

Metal Compositions of Meteoroids in Meteor Showers

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Chemical compositions of many meteor showers, for example Na, Mg, Fe, Ca, has been revealed. However, it is unknown whether they are intrinsic properties of parent bodies or not. Results may be considerable to be after changed by the effect, such like cosmic ray, sputtering by the solar wind, thermal desorption by solar heating and so on. In this presentation, the thermal desorption by solar heating effect on the meteoroids' compositions, especially about Na, was studied by considering the previous observations. Based on the calculated equilibrium temperatures of the meteoroids at each perihelion distance, the possibility of the effect was discussed.