

- (1) $D [h_{\text{cosmo}}^{-1} \text{ Mpc}] =$ luminosity distance.
- (2) $z =$ redshift.
- (3) $l [\text{deg}] =$ Galactic longitude.
- (4) $b [\text{deg}] =$ Galactic latitude.
- (5) $M_{200} [h_{\text{cosmo}}^{-1} \text{ M}_{\odot}] =$ mass defined with respect to 200 times the critical density of the Universe.
- (6) $M_{500} [h_{\text{cosmo}}^{-1} \text{ M}_{\odot}] =$ mass defined with respect to 500 times the critical density of the Universe.
- (7) $R_{500} [h_{\text{cosmo}}^{-1} \text{ Mpc}] =$ radius corresponding to M_{500} .
- (8) $T_{\text{drop}} [\#] =$ central temperature drop (0.4, 0.6, 0.8, 1) that defines the type of cluster.
- (9) $P_{500} [h_{\text{cosmo}}^{1/2} \text{ keV cm}^{-3}] =$ pressure normalisation defined with respect to R_{500} .
- (10) $T_{\text{Mantz}} [\text{keV}] =$ temperature from the centrally-excised $M_{500} - T$ relation of Mantz et al. (2010) or Mantz et al. (2016) depending on the catalogue.
- (11) $T_{500} [\text{keV}] =$ final R_{500} -volume-averaged temperature (not centrally-excised) used as input for the XSPEC apec model to obtain volume-integrated fluxes, luminosities and counts.
- (12) $\text{APEC}_{\text{norm}} [\text{cm}^{-5}] =$ XSPEC apec normalisation within R_{500} .
- (13) $Y_{\text{SZ}} [h_{\text{cosmo}}^{-2.5} \text{ Mpc}^2] =$ Sunyaev-Zel'dovich signal within R_{500} .
- (14) $Y_{\text{SZ,HE}} [h_{\text{cosmo}}^{-2.5} \text{ Mpc}^2] =$ Sunyaev-Zel'dovich signal within $R_{500,\text{HE}}$ which refers to the hydrostatic-biased mass.
- (15) $Y_{\text{X}} [h_{\text{cosmo}}^{-2.5} \text{ M}_{\odot} \text{ keV}] = M_{\text{gas}} \times T_{500,\text{HE}}$ within $R_{500,\text{HE}}$ for comparison with Vikhlinin et al. (2009).
- (16) $M_{\text{gas}} [h_{\text{cosmo}}^{-2.5} \text{ M}_{\odot}] =$ gas mass calculated from the gas profile integrated within $R_{500,\text{HE}}$.
- (17) $F_{0.1-2.4} [\text{erg cm}^{-2} \text{ s}^{-1}] =$ XSPEC apec observer-frame unabsorbed flux within R_{500} and 0.1 – 2.4 keV energy range (metallicity is fixed to 0.3).
- (18) $F_{0.5-2} [\text{erg cm}^{-2} \text{ s}^{-1}] =$ as above but for the 0.5 – 2 keV energy range.
- (19) $L_{0.1-2.4} [\text{erg s}^{-1}] =$ XSPEC APEC rest-frame unabsorbed luminosity within R_{500} and 0.1 – 2.4 keV energy range.
- (20) $L_{0.5-2} [\text{erg s}^{-1}] =$ as above but for the 0.5 – 2 keV energy range.
- (21) $L_{\text{bol}} [\text{erg s}^{-1}] =$ as above but bolometric in the the 0.01 – 100 keV energy range.
- (22) count rate $[\text{ph s}^{-1}] =$ observer-frame eROSITA count rate (including absorption) within R_{500} and in the 0.5 – 2 keV energy range obtained as in Pillepich et al. (2012) without Poissonian noise.
- (23) to (32) $F_{0.5-2,\text{proj}}^{0-9} [\text{erg cm}^{-2} \text{ s}^{-1}] =$ observer-frame unabsorbed fluxes in the 0.5 – 2 keV energy range of galaxy clusters projected onto the sky corresponding to 10 spherical shells at $r_{i=0-9} = (\Delta r \times i) + \Delta r/2$ with thickness $\Delta r = R_{500}/10$, used to describe the X-ray profile of each cluster, if summed return $F_{0.5-2}$ (entry 18).
- (33) to (42) $Y_{\text{SZ,proj}}^{0-9} [h_{\text{cosmo}}^{-2.5} \text{ Mpc}^2] =$ same as above but for the Sunyaev-Zel'dovich signal, if summed return Y_{SZ} (entry 13).