Near Earth Asteroid Characteristics for Asteroid Threat Assessment

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Information about the physical characteristics of Near Earth Asteroids (NEAs) is needed to model behavior during atmospheric entry, to assess the risk of an impact, and to model possible mitigation techniques. The intrinsic properties of interest to entry and mitigation modelers, however, rarely are directly measureable. Instead we measure other properties and infer the intrinsic physical properties, so determining the complete set of characteristics of interest is far from straightforward. In addition, for the majority of NEAs, only the basic measurements exist so often properties must be inferred from statistics of the population of more completely characterized objects. We will provide an assessment of the current state of knowledge about the physical characteristics of importance to asteroid threat assessment. In addition, an ongoing effort to collate NEA characteristics into a readily accessible database for use by the planetary defense community will be discussed.