

KIC 011667548

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})
011667548-01	OBS	3926.01	0.831722	132.085370	345.5	1.387	21.8	33.6	1.14	6343	2.50	5529.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011667548-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET—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 011667548-01

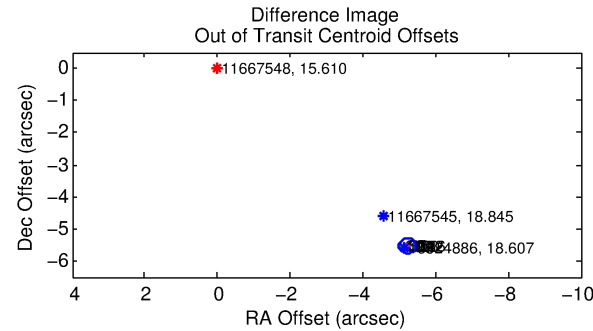
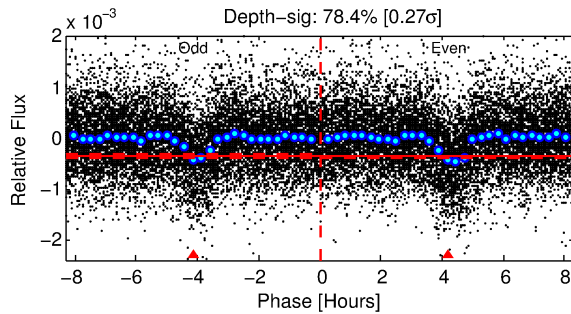
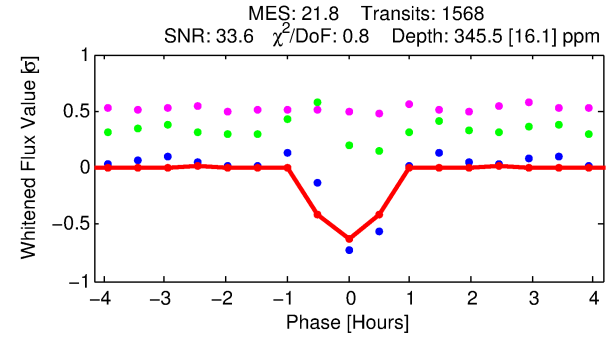
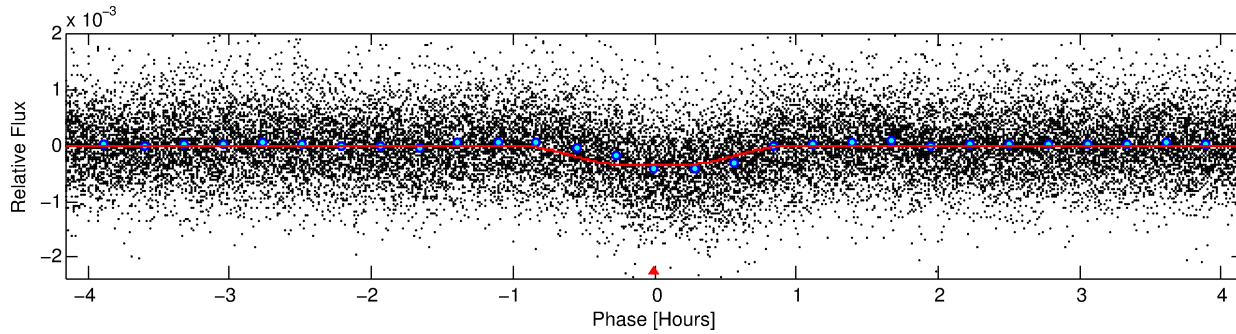
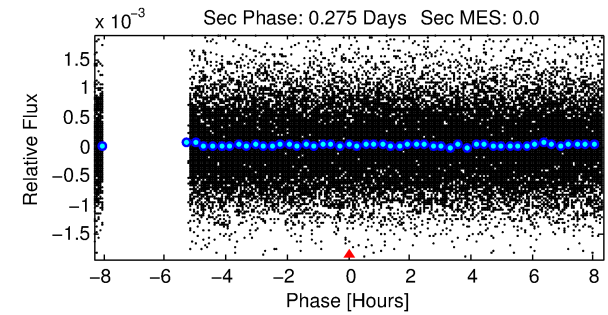
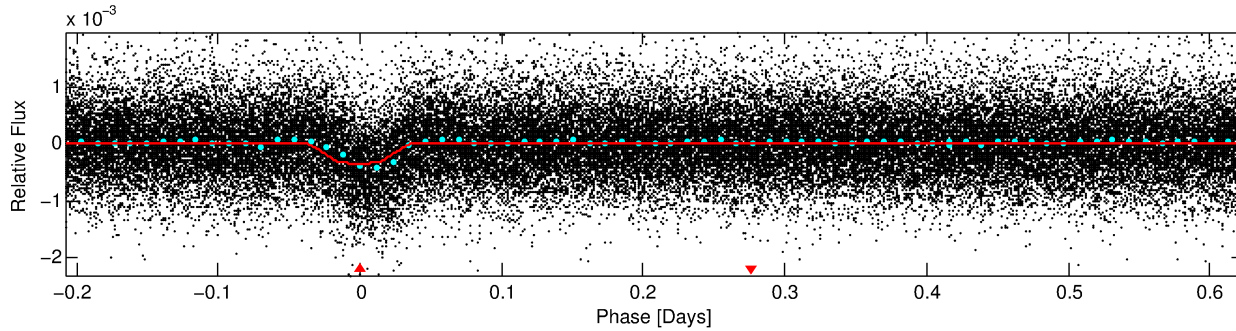
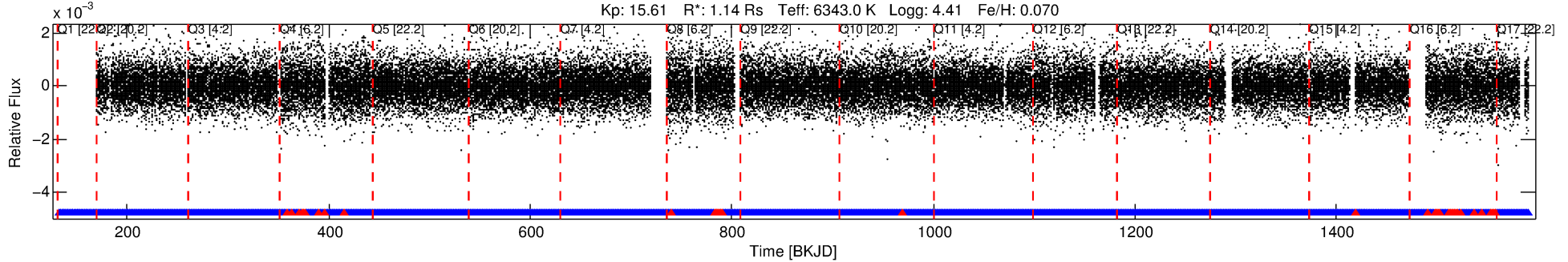
No Significant Match Found

DV One-Page Summary

KIC: 11667548 Candidate: 1 of 1 Period: 0.832 d

KOI: K03926.01 Corr: 0.776

Kp: 15.61 R*: 1.14 Rs Teff: 6343.0 K Logg: 4.41 Fe/H: 0.070



DV Fit Results:

Period = 0.83172 [0.00000] d
Epoch = 132.0854 [0.0007] BKJD
Rp/R* = 0.0201 [0.0037]
a/R* = 2.38 [1.92]
b = 0.90 [0.21]
Seff = 5529.75 [2357.59]
Teq = 2199 [234] K
Rp = 2.50 [0.95] Re
a = 0.0185 [0.0051] AU
Ag = N/A
Teffp = N/A

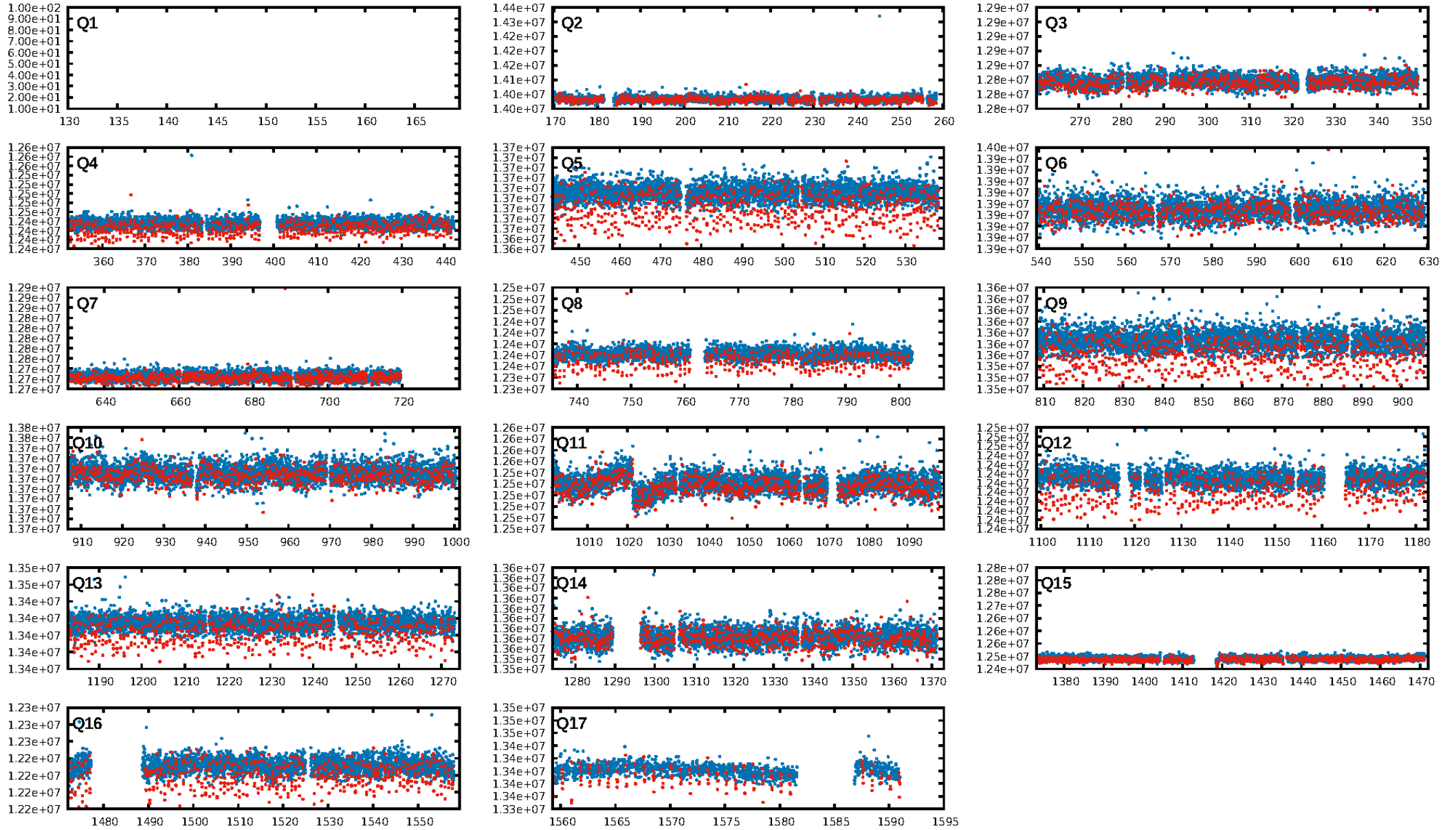
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 9.98e-104
RollingBand-fgt: 0.97 [1491/1536]
GhostDiagnostic-chr: -0.1201
Centroid-sig: 0.0%
Centroid-so: 131.123 arcsec [282.27σ]
OotOffset-rm: 7.596 arcsec [98.65σ]
KicOffset-rm: 7.608 arcsec [103.36σ]
OotOffset-st: 0/0/4/4 [8]
KicOffset-st: 0/0/4/4 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [16/16]

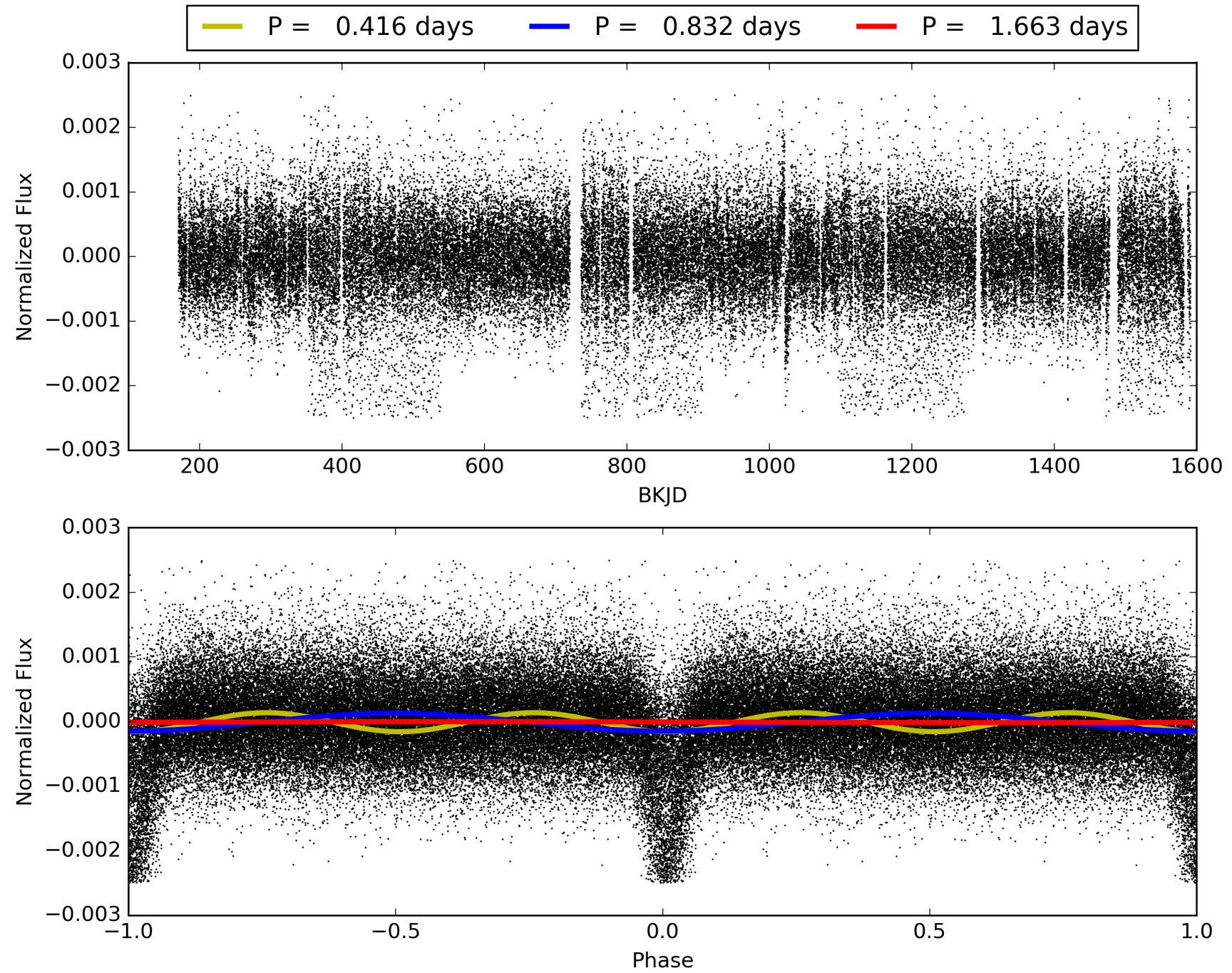
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:26:06 Z

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

TCE 011667548-01, PDC Light Curves

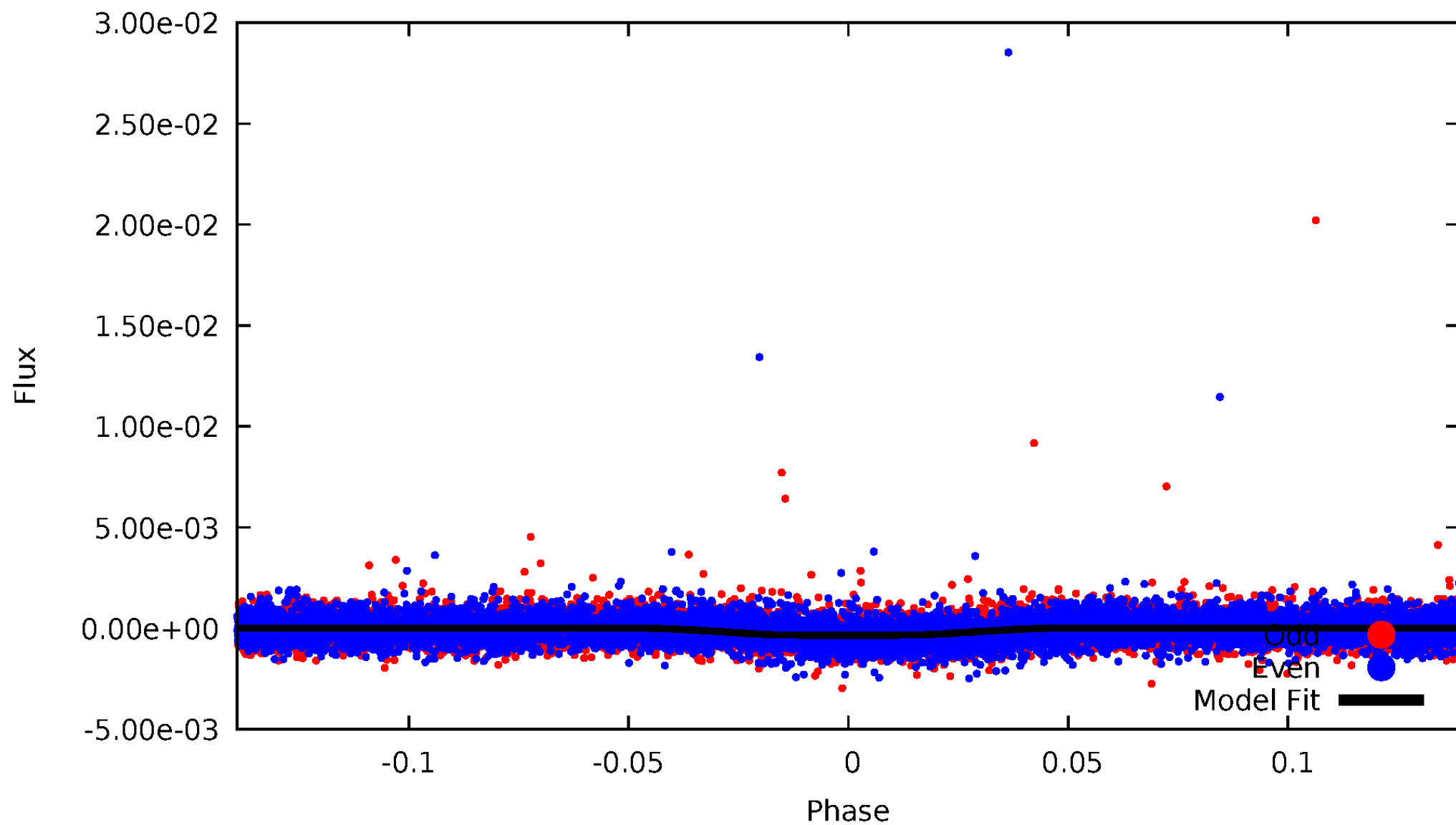


TCE 011667548-01



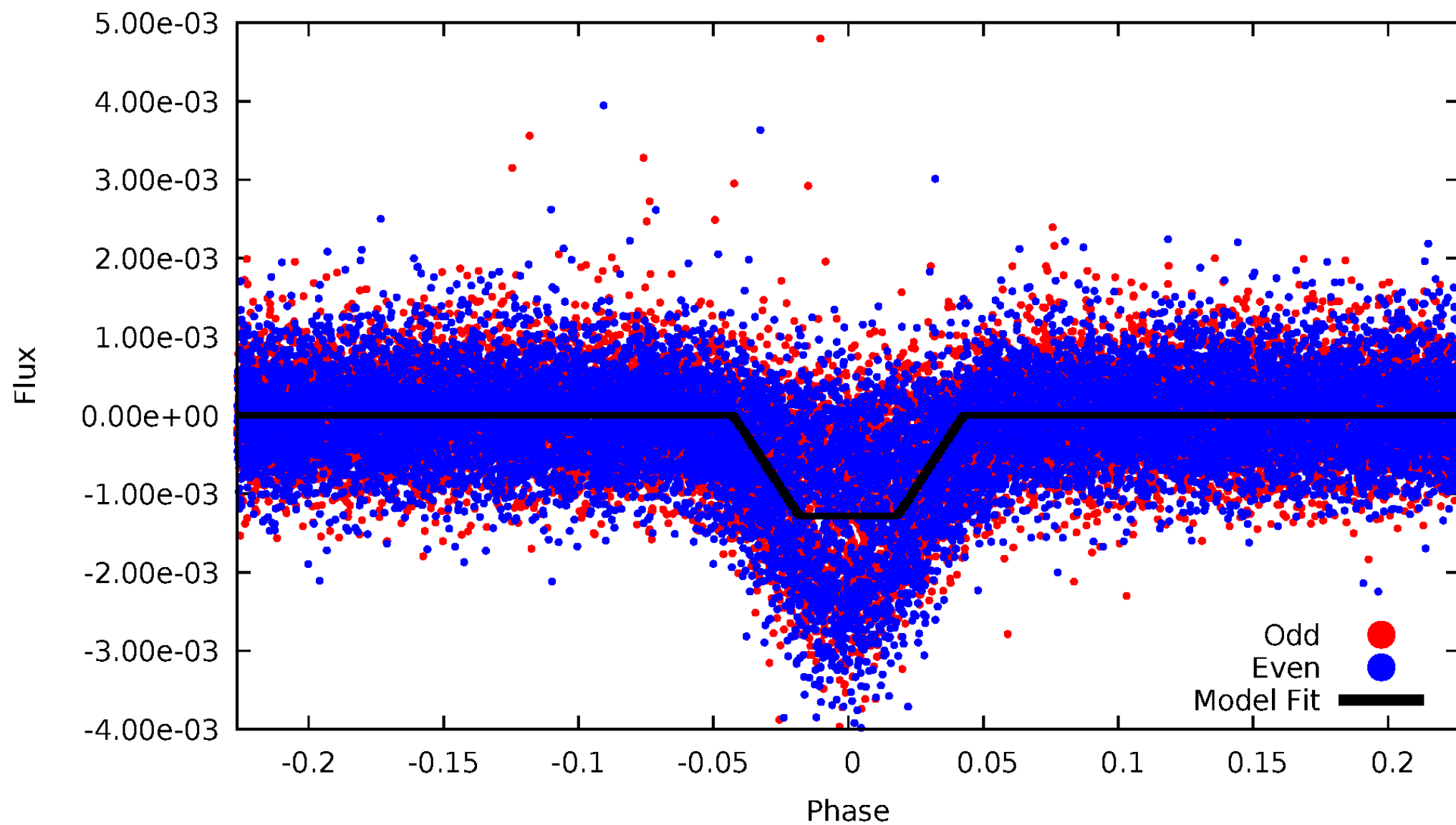
DV Odd/Even

TCE 011667548-01



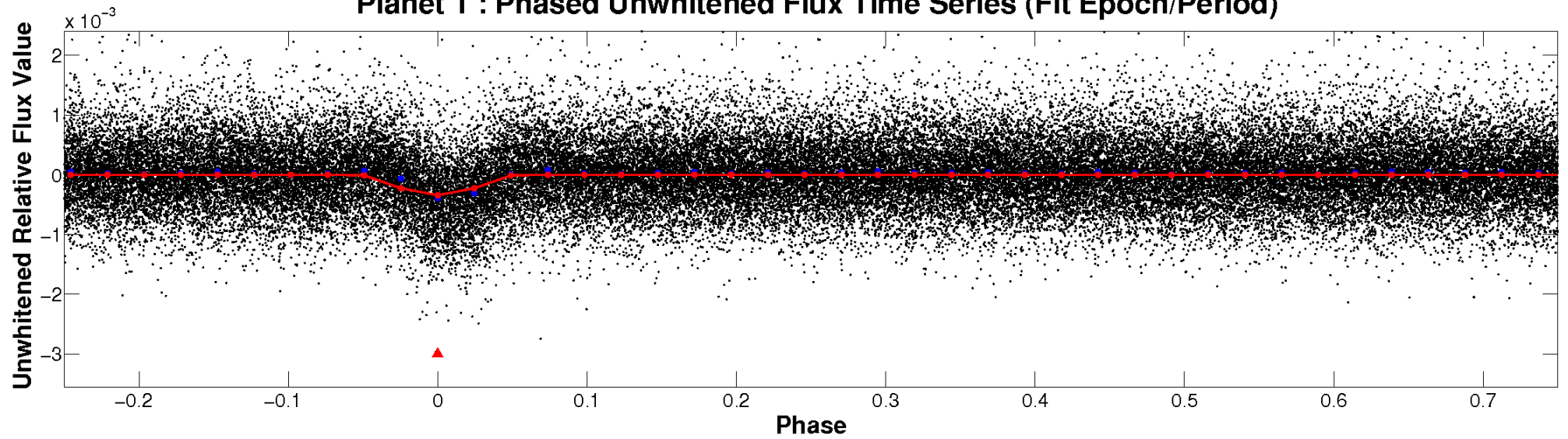
ALT Odd/Even

TCE 011667548-01

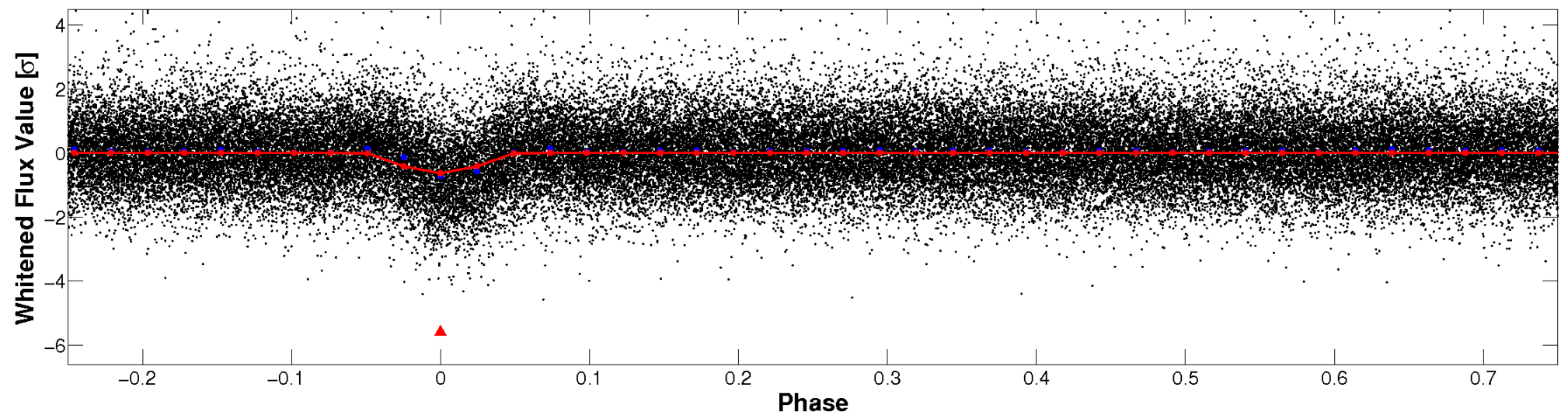


Non-Whitened Vs. Whitened Light Curve

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

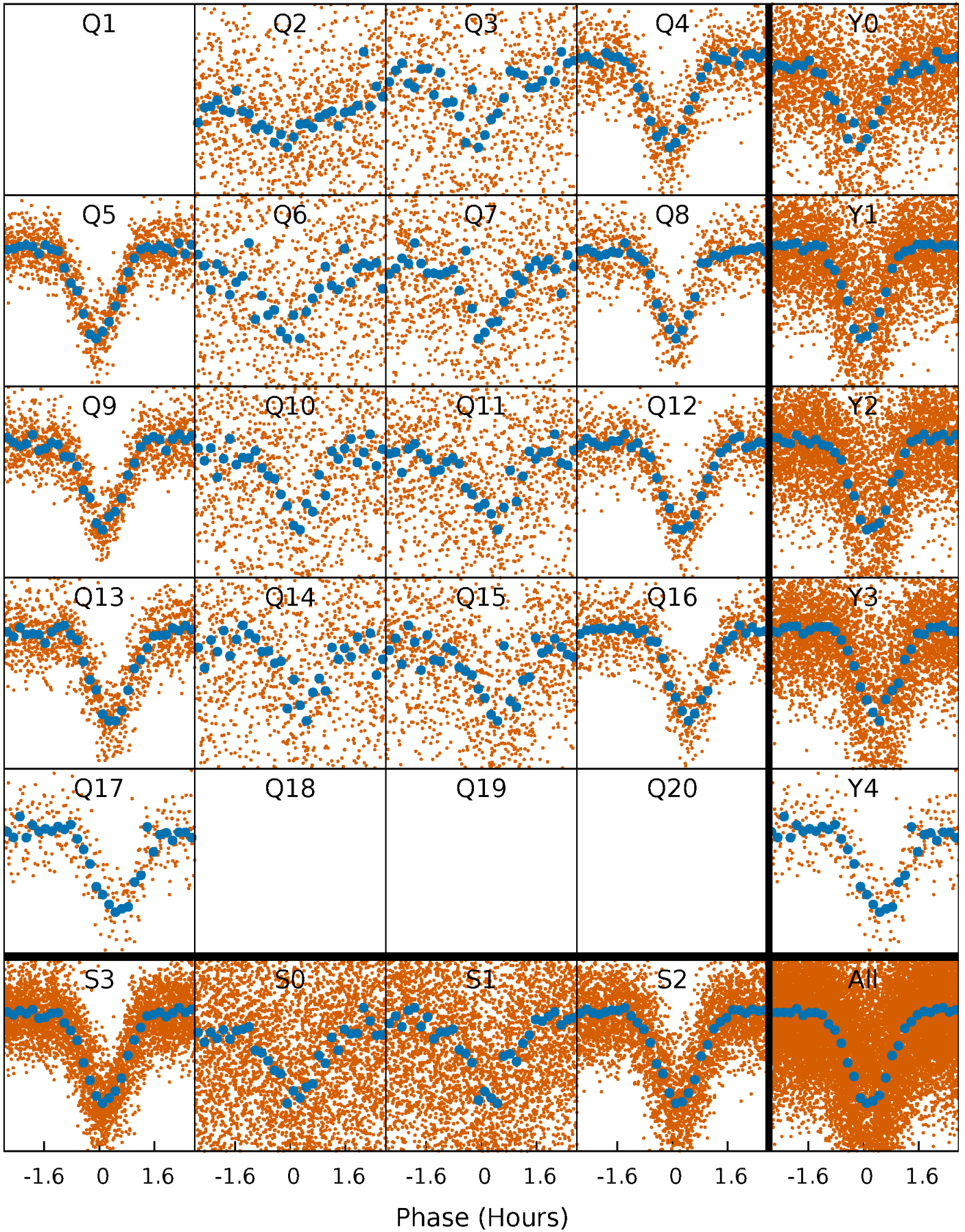


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



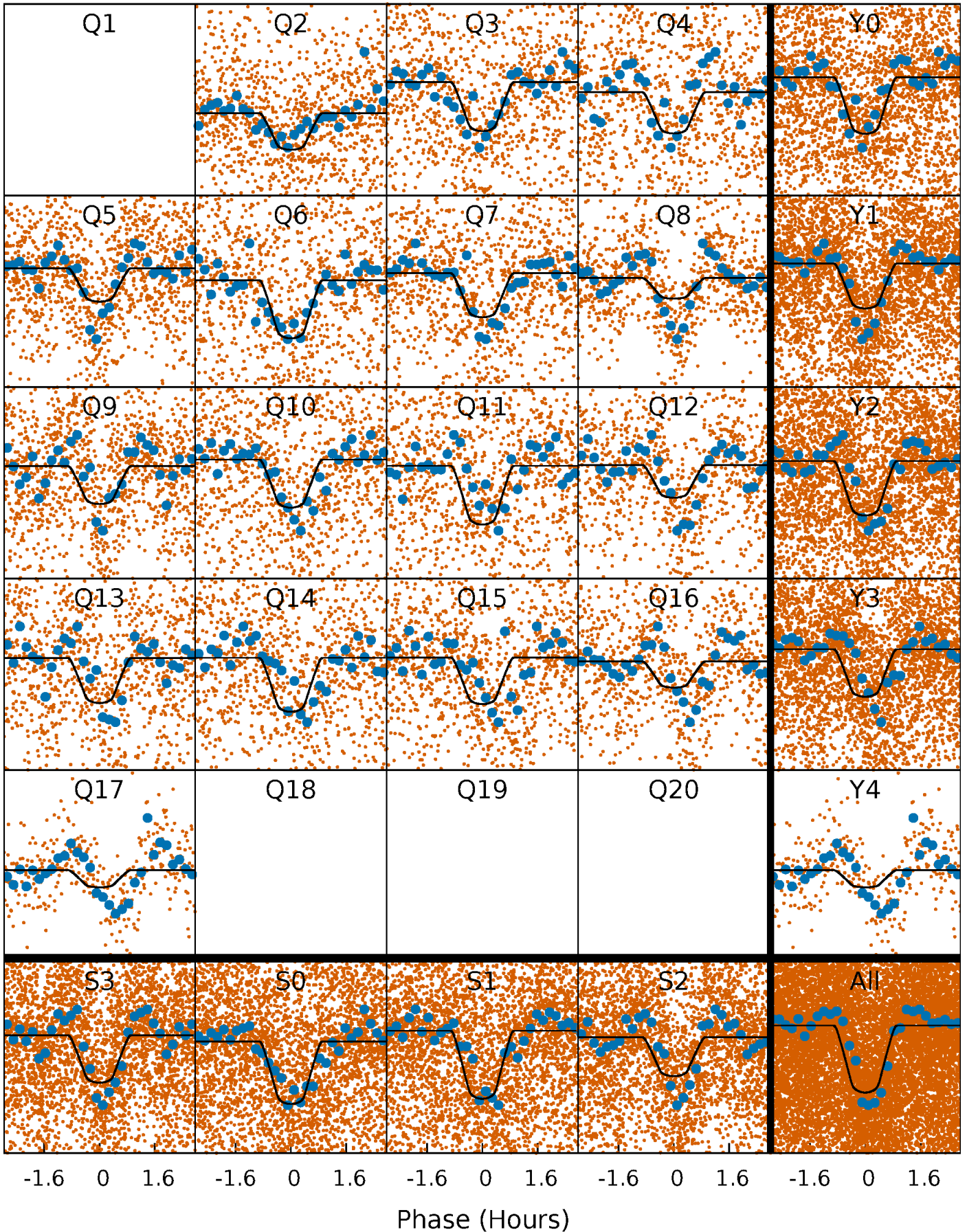
PDC Quarter-Phased Transit Curves

TCE 011667548-01 P= 0.831722 Days $T_0=132.085370$ (BKJD)



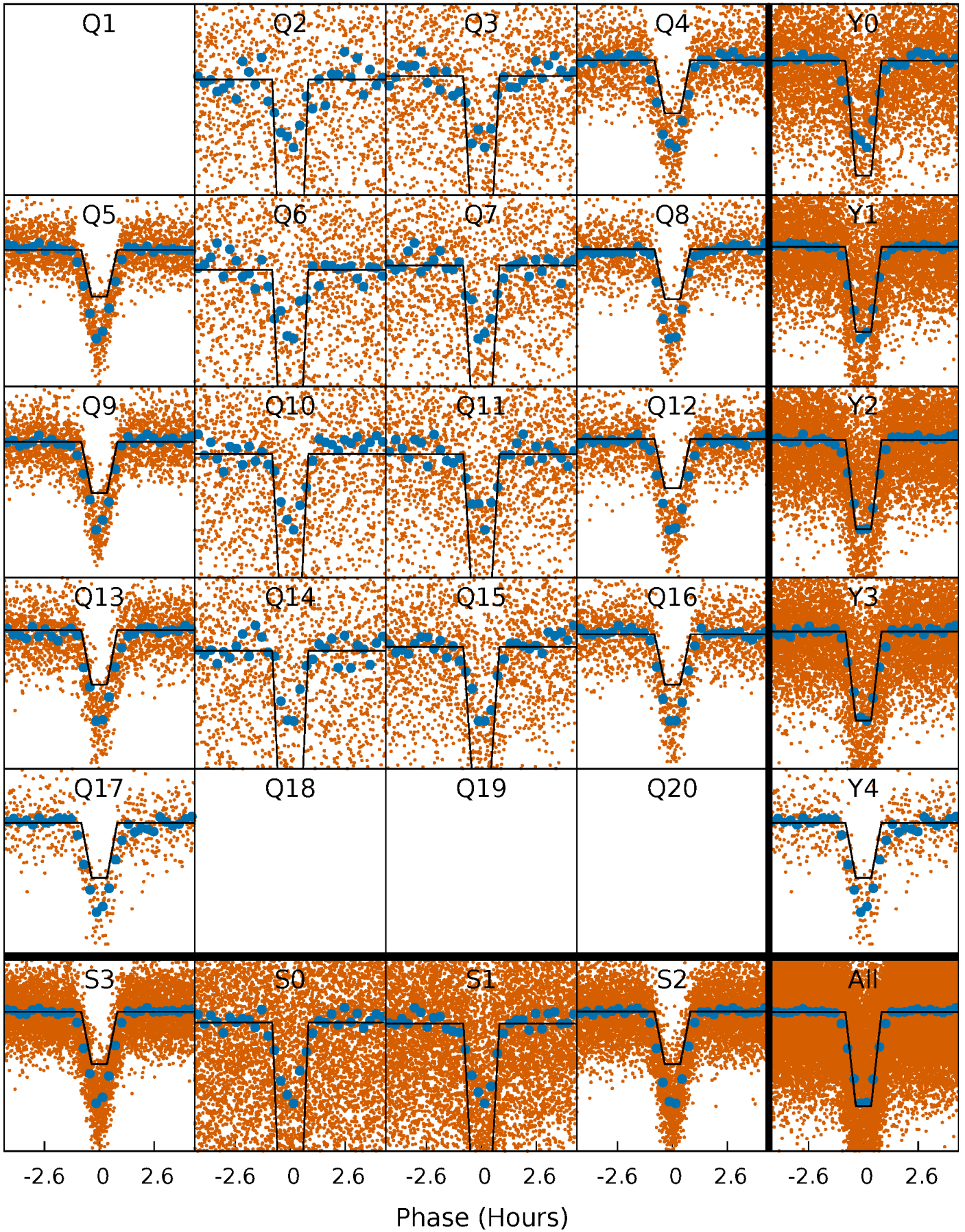
DV Quarter-Phased Transit Curves

TCE 011667548-01 P= 0.831722 Days $T_0=132.085370$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

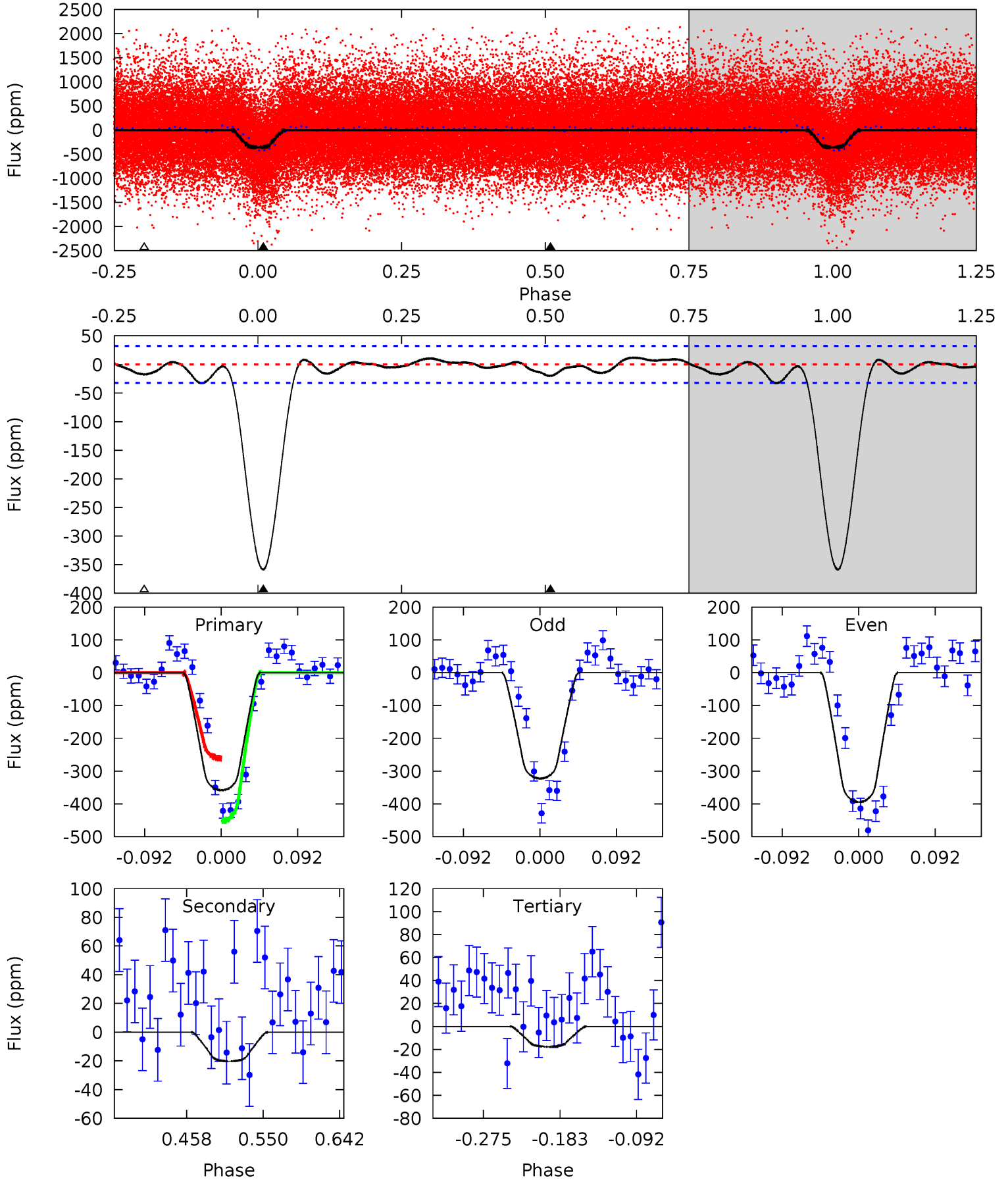
TCE 011667548-01 P= 0.831739 Days $T_0=132.077441$ (BKJD)



DV Model-Shift Uniqueness Test

011667548-01, P = 0.831722 Days, E = 132.085370 Days

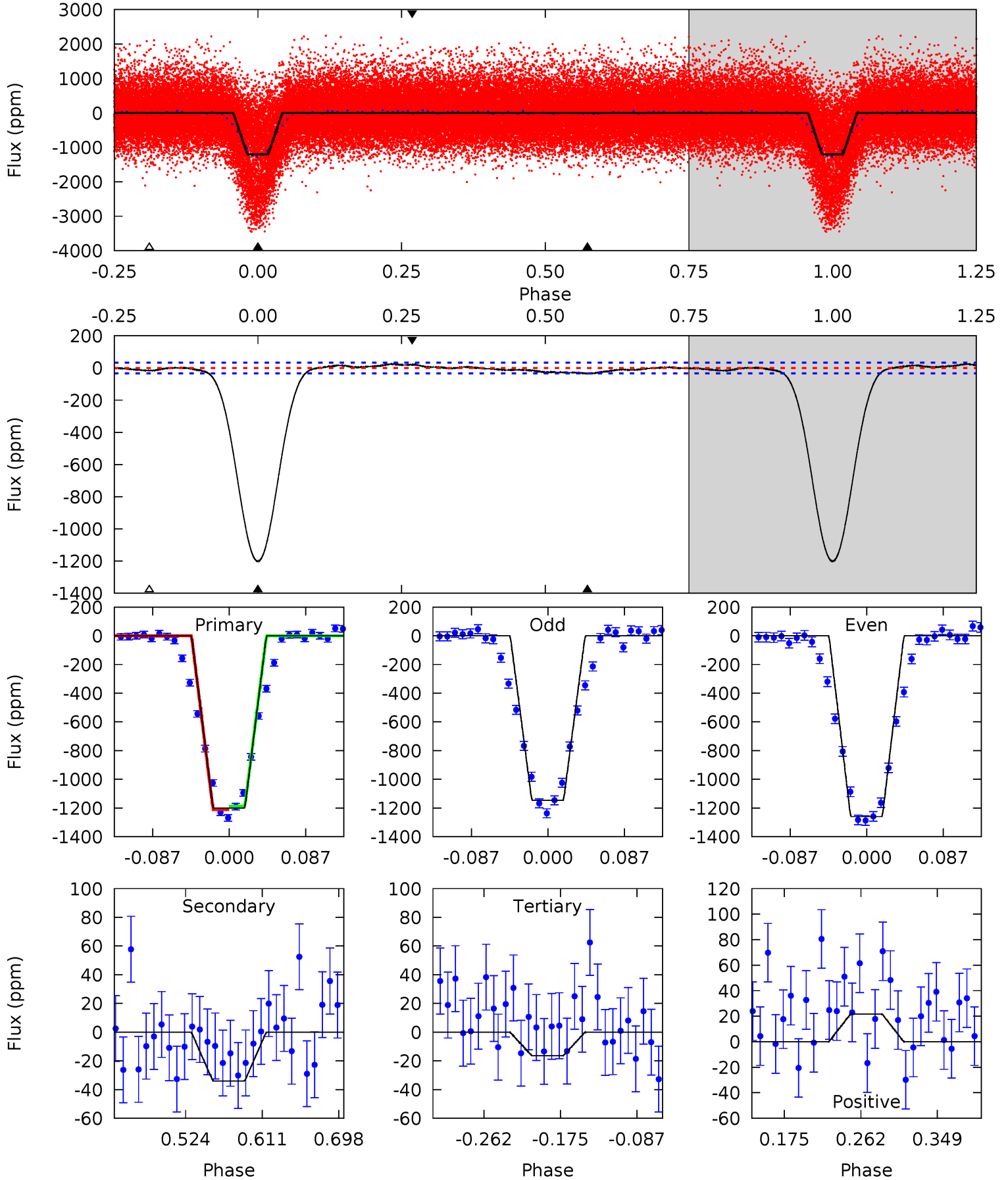
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
51.0	2.88	2.51	0	4.58	1.69	1.41	48.5	51.0	0.37	2.88	5.12	0.97	0.03	13.6



Alt Model-Shift Uniqueness Test

011667548-01, P = 0.831739 Days, E = 132.077441 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
163.9	4.65	2.23	2.95	4.59	1.71	1.48	161.7	160.9	2.42	1.70	7.68	1.27	0.02	1.64



Stellar Parameters For KIC 011667548

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6343^{+177}_{-243}	$4.408^{+0.054}_{-0.216}$	$0.070^{+0.250}_{-0.300}$	$1.140^{+0.376}_{-0.125}$	$1.213^{+0.168}_{-0.168}$	$1.155^{+0.326}_{-0.634}$
	+3%/-4%	+1%/-5%	+357%/-429%	+33%/-11%	+14%/-14%	+28%/-55%
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 011667548-01 / KOI 3926.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-20 ± 7	$2.62^{+0.60}_{-0.55}$	3143^{+235}_{-164}	3032^{+475}_{-5284}	$0.509^{+0.376}_{-0.227}$
Alt.	-34 ± 7	$4.67^{+0.86}_{-0.62}$	3132^{+229}_{-148}	-2208^{+4934}_{-608}	$0.281^{+0.128}_{-0.090}$

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

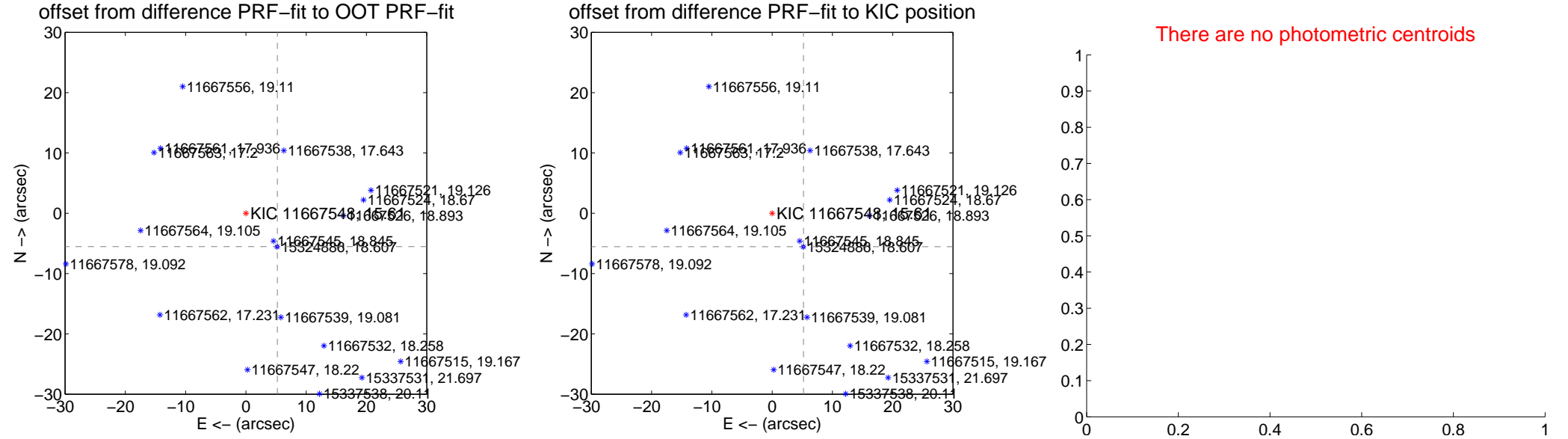
DV Centroid Data

Supplemental centroid analysis for 011667548-01. Kepler magnitude: 15.61. Transit SNR 33.58

There are 8 quarters with good PRF difference image offsets

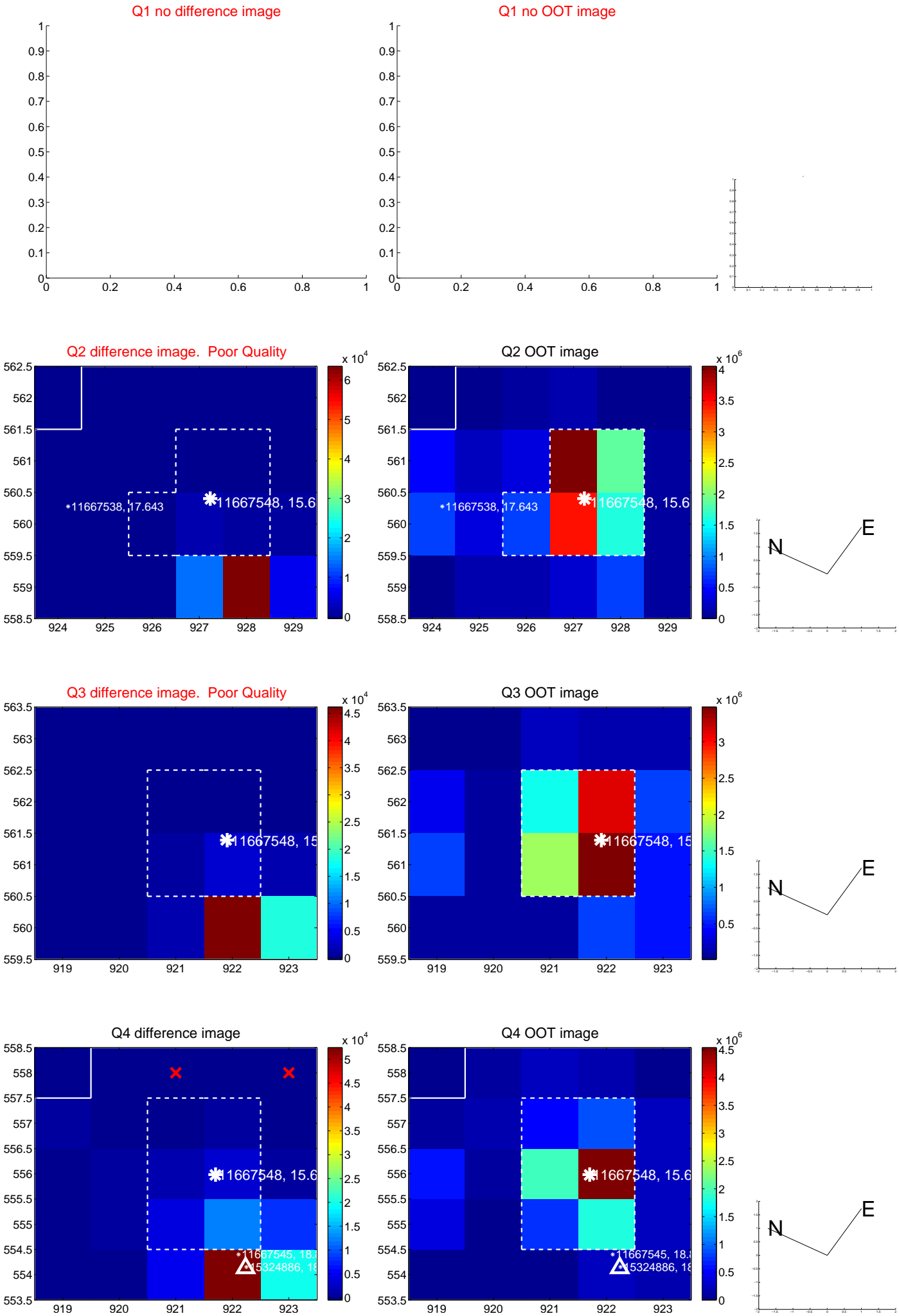
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.596 ± 0.077	98.65	-5.211 ± 0.087	-5.527 ± 0.067
PRF-fit source offset from KIC position	7.608 ± 0.074	103.36	-5.206 ± 0.080	-5.547 ± 0.067
photometric centroid source offset	—	—	—	—

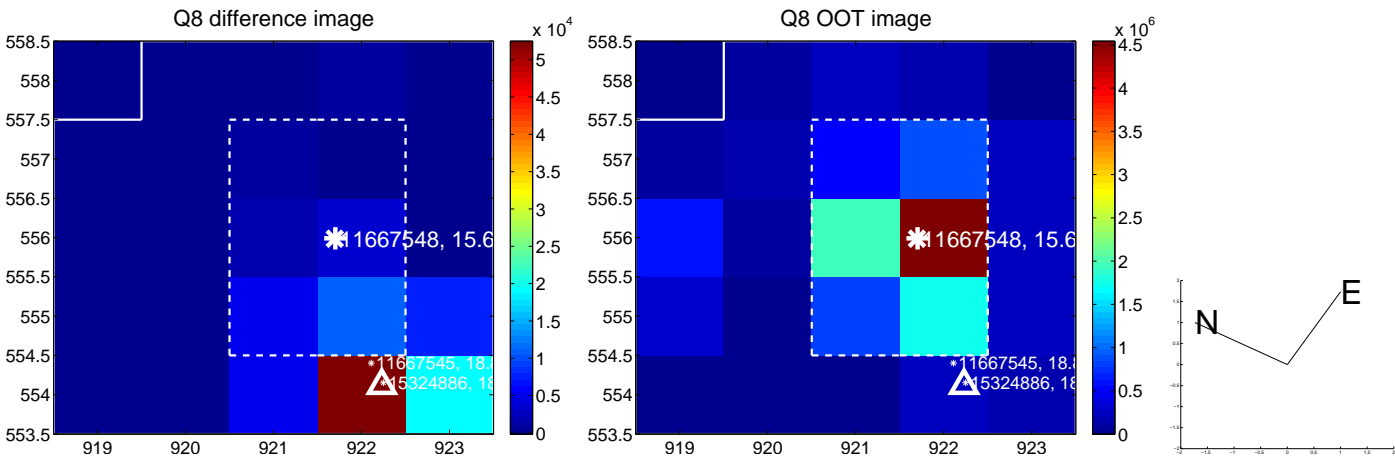
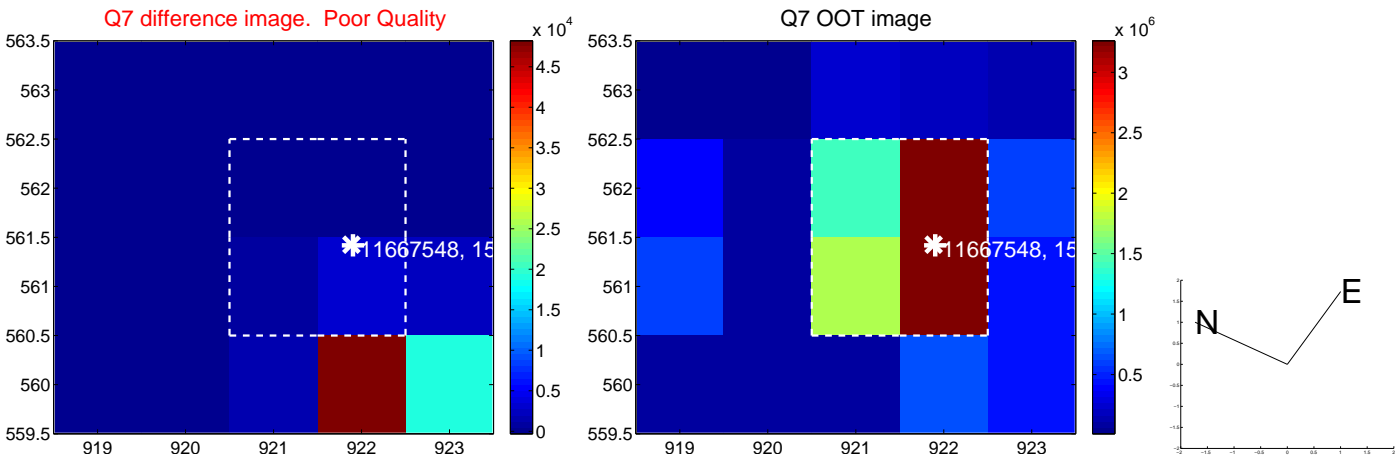
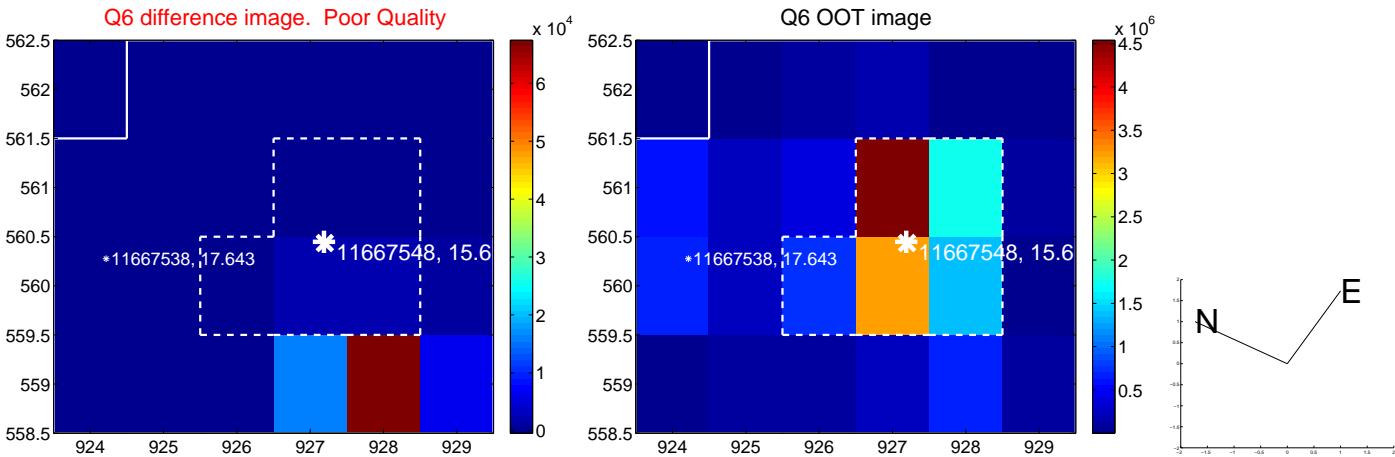
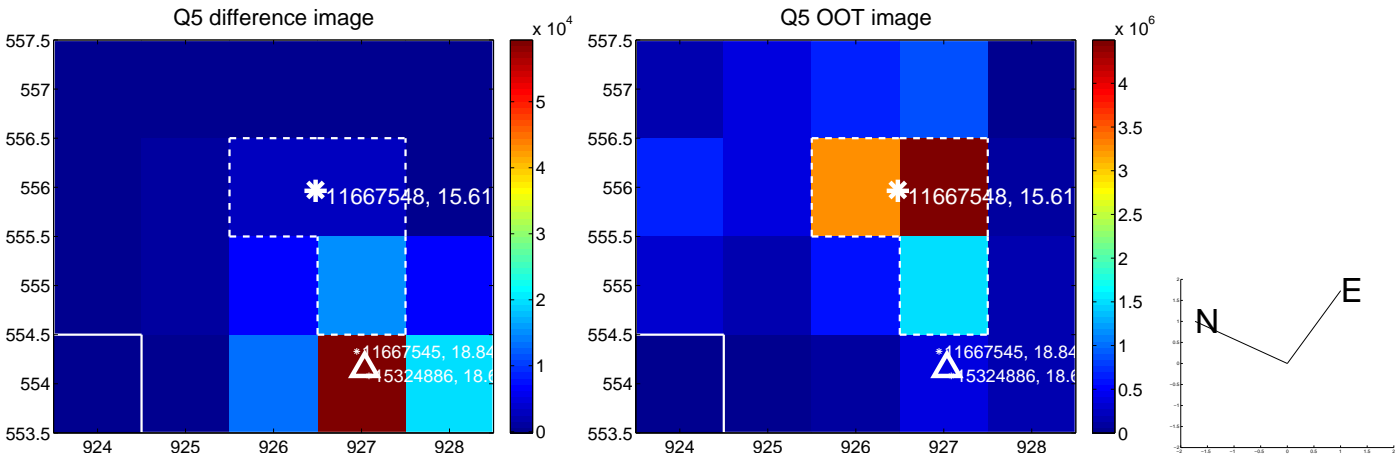


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

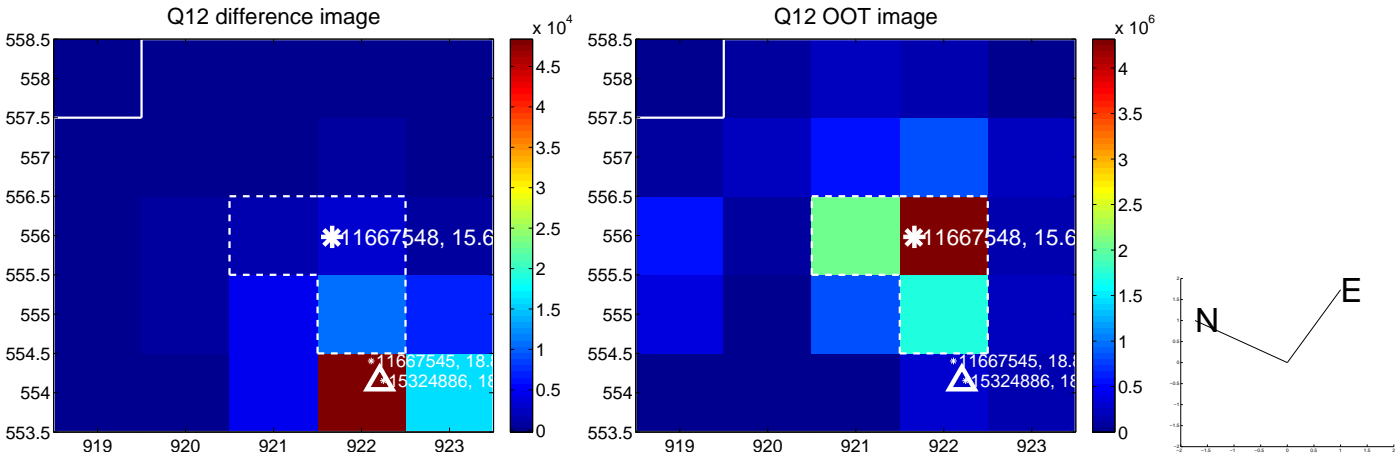
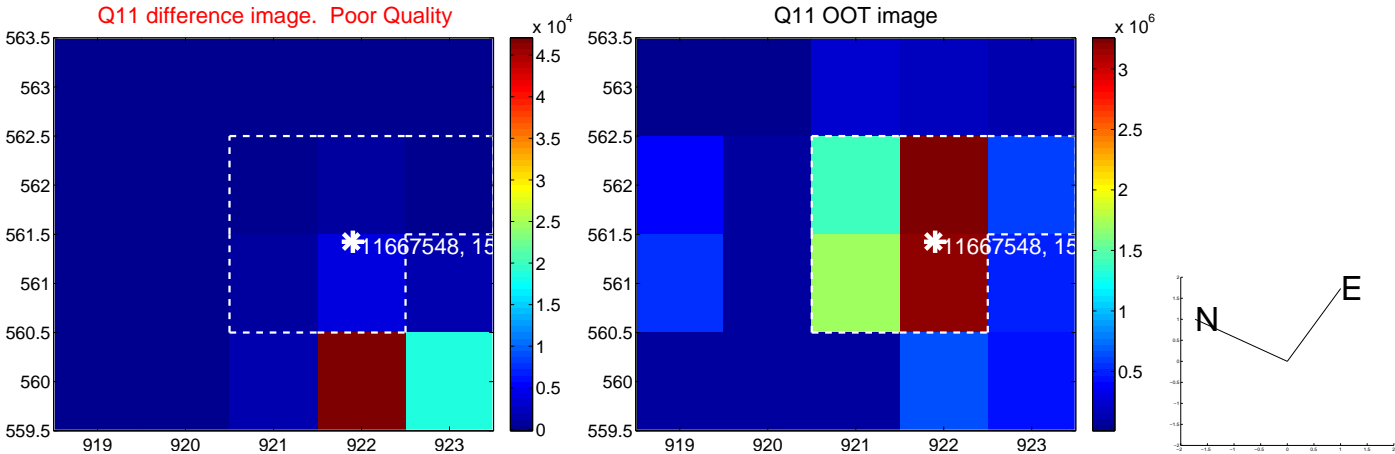
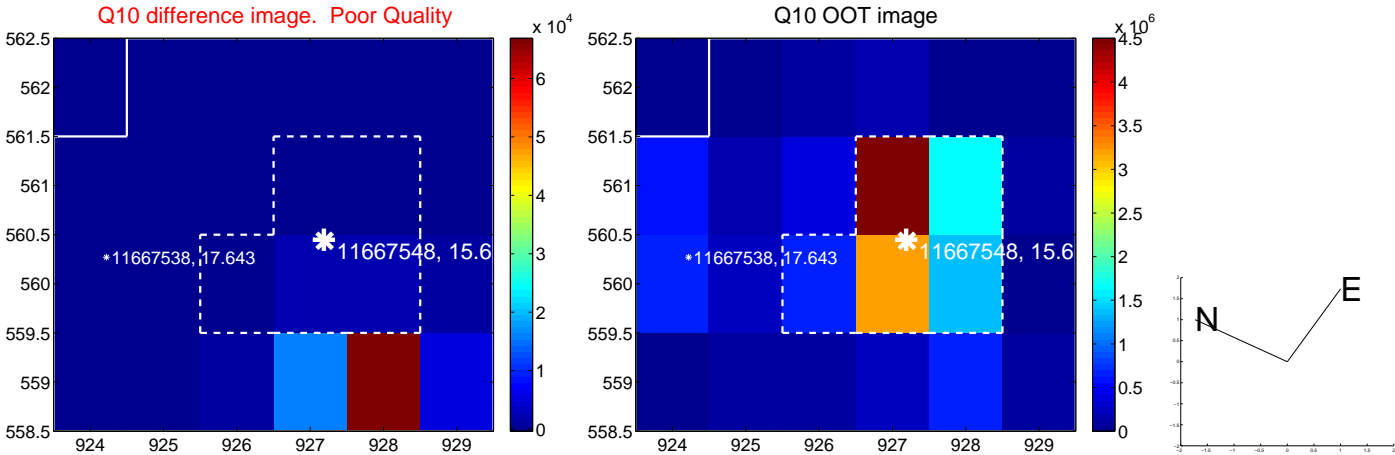
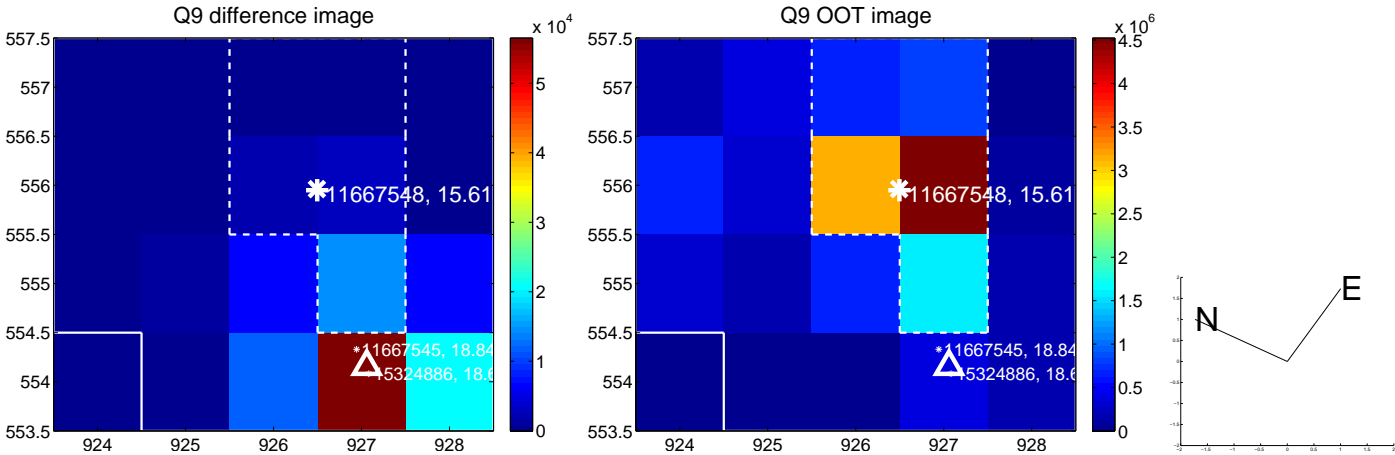
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



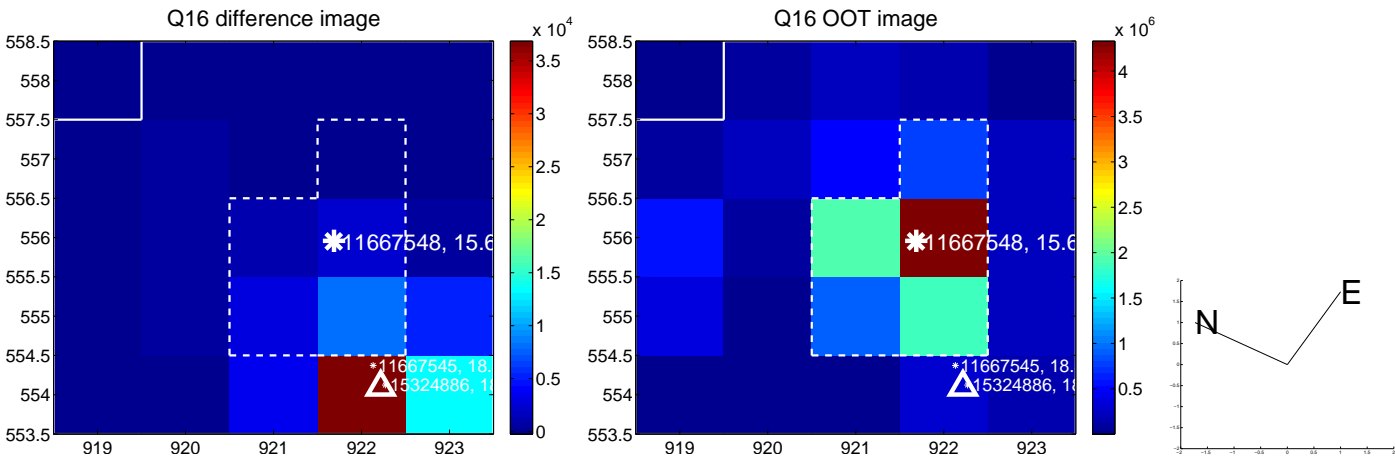
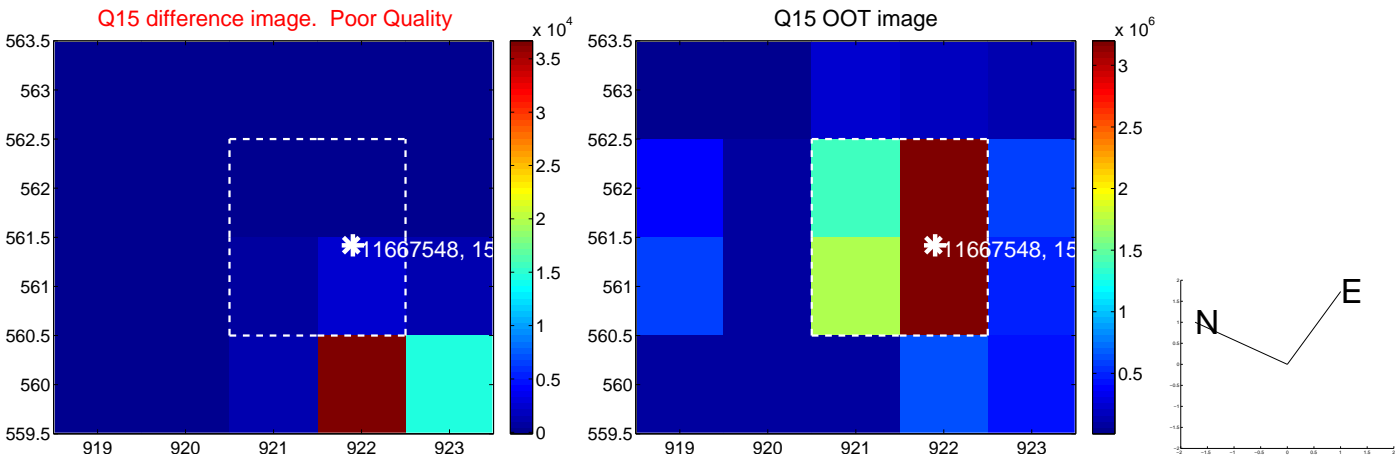
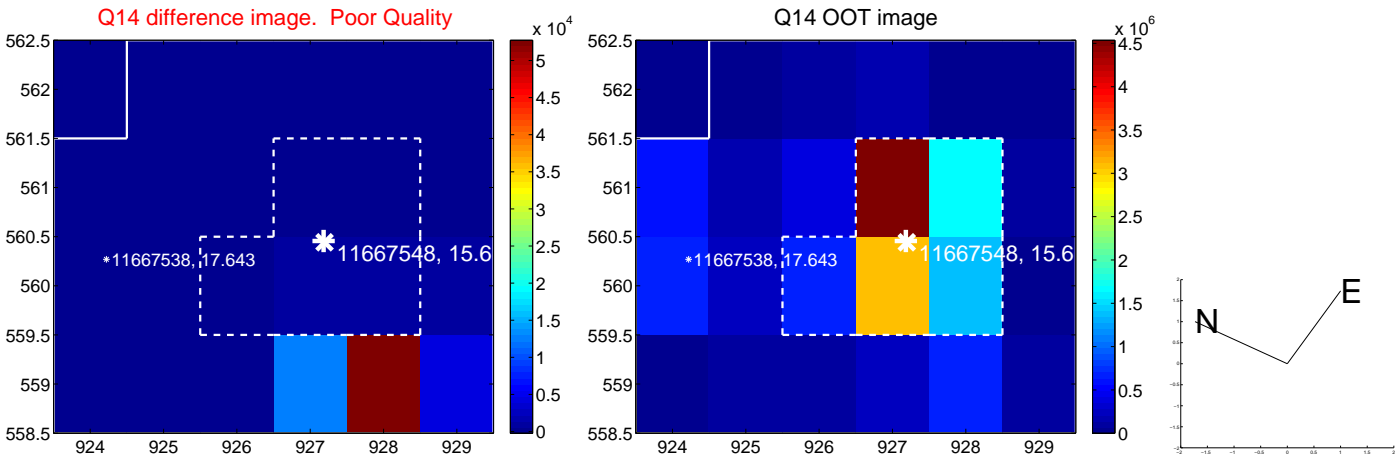
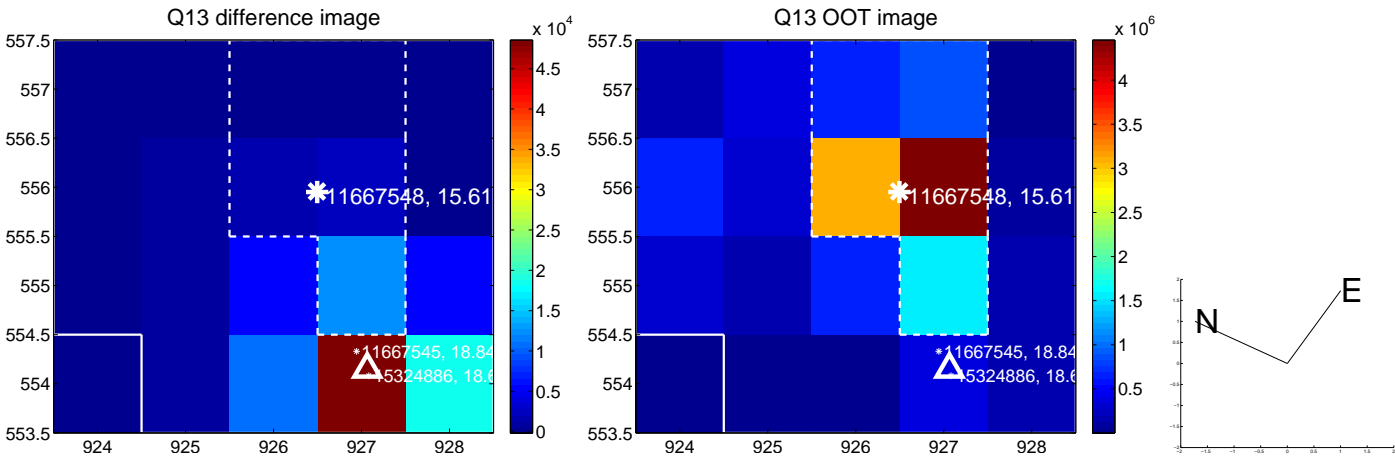
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



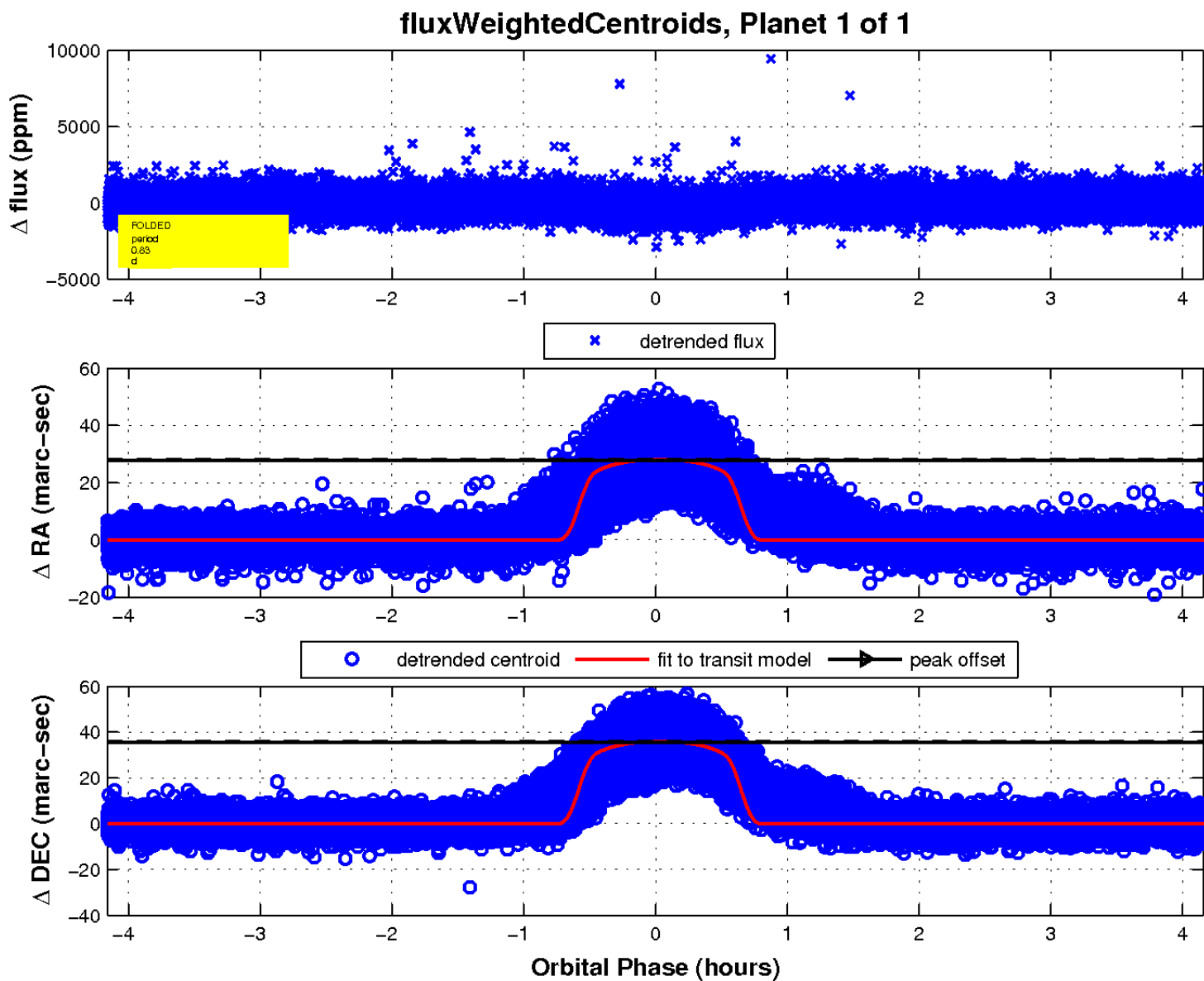
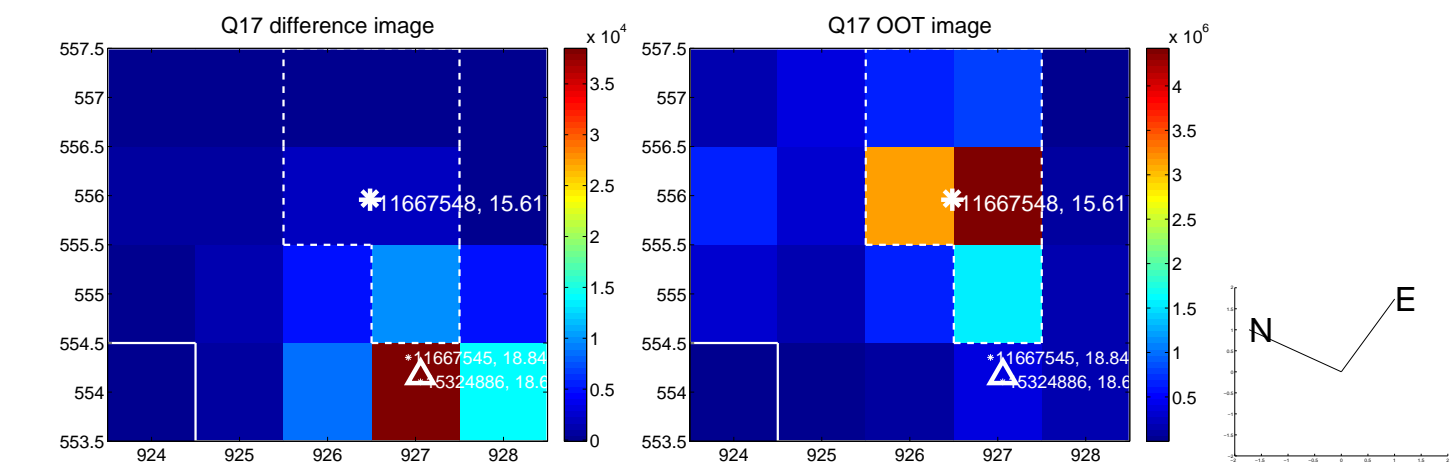
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



UKIRT Image

Declination

