

KIC 009650957

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})
009650957-01	OBS	No	0.577416	131.585643	0.0	5.084	9.1	0.0	2.16	7271	0.00	45777.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009650957-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—CENT_UNRESOLVED_OFFSET

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

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

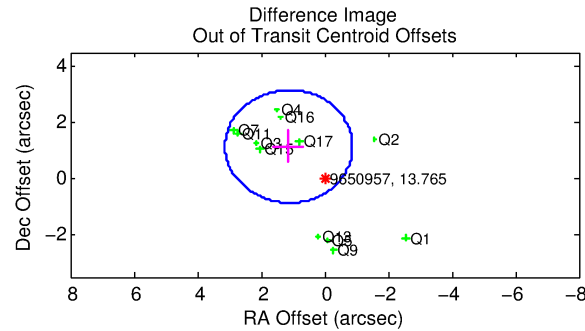
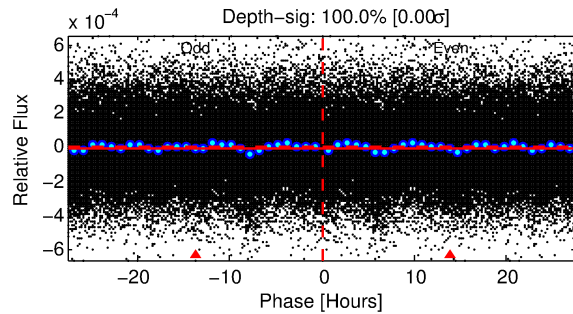
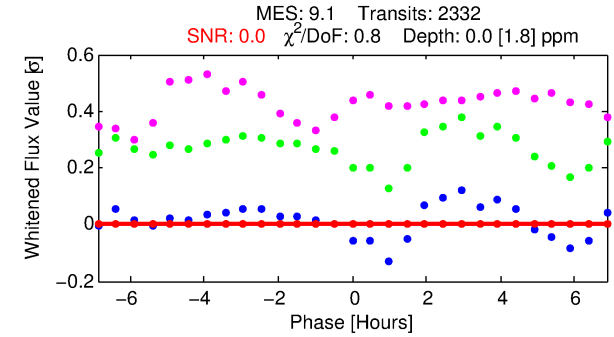
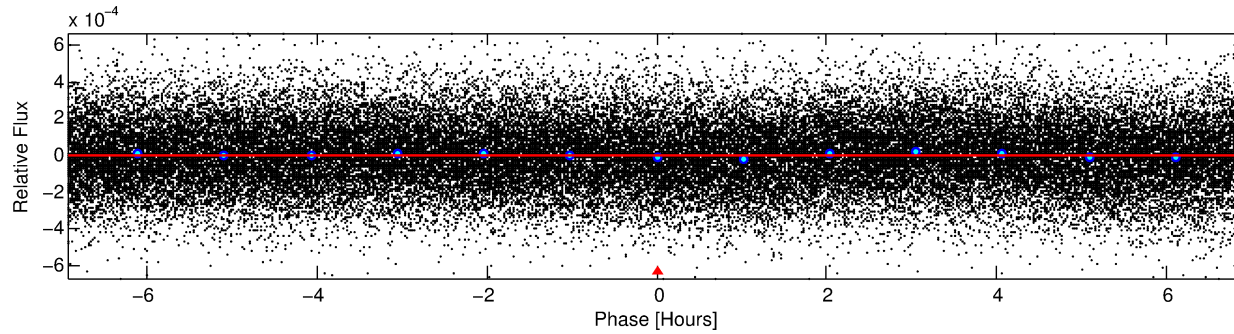
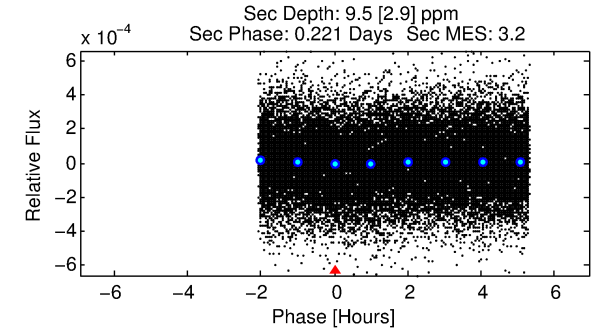
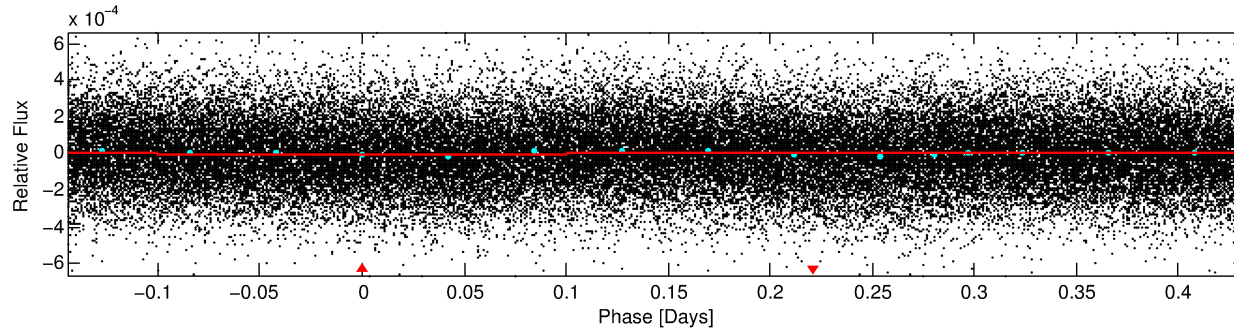
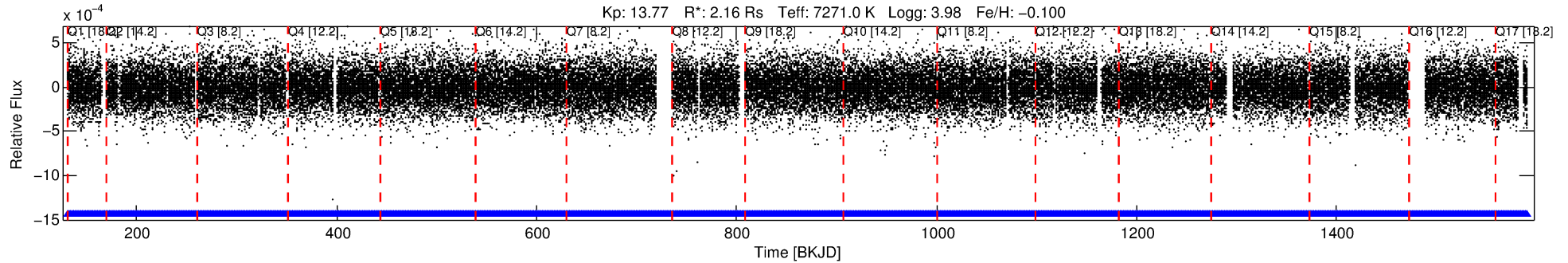
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009650957-01

No Significant Match Found

DV One-Page Summary

KIC: 9650957 Candidate: 1 of 1 Period: 0.577 d



DV Fit Results:

Period = 0.57742 [10.66979] d
Epoch = 131.5856 [4475.0666] BKJD
Rp/R* = 0.0000 [0.2033]
a/R* = 1.09 [4917.20]
b = 0.21 [113661.02]
Seff = 45777.61 [1128068.21]
Teq = 3730 [22978] K
Rp = 0.00 [47.87] Re
a = 0.0160 [0.1967] AU
Ag = 1653989.34 [176331193219.62] [0.00σ]
Teffp = 206806 [5512527504] K [0.00σ]

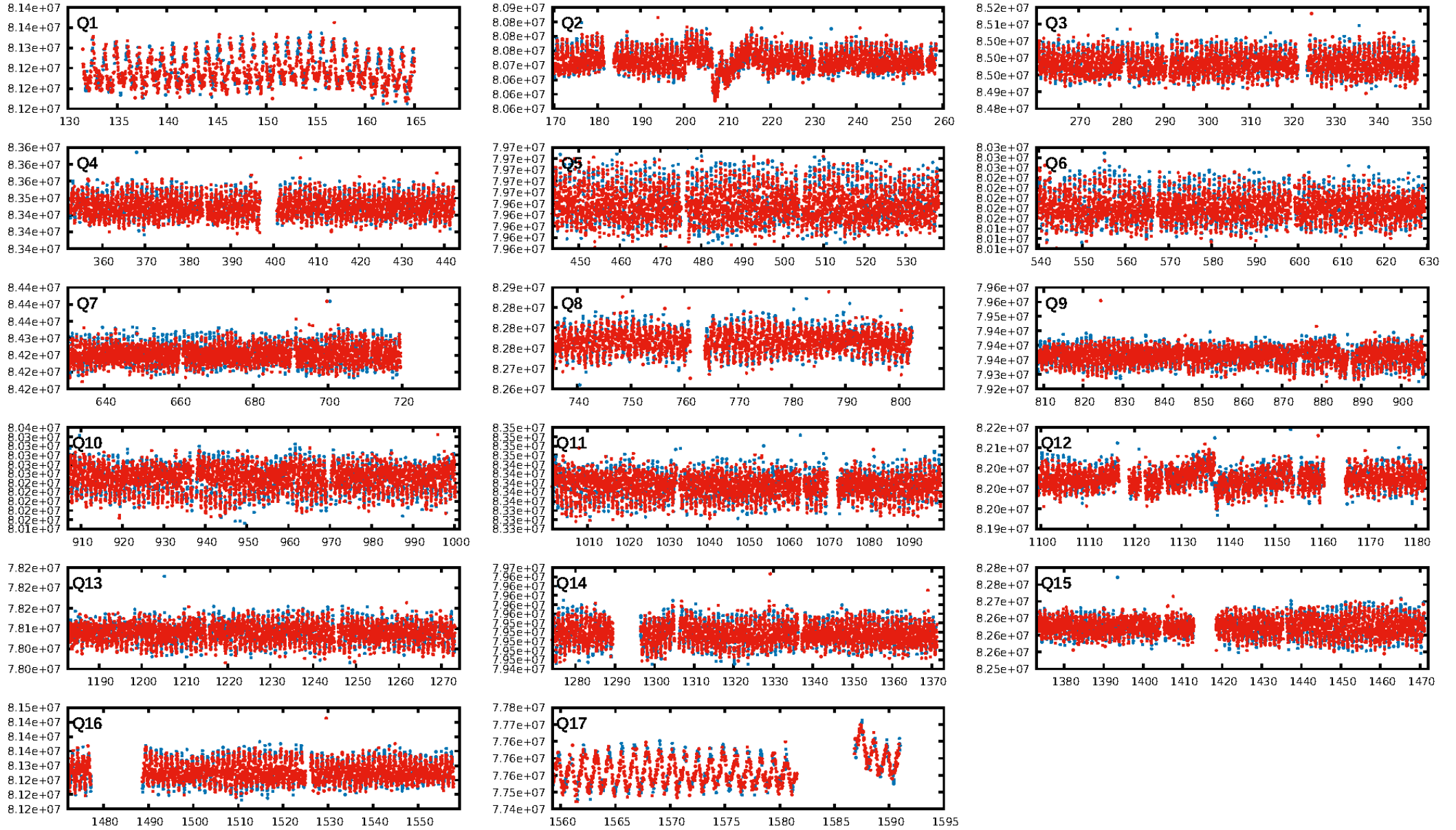
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2227/2227]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
QotOffset-rm: 1.606 arcsec [2.40σ]
KicOffset-rm: 1.699 arcsec [2.61σ]
QotOffset-st: 1/4/2/5 [12]
KicOffset-st: 1/4/2/5 [12]
DiffImageQuality-fgm: 0.58 [7/12]
DiffImageOverlap-fno: 1.00 [17/17]

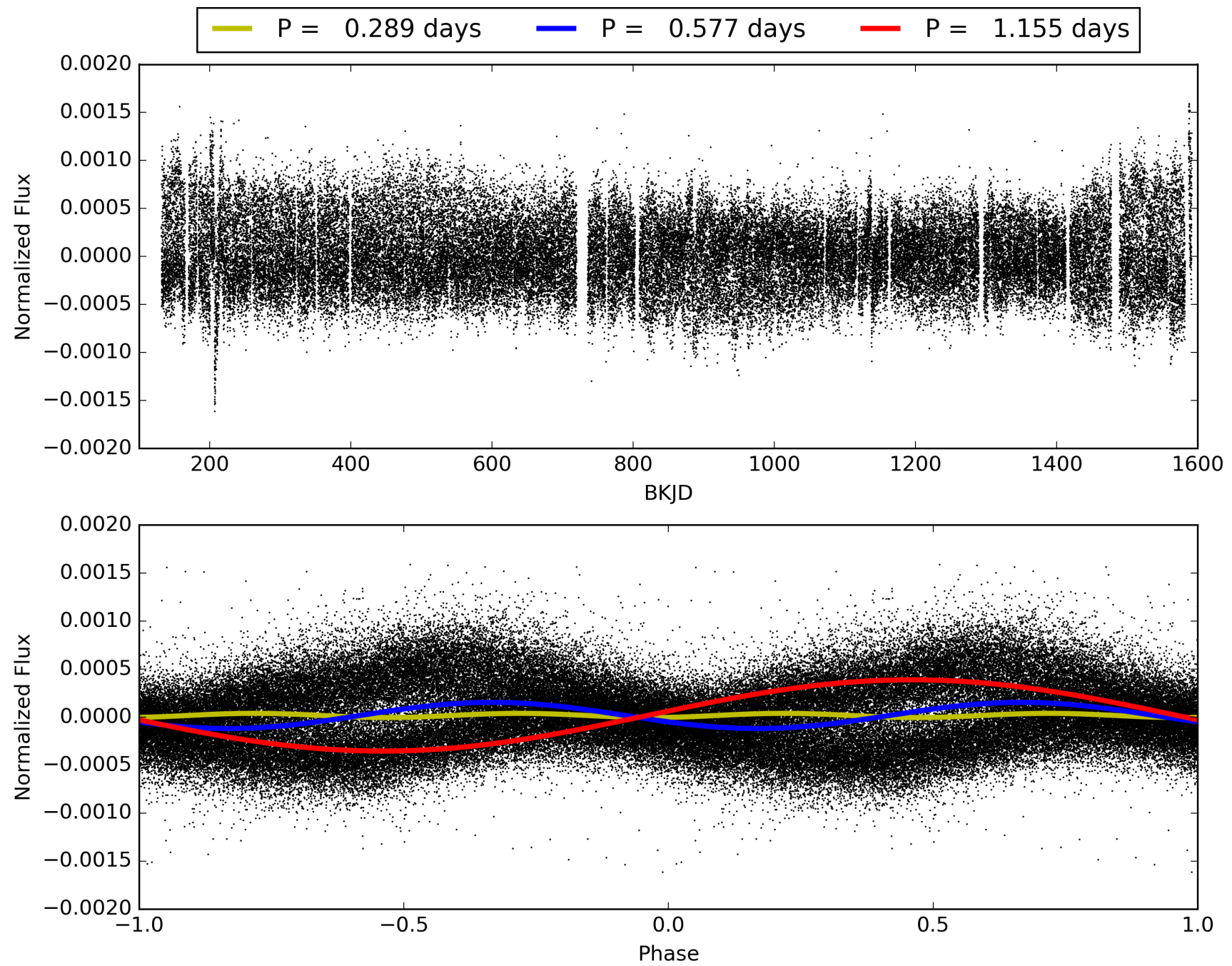
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:19:02 Z

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

TCE 009650957-01, PDC Light Curves

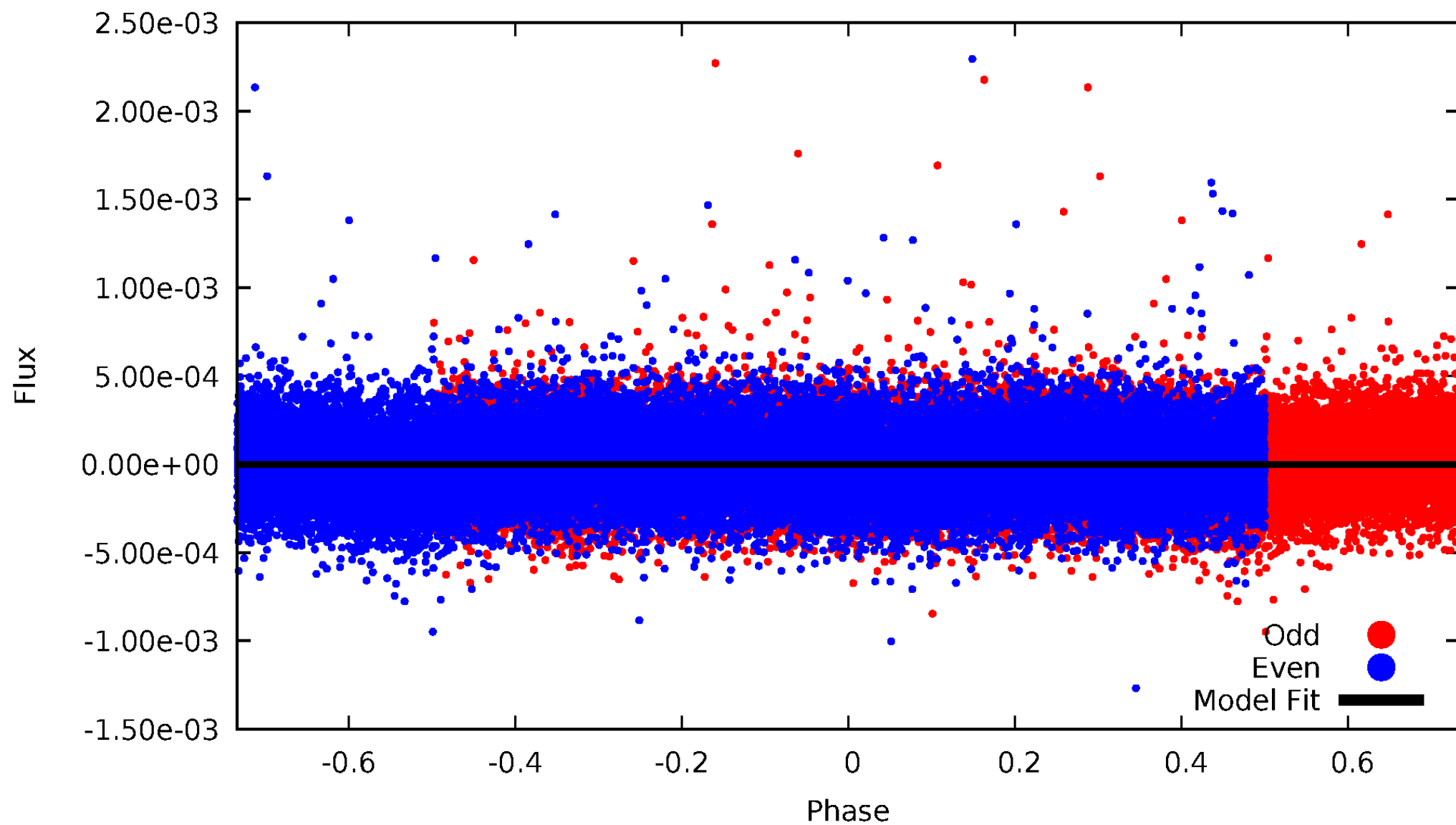


TCE 009650957-01



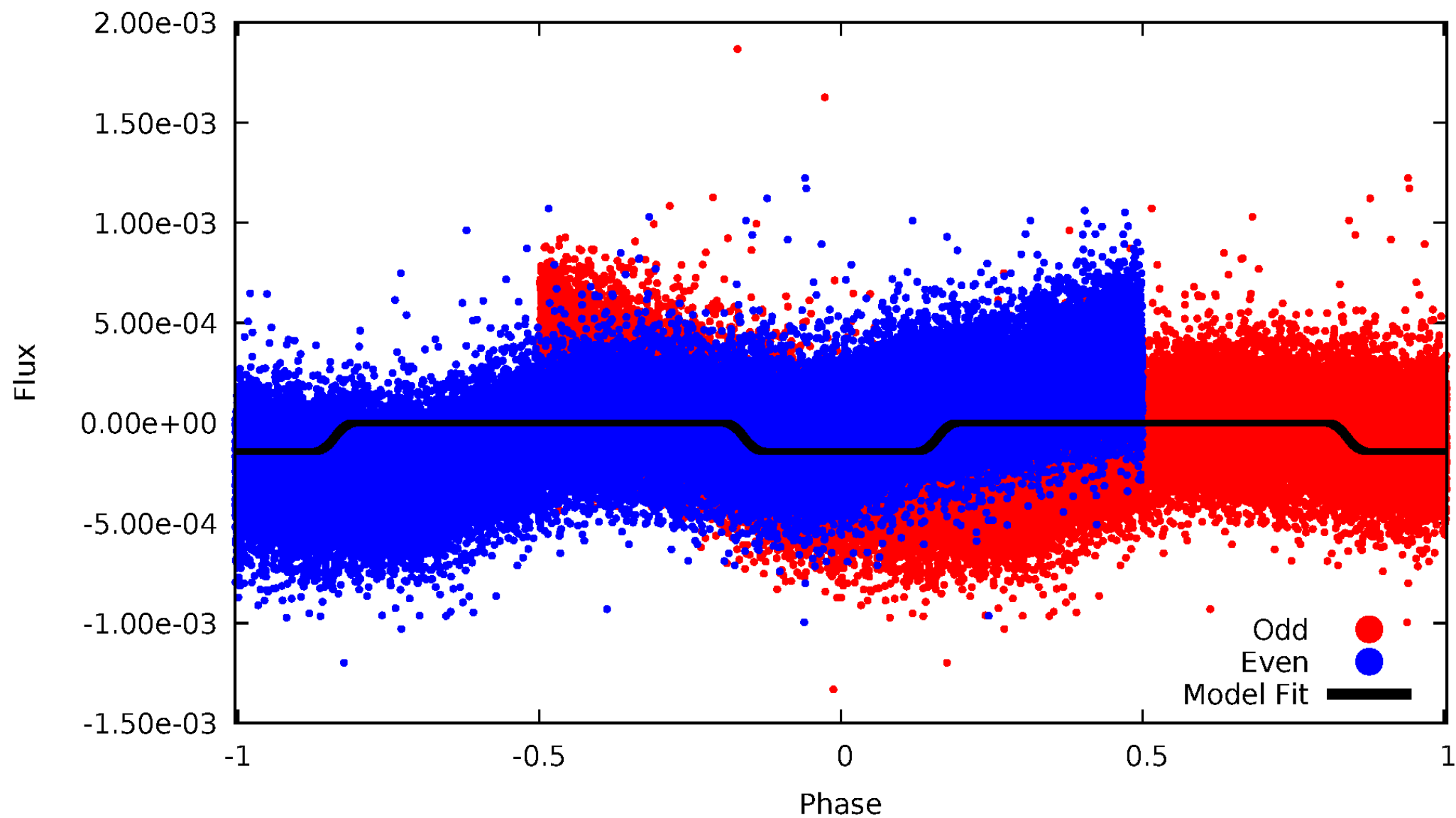
DV Odd/Even

TCE 009650957-01



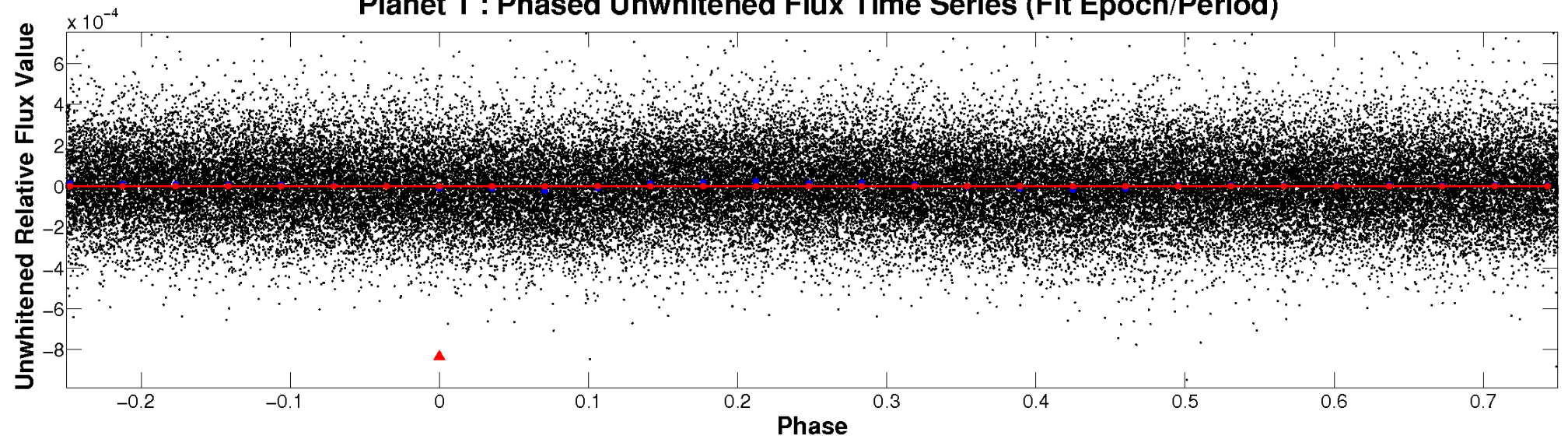
ALT Odd/Even

TCE 009650957-01

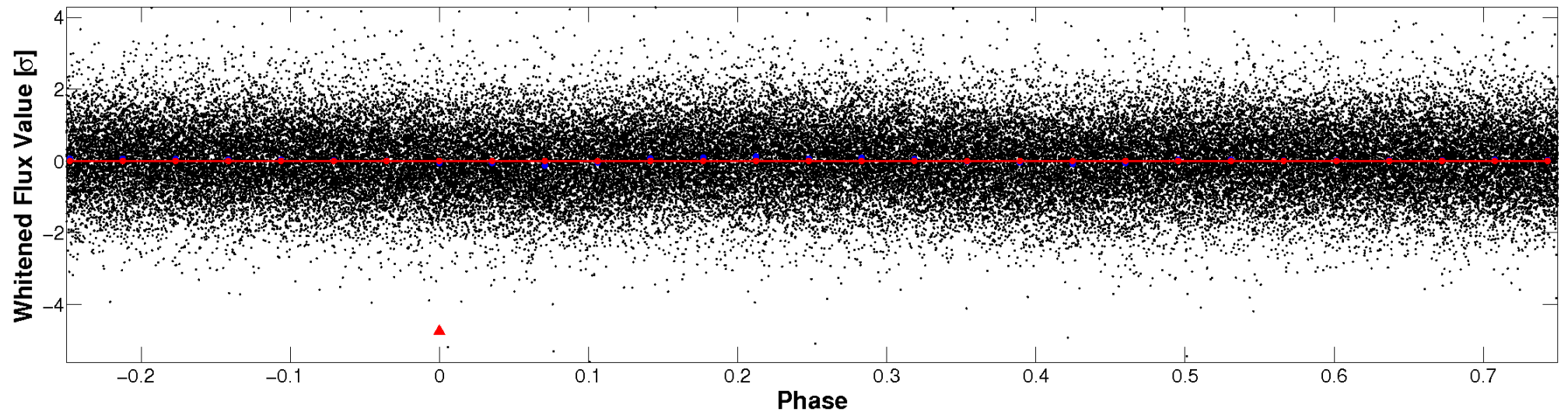


Non-Whitened Vs. Whitened Light Curve

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

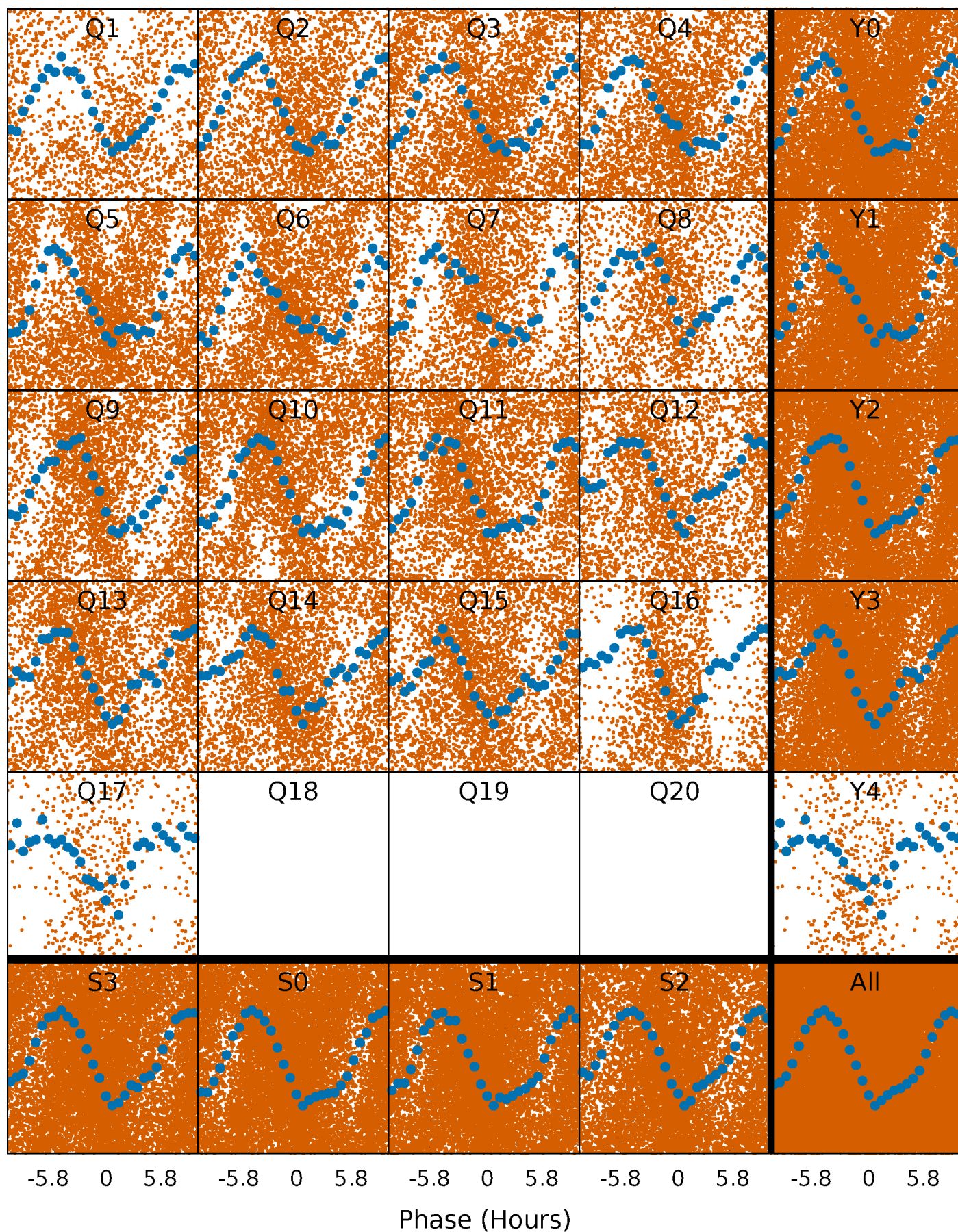


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



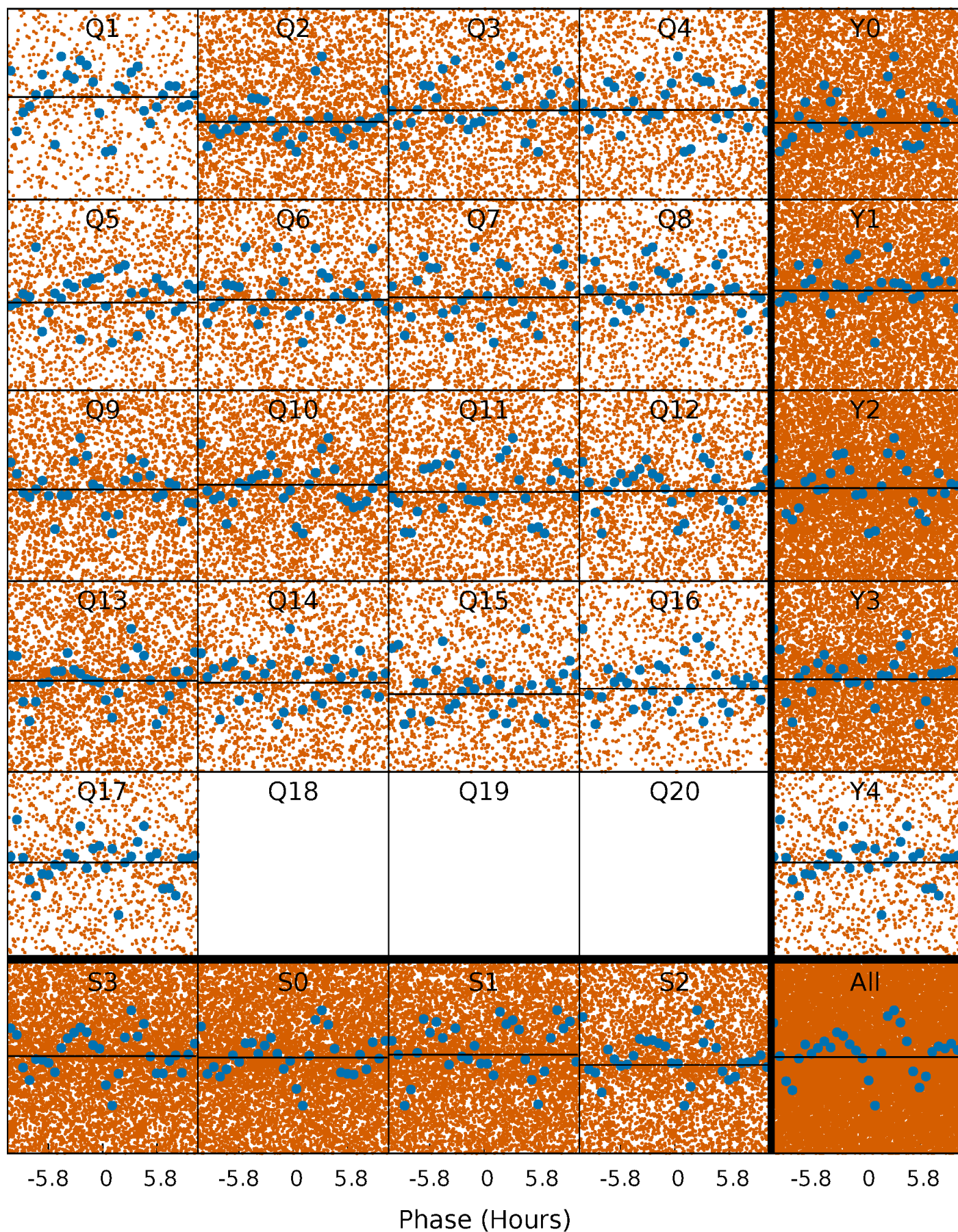
PDC Quarter-Phased Transit Curves

TCE 009650957-01 P= 0.577416 Days $T_0=131.585643$ (BKJD)



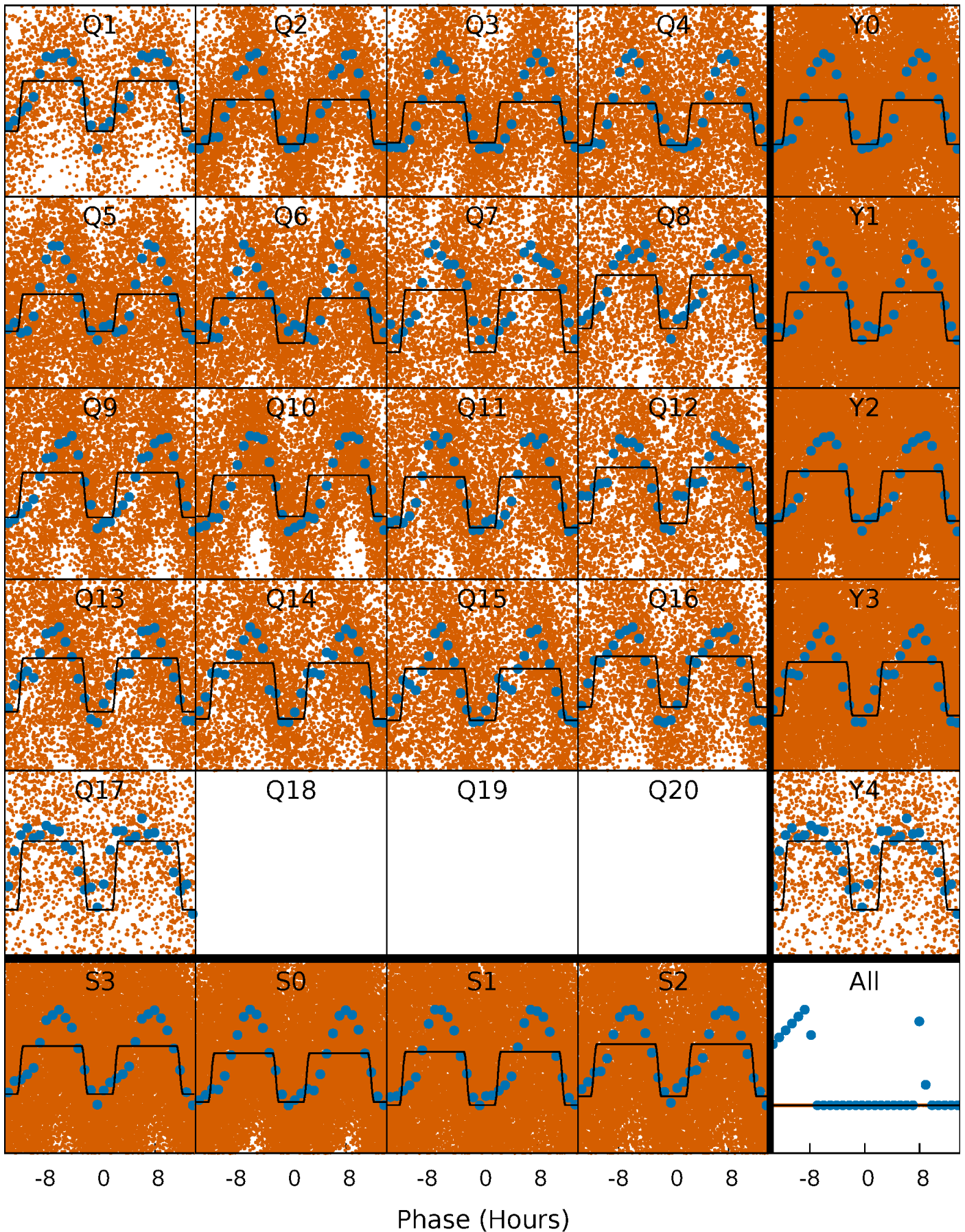
DV Quarter-Phased Transit Curves

TCE 009650957-01 P= 0.577416 Days $T_0=131.585643$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

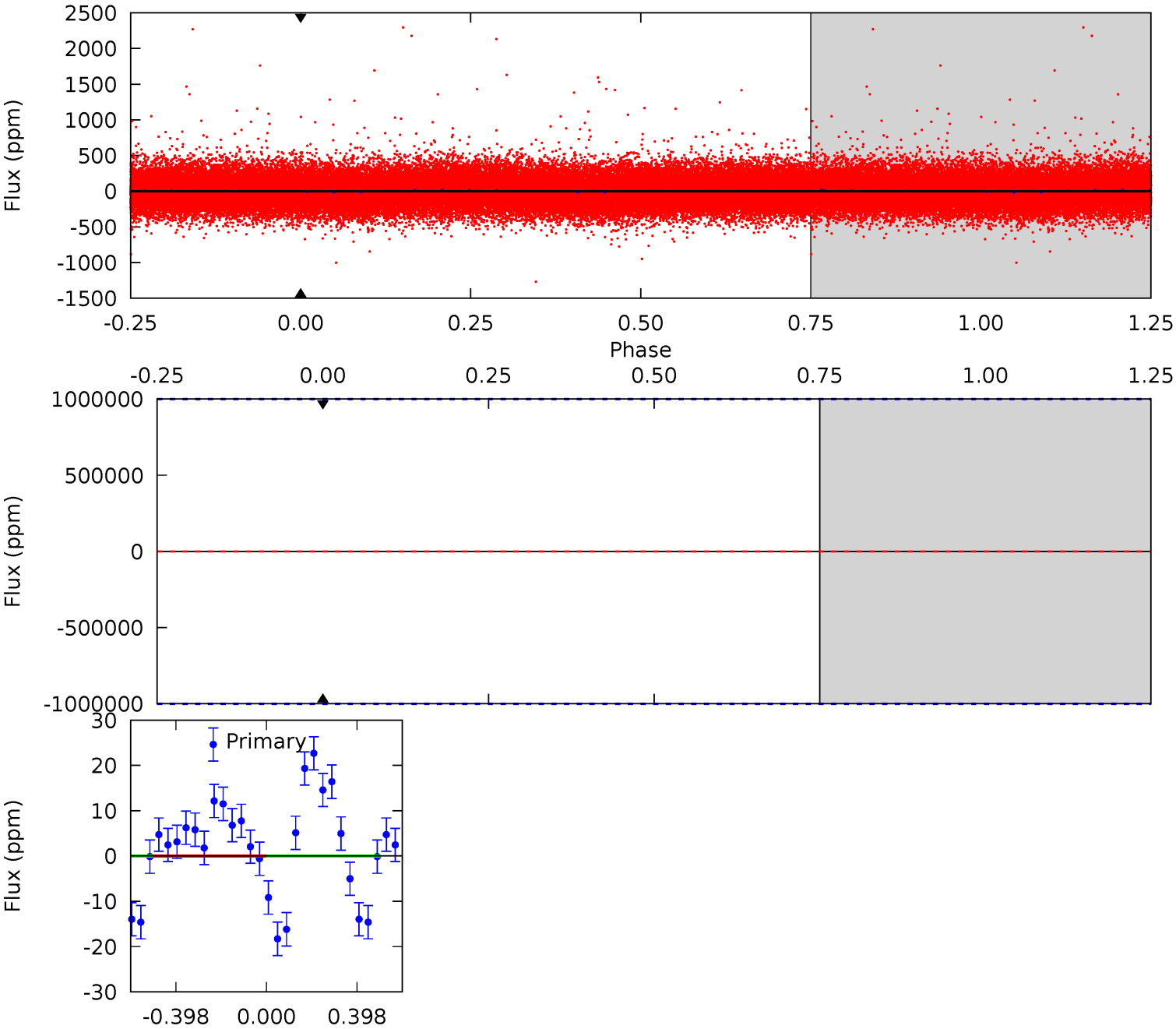
TCE 009650957-01 P= 0.577428 Days $T_0=131.638122$ (BKJD)



DV Model-Shift Uniqueness Test

009650957-01, P = 0.577416 Days, E = 131.008227 Days

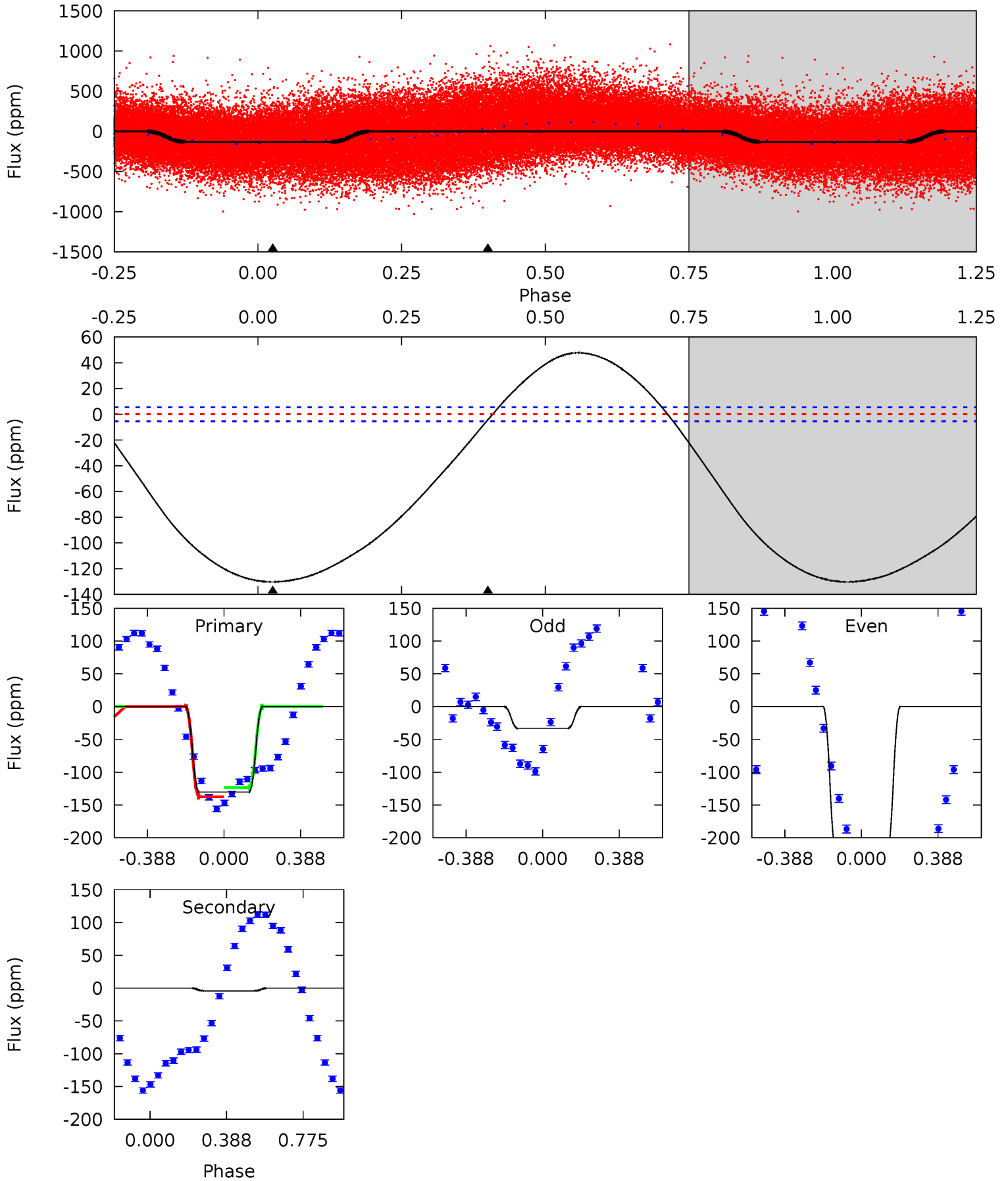
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009650957-01, P = 0.577428 Days, E = 131.060694 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
100.8	3.33	0	0	4.27	0.86	12.7	100.8	100.8	3.33	3.33	73.0	1.05	0.27	4.43



Stellar Parameters For KIC 009650957

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7271^{+230}_{-345}	$3.981^{+0.240}_{-0.160}$	$-0.100^{+0.250}_{-0.350}$	$2.158^{+0.552}_{-0.675}$	$1.625^{+0.186}_{-0.345}$	$0.228^{+0.364}_{-0.100}$
	+3%/-5%	+6%/-4%	+250%/-350%	+26%/-31%	+11%/-21%	+160%/-44%
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 009650957-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$30.83^{+32.44}_{-21.81}$	2190^{+1024}_{-512}	4421^{+14855}_{-20486}	$4.308^{+919.160}_{-673.823}$
Alt.	-4 ± 1	$31.51^{+32.97}_{-21.41}$	2176^{+1189}_{-498}	-2498^{+483}_{-715}	$0.016^{+0.201}_{-0.014}$

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 $A_{obs} \gg 1.0$

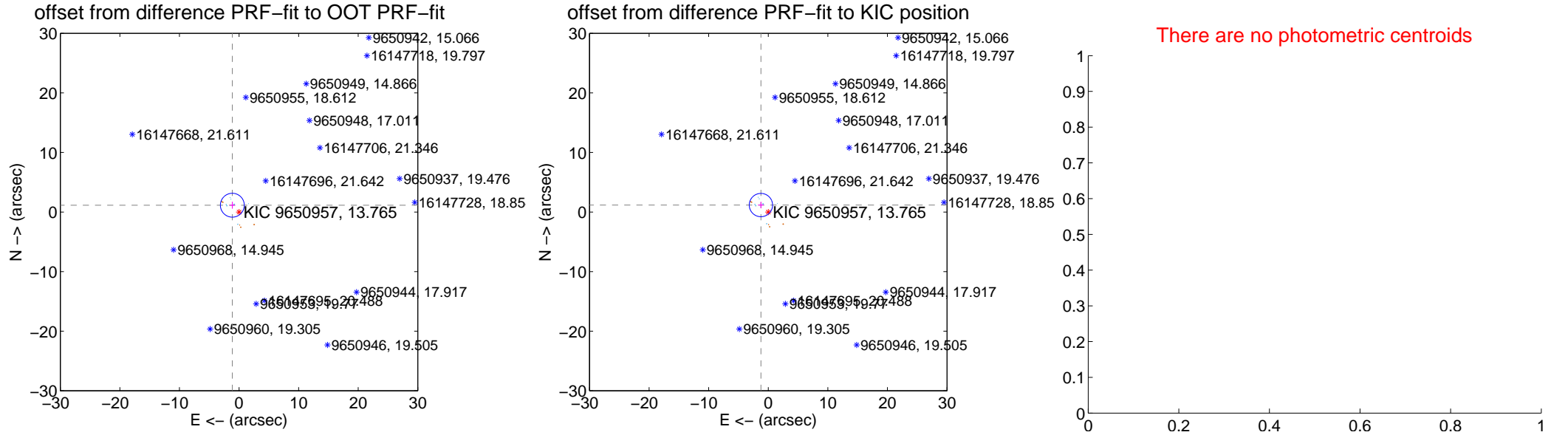
DV Centroid Data

Supplemental centroid analysis for 009650957-01. Kepler magnitude: 13.77. Transit SNR 0.00

There are 7 quarters with good PRF difference image offsets

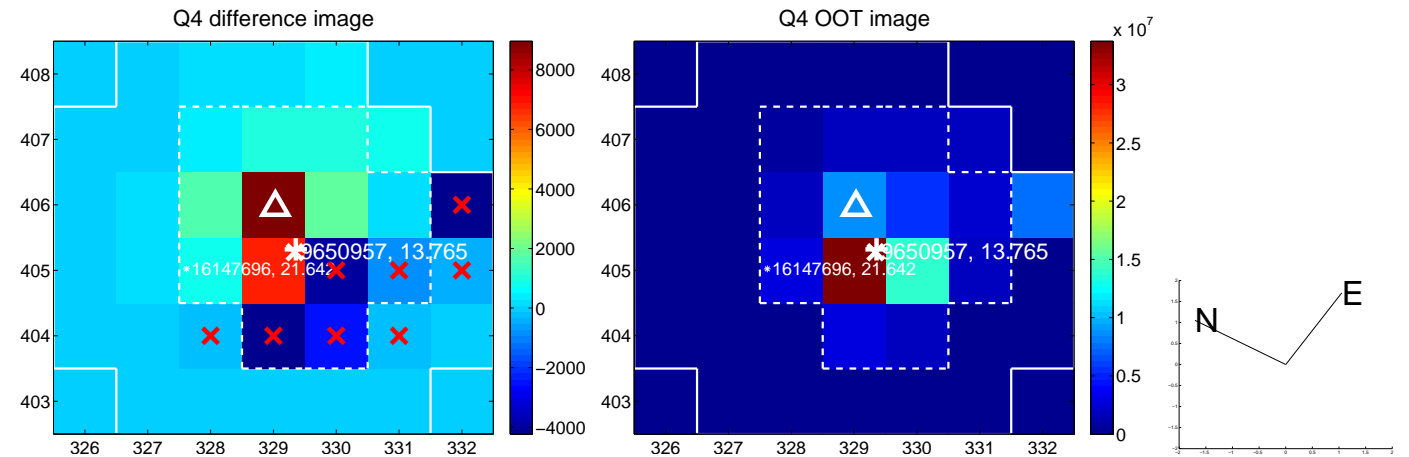
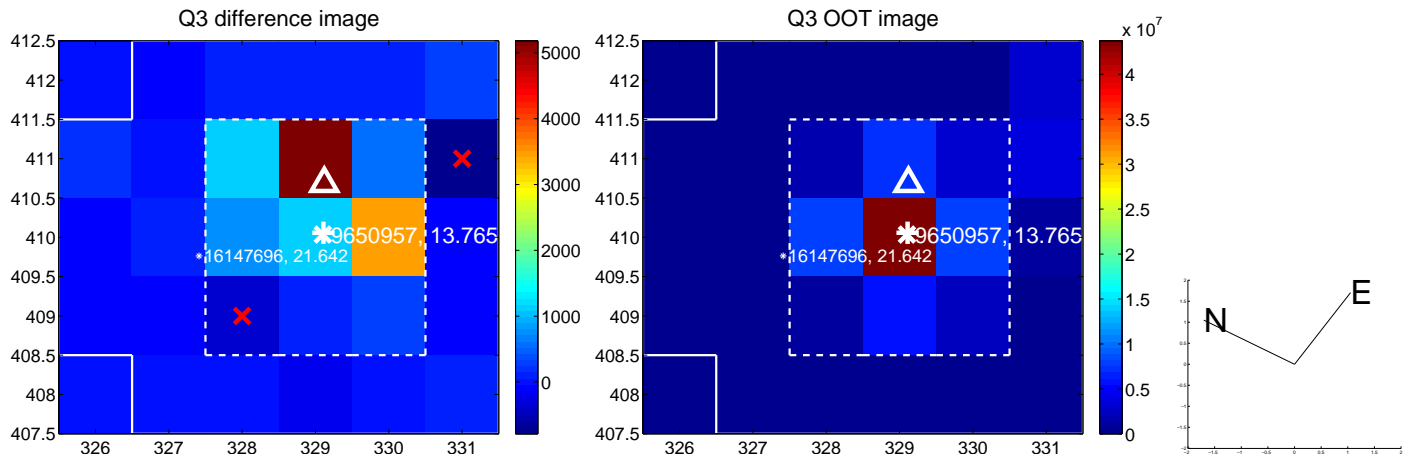
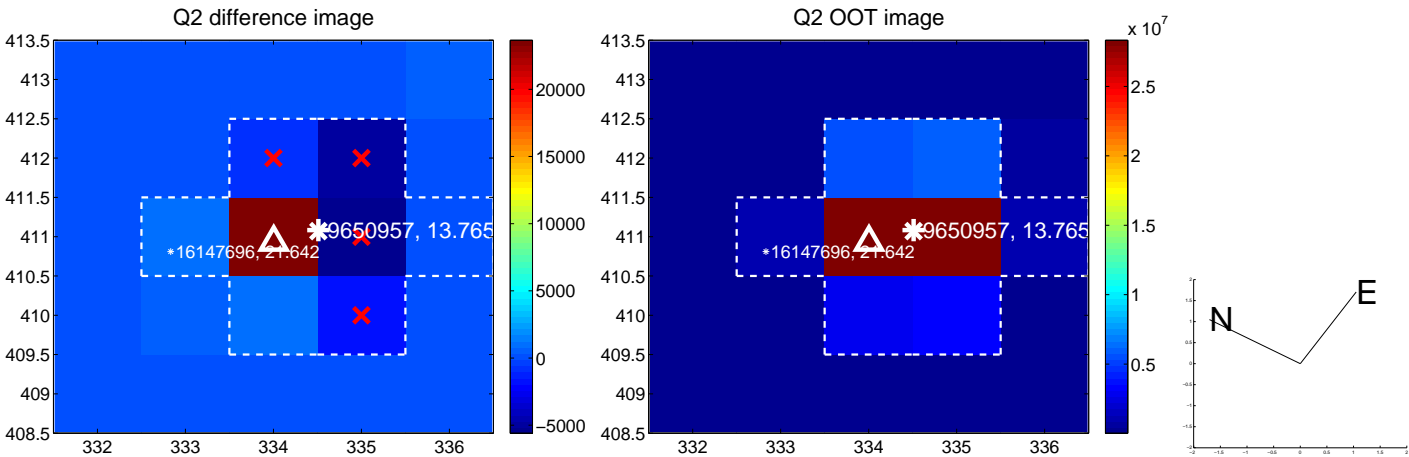
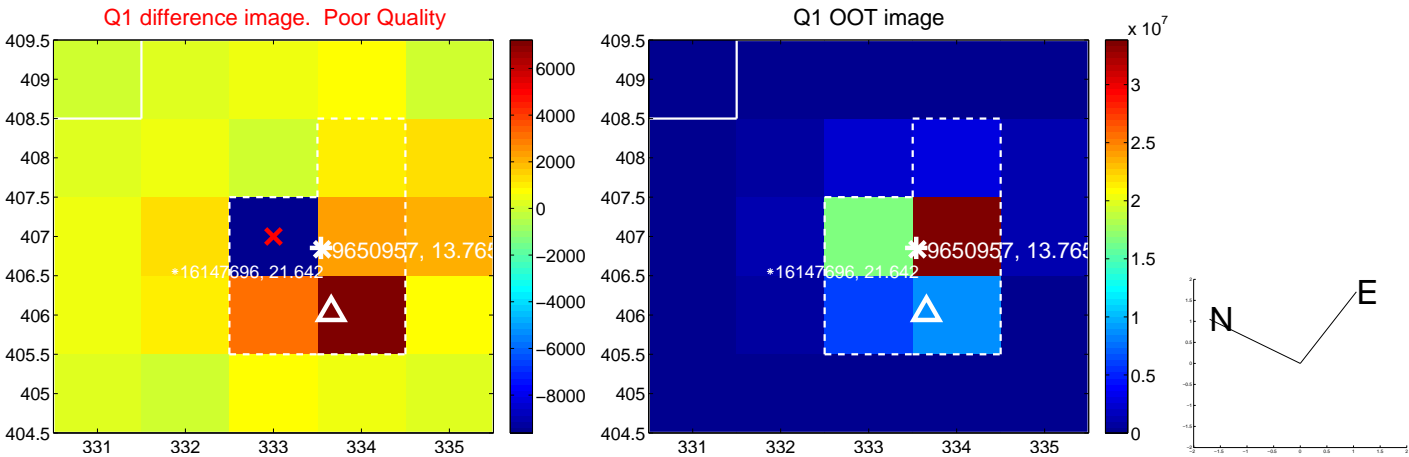
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.606 ± 0.668	2.40	1.126 ± 0.463	1.145 ± 0.578
PRF-fit source offset from KIC position	1.699 ± 0.652	2.61	1.232 ± 0.470	1.170 ± 0.541
photometric centroid source offset	—	—	—	—

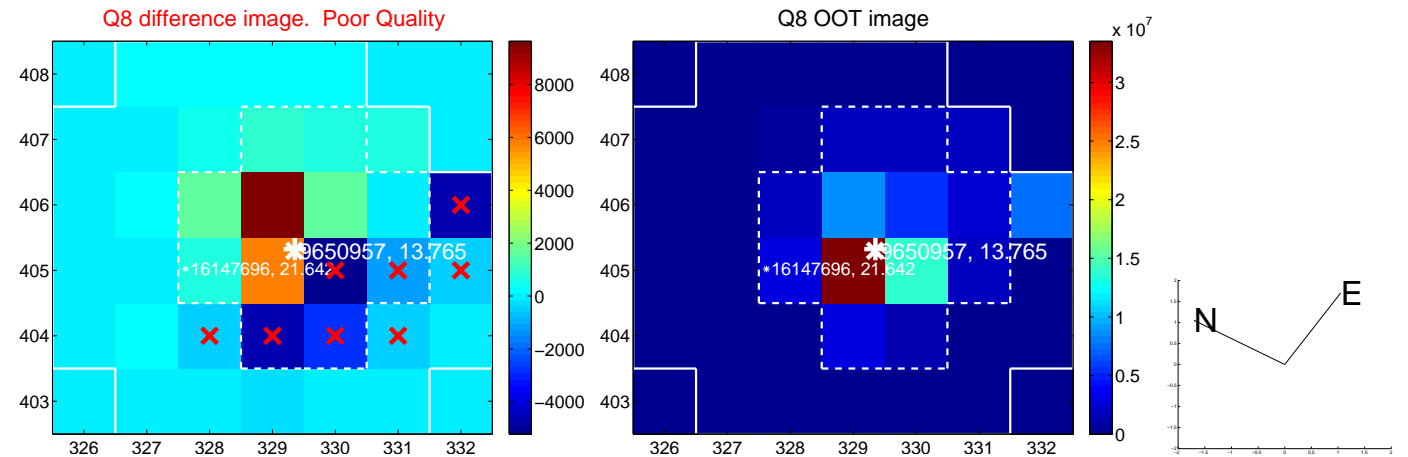
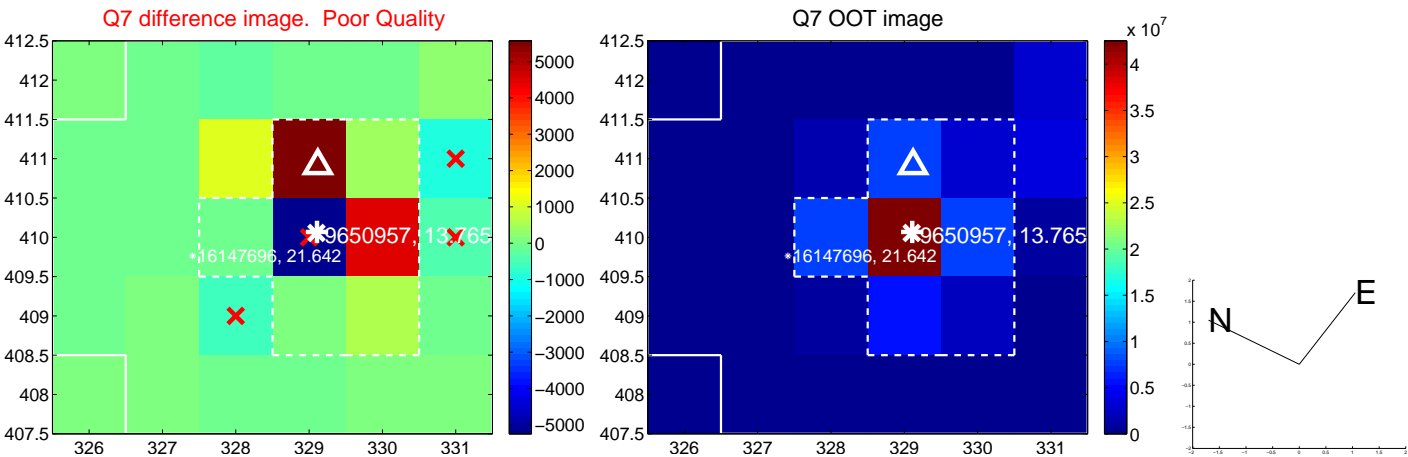
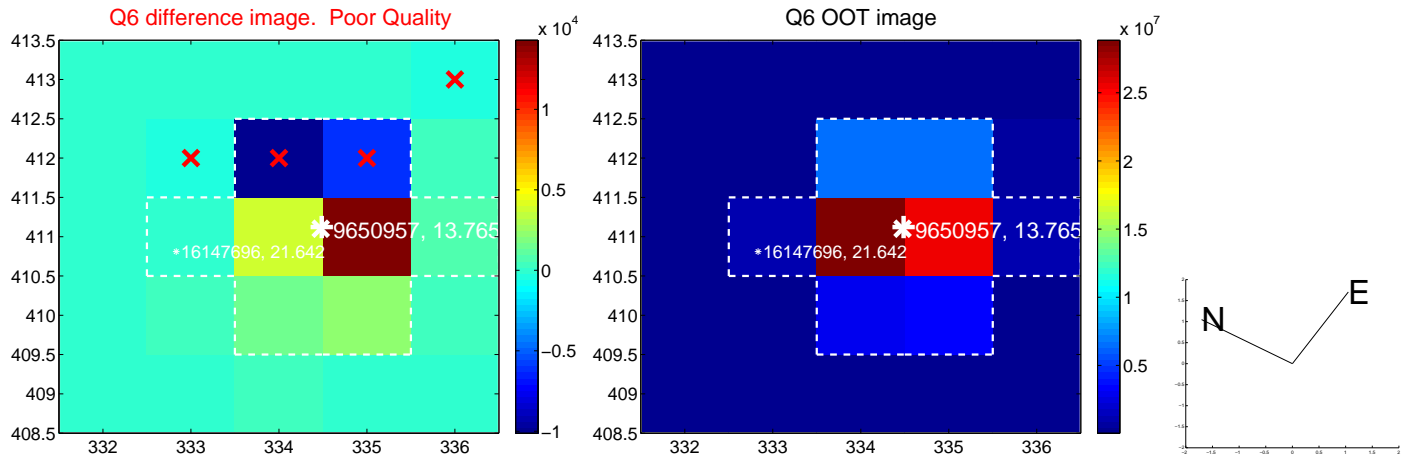
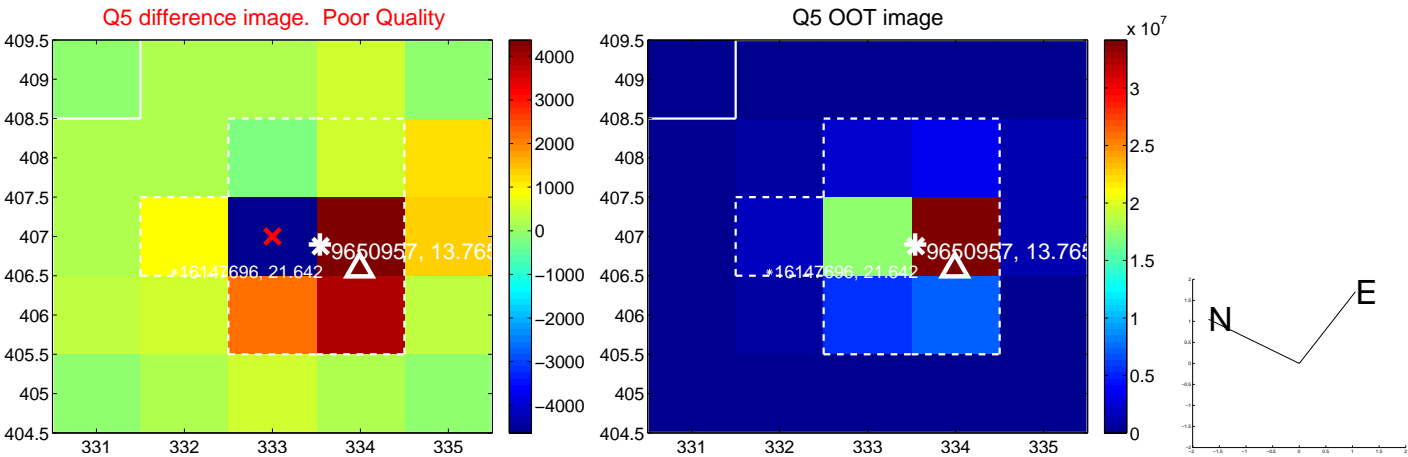


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

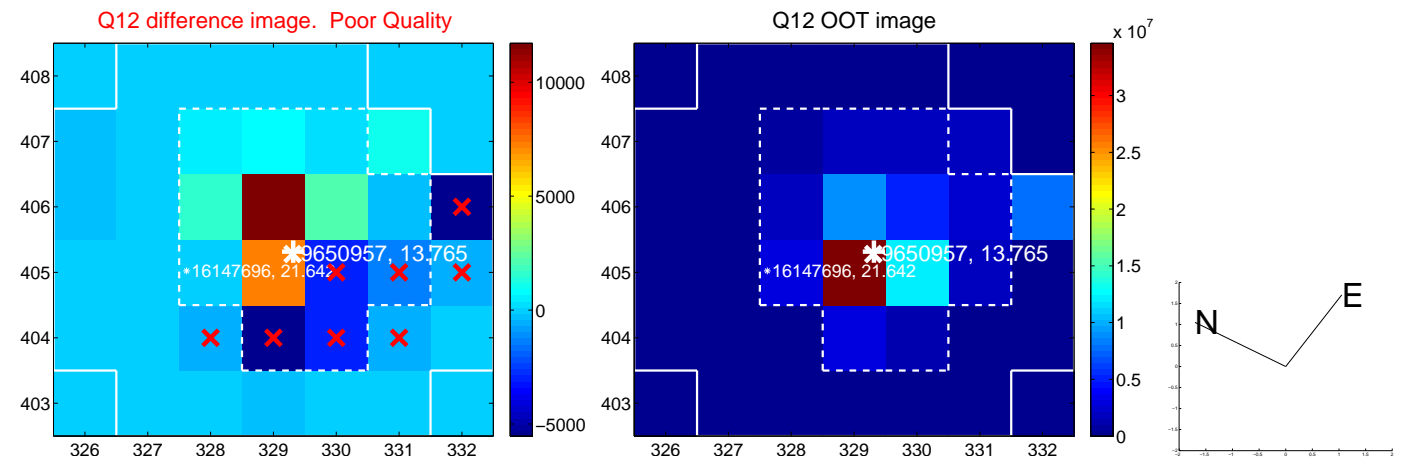
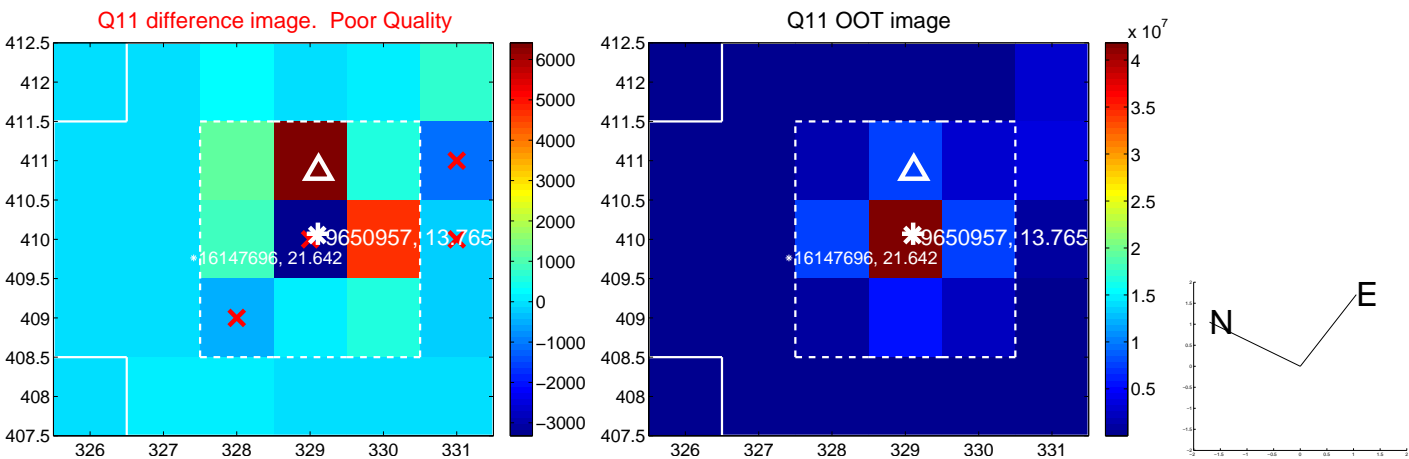
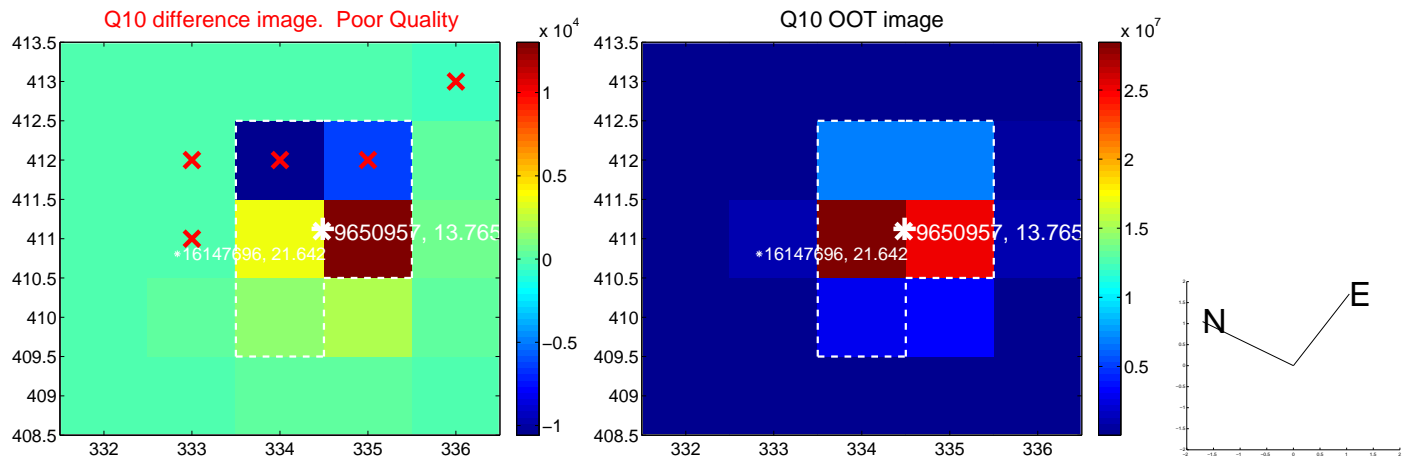
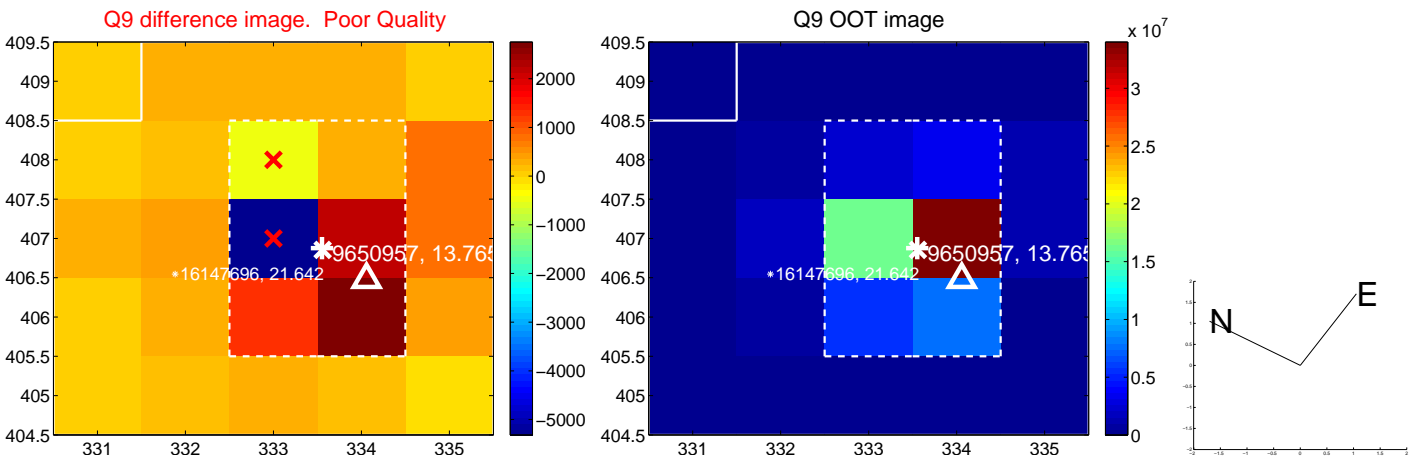
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



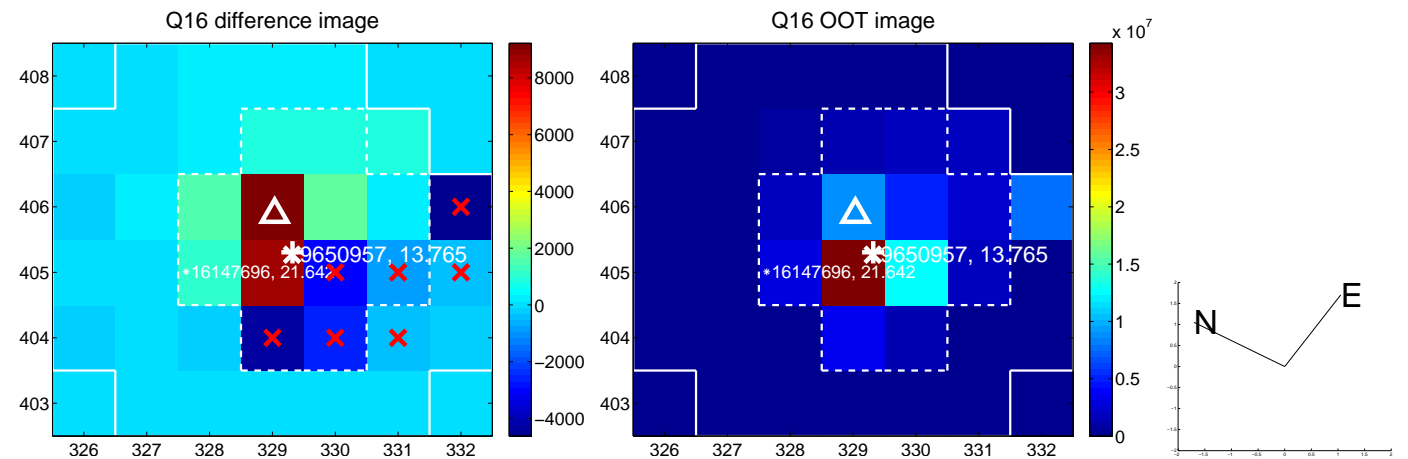
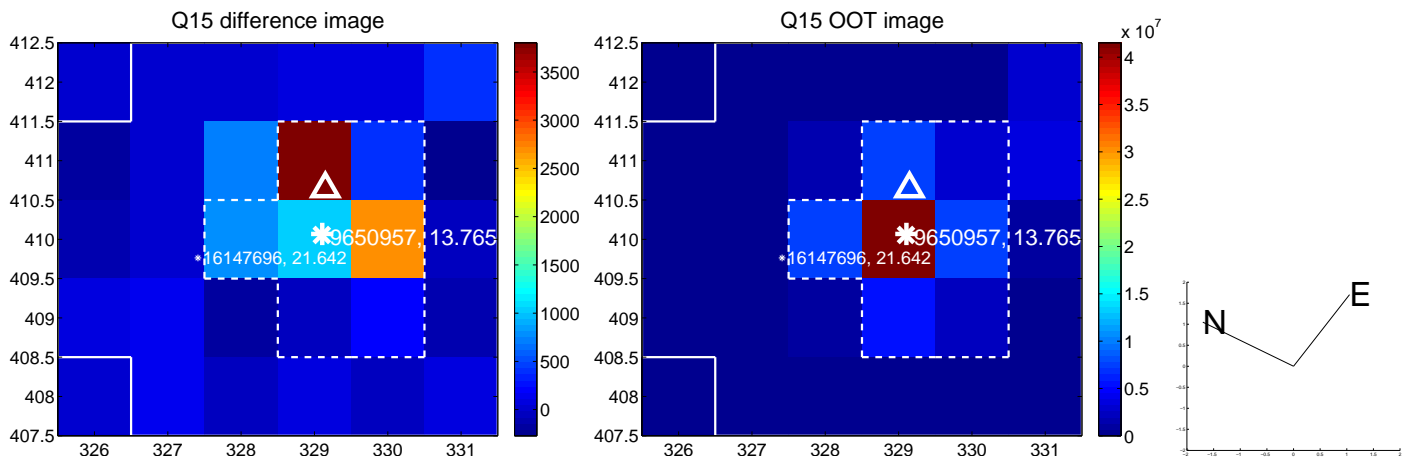
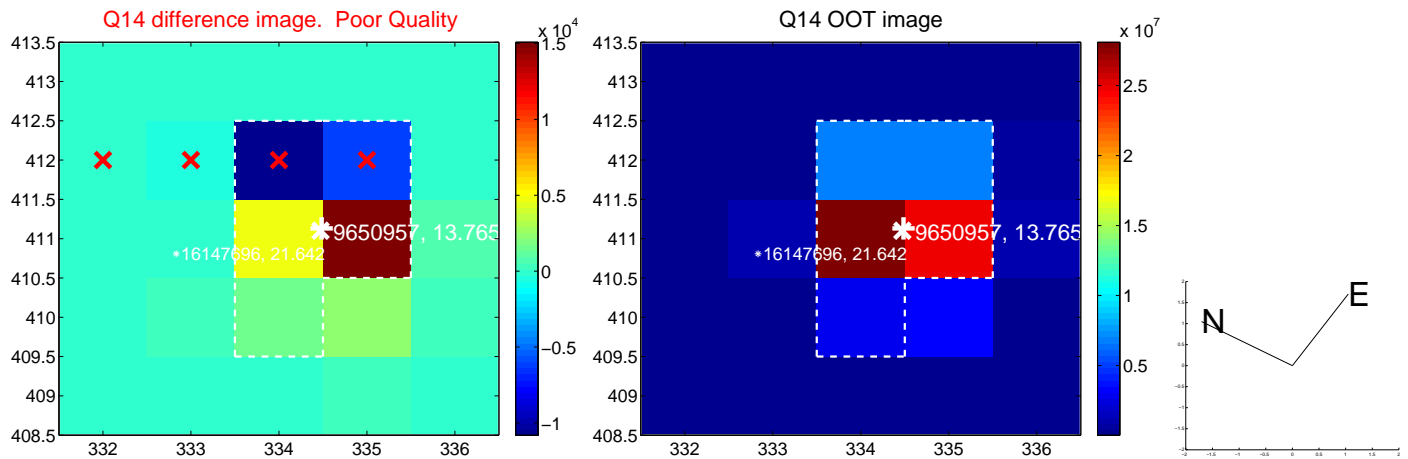
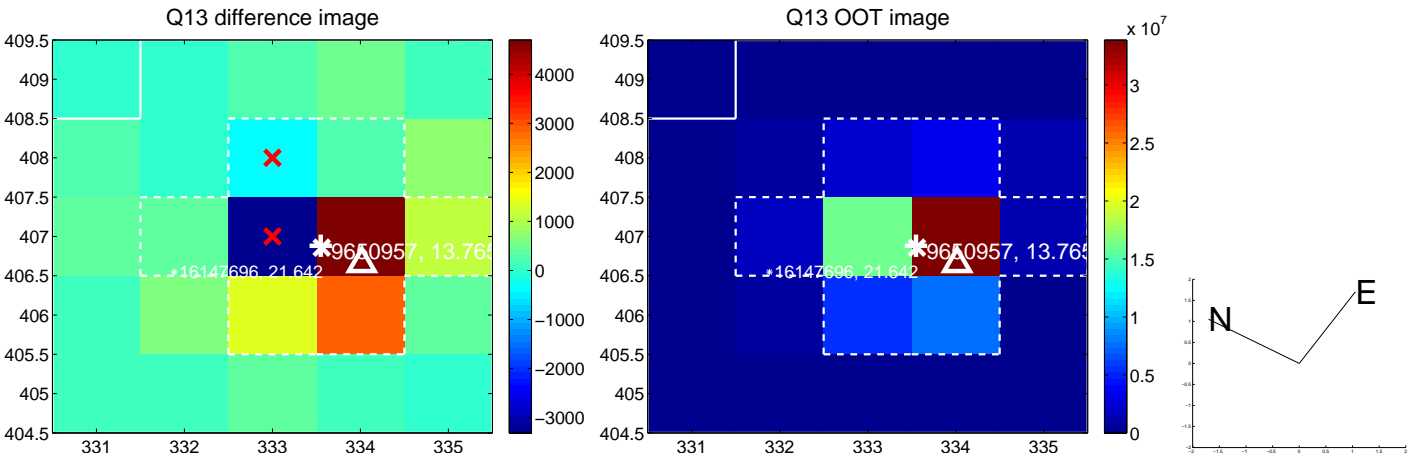
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



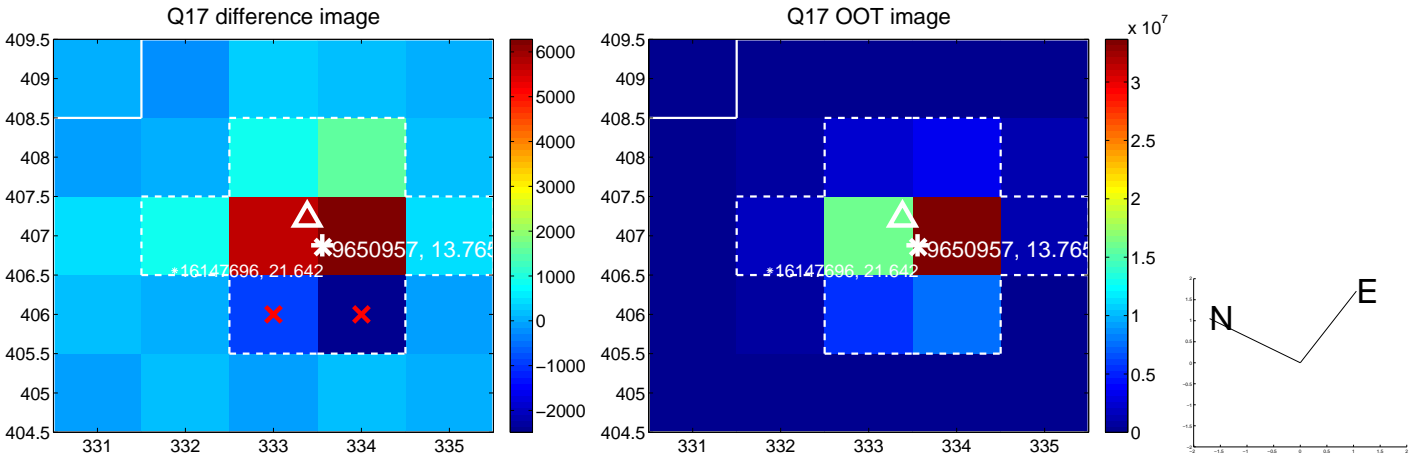
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

