

KIC 011443757

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})
011443757-01	OBS	8054.01	43.907672	169.345912	268.9	7.309	7.3	7.3	4.30	5216	7.55	145.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011443757-01	OBS	PC	0.99	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.

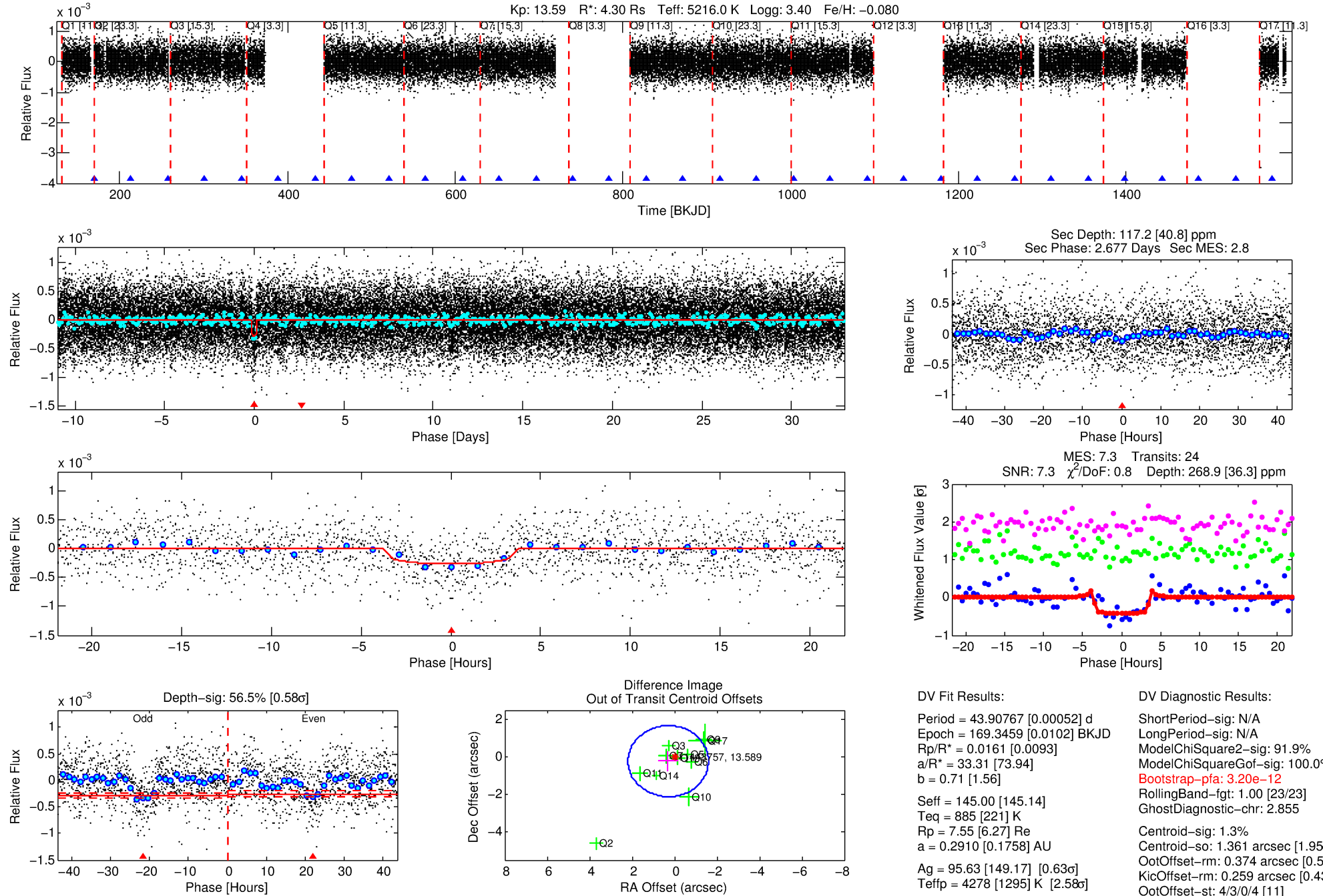
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011443757-01

No Significant Match Found

DV One-Page Summary

KIC: 11443757 Candidate: 1 of 1 Period: 43.908 d



DV Fit Results:

Period = 43.90767 [0.00052] d
Epoch = 169.3459 [0.0102] BKJD
Rp/R* = 0.0161 [0.0093]
a/R* = 33.31 [73.94]
b = 0.71 [1.56]
Seff = 145.00 [145.14]
Teff = 885 [221] K
Rp = 7.55 [6.27] Re
a = 0.2910 [0.1758] AU
Ag = 95.63 [149.17] [0.63 σ]
Teffp = 4278 [1295] K [2.58 σ]

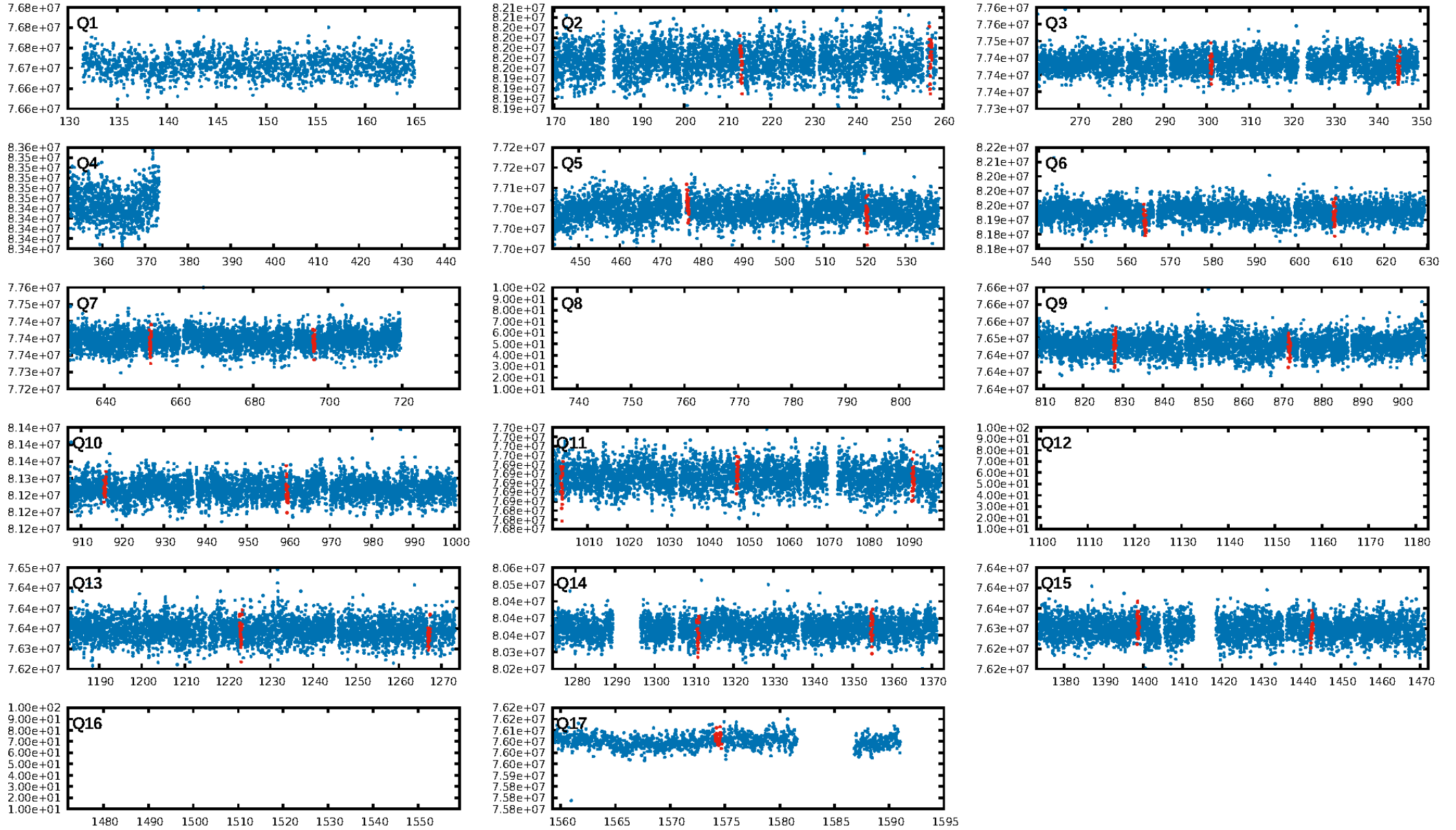
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 91.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.20e-12
RollingBand-fgt: 1.00 [23/23]
GhostDiagnostic-chr: 2.855
Centroid-sig: 1.3%
Centroid-so: 1.361 arcsec [1.95 σ]
OotOffset-rm: 0.374 arcsec [0.59 σ]
KicOffset-rm: 0.259 arcsec [0.43 σ]
OotOffset-st: 4/3/0/4 [11]
KicOffset-st: 4/3/0/4 [11]
DiffImageQuality-fgm: 0.82 [9/11]
DiffImageOverlap-fno: 1.00 [12/12]

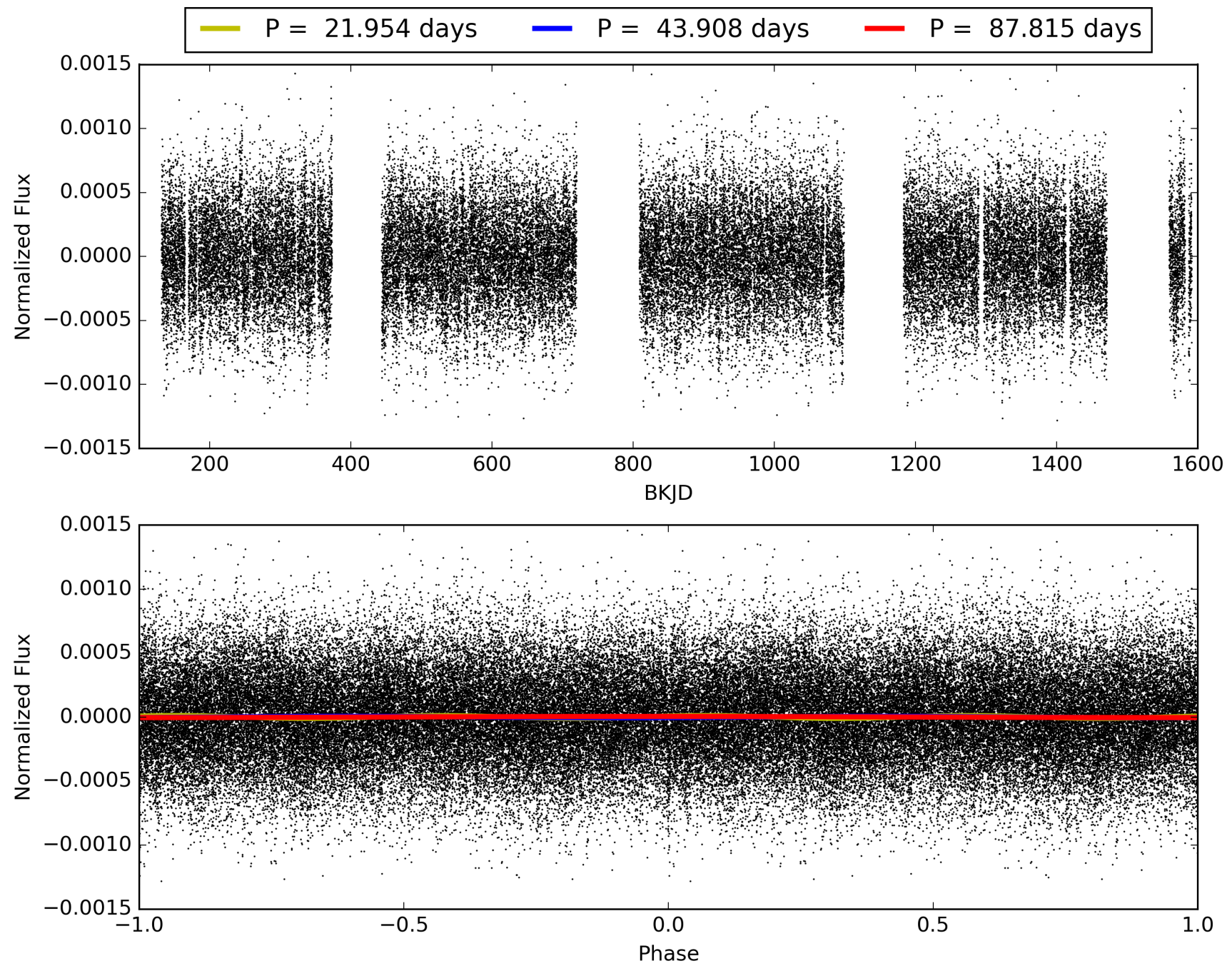
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:11:24 Z

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

TCE 011443757-01, PDC Light Curves

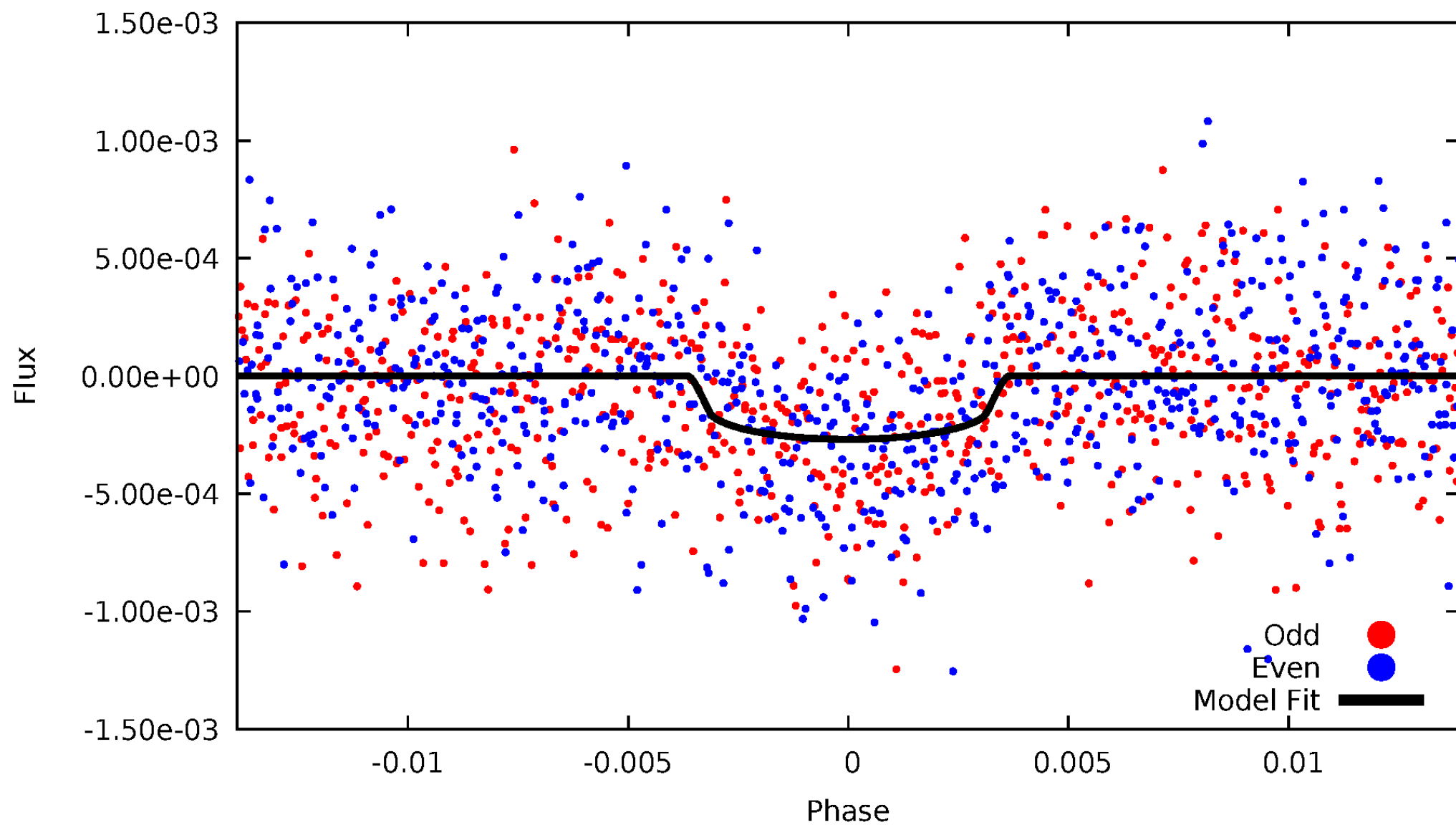


TCE 011443757-01



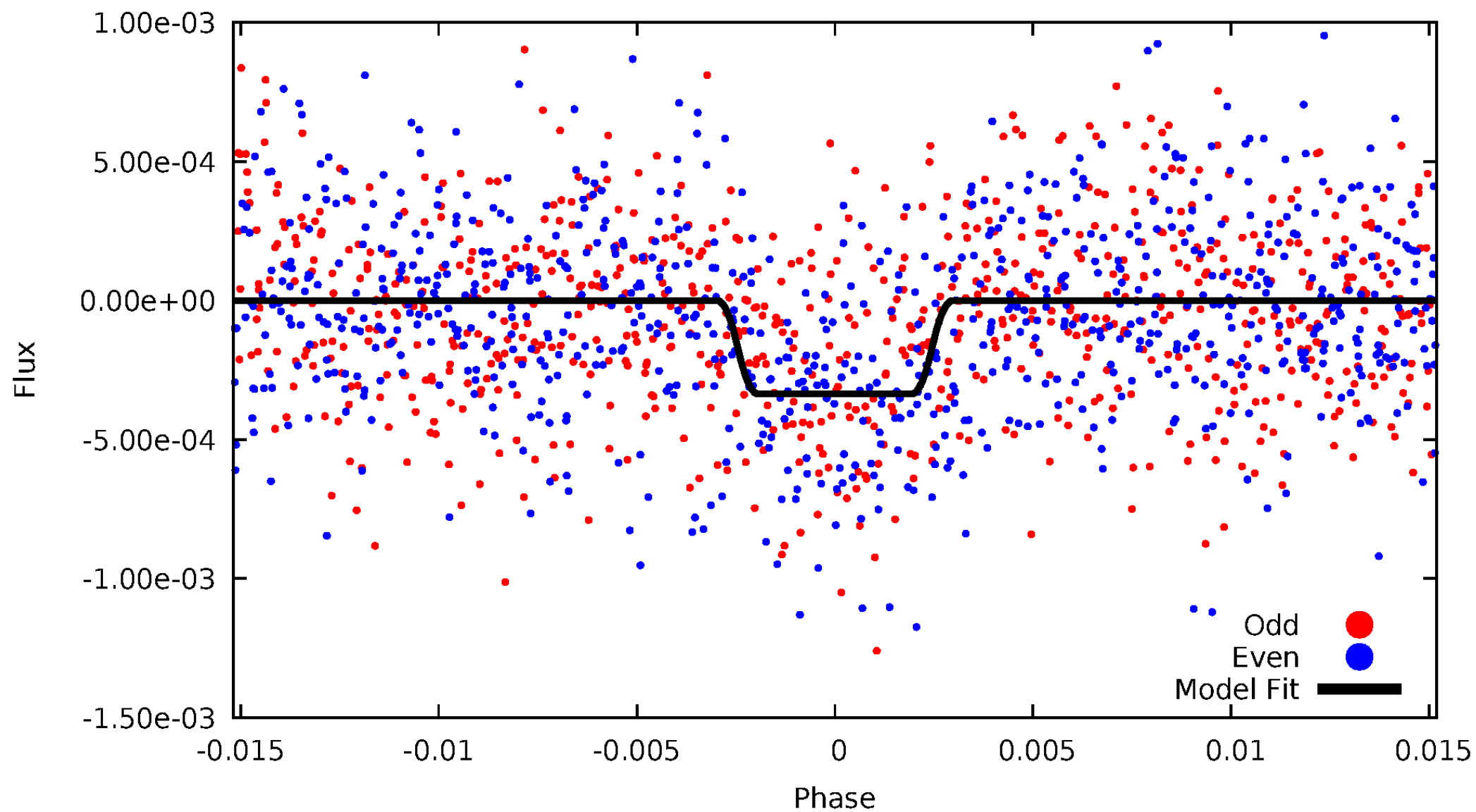
DV Odd/Even

TCE 011443757-01

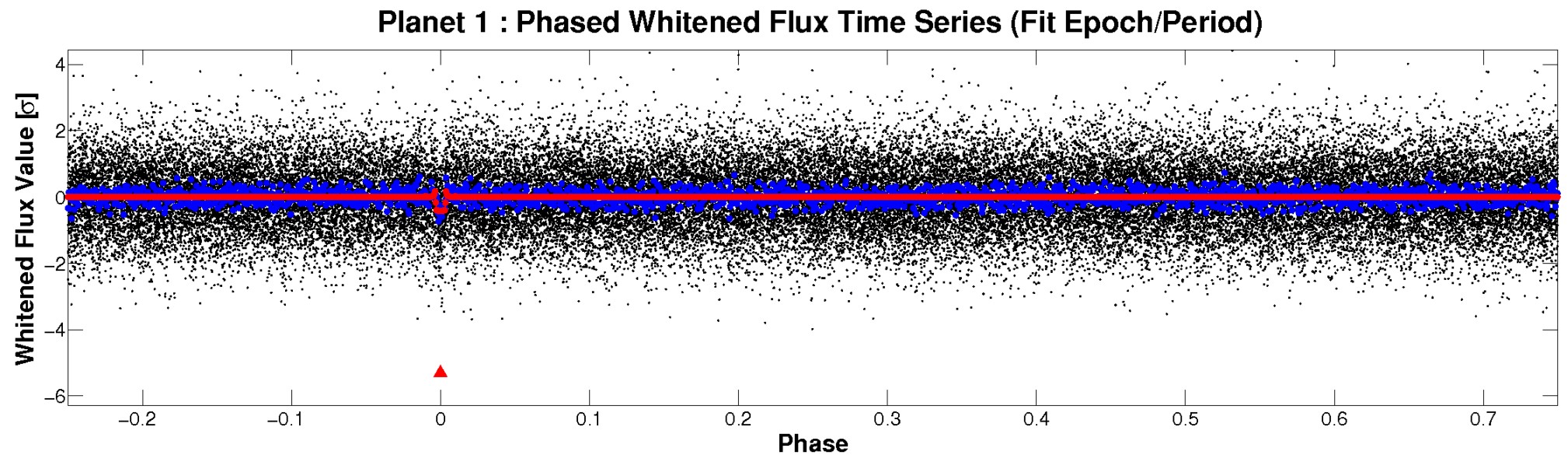
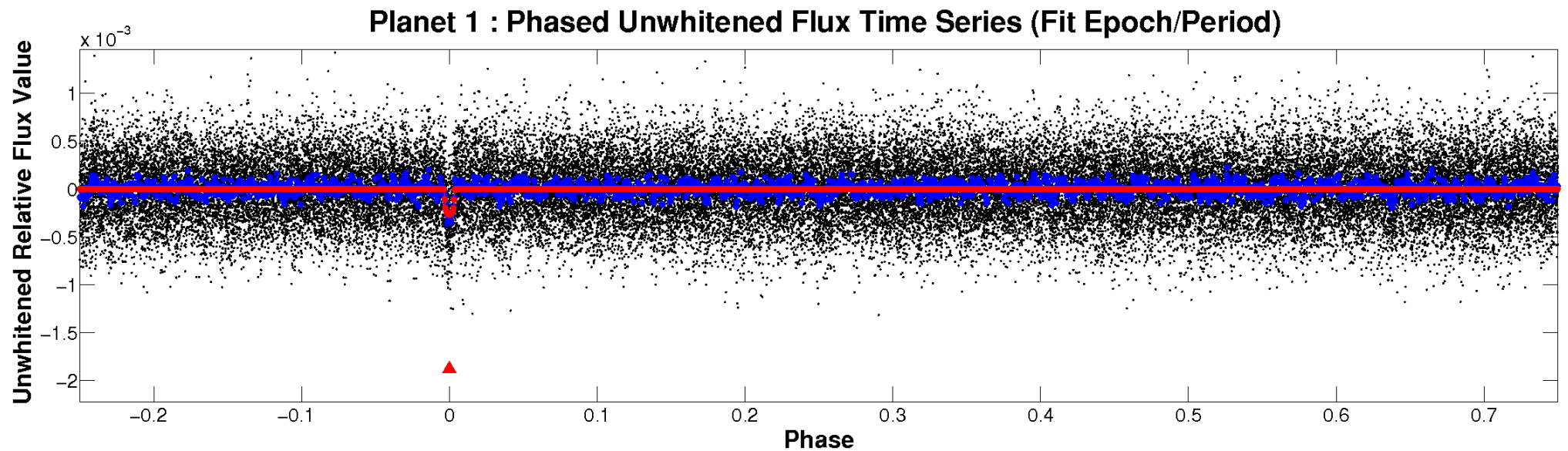


ALT Odd/Even

TCE 011443757-01

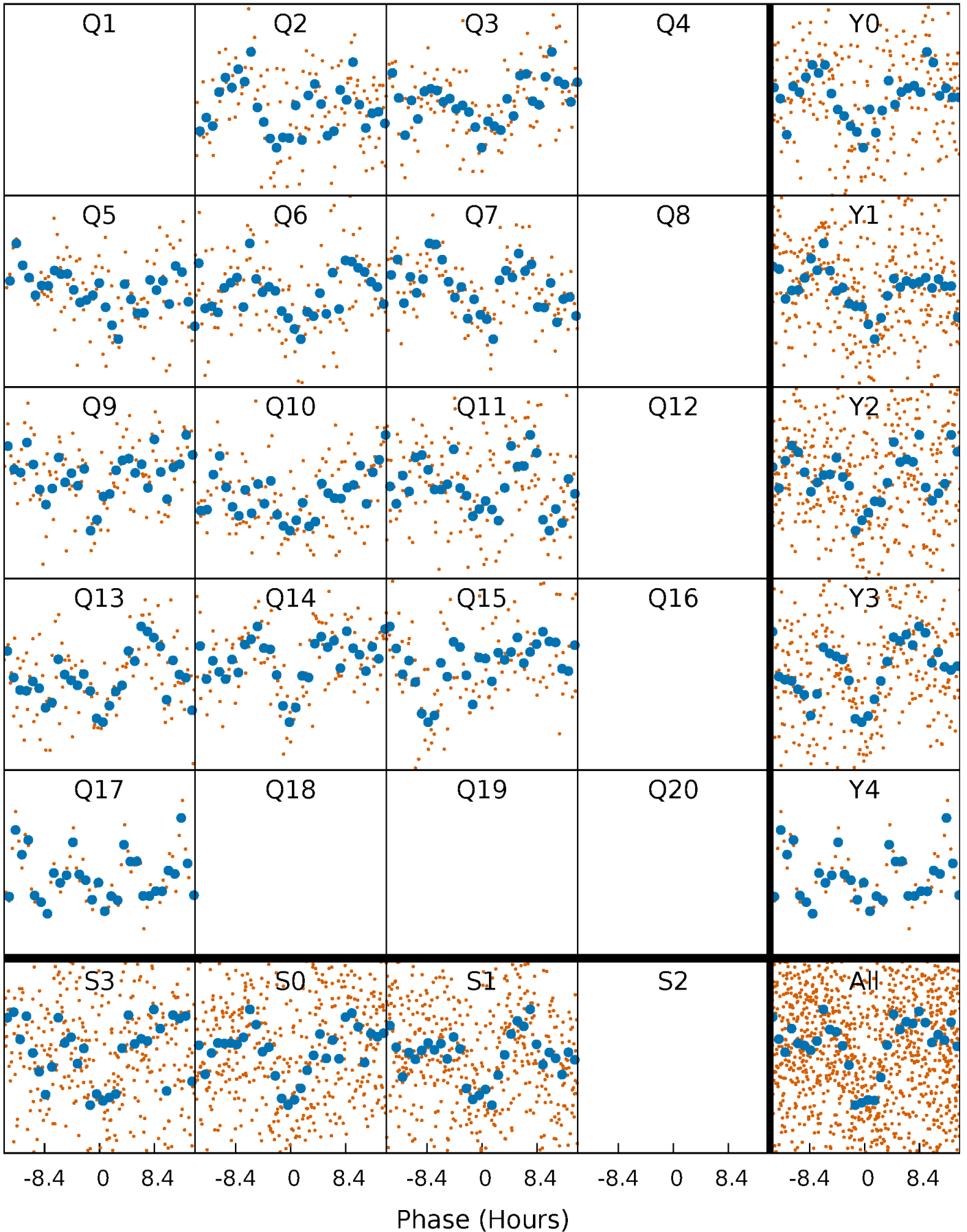


Non-Whitened Vs. Whitened Light Curve



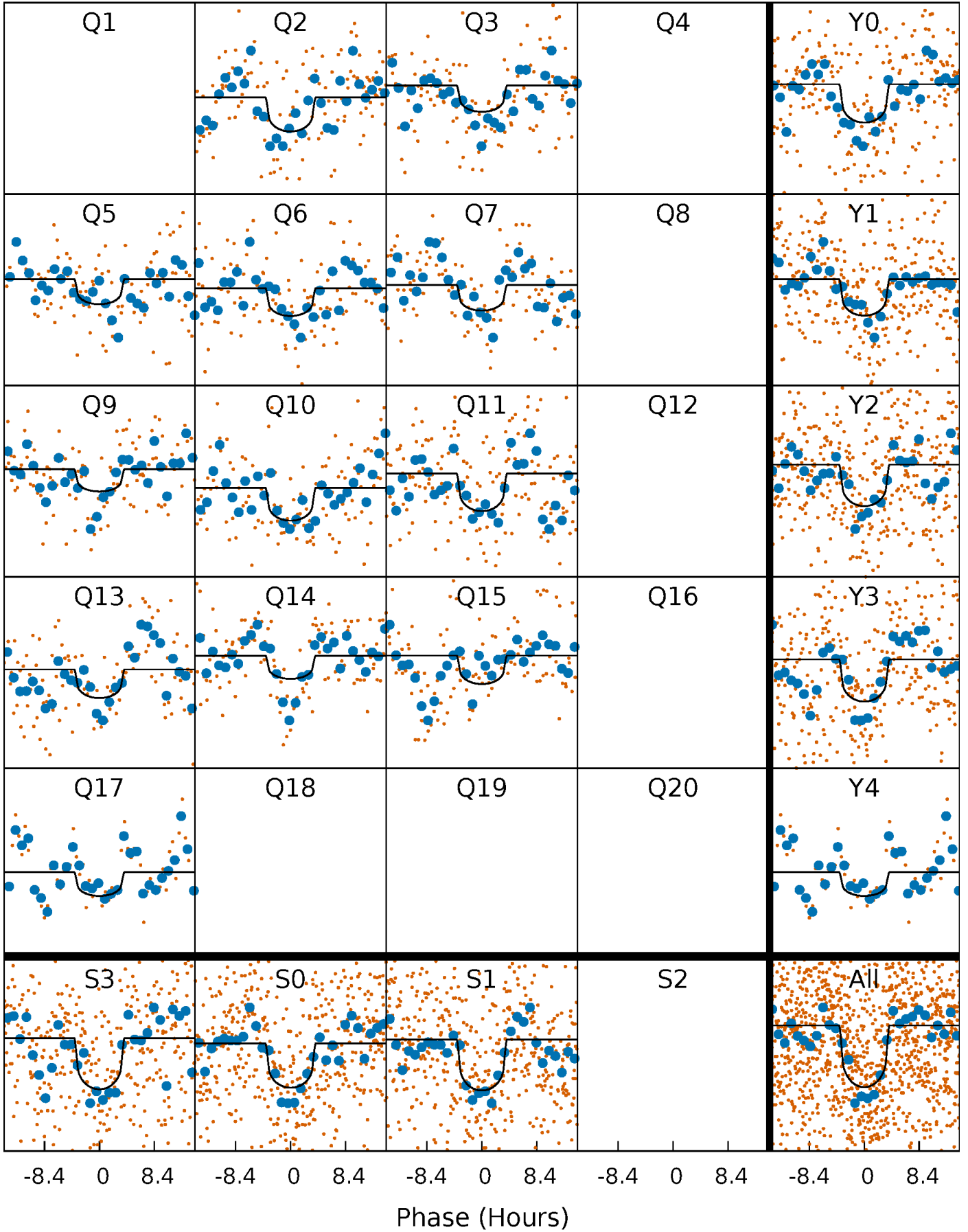
PDC Quarter-Phased Transit Curves

TCE 011443757-01 P= 43.907672 Days $T_0=169.345912$ (BKJD)



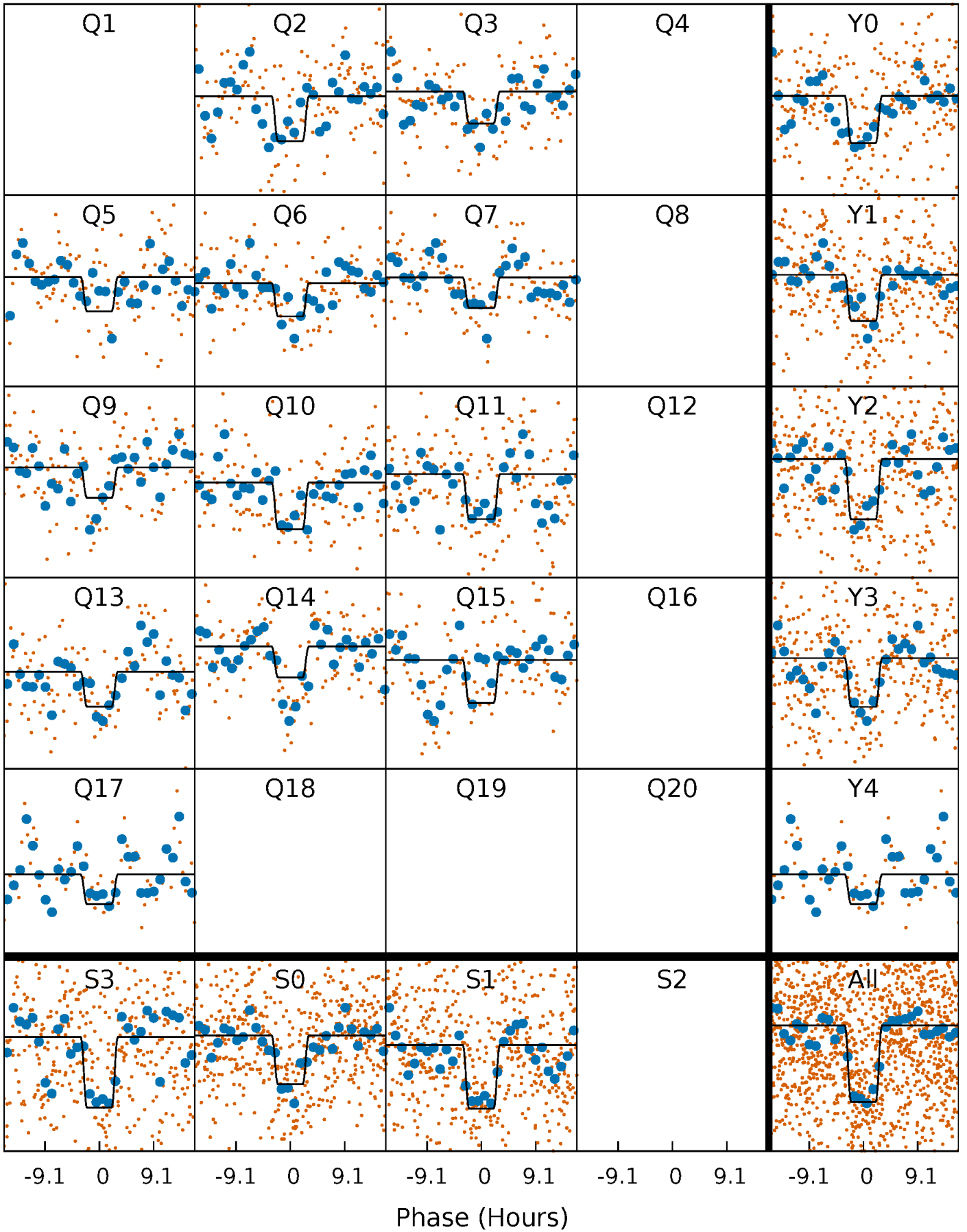
DV Quarter-Phased Transit Curves

TCE 011443757-01 P= 43.907672 Days $T_0=169.345912$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

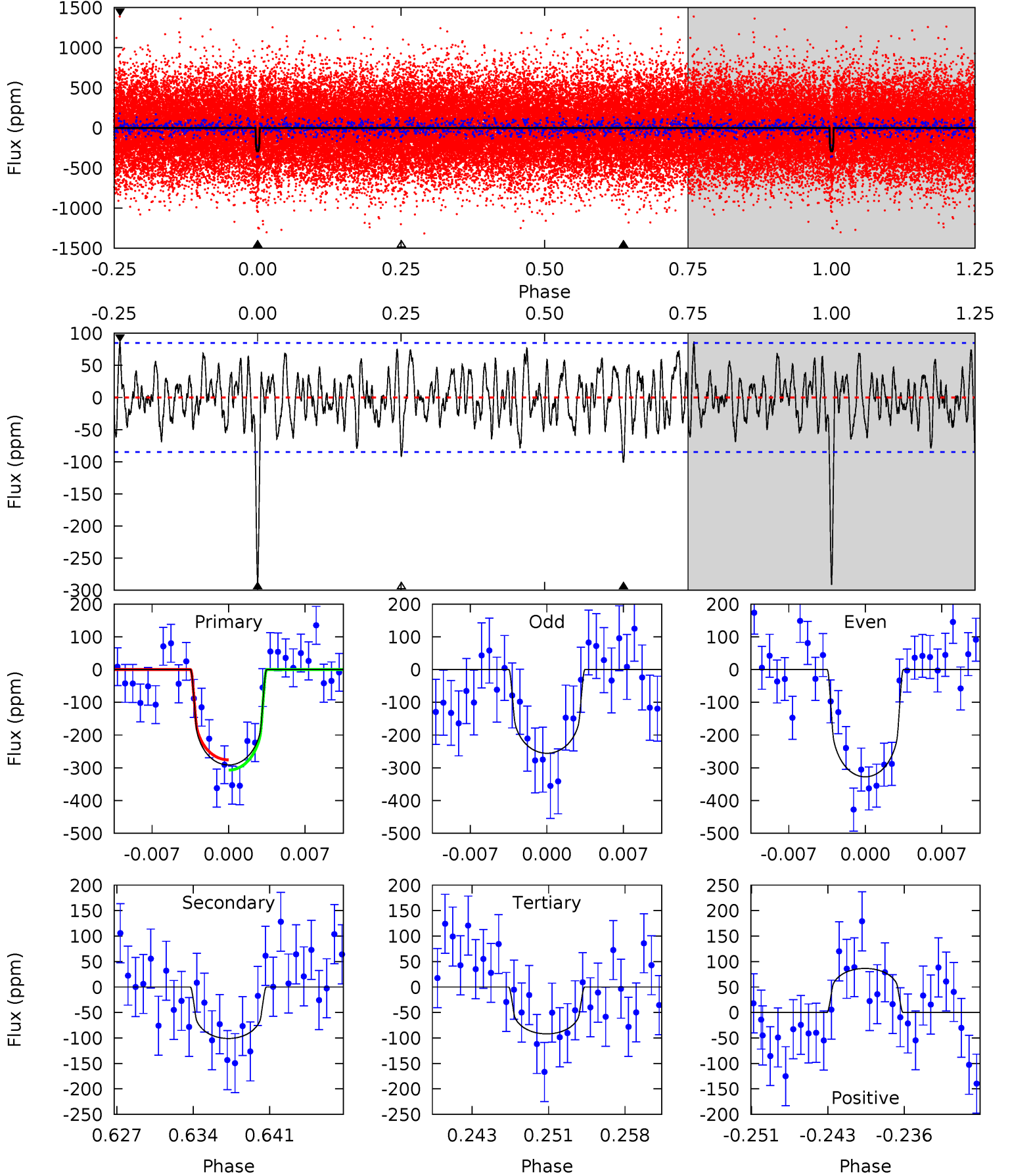
TCE 011443757-01 P= 43.906527 Days $T_0=169.369153$ (BKJD)



DV Model-Shift Uniqueness Test

011443757-01, P = 43.907672 Days, E = 125.438240 Days

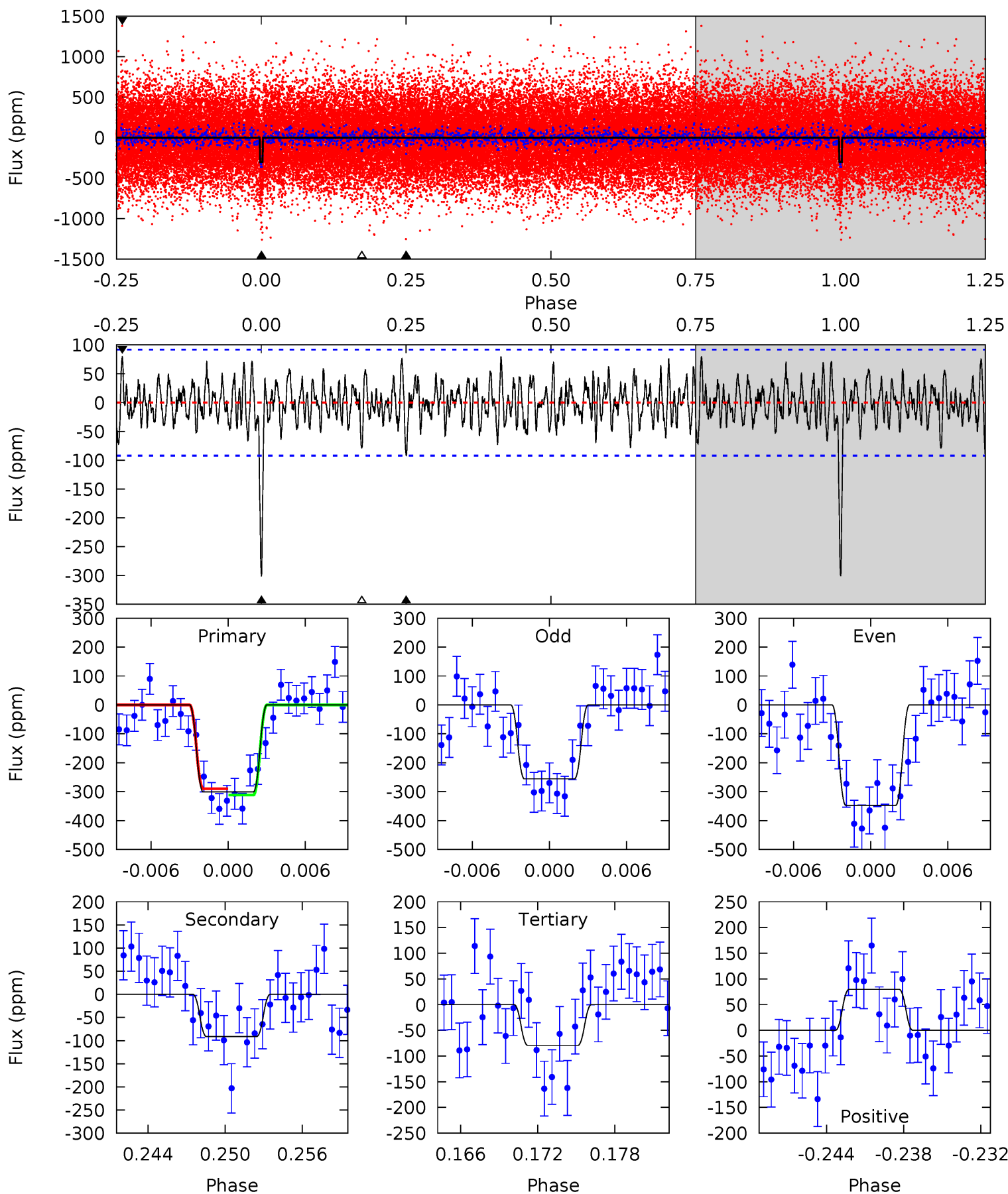
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.5	6.05	5.51	5.19	5.08	2.68	1.89	12.0	12.3	0.54	0.87	2.16	1.08	0.23	0.94



Alt Model-Shift Uniqueness Test

011443757-01, $P = 43.906527$ Days, $E = 125.462626$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.8	5.09	4.42	4.44	5.13	2.75	1.60	12.4	12.3	0.67	0.65	2.55	0.99	0.21	0.62



Stellar Parameters For KIC 011443757

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5216^{+172}_{-172}	$3.402^{+0.592}_{-0.197}$	$-0.080^{+0.300}_{-0.300}$	$4.303^{+1.102}_{-2.571}$	$1.703^{+0.195}_{-0.732}$	$0.030^{+0.241}_{-0.015}$
	+3%/-3%	+17%/-6%	+375%/-375%	+26%/-60%	+11%/-43%	+801%/-51%
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 011443757-01 / KOI 8054.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-101 ± 17	$7.04^{+4.93}_{-4.17}$	1207^{+130}_{-178}	4244^{+1671}_{-636}	95^{+426}_{-62}
Alt.	-91 ± 18	$7.79^{+5.03}_{-4.25}$	1213^{+122}_{-185}	3996^{+1302}_{-508}	66^{+236}_{-40}

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

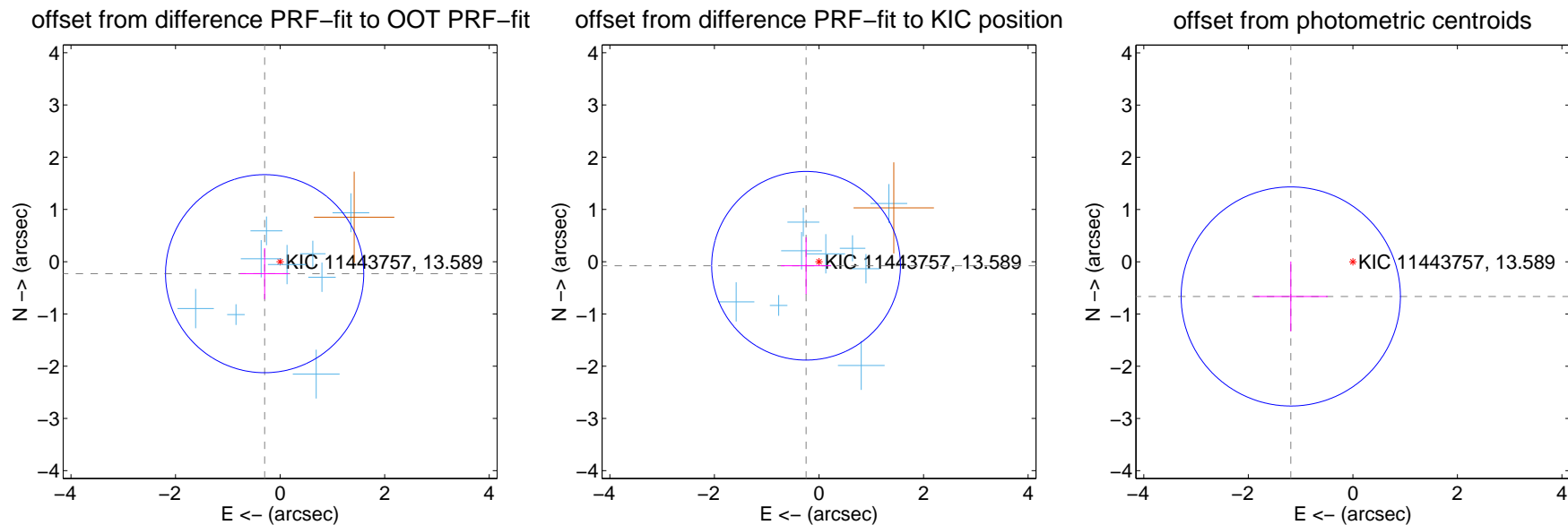
DV Centroid Data

Supplemental centroid analysis for 011443757-01. Kepler magnitude: 13.59. Transit SNR 7.31

There are 9 quarters with good PRF difference image offsets

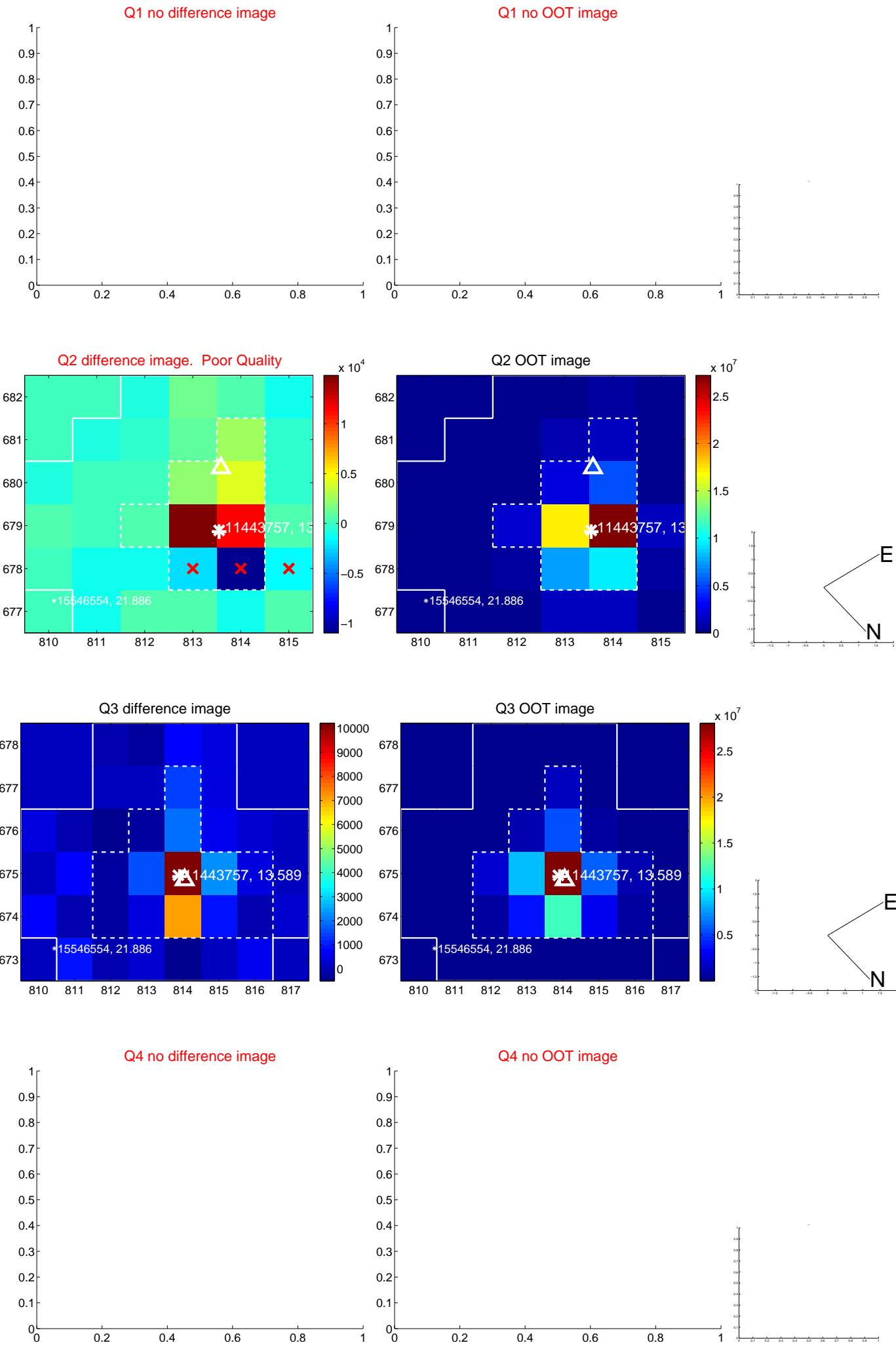
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.374 ± 0.632	0.59	0.296 ± 0.465	-0.229 ± 0.490
PRF-fit source offset from KIC position	0.259 ± 0.602	0.43	0.247 ± 0.481	-0.078 ± 0.544
photometric centroid source offset	1.36 ± 0.70	1.95	1.19 ± 0.71	-0.66 ± 0.67

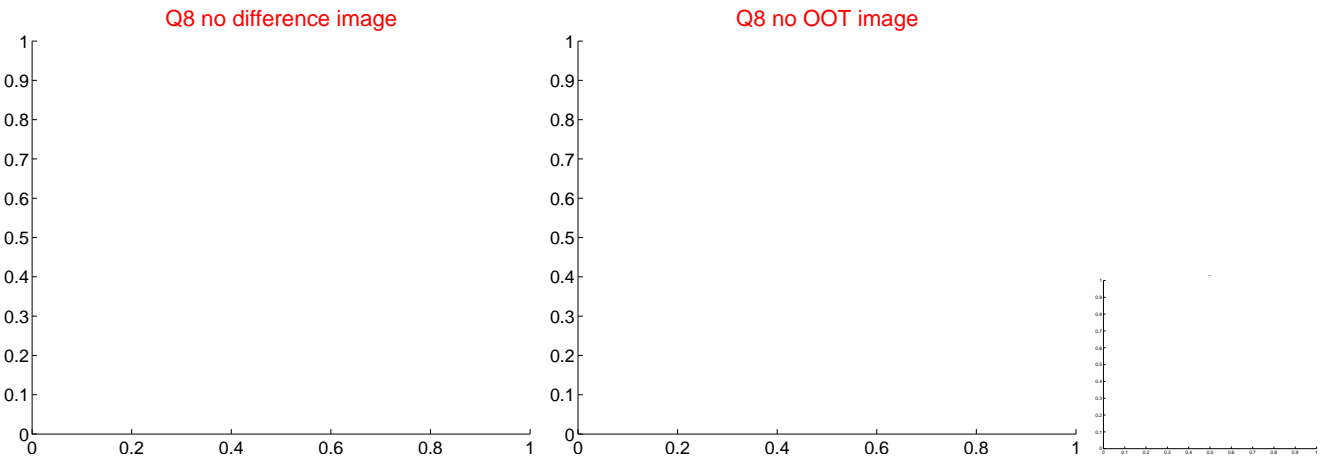
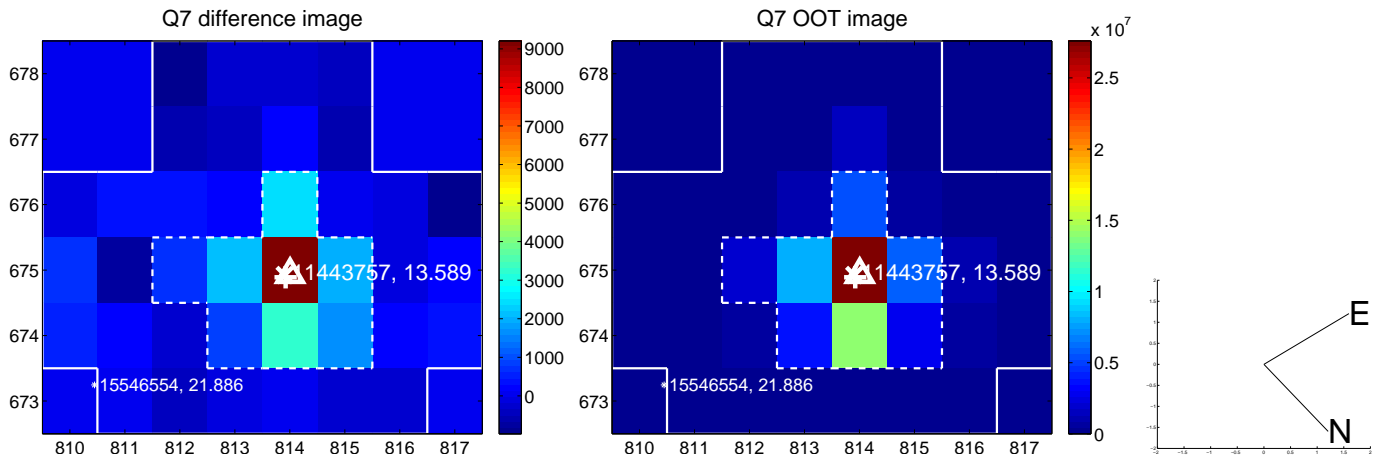
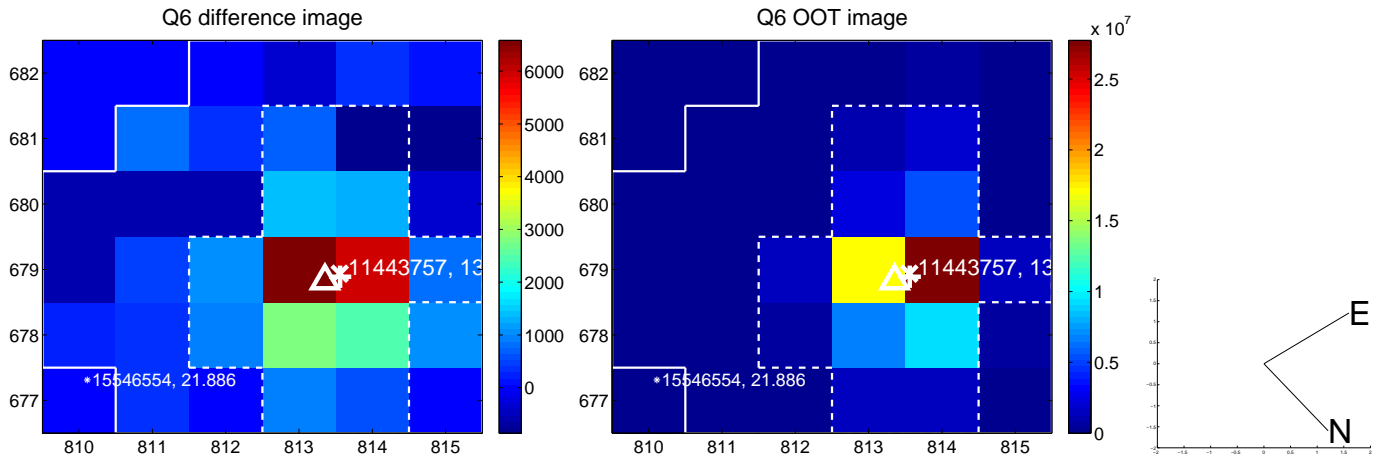
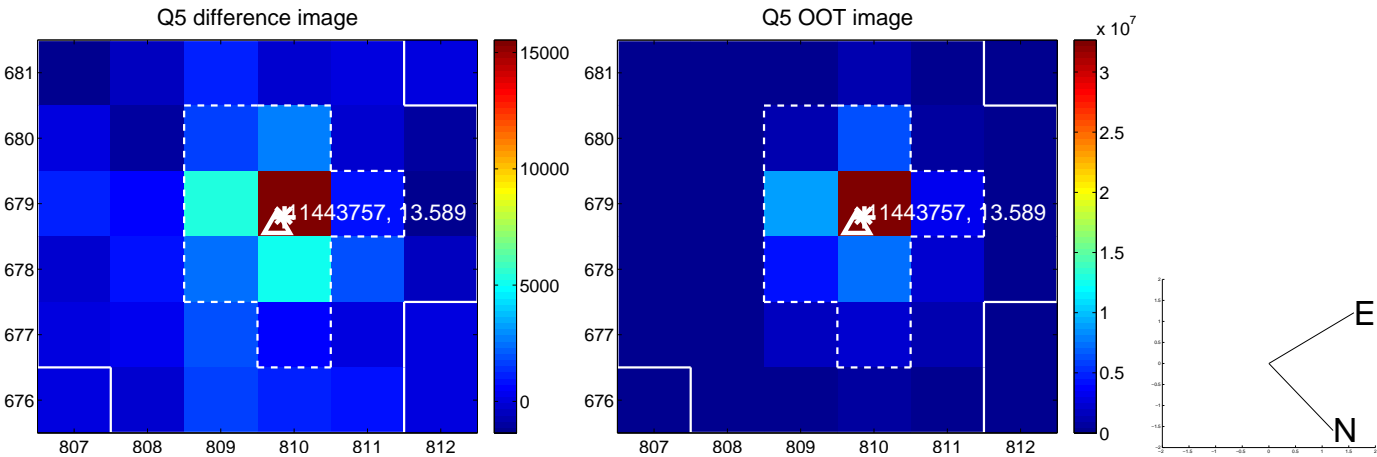


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

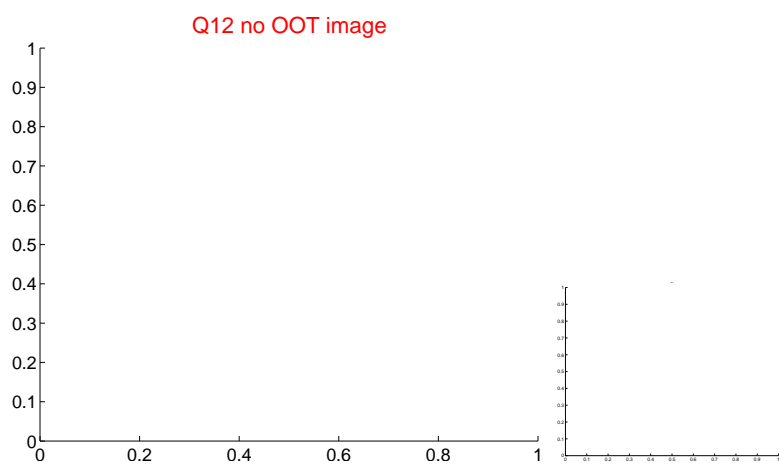
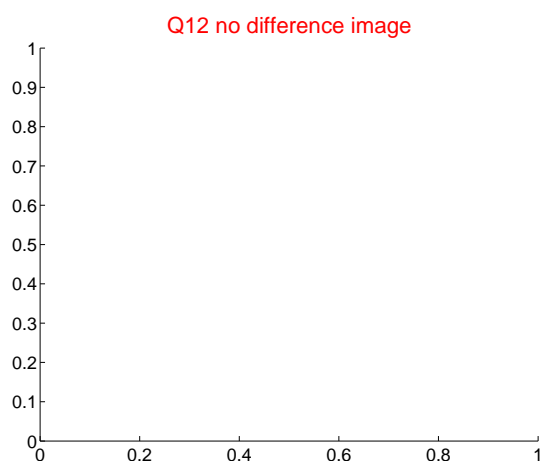
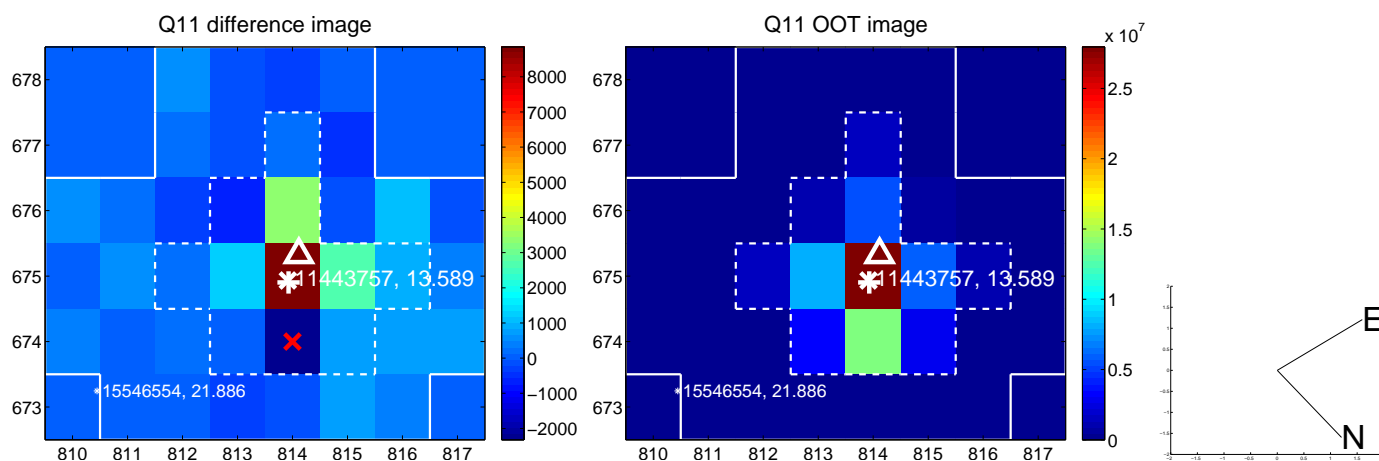
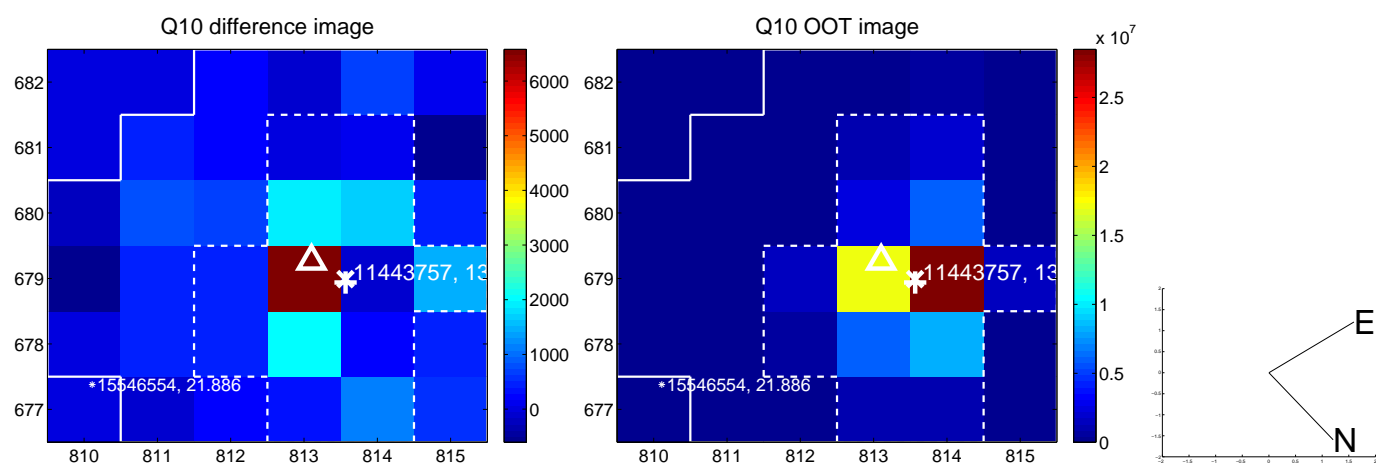
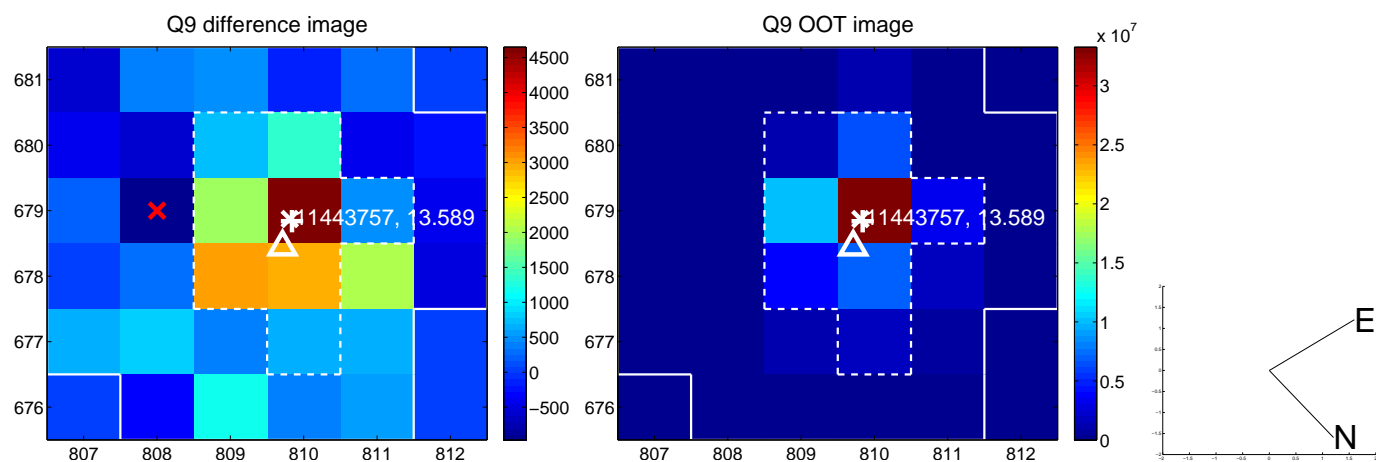
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



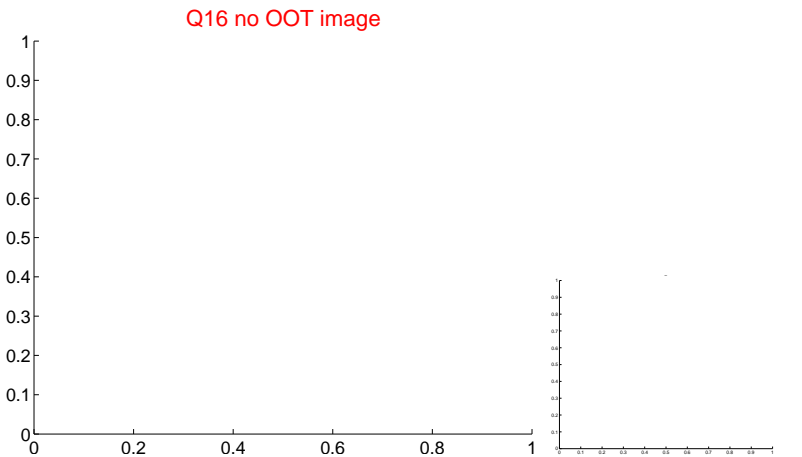
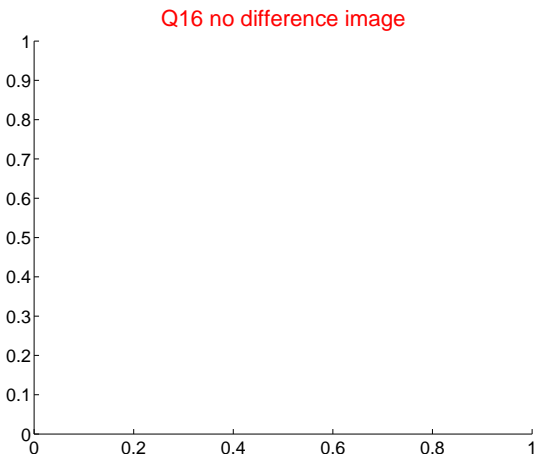
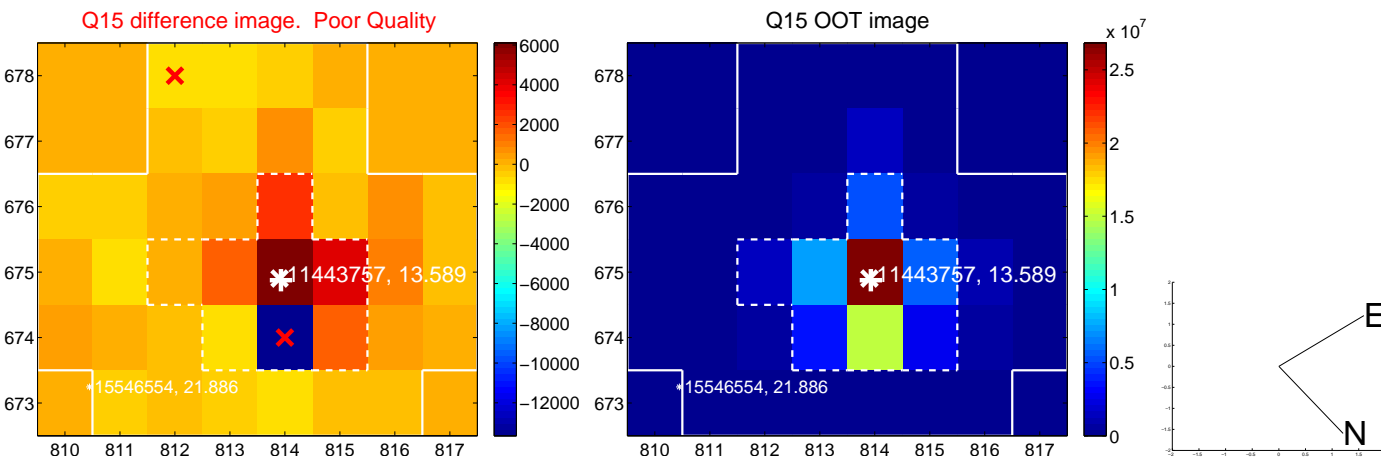
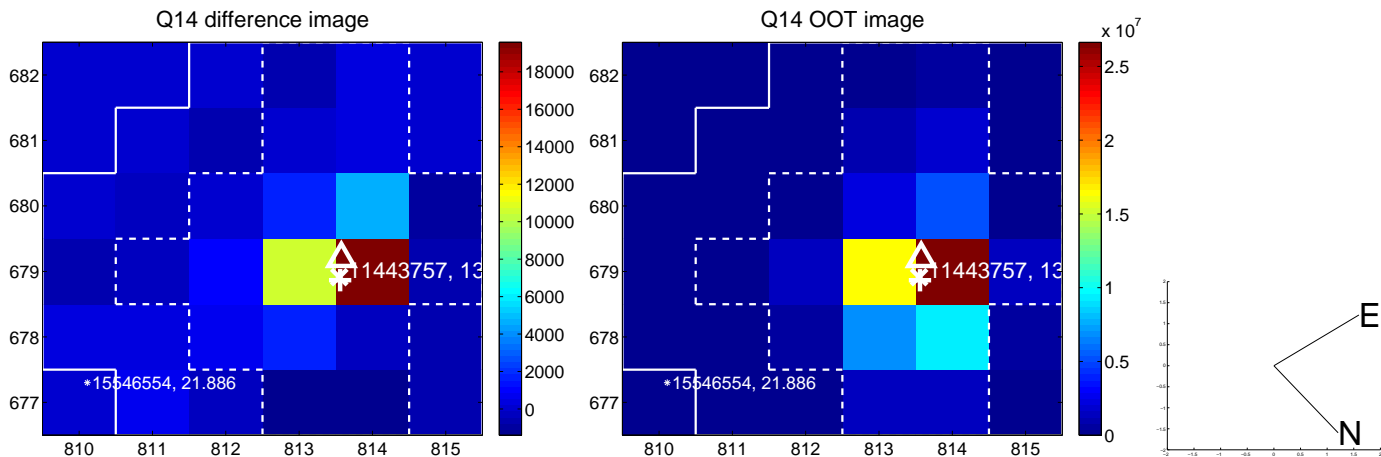
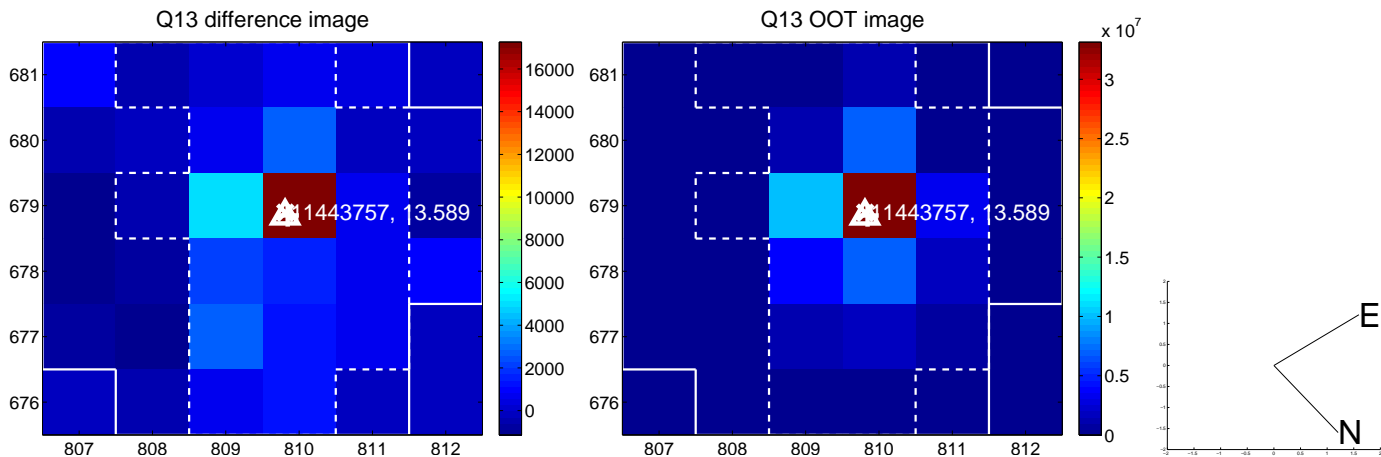
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



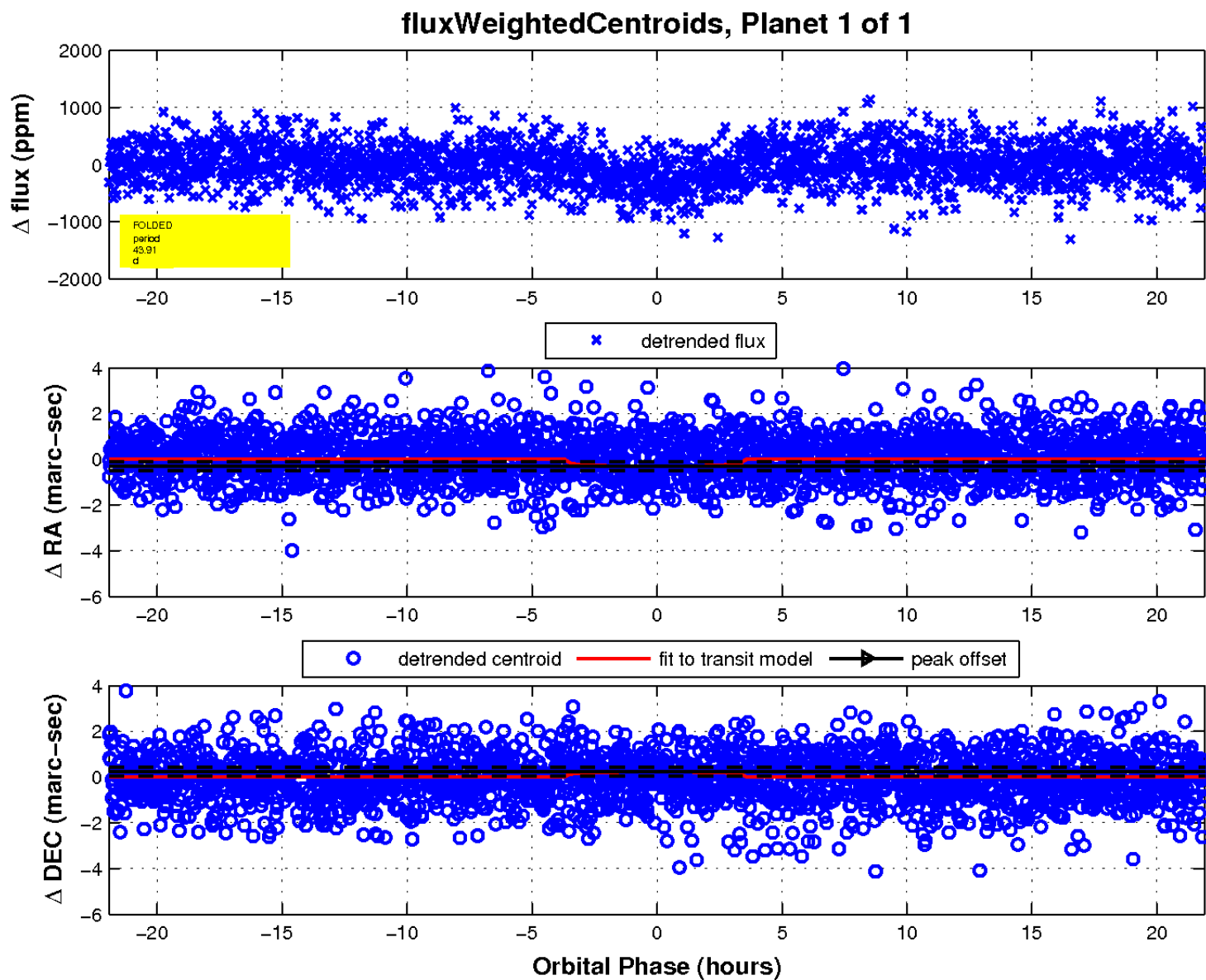
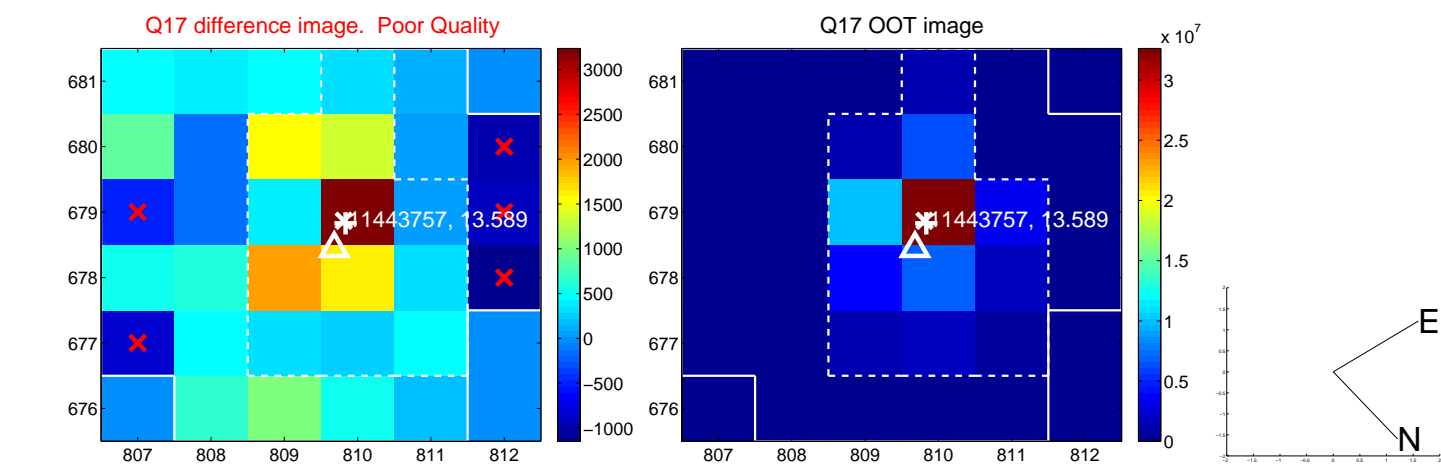
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UKIRT Image

Declination

