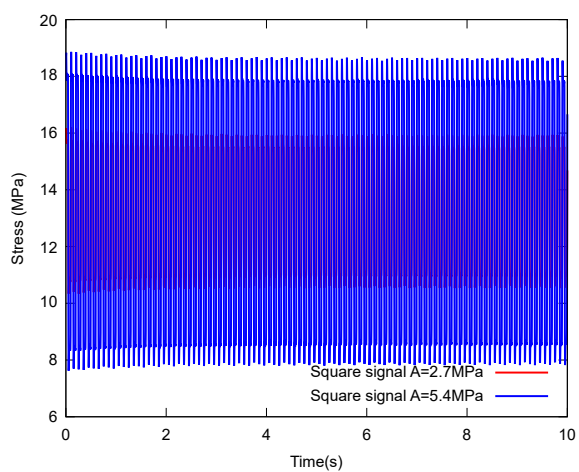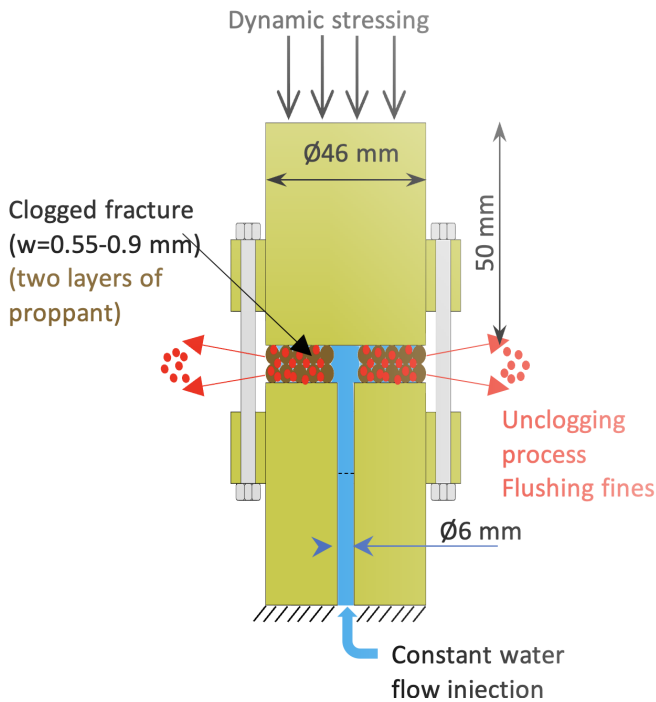**(a)** f=1Hz

(b) f=10Hz

(c) Schematic description of the f uid f ow in the propped fracture. Upon applying the dynamic loads with a constant f ow injection, f nes are f ushed out from the fracture.