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Homogeneous studies of transiting extrasolar planets. IV. Thirty systems with space-based light curves (Appendix)

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ABSTRACT

I calculate the physical properties of 32 transiting extrasolar planet and brown-dwarf systems from existing photometric observations and measured spectroscopic parameters. The systems studied include fifteen observed by the CoRoT satellite, ten by *Kepler* and five by the *Deep Impact* spacecraft. Inclusion of the objects studied in previous papers leads to a sample of 58 transiting systems with homogeneously measured properties. The *Kepler* data include observations from Quarter 2, and my analyses of several of the systems are the first to be based on short-cadence data from this satellite.

The light curves are modelled using the JKTEBOP code, with attention paid to the treatment of limb darkening, contaminating light, orbital eccentricity, correlated noise, and numerical integration over long exposure times. The physical properties are derived from the light curve parameters, spectroscopic characteristics of the host star, and constraints from five sets of theoretical stellar model predictions. An alternative approach using a calibration from eclipsing binary star systems is explored and found to give comparable results whilst imposing a much smaller computational burden.

My results are in good agreement with published properties for most of the transiting systems, but discrepancies are identified for CoRoT-5, CoRoT-8, CoRoT-13, Kepler-5 and Kepler-7. Many of the errorbars quoted in the literature are underestimated. Refined orbital ephemerides are given for CoRoT-8 and for the *Kepler* planets. Asteroseismic constraints on the density of the host stars are in good agreement with the photometric equivalents for HD 17156 and TrES-2, but not for HAT-P-7 and HAT-P-11.

Complete error budgets are generated for each transiting system, allowing identification of the observations best-suited to improve measurements of their physical properties. Whilst most systems would benefit from further photometry and spectroscopy, HD 17156, HD 80606, HAT-P-7 and TrES-2 are now extremely well characterised. HAT-P-11 is an exceptional candidate for studying starspots. The orbital ephemerides of some transiting systems are becoming uncertain and they should be re-observed in the near future.

The primary results from the current work and from previous papers in the series have been placed in an online catalogue, from where they can be obtained in a range of formats for reference and further study. TEPCat is available at `http://www.astro.keele.ac.uk/~jkt/tepcat/`

Key words: stars: planetary systems — stars: binaries: eclipsing — stars: binaries: spectroscopic — stars: fundamental parameters

APPENDIX A: FULL RESULTS FOR THE TRANSITING PLANETARY SYSTEMS ANALYSED IN THIS WORK

The tables in this Appendix contain the detailed results of the analysis process for the transiting extrasolar planetary systems (TEPs) studied in this work. For each TEP this includes:

- One table for each light curve showing the individual solutions (JKTEBOP analysis).
- One table for each TEP containing the final results for each light curve and comparison to published values.
- One table for each TEP with the individual physical properties calculated using the different sets of stellar evolutionary model predictions (JKTABSDIM analysis), the final physical properties from this work and comparison to published values.

Note that whilst all the results are best fits to the relevant data, some parameters are unphysical (for example the limb darkening coefficients imply that the limb of the star produces a negative amount of light). In these cases the unphysical results have *not* been used but are retained in the tables for completeness.

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Table A1. Parameters of the JKTEBOP best fits of the CoRoT-1 32s-sampled light curve from Barge et al. (2008), using different approaches to LD. The light curve contains 159 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.2313 ± 0.0033	0.2316 ± 0.0025	0.2311 ± 0.0027	0.2327 ± 0.0026	0.2380 ± 0.0022
k	0.13858 ± 0.00065	0.13887 ± 0.00042	0.13842 ± 0.00051	0.13929 ± 0.00043	0.14185 ± 0.00036
i (deg.)	85.36 ± 0.43	85.29 ± 0.31	85.41 ± 0.35	85.11 ± 0.30	84.23 ± 0.23
$u_{\rm A}$	0.61 fixed	0.40 fixed	0.25 fixed	0.70 fixed	0.40 fixed
$v_{\rm A}$		0.26 fixed	0.55 fixed	0.25 fixed	0.13 fixed
$r_{\rm A}$	0.2032 ± 0.0027	0.2033 ± 0.0021	0.2030 ± 0.0023	0.2043 ± 0.0022	0.2084 ± 0.0019
$r_{\rm b}$	0.02816 ± 0.00051	0.02824 ± 0.00036	0.02810 ± 0.00041	0.02845 ± 0.00038	0.02957 ± 0.00034
σ ($m$mag)	0.4369	0.3803	0.3996	0.3794	0.3835
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.2360 ± 0.0023	0.2345 ± 0.0025	0.2355 ± 0.0024	0.2350 ± 0.0026	0.2353 ± 0.0025
k	0.14157 ± 0.00053	0.14009 ± 0.00068	0.14064 ± 0.00057	0.14032 ± 0.00073	0.14074 ± 0.00069
i (deg.)	84.47 ± 0.27	84.80 ± 0.32	84.65 ± 0.29	84.73 ± 0.33	84.64 ± 0.31
$u_{\rm A}$	0.484 ± 0.017	0.353 ± 0.036	0.163 ± 0.042	0.658 ± 0.050	0.453 ± 0.024
$v_{\rm A}$		0.26 perturbed	0.55 perturbed	0.25 perturbed	0.13 perturbed
$r_{\rm A}$	0.2067 ± 0.0020	0.2057 ± 0.0021	0.2064 ± 0.0020	0.2061 ± 0.0022	0.2063 ± 0.0021
$r_{\rm b}$	0.02927 ± 0.00037	0.02882 ± 0.00041	0.02903 ± 0.00038	0.02892 ± 0.00043	0.02904 ± 0.00040
σ ($m$mag)	0.3752	0.3739	0.3740	0.3738	0.3740
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.2360 ± 0.0025	0.2349 ± 0.0028	0.2352 ± 0.0025	0.2350 ± 0.0026	0.2351 ± 0.0026
k	0.1416 ± 0.0005	0.1405 ± 0.0011	0.1403 ± 0.0015	0.1403 ± 0.0013	0.1404 ± 0.0015
i (deg.)	84.47 ± 0.29	84.71 ± 0.38	84.72 ± 0.38	84.73 ± 0.38	84.72 ± 0.44
$u_{\rm A}$	0.484 ± 0.017	0.384 ± 0.085	0.046 ± 0.442	0.657 ± 0.163	0.442 ± 0.042
$v_{\rm A}$		0.19 ± 0.17	0.75 ± 0.77	0.25 ± 0.23	0.18 ± 0.19
$r_{\rm A}$	0.2067 ± 0.0021	0.2060 ± 0.0023	0.2063 ± 0.0022	0.2061 ± 0.0022	0.2061 ± 0.0021
$r_{\rm b}$	0.02927 ± 0.00040	0.02894 ± 0.00050	0.02893 ± 0.00048	0.02892 ± 0.00049	0.02894 ± 0.00055
σ ($m$mag)	0.3752	0.3737	0.3739	0.3738	0.3740

Table A2. Parameters of the JKTEBOP best fits of the CoRoT-1 512s-sampled light curve from Barge et al. (2008), using different approaches to LD.The light curve contains 539 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.2379 ± 0.0045	0.2370 ± 0.0044	0.2368 ± 0.0044	0.2381 ± 0.0044	0.2428 ± 0.0037
k	0.14220 ± 0.00089	0.14217 ± 0.00073	0.14183 ± 0.00080	0.14259 ± 0.00073	0.14505 ± 0.00056
i (deg.)	84.71 ± 0.50	84.75 ± 0.48	84.84 ± 0.51	84.60 ± 0.48	83.83 ± 0.36
$u_{\rm A}$	0.61 fixed	0.40 fixed	0.25 fixed	0.70 fixed	0.40 fixed
$v_{\rm A}$		0.26 fixed	0.55 fixed	0.25 fixed	0.13 fixed
T_0	524.6185 ± 0.0038	524.6188 ± 0.0038	524.6189 ± 0.0038	524.6207 ± 0.0037	524.6195 ± 0.0036
$r_{\rm A}$	0.2083 ± 0.0038	0.2075 ± 0.0037	0.2074 ± 0.0038	0.2083 ± 0.0037	0.2120 ± 0.0031
$r_{\rm b}$	0.02962 ± 0.00070	0.02950 ± 0.00066	0.02941 ± 0.00068	0.02971 ± 0.00067	0.03075 ± 0.00056
σ ($m$mag)	0.8986	0.8796	0.8857	0.8786	0.8787
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.2404 ± 0.0040	0.2398 ± 0.0045	0.2404 ± 0.0042	0.2400 ± 0.0042	0.2402 ± 0.0042
k	0.14479 ± 0.00084	0.14343 ± 0.00111	0.14392 ± 0.00088	0.14361 ± 0.00102	0.14401 ± 0.00098
i (deg.)	84.09 ± 0.44	84.31 ± 0.53	84.19 ± 0.47	84.27 ± 0.50	84.20 ± 0.48
$u_{\rm A}$	0.483 ± 0.025	0.346 ± 0.041	0.160 ± 0.047	0.655 ± 0.054	0.451 ± 0.033
$v_{\rm A}$		0.26 perturbed	0.55 perturbed	0.25 perturbed	0.13 perturbed
T_0	524.6195 ± 0.0035	524.6206 ± 0.0037	524.6206 ± 0.0037	524.6204 ± 0.0035	524.6203 ± 0.0039
$r_{\rm A}$	0.2100 ± 0.0034	0.2097 ± 0.0038	0.2102 ± 0.0035	0.2099 ± 0.0035	0.2100 ± 0.0036
$r_{\rm b}$	0.03041 ± 0.00063	0.03008 ± 0.00074	0.03025 ± 0.00067	0.03014 ± 0.00068	0.03024 ± 0.00068
σ ($m$mag)	0.8750	0.8768	0.8759	0.8762	0.8758
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.2404 ± 0.0041	0.2411 ± 0.0044	0.2412 ± 0.0044	0.2412 ± 0.0044	0.2413 ± 0.0043
k	0.1448 ± 0.0009	0.1455 ± 0.0018	0.1459 ± 0.0020	0.1458 ± 0.0019	0.1458 ± 0.0019
i (deg.)	84.09 ± 0.44	83.95 ± 0.53	83.89 ± 0.53	83.92 ± 0.54	83.90 ± 0.55
$u_{\rm A}$	0.483 ± 0.025	0.558 ± 0.156	0.886 ± 0.591	0.351 ± 0.242	0.528 ± 0.076
$v_{\rm A}$		-0.14 $\pm$ 0.28	-0.68 $\pm$ 1.00	-0.20 $\pm$ 0.37	-0.16 $\pm$ 0.27
T_0	524.6195 ± 0.0038	524.6210 ± 0.0036	524.6202 ± 0.0036	524.6201 ± 0.0037	524.6199 ± 0.0036
$r_{\rm A}$	0.2100 ± 0.0035	0.2105 ± 0.0036	0.2105 ± 0.0036	0.2105 ± 0.0035	0.2106 ± 0.0035
$r_{\rm b}$	0.03041 ± 0.00063	0.03063 ± 0.00081	0.03072 ± 0.00083	0.03068 ± 0.00084	0.03071 ± 0.00084
σ ($m$mag)	0.8750	0.8750	0.8747	0.8748	0.8747

Table A3. Parameters of the JKTEBOP best fits of the CoRoT-1 R-band light curve from Gillon et al. (2009), using different approaches to LD. T_0 is given as HJD $-$ 2454000.0. The light curve contains 103 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.2280 ± 0.0042	0.2231 ± 0.0039	0.2279 ± 0.0041	0.2268 ± 0.0043	0.2350 ± 0.0037
k	0.13527 ± 0.00085	0.13425 ± 0.00067	0.13536 ± 0.00071	0.13514 ± 0.00075	0.13864 ± 0.00055
i (deg.)	85.60 ± 0.59	86.41 ± 0.66	85.62 ± 0.57	85.79 ± 0.61	84.42 ± 0.40
$u_{\rm A}$	0.55 fixed	0.35 fixed	0.15 fixed	0.68 fixed	0.35 fixed
$v_{\rm A}$		0.30 fixed	0.60 fixed	0.17 fixed	0.10 fixed
T_0	524.623155 ± 0.000087	524.623135 ± 0.000089	524.623135 ± 0.000087	524.623132 ± 0.000090	524.623100 ± 0.000086
$r_{\rm A}$	0.2008 ± 0.0036	0.1967 ± 0.0033	0.2007 ± 0.0034	0.1998 ± 0.0037	0.2064 ± 0.0032
$r_{\rm b}$	0.02717 ± 0.00065	0.02641 ± 0.00057	0.02717 ± 0.00060	0.02700 ± 0.00064	0.02861 ± 0.00053
σ ($m$mag)	0.7066	0.6325	0.6474	0.6361	0.5857
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.2382 ± 0.0035	0.2359 ± 0.0038	0.2375 ± 0.0038	0.2370 ± 0.0037	0.2373 ± 0.0037
k	0.13997 ± 0.00066	0.13857 ± 0.00078	0.13919 ± 0.00070	0.13893 ± 0.00073	0.13943 ± 0.00076
i (deg.)	83.94 ± 0.38	84.32 ± 0.45	84.10 ± 0.42	84.18 ± 0.42	84.09 ± 0.42
$u_{\rm A}$	0.333 ± 0.027	0.172 ± 0.047	-0.025 $\pm$ 0.046	0.512 ± 0.052	0.306 ± 0.033
$v_{\rm A}$		0.30 perturbed	0.60 perturbed	0.27 perturbed	0.10 perturbed
T_0	524.623096 ± 0.000086	524.623094 ± 0.000085	524.623095 ± 0.000089	524.623095 ± 0.000089	524.623094 ± 0.000088
$r_{\rm A}$	0.2089 ± 0.0029	0.2072 ± 0.0033	0.2085 ± 0.0032	0.2081 ± 0.0032	0.2083 ± 0.0032
$r_{\rm b}$	0.02924 ± 0.00053	0.02871 ± 0.00059	0.02902 ± 0.00056	0.02891 ± 0.00056	0.02904 ± 0.00057
σ ($m$mag)	0.5844	0.5767	0.5803	0.5788	0.5814
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.2382 ± 0.0037	0.2322 ± 0.0051	0.2416 ± 0.0074	0.2323 ± 0.0050	0.2332 ± 0.0051
k	0.1400 ± 0.0007	0.1363 ± 0.0021	0.1286 ± 0.0022	0.1357 ± 0.0029	0.1363 ± 0.0034
i (deg.)	83.94 ± 0.40	85.02 ± 0.82	85.25 ± 0.68	85.13 ± 0.79	84.94 ± 0.75
$u_{\rm A}$	0.333 ± 0.027	-0.007 $\pm$ 0.126	-3.279 $\pm$ 0.725	1.000 ± 0.396	0.202 ± 0.069
$v_{\rm A}$		0.70 ± 0.29	6.50 ± 1.27	0.92 ± 0.49	0.63 ± 0.46
T_0	524.623096 ± 0.000087	524.623098 ± 0.000092	524.623097 ± 0.000083	524.623097 ± 0.000088	524.623095 ± 0.000093
$r_{\rm A}$	0.2089 ± 0.0032	0.2043 ± 0.0042	0.2141 ± 0.0068	0.2045 ± 0.0043	0.2053 ± 0.0042
$r_{\rm b}$	0.02924 ± 0.00054	0.02786 ± 0.00089	0.02753 ± 0.00070	0.02775 ± 0.00088	0.02797 ± 0.00086
σ ($m$mag)	0.5844	0.5738	0.5716	0.5754	0.5759

Table A4. Parameters of the JKTEBOP best fits of the CoRoT-1 B-band light curve from Pont et al. (2010), using different approaches to LD. T_0 is given as HJD $-$ 2454000.0. The light curve contains 19 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.2200 ± 0.0072	0.2207 ± 0.0065	0.2204 ± 0.0068	0.2332 ± 0.0064	0.2256 ± 0.0065
k	0.1326 ± 0.0018	0.1325 ± 0.0015	0.1321 ± 0.0017	0.1391 ± 0.0012	0.1363 ± 0.0014
i (deg.)	86.52 ± 1.21	86.46 ± 1.03	86.56 ± 1.11	84.25 ± 0.65	85.34 ± 0.81
$u_{\rm A}$	0.75 fixed	0.65 fixed	0.55 fixed	0.67 fixed	0.60 fixed
$v_{\rm A}$		0.16 fixed	0.34 fixed	0.27 fixed	0.08 fixed
T_0	524.62309 ± 0.00017	524.62310 ± 0.00016	524.62309 ± 0.00017	524.62310 ± 0.00018	524.62310 ± 0.00017
$r_{\rm A}$	0.1942 ± 0.0060	0.1949 ± 0.0055	0.1946 ± 0.0057	0.2047 ± 0.0054	0.1985 ± 0.0056
$r_{\rm b}$	0.02575 ± 0.00116	0.02582 ± 0.00099	0.02572 ± 0.00106	0.02848 ± 0.00096	0.02706 ± 0.00101
σ ($m$mag)	0.5359	0.5201	0.5282	0.6727	0.5454
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.2223 ± 0.0073	0.2210 ± 0.0075	0.2220 ± 0.0075	0.2214 ± 0.0074	0.2220 ± 0.0075
k	0.1344 ± 0.0024	0.1327 ± 0.0028	0.1335 ± 0.0026	0.1320 ± 0.0030	0.1336 ± 0.0027
i (deg.)	86.0 ± 1.1	86.4 ± 1.4	86.1 ± 1.3	86.5 ± 1.6	86.1 ± 1.3
$u_{\rm A}$	0.697 ± 0.055	0.644 ± 0.064	0.512 ± 0.064	0.923 ± 0.089	0.690 ± 0.052
$v_{\rm A}$		0.16 perturbed	0.34 perturbed	0.27 perturbed	0.08 perturbed
T_0	524.62309 ± 0.00016	524.62310 ± 0.00018	524.62309 ± 0.00018	524.62310 ± 0.00017	524.62310 ± 0.00018
$r_{\rm A}$	0.1960 ± 0.0060	0.1951 ± 0.0062	0.1958 ± 0.0062	0.1955 ± 0.0061	0.1958 ± 0.0063
$r_{\rm b}$	0.0263 ± 0.0012	0.0259 ± 0.0013	0.0261 ± 0.0013	0.0258 ± 0.0014	0.0262 ± 0.0013
σ ($m$mag)	0.5246	0.5197	0.5227	0.5199	0.5232

Table A5. Final parameters of the fit to the light curves of CoRoT-1 from the JKTEBOP analysis, compared to those found by other studies. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work (CoRoT 32 s)	This work (CoRoT 512 s)	This work (FORS2 R)	This work (FORS2 B)	**This work (final)**
$r_{\rm A} + r_{\rm b}$	0.2351 ± 0.0031	0.2401 ± 0.0050	0.2369 ± 0.0050	0.2216 ± 0.0121	0.2366 ± 0.0023
k	0.1404 ± 0.0017	0.1438 ± 0.0012	0.1390 ± 0.0010	0.1330 ± 0.0047	0.1409 ± 0.0012
i (°)	84.72 ± 0.48	84.24 ± 0.58	84.17 ± 0.57	86.3 ± 2.6	84.42 ± 0.31
$r_{\rm A}$	0.2061 ± 0.0026	0.2099 ± 0.0042	0.2080 ± 0.0042	0.1956 ± 0.0100	0.2073 ± 0.0020
$r_{\rm b}$	0.02893 ± 0.00060	0.03018 ± 0.00082	0.02892 ± 0.00076	0.0260 ± 0.0022	0.02924 ± 0.00041

	Barge et al. (2008)	Bean (2009)	Gillon et al. (2009)	Pont et al. (2010)
$r_{\rm A} + r_{\rm b}$	0.2315	0.2407	0.2166	0.2303
k	0.1388 ± 0.0021	0.1433 ± 0.0010	$0.13806^{+0.00072}_{-0.00146}$	0.1334
i (°)	85.1 ± 0.5	83.88 ± 0.29	$85.66^{+0.62}_{-0.48}$	86.7 ± 0.6
$r_{\rm A}$	0.2033 ± 0.0033	0.2105 ± 0.0020	0.1899	0.2032
$r_{\rm b}$	0.02822	0.03016	0.02675	0.02710

Table A6. Derived physical properties of the CoRoT-1 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 10.65 \pm 0.69\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.660 \pm 0.019\,\rho_\odot$ and $T'_{\rm eq} = 1915 \pm 49\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	185.5 ± 7.7	182.7 ± 5.5	182.8 ± 7.0	180.6 ± 6.1	181.8 ± 6.7	180.8 ± 6.9
$M_{\rm A}$ ($M_\odot$)	1.014 ± 0.126	0.969 ± 0.088	0.971 ± 0.112	0.937 ± 0.096	0.955 ± 0.106	0.939 ± 0.107
$R_{\rm A}$ ($R_\odot$)	1.154 ± 0.049	1.136 ± 0.036	1.137 ± 0.045	1.124 ± 0.040	1.131 ± 0.043	1.125 ± 0.044
$\log g_{\rm A}$ (cgs)	4.320 ± 0.020	4.314 ± 0.015	4.314 ± 0.019	4.309 ± 0.017	4.311 ± 0.018	4.309 ± 0.018
$M_{\rm b}$ ($M_{\rm Jup}$)	1.076 ± 0.109	1.044 ± 0.088	1.046 ± 0.101	1.021 ± 0.092	1.034 ± 0.098	1.023 ± 0.098
$R_{\rm b}$ ($R_{\rm Jup}$)	1.583 ± 0.069	1.559 ± 0.052	1.561 ± 0.064	1.542 ± 0.057	1.552 ± 0.061	1.543 ± 0.062
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.254 ± 0.021	0.258 ± 0.020	0.257 ± 0.021	0.260 ± 0.021	0.259 ± 0.021	0.260 ± 0.021
Θ	0.0347 ± 0.0025	0.0352 ± 0.0024	0.0352 ± 0.0025	0.0356 ± 0.0025	0.0354 ± 0.0025	0.0356 ± 0.0025
a (AU)	0.02587 ± 0.00107	0.02549 ± 0.00076	0.02551 ± 0.00098	0.02520 ± 0.00086	0.02536 ± 0.00094	0.02522 ± 0.00096
Age (Gyr)		$8.4^{+1.5}_{-3.8}$	$7.1^{+3.2}_{-3.1}$	$8.2^{+2.0}_{-2.8}$	$7.4^{+4.0}_{-2.9}$	$7.7^{+3.8}_{-2.8}$

	This work (final)	Barge et al. (2008)	Bean (2009)	Gillon et al. (2009)	Pont et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$0.95 \pm 0.11 \pm 0.02$	0.95 ± 0.15		$1.01^{+0.13}_{-0.22}$	1.03 ± 0.06
$R_{\rm A}$ ($R_\odot$)	$1.131 \pm 0.045 \pm 0.007$	1.11 ± 0.05		$1.057^{+0.055}_{-0.094}$	1.14 ± 0.03
$\log g_{\rm A}$ (cgs)	$4.311 \pm 0.019 \pm 0.003$				
$\rho_{\rm A}$ ($\rho_\odot$)	0.660 ± 0.019			$0.86^{+0.13}_{-0.08}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.03 \pm 0.10 \pm 0.01$	1.03 ± 0.12		$1.07^{+0.13}_{-0.18}$	1.13 ± 0.07
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.551 \pm 0.064 \pm 0.010$	1.49 ± 0.08	1.54 ± 0.07	$1.45^{+0.07}_{-0.13}$	1.48 ± 0.06
$g_{\rm b}$ (m s^{-1})	10.65 ± 0.69				
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.259 \pm 0.021 \pm 0.002$	0.29 ± 0.04		$0.350^{+0.077}_{-0.042}$	
$T'_{\rm eq}$ (K)	1915 ± 49	1898 ± 50			
Θ	$0.0354 \pm 0.0025 \pm 0.0002$				
a (AU)	$0.02536 \pm 0.00098 \pm 0.00016$			$0.0259^{+0.0011}_{-0.0020}$	0.0261 ± 0.0005
Age (Gyr)	$7.8^{+4.0\ +0.7}_{-3.8\ -0.7}$				7 ± 6

Table A7. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-2, using different approaches to LD. The light curve contains 254 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1570 ± 0.0015	0.1653 ± 0.0016	0.1587 ± 0.0014	0.1602 ± 0.0014	0.1760 ± 0.0017
k	0.16370 ± 0.00031	0.16312 ± 0.00030	0.16294 ± 0.00029	0.16288 ± 0.00030	0.16542 ± 0.00028
i (deg.)	86.792 ± 0.090	87.605 ± 0.184	86.996 ± 0.099	87.136 ± 0.106	88.551 ± 0.456
$u_{\rm A}$	0.61 fixed	0.41 fixed	0.30 fixed	0.73 fixed	0.41 fixed
$v_{\rm A}$		0.25 fixed	0.50 fixed	0.22 fixed	0.12 fixed
T_0	0.00410 ± 0.00010	0.00202 ± 0.00023	0.00366 ± 0.00012	0.00327 ± 0.00014	-0.00052 ± 0.00032
$r_{\rm A}$	0.1349 ± 0.0013	0.1421 ± 0.0014	0.1365 ± 0.0012	0.1378 ± 0.0012	0.1510 ± 0.0015
$r_{\rm b}$	0.02209 ± 0.00021	0.02318 ± 0.00022	0.02224 ± 0.00020	0.02244 ± 0.00020	0.02498 ± 0.00025
σ ($m$mag)	0.2252	0.1695	0.2058	0.1940	0.1300
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1734 ± 0.0020	0.1764 ± 0.0030	0.1750 ± 0.0024	0.1755 ± 0.0024	0.1750 ± 0.0024
k	0.16625 ± 0.00029	0.16442 ± 0.00062	0.16524 ± 0.00032	0.16493 ± 0.00050	0.16535 ± 0.00055
i (deg.)	87.71 ± 0.23	89.96 ± 1.04	88.26 ± 0.42	88.52 ± 0.73	88.24 ± 0.51
$u_{\rm A}$	0.445 ± 0.007	0.330 ± 0.027	0.155 ± 0.038	0.603 ± 0.051	0.417 ± 0.016
$v_{\rm A}$		0.25 perturbed	0.50 perturbed	0.22 perturbed	0.12 perturbed
T_0	0.00036 ± 0.00039	-0.00084 ± 0.00082	-0.00014 ± 0.00052	-0.00031 ± 0.00060	-0.00013 ± 0.00055
$r_{\rm A}$	0.1487 ± 0.0017	0.1515 ± 0.0025	0.1502 ± 0.0021	0.1506 ± 0.0021	0.1502 ± 0.0021
$r_{\rm b}$	0.02472 ± 0.00029	0.02491 ± 0.00044	0.02482 ± 0.00035	0.02484 ± 0.00034	0.02483 ± 0.00033
σ ($m$mag)	0.1288	0.1396	0.1306	0.1329	0.1302
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.1734 ± 0.0021	0.1716 ± 0.0024	0.1726 ± 0.0022	0.1726 ± 0.0022	0.1729 ± 0.0022
k	0.16625 ± 0.00029	0.16688 ± 0.00046	0.16650 ± 0.00050	0.16657 ± 0.00046	0.16643 ± 0.00047
i (deg.)	87.71 ± 0.23	87.23 ± 0.28	87.53 ± 0.31	87.49 ± 0.28	87.58 ± 0.30
$u_{\rm A}$	0.445 ± 0.008	0.497 ± 0.035	0.517 ± 0.128	0.410 ± 0.042	0.452 ± 0.017
$v_{\rm A}$		-0.091 ± 0.058	-0.120 ± 0.213	-0.053 ± 0.062	-0.023 ± 0.053
T_0	0.00036 ± 0.00039	0.00105 ± 0.00049	0.00061 ± 0.00050	0.00064 ± 0.00047	0.00053 ± 0.00046
$r_{\rm A}$	0.1487 ± 0.0018	0.1470 ± 0.0021	0.1479 ± 0.0019	0.1480 ± 0.0019	0.1482 ± 0.0019
$r_{\rm b}$	0.02472 ± 0.00031	0.02454 ± 0.00032	0.02463 ± 0.00030	0.02465 ± 0.00030	0.02467 ± 0.00031
σ ($m$mag)	0.1288	0.1284	0.1288	0.1287	0.1288

Table A8. Final parameters of the fit to the light curves of CoRoT-2 from the JKTEBOP analysis, compared to those found by other studies. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work	Czesla et al. (2009)	Rauer et al. (2010)	Gillon et al. (2010a)
$r_{\rm A}+r_{\rm b}$	0.1724 ± 0.0026		0.1838	0.1757
k	0.16660 ± 0.00055	0.172 ± 0.001	0.1633 ± 0.0031	0.1657 ± 0.0003
i ($^\circ$)	87.45 ± 0.34	87.7 ± 0.2	85.23 ± 1.37	$88.08^{+0.18}_{-0.16}$
$r_{\rm A}$	0.1478 ± 0.0023		0.158 ± 0.012	0.1506
$r_{\rm b}$	0.02462 ± 0.00035		0.02580	0.02504

Table A9. Derived physical properties of the CoRoT-2 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 41.5 \pm 1.7\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 1.362 \pm 0.064\,\rho_\odot$ and $T'_{\rm eq} = 1548 \pm 22\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	176.49 ± 4.08	179.26 ± 0.91	175.41 ± 1.61	177.66 ± 1.75	177.67 ± 1.21	176.96 ± 2.22
$M_{\rm A}$ ($M_\odot$)	1.002 ± 0.069	1.050 ± 0.016	0.984 ± 0.027	1.022 ± 0.030	1.023 ± 0.021	1.010 ± 0.038
$R_{\rm A}$ ($R_\odot$)	0.903 ± 0.026	0.917 ± 0.018	0.897 ± 0.020	0.909 ± 0.017	0.909 ± 0.017	0.905 ± 0.016
$\log g_{\rm A}$ (cgs)	4.528 ± 0.016	4.535 ± 0.012	4.525 ± 0.012	4.531 ± 0.014	4.531 ± 0.013	4.529 ± 0.015
$M_{\rm b}$ ($M_{\rm Jup}$)	3.59 ± 0.20	3.70 ± 0.12	3.54 ± 0.12	3.63 ± 0.13	3.63 ± 0.12	3.61 ± 0.14
$R_{\rm b}$ ($R_{\rm Jup}$)	1.463 ± 0.040	1.486 ± 0.022	1.454 ± 0.025	1.473 ± 0.026	1.473 ± 0.024	1.467 ± 0.028
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	1.071 ± 0.061	1.055 ± 0.055	1.078 ± 0.057	1.064 ± 0.057	1.064 ± 0.056	1.068 ± 0.057
Θ	0.1388 ± 0.0056	0.1366 ± 0.0046	0.1396 ± 0.0048	0.1379 ± 0.0048	0.1379 ± 0.0047	0.1384 ± 0.0049
a (AU)	0.02840 ± 0.00065	0.02884 ± 0.00015	0.02822 ± 0.00026	0.02859 ± 0.00028	0.02859 ± 0.00019	0.02847 ± 0.00036
Age (Gyr)		$0.0^{+0.0}_{-0.0}$	$2.1^{+0.0}_{-2.1}$	$0.2^{+1.9}_{-0.3}$	$0.0^{+0.8}_{-0.0}$	$0.7^{+1.4}_{-1.1}$

	This work (final)	Alonso et al. (2008)	Vereš et al. (2009)	Gillon et al. (2010a)	Chavero et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$1.018 \pm 0.038 \pm 0.034$	0.97 ± 0.06		0.96 ± 0.08	
$R_{\rm A}$ ($R_\odot$)	$0.907 \pm 0.020 \pm 0.010$	0.902 ± 0.018		$0.906^{+0.026}_{-0.027}$	
$\log g_{\rm A}$ (cgs)	$4.530 \pm 0.015 \pm 0.005$				
$\rho_{\rm A}$ ($\rho_\odot$)	1.362 ± 0.064			$1.288^{+0.035}_{-0.033}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	$3.62 \pm 0.14 \pm 0.08$	3.31 ± 0.16			
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.470 \pm 0.028 \pm 0.016$	1.465 ± 0.029	1.318 ± 0.158		
$g_{\rm b}$ (m s^{-1})	41.5 ± 1.7				
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$1.066 \pm 0.057 \pm 0.012$	0.99 ± 0.03		$1.105^{+0.060}_{-0.056}$	
$T'_{\rm eq}$ (K)	1548 ± 22	1537 ± 35			
Θ	$0.1381 \pm 0.0049 \pm 0.0016$				
a (AU)	$0.02854 \pm 0.00036 \pm 0.00032$			$0.02798^{+0.00076}_{-0.00080}$	
Age (Gyr)	$0.6^{+1.9\ +1.5}_{-2.1\ -0.6}$			$2.7^{+3.2}_{-2.7}$	0.12

Table A10. Parameters of the JKTEBOP best fits of the CoRoT 32s-sampled light curve of CoRoT-3, using different approaches to LD. The light curve contains 477 phase-binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1338 ± 0.0074	0.1272 ± 0.0069	0.1308 ± 0.0068	0.1296 ± 0.0067	0.1338 ± 0.0061
k	0.06646 ± 0.00103	0.06548 ± 0.00078	0.06611 ± 0.00085	0.06588 ± 0.00080	0.06687 ± 0.00058
i (deg.)	86.10 ± 0.76	86.81 ± 0.82	86.39 ± 0.73	86.53 ± 0.75	85.99 ± 0.59
$u_{\rm A}$	0.57 fixed	0.32 fixed	0.17 fixed	0.66 fixed	0.32 fixed
$v_{\rm A}$		0.31 fixed	0.54 fixed	0.26 fixed	0.15 fixed
$r_{\rm A}$	0.1254 ± 0.0068	0.1194 ± 0.0064	0.1226 ± 0.0063	0.1216 ± 0.0062	0.1254 ± 0.0056
$r_{\rm b}$	0.00834 ± 0.00058	0.00782 ± 0.00050	0.00811 ± 0.00051	0.00801 ± 0.00050	0.00839 ± 0.00043
σ ($m$mag)	0.3885	0.3857	0.3850	0.3851	0.3844
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1326 ± 0.0062	0.1313 ± 0.0072	0.1317 ± 0.0068	0.1313 ± 0.0072	0.1315 ± 0.0069
k	0.06688 ± 0.00076	0.06629 ± 0.00084	0.06651 ± 0.00079	0.06639 ± 0.00081	0.06649 ± 0.00082
i (deg.)	86.11 ± 0.63	86.29 ± 0.80	86.24 ± 0.72	86.29 ± 0.75	86.26 ± 0.74
$u_{\rm A}$	0.433 ± 0.039	0.228 ± 0.065	0.097 ± 0.059	0.583 ± 0.057	0.375 ± 0.050
$v_{\rm A}$		0.31 perturbed	0.54 perturbed	0.26 perturbed	0.15 perturbed
$r_{\rm A}$	0.1243 ± 0.0057	0.1232 ± 0.0068	0.1235 ± 0.0063	0.1232 ± 0.0067	0.1233 ± 0.0064
$r_{\rm b}$	0.00831 ± 0.00047	0.00816 ± 0.00054	0.00821 ± 0.00050	0.00818 ± 0.00051	0.00820 ± 0.00052
σ ($m$mag)	0.3838	0.3841	0.3838	0.3838	0.3838
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1326 ± 0.0066	0.1322 ± 0.0070	0.1321 ± 0.0073	0.1322 ± 0.0075	0.1321 ± 0.0081
k	0.0669 ± 0.0008	0.0668 ± 0.0011	0.0667 ± 0.0014	0.0667 ± 0.0014	0.0667 ± 0.0015
i (deg.)	86.11 ± 0.68	86.15 ± 0.75	86.18 ± 0.80	86.17 ± 0.84	86.17 ± 0.93
$u_{\rm A}$	0.43 ± 0.04	0.43 ± 0.24	0.27 ± 0.88	0.47 ± 0.27	0.41 ± 0.13
$v_{\rm A}$		0.01 ± 0.36	0.27 ± 1.41	0.06 ± 0.47	0.06 ± 0.39
$r_{\rm A}$	0.1243 ± 0.0061	0.1239 ± 0.0064	0.1238 ± 0.0067	0.1239 ± 0.0069	0.1239 ± 0.0075
$r_{\rm b}$	0.00831 ± 0.00049	0.00828 ± 0.00056	0.00826 ± 0.00060	0.00827 ± 0.00060	0.00826 ± 0.00066
σ ($m$mag)	0.3838	0.3838	0.3837	0.3837	0.3837

Table A11. Parameters of the JKTEBOP best fits of the CoRoT 512s-sampled light curve of CoRoT-3, using different approaches to LD. The light curve contains 835 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1363 ± 0.0127	0.1168 ± 0.0081	0.1306 ± 0.0131	0.1273 ± 0.0122	0.1356 ± 0.0100
k	0.06748 ± 0.00179	0.06509 ± 0.00099	0.06682 ± 0.00151	0.06634 ± 0.00139	0.06781 ± 0.00093
i (deg.)	85.92 ± 1.39	88.48 ± 1.66	86.48 ± 1.62	86.87 ± 1.85	85.87 ± 0.98
$u_{\rm A}$	0.57 fixed	0.32 fixed	0.17 fixed	0.66 fixed	0.32 fixed
$v_{\rm A}$		0.31 fixed	0.54 fixed	0.26 fixed	0.15 fixed
P	4.256599 ± 0.000100	4.256604 ± 0.000096	4.256602 ± 0.000099	4.256601 ± 0.000095	4.256607 ± 0.000096
T_0	283.14015 ± 0.00043	283.14012 ± 0.00041	283.14013 ± 0.00043	283.14013 ± 0.00042	283.14015 ± 0.00041
$r_{\rm A}$	0.1277 ± 0.0118	0.1096 ± 0.0075	0.1224 ± 0.0121	0.1193 ± 0.0113	0.1270 ± 0.0092
$r_{\rm b}$	0.00861 ± 0.00100	0.00714 ± 0.00060	0.00818 ± 0.00099	0.00792 ± 0.00091	0.00861 ± 0.00072
σ ($m$mag)	0.7783	0.7741	0.7746	0.7745	0.7714
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.143 ± 0.009	0.139 ± 0.011	0.142 ± 0.010	0.141 ± 0.011	0.141 ± 0.010
k	0.06877 ± 0.00073	0.06801 ± 0.00083	0.06838 ± 0.00078	0.06822 ± 0.00081	0.06836 ± 0.00084
i (deg.)	85.11 ± 0.83	85.50 ± 1.03	85.27 ± 0.93	85.36 ± 1.01	85.30 ± 0.93
$u_{\rm A}$	0.293 ± 0.080	0.078 ± 0.101	-0.050 $\pm$ 0.091	0.434 ± 0.092	0.228 ± 0.091
$v_{\rm A}$		0.31 perturbed	0.54 perturbed	0.26 perturbed	0.15 perturbed
P	4.256596 ± 0.000093	4.256600 ± 0.000095	4.256595 ± 0.000093	4.256596 ± 0.000092	4.256596 ± 0.000096
T_0	283.14022 ± 0.00040	283.14018 ± 0.00041	283.14020 ± 0.00038	283.14019 ± 0.00044	283.14020 ± 0.00041
$r_{\rm A}$	0.1339 ± 0.0087	0.1302 ± 0.0099	0.1325 ± 0.0097	0.1316 ± 0.0101	0.1322 ± 0.0094
$r_{\rm b}$	0.00921 ± 0.00066	0.00886 ± 0.00077	0.00906 ± 0.00074	0.00898 ± 0.00077	0.00904 ± 0.00073
σ ($m$mag)	0.7711	0.7708	0.7709	0.7708	0.7709
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.143 ± 0.010	0.132 ± 0.015	0.131 ± 0.015	0.132 ± 0.014	0.129 ± 0.014
k	0.0688 ± 0.0008	0.0666 ± 0.0019	0.0659 ± 0.0025	0.0664 ± 0.0024	0.0660 ± 0.0025
i (deg.)	85.1 ± 0.8	86.3 ± 2.1	86.5 ± 1.6	86.4 ± 1.7	86.8 ± 1.8
$u_{\rm A}$	0.29 ± 0.08	-0.28 $\pm$ 0.43	-2.05 $\pm$ 2.18	1.01 ± 0.81	0.03 ± 0.25
$v_{\rm A}$		0.93 ± 0.73	3.90 ± 3.70	1.15 ± 1.15	0.94 ± 0.91
P	4.256596 ± 0.000094	4.256601 ± 0.000096	4.256598 ± 0.000096	4.256599 ± 0.000095	4.256598 ± 0.000094
T_0	283.14022 ± 0.00042	283.14015 ± 0.00041	283.14016 ± 0.00041	283.14016 ± 0.00041	283.14016 ± 0.00040
$r_{\rm A}$	0.134 ± 0.009	0.123 ± 0.014	0.123 ± 0.014	0.123 ± 0.013	0.121 ± 0.013
$r_{\rm b}$	0.0092 ± 0.0007	0.0082 ± 0.0011	0.0081 ± 0.0011	0.0082 ± 0.0010	0.0080 ± 0.0011
σ ($m$mag)	0.7711	0.7704	0.7704	0.7704	0.7704

Table A12. Final parameters of the fit to the light curves of CoRoT-3 from the JKTEBOP analysis, compared to those found by other authors. Quantities without quoted uncertainties were not given in other studies but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Deleuil et al. (2008)	Triaud et al. (2009)
$r_{\rm A}+r_{\rm b}$	0.1322 ± 0.0090	0.1406 ± 0.0121	0.1352 ± 0.0072	0.1365	0.1340
k	0.0668 ± 0.0016	0.06825 ± 0.00094	0.06787 ± 0.00082	0.0663 ± 0.0009	$0.06632^{+0.00063}_{-0.00069}$
i ($^\circ$)	86.2 ± 1.0	85.4 ± 1.1	85.80 ± 0.77	85.9 ± 0.8	$86.10^{+0.73}_{-0.52}$
$r_{\rm A}$	0.1239 ± 0.0083	0.1317 ± 0.0113	0.1266 ± 0.0067	0.128 ± 0.007	$0.1257^{+0.0057}_{-0.0064}$
$r_{\rm b}$	0.00827 ± 0.00073	0.00899 ± 0.00086	0.00857 ± 0.00056	0.00849	$0.00834^{+0.00042}_{-0.00030}$

Table A13. Derived physical properties of the CoRoT-3 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 506 \pm 67\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.359 \pm 0.058\,\rho_\odot$ and $T'_{\rm eq} = 1695 \pm 57\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	146.0 ± 3.7	145.7 ± 1.4	145.8 ± 1.5	145.1 ± 2.0	145.1 ± 1.4	144.3 ± 2.0
$M_{\rm A}$ ($M_\odot$)	1.425 ± 0.106	1.417 ± 0.042	1.420 ± 0.045	1.401 ± 0.056	1.400 ± 0.040	1.378 ± 0.056
$R_{\rm A}$ ($R_\odot$)	1.583 ± 0.102	1.580 ± 0.092	1.581 ± 0.092	1.574 ± 0.092	1.574 ± 0.085	1.565 ± 0.094
$\log g_{\rm A}$ (cgs)	4.193 ± 0.044	4.192 ± 0.044	4.193 ± 0.044	4.191 ± 0.044	4.191 ± 0.046	4.188 ± 0.044
$M_{\rm b}$ ($M_{\rm Jup}$)	22.18 ± 1.13	22.11 ± 0.52	22.13 ± 0.54	21.93 ± 0.64	21.92 ± 0.50	21.69 ± 0.65
$R_{\rm b}$ ($R_{\rm Jup}$)	1.042 ± 0.073	1.041 ± 0.069	1.041 ± 0.069	1.036 ± 0.069	1.036 ± 0.068	1.031 ± 0.069
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	18.3 ± 3.7	18.3 ± 3.7	18.3 ± 3.7	18.4 ± 3.7	18.4 ± 3.7	18.5 ± 3.7
Θ	1.73 ± 0.12	1.74 ± 0.12	1.74 ± 0.12	1.74 ± 0.12	1.74 ± 0.12	1.75 ± 0.12
a (AU)	0.05813 ± 0.00144	0.05803 ± 0.00057	0.05807 ± 0.00060	0.05780 ± 0.00077	0.05779 ± 0.00054	0.05748 ± 0.00078
Age (Gyr)		$1.5^{+0.3}_{-0.4}$	$1.5^{+0.4}_{-0.4}$	$1.4^{+0.4}_{-0.3}$	$1.3^{+0.4}_{-0.5}$	$1.8^{+0.5}_{-0.4}$

	This work (final)	Deleuil et al. (2008)	Triaud et al. (2009)
$M_{\rm A}$ ($M_\odot$)	$1.403 \pm 0.056 \pm 0.026$	1.37 ± 0.09	$1.359^{+0.059}_{-0.043}$
$R_{\rm A}$ ($R_\odot$)	$1.575 \pm 0.094 \pm 0.010$	1.56 ± 0.09	$1.540^{+0.083}_{-0.078}$
$\log g_{\rm A}$ (cgs)	$4.191 \pm 0.046 \pm 0.003$	4.25 ± 0.07	
$\rho_{\rm A}$ ($\rho_\odot$)	0.359 ± 0.058		$0.372^{+0.064}_{-0.047}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$21.96 \pm 0.65 \pm 0.27$	21.7 ± 1.0	$21.23^{+0.82}_{-0.59}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.037 \pm 0.069 \pm 0.006$	1.01 ± 0.07	$0.9934^{+0.058}_{-0.058}$
$g_{\rm b}$ (m s^{-1})	506 ± 67	524 ± 85	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$18.4 \pm 3.7 \pm 0.1$	19.9 ± 4.2	
$T'_{\rm eq}$ (K)	1695 ± 57		
Θ	$1.74 \pm 0.12 \pm 0.01$		
a (AU)	$0.05783 \pm 0.00078 \pm 0.00035$		$0.05694^{+0.00096}_{-0.00079}$
Age (Gyr)	$1.5\,^{+0.5\ +0.3}_{-0.5\ -0.2}$	1.6–2.8	

Table A14. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-4, using different approaches to LD. The light curve contains 519 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.0646^{+0.0049}_{-0.0017}$	$0.0649^{+0.0029}_{-0.0012}$	$0.0645^{+0.0032}_{-0.0012}$	$0.0652^{+0.0026}_{-0.0010}$	$0.0663^{+0.0025}_{-0.0024}$
k	$0.10299^{+0.00203}_{-0.00079}$	$0.10384^{+0.00084}_{-0.00062}$	$0.10409^{+0.00111}_{-0.00060}$	$0.10446^{+0.00083}_{-0.00056}$	$0.10603^{+0.00079}_{-0.00068}$
i (deg.)	$89.92^{+0.67}_{-0.79}$	$89.61^{+0.58}_{-0.56}$	$89.70^{+0.58}_{-0.58}$	$89.41^{+0.53}_{-0.54}$	$89.05^{+0.75}_{-0.40}$
$u_{\rm A}$	0.57 fixed	0.33 fixed	0.11 fixed	0.66 fixed	0.33 fixed
$v_{\rm A}$		0.30 fixed	0.61 fixed	0.31 fixed	0.15 fixed
$r_{\rm A}$	$0.0585^{+0.0044}_{-0.0015}$	$0.0588^{+0.0025}_{-0.0011}$	$0.0584^{+0.0028}_{-0.0011}$	$0.0591^{+0.0023}_{-0.0009}$	$0.0599^{+0.0022}_{-0.0021}$
$r_{\rm b}$	$0.00603^{+0.00059}_{-0.00019}$	$0.00610^{+0.00033}_{-0.00014}$	$0.00608^{+0.00036}_{-0.00014}$	$0.00617^{+0.00030}_{-0.00011}$	$0.00635^{+0.00028}_{-0.00025}$
σ ($m$mag)	0.9468	0.9489	0.9466	0.9494	0.9559
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.0645^{+0.0030}_{-0.0012}$	$0.0647^{+0.0052}_{-0.0017}$	$0.0645^{+0.0055}_{-0.0017}$	$0.0647^{+0.0059}_{-0.0018}$	$0.0645^{+0.0050}_{-0.0016}$
k	$0.1041^{+0.0013}_{-0.0009}$	$0.1031^{+0.0019}_{-0.0012}$	$0.1034^{+0.0020}_{-0.0011}$	$0.1031^{+0.0022}_{-0.0012}$	$0.1035^{+0.0018}_{-0.0011}$
i (deg.)	$89.67^{+0.59}_{-0.59}$	$89.94^{+0.69}_{-0.81}$	$89.96^{+0.65}_{-0.88}$	$90.00^{+0.71}_{-0.92}$	$89.92^{+0.70}_{-0.80}$
$u_{\rm A}$	$0.502^{+0.041}_{-0.041}$	$0.373^{+0.058}_{-0.074}$	$0.155^{+0.059}_{-0.069}$	$0.734^{+0.069}_{-0.080}$	$0.474^{+0.050}_{-0.062}$
$v_{\rm A}$		0.30 perturbed	0.61 perturbed	0.31 perturbed	0.15 perturbed
$r_{\rm A}$	$0.0584^{+0.0027}_{-0.0011}$	$0.0587^{+0.0045}_{-0.0015}$	$0.0585^{+0.0048}_{-0.0015}$	$0.0586^{+0.0052}_{-0.0016}$	$0.0584^{+0.0044}_{-0.0014}$
$r_{\rm b}$	$0.00608^{+0.00035}_{-0.00015}$	$0.00605^{+0.00061}_{-0.00020}$	$0.00604^{+0.00065}_{-0.00019}$	$0.00605^{+0.00071}_{-0.00021}$	$0.00605^{+0.00058}_{-0.00019}$
σ ($m$mag)	0.9442	0.9480	0.9455	0.9467	0.9455
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.0645^{+0.0029}_{-0.0013}$	$0.0658^{+0.0028}_{-0.0019}$	$0.0658^{+0.0026}_{-0.0020}$	$0.0658^{+0.0024}_{-0.0021}$	$0.0675^{+0.0063}_{-0.0027}$
k	$0.1041^{+0.0013}_{-0.0009}$	$0.1058^{+0.0016}_{-0.0013}$	$0.1062^{+0.0015}_{-0.0014}$	$0.1060^{+0.0016}_{-0.0013}$	$0.0985^{+0.0056}_{-0.0031}$
i (deg.)	$89.67^{+0.60}_{-0.56}$	$89.11^{+0.76}_{-0.46}$	$89.06^{+0.82}_{-0.44}$	$89.08^{+0.84}_{-0.44}$	$89.94^{+0.78}_{-0.89}$
$u_{\rm A}$	$0.502^{+0.039}_{-0.042}$	$0.718^{+0.164}_{-0.151}$	$1.570^{+0.654}_{-0.592}$	$0.106^{+0.212}_{-0.208}$	$0.415^{+0.096}_{-0.104}$
$v_{\rm A}$		$-0.43^{+0.27}_{-0.28}$	$-1.82^{+0.99}_{-1.06}$	$-0.58^{+0.33}_{-0.33}$	$1.08^{+0.49}_{-0.87}$
$r_{\rm A}$	$0.0584^{+0.0025}_{-0.0011}$	$0.0595^{+0.0024}_{-0.0017}$	$0.0595^{+0.0023}_{-0.0017}$	$0.0595^{+0.0021}_{-0.0018}$	$0.0614^{+0.0057}_{-0.0025}$
$r_{\rm b}$	$0.00608^{+0.00034}_{-0.00016}$	$0.00629^{+0.00034}_{-0.00025}$	$0.00632^{+0.00033}_{-0.00025}$	$0.00631^{+0.00032}_{-0.00025}$	$0.00605^{+0.00075}_{-0.00030}$
σ ($m$mag)	0.9442	0.9420	0.9420	0.9420	0.9529

Table A15. Parameters of the JKTEBOP best fits of the 512s-sampled CoRoT light curve for CoRoT-4, using different approaches to LD. T_0 is given as HJD − 2454000.0. The light curve contains 254 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.0651^{+0.0059}_{-0.0023}$	$0.0650^{+0.0053}_{-0.0018}$	$0.0648^{+0.0075}_{-0.0020}$	$0.0648^{+0.0062}_{-0.0022}$	$0.0642^{+0.0062}_{-0.0020}$
k	$0.1023^{+0.0026}_{-0.0011}$	$0.1031^{+0.0017}_{-0.0008}$	$0.1034^{+0.0023}_{-0.0009}$	$0.1035^{+0.0017}_{-0.0009}$	$0.1047^{+0.0016}_{-0.0008}$
i (deg.)	$89.93^{+0.78}_{-0.86}$	$89.96^{+0.70}_{-0.83}$	$89.96^{+0.79}_{-1.04}$	$89.97^{+0.80}_{-0.89}$	$89.94^{+0.71}_{-0.91}$
$u_{\rm A}$	0.57 fixed	0.33 fixed	0.11 fixed	0.66 fixed	0.33 fixed
$v_{\rm A}$		0.30 fixed	0.61 fixed	0.31 fixed	0.15 fixed
$r_{\rm A}$	$0.0590^{+0.0050}_{-0.0020}$	$0.0589^{+0.0047}_{-0.0016}$	$0.0587^{+0.0066}_{-0.0018}$	$0.0587^{+0.0055}_{-0.0020}$	$0.0581^{+0.0055}_{-0.0018}$
$r_{\rm b}$	$0.00604^{+0.00071}_{-0.00027}$	$0.00607^{+0.00061}_{-0.00019}$	$0.00607^{+0.00085}_{-0.00023}$	$0.00607^{+0.00068}_{-0.00024}$	$0.00609^{+0.00070}_{-0.00022}$
σ ($m$mag)	0.8598	0.8410	0.8396	0.8371	0.8325
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.0639^{+0.0061}_{-0.0019}$	$0.0643^{+0.0084}_{-0.0022}$	$0.0642^{+0.0067}_{-0.0020}$	$0.0643^{+0.0078}_{-0.0020}$	$0.0641^{+0.0066}_{-0.0021}$
k	$0.1053^{+0.0015}_{-0.0012}$	$0.1046^{+0.0019}_{-0.0014}$	$0.1048^{+0.0016}_{-0.0012}$	$0.1046^{+0.0016}_{-0.0013}$	$0.1049^{+0.0016}_{-0.0012}$
i (deg.)	$89.95^{+0.75}_{-0.90}$	$89.97^{+0.75}_{-1.12}$	$89.95^{+0.72}_{-0.99}$	$89.98^{+0.74}_{-1.09}$	$89.94^{+0.76}_{-0.94}$
$u_{\rm A}$	$0.348^{+0.060}_{-0.070}$	$0.209^{+0.077}_{-0.100}$	$-0.005^{+0.074}_{-0.084}$	$0.571^{+0.084}_{-0.090}$	$0.315^{+0.063}_{-0.083}$
$v_{\rm A}$		0.30 perturbed	0.61 perturbed	0.31 perturbed	0.15 perturbed
$r_{\rm A}$	$0.0578^{+0.0055}_{-0.0016}$	$0.0582^{+0.0074}_{-0.0020}$	$0.0581^{+0.0059}_{-0.0018}$	$0.0582^{+0.0069}_{-0.0018}$	$0.0581^{+0.0059}_{-0.0018}$
$r_{\rm b}$	$0.00609^{+0.00068}_{-0.00021}$	$0.00609^{+0.00092}_{-0.00024}$	$0.00609^{+0.00075}_{-0.00021}$	$0.00609^{+0.00087}_{-0.00022}$	$0.00609^{+0.00073}_{-0.00022}$
σ ($m$mag)	0.8319	0.8334	0.8324	0.8329	0.8324
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.064^{+0.007}_{-0.002}$	$0.064^{+0.012}_{-0.002}$	$0.064^{+0.011}_{-0.002}$	$0.064^{+0.012}_{-0.002}$	$0.064^{+0.010}_{-0.003}$
k	$0.1053^{+0.0016}_{-0.0012}$	$0.1053^{+0.0020}_{-0.0085}$	$0.1054^{+0.0024}_{-0.0075}$	$0.1053^{+0.0022}_{-0.0086}$	$0.1053^{+0.0023}_{-0.0084}$
i (deg.)	$89.95^{+0.73}_{-0.99}$	$89.95^{+0.80}_{-1.02}$	$89.98^{+0.85}_{-1.12}$	$89.97^{+0.80}_{-1.03}$	$89.97^{+0.77}_{-1.09}$
$u_{\rm A}$	$0.35^{+0.06}_{-0.07}$	$0.35^{+0.31}_{-0.54}$	$0.44^{+1.38}_{-3.84}$	$0.32^{+2.14}_{-0.48}$	$0.36^{+0.18}_{-0.24}$
$v_{\rm A}$		$-0.0^{+1.8}_{-0.5}$	$-0.2^{+6.7}_{-2.3}$	$-0.0^{+2.6}_{-0.7}$	$-0.0^{+2.1}_{-0.6}$
$r_{\rm A}$	$0.0578^{+0.0061}_{-0.0018}$	$0.0578^{+0.0111}_{-0.0021}$	$0.0578^{+0.0099}_{-0.0022}$	$0.0578^{+0.0110}_{-0.0021}$	$0.0578^{+0.0094}_{-0.0024}$
$r_{\rm b}$	$0.00609^{+0.00077}_{-0.00022}$	$0.00609^{+0.00073}_{-0.00024}$	$0.00609^{+0.00092}_{-0.00026}$	$0.00609^{+0.00075}_{-0.00022}$	$0.00609^{+0.00083}_{-0.00022}$
σ ($m$mag)	0.8319	0.8319	0.8319	0.8319	0.8319

Table A16. Final parameters of the fit to the light curves of CoRoT-4 from the JKTEBOP analysis, compared to those found by Aigrain et al. (2008). Quantities without quoted uncertainties were not given by Aigrain et al. (2008) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Aigrain et al. (2008)
$r_{\rm A}+r_{\rm b}$	$0.0646^{+0.0060}_{-0.0020}$	$0.0642^{+0.0115}_{-0.0028}$	$0.0646^{+0.0053}_{-0.0017}$	0.0636
k	$0.1033^{+0.0022}_{-0.0012}$	$0.1047^{+0.0019}_{-0.0014}$	$0.1043^{+0.0013}_{-0.0012}$	$0.1047^{+0.0041}_{-0.0022}$
i (°)	$89.95^{+0.05}_{-0.94}$	$89.96^{+0.04}_{-1.44}$	$89.96^{+0.04}_{-0.79}$	$90.00^{+0.000}_{-0.085}$
$r_{\rm A}$	$0.0585^{+0.0053}_{-0.0018}$	$0.0581^{+0.0102}_{-0.0025}$	$0.0585^{+0.0046}_{-0.0015}$	$0.0576^{+0.0008}_{-0.0002}$
$r_{\rm b}$	$0.00605^{+0.00072}_{-0.00024}$	$0.00609^{+0.00120}_{-0.00031}$	$0.00608^{+0.00060}_{-0.00020}$	0.006031

Table A17. Derived physical properties of the CoRoT-4 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 13.5^{+1.6}_{-2.6}\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.790^{+0.064}_{-0.161}\,\rho_\odot$ and $T'_{\rm eq} = 1058^{+42}_{-17}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$107.81^{+2.77}_{-2.52}$	$108.48^{+0.90}_{-1.10}$	$107.93^{+0.95}_{-1.18}$	$107.62^{+1.18}_{-1.32}$	$107.79^{+0.91}_{-1.09}$	$106.97^{+1.31}_{-1.17}$
$M_{\rm A}$ ($M_\odot$)	$1.196^{+0.094}_{-0.082}$	$1.219^{+0.031}_{-0.037}$	$1.200^{+0.032}_{-0.039}$	$1.190^{+0.039}_{-0.043}$	$1.196^{+0.031}_{-0.036}$	$1.168^{+0.043}_{-0.038}$
$R_{\rm A}$ ($R_\odot$)	$1.148^{+0.107}_{-0.043}$	$1.155^{+0.086}_{-0.032}$	$1.149^{+0.091}_{-0.032}$	$1.146^{+0.088}_{-0.032}$	$1.148^{+0.092}_{-0.032}$	$1.139^{+0.089}_{-0.031}$
$\log g_{\rm A}$ (cgs)	$4.396^{+0.023}_{-0.062}$	$4.399^{+0.023}_{-0.068}$	$4.397^{+0.023}_{-0.066}$	$4.395^{+0.023}_{-0.067}$	$4.396^{+0.023}_{-0.065}$	$4.393^{+0.024}_{-0.066}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.732^{+0.079}_{-0.078}$	$0.741^{+0.072}_{-0.072}$	$0.734^{+0.071}_{-0.073}$	$0.729^{+0.071}_{-0.072}$	$0.732^{+0.071}_{-0.071}$	$0.721^{+0.071}_{-0.070}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.161^{+0.118}_{-0.047}$	$1.168^{+0.116}_{-0.040}$	$1.162^{+0.115}_{-0.040}$	$1.159^{+0.115}_{-0.041}$	$1.161^{+0.115}_{-0.040}$	$1.152^{+0.115}_{-0.040}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.438^{+0.063}_{-0.116}$	$0.435^{+0.062}_{-0.115}$	$0.437^{+0.062}_{-0.115}$	$0.438^{+0.063}_{-0.116}$	$0.438^{+0.062}_{-0.116}$	$0.441^{+0.063}_{-0.116}$
Θ	$0.0961^{+0.0100}_{-0.0128}$	$0.0955^{+0.0097}_{-0.0125}$	$0.0960^{+0.0098}_{-0.0126}$	$0.0963^{+0.0098}_{-0.0127}$	$0.0961^{+0.0098}_{-0.0126}$	$0.0969^{+0.0099}_{-0.0127}$
a (AU)	$0.09124^{+0.00235}_{-0.00213}$	$0.09181^{+0.00076}_{-0.00093}$	$0.09134^{+0.00081}_{-0.00100}$	$0.09108^{+0.00099}_{-0.00112}$	$0.09123^{+0.00077}_{-0.00092}$	$0.09053^{+0.00110}_{-0.00099}$
Age (Gyr)		$0.5^{+1.9}_{-0.0}$	$0.8^{+1.5}_{-0.6}$	$0.8^{+2.6}_{-0.6}$	$0.5^{+1.3}_{-0.0}$	$1.5^{+2.2}_{-1.0}$

	This work (final)	Moutou et al. (2008)
$M_{\rm A}$ ($M_\odot$)	$1.194\,^{+0.043\,+0.024}_{-0.043\,-0.026}$	$1.16^{+0.03}_{-0.02}$
$R_{\rm A}$ ($R_\odot$)	$1.148\,^{+0.092\,+0.008}_{-0.032\,-0.008}$	$1.17^{+0.01}_{-0.03}$
$\log g_{\rm A}$ (cgs)	$4.396\,^{+0.024\,+0.003}_{-0.068\,-0.003}$	4.37 ± 0.02
$\rho_{\rm A}$ ($\rho_\odot$)	$0.790^{+0.064}_{-0.161}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.731\,^{+0.072\,+0.010}_{-0.073\,-0.011}$	0.72 ± 0.08
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.160\,^{+0.116\,+0.008}_{-0.041\,-0.008}$	$1.19^{+0.06}_{-0.05}$
$g_{\rm b}$ (m s^{-1})	$13.5^{+1.6}_{-2.6}$	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.438\,^{+0.063\,+0.003}_{-0.116\,-0.003}$	0.396 ± 0.11
$T'_{\rm eq}$ (K)	1058^{+42}_{-17}	1074 ± 19
Θ	$0.0962\,^{+0.0099\,+0.0007}_{-0.0127\,-0.0006}$	
a (AU)	$0.0912\,^{+0.0011\,+0.0006}_{-0.0011\,-0.0007}$	0.090 ± 0.001
Age (Gyr)	$0.8\,^{+2.6\,+0.6}_{-1.0\,-0.3}$	$1^{+1.0}_{-0.3}$

Table A18. Parameters of the JKTEBOP best fits of the CoRoT 32s-sampled light curve of CoRoT-5, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 459 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1140 ± 0.0093	0.1101 ± 0.0095	0.1261 ± 0.0110	0.1094 ± 0.0091	0.1250 ± 0.0113
k	0.1169 ± 0.0013	0.1158 ± 0.0012	0.1169 ± 0.0012	0.1159 ± 0.0013	0.1166 ± 0.0013
i (deg.)	85.90 ± 0.62	86.18 ± 0.63	84.90 ± 0.81	86.23 ± 0.60	85.02 ± 0.83
$u_{\rm A}$	0.57 fixed	0.33 fixed	0.24 fixed	0.70 fixed	0.33 fixed
$v_{\rm A}$		0.29 fixed	0.14 fixed	0.28 fixed	0.15 fixed
$r_{\rm A}$	0.1021 ± 0.0083	0.0987 ± 0.0085	0.1129 ± 0.0098	0.0981 ± 0.0082	0.1120 ± 0.0101
$r_{\rm b}$	0.01193 ± 0.00099	0.01143 ± 0.00103	0.01321 ± 0.00116	0.01137 ± 0.00095	0.01305 ± 0.00123
σ ($m$mag)	0.4788	0.4777	0.4819	0.4779	0.4780
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1093 ± 0.0098	0.1160 ± 0.0109	0.1085 ± 0.0103	0.1151 ± 0.0100	0.1176 ± 0.0100
k	0.1172 ± 0.0013	0.1161 ± 0.0013	0.1170 ± 0.0013	0.1162 ± 0.0012	0.1165 ± 0.0013
i (deg.)	86.20 ± 0.66	85.74 ± 0.75	86.25 ± 0.70	85.81 ± 0.67	85.63 ± 0.70
$u_{\rm A}$	0.498 ± 0.050	0.265 ± 0.074	0.406 ± 0.063	0.631 ± 0.063	0.414 ± 0.065
$v_{\rm A}$		0.29 perturbed	0.14 perturbed	0.28 perturbed	0.15 perturbed
$r_{\rm A}$	0.0978 ± 0.0088	0.1039 ± 0.0098	0.0971 ± 0.0093	0.1032 ± 0.0089	0.1053 ± 0.0090
$r_{\rm b}$	0.0115 ± 0.0011	0.0121 ± 0.0011	0.0114 ± 0.0011	0.0120 ± 0.0011	0.0123 ± 0.0011
σ ($m$mag)	0.4773	0.4768	0.4772	0.4769	0.4771
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.109 ± 0.009	0.112 ± 0.011	0.118 ± 0.012	0.128 ± 0.012	0.130 ± 0.013
k	0.1172 ± 0.0013	0.1139 ± 0.0039	0.1142 ± 0.0031	0.1146 ± 0.0040	0.1149 ± 0.0038
i (deg.)	86.20 ± 0.64	86.02 ± 0.73	85.68 ± 0.79	84.86 ± 0.89	84.68 ± 0.93
$u_{\rm A}$	0.50 ± 0.05	-0.17 ± 0.79	-0.95 ± 1.40	0.86 ± 0.62	0.26 ± 0.33
$v_{\rm A}$		0.88 ± 1.09	2.27 ± 2.25	0.73 ± 1.10	0.47 ± 0.79
$r_{\rm A}$	0.0978 ± 0.0083	0.1010 ± 0.0094	0.1056 ± 0.0106	0.1147 ± 0.0110	0.1164 ± 0.0112
$r_{\rm b}$	0.0115 ± 0.0010	0.0115 ± 0.0011	0.0121 ± 0.0012	0.0131 ± 0.0013	0.0134 ± 0.0013
σ ($m$mag)	0.4773	0.4766	0.4766	0.4764	0.4764

Table A19. Parameters of the JKTEBOP best fits of the CoRoT 512s-sampled light curve of CoRoT-5, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 322 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.096 ± 0.014	0.096 ± 0.013	0.101 ± 0.013	0.096 ± 0.014	0.100 ± 0.013
k	0.1125 ± 0.0024	0.1119 ± 0.0020	0.1145 ± 0.0015	0.1118 ± 0.0021	0.1138 ± 0.0016
i (deg.)	87.18 ± 0.87	87.17 ± 0.82	86.67 ± 0.86	87.21 ± 0.87	86.78 ± 0.89
$u_{\rm A}$	0.57 fixed	0.33 fixed	0.24 fixed	0.70 fixed	0.33 fixed
$v_{\rm A}$		0.29 fixed	0.14 fixed	0.28 fixed	0.15 fixed
T_0	400.19898 ± 0.00068	400.19896 ± 0.00070	400.19877 ± 0.00067	400.19897 ± 0.00072	400.19883 ± 0.00064
$r_{\rm A}$	0.086 ± 0.012	0.086 ± 0.012	0.091 ± 0.012	0.086 ± 0.013	0.090 ± 0.012
$r_{\rm b}$	0.0097 ± 0.0015	0.0097 ± 0.0014	0.0104 ± 0.0013	0.0096 ± 0.0015	0.0102 ± 0.0014
σ ($m$mag)	1.0699	1.0684	1.0706	1.0686	1.0687
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.099 ± 0.014	0.098 ± 0.014	0.099 ± 0.014	0.098 ± 0.014	0.098 ± 0.015
k	0.1139 ± 0.0020	0.1127 ± 0.0025	0.1137 ± 0.0020	0.1128 ± 0.0022	0.1131 ± 0.0021
i (deg.)	86.92 ± 0.91	86.99 ± 0.97	86.90 ± 0.93	86.99 ± 0.88	86.99 ± 0.95
$u_{\rm A}$	0.46 ± 0.10	0.27 ± 0.12	0.38 ± 0.10	0.63 ± 0.11	0.41 ± 0.11
$v_{\rm A}$		0.29 perturbed	0.14 perturbed	0.28 perturbed	0.15 perturbed
T_0	400.19885 ± 0.00065	400.19889 ± 0.00066	400.19885 ± 0.00070	400.19889 ± 0.00069	400.19888 ± 0.00070
$r_{\rm A}$	0.088 ± 0.012	0.088 ± 0.013	0.089 ± 0.013	0.088 ± 0.012	0.088 ± 0.013
$r_{\rm b}$	0.0101 ± 0.0015	0.0099 ± 0.0015	0.0101 ± 0.0015	0.0099 ± 0.0014	0.0099 ± 0.0016
σ ($m$mag)	1.0676	1.0680	1.0677	1.0680	1.0679
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.099 ± 0.015	0.100 ± 0.014	0.097 ± 0.014	0.100 ± 0.014	0.099 ± 0.013
k	0.1139 ± 0.0020	0.1166 ± 0.0062	0.1170 ± 0.0054	0.1169 ± 0.0060	0.1167 ± 0.0057
i (deg.)	86.92 ± 0.94	86.79 ± 0.96	86.90 ± 0.90	86.77 ± 0.91	86.79 ± 0.91
$u_{\rm A}$	0.46 ± 0.09	0.91 ± 0.82	1.94 ± 2.06	0.06 ± 0.66	0.71 ± 0.41
$v_{\rm A}$		-0.62 ± 1.18	-2.32 ± 3.23	-0.77 ± 1.26	-0.55 ± 0.89
T_0	400.19885 ± 0.00066	400.19880 ± 0.00067	400.19879 ± 0.00063	400.19879 ± 0.00064	400.19879 ± 0.00069
$r_{\rm A}$	0.088 ± 0.013	0.089 ± 0.013	0.087 ± 0.012	0.089 ± 0.012	0.089 ± 0.012
$r_{\rm b}$	0.0101 ± 0.0015	0.0104 ± 0.0017	0.0102 ± 0.0016	0.0104 ± 0.0015	0.0104 ± 0.0016
σ ($m$mag)	1.0676	1.0672	1.0669	1.0670	1.0670

Table A20. Final parameters of the fit to the light curves of CoRoT-5 from the JKTEBOP analysis, compared to those found by Rauer et al. (2009). Quantities without quoted uncertainties were not given byRauer et al. (2009) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Rauer et al. (2009)
$r_{\rm A}+r_{\rm b}$	0.114 ± 0.012	0.098 ± 0.017	0.1090 ± 0.0076	0.1249
k	0.1164 ± 0.0014	0.1131 ± 0.0027	0.1157 ± 0.0013	$0.1209^{+0.0012}_{-0.0013}$
i ($^\circ$)	85.86 ± 0.76	86.97 ± 1.09	86.24 ± 0.53	$85.83^{+0.99}_{-1.38}$
$r_{\rm A}$	0.102 ± 0.010	0.088 ± 0.015	0.0977 ± 0.0067	0.1115
$r_{\rm b}$	0.0119 ± 0.0012	0.0100 ± 0.0018	0.01129 ± 0.00091	0.01341

Table A21. Derived physical properties of the CoRoT-5 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 8.3^{+1.8}_{-1.3}\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.88^{+0.21}_{-0.16}\,\rho_\odot$ and $T'_{\rm eq} = 1348^{+50}_{-51}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$135.0^{+3.8}_{-3.4}$	$135.6^{+4.5}_{-1.2}$	$135.2^{+3.4}_{-1.4}$	$134.5^{+3.0}_{-2.0}$	$135.6^{+3.0}_{-2.5}$	$134.1^{+4.7}_{-1.5}$
$M_{\rm A}$ ($M_\odot$)	$1.023^{+0.079}_{-0.075}$	$1.038^{+0.097}_{-0.026}$	$1.030^{+0.067}_{-0.030}$	$1.014^{+0.057}_{-0.044}$	$1.038^{+0.058}_{-0.056}$	$1.005^{+0.100}_{-0.031}$
$R_{\rm A}$ ($R_\odot$)	$1.051^{+0.086}_{-0.085}$	$1.056^{+0.079}_{-0.060}$	$1.053^{+0.081}_{-0.065}$	$1.048^{+0.070}_{-0.066}$	$1.056^{+0.072}_{-0.067}$	$1.045^{+0.079}_{-0.066}$
$\log g_{\rm A}$ (cgs)	$4.405^{+0.058}_{-0.055}$	$4.407^{+0.068}_{-0.057}$	$4.406^{+0.066}_{-0.055}$	$4.404^{+0.066}_{-0.059}$	$4.407^{+0.066}_{-0.059}$	$4.402^{+0.066}_{-0.058}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.469^{+0.055}_{-0.034}$	$0.474^{+0.058}_{-0.027}$	$0.471^{+0.053}_{-0.027}$	$0.467^{+0.052}_{-0.029}$	$0.474^{+0.053}_{-0.031}$	$0.464^{+0.057}_{-0.027}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.182^{+0.100}_{-0.100}$	$1.187^{+0.102}_{-0.096}$	$1.184^{+0.099}_{-0.096}$	$1.178^{+0.097}_{-0.096}$	$1.187^{+0.098}_{-0.098}$	$1.174^{+0.102}_{-0.095}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.266^{+0.082}_{-0.057}$	$0.265^{+0.081}_{-0.057}$	$0.266^{+0.081}_{-0.057}$	$0.267^{+0.082}_{-0.057}$	$0.265^{+0.081}_{-0.057}$	$0.268^{+0.082}_{-0.058}$
Θ	$0.0388^{+0.0054}_{-0.0037}$	$0.0386^{+0.0053}_{-0.0037}$	$0.0387^{+0.0053}_{-0.0037}$	$0.0389^{+0.0054}_{-0.0037}$	$0.0386^{+0.0053}_{-0.0036}$	$0.0390^{+0.0054}_{-0.0038}$
a (AU)	$0.05002^{+0.00126}_{-0.00125}$	$0.05025^{+0.00153}_{-0.00043}$	$0.05012^{+0.00107}_{-0.00049}$	$0.04986^{+0.00092}_{-0.00073}$	$0.05026^{+0.00092}_{-0.00092}$	$0.04972^{+0.00161}_{-0.00052}$
Age (Gyr)		$4.5^{+1.0}_{-5.3}$	$4.0^{+0.6}_{-3.7}$	$3.9^{+2.3}_{-3.1}$	$2.8^{+2.6}_{-3.0}$	$4.2^{+1.4}_{-4.9}$

	This work (final)	Rauer et al. (2009)
$M_{\rm A}$ ($M_\odot$)	$1.025\,^{+0.100\ +0.013}_{-0.056\ -0.020}$	1.00 ± 0.02
$R_{\rm A}$ ($R_\odot$)	$1.052\,^{+0.081\ +0.005}_{-0.067\ -0.007}$	1.186 ± 0.04
$\log g_{\rm A}$ (cgs)	$4.405\,^{+0.068\ +0.002}_{-0.059\ -0.003}$	4.311 ± 0.033
$\rho_{\rm A}$ ($\rho_\odot$)	$0.88^{+0.21}_{-0.16}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.470\,^{+0.058\ +0.004}_{-0.031\ -0.006}$	$0.467^{+0.047}_{-0.024}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.182\,^{+0.102\ +0.005}_{-0.098\ -0.008}$	$1.388^{+0.046}_{-0.047}$
$g_{\rm b}$ (m s^{-1})	$8.3^{+1.8}_{-1.3}$	$\star$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.266\,^{+0.082\ +0.002}_{-0.058\ -0.001}$	$0.164^{+0.023}_{-0.019}$
$T'_{\rm eq}$ (K)	1348^{+50}_{-51}	1438 ± 39
Θ	$0.0388\,^{+0.0054\ +0.0003}_{-0.0038\ -0.0002}$	
a (AU)	$0.05004\,^{+0.00161\ +0.00022}_{-0.00092\ -0.00033}$	$0.04947^{+0.00026}_{-0.00029}$
Age (Gyr)	$3.9\,^{+2.6\ +0.6}_{-5.3\ -1.0}$	5.5 to 8.3

$\star$ The quoted surface gravity of the planet from Rauer et al. (2009) is $\log g_{\rm b} = 7.77^{+0.14}_{-0.08}$, which is much too high. If we guess it is out by a factor of 10^5 then we would get $g_{\rm b} = 5.9^{+2.2}_{-1.0}$. The surface gravity calculated from the $M_{\rm b}$ and $R_{\rm b}$ values given by Rauer et al. (2009) is $g_{\rm b} = 6.0^{+0.6}_{-0.9}$. The likely explanation of this discrepancy is therefore that the quoted $\log g_{\rm b}$ is actually non-logarithmic $g_{\rm b}$ but that the errorbars *are* logarithmic.

Table A22. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-6, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 476 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.0632 ± 0.0014	0.0604 ± 0.0016	0.0623 ± 0.0015	0.0619 ± 0.0014	0.0630 ± 0.0013
k	0.11444 ± 0.00089	0.11287 ± 0.00084	0.11377 ± 0.00081	0.11372 ± 0.00077	0.11631 ± 0.00067
i (deg.)	89.01 ± 0.25	89.95 ± 0.48	89.20 ± 0.32	89.29 ± 0.37	88.95 ± 0.21
$u_{\rm A}$	0.60 fixed	0.39 fixed	0.25 fixed	0.72 fixed	0.39 fixed
$v_{\rm A}$		0.34 fixed	0.56 fixed	0.22 fixed	0.17 fixed
$r_{\rm A}$	0.0567 ± 0.0012	0.0543 ± 0.0014	0.0559 ± 0.0013	0.0556 ± 0.0013	0.0564 ± 0.0011
$r_{\rm b}$	0.00649 ± 0.00019	0.00613 ± 0.00020	0.00636 ± 0.00019	0.00632 ± 0.00018	0.00656 ± 0.00016
σ ($m$mag)	0.5369	0.5142	0.5250	0.5210	0.4978
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.0639 ± 0.0012	0.0629 ± 0.0015	0.0635 ± 0.0013	0.0634 ± 0.0013	0.0634 ± 0.0013
k	0.11763 ± 0.00072	0.11616 ± 0.00087	0.11689 ± 0.00077	0.11678 ± 0.00084	0.11678 ± 0.00086
i (deg.)	88.75 ± 0.17	88.96 ± 0.25	88.84 ± 0.19	88.87 ± 0.20	88.86 ± 0.21
$u_{\rm A}$	0.405 ± 0.024	0.239 ± 0.043	0.079 ± 0.043	0.559 ± 0.055	0.366 ± 0.030
$v_{\rm A}$		0.34 perturbed	0.56 perturbed	0.22 perturbed	0.17 perturbed
$r_{\rm A}$	0.0572 ± 0.0011	0.0564 ± 0.0013	0.0569 ± 0.0011	0.0568 ± 0.0011	0.0568 ± 0.0012
$r_{\rm b}$	0.00673 ± 0.00016	0.00655 ± 0.00019	0.00665 ± 0.00016	0.00663 ± 0.00017	0.00663 ± 0.00017
σ ($m$mag)	0.4988	0.4975	0.4977	0.4976	0.4975
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.0639 ± 0.0012	0.0628 ± 0.0017	0.0631 ± 0.0015	0.0630 ± 0.0015	0.0629 ± 0.0016
k	0.1176 ± 0.0007	0.1163 ± 0.0014	0.1158 ± 0.0018	0.1161 ± 0.0015	0.1159 ± 0.0020
i (deg.)	88.75 ± 0.17	88.97 ± 0.32	88.96 ± 0.30	88.96 ± 0.31	88.98 ± 0.35
$u_{\rm A}$	0.405 ± 0.024	0.262 ± 0.095	-0.392 $\pm$ 0.538	0.692 ± 0.224	0.331 ± 0.054
$v_{\rm A}$		0.30 ± 0.21	1.38 ± 0.96	0.40 ± 0.29	0.34 ± 0.29
$r_{\rm A}$	0.0572 ± 0.0011	0.0563 ± 0.0014	0.0566 ± 0.0013	0.0565 ± 0.0013	0.0564 ± 0.0014
$r_{\rm b}$	0.00673 ± 0.00016	0.00654 ± 0.00024	0.00655 ± 0.00022	0.00655 ± 0.00023	0.00654 ± 0.00025
σ ($m$mag)	0.4988	0.4974	0.4972	0.4973	0.4971

Table A23. Final parameters of the fit to the light curves of CoRoT-6 from the JKTEBOP analysis, compared to those found by Fridlund et al. (2010). Quantities without quoted uncertainties were not given by Fridlund et al. (2010) but have been calculated from other parameters which were.

	This work	Fridlund et al. (2010)
$r_{\rm A}+r_{\rm b}$	0.0633 ± 0.0015	0.0623
k	0.11667 ± 0.00089	0.1169 ± 0.0009
i ($^\circ$)	88.88 ± 0.25	89.07 ± 0.30
$r_{\rm A}$	0.0567 ± 0.0013	0.05574 ± 0.00103
$r_{\rm b}$	0.00662 ± 0.00019	0.00652

Table A24. Derived physical properties of the CoRoT-6 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 52.3 \pm 6.4\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.929 \pm 0.064\,\rho_\odot$ and $T'_{\rm eq} = 1025 \pm 16\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	103.8 ± 2.7	105.2 ± 1.8	104.7 ± 1.6	103.9 ± 2.0	104.7 ± 1.9	103.6 ± 1.7
$M_{\rm A}$ ($M_\odot$)	1.036 ± 0.080	1.077 ± 0.055	1.062 ± 0.049	1.039 ± 0.059	1.063 ± 0.058	1.030 ± 0.050
$R_{\rm A}$ ($R_\odot$)	1.037 ± 0.038	1.051 ± 0.028	1.046 ± 0.028	1.038 ± 0.029	1.046 ± 0.028	1.035 ± 0.028
$\log g_{\rm A}$ (cgs)	4.422 ± 0.022	4.428 ± 0.022	4.426 ± 0.021	4.422 ± 0.022	4.426 ± 0.022	4.421 ± 0.022
$M_{\rm b}$ ($M_{\rm Jup}$)	2.93 ± 0.35	3.00 ± 0.34	2.98 ± 0.33	2.93 ± 0.33	2.98 ± 0.34	2.92 ± 0.33
$R_{\rm b}$ ($R_{\rm Jup}$)	1.178 ± 0.045	1.193 ± 0.040	1.188 ± 0.039	1.179 ± 0.041	1.188 ± 0.040	1.176 ± 0.039
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	1.67 ± 0.23	1.65 ± 0.23	1.66 ± 0.23	1.67 ± 0.23	1.66 ± 0.23	1.68 ± 0.23
Θ	0.408 ± 0.046	0.402 ± 0.045	0.404 ± 0.045	0.407 ± 0.046	0.404 ± 0.045	0.408 ± 0.046
a (AU)	0.0850 ± 0.0022	0.0861 ± 0.0015	0.0857 ± 0.0013	0.0851 ± 0.0016	0.0858 ± 0.0016	0.0849 ± 0.0014
Age (Gyr)		$2.4^{+1.7}_{-1.7}$	$2.3^{+1.5}_{-1.1}$	$2.8^{+2.1}_{-1.7}$	$1.8^{+1.8}_{-1.6}$	$3.1^{+1.4}_{-1.3}$

	This work (final)	Fridlund et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$1.054 \pm 0.059 \pm 0.024$	1.05 ± 0.05
$R_{\rm A}$ ($R_\odot$)	$1.043 \pm 0.029 \pm 0.008$	1.025 ± 0.026
$\log g_{\rm A}$ (cgs)	$4.425 \pm 0.022 \pm 0.003$	4.44 ± 0.023
$\rho_{\rm A}$ ($\rho_\odot$)	0.929 ± 0.064	
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.96 \pm 0.34 \pm 0.05$	2.96 ± 0.34
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.185 \pm 0.041 \pm 0.009$	1.166 ± 0.035
$g_{\rm b}$ (m s^{-1})	52.3 ± 6.4	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$1.66 \pm 0.23 \pm 0.01$	1.74 ± 0.23
$T'_{\rm eq}$ (K)	1025 ± 16	1017 ± 19
Θ	$0.405 \pm 0.046 \pm 0.003$	
a (AU)	$0.0855 \pm 0.0016 \pm 0.0007$	0.0855 ± 0.0015
Age (Gyr)	$2.5\,^{+2.1\ +0.6}_{-1.7\ -0.7}$	1.0 to 3.3

Table A25. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-7, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 160 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.270 ± 0.036	0.239 ± 0.036	0.268 ± 0.041	0.240 ± 0.040	0.170 ± 0.036
k	0.01912 ± 0.00078	0.01828 ± 0.00086	0.01899 ± 0.00087	0.01833 ± 0.00089	0.01701 ± 0.00075
i (deg.)	77.7 ± 2.7	80.2 ± 2.9	77.9 ± 3.0	80.1 ± 3.3	87.5 ± 4.6
$u_{\rm A}$	0.65 fixed	0.50 fixed	0.40 fixed	0.73 fixed	0.45 fixed
$v_{\rm A}$		0.19 fixed	0.40 fixed	0.18 fixed	0.10 fixed
T_0	-0.00003 ± 0.00039	-0.00015 ± 0.00033	-0.00005 ± 0.00038	-0.00028 ± 0.00037	-0.00014 ± 0.00035
$r_{\rm A}$	0.265 ± 0.035	0.234 ± 0.035	0.263 ± 0.040	0.236 ± 0.039	0.167 ± 0.035
$r_{\rm b}$	0.00506 ± 0.00086	0.00429 ± 0.00083	0.00500 ± 0.00098	0.00433 ± 0.00091	0.00284 ± 0.00075
σ ($m$mag)	0.0737	0.0738	0.0736	0.0738	0.0743
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.277 ± 0.038	0.269 ± 0.036	0.271 ± 0.031	0.266 ± 0.034	0.269 ± 0.035
k	0.0183 ± 0.0018	0.0178 ± 0.0015	0.0178 ± 0.0015	0.0176 ± 0.0015	0.0178 ± 0.0017
i (deg.)	78.9 ± 3.1	79.6 ± 2.9	79.5 ± 2.6	79.9 ± 2.8	79.6 ± 2.9
$u_{\rm A}$	1.29 ± 0.14	1.16 ± 0.13	1.05 ± 0.12	1.39 ± 0.12	1.25 ± 0.13
$v_{\rm A}$		0.19 perturbed	0.40 perturbed	0.18 perturbed	0.10 perturbed
T_0	-0.00043 ± 0.00054	-0.00046 ± 0.00050	-0.00046 ± 0.00046	-0.00050 ± 0.00049	-0.00045 ± 0.00047
$r_{\rm A}$	0.272 ± 0.037	0.265 ± 0.035	0.266 ± 0.030	0.261 ± 0.033	0.265 ± 0.034
$r_{\rm b}$	0.00498 ± 0.00115	0.00471 ± 0.00103	0.00473 ± 0.00094	0.00460 ± 0.00096	0.00472 ± 0.00104
σ ($m$mag)	0.0736	0.0734	0.0734	0.0734	0.0734

Table A26. Final parameters of the fit to the light curves of CoRoT-7 from the JKTEBOP analysis, compared to those found by Léger et al. (2009). Quantities without quoted uncertainties were not given by Léger et al. (2009) but have been calculated from other parameters which were.

	This work	Léger et al. (2009)
$r_{\rm A} + r_{\rm b}$	0.269 ± 0.040	0.238
k	0.0178 ± 0.0019	0.0187 ± 0.0003
i ($^\circ$)	79.6 ± 3.2	80.1 ± 0.3
$r_{\rm A}$	0.264 ± 0.039	0.234 ± 0.011
$r_{\rm b}$	0.0047 ± 0.0012	0.0044

Table A27. Derived physical properties of the CoRoT-7 system. The upper part of the table contains the individual results from this work; in each case. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ ($\rm km\,s^{-1}$)	$220.0^{+6.8}_{-7.4}$	$211.0^{+7.3}_{-2.9}$	$213.1^{+2.6}_{-5.0}$	$208.6^{+10.0}_{-2.5}$	$213.1^{+1.9}_{-8.7}$	$213.1^{+2.1}_{-5.6}$
$M_{\rm A}$ ($\rm M_\odot$)	$0.989^{+0.090}_{-0.091}$	$0.873^{+0.090}_{-0.019}$	$0.900^{+0.023}_{-0.054}$	$0.844^{+0.111}_{-0.015}$	$0.900^{+0.051}_{-0.103}$	$0.900^{+0.013}_{-0.062}$
$R_{\rm A}$ ($\rm R_\odot$)	$1.00^{+0.17}_{-0.17}$	$0.96^{+0.14}_{-0.12}$	$0.97^{+0.13}_{-0.14}$	$0.95^{+0.15}_{-0.12}$	$0.97^{+0.14}_{-0.15}$	$0.97^{+0.14}_{-0.14}$
$\log g_{\rm A}$ (cgs)	$4.44^{+0.13}_{-0.11}$	$4.42^{+0.15}_{-0.12}$	$4.42^{+0.14}_{-0.12}$	$4.41^{+0.15}_{-0.12}$	$4.42^{+0.14}_{-0.12}$	$4.42^{+0.14}_{-0.12}$
$M_{\rm b}$ ($\rm M_{Jup}$)	$0.0237^{+0.0053}_{-0.0053}$	$0.0218^{+0.0050}_{-0.0047}$	$0.0223^{+0.0048}_{-0.0049}$	$0.0214^{+0.0049}_{-0.0046}$	$0.0223^{+0.0048}_{-0.0051}$	$0.0223^{+0.0048}_{-0.0049}$
$R_{\rm b}$ ($\rm R_{Jup}$)	$0.173^{+0.044}_{-0.044}$	$0.166^{+0.043}_{-0.042}$	$0.167^{+0.043}_{-0.043}$	$0.164^{+0.042}_{-0.042}$	$0.167^{+0.043}_{-0.043}$	$0.167^{+0.043}_{-0.043}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$4.3^{+6.2}_{-2.3}$	$4.5^{+6.5}_{-2.4}$	$4.5^{+6.4}_{-2.4}$	$4.6^{+6.5}_{-2.5}$	$4.5^{+6.4}_{-2.4}$	$4.5^{+6.4}_{-2.4}$
Θ	$0.0049^{+0.0020}_{-0.0015}$	$0.0051^{+0.0021}_{-0.0015}$	$0.0050^{+0.0020}_{-0.0015}$	$0.0051^{+0.0021}_{-0.0015}$	$0.0050^{+0.0021}_{-0.0015}$	$0.0050^{+0.0020}_{-0.0015}$
a (AU)	$0.01755^{+0.00052}_{-0.00055}$	$0.01683^{+0.00056}_{-0.00012}$	$0.01700^{+0.00015}_{-0.00034}$	$0.01664^{+0.00072}_{-0.00032}$	$0.01700^{+0.00033}_{-0.00067}$	$0.01700^{+0.00084}_{-0.00040}$
Age (Gyr)		$15.2^{+3.4}_{-15.5}$	$7.2^{+11.1}_{-5.7}$	$16.4^{+0.8}_{-27.1}$	$3.2^{+18.9}_{-0.0}$	$5.0^{+10.4}_{-3.9}$

	This work (final)	Léger et al. (2009)	Queloz et al. (2009)	Bruntt et al. (2010)
$M_{\rm A}$ ($\rm M_\odot$)	$0.88\,^{+0.11}_{-0.10}\,^{+0.02}_{-0.04}$	0.93 ± 0.03		0.91 ± 0.03
$R_{\rm A}$ ($\rm R_\odot$)	$0.96\,^{+0.15}_{-0.15}\,^{+0.01}_{-0.01}$	0.87 ± 0.04		0.82 ± 0.04
$\log g_{\rm A}$ (cgs)	$4.42\,^{+0.15}_{-0.12}\,^{+0.00}_{-0.01}$	4.50 ± 0.10		4.45 ± 0.05
$\rho_{\rm A}$ ($\rho_\odot$)	$1.00^{+0.62}_{-0.34}$	1.1		
$M_{\rm b}$ ($\rm M_{Jup}$)	$0.0220\,^{+0.0050}_{-0.0051}\,^{+0.0003}_{-0.0007}$	< 0.066	0.015 ± 0.005	
$R_{\rm b}$ ($\rm R_{Jup}$)	$0.166\,^{+0.043}_{-0.043}\,^{+0.001}_{-0.002}$	0.150 ± 0.008		0.141 ± 0.009
$g_{\rm b}$ ($\rm m\,s^{-1}$)	$19.8^{+16.4}_{-8.4}$			
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$4.5\,^{+6.5}_{-2.5}\,^{+0.1}_{-0.0}$		4.2 ± 1.0	5.4 ± 1.4
$T'_{\rm eq}$ (K)	1910^{+140}_{-150}	1810 ± 90		
Θ	$0.0051\,^{+0.0021}_{-0.0015}\,^{+0.0001}_{-0.0000}$			
a (AU)	$0.01690\,^{+0.00072}_{-0.00067}\,^{+0.00011}_{-0.00025}$	0.0172 ± 0.00029	0.017	
Age (Gyr)	unconstrained	1.2 to 2.3		1.2 to 2.3

	Hatzes et al. (2010)	Pont et al. (2011)	Ferraz-Mello et al. (2010)	Boisse et al. (2011)
$M_{\rm A}$ ($\rm M_\odot$)				
$R_{\rm A}$ ($\rm R_\odot$)				
$\log g_{\rm A}$ (cgs)				
$\rho_{\rm A}$ ($\rho_\odot$)				
$M_{\rm b}$ ($\rm M_{Jup}$)	0.022 ± 0.004	0.003 to 0.013	0.027 ± 0.005	0.018 ± 0.008
$R_{\rm b}$ ($\rm R_{Jup}$)				
$g_{\rm b}$ ($\rm m\,s^{-1}$)				
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)				
$T'_{\rm eq}$ (K)				
Θ				
a (AU)	0.017			
Age (Gyr)				

Table A28. Parameters of the JKTEBOP best fits of the CoRoT 32s-sampled light curve of CoRoT-8, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 485 phase-binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.0708 ± 0.0057	0.0583 ± 0.0048	0.0726 ± 0.0054	0.0715 ± 0.0052	0.0708 ± 0.0058
k	0.0816 ± 0.0022	0.0729 ± 0.0020	0.0820 ± 0.0017	0.0816 ± 0.0017	0.0808 ± 0.0020
i (deg.)	87.51 ± 0.46	89.02 ± 0.84	87.36 ± 0.41	87.45 ± 0.41	87.53 ± 0.46
$u_{\rm A}$	0.68 fixed	0.56 fixed	0.36 fixed	0.72 fixed	0.55 fixed
$v_{\rm A}$		0.54 fixed	0.41 fixed	0.16 fixed	0.25 fixed
$r_{\rm A}$	0.0655 ± 0.0052	0.0543 ± 0.0044	0.0671 ± 0.0049	0.0662 ± 0.0048	0.0656 ± 0.0053
$r_{\rm b}$	0.00534 ± 0.00055	0.00396 ± 0.00042	0.00550 ± 0.00051	0.00540 ± 0.00049	0.00530 ± 0.00054
σ ($m$mag)	0.6811	0.6823	0.6799	0.6801	0.6801
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.0719 ± 0.0052	0.0721 ± 0.0066	0.0716 ± 0.0056	0.0713 ± 0.0057	0.0711 ± 0.0068
k	0.0822 ± 0.0017	0.0808 ± 0.0020	0.0817 ± 0.0019	0.0816 ± 0.0020	0.0811 ± 0.0021
i (deg.)	87.39 ± 0.42	87.40 ± 0.54	87.42 ± 0.46	87.45 ± 0.48	87.48 ± 0.58
$u_{\rm A}$	0.60 ± 0.10	0.21 ± 0.17	0.34 ± 0.12	0.69 ± 0.12	0.50 ± 0.13
$v_{\rm A}$		0.54 perturbed	0.41 perturbed	0.16 perturbed	0.25 perturbed
$r_{\rm A}$	0.0664 ± 0.0047	0.0668 ± 0.0060	0.0662 ± 0.0051	0.0659 ± 0.0051	0.0658 ± 0.0061
$r_{\rm b}$	0.00546 ± 0.00049	0.00539 ± 0.00060	0.00541 ± 0.00053	0.00538 ± 0.00055	0.00533 ± 0.00064
σ ($m$mag)	0.6801	0.6794	0.6800	0.6800	0.6798
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.0719 ± 0.0052	0.0831 ± 0.0072	0.0744 ± 0.0069	0.0745 ± 0.0067	0.0750 ± 0.0068
k	0.0822 ± 0.0018	0.0744 ± 0.0025	0.0792 ± 0.0038	0.0785 ± 0.0044	0.0785 ± 0.0047
i (deg.)	87.39 ± 0.43	86.86 ± 0.51	87.32 ± 0.56	87.33 ± 0.51	87.30 ± 0.54
$u_{\rm A}$	0.60 ± 0.10	-2.44 ± 2.34	-1.75 ± 2.19	1.56 ± 1.03	0.11 ± 0.62
$v_{\rm A}$		4.6 ± 2.9	3.8 ± 3.5	1.7 ± 1.8	1.3 ± 1.4
$r_{\rm A}$	0.0664 ± 0.0047	0.0774 ± 0.0068	0.0690 ± 0.0063	0.0691 ± 0.0063	0.0695 ± 0.0062
$r_{\rm b}$	0.00546 ± 0.00049	0.00576 ± 0.00044	0.00546 ± 0.00066	0.00543 ± 0.00059	0.00546 ± 0.00062
σ ($m$mag)	0.6801	0.6778	0.6791	0.6789	0.6788

Table A29. Parameters of the JKTEBOP best fits of the 512s-sampled CoRoT light curve of CoRoT-8, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 954 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.0810 ± 0.0083	0.0606 ± 0.0084	0.0825 ± 0.0076	0.0819 ± 0.0074	0.0804 ± 0.0079
k	0.0872 ± 0.0031	0.0754 ± 0.0035	0.0869 ± 0.0025	0.0867 ± 0.0024	0.0856 ± 0.0027
i (deg.)	86.71 ± 0.56	88.60 ± 1.15	86.59 ± 0.51	86.64 ± 0.51	86.77 ± 0.55
$u_{\rm A}$	0.68 fixed	0.56 fixed	0.36 fixed	0.72 fixed	0.55 fixed
$v_{\rm A}$		0.54 fixed	0.41 fixed	0.16 fixed	0.25 fixed
T_0	239.0349 ± 0.0011	239.0352 ± 0.0011	239.0350 ± 0.0011	239.0349 ± 0.0011	239.0349 ± 0.0011
$r_{\rm A}$	0.0745 ± 0.0074	0.0564 ± 0.0075	0.0759 ± 0.0068	0.0754 ± 0.0066	0.0740 ± 0.0071
$r_{\rm b}$	0.00649 ± 0.00085	0.00425 ± 0.00077	0.00660 ± 0.00076	0.00654 ± 0.00075	0.00634 ± 0.00079
σ ($m$mag)	1.2479	1.2470	1.2477	1.2478	1.2476
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.074 ± 0.011	0.065 ± 0.012	0.074 ± 0.012	0.073 ± 0.012	0.070 ± 0.013
k	0.0843 ± 0.0047	0.0782 ± 0.0059	0.0838 ± 0.0049	0.0834 ± 0.0053	0.0816 ± 0.0054
i (deg.)	87.27 ± 0.95	88.10 ± 1.51	87.27 ± 1.00	87.33 ± 1.19	87.58 ± 1.36
$u_{\rm A}$	0.73 ± 0.15	0.48 ± 0.29	0.48 ± 0.18	0.83 ± 0.19	0.67 ± 0.21
$v_{\rm A}$		0.54 perturbed	0.41 perturbed	0.16 perturbed	0.25 perturbed
T_0	239.0349 ± 0.0011	239.0351 ± 0.0010	239.0350 ± 0.0011	239.0350 ± 0.0011	239.0350 ± 0.0011
$r_{\rm A}$	0.068 ± 0.010	0.060 ± 0.011	0.068 ± 0.011	0.067 ± 0.011	0.065 ± 0.011
$r_{\rm b}$	0.0057 ± 0.0012	0.0047 ± 0.0012	0.0057 ± 0.0012	0.0056 ± 0.0013	0.0053 ± 0.0013
σ ($m$mag)	1.2479	1.2470	1.2477	1.2477	1.2473
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.074 ± 0.011	0.067 ± 0.012	0.072 ± 0.012	0.071 ± 0.011	0.074 ± 0.011
k	0.0843 ± 0.0048	0.0766 ± 0.0082	0.0794 ± 0.0076	0.0787 ± 0.0084	0.0796 ± 0.0083
i (deg.)	87.27 ± 0.98	88.02 ± 1.26	87.57 ± 1.08	87.63 ± 0.95	87.38 ± 0.86
$u_{\rm A}$	0.73 ± 0.15	0.19 ± 1.17	-0.97 $\pm$ 2.49	1.54 ± 1.14	0.44 ± 0.66
$v_{\rm A}$		1.1 ± 1.8	2.9 ± 4.1	1.2 ± 1.8	1.0 ± 1.5
T_0	239.0349 ± 0.0011	239.0351 ± 0.0011	239.0350 ± 0.0010	239.0350 ± 0.0011	239.0350 ± 0.0010
$r_{\rm A}$	0.0678 ± 0.0101	0.0621 ± 0.0111	0.0665 ± 0.0112	0.0660 ± 0.0096	0.0690 ± 0.0100
$r_{\rm b}$	0.0057 ± 0.0012	0.0048 ± 0.0013	0.0053 ± 0.0013	0.0052 ± 0.0012	0.0055 ± 0.0012
σ ($m$mag)	1.2479	1.2467	1.2471	1.2469	1.2469

Table A30. Final parameters of the fit to the light curves of CoRoT-8 from the JKTEBOP analysis, compared to those found by Bordé et al. (2010). Quantities without quoted uncertainties were not given by Bordé et al. (2010) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Bordé et al. (2010)
$r_{\rm A} + r_{\rm b}$	0.0715 ± 0.0070	0.070 ± 0.013	0.0713 ± 0.0062	0.0611
k	0.0813 ± 0.0022	0.0820 ± 0.0060	0.0814 ± 0.0021	0.075 ± 0.001
i ($^\circ$)	87.44 ± 0.60	87.5 ± 1.5	87.44 ± 0.56	88.4 ± 0.1
$r_{\rm A}$	0.0662 ± 0.0064	0.065 ± 0.012	0.0659 ± 0.0056	0.0568 ± 0.0013
$r_{\rm b}$	0.00538 ± 0.00066	0.0053 ± 0.0014	0.00537 ± 0.00060	0.00426

Table A31. Derived physical properties of the CoRoT-8 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 10.6 \pm 2.9\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 1.21 \pm 0.32\,\rho_\odot$ and $T'_{\rm eq} = 922 \pm 41$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	115.85 ± 2.96	111.69 ± 0.96	111.07 ± 1.08	110.06 ± 3.27	109.27 ± 3.32	111.69 ± 1.07
$M_{\rm A}$ ($M_\odot$)	1.004 ± 0.077	0.900 ± 0.023	0.885 ± 0.026	0.861 ± 0.077	0.843 ± 0.078	0.900 ± 0.025
$R_{\rm A}$ ($R_\odot$)	0.939 ± 0.093	0.905 ± 0.070	0.900 ± 0.076	0.892 ± 0.081	0.886 ± 0.090	0.905 ± 0.076
$\log g_{\rm A}$ (cgs)	4.495 ± 0.070	4.479 ± 0.077	4.477 ± 0.075	4.473 ± 0.075	4.470 ± 0.071	4.479 ± 0.075
$M_{\rm b}$ ($M_{\rm Jup}$)	0.236 ± 0.038	0.219 ± 0.034	0.217 ± 0.034	0.213 ± 0.036	0.210 ± 0.036	0.219 ± 0.034
$R_{\rm b}$ ($R_{\rm Jup}$)	0.744 ± 0.085	0.718 ± 0.081	0.714 ± 0.081	0.707 ± 0.083	0.702 ± 0.083	0.718 ± 0.081
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.54 ± 0.21	0.56 ± 0.21	0.56 ± 0.21	0.56 ± 0.21	0.57 ± 0.21	0.56 ± 0.21
Θ	0.0418 ± 0.0081	0.0433 ± 0.0083	0.0436 ± 0.0083	0.0440 ± 0.0084	0.0443 ± 0.0084	0.0433 ± 0.0083
a (AU)	0.06624 ± 0.00169	0.06386 ± 0.00054	0.06350 ± 0.00061	0.06293 ± 0.00187	0.06248 ± 0.00189	0.06386 ± 0.00061
Age (Gyr)		$7.7^{+2.6}_{-8.1}$	$9.5^{+0.5}_{-10.3}$	$10.0^{+0.0}_{-17.3}$	$10.0^{+0.0}_{-22.3}$	$5.6^{+5.0}_{-3.1}$

	This work (final)	Bordé et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$0.878 \pm 0.078 \pm 0.035$	0.88 ± 0.04
$R_{\rm A}$ ($R_\odot$)	$0.898 \pm 0.090 \pm 0.012$	0.77 ± 0.02
$\log g_{\rm A}$ (cgs)	$4.475 \pm 0.077 \pm 0.006$	4.61 ± 0.07
$\rho_{\rm A}$ ($\rho_\odot$)	1.21 ± 0.32	1.9 ± 0.1
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.216 \pm 0.036 \pm 0.006$	0.22 ± 0.03
$R_{\rm b}$ ($R_{\rm Jup}$)	$0.712 \pm 0.083 \pm 0.010$	0.57 ± 0.02
$g_{\rm b}$ (m s^{-1})	10.6 ± 2.9	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.56 \pm 0.21 \pm 0.01$	1.2 ± 0.1
$T'_{\rm eq}$ (K)	922 ± 41	
Θ	$0.0437 \pm 0.0084 \pm 0.0006$	
a (AU)	$0.0633 \pm 0.0019 \pm 0.0008$	0.063 ± 0.001
Age (Gyr)	$8.6\,^{+5.0}_{-22.3}\,^{+1.4}_{-3.0}$	< 3

Table A32. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-9, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 944 binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.01240 ± 0.00083	0.01250 ± 0.00074	0.01243 ± 0.00079	0.01216 ± 0.00074	0.01201 ± 0.00073
k	0.11142 ± 0.00160	0.11218 ± 0.00099	0.11274 ± 0.00109	0.11294 ± 0.00102	0.11393 ± 0.00092
i (deg.)	89.95 ± 0.13	89.96 ± 0.11	89.95 ± 0.12	89.95 ± 0.12	89.95 ± 0.11
$u_{\rm A}$	0.64 fixed	0.46 fixed	0.23 fixed	0.69 fixed	0.45 fixed
$v_{\rm A}$		0.22 fixed	0.53 fixed	0.24 fixed	0.10 fixed
P	95.2707 ± 0.0015	95.2706 ± 0.0013	95.2707 ± 0.0013	95.2706 ± 0.0013	95.2706 ± 0.0013
T_0	603.34444 ± 0.00072	603.34453 ± 0.00073	603.34456 ± 0.00071	603.34457 ± 0.00071	603.34462 ± 0.00066
$r_{\rm A}$	0.01116 ± 0.00073	0.01124 ± 0.00066	0.01117 ± 0.00071	0.01093 ± 0.00066	0.01078 ± 0.00064
$r_{\rm b}$	0.001243 ± 0.000095	0.001261 ± 0.000082	0.001259 ± 0.000087	0.001234 ± 0.000081	0.001228 ± 0.000080
σ ($m$mag)	1.4035	1.3924	1.3901	1.3891	1.3875
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.01203 ± 0.00068	0.01216 ± 0.00071	0.01206 ± 0.00074	0.01210 ± 0.00076	0.01195 ± 0.00071
k	0.1146 ± 0.0012	0.1137 ± 0.0014	0.1138 ± 0.0013	0.1137 ± 0.0013	0.1140 ± 0.0013
i (deg.)	89.90 ± 0.12	89.98 ± 0.13	89.98 ± 0.12	89.98 ± 0.13	89.96 ± 0.12
$u_{\rm A}$	0.464 ± 0.041	0.368 ± 0.054	0.161 ± 0.055	0.641 ± 0.066	0.445 ± 0.044
$v_{\rm A}$		0.22 perturbed	0.53 perturbed	0.24 perturbed	0.10 perturbed
P	95.2706 ± 0.0012	95.2706 ± 0.0013	95.2706 ± 0.0012	95.2706 ± 0.0013	95.2706 ± 0.0013
T_0	603.34465 ± 0.00071	603.34463 ± 0.00069	603.34463 ± 0.00071	603.34463 ± 0.00067	603.34462 ± 0.00066
$r_{\rm A}$	0.01079 ± 0.00061	0.01092 ± 0.00063	0.01083 ± 0.00065	0.01086 ± 0.00067	0.01073 ± 0.00063
$r_{\rm b}$	0.001236 ± 0.000077	0.001241 ± 0.000078	0.001232 ± 0.000083	0.001235 ± 0.000083	0.001222 ± 0.000077
σ ($m$mag)	1.3878	1.3882	1.3877	1.3879	1.3876
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.01203 ± 0.00070	0.01229 ± 0.00075	0.01296 ± 0.00076	0.01278 ± 0.00069	0.01197 ± 0.00073
k	0.1146 ± 0.0013	0.1148 ± 0.0021	0.1168 ± 0.0030	0.1159 ± 0.0030	0.1140 ± 0.0037
i (deg.)	89.90 ± 0.12	89.87 ± 0.13	89.74 ± 0.15	89.78 ± 0.14	89.95 ± 0.12
$u_{\rm A}$	0.464 ± 0.041	0.475 ± 0.171	0.912 ± 1.029	0.367 ± 0.493	0.453 ± 0.085
$v_{\rm A}$		-0.03 $\pm$ 0.34	-0.78 $\pm$ 1.78	-0.13 $\pm$ 0.63	0.07 $\pm$ 0.66
P	95.2706 ± 0.0013	95.2706 ± 0.0013	95.2706 ± 0.0014	95.2706 ± 0.0014	95.2706 ± 0.0013
T_0	603.34465 ± 0.00068	603.34466 ± 0.00066	603.34473 ± 0.00070	603.34473 ± 0.00068	603.34462 ± 0.00066
$r_{\rm A}$	0.01079 ± 0.00062	0.01102 ± 0.00066	0.01161 ± 0.00068	0.01145 ± 0.00062	0.01075 ± 0.00067
$r_{\rm b}$	0.001236 ± 0.000079	0.001266 ± 0.000082	0.001356 ± 0.000097	0.001327 ± 0.000087	0.001226 ± 0.000079
σ ($m$mag)	1.3878	1.3880	1.3899	1.3889	1.3875

Table A33. Final parameters of the fit to the light curves of CoRoT-9 from the JKTEBOP analysis, compared to those found by Deeg et al. (2010). Quantities without quoted uncertainties were not given by Deeg et al. (2010) but have been calculated from other parameters which were.

	This work	Deeg et al. (2010)
$r_{\rm A} + r_{\rm b}$	0.01207 ± 0.00081	0.01204
k	0.1138 ± 0.0015	0.115 ± 0.001
i ($^\circ$)	$89.97^{+0.03}_{-0.13}$	$89.99^{+0.01}_{-0.04}$
$r_{\rm A}$	0.01083 ± 0.00072	0.0108 ± 0.0003
$r_{\rm b}$	0.001233 ± 0.000089	0.001242

Table A34. Derived physical properties of the GOAT system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 19.1 \pm 3.2\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 1.16 \pm 0.24\,\rho_\odot$ and $T'_{\rm eq} = 413 \pm 14\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	46.77 ± 1.18	46.88 ± 0.91	46.48 ± 0.54	46.03 ± 1.11	45.67 ± 1.13	46.10 ± 0.93
$M_{\rm A}$ ($M_\odot$)	0.993 ± 0.074	1.000 ± 0.056	0.975 ± 0.031	0.947 ± 0.068	0.925 ± 0.067	0.951 ± 0.057
$R_{\rm A}$ ($R_\odot$)	0.949 ± 0.075	0.951 ± 0.055	0.943 ± 0.058	0.934 ± 0.058	0.927 ± 0.058	0.935 ± 0.059
$\log g_{\rm A}$ (cgs)	4.481 ± 0.055	4.482 ± 0.063	4.478 ± 0.060	4.474 ± 0.063	4.470 ± 0.063	4.474 ± 0.061
$M_{\rm b}$ ($M_{\rm Jup}$)	0.845 ± 0.079	0.849 ± 0.075	0.835 ± 0.068	0.819 ± 0.076	0.806 ± 0.080	0.821 ± 0.073
$R_{\rm b}$ ($R_{\rm Jup}$)	1.049 ± 0.081	1.051 ± 0.080	1.042 ± 0.077	1.032 ± 0.080	1.024 ± 0.081	1.034 ± 0.079
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.69 ± 0.16	0.68 ± 0.16	0.69 ± 0.16	0.70 ± 0.17	0.70 ± 0.17	0.70 ± 0.17
Θ	0.661 ± 0.073	0.659 ± 0.072	0.665 ± 0.072	0.671 ± 0.074	0.676 ± 0.076	0.670 ± 0.074
a (AU)	0.4074 ± 0.0101	0.4084 ± 0.0076	0.4049 ± 0.0043	0.4010 ± 0.0095	0.3979 ± 0.0094	0.4016 ± 0.0079
Age (Gyr)		$3.3^{+7.2}_{-3.7}$	$0.0^{+12.8}_{-0.0}$	$5.9^{+4.4}_{-7.3}$	$8.0^{+0.0}_{-11.6}$	$5.1^{+3.9}_{-7.0}$

	This work (final)	Deeg et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$0.960 \pm 0.068 \pm 0.040$	0.99 ± 0.04
$R_{\rm A}$ ($R_\odot$)	$0.938 \pm 0.059 \pm 0.013$	0.94 ± 0.04
$\log g_{\rm A}$ (cgs)	$4.476 \pm 0.063 \pm 0.006$	4.49 ± 0.04
$\rho_{\rm A}$ ($\rho_\odot$)	1.16 ± 0.24	1.19 ± 0.14
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.826 \pm 0.080 \pm 0.023$	0.84 ± 0.07
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.037 \pm 0.081 \pm 0.014$	1.05 ± 0.04
$g_{\rm b}$ (m s^{-1})	19.1 ± 3.2	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.69 \pm 0.17 \pm 0.01$	0.68 ± 0.10
$T'_{\rm eq}$ (K)	413 ± 14	250 to 430
Θ	$0.668 \pm 0.076 \pm 0.009$	
a (AU)	$0.4027 \pm 0.0095 \pm 0.0056$	0.407 ± 0.005
Age (Gyr)	$4.5\,^{+12.8\,+3.5}_{-11.6\,-4.4}$	

Table A35. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-10, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 359 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.0372 ± 0.0025	0.0375 ± 0.0027	0.0377 ± 0.0026	0.0380 ± 0.0026	0.0382 ± 0.0024
k	0.1304 ± 0.0027	0.1296 ± 0.0030	0.1293 ± 0.0029	0.1289 ± 0.0030	0.1279 ± 0.0027
i (deg.)	88.51 ± 0.20	88.48 ± 0.20	88.47 ± 0.20	88.44 ± 0.20	88.42 ± 0.18
$u_{\rm A}$	0.68 fixed	0.56 fixed	0.38 fixed	0.73 fixed	0.50 fixed
$v_{\rm A}$		0.14 fixed	0.41 fixed	0.20 fixed	0.07 fixed
$r_{\rm A}$	0.0329 ± 0.0022	0.0332 ± 0.0024	0.0333 ± 0.0023	0.0337 ± 0.0023	0.0338 ± 0.0021
$r_{\rm b}$	0.00429 ± 0.00034	0.00430 ± 0.00036	0.00431 ± 0.00034	0.00435 ± 0.00035	0.00433 ± 0.00032
σ ($m$mag)	1.0896	1.0897	1.0897	1.0897	1.0897
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.0388 ± 0.0029	0.0371 ± 0.0029	0.0372 ± 0.0029	0.0384 ± 0.0028	0.0354 ± 0.0029
k	0.1258 ± 0.0076	0.1279 ± 0.0058	0.1279 ± 0.0051	0.1256 ± 0.0065	0.1296 ± 0.0050
i (deg.)	88.36 ± 0.24	88.49 ± 0.21	88.49 ± 0.21	88.39 ± 0.22	88.63 ± 0.22
$u_{\rm A}$	0.34 ± 0.87	0.46 ± 0.60	0.30 ± 0.55	0.48 ± 0.81	0.60 ± 0.38
$v_{\rm A}$		0.14 perturbed	0.41 perturbed	0.20 perturbed	0.07 perturbed
$r_{\rm A}$	0.0344 ± 0.0026	0.0329 ± 0.0026	0.0330 ± 0.0025	0.0341 ± 0.0025	0.0314 ± 0.0025
$r_{\rm b}$	0.00433 ± 0.00042	0.00421 ± 0.00039	0.00422 ± 0.00037	0.00429 ± 0.00039	0.00407 ± 0.00038
σ ($m$mag)	1.0903	1.0896	1.0896	1.0900	1.0896
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.0388 ± 0.0029	0.0367 ± 0.0030	0.0369 ± 0.0031	0.0366 ± 0.0029	0.0357 ± 0.0029
k	0.1258 ± 0.0072	0.1307 ± 0.0086	0.1360 ± 0.0116	0.1385 ± 0.0152	0.1243 ± 0.0098
i (deg.)	88.36 ± 0.23	88.52 ± 0.22	88.46 ± 0.24	88.48 ± 0.22	88.69 ± 0.19
$u_{\rm A}$	0.34 ± 0.82	0.87 ± 1.02	3.11 ± 1.40	-0.05 ± 0.80	0.41 ± 0.81
$v_{\rm A}$		-0.3 ± 1.2	-3.7 ± 2.2	-1.6 ± 1.6	1.0 ± 1.2
$r_{\rm A}$	0.0344 ± 0.0026	0.0324 ± 0.0026	0.0325 ± 0.0028	0.0322 ± 0.0028	0.0317 ± 0.0025
$r_{\rm b}$	0.00433 ± 0.00041	0.00424 ± 0.00046	0.00442 ± 0.00049	0.00445 ± 0.00051	0.00394 ± 0.00044
σ ($m$mag)	1.0903	1.0894	1.0895	1.0894	1.0910

Table A36. Parameters of the JKTEBOP best fits of the 512s-sampled CoRoT light curve of CoRoT-10, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 473 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.0366 ± 0.0038	0.0379 ± 0.0040	0.0372 ± 0.0038	0.0369 ± 0.0037	0.0391 ± 0.0045
k	0.136 ± 0.013	0.137 ± 0.019	0.137 ± 0.017	0.135 ± 0.014	0.140 ± 0.029
i (deg.)	88.57 ± 0.27	88.48 ± 0.30	88.53 ± 0.29	88.54 ± 0.27	88.39 ± 0.32
$u_{\rm A}$	0.68 fixed	0.56 fixed	0.38 fixed	0.73 fixed	0.50 fixed
$v_{\rm A}$		0.14 fixed	0.41 fixed	0.20 fixed	0.07 fixed
T_0	273.34507 ± 0.00093	273.34496 ± 0.00093	273.34502 ± 0.00092	273.34504 ± 0.00087	273.34481 ± 0.00096
$r_{\rm A}$	0.0322 ± 0.0029	0.0333 ± 0.0030	0.0327 ± 0.0029	0.0325 ± 0.0029	0.0343 ± 0.0030
$r_{\rm b}$	0.00439 ± 0.00076	0.00458 ± 0.00103	0.00447 ± 0.00093	0.00440 ± 0.00079	0.00480 ± 0.00143
σ ($m$mag)	1.6404	1.6399	1.6401	1.6403	1.6404
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.0378 ± 0.0046	0.0369 ± 0.0046	0.0365 ± 0.0043	0.0366 ± 0.0042	0.0362 ± 0.0045
k	0.1392 ± 0.0127	0.1368 ± 0.0102	0.1358 ± 0.0097	0.1359 ± 0.0093	0.1363 ± 0.0096
i (deg.)	88.58 ± 0.27	88.64 ± 0.28	88.66 ± 0.25	88.66 ± 0.25	88.70 ± 0.25
$u_{\rm A}$	1.12 ± 0.27	1.01 ± 0.25	0.83 ± 0.28	1.19 ± 0.27	1.10 ± 0.24
$v_{\rm A}$		0.14 perturbed	0.41 perturbed	0.20 perturbed	0.07 perturbed
T_0	273.34513 ± 0.00091	273.34519 ± 0.00091	273.34524 ± 0.00092	273.34522 ± 0.00086	273.34527 ± 0.00089
$r_{\rm A}$	0.0332 ± 0.0036	0.0325 ± 0.0036	0.0321 ± 0.0035	0.0323 ± 0.0034	0.0319 ± 0.0037
$r_{\rm b}$	0.00462 ± 0.00086	0.00444 ± 0.00079	0.00436 ± 0.00076	0.00439 ± 0.00069	0.00435 ± 0.00076
σ ($m$mag)	1.6371	1.6375	1.6380	1.6378	1.6375
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.0378 ± 0.0043	0.0384 ± 0.0043	0.0383 ± 0.0044	0.0287 ± 0.0036	0.0371 ± 0.0051
k	0.139 ± 0.012	0.136 ± 0.017	0.141 ± 0.017	0.088 ± 0.011	0.124 ± 0.023
i (deg.)	88.58 ± 0.26	88.53 ± 0.25	88.56 ± 0.28	89.49 ± 0.39	88.77 ± 0.31
$u_{\rm A}$	1.12 ± 0.27	0.41 ± 1.11	1.93 ± 1.10	-0.03 $\pm$ 0.30	1.93 ± 0.37
$v_{\rm A}$		0.79 ± 1.26	-1.14 $\pm$ 1.52	-2.68 $\pm$ 0.52	-1.09 $\pm$ 0.67
T_0	273.34513 ± 0.00086	273.34502 ± 0.00091	273.34511 ± 0.00094	273.34594 ± 0.00081	273.34540 ± 0.00095
$r_{\rm A}$	0.0332 ± 0.0034	0.0338 ± 0.0034	0.0336 ± 0.0035	0.0264 ± 0.0031	0.0330 ± 0.0043
$r_{\rm b}$	0.00462 ± 0.00082	0.00458 ± 0.00087	0.00475 ± 0.00097	0.00233 ± 0.00053	0.00410 ± 0.00108
σ ($m$mag)	1.6371	1.6377	1.6361	1.6282	1.6348

Table A37. Final parameters of the fit to the light curves of CoRoT-10 from the JKTEBOP analysis, compared to those found by Bonomo et al. (2010). Quantities without quoted uncertainties were not given by Bonomo et al. (2010) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Bonomo et al. (2010)
$r_{\rm A} + r_{\rm b}$	0.0371 ± 0.0032	0.0366 ± 0.0046	0.0369 ± 0.0026	0.03597
k	0.1280 ± 0.0069	0.1362 ± 0.0104	0.1305 ± 0.0057	0.1269 ± 0.0038
i ($^\circ$)	88.50 ± 0.24	88.66 ± 0.28	88.57 ± 0.18	88.55 ± 0.2
$r_{\rm A}$	0.0329 ± 0.0028	0.0322 ± 0.0038	0.0326 ± 0.0023	0.03192 ± 0.00220
$r_{\rm b}$	0.00419 ± 0.00043	0.00438 ± 0.00080	0.00424 ± 0.00038	0.004051

Table A38. Derived physical properties of the CoRoT-10 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 78 \pm 14\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 2.20 \pm 0.47\,\rho_\odot$ and $T'_{\rm eq} = 647 \pm 24\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	102.5 ± 4.0	103.2 ± 3.2	102.2 ± 3.2	102.4 ± 3.2	101.9 ± 3.1	102.2 ± 3.2
$M_{\rm A}$ ($M_\odot$)	0.906 ± 0.070	0.926 ± 0.023	0.900 ± 0.025	0.905 ± 0.022	0.891 ± 0.021	0.900 ± 0.027
$R_{\rm A}$ ($R_\odot$)	0.744 ± 0.062	0.749 ± 0.055	0.742 ± 0.055	0.744 ± 0.053	0.740 ± 0.051	0.742 ± 0.055
$\log g_{\rm A}$ (cgs)	4.652 ± 0.058	4.656 ± 0.061	4.651 ± 0.060	4.652 ± 0.061	4.650 ± 0.062	4.651 ± 0.060
$M_{\rm b}$ ($M_{\rm Jup}$)	2.79 ± 0.19	2.83 ± 0.13	2.78 ± 0.13	2.78 ± 0.13	2.76 ± 0.13	2.78 ± 0.14
$R_{\rm b}$ ($R_{\rm Jup}$)	0.941 ± 0.088	0.948 ± 0.085	0.939 ± 0.085	0.941 ± 0.085	0.936 ± 0.084	0.939 ± 0.085
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	3.13 ± 0.88	3.10 ± 0.87	3.13 ± 0.88	3.13 ± 0.88	3.14 ± 0.88	3.13 ± 0.88
Θ	0.693 ± 0.072	0.688 ± 0.070	0.694 ± 0.070	0.693 ± 0.070	0.697 ± 0.070	0.694 ± 0.070
a (AU)	0.10609 ± 0.00271	0.10688 ± 0.00090	0.10585 ± 0.00097	0.10603 ± 0.00086	0.10549 ± 0.00082	0.10585 ± 0.00107
Age (Gyr)		$0.0^{+0.0}_{-0.0}$	$0.5^{+0.2}_{-0.0}$	$0.0^{+1.1}_{-0.0}$	$0.0^{+2.0}_{-0.0}$	$0.1^{+0.1}_{-0.2}$

	This work (final)	Bonomo et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$0.904 \pm 0.027 \pm 0.022$	0.89 ± 0.05
$R_{\rm A}$ ($R_\odot$)	$0.743 \pm 0.055 \pm 0.006$	0.79 ± 0.05
$\log g_{\rm A}$ (cgs)	$4.652 \pm 0.062 \pm 0.004$	4.65 ± 0.10
$\rho_{\rm A}$ ($\rho_\odot$)	2.20 ± 0.47	2.36 ± 0.50
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.78 \pm 0.14 \pm 0.05$	2.75 ± 0.16
$R_{\rm b}$ ($R_{\rm Jup}$)	$0.941 \pm 0.085 \pm 0.008$	0.97 ± 0.07
$g_{\rm b}$ (m s^{-1})	78 ± 14	85 ± 16
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$3.13 \pm 0.88 \pm 0.03$	2.79 ± 0.63
$T'_{\rm eq}$ (K)	647 ± 24	600 ± 23
Θ	$0.693 \pm 0.070 \pm 0.006$	
a (AU)	$0.1060 \pm 0.0011 \pm 0.0009$	0.1055 ± 0.0021
Age (Gyr)	$0.1\,^{+2.0\ +0.3}_{-0.2\ -0.1}$	

Table A39. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-11, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 527 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1570 ± 0.0017	0.1571 ± 0.0017	0.1573 ± 0.0017	0.1591 ± 0.0016	0.1610 ± 0.0015
k	0.10749 ± 0.00092	0.10619 ± 0.00092	0.10643 ± 0.00091	0.10610 ± 0.00091	0.10599 ± 0.00091
i (deg.)	83.415 ± 0.113	83.427 ± 0.110	83.418 ± 0.107	83.264 ± 0.102	83.096 ± 0.096
$u_{\rm A}$	0.58 fixed	0.35 fixed	0.12 fixed	0.64 fixed	0.35 fixed
$v_{\rm A}$		0.29 fixed	0.69 fixed	0.28 fixed	0.15 fixed
$r_{\rm A}$	0.1417 ± 0.0015	0.1420 ± 0.0015	0.1422 ± 0.0015	0.1438 ± 0.0014	0.1455 ± 0.0014
$r_{\rm b}$	0.01524 ± 0.00020	0.01508 ± 0.00021	0.01513 ± 0.00020	0.01526 ± 0.00019	0.01543 ± 0.00018
σ ($m$mag)	0.3090	0.3093	0.3092	0.3088	0.3091
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1588 ± 0.0021	0.1596 ± 0.0021	0.1594 ± 0.0022	0.1595 ± 0.0021	0.1593 ± 0.0021
k	0.10724 ± 0.00100	0.10592 ± 0.00096	0.10619 ± 0.00093	0.10604 ± 0.00109	0.10636 ± 0.00105
i (deg.)	83.26 ± 0.16	83.22 ± 0.17	83.24 ± 0.17	83.23 ± 0.17	83.23 ± 0.16
$u_{\rm A}$	0.517 ± 0.057	0.261 ± 0.084	0.046 ± 0.074	0.626 ± 0.070	0.418 ± 0.070
$v_{\rm A}$		0.29 perturbed	0.69 perturbed	0.28 perturbed	0.15 perturbed
$r_{\rm A}$	0.1435 ± 0.0019	0.1443 ± 0.0020	0.1441 ± 0.0020	0.1442 ± 0.0020	0.1440 ± 0.0019
$r_{\rm b}$	0.01538 ± 0.00020	0.01528 ± 0.00021	0.01530 ± 0.00021	0.01529 ± 0.00022	0.01532 ± 0.00020
σ ($m$mag)	0.3086	0.3087	0.3088	0.3088	0.3087
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1588 ± 0.0020	0.1549 ± 0.0031	0.1556 ± 0.0027	0.1555 ± 0.0029	0.1557 ± 0.0026
k	0.1072 ± 0.0009	0.1147 ± 0.0053	0.1127 ± 0.0034	0.1132 ± 0.0043	0.1131 ± 0.0042
i (deg.)	83.26 ± 0.15	83.50 ± 0.20	83.42 ± 0.16	83.44 ± 0.18	83.43 ± 0.17
$u_{\rm A}$	0.52 ± 0.06	1.53 ± 0.54	2.36 ± 0.95	0.15 ± 0.21	1.03 ± 0.30
$v_{\rm A}$		-1.14 $\pm$ 0.60	-2.63 $\pm$ 1.35	-1.03 $\pm$ 0.61	-0.75 $\pm$ 0.43
$r_{\rm A}$	0.1435 ± 0.0018	0.1390 ± 0.0033	0.1399 ± 0.0027	0.1397 ± 0.0031	0.1399 ± 0.0028
$r_{\rm b}$	0.01538 ± 0.00020	0.01595 ± 0.00040	0.01576 ± 0.00028	0.01582 ± 0.00035	0.01581 ± 0.00035
σ ($m$mag)	0.3086	0.3083	0.3083	0.3083	0.3083

Table A40. Parameters of the JKTEBOP best fits of the CoRoT 512s-sampled light curve of CoRoT-11, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 703 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1635 ± 0.0037	0.1634 ± 0.0037	0.1636 ± 0.0037	0.1652 ± 0.0036	0.1668 ± 0.0032
k	0.1081 ± 0.0012	0.1067 ± 0.0012	0.1069 ± 0.0012	0.1065 ± 0.0011	0.1062 ± 0.0011
i (deg.)	82.96 ± 0.23	82.98 ± 0.23	82.97 ± 0.23	82.84 ± 0.22	82.69 ± 0.19
$u_{\rm A}$	0.58 fixed	0.35 fixed	0.12 fixed	0.64 fixed	0.35 fixed
$v_{\rm A}$		0.29 fixed	0.69 fixed	0.28 fixed	0.15 fixed
T_0	597.67989 ± 0.00022	597.67989 ± 0.00022	597.67989 ± 0.00023	597.67989 ± 0.00022	597.67990 ± 0.00021
$r_{\rm A}$	0.1475 ± 0.0032	0.1477 ± 0.0032	0.1478 ± 0.0033	0.1493 ± 0.0032	0.1507 ± 0.0029
$r_{\rm b}$	0.01594 ± 0.00044	0.01576 ± 0.00045	0.01580 ± 0.00047	0.01590 ± 0.00043	0.01601 ± 0.00038
σ ($m$mag)	0.6833	0.6836	0.6835	0.6829	0.6822
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1692 ± 0.0063	0.1704 ± 0.0061	0.1703 ± 0.0061	0.1703 ± 0.0060	0.1701 ± 0.0065
k	0.1054 ± 0.0038	0.1039 ± 0.0035	0.1041 ± 0.0035	0.1040 ± 0.0037	0.1043 ± 0.0039
i (deg.)	82.47 ± 0.48	82.39 ± 0.48	82.40 ± 0.48	82.39 ± 0.48	82.41 ± 0.50
$u_{\rm A}$	0.29 ± 0.38	-0.02 $\pm$ 0.40	-0.23 $\pm$ 0.37	0.35 ± 0.39	0.16 ± 0.41
$v_{\rm A}$		0.29 perturbed	0.69 perturbed	0.28 perturbed	0.15 perturbed
T_0	597.67989 ± 0.00022	597.67989 ± 0.00021	597.67989 ± 0.00023	597.67989 ± 0.00022	597.67989 ± 0.00023
$r_{\rm A}$	0.1531 ± 0.0062	0.1543 ± 0.0059	0.1542 ± 0.0059	0.1543 ± 0.0059	0.1540 ± 0.0063
$r_{\rm b}$	0.01614 ± 0.00041	0.01603 ± 0.00037	0.01606 ± 0.00037	0.01604 ± 0.00038	0.01607 ± 0.00039
σ ($m$mag)	0.6816	0.6816	0.6817	0.6817	0.6816
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1692 ± 0.0062	0.1626 ± 0.0086	0.1592 ± 0.0076	0.1595 ± 0.0088	0.1605 ± 0.0085
k	0.105 ± 0.003	0.115 ± 0.012	0.119 ± 0.010	0.119 ± 0.012	0.118 ± 0.012
i (deg.)	82.47 ± 0.48	82.92 ± 0.59	83.11 ± 0.49	83.11 ± 0.58	83.05 ± 0.56
$u_{\rm A}$	0.29 ± 0.33	1.56 ± 1.24	3.73 ± 1.94	-0.09 $\pm$ 0.32	1.30 ± 0.74
$v_{\rm A}$		-1.24 $\pm$ 1.26	-4.57 $\pm$ 2.67	-1.67 $\pm$ 1.14	-1.17 $\pm$ 0.94
T_0	597.67989 ± 0.00022	597.67989 ± 0.00022	597.67989 ± 0.00022	597.67989 ± 0.00022	597.67989 ± 0.00022
$r_{\rm A}$	0.1531 ± 0.0060	0.1459 ± 0.0091	0.1423 ± 0.0079	0.1425 ± 0.0095	0.1436 ± 0.0089
$r_{\rm b}$	0.01614 ± 0.00038	0.01675 ± 0.00088	0.01691 ± 0.00069	0.01695 ± 0.00087	0.01687 ± 0.00081
σ ($m$mag)	0.6816	0.6814	0.6812	0.6812	0.6813

Table A41. Final parameters of the fit to the light curves of CoRoT-11 from the JKTEBOP analysis, compared to those found by Gandolfi et al. (2010). Quantities without quoted uncertainties were not given by Gandolfi et al. (2010) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Gandolfi et al. (2010)
$r_{\rm A} + r_{\rm b}$	0.1594 ± 0.0024	0.1703 ± 0.0069	0.1607 ± 0.0024	0.1606
k	0.1061 ± 0.0012	0.1041 ± 0.0041	0.1060 ± 0.0011	0.1070 ± 0.0017
i ($^\circ$)	83.23 ± 0.19	82.40 ± 0.53	83.13 ± 0.19	83.170 ± 0.150
$r_{\rm A}$	0.1441 ± 0.0023	0.1542 ± 0.0067	0.1452 ± 0.0022	0.1451 ± 0.0017
$r_{\rm b}$	0.01530 ± 0.00024	0.01605 ± 0.00041	0.01549 ± 0.00023	0.01553

Table A42. Derived physical properties of the CoRoT-11 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 28.5 \pm 4.2\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.488 \pm 0.022\,\rho_\odot$ and $T'_{\rm eq} = 1735 \pm 34\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	159.6 ± 4.0	159.0 ± 2.2	158.8 ± 1.1	158.2 ± 2.3	158.5 ± 5.7	157.4 ± 4.8
$M_{\rm A}$ ($M_\odot$)	1.293 ± 0.096	1.279 ± 0.053	1.275 ± 0.027	1.259 ± 0.054	1.268 ± 0.140	1.240 ± 0.116
$R_{\rm A}$ ($R_\odot$)	1.384 ± 0.042	1.379 ± 0.029	1.378 ± 0.026	1.372 ± 0.030	1.375 ± 0.061	1.365 ± 0.049
$\log g_{\rm A}$ (cgs)	4.268 ± 0.016	4.266 ± 0.014	4.266 ± 0.013	4.264 ± 0.014	4.265 ± 0.015	4.261 ± 0.019
$M_{\rm b}$ ($M_{\rm Jup}$)	2.38 ± 0.36	2.36 ± 0.34	2.35 ± 0.34	2.33 ± 0.34	2.35 ± 0.39	2.31 ± 0.37
$R_{\rm b}$ ($R_{\rm Jup}$)	1.436 ± 0.041	1.431 ± 0.029	1.430 ± 0.025	1.424 ± 0.029	1.427 ± 0.057	1.417 ± 0.050
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.75 ± 0.11	0.75 ± 0.11	0.75 ± 0.11	0.76 ± 0.11	0.75 ± 0.12	0.76 ± 0.12
Θ	0.113 ± 0.017	0.114 ± 0.016	0.114 ± 0.016	0.114 ± 0.017	0.114 ± 0.017	0.115 ± 0.017
a (AU)	0.04431 ± 0.00110	0.04416 ± 0.00061	0.04411 ± 0.00031	0.04393 ± 0.00063	0.04403 ± 0.00158	0.04370 ± 0.00133
Age (Gyr)		$2.0^{+0.8}_{-0.7}$	$2.1^{+0.6}_{-0.1}$	$2.0^{+0.8}_{-0.6}$	$1.7^{+0.7}_{-2.1}$	$2.4^{+0.4}_{-2.0}$

	This work (final)	Gandolfi et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$1.26 \pm 0.14 \pm 0.02$	1.27 ± 0.05
$R_{\rm A}$ ($R_\odot$)	$1.374 \pm 0.061 \pm 0.009$	1.37 ± 0.03
$\log g_{\rm A}$ (cgs)	$4.264 \pm 0.019 \pm 0.003$	4.26 ± 0.06
$\rho_{\rm A}$ ($\rho_\odot$)	0.488 ± 0.022	0.490 ± 0.014
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.34 \pm 0.39 \pm 0.03$	2.33 ± 0.34
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.426 \pm 0.057 \pm 0.009$	1.43 ± 0.03
$g_{\rm b}$ (m s^{-1})	28.5 ± 4.2	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.76 \pm 0.12 \pm 0.00$	0.75 ± 0.11
$T'_{\rm eq}$ (K)	1735 ± 34	1657 ± 55
Θ	$0.114 \pm 0.017 \pm 0.001$	
a (AU)	$0.0440 \pm 0.0016 \pm 0.0003$	0.0436 ± 0.0005
Age (Gyr)	$2.0\,^{+0.8\,+0.4}_{-2.1\,-0.4}$	2.0 ± 1.0

Table A43. Parameters of the JKTEBOP best fits of the CoRoT 32s-sampled light curve of CoRoT-12, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 291 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1376 ± 0.0032	0.1361 ± 0.0033	0.1404 ± 0.0031	0.1399 ± 0.0030	0.1413 ± 0.0028
k	0.13227 ± 0.00108	0.12900 ± 0.00112	0.13316 ± 0.00085	0.13271 ± 0.00093	0.13328 ± 0.00080
i (deg.)	86.00 ± 0.29	86.31 ± 0.31	85.71 ± 0.24	85.78 ± 0.25	85.63 ± 0.23
$u_{\rm A}$	0.63 fixed	0.45 fixed	0.21 fixed	0.70 fixed	0.45 fixed
$v_{\rm A}$		0.41 fixed	0.54 fixed	0.23 fixed	0.20 fixed
$r_{\rm A}$	0.1215 ± 0.0027	0.1205 ± 0.0028	0.1239 ± 0.0026	0.1235 ± 0.0025	0.1247 ± 0.0024
$r_{\rm b}$	0.01608 ± 0.00048	0.01555 ± 0.00048	0.01650 ± 0.00042	0.01639 ± 0.00044	0.01662 ± 0.00040
σ ($m$mag)	0.7422	0.7431	0.7486	0.7463	0.7514
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1376 ± 0.0032	0.1374 ± 0.0040	0.1376 ± 0.0037	0.1375 ± 0.0038	0.1375 ± 0.0036
k	0.1322 ± 0.0014	0.1301 ± 0.0018	0.1313 ± 0.0016	0.1311 ± 0.0017	0.1309 ± 0.0017
i (deg.)	86.01 ± 0.31	86.13 ± 0.41	86.07 ± 0.37	86.08 ± 0.38	86.09 ± 0.36
$u_{\rm A}$	0.632 ± 0.045	0.405 ± 0.066	0.312 ± 0.062	0.784 ± 0.068	0.579 ± 0.054
$v_{\rm A}$		0.41 perturbed	0.54 perturbed	0.23 perturbed	0.20 perturbed
$r_{\rm A}$	0.1215 ± 0.0028	0.1216 ± 0.0034	0.1216 ± 0.0031	0.1216 ± 0.0032	0.1216 ± 0.0031
$r_{\rm b}$	0.01607 ± 0.00051	0.01582 ± 0.00065	0.01596 ± 0.00059	0.01593 ± 0.00061	0.01592 ± 0.00058
σ ($m$mag)	0.7422	0.7423	0.7421	0.7421	0.7421
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1376 ± 0.0033	0.1374 ± 0.0040	0.1376 ± 0.0040	0.1375 ± 0.0038	0.1375 ± 0.0040
k	0.1322 ± 0.0014	0.1312 ± 0.0039	0.1312 ± 0.0044	0.1312 ± 0.0043	0.1314 ± 0.0042
i (deg.)	86.01 ± 0.32	86.07 ± 0.44	86.07 ± 0.39	86.07 ± 0.40	86.06 ± 0.39
$u_{\rm A}$	0.63 ± 0.04	0.52 ± 0.28	0.28 ± 1.23	0.77 ± 0.50	0.60 ± 0.12
$v_{\rm A}$		0.20 ± 0.52	0.60 ± 2.09	0.20 ± 0.70	0.13 ± 0.52
$r_{\rm A}$	0.1215 ± 0.0029	0.1215 ± 0.0034	0.1216 ± 0.0035	0.1216 ± 0.0033	0.1215 ± 0.0035
$r_{\rm b}$	0.01607 ± 0.00053	0.01594 ± 0.00073	0.01596 ± 0.00064	0.01595 ± 0.00068	0.01597 ± 0.00065
σ ($m$mag)	0.7422	0.7420	0.7421	0.7420	0.7421

Table A44. Parameters of the JKTEBOP best fits of the CoRoT 512s-sampled light curve of CoRoT-12, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD − 2454000.0. The light curve contains 413 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1476 ± 0.0096	0.1423 ± 0.0102	0.1507 ± 0.0081	0.1497 ± 0.0085	0.1512 ± 0.0087
k	0.1356 ± 0.0030	0.1310 ± 0.0031	0.1362 ± 0.0024	0.1356 ± 0.0025	0.1361 ± 0.0022
i (deg.)	85.24 ± 0.76	85.86 ± 0.91	84.95 ± 0.61	85.05 ± 0.66	84.90 ± 0.65
$u_{\rm A}$	0.63 fixed	0.45 fixed	0.21 fixed	0.70 fixed	0.45 fixed
$v_{\rm A}$		0.41 fixed	0.54 fixed	0.23 fixed	0.20 fixed
T_0	398.62700 ± 0.00074	398.62704 ± 0.00075	398.62702 ± 0.00077	398.62701 ± 0.00076	398.62703 ± 0.00075
$r_{\rm A}$	0.1300 ± 0.0081	0.1258 ± 0.0087	0.1327 ± 0.0069	0.1319 ± 0.0073	0.1331 ± 0.0074
$r_{\rm b}$	0.0176 ± 0.0014	0.0165 ± 0.0015	0.0181 ± 0.0012	0.0179 ± 0.0013	0.0181 ± 0.0012
σ ($m$mag)	2.3975	2.3971	2.3944	2.3947	2.3938
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1553 ± 0.0094	0.1547 ± 0.0099	0.1551 ± 0.0095	0.1550 ± 0.0096	0.1550 ± 0.0100
k	0.1383 ± 0.0022	0.1365 ± 0.0025	0.1375 ± 0.0024	0.1374 ± 0.0022	0.1372 ± 0.0024
i (deg.)	84.48 ± 0.76	84.57 ± 0.82	84.51 ± 0.78	84.53 ± 0.78	84.53 ± 0.81
$u_{\rm A}$	0.42 ± 0.22	0.13 ± 0.26	0.08 ± 0.23	0.55 ± 0.21	0.33 ± 0.21
$v_{\rm A}$		0.41 perturbed	0.54 perturbed	0.23 perturbed	0.20 perturbed
T_0	398.62704 ± 0.00074	398.62705 ± 0.00074	398.62705 ± 0.00073	398.62705 ± 0.00073	398.62706 ± 0.00077
$r_{\rm A}$	0.1364 ± 0.0080	0.1361 ± 0.0085	0.1364 ± 0.0081	0.1362 ± 0.0082	0.1363 ± 0.0085
$r_{\rm b}$	0.0189 ± 0.0013	0.0186 ± 0.0014	0.0188 ± 0.0013	0.0187 ± 0.0013	0.0187 ± 0.0014
σ ($m$mag)	2.3936	2.3924	2.3931	2.3930	2.3929
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.155 ± 0.009	0.161 ± 0.014	0.163 ± 0.014	0.162 ± 0.012	0.164 ± 0.015
k	0.1383 ± 0.0023	0.1243 ± 0.0092	0.1288 ± 0.0077	0.1270 ± 0.0080	0.1272 ± 0.0090
i (deg.)	84.48 ± 0.72	84.75 ± 1.04	84.42 ± 0.89	84.56 ± 0.79	84.39 ± 0.90
$u_{\rm A}$	0.4 ± 0.2	-1.6 ± 2.8	-4.4 ± 4.9	2.4 ± 1.4	-0.4 ± 1.3
$v_{\rm A}$		3.6 ± 3.9	7.9 ± 7.9	3.2 ± 2.5	2.5 ± 2.6
T_0	398.62704 ± 0.00075	398.62709 ± 0.00072	398.62707 ± 0.00078	398.62703 ± 0.00075	398.62708 ± 0.00076
$r_{\rm A}$	0.136 ± 0.008	0.143 ± 0.014	0.144 ± 0.014	0.144 ± 0.012	0.146 ± 0.014
$r_{\rm b}$	0.0189 ± 0.0013	0.0178 ± 0.0014	0.0185 ± 0.0013	0.0182 ± 0.0013	0.0185 ± 0.0012
σ ($m$mag)	2.3936	2.3888	2.3903	2.3899	2.3900

Table A45. Final parameters of the fit to the light curves of CoRoT-12 from the JKTEBOP analysis, compared to those found by Gillon et al. (2010b). Quantities without quoted uncertainties were not given by Gillon et al. (2010b) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Gillon et al. (2010b)
$r_{\rm A}+r_{\rm b}$	0.1375 ± 0.0043	0.1550 ± 0.0112	0.1398 ± 0.0042	0.1464
k	0.1309 ± 0.0020	0.1371 ± 0.0028	0.1330 ± 0.0021	0.1321 ± 0.0015
i ($^\circ$)	86.08 ± 0.45	84.53 ± 0.91	85.79 ± 0.43	$85.48^{+0.72}_{-0.77}$
$r_{\rm A}$	0.1216 ± 0.0037	0.1363 ± 0.0096	0.1235 ± 0.0035	0.1293
$r_{\rm b}$	0.01591 ± 0.00070	0.01869 ± 0.00156	0.01638 ± 0.00074	0.01714

Table A46. Derived physical properties of the CoRoT-12 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 12.1 \pm 1.3\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.889 \pm 0.076\,\rho_{\odot}$ and $T'_{\rm eq} = 1410 \pm 28\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	155.7 ± 4.0	152.4 ± 2.4	152.1 ± 2.2	149.8 ± 4.3	149.8 ± 2.2	150.8 ± 2.3
$M_{\rm A}$ ($M_{\odot}$)	1.116 ± 0.087	1.047 ± 0.049	1.041 ± 0.044	0.996 ± 0.088	0.995 ± 0.044	1.014 ± 0.046
$R_{\rm A}$ ($R_{\odot}$)	1.079 ± 0.044	1.056 ± 0.033	1.054 ± 0.034	1.038 ± 0.042	1.038 ± 0.032	1.045 ± 0.034
$\log g_{\rm A}$ (cgs)	4.420 ± 0.025	4.411 ± 0.026	4.410 ± 0.025	4.404 ± 0.029	4.404 ± 0.026	4.406 ± 0.025
$M_{\rm b}$ ($M_{\rm Jup}$)	0.943 ± 0.076	0.903 ± 0.063	0.899 ± 0.061	0.873 ± 0.077	0.873 ± 0.060	0.884 ± 0.061
$R_{\rm b}$ ($R_{\rm Jup}$)	1.392 ± 0.072	1.363 ± 0.065	1.360 ± 0.064	1.340 ± 0.074	1.340 ± 0.064	1.348 ± 0.064
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.327 ± 0.050	0.334 ± 0.050	0.335 ± 0.050	0.340 ± 0.052	0.340 ± 0.051	0.337 ± 0.051
Θ	0.0492 ± 0.0040	0.0503 ± 0.0040	0.0504 ± 0.0039	0.0511 ± 0.0042	0.0511 ± 0.0040	0.0508 ± 0.0040
a (AU)	0.04061 ± 0.00105	0.03975 ± 0.00063	0.03967 ± 0.00056	0.03909 ± 0.00112	0.03908 ± 0.00057	0.03933 ± 0.00060
Age (Gyr)		$4.8^{+3.3}_{-1.9}$	$4.4^{+2.1}_{-1.5}$	$7.6^{+1.6}_{-6.7}$	$6.7^{+1.6}_{-2.9}$	$5.6^{+2.0}_{-1.7}$

	This work (final)	Gillon et al. (2010b)
$M_{\rm A}$ ($M_{\odot}$)	$1.018 \pm 0.088 \pm 0.029$	$1.078^{+0.077}_{-0.072}$
$R_{\rm A}$ ($R_{\odot}$)	$1.046 \pm 0.042 \pm 0.010$	$1.116^{+0.096}_{-0.092}$
$\log g_{\rm A}$ (cgs)	$4.407 \pm 0.029 \pm 0.004$	$4.375^{+0.065}_{-0.062}$
$\rho_{\rm A}$ ($\rho_{\odot}$)	0.889 ± 0.076	$0.77^{+0.20}_{-0.15}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.887 \pm 0.077 \pm 0.017$	$0.917^{+0.070}_{-0.065}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.350 \pm 0.074 \pm 0.013$	1.44 ± 0.13
$g_{\rm b}$ (m s^{-1})	12.1 ± 1.3	$11.0^{+2.3}_{-1.9}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.337 \pm 0.052 \pm 0.003$	$0.309^{+0.097}_{-0.071}$
$T'_{\rm eq}$ (K)	1410 ± 28	1442 ± 58
Θ	$0.0508 \pm 0.0042 \pm 0.0005$	
a (AU)	$0.0394 \pm 0.0011 \pm 0.0004$	$0.04016^{+0.00093}_{-0.00092}$
Age (Gyr)	$5.8^{+3.3}_{-6.7}{}^{+1.8}_{-1.5}$	6.3 ± 3.1

Table A47. Parameters of the JKTEBOP best fits of the 32s-sampled CoRoT light curve of CoRoT-13, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 441 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1207 ± 0.0057	0.1158 ± 0.0060	0.1234 ± 0.0048	0.1230 ± 0.0048	0.1251 ± 0.0046
k	0.1001 ± 0.0015	0.0975 ± 0.0015	0.1004 ± 0.0011	0.1001 ± 0.0012	0.1007 ± 0.0011
i (deg.)	85.93 ± 0.46	86.42 ± 0.52	85.68 ± 0.37	85.71 ± 0.37	85.52 ± 0.36
$u_{\rm A}$	0.61 fixed	0.41 fixed	0.16 fixed	0.67 fixed	0.40 fixed
$v_{\rm A}$		0.36 fixed	0.57 fixed	0.27 fixed	0.18 fixed
$r_{\rm A}$	0.1097 ± 0.0050	0.1055 ± 0.0054	0.1121 ± 0.0043	0.1118 ± 0.0042	0.1137 ± 0.0041
$r_{\rm b}$	0.01099 ± 0.00065	0.01029 ± 0.00066	0.01126 ± 0.00051	0.01120 ± 0.00054	0.01145 ± 0.00051
σ ($m$mag)	0.8144	0.8142	0.8104	0.8102	0.8094
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1281 ± 0.0048	0.1276 ± 0.0056	0.1281 ± 0.0049	0.1279 ± 0.0050	0.1278 ± 0.0053
k	0.1019 ± 0.0010	0.1006 ± 0.0011	0.1013 ± 0.0011	0.1010 ± 0.0010	0.1011 ± 0.0010
i (deg.)	85.23 ± 0.37	85.30 ± 0.45	85.25 ± 0.38	85.27 ± 0.39	85.28 ± 0.42
$u_{\rm A}$	0.417 ± 0.089	0.145 ± 0.121	0.046 ± 0.101	0.550 ± 0.103	0.329 ± 0.099
$v_{\rm A}$		0.36 perturbed	0.57 perturbed	0.27 perturbed	0.18 perturbed
$r_{\rm A}$	0.1163 ± 0.0043	0.1159 ± 0.0051	0.1163 ± 0.0043	0.1162 ± 0.0044	0.1161 ± 0.0047
$r_{\rm b}$	0.01185 ± 0.00051	0.01166 ± 0.00059	0.01178 ± 0.00052	0.01174 ± 0.00052	0.01174 ± 0.00057
σ ($m$mag)	0.8090	0.8086	0.8088	0.8087	0.8087
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.1281 ± 0.0049	0.1234 ± 0.0085	0.1278 ± 0.0075	0.1630 ± 0.0178	0.1294 ± 0.0084
k	0.1019 ± 0.0010	0.0936 ± 0.0046	0.0956 ± 0.0037	0.1403 ± 0.0261	0.0941 ± 0.0034
i (deg.)	85.23 ± 0.38	85.99 ± 0.71	85.60 ± 0.52	82.29 ± 1.26	85.59 ± 0.60
$u_{\rm A}$	0.42 ± 0.09	-1.06 $\pm$ 1.27	-3.18 $\pm$ 2.52	-1.90 $\pm$ 0.41	-0.19 $\pm$ 0.51
$v_{\rm A}$		2.52 $\pm$ 2.02	5.95 $\pm$ 4.12	-5.58 $\pm$ 0.69	2.02 $\pm$ 1.17
$r_{\rm A}$	0.1163 ± 0.0044	0.1129 ± 0.0077	0.1167 ± 0.0069	0.1429 ± 0.0157	0.1183 ± 0.0078
$r_{\rm b}$	0.01185 ± 0.00053	0.01057 ± 0.00084	0.01115 ± 0.00068	0.02005 ± 0.00365	0.01113 ± 0.00070
σ ($m$mag)	0.8090	0.8072	0.8077	0.8064	0.8074

Table A48. Parameters of the JKTEBOP best fits of the 512s-sampled CoRoT light curve of CoRoT-13, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 196 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_\mathrm{A} + r_\mathrm{b}$	$0.093^{+0.020}_{-0.005}$	$0.094^{+0.019}_{-0.005}$	$0.093^{+0.021}_{-0.005}$	$0.093^{+0.019}_{-0.005}$	$0.092^{+0.019}_{-0.005}$
k	$0.0930^{+0.0046}_{-0.0027}$	$0.0927^{+0.0039}_{-0.0025}$	$0.0942^{+0.0038}_{-0.0028}$	$0.0942^{+0.0037}_{-0.0026}$	$0.0947^{+0.0032}_{-0.0025}$
i (deg.)	$89.9^{+1.1}_{-2.4}$	$90.0^{+1.1}_{-2.4}$	$90.0^{+1.1}_{-2.6}$	$90.0^{+1.0}_{-2.5}$	$89.9^{+1.2}_{-2.3}$
u_A	0.61 fixed	0.41 fixed	0.16 fixed	0.67 fixed	0.40 fixed
v_A		0.36 fixed	0.57 fixed	0.27 fixed	0.18 fixed
T_0	$790.8085^{+0.0021}_{-0.0021}$	$790.8085^{+0.0022}_{-0.0022}$	$790.8085^{+0.0021}_{-0.0020}$	$790.8086^{+0.0021}_{-0.0021}$	$790.8086^{+0.0021}_{-0.0019}$
r_A	$0.085^{+0.017}_{-0.005}$	$0.086^{+0.017}_{-0.004}$	$0.085^{+0.019}_{-0.004}$	$0.085^{+0.018}_{-0.004}$	$0.084^{+0.017}_{-0.004}$
r_b	$0.0079^{+0.0021}_{-0.0005}$	$0.0080^{+0.0021}_{-0.0005}$	$0.0080^{+0.0023}_{-0.0004}$	$0.0080^{+0.0021}_{-0.0005}$	$0.0080^{+0.0020}_{-0.0005}$
σ ($m$mag)	2.2190	2.2155	2.2160	2.2155	2.2163
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_\mathrm{A} + r_\mathrm{b}$	$0.092^{+0.021}_{-0.006}$	$0.173^{+0.010}_{-0.011}$	$0.092^{+0.024}_{-0.006}$	$0.093^{+0.023}_{-0.006}$	$0.093^{+0.021}_{-0.006}$
k	$0.0947^{+0.0038}_{-0.0056}$	$0.0776^{+0.0028}_{-0.0027}$	$0.0943^{+0.0041}_{-0.0052}$	$0.0942^{+0.0038}_{-0.0044}$	$0.0943^{+0.0037}_{-0.0050}$
i (deg.)	$89.99^{+1.11}_{-2.37}$	$81.76^{+0.66}_{-0.61}$	$89.99^{+1.12}_{-2.59}$	$89.95^{+1.10}_{-2.53}$	$89.98^{+1.13}_{-2.38}$
u_A	$0.48^{+0.28}_{-0.30}$	$-60.37^{+479.78}_{-496.31}$	$0.15^{+0.31}_{-0.29}$	$0.67^{+0.28}_{-0.30}$	$0.44^{+0.29}_{-0.29}$
v_A		0.36 perturbed	0.57 perturbed	0.27 perturbed	0.18 perturbed
T_0	$790.8085^{+0.0021}_{-0.0019}$	$790.8087^{+0.0021}_{-0.0020}$	$790.8085^{+0.0022}_{-0.0020}$	$790.8085^{+0.0022}_{-0.0021}$	$790.8085^{+0.0022}_{-0.0018}$
r_A	$0.0841^{+0.0195}_{-0.0059}$	$0.1607^{+0.0097}_{-0.0104}$	$0.0845^{+0.0222}_{-0.0054}$	$0.0846^{+0.0212}_{-0.0056}$	$0.0846^{+0.0190}_{-0.0057}$
r_b	$0.00796^{+0.00204}_{-0.00046}$	$0.01247^{+0.00068}_{-0.00073}$	$0.00797^{+0.00227}_{-0.00049}$	$0.00798^{+0.00220}_{-0.00048}$	$0.00797^{+0.00208}_{-0.00048}$
σ ($m$mag)	2.2165	2.2136	2.2160	2.2155	2.2161
Fitting for both LD coefficients					
$r_\mathrm{A} + r_\mathrm{b}$	$0.092^{+0.021}_{-0.005}$	$0.100^{+0.020}_{-0.009}$	$0.165^{+0.015}_{-0.021}$	$0.099^{+0.016}_{-0.008}$	$0.103^{+0.023}_{-0.010}$
k	$0.095^{+0.004}_{-0.004}$	$0.087^{+0.012}_{-0.007}$	$0.086^{+0.017}_{-0.008}$	$0.088^{+0.011}_{-0.007}$	$0.089^{+0.013}_{-0.007}$
i (deg.)	$90.0^{+1.0}_{-2.5}$	$89.9^{+1.3}_{-2.9}$	$82.4^{+1.6}_{-1.0}$	$89.9^{+1.1}_{-2.7}$	$88.5^{+1.9}_{-2.6}$
u_A	$0.48^{+0.24}_{-0.27}$	$-0.19^{+1.14}_{-1.45}$	$-3.03^{+12.22}_{-55.68}$	$2.24^{+1.05}_{-2.88}$	$0.24^{+0.59}_{-0.88}$
v_A		$2.0^{+2.1}_{-3.0}$	$-2.4^{+55.9}_{-23.7}$	$2.2^{+1.8}_{-3.7}$	$1.7^{+1.9}_{-3.2}$
T_0	$790.8085^{+0.0022}_{-0.0021}$	$790.8086^{+0.0023}_{-0.0022}$	$790.8087^{+0.0022}_{-0.0021}$	$790.8087^{+0.0022}_{-0.0020}$	$790.8086^{+0.0022}_{-0.0020}$
r_A	$0.084^{+0.019}_{-0.005}$	$0.092^{+0.017}_{-0.009}$	$0.152^{+0.014}_{-0.021}$	$0.091^{+0.014}_{-0.008}$	$0.095^{+0.019}_{-0.010}$
r_b	$0.0080^{+0.0020}_{-0.0004}$	$0.0080^{+0.0024}_{-0.0005}$	$0.0130^{+0.0015}_{-0.0013}$	$0.0080^{+0.0022}_{-0.0005}$	$0.0084^{+0.0029}_{-0.0008}$
σ ($m$mag)	2.2165	2.2110	2.2134	2.2124	2.2145

Table A49. Final parameters of the fit to the 32s-sampled light curves of CoRoT-13 from the JKTEBOP analysis, compared to those found by Cabrera et al. (2010). The 512s-sampled solutions are not included because they are unreliable and should be ignored. Quantities without quoted uncertainties were not given by Cabrera et al. (2010) but have been calculated from other parameters which were.

	This work (32s sampling)	Cabrera et al. (2010)
$r_\mathrm{A} + r_\mathrm{b}$	0.1279 ± 0.0060	0.1009
k	0.1010 ± 0.0012	0.0909 ± 0.0014
i ($^\circ$)	85.27 ± 0.47	$88.02^{+0.34}_{-0.36}$
r_A	0.1161 ± 0.0053	0.0925 ± 0.0027
r_b	0.01173 ± 0.00063	0.00841

Table A50. Derived physical properties of the CoRoT-13 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 20.7 \pm 2.5\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.526 \pm 0.072\,\rho_\odot$ and $T'_{\rm eq} = 1432 \pm 39\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	141.1 ± 3.5	137.1 ± 1.7	138.4 ± 3.1	136.2 ± 3.1	136.6 ± 2.5	136.3 ± 3.2
$M_{\rm A}$ ($M_\odot$)	1.188 ± 0.087	1.092 ± 0.040	1.122 ± 0.075	1.069 ± 0.073	1.078 ± 0.061	1.072 ± 0.077
$R_{\rm A}$ ($R_\odot$)	1.312 ± 0.075	1.276 ± 0.065	1.287 ± 0.074	1.267 ± 0.074	1.271 ± 0.077	1.268 ± 0.070
$\log g_{\rm A}$ (cgs)	4.277 ± 0.038	4.265 ± 0.038	4.269 ± 0.037	4.262 ± 0.038	4.263 ± 0.034	4.262 ± 0.040
$M_{\rm b}$ ($M_{\rm Jup}$)	1.392 ± 0.096	1.316 ± 0.073	1.340 ± 0.089	1.298 ± 0.079	1.305 ± 0.084	1.300 ± 0.092
$R_{\rm b}$ ($R_{\rm Jup}$)	1.290 ± 0.076	1.254 ± 0.069	1.265 ± 0.074	1.245 ± 0.075	1.249 ± 0.072	1.246 ± 0.075
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.61 ± 0.10	0.62 ± 0.11	0.62 ± 0.11	0.63 ± 0.11	0.63 ± 0.11	0.63 ± 0.11
Θ	0.0954 ± 0.0073	0.0981 ± 0.0073	0.0972 ± 0.0074	0.0988 ± 0.0080	0.0985 ± 0.0075	0.0987 ± 0.0076
a (AU)	0.05256 ± 0.00129	0.05110 ± 0.00062	0.05156 ± 0.00114	0.05074 ± 0.00114	0.05088 ± 0.00094	0.05078 ± 0.00119
Age (Gyr)		$6.3^{+0.3}_{-1.9}$	$4.8^{+1.4}_{-1.6}$	$6.3^{+0.0}_{-3.0}$	$5.7^{+0.3}_{-2.2}$	$6.0^{+0.8}_{-6.2}$

	This work (final)	Cabrera et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$1.086 \pm 0.077 \pm 0.035$	1.09 ± 0.02
$R_{\rm A}$ ($R_\odot$)	$1.274 \pm 0.077 \pm 0.014$	1.01 ± 0.03
$\log g_{\rm A}$ (cgs)	$4.264 \pm 0.040 \pm 0.005$	4.46 ± 0.05
$\rho_{\rm A}$ ($\rho_\odot$)	0.526 ± 0.072	1.043 ± 0.093
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.312 \pm 0.092 \pm 0.028$	1.308 ± 0.066
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.252 \pm 0.075 \pm 0.013$	0.885 ± 0.014
$g_{\rm b}$ (m s^{-1})	20.7 ± 2.5	41.7 ± 2.9
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.62 \pm 0.11 \pm 0.01$	1.76 ± 0.17
$T'_{\rm eq}$ (K)	1432 ± 39	1700
Θ	$0.0983 \pm 0.0080 \pm 0.0010$	
a (AU)	$0.0510 \pm 0.0012 \pm 0.0005$	0.0510 ± 0.0031
Age (Gyr)	$5.8\,^{+1.4\ +0.5}_{-6.2\ -1.0}$	0.12 to 3.15

Table A51. Parameters of the JKTEBOP best fits of the CoRoT 32s-sampled light curve of CoRoT-14, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 263 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.220 ± 0.011	0.222 ± 0.012	0.221 ± 0.012	0.222 ± 0.012	0.222 ± 0.011
k	0.0923 ± 0.0020	0.0914 ± 0.0020	0.0912 ± 0.0019	0.0911 ± 0.0019	0.0901 ± 0.0017
i (deg.)	80.11 ± 0.71	80.02 ± 0.76	80.01 ± 0.73	80.00 ± 0.74	79.93 ± 0.68
$u_{\rm A}$	0.61 fixed	0.40 fixed	0.23 fixed	0.69 fixed	0.40 fixed
$v_{\rm A}$		0.26 fixed	0.51 fixed	0.25 fixed	0.13 fixed
$r_{\rm A}$	0.2013 ± 0.0101	0.2030 ± 0.0107	0.2029 ± 0.0106	0.2032 ± 0.0107	0.2034 ± 0.0099
$r_{\rm b}$	0.0186 ± 0.0013	0.0186 ± 0.0014	0.0185 ± 0.0013	0.0185 ± 0.0013	0.0183 ± 0.0012
σ ($m$mag)	1.0151	1.0160	1.0151	1.0154	1.0138
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.224 ± 0.017	0.224 ± 0.017	0.226 ± 0.018	0.226 ± 0.017	0.223 ± 0.017
k	0.0889 ± 0.0058	0.0878 ± 0.0055	0.0878 ± 0.0063	0.0875 ± 0.0061	0.0886 ± 0.0054
i (deg.)	79.7 ± 1.2	79.7 ± 1.2	79.6 ± 1.3	79.6 ± 1.3	79.8 ± 1.2
$u_{\rm A}$	0.34 ± 0.62	0.08 ± 0.70	-0.07 $\pm$ 0.75	0.37 ± 0.74	0.28 ± 0.63
$v_{\rm A}$		0.26 perturbed	0.51 perturbed	0.25 perturbed	0.13 perturbed
$r_{\rm A}$	0.206 ± 0.016	0.206 ± 0.016	0.208 ± 0.017	0.208 ± 0.017	0.205 ± 0.016
$r_{\rm b}$	0.0183 ± 0.0011	0.0181 ± 0.0012	0.0182 ± 0.0011	0.0182 ± 0.0011	0.0181 ± 0.0011
σ ($m$mag)	1.0131	1.0133	1.0132	1.0132	1.0134

Table A52. Parameters of the JKTEBOP best fits of the CoRoT 512s-sampled light curve of CoRoT-14, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 291 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.212 ± 0.057	0.210 ± 0.060	0.215 ± 0.058	0.214 ± 0.061	0.213 ± 0.057
k	0.0893 ± 0.0080	0.0882 ± 0.0083	0.0887 ± 0.0076	0.0884 ± 0.0078	0.0878 ± 0.0064
i (deg.)	81.0 ± 4.3	81.1 ± 5.2	80.8 ± 4.6	80.8 ± 5.0	80.8 ± 4.5
$u_{\rm A}$	0.61 fixed	0.40 fixed	0.23 fixed	0.69 fixed	0.40 fixed
$v_{\rm A}$		0.26 fixed	0.51 fixed	0.25 fixed	0.13 fixed
P	1.51244 ± 0.00026	1.51244 ± 0.00026	1.51244 ± 0.00027	1.51244 ± 0.00027	1.51244 ± 0.00025
T_0	787.6673 ± 0.0022	787.6672 ± 0.0022	787.6673 ± 0.0022	787.6673 ± 0.0023	787.6673 ± 0.0022
$r_{\rm A}$	0.194 ± 0.050	0.193 ± 0.054	0.198 ± 0.052	0.197 ± 0.055	0.196 ± 0.052
$r_{\rm b}$	0.0174 ± 0.0059	0.0171 ± 0.0061	0.0175 ± 0.0059	0.0174 ± 0.0061	0.0172 ± 0.0055
σ ($m$mag)	3.3074	3.3077	3.3082	3.3081	3.3097
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.160 ± 0.019	0.159 ± 0.021	0.159 ± 0.021	0.159 ± 0.019	0.159 ± 0.019
k	0.059 ± 0.012	0.060 ± 0.012	0.060 ± 0.012	0.059 ± 0.012	0.059 ± 0.012
i (deg.)	89.7 ± 2.9	89.4 ± 2.9	89.5 ± 2.9	89.5 ± 2.9	89.6 ± 2.7
$u_{\rm A}$	1.65 ± 0.56	1.49 ± 0.60	1.32 ± 0.59	1.80 ± 0.59	1.60 ± 0.57
$v_{\rm A}$		0.26 perturbed	0.51 perturbed	0.25 perturbed	0.13 perturbed
P	1.51236 ± 0.00026	1.51236 ± 0.00026	1.51236 ± 0.00026	1.51236 ± 0.00027	1.51236 ± 0.00025
T_0	787.6682 ± 0.0022	787.6682 ± 0.0022	787.6682 ± 0.0023	787.6682 ± 0.0023	787.6682 ± 0.0022
$r_{\rm A}$	0.151 ± 0.019	0.150 ± 0.020	0.150 ± 0.019	0.150 ± 0.018	0.150 ± 0.018
$r_{\rm b}$	0.0089 ± 0.0020	0.0090 ± 0.0023	0.0090 ± 0.0022	0.0089 ± 0.0020	0.0089 ± 0.0020
σ ($m$mag)	3.2996	3.3000	3.2996	3.2997	3.2996

Table A53. Final parameters of the fit to the light curves of CoRoT-14 from the JKTEBOP analysis, compared to those found by Tingley et al. (2011). Quantities without quoted uncertainties were not given by Tingley et al. (2011) but have been calculated from other parameters which were.

	This work (32s sampling)	This work (512s sampling)	**This work (final)**	Tingley et al. (2011)
$r_{\rm A} + r_{\rm b}$	0.225 ± 0.020	0.213 ± 0.069	0.223 ± 0.019	0.228
k	0.0880 ± 0.0020	0.0882 ± 0.0092	0.0881 ± 0.0056	0.0925 ± 0.0019
i ($^\circ$)	79.7 ± 1.5	80.9 ± 5.8	79.7 ± 1.4	79.6 ± 0.8
$r_{\rm A}$	0.206 ± 0.019	0.196 ± 0.062	0.206 ± 0.019	0.209 ± 0.012
$r_{\rm b}$	0.0182 ± 0.0013	0.0173 ± 0.0069	0.0181 ± 0.0013	0.0193

Table A54. Derived physical properties of the CoRoT-14 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 183 \pm 27\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.67 \pm 0.19\,\rho_\odot$ and $T'_{\rm eq} = 1936 \pm 95$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Υ^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	192.6 ± 6.4	189.2 ± 5.0	190.0 ± 5.5	188.5 ± 4.4	189.0 ± 4.0	188.1 ± 4.2
$M_{\rm A}$ ($M_\odot$)	1.190 ± 0.116	1.129 ± 0.088	1.143 ± 0.098	1.117 ± 0.076	1.126 ± 0.069	1.110 ± 0.072
$R_{\rm A}$ ($R_\odot$)	1.21 ± 0.13	1.19 ± 0.11	1.20 ± 0.14	1.19 ± 0.11	1.19 ± 0.11	1.19 ± 0.11
$\log g_{\rm A}$ (cgs)	4.346 ± 0.076	4.338 ± 0.082	4.340 ± 0.073	4.337 ± 0.081	4.338 ± 0.081	4.336 ± 0.080
$M_{\rm b}$ ($M_{\rm Jup}$)	7.96 ± 0.56	7.69 ± 0.46	7.75 ± 0.49	7.63 ± 0.41	7.67 ± 0.38	7.60 ± 0.39
$R_{\rm b}$ ($R_{\rm Jup}$)	1.037 ± 0.082	1.019 ± 0.078	1.023 ± 0.079	1.015 ± 0.077	1.018 ± 0.076	1.013 ± 0.076
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	6.7 ± 1.5	6.8 ± 1.5	6.8 ± 1.5	6.8 ± 1.5	6.8 ± 1.5	6.8 ± 1.5
Θ	0.353 ± 0.030	0.359 ± 0.029	0.358 ± 0.030	0.360 ± 0.029	0.359 ± 0.029	0.361 ± 0.029
a (AU)	0.02738 ± 0.00089	0.02690 ± 0.00070	0.02702 ± 0.00077	0.02681 ± 0.00061	0.02688 ± 0.00055	0.02675 ± 0.00058
Age (Gyr)		$4.3^{+1.9}_{-5.0}$	$3.1^{+2.1}_{-3.2}$	$3.9^{+2.5}_{-2.8}$	$3.2^{+2.4}_{-2.7}$	$3.9^{+2.0}_{-2.2}$

	This work (final)	Tingley et al. (2011)
$M_{\rm A}$ ($M_\odot$)	$1.125 \pm 0.098 \pm 0.018$	1.13 ± 0.09
$R_{\rm A}$ ($R_\odot$)	$1.19 \pm 0.14 \pm 0.01$	1.21 ± 0.08
$\log g_{\rm A}$ (cgs)	$4.338 \pm 0.082 \pm 0.002$	4.33 ± 0.14
$\rho_{\rm A}$ ($\rho_\odot$)	0.67 ± 0.19	0.65 ± 0.12
$M_{\rm b}$ ($M_{\rm Jup}$)	$7.67 \pm 0.49 \pm 0.08$	7.6 ± 0.6
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.018 \pm 0.079 \pm 0.005$	1.09 ± 0.07
$g_{\rm b}$ (m s^{-1})	183 ± 27	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$6.8 \pm 1.5 \pm 0.0$	5.5 ± 1.1
$T'_{\rm eq}$ (K)	1936 ± 95	1952 ± 66
Θ	$0.360 \pm 0.030 \pm 0.002$	
a (AU)	$0.02687 \pm 0.00077 \pm 0.00015$	0.0270 ± 0.0002
Age (Gyr)	$3.7^{+2.5\ +0.7}_{-5.0\ -0.6}$	0.4 to 8.0

Table A55. Parameters of the JKTEBOP best fits of the CoRoT 512s light curve of CoRoT-15, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 391 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.149^{+0.028}_{-0.005}$	$0.149^{+0.029}_{-0.005}$	$0.148^{+0.032}_{-0.006}$	$0.149^{+0.029}_{-0.005}$	$0.147^{+0.027}_{-0.005}$
k	$0.0790^{+0.0040}_{-0.0022}$	$0.0795^{+0.0029}_{-0.0022}$	$0.0796^{+0.0034}_{-0.0024}$	$0.0795^{+0.0033}_{-0.0021}$	$0.0807^{+0.0026}_{-0.0021}$
i (deg.)	$90.0^{+1.4}_{-4.4}$	$90.0^{+1.4}_{-4.2}$	$90.0^{+1.3}_{-4.5}$	$89.9^{+1.5}_{-4.2}$	$89.9^{+1.5}_{-3.9}$
$u_{\rm A}$	0.59 fixed	0.36 fixed	0.20 fixed	0.68 fixed	0.35 fixed
$v_{\rm A}$		0.28 fixed	0.52 fixed	0.25 fixed	0.14 fixed
P	$3.06004^{+0.00048}_{-0.00050}$	$3.06005^{+0.00045}_{-0.00048}$	$3.06005^{+0.00049}_{-0.00046}$	$3.06005^{+0.00045}_{-0.00047}$	$3.06008^{+0.00039}_{-0.00048}$
T_0	$753.5601^{+0.0027}_{-0.0026}$	$753.5601^{+0.0026}_{-0.0022}$	$753.5601^{+0.0025}_{-0.0024}$	$753.5601^{+0.0023}_{-0.0025}$	$753.5600^{+0.0024}_{-0.0021}$
$r_{\rm A}$	$0.138^{+0.025}_{-0.005}$	$0.138^{+0.027}_{-0.005}$	$0.137^{+0.029}_{-0.005}$	$0.138^{+0.026}_{-0.005}$	$0.136^{+0.025}_{-0.005}$
$r_{\rm b}$	$0.0109^{+0.0027}_{-0.0005}$	$0.0109^{+0.0027}_{-0.0005}$	$0.0109^{+0.0029}_{-0.0006}$	$0.0109^{+0.0027}_{-0.0005}$	$0.0110^{+0.0024}_{-0.0005}$
σ ($m$mag)	2.8702	2.8724	2.8713	2.8717	2.8747
$\chi^2_{\rm red}$	0.9974	0.9989	0.9981	0.9984	1.0005
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.148^{+0.033}_{-0.008}$	$0.149^{+0.037}_{-0.008}$	$0.149^{+0.036}_{-0.007}$	$0.149^{+0.037}_{-0.008}$	$0.149^{+0.034}_{-0.008}$
k	$0.0793^{+0.0037}_{-0.0034}$	$0.0788^{+0.0035}_{-0.0039}$	$0.0789^{+0.0035}_{-0.0040}$	$0.0788^{+0.0033}_{-0.0039}$	$0.0790^{+0.0034}_{-0.0040}$
i (deg.)	$90.0^{+1.7}_{-4.5}$	$89.9^{+1.6}_{-5.0}$	$90.0^{+1.4}_{-4.9}$	$89.9^{+1.5}_{-4.9}$	$90.0^{+1.5}_{-4.8}$
$u_{\rm A}$	$0.56^{+0.22}_{-0.24}$	$0.43^{+0.26}_{-0.26}$	$0.26^{+0.23}_{-0.26}$	$0.74^{+0.25}_{-0.28}$	$0.53^{+0.24}_{-0.24}$
$v_{\rm A}$		0.28 perturbed	0.52 perturbed	0.25 perturbed	0.14 perturbed
P	$3.06004^{+0.00047}_{-0.00056}$	$3.06004^{+0.00047}_{-0.00051}$	$3.06005^{+0.00046}_{-0.00050}$	$3.06005^{+0.00051}_{-0.00052}$	$3.06005^{+0.00048}_{-0.00048}$
T_0	$753.5601^{+0.0026}_{-0.0027}$	$753.5601^{+0.0026}_{-0.0025}$	$753.5601^{+0.0026}_{-0.0026}$	$753.5601^{+0.0029}_{-0.0027}$	$753.5601^{+0.0025}_{-0.0026}$
$r_{\rm A}$	$0.137^{+0.030}_{-0.007}$	$0.139^{+0.034}_{-0.008}$	$0.138^{+0.033}_{-0.007}$	$0.138^{+0.034}_{-0.008}$	$0.138^{+0.031}_{-0.007}$
$r_{\rm b}$	$0.0109^{+0.0032}_{-0.0006}$	$0.0109^{+0.0034}_{-0.0006}$	$0.0109^{+0.0033}_{-0.0005}$	$0.0109^{+0.0032}_{-0.0006}$	$0.0109^{+0.0030}_{-0.0005}$
σ ($m$mag)	2.8701	2.8718	2.8709	2.8713	2.8709
$\chi^2_{\rm red}$	0.9999	1.0011	1.0004	1.0007	1.0005

Table A56. Final parameters of the fit to the light curves of CoRoT-15 from the JKTEBOP analysis, compared to those found by Bouchy et al. (2011). Quantities without quoted uncertainties were not given by Bouchy et al. (2011) but have been calculated from other parameters which were.

	This work	Bouchy et al. (2011)
$r_{\rm A}+r_{\rm b}$	$0.149^{+0.039}_{-0.009}$	0.162
k	$0.0789^{+0.0036}_{-0.0044}$	$0.0788^{+0.0059}_{-0.0029}$
i ($^\circ$)	$89.9^{+0.1}_{-5.0}$	$86.7^{+2.3}_{-3.2}$
$r_{\rm A}$	$0.138^{+0.034}_{-0.009}$	$0.150^{+0.020}_{-0.012}$
$r_{\rm b}$	$0.0109^{+0.0034}_{-0.0008}$	0.0118

Table A57. Derived physical properties of the CoRoT-15 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 1470^{+240}_{-620}\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.52^{+0.12}_{-0.25}\,\rho_\odot$ and $T'_{\rm eq} = 1668^{+201}_{-76}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$156.4^{+7.7}_{-6.1}$	$155.2^{+5.2}_{-0.7}$	$156.7^{+2.7}_{-7.4}$	$154.4^{+6.5}_{-5.3}$	$154.3^{+5.7}_{-4.6}$	$157.2^{+4.0}_{-7.8}$
$M_{\rm A}$ ($M_\odot$)	$1.331^{+0.196}_{-0.146}$	$1.300^{+0.130}_{-0.006}$	$1.339^{+0.068}_{-0.177}$	$1.281^{+0.162}_{-0.123}$	$1.279^{+0.141}_{-0.108}$	$1.350^{+0.101}_{-0.188}$
$R_{\rm A}$ ($R_\odot$)	$1.37^{+0.39}_{-0.11}$	$1.36^{+0.37}_{-0.09}$	$1.37^{+0.36}_{-0.12}$	$1.35^{+0.39}_{-0.10}$	$1.35^{+0.38}_{-0.10}$	$1.37^{+0.35}_{-0.11}$
$\log g_{\rm A}$ (cgs)	$4.290^{+0.057}_{-0.179}$	$4.287^{+0.059}_{-0.181}$	$4.291^{+0.055}_{-0.186}$	$4.285^{+0.059}_{-0.178}$	$4.285^{+0.059}_{-0.180}$	$4.293^{+0.059}_{-0.191}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$65.6^{+6.3}_{-4.9}$	$64.6^{+4.3}_{-1.0}$	$65.8^{+2.4}_{-5.9}$	$63.9^{+5.3}_{-4.2}$	$63.9^{+4.7}_{-3.7}$	$66.2^{+3.9}_{-6.2}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.051^{+0.332}_{-0.086}$	$1.043^{+0.327}_{-0.077}$	$1.053^{+0.329}_{-0.091}$	$1.038^{+0.326}_{-0.083}$	$1.037^{+0.326}_{-0.082}$	$1.056^{+0.347}_{-0.083}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	52^{+13}_{-29}	53^{+13}_{-29}	52^{+13}_{-29}	53^{+13}_{-29}	53^{+13}_{-29}	52^{+12}_{-29}
Θ	$4.32^{+0.39}_{-1.05}$	$4.35^{+0.35}_{-1.05}$	$4.31^{+0.41}_{-1.03}$	$4.37^{+0.38}_{-1.06}$	$4.38^{+0.38}_{-1.05}$	$4.30^{+0.36}_{-1.07}$
a (AU)	$0.04608^{+0.00217}_{-0.00169}$	$0.04572^{+0.00147}_{-0.00007}$	$0.04616^{+0.00076}_{-0.00207}$	$0.04550^{+0.00184}_{-0.00147}$	$0.04548^{+0.00161}_{-0.00128}$	$0.04629^{+0.00113}_{-0.00220}$
Age (Gyr)		$1.8^{+2.1}_{-1.8}$	$0.0^{+4.5}_{-0.0}$	$2.2^{+1.4}_{-2.4}$	$1.4^{+1.8}_{-1.5}$	$2.5^{+1.3}_{-5.9}$

	This work (final)	Bouchy et al. (2011)
$M_{\rm A}$ ($M_\odot$)	$1.31\,^{+0.16}_{-0.19}\,^{+0.04}_{-0.03}$	1.32 ± 0.12
$R_{\rm A}$ ($R_\odot$)	$1.36\,^{+0.39}_{-0.12}\,^{+0.01}_{-0.01}$	$1.46^{+0.31}_{-0.14}$
$\log g_{\rm A}$ (cgs)	$4.288\,^{+0.059}_{-0.191}\,^{+0.005}_{-0.003}$	$4.23^{+0.12}_{-0.20}$
$\rho_{\rm A}$ ($\rho_\odot$)	$0.52^{+0.12}_{-0.25}$	$0.43^{+0.09}_{-0.20}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$64.9\,^{+5.3}_{-6.2}\,^{+1.3}_{-1.0}$	63.3 ± 4.1
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.045\,^{+0.347}_{-0.091}\,^{+0.011}_{-0.008}$	$1.12^{+0.30}_{-0.15}$
$g_{\rm b}$ (m s^{-1})	1470^{+240}_{-620}	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$53\,^{+13}_{-29}\,^{+0}_{-0}$	44^{+28}_{-24}
$T'_{\rm eq}$ (K)	1668^{+201}_{-76}	1740^{+120}_{-190}
Θ	$4.34\,^{+0.41}_{-1.07}\,^{+0.03}_{-0.05}$	
a (AU)	$0.0458\,^{+0.0018}_{-0.0022}\,^{+0.0005}_{-0.0003}$	$0.045^{+0.014}_{-0.010}$
Age (Gyr)	$1.6\,^{+4.5}_{-5.9}\,^{+0.9}_{-1.6}$	1.14 to 3.35

Table A58. Parameters of the JKTEBOP best fits of the HAT-P-4 z-band light curve from Kovács et al. (2007), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 985 datapoints. The measurement errors on the datapoints have been multiplied by 1.67 to force $\chi^2_\nu \approx 1$.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1874^{+0.0113}_{-0.0078}$	$0.1819^{+0.0102}_{-0.0029}$	$0.1802^{+0.0105}_{-0.0034}$	$0.1790^{+0.0154}_{-0.0043}$	$0.1790^{+0.0098}_{-0.0028}$
k	$0.08190^{+0.00129}_{-0.00103}$	$0.08196^{+0.00081}_{-0.00072}$	$0.08195^{+0.00094}_{-0.00076}$	$0.08187^{+0.00123}_{-0.00077}$	$0.08339^{+0.00070}_{-0.00066}$
i (deg.)	$87.1^{+2.8}_{-1.7}$	$88.3^{+1.7}_{-2.0}$	$88.8^{+1.8}_{-2.0}$	$89.5^{+2.0}_{-2.5}$	$88.6^{+1.6}_{-2.0}$
$u_{\rm A}$	0.50 fixed	0.23 fixed	0.07 fixed	0.58 fixed	0.20 fixed
$v_{\rm A}$		0.32 fixed	0.56 fixed	0.28 fixed	0.15 fixed
T_0	$245.81398^{+0.00055}_{-0.00050}$	$245.81392^{+0.00054}_{-0.00051}$	$245.81394^{+0.00049}_{-0.00048}$	$245.81393^{+0.00048}_{-0.00049}$	$245.81394^{+0.00042}_{-0.00046}$
$r_{\rm A}$	$0.1732^{+0.0104}_{-0.0071}$	$0.1681^{+0.0093}_{-0.0026}$	$0.1665^{+0.0095}_{-0.0031}$	$0.1655^{+0.0140}_{-0.0039}$	$0.1652^{+0.0089}_{-0.0025}$
$r_{\rm b}$	$0.01419^{+0.00106}_{-0.00072}$	$0.01378^{+0.00091}_{-0.00028}$	$0.01365^{+0.00095}_{-0.00031}$	$0.01355^{+0.00137}_{-0.00039}$	$0.01378^{+0.00083}_{-0.00028}$
σ ($m$mag)	1.7621	1.7447	1.7467	1.7448	1.7380
$\chi^2_{\rm red}$	1.0457	1.0244	1.0264	1.0241	1.0150
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1804^{+0.0093}_{-0.0035}$	$0.1779^{+0.0114}_{-0.0048}$	$0.1791^{+0.0099}_{-0.0030}$	$0.1787^{+0.0097}_{-0.0031}$	$0.1794^{+0.0103}_{-0.0034}$
k	$0.08374^{+0.00093}_{-0.00080}$	$0.08322^{+0.00095}_{-0.00085}$	$0.08344^{+0.00079}_{-0.00085}$	$0.08333^{+0.00085}_{-0.00081}$	$0.08347^{+0.00084}_{-0.00087}$
i (deg.)	$88.0^{+1.8}_{-1.9}$	$89.2^{+2.1}_{-2.0}$	$88.5^{+1.6}_{-2.0}$	$88.7^{+1.7}_{-2.0}$	$88.4^{+1.7}_{-2.0}$
$u_{\rm A}$	$0.236^{+0.047}_{-0.052}$	$0.070^{+0.070}_{-0.073}$	$-0.098^{+0.068}_{-0.068}$	$0.423^{+0.068}_{-0.067}$	$0.193^{+0.055}_{-0.056}$
$v_{\rm A}$		0.32 perturbed	0.56 perturbed	0.28 perturbed	0.15 perturbed
T_0	$245.81397^{+0.00042}_{-0.00047}$	$245.81391^{+0.00046}_{-0.00046}$	$245.81394^{+0.00042}_{-0.00046}$	$245.81392^{+0.00045}_{-0.00045}$	$245.81394^{+0.00042}_{-0.00046}$
$r_{\rm A}$	$0.1664^{+0.0086}_{-0.0032}$	$0.1642^{+0.0104}_{-0.0044}$	$0.1653^{+0.0090}_{-0.0028}$	$0.1649^{+0.0088}_{-0.0028}$	$0.1656^{+0.0094}_{-0.0031}$
$r_{\rm b}$	$0.01394^{+0.00079}_{-0.00035}$	$0.01367^{+0.00101}_{-0.00041}$	$0.01379^{+0.00085}_{-0.00031}$	$0.01374^{+0.00086}_{-0.00028}$	$0.01382^{+0.00092}_{-0.00031}$
σ ($m$mag)	1.7392	1.7366	1.7380	1.7374	1.7380
$\chi^2_{\rm red}$	1.0170	1.0149	1.0160	1.0154	1.0159
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.180^{+0.010}_{-0.004}$	$0.179^{+0.018}_{-0.005}$	$0.180^{+0.013}_{-0.005}$	$0.178^{+0.030}_{-0.007}$	$0.179^{+0.018}_{-0.007}$
k	$0.0837^{+0.0008}_{-0.0008}$	$0.0830^{+0.0012}_{-0.0019}$	$0.0829^{+0.0013}_{-0.0019}$	$0.0828^{+0.0016}_{-0.0052}$	$0.0829^{+0.0015}_{-0.0051}$
i (deg.)	$88.0^{+2.0}_{-1.7}$	$89.1^{+2.1}_{-2.5}$	$88.5^{+1.8}_{-2.4}$	$89.8^{+2.3}_{-3.5}$	$89.2^{+2.0}_{-2.8}$
$u_{\rm A}$	$0.24^{+0.05}_{-0.05}$	$-0.02^{+0.21}_{-0.33}$	$-0.92^{+0.98}_{-1.44}$	$0.68^{+2.03}_{-0.48}$	$0.11^{+0.14}_{-0.26}$
$v_{\rm A}$		$0.50^{+0.63}_{-0.44}$	$1.95^{+2.36}_{-1.67}$	$0.65^{+2.79}_{-0.65}$	$0.49^{+1.83}_{-0.48}$
T_0	$245.81397^{+0.00044}_{-0.00046}$	$245.81390^{+0.00046}_{-0.00047}$	$245.81389^{+0.00047}_{-0.00048}$	$245.81388^{+0.00043}_{-0.00049}$	$245.81388^{+0.00046}_{-0.00049}$
$r_{\rm A}$	$0.166^{+0.009}_{-0.004}$	$0.165^{+0.017}_{-0.005}$	$0.167^{+0.012}_{-0.005}$	$0.165^{+0.028}_{-0.006}$	$0.165^{+0.017}_{-0.007}$
$r_{\rm b}$	$0.0139^{+0.0008}_{-0.0004}$	$0.0137^{+0.0013}_{-0.0004}$	$0.0138^{+0.0012}_{-0.0003}$	$0.0136^{+0.0020}_{-0.0005}$	$0.0137^{+0.0015}_{-0.0004}$
σ ($m$mag)	1.7392	1.7359	1.7363	1.7362	1.7366
$\chi^2_{\rm red}$	1.0170	1.0155	1.0158	1.0158	1.0161

Table A59. Parameters of the JKTEBOP best fits of the FTN i-band light curve of HAT-P-4 from Winn et al. (2011), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD(UTC) $-$ 2455000.0. The light curve contains 133 binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.181^{+0.014}_{-0.004}$	$0.183^{+0.013}_{-0.004}$	$0.179^{+0.014}_{-0.005}$	$0.179^{+0.017}_{-0.005}$	$0.188^{+0.010}_{-0.010}$
k	$0.0837^{+0.0016}_{-0.0010}$	$0.0843^{+0.0011}_{-0.0009}$	$0.0841^{+0.0015}_{-0.0010}$	$0.0841^{+0.0017}_{-0.0010}$	$0.0861^{+0.0011}_{-0.0011}$
i (deg.)	$88.4^{+2.0}_{-2.3}$	$88.0^{+1.9}_{-2.3}$	$89.3^{+2.1}_{-2.3}$	$89.7^{+2.2}_{-2.6}$	$86.6^{+2.5}_{-1.4}$
$u_{\rm A}$	0.56 fixed	0.30 fixed	0.14 fixed	0.64 fixed	0.30 fixed
$v_{\rm A}$		0.31 fixed	0.56 fixed	0.27 fixed	0.15 fixed
T_0	$285.03007^{+0.00041}_{-0.00042}$	$285.03008^{+0.00038}_{-0.00040}$	$285.03017^{+0.00039}_{-0.00041}$	$285.03016^{+0.00039}_{-0.00041}$	$285.03014^{+0.00037}_{-0.00036}$
$r_{\rm A}$	$0.1672^{+0.0128}_{-0.0036}$	$0.1684^{+0.0121}_{-0.0035}$	$0.1650^{+0.0125}_{-0.0043}$	$0.1647^{+0.0155}_{-0.0042}$	$0.1731^{+0.0093}_{-0.0091}$
$r_{\rm b}$	$0.01400^{+0.00136}_{-0.00042}$	$0.01421^{+0.00122}_{-0.00038}$	$0.01387^{+0.00126}_{-0.00047}$	$0.01385^{+0.00162}_{-0.00045}$	$0.01490^{+0.00098}_{-0.00089}$
σ ($m$mag)	2.1160	2.1471	2.1364	2.1430	2.1675
$\chi^2_{\rm red}$	7.9641	8.2121	8.1264	8.1789	8.3751
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.181^{+0.022}_{-0.004}$	$0.186^{+0.018}_{-0.007}$	$0.185^{+0.018}_{-0.005}$	$0.185^{+0.019}_{-0.006}$	$0.184^{+0.020}_{-0.006}$
k	$0.0811^{+0.0032}_{-0.0017}$	$0.0807^{+0.0033}_{-0.0019}$	$0.0812^{+0.0029}_{-0.0016}$	$0.0809^{+0.0031}_{-0.0018}$	$0.0811^{+0.0027}_{-0.0019}$
i (deg.)	$89.9^{+1.7}_{-3.5}$	$88.3^{+2.5}_{-2.8}$	$88.3^{+2.0}_{-3.0}$	$88.3^{+2.3}_{-3.0}$	$88.5^{+2.2}_{-3.0}$
$u_{\rm A}$	$0.741^{+0.063}_{-0.063}$	$0.607^{+0.081}_{-0.098}$	$0.411^{+0.074}_{-0.077}$	$0.942^{+0.086}_{-0.098}$	$0.701^{+0.072}_{-0.065}$
$v_{\rm A}$		0.31 perturbed	0.56 perturbed	0.27 perturbed	0.15 perturbed
T_0	$285.02971^{+0.00049}_{-0.00046}$	$285.02963^{+0.00050}_{-0.00049}$	$285.02967^{+0.00047}_{-0.00047}$	$285.02965^{+0.00048}_{-0.00044}$	$285.02967^{+0.00046}_{-0.00047}$
$r_{\rm A}$	$0.168^{+0.019}_{-0.004}$	$0.172^{+0.016}_{-0.006}$	$0.171^{+0.016}_{-0.004}$	$0.172^{+0.017}_{-0.005}$	$0.170^{+0.018}_{-0.005}$
$r_{\rm b}$	$0.0136^{+0.0024}_{-0.0005}$	$0.0139^{+0.0021}_{-0.0007}$	$0.0139^{+0.0019}_{-0.0005}$	$0.0139^{+0.0021}_{-0.0006}$	$0.0138^{+0.0020}_{-0.0006}$
σ ($m$mag)	2.1043	2.1186	2.1102	2.1133	2.1102
$\chi^2_{\rm red}$	7.9348	8.0490	7.9826	8.0069	7.9826

Table A60. Parameters of the JKTEBOP best fits of the FLWO i-band light curve of HAT-P-4 from Winn et al. (2011), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD(UTC) $-$ 2455000.0. The light curve contains 241 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.177^{+0.025}_{-0.006}$	$0.184^{+0.021}_{-0.007}$	$0.194^{+0.021}_{-0.015}$	$0.201^{+0.021}_{-0.020}$	$0.211^{+0.018}_{-0.019}$
k	$0.0887^{+0.0033}_{-0.0016}$	$0.0904^{+0.0020}_{-0.0016}$	$0.0915^{+0.0025}_{-0.0019}$	$0.0922^{+0.0023}_{-0.0022}$	$0.0941^{+0.0019}_{-0.0018}$
i (deg.)	$89.9^{+2.0}_{-3.6}$	$87.3^{+2.5}_{-2.7}$	$85.8^{+3.9}_{-2.3}$	$84.9^{+3.2}_{-2.1}$	$83.7^{+2.0}_{-1.5}$
$u_{\rm A}$	0.56 fixed	0.30 fixed	0.14 fixed	0.64 fixed	0.30 fixed
$v_{\rm A}$		0.31 fixed	0.56 fixed	0.27 fixed	0.15 fixed
T_0	$324.76692^{+0.00073}_{-0.00078}$	$324.76696^{+0.00075}_{-0.00071}$	$324.76693^{+0.00077}_{-0.00073}$	$324.76693^{+0.00070}_{-0.00080}$	$324.76694^{+0.00074}_{-0.00068}$
$r_{\rm A}$	$0.163^{+0.022}_{-0.005}$	$0.169^{+0.019}_{-0.006}$	$0.177^{+0.019}_{-0.013}$	$0.184^{+0.019}_{-0.018}$	$0.193^{+0.016}_{-0.017}$
$r_{\rm b}$	$0.0145^{+0.0027}_{-0.0007}$	$0.0153^{+0.0020}_{-0.0008}$	$0.0162^{+0.0023}_{-0.0014}$	$0.0169^{+0.0021}_{-0.0020}$	$0.0182^{+0.0018}_{-0.0019}$
σ ($m$mag)	1.6027	1.6123	1.6090	1.6109	1.6248
$\chi^2_{\rm red}$	0.7726	0.7819	0.7786	0.7805	0.7939
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.178^{+0.025}_{-0.007}$	$0.180^{+0.034}_{-0.010}$	$0.179^{+0.025}_{-0.006}$	$0.179^{+0.031}_{-0.011}$	$0.179^{+0.026}_{-0.006}$
k	$0.0882^{+0.0031}_{-0.0023}$	$0.0876^{+0.0038}_{-0.0030}$	$0.0878^{+0.0029}_{-0.0024}$	$0.0877^{+0.0034}_{-0.0029}$	$0.0878^{+0.0031}_{-0.0024}$
i (deg.)	$89.9^{+2.0}_{-3.6}$	$89.5^{+2.9}_{-3.9}$	$90.0^{+1.8}_{-3.8}$	$89.6^{+2.8}_{-3.7}$	$90.0^{+1.7}_{-4.2}$
$u_{\rm A}$	$0.59^{+0.10}_{-0.10}$	$0.46^{+0.13}_{-0.16}$	$0.27^{+0.12}_{-0.12}$	$0.79^{+0.12}_{-0.14}$	$0.57^{+0.12}_{-0.11}$
$v_{\rm A}$		0.31 perturbed	0.56 perturbed	0.27 perturbed	0.15 perturbed
T_0	$324.76690^{+0.00081}_{-0.00068}$	$324.76690^{+0.00069}_{-0.00073}$	$324.76690^{+0.00078}_{-0.00079}$	$324.76689^{+0.00078}_{-0.00071}$	$324.76690^{+0.00072}_{-0.00078}$
$r_{\rm A}$	$0.164^{+0.023}_{-0.006}$	$0.165^{+0.031}_{-0.009}$	$0.164^{+0.022}_{-0.005}$	$0.165^{+0.028}_{-0.010}$	$0.164^{+0.023}_{-0.006}$
$r_{\rm b}$	$0.0144^{+0.0026}_{-0.0007}$	$0.0145^{+0.0035}_{-0.0010}$	$0.0144^{+0.0027}_{-0.0005}$	$0.0145^{+0.0033}_{-0.0011}$	$0.0144^{+0.0028}_{-0.0006}$
σ ($m$mag)	1.6021	1.6035	1.6022	1.6026	1.6022
$\chi^2_{\rm red}$	0.7752	0.7766	0.7753	0.7757	0.7754

Table A61. Parameters of the JKTEBOP best fits of the EPOXI light curve of HAT-P-4, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD(UTC) − 2454000.0. The light curve contains 5248 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_\mathrm{A}+r_\mathrm{b}$	$0.1950^{+0.0053}_{-0.0057}$	$0.1818^{+0.0092}_{-0.0015}$	$0.1818^{+0.0106}_{-0.0017}$	$0.1819^{+0.0092}_{-0.0017}$	$0.1859^{+0.0048}_{-0.0043}$
k	$0.08665^{+0.00075}_{-0.00080}$	$0.08538^{+0.00088}_{-0.00031}$	$0.08520^{+0.00119}_{-0.00033}$	$0.08525^{+0.00101}_{-0.00032}$	$0.08733^{+0.00046}_{-0.00043}$
i (deg.)	$86.3^{+1.0}_{-0.7}$	$90.0^{+1.1}_{-2.2}$	$90.0^{+1.3}_{-2.3}$	$89.9^{+1.3}_{-2.1}$	$87.5^{+1.1}_{-0.9}$
u_A	0.61 fixed	0.41 fixed	0.26 fixed	0.72 fixed	0.40 fixed
v_A		0.25 fixed	0.51 fixed	0.25 fixed	0.10 fixed
T_0	$508.67528^{+0.00021}_{-0.00020}$	$508.67528^{+0.00018}_{-0.00020}$	$508.67527^{+0.00018}_{-0.00020}$	$508.67528^{+0.00018}_{-0.00019}$	$508.67530^{+0.00019}_{-0.00018}$
r_A	$0.1794^{+0.0047}_{-0.0051}$	$0.1675^{+0.0068}_{-0.0013}$	$0.1675^{+0.0086}_{-0.0014}$	$0.1676^{+0.0078}_{-0.0015}$	$0.1709^{+0.0043}_{-0.0039}$
r_b	$0.01555^{+0.00052}_{-0.00060}$	$0.01430^{+0.00086}_{-0.00014}$	$0.01427^{+0.00103}_{-0.00016}$	$0.01429^{+0.00091}_{-0.00016}$	$0.01493^{+0.00044}_{-0.00042}$
σ ($m$mag)	1.4835	1.4770	1.4782	1.4775	1.4769
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_\mathrm{A}+r_\mathrm{b}$	$0.1798^{+0.0095}_{-0.0015}$	$0.1810^{+0.0064}_{-0.0021}$	$0.1807^{+0.0051}_{-0.0019}$	$0.1807^{+0.0119}_{-0.0020}$	$0.1802^{+0.0099}_{-0.0018}$
k	$0.08649^{+0.00086}_{-0.00042}$	$0.08611^{+0.00065}_{-0.00047}$	$0.08623^{+0.00056}_{-0.00043}$	$0.08610^{+0.00091}_{-0.00048}$	$0.08629^{+0.00096}_{-0.00048}$
i (deg.)	$90.0^{+1.1}_{-2.3}$	$89.5^{+1.5}_{-1.5}$	$89.5^{+1.4}_{-1.3}$	$90.0^{+1.3}_{-2.5}$	$90.0^{+1.2}_{-2.4}$
u_A	$0.467^{+0.023}_{-0.020}$	$0.345^{+0.041}_{-0.039}$	$0.169^{+0.046}_{-0.044}$	$0.643^{+0.056}_{-0.053}$	$0.443^{+0.026}_{-0.030}$
v_A		0.25 perturbed	0.51 perturbed	0.25 perturbed	0.10 perturbed
T_0	$245.81453^{+0.00060}_{-0.00062}$	$245.81460^{+0.00070}_{-0.00064}$	$285.03124^{+0.00014}_{-0.00015}$	$285.03125^{+0.00015}_{-0.00015}$	$285.03124^{+0.00016}_{-0.00015}$
r_A	$0.1655^{+0.0085}_{-0.0014}$	$0.1666^{+0.0058}_{-0.0019}$	$0.1663^{+0.0046}_{-0.0017}$	$0.1664^{+0.0106}_{-0.0018}$	$0.1659^{+0.0089}_{-0.0016}$
r_b	$0.01431^{+0.00092}_{-0.00015}$	$0.01435^{+0.00064}_{-0.00021}$	$0.01434^{+0.00050}_{-0.00020}$	$0.01432^{+0.00116}_{-0.00019}$	$0.01432^{+0.00100}_{-0.00017}$
σ ($m$mag)	1.4761	1.4759	1.4760	1.4760	1.4760
Fitting for both LD coefficients					
$r_\mathrm{A}+r_\mathrm{b}$	$0.1798^{+0.0099}_{-0.0017}$	$0.1812^{+0.0052}_{-0.0017}$	$0.1806^{+0.0173}_{-0.0025}$	$0.1807^{+0.0240}_{-0.0028}$	$0.1804^{+0.0203}_{-0.0037}$
k	$0.08649^{+0.00085}_{-0.00041}$	$0.08631^{+0.00074}_{-0.00047}$	$0.08614^{+0.00085}_{-0.00323}$	$0.08620^{+0.00076}_{-0.00432}$	$0.08621^{+0.00091}_{-0.00476}$
i (deg.)	$89.9^{+1.2}_{-2.3}$	$89.1^{+1.1}_{-1.5}$	$90.0^{+1.4}_{-2.3}$	$89.6^{+1.5}_{-2.6}$	$89.9^{+1.3}_{-2.5}$
u_A	$0.467^{+0.021}_{-0.023}$	$0.382^{+0.072}_{-0.076}$	$0.117^{+0.408}_{-2.178}$	$0.609^{+1.430}_{-0.160}$	$0.434^{+0.057}_{-0.121}$
v_A		$0.17^{+0.15}_{-0.14}$	$0.60^{+3.89}_{-0.71}$	$0.20^{+1.83}_{-0.23}$	$0.14^{+1.32}_{-0.19}$
T_0	$285.03124^{+0.00015}_{-0.00015}$	$285.03125^{+0.00016}_{-0.00015}$	$285.03124^{+0.00016}_{-0.00016}$	$285.03124^{+0.00015}_{-0.00016}$	$285.03124^{+0.00015}_{-0.00015}$
r_A	$0.1655^{+0.0090}_{-0.0015}$	$0.1668^{+0.0046}_{-0.0015}$	$0.1662^{+0.0167}_{-0.0023}$	$0.1663^{+0.0225}_{-0.0026}$	$0.1661^{+0.0196}_{-0.0034}$
r_b	$0.01431^{+0.00095}_{-0.00017}$	$0.01440^{+0.00054}_{-0.00013}$	$0.01432^{+0.00101}_{-0.00018}$	$0.01434^{+0.00125}_{-0.00022}$	$0.01432^{+0.00110}_{-0.00018}$
σ ($m$mag)	1.4761	1.4759	1.4760	1.4760	1.4760

Table A62. Final parameters of the JKTEBOP fit to the *Kepler* light curve of HAT-P-4, compared to parameters found in other studies. Quantities without quoted uncertainties were not given in other studies but have been calculated from other parameters which were.

	This work (z-band)	This work (FTN i)	This work (FLWO i)	This work (EPOCH)	**This work (final)**
$r_\mathrm{A}+r_\mathrm{b}$	$0.1788^{+0.0151}_{-0.0049}$	$0.185^{+0.057}_{-0.021}$	$0.179^{+0.039}_{-0.013}$	$0.1806^{+0.0131}_{-0.0029}$	$0.1807^{+0.0089}_{-0.0028}$
k	$0.0834^{+0.0011}_{-0.0010}$	$0.0810^{+0.0093}_{-0.0080}$	$0.0878^{+0.0047}_{-0.0027}$	$0.0862^{+0.0012}_{-0.0009}$	$0.08520^{+0.00076}_{-0.00078}$
i (°)	$88.7^{+1.3}_{-2.4}$	$88.4^{+1.6}_{-8.5}$	$89.8^{+0.2}_{-4.3}$	$89.7^{+0.3}_{-2.5}$	$89.2^{+0.8}_{-1.5}$
r_A	$0.1650^{+0.0136}_{-0.0045}$	$0.171^{+0.050}_{-0.020}$	$0.165^{+0.034}_{-0.012}$	$0.1663^{+0.0117}_{-0.0027}$	$0.1666^{+0.0080}_{-0.0027}$
r_b	$0.01376^{+0.00134}_{-0.00042}$	$0.0139^{+0.0060}_{-0.0019}$	$0.0145^{+0.0041}_{-0.0014}$	$0.01433^{+0.00129}_{-0.00029}$	$0.01431^{+0.00072}_{-0.00028}$
	Kovács et al. (2007)	TWH08	Winn et al. (2011)	Christiansen et al. (2011)	
$r_\mathrm{A}+r_\mathrm{b}$	0.1792	0.1791	0.1837	0.1815	
k	0.08200 ± 0.00044	$0.08200^{+0.00044}_{-0.00044}$	$0.08697^{+0.00052}_{-0.00045}$	0.0855 ± 0.0078	
i (°)	$89.9^{+0.1}_{-2.2}$	$89.91^{+0.09}_{-2.2}$	$88.76^{+0.89}_{-1.38}$	89.67 ± 0.30	
r_A	$0.1656^{+0.0051}_{-0.0008}$	$0.16556^{+0.00479}_{-0.00083}$	$0.1690^{+0.0064}_{-0.0051}$	0.1672 ± 0.078	
r_b	0.01358	0.01358	0.01470	0.01430	

Table A63. Derived physical properties of the HAT-P-4 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 9.42^{+0.44}_{-0.91}$ m s^{-2}, $\rho_{\rm A} = 0.310^{+0.016}_{-0.041}$ $\rho_\odot$ and $T'_{\rm eq} = 1691^{+27}_{-26}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$163.33^{+3.70}_{-3.50}$	$158.57^{+2.52}_{-2.02}$	$159.02^{+1.64}_{-2.21}$	$161.81^{+0.65}_{-0.48}$	$156.92^{+4.02}_{-0.52}$	$157.82^{+1.25}_{-0.61}$
$M_{\rm A}$ ($M_\odot$)	$1.382^{+0.096}_{-0.087}$	$1.264^{+0.061}_{-0.048}$	$1.275^{+0.040}_{-0.053}$	$1.343^{+0.016}_{-0.012}$	$1.225^{+0.096}_{-0.012}$	$1.247^{+0.030}_{-0.014}$
$R_{\rm A}$ ($R_\odot$)	$1.645^{+0.097}_{-0.046}$	$1.597^{+0.097}_{-0.036}$	$1.602^{+0.042}_{-0.037}$	$1.630^{+0.052}_{-0.029}$	$1.581^{+0.113}_{-0.028}$	$1.590^{+0.089}_{-0.030}$
$\log g_{\rm A}$ (cgs)	$4.146^{+0.016}_{-0.039}$	$4.133^{+0.014}_{-0.036}$	$4.135^{+0.013}_{-0.014}$	$4.142^{+0.014}_{-0.025}$	$4.129^{+0.015}_{-0.032}$	$4.131^{+0.013}_{-0.038}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.719^{+0.037}_{-0.035}$	$0.677^{+0.027}_{-0.023}$	$0.681^{+0.021}_{-0.025}$	$0.705^{+0.017}_{-0.017}$	$0.663^{+0.038}_{-0.016}$	$0.671^{+0.019}_{-0.017}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.375^{+0.076}_{-0.040}$	$1.335^{+0.070}_{-0.031}$	$1.339^{+0.069}_{-0.032}$	$1.362^{+0.069}_{-0.027}$	$1.321^{+0.075}_{-0.026}$	$1.329^{+0.068}_{-0.026}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.259^{+0.018}_{-0.036}$	$0.266^{+0.018}_{-0.037}$	$0.266^{+0.018}_{-0.037}$	$0.261^{+0.017}_{-0.036}$	$0.269^{+0.018}_{-0.038}$	$0.268^{+0.018}_{-0.037}$
Θ	$0.0347^{+0.0013}_{-0.0020}$	$0.0357^{+0.0012}_{-0.0020}$	$0.0356^{+0.0012}_{-0.0019}$	$0.0350^{+0.0011}_{-0.0019}$	$0.0361^{+0.0011}_{-0.0021}$	$0.0359^{+0.0011}_{-0.0019}$
a (AU)	$0.04592^{+0.00104}_{-0.00098}$	$0.04458^{+0.00071}_{-0.00057}$	$0.04471^{+0.00046}_{-0.00062}$	$0.04549^{+0.00018}_{-0.00013}$	$0.04412^{+0.00113}_{-0.00014}$	$0.04437^{+0.00035}_{-0.00017}$
Age (Gyr)		$4.2^{+0.5}_{-0.6}$	$3.9^{+0.6}_{-0.5}$	$2.8^{+0.0}_{-0.0}$	$4.2^{+0.3}_{-0.9}$	$4.5^{+0.2}_{-0.3}$

	This work (final)	Kovács et al. (2007)	TWH08	Winn et al. (2011)	Christiansen et al. (2011)
$M_{\rm A}$ ($M_\odot$)	$1.271\,^{+0.096}_{-0.053}\,^{+0.072}_{-0.046}$	$1.26^{+0.06}_{-0.14}$	$1.248^{+0.070}_{-0.12}$	1.26 ± 0.10 adopted	1.26 ± 0.14 adopted
$R_{\rm A}$ ($R_\odot$)	$1.600\,^{+0.113}_{-0.037}\,^{+0.030}_{-0.019}$	1.59 ± 0.07	$1.596^{+0.060}_{-0.075}$	$1.617^{+0.057}_{-0.050}$	1.602 ± 0.061
$\log g_{\rm A}$ (cgs)	$4.134\,^{+0.015}_{-0.038}\,^{+0.008}_{-0.005}$	$4.14^{+0.01}_{-0.04}$	$4.127^{+0.019}_{-0.027}$		
$\rho_{\rm A}$ ($\rho_\odot$)	$0.310^{+0.016}_{-0.041}$		$0.317^{+0.005}_{-0.028}$		
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.680\,^{+0.038}_{-0.025}\,^{+0.026}_{-0.016}$	0.68 ± 0.04	$0.671^{+0.033}_{-0.044}$	0.556 ± 0.068	0.68 ± 0.04 adopted
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.337\,^{+0.075}_{-0.032}\,^{+0.025}_{-0.016}$	1.27 ± 0.05	$1.274^{+0.049}_{-0.060}$	$1.367^{+0.052}_{-0.044}$	1.332 ± 0.052
$g_{\rm b}$ (m s^{-1})	$9.42^{+0.44}_{-0.91}$	10.47 ± 0.48	$10.47^{+0.39}_{-0.54}$		
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.266\,^{+0.018}_{-0.038}\,^{+0.003}_{-0.005}$	0.31 ± 0.05	$0.304^{+0.049}_{-0.037}$		
$T'_{\rm eq}$ (K)	1691^{+46}_{-26}		1686^{+30}_{-26}		
Θ	$0.0357\,^{+0.0012}_{-0.0021}\,^{+0.0004}_{-0.0007}$		$0.0378^{+0.0016}_{-0.0014}$		
a (AU)	$0.04465\,^{+0.00113}_{-0.00062}\,^{+0.00084}_{-0.00054}$	0.0446 ± 0.0012	$0.04438^{+0.00081}_{-0.0015}$		
Age (Gyr)	$3.9\,^{+0.6}_{-0.9}\,^{+0.6}_{-1.1}$	$4.2^{+2.6}_{-0.6}$	$4.6^{+2.2}_{-1.0}$		

Table A64. Parameters of the JKTEBOP best fits of the *Kepler* light curve of HAT-P-7, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 633 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.25848 ± 0.00048	0.25289 ± 0.00044	0.25756 ± 0.00043	0.25305 ± 0.00050	0.26768 ± 0.00038
k	0.076926 ± 0.000040	0.076478 ± 0.000029	0.077110 ± 0.000028	0.076446 ± 0.000034	0.078211 ± 0.000021
i (deg.)	83.350 ± 0.055	84.017 ± 0.055	83.366 ± 0.050	84.014 ± 0.062	82.083 ± 0.038
$u_{\rm A}$	0.56 fixed	0.30 fixed	0.09 fixed	0.67 fixed	0.30 fixed
$v_{\rm A}$		0.31 fixed	0.61 fixed	0.27 fixed	0.15 fixed
$r_{\rm A}$	0.24001 ± 0.00044	0.23492 ± 0.00041	0.23912 ± 0.00039	0.23508 ± 0.00045	0.24826 ± 0.00034
$r_{\rm b}$	0.018463 ± 0.000042	0.017966 ± 0.000037	0.018439 ± 0.000036	0.017971 ± 0.000042	0.019417 ± 0.000031
σ ($m$mag)	0.0733	0.0355	0.0319	0.0403	0.0688
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.26036 ± 0.00043	0.25599 ± 0.00089	0.25766 ± 0.00052	0.25663 ± 0.00092	0.25761 ± 0.00115
k	0.077701 ± 0.000034	0.076839 ± 0.000180	0.077122 ± 0.000068	0.076959 ± 0.000189	0.077179 ± 0.000234
i (deg.)	82.943 ± 0.047	83.583 ± 0.135	83.353 ± 0.066	83.490 ± 0.143	83.345 ± 0.175
$u_{\rm A}$	0.460 ± 0.002	0.273 ± 0.039	0.089 ± 0.041	0.628 ± 0.045	0.410 ± 0.022
$v_{\rm A}$		0.31 perturbed	0.61 perturbed	0.27 perturbed	0.15 perturbed
$r_{\rm A}$	0.24159 ± 0.00039	0.23772 ± 0.00080	0.23921 ± 0.00047	0.23829 ± 0.00083	0.23915 ± 0.00101
$r_{\rm b}$	0.018772 ± 0.000038	0.018266 ± 0.000100	0.018449 ± 0.000049	0.018339 ± 0.000107	0.018457 ± 0.000133
σ ($m$mag)	0.0345	0.0327	0.0319	0.0324	0.0315
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.26036 ± 0.00041	0.25739 ± 0.00051	0.25716 ± 0.00051	0.25738 ± 0.00051	0.25701 ± 0.00054
k	0.077701 ± 0.000031	0.077146 ± 0.000054	0.077011 ± 0.000063	0.077114 ± 0.000060	0.077056 ± 0.000058
i (deg.)	82.943 ± 0.047	83.363 ± 0.064	83.433 ± 0.067	83.375 ± 0.063	83.439 ± 0.067
$u_{\rm A}$	0.4595 ± 0.0016	0.3406 ± 0.0084	0.0191 ± 0.0332	0.5913 ± 0.0117	0.3989 ± 0.0042
$v_{\rm A}$		0.194 ± 0.014	0.726 ± 0.056	0.213 ± 0.018	0.186 ± 0.013
$r_{\rm A}$	0.24159 ± 0.00038	0.23895 ± 0.00046	0.23877 ± 0.00046	0.23895 ± 0.00047	0.23862 ± 0.00049
$r_{\rm b}$	0.018772 ± 0.000036	0.018434 ± 0.000048	0.018388 ± 0.000049	0.018427 ± 0.000048	0.018387 ± 0.000049
σ ($m$mag)	0.0345	0.0316	0.0318	0.0322	0.0314

Table A65. Parameters of the JKTEBOP best fits of the HAT-P-7 i-band light curve from Winn et al. (2009a), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD(UTC) $-$ 2454000.0. The light curve contains 630 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.276 ± 0.016	0.240 ± 0.013	0.274 ± 0.016	0.250 ± 0.017	0.287 ± 0.013
k	0.08228 ± 0.00142	0.07980 ± 0.00096	0.08210 ± 0.00122	0.08042 ± 0.00112	0.08324 ± 0.00088
i (deg.)	81.7 ± 1.7	86.4 ± 3.0	81.9 ± 1.7	84.8 ± 2.6	80.4 ± 1.2
$u_{\rm A}$	0.51 fixed	0.23 fixed	0.06 fixed	0.61 fixed	0.20 fixed
$v_{\rm A}$		0.34 fixed	0.60 fixed	0.29 fixed	0.15 fixed
T_0	731.67931 ± 0.00043	731.67917 ± 0.00041	731.67927 ± 0.00042	731.67918 ± 0.00042	731.67925 ± 0.00045
$r_{\rm A}$	0.255 ± 0.015	0.222 ± 0.012	0.253 ± 0.015	0.231 ± 0.015	0.265 ± 0.012
$r_{\rm b}$	0.0210 ± 0.0015	0.0177 ± 0.0011	0.0208 ± 0.0015	0.0186 ± 0.0014	0.0221 ± 0.0011
σ ($m$mag)	1.4746	1.4629	1.4649	1.4642	1.4563
$\chi^2_{\rm red}$	1.0004	0.9849	0.9874	0.9866	0.9761
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.286 ± 0.013	0.287 ± 0.015	0.287 ± 0.015	0.288 ± 0.015	0.286 ± 0.014
k	0.08352 ± 0.00088	0.08294 ± 0.00079	0.08319 ± 0.00089	0.08309 ± 0.00087	0.08322 ± 0.00084
i (deg.)	80.5 ± 1.2	80.4 ± 1.4	80.4 ± 1.3	80.3 ± 1.4	80.4 ± 1.3
$u_{\rm A}$	0.214 ± 0.081	-0.052 ± 0.116	-0.178 ± 0.106	0.350 ± 0.103	0.137 ± 0.099
$v_{\rm A}$		0.34 perturbed	0.60 perturbed	0.29 perturbed	0.15 perturbed
T_0	731.67921 ± 0.00042	731.67923 ± 0.00042	731.67921 ± 0.00042	731.67923 ± 0.00043	731.67922 ± 0.00041
$r_{\rm A}$	0.264 ± 0.012	0.265 ± 0.014	0.265 ± 0.013	0.266 ± 0.014	0.264 ± 0.013
$r_{\rm b}$	0.0220 ± 0.0012	0.0220 ± 0.0012	0.0220 ± 0.0012	0.0221 ± 0.0013	0.0220 ± 0.0012
σ ($m$mag)	1.4556	1.4554	1.4554	1.4554	1.4554
$\chi^2_{\rm red}$	0.9768	0.9766	0.9766	0.9766	0.9766
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.286 ± 0.014	0.251 ± 0.021	0.286 ± 0.018	0.257 ± 0.023	0.258 ± 0.022
k	0.0835 ± 0.0008	0.0797 ± 0.0024	0.0826 ± 0.0027	0.0785 ± 0.0031	0.0783 ± 0.0032
i (deg.)	80.5 ± 1.3	84.9 ± 4.0	80.5 ± 1.7	84.6 ± 3.2	84.7 ± 2.9
$u_{\rm A}$	0.21 ± 0.08	-0.39 ± 0.44	-0.85 ± 2.36	1.64 ± 0.92	-0.08 ± 0.29
$v_{\rm A}$		1.25 ± 0.89	1.65 ± 3.84	1.97 ± 1.37	1.55 ± 1.05
T_0	731.67921 ± 0.00041	731.67919 ± 0.00040	731.67923 ± 0.00040	731.67920 ± 0.00039	731.67921 ± 0.00043
$r_{\rm A}$	0.264 ± 0.013	0.233 ± 0.019	0.264 ± 0.016	0.238 ± 0.021	0.239 ± 0.021
$r_{\rm b}$	0.0220 ± 0.0012	0.0186 ± 0.0018	0.0218 ± 0.0016	0.0187 ± 0.0020	0.0187 ± 0.0019
σ ($m$mag)	1.4556	1.4557	1.4555	1.4554	1.4552
$\chi^2_{\rm red}$	0.9768	0.9785	0.9783	0.9780	0.9778

Table A66. Parameters of the JKTEBOP best fits of the EPOXI light curve of HAT-P-7, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD(UTC) − 2454000.0. The light curve contains 5248 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_\mathrm{A} + r_\mathrm{b}$	0.2541 ± 0.0058	0.2595 ± 0.0057	0.2627 ± 0.0057	0.2563 ± 0.0058	0.2861 ± 0.0047
k	0.07713 ± 0.00051	0.07741 ± 0.00038	0.07797 ± 0.00038	0.07720 ± 0.00041	0.07962 ± 0.00028
i (deg.)	83.78 ± 0.72	83.14 ± 0.63	82.70 ± 0.61	83.52 ± 0.68	80.25 ± 0.41
u_A	0.56 fixed	0.30 fixed	0.09 fixed	0.67 fixed	0.30 fixed
v_A		0.31 fixed	0.61 fixed	0.27 fixed	0.15 fixed
T_0	700.81305 ± 0.00013	700.81307 ± 0.00013	700.81307 ± 0.00014	700.81306 ± 0.00014	700.81312 ± 0.00014
r_A	0.2359 ± 0.0053	0.2408 ± 0.0053	0.2437 ± 0.0052	0.2379 ± 0.0053	0.2650 ± 0.0043
r_b	0.01819 ± 0.00053	0.01864 ± 0.00050	0.01900 ± 0.00049	0.01836 ± 0.00050	0.02110 ± 0.00040
σ ($m$mag)	1.0164	1.0167	1.0176	1.0164	1.0222
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_\mathrm{A} + r_\mathrm{b}$	0.2550 ± 0.0059	0.2526 ± 0.0079	0.2535 ± 0.0067	0.2530 ± 0.0065	0.2531 ± 0.0065
k	0.07731 ± 0.00052	0.07649 ± 0.00071	0.07674 ± 0.00062	0.07661 ± 0.00063	0.07678 ± 0.00066
i (deg.)	83.63 ± 0.70	84.10 ± 1.05	83.95 ± 0.85	84.02 ± 0.86	83.97 ± 0.86
u_A	0.546 ± 0.020	0.367 ± 0.042	0.179 ± 0.044	0.719 ± 0.051	0.500 ± 0.027
v_A		0.31 perturbed	0.61 perturbed	0.27 perturbed	0.15 perturbed
T_0	700.81305 ± 0.00014	700.81306 ± 0.00014	700.81306 ± 0.00014	700.81306 ± 0.00014	700.81306 ± 0.00013
r_A	0.2367 ± 0.0054	0.2347 ± 0.0072	0.2354 ± 0.0061	0.2350 ± 0.0060	0.2351 ± 0.0059
r_b	0.01830 ± 0.00052	0.01795 ± 0.00069	0.01806 ± 0.00060	0.01800 ± 0.00059	0.01805 ± 0.00060
σ ($m$mag)	1.0164	1.0159	1.0160	1.0159	1.0160
Fitting for both LD coefficients					
$r_\mathrm{A} + r_\mathrm{b}$	0.2550 ± 0.0059	0.2527 ± 0.0080	0.2486 ± 0.0083	0.2492 ± 0.0081	0.2489 ± 0.0083
k	0.07731 ± 0.00055	0.07650 ± 0.00091	0.07551 ± 0.00143	0.07579 ± 0.00119	0.07584 ± 0.00127
i (deg.)	83.6 ± 0.7	84.1 ± 1.1	84.9 ± 1.4	84.7 ± 1.3	84.7 ± 1.4
u_A	0.546 ± 0.021	0.367 ± 0.095	-0.393 $\pm$ 0.485	0.872 ± 0.182	0.451 ± 0.045
v_A		0.31 ± 0.17	1.60 ± 0.88	0.49 ± 0.24	0.36 ± 0.21
T_0	700.81305 ± 0.00014	700.81306 ± 0.00013	700.81306 ± 0.00014	700.81306 ± 0.00014	700.81306 ± 0.00014
r_A	0.2367 ± 0.0053	0.2348 ± 0.0073	0.2312 ± 0.0076	0.2317 ± 0.0073	0.2314 ± 0.0075
r_b	0.01830 ± 0.00053	0.01796 ± 0.00074	0.01745 ± 0.00081	0.01756 ± 0.00080	0.01755 ± 0.00083
σ ($m$mag)	1.0164	1.0160	1.0159	1.0158	1.0159

Table A67. Final parameters of the JKTEBOP fit to the *Kepler* light curve of HAT-P-7, compared to parameters found in other studies. Quantities without quoted uncertainties were not given in other studies but have been calculated from other parameters which were.

	This work (*Kepler*)	This work (i-band)	This work (EPOCH)	**This work (final)**
$r_\mathrm{A} + r_\mathrm{b}$	0.2572 ± 0.0011	0.287 ± 0.017	0.253 ± 0.012	0.2572 ± 0.0010
k	0.07709 ± 0.00012	0.0831 ± 0.0010	0.0767 ± 0.0011	0.07708 ± 0.00012
i (°)	83.40 ± 0.12	80.4 ± 1.5	84.0 ± 1.5	83.40 ± 0.12
r_A	0.23883 ± 0.00096	0.265 ± 0.015	0.2351 ± 0.011	0.23880 ± 0.00095
r_b	0.018410 ± 0.000090	0.0220 ± 0.0014	0.0180 ± 0.0010	0.018401 ± 0.000090
	Pál et al. (2008)	Winn et al. (2009a)	Christiansen et al. (2010)	Welsh et al. (2010)
$r_\mathrm{A} + r_\mathrm{b}$	0.248	0.284		0.2596
k	0.0762 ± 0.0012	$0.0834^{+0.0012}_{-0.0021}$		0.0778 ± 0.0003
i (°)	$85.7^{+3.5}_{-3.1}$	$80.8^{+2.8}_{-1.2}$	$85.7^{+3.5}_{-2.2}$	83.1 ± 0.5
r_A	$0.230^{+0.018}_{-0.016}$	$0.262^{+0.011}_{-0.030}$		0.2409
r_b	0.0175	0.0219		0.01874

Table A68. Derived physical properties of the HAT-P-7 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 20.77 \pm 0.33\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.2023 \pm 0.0024\,\rho_\odot$ and $T'_{\rm eq} = 2194 \pm 27\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	190.6 ± 4.6	186.4 ± 1.3	186.9 ± 1.5	187.0 ± 1.4	185.7 ± 1.3	185.6 ± 1.6
$M_{\rm A}$ ($M_\odot$)	1.618 ± 0.117	1.512 ± 0.032	1.524 ± 0.037	1.528 ± 0.034	1.497 ± 0.031	1.493 ± 0.039
$R_{\rm A}$ ($R_\odot$)	2.000 ± 0.049	1.955 ± 0.017	1.960 ± 0.018	1.962 ± 0.017	1.948 ± 0.016	1.947 ± 0.019
$\log g_{\rm A}$ (cgs)	4.0453 ± 0.0110	4.0355 ± 0.0043	4.0366 ± 0.0047	4.0370 ± 0.0045	4.0340 ± 0.0044	4.0337 ± 0.0049
$M_{\rm b}$ ($M_{\rm Jup}$)	1.883 ± 0.094	1.800 ± 0.034	1.809 ± 0.037	1.812 ± 0.035	1.787 ± 0.033	1.785 ± 0.038
$R_{\rm b}$ ($R_{\rm Jup}$)	1.499 ± 0.037	1.466 ± 0.013	1.469 ± 0.014	1.471 ± 0.013	1.461 ± 0.012	1.460 ± 0.015
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.523 ± 0.016	0.535 ± 0.011	0.533 ± 0.011	0.533 ± 0.011	0.536 ± 0.011	0.537 ± 0.011
Θ	0.06038 ± 0.00166	0.06176 ± 0.00093	0.06160 ± 0.00096	0.06154 ± 0.00093	0.06197 ± 0.00093	0.06201 ± 0.00098
a (AU)	0.03893 ± 0.00094	0.03806 ± 0.00027	0.03816 ± 0.00031	0.03820 ± 0.00028	0.03793 ± 0.00027	0.03791 ± 0.00033
Age (Gyr)		$2.0^{+0.3}_{-0.3}$	$2.0^{+0.3}_{-0.3}$	$1.8^{+0.3}_{-0.2}$	$1.9^{+0.2}_{-0.3}$	$2.2^{+0.4}_{-0.3}$

	This work (final)	Pál et al. (2008)	Christiansen et al. (2010)	Welsh et al. (2010)	Christensen-Dalsgaard et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$1.511 \pm 0.039 \pm 0.017$	$1.47^{+0.08}_{-0.05}$	1.47 ± 0.08 adopted	1.53 ± 0.04	1.520 ± 0.036
$R_{\rm A}$ ($R_\odot$)	$1.955 \pm 0.019 \pm 0.007$	$1.84^{+0.23}_{-0.1}1$	1.824 ± 0.089	1.98 ± 0.02	1.991 ± 0.018
$\log g_{\rm A}$ (cgs)	$4.0354 \pm 0.0049 \pm 0.0017$	$4.07^{+0.04}_{-0.0}8$			
$\rho_{\rm A}$ ($\rho_\odot$)	0.2023 ± 0.0024				0.1926 ± 0.0023
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.799 \pm 0.038 \pm 0.014$	$1.776^{+0.077}_{-0.049}$	1.776 ± 0.077 adopted	1.82 ± 0.03	
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.465 \pm 0.015 \pm 0.006$	$1.363^{+0.195}_{-0.087}$	1.342 ± 0.068	1.50 ± 0.02	
$g_{\rm b}$ (m s^{-1})	20.77 ± 0.33	$20.4^{+4.1}_{-3.4}$			
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.535 \pm 0.011 \pm 0.002$	$0.66^{+0.13}_{-0.18}$			
$T'_{\rm eq}$ (K)	2194 ± 27			2885 ± 100	
Θ	$0.06178 \pm 0.00098 \pm 0.00024$				
a (AU)	$0.03805 \pm 0.00033 \pm 0.00015$	0.0377 ± 0.0005		0.03824 ± 0.00009	
Age (Gyr)	$2.0\,^{+0.4\ +0.3}_{-0.3\ -0.2}$	2.2 ± 1.0			

Table A69. Parameters of the JKTEBOP best fits of the *Kepler* light curve of HAT-P-11, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD $-$ 2454000.0. The light curve contains 12532 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.06708 ± 0.00044	0.06431 ± 0.00079	0.06521 ± 0.00045	0.06458 ± 0.00080	0.06545 ± 0.00042
k	0.05880 ± 0.00013	0.05820 ± 0.00022	0.05861 ± 0.00012	0.05786 ± 0.00023	0.05901 ± 0.00011
i (deg.)	88.93 ± 0.09	89.92 ± 0.36	89.35 ± 0.14	89.93 ± 0.37	89.22 ± 0.11
$u_{\rm A}$	0.70 fixed	0.60 fixed	0.45 fixed	0.80 fixed	0.60 fixed
$v_{\rm A}$		0.12 fixed	0.33 fixed	0.15 fixed	0.06 fixed
T_0	957.812592 ± 0.000016	957.812542 ± 0.000022	957.812503 ± 0.000024	957.812484 ± 0.000034	957.812569 ± 0.000014
$r_{\rm A}$	0.06336 ± 0.00041	0.06077 ± 0.00074	0.06160 ± 0.00041	0.06105 ± 0.00074	0.06180 ± 0.00039
$r_{\rm b}$	0.003725 ± 0.000032	0.003537 ± 0.000055	0.003610 ± 0.000032	0.003532 ± 0.000057	0.003647 ± 0.000029
σ ($m$mag)	0.1414	0.1391	0.1388	0.1405	0.1392
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.06615 ± 0.00041	0.06489 ± 0.00067	0.06523 ± 0.00051	0.06483 ± 0.00064	0.06548 ± 0.00083
k	0.05911 ± 0.00012	0.05858 ± 0.00027	0.05867 ± 0.00015	0.05851 ± 0.00027	0.05881 ± 0.00036
i (deg.)	89.05 ± 0.09	89.45 ± 0.31	89.34 ± 0.16	89.49 ± 0.34	89.24 ± 0.28
$u_{\rm A}$	0.638 ± 0.003	0.578 ± 0.032	0.445 ± 0.039	0.743 ± 0.050	0.623 ± 0.017
$v_{\rm A}$		0.12 perturbed	0.33 perturbed	0.15 perturbed	0.06 perturbed
T_0	957.812526 ± 0.000024	957.812497 ± 0.000029	957.812504 ± 0.000026	957.812495 ± 0.000027	957.812511 ± 0.000029
$r_{\rm A}$	0.06245 ± 0.00038	0.06130 ± 0.00061	0.06161 ± 0.00047	0.06124 ± 0.00058	0.06184 ± 0.00077
$r_{\rm b}$	0.003692 ± 0.000030	0.003591 ± 0.000053	0.003615 ± 0.000037	0.003583 ± 0.000051	0.003637 ± 0.000067
σ ($m$mag)	0.1390	0.1388	0.1388	0.1387	0.1388
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.06615 ± 0.00044	0.06419 ± 0.00111	0.06674 ± 0.00093	0.06786 ± 0.00086	0.06658 ± 0.00063
k	0.05911 ± 0.00012	0.05837 ± 0.00017	0.05619 ± 0.00042	0.05631 ± 0.00018	0.05623 ± 0.00035
i (deg.)	89.05 ± 0.10	89.94 ± 0.39	89.76 ± 0.29	89.33 ± 0.25	89.93 ± 0.30
$u_{\rm A}$	0.6379 ± 0.0029	0.5767 ± 0.0114	-1.0920 ± 0.2519	1.5495 ± 0.0399	0.5494 ± 0.0067
$v_{\rm A}$		0.125 ± 0.022	3.146 ± 0.477	1.133 ± 0.051	0.821 ± 0.078
T_0	957.812526 ± 0.000025	957.812483 ± 0.000033	957.812488 ± 0.000027	957.812505 ± 0.000028	957.812487 ± 0.000031
$r_{\rm A}$	0.06245 ± 0.00041	0.06065 ± 0.00103	0.06319 ± 0.00090	0.06424 ± 0.00081	0.06303 ± 0.00059
$r_{\rm b}$	0.003692 ± 0.000031	0.003540 ± 0.000059	0.003551 ± 0.000036	0.003617 ± 0.000052	0.003544 ± 0.000038
σ ($m$mag)	0.1390	0.1388	0.1411	0.1429	0.1414

Table A70. Parameters of the JKTEBOP best fits of the HAT-P-11 z-band light curve from Bakos et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 411 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.0651 ± 0.0024	0.0630 ± 0.0021	0.0629 ± 0.0021	0.0629 ± 0.0021	0.0625 ± 0.0020
k	0.05677 ± 0.00055	0.05655 ± 0.00038	0.05664 ± 0.00045	0.05667 ± 0.00041	0.05753 ± 0.00030
i (deg.)	89.07 ± 0.55	89.99 ± 0.62	89.92 ± 0.62	89.94 ± 0.62	89.93 ± 0.61
$u_{\rm A}$	0.57 fixed	0.35 fixed	0.21 fixed	0.64 fixed	0.30 fixed
$v_{\rm A}$		0.28 fixed	0.48 fixed	0.23 fixed	0.15 fixed
$r_{\rm A}$	0.0616 ± 0.0022	0.0597 ± 0.0019	0.0595 ± 0.0020	0.0596 ± 0.0019	0.0591 ± 0.0019
$r_{\rm b}$	0.00350 ± 0.00016	0.00337 ± 0.00013	0.00337 ± 0.00014	0.00338 ± 0.00013	0.00340 ± 0.00012
σ ($m$mag)	0.8604	0.8594	0.8587	0.8589	0.8619
$\chi^2_{\rm red}$	19.2076	19.1608	19.1315	19.1408	19.2776
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.0627 ± 0.0026	0.0649 ± 0.0023	0.0635 ± 0.0017	0.0629 ± 0.0024	0.0630 ± 0.0022
k	0.05684 ± 0.00054	0.05699 ± 0.00051	0.05680 ± 0.00039	0.05666 ± 0.00050	0.05670 ± 0.00049
i (deg.)	90.00 ± 0.68	89.11 ± 0.59	89.50 ± 0.55	89.95 ± 0.66	89.79 ± 0.64
$u_{\rm A}$	0.486 ± 0.020	0.333 ± 0.039	0.204 ± 0.043	0.641 ± 0.048	0.445 ± 0.026
$v_{\rm A}$		0.28 perturbed	0.48 perturbed	0.23 perturbed	0.15 perturbed
$r_{\rm A}$	0.0593 ± 0.0024	0.0614 ± 0.0022	0.0601 ± 0.0016	0.0596 ± 0.0022	0.0596 ± 0.0021
$r_{\rm b}$	0.00337 ± 0.00016	0.00350 ± 0.00015	0.00341 ± 0.00011	0.00337 ± 0.00016	0.00338 ± 0.00014
σ ($m$mag)	0.8583	0.8602	0.8590	0.8589	0.8589
$\chi^2_{\rm red}$	19.1558	19.2465	19.1908	19.1877	19.1841

Table A71. Final parameters of the JKTEBOP fit to the *Kepler* and z-band light curve of HAT-P-11, compared to parameters found in other studies. Quantities without quoted uncertainties were not given in other studies but have been calculated from other parameters which were.

	This work (*Kepler*)	This work (z-band)	**This work (final)**
$r_\mathrm{A} + r_\mathrm{b}$	0.06510 ± 0.00089	0.0636 ± 0.0115	0.06508 ± 0.00088
k	0.05863 ± 0.00037	0.0568 ± 0.0024	0.05860 ± 0.00037
i (°)	89.35 ± 0.36	$89.56^{+0.44}_{-3.19}$	89.36 ± 0.36
r_A	0.06148 ± 0.00082	0.0601 ± 0.0108	0.06148 ± 0.00082
r_b	0.003606 ± 0.000071	0.00341 ± 0.00075	0.003604 ± 0.000071
	Bakos et al. (2010)	Dittmann et al. (2009)	Hirano et al. (2011)
$r_\mathrm{A} + r_\mathrm{b}$	0.0724		0.0712
k	0.0576 ± 0.0009	0.0621 ± 0.0011	0.0576 ± 0.0090
i (°)	88.5 ± 0.6		$89.17^{+0.46}_{-0.60}$
r_A	$0.06849^{+0.0060}_{-0.0090}$		0.0673 ± 0.0018
r_b	0.00395		0.00388

Table A72. Derived physical properties of the HAT-P-11 system. The upper part of the table contains the individual results from this work; in each case $g_\mathrm{b} = 13.2 \pm 1.1\,\mathrm{m\,s^{-2}}$, $\rho_\mathrm{A} = 2.415 \pm 0.097\,\rho_\odot$ and $T'_\mathrm{eq} = 838 \pm 10$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
K_b ($\mathrm{km\,s^{-1}}$)	121.6 ± 2.9	120.1 ± 1.1	119.3 ± 1.1	119.7 ± 1.7	119.0 ± 1.0	119.8 ± 1.0
M_A ($\mathrm{M_\odot}$)	0.8534 ± 0.0574	0.8228 ± 0.0133	0.8069 ± 0.0104	0.8157 ± 0.0259	0.7998 ± 0.0086	0.8163 ± 0.0101
R_A ($\mathrm{R_\odot}$)	0.707 ± 0.019	0.698 ± 0.011	0.694 ± 0.012	0.696 ± 0.014	0.692 ± 0.011	0.697 ± 0.011
$\log g_\mathrm{A}$ (cgs)	4.671 ± 0.015	4.665 ± 0.011	4.662 ± 0.010	4.664 ± 0.012	4.661 ± 0.011	4.664 ± 0.011
M_b ($\mathrm{M_{Jup}}$)	0.0868 ± 0.0077	0.0847 ± 0.0066	0.0836 ± 0.0064	0.0842 ± 0.0068	0.0831 ± 0.0064	0.0842 ± 0.0065
R_b ($\mathrm{R_{Jup}}$)	0.4032 ± 0.0120	0.3983 ± 0.0081	0.3958 ± 0.0080	0.3972 ± 0.0092	0.3946 ± 0.0079	0.3973 ± 0.0080
ρ_b (ρ_Jup)	1.24 ± 0.12	1.25 ± 0.12	1.26 ± 0.12	1.26 ± 0.12	1.26 ± 0.12	1.26 ± 0.12
Θ	0.0269 ± 0.0022	0.0273 ± 0.0022	0.0274 ± 0.0022	0.0273 ± 0.0022	0.0275 ± 0.0022	0.0273 ± 0.0022
a (AU)	0.05347 ± 0.00120	0.05282 ± 0.00028	0.05248 ± 0.00023	0.05267 ± 0.00056	0.05232 ± 0.00019	0.05268 ± 0.00022
Age (Gyr)		$1.0^{+0.0}_{-0.0}$	$1.0^{+0.0}_{-0.0}$	$1.0^{+5.0}_{-0.0}$	$1.0^{+0.0}_{-0.0}$	$1.0^{+0.0}_{-0.0}$

	This work (final)	Bakos et al. (2010)	Dittmann et al. (2009)	Christensen-Dalsgaard et al. (2010)
M_A ($\mathrm{M_\odot}$)	$0.812 \pm 0.026 \pm 0.012$	$0.809^{+0.020}_{-0.027}$		
R_A ($\mathrm{R_\odot}$)	$0.695 \pm 0.014 \pm 0.004$	0.752 ± 0.021		
$\log g_\mathrm{A}$ (cgs)	$4.663 \pm 0.012 \pm 0.002$	4.59 ± 0.03		
ρ_A ($\rho_\odot$)	2.415 ± 0.097			1.7846 ± 0.0006
M_b ($\mathrm{M_{Jup}}$)	$0.0840 \pm 0.0068 \pm 0.0009$	0.081 ± 0.009		
R_b ($\mathrm{R_{Jup}}$)	$0.3966 \pm 0.0092 \pm 0.0020$	0.422 ± 0.014	0.452 ± 0.020	
g_b ($\mathrm{m\,s^{-1}}$)	13.2 ± 1.1	11.2 ± 1.6		
ρ_b (ρ_Jup)	$1.26 \pm 0.12 \pm 0.01$	1.00 ± 0.15		
T'_eq (K)	838 ± 10	878 ± 15		
Θ	$0.0274 \pm 0.0022 \pm 0.0001$	0.025 ± 0.003		
a (AU)	$0.05259 \pm 0.00056 \pm 0.00027$	$0.0530^{+0.0002}_{-0.0008}$		
Age (Gyr)	unconstrained	$6.5^{+5.9}_{-4.1}$		

Table A73. Parameters of the JKTEBOP best fits of the HD 17156 $(b+y)/2$-band light curve from Winn et al. (2009c), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 523 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.0417^{+0.0094}_{-0.0019}$	$0.0410^{+0.0076}_{-0.0023}$	$0.0401^{+0.0086}_{-0.0015}$	$0.0401^{+0.0076}_{-0.0016}$	$0.0397^{+0.0084}_{-0.0019}$
k	$0.0709^{+0.0049}_{-0.0020}$	$0.0685^{+0.0034}_{-0.0018}$	$0.0701^{+0.0033}_{-0.0020}$	$0.0700^{+0.0035}_{-0.0017}$	$0.0710^{+0.0031}_{-0.0017}$
i (deg.)	$88.2^{+1.8}_{-3.1}$	$89.7^{+1.9}_{-2.5}$	$90.0^{+1.3}_{-3.1}$	$89.9^{+1.3}_{-2.8}$	$89.9^{+1.7}_{-2.8}$
$u_{\rm A}$	0.68 fixed	0.55 fixed	0.35 fixed	0.78 fixed	0.50 fixed
$v_{\rm A}$		0.42 fixed	0.50 fixed	0.18 fixed	0.20 fixed
T_0	$459.69942^{+0.00088}_{-0.00110}$	$459.69972^{+0.00090}_{-0.00097}$	$459.69955^{+0.00091}_{-0.00103}$	$459.69958^{+0.00086}_{-0.00111}$	$459.69936^{+0.00080}_{-0.00099}$
$r_{\rm A}$	$0.0389^{+0.0086}_{-0.0017}$	$0.0384^{+0.0070}_{-0.0021}$	$0.0374^{+0.0079}_{-0.0014}$	$0.0375^{+0.0069}_{-0.0015}$	$0.0371^{+0.0077}_{-0.0017}$
$r_{\rm b}$	$0.00276^{+0.00088}_{-0.00016}$	$0.00263^{+0.00064}_{-0.00019}$	$0.00263^{+0.00074}_{-0.00014}$	$0.00263^{+0.00064}_{-0.00014}$	$0.00263^{+0.00072}_{-0.00016}$
σ ($m$mag)	2.3109	2.3140	2.3085	2.3091	2.3045
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.0405^{+0.0080}_{-0.0017}$	$0.0394^{+0.0072}_{-0.0015}$	$0.0401^{+0.0078}_{-0.0019}$	$0.0400^{+0.0089}_{-0.0018}$	$0.0395^{+0.0086}_{-0.0025}$
k	$0.0732^{+0.0020}_{-0.0022}$	$0.0722^{+0.0020}_{-0.0020}$	$0.0728^{+0.0022}_{-0.0020}$	$0.0728^{+0.0023}_{-0.0022}$	$0.0725^{+0.0022}_{-0.0023}$
i (deg.)	$88.4^{+1.7}_{-2.8}$	$90.0^{+1.3}_{-2.8}$	$88.7^{+1.7}_{-2.8}$	$88.7^{+1.6}_{-3.1}$	$89.2^{+2.1}_{-2.8}$
$u_{\rm A}$	$0.39^{+0.15}_{-0.19}$	$0.18^{+0.17}_{-0.21}$	$0.09^{+0.17}_{-0.18}$	$0.51^{+0.17}_{-0.19}$	$0.34^{+0.16}_{-0.21}$
$v_{\rm A}$		0.42 perturbed	0.50 perturbed	0.18 perturbed	0.20 perturbed
T_0	$459.69908^{+0.00077}_{-0.00092}$	$459.69924^{+0.00074}_{-0.00089}$	$459.69913^{+0.00078}_{-0.00089}$	$459.69914^{+0.00080}_{-0.00097}$	$459.69918^{+0.00079}_{-0.00098}$
$r_{\rm A}$	$0.0377^{+0.0073}_{-0.0016}$	$0.0367^{+0.0066}_{-0.0015}$	$0.0374^{+0.0073}_{-0.0018}$	$0.0373^{+0.0081}_{-0.0016}$	$0.0369^{+0.0080}_{-0.0023}$
$r_{\rm b}$	$0.00276^{+0.00066}_{-0.00014}$	$0.00265^{+0.00055}_{-0.00012}$	$0.00272^{+0.00063}_{-0.00015}$	$0.00272^{+0.00072}_{-0.00014}$	$0.00267^{+0.00073}_{-0.00018}$
σ ($m$mag)	2.3014	2.3028	2.3017	2.3017	2.3017

Table A74. Parameters of the JKTEBOP best fits of the HD 17156 z-band light curve from Winn et al. (2009c), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 849 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.0513 ± 0.0059	0.0479 ± 0.0052	0.0507 ± 0.0059	0.0491 ± 0.0057	0.0505 ± 0.0051
k	0.0737 ± 0.0020	0.0725 ± 0.0015	0.0735 ± 0.0017	0.0730 ± 0.0015	0.0739 ± 0.0013
i (deg.)	85.5 ± 1.8	86.6 ± 2.4	85.7 ± 1.8	86.1 ± 2.1	85.6 ± 1.5
$u_{\rm A}$	0.47 fixed	0.20 fixed	0.03 fixed	0.55 fixed	0.20 fixed
$v_{\rm A}$		0.33 fixed	0.57 fixed	0.29 fixed	0.15 fixed
T_0	459.69963 ± 0.00080	459.69989 ± 0.00071	459.69971 ± 0.00081	459.69983 ± 0.00071	459.69978 ± 0.00065
$r_{\rm A}$	0.0477 ± 0.0054	0.0446 ± 0.0048	0.0472 ± 0.0055	0.0458 ± 0.0053	0.0470 ± 0.0047
$r_{\rm b}$	0.00352 ± 0.00048	0.00324 ± 0.00041	0.00347 ± 0.00046	0.00334 ± 0.00045	0.00347 ± 0.00040
σ ($m$mag)	2.2442	2.2427	2.2415	2.2418	2.2398
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.0511 ± 0.0051	0.0508 ± 0.0059	0.0508 ± 0.0056	0.0509 ± 0.0055	0.0505 ± 0.0053
k	0.0742 ± 0.0014	0.0737 ± 0.0014	0.0739 ± 0.0014	0.0738 ± 0.0013	0.0739 ± 0.0013
i (deg.)	85.5 ± 1.5	85.6 ± 1.8	85.6 ± 1.8	85.5 ± 1.7	85.6 ± 1.6
$u_{\rm A}$	0.26 ± 0.12	0.02 ± 0.15	-0.10 $\pm$ 0.15	0.41 ± 0.15	0.19 ± 0.14
$v_{\rm A}$		0.33 perturbed	0.57 perturbed	0.29 perturbed	0.15 perturbed
T_0	459.69973 ± 0.00071	459.69975 ± 0.00073	459.69976 ± 0.00076	459.69974 ± 0.00078	459.69978 ± 0.00075
$r_{\rm A}$	0.0475 ± 0.0048	0.0473 ± 0.0054	0.0473 ± 0.0051	0.0474 ± 0.0051	0.0470 ± 0.0049
$r_{\rm b}$	0.00353 ± 0.00040	0.00349 ± 0.00045	0.00349 ± 0.00044	0.00350 ± 0.00042	0.00347 ± 0.00041
σ ($m$mag)	2.2394	2.2400	2.2397	2.2399	2.2398

Table A75. Parameters of the JKTEBOP best fits of the HST/FGS curve of HD 17156, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD/BJD $-$ 2454000.0. The light curve contains 2048 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.04612 ± 0.00059	0.04573 ± 0.00052	0.04608 ± 0.00057	0.04597 ± 0.00056	0.05048 ± 0.00047
k	0.07411 ± 0.00026	0.07401 ± 0.00018	0.07440 ± 0.00021	0.07428 ± 0.00019	0.07682 ± 0.00011
i (deg.)	86.63 ± 0.18	86.76 ± 0.16	86.61 ± 0.17	86.65 ± 0.17	85.19 ± 0.12
$u_{\rm A}$	0.66 fixed	0.38 fixed	0.25 fixed	0.74 fixed	0.35 fixed
$v_{\rm A}$		0.33 fixed	0.54 fixed	0.27 fixed	0.15 fixed
T_0	820.378552 ± 0.000066	820.378604 ± 0.000059	820.378568 ± 0.000059	820.378580 ± 0.000057	820.378110 ± 0.000059
$r_{\rm A}$	0.04294 ± 0.00054	0.04258 ± 0.00047	0.04289 ± 0.00052	0.04279 ± 0.00052	0.04688 ± 0.00043
$r_{\rm b}$	0.003182 ± 0.000050	0.003151 ± 0.000042	0.003191 ± 0.000046	0.003179 ± 0.000046	0.003601 ± 0.000036
σ ($m$mag)	0.2102	0.2038	0.2040	0.2038	0.2212
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.04669 ± 0.00056	0.04539 ± 0.00069	0.04606 ± 0.00058	0.04576 ± 0.00063	0.04597 ± 0.00065
k	0.07507 ± 0.00023	0.07377 ± 0.00036	0.07438 ± 0.00024	0.07409 ± 0.00034	0.07435 ± 0.00040
i (deg.)	86.36 ± 0.16	86.89 ± 0.23	86.62 ± 0.17	86.74 ± 0.21	86.65 ± 0.22
$u_{\rm A}$	0.574 ± 0.008	0.393 ± 0.034	0.252 ± 0.040	0.752 ± 0.048	0.531 ± 0.018
$v_{\rm A}$		0.33 perturbed	0.54 perturbed	0.27 perturbed	0.15 perturbed
T_0	820.378501 ± 0.000059	820.378636 ± 0.000073	820.378571 ± 0.000060	820.378601 ± 0.000068	820.378578 ± 0.000069
$r_{\rm A}$	0.04343 ± 0.00051	0.04228 ± 0.00063	0.04287 ± 0.00053	0.04260 ± 0.00058	0.04279 ± 0.00059
$r_{\rm b}$	0.003260 ± 0.000046	0.003119 ± 0.000059	0.003188 ± 0.000048	0.003156 ± 0.000056	0.003181 ± 0.000058
σ ($m$mag)	0.2047	0.2037	0.2040	0.2038	0.2039
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.04669 ± 0.00055	0.04547 ± 0.00066	0.04530 ± 0.00072	0.04530 ± 0.00070	0.04519 ± 0.00075
k	0.07507 ± 0.00022	0.07386 ± 0.00040	0.07335 ± 0.00058	0.07356 ± 0.00047	0.07347 ± 0.00052
i (deg.)	86.36 ± 0.16	86.85 ± 0.23	86.99 ± 0.28	86.95 ± 0.27	87.00 ± 0.30
$u_{\rm A}$	0.574 ± 0.008	0.405 ± 0.037	-0.210 $\pm$ 0.205	0.851 ± 0.068	0.492 ± 0.018
$v_{\rm A}$		0.307 ± 0.071	1.337 $\pm$ 0.359	0.410 ± 0.094	0.323 ± 0.081
T_0	820.378501 ± 0.000060	820.378628 ± 0.000074	820.378658 ± 0.000080	820.378650 ± 0.000077	820.378662 ± 0.000081
$r_{\rm A}$	0.04343 ± 0.00051	0.04235 ± 0.00060	0.04220 ± 0.00065	0.04220 ± 0.00064	0.04210 ± 0.00068
$r_{\rm b}$	0.003260 ± 0.000046	0.003128 ± 0.000059	0.003096 ± 0.000069	0.003104 ± 0.000064	0.003093 ± 0.000071
σ ($m$mag)	0.2047	0.2037	0.2037	0.2037	0.2037

Table A76. Final parameters of the JKTEBOP fit to the HST/FGS and z- and $(b+y)/2$)-band light curves of HD 17156, compared to parameters found in other studies. Quantities without quoted uncertainties were not given in other studies but have been calculated from other parameters which were.

	This work ($(b+y)/2$)	This work (z-band)	This work (HST/FGS)	**This work (final)**	Barbieri et al. (2007)
$r_{\rm A}+r_{\rm b}$	$0.0398^{+0.0089}_{-0.0026}$	0.0507 ± 0.0066	0.04533 ± 0.00087	0.04533 ± 0.00087	
k	$0.0726^{+0.0023}_{-0.0024}$	0.0738 ± 0.0026	0.07361 ± 0.00064	0.07361 ± 0.00064	0.08007 ± 0.0028
i ($^\circ$)	$89.1^{+0.9}_{-3.2}$	85.6 ± 2.1	86.94 ± 0.34	86.94 ± 0.34	87.89 ± 0.10
$r_{\rm A}$	$0.0371^{+0.0082}_{-0.0024}$	0.0472 ± 0.0061	0.04222 ± 0.00079	0.04222 ± 0.00079	0.046
$r_{\rm b}$	$0.00269^{+0.00073}_{-0.00018}$	0.00349 ± 0.00050	0.003107 ± 0.000081	0.003107 ± 0.000081	0.0037

	Gillon et al. (2008)	Irwin et al. (2008)	Narita et al. (2008)	Barbieri et al. (2009)	Winn et al. (2009c)	Nutzman et al. (2011)
$r_{\rm A}+r_{\rm b}$	0.04238		0.0495	0.04450		0.04633
k	$0.07320^{+0.00036}_{-0.00041}$	0.070 ± 0.003	0.0846 ± 0.0026	0.0727 ± 0.0006	0.0727 ± 0.0016	0.07454 ± 0.00035
i ($^\circ$)	$88.23^{+0.17}_{-0.05}$	$86.5^{+1.1}_{-0.7}$	85.65 ± 0.29	87.89 ± 0.11	$86.2^{+2.1}_{-0.8}$	$86.49^{+0.24}_{-0.20}$
$r_{\rm A}$	$0.03949^{+0.00026}_{-0.00035}$		0.0456	0.04148	$0.0439^{+0.0030}_{-0.0047}$	$0.04312^{+0.00050}_{-0.00060}$
$r_{\rm b}$	$0.002891^{+0.000022}_{-0.000032}$		0.00386	0.000302		0.003214

Table A77. Derived physical properties of the HD 17156 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 71.2 \pm 3.7\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.395 \pm 0.022\,\rho_{\odot}$ and $T'_{\rm eq} = 883 \pm 11$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	116.35 ± 2.66	112.93 ± 0.81	113.35 ± 0.90	113.77 ± 0.77	112.76 ± 0.80	115.11 ± 1.61
$M_{\rm A}$ ($M_{\odot}$)	1.394 ± 0.094	1.275 ± 0.022	1.289 ± 0.026	1.303 ± 0.018	1.269 ± 0.022	1.350 ± 0.046
$R_{\rm A}$ ($R_{\odot}$)	1.523 ± 0.047	1.478 ± 0.032	1.484 ± 0.033	1.489 ± 0.023	1.476 ± 0.033	1.507 ± 0.037
$\log g_{\rm A}$ (cgs)	4.217 ± 0.018	4.204 ± 0.015	4.206 ± 0.015	4.208 ± 0.018	4.204 ± 0.015	4.213 ± 0.018
$M_{\rm b}$ ($M_{\rm Jup}$)	3.421 ± 0.156	3.224 ± 0.047	3.248 ± 0.052	3.272 ± 0.045	3.214 ± 0.046	3.349 ± 0.072
$R_{\rm b}$ ($R_{\rm Jup}$)	1.091 ± 0.037	1.059 ± 0.028	1.063 ± 0.028	1.067 ± 0.028	1.058 ± 0.028	1.080 ± 0.033
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	2.46 ± 0.20	2.54 ± 0.20	2.53 ± 0.20	2.52 ± 0.20	2.54 ± 0.20	2.49 ± 0.20
Θ	0.754 ± 0.027	0.776 ± 0.022	0.774 ± 0.022	0.771 ± 0.021	0.778 ± 0.022	0.762 ± 0.026
a (AU)	0.16767 ± 0.00376	0.16276 ± 0.00093	0.16336 ± 0.00109	0.16396 ± 0.00073	0.16251 ± 0.00092	0.16590 ± 0.00193
Age (Gyr)		$3.2^{+0.4}_{-0.3}$	$2.9^{+0.3}_{-0.4}$	$2.9^{+0.0}_{-0.6}$	$2.8^{+0.3}_{-0.3}$	$2.4^{+1.1}_{-0.1}$

	This work (final)	Fischer et al. (2007)	Barbieri et al. (2007)	Gillon et al. (2008)	Irwin et al. (2008)
$M_{\rm A}$ ($M_{\odot}$)	$1.297 \pm 0.046 \pm 0.053$	1.2 ± 0.1	1.2 adopted	1.2 ± 0.1 adopted	1.2 fixed
$R_{\rm A}$ ($R_{\odot}$)	$1.487 \pm 0.037 \pm 0.020$	$1.47^{+0.13}_{-0.17}$	1.47 adopted	$1.354^{+0.012}_{-0.037}$	1.47 ± 0.08
$\log g_{\rm A}$ (cgs)	$4.207 \pm 0.018 \pm 0.006$	4.29 ± 0.06			
$\rho_{\rm A}$ ($\rho_{\odot}$)	0.395 ± 0.022				
$M_{\rm b}$ ($M_{\rm Jup}$)	$3.262 \pm 0.072 \pm 0.088$		3.12 ± 0.5	$3.111^{+0.035}_{-0.013}$	3.13 ± 0.11 adopted
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.065 \pm 0.033 \pm 0.014$		1.15 ± 0.11	$0.964^{+0.016}_{-0.027}$	1.01 ± 0.09
$g_{\rm b}$ (m s^{-1})	71.2 ± 3.7				
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$2.52 \pm 0.20 \pm 0.03$		1.95 ± 0.63	$1.66^{+1.37}_{-0.60}$	$2.9^{+0.6}_{-0.8}$
$T'_{\rm eq}$ (K)	883 ± 11				
Θ	$0.772 \pm 0.026 \pm 0.010$				
a (AU)	$0.1637 \pm 0.0019 \pm 0.0022$			$0.1594^{+0.0012}_{-0.0041}$	
Age (Gyr)	$2.8^{+1.1}_{-0.6}{}^{+0.4}_{-0.4}$	$5.7^{+1.3}_{-0.9}$			

	Winn et al. (2009c)	Barbieri et al. (2009)	van Belle et al. (2009)	Gonzalez et al. (2010)	Gilliland et al. (2011)	Nutzman et al. (2011)
$M_{\rm A}$ ($M_{\odot}$)	$1.263^{+0.035}_{-0.047}$	1.24 ± 0.03		1.16 ± 0.03	1.285 ± 0.026	1.275 ± 0.018
$R_{\rm A}$ ($R_{\odot}$)	$1.446^{+0.099}_{-0.06}$	1.44 ± 0.08	1.36 ± 0.08		1.507 ± 0.012	1.5007 ± 0.0076
$\log g_{\rm A}$ (cgs)	$4.219^{+0.033}_{-0.055}$	4.22 ± 0.05		4.22 ± 0.05	4.191 ± 0.004	
$\rho_{\rm A}$ ($\rho_{\odot}$)	$0.418^{+0.047}_{-0.073}$	0.42 ± 0.04			0.3765 ± 0.0031	0.3770 ± 0.0028
$M_{\rm b}$ ($M_{\rm Jup}$)	$3.212^{+0.069}_{-0.082}$	3.22 ± 0.08				3.191 ± 0.033
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.023^{+0.070}_{-0.055}$	1.02 ± 0.08				1.0870 ± 0.0066
$g_{\rm b}$ (m s^{-1})	$76.1^{+7.3}_{-9.0}$	78 ± 11				67.0 ± 2.4
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	2.80 ± 0.51	2.84 ± 0.05				
$T'_{\rm eq}$ (K)						
Θ						
a (AU)	$0.1623^{+0.0015}_{-0.0020}$	0.1614 ± 0.0022				
Age (Gyr)	$3.06^{+0.76}_{-0.64}$	2.6 ± 1.0		3.5 ± 1.2	3.2 ± 0.3	$3.38^{+0.20}_{-0.47}$

Table A78. Parameters of the JKTEBOP best fits of the HD 80606 *Spitzer*/IRAC 4.5 μm light curve from Hébrard et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2455000.0. The light curve contains 318 binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_A + r_b$	0.01135 ± 0.00012	0.01123 ± 0.00012	0.01128 ± 0.00012	0.01125 ± 0.00012	0.01144 ± 0.00012
k	0.10050 ± 0.00022	0.10016 ± 0.00021	0.10040 ± 0.00022	0.10030 ± 0.00023	0.09973 ± 0.00021
i (deg.)	89.265 ± 0.021	89.285 ± 0.020	89.278 ± 0.020	89.282 ± 0.020	89.254 ± 0.021
u_A	0.17 fixed	0.05 fixed	0.00 fixed	0.28 fixed	0.05 fixed
v_A		0.20 fixed	0.30 fixed	0.16 fixed	0.10 fixed
T_0	210.65060 ± 0.00050	210.65018 ± 0.00048	210.65032 ± 0.00051	210.65023 ± 0.00049	210.65084 ± 0.00047
r_A	0.01032 ± 0.00011	0.01021 ± 0.00011	0.01025 ± 0.00011	0.01022 ± 0.00011	0.01040 ± 0.00011
r_b	0.001037 ± 0.000012	0.001023 ± 0.000012	0.001029 ± 0.000012	0.001025 ± 0.000012	0.001037 ± 0.000012
σ ($m$mag)	0.3161	0.3190	0.3177	0.3184	0.3145
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_A + r_b$	0.01155 ± 0.00014	0.01162 ± 0.00014	0.01157 ± 0.00014	0.01161 ± 0.00015	0.01161 ± 0.00015
k	0.09956 ± 0.00053	0.09875 ± 0.00057	0.09917 ± 0.00050	0.09894 ± 0.00055	0.09902 ± 0.00062
i (deg.)	89.237 ± 0.023	89.229 ± 0.024	89.237 ± 0.024	89.230 ± 0.024	89.231 ± 0.023
u_A	0.039 ± 0.065	-0.174 $\pm$ 0.094	-0.182 $\pm$ 0.076	0.072 ± 0.072	-0.051 $\pm$ 0.086
v_A		0.20 perturbed	0.30 perturbed	0.16 perturbed	0.10 perturbed
T_0	210.65123 ± 0.00055	210.65139 ± 0.00055	210.65122 ± 0.00059	210.65136 ± 0.00057	210.65135 ± 0.00057
r_A	0.01051 ± 0.00013	0.01057 ± 0.00013	0.01053 ± 0.00013	0.01056 ± 0.00013	0.01056 ± 0.00014
r_b	0.001046 ± 0.000011	0.001044 ± 0.000011	0.001044 ± 0.000012	0.001045 ± 0.000011	0.001046 ± 0.000011
σ ($m$mag)	0.3145	0.3140	0.3141	0.3141	0.3141
Fitting for both LD coefficients					
$r_A + r_b$	0.01155 ± 0.00015	0.01182 ± 0.00026	0.01191 ± 0.00027	0.01197 ± 0.00026	0.01188 ± 0.00026
k	0.0996 ± 0.0005	0.0926 ± 0.0040	0.0913 ± 0.0032	0.0895 ± 0.0038	0.0909 ± 0.0038
i (deg.)	89.237 ± 0.023	89.215 ± 0.033	89.219 ± 0.030	89.211 ± 0.031	89.217 ± 0.032
u_A	0.0 ± 0.1	-3.0 $\pm$ 3.2	-8.1 $\pm$ 4.5	1.6 ± 1.2	-2.5 $\pm$ 2.0
v_A		2.9 ± 3.1	11.3 ± 6.3	5.8 ± 4.4	3.1 ± 2.5
T_0	210.65123 ± 0.00056	210.65174 ± 0.00085	210.65166 ± 0.00074	210.65186 ± 0.00080	210.65171 ± 0.00074
r_A	0.01051 ± 0.00014	0.01082 ± 0.00027	0.01091 ± 0.00027	0.01098 ± 0.00027	0.01089 ± 0.00027
r_b	0.001046 ± 0.000012	0.001001 ± 0.000026	0.000996 ± 0.000019	0.000983 ± 0.000024	0.000990 ± 0.000025
σ ($m$mag)	0.3145	0.3116	0.3112	0.3110	0.3111

Table A79. Final parameters of the fit to the *Spitzer* light curve of HD 80606 from the JKTEBOP analysis, compared to those found by other authors. Quantities without quoted uncertainties were not given in the relevant studies so have been calculated from other parameters which were.

	This work	Moutou et al. (2009)	Garcia-Melendo & McCullough (2009)	Fossey et al. (2009)
$r_A + r_b$	0.01160 ± 0.00025	0.0110	0.0111	0.0114
k	0.09898 ± 0.00077	0.094 ± 0.009	$0.11^{+0.04}_{-0.02}$	0.1057 ± 0.0018
i ($^\circ$)	89.232 ± 0.029	89.6 ± 0.4	$89.26^{+0.24}_{-0.09}$	89.285 ± 0.023
r_A	0.01056 ± 0.00024	0.0101	0.01 fixed	0.103 fixed
r_b	0.001045 ± 0.000019	0.00095	0.0011	0.00109

	Pont et al. (2009)	Winn et al. (2009b)	Hébrard et al. (2010)	Hidas et al. (2010)
$r_A + r_b$	0.0111	0.01078	0.11341	0.01084
k	0.103 ± 0.003	0.1033 ± 0.0011	0.1001 ± 0.0006	$0.0967^{+0.0032}_{-0.0035}$
i ($^\circ$)	89.32 ± 0.06	89.324 ± 0.029	89.269 ± 0.018	$89.341^{+0.073}_{-0.063}$
r_A	0.0101	0.00977 ± 0.00028	0.01031 ± 0.00017	$0.00988^{+0.00051}_{-0.00072}$
r_b	0.00104	0.001009	0.01032	0.000955

Table A80. Derived physical properties of the HD 80606 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 101.4 \pm 3.9\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.913 \pm 0.062\,\rho_\odot$ and $T'_{\rm eq} = 405.0 \pm 7.0\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	129.4 ± 3.0	124.4 ± 1.3	124.7 ± 1.1	121.5 ± 1.7	122.0 ± 1.4	124.0 ± 1.3
$M_{\rm A}$ ($M_\odot$)	1.174 ± 0.080	1.045 ± 0.031	1.051 ± 0.024	0.973 ± 0.035	0.985 ± 0.033	1.035 ± 0.031
$R_{\rm A}$ ($R_\odot$)	1.087 ± 0.037	1.046 ± 0.024	1.048 ± 0.026	1.021 ± 0.032	1.026 ± 0.026	1.043 ± 0.025
$\log g_{\rm A}$ (cgs)	4.435 ± 0.021	4.418 ± 0.021	4.419 ± 0.020	4.408 ± 0.018	4.410 ± 0.021	4.417 ± 0.021
$M_{\rm b}$ ($M_{\rm Jup}$)	4.526 ± 0.207	4.188 ± 0.087	4.203 ± 0.068	3.992 ± 0.096	4.026 ± 0.093	4.161 ± 0.085
$R_{\rm b}$ ($R_{\rm Jup}$)	1.052 ± 0.031	1.012 ± 0.022	1.014 ± 0.021	0.988 ± 0.023	0.992 ± 0.022	1.008 ± 0.022
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	3.64 ± 0.22	3.78 ± 0.22	3.77 ± 0.22	3.87 ± 0.23	3.86 ± 0.23	3.79 ± 0.22
Θ	3.505 ± 0.106	3.644 ± 0.081	3.637 ± 0.078	3.733 ± 0.093	3.717 ± 0.085	3.656 ± 0.081
a (AU)	0.4787 ± 0.0109	0.4605 ± 0.0046	0.4613 ± 0.0035	0.4496 ± 0.0054	0.4515 ± 0.0050	0.4590 ± 0.0045
Age (Gyr)		$4.3^{+1.3}_{-2.0}$	$3.9^{+1.2}_{-1.1}$	$10.0^{+0.0}_{-2.2}$	$6.9^{+1.5}_{-2.1}$	$4.6^{+1.6}_{-1.4}$

	This work (final)	Moutou et al. (2009)	Garcia-Melendo & McCullough (2009)	Fossey et al. (2009)
$M_{\rm A}$ ($M_\odot$)	$1.018 \pm 0.035 \pm 0.045$	0.98 ± 0.10	0.90 fixed	1.0 fixed
$R_{\rm A}$ ($R_\odot$)	$1.037 \pm 0.032 \pm 0.015$	0.98 ± 0.07	1.0 fixed	1.0 fixed
$\log g_{\rm A}$ (cgs)	$4.415 \pm 0.021 \pm 0.007$			
$\rho_{\rm A}$ ($\rho_\odot$)	0.913 ± 0.062			
$M_{\rm b}$ ($M_{\rm Jup}$)	$4.114 \pm 0.096 \pm 0.122$	4.0 ± 0.3		3.9 fixed
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.003 \pm 0.023 \pm 0.015$	0.9 ± 0.10	1.1 fixed	1.029 ± 0.017
$g_{\rm b}$ (m s^{-1})	101.4 ± 3.9			
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$3.82 \pm 0.23 \pm 0.06$			3.35 ± 0.18
$T'_{\rm eq}$ (K)	405.0 ± 7.0			
Θ	$3.677 \pm 0.093 \pm 0.055$			
a (AU)	$0.4564 \pm 0.0054 \pm 0.0068$	0.453 ± 0.015	0.469 fixed	
Age (Gyr)	$5.9^{+1.6}_{-2.2}{}^{+4.1}_{-2.1}$			

	Pont et al. (2009)	Winn et al. (2009b)	Gonzalez et al. (2010)	Hébrard et al. (2010)	Hidas et al. (2010)
$M_{\rm A}$ ($M_\odot$)	0.97 ± 0.04	1.05 ± 0.032	0.98 ± 0.06	1.01 ± 0.05 adopted	
$R_{\rm A}$ ($R_\odot$)	0.978 ± 0.015	0.968 ± 0.028		1.007 ± 0.024	0.978 ± 0.015 adopted
$\log g_{\rm A}$ (cgs)		4.487 ± 0.021	4.33 ± 0.07		
$\rho_{\rm A}$ ($\rho_\odot$)		1.16 ± 0.11		0.992 ± 0.050	
$M_{\rm b}$ ($M_{\rm Jup}$)	3.94 ± 0.11	4.20 ± 0.11		4.08 ± 0.14	
$R_{\rm b}$ ($R_{\rm Jup}$)	0.98 ± 0.03	0.974 ± 0.030		0.981 ± 0.023	0.921 ± 0.036
$g_{\rm b}$ (m s^{-1})		110.5 ± 8.2			
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)		4.26 ± 0.41		4.1 ± 0.3	
$T'_{\rm eq}$ (K)					
Θ					
a (AU)		0.4614 ± 0.0047			
Age (Gyr)		$1.6^{+1.8}_{-1.1}$	5.5 ± 4.6		

Table A81. Parameters of the JKTEBOP best fits of the *Kepler* Q0-Q2 long-cadence light curve of Kepler-4, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 323 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1611^{+0.0020}_{-0.0018}$	$0.1604^{+0.0019}_{-0.0017}$	$0.1657^{+0.0022}_{-0.0018}$	$0.1603^{+0.0018}_{-0.0019}$	$0.1992^{+0.0017}_{-0.0018}$
k	$0.02480^{+0.00035}_{-0.00038}$	$0.02500^{+0.00039}_{-0.00035}$	$0.02515^{+0.00039}_{-0.00039}$	$0.02496^{+0.00036}_{-0.00035}$	$0.02648^{+0.00035}_{-0.00037}$
i (deg.)	$89.5552^{+0.0013}_{-0.0017}$	$89.4417^{+0.0051}_{-0.0389}$	$87.5889^{+0.0025}_{-0.0185}$	$89.6864^{+0.0026}_{-0.0139}$	$83.0742^{+0.0074}_{-0.0349}$
$u_{\rm A}$	0.60 fixed	0.38 fixed	0.24 fixed	0.70 fixed	0.40 fixed
$v_{\rm A}$		0.27 fixed	0.51 fixed	0.25 fixed	0.10 fixed
P	$3.21353^{+0.00023}_{-0.00022}$	$3.21352^{+0.00023}_{-0.00021}$	$3.21351^{+0.00023}_{-0.00022}$	$3.21352^{+0.00023}_{-0.00024}$	$3.21349^{+0.00022}_{-0.00020}$
T_0	$956.6121^{+0.0016}_{-0.0015}$	$956.6122^{+0.0015}_{-0.0016}$	$956.6123^{+0.0014}_{-0.0018}$	$956.6122^{+0.0015}_{-0.0016}$	$956.6125^{+0.0015}_{-0.0016}$
$r_{\rm A}$	$0.1572^{+0.0020}_{-0.0018}$	$0.1565^{+0.0018}_{-0.0017}$	$0.1616^{+0.0022}_{-0.0017}$	$0.1564^{+0.0018}_{-0.0018}$	$0.1940^{+0.0017}_{-0.0017}$
$r_{\rm b}$	$0.003898^{+0.000066}_{-0.000070}$	$0.003913^{+0.000072}_{-0.000070}$	$0.004064^{+0.000074}_{-0.000070}$	$0.003903^{+0.000067}_{-0.000066}$	$0.005138^{+0.000063}_{-0.000069}$
σ ($m$mag)	0.1170	0.1162	0.1164	0.1163	0.1157
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1744^{+0.0028}_{-0.0023}$	$0.1564^{+0.0026}_{-0.0024}$	$0.1560^{+0.0024}_{-0.0023}$	$0.1558^{+0.0026}_{-0.0024}$	$0.1555^{+0.0023}_{-0.0024}$
k	$0.02624^{+0.00049}_{-0.00050}$	$0.02573^{+0.00047}_{-0.00054}$	$0.02579^{+0.00053}_{-0.00050}$	$0.02575^{+0.00050}_{-0.00050}$	$0.02580^{+0.00049}_{-0.00050}$
i (deg.)	$85.4443^{+0.0016}_{-0.0164}$	$89.4325^{+0.0016}_{-0.0030}$	$89.3648^{+0.0076}_{-0.0077}$	$89.9391^{+0.0170}_{-0.0238}$	$89.9471^{+0.0206}_{-0.0182}$
$u_{\rm A}$	$0.28^{+0.10}_{-0.12}$	$0.15^{+0.12}_{-0.12}$	$-0.02^{+0.12}_{-0.12}$	$0.46^{+0.12}_{-0.13}$	$0.25^{+0.11}_{-0.13}$
$v_{\rm A}$		0.27 perturbed	0.51 perturbed	0.25 perturbed	0.10 perturbed
P	$3.21349^{+0.00020}_{-0.00019}$	$3.21345^{+0.00020}_{-0.00020}$	$3.21346^{+0.00019}_{-0.00021}$	$3.21345^{+0.00021}_{-0.00020}$	$3.21346^{+0.00022}_{-0.00021}$
T_0	$956.6126^{+0.0015}_{-0.0014}$	$956.6127^{+0.0015}_{-0.0014}$	$956.6127^{+0.0015}_{-0.0015}$	$956.6127^{+0.0015}_{-0.0013}$	$956.6127^{+0.0014}_{-0.0014}$
$r_{\rm A}$	$0.1699^{+0.0027}_{-0.0022}$	$0.1525^{+0.0026}_{-0.0024}$	$0.1521^{+0.0024}_{-0.0023}$	$0.1519^{+0.0025}_{-0.0024}$	$0.1515^{+0.0022}_{-0.0024}$
$r_{\rm b}$	$0.004459^{+0.000079}_{-0.000074}$	$0.003923^{+0.000061}_{-0.000068}$	$0.003921^{+0.000063}_{-0.000065}$	$0.003912^{+0.000065}_{-0.000074}$	$0.003910^{+0.000065}_{-0.000066}$
σ ($m$mag)	0.1154	0.1154	0.1154	0.1154	0.1154

Table A82. Parameters of the JKTEBOP best fits of the *Kepler* Q2 short-cadence light curve of Kepler-4, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 323 phase-binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.132^{+0.054}_{-0.017}$	$0.161^{+0.038}_{-0.009}$	$0.161^{+0.037}_{-0.009}$	$0.161^{+0.035}_{-0.010}$	$0.159^{+0.033}_{-0.009}$
k	$0.02385^{+0.00153}_{-0.00071}$	$0.02432^{+0.00109}_{-0.00045}$	$0.02428^{+0.00103}_{-0.00045}$	$0.02430^{+0.00095}_{-0.00047}$	$0.02460^{+0.00074}_{-0.00038}$
i (deg.)	$89.7^{+2.8}_{-4.0}$	$88.6^{+2.3}_{-4.5}$	$88.7^{+2.1}_{-4.5}$	$88.6^{+2.2}_{-4.3}$	$89.0^{+2.2}_{-3.8}$
$u_{\rm A}$	0.60 fixed	0.38 fixed	0.24 fixed	0.70 fixed	0.40 fixed
$v_{\rm A}$		0.27 fixed	0.51 fixed	0.25 fixed	0.10 fixed
$r_{\rm A}$	$0.129^{+0.052}_{-0.016}$	$0.157^{+0.037}_{-0.009}$	$0.157^{+0.036}_{-0.008}$	$0.157^{+0.034}_{-0.009}$	$0.155^{+0.032}_{-0.008}$
$r_{\rm b}$	$0.00309^{+0.00159}_{-0.00048}$	$0.00382^{+0.00113}_{-0.00025}$	$0.00382^{+0.00111}_{-0.00024}$	$0.00382^{+0.00103}_{-0.00026}$	$0.00382^{+0.00094}_{-0.00024}$
σ ($m$mag)	0.0873	0.0874	0.0875	0.0874	0.0881
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.133^{+0.028}_{-0.013}$	$0.161^{+0.057}_{-0.014}$	$0.161^{+0.055}_{-0.015}$	$0.161^{+0.053}_{-0.016}$	$0.146^{+0.039}_{-0.012}$
k	$0.0239^{+0.0012}_{-0.0006}$	$0.0242^{+0.0016}_{-0.0006}$	$0.0242^{+0.0015}_{-0.0006}$	$0.0242^{+0.0015}_{-0.0006}$	$0.0241^{+0.0012}_{-0.0006}$
i (deg.)	$88.5^{+2.7}_{-2.8}$	$88.7^{+3.1}_{-5.6}$	$88.8^{+3.0}_{-5.2}$	$88.8^{+3.3}_{-5.1}$	$88.6^{+2.6}_{-3.8}$
$u_{\rm A}$	$0.612^{+0.052}_{-0.047}$	$0.416^{+0.057}_{-0.068}$	$0.257^{+0.053}_{-0.059}$	$0.727^{+0.059}_{-0.057}$	$0.552^{+0.054}_{-0.048}$
$v_{\rm A}$		0.27 perturbed	0.51 perturbed	0.25 perturbed	0.10 perturbed
$r_{\rm A}$	$0.130^{+0.027}_{-0.012}$	$0.157^{+0.055}_{-0.014}$	$0.157^{+0.054}_{-0.015}$	$0.157^{+0.051}_{-0.015}$	$0.142^{+0.038}_{-0.012}$
$r_{\rm b}$	$0.0031^{+0.0009}_{-0.0004}$	$0.0038^{+0.0017}_{-0.0004}$	$0.0038^{+0.0017}_{-0.0004}$	$0.0038^{+0.0016}_{-0.0005}$	$0.0034^{+0.0012}_{-0.0004}$
σ ($m$mag)	0.0873	0.0874	0.0875	0.0874	0.0874

Table A83. Final parameters of the fit to the *Kepler* light curves of Kepler-4 from the JKTEBOP analysis, compared to those found by Borucki et al. (2010) and Kipping & Bakos (2011b) (their solution 'A.c') from the same data. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work (LC)	This work (SC)	**This work (final)**	Borucki et al. (2010)	Kipping & Bakos (2011b)
$r_\mathrm{A} + r_\mathrm{b}$	$0.156^{+0.031}_{-0.012}$	$0.157^{+0.058}_{-0.017}$	$0.157^{+0.027}_{-0.010}$	0.1584	0.1888
k	$0.02577^{+0.00052}_{-0.00053}$	$0.02417^{+0.00159}_{-0.00063}$	$0.02561^{+0.00049}_{-0.00050}$	$0.02470^{+0.00031}_{-0.00030}$	$0.0263^{+0.0022}_{-0.0014}$
i (°)	$89.7^{+0.3}_{-3.2}$	$88.7^{+1.1}_{-5.6}$	$89.2^{+0.8}_{-2.6}$	$89.76^{+0.24}_{-2.05}$	$84.3^{+4.0}_{-6.0}$
r_A	$0.152^{+0.030}_{-0.012}$	$0.153^{+0.056}_{-0.016}$	$0.153^{+0.026}_{-0.010}$	$0.1546^{+0.0064}_{-0.0065}$	$0.184^{+0.039}_{-0.035}$
r_b	$0.00392^{+0.00088}_{-0.00036}$	$0.00371^{+0.00175}_{-0.00048}$	$0.00391^{+0.00076}_{-0.00034}$	0.00382	0.00484

Table A84. Derived physical properties of the Kepler-4 system. The upper part of the table contains the individual results from this work; in each case $g_\mathrm{b} = 13.7^{+3.4}_{-4.9}\,\mathrm{m\,s^{-2}}$, $\rho_\mathrm{A} = 0.37^{+0.10}_{-0.15}\,\rho_\odot$ and $T'_\mathrm{eq} = 1614^{+155}_{-72}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
K_b ($\mathrm{km\,s^{-1}}$)	$158.0^{+5.1}_{-4.0}$	$153.8^{+2.0}_{-4.1}$	$152.9^{+5.6}_{-2.2}$	$151.1^{+6.4}_{-1.2}$	$150.7^{+8.2}_{-0.9}$	$152.1^{+2.4}_{-2.2}$
M_A ($\mathrm{M}_\odot$)	$1.313^{+0.130}_{-0.098}$	$1.212^{+0.047}_{-0.095}$	$1.190^{+0.133}_{-0.050}$	$1.150^{+0.150}_{-0.027}$	$1.140^{+0.193}_{-0.018}$	$1.173^{+0.057}_{-0.049}$
R_A ($\mathrm{R}_\odot$)	$1.54^{+0.30}_{-0.12}$	$1.50^{+0.27}_{-0.13}$	$1.49^{+0.31}_{-0.11}$	$1.47^{+0.31}_{-0.11}$	$1.47^{+0.33}_{-0.09}$	$1.48^{+0.27}_{-0.11}$
$\log g_\mathrm{A}$ (cgs)	$4.184^{+0.056}_{-0.127}$	$4.172^{+0.049}_{-0.133}$	$4.170^{+0.057}_{-0.124}$	$4.165^{+0.057}_{-0.123}$	$4.163^{+0.063}_{-0.117}$	$4.168^{+0.056}_{-0.133}$
M_b ($\mathrm{M_{Jup}}$)	$0.0810^{+0.0117}_{-0.0112}$	$0.0767^{+0.0101}_{-0.0107}$	$0.0758^{+0.0113}_{-0.0100}$	$0.0741^{+0.0129}_{-0.0096}$	$0.0737^{+0.0125}_{-0.0095}$	$0.0751^{+0.0100}_{-0.0099}$
R_b ($\mathrm{R_{Jup}}$)	$0.382^{+0.075}_{-0.035}$	$0.372^{+0.072}_{-0.034}$	$0.370^{+0.073}_{-0.033}$	$0.365^{+0.073}_{-0.032}$	$0.364^{+0.074}_{-0.032}$	$0.368^{+0.072}_{-0.032}$
ρ_b (ρ_Jup)	$1.36^{+0.46}_{-0.59}$	$1.40^{+0.48}_{-0.60}$	$1.41^{+0.48}_{-0.61}$	$1.42^{+0.48}_{-0.62}$	$1.43^{+0.48}_{-0.62}$	$1.41^{+0.48}_{-0.61}$
Θ	$0.0151^{+0.0024}_{-0.0032}$	$0.0155^{+0.0025}_{-0.0032}$	$0.0156^{+0.0025}_{-0.0033}$	$0.0157^{+0.0024}_{-0.0033}$	$0.0158^{+0.0025}_{-0.0034}$	$0.0156^{+0.0025}_{-0.0033}$
a (AU)	$0.04667^{+0.00151}_{-0.00118}$	$0.04544^{+0.00058}_{-0.00121}$	$0.04517^{+0.00164}_{-0.00064}$	$0.04466^{+0.00190}_{-0.00035}$	$0.04452^{+0.00243}_{-0.00024}$	$0.04495^{+0.00072}_{-0.00064}$
Age (Gyr)		$4.9^{+1.5}_{-1.0}$	$5.0^{+0.6}_{-1.7}$	$5.7^{+0.3}_{-2.4}$	$5.4^{+0.4}_{-2.5}$	$5.4^{+0.6}_{-1.2}$

	This work (final)	Borucki et al. (2010)	Kipping & Bakos (2011b)
M_A ($\mathrm{M}_\odot$)	$1.173\,^{+0.193\,+0.039}_{-0.095\,-0.033}$	$1.223^{+0.053}_{-0.091}$	$1.28^{+0.20}_{-0.13}$
R_A ($\mathrm{R}_\odot$)	$1.48\,^{+0.33\,+0.02}_{-0.13\,-0.01}$	$1.487^{+0.071}_{-0.084}$	$1.487^{+0.071}_{-0.084}$
$\log g_\mathrm{A}$ (cgs)	$4.168\,^{+0.063\,+0.005}_{-0.133\,-0.004}$	4.17 ± 0.04	4.17 ± 0.04
ρ_A ($\rho_\odot$)	$0.362^{+0.081}_{-0.136}$	0.36 ± 0.11	$0.21^{+0.12}_{-0.13}$
M_b ($\mathrm{M_{Jup}}$)	$0.075\,^{+0.013\,+0.002}_{-0.011\,-0.001}$	0.077 ± 0.012	$0.081^{+0.031}_{-0.030}$
R_b ($\mathrm{R_{Jup}}$)	$0.368\,^{+0.074\,+0.004}_{-0.034\,-0.003}$	0.357 ± 0.019	$0.460^{+0.272}_{-0.084}$
g_b ($\mathrm{m\,s^{-1}}$)	$13.8^{+3.3}_{-4.5}$	$14.5^{+2.1}_{-3.0}$	$7.9^{+6.2}_{-4.6}$
ρ_b (ρ_Jup)	$1.41\,^{+0.48\,+0.01}_{-0.62\,-0.02}$	$1.44^{+0.27}_{-0.35}$	$0.65^{+0.73}_{-0.47}$
T'_eq (K)	1619^{+136}_{-63}	1650 ± 200	1777^{+308}_{-132}
Θ	$0.0156\,^{+0.0025\,+0.0001}_{-0.0034\,-0.0002}$		
a (AU)	$0.0449\,^{+0.0024\,+0.0005}_{-0.0012\,-0.0004}$	0.0456 ± 0.0009	$0.0463^{+0.0023}_{-0.0016}$
Age (Gyr)	$5.3\,^{+1.5\,+0.4}_{-2.5\,-0.4}$	4.5 ± 1.5	$4.2^{+2.1}_{-1.2}$

Table A85. Parameters of the JKTEBOP best fits of the *Kepler* ong-cadence light curve of Kepler-5, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 330 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1858^{+0.0060}_{-0.0069}$	$0.1702^{+0.0051}_{-0.0016}$	$0.1683^{+0.0085}_{-0.0028}$	$0.1685^{+0.0076}_{-0.0026}$	$0.1843^{+0.0052}_{-0.0056}$
k	$0.08054^{+0.00073}_{-0.00086}$	$0.07862^{+0.00046}_{-0.00022}$	$0.07869^{+0.00091}_{-0.00032}$	$0.07861^{+0.00075}_{-0.00031}$	$0.08137^{+0.00043}_{-0.00047}$
i (deg.)	$85.78^{+0.99}_{-0.72}$	$88.84^{+1.18}_{-1.29}$	$89.74^{+1.49}_{-1.67}$	$89.75^{+1.38}_{-1.59}$	$85.72^{+0.74}_{-0.60}$
$u_{\rm A}$	0.56 fixed	0.36 fixed	0.20 fixed	0.69 fixed	0.36 fixed
$v_{\rm A}$		0.31 fixed	0.53 fixed	0.26 fixed	0.15 fixed
P	$3.548463^{+0.000028}_{-0.000029}$	$3.548461^{+0.000029}_{-0.000029}$	$3.548461^{+0.000030}_{-0.000029}$	$3.548461^{+0.000032}_{-0.000028}$	$3.548463^{+0.000025}_{-0.000029}$
T_0	$955.90124^{+0.00018}_{-0.00019}$	$955.90126^{+0.00019}_{-0.00019}$	$955.90125^{+0.00019}_{-0.00020}$	$955.90126^{+0.00019}_{-0.00019}$	$955.90126^{+0.00018}_{-0.00018}$
$r_{\rm A}$	$0.1719^{+0.0054}_{-0.0063}$	$0.1578^{+0.0046}_{-0.0015}$	$0.1560^{+0.0078}_{-0.0025}$	$0.1562^{+0.0069}_{-0.0024}$	$0.1705^{+0.0047}_{-0.0051}$
$r_{\rm b}$	$0.01385^{+0.00057}_{-0.00064}$	$0.01241^{+0.00044}_{-0.00014}$	$0.01228^{+0.00076}_{-0.00024}$	$0.01228^{+0.00067}_{-0.00024}$	$0.01387^{+0.00045}_{-0.00050}$
σ ($m$mag)	0.1506	0.1315	0.1353	0.1330	0.1263
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1870^{+0.0052}_{-0.0058}$	$0.1676^{+0.0090}_{-0.0025}$	$0.1799^{+0.0058}_{-0.0067}$	$0.1763^{+0.0063}_{-0.0076}$	$0.1782^{+0.0063}_{-0.0068}$
k	$0.08191^{+0.00047}_{-0.00056}$	$0.07928^{+0.00095}_{-0.00042}$	$0.08087^{+0.00057}_{-0.00065}$	$0.08037^{+0.00065}_{-0.00074}$	$0.08070^{+0.00066}_{-0.00072}$
i (deg.)	$85.3^{+0.7}_{-0.6}$	$89.6^{+1.5}_{-1.8}$	$86.3^{+1.1}_{-0.8}$	$86.9^{+1.7}_{-1.0}$	$86.6^{+1.3}_{-0.9}$
$u_{\rm A}$	$0.413^{+0.012}_{-0.013}$	$0.287^{+0.031}_{-0.032}$	$0.104^{+0.043}_{-0.040}$	$0.599^{+0.056}_{-0.053}$	$0.380^{+0.018}_{-0.019}$
$v_{\rm A}$		0.31 perturbed	0.53 perturbed	0.26 perturbed	0.15 perturbed
P	$3.548464^{+0.000030}_{-0.000030}$	$3.548462^{+0.000028}_{-0.000028}$	$3.548463^{+0.000027}_{-0.000025}$	$3.548463^{+0.000028}_{-0.000029}$	$3.548463^{+0.000028}_{-0.000028}$
T_0	$955.90125^{+0.00019}_{-0.00017}$	$955.90125^{+0.00018}_{-0.00019}$	$955.90125^{+0.00017}_{-0.00018}$	$955.90125^{+0.00019}_{-0.00018}$	$955.90125^{+0.00016}_{-0.00020}$
$r_{\rm A}$	$0.1729^{+0.0047}_{-0.0053}$	$0.1553^{+0.0082}_{-0.0023}$	$0.1664^{+0.0053}_{-0.0061}$	$0.1632^{+0.0057}_{-0.0069}$	$0.1649^{+0.0058}_{-0.0062}$
$r_{\rm b}$	$0.01416^{+0.00046}_{-0.00052}$	$0.01231^{+0.00081}_{-0.00023}$	$0.01346^{+0.00052}_{-0.00060}$	$0.01312^{+0.00058}_{-0.00067}$	$0.01331^{+0.00057}_{-0.00062}$
σ ($m$mag)	0.1269	0.1250	0.1261	0.1257	0.1260
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.1870^{+0.0051}_{-0.0059}$	$0.1685^{+0.0073}_{-0.0016}$	$0.1688^{+0.0148}_{-0.0038}$	$0.1687^{+0.0088}_{-0.0016}$	$0.1687^{+0.0181}_{-0.0049}$
k	$0.08191^{+0.00043}_{-0.00056}$	$0.07919^{+0.00088}_{-0.00044}$	$0.07860^{+0.00107}_{-0.00290}$	$0.07887^{+0.00099}_{-0.00053}$	$0.07865^{+0.00100}_{-0.00390}$
i (deg.)	$85.33^{+0.73}_{-0.58}$	$89.13^{+1.07}_{-1.89}$	$89.93^{+1.43}_{-2.24}$	$89.38^{+0.92}_{-2.18}$	$89.96^{+1.38}_{-2.35}$
$u_{\rm A}$	$0.413^{+0.013}_{-0.013}$	$0.258^{+0.043}_{-0.045}$	$-0.617^{+0.386}_{-1.891}$	$0.832^{+0.146}_{-0.135}$	$0.335^{+0.032}_{-0.077}$
$v_{\rm A}$		$0.38^{+0.11}_{-0.10}$	$1.84^{+3.42}_{-0.71}$	$0.55^{+0.18}_{-0.17}$	$0.49^{+1.13}_{-0.21}$
P	$3.548464^{+0.000027}_{-0.000028}$	$3.548462^{+0.000028}_{-0.000029}$	$3.548462^{+0.000028}_{-0.000029}$	$3.548462^{+0.000028}_{-0.000029}$	$3.548462^{+0.000027}_{-0.000029}$
T_0	$955.90125^{+0.00019}_{-0.00017}$	$955.90125^{+0.00017}_{-0.00019}$	$955.90125^{+0.00019}_{-0.00018}$	$955.90125^{+0.00018}_{-0.00020}$	$955.90125^{+0.00020}_{-0.00018}$
$r_{\rm A}$	$0.1729^{+0.0047}_{-0.0053}$	$0.1562^{+0.0067}_{-0.0015}$	$0.1565^{+0.0142}_{-0.0035}$	$0.1564^{+0.0083}_{-0.0015}$	$0.1564^{+0.0173}_{-0.0043}$
$r_{\rm b}$	$0.01416^{+0.00046}_{-0.00052}$	$0.01237^{+0.00068}_{-0.00012}$	$0.01230^{+0.00105}_{-0.00023}$	$0.01233^{+0.00078}_{-0.00009}$	$0.01230^{+0.00108}_{-0.00024}$
σ ($m$mag)	0.1269	0.1249	0.1249	0.1249	0.1249

Table A86. Parameters of the JKTEBOP best fits of the *Kepler* short-cadence light curve of Kepler-5, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 379 phase-binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1471^{+0.0020}_{-0.0022}$	$0.1459^{+0.0060}_{-0.0032}$	$0.1453^{+0.0068}_{-0.0030}$	$0.1455^{+0.0052}_{-0.0030}$	$0.1665^{+0.0125}_{-0.0034}$
k	$0.08005^{+0.00027}_{-0.00033}$	$0.07815^{+0.00061}_{-0.00021}$	$0.07835^{+0.00035}_{-0.00021}$	$0.07826^{+0.00035}_{-0.00019}$	$0.08022^{+0.00028}_{-0.00022}$
i (deg.)	$86.45^{+0.25}_{-0.20}$	$89.96^{+0.87}_{-1.41}$	$89.37^{+0.56}_{-1.06}$	$89.59^{+0.56}_{-1.13}$	$88.31^{+1.21}_{-0.98}$
$u_{\rm A}$	0.56 fixed	0.36 fixed	0.20 fixed	0.69 fixed	0.36 fixed
$v_{\rm A}$		0.31 fixed	0.53 fixed	0.26 fixed	0.15 fixed
$r_{\rm A}$	$0.1362^{+0.0019}_{-0.0020}$	$0.1353^{+0.0055}_{-0.0030}$	$0.1348^{+0.0062}_{-0.0028}$	$0.1349^{+0.0048}_{-0.0027}$	$0.1541^{+0.0116}_{-0.0031}$
$r_{\rm b}$	$0.01091^{+0.00017}_{-0.00018}$	$0.01058^{+0.00050}_{-0.00023}$	$0.01056^{+0.00052}_{-0.00023}$	$0.01056^{+0.00041}_{-0.00023}$	$0.01236^{+0.00095}_{-0.00027}$
σ ($m$mag)	0.1192	0.1176	0.1162	0.1159	0.1115
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1574^{+0.0042}_{-0.0029}$	$0.1640^{+0.0092}_{-0.0076}$	$0.1576^{+0.0056}_{-0.0041}$	$0.1608^{+0.0069}_{-0.0059}$	$0.1601^{+0.0055}_{-0.0046}$
k	$0.08033^{+0.00023}_{-0.00024}$	$0.07949^{+0.00059}_{-0.00041}$	$0.07975^{+0.00030}_{-0.00028}$	$0.07944^{+0.00043}_{-0.00035}$	$0.07972^{+0.00036}_{-0.00037}$
i (deg.)	$87.06^{+0.50}_{-0.33}$	$89.95^{+1.01}_{-1.71}$	$87.75^{+1.27}_{-0.54}$	$89.91^{+0.92}_{-1.48}$	$88.22^{+1.52}_{-0.84}$
$u_{\rm A}$	$0.458^{+0.014}_{-0.017}$	$0.276^{+0.039}_{-0.043}$	$0.138^{+0.044}_{-0.042}$	$0.615^{+0.046}_{-0.054}$	$0.401^{+0.024}_{-0.023}$
$v_{\rm A}$		0.31 perturbed	0.53 perturbed	0.26 perturbed	0.15 perturbed
$r_{\rm A}$	$0.1457^{+0.0040}_{-0.0027}$	$0.1519^{+0.0085}_{-0.0071}$	$0.1459^{+0.0052}_{-0.0037}$	$0.1489^{+0.0063}_{-0.0055}$	$0.1483^{+0.0051}_{-0.0042}$
$r_{\rm b}$	$0.01170^{+0.00032}_{-0.00024}$	$0.01207^{+0.00077}_{-0.00058}$	$0.01164^{+0.00043}_{-0.00032}$	$0.01183^{+0.00057}_{-0.00045}$	$0.01182^{+0.00043}_{-0.00035}$
σ ($m$mag)	0.1091	0.1114	0.1094	0.1098	0.1094
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.1574^{+0.0044}_{-0.0030}$	$0.1566^{+0.0036}_{-0.0031}$	$0.1561^{+0.0045}_{-0.0031}$	$0.1577^{+0.0036}_{-0.0031}$	$0.1561^{+0.0034}_{-0.0032}$
k	$0.08033^{+0.00025}_{-0.00024}$	$0.08032^{+0.00036}_{-0.00040}$	$0.08013^{+0.00044}_{-0.00051}$	$0.08016^{+0.00042}_{-0.00043}$	$0.08035^{+0.00038}_{-0.00055}$
i (deg.)	$87.06^{+0.47}_{-0.33}$	$87.03^{+0.73}_{-0.43}$	$87.19^{+1.00}_{-0.50}$	$87.31^{+1.01}_{-0.56}$	$86.97^{+0.85}_{-0.42}$
$u_{\rm A}$	$0.458^{+0.014}_{-0.017}$	$0.459^{+0.056}_{-0.059}$	$0.360^{+0.207}_{-0.234}$	$0.486^{+0.069}_{-0.069}$	$0.465^{+0.034}_{-0.039}$
$v_{\rm A}$		$0.003^{+0.088}_{-0.079}$	$0.167^{+0.370}_{-0.336}$	$0.048^{+0.108}_{-0.112}$	$-0.008^{+0.100}_{-0.081}$
$r_{\rm A}$	$0.1457^{+0.0040}_{-0.0028}$	$0.1449^{+0.0033}_{-0.0028}$	$0.1445^{+0.0042}_{-0.0028}$	$0.1460^{+0.0034}_{-0.0029}$	$0.1444^{+0.0031}_{-0.0030}$
$r_{\rm b}$	$0.01170^{+0.00033}_{-0.00024}$	$0.01164^{+0.00026}_{-0.00025}$	$0.01158^{+0.00032}_{-0.00025}$	$0.01170^{+0.00026}_{-0.00025}$	$0.01161^{+0.00026}_{-0.00027}$
σ ($m$mag)	0.1091	0.1091	0.1092	0.1091	0.1091

Table A87. Final parameters of the fit to the *Kepler* light curve of Kepler-5 from the JKTEBOP analysis, compared to those found by Koch et al. (2010) and Kipping & Bakos (2011b) (their solution 'A.c') from the same data. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work (LC)	**This work (SC, final)**	Koch et al. (2010)	Kipping & Bakos (2011b)
$r_{\rm A}+r_{\rm b}$	$0.1689^{+0.0176}_{-0.0047}$	$0.15661^{+0.0045}_{-0.0034}$	0.1785	0.1738
k	$0.07883^{+0.00106}_{-0.00038}$	$0.08024^{+0.00045}_{-0.00056}$	$0.08195^{+0.00030}_{-0.00047}$	$0.0798^{+0.0016}_{-0.0011}$
i ($^\circ$)	$89.6^{+0.4}_{-2.3}$	$87.1^{+1.0}_{-0.6}$	86.3 ± 0.5	$87.6^{+1.7}_{-2.2}$
$r_{\rm A}$	$0.1564^{+0.0169}_{-0.0042}$	$0.1445^{+0.0042}_{-0.0033}$	0.1650 ± 0.0038	$0.161^{+0.010}_{-0.005}$
$r_{\rm b}$	$0.01233^{+0.00105}_{-0.00023}$	$0.01163^{+0.00032}_{-0.00027}$	0.01352	0.01280

Table A88. Derived physical properties of the Kepler-5 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 34.5^{+1.7}_{-1.9}\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.352^{+0.025}_{-0.029}\,\rho_\odot$ and $T'_{\rm eq} = 1692^{+29}_{-25}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$154.15^{+3.60}_{-3.51}$	$151.92^{+1.52}_{-1.09}$	$152.27^{+1.35}_{-1.18}$	$152.28^{+0.59}_{-0.18}$	$151.81^{+1.28}_{-1.10}$	$150.99^{+1.57}_{-0.76}$
$M_{\rm A}$ ($M_\odot$)	$1.356^{+0.097}_{-0.091}$	$1.298^{+0.039}_{-0.028}$	$1.307^{+0.035}_{-0.030}$	$1.3072^{+0.015}_{-0.040}$	$1.2953^{+0.0328}_{-0.0280}$	$1.2744^{+0.040}_{-0.019}$
$R_{\rm A}$ ($R_\odot$)	$1.567^{+0.063}_{-0.054}$	$1.544^{+0.055}_{-0.041}$	$1.548^{+0.054}_{-0.042}$	$1.548^{+0.049}_{-0.037}$	$1.543^{+0.053}_{-0.041}$	$1.535^{+0.053}_{-0.026}$
$\log g_{\rm A}$ (cgs)	$4.180^{+0.021}_{-0.025}$	$4.174^{+0.019}_{-0.023}$	$4.175^{+0.019}_{-0.023}$	$4.175^{+0.020}_{-0.024}$	$4.174^{+0.019}_{-0.023}$	$4.171^{+0.023}_{-0.023}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.096^{+0.102}_{-0.098}$	$2.036^{+0.048}_{-0.038}$	$2.045^{+0.044}_{-0.040}$	$2.045^{+0.030}_{-0.026}$	$2.033^{+0.042}_{-0.039}$	$2.011^{+0.049}_{-0.032}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.227^{+0.044}_{-0.040}$	$1.209^{+0.035}_{-0.029}$	$1.212^{+0.035}_{-0.030}$	$1.212^{+0.034}_{-0.028}$	$1.208^{+0.035}_{-0.029}$	$1.202^{+0.035}_{-0.029}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$1.061^{+0.082}_{-0.087}$	$1.077^{+0.080}_{-0.086}$	$1.074^{+0.080}_{-0.086}$	$1.074^{+0.080}_{-0.085}$	$1.077^{+0.080}_{-0.086}$	$1.083^{+0.080}_{-0.086}$
Θ	$0.1269^{+0.0045}_{-0.0047}$	$0.1288^{+0.0036}_{-0.0040}$	$0.1285^{+0.0036}_{-0.0040}$	$0.1285^{+0.0034}_{-0.0038}$	$0.1289^{+0.0036}_{-0.0039}$	$0.1296^{+0.0035}_{-0.0040}$
a (AU)	$0.050419^{+0.00117}_{-0.00115}$	$0.04969^{+0.00050}_{-0.00035}$	$0.04981^{+0.00044}_{-0.00038}$	$0.049808^{+0.00019}_{-0.00049}$	$0.049655^{+0.00042}_{-0.00036}$	$0.049388^{+0.00051}_{-0.00025}$
Age (Gyr)		$3.0^{+0.3}_{-0.5}$	$2.8^{+0.3}_{-0.4}$	$2.6^{+0.0}_{-0.1}$	$2.5^{+0.3}_{-0.3}$	$3.1^{+0.1}_{-0.3}$

	This work (final)	Koch et al. (2010)	Kipping & Bakos (2011b)
$M_{\rm A}$ ($M_\odot$)	$1.296\,^{+0.040\,+0.011}_{-0.030\,-0.022}$	$1.374^{+0.040}_{-0.059}$	$1.370^{+0.050}_{-0.036}$
$R_{\rm A}$ ($R_\odot$)	$1.544\,^{+0.055\,+0.004}_{-0.042\,-0.009}$	$1.793^{+0.043}_{-0.062}$	$1.749^{+0.151}_{-0.059}$
$\log g_{\rm A}$ (cgs)	$4.174\,^{+0.023\,+0.001}_{-0.024\,-0.002}$	4.07 ± 0.02	$4.087^{+0.023}_{-0.057}$
$\rho_{\rm A}$ ($\rho_\odot$)	$0.352^{+0.025}_{-0.029}$	0.236 ± 0.014	$0.256^{+0.023}_{-0.050}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.034\,^{+0.049\,+0.011}_{-0.040\,-0.023}$	$2.114^{+0.056}_{-0.059}$	$2.05^{+0.14}_{-0.14}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.209\,^{+0.035\,+0.003}_{-0.030\,-0.007}$	$1.431^{+0.041}_{-0.052}$	$1.352^{+0.149}_{-0.052}$
$g_{\rm b}$ (m s^{-1})	$34.5^{+1.7}_{-1.9}$	25.7 ± 1.8	$27.1^{+3.0}_{-4.5}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$1.077\,^{+0.080\,+0.006}_{-0.086\,-0.003}$	0.674 ± 0.060	$0.76^{+0.11}_{-0.19}$
$T'_{\rm eq}$ (K)	1692^{+29}_{-25}	1868 ± 284	1790^{+64}_{-33}
Θ	$0.1288\,^{+0.0036\,+0.0007}_{-0.0040\,-0.0004}$		
a (AU)	$0.04967\,^{+0.00051\,+0.00014}_{-0.00038\,-0.00028}$	0.05064 ± 0.00070	$0.05056^{+0.00061}_{-0.00045}$
Age (Gyr)	$2.8\,^{+0.3\,+0.3}_{-0.5\,-0.3}$	3.0 ± 0.6	$2.83^{+0.23}_{-0.25}$

Table A89. Parameters of the JKTEBOP best fits of the *Kepler* long-cadence light curve of Kepler-6, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 246 datapoints with a temporal sampling rate of 29.4244 min.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1493^{+0.0060}_{-0.0038}$	$0.1462^{+0.0047}_{-0.0015}$	$0.1463^{+0.0063}_{-0.0017}$	$0.1457^{+0.0051}_{-0.0014}$	$0.1715^{+0.0033}_{-0.0034}$
k	$0.09426^{+0.00120}_{-0.00077}$	$0.09427^{+0.00073}_{-0.00036}$	$0.09301^{+0.00126}_{-0.00042}$	$0.09355^{+0.00092}_{-0.00041}$	$0.09978^{+0.00040}_{-0.00046}$
i (deg.)	$88.23^{+1.62}_{-1.08}$	$88.98^{+1.02}_{-1.16}$	$89.81^{+1.09}_{-1.42}$	$89.68^{+0.99}_{-1.25}$	$84.94^{+0.33}_{-0.30}$
$u_{\rm A}$	0.63 fixed	0.45 fixed	0.40 fixed	0.75 fixed	0.40 fixed
$v_{\rm A}$		0.23 fixed	0.42 fixed	0.21 fixed	0.10 fixed
T_0	$954.48638^{+0.00015}_{-0.00015}$	$954.48640^{+0.00014}_{-0.00015}$	$954.48638^{+0.00017}_{-0.00014}$	$954.48639^{+0.00015}_{-0.00015}$	$954.48643^{+0.00015}_{-0.00014}$
$r_{\rm A}$	$0.1365^{+0.0053}_{-0.0034}$	$0.1336^{+0.0042}_{-0.0013}$	$0.1339^{+0.0056}_{-0.0015}$	$0.1332^{+0.0046}_{-0.0013}$	$0.1560^{+0.0029}_{-0.0031}$
$r_{\rm b}$	$0.01286^{+0.00067}_{-0.00043}$	$0.01260^{+0.00050}_{-0.00016}$	$0.01245^{+0.00069}_{-0.00019}$	$0.01246^{+0.00058}_{-0.00016}$	$0.01556^{+0.00036}_{-0.00036}$
σ ($m$mag)	0.1627	0.1519	0.1627	0.1531	0.1728
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1515^{+0.0056}_{-0.0053}$	$0.1452^{+0.0079}_{-0.0022}$	$0.1447^{+0.0060}_{-0.0017}$	$0.1449^{+0.0074}_{-0.0022}$	$0.1445^{+0.0070}_{-0.0018}$
k	$0.09606^{+0.00100}_{-0.00093}$	$0.09390^{+0.00156}_{-0.00074}$	$0.09430^{+0.00098}_{-0.00050}$	$0.09407^{+0.00133}_{-0.00064}$	$0.09435^{+0.00127}_{-0.00060}$
i (deg.)	$87.5^{+1.2}_{-0.8}$	$89.8^{+1.2}_{-1.6}$	$89.7^{+1.1}_{-1.4}$	$89.9^{+1.2}_{-1.5}$	$89.7^{+1.1}_{-1.5}$
$u_{\rm A}$	$0.545^{+0.014}_{-0.012}$	$0.463^{+0.026}_{-0.031}$	$0.312^{+0.039}_{-0.042}$	$0.712^{+0.060}_{-0.054}$	$0.532^{+0.016}_{-0.015}$
$v_{\rm A}$		0.23 perturbed	0.42 perturbed	0.21 perturbed	0.10 perturbed
T_0	$954.48640^{+0.00013}_{-0.00016}$	$954.48639^{+0.00014}_{-0.00015}$	$954.48640^{+0.00014}_{-0.00014}$	$954.48640^{+0.00014}_{-0.00015}$	$954.48640^{+0.00014}_{-0.00014}$
$r_{\rm A}$	$0.1382^{+0.0050}_{-0.0047}$	$0.1328^{+0.0070}_{-0.0020}$	$0.1322^{+0.0053}_{-0.0016}$	$0.1324^{+0.0066}_{-0.0020}$	$0.1321^{+0.0061}_{-0.0016}$
$r_{\rm b}$	$0.01327^{+0.00062}_{-0.00058}$	$0.01247^{+0.00089}_{-0.00025}$	$0.01246^{+0.00065}_{-0.00019}$	$0.01246^{+0.00082}_{-0.00025}$	$0.01246^{+0.00078}_{-0.00020}$
σ ($m$mag)	0.1506	0.1516	0.1505	0.1508	0.1504
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.1515^{+0.0058}_{-0.0063}$	$0.1536^{+0.0067}_{-0.0071}$	$0.1536^{+0.0072}_{-0.0068}$	$0.1537^{+0.0070}_{-0.0070}$	$0.1539^{+0.0068}_{-0.0067}$
k	$0.0961^{+0.0010}_{-0.0011}$	$0.0967^{+0.0016}_{-0.0015}$	$0.0968^{+0.0019}_{-0.0017}$	$0.0968^{+0.0017}_{-0.0016}$	$0.0969^{+0.0016}_{-0.0017}$
i (deg.)	$87.5^{+1.5}_{-0.9}$	$87.1^{+1.4}_{-0.9}$	$87.1^{+1.4}_{-1.0}$	$87.1^{+1.5}_{-1.0}$	$87.0^{+1.4}_{-0.9}$
$u_{\rm A}$	$0.545^{+0.013}_{-0.012}$	$0.585^{+0.090}_{-0.065}$	$0.749^{+0.389}_{-0.334}$	$0.462^{+0.149}_{-0.139}$	$0.563^{+0.042}_{-0.033}$
$v_{\rm A}$		$-0.09^{+0.14}_{-0.16}$	$-0.36^{+0.59}_{-0.66}$	$-0.11^{+0.20}_{-0.21}$	$-0.09^{+0.16}_{-0.16}$
T_0	$954.48640^{+0.00015}_{-0.00014}$	$954.48640^{+0.00014}_{-0.00015}$	$954.48640^{+0.00014}_{-0.00014}$	$954.48640^{+0.00013}_{-0.00015}$	$954.48640^{+0.00014}_{-0.00014}$
$r_{\rm A}$	$0.1382^{+0.0052}_{-0.0056}$	$0.1400^{+0.0060}_{-0.0062}$	$0.1400^{+0.0063}_{-0.0060}$	$0.1401^{+0.0062}_{-0.0062}$	$0.1403^{+0.0060}_{-0.0059}$
$r_{\rm b}$	$0.01327^{+0.00062}_{-0.00068}$	$0.01355^{+0.00079}_{-0.00083}$	$0.01356^{+0.00088}_{-0.00082}$	$0.01357^{+0.00085}_{-0.00083}$	$0.01359^{+0.00079}_{-0.00081}$
σ ($m$mag)	0.1506	0.1506	0.1506	0.1506	0.1506

Table A90. Parameters of the JKTEBOP best fits of the *Kepler* short-cadence light curve of Kepler-6, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains phase-binned 304 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.14504^{+0.00152}_{-0.00037}$	$0.14489^{+0.00139}_{-0.00045}$	$0.14578^{+0.00168}_{-0.00052}$	$0.14533^{+0.00175}_{-0.00046}$	$0.14977^{+0.00088}_{-0.00080}$
k	$0.09454^{+0.00036}_{-0.00025}$	$0.09511^{+0.00030}_{-0.00023}$	$0.09400^{+0.00039}_{-0.00024}$	$0.09454^{+0.00035}_{-0.00026}$	$0.09815^{+0.00020}_{-0.00023}$
i (deg.)	$89.92^{+0.48}_{-0.69}$	$89.93^{+0.54}_{-0.61}$	$89.97^{+0.57}_{-0.69}$	$89.98^{+0.54}_{-0.75}$	$87.62^{+0.14}_{-0.15}$
$u_{\rm A}$	0.63 fixed	0.45 fixed	0.40 fixed	0.75 fixed	0.40 fixed
$v_{\rm A}$		0.23 fixed	0.42 fixed	0.21 fixed	0.10 fixed
$r_{\rm A}$	$0.13251^{+0.00135}_{-0.00034}$	$0.13230^{+0.00125}_{-0.00040}$	$0.13325^{+0.00152}_{-0.00045}$	$0.13278^{+0.00157}_{-0.00042}$	$0.13639^{+0.00078}_{-0.00071}$
$r_{\rm b}$	$0.012528^{+0.000165}_{-0.000053}$	$0.012583^{+0.000139}_{-0.000058}$	$0.012525^{+0.000185}_{-0.000062}$	$0.012553^{+0.000186}_{-0.000061}$	$0.013386^{+0.000090}_{-0.000082}$
σ ($m$mag)	0.1339	0.0967	0.1380	0.1089	0.1537
$\chi^2_{\rm red}$	2.0210	1.0532	2.1456	1.3362	2.6597
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1444^{+0.0009}_{-0.0006}$	$0.1447^{+0.0019}_{-0.0006}$	$0.1444^{+0.0014}_{-0.0005}$	$0.1446^{+0.0021}_{-0.0006}$	$0.1443^{+0.0021}_{-0.0006}$
k	$0.09599^{+0.00026}_{-0.00025}$	$0.09528^{+0.00047}_{-0.00034}$	$0.09553^{+0.00034}_{-0.00026}$	$0.09538^{+0.00048}_{-0.00035}$	$0.09559^{+0.00052}_{-0.00034}$
i (deg.)	$89.34^{+0.62}_{-0.41}$	$89.92^{+0.67}_{-0.74}$	$89.94^{+0.57}_{-0.62}$	$89.93^{+0.64}_{-0.79}$	$89.91^{+0.65}_{-0.77}$
$u_{\rm A}$	$0.541^{+0.005}_{-0.005}$	$0.439^{+0.030}_{-0.033}$	$0.301^{+0.037}_{-0.039}$	$0.696^{+0.046}_{-0.054}$	$0.521^{+0.014}_{-0.017}$
$v_{\rm A}$		0.23 perturbed	0.42 perturbed	0.21 perturbed	0.10 perturbed
$r_{\rm A}$	$0.1317^{+0.0008}_{-0.0005}$	$0.1321^{+0.0017}_{-0.0005}$	$0.1318^{+0.0012}_{-0.0004}$	$0.1320^{+0.0019}_{-0.0005}$	$0.1317^{+0.0019}_{-0.0005}$
$r_{\rm b}$	$0.01264^{+0.00010}_{-0.00007}$	$0.01259^{+0.00022}_{-0.00007}$	$0.01259^{+0.00015}_{-0.00006}$	$0.01259^{+0.00023}_{-0.00007}$	$0.01259^{+0.00022}_{-0.00007}$
σ ($m$mag)	0.0957	0.0960	0.0937	0.0940	0.0937
$\chi^2_{\rm red}$	1.0358	1.0425	0.9926	0.9977	0.9933
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	$0.1444^{+0.0010}_{-0.0005}$	$0.1443^{+0.0023}_{-0.0005}$	$0.1443^{+0.0016}_{-0.0005}$	$0.1443^{+0.0026}_{-0.0006}$	$0.1444^{+0.0058}_{-0.0007}$
k	$0.09599^{+0.00027}_{-0.00024}$	$0.09562^{+0.00039}_{-0.00035}$	$0.09556^{+0.00041}_{-0.00036}$	$0.09557^{+0.00041}_{-0.00037}$	$0.09551^{+0.00044}_{-0.00058}$
i (deg.)	$89.34^{+0.57}_{-0.47}$	$89.90^{+0.52}_{-0.69}$	$89.91^{+0.60}_{-0.69}$	$89.95^{+0.58}_{-0.80}$	$89.93^{+0.57}_{-0.76}$
$u_{\rm A}$	$0.541^{+0.005}_{-0.005}$	$0.493^{+0.018}_{-0.020}$	$0.318^{+0.101}_{-0.113}$	$0.643^{+0.043}_{-0.045}$	$0.516^{+0.012}_{-0.018}$
$v_{\rm A}$		$0.108^{+0.043}_{-0.041}$	$0.391^{+0.200}_{-0.173}$	$0.139^{+0.060}_{-0.059}$	$0.127^{+0.077}_{-0.053}$
$r_{\rm A}$	$0.1317^{+0.0009}_{-0.0004}$	$0.1317^{+0.0020}_{-0.0005}$	$0.1317^{+0.0014}_{-0.0005}$	$0.1317^{+0.0023}_{-0.0005}$	$0.1318^{+0.0051}_{-0.0006}$
$r_{\rm b}$	$0.01264^{+0.00011}_{-0.00006}$	$0.01259^{+0.00017}_{-0.00006}$	$0.01259^{+0.00018}_{-0.00006}$	$0.01259^{+0.00022}_{-0.00006}$	$0.01259^{+0.00020}_{-0.00007}$
σ ($m$mag)	0.0957	0.0937	0.0938	0.0937	0.0936
$\chi^2_{\rm red}$	1.0358	0.9958	0.9969	0.9953	0.9944

Table A91. Final parameters of the fit to the *Kepler* light curve of Kepler-6 from the JKTEBOP analysis, compared to those found by Dunham et al. (2010) and Kipping & Bakos (2011b) (their solution 'A.c') from the same data. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work (LC)	This work (SC)	**This work (final)**	Dunham et al. (2010)	Kipping & Bakos (2011b)
$r_{\rm A}+r_{\rm b}$	$0.1448^{+0.0080}_{-0.0023}$	$0.1445^{+0.0022}_{-0.0006}$	$0.1446^{+0.0020}_{-0.0006}$	0.1557	0.1496
k	$0.09415^{+0.00160}_{-0.00077}$	$0.09544^{+0.00054}_{-0.00037}$	$0.09538^{+0.00046}_{-0.00036}$	$0.09829^{+0.00014}_{-0.00050}$	$0.0955^{+0.0024}_{-0.0015}$
i (°)	$89.8^{+0.2}_{-1.6}$	$89.9^{+0.1}_{-0.8}$	$89.9^{+0.1}_{-0.7}$	86.8 ± 0.3	$87.9^{+1.4}_{-1.7}$
$r_{\rm A}$	$0.1324^{+0.0072}_{-0.0020}$	$0.1319^{+0.0019}_{-0.0006}$	$0.1321^{+0.0017}_{-0.0006}$	$0.1418^{+0.0012}_{-0.0022}$	$0.1366^{+0.0084}_{-0.0042}$
$r_{\rm b}$	$0.01246^{+0.00091}_{-0.00026}$	$0.01259^{+0.00023}_{-0.00007}$	$0.01259^{+0.00022}_{-0.00007}$	0.01394	0.01305

* Some of the values for k in Table 6 Kipping & Bakos (2011b) are misprints: they appear to be quantities for Kepler-4, not Kepler-6.

Table A92. Derived physical properties of the Kepler-6 system. The upper part of the table contains the individual results from this work; in each case.$g_{\rm b} = 11.48^{+0.39}_{-0.54}\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.556^{+0.008}_{-0.021}\,\rho_\odot$ and $T'_{\rm eq} = 1451^{+15}_{-13}$ K The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$156.05^{+3.52}_{-3.44}$	$148.59^{+0.18}_{-0.39}$	$149.48^{+0.87}_{-0.97}$	$151.86^{+6.09}_{-2.72}$	$147.40^{+1.57}_{-0.36}$	$148.51^{+1.00}_{-0.12}$
$M_{\rm A}$ ($M_\odot$)	$1.275^{+0.088}_{-0.083}$	$1.101^{+0.004}_{-0.009}$	$1.121^{+0.020}_{-0.022}$	$1.175^{+0.146}_{-0.062}$	$1.075^{+0.035}_{-0.008}$	$1.099^{+0.022}_{-0.003}$
$R_{\rm A}$ ($R_\odot$)	$1.319^{+0.035}_{-0.030}$	$1.256^{+0.017}_{-0.007}$	$1.264^{+0.020}_{-0.011}$	$1.284^{+0.057}_{-0.024}$	$1.246^{+0.029}_{-0.007}$	$1.255^{+0.020}_{-0.007}$
$\log g_{\rm A}$ (cgs)	$4.3033^{+0.0103}_{-0.0142}$	$4.2821^{+0.0039}_{-0.0108}$	$4.2847^{+0.0043}_{-0.0106}$	$4.2915^{+0.0171}_{-0.0108}$	$4.2786^{+0.0037}_{-0.0066}$	$4.2818^{+0.0046}_{-0.0103}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.693^{+0.039}_{-0.038}$	$0.628^{+0.020}_{-0.020}$	$0.635^{+0.022}_{-0.022}$	$0.656^{+0.057}_{-0.031}$	$0.618^{+0.024}_{-0.020}$	$0.627^{+0.022}_{-0.020}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.223^{+0.035}_{-0.028}$	$1.165^{+0.020}_{-0.007}$	$1.172^{+0.022}_{-0.010}$	$1.190^{+0.052}_{-0.022}$	$1.155^{+0.024}_{-0.007}$	$1.164^{+0.022}_{-0.007}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.354^{+0.015}_{-0.023}$	$0.372^{+0.014}_{-0.022}$	$0.369^{+0.014}_{-0.022}$	$0.364^{+0.015}_{-0.026}$	$0.375^{+0.014}_{-0.023}$	$0.372^{+0.013}_{-0.022}$
Θ	$0.0412^{+0.0016}_{-0.0018}$	$0.0432^{+0.0014}_{-0.0016}$	$0.0430^{+0.0014}_{-0.0016}$	$0.0423^{+0.0016}_{-0.0022}$	$0.0436^{+0.0014}_{-0.0017}$	$0.0433^{+0.0014}_{-0.0016}$
a (AU)	$0.04643^{+0.00105}_{-0.00102}$	$0.04421^{+0.00005}_{-0.00012}$	$0.04448^{+0.00026}_{-0.00029}$	$0.04518^{+0.00181}_{-0.00081}$	$0.04386^{+0.00047}_{-0.00011}$	$0.04419^{+0.00030}_{-0.00003}$
Age (Gyr)		$6.0^{+0.0}_{-0.1}$	$5.2^{+0.8}_{-0.7}$	$5.2^{+0.8}_{-2.3}$	$6.0^{+0.0}_{-0.7}$	$6.0^{+0.0}_{-0.8}$

	This work (final)	Dunham et al. (2010)	Kipping & Bakos (2011b)
$M_{\rm A}$ ($M_\odot$)	$1.114\,^{+0.146\,+0.061}_{-0.062\,-0.040}$	$1.209^{+0.044}_{-0.038}$	$1.127^{+0.045}_{-0.065}$
$R_{\rm A}$ ($R_\odot$)	$1.261\,^{+0.057\,+0.023}_{-0.024\,-0.015}$	$1.391^{+0.017}_{-0.034}$	$1.306^{+0.102}_{-0.046}$
$\log g_{\rm A}$ (cgs)	$4.284\,^{+0.017\,+0.008}_{-0.011\,-0.005}$	4.236 ± 0.011	$4.254^{+0.026}_{-0.056}$
$\rho_{\rm A}$ ($\rho_\odot$)	$0.5555^{+0.0076}_{-0.0209}$		$0.504^{+0.048}_{-0.093}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.633\,^{+0.057\,+0.023}_{-0.031\,-0.015}$	$0.669^{+0.025}_{-0.030}$	$0.617^{+0.052}_{-0.051}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.169\,^{+0.052\,+0.021}_{-0.022\,-0.014}$	$1.323^{+0.026}_{-0.029}$	$1.208^{+0.129}_{-0.049}$
$g_{\rm b}$ (m s^{-1})	$11.48^{+0.39}_{-0.54}$	$9.42^{+0.35}_{-0.47}$	$10.2^{+1.3}_{-1.7}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.370\,^{+0.015\,+0.004}_{-0.026\,-0.007}$	$0.265^{+0.14}_{-0.17}$	$0.321^{+0.052}_{-0.079}$
$T'_{\rm eq}$ (K)	1451^{+15}_{-13}	1500 ± 200	1480^{+51}_{-33}
Θ	$0.0431\,^{+0.0016\,+0.0005}_{-0.0022\,-0.0008}$		
a (AU)	$0.04438\,^{+0.00181\,+0.00080}_{-0.00081\,-0.00053}$	$0.04567^{+0.00055}_{-0.00046}$	$0.04452^{+0.00058}_{-0.00088}$
Age (Gyr)	$5.7\,^{+0.8\,+0.3}_{-2.3\,-0.5}$	3.8 ± 1.0	$5.65^{+2.68}_{-0.86}$

Table A93. Parameters of the JKTEBOP best fits of the *Kepler* light curve of Kepler-7, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 341 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1609 ± 0.0024	0.1548 ± 0.0021	0.1568 ± 0.0024	0.1539 ± 0.0024	0.1715 ± 0.0016
k	0.08339 ± 0.00038	0.08249 ± 0.00029	0.08274 ± 0.00034	0.08227 ± 0.00035	0.08518 ± 0.00023
i (deg.)	85.47 ± 0.24	86.11 ± 0.23	85.90 ± 0.26	86.24 ± 0.28	84.33 ± 0.14
$u_{\rm A}$	0.59 fixed	0.36 fixed	0.23 fixed	0.71 fixed	0.36 fixed
$v_{\rm A}$		0.28 fixed	0.53 fixed	0.26 fixed	0.14 fixed
P	4.8854946 ± 0.0000086	4.8854950 ± 0.0000078	4.8854951 ± 0.0000086	4.8854950 ± 0.0000079	4.8854947 ± 0.0000082
T_0	967.27596 ± 0.00012	967.27597 ± 0.00011	967.27596 ± 0.00012	967.27597 ± 0.00011	967.27599 ± 0.00011
$r_{\rm A}$	0.1485 ± 0.0022	0.1430 ± 0.0019	0.1448 ± 0.0022	0.1422 ± 0.0022	0.1580 ± 0.0014
$r_{\rm b}$	0.01239 ± 0.00023	0.01179 ± 0.00019	0.01198 ± 0.00022	0.01170 ± 0.00022	0.01346 ± 0.00015
σ ($m$mag)	0.1287	0.1189	0.1213	0.1203	0.1231
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1654 ± 0.0020	0.1605 ± 0.0030	0.1629 ± 0.0021	0.1616 ± 0.0024	0.1626 ± 0.0026
k	0.08469 ± 0.00030	0.08340 ± 0.00048	0.08394 ± 0.00032	0.08362 ± 0.00041	0.08392 ± 0.00050
i (deg.)	84.90 ± 0.19	85.45 ± 0.31	85.20 ± 0.21	85.34 ± 0.25	85.22 ± 0.27
$u_{\rm A}$	0.488 ± 0.008	0.324 ± 0.035	0.168 ± 0.040	0.654 ± 0.045	0.444 ± 0.020
$v_{\rm A}$		0.28 perturbed	0.53 perturbed	0.26 perturbed	0.14 perturbed
P	4.8854947 ± 0.0000080	4.8854948 ± 0.0000077	4.8854948 ± 0.0000082	4.8854947 ± 0.0000084	4.8854948 ± 0.0000081
T_0	967.27598 ± 0.00011	967.27598 ± 0.00011	967.27598 ± 0.00011	967.27598 ± 0.00011	967.27598 ± 0.00011
$r_{\rm A}$	0.1525 ± 0.0018	0.1482 ± 0.0027	0.1503 ± 0.0019	0.1491 ± 0.0022	0.1500 ± 0.0023
$r_{\rm b}$	0.01291 ± 0.00019	0.01236 ± 0.00028	0.01261 ± 0.00020	0.01247 ± 0.00024	0.01259 ± 0.00026
σ ($m$mag)	0.1184	0.1182	0.1182	0.1182	0.1182
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1654 ± 0.0020	0.1623 ± 0.0030	0.1615 ± 0.0034	0.1619 ± 0.0032	0.1616 ± 0.0035
k	0.08469 ± 0.00030	0.08384 ± 0.00061	0.08354 ± 0.00082	0.08370 ± 0.00068	0.08367 ± 0.00075
i (deg.)	84.90 ± 0.19	85.25 ± 0.32	85.36 ± 0.39	85.31 ± 0.35	85.33 ± 0.39
$u_{\rm A}$	0.488 ± 0.008	0.373 ± 0.064	0.012 ± 0.298	0.641 ± 0.094	0.433 ± 0.030
$v_{\rm A}$		0.19 ± 0.11	0.79 ± 0.50	0.24 ± 0.14	0.18 ± 0.11
P	4.8854947 ± 0.0000078	4.8854948 ± 0.0000080	4.8854948 ± 0.0000086	4.8854947 ± 0.0000076	4.8854947 ± 0.0000081
T_0	967.27598 ± 0.00012	967.27598 ± 0.00011	967.27598 ± 0.00012	967.27598 ± 0.00011	967.27598 ± 0.00011
$r_{\rm A}$	0.1525 ± 0.0018	0.1497 ± 0.0027	0.1490 ± 0.0030	0.1494 ± 0.0029	0.1492 ± 0.0032
$r_{\rm b}$	0.01291 ± 0.00019	0.01255 ± 0.00031	0.01245 ± 0.00037	0.01250 ± 0.00033	0.01248 ± 0.00037
σ ($m$mag)	0.1184	0.1182	0.1182	0.1182	0.1182

Table A94. Final parameters of the fit to the *Kepler* light curve of Kepler-7 from the JKTEBOP analysis, compared to those found by Latham et al. (2010) and Kipping & Bakos (2011b) (their solution 'A.c') from the same data. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work	Latham et al. (2010)	Kipping & Bakos (2011b)
$r_{\rm A} + r_{\rm b}$	0.1619 ± 0.0039	0.1499	0.1514
k	0.0837 ± 0.0009	$0.08241^{+0.00032}_{-0.00044}$	$0.0813^{+0.0023}_{-0.0021}$
i ($^\circ$)	85.31 ± 0.43	86.5 ± 0.4	$86.5^{+2.0}_{-1.4}$
$r_{\rm A}$	0.1494 ± 0.0035	$0.1385^{+0.0025}_{-0.0031}$	$0.1401^{+0.0097}_{-0.0119}$
$r_{\rm b}$	0.01250 ± 0.00041	0.01141	0.01138

Table A95. Derived physical properties of the Kepler-7 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 4.10 \pm 0.43\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.168 \pm 0.012\,\rho_\odot$ and $T'_{\rm eq} = 1621 \pm 23\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	141.29 ± 3.17	136.45 ± 0.43	136.45 ± 0.62	136.18 ± 3.86	135.80 ± 0.70	134.68 ± 1.86
$M_{\rm A}$ ($M_\odot$)	1.443 ± 0.097	1.300 ± 0.011	1.300 ± 0.016	1.292 ± 0.115	1.281 ± 0.020	1.250 ± 0.052
$R_{\rm A}$ ($R_\odot$)	2.046 ± 0.071	1.976 ± 0.048	1.976 ± 0.051	1.972 ± 0.081	1.967 ± 0.053	1.951 ± 0.053
$\log g_{\rm A}$ (cgs)	3.976 ± 0.021	3.960 ± 0.020	3.960 ± 0.020	3.960 ± 0.024	3.958 ± 0.019	3.955 ± 0.021
$M_{\rm b}$ ($M_{\rm Jup}$)	0.459 ± 0.043	0.428 ± 0.035	0.428 ± 0.035	0.426 ± 0.046	0.424 ± 0.035	0.417 ± 0.036
$R_{\rm b}$ ($R_{\rm Jup}$)	1.666 ± 0.066	1.609 ± 0.053	1.609 ± 0.054	1.606 ± 0.075	1.601 ± 0.053	1.588 ± 0.057
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.093 ± 0.012	0.096 ± 0.012	0.096 ± 0.012	0.096 ± 0.013	0.097 ± 0.012	0.097 ± 0.013
Θ	0.0243 ± 0.0022	0.0252 ± 0.0022	0.0252 ± 0.0022	0.0252 ± 0.0024	0.0253 ± 0.0022	0.0255 ± 0.0023
a (AU)	0.06368 ± 0.00143	0.06150 ± 0.00018	0.06150 ± 0.00026	0.06138 ± 0.00174	0.06121 ± 0.00031	0.06070 ± 0.00084
Age (Gyr)		$4.4^{+0.2}_{-0.0}$	$4.2^{+0.1}_{-0.0}$	$4.1^{+0.0}_{-1.6}$	$4.0^{+0.1}_{-0.4}$	$5.1^{+0.4}_{-0.6}$

	This work (final)	Latham et al. (2010)	Kipping & Bakos (2011b)
$M_{\rm A}$ ($M_\odot$)	$1.28 \pm 0.11 \pm 0.03$	$1.347^{+0.072}_{-0.054}$	$1.257^{+0.087}_{-0.073}$
$R_{\rm A}$ ($R_\odot$)	$1.969 \pm 0.081 \pm 0.018$	$1.843^{+0.048}_{-0.066}$	$1.83^{+0.17}_{-0.14}$
$\log g_{\rm A}$ (cgs)	$3.959 \pm 0.024 \pm 0.004$	$4.030^{+0.018}_{-0.019}$	$4.012^{+0.061}_{-.063}$
$\rho_{\rm A}$ ($\rho_\odot$)	0.168 ± 0.012		$0.197^{+0.052}_{-.043}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.425 \pm 0.046 \pm 0.008$	$0.433^{+0.040}_{-0.041}$	$0.42^{+0.11}_{-0.11}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.602 \pm 0.075 \pm 0.014$	$1.478^{+0.050}_{-0.051}$	$1.45^{+0.18}_{-0.15}$
$g_{\rm b}$ (m s^{-1})	4.10 ± 0.43	$4.91^{+0.45}_{-0.44}$	$4.9^{+1.7}_{-1.4}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.097 \pm 0.013 \pm 0.001$	$0.125^{+0.014}_{-0.015}$	$0.126^{+0.056}_{-0.042}$
$T'_{\rm eq}$ (K)	1621 ± 23	1540 ± 200	1569^{+65}_{-58}
Θ	$0.0253 \pm 0.0024 \pm 0.0002$		
a (AU)	$0.0613 \pm 0.0017 \pm 0.0006$	$0.06224^{+0.00109}_{-0.00084}$	$0.0608^{+0.0014}_{-0.0012}$
Age (Gyr)	$4.4\,^{+0.4}_{-1.6}\,^{+0.7}_{-0.4}$	3.5 ± 1.0	$4.82^{+0.82}_{-1.20}$

Table A96. Parameters of the JKTEBOP best fits of the *Kepler* light curve of Kepler-8, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD $-$ 2454000.0. The light curve contains 264 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1591 ± 0.0074	0.1572 ± 0.0065	0.1582 ± 0.0071	0.1565 ± 0.0072	0.1697 ± 0.0053
k	0.09525 ± 0.00126	0.09398 ± 0.00101	0.09452 ± 0.00111	0.09407 ± 0.00116	0.09568 ± 0.00070
i (deg.)	84.09 ± 0.55	84.24 ± 0.50	84.17 ± 0.53	84.31 ± 0.55	83.22 ± 0.37
$u_{\rm A}$	0.57 fixed	0.32 fixed	0.22 fixed	0.69 fixed	0.32 fixed
$v_{\rm A}$		0.30 fixed	0.52 fixed	0.25 fixed	0.15 fixed
P	3.522477 ± 0.000052	3.522477 ± 0.000053	3.522478 ± 0.000050	3.522477 ± 0.000053	3.522477 ± 0.000050
T_0	954.11860 ± 0.00036	954.11860 ± 0.00037	954.11860 ± 0.00036	954.11860 ± 0.00037	954.11861 ± 0.00037
$r_{\rm A}$	0.1452 ± 0.0066	0.1437 ± 0.0058	0.1445 ± 0.0064	0.1431 ± 0.0065	0.1549 ± 0.0048
$r_{\rm b}$	0.01383 ± 0.00078	0.01350 ± 0.00069	0.01366 ± 0.00076	0.01346 ± 0.00076	0.01482 ± 0.00055
σ ($m$mag)	0.3463	0.3437	0.3446	0.3447	0.3402
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1741 ± 0.0062	0.1739 ± 0.0067	0.1739 ± 0.0069	0.1738 ± 0.0068	0.1739 ± 0.0067
k	0.09638 ± 0.00067	0.09533 ± 0.00068	0.09578 ± 0.00068	0.09557 ± 0.00067	0.09572 ± 0.00073
i (deg.)	82.86 ± 0.45	82.89 ± 0.50	82.89 ± 0.50	82.90 ± 0.50	82.89 ± 0.51
$u_{\rm A}$	0.33 ± 0.10	0.08 ± 0.13	-0.02 ± 0.11	0.44 ± 0.11	0.24 ± 0.11
$v_{\rm A}$		0.30 perturbed	0.52 perturbed	0.25 perturbed	0.15 perturbed
P	3.522476 ± 0.000052	3.522476 ± 0.000055	3.522476 ± 0.000048	3.522476 ± 0.000050	3.522476 ± 0.000052
T_0	954.11862 ± 0.00037	954.11862 ± 0.00037	954.11862 ± 0.00036	954.11862 ± 0.00037	954.11862 ± 0.00036
$r_{\rm A}$	0.1588 ± 0.0056	0.1588 ± 0.0062	0.1587 ± 0.0063	0.1587 ± 0.0061	0.1587 ± 0.0062
$r_{\rm b}$	0.01531 ± 0.00058	0.01514 ± 0.00060	0.01520 ± 0.00062	0.01516 ± 0.00061	0.01519 ± 0.00061
σ ($m$mag)	0.3398	0.3398	0.3398	0.3398	0.3398
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1741 ± 0.0065	0.1742 ± 0.0055	0.1750 ± 0.0053	0.1745 ± 0.0057	0.1746 ± 0.0057
k	0.0964 ± 0.0007	0.1000 ± 0.0096	0.1014 ± 0.0088	0.0992 ± 0.0097	0.0991 ± 0.0092
i (deg.)	82.86 ± 0.47	82.82 ± 0.41	82.71 ± 0.36	82.79 ± 0.40	82.78 ± 0.41
$u_{\rm A}$	0.33 ± 0.08	1.04 ± 1.52	2.56 ± 3.26	0.06 ± 0.86	0.67 ± 0.93
$v_{\rm A}$		-0.8 ± 1.8	-3.2 ± 4.7	-0.7 ± 2.1	-0.5 ± 1.6
P	3.522476 ± 0.000052	3.522476 ± 0.000053	3.522478 ± 0.000053	3.522476 ± 0.000054	3.522476 ± 0.000051
T_0	954.11862 ± 0.00037	954.11861 ± 0.00035	954.11860 ± 0.00038	954.11861 ± 0.00038	954.11861 ± 0.00036
$r_{\rm A}$	0.1588 ± 0.0059	0.1584 ± 0.0053	0.1589 ± 0.0051	0.1587 ± 0.0057	0.1589 ± 0.0056
$r_{\rm b}$	0.0153 ± 0.0006	0.0158 ± 0.0015	0.0161 ± 0.0012	0.0157 ± 0.0013	0.0157 ± 0.0014
σ ($m$mag)	0.3398	0.3396	0.3395	0.3396	0.3396

Table A97. Parameters of the JKTEBOP best fits of the *Kepler* short-cadence light curve of Kepler-8, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 298 phase-binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.1551 ± 0.0016	0.1553 ± 0.0015	0.1552 ± 0.0016	0.1546 ± 0.0016	0.1622 ± 0.0013
k	0.09542 ± 0.00043	0.09451 ± 0.00041	0.09488 ± 0.00040	0.09459 ± 0.00043	0.09559 ± 0.00038
i (deg.)	84.369 ± 0.124	84.360 ± 0.111	84.372 ± 0.120	84.429 ± 0.118	83.742 ± 0.097
$u_{\rm A}$	0.57 fixed	0.32 fixed	0.22 fixed	0.69 fixed	0.32 fixed
$v_{\rm A}$		0.30 fixed	0.52 fixed	0.25 fixed	0.15 fixed
$r_{\rm A}$	0.1416 ± 0.0015	0.1419 ± 0.0013	0.1418 ± 0.0014	0.1413 ± 0.0014	0.1481 ± 0.0012
$r_{\rm b}$	0.01351 ± 0.00017	0.01341 ± 0.00016	0.01345 ± 0.00016	0.01336 ± 0.00017	0.01416 ± 0.00014
σ ($m$mag)	0.1718	0.1690	0.1697	0.1698	0.1771
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.1574 ± 0.0016	0.1566 ± 0.0018	0.1569 ± 0.0016	0.1567 ± 0.0017	0.1568 ± 0.0018
k	0.09582 ± 0.00043	0.09471 ± 0.00046	0.09517 ± 0.00041	0.09495 ± 0.00047	0.09511 ± 0.00049
i (deg.)	84.15 ± 0.13	84.25 ± 0.14	84.22 ± 0.13	84.24 ± 0.13	84.23 ± 0.14
$u_{\rm A}$	0.514 ± 0.019	0.295 ± 0.052	0.184 ± 0.045	0.646 ± 0.040	0.447 ± 0.035
$v_{\rm A}$		0.30 perturbed	0.52 perturbed	0.25 perturbed	0.15 perturbed
$r_{\rm A}$	0.1437 ± 0.0015	0.1431 ± 0.0016	0.1433 ± 0.0015	0.1432 ± 0.0015	0.1432 ± 0.0016
$r_{\rm b}$	0.01376 ± 0.00018	0.01355 ± 0.00019	0.01364 ± 0.00017	0.01359 ± 0.00018	0.01362 ± 0.00019
σ ($m$mag)	0.1692	0.1686	0.1688	0.1687	0.1687
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.1574 ± 0.0017	0.1557 ± 0.0021	0.1560 ± 0.0019	0.1558 ± 0.0020	0.1556 ± 0.0020
k	0.0958 ± 0.0004	0.0939 ± 0.0011	0.0940 ± 0.0013	0.0940 ± 0.0012	0.0940 ± 0.0011
i (deg.)	84.15 ± 0.13	84.34 ± 0.18	84.35 ± 0.18	84.35 ± 0.19	84.36 ± 0.18
$u_{\rm A}$	0.514 ± 0.020	0.133 ± 0.212	-0.439 $\pm$ 0.688	0.808 ± 0.199	0.355 ± 0.094
$v_{\rm A}$		0.53 ± 0.31	1.52 ± 1.11	0.54 ± 0.35	0.38 ± 0.24
$r_{\rm A}$	0.1437 ± 0.0015	0.1423 ± 0.0018	0.1426 ± 0.0017	0.1424 ± 0.0018	0.1423 ± 0.0017
$r_{\rm b}$	0.01376 ± 0.00017	0.01336 ± 0.00027	0.01339 ± 0.00027	0.01338 ± 0.00028	0.01338 ± 0.00026
σ ($m$mag)	0.1692	0.1685	0.1685	0.1685	0.1685

Table A98. Final parameters of the fit to the *Kepler* light curves of Kepler-8 from the JKTEBOP analysis, compared to those found by Jenkins et al. (2010) and Kipping & Bakos (2011b) (their solution 'A.c') from the same data. Quantities without quoted uncertainties were not given by those authors but have been calculated from other parameters which were.

	This work (LC)	**This work (SC, final)**	Jenkins et al. (2010)	Kipping & Bakos (2011b)
$r_{\rm A} + r_{\rm b}$	0.1739 ± 0.0076	0.1568 ± 0.0020	0.1576	0.1532
k	0.09559 ± 0.00080	0.09499 ± 0.00054	$0.08241^{+0.00032}_{-0.00044}$	$0.0942^{+0.0047}_{-0.0058}$
i ($^\circ$)	82.89 ± 0.56	84.23 ± 0.16	84.07 ± 0.33	$84.5^{+2.8}_{-1.6}$
$r_{\rm A}$	0.1587 ± 0.0069	0.1432 ± 0.0018	$0.1435^{+0.0048}_{-0.0042}$	$0.140^{+0.014}_{-0.039}$
$r_{\rm b}$	0.01517 ± 0.00068	0.01360 ± 0.00021	0.01408	0.01319

Table A99. Derived physical properties of the Kepler-8 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 7.7 \pm 1.4\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.368 \pm 0.014\,\rho_\odot$ and $T'_{\rm eq} = 1662 \pm 41$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	150.87 ± 3.60	149.17 ± 2.59	149.31 ± 1.71	152.40 ± 0.36	149.14 ± 3.18	148.49 ± 3.62
$M_{\rm A}$ ($M_\odot$)	1.2738 ± 0.0913	1.2312 ± 0.0638	1.2346 ± 0.0426	1.3129 ± 0.0091	1.2305 ± 0.0776	1.2146 ± 0.0719
$R_{\rm A}$ ($R_\odot$)	1.513 ± 0.042	1.496 ± 0.035	1.497 ± 0.027	1.528 ± 0.022	1.496 ± 0.032	1.489 ± 0.037
$\log g_{\rm A}$ (cgs)	4.184 ± 0.015	4.179 ± 0.012	4.179 ± 0.011	4.188 ± 0.010	4.179 ± 0.016	4.177 ± 0.022
$M_{\rm b}$ ($M_{\rm Jup}$)	0.60 ± 0.11	0.59 ± 0.11	0.59 ± 0.10	0.62 ± 0.11	0.59 ± 0.11	0.59 ± 0.12
$R_{\rm b}$ ($R_{\rm Jup}$)	1.398 ± 0.040	1.382 ± 0.032	1.383 ± 0.027	1.412 ± 0.022	1.382 ± 0.037	1.376 ± 0.037
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.207 ± 0.038	0.209 ± 0.038	0.209 ± 0.038	0.205 ± 0.037	0.209 ± 0.038	0.210 ± 0.040
Θ	0.0333 ± 0.0059	0.0337 ± 0.0060	0.0337 ± 0.0060	0.0330 ± 0.0058	0.0337 ± 0.0060	0.0339 ± 0.0063
a (AU)	0.04912 ± 0.00117	0.04857 ± 0.00084	0.04861 ± 0.00056	0.04962 ± 0.00012	0.04856 ± 0.00103	0.04835 ± 0.00115
Age (Gyr)		$3.8^{+1.5}_{-0.8}$	$3.4^{+0.5}_{-0.6}$	$2.1^{+0.0}_{-0.0}$	$3.2^{+1.8}_{-0.7}$	$3.5^{+0.0}_{-3.1}$

	This work (final)	Jenkins et al. (2010)	Kipping & Bakos (2011b)
$M_{\rm A}$ ($M_\odot$)	$1.230 \pm 0.072 \pm 0.010$	$1.213^{+0.067}_{-0.063}$	$1.214^{+0.092}_{-0.087}$
$R_{\rm A}$ ($R_\odot$)	$1.495 \pm 0.037 \pm 0.005$	$1.486^{+0.053}_{-0.062}$	$1.46^{+0.21}_{-0.26}$
$\log g_{\rm A}$ (cgs)	$4.178 \pm 0.022 \pm 0.002$	4.174 ± 0.026	$4.192^{+0.149}_{-0.094}$
$\rho_{\rm A}$ ($\rho_\odot$)	0.368 ± 0.014		$0.40^{+0.32}_{-0.12}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.59 \pm 0.12 \pm 0.00$	$0.603^{+0.13}_{-0.19}$	$0.58^{+0.32}_{-0.31}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.381 \pm 0.037 \pm 0.005$	$1.419^{+0.056}_{-0.058}$	$1.35^{+0.26}_{-0.31}$
$g_{\rm b}$ (m s^{-1})	7.7 ± 1.4	7.430 ± 2.06	$8.1^{+7.0}_{-4.6}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.210 \pm 0.040 \pm 0.001$	0.197 ± 0.054	$0.21^{+0.27}_{-0.13}$
$T'_{\rm eq}$ (K)	1662 ± 41	1764 ± 200	1645^{+108}_{-146}
Θ	$0.0337 \pm 0.0063 \pm 0.0001$		
a (AU)	$0.0485 \pm 0.0012 \pm 0.0002$	$0.0483^{+0.0006}_{-0.0012}$	$0.0483^{+0.0012}_{-0.0012}$
Age (Gyr)	$3.2^{+1.8}_{-3.1}{}^{+0.6}_{-1.1}$	3.84 ± 1.5	$3.23^{+1.37}_{-0.88}$

Table A100. Parameters of the JKTEBOP best fits of the *Kepler* light curve of KOI-428, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD $-$ 2455000.0. The light curve contains 184 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.145 ± 0.013	0.157 ± 0.011	0.144 ± 0.013	0.143 ± 0.012	0.149 ± 0.011
k	0.05824 ± 0.00136	0.05913 ± 0.00079	0.05808 ± 0.00118	0.05797 ± 0.00105	0.05925 ± 0.00064
i (deg.)	86.5 ± 1.9	85.2 ± 1.0	86.6 ± 2.1	86.7 ± 1.9	85.8 ± 1.2
$u_{\rm A}$	0.54 fixed	0.28 fixed	0.19 fixed	0.67 fixed	0.28 fixed
$v_{\rm A}$		0.32 fixed	0.53 fixed	0.26 fixed	0.16 fixed
P	6.873131 ± 0.000079	6.873125 ± 0.000076	6.873131 ± 0.000074	6.873130 ± 0.000078	6.873123 ± 0.000073
T_0	5.51861 ± 0.00050	5.51857 ± 0.00052	5.51860 ± 0.00050	5.51860 ± 0.00050	5.51852 ± 0.00049
$r_{\rm A}$	0.1366 ± 0.0125	0.1484 ± 0.0099	0.1359 ± 0.0125	0.1353 ± 0.0114	0.1409 ± 0.0101
$r_{\rm b}$	0.00795 ± 0.00091	0.00878 ± 0.00069	0.00789 ± 0.00090	0.00784 ± 0.00080	0.00835 ± 0.00067
σ ($m$mag)	0.3003	0.2998	0.2994	0.2993	0.3011
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.147 ± 0.013	0.140 ± 0.013	0.144 ± 0.014	0.143 ± 0.013	0.130 ± 0.011
k	0.05895 ± 0.00101	0.05794 ± 0.00107	0.05842 ± 0.00111	0.05829 ± 0.00107	0.05713 ± 0.00089
i (deg.)	86.1 ± 1.6	87.1 ± 2.1	86.5 ± 2.0	86.6 ± 2.0	89.7 ± 2.0
$u_{\rm A}$	0.453 ± 0.034	0.272 ± 0.053	0.132 ± 0.052	0.617 ± 0.060	0.412 ± 0.038
$v_{\rm A}$		0.32 perturbed	0.53 perturbed	0.26 perturbed	0.16 perturbed
P	6.873128 ± 0.000074	6.873130 ± 0.000075	6.873128 ± 0.000075	6.873127 ± 0.000072	6.873132 ± 0.000073
T_0	5.51856 ± 0.00052	5.51858 ± 0.00050	5.51857 ± 0.00049	5.51858 ± 0.00049	5.51861 ± 0.00049
$r_{\rm A}$	0.139 ± 0.012	0.133 ± 0.012	0.136 ± 0.013	0.136 ± 0.012	0.123 ± 0.010
$r_{\rm b}$	0.00820 ± 0.00083	0.00769 ± 0.00085	0.00795 ± 0.00092	0.00790 ± 0.00086	0.00701 ± 0.00070
σ ($m$mag)	0.2989	0.2989	0.2988	0.2988	0.2986
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.147 ± 0.013	0.154 ± 0.014	0.155 ± 0.013	0.155 ± 0.013	0.147 ± 0.014
k	0.0590 ± 0.0010	0.0527 ± 0.0010	0.0541 ± 0.0011	0.0536 ± 0.0012	0.0588 ± 0.0015
i (deg.)	86.1 ± 1.6	86.9 ± 2.0	86.4 ± 1.6	86.6 ± 1.8	86.2 ± 1.9
$u_{\rm A}$	0.45 ± 0.03	-0.46 $\pm$ 0.61	-3.44 $\pm$ 0.62	2.43 ± 0.21	0.43 ± 0.10
$v_{\rm A}$		2.40 ± 0.76	6.92 ± 0.90	2.56 ± 0.48	0.06 ± 0.30
P	6.873128 ± 0.000074	6.873116 ± 0.000080	6.873123 ± 0.000074	6.873124 ± 0.000076	6.873129 ± 0.000077
T_0	5.51856 ± 0.00051	5.51882 ± 0.00053	5.51880 ± 0.00048	5.51879 ± 0.00045	5.51856 ± 0.00052
$r_{\rm A}$	0.139 ± 0.012	0.146 ± 0.013	0.147 ± 0.012	0.147 ± 0.013	0.139 ± 0.013
$r_{\rm b}$	0.00820 ± 0.00085	0.00770 ± 0.00085	0.00794 ± 0.00080	0.00786 ± 0.00084	0.00815 ± 0.00097
σ ($m$mag)	0.2989	0.3014	0.2986	0.2994	0.2989

Table A101. Final parameters of the fit to the *Kepler* light curve of KOI-428 from the JKTEBOP analysis, compared to those found by Santerne et al. (2011) from the same data. Quantities without quoted uncertainties were not given by Santerne et al. (2011) but have been calculated from other parameters which were.

	This work	Santerne et al. (2011)
$r_{\rm A} + r_{\rm b}$	0.138 ± 0.015	0.1303
k	0.0579 ± 0.0012	0.0565 ± 0.0004
i ($^\circ$)	87.5 ± 2.3	$89.7^{+0.3}_{-0.1}$
$r_{\rm A}$	0.131 ± 0.014	0.1233 ± 0.0009
$r_{\rm b}$	0.0076 ± 0.0010	0.00697

Table A102. Derived physical properties of the KOI-428 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 32 \pm 10\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.126 \pm 0.042\,\rho_\odot$ and $T'_{\rm eq} = 1666 \pm 92\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	132.4 ± 4.4	124.9 ± 2.7	125.1 ± 3.2	125.0 ± 2.0	125.1 ± 3.5	127.9 ± 3.5
$M_{\rm A}$ ($M_\odot$)	1.661 ± 0.166	1.397 ± 0.092	1.401 ± 0.109	1.401 ± 0.065	1.401 ± 0.120	1.500 ± 0.124
$R_{\rm A}$ ($R_\odot$)	2.36 ± 0.30	2.23 ± 0.25	2.23 ± 0.25	2.23 ± 0.25	2.23 ± 0.25	2.28 ± 0.22
$\log g_{\rm A}$ (cgs)	3.912 ± 0.088	3.887 ± 0.093	3.887 ± 0.093	3.887 ± 0.092	3.887 ± 0.093	3.897 ± 0.099
$M_{\rm b}$ ($M_{\rm Jup}$)	2.35 ± 0.39	2.10 ± 0.33	2.10 ± 0.34	2.10 ± 0.33	2.10 ± 0.34	2.20 ± 0.35
$R_{\rm b}$ ($R_{\rm Jup}$)	1.33 ± 0.18	1.26 ± 0.17	1.26 ± 0.17	1.26 ± 0.17	1.26 ± 0.17	1.29 ± 0.17
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.93 ± 0.42	0.98 ± 0.44	0.98 ± 0.44	0.98 ± 0.44	0.98 ± 0.44	0.96 ± 0.43
Θ	0.178 ± 0.036	0.188 ± 0.038	0.188 ± 0.038	0.188 ± 0.038	0.188 ± 0.038	0.184 ± 0.038
a (AU)	0.0838 ± 0.0028	0.0791 ± 0.0017	0.0792 ± 0.0020	0.0792 ± 0.0012	0.0792 ± 0.0022	0.0810 ± 0.0022
Age (Gyr)		$2.2^{+0.6}_{-0.6}$	$2.2^{+0.5}_{-0.5}$	$1.9^{+0.3}_{-0.2}$	$2.1^{+0.4}_{-0.5}$	$2.2^{+0.4}_{-0.3}$

	This work (final)	Santerne et al. (2011)
$M_{\rm A}$ ($M_\odot$)	$1.42 \pm 0.12 \pm 0.08$	1.48 ± 0.06
$R_{\rm A}$ ($R_\odot$)	$2.24 \pm 0.25 \pm 0.04$	2.13 ± 0.06
$\log g_{\rm A}$ (cgs)	$3.889 \pm 0.099 \pm 0.008$	3.94 ± 0.32
$\rho_{\rm A}$ ($\rho_\odot$)	0.126 ± 0.042	0.151 ± 0.004
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.12 \pm 0.35 \pm 0.08$	2.2 ± 0.4
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.27 \pm 0.17 \pm 0.02$	1.17 ± 0.04
$g_{\rm b}$ (m s^{-1})	32 ± 10	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.98 \pm 0.44 \pm 0.02$	$1.27^{+0.40}_{-0.32}$
$T'_{\rm eq}$ (K)	1666 ± 92	1620 ± 30
Θ	$0.188 \pm 0.038 \pm 0.003$	
a (AU)	$0.0795 \pm 0.0022 \pm 0.0015$	0.080 ± 0.003
Age (Gyr)	$2.1^{+0.6}_{-0.6}{}^{+0.1}_{-0.3}$	2.8 ± 0.3

Table A103. Parameters of the JKTEBOP best fits of the *Kepler* light curve of LHS 6343, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD − 2454000.0. The light curve contains 99 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.02577 ± 0.00087	0.02515 ± 0.00083	0.02523 ± 0.00076	0.02543 ± 0.00080	0.02691 ± 0.00084
k	0.2066 ± 0.0076	0.2190 ± 0.0103	0.2015 ± 0.0076	0.2179 ± 0.0108	0.2145 ± 0.0118
i (deg.)	89.943 ± 0.181	89.971 ± 0.175	89.756 ± 0.147	89.742 ± 0.133	89.450 ± 0.091
$u_{\rm A}$	0.67 fixed	0.38 fixed	0.20 fixed	0.70 fixed	0.35 fixed
$v_{\rm A}$		0.35 fixed	0.64 fixed	0.27 fixed	0.15 fixed
P	12.7138102 ± 0.0000080	12.7138120 ± 0.0000072	12.7138121 ± 0.0000071	12.7138122 ± 0.0000074	12.7138116 ± 0.0000067
T_0	995.358004 ± 0.000042	995.357996 ± 0.000043	995.357998 ± 0.000040	995.357999 ± 0.000041	995.358010 ± 0.000042
$r_{\rm A}$	0.02135 ± 0.00081	0.02063 ± 0.00080	0.02100 ± 0.00070	0.02088 ± 0.00076	0.02216 ± 0.00085
$r_{\rm b}$	0.00441 ± 0.00015	0.00452 ± 0.00019	0.00423 ± 0.00015	0.00455 ± 0.00017	0.00475 ± 0.00017
σ ($m$mag)	0.3510	0.2615	0.2847	0.2640	0.2465
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.02814 ± 0.00094	0.02774 ± 0.00087	0.02791 ± 0.00091	0.02750 ± 0.00088	0.02787 ± 0.00092
k	0.209 ± 0.012	0.211 ± 0.011	0.210 ± 0.012	0.218 ± 0.012	0.210 ± 0.012
i (deg.)	89.298 ± 0.090	89.367 ± 0.090	89.334 ± 0.090	89.394 ± 0.088	89.336 ± 0.091
$u_{\rm A}$	0.316 ± 0.026	0.154 ± 0.046	-0.053 ± 0.047	0.513 ± 0.058	0.285 ± 0.031
$v_{\rm A}$		0.35 perturbed	0.64 perturbed	0.27 perturbed	0.15 perturbed
P	12.7138107 ± 0.0000069	12.7138107 ± 0.0000073	12.7138106 ± 0.0000070	12.7138107 ± 0.0000069	12.7138106 ± 0.0000073
T_0	995.358017 ± 0.000040	995.358014 ± 0.000044	995.358015 ± 0.000042	995.358012 ± 0.000041	995.358015 ± 0.000040
$r_{\rm A}$	0.02328 ± 0.00092	0.02291 ± 0.00088	0.02307 ± 0.00089	0.02258 ± 0.00084	0.02303 ± 0.00091
$r_{\rm b}$	0.00486 ± 0.00018	0.00483 ± 0.00017	0.00484 ± 0.00018	0.00492 ± 0.00018	0.00484 ± 0.00019
σ ($m$mag)	0.2446	0.2438	0.2443	0.2443	0.2443
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.02814 ± 0.00095	0.02714 ± 0.00098	0.02783 ± 0.00095	0.02763 ± 0.00096	0.02986 ± 0.00126
k	0.209 ± 0.012	0.207 ± 0.012	0.210 ± 0.013	0.205 ± 0.013	0.195 ± 0.010
i (deg.)	89.298 ± 0.090	89.512 ± 0.120	89.359 ± 0.101	89.455 ± 0.109	89.354 ± 0.096
$u_{\rm A}$	0.32 ± 0.03	-0.07 ± 0.19	-0.42 ± 1.27	1.39 ± 0.68	0.09 ± 0.10
$v_{\rm A}$		1.09 ± 0.63	1.29 ± 2.27	1.35 ± 0.83	2.09 ± 0.34
P	12.7138107 ± 0.0000067	12.7138104 ± 0.0000072	12.7138106 ± 0.0000073	12.7138105 ± 0.0000066	12.7138104 ± 0.0000071
T_0	995.358017 ± 0.000041	995.358009 ± 0.000043	995.358014 ± 0.000042	995.358010 ± 0.000042	995.358014 ± 0.000042
$r_{\rm A}$	0.02328 ± 0.00093	0.02249 ± 0.00095	0.02300 ± 0.00095	0.02293 ± 0.00092	0.02499 ± 0.00115
$r_{\rm b}$	0.00486 ± 0.00018	0.00465 ± 0.00021	0.00483 ± 0.00021	0.00469 ± 0.00021	0.00487 ± 0.00021
σ ($m$mag)	0.2446	0.2426	0.2439	0.2429	0.2424

Table A104. Final parameters of the fit to the *Kepler* light curve of LHS 6343 from the JKTEBOP analysis, compared to those found by Johnson et al. (2011) from the same data. Quantities without quoted uncertainties were not given by Johnson et al. (2011) but have been calculated from other parameters which were.

	This work	Johnson et al. (2011)
$r_{\rm A} + r_{\rm b}$	0.02877 ± 0.00097	0.0271
k	0.2123 ± 0.0131	0.226 ± 0.003
i (°)	89.358 ± 0.097	89.50 ± 0.05
$r_{\rm A}$	0.02288 ± 0.00097	0.0221 ± 0.0003
$r_{\rm b}$	0.00486 ± 0.00020	0.00499

Table A105. Derived physical properties of the LHS 6343 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 2320 \pm 210\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 6.01 \pm 0.77\,\rho_\odot$ and $T'_{\rm eq} = 352 \pm 22\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	63.4 ± 2.3	63.0 ± 2.6	63.5 ± 1.7	63.9 ± 1.4	63.1 ± 1.6	62.6 ± 1.5
$M_{\rm A}$ ($M_\odot$)	0.443 ± 0.044	0.436 ± 0.049	0.446 ± 0.032	0.452 ± 0.027	0.438 ± 0.031	0.428 ± 0.028
$R_{\rm A}$ ($R_\odot$)	0.419 ± 0.024	0.417 ± 0.030	0.420 ± 0.023	0.422 ± 0.026	0.418 ± 0.027	0.415 ± 0.026
$\log g_{\rm A}$ (cgs)	4.840 ± 0.038	4.837 ± 0.030	4.841 ± 0.035	4.843 ± 0.028	4.838 ± 0.026	4.834 ± 0.027
$M_{\rm b}$ ($M_{\rm Jup}$)	70.2 ± 5.1	69.6 ± 5.6	70.5 ± 4.0	71.2 ± 3.7	69.8 ± 4.0	68.7 ± 3.8
$R_{\rm b}$ ($R_{\rm Jup}$)	0.866 ± 0.045	0.862 ± 0.048	0.868 ± 0.041	0.872 ± 0.040	0.863 ± 0.040	0.857 ± 0.040
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	101 ± 13	101 ± 13	100 ± 13	100 ± 12	101 ± 13	102 ± 13
Θ	31.2 ± 2.0	31.3 ± 2.2	31.1 ± 1.8	30.9 ± 1.8	31.3 ± 1.8	31.6 ± 1.8
a (AU)	0.0852 ± 0.0027	0.0848 ± 0.0031	0.0853 ± 0.0019	0.0857 ± 0.0016	0.0849 ± 0.0019	0.0843 ± 0.0018
Age (Gyr)		$1.0^{+0.0}_{-0.0}$	$1.0^{+0.7}_{-0.0}$	$6.0^{+0.0}_{-0.0}$	$6.0^{+0.0}_{-0.0}$	$6.0^{+0.0}_{-0.0}$

	This work (final)	Johnson et al. (2011)
$M_{\rm A}$ ($M_\odot$)	$0.440 \pm 0.049 \pm 0.012$	0.370 ± 0.009
$R_{\rm A}$ ($R_\odot$)	$0.418 \pm 0.030 \pm 0.004$	0.378 ± 0.008
$\log g_{\rm A}$ (cgs)	$4.839 \pm 0.035 \pm 0.004$	4.851 ± 0.008
$\rho_{\rm A}$ ($\rho_\odot$)	$6.01 \pm 0.76 \pm 0.01$	6.6 ± 0.5
$M_{\rm b}$ ($M_{\rm Jup}$)	$69.9 \pm 5.6 \pm 1.2$	62.7 ± 2.4
$R_{\rm b}$ ($R_{\rm Jup}$)	$0.864 \pm 0.048 \pm 0.007$	0.833 ± 0.021
$g_{\rm b}$ (m s^{-1})	2320 ± 210	2240 ± 100
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$101 \pm 13 \pm 0$	82 ± 6
$T'_{\rm eq}$ (K)	352 ± 22	
Θ	$31.2 \pm 2.2 \pm 0.3$	
a (AU)	$0.0850 \pm 0.0031 \pm 0.0007$	0.804 ± 0.0006
Age (Gyr)	$4.0^{+0.7}_{-0.0}\,^{+2.0}_{-3.0}$	> 1–2

Table A106. Parameters of the JKTEBOP best fits of the *Kepler* light curve of TrES-2, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 645 phased and binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.14066 ± 0.00013	0.14126 ± 0.00012	0.14131 ± 0.00012	0.14129 ± 0.00013	0.14290 ± 0.00012
k	0.12850 ± 0.00012	0.12716 ± 0.00013	0.12750 ± 0.00013	0.12732 ± 0.00014	0.12610 ± 0.00013
i (deg.)	83.9975 ± 0.0078	83.9686 ± 0.0077	83.9613 ± 0.0078	83.9682 ± 0.0082	83.7987 ± 0.0075
$u_{\rm A}$	0.60 fixed	0.38 fixed	0.25 fixed	0.70 fixed	0.37 fixed
$v_{\rm A}$		0.27 fixed	0.50 fixed	0.24 fixed	0.13 fixed
$r_{\rm A}$	0.12464 ± 0.00011	0.12533 ± 0.00011	0.12533 ± 0.00011	0.12533 ± 0.00012	0.12690 ± 0.00011
$r_{\rm b}$	0.016017 ± 0.000018	0.015936 ± 0.000019	0.015980 ± 0.000019	0.015956 ± 0.000020	0.016002 ± 0.000018
σ ($m$mag)	0.0497	0.0502	0.0498	0.0500	0.0521
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.14085 ± 0.00021	0.14180 ± 0.00030	0.14156 ± 0.00023	0.14174 ± 0.00030	0.14152 ± 0.00038
k	0.12837 ± 0.00017	0.12679 ± 0.00040	0.12732 ± 0.00022	0.12700 ± 0.00038	0.12735 ± 0.00053
i (deg.)	83.978 ± 0.019	83.914 ± 0.025	83.935 ± 0.020	83.921 ± 0.024	83.935 ± 0.028
$u_{\rm A}$	0.585 ± 0.013	0.335 ± 0.065	0.229 ± 0.049	0.662 ± 0.025	0.488 ± 0.053
$v_{\rm A}$		0.27 perturbed	0.50 perturbed	0.24 perturbed	0.13 perturbed
$r_{\rm A}$	0.12483 ± 0.00020	0.12585 ± 0.00031	0.12557 ± 0.00022	0.12577 ± 0.00031	0.12553 ± 0.00040
$r_{\rm b}$	0.016024 ± 0.000021	0.015956 ± 0.000023	0.015988 ± 0.000019	0.015973 ± 0.000023	0.015987 ± 0.000025
σ ($m$mag)	0.0496	0.0496	0.0496	0.0496	0.0496
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.14085 ± 0.00020	0.14097 ± 0.00089	0.14114 ± 0.00070	0.14037 ± 0.00104	0.14056 ± 0.00101
k	0.12837 ± 0.00018	0.12817 ± 0.00139	0.12794 ± 0.00096	0.12911 ± 0.00148	0.12881 ± 0.00146
i (deg.)	83.978 ± 0.017	83.970 ± 0.063	83.961 ± 0.047	84.009 ± 0.068	83.997 ± 0.067
$u_{\rm A}$	0.585 ± 0.012	0.557 ± 0.207	0.444 ± 0.317	0.547 ± 0.074	0.627 ± 0.133
$v_{\rm A}$		0.03 ± 0.22	0.20 ± 0.44	-0.12 ± 0.24	-0.06 ± 0.17
$r_{\rm A}$	0.12483 ± 0.00019	0.12495 ± 0.00095	0.12513 ± 0.00073	0.12432 ± 0.00108	0.12452 ± 0.00105
$r_{\rm b}$	0.016024 ± 0.000019	0.016016 ± 0.000059	0.016009 ± 0.000036	0.016051 ± 0.000055	0.016040 ± 0.000053
σ ($m$mag)	0.0496	0.0496	0.0496	0.0496	0.0496

Table A107. Parameters of the JKTEBOP best fits of the TrES-2 790.2 nm light curve from Colón et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 53 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1405 ± 0.0023	0.1410 ± 0.0024	0.1414 ± 0.0025	0.1412 ± 0.0025	0.1431 ± 0.0023
k	0.1316 ± 0.0011	0.1302 ± 0.0011	0.1304 ± 0.0011	0.1304 ± 0.0011	0.1292 ± 0.0010
i (deg.)	84.00 ± 0.14	83.99 ± 0.14	83.95 ± 0.15	83.97 ± 0.15	83.79 ± 0.13
$u_{\rm A}$	0.50 fixed	0.26 fixed	0.09 fixed	0.60 fixed	0.25 fixed
$v_{\rm A}$		0.31 fixed	0.57 fixed	0.25 fixed	0.15 fixed
T_0	955.730 ± 0.013	955.754 ± 0.016	955.737 ± 0.015	955.737 ± 0.014	955.761 ± 0.014
$r_{\rm A}$	0.1242 ± 0.0019	0.1247 ± 0.0021	0.1251 ± 0.0022	0.1249 ± 0.0022	0.1268 ± 0.0019
$r_{\rm b}$	0.01634 ± 0.00037	0.01624 ± 0.00038	0.01631 ± 0.00038	0.01629 ± 0.00039	0.01637 ± 0.00034
σ ($m$mag)	0.4439	0.4456	0.4440	0.4448	0.4409
$\chi^2_{\rm red}$	0.9974	1.0052	0.9980	1.0014	0.9837
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1538 ± 0.0087	0.1659 ± 0.0082	0.1658 ± 0.0087	0.1658 ± 0.0093	0.1653 ± 0.0094
k	0.1150 ± 0.0101	0.1020 ± 0.0090	0.1023 ± 0.0098	0.1022 ± 0.0098	0.1027 ± 0.0102
i (deg.)	82.88 ± 0.66	81.99 ± 0.59	82.00 ± 0.62	82.00 ± 0.66	82.03 ± 0.68
$u_{\rm A}$	-1 ± 3	-10 ± 36	-9 ± 33	-9 ± 37	-8 ± 34
$v_{\rm A}$		0.31 perturbed	0.57 perturbed	0.25 perturbed	0.15 perturbed
T_0	955.750 ± 0.029	955.706 ± 0.028	955.706 ± 0.027	955.706 ± 0.028	955.708 ± 0.031
$r_{\rm A}$	0.1379 ± 0.0091	0.1505 ± 0.0085	0.1504 ± 0.0090	0.1504 ± 0.0094	0.1499 ± 0.0097
$r_{\rm b}$	0.01586 ± 0.00062	0.01536 ± 0.00073	0.01538 ± 0.00072	0.01537 ± 0.00074	0.01539 ± 0.00074
σ ($m$mag)	0.4061	0.4002	0.4003	0.4003	0.4003
$\chi^2_{\rm red}$	0.8478	0.8228	0.8229	0.8229	0.8233

Table A108. Parameters of the JKTEBOP best fits of the TrES-2 794.4 nm light curve from Colón et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD − 2454000.0. The light curve contains 53 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1434 ± 0.0025	0.1438 ± 0.0026	0.1440 ± 0.0028	0.1440 ± 0.0026	0.1449 ± 0.0025
k	0.1308 ± 0.0011	0.1295 ± 0.0011	0.1296 ± 0.0012	0.1296 ± 0.0011	0.1281 ± 0.0010
i (deg.)	83.86 ± 0.15	83.85 ± 0.15	83.82 ± 0.17	83.83 ± 0.15	83.71 ± 0.15
$u_{\rm A}$	0.50 fixed	0.26 fixed	0.09 fixed	0.60 fixed	0.25 fixed
$v_{\rm A}$		0.31 fixed	0.57 fixed	0.25 fixed	0.15 fixed
T_0	955.754 ± 0.014	955.758 ± 0.013	955.744 ± 0.013	955.755 ± 0.013	955.757 ± 0.015
$r_{\rm A}$	0.1268 ± 0.0022	0.1273 ± 0.0022	0.1275 ± 0.0024	0.1274 ± 0.0022	0.1285 ± 0.0021
$r_{\rm b}$	0.01658 ± 0.00038	0.01648 ± 0.00038	0.01653 ± 0.00043	0.01652 ± 0.00040	0.01646 ± 0.00037
σ ($m$mag)	0.4545	0.4549	0.4539	0.4543	0.4509
$\chi^2_{\rm red}$	0.9862	0.9874	0.9833	0.9851	0.9703
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1450 ± 0.0042	0.1453 ± 0.0043	0.1449 ± 0.0041	0.1451 ± 0.0041	0.1449 ± 0.0041
k	0.1280 ± 0.0044	0.1276 ± 0.0041	0.1282 ± 0.0041	0.1279 ± 0.0042	0.1282 ± 0.0039
i (deg.)	83.68 ± 0.37	83.69 ± 0.37	83.72 ± 0.38	83.70 ± 0.36	83.72 ± 0.37
$u_{\rm A}$	0.28 ± 0.40	0.07 ± 0.42	-0.04 ± 0.41	0.44 ± 0.40	0.26 ± 0.38
$v_{\rm A}$		0.31 perturbed	0.57 perturbed	0.25 perturbed	0.15 perturbed
T_0	955.749 ± 0.012	955.762 ± 0.014	955.762 ± 0.014	955.762 ± 0.014	955.762 ± 0.014
$r_{\rm A}$	0.1285 ± 0.0042	0.1288 ± 0.0041	0.1285 ± 0.0040	0.1287 ± 0.0040	0.1284 ± 0.0039
$r_{\rm b}$	0.01645 ± 0.00044	0.01643 ± 0.00046	0.01647 ± 0.00047	0.01646 ± 0.00044	0.01646 ± 0.00044
σ ($m$mag)	0.4486	0.4509	0.4511	0.4509	0.4511
$\chi^2_{\rm red}$	0.9815	0.9915	0.9923	0.9915	0.9925

Table A109. Parameters of the JKTEBOP best fits of the TrES-2 light curve from Rabus et al. (2009), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. The light curve contains 53 phase-binned datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.1447 ± 0.0058	0.1449 ± 0.0060	0.1444 ± 0.0059	0.1438 ± 0.0059	0.1436 ± 0.0063
k	0.13204 ± 0.00093	0.12941 ± 0.00088	0.13140 ± 0.00105	0.13154 ± 0.00103	0.12860 ± 0.00089
i (deg.)	83.77 ± 0.27	83.69 ± 0.27	83.82 ± 0.28	83.86 ± 0.28	83.70 ± 0.30
$u_{\rm A}$	0.49 fixed	0.15 fixed	0.10 fixed	0.66 fixed	0.20 fixed
$v_{\rm A}$		0.25 fixed	0.64 fixed	0.25 fixed	0.10 fixed
T_0	-0.000162 ± 0.000064	-0.000159 ± 0.000062	-0.000165 ± 0.000059	-0.000166 ± 0.000066	-0.000156 ± 0.000065
$r_{\rm A}$	0.1279 ± 0.0051	0.1283 ± 0.0053	0.1276 ± 0.0052	0.1271 ± 0.0052	0.1272 ± 0.0056
$r_{\rm b}$	0.01688 ± 0.00070	0.01660 ± 0.00071	0.01677 ± 0.00074	0.01672 ± 0.00074	0.01636 ± 0.00077
σ ($m$mag)	0.7552	0.7549	0.7548	0.7550	0.7551
$\chi^2_{\rm red}$	0.9993	1.0003	0.9999	1.0002	1.0023
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.1390 ± 0.0064	0.1400 ± 0.0075	0.1436 ± 0.0074	0.1589 ± 0.0087	0.1516 ± 0.0080
k	0.1319 ± 0.0034	0.1294 ± 0.0039	0.1308 ± 0.0034	0.1302 ± 0.0036	0.1310 ± 0.0039
i (deg.)	84.02 ± 0.41	83.90 ± 0.44	83.81 ± 0.48	83.12 ± 0.51	83.45 ± 0.48
$u_{\rm A}$	0.48 ± 0.32	0.15 ± 0.40	0.03 ± 0.37	0.53 ± 0.38	0.39 ± 0.36
$v_{\rm A}$		0.25 perturbed	0.64 perturbed	0.25 perturbed	0.10 perturbed
T_0	-0.000163 ± 0.000065	-0.000159 ± 0.000060	-0.000163 ± 0.000066	-0.000162 ± 0.000067	-0.000161 ± 0.000066
$r_{\rm A}$	0.1228 ± 0.0057	0.1240 ± 0.0067	0.1270 ± 0.0066	0.1406 ± 0.0079	0.1340 ± 0.0072
$r_{\rm b}$	0.01620 ± 0.00082	0.01605 ± 0.00091	0.01660 ± 0.00089	0.01830 ± 0.00100	0.01755 ± 0.00101
σ ($m$mag)	0.7551	0.7549	0.7551	0.7551	0.7550
$\chi^2_{\rm red}$	1.0044	1.0053	1.0047	1.0049	1.0047

Table A110. Parameters of the JKTEBOP best fits of the EPOCH light curve of TrES-2, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD(UTC) − 2454000.0. The light curve contains 3517 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_A + r_b$	0.1398 ± 0.0018	0.1403 ± 0.0021	0.1404 ± 0.0018	0.1404 ± 0.0018	0.1420 ± 0.0018
k	0.12877 ± 0.00085	0.12739 ± 0.00090	0.12775 ± 0.00084	0.12755 ± 0.00086	0.12639 ± 0.00077
i (deg.)	84.02 ± 0.11	84.00 ± 0.12	83.99 ± 0.11	84.00 ± 0.11	83.83 ± 0.10
u_A	0.60 fixed	0.38 fixed	0.25 fixed	0.70 fixed	0.37 fixed
v_A		0.27 fixed	0.50 fixed	0.24 fixed	0.13 fixed
T_0	661.75983 ± 0.00012	661.75983 ± 0.00013	661.75983 ± 0.00013	661.75983 ± 0.00012	661.75983 ± 0.00012
r_A	0.1239 ± 0.0016	0.1245 ± 0.0018	0.1245 ± 0.0015	0.1245 ± 0.0016	0.1260 ± 0.0015
r_b	0.01595 ± 0.00029	0.01586 ± 0.00033	0.01591 ± 0.00028	0.01588 ± 0.00029	0.01593 ± 0.00025
σ ($m$mag)	2.0147	2.0148	2.0147	2.0148	2.0140
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_A + r_b$	0.1465 ± 0.0041	0.1468 ± 0.0041	0.1466 ± 0.0040	0.1467 ± 0.0041	0.1473 ± 0.0045
k	0.1190 ± 0.0059	0.1185 ± 0.0055	0.1190 ± 0.0056	0.1187 ± 0.0059	0.1177 ± 0.0062
i (deg.)	83.39 ± 0.34	83.38 ± 0.33	83.40 ± 0.33	83.38 ± 0.34	83.33 ± 0.36
u_A	-0.20 ± 0.60	-0.43 ± 0.58	-0.51 ± 0.58	-0.10 ± 0.61	-0.38 ± 0.75
v_A		0.27 perturbed	0.50 perturbed	0.24 perturbed	0.13 perturbed
T_0	661.75982 ± 0.00013	661.75982 ± 0.00012	661.75982 ± 0.00012	661.75982 ± 0.00012	661.75982 ± 0.00013
r_A	0.1310 ± 0.0042	0.1312 ± 0.0041	0.1310 ± 0.0042	0.1312 ± 0.0042	0.1318 ± 0.0047
r_b	0.01558 ± 0.00034	0.01555 ± 0.00036	0.01559 ± 0.00033	0.01556 ± 0.00035	0.01551 ± 0.00035
σ ($m$mag)	2.0131	2.0131	2.0131	2.0131	2.0132
Fitting for both LD coefficients					
$r_A + r_b$	0.1465 ± 0.0041	0.1453 ± 0.0043	0.1465 ± 0.0045	0.1440 ± 0.0058	0.1431 ± 0.0048
k	0.1190 ± 0.0058	0.1215 ± 0.0068	0.1192 ± 0.0061	0.1232 ± 0.0095	0.1249 ± 0.0081
i (deg.)	83.39 ± 0.35	83.46 ± 0.33	83.38 ± 0.36	83.55 ± 0.41	83.62 ± 0.35
u_A	-0.20 ± 0.60	0.44 ± 1.04	0.32 ± 1.81	-0.30 ± 0.55	0.52 ± 0.78
v_A		-0.61 ± 1.14	-0.79 ± 2.59	-0.79 ± 1.67	-0.67 ± 0.93
T_0	661.75982 ± 0.00012	661.75982 ± 0.00012	661.75982 ± 0.00012	661.75982 ± 0.00012	661.75982 ± 0.00012
r_A	0.1310 ± 0.0044	0.1296 ± 0.0045	0.1309 ± 0.0046	0.1282 ± 0.0063	0.1272 ± 0.0051
r_b	0.01558 ± 0.00036	0.01575 ± 0.00051	0.01560 ± 0.00042	0.01579 ± 0.00058	0.01589 ± 0.00052
σ ($m$mag)	2.0131	2.0132	2.0132	2.0131	2.0131

Table A111. Final parameters of the fits to the light curves of TrES-2 from the JKTEBOP analysis, compared to those found by other authors. Quantities without quoted uncertainties were not given by other authors but have been calculated from those parameters which were. Note that the earlier works did not account for the presence of the close faint stars discovered by Daemgen et al. (2009).

	This work (*Kepler*)	This work (790.2 nm)	This work (794.4 nm)	This work (Rabus)	This work (EPOCH)	**This work (final)**
$r_A + r_b$	0.14165 ± 0.00041	0.1417 ± 0.0034	0.1451 ± 0.0047	0.1476 ± 0.0095	0.1408 ± 0.0026	0.14167 ± 0.00040
k	0.12718 ± 0.00055	0.1300 ± 0.0013	0.1278 ± 0.0047	0.1304 ± 0.0054	0.1272 ± 0.0012	0.12760 ± 0.00046
i (°)	83.927 ± 0.031	83.92 ± 0.22	83.71 ± 0.44	83.59 ± 0.56	83.95 ± 0.16	83.925 ± 0.030
r_A	0.12566 ± 0.00042	0.1254 ± 0.0029	0.1286 ± 0.0045	0.1305 ± 0.0086	0.1249 ± 0.0023	0.12568 ± 0.00041
r_b	0.015977 ± 0.000027	0.01631 ± 0.00051	0.01646 ± 0.00052	0.0170 ± 0.0011	0.01590 ± 0.00040	0.015979 ± 0.000027

	O'Donovan et al. (2006)	Holman et al. (2007)	TWH08	**Paper I**	Winn et al. (2008)	Daemgen et al. (2009)
$r_A + r_b$	0.1429	0.1475	0.1476	0.1460 ± 0.0042		0.1474
k	0.1273	0.1253 ± 0.0010	0.1253 ± 0.0010	0.1268 ± 0.0032	0.1253 ± 0.0012	0.1279 ± 0.0010
i (°)	83.90 ± 0.22	83.57 ± 0.14	83.57 ± 0.14	83.71 ± 0.42		83.62 ± 0.14
r_A	0.1267	0.1311 ± 0.0021	0.1312 ± 0.0019	0.1296 ± 0.0038		0.1307 ± 0.0020
r_b	0.01614	0.0164 ± 0.0004	0.01644	0.01643 ± 0.00046		0.01672

	Rabus et al. (2009)	Scuderi et al. (2010)	**Paper III**	Colon+10mn	Kipping & Bakos (2011a)	Christiansen et al. (2011)
$r_A + r_b$	0.1462		0.1448 ± 0.0038		0.1379	0.1388
k	0.1260		0.1293 ± 0.0029	$0.1249^{+0.0048}_{-0.0007}$	$0.12582^{+0.00093}_{-0.00124}$	0.1278 ± 0.0094
i (°)	83.70	83.92 ± 0.05	83.80 ± 0.36		$84.21^{+0.21}_{-0.22}$	84.15 ± 0.16
r_A	0.1298		0.1282 ± 0.0035		0.1225 ± 0.0022	0.1230 ± 0.0179
r_b	0.01635		0.01658 ± 0.00043		0.01541	0.01572

Table A112. Derived physical properties of the TrES-2 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 21.02 \pm 0.31\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 1.105 \pm 0.011\,\rho_\odot$ and $T'_{\rm eq} = 1466 \pm 12\,{\rm K}$. The lower parts of the table contain the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	155.8 ± 3.9	157.3 ± 2.7	156.4 ± 2.4	155.2 ± 2.7	156.1 ± 2.5	155.2 ± 2.3
$M_{\rm A}$ ($M_\odot$)	0.986 ± 0.075	1.015 ± 0.052	0.998 ± 0.045	0.975 ± 0.051	0.993 ± 0.048	0.975 ± 0.043
$R_{\rm A}$ ($R_\odot$)	0.963 ± 0.025	0.972 ± 0.017	0.966 ± 0.015	0.959 ± 0.017	0.965 ± 0.016	0.959 ± 0.014
$\log g_{\rm A}$ (cgs)	4.4653 ± 0.0113	4.4695 ± 0.0080	4.4669 ± 0.0072	4.4635 ± 0.0081	4.4663 ± 0.0077	4.4636 ± 0.0070
$M_{\rm b}$ ($M_{\rm Jup}$)	1.202 ± 0.063	1.226 ± 0.045	1.211 ± 0.040	1.193 ± 0.045	1.208 ± 0.043	1.193 ± 0.039
$R_{\rm b}$ ($R_{\rm Jup}$)	1.191 ± 0.030	1.202 ± 0.021	1.195 ± 0.018	1.186 ± 0.021	1.194 ± 0.019	1.186 ± 0.017
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.666 ± 0.020	0.659 ± 0.015	0.663 ± 0.014	0.668 ± 0.015	0.664 ± 0.015	0.668 ± 0.014
Θ	0.0728 ± 0.0021	0.0721 ± 0.0016	0.0726 ± 0.0015	0.0731 ± 0.0017	0.0727 ± 0.0016	0.0731 ± 0.0015
a (AU)	0.03562 ± 0.00090	0.03596 ± 0.00061	0.03575 ± 0.00054	0.03548 ± 0.00061	0.03570 ± 0.00058	0.03548 ± 0.00052
Age (Gyr)		$3.2^{+2.0}_{-2.2}$	$3.2^{+1.1}_{-1.6}$	$4.0^{+1.9}_{-1.6}$	$3.0^{+1.4}_{-1.9}$	$3.8^{+1.3}_{-1.2}$

	This work (final)	Paper III	Paper II
$M_{\rm A}$ ($M_\odot$)	$0.991 \pm 0.052 \pm 0.024$	$1.049 \pm 0.054 \pm 0.030$	$0.991 \pm 0.050 \pm 0.025$
$R_{\rm A}$ ($R_\odot$)	$0.964 \pm 0.017 \pm 0.008$	$1.002 \pm 0.029 \pm 0.010$	$0.994 \pm 0.031 \pm 0.009$
$\log g_{\rm A}$ (cgs)	$4.4660 \pm 0.0081 \pm 0.0035$	$4.457 \pm 0.027 \pm 0.004$	$4.440 \pm 0.028 \pm 0.004$
$\rho_{\rm A}$ ($\rho_\odot$)	1.105 ± 0.011	1.043 ± 0.088	1.010 ± 0.092
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.206 \pm 0.045 \pm 0.020$	$1.253 \pm 0.047 \pm 0.024$	$1.206 \pm 0.045 \pm 0.020$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.193 \pm 0.021 \pm 0.010$	$1.261 \pm 0.039 \pm 0.012$	$1.226 \pm 0.040 \pm 0.010$
$g_{\rm b}$ (m s^{-1})	21.02 ± 0.31	19.5 ± 1.1	19.9 ± 1.2
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.665 \pm 0.015 \pm 0.005$	$0.626 \pm 0.051 \pm 0.006$	$0.654 \pm 0.057 \pm 0.006$
$T'_{\rm eq}$ (K)	1466 ± 12	1467 ± 27	
Θ	$0.0727 \pm 0.0017 \pm 0.0006$	$0.0688 \pm 0.0024 \pm 0.0007$	
a (AU)	$0.03567 \pm 0.00061 \pm 0.00029$	$0.03635 \pm 0.00063 \pm 0.00035$	$0.03568 \pm 0.00061 \pm 0.00031$
Age (Gyr)	$3.4^{+2.0}_{-2.2}{}^{+0.5}_{-0.5}$	$2.5^{+2.8}_{-2.5}{}^{+0.7}_{-0.8}$	$5.3^{+1.6}_{-2.6}{}^{+0.8}_{-0.8}$

	O'Donovan et al. (2006)	Holman et al. (2007)	Sozzetti et al. (2007)	TWH08	Winn et al. (2008)
$M_{\rm A}$ ($M_\odot$)	$1.08^{+0.11}_{-0.05}$		0.980 ± 0.062	$0.983^{+0.059}_{-0.063}$	0.980 ± 0.062
$R_{\rm A}$ ($R_\odot$)	$1.00^{+0.06}_{-0.04}$	1.003 ± 0.027	$1.000^{+0.036}_{-0.033}$	$1.003^{+0.033}_{-0.033}$	$1.000^{+0.036}_{-0.033}$
$\log g_{\rm A}$ (cgs)			$4.429^{+0.021}_{-0.023}$	$4.427^{+0.019}_{-0.021}$	
$\rho_{\rm A}$ ($\rho_\odot$)			0.976 ± 0.046	$0.974^{+0.043}_{-0.042}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.28^{+0.09}_{-0.04}$	1.198 ± 0.053		$1.200^{+0.051}_{-0.053}$	1.198 ± 0.053
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.24^{+0.09}_{-0.06}$	1.222 ± 0.038		$1.224^{+0.041}_{-0.041}$	$1.220^{+0.045}_{-0.042}$
$g_{\rm b}$ (m s^{-1})		19.76 ± 0.91		$19.86^{+0.75}_{-0.72}$	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.67^{+0.10}_{-0.07}$			$0.665^{+0.077}_{-0.067}$	
$T'_{\rm eq}$ (K)				1498^{+17}_{-17}	
Θ				$0.0709^{+0.0022}_{-0.0021}$	
a (AU)				$0.03558^{+0.00070}_{-0.00077}$	
Age (Gyr)				$5.0^{+2.7}_{-2.1}$	

	Daemgen et al. (2009)	Christensen-Dalsgaard et al. (2010)	Kipping & Bakos (2011a)	Christiansen et al. (2011)
$M_{\rm A}$ ($M_\odot$)	0.983 ± 0.061		$0.992^{+0.039}_{-0.045}$	0.98 ± 0.062 adopted
$R_{\rm A}$ ($R_\odot$)	0.999 ± 0.033		0.939 ± 0.022	0.940 ± 0.026
$\log g_{\rm A}$ (cgs)			4.488 ± 0.017	
$\rho_{\rm A}$ ($\rho_\odot$)	0.987 ± 0.043	0.9398 ± 0.0019	$1.204^{+0.069}_{-0.066}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	1.199 ± 0.052		$1.199^{+0.038}_{-0.042}$	1.198 ± 0.053 adopted
$R_{\rm b}$ ($R_{\rm Jup}$)	1.272 ± 0.041		1.173 ± 0.027	1.169 ± 0.034
$g_{\rm b}$ (m s^{-1})	19.2 ± 0.8		$21.58^{+0.81}_{-0.78}$	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.62 ± 0.07		$0.694^{+0.038}_{-0.037}$	
$T'_{\rm eq}$ (K)	1495 ± 17			
Θ	0.0697 ± 0.0022			
a (AU)	0.03556 ± 0.00075		$0.03566^{+0.00049}_{-0.00056}$	
Age (Gyr)				

Table A113. Parameters of the JKTEBOP best fits of the TrES-3 790.2 nm light curve from Colón et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD − 2454000.0. The light curve contains 36 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1949^{+0.0038}_{-0.0030}$	$0.1958^{+0.0038}_{-0.0031}$	$0.1960^{+0.0039}_{-0.0031}$	$0.1959^{+0.0038}_{-0.0031}$	$0.1984^{+0.0054}_{-0.0037}$
k	$0.1674^{+0.0036}_{-0.0022}$	$0.1659^{+0.0035}_{-0.0020}$	$0.1665^{+0.0037}_{-0.0022}$	$0.1663^{+0.0035}_{-0.0022}$	$0.1670^{+0.0056}_{-0.0032}$
i (deg.)	$81.97^{+0.18}_{-0.25}$	$81.94^{+0.18}_{-0.24}$	$81.90^{+0.19}_{-0.25}$	$81.92^{+0.19}_{-0.25}$	$81.66^{+0.25}_{-0.34}$
$u_{\rm A}$	0.50 fixed	0.26 fixed	0.09 fixed	0.60 fixed	0.25 fixed
$v_{\rm A}$		0.31 fixed	0.57 fixed	0.25 fixed	0.15 fixed
T_0	$54.52449^{+0.00013}_{-0.00012}$	$54.52449^{+0.00012}_{-0.00012}$	$54.52449^{+0.00011}_{-0.00013}$	$54.52449^{+0.00013}_{-0.00012}$	$54.52449^{+0.00012}_{-0.00012}$
$r_{\rm A}$	$0.1669^{+0.0028}_{-0.0024}$	$0.1679^{+0.0030}_{-0.0024}$	$0.1680^{+0.0028}_{-0.0025}$	$0.1680^{+0.0028}_{-0.0025}$	$0.1700^{+0.0038}_{-0.0028}$
$r_{\rm b}$	$0.02795^{+0.00101}_{-0.00068}$	$0.02787^{+0.00093}_{-0.00067}$	$0.02797^{+0.00106}_{-0.00069}$	$0.02794^{+0.00105}_{-0.00069}$	$0.02839^{+0.00153}_{-0.00097}$
σ ($m$mag)	0.5543	0.5522	0.5554	0.5539	0.5627
$\chi^2_{\rm red}$	1.2005	1.1907	1.2051	1.1986	1.2378
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.1937^{+0.0081}_{-0.0039}$	$0.1953^{+0.0090}_{-0.0043}$	$0.1949^{+0.0087}_{-0.0045}$	$0.1951^{+0.0087}_{-0.0045}$	$0.1948^{+0.0080}_{-0.0046}$
k	$0.1696^{+0.0032}_{-0.0044}$	$0.1677^{+0.0033}_{-0.0042}$	$0.1683^{+0.0035}_{-0.0043}$	$0.1681^{+0.0035}_{-0.0040}$	$0.1684^{+0.0036}_{-0.0043}$
i (deg.)	$82.33^{+0.35}_{-0.38}$	$82.27^{+0.32}_{-0.47}$	$82.30^{+0.33}_{-0.45}$	$82.28^{+0.33}_{-0.44}$	$82.30^{+0.34}_{-0.42}$
$u_{\rm A}$	$0.83^{+0.29}_{-0.31}$	$0.61^{+0.36}_{-0.37}$	$0.47^{+0.34}_{-0.37}$	$0.96^{+0.34}_{-0.35}$	$0.77^{+0.35}_{-0.32}$
$v_{\rm A}$		0.31 perturbed	0.57 perturbed	0.25 perturbed	0.15 perturbed
T_0	$54.52450^{+0.00013}_{-0.00012}$	$54.52450^{+0.00012}_{-0.00012}$	$54.52450^{+0.00012}_{-0.00012}$	$54.52450^{+0.00011}_{-0.00013}$	$54.52450^{+0.00012}_{-0.00012}$
$r_{\rm A}$	$0.1656^{+0.0067}_{-0.0032}$	$0.1672^{+0.0079}_{-0.0035}$	$0.1668^{+0.0078}_{-0.0036}$	$0.1670^{+0.0075}_{-0.0036}$	$0.1667^{+0.0068}_{-0.0037}$
$r_{\rm b}$	$0.0281^{+0.0011}_{-0.0009}$	$0.0280^{+0.0013}_{-0.0008}$	$0.0281^{+0.0013}_{-0.0010}$	$0.0281^{+0.0013}_{-0.0009}$	$0.0281^{+0.0013}_{-0.0009}$
σ ($m$mag)	0.5389	0.5394	0.5393	0.5394	0.5393
$\chi^2_{\rm red}$	1.1680	1.1702	1.1699	1.1701	1.1698

Table A114. Parameters of the JKTEBOP best fits of the TrES-3 794.4 nm light curve from Colón et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD − 2454000.0. The light curve contains 35 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	$0.1944^{+0.0052}_{-0.0037}$	$0.1955^{+0.0049}_{-0.0037}$	$0.1955^{+0.0049}_{-0.0041}$	$0.1955^{+0.0052}_{-0.0039}$	$0.1968^{+0.0052}_{-0.0042}$
k	$0.1645^{+0.0055}_{-0.0030}$	$0.1632^{+0.0051}_{-0.0029}$	$0.1635^{+0.0053}_{-0.0030}$	$0.1634^{+0.0053}_{-0.0032}$	$0.1630^{+0.0059}_{-0.0037}$
i (deg.)	$81.88^{+0.24}_{-0.34}$	$81.83^{+0.23}_{-0.32}$	$81.81^{+0.26}_{-0.32}$	$81.82^{+0.25}_{-0.35}$	$81.64^{+0.27}_{-0.34}$
$u_{\rm A}$	0.50 fixed	0.26 fixed	0.09 fixed	0.60 fixed	0.25 fixed
$v_{\rm A}$		0.31 fixed	0.57 fixed	0.25 fixed	0.15 fixed
T_0	$54.52445^{+0.00012}_{-0.00013}$	$54.52445^{+0.00013}_{-0.00014}$	$54.52445^{+0.00012}_{-0.00013}$	$54.52445^{+0.00014}_{-0.00013}$	$54.52445^{+0.00012}_{-0.00013}$
$r_{\rm A}$	$0.1670^{+0.0035}_{-0.0029}$	$0.1681^{+0.0035}_{-0.0029}$	$0.1680^{+0.0035}_{-0.0032}$	$0.1680^{+0.0037}_{-0.0030}$	$0.1692^{+0.0037}_{-0.0032}$
$r_{\rm b}$	$0.0275^{+0.0015}_{-0.0009}$	$0.0274^{+0.0014}_{-0.0009}$	$0.0275^{+0.0015}_{-0.0010}$	$0.0275^{+0.0015}_{-0.0009}$	$0.0276^{+0.0016}_{-0.0010}$
σ ($m$mag)	0.4671	0.4680	0.4668	0.4673	0.4653
$\chi^2_{\rm red}$	0.8273	0.8306	0.8261	0.8279	0.8210
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	$0.197^{+0.015}_{-0.006}$	$0.198^{+0.014}_{-0.007}$	$0.197^{+0.015}_{-0.006}$	$0.198^{+0.015}_{-0.006}$	$0.198^{+0.015}_{-0.007}$
k	$0.1641^{+0.0069}_{-0.0054}$	$0.1624^{+0.0070}_{-0.0049}$	$0.1630^{+0.0055}_{-0.0054}$	$0.1628^{+0.0068}_{-0.0054}$	$0.1630^{+0.0061}_{-0.0055}$
i (deg.)	$81.56^{+0.57}_{-1.35}$	$81.55^{+0.62}_{-1.34}$	$81.58^{+0.58}_{-1.37}$	$81.57^{+0.55}_{-1.39}$	$81.58^{+0.67}_{-1.32}$
$u_{\rm A}$	$0.27^{+0.41}_{-1.15}$	$0.02^{+0.48}_{-1.33}$	$-0.09^{+0.44}_{-1.22}$	$0.40^{+0.44}_{-1.22}$	$0.20^{+0.47}_{-1.27}$
$v_{\rm A}$		0.31 perturbed	0.57 perturbed	0.25 perturbed	0.15 perturbed
T_0	$54.52445^{+0.00012}_{-0.00011}$	$54.52445^{+0.00013}_{-0.00011}$	$54.52445^{+0.00012}_{-0.00014}$	$54.52445^{+0.00012}_{-0.00013}$	$54.52445^{+0.00013}_{-0.00013}$
$r_{\rm A}$	$0.170^{+0.013}_{-0.005}$	$0.170^{+0.013}_{-0.005}$	$0.170^{+0.013}_{-0.005}$	$0.170^{+0.012}_{-0.005}$	$0.170^{+0.012}_{-0.005}$
$r_{\rm b}$	$0.0278^{+0.0024}_{-0.0012}$	$0.0276^{+0.0026}_{-0.0013}$	$0.0277^{+0.0025}_{-0.0012}$	$0.0277^{+0.0026}_{-0.0011}$	$0.0277^{+0.0026}_{-0.0013}$
σ ($m$mag)	0.4650	0.4651	0.4651	0.4651	0.4651
$\chi^2_{\rm red}$	0.8479	0.8483	0.8484	0.8483	0.8483

Table A115. Parameters of the JKTEBOP best fits of the EPOCH light curve of TrES-2, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD(UTC) − 2454000.0. The light curve contains 3517 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_A + r_b$	$0.1963^{+0.0037}_{-0.0031}$	$0.1973^{+0.0042}_{-0.0032}$	$0.1974^{+0.0041}_{-0.0031}$	$0.1975^{+0.0041}_{-0.0032}$	$0.1996^{+0.0048}_{-0.0038}$
k	$0.1646^{+0.0044}_{-0.0024}$	$0.1633^{+0.0043}_{-0.0023}$	$0.1639^{+0.0040}_{-0.0026}$	$0.1635^{+0.0044}_{-0.0027}$	$0.1648^{+0.0059}_{-0.0036}$
i (deg.)	$81.83^{+0.19}_{-0.24}$	$81.77^{+0.20}_{-0.27}$	$81.75^{+0.21}_{-0.27}$	$81.75^{+0.20}_{-0.27}$	$81.52^{+0.25}_{-0.31}$
u_A	0.62 fixed	0.42 fixed	0.27 fixed	0.71 fixed	0.40 fixed
v_A		0.25 fixed	0.49 fixed	0.24 fixed	0.12 fixed
P	$1.306310^{+0.000037}_{-0.000034}$	$1.306310^{+0.000034}_{-0.000036}$	$1.306310^{+0.000038}_{-0.000035}$	$1.306310^{+0.000035}_{-0.000036}$	$1.306309^{+0.000035}_{-0.000035}$
T_0	$538.58083^{+0.00011}_{-0.00011}$	$538.58083^{+0.00011}_{-0.00011}$	$538.58083^{+0.00010}_{-0.00011}$	$538.58083^{+0.00011}_{-0.00010}$	$538.58082^{+0.00011}_{-0.00011}$
r_A	$0.1685^{+0.0026}_{-0.0023}$	$0.1696^{+0.0030}_{-0.0025}$	$0.1696^{+0.0030}_{-0.0023}$	$0.1698^{+0.0030}_{-0.0024}$	$0.1714^{+0.0034}_{-0.0028}$
r_b	$0.0277^{+0.0011}_{-0.0007}$	$0.0277^{+0.0012}_{-0.0008}$	$0.0278^{+0.0012}_{-0.0008}$	$0.0278^{+0.0012}_{-0.0008}$	$0.0282^{+0.0015}_{-0.0010}$
σ ($m$mag)	2.1777	2.1775	2.1778	2.1777	2.1788
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_A + r_b$	$0.2086^{+0.0067}_{-0.0092}$	$0.2093^{+0.0072}_{-0.0077}$	$0.2087^{+0.0070}_{-0.0077}$	$0.2090^{+0.0069}_{-0.0086}$	$0.2088^{+0.0069}_{-0.0077}$
k	$0.1561^{+0.0036}_{-0.0028}$	$0.1559^{+0.0033}_{-0.0028}$	$0.1563^{+0.0030}_{-0.0028}$	$0.1562^{+0.0032}_{-0.0028}$	$0.1562^{+0.0033}_{-0.0025}$
i (deg.)	$82.28^{+0.30}_{-0.30}$	$82.17^{+0.28}_{-0.30}$	$82.20^{+0.28}_{-0.29}$	$82.17^{+0.27}_{-0.29}$	$82.21^{+0.27}_{-0.30}$
u_A	$1.340^{+0.051}_{-0.099}$	$1.145^{+0.082}_{-0.108}$	$0.999^{+0.074}_{-0.120}$	$1.438^{+0.068}_{-0.114}$	$1.265^{+0.072}_{-0.107}$
v_A		0.25 perturbed	0.49 perturbed	0.24 perturbed	0.12 perturbed
P	$1.306307^{+0.000037}_{-0.000033}$	$1.306307^{+0.000032}_{-0.000037}$	$1.306307^{+0.000033}_{-0.000036}$	$1.306307^{+0.000035}_{-0.000036}$	$1.306306^{+0.000037}_{-0.000036}$
T_0	$538.58084^{+0.00010}_{-0.00012}$	$538.58084^{+0.00011}_{-0.00011}$	$538.58084^{+0.00011}_{-0.00011}$	$538.58084^{+0.00011}_{-0.00011}$	$538.58084^{+0.00011}_{-0.00011}$
r_A	$0.1805^{+0.0058}_{-0.0082}$	$0.1811^{+0.0061}_{-0.0072}$	$0.1805^{+0.0059}_{-0.0072}$	$0.1808^{+0.0058}_{-0.0077}$	$0.1806^{+0.0056}_{-0.0070}$
r_b	$0.0282^{+0.0012}_{-0.0013}$	$0.0282^{+0.0012}_{-0.0011}$	$0.0282^{+0.0011}_{-0.0011}$	$0.0282^{+0.0012}_{-0.0011}$	$0.0282^{+0.0012}_{-0.0010}$
σ ($m$mag)	2.1721	2.1722	2.1721	2.1722	2.1721
Fitting for both LD coefficients					
$r_A + r_b$	$0.2086^{+0.0067}_{-0.0095}$	$0.2086^{+0.0076}_{-0.0105}$	$0.2086^{+0.0077}_{-0.0101}$	$0.2088^{+0.0077}_{-0.0091}$	$0.2089^{+0.0070}_{-0.0102}$
k	$0.1561^{+0.0036}_{-0.0031}$	$0.1561^{+0.0035}_{-0.0043}$	$0.1561^{+0.0037}_{-0.0043}$	$0.1560^{+0.0036}_{-0.0042}$	$0.1562^{+0.0034}_{-0.0043}$
i (deg.)	$82.28^{+0.33}_{-0.29}$	$82.29^{+0.55}_{-0.51}$	$82.28^{+0.54}_{-0.47}$	$82.29^{+0.54}_{-0.45}$	$82.27^{+0.53}_{-0.48}$
u_A	$1.34^{+0.05}_{-0.10}$	$1.37^{+0.49}_{-0.81}$	$1.37^{+1.21}_{-1.36}$	$1.32^{+0.38}_{-0.30}$	$1.35^{+0.29}_{-0.45}$
v_A		$-0.03^{+1.02}_{-0.64}$	$-0.04^{+2.03}_{-1.79}$	$-0.06^{+0.87}_{-0.70}$	$-0.01^{+0.72}_{-0.47}$
P	$1.306307^{+0.000033}_{-0.000034}$	$1.306307^{+0.000033}_{-0.000036}$	$1.306307^{+0.000033}_{-0.000037}$	$1.306307^{+0.000036}_{-0.000036}$	$1.306307^{+0.000033}_{-0.000033}$
T_0	$538.58084^{+0.00011}_{-0.00011}$	$538.58084^{+0.00012}_{-0.00010}$	$538.58084^{+0.00011}_{-0.00011}$	$538.58084^{+0.00012}_{-0.00011}$	$538.58084^{+0.00011}_{-0.00011}$
r_A	$0.1805^{+0.0056}_{-0.0085}$	$0.1805^{+0.0063}_{-0.0089}$	$0.1804^{+0.0065}_{-0.0087}$	$0.1807^{+0.0063}_{-0.0080}$	$0.1807^{+0.0059}_{-0.0087}$
r_b	$0.0282^{+0.0012}_{-0.0013}$	$0.0282^{+0.0012}_{-0.0015}$	$0.0282^{+0.0012}_{-0.0016}$	$0.0282^{+0.0013}_{-0.0014}$	$0.0282^{+0.0012}_{-0.0014}$
σ ($m$mag)	2.1721	2.1721	2.1721	2.1721	2.1721

Table A116. Final parameters of the fits to the light curves of TrES-3 from the JKTEBOP analysis, compared to those found by other authors. The light curve results from Paper III are reproduced and used in calculating the final results for the current work. Quantities without quoted uncertainties were not given by other authors but have been calculated from those parameters which were.

	Paper III (B-band)	Paper III (z-band)	Paper III (V-band)	Paper III (g-band)	Paper III (r-band)	Paper III (i-band)	Paper III (LT/RISE)
$r_{\rm A}+r_{\rm b}$	$0.189^{+0.027}_{-0.012}$	$0.1958^{+0.0101}_{-0.0058}$	$0.215^{+0.027}_{-0.017}$	$0.214^{+0.023}_{-0.020}$	$0.1921^{+0.0039}_{-0.0055}$	$0.1948^{+0.0034}_{-0.0055}$	$0.1934^{+0.0055}_{-0.0026}$
k	$0.164^{+0.030}_{-0.009}$	$0.1671^{+0.0041}_{-0.0052}$	$0.203^{+0.107}_{-0.040}$	$0.201^{+0.095}_{-0.054}$	$0.1602^{+0.0023}_{-0.0045}$	$0.1654^{+0.0031}_{-0.0045}$	$0.1646^{+0.0023}_{-0.0013}$
i (°)	$81.8^{+1.2}_{-2.2}$	$82.32^{+0.48}_{-0.88}$	$80.6^{+1.2}_{-2.0}$	$80.9^{+1.7}_{-1.7}$	$82.05^{+0.37}_{-0.26}$	$82.07^{+0.20}_{-0.26}$	$82.05^{+0.35}_{-0.54}$
$r_{\rm A}$	$0.1621^{+0.0203}_{-0.0096}$	$0.1677^{+0.0094}_{-0.0046}$	$0.1791^{+0.0068}_{-0.0102}$	$0.1783^{+0.0082}_{-0.0075}$	$0.1656^{+0.0031}_{-0.0041}$	$0.1672^{+0.0026}_{-0.0041}$	$0.1660^{+0.0044}_{-0.0021}$
$r_{\rm b}$	$0.0266^{+0.0069}_{-0.0024}$	$0.0280^{+0.0015}_{-0.0011}$	$0.0364^{+0.0205}_{-0.0089}$	$0.036^{+0.019}_{-0.011}$	$0.02653^{+0.00075}_{-0.00140}$	$0.02765^{+0.00095}_{-0.00140}$	$0.02733^{+0.00113}_{-0.00048}$

	This work (790.2 nm)	This work (794.4 nm)	This work (EPOCH)	**This work (final)**	Paper III
$r_{\rm A}+r_{\rm b}$	$0.1950^{+0.0098}_{-0.0050}$	$0.1976^{+0.0137}_{-0.0062}$	$0.1980^{+0.0049}_{-0.0039}$	$0.1954^{+0.0018}_{-0.0017}$	$0.1940^{+0.0021}_{-0.0018}$
k	$0.1681^{+0.0039}_{-0.0053}$	$0.1628^{+0.0118}_{-0.0056}$	$0.1639^{+0.0059}_{-0.0036}$	$0.1642^{+0.0010}_{-0.0009}$	$0.1641^{+0.0020}_{-0.0019}$
i (°)	$82.29^{+0.37}_{-0.99}$	$81.57^{+0.62}_{-1.99}$	$81.70^{+0.27}_{-0.33}$	$81.93^{+0.13}_{-0.13}$	$82.07^{+0.16}_{-0.17}$
$r_{\rm A}$	$0.1669^{+0.0086}_{-0.0040}$	$0.1699^{+0.0118}_{-0.0050}$	$0.1701^{+0.0034}_{-0.0029}$	$0.1682^{+0.0014}_{-0.0014}$	$0.1666^{+0.0017}_{-0.0015}$
$r_{\rm b}$	$0.0281^{+0.0014}_{-0.0011}$	$0.0277^{+0.0034}_{-0.0015}$	$0.0279^{+0.0015}_{-0.0012}$	$0.02750^{+0.00037}_{-0.00033}$	$0.02731^{+0.00055}_{-0.00043}$

	O'Donovan et al. (2007)	TWH08	Sozzetti et al. (2009)	Gibson et al. (2009)	Colón et al. (2010)	Lee et al. (2011)	Christiansen et al. (2011)
$r_{\rm A}+r_{\rm b}$	0.1925	0.1926	0.1978			0.1954 ± 0.0023	0.1940
k	0.1660 ± 0.0024	$0.1660^{+0.0024}_{-0.0024}$	0.1655 ± 0.0020	$0.1664^{+0.0011}_{-0.0018}$	$0.1662^{+0.0046}_{-0.0048}$	0.1603 ± 0.0042	0.1661 ± 0.0343
i (°)	82.15 ± 0.21	$82.15^{+0.21}_{-0.21}$	81.85 ± 0.16	$81.73^{+0.13}_{-0.04}$		81.77 ± 0.14	81.99 ± 0.30
$r_{\rm A}$	0.1651	$0.1652^{+0.0027}_{-0.0028}$	0.1697 ± 0.0016			0.1687 ± 0.017	0.1664 ± 0.0204
$r_{\rm b}$	0.02738	0.02742	0.02809			0.02712 ± 0.00074	0.02764

Table A117. Derived physical properties of the TrES-3 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 27.4 \pm 1.1\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 1.648 \pm 0.041\,\rho_\odot$ and $T'_{\rm eq} = 1638 \pm 22\,{\rm K}$. The lower parts of the table contain the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	184.78 ± 4.48	188.27 ± 0.68	187.58 ± 0.70	186.98 ± 0.96	186.82 ± 0.72	187.09 ± 0.96
$M_{\rm A}$ ($M_\odot$)	0.883 ± 0.064	0.934 ± 0.010	0.924 ± 0.010	0.915 ± 0.014	0.913 ± 0.011	0.917 ± 0.014
$R_{\rm A}$ ($R_\odot$)	0.8123 ± 0.0211	0.8276 ± 0.0093	0.8245 ± 0.0093	0.8219 ± 0.0097	0.8212 ± 0.0092	0.8224 ± 0.0098
$\log g_{\rm A}$ (cgs)	4.5650 ± 0.0125	4.5731 ± 0.0061	4.5715 ± 0.0062	4.5701 ± 0.0064	4.5698 ± 0.0063	4.5704 ± 0.0063
$M_{\rm b}$ ($M_{\rm Jup}$)	1.847 ± 0.105	1.918 ± 0.059	1.904 ± 0.059	1.892 ± 0.060	1.888 ± 0.058	1.894 ± 0.060
$R_{\rm b}$ ($R_{\rm Jup}$)	1.292 ± 0.036	1.316 ± 0.018	1.311 ± 0.018	1.307 ± 0.019	1.306 ± 0.018	1.308 ± 0.019
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.801 ± 0.045	0.786 ± 0.040	0.789 ± 0.040	0.792 ± 0.040	0.792 ± 0.040	0.791 ± 0.040
Θ	0.0726 ± 0.0030	0.0713 ± 0.0023	0.0715 ± 0.0024	0.0718 ± 0.0024	0.0718 ± 0.0024	0.0717 ± 0.0024
a (AU)	0.02245 ± 0.00054	0.02288 ± 0.00008	0.02279 ± 0.00008	0.02272 ± 0.00012	0.02270 ± 0.00009	0.02273 ± 0.00012
Age (Gyr)		$1.0^{+0.0}_{-0.0}$	$1.0^{+0.0}_{-0.0}$	$1.0^{+0.5}_{-0.0}$	$1.0^{+0.0}_{-0.0}$	$1.0^{+0.3}_{-0.0}$

	This work (final)	Paper III
$M_{\rm A}$ ($M_\odot$)	$0.921 \pm 0.014 \pm 0.014$	$0.929^{+0.101}_{-0.030}{}^{+0.014}_{-0.021}$
$R_{\rm A}$ ($R_\odot$)	$0.8235 \pm 0.0098 \pm 0.0040$	$0.818^{+0.030}_{-0.013}{}^{+0.004}_{-0.006}$
$\log g_{\rm A}$ (cgs)	$4.5710 \pm 0.0064 \pm 0.0021$	$4.581^{+0.016}_{-0.010}{}^{+0.002}_{-0.003}$
$\rho_{\rm A}$ ($\rho_\odot$)	1.648 ± 0.041	$1.700^{+0.047}_{-0.051}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.899 \pm 0.060 \pm 0.019$	$1.910^{+0.148}_{-0.070}{}^{+0.020}_{-0.029}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.310 \pm 0.019 \pm 0.006$	$1.305^{+0.053}_{-0.025}{}^{+0.007}_{-0.010}$
$g_{\rm b}$ (m s^{-1})	27.4 ± 1.1	$27.8^{+1.2}_{-1.4}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.790 \pm 0.040 \pm 0.004$	$0.860^{+0.050}_{-0.063}{}^{+0.007}_{-0.004}$
$T'_{\rm eq}$ (K)	1638 ± 22	1630^{+23}_{-22}
Θ	$0.0716 \pm 0.0024 \pm 0.0004$	$0.0719^{+0.0026}_{-0.0035}{}^{+0.0005}_{-0.0004}$
a (AU)	$0.02276 \pm 0.00012 \pm 0.00011$	$0.02283^{+0.00012}_{-0.00025}{}^{+0.00012}_{-0.00017}$
Age (Gyr)	$1.0^{+0.5}_{-0.0}{}^{+0.0}_{-0.0}$	$0.0^{+0.7}_{-0.0}{}^{+0.0}_{-0.0}$

	O'Donovan et al. (2007)	TWH08	Sozzetti et al. (2009)	de Mooij & Snellen (2009)	Gibson et al. (2009)	Lee et al. (2011)	Christiansen et al. (2011)
$M_{\rm A}$ ($M_\odot$)	0.91 ± 0.15	$0.915^{+0.021}_{-0.031}$	$0.928^{+0.028}_{-0.048}$			0.944 ± 0.025	$0.928^{+0.028}_{-0.048}$ adopted
$R_{\rm A}$ ($R_\odot$)	0.802 ± 0.046	$0.812^{+0.014}_{-0.025}$	$0.829^{+0.015}_{-0.022}$			0.832 ± 0.013	0.817 ± 0.022
$\log g_{\rm A}$ (cgs)	4.6 ± 0.3	$4.581^{+0.017}_{-0.012}$	$4.568^{+0.009}_{-0.014}$			4.572 ± 0.018	
$\rho_{\rm A}$ ($\rho_\odot$)		$1.754^{+0.085}_{-0.085}$	1.636 ± 0.046			1.639 ± 0.050	
$M_{\rm b}$ ($M_{\rm Jup}$)	1.92 ± 0.23	$1.938^{+0.062}_{-0.063}$	$1.910^{+0.075}_{-0.080}$		$1.910^{+0.075}_{-0.080}$	1.931 ± 0.074	$1.910^{+0.075}_{-0.080}$ adopted
$R_{\rm b}$ ($R_{\rm Jup}$)	1.295 ± 0.081	$1.312^{+0.033}_{-0.041}$	$1.336^{+0.031}_{-0.036}$	1.338 ± 0.016	$1.341^{+0.025}_{-0.035}$	1.302 ± 0.038	1.320 ± 0.057
$g_{\rm b}$ (m s^{-1})		$28.3^{+1.5}_{-1.4}$	26.6 ± 1.2		$26.3^{+1.4}_{-1.3}$	28.2 ± 1.2	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)		$0.858^{+0.089}_{-0.068}$	$0.801^{+0.077}_{-0.063}$		$0.792^{+0.047}_{-0.042}$	0.817 ± 0.056	
$T'_{\rm eq}$ (K)		1623^{+26}_{-25}				1641 ± 23	
Θ		$0.0738^{+0.0026}_{-0.0026}$				0.0721 ± 0.0039	
a (AU)	0.0226 ± 0.0013	$0.02272^{+0.00017}_{-0.00026}$	$0.02282^{+0.00023}_{-0.00040}$			0.02297 ± 0.00028	
Age (Gyr)		$0.6^{+2.0}_{-0.4}$	$0.9^{+2.8}_{-0.8}$			0.2 ± 1.0	

Table A118. Parameters of the JKTEBOP best fits of the WASP-3 g-band light curve from Tripathi et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 463 datapoints. The original errorbars were multiplied by $\sqrt{0.25}$ to obtain $\chi^2_\nu \approx 1.0$.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.2176 ± 0.0090	0.2169 ± 0.0084	0.2171 ± 0.0090	0.2177 ± 0.0089	0.2238 ± 0.0074
k	0.1079 ± 0.0017	0.1077 ± 0.0014	0.1076 ± 0.0016	0.1081 ± 0.0015	0.1104 ± 0.0011
i (deg.)	84.34 ± 0.94	84.39 ± 0.90	84.40 ± 0.96	84.27 ± 0.92	83.43 ± 0.68
$u_{\rm A}$	0.72 fixed	0.51 fixed	0.38 fixed	0.79 fixed	0.50 fixed
$v_{\rm A}$		0.26 fixed	0.51 fixed	0.21 fixed	0.12 fixed
T_0	963.84453 ± 0.00035	963.84453 ± 0.00036	963.84453 ± 0.00035	963.84453 ± 0.00035	963.84449 ± 0.00034
$r_{\rm A}$	0.1964 ± 0.0079	0.1958 ± 0.0074	0.1960 ± 0.0078	0.1965 ± 0.0077	0.2015 ± 0.0065
$r_{\rm b}$	0.02119 ± 0.00117	0.02108 ± 0.00108	0.02110 ± 0.00113	0.02123 ± 0.00111	0.02224 ± 0.00091
σ ($m$mag)	1.3163	1.3053	1.3091	1.3064	1.3075
$\chi^2_{\rm red}$	1.1072	1.0938	1.0982	1.0951	1.1021
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.2199 ± 0.0087	0.2181 ± 0.0098	0.2189 ± 0.0091	0.2186 ± 0.0096	0.2189 ± 0.0094
k	0.1095 ± 0.0016	0.1082 ± 0.0020	0.1087 ± 0.0017	0.1085 ± 0.0020	0.1088 ± 0.0019
i (deg.)	83.89 ± 0.84	84.19 ± 1.08	84.09 ± 0.96	84.12 ± 1.03	84.07 ± 1.00
$u_{\rm A}$	0.623 ± 0.047	0.480 ± 0.068	0.322 ± 0.066	0.764 ± 0.069	0.591 ± 0.053
$v_{\rm A}$		0.26 perturbed	0.51 perturbed	0.21 perturbed	0.12 perturbed
T_0	963.84450 ± 0.00034	963.84453 ± 0.00033	963.84453 ± 0.00035	963.84453 ± 0.00033	963.84452 ± 0.00034
$r_{\rm A}$	0.1982 ± 0.0076	0.1968 ± 0.0085	0.1974 ± 0.0079	0.1972 ± 0.0083	0.1974 ± 0.0081
$r_{\rm b}$	0.0217 ± 0.0011	0.0213 ± 0.0013	0.0215 ± 0.0012	0.0214 ± 0.0013	0.0215 ± 0.0012
σ ($m$mag)	1.3077	1.3042	1.3058	1.3053	1.3058
$\chi^2_{\rm red}$	1.1001	1.0954	1.0976	1.0969	1.0976
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.220 ± 0.009	0.232 ± 0.015	0.235 ± 0.013	0.233 ± 0.013	0.235 ± 0.014
k	0.1095 ± 0.0017	0.1006 ± 0.0029	0.1030 ± 0.0020	0.1019 ± 0.0022	0.1022 ± 0.0025
i (deg.)	83.9 ± 0.9	84.2 ± 1.4	83.5 ± 1.1	83.9 ± 1.2	83.7 ± 1.2
$u_{\rm A}$	0.62 ± 0.05	-0.11 $\pm$ 0.40	-2.16 $\pm$ 0.83	2.00 $\pm$ 0.41	0.41 $\pm$ 0.16
$v_{\rm A}$		1.77 $\pm$ 0.70	4.90 $\pm$ 1.33	1.82 $\pm$ 0.57	1.38 $\pm$ 0.46
T_0	963.84450 ± 0.00035	963.84450 ± 0.00034	963.84456 ± 0.00035	963.84453 ± 0.00035	963.84451 ± 0.00035
$r_{\rm A}$	0.198 ± 0.008	0.210 ± 0.014	0.213 ± 0.011	0.211 ± 0.012	0.214 ± 0.012
$r_{\rm b}$	0.0217 ± 0.0011	0.0212 ± 0.0016	0.0220 ± 0.0013	0.0215 ± 0.0014	0.0218 ± 0.0014
σ ($m$mag)	1.3077	1.2987	1.2987	1.2984	1.2990
$\chi^2_{\rm red}$	1.1001	1.0897	1.0884	1.0885	1.0894

Table A119. Parameters of the JKTEBOP best fits of the WASP-3 i-band light curve from Tripathi et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 1194 datapoints. The original errorbars were multiplied by $\sqrt{0.69}$ to obtain $\chi^2_\nu \approx 1.0$.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.2037 ± 0.0063	0.2023 ± 0.0055	0.2038 ± 0.0056	0.2034 ± 0.0057	0.2122 ± 0.0049
k	0.10103 ± 0.00090	0.10107 ± 0.00062	0.10154 ± 0.00068	0.10140 ± 0.00063	0.10325 ± 0.00049
i (deg.)	85.83 ± 0.89	86.00 ± 0.78	85.74 ± 0.74	85.80 ± 0.77	84.53 ± 0.53
$u_{\rm A}$	0.52 fixed	0.24 fixed	0.07 fixed	0.60 fixed	0.25 fixed
$v_{\rm A}$		0.33 fixed	0.59 fixed	0.28 fixed	0.15 fixed
T_0	627.72175 ± 0.00018	627.72174 ± 0.00016	627.72175 ± 0.00017	627.72174 ± 0.00017	627.72175 ± 0.00017
$r_{\rm A}$	0.1850 ± 0.0055	0.1837 ± 0.0049	0.1850 ± 0.0050	0.1847 ± 0.0050	0.1923 ± 0.0044
$r_{\rm b}$	0.01869 ± 0.00071	0.01857 ± 0.00061	0.01878 ± 0.00062	0.01873 ± 0.00061	0.01986 ± 0.00051
σ ($m$mag)	1.4578	1.4512	1.4518	1.4515	1.4574
$\chi^2_{\rm red}$	1.0086	0.9960	0.9965	0.9961	1.0033
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.2075 ± 0.0056	0.2032 ± 0.0066	0.2059 ± 0.0057	0.2045 ± 0.0062	0.2060 ± 0.0061
k	0.10260 ± 0.00076	0.10131 ± 0.00095	0.10194 ± 0.00081	0.10162 ± 0.00089	0.10199 ± 0.00088
i (deg.)	85.14 ± 0.70	85.84 ± 0.96	85.43 ± 0.74	85.63 ± 0.86	85.41 ± 0.80
$u_{\rm A}$	0.401 ± 0.033	0.224 ± 0.051	0.049 ± 0.050	0.588 ± 0.057	0.357 ± 0.040
$v_{\rm A}$		0.33 perturbed	0.59 perturbed	0.28 perturbed	0.15 perturbed
T_0	627.72175 ± 0.00017	627.72174 ± 0.00016	627.72175 ± 0.00016	627.72175 ± 0.00016	627.72175 ± 0.00017
$r_{\rm A}$	0.1882 ± 0.0050	0.1845 ± 0.0059	0.1868 ± 0.0051	0.1857 ± 0.0055	0.1869 ± 0.0054
$r_{\rm b}$	0.01930 ± 0.00062	0.01869 ± 0.00073	0.01904 ± 0.00064	0.01887 ± 0.00071	0.01906 ± 0.00069
σ ($m$mag)	1.4524	1.4513	1.4517	1.4515	1.4517
$\chi^2_{\rm red}$	0.9978	0.9967	0.9970	0.9968	0.9970
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.2075 ± 0.0053	0.2034 ± 0.0070	0.2030 ± 0.0073	0.2034 ± 0.0072	0.2022 ± 0.0073
k	0.1026 ± 0.0007	0.1013 ± 0.0014	0.1007 ± 0.0021	0.1010 ± 0.0018	0.1007 ± 0.0021
i (deg.)	85.1 ± 0.7	85.8 ± 1.1	86.0 ± 1.2	85.9 ± 1.3	86.1 ± 1.4
$u_{\rm A}$	0.401 ± 0.033	0.215 ± 0.144	-0.513 ± 0.836	0.713 ± 0.311	0.302 ± 0.074
$v_{\rm A}$		0.34 ± 0.27	1.56 ± 1.46	0.46 ± 0.42	0.41 ± 0.36
T_0	627.72175 ± 0.00017	627.72174 ± 0.00017	627.72174 ± 0.00017	627.72174 ± 0.00017	627.72174 ± 0.00017
$r_{\rm A}$	0.1882 ± 0.0047	0.1847 ± 0.0061	0.1845 ± 0.0064	0.1847 ± 0.0064	0.1837 ± 0.0065
$r_{\rm b}$	0.01930 ± 0.00060	0.01870 ± 0.00087	0.01858 ± 0.00090	0.01867 ± 0.00092	0.01850 ± 0.00097
σ ($m$mag)	1.4524	1.4513	1.4512	1.4512	1.4511
$\chi^2_{\rm red}$	0.9978	0.9975	0.9974	0.9974	0.9973

Table A120. Parameters of the JKTEBOP best fits of the WASP-3 z-band light curve from Tripathi et al. (2010), using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as HJD $-$ 2454000.0. The light curve contains 277 datapoints. The original errorbars were multiplied by $\sqrt{0.55}$ to obtain $\chi^2_\nu \approx 1.0$.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A} + r_{\rm b}$	0.2318 ± 0.0059	0.2308 ± 0.0061	0.2348 ± 0.0060	0.2338 ± 0.0057	0.2401 ± 0.0050
k	0.11041 ± 0.00079	0.10977 ± 0.00064	0.11060 ± 0.00066	0.11032 ± 0.00062	0.11140 ± 0.00055
i (deg.)	83.20 ± 0.55	83.29 ± 0.56	82.87 ± 0.54	82.98 ± 0.52	82.25 ± 0.42
$u_{\rm A}$	0.46 fixed	0.18 fixed	0.02 fixed	0.54 fixed	0.20 fixed
$v_{\rm A}$		0.33 fixed	0.58 fixed	0.28 fixed	0.15 fixed
T_0	660.96402 ± 0.00017	660.96403 ± 0.00017	660.96404 ± 0.00018	660.96404 ± 0.00017	660.96406 ± 0.00016
$r_{\rm A}$	0.2088 ± 0.0051	0.2080 ± 0.0053	0.2115 ± 0.0053	0.2105 ± 0.0050	0.2161 ± 0.0045
$r_{\rm b}$	0.02305 ± 0.00071	0.02283 ± 0.00069	0.02339 ± 0.00071	0.02323 ± 0.00065	0.02407 ± 0.00057
σ ($m$mag)	0.8374	0.8280	0.8256	0.8258	0.8230
$\chi^2_{\rm red}$	1.0621	1.0383	1.0323	1.0328	1.0258
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A} + r_{\rm b}$	0.2387 ± 0.0056	0.2382 ± 0.0064	0.2383 ± 0.0058	0.2382 ± 0.0061	0.2381 ± 0.0060
k	0.11172 ± 0.00066	0.11078 ± 0.00070	0.11116 ± 0.00065	0.11097 ± 0.00069	0.11117 ± 0.00069
i (deg.)	82.37 ± 0.50	82.49 ± 0.59	82.47 ± 0.54	82.49 ± 0.55	82.48 ± 0.55
$u_{\rm A}$	0.303 ± 0.048	0.074 ± 0.077	-0.060 ± 0.062	0.460 ± 0.066	0.243 ± 0.061
$v_{\rm A}$		0.33 perturbed	0.58 perturbed	0.28 perturbed	0.15 perturbed
T_0	660.96405 ± 0.00017	660.96405 ± 0.00017	660.96405 ± 0.00015	660.96405 ± 0.00017	660.96405 ± 0.00017
$r_{\rm A}$	0.2147 ± 0.0049	0.2144 ± 0.0057	0.2144 ± 0.0052	0.2144 ± 0.0054	0.2143 ± 0.0053
$r_{\rm b}$	0.02399 ± 0.00064	0.02376 ± 0.00074	0.02384 ± 0.00068	0.02379 ± 0.00070	0.02382 ± 0.00070
σ ($m$mag)	0.8207	0.8234	0.8220	0.8226	0.8221
$\chi^2_{\rm red}$	1.0240	1.0307	1.0271	1.0287	1.0275
Fitting for both LD coefficients					
$r_{\rm A} + r_{\rm b}$	0.2387 ± 0.0054	0.2395 ± 0.0051	0.2419 ± 0.0046	0.2417 ± 0.0049	0.2418 ± 0.0043
k	0.1117 ± 0.0006	0.1138 ± 0.0019	0.1146 ± 0.0018	0.1145 ± 0.0018	0.1143 ± 0.0017
i (deg.)	82.37 ± 0.48	82.18 ± 0.47	81.90 ± 0.41	81.94 ± 0.43	81.93 ± 0.41
$u_{\rm A}$	0.30 ± 0.05	0.79 ± 0.36	1.99 ± 0.94	-0.16 ± 0.25	0.61 ± 0.20
$v_{\rm A}$		-0.67 ± 0.47	-2.62 ± 1.43	-0.90 ± 0.52	-0.65 ± 0.39
T_0	660.96405 ± 0.00017	660.96405 ± 0.00016	660.96404 ± 0.00017	660.96404 ± 0.00017	660.96404 ± 0.00016
$r_{\rm A}$	0.2147 ± 0.0047	0.2151 ± 0.0044	0.2170 ± 0.0040	0.2169 ± 0.0042	0.2170 ± 0.0038
$r_{\rm b}$	0.02399 ± 0.00065	0.02448 ± 0.00077	0.02486 ± 0.00071	0.02483 ± 0.00072	0.02481 ± 0.00066
σ ($m$mag)	0.8207	0.8183	0.8183	0.8184	0.8183
$\chi^2_{\rm red}$	1.0240	1.0217	1.0218	1.0218	1.0216

Table A121. Parameters of the JKTEBOP best fits of the WASP-3 light curve from EPOCH, using different approaches to LD. For each part of the table the upper quantities are fitted parameters and the lower quantities are derived parameters. T_0 is given as BJD − 2454000.0. The light curve contains 3363 datapoints.

	Linear LD law	Quadratic LD law	Square-root LD law	Logarithmic LD law	Cubic LD law
All LD coefficients fixed					
$r_{\rm A}+r_{\rm b}$	0.2210 ± 0.0034	0.2206 ± 0.0030	0.2207 ± 0.0032	0.2199 ± 0.0032	0.2334 ± 0.0026
k	0.10645 ± 0.00046	0.10599 ± 0.00035	0.10617 ± 0.00043	0.10590 ± 0.00041	0.10844 ± 0.00028
i (deg.)	83.90 ± 0.34	83.94 ± 0.30	83.94 ± 0.31	84.04 ± 0.32	82.51 ± 0.22
$u_{\rm A}$	0.56 fixed	0.31 fixed	0.21 fixed	0.68 fixed	0.30 fixed
$v_{\rm A}$		0.31 fixed	0.52 fixed	0.25 fixed	0.15 fixed
T_0	686.820226 ± 0.000087	686.820218 ± 0.000082	686.820220 ± 0.000085	686.820220 ± 0.000083	686.820217 ± 0.000083
$r_{\rm A}$	0.1998 ± 0.0030	0.1995 ± 0.0026	0.1996 ± 0.0028	0.1988 ± 0.0029	0.2105 ± 0.0023
$r_{\rm b}$	0.02127 ± 0.00039	0.02114 ± 0.00034	0.02119 ± 0.00038	0.02106 ± 0.00038	0.02283 ± 0.00029
σ ($m$mag)	1.1316	1.1280	1.1289	1.1287	1.1319
Fitting for the linear LD coefficient and perturbing the nonlinear LD coefficient					
$r_{\rm A}+r_{\rm b}$	0.2253 ± 0.0031	0.2224 ± 0.0036	0.2238 ± 0.0034	0.2233 ± 0.0034	0.2235 ± 0.0032
k	0.10769 ± 0.00046	0.10637 ± 0.00058	0.10695 ± 0.00047	0.10671 ± 0.00052	0.10689 ± 0.00053
i (deg.)	83.33 ± 0.30	83.73 ± 0.37	83.55 ± 0.34	83.62 ± 0.35	83.58 ± 0.32
$u_{\rm A}$	0.470 ± 0.021	0.287 ± 0.046	0.157 ± 0.045	0.629 ± 0.049	0.424 ± 0.030
$v_{\rm A}$		0.31 perturbed	0.52 perturbed	0.25 perturbed	0.15 perturbed
T_0	686.820212 ± 0.000081	686.820216 ± 0.000083	686.820213 ± 0.000083	686.820214 ± 0.000089	686.820213 ± 0.000084
$r_{\rm A}$	0.2034 ± 0.0027	0.2010 ± 0.0032	0.2022 ± 0.0030	0.2018 ± 0.0030	0.2019 ± 0.0029
$r_{\rm b}$	0.02191 ± 0.00037	0.02138 ± 0.00045	0.02163 ± 0.00041	0.02153 ± 0.00041	0.02158 ± 0.00039
σ ($m$mag)	1.1283	1.1279	1.1279	1.1279	1.1279
Fitting for both LD coefficients					
$r_{\rm A}+r_{\rm b}$	0.2253 ± 0.0032	0.2217 ± 0.0042	0.2219 ± 0.0042	0.2217 ± 0.0041	0.2208 ± 0.0042
k	0.1077 ± 0.0004	0.1061 ± 0.0010	0.1053 ± 0.0015	0.1056 ± 0.0014	0.1053 ± 0.0015
i (deg.)	83.33 ± 0.31	83.82 ± 0.47	83.94 ± 0.47	83.90 ± 0.52	84.04 ± 0.53
$u_{\rm A}$	0.470 ± 0.021	0.247 ± 0.127	-0.610 ± 0.619	0.826 ± 0.222	0.343 ± 0.061
$v_{\rm A}$		0.38 ± 0.22	1.82 ± 1.05	0.55 ± 0.32	0.47 ± 0.27
T_0	686.820212 ± 0.000085	686.820217 ± 0.000088	686.820220 ± 0.000081	686.820219 ± 0.000085	686.820221 ± 0.000082
$r_{\rm A}$	0.2034 ± 0.0029	0.2005 ± 0.0036	0.2008 ± 0.0036	0.2005 ± 0.0036	0.1998 ± 0.0037
$r_{\rm b}$	0.02191 ± 0.00038	0.02126 ± 0.00056	0.02114 ± 0.00055	0.02117 ± 0.00060	0.02103 ± 0.00059
σ ($m$mag)	1.1283	1.1279	1.1276	1.1277	1.1276

Table A122. Final parameters of the fits to the light curves of WASP-3 from the JKTEBOP analysis, compared to those found by other authors. The light curve results from Paper III are reproduced and used in calculating the final results for the current work. Quantities without quoted uncertainties were not given by other authors but have been calculated from those parameters which were.

	Paper III (LT)	Paper III (Keele)	Paper III (IAC I)	This work (g-band)	This work (i-band)	This work (z-band)	This work (EPOCH)
$r_{\rm A}+r_{\rm b}$	0.223 ± 0.012	0.221 ± 0.031	0.220 ± 0.061	0.219 ± 0.014	0.2050 ± 0.0073	0.2382 ± 0.0094	0.2233 ± 0.0054
k	0.1094 ± 0.0028	0.1087 ± 0.0065	0.0950 ± 0.0154	0.1086 ± 0.0036	0.1017 ± 0.0013	0.11102 ± 0.00091	0.10676 ± 0.00081
i (°)	84.2 ± 1.4	83.5 ± 3.1	83.6 ± 6.4	84.1 ± 1.5	85.5 ± 1.0	82.48 ± 0.86	83.61 ± 0.56
$r_{\rm A}$	0.201 ± 0.011	0.199 ± 0.027	0.201 ± 0.058	0.197 ± 0.012	0.1861 ± 0.0065	0.2144 ± 0.0084	0.2018 ± 0.0047
$r_{\rm b}$	0.0220 ± 0.0012	0.0217 ± 0.0035	0.0190 ± 0.0053	0.0214 ± 0.0019	0.01893 ± 0.00083	0.02380 ± 0.00110	0.02154 ± 0.00064

	This work (final)	Paper III
$r_{\rm A}+r_{\rm b}$	0.2206 ± 0.0039	0.223 ± 0.011
k	0.1074 ± 0.0012	0.1089 ± 0.0025
i (°)	83.72 ± 0.39	84.1 ± 1.3
$r_{\rm A}$	0.1994 ± 0.0033	0.201 ± 0.010
$r_{\rm b}$	0.02125 ± 0.00059	0.0218 ± 0.0011

	Pollacco et al. (2008)	Gibson et al. (2008)	Damasso et al. (2010)	Simpson et al. (2010)	Tripathi et al. (2010)	Miller et al. (2010)	Christiansen et al. (2011)
$r_{\rm A}+r_{\rm b}$	0.212			0.2132		0.1983	0.2198
k	$0.103^{+0.001}_{-0.002}$	$0.1014^{+0.0010}_{-0.0008}$	0.1091 ± 0.0006	$0.1013^{+0.0014}_{-0.0013}$		$0.1025^{+0.0010}_{-0.0005}$	0.1051 ± 0.0124
i (°)	$84.4^{+2.1}_{-0.8}$	$85.06^{+0.16}_{-0.15}$	81.24 ± 0.06	$84.93^{+1.32}_{-0.78}$	84.1	$87.0^{+1.0}_{-1.1}$	84.22 ± 0.81
$r_{\rm A}$	0.192			$0.1933^{+0.0059}_{-0.0097}$		0.1799	0.1989 ± 0.0287
$r_{\rm b}$	0.0197	0.0194		0.02132		0.01844	0.02090

Table A123. Derived physical properties of the WASP-3 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 25.1 \pm 1.2\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.495 \pm 0.024\,\rho_{\odot}$ and $T'_{\rm eq} = 2020 \pm 35\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	187.9 ± 6.6	186.9 ± 2.9	186.7 ± 2.7	186.0 ± 4.7	186.3 ± 4.0	185.0 ± 5.0
$M_{\rm A}$ ($M_{\odot}$)	1.297 ± 0.137	1.276 ± 0.060	1.273 ± 0.056	1.258 ± 0.095	1.264 ± 0.082	1.238 ± 0.101
$R_{\rm A}$ ($R_{\odot}$)	1.379 ± 0.055	1.371 ± 0.032	1.370 ± 0.032	1.365 ± 0.042	1.367 ± 0.038	1.358 ± 0.044
$\log g_{\rm A}$ (cgs)	4.272 ± 0.020	4.270 ± 0.015	4.270 ± 0.015	4.268 ± 0.017	4.269 ± 0.016	4.266 ± 0.018
$M_{\rm b}$ ($M_{\rm Jup}$)	2.071 ± 0.156	2.048 ± 0.087	2.045 ± 0.084	2.029 ± 0.116	2.036 ± 0.104	2.008 ± 0.122
$R_{\rm b}$ ($R_{\rm Jup}$)	1.429 ± 0.057	1.421 ± 0.036	1.420 ± 0.035	1.415 ± 0.045	1.417 ± 0.041	1.407 ± 0.047
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.663 ± 0.048	0.667 ± 0.044	0.667 ± 0.044	0.670 ± 0.046	0.669 ± 0.045	0.674 ± 0.047
Θ	0.0717 ± 0.0035	0.0721 ± 0.0027	0.0722 ± 0.0027	0.0725 ± 0.0030	0.0724 ± 0.0029	0.0729 ± 0.0031
a (AU)	0.03214 ± 0.00113	0.03197 ± 0.00050	0.03194 ± 0.00046	0.03181 ± 0.00080	0.03187 ± 0.00069	0.03165 ± 0.00086
Age (Gyr)		$2.1^{+0.6}_{-1.1}$	$2.1^{+0.4}_{-1.0}$	$2.0^{+1.1}_{-1.0}$	$1.7^{+1.1}_{-0.8}$	$2.5^{+1.2}_{-1.2}$

	This work (final)	Paper III
$M_{\rm A}$ ($M_{\odot}$)	$1.26 \pm 0.10 \pm 0.02$	$1.26 \pm 0.10 \pm 0.02$
$R_{\rm A}$ ($R_{\odot}$)	$1.366 \pm 0.044 \pm 0.008$	$1.377 \pm 0.085 \pm 0.009$
$\log g_{\rm A}$ (cgs)	$4.268 \pm 0.018 \pm 0.003$	$4.262 \pm 0.044 \pm 0.003$
$\rho_{\rm A}$ ($\rho_{\odot}$)	0.495 ± 0.024	0.484 ± 0.073
$M_{\rm b}$ ($M_{\rm Jup}$)	$2.03 \pm 0.12 \pm 0.03$	$2.06 \pm 0.13 \pm 0.03$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.416 \pm 0.047 \pm 0.009$	$1.454 \pm 0.083 \pm 0.009$
$g_{\rm b}$ (m s^{-1})	25.1 ± 1.2	24.2 ± 2.6
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.669 \pm 0.047 \pm 0.004$	$0.67 \pm 0.11 \pm 0.00$
$T'_{\rm eq}$ (K)	2020 ± 35	2028 ± 59
Θ	$0.0724 \pm 0.0031 \pm 0.0004$	$0.0715 \pm 0.0048 \pm 0.0004$
a (AU)	$0.03185 \pm 0.00086 \pm 0.00020$	$0.03187 \pm 0.00086 \pm 0.00020$
Age (Gyr)	$2.1\,^{+1.2\ +0.4}_{-1.2\ -0.4}$	$2.1\,^{+1.5\ +0.4}_{-1.2\ -0.3}$

	Pollacco et al. (2008)	Gibson et al. (2008)	Simpson et al. (2010)	Tripathi et al. (2010)	Miller et al. (2010)	Christiansen et al. (2011)
$M_{\rm A}$ ($M_{\odot}$)	$1.24^{+0.06}_{-0.11}$			1.24 adopted	1.20 ± 0.01	$1.24^{+0.06}_{-0.11}$ adopted
$R_{\rm A}$ ($R_{\odot}$)	$1.31^{+0.05}_{-0.12}$		$1.31^{+0.05}_{-0.07}$		$1.21^{+0.04}_{-0.03}$	1.3540.056
$\log g_{\rm A}$ (cgs)	$4.30^{+0.07}_{-0.03}$				4.33 ± 0.03	
$\rho_{\rm A}$ ($\rho_{\odot}$)	$0.55^{+0.15}_{-0.05}$				$0.67^{+0.05}_{-0.06}$	
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.76^{+0.08}_{-0.14}$	$1.76^{+0.08}_{-0.14}$		2.04 ± 0.07	$1.90^{+0.10}_{-0.09}$	$1.76^{+0.08}_{-0.14}$ adopted
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.31^{+0.07}_{-0.14}$	$1.29^{+0.05}_{-0.12}$	$1.29^{+0.05}_{-0.07}$		$1.20^{+0.05}_{-0.03}$	1.3850.060
$g_{\rm b}$ (m s^{-1})	$23.4^{+5.4}_{-2.1}$	$26.3^{+3.9}_{-2.3}$			$29.5^{+2.1}_{-2.6}$	
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.78^{+0.28}_{-0.09}$	$0.82^{+0.14}_{-0.09}$			$1.08^{+0.11}_{-0.13}$	
$T'_{\rm eq}$ (K)	1960^{+33}_{-76}				1920^{+32}_{-22}	
Θ						
a (AU)	$0.0317^{+0.0005}_{-0.0010}$				0.0313 ± 0.0001	
Age (Gyr)	0.7 to 3.5				$0.3^{+1.7}_{-0.3}$	

Table A124. Derived physical properties of the XO-4 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 23.1^{+2.5}_{-9.4}\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.358^{+0.046}_{-0.160}\,\rho_\odot$ and $T'_{\rm eq} = 1630^{+169}_{-36}$ K. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	$146.0^{+5.2}_{-3.4}$	$144.7^{+3.1}_{-1.2}$	$144.5^{+4.1}_{-1.2}$	$144.0^{+4.2}_{-1.5}$	$144.3^{+4.3}_{-1.1}$	$143.4^{+1.3}_{-1.4}$
$M_{\rm A}$ ($M_\odot$)	$1.332^{+0.145}_{-0.090}$	$1.299^{+0.085}_{-0.030}$	$1.293^{+0.112}_{-0.032}$	$1.280^{+0.116}_{-0.039}$	$1.289^{+0.117}_{-0.028}$	$1.263^{+0.035}_{-0.036}$
$R_{\rm A}$ ($R_\odot$)	$1.549^{+0.390}_{-0.077}$	$1.536^{+0.371}_{-0.068}$	$1.534^{+0.382}_{-0.066}$	$1.529^{+0.385}_{-0.066}$	$1.532^{+0.386}_{-0.066}$	$1.522^{+0.326}_{-0.066}$
$\log g_{\rm A}$ (cgs)	$4.183^{+0.034}_{-0.160}$	$4.179^{+0.033}_{-0.163}$	$4.178^{+0.034}_{-0.160}$	$4.177^{+0.034}_{-0.159}$	$4.178^{+0.033}_{-0.159}$	$4.175^{+0.034}_{-0.172}$
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.585^{+0.128}_{-0.093}$	$1.558^{+0.089}_{-0.063}$	$1.553^{+0.106}_{-0.063}$	$1.544^{+0.109}_{-0.066}$	$1.550^{+0.110}_{-0.062}$	$1.530^{+0.064}_{-0.064}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.303^{+0.390}_{-0.069}$	$1.292^{+0.385}_{-0.063}$	$1.290^{+0.385}_{-0.063}$	$1.286^{+0.384}_{-0.063}$	$1.289^{+0.385}_{-0.063}$	$1.280^{+0.381}_{-0.063}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.67^{+0.11}_{-0.36}$	$0.68^{+0.11}_{-0.37}$	$0.68^{+0.11}_{-0.37}$	$0.68^{+0.11}_{-0.37}$	$0.68^{+0.11}_{-0.37}$	$0.68^{+0.11}_{-0.37}$
Θ	$0.1011^{+0.0068}_{-0.0237}$	$0.1019^{+0.0065}_{-0.0238}$	$0.1021^{+0.0065}_{-0.0239}$	$0.1024^{+0.0065}_{-0.0240}$	$0.1022^{+0.0065}_{-0.0239}$	$0.1029^{+0.0065}_{-0.0239}$
a (AU)	$0.05541^{+0.00196}_{-0.00126}$	$0.05494^{+0.00117}_{-0.00043}$	$0.05485^{+0.00154}_{-0.00045}$	$0.05468^{+0.00161}_{-0.00056}$	$0.05480^{+0.00162}_{-0.00040}$	$0.05443^{+0.00049}_{-0.00053}$
Age (Gyr)		$2.9^{+0.3}_{-0.5}$	$2.7^{+0.3}_{-0.4}$	$2.6^{+0.5}_{-0.3}$	$2.4^{+0.3}_{-0.4}$	$2.9^{+1.1}_{-0.3}$

	This work (final)	Paper III	McCullough et al. (2008)	Narita et al. (2010)
$M_{\rm A}$ ($M_\odot$)	$1.285\,^{+0.117\,+0.014}_{-0.039\,-0.022}$	$1.285\,^{+0.068\,+0.016}_{-0.036\,-0.024}$	1.32 ± 0.02	1.32 ± 0.02 adopted
$R_{\rm A}$ ($R_\odot$)	$1.531\,^{+0.386\,+0.006}_{-0.068\,-0.009}$	$1.530\,^{+0.362\,+0.006}_{-0.069\,-0.010}$	1.55 ± 0.05	
$\log g_{\rm A}$ (cgs)	$4.177\,^{+0.034\,+0.002}_{-0.172\,-0.002}$	$4.178\,^{+0.034\,+0.002}_{-0.169\,-0.003}$	4.18 ± 0.07	
$\rho_{\rm A}$ ($\rho_\odot$)	$0.358^{+0.046}_{-0.160}$	$0.359^{+0.046}_{-0.160}$		
$M_{\rm b}$ ($M_{\rm Jup}$)	$1.547\,^{+0.110\,+0.011}_{-0.066\,-0.017}$	$1.52\,^{+0.16\,+0.01}_{-0.15\,-0.02}$	1.72 ± 0.20	1.78 ± 0.08
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.287\,^{+0.385\,+0.005}_{-0.063\,-0.007}$	$1.288\,^{+0.385\,+0.005}_{-0.063\,-0.008}$	1.34 ± 0.048	1.33 ± 0.05
$g_{\rm b}$ (m s^{-1})	$23.1^{+2.5}_{-9.4}$	$22.8^{+3.2}_{-9.5}$		
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.68\,^{+0.11\,+0.00}_{-0.37\,-0.00}$	$0.71\,^{+0.13\,+0.00}_{-0.39\,-0.00}$		
$T'_{\rm eq}$ (K)	1630^{+169}_{-36}	1630^{+169}_{-36}		
Θ	$0.1023\,^{+0.0065\,+0.0006}_{-0.0240\,-0.0004}$	$0.101\,^{+0.011\,+0.001}_{-0.025\,-0.000}$		
a (AU)	$0.05474\,^{+0.00162\,+0.00020}_{-0.00056\,-0.00031}$	$0.05475\,^{+0.00094\,+0.00022}_{-0.00051\,-0.00035}$	0.0555 ± 0.0011	
Age (Gyr)	$2.7\,^{+1.1\,+0.2}_{-0.5\,-0.3}$	$2.7\,^{+0.6\,+0.2}_{-0.5\,-0.3}$	2.1 ± 0.6	

Table A125. Derived physical properties of the WASP-7 system. The upper part of the table contains the individual results from this work; in each case $g_{\rm b} = 12.9 \pm 2.4\,{\rm m\,s^{-2}}$, $\rho_{\rm A} = 0.408 \pm 0.068\,\rho_\odot$ and $T'_{\rm eq} = 1502 \pm 47\,{\rm K}$. The lower part of the table contains the final results and a comparison to published measurements.

	This work (dEB constraint)	This work (Claret models)	This work (Y^2 models)	This work (Teramo models)	This work (VRSS models)	This work (DSEP models)
$K_{\rm b}$ (km s^{-1})	137.2 ± 3.7	135.8 ± 2.0	135.9 ± 2.0	135.4 ± 2.1	135.6 ± 1.9	134.8 ± 2.2
$M_{\rm A}$ ($M_\odot$)	1.332 ± 0.107	1.293 ± 0.056	1.297 ± 0.056	1.282 ± 0.060	1.288 ± 0.053	1.266 ± 0.063
$R_{\rm A}$ ($R_\odot$)	1.484 ± 0.101	1.469 ± 0.092	1.471 ± 0.093	1.465 ± 0.094	1.467 ± 0.092	1.459 ± 0.094
$\log g_{\rm A}$ (cgs)	4.220 ± 0.046	4.216 ± 0.046	4.216 ± 0.045	4.215 ± 0.045	4.215 ± 0.046	4.213 ± 0.046
$M_{\rm b}$ ($M_{\rm Jup}$)	0.99 ± 0.14	0.97 ± 0.13	0.97 ± 0.13	0.96 ± 0.13	0.96 ± 0.13	0.95 ± 0.13
$R_{\rm b}$ ($R_{\rm Jup}$)	1.379 ± 0.099	1.366 ± 0.093	1.367 ± 0.093	1.362 ± 0.093	1.364 ± 0.093	1.356 ± 0.093
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	0.352 ± 0.086	0.355 ± 0.087	0.355 ± 0.086	0.356 ± 0.087	0.356 ± 0.087	0.358 ± 0.087
Θ	0.067 ± 0.010	0.068 ± 0.010	0.068 ± 0.010	0.068 ± 0.010	0.068 ± 0.010	0.068 ± 0.010
a (AU)	0.06259 ± 0.00168	0.06198 ± 0.00089	0.06204 ± 0.00089	0.06181 ± 0.00096	0.06189 ± 0.00085	0.06154 ± 0.00102
Age (Gyr)		$2.6^{+0.5}_{-0.9}$	$2.5^{+0.4}_{-0.8}$	$2.4^{+0.5}_{-0.8}$	$2.1^{+0.5}_{-0.6}$	$2.7^{+0.8}_{-0.5}$

	This work (final)	Southworth et al. (2011)	Hellier et al. (2009)
$M_{\rm A}$ ($M_\odot$)	$1.285 \pm 0.063 \pm 0.019$	$1.287 \pm 0.064 \pm 0.021$	$1.28^{+0.09}_{-0.19}$
$R_{\rm A}$ ($R_\odot$)	$1.466 \pm 0.094 \pm 0.007$	$1.466 \pm 0.094 \pm 0.008$	$1.236^{+0.059}_{-0.046}$
$\log g_{\rm A}$ (cgs)	$4.215 \pm 0.046 \pm 0.002$	$4.215 \pm 0.046 \pm 0.002$	$4.363^{+0.010}_{-0.047}$
$\rho_{\rm A}$ ($\rho_\odot$)	0.408 ± 0.068	0.408 ± 0.069	
$M_{\rm b}$ ($M_{\rm Jup}$)	$0.96 \pm 0.13 \pm 0.01$	$0.96 \pm 0.13 \pm 0.01$	$0.96^{+0.12}_{-0.18}$
$R_{\rm b}$ ($R_{\rm Jup}$)	$1.363 \pm 0.093 \pm 0.007$	$1.364 \pm 0.093 \pm 0.007$	$0.915^{+0.046}_{-0.040}$
$g_{\rm b}$ (m s^{-1})	12.9 ± 2.4	12.8 ± 2.4	$26.4^{+4.4}_{-4.0}$
$\rho_{\rm b}$ ($\rho_{\rm Jup}$)	$0.356 \pm 0.087 \pm 0.002$	$0.380 \pm 0.093 \pm 0.002$	$1.26^{+0.25}_{-0.21}$
$T'_{\rm eq}$ (K)	1502 ± 47	1502 ± 47	1379^{+35}_{-23}
Θ	$0.068 \pm 0.010 \pm 0.000$	$0.068 \pm 0.010 \pm 0.000$	
a (AU)	$0.0619 \pm 0.0010 \pm 0.0003$	$0.0619 \pm 0.0010 \pm 0.0003$	$0.0618^{+0.0014}_{-0.0033}$
Age (Gyr)	$2.5\,^{+0.8\ +0.2}_{-0.9\ -0.4}$	$2.5\,^{+0.8\ +0.2}_{-0.9\ -0.3}$	

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