The Universidad Complutense of Madrid meteor and fireball patrol station

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Abstract

The Universidad Complutense of Madrid (UCM) has recently installed a high sensitivity video system to detect meteors. It is intended to study the entry in our atmosphere of interplanetary particles of mass greater than a gram. The station, not fully equipped yet, is a node of the national Spanish Fireball Network (SPMN) and includes cameras located at the Astronomical Observatory (Physics building) and others distributed around. The system has been automated to detect and record meteors only when the atmospheric conditions are good enough. Undergraduate and graduate physics students have collaborated to develop, install and test the system. Detections which are bright enough to drop a meteorite are analyzed using double station observations with the cameras of the SPMN nodes around Spain to determine their atmospheric paths, origin and landing area.

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