High-Performance Tiled WMS and KML Web Server

NASA’s Jet Propulsion Laboratory, Pasadena, California

This software is an Apache 2.0 module implementing a high-performance map server to support interactive map viewers and virtual planet client software. It can be used in applications that require access to very-high-resolution geolocated images, such as GIS, virtual planet applications, and flight simulators. It serves Web Map Service (WMS) requests that comply with a given request grid from read-only media. This server makes it possible to support very demanding interactive or immersive applications that require geographically located data. It has direct applications for making NASA data such as remote sensing and modeled or simulated data available to applications like WorldWind or Google Earth.

This program was written by Lucian Plesea of Caltech for NASA’s Jet Propulsion Laboratory.

This software is available for commercial licensing. Please contact Karina Edmonds of the California Institute of Technology at (626) 395-2322. Refer to NPO-44685.

Modeling of Radiative Transfer in Protostellar Disks

NASA’s Jet Propulsion Laboratory, Pasadena, California

This program implements a spectral line, radiative transfer tool for interpreting Spitzer Space Telescope observations by matching them with models of protostellar disks for improved understanding of planet and star formation. The Spitzer Space Telescope detects gas-phase molecules in the infrared spectra of protostellar disks, with spectral lines carrying information on the chemical composition of the material from which planets form. Input to the software in-