

KIC 011455795

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
011455795-01	OBS	7446.01	1.057328	131.797380	33335.1	1.361	1942.0	874.4	0.68	4664	13.45	626.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011455795-01	OBS	PC	0.37	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011455795-01

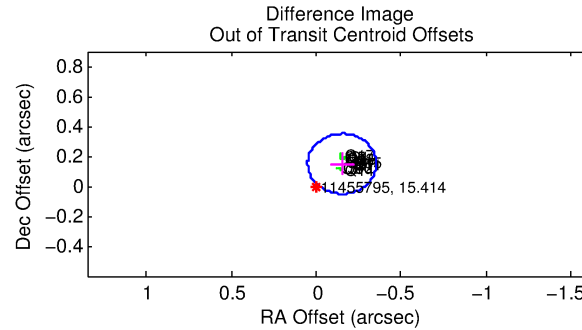
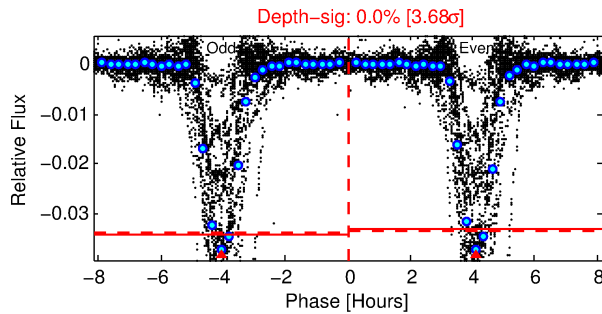
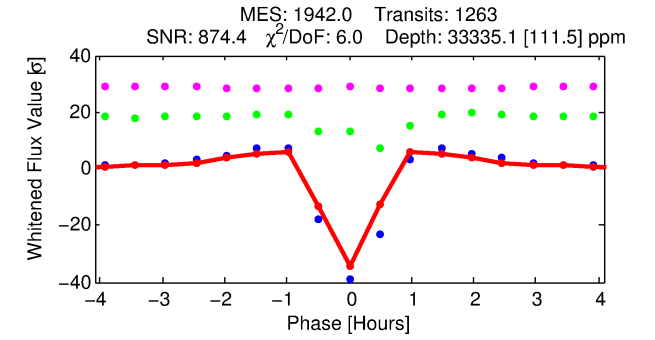
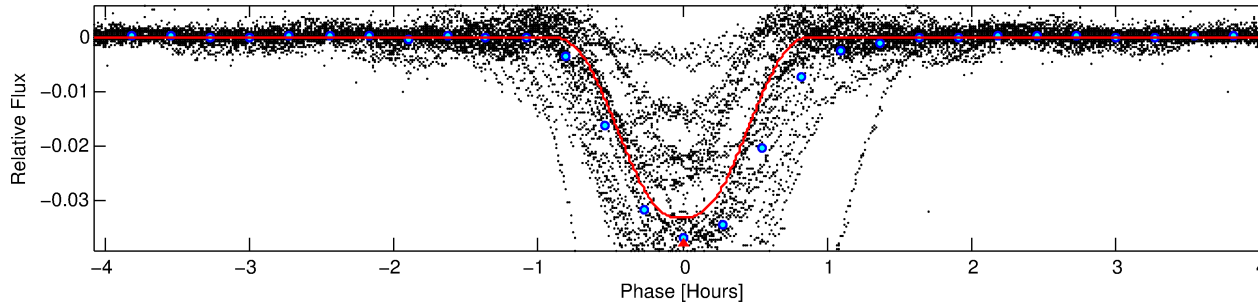
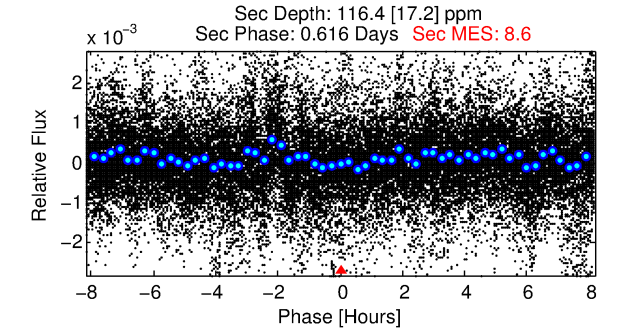
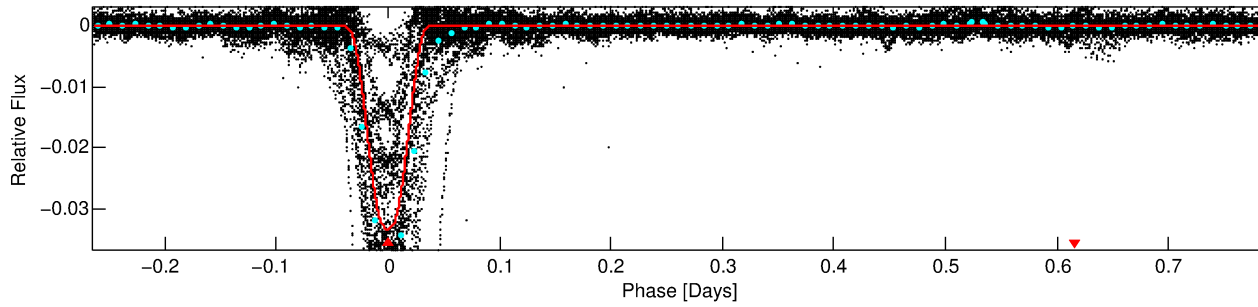
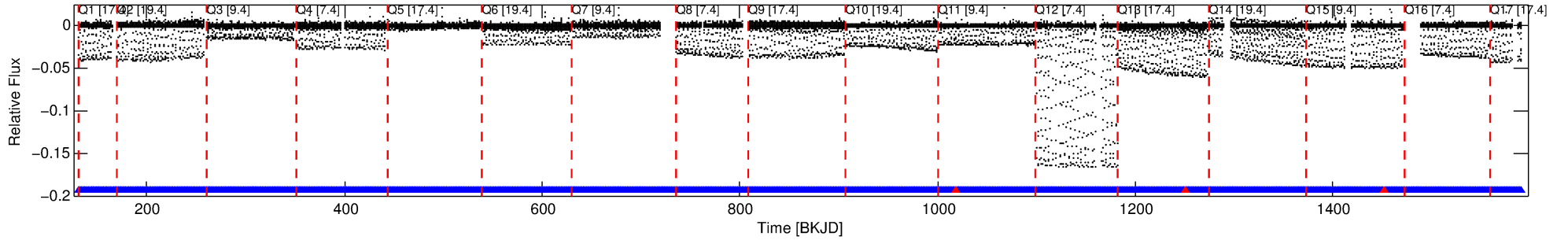
No Significant Match Found

DV One-Page Summary

KIC: 11455795 Candidate: 1 of 1 Period: 1.057 d

KOI: K07446.01 Corr: 0.923

Kp: 15.41 R*: 0.68 Rs Teff: 4664.0 K Logg: 4.59 Fe/H: -0.200



DV Fit Results:

Period = 1.05733 [0.00000] d
Epoch = 131.7974 [0.0000] BKJD
Rp/R* = 0.1805 [0.0014]
a/R* = 5.80 [0.10]
b = 0.68 [0.02]
Seff = 626.99 [98.57]
Teq = 1276 [50] K
Rp = 13.45 [1.19] Re
a = 0.0178 [0.0013] AU
Ag = 0.11 [0.02] [-44.33σ]
Teffp = 1140 [54] K [-1.84σ]

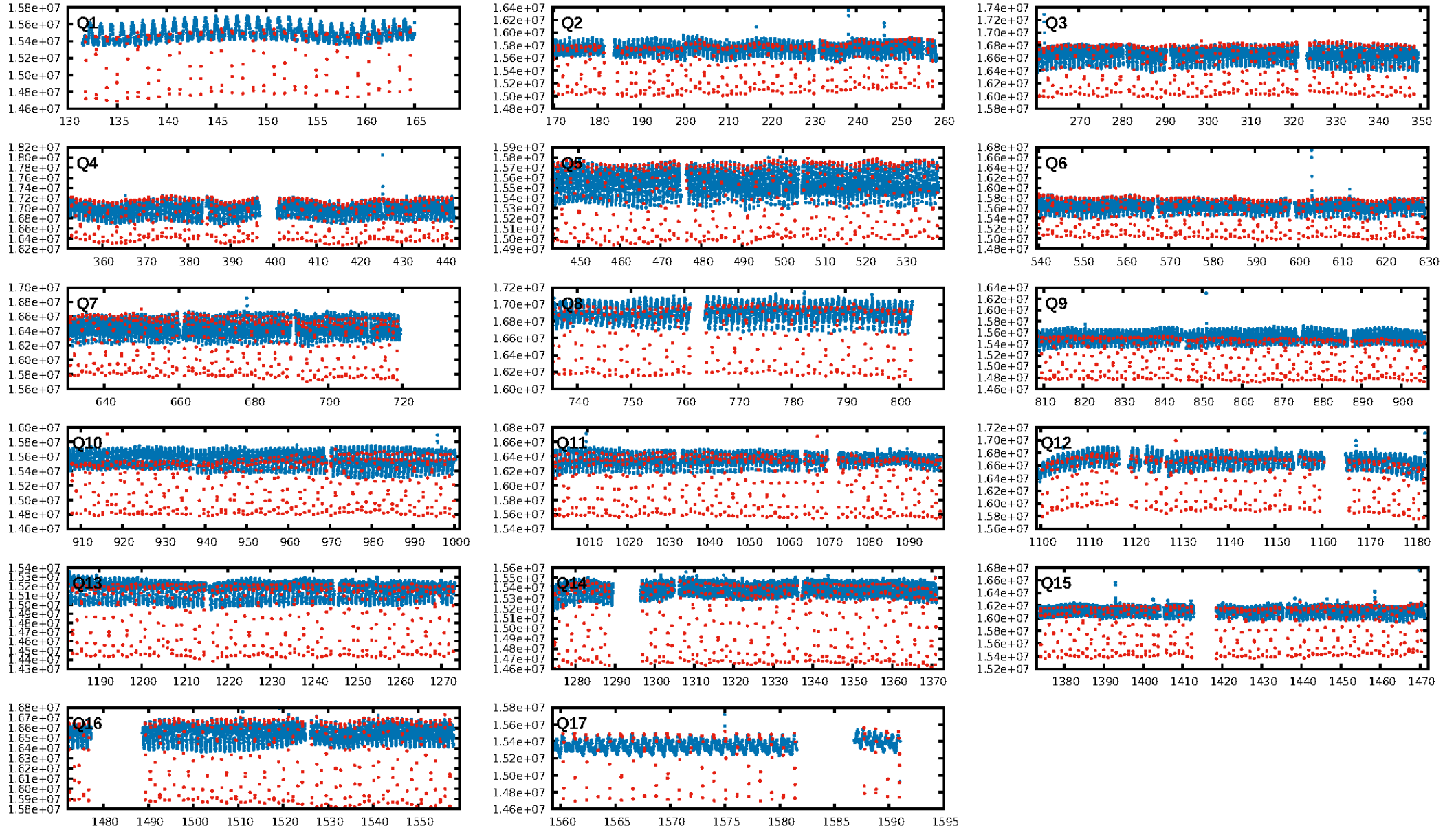
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [1203/1206]
GhostDiagnostic-chr: 2.07
Centroid-sig: N/A
Centroid-so: 0.105 arcsec [22.80σ]
OotOffset-rm: 0.213 arcsec [3.17σ]
KicOffset-rm: 0.131 arcsec [1.94σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

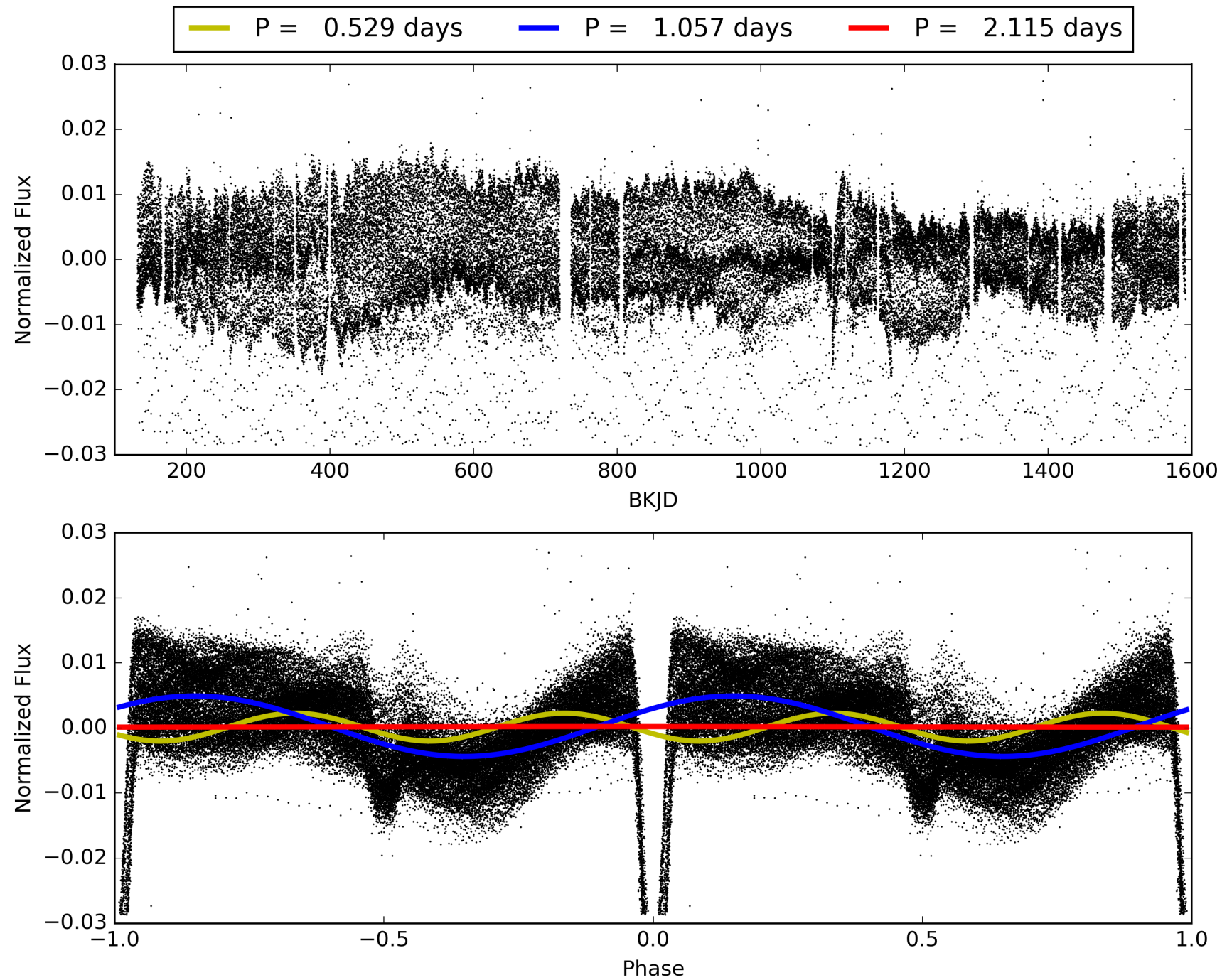
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 12:07:59 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011455795-01, PDC Light Curves

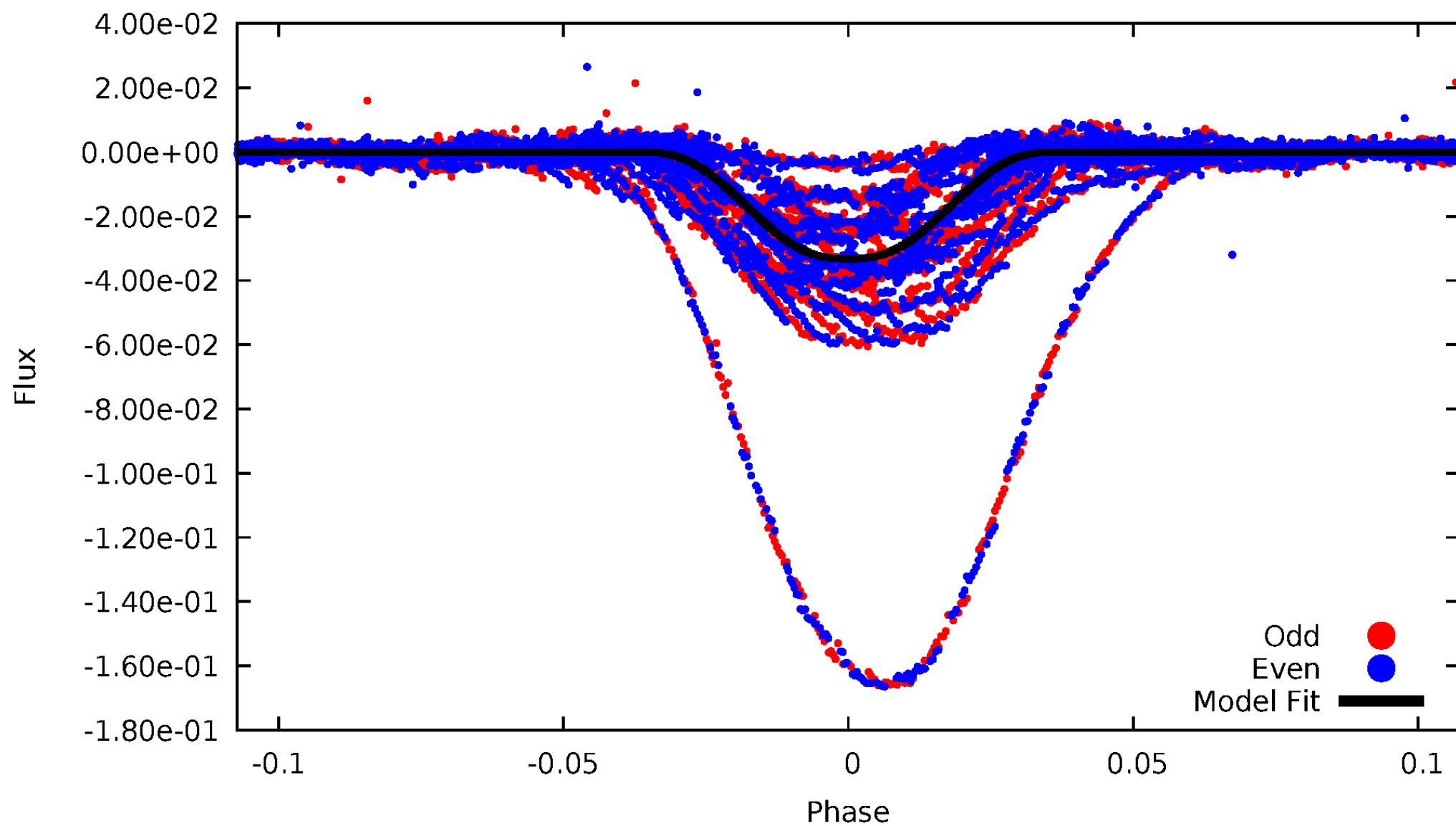


TCE 011455795-01



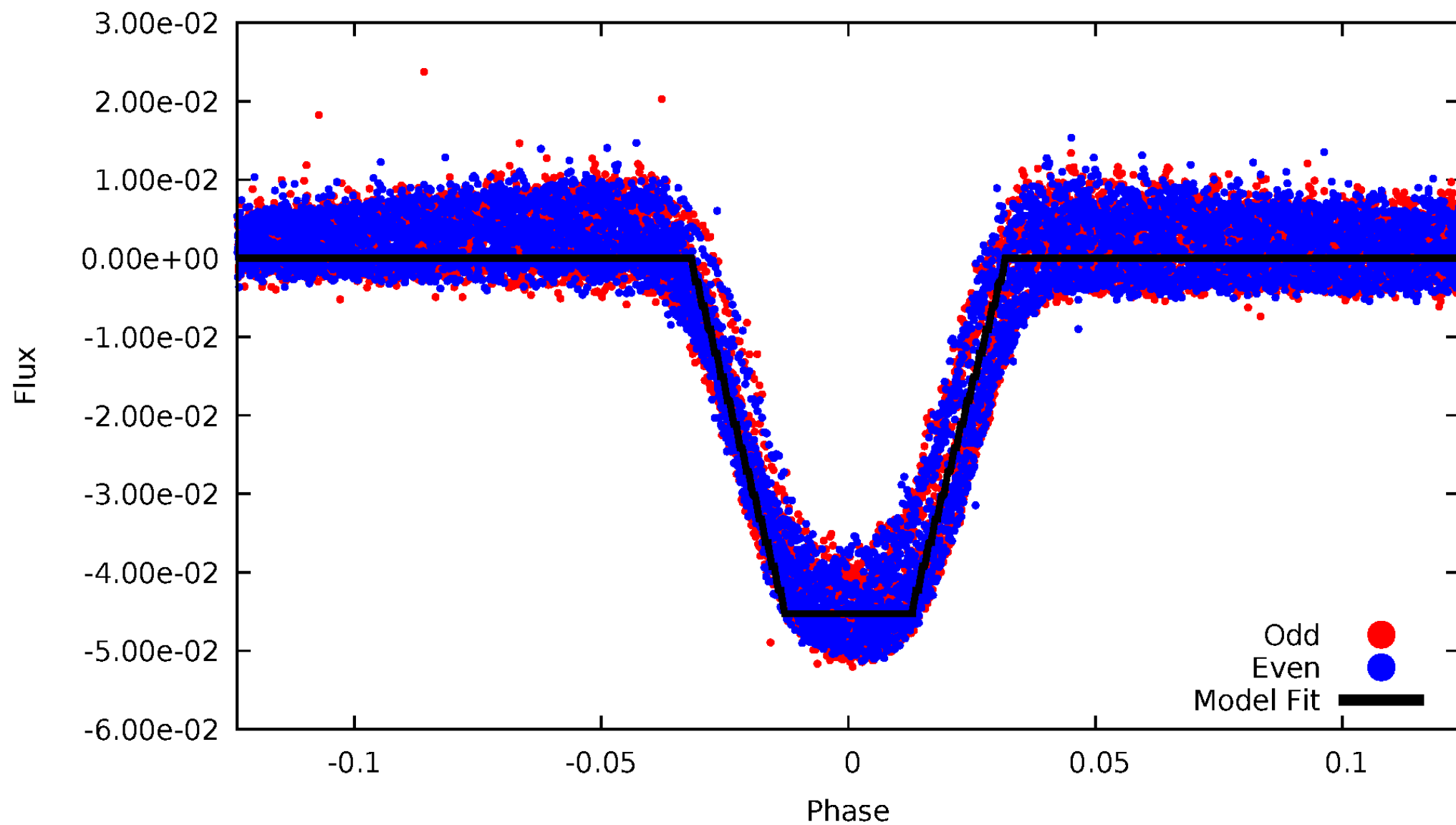
DV Odd/Even

TCE 011455795-01



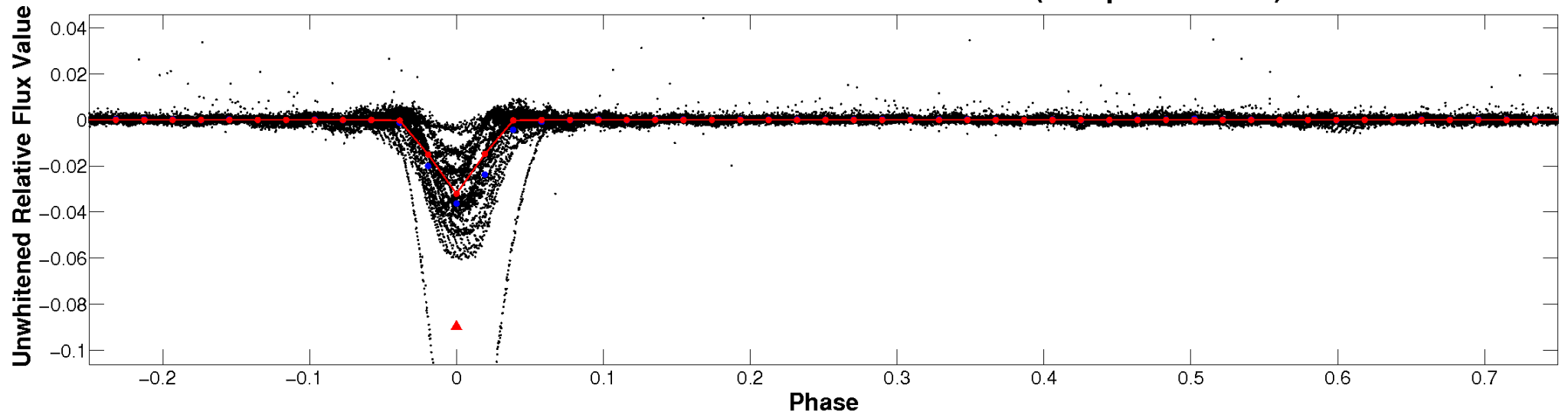
ALT Odd/Even

TCE 011455795-01

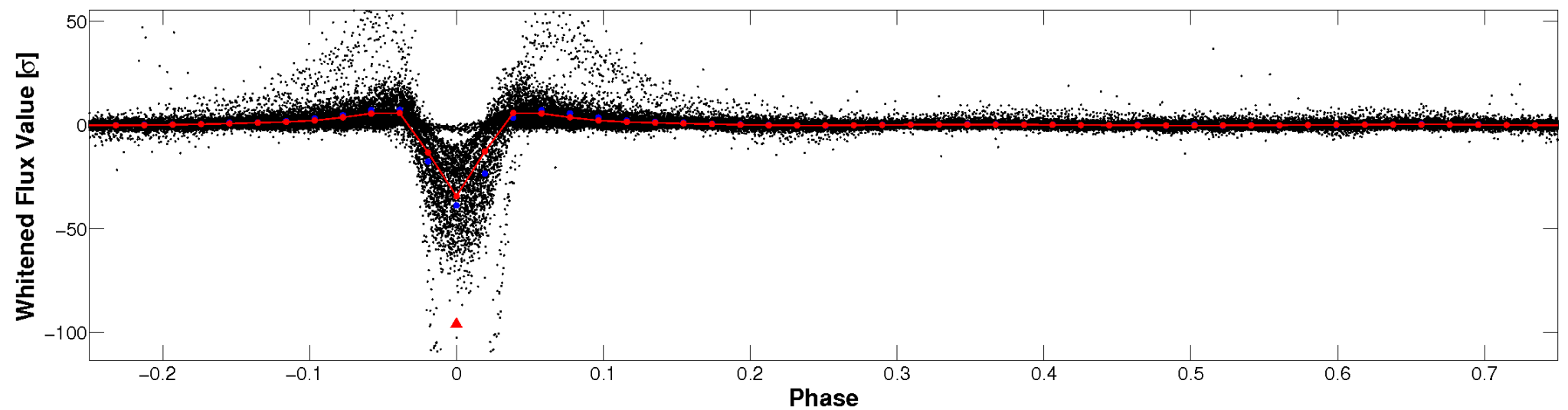


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

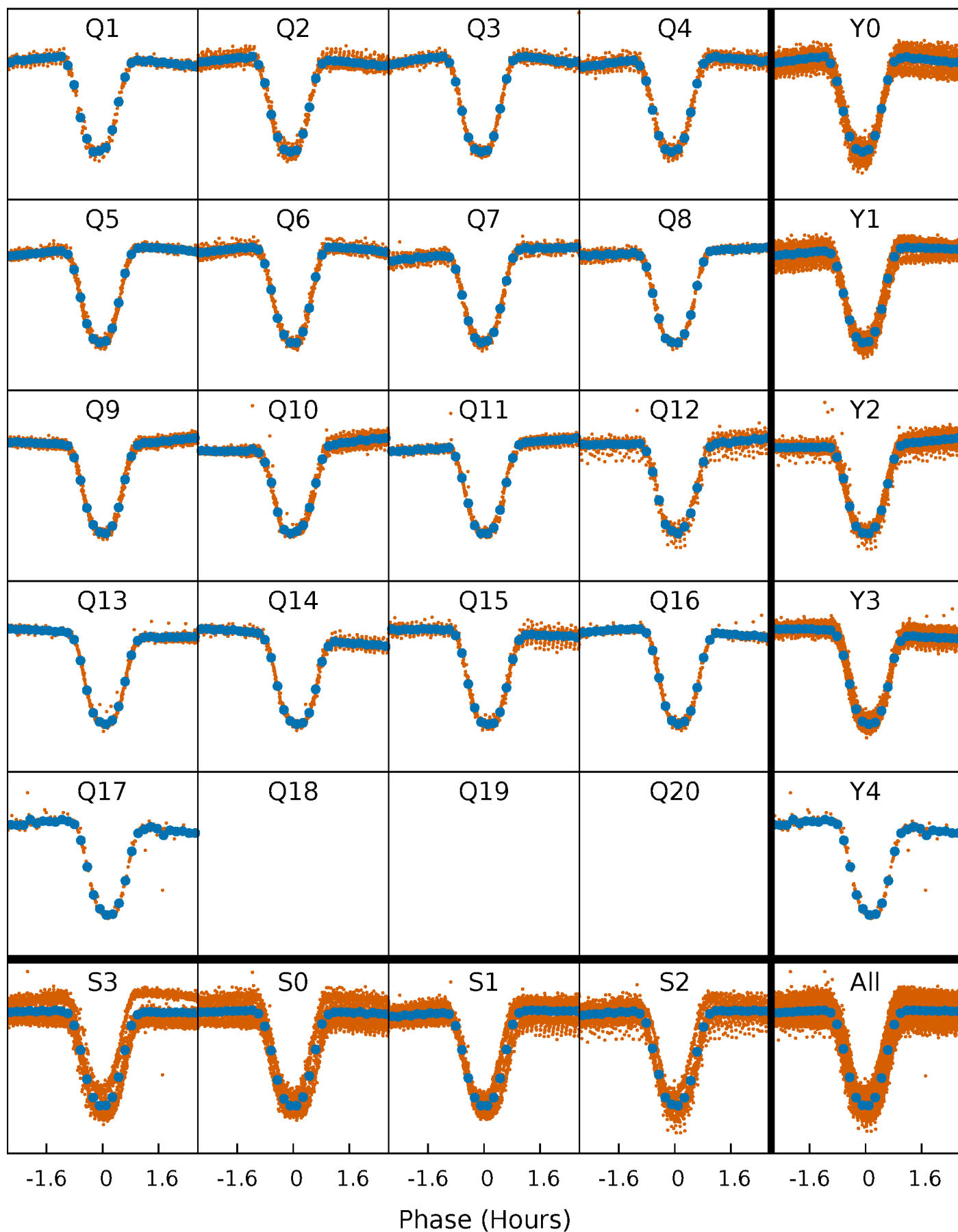


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



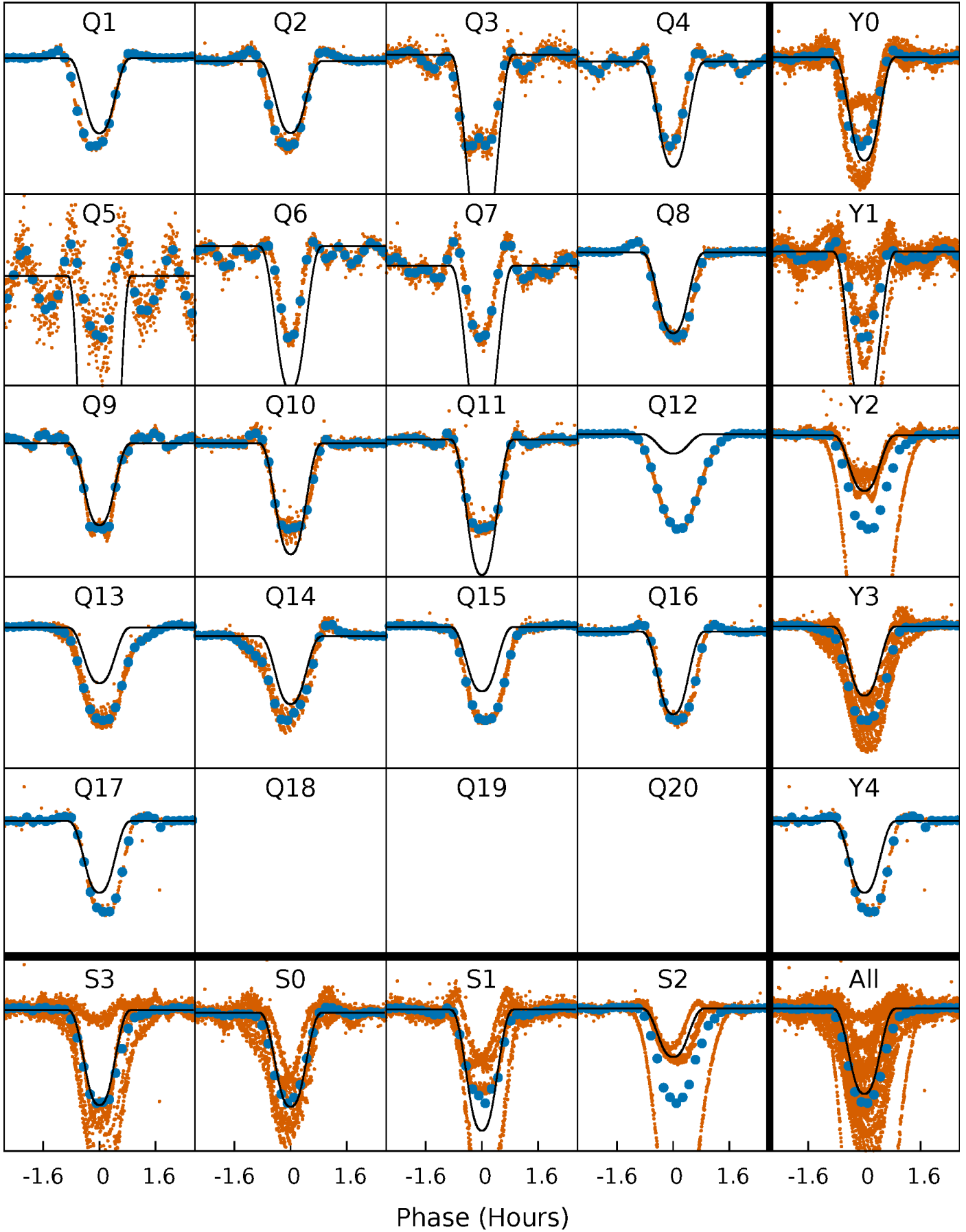
PDC Quarter-Phased Transit Curves

TCE 011455795-01 P= 1.057328 Days $T_0=131.797380$ (BKJD)



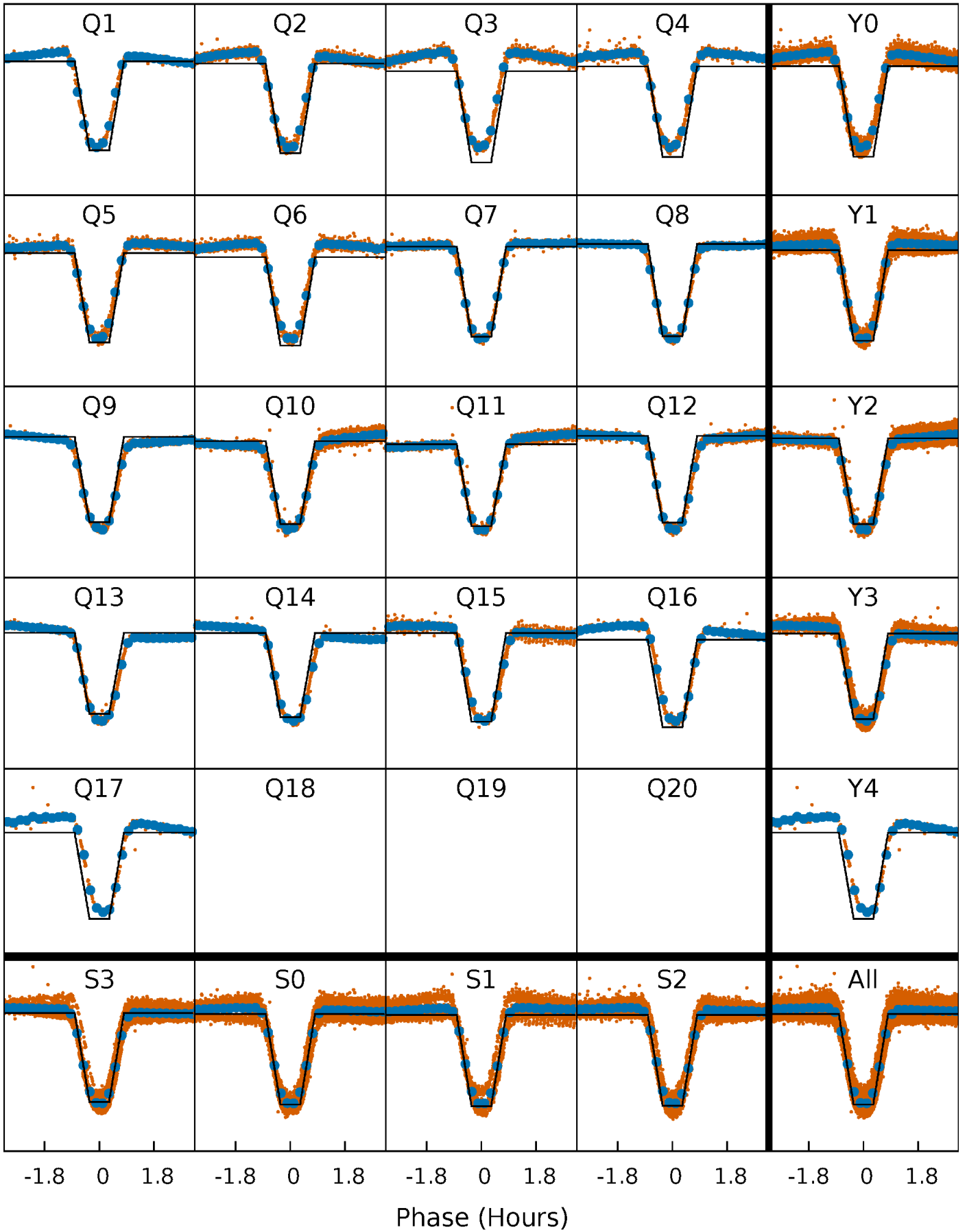
DV Quarter-Phased Transit Curves

TCE 011455795-01 P= 1.057328 Days $T_0=131.797380$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

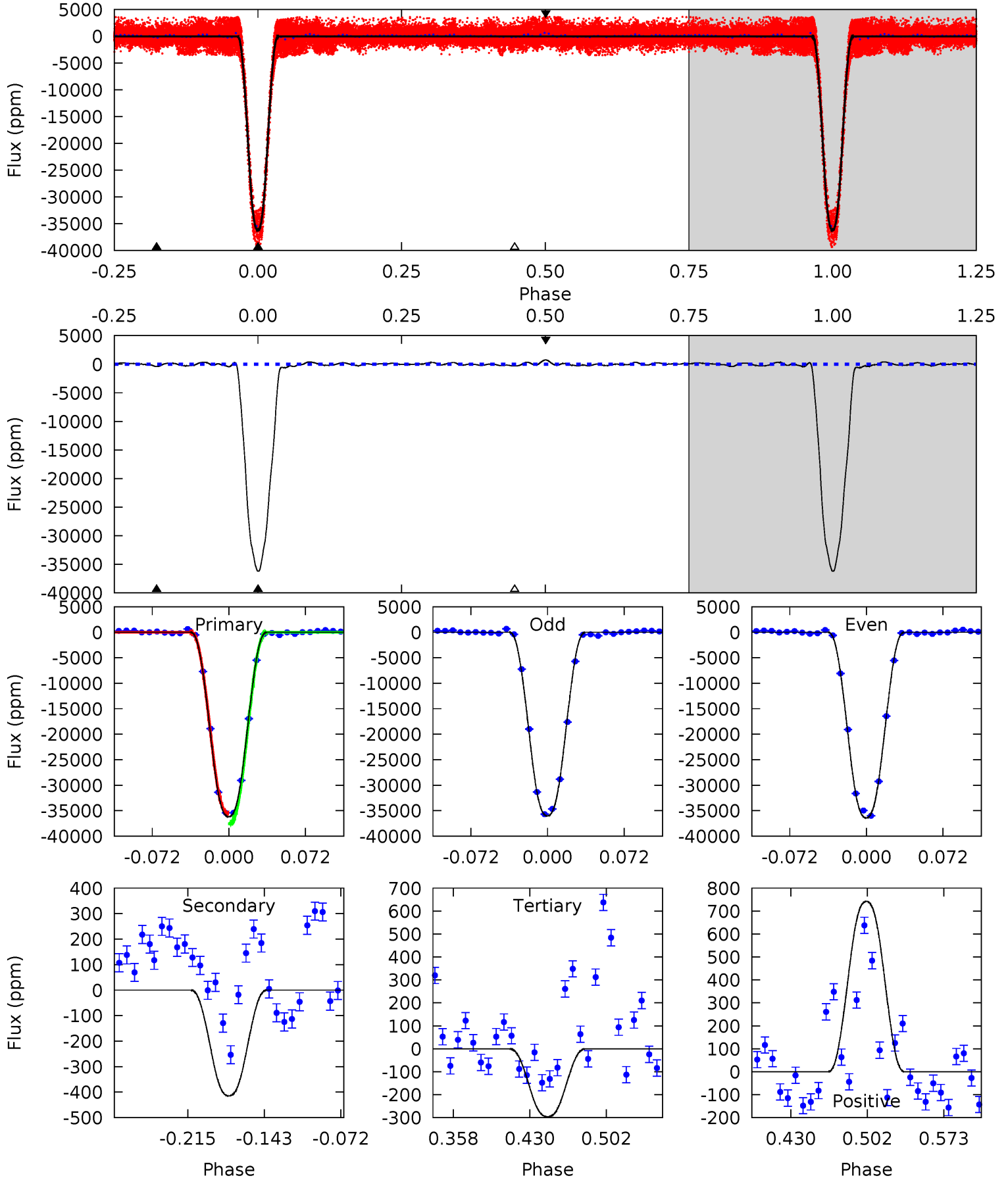
TCE 011455795-01 P= 1.057330 Days $T_0=131.795608$ (BKJD)



DV Model-Shift Uniqueness Test

011455795-01, P = 1.057328 Days, E = 130.740052 Days

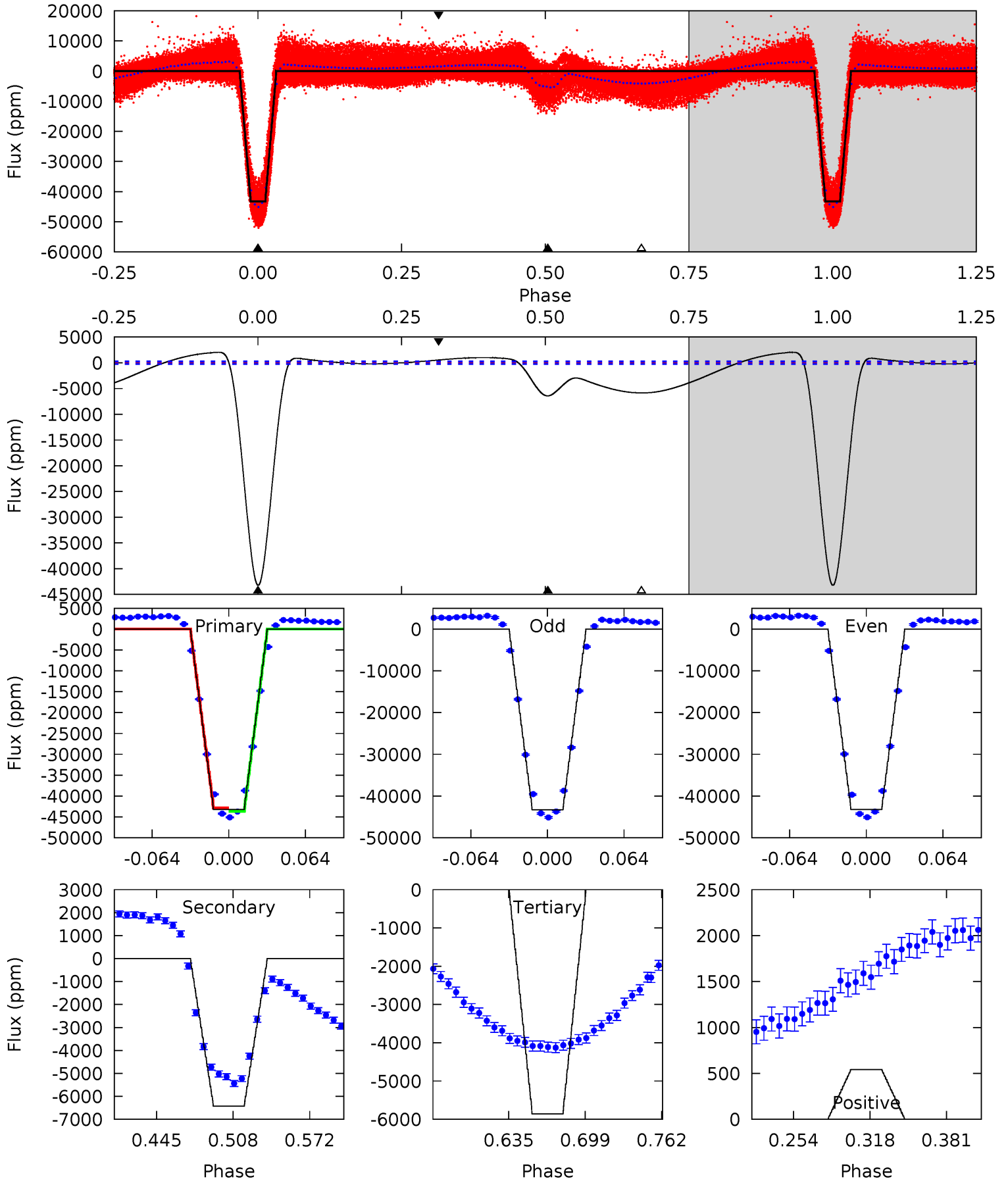
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1544	17.7	12.6	31.7	4.63	1.80	7.99	1532	1513	5.07	-14.0	8.23	1.13	0.02	0



Alt Model-Shift Uniqueness Test

011455795-01, P = 1.057330 Days, E = 130.738278 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
781.8	116.3	106.0	9.82	4.66	1.86	45.1	675.8	772.0	10.3	106.5	0.21	0.98	0.05	7.53



Stellar Parameters For KIC 011455795

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4664^{+126}_{-140}	$4.594^{+0.054}_{-0.027}$	$-0.200^{+0.300}_{-0.300}$	$0.683^{+0.054}_{-0.060}$	$0.668^{+0.082}_{-0.048}$	$2.951^{+0.727}_{-0.355}$
	+3%/-3%	+1%/-1%	+150%/-150%	+8%/-9%	+12%/-7%	+25%/-12%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011455795-01 / KOI 7446.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-415 ± 23	$13.36^{+0.65}_{-0.61}$	1770^{+55}_{-66}	2066^{+66}_{-78}	$0.407^{+0.036}_{-0.035}$
Alt.	-6430 ± 55	$15.79^{+0.79}_{-0.81}$	1772^{+56}_{-67}	3288^{+69}_{-80}	$4.543^{+0.424}_{-0.274}$

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

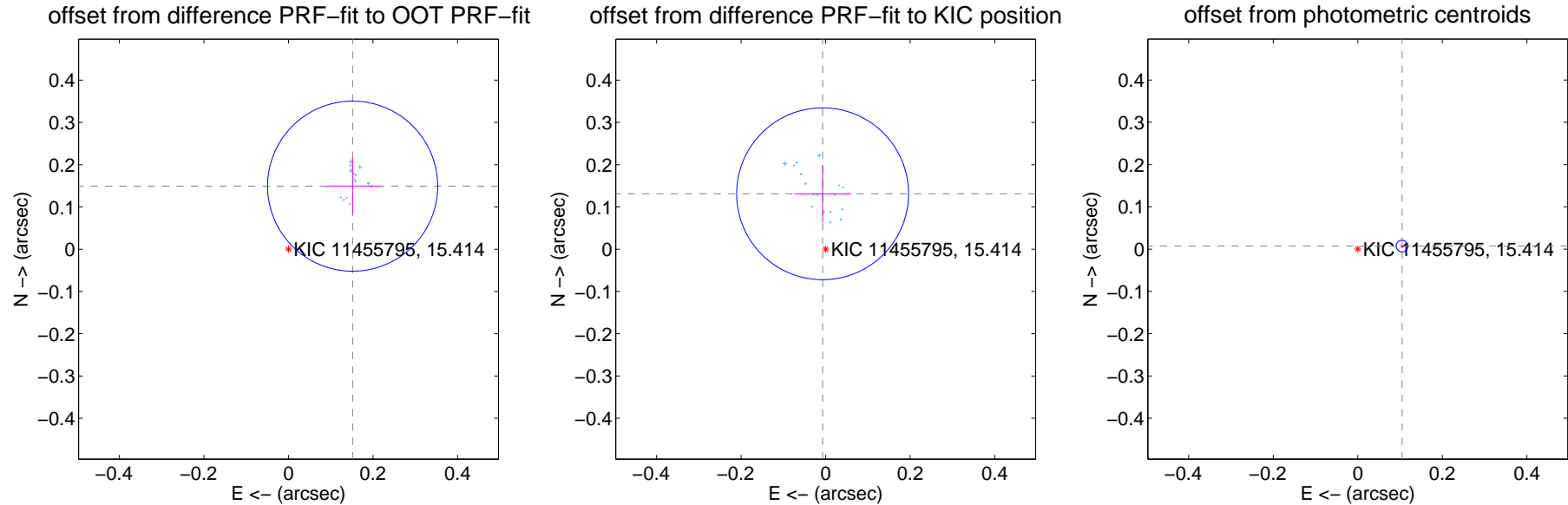
DV Centroid Data

Supplemental centroid analysis for 011455795-01. Kepler magnitude: 15.41. Transit SNR 874.40

There are 17 quarters with good PRF difference image offsets

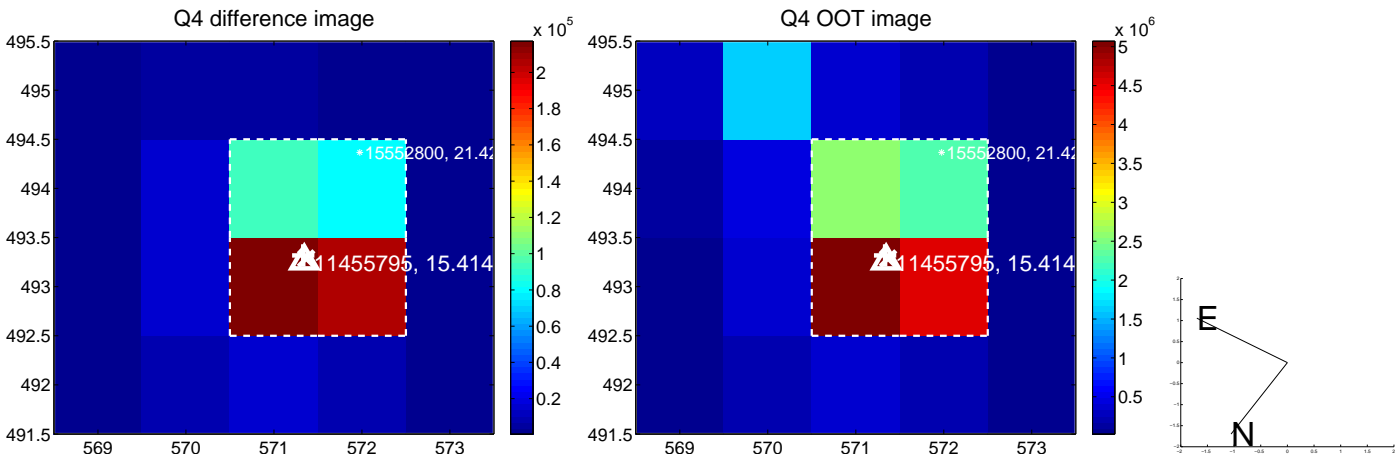
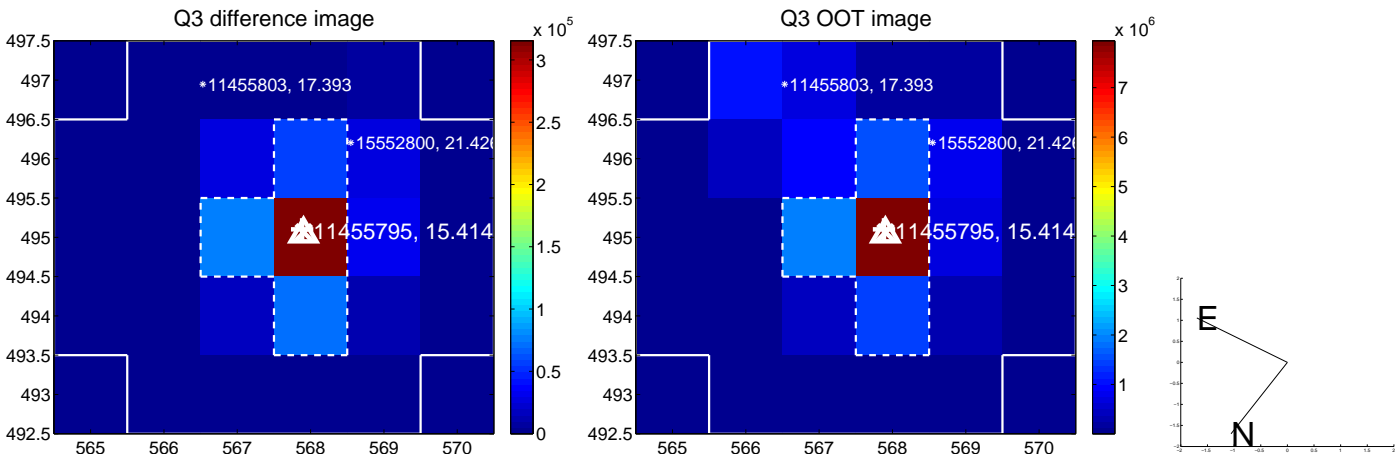
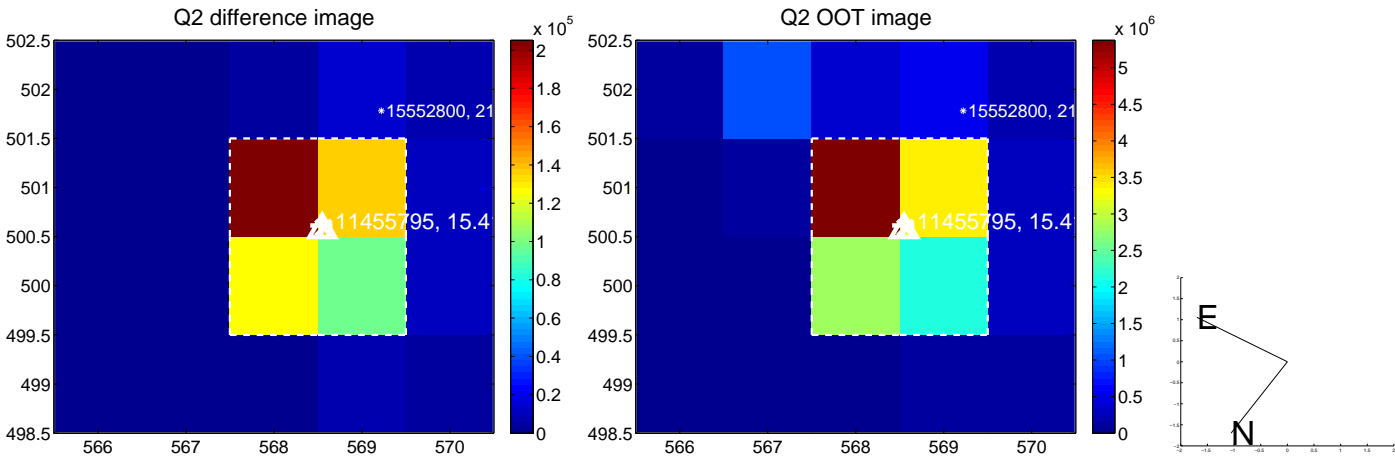
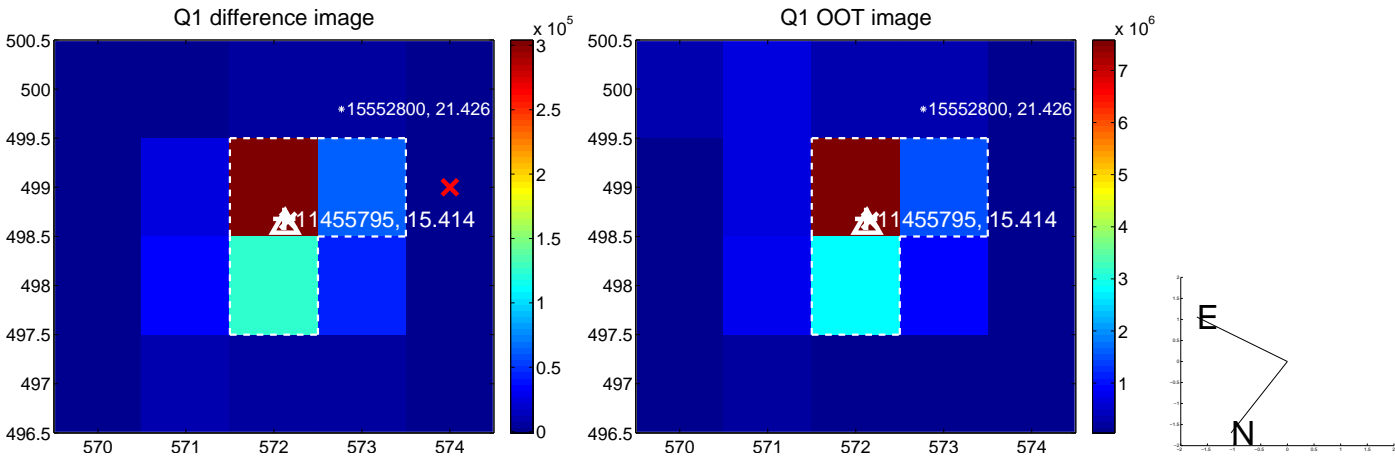
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.213 ± 0.067	3.17	-0.152 ± 0.067	0.149 ± 0.067
PRF-fit source offset from KIC position	0.131 ± 0.068	1.94	0.007 ± 0.067	0.131 ± 0.068
photometric centroid source offset	0.10 ± 0.00	22.80	-0.10 ± 0.00	0.01 ± 0.00

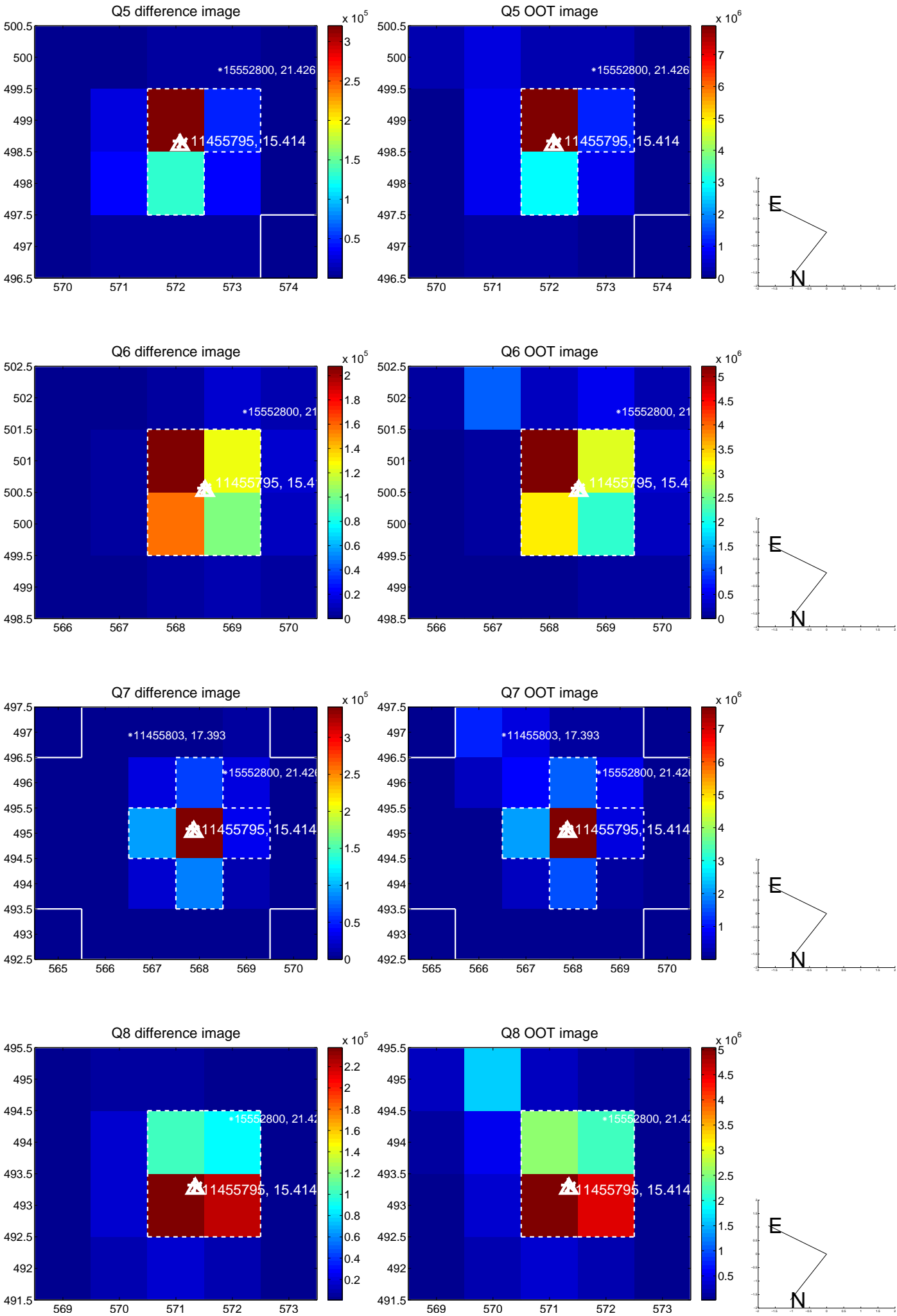


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

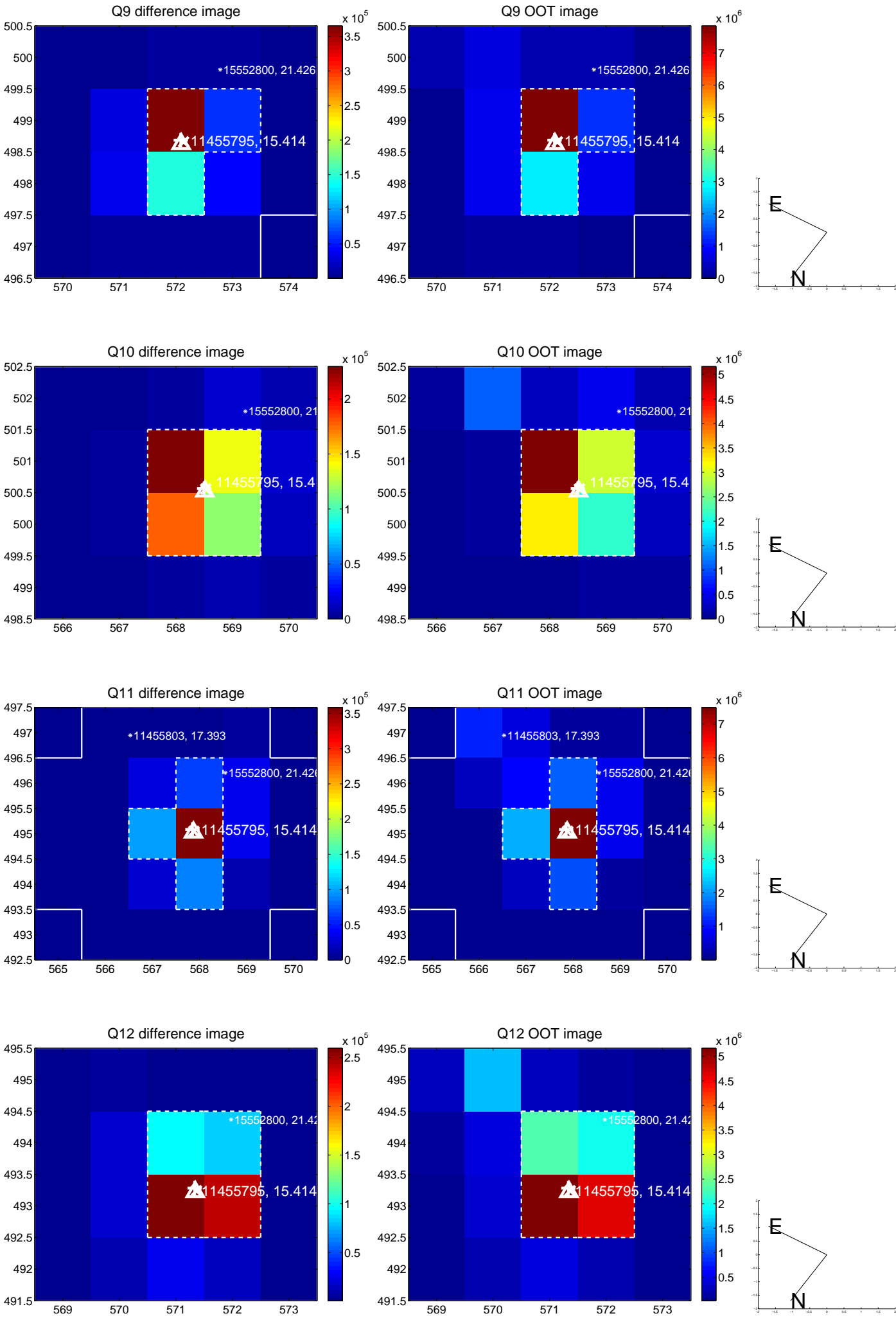
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



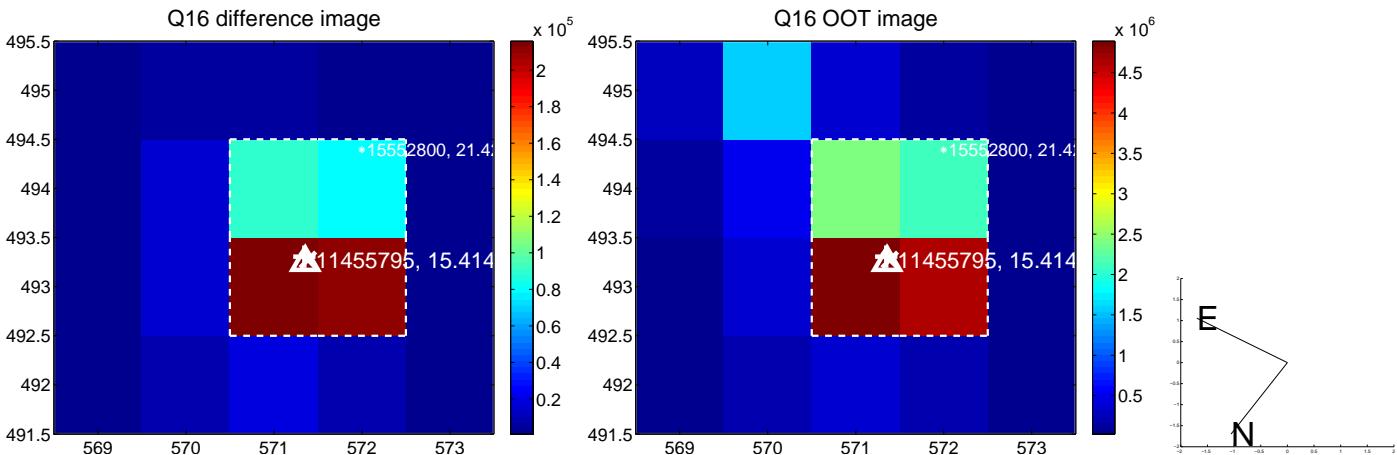
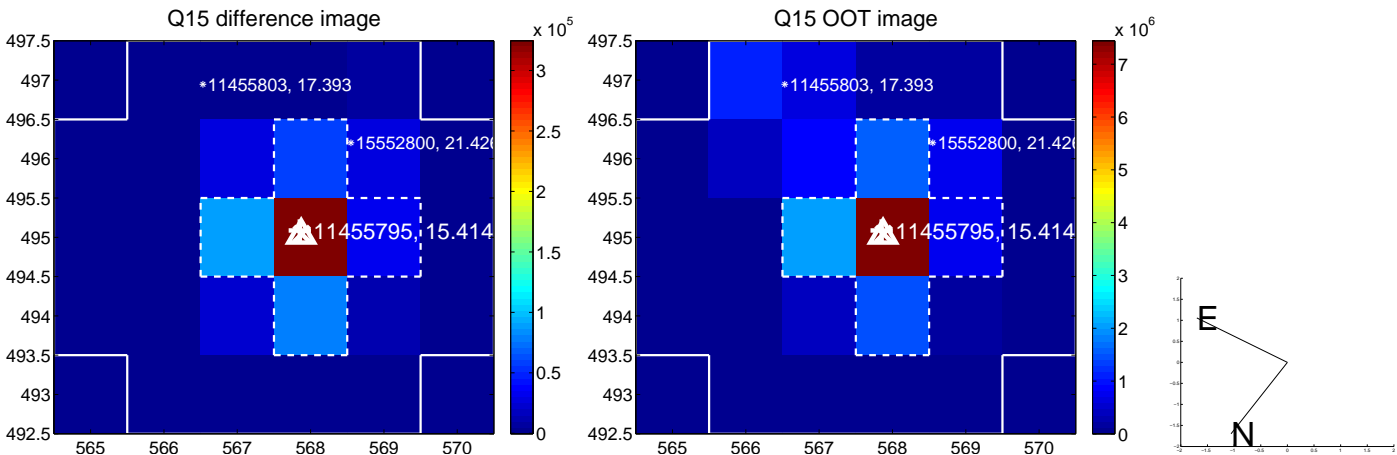
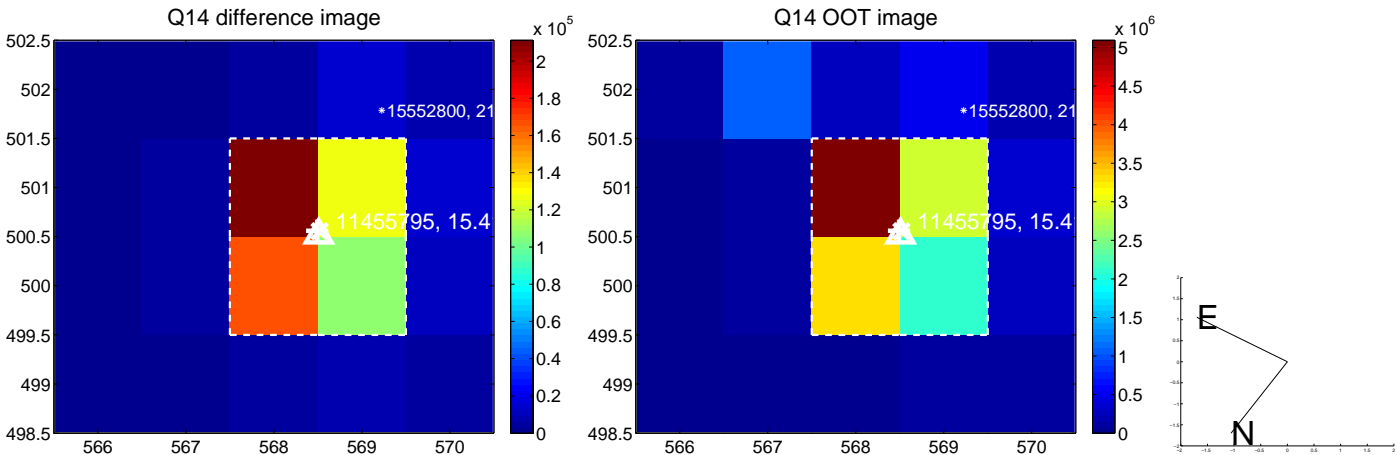
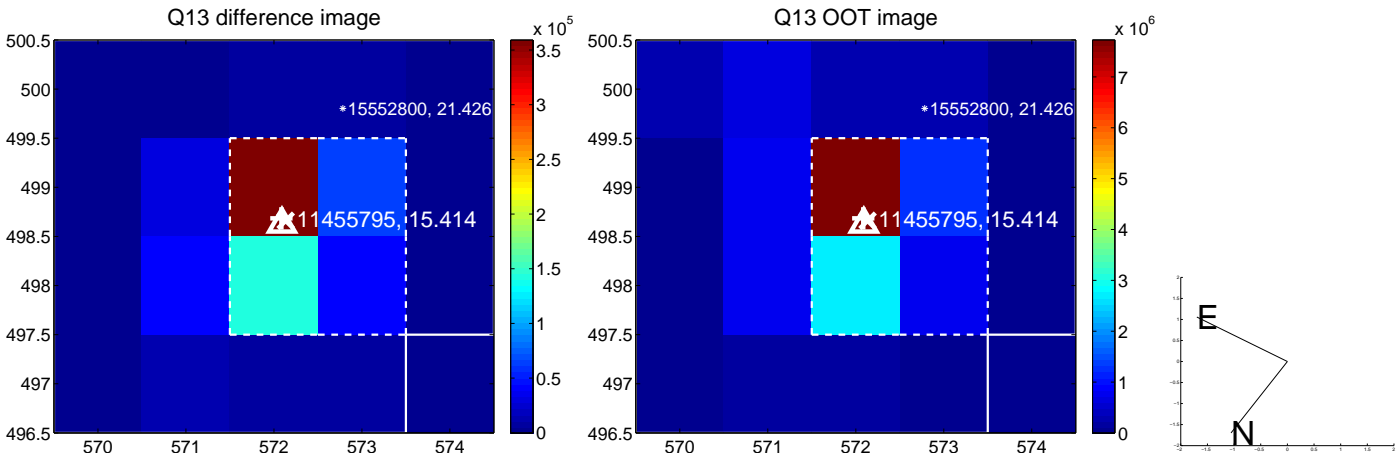
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



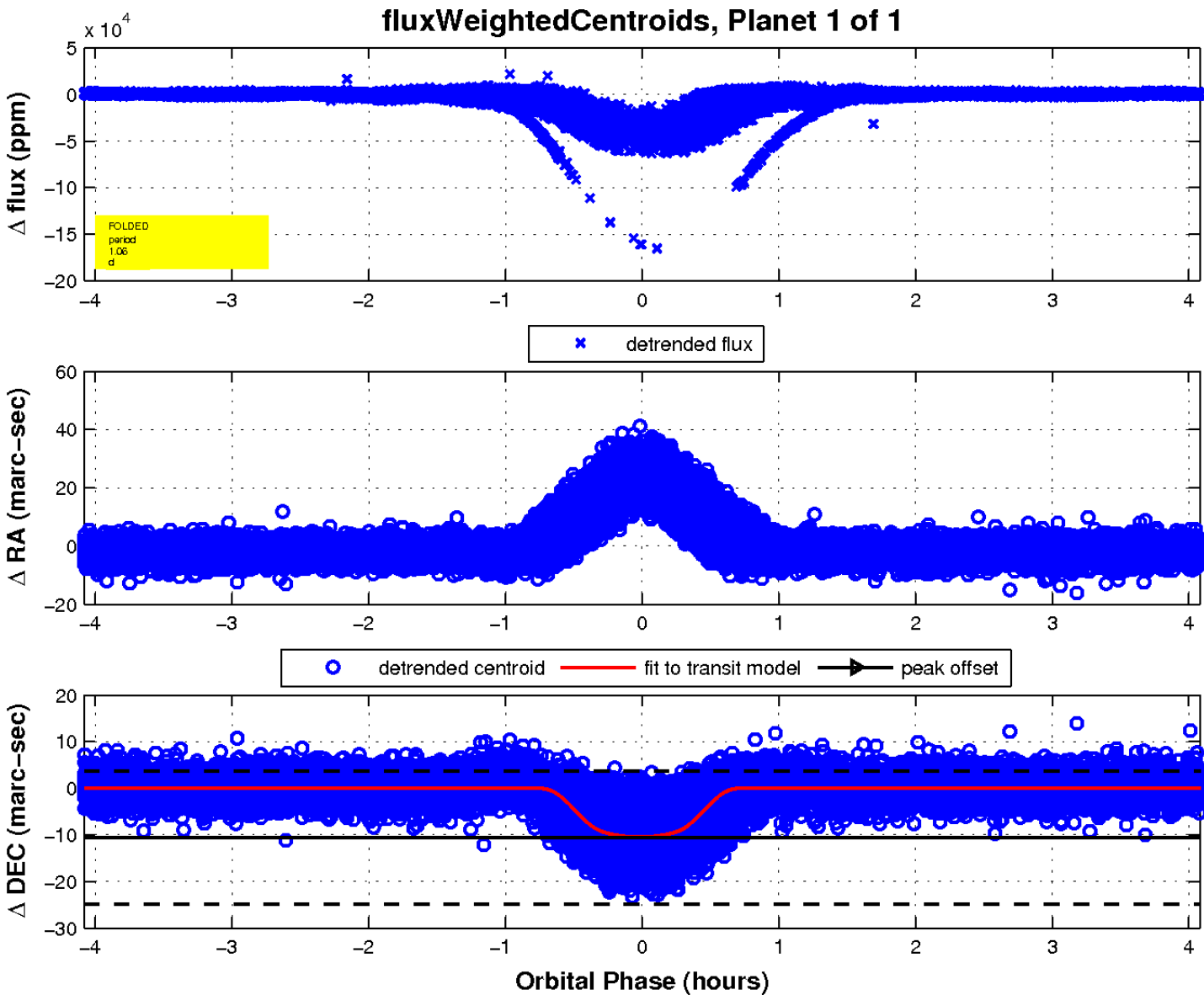
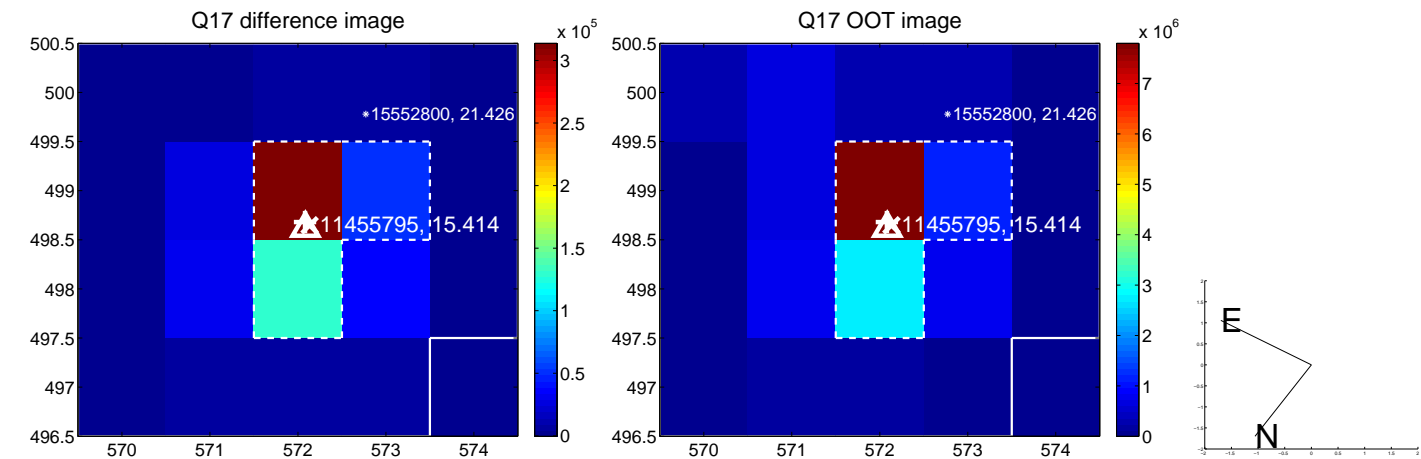
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UKIRT Image

Declination

