

Diffuse X-Ray-Emitting Gas in Major Mergers

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SAMPLE: 40 nearby major mergers with archival Chandra data.

METHOD:

- After removing point sources, measured the diffuse X-ray flux.
- Corrected for Galactic dust and dust internal to the target.

RESULTS:

- No trend of diffuse $L_X(\text{corrected})/\text{SFR}$ with merger stage, SFR, or UV/IR colors
- >EXCEPT some very late-stage merger remnants with older stellar populations have higher $L_X(\text{corrected})/\text{SFR}$
- An observed decrease of the uncorrected diffuse L_X/SFR with increasing SFR may be due to dust absorption

Green open triangles: pre-mergers
Cyan open diamonds: mid-mergers
Blue open squares: late-stage merger remnants
Red circles: Seyfert galaxies
Black crosses: normal spirals

