

Precision Aerospace Solutions



STAR SIMULATOR

Arcsec's **Star Simulator** allows to carry out hardware in the loop tests with arcsec's star trackers. The simulator allows to generate a variety of star images with realistic noise sources and rotational rates. A custom lens ensures that the image is displayed to the star tracker as it would be in space.

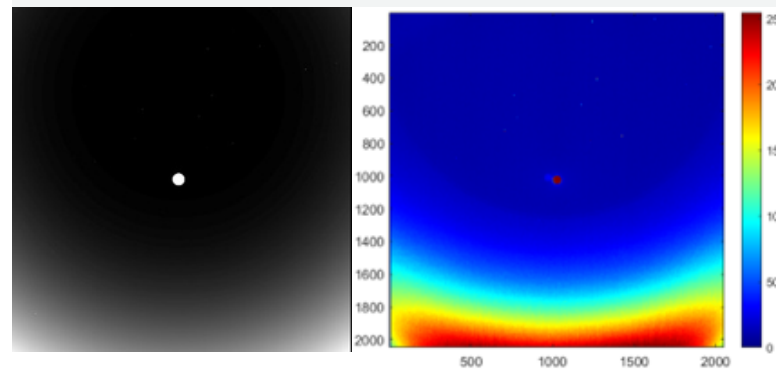


SIMULATOR FEATURES

Performance

- Display images with different FOVs, focal lengths and sizes
- Inertial pointing and slew maneuvers with different rotational rates can be set
- Displays mission scenarios based on position, time and pointing mode
- Representative noise sources:
 - Stray light
 - Radiation artefacts
 - False stars
- Auto calibration mode
- Black pixels truly emit no light
- Custom designed lens and high resolution screen result in high quality image display
- Closed casing included

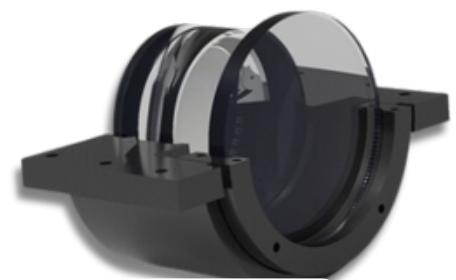
- ✓ Easy to use interface
- ✓ Representative images
- ✓ Compact



Orbit scenario when pointing the boresight axis of the star tracker towards the moon with stray light originating from celestial bodies as (left) displayed on the tablet and (right) observed by arcsec's Sagitta star tracker

Interface

- Interface via Python
- USB-C connection
- Parameters can be set in graphical user interface or via a log file



Custom lens