

SpaceInn

Exploitation of Space Data for Innovative Helio- and Asteroseismology

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Deliverable D5.4

Stellar Activity/Cycle Catalogue

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The Stellar Activity/Cycle Catalogue is part of SpaceInn deliverable D5.4.

The catalogue was completed in the work of [Campante et al. \(2014\)](#) and is accessible in the [KASOC](#) data base and at the [Seismic+ Portal](#).

The activity proxy given in the catalogue was computed for the set of 2750 targets observed during the nominal *Kepler* mission that are classified as solar-type stars in the framework of the Kepler Asteroseismic Science Consortium (KASC). The proxy has also been derived for an additional set of 885 Kepler Objects of Interest (KOIs).

The long-cadence (LC; ~30 min cadence) Pre-search Data Conditioning (PDC, [Jenkins et al. 2010](#)) data from quarters 0-14 was used in the computation, which was done using the so-called MAD-metric. The MAD-metric gives a simple measure of the stellar photometric variability, and is given by first for individual quarters estimating the median-absolute-deviation (MAD) of the 5.5 hour binned light curve. The final MAD-metric is then given by the average estimates from the individual quarters. Finally, a magnitude-dependent shot-noise correction is applied to the estimate.