

Activities of the NEO Coordination Centre of ESA's Planetary Defence Office

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Abstract. Activities at ESA's NEO Coordination Centre encompass two of the main pillars in the Planetary Defence Office and one transversal segment. Those include the observational pillar, the assessment pillar and the information provision activities. Within the observation pillar, and among other activities, the NEOCC performs follow-up observation of NEAs with the aim at removing objects from the risk list (e.g. the recent cases of 2021 QM1 and 2022 AE1). Other than that, the pillar staff participate to international observing campaigns and dedicated observational targets (e.g. the DART impact observational campaign). In the assessment pillar, the team performs activities of NEA orbit determination and impact assessment and dedicated studies (as the one on the second Earth Trojan 2020 XL5). Finally, the information provision maintains the information distribution system centred around the NEOCC web portal¹. The portal provides many services to the small bodies community as: a full database of NEAs, a risk list, a close approaches list, a priority list, a FITS image database, several graphical tools, etc. For all those purposes, the staff at the centre operate a worldwide network of observatories and a wealth of software applications. The present talk will provide detailed explanations of the different centre tasks.

Keywords: First Keyword, Second Keyword, Third Keyword.

¹ <https://neo.ssa.esa.int/>