

# Ice Forming Regions during Evolution of the Solar Nebula

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The condensation/sublimation front is computed using a two dimensional model of the evolving solar system including combined viscous and radiative heating. The “snow line” is shown to be a two-branched curve reflecting the competing effects of solar heating in the photosphere and internal heating at the center plane. The evolution of the icy region is described from a limited region early in the disk evolution to final positions near 1 AU. The snow line evolution is predicted using two surface density models: a Hayashi minimum mass power law and an analytical solution of the nebula evolution equation. Possible effects of this dynamic motion on disk chemistry and organic molecule formation are also described.