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ESASKY SSOSS: A NEW WINDOW FOR SOLAR SYSTEM DATA EXPLORATION

Content

Solar System Objects (SSOs) are often difficult, or even impossible, to query for in astronomy archives if they were not the target of the observation, owing to their ever- changing coordinates. We aim to provide the scientific community with a service to search for all the potential detections of any SSOs (asteroids, Kuiper-belt objects and comets) within the ESA astronomy archival imaging data, called the Solar System Object Search Service (SSOSS). This service performs a geometrical cross-match of the orbital path of each SSO, as seen by the satellite reference frame, with respect to the public high-level imaging footprints stored in the ESA archives. About 800,000 asteroids and 2,000 comets are included in this work. This service is available through the ESASky application and it provides both targeted and serendipitous observations. For this first integration, three representative missions covering a wide range of frequencies, from X- Rays (XMM-Newton) to far infrared (Herschel) including the UV-Near Infrared band from the Hubble Space Telescope (HST), were chosen as a proof of concept.

Preferred talk time

Day time UTC+2

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