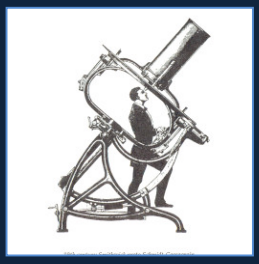
Distant Suns
Quickstart



Originally written for the Commodore Amiga in 1985, Distant Suns is one of the longest-lived consumer programs still on the market. When I first wrote it, I longed to have it run on a small hand-held device that I could carry in my pocket. The iPhone and iPod Touch have made that possible, and it took only 24 years of waiting. Enjoy this software that I had always wanted to have, as you gaze up into the heavens and deep into the glories of the Universe

The Screen

The screen contains three sections: The top has a status bar, showing your *look-angle* the direction you are currently aimed in altitude (up/down) and azimuth (left/right). The horizon is at an altitude of 0, with 90 degrees being straight up. While a 0 degree azimuth is directly north, 180 is directly south. In the middle is the star display (of course!) and a scrollable toolbar along the bottom.

The toolbar at the bottom scrolls back and fourth to expose any number of features to control what you see and how you can find stuff to look at.

Date/Time

You may set the date/time directly via the Preference/Time selections, or you may use the Time Spinners on the main screen. Simply select the clock icon. The time/date button near the top of the new window alternates between time and date on the iPhone and iPods, but both are available on the iPad if you have Distant Suns(max).

The Sky

When launched, Distant Suns will attempt to use your device's location services to discover your position on the Earth. If it cannot do that you'll need to set your location manually, either using latitude/longitude or by selecting a nearby city.

The opening display starts out looking north with identifiers turned on such as the constellation names and outlines. The sky you see on the screen is the sky for now, and is updated every minute. Along the top is a statusbar that shows your current field of view ("FOV") and look-angle in altitude and azimuth, along with your location and current time of the display.

The Sun is depicted as a large yellow disk, while the moon's look will differ based on its current phase. The cloudy band is our own Milky-Way galaxy while the planets are various colored points stretched across the ecliptic, the plane of the solar system.

The horizontal blue line is your local flat horizon, but you can look below it to see the stars on the other side of the earth or what objects are about to rise. Around the sun is a blue glow of skylight, which you may turn off if you want to see the full sky.

If you live near city lights you can optionally limit the number of stars only to those visible in a bright sky.

If the different identifiers get in the way, you can switch them off using the clear button giving a more authentic look at the night sky. Clicking clear again will turn them back on. You may choose to beef up the stellar images using Chart Mode, making the sky look more like a printed chart.

There are over 130,000 stars in this database, of Distant Suns, nearly 300,000 for Distant Suns(max) but only about 6000 are bright enough to be seen with the naked eye. So you have over hundreds of thousands of new stars to explore.

And if all you're interested in seeing where the planets are for the night, you can use the *What's Up?* panel to give you a quick snapshot of the entire sky.

Navigation

You can move around the sky with your finger as with any normal iOS application. Up or down changes your *altitude*, left or right, the *azimuth*. Zooming in or out is possible with the normal pinch function. A quick swipe of your finger will set the sky moving on its own.

You may center the planets, constellation and assorted deep-sky objects using the various search dialogs available from the toolbar. The constellations come with detailed descriptions of their mythology while the deep-sky objects (galaxies, etc) include descriptions and photos.

If your device has a compass the display can be changed by merely holding the phone up to the sky. Merely select the compass button in the toolbar.

Double-tapping the screen will toggle on or off *Pick* mode that will give you additional information about the stars, planets and deep-sky objects. A crosshair

will appear right above your fingertip. Merely center an object inside the crosshair and a new status bar will popup with additional data.

If you need more help visualizing where you are looking you can use the *direction pointers*. These are the little arrows along the side and bottom. The side shows your elevation from straight down to straight up, and the bottom one is your heading.

If you are using the compass and select an object to center, you'll see the location of the object pointed out by the blue arrows. In order to find that object in the sky, move the phone until the blue arrows align with the lavender ones.

On *Distant Suns(max)* you may also fly out to each of the planets and many of their moons. Simply open up the planet finder, tap one of the rocket icons and be amazed. You will be hovering over your target and can look at all sides by merely swiping the screen. A new toolbar along the top will let you jump from object to object, move closer or further, or return back to earth.

Preferences

You may change various settings by clicking the Prefs icon. Here you can toggle on or off many of the identifiers, change the date and time of the display and even the way the stars are rendered.

Tips for Observing

When you take Distant Suns outside at night, you may want to use the special Nightvision mode. This turns many of the display elements red to keep from hurting the dark adaptation of your eyes. Some of the iPhone's colors cannot be changed however, so you may also want to turn down the brightness of the screen as well.