Track 1

The Night Sky

With Micah Acinapura

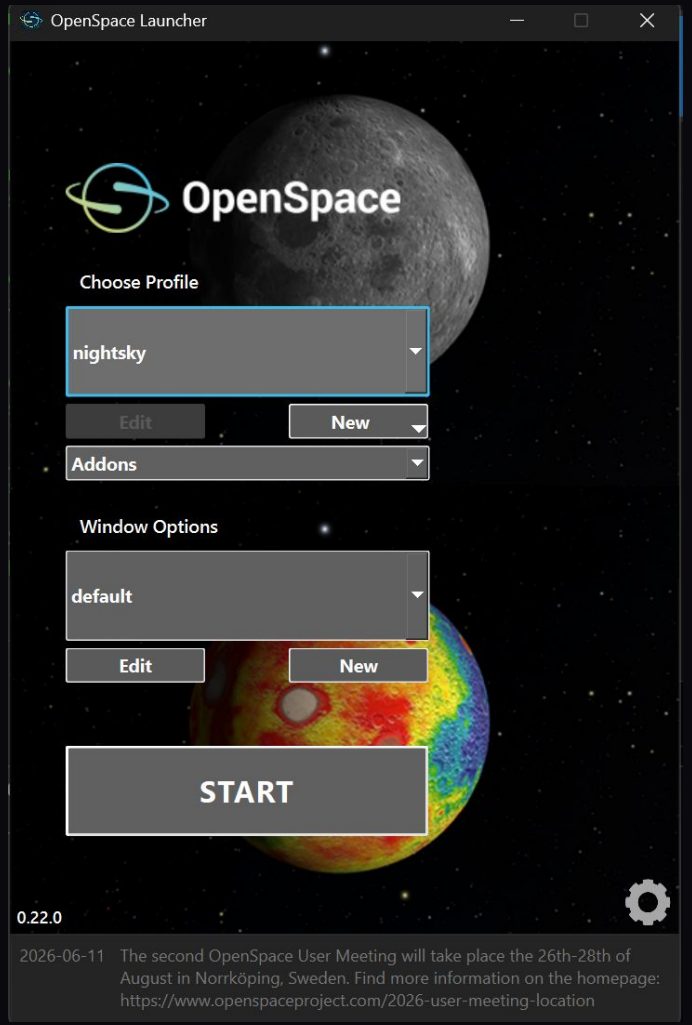
Topics

1. Night sky profile
2. Night sky panel - overview
3. Night sky panel - markings tab
4. Night sky planets
5. “Looking Up” - view/tilt options/settings
6. Time / Motions
7. Constellations

nightsky profile

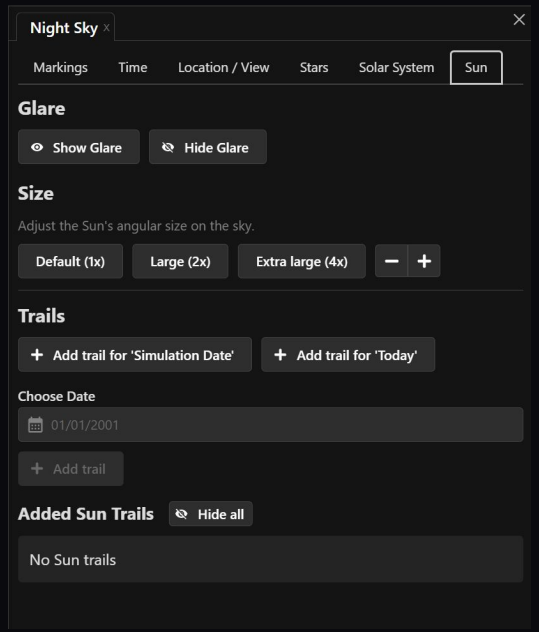
- Same content as default profile, with some customizations:
  - Location/Time.
  - Earth night layer.
  - Actions for star settings
  - Nightsky panel enabled

- Duplicate the nightsky profile and make your own, setting the location/view

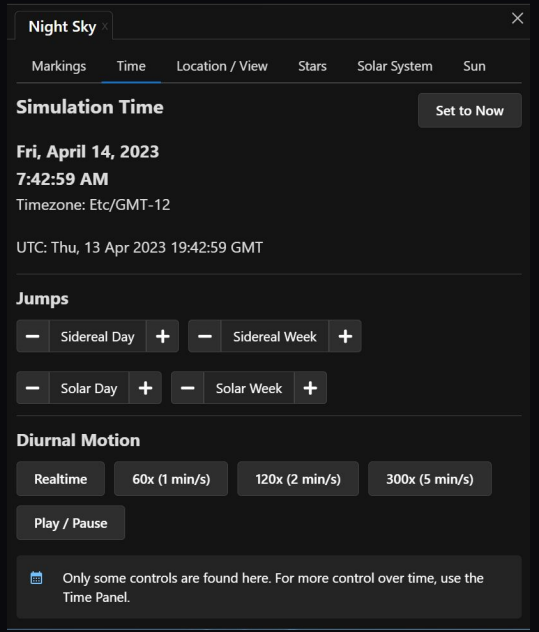


Night Sky panel - overview

- Available in any profile, enabled in nightsky
- Has tabs for different topic areas
- Location items may be moved out later to geolocation panel
- Open to suggestions/feature requests



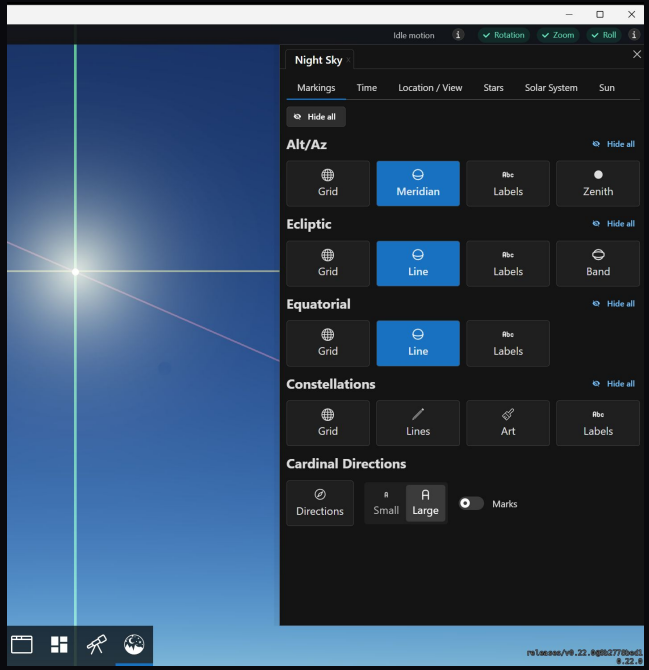
Night Sky panel - sun tab



Night Sky panel - time tab

Night Sky panel - markings tab

- Groups together similar items
- Toggles on/off
- Hide all for buttons for speed
- Cardinal Directions working a bit different
- Designed after Stellarium markings tab



Night Sky panel - Markings tab showing solar noon on the spring equinox

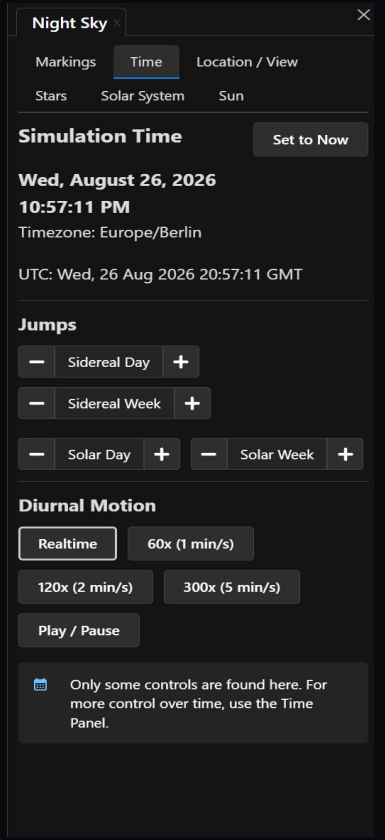


Night Sky panel - Solar System

- By default, planets are not rendered in night sky for optimization.
- Each planet has a night sky version aka “Night Sky Jupiter” to show it in the sky.
- Moon enlargement option

Night Sky - motions/time

- Diurnal motion is standard OpenSpace clock
- For annular motion, anchor on earth, aim at sun, turn earth off.
- Sidereal / Solar actions for day/week
- Helper functions, not meant to replace time panel



Night Sky - constellations

- Artwork, Lines and Boundaries available
- Each drawing an individual OpenSpace Renderable
- All lines together are one OpenSpace renderable.
- All boundaries together are one OpenSpace renderable
- Lines and Boundaries have a ‘selection’ property for only showing one or some.
- Labels exist on line renderable
- Drawings may be colored in GUI, changing line color requires updating speck/asset files.

