

Visible and Infrared Observations of Interplanetary Dust

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We are promoting observations of interplanetary dust cloud at visible and infrared wavelength. We developed a new observation system WIZARD. Since the zodiacal light is faint and very extended all over the sky, WIZARD employs a sensitive CCD and a wide field optics with sufficient spatial resolution to measure the contribution of integrated flux of the individual stars. WIZARD is designed to measure the absolute brightness of the diffuse sky at visible wavelength and to have good stability of the system zero-level as well as low noise feature. We have been promoting extended observations of the zodiacal light along the ecliptic plane, for three years at NASA/ IRTF site. We present highlight of WIZARD system, and also the preliminary results of our observations, as well as IPD observations at ground-based telescopes and observing plan with ASTRO-F.