

# Southern Stars' SkySafari 3

*This app for Apple's mobile devices literally puts access to the night sky at your fingertips.*



## SkySafari 3

**U.S. price:** basic version, \$2.99; Plus, \$14.99; and Pro, \$59.99. Southern Stars, 123 Tenth St. San Francisco, CA 94103 415-671-6251 [www.southernstars.com](http://www.southernstars.com)

**MOST WOULD AGREE** that the digital revolution in amateur astronomy began quietly in the 1980s with the growing adoption of personal computers. The revolution took a leap forward in the 1990s with the introduction of astronomical CCD cameras and Go To telescopes. A decade later digital photography was reshaping the hobby. Now another decade has passed and another revolution has arrived. Today many amateurs use one device for personal communication, accessing the Internet, and enjoying astronomy. I speak of smartphones and tablet computers, of course.

Apple's iPhone, iPad, and iPod Touch have become mature computing platforms and there are now lots of

**Sky Safari 3** literally places the wonders of the night sky at your fingertips. The program packs the power of planetarium software once reserved for desktop computers into an app that runs on Apple's iPad, iPhone, and iPod Touch devices. With it you can locate and identify stars, planets, asteroids, comets, and deep-sky objects. And, with an optional Wi-Fi module, you can control a wide variety of Go To telescopes. This screen capture shows **Sky Safari 3 Pro** as displayed on the author's iPad 2.

### System Requirements

All **SkySafari 3** versions are universal apps for Apple's iPhone, iPad, and iPod Touch running iOS 4 or higher.

excellent astronomy apps. Many of these programs behave similarly and have comparable features, but Southern Stars' *SkySafari 3* stands out for its pedigree. The program is a rewrite of Carina Software's venerable *Sky Voyager*, which traces its roots way back to the 1980s (*S&T*: July 2008, page 32).

*SkySafari 3* comes in three versions: basic, Plus, and Pro. The basic version is aimed at beginners and casual naked-eye observers. Its database includes about 120,000 stars to 8th magnitude, all the objects in the Messier and Caldwell catalogs, many deep-sky images, and about 500 object descriptions.

The Plus version of the program ups this to about 2½ million stars to 12th magnitude, 30,000 deep-sky objects (including the entire NGC and IC catalogs), about 300 images from the Digitized Sky Survey, and roughly 1,000 object descriptions. The Plus version also includes Go To telescope control (which requires optional hardware). And, for good measure, you get precise sky charting, asteroid/comet/satellite databases, and observation planning and logging capabilities.

In addition to the Plus version's features, *SkySafari 3 Pro* ups the ante to about 15 million stars to 15th magnitude, about 740,000 deep-sky objects to 18th magnitude, and every cataloged object in our solar system. This is the version I tested.

I prefer running *SkySafari 3* on the larger screen of my iPad 2 (with 64 gigabytes of memory) rather than my iPhone 4, but everything works the same way on both devices. You can manually set your location or use the iPad's internal location capability. Multiple locations can be saved, and all the typical settings for date and time are easily accessed from the tool bar.

There are buttons for toggling the tablet's built-in compass and gyroscope, as well as a night-vision mode (which is especially nice to have readily accessible rather than buried in a menu). The compass and gyroscope let you move the iPad or iPhone (the iPod Touch lacks a compass) around while the screen continually shows a simulated view of the sky in the direction the device is pointed.

There's also a tool bar button to access *Sky & Telescope's* SkyWeek, a selection of current events along with appropriate sky simulations. Of course you can always use your fingertip to scroll around the sky and zoom in or out. Once you learn the basics of *SkySafari 3's* touch interface, it quickly becomes intuitive.

I really enjoy the extreme portability of tablet-based planetarium programs. Imagine, for example, hosting a public star party with several telescopes set up to view different objects. With *SkySafari 3* on an iPad or iPhone, I can circulate among the attendees and quickly answer all sorts of questions. Some guy points to a star and asks

#### WHAT WE LIKE:

The power of desktop planetarium software in an app for Apple's mobile devices

#### WHAT WE DON'T LIKE:

Minor issues with night-vision mode displaying things with white light

its name. I simply point the iPad in the appropriate direction and let him see the star's name himself. Touching the star on the screen brings up literally everything *SkySafari 3* knows about that star.

A lady asks if there's more to the globular cluster M13 than the fuzzy view she's seeing through the telescope. I oblige by zooming *SkySafari 3's* star chart in until it displays a photograph,

and touching the image followed by the Info button brings up all kinds of information about this magnificent cluster. A boy at another telescope wants to know which of the "dots" around Saturn are satellites and which are stars. Zooming the iPad display shows Saturn with its satellites and rings correctly oriented and labeled for easy identification.

Two girls spot a point of light moving silently across the sky and ask if it's an artificial satellite or an airplane. I swing the iPad (with *SkySafari 3* running in real-time mode) to that part of the sky and show them a bright green dot moving among the plotted stars, and a touch of the dot reveals that it's an Earth-orbiting satellite. (Note that the basic edition of *SkySafari 3* does not include comet, asteroid, and satellite data and thus is unsuitable for satellite chasing.)

In the past, answering questions like these meant carrying around observing guides and a red flashlight or running inside to consult a computer. Now, I can simply carry around an iPad or iPhone with *SkySafari 3* and have all this information literally at my fingertips.

I found a few minor annoyances in the initial release of the program, mostly involving the display. For example, in night-vision mode some text labels appear in white rather than red, and touching the buttons on the tool bar create a momentary flash of white light. A similar but more-substantial flash occurs when tapping to enter text into the search bar.

In future updates, a feature for predicting Iridium flares would be a welcome addition, as would an ability for creating animations similar to those in the program's distant relative, *Voyager*. The developers of *SkySafari* are extremely responsive to bug reports and requests for additional features. They also maintain an online discussion group for feedback purposes.

As with other aspects of the digital revolution, smartphone- and tablet-based planetarium programs are game changers. The Pro version of *Sky Safari 3* has completely replaced my desktop planetarium program. Before now, we could only watch the sky on computer screens. With *SkySafari 3* we can touch the sky, and that's revolutionary. ♦

---

College instructor **Joe Heafner** lives in North Carolina and is currently writing an introductory astronomy textbook.