

Grand Tour

Quickstart

What is Grand Tour? It was a code name used by NASA in the 60s to describe a proposed tour of the outer planets. One that could only happen every 176 years due to the chance alignment of the planets. This mission would eventually become the now legendary Voyager flights to Jupiter, Saturn, Uranus and Neptune. The textures of the moons of Jupiter, Neptune and Uranus were all derived from the dramatic images returned by those very same Voyager spacecraft.

For the inner worlds, the images largely came from a great assortment of spacecraft. And note that the cloud images used for the earth are current to within 3 hours if you have an iPhone or an iPod with Wifi activated.

The Screen

The screen contains three sections: The top has a status bar, showing your field of view, typically 35 degrees, and the date/time of the display.

Along the bottom is a standard tool bar. An additional toolbar can be displayed to control the clock. You start up at the Earth, about 16,000 miles (26,000 km) . Since Earth is our home, the little Earth icon acts as the home key. You can skip from planet to planet by either “flying” or jumping, and see them and their moons much as they would look at this very moment. Likewise the stars, constellations and Milky Way are realistically displayed as well. Note that the cloud patterns on the Earth are current to within 3 hours.

What's Up? shows a thumbnail sketch as to where each of the planets are in your own sky.

Using the clock you can accelerate the motions of the planets and produce beautiful animations. The right button accelerates the time forward, each additional click moving things faster. The left button does the same, but backwards, while the center stops all time changes. Tap the center button again, and you return to the present. (In the preferences you can set your eye point to be fixed in space, in which case the planets and moons will fly away from you, or you can tether your eye point such that you fly along side the object.)

Navigation

Navigation is as simple as selecting your target from a list of all of the planets and their major moons. You can “jump” immediately to each planet if you are in a hurry (the default) or you may fly there at a more leisurely rate if you want to see

the sites along the way. Once you are locked in “orbit” you can use your finger to spin the planet around from all angles. You can move your eye point closer by double tapping the upper half of the screen, and away, by using the bottom half of the screen.

Event Alerts

From time to time you may see an “alert bar” pop up along the top of the screen. (This requires a Wi-Fi connection if you are using the iPod/Touch.) This alerts you to any interesting recent astronomical discoveries or upcoming events such as eclipses, meteor showers or conjunctions. Selecting the “...” button will reveal more detailed information, or selecting the “X” will close the display).








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, change the way the stars are rendered and flight modes.

Toolbars

Grand Tour has one main toolbar and an additional popup toolbar for controlling the time.

Search

	Return to home.
	Select a target.
	Gives a quick look at where the planets are in your home sky.
	Opens up a popup toolbar to animate the solar-system
	Basic info panel and About Box.
	Opens up the preference panel.
	Displays a list of help files.

Clock

Think of this as a giant remote-control for the solar system. The Forward and Back buttons will speed up the clock, letting you see the more subtle motions of

the planets. Each tap will double the speed of time. The center button will stop the clock with a single tap. A double-tap will return you to real-time.

Preferences

The following preferences are available:

Constellations

Borders: toggles on or off the generally accepted borders of each of the constellations

Names: toggles on or off the standardized constellation names

Outlines: toggles on or off the outlines of the constellations

Solar system

Names: toggles on or off the names of the planets

Cloudless Venus: toggles on to see Venus without her suffocating cloud layer.

Show Pluto: If you are a traditionalist (as I am), toggling on will put little Pluto back into its rightful honor as a full-blown planet. If you are a dues paying member of the IAU and think that Pluto doesn't deserve the same status as Mars or say, Mercury (Mercury? Bah!), then you can turn this off.

Markers

Celestial Equator: Toggles on or off the boundary between the northern and southern skies.

Ecliptic: Toggles on or off a line showing the plane of the solar system. You will find the planets located here.

Extras

Jump to Planets: Use when you are in a hurry and don't want to do all that mucking around in hyperspace.

Tether Eyepoint: When on, your eyepoint will travel along with your target. When off, it will stay fixed in space letting you observe the slow and graceful motion in its orbit.

Show Stars as Pinpoints: When on, the stars are rendered as pinpoints. Smaller and more realistic, but could be hard to see in brightly lit areas.

Highlight Home: Turns on a little flashing doo-hicky over your current position.

Ambient Light: when on, makes the dark side of the planets a little lighter. Most helpful in seeing the cloud patterns on Earth, at night.

System

Sound-FX: toggles annoying sound effects.

Use Location Services: Attempts to use the GPS services when on.

Set Date/Time: Lets you set the date and time of your display. When not set to the current time, the clock stops updating. In the date/time dialog you will see the Julian Date. This is simply the absolute date in days from January 1, 4713 BC. Used by astronomers to remove the ambiguities inflicted by the different calendars over the centuries.