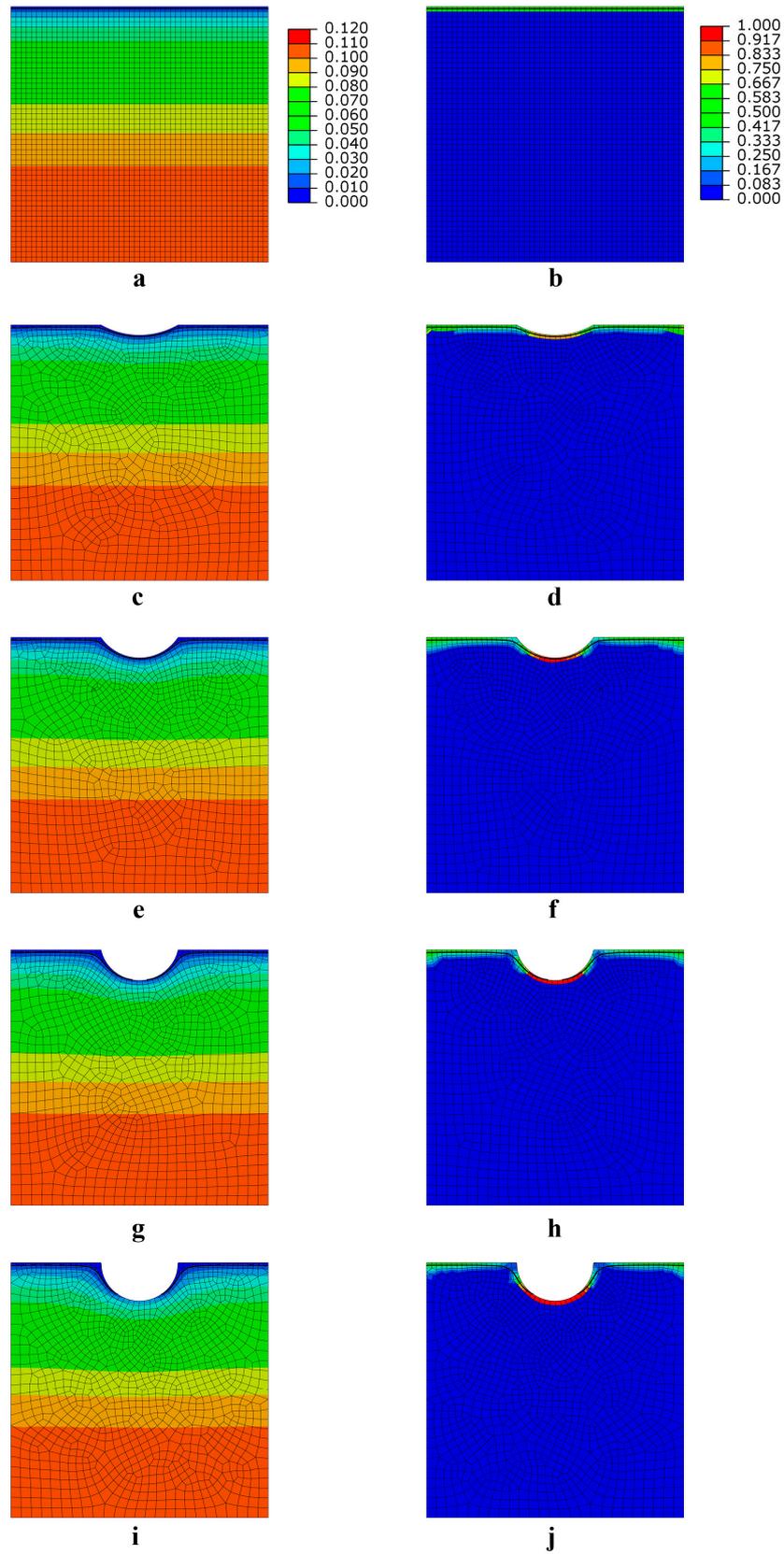
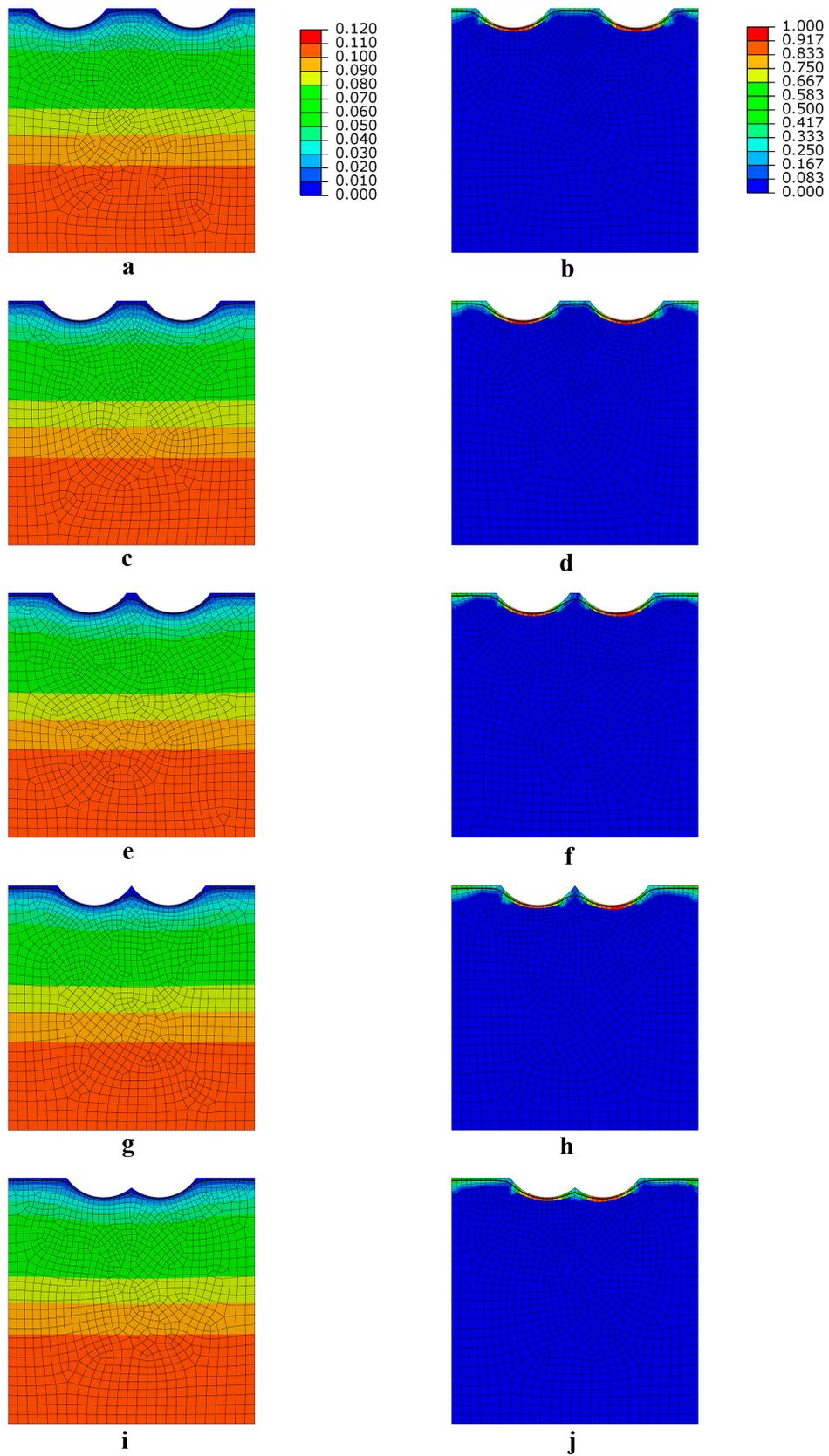


Supplementary Figure S1: Hydraulic field under various  $\theta_0$ . (a)  $\theta_0 = 0.12$ . (b)  $\theta_0 = 0.11$ . (c)  $\theta_0 = 0.10$ . (d)  $\theta_0 = 0.09$ . (e)  $\theta_0 = 0.08$ . (f)  $\theta_0 = 0.07$ . (g)  $\theta_0 = 0.06$ . (h)  $\theta_0 = 0.05$ . (i)  $\theta_0 = 0.04$ .



Supplementary Figure S2: Hydraulic field under various pit depths  $H$ . Width of pit is 15 mm,  $\theta_0 = 0.11$ . (a,c,e,g,i) The distribution of moisture content. (b,d,f,h,j) The distribution of the intensity of evaporation  $q$ . (a,b)  $H=0$  mm. (c,d)  $H=2.0$  mm. (e,f)  $H=4.0$  mm. (g,h)  $H=6.0$  mm. (i,j)  $H=7.5$  mm.



Supplementary Figure S3: Hydraulic field with two adjacent pits. Width of pits is 15 mm, pits depth is  $H=4.0$  mm,  $\theta_0 = 0.11$ . (a,c,e,g,i) The distribution of moisture content. (b,d,f,h,j). The distribution of the intensity of evaporation  $q$ . (a,b)  $L=25.0$  mm. (c,d)  $L=21.0$  mm. (e,f)  $L=17.0$  mm. (g,h)  $L=15.0$  mm. (i,j)  $L=11.3$  mm.