The INTEGRAL observations took place in two parts, the first part had an approximately 250 ks exposure time, and conducted during revolutions 30 and 32. The second part had a ~755 ks exposure time, and conducted during revolutions 155, 156, 157 and 158. The first part was before the new background rejection criteria were implemented in JEM-X, and therefore was not included in this analysis. The results are from the second part of observations. We present here, although the total exposure time is 755 ks, after the vignetting of JEM-X instrument during the 25 point dither, the effective exposure time of the central object is approximately 250 ks.

We have obtained JEM-X images in 4 energy bands. Using the "JEM-X Midsky" offline software package available from the DSRI (Lund et al., 2004). These energy bands are 3–4.2 keV, 4.2–8.4 keV, 8.4–14 keV, and 14–35 keV. The images were each smoothed prior to mosaicking using the "mosaick-weight" program (Chenevez et al., 2004) to create the final images shown here. The contour plot of an ASCA image (0.4–8 keV band) of the source is over-plotted in red. The two synchrotron emission-dominated limbs are apparent in the contour plot.

The source is definitely detected at the limbs in 3–4.2 keV and 4.2–8.4 keV bands (see Table 1 below). This is the first time that the structure in an extended source is imaged with JEM-X. It appears that the South-West limb (right, bottom side of the image) is stronger in 3–4.2 keV band, but the trend is reversed at higher energies. At 4.2–8.4 keV, the North-East limb is stronger. An excess at the position of the NE limb is present in the 8.4–14 keV band (1.7 σ, no excess is seen in the SW limb). If this excess represents the NE limb (both the position and the flux is consistent), then the source is imaged for the first time in an energy band beyond the energy range of the soft X-ray instruments (ASCA, XMM-Newton, and Chandra). At the highest energy band, the source was not detected.

The ASCA fluxes were calculated using the spectral shape-prediction given in Dyer et al. (2001). The actual lower limit of the first energy bin is around 3 keV set by the lower energy threshold.