

Fossilized condensation lines in the Solar System proto-planetary disk

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Abstract

A proto-planetary disk cools very quickly, so that the snowline is expected to move inwards of 2 AU within a My. However, ordinary chondrites, which formed presumably in the asteroid belt at about 3 My, contain very little water and show little signs of water alteration. In this talk we propose a scenario that explains why the chemistry of the objects of the solar system reflects the position of the snowline fossilized at the time the proto-Jupiter achieved a mass of the order of 20 Earth masses.