



Arcsecond.local

a multi-user, multi-telescope professional software automating observations

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Coordinate observations across multiple sites, telescopes, setups and users.

By design, Arcsecond is multi-user, multi-telescope, allowing n remote watchers for one observer, for a given setup. It also solves the data management and its distribution burden.

- Require ASCOM / Alpaca compatible equipments.
- Packaged with Docker.
- Require a standard PC with a dedicated storage.
- Write standard FITS file headers, and include XISF support.
- Provide a browser-native FITS/XISF viewer.
- Integrate a permanent full monitoring of all resources.



A software infrastructure that can be extended

The platform expose standard REST APIs. It also integrates plugins, external services and an open-source CLI companion.

References & contact

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Docs docs.arcsecond.io Code github.com/arcsecond-io

The screenshot displays the Arcsecond.io web interface. At the top, there's a navigation bar with tabs for 'Equipments Registry', 'Observer Console', 'Night Scheduler', 'Observing Queue', and 'Calibration Manager'. The main area is divided into several sections:

- Observer Console:** A central panel showing a night scheduler with a timeline of observations. It includes a 'Time Locked' indicator and a 'Local' dropdown.
- Target Information:** A section for the current target, 'M54 (22.1st)', with its coordinates (R.A. 3h 46m 38.000s, Dec. +24° 18' 41.00") and current pointing data (Azimuth 75.23, Altitude -51.22).
- Telescope and Camera Settings:** A control panel for the telescope (pointed), camera (CCD 10.0 °C, Cooler OFF, Binning 1 x 1), and filter wheel (Red 0).
- Image Viewer:** A large central window showing a live image of a star field (M54) with a bright central star. The image is displayed in a 'Z-scale' view.
- Statistics and Monitoring:** A sidebar on the right provides real-time statistics (Range, Background, Noise, Saturation, Stars, HFR, FWHM) and a 3D pixel plot.

The interface is designed for manual observations, with a focus on real-time monitoring and control of the telescope and camera systems.