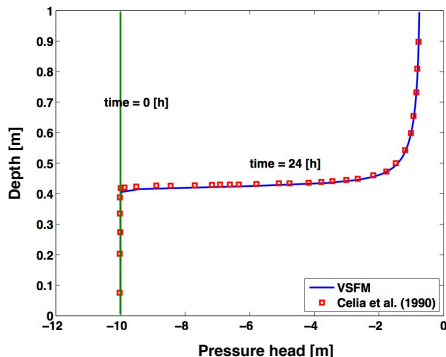


Infiltration in a very dry soil

- ▶ 1 [m] deep soil column (Celia et al. (1990))¹.
- ▶ Soils: $K_{sat} = 0.00922$ [cm s⁻¹];
 - ▶ $\theta_r = 0.102$ $\theta_s = 0.368$ $\alpha = 0.0335$ [cm⁻¹]
- ▶ Conditions
 - ▶ IC : $P(z, t = 0) = -10$ [m]
 - ▶ BC: $P(z = 0, t) = -0.75$ [m]
- ▶ Model captures the sharp wetting profile at $t = 24$ [hr].



¹Celia, M. A., E. T. Bouloutas, and R. L. Zarba (1990), A general mass-conservative numerical solution for the unsaturated flow equation, *Water Resour. Res.*, 26(7), 1483-1496, doi:10.1029/WR026i007p01483