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**Discovery of Human Exploration Candidates with Sentinel
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ABSTRACT

While the Sentinel telescope's primary mission is to find and determine trajectories for 90% of all NEOs with diameters greater than 140 meters, the large majority of NEOs that it discovers will be much smaller than this. Future human and robotic missions that will rendezvous with NEOs will require targets that have low velocity relative to Earth, and Sentinel will discover and determine orbits for many of these objects. Two phases of the mission will be useful in this search: The 1.4-year cruise phase to Venus flyby when Sentinel is relatively close to the 1AU orbits of the target NEOs and the post-Venus phase when Sentinel is in its inner heliocentric orbit at larger distance from 1 AU but will have an extended observing period of over 5 years for discovery.