ミリ波分子分光データの解析ソフトウェアの開発

井上 舞*·土橋 一仁*·高木 知里*·秋里 昂*·大江 佑香* 宇宙地球科学分野

(2008年5月26日受理)

INOUE, M., DOBASHI, K., TAKAGI, C., AKISATO, K. and OOE, Y.: Development of reduction software for millimeter-wave radio astronomy. Bull. Tokyo Gakugei Univ. Natur. Sci., **60**: 4–36. (2008)

ISSN 1880-4330

Abstract

We have developed two types of software for astronomy to analyze the molecular emission line data standardized to the Flexible Image Transport System (FITS) format. One is the Gakugei Baseline Fitting System (GBFITS) to apply baseline fitting to the molecular data, and the other is the Astronomical Image Display & Analysis system (AIDAS) to display 2D images reduced using GBFITS. We developed the software using the "Interactive Data Language" (IDL) which is a popular computer language in the field of astronomy. The widget function with the Graphical User Interface (GUI) prepared in IDL has made the software easy to use and sufficient to analyze and display complex astronomical data.

Key words: widget, spectroscopy, radio astromony, image processing

Department of Astronomy and Earth Sciences, Tokyo Gakugei University, 4-1-1 Nukuikita-machi, Koganei-shi, Tokyo 184-8501, Japan

* 東京学芸大学宇宙地球科学分野(184-8501 小金井市貫井北町 4-1-1)