

MCG—6-30-15

Observation plan

Our PV proposal for MCG6 was approved for a single 100-ks exposure at priority A. The observation is not a ToO, so it requires no trigger. We require no filter for Resolve and select 1/8 window mode for Xtend to avoid pile-up in case the source is caught in an historically high flux state.

Immediate objectives

- [1] Determine whether relativistic reflection is seen in MCG6 using its time-averaged spectrum, time-resolved spectrum, RMS variability analysis and time lag analysis.
- [2] If relativistic reflection from the inner disk is seen, determine whether the black hole spin derived by XRISM is consistent with previous measurements.
- [3] Characterize the holistic properties of the warm absorber, including saturation and partial-covering effects, to determine the total energetic output of the outflowing wind; investigate the outflow energy and momentum transfer mechanism through the ISM by comparing the momentum rate of the X-ray warm absorber and that of the molecular outflow.
- [4] Measure any differences between the inner and outer disk geometries.