NGC 4636

Observation plan

One standard mode 100 ks pointing centered on the nucleus of NGC 4636.

<u>Immediate objectives</u>

- [1] Measure the velocity widths of emission lines to reveal the hot gas kinematics and details of AGN feedback.
- [2] Measure the optical depth through resonance scattering of the ions with the strongest transitions. This also contributes to constraints on the turbulent velocities.
- [3] Probe the star formation and chemical evolution by measuring the abundances of C, N, O, Ne, Mg, Al, Si, Ar, Fe, and Ni.
- [4] Contribute to the calibration of atomic physics in sub-keV plasmas.
- [5] Constrain the thermal structure of the interstellar plasma