

Application for Membership in the International Asteroid Warning
Network (IAWN)

17 of July 2025

Dear IAWN Steering Committee,

I express my interest in joining IAWN and contributing to its global efforts in near-Earth object (NEO) detection, tracking, and characterization.

Santa Maria de Montmagastrell observatory operates and manages a optical telescope at the Santa Maria de Montmagastrell, Spain. Our facilities include the ACF Meade 16" at f/10 remote telescope, equipped with high-precision tracking, rapid slewing capabilities, and CCD SBIG STL 1001E for astrometric and photometric observations. The telescope is registered with Minor Planet Center (MPC) code B74 at $1^{\circ} 9' 31.2''$ / $41^{\circ} 27' 8.2''$ coordinates.

All data are reduced on a PC. Flat-fielding, dark and bias is done using MaxImDL. The astrometry is done with both TheSky6 Astronomy Software, Herbert Raab's Astrometrica and Daniel Parrott's Tycho Tracker software which are an excellent track and stack options. As Astrometrica & Tycho also allows the simple identification of all objects in the field, these are currently the software of choice. Following the release of EDR3 Gaia, virtually all of our astrometry is done using this. An astrometric accuracy in the fit of $0''.0 - 0''.5$ RMS in each coordinate is obtained and provide high-sensitivity photometric and astrometric tracking, leveraging good seeing conditions ($\sim 2''$)

The telescopes I manage are described at
<https://santamariaobservatory.blogspot.com>

I support the principles and operational framework of IAWN and are committed to the open and timely sharing of our observational data. The owner and director of the observatory, Josep M. Bosch., is eager to collaborate with IAWN to strengthen global capabilities in planetary defense.

Sincerely,

Josep M. Bosch

Owner and manager of the observatory