

DETERMINING THE COORDINATES OF THE SPECULAR REFLECTION ON THE TRAIL OF A METEOR THROUGH TWO SEPARATED FM RECEIVERS

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Abstract. To observe the forward scattering in the meteor trails of signal FM-transmitter consider a system of two separated reception points. When the radio observations of meteors using the FM-transmitter signal in two separated receiving points from the known time difference of arrival signals scattered by meteor trails at points of reception method of determining the coordinates of the specular reflection on the trail of a meteor. At the same time bearing the azimuth and elevation point of reflection is determined by only one of the separated items. On the example of radio paths Kielce (Poland) – Nikolaev provides an assessment of the spatial zone of control. In determining the height of the point of reflection is taken into account the curvature of the Earth.

Keywords: meteor, trail, specular, reflection, FM-transmitter, FM-receiver.