

# ***Welcome to Distant Suns!***

Distant Suns is a desktop planetarium that allows you to browse through time and space exploring a wide variety of celestial phenomenon.

Distant Suns is published under exclusive worldwide license by:

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# ***Navigation***

There are three ways to navigate in Distant Suns:

1. Double-Click with the left mouse button to "center" that point.
2. Use the "navbars" on the bottom and left edges to set (ra,dec).
3. Aim at an object by name. Use the Aim menu.

# ***Setting a Location***

Setting a location depends on what the current view mode is.

Equatorial Mode - location is fixed.

Horizon Mode - use the When & Where panel to set latitude and longitude.

Off-Earth Mode - use the red navbars to set heliocentric latitude, longitude, and distance. This allows you to view the heavens from anywhere within the solar system.

# ***View Mode***

There are three view modes in Distant Suns:

EQUATORIAL - ignores viewers location on the earth; fastest

HORIZON - a realistic night sky for a particular place on earth

OFF-EARTH - a "spaceship" mode that allows travel throughout the solar system and beyond.

# When & Where Panel

The image shows a software panel titled "When & Where". It is divided into two main sections: "When" and "Where".

**When Section:**

- Labels: "Date" and "Time".
- Inputs: "Jun 10, 1986" and "7:13 pm".
- Button: "Now".

**Where Section:**

- Text input: "Buffalo, Wyoming, USA".
- Labels: "Latitude", "Longitude", "Time Zone".
- Inputs: "19:30 N", "156:00 W", "10.00".
- Button: "Select".

**Bottom Buttons:** "Save", "Try", "OK", "Cancel".

Enter the desired date and time in the boxes. The demo only allows dates between Jan 1 and Dec 31 1986.

The "Where" field allows you to describe the location in meaningful terms. The "Select" button brings up a list of cities to choose from. The demo is limited in the number of cities it provides.

The latitude and longitude fields allow you to specify a location on the surface of the Earth. These values are only meaningful in the Horizon view mode.

# ***Time***

To set the time use the "Set/When & Where" menuitem to bring up the When & Where box. Type the desired date and time in the appropriate boxes. The demo is limited to the year 1986.

The date can also be controlled from the clock control bar. It provides a programmable "step" feature.

The toolbar provides shortcuts for incrementing by 1 day and setting sunrise or sunset.

# ***Field Of View***

The field of view is easily set from the left navbar control or the Set/Field-of-View menu.

Dragging a box with the left mouse button will perform a ZOOM IN operation.

# ***Hardware Requirements***

Microsoft Windows 3.1

386 or greater processor, VGA or SVGA, 2MB RAM

Math coprocessor recommended

Hard disk drive with 5 MB free space (8 megs to install)



# ***Demo Limitations***

The demo provides a very realistic "Look and Feel" of the actual program. However, it has been intentionally limited in the following ways:

- Many menu items are disabled.
- Time is restricted to a few months of 1986.
- Star database is significantly limited.
- Off-Earth view position is fixed at (100, 15, 10).
- Printing is disabled.
- Comet and Asteroid orbits are disabled (except for Comet Halley).
- Event saving is disabled.
- A single event is provided: Halley's comet flyby.
- Star information tags and pop-up info is disabled.
- Most thumbnail images have been removed.
- Flashcard is fixed at (0,0).

# ***Product Features***

Distant Suns is a full-featured planetarium and solar system simulator program. Here is a partial list of features:

- Realistically displays the night sky anywhere on earth from 4713 B.C. to 10,000 A.D.
- Very easy to use.
- Databases of 2200 and 9100 stars included.
- Database of 450 galaxies, nebulas, and star clusters is included.
- Over 200 thumbnail images are included, including planets.
- Add up to 3000 custom objects.
- Save and restore interesting astronomical events. Eleven sample events are included.
- Produce high quality star charts.
- Reproduce eclipses and show lunar phases.
- Add your favorite digitized space images. Some samples included.
- CD-ROM of over 1400 NASA images is available.
- Teach yourself constellations with the Flashcard feature.
- Information on any object is easily displayed.
- Spaceship mode offers wonderful off-earth views of the solar system!
- Animation shows orbital motions and eclipses. "Fly" on a comet with the lock viewpoint option!
- "What's Up?" guide helps plan observing sessions.
- Ephemeris calculator.
- Moon map.
- Lunar phase guide.
- Planet position guide.
- Rise/Set guide.
- Special features for laptop users.



