We present the results of two Beppo-SAX observations of the poor clusters SC 1327–312 and SC 1329–313: these objects are located in a huge structure, formed by three ACO clusters, which is probably the remnant of one of the largest and best studied major mergings known. Given the fact that these poor clusters are in between two interacting ACO clusters, the aim of this work is to study the physics of the intracluster medium and to look for the possible presence of shocks.

Introduction

Cluster mergings are among the most energetic phenomena in the Universe, leading to a release of $\sim 10^{50-60}$ erg in a time scale of the order of few Gyrs (Sarazin sarazin00), but it is not yet clear in detail in which way this kinetic energy is dissipated and which is its influence on the galaxy population. There are some observational features that have been associated with the cluster merging phenomenon, like shocks in the hot gas, radio halos, relics and wide angle tail radiosources, and the presence of starburst activity in galaxies, although the precise theoretical description is not yet completely assessed.

Figure 1

Upper panel: optical galaxy isodensity contours of the A3558 cluster complex. The data have been smoothed with...
SC 1327 -312
SAX MECS Exposure: 85115 s