

KIC 011764532

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})
011764532-01	OBS	No	398.956523	238.648663	158.8	21.868	10.6	9.9	1.87	6157	2.55	3.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011764532-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

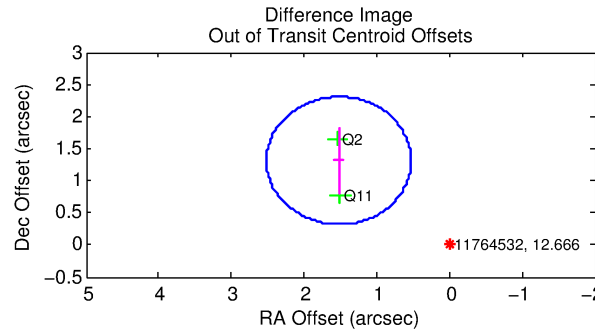
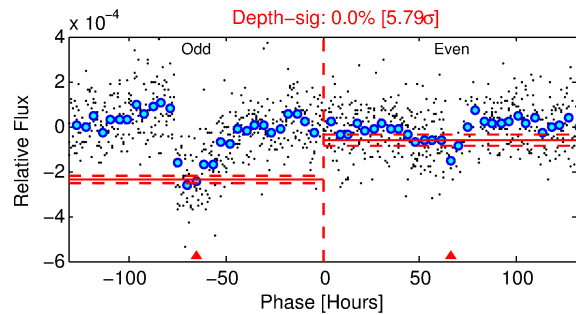
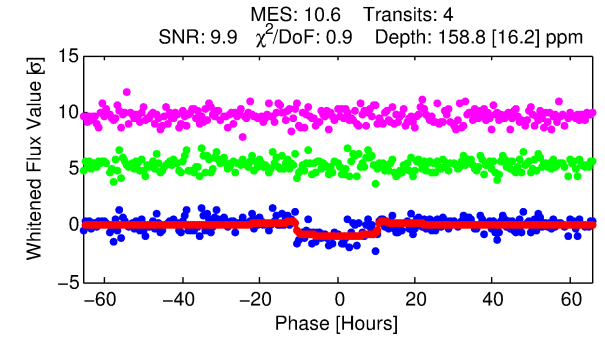
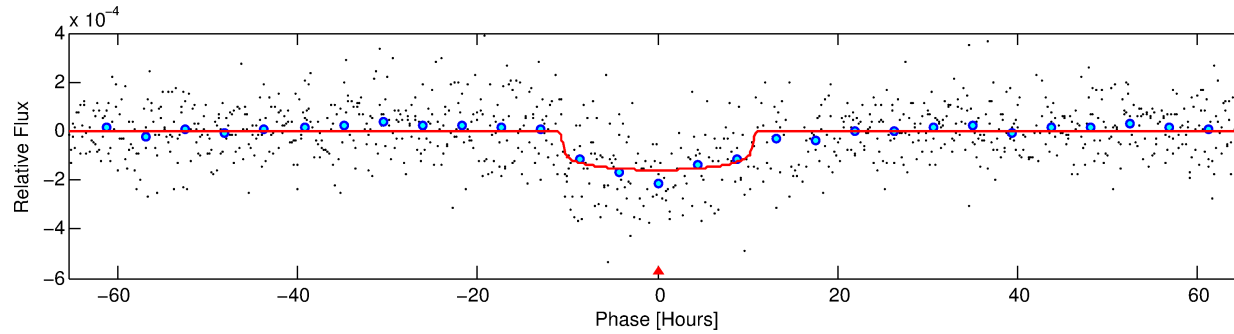
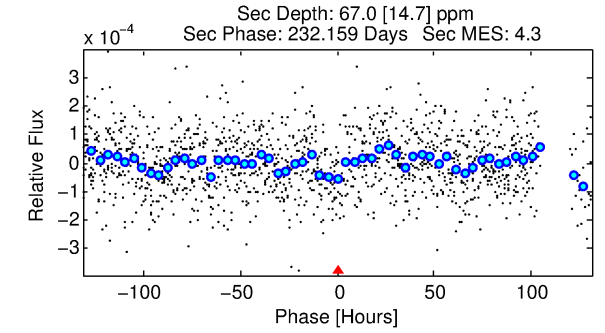
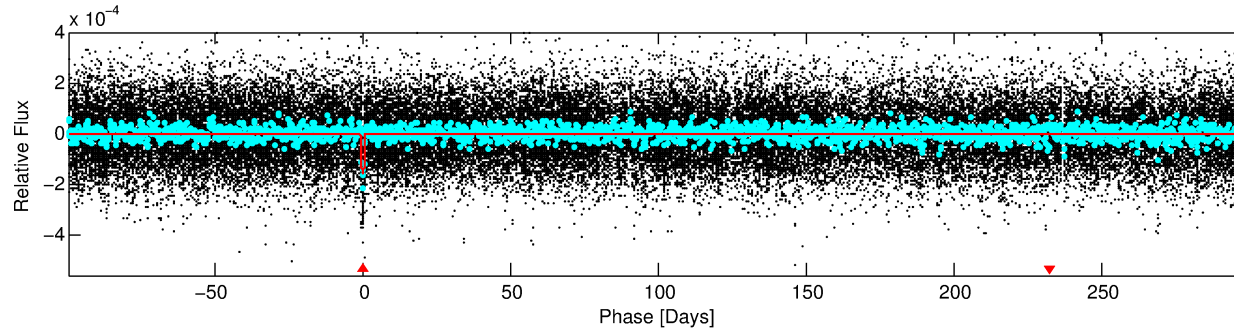
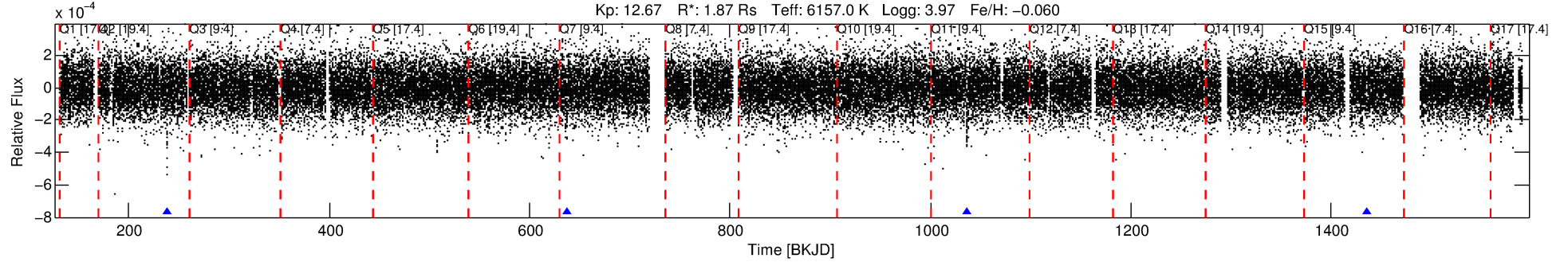
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011764532-01

No Significant Match Found

DV One-Page Summary

KIC: 11764532 Candidate: 1 of 1 Period: 398.957 d



DV Fit Results:

Period = 398.95652 [0.01036] d
Epoch = 238.6487 [0.0179] BKJD
Rp/R* = 0.0125 [0.0023]
a/R* = 96.35 [83.76]
b = 0.74 [0.54]
Seff = 3.55 [1.68]
Teq = 350 [41] K
Rp = 2.55 [0.91] Re
a = 1.1260 [0.3258] AU
Ag = 7191.05 [4476.25] [1.61σ]
Teffp = 4984 [548] K [8.43σ]

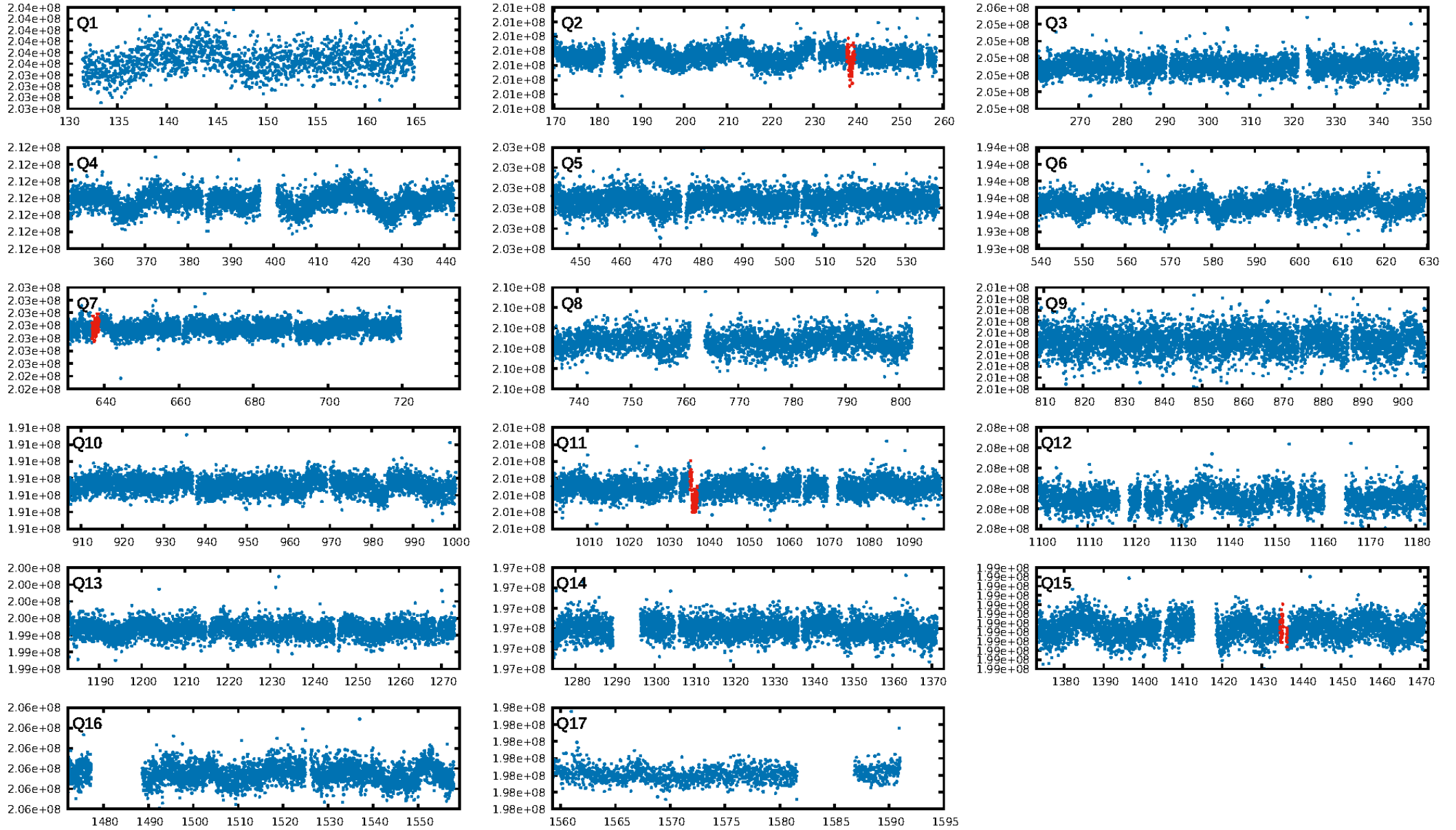
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.86e-23
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 3.489
Centroid-sig: 0.8%
Centroid-so: 1.799 arcsec [1.62σ]
OotOffset-rm: 2.012 arcsec [6.07σ]
KicOffset-rm: 2.029 arcsec [5.17σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

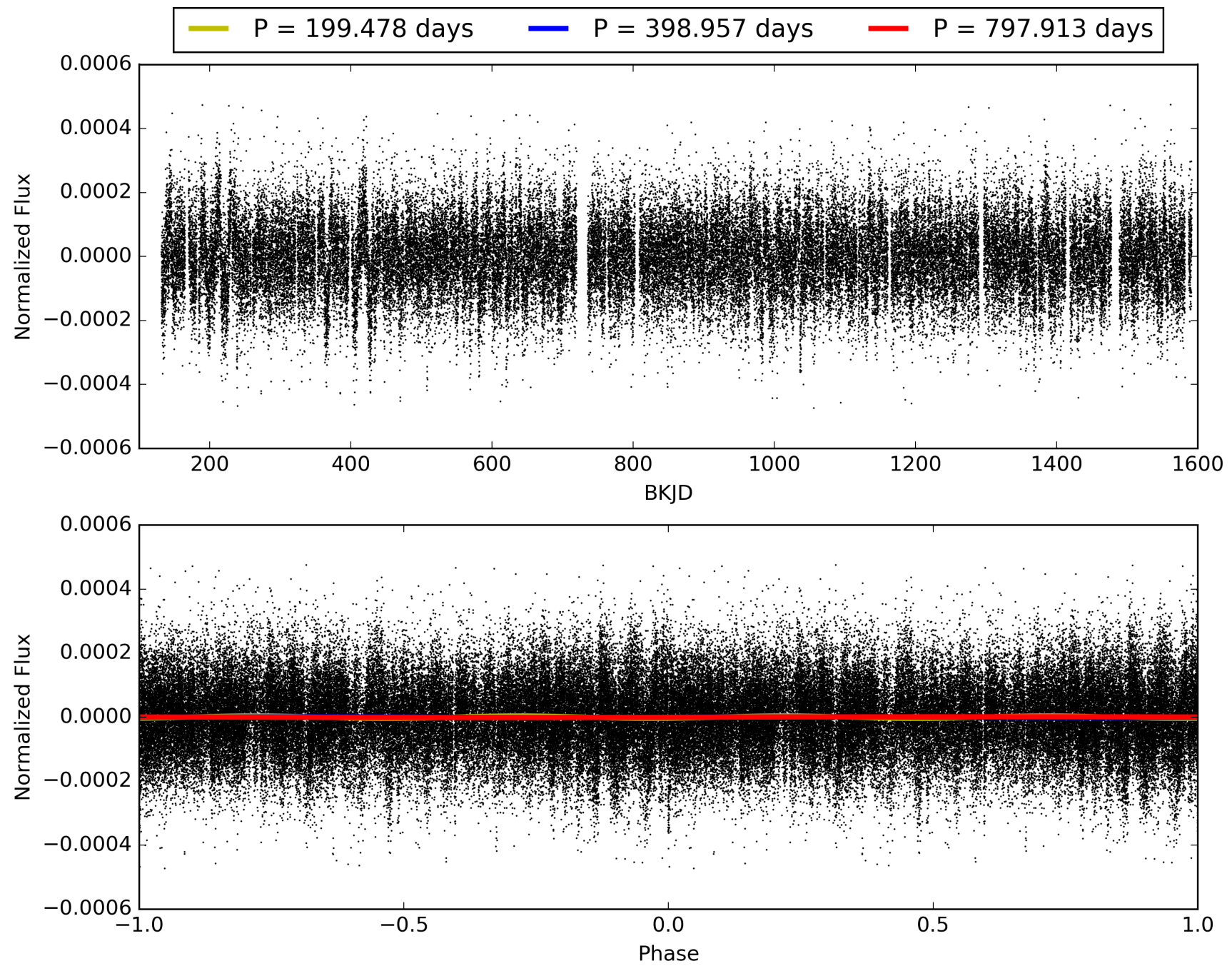
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:19:21 Z

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

TCE 011764532-01, PDC Light Curves

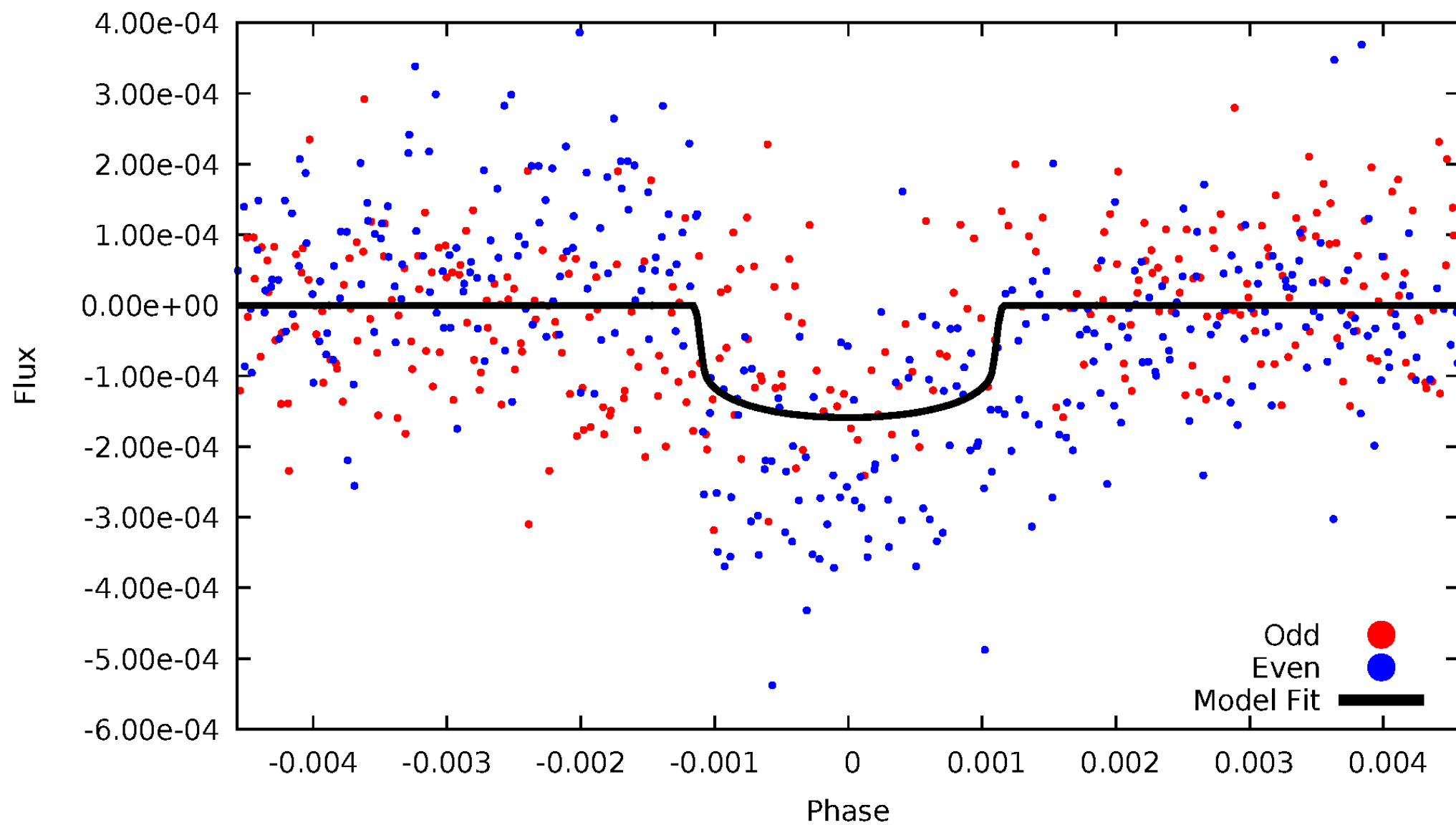


TCE 011764532-01



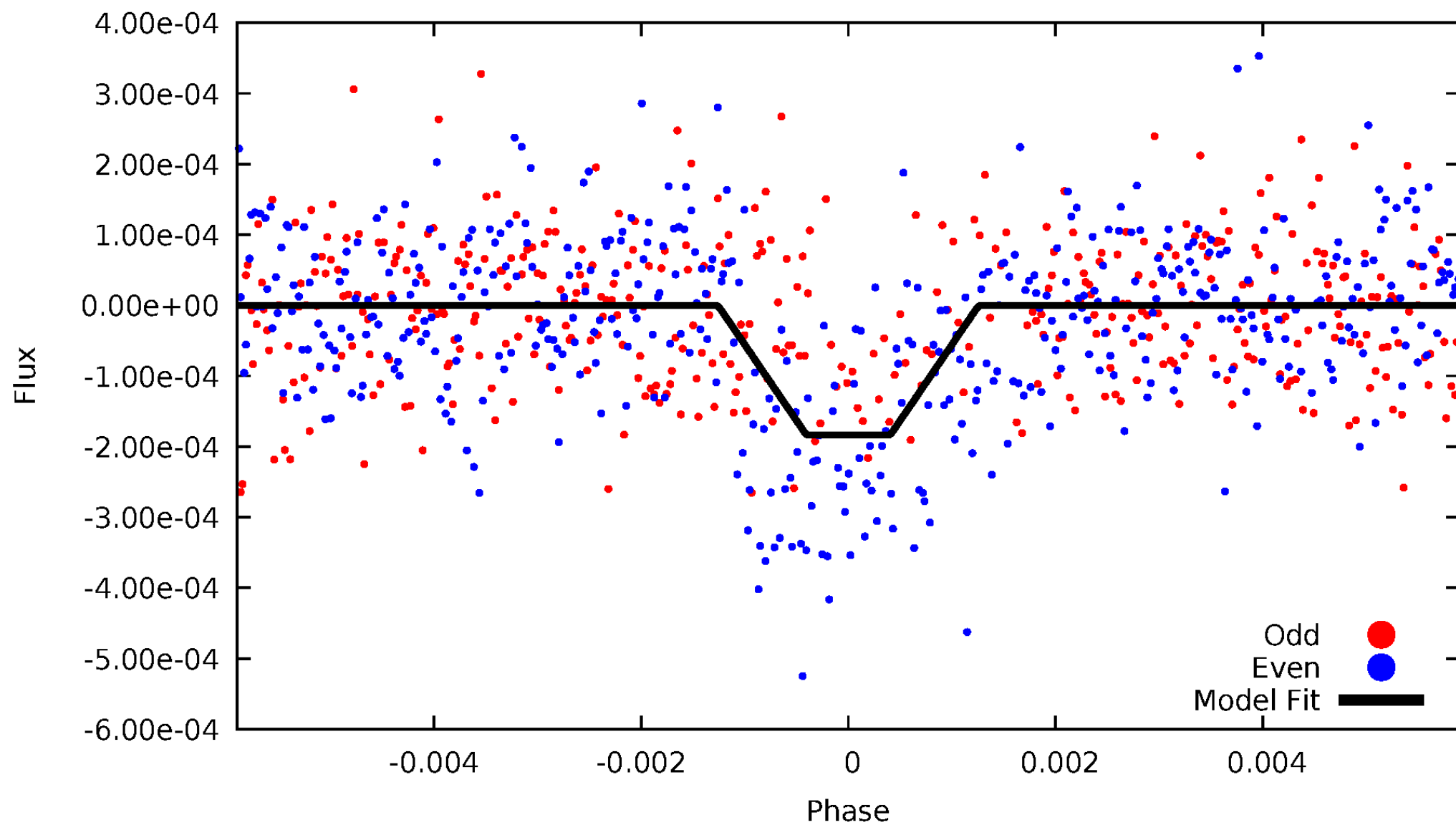
DV Odd/Even

TCE 011764532-01

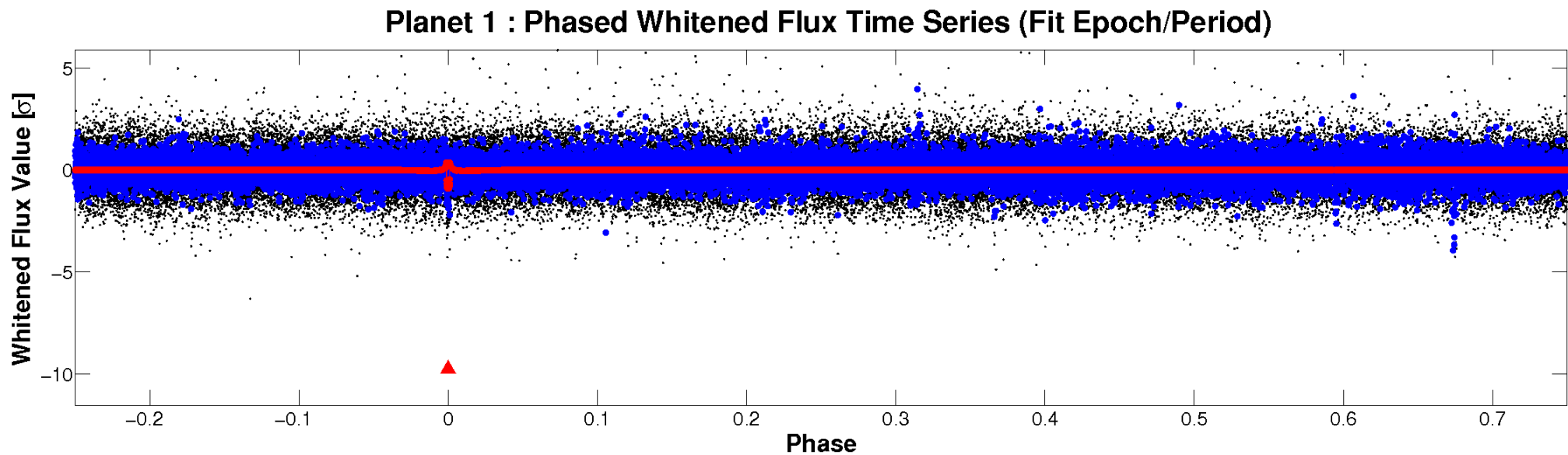
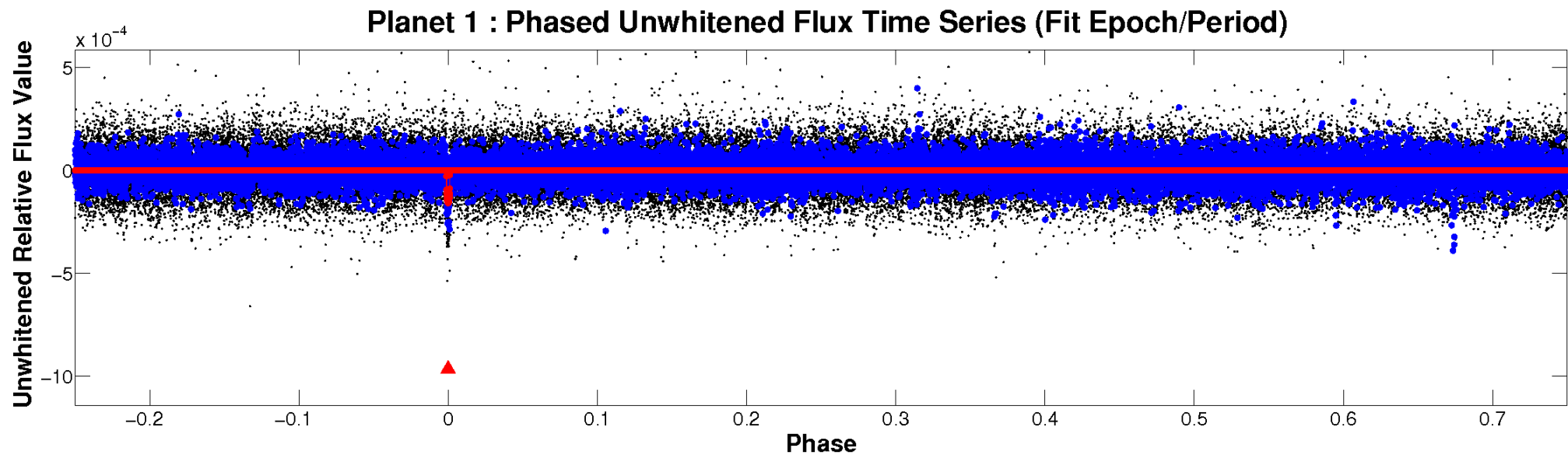


ALT Odd/Even

TCE 011764532-01



Non-Whitened Vs. Whitened Light Curve



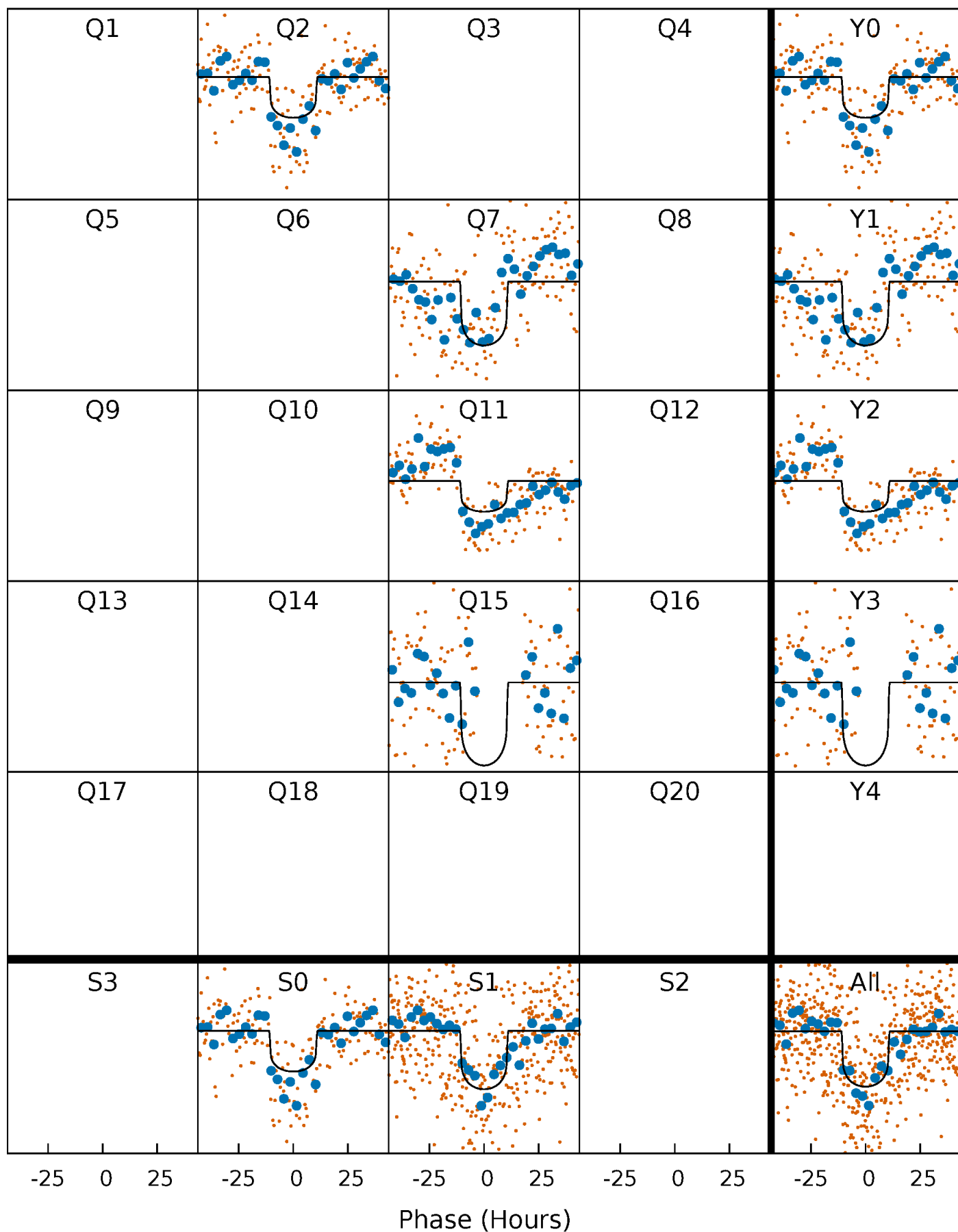
PDC Quarter-Phased Transit Curves

TCE 011764532-01 P=398.956523 Days $T_0=238.648663$ (BKJD)



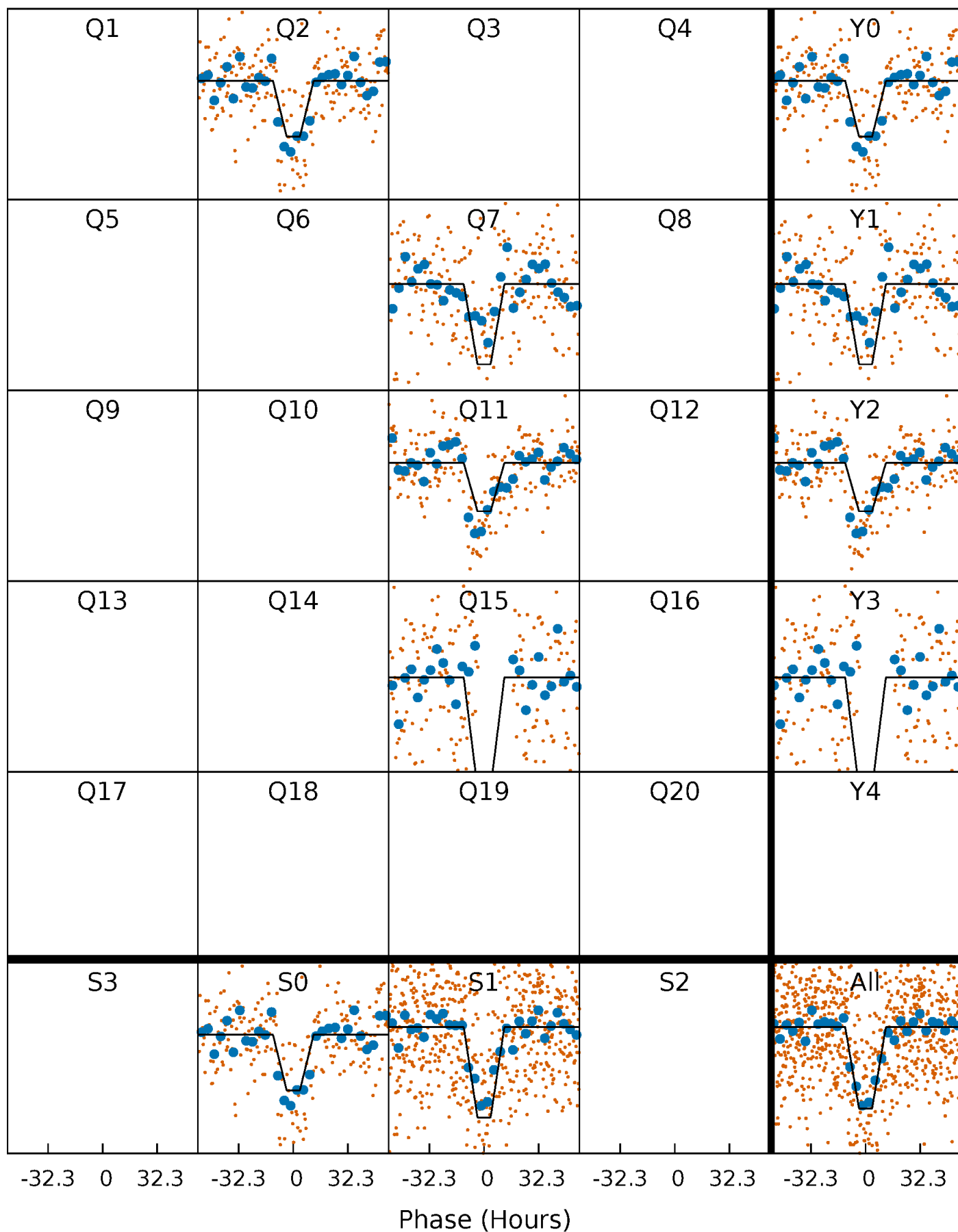
DV Quarter-Phased Transit Curves

TCE 011764532-01 P=398.956523 Days $T_0=238.648663$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

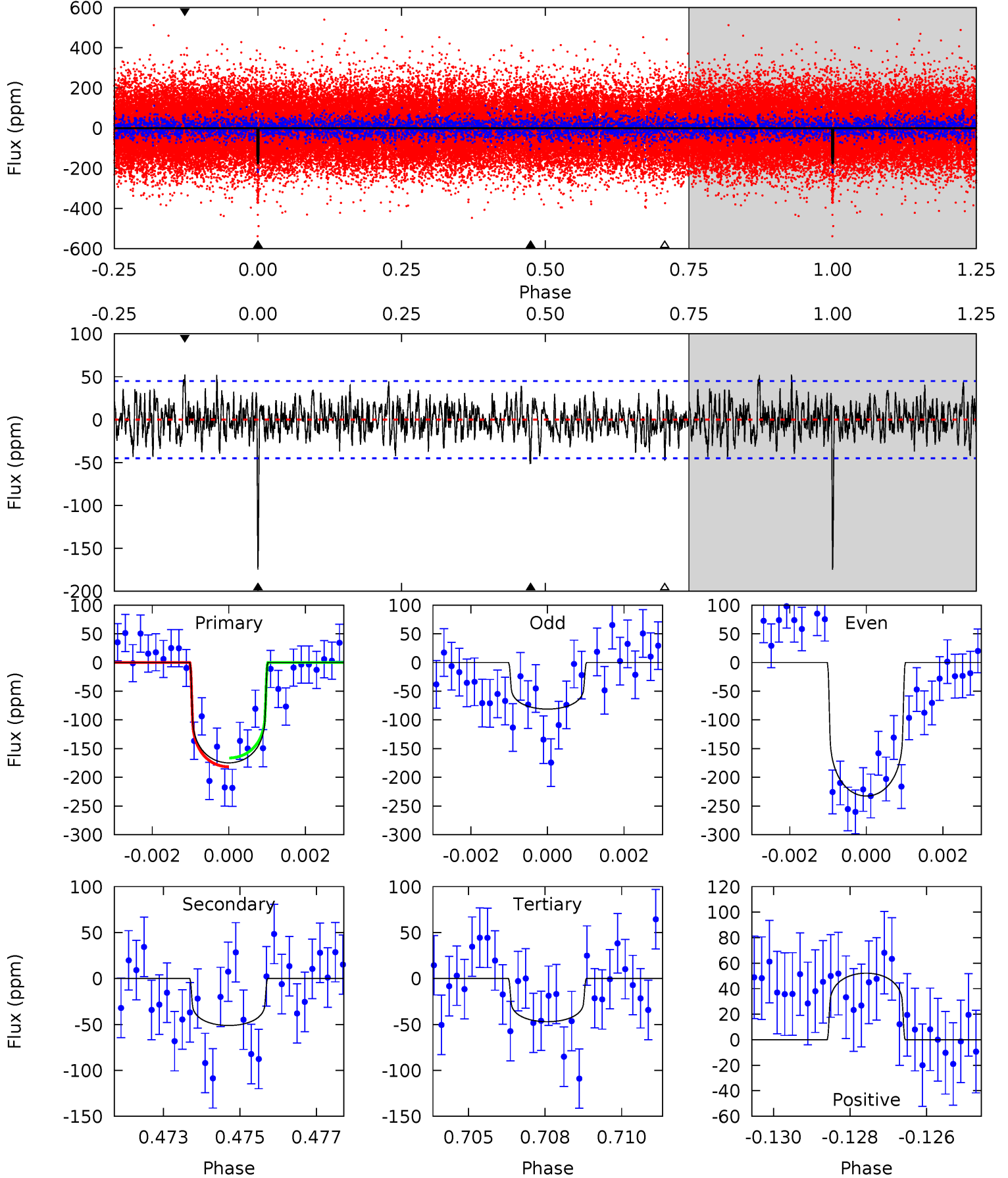
TCE 011764532-01 P=398.978881 Days $T_0=238.598150$ (BKJD)



DV Model-Shift Uniqueness Test

011764532-01, P = 398.956523 Days, E = 238.648663 Days

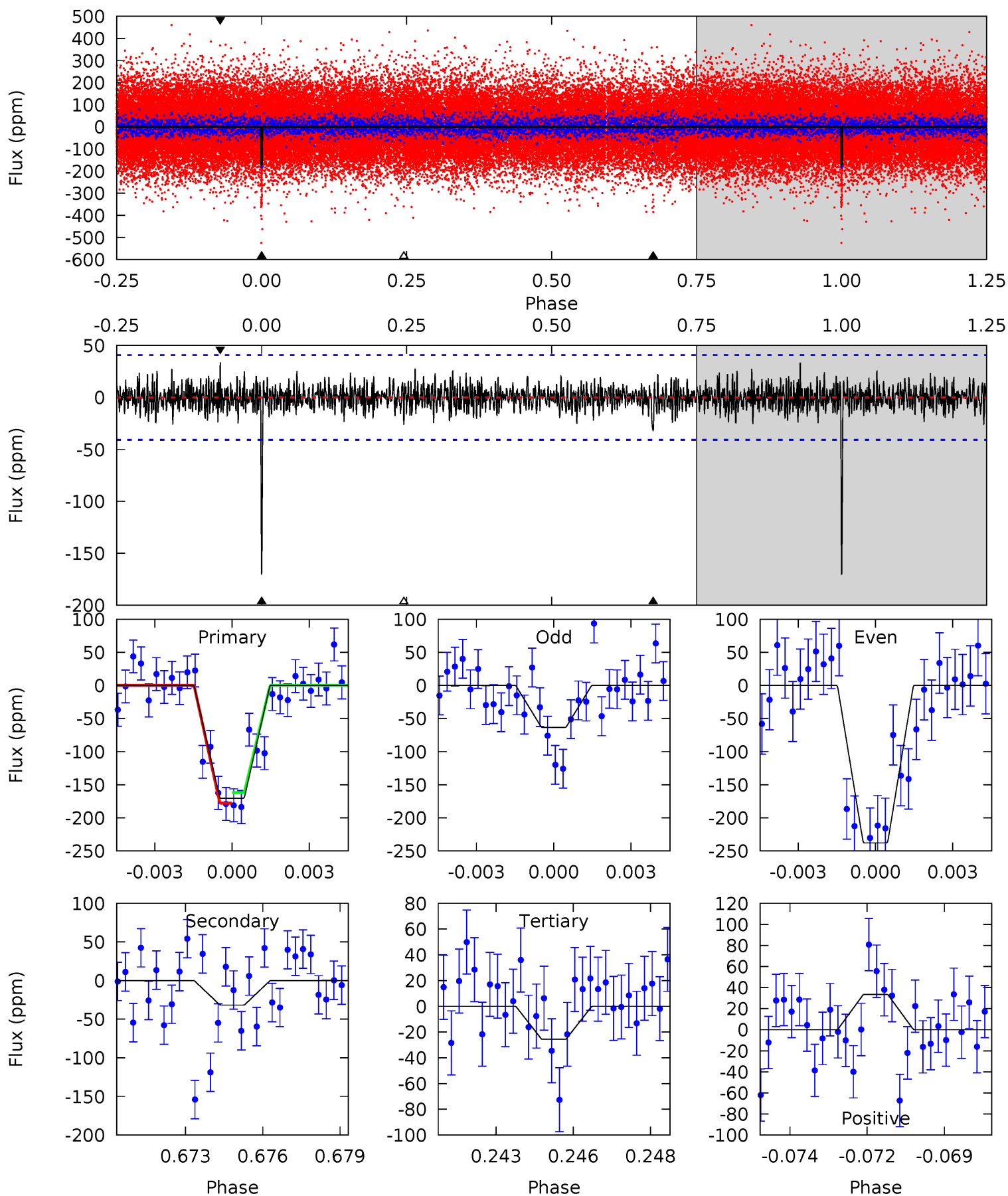
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.6	6.03	5.55	6.15	5.30	3.05	1.74	15.1	14.5	0.49	-0.12	8.81	0.84	0.23	0.90



Alt Model-Shift Uniqueness Test

011764532-01, P = 398.978881 Days, E = 238.598150 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.1	4.10	3.31	4.33	5.28	3.02	1.13	18.7	17.7	0.80	-0.23	11.1	0.76	0.16	1.02



Stellar Parameters For KIC 011764532

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6157^{+167}_{-186}	$3.972^{+0.266}_{-0.114}$	$-0.060^{+0.300}_{-0.250}$	$1.870^{+0.383}_{-0.575}$	$1.197^{+0.198}_{-0.179}$	$0.258^{+0.445}_{-0.091}$
	+3%/-3%	+7%/-3%	+500%/-417%	+20%/-31%	+17%/-15%	+173%/-35%
Source	PHO1	FLK73	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 011764532-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-51 ± 8	$2.48^{+0.57}_{-0.62}$	483^{+30}_{-40}	4793^{+435}_{-373}	5898^{+4301}_{-2102}
Alt.	-32 ± 8	$2.69^{+0.61}_{-0.63}$	480^{+33}_{-38}	4211^{+371}_{-307}	3141^{+2216}_{-1309}

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

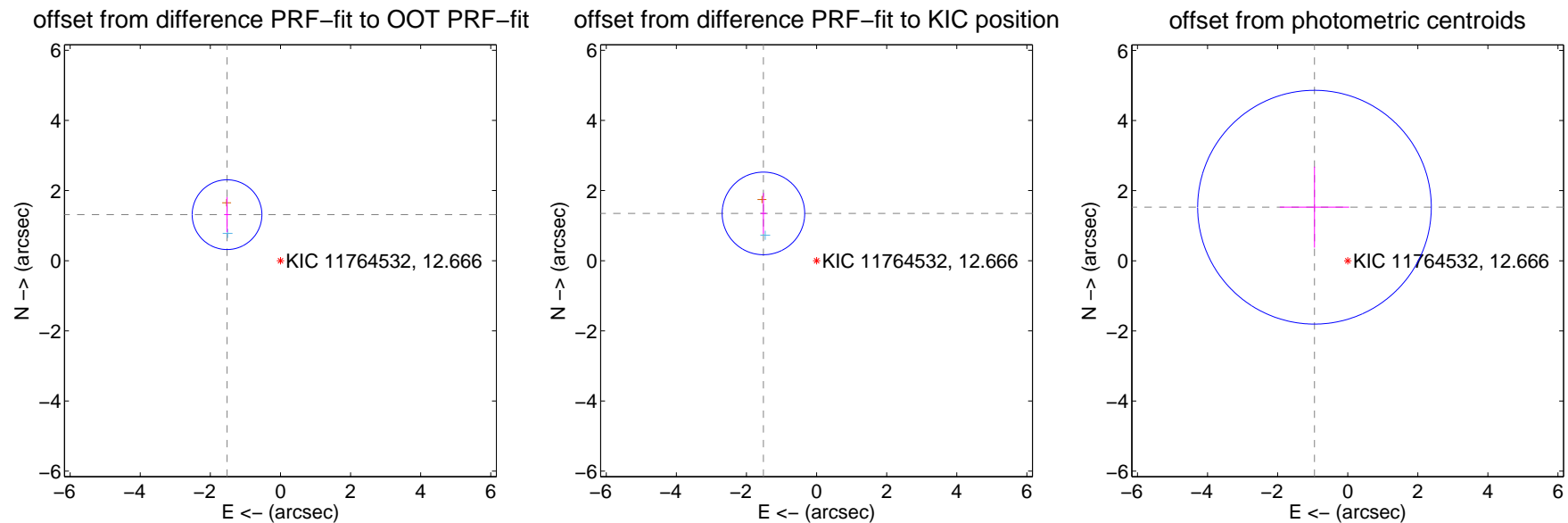
DV Centroid Data

Supplemental centroid analysis for 011764532-01. Kepler magnitude: 12.67. Transit SNR 9.92

There are 1 quarters with good PRF difference image offsets

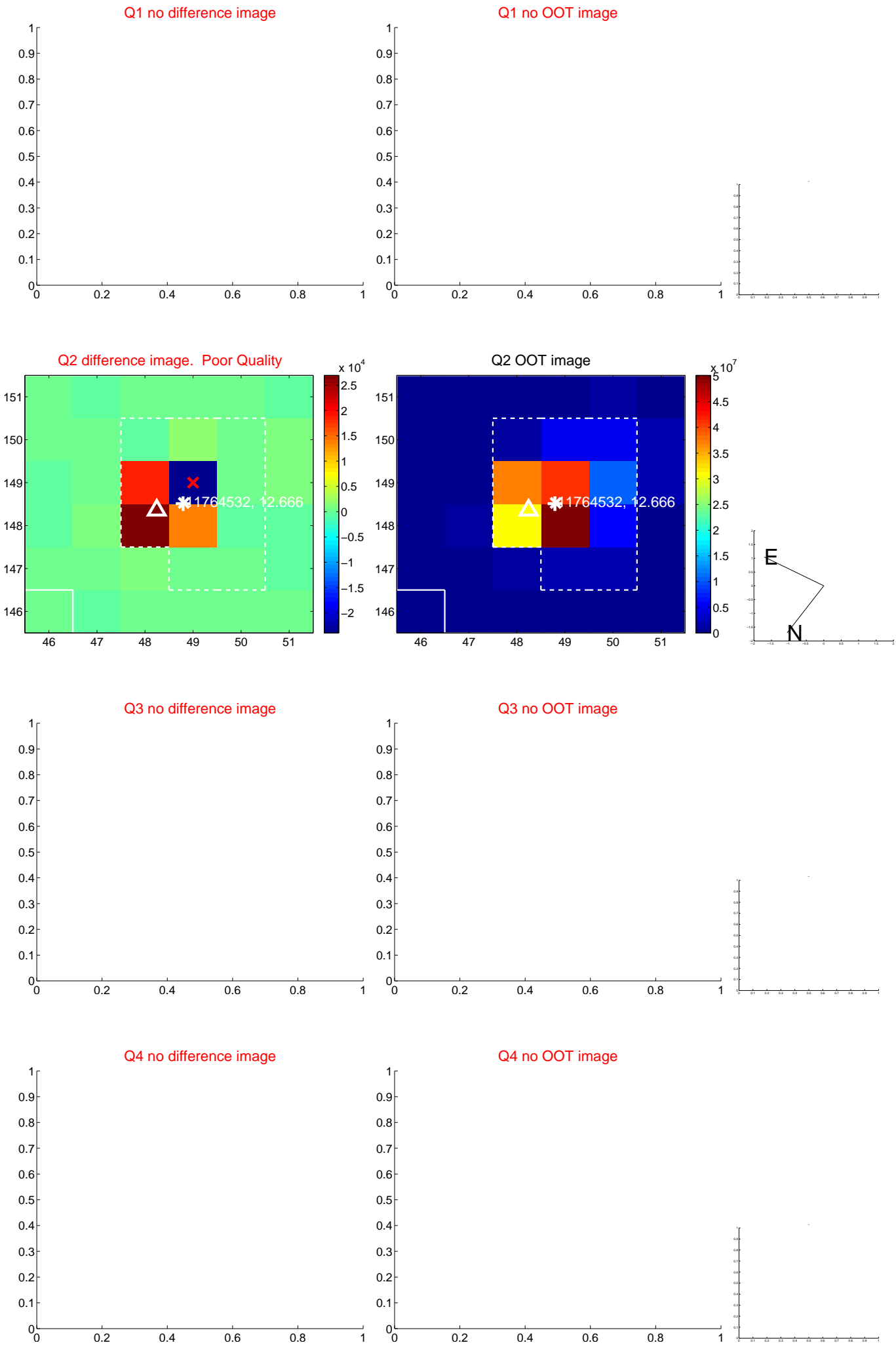
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.012 ± 0.332	6.07	1.524 ± 0.068	1.313 ± 0.502
PRF-fit source offset from KIC position	2.029 ± 0.393	5.17	1.517 ± 0.086	1.348 ± 0.583
photometric centroid source offset	1.80 ± 1.11	1.62	0.95 ± 0.99	1.53 ± 1.15

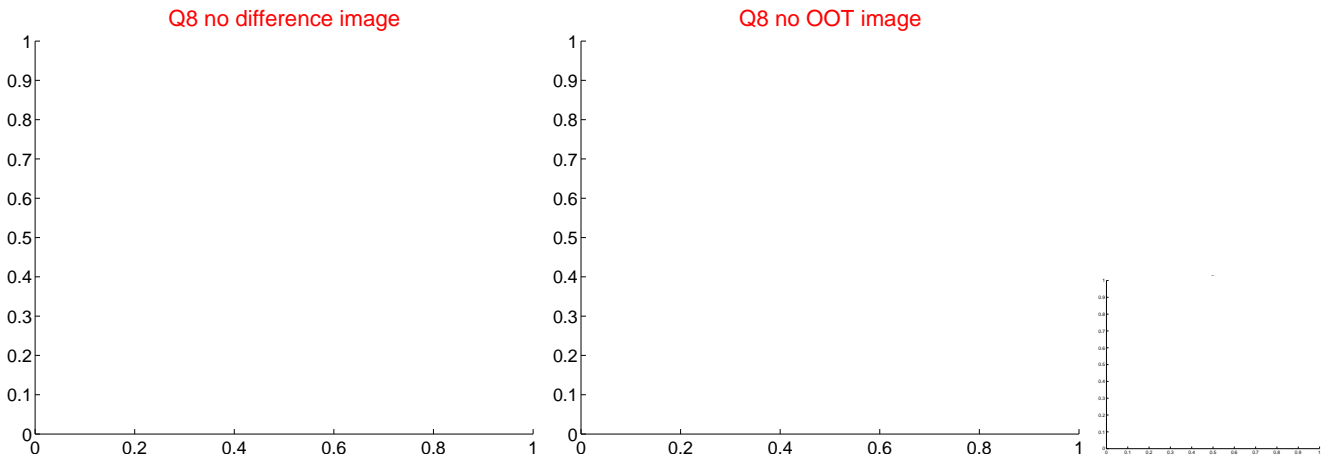
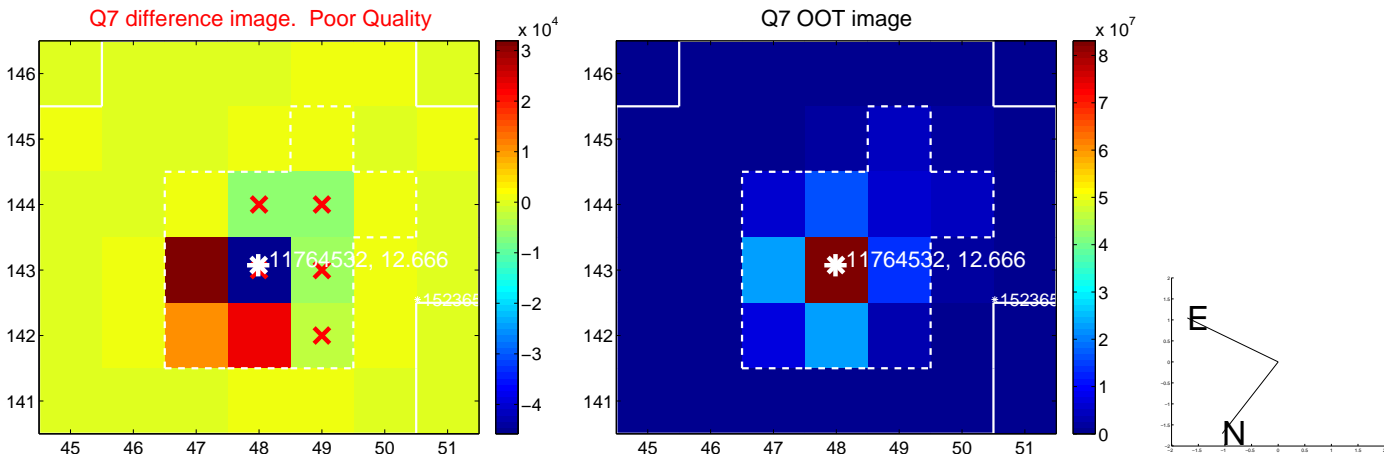
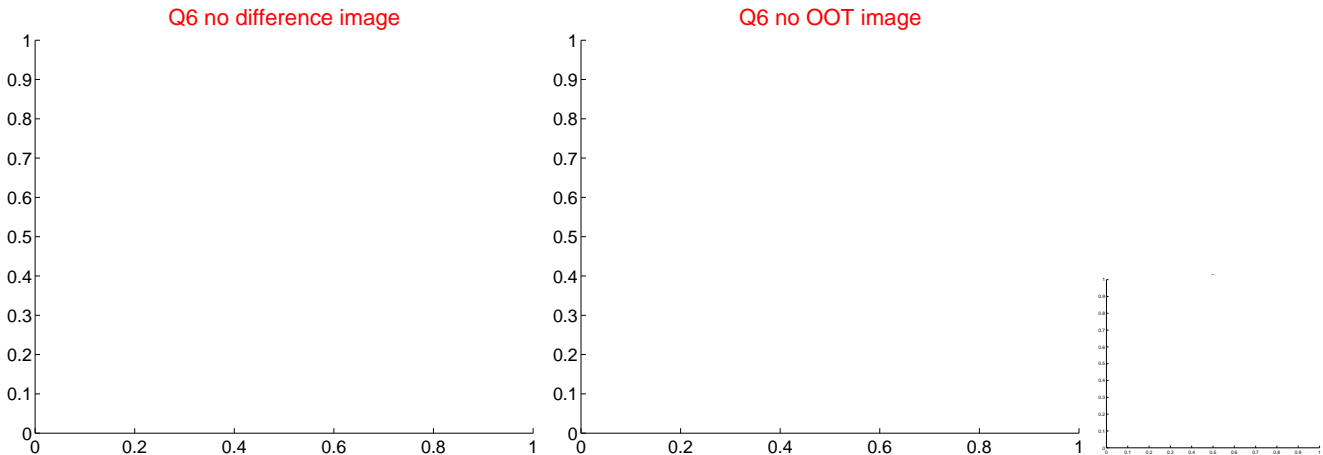
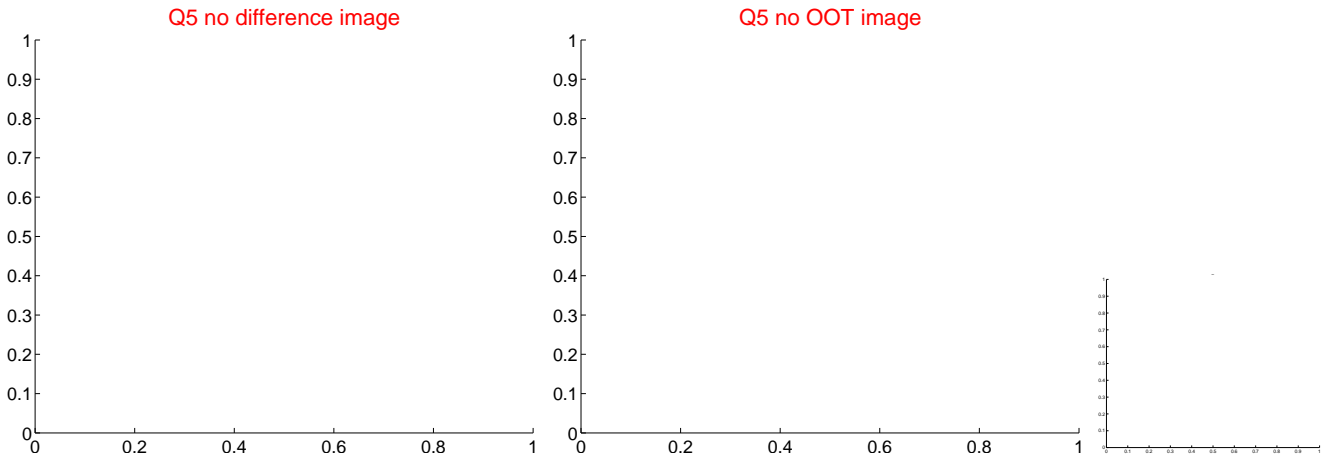


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

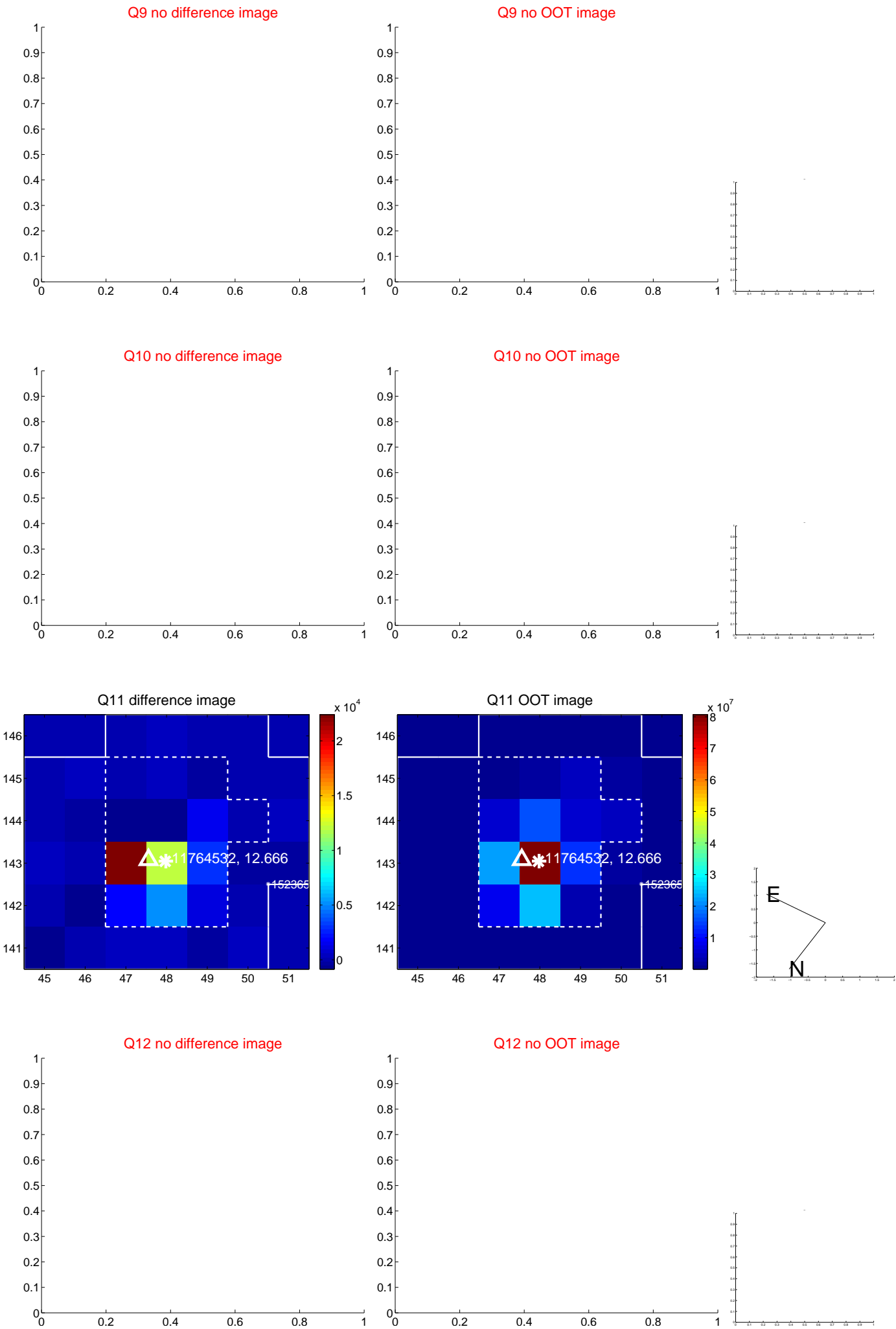
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



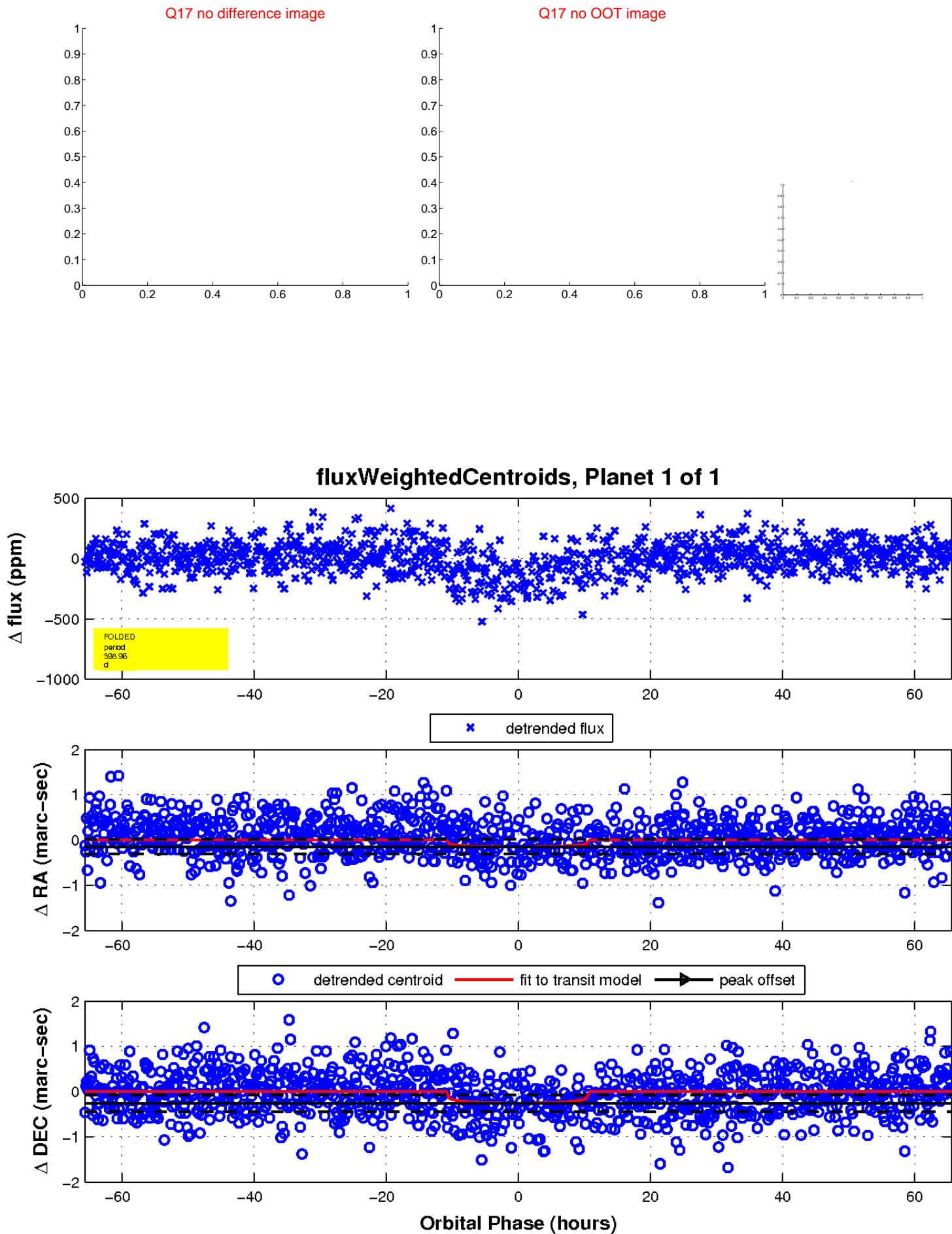
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

