

RCW 86

Observation plan

The observation plan consists of two pointings targeting the eastern region (observation 50 ks) and a northeastern region (100 ks). The open position of the filter wheel is chosen for Resolve and the normal window/clocking mode for Xtend.

Immediate objectives

- [1] Measure the electron/ion temperature ratios in a region with X-ray synchrotron emission (NE) and in a region without X-ray synchrotron (E)
- [2] Use the ion temperatures to search for deviations from the standard Rankine-Hugoniot relations, expected for shock acceleration
- [3] Measure in detail the peculiar Fe-K line at 6.4 keV, probably from shocked Fe-rich ejecta (i.e. reverse shock related): measure charge state, Doppler broadening search for related low-ionisation lines, and searching for other K-lines from ejecta (Si, S, Ar, Ca), as evidence to support that the Fe-K emission is due to an ejecta component, and determine abundances and supernova type (thought to be Type Ia).