Poster

CASSIS, A VO-TOOL SOFTWARE PACKAGE TO ANALYSE HIGH SPECTRAL RESOLUTION OBSERVATIONS

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CASSIS[1] (Centre d'Analyse Scientifique de Spectres Instrumentaux et Synthtiques) is a standalone VO-Tool software package aimed to speed-up the scientific analysis of high spectral resolution observations, particularly suited for broad-band spectral surveys. CASSIS is written in Java and can be ran on any platform. It has been extensively tested on Mac OSX, Linux and Windows operating systems. CASSIS is regularly enhanced, and can be easily installed and updated on any modern laptop. To read the JPL[2] and CDMS[3] molecular spectroscopic databases and the atomic spectroscopic database NIST[4], it uses either the VAMDC protocol or a fast SQLite access to a local database. The tools available in the currently distributed version (4.2.2) include, among others, a LTE model and the RADEX[5] model connected to the LAMDA[6] molecular collisional database, a module building line lists fitting the various transitions of a given species and producing rotational diagrams from these lists, a complete set of spectral tools, a scripting interface and a SSAP query module.

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[1]*http://cassis.irap.omp.eu,* [2]*http://spec.jpl.nasa.gov,* [3]*http://www.astro.uni-koeln.de/cdms/catalog,* [4]*http://physics.nist.gov/asd,* [5]*van der Tak, F.F.S. et al. 2007, A&A 468, 627,* [6]*Schoier, F.L. et al. 2005, A&A 432, 369*