Detection of "missing baryons" emission in the ROSAT and XMM-Newton observations

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Emission by a Warm-Hot Intergalactic Medium (WHIM) is searched for using the X-ray observations. Following our work on the large angular scales (based on the ROSAT All-Sky Survey maps), we concentrate now on smaller scales (< 15 arcmin, corresponding to linear separations below 1 Mpc) where the WHIM signal is expected to be stronger. A large number of ROSAT and XMM-Newton pointing observations has been investigated and the soft emission was detected. Rough estimates of the gas temperatures are significantly below 1 keV in agreement with the theoretical predictions.