Spectroscopic observation of meteor using diffraction grating

*Soya Ito¹, *Atsuya Sugawara¹, *Tomoki Misao¹, *Shotaro Mino¹

1. Miyagi Furukawa Reimei Junior and Senior High School

We do spectroscopic observations of meteors and identify the elements from which they emit. We attached the diffraction grating to the lens on the camera, and held the camera to shoot meteors vertically. When meteors are shot, we will do calibration to measure the scale of the diffraction grating spectrum. Then, the wavelength of the bright line on the image is obtained to specify the element derived from the light emission. Mostly sodium and magnesium were confirmed.

Keywords: Meteor, Diffraction grating

