

# Near Earth Object Detection by Continues Sky Imaging for Observing Occultation from different visual Points

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## ABSTRACT

IAA-PDC-15-P-43

Asteroid occultations are useful for measuring the size and position of asteroids. It is possible that an undiscovered asteroid could occult a celestial body at any time. By continuously monitoring these celestial bodies, we could discovery a new asteroid when it occults any celestial body. Recently, several new tools and techniques have been developed to allow for robust detection and prediction of planetary encounters and potential impacts by near-Earth asteroids (NEAs). The difficulties involved in measuring occultations from earth are, finding smaller asteroids requires more sensitive measurements, Each occultation can be seen only at the right time and from a limited part of the Earth. We describe a system consisting of series of CCD Cameras placed at particular place in the earth along with a video camera and GPS time inserter. An observer at different places can expect to see a single disappearance (or drop in starlight) and a single reappearance through it. The level of drop in the star's light and the expected duration of occultation are noted. The brightness variations for all of these stars due to occultation and Changes in the magnitude of these stars over time are documented continuously. In this research project we will use our new method to indentify NEO's. For each individual star a separate instrument and a separate database is created. For every new image taken at a particular interval time, the data obtained from that particular star goes into that particular star database. Similarly all stars have separate databases.