

KIC 006127362

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})
006127362-01	OBS	No	328.429004	304.989564	24.6	1.480	14.5	1.9	145.36	3673	101.03	1797.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006127362-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED

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

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

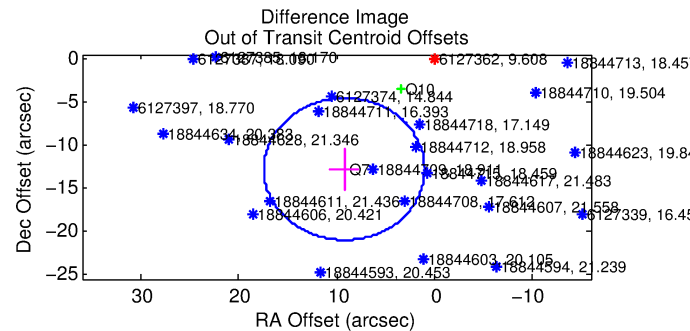
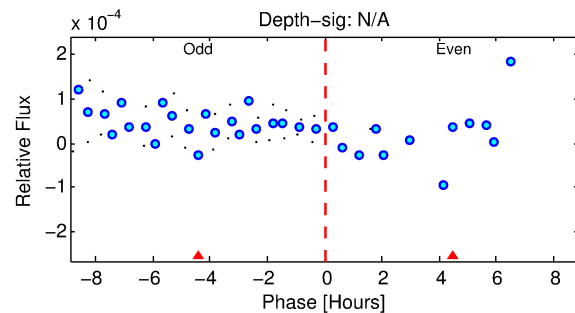
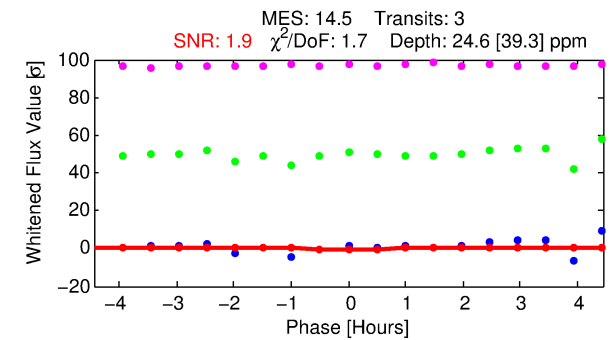
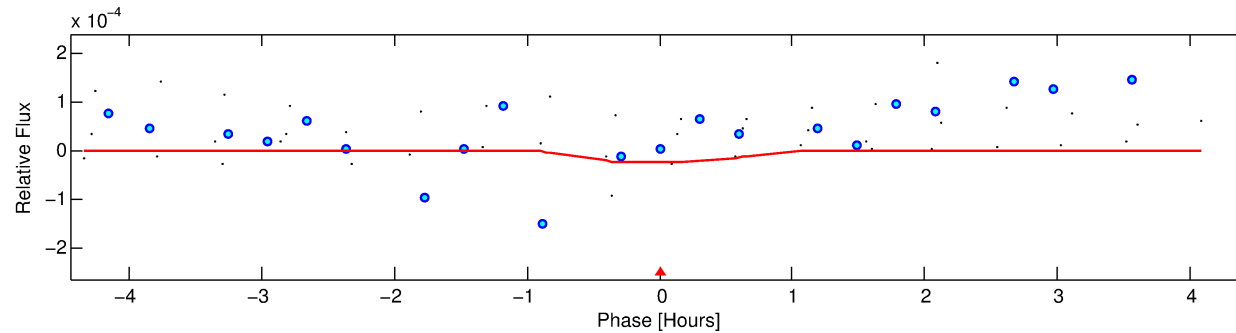
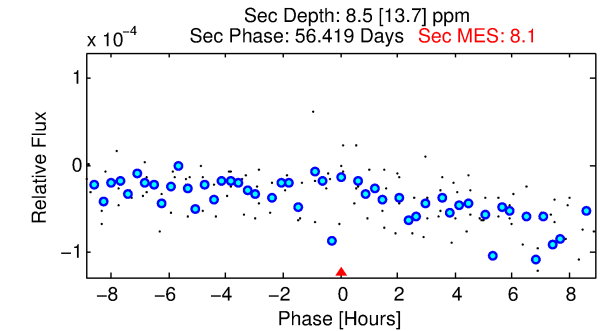
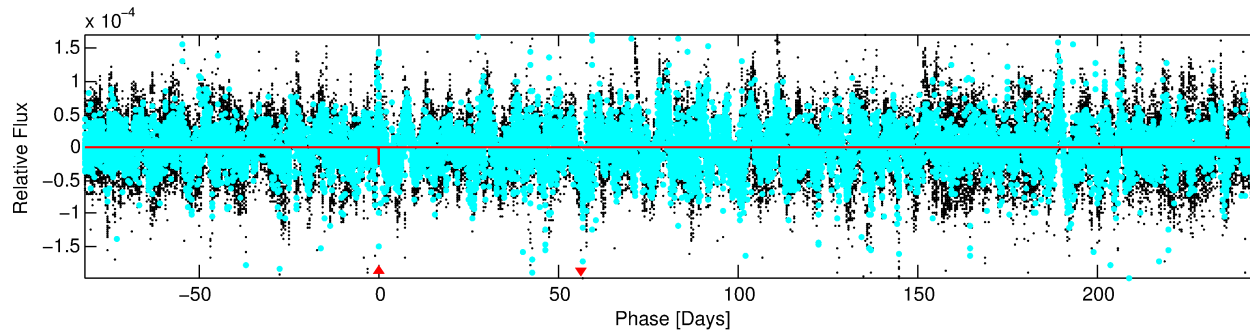
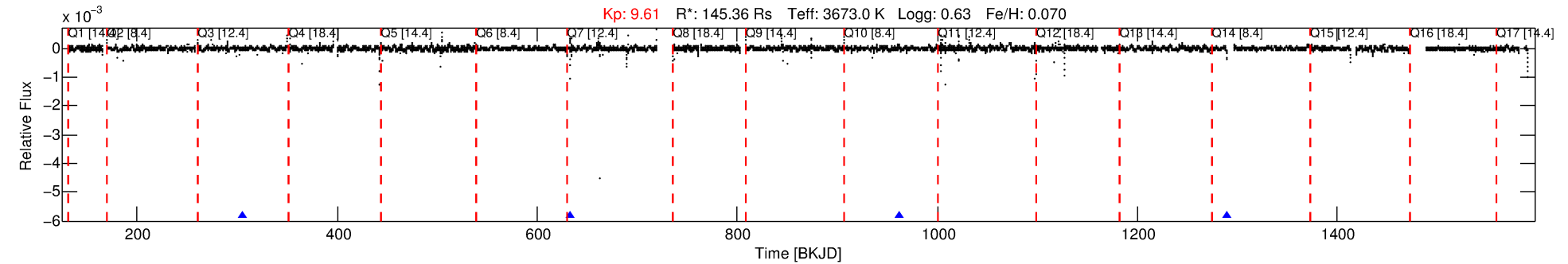
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006127362-01

No Significant Match Found

DV One-Page Summary

KIC: 6127362 Candidate: 1 of 1 Period: 328.429 d



DV Fit Results:

Period = 328.42900 [0.03255] d
Epoch = 304.9896 [0.0448] BKJD
Rp/R* = 0.0064 [0.1267]
a/R* = 583.60 [42980.13]
b = 0.95 [8.48]
Seff = 1797.60 [1135.96]
Teff = 1660 [262] K
Rp = 101.03 [2010.16] Re
a = 1.3845 [0.6166] AU
Ag = 0.87 [34.77] [-0.00σ]
Teffp = 2482 [24698] K [0.03σ]

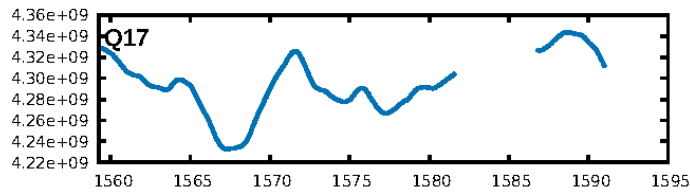
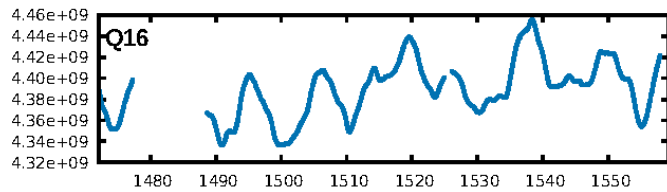
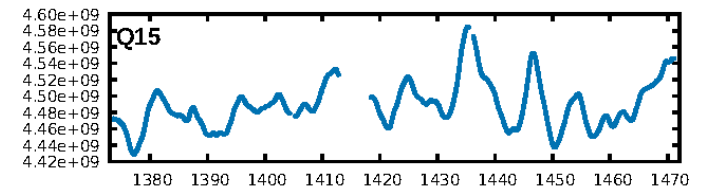
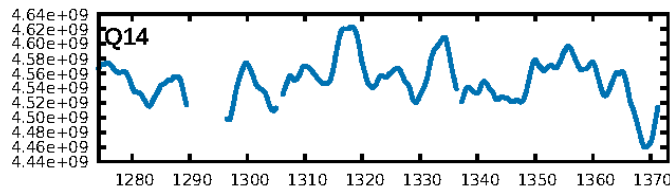
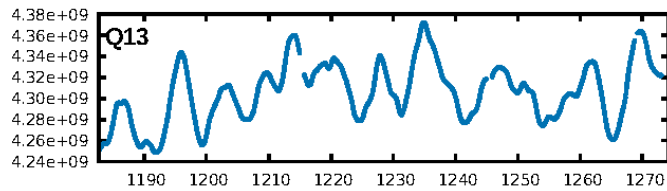
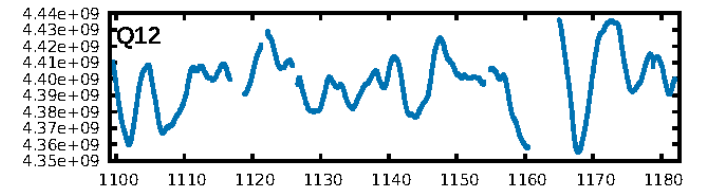
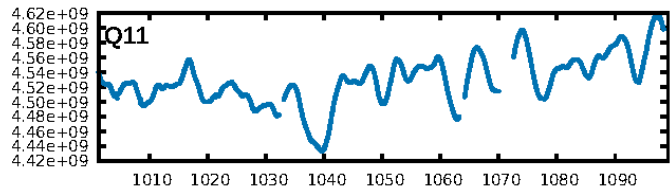
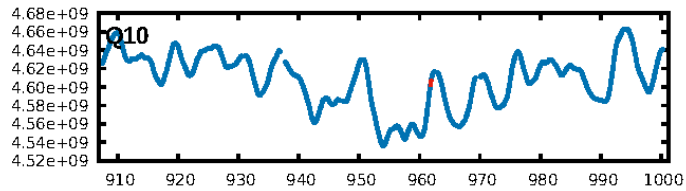
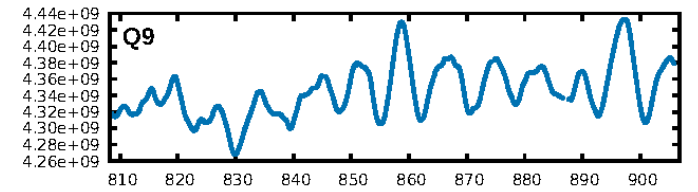
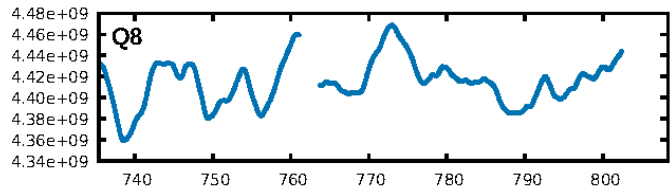
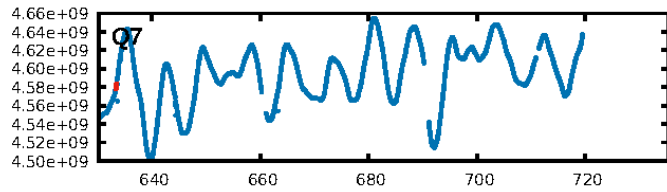
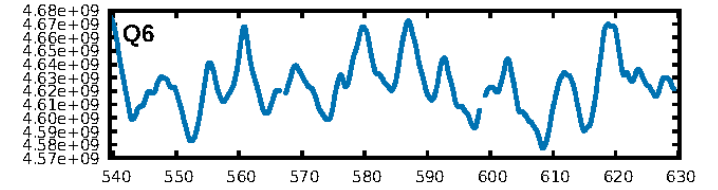
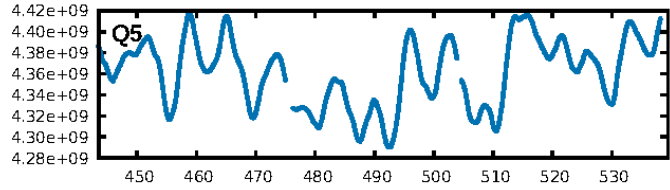
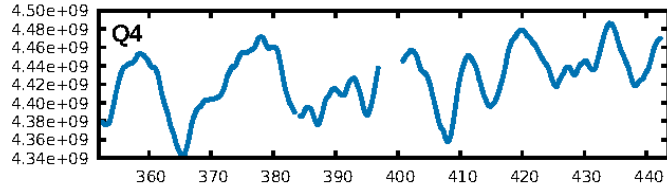
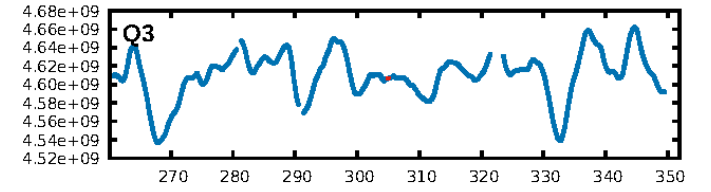
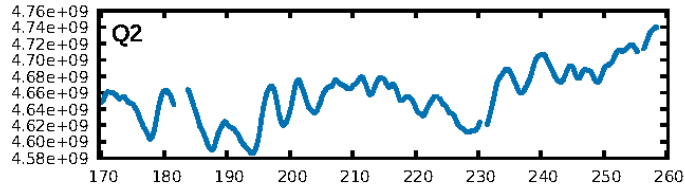
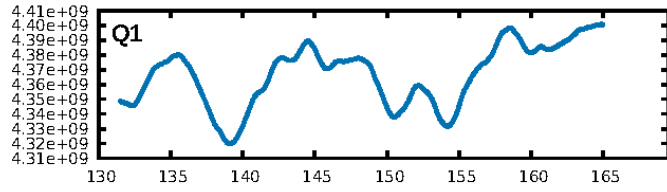
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 53.0%
ModelChiSquareGof-sig: 34.4%
Bootstrap-pfa: 8.76e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 83.3%
Centroid-so: 9.565 arcsec [0.50σ]
OotOffset-rm: 15.759 arcsec [5.75σ]
KicOffset-rm: 18.149 arcsec [65.77σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

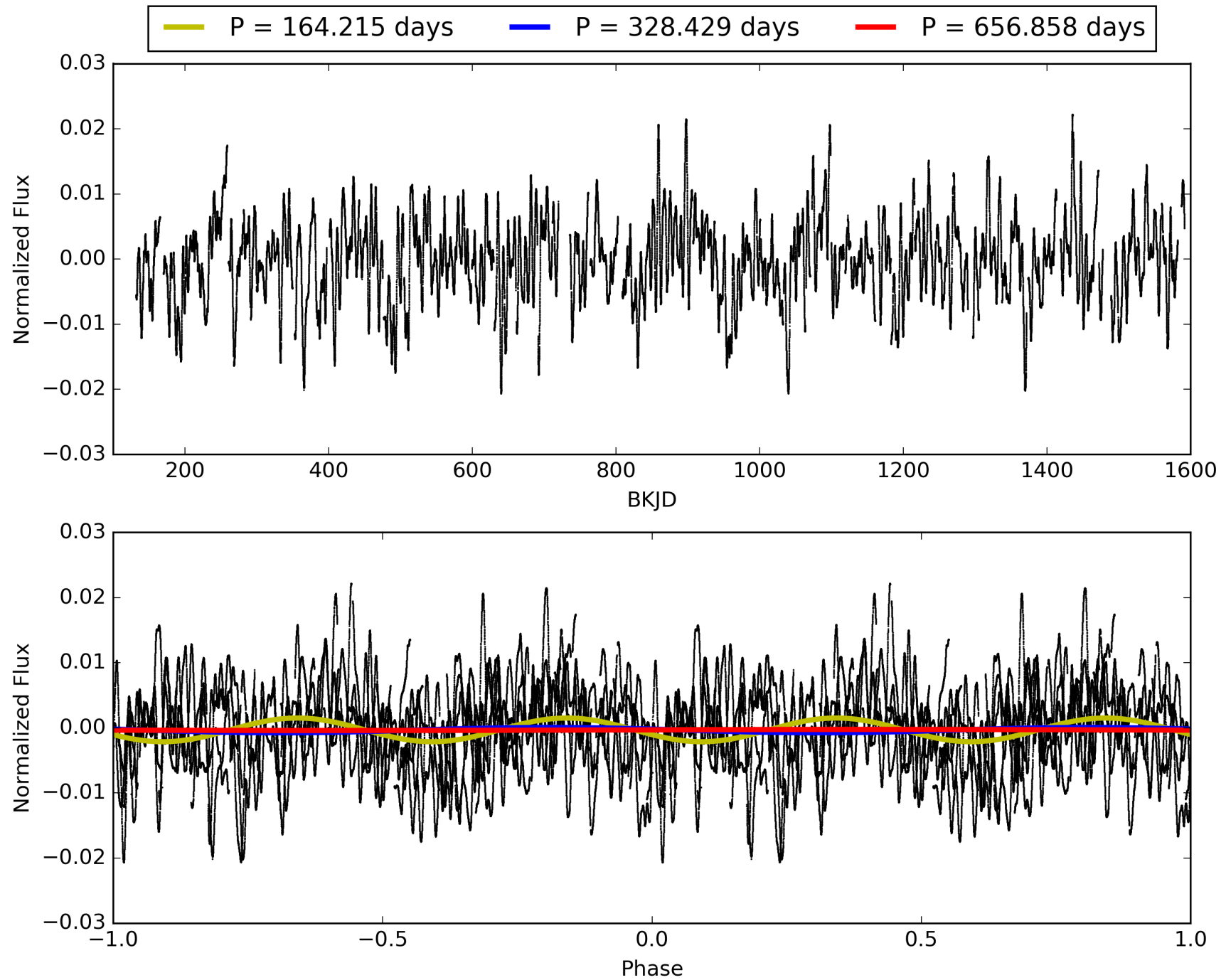
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:12:42 Z

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

TCE 006127362-01, PDC Light Curves

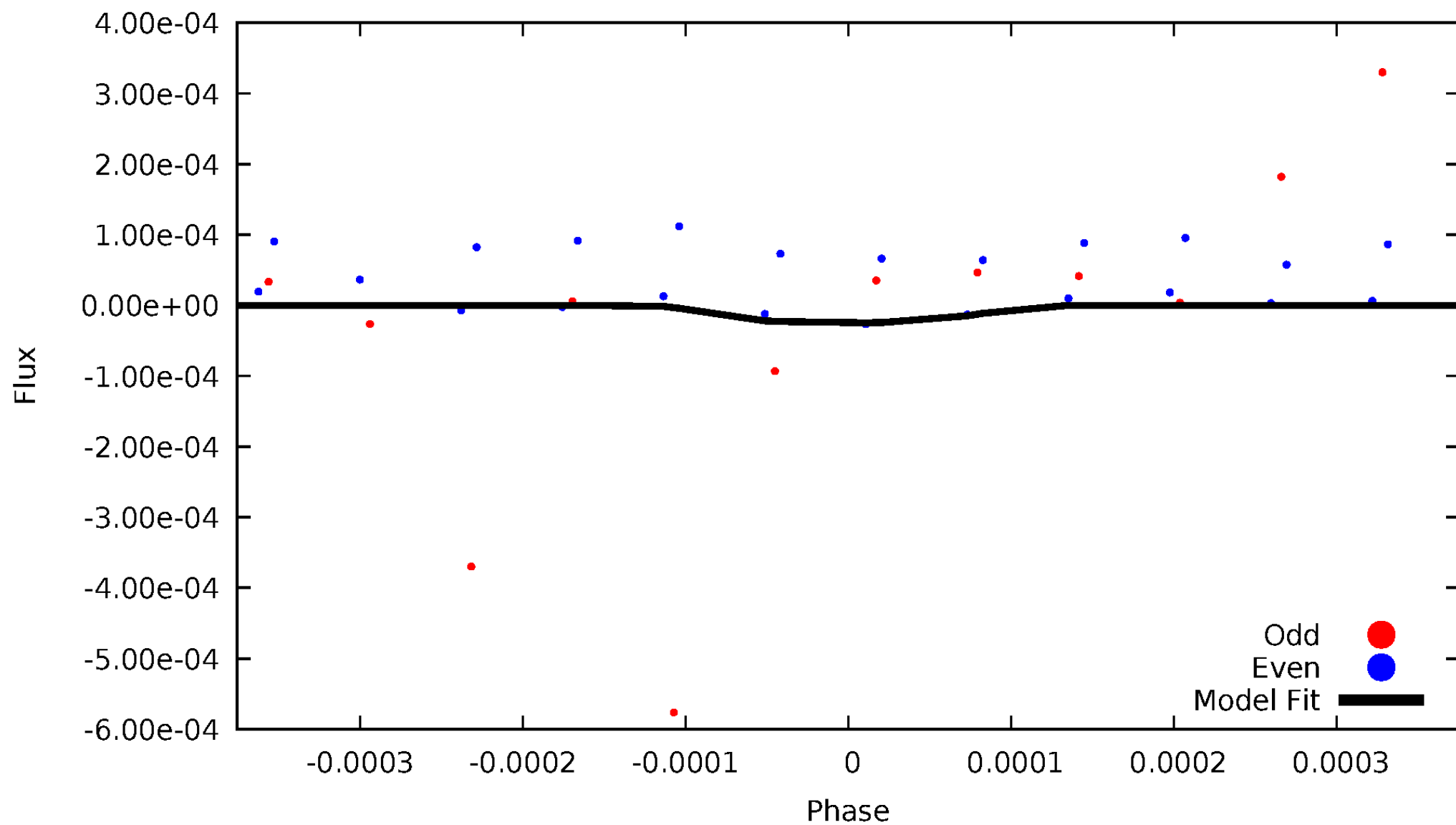


TCE 006127362-01



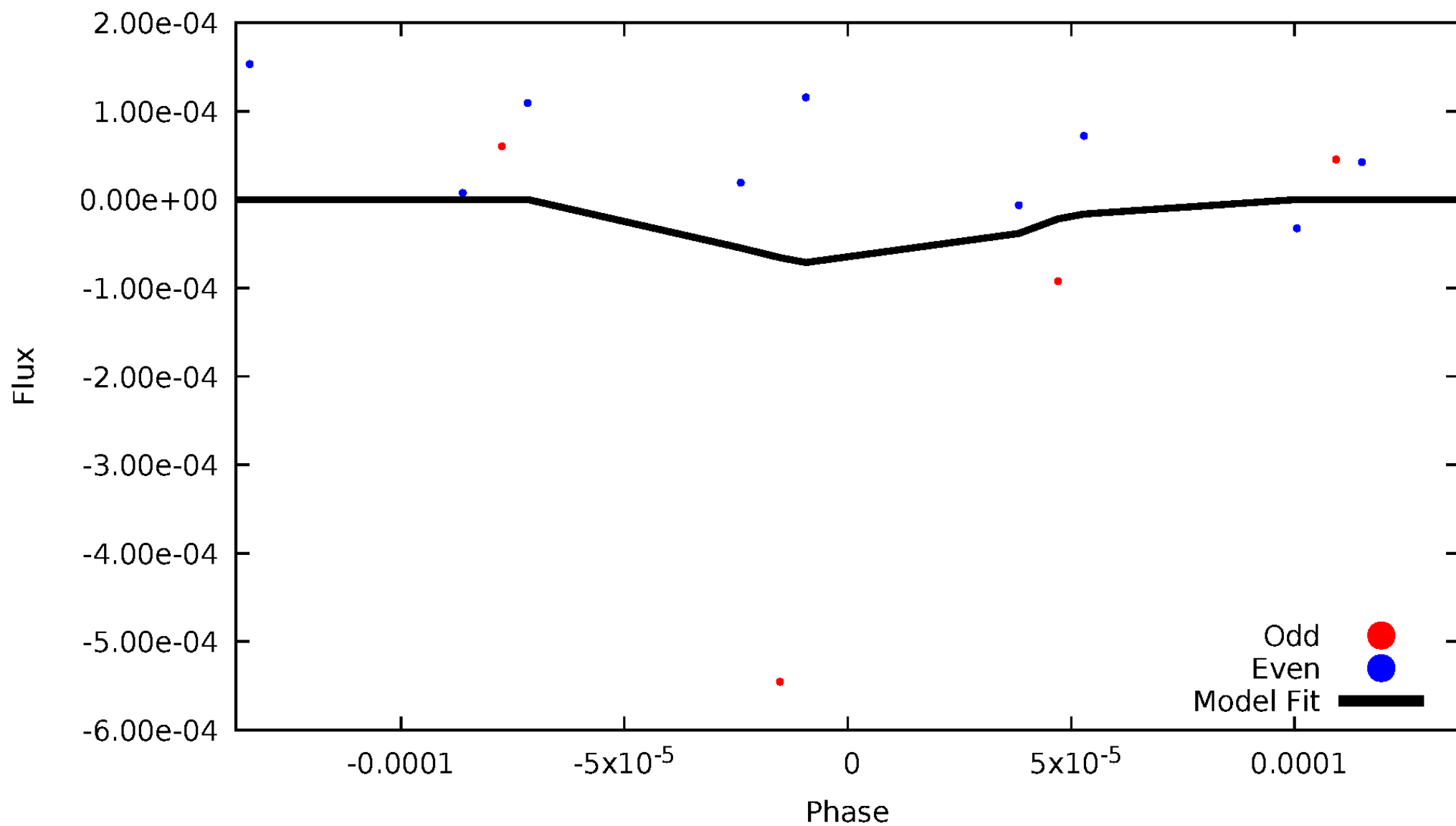
DV Odd/Even

TCE 006127362-01



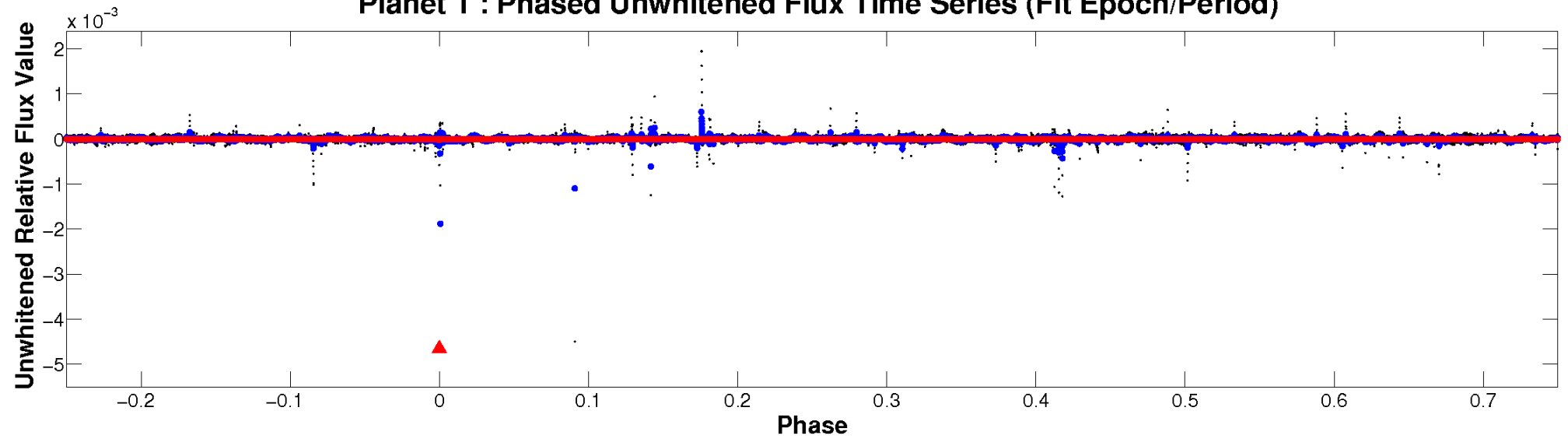
ALT Odd/Even

TCE 006127362-01

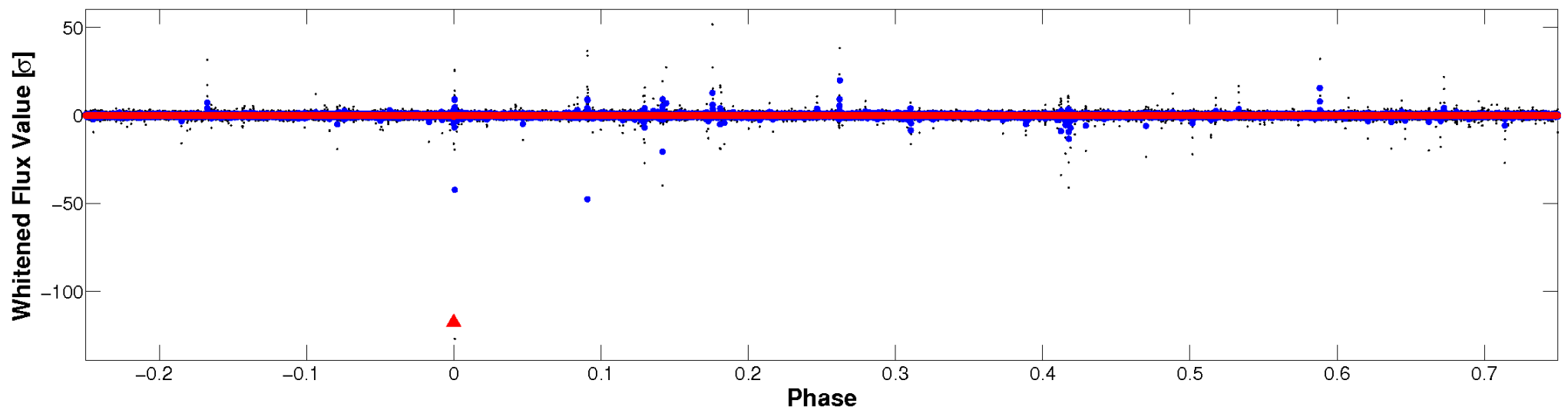


Non-Whitened Vs. Whitened Light Curve

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

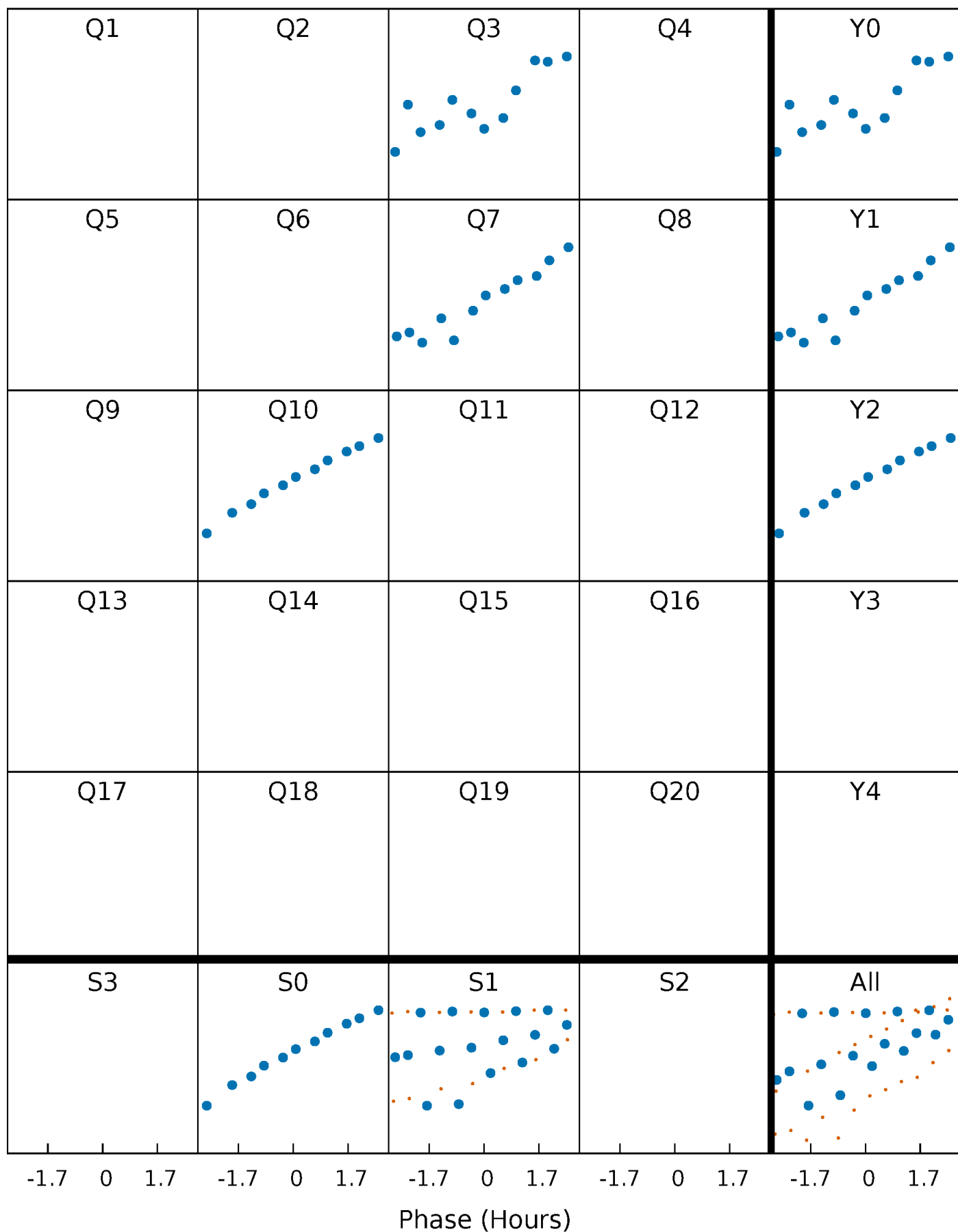


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



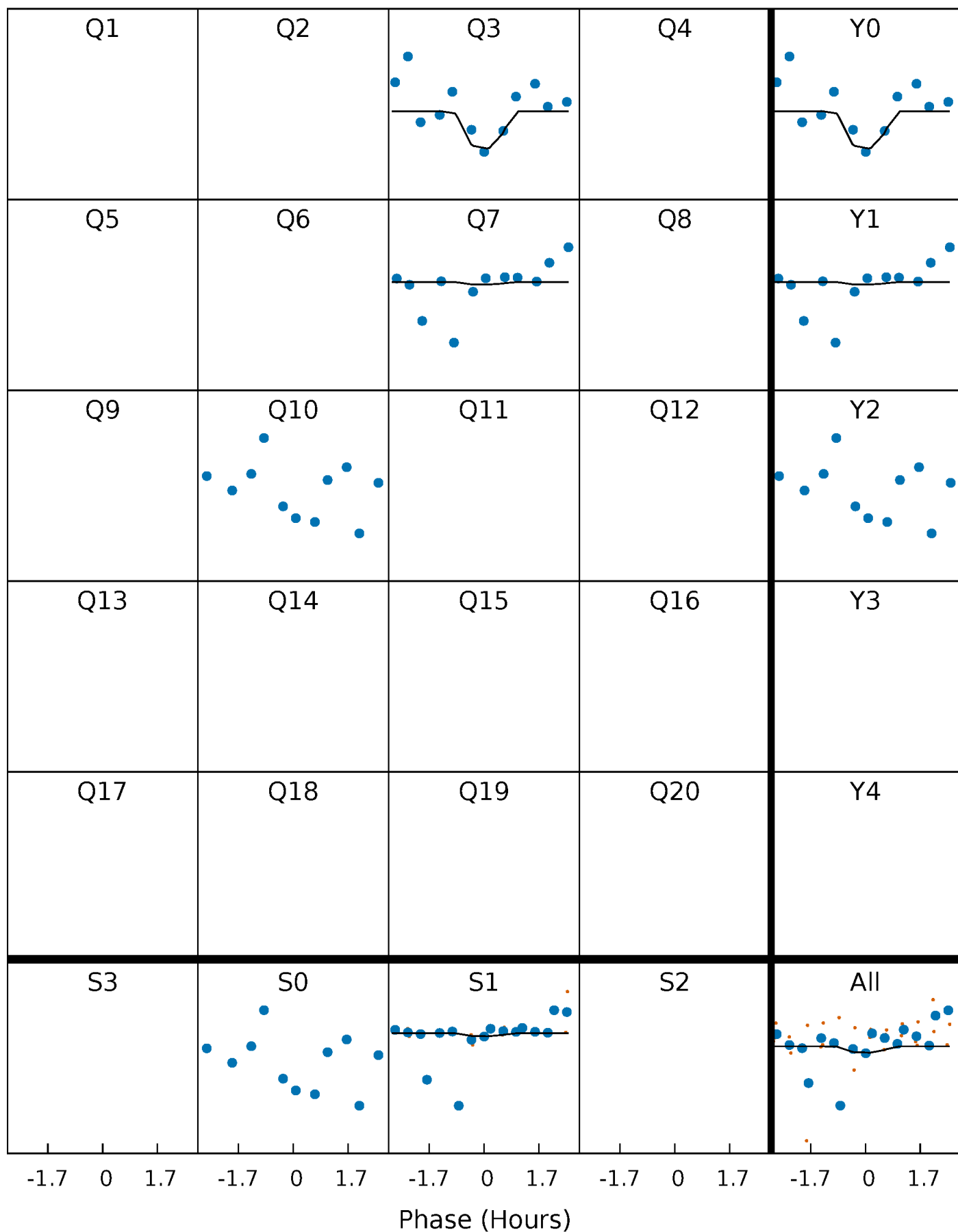
PDC Quarter-Phased Transit Curves

TCE 006127362-01 P=328.429004 Days $T_0=304.989564$ (BKJD)



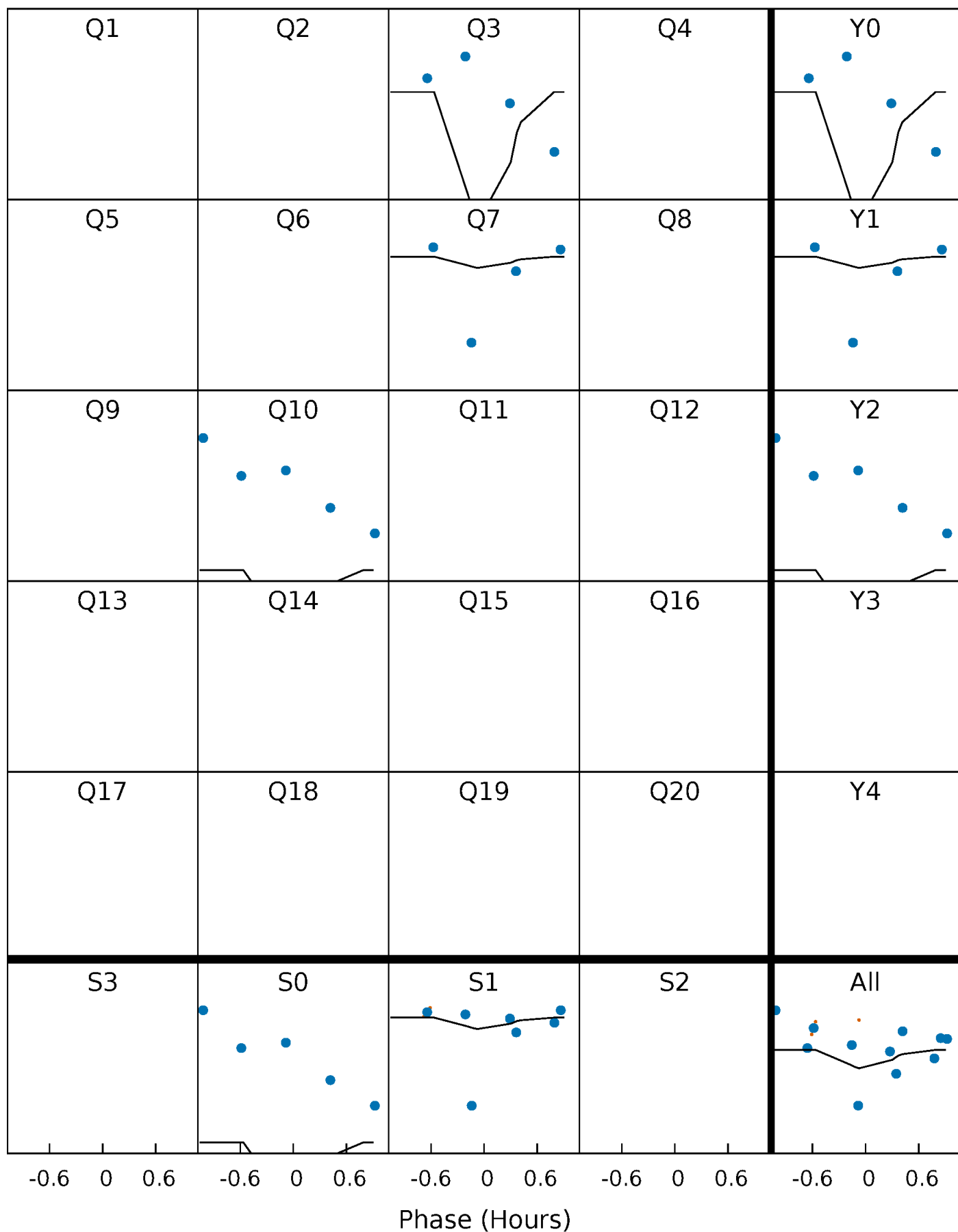
DV Quarter-Phased Transit Curves

TCE 006127362-01 P=328.429004 Days $T_0=304.989564$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

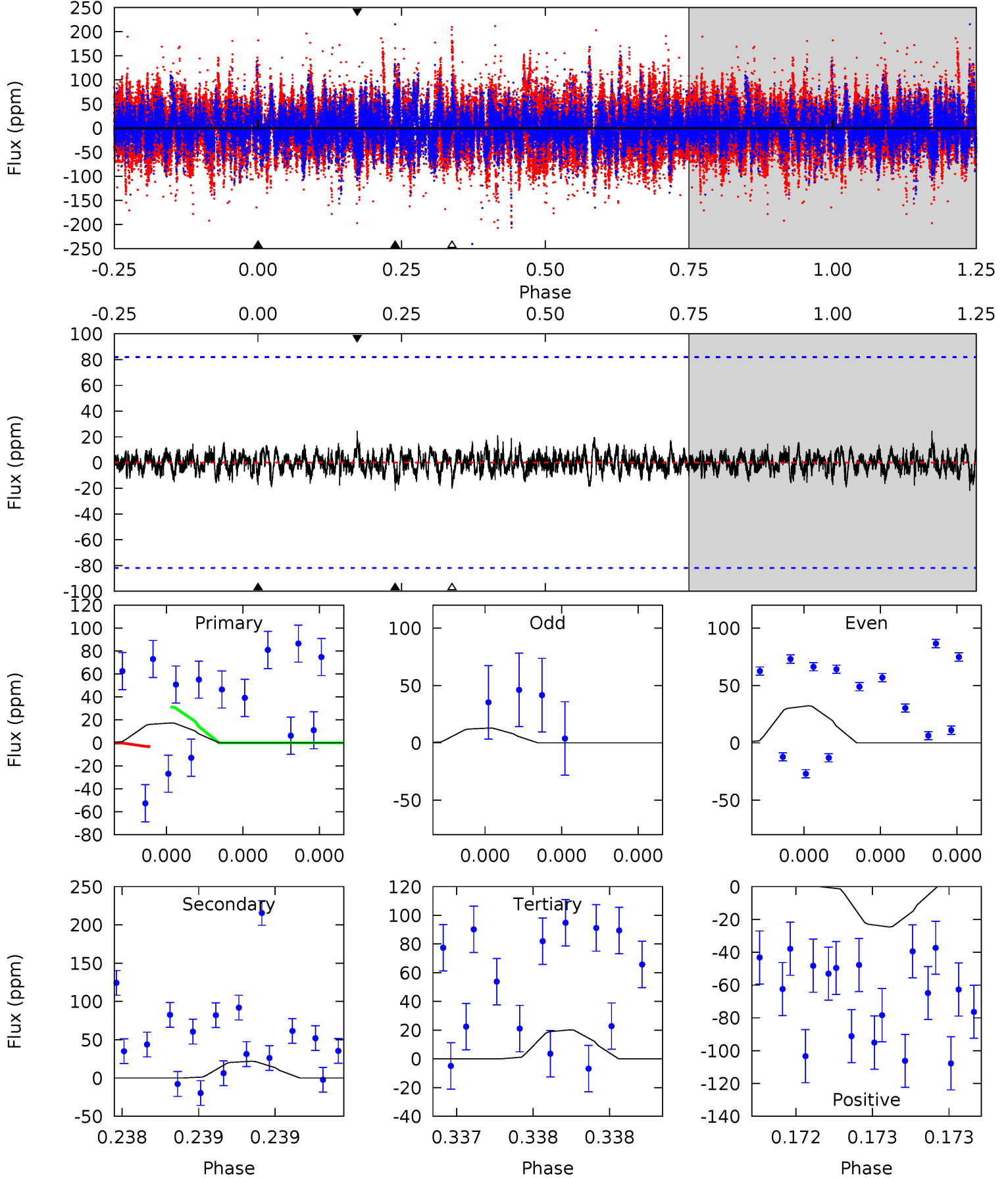
TCE 006127362-01 P=328.428178 Days $T_0=304.960131$ (BKJD)



DV Model-Shift Uniqueness Test

006127362-01, P = 328.429004 Days, E = 304.989564 Days

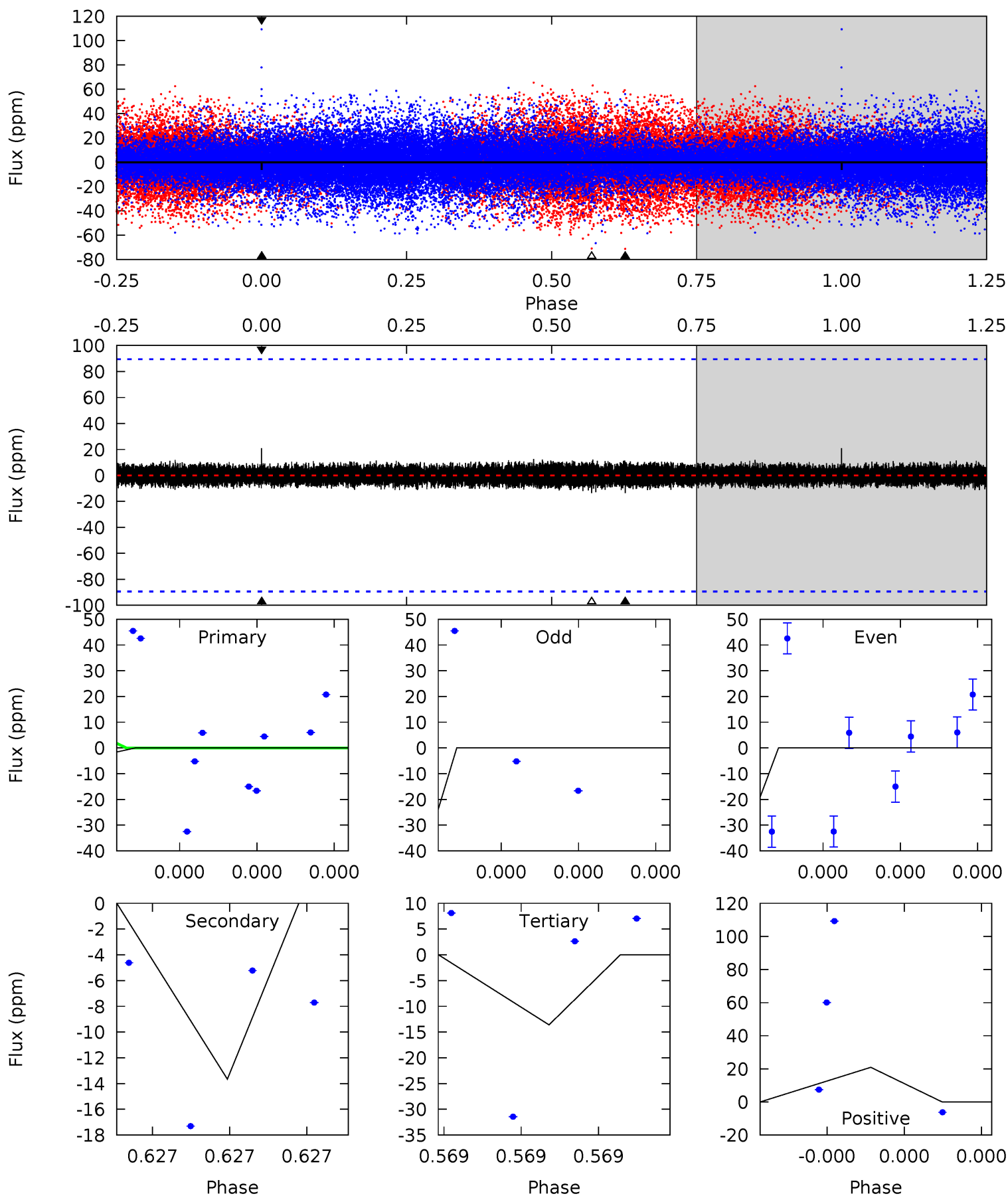
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.21	1.53	1.42	1.72	5.73	3.72	0.40	-0.21	-0.51	0.11	-0.19	0.64	-0.30	0.53	0.97



Alt Model-Shift Uniqueness Test

006127362-01, P = 328.428178 Days, E = 304.960131 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.41	0.90	0.89	1.38	5.89	3.95	0.19	-0.48	-0.97	0.00	-0.48	1.01	-10.8	0.61	0



Stellar Parameters For KIC 006127362

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3673^{+72}_{-79}	$0.629^{+0.331}_{-0.153}$	$0.070^{+0.200}_{-0.300}$	$145.363^{+19.937}_{-79.749}$	$3.275^{+0.232}_{-2.203}$	$0.000^{+0.000}_{-0.000}$
	+2%/-2%	+53%/-24%	+286%/-429%	+14%/-55%	+7%/-67%	+392%/-34%
Source	SPE14	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 006127362-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22 ± 14	$1280.93^{+1551.70}_{-878.72}$	2320^{+121}_{-257}	-2481^{+245}_{-97}	$0.010^{+0.105}_{-0.009}$
Alt.	-14 ± 15	$1335.38^{+1498.64}_{-936.09}$	2337^{+119}_{-219}	-2509^{+224}_{-86}	$0.005^{+0.071}_{-0.005}$

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

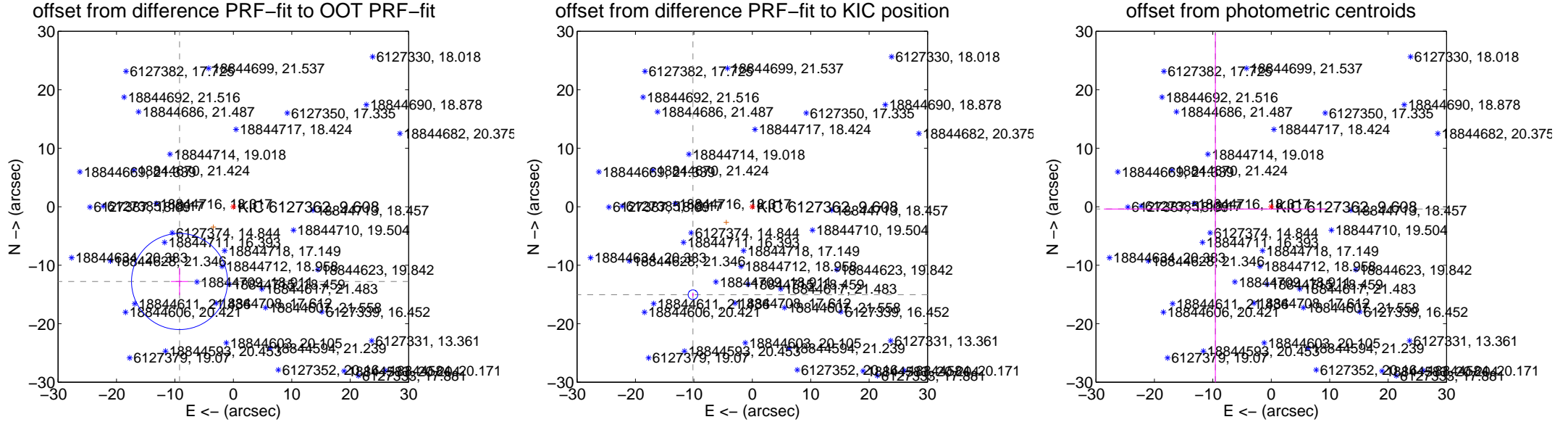
DV Centroid Data

Supplemental centroid analysis for 006127362-01. **Kepler magnitude: 9.61.** Transit SNR 1.89

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.30 arcsec

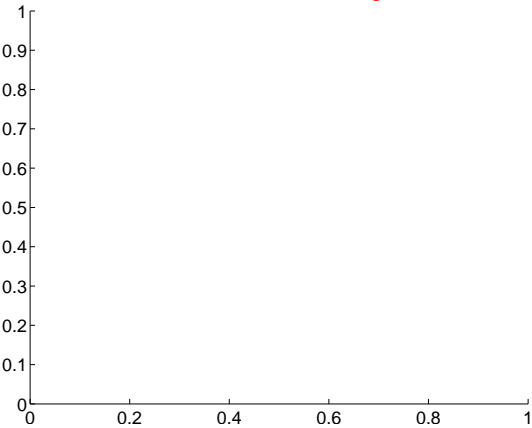
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	15.759 \pm 2.739	5.75	9.212 \pm 1.451	-12.786 \pm 2.331
PRF-fit source offset from KIC position	18.149 \pm 0.276	65.77	10.155 \pm 0.140	-15.042 \pm 0.319
photometric centroid source offset	9.56 \pm 19.10	0.50	9.56 \pm 19.08	-0.39 \pm 30.06



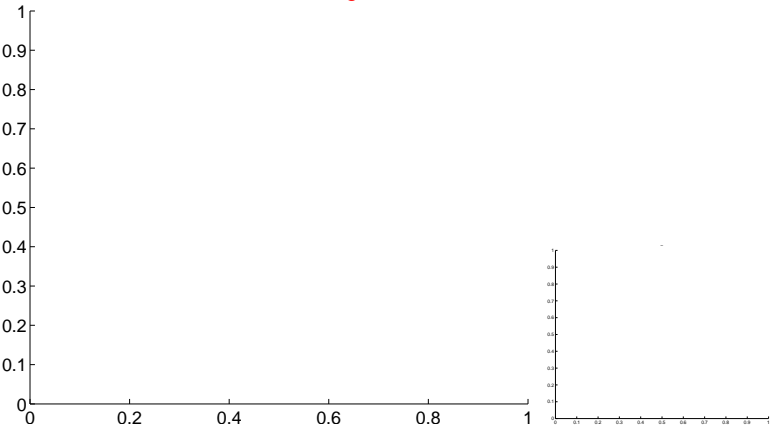
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

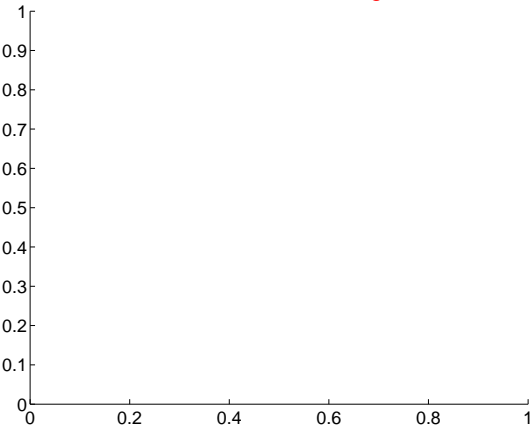
Q1 no difference image



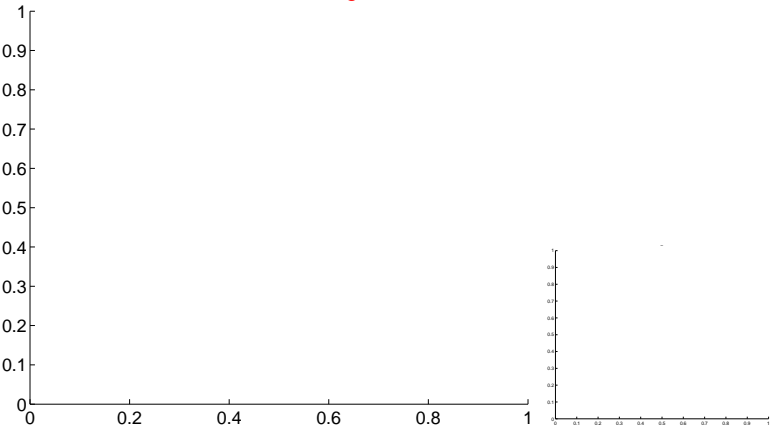
Q1 no OOT image



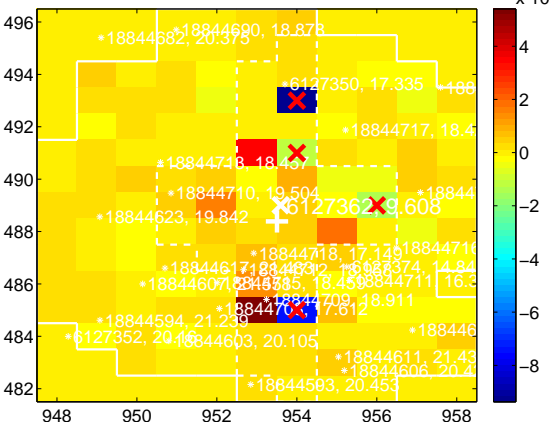
Q2 no difference image



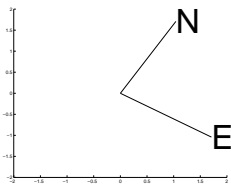
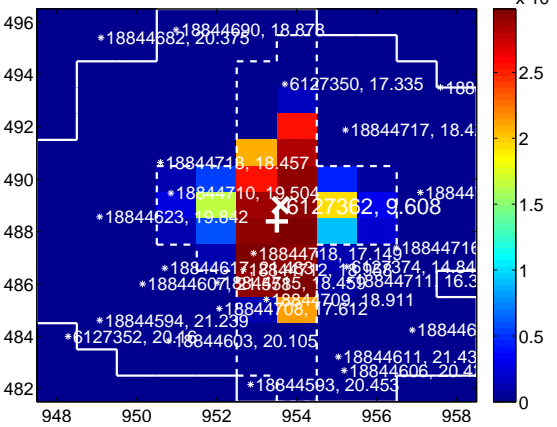
Q2 no OOT image



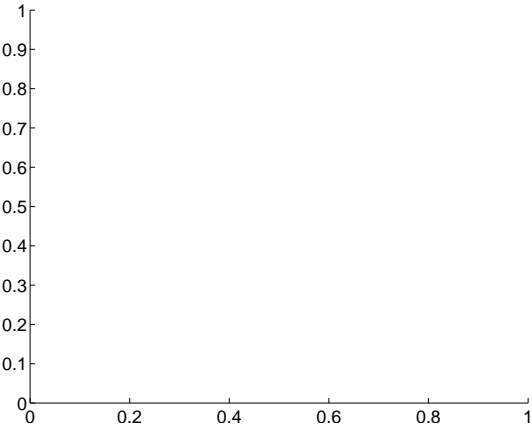
Q3 difference image. Poor Quality



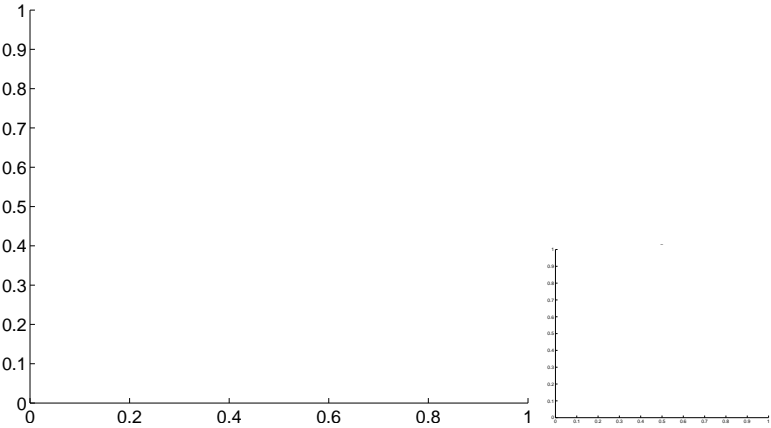
Q3 OOT image



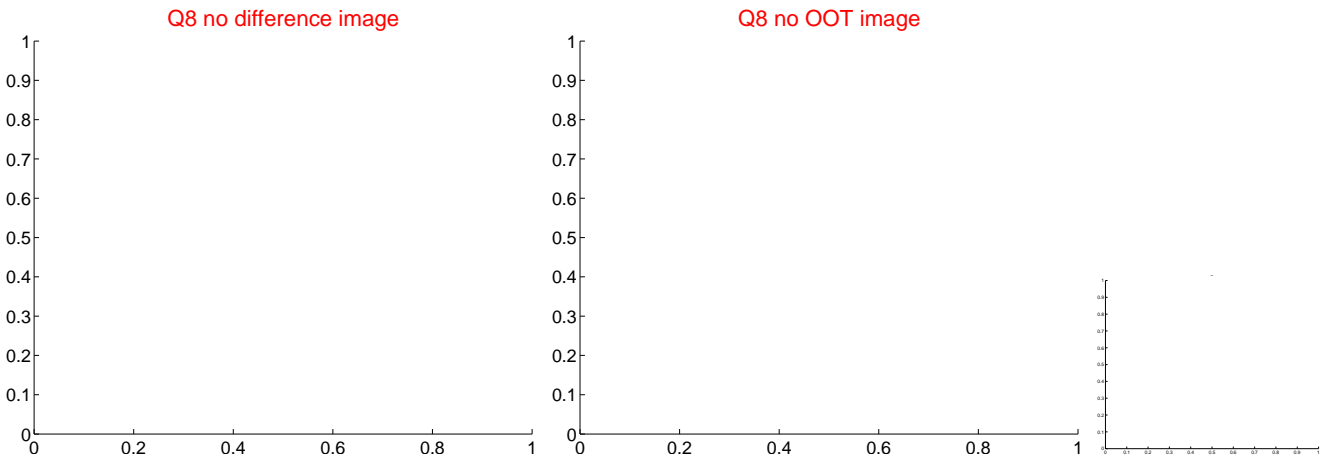
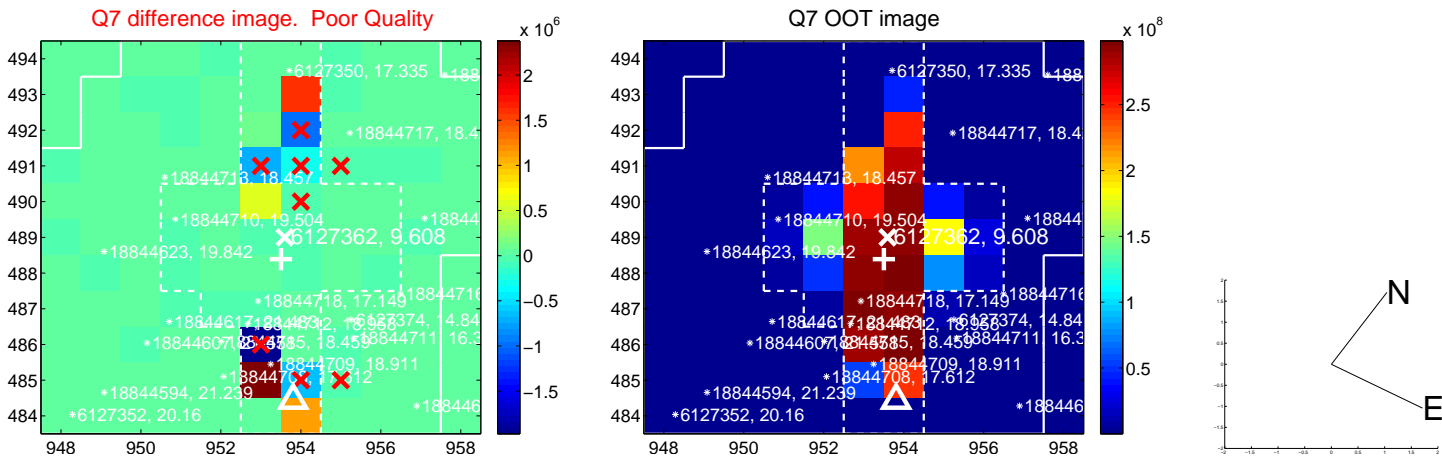
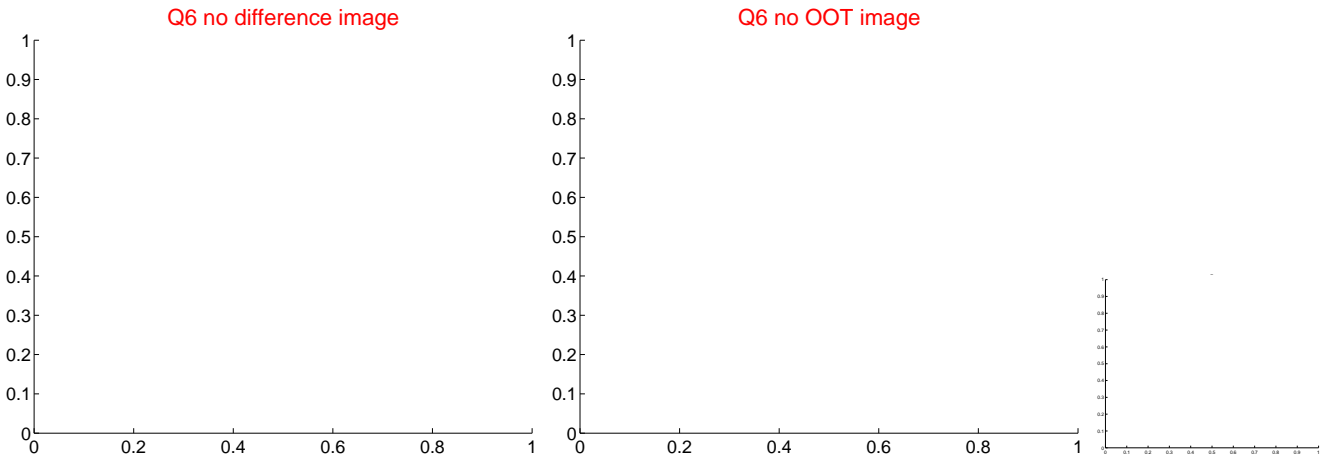
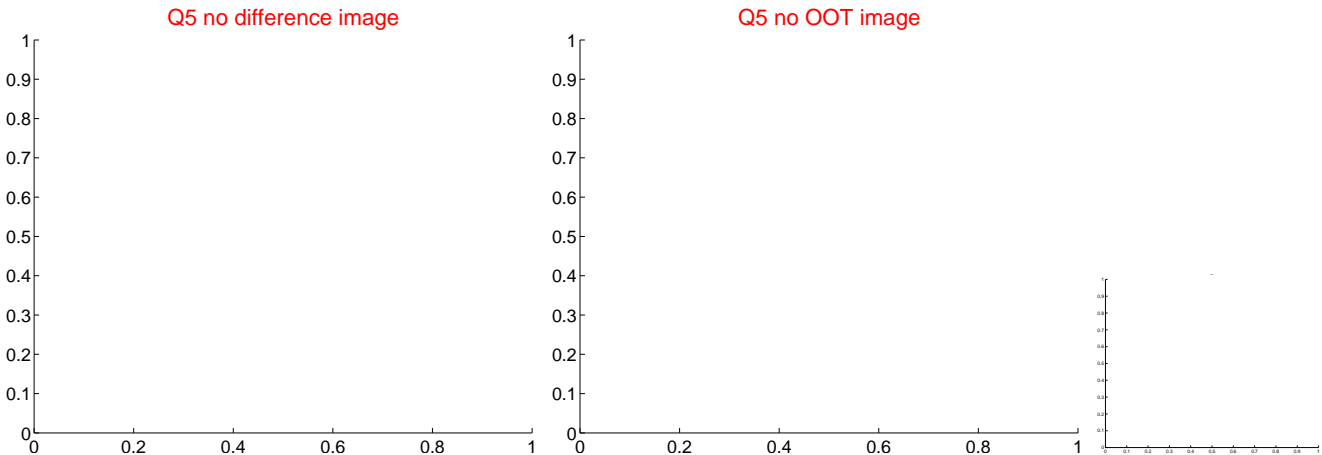
Q4 no difference image



Q4 no OOT image

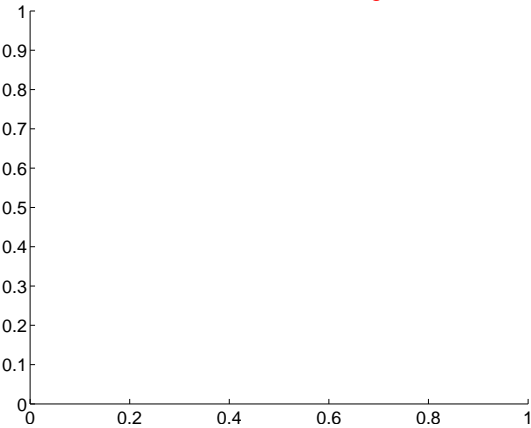


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value

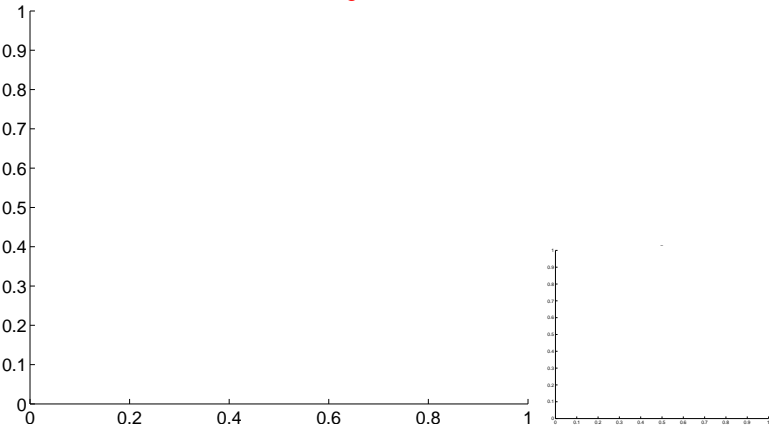


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

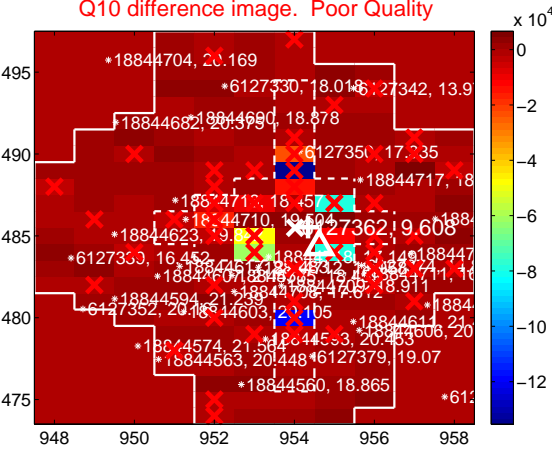
Q9 no difference image



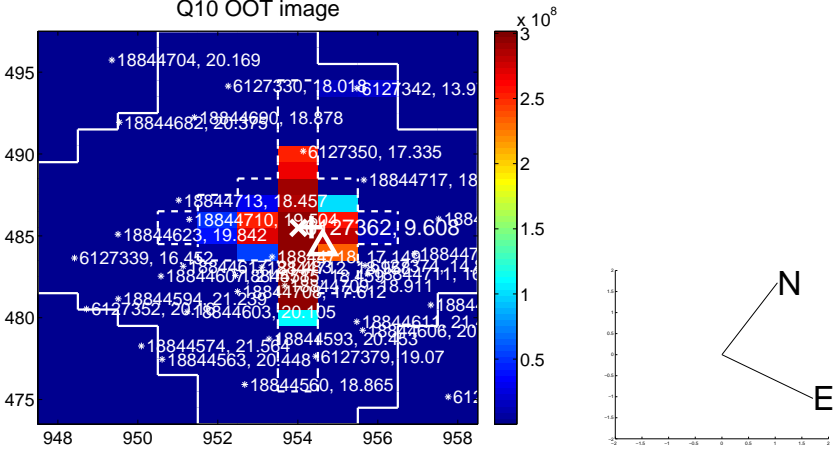
Q9 no OOT image



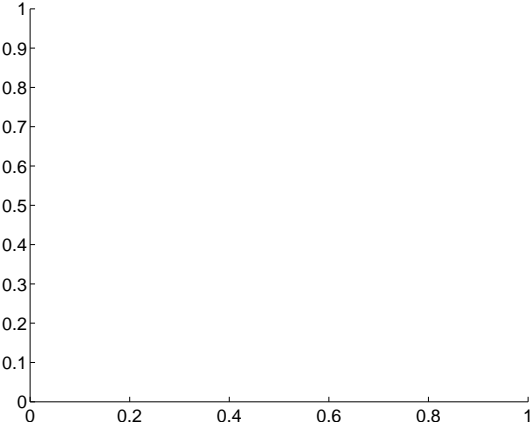
Q10 difference image. Poor Quality



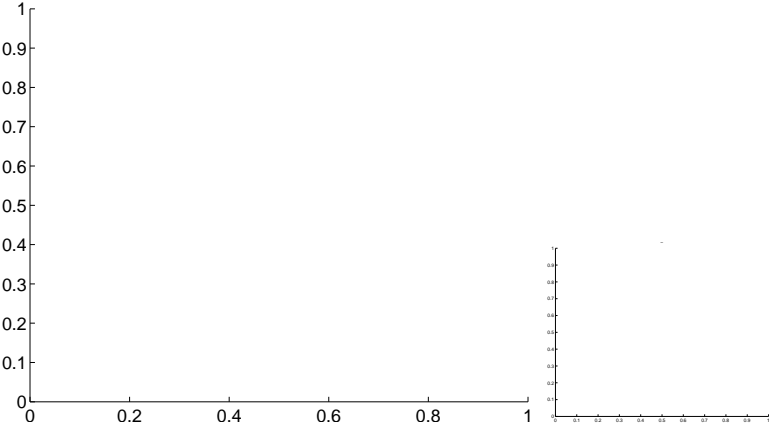
Q10 OOT image



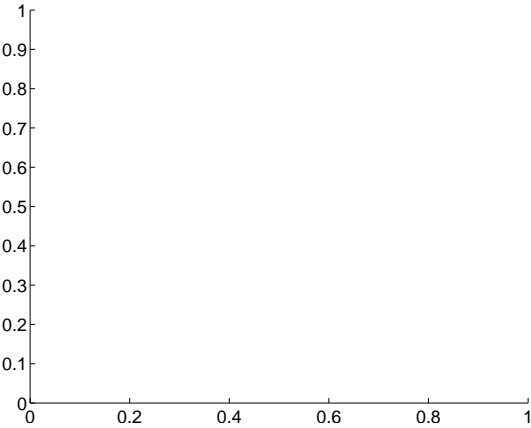
Q11 no difference image



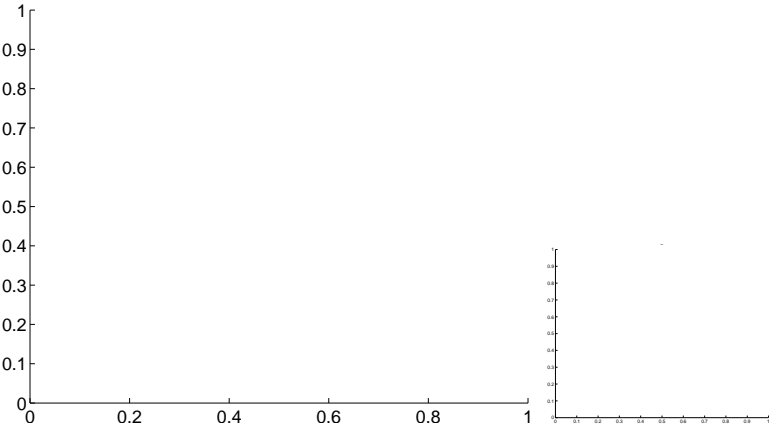
Q11 no OOT image



Q12 no difference image



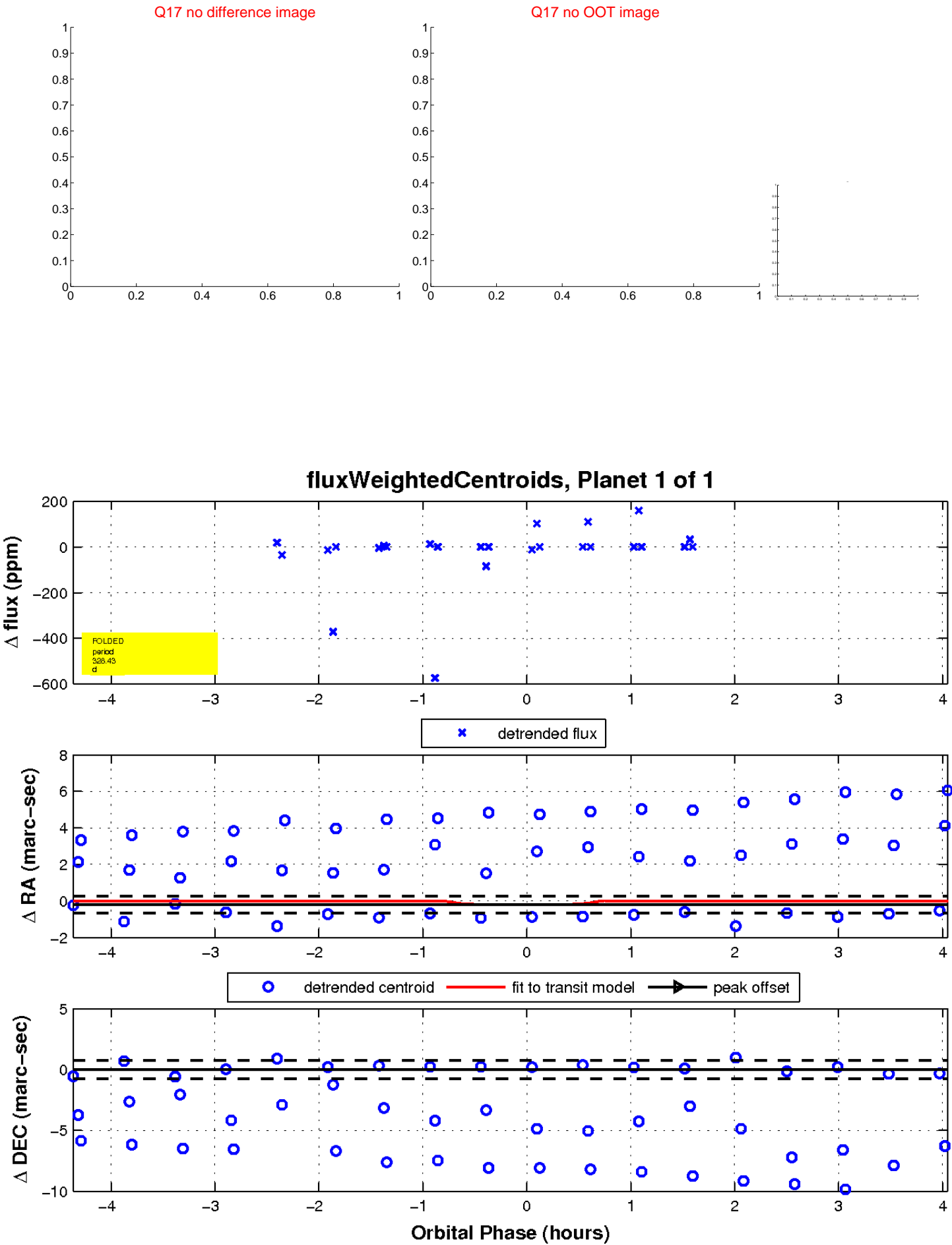
Q12 no OOT image



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

