

APPENDIX A
VISUALIZATION OF FRAGMENTS

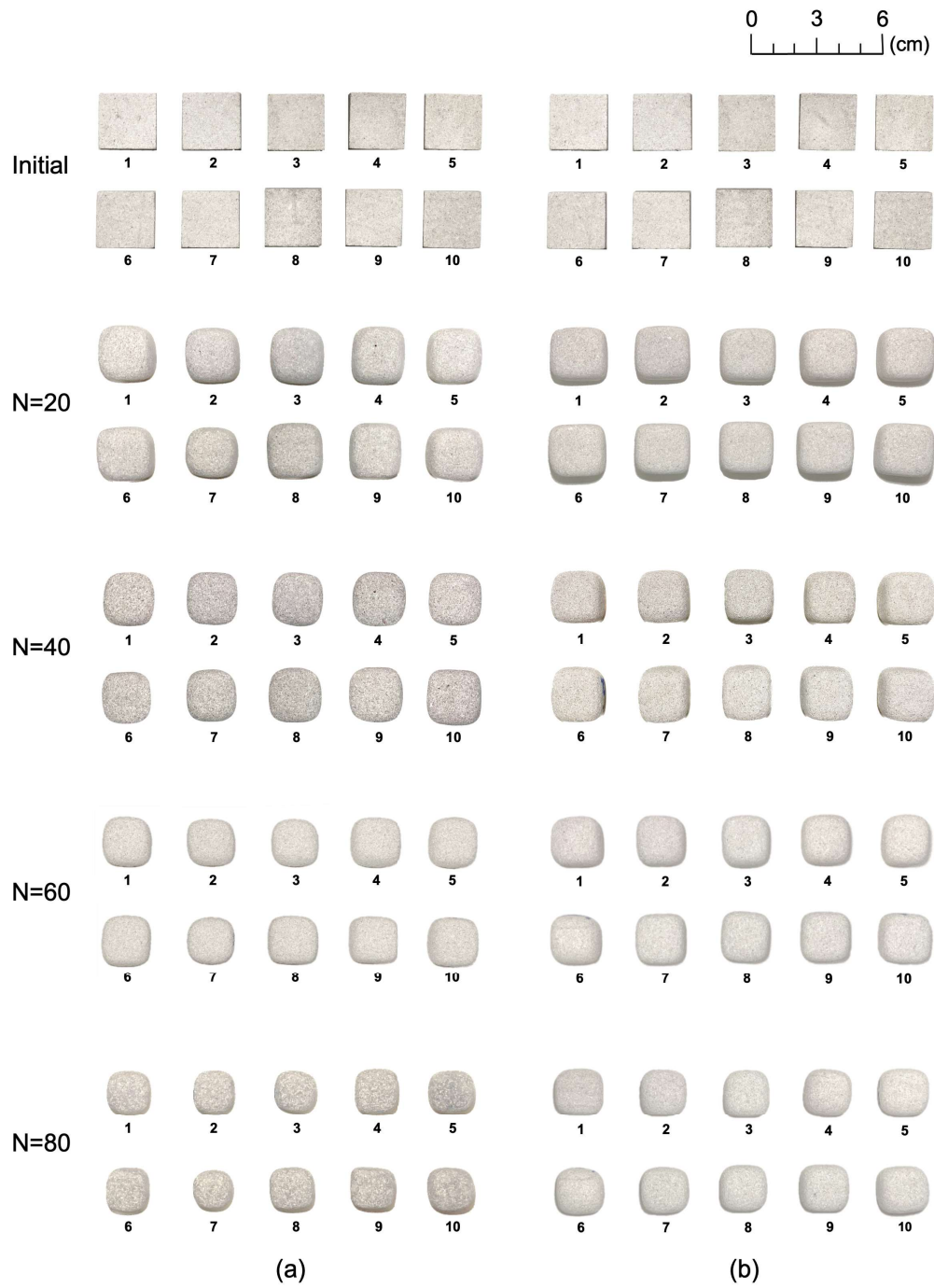


Figure A.1 Images of PWSS fragments under dry condition (a) and wet condition (b) from initial condition through 20, 40, 60, and 80 test cycle, N.

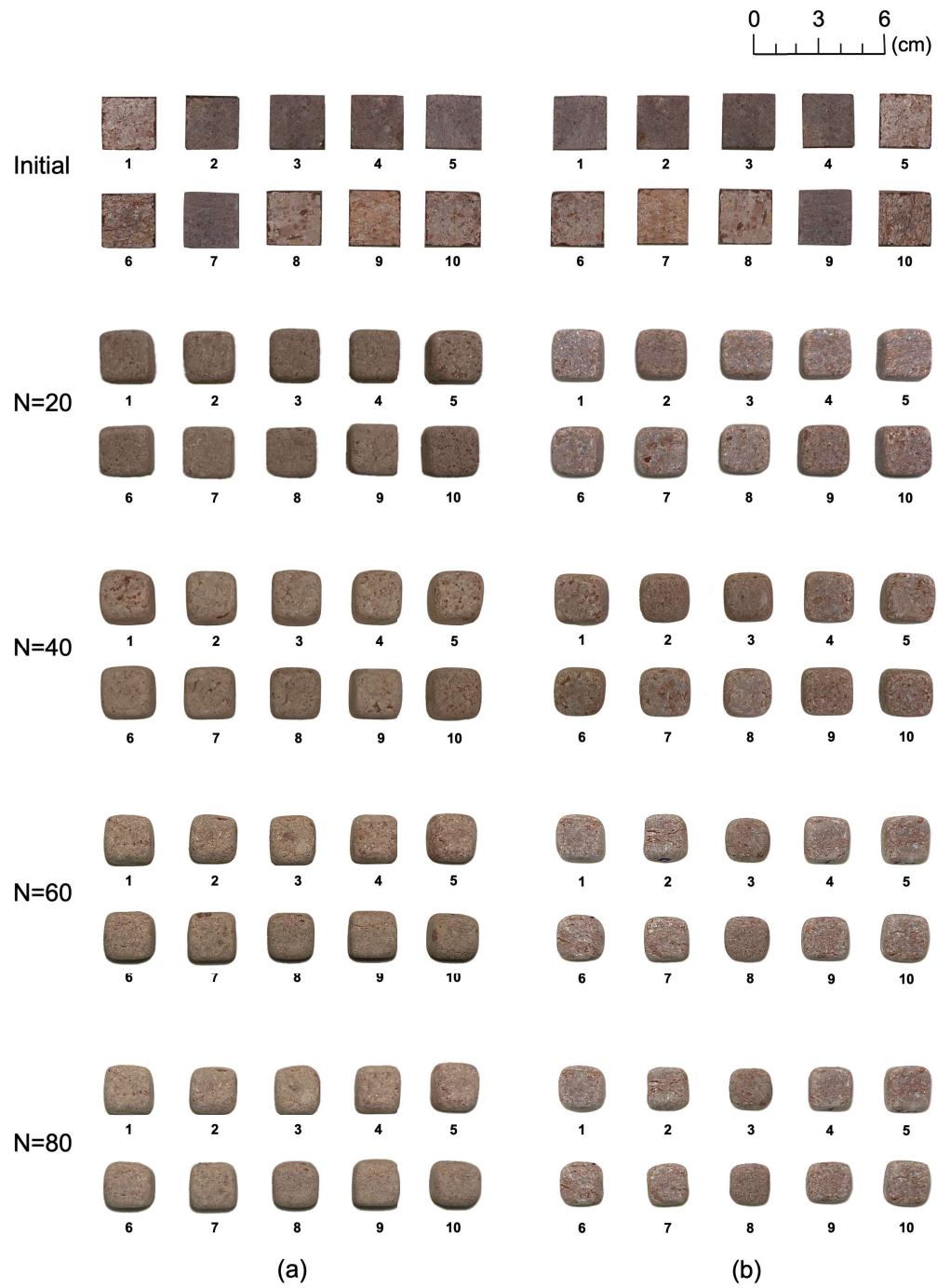


Figure A.2 Images of PPCS fragments under dry condition (a) and wet condition (b) from initial condition through 20, 40, 60, and 80 test cycle, N.

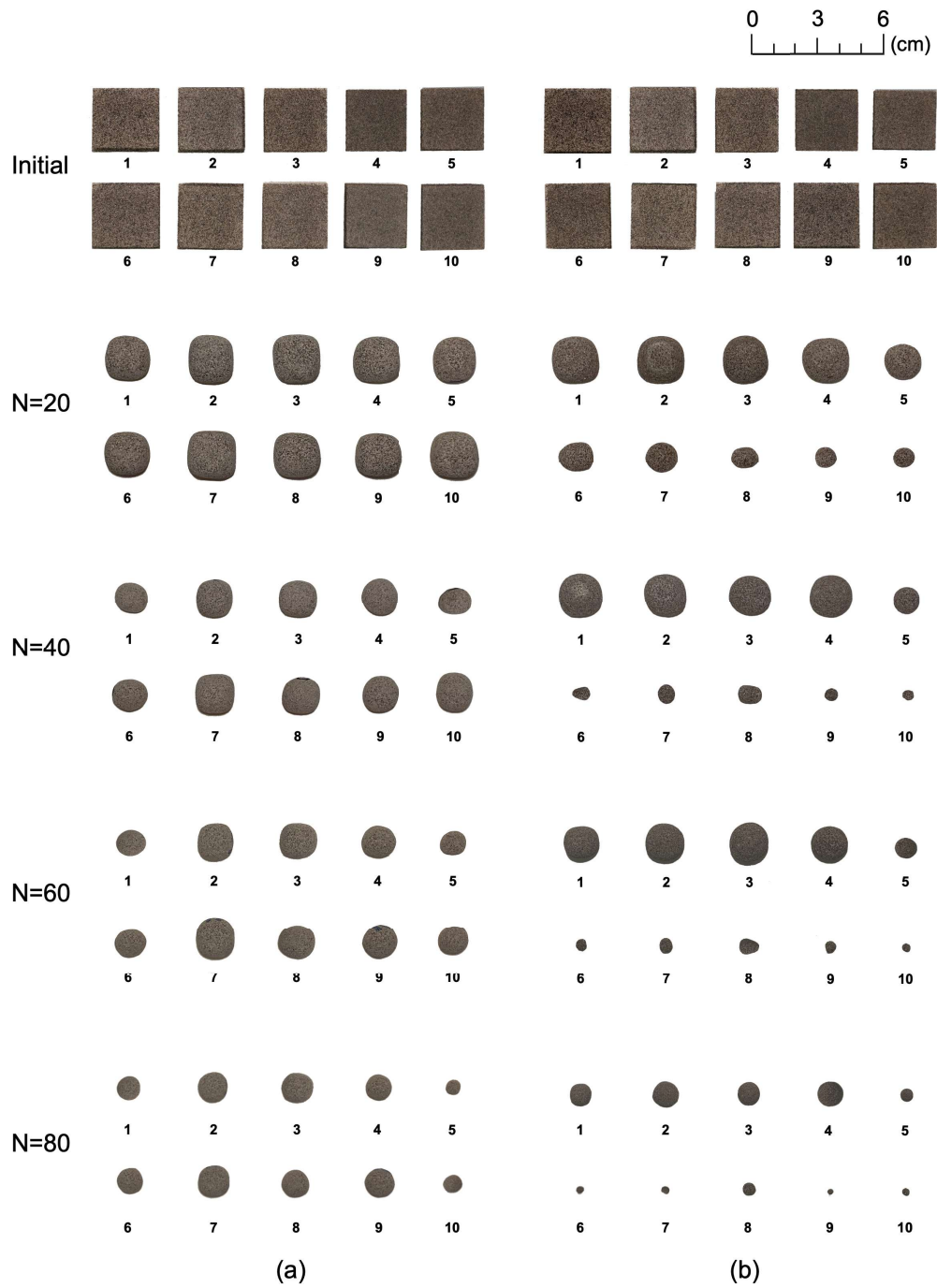


Figure A.3 Images of PPSS fragments under dry condition (a) and wet condition (b) from initial condition through 20, 40, 60, and 80 test cycle, N.