

Database for Thermal Infrared Observations of Solar System Small Bodies

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One of the goals of the Small Bodies: Near and Far (SBNF) project was to create a database for thermal infrared observations of small bodies. We collected published thermal IR measurements for our selected samples of Solar System targets including data from large missions (e.g. catalogues based on Akari, IRAS and WISE observations) and also data from smaller scale and individual reductions (e.g. the Herschel Space Observatory measurements of near-Earth and main belt asteroids). The main advantage of our database is that it collects all available thermal emission measurements for small solar systems targets that are otherwise available in scattered sources and it gives a complete description of the data, with all information necessary to perform direct scientific calculations and without the need to access additional, external resources. A primary goal of this database is to help scientists working in the field of modeling the thermal emission of small bodies, providing them with an easy-to-use tool. In addition to answering direct scientific questions related e.g. to thermal inertia and other surface properties of the targets it will also help in establishing celestial calibrators for instruments working in the thermal infrared regime, from mid-IR to submm wavelengths. The database has the option to include more thermal data of Solar System small bodies which have been detected at thermal IR wavelengths. In this presentation we review the procedures and methods that we used to create this SBNF thermal infrared database.