

KIC 010801495

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})
010801495-01	OBS	No	445.349131	203.369214	72.1	7.322	7.7	2.7	2.79	9176	2.73	21.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801495-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

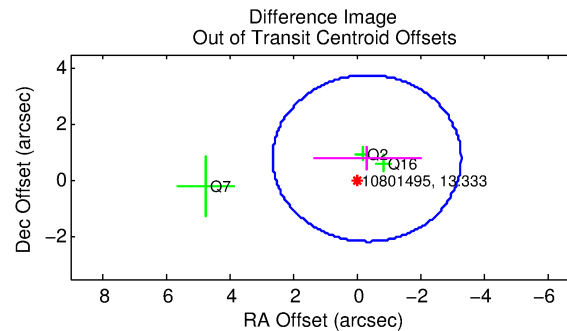
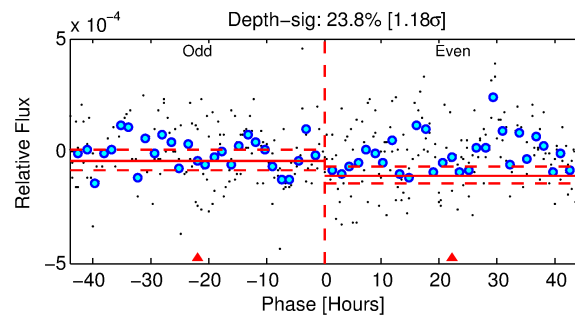
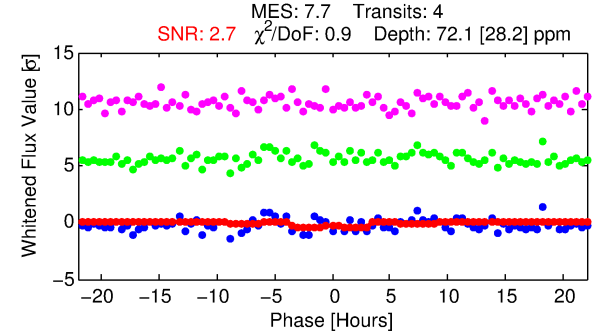
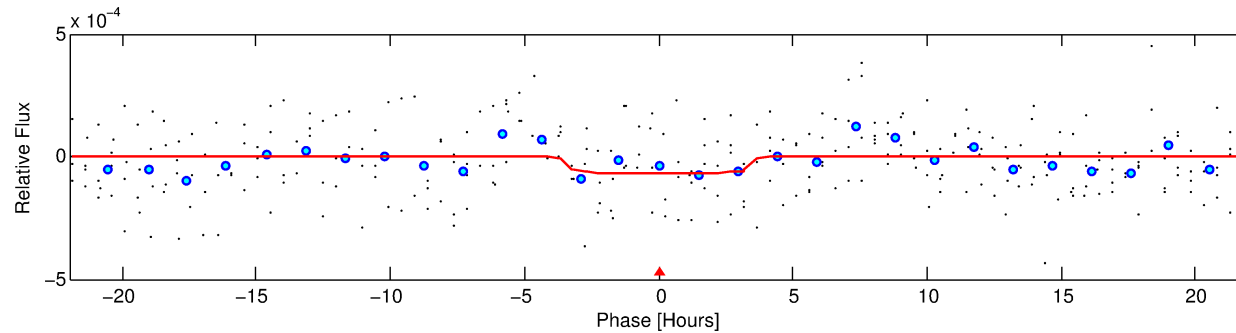
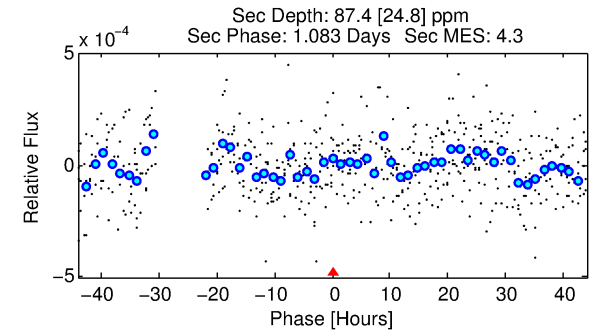
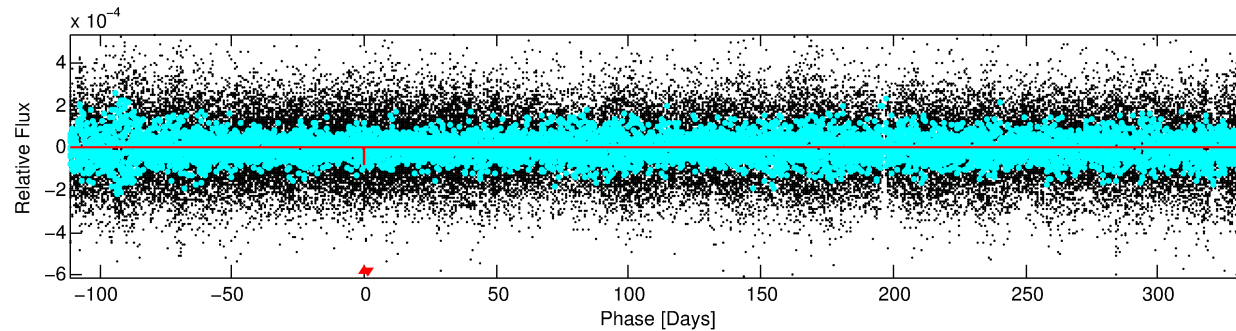
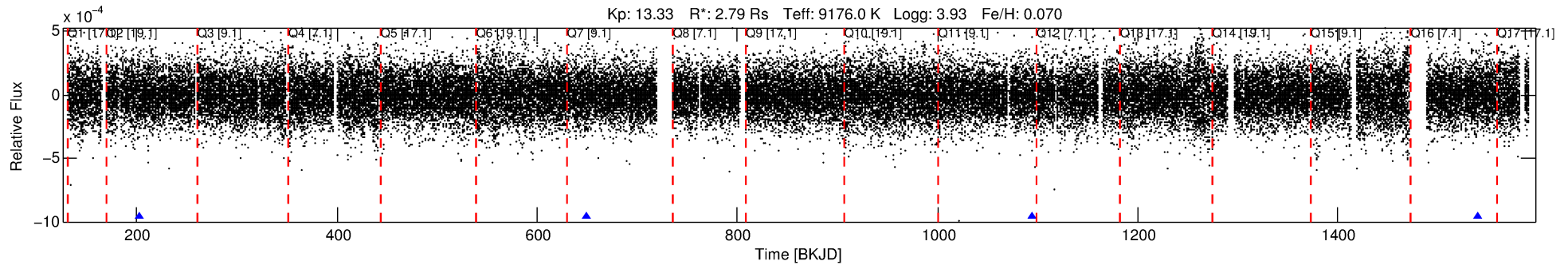
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010801495-01

No Significant Match Found

DV One-Page Summary

KIC: 10801495 Candidate: 1 of 1 Period: 445.349 d



DV Fit Results:

Period = 445.34913 [0.01920] d
Epoch = 203.3692 [0.0350] BKJD
Rp/R* = 0.0090 [0.0050]
a/R* = 211.39 [764.14]
b = 0.90 [0.77]
Seff = 21.08 [11.03]
Teff = 546 [71] K
Rp = 2.73 [1.86] Re
a = 1.5293 [0.5063] AU
Ag = 15135.59 [19011.35] [0.80σ]
Teffp = 9370 [2746] K [3.21σ]

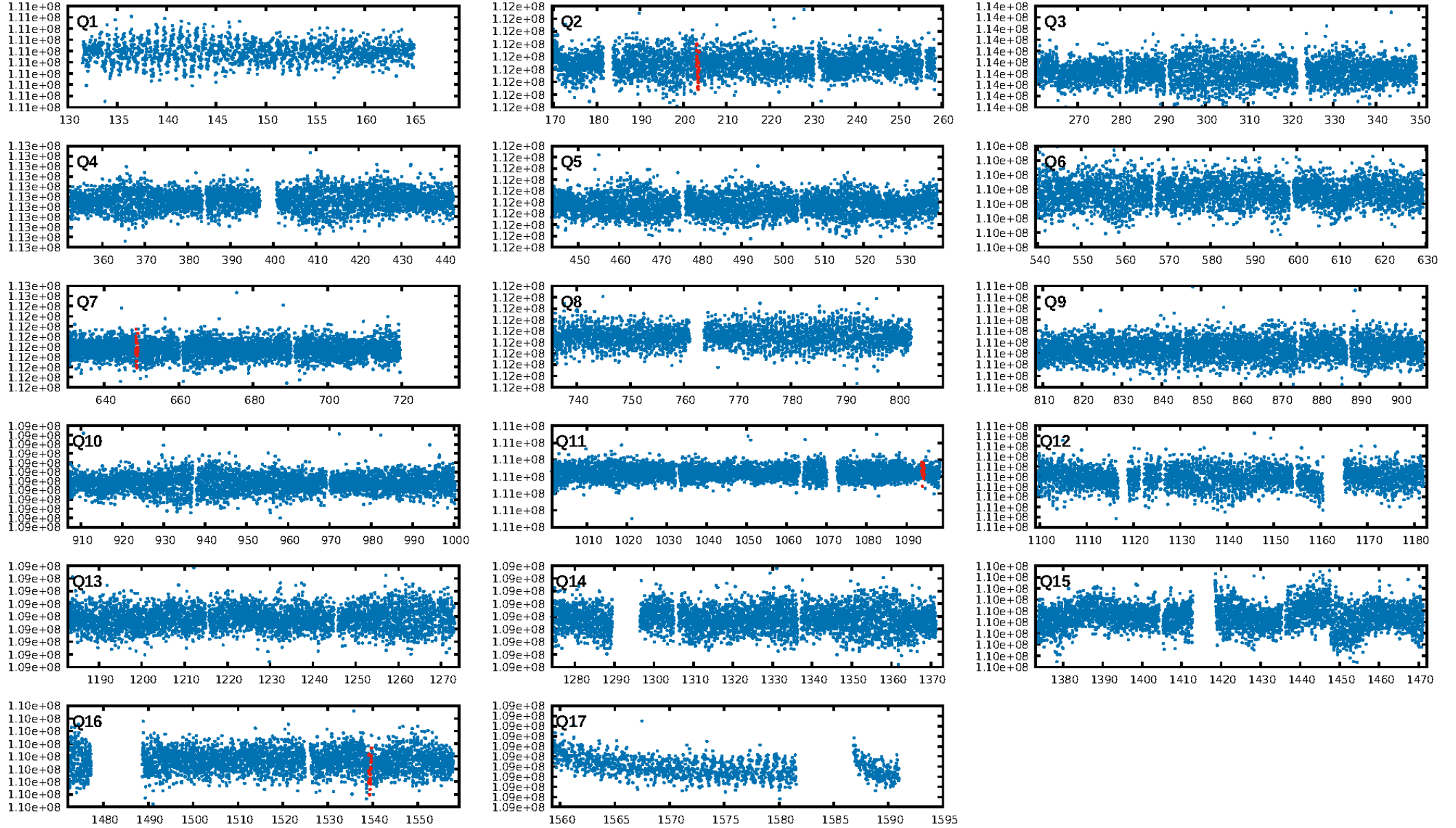
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.4%
ModelChiSquareGof-sig: 97.0%
Bootstrap-pfa: 4.67e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.4522
Centroid-sig: 18.4%
Centroid-so: 3.557 arcsec [1.05σ]
OotOffset-rm: 0.863 arcsec [0.87σ]
KicOffset-rm: 0.907 arcsec [1.21σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

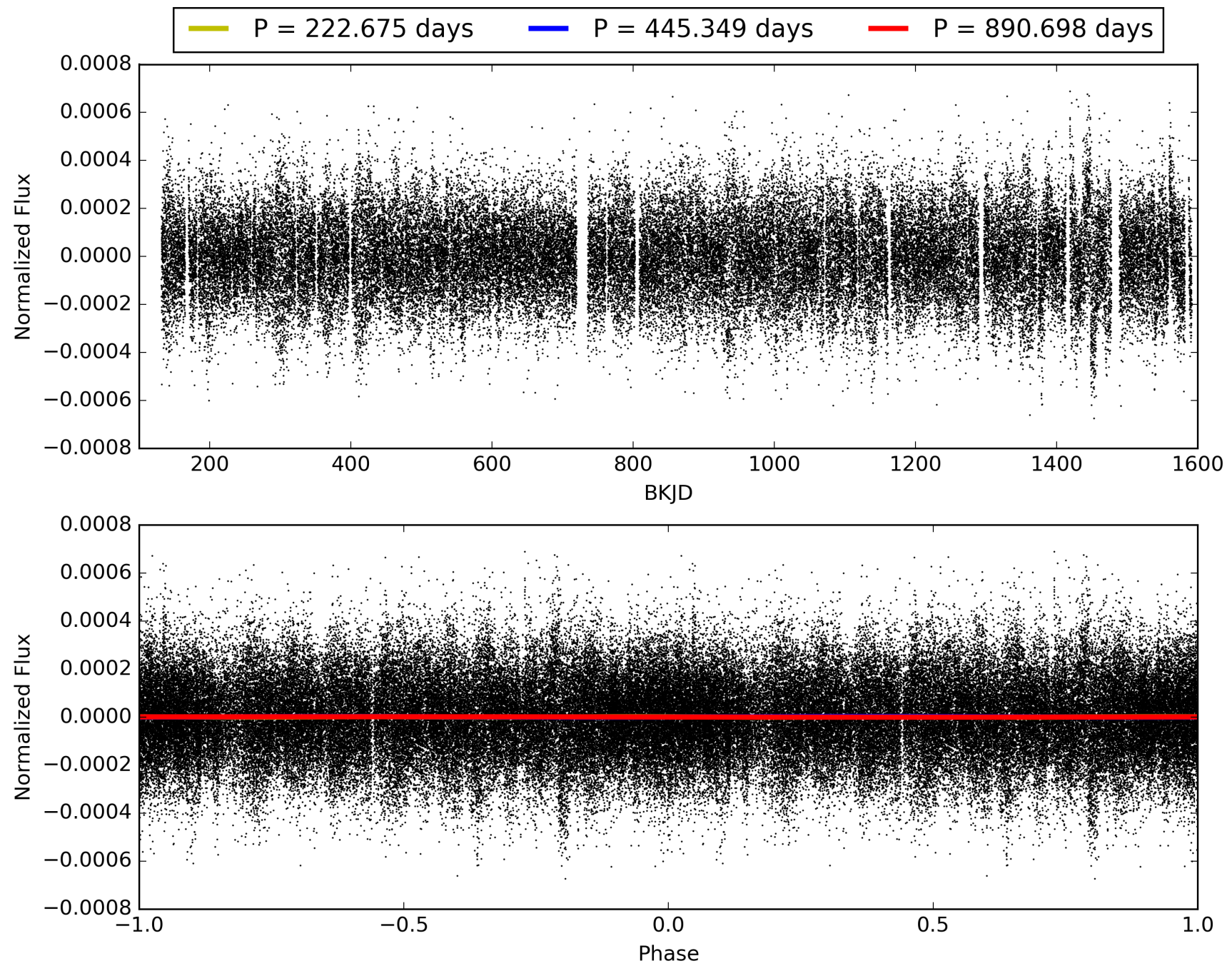
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:46:01 Z

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

TCE 010801495-01, PDC Light Curves

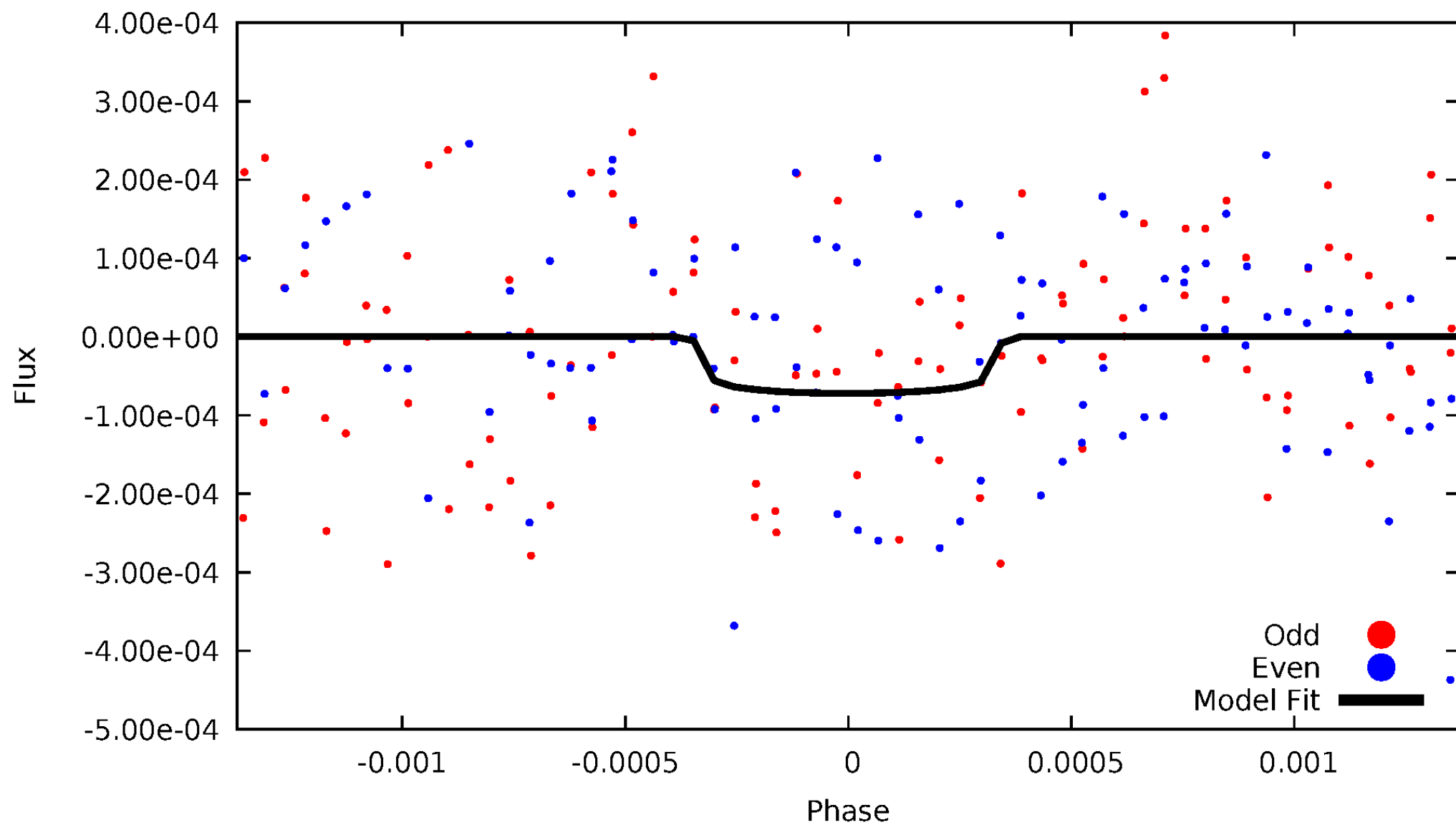


TCE 010801495-01



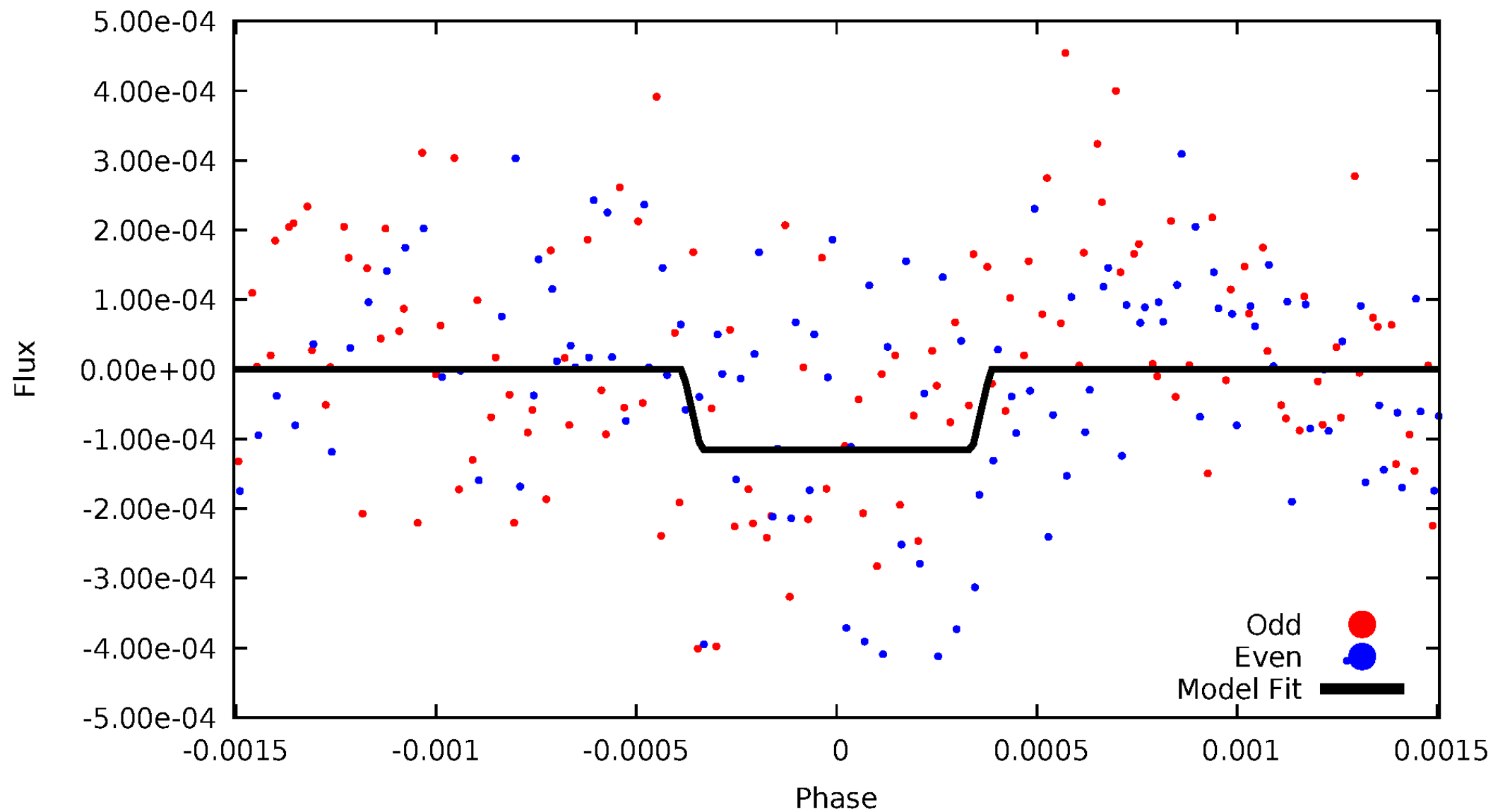
DV Odd/Even

TCE 010801495-01

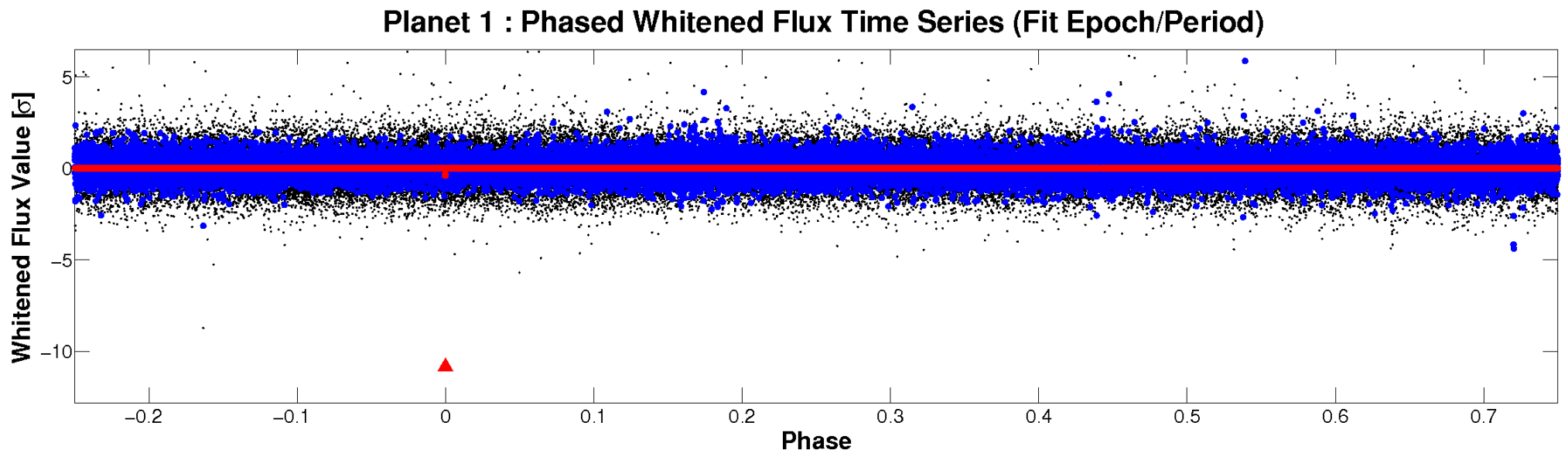
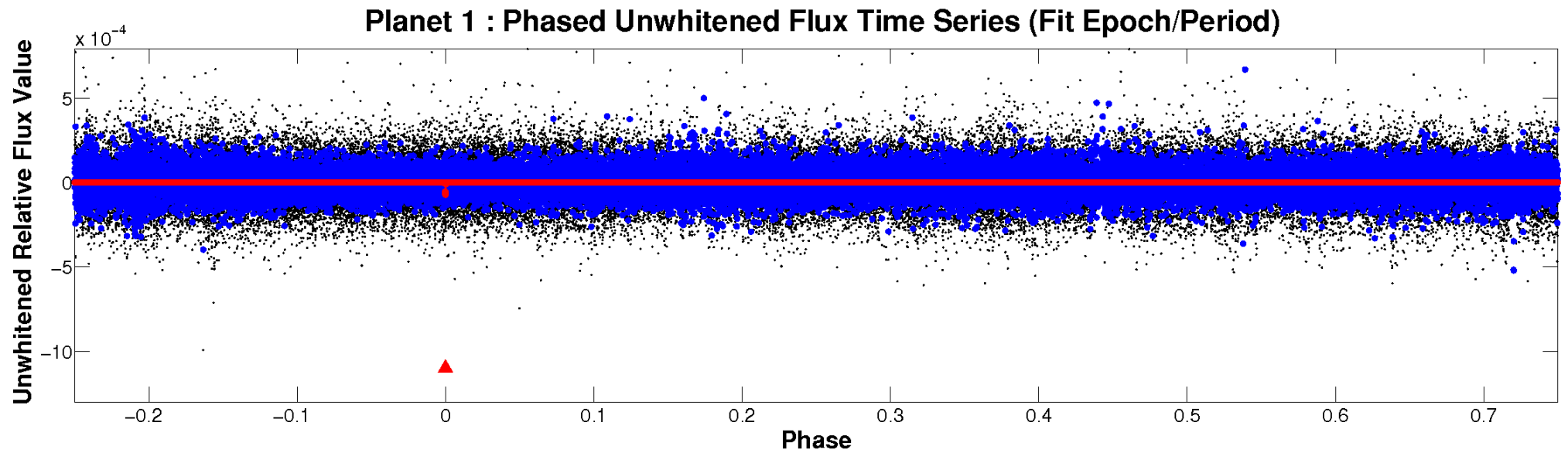


ALT Odd/Even

TCE 010801495-01

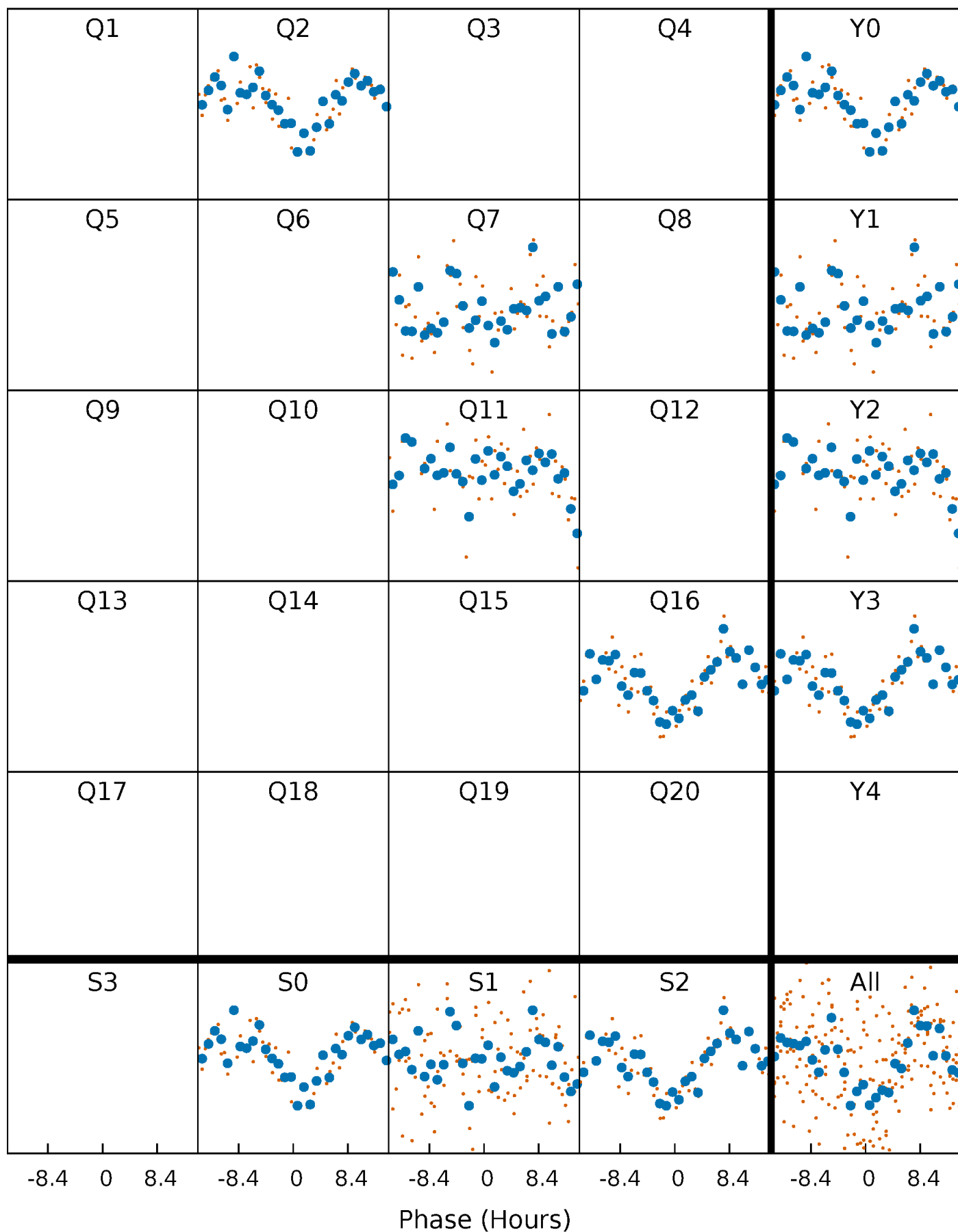


Non-Whitened Vs. Whitened Light Curve



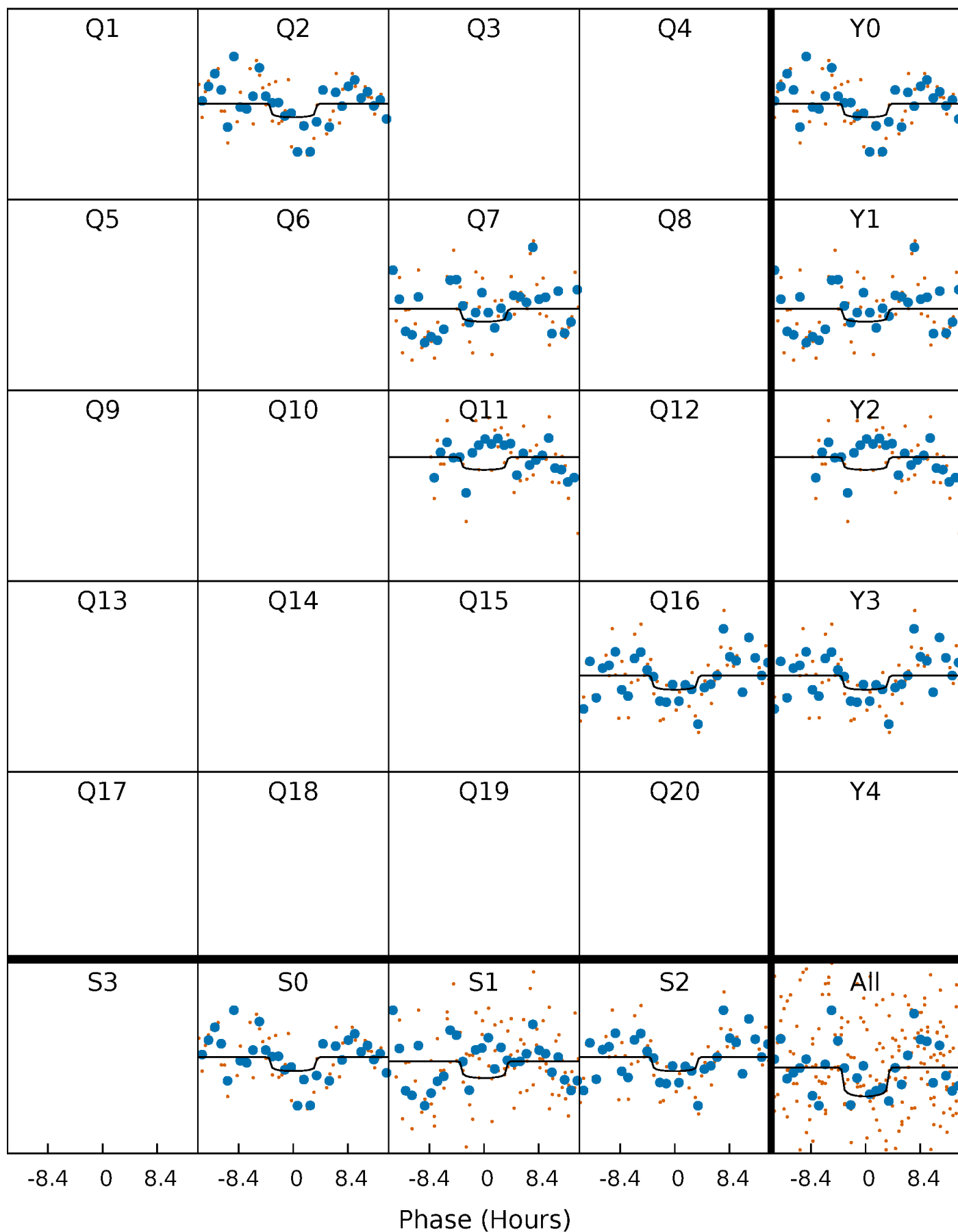
PDC Quarter-Phased Transit Curves

TCE 010801495-01 P=445.349131 Days $T_0=203.369214$ (BKJD)



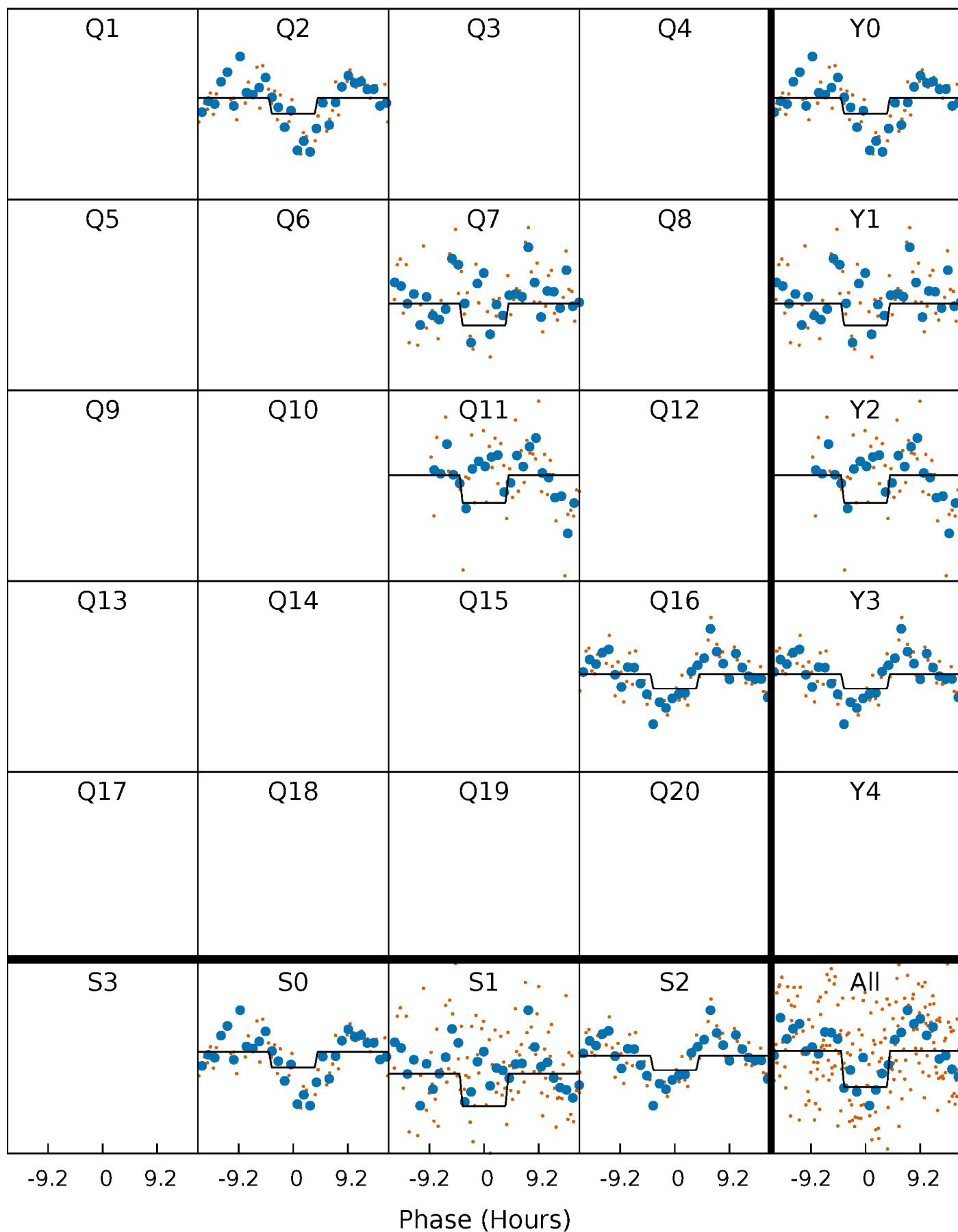
DV Quarter-Phased Transit Curves

TCE 010801495-01 $P=445.349131$ Days $T_0=203.369214$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

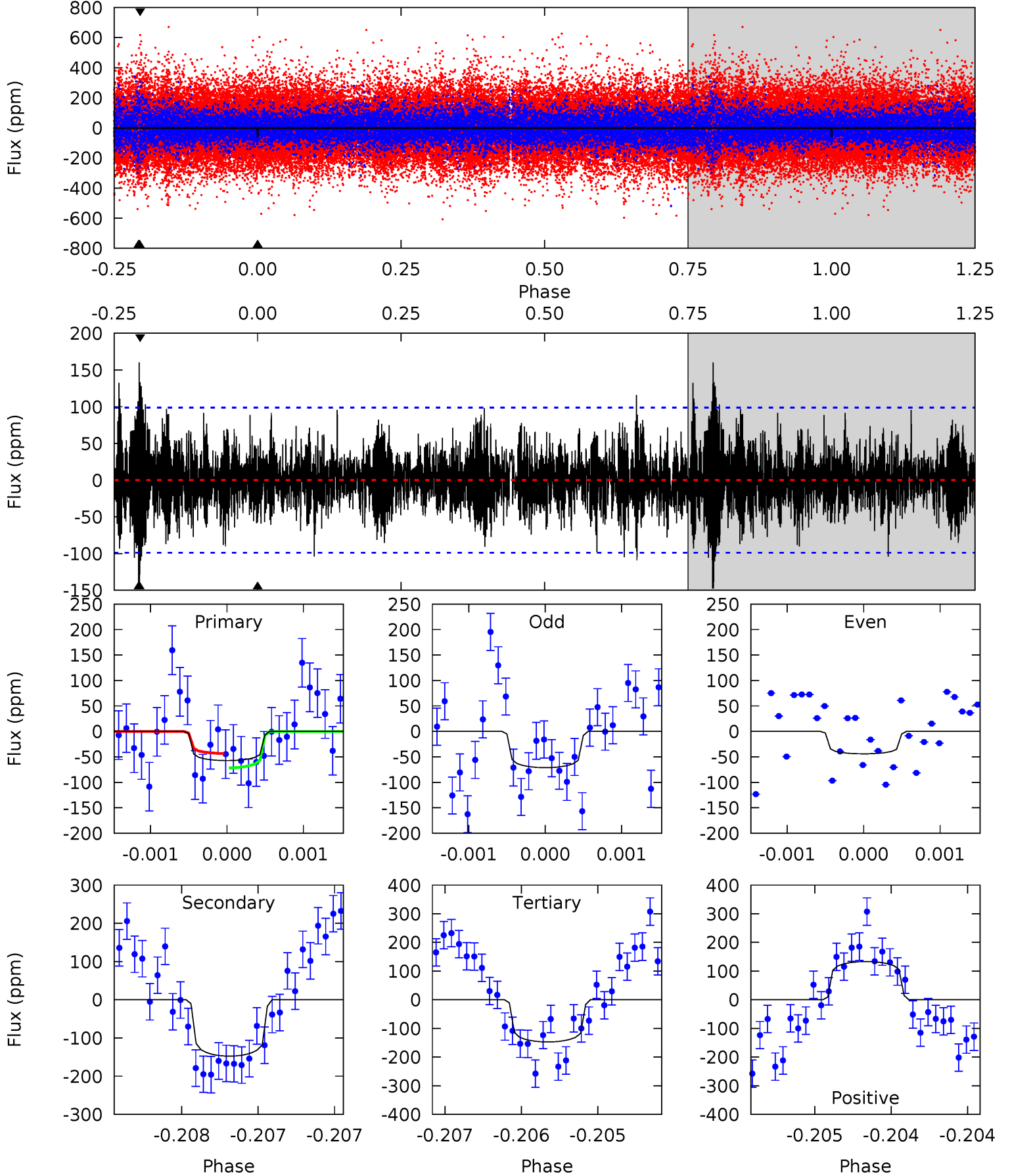
TCE 010801495-01 $P=445.376685$ Days $T_0=203.347573$ (BKJD)



DV Model-Shift Uniqueness Test

010801495-01, P = 445.349131 Days, E = 203.369214 Days

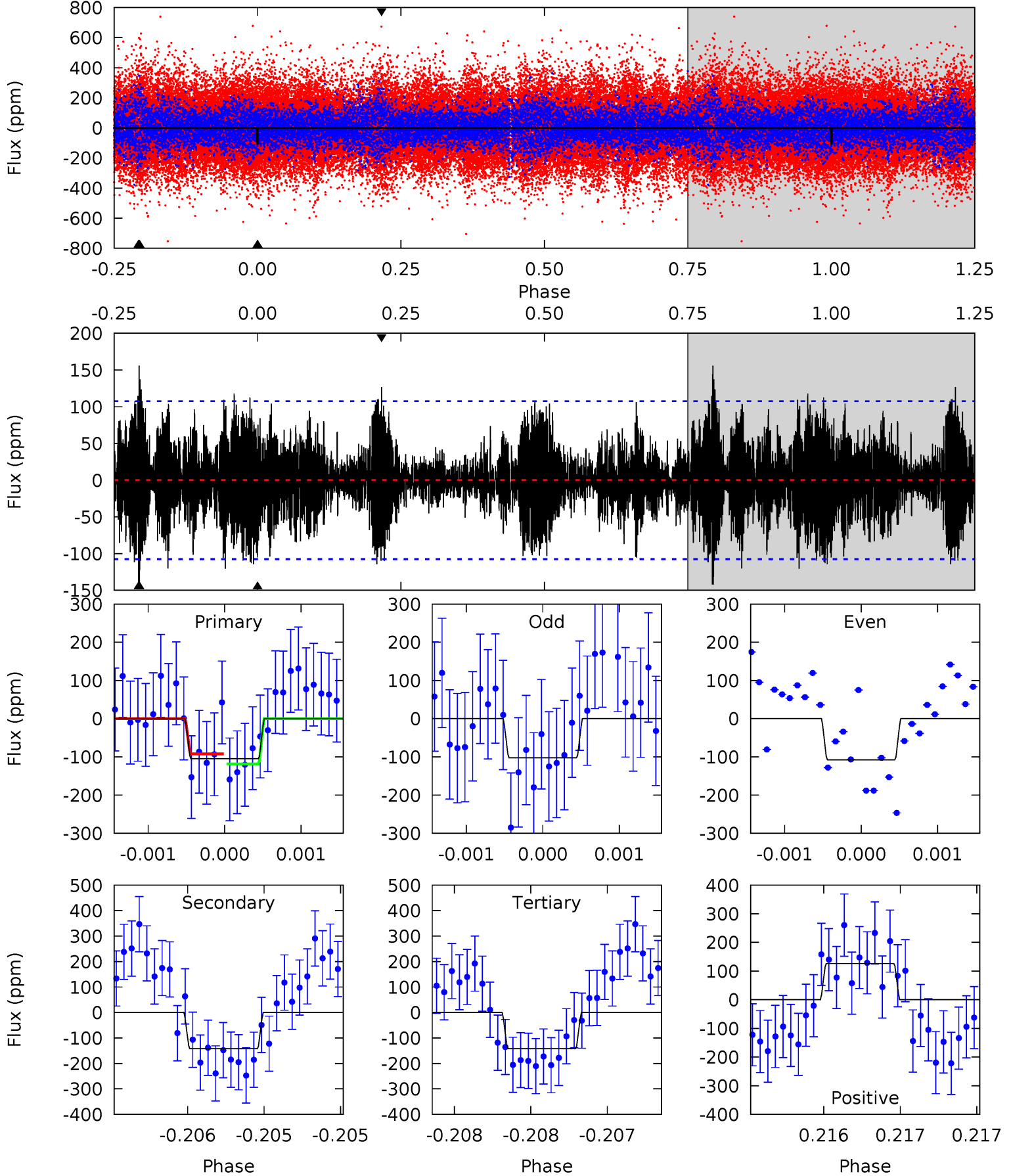
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.20	8.23	8.21	7.43	5.52	3.39	1.72	-5.01	-4.23	0.03	0.81	0.76	0.82	0.52	0.79



Alt Model-Shift Uniqueness Test

010801495-01, P = 445.376685 Days, E = 203.347573 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.37	7.27	7.26	6.47	5.50	3.37	1.95	-1.89	-1.10	0.01	0.80	0.13	1.04	0.52	0.66



Stellar Parameters For KIC 010801495

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9176^{+286}_{-430}	$3.929^{+0.270}_{-0.180}$	$0.070^{+0.150}_{-0.650}$	$2.786^{+0.883}_{-1.079}$	$2.402^{+0.384}_{-0.768}$	$0.157^{+0.315}_{-0.082}$
	+3%/-5%	+7%/-5%	+214%/-929%	+32%/-39%	+16%/-32%	+201%/-53%
Source	KIC0	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 010801495-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-148 ± 18	$2.59^{+1.61}_{-1.47}$	758^{+62}_{-73}	11523^{+14133}_{-3223}	$27877^{+106150}_{-17413}$
Alt.	-142 ± 20	$3.14^{+1.68}_{-1.40}$	753^{+69}_{-75}	9716^{+5470}_{-2240}	17723^{+40857}_{-10050}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

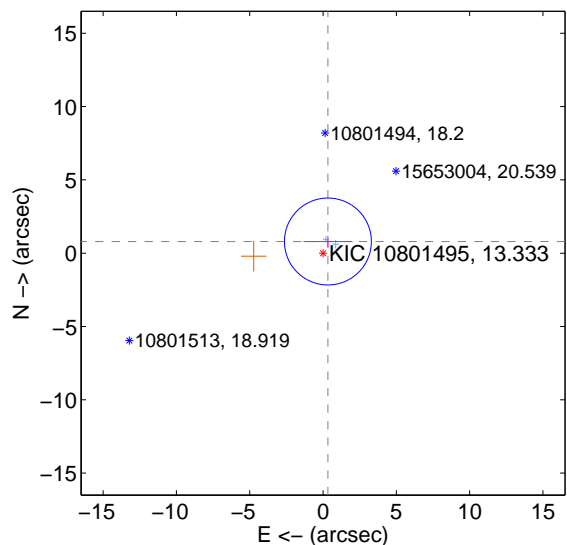
Supplemental centroid analysis for 010801495-01. Kepler magnitude: 13.33. Transit SNR 2.72

There are 2 quarters with good PRF difference image offsets

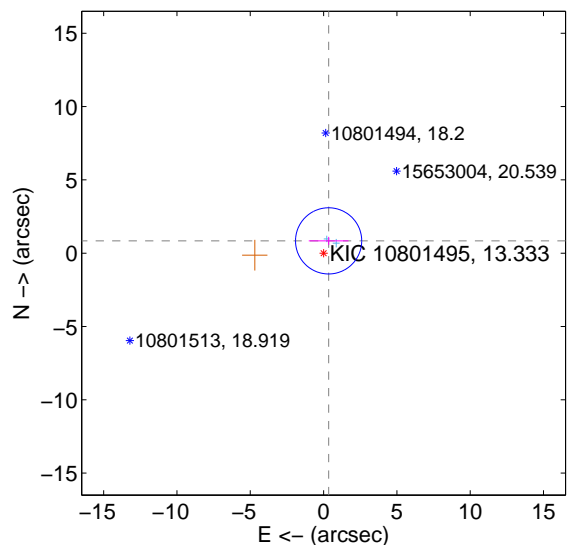
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.863 ± 0.988	0.87	-0.332 ± 1.678	0.796 ± 0.386
PRF-fit source offset from KIC position	0.907 ± 0.752	1.21	-0.344 ± 1.354	0.839 ± 0.277
photometric centroid source offset	3.56 ± 3.40	1.05	1.64 ± 3.56	3.15 ± 3.35

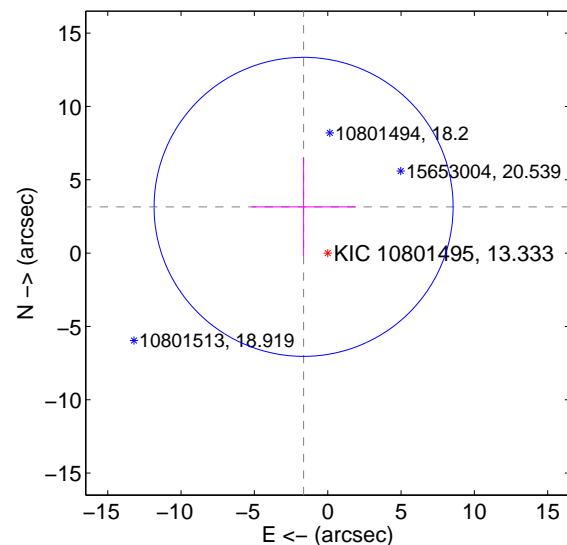
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

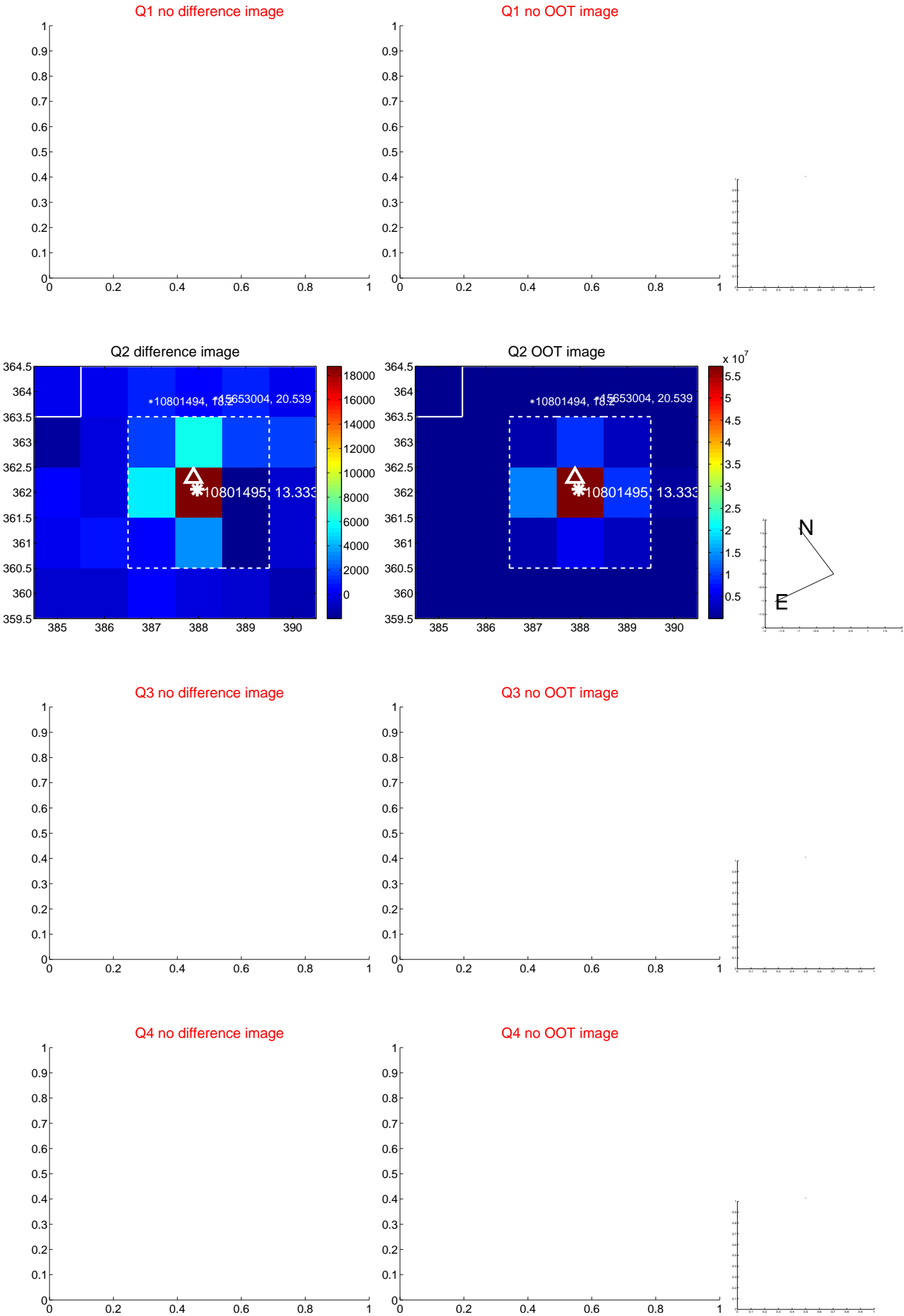


offset from photometric centroids

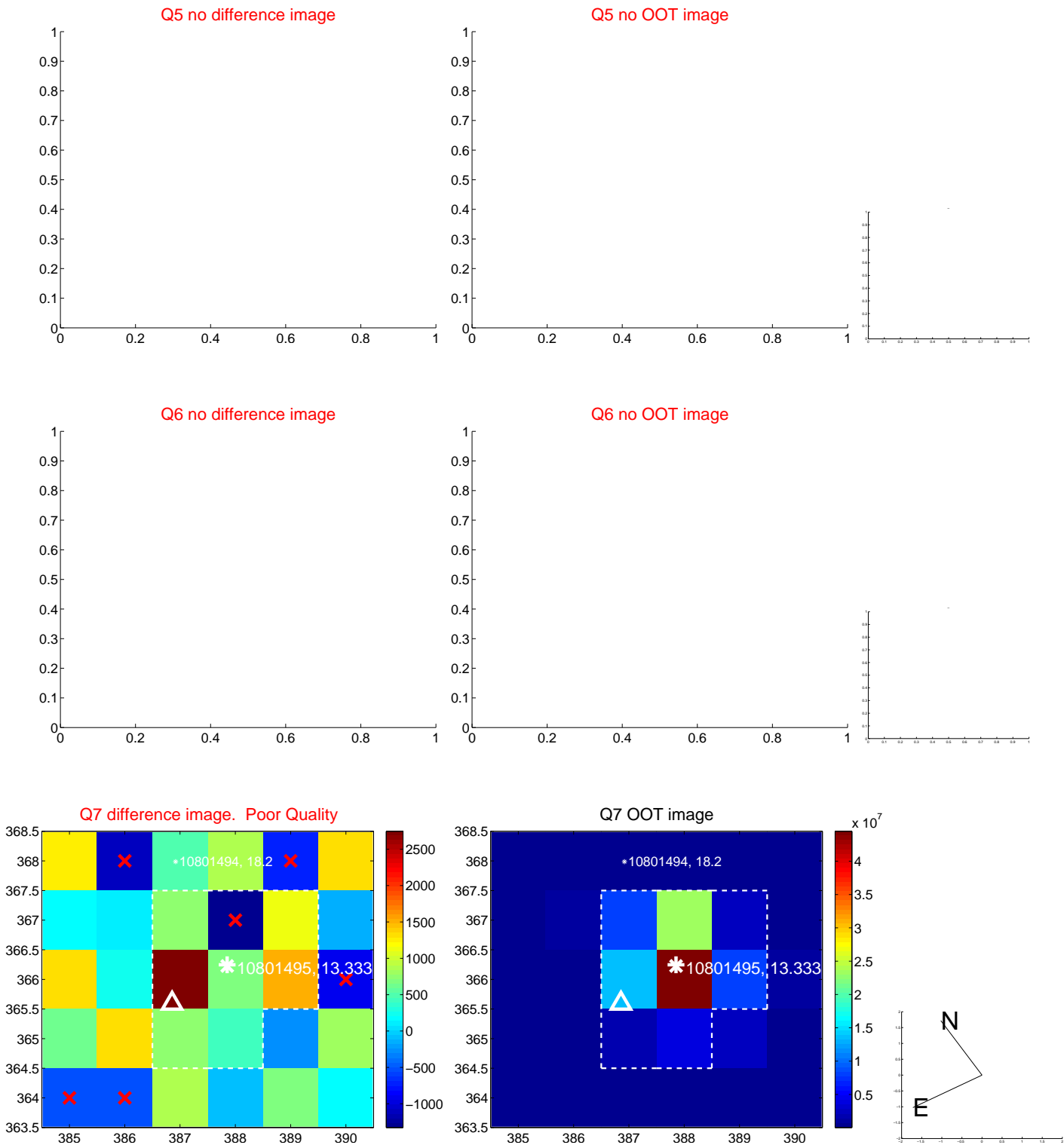


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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.



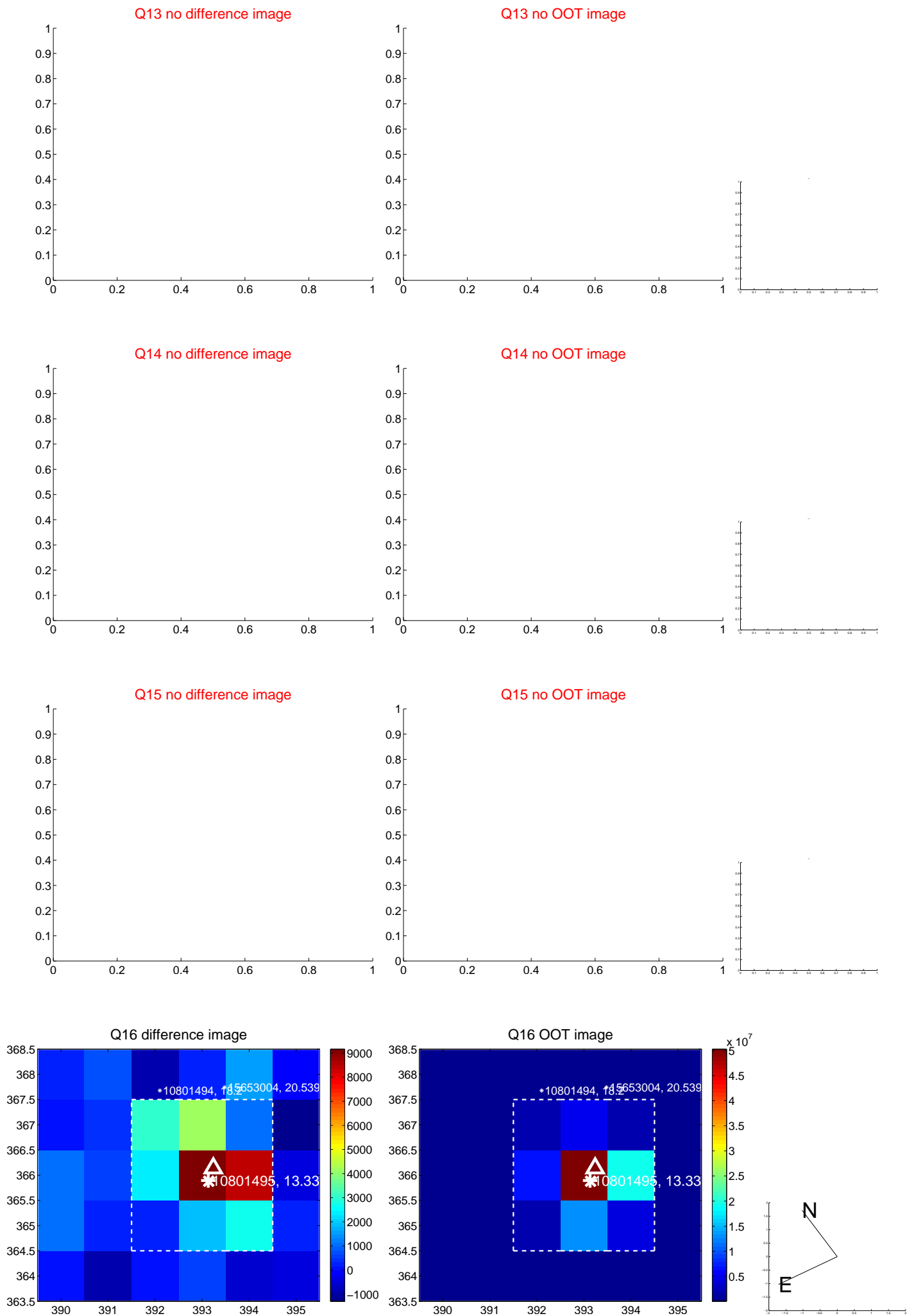
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



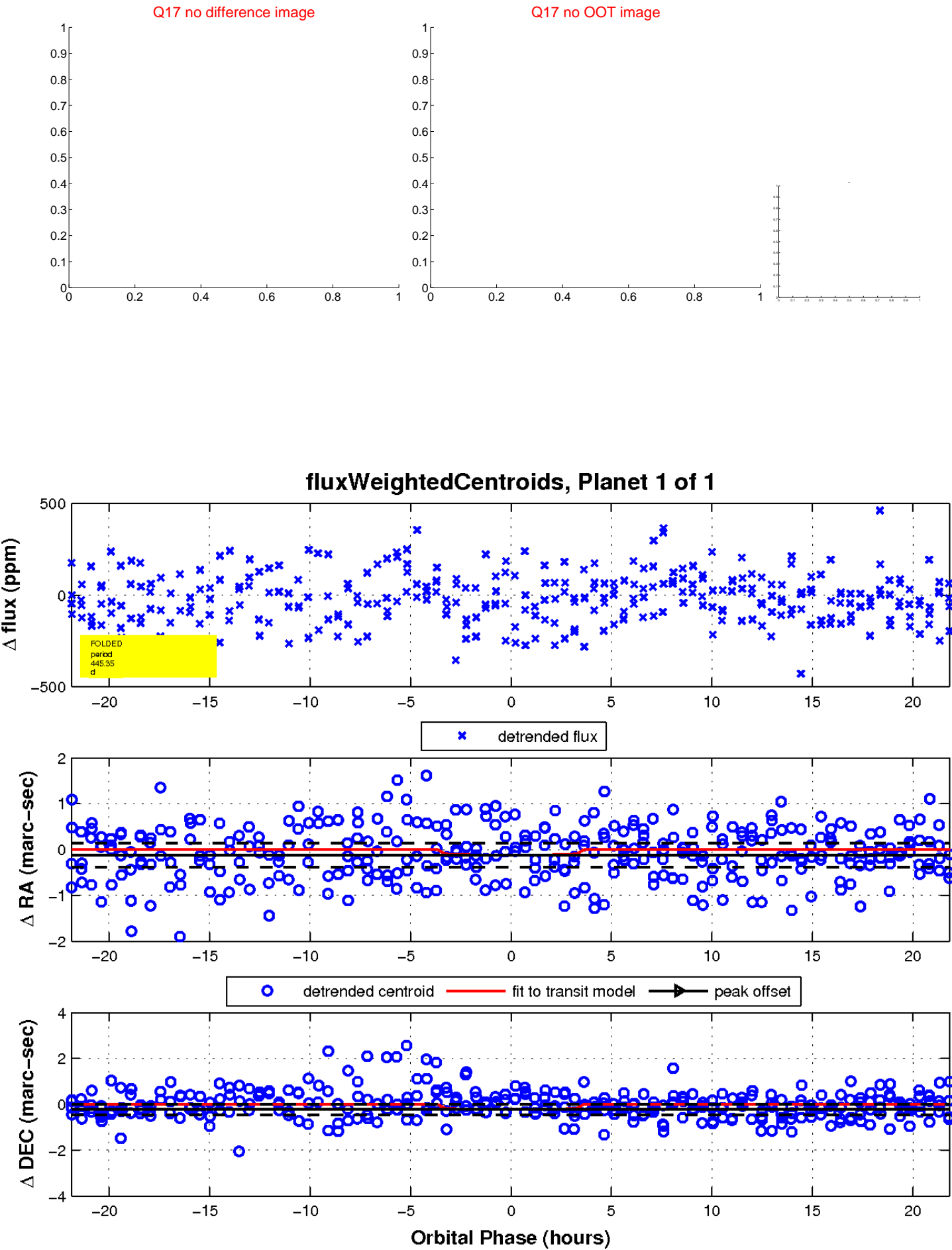
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

