

KIC 007365528

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})
007365528-01	OBS	No	0.641455	131.706419	51.6	5.028	8.7	6.8	1.05	6161	0.77	6150.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007365528-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

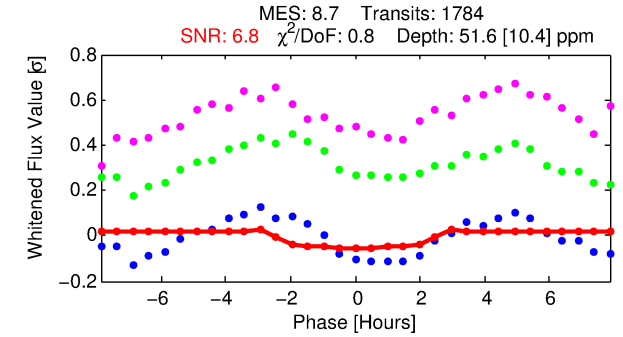
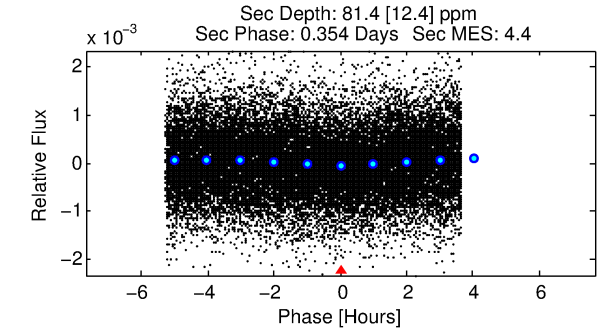
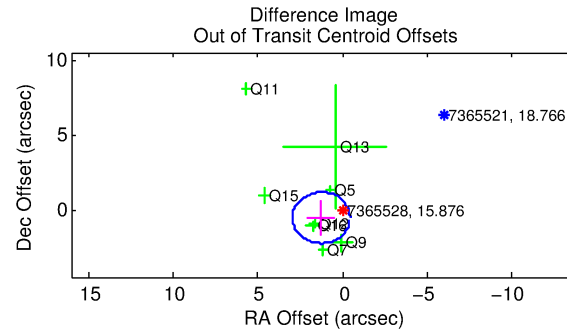
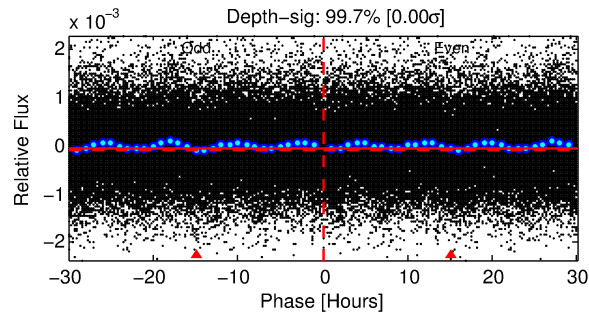
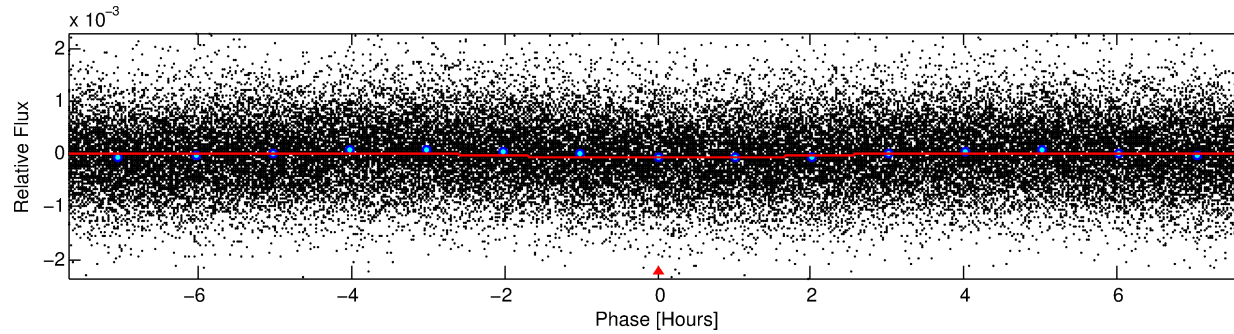
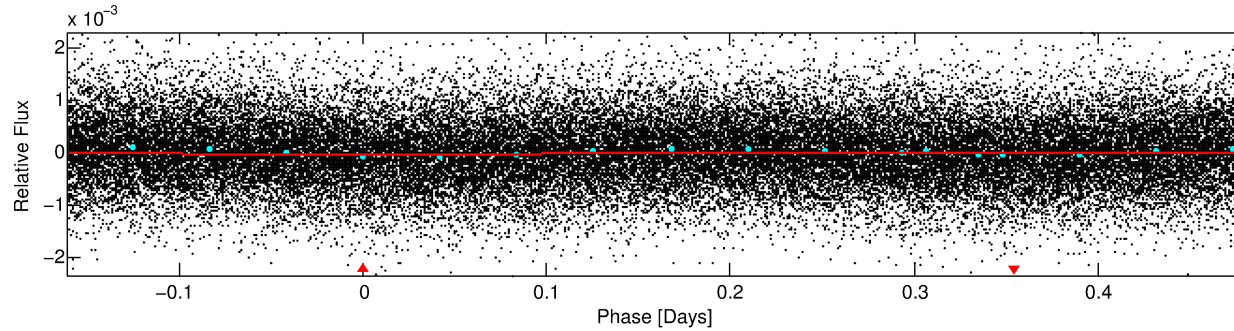
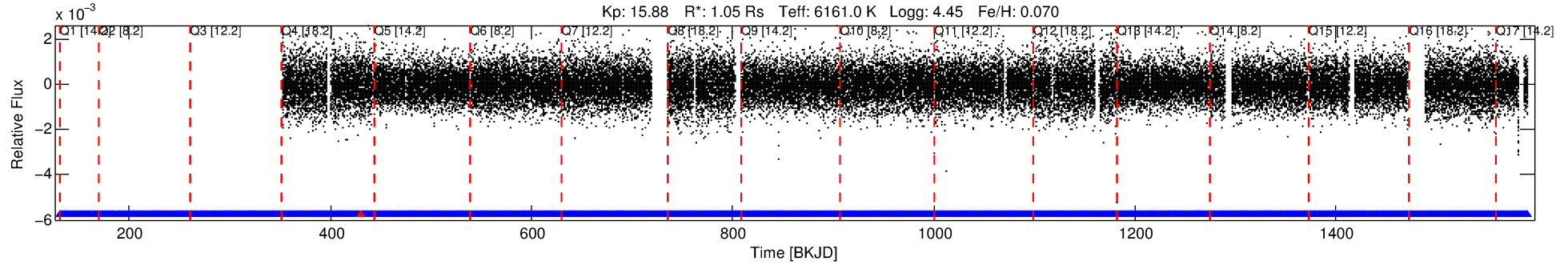
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007365528-01

No Significant Match Found

DV One-Page Summary

KIC: 7365528 Candidate: 1 of 1 Period: 0.641 d



DV Fit Results:

Period = 0.64145 [0.00001] d
Epoch = 131.7064 [0.0061] BKJD
Rp/R* = 0.0067 [0.0109]
a/R* = 1.14 [2.10]
b = 0.46 [13.81]
Seff = 6150.31 [2769.11]
Teq = 2258 [254] K
Rp = 0.77 [1.28] Re
a = 0.0153 [0.0044] AU
Ag = 17.46 [56.97] [0.29 σ]
Teffp = 7137 [5781] K [0.84 σ]

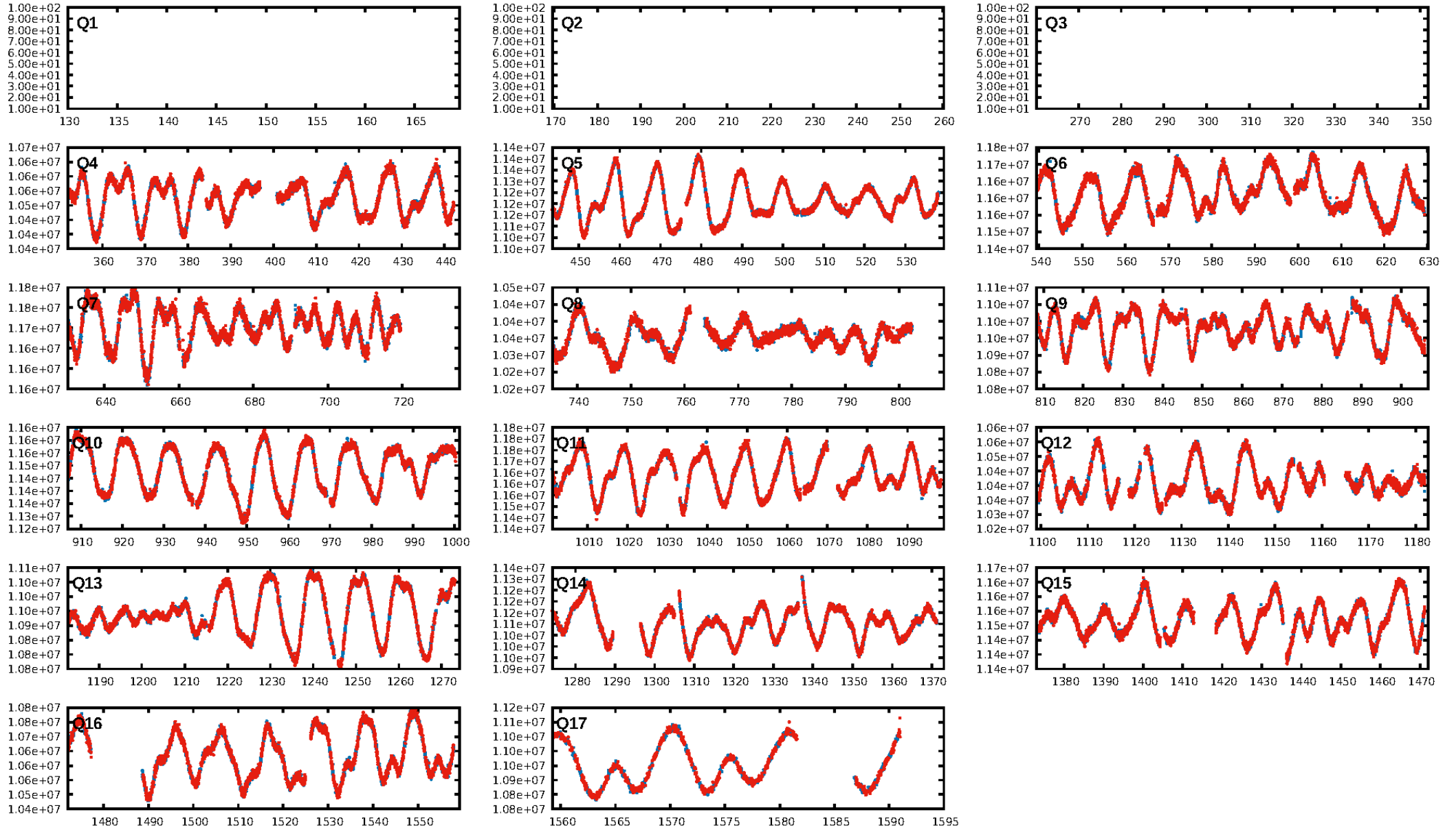
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1741/1742]
GhostDiagnostic-chr: 4.288
Centroid-sig: 34.1%
Centroid-so: 1.296 arcsec [0.93 σ]
OotOffset-rm: 1.379 arcsec [2.43 σ]
OotOffset-st: 0/3/2/3 [8]
KicOffset-rm: 1.430 arcsec [2.97 σ]
KicOffset-st: 0/3/2/3 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 1.00 [14/14]

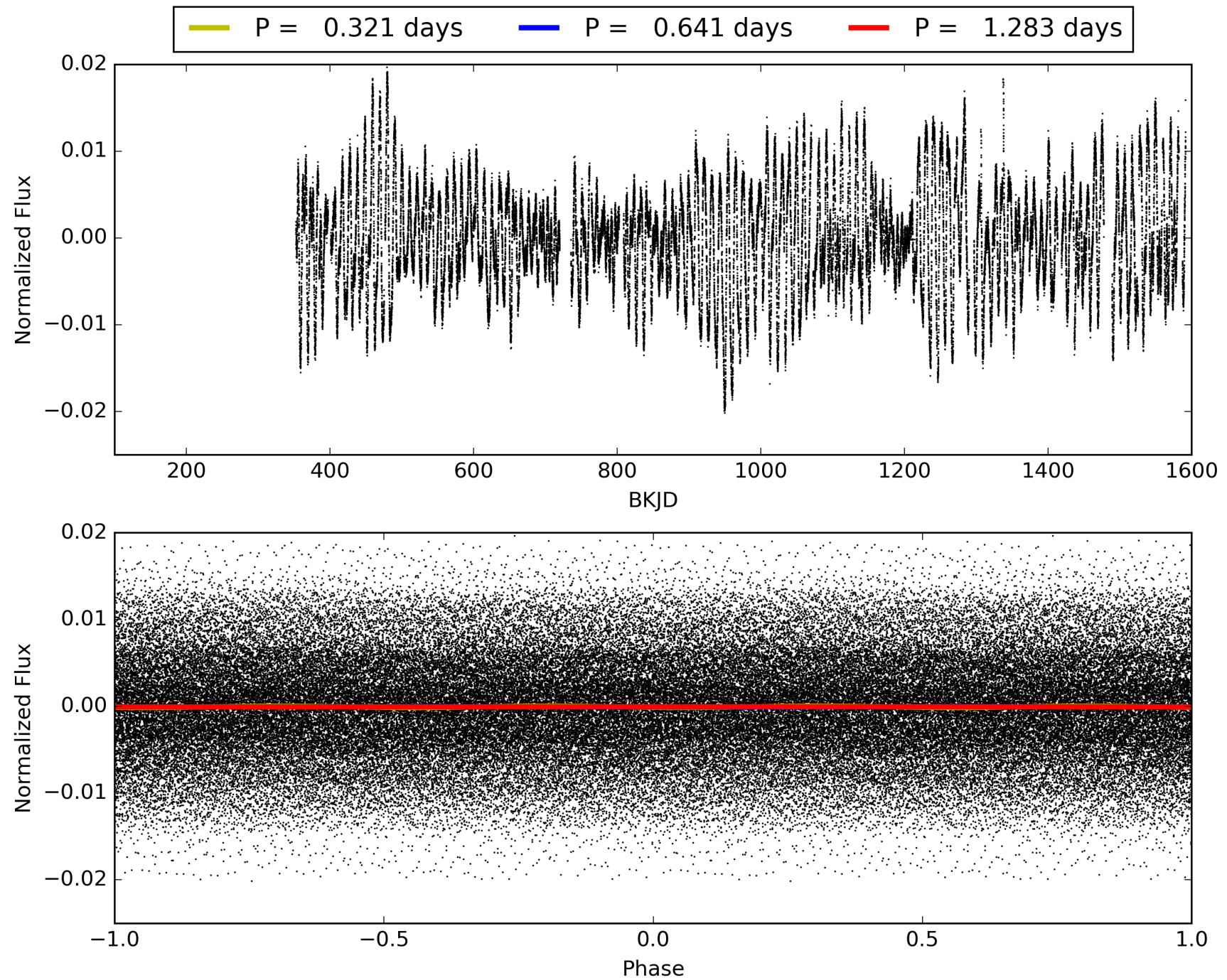
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 08:17:07 Z

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

TCE 007365528-01, PDC Light Curves

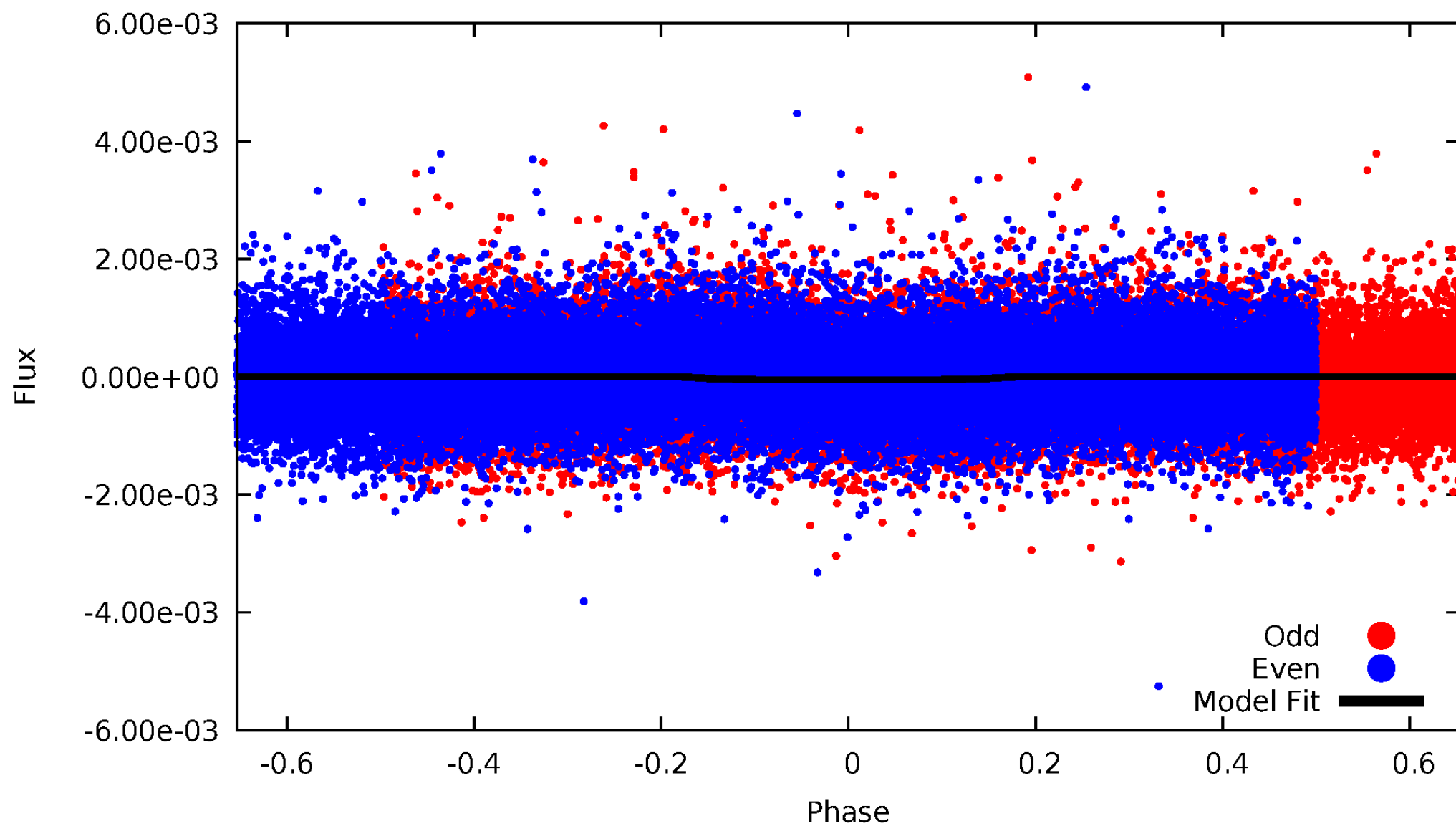


TCE 007365528-01



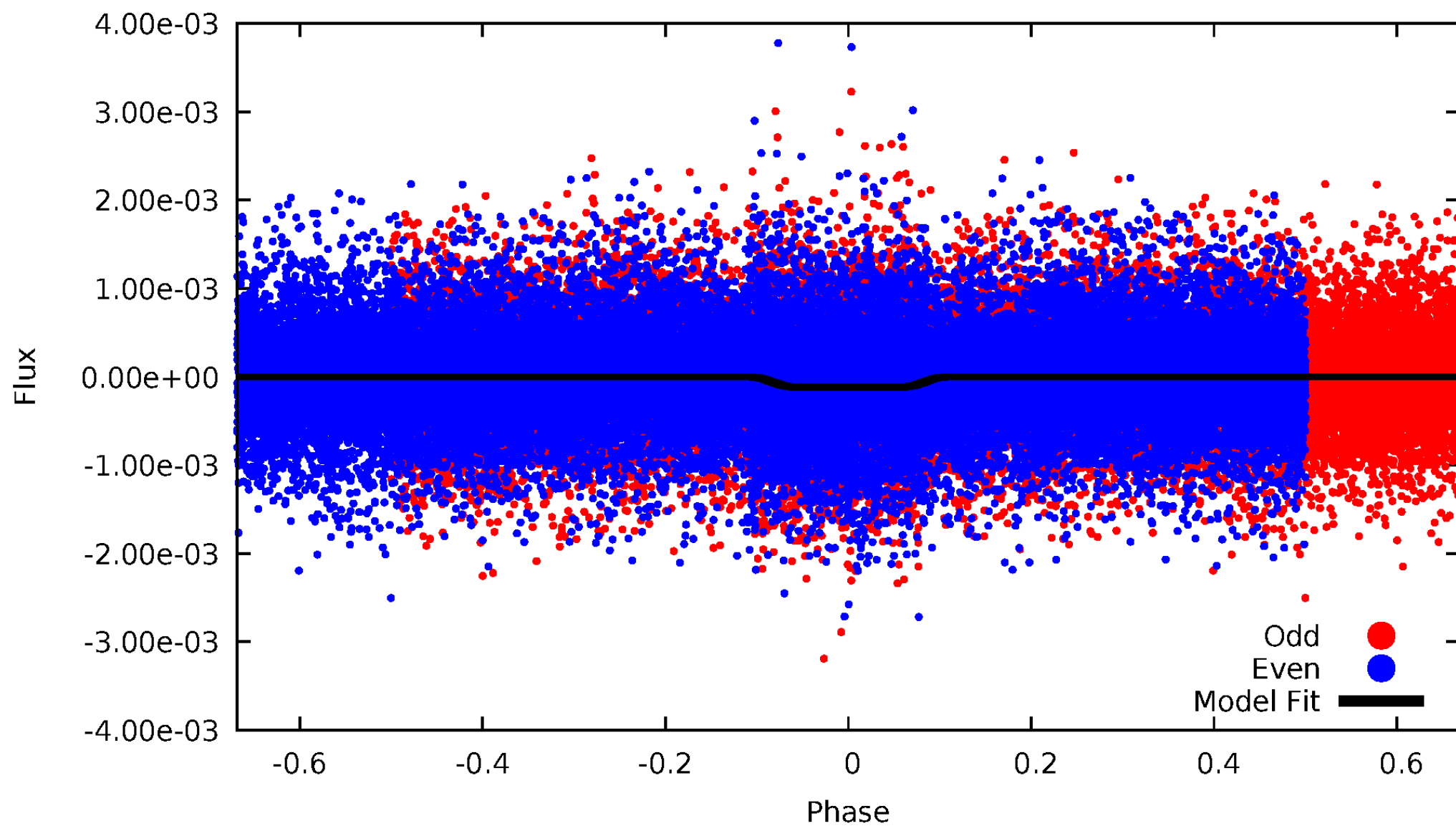
DV Odd/Even

TCE 00736528-01



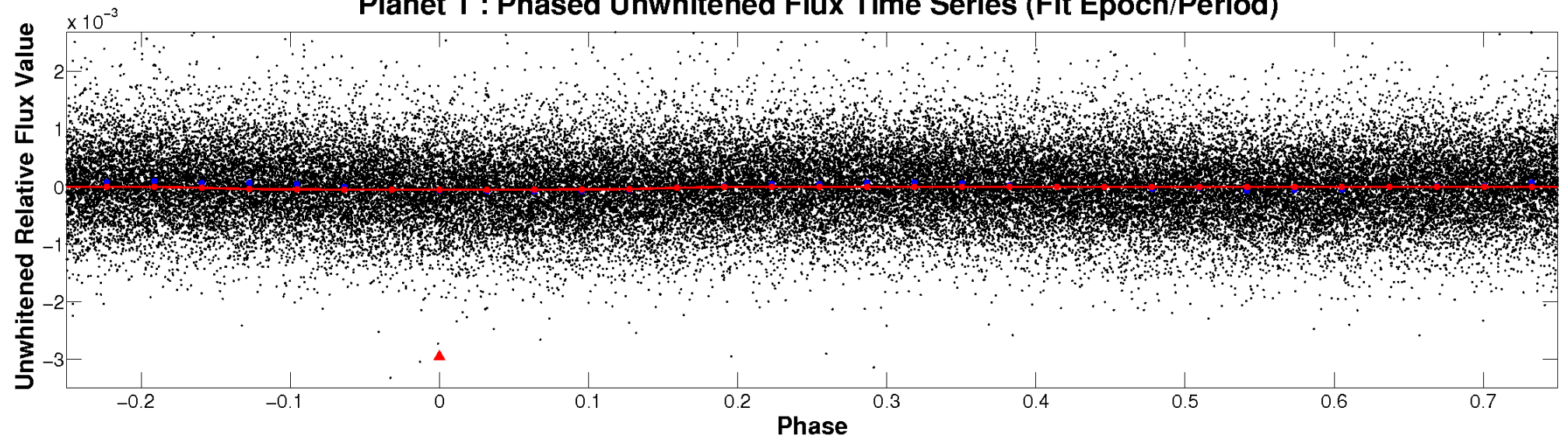
ALT Odd/Even

TCE 007365528-01

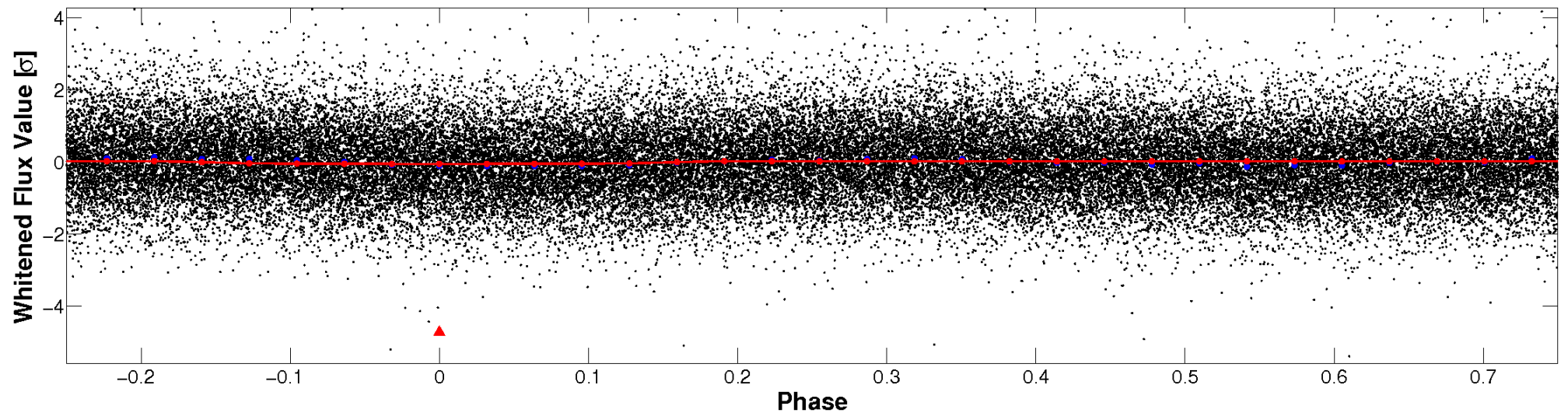


Non-Whitened Vs. Whitened Light Curve

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

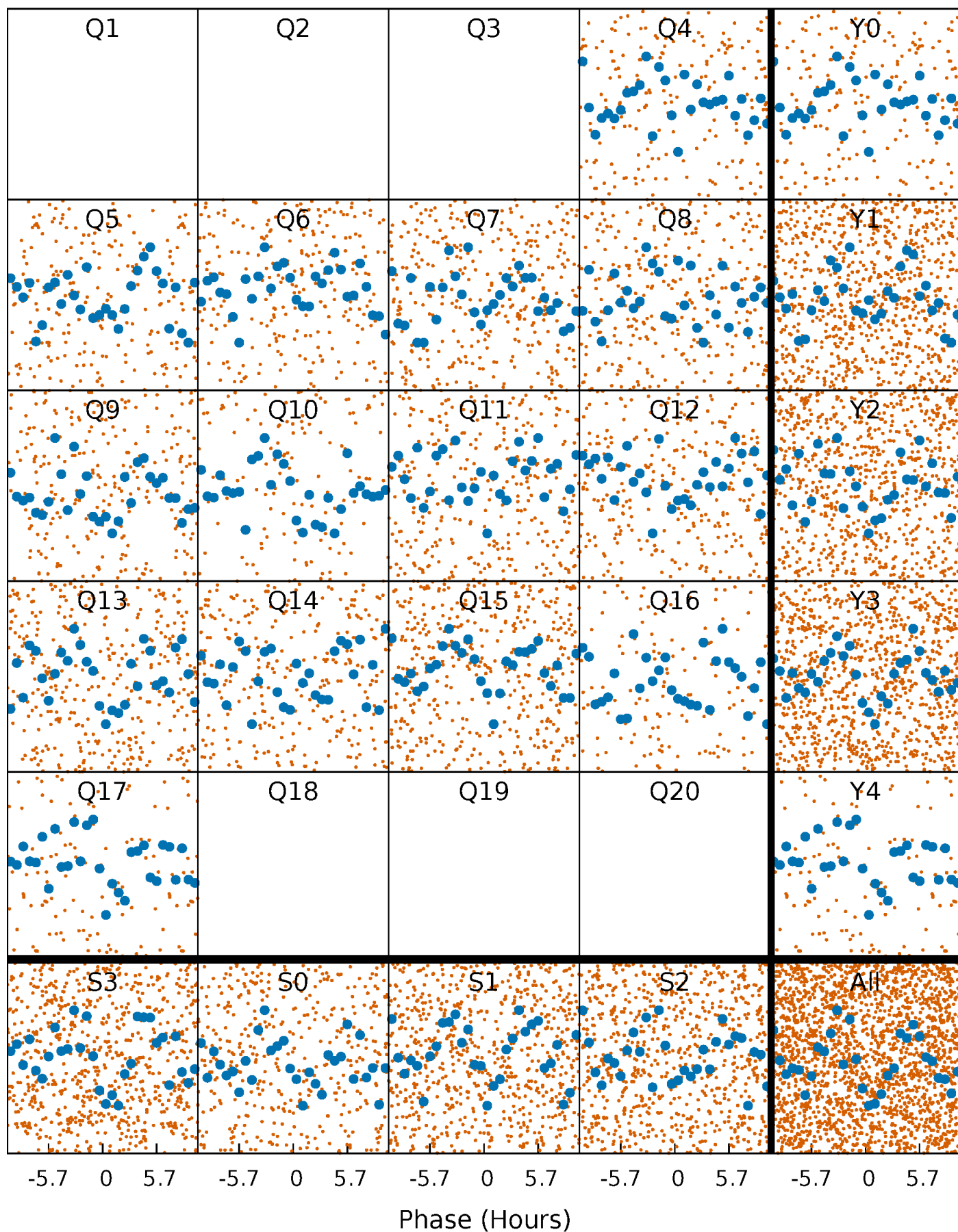


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



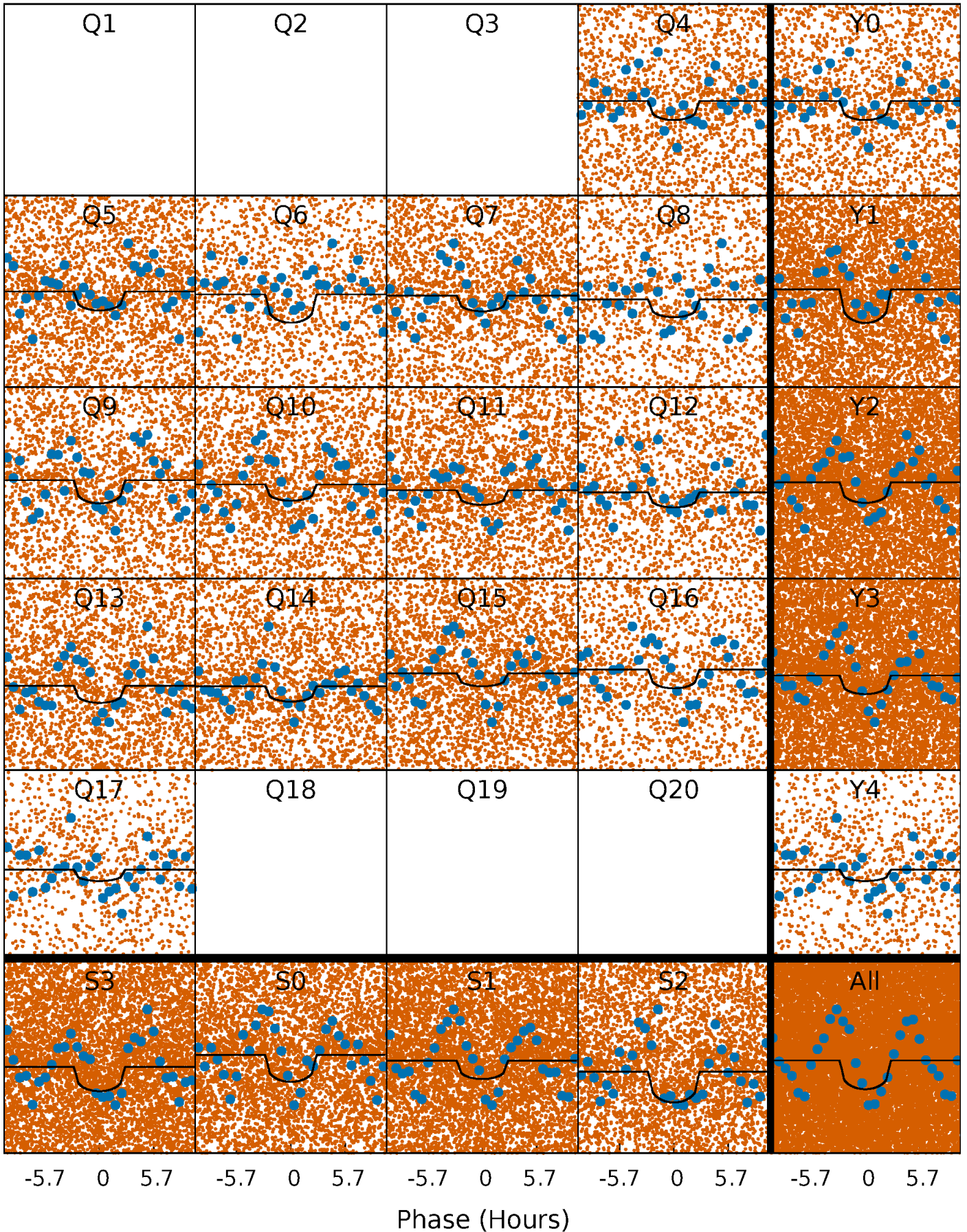
PDC Quarter-Phased Transit Curves

TCE 007365528-01 P= 0.641455 Days $T_0=131.706419$ (BKJD)



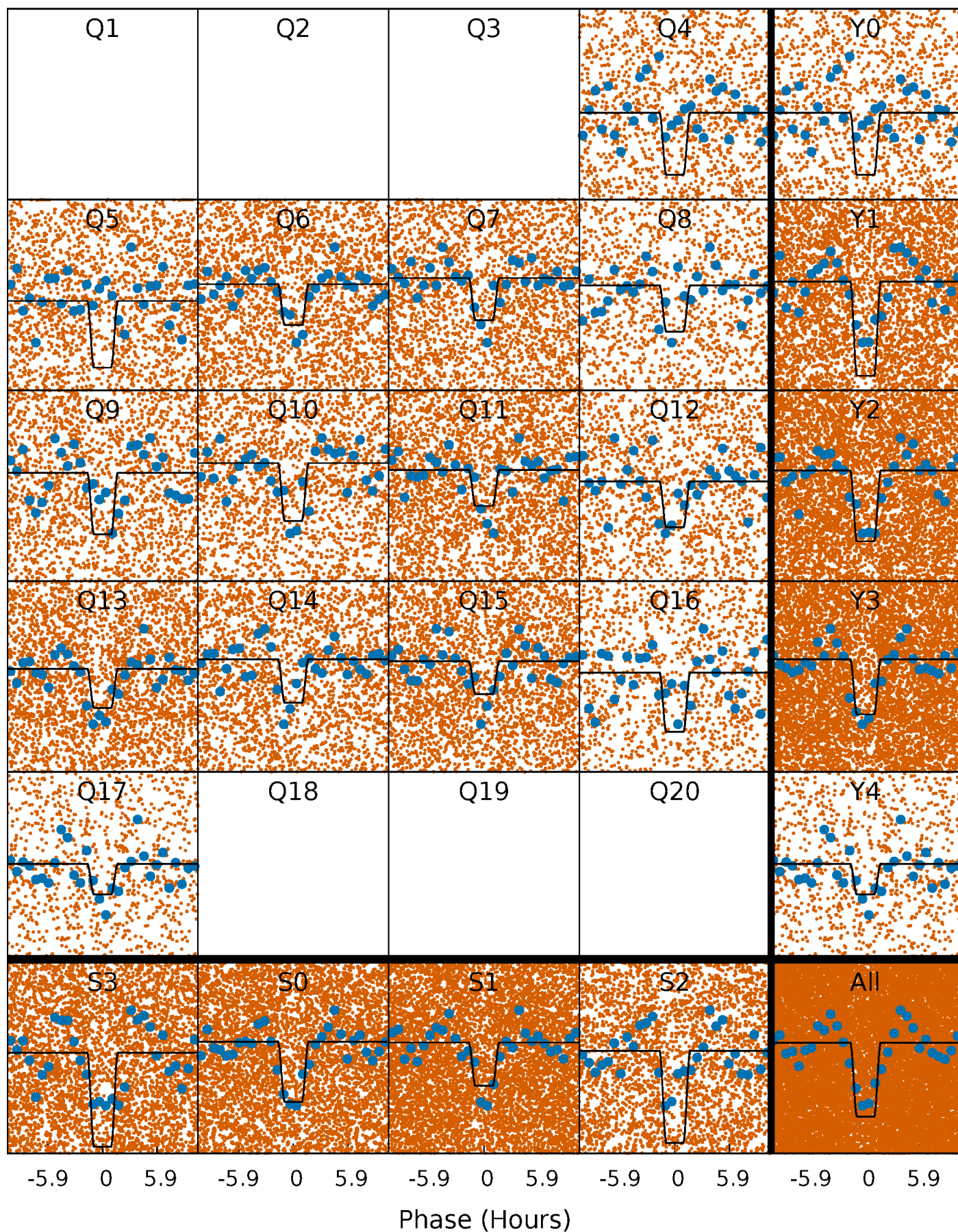
DV Quarter-Phased Transit Curves

TCE 007365528-01 P= 0.641455 Days $T_0=131.706419$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

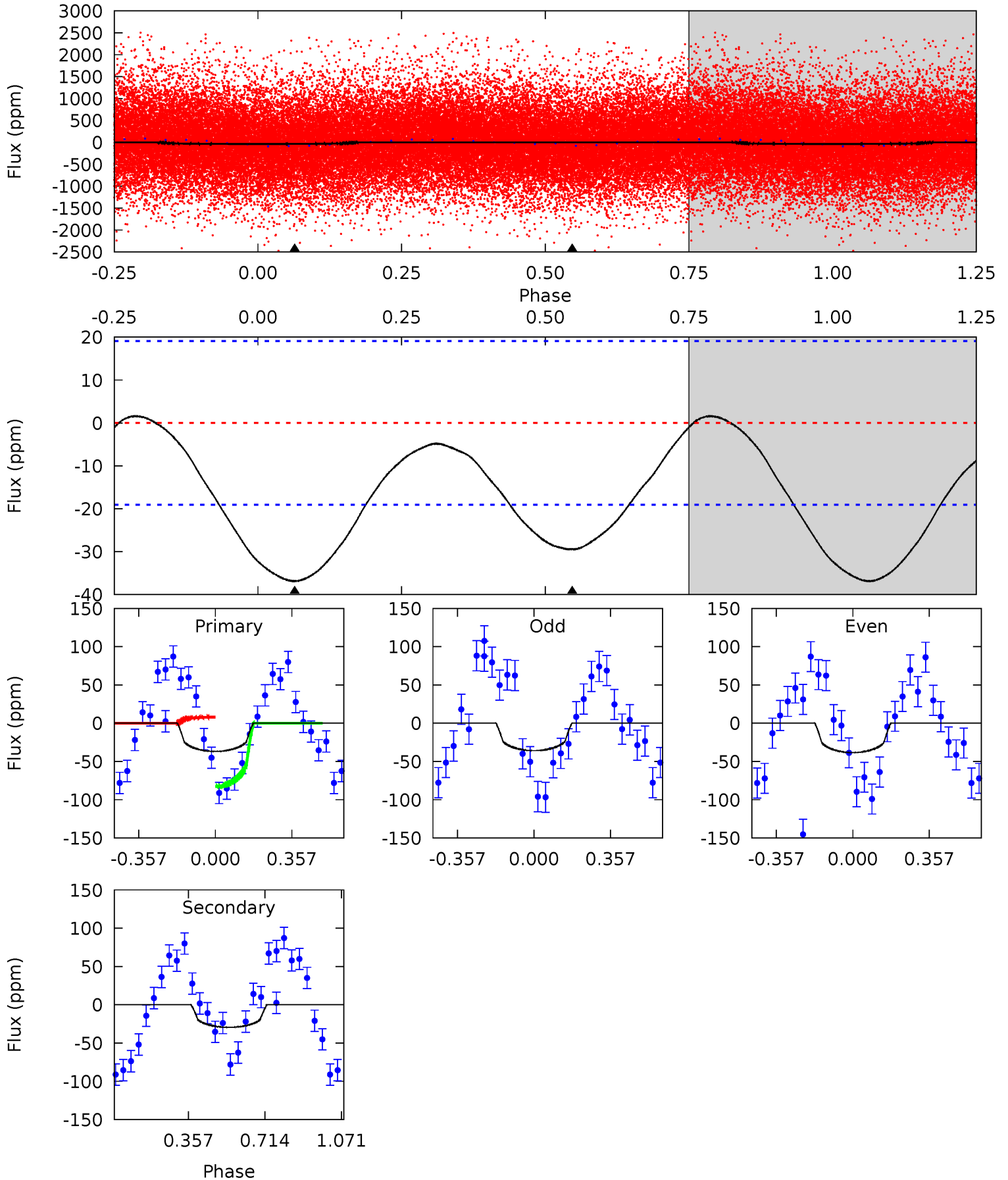
TCE 007365528-01 P= 0.641488 Days $T_0=131.682833$ (BKJD)



DV Model-Shift Uniqueness Test

007365528-01, P = 0.641455 Days, E = 131.706419 Days

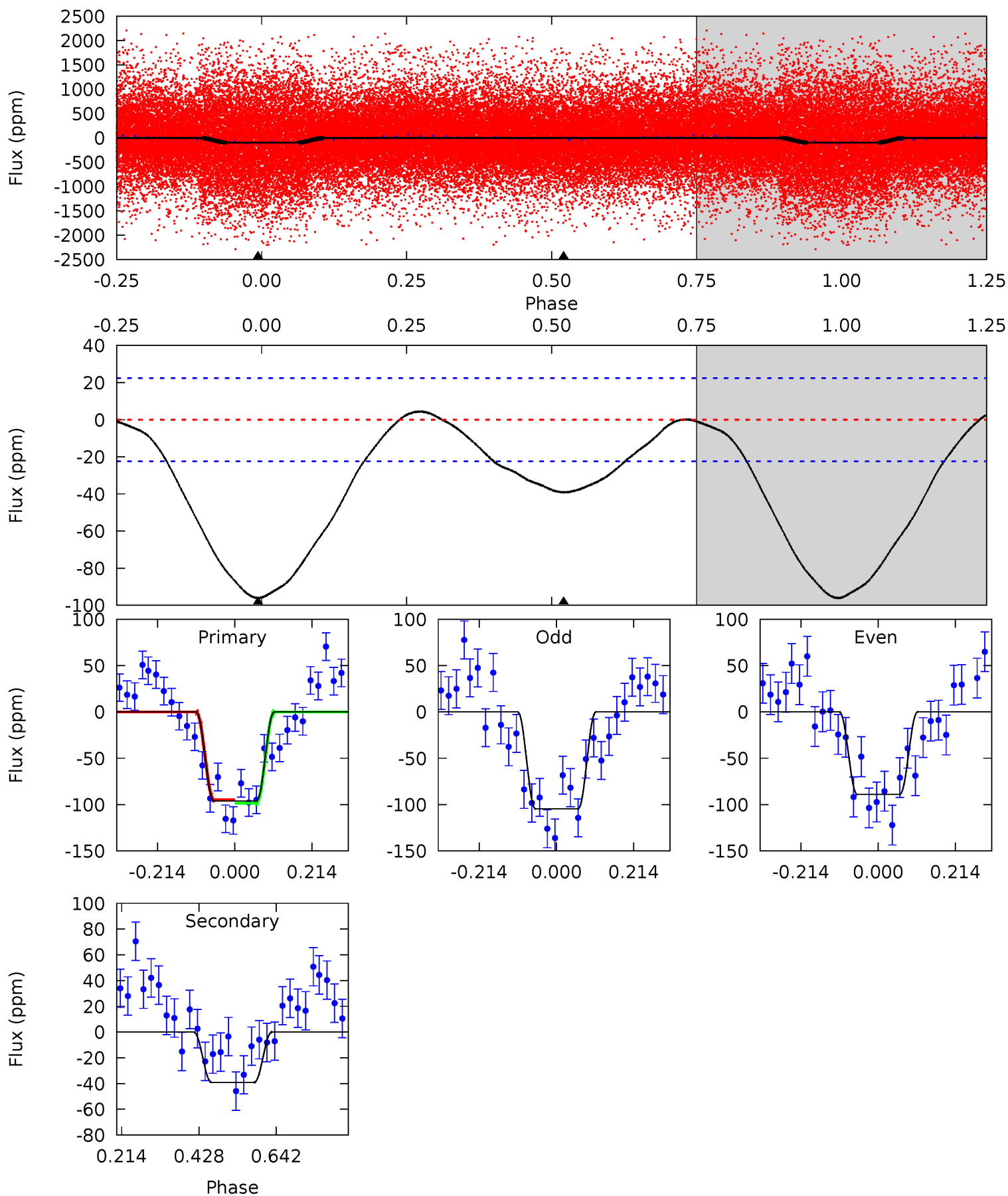
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.30	6.63	0	0	4.29	0.92	0.63	8.30	8.30	6.63	6.63	0.29	1.00	0.04	8.63



Alt Model-Shift Uniqueness Test

007365528-01, P = 0.641488 Days, E = 131.682833 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.9	7.69	0	0	4.40	1.24	0.70	18.9	18.9	7.69	7.69	1.54	1.10	0.04	0.38



Stellar Parameters For KIC 007365528

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6161^{+193}_{-258}	$4.454^{+0.054}_{-0.229}$	$0.070^{+0.250}_{-0.300}$	$1.053^{+0.357}_{-0.119}$	$1.150^{+0.156}_{-0.156}$	$1.388^{+0.312}_{-0.772}$
	+3%/-4%	+1%/-5%	+357%/-429%	+34%/-11%	+14%/-14%	+22%/-56%
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 007365528-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-29 ± 4	$1.27^{+1.27}_{-0.87}$	3238^{+241}_{-193}	4439^{+3667}_{-1238}	$2.273^{+19.951}_{-1.694}$
Alt.	-39 ± 5	$1.56^{+1.26}_{-1.00}$	3216^{+249}_{-170}	4317^{+2810}_{-1093}	$1.993^{+12.651}_{-1.365}$

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

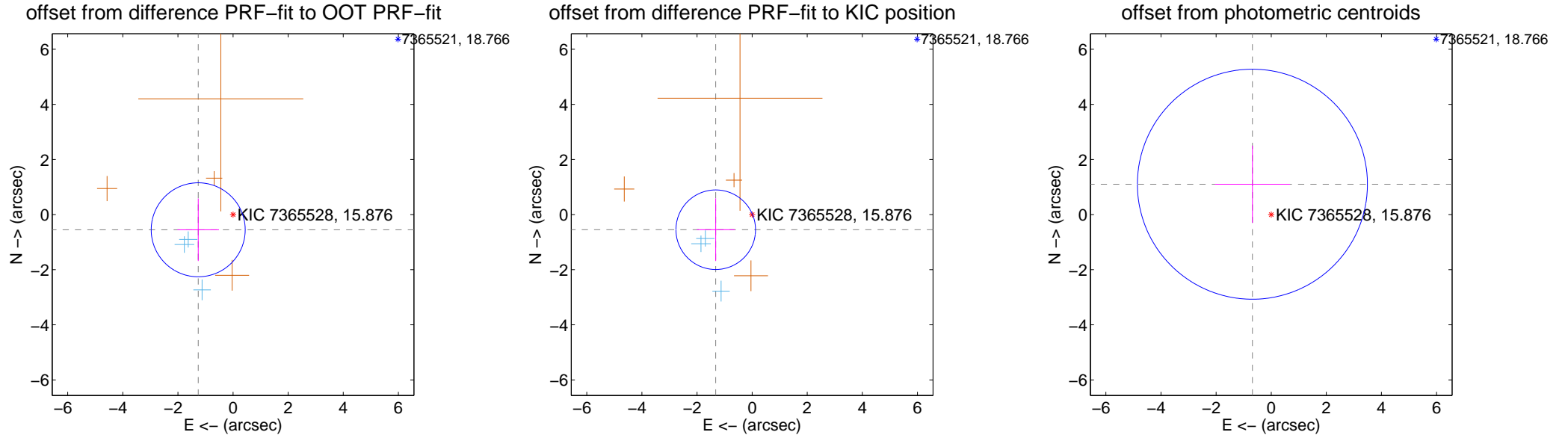
DV Centroid Data

Supplemental centroid analysis for 007365528-01. Kepler magnitude: 15.88. Transit SNR 6.82

There are 3 quarters with good PRF difference image offsets

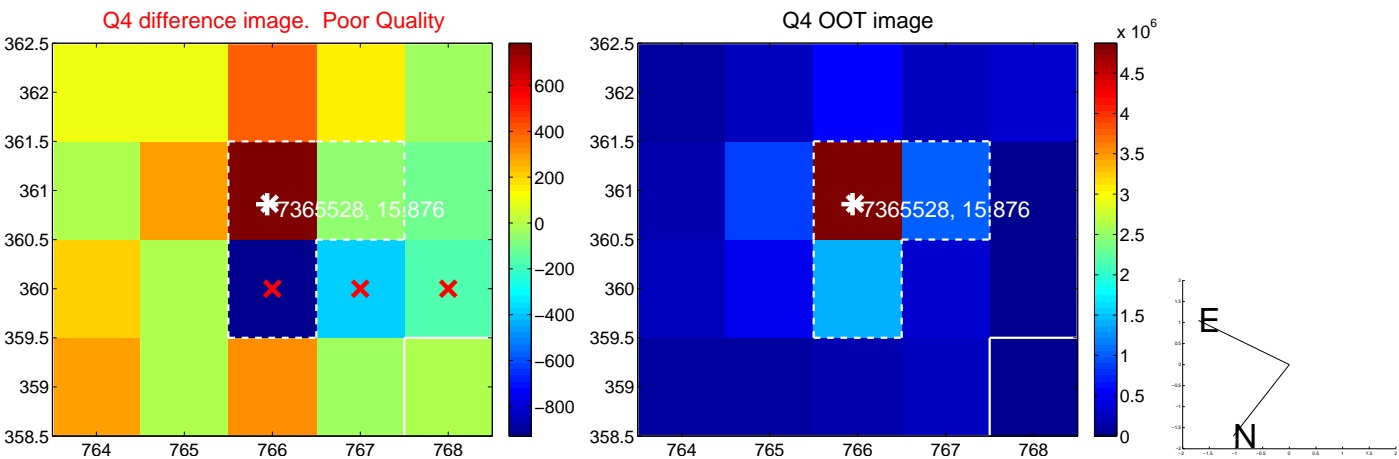
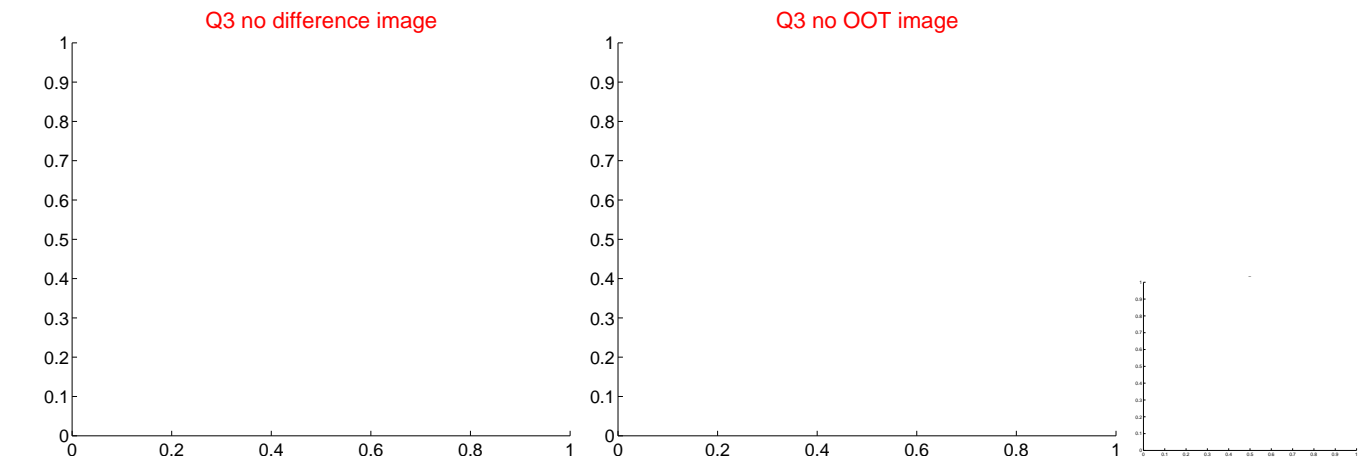
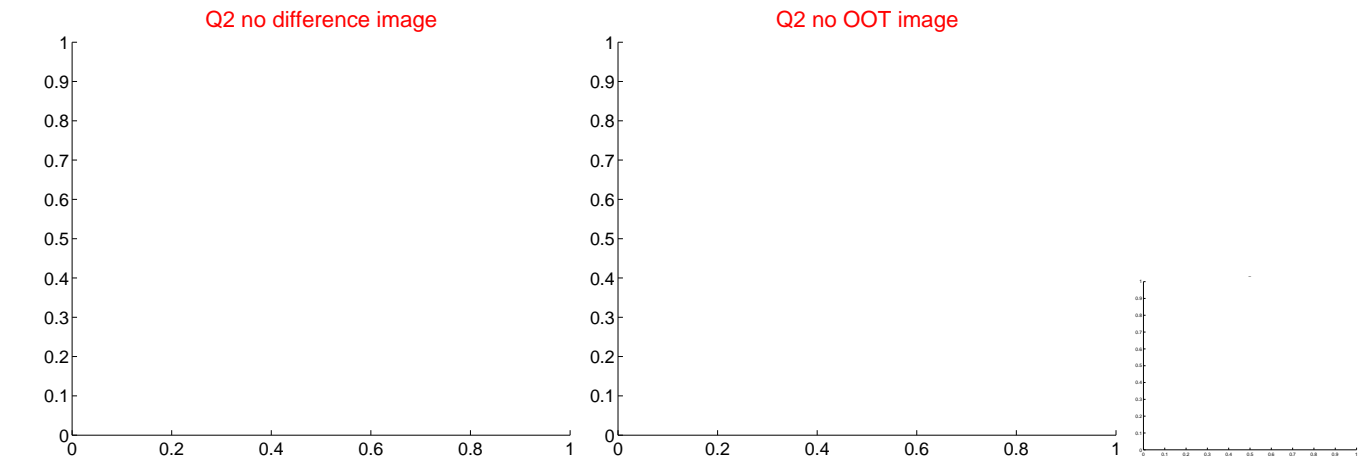
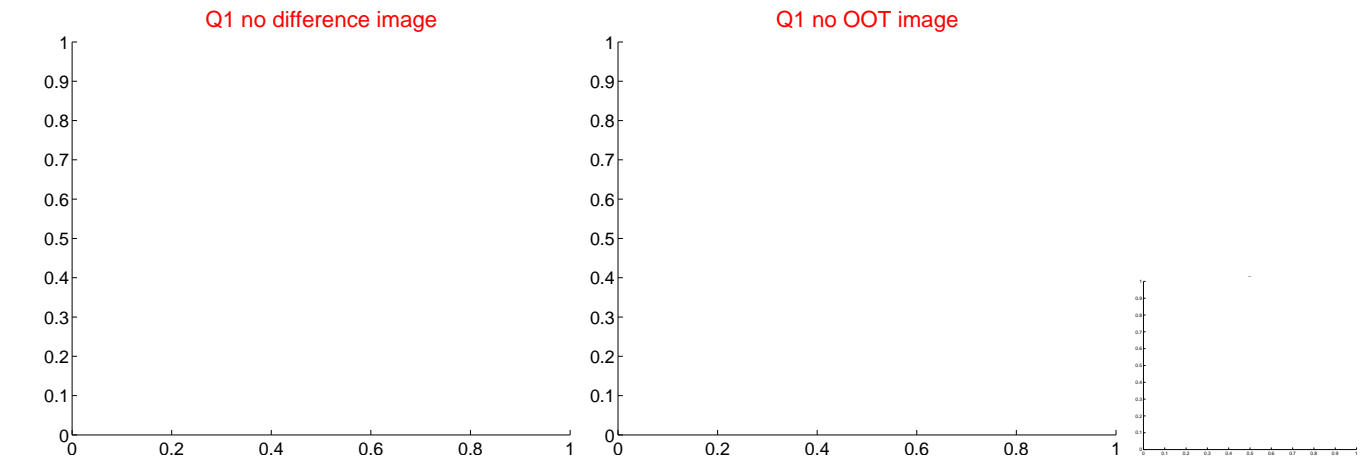
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.379 ± 0.568	2.43	1.264 ± 0.753	-0.552 ± 1.133
PRF-fit source offset from KIC position	1.430 ± 0.481	2.97	1.320 ± 0.688	-0.549 ± 1.136
photometric centroid source offset	1.30 ± 1.39	0.93	0.68 ± 1.36	1.10 ± 1.40

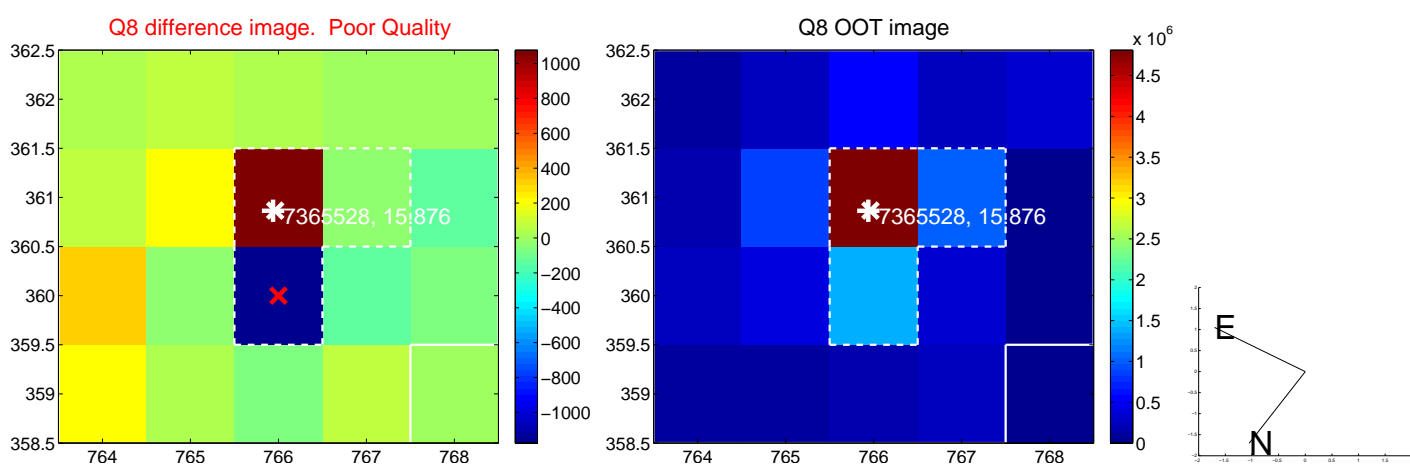
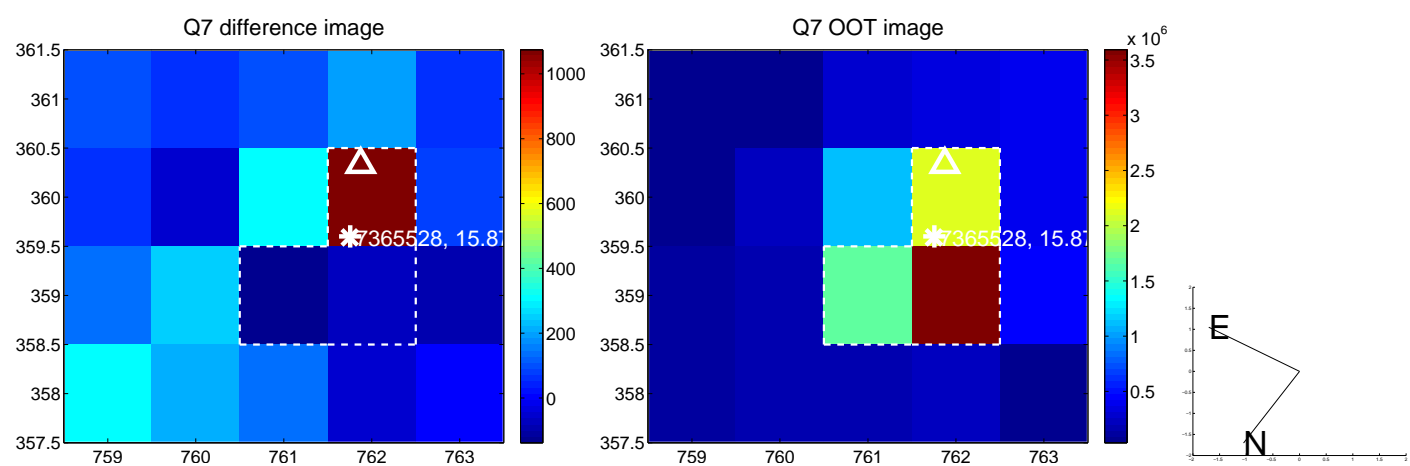
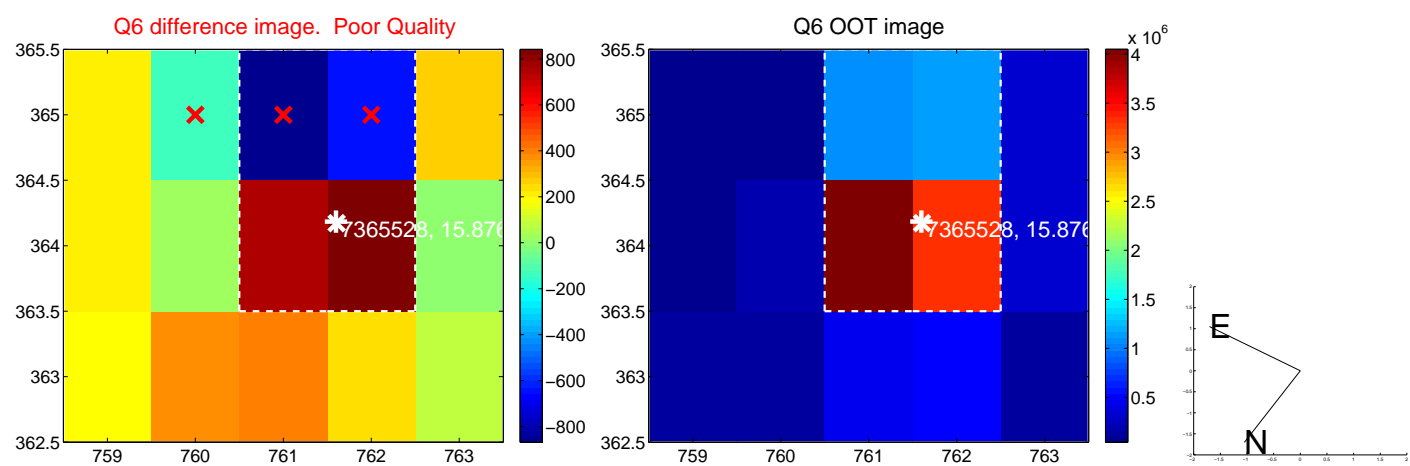
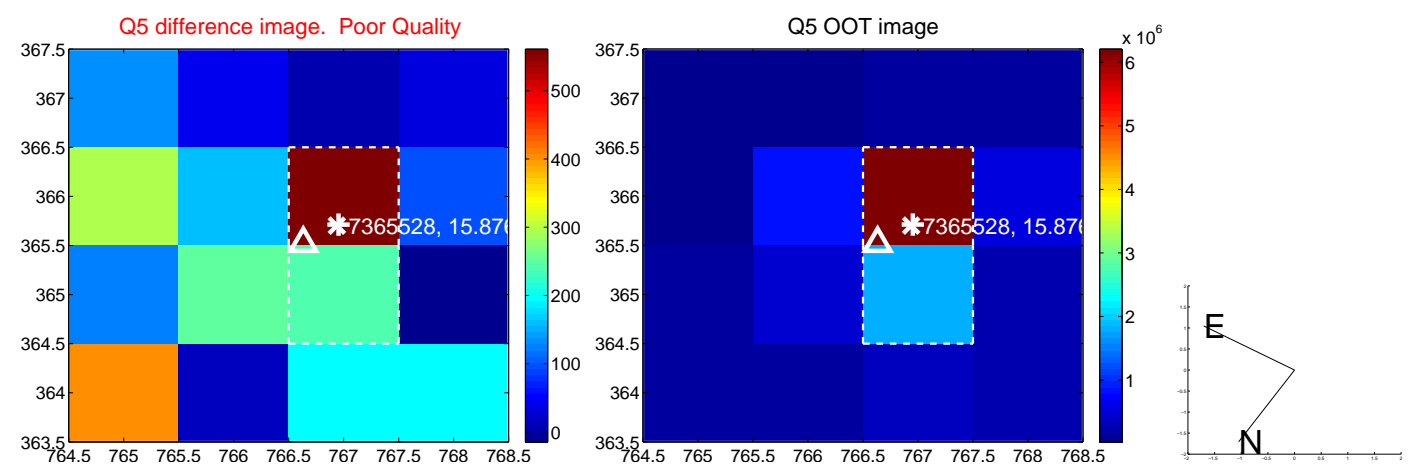


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

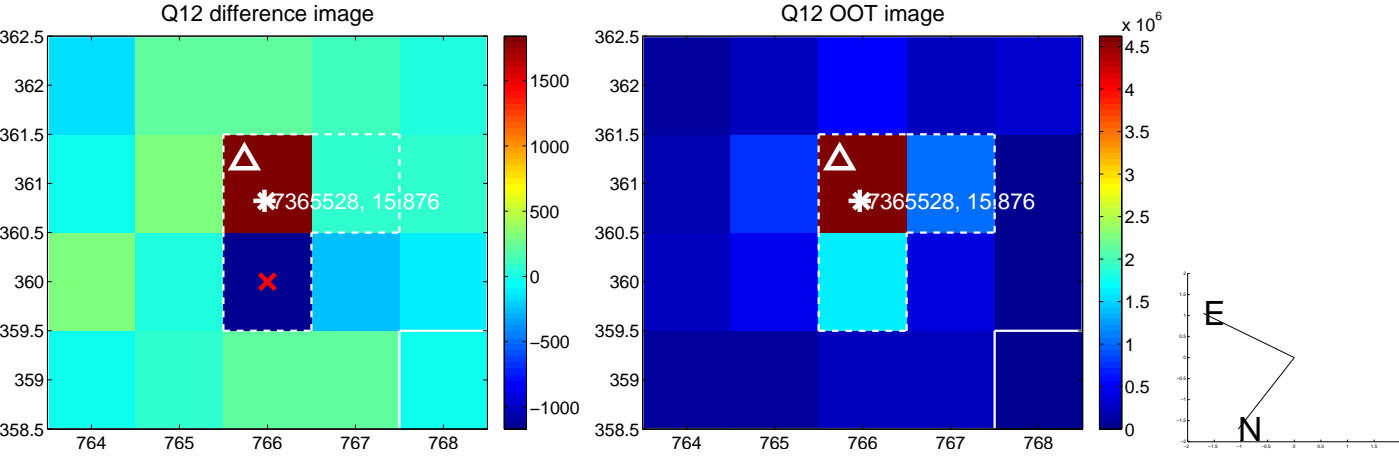
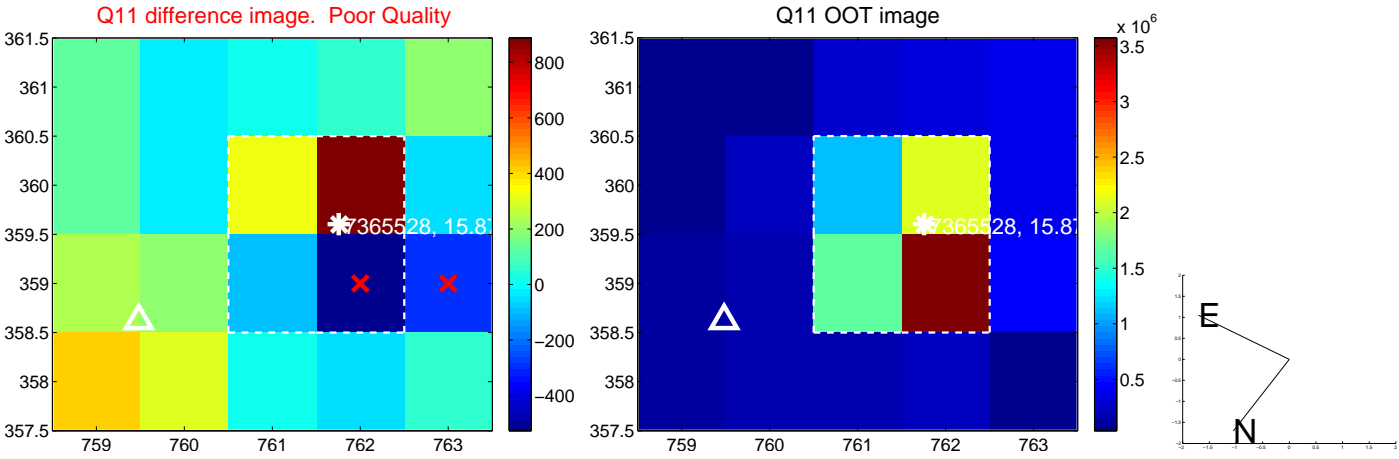
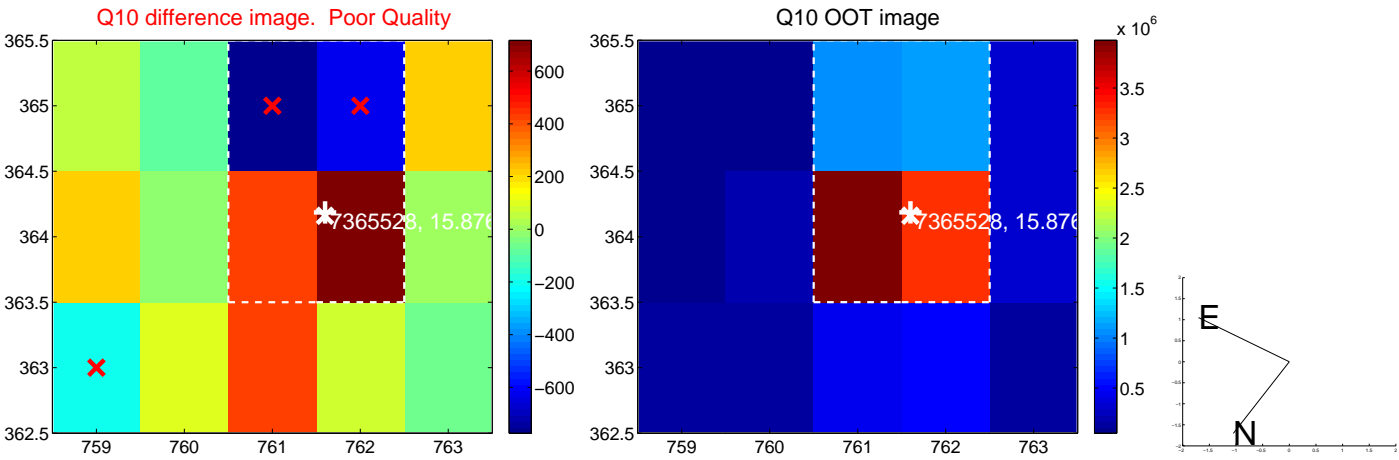
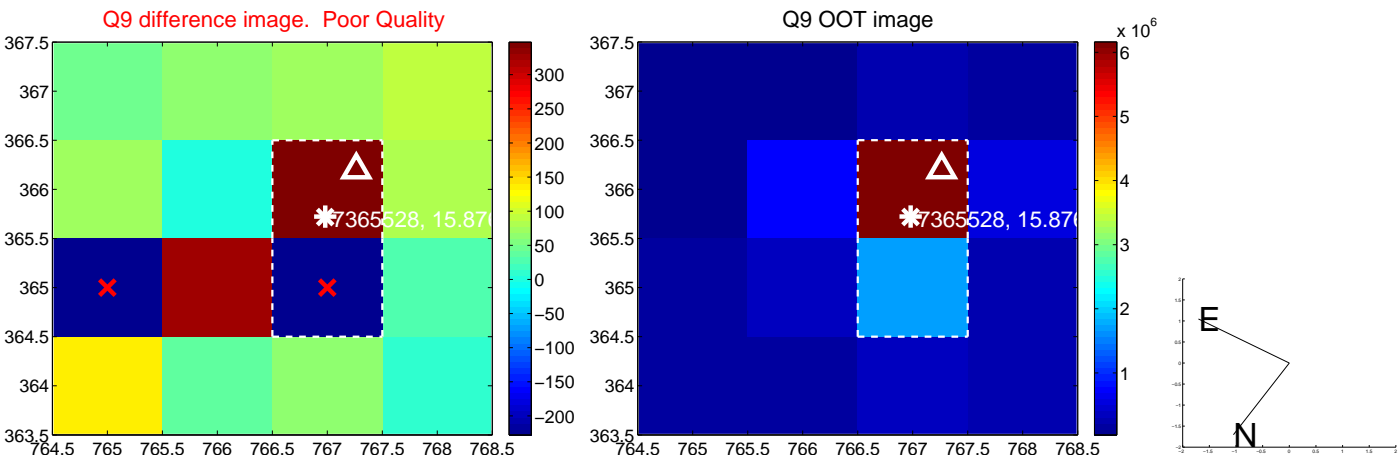
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



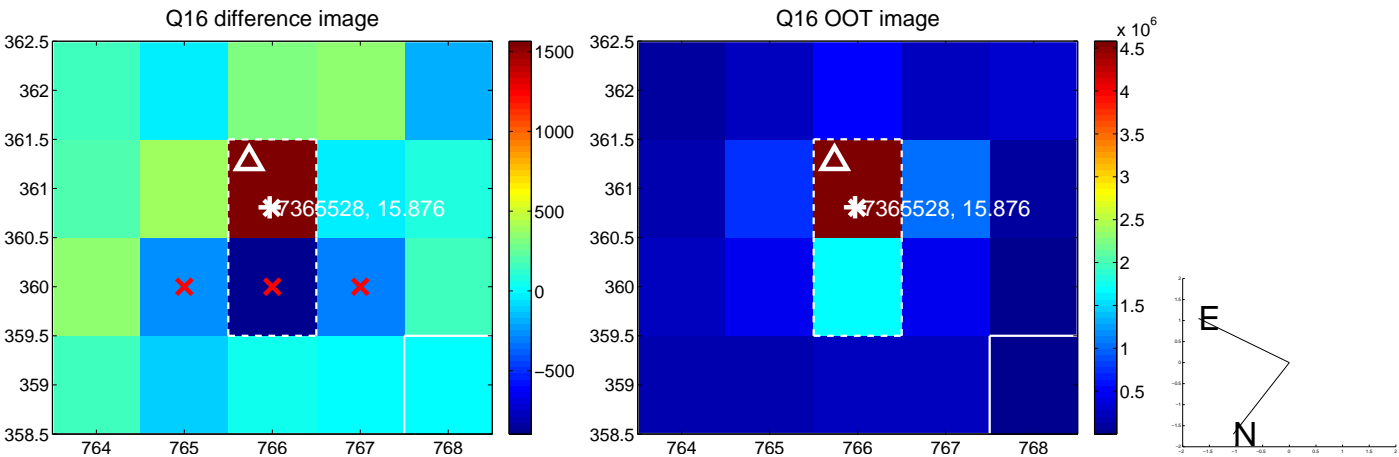
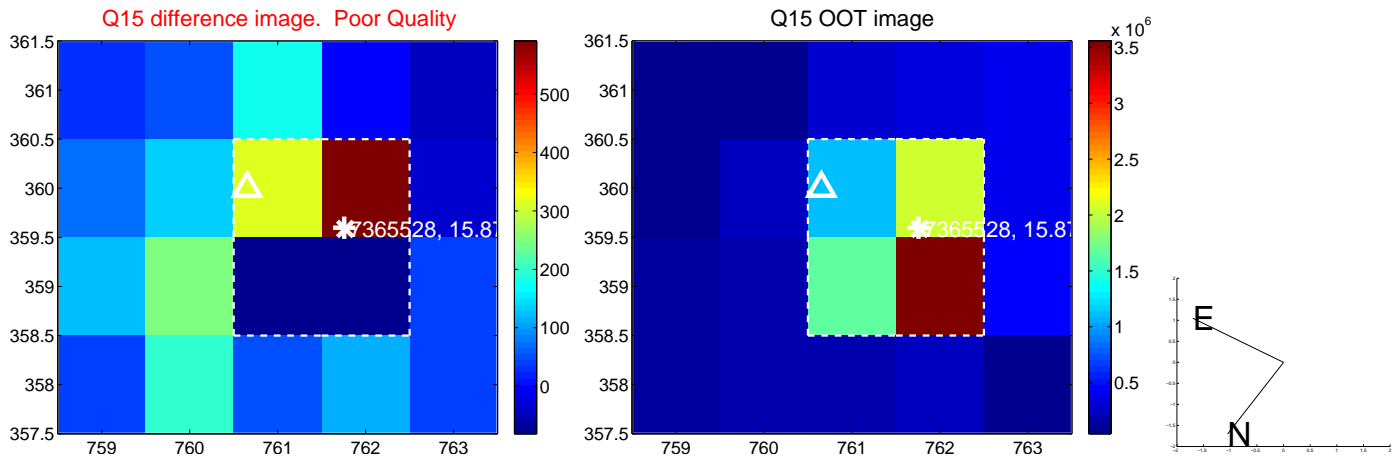
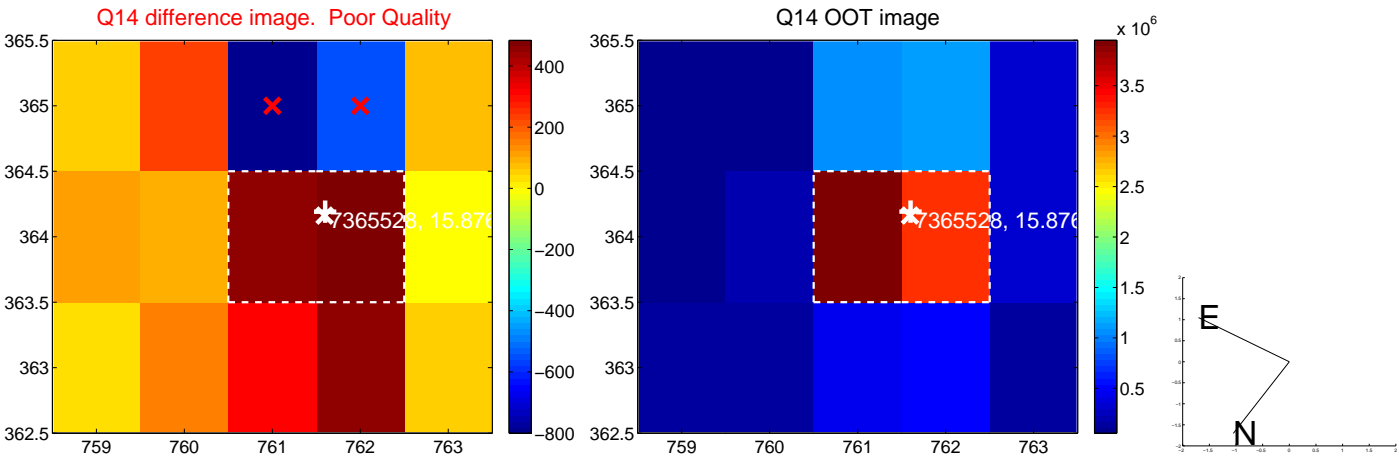
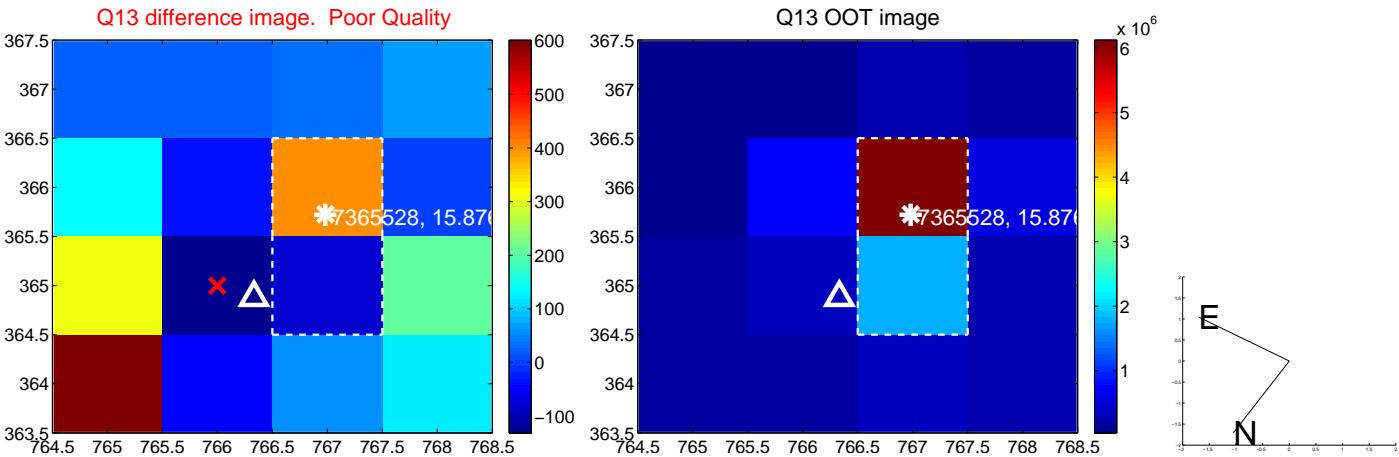
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



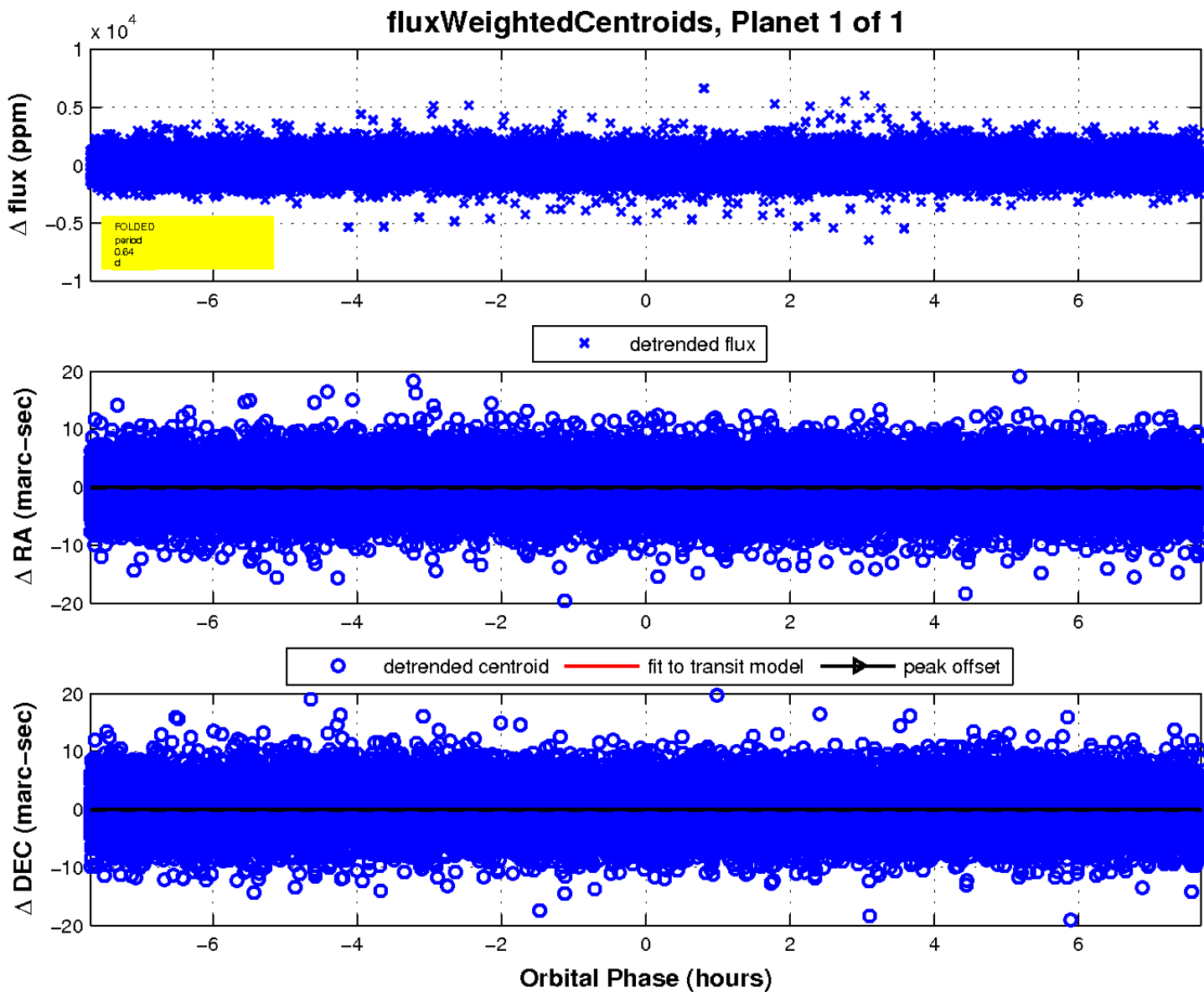
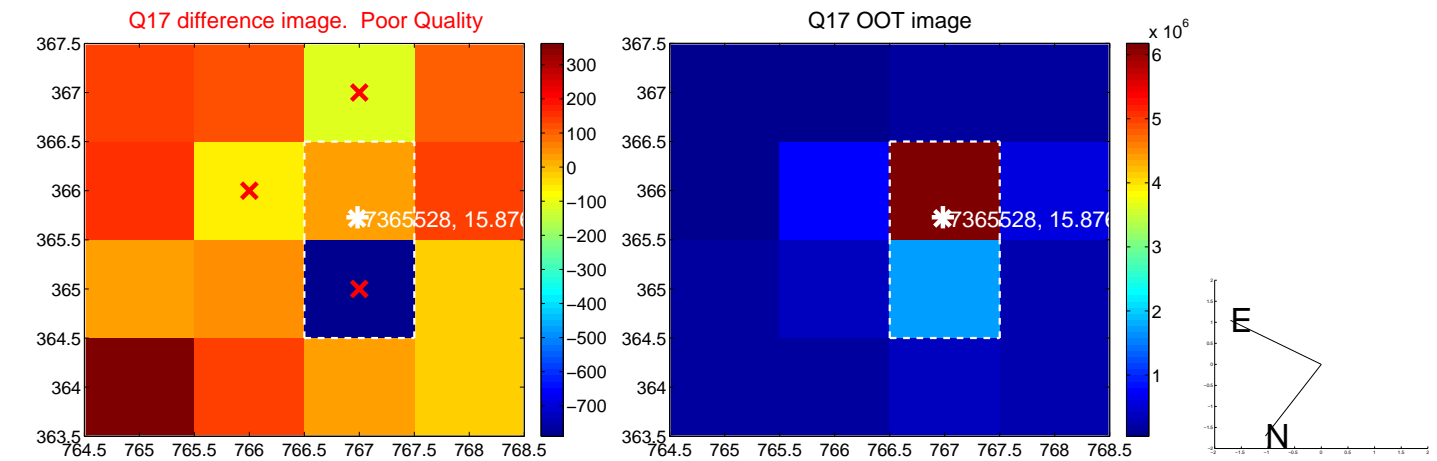
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

