

Centaurus Cluster

Observation plan

We observe the central region of the cluster with a slightly offset pointing to discriminate dust depletion and SN Ia metal enrichment. We consider the contamination of the PSF scattering photons. The exposure time is 150 ks.

Immediate objectives

- [1] Investigate multi-temperature structure of the ICM and its impact on the metal abundance.
- [2] Measure detailed metal abundance of the ICM to study dust formation. The formation can be confirmed by comparing the abundance of metals that form the dusts with that of noble gas.
- [3] Measure detailed metal abundance of the ICM to study SN Ia explosion mechanism. We also investigate the contribution of the metals from core collapse supernovae.
- [4] Measure turbulent and bulk velocities around the AGN to study the efficiency of AGN feedback. The results are compared with those for other clusters.