

**An Update of the Near-Earth Asteroid Tracking / Maui Space Surveillance System (NEAT/MSSS)
Collaboration**

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1.0 Abstract:

The Jet Propulsion Laboratory's (JPL) Near-Earth Asteroid Tracking (NEAT) program consists of two 1.2m telescopes located at the Maui Space Surveillance Site (MSSS) on Haleakala, Maui, HI and at Palomar Observatory, NEAT/MSSS and NEAT/ Palomar respectively. This paper will focus exclusively on the NEAT/MSSS system. NEAT/MSSS is operated as a partnership between NASA/JPL and the United States Air Force Research Laboratory (AFRL).

Observations at the NEAT/MSSS site have continued on a nearly nightly basis since the upgrade of the AFRL 1.2m telescope. Since transitioning to the 1.2m in March 2000, NEAT/MSSS has discovered 58 Near-Earth Asteroids (NEAs), including 10 Potentially Hazardous Asteroids (PHAs) and 15 that are greater than 1 km in diameter, 6 comets and over 150,000 asteroid detections. A certain fraction of the lunar month is utilized by AFRL with the NEAT system to conduct satellite tracking and space debris studies. NEAT/MSSS covers nearly 8,000 square degrees per month. NEAT has provided highly efficient multi-use capabilities and is contributing significantly to the discovery of NEAs and comets, collectively known as Near-Earth Objects (NEOs).