

KIC 007288306

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})
007288306-01	OBS	3443.01	96.170159	170.252361	867.2	7.525	17.2	18.4	0.70	5340	2.09	2.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007288306-01	OBS	PC	0.98	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.

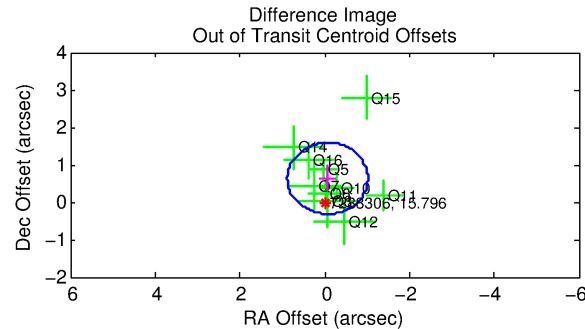
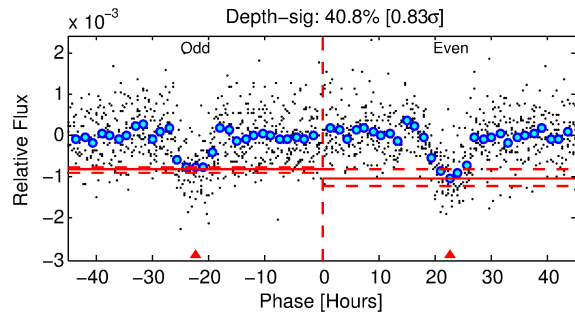
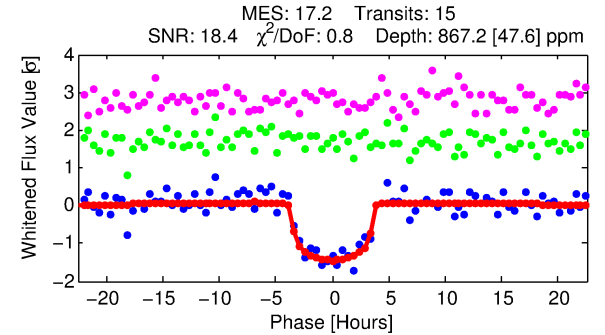
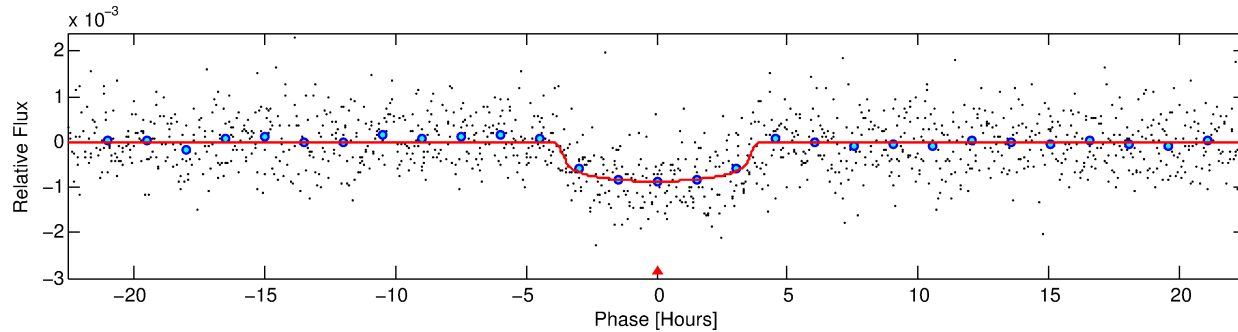
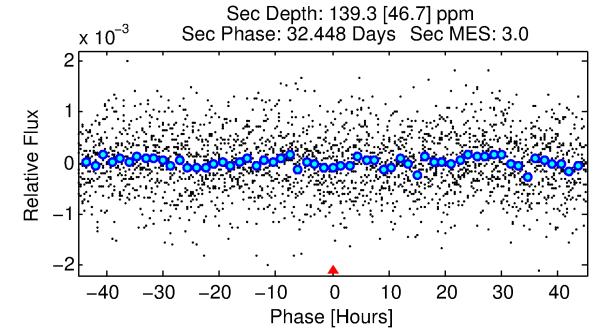
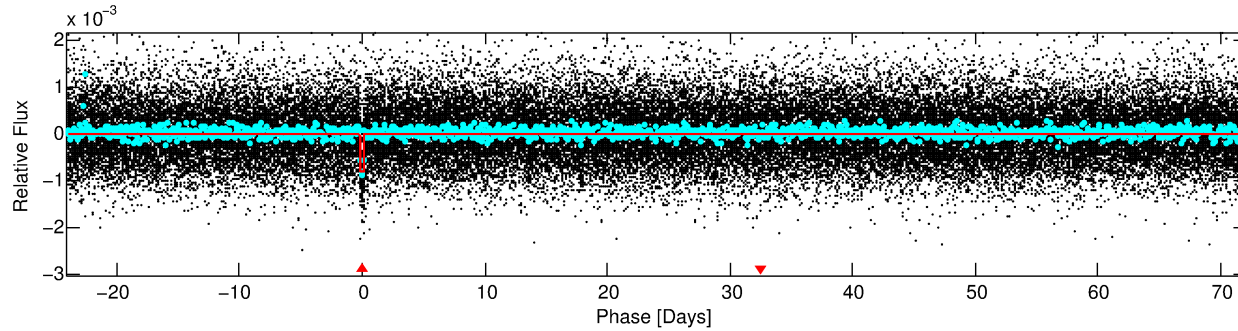
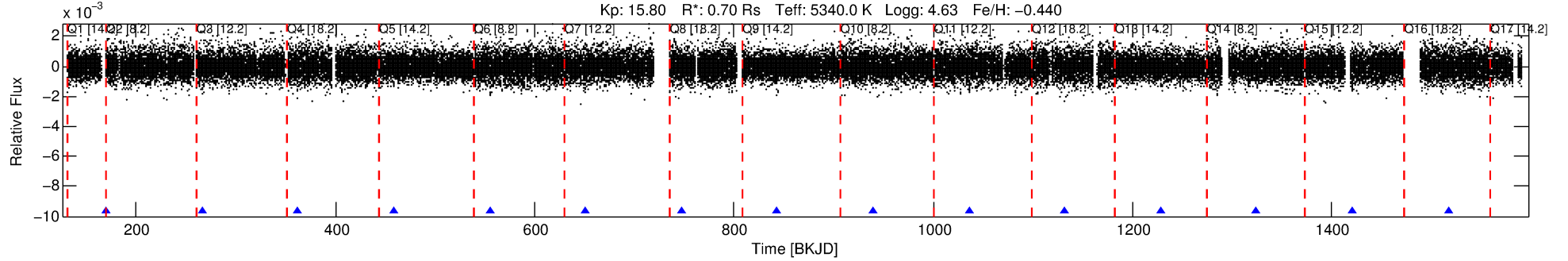
Ephemeris Match Information For 007288306-01

No Significant Match Found

DV One-Page Summary

KIC: 7288306 Candidate: 1 of 1 Period: 96.170 d

KOI: K03443.01 Corr: 0.992



DV Fit Results:

Period = 96.17016 [0.00090] d
Epoch = 170.2524 [0.0074] BKJD
Rp/R* = 0.0273 [0.0221]
a/R* = 90.03 [297.02]
b = 0.45 [5.85]
Seff = 2.53 [0.53]
Teq = 321 [17] K
Rp = 2.09 [1.72] Re
a = 0.3769 [0.0478] AU
Ag = 2493.83 [4142.22] [0.60σ]
Teffp = 3513 [1454] K [2.19σ]

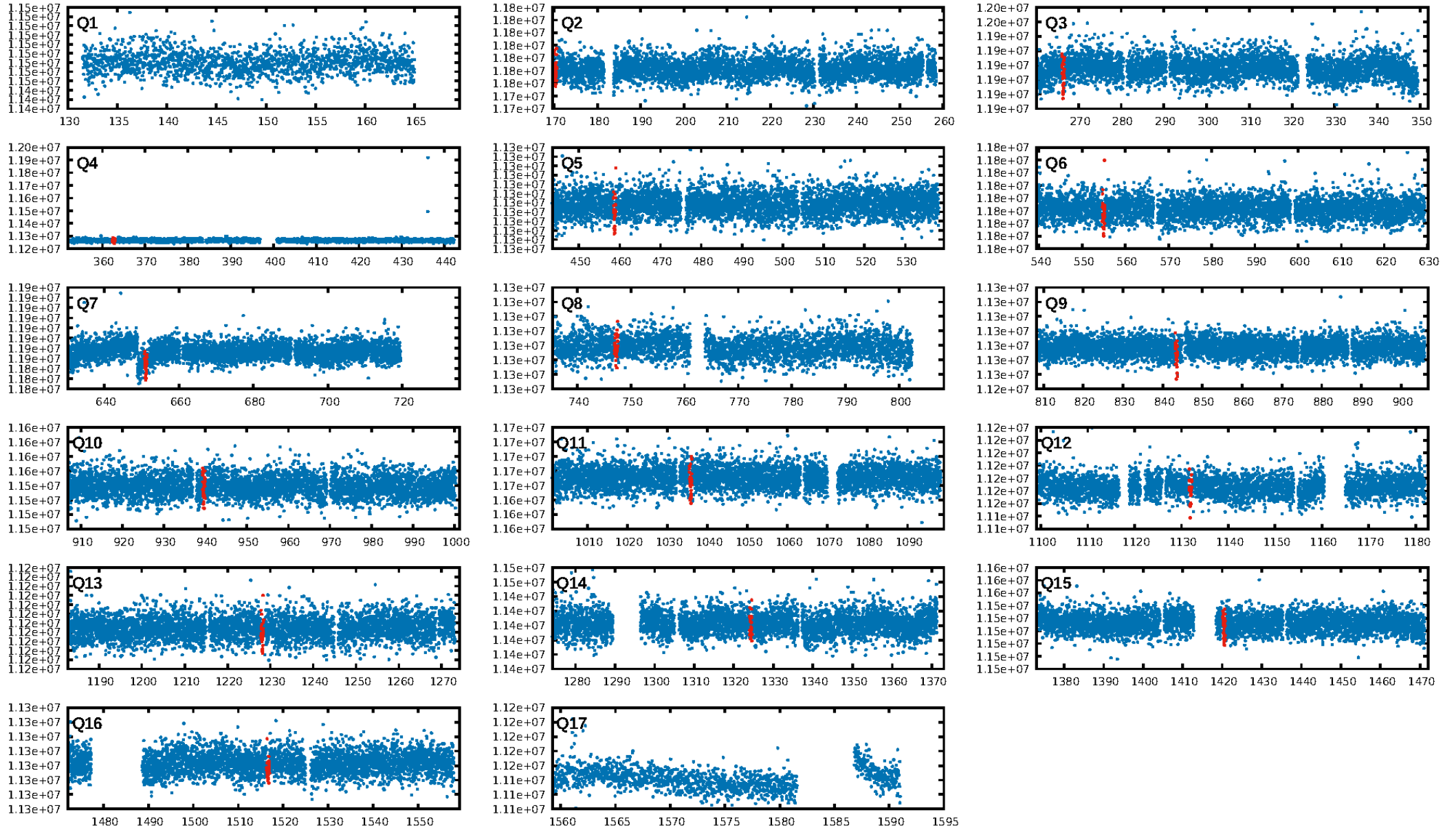
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 56.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.95e-70
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 8.241
Centroid-sig: 79.9%
Centroid-so: 0.403 arcsec [0.52σ]
OotOffset-rm: 0.638 arcsec [2.01σ]
KicOffset-rm: 0.548 arcsec [1.88σ]
OotOffset-st: 3/4/2/1 [10]
KicOffset-st: 3/4/2/1 [10]
DiffImageQuality-fgm: 0.90 [9/10]
DiffImageOverlap-fno: 1.00 [13/13]

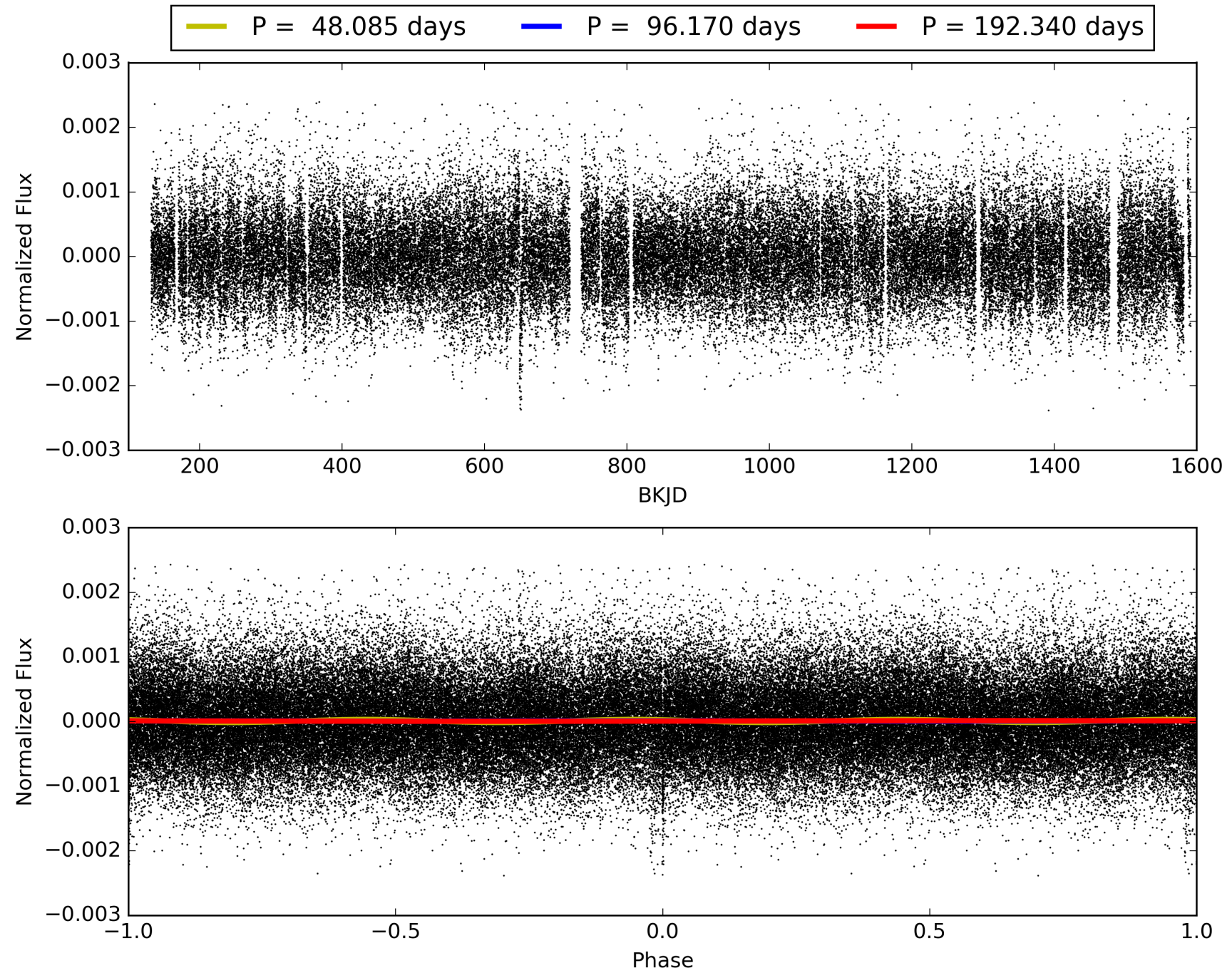
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 04:35:50 Z

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

TCE 007288306-01, PDC Light Curves

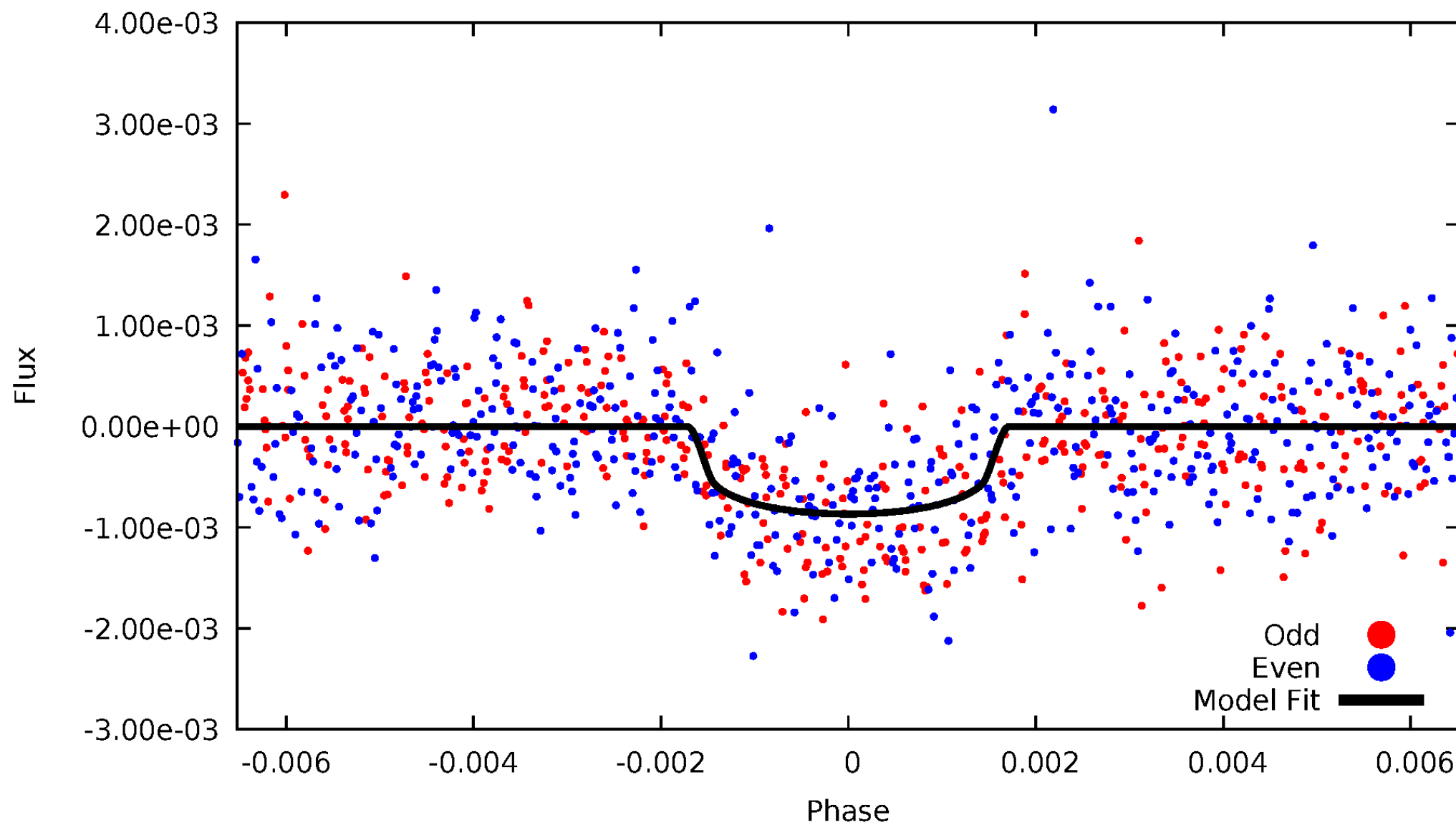


TCE 007288306-01



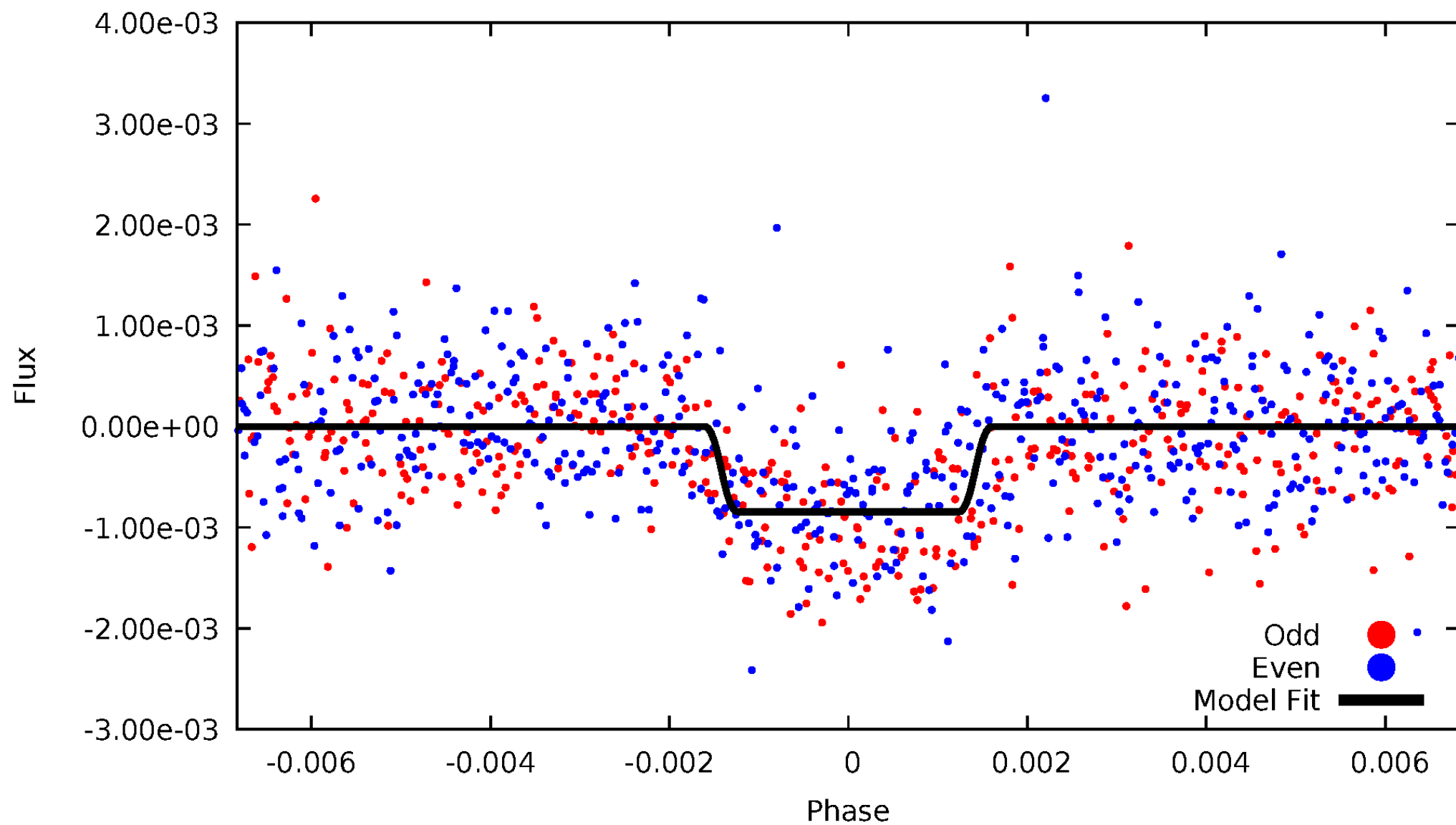
DV Odd/Even

TCE 007288306-01

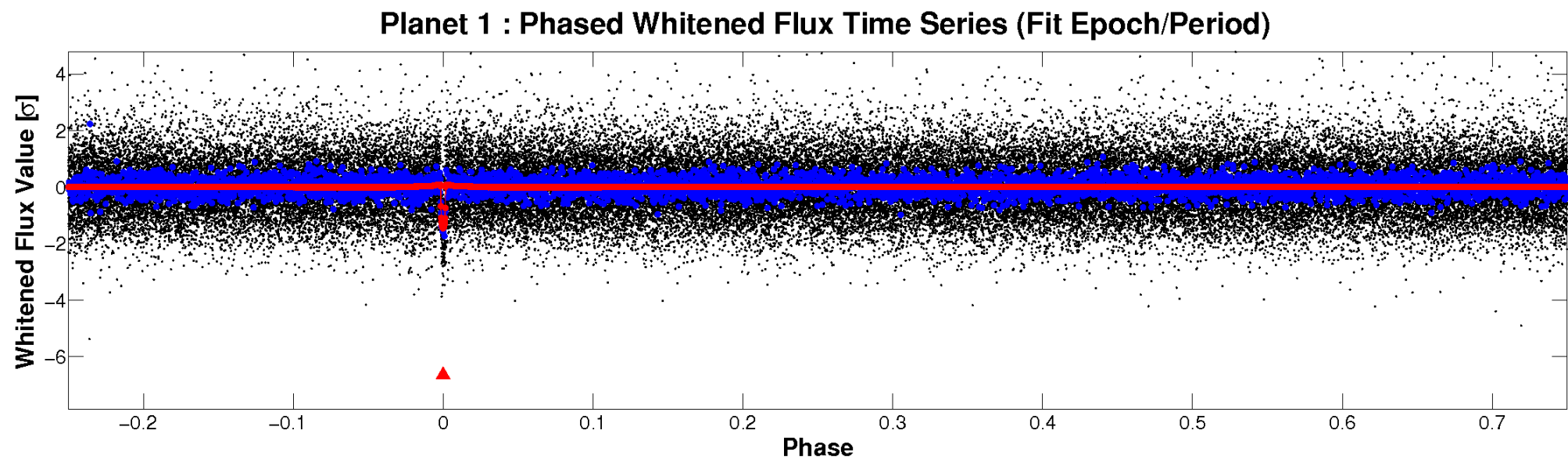
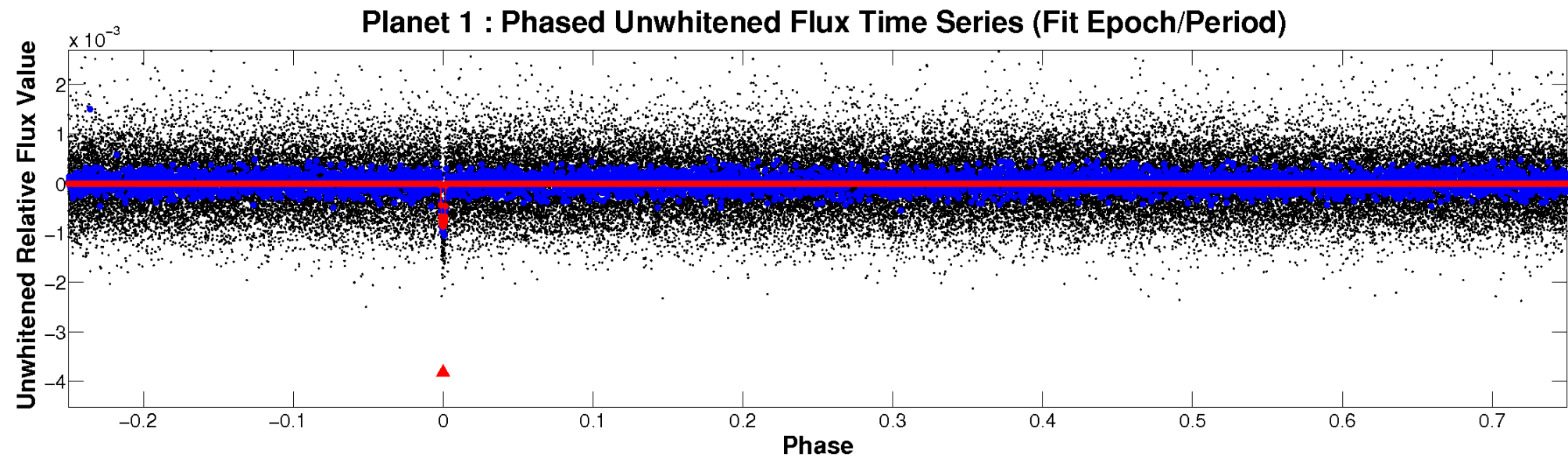


ALT Odd/Even

TCE 007288306-01

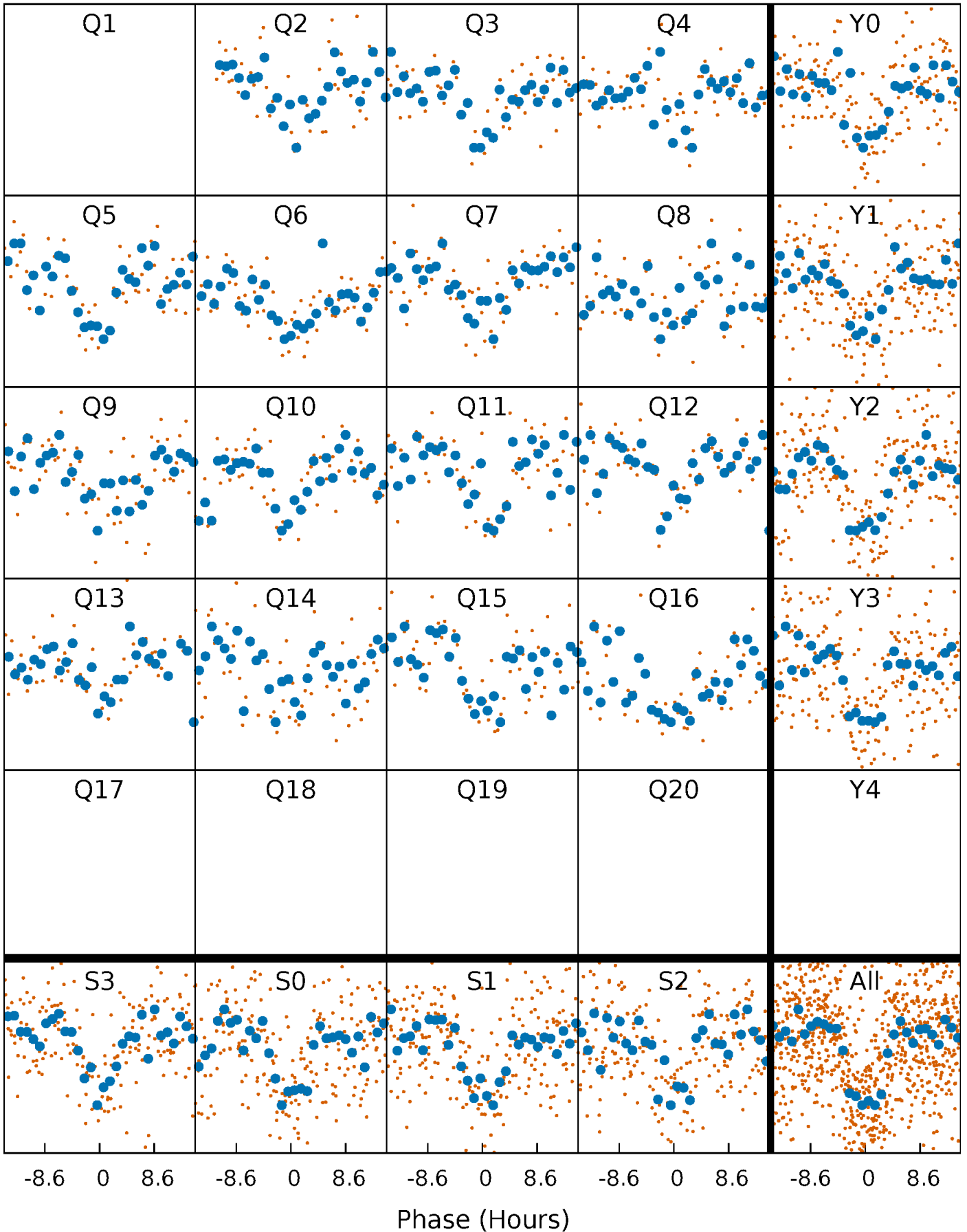


Non-Whitened Vs. Whitened Light Curve



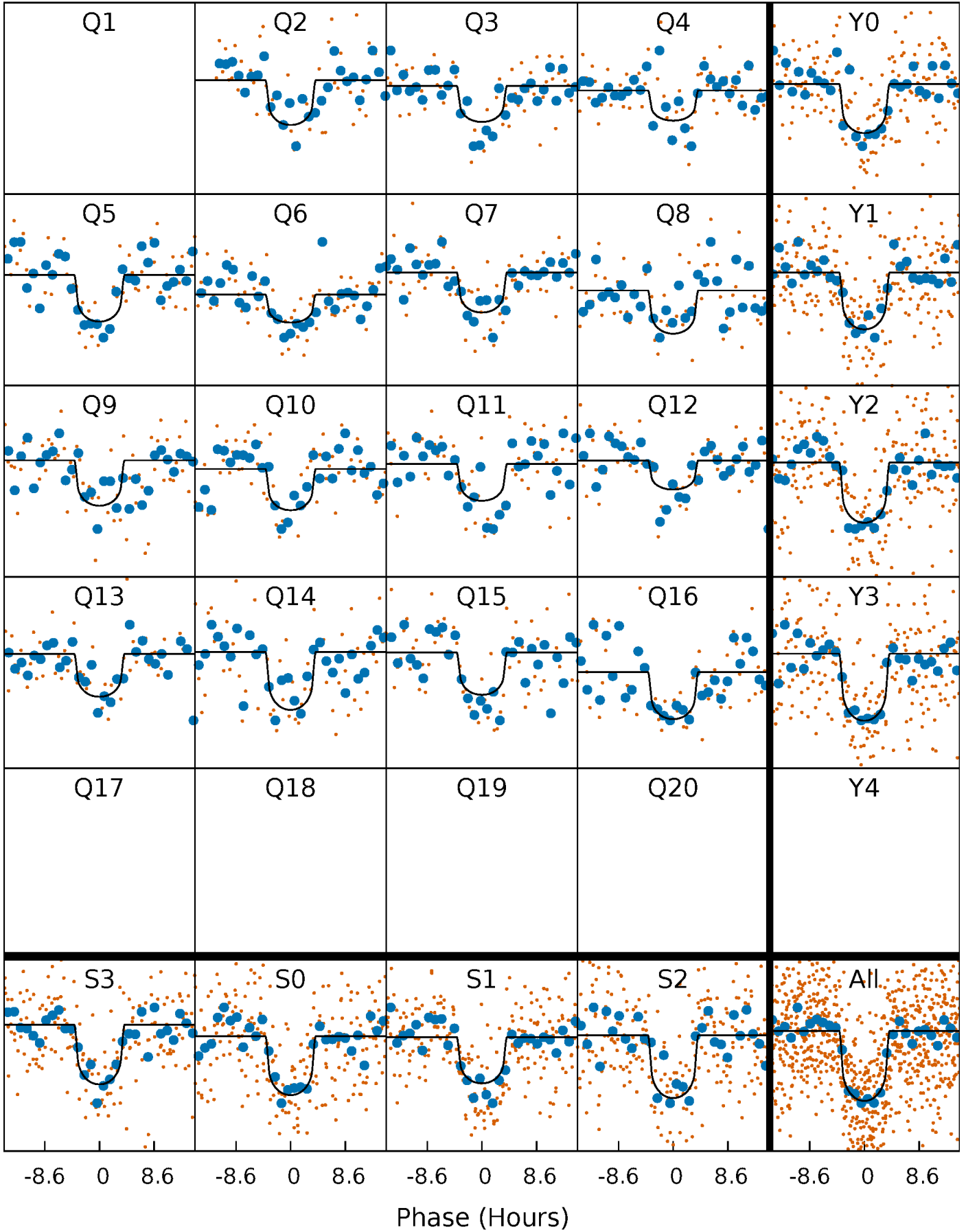
PDC Quarter-Phased Transit Curves

TCE 007288306-01 P= 96.170159 Days $T_0=170.252361$ (BKJD)



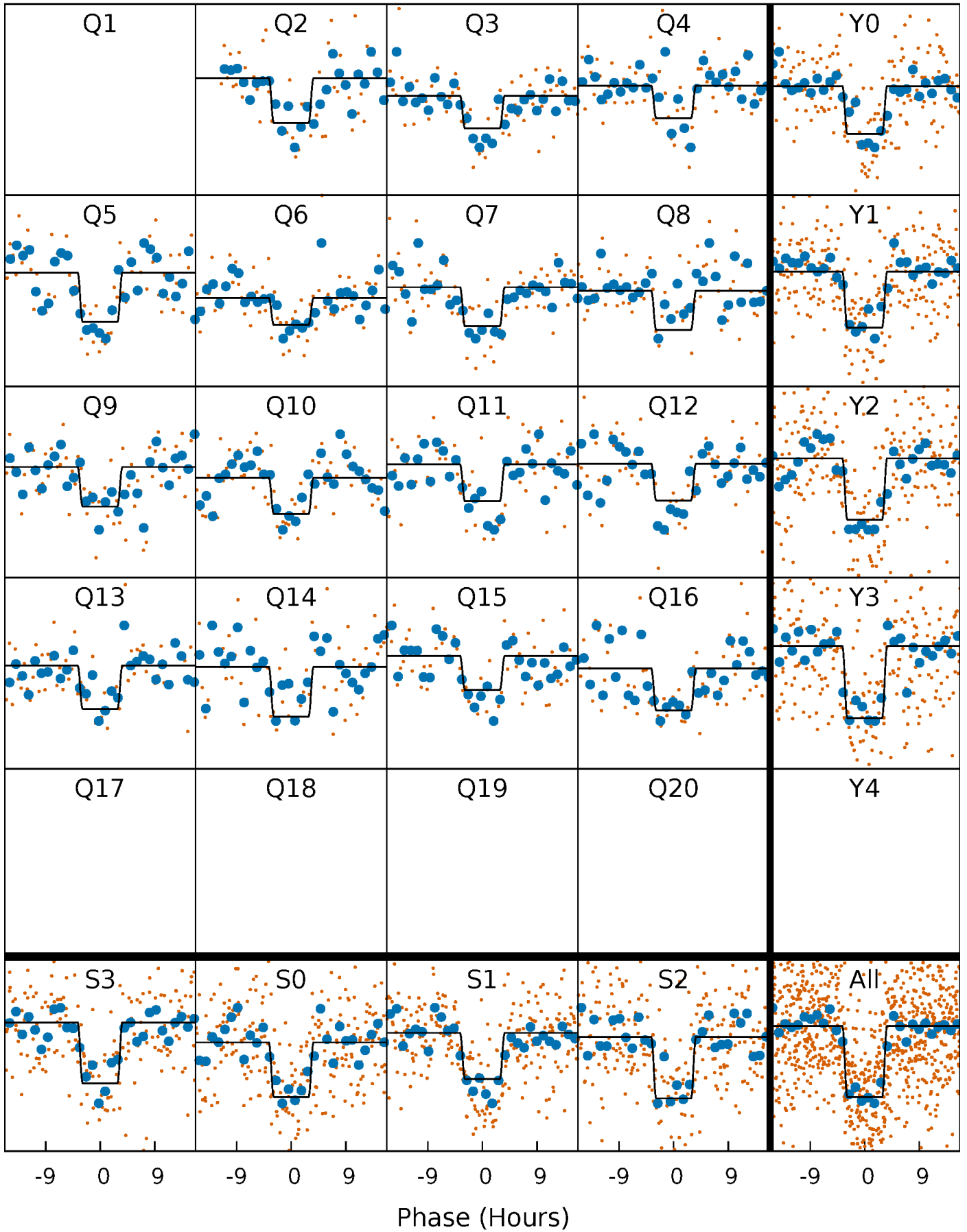
DV Quarter-Phased Transit Curves

TCE 007288306-01 P= 96.170159 Days $T_0=170.252361$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

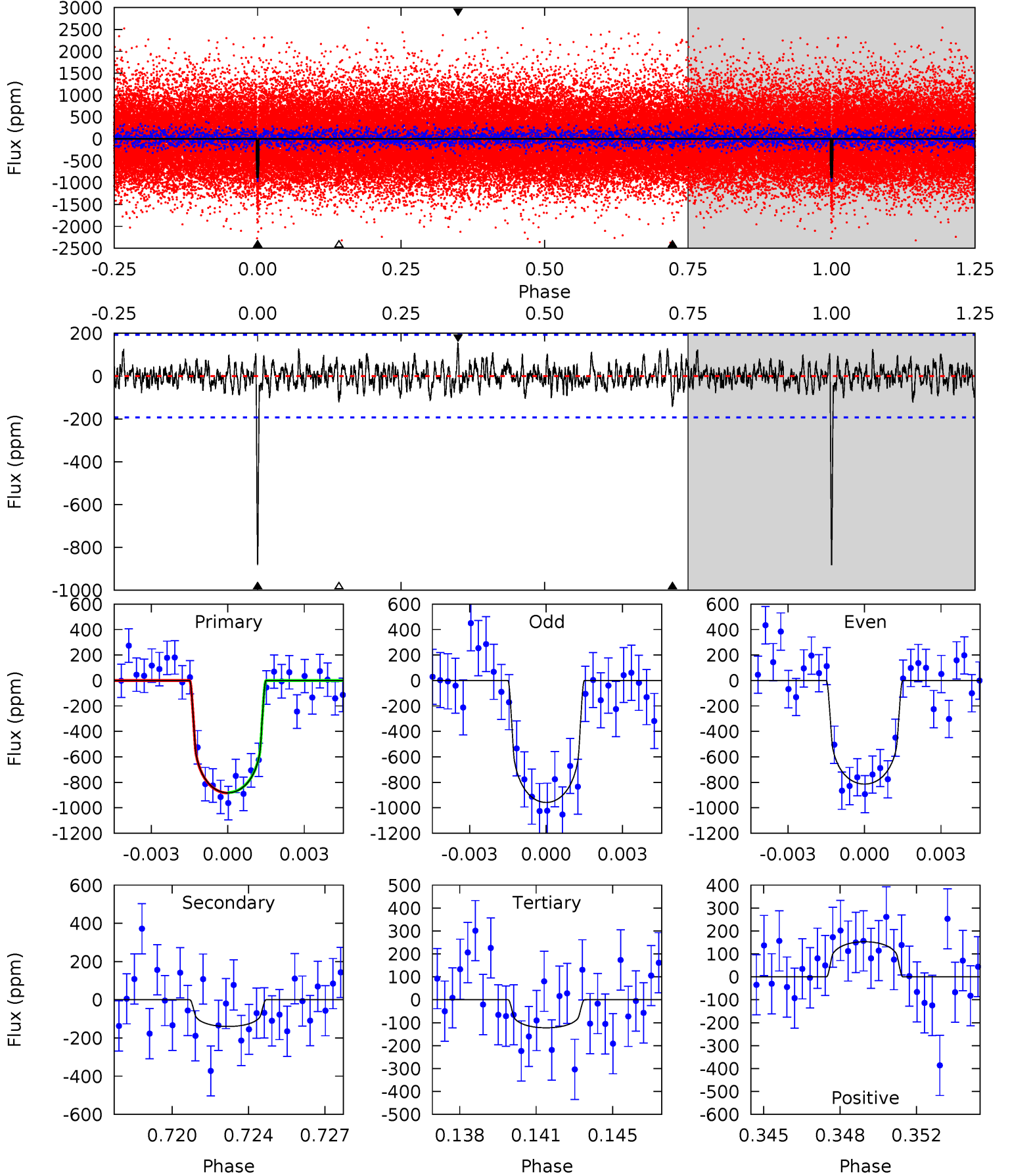
TCE 007288306-01 P= 96.171491 Days $T_0=170.245211$ (BKJD)



DV Model-Shift Uniqueness Test

007288306-01, P = 96.170159 Days, E = 74.082202 Days

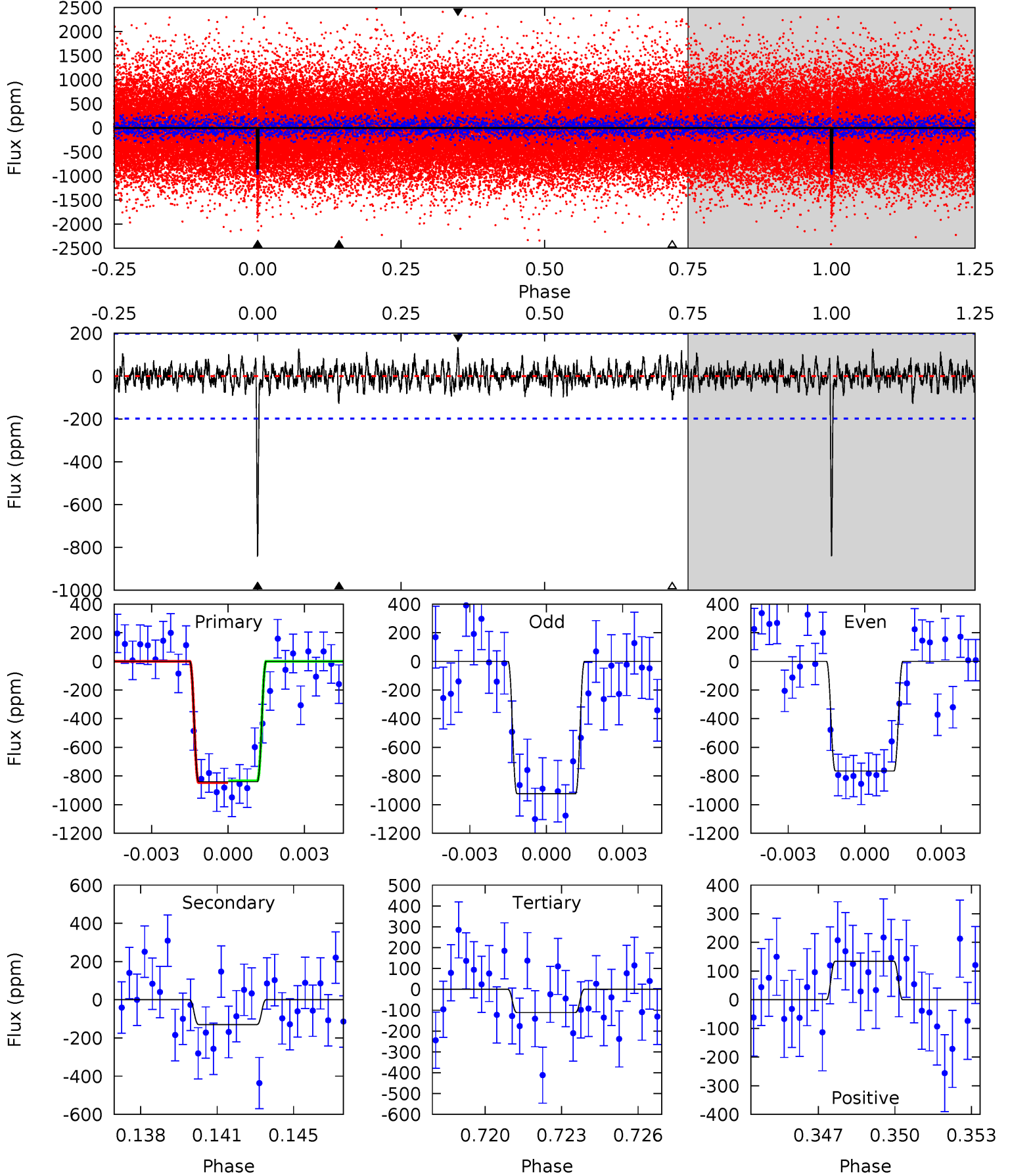
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.9	3.80	3.33	4.15	5.23	2.92	1.11	20.6	19.8	0.48	-0.35	1.97	1.09	0.15	0.05



Alt Model-Shift Uniqueness Test

007288306-01, P = 96.171491 Days, E = 74.073720 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.2	3.43	2.95	3.55	5.24	2.95	0.97	19.3	18.7	0.48	-0.13	2.11	1.00	0.14	0.16



Stellar Parameters For KIC 007288306

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5340^{+160}_{-160}	$4.633^{+0.036}_{-0.090}$	$-0.440^{+0.300}_{-0.300}$	$0.702^{+0.112}_{-0.048}$	$0.783^{+0.076}_{-0.084}$	$3.193^{+0.520}_{-0.946}$
	+3%/-3%	+1%/-2%	+68%/-68%	+16%/-7%	+10%/-11%	+16%/-30%
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 007288306-01 / KOI 3443.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-140 ± 37	$2.21^{+1.56}_{-1.32}$	454^{+19}_{-17}	3797^{+1656}_{-612}	2126^{+11210}_{-1440}
Alt.	-129 ± 38	$2.40^{+1.64}_{-1.46}$	453^{+20}_{-16}	3639^{+1629}_{-567}	1680^{+10017}_{-1115}

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 $A_{\text{obs}} \gg 1.0$

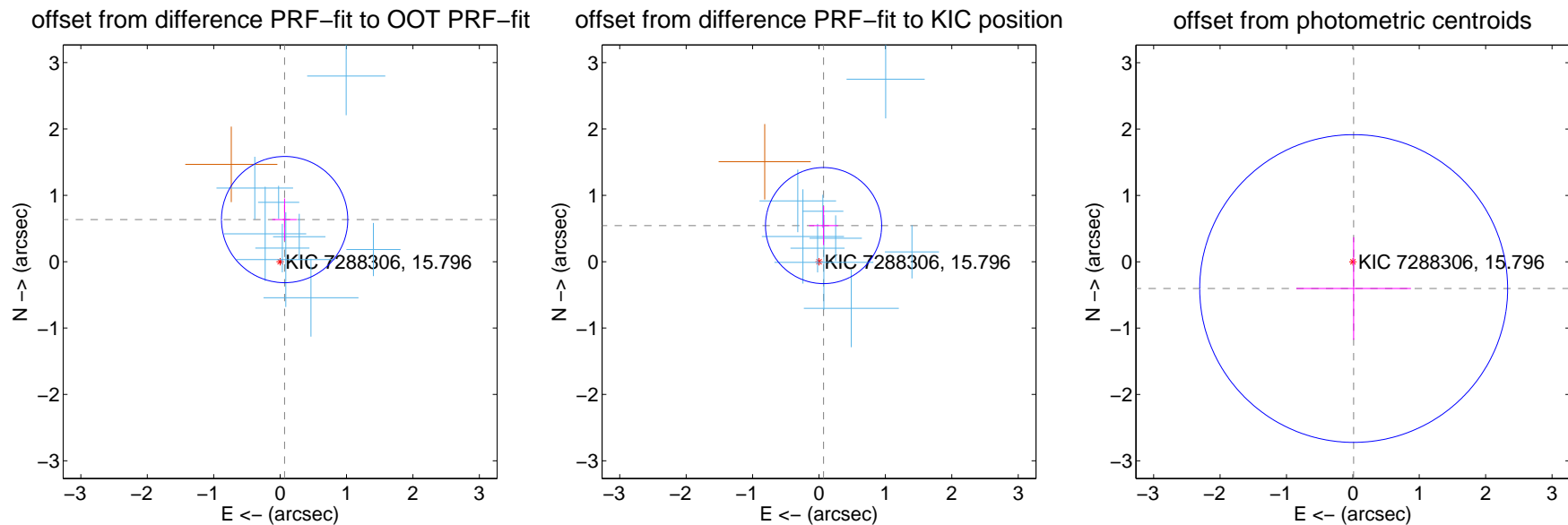
DV Centroid Data

Supplemental centroid analysis for 007288306-01. Kepler magnitude: 15.80. Transit SNR 18.44

There are 9 quarters with good PRF difference image offsets

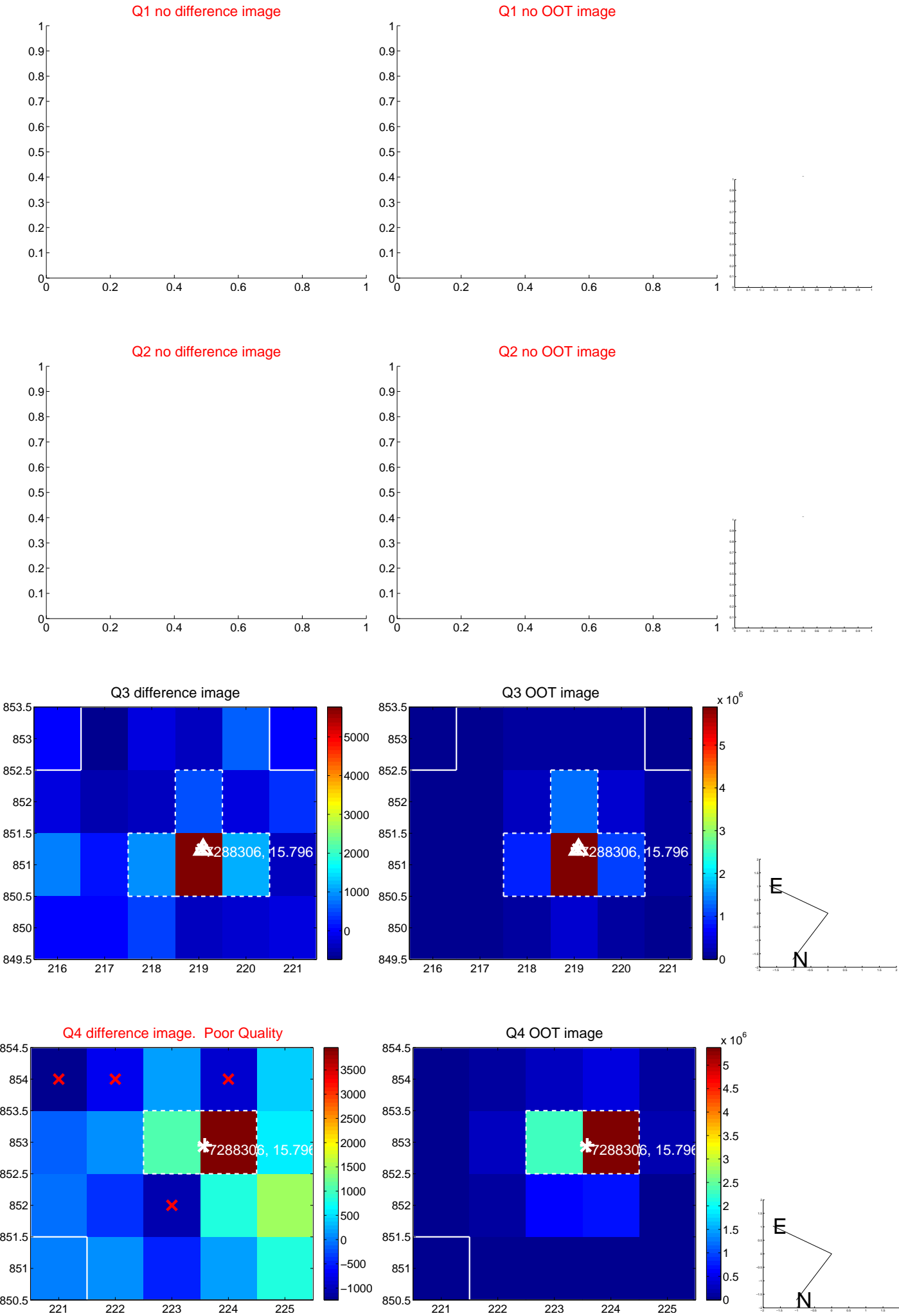
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.638 ± 0.317	2.01	-0.068 ± 0.186	0.634 ± 0.319
PRF-fit source offset from KIC position	0.548 ± 0.291	1.88	-0.069 ± 0.218	0.544 ± 0.295
photometric centroid source offset	0.40 ± 0.77	0.52	-0.01 ± 0.86	-0.40 ± 0.77

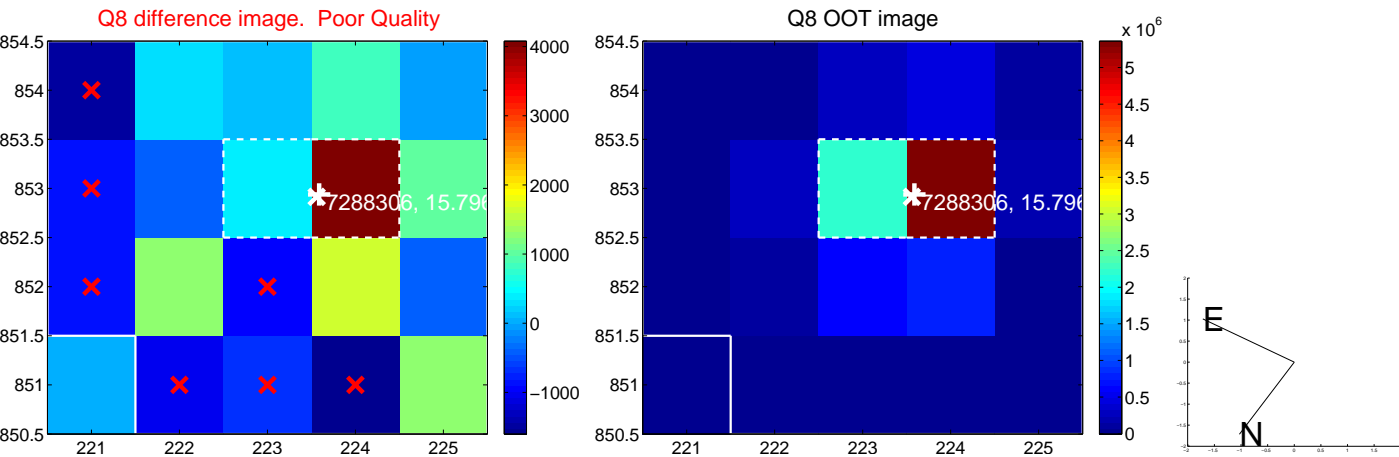
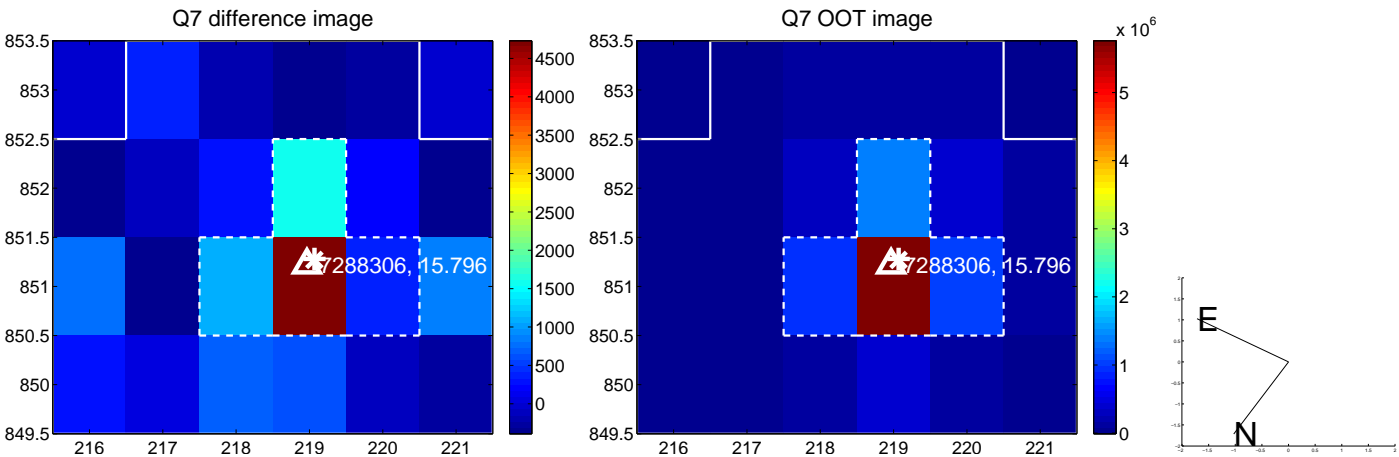
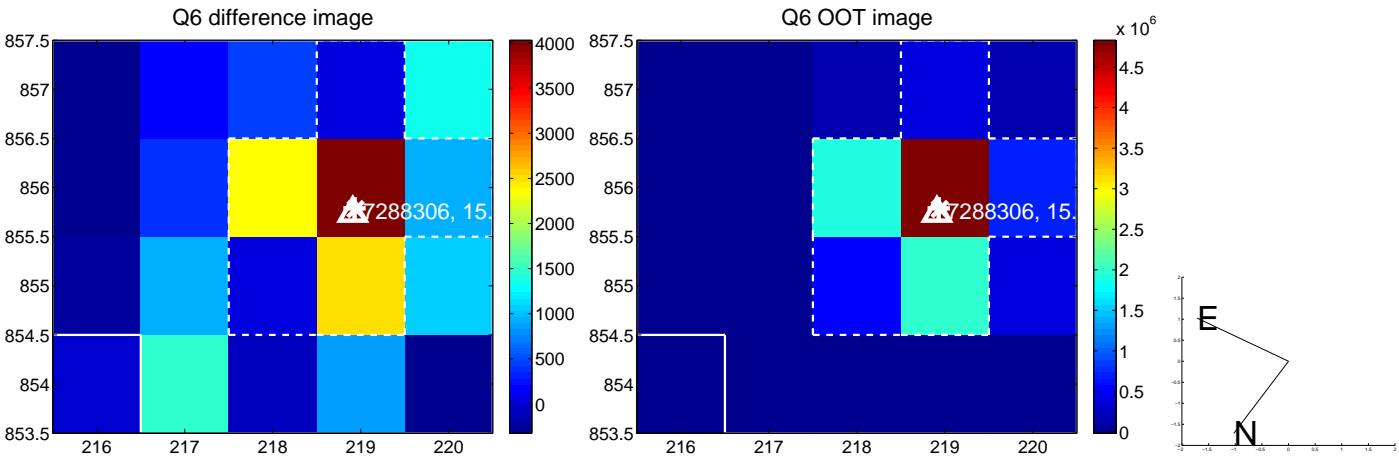
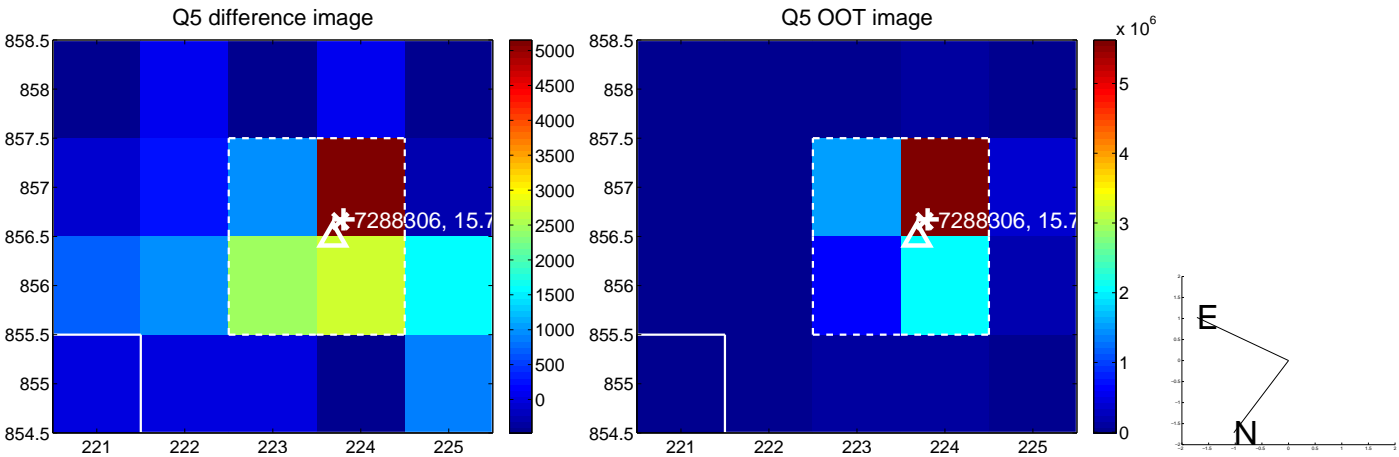


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

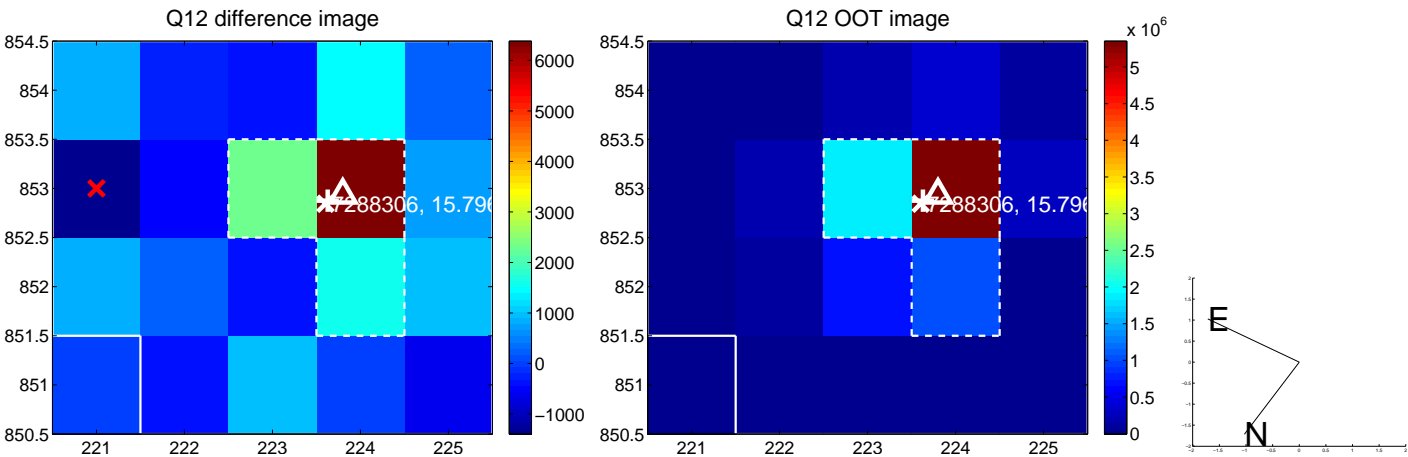
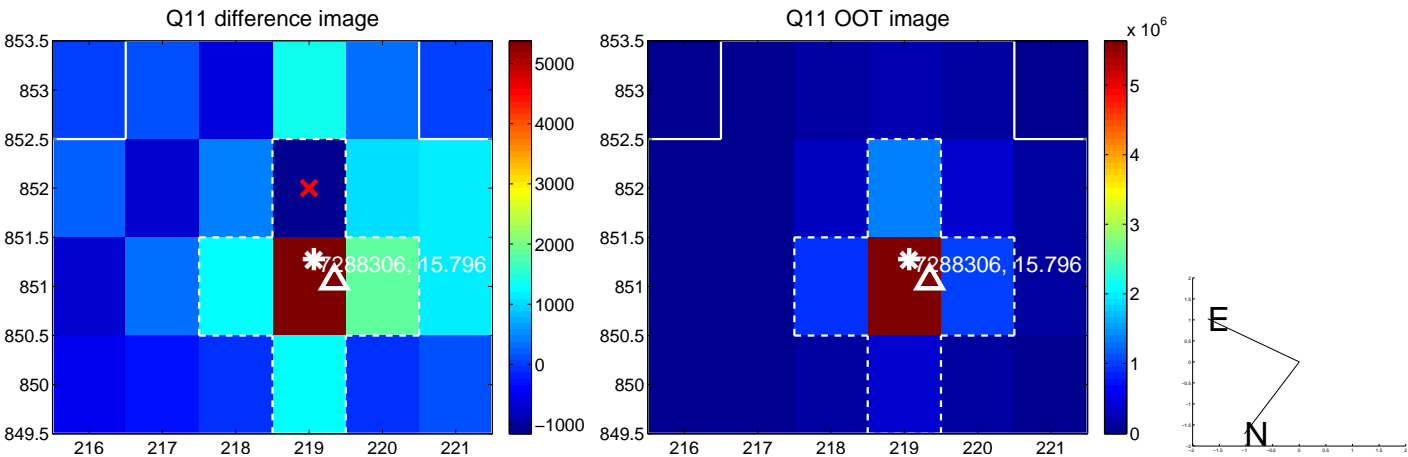
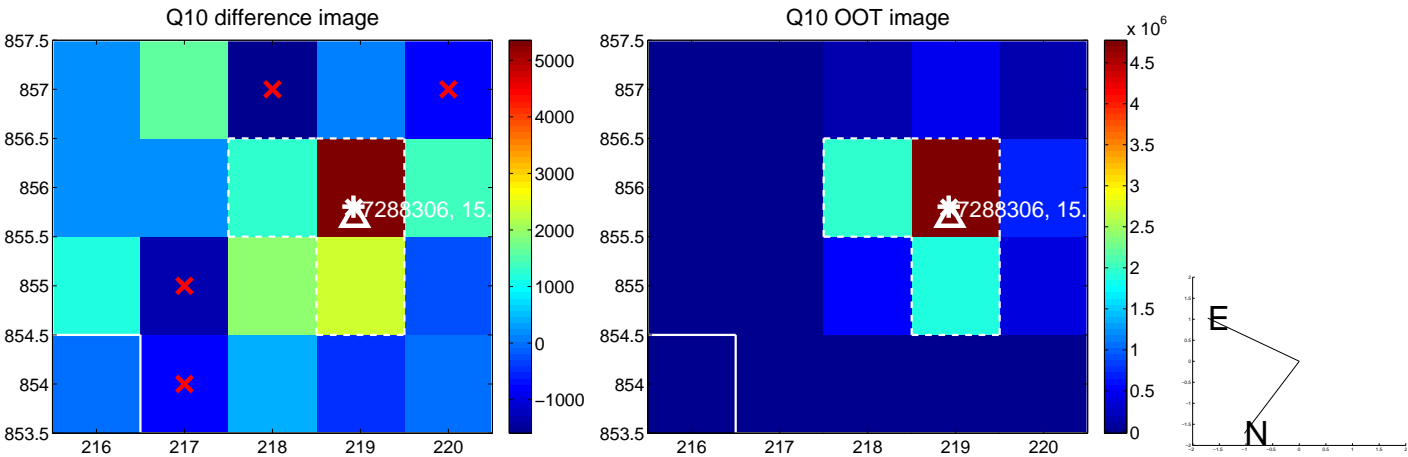
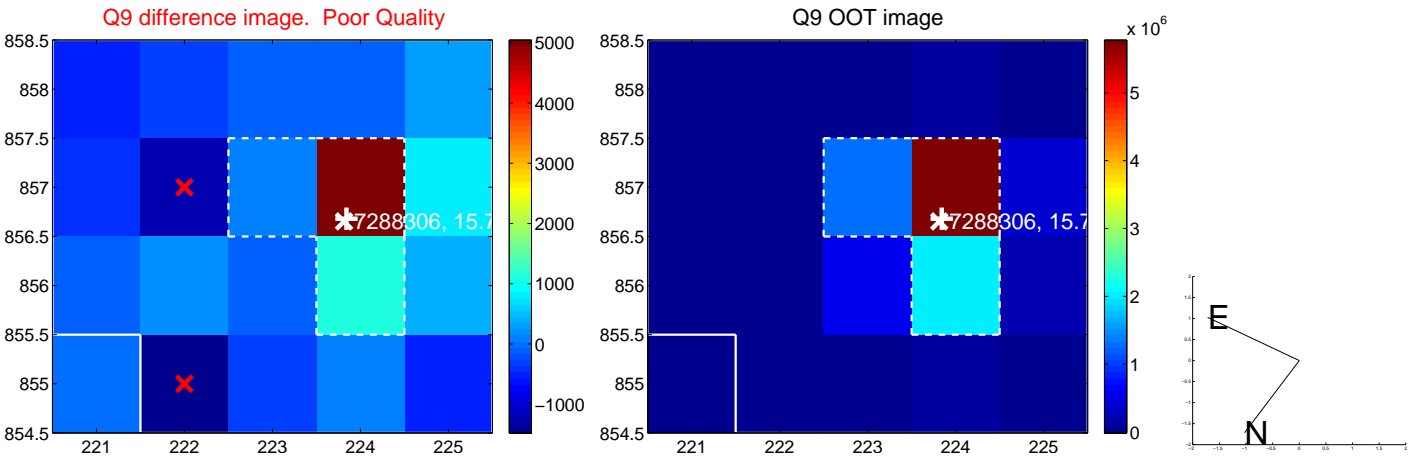
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



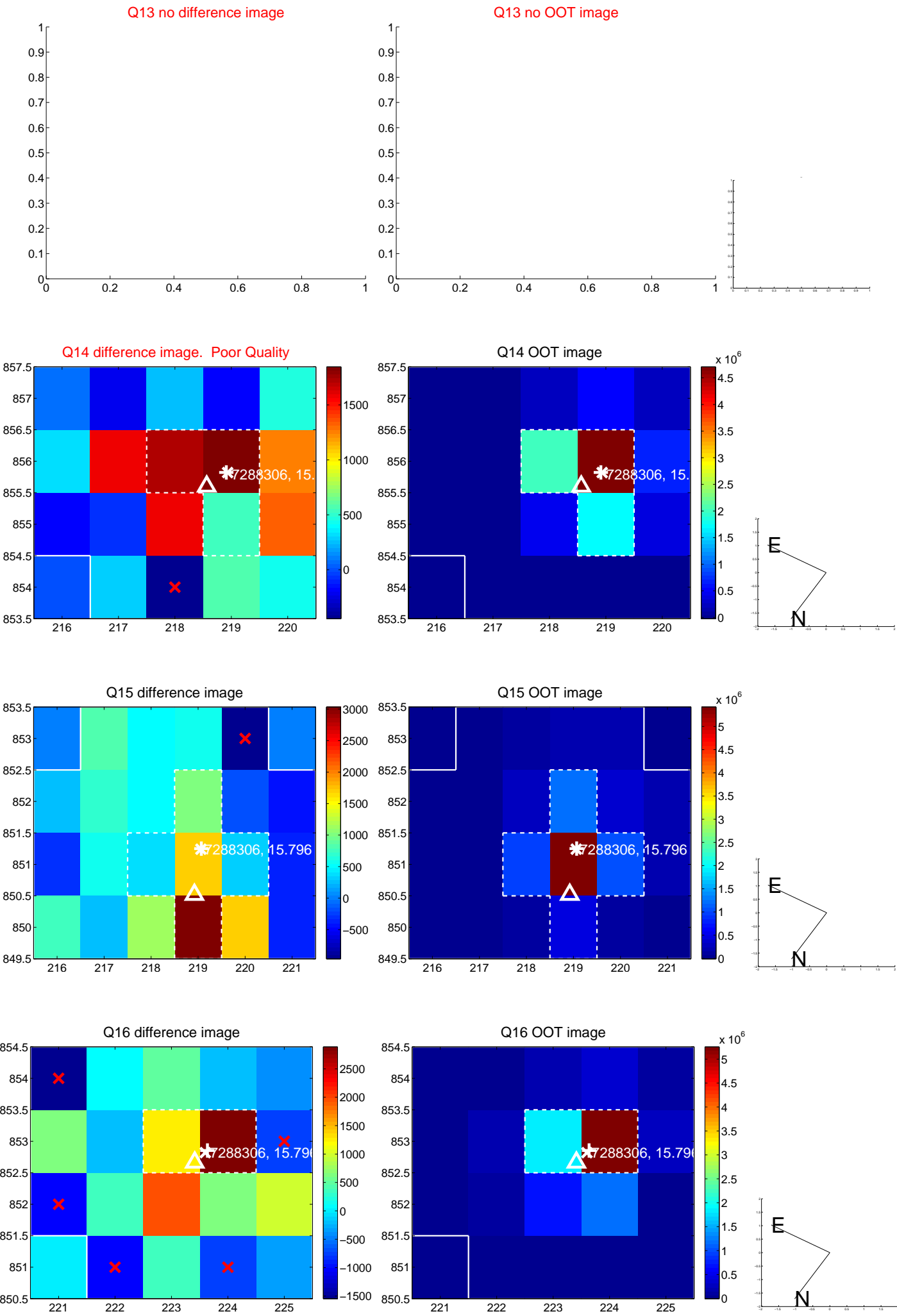
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



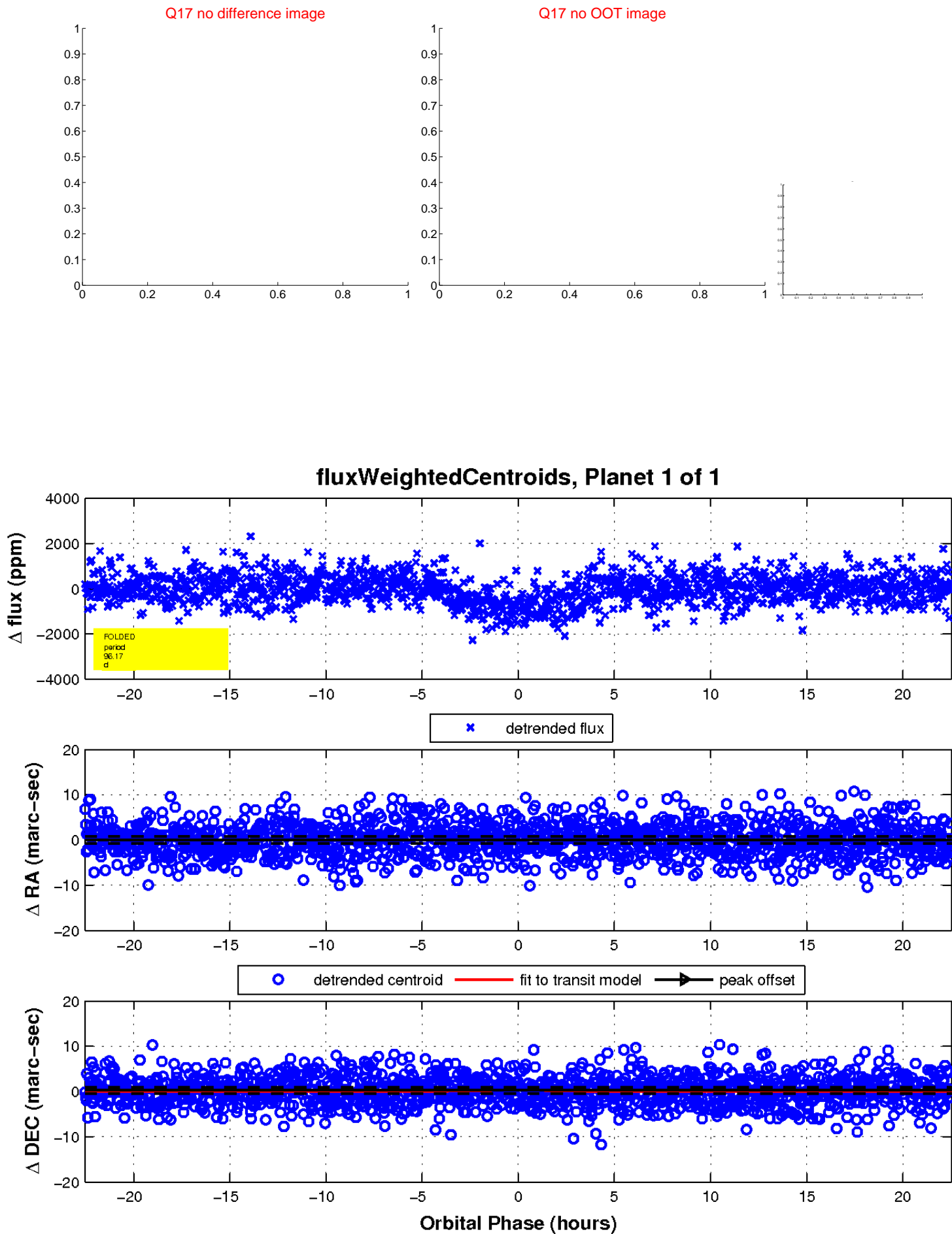
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

