
Risk and Mitigation

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Résumé

Some of the asteroids and objects orbiting around the Sun in the vicinity of the Earth (NEOs) show probabilities of having an impact trajectory. Given the impact risk assessment, and the characterisation of the impact, measures to reduce our vulnerability are taken. We will address the vulnerability and probability parameters involved in risk assessments, and see their application to the case of NEOs and Potentially Hazardous Asteroids (PHAs). We will also review the different analysis and actions taken by various international services and organisations. Then we will tackle the problem of mitigation by space mission. Indeed, in some cases a space mission to deviate the threatening asteroid from its dangerous orbit is the best option. This is however always combined to measures of civil defence on ground. One should ensure that any deviation does not put the asteroid on another impact trajectory.

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