

Recent Development of Meteor Train Studies

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Physics of meteor trains and its concernings is one of the untamed territories in meteor science. Leonid outbursts during 1998-2002 provided us many significant clues of the generation mechanism of meteor trains as well as the whole stories of meteor phenomena. However, observations of meteor trains are still limited for many minor meteor showers. Here we show the recent studies of meteor trains based on systematic fine imagings by Japanese observers in the Leonid period and its applications to the general meteor showers. Several unreachable pictures of meteor dynamics in upper atmosphere became revealed not only by event studies but also by innovative statistical approaches.