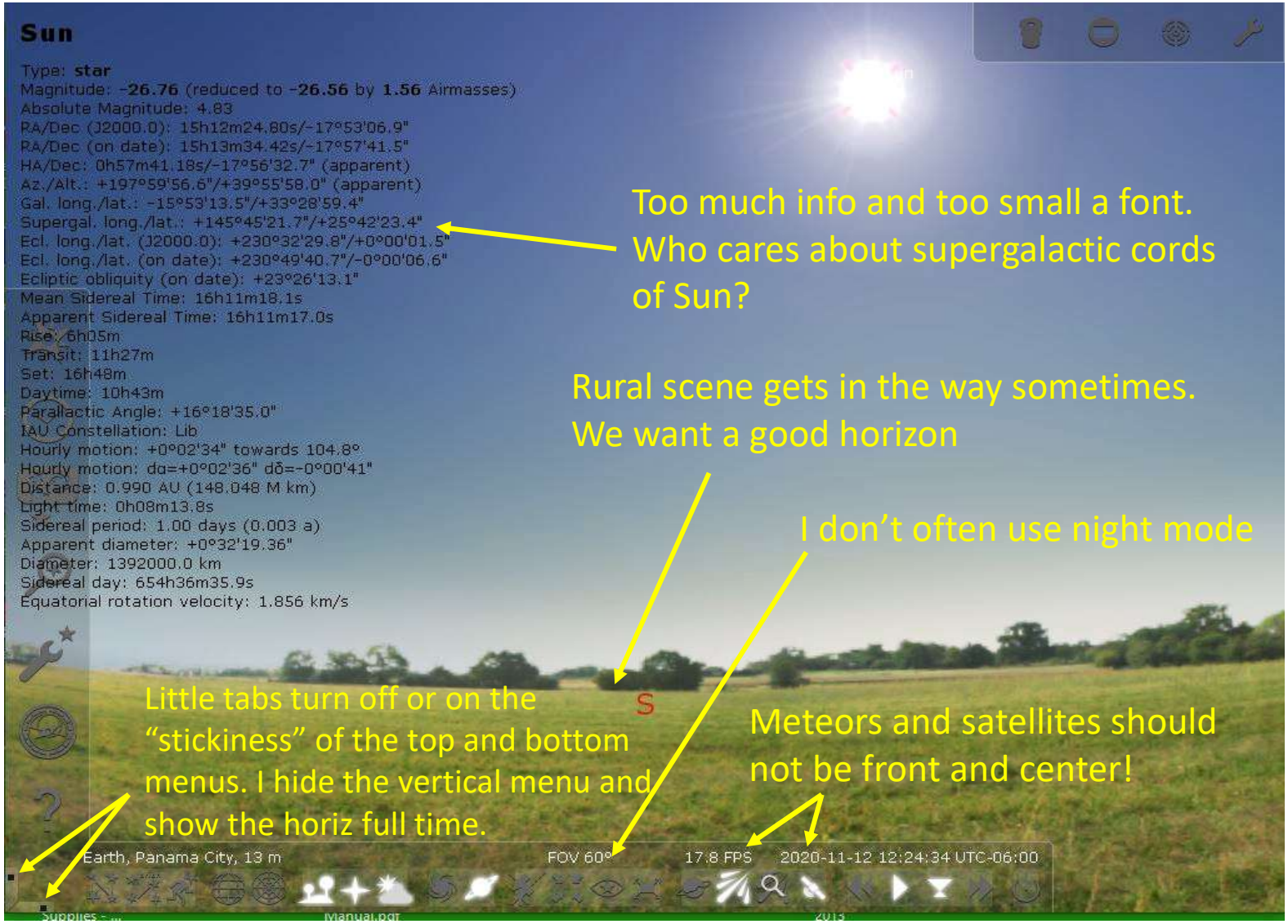
My favorite initial settings of *Stellarium*

The distribution package of *Stellarium* is okay, I guess, but it has a lot of defaults that I find to be non-useful or cumbersome (possibly these are out front to force you to customize). This presentation is to show you a set of operating parameters that I found to be better at allowing *Stellarium* to be a more useful tool for investigating the night sky.* I may seem to be painfully obvious to existing *Stellarium* users in some points, but I hope to be helpful to even advanced users concerning some obscure topics.

This is version 0.20.3

* Of course, your application may have different requirements. You are perfectly welcome to vary them.

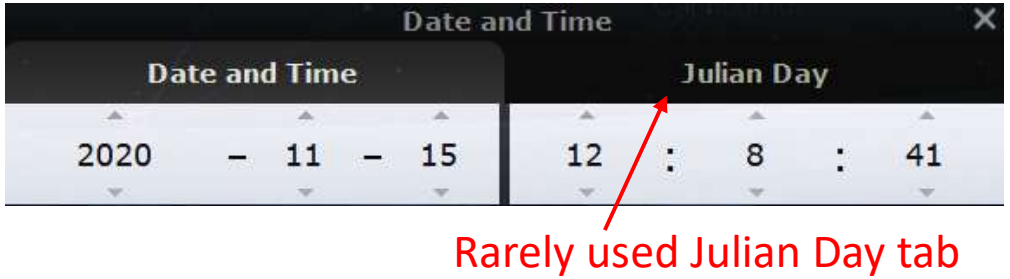
Default display in daytime.



VERTICAL SIDE MENU

Location Setting Dialog Box (where you are)

Date/Time Window
(time of display)



Sky and Viewing Options (mostly astronomical detail)
Tabs: Sky…Solar Sys Obj…Deep Sky Obj…Markings…Landscape…Starlore…Surveys

Search Dialog Box

Configuration Window (mostly *Stellarium* control)
Tabs: Main…Information…Extras…Time…Tools…Scripts…Plugins

Astronomical Calculations Window (operations)
Tabs: Positions…Ephemeris…Transits…Phenomena…Graphs…WUT…PC
"what's up tonight" "planetary calculator"

Help (mostly keyboard shortcuts)

LOCATION MENU: Check that you are at your location (if the network is active, it probably found your location). The default is Paris. France. Club members put Panama City in the search box. If your location is not listed, you have two choices. Either 1) select near your location in Google Maps and read off *What's Here?*

(And change the time zone.)

1200-1298 W 12th St
Lynn Haven, FL 32444
30.241323, -85.661294

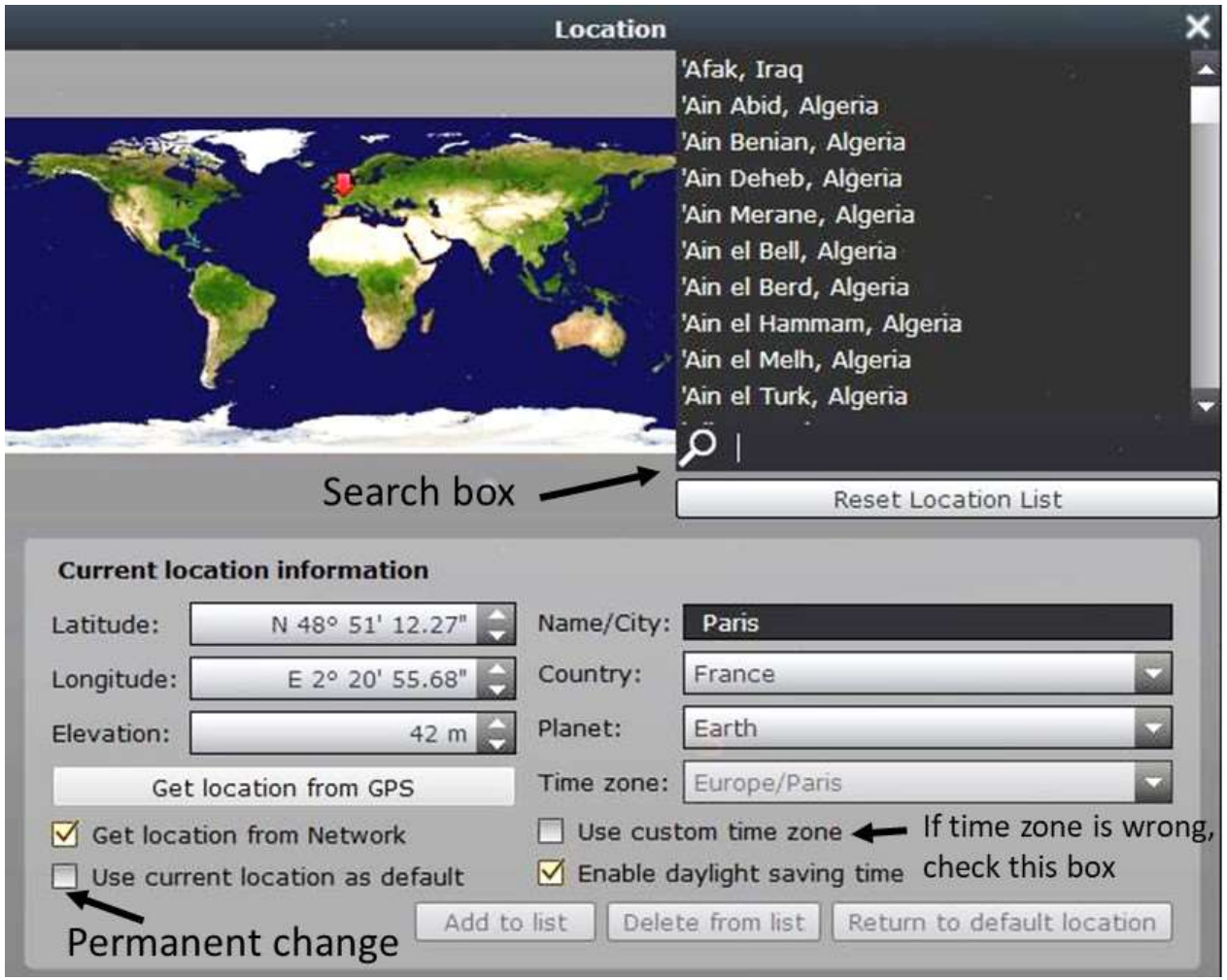
Decimal convert:
x decimal by 60

Close to N30° 15', W85°40'

2) Put in a very close city that IS on the list and adjust the time zone.

Enable DST if you don't live in Hawaii (and don't need it), Arizona (if you're contrary), and N. Indiana (close to Chicago). Port St. Joe is nearby example of one you may want to switch.

Note the permanent change button if you want these changes to stick.



DATE/TIME WINDOW (operation is obvious)

SKY AND VIEWING OPTIONS

First, get rid of the farm landscape and chose something with a level horizon.

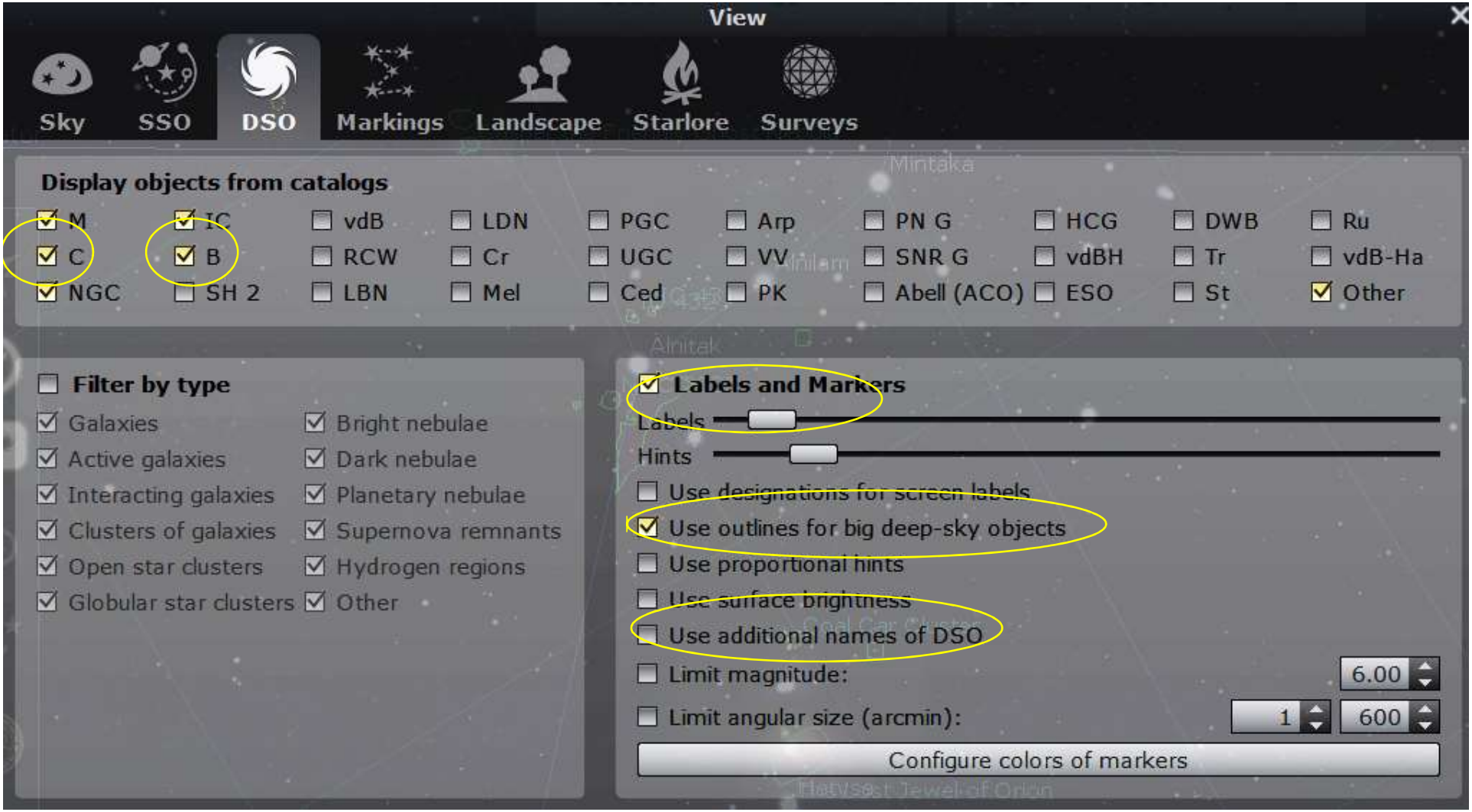
I like Ocean. It is more interesting than Zero Horizon

SKY AND VIEWING OPTIONS

1) Turn off Zodiacal Light
2) Increase Milky Way brightness
3) Turn light pollution down to 1
4) Turn limit magnitude to 7
5) Ratchet back lines and markers

SKY AND VIEWING OPTIONS

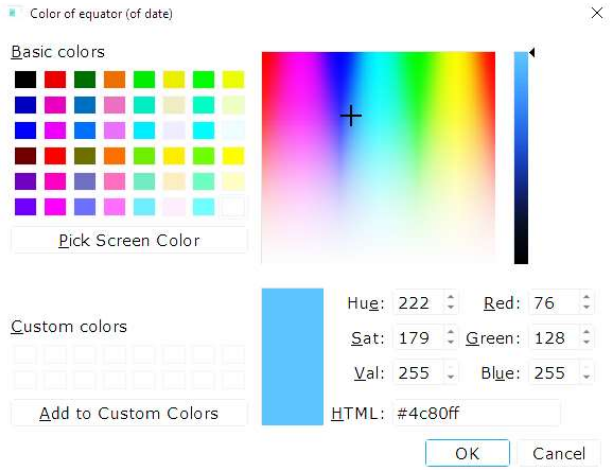
On Deep Sky Objects tab, turn on Barnard and Caldwell objects
Turn ON Outlines for Big Deep-Sky Objects
Turn OFF Additional names
Reduce labels and markers

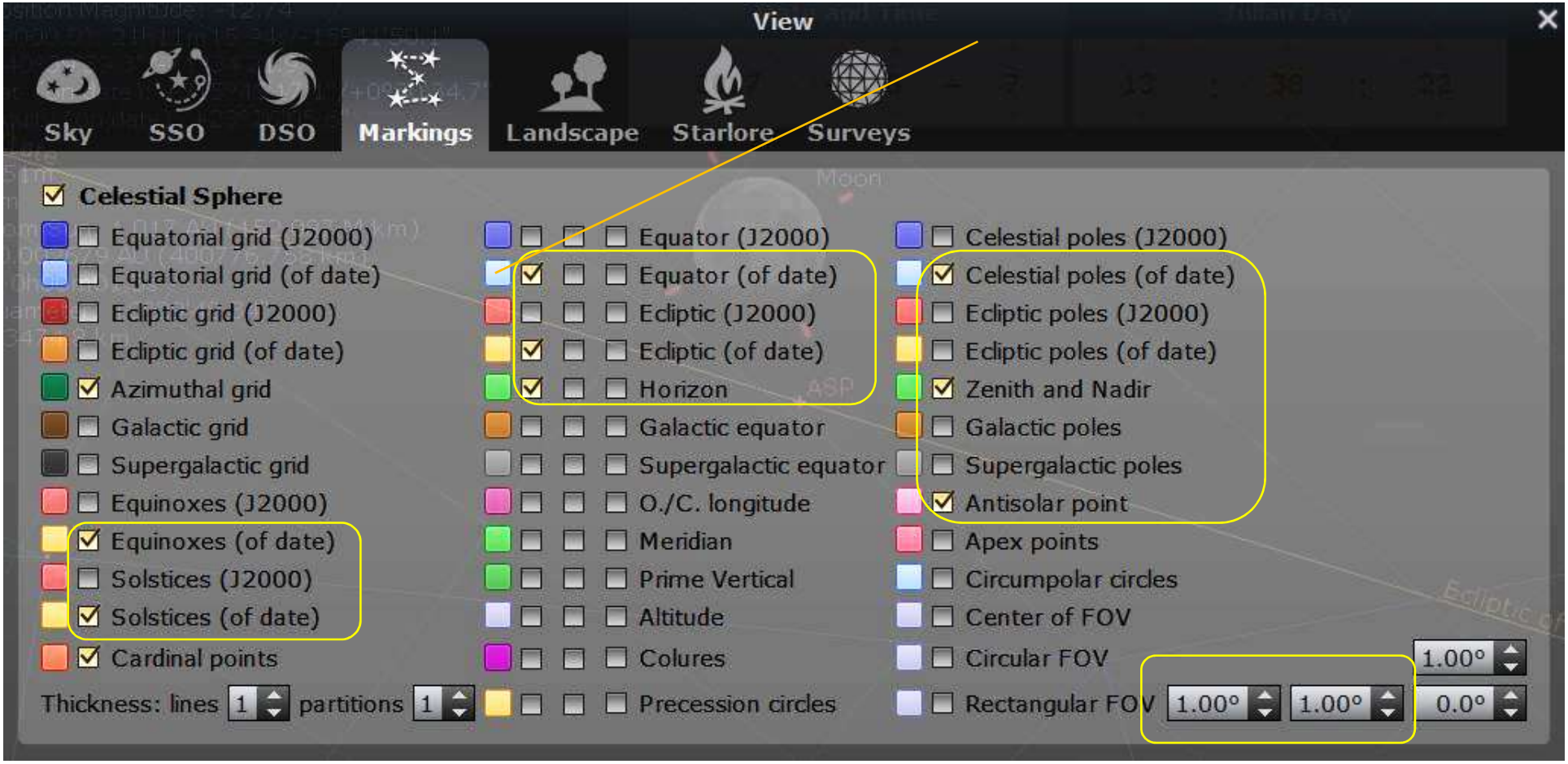


SKY AND VIEWING OPTIONS

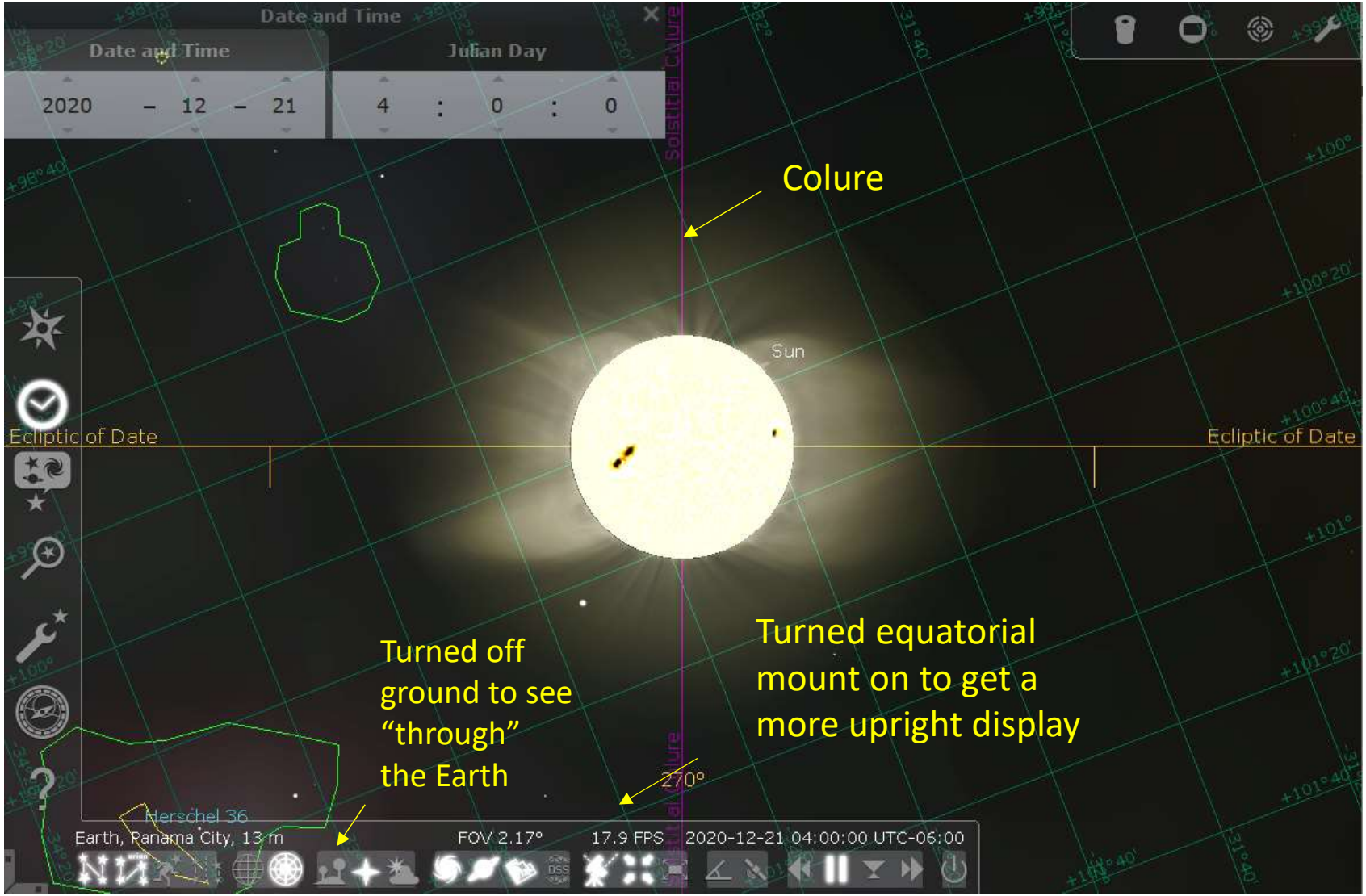
1) Want the equinoxes and solstices turned on
2) Same with equator and ecliptic of date
3) Horizon is for case where you turn landscape button off
4) Want the celestial pole, zenith and nadir, and antisolar point indicated

1) Rectangular area change to 1 by 1 degree





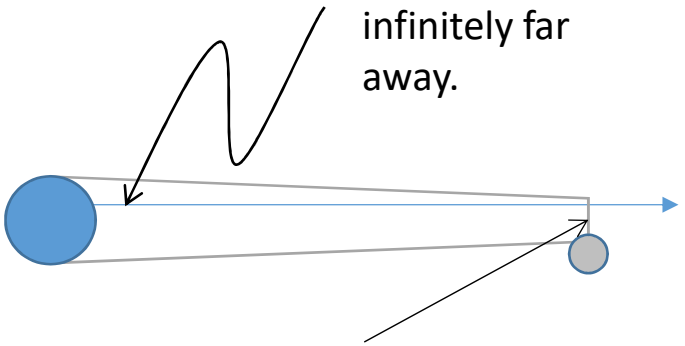
EXAMPLE: Turned on Colure line to predict time of winter solstice as 4:00 on Dec 21, 2020. Determined time by bisecting Sun on ecliptic of date. Have to make an eyeball estimate, but timeanddate.com says that the true time is 4:02 on that date. Pretty close!

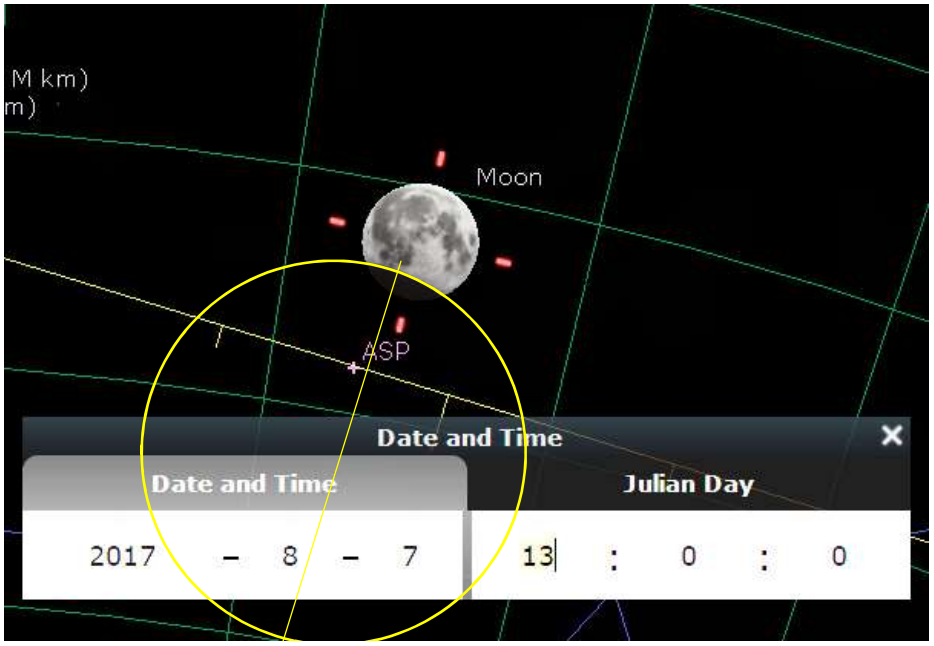


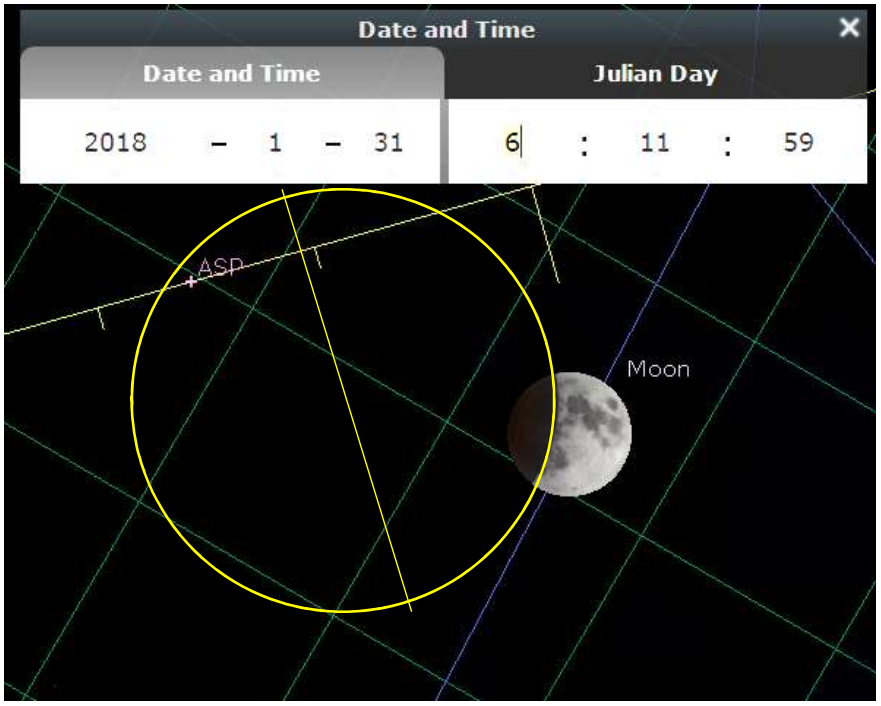
EXAMPLE: TWO LUNAR ECLIPSES. If we display the Anti-Solar Point (ASP), we must keep in mind that the ASP is a vector projected to infinity, whereas the shadow of the Moon is a circle at 1/4 million miles or so. There is a parallax effect.

Both of these yellow circles are estimates drawn on the graphic in Powerpoint by just looking at the arc of the shadow of the Earth on the Moon. Nevertheless, they still demonstrate the principle

Note that when the local time is near noon (or midnight) the ASP seems to balance along the ecliptic. When the local time is near sunset or sunrise it moves toward one edge.

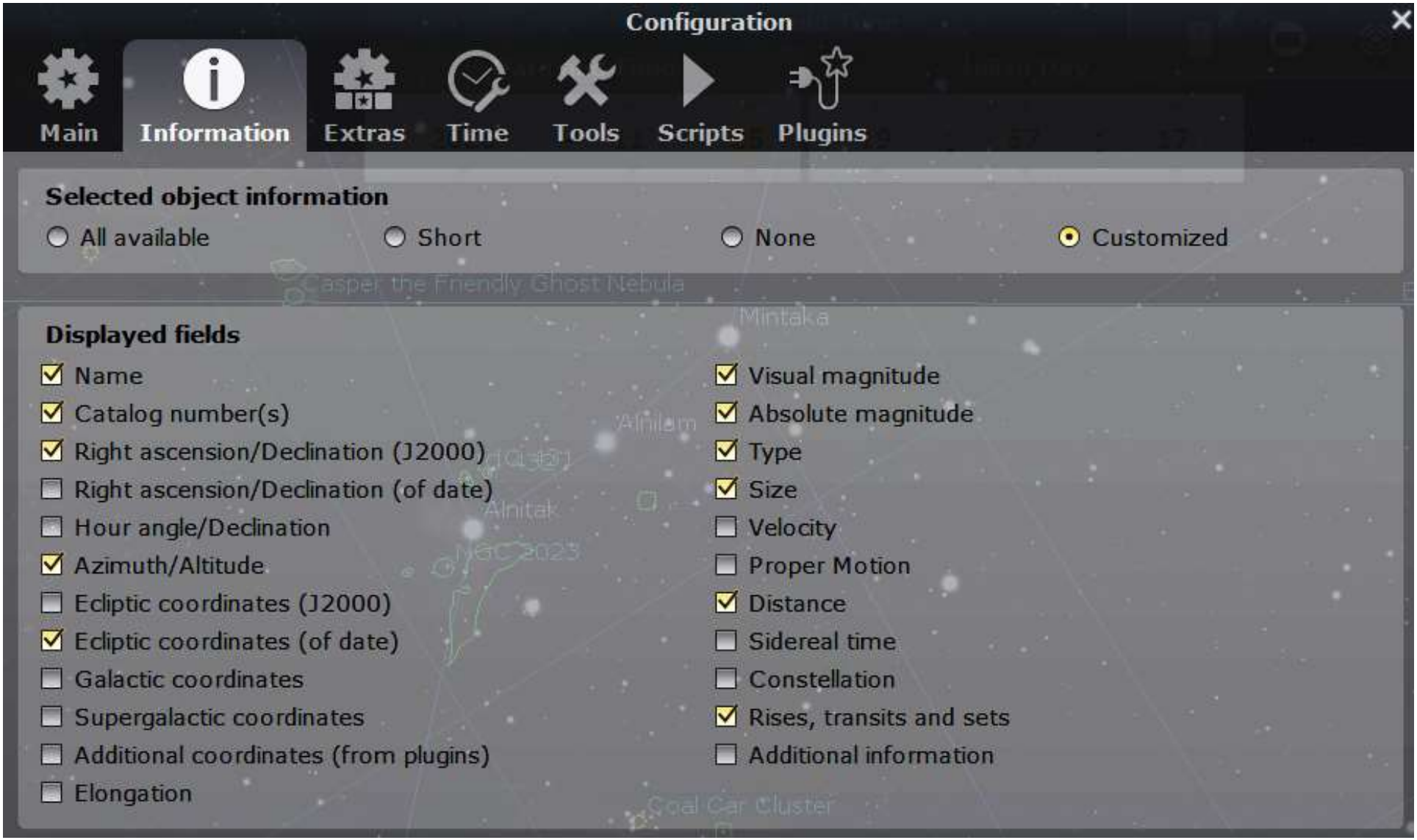






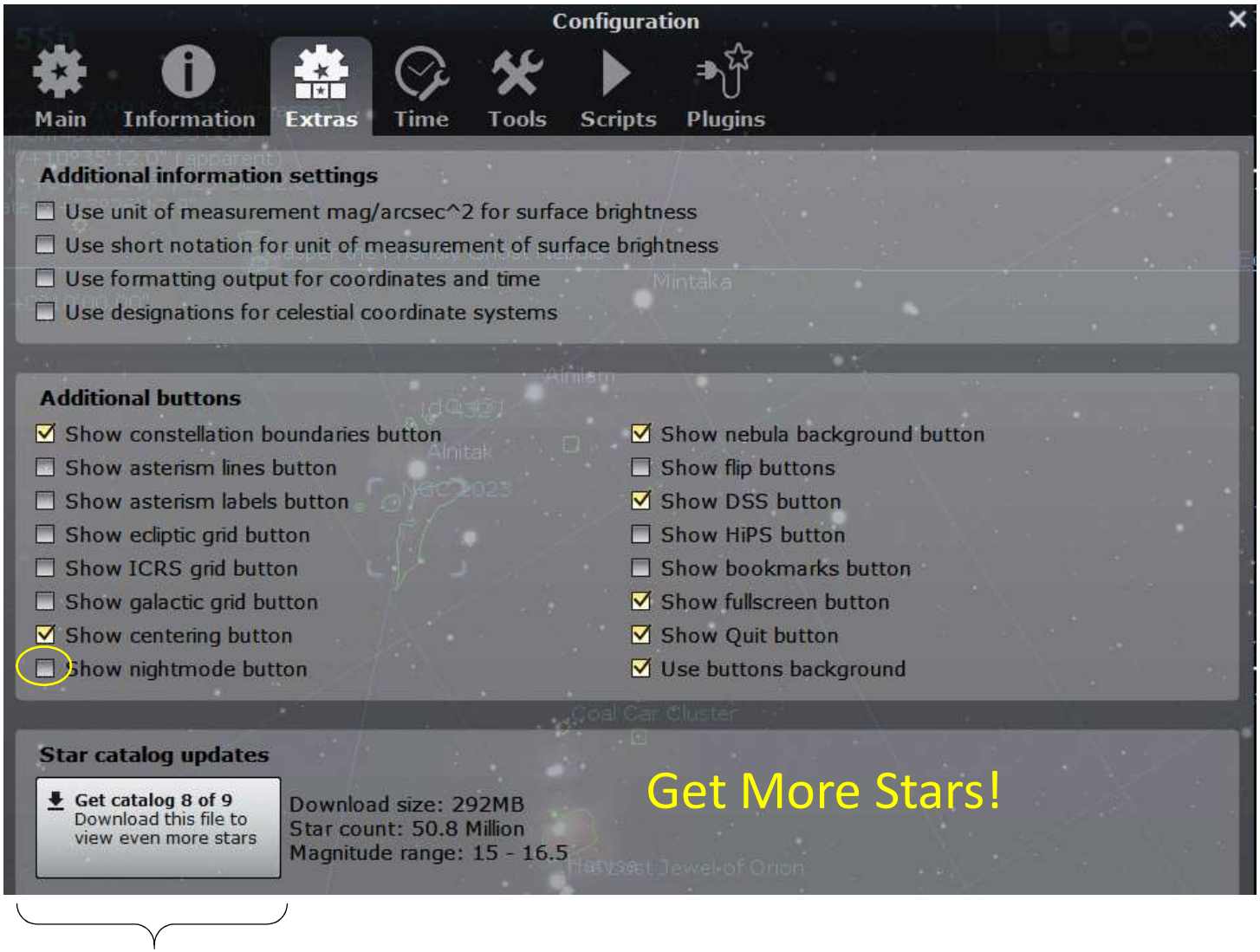
CONFIGURATION WINDOW

Information tab: This is the text that appears at the left when you select an object



CONFIGURATION WINDOW Extras tab

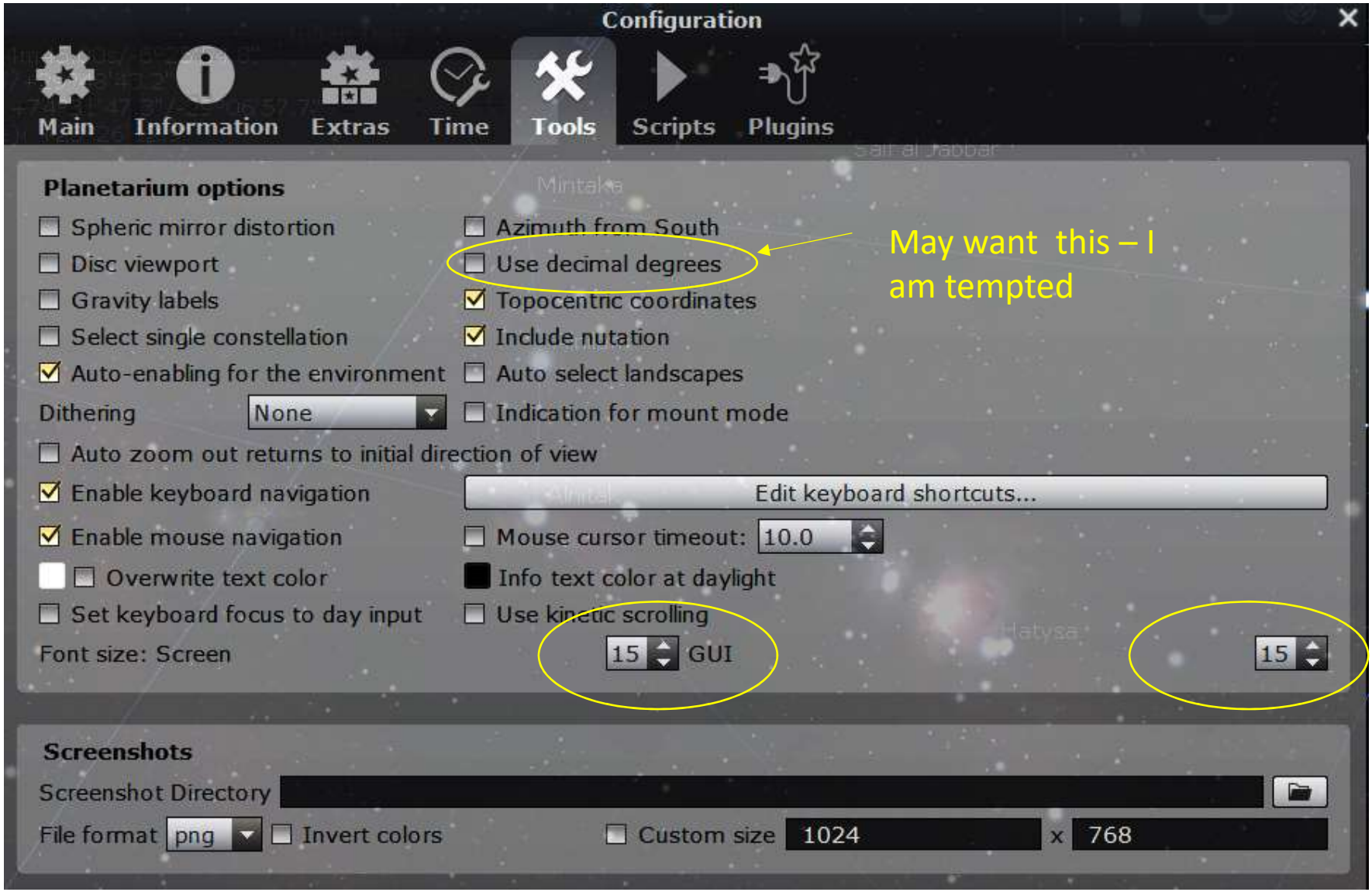
These are useful buttons on the bottom row.



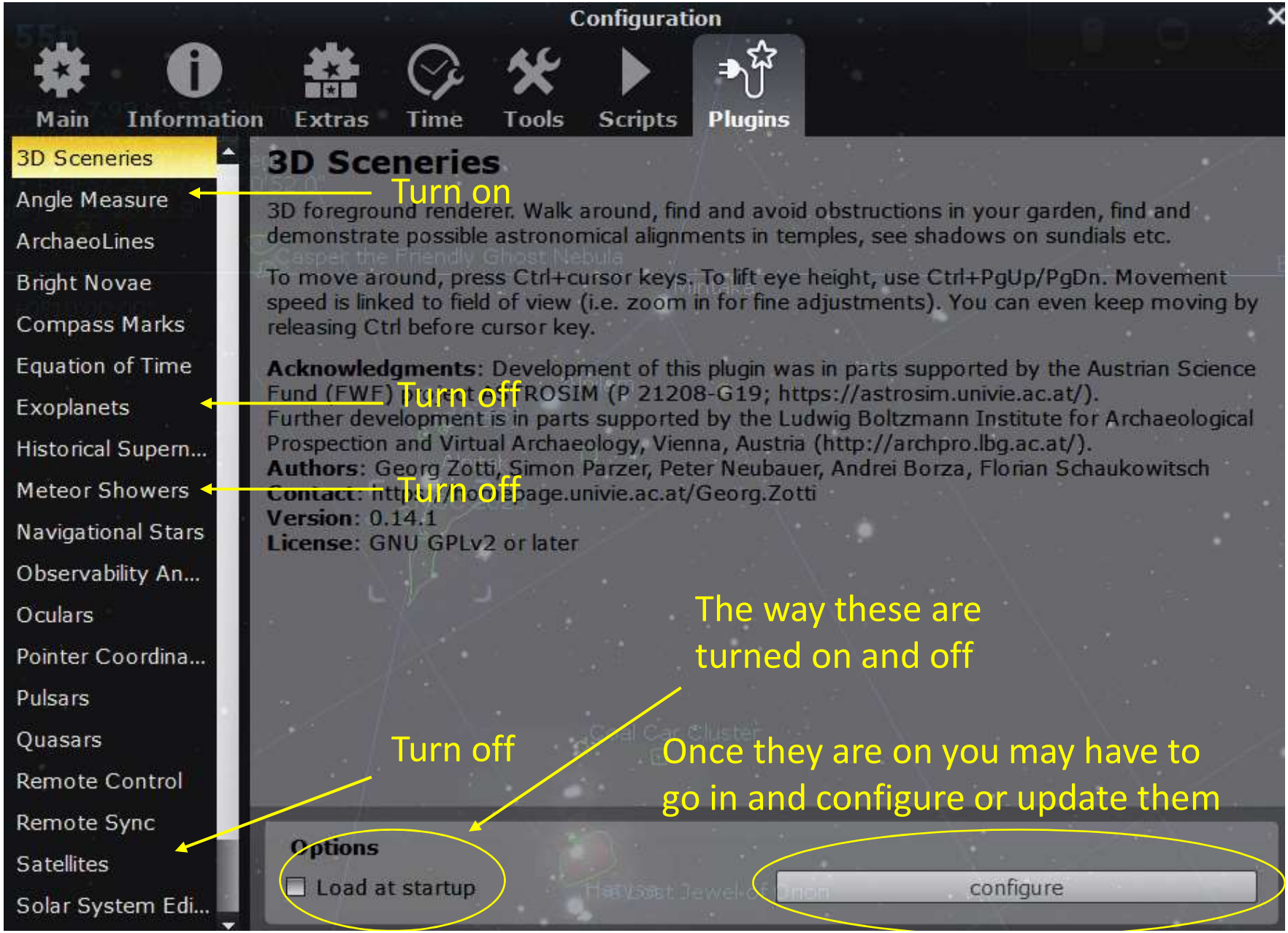
When you are attached to the network, download these at least until you are waiting for Catalog 8. This means you have stars to mag 15 (440 mm aperture).

CONFIGURATION WINDOW Tools tab

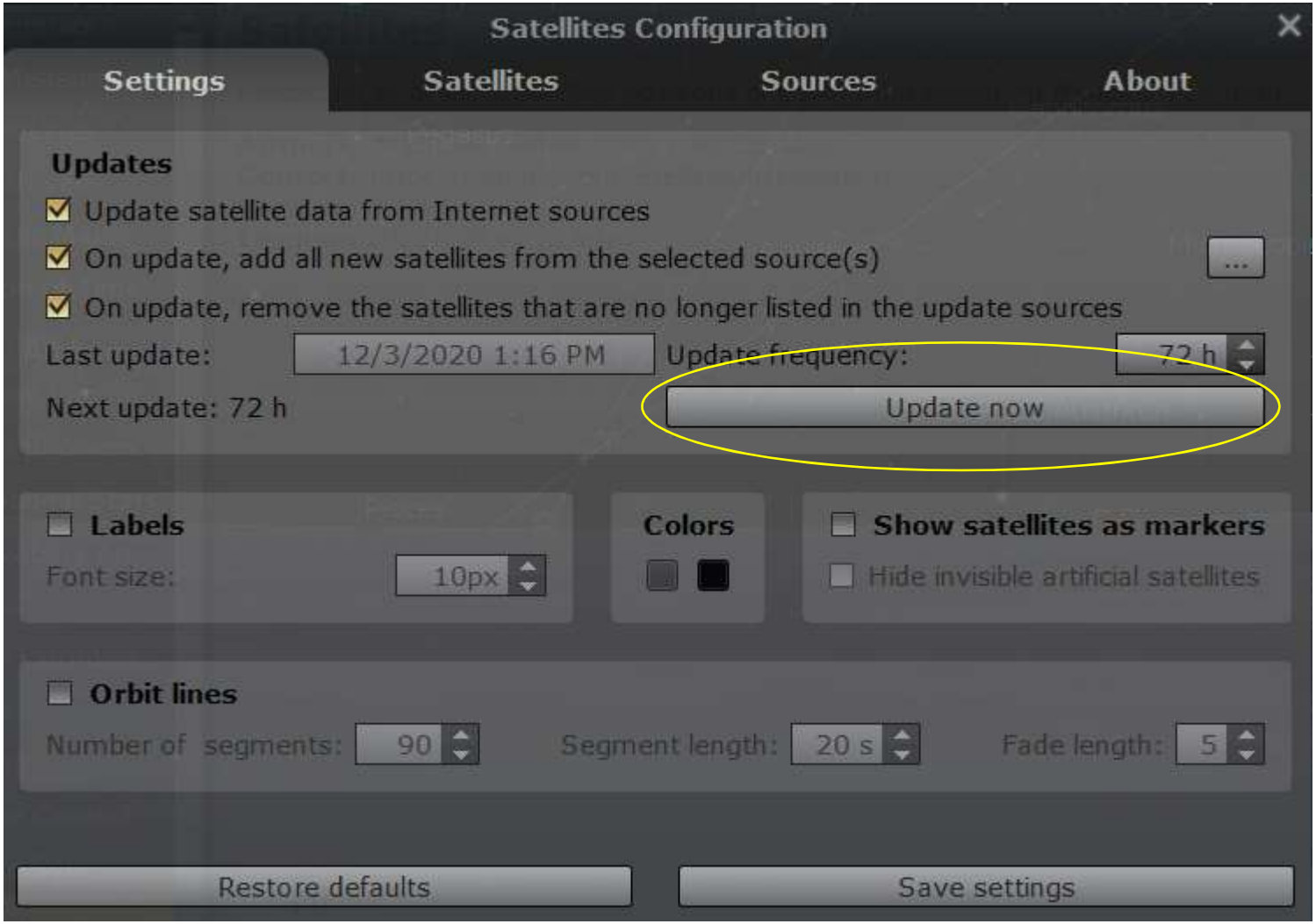
Change GUI and Info fonts to be bigger (here from 13 to 15)
Use decimal degrees if you want



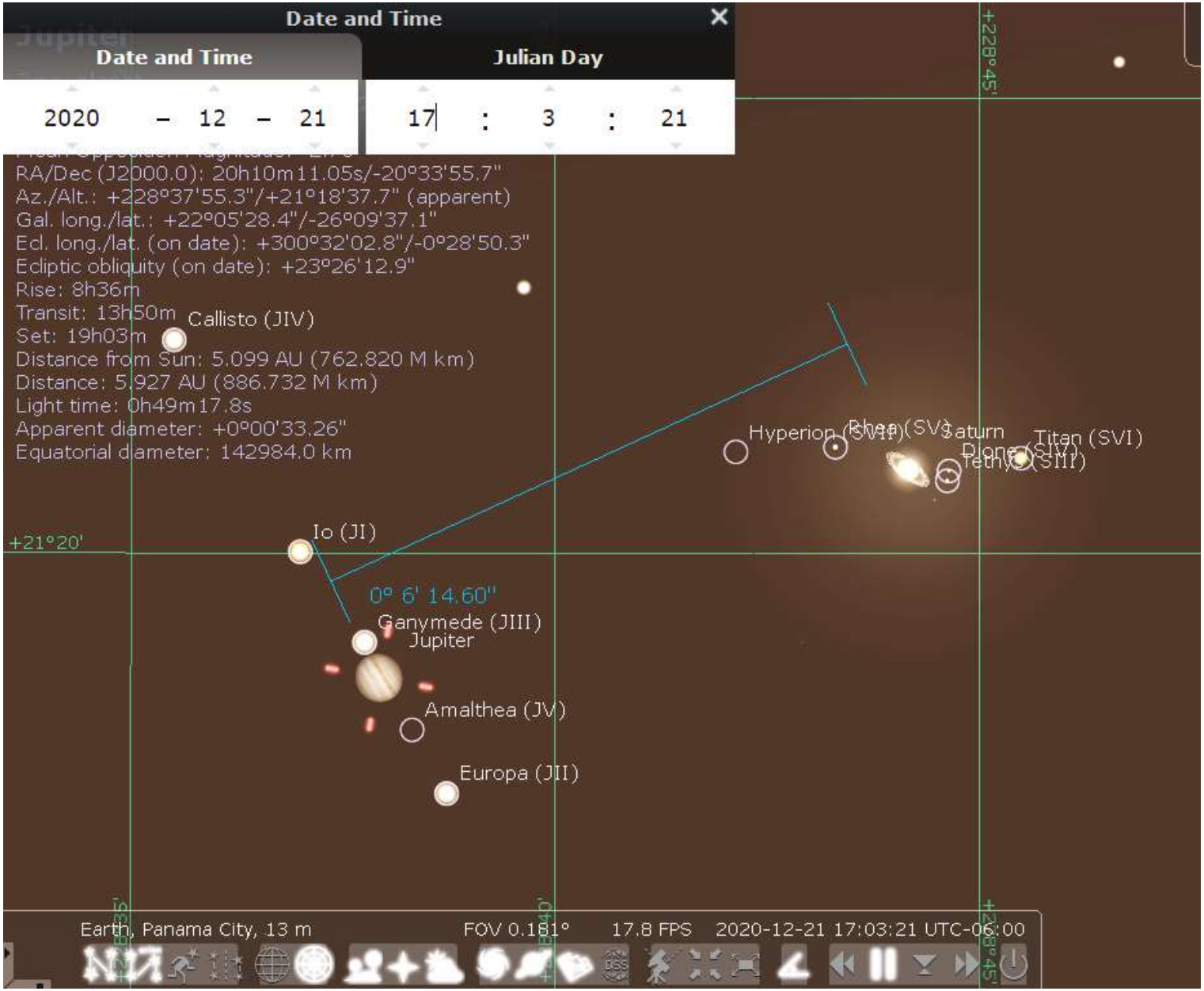
CONFIGURATION WINDOW Plug-Ins tab



Aside: If you do turn Satellites on, you must update at the time. Satellite orbits are off after only a few days.



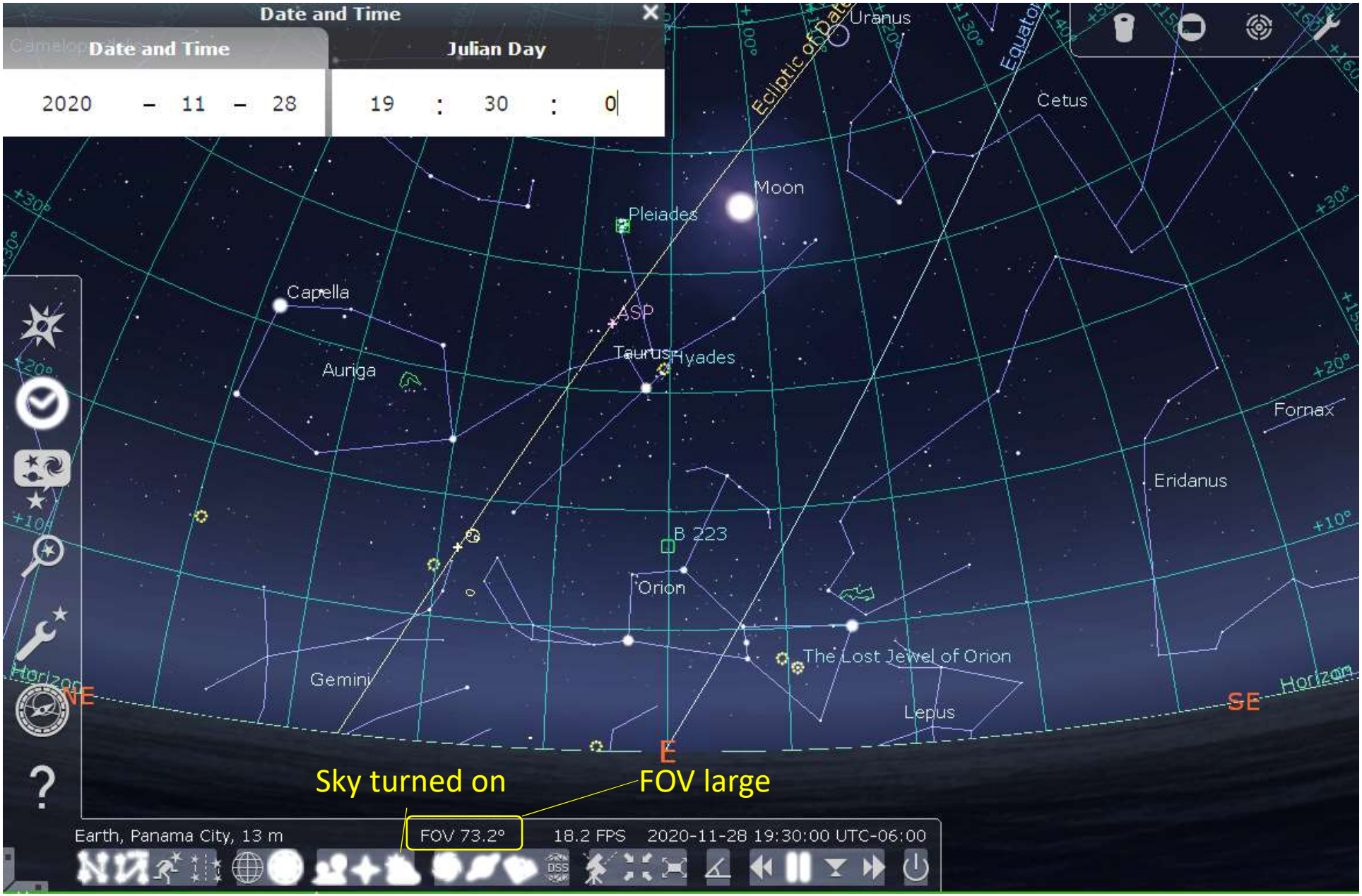
Example: Angle Plug-In (during dusk on Dec 21)



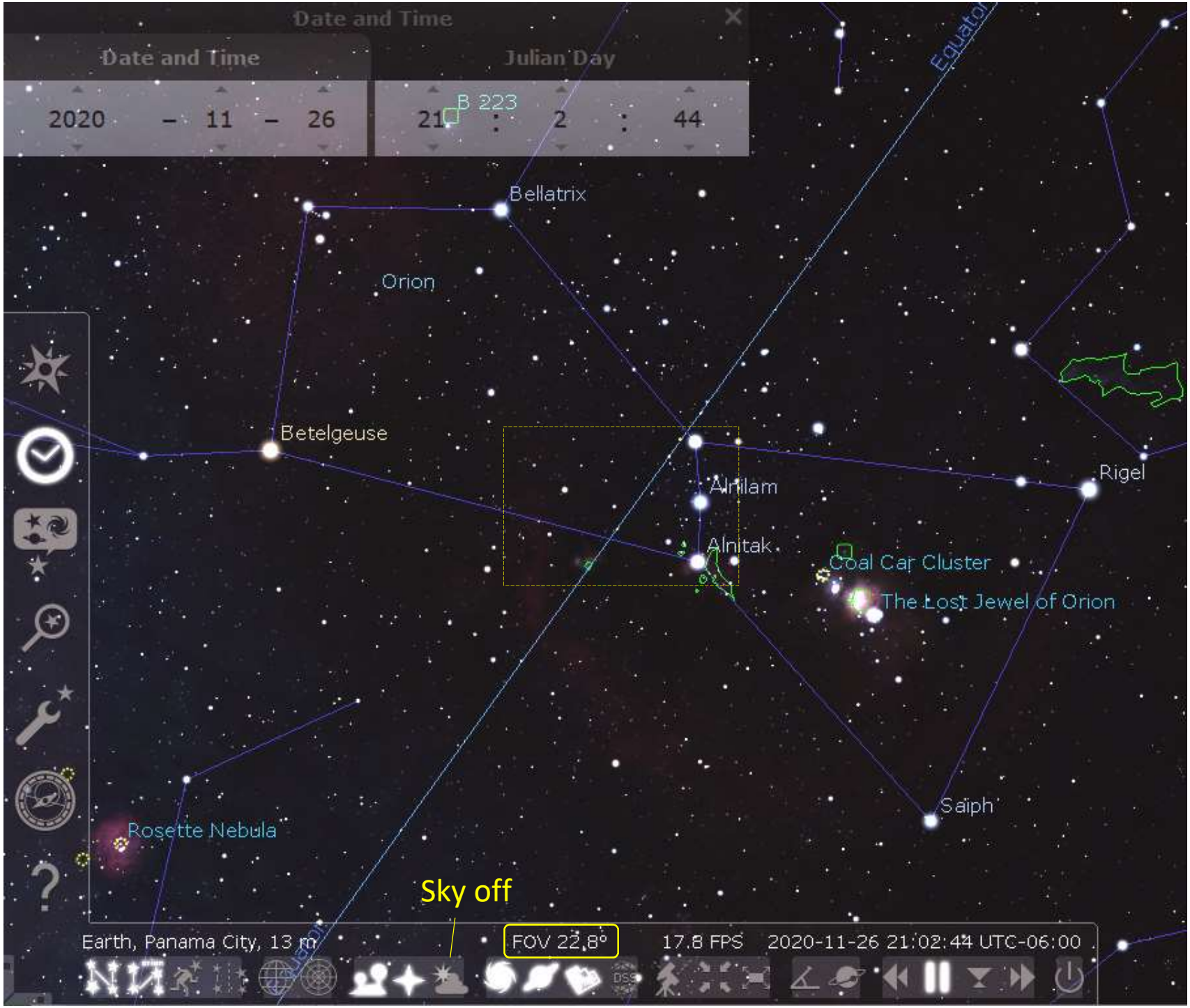
CONFIGURATION WINDOW Main tab

"Save view" saves just view direction and angle (I like East, FOV ~ 70 deg startup)
"Save settings" saves all the setting changes mentioned in this slideshow
"Restore defaults" returns everything to beginning is case you foul it up

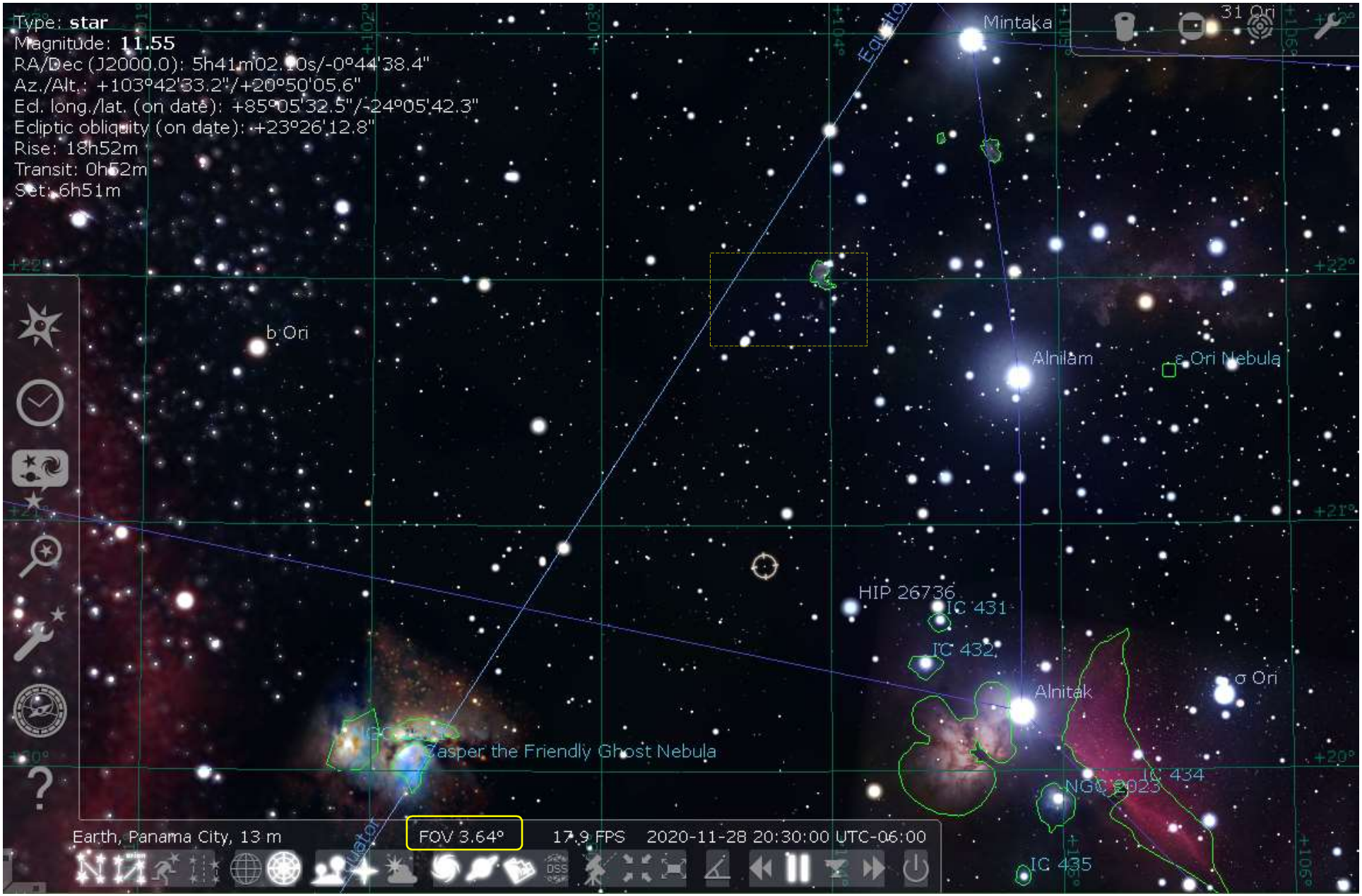
The Way It Looks



Moving closer



And closer


Type: star
Magnitude: 11.55
RA/Dec (J2000.0): 5h41m02.10s/-0°44'38.4"
Az./Alt.: +103°42'33.2"/+20°50'05.6"
Ecl. long./lat. (on date): +85°05'32.5"/-24°05'42.3"
Ecliptic obliquity (on date): +23°26'12.8"
Rise: 18h52m
Transit: 0h52m
Set: 6h51m
Mintaka
31 Ori
b Ori
Alnilam
ε Ori Nebula
HIP 26736
IC 431
IC 432
Alnitak
σ Ori
Casper the Friendly Ghost Nebula
IC 434
NGC 2023
IC 435
Earth, Panama City, 13 m
FOV 3.64°
17.9 FPS
2020-11-28 20:30:00 UTC-06:00

Narrow FOV


Type: star
Magnitude: 14.70
RA/Dec (J2000.0): 5h37m05.95s/-0°08'04.2"
Az./Alt.: +103°43'49.1"/+21°59'31.7"
Ecl. long./lat. (on date): +84°02'40.1"/-23°26'49.5"
Ecliptic obliquity (on date): +23°26'12.8"
Rise: 18h47m
Transit: 0h48m
Set: 6h48m
HIP 26431
HIP 26494
+21°55'
+21°50'
+21°45'
+22°
+103°40'
+103°45'
+103°50'
+104°
Earth, Panama City, 13 m
FOV 0.299°
18.8 FPS
2020-11-28 20:30:00 UTC-06:00