READ DATA

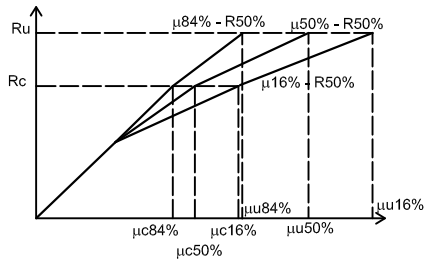
a. Limits (droof and drift)
b. Idealised pushover
c. Building parameters (T and Γ)
d. Correspondance droof-drift (from pushover or linear)

METHODOLOGY

from Limits to μds

a. get R corresponding to softening and ultimate ductility, μc and μu.
b. get βR from RGM, and derive μc84% μc16% and μu84% μu16%

build R50%-μ50%
R50%-μ16%
R50%-μ84% curves



find R50%,ds R16%,ds R84%,ds
interpolating the curves for μds

Find Sa50%,ds from R50%,ds
and βSa,ds from R16%,ds and R84%,ds

RESULTS

vuln = 0

βθc = 0

median Sa,ds = Sa50%,ds
dispersion Sa,ds = βSa,ds

βθc > 0

a. Sample MC values of μds
b. From each μds,i get Sa,ds,i and βSa,ds,i
c. From each Sa,ds,i and βSa,ds,i sample MC Sa,ds,i,j
d. Combine together all MC*MC values of Sa,ds,i,j

median Sa,ds = mean(Sa,ds,i,j)
dispersion Sa,ds = st.dev(Sa,ds,i,j)

vuln = 1

βθc = 0

a. Aplly consequence function to single set of μds
b. Get mean LR for each IML

βθc > 0

a. Sample MC sets of μds
b. From each μds,i get Sa,ds,i and βSa,ds,i
c. Apply consequence function to MC sets of Sa,ds and βSa,ds
d. Get MC values of LRs for each IML

median LR = mean(LRs) for each IML
dispersion LR = st.dev(LRs) for each IML