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IAWN GLOBAL PLANETARY DEFENSE CAMPAIGNS: LESSONS LEARNED

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ABSTRACT

The International Asteroid Warning Network (IAWN) has been conducting real-world planetary defense campaigns involving global participants since 2017. Over the last five years we have conducted five campaigns focused on a range of targets and techniques relevant to planetary defense. The primary objective of these campaigns was to test our preparedness to respond to a potential NEO impact threat and involved observers, modelers, communicators, and decision makers. All five campaigns used real NEOs making close approaches to the Earth with our first three campaigns treating them as hypothetical impactors. Our two most recent campaigns focused on improving timing errors in astrometry that were identified during the previous campaigns. We will summarize lessons learned from these planetary defense campaigns including key strengths of the existing global planetary defense systems and areas to improve on, so we are better prepared for a potential impact in the future.

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Oral presentation