

Figures for Golden *et al.*, Critical behavior of electrical transport in sea ice, with brief captions. Full captions are in the manuscript file.

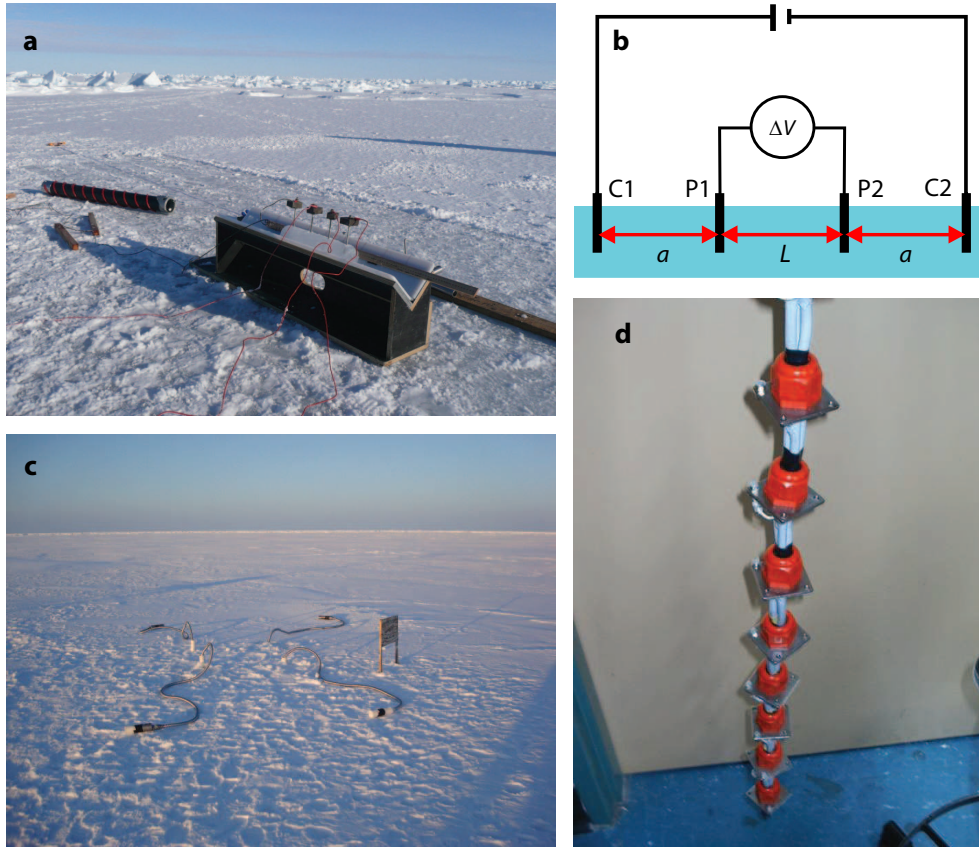


Figure 1: Direct measurements of the vertical conductivity of Antarctic sea ice in (a) and (b). Cross-borehole DC tomography for the conductivity of Arctic sea ice in (c) and (d).

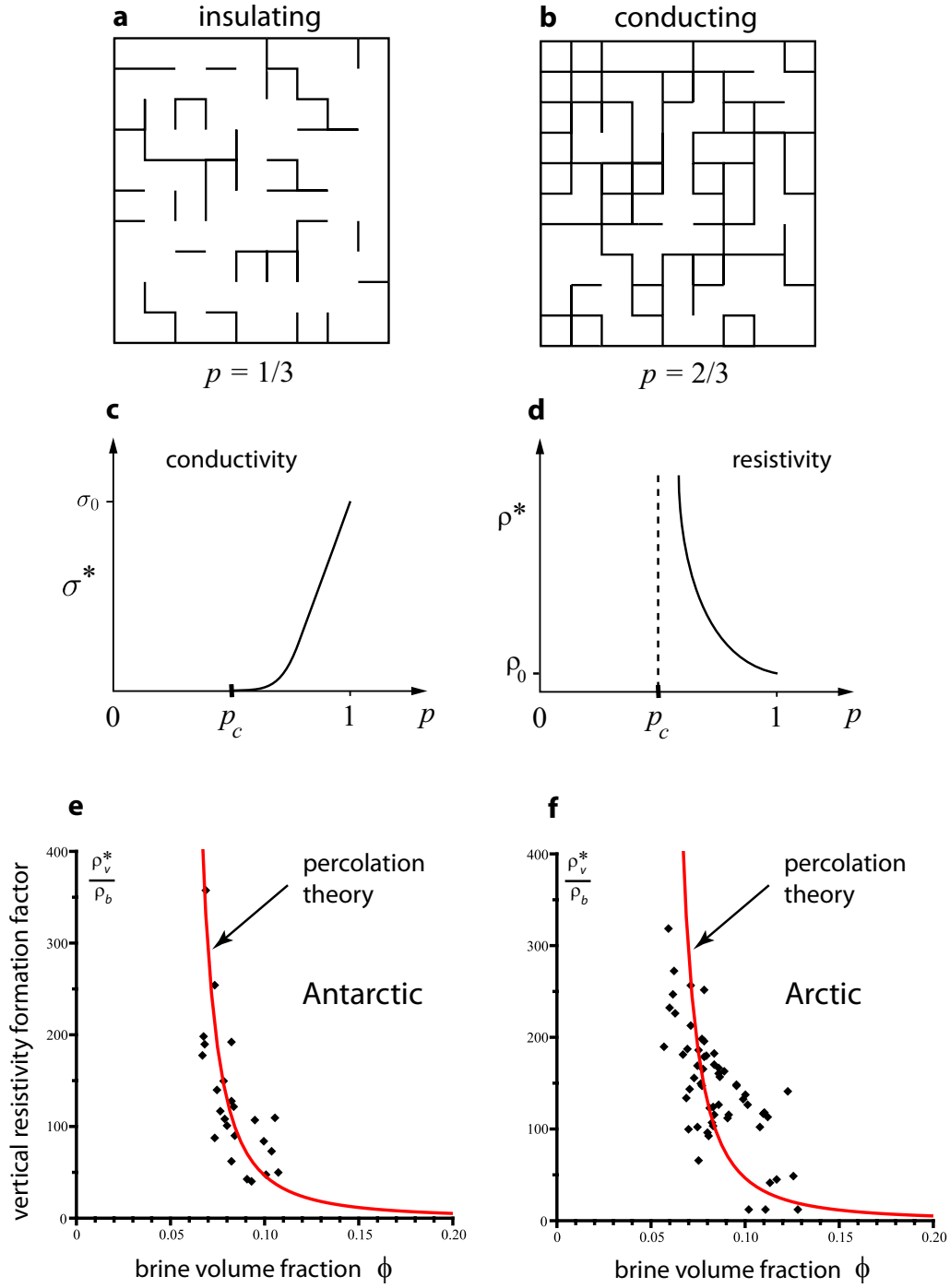


Figure 2: The lattice percolation model and critical behavior of its effective conductivity and resistivity in (a-d). Comparison of the resistivity data from the Antarctic (e) and the Arctic (f) with the same percolation theory prediction.

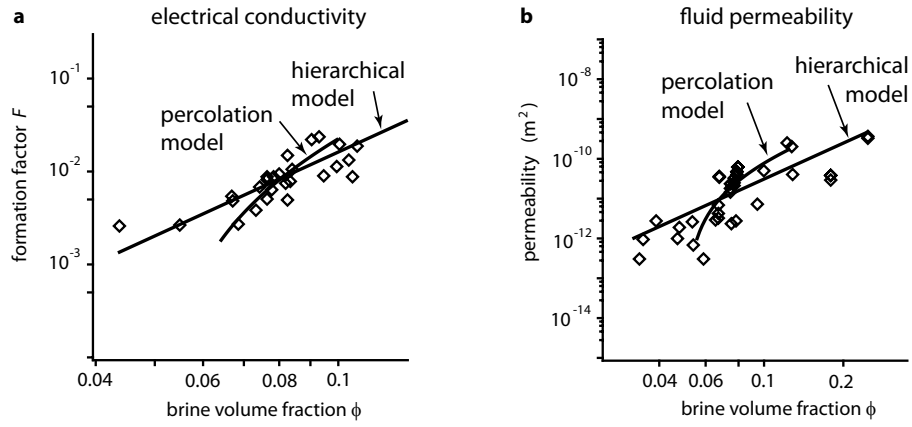


Figure 3: Conductivity data from the Antarctic in (a) and fluid permeability data from the Arctic in (b), compared with the predictions from percolation and hierarchical models.

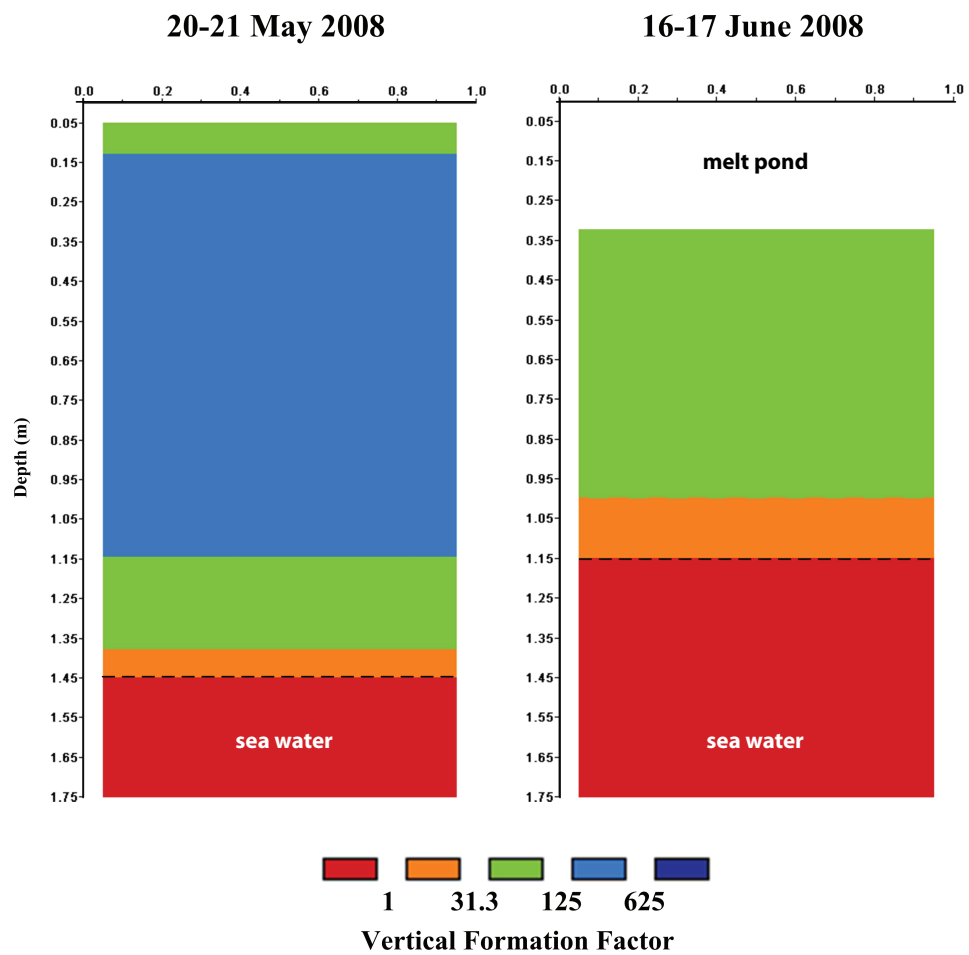


Figure 4: Change in electrical profile with the onset of surface ponding.

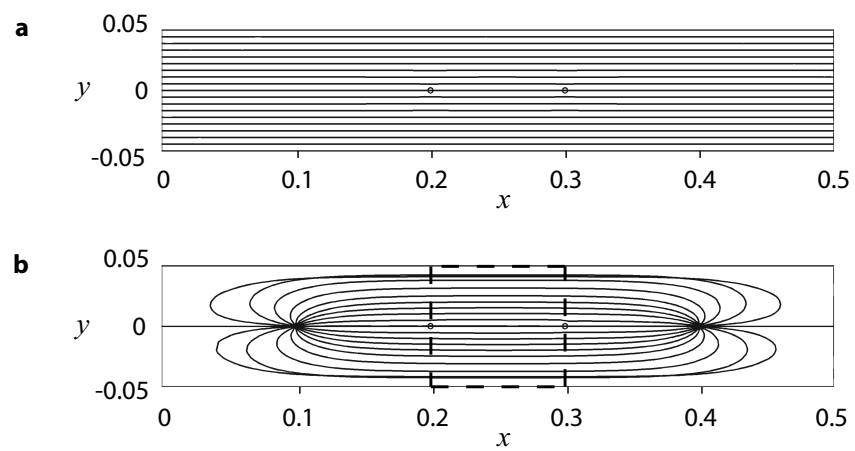


Figure 5: Comparison of field lines for a parallel plate configuration in (a) with those for a four probe Wenner array in (b).