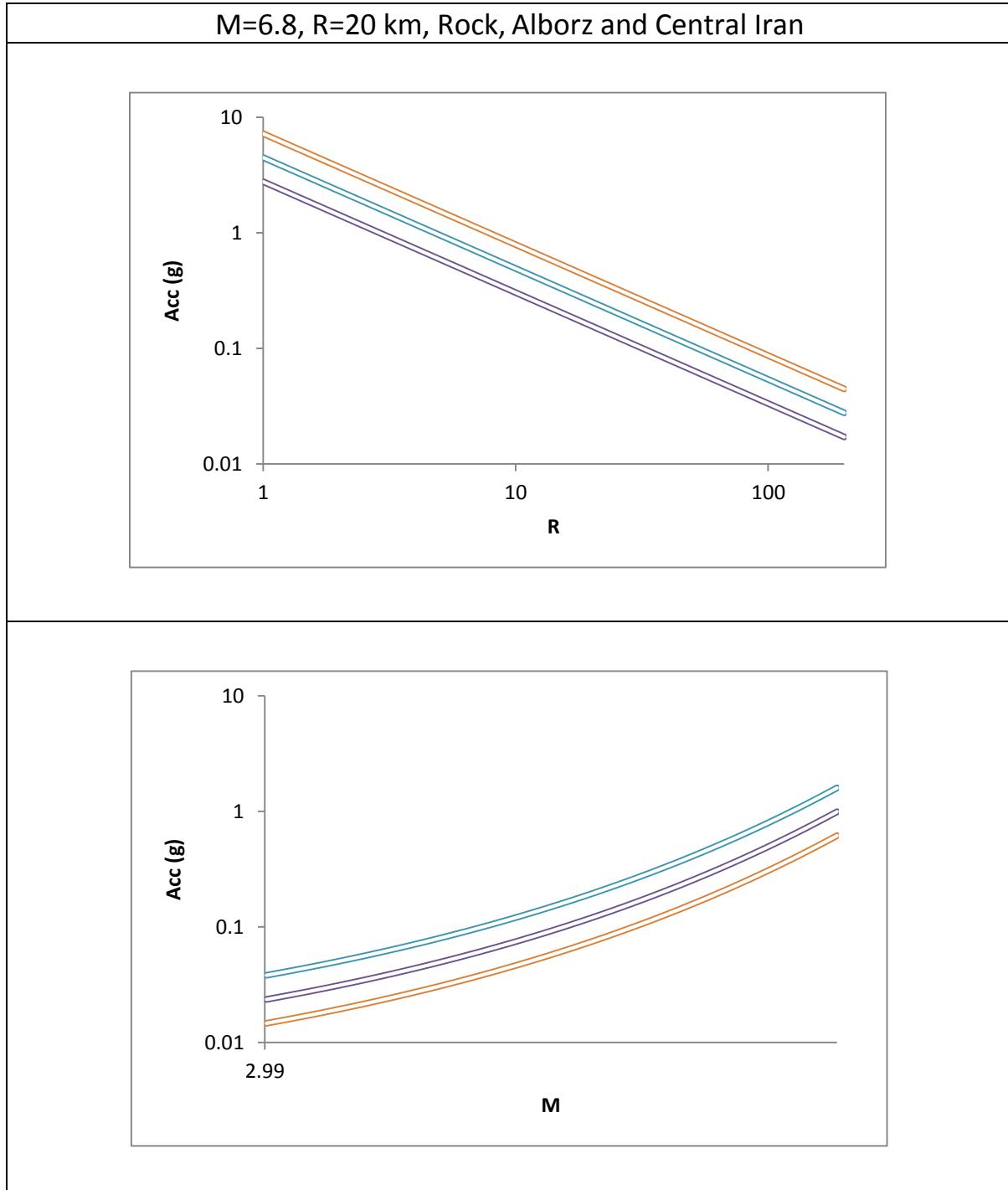
15. Zare et al. (1999)



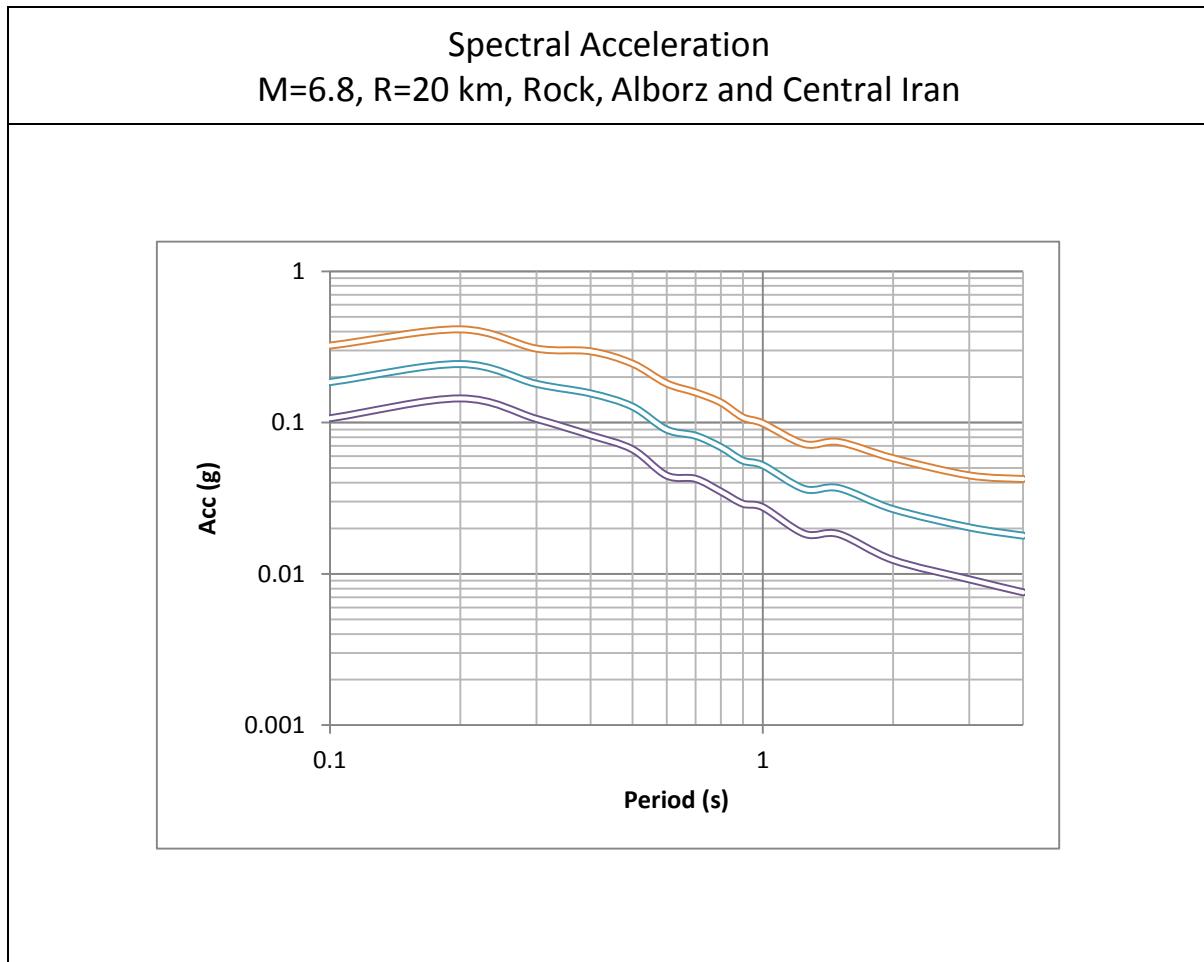
16. Zare & Sabzali (2006)



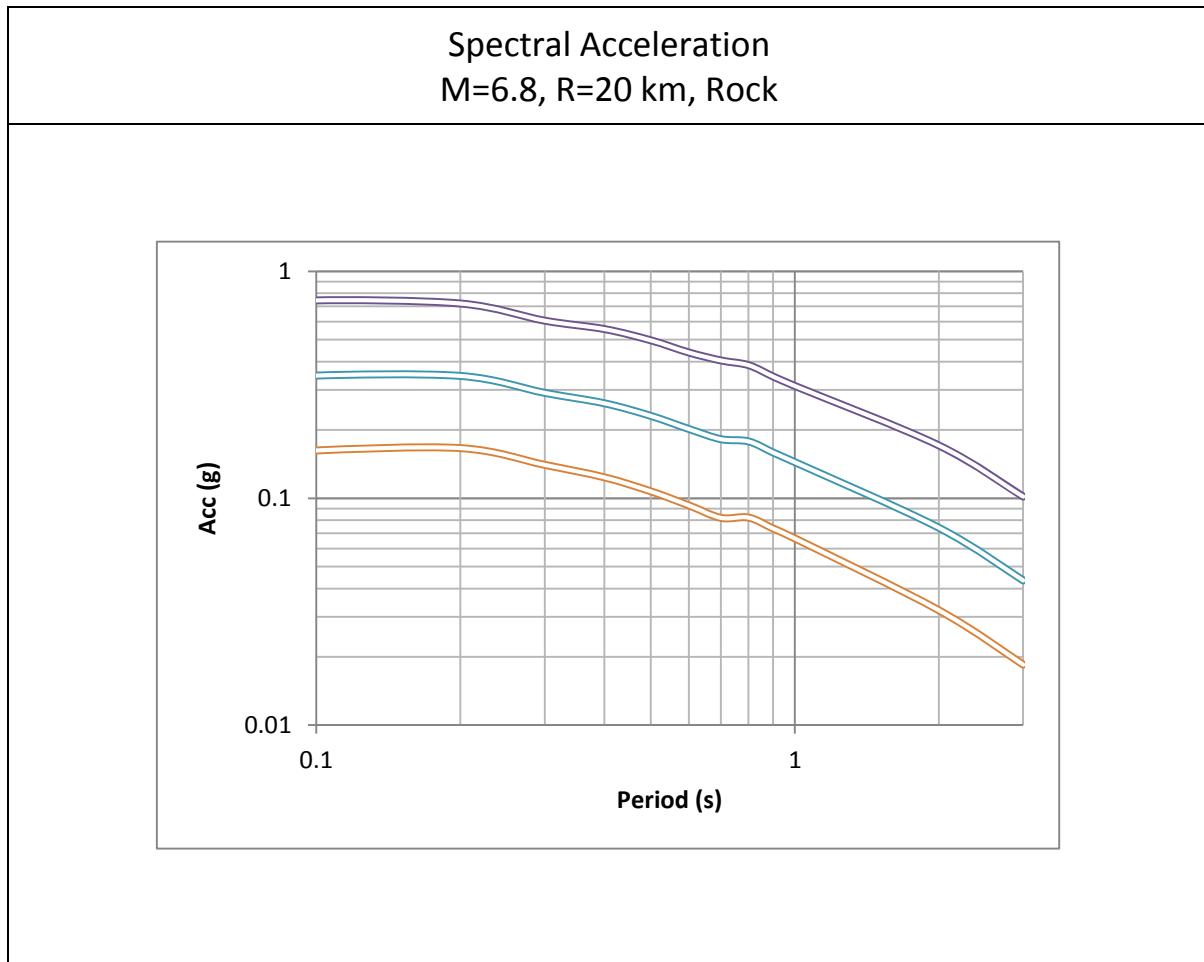
17. Ghodrati Amiri et al. (2007)



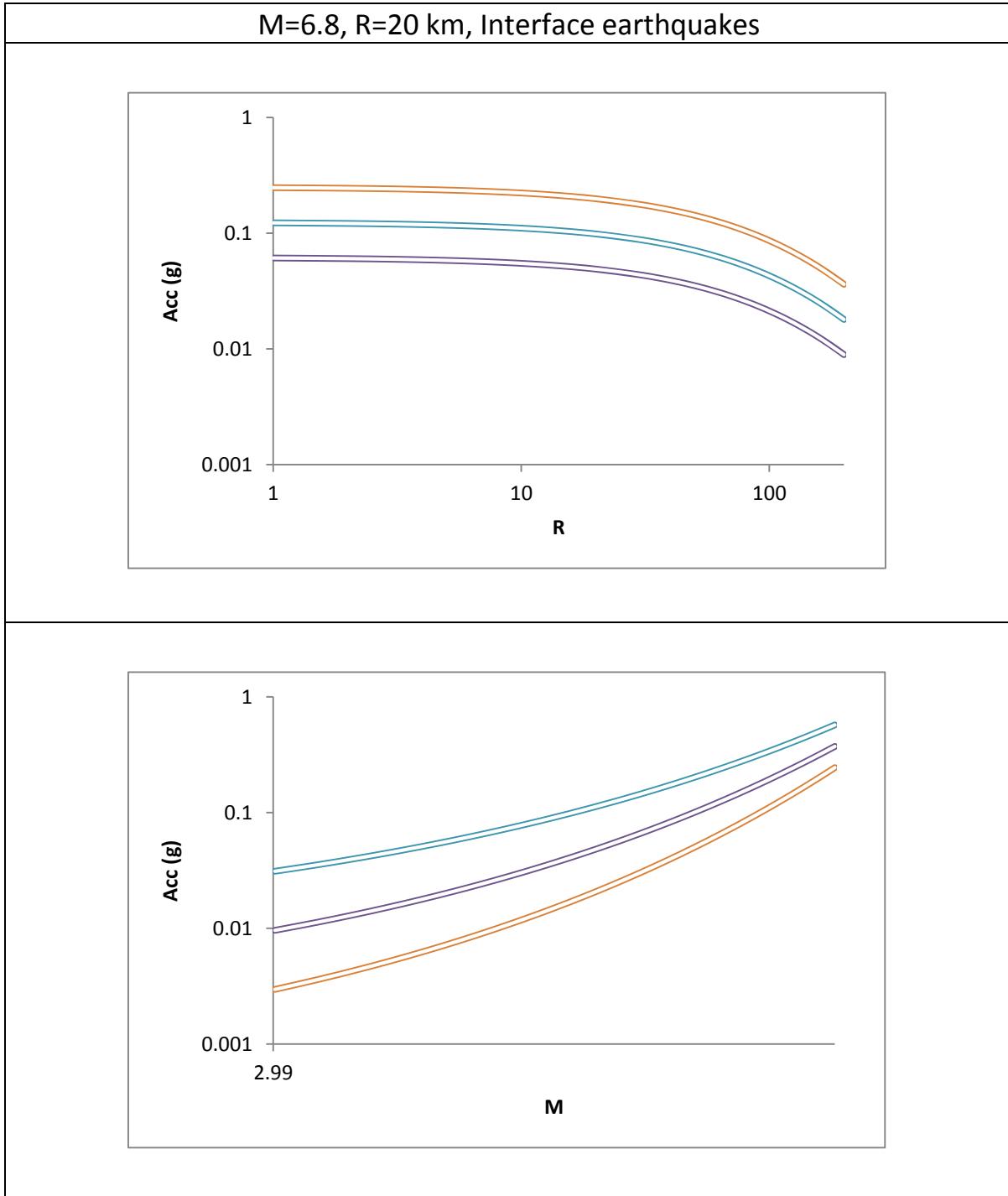
18. Ghodrati Amiri et al. (2010)



19. Ghasemi et al. (2009)

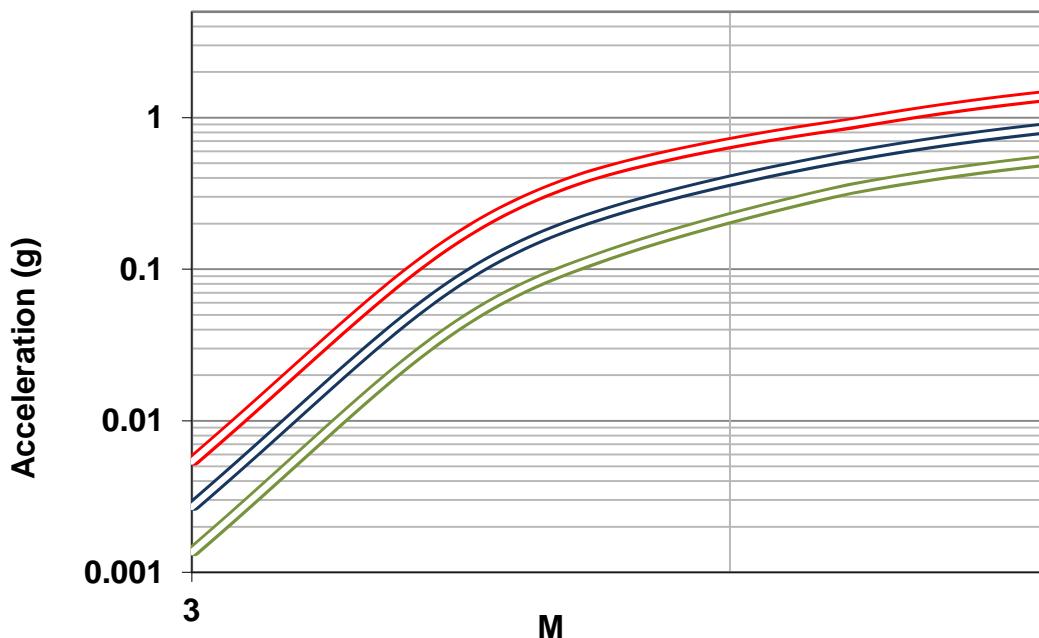
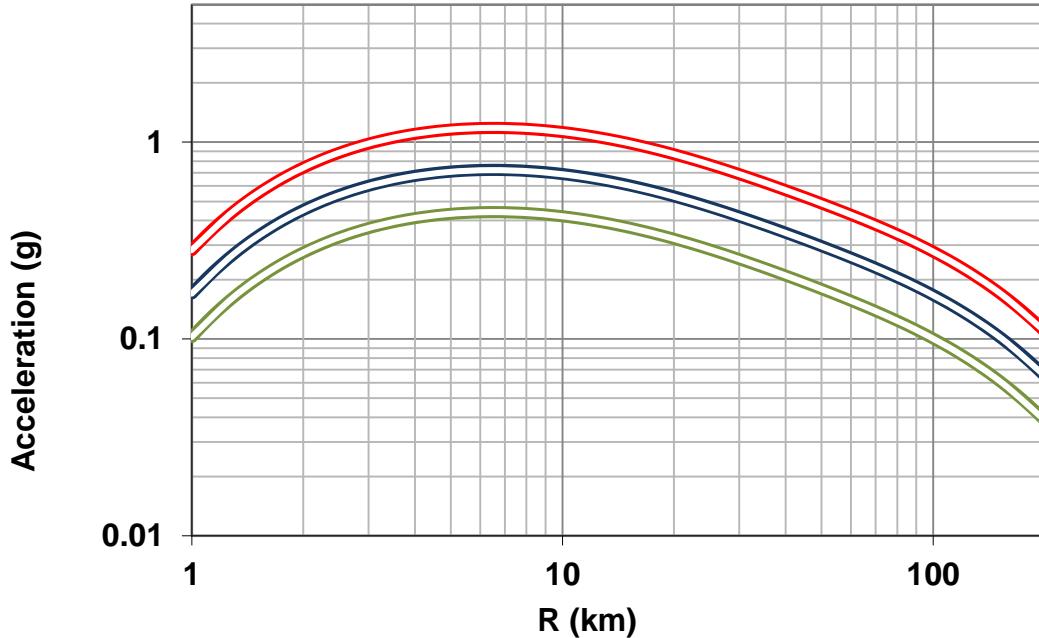


20. Youngs et al. (1988)

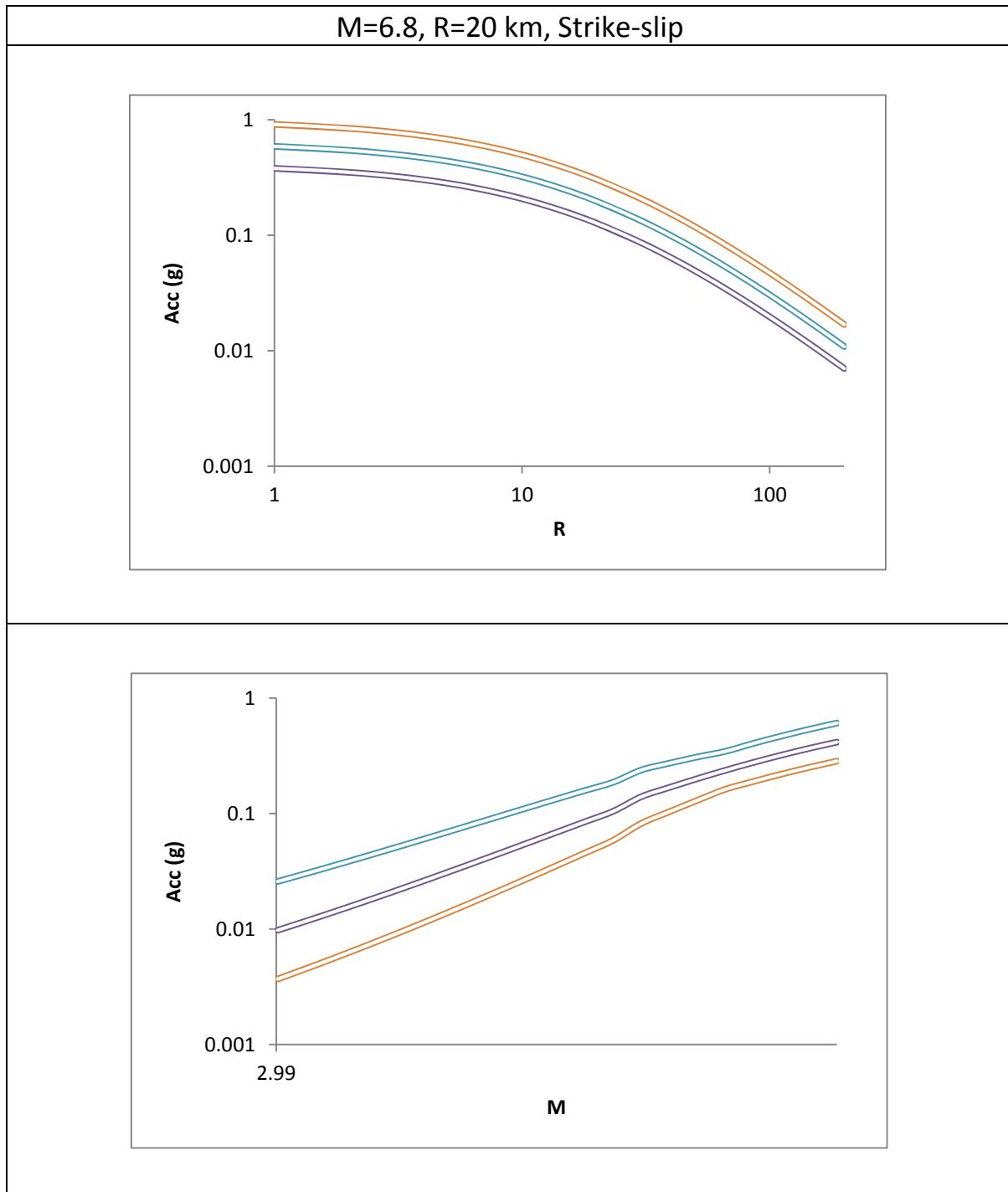


21. Chiou & Youngs (2008)

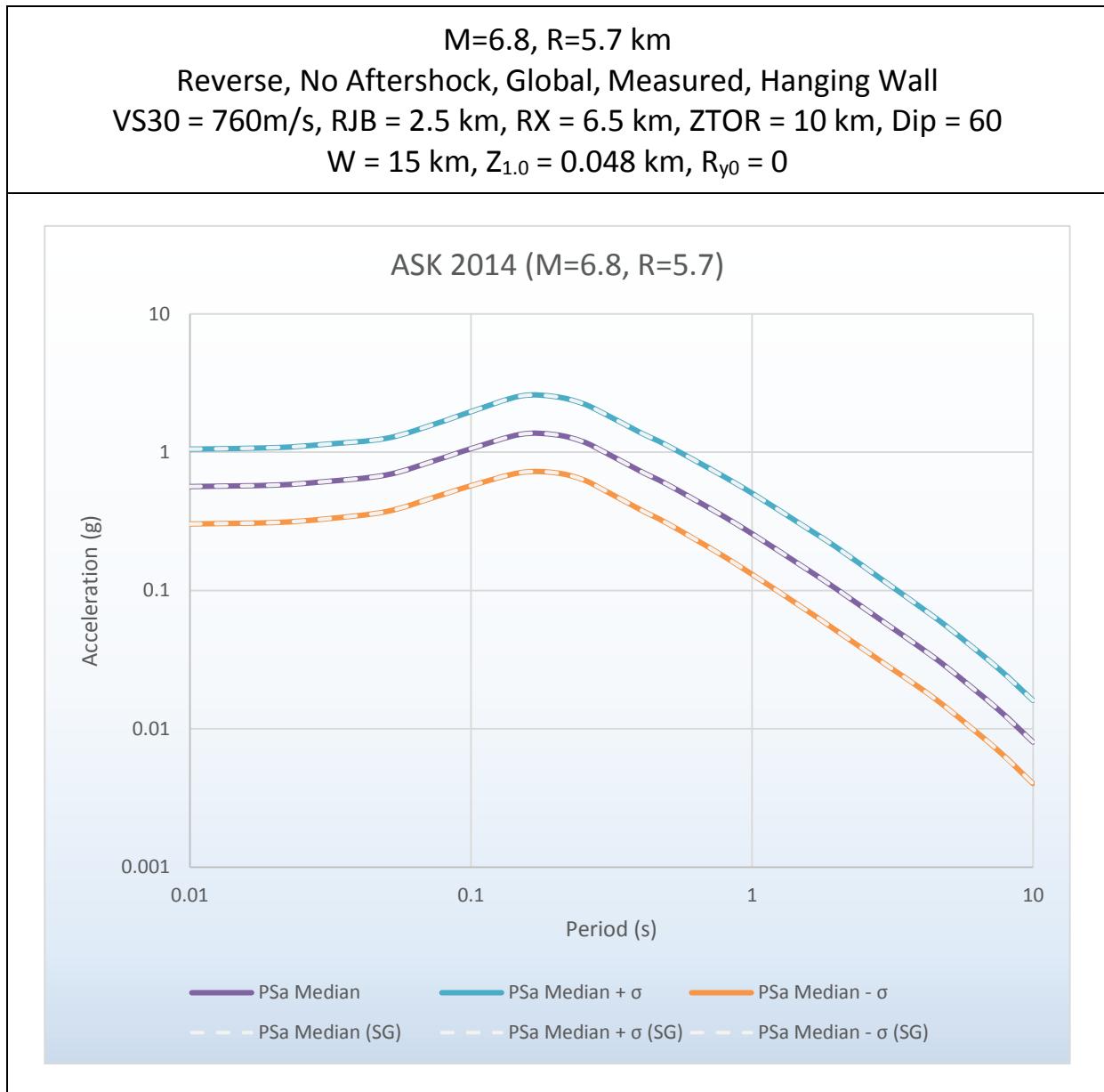
M=8, R=8 km, , Strike-Slip, Mainshock, Inferred
VS30 = 360m/s, RJB = 2 km, RX = 10 km, ZTOR = 3 km, Dip = 66

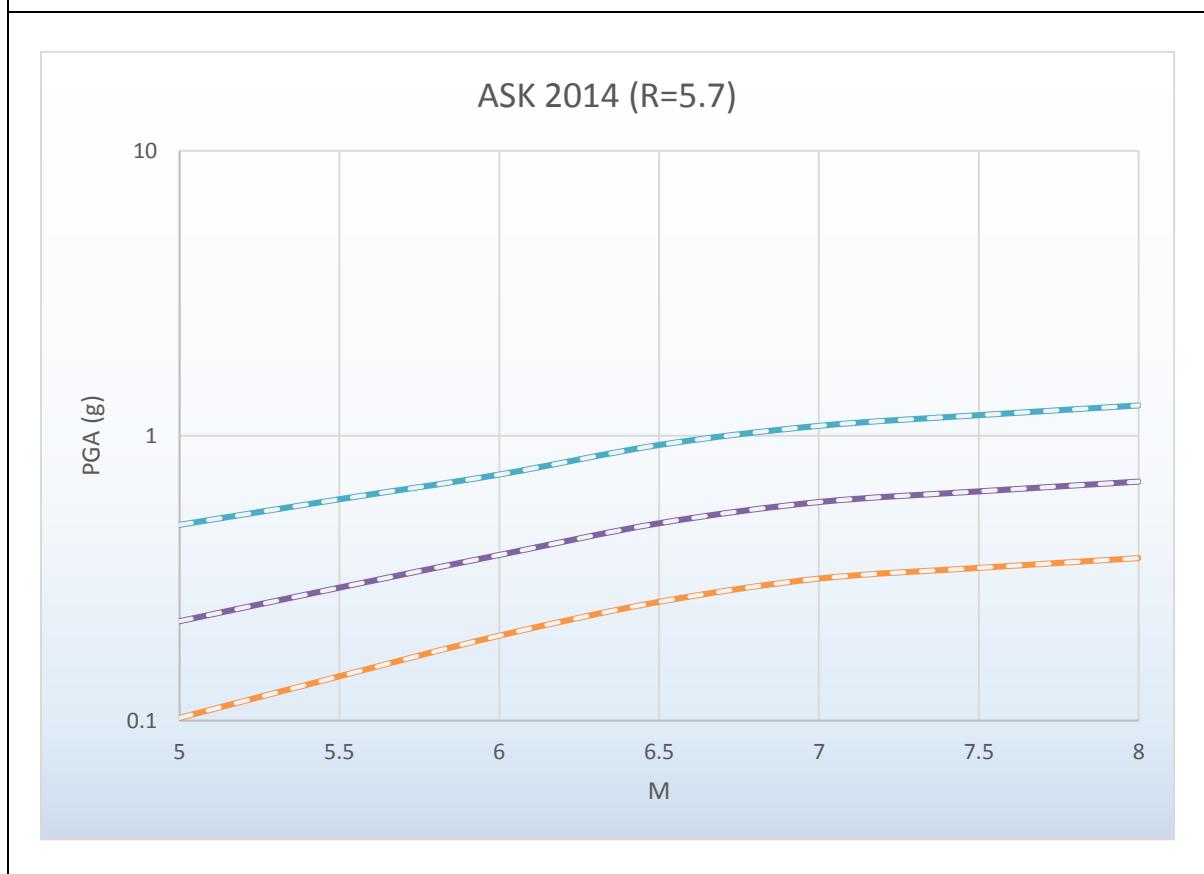
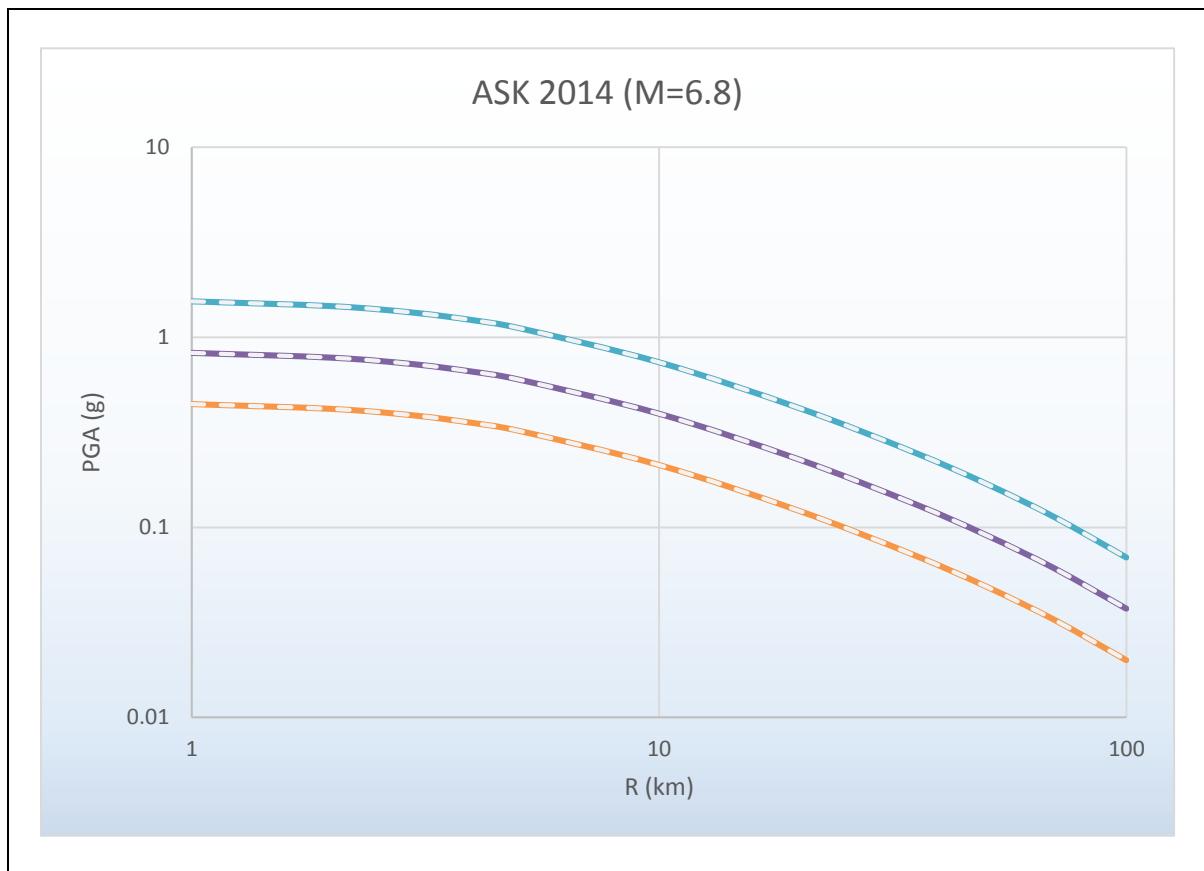


22. Idriss (1993)

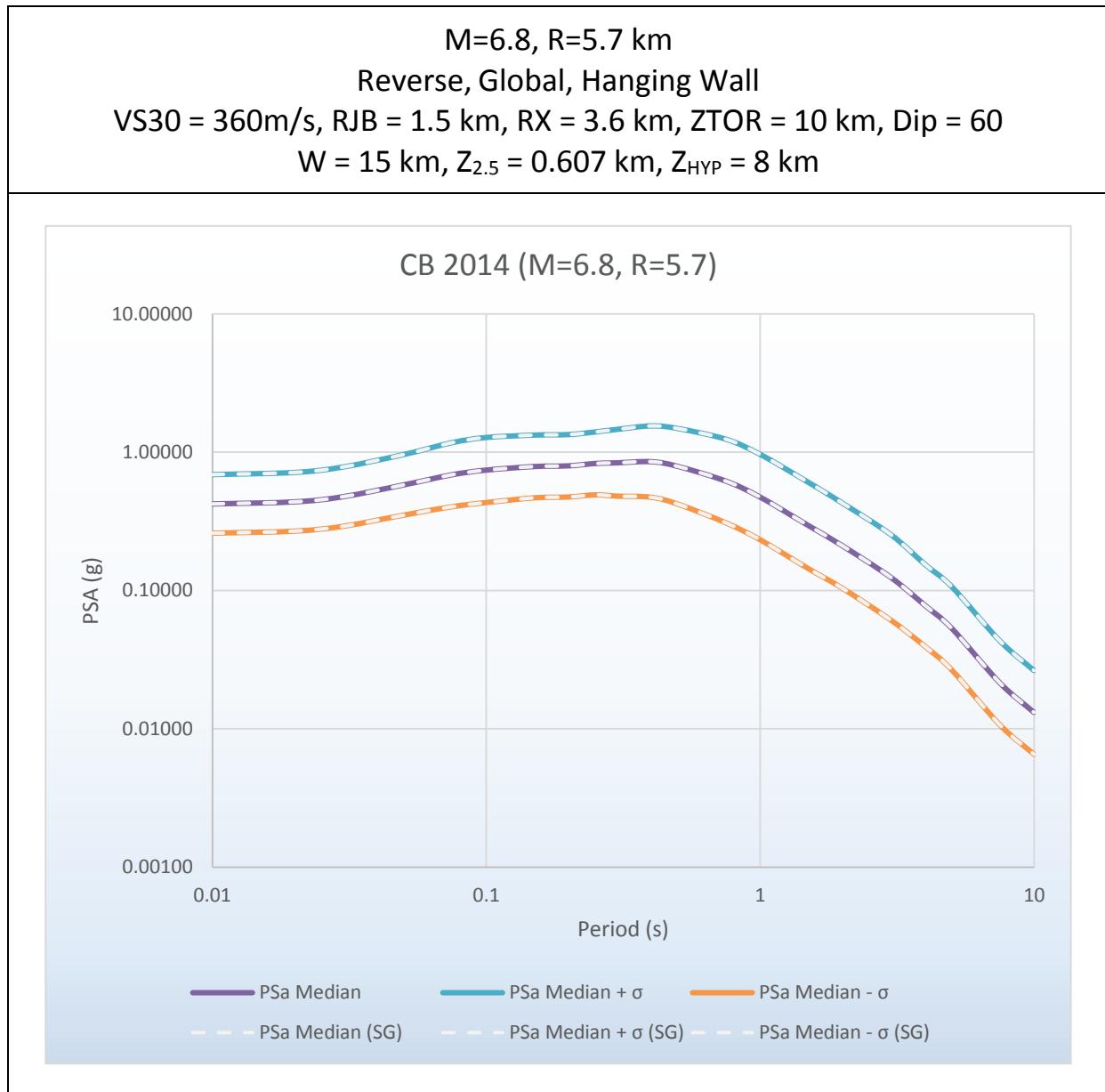


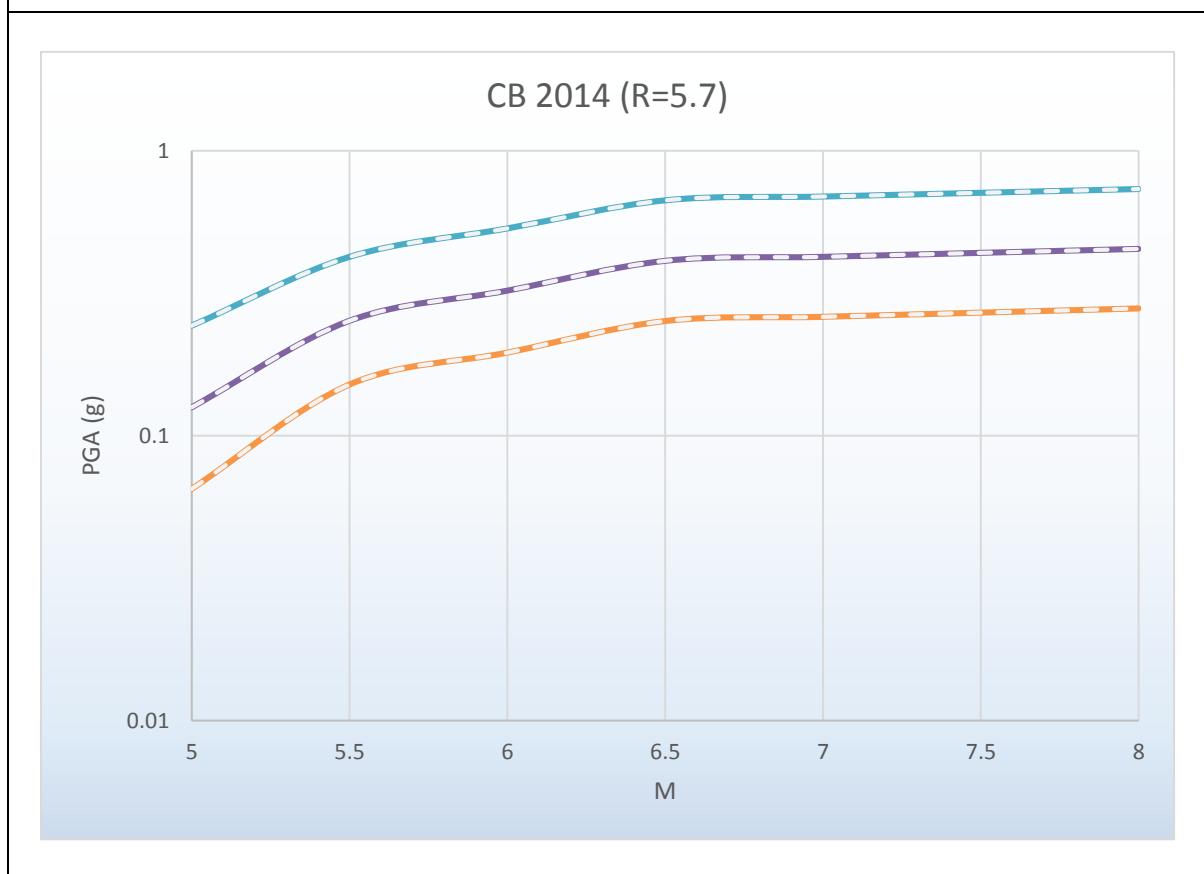
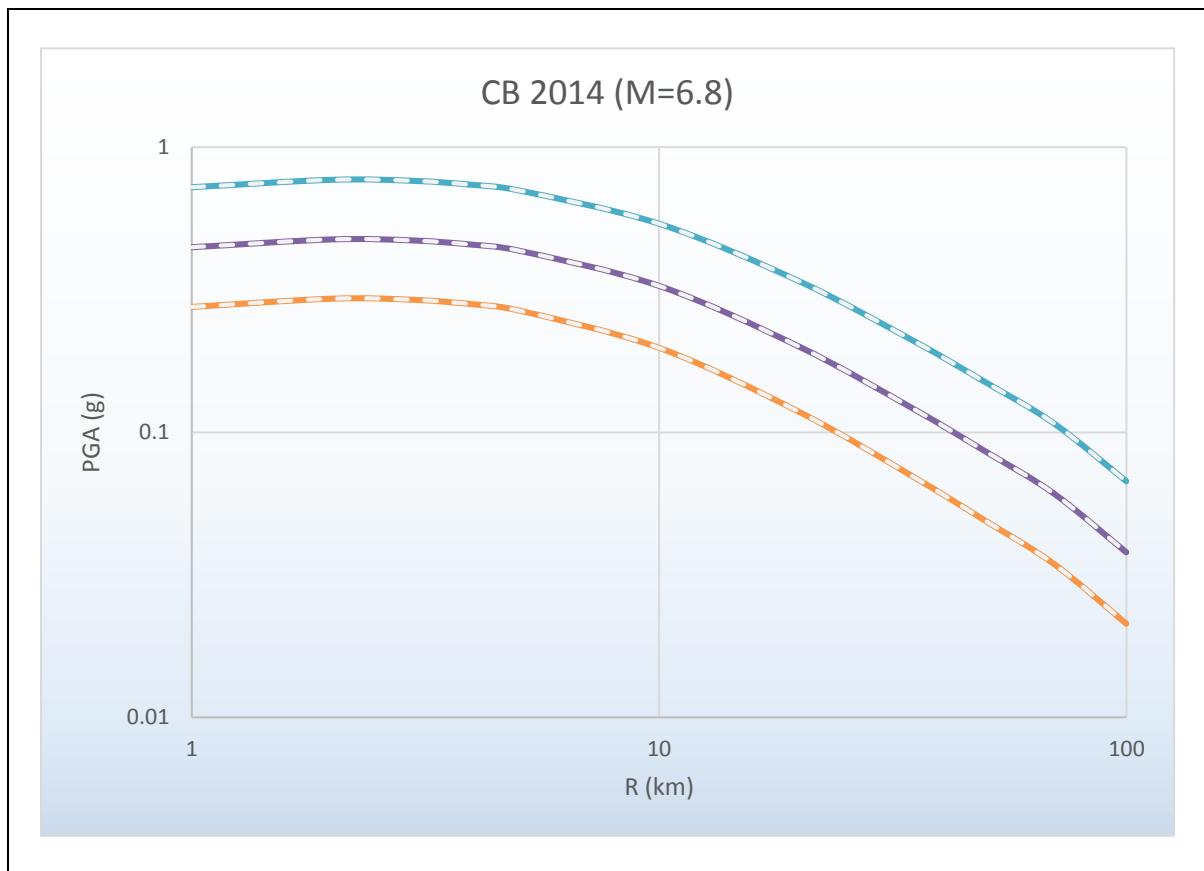
23. Abrahamson et al. (2014)





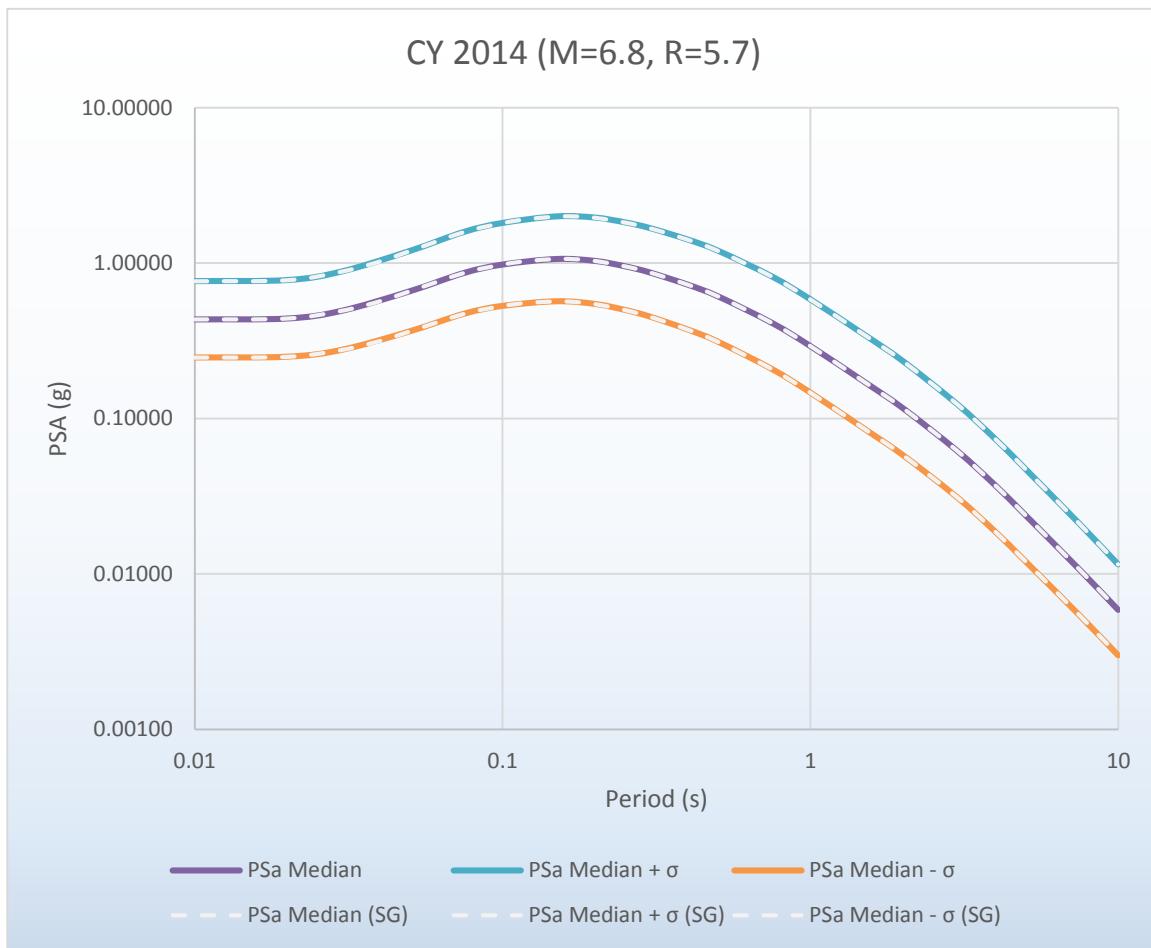
24. Campbell & Bozorgnia (2014)

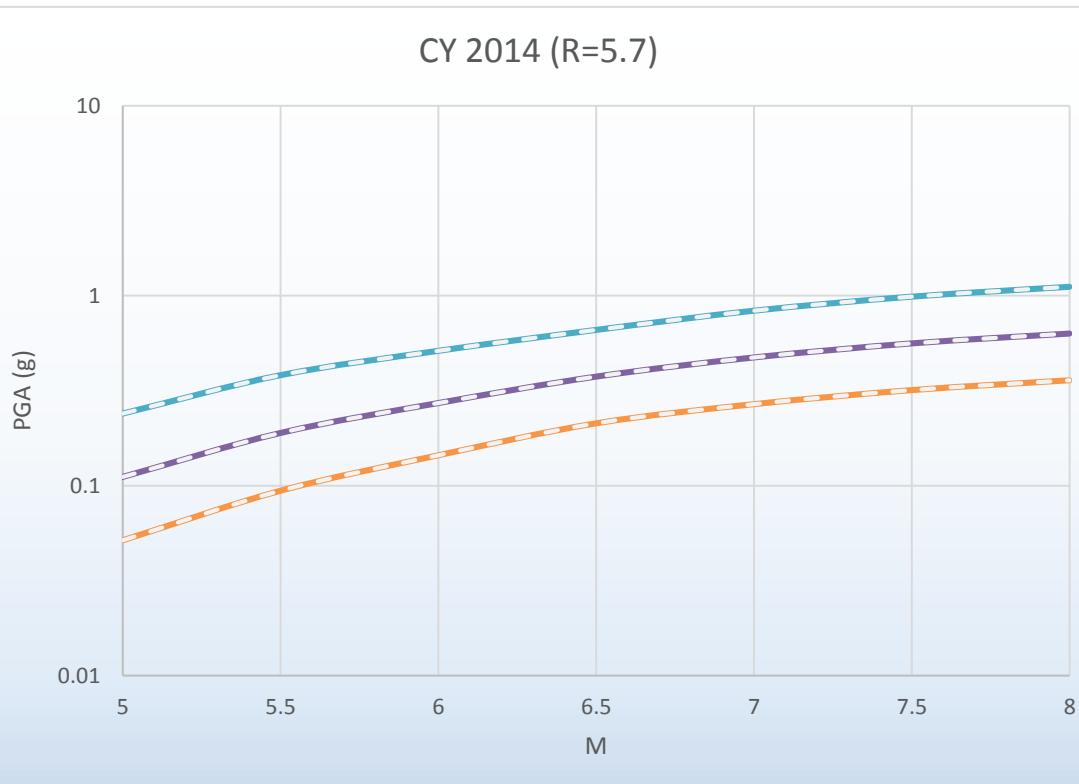
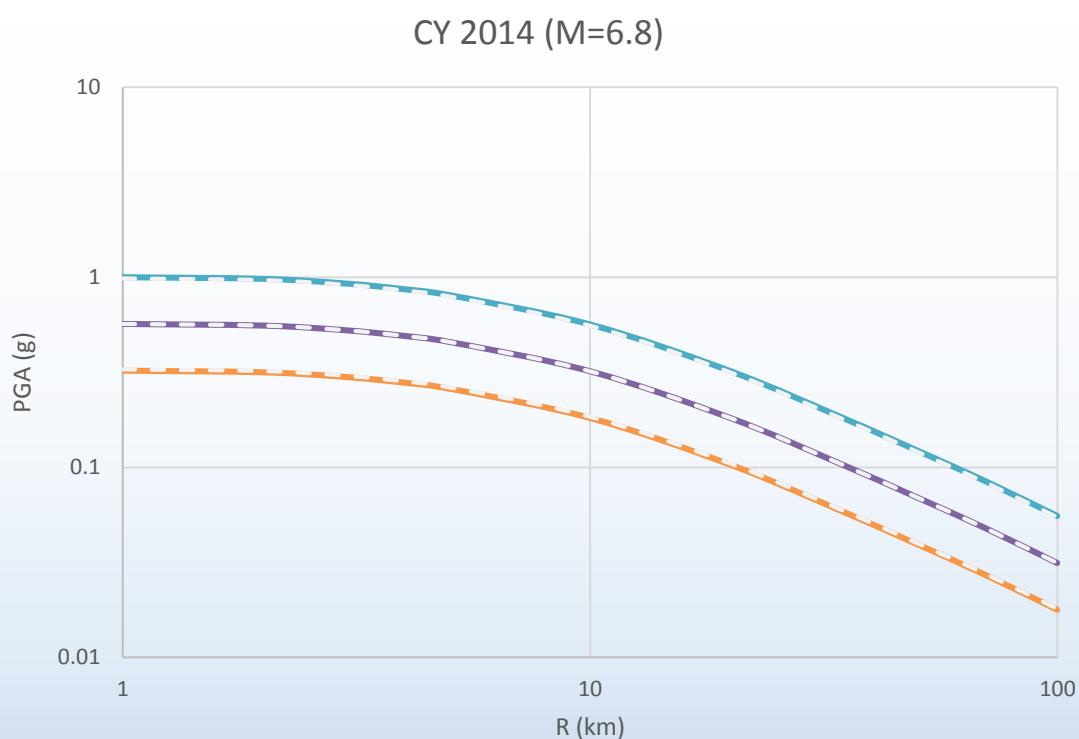




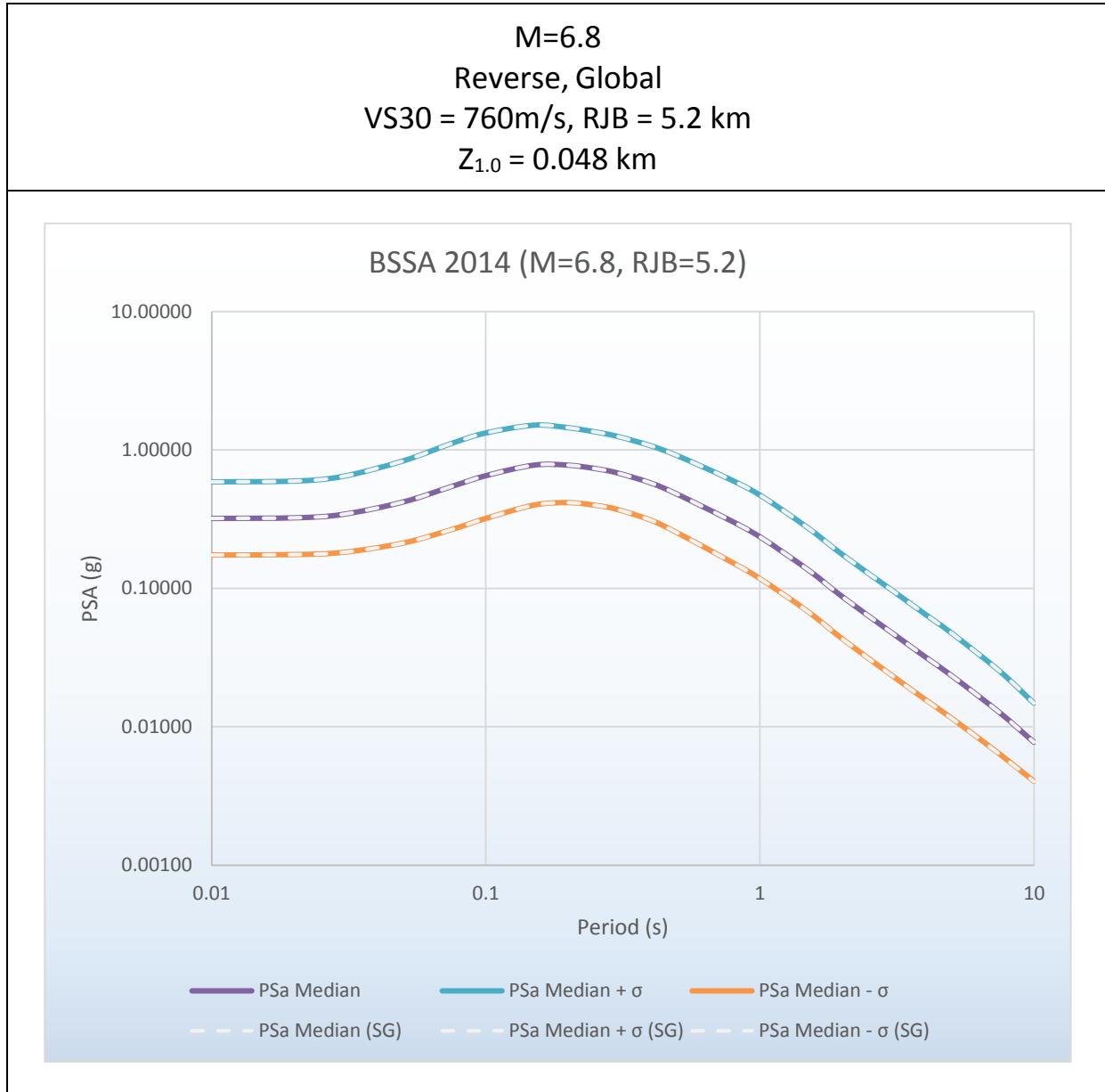
25. Chiou & Youngs (2014)

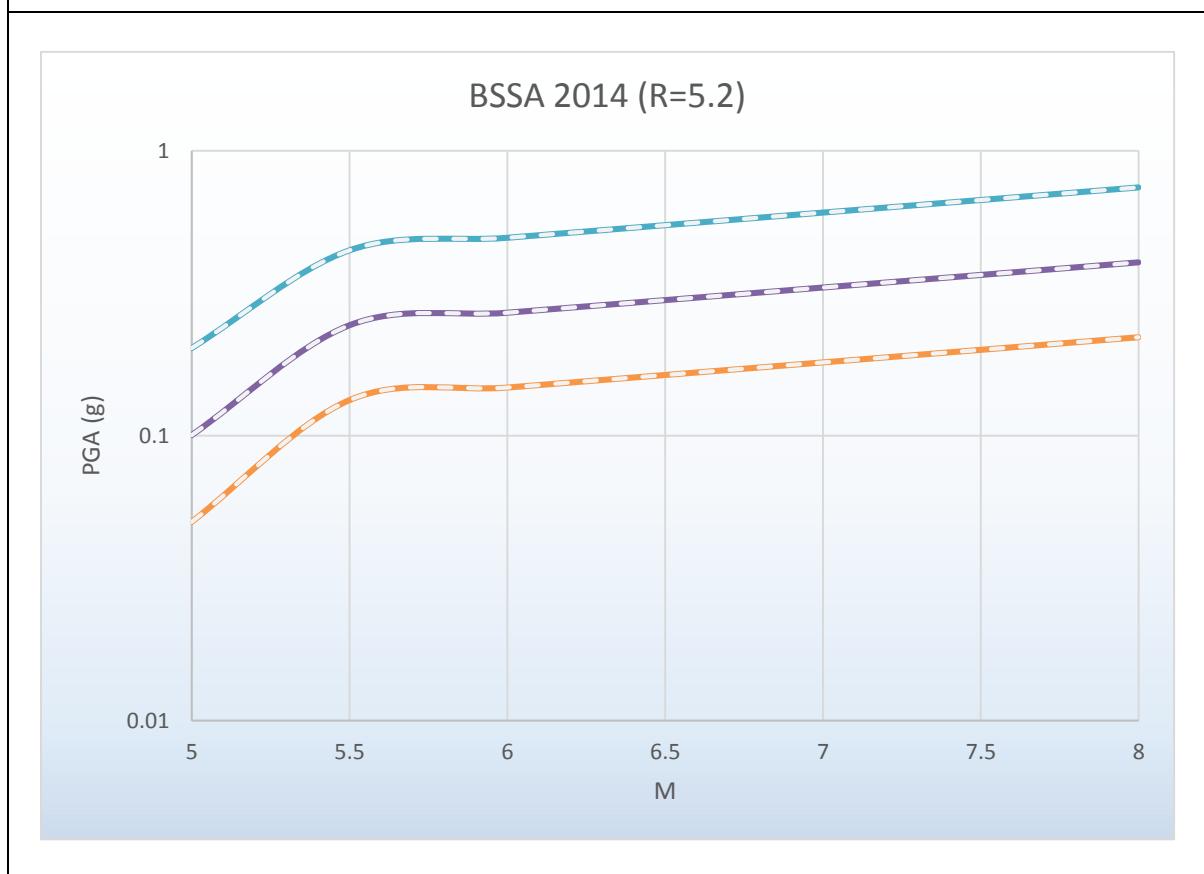
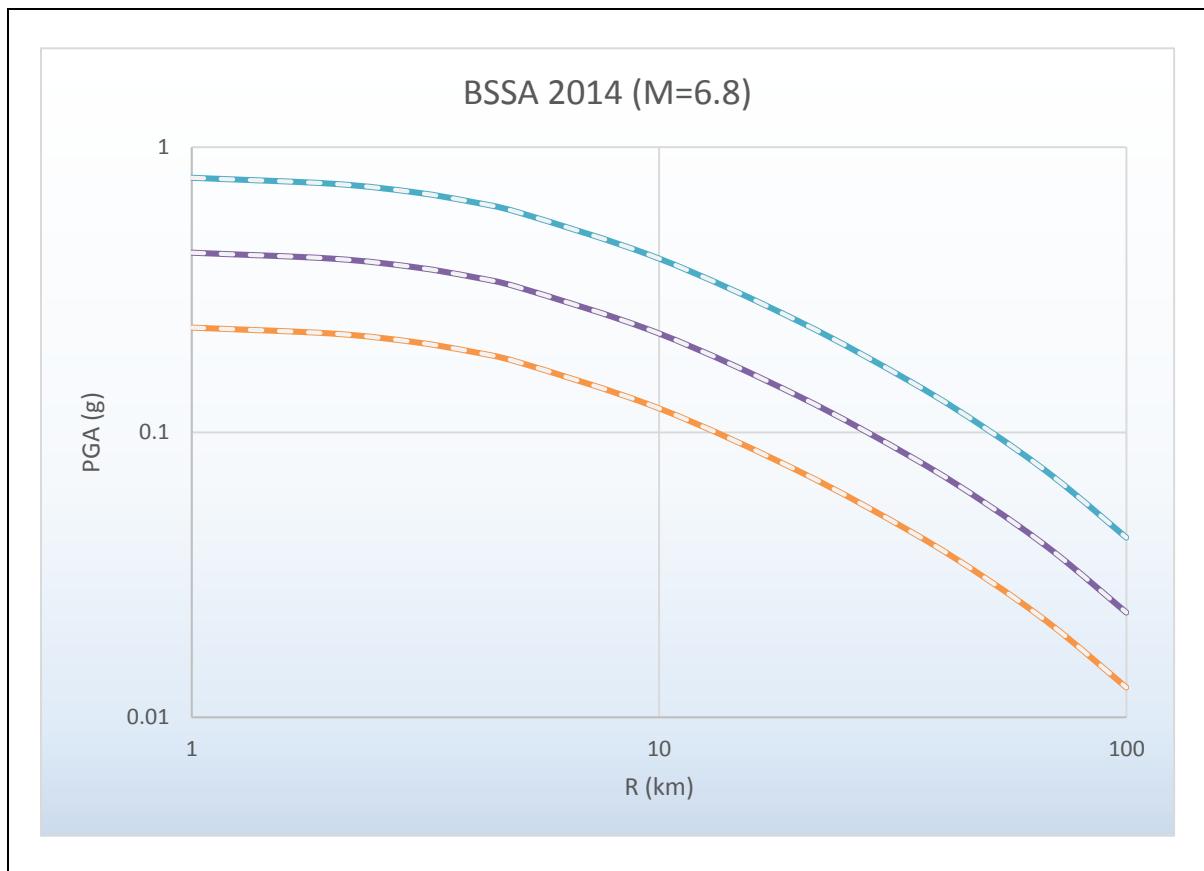
M=6.8, R=5.7 km
Reverse, Global, Hanging Wall, Inferred
VS30 = 760m/s, RJB = 2 km, RX = 3 km, ZTOR = 1 km, Dip = 60
 $Z_{1.0} = 0.048 \text{ km}$



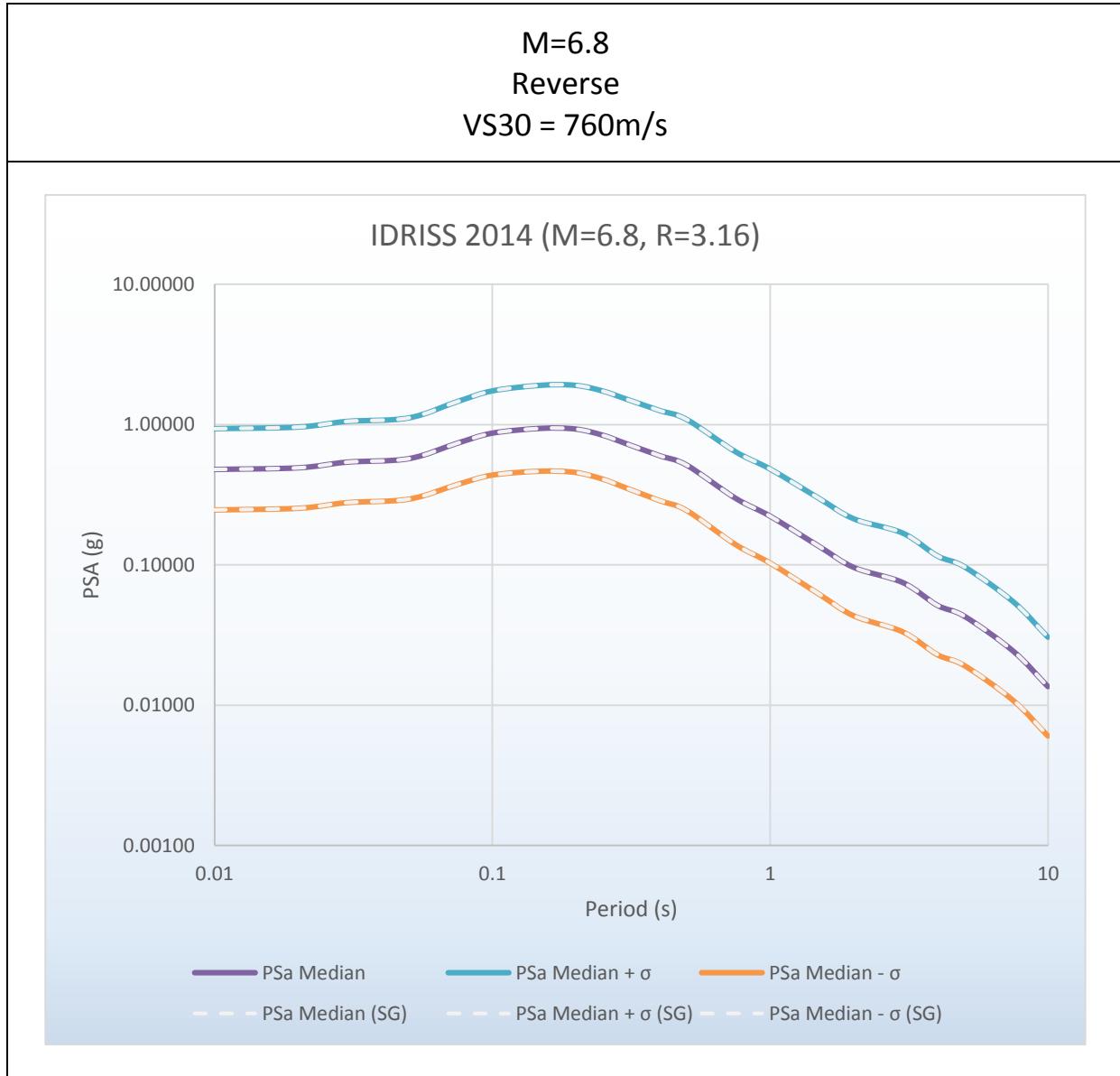


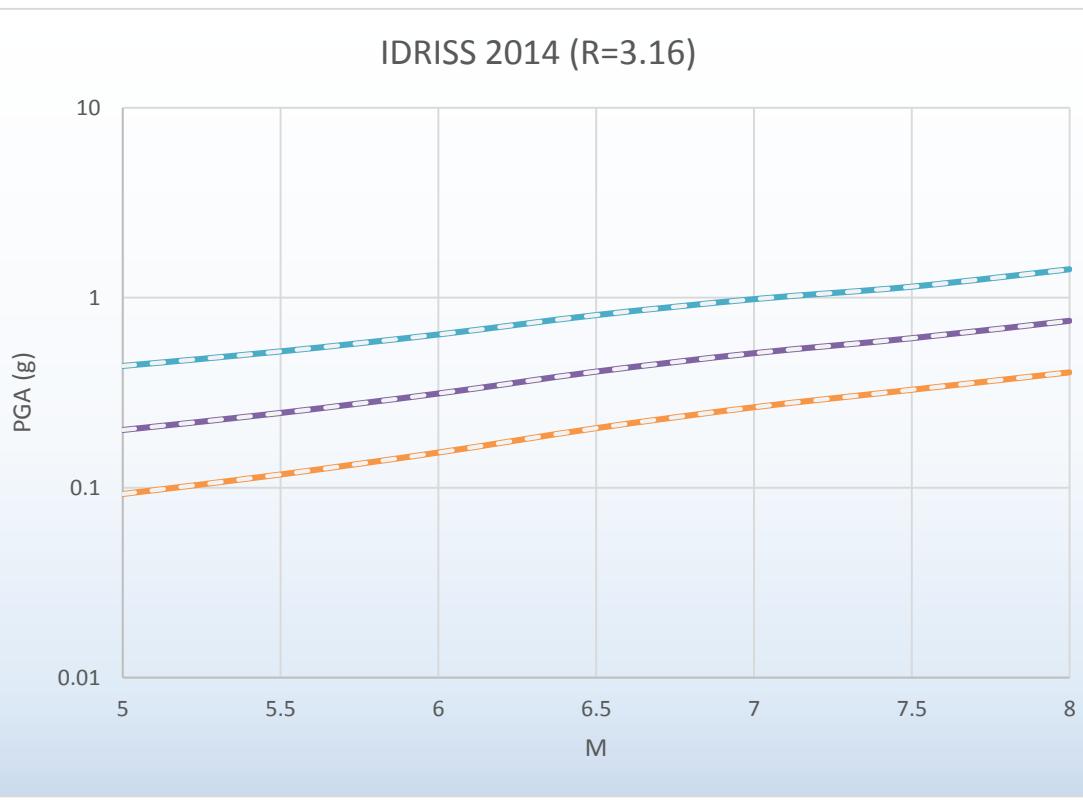
26. Boore et al. (2014)



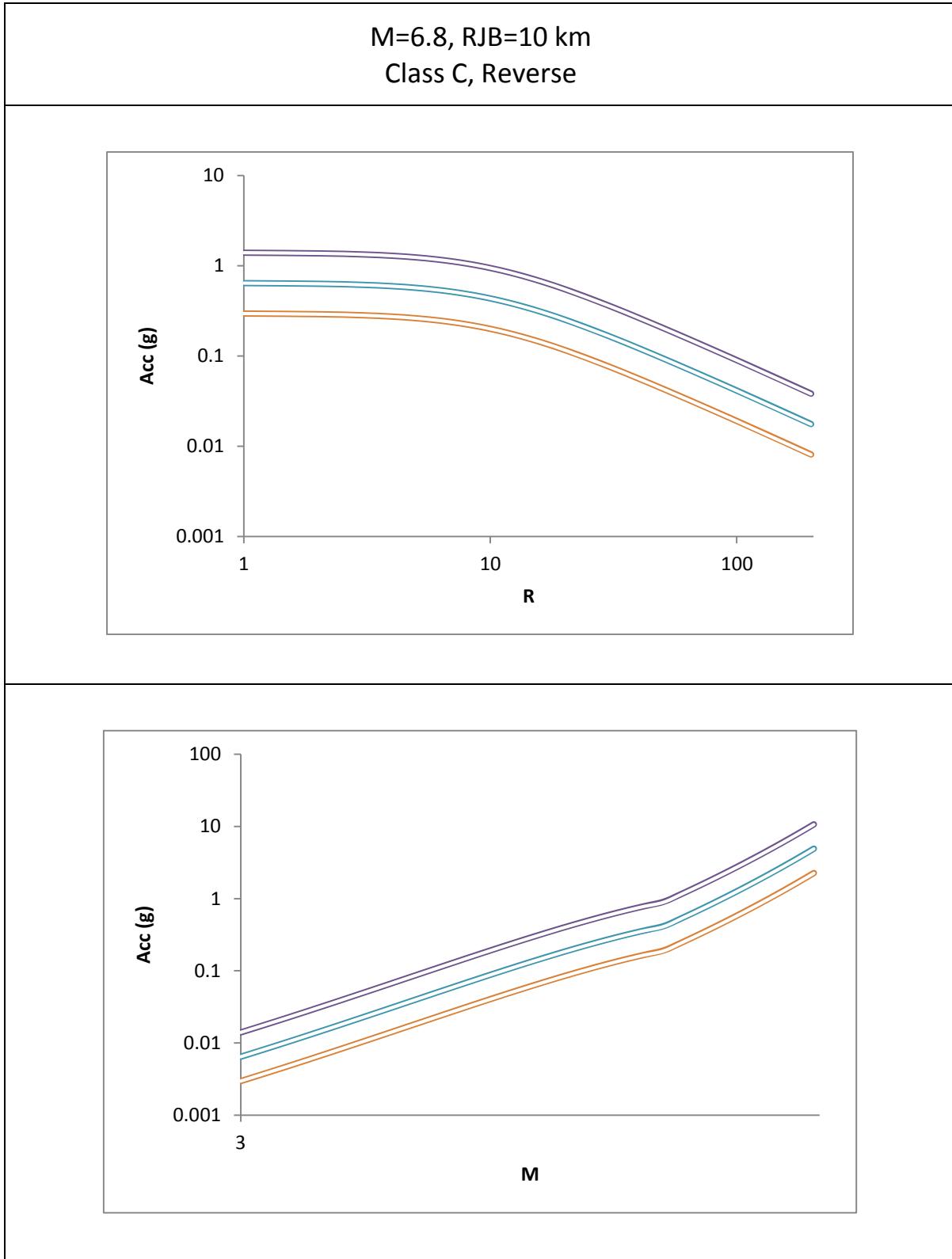


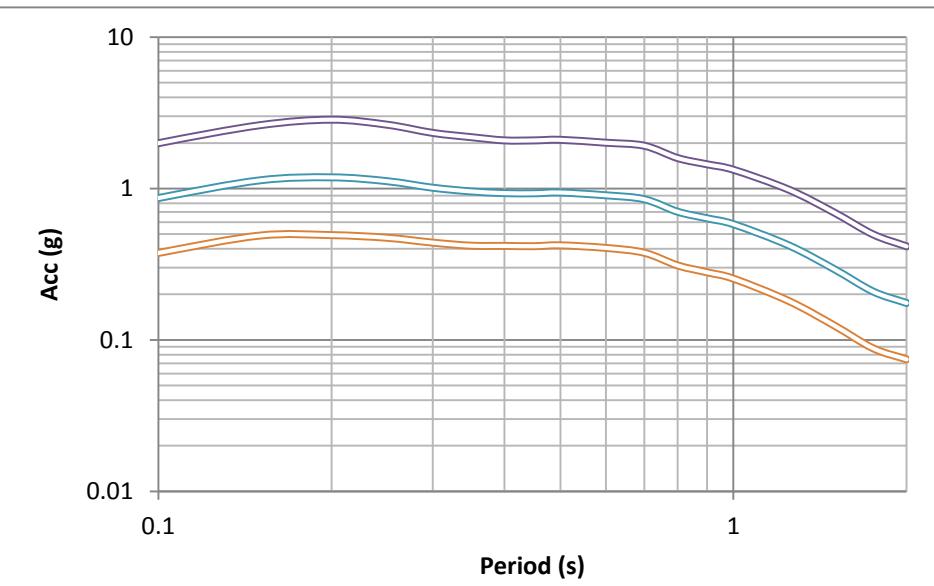
27. Idriss (2014)



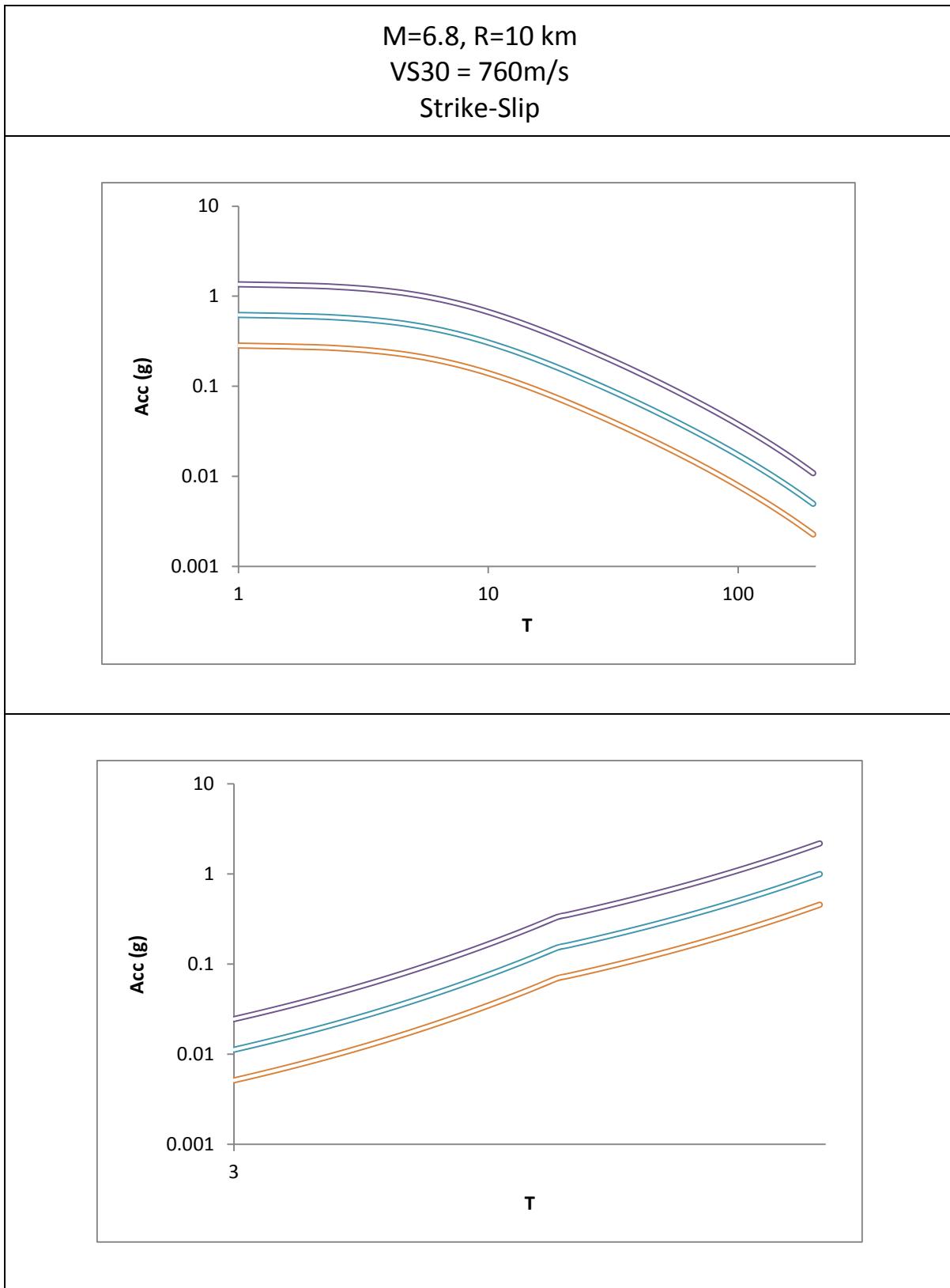


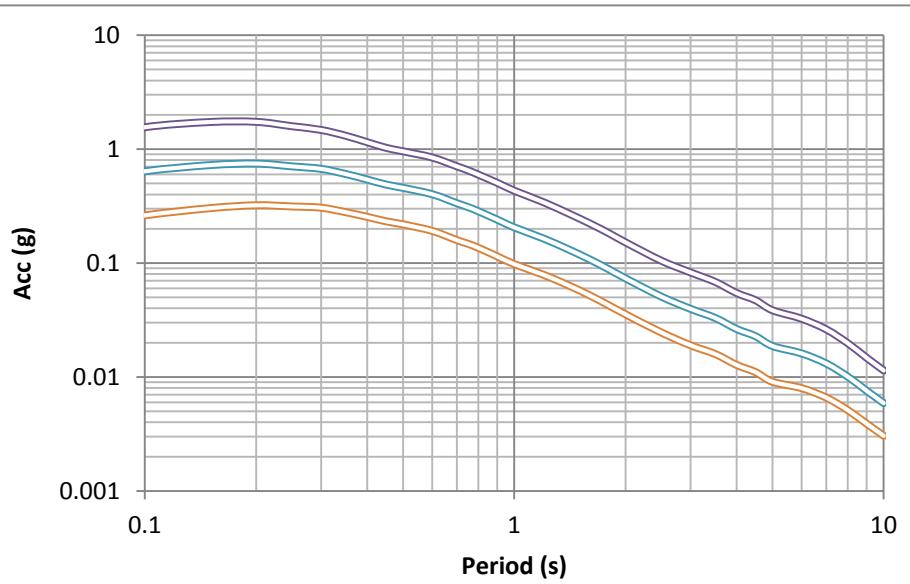
28. Bindi et al. (2011)





29. Lanzano et al. (2019)





SEISMOGRAPH
earthquake engineering software