

# A systematic cross-search for radio/infrared counterparts of XMM-Newton sources

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**Abstract** We present a catalog of cross-correlated radio, infrared and X-ray sources using a very restrictive selection criteria with an IDL-based code developed by us. The significance of the observed coincidences was evaluated through Monte Carlo simulations of synthetic sources following a well-tested protocol. We found 3320 coincident radio/X-ray sources with a high statistical significance characterized by the sum of error-weighted coordinate differences. For 997 of them, 2MASS counterparts were found. The percentage of chance coincidences is less than 1%. X-ray hardness ratios of well-known populations of objects were used to provide a

crude representation of their X-ray spectrum and to make a preliminary diagnosis of the possible nature of unidentified X-ray sources. The results support the fact that the X-ray sky is largely dominated by Active Galactic Nuclei at high galactic latitudes ( $|b| \geq 10^\circ$ ). At low galactic latitudes ( $|b| \leq 10^\circ$ ) most of unidentified X-ray sources ( $\sim 94\%$ ) lie at  $|b| \leq 2^\circ$ . This result suggests that most of the unidentified sources found toward the Milky Way plane are galactic objects. Well-known and unidentified sources were classified in different tables with their corresponding radio/infrared and X-ray properties. These tables are intended as a useful tool for researchers interested in particular identifications.

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## 1 Introduction

Understanding the nature of the galactic and extragalactic X-ray sources and the physical phenomena that produce the emission is one of the main goals of modern astrophysics. Astrophysical systems emitting at high energies are usually complex, comprising objects or media capable of emitting over different ranges of the electromagnetic spectrum (e.g. Fabbiano 2006). Multi-wavelength analyses are needed to disentangle and characterize the different components of such astrophysical systems.

The last generation of high-sensitivity X-ray observatories, like *Chandra* and *XMM-Newton*, have led to the detection of large samples of X-ray sources (Watson et al. 2009). These observatories provide a new and more detailed view of the X-ray Universe having an impact on our understanding of different populations of high-energy objects. In past years several stud-

ies of X-ray sources, at high and middle galactic latitude, have been carried out to investigate various statistical properties of X-ray sources (Severgnini et al. 2003; Mateos et al. 2005; Carrera et al. 2007; Caccianiga et al. 2007; Mateos et al. 2008; Della Ceca et al. 2004, 2008; Ebrero et al. 2009). Type 1 AGNs (Seyferts) seem to be the dominating population, but type 2 AGNs, absorption-line galaxies, clusters of galaxies, and stars also contribute to the total number of detected sources (Barcons et al. 2002, 2007; Barcons & Negueruela 2003; Micela et al. 2007; López-Santiago et al. 2007; Feruglio et al. 2008; Novara et al. 2009). The size of these dataset (over  $10^5$  sources) prevents detailed multiwavelength studies of any statistically meaningful subsample of them. The only way to expand the knowledge of their properties to other regions of the electromagnetic spectrum is to cross-correlate these samples with surveys at other wavelengths. Cross-correlation is a powerful method in data analysis to compare the similarity and to quantitatively measure the relationship between two data groups. A large volume of papers describing several methods exists (e.g. Peebles 1974; Seldner & Peebles 1977; Furenlid & Furenlid 1990; Boyle et al. 1995), and many important applications have been developed since the first work by (Woodward 1995).

The cross-correlation of X-ray surveys with others at different wavelengths, and the analysis of their properties along the whole electromagnetic spectrum is important in several ways. First, it would provide clues on the nature of individual sources and their emission. Second, it would allow to acquire a deeper and more accurate insight into the statistical properties of different X-ray source populations, particularly for rare objects. It would also provide the basis for statistical modeling of such populations, which might give insight into the origin and evolution of systems emitting at high energies (e.g., Fabbiano 2006). Finally, it might reveal the existence of new classes of objects. Unidentified sources are particularly interesting for this last point.

The XMM-Newton Serendipitous Source Catalogue (2XMMi; Watson et al. 2009) is the largest survey of X-ray sources available at present, providing nearly homogeneous data for almost  $2.5 \times 10^5$  sources at arc-second angular resolution. Most of these sources have been identified with others at longer wavelengths, while many others remain unidentified. Watson et al. (2009) provide cross-identification of the 2XMMi sources with many other catalogs, including NVSS, 2MASS, USNO, etc. However, they do not investigate the statistical properties of the correlated samples. A recent study by Flesch (2010) provides a thorough investigation on the correlation of 2XMMi sources (and also of those from other XMM and Chandra catalogues) with different classes of optical objects. They also correlate the

optical sources with radio catalogs, although they avoid a direct cross-identification of X-ray with radio sources.

In this paper, we present a cross-identification of the 2XMMi sources with different radio catalogues covering the whole sky, the NRAO-VLA Sky Survey (NVSS; Condon et al. 1998), the Sydney University Molonglo Sky Survey (SUMSS; Mauch et al. 2007) and the Molonglo Galactic Plane Survey 2 (MGPS-2; Green et al. 1999). These catalogues were chosen because of their complementary sky coverage and their homogeneity (both internal and between catalogues). These properties allow us to perform a statistically significant analysis of X-ray source populations and their properties at radio wavelengths. We also perform a cross-correlation with the 2MASS Catalogue (Cutri et al. 2003). Using restrictive selection criteria, we assess the reliability of these cross-correlations and we use characteristics of well-known X-ray populations to make preliminary diagnosis of the nature of unidentified X-ray sources with radio and infrared counterparts. The structure of the paper is as follows: in Sect. 2 we describe the cross-correlation analysis and strategy to compute the positional correlation of sources. The main results and discussion are presented in Sect. 3. Finally, we summarize the main conclusions in Sect. 4.

## 2 Cross-correlation analysis

### 2.1 The catalogues

To perform a positional cross-identification between radio and X-ray sources we have used the NRAO VLA Sky Survey (NVSS<sup>1</sup>) catalog (Condon et al. 1998), the Sydney University Molonglo Sky Survey (SUMSS<sup>2</sup>; Mauch et al. 2007), and the Molonglo Galactic Plane Survey (MGPS2<sup>3</sup>; Green et al. 1999) with the XMM-Newton Serendipitous Source Catalog (Second Version: 2XMM<sup>4</sup>, 2007). The three radio surveys cover the whole sky.

The NVSS catalog (at 1420 MHz) contains 1773484 sources. It covers the entire sky north of  $-40^\circ$  declination. The rms positional uncertainties in RA and DEC vary from  $1''$  for relatively strong ( $S \geq 15$  mJy) point sources, to  $7''$  for the faintest ( $S \leq 2.3$  mJy) detectable sources. The SUMSS catalog (at 843 MHz) consists of 210412 radio sources. It covers the southern

<sup>1</sup><http://www.cv.nrao.edu/nvss/>

<sup>2</sup><http://www.astrop.physics.usyd.edu.au/sumsscat/>

<sup>3</sup><http://www.astrop.physics.usyd.edu.au/MGPS/ORIGINALS/>

<sup>4</sup>[http://heasarc.gsfc.nasa.gov/FTP/xmm/data/catalogs/2XMMcat\\_v1.0.fits.gz](http://heasarc.gsfc.nasa.gov/FTP/xmm/data/catalogs/2XMMcat_v1.0.fits.gz)

sky with  $\delta \leq -30^\circ$ . Positions in the catalog are accurate within  $1''$  to  $2''$  for sources with peak brightness  $\geq 20$  mJy/beam and are always better than  $10''$ . The MGPS2 is a radio continuum survey carried out with the Molonglo Observatory Synthesis Telescope (MOST) at 843 MHz with a resolution of  $45'' \times 45'' \text{ cosec}|\delta|$ . This catalog has 48850 sources above a limiting peak brightness of  $10$  mJy beam $^{-1}$ . The region surveyed is  $245^\circ \leq l \leq 365^\circ$  and  $|b| \leq 10^\circ$ . Actually, it is the Galactic counterpart of the SUMSS catalog.

At X-ray wavelengths, the 2XMM catalog contains 246897 X-ray source detections above processing likelihood threshold of 6. The median flux (in the total photon energy band 0.2-12 keV) of the catalog detections is  $\sim 2.5 \times 10^{-14}$  erg cm $^{-2}$  s $^{-1}$ ; in the soft energy band (0.2-2 keV) the median flux is  $\sim 5.8 \times 10^{-15}$  erg cm $^{-2}$  s $^{-1}$  and in the hard band (2-12 keV) it is  $\sim 1.4 \times 10^{-14}$  erg cm $^{-2}$  s $^{-1}$ . About 20% of the sources have fluxes below  $10^{-14}$  erg cm $^{-2}$  s $^{-1}$ . The positional accuracy of the detections in the catalog is generally  $< 5$  arcseconds (99% confidence radius). To date, 1.93% of the whole sky has been observed with the *XMM-Newton* satellite.

Since we are interested in finding a positional correlation between radio and XMM-*Newton* sources, we adopted the following procedure for the determination of positional coincidences:

- First, we cross-identified radio and X-ray sources using the method described in the next subsection.
- The position of those radio/XMM coincident sources were subsequently cross-correlated with the 2MASS<sup>5</sup> catalog (Cutri et al. 2003), using for each pair of infrared/X-ray sources the same criteria used above.
- Then, we inspected the SIMBAD database and the NASA/IPAC Extragalactic Database (NED) to identify those previously known sources of the sample, which were separated in different tables.
- We finally studied the X-ray properties of unidentified X-ray sources with radio and infrared counterparts and compare them with those of well-known objects with the aim of making a preliminary diagnosis their possible nature.

## 2.2 Coincidence sample and statistical analysis

The cross-correlation of two catalogs to search for positional coincidences of sources is usually done using, as the selection criterion, the angular distance between sources (one in each catalog) appropriately weighted by its uncertainty. However, as the significance of such an approach also depends on the density of sources in the respective catalogs, the construction of the sample of

coincident sources must be carried out with some care. In this section we describe our approach to this task, which was applied to cross-correlate the 2XMM catalog with each one of the radio catalogs (NVSS, SUMSS, MGPS2) independently.

We constructed our sample of X–radio source coincidences in three steps. First, we computed for each pair of sources (one in the 2XMM catalog and the other in the corresponding radio catalog) the  $R$  statistic defined as

$$R = \left[ \frac{(\alpha_X - \alpha_R)^2}{\sigma_{\alpha,X}^2 + \sigma_{\alpha,R}^2} + \frac{(\delta_X - \delta_R)^2}{\sigma_{\delta,X}^2 + \sigma_{\delta,R}^2} \right]^{1/2}, \quad (1)$$

where  $(\alpha_{X/R}, \delta_{X/R})$  are the equatorial coordinates of the X-ray/radio source, and  $(\sigma_{\alpha,X/R}, \sigma_{\delta,X/R})$  their corresponding standard deviations. Clearly,  $R$  increases with the increase of the source differential position, in such a way that the uncertainties in the coordinates of each source are fully taken into account. Low  $R$  values point to a possible coincidence, while high  $R$  values suggest no relationship between the sources. Under the assumption that the positions of both sources do coincide,  $R$  has a Rayleigh distribution (e.g. Allington-Smith et al. 1982), i.e. the probability that  $R$  is greater than any given non-negative value  $R_0$  is

$$P(R > R_0) = \exp(-R^2/2). \quad (2)$$

For  $R_0 = 3.03$ ,  $P(R > R_0)$  is only of 1%, hence we constructed a first sample of coincident sources by retaining all pairs of sources for which  $R \leq 3.03$ . For such purpose, we used our IDL (Interactive Data Language<sup>6</sup>)-based code to cross-correlate the aforementioned catalogs. Given the construction of this sample, the probability that a *true* coincidence is missed is only 1% (the completeness is 99%). However, we expect this sample to be contaminated by some amount of chance coincidences of unrelated X and radio sources. We call it our *dirty* sample.

As a second step, we estimated the fraction of spurious (chance) coincidences in our sample. For this purpose, we evaluated the probability  $P_u(R \leq R_0)$  of getting an unrelated 2XMM–radio source pair with  $R \leq R_0$ , assuming a uniform distribution of radio sources in the vicinity of each 2XMM source. This probability is

<sup>6</sup>[http://physics.nyu.edu/grierlab/idl\\_html\\_help/home.html](http://physics.nyu.edu/grierlab/idl_html_help/home.html)

<sup>5</sup><http://irsa.ipac.caltech.edu/cgi-bin/Gator/>

**Table 1** Statistical analysis.

Catalogue	$\sigma_{\alpha,R}$ ''	$\sigma_{\delta,R}$ ''	$\langle n \rangle$ deg <sup>-2</sup>	$\sigma_n$ deg <sup>-2</sup>	$P_u(R \leq 3.03)$ $\times 10^{-4}$	$N$	$\langle N_{99} \rangle$	$\sigma_{99}$	$N_{99}$	$f_{99}$	$f_{95}$	$f_{68}$
MGPS2	2.9	3.1	19	6	5.5	24148	13	4	109	0.12	0.09	0.06
SUMSS A	2.7	2.9	30	5	8.0	17436	14	4	232	0.06	0.05	0.02
SUMSS B	2.7	2.9	20	5	5.3	17681	9	3	217	0.04	0.03	0.02
NVSS	4.0	4.3	52	10	24.5	150032	368	19	2762	0.13	0.10	0.07

$$P_u(R \leq R_0) = \int_0^\infty \int_0^\infty P_u(R \leq R_0 | \sigma_\alpha, \sigma_\delta) \cdot f(\sigma_\alpha, \sigma_\delta) d\sigma_\alpha d\sigma_\delta, \quad (3)$$

where  $\sigma_\alpha = (\sigma_{\alpha,X}^2 + \sigma_{\alpha,R}^2)^{1/2}$ ,  $\sigma_\delta = (\sigma_{\delta,X}^2 + \sigma_{\delta,R}^2)^{1/2}$ ,  $P_u(R \leq R_0 | \sigma_\alpha, \sigma_\delta)$  is the conditional probability that an unrelated pair has  $R < R_0$ , given the values of  $\sigma_\alpha$  and  $\sigma_\delta$ , and  $f(\sigma_\alpha, \sigma_\delta)$  the joint probability density function of these two variables. It can be seen, from the definition of  $R$ , that  $P_u(R \leq R_0 | \sigma_\alpha, \sigma_\delta)$  is the probability of finding at least one radio source inside an ellipse of semiaxes  $\sigma_\alpha$  and  $\sigma_\delta$  centered at the position of the 2XMM source. If the local density of radio sources is  $n$ , this is simply

$$P_u(R \leq R_0 | \sigma_\alpha, \sigma_\delta) = 1 - e^{-\pi n R_0^2 \sigma_\alpha \sigma_\delta}. \quad (4)$$

To simplify expression 3, we computed mean position uncertainties of the radio sources directly from the data in the catalogs, obtaining values  $< 5''$  (see Table 1). Mean position uncertainties in the 2XMM catalog were also computed, obtaining a value of  $2.0''$ . We also determined the radio source density  $n$  at the position of each 2XMM source located within the radio catalog boundaries, by counting the number of sources inside  $1^\circ$ -radius circles centered in the X sources, and dividing it by the area of the circles. For this purpose, we divided the SUMSS catalog into two parts, one comprising sources with  $\delta_{J2000} \leq -50^\circ$  (SUMSS A), and the other comprising sources with  $\delta_{J2000} > -50^\circ$  (SUMSS B) because of the different sensitivities of this catalog in the two regions, which results in different source densities. The mean density  $\langle n \rangle$  for each radio catalog is given in Table 1, together with the dispersion  $\sigma_n$ . Given that  $\sigma_n$  is small compared to  $\langle n \rangle$ , for the purpose of computing the probability of chance coincidences we assumed that the local source density  $n$  in each radio catalog is constant and equal to  $\langle n \rangle$ .

From the source densities and mean positional uncertainties, it is easy to verify that in every case  $\pi \langle n \rangle R_0^2 \sigma_\alpha \sigma_\delta \ll 1$  hence, to first order,  $P_u(R \leq R_0 | \sigma_\alpha, \sigma_\delta) = \pi \langle n \rangle R_0^2 \sigma_\alpha \sigma_\delta$ . Assuming that total uncer-

tainties in each coordinate are independent, the probability of a chance coincidence is

$$P_u(R \leq R_0) = \pi \langle n \rangle R_0^2 \langle \sigma_\alpha \rangle \langle \sigma_\delta \rangle. \quad (5)$$

Finally, by counting the number  $N$  of 2XMM sources within the boundaries of each radio catalog, we were able to compute the mean  $\langle N_{99} \rangle$  and variance  $\sigma_{99}^2$  of the number of coincidences expected by chance between each pair of catalogs, at 99% completeness,

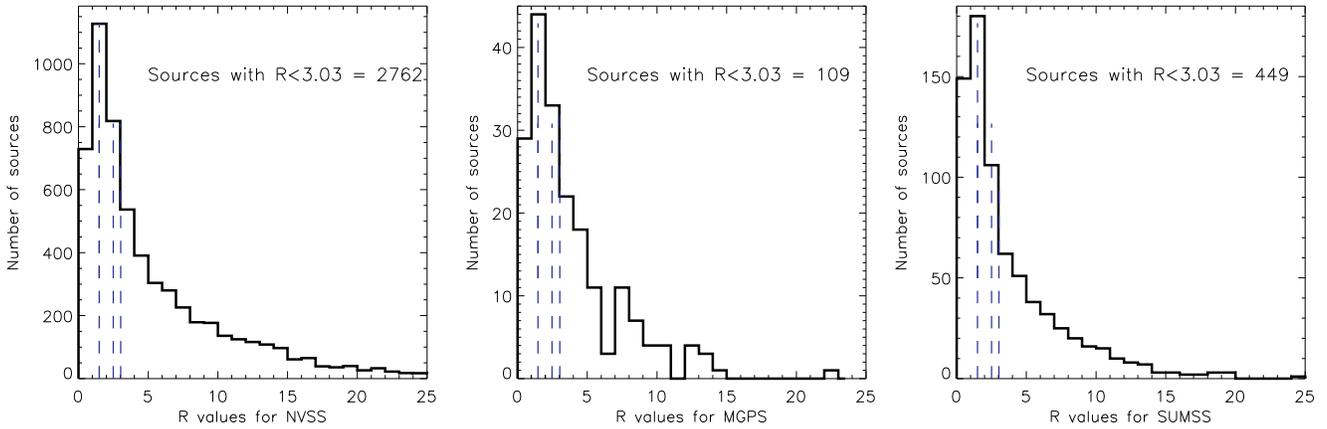
$$\langle N_{99} \rangle = N P_u(R \leq 3.03), \quad (6)$$

and

$$\sigma_{99}^2 = N P_u(R \leq 3.03) (1 - P_u(R \leq 3.03)), \quad (7)$$

respectively. These values, together with the actual number of coincidences  $N_{99}$  obtained in the cross-correlations, are given in Table 1. As it can be seen, the observed  $N_{99}$  values are greater than their expected means by at least  $24\sigma_{99}$ , which implies that the observed coincidences cannot be explained as due only to chance superposition of unrelated X and radio sources. This strongly suggests that many 2XMM sources do emit at radio wavelengths.

The contamination fraction of our sample can be estimated as  $f_{99} = \langle N_{99} \rangle / N_{99}$ , and is also listed in Table 1. The contamination is low, reaching only 13% in the worst case. Nevertheless, it could be interesting to have a sample with a very low contamination, at the expense of a smaller completeness. Starting with the value of the desired completeness, any such sample could be constructed using the data of our dirty sample and the formulae given above. As the last step of our coincidence analysis, and with the purpose of obtaining cleaner samples for the subsequent analysis of the 2XMM sources, we constructed an *intermediate* and a *clean* sample, defined by their completeness levels of 95% ( $R_0 = 2.45$ ) and 68% ( $R_0 = 1.51$ ) respectively. The contamination fractions obtained ( $f_{95}$  and  $f_{68}$  respectively) are shown in Table 1.



**Fig. 1** Distribution of  $R$  values for X-ray sources and their nearest neighbours. Dotted lines at  $R = 3.03$ ,  $2.45$  and  $1.51$  define the criteria for the construction of our dirty, intermediate and clean samples of coincidences. See text.

### 3 Main results and discussion

#### 3.1 Coincidences between radio/infrared and X-ray sources

Fig.1 shows the distribution of  $R$  for all the X-ray sources and their nearest radio neighbours in each of the three catalogs. The distribution shows a maximum at  $R \sim 1.5$ . After applying the first criterion ( $R_0 = 3.03$ ), a total of 2762, 449, and 109 observed coincidences were found for the NVSS, SUMSS and MGPS2 catalogs, respectively. Among these, only 368, 23 and 13 respectively are expected to be due to chance alignment of unrelated sources. Figure 2 shows the all sky distribution of the positionally correlated radio/X-ray sources.

We cross-identified the radio-X-ray sample in our 'dirty' sample with the 2MASS catalog using the same value of  $R \leq 3.03$ . Out of 2762 NVSS sources, 1253 lie at high galactic latitudes ( $|b| \geq 10^\circ$ ) and, of them, 432 display 2MASS counterparts. At low galactic latitudes ( $|b| \leq 10^\circ$ ) we found 1509 sources, of which only 468 present 2MASS counterparts. A preliminary study of the latter sources was carried out by Combi et al. (2008). Of the 449 SUMSS/2XMM coincidences sources, 348 are at low galactic latitude ( $|b| \leq 10^\circ$ ), of which 17 display 2MASS counterparts. At high galactic latitude, there are 65 coincidences, among which 27 present 2MASS counterpart. Finally, out of 109 MGPS2/2XMM coincidences (all with  $|b| \leq 10^\circ$ ) only 53 display 2MASS counterparts.

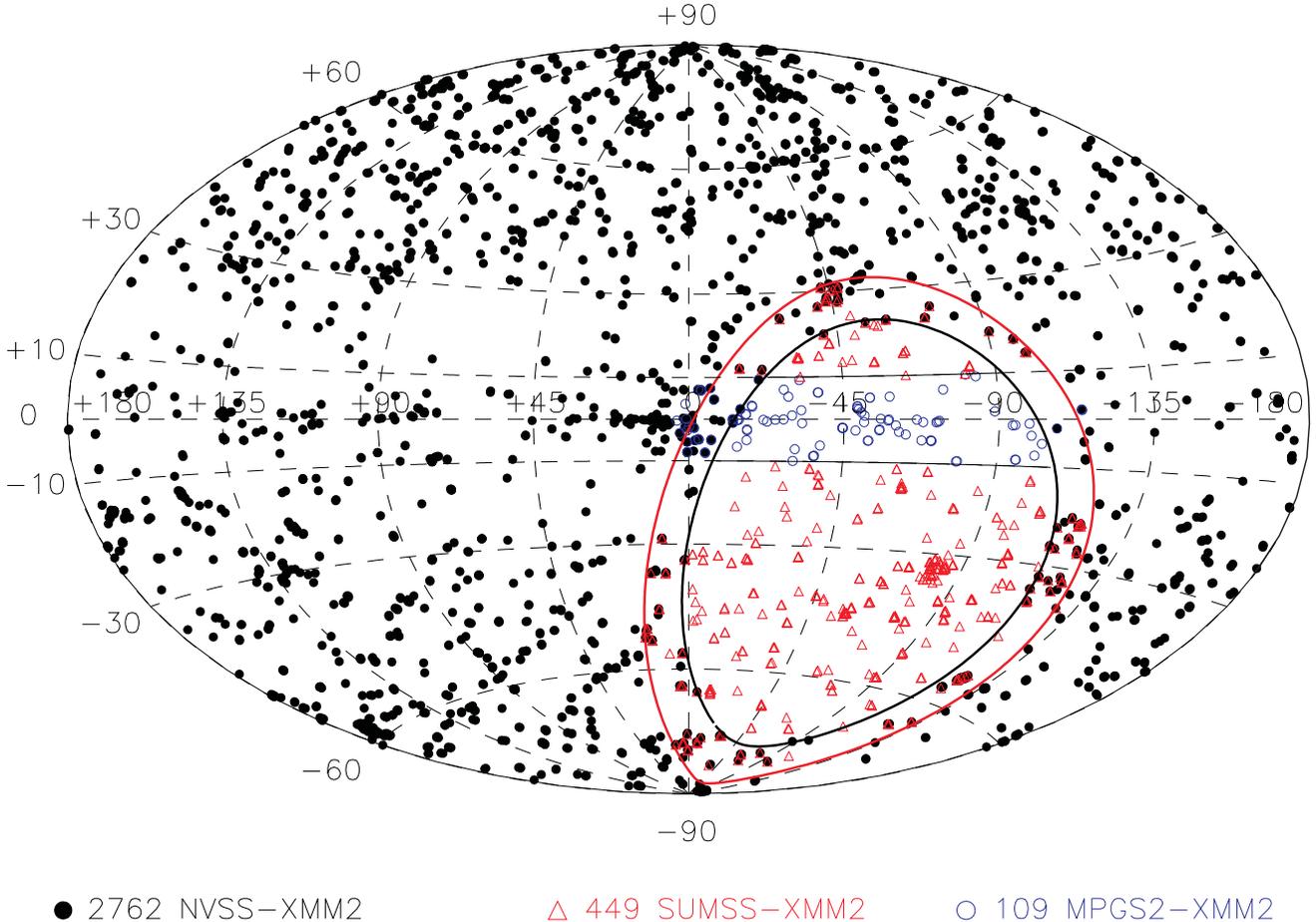
As a further step, we inspected the SIMBAD and the NASA/IPAC Extragalactic Database (NED) to classify unidentified and well-known sources. In a series of tables, described in a latter subsection, we present geometric and physical characteristics of different identified objects. Of the total coincident radio/X-ray sources,

2225 are unidentified (67%). These sources are published online only. Out of them, 416 were detected in radio catalogs different from the NVSS/SUMSS and MGPS2. We find a very wide taxonomy of sources among the latter: 320 normal galaxies, 78 Seyferts I, 91 Seyferts II, 23 Liners, 46 radiogalaxies, 12 double galaxies, 176 clusters of galaxies, 196 QSOs, 58 different types of stars, 15 pulsars, 4 HII regions, 19 supernovae or supernova remnants, 5 low or high mass binaries, 2 young stellar objects, 7 young or old open clusters, 4 maser sources, 5 possible connections with gamma-ray sources, 29 star forming regions, 4 planetary nebulae, and one source likely related to the Galactic Center.

#### 3.2 X-ray properties of well-known populations

Statistical studies of X-ray sources based on X-ray colors can be used to classify objects with different spectral energy distributions belonging to a class of galactic or extragalactic population. Owing to the wide energy range of the XMM-Newton telescope (0.2-12 keV), we were able to compute X-ray colors of sources in three different broad-bands, thus helping us to better unmask signs of high energy processes in our list of coincident sources.

The most efficient representation of the hardness-ratio plane in terms of thermal and/or non-thermal models suggests us a restricted energy range. We used three energy bands defined in the catalog as: Soft ( $S$ : 0.5–1.0 keV), Medium ( $M$ : 1.0–2.0 keV), and Hard ( $H$ : 2–4.5 keV). The X-ray hardness-ratio was defined as:  $H_x = (M - S)/(S + M)$  and  $H_y = (H - M)/(H + M)$ . Since it is difficult to classify individual sources with confidence on the basis of X-ray colors alone, we computed and plotted the predicted loci for thermal (in orange) and non-thermal (black) models with absorption. For the thermal model we used the APEC (Smith et al.



**Fig. 2** Spatial distribution of the positionally correlated radio/X-ray sources. NVSS sources with galactic latitudes  $|b| \geq 10^\circ$  and  $|b| \leq 10^\circ$  are shown as black dots. SUMSS sources are shown in open blue circles and MGPS-2 sources are shown as red triangles. The black solid line represents the declination limit  $-40^\circ$

2001) with values of temperature ranging from 0.2 to 2.6 keV and interstellar absorptions  $N_{\text{H}}$  from  $0.1 \times 10^{21}$  to  $10 \times 10^{22} \text{ cm}^{-2}$ . On the other hand, for the absorbed power-law (PL) model, we used values of  $\Gamma$  index ranging from 0 to 4 and interstellar absorptions  $N_{\text{H}}$  from  $1 \times 10^{21}$  to  $4 \times 10^{22} \text{ cm}^{-2}$ . The grid was calculated with the Portable Interactive Multi-Mission Simulator (PIMMS6). To determine the X-ray properties of each source, we performed a two-dimensional interpolation with the grids of both models using the information provided by the hardness-ratios. First,  $H_y$  was used to determine the temperature in the thermal model and  $\Gamma$  in the power-law one. Then, a value of  $N_{\text{H}}$  was determined for each model from  $H_x$ . Our final results are given in the tables in the appendix (see Appendix).

The uncertainties in the estimate of the source parameters depend on the obtained values for them. For instance,  $N_{\text{H}}$  remains undetermined using both models for values above  $4 \times 10^{22} \text{ cm}^{-2}$ , i.e. for high  $H_x$  values ( $H_x \sim 1$ ). Also, in the thermal model, the temperature above 2 keV is less constrained since the separation in

the grid between models is very short. The X-ray characteristics for different objects are presented and briefly discussed below.

### 3.2.1 Galactic sources

The resulting hardness ratio (HR) diagrams for galactic objects are shown in Figure 3 (only the results for stars are shown here; figures for the remaining objects are available on-line). Filled (blue) points, open (green) squares and open (red) diamonds indicate the positional coincident XMM-Newton sources with NVSS, SUMSS and MGPS2 radio sources, respectively. Number of sources follows those that are presented in their respective electronic tables. Table 2 displays different types of galactic sources, which are fitted by a thermal model, a power-law model, a combination of both models or none model.

**Table 2** Number of sources of known class of our sample that could be fitted to each model.

Tipo	$N_{\text{tot}}$	Fit			
		Both	PL	Thermal	None
Stars	58	28	7	5	16
Pulsars	15	3	3	4	5
SNe and SNR <sup>a</sup>	19	4	0	1	4
X-ray binaries	5	4	0	1	0
SFR <sup>b</sup>	29	15	6	5	3
HII regions	4	0	2	1	1
YSO <sup>c</sup>	2	2	0	0	0
Masers	2	1	0	0	1
PNe <sup>d</sup>	4	0	1	1	2
Stellar clusters	7	5	1	1	0
$\Gamma$ -Ray sources	5	4	0	1	0
Galactic center	1	0	0	0	0

<sup>a</sup>Supernovae and Supernova Remnants

<sup>b</sup>Star-Forming Regions

<sup>c</sup>Young Stellar Objects

<sup>d</sup>Planetary Nebulae

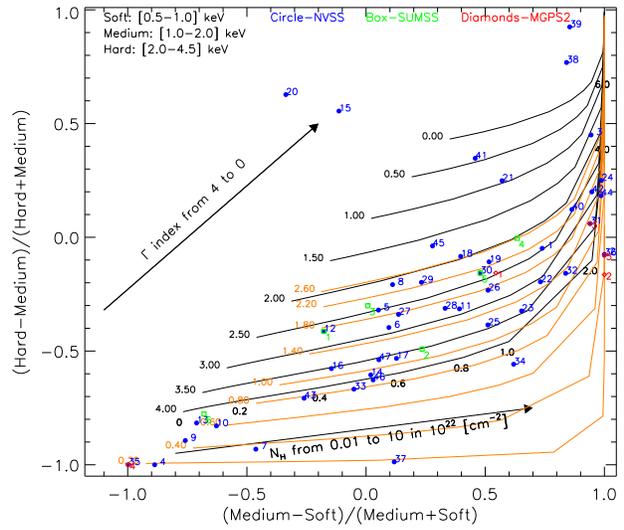
### 3.2.2 Extragalactic objects

In the appendix, we show the HR diagrams for Quasi-Stellar Objects (QSOs) at different redshifts ( $z=0.1, 0.25, 0.5, 1.0, 1.5$  and  $2$ ). Figures for the remaining extragalactic objects are available on-line.

**Normal galaxies:** In Figure 8 we show the distribution of normal galaxies in the HR diagram. Most of these objects lie at  $z \approx 0.1$ . At this redshift there are twenty six sources that do not fit the models, 56 are fitted by both models, 22 only by a PL and 24 only by a thermal model. Most of the sources lie between values of the  $\Gamma$  index from 1.75 to 4, temperatures in the range 0.8 to 2.6 kT and interstellar absorption  $N_{\text{H}}$  with values ranging from  $0.1$  to  $0.8 \times 10^{22} \text{ cm}^{-2}$ . For values of  $z$  between 0.25 to 0.50 the behaviour is similar to the previous case. At values of  $z > 1$  only a PL model fit the objects. There are not objects for values of  $z > 1.25$ .

**Seyfert I:** Figure 9 shows the distribution of Seyfert I galaxies in the HR diagram. As can be seen, a large fraction of these sources have  $z \approx 0.1$ , with values of  $\Gamma$  indices from 2.0 to 3.75, temperatures ranging from 1.2 to 2.6 kT and a mean interstellar absorption  $N_{\text{H}}$  of  $0.3 \times 10^{22} \text{ cm}^{-2}$ . It is interesting to note that when  $z$  increases ( $z=0.5, z=1.0$  and  $z=1.5$ ) the  $N_{\text{H}}$  increases gradually to 0.8, 1.5 and  $3 \times 10^{22} \text{ cm}^{-2}$ . In addition, when  $z$  increases thermal models compressed towards high values of  $\Gamma$ . At values of  $z > 0.75$  a PL model is most suitable to fit the sources.

**Seyfert II:** Figure 10 shows the distribution of Seyfert II galaxies in the HR diagram. As in the previous case, most of the sources have  $z \approx 0.1$  with values



**Fig. 3** Ratios of source counts in different spectral bands for stars in the NVSS (circle), SUMS (square) and MGPS2 (diamonds). Plots for the remaining galactic objects are available on-line. A color version of this plot is also available on-line.

of  $\Gamma$  indices from 1.5 to 4.0, temperatures ranging from 0.9 to 2.6 kT and a mean interstellar absorption  $N_{\text{H}}$  of  $0.2 \times 10^{22} \text{ cm}^{-2}$ . As can be seen, Seyfert II galaxies display values of interstellar absorption  $N_{\text{H}}$  lower than Seyfert I, and most of the sources are best fitted by a PL model.

**Liners:** Figure 11 shows the distribution of Liner galaxies in the HR diagram. Around 90% of the sources have  $z \approx 0.1$  and lie concentrated between values of  $\Gamma$  indices of 2.25 to 3.25, temperatures ranging from 1.4 to 2.2 kT and a mean interstellar absorption  $N_{\text{H}}$  of  $0.3 \times 10^{22} \text{ cm}^{-2}$ .

**Radiogalaxies:** Figure 12 shows the distribution of radiogalaxies in the HR diagram. Around 50% of the sources lie at  $z \approx 0.1$ , which display values of  $\Gamma$  indices from 2.25 to 4.0, temperatures ranging from 0.8 to 2.6 kT and a mean interstellar absorption  $N_{\text{H}}$  of  $0.4 \times 10^{22} \text{ cm}^{-2}$ . At values of  $z > 0.5$  a PL model seem to be most suitable to fit the sources.

**Double galaxies:** Figure 13 shows the distribution of double galaxies in the HR diagram. All the sources lie at  $z \approx 0.1$ . Unfortunately in this case the statistic is very low, therefore, it is impossible to suggest a possible trend for these sources.

**Clusters of galaxies:** Figure 14 illustrates the distribution of clusters of galaxies in the HR diagram. In this case, 89% of the objects lie at  $z \approx 0.1$  and display values of  $\Gamma$  indices between 2.0 and 4.0, temperatures ranging from 0.4 to 2.6 kT and a mean interstellar absorption  $N_{\text{H}}$  of  $0.2 \times 10^{22} \text{ cm}^{-2}$ . Although most of the

sources are fitted by a combination of thermal and non-thermal models, an important fraction of these (30%) is only fitted by a thermal model. At values of  $z$  larger than 1.0 a PL model is most suitable to fit the sources.

**Quasars:** Figure 4 shows the distribution of Quasars (QSOs) in the HR diagram. Out of 196 objects, 65% lie at  $z > 0.75$ . Objects with values of  $z$  between 0.1 and 0.75 are best fitted by a combination of both thermal and PL models. On the contrary, for values of  $z > 0.8$  only a PL model fit properly the X-ray emission of the sources. In this last case, the objects show values of  $\Gamma$  indices between 1.5 and 3.0, and a mean interstellar absorption  $N_{\text{H}} = 0.3 \times 10^{22} \text{ cm}^{-2}$ .

It is interesting to note that for values of interstellar absorption  $N_{\text{H}} > 10^{22} \text{ cm}^{-2}$  the fraction of AGNs is quite low. A result consistent with the X-ray study recently carried out by Watson et al. (2009).

### 3.3 Unidentified sources

Figures 5, 6 and 7 show the distribution of unidentified radio/X-ray sources in the HR diagram, for galactic latitudes  $|b| \geq 10^\circ$ ,  $|b| < 10^\circ$ ,  $|b| \leq 5^\circ$  and  $|b| \leq 2^\circ$ , respectively. Grids with the predicted loci for thermal and non-thermal models were computed for  $z=0$ . Of the total unidentified sources, 392 lie out of the grids, 1048 are fitted by both models, 330 only by a power-law model and 354 only by a thermal model.

Out of 2225 objects, 1018 have galactic latitudes  $|b| \geq 10^\circ$ , 1207  $|b| \leq 10^\circ$ , 1166  $|b| \leq 5^\circ$  and 1124  $|b| \leq 2^\circ$ . For galactic latitudes  $|b| \leq 10^\circ$ , the contamination of extragalactic objects is  $< 6\%$ . In other words, 94% of sources with  $|b| \leq 10^\circ$  lie mainly on the galactic plane and are probably galactic objects.

Figure 5 (left panel) shows unidentified sources with galactic latitudes  $|b| \geq 10^\circ$ . As can be seen, a large concentration of sources lie between values of  $\Gamma$  indices from 1.5 to 4.0 (with a mean of  $\approx 2.75$ ), values of temperature between 0.6 and 2.6 kT (with a mean kT of 1.6) and interstellar absorption  $N_{\text{H}}$  with values in the range from  $0.2$  to  $0.8 \times 10^{22} \text{ cm}^{-2}$  (with a mean of  $N_{\text{H}} \approx 0.5 \times 10^{22} \text{ cm}^{-2}$ ). X-ray spectral characteristics of well-known extragalactic objects (see Figures 3 and 8–14) suggest that unidentified sources with galactic latitudes  $|b| \geq 10^\circ$  have mainly an extragalactic origin and could be different types of AGNs, in agreement with recent X-ray studies of sources with high galactic latitudes. These results support the widely accepted findings that the X-ray sky at middle and high galactic latitudes is largely dominated by AGNs (see Barcons et al. 2007; Caccianiga et al. 2007; Watson et al. 2009).

Figure 6 (left panel) displays the distribution of unidentified sources with galactic latitudes  $|b| \leq 10^\circ$

in the HR diagram. As can be seen, in contrast with the sources at high galactic latitudes, the distribution presents a more complex structure. There is still a small concentration of sources at low values of interstellar absorption, but with an important fraction of sources with  $N_{\text{H}}$  greater than  $0.5 \times 10^{22} \text{ cm}^{-2}$ . These objects could be more absorbed sources belonging to the galactic plane and therefore with galactic origin. Comparing the positions of well-known galactic objects and unidentified sources in the HR diagrams, it is possible to provide constraints on the overall unidentified X-ray population and delineate some likely origin for these sources. For values of interstellar absorption  $N_{\text{H}}$  less than  $0.5 \times 10^{22} \text{ cm}^{-2}$ , unidentified sources could be different types of stars, SNRs or a small fraction of AGNs behind the galactic plane. On the other hand, for values of interstellar absorption  $N_{\text{H}}$  greater than  $0.5 \times 10^{22} \text{ cm}^{-2}$  these objects could be HII regions, low/high mass X-ray binaries, young stellar objects, sources of masers or star forming regions.

Finally, in order to distinguish more clearly the concentration of these objects in the HR diagrams, we constructed density maps for the sources at galactic latitudes  $|b| \geq 10^\circ$  and  $|b| \leq 10^\circ$ . Figures 5 (right panel) and 6 (right panel) show density maps for unidentified sources. The maps are 2D-histograms normalized to  $1/N$ , where  $N$  is the total number of sources in the diagram. For the size of the bin in axis  $x$  and  $y$ , we chose the median of the errors in HR1 and HR2, respectively. Contours were overplotted, each level corresponding to the percentage with respect to the total number of sources in the plot.

For unidentified sources with galactic latitudes  $|b| \geq 10^\circ$  (see Fig.13, right panel) the density map shows a feature of double-peak nature. Here, the contours were determined for the density map normalized to the maximum number of sources found in a bin in the histogram, to better distinguish the double-peak nature of the source sample in the density map. Comparing this figure with the HR diagrams of well-known extragalactic objects, we found that the highest peak at  $(H - M)/(H + M) = (0.1 - 0.3)$  is formed by the contribution of Seyfert I and QSOs, and the lowest one at  $(M - S)/(M + S) = (-0.1 - 0.4)$  by normal galaxies. On the other hand, for unidentified sources with galactic latitudes  $|b| \leq 10^\circ$  (see Fig.14, right panel), the density map shows a more complex structure, with a significant fraction of much more absorbed objects. These sources could be part of the dominant X-ray population of obscured (highly absorbed) and hard-spectrum sources, absent in earlier soft X-ray surveys. Possibly, the contribution of distant accreting low/high mass X-ray binaries, cataclysmic variables, RS CVn systems, and a

large population of coronally active stars (Hands et al. 2004).

#### 4 Summary

In this paper we have presented the first positional cross-correlation study between radio, infrared and X-ray sources detected by XMM-Newton telescope. Analysing radio and modern, more sensitive X-ray data, we found 3320 objects with positional coincidence between radio and X-ray catalogs. The significance of the observed coincidences was evaluated through Monte Carlo simulations of synthetic sources following a well-tested protocol. As a result we found that the percentage of chance coincidences is less than 1%.

Out of 3320 coincident sources, 1746 have galactic latitudes  $|b| < 10^\circ$  and 1576  $|b| \geq 10^\circ$ . Besides, 997 display infrared counterparts in the 2MASS catalog, 1095 are well-known objects and the remainder 2225 sources ( $\sim 67\%$ ) are unidentified. We found galactic and extragalactic objects among the list of well-known X-ray sources. Galactic objects such as stars, pulsars, HII regions, supernova and supernova remnants, low/high mass X-ray binaries, young stellar objects, young and old open clusters, masers, gamma-ray sources, star forming regions, planetary nebulae and a source possibly related to the galactic center. Among the extragalactic objects, we found normal galaxies, different types of AGNs (e.g., Seyfert I, Seyfert II, Liners, radiogalaxies and double galaxies), QSOs, and clusters of galaxies.

As a second step, we carried out a dedicated study based on X-ray colors of well-known galactic and extragalactic objects. These X-ray hardness ratios were used to provide a crude representation of the X-ray spectrum and to make preliminary diagnosis of the nature of unidentified X-ray sources. X-ray spectral characteristics of well-known populations of objects suggest that unidentified sources with galactic latitudes  $|b| \geq 10^\circ$  have mainly an extragalactic origin. In addition, for galactic latitudes  $|b| \leq 10^\circ$  we found that most of the unidentified sources lie at galactic latitudes  $|b| \leq 2^\circ$ . This latter result suggests that most of the unidentified sources found on the galactic plane might have a galactic origin. They could be different type of stars, SNRs, low/high mass X-ray binaries, young stellar objects, masers, star forming regions or part of some new population of X-ray sources.

The present catalog, we hope, will be a very useful tool for researchers interested in both population and individual source studies.

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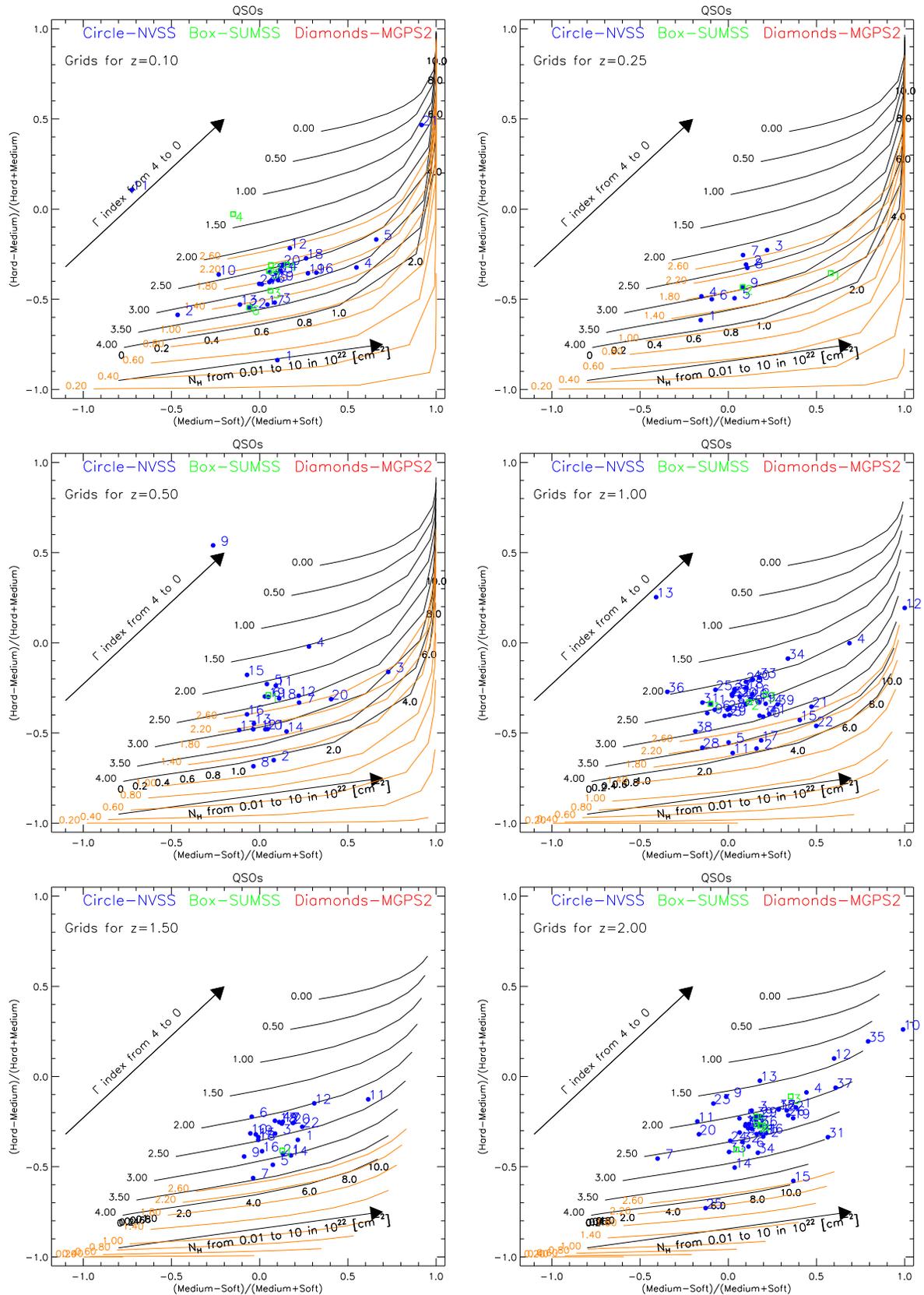
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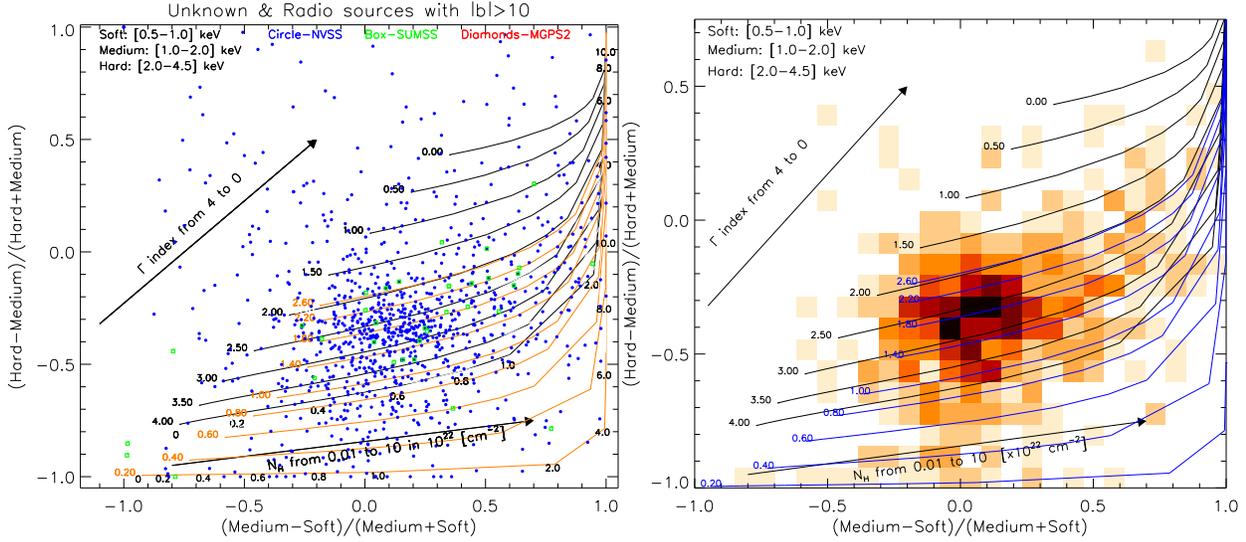
## A Description of the tables

Tables 3 to 8 list positional coincidences between the NVSS, SUMSS and MGPS2 surveys with the 2XMM-*Newton* catalog, for different types of sources. Unidentified sources are published online only. In the tables, the sources are ordered according to right ascension; part of the information on a source is arranged in twenty one and twenty two columns for galactic and extragalactic sources, respectively. These tables are intended as a useful tool for researchers interested in particular identifications.

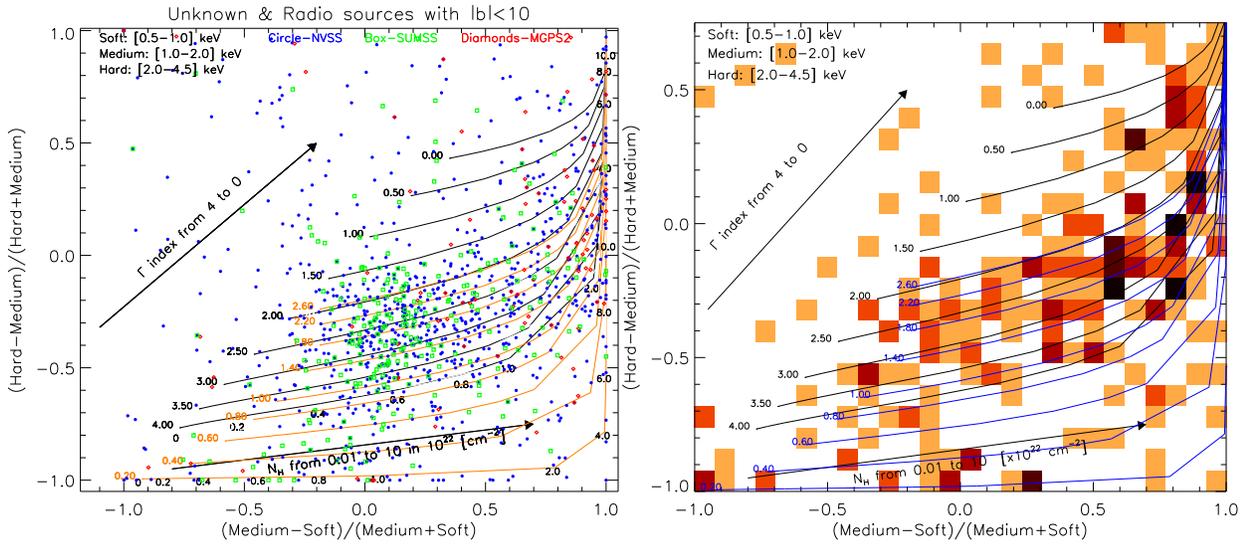
Columns 1 and 2 provide the source number and name with rough information on its sky location, according to the conventional XMM-*Newton* source nomenclature. Columns 3 and 4 give the right ascension (RA) and declination (DEC) of the source for equinox J2000.0. The RA and DEC are given as [hh mm ss] and [° ' "], respectively. An indication of the accuracy of this position, in the form of equivalent (90 percent confidence level) error radii is indicated in Column 5. Columns 6 and 7 give the hardness ratio as defined in Sec.3.2. Columns 8 and 9 display the temperature ( $kT$ ) and interstellar absorptions  $N_{\text{H}}$  obtained from the thermal model. Columns 10 and 11 list  $\Gamma$  indexes and the interstellar absorptions  $N_{\text{H}}$  computed with the non-thermal model. The X-ray flux, in units of  $\text{ergs s}^{-1} \text{cm}^{-2}$ , is indicated in Column 12. It was computed in the SXSSC using an energy conversion factor (ECF) in the 0.2-12 keV energy band. Columns 13, 14 and 15 give the name of the radio counterpart in the NVSS, SUMSS or MGPS2 surveys, its radio flux (in mJy) and R statistic, respectively. Columns 16, 17, 18 and 19 list the possible infrared counterpart in the 2MASS catalog, its magnitude  $K_s$ , the  $(H - K_s)$  and  $(J - H)$  differences, and the value of  $R$  obtained from the XMM and 2MASS catalogs (Cutri et al. 2003, Skrutskie et al. 2006). Finally, Columns 20 and 21, provide the redshift (for extragalactic sources) and the main reference associated to each source. The references are the more recent study with the XMM-*Newton* satellite or another X-ray observatory. If the source has not been previously studied with any X-ray observatory, the reference indicates the detection at other wavelengths.



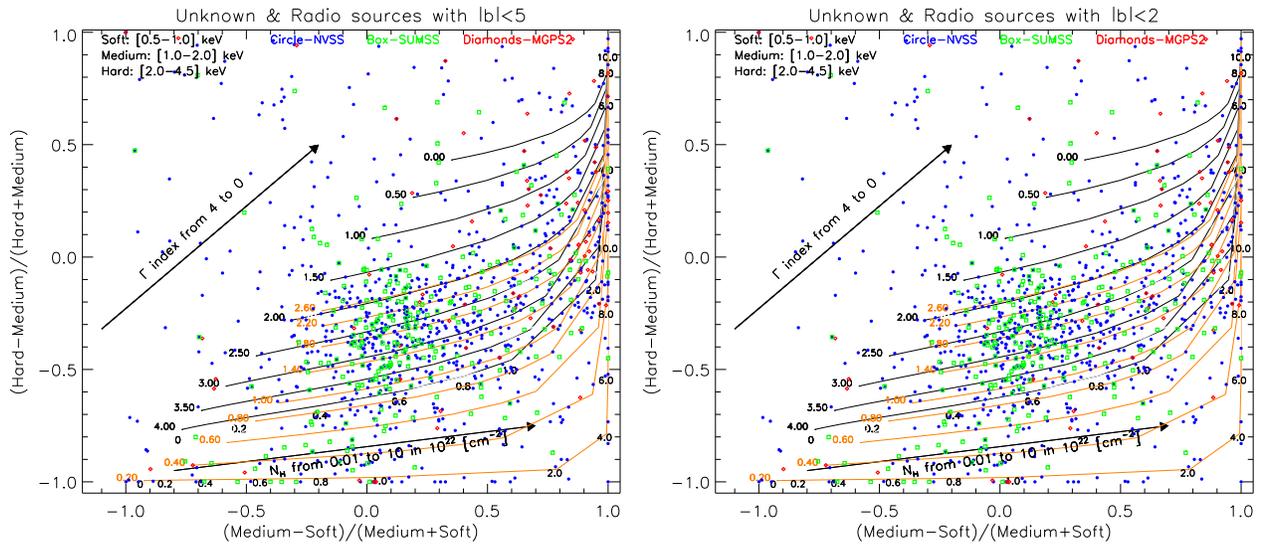
**Fig. 4** Ratios of source counts in different spectral bands for QSOs at different redshifts ( $z=0.1, 0.25, 0.5, 1.0, 1.5,$  and  $2$ ) in the NVSS (circle), SUMS (square) and MGPS2 (diamonds). Plots for the remaining extragalactic objects are available on-line. A color version of this plot is also available on-line.



**Fig. 5 Left:** Ratios of source counts in different spectral bands for unidentified coincident radio/X-ray sources with galactic latitude  $|b| > 10^\circ$ . Points represent the same as in the previous figures. **Right:** Density map in the hardness-ratio diagram for unidentified sources with galactic latitude  $|b| > 10^\circ$ . Contours were overplotted, each level corresponding to the percentage with respect to the total number of sources in the plot. Bin size corresponds to a maximum of 39 sources per bin.



**Fig. 6 Left:** Ratios of source counts in different spectral bands for unidentified coincident radio/X-ray sources with galactic latitude  $|b| < 10^\circ$ . Points represent the same as in the previous figures. **Right:** Density map in the hardness-ratio diagram for unidentified sources with galactic latitude  $|b| < 10^\circ$ . Contours were overplotted, each level corresponding to the percentage with respect to the total number of sources in the plot. Bin size corresponds to a maximum of 39 sources per bin.



**Fig. 7** **Left:** Ratios of source counts in different spectral bands for unidentified radio/X-ray sources with galactic latitude  $|b| < 5^\circ$ . **Right:** Ratios of source counts in different spectral bands for unidentified radio/X-ray sources with galactic latitude  $|b| < 2^\circ$ . Points represent the same as in the previous figures.

Table 3 NVSS/XMM: Galactic objects

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal - Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>Xr</sub> f<99%	2MASS Mag & Colors			R <sub>xi</sub> f<99%	Bib Ref.	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	$\Gamma$					K	H - K	J - H			
<b>Stars</b>																				
1	000537.0+634027	00:05:37.00	+63:40:27.79	0.45	0.74±0.06	-0.05±0.05	0.8	2.0	1.	2.5	1.25±0.10	000537+634030	41.4 ± 1.3	2.81	---	---	---	---	302	
2	000647.0+633602	00:06:47.04	+63:36: 2.37	1.49	1.00±0.40	-0.08±0.26	---	---	---	---	0.08±0.04	000647+633558	4.5 ± 0.5	1.06	---	---	---	---	302	
3	000701.5+634152	00:07: 1.57	+63:41:52.19	0.33	0.94±0.04	0.45±0.04	---	---	2.	1.5	2.21±0.13	000701+634141	3.2 ± 0.5	1.45	---	---	---	---	302	
4	000937.0-321630	00:09:37.01	-32:16:30.97	34.67	-0.89±0.12	-1.00±0.41	---	---	---	---	1.15±0.65	000935-321636	388.3 ± 11.7	0.49	000937-321630	15.46	-0.06	0.587	0.21	474
5	003300.9+851618	00:33: 0.99	+85:16:17.09	0.77	0.05±0.03	-0.32±0.03	0.1	2.0	0.2	2.5	5.31±0.28	003259+851616	41.4 ± 2.0	2.55	---	---	---	---	28	
6	004056.6+851823	00:40:56.62	+85:18:23.64	0.73	0.10±0.11	-0.40±0.13	0.2	1.6	0.4	3.0	0.23±0.05	004055+851825	8.3 ± 0.5	1.78	---	---	---	---	161	
7	013335.8+303627	01:33:35.63	+30:36:27.79	1.93	-0.46±0.05	-0.93±0.06	0.4	0.30	---	---	0.15±0.02	013335+303629	3.3 ± 0.5	0.44	---	---	---	---	279	
8	013351.5+303947	01:33:51.57	+30:39:47.17	1.80	0.11±0.27	-0.21±0.27	0.2	2.4	0.2	2.0	8.60±3.61	013351+303933	3.2 ± 0.5	2.51	013351+303947	14.38	0.480	0.677	2.65	210
9	013354.8+303312	01:33:54.58	+30:33:11.17	1.35	-0.76±0.02	-0.89±0.06	---	---	---	---	0.40±0.03	013354+303312	6.1 ± 0.4	0.98	---	---	---	---	210	
10	013433.2+304705	01:34:32.74	+30:47:58.33	5.91	-0.63±0.02	-0.83±0.04	---	---	---	---	1.22±0.09	013432+304700	69.9 ± 2.8	0.49	013432+304658	15.35	0.224	0.133	0.75	210
11	022715.1-031553	02:27:15.13	-03:15:53.62	2.37	0.39±0.32	-0.31±0.27	0.4	1.6	0.6	3.0	0.23±0.15	022715-031554	3.2 ± 0.5	0.43	---	---	---	---	89	
12	023917.9-341654	02:39:17.93	-34:16:54.02	2.20	-0.18±0.08	-0.41±0.12	0.	1.8	0.2	2.7	0.54±0.21	023918-341651	17.3 ± 1.1	2.17	023917-341654	15.72	0.163	0.540	2.09	416
13	023956.1-342116	02:39:56.10	-34:21:16.80	1.81	-0.71±0.16	-0.82±0.46	---	---	---	---	0.02±0.02	023955-342117	5.3 ± 0.5	1.15	023956-342116	15.7	0.488	0.450	0.64	416
14	032635.3+284251	03:26:35.42	+28:42:52.58	0.04	0.02±0.00	-0.61±0.00	0.2	0.90	0.6	4.0	633.80±1.73	032635+284254	41.1 ± 1.3	1.42	032635+284252	4.027	0.046	0.712	1.79	443
15	033111.2+435413	03:31:11.26	+43:54:13.27	1.48	-0.11±0.08	0.55±0.06	---	---	---	---	29.02±4.08	033110+435405	19.3 ± 1.9	2.78	---	---	---	---	109	
16	033647.2+003516	03:36:47.26	+00:35:15.56	0.04	-0.15±0.00	-0.58±0.00	0.1	1.2	0.4	3.5	620.83±0.40	033647+003515	122.3 ± 4.4	0.94	033647+003515	3.187	0.109	0.636	0.93	349
17	034648.5+680547	03:46:48.64	+68:05:46.81	0.29	0.13±0.01	-0.53±0.01	0.2	1.0	0.6	3.5	5.45±0.10	034648+680546	190.7 ± 7.3	1.27	034648+680546	9.195	0.588	0.981	0.86	97
18	035516.5+003057	03:55:16.53	+00:30:57.70	1.78	0.40±0.27	-0.08±0.27	---	---	0.4	2.0	1.22±0.72	035516+003054	115.6 ± 4.1	1.41	---	---	---	---	512	
19	053428.3+221425	05:34:28.14	+22:14:31.65	2.49	0.52±0.04	-0.11±0.04	0.4	2.2	0.6	2.2	61.72±4.42	053428+221433	767.9 ± 23.7	0.86	---	---	---	---	155	
20	053519.2-043532	05:35:19.30	-04:35:32.98	1.01	-0.34±0.26	0.63±0.16	---	---	---	---	0.49±0.08	053519-043527	2.3 ± 0.5	2.48	---	---	---	---	369	
21	053845.2+282838	05:38:45.28	+28:28:38.20	1.22	0.57±0.25	0.25±0.19	---	---	0.4	1.0	1.85±0.62	053845+282838	10.6 ± 0.5	0.14	---	---	---	---	110	
22	054539.8-253615	05:45:39.80	-25:36:15.10	2.00	0.73±0.22	-0.20±0.21	0.8	1.6	1.	3.0	0.15±0.11	054539-253618	41.2 ± 1.3	2.15	---	---	---	---	470	
23	054644.7-320002	05:46:44.78	-32:00: 2.27	1.89	0.65±0.24	-0.32±0.25	0.6	1.2	1.	3.5	0.18±0.15	054645-320003	61.5 ± 2.2	2.60	---	---	---	---	409	
24	064052.8+094858	06:40:52.89	+09:48:58.21	1.26	0.99±0.08	0.25±0.14	2.	1.0	---	---	0.24±0.05	064052+094857	61.9 ± 1.9	0.70	064052+094858	12.39	1.276	1.864	0.95	238
25	074433.8+034442	07:44:33.88	+03:44:42.88	1.03	0.51±0.11	-0.39±0.12	0.6	1.2	0.8	3.5	0.87±0.27	074433+034443	7.2 ± 0.5	0.91	---	---	---	---	357	
26	085038.0+114708	08:50:38.06	+11:47: 8.91	1.27	0.51±0.14	-0.23±0.14	0.4	1.8	0.6	2.7	0.90±0.35	085038+114709	111.2 ± 3.4	0.69	---	---	---	---	28	
27	085841.5+140540	08:58:41.58	+14:05:40.97	0.33	0.14±0.04	-0.34±0.05	0.2	1.8	0.4	2.7	1.21±0.12	085841+140539	189.9 ± 6.7	1.61	---	---	---	---	277	
28	110049.5-344324	11:00:49.58	-34:43:24.19	0.28	0.33±0.03	-0.31±0.03	0.4	1.6	0.6	2.7	5.40±0.33	110049-344326	2.3 ± 0.5	0.48	110049-344324	14.58	0.766	0.791	1.51	194
29	133146.3+111409	13:31:46.32	+11:14: 9.89	0.75	0.23±0.12	-0.20±0.12	0.2	2.2	0.4	2.2	0.81±0.15	133146+111409	153.5 ± 4.6	1.33	---	---	---	---	317	
30	155702.2-380219	15:57: 2.25	-38:02:19.39	0.65	0.48±0.06	-0.16±0.06	0.4	2.2	0.6	2.2	3.32±0.37	155702-380220	39.1 ± 1.3	2.43	---	---	---	---	236	
31	160833.8-390009	16:08:33.89	-39:00: 9.95	1.23	0.94±0.13	-0.06±0.15	2.	1.2	2.	3.2	0.34±0.08	160833-390011	22.1 ± 1.2	1.52	---	---	---	---	161	
32	162603.0-242336	16:26: 3.02	-24:23:36.43	0.04	0.84±0.00	-0.16±0.00	1.	1.4	2.	3.7	91.79±0.81	162602-242339	6.1 ± 0.5	2.09	162603-242336	6.227	0.635	1.228	1.05	52
33	173241.0+741339	17:32:41.05	+74:13:39.74	0.10	-0.05±0.01	-0.67±0.01	0.2	0.80	---	---	102.12±2.47	173240+741332	2.7 ± 0.5	3.00	---	---	---	---	514	
34	174852.8-202137	17:48:52.82	-20:21:37.62	1.06	0.62±0.10	-0.56±0.10	0.8	0.70	---	---	5.73±1.11	174853-202134	4.0 ± 0.7	2.95	---	---	---	---	351	
35	174948.2-370129	17:49:48.21	-37:01:29.20	1.86	-1.00±0.19	-1.00±****	---	---	---	---	0.08±0.05	174948-370129	11.8 ± 0.6	0.61	---	---	---	---	226	
36	175015.5-370616	17:50:15.57	-37:06:16.59	1.36	1.00±0.16	-0.08±0.18	---	---	---	---	0.47±0.18	175015-370616	61.5 ± 2.3	0.88	175015-370616	13.44	0.137	0.621	2.81	167
37	180453.0-241920	18:04:53.04	-24:19:20.26	3.30	0.12±0.26	-0.99±0.13	---	---	---	---	0.12±0.18	180452-241923	52.6 ± 3.9	1.12	180453-241920	10.45	0.308	0.885	0.51	92
38	180926.8-201930	18:09:26.60	-20:19:27.68	3.67	0.84±0.07	0.77±0.02	---	---	---	---	14.61±0.64	180925-201924	9686.3 ± 605.0	2.70	180926-201927	10.32	1.017	2.158	2.32	35
39	183220.7-103509	18:32:20.77	-10:35:11.02	0.61	0.85±0.08	0.92±0.01	---	---	---	---	61.98±0.87	183220-103510	867.4 ± 26.0	0.83	---	---	---	---	36	
40	191149.5+045858	19:11:49.51	+04:58:58.92	0.05	0.86±0.00	0.12±0.00	1.	2.4	1.	2.5	1364.93±3.91	191149+045858	879.4 ± 26.4	0.77	191149+045858	8.133	0.576	0.658	1.45	51
41	203355.4+412251	20:33:55.46	+41:22:51.43	4.16	0.46±0.24	0.35±0.17	---	---	0.2	0.50	1.15±0.32	203355+412259	252.8 ± 8.6	2.18	203355+412251	11.26	0.095	0.245	2.12	35
42	203354.8+412248	20:33:54.84	+41:22:48.99	1.59	0.95±0.12	0.20±0.18	2.	1.8	2.	2.7	1.07±0.30	203355+412246	479.5 ± 18.5	2.36	203354+412248	11.26	0.095	0.245	1.95	278
43	204151.1-322607	20:41:51.14	-32:26: 7.94	0.04	-0.26±0.00	-0.71±0.01	0.1	0.80	---	---	214.88±1.19	204151-322603	3.0 ± 0.7	1.11	204151-322607	4.944	0.257	0.606	1.89	443
44	205341.1+443142	20:53:41.38	+44:31:42.95	2.18	0.99±0.03	0.18±0.06	2.	0.90	---	---	4.19±0.52	205341+443136	36.6 ± 1.2	2.74	205341+443142	10.38	1.610	2.422	0.39	35
45	212953.3+121615	21:29:53.33	+12:16:15.90	9.06	0.28±0.13	-0.04±0.13	---	---	0.2	1.7	4.84±1.82	212952+121618	4.0 ± 0.4	1.94	212953+121615	12.26	0.115	0.406	0.74	254
46	220840.7+454432	22:08:40.80	+45:44:32.09	0.01	0.03±0.00	-0.63±0.00	0.2	0.90	---	---	549.09±1.49	220840+454434	6.8 ± 0.5	1.26	220840+454432	4.270	0.059	0.750	0.08	443
47	234941.0+362530	23:49:41.00	+36:25:30.84	0.04	0.05±0.00	-0.54±0.00	0.2	1.2	0.4	3.5	161.15±0.92	234941+362530	17.8 ± 0.7	0.10	234941+362530	4.07	0.111	0.515	0.79	306
<b>Pulsars</b>																				
1	053630.0-011940	05:36:30.07	-01:19:40.41	1.84	0.35±0.33	0.18±0.30	---	---	0.2	1.0	0.59±0.27	053630-011940	23.4 ± 0.8	2.59	---	---	---	---	285	
2	053954.2-283956	05:39:54.27	-28:39:56.10	0.05	0.24±0.01	-0.13±0.01	---	---	0.4	2.0	78.34±0.82	053954-283956	862.2 ± 25.9	1.46	---	---	---	---	157	
3	063400.1+174024	06:34: 0.10	+17:40:24.66	2.05	0.24±0.47	0.41±0.27	---	---	---	---	0.06±0.03	063359+174022	23.0 ± 0.8	1.49	---	---	---	---	26	
4	073619.3+653711	07:36:19.35	+65:37:11.08	2.08	-0.61±0.09	-0.23±0.22	---	---	---	---	0.28±0.10	073619+653717	7.2 ± 1.3	1.22	---	---	---	---	72	
5	073706.8+653639	07:37: 6.86	+65:36:38.74	1.04	-0.74±0.04	-0.90±0.12	---	---	---	---	0.30±0.05	073706+653639	18.0 ± 1							

Table 3—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS Mag & Colors			R <sub>xi</sub> f <sub>&lt;99%</sub>	Bib. Ref.
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						H – K	J – H	f <sub>&lt;99%</sub>		
2	013354.8+304521	01:33:54.89	+30:45:21.54	2.02	-0.88±0.15	-1.00±0.54	--	--	--	--	0.04 ± 0.04	013354+304532	3.8 ± 0.4	2.15	013354+304521	15.33	0.359	0.832	2.86	112
3	013414.6+303410	01:34:14.68	+30:34:10.02	2.07	0.33±0.20	-0.84±0.21	0.8	0.40	--	--	0.14 ± 0.07	013414+303409	3.8 ± 0.7	0.16	--	--	--	--	--	163
4	013647.7+154749	01:36:47.72	+15:47:49.19	8.70	-0.64±0.09	-0.93±0.23	0.1	0.40	--	--	3.96 ± 0.91	013648+154814	24.4 ± 4.1	2.07	013647+154749	10.15	0.245	0.539	0.66	436
5	033332.1-360658	03:33:32.19	-36:06:58.53	2.59	-0.46±0.06	-0.62±0.14	--	--	0.2	3.5	1.44 ± 0.32	033331-360704	42.6 ± 3.1	1.78	--	--	--	--	--	465
6	052506.1-334305	05:25: 6.13	-33:43: 5.31	0.12	0.16±0.01	-0.27±0.01	0.2	2.0	0.4	2.5	16.12 ± 0.13	052506-334304	188.3 ± 5.7	2.18	--	--	--	--	--	239
7	072618.0+690922	07:26:18.05	+69:09:22.51	0.84	0.28±0.09	-0.50±0.10	0.4	1.0	0.6	3.5	0.53 ± 0.17	072617+690920	10.6 ± 0.5	1.14	--	--	--	--	--	213
8	095524.7+690114	09:55:24.81	+69:01:14.62	0.59	0.01±0.03	-0.75±0.03	0.4	0.60	--	--	2.33 ± 0.17	095524+690112	61.6 ± 1.9	2.77	--	--	--	--	--	373
9	122103.4+281041	12:21: 3.40	+28:10:41.29	1.29	0.34±0.17	-0.51±0.17	0.4	1.0	0.6	3.7	0.11 ± 0.04	122103+281041	132.6 ± 4.0	2.12	--	--	--	--	--	419
10	140300.8+541428	14:03: 0.90	+54:14:26.76	2.67	-0.48±0.05	-0.88±0.12	0.1	0.50	--	--	0.28 ± 0.06	140301+541420	6.8 ± 0.5	1.94	--	--	--	--	--	206
11	213430.5+510148	21:34:30.78	+51:01:48.66	1.82	0.91±0.13	0.33±0.13	--	--	2.	2.0	1.02 ± 0.26	213430+510145	108.8 ± 3.7	1.59	--	--	--	--	--	455
12	232333.8+584723	23:23:33.87	+58:47:23.58	4.02	1.00±0.55	0.98±0.13	--	--	--	--	19.47 ± 4.25	232334+584733	4008.2 ± 420.2	2.84	232333+584723	14.46	0.384	0.687	1.72	8
<b>Low/High mass X-ray binaries</b>																				
1	024031.6+611345	02:40:31.49	+61:13:45.95	0.10	0.74±0.00	-0.03±0.00	0.6	2.2	1.	2.5	118.23 ± 0.71	024031+611345	42.2 ± 1.3	0.71	024031+611345	7.917	0.311	0.393	1.21	406
2	182615.0-145053	18:26:15.00	-14:50:54.69	0.13	0.81±0.01	0.08±0.01	0.8	2.4	1.	2.2	84.33 ± 0.79	182614-145054	23.4 ± 0.9	1.02	182615-145054	8.604	0.147	0.273	0.95	42
<b>Star-forming regions (SFR)</b>																				
1	035333.5+315727	03:53:33.55	+31:57:27.45	1.33	0.93±0.11	-0.13±0.17	2.	0.90	--	--	0.09 ± 0.04	035333+315726	16.7 ± 0.6	0.89	--	--	--	--	--	181
2	035402.6+315331	03:54: 2.67	+31:53:31.24	0.60	0.42±0.09	-0.47±0.08	0.6	1.0	0.8	3.7	0.21 ± 0.04	035402+315333	20.5 ± 0.7	2.70	--	--	--	--	--	181
3	041448.0+281657	04:14:48.02	+28:16:57.74	2.01	0.97±0.60	0.96±0.11	--	--	--	--	0.17 ± 0.07	041448+281655	19.8 ± 0.7	1.18	--	--	--	--	--	181
4	041920.9+270629	04:19:20.93	+27:06:29.28	1.23	0.80±0.13	-0.22±0.16	1.	1.2	2.	3.7	0.49 ± 0.15	041921+270630	42.9 ± 1.3	2.45	--	--	--	--	--	181
5	041950.1+272233	04:19:50.11	+27:22:33.27	1.29	0.79±0.15	-0.09±0.17	0.8	1.8	1.	3.0	0.53 ± 0.15	041950+272243	5.8 ± 1.3	1.06	--	--	--	--	--	181
6	041959.1+023132	04:19:59.17	+02:31:32.16	0.74	0.40±0.09	-0.48±0.09	0.4	1.0	0.8	3.7	0.93 ± 0.18	041959+023132	112.2 ± 3.4	2.25	--	--	--	--	--	268
7	042113.0+193409	04:21:13.08	+19:34: 9.80	3.94	0.65±0.13	-0.41±0.16	0.8	1.0	1.	4.0	0.60 ± 0.24	042112+193410	4.6 ± 0.5	2.82	--	--	--	--	--	181
8	042952.5+644254	04:29:52.58	+64:42:54.32	1.58	0.76±0.17	-0.46±0.21	1.	0.70	--	--	0.32 ± 0.16	042952+644251	18.7 ± 0.7	1.69	--	--	--	--	--	181
9	043004.3+264527	04:30: 4.33	+26:45:27.19	1.00	0.67±0.12	-0.01±0.12	0.6	2.4	0.8	2.2	2.58 ± 0.52	043004+264526	3.1 ± 0.4	2.71	--	--	--	--	--	181
10	043004.6+261257	04:30: 4.62	+26:12:57.70	0.90	0.56±0.10	-0.31±0.12	0.6	1.4	0.8	3.2	0.99 ± 0.23	043004+261259	2.8 ± 0.5	2.79	--	--	--	--	--	181
11	043009.9+264555	04:30: 9.92	+26:45:55.77	0.78	0.69±0.10	0.08±0.09	--	--	0.6	1.7	2.36 ± 0.43	043009+264557	10.7 ± 0.5	1.24	--	--	--	--	--	181
12	043117.1+175802	04:31:17.36	+17:58: 3.53	2.04	0.67±0.09	0.05±0.08	--	--	0.6	2.0	0.91 ± 0.15	043117+175804	24.8 ± 1.2	0.64	--	--	--	--	--	181
13	043140.5+180325	04:31:40.77	+18:03:25.43	4.85	0.90±0.22	0.43±0.16	--	--	1.	1.0	0.25 ± 0.07	043140+180315	23.9 ± 1.3	1.93	--	--	--	--	--	181
14	043144.0+181033	04:31:43.95	+18:10:31.35	1.75	0.90±0.07	0.13±0.08	1.	2.0	2.	2.7	0.26 ± 0.03	043144+181031	50.8 ± 1.9	0.58	--	--	--	--	--	181
15	043217.8+255618	04:32:17.89	+25:56:18.56	1.39	0.60±0.20	0.18±0.19	--	--	0.4	1.2	0.09 ± 0.04	043218+255614	3.6 ± 0.4	2.99	--	--	--	--	--	181
16	043229.4+181359	04:32:29.49	+18:13:59.50	1.28	0.44±0.04	-0.21±0.04	0.4	2.0	0.6	2.5	1.62 ± 0.15	043229+181359	46.5 ± 1.5	0.21	043229+181359	13.17	0.520	0.768	0.62	181
17	043235.1+242021	04:32:35.18	+24:20:20.25	0.91	0.80±0.05	0.26±0.04	--	--	0.8	1.5	1.80 ± 0.12	043235+242018	108.7 ± 3.7	2.35	--	--	--	--	--	181
18	043302.3+254406	04:33: 2.32	+25:44: 6.58	0.53	0.79±0.05	-0.14±0.07	0.8	1.6	1.	3.2	1.12 ± 0.15	043302+254402	4.0 ± 0.5	2.86	--	--	--	--	--	181
19	043311.0+052116	04:33:11.10	+05:21:16.06	0.01	0.33±0.00	-0.31±0.00	0.4	1.6	0.6	2.7	815.91 ± 1.60	043311+052115	3439.0 ± 103.2	2.95	043311+052116	10.57	1.134	0.955	0.98	181
20	043323.3+225915	04:33:23.32	+22:59:15.03	1.47	0.97±0.16	0.27±0.23	2.	1.8	2.	2.7	0.08 ± 0.05	043323+225922	3.8 ± 0.5	2.24	--	--	--	--	--	181
21	043334.7+242850	04:33:34.80	+24:28:50.50	0.94	0.88±0.12	0.10±0.11	1.	2.0	2.	2.7	0.35 ± 0.08	043334+242851	26.2 ± 0.9	0.45	--	--	--	--	--	181
22	044127.3+150456	04:41:27.32	+15:04:56.08	0.06	0.47±0.01	-0.24±0.01	0.4	1.8	0.6	2.7	146.07 ± 1.61	044127+150454	13.6 ± 0.6	1.73	044127+150456	15.35	0.349	1.003	1.92	181
23	044155.8+150441	04:41:55.83	+15:04:41.30	1.78	0.42±0.19	-0.48±0.19	0.6	1.0	0.8	3.7	0.59 ± 0.23	044156+150440	17.7 ± 0.7	1.43	--	--	--	--	--	181
24	045420.9+024902	04:54:20.99	+02:49: 2.53	0.47	0.03±0.07	-0.27±0.08	0.1	2.2	0.2	2.2	0.61 ± 0.09	045420+024901	7.1 ± 0.5	2.79	--	--	--	--	--	181
25	045528.7+302824	04:55:28.77	+30:28:24.51	4.67	0.58±0.16	0.03±0.15	--	--	0.6	1.7	0.41 ± 0.19	045528+302822	63.5 ± 2.3	1.61	--	--	--	--	--	181
26	063948.3+821846	06:39:48.99	+82:18:46.76	1.74	0.04±0.03	-0.42±0.04	0.1	1.6	0.4	3.0	1.85 ± 0.18	063949+821842	3.5 ± 0.5	0.94	--	--	--	--	--	122
27	162418.7-241428	16:24:18.79	-24:14:28.10	1.59	1.00±0.15	0.36±0.17	--	--	--	--	0.43 ± 0.16	162418-241428	15.6 ± 0.7	0.59	--	--	--	--	--	487
28	162447.0-241719	16:24:47.04	-24:17:19.52	1.37	1.00±0.18	0.46±0.15	4.	1.0	4.	3.7	0.19 ± 0.04	162446-241721	90.9 ± 2.8	1.25	--	--	--	--	--	9
29	190156.2-365727	19:01:56.17	-36:57:26.12	0.77	0.15±0.38	0.97±0.02	--	--	--	--	3.84 ± 0.15	190156-365722	15.2 ± 1.3	1.58	--	--	--	--	--	156
<b>HII regions</b>																				
1	013416.6+305157	01:34:16.47	+30:51:59.37	2.03	-0.69±0.12	-0.96±0.26	0.1	0.30	--	--	0.05 ± 0.03	013416+305156	5.8 ± 0.5	1.58	013416+305159	13.34	0.624	0.849	2.04	208
2	024240.7-000046	02:42:40.73	-00:00:****	0.01	-0.45±0.00	-0.68±0.00	--	--	0.2	3.7	225.05 ± 0.37	024240-000047	4848.1 ± 170.4	1.47	--	--	--	--	--	118
3	185146.7+003533	18:51:46.70	+00:35:33.42	0.76	0.92±0.27	0.89±0.05	--	--	--	--	7.06 ± 0.45	185146+003532	839.9 ± 29.6	0.45	185146+003533	13.12	0.760	1.867	2.88	229
4	224645.8+580306	22:46:45.90	+58:03: 6.26	1.43	0.97±0.16	0.06±0.26	2.	1.2	--	--	0.20 ± 0.05	224646+580309	21.2 ± 0.8	1.88	--	--	--	--	--	217
<b>Young Stellar Objects (YSO)</b>																				
1	181856.1-205236	18:18:56.18	-20:52:36.87	1.34	0.93±0.16	0.15±0.18	2.	1.8	2.	2.7	0.12 ± 0.04	181856-205235	15.4 ± 0.7	0.94	181856-205236	12.72	0.424	0.891	1.53	274
<b>Masers</b>																				
1	174718.8-282254	17:47:18.81	-28:22:54.58	9.18	0.94±0.55	-0.03±0.62	2.	1.0	2.	3.7	40.23 ± 3.77	174720-282252	6286.2 ± 198.0	2.30	174718-282254	11.18	1.558	3.403	1.27	105
2	180157.5-231225	18:01:57.51	-23:12:25.14	6.23	NaN ± NaN	1.00±0.06	--	--	--	--	0.87 ± 0.26	180156-231230	5.4 ± 0.9	1.44	180157-231225	9.608	2.256	3.583	1.97	68
3	182602.2-133818	18:26: 2.19	-13:38:20.07	2.52	0.58±0.28	0.70±0.14	--	--	--	--	0.18 ± 0.07	182601-133819	32.5 ± 2.0	1.91	182602-133820	10.74	0.656	0.895	1.96	438
<b>Planetary Nebulae (PNe)</b>																				
1	102446.0-183832	10:24:46.08	-18:38:32.00	0.31	-0.91±0.02	-0.76±0.20	--	--	--	--	0.61 ± 0.03	102446-183832	757.7 ± 29.1	0.54	102446-183832	11.74	0.713	-0.35	1.48	181
2	174756.2-295937	17:47:56.21	-29:59:37.13	1.46	-0.62±0.11	-1.00±0.13	--	--	--	--	0.18 ± 0.08	174756-295940	179.5 ± 5.4	2.22	--	--</				

Table 3—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS Mag & Colors			Bib. Ref.	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						K	H – K	J – H		R <sub>xi</sub> f <sub>&lt;99%</sub>
1	084945.5+110937	08:49:45.53	+11:09:37.31	1.83	0.09±0.21	-0.60±0.25	0.2	0.90	0.6	4.0	5.63± 3.04	084945+110951	2.8 ± 0.4	2.38	- - - - -	- -	- -	- -	- -	
<b>Gamma-ray sources</b>																				
1	061541.0+221540	06:15:41.01	+22:15:40.88	19.38	-0.15±0.23	-0.97±0.11	0.8	0.20	--	--	0.85± 0.60	061541+221521	15.2 ± 3.0	1.04	061541+221540	15.28	0.242	0.776	1.06	242
2	061756.9+781608	06:17:56.95	+78:16: 8.10	0.38	0.15±0.04	-0.32±0.04	0.2	1.8	0.4	2.5	2.70± 0.20	061757+781609	156.6 ± 4.7	1.26	- - - - -	- -	- -	- -	- -	242
3	202017.2+402615	20:20:17.25	+40:26:15.01	0.70	-0.20±0.09	-0.67±0.11	0.1	0.90	--	--	0.73± 0.23	202017+402607	5.5 ± 1.1	0.90	202017+402615	11.68	0.144	0.543	1.92	487
<b>Galactic Center</b>																				
1	174541.5-290020	17:45:42.02	-29:00:21.33	2.69	0.79±0.02	0.94±0.00	--	--	--	--	317.42± 1.02	174542-290015	61188.0 ±4862.1	2.16	174542-290021	9.124	2.073	2.857	3.00	297

Table 4 NVSS/XMM: Extragalactic objects

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal - Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>T</sub> [mJy]	R <sub>Xr</sub> f<99%	Name 2MASS J+	2MASS		S Mag & Colors		R <sub>Xi</sub> f<99%	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						K	K	H - K	J - H		
Normal Galaxies																					
1	001110.4-120114	00:11:10.48	-12:01:14.43	0.95	-0.35±0.10	-0.59±0.17	--	--	0.2	3.2	0.36±0.10	001110-120113	12.8±1.0	0.40	001110-120114	12.87	0.437	0.692	0.356	0.020096	
2	001501.6-390537	00:15:1.69	-39:05:37.30	1.87	0.07±0.30	0.13±0.25	--	--	0.6	1.2	0.17±0.11	001501-390541	2.8±0.5	1.00	001501-390537	14.90	0.362	0.893	2.629	0.160000	
3	001537.0-390946	00:15:37.17	-39:09:47.41	2.32	-0.29±0.15	-0.62±0.22	0.01	1.2	0.2	3.5	0.07±0.04	001537-390940	4.2±0.5	2.03	001537-390947	13.40	0.588	0.821	0.787	0.062843	
4	002155.3-151738	00:21:55.38	-15:17:38.34	1.14	-0.24±0.13	-0.38±0.21	--	--	0.1	2.5	0.10±0.04	002155-151736	7.7±0.6	1.10	002155-151738	13.13	0.528	0.734	1.138	0.027470	
5	002914.1+345632	00:29:14.16	+34:56:32.34	0.29	0.64±0.04	-0.04±0.04	--	--	2.	2.2	3.13±0.17	002914+345632	1902.9±57.1	0.66	--	--	--	--	--	0.517000	
6	003017.4+261139	00:30:17.49	+26:11:39.50	1.88	0.29±0.21	-0.94±0.19	1.	0.30	--	--	0.06±0.05	003017+261144	2.7±0.4	3.00	003017+261139	13.65	0.439	0.775	0.587	0.077000	
7	003432.3-054330	00:34:32.38	-05:43:30.65	1.24	-0.36±0.16	-0.86±0.27	0.2	0.50	--	--	0.24±0.14	003432-054326	2.2±0.5	0.37	--	--	--	--	--	0.013774	
8	003600.8-271535	00:36:0.83	-27:15:35.42	2.50	0.14±0.22	0.09±0.19	--	--	0.1	1.0	1.01±0.33	003600-271534	11.3±0.6	2.86	003600-271535	13.32	0.661	0.834	2.535	0.069044	
9	003917.8+481211	00:39:17.83	+48:12:11.35	1.70	0.76±0.24	-0.13±0.23	0.8	2.0	1.	3.0	0.16±0.12	003917+481210	13.0±0.6	0.36	--	--	--	--	--	--	
10	003948.2+403434	00:39:48.21	+40:34:34.55	1.25	0.55±0.16	-0.32±0.18	0.6	1.6	0.8	3.0	0.12±0.04	003948+403432	8.5±0.5	1.75	--	--	--	--	--	--	
11	004006.5+402149	00:40:6.54	+40:21:49.28	2.08	-0.23±0.24	-0.58±0.41	0.01	1.2	0.4	3.5	0.13±0.15	004006+402146	8.7±0.5	1.64	004006+402149	10.68	0.027	0.229	2.137	--	
12	004058.3+410300	00:40:58.37	+41:03:0.04	3.70	-0.37±0.21	-0.71±0.37	0.01	0.90	--	--	0.15±0.10	004057+410309	4.1±0.7	2.18	004058+410300	14.58	0.674	1.279	2.891	--	
13	004141.2+410332	00:41:41.25	+41:03:33.08	0.38	0.23±0.05	-0.20±0.05	0.2	2.6	0.4	2.2	0.79±0.08	004141+410333	48.1±1.5	1.46	--	--	--	--	--	--	
14	004144.6+412620	00:41:44.65	+41:26:21.45	1.69	0.41±0.14	-0.44±0.14	0.4	1.4	0.8	3.5	0.56±0.29	004144+412628	4.8±0.4	1.82	--	--	--	--	--	--	
15	004218.5+411294	00:42:18.72	+41:29:26.40	1.07	0.71±0.05	-0.16±0.05	0.8	1.8	1.	3.0	1.86±0.21	004218+412926	371.4±11.2	0.33	--	--	--	--	--	--	
16	004241.4+411451	00:42:41.46	+41:14:51.58	4.88	-0.55±0.05	-0.63±0.11	--	--	0.1	3.2	17.09±1.29	004240+411453	26.3±4.0	1.96	004241+411451	15.58	-1.57	1.299	1.274	--	
17	004246.0+411615	00:42:46.08	+41:16:15.27	6.98	-0.18±0.12	-0.70±0.16	0.2	0.90	--	--	46.60±11.09	004246+411610	81.0±4.6	0.97	004246+411615	10.84	2.021	-1.14	1.183	--	
18	004251.4+412633	00:42:51.59	+41:26:33.50	1.42	0.68±0.05	-0.16±0.05	0.8	2.0	1.	2.7	0.37±0.04	004251+412633	21.7±0.8	0.27	--	--	--	--	--	--	
19	004331.6+413602	00:43:31.65	+41:36:2.97	1.48	0.57±0.19	-0.22±0.22	0.6	2.0	0.8	2.7	0.03±0.02	004331+413613	6.6±1.6	0.76	--	--	--	--	--	--	
20	004449.6+414018	00:44:49.62	+41:40:18.89	5.20	-0.76±0.27	-0.07±0.54	--	--	--	--	0.11±0.12	004449+414023	6.6±0.5	0.82	004449+414018	14.92	0.003	0.427	1.431	--	
21	004620.7+412451	00:46:20.78	+41:24:51.12	2.04	-0.25±0.28	-1.00±0.42	--	--	--	--	0.06±0.04	004621+412444	4.6±0.4	2.16	--	--	--	--	--	--	
22	004648.7+422737	00:46:48.75	+42:27:37.99	2.41	0.48±0.25	-0.20±0.24	0.4	2.2	0.6	2.5	0.05±0.05	004648+422731	2.5±0.5	1.07	--	--	--	--	--	--	
23	004738.4+422023	00:47:38.45	+42:20:23.17	0.76	0.37±0.09	-0.18±0.09	0.4	2.4	0.6	2.2	0.58±0.15	004738+422020	7.0±0.5	2.07	--	--	--	--	--	--	
24	004751.0+852718	00:47:51.06	+85:27:18.97	1.92	0.17±0.09	-0.54±0.10	0.6	1.6	1.	3.7	0.28±0.11	004752+852718	58.9±2.1	0.90	004751+852718	14.55	0.939	0.631	1.112	0.620000	
25	005353.2-374026	00:53:53.30	-37:40:24.15	1.43	-0.01±0.10	-0.12±0.11	--	--	0.1	1.7	0.15±0.04	005353-374020	132.7±4.7	2.54	--	--	--	--	--	--	
26	005403.5-374640	00:54:3.52	-37:46:40.04	2.16	-0.55±0.31	-1.00±0.38	--	--	--	--	0.19±0.19	005403-374636	145.2±4.4	1.65	--	--	--	--	--	--	
27	005442.5-374254	00:54:42.56	-37:42:54.34	2.14	-0.65±0.24	-0.40±0.56	--	--	--	--	0.03±0.03	005442-374257	4.4±0.6	1.56	--	--	--	--	--	--	
28	005546.1+003838	00:55:46.19	+00:38:38.93	4.98	-0.04±0.19	-0.41±0.25	0.1	1.8	0.4	2.7	0.50±0.43	005546+003847	3.5±0.6	2.45	005546+003838	12.79	0.453	0.716	0.894	--	
29	005747.0-273006	00:57:47.01	-27:30:6.17	1.70	-0.44±0.10	-0.34±0.20	--	--	--	--	0.13±0.04	005746-273004	3.4±0.7	0.96	005747-273006	13.36	0.348	0.630	0.520	0.018760	
30	010721.2+141619	01:07:21.21	+14:16:19.21	1.96	0.09±0.04	-0.51±0.04	0.2	1.4	0.6	3.2	4.62±0.59	010721+141618	4.1±0.6	0.75	--	--	--	--	--	0.075438	
31	010736.6-173220	01:07:36.69	-17:32:20.11	0.91	0.23±0.14	0.05±0.12	--	--	0.2	1.2	1.07±0.21	010736-173220	7.1±0.5	2.56	010736-173220	13.52	0.299	0.681	0.654	0.021387	
32	011008.8-165111	01:10:8.80	-16:51:11.83	1.53	0.09±0.17	-0.70±0.18	0.4	0.80	--	--	2.23±0.75	011008-165109	43.8±1.4	1.45	011008-165111	11.58	0.500	1.093	1.492	0.034244	
33	012435.0+034729	01:24:35.02	+03:47:29.01	0.77	0.65±0.09	-0.32±0.09	0.2	2.0	0.4	2.5	1.35±0.17	012434+034729	176.3±5.3	2.49	012435+034729	11.45	1.571	1.527	2.611	--	
34	013240.2-133306	01:32:40.23	-13:33:6.89	0.52	0.74±0.06	0.07±0.06	--	--	2.	2.0	3.54±0.37	013240-133307	4.6±0.5	0.77	--	--	--	--	--	0.562000	
35	013329.2+304539	01:33:29.27	+30:45:38.28	1.93	0.70±0.09	0.00±0.09	--	--	0.8	2.0	0.16±0.05	013329+304538	17.7±0.7	0.13	--	--	--	--	--	--	
36	013429.3+310308	01:34:29.39	+31:03:8.72	0.45	0.17±0.02	-0.36±0.03	0.2	1.8	0.4	2.7	2.66±0.13	013429+310308	44.0±1.4	0.33	--	--	--	--	--	--	
37	013508.0+310528	01:35:8.24	+31:05:27.61	3.35	0.19±0.09	-0.42±0.10	0.2	1.6	0.6	3.0	0.35±0.08	013507+310529	16.2±0.6	1.64	--	--	--	--	--	--	
38	013522.9+302728	01:35:22.90	+30:27:28.83	0.75	0.25±0.11	-0.28±0.11	0.2	2.2	0.4	2.5	1.24±0.27	013522+302728	10.6±0.5	1.06	--	--	--	--	--	--	
39	013750.3+581410	01:37:50.35	+58:14:10.46	0.11	0.59±0.01	-0.28±0.01	0.6	1.6	1.	3.0	179.47±4.47	013750+581413	170.0±6.0	2.42	013750+581410	13.85	0.803	0.896	1.253	--	
40	014302.3+133845	01:43:2.34	+13:38:45.81	0.29	0.22±0.04	-0.39±0.04	0.4	1.6	0.6	3.0	2.86±1.48	014302+133845	372.8±13.9	2.14	014302+133845	9.826	0.737	1.073	2.525	--	
41	014510.0-042422	01:45:10.02	-04:24:22.89	1.48	0.06±0.20	-0.59±0.25	0.4	1.0	0.6	3.7	0.06±0.04	014510-042427	3.0±0.5	2.32	014510-042422	13.55	0.546	0.746	1.073	--	
42	014537.6-043401	01:45:37.58	-04:34:1.28	0.63	-0.19±0.05	-0.52±0.06	0.01	1.4	0.2	3.0	0.15±0.02	014537-043400	9.8±0.5	0.31	014537-043401	13.78	0.774	0.824	2.644	--	
43	015114.2+223456	01:51:14.25	+22:34:56.35	0.62	-0.11±0.08	-0.20±0.09	--	--	0.1	1.7	2.86±0.36	015114+223456	74.8±3.1	0.42	015114+223456	11.93	0.268	0.885	1.253	0.032456	
44	015722.3+315901	01:57:22.37	+31:59:1.70	2.13	0.02±0.33	-0.69±0.38	0.4	0.80	--	--	0.15±0.17	015722+315902	34.8±1.4	0.55	015722+315901	11.18	0.456	0.564	0.505	--	
45	015841.9+082047	01:58:41.95	+08:20:47.85	0.86	-0.48±0.06	-0.68±0.12	--	--	0.2	3.7	0.97±0.12	015842+082049	2.7±0.5	1.98	015841+082047	13.95	0.361	0.839	1.026	0.027055	
46	021718.5-052920	02:17:18.60	-05:29:20.68	0.15	-0.06±0.02	-0.46±0.02	0.1	1.6	0.4	3.0	3.35±0.12	021718-052919	5.2±0.5	1.24	--	--	--	--	--	--	
47	022313.3-043101	02:23:13.28	-04:31:0.66	0.97	-0.04±0.11	-0.07±0.12	--	--	0.01	1.5	0.34±0.09	022313-043054	2.5±0.5	1.18	022313-043100	14.54	0.437	0.603	0.694	--	
48	022402.9-040934	02:24:2.90	-04:09:36.87	2.02	-0.08±0.06	-0.36±0.07	0.01	2.0	0.2	2.5	0.16±0.02	022402-040944	2.1±0.5	1.69	022402-040936	14.31	0.505	0.669	1.176	--	
49	022403.7-043303	02:24:3.79	-04:33:3.46	0.82	-0.08±0.12	-0.28±0.14	0.01	2.4	0.2	2.2	0.26±0.06	022403-043305	4.0±0.5	1.86	022403-043303	13.81	0.382	0.653	1.697	0.043920	
50	022617.4-050443	02:26:17.48	-05:04:43.29	0.83	-0.56±0.09	-0.36±0.12	--	--	--	--	1.10±0.17	022617-050443	8.4±0.5	1.96	022617-050443	13.17	0.399	0.841	0.505	--	
51	022712.9-044636	02:27:12.99	-04:46:36.92	0.35	0.09±0.06	-0.47±0.06	0.2	1.4	0.6	3.2											

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors		R <sub>xi</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						H – K	J – H			
61	031308.7-024319	03:13: 8.78	-02:43:19.00	0.37	-0.23±0.05	-0.17±0.06	---	---	---	---	2.93± 0.18	031308-024319	50.1± 1.6	0.96	031308-024319	11.61	0.624	0.819	0.328	---
62	031848.1+414937	03:18:48.16	+41:49:36.63	1.68	0.48±0.14	-0.05±0.12	---	---	0.6	2.0	0.31± 0.10	031848+414936	538.2± 19.0	0.04	---	---	---	---	---	---
63	032531.0-060741	03:25:31.04	-06:07:41.53	1.87	-0.70±0.17	-1.00±0.62	---	---	---	---	0.21± 0.10	032531-060741	4.8± 0.5	2.64	032531-060741	13.17	0.534	0.818	3.023	0.034134
64	032614.8-212126	03:26:14.82	-21:21:26.17	0.43	0.18±0.07	0.12±0.06	---	---	0.1	1.0	0.49± 0.04	032614-212127	23.4± 1.2	2.91	---	---	---	---	---	
65	033201.3-274648	03:32: 1.35	-27:46:48.88	0.93	0.63±0.09	0.55±0.06	---	---	---	---	0.13± 0.01	033201-274649	55.9± 1.7	0.62	---	---	---	---	1.070000	
66	033219.1-275407	03:32:19.10	-27:54: 7.16	2.19	-0.10±0.08	-0.48±0.11	0.1	1.6	0.4	3.0	0.03± 0.01	033219-275406	10.9± 0.6	0.85	---	---	---	---	---	
67	033229.0-274358	03:32:29.01	-27:43:58.30	2.30	0.04±0.23	-0.95±0.13	1.1	0.30	---	---	0.04± 0.02	033229-274356	5.3± 0.6	2.28	---	---	---	---	0.215000	
68	033242.5-273816	03:32:42.46	-27:38:17.08	1.16	0.68±0.04	0.31±0.03	---	---	0.6	0.75	0.67± 0.04	033242-273817	93.3± 3.4	0.29	---	---	---	---	---	
69	033646.1-355957	03:36:46.18	-35:59:57.87	0.12	-0.40±0.02	-0.58±0.02	---	---	0.2	3.2	7.37± 0.20	033646-355957	37.1± 1.5	1.42	033646-355957	10.26	0.566	0.751	1.439	---
70	033829.0-352702	03:38:29.04	-35:27: 1.96	0.18	-0.22±0.01	-0.79±0.01	0.2	0.70	---	---	34.73± 0.36	033829-352700	208.0± 6.9	1.83	033829-352701	9.761	0.705	0.875	0.855	0.004900
71	034447.5+680841	03:44:47.56	+68:08:42.52	0.71	0.72±0.04	-0.16±0.05	0.8	1.8	1.	3.0	0.92± 0.09	034447+680850	3.1± 0.5	1.42	---	---	---	---	---	
72	034631.9+680102	03:46:31.92	+68:01: 2.98	4.05	-0.18±0.17	-0.33±0.25	0.	2.2	0.1	2.0	0.14± 0.09	034632+680102	14.9± 1.4	0.37	---	---	---	---	---	
73	035348.8-102015	03:53:48.84	-10:20:15.08	0.29	0.05±0.03	-0.36±0.03	---	---	1.	2.5	1.75± 0.10	035348-102014	19.1± 0.7	2.51	---	---	---	---	0.870000	
74	035438.9-203009	03:54:38.96	-20:30: 9.65	0.17	-0.21±0.02	-0.17±0.03	---	---	0.	1.7	10.48± 0.34	035438-203008	237.8± 8.4	2.93	---	---	---	---	---	
75	040234.4+714222	04:02:34.41	+71:42:22.71	2.07	0.28±0.10	-0.21±0.11	0.2	2.4	0.4	2.2	0.68± 0.15	040233+714221	14.8± 1.3	1.11	040234+714222	11.54	0.249	1.033	1.241	0.015277
76	041641.4+011059	04:16:41.41	+01:10:59.03	1.58	0.15±0.18	-0.46±0.22	0.2	1.4	0.6	3.2	0.16± 0.07	041641+011052	5.3± 0.5	1.94	041641+011059	13.21	0.747	0.797	0.373	0.073991
77	041911.9+555242	04:19:11.94	+55:52:42.22	2.05	0.50±0.14	-0.72±0.14	1.	0.60	---	---	0.13± 0.07	041911+555245	34.0± 1.7	1.33	---	---	---	---	0.017543	
78	041937.9+022434	04:19:37.93	+02:24:34.06	0.19	0.04±0.00	-0.75±0.00	0.4	0.70	---	---	58.54± 0.38	041937+022435	16.6± 1.6	1.21	---	---	---	---	0.012349	
79	042551.3-083337	04:25:51.30	-08:33:37.63	0.11	0.30±0.00	-0.46±0.00	0.4	1.4	0.6	3.2	179.42± 0.71	042551-083336	112.4± 3.4	1.18	---	---	---	---	0.038223	
80	042929.3+263154	04:29:29.35	+26:31:54.75	2.06	-0.19±0.07	-0.41±0.10	---	---	0.2	2.5	0.79± 0.16	042929+263153	17.8± 0.7	1.22	042929+263154	11.57	0.358	0.914	1.275	---
81	042944.3+260245	04:29:44.32	+26:02:45.60	2.86	0.79±0.17	-0.64±0.29	2.	0.50	---	---	0.09± 0.09	042944+260249	85.2± 2.9	1.11	---	---	---	---	---	
82	043344.6+242840	04:33:44.66	+24:28:40.55	1.25	0.76±0.14	0.18±0.13	---	---	0.8	1.5	0.27± 0.08	043344+242840	11.3± 1.0	1.46	---	---	---	---	0.015851	
83	044725.3-032932	04:47:25.36	-03:29:32.94	2.50	-0.44±0.33	-1.00±0.43	---	---	---	---	0.10± 0.17	044725-032935	25.8± 0.9	1.72	---	---	---	---	---	
84	044801.5-202702	04:48: 1.56	-20:27: 2.85	7.87	0.18±0.10	-0.51±0.14	0.4	1.2	0.6	3.5	5.10± 2.40	044801-202718	122.2± 4.0	2.05	---	---	---	---	0.009397	
85	044900.4-061612	04:49: 0.42	-06:16:12.26	1.20	0.28±0.17	-0.33±0.16	0.4	1.8	0.6	2.7	0.25± 0.08	044900-061617	4.2± 0.5	1.67	---	---	---	---	---	
86	044937.3-203922	04:49:37.34	-20:39:22.71	1.96	-0.24±0.19	-0.54±0.30	0.01	1.4	0.2	3.2	0.57± 0.51	044937-203922	26.2± 1.2	0.12	---	---	---	---	---	
87	045006.6+450309	04:50: 6.67	+45:03: 9.48	3.92	0.91±0.06	-0.23±0.10	2.	0.90	---	---	19.53± 3.50	045005+450304	499.6± 19.2	2.24	045006+450309	12.05	0.597	1.181	0.827	---
88	045218.7-030446	04:52:18.75	-03:04:46.70	1.33	0.30±0.22	-0.48±0.24	0.4	1.2	0.8	3.5	0.16± 0.10	045218-030445	36.3± 1.5	2.51	---	---	---	---	0.014766	
89	050047.3-242028	05:00:47.32	-24:20:28.37	1.70	0.19±0.37	0.89±0.15	---	---	---	---	0.05± 0.03	050047-242029	2.3± 0.5	0.68	---	---	---	---	0.055795	
90	050112.8-242301	05:01:12.81	-24:23: 1.57	0.08	0.01±0.01	-0.35±0.02	0.1	2.0	0.2	2.5	8.54± 0.19	050112-242301	135.1± 4.1	1.16	---	---	---	---	0.053890	
91	050114.9-383811	05:01:14.91	-38:38:11.44	1.58	-0.50±0.14	-0.44±0.28	---	---	---	---	0.21± 0.09	050114-383810	10.0± 1.2	1.17	050114-383811	13.88	0.542	0.797	1.730	0.055202
92	051045.0-341735	05:10:45.08	-34:17:35.68	1.79	0.46±0.34	0.59±0.29	---	---	---	---	0.37± 0.14	051044-341737	3.8± 0.5	1.49	---	---	---	---	0.094212	
93	054442.6+090344	05:44:42.65	+09:03:44.87	6.32	0.51±0.13	-0.30±0.12	0.6	1.8	0.8	3.0	0.50± 0.23	054443+090355	8.9± 0.5	2.70	---	---	---	---	0.035905	
94	054519.3-255601	05:45:19.31	-25:56: 1.62	26.24	0.10±0.31	0.01±0.36	---	---	0.1	1.2	1.14± 0.62	054520-255553	6.7± 0.5	0.56	054519-255601	13.64	0.344	0.678	0.948	0.038733
95	060506.4-352217	06:05: 6.47	-35:22:17.70	0.51	0.15±0.07	-0.15±0.07	---	---	0.4	2.0	1.21± 0.19	060506-352217	261.4± 7.9	0.78	---	---	---	---	---	
96	061343.5-234701	06:13:43.55	-23:47: 1.18	1.68	0.55±0.19	0.24±0.15	---	---	0.4	1.0	0.63± 0.33	061343-234709	4.0± 0.6	2.09	---	---	---	---	---	
97	062523.8-372309	06:25:23.80	-37:23:10.00	1.17	-0.11±0.19	-0.06±0.20	---	---	---	---	0.56± 0.18	062523-372320	3.4± 0.5	2.16	---	---	---	---	---	
98	062630.9-352709	06:26:30.93	-35:27: 7.78	1.03	0.06±0.13	-0.38±0.12	0.2	1.8	0.4	2.7	0.50± 0.17	062631-352710	47.6± 2.1	2.19	062630-352707	14.40	0.535	0.764	0.400	---
99	063041.2-282659	06:30:41.26	-28:26:59.61	1.56	0.24±0.25	-0.11±0.24	---	---	0.4	1.7	0.27± 0.11	063041-282700	15.0± 0.6	0.63	---	---	---	---	---	
100	064052.6+092952	06:40:52.66	+09:29:52.62	0.89	-0.69±0.47	0.95±0.09	---	---	---	---	0.31± 0.05	064052+092954	23.6± 1.2	2.00	---	---	---	---	---	
101	065008.6+605044	06:50: 8.68	+60:50:44.77	0.32	-0.07±0.06	-0.01±0.06	---	---	---	---	12.42± 0.58	065008+605044	62.6± 2.3	0.73	065008+605044	10.57	0.497	0.877	0.366	---
102	070833.9-004145	07:08:33.92	-00:41:45.92	2.28	0.25±0.29	0.06±0.27	---	---	0.2	1.2	0.17± 0.12	070833-004146	17.4± 0.7	2.62	---	---	---	---	0.017432	
103	073529.3+433653	07:35:29.33	+43:36:53.31	1.53	0.41±0.25	0.11±0.21	---	---	0.4	1.2	0.14± 0.09	073529+433655	16.7± 0.6	0.93	---	---	---	---	---	
104	073651.4-303747	07:36:51.44	-30:37:47.34	0.74	0.54±0.07	-0.15±0.08	0.6	2.2	0.8	2.5	3.48± 0.57	073651-303744	2.8± 0.6	2.14	073651-303747	14.67	0.121	0.365	1.829	---
105	080646.3+153915	08:06:46.37	+15:39:15.57	1.76	0.84±0.18	-0.10±0.20	1.	1.6	2.	3.2	0.32± 0.18	080646+153915	13.1± 0.9	1.15	---	---	---	---	0.013132	
106	081537.2+515755	08:15:37.23	+51:57:55.89	1.16	0.22±0.16	-0.59±0.17	0.6	1.2	1.	4.0	1.69± 0.71	081537+515757	26.5± 1.2	1.29	---	---	---	---	0.230400	
107	082135.2+010231	08:21:35.19	+01:02:31.24	1.45	0.07±0.04	-0.75±0.05	0.4	0.70	---	---	2.82± 0.46	082135+010232	156.5± 4.7	0.80	082135+010231	13.72	0.342	0.656	0.430	---
108	083607.4-263754	08:36: 7.43	-26:37:54.98	1.67	-0.01±0.23	-0.23±0.24	---	---	0.2	2.0	0.87± 0.38	083607-263757	5.2± 0.5	0.92	---	---	---	---	---	
109	083810.8+245342	08:38:10.90	+24:53:42.74	0.16	0.54±0.02	-0.05±0.02	---	---	0.6	2.0	20.26± 0.66	083810+245343	65.1± 2.0	1.04	083810+245342	11.56	0.579	0.803	1.717	0.018630
110	084748.6+345325	08:47:48.63	+34:53:25.55	7.20	0.21±0.14	-0.43±0.19	0.2	1.6	0.6	3.0	1.99± 0.74	084749+345321	29.8± 1.5	1.71	---	---	---	---	0.007212	
111	090434.7+143538	09:04:34.75	+14:35:38.40	0.53	-0.28±0.05	-0.73±0.06	0.2	0.80	---	---	1.33± 0.13	090434+143538	104.1± 3.7	2.22	---	---	---	---	---	
112	091324.2+525356	09:13:24.23	+52:53:56.18	1.68	-0.18±0.39	0.35±0.34	---	---	---	---	0.33± 0.09	091324+525357	14.9± 0.6	0.54	091324+525356	13.23	0.580	0.694	0.823	---
113	091555.5+441955	09:15:55.53	+44:19:55.57	1.27	-0.45±0.12	-0.73±0.19	0.	0.90	---	---	0.44± 0.14	091555+441957	36.8± 1.2	1.67	091555+441955	12.46	0.524	0.771	1.705	0.039184</

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>R</sub> [mJy]	R <sub>Xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors			R <sub>xi</sub> f<99%	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						K	H – K	J – H		
122	095933.9+684411	09:59:33.96	+68:44:11.64	1.42	0.11±0.14	-0.79±0.16	0.6	0.60	--	--	0.10± 0.06	095933+684407	17.6± 1.0	2.72	--	--	--	--	--	--
123	100045.7+013928	10:00:45.75	+01:39:28.57	4.01	-0.19±0.09	-0.28±0.13	--	--	0.1	2.0	2.18± 1.10	100045+013915	3.8± 0.6	1.62	100045-013928	14.57	0.659	0.814	0.904	0.220600
124	100157.8+554047	10:01:57.80	+55:40:47.92	0.58	0.99±0.03	-0.11±0.04	4.	0.60	--	--	3.97± 0.16	100157+554048	769.4± 27.1	0.70	100157+554047	9.645	0.941	1.329	0.851	--
125	100201.3+021332	10:02:1.42	+02:13:32.39	1.22	0.12±0.03	-0.42±0.03	--	--	2.	3.0	1.19± 0.11	100201+021325	6.3± 0.5	2.68	--	--	--	--	--	0.900000
126	100259.0+022034	10:02:59.08	+02:20:34.68	1.06	-0.33±0.14	-0.44±0.23	--	--	0.1	2.5	0.91± 0.21	100258+022037	9.6± 0.5	1.62	100259+022034	13.44	0.397	0.799	0.344	0.044197
127	100318.7+684359	10:03:18.77	+68:43:59.69	0.86	0.30±0.09	-0.17±0.08	--	--	0.4	2.0	0.69± 0.13	100318+684400	29.0± 1.5	0.53	100318+684359	11.51	0.644	0.953	2.799	--
128	101618.7-333350	10:16:18.71	-33:33:50.06	0.09	-0.34±0.01	-0.21±0.02	--	--	--	--	6.13± 0.10	101618-333350	31.0± 1.6	1.93	101618-333350	11.27	0.535	0.684	1.475	--
129	102901.2+293805	10:29:1.26	+29:38:5.63	2.14	-0.38±0.26	-0.28±0.41	--	--	--	--	0.08± 0.08	102901+293811	2.5± 0.4	1.62	--	--	--	--	--	0.036869
130	103245.7+585136	10:32:45.71	+58:51:36.51	4.19	-0.32±0.22	-0.29±0.36	--	--	0.	2.0	1.98± 0.77	103246+585135	3.5± 0.4	1.72	103245+585136	12.29	0.298	0.455	0.235	--
131	103259.6+575320	10:32:59.70	+57:53:20.34	1.31	0.26±0.18	-0.62±0.26	0.6	1.0	--	--	0.10± 0.06	103300+575324	2.4± 0.5	1.93	103259+575320	13.90	0.498	0.603	1.108	0.123000
132	103952.4+205049	10:39:52.47	+20:50:49.71	1.00	0.30±0.14	-0.22±0.14	0.4	2.4	0.4	2.2	0.60± 0.13	103952+205051	6.8± 0.5	0.83	103952+205049	12.87	0.351	0.706	0.367	0.046132
133	104028.3+091057	10:40:28.35	+09:10:57.67	0.71	-0.14±0.07	-0.73±0.09	0.2	0.80	--	--	0.25± 0.04	104028+091057	68.3± 2.1	0.60	104028+091057	11.52	0.634	0.714	0.664	0.019427
134	104144.3+400227	10:41:44.32	+40:02:27.97	1.07	-0.53±0.13	-0.40±0.30	--	--	--	--	0.19± 0.12	104144+400231	5.6± 0.4	1.45	104144+400227	12.20	0.390	0.664	1.252	--
135	104352.5-011741	10:43:52.60	-01:17:41.22	0.72	0.02±0.08	-0.54±0.09	0.2	1.2	0.6	3.5	1.04± 0.24	104352-011741	26.0± 1.2	0.46	104352-011741	12.34	0.647	0.672	1.397	0.026200
136	104456.3+214025	10:44:56.28	+21:40:25.04	2.09	0.49±0.17	0.04±0.16	--	--	0.4	1.5	0.31± 0.05	104456+214022	3.4± 0.5	2.84	104456+214025	13.46	0.460	0.913	0.078	--
137	105401.4-115326	10:54:1.45	-11:53:26.83	1.93	-0.08±0.21	-0.79±0.29	0.4	0.60	--	--	0.05± 0.03	105401-115326	13.8± 0.6	1.26	105401-115326	14.87	1.024	0.642	0.593	--
138	110250.1-233530	11:02:50.14	-23:35:30.81	3.00	0.29±0.25	-0.57±0.22	0.6	1.0	0.8	4.0	0.16± 0.13	110250-233539	3.7± 0.6	2.83	110250-233530	13.75	0.329	0.640	0.229	0.012145
139	110353.9+405100	11:03:53.93	+40:51:0.54	0.59	-0.52±0.05	-0.42±0.10	--	--	--	--	0.60± 0.08	110353+405059	36.4± 1.2	0.94	--	--	--	--	--	0.034524
140	111548.6-215509	11:15:48.63	-21:55:9.75	0.72	-0.55±0.08	-0.10±0.16	--	--	--	--	0.33± 0.06	111548-215508	5.1± 0.5	2.23	--	--	--	--	--	--
141	111703.3+411216	11:17:3.37	+41:12:16.15	2.64	0.67±0.25	-0.32±0.39	0.8	1.4	1.	3.5	0.25± 0.29	111702+411221	2.9± 0.4	2.26	111703+411216	14.23	0.475	0.613	1.727	--
142	112214.7+241754	11:22:14.72	+24:17:54.06	6.79	-0.34±0.17	-0.68±0.31	0.01	1.0	0.4	4.0	0.44± 0.17	112214+241756	2.5± 0.5	0.33	--	--	--	--	--	--
143	114132.1-122710	11:41:32.17	-12:27:10.54	2.57	-0.18±0.31	-0.74±0.22	0.2	0.70	--	--	0.05± 0.06	114132-122712	5.6± 0.6	1.39	--	--	--	--	--	0.070000
144	114811.9+525107	11:48:11.95	+52:51:7.02	1.72	-0.00±0.18	-0.88±0.18	0.6	0.40	--	--	0.41± 0.23	114812+525110	18.0± 1.3	2.01	114811+525107	13.31	-0.03	1.005	1.182	0.050000
145	115050.9+550836	11:50:50.90	+55:08:36.42	1.23	-0.35±0.14	-0.09±0.18	--	--	--	--	0.19± 0.05	115051+550831	3.9± 0.5	1.40	--	--	--	--	--	0.019113
146	115107.0+550443	11:51:7.03	+55:04:43.15	0.21	-0.13±0.03	0.01±0.03	--	--	--	--	4.16± 0.14	115106+550445	8.3± 0.5	2.61	--	--	--	--	--	--
147	115128.8-284349	11:51:28.88	-28:43:49.87	0.50	0.36±0.06	-0.37±0.07	0.4	1.6	0.6	3.0	0.88± 0.11	115128-284350	10.7± 0.6	0.49	--	--	--	--	--	--
148	115732.1+435716	11:57:32.14	+43:57:16.98	1.33	-0.07±0.15	-0.42±0.22	0.1	1.8	0.2	2.7	0.11± 0.05	115732+435715	7.1± 0.5	0.82	115732+435716	13.96	0.486	0.631	0.443	0.069600
149	120152.4-185206	12:01:52.50	-18:52:6.04	1.02	0.36±0.12	-0.87±0.12	1.	0.40	--	--	0.07± 0.02	120152-185205	257.4± 8.6	2.14	--	--	--	--	--	--
150	121357.9+140400	12:13:57.89	+14:04:2.07	2.09	-0.41±0.07	-0.62±0.13	--	--	0.2	3.5	0.11± 0.02	121357+140409	4.0± 0.5	1.23	121357+140402	13.86	0.693	0.530	0.901	0.152000
151	121845.7+142645	12:18:45.70	+14:26:45.48	0.92	0.43±0.16	-0.05±0.13	--	--	0.4	1.7	0.27± 0.06	121845+142644	27.3± 1.5	2.59	--	--	--	--	--	--
152	121846.2+471428	12:18:46.29	+47:14:26.91	1.44	0.48±0.07	-0.31±0.07	0.6	1.6	0.8	3.0	0.21± 0.03	121846+471426	16.9± 0.6	0.77	--	--	--	--	--	--
153	121901.3+471526	12:19:1.42	+47:15:26.37	1.64	-0.77±0.12	-0.96±0.27	0.1	0.30	--	--	0.07± 0.03	121901+471522	5.2± 0.4	1.47	121901+471526	14.78	0.483	0.374	0.883	--
154	122542.8+003421	12:25:42.84	+00:34:21.36	0.75	-0.26±0.09	-0.42±0.11	0.1	1.0	0.4	4.0	0.41± 0.07	122542+003423	13.1± 0.6	1.20	122542+003421	11.90	0.561	0.723	0.785	0.007142
155	122557.9+333144	12:25:57.90	+33:31:44.16	2.02	-0.87±0.08	-1.00±0.13	--	--	--	--	0.07± 0.02	122557+333143	7.3± 1.3	2.62	--	--	--	--	--	0.000981
156	122745.6+130031	12:27:45.61	+13:00:31.87	0.19	-0.31±0.02	-0.67±0.03	0.01	1.0	0.4	3.7	3.29± 0.19	122745+130031	63.3± 2.7	2.27	122745+130031	9.789	-0.14	1.152	1.893	--
157	122942.1+080011	12:29:42.19	+08:00:11.22	1.74	-0.18±0.17	-0.31±0.16	0.	2.4	0.1	2.2	0.42± 0.07	122941+080019	14.7± 1.3	2.80	--	--	--	--	--	0.003341
158	123055.7+414704	12:30:55.75	+41:47:4.29	1.90	-0.69±0.17	-0.14±0.25	--	--	--	--	0.10± 0.09	123055+414705	14.1± 0.6	2.34	123055+414704	14.05	0.660	0.666	1.732	--
159	123144.3+413729	12:31:44.35	+41:37:29.38	3.62	-0.05±0.08	-0.51±0.11	0.2	1.6	0.6	3.2	2.09± 0.88	123143+413737	39.1± 1.5	2.82	123144+413729	14.45	0.773	0.710	1.902	0.175740
160	123252.9+640849	12:32:52.93	+64:08:49.95	1.29	-0.57±0.14	-0.61±0.37	--	--	0.01	3.2	0.11± 0.11	123252+640849	3.3± 0.4	2.45	123252+640849	12.80	0.394	0.611	1.318	--
161	123302.1+000016	12:33:2.18	+00:00:16.07	3.14	-0.11±0.15	-0.24±0.20	--	--	0.1	2.0	0.13± 0.06	123302+000013	3.1± 0.4	1.31	123302+000016	14.71	0.594	0.867	1.457	0.084230
162	123353.5+373252	12:33:53.59	+37:32:52.88	1.92	-0.18±0.22	-0.90±0.32	0.4	0.40	--	--	0.15± 0.15	123353+373249	4.7± 0.4	2.80	123353+373252	14.25	0.612	0.416	0.767	--
163	123447.5+474536	12:34:47.59	+47:45:36.53	10.55	0.08±0.17	-1.00±0.12	--	--	--	--	4.67± 3.62	123446+474532	17.4± 0.7	0.80	123447+474536	12.03	0.276	0.629	0.874	0.031128
164	123854.6-271827	12:38:54.62	-27:18:27.97	0.12	0.18±0.07	0.40±0.04	--	--	--	--	44.38± 8.00	123854-271826	73.7± 2.3	2.79	123854-271827	11.33	0.822	0.936	1.377	0.025208
165	124001.3+474705	12:40:1.34	+47:47:5.50	1.71	-0.85±0.11	-0.21±0.61	--	--	--	--	0.51± 0.25	124000+474703	3.4± 0.4	2.59	124001+474705	12.44	0.321	0.677	1.920	--
166	124119.3+331111	12:41:19.18	+33:11:15.06	1.84	-0.16±0.10	-0.18±0.13	--	--	0.01	1.7	0.20± 0.06	124119+331109	4.0± 0.4	1.67	124119+331111	14.11	0.726	0.783	1.337	--
167	124454.0-002636	12:44:54.03	-00:26:36.32	2.88	-0.13±0.06	-0.49±0.12	0.1	1.8	0.4	3.0	0.52± 0.07	124454-002640	9.8± 0.5	2.50	124454-002636	15.04	0.414	0.612	2.702	0.231000
168	124748.1+340513	12:47:48.17	+34:05:13.30	1.75	-0.20±0.32	-1.00±0.47	--	--	--	--	0.11± 0.05	124747+340513	399.7± 12.0	1.60	--	--	--	--	--	0.409000
169	125019.0-233357	12:50:19.02	-23:33:57.17	0.65	0.01±0.08	-0.62±0.10	0.2	1.0	0.6	4.0	0.33± 0.07	125019-233352	3.4± 0.5	1.37	125019-233357	14.49	0.783	0.317	1.444	0.048000
170	125725.1+272416	12:57:25.15	+27:24:16.64	1.06	-0.33±0.13	-0.30±0.20	--	--	--	--	0.33± 0.10	125724+272421	2.5± 0.5	2.73	125725+272416	13.83	0.094	0.758	1.129	0.016200
171	125744.9-294558	12:57:44.92	-29:45:58.10	0.35	-0.27±0.04	-0.25±0.06	--	--	0.01	2.0	2.24± 0.15	125744-294558	38.5±							

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>R</sub> [mJy]	R <sub>Xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS Mag & Colors		R <sub>xi</sub> f <sub>&lt;99%</sub>	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	NH	KT	NH	Γ						H – K	J – H			
183	130417.0-303134	13:04:17.07	-30:31:34.77	0.33	-0.05±0.04	-0.46±0.05	0.1	1.6	0.4	3.0	1.48± 0.10	130417-303133	39.8± 1.6	2.78	130417-303134	10.47	0.570	0.723	1.409	0.010757
184	130916.0+292201	13:09:16.07	+29:22: 1.66	0.77	-0.54±0.08	-0.64±0.19	--	--	0.1	3.5	0.14± 0.05	130916+292202	5.0± 0.4	2.27	---	---	---	---	---	0.021078
185	131121.7+273031	13:11:21.70	+27:30:31.40	0.74	-0.13±0.12	0.05±0.12	--	--	--	--	0.14± 0.03	131121+273030	2.6± 0.5	1.72	131121+273031	14.35	0.311	0.811	1.340	---
186	131346.6-162007	13:13:46.63	-16:20: 7.44	0.47	0.16±0.08	-0.28±0.08	0.2	2.2	0.4	2.5	0.23± 0.04	131346-162006	217.3± 6.5	1.18	131346-162007	15.45	0.825	0.611	0.404	---
187	132035.3+340821	13:20:35.34	+34:08:21.54	0.29	0.19±0.04	-0.37±0.04	0.2	1.8	0.4	2.7	1.54± 0.09	132035+340822	104.4± 3.2	1.77	132035+340821	11.85	0.824	1.085	1.120	0.023079
188	132525.5+301824	13:25:25.54	+30:18:24.50	0.87	0.08±0.11	-0.12±0.11	--	--	0.4	1.7	0.21± 0.05	132525+301823	18.7± 0.7	0.51	---	---	---	---	0.500000	
189	132952.5+471144	13:29:52.58	+47:11:44.63	0.18	-0.55±0.01	-0.56±0.01	--	--	0.01	3.0	19.28± 0.28	132952+471145	427.1± 13.4	2.27	---	---	---	---	---	---
190	133051.6-014642	13:30:51.64	-01:46:42.43	1.39	-0.98±0.07	0.38±0.47	--	--	--	--	0.05± 0.02	133051-014645	8.9± 0.5	1.55	133051-014642	13.16	0.552	0.627	0.697	0.036746
191	133059.1+581452	13:30:59.17	+58:14:52.11	1.75	-0.05±0.19	-0.61±0.26	0.4	1.4	1.1	3.7	2.52± 0.97	133058+581455	49.7± 1.5	2.36	133059+581452	15.12	0.533	0.729	0.862	0.031130
192	133224.3+110623	13:32:24.36	+11:06:23.29	1.87	-0.30±0.21	-0.82±0.23	0.2	0.60	--	--	0.78± 0.49	133224+110620	35.2± 1.1	2.57	133224+110623	12.32	0.575	0.809	2.652	0.032221
193	133329.1+375559	13:33:29.13	+37:55:58.02	2.09	0.10±0.16	-0.65±0.19	0.8	1.2	--	--	0.16± 0.09	133328+375600	153.0± 5.4	1.42	---	---	---	---	0.390000	
194	133340.8-311957	13:33:40.83	-31:19:57.52	1.75	-0.19±0.20	-0.90±0.25	0.4	0.40	--	--	0.07± 0.06	133340-312006	4.7± 0.5	2.23	133340-311957	12.70	0.311	0.396	2.373	---
195	133438.5+380626	13:34:38.49	+38:06:26.79	0.67	-0.07±0.05	-0.40±0.06	0.1	2.2	0.4	2.7	0.33± 0.05	133438+380629	13.5± 0.6	1.78	133438+380626	14.97	0.370	0.793	0.445	0.230000
196	133439.5-234052	13:34:39.53	-23:40:52.59	2.95	0.19±0.29	-0.05±0.27	--	--	0.2	1.5	0.52± 0.22	133438-234057	3.7± 0.5	2.58	133439-234052	15.30	0.463	1.065	2.239	0.008596
197	133446.6-341842	13:34:46.71	-34:18:44.15	1.43	-0.09±0.06	-0.42±0.08	0.1	1.8	0.2	2.7	0.23± 0.06	133446-341848	4.9± 0.5	2.02	133446-341844	12.44	0.558	0.741	1.172	0.013022
198	133742.3+275948	13:37:42.35	+27:59:48.61	1.93	-0.34±0.21	-0.79±0.22	0.2	0.70	--	--	0.10± 0.09	133742+275953	3.7± 0.5	1.68	133742+275948	14.09	0.441	0.546	2.633	0.063631
199	133917.8+280204	13:39:17.84	+28:02: 4.95	2.11	-0.08±0.30	-0.23±0.39	--	--	0.1	2.0	0.12± 0.11	133917+280209	2.8± 0.5	1.43	133917+280204	13.66	0.294	0.759	2.442	0.037034
200	134727.6-114040	13:47:27.67	-11:40:40.80	0.63	-0.42±0.07	-0.82±0.10	0.2	0.60	--	--	0.15± 0.02	134727-114043	5.1± 0.6	2.36	134727-114040	10.96	0.444	0.698	2.209	---
201	135326.7+401659	13:53:26.76	+40:16:59.32	0.34	-0.46±0.03	-0.68±0.04	--	--	0.2	3.7	2.40± 0.13	135326+401658	40.5± 1.3	2.21	135326+401659	10.04	0.351	0.588	1.200	---
202	140118.3+025950	14:01:18.32	+02:59:50.33	2.08	-0.08±0.26	-0.39±0.36	0.01	2.0	0.2	2.7	0.11± 0.06	140118+025953	3.1± 0.5	0.30	140118+025950	13.56	0.505	0.710	0.792	---
203	140227.6+541952	14:02:27.68	+54:19:52.50	3.94	-0.88±0.12	-1.00±0.84	--	--	--	--	0.07± 0.05	140227+542000	3.6± 0.5	0.99	---	---	---	---	---	---
204	140341.1+541903	14:03:41.16	+54:19: 3.88	0.70	-0.48±0.03	-0.84±0.05	0.1	0.60	--	--	0.20± 0.01	140341+541905	24.6± 1.2	0.92	140341+541903	13.73	0.782	0.329	2.508	---
205	140353.6+542157	14:03:54.14	+54:21:49.29	6.76	-0.41±0.03	-0.61±0.04	--	--	0.2	3.5	0.59± 0.04	140352+542152	21.5± 1.8	2.68	---	---	---	---	---	---
206	140429.1+542352	14:04:29.20	+54:23:51.79	0.53	-0.68±0.03	-0.89±0.06	--	--	--	--	0.48± 0.03	140429+542348	14.8± 0.9	2.57	---	---	---	---	---	---
207	140715.5-270928	14:07:15.54	-27:09:28.87	0.15	-0.11±0.02	-0.48±0.02	0.1	1.6	0.4	3.0	4.51± 0.16	140715-270929	101.4± 3.1	1.90	140715-270928	11.69	0.457	0.627	2.117	0.024210
208	141340.0+435159	14:13:40.07	+43:51:59.04	1.76	-0.52±0.19	0.34±0.27	--	--	--	--	0.07± 0.05	141339+435158	3.6± 0.4	1.27	141340+435159	13.23	0.430	0.579	0.567	0.035000
209	141443.7-001651	14:14:43.78	-00:16:51.01	3.34	-0.30±0.16	-0.08±0.17	--	--	--	--	0.09± 0.08	141443-001702	2.1± 0.4	2.16	141443+001651	13.50	0.547	0.747	1.854	---
210	141622.7+521916	14:16:22.80	+52:19:16.86	0.27	0.12±0.03	-0.34±0.03	0.2	2.0	0.4	2.5	0.98± 0.06	141622+521916	76.9± 2.3	1.29	---	---	---	---	---	---
211	141628.5+522709	14:16:28.38	+52:27: 7.13	2.23	0.02±0.10	-0.15±0.12	--	--	0.2	1.7	0.32± 0.09	141628+522709	118.5± 4.4	1.68	---	---	---	---	---	---
212	141935.7+064741	14:19:35.72	+06:47:41.21	0.52	-0.08±0.04	-0.66±0.06	0.2	0.90	--	--	1.12± 0.11	141935+064741	73.1± 2.6	1.27	141935+064741	14.25	0.391	0.675	2.782	---
213	143525.2+002003	14:35:25.05	+00:20: 3.89	1.86	0.08±0.17	-0.27±0.22	0.2	2.4	0.2	2.2	0.57± 0.34	143525+002007	10.9± 0.5	2.37	143525+002003	13.18	0.561	0.724	2.024	0.034467
214	144930.7-101032	14:49:30.80	-10:10:32.72	0.62	0.06±0.09	-0.27±0.09	0.1	2.4	0.2	2.2	0.34± 0.06	144930-101020	16.1± 2.3	2.47	---	---	---	---	---	---
215	150121.1+013813	15:01:21.15	+01:38:13.50	0.29	0.22±0.05	-0.06±0.04	--	--	0.2	1.7	1.88± 0.11	150121+013813	28.8± 1.0	2.62	150121+013813	11.79	0.598	0.728	0.428	0.035463
216	150422.1+474112	15:04:22.20	+47:41:12.94	1.30	-0.69±0.13	-0.89±0.40	--	--	--	--	0.10± 0.04	150422+474110	12.2± 0.9	1.12	150422+474112	13.08	0.464	0.939	0.640	---
217	151550.1+562040	15:15:50.16	+56:20:40.89	2.14	0.13±0.07	-0.14±0.07	--	--	0.2	1.7	1.45± 0.21	151549+562042	52.9± 2.8	1.74	---	---	---	---	---	---
218	153453.8+232828	15:34:53.71	+23:28:27.56	1.94	-0.20±0.03	-0.62±0.04	0.1	1.2	0.4	3.7	2.33± 0.19	153453+232821	4.4± 0.4	1.83	---	---	---	---	---	0.088000
219	160534.5+323941	16:05:34.50	+32:39:41.82	1.56	0.02±0.03	-0.40±0.03	0.1	1.8	0.4	2.7	1.00± 0.08	160534+323938	8.1± 0.5	2.32	160534+323941	14.65	0.412	0.591	1.158	---
220	160536.7+174808	16:05:36.76	+17:48: 7.93	0.98	-0.31±0.08	-0.49±0.11	--	--	0.1	2.7	0.51± 0.09	160536+174804	4.2± 0.4	1.06	160536+174807	12.13	0.390	0.726	0.725	0.034170
221	160636.8+272500	16:06:36.86	+27:25: 0.87	2.17	-0.52±0.25	-1.00±0.49	--	--	--	--	0.41± 0.43	160637+272457	9.2± 0.5	1.80	160636+272500	13.26	0.664	0.813	1.252	0.121199
222	162806.3+780443	16:28: 6.40	+78:04:43.34	2.77	0.69±0.25	-0.11±0.27	0.8	2.2	1.1	2.5	0.27± 0.27	162807+780438	4.8± 0.5	1.37	---	---	---	---	---	---
223	163239.1+781154	16:32:39.31	+78:11:54.21	0.96	-0.25±0.04	-0.86±0.04	0.4	0.50	--	--	2.41± 0.16	163239+781152	79.9± 3.1	1.10	163239+781154	10.84	0.389	0.779	0.902	0.004556
224	163615.5+661425	16:36:15.57	+66:14:25.36	1.65	-0.64±0.28	0.29±0.41	--	--	--	--	0.24± 0.11	163615+661423	12.8± 0.5	0.90	163615+661425	13.06	0.462	0.691	0.529	0.024130
225	164203.4+362416	16:42: 3.34	+36:24:17.55	1.63	0.23±0.10	-0.23±0.10	0.2	2.4	0.4	2.2	0.47± 0.10	164203+362348	8.4± 1.5	2.51	---	---	---	---	---	---
226	165258.9+022403	16:52:58.89	+02:24: 3.72	0.31	0.14±0.01	-0.40±0.01	0.2	1.8	0.4	3.0	26.30± 0.25	165258+022403	426.3± 15.0	2.64	165258+022403	10.57	0.630	0.739	0.098	0.024900
227	170024.3+593222	17:00:24.36	+59:32:22.39	3.04	0.36±0.27	-0.11±0.35	--	--	0.4	2.0	0.54± 0.36	170025+593220	2.5± 0.4	1.85	170024+593222	13.73	0.284	0.881	2.143	---
228	170041.9+641258	17:00:41.91	+64:12:58.76	0.96	0.09±0.04	-0.37±0.05	0.2	1.8	0.4	2.7	9.46± 0.79	170042+641259	5.4± 0.5	1.18	170041+641258	14.53	0.753	0.787	0.740	---
229	171343.0+640502	17:13:43.07	+64:05: 2.96	2.14	-0.97±0.14	0.61±0.74	--	--	--	--	0.19± 0.15	171343+640501	2.3± 0.4	1.49	171343+640502	15.18	0.521	0.540	1.750	0.090206
230	174145.0+650422	17:41:45.03	+65:04:22.27	6.46	0.37±0.17	-0.53±0.23	0.6	1.0	1.1	4.0	3.72± 1.80	174145+650414	21.8± 0.8	1.17	---	---	---	---	---	---
231	201451.6-243021	20:14:51.64	-24:30:21.17	0.08	0.27±0.00	-0.32±0.00	0.2	2.0	0.6	2.7	201.48± 0.96	201451-243022	229.2± 6.9	2.04	201451-243021	14.07	0.505	0.858	1.754	---
232	203425.0+601041	20:34:24.94	+60:10:40.43	2.49																

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>Xr</sub> f<99%	2MASS Mag & Colors			R <sub>Xi</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	NH	KT	NH	$\Gamma$					K	H – K	J – H			
244	224231.0+293229	22:42:31.32	+29:32:28.43	2.81	-0.14±0.11	-0.33±0.14	0.01	2.2	0.2	2.2	0.11± 0.05	224231+293238	7.0± 0.4	2.86	224231+293228	13.28	0.455	0.812	2.235	—
245	224238.6+293020	22:42:38.65	+29:30:20.83	1.02	0.26±0.10	-0.54±0.12	0.4	1.0	0.8	3.7	0.19± 0.08	224238+293023	13.4± 0.6	2.39	224238+293020	12.33	0.380	0.860	0.178	0.024
246	225149.3-175224	22:51:49.33	-17:52:24.27	0.67	-0.42±0.08	-0.44±0.13	—	—	0.01	2.5	0.18± 0.03	225149-175225	5.9± 0.5	1.90	225149-175224	13.74	0.620	0.782	1.133	0.080
247	225801.9-021945	22:58: 1.91	-02:19:45.16	0.16	0.01±0.02	-0.32±0.03	0.1	2.2	0.4	2.5	45.74± 1.54	225801-021938	3.2± 0.6	2.46	225801-021945	13.05	0.756	0.879	1.253	—
248	232009.4+425800	23:20: 9.47	+42:58: 0.72	1.89	-0.38±0.22	-0.32±0.38	—	—	—	—	0.09± 0.07	232008+425800	4.2± 0.4	2.97	232009+425800	12.69	0.462	0.816	0.987	—
249	234402.0+003059	23:44: 2.05	+00:30:59.50	0.45	-0.15±0.05	-0.61±0.07	0.1	1.2	0.4	3.7	1.07± 0.16	234402+003059	36.2± 1.2	0.93	234402+003059	11.55	0.581	0.688	0.825	0.022
<b>Seyfert I</b>																				
1	000122.6-250020	00:01:22.67	-25:00:20.01	0.44	0.17±0.07	-0.32±0.07	—	—	2.	2.5	3.50± 0.52	000122-250018	69.2± 2.1	1.71	—	—	—	—	0.964	
2	000619.5+201210	00:06:19.51	+20:12:10.10	0.01	-0.10±0.00	-0.48±0.00	0.1	1.6	0.4	3.0	505.44± 0.55	000619+201210	7.3± 0.5	2.19	000619+201210	10.59	1.139	0.884	1.623	0.025
3	003413.6-212618	00:34:13.67	-21:26:18.57	0.13	-0.09±0.02	-0.39±0.02	0.01	2.0	0.2	2.5	8.01± 0.22	003413-212616	42.6± 1.9	2.12	003413-212618	11.47	0.743	0.669	1.360	0.026
4	004153.4+402117	00:41:53.45	+40:21:17.58	0.13	-0.18±0.02	-0.57±0.02	0.1	1.2	0.4	3.5	14.29± 0.36	004153+402116	16.4± 0.6	0.93	004153+402117	12.58	0.826	0.617	0.816	0.071
5	012531.4+320811	01:25:31.41	+32:08:11.35	0.08	0.24±0.01	-0.28±0.01	0.2	2.2	0.4	2.5	21.66± 0.34	012531+320806	5.4± 0.5	3.00	012531+320811	11.63	0.271	0.672	2.678	0.015
6	015950.2+002341	01:59:50.23	+00:23:41.23	0.10	-0.12±0.01	-0.47±0.02	0.1	1.8	0.4	3.0	28.23± 0.50	015950+002338	26.2± 0.9	2.77	015950+002341	12.01	1.074	0.978	1.464	0.162
7	020014.9+312546	02:00:14.90	+31:25:46.45	0.35	-0.35±0.01	-0.82±0.01	0.2	0.60	—	—	21.53± 0.32	020014+312545	7.0± 0.5	0.72	020014+312546	10.44	0.284	0.798	1.123	0.016
8	021433.5-004600	02:14:33.58	-00:46: 0.23	0.02	0.18±0.00	-0.30±0.00	0.2	2.2	0.4	2.5	129.44± 0.56	021433-004600	16.2± 0.6	2.27	021433+004600	10.57	1.070	0.769	0.505	0.026
9	023005.4-085953	02:30: 5.47	-08:59:53.45	0.09	-0.16±0.01	-0.47±0.01	0.01	1.6	0.2	3.0	238.41± 3.47	023005-085944	2.4± 0.5	1.71	023005-085953	10.83	0.779	0.851	0.701	0.016
10	031948.1+413042	03:19:48.16	+41:30:42.40	0.02	0.26±0.00	-0.20±0.00	0.2	2.4	0.4	2.2	165.02± 0.63	031948+413042	2829.2± 684.9	0.42	031948+413042	11.29	0.679	0.791	0.742	0.017
11	032511.5-061051	03:25:11.55	-06:10:51.41	0.96	-0.30±0.10	-0.61±0.14	0.	1.2	0.2	3.5	0.71± 0.17	032511-061050	24.8± 0.9	2.08	032511-061051	12.60	0.554	0.714	0.289	0.033
12	032525.3-060838	03:25:25.37	-06:08:38.39	0.11	0.06±0.01	-0.33±0.01	0.2	2.0	0.4	2.5	26.88± 0.51	032525-060837	30.2± 1.0	2.56	032525-060838	11.54	0.569	0.750	1.058	0.034
13	033210.9-274415	03:32:10.97	-27:44:14.85	0.57	-0.00±0.03	-0.36±0.03	—	—	2.	2.5	0.18± 0.01	033211-274414	3.6± 0.6	2.98	—	—	—	—	1.615	
14	033336.3-360825	03:33:36.42	-36:08:26.26	0.05	-0.21±0.00	0.39±0.00	—	—	—	—	109.01± 0.35	033336-360825	375.9± 13.0	1.43	033336-360825	9.229	1.011	1.104	1.988	0.005
15	043308.9+053511	04:33: 9.00	+05:35:12.92	2.42	0.28±0.06	-0.39±0.07	0.4	1.6	0.6	3.0	0.86± 0.16	043309+053521	6.4± 0.5	2.55	—	—	—	—	0.033	
16	043400.0-083444	04:34: 0.06	-08:34:44.35	0.14	0.12±0.02	-0.38±0.02	0.2	2.0	0.6	2.7	5.44± 0.17	043400-083445	137.1± 4.9	1.94	043400-083444	10.34	0.665	0.865	2.168	0.155
17	044115.8+085035	04:41:15.83	+08:50:35.11	2.43	0.90±0.23	-0.08±0.26	2.	1.4	2.	3.5	0.79± 0.65	044115+085034	32.2± 1.0	1.10	—	—	—	—	0.083	
18	045112.2-035453	04:51:12.28	-03:54:52.69	0.63	0.23±0.07	-0.20±0.07	0.2	2.6	0.4	2.2	3.19± 0.40	045112-035452	106.1± 3.2	0.64	—	—	—	—	0.013	
19	051556.9+460534	05:15:56.94	+46:05:34.85	1.83	0.91±0.23	-0.35±0.21	2.	0.80	—	—	0.19± 0.12	051556+460534	3.5± 0.5	0.13	—	—	—	—	0.033	
20	053904.7-284325	05:39: 4.71	-28:43:25.01	1.27	0.21±0.16	-0.42±0.17	—	—	4.	3.0	0.10± 0.06	053904-284329	3.0± 0.5	1.09	—	—	—	—	1.650	
21	055426.0+200640	05:54:26.05	+20:06:40.92	3.41	1.00±0.79	-0.02±0.52	8.	0.30	—	—	4.38± 2.98	055425+200639	39.0± 1.6	1.66	055426+200640	11.53	0.157	0.462	1.640	0.020
22	055741.6+535946	05:57:41.64	+53:59:46.62	1.28	0.77±0.16	-0.29±0.17	1.	1.2	2.	3.7	0.78± 0.21	055741+535946	8.5± 0.5	1.50	—	—	—	—	0.033	
23	065046.5+250259	06:50:46.59	+25:02:59.64	0.09	0.12±0.01	-0.55±0.01	0.2	1.2	0.6	3.7	165.96± 2.56	065046+250259	96.2± 2.9	2.15	065046+250259	12.20	0.625	0.670	1.288	0.018
24	083759.7+483608	08:37:59.63	+48:36: 6.36	2.94	-0.14±0.20	-0.43±0.29	0.01	1.8	0.2	2.7	0.14± 0.07	083759+483607	48.9± 1.8	0.43	—	—	—	—	0.028	
25	084132.3+704757	08:41:32.34	+70:47:57.81	0.50	-0.21±0.07	-0.21±0.09	—	—	0.	1.7	0.81± 0.11	084132+704757	96.5± 3.9	1.74	084132+704757	15.00	0.881	0.632	1.554	0.010
26	091345.5+405629	09:13:45.52	+40:56:29.03	0.16	0.10±0.01	-0.36±0.01	—	—	0.8	2.5	37.26± 0.53	091345+405630	15.9± 0.9	2.86	091345+405629	14.77	1.097	0.955	2.410	0.442
27	091826.0+161819	09:18:26.02	+16:18:19.94	0.06	0.25±0.01	0.17±0.01	—	—	0.1	0.75	147.16± 1.50	091826+161821	6.1± 0.5	1.14	091826+161819	10.70	1.028	0.983	1.086	0.029
28	094541.9-141934	09:45:41.97	-14:19:34.58	0.01	0.69±0.00	-0.05±0.00	0.8	2.4	1.	2.2	1084.17± 2.08	094542-141934	226.2± 6.8	1.23	094541-141934	10.41	0.797	0.886	1.021	0.007
29	095219.1-013643	09:52:19.14	-01:36:44.00	0.24	-0.47±0.03	-0.42±0.05	—	—	—	—	21.83± 1.25	095219-013643	62.2± 1.9	1.14	095219-013643	9.72	1.217	1.250	1.526	0.019
30	102330.5+195153	10:23:30.58	+19:51:53.87	0.04	0.20±0.01	0.45±0.01	—	—	—	—	110.88± 0.61	102330+195154	97.5± 3.5	1.69	102330+195153	9.923	0.605	0.737	1.194	0.003
31	103352.6+004403	10:33:52.61	+00:44: 3.81	0.46	0.09±0.16	0.71±0.06	—	—	—	—	7.26± 0.44	103352+004403	19.2± 1.0	0.41	103352+004403	13.24	0.978	1.094	0.561	0.130
32	103438.6+393828	10:34:38.60	+39:38:28.65	0.04	-0.52±0.01	-0.63±0.01	—	—	0.1	3.5	96.16± 0.54	103438+393827	25.4± 0.9	1.42	103438+393828	12.64	0.769	0.705	1.429	0.043
33	105144.3+353930	10:51:44.36	+35:39:30.76	0.17	0.73±0.02	-0.08±0.02	1.	2.4	2.	2.5	26.84± 0.82	105144+353931	11.6± 0.5	0.39	105144+353930	13.55	1.018	1.062	1.275	0.158
34	112408.6+061253	11:24: 8.68	+06:12:53.12	0.08	0.08±0.01	-0.36±0.01	0.2	2.0	0.4	2.7	49.88± 0.75	112408+061254	14.8± 0.6	2.59	112408+061253	12.30	0.517	0.843	0.822	0.036
35	113021.3+005823	11:30:21.35	+00:58:23.63	0.31	0.49±0.06	0.29±0.04	—	—	0.4	0.75	6.93± 0.39	113021+005825	666.6± 23.6	2.69	113021+005823	13.80	0.765	0.685	2.804	0.132
36	113942.5+315433	11:39:42.51	+31:54:33.64	0.21	0.75±0.04	0.49±0.03	—	—	0.6	0.25	89.18± 3.03	113942+315433	18.6± 0.7	2.89	113942+315433	10.83	0.679	0.937	0.768	0.010
37	114540.4-182714	11:45:40.43	-18:27:14.74	0.02	0.04±0.00	-0.38±0.00	0.2	1.8	0.4	2.7	595.27± 1.75	114540-182713	9.5± 0.6	2.88	114540-182714	12.00	0.767	0.702	1.210	0.032
38	120326.4+443635	12:03:26.48	+44:36:35.06	1.11	0.02±0.15	-0.28±0.17	0.1	2.4	0.2	2.2	0.16± 0.05	120326+443636	21.6± 0.8	1.02	—	—	—	—	—	
39	121217.2+131218	12:12:17.22	+13:12:18.27	0.27	-0.07±0.04	-0.30±0.04	0.01	2.4	0.2	2.2	1.36± 0.08	121217+131223	5.6± 0.4	2.44	121217+131218	11.83	0.263	0.572	1.898	0.007
40	123939.2-052038	12:39:39.29	-05:20:38.83	0.04	0.10±0.01	-0.31±0.01	0.2	2.2	0.4	2.5	605.24± 5.02	123939-052035	4.4± 0.5	0.76	123939-052038	10.03	1.035	0.665	2.505	0.009
41	124252.3+131526	12:42:52.39	+13:15:26.58	0.11	0.03±0.02	-0.33±0.02	0.1	2.2	0.4	2.5	10.48± 0.27	124252+131542	7.5± 1.6	2.16	124252+131526	11.29	0.610	0.689	0.753	0.003
42	125808.5+015142	12:58: 8.53	+01:51:42.36	1.68	0.24±0.23	-0.61±0.22	0.4	0.90	—	—	0.22± 0.11	125808+015150	6.4± 0.6	1.88	125808+015142	13.83	0.679	0.674	1.777	0.070
43																				

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS K	SS Mag & Colors			Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ							H – K	J – H	R <sub>xi</sub> f<99%	
55	151159.8-211901	15:11:59.82	-21:19:1.74	0.04	0.39±0.01	-0.24±0.01	0.4	2.2	0.6	2.5	143.98±1.21	151159-211900	46.9±1.5	2.35	151159-211901	10.97	0.936	0.872	0.983	0.04437
56	153159.1+242047	15:31:59.11	+24:20:47.14	0.14	0.02±0.02	-0.39±0.02	0.2	2.6	0.8	2.7	17.16±0.57	153159+242045	9.4±0.5	1.09	153159+242047	14.60	0.437	0.389	0.348	0.63100
57	153228.8+045358	15:32:28.82	+04:53:58.28	0.11	0.05±0.01	-0.38±0.01	0.2	2.2	0.4	2.7	23.40±0.57	153228+045358	11.9±0.5	2.17	153228+045358	14.50	0.937	0.792	0.752	0.21900
58	154948.9+212537	15:49:48.94	+21:25:37.08	1.41	0.12±0.25	-0.11±0.24	--	--	0.8	1.7	0.09±0.03	154948+212539	2522.0±75.7	1.33	--	--	--	--	--	1.2614
59	170330.2+454047	17:03:30.29	+45:40:46.99	0.03	0.12±0.00	-0.45±0.00	0.2	1.6	0.4	3.0	182.43±0.88	170330+454047	121.4±3.7	0.67	170330+454046	11.68	0.905	0.985	1.022	0.06069
60	172320.8+341758	17:23:20.86	+34:17:58.36	0.09	0.15±0.01	-0.32±0.01	0.2	2.4	0.6	2.5	188.33±2.04	172320+341757	518.3±19.7	0.92	172320+341758	12.88	0.933	0.597	0.892	0.20599
61	213202.1-334254	21:32:2.17	-33:42:54.09	0.03	0.21±0.00	-0.25±0.00	0.2	2.4	0.4	2.2	134.29±0.87	213202-334318	3.2±0.7	2.42	213202-334254	12.00	0.865	0.745	1.477	0.02972
62	215151.0-194605	21:51:51.05	-19:46:5.12	0.14	0.18±0.02	-0.10±0.02	--	--	0.6	1.7	9.28±0.30	215151-194606	1971.6±59.2	2.16	215151-194605	14.93	0.854	1.032	1.665	0.42400
63	222113.5-280420	22:21:13.60	-28:04:20.75	0.50	-0.08±0.06	-0.35±0.07	--	--	0.4	2.5	2.73±0.37	222113-280420	70.8±2.2	1.02	222113-280420	15.44	0.540	0.823	0.171	0.33000
64	223656.0-221315	22:36:56.04	-22:13:15.00	0.06	0.02±0.01	-0.34±0.01	0.1	2.0	0.4	2.5	107.78±1.03	223656-221316	6.8±0.5	0.84	--	--	--	--	0.03325	
65	224016.9+080312	22:40:16.96	+08:03:12.85	0.05	0.07±0.01	-0.36±0.01	0.2	2.0	0.4	2.5	174.00±1.87	224017+080315	15.1±0.6	1.80	224016+080312	11.54	0.691	0.733	1.646	0.02500
66	224239.3+294331	22:42:39.38	+29:43:32.87	0.02	-0.12±0.00	-0.56±0.00	0.1	1.2	0.4	3.5	721.16±0.77	224239+294333	28.6±0.9	0.68	224239+294332	11.44	0.940	0.867	1.722	0.02491
<b>Seyfert II</b>																				
1	001106.5-120626	00:11:6.55	-12:06:26.43	0.29	-0.17±0.04	-0.26±0.04	--	--	0.1	2.0	4.53±0.21	001106-120627	66.9±2.5	1.32	001106-120626	10.68	0.658	0.964	2.665	0.01998
2	004847.1+315724	00:48:47.11	+31:57:24.29	0.21	0.13±0.12	0.88±0.02	--	--	--	--	326.33±7.77	004847+315725	292.2±8.8	0.99	004847+315724	11.54	0.758	0.650	0.932	0.01514
3	005621.6+003235	00:56:21.68	+00:32:35.41	1.76	-0.45±0.25	-0.05±0.39	--	--	--	--	0.08±0.05	005621+003232	9.0±0.5	2.12	--	--	--	--	0.48400	
4	010730.4+141222	01:07:30.46	+14:12:22.11	0.98	0.52±0.11	-0.18±0.11	0.6	2.2	0.8	2.5	0.32±0.07	010730+141221	4.9±0.4	1.87	010730+141222	13.70	0.423	0.684	0.198	0.07800
5	011607.1+330522	01:16:7.17	+33:05:22.18	0.23	-0.20±0.03	-0.62±0.04	0.1	1.2	0.4	3.7	2.32±0.14	011607+330521	75.4±2.3	1.70	011607+330522	12.59	0.492	0.700	1.871	0.01604
6	013331.1+354006	01:33:31.19	+35:40:6.40	0.24	-0.38±0.03	-0.45±0.05	--	--	0.01	2.5	3.93±0.21	013331+354005	32.8±1.1	1.24	013331+354006	11.86	0.372	0.721	2.060	0.01512
7	014357.7+022059	01:43:57.73	+02:20:59.92	0.13	-0.49±0.02	-0.62±0.03	--	--	0.1	3.2	8.02±0.23	014357+022059	24.0±1.1	1.57	014357+022059	11.45	0.570	0.809	1.854	0.01728
8	014430.6+170610	01:44:30.61	+17:06:10.52	2.74	-0.18±0.30	-1.00±0.70	--	--	--	--	0.14±0.12	014430+170608	40.1±1.3	0.90	014430+170610	12.30	0.374	0.804	0.690	0.02771
9	015002.6-072548	01:50:2.67	-07:25:48.38	0.11	0.55±0.02	-0.25±0.02	0.6	1.8	0.8	2.7	13.33±0.33	015002-072549	318.2±9.6	1.26	015002-072548	12.67	0.590	0.663	0.940	0.01771
10	024104.7-081520	02:41:4.78	-08:15:20.97	0.09	0.04±0.01	0.29±0.01	--	--	--	--	56.86±0.33	024104-081521	912.5±27.4	0.31	024104-081520	9.811	0.593	0.601	0.268	0.00493
11	025512.1-001100	02:55:12.18	-00:11:0.44	0.15	-0.26±0.04	0.15±0.04	--	--	--	--	40.72±0.74	025512-001058	154.6±5.4	2.56	025512-001100	11.73	0.694	0.742	1.681	0.02884
12	025958.5+364914	02:59:58.59	+36:49:14.72	0.21	-0.00±0.03	-0.54±0.03	0.2	1.2	0.4	3.5	5.59±0.24	025958+364913	100.4±3.0	1.30	025958+364914	10.72	0.237	0.896	2.444	0.01208
13	033040.9-030815	03:30:40.91	-03:08:15.42	0.28	-0.39±0.04	-0.56±0.06	--	--	0.1	3.0	5.35±0.27	033040-030816	12.0±0.6	0.63	033040-030815	11.91	0.552	0.633	1.429	0.02050
14	033339.6-050522	03:33:39.67	-05:05:22.39	0.37	-0.34±0.04	-0.48±0.06	--	--	0.1	2.7	4.22±0.23	033339-050522	19.6±0.7	2.18	033339-050522	11.36	0.469	0.594	0.656	0.01344
15	034110.6-011756	03:41:10.90	-01:17:56.53	3.59	-0.20±0.07	-0.65±0.09	0.1	1.0	0.4	3.7	1.46±0.17	034110-011753	15.2±0.6	0.71	034110-011756	12.34	0.478	0.828	0.751	0.02532
16	044830.4-203213	04:48:30.58	-20:32:17.21	4.56	0.08±0.11	-0.16±0.12	--	--	0.2	2.0	0.48±0.11	044830-203221	275.5±10.5	1.33	044830-203217	12.25	0.456	0.707	0.808	0.01520
17	051938.3-324920	05:19:38.37	-32:49:20.18	2.62	-0.41±0.27	-0.00±0.42	--	--	--	--	0.15±0.12	051938-324916	4.4±0.5	1.60	--	--	--	--	0.04347	
18	055155.1-071612	05:51:55.14	-07:16:12.15	2.37	-0.17±0.82	0.81±0.32	--	--	--	--	0.61±0.25	055154-071557	9.2±1.5	2.13	--	--	--	--	0.00757	
19	061534.7+224146	06:15:34.72	+22:41:45.71	1.29	0.52±0.11	0.07±0.07	--	--	0.4	1.5	2.94±0.29	061534+224145	566.4±17.0	0.20	--	--	--	--	0.01343	
20	064659.4+821506	06:46:59.63	+82:15:7.17	0.55	0.32±0.04	-0.26±0.04	0.4	2.0	0.6	2.5	1.24±0.12	064659+821506	314.5±11.1	0.94	--	--	--	--	0.00615	
21	081919.5+705507	08:19:19.25	+70:55:6.27	3.43	-0.07±0.06	-0.47±0.12	0.1	1.6	0.4	3.0	1.04±0.26	081918+705504	23.5±0.8	1.14	081919+705506	14.85	0.924	0.547	1.370	0.01830
22	094740.1-305655	09:47:40.19	-30:56:56.17	0.00	0.87±0.00	0.21±0.00	--	--	2.	2.0	1032.60±0.83	094740-305657	14.3±0.6	1.32	094740-305656	10.34	0.905	0.837	1.609	0.00822
23	101738.5+214119	10:17:38.58	+21:41:19.42	0.55	-0.21±0.08	-0.34±0.11	--	--	0.1	2.2	0.87±0.11	101738+214116	5.3±0.5	2.58	101738+214119	11.58	0.317	0.742	2.822	0.04123
24	102651.8-032754	10:26:51.90	-03:27:54.03	0.71	-0.24±0.11	-0.30±0.15	--	--	--	--	0.01	2.0	3.31±0.43	0.28	102651-032754	13.07	0.448	0.610	1.439	0.03452
25	102924.9+292356	10:29:24.93	+29:23:56.74	0.55	0.20±0.08	-0.31±0.09	0.2	2.0	0.4	2.5	0.78±0.12	102924+292357	15.5±0.6	2.49	--	--	--	--	--	--
26	103408.5+600152	10:34:8.56	+60:01:52.65	0.28	-0.39±0.04	-0.40±0.06	--	--	0.01	2.5	3.19±0.19	103408+600153	19.1±0.7	1.71	103408+600152	12.65	0.627	0.814	1.244	0.05260
27	103506.8+562846	10:35:6.89	+56:28:46.86	0.87	0.43±0.14	0.09±0.13	--	--	0.6	1.2	1.09±0.21	103507+562847	1801.9±54.1	1.33	--	--	--	--	0.45970	
28	103951.5+643005	10:39:51.55	+64:30:5.55	1.70	0.25±0.17	-0.41±0.20	0.6	2.2	1.	3.0	0.19±0.08	103951+642959	3.9±0.4	2.45	--	--	--	--	0.40180	
29	110023.6+285835	11:00:23.63	+28:58:35.89	4.63	-0.39±0.15	-0.32±0.26	--	--	--	--	1.33±0.42	110023+285840	54.7±4.0	0.75	110023+285835	11.13	0.426	0.596	1.370	0.02272
30	113557.1+703209	11:35:57.15	+70:32:9.37	1.13	-0.38±0.16	-0.41±0.26	--	--	0.01	2.5	1.47±0.48	113557+703209	85.8±3.2	0.43	113557+703209	11.35	0.266	0.859	1.053	0.00901
31	115217.0+370548	11:52:17.03	+37:05:48.02	1.81	0.59±0.23	-0.29±0.22	0.6	1.6	1.	3.0	0.34±0.20	115216+370550	79.7±2.8	1.49	--	--	--	--	--	--
32	115513.7+550441	11:55:13.72	+55:04:41.62	1.63	0.69±0.42	0.81±0.15	--	--	--	--	0.54±0.21	115513+550442	79.1±2.9	0.54	--	--	--	--	--	--
33	121354.8+024754	12:13:54.84	+02:47:54.27	0.72	-0.31±0.10	-0.59±0.14	--	--	0.2	3.2	0.19±0.04	121354+024748	5.1±0.4	1.89	121354+024754	13.59	0.573	0.790	1.620	0.07400
34	122154.8+042825	12:21:54.89	+04:28:25.92	0.27	-0.38±0.03	-0.69±0.04	0.	1.0	0.4	4.0	0.88±0.05	122154+042825	428.3±13.5	2.17	122154+042825	10.19	0.589	0.596	1.241	0.00524
35	122456.3+332814	12:24:56.35	+33:28:14.12	1.66	0.13±0.27	0.12±0.26	--	--	0.1	1.0	0.26±0.09	122456+332815	70.8±2.5	0.62	--	--	--	--	--	--
36	122600.0+333354	12:26:0.08	+33:33:54.11	6.81	0.33±0.16	-0.51±0.17	0.4	1.2	0.8	3.7	0.87±0.56	122559+333344	32.1±1.0	1.49	--	--	--	--	--	--
37	123158.8+142508	12:31:58.88	+14:25:8.62	1.10	-0.37±0.03	-0.47±0.04	--	--	0.1	2.7	7.57±0.43	123158+142505	277.1±8.9	2.81	--	--	--	--	--	0.00760
38	123221.9+142418	12:32:21.91	+14:24:18.65	1.71	0.41±0.21	-0.76±0														

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal - Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors			R <sub>xi</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	$\Gamma$						K	H - K	J - H			
49	134915.2+601126	13:49:15.28	+60:11:26.17	0.23	-0.58±0.02	-0.41±0.05	---	---	---	---	1.53± 0.08	134915+601126	78.4± 2.8	0.50	134915+601126	9.91	0.491	0.673	1.206	0.006	
50	135602.7+182218	13:56: 2.79	+18:22:18.05	0.14	-0.30±0.02	-0.23±0.03	---	---	---	---	9.75± 0.23	135602+182219	380.5± 11.4	2.86	---	---	---	---	---	0.050	
51	140028.6+621038	14:00:28.68	+62:10:38.15	0.74	0.81±0.12	0.27±0.09	---	---	2.	1.2	4.11± 0.62	140028+621038	4307.6± 129.2	0.52	---	---	---	---	---	0.431	
52	141314.9-031227	14:13:14.89	-03:12:27.62	0.02	0.81±0.00	0.54±0.00	---	---	0.6	0.25	905.95± 1.33	141314-031227	338.8± 10.2	2.33	141314-031227	9.03	1.397	1.638	0.516	0.006	
53	141721.0+265127	14:17:21.04	+26:51:27.04	0.49	-0.40±0.04	-0.63±0.06	---	---	0.2	3.5	0.73± 0.05	141721+265128	22.6± 0.8	1.75	141721+265127	11.5	0.365	0.875	1.353	0.036	
54	143445.5-325031	14:34:45.51	-32:50:31.55	0.77	-0.21±0.10	-0.82±0.11	0.4	0.60	---	---	0.18± 0.05	143445-325030	8.2± 0.5	2.92	143445-325031	12.8	0.474	0.652	1.399	0.025	
55	144314.3+770727	14:43:14.33	+77:07:27.72	0.55	-0.33±0.08	-0.53±0.13	---	---	0.2	3.0	0.32± 0.05	144314+770726	1880.4± 66.2	1.71	144314+770727	15.6	0.259	0.729	1.453	0.267	
56	151555.1-200917	15:15:55.18	-20:09:17.05	1.07	-0.41±0.15	-0.17±0.24	---	---	---	---	0.22± 0.07	151555-200916	9.6± 0.6	0.76	151555-200917	13.0	1.249	1.132	0.127	0.109	
57	151644.5+070119	15:16:44.56	+07:01:18.48	0.74	0.15±0.00	-0.53±0.00	0.4	1.2	0.6	3.5	301.26± 1.83	151644+070118	5499.3± 209.1	0.33	151644+070118	13.0	0.525	0.783	1.095	0.034	
58	153229.7+300749	15:32:29.74	+30:07:49.64	1.57	-0.33±0.20	0.00±0.26	---	---	---	---	0.51± 0.25	153229+300748	8.9± 0.5	0.46	153229+300749	13.1	0.651	0.710	0.507	0.064	
59	153244.0+324248	15:32:44.00	+32:42:48.38	1.25	0.31±0.15	-0.58±0.15	2.	1.8	---	---	0.42± 0.12	153243+324246	8.1± 0.5	1.75	---	---	---	---	0.925		
60	153457.3+233011	15:34:57.21	+23:30:10.12	1.50	-0.06±0.03	-0.40±0.03	0.1	1.8	0.4	2.7	2.10± 0.09	153457+233011	326.3± 9.8	0.63	153457+233010	11.4	0.879	1.216	0.753	0.018	
61	153547.7+732703	15:35:47.75	+73:27: 3.27	0.20	-0.46±0.02	-0.69±0.04	---	---	0.2	3.7	2.48± 0.11	153547+732702	40.2± 1.3	2.07	153547+732703	12.0	0.481	0.621	1.630	0.024	
62	155041.6-035318	15:50:41.55	-03:53:17.79	1.23	-0.20±0.08	-0.36±0.10	---	---	0.2	2.5	5.93± 0.58	155041-035317	41.6± 1.3	0.88	155041-035317	11.9	0.696	0.796	0.541	0.030	
63	180007.1+663654	18:00: 7.19	+66:36:54.04	0.72	-0.39±0.05	-0.03±0.07	---	---	---	---	8.19± 0.43	180007+663654	31.7± 1.0	0.63	180007+663654	11.9	0.695	0.852	0.502	0.026	
64	200751.2-110834	20:07:51.28	-11:08:34.49	0.08	0.07±0.01	-0.36±0.01	0.2	2.0	0.4	2.7	28.11± 0.35	200751-110835	8.1± 0.5	0.74	200751-110834	12.4	0.408	0.931	0.217	0.032	
65	203714.0+660619	20:37:14.10	+66:06:19.53	0.85	0.09±0.10	-0.63±0.11	0.4	0.90	---	---	1.15± 0.25	203713+660619	68.1± 2.7	0.92	203714+660619	10.4	0.433	1.034	0.498	0.004	
66	204446.2-103842	20:44:46.25	-10:38:42.57	13.93	-0.02±0.25	0.25±0.34	---	---	---	---	5.69± 3.09	204446-103842	279.0± 9.9	0.53	204446-103842	14.0	0.041	0.326	2.074	0.690	
67	220702.0+101401	22:07: 2.02	+10:14: 1.09	2.00	-0.12±0.03	-0.13±0.04	---	---	0.	1.5	9.63± 0.33	220702+101402	114.1± 3.4	2.41	220702+101401	12.2	0.447	0.654	1.165	0.026	
68	224937.0-191627	22:49:37.09	-19:16:27.22	0.49	-0.74±0.07	0.49±0.12	---	---	---	---	12.00± 1.02	224937-191625	12.5± 0.6	0.97	224937-191627	10.9	1.022	1.027	1.130	0.031	
69	230456.6+121921	23:04:56.69	+12:19:21.79	0.58	-0.43±0.09	-0.53±0.15	---	---	0.1	3.0	3.45± 0.27	230456+121920	99.0± 3.7	1.72	230456+121921	11.4	0.508	0.782	1.408	0.007	
70	232846.7+033041	23:28:46.70	+03:30:41.29	0.12	0.04±0.02	-0.32±0.02	0.1	2.2	0.4	2.5	12.76± 0.36	232846+033041	55.8± 1.7	1.36	232846+033041	11.3	0.731	0.521	1.835	0.017	
71	232903.9+033159	23:29: 3.94	+03:31:59.57	0.36	-0.09±0.06	-0.11±0.07	---	---	0.01	1.5	3.69± 0.21	232903+033159	59.8± 1.8	0.74	232903+033159	12.2	0.651	0.599	1.550	0.017	
72	234421.0+095602	23:44:21.08	+09:56: 2.28	0.56	-0.11±0.06	-0.55±0.08	0.1	1.4	0.4	3.2	1.00± 0.11	234421+095606	7.2± 0.5	1.99	234421+095602	10.7	0.374	0.450	1.747	0.005	
73	235113.9+201346	23:51:13.91	+20:13:46.18	0.15	0.40±0.02	-0.27±0.02	0.4	2.0	0.6	2.7	6.74± 0.22	235113+201349	5.8± 0.4	2.61	235113+201346	12.3	0.680	0.896	1.158	0.043	
74	235509.4+495008	23:55: 9.45	+49:50: 8.04	0.64	0.12±0.12	-0.23±0.09	---	---	---	---	1.11± 0.12	235509+495008	2305.9± 69.2	0.93	235509+495008	15.1	0.750	0.745	0.839	0.037	
<b>Liners</b>																					
1	002126.4-083925	00:21:26.49	-08:39:25.74	0.69	-0.06±0.09	-0.45±0.11	0.1	1.8	0.4	3.0	0.15± 0.03	002126-083927	15.7± 0.6	1.70	002126-083925	13.4	0.931	0.905	0.751	0.138	
2	012002.4+142142	01:20: 2.46	+14:21:42.87	0.85	-0.12±0.10	-0.37±0.13	0.01	2.0	0.2	2.5	1.22± 0.27	012002+142142	49.8± 1.5	1.92	---	---	---	---	---	0.031	
3	083354.0-230211	08:33:54.07	-23:02:11.56	1.32	0.47±0.15	-0.14±0.17	---	---	0.8	2.2	0.19± 0.08	083354-230212	19.5± 0.7	0.64	---	---	---	---	0.242		
4	085537.7+781324	08:55:37.76	+78:13:24.78	0.27	-0.37±0.03	-0.38±0.05	---	---	0.	2.2	16.77± 0.74	085538+781324	123.2± 3.7	1.40	085537+781324	9.39	0.153	0.830	1.114	0.004	
5	091805.8-120540	09:18: 5.78	-12:05:40.87	0.11	0.16±0.00	-0.41±0.00	0.2	1.6	0.6	3.0	431.57± 1.52	091805-120541	849.9± 1278.8	0.61	---	---	---	---	0.054		
6	091918.6+691211	09:19:18.63	+69:12:11.21	0.23	0.05±0.02	-0.31±0.02	0.1	2.2	0.4	2.5	2.50± 0.09	091918+691208	10.9± 0.5	2.11	091918+691211	9.34	0.309	0.964	0.875	0.002	
7	095533.1+690355	09:55:33.20	+69:03:55.47	0.06	0.16±0.00	-0.34±0.00	0.2	2.0	0.4	2.7	302.83± 1.36	095533+690355	86.0± 2.6	1.42	095533+690355	8.43	0.527	0.681	1.278	---	
8	103702.5-273354	10:37: 2.52	-27:33:54.25	0.19	-0.34±0.04	0.20±0.04	---	---	---	---	6.13± 0.19	103702-273352	49.0± 2.2	1.96	103702-273354	10.9	0.463	0.769	0.613	0.009	
9	105223.5+440846	10:52:23.56	+44:08:45.19	1.22	-0.04±0.14	-0.48±0.15	0.1	1.6	0.4	3.0	0.15± 0.05	105223+440845	21.2± 0.8	0.13	105223+440845	13.4	0.841	1.164	1.506	0.092	
10	105918.1+243234	10:59:18.12	+24:32:34.30	0.28	-0.05±0.04	-0.40±0.04	0.1	1.8	0.4	2.7	0.94± 0.06	105918+243235	57.0± 2.1	2.75	105918+243234	11.6	0.683	0.926	0.762	0.042	
11	113234.8+530404	11:32:34.89	+53:04: 4.50	0.19	0.76±0.01	0.04±0.01	---	---	1.	2.0	24.62± 0.54	113234+530403	14.9± 0.9	0.49	113234+530404	10.4	0.563	0.601	0.915	0.003	
12	115756.1+552714	11:57:56.12	+55:27:14.05	0.03	0.06±0.00	-0.33±0.00	0.2	2.0	0.4	2.5	213.46± 1.33	115756+552712	98.4± 3.0	2.14	---	---	---	---	0.003		
13	122006.8+291651	12:20: 6.80	+29:16:51.22	0.04	0.01±0.00	-0.39±0.01	0.1	1.8	0.4	2.7	44.45± 0.32	122006+291650	385.0± 11.6	1.35	122006+291651	10.0	0.446	0.530	1.989	0.002	
14	122232.0+295345	12:22:32.08	+29:53:45.81	0.48	-0.45±0.03	-0.52±0.05	---	---	0.01	2.7	1.81± 0.11	122231+295345	13.1± 1.0	2.91	---	---	---	---	0.003		
15	123539.7+123323	12:35:39.78	+12:33:23.28	0.12	-0.37±0.01	-0.54±0.01	---	---	0.1	3.0	17.31± 0.21	123539+123322	100.1± 3.0	1.56	123539+123323	9.53	0.426	0.768	1.754	0.000	
16	135326.6+401810	13:53:26.65	+40:18:10.39	1.15	-0.02±0.06	-0.43±0.06	0.1	1.8	0.4	2.7	1.07± 0.11	135326+401812	8.0± 0.5	1.27	135326+401810	10.6	0.275	0.565	0.793	0.008	
17	151640.2+001502	15:16:40.19	+00:15: 2.69	0.08	0.13±0.01	-0.28±0.01	0.2	2.2	0.4	2.2	34.27± 0.40	151640+001502	922.2± 35.2	0.84	151640+001502	12.3	0.664	0.802	2.322	0.052	
18	153253.8+302059	15:32:53.82	+30:20:59.96	0.12	0.11±0.01	-0.37±0.01	0.4	2.6	0.8	2.7	83.93± 0.76	153253+302059	22.8± 0.8	1.73	---	---	---	---	0.362		
19	172322.0-001700	17:23:22.05	-00:17: 0.56	0.57	0.07±0.07	-0.33±0.08	0.2	2.0	0.4	2.5	0.81± 0.10	172321-001702	81.8± 2.5	1.39	172322+001700	11.8	0.925	1.080	1.162	0.042	
20	225710.6-362743	22:57:10.62	-36:27:43.97	0.07	0.00±0.01	-0.35±0.01	0.1	2.0	0.2	2.5	15.54± 0.20	225710-362743	1279.7± 45.2	2.34	225710-362743	9.76	0.325	0.811	0.545	0.005	
21	232519.7-120727	23:25:19.79	-12:07:26.98	0.07	0.11±0.00	-0.43±0.00	0.2	1.6	0.4	3.0	293.77± 0.66	232519-120728	1874.6± 56.2	2.45	232519-120726	14.0	0.481	0.605	2.880	0.082	
22	235103.8+200902	23:51: 3.88	+20:09: 2.11	0.62	-0.39±0.03	-0.54±0.04	---	---	0.1	3.0	1.25± 0.08	235104+200900	59.9± 2.4	3.00	235103+200902	11.4	0.214	0.849	2.116	0.013	
<b>Radiogalaxies</b>																					
1	005512.7-275204	00:55:12.74	-27:52: 4.98	2.10</																	

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors		R <sub>xi</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						H – K	J – H			
12	073412.1+313841	07:34:11.77	+31:38:43.30	1.97	0.56±0.12	-0.20±0.12	--	--	8.	2.5	1.42± 0.37	073411+313842	310.4± 9.3	0.18	---	---	---	2.42900		
13	073844.8+653746	07:38:44.85	+65:37:46.24	0.39	0.27±0.05	-0.28±0.05	--	--	2.	2.5	0.91± 0.11	073844+653745	51.9± 1.6	1.25	---	---	---	0.99400		
14	080813.8-361432	08:08:13.89	-36:14:32.24	1.43	0.90±0.14	0.21±0.16	--	--	4.	2.2	1.30± 0.44	080813-361432	144.7± 4.4	0.47	---	---	---	0.36830		
15	082350.7+403843	08:23:50.75	+40:38:43.41	0.71	-0.05±0.10	-0.41±0.12	--	--	2.	2.7	1.49± 0.33	082350+403842	12.7± 0.9	2.80	---	---	---	1.61000		
16	085810.0+275052	08:58:10.03	+27:50:52.11	0.42	0.06±0.05	-0.05±0.05	--	--	0.6	1.5	0.76± 0.04	085810+275050	1807.8± 63.4	1.89	---	---	---	1.16900		
17	090053.8+385616	09:00:53.82	+38:56:16.01	0.42	0.48±0.15	0.76±0.05	--	--	--	--	6.57± 0.44	090053+385616	509.1± 17.4	2.11	---	---	---	0.22900		
18	101145.4+462820	10:11:45.49	+46:28:20.76	1.10	-0.13±0.16	-0.24±0.21	--	--	1.	2.0	0.20± 0.06	101145+462820	1557.2± 46.7	0.58	---	---	---	1.79000		
19	101345.2-000713	10:13:45.21	-00:07:13.26	2.19	0.26±0.03	-0.44±0.04	0.4	1.4	0.6	3.2	16.13± 1.47	101345-000719	4.0± 0.5	2.68	101345+00-713	13.25	0.556	0.624	2.192	0.09510
20	104420.3-011146	10:44:20.33	-01:11:46.11	0.98	-0.10±0.11	-0.17±0.14	--	--	0.2	1.7	0.45± 0.12	104420-011146	275.5± 8.3	0.61	---	---	---	0.46200		
21	112443.7+384547	11:24:43.74	+38:45:47.01	0.44	-0.49±0.01	-0.46±0.03	--	--	--	--	4.25± 0.15	112443+384546	112.2± 3.7	1.32	112443+384547	10.61	0.290	0.514	2.780	0.00682
22	120846.7+433754	12:08:46.71	+43:37:54.60	1.86	0.62±0.25	-0.42±0.34	0.8	1.2	1.	4.0	0.56± 0.22	120847+433752	41.1± 1.3	2.11	---	---	---	---	---	
23	123222.3+000039	12:32:22.34	+00:00:39.84	1.51	-0.10±0.21	-0.00±0.24	--	--	--	--	0.04± 0.02	123222+000046	4.1± 0.4	1.72	---	---	---	---	0.04490	
24	123429.7+393037	12:34:29.71	+39:30:37.15	0.50	0.23±0.10	0.36±0.07	--	--	--	--	1.33± 0.13	123429+393038	154.0± 5.5	1.56	---	---	---	---	0.63200	
25	123504.8+392538	12:35: 4.86	+39:25:38.67	1.52	-0.32±0.22	0.32±0.19	--	--	--	--	0.03± 0.02	123504+392540	255.3± 7.7	1.61	---	---	---	---	3.22000	
26	124733.2+672316	12:47:33.25	+67:23:16.36	0.99	0.17±0.18	0.18±0.15	--	--	0.01	0.75	0.16± 0.03	124733+672316	263.4± 7.9	0.49	124733+672316	13.73	0.485	0.606	0.209	0.10730
27	125749.0-171624	12:57:49.09	-17:16:24.24	0.56	-0.02±0.02	-0.64±0.02	0.2	1.0	0.6	4.0	11.72± 0.49	125749-171622	75.8± 2.3	2.96	---	---	---	---	0.4934	
28	125922.2+275438	12:59:22.26	+27:54:38.19	20.87	-0.47±0.14	-1.00±0.29	--	--	--	--	1.91± 2.27	125921+275438	248.2± 8.0	0.46	125922+275438	12.20	0.393	0.410	0.708	0.02260
29	125935.6+275733	12:59:35.59	+27:57:31.35	1.96	-0.05±0.02	-0.48±0.02	0.1	1.6	0.4	3.0	0.52± 0.03	125935+275736	205.9± 7.1	2.60	---	---	---	---	0.02402	
30	130240.6+672840	13:02:40.62	+67:28:40.79	2.03	0.07±0.05	-0.61±0.06	0.4	1.2	0.8	3.7	2.09± 0.43	130240+672841	340.5± 12.0	0.57	130240+672840	13.58	0.523	0.744	0.768	0.10581
31	130919.0-013720	13:09:19.04	-01:37:20.52	0.66	0.13±0.02	-0.41±0.02	0.2	1.8	0.4	3.0	25.94± 0.71	130919-013720	9.8± 0.5	2.61	130919-013720	13.18	0.733	0.672	1.574	0.08350
32	131929.9-010841	13:19:29.98	-01:08:41.66	1.52	0.17±0.21	-0.30±0.23	0.2	2.4	0.6	2.5	0.16± 0.08	131929-010842	12.3± 1.0	0.18	131929-010841	13.86	0.580	0.711	1.632	0.14000
33	135055.7+642857	13:50:55.71	+64:28:57.35	0.18	0.25±0.03	-0.34±0.03	0.2	1.8	0.6	2.7	2.68± 0.11	135055+642857	183.0± 5.5	0.66	---	---	---	---	---	
34	140729.8-270104	14:07:29.81	-27:01: 4.43	0.21	-0.22±0.02	-0.66±0.03	0.1	1.0	0.4	4.0	3.51± 0.10	140729-270104	645.5± 22.8	0.65	140729-270104	11.74	0.525	0.601	1.666	0.02211
35	143637.2+631914	14:36:37.22	+63:19:14.14	1.42	-0.03±0.24	0.15±0.24	--	--	--	--	0.05± 0.02	143637+631912	497.3± 14.9	0.99	---	---	---	---	4.26100	
36	144712.7+404744	14:47:12.79	+40:47:44.66	0.92	0.06±0.12	-0.33±0.14	0.2	2.4	0.4	2.5	0.85± 0.33	144712+404745	409.1± 12.3	1.28	144712+404744	14.80	0.496	1.090	0.782	0.18000
37	145431.4+183831	14:54:31.50	+18:38:31.91	0.16	0.13±0.00	-0.55±0.00	0.4	1.2	0.6	3.5	90.91± 0.53	145431+183832	39.0± 1.2	2.22	145431+183831	13.42	0.430	0.598	1.624	0.05200
38	162528.0+823454	16:25:28.00	+82:34:54.80	1.15	0.25±0.12	-0.29±0.14	0.2	2.0	0.4	2.5	1.50± 0.51	162527+823457	45.6± 1.8	1.95	---	---	---	---	---	
39	171329.0+640249	17:13:29.14	+64:02:49.61	1.20	0.16±0.14	-0.17±0.15	0.2	2.4	0.4	2.2	0.34± 0.09	171329+640250	265.7± 9.1	1.01	171329+640249	13.27	0.453	0.667	0.705	0.07833
40	171415.0+434103	17:14:14.81	+43:41: 2.66	2.29	-0.31±0.04	-0.82±0.05	0.2	0.60	--	--	5.87± 0.78	171414+434111	5.8± 0.5	2.46	171414+434102	11.27	0.187	0.894	1.200	0.02781
41	221942.6-275627	22:19:42.62	-27:56:27.19	0.95	0.06±0.16	0.00±0.15	--	--	0.2	1.2	0.43± 0.10	221942-275626	2023.6± 60.7	1.10	---	---	---	---	0.65700	
42	232535.3-115935	23:25:35.35	-11:59:36.29	2.72	-0.05±0.06	-0.45±0.08	0.1	1.6	0.4	3.0	0.71± 0.15	232535-115935	46.3± 1.8	2.64	232535-115936	15.24	0.804	1.302	0.579	0.08200
Double galaxies																				
1	011944.9+032434	01:19:44.99	+03:24:34.89	1.24	-0.23±0.10	-0.40±0.13	--	--	0.2	2.5	0.60± 0.11	011944+032434	44.8± 2.0	1.63	011944+032434	11.14	0.735	0.830	1.870	0.00795
2	022402.5-044137	02:24: 2.67	-04:41:35.77	2.89	-0.22±0.13	-0.02±0.16	--	--	--	--	0.91± 0.23	022402-044129	4.7± 0.6	2.55	022402-044135	13.33	0.361	0.743	0.220	0.04300
3	091443.4+405253	09:14:43.49	+40:52:53.20	1.86	0.49±0.19	-0.95±0.11	2.	0.20	--	--	0.21± 0.16	091443+405300	2.9± 0.5	0.72	---	---	---	---	0.00831	
4	094548.3-142205	09:45:48.36	-14:22: 5.21	0.17	-0.17±0.02	-0.26±0.02	--	--	0.1	2.0	4.60± 0.15	094548-142204	74.1± 2.7	1.67	094548-142205	12.40	0.424	0.573	2.116	0.00810
5	102142.6+130654	10:21:42.68	+13:06:54.34	0.82	-0.13±0.12	-0.29±0.14	0.01	2.4	0.2	2.2	0.31± 0.06	102142+130654	16.8± 0.6	0.91	102142+130654	13.18	0.618	0.914	1.718	0.07660
6	113944.3+315547	11:39:44.38	+31:55:47.77	2.44	0.30±0.28	-0.46±0.30	0.4	1.4	0.6	3.2	0.27± 0.22	113944+315556	17.3± 1.1	2.88	113944+315547	11.88	0.292	0.927	2.184	0.00850
7	121345.9+024839	12:13:45.98	+02:48:39.78	0.61	-0.12±0.07	-0.35±0.09	0.01	2.2	0.2	2.5	0.29± 0.05	121345+024840	23.3± 0.8	1.33	121345+024839	13.48	0.903	1.006	0.478	0.07268
8	122142.7+143548	12:21:42.74	+14:35:48.63	2.08	-0.48±0.05	-0.41±0.12	--	--	--	--	0.44± 0.07	122142+143544	34.8± 2.3	2.79	---	---	---	---	0.00388	
9	124240.8+141751	12:42:40.89	+14:17:51.35	1.89	-0.53±0.06	-0.43±0.14	--	--	--	--	0.51± 0.11	124240+141746	33.0± 1.7	2.56	---	---	---	---	0.00600	
10	134222.3+353728	13:42:22.37	+35:37:28.19	2.18	0.05±0.22	-0.70±0.25	0.4	0.80	--	--	0.10± 0.06	134222+353727	5.6± 0.5	1.07	134222+353728	13.61	0.157	0.540	2.202	0.01825
11	160523.0+174532	16:05:23.06	+17:45:32.81	2.73	0.90±0.23	0.09±0.31	2.	2.0	2.	2.7	0.44± 0.41	160523+174515	2.8± 0.5	1.88	160523+174532	13.49	0.422	0.695	2.848	0.03200
Cluster of galaxies																				
1	000013.5-251107	00:00:13.51	-25:11: 7.46	2.93	-0.04±0.06	-0.61±0.11	0.2	1.0	0.6	3.7	1.09± 0.20	000013-251113	28.4± 1.5	2.51	000013-251107	14.31	0.509	0.598	0.992	0.08443
2	000141.2-154040	00:01:41.29	-15:40:40.54	1.18	0.15±0.04	-0.53±0.04	0.4	1.2	0.6	3.5	18.76± 2.42	000141-154040	436.2± 15.1	2.62	000141-154040	14.18	0.592	0.858	2.833	---
3	000312.8-355611	00:03:12.82	-35:56:11.76	0.27	0.11±0.00	-0.57±0.00	0.4	1.0	0.6	3.7	43.53± 0.35	000312-355612	515.5± 17.3	2.20	---	---	---	---	0.04970	
4	000327.6+020701	00:03:27.66	+02:07: 1.35	0.43	-0.61±0.12	0.66±0.11	--	--	--	--	4.09± 0.23	000327+020706	3.0± 0.5	0.80	000327+020701	13.53	0.617	0.748	1.536	0.10095
5	001323.6-192221	00:13:23.61	-19:22:21.82	1.57	-0.82±0.23	0.58±0.56	--	--	--	--	0.11± 0.05	001323-192218	4.3± 0.6	2.19	001323-192221	15.18	1.110	1.445	1.284	---
6	001408.1-193217	00:14: 8.16	-19:32:17.00	1.65	-0.46±0.17	-0.52±0.19	--	--	0.01	2.7	0.09± 0.06	001408-193218	11.6± 1.0	1.65	001408-193216	12.94	0.604	0.643	0.744	0.09611
7	002038.9-253530	00:20:38.98	-25:35:30.30	1.17	-0.31±0.14	-0.66±0.19	0.01	1.0	0.4	3.7	0.25± 0.08	002039-253522	6.5± 0.5	2.53	002038-253530	12.75	0.391	0.752	1.230	0.06677
8																				

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>R</sub> [mJy]	R <sub>Xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS		SS Mag & Colors		R <sub>xi</sub> f <sub>&lt;99%</sub>	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	NH	KT	NH	Γ						K	H – K	J – H	f <sub>&lt;99%</sub>		
18	004230.3-092203	00:42:30.39	-09:22:3.40	1.59	0.58±0.30	0.04±0.29	--	--	0.6	1.7	0.34±0.18	004230-092204	105.4±3.2	0.36	--	--	--	--	--	--	--
19	004301.6-094723	00:43:1.61	-09:47:23.71	2.13	-0.47±0.24	-0.20±0.39	--	--	--	--	0.10±0.10	004301-094721	5.1±0.5	0.88	004301-094723	14.35	0.560	0.737	0.852	0.12979	
20	005619.2-013012	00:56:19.22	-01:30:12.73	2.14	0.08±0.34	0.08±0.34	--	--	0.01	1.0	0.10±0.08	005619-013010	5.8±0.5	1.35	--	--	--	--	--	--	--
21	011058.8+330907	01:10:58.93	+33:09:6.91	0.11	-0.42±0.01	-0.83±0.01	0.2	0.60	--	--	6.90±0.08	011058+330905	5.8±0.5	0.40	011058+330906	10.82	0.599	0.608	1.346	0.01761	
22	012239.3+342616	01:22:39.36	+34:26:16.24	2.84	-0.59±0.28	-1.00±0.97	--	--	--	--	0.60±0.35	012238+342611	7.3±0.4	2.66	012239+342616	11.98	0.447	0.837	2.026	0.01618	
23	012531.4+014533	01:25:31.46	+01:45:34.13	0.14	-0.25±0.01	-0.83±0.01	0.2	0.60	--	--	15.09±0.11	012531+014534	28.6±1.0	0.53	012531+014534	11.76	0.704	0.497	2.783	0.01844	
24	012604.6+014509	01:26:4.66	+01:45:9.63	1.16	0.14±0.16	-0.16±0.22	--	--	0.2	2.0	0.22±0.06	012604+014510	3.0±0.5	1.21	012604+014509	13.79	0.502	0.653	0.954	0.06103	
25	012654.3+191253	01:26:54.34	+19:12:53.30	0.92	-0.21±0.09	-0.72±0.12	0.2	0.80	--	--	0.85±0.18	012654+191252	1408.1±45.2	1.03	012654+191253	12.38	0.485	0.521	1.189	0.04309	
26	015253.9+360310	01:52:53.99	+36:03:10.24	2.14	-0.40±0.08	-0.44±0.14	--	--	0.01	2.5	0.98±0.17	015254+360312	34.8±1.7	1.66	--	--	--	--	--	0.02043	
27	020752.9+021002	02:07:52.92	+02:10:2.72	3.17	-0.23±0.25	-0.45±0.37	--	--	0.2	2.7	0.08±0.12	020752+020956	3.6±0.6	2.58	020752+021002	11.71	0.572	0.750	0.834	0.02333	
28	024055.2+083539	02:40:55.30	+08:35:39.60	1.93	-0.22±0.23	-0.89±0.20	0.4	0.50	--	--	0.06±0.05	024055+083544	6.3±0.5	1.39	024055+083539	13.69	0.591	0.565	2.796	0.01827	
29	024106.2+084414	02:41:6.24	+08:44:14.55	0.51	-0.25±0.03	-0.54±0.04	0.	1.4	0.2	3.2	1.36±0.09	024106+084414	228.1±7.4	1.92	--	--	--	--	--	0.01962	
30	025918.8+132133	02:59:18.87	+13:21:33.88	2.84	-0.07±0.37	0.39±0.28	--	--	--	--	1.08±0.38	025918+132129	18.1±0.7	1.51	--	--	--	--	--	--	
31	031642.9+411929	03:16:42.93	+41:19:29.61	0.04	0.04±0.01	-0.49±0.01	0.2	1.4	0.4	3.2	35.5±0.28	031642+411928	168.1±5.9	1.51	031642+411929	10.98	0.347	0.888	1.742	0.01890	
32	042607.3+165513	04:26:7.33	+16:55:13.11	0.51	0.41±0.02	-0.31±0.02	0.8	2.6	1.	2.7	8.93±0.34	042607+165514	328.8±9.9	1.76	--	--	--	--	--	0.38000	
33	043420.3-082918	04:34:20.30	-08:29:18.16	6.83	0.00±0.11	-0.45±0.15	0.1	1.6	0.4	3.0	1.61±0.51	043421-082912	110.4±4.3	2.62	043420-082918	14.42	0.924	0.734	1.919	--	
34	044906.9-061736	04:49:6.91	-06:17:36.34	1.78	-0.00±0.24	-0.12±0.26	--	--	0.1	1.7	0.30±0.12	044907-061736	17.5±0.7	1.96	--	--	--	--	--	--	
35	045400.6-030832	04:54:0.62	-03:08:32.23	2.61	-0.03±0.06	-0.44±0.09	0.1	2.0	0.4	3.0	1.95±0.41	045400-030835	47.5±1.8	1.30	045400-030832	14.90	0.971	0.526	0.812	0.23421	
36	063528.3+052608	06:35:28.38	+05:26:8.91	2.30	-0.35±0.57	0.81±0.32	--	--	--	--	1.14±0.41	063528+052607	81.7±2.5	0.71	--	--	--	--	--	--	
37	072153.2+712036	07:21:53.14	+71:20:36.34	0.27	-0.07±0.00	-0.50±0.00	0.1	1.4	0.4	3.2	146.59±0.59	072153+712036	726.6±21.8	0.35	072153+712036	10.43	0.766	0.744	1.333	--	
38	082733.7+263715	08:27:33.74	+26:37:15.10	0.28	0.16±0.04	-0.34±0.04	0.2	2.2	0.6	2.5	2.85±0.24	082733+263716	101.9±3.1	1.96	--	--	--	--	--	0.20100	
39	084124.3+705342	08:41:24.39	+70:53:42.99	0.02	0.14±0.00	-0.18±0.00	--	--	0.4	2.0	545.01±1.69	084124+705341	3823.1±114.7	2.48	084124+705342	14.10	0.684	0.729	2.827	0.24020	
40	095557.3-095904	09:55:57.37	-09:59:4.10	0.11	0.07±0.00	-0.43±0.00	0.2	1.8	0.6	3.0	38.05±0.27	095557-095902	20.5±0.7	2.58	--	--	--	--	--	0.16000	
41	100236.5+324224	10:02:36.59	+32:42:24.71	1.01	-0.02±0.10	-0.82±0.10	0.4	0.60	--	--	0.58±0.18	100236+324226	10.0±0.5	0.78	100236+324224	12.18	0.304	0.724	0.695	0.04990	
42	103635.4-273059	10:36:35.46	-27:30:59.97	3.17	0.21±0.05	-0.29±0.05	0.2	2.2	0.4	2.5	15.78±1.14	103635-273104	62.8±2.7	2.57	103635-273059	11.31	0.420	0.834	2.071	0.01357	
43	103712.7-274103	10:37:12.73	-27:41:3.29	1.43	-0.34±0.08	-0.26±0.12	--	--	--	--	1.16±0.23	103712-274103	26.4±1.2	0.83	103712-274103	13.31	0.373	0.900	1.111	0.00932	
44	103749.6-270716	10:37:49.61	-27:07:16.61	0.29	0.05±0.04	-0.28±0.04	0.1	2.4	0.2	2.2	4.57±0.29	103749-270717	15.1±0.7	1.96	103749-270716	13.26	0.514	0.610	1.443	0.00813	
45	104055.0+055932	10:40:55.02	+05:59:32.05	0.64	-0.47±0.06	-0.89±0.09	0.2	0.50	--	--	0.27±0.07	104054+055931	16.2±0.6	1.40	--	--	--	--	--	0.02800	
46	104432.8-070407	10:44:32.82	-07:04:7.61	0.08	0.09±0.00	-0.41±0.00	0.2	2.0	0.6	2.7	111.37±0.62	104432-070407	31.6±1.0	1.72	104432-070407	14.52	0.509	0.669	2.089	0.13240	
47	110521.8+381402	11:05:21.86	+38:14:2.85	0.79	-0.30±0.02	-0.20±0.03	--	--	--	--	1.25±0.05	110521+381402	24.1±0.8	0.17	110521+381402	12.10	0.554	0.673	1.173	0.02823	
48	111725.8+074337	11:17:25.88	+07:43:39.89	1.60	0.08±0.03	-0.39±0.04	0.4	2.4	0.8	2.7	1.02±0.12	111725+074339	11.4±0.5	0.60	--	--	--	--	--	0.47700	
49	112230.1+241643	11:22:30.13	+24:16:43.03	2.20	-0.23±0.09	-0.92±0.11	0.4	0.40	--	--	0.82±0.17	112230+241644	24.2±1.2	1.40	112230+241643	11.43	0.617	0.741	1.373	0.02969	
50	113305.2-040045	11:33:5.22	-04:00:45.61	0.54	0.23±0.07	-0.20±0.07	0.2	2.6	0.4	2.2	4.36±0.53	113305-040047	318.4±10.3	2.74	113305-040045	12.21	0.618	0.750	2.257	0.05190	
51	114220.4+195741	11:42:20.40	+19:57:41.25	2.45	0.27±0.37	0.12±0.31	--	--	0.2	1.0	0.65±0.31	114220+195747	158.7±5.6	2.60	--	--	--	--	--	--	
52	114224.3+200711	11:42:24.36	+20:07:11.29	1.62	-0.22±0.17	0.10±0.20	--	--	--	--	0.24±0.13	114224+200711	12.2±0.6	1.13	114224+200711	12.31	0.514	0.747	1.500	0.01994	
53	114256.3+195809	11:42:56.34	+19:58:9.57	2.68	-0.55±0.11	-0.20±0.21	--	--	--	--	0.54±0.18	114256+195810	21.5±1.2	0.70	--	--	--	--	--	--	
54	114358.0+201104	11:43:58.03	+20:11:4.95	3.34	-0.29±0.18	-0.90±0.33	0.4	0.40	--	--	0.51±0.29	114358+201116	2.9±0.4	2.58	114358+201104	14.23	0.380	0.762	1.110	--	
55	114359.1+200435	11:43:59.12	+20:04:35.35	1.80	0.16±0.19	-0.68±0.23	0.4	0.80	--	--	0.13±0.08	114359+200432	4.3±0.5	1.32	114359+200435	12.27	0.273	0.906	1.641	0.02460	
56	114454.8+194635	11:44:54.90	+19:46:35.42	0.63	-0.23±0.14	-0.01±0.16	--	--	--	--	1.01±0.10	114454+194624	2.4±0.4	2.05	114454+194635	12.58	0.459	0.760	1.328	0.02738	
57	114507.5+195419	11:45:7.56	+19:54:19.08	1.30	0.19±0.19	-0.21±0.17	0.2	2.6	0.4	2.2	0.32±0.12	114507+195416	107.7±3.3	2.12	--	--	--	--	--	--	
58	114607.8+472939	11:46:7.81	+47:29:39.98	2.87	-0.25±0.12	-0.34±0.18	--	--	0.1	2.2	0.98±0.36	114608+472944	40.7±2.6	1.58	114607+472939	11.74	0.117	0.889	0.319	0.00299	
59	115123.0+550905	11:51:23.05	+55:09:5.49	1.86	-0.07±0.26	-0.76±0.19	0.4	0.70	--	--	0.05±0.03	115123+550905	33.5±1.1	0.93	115123+550905	14.80	1.016	0.381	1.155	--	
60	115517.9+232418	11:55:17.98	+23:24:18.62	0.19	0.16±0.00	-0.29±0.00	--	--	--	--	230.86±1.38	115517+232420	3.5±0.5	2.18	115517+232418	13.88	0.371	0.738	1.684	0.014291	
61	115536.7+231412	11:55:36.78	+23:14:12.43	1.81	-0.42±0.30	0.17±0.38	--	--	--	--	0.20±0.11	115536+231411	46.6±1.5	1.89	115536+231412	13.80	0.377	0.661	2.287	--	
62	115831.1+435647	11:58:31.13	+43:56:47.25	2.20	-0.25±0.08	-0.11±0.11	--	--	--	--	0.91±0.17	115831+435651	38.2±2.2	1.97	--	--	--	--	--	0.00277	
63	120438.4+014717	12:04:38.41	+01:47:17.07	0.69	-0.46±0.08	-0.31±0.12	--	--	--	--	0.90±0.17	120438+014722	2.8±0.5	0.78	--	--	--	--	--	0.02357	
64	120702.3+280603	12:07:2.33	+28:06:3.76	1.10	0.43±0.17	0.16±0.15	--	--	0.2	1.0	0.60±0.16	120702+280604	51.1±1.9	2.37	--	--	--	--	--	--	
65	121032.5+392421	12:10:32.55	+39:24:21.29	0.02	0.04±0.00	0.54±0.00	--	--	--	--	664.90±0.87	121032+392420	359.6±10.8	1.14	121032+392421	8.519	0.917	0.826	1.248	--	
66	121115.3+391141	12:11:15.34	+39:11:41.51	0.79	0.10±0.02	-0.35±0.03	--	--	0.8	2.5	7.75±0.33	121115+391136	5.8±0.4	2.64	--	--	--	--	--	0.34000	
67	122608.1+130644	12:26:8.15	+13:06:44.27	2.60	-0.48±0.09	-0.29±0.16	--	--	--	--	1.30±0.13	122607+130650	26.8±1.8	3.01	--	--	--	--	--	0.00083	
68	122627.0+311325	12:26:27.02	+31:13:25.56	0.82	-0.28±0.03	-0.32															

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>R</sub> [mJy]	R <sub>Xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS Mag & Colors			R <sub>xi</sub> f <sub>&lt;99%</sub>	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	NH	KT	NH	$\Gamma$						H – K	J – H	f <sub>&lt;99%</sub>		
79	125745.1+275741	12:57:45.21	+27:57:40.87	1.71	-0.00±0.14	-0.38±0.21	0.1	2.0	0.4	2.7	0.20±0.07	125745+275741	19.3±0.7	1.70	---	---	---	---	---	---
80	125801.8+282002	12:58:1.91	+28:20:2.42	0.96	-0.00±0.07	-0.02±0.07	--	--	0.01	1.2	0.55±0.08	125802+282002	23.5±0.8	1.54	---	---	---	---	---	---
81	125805.5+281434	12:58:5.55	+28:14:36.95	2.07	-0.37±0.05	-0.66±0.08	0.01	1.0	0.2	3.7	0.53±0.08	125805+281437	21.8±0.8	0.68	125805+281436	12.70	0.618	0.564	1.756	0.024060
82	125810.1+242100	12:58:10.10	+24:21:0.52	2.43	0.10±0.37	0.01±0.35	--	--	0.1	1.2	0.34±0.24	125809+242051	3.4±0.4	2.45	125810+242100	13.46	0.373	0.650	1.770	0.022155
83	125811.9+282749	12:58:11.96	+28:27:49.19	0.83	-0.02±0.13	-0.19±0.14	--	--	0.2	2.0	0.22±0.07	125811+282749	90.6±2.7	0.25	---	---	---	---	---	---
84	125837.4+271036	12:58:37.42	+27:10:36.39	1.19	0.24±0.16	-0.28±0.16	0.2	2.2	0.4	2.5	0.42±0.16	125837+271033	5.6±0.4	1.94	125837+271036	14.30	0.379	0.627	1.667	0.025570
85	125838.3+272258	12:58:38.34	+27:22:58.46	0.45	0.15±0.07	-0.28±0.07	0.2	2.2	0.4	2.5	1.18±0.13	125838+272259	11.6±0.5	1.08	---	---	---	---	---	---
86	125858.9+274646	12:58:58.91	+27:46:46.70	7.24	0.23±0.27	-0.01±0.21	--	--	0.2	1.5	2.34±0.61	125859+274645	71.9±2.5	0.91	---	---	---	---	---	---
87	125902.1+280659	12:59:2.16	+28:06:59.34	1.56	-0.34±0.08	-0.93±0.08	0.4	0.40	--	--	0.23±0.06	125902+280658	7.5±0.5	0.21	125902+280659	13.96	0.415	0.507	2.055	0.031475
88	130030.7+283308	13:00:30.77	+28:33:8.68	1.86	0.99±0.64	0.38±0.56	4.	1.6	4.	3.2	0.31±0.08	130030+283310	7.6±1.1	0.49	---	---	---	---	---	---
89	130038.0+280325	13:00:38.07	+28:03:23.64	1.66	-0.68±0.06	-0.89±0.07	--	--	--	--	0.21±0.04	130037+280323	21.1±1.1	0.82	130038+280323	12.89	0.500	0.570	1.971	0.026151
90	130040.6+283111	13:00:40.70	+28:31:14.24	1.17	-0.03±0.07	-0.58±0.08	0.2	1.2	0.4	3.5	0.09±0.02	130040+283116	6.3±0.5	0.90	---	---	---	---	---	0.029700
91	130113.0+281428	13:01:13.09	+28:14:28.12	1.80	-0.33±0.27	-0.08±0.38	--	--	--	--	0.25±0.15	130112+281428	8.0±0.5	1.67	---	---	---	---	---	---
92	130153.0+281343	13:01:53.02	+28:13:43.21	0.91	0.12±0.12	-0.35±0.15	0.2	2.0	0.4	2.7	0.19±0.05	130153+281344	57.2±2.1	1.62	---	---	---	---	---	---
93	130212.7+281253	13:02:12.80	+28:12:53.75	1.20	-0.35±0.14	-0.87±0.20	0.2	0.50	--	--	0.19±0.08	130213+281247	27.7±0.4	3.00	130212+281253	14.35	0.400	0.635	0.246	0.027360
94	130342.4+241443	13:03:42.42	+24:14:43.22	0.66	0.22±0.02	-0.46±0.02	0.4	1.6	0.8	3.2	85.21±2.98	130342-241442	36.4±1.2	2.67	130342-241443	14.50	0.587	0.867	1.852	0.127600
95	131142.2-012343	13:11:42.24	-01:23:43.80	0.72	0.99±0.56	0.77±0.12	--	--	4.	0.75	0.31±0.05	131142-012345	16.4±1.1	0.99	---	---	---	---	---	---
96	131459.3-163524	13:14:59.19	-16:35:22.64	1.40	-0.33±0.07	-0.29±0.11	--	--	--	--	2.78±0.20	131459-163522	8.3±1.1	2.08	131459-163522	10.91	0.851	0.580	2.341	0.006351
97	131524.0-162306	13:15:24.07	-16:23:6.60	0.45	-0.53±0.04	-0.78±0.06	--	--	--	--	1.97±0.10	131523-162307	34.7±1.1	2.38	---	---	---	---	---	0.009000
98	131619.6-164007	13:16:19.62	-16:40:7.49	1.53	0.38±0.18	-0.15±0.16	0.4	2.6	0.6	2.2	0.83±0.30	131619-164007	4.0±0.5	3.02	---	---	---	---	---	0.018000
99	132409.9+135835	13:24:9.98	+13:58:35.75	0.31	-0.35±0.01	-0.82±0.02	0.2	0.60	--	--	4.80±0.14	132410+135839	7.2±0.5	2.90	132409+135835	11.12	0.286	0.717	1.740	0.022983
100	132428.8+140533	13:24:28.87	+14:05:33.06	0.59	-0.12±0.08	-0.33±0.09	0.01	2.2	0.2	3.2	0.92±0.16	132428+140536	8.1±0.5	1.85	---	---	---	---	---	0.024233
101	132729.5-312324	13:27:29.60	-31:23:24.45	0.80	0.05±0.08	-0.56±0.10	0.2	1.2	0.6	2.5	0.59±0.09	132729-312327	2.4±0.6	2.45	132729-312324	12.11	0.830	0.670	0.680	0.048827
102	132749.9-312107	13:27:49.97	-31:21:7.12	1.40	0.35±0.20	-0.15±0.18	--	--	0.4	2.0	0.15±0.06	132750-312103	19.0±0.8	1.96	---	---	---	---	---	---
103	132755.1-313217	13:27:55.11	-31:32:17.65	0.65	-0.41±0.09	-0.54±0.18	--	--	0.1	3.0	0.74±0.11	132754-313215	5.0±0.5	2.65	132755-313217	12.35	0.563	0.592	2.685	0.052952
104	132929.2+113730	13:29:29.28	+11:37:30.40	1.39	-0.68±0.13	0.47±0.23	--	--	--	--	0.26±0.12	132929+113728	2.9±0.4	0.81	132929+113730	12.99	0.358	0.735	0.859	0.020921
105	133106.4-315508	13:31:6.48	-31:55:8.03	1.10	0.33±0.16	-0.57±0.14	0.6	1.0	--	--	0.34±0.16	133106-315509	6.6±0.5	1.34	133106-315508	13.08	0.110	0.342	2.280	---
106	133110.8-014345	13:31:10.83	-01:43:45.23	1.36	0.11±0.02	-0.46±0.02	0.2	1.6	0.4	3.0	26.05±1.68	133110-014345	3.5±0.5	1.97	133110-014345	13.54	0.439	0.619	2.658	0.087247
107	133112.1-313928	13:31:12.17	-31:39:28.50	1.48	0.62±0.26	0.21±0.21	--	--	0.6	1.2	0.20±0.12	133111-313927	7.4±0.6	1.89	---	---	---	---	---	---
108	133137.7-313310	13:31:37.74	-31:33:10.14	2.05	-0.16±0.20	-0.83±0.21	0.4	0.60	--	--	0.75±0.32	133137-313320	3.7±0.6	1.80	133137-313310	13.47	0.343	0.795	0.825	0.047410
109	133231.7-314153	13:32:31.78	-31:41:53.95	1.62	0.58±0.28	-0.14±0.22	0.6	2.2	0.8	2.5	0.09±0.04	133231-314153	4.5±0.5	0.22	---	---	---	---	---	---
110	133353.0-312003	13:33:53.01	-31:20:3.11	1.18	0.56±0.16	-0.09±0.15	--	--	0.8	2.2	0.50±0.16	133352-312002	9.3±0.6	0.48	---	---	---	---	---	---
111	133503.0-313918	13:35:3.02	-31:39:18.91	0.81	-0.30±0.08	-0.70±0.12	0.1	0.90	--	--	0.62±0.14	133503-313917	14.6±0.6	0.71	133503-313918	12.28	0.323	0.783	0.322	0.052072
112	133913.3+043715	13:39:13.35	+04:37:15.15	2.61	-0.64±0.39	-0.36±1.14	--	--	--	--	0.07±0.11	133913+043726	2.6±0.5	2.02	---	---	---	---	---	0.022874
113	134056.5+262910	13:40:56.55	+26:29:10.37	1.30	-0.19±0.16	-0.74±0.25	0.2	0.80	--	--	0.16±0.08	134056+262911	26.0±0.9	1.02	134056+262910	13.54	0.252	0.640	1.299	0.078961
114	134148.9+260900	13:41:48.97	+26:09:0.73	1.47	-0.30±0.17	-0.24±0.25	--	--	--	--	0.34±0.14	134149+260901	11.4±0.5	2.08	---	---	---	---	---	---
115	134742.5-331141	13:47:42.52	-33:11:41.28	0.98	0.07±0.16	-0.15±0.19	--	--	0.2	1.7	0.45±0.17	134742-331141	15.9±0.7	1.55	---	---	---	---	---	0.039640
116	134807.9-324614	13:48:7.93	-32:46:14.41	1.52	0.56±0.19	-0.27±0.18	0.6	1.8	1.	3.0	0.25±0.15	134807-324613	207.6±6.2	1.00	---	---	---	---	---	---
117	135022.4-333657	13:50:22.42	-33:36:57.55	0.39	0.16±0.05	-0.28±0.06	0.2	2.2	0.4	2.5	1.82±0.20	135022-333657	76.4±2.3	2.53	---	---	---	---	---	---
118	140136.3-110744	14:01:36.31	-11:07:44.80	0.37	0.13±0.03	-0.60±0.03	0.4	1.0	0.6	4.0	1.19±0.07	140136-110747	4.8±0.5	2.97	140136-110744	12.75	0.549	0.700	2.679	0.071864
119	141429.0-002231	14:14:29.07	-00:22:31.33	1.30	-0.56±0.17	-0.78±0.40	--	--	--	--	0.09±0.04	141429-002227	10.8±0.5	2.95	141429+002231	14.69	0.396	0.616	1.369	0.134400
120	141510.9+361204	14:15:10.97	+36:12:4.49	0.72	0.02±0.03	-0.35±0.04	--	--	1.	2.5	2.01±0.13	141510+361207	4.8±0.5	1.51	---	---	---	---	---	1.013000
121	141557.0+230729	14:15:57.06	+23:07:29.36	2.21	0.09±0.07	-0.70±0.08	0.4	0.80	--	--	2.41±0.61	141556+230730	195.7±6.4	2.62	---	---	---	---	---	---
122	141627.6+231529	14:16:27.67	+23:15:29.82	3.29	0.12±0.06	-0.44±0.05	0.2	1.6	0.4	3.0	29.07±2.27	141627+231535	3.6±0.5	0.79	141627+231529	13.72	0.511	0.650	2.501	---
123	141832.2+251211	14:18:32.28	+25:12:11.85	5.57	0.45±0.22	-0.55±0.20	0.8	0.90	--	--	0.53±0.34	141832+251203	38.0±1.5	1.58	141832+251211	14.94	0.059	0.582	2.091	---
124	142601.5+374934	14:26:1.54	+37:49:34.49	0.24	0.15±0.00	-0.26±0.00	--	--	0.4	2.2	399.32±2.09	142601+374957	15.1±3.1	2.72	---	---	---	---	---	0.171000
125	145243.2+165414	14:52:43.26	+16:54:14.38	1.03	-0.15±0.12	-0.95±0.11	0.6	0.30	--	--	0.10±0.05	145243+165413	17.7±0.7	0.93	145243+165414	12.09	0.366	0.823	0.750	0.046079
126	145351.0+032908	14:53:51.01	+03:29:8.48	1.36	0.33±0.18	-0.09±0.18	--	--	0.4	2.0	0.09±0.03	145351+032903	2.8±0.5	1.08	---	---	---	---	---	0.005590
127	145453.1+184525	14:54:53.20	+18:45:25.80	1.83	-0.69±0.17	-0.77±0.40	--	--	--	--	0.06±0.05	145452+184527	3.3±0.5	2.32	145453+184525	13.86	0.444	0.782	0.645	0.071553
128	150824.5-001557	15:08:24.57	-00:15:57.36	6.89	-0.03±0.12	-0.31±0.13	0.1	2.2	0.2	2.2	4.07±1.21	150824-001614	2.5±0.5	1.63	150824+001557	13.46	0.434	0.797	1.735	0.092308
129	151100.3+054920	15:11:0.40	+05:49:20.70	0.63	-0.09±0.11	-0.47±0.15	0.1	1.6	0.4	3.0	0.63±0.12	151100+054916	6.6±0.5	2.30	151100+054920	15.16	1.086	0.686	1.736	---
130	152140																			

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors		R <sub>xi</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						H – K	J – H			
140	162944.8+404842	16:29:44.85	+40:48:42.23	0.35	-0.52±0.03	-0.88±0.03	0.1	0.50	--	--	2.99± 0.14	162944+404842	7.5± 0.5	2.88	162944+404842	11.08	0.272	0.849	1.034	0.029490
141	162958.1+403743	16:29:58.11	+40:37:43.08	1.96	-0.24±0.21	-0.21±0.22	--	--	0.	1.7	0.40± 0.25	162957+403744	11.7± 0.5	1.02	162958+403743	11.54	0.297	0.979	0.452	0.020850
142	165758.0+275110	16:57:58.02	+27:51:10.15	6.17	0.49±0.16	-0.65±0.17	0.8	0.70	--	--	15.04± 8.44	165758+275116	50.0± 1.9	1.05	165758+275110	11.26	0.212	0.929	0.952	0.034880
143	165823.8+585722	16:58:23.86	+58:57:22.48	3.00	0.08±0.34	-1.00±0.32	--	--	--	--	0.15± 0.24	165823+585721	10.9± 0.5	0.50	165823+585722	12.23	0.393	1.018	0.484	0.018610
144	165831.4+585617	16:58:31.47	+58:56:17.16	0.91	-0.54±0.08	-0.70±0.17	--	--	0.2	3.7	1.99± 0.41	165831+585615	156.7± 5.6	1.95	--	--	--	--	--	0.018300
145	170533.5+785116	17:05:33.56	+78:51:16.43	1.85	0.05±0.26	-0.51±0.23	0.2	1.4	0.4	3.2	0.36± 0.15	170533+785103	2.3± 0.5	2.01	170533+785116	13.74	0.524	0.886	0.080	0.064970
146	170930.7+784137	17:09:30.72	+78:41:37.15	2.12	-0.41±0.26	-0.04±0.36	--	--	--	--	0.17± 0.08	170930+784149	10.1± 1.2	2.89	--	--	--	--	--	--
147	171148.4+635607	17:11:48.35	+63:56: 7.95	0.91	-0.15±0.12	-0.02±0.13	--	--	--	--	0.59± 0.16	171148+635605	43.2± 1.4	1.81	--	--	--	--	--	--
148	171522.8+572441	17:15:22.85	+57:24:41.02	0.78	0.15±0.03	-0.72±0.03	0.6	0.70	--	--	31.82± 2.01	171522+572440	57.0± 1.8	0.94	171522+572441	11.48	0.486	0.839	1.377	0.027570
149	192131.8+435943	19:21:31.97	+43:59:43.23	0.20	0.28±0.02	-0.24±0.02	0.4	2.2	0.6	2.5	7.98± 0.24	192132+435946	4.6± 0.5	2.78	--	--	--	--	--	0.045470
150	214907.4-304203	21:49: 7.42	-30:42: 3.98	0.16	0.08±0.01	-0.45±0.01	0.2	1.8	0.6	3.0	65.87± 0.51	214907-304204	31.5± 1.1	0.86	214907-304203	13.32	0.510	0.593	2.223	0.120170
151	220201.8-315210	22:02: 1.73	-31:52:10.22	0.13	0.36±0.03	0.89±0.00	--	--	--	--	264.46± 1.50	220201-315210	36.8± 1.5	2.88	220201-315210	10.45	1.064	0.992	2.016	0.008620
152	221905.8-390043	22:19: 5.88	-39:00:43.39	1.92	-0.44±0.22	-0.92±0.23	0.4	0.50	--	--	0.05± 0.06	221905-390050	7.0± 0.5	2.64	221905-390043	14.73	0.540	0.565	1.881	0.149580
153	223416.7-374913	22:34:16.72	-37:49:13.15	1.22	-0.53±0.19	-1.00±0.67	--	--	--	--	0.06± 0.04	223416-374908	19.1± 0.7	2.54	223416-374913	14.31	0.386	0.741	0.852	0.151590
154	223655.8-153038	22:36:55.89	-15:30:38.85	7.62	0.04±0.15	-0.42±0.35	0.1	1.8	0.4	2.7	3.57± 2.30	223655-153036	40.6± 2.0	0.43	223655-153038	13.03	0.568	0.682	0.652	--
155	230247.9+084353	23:02:47.97	+08:43:52.28	2.25	0.26±0.03	-0.34±0.03	--	--	2.	2.7	1.46± 0.15	230248+084350	25.2± 0.9	1.03	--	--	--	--	--	0.720000
156	233609.7+212024	23:36: 9.75	+21:20:24.78	0.67	0.12±0.04	-0.28±0.04	0.2	2.2	0.4	2.5	1.51± 0.14	233609+212024	83.6± 2.5	0.23	--	--	--	--	--	--
157	233614.1+020919	23:36:14.17	+02:09:19.16	0.16	-0.05±0.01	-0.43±0.02	0.1	1.8	0.4	2.7	4.64± 0.10	233614+020918	65.8± 2.7	2.67	--	--	--	--	--	--
158	233630.4+210846	23:36:30.41	+21:08:45.90	0.36	0.17±0.00	-0.47±0.00	0.2	1.4	0.6	3.2	92.02± 0.48	233630+210845	54.5± 2.4	0.55	--	--	--	--	--	0.055100
159	234818.9-281330	23:48:18.97	-28:13:30.95	8.59	-0.43±0.21	-0.81±0.28	0.1	0.70	--	--	1.01± 0.46	234819-281347	2.5± 0.5	1.39	234818-281330	14.91	0.714	0.732	2.155	--
160	235413.6-102509	23:54:13.66	-10:25: 9.08	0.77	0.13±0.08	-0.71±0.09	0.6	0.70	--	--	0.72± 0.12	235413-102512	6.2± 0.5	2.18	235413-102509	12.75	0.601	0.792	0.574	0.077700
Quasars																				
1	000020.4-322100	00:00:20.41	-32:21: 0.32	0.27	-0.10±0.04	-0.34±0.05	--	--	0.6	2.2	2.04± 0.20	000020-322059	520.9± 15.6	2.85	--	--	--	--	--	1.275000
2	001318.5-271514	00:13:18.58	-27:15:14.30	0.16	0.05±0.02	-0.34±0.02	0.2	2.0	0.4	2.5	2.33± 0.09	001318-271515	37.6± 1.2	1.39	--	--	--	--	--	--
3	001708.8+813508	00:17: 8.81	+81:35: 8.67	0.05	0.38±0.01	-0.17±0.01	--	--	6.	2.0	52.27± 0.53	001708+813508	692.5± 20.8	1.90	001708+813508	13.54	0.580	0.597	2.092	2.428800
4	001831.4+162043	00:18:31.42	+16:20:43.09	0.42	0.22±0.06	-0.35±0.07	--	--	4.	2.7	0.51± 0.06	001831+162042	268.8± 8.1	2.76	--	--	--	--	--	1.333000
5	003255.7+394620	00:32:55.75	+39:46:20.19	1.23	0.16±0.11	-0.59±0.12	2.	1.8	2.	3.7	1.00± 0.30	003255+394618	38.8± 1.5	2.54	--	--	--	--	--	1.140000
6	003430.8-213351	00:34:30.85	-21:33:51.61	0.45	0.02±0.06	-0.29±0.06	--	--	1.	2.2	2.14± 0.23	003430-213349	167.2± 5.8	2.90	--	--	--	--	--	0.764000
7	004013.7+405004	00:40:13.72	+40:50: 4.62	0.09	0.47±0.01	-0.24±0.01	0.4	2.0	0.8	2.7	101.84± 1.50	004013+405005	47.3± 1.8	2.51	004013+405004	14.71	0.470	0.962	0.965	--
8	004016.3-271913	00:40:16.31	-27:19:13.16	0.18	-0.16±0.02	-0.62±0.03	0.2	1.2	0.6	3.7	34.30± 1.19	004016-271912	160.2± 4.8	1.86	--	--	--	--	--	0.170000
9	004906.5-294045	00:49: 6.53	-29:40:45.62	0.49	0.02±0.07	-0.41±0.08	0.1	1.8	0.4	2.7	0.66± 0.10	004906-294045	13.6± 0.6	2.94	--	--	--	--	--	--
10	005429.5-275307	00:54:29.50	-27:53: 7.96	2.65	0.69±0.36	-0.00±0.39	--	--	4.	2.0	0.19± 0.19	005429-275311	7.1± 0.5	1.20	--	--	--	--	--	0.838000
11	011853.7-010009	01:18:53.75	-01:00: 9.42	0.77	0.10±0.08	-0.84±0.07	0.6	0.50	--	--	0.50± 0.07	011853-010010	4.0± 0.5	1.49	--	--	--	--	--	0.045120
12	012505.5+014626	01:25: 5.54	+01:46:26.49	0.53	0.13±0.02	-0.26±0.02	--	--	2.	2.2	3.16± 0.12	012505+014626	186.6± 5.6	1.10	--	--	--	--	--	1.559000
13	014318.6+022821	01:43:18.67	+02:28:21.35	0.60	0.00±0.09	-0.55±0.11	0.8	2.2	2.	3.5	0.66± 0.14	014318+022820	15.7± 0.6	2.02	--	--	--	--	--	0.830000
14	014922.3+055554	01:49:22.36	+05:55:54.03	0.25	0.20±0.04	-0.33±0.04	--	--	4.	2.5	3.38± 0.22	014922+055553	906.3± 27.2	0.85	--	--	--	--	--	2.344990
15	015328.4+260937	01:53:28.40	+26:09:37.40	1.48	-0.04±0.23	-0.48±0.28	0.2	2.2	0.8	3.0	0.13± 0.06	015328+260939	38.7± 1.2	1.80	015328+260937	12.37	1.316	1.019	1.743	0.329700
16	020858.2+351914	02:08:58.21	+35:19:14.68	1.80	0.48±0.23	-0.35±0.22	0.6	1.6	0.8	3.2	0.04± 0.03	020858+351912	16.6± 0.9	1.33	--	--	--	--	--	--
17	021000.2-100353	02:10: 0.22	-10:03:53.70	0.59	0.13±0.08	-0.19±0.08	--	--	4.	2.0	2.02± 0.31	021000-100353	265.5± 8.0	0.88	--	--	--	--	--	1.976000
18	021640.7-044404	02:16:40.72	-04:44: 4.89	0.18	-0.08±0.02	-0.37±0.02	--	--	1.	2.5	3.80± 0.14	021640-044404	88.3± 2.7	2.82	021640-044404	14.52	0.461	0.186	0.603	0.870000
19	022504.5+184649	02:25: 4.55	+18:46:49.46	0.03	0.44±0.00	-0.09±0.00	--	--	6.	1.7	219.48± 1.02	022504+184648	460.8± 13.8	1.53	--	--	--	--	--	2.690000
20	023838.9+163659	02:38:38.91	+16:36:59.18	0.18	0.18±0.00	-0.40±0.00	--	--	2.	3.0	40.89± 0.28	023838+163658	1941.4± 58.2	1.08	023838+163659	13.23	0.871	1.213	0.688	0.940000
21	024008.1-230915	02:40: 8.15	-23:09:15.37	0.06	0.09±0.01	-0.32±0.01	--	--	2.	2.5	31.55± 0.37	024008-230916	6256.4± 187.7	0.93	024008-230915	13.63	0.879	0.601	1.875	1.657500
22	025315.6-012405	02:53:15.63	-01:24: 5.21	0.58	-0.23±0.09	-0.50±0.12	0.	1.6	0.2	3.0	0.51± 0.10	025315-012405	32.8± 1.1	0.51	--	--	--	--	--	--
23	031357.6+411524	03:13:57.61	+41:15:24.00	0.67	-0.46±0.02	-0.59±0.04	--	--	0.1	3.2	3.98± 0.33	031357+411522	40.6± 1.6	2.60	031357+411524	12.19	0.438	0.716	0.472	0.029400
24	031522.5-031647	03:15:22.60	-03:16:47.88	0.38	0.01±0.05	-0.36±0.06	--	--	1.	2.5	8.88± 0.90	031522-031646	1300.6± 41.3	2.93	031522-031647	15.43	0.643	0.594	2.910	1.072000
25	032444.2-291820	03:24:44.26	-29:18:20.77	0.50	0.06±0.07	-0.23±0.08	--	--	2.	2.0	1.55± 0.18	032444-291821	236.5± 7.1	1.53	--	--	--	--	--	4.210000
26	032613.8+022514	03:26:13.86	+02:25:14.88	0.09	0.09±0.01	-0.52±0.01	0.4	1.4	0.6	3.2	64.96± 1.18	032613+022515	67.7± 2.1	1.87	032613+022514	13.86	0.656	0.645	1.321	0.147000
27	033211.6-273726	03:32:11.52	-27:37:27.54	0.55	0.09±0.02	-0.25±0.03	--	--	2.	2.2	0.73± 0.04	033211-273727	4.5± 0.5	2.92	--	--	--	--	--	1.600000
28	033226.9-274105	03:32:26.96	-27:41: 5.72	0.16	-0.12±0.01	-0.39±0.01	--	--	0.8	2.5	1.66± 0.03	033226-274105	22.5± 1.2	2.89	--	--	--	--	--	0.734000
29	033232.0-280308	03:32:31.96	-28:03:10.55	2.23	0.11±0.08	-0.39±0.09	--	--	4.	2.7	0.51± 0.13	033232-280311	29.6± 1.3	0.57	--	--	--	--	--	1.966000
30	033310.1-274842	03:33:10.19	-27:48:41.18	1.27	0.20±0.05	-0.41±0.07	--	--	2.	3.0	0.0									

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>Xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS Mag & Colors			R <sub>xi</sub> f <sub>&lt;99%</sub>	Red z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						K	H – K	J – H		
40	071302.5+433807	07:13: 2.54	+43:38: 7.40	2.17	0.73±0.26	-0.16±0.31	2.	2.6	2.	3.0	0.60± 0.34	071302+433807	43.1± 1.7	0.18	---	---	---	---	0.518	
41	072132.3-312913	07:21:32.35	-31:29:13.14	2.83	0.28±0.22	-0.73±0.24	1.	0.90	---	---	0.11± 0.07	072132-312913	7.7± 0.5	0.75	---	---	---	---	0.300	
42	072344.7+712733	07:23:44.75	+71:27:33.90	14.62	-0.18±0.26	-0.25±0.30	---	---	1.	2.0	2.62± 1.75	072344+712722	2.5± 0.4	0.71	072344+712733	14.18	0.808	0.760	0.191	2.100
43	074024.3+740819	07:40:24.35	+74:08:19.30	1.09	0.28±0.16	-0.02±0.15	---	---	0.6	1.5	0.17± 0.06	074024+740820	60.4± 1.9	1.03	---	---	---	---	0.630	
44	074226.5+493435	07:42:26.73	+49:34:34.96	3.03	0.66±0.14	-0.17±0.18	0.8	2.0	1.	2.7	2.45± 0.91	074225+493431	6.7± 1.0	2.88	---	---	---	---	0.020	
45	082207.2+011856	08:22: 7.28	+01:18:56.54	2.10	1.00±0.42	0.19±0.39	10	2.6	10	3.2	0.06± 0.06	082207+011858	13.5± 1.1	1.04	---	---	---	---	0.864	
46	082651.4+263720	08:26:51.44	+26:37:20.28	1.75	0.04±0.26	-0.23±0.27	---	---	0.4	2.0	0.07± 0.03	082651+263721	16.6± 0.6	0.85	---	---	---	---	0.690	
47	083736.7-130404	08:37:36.70	-13:04: 4.89	2.33	-0.41±0.33	0.25±0.38	---	---	---	---	0.42± 0.30	083736-130403	11.0± 0.6	0.76	---	---	---	---	1.120	
48	083754.4+244444	08:37:54.55	+24:44:42.74	2.37	0.60±0.24	0.10±0.23	---	---	6.	1.5	0.26± 0.12	083754+244443	3.1± 0.5	1.18	---	---	---	---	2.050	
49	084038.7+132510	08:40:38.72	+13:25:10.78	1.23	0.18±0.14	-0.02±0.14	---	---	2.	1.5	1.06± 0.37	084038+132513	16.6± 0.6	2.01	---	---	---	---	2.170	
50	085045.7+110841	08:50:45.73	+11:08:41.96	0.98	0.04±0.13	-0.50±0.15	---	---	6.	3.2	0.53± 0.13	085045+110841	50.4± 1.6	0.38	085045+110841	15.96	0.143	0.365	1.029	2.620
51	085448.8+200630	08:54:48.85	+20:06:30.41	0.04	0.03±0.01	-0.30±0.01	---	---	0.6	2.2	39.45± 0.29	085448+200630	1511.8± 45.4	0.66	085448+200630	11.83	0.846	0.926	1.185	0.300
52	085841.4+140944	08:58:41.47	+14:09:44.99	0.10	0.21±0.01	-0.34±0.01	---	---	2.	2.7	18.27± 0.45	085841+140943	2370.8± 71.1	2.40	085841+140944	15.28	0.723	0.913	0.880	1.043
53	091528.7+441633	09:15:28.78	+44:16:33.56	0.48	-0.04±0.07	-0.22±0.08	---	---	1.	2.0	4.18± 0.56	091528+441632	176.9± 5.9	2.35	---	---	---	---	1.488	
54	094124.7+033914	09:41:24.75	+03:39:16.48	1.56	0.41±0.18	-0.43±0.18	2.	2.6	4.	3.2	0.61± 0.21	094124+033914	12.3± 0.6	0.81	---	---	---	---	1.220	
55	095306.4+012241	09:53: 6.41	+01:22:41.31	1.25	-0.04±0.16	-0.56±0.19	---	---	4.	3.5	1.18± 0.56	095306+012242	22.7± 0.8	1.75	---	---	---	---	1.411	
56	095456.7+174332	09:54:56.80	+17:43:32.08	0.11	0.12±0.02	-0.26±0.02	---	---	2.	2.2	9.76± 0.23	095456+174331	1158.5± 34.8	0.85	095456+174332	15.68	-0.18	0.935	2.500	1.470
57	095711.1+412230	09:57:11.13	+41:22:30.44	1.51	0.37±0.20	-0.58±0.22	---	---	10	4.0	0.52± 0.23	095711+412229	31.3± 1.0	0.72	---	---	---	---	1.720	
58	095847.2+653355	09:58:47.23	+65:33:55.69	0.04	0.22±0.01	-0.33±0.01	---	---	1.	2.7	52.61± 0.65	095847+653354	729.4± 21.9	1.99	095847+653355	12.42	0.861	0.803	2.194	0.368
59	100249.2+023746	10:02:49.30	+02:37:46.06	1.31	0.21±0.11	-0.31±0.12	---	---	4.	2.5	0.21± 0.05	100249+023749	7.0± 0.5	2.93	---	---	---	---	2.130	
60	101112.2+554447	10:11:12.29	+55:44:47.56	0.18	0.14±0.02	-0.28±0.03	---	---	1.	2.2	2.34± 0.09	101112+554449	173.6± 6.1	2.71	---	---	---	---	1.240	
61	101511.8+520707	10:15:11.90	+52:07: 7.92	1.07	0.19±0.14	-0.54±0.15	1.	2.2	2.	3.7	1.70± 0.73	101511+520707	77.5± 2.4	0.73	---	---	---	---	0.890	
62	101706.6+520247	10:17: 6.67	+52:02:47.65	0.70	-0.04±0.11	-0.68±0.12	0.6	1.2	---	---	1.63± 0.48	101706+520247	39.7± 1.2	0.64	101706+520247	15.31	0.526	0.863	0.641	0.380
63	101714.0+390125	10:17:14.05	+39:01:25.38	0.72	-0.26±0.23	0.54±0.16	---	---	---	---	1.33± 0.14	101714+390124	1392.2± 41.8	1.98	---	---	---	---	0.560	
64	102838.8-084438	10:28:38.81	-08:44:38.28	0.13	0.28±0.01	-0.18±0.01	---	---	4.	2.0	15.61± 0.24	102838-084438	269.2± 8.1	0.53	---	---	---	---	3.420	
65	103118.4+505336	10:31:18.50	+50:53:36.61	0.04	0.03±0.00	-0.48±0.00	0.4	2.0	0.8	3.0	170.13± 0.33	103118+505336	37.5± 1.2	0.26	103118+505336	13.90	0.585	0.800	0.746	0.360
66	103154.3-141651	10:31:54.34	-14:16:51.04	0.02	0.05±0.00	-0.40±0.00	0.2	1.8	0.4	2.7	370.01± 1.08	103154-141650	14.3± 0.7	2.73	103154-141651	11.16	1.010	0.587	1.461	0.086
67	103739.8-270527	10:37:39.82	-27:05:27.80	0.31	0.09±0.04	-0.24±0.05	---	---	0.6	2.2	3.45± 0.23	103739-270525	218.2± 6.6	1.92	103739-270527	15.19	0.804	1.303	2.062	0.570
68	103850.8+415513	10:38:50.90	+41:55:13.62	0.46	-0.09±0.07	-0.44±0.08	---	---	2.	2.7	2.26± 0.35	103850+415516	6.1± 0.4	1.40	103850+415513	15.29	0.820	0.937	1.340	1.468
69	104117.1+061017	10:41:17.14	+06:10:17.63	0.04	0.10±0.01	-0.25±0.01	---	---	1.	2.2	26.01± 0.22	104117+061016	1405.2± 42.2	1.81	104117+061017	15.01	0.599	0.639	1.825	1.270
70	105137.2+572942	10:51:37.21	+57:29:42.09	3.32	-0.32±0.74	0.71±0.36	---	---	---	---	0.08± 0.05	105138+572942	2.8± 0.5	2.42	---	---	---	---	---	
71	105142.0+573554	10:51:42.04	+57:35:56.59	1.00	0.10±0.05	-0.20±0.06	---	---	0.2	2.0	0.10± 0.02	105142+573601	4.8± 0.4	2.57	---	---	---	---	---	
72	105237.2+573103	10:52:37.21	+57:31: 2.44	1.68	0.17±0.03	-0.33±0.03	---	---	2.	2.5	0.15± 0.01	105237+573101	65.0± 2.3	0.42	---	---	---	---	0.708	
73	105250.0+335505	10:52:50.07	+33:55: 5.69	0.48	-0.05±0.05	-0.32±0.06	---	---	1.	2.2	4.50± 0.50	105250+335504	20.6± 1.0	1.49	105250+335505	15.06	-0.04	1.176	1.166	1.408
74	105255.2+571951	10:52:55.01	+57:19:51.06	1.65	0.62±0.05	-0.13±0.05	---	---	6.	2.2	0.12± 0.02	105254+571950	3.5± 0.5	1.01	---	---	---	---	1.400	
75	105400.3+573321	10:54: 0.51	+57:33:21.72	0.92	0.63±0.04	-0.12±0.04	0.6	2.2	1.	2.5	0.26± 0.02	105400+573322	3.0± 0.4	0.74	---	---	---	---	---	
76	110427.3+381231	11:04:27.43	+38:12:32.66	0.02	0.01±0.00	-0.42±0.00	0.1	1.8	0.4	2.7	2930.26± 0.78	110427+381232	767.4± 28.9	0.37	---	---	---	---	0.030	
77	11036.2+481752	11:10:36.22	+48:17:52.75	0.59	0.10±0.07	-0.34±0.07	---	---	1.	2.5	1.57± 0.29	11036+481753	512.1± 15.4	2.07	---	---	---	---	0.740	
78	111121.6+482047	11:11:21.64	+48:20:47.47	0.26	0.22±0.03	-0.23±0.03	---	---	0.6	2.2	4.55± 0.29	111121+482047	15.0± 0.9	2.87	---	---	---	---	0.280	
79	111547.0+430431	11:15:47.08	+43:04:31.10	1.35	0.47±0.14	-0.35±0.16	---	---	4.	3.0	1.86± 0.64	111547+430429	47.4± 1.5	1.39	---	---	---	---	1.030	
80	111654.7+180307	11:16:54.71	+18:03: 7.24	0.87	-0.27±0.03	-0.49±0.05	---	---	0.2	3.0	3.45± 0.35	111654+180304	6.9± 0.4	1.46	111654+180307	9.529	0.158	0.674	1.143	---
81	111908.6+211918	11:19: 8.71	+21:19:18.38	0.07	-0.15±0.00	-0.48±0.01	0.01	1.8	0.4	3.0	113.75± 0.74	111908+211913	6.1± 0.5	2.46	111908+211918	11.54	1.144	0.908	0.650	0.170
82	112338.0+052038	11:23:38.07	+05:20:38.62	0.25	0.10±0.03	-0.26±0.03	---	---	4.	2.2	3.75± 0.24	112338+052039	149.5± 4.5	2.85	---	---	---	---	2.180	
83	113007.0-144926	11:30: 7.03	-14:49:26.96	0.04	0.31±0.01	-0.15±0.01	---	---	4.	2.0	94.23± 0.72	113007-144927	5622.2± 198.5	1.07	113007-144926	13.59	0.831	0.851	1.753	1.480
84	114106.3-014110	11:41: 6.39	-01:41:10.81	1.62	0.50±0.26	-0.46±0.25	4.	2.0	4.	3.7	0.08± 0.07	114106-014106	3.9± 0.5	1.44	---	---	---	---	1.270	
85	114405.3+195601	11:44: 5.39	+19:56: 2.96	1.02	0.37±0.14	-0.23±0.13	---	---	6.	2.2	0.38± 0.12	114405+195601	15.9± 0.6	1.93	---	---	---	---	2.200	
86	114758.4+525545	11:47:58.42	+52:55:45.47	1.86	0.23±0.30	0.21±0.29	---	---	0.1	0.75	0.33± 0.20	114758+525545	22.5± 0.8	0.13	---	---	---	---	---	
87	114816.1+525900	11:48:16.14	+52:59: 0.27	0.96	0.25±0.12	-0.52±0.14	0.4	1.2	0.8	3.7	2.22± 0.65	114816+525859	107.7± 3.3	0.49	---	---	---	---	---	
88	114856.5+525426	11:48:56.60	+52:54:26.00	0.34	0.11±0.05	-0.25±0.05	---	---	2.	2.2	10.25± 0.78	114856+525425	92.9± 2.8	0.72	114856+525426	14.32	0.165	0.848	1.385	1.630
89	115024.7+015620	11:50:24.77	+01:56:20.56	0.31	0.10±0.03	-0.22±0.04	---	---	1.	2.0	2.33± 0.14	115024+015619	153.2± 5.5	2.73	---	---	---	---	0.705	
90	120619.6+282254	12:06:19.68	+28:22:54.63	0.42	0.03±0.06	-0.27±0.06	---	---	1.	2.2	2.91± 0.36	120619+282254	37.8± 1.2	1.65	---	---	---	---	0.708	
91	120703.2+652407	12:07: 3.26	+65:24: 7.58	2.04	0.18±0.16	-0.44±0.18	---	---	4.	3.0	0.77± 0.55	120703+652409	46.7± 1.8	0.76	120703+652407	15.07	0.077	0.804	0.819	1.548
92	120943.4+393644	12:09:43.28	+39:36:42.03	1.24	-0.17±0.08	-0.32±0.10	---	---	2.	2.2	0.71± 0.14	120943+393642	24.2							

Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name NVSS J+	F <sub>R</sub> [mJy]	R <sub>Xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors			R <sub>xi</sub> f<99%	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						H – K	J – H	f<99%		
101	122523.9+002333	12:25:23.97	+00:23:33.91	1.22	-0.15±0.15	-0.58±0.19	0.4	2.2	2.	3.5	0.49± 0.22	122524+002337	12.2± 0.6	2.27	---	---	---	---	0.970000	
102	123131.4+641418	12:31:31.39	+64:14:18.91	0.03	-0.09±0.00	-0.50±0.00	0.1	1.8	0.4	3.0	31.61± 0.19	123131+641419	58.0± 2.2	1.16	123131+641418	13.67	0.659	0.694	1.592	0.164000
103	123413.4+475352	12:34:13.43	+47:53:52.52	0.37	0.15±0.07	-0.49±0.07	0.6	1.8	1.	3.2	11.21± 1.17	123413+475351	355.9± 10.7	0.95	123413+475352	14.49	0.594	0.346	1.520	0.375000
104	123545.2-033615	12:35:45.28	-03:36:15.56	1.31	0.33±0.19	-0.19±0.19	---	---	4.	2.0	0.51± 0.26	123545-033611	11.3± 0.5	2.30	---	---	---	---	2.375100	
105	123820.3+175038	12:38:20.34	+17:50:38.08	1.33	-0.07±0.20	-0.18±0.24	---	---	0.2	1.7	0.11± 0.04	123820+175041	5.6± 0.4	1.24	123820+175038	12.96	1.332	1.047	1.749	0.449000
106	124903.4-061046	12:49: 3.49	-06:10:46.51	0.22	-0.07±0.02	-0.40±0.02	---	---	0.4	2.5	2.87± 0.12	124903-061043	12.6± 0.6	2.15	---	---	---	---	0.610000	
107	125731.9+241241	12:57:31.94	+24:12:41.12	0.07	0.10±0.01	-0.39±0.01	0.2	2.0	0.6	2.7	124.25± 1.80	125731+241238	14.0± 0.9	1.23	125731+241241	14.22	0.470	0.823	0.944	0.140700
108	125805.3+014339	12:58: 5.32	+01:43:39.75	1.82	0.01±0.20	-0.40±0.23	---	---	1.	2.7	0.53± 0.22	125805+014339	6.0± 0.4	1.79	---	---	---	---	1.049800	
109	125810.8+014343	12:58:10.82	+01:43:44.00	1.50	-0.08±0.25	-0.15±0.29	---	---	1.	1.7	0.39± 0.25	125810+014345	24.3± 0.8	1.45	---	---	---	---	2.568600	
110	130120.0+282137	13:01:20.10	+28:21:37.60	0.17	-0.01±0.01	-0.34±0.01	---	---	2.	2.5	4.55± 0.11	130120+282137	100.7± 3.0	2.07	---	---	---	---	1.373000	
111	131028.6+322044	13:10:28.65	+32:20:44.18	0.03	0.07±0.00	-0.30±0.00	---	---	1.	2.2	64.31± 0.43	131028+322044	1686.6± 50.6	1.75	131028+322044	14.69	0.842	0.797	1.838	0.997000
112	131055.5-012723	13:10:55.59	-01:27:23.34	0.50	-0.15±0.08	-0.33±0.10	---	---	0.6	2.2	0.40± 0.10	131055-012726	4.9± 0.5	1.32	---	---	---	---	1.004000	
113	131938.7-004940	13:19:38.76	-00:49:40.00	0.12	0.02±0.02	-0.29±0.02	---	---	1.	2.2	12.02± 0.34	131938-004940	1468.9± 44.1	1.79	131938+004940	15.18	0.731	0.209	1.896	0.870000
114	132033.2+331143	13:20:33.22	+33:11:43.15	0.30	0.18±0.05	-0.19±0.05	---	---	1.	2.0	2.07± 0.14	132033+331142	25.8± 0.9	2.96	---	---	---	---	0.924000	
115	132830.8+470356	13:28:30.88	+47:03:56.10	2.08	0.01±0.11	-0.41±0.14	---	---	2.	2.7	1.47± 0.59	132831+470403	3.1± 0.5	0.94	---	---	---	---	1.545000	
116	132833.6+114519	13:28:33.62	+11:45:19.65	0.09	-0.12±0.01	-0.48±0.01	0.1	2.2	0.6	3.0	46.46± 0.90	132833+114521	2.4± 0.5	1.16	---	---	---	---	0.490000	
117	133232.6+111224	13:32:32.60	+11:12:24.89	0.83	0.07±0.11	-0.35±0.12	0.2	2.0	0.4	2.5	0.85± 0.17	133232+111222	26.0± 0.9	1.82	---	---	---	---	---	
118	133718.6+242303	13:37:18.70	+24:23: 3.33	0.04	-0.23±0.01	-0.36±0.01	---	---	0.1	2.2	86.30± 0.68	133718+242302	19.6± 0.7	1.48	133718+242303	10.49	1.289	1.010	0.778	0.107000
119	133739.8-125725	13:37:39.80	-12:57:25.75	0.05	0.11±0.01	-0.31±0.01	---	---	0.8	2.5	51.97± 0.55	133739-125724	2676.3± 80.3	1.94	---	---	---	---	0.539000	
120	133807.4+280508	13:38: 7.49	+28:05: 8.53	0.38	0.34±0.05	-0.09±0.05	---	---	2.	1.7	1.85± 0.14	133807+280509	166.6± 5.0	1.07	---	---	---	---	1.086000	
121	134133.1+353252	13:41:33.14	+35:32:52.35	0.22	-0.02±0.03	-0.40±0.03	---	---	1.	2.7	4.91± 0.28	134133+353253	76.8± 2.8	1.85	---	---	---	---	0.780000	
122	134133.4-002433	13:41:33.40	-00:24:33.86	2.21	-0.72±0.21	0.11±0.39	---	---	---	---	0.21± 0.11	134133-002432	3.4± 0.5	1.35	134133+002433	14.00	0.466	0.613	0.815	0.071700
123	134232.4-003151	13:42:32.44	-00:31:51.83	1.28	-0.35±0.17	-0.27±0.26	---	---	---	---	0.97± 0.63	134232-003154	2.2± 0.4	1.23	---	---	---	---	1.209000	
124	134252.9+403202	13:42:52.93	+40:32: 2.08	0.13	0.04±0.02	-0.26±0.03	---	---	1.	2.2	3.41± 0.12	134252+403201	151.6± 4.6	1.90	---	---	---	---	0.910000	
125	134414.1+001642	13:44:14.13	+00:16:42.50	0.30	0.05±0.04	-0.30±0.04	---	---	0.6	2.2	12.62± 0.98	134414+001643	114.2± 4.2	2.48	---	---	---	---	0.452000	
126	134740.9+581242	13:47:40.97	+58:12:42.99	0.12	0.01±0.02	-0.36±0.02	---	---	4.	2.5	3.94± 0.10	134740+581242	641.9± 22.7	0.35	---	---	---	---	2.039000	
127	140700.4+282714	14:07: 0.41	+28:27:14.37	0.26	0.17±0.04	-0.22±0.04	0.2	2.6	0.4	2.2	4.71± 0.21	140700+282714	816.6± 24.5	0.71	140700+282714	11.94	1.062	0.860	0.610	0.076576
128	140856.4-075225	14:08:56.45	-07:52:26.28	0.17	0.13±0.02	-0.25±0.02	---	---	2.	2.2	7.18± 0.20	140856-075226	688.2± 24.1	0.51	140856-075226	15.18	0.542	1.291	0.864	1.493500
129	140923.9+261820	14:09:23.91	+26:18:21.01	0.04	-0.19±0.00	-0.49±0.00	---	---	1.	3.0	31.50± 0.14	140923+261822	9.1± 0.5	1.92	140923+261821	13.90	0.601	0.396	0.527	0.940000
130	141617.2+264903	14:16:17.29	+26:49: 3.39	1.70	-0.13±0.18	-0.73±0.25	2.	2.2	---	---	0.45± 0.28	141617+264906	3.0± 0.4	0.50	141617+264903	14.83	0.840	0.711	1.647	2.292800
131	141655.6+445453	14:16:55.65	+44:54:53.28	0.56	0.40±0.07	-0.31±0.07	0.8	2.6	1.	2.7	0.96± 0.10	141655+445449	2.8± 0.5	0.62	---	---	---	---	0.579000	
132	141730.4+264457	14:17:30.41	+26:44:57.41	0.34	-0.01±0.05	-0.35±0.06	---	---	2.	2.5	1.52± 0.14	141730+264456	75.6± 2.3	0.99	---	---	---	---	1.455000	
133	142414.0+421400	14:24:14.13	+42:14: 0.54	0.63	-0.02±0.06	-0.32±0.07	---	---	2.	2.2	1.62± 0.17	142414+421401	308.7± 9.3	2.38	---	---	---	---	1.608000	
134	142437.9+225602	14:24:37.95	+22:56: 2.62	0.82	0.34±0.11	-0.21±0.11	---	---	6.	2.2	16.21± 3.17	142438+225600	267.9± 8.0	2.31	142437+225602	12.66	0.650	0.566	2.263	3.620000
135	143023.7+420436	14:30:23.71	+42:04:36.72	0.08	0.11±0.01	-0.29±0.01	---	---	4.	2.2	21.12± 0.24	143023+420436	210.6± 6.3	0.73	---	---	---	---	4.715000	
136	145147.0-151220	14:51:47.07	-15:12:20.48	0.36	0.16±0.03	-0.32±0.03	---	---	4.	2.5	2.36± 0.11	145147-151219	28.5± 1.0	1.65	145147-151220	14.69	0.585	1.104	0.963	4.763000
137	150424.9+102938	15:04:25.00	+10:29:37.40	0.54	0.18±0.03	-0.22±0.03	---	---	4.	2.0	10.80± 0.49	150425+102938	1774.2± 53.2	1.42	150425+102937	14.29	0.971	0.898	2.610	1.839000
138	150837.6+671634	15:08:37.62	+67:16:34.89	0.88	0.28±0.10	-0.34±0.11	---	---	2.	2.7	0.75± 0.15	150838+671637	7.8± 0.4	2.78	---	---	---	---	1.219000	
139	151002.9+570243	15:10: 2.97	+57:02:43.62	0.19	0.10±0.03	-0.27±0.03	---	---	4.	2.2	6.58± 0.25	151002+570243	202.0± 6.1	1.42	---	---	---	---	4.901000	
140	151630.2-005625	15:16:30.25	-00:56:25.34	0.61	0.56±0.07	-0.34±0.06	---	---	10	3.0	0.52± 0.05	151630-005626	25.8± 0.9	1.90	151630+005625	16.15	0.612	0.396	1.189	1.921400
141	153202.2+301629	15:32: 2.27	+30:16:29.11	0.08	-0.11±0.01	-0.53±0.01	0.1	1.4	0.4	3.2	45.19± 0.77	153202+301629	52.3± 1.6	0.42	153202+301629	13.32	0.470	0.610	1.342	0.064000
142	153452.4+013104	15:34:52.45	+01:31: 4.03	0.22	0.19±0.03	-0.26±0.03	---	---	2.	2.2	18.13± 1.02	153452+013103	1320.4± 39.6	1.00	---	---	---	---	1.435000	
143	155542.9+111124	15:55:42.97	+11:11:24.46	0.03	0.05±0.00	-0.48±0.00	0.4	2.0	0.8	3.0	1063.04± 4.58	155543+111124	312.0± 9.4	1.74	155542+111124	11.18	0.715	0.644	1.131	0.360000
144	160222.5+084538	16:02:22.55	+08:45:38.88	2.98	0.08±0.31	-0.36±0.33	---	---	4.	2.5	0.44± 0.31	160222+084536	4.5± 0.5	0.70	160222+084538	14.01	0.998	0.609	0.862	2.281000
145	160601.2+174741	16:06: 1.19	+17:47:44.07	1.90	0.00±0.07	-0.42±0.07	---	---	4.	2.7	1.54± 0.23	160601+174748	111.0± 3.4	1.98	---	---	---	---	1.813000	
146	160658.2+271706	16:06:58.24	+27:17: 6.13	0.43	0.14±0.06	-0.20±0.06	---	---	1.	2.0	7.10± 0.64	160658+271705	178.0± 5.4	2.19	---	---	---	---	0.933700	
147	161357.1+654310	16:13:57.07	+65:43: 9.89	0.16	0.12±0.02	-0.34±0.02	0.2	2.2	0.4	2.5	102.04± 2.15	161356+654310	3.9± 0.5	1.05	161357+654309	11.41	1.064	0.687	0.647	0.120000
148	163308.5+570255	16:33: 8.42	+57:02:55.90	0.71	0.17±0.06	-0.42±0.06	---	---	6.	3.0	0.40± 0.05	163308+570255	16.7± 0.6	0.69	---	---	---	---	2.802000	
149	165352.1+394535	16:53:52.15	+39:45:36.54	0.05	0.07±0.00	-0.40±0.00	0.2	1.8	0.4	2.7	774.82± 4.58	165352+394536	1558.0± 46.7	1.01	165352+394536	10.45	0.454	0.679	0.800	0.033640
150	165412.7+395004	16:54:12.70	+39:50: 4.90	1.62	0.14±0.16	-0.08±0.16	---	---	0.2	1.7	0.77± 0.25	165412+395005	68.2± 2.1	0.36	---	---	---	---	---	
151	165857.6+352000	16:58:57.62	+35:20:58.67	2.09	0.32±0.08	-0.35±0.07	0.4	1.8	0.6	3.0	0.85± 0.16	165857+351953	4.8± 0.4	2.55	---	---	---	---	0.049000	
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Table 4—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name NVSS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS K	SS Mag & Colors		R <sub>xi</sub> f<99%	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ							H – K	J – H		
162	212439.3+505826	21:24:39.14	+50:58:25.79	0.13	0.92±0.00	0.47±0.00	--	--	2.	1.2	605.80± 1.61	212439+505823	381.5± 12.9	1.99	212439+505825	11.36	1.012	0.893	1.785	0.02000
163	212912.1-153840	21:29:12.19	-15:38:40.90	0.03	0.29±0.00	-0.18±0.00	--	--	4.	2.0	140.36± 0.83	212912-153841	589.7± 17.7	1.82	212912-153840	14.22	0.695	0.506	0.942	2.72700
164	213348.5-004150	21:33:48.52	-00:41:50.51	0.85	0.13±0.12	-0.43±0.13	--	--	4.	3.0	0.95± 0.26	213348-004147	34.6± 1.5	2.86	--	--	--	--	1.63000	
165	215121.9-274221	21:51:21.92	-27:42:21.66	0.45	0.24±0.06	-0.28±0.06	--	--	4.	2.5	12.61± 1.43	215121-274223	314.7± 9.5	2.49	215121-274221	14.38	1.016	0.851	2.042	1.48000
166	215155.5-302753	21:51:55.56	-30:27:53.50	0.04	0.16±0.00	-0.22±0.00	--	--	4.	2.0	90.97± 0.59	215155-302753	1243.2± 37.3	0.56	215155-302753	14.95	0.770	0.788	1.942	2.34499
167	215852.0-301332	21:58:52.12	-30:13:30.67	0.01	-0.06±0.00	-0.55±0.00	0.2	1.4	0.6	3.2	1090.28± 0.39	215852-301330	489.3± 19.0	0.41	215852-301330	10.13	0.621	0.643	1.674	0.11700
168	224050.9+032309	22:40:50.93	+03:23: 9.57	0.53	-0.07±0.07	-0.63±0.09	0.2	1.0	0.4	3.7	0.37± 0.05	224050+032308	19.5± 0.7	1.44	224050+032309	14.54	0.413	0.837	1.063	--
169	225134.6+184839	22:51:34.64	+18:48:39.72	0.27	0.13±0.04	-0.29±0.05	--	--	4.	2.2	3.35± 0.24	225134+184840	2133.0± 64.0	1.42	--	--	--	--	1.75800	
170	230315.6+085226	23:03:15.62	+08:52:26.28	0.01	0.09±0.00	-0.35±0.00	0.2	2.0	0.4	2.7	531.14± 1.45	230315+085226	180.5± 5.4	0.59	230315+085226	9.762	0.920	0.717	1.140	0.01340
171	231856.6+001437	23:18:56.64	+00:14:36.75	0.04	-0.00±0.00	-0.41±0.00	0.1	1.8	0.4	2.7	459.73± 3.29	231856+001437	24.4± 0.8	1.66	--	--	--	--	0.02929	
172	233822.3+001148	23:38:22.34	+00:11:48.96	1.44	-0.07±0.15	-0.65±0.18	0.2	0.90	--	--	0.18± 0.13	233822+001145	21.8± 0.8	2.17	--	--	--	--	--	
173	235139.4-260502	23:51:39.41	-26:05: 2.62	0.12	0.11±0.00	-0.33±0.00	0.2	2.4	0.4	2.5	161.49± 0.88	235139-260502	19.4± 1.0	1.33	--	--	--	--	0.23000	
174	235430.1-151310	23:54:30.17	-15:13:10.46	0.07	0.12±0.01	-0.26±0.01	--	--	4.	2.2	13.06± 0.20	235430-151311	864.7± 25.9	0.93	--	--	--	--	2.67500	
175	235907.7-303739	23:59: 7.73	-30:37:39.83	0.05	0.08±0.01	-0.43±0.01	0.2	1.8	0.6	3.0	257.75± 2.01	235907-303740	62.1± 2.3	2.18	235907-303739	14.03	0.680	0.613	2.507	0.16710

Table 5 SUMSS/XMM: Galactic objects

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal - Non thermal				F <sub>X</sub> [cgs]	Name SUMMS J+	S <sub>t</sub> [mJy]	S <sub>p</sub> [mJy]	R <sub>Xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS K	S Mag & Colors		R <sub>Xi</sub> f <sub>&lt;99%</sub>	Bib. Ref.
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ								H - K	J - H		
<b>Stars</b>																					
1	023917.9-341654	02:39:17.93	-34:16:54.02	2.20	-0.18±0.08	-0.41±0.12	0.	1.8	0.2	2.7	0.54± 0.21	023917-341654	1.7	23.3	1.78	023917-341654	15.72	0.163	0.540	2.09	416
2	045818.0-751637	04:58:18.03	-75:16:37.90	0.03	0.24±0.00	-0.49±0.00	0.4	1.2	0.6	3.5	134.56± 0.44	045818-751637	1.4	8.8	1.33	045818-751637	5.287	0.194	0.557	1.27	433
3	111058.4-761759	11:10:58.45	-76:17:59.26	1.26	0.01±0.07	-0.30±0.09	0.1	2.0	0.2	2.5	0.23± 0.04	111058-761759	3.7	113.7	2.89	111058-761759	14.44	0.792	0.922	1.02	64
4	125701.0-764832	12:57: 1.01	-76:48:32.77	1.52	0.63±0.17	-0.00±0.18	0.6	2.6	0.6	2.0	0.12± 0.05	125701-764832	1.2	7.8	2.30	---	---	---	---	---	346
5	155702.2-380219	15:57: 2.25	-38:02:19.39	0.65	0.48±0.06	-0.16±0.06	0.4	2.2	0.6	2.2	3.32± 0.37	155702-380219	2.2	64.3	0.98	---	---	---	---	---	236
6	201702.3-704517	20:17: 2.34	-70:45:17.10	4.98	-0.68±0.14	-0.78±0.50	--	--	--	--	0.39± 0.26	201702-704517	1.3	13.9	2.69	---	---	---	---	---	20
<b>Pulsars</b>																					
1	043715.8-471508	04:37:15.89	-47:15: 8.95	0.06	-0.12±0.01	-0.78±0.01	0.2	0.60	--	--	10.98± 0.10	043715-471508	7.3	238.7	1.43	---	---	---	---	---	330
2	212443.8-335843	21:24:43.82	-33:58:43.76	0.21	-0.04±0.03	-0.73±0.03	0.2	0.70	--	--	1.04± 0.05	212443-335843	1.6	19.3	0.95	---	---	---	---	---	199
<b>Supernova Remnants (SNR)</b>																					
1	010315.1-720940	01:03:15.34	-72:09:41.92	4.65	-0.81±0.07	-0.73±0.24	--	--	--	--	0.35± 0.12	010315-720941	1.7	37.9	1.75	010315-720941	13.11	0.109	0.835	0.57	504
2	031738.5-663304	03:17:38.41	-66:33: 4.71	0.25	0.05±0.01	-0.53±0.01	0.2	1.2	0.4	3.5	8.88± 0.09	031738-663304	3.2	103.7	1.53	---	---	---	---	---	382
3	050554.3-680150	05:05:54.35	-68:01:50.08	0.11	-0.62±0.00	-0.89±0.00	0.	0.50	--	--	123.56± 0.21	050554-680150	6.3	206.8	0.61	---	---	---	---	---	138
4	050930.7-673119	05:09:30.71	-67:31:19.13	0.02	-0.62±0.00	-0.76±0.00	--	--	--	--	68.84± 0.18	050930-673119	3.1	96.6	1.01	---	---	---	---	---	11
5	051934.4-690206	05:19:34.50	-69:02: 7.83	0.02	-0.43±0.00	-0.81±0.00	0.1	0.60	--	--	164.99± 0.30	051934-690207	3.8	121.7	0.78	---	---	---	---	---	460
6	052502.9-693841	05:25: 2.35	-69:38:39.42	0.07	-0.38±0.00	-0.82±0.00	0.1	0.60	--	--	1859.89± 0.47	052502-693839	59.8	1992.0	0.40	---	---	---	---	---	41
7	052600.6-660456	05:26: 0.62	-66:04:57.17	0.32	-0.39±0.00	-0.81±0.00	0.1	0.60	--	--	332.96± 1.75	052600-660457	26.4	879.0	2.91	---	---	---	---	---	460
<b>Low/High mass X-ray binaries</b>																					
1	023359.3-434213	02:33:59.32	-43:42:13.91	1.04	0.57±0.12	-0.47±0.12	0.6	0.90	--	--	0.12± 0.04	023359-434213	2.3	71.1	2.32	---	---	---	---	---	414
2	051832.4-693520	05:18:32.40	-69:35:21.92	0.81	0.50±0.08	-0.15±0.07	0.4	2.2	0.6	2.2	0.72± 0.12	051832-693521	16.6	551.2	0.92	---	---	---	---	---	405
3	052847.4-653956	05:28:48.05	-65:39:57.57	1.27	0.24±0.02	-0.25±0.02	0.2	2.0	0.4	2.5	4.26± 0.16	052848-653957	2.1	60.7	1.19	---	---	---	---	---	405
<b>Young Stellar Objects (YSO)</b>																					
1	110513.8-772101	11:05:13.87	-77:21: 1.78	1.14	0.92±0.12	0.08±0.15	1.	1.6	2.	3.0	0.24± 0.09	110513-772101	2.0	50.1	0.43	---	---	---	---	---	255
<b>Young Open Clusters</b>																					
1	075940.8-604525	07:59:40.87	-60:45:26.22	1.55	0.40±0.08	-0.44±0.09	0.4	1.2	0.8	3.5	0.21± 0.05	075940-604526	1.5	40.7	0.89	---	---	---	---	---	344
<b>Gamma-ray sources</b>																					
1	061547.3-333342	06:15:47.35	-33:33:42.04	1.52	0.33±0.23	-0.32±0.21	0.4	1.6	0.6	2.7	0.34± 0.17	061547-333342	1.5	12.4	0.47	---	---	---	---	---	242

Table 6 SUMSS/XMM: Extragalactic objects

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name SUMMS J+	S <sub>t</sub> [mJy]	S <sub>p</sub> [mJy]	R <sub>Xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors		R <sub>X1</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ							H – K	J – H			
<b>Normal galaxies</b>																					
1	000935.5-321636	00:09:35.58	-32:16:36.93	0.11	-0.27±0.01	-0.48±0.02	0.4	1.0	0.6	3.7	7.21± 0.15	000935-321636	13.7	453.6	1.36	000935-321636	11.55	0.384	0.747	1.008	0.025628
2	002124.5-483954	00:21:24.53	-48:39:54.85	0.39	-0.40±0.04	-0.69±0.07	0.1	1.6	0.4	3.0	0.59± 0.06	002124-483954	1.5	21.8	1.18	---	---	---	---	---	0.012838
3	002131.7-483729	00:21:31.70	-48:37:29.11	0.17	0.13±0.02	-0.44±0.02	--	--	--	--	2.69± 0.09	002131-483729	7.4	243.8	0.45	002131-483729	10.57	0.837	0.971	1.514	---
4	002238.2-483444	00:22:38.25	-48:34:44.21	2.25	-0.23±0.17	-0.65±0.27	--	--	--	--	0.12± 0.10	002238-483444	1.0	10.8	2.08	---	---	---	---	---	---
5	003652.3-333318	00:36:52.32	-33:33:18.34	0.45	0.03±0.06	-0.44±0.07	--	--	2.	1.5	2.21± 0.39	003652-333318	2.1	33.4	1.94	---	---	---	---	---	---
6	005353.2-374026	00:53:53.30	-37:40:24.15	1.43	-0.01±0.10	-0.12±0.11	0.6	1.0	0.8	3.7	0.15± 0.04	005353-374024	6.7	215.4	0.55	---	---	---	---	---	---
7	005403.5-374640	00:54: 3.52	-37:46:40.04	2.16	-0.55±0.31	-1.00±0.38	--	--	--	--	0.19± 0.19	005403-374640	8.9	290.6	0.77	---	---	---	---	---	---
8	005652.6-712301	00:56:52.66	-71:23: 1.15	1.64	0.36±0.19	-0.87±0.18	--	--	0.1	2.0	0.20± 0.16	005652-712301	3.8	124.1	1.51	---	---	---	---	---	0.01
9	005816.7-721806	00:58:16.90	-72:18: 7.71	0.37	0.32±0.03	-0.28±0.03	--	--	0.01	1.7	2.97± 0.16	005816-721807	1.6	28.2	3.00	---	---	---	---	---	---
10	005820.2-713039	00:58:20.18	-71:30:39.80	1.97	0.77±0.22	0.38±0.17	--	--	--	--	0.77± 0.33	005820-713039	1.8	50.3	1.18	---	---	---	---	---	---
11	005823.9-720033	00:58:23.93	-72:00:33.81	7.15	0.33±0.14	-0.74±0.11	0.2	2.0	0.4	2.5	1.28± 0.57	005823-720033	1.3	17.9	1.46	005823-720033	15.18	0.191	0.910	1.691	---
12	010321.1-721344	01:03:21.14	-72:13:47.38	2.21	0.97±0.14	-0.55±0.11	--	--	--	--	0.31± 0.07	010321-721347	1.2	16.6	0.65	---	---	---	---	---	---
13	010402.1-720152	01:04: 1.90	-72:01:51.92	0.15	-0.52±0.00	-0.92±0.00	--	--	0.01	2.7	255.67± 0.12	010401-720151	8.9	294.9	2.01	---	---	---	---	---	0.01
14	010533.0-721330	01:05:32.53	-72:13:32.01	0.83	0.28±0.02	-0.48±0.02	0.1	2.0	0.2	2.5	0.87± 0.07	010532-721332	1.1	18.5	2.45	---	---	---	---	---	---
15	010539.7-720353	01:05:39.71	-72:03:53.19	4.52	-0.81±0.32	-0.73±0.41	--	--	--	--	0.29± 0.17	010539-720353	1.1	7.7	1.10	010539-720353	14.01	0.118	0.692	2.313	---
16	010700.8-801828	01:07: 0.81	-80:18:28.72	1.56	-0.21±0.08	-0.06±0.10	0.0	0.40	--	--	0.74± 0.10	010700-801828	1.2	22.4	2.62	---	---	---	---	---	---
17	011405.3-732007	01:14: 5.47	-73:20: 7.85	0.43	0.61±0.05	-0.20±0.05	--	--	6.	2.0	2.26± 0.26	011405-732007	3.6	114.6	2.19	---	---	---	---	---	0.01
18	011427.3-733314	01:14:27.21	-73:33:13.74	1.10	0.39±0.11	-0.42±0.14	--	--	4.	2.7	0.46± 0.14	011427-733313	0.8	8.6	1.20	---	---	---	---	---	0.01
19	011615.3-732655	01:16:15.36	-73:26:55.84	1.81	0.45±0.06	-0.48±0.07	0.4	1.0	0.8	3.7	0.73± 0.13	011615-732655	2.2	66.7	0.94	---	---	---	---	---	---
20	011627.7-731448	01:16:28.18	-73:14:47.57	1.68	0.40±0.06	-0.24±0.06	1.	1.8	1.	3.0	0.71± 0.11	011628-731447	4.2	137.4	2.58	---	---	---	---	---	---
21	021125.0-401727	02:11:25.05	-40:17:27.60	0.49	0.04±0.01	-0.54±0.01	--	--	--	--	22.19± 0.37	021125-401727	9.5	314.7	1.47	---	---	---	---	---	---
22	023021.0-540504	02:30:21.03	-54:05: 4.51	1.58	-0.03±0.21	-0.02±0.22	0.8	0.80	--	--	0.14± 0.06	023021-540504	0.9	12.9	2.11	---	---	---	---	---	---
23	023903.5-343640	02:39: 3.57	-34:36:40.44	0.70	-0.08±0.09	-0.34±0.11	0.4	2.0	0.4	2.5	0.82± 0.17	023903-343640	1.5	25.1	1.79	---	---	---	---	---	---
24	023933.0-342642	02:39:33.02	-34:26:42.21	1.75	0.31±0.33	0.28±0.24	0.1	2.0	0.2	2.5	0.11± 0.04	023933-342642	1.4	10.6	2.37	---	---	---	---	---	---
25	031231.0-764323	03:12:31.05	-76:43:23.27	0.48	-0.40±0.05	-0.39±0.09	0.1	1.4	0.4	3.2	0.50± 0.07	031231-764323	1.2	8.0	0.82	031231-764323	12.32	0.433	0.677	2.649	---
26	031313.5-550158	03:13:13.18	-55:01:58.78	2.24	0.11±0.22	0.25±0.19	0.6	2.0	1.	3.2	0.28± 0.08	031313-550158	1.8	51.6	0.97	031313-550158	14.63	0.404	0.676	1.299	0.094000
27	031622.3-663340	03:16:22.20	-66:33:43.36	1.26	0.12±0.03	-0.31±0.03	0.8	2.0	1.	3.0	1.62± 0.10	031622-663343	1.0	8.2	0.76	---	---	---	---	---	---
28	031809.3-663004	03:18: 9.40	-66:30: 4.99	8.57	-0.78±0.12	-0.67±0.43	0.4	2.0	0.8	2.7	1.11± 0.56	031809-663004	1.0	15.4	2.68	---	---	---	---	---	---
29	031825.9-662843	03:18:25.26	-66:28:48.29	4.94	-0.38±0.04	-0.56±0.09	0.2	1.2	0.6	3.7	1.13± 0.15	031825-662848	0.9	15.0	2.87	031825-662848	14.50	0.803	0.443	2.015	-1
30	032004.9-664208	03:20: 5.29	-66:42: 7.40	4.04	-0.10±0.10	-0.22±0.12	--	--	--	--	0.28± 0.09	032005-664207	0.9	12.5	0.11	032005-664207	13.26	0.462	0.855	0.986	---
31	033312.2-361946	03:33:12.26	-36:19:46.46	0.22	-0.03±0.01	-0.42±0.01	0.2	1.8	0.4	2.7	26.80± 0.26	033312-361946	1.7	16.7	0.60	033312-361946	14.96	0.585	1.131	0.359	---
32	033646.1-355957	03:36:46.18	-35:59:57.87	0.12	-0.40±0.02	-0.58±0.02	--	--	0.2	3.2	7.37± 0.20	033646-355957	2.3	42.6	1.63	033646-355957	10.26	0.566	0.751	1.439	---
33	041610.4-554647	04:16:10.47	-55:46:48.11	0.41	0.04±0.02	-0.29±0.02	0.01	2.0	0.2	2.2	9.64± 0.30	041610-554648	1.1	6.7	2.56	041610-554648	9.129	0.273	0.910	0.189	---
34	045427.6-662522	04:54:27.62	-66:25:22.94	1.34	0.19±0.15	-0.28±0.14	--	--	0.01	1.0	0.26± 0.10	045427-662522	1.3	16.1	2.68	---	---	---	---	---	---
35	052517.4-672247	05:25:17.47	-67:22:47.21	0.73	0.41±0.10	-0.29±0.10	0.1	1.2	0.4	3.7	0.33± 0.07	052517-672247	1.9	52.7	2.57	---	---	---	---	---	0.01
36	052528.8-672719	05:25:28.90	-67:27:19.93	0.73	-0.19±0.09	-0.65±0.11	0.6	0.50	--	--	0.14± 0.02	052528-672719	1.1	9.0	1.13	---	---	---	---	---	0.01
37	052526.5-673125	05:25:26.55	-67:31:25.73	6.09	-0.97±0.04	0.44±0.43	4.	0.50	--	--	0.96± 0.25	052526-673125	1.3	28.1	2.66	052526-673125	15.19	-0.02	0.952	2.836	---
38	053254.2-704028	05:32:54.26	-70:40:28.89	0.53	0.09±0.07	-0.35±0.07	0.2	1.0	0.6	3.7	1.24± 0.16	053254-704028	1.0	15.9	2.99	---	---	---	---	---	---
39	053523.6-673450	05:35:23.68	-67:34:50.00	1.97	1.00±0.24	0.61±0.19	0.2	0.80	--	--	0.07± 0.03	053523-673450	11.2	369.8	1.97	---	---	---	---	---	---
40	054006.6-405012	05:40: 6.66	-40:50:12.20	0.23	0.04±0.03	-0.75±0.03	0.2	1.8	0.4	2.7	3.06± 0.15	054006-405012	1.4	18.3	2.77	054006-405012	12.26	0.474	0.625	1.771	---
41	054158.6-681542	05:41:58.68	-68:15:42.18	0.83	0.09±0.13	-0.24±0.13	0.2	0.50	--	--	0.89± 0.23	054158-681542	1.6	45.2	0.16	---	---	---	---	---	---
42	054557.4-694356	05:45:57.42	-69:43:57.29	0.57	0.46±0.06	-0.24±0.06	0.2	0.80	--	--	1.65± 0.17	054557-694357	1.3	6.0	2.59	---	---	---	---	---	0.01
43	054930.1-321508	05:49:30.14	-32:15: 8.74	1.04	-0.25±0.19	-0.42±0.33	--	--	2.	2.0	1.88± 0.21	054930-321508	9.1	295.8	2.44	054930-321508	14.79	0.925	0.724	0.831	-1
44	060554.0-351808	06:05:54.08	-35:18: 8.18	0.13	0.16±0.00	-0.36±0.00	0.2	1.8	0.4	2.7	126.10± 0.80	060554-351808	53.9	1794.0	2.00	060554-351808	13.61	0.625	0.795	1.631	---
45	102751.2-435413	10:27:51.27	-43:54:13.49	0.03	-0.02±0.00	-0.59±0.00	0.2	2.2	0.8	3.0	13.31± 0.08	102751-435413	28.6	950.3	2.98	102751-435413	10.38	0.830	0.847	1.552	-1
46	102905.7-435059	10:29: 5.76	-43:50:60.00	0.88	0.06±0.09	-0.43±0.11	2.	2.0	2.	3.0	0.33± 0.09	102905-435059	1.4	22.3	2.42	102905-435059	13.35	0.502	0.748	2.827	---
47	103111.6-461504	10:31:11.68	-46:15: 4.89	1.20	-0.37±0.05	-0.53±0.08	0.2	1.0</													

Table 6—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>X</sub> [cgs]	Name SUMMS J+	S <sub>t</sub> [mJy]	S <sub>p</sub> [mJy]	R <sub>Xr</sub> f<99%	Name 2MASS J+	2MASS Mag & Colors		R <sub>xi</sub> f<99%	Redshift z	
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ							H – K	J – H			
61	174457.6-604423	17:44:57.65	-60:44:23.92	0.50	-0.11±0.02	-0.87±0.01	0.4	1.0	0.6	3.7	15.69± 0.42	174457-604423	1.4	33.1	0.44	174457-604423	11.01	0.488	0.670	0.475	-- --
62	194334.2-583920	19:43:34.25	-58:39:20.12	0.27	0.09±0.03	-0.52±0.03	--	--	0.2	1.7	1.18± 0.06	194334-583920	4.5	147.0	2.70	-- -- -- --	--	--	--	--	-- --
63	201835.6-445128	20:18:35.63	-44:51:28.34	2.09	-0.00±0.23	-0.07±0.26	0.1	1.4	0.4	3.2	0.28± 0.15	201835-445128	1.5	42.1	2.06	201835-445128	13.22	0.618	0.976	2.034	-- --
64	205826.7-423859	20:58:26.78	-42:38:59.98	0.50	-0.27±0.05	-0.58±0.06	--	--	--	--	1.63± 0.15	205826-423859	1.7	37.3	1.25	205826-423859	12.45	0.736	0.740	0.621	-- --
65	220554.7-500710	22:05:54.74	-50:07:10.43	0.37	-0.52±0.02	-0.64±0.03	--	--	--	--	4.42± 0.18	220554-500710	1.2	7.9	0.42	220554-500710	10.17	0.637	0.761	2.085	-- --
66	221822.0-385110	22:18:22.01	-38:51:10.42	1.84	0.39±0.24	0.11±0.26	0.6	2.2	1.	2.5	0.14± 0.06	221822-385110	2.2	54.7	2.23	221822-385110	14.57	0.343	0.670	1.234	-- --
67	221840.0-385402	22:18:40.01	-38:54: 2.75	0.38	0.10±0.01	-0.32±0.01	0.1	2.0	0.2	2.2	172.70± 1.86	221840-385402	10.0	329.4	1.81	-- -- -- --	--	--	--	--	-- --
68	225636.0-370145	22:56:36.01	-37:01:45.85	0.63	0.50±0.10	0.20±0.07	0.4	1.4	0.6	3.0	3.13± 0.48	225636-370145	1.5	18.3	2.72	-- -- -- --	--	--	--	--	-- --
69	231610.7-423505	23:16:10.76	-42:35: 5.07	0.22	-0.24±0.02	-0.68±0.02	0.1	2.0	0.4	2.5	7.58± 0.24	231610-423505	9.4	310.3	1.66	231610-423505	9.635	0.835	0.657	1.402	-- --
<b>Seyfert I</b>																					
1	012019.6-440742	01:20:19.63	-44:07:42.56	0.04	-0.04±0.00	-0.38±0.01	0.4	0.70	--	--	68.59± 0.47	012019-440742	1.1	10.2	0.87	012019-440742	12.33	0.629	0.839	2.543	-- --
2	012354.3-350355	01:23:54.36	-35:03:55.59	0.02	0.80±0.00	0.18±0.00	1.	1.0	2.	4.0	276.81± 0.76	012354-350355	1.3	13.7	0.98	012354-350355	10.90	1.000	0.900	0.684	-- --
3	031155.2-765150	03:11:55.20	-76:51:50.84	0.04	0.04±0.01	-0.34±0.01	--	--	0.1	1.0	48.74± 0.35	031155-765150	23.9	796.9	2.11	031155-765150	13.05	0.932	0.658	0.551	0.2230
4	033336.3-360825	03:33:36.42	-36:08:26.26	0.05	-0.21±0.00	0.39±0.00	0.8	1.8	1.	3.0	109.01± 0.35	033336-360826	16.1	534.8	0.13	033336-360826	9.229	1.011	1.104	1.988	-- --
5	042600.7-571201	04:26: 0.76	-57:12: 2.75	0.02	-0.05±0.00	-0.29±0.00	--	--	0.6	1.5	192.60± 0.54	042600-571202	1.0	17.1	1.64	042600-571202	12.00	0.880	0.493	2.926	-- --
6	043516.1-780156	04:35:16.16	-78:01:56.80	0.10	0.10±0.01	-0.35±0.01	1.	0.90	--	--	25.19± 0.41	043516-780156	1.2	27.8	0.33	-- -- -- --	--	--	--	--	-- --
7	051935.7-323927	05:19:35.80	-32:39:27.31	0.07	-0.11±0.01	-0.06±0.01	--	--	0.2	1.2	55.47± 0.76	051935-323927	2.0	20.0	1.49	051935-323927	11.01	0.681	0.764	1.493	0.0126
8	055802.0-382002	05:58: 2.07	-38:20: 2.68	0.08	0.61±0.01	-0.06±0.01	0.2	1.0	0.4	3.7	729.12± 9.83	055802-382002	2.0	49.8	1.38	055802-382002	9.993	1.269	1.073	1.745	-- --
9	062307.6-643620	06:23: 7.69	-64:36:20.03	0.11	-0.14±0.01	-0.39±0.02	0.8	2.2	2.	3.5	79.93± 1.69	062307-643620	8.4	279.0	1.17	062307-643620	11.73	1.139	1.027	0.709	0.1290
10	113901.7-374418	11:39: 1.76	-37:44:19.21	0.02	0.34±0.00	-0.07±0.00	--	--	--	--	636.74± 0.95	113901-374419	1.9	54.0	0.54	113901-374419	10.01	1.010	0.960	1.832	-- --
11	134919.2-301834	13:49:19.27	-30:18:33.97	0.00	0.59±0.00	-0.15±0.00	0.4	1.8	0.6	2.7	1435.33± 1.70	134919-301833	3.0	78.0	1.97	134919-301833	9.309	1.036	0.962	0.731	-- --
12	220916.0-470959	22:09:16.07	-47:09:59.47	0.01	0.16±0.00	-0.31±0.00	--	--	2.	2.5	408.58± 1.26	220916-470959	3.1	96.6	0.98	220916-470959	9.486	0.340	1.082	1.780	0.0059
<b>Seyfert II</b>																					
1	011127.5-380500	01:11:27.58	-38:05: 0.47	0.16	-0.25±0.03	-0.27±0.03	0.4	0.50	--	--	22.27± 0.66	011127-380500	1.2	21.9	0.92	011127-380500	9.922	1.373	1.394	1.829	-- --
2	024904.0-311021	02:49: 4.00	-31:10:21.66	0.65	-0.56±0.04	-0.50±0.08	0.01	2.0	0.2	2.5	0.52± 0.05	024904-311021	1.9	26.3	0.32	024904-311021	12.42	0.526	0.778	1.692	0.0198
3	045442.4-591451	04:45:42.00	-59:14:51.23	0.09	-0.38±0.01	-0.64±0.01	--	--	0.01	2.0	3.92± 0.06	045442-591451	5.8	186.8	1.72	-- -- -- --	--	--	--	--	-- --
4	094740.1-305655	09:47:40.19	-30:56:56.17	0.00	0.87±0.00	0.21±0.00	0.1	2.0	0.2	2.5	1032.60± 0.83	094740-305656	2.2	25.2	1.34	094740-305656	10.34	0.905	0.837	1.609	-- --
5	101618.7-333350	10:16:18.71	-33:33:50.06	0.09	-0.34±0.01	-0.21±0.02	0.2	0.40	--	--	6.13± 0.10	101618-333350	1.7	37.6	1.08	101618-333350	11.27	0.535	0.684	1.475	-- --
6	120944.8-521827	12:09:44.84	-52:18:27.99	0.65	0.41±0.05	-0.30±0.05	0.2	1.4	0.4	3.2	0.26± 0.03	120944-521827	1.1	24.6	0.78	-- -- -- --	--	--	--	--	-- --
7	123536.6-395433	12:35:36.66	-39:54:33.53	0.04	-0.22±0.01	0.18±0.01	0.2	1.0	0.4	3.7	148.72± 0.71	123536-395433	2.3	68.6	0.38	123536-395433	10.38	0.923	0.807	0.946	-- --
8	130626.1-402452	13:06:26.12	-40:24:52.81	0.04	0.25±0.01	0.70±0.00	0.2	1.8	0.4	2.5	120.70± 0.59	130626-402452	1.9	47.9	2.31	130626-402452	9.449	1.048	1.013	0.610	-- --
9	133326.1-340052	13:33:26.12	-34:00:52.90	0.09	0.00±0.04	0.74±0.01	0.4	1.6	0.6	2.7	74.46± 0.83	133326-340052	1.5	10.5	1.19	133326-340052	11.91	1.027	0.979	1.154	-- --
10	143240.7-441027	14:32:40.74	-44:10:27.46	0.20	-0.39±0.03	-0.35±0.04	0.2	1.8	0.4	2.7	10.81± 0.40	143240-441027	2.3	67.4	1.18	143240-441027	10.80	0.444	0.811	0.654	-- --
11	181934.9-634546	18:19:35.09	-63:45:47.11	0.20	0.93±0.01	0.41±0.01	0.6	0.60	--	--	49.05± 0.76	181935-634547	586.0	19532.0	0.88	181935-634547	12.62	0.449	0.615	1.245	-- --
12	193121.5-723920	19:31:21.55	-72:39:20.42	0.34	0.13±0.05	-0.25±0.05	0.2	1.8	0.4	2.7	3.89± 0.25	193121-723920	7.6	252.7	1.70	193121-723920	12.32	0.942	0.832	2.420	-- --
13	201818.0-444824	20:18:18.10	-44:48:24.21	0.35	-0.33±0.05	-0.50±0.07	--	--	6.	1.7	3.88± 0.31	201818-444824	1.3	29.5	1.61	201818-444824	11.76	0.401	0.834	1.339	0.0081
14	201958.9-523718	20:19:58.95	-52:37:18.10	0.28	-0.49±0.04	-0.34±0.08	0.01	1.4	0.2	3.0	5.68± 0.30	201958-523718	0.9	13.5	1.40	201958-523718	11.66	0.425	0.809	1.961	-- --
15	231546.7-590314	23:15:46.80	-59:03:14.99	0.65	-0.15±0.04	-0.04±0.04	0.	1.6	0.2	2.7	2.62± 0.15	231546-590314	1.4	35.2	0.46	231546-590314	12.59	0.783	0.920	1.019	-- --
16	231823.5-422213	23:18:23.54	-42:22:14.00	0.04	-0.18±0.01	-0.21±0.01	--	--	0.1	2.0	35.29± 0.21	231823-422214	9.8	323.5	1.02	231823-422214	9.197	0.931	0.882	2.319	-- --
<b>Liners</b>																					
1	225710.6-362743	22:57:10.62	-36:27:43.97	0.07	0.00±0.01	-0.35±0.01	--	--	0.2	3.7	15.54± 0.20	225710-362743	30.6	1017.0	0.33	225710-362743	9.763	0.325	0.811	0.545	-- --
<b>Radiogalaxies</b>																					
1	002022.7-484706	00:20:22.71	-48:47: 6.20	0.37	0.08±0.06	-0.23±0.06	--	--	--	--	2.56± 0.32	002022-484706	37.3	1243.0	1.72	-- -- -- --	--	--	--	--	-- --
2	031426.2-551746	03:14:26.20	-55:17:47.64	1.93	0.49±0.12	-0.75±0.09	--	--	--	--	0.10± 0.04	031426-551747	1.0	9.5	1.19	-- -- -- --	--	--	--	--	-- --
3	062706.7-352915	06:27: 6.82	-35:29:15.21	0.10	-0.05±0.00	-0.51±0.01	1.	1.0	--	--	85.22± 0.57	062706-352915	86.9	2896.0	0.62	062706-352915	11.98	0.665	0.733	1.127	-- --
4	140338.7-335841	14:03:38.77	-33:58:41.82	0.14	-0.06±0.01	-0.51±0.02	--	--	0.6	1.0	16.42± 0.42	140338-335841	15.1	498.8	2.21	140338-335841	10.87	0.489	0.792	0.831	-- --
<b>Double galaxies</b>																					
1	164520.4-733512	16:45:20.49	-73:35:12.96	0.51	0.23±0.02	-0.44±0.02	0.1	1.8	0.4	2.7	108.08± 2.74	164520-733512	25.1	835.1	1.01	164520-733512	13.20	0.476	0.812	0.861	-- --
<b>Cluster of galaxies</b>																					
1	023630.2-522702	02:36:30.22	-52:27: 2.12	0.23	0.00±0.03	-0.39±0.04	--	--	0.2	2.0	2.28± 0.14	023630-522702	1.0	10.2	1.24	023630-522702	15.24	0.219	0.964	0.505	-- --
2	024933.8-311118	02:49:33.85	-31:11:18.61	0.21	-0.45±0.02	-0.89±0.03	--	--	--	--	1.85± 0.06	024933-311118	2.1	20.0	2.61	-- -- -- --	--	--	--	--	-- --
3	031757.6-441148	03:17:57.65	-44:14:18.44	0.09	0.13±0.00	-0.40±0.00	0.01	1.2	0.4	3.5	322.10± 1.29	031757-441148	56.2	1870.0	0.69	-- -- -- --	--	--	--	--	-- --
4	031844.9-441043	03:18:44.95	-44:10:43.11	1.45	-0.29±0.16	-0.95±0.13	0.6	0.40	--	--	0.07± 0.03	031844-441043	2.1	14.6	0.57	031844-441043	14.66	0.319	0.826	2.087	-- --
5	034252.7-533742	03:42:52.72	-53:37:42.86	1.29	0.11±0.01	-0.29±0.01	0.8	2.0	1.												

Table 6—Continued

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal – Non thermal				F <sub>x</sub> [cgs]	Name SUMMS J+	S <sub>t</sub> [mJy]	S <sub>p</sub> [mJy]	R <sub>xr</sub> f<99%	Name 2MASS J+	2MASS K	2MASS Mag & Colors		R <sub>xi</sub> f<99%	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	NH	KT	NH	Γ								H – K	J – H		
13	220201.8-315210	22:02: 1.87	-31:52:10.20	0.05	0.36±0.03	0.89±0.00	--	--	2.	3.0	264.46± 1.50	220201-315210	1.7	45.3	0.71	220201-315210	10.45	1.064	0.992	1.692	0.0086
14	225046.4-641700	22:50:46.47	-64:17: 0.54	1.97	0.76±0.30	0.21±0.22	--	--	0.8	2.0	0.14± 0.07	225046-641700	1.2	31.1	0.86	--	--	--	--	--	--
15	231358.6-424337	23:13:58.65	-42:43:37.95	0.09	0.08±0.00	-0.51±0.00	0.2	1.2	0.4	3.5	290.87± 0.46	231358-424337	14.2	470.3	2.22	--	--	--	--	--	--
<b>Quasars</b>																					
1	000020.4-322100	00:00:20.41	-32:21: 0.32	0.27	-0.10±0.04	-0.34±0.05	0.2	1.0	0.6	3.7	2.04± 0.20	000020-322100	9.7	316.9	1.24	--	--	--	--	1.2750	
2	021745.1-734723	02:17:45.27	-73:47:23.48	0.26	0.12±0.02	-0.33±0.02	0.1	2.2	0.2	2.2	6.13± 0.23	021745-734723	4.9	162.2	1.57	--	--	--	--	--	
3	031346.7-551148	03:13:46.62	-55:11:49.50	0.54	0.13±0.03	-0.41±0.03	0.1	1.8	0.2	2.7	1.58± 0.09	031346-551149	7.3	239.4	0.21	--	--	--	--	--	
4	042214.7-384452	04:22:14.74	-38:44:52.84	0.15	0.05±0.02	-0.40±0.02	--	--	0.1	0.50	7.39± 0.24	042214-384452	6.6	214.1	0.70	042214-384452	14.16	0.790	0.462	1.465	--
5	044017.1-433308	04:40:17.20	-43:33: 8.37	0.07	0.15±0.01	-0.31±0.01	--	--	0.8	2.0	34.76± 0.50	044017-433308	176.1	5868.0	1.37	--	--	--	--	--	
6	052257.9-362731	05:22:57.96	-36:27:31.01	0.03	0.06±0.00	-0.31±0.00	1.	1.0	--	--	164.24± 0.55	052257-362731	606.5	20217.0	0.96	052257-362731	11.32	0.881	0.740	0.652	--
7	052506.1-334305	05:25: 6.11	-33:43: 5.42	0.12	0.16±0.01	-0.27±0.01	--	--	0.6	1.7	16.12± 0.13	052506-334305	5.9	183.6	0.77	--	--	--	--	--	
8	064019.7-505819	06:40:19.77	-50:58:19.53	0.35	-0.20±0.04	-0.45±0.06	--	--	--	--	1.06± 0.12	064019-505819	1.5	39.7	1.15	064019-505819	14.46	0.552	0.619	0.726	-1
9	074704.2-674440	07:47: 4.57	-67:44:40.59	0.72	0.21±0.02	-0.29±0.02	0.1	1.8	0.4	2.7	1.21± 0.04	074704-674440	2.1	27.7	0.36	074704-674440	15.49	0.382	1.033	1.569	--
10	105732.8-772429	10:57:32.84	-77:24:29.53	0.35	0.58±0.04	-0.36±0.04	--	--	0.2	1.7	1.38± 0.13	105732-772429	30.4	1013.0	1.15	--	--	--	--	--	
11	125359.6-405930	12:53:59.63	-40:59:30.20	0.78	0.35±0.10	-0.11±0.10	0.2	1.2	0.4	3.2	2.05± 0.32	125359-405930	5.6	178.4	1.93	--	--	--	--	--	
12	132859.9-312638	13:28:59.96	-31:26:38.78	0.75	0.25±0.09	-0.26±0.09	0.4	0.60	--	--	1.11± 0.21	132859-312638	3.4	99.2	2.24	--	--	--	--	--	
13	200324.1-325144	20:03:24.14	-32:51:44.78	0.11	0.18±0.02	-0.27±0.02	0.01	2.0	0.2	2.5	9.51± 0.22	200324-325144	8.5	279.1	0.95	200324-325144	15.15	0.171	0.746	1.528	--
14	200925.4-484953	20:09:25.35	-48:49:53.75	0.04	0.06±0.00	-0.45±0.00	0.01	2.4	0.2	2.2	241.95± 0.72	200925-484953	38.5	1282.0	1.81	200925-484953	10.06	0.625	0.659	0.581	0.0710
15	201329.5-414735	20:13:29.52	-41:47:35.83	1.12	-0.15±0.16	-0.03±0.18	--	--	0.8	2.0	0.21± 0.07	201329-414735	1.2	18.7	1.43	201329-414735	14.04	0.732	0.719	0.714	--
16	213924.1-423520	21:39:24.13	-42:35:20.18	0.40	-0.22±0.06	-0.65±0.07	0.8	1.4	1.	3.2	12.73± 1.27	213924-423520	2.6	75.1	0.72	213924-423520	13.16	0.696	0.714	0.758	--
17	214905.1-303832	21:49: 5.13	-30:38:32.65	0.13	0.05±0.02	-0.29±0.02	--	--	1.	2.0	6.46± 0.18	214905-303832	2.1	40.9	2.86	--	--	--	--	--	
18	215155.5-302753	21:51:55.56	-30:27:53.50	0.04	0.16±0.00	-0.22±0.00	0.1	1.6	0.2	2.7	90.97± 0.59	215155-302753	31.5	1048.0	1.17	215155-302753	14.95	0.770	0.788	1.942	--
19	215705.9-694123	21:57: 5.90	-69:41:23.57	0.03	0.05±0.00	-0.34±0.00	0.4	1.0	0.6	3.7	133.29± 0.68	215705-694123	499.4	16647.0	2.78	215705-694123	11.81	0.552	0.717	1.150	--
20	215852.0-301332	21:58:52.12	-30:13:30.67	0.01	-0.06±0.00	-0.55±0.00	--	--	--	--	1090.28± 0.39	215852-301330	12.2	401.2	2.08	215852-301330	10.13	0.621	0.643	1.674	--
21	235907.7-303739	23:59: 7.73	-30:37:39.83	0.05	0.08±0.01	-0.43±0.01	--	--	0.6	1.2	257.75± 2.01	235907-303739	2.4	64.4	2.69	235907-303739	14.03	0.680	0.613	2.507	--

Table 7 MGPS2/XMM: Galactic objects

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal - Non thermal				$F_X$ [cgs]	Name MGPS J+	$F_r$ [mJy]	$R_{Xr}$ $f_{<99\%}$	Name 2MASS J+	2MASS K	Mag & Colors		$R_{xi}$ $f_{<99\%}$	Bib. Ref.
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	$N_H$	KT	$N_H$	$\Gamma$							H - K	J - H		
<b>Stars</b>																				
1	110728.5-653126	11:07:28.54	-65:31:26.38	1.17	0.54±0.13	-0.16±0.13	0.40	2.00	0.60	2.50	0.56±0.12	110727-653125	15.6 ± 1.2	1.86	110728-653126	14.83	0.113	0.411	1.04	165
2	134648.9-625237	13:46:48.95	-62:52:37.42	7.44	1.00±0.03	-0.16±0.15	--	--	--	--	1.66±0.47	134647-625233	24.2 ± 2.6	1.50	134648-625237	10.58	0.873	2.012	0.75	360
3	160833.8-390009	16:08:33.89	-39:00: 9.95	1.23	0.94±0.13	0.06±0.15	2.0	1.20	2.0	3.25	0.34±0.08	160833-390016	31.0 ± 2.1	2.94	-- -- -- --	--	--	--	--	162
4	174948.2-370129	17:49:48.21	-37:01:29.20	1.86	-1.00±0.19	-1.00±****	--	--	--	--	0.08±0.05	174947-370135	16.0 ± 1.9	1.85	-- -- -- --	--	--	--	--	226
5	175015.5-370616	17:50:15.57	-37:06:16.59	1.36	1.00±0.16	-0.08±0.18	--	--	--	--	0.47±0.18	175015-370615	146.1 ± 4.6	0.85	175015-370616	13.44	0.137	0.621	2.81	167
<b>Pulsars</b>																				
1	105759.0-522656	10:57:59.00	-52:26:56.57	0.04	-0.69±0.01	-0.62±0.02	--	--	--	--	15.22±0.10	105758-522655	21.0 ± 1.2	0.97	-- -- -- --	--	--	--	--	285
2	122421.8-640753	12:24:21.90	-64:07:53.39	1.63	0.81±0.23	-0.31±0.21	1.0	0.900	--	--	0.16±0.10	122422-640756	18.2 ± 1.9	1.03	-- -- -- --	--	--	--	--	271
3	170942.6-442905	17:09:42.78	-44:29: 5.53	0.21	0.54±0.02	-0.21±0.02	0.40	1.80	0.60	2.75	12.05±0.31	170942-442913	26.1 ± 2.2	2.25	-- -- -- --	--	--	--	--	117
<b>Masers</b>																				
1	124331.6-625501	12:43:31.66	-62:55: 1.44	3.90	1.00±0.17	0.52±0.14	4.0	1.20	4.0	3.50	1.36±0.28	124331-625509	286.5 ± 8.7	1.78	-- -- -- --	--	--	--	--	335
<b>Young Open Clusters</b>																				
1	080946.0-491640	08:09:46.03	-49:16:40.20	0.15	0.45±0.02	-0.16±0.02	0.40	2.20	0.40	2.25	9.81±0.28	080945-491641	700.7 ± 21.1	0.96	080946-491640	14.81	1.131	0.716	1.52	214
2	104439.0-642102	10:44:39.02	-64:21: 2.16	0.53	0.59±0.04	-0.24±0.04	0.60	1.60	0.80	3.00	2.96±0.25	104439-642105	190.6 ± 7.8	1.84	-- -- -- --	--	--	--	--	364
3	104444.1-592125	10:44:45.52	-59:21:26.07	8.95	0.10±0.03	-0.56±0.04	0.20	1.00	0.60	3.75	0.34±0.06	104447-592131	15.3 ± 6.5	1.55	104445-592126	10.08	-0.06	0.095	1.15	65
4	165342.0-415140	16:53:42.00	-41:51:42.60	1.19	0.31±0.12	0.27±0.09	--	--	0.010	0.500	0.16±0.02	165341-415148	16.6 ± 2.1	1.60	165341-415142	13.68	0.221	0.380	2.61	387
5	165429.7-414929	16:54:29.66	-41:49:28.42	1.27	0.24±0.07	-0.59±0.08	0.40	0.900	--	--	0.09±0.02	165429-414923	25.2 ± 2.0	1.40	165429-414928	12.14	0.186	0.424	1.54	387
<b>Gamma-ray sources</b>																				
1	141242.9-640703	14:12:42.95	-64:07: 3.43	0.74	0.95±0.06	0.01±0.09	2.0	1.00	2.0	3.50	2.50±0.37	141243-640706	204.9 ± 6.3	1.77	-- -- -- --	--	--	--	--	450

Table 8 MGPS2/XMM: Extragalactic objects

Src. #	Name 2XMM J+	RA h:m:s	DEC d:m:s	err "	Hardness ratio		Thermal - Non thermal				F <sub>x</sub> [cgs]	Name MGPS J+	F <sub>r</sub> [mJy]	R <sub>xr</sub> f <sub>&lt;99%</sub>	Name 2MASS J+	2MASS Magnitude & Colors			R <sub>xi</sub> f <sub>&lt;99%</sub>	Redshift z
					$\frac{M-S}{S+M}$	$\frac{H-M}{H+M}$	N <sub>H</sub>	KT	N <sub>H</sub>	Γ						K	H	J - H		
<b>Normal galaxies</b>																				
1	154807.1-473818	15:48: 7.15	-47:38:18.43	0.22	0.71±0.02	-0.03±0.02	0.8	2.6	1.	2.2	94.45± 4.00	154807-473821	64.3 ± 2.4	1.23	154807-473818	11.40	0.742	0.967	1.162	- - -
2	161405.5-630837	16:14: 5.59	-63:08:37.13	1.67	0.33±0.03	-0.40±0.03	0.4	1.6	0.6	3.0	23.15± 1.48	161405-630827	16.7 ± 1.2	2.88	161405-630837	12.95	0.879	0.804	2.988	- - -
<b>Seyfert II</b>																				
1	163513.9-580447	16:35:13.95	-58:04:47.90	0.16	-0.03±0.02	-0.41±0.02	0.1	1.8	0.4	2.7	7.96± 0.23	163513-580447	111.9 ± 3.6	0.57	163513-580447	11.42	0.928	0.860	0.204	- - -
<b>Cluster of galaxies</b>																				
1	132446.7-573630	13:24:46.77	-57:36:30.92	0.58	0.52±0.05	-0.74±0.07	1.	0.60	--	--	2.19± 0.27	132446-573631	3181.0 ± 126.6	2.32	132446-573630	11.61	0.967	1.133	1.750	0.019

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