n the accompanying photos are a new astronomy software package called TheSky and a sample chart view generated by the program. TheSky is part of a software family that incorporates NASA astronomy technology developed for the Hubble Space Telescope. The family includes, in addition to TheSky, the SkyPro image processing program and the Remote Astronomy Software for running a telescope and imaging system.

The programs were developed by Software Bisque, Golden, Colorado with NASA input, in particular the 19-

million-object database compiled for the Hubble Space Telescope. With TheSky, amateur and professional astronomers can quickly plot any of the Hubble data onto the computer screen. Dozens of commands make it easy to locate any area of the sky; the software presents a wide angle view that identifies each constellation and bright object. As shown above, the astronomer can use a mouse to zoom in on any zone of the view presented.

The companion SkyPro CCD Astronomy Software is a Windows-based image processing program that also controls CCD (charge coupled device) cameras, transforming raw CCD data into imagery and extracting hidden information. TheSky and SkyPro work in tandem to orchestrate locating, identifying, and acquiring images of deep sky objects.

With TheSky, SkyPro and the Remote Astronomy Software, a user can directly control computer-driven telescopes and CCD cameras through computer serial ports. Telescope support is provided for a number of different types of instruments.

Through a cooperative effort involving Software Bisque, NASA, The Mount Wilson Observatory Institute, Pasadena, California and the Observatory’s Telescopes in Education program, individual astronomers or astronomy classroom groups can remotely operate Mount Wilson’s 24-inch telescope and CCD camera, which are fully dedicated to remote astronomy. A Local Serial Port Controller enables TheSky and SkyPro to communicate via modem and phone lines with Mount Wilson; a simple click of the mouse instructs the telescope to point at a selected object contained in TheSky database and SkyPro captures an image of the object by controlling the Observatory’s CCD camera. Astronomers can access the telescope by paying a fee based on duration of usage; through a NASA grant, K through 12 school groups can use the telescope free of charge.