

Cen X-3

Observation plan

We propose an entire coverage of the 2.08 day binary orbit of Cen X-3 to map the wind velocity fields around the O star by tracing the photo-ionized line profiles with Resolve.

If the observing efficiency is 50%, this is equivalent to 90 ks exposure. We request a continuous observation. One pointing with no time constraint. Open filter for Resolve. Full window for Xtend.

Immediate objectives

- [1] Detect and measure the line profiles of major photo-ionized lines over an entire orbital period, and interpret the result based on X-ray Doppler tomography.
- [2] Fe Ka fluorescence during the eclipse.