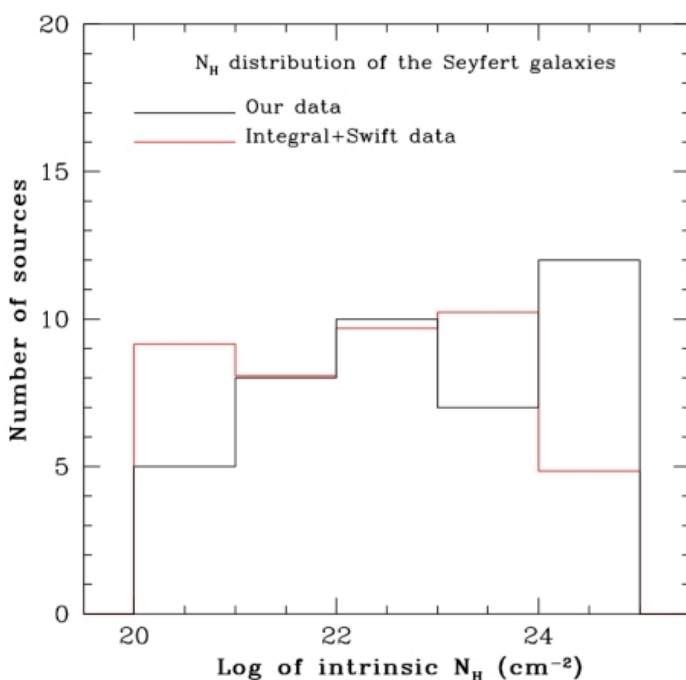


XMM-Newton observations of the X-ray absorption in the local Universe

- We study the largest spectroscopic sample of all optically select bona-fide Seyfert galaxies found in the Ho et al. (1997) catalogue.
- We try to settle the issue for the N_{H} distribution in the local Universe
- We analyze *XMM-Newton* observations.
- We adopt three criteria to unveil the presence of Compton thick sources:
 - ✓ Flat photon index ($\Gamma < 1$)
 - ✓ Large Fe K_{α} line EW (> 1 keV)
 - ✓ $F_X/F_{\text{OIII}} < -1$

70% of the sources are absorbed by $N_{\text{H}} > 10^{22}$ cm $^{-2}$
30% of the sources are possibly Compton thick AGN



Recent ultra hard X-ray surveys reveal less Compton thick AGN

But...

Even these surveys can miss number of Compton thick sources