

KIC 007354213

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})
007354213-01	OBS	No	0.735969	132.229744	77.2	1.500	8.1	-1.0	1.72	7048	1.54	19847.37

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007354213-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED—HALO_GHOST

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

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

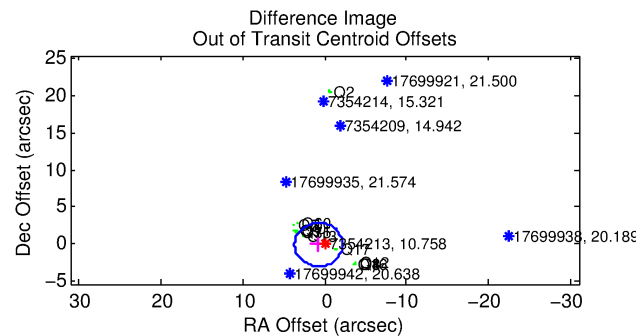
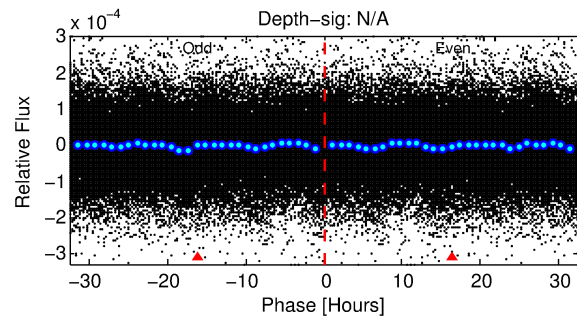
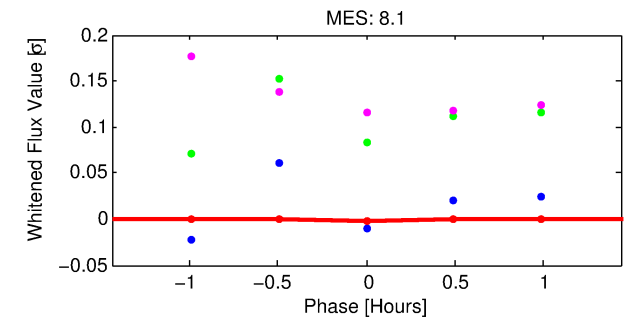
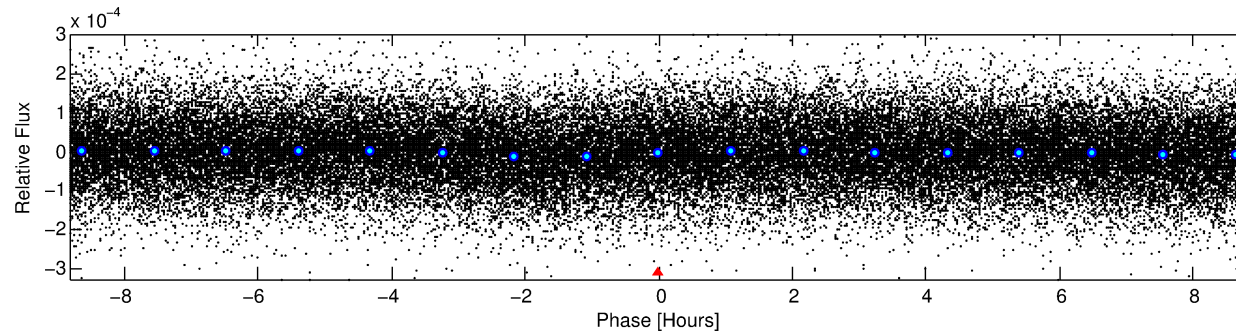
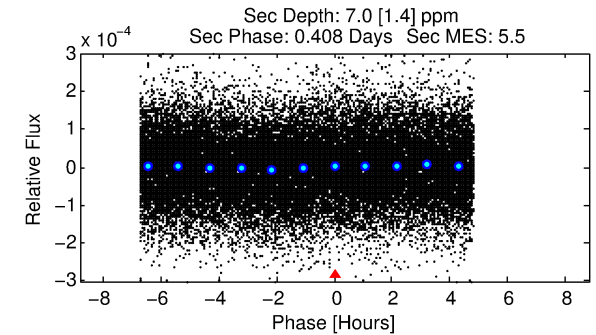
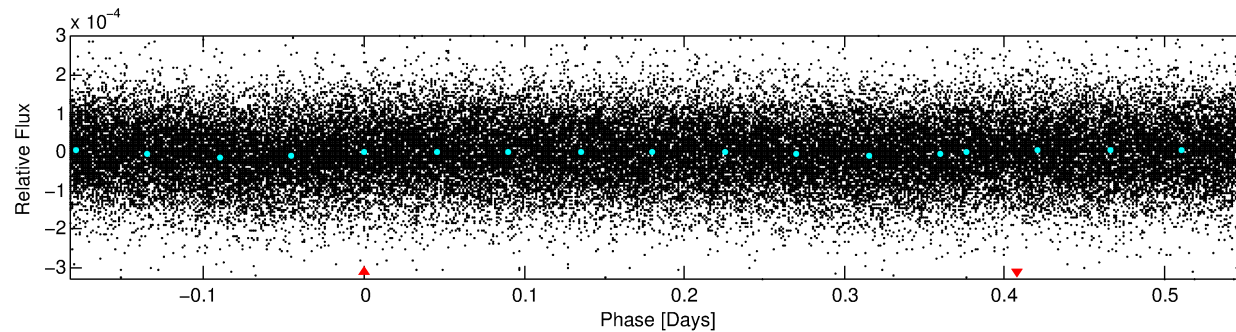
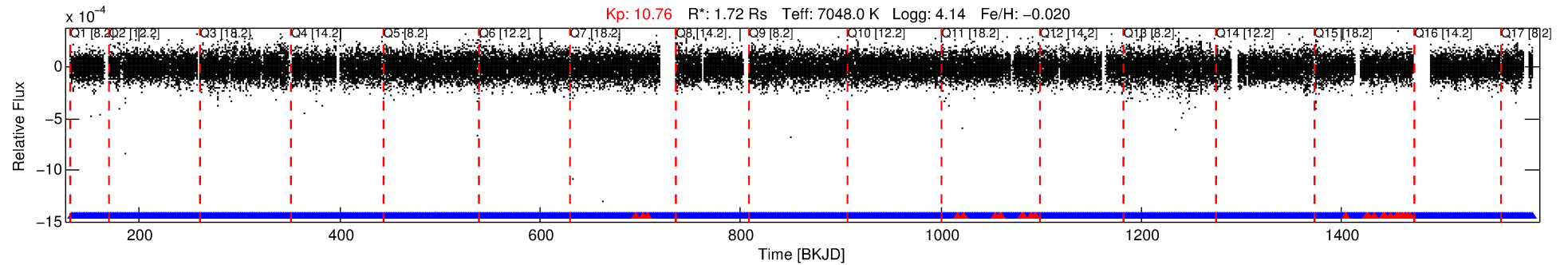
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007354213-01

No Significant Match Found

DV One-Page Summary

KIC: 7354213 Candidate: 1 of 1 Period: 0.736 d



TPS TCE Results:

Period = 0.73597 d
Epoch = 132.2297 BKJD

DV fit results are unavailable

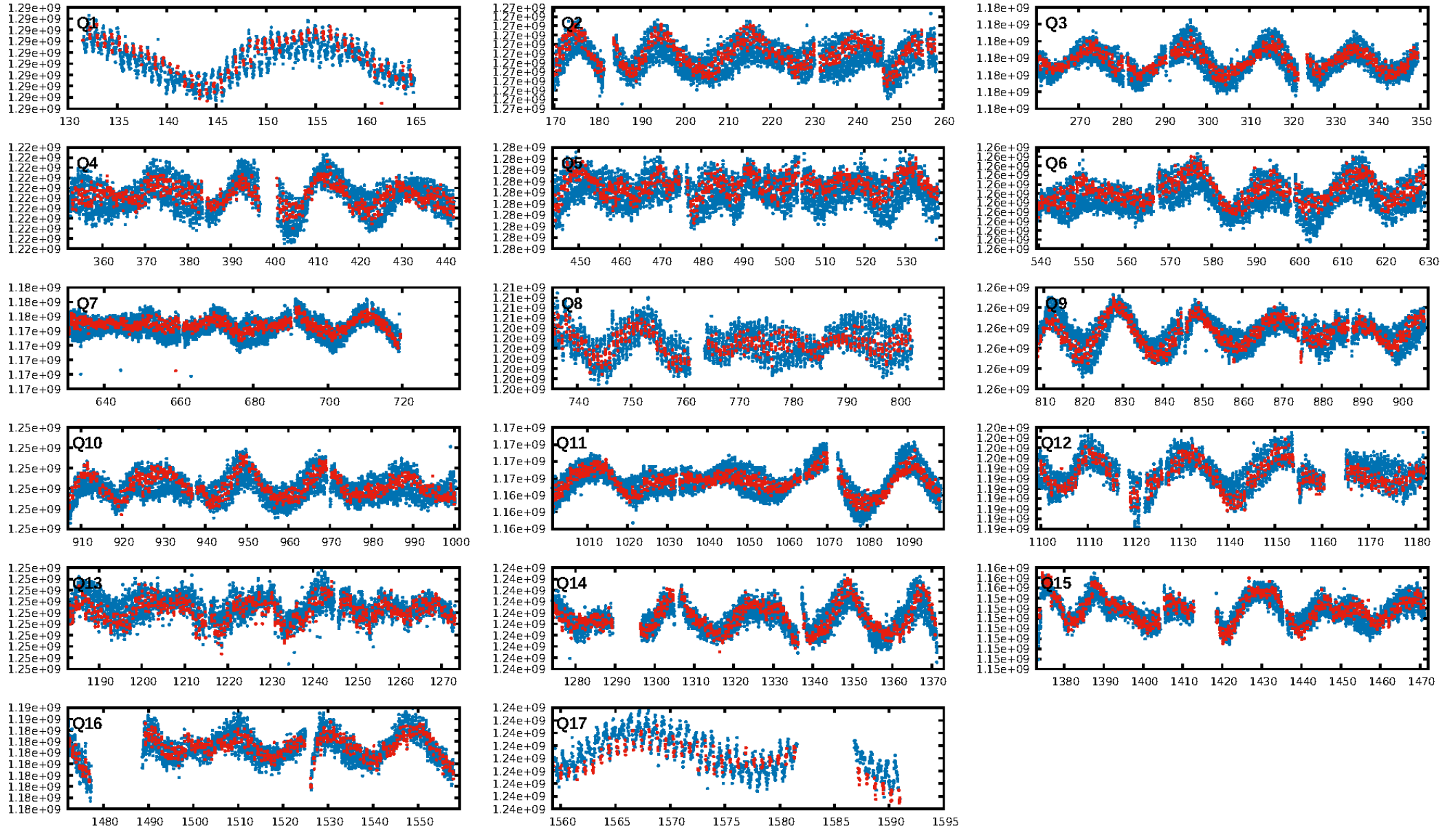
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.69e-32
RollingBand-fgt: 0.98 [1724/1754]
GhostDiagnostic-chr: 0.2047
Centroid-sig: 0.2%
Centroid-so: 0.667 arcsec [2.79σ]
OotOffset-rm: 0.763 arcsec [0.78σ]
KicOffset-rm: 0.749 arcsec [0.88σ]
OotOffset-st: 3/4/4/4 [15]
KicOffset-st: 3/4/4/4 [15]
DiffImageQuality-fgm: 0.73 [11/15]
DiffImageOverlap-fno: 1.00 [17/17]

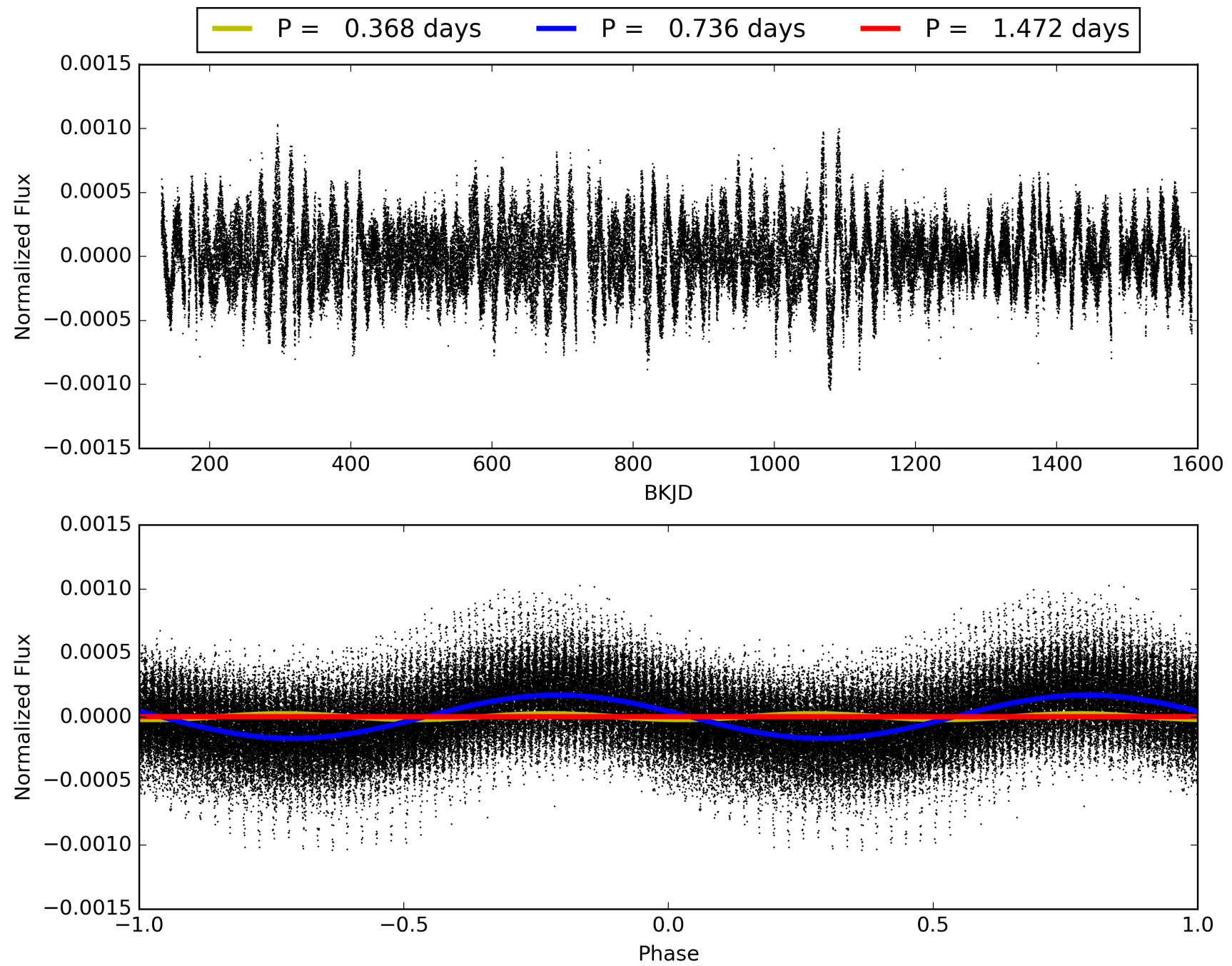
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 19:01:15 Z

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

TCE 007354213-01, PDC Light Curves

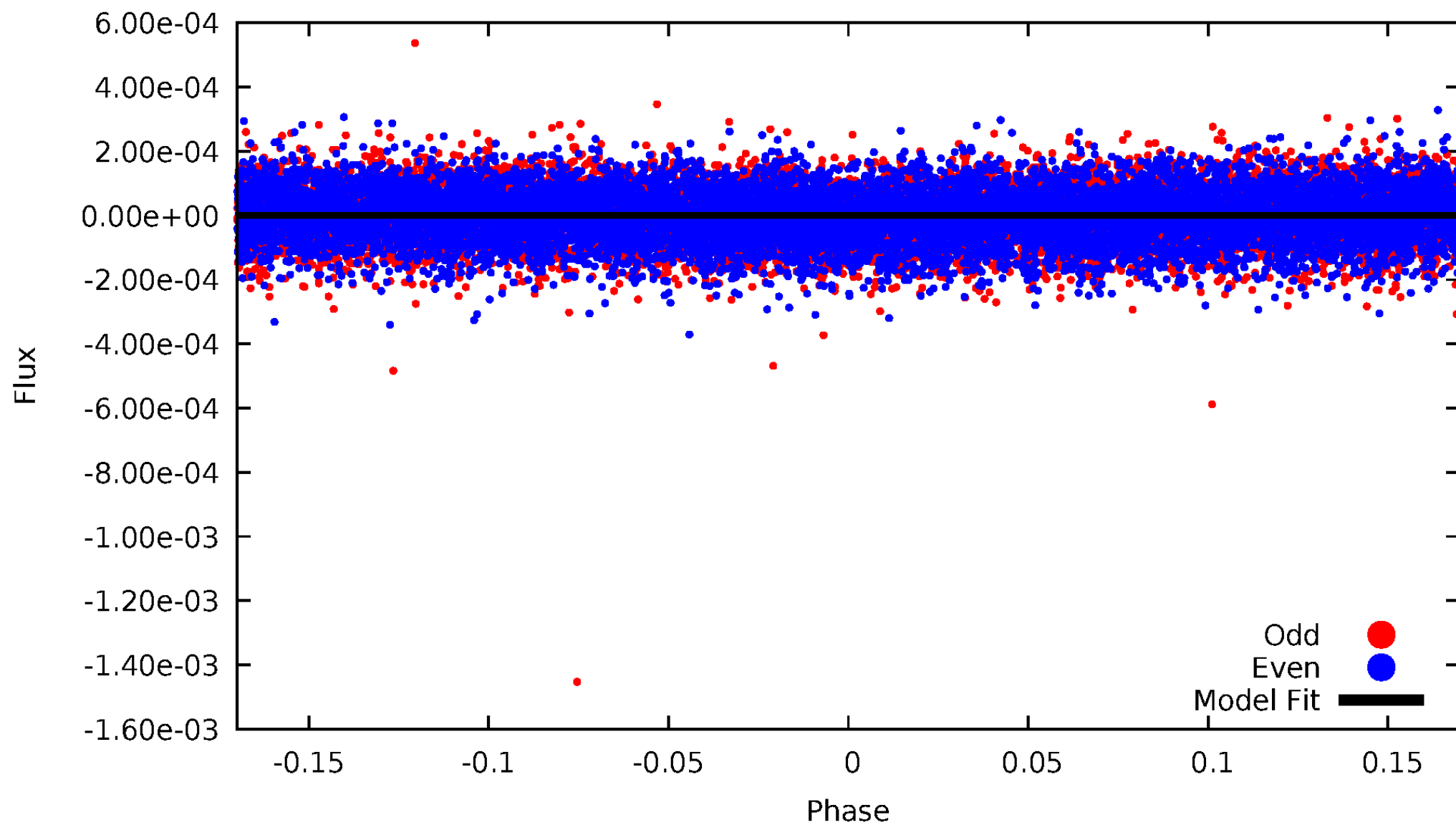


TCE 007354213-01



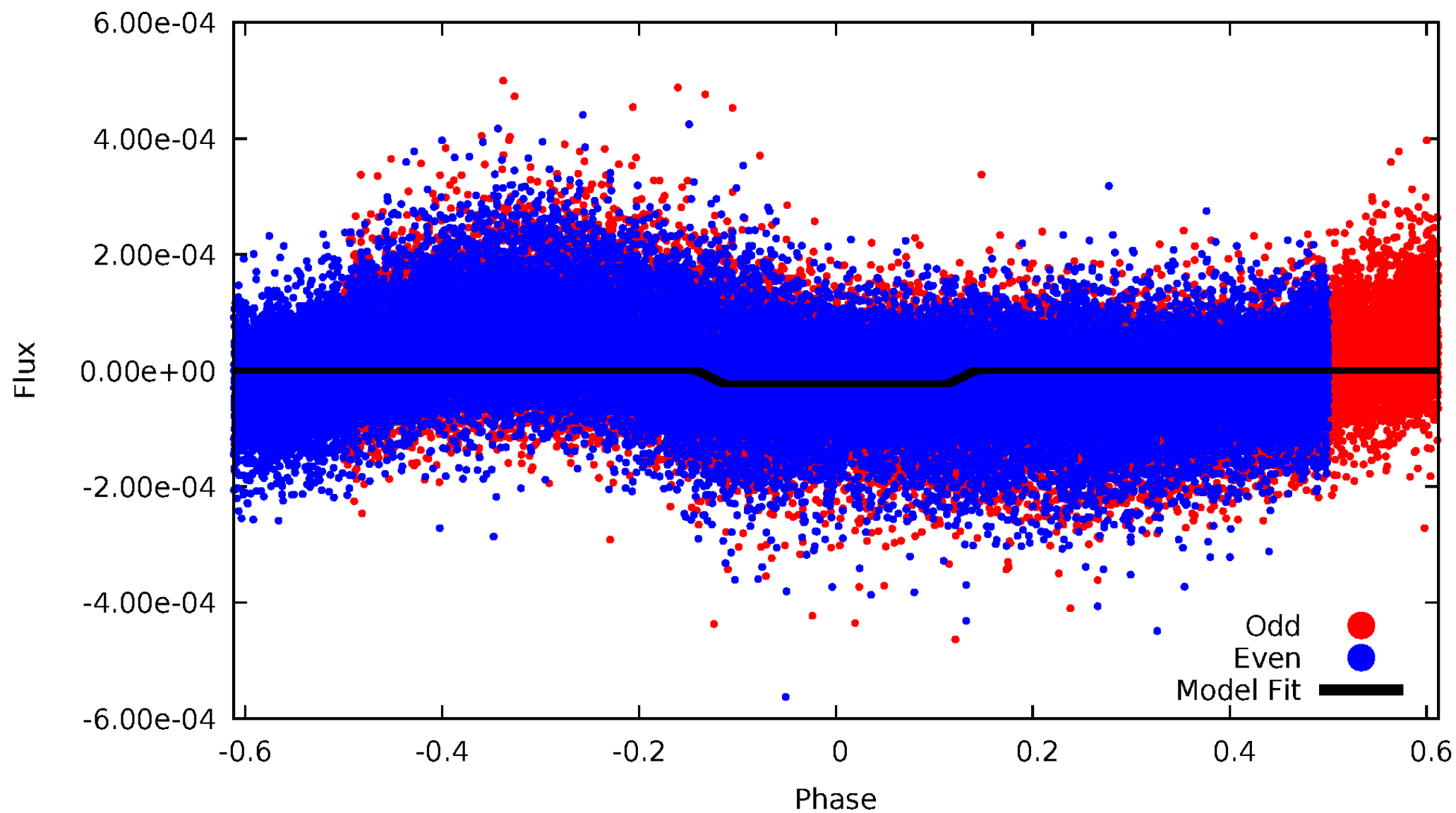
DV Odd/Even

TCE 007354213-01

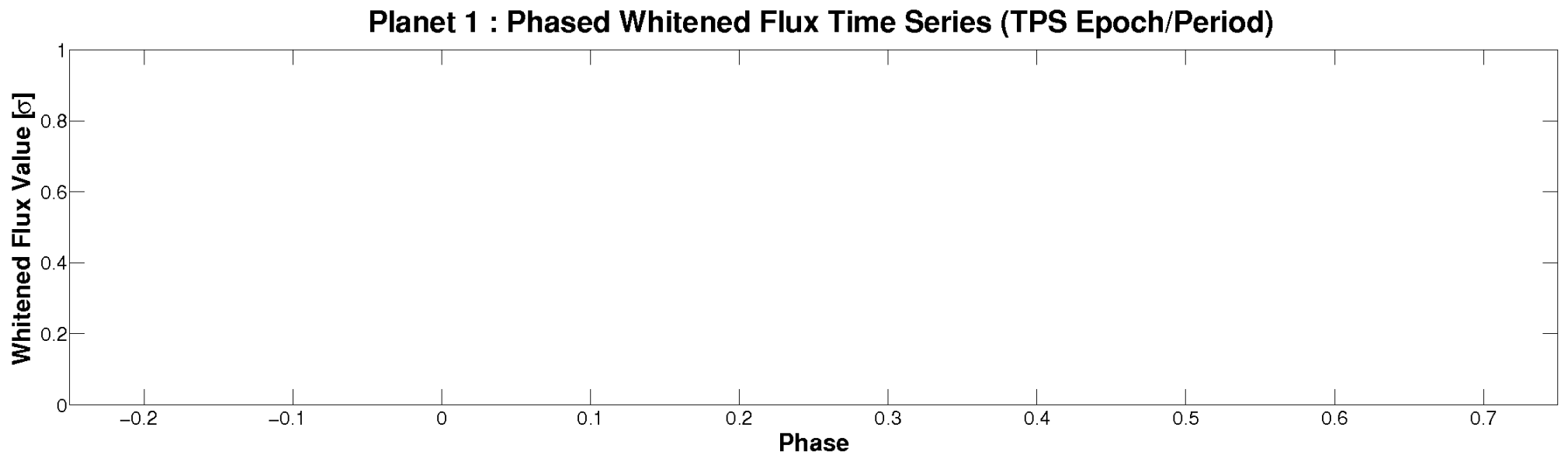
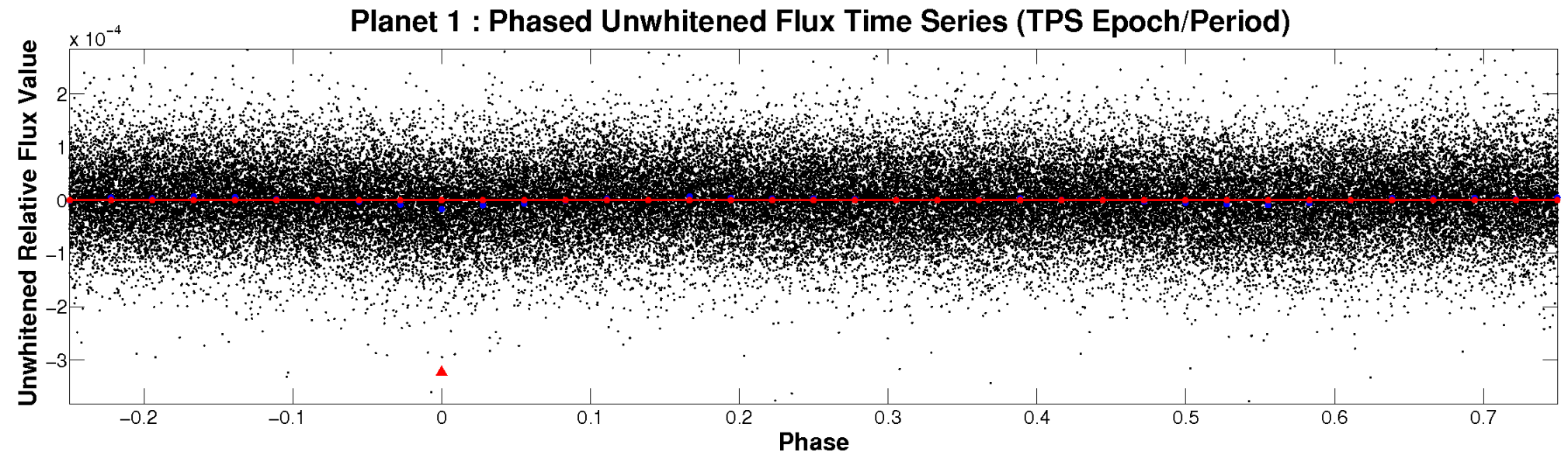


ALT Odd/Even

TCE 007354213-01

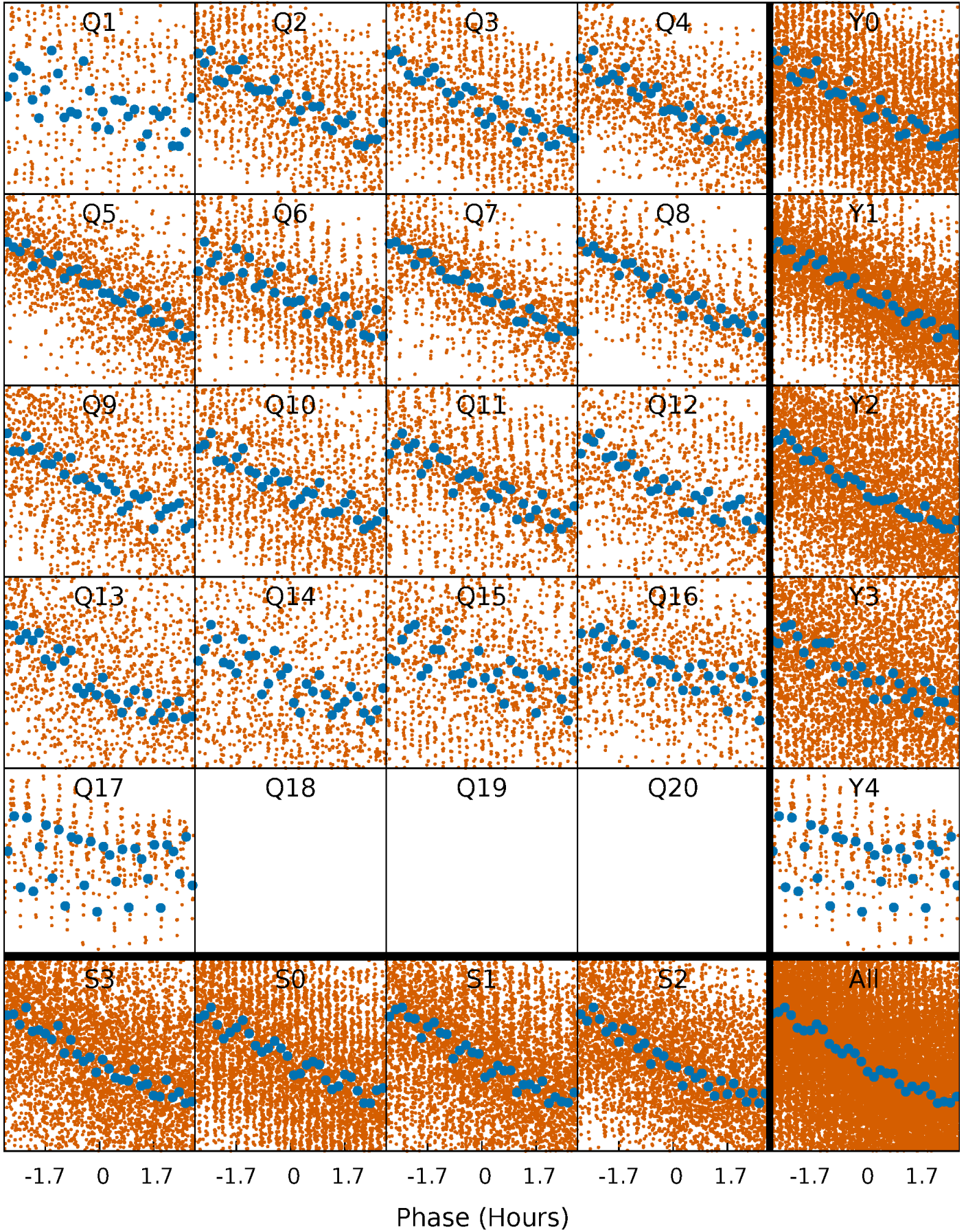


Non-Whitened Vs. Whitened Light Curve



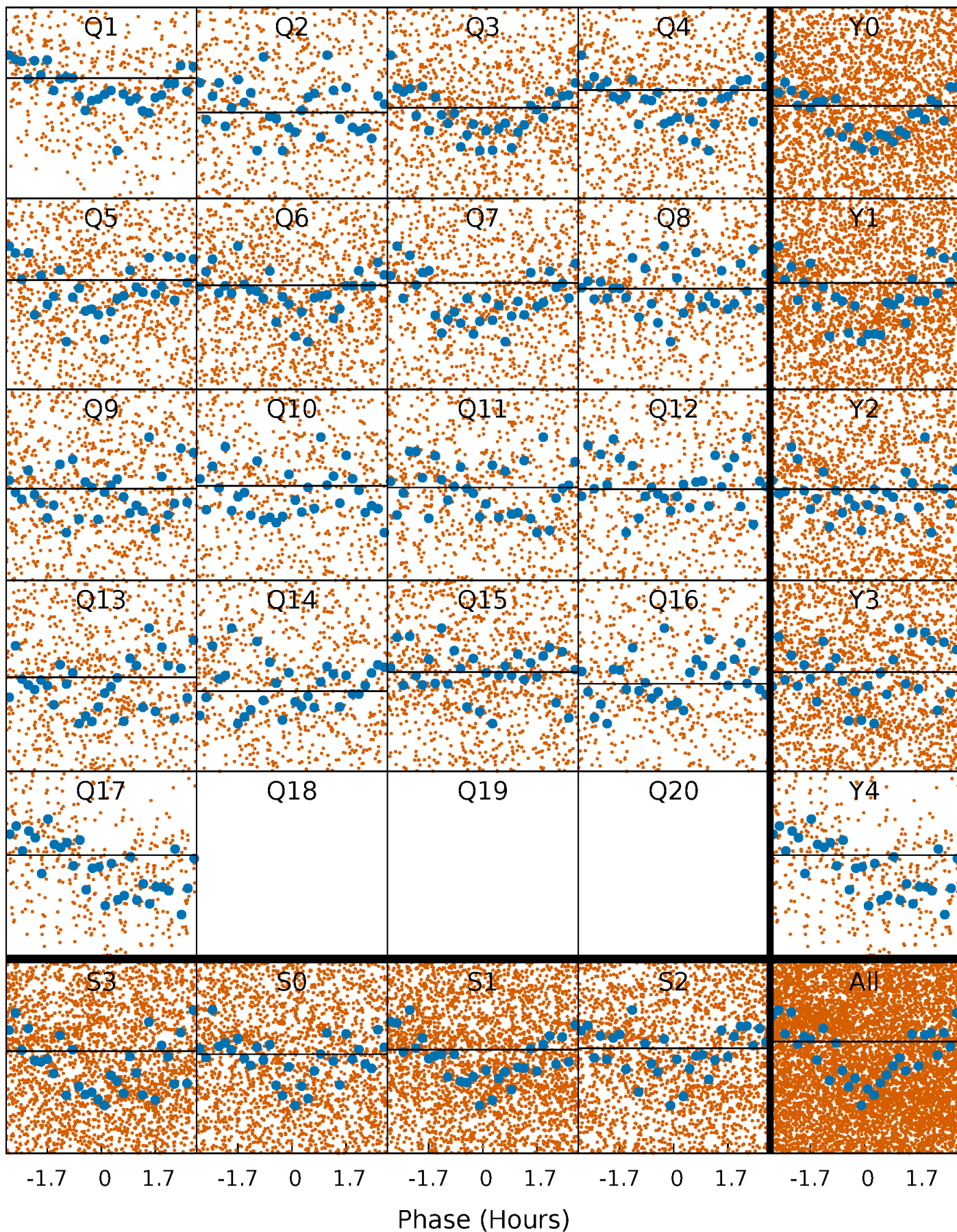
PDC Quarter-Phased Transit Curves

TCE 007354213-01 P= 0.735969 Days $T_0=132.229744$ (BKJD)



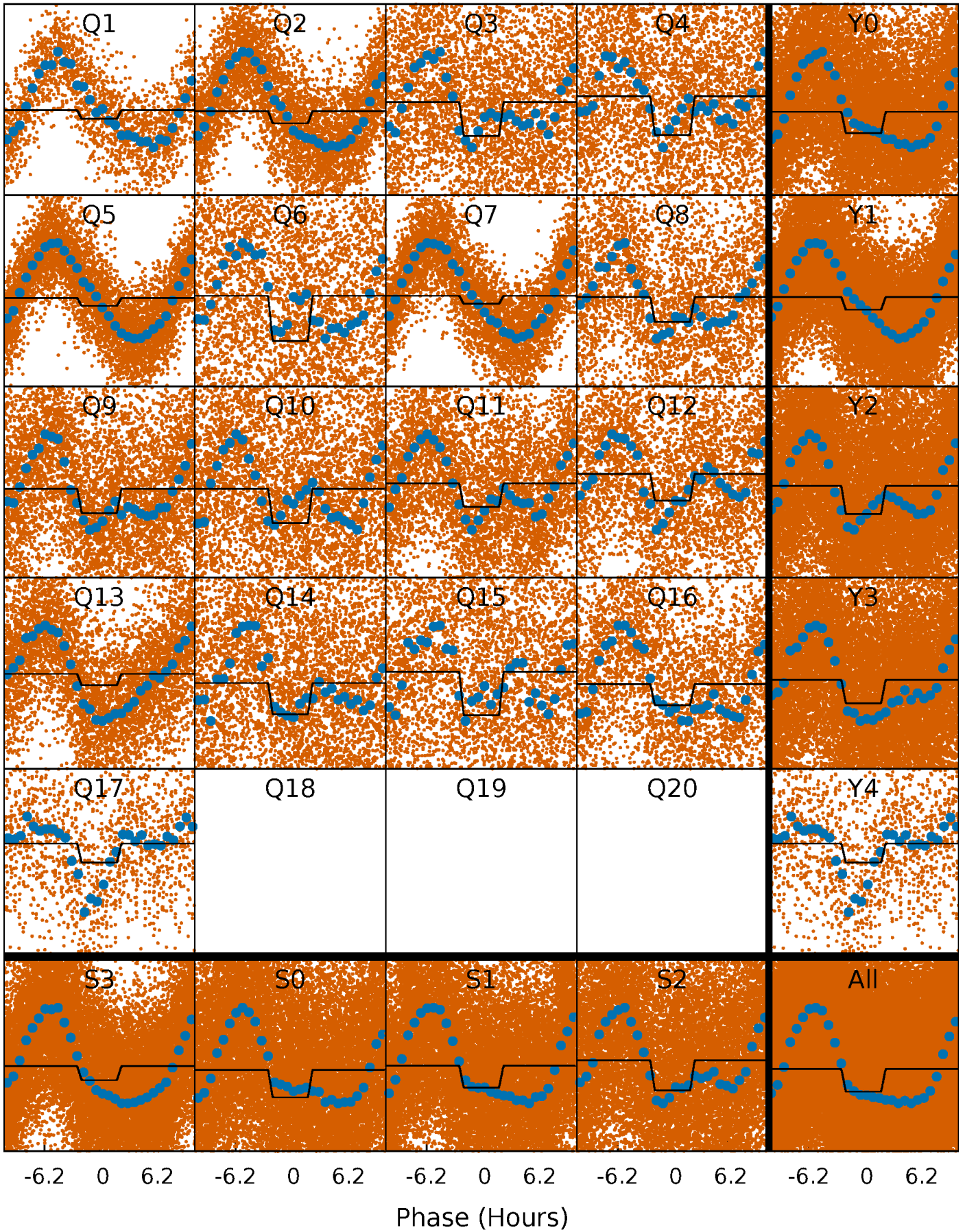
DV Quarter-Phased Transit Curves

TCE 007354213-01 P= 0.735969 Days $T_0=132.229744$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

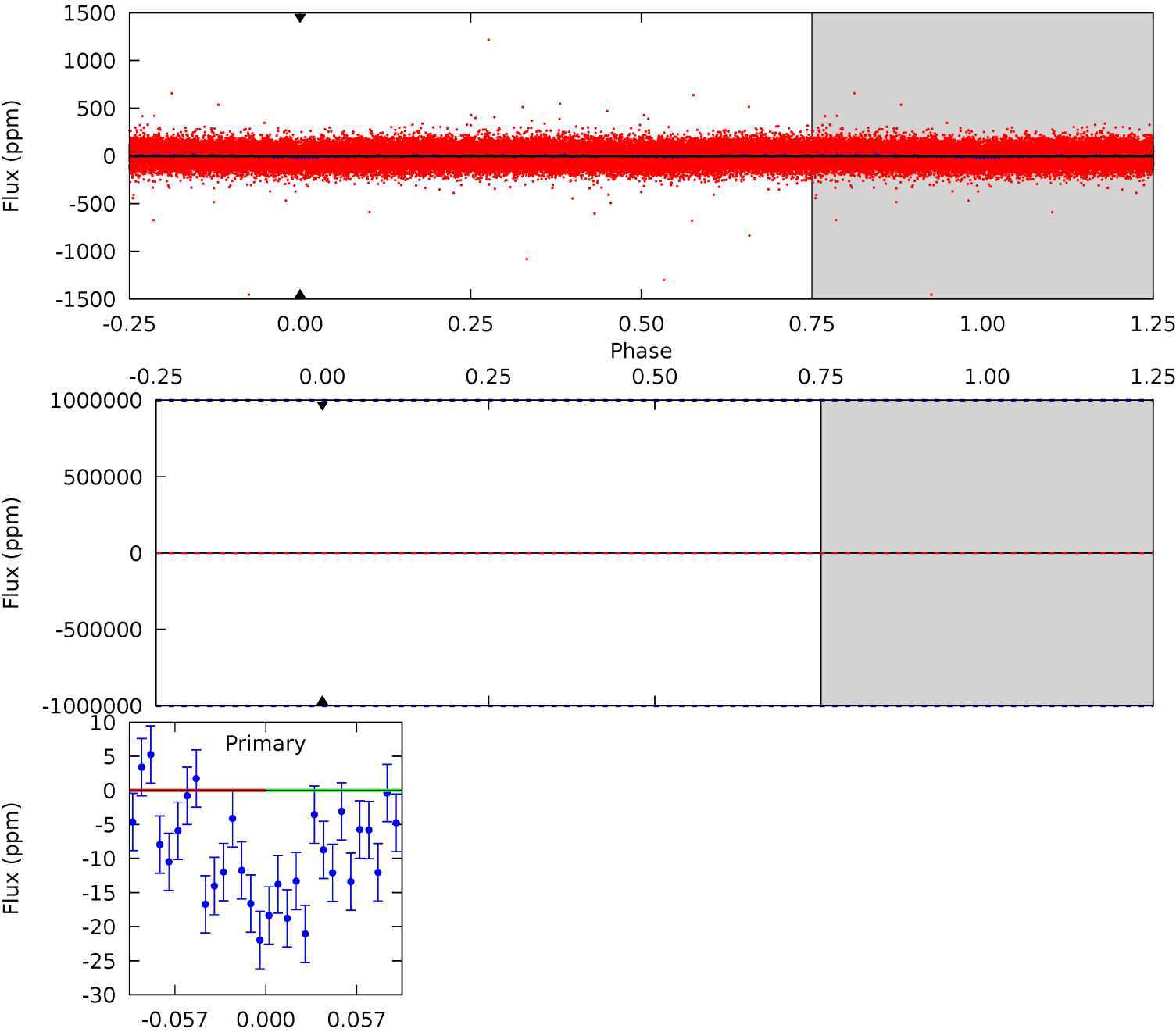
TCE 007354213-01 P= 0.735969 Days $T_0=132.305567$ (BKJD)



DV Model-Shift Uniqueness Test

007354213-01, P = 0.735969 Days, E = 131.493775 Days

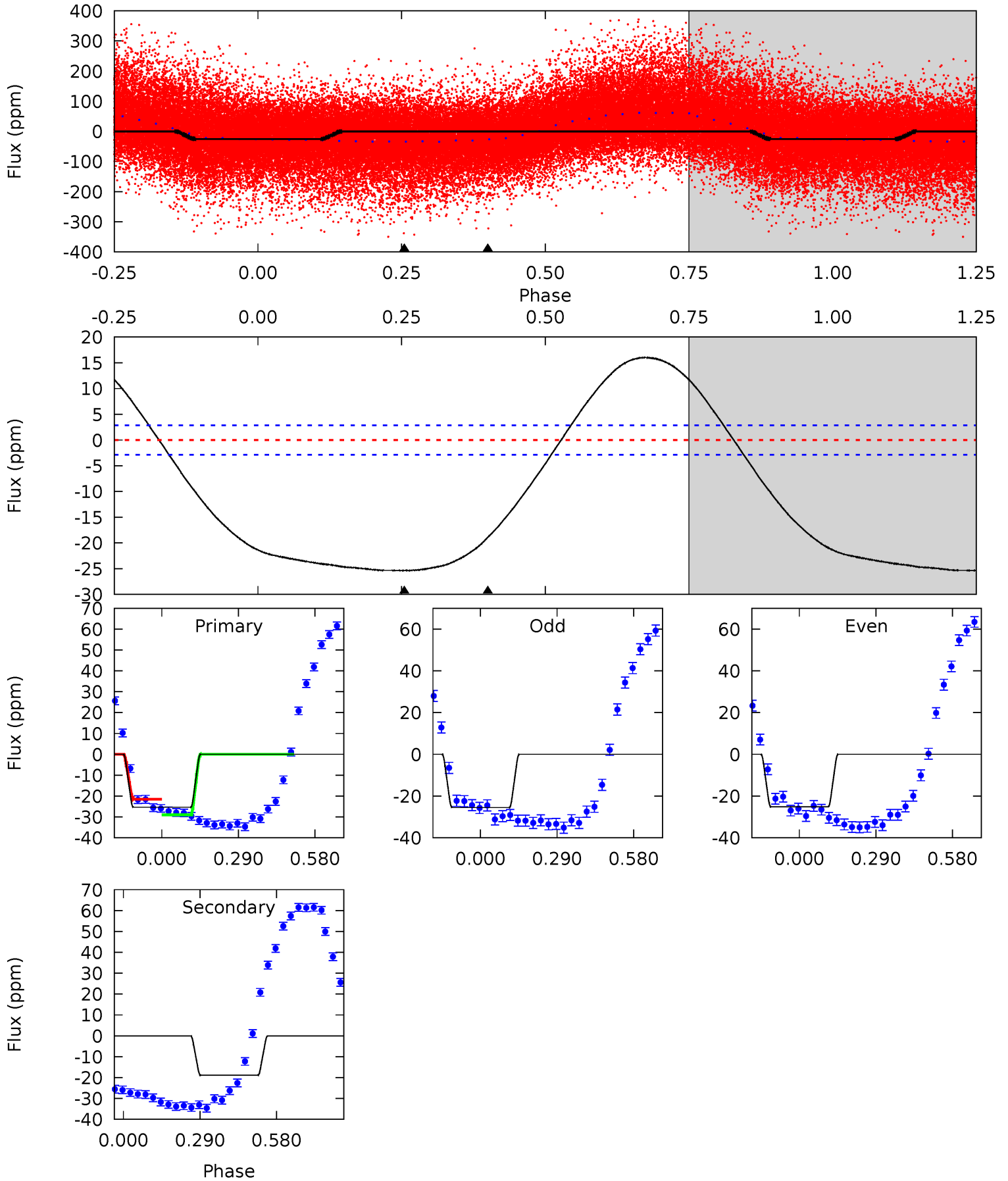
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007354213-01, P = 0.735969 Days, E = 130.833629 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.5	28.7	0	0	4.34	1.06	17.1	38.5	38.5	28.7	28.7	0.23	1.14	0.39	6.57



Stellar Parameters For KIC 007354213

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7048^{+74}_{-95}	$4.136^{+0.084}_{-0.126}$	$-0.020^{+0.150}_{-0.150}$	$1.724^{+0.322}_{-0.215}$	$1.484^{+0.113}_{-0.103}$	$0.408^{+0.170}_{-0.151}$
	+1%/-1%	+2%/-3%	+750%/-750%	+19%/-12%	+8%/-7%	+42%/-37%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 007354213-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$13.87^{+14.14}_{-9.45}$	4236^{+193}_{-155}	6233^{+33871}_{-34319}	$2.873^{+204.438}_{-128.812}$
Alt.	-19 ± 1	$12.75^{+14.25}_{-8.84}$	4238^{+201}_{-149}	-3733^{+691}_{-160}	$0.021^{+0.207}_{-0.016}$

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

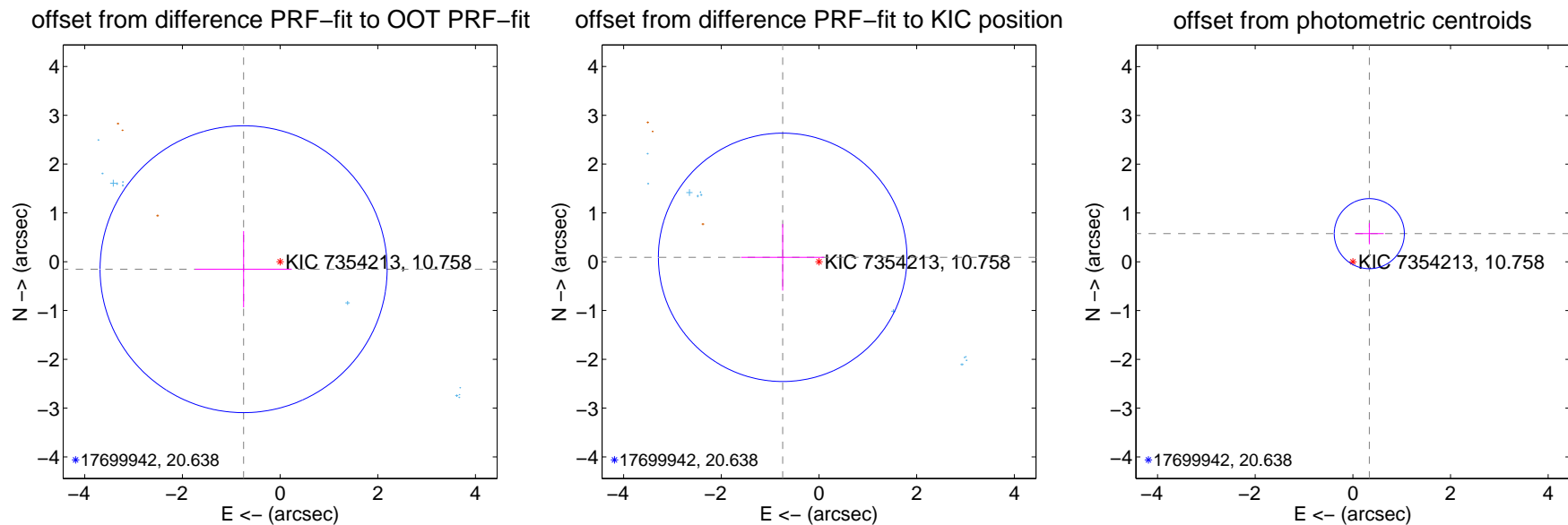
DV Centroid Data

Supplemental centroid analysis for 007354213-01. **Kepler magnitude: 10.76.** Transit SNR -1.00

There are 11 quarters with good PRF difference image offsets

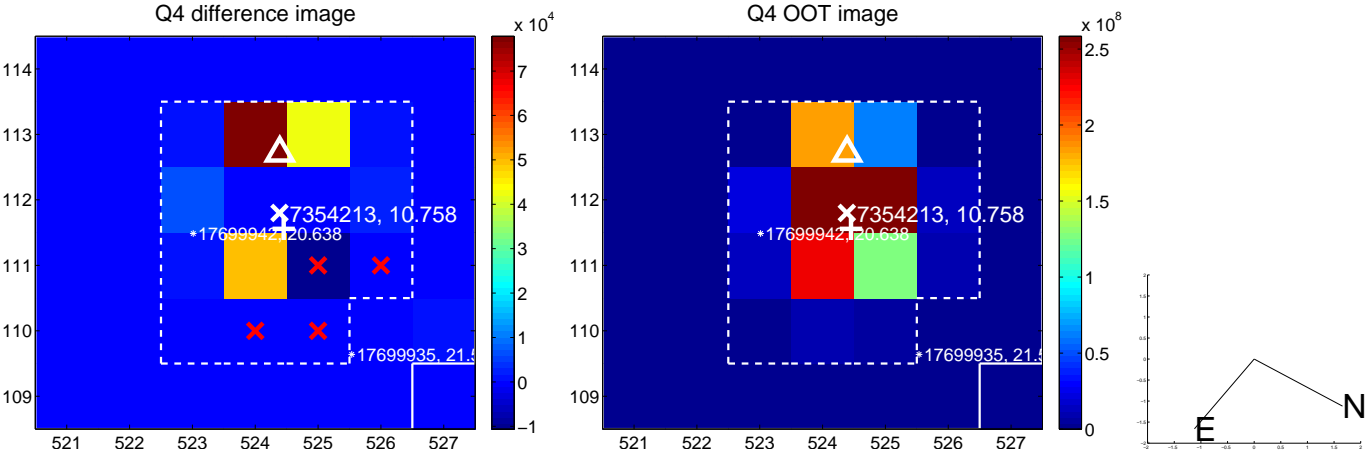
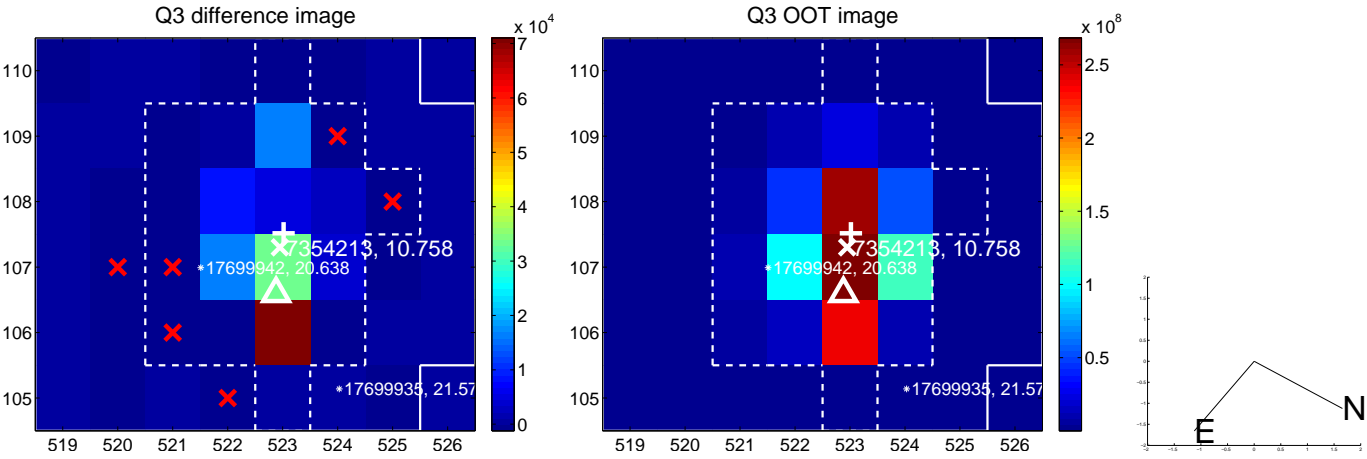
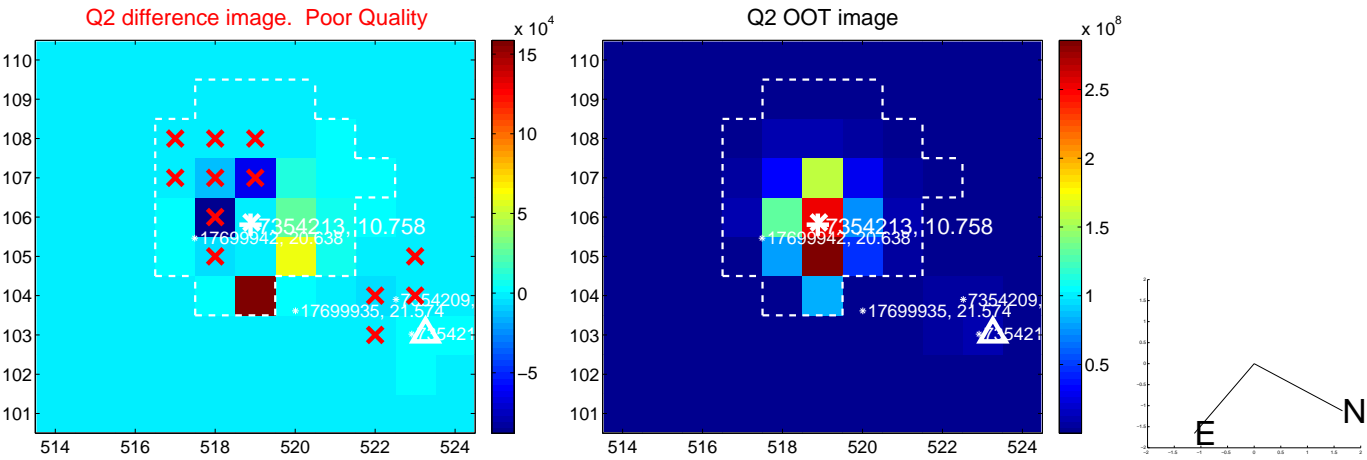
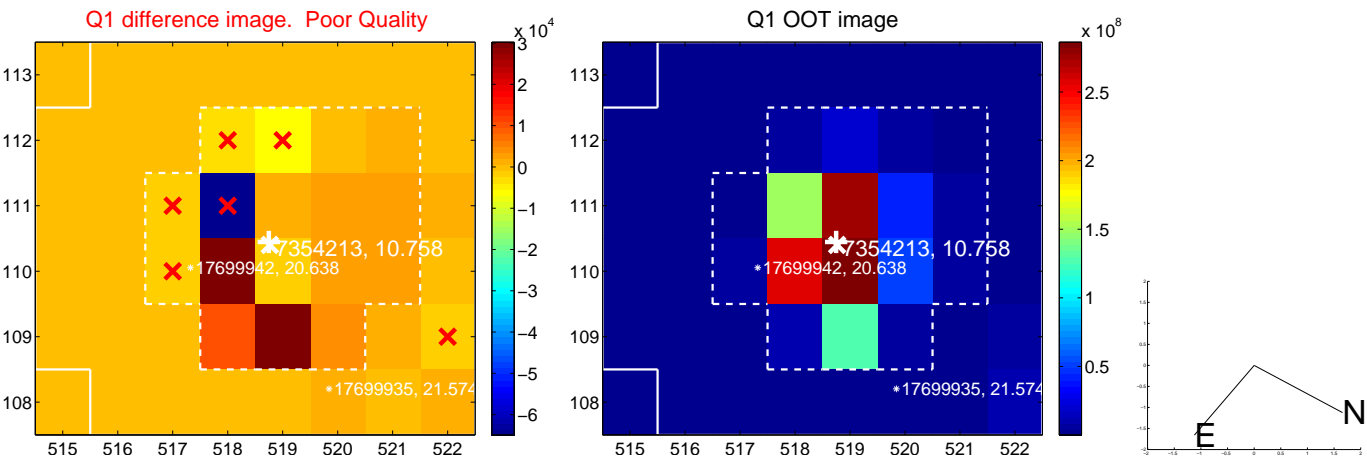
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.763 ± 0.980	0.78	0.748 ± 0.987	-0.154 ± 0.782
PRF-fit source offset from KIC position	0.749 ± 0.848	0.88	0.744 ± 0.850	0.089 ± 0.681
photometric centroid source offset	0.67 ± 0.24	2.79	-0.34 ± 0.29	0.58 ± 0.22

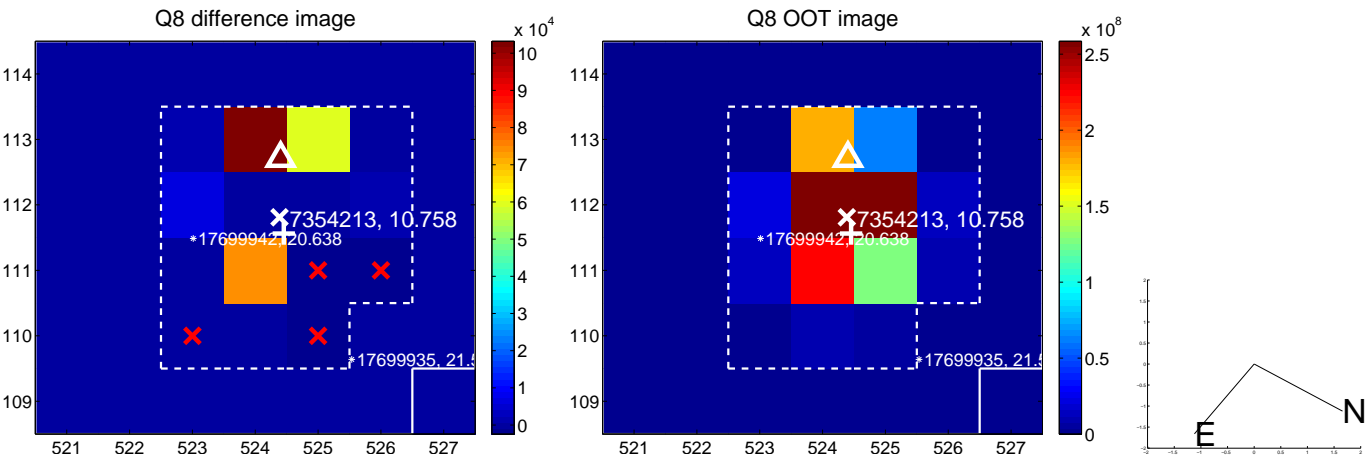
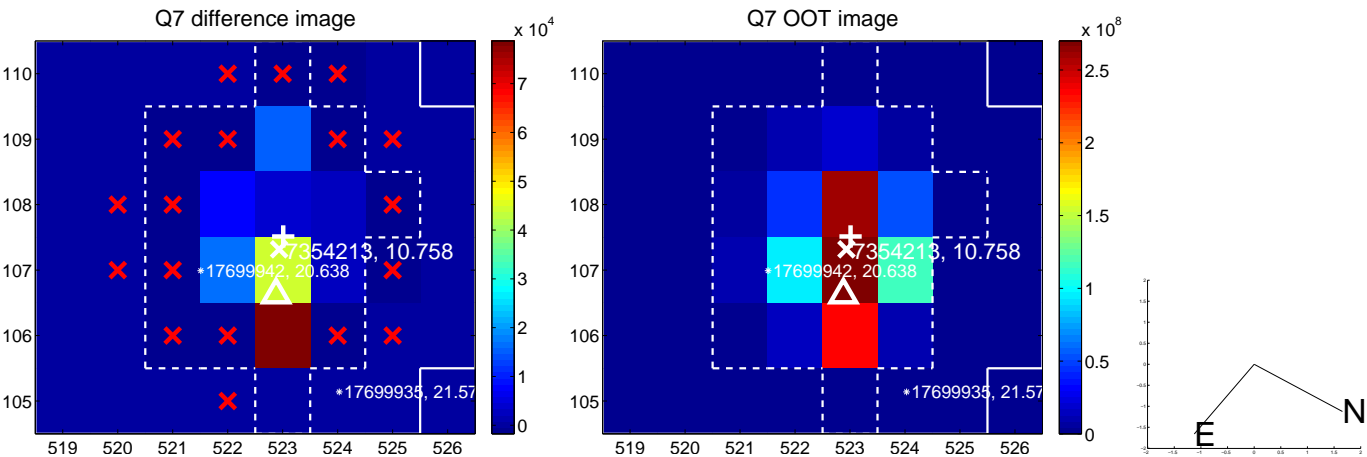
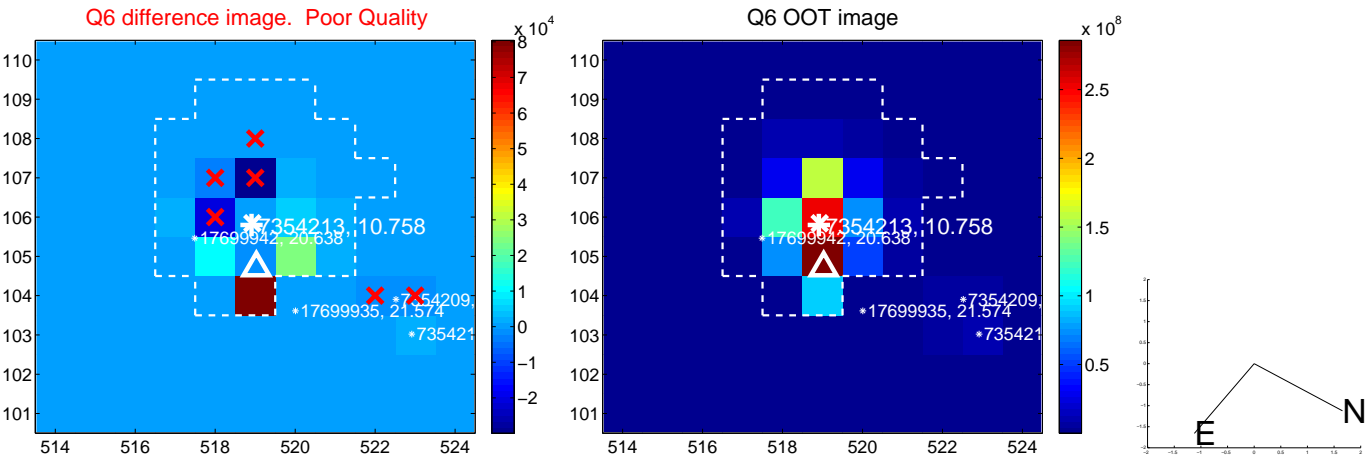
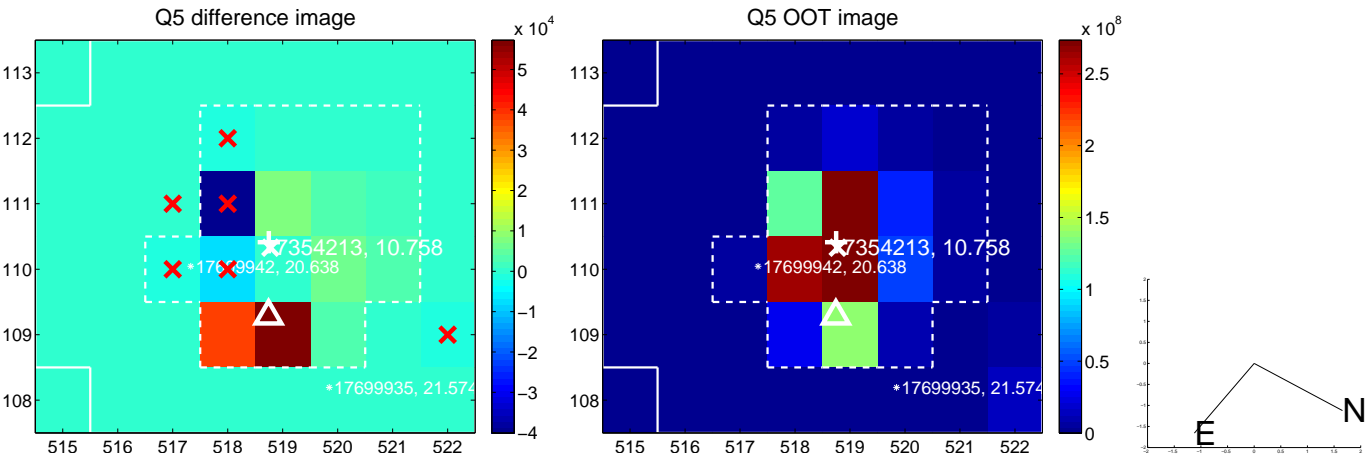


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

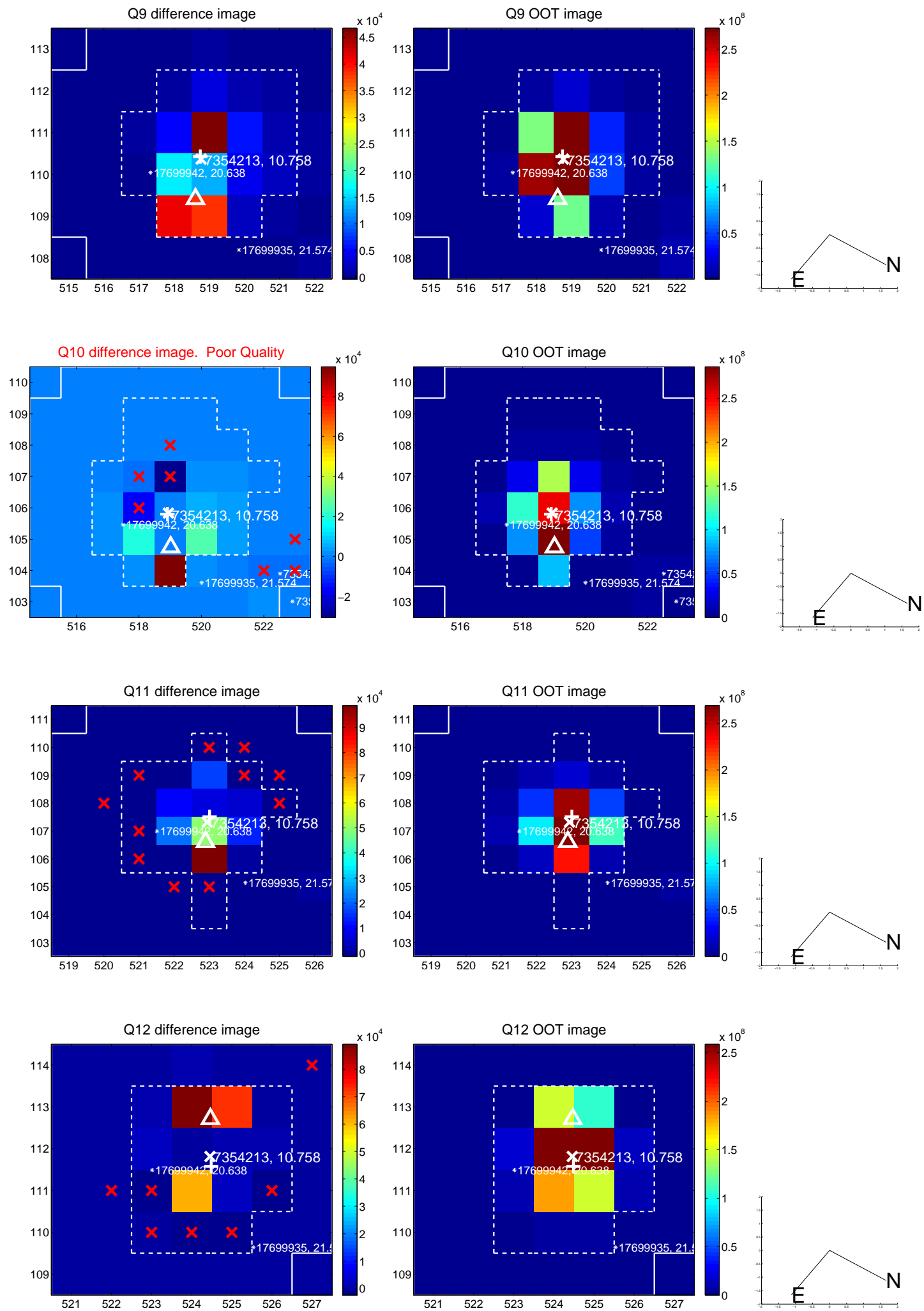
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



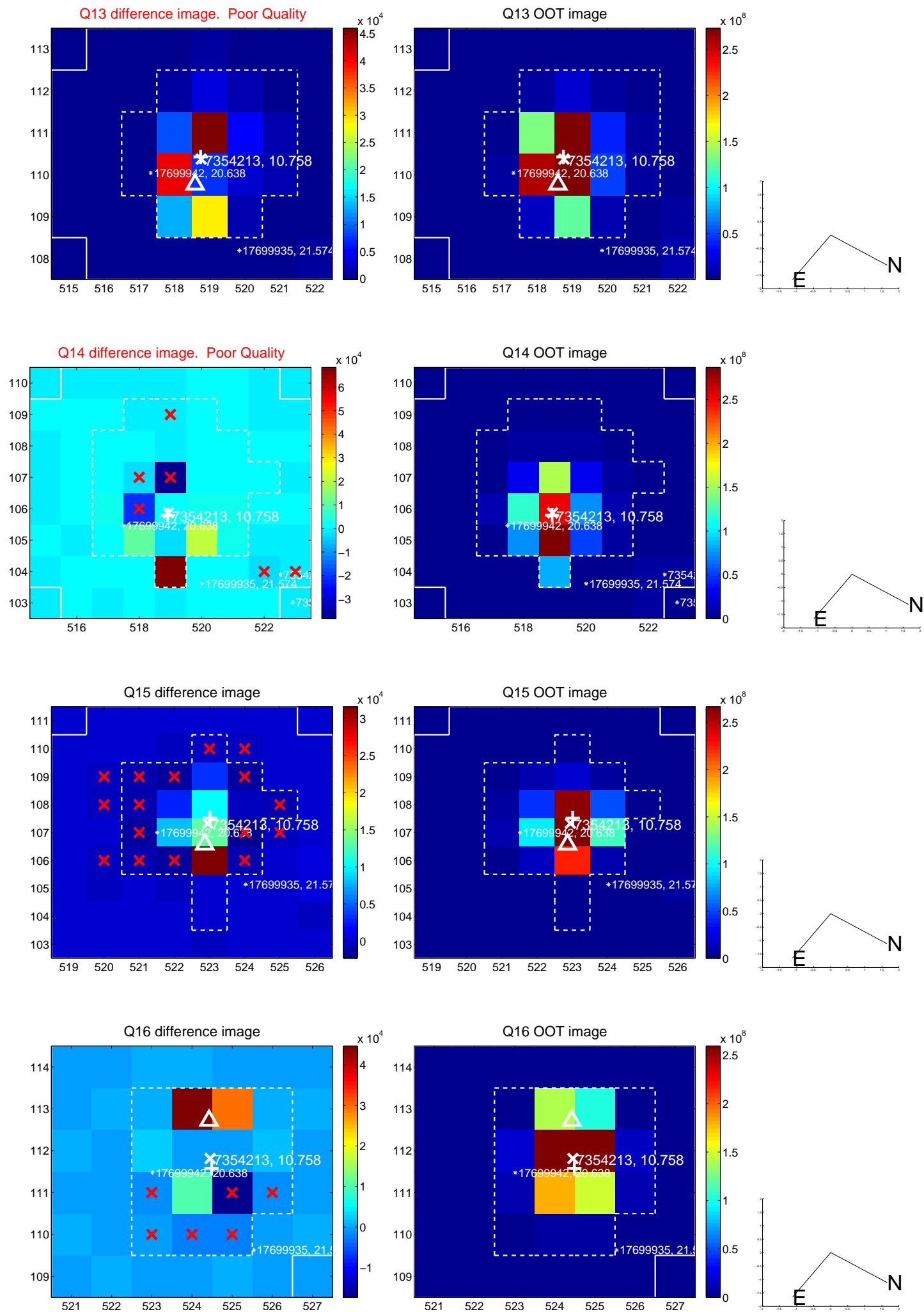
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



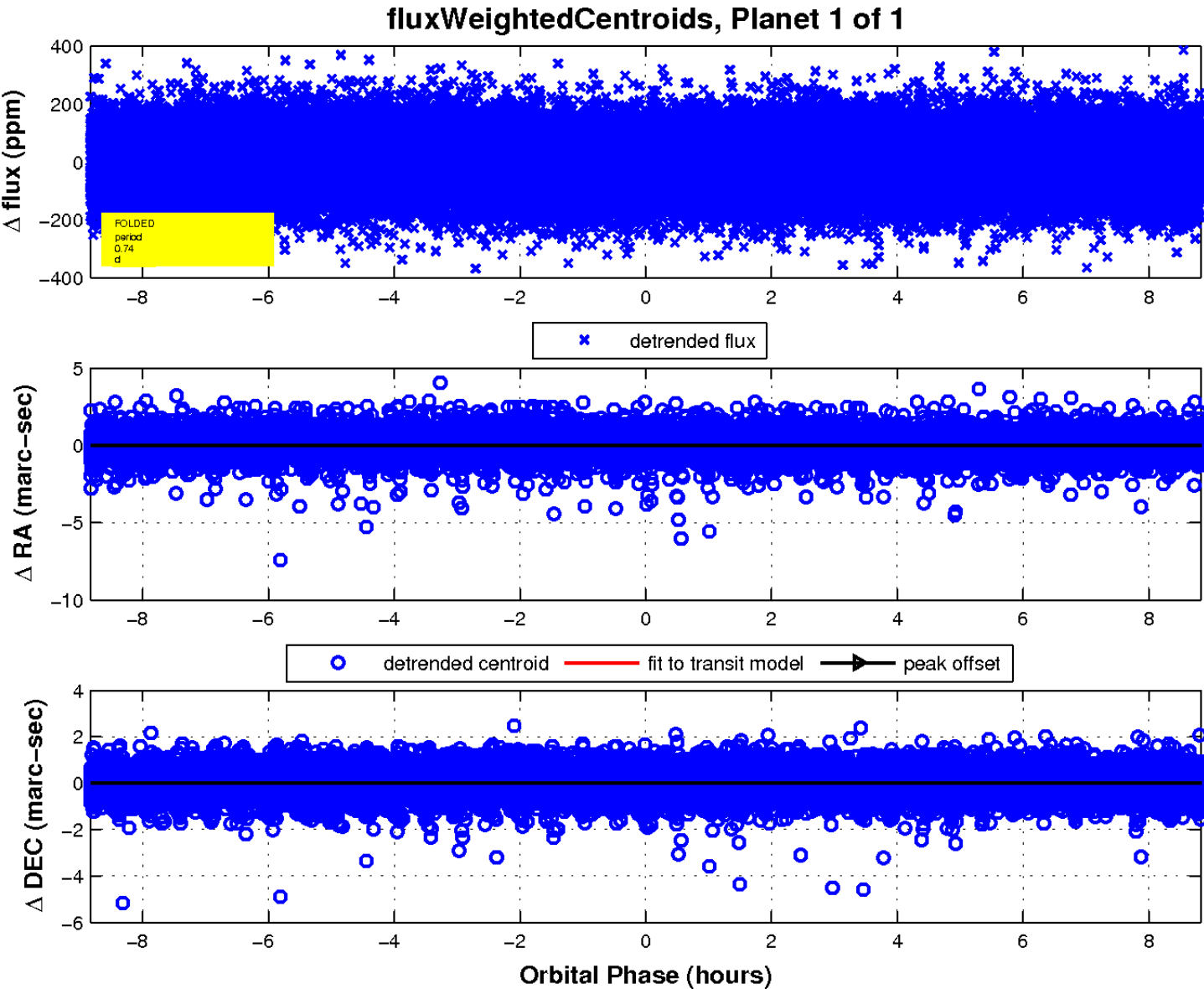
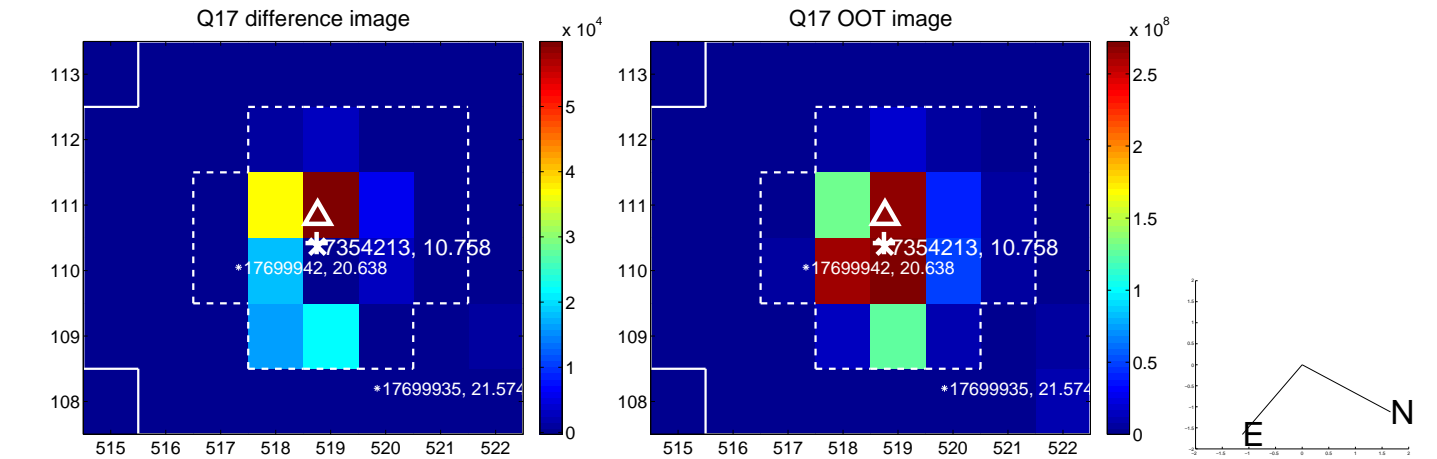
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

