CAV Regression Report

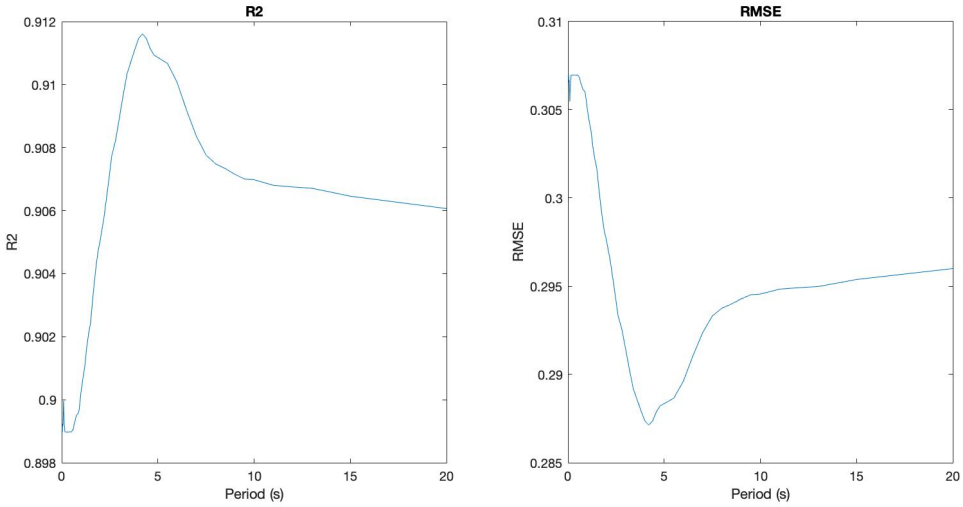


Fig. 1

From Fig. 1 the optimum T value for Sa is obtained, T = 4.2 sec.

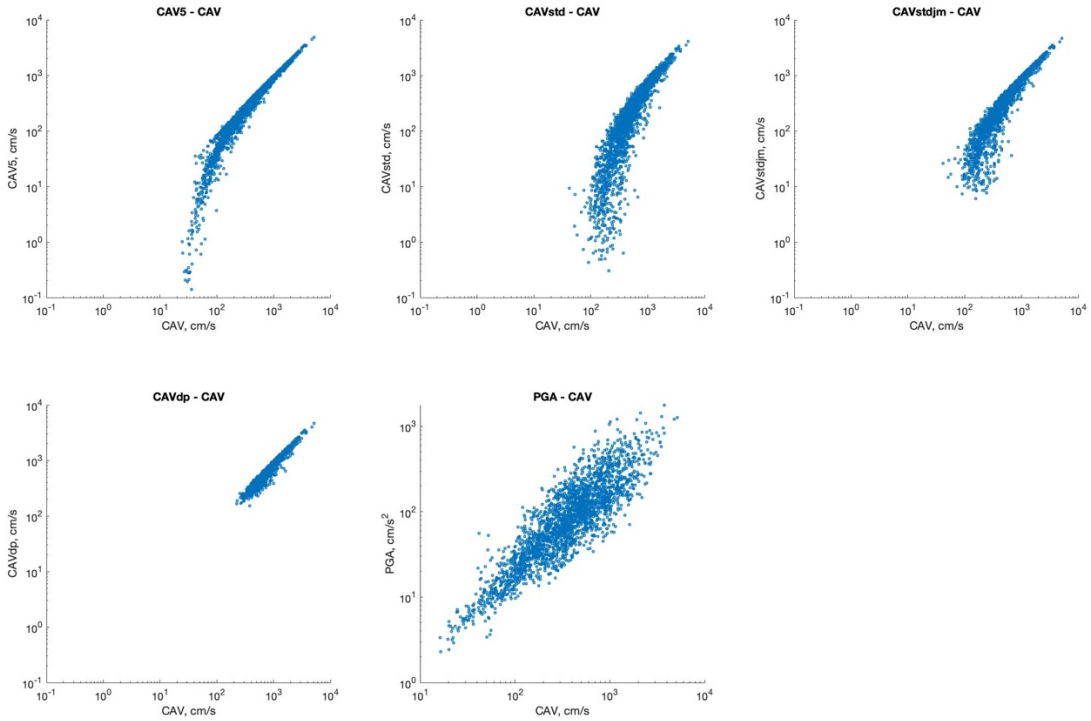


Fig. 2

In Fig.2, the *CAVstd* is not mentioned in Campbell's paper, which directly impose threshold on all time series. However, *CAVstdjm* divide the time series into intervals in terms of time and then find the *PGA* within each interval. As a result, *CAVstdjm* has a higher value than *CAVstd*.

CAVdp impose checks on *CAVstdjm*, thus, the plot of *CAVdp* only is the upper right part of *CAVstdjm*.

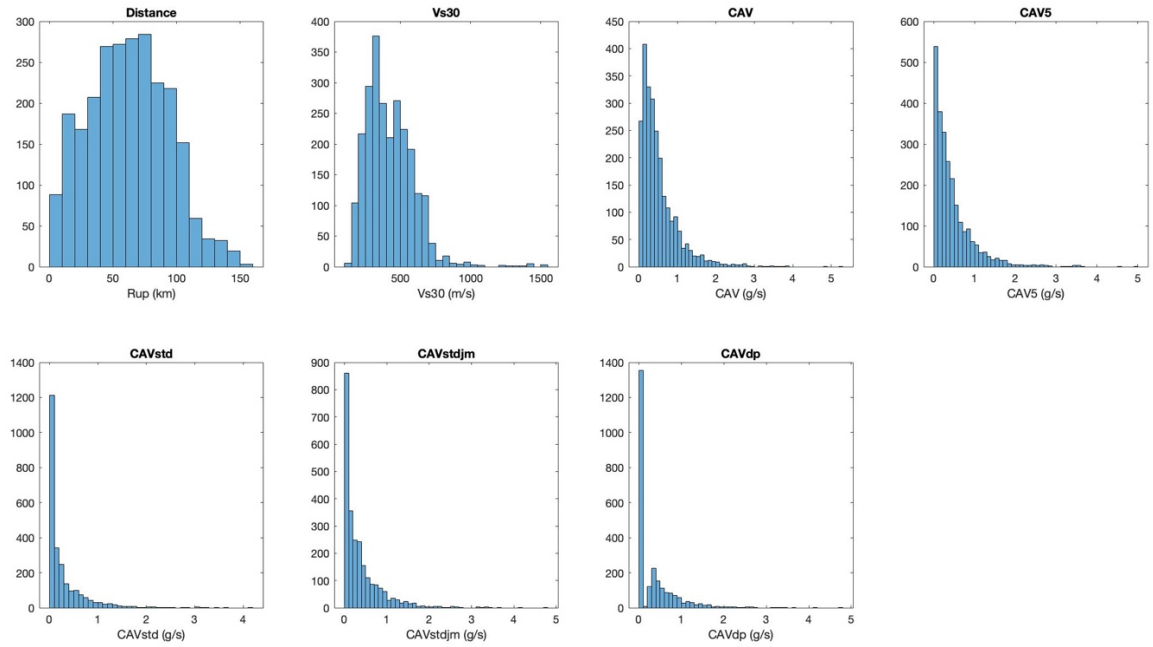
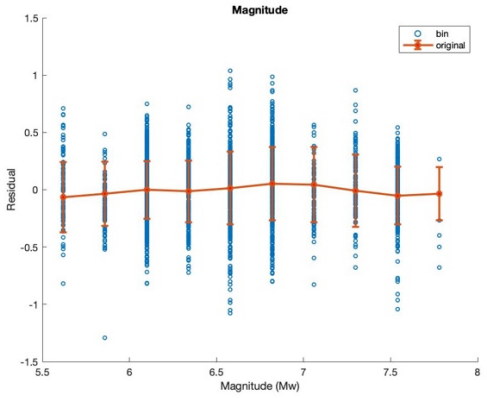
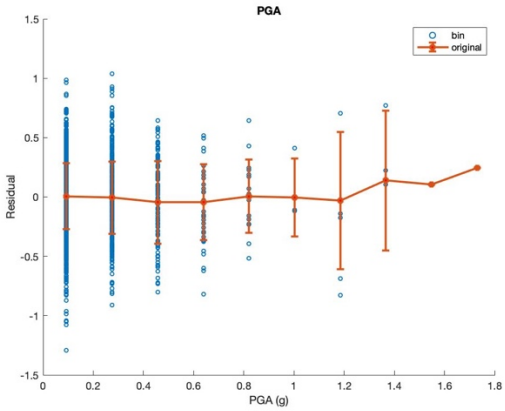
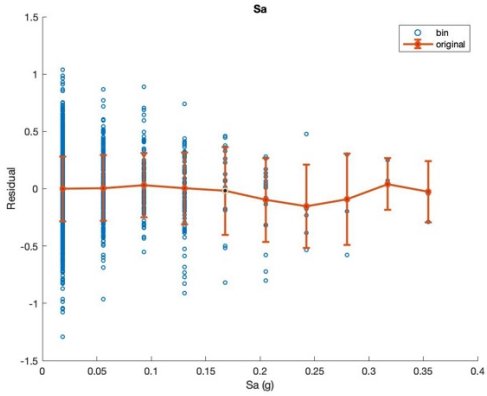


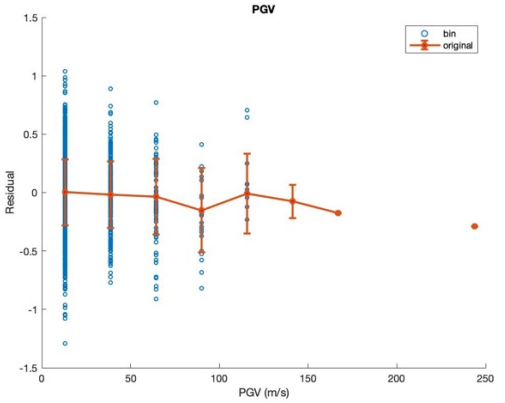
Fig.3

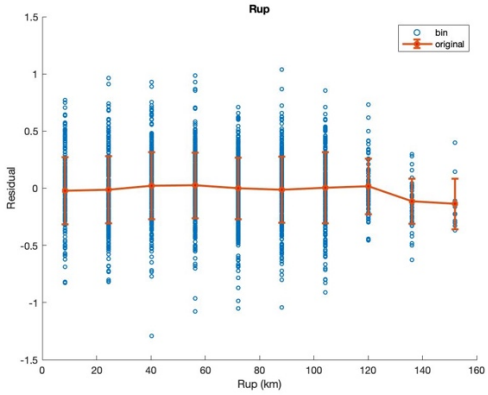
In Fig.3, the highest bar in CAVdp is actually 0 values, which are CAVstdjm that have failed the checks.

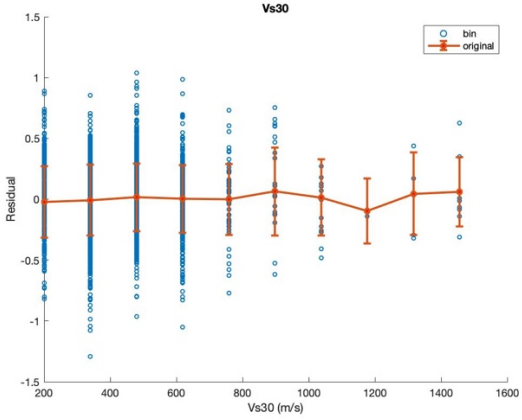

Magnitude
bin
original
Residual
Magnitude (Mw)


PGA
bin
original
Residual
PGA (g)


Sa
bin
original
Residual
Sa (g)


PGV
bin
original
Residual
PGV (m/s)


Rup
bin
original
Residual
Rup (km)


Vs30
bin
original
Residual
Vs30 (m/s)