

**Table 1.** Sample flags and their meaning.

bit value	COMBO-17 flag	STAGES flag	MIPS flag
1	in COMBO-17 footprint	in STAGES footprint	in COMBO-17 footprint
2	detected by COMBO-17	detected by STAGES	detected by MIPS
4	in <i>Galaxy</i> sample	HST extended source	
8	in <i>Cluster</i> sample		
16	in <i>WGM05</i> sample		

**Table 2.** Column entries in the published FITS catalogue. Some restframe luminosities are extrapolated in some redshift ranges. We give the redshift intervals, where no extrapolation errors are expected.

column header	meaning
Complete STAGES results	
ST_NUMBER	STAGES object number
ST_X_IMAGE	STAGES x-position from SExtractor in [pix] measured on 1 tile
ST_Y_IMAGE	STAGES y-position from SExtractor in [pix] measured on 1 tile
ST_CXX_IMAGE	STAGES ellipse parameter from SExtractor in [pix]
ST_CYY_IMAGE	STAGES ellipse parameter from SExtractor in [pix]
ST_CXY_IMAGE	STAGES ellipse parameter from SExtractor in [pix]
ST_THETA_IMAGE	STAGES position angle from SExtractor in [deg] in image coordinates (measured from right to up)
ST_THETA_WORLD	STAGES position angle from SExtractor in [deg] in world coordinates
ST_ELLIPTICITY	STAGES ellipticity from SExtractor
ST_KRON_RADIUS	STAGES Kron-Radius from SExtractor in units of [ST_A_IMAGE]
ST_A_IMAGE	STAGES semi-major half-axis from SExtractor in [pix]
ST_B_IMAGE	STAGES semi-minor half-axis from SExtractor in [pix]
ST_ALPHA_J2000	STAGES right ascension from SExtractor in [deg]
ST_DELTA_J2000	STAGES declination from SExtractor in [deg]
ST_BACKGROUND	STAGES background value from SExtractor in [counts]
ST_FLUX_BEST	STAGES “best” flux from SExtractor in [counts]
ST_FLUXERR_BEST	error of ST_FLUX_BEST
ST_MAG_BEST	STAGES “best” magnitude from SExtractor in [AB mag]
ST_MAGERR_BEST	error of ST_MAG_BEST
ST_FLUX_RADIUS	STAGES half-light radius from SExtractor in [pix]
ST_ISOAREA_IMAGE	STAGES isophotal area from SExtractor in [pix <sup>2</sup> ]
ST_FWHM_IMAGE	STAGES full-width at half maximum from SExtractor in [pix]
ST_FLAGS	STAGES SExtractor quality flags
ST_CLASS_STAR	STAGES SExtractor stellarity estimator
ST_ORG_IMAGE	STAGES postage stamp image file name
ST_FILE_GALFIT	STAGES GALFIT postage stamp output filename (containing fit data)
ST_X_GALFIT	STAGES x-position from GALFIT in [pix] measured on postage stamp
ST_XERR_GALFIT	error of ST_X_GALFIT
ST_Y_GALFIT	STAGES y-position from GALFIT in [pix] measured on postage stamp
ST_YERR_GALFIT	error of ST_Y_GALFIT
ST_MAG_GALFIT	STAGES total magnitude from GALFIT in [AB mag]
ST_MAGERR_GALFIT	error of ST_MAG_GALFIT
ST_RE_GALFIT	STAGES half-light radius from GALFIT in [pix]
ST_REERR_GALFIT	error of ST_RE_GALFIT
ST_N_GALFIT	STAGES Sérsic index from GALFIT
ST_NERR_GALFIT	error of ST_N_GALFIT
ST_Q_GALFIT	STAGES semi-major over semi-minor axis ratio from GALFIT
ST_QERR_GALFIT	error of ST_Q_GALFIT
ST_PA_GALFIT	STAGES position angle from GALFIT in [deg] measured from up to left
ST_PAERR_GALFIT	error of ST_PA_GALFIT
ST_SKY_GALFIT	STAGES sky value from GALAPAGOS
COMBO general information	
COMBO_Nr	COMBO-17 A901 field unique object number
ra	right ascension (J2000)
dec	declination (J2000)
xpix	x-position on COMBO-17 R-frame in pixels
ypix	y-position on COMBO-17 R-frame in pixels
Rmag	total R-band magnitude
e.Rmag	1- $\sigma$ error of total R-band mag
Ap.Rmag	aperture R-band magnitude in run D
ApD.Rmag	difference total to aperture (point sources $\sim 0$ )
phot_flag	photometry flags (see Sect. 3.5)
combo_flag	COMBO-17 sample flag (see Tab. 1)
stages_flag	STAGES sample flag (see Tab. 1)
mips_flag	MIPS sample flag (see Tab. 1)
ST_tile	tile number in STAGES mosaic

Table 3. Column entries, continued.

column header	meaning	column header	meaning
	classification results		observed seeing-adaptive aperture fluxes
p_star	SED-based probability for star	W420F	photon flux in filter 420
p_gal	SED-based probability for gal	e_W420F	1- $\sigma$ photon flux error in 420
p_qso	SED-based probability for QSO	W462F	photon flux in filter 462
p_wd	SED-based probability for WD	e_W462F	1- $\sigma$ photon flux error in 462
chi2red	$\chi^2/N_f$ of best-fitting template	W485F	photon flux in filter 485
chi2reds	$\chi^2/N_f$ of best-fitting star template	e_W485F	1- $\sigma$ photon flux error in 485
chi2redg	$\chi^2/N_f$ of best-fitting galaxy template	W518F	photon flux in filter 518
chi2redq	$\chi^2/N_f$ of best-fitting QSO template	e_W518F	1- $\sigma$ photon flux error in 518
chi2redw	$\chi^2/N_f$ of best-fitting WD template	W571F	photon flux in filter 571
chi2redg_cl	$\chi^2/N_f$ of best-fitting galaxy template at $z = 0.167$	e_W571F	1- $\sigma$ photon flux error in 571
MC_class	multi-colour class (see Tab. ??)	W604F	photon flux in filter 604
MC_z	mean redshift in distribution $p(z)$	e_W604F	1- $\sigma$ photon flux error in 604
e_MC_z	standard deviation (1- $\sigma$ ) in distribution $p(z)$	W646F	photon flux in filter 646
MC_z2	alternative redshift if $p(z)$ bimodal	e_W646F	1- $\sigma$ photon flux error in 646
e_MC_z2	standard deviation (1- $\sigma$ ) at alternative redshift	W696F	photon flux in filter 696
MC_z_ml	peak redshift in distribution $p(z)$	e_W696F	1- $\sigma$ photon flux error in 696
MC_Ebmv	mean $E_B - V$ in distribution $p(z)$	W753F	photon flux in filter 753
e_MC_Ebmv	standard deviation (1- $\sigma$ ) in distribution $p(E_B - V)$	e_W753F	1- $\sigma$ photon flux error in 753
MC_Ebmv_ml	peak value in distribution $p(E_B - V)$	W815F	photon flux in filter 815
MC_age	mean template age index	e_W815F	1- $\sigma$ photon flux error in 815
e_MC_age	standard deviation (1- $\sigma$ ) of template age index	W856F	photon flux in filter 856
MC_age_ml	peak in template age index distribution	e_W856F	1- $\sigma$ photon flux error in 856
MC_z_cl	redshift assuming cluster membership	W914F	photon flux in filter 914
MC_Ebmv_cl	mean $E_B - V$ assuming cluster membership	e_W914F	1- $\sigma$ photon flux error in 914
e_MC_Ebmv_cl	standard deviation in $p(E_B - V)$ if cluster member	UF	photon flux in filter $U$
MC_age_cl	mean age index assuming cluster membership	e_UF	1- $\sigma$ photon flux error in $U$
e_MC_age_cl	standard deviation in age index if cluster member	BF_A	photon flux in filter $B$ in run A
	total galaxy restframe luminosities ( $h_{100} = 1$ )	e_BF_A	1- $\sigma$ photon flux error in $B/A$
S280Mag	$M_{\text{abs,gal}}$ in 280/40 ( $z \approx [0.25, 1.3]$ )	BF_G	photon flux in filter $B$ in run G
e_S280Mag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in 280/40	e_BF_G	1- $\sigma$ photon flux error in $B/G$
UjMag	$M_{\text{abs,gal}}$ in Johnson $U$ (ok at all $z$ )	VF	photon flux in filter $V$
e_UjMag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in Johnson $U$	e_VF	1- $\sigma$ photon flux error in $V$
BjMag	$M_{\text{abs,gal}}$ in Johnson $B$ ( $z \approx [0.0, 1.1]$ )	RF	photon flux in filter $R$
e_BjMag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in Johnson $B$	e_RF	1- $\sigma$ photon flux error in $R$
VjMag	$M_{\text{abs,gal}}$ in Johnson $V$ ( $z \approx [0.0, 0.7]$ )	IF	photon flux in filter $I$
e_VjMag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in Johnson $V$	e_IF	1- $\sigma$ photon flux error in $I$
usMag	$M_{\text{abs,gal}}$ in SDSS $u$ (ok at all $z$ )		observed aperture Asinh Vega magnitudes
e_usMag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in SDSS $u$	W420magA	photon flux in filter 420
gsMag	$M_{\text{abs,gal}}$ in SDSS $g$ ( $z \approx [0.0, 1.0]$ )	e_W420magA	1- $\sigma$ photon flux error in 420
e_gsMag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in SDSS $g$	W462magA	photon flux in filter 462
rsMag	$M_{\text{abs,gal}}$ in SDSS $r$ ( $z \approx [0.0, 0.5]$ )	e_W462magA	1- $\sigma$ photon flux error in 462
e_rsMag	1- $\sigma$ error of $M_{\text{abs,gal}}$ in SDSS $r$	W485magA	photon flux in filter 485
	restframe luminosities at cluster distance	e_W485magA	1- $\sigma$ photon flux error in 485
S280Mag_cl	$M_{\text{abs,gal}}$ in 280/40 (if cluster member)	W518magA	photon flux in filter 518
e_S280Mag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in 280/40	e_W518magA	1- $\sigma$ photon flux error in 518
UjMag_cl	$M_{\text{abs,gal}}$ in Johnson $U$ (if cluster member)	W571magA	photon flux in filter 571
e_UjMag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in Johnson $U$	e_W571magA	1- $\sigma$ photon flux error in 571
BjMag_cl	$M_{\text{abs,gal}}$ in Johnson $B$ (if cluster member)	W604magA	photon flux in filter 604
e_BjMag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in Johnson $B$	e_W604magA	1- $\sigma$ photon flux error in 604
VjMag_cl	$M_{\text{abs,gal}}$ in Johnson $V$ (if cluster member)	W646magA	photon flux in filter 646
e_VjMag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in Johnson $V$	e_W646magA	1- $\sigma$ photon flux error in 646
usMag_cl	$M_{\text{abs,gal}}$ in SDSS $u$ (if cluster member)	W696magA	photon flux in filter 696
e_usMag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in SDSS $u$	e_W696magA	1- $\sigma$ photon flux error in 696
gsMag_cl	$M_{\text{abs,gal}}$ in SDSS $g$ (if cluster member)	W753magA	photon flux in filter 753
e_gsMag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in SDSS $g$	e_W753magA	1- $\sigma$ photon flux error in 753
rsMag_cl	$M_{\text{abs,gal}}$ in SDSS $r$ (if cluster member)	W815magA	photon flux in filter 815
e_rsMag_cl	1- $\sigma$ error of $M_{\text{abs,gal}}$ in SDSS $r$	e_W815magA	1- $\sigma$ photon flux error in 815
	QSO restframe luminosities	W856magA	photon flux in filter 856
S145Mag	$M_{\text{abs,QSO}}$ in 145/10 ( $z \approx [1.4, 5.2]$ )	e_W856magA	1- $\sigma$ photon flux error in 856
e_S145Mag	1- $\sigma$ error of $M_{\text{abs,QSO}}$ in 145/10	W914magA	photon flux in filter 914
		e_W914magA	1- $\sigma$ photon flux error in 914

**Table 4.** Column entries, continued.

column header	meaning
observed aperture Asinh Vega magnitudes	
UmagA	photon flux in filter <i>U</i>
e_UmagA	1- $\sigma$ photon flux error in <i>U</i>
BmagA_A	photon flux in filter <i>B</i> in run A
e_BmagA_A	1- $\sigma$ photon flux error in <i>B/A</i>
BmagA_G	photon flux in filter <i>B</i> in run G
e_BmagA_G	1- $\sigma$ photon flux error in <i>B/G</i>
VmagA	photon flux in filter <i>V</i>
e_VmagA	1- $\sigma$ photon flux error in <i>V</i>
RmagA	photon flux in filter <i>R</i>
e_RmagA	1- $\sigma$ photon flux error in <i>R</i>
ImagA	photon flux in filter <i>I</i>
e_ImagA	1- $\sigma$ photon flux error in <i>I</i>
stellar masses and star formation rates	
logmass	log10 of stellar mass
logmass_cl	log10 of stellar mass if cluster member
flux24	MIPS 24 $\mu$ flux in microJy
tir	IR luminosity in $L_{\odot}$
tuv	UV luminosity in $L_{\odot}$
tir_cl	IR luminosity in $L_{\odot}$ if cluster member
tuv_cl	UV luminosity in $L_{\odot}$ if cluster member
sfr_det	SFR from UV + IR if IR detected
sfr_lo	SFR lower limit from UV alone (if IR non-detected)
sfr_hi	SFR upper limit (if IR non-detected)
sfr_det_cl	SFR if IR detected (if cluster member)
sfr_lo_cl	SFR lower limit from UV alone (if no-IR, if cluster member)
sfr_hi_cl	SFR upper limit (if no-IR, if cluster member)
SED_type	1=old red sequence, 2=dusty red sequence, 3=blue cloud