

PhotoPills



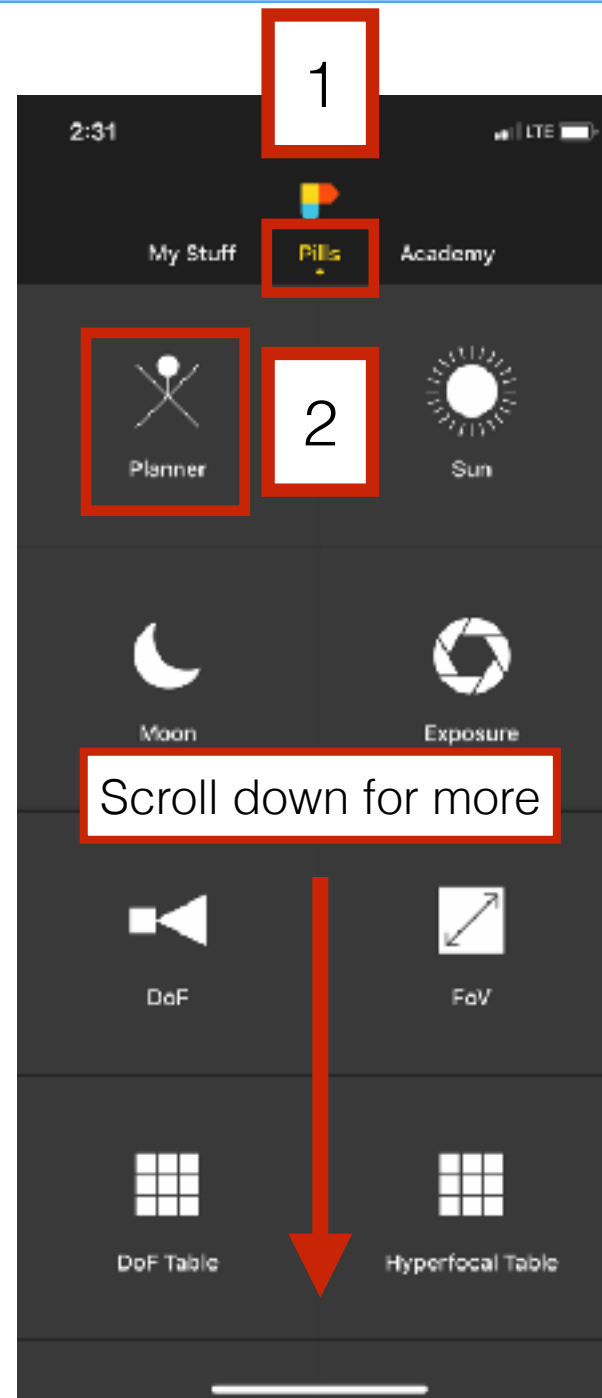
DISCOVER THE LIGHT
PHOTOGRAPHY

Topics Covered

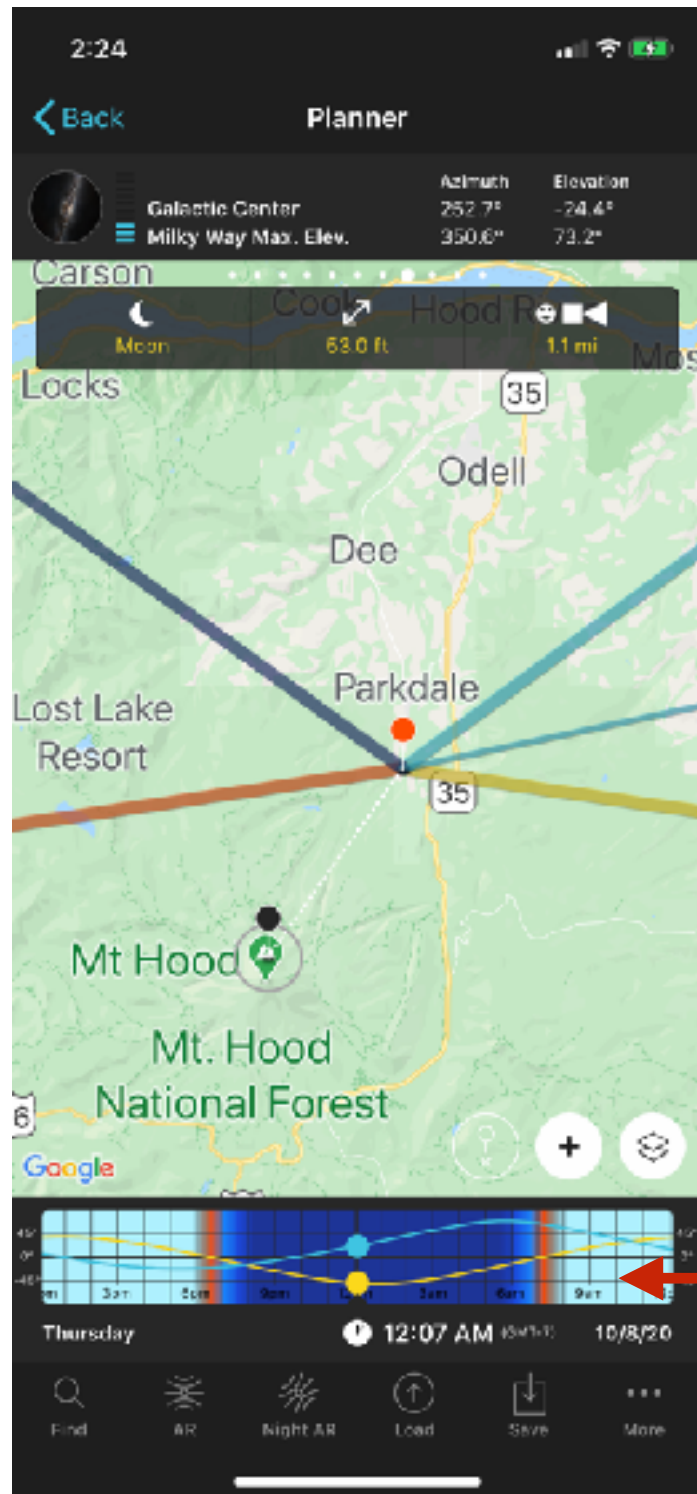
- ✓ Getting Started
- ✓ Planner - Time Bar
- ✓ Planner - Panels
- ✓ Planner - Map Types
- ✓ Planner - Map Tools
- ✓ Planner - Tool Bar
- ✓ Find Tool
- ✓ PhotoPills Plans

Basic Navigation

1. "Pills" menu.
 2. Tap one of the options (i.e., Planner).
- NOTE:** Tap "Back" to return to the "Pills" page.



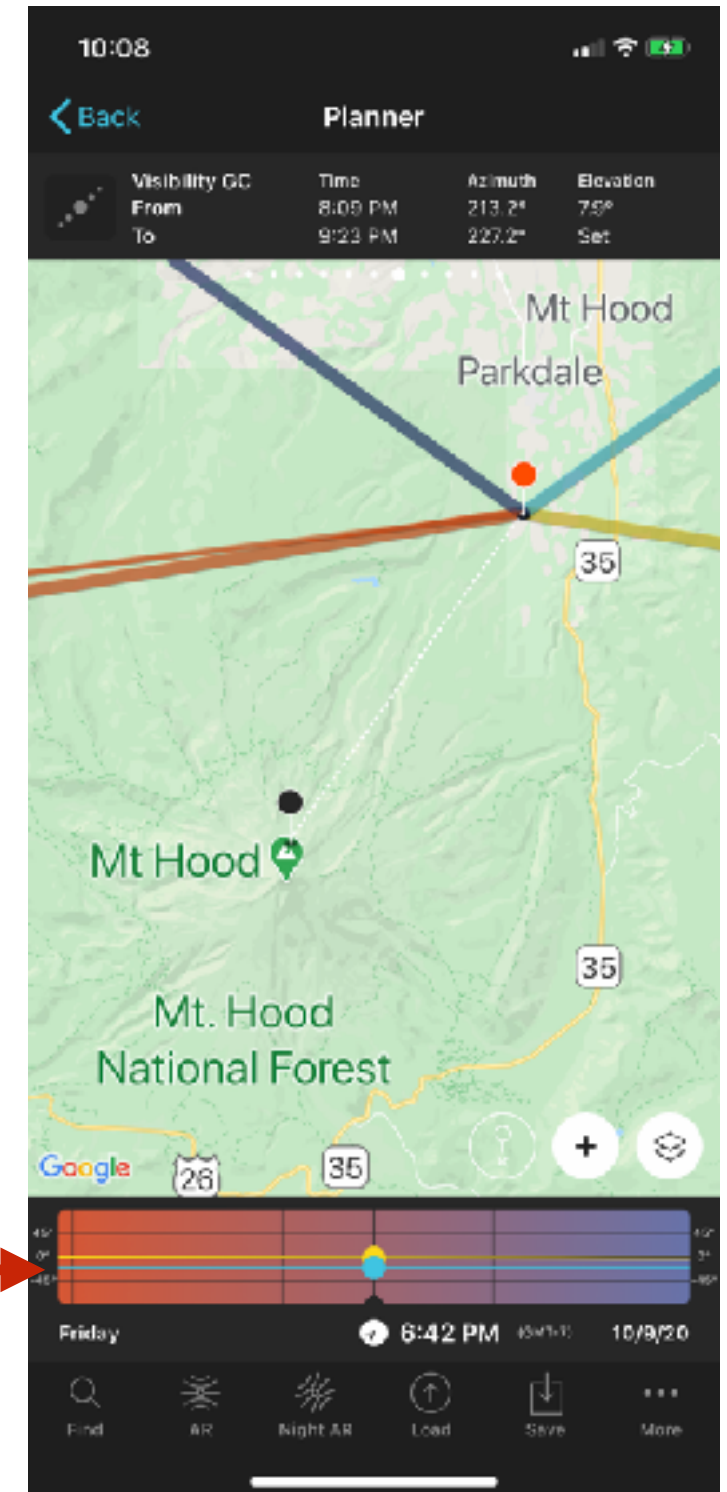
Time Bar



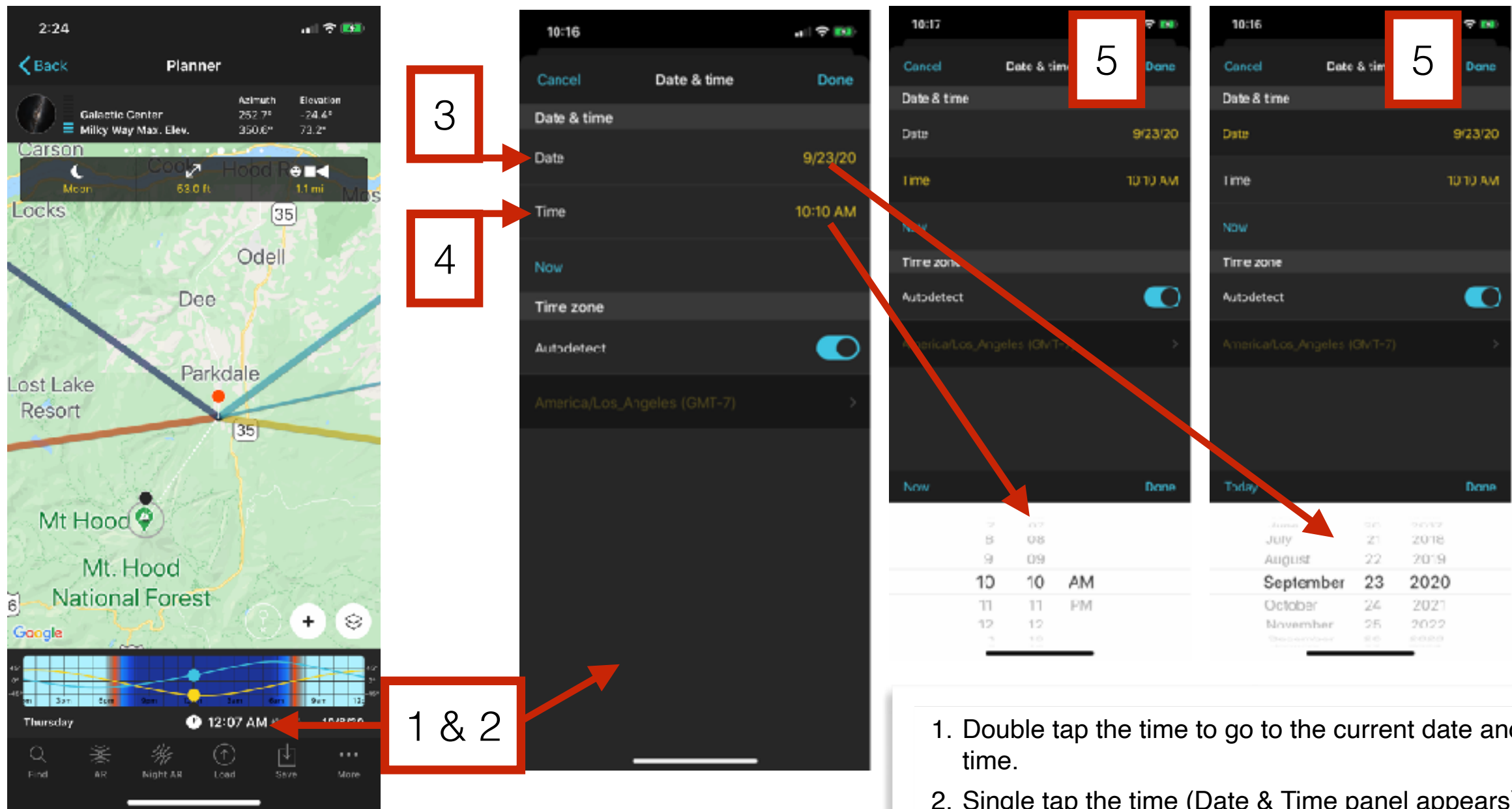
1. Tap and drag the timeline left and right.
2. Tap and hold inside the timeline to switch to 15 minute mode.
3. Tap and drag the timeline left and right to move the timeline more precisely.
4. Tap and hold again to return to 24 hour mode.

1 & 4

2 & 3



Time Bar - Date and Time



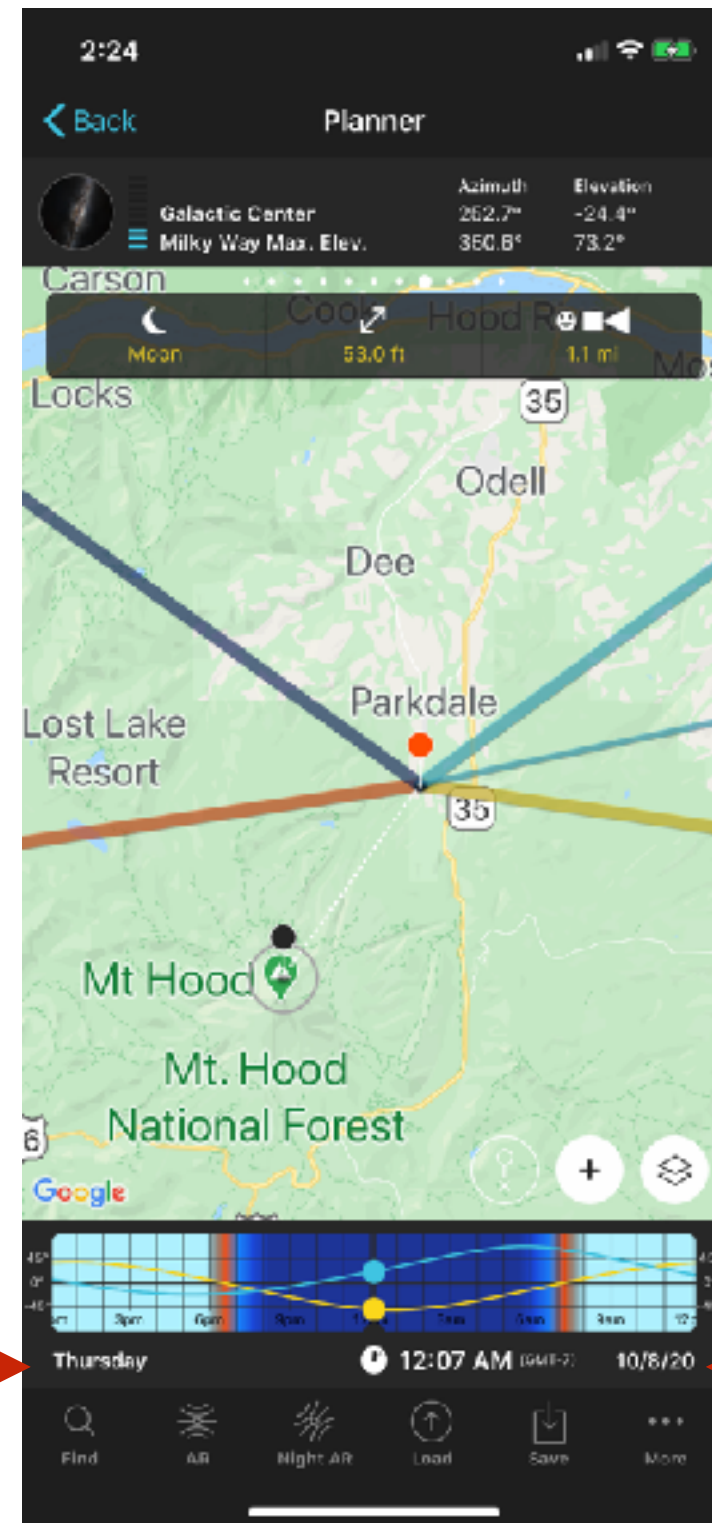
1. Double tap the time to go to the current date and time.
2. Single tap the time (Date & Time panel appears).
3. Tap "Date" to enter the desired date.
4. Tap "Time" to enter the desired time.
5. Tap "Done" when finished entering time or date.

Time Bar - Events

Events:

- Sunset
- Golden hour
- Blue hour
- Twilight periods
- Sunrise
- Moonrise

1. Tap the day text to go to previous event.
2. Tap the date to go to the next event.



Planner - Top Panels



	Ratio	Object height	Shadow length
Sun Moon	-	328.1 ft	-

Sun/Moon Shadows

	Distance	Azimuth	Altitude difference
	187.2 mi	163.8°	4534ft -0.90°
	Milky Way arch height: 23,111.83mi from Black Pin		

Black Pin Shooting Direction

	Azimuth	Elevation	Phase
Sun Moon	308.9°	-27.60°	Waning Crescent
	343.4°	-24.82°	7.3%

Sun/Moon Location and Information

	Sun	Moon
	6:47 AM@84.6°	2:56 AM@58.9°
	7:22 PM@275.1°	6:27 PM@297.6°

Sun/Moon Rise/Set

	Civil	Nautical	Astronomical
	6:16 - 6:47 AM	5:41 - 6:16 AM	5:03 - 5:41 AM
	7:22 - 7:52 PM	7:52 - 8:27 PM	8:27 - 9:04 PM

Twilight Periods

	Blue hour	Golden hour
	6:16 - 6:28 AM	6:28 - 7:27 AM
	7:40 - 7:52 PM	6:42 - 7:40 PM

Blue and Golden Hours


	Visibility GC	Time	Azimuth	Elevation
From		9:04 PM	203.9°	11.0°
To		10:59 PM	226.4°	Set

Galactic Center Visibility and Position

	Azimuth	Elevation
Galactic Center	217.1°	5.3°
Milky Way Max. Elev.	127.4°	86.8°

Galactic Center Position Milky Way Intensity

Planner - Top Panel Information

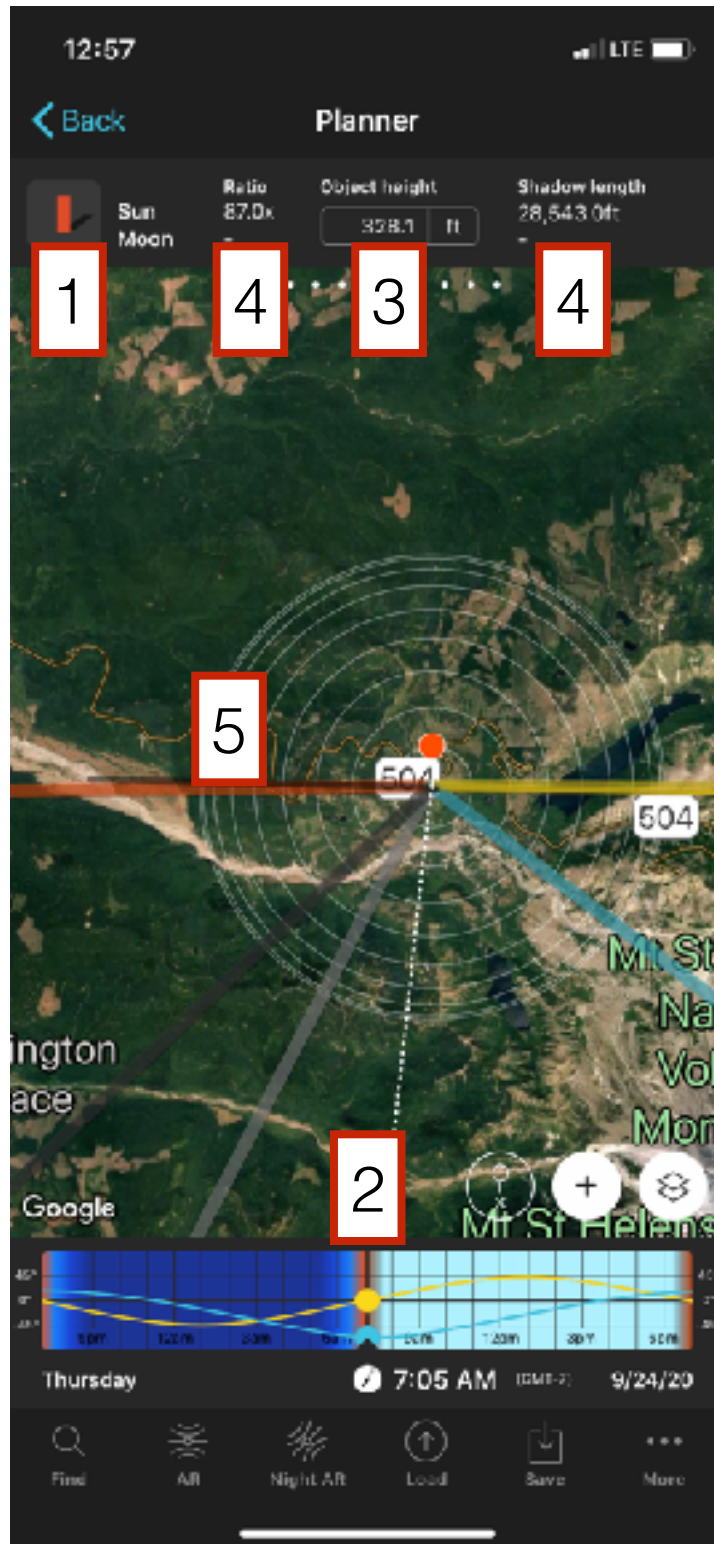
				
		Azimuth	Elevation	Phase
Sun		308.9°	-27.60°	<i>Waning Crescent</i>
Moon		343.4°	-24.82°	7.3%

Panel icon and name

Panel information for selected date/time

NOTE: Tapping the panel icon displays different information depending on the panel

Sun and Moon Shadows



1. Tap panel icon to turn ON calculator (icon is bright).
2. Move timeline to a time during daylight to show sun shadows.
3. Enter *Object height*.
4. *Ratio* and *Shadow length* are displayed.
5. Shadow length is displayed on the map as a black line.
6. Tap panel icon to turn OFF calculator (icon is dim).

NOTE: Move timeline to a dark period when the moon is visible to show moon shadow information.

Black Pin

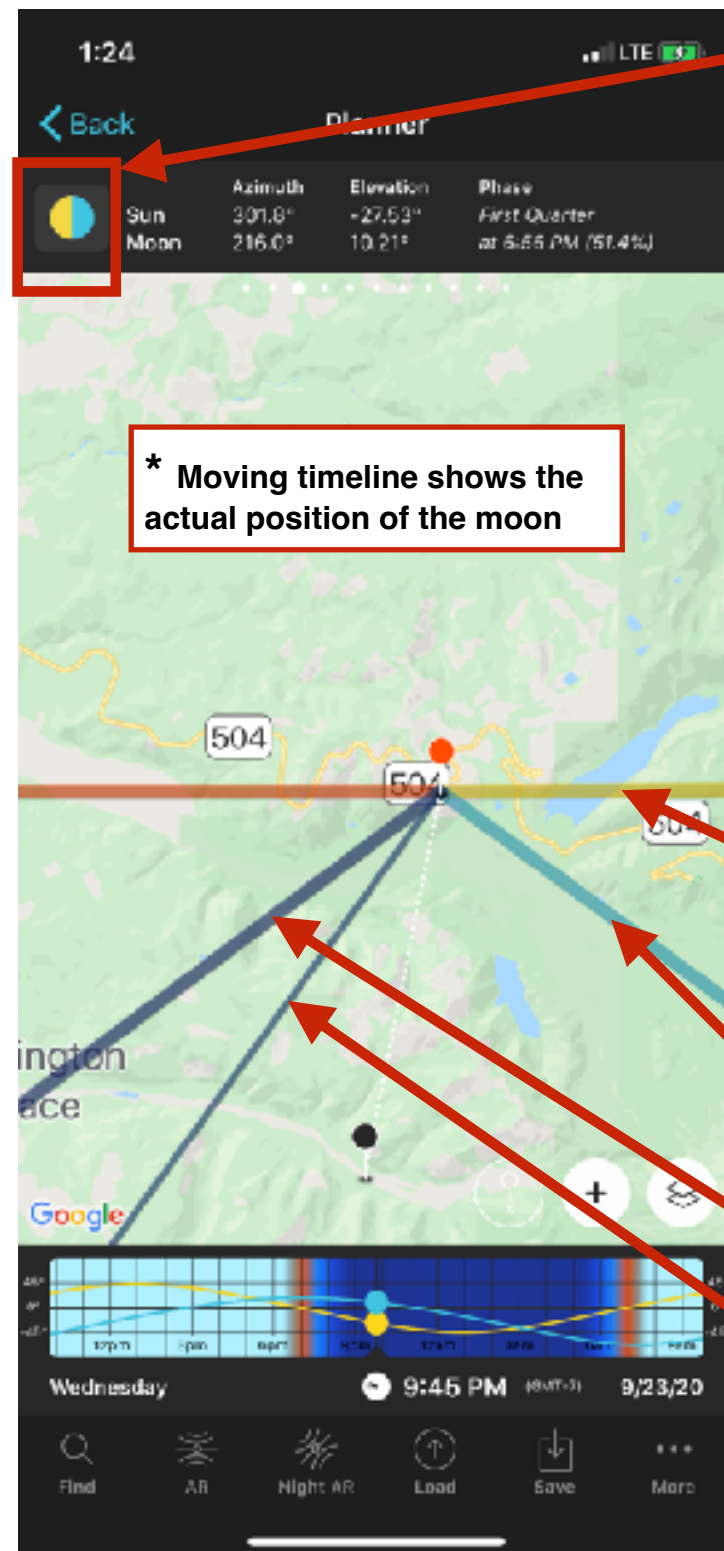


NOTES:

- Red pin is where you are located.
- Black pin is a point where you want information regarding shooting direction and/or information relative to the red pin.

1. Tap panel icon to turn black pin ON (icon is bright).
2. Black pin is displayed (with dashed line from red pin).
3. Black pin information box is displayed (coordinates, altitude, and elevation difference between red and black pin).
4. Tap pin information box to turn OFF.
5. Tap and drag black pin to move to desired location.
6. Tap panel icon to turn black pin OFF (icon is dim).

Sun and Moon Location and Information






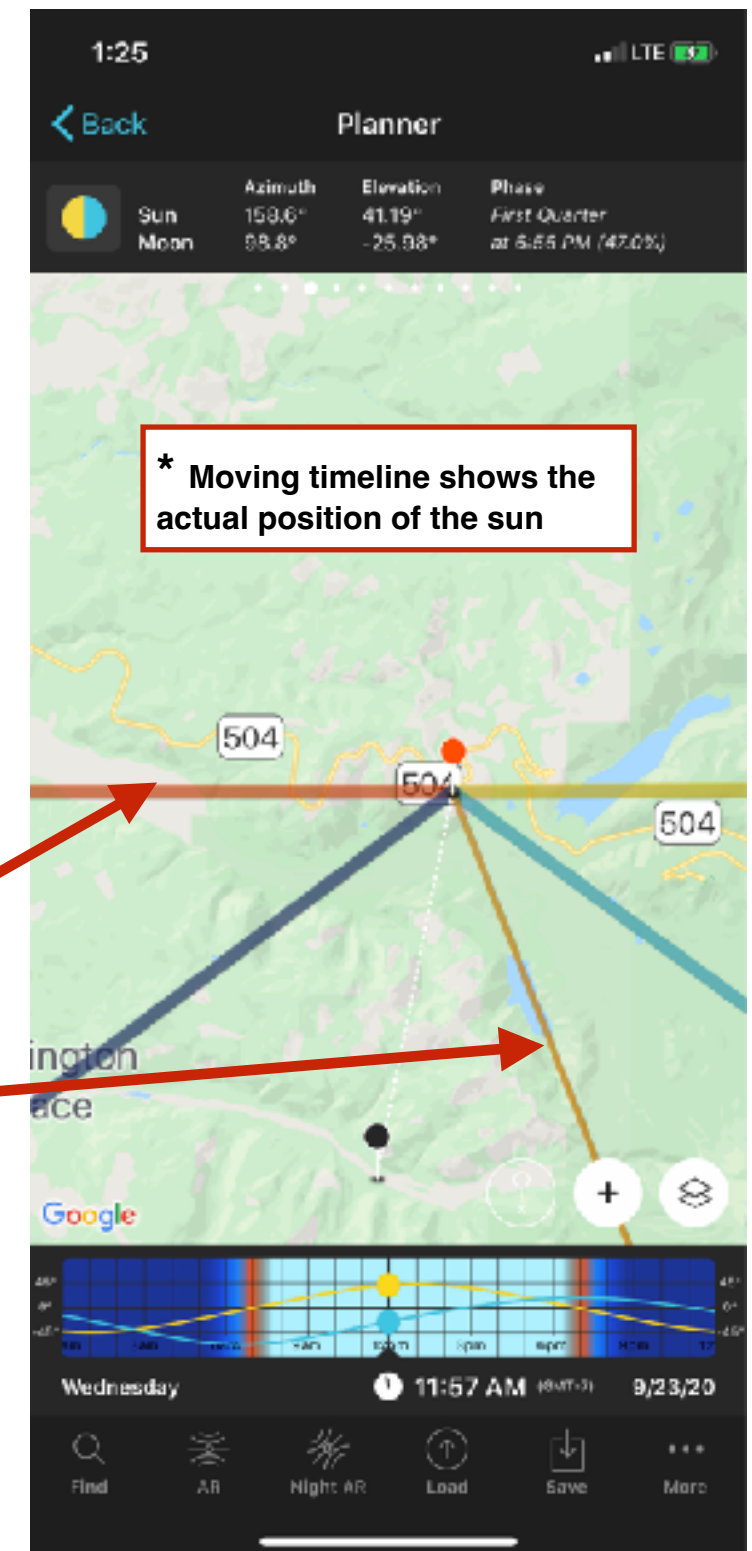
Tap panel icon to go to the next icon:

-  Sun and Moon lines on the Map
-  Only Sun lines on the Map
-  Only Moon lines on the Map
-  No Sun or Moon lines on the Map

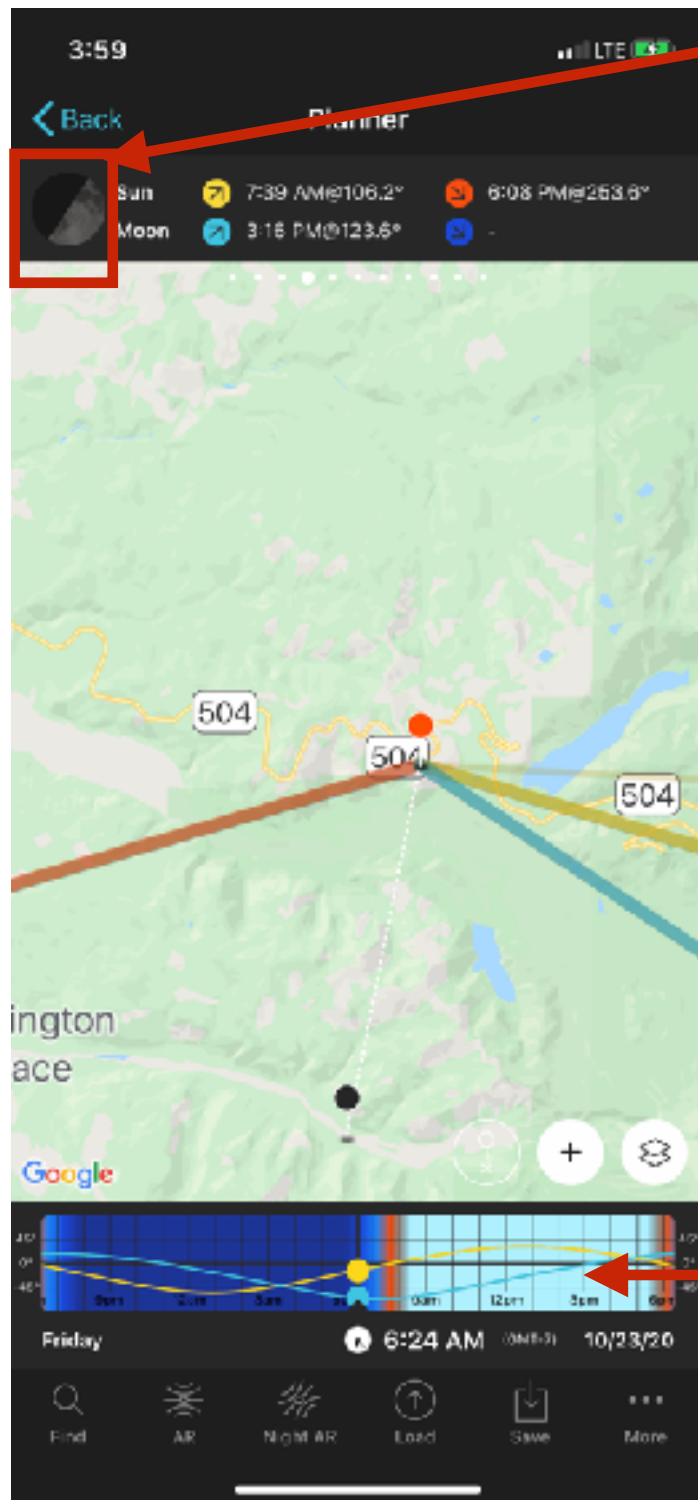
NOTE:

Blue colored moon (in icon) indicates the moon is visible during the day.
Gray colored moon (in icon) indicates the moon is visible at night.

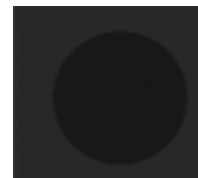
-  Sunrise
-  Sunset
- *  Sun
-  Moonrise
-  Moonset
- *  Moon



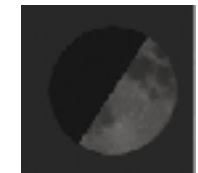
Moon Rise and Set



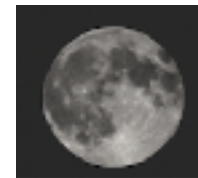
Tap panel icon to go to the next icon:



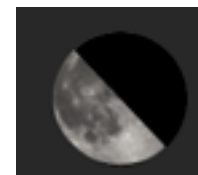
- New moon



- First quarter



- Full moon



- Last quarter



Daytime



Night-time



Moonset in daytime



Moonset in night-time

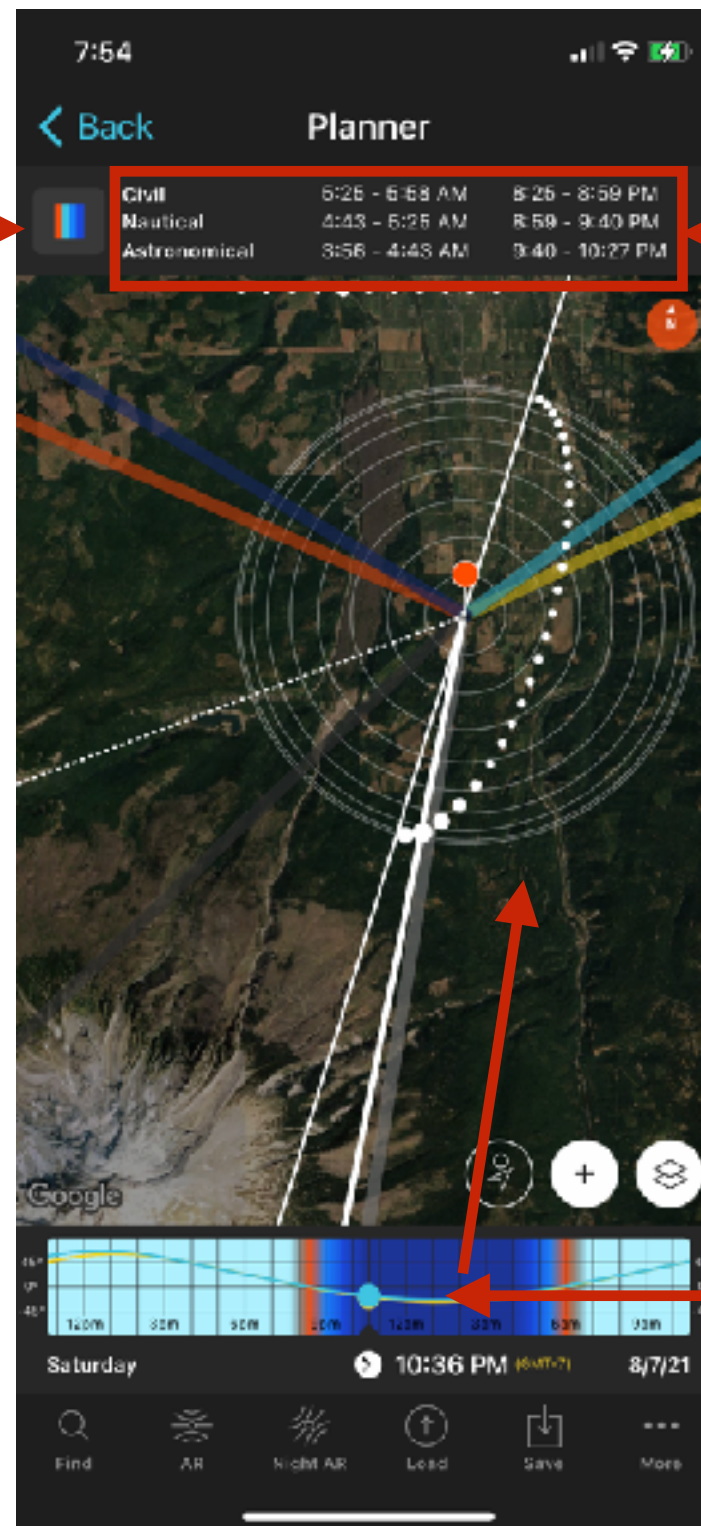
Moving the timeline shows:

- The actual moon phase (shown in the panel icon)
- Moon phase is based on date, time, and red pin location

Twilight Periods



Tap panel icon to turn information ON or OFF



Twilight period information

Civil: The period after sunset or before sunrise (a.k.a. Blue Hour)

Nautical: The period after Civil where there's still some light in the sky and the brightest stars are visible.

Astronomical: The period after Nautical where more stars are visible

When this panel is turned on, the twilight colors will be displayed on the map.

Blue and Golden Hour

Blue hour	6:16 -6:28 AM	7:40 -7:52 PM
Golden hour	6:28 -7:27 AM	6:42 -7:40 PM

This panel has no icon and displays information only

Galactic Center Visibility and Position



1. Tap panel icon to turn information and display ON (icon is bright).
2. Move timeline to dark period to display the Milky Way.
3. Tap panel icon to turn information and display OFF (icon is dim).

NOTES:

- The angle of Milky Way is displayed (changes throughout the year and time of day).
- The Galactic Core is represented by the large orbs.
- The center of the Galactic Core is represented by the thick white line.

Galactic Center Position / Milky Way Intensity

1, 2

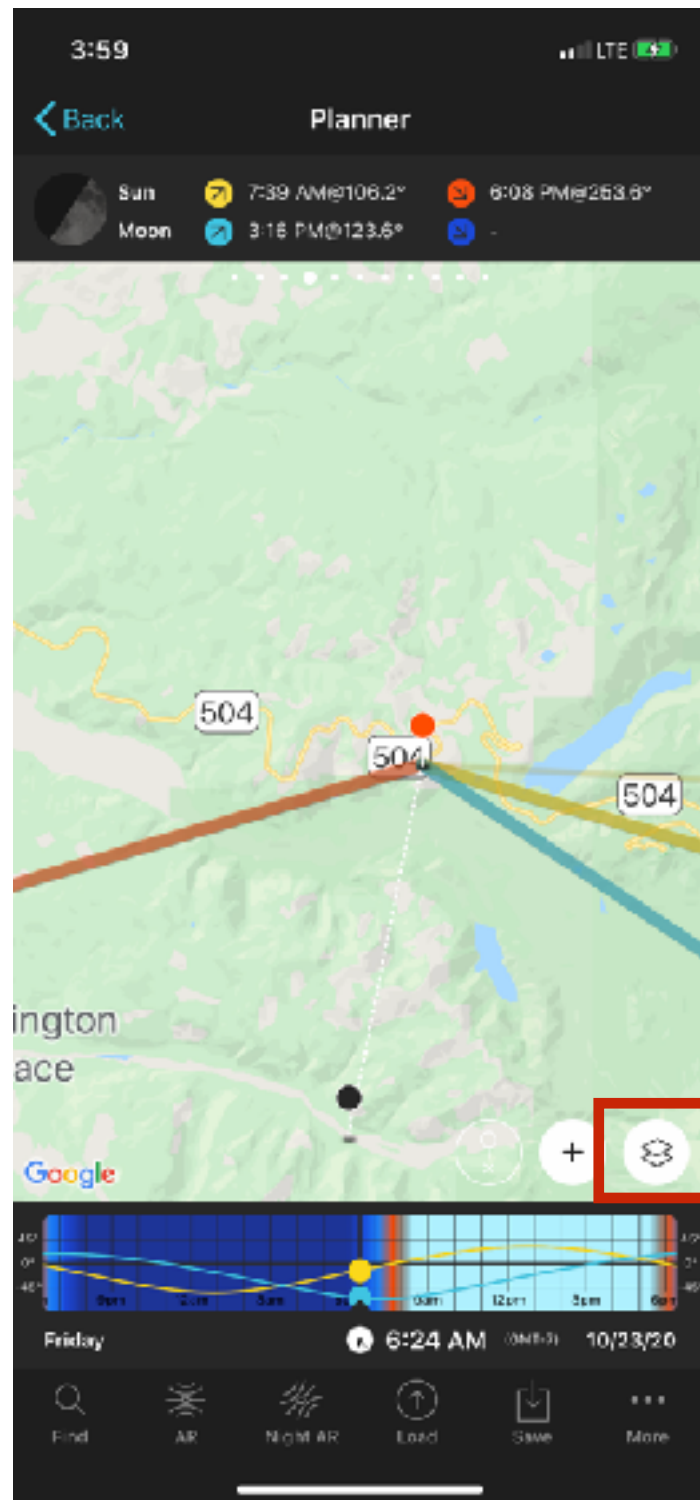


1. Single tap the panel icon to move to the next new moon.
2. Double tap the panel icon to move to the previous new moon.

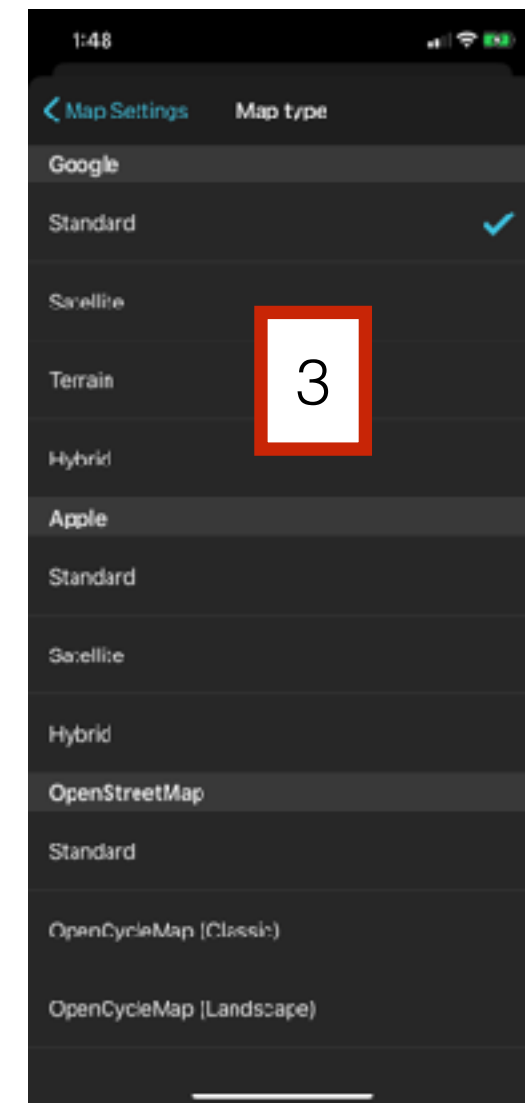
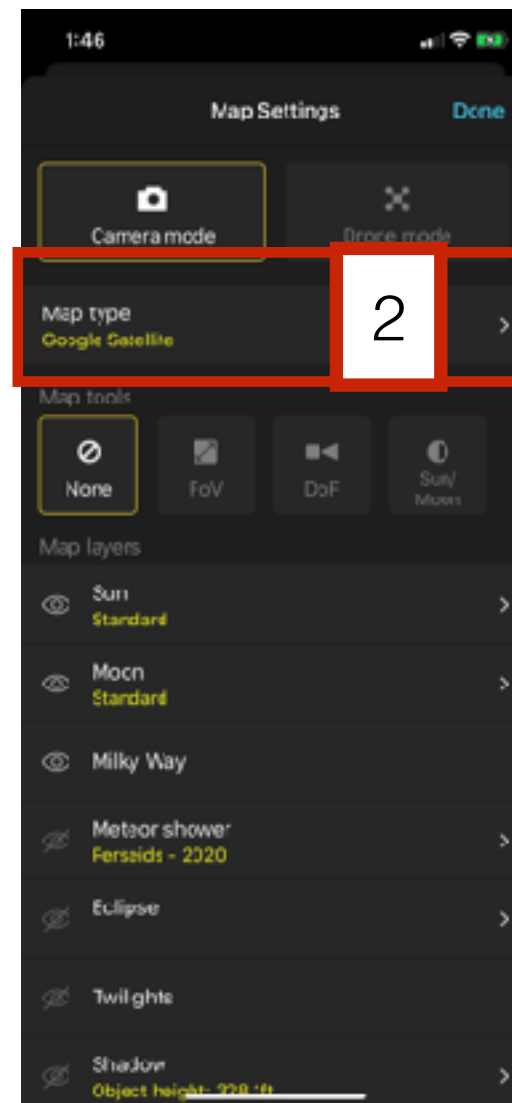
NOTES:

- The Milky Way intensity is displayed by the light blue vertical bar (the higher the bar, the more intense the Milky Way is for the date/time selected).
- Prime Milky Way intensity is from 3 to 5 days before and after the new moon (depending on the time of year).

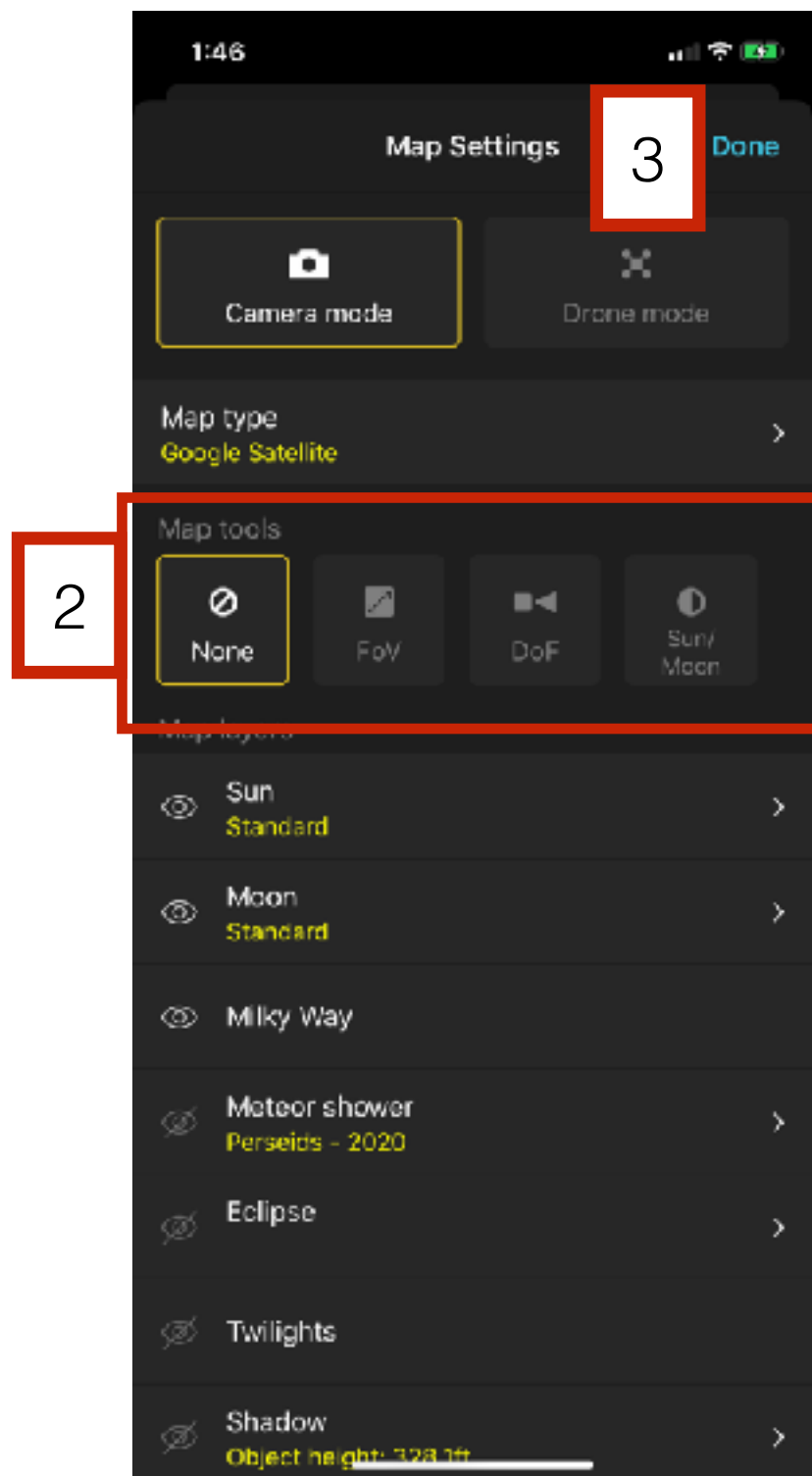
Map Types



1. Tap the **Map Settings** icon.
2. Tap **Map type**.
3. Tap desired map.
4. Tap **Done**.

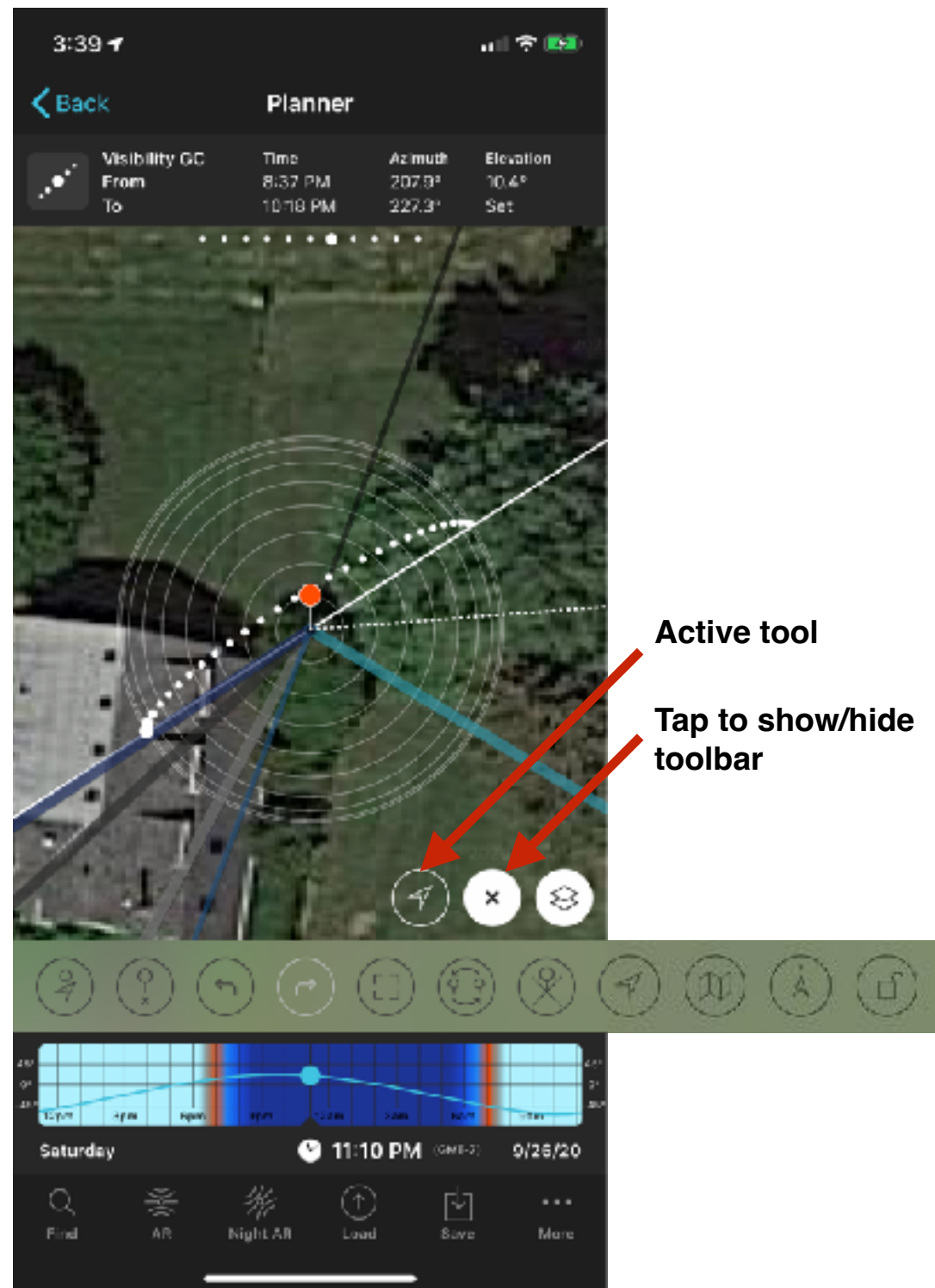


Map Tools



1. Tap the **Map Settings** icon.
2. Tap desired Map Tool
 - **None** - No map tool displayed
 - **FoV** - Field of View
 - **DoF** - Depth of Field
 - **Sun/Moon**
3. Tap **Done**.

Planner Tool Bar



GPS: Place the Red pin at your current location.



Move Red Pin: Tap place red pin at center of the map



Undo: Tap to recover the previous position of the Red and Black Pin.



Redo: Tap to recover the previous position of the Red and Black Pin.



Expand Map: Work with a larger map screen.



Swap pins: Tap to swap the position of the Red and Black Pin.



Extend Sun/moon azimuth lines: Use it to figure out where you can place the Red Pin for a given Sun or Moon alignment.



Show current position: Enable/disable your current position on the Map.



Change Map type: Change the Map type (same as map settings button)

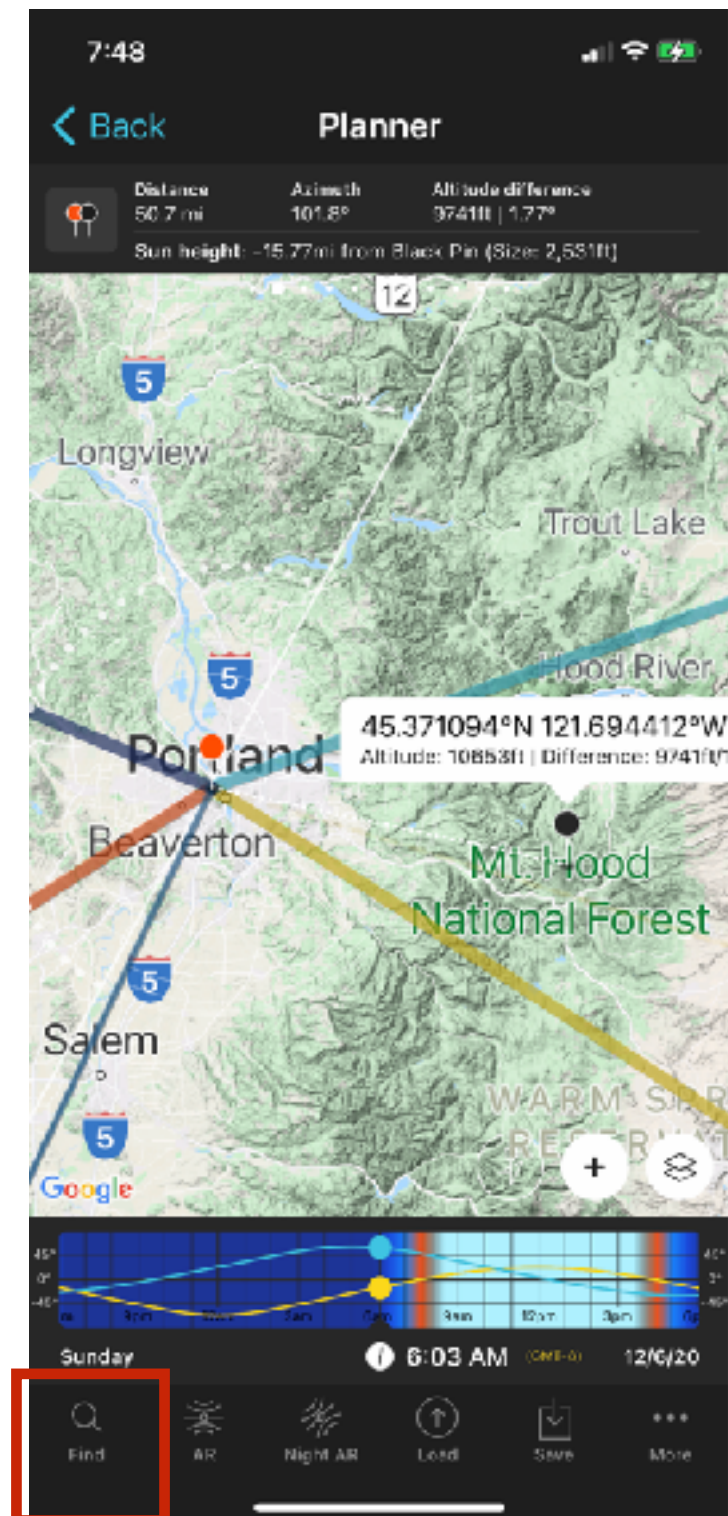


Compass: Switch from north up to auto-rotate.



Block Map: Tap to have all the options visible all the time. Tap on it again to hide the options.

Find Tool



WHAT DOES THE FIND TOOL DO?

- Finds sun and moon positions based on red and black pin positions.
- Parameter settings allow precise results.