XMM-Newtonlarge programme on SN1006 - II. Thermal emission

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Erratum: 'XMM-newton large program on SN1006 - II: Thermal emission' (2016, MNRAS, 462, 158)

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There are a few mistakes in the original scripts used to calculate the physical parameters of the hot gas from X-ray spectral analysis with a thermal plasma code, as discussed in Li & Huang (2020). We herein present the erratum of Li et al. (2016). The major conclusions in this paper are not affected by the mistakes, but some figure and table need to be updated.

(i) $n_{\rm e,ISM}$ and $n_{\rm e,\ ejecta}$ in table 1 of Li et al. (2016) should be updated to those in Table 1 of this erratum.

(ii) Figs 4(e), (f), (h), (i) of Li et al. (2016) should be updated to the upper left, upper right, lower left, lower right panels of Fig. 1 of this erratum, respectively. Only the scale of the colour bars in these figures are changed.

Table 1. Parameters and errors of the two example regions shown in Fig. 1. Errors are statistical only and are quoted at 90 per cent confidence level.

Parameter	reg100515	reg100573
$\log(n_{\rm e}t/{\rm cm^{-3}\ s})_{\rm ISM}$	$9.320^{+0.034}_{-0.103}$	$8.948^{+0.220}_{-0.076}$
$n_{\rm e,\ ISM}/{\rm cm^{-3}}$	$0.240^{+0.022}_{-0.016}$	$0.066^{+0.009}_{-0.006}$
$kT_{\rm ejecta}/{\rm keV}$	$1.29^{+0.25}_{-0.26}$	>9.2
$\log(n_{\rm e}t/{\rm cm^{-3}\ s})_{\rm ejecta}$	$9.065^{+0.070}_{-0.089}$	$9.532^{+0.008}_{-0.021}$
$n_{\rm e,\ ejecta}/{\rm cm^{-3}}$	$0.082^{+0.016}_{-0.006}$	$0.085^{+0.006}_{-0.003}$
$Z_{\rm O,ejecta}/{\rm solar}$	<20	$2.39^{+0.74}_{-0.33}$
$(Z_{\rm Ne}/Z_{\rm O})_{\rm ejecta}$	$0.62^{+0.21}_{-0.19}$	$0.28^{+0.03}_{-0.02}$
$(Z_{\rm Mg}/Z_{\rm O})_{\rm ejecta}$	$3.78^{+0.89}_{-0.91}$	$1.43^{+0.12}_{-0.13}$
$(Z_{\rm Si}/Z_{\rm O})_{\rm ejecta}$	$13.8^{+9.7}_{-2.8}$	3.22 ± 0.33
$(Z_{\rm S}/Z_{\rm O})_{\rm ejecta}$	$30.1^{+9.1}_{-11.6}$	$2.21^{+1.51}_{-0.95}$
$(Z_{\rm Fe}/Z_{\rm O})_{\rm ejecta}$	<0.39	<0.13
$v_{\rm ejecta}/({\rm km\ s^{-1}})$	1238^{+264}_{-344}	2818^{+75}_{-443}
α	$0.11^{+0.06}_{-0.01}$	$0.1(<0.103)$
$\nu_{\rm cutoff}/{\rm Hz}$	$7.51^{+0.94}_{-1.22} \times 10^{14}$	$6.54^{+0.78}_{-0.09} \times 10^{14}$
$\chi^2/{\rm d.o.f.}$	704.14/603	1417.55/1258

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Li J.-T., Decourchelle A., Miceli M., Vink J., Bocchino F., 2016, MNRAS, 462, 158

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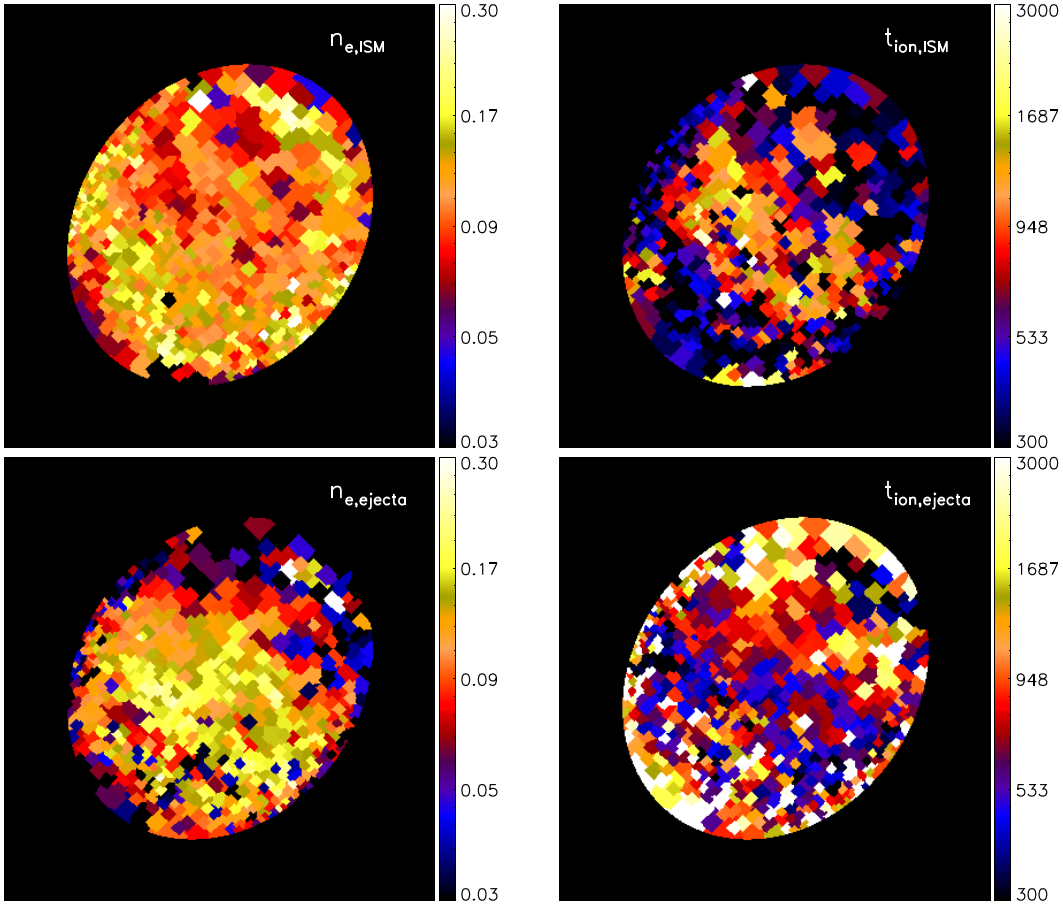

Figure 1. Updated version of figs 4(e), (f), (h), (i) of Li et al. (2016).

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