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Canadian Meteor Orbit Radar (CMOR)

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Abstract. The radar system described here (CMOR) comprises a basic 5-element receiving system, co-located with a pulsed transmitter, specifically designed to observe meteor echoes and to determine their position in space with an angular resolution of ~1° and a radial resolution of ~3 km. Two secondary receiving sites, a few km distant and arranged to form approximately a right angle with the base station, allow the determination of the velocity (speed and direction) of the meteor that, together with the time of occurrence, lead to an estimate of the orbit of the original meteoroid. Some equipment details are presented along with a method used to determine the orbits. Representative echoes are shown and observations on the 2002 Leonid shower presented.

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