# Spacewatch® Group Description

SPACEWATCH® is a research group at the University of Arizona’s Lunar and Planetary Laboratory founded in 1980 by Professor Tom Gehrels and Dr. Robert S. McMillan. Spacewatch was created to explore the various populations of small objects in the solar system and study the statistics of asteroids and comets in order to investigate the dynamical evolution of the solar system. Studies included the Main-Belt, Centaur, Trojan, Comet, Trans-Neptunian, and Earth-approaching asteroid populations. Spacewatch played an important role in selecting potential targets for interplanetary spacecraft missions.

After 1998, Spacewatch focused primarily on follow-up astrometry of such targets, and monitored the positions and motions of objects that might present a hazard to the Earth. Later on, the focus was on near-Earth objects (NEOs), especially Potentially Hazardous Asteroids (PHAs) and Virtual Impactors (VIs). Spacewatch also focused on Yarkovsky effect candidates, NEOs observed by spacecraft, potential spacecraft destinations, and potential targets of planetary radar.

Spacewatch primarily used Steward Observatory’s 0.9-m telescope and the Lunar and Planetary Laboratory’s Spacewatch II 1.8-m telescope. Their observatory codes at the Minor Planet Center (MPC) are 691 and 291 respectively. Spacewatch was the exclusive user of these telescopes on Kitt Peak in the Tohono O’Odham Nation, Arizona.