Distant Suns v5.0

by Rob Hays

News items indicate that this summer's celestial fireworks on Jupiter have spurred sales of telescopes. Whether you are still considering joining this fast-growing hobby, or you are an advanced amateur astronomer, Distant Suns is a program you need on your Amiga's hard drive.

Recently updated to version 5.0, Distant Suns from Virtual Reality Laboratories, is an Amiga classic that just keeps getting better. This latest version represents a complete re-write of the program code, and is the smoothest, most feature packed version yet.

If you have never heard of Distant Suns (DS), the premise is disarmingly simple. Put dots of light on the monitor screen so that it matches what you would see in the actual sky. The reality is a program that has grown to require 4 megabytes of free hard disk space, a minimum of 2 megabytes of memory, and Workbench 2.04 or higher.

Because the stars and planets will appear in different places depending on where on Earth you are observing from, DS has always included provisions for entering the longitude and latitude of your location. DS5 enhances this with the addition of a scrolling list of more than 100 major cities around the world. If you don't know the longitude and latitude of your home, choosing the nearest major city will be good enough for casual observation. If you need more precise information, check with your local library.

The date also determines what is visible, and while DS reads the current date and time from your system, you certainly are not limited to what is visible today. Any date between 4713 B.C. and 9999 A.D. is fair game for observations, with one caveat. The further away you are from the present date, the less accurate calculations of positions are likely to be. As a practical matter this would have little consequence, even if you could take your telescope into the far past or future.

Once you have chosen a date and time to view, you can control the passage of time by making it stand still, move forward or backward, or run in real-time. Further controls allow you to have each screen update reflect any interval from one minute to 100 years. Used with the look down feature, you can watch the planets whiz around the sun from a vantage point above the sun.

You can choose to view the sky from earth in either of two modes. Planetarium mode provides a view unobstructed by the Earth itself, or Local mode, which actually places a silhouette of hills and on the screen for a more natural view. There are so many options available that you could spend many hours just exploring different ways to look at things. For example, the left mouse button can be set to perform any of three different actions when clicked. Center the view on the point where the mouse was clicked, zoom into the point clicked, or identify the point. The field of view presented on your monitor screen can range from 180 degrees, to an ultra-narrow .01 degree.

Moving about the virtual sky can be accomplished in several ways. You can use the mouse in centering mode, or you could select a quick move direction from a menu. Alternately, you may choose an object by name from a scrolling list, enter a specific location coordinate, or use the motion control arrows that are part of the control panel. This is a small window that also gives quick access to the field of view setting, and current time and date settings. Also available, and new to 5.0, is a tool box window. This gives instant access to 20 of the most frequently used commands.

If you have the mouse set to identify, and click on an anonymous point of light, a small data window will pop up. This provides information ranging from astronomical data such as position, magnitude, distance, the next rise and set times for viewing, and folklore. If the object is one of several that images are included for, this box also gives you the chance to view those images. These are full screen 16 color images from either NASA space probes or ground-based telescopes. Owners of AGA machines get 256 color images.

Also new to 5.0 is the ability to render planetary bodies as shaded spheres. A requester allows you to pick any of the nine planets, the sun, or moon, then choose any of eight positions relative to your object to view from. Combining this feature with the built-in animation functions would allow you to produce your own fly-by animated tour of the solar system. While the detail of these renderings is limited to solid colors, it is more interesting than simple points of light.

The backyard astronomer often wants a quick overview of what will be visible that evening. While books and magazines can provide this information, Distant Suns can do it quicker and more informatively. Picking the What's up menu item provides a choice of three different displays. A planet chart that shows the relative positions of the planets currently visible from your location, a Rise/set plot that is a bar-graph chart which shows the planetary visibility over the next 24 hour period, as well as sunrise and sunset times, and the current time, or the Summary selection. This lists the solar system objects, with their location information, and highlights the currently visible objects. Also shown here is the current moon phase and upcoming meteor showers. A Lunar Phase chart is also available to quickly judge how much moonlight will be competing with the fainter starlight.

The supplied databases contain more than 8000 stars, and 100 nebulae. Virtual Reality Laboratories has additional data sets available if you desire. Best of all, you can update this information yourself, entering orbital parameters for asteroids or comets as they are discovered. You can even customize the data used for the ground silhouette to more closely resemble your location.

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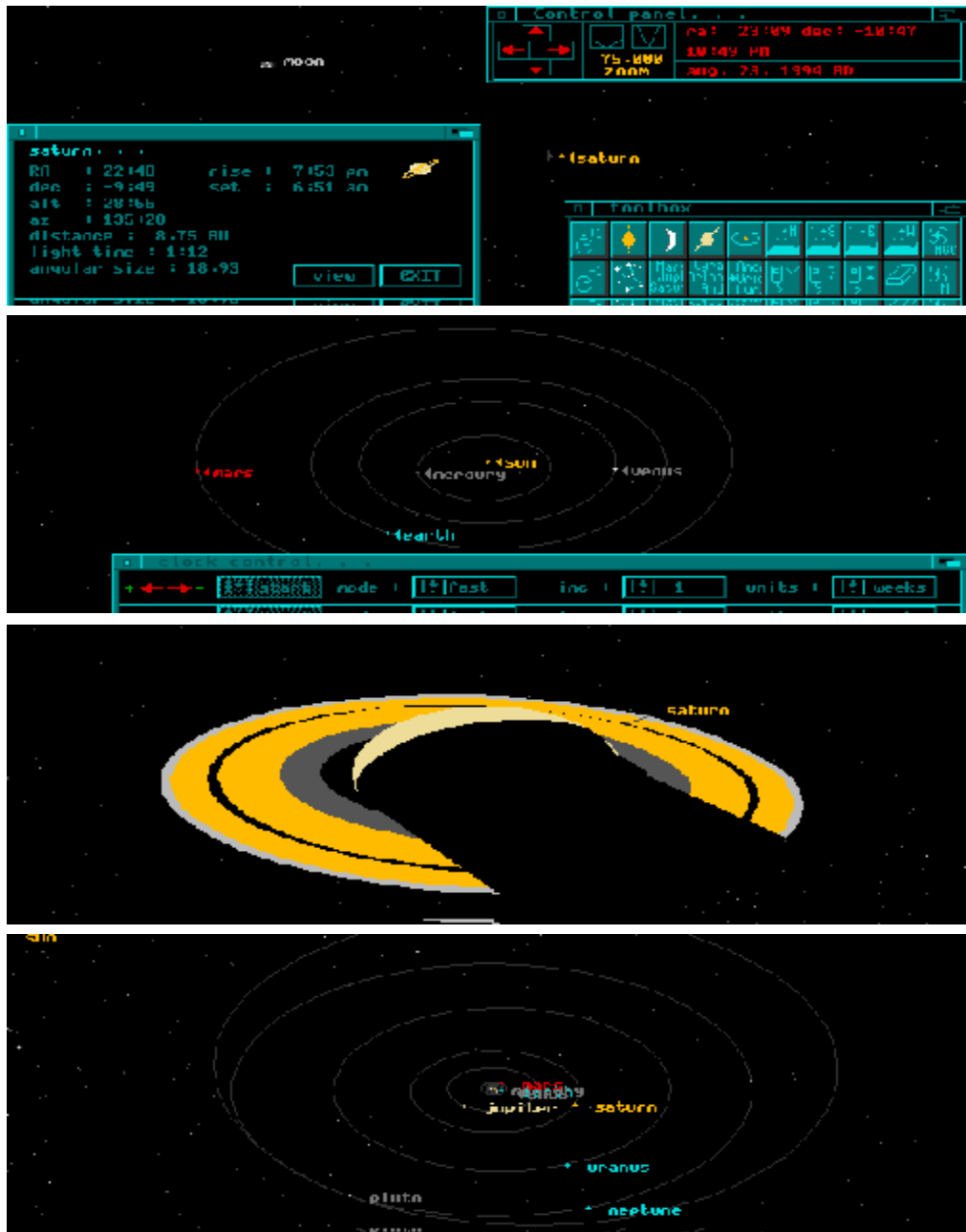
The 128 page spiral-bound manual contains information ranging from the history of astronomical observations to technical details of the program. There is even a section about buying a telescope. Scattered throughout are tutorials that familiarize the user with the features of the program, while also providing eye-opening lessons. For example, one of the tutorials demonstrates an event in 1989, where an asteroid made one of the closest known approaches to earth. On March 22, 1989 this asteroid passed within 400,000 miles of earth, and because of its direction of travel, no one knew of its approach until after it had passed us.

Distant Suns 5.0 is supplied on 5 disks, which contain versions of the program suitable for systems with or without math co-processors. The Commodore Installer will evaluate your system and install the correct version, as well as the support files and images. The program is not copy protected. DS supports ARexx for control of the program features externally with more than 40 different commands supported, and sample scripts are included.

Don't stare up at the sky any longer wondering which point of light is a star and which is Jupiter. Distant Suns is ready to start you on a lifetime of sky viewing enjoyment.

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