

KIC 008492337

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})
008492337-01	OBS	No	378.313272	501.109687	717.0	34.010	8.6	10.1	0.84	5589	2.35	0.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008492337-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—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.

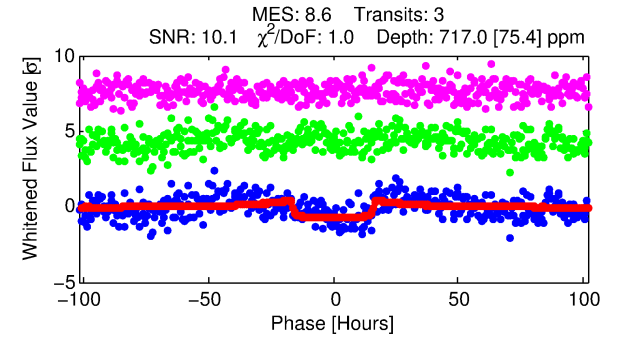
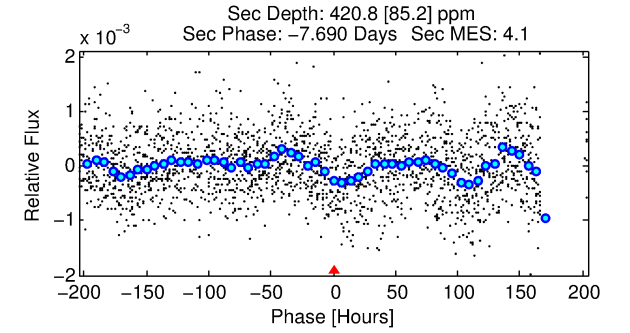
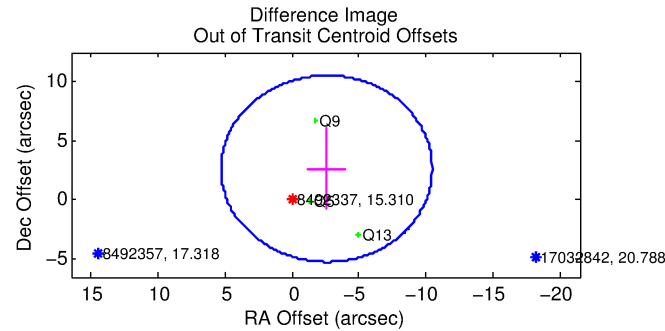
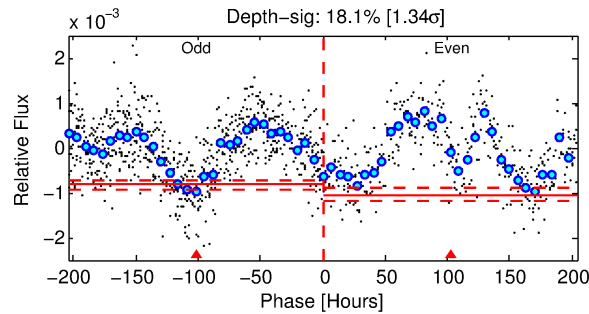
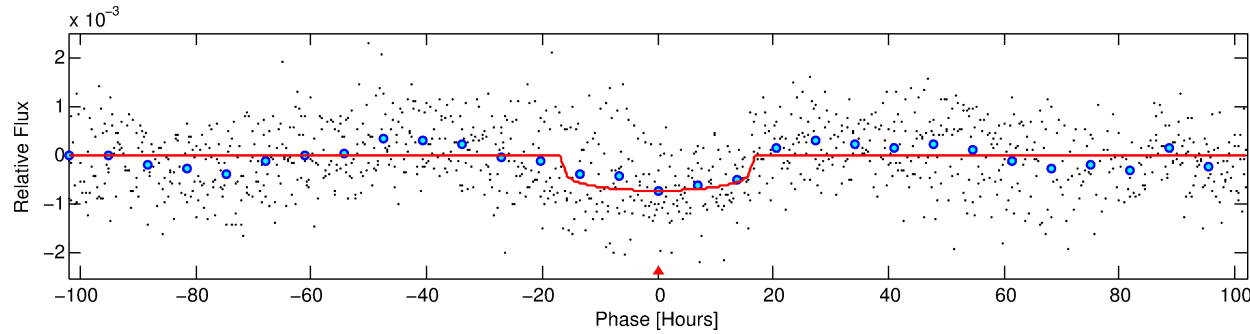
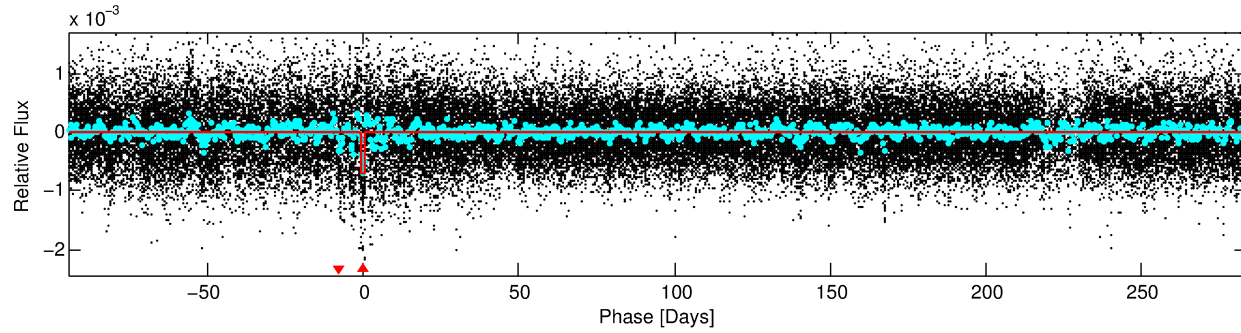
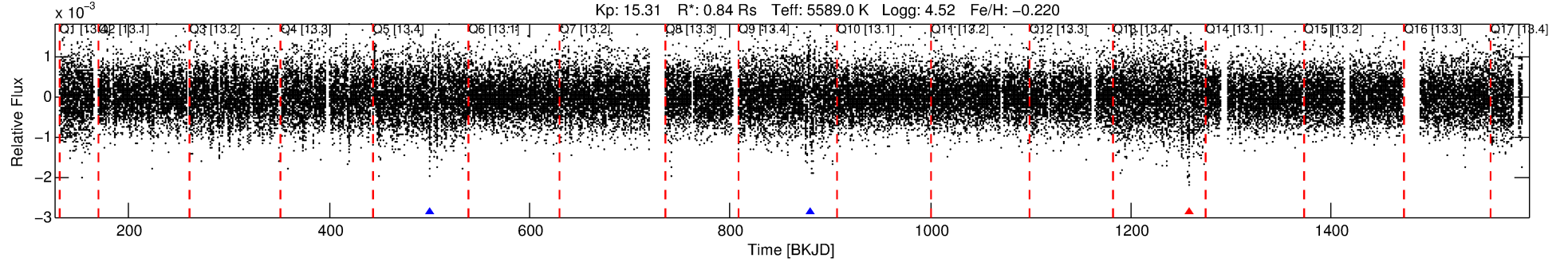
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008492337-01

No Significant Match Found

DV One-Page Summary

KIC: 8492337 Candidate: 1 of 1 Period: 378.313 d



DV Fit Results:

Period = 378.31327 [0.02205] d
Epoch = 501.1097 [0.0278] BKJD
Rp/R* = 0.0255 [0.0054]
a/R* = 70.82 [61.29]
b = 0.60 [0.94]
Seff = 0.66 [0.21]
Teq = 230 [18] K
Rp = 2.35 [0.74] Re
a = 0.9716 [0.1909] AU
Ag = 39577.81 [21824.82] [1.81σ]
Teffp = 5014 [609] K [7.86σ]

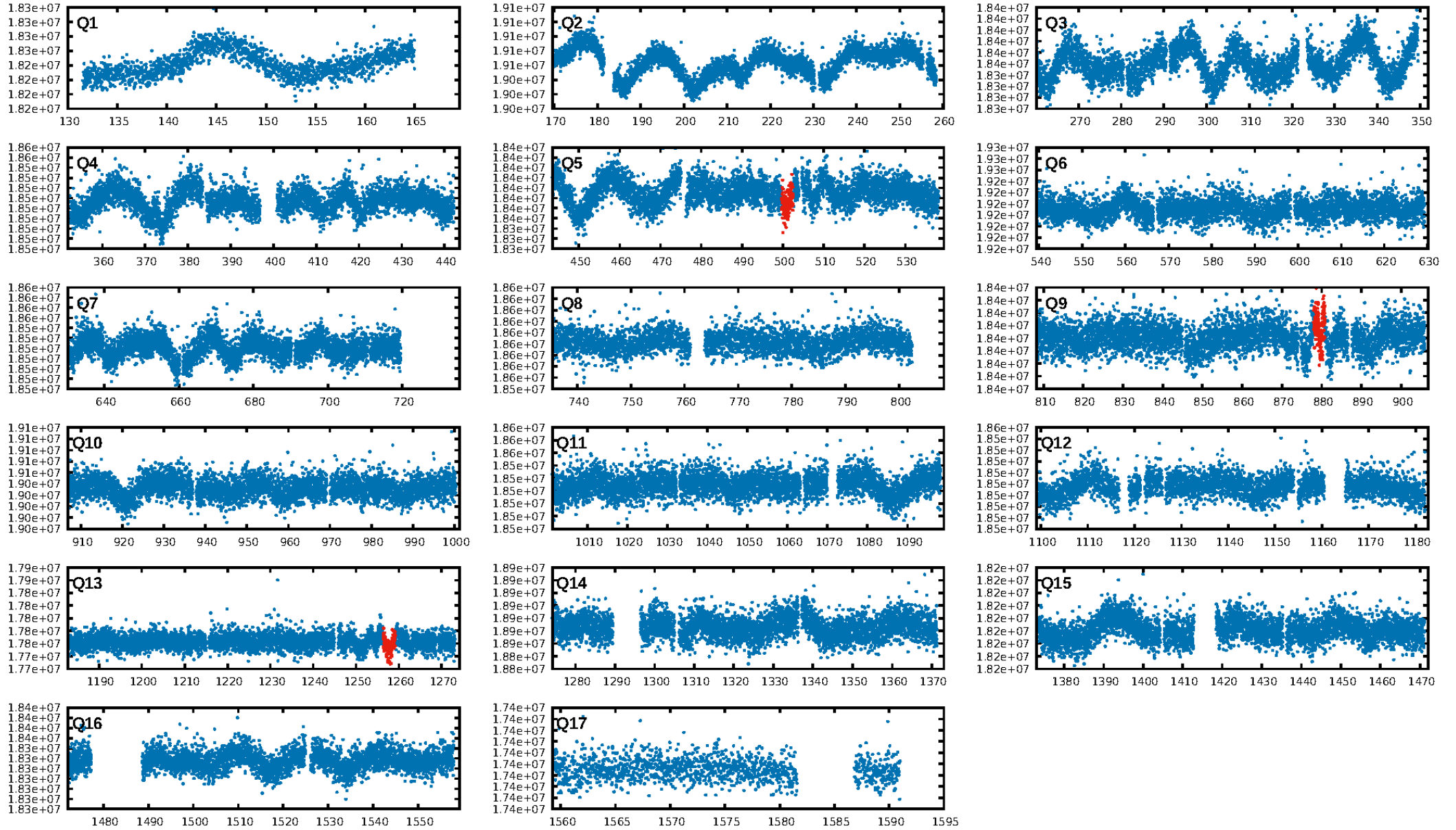
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 7.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.12e-12
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 12.2
Centroid-sig: 31.4%
Centroid-so: 1.495 arcsec [0.85σ]
OotOffset-rm: 3.706 arcsec [1.41σ]
OotOffset-st: 0/0/0/3 [3]
KicOffset-rm: 3.480 arcsec [1.29σ]
KicOffset-st: 0/0/0/3 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

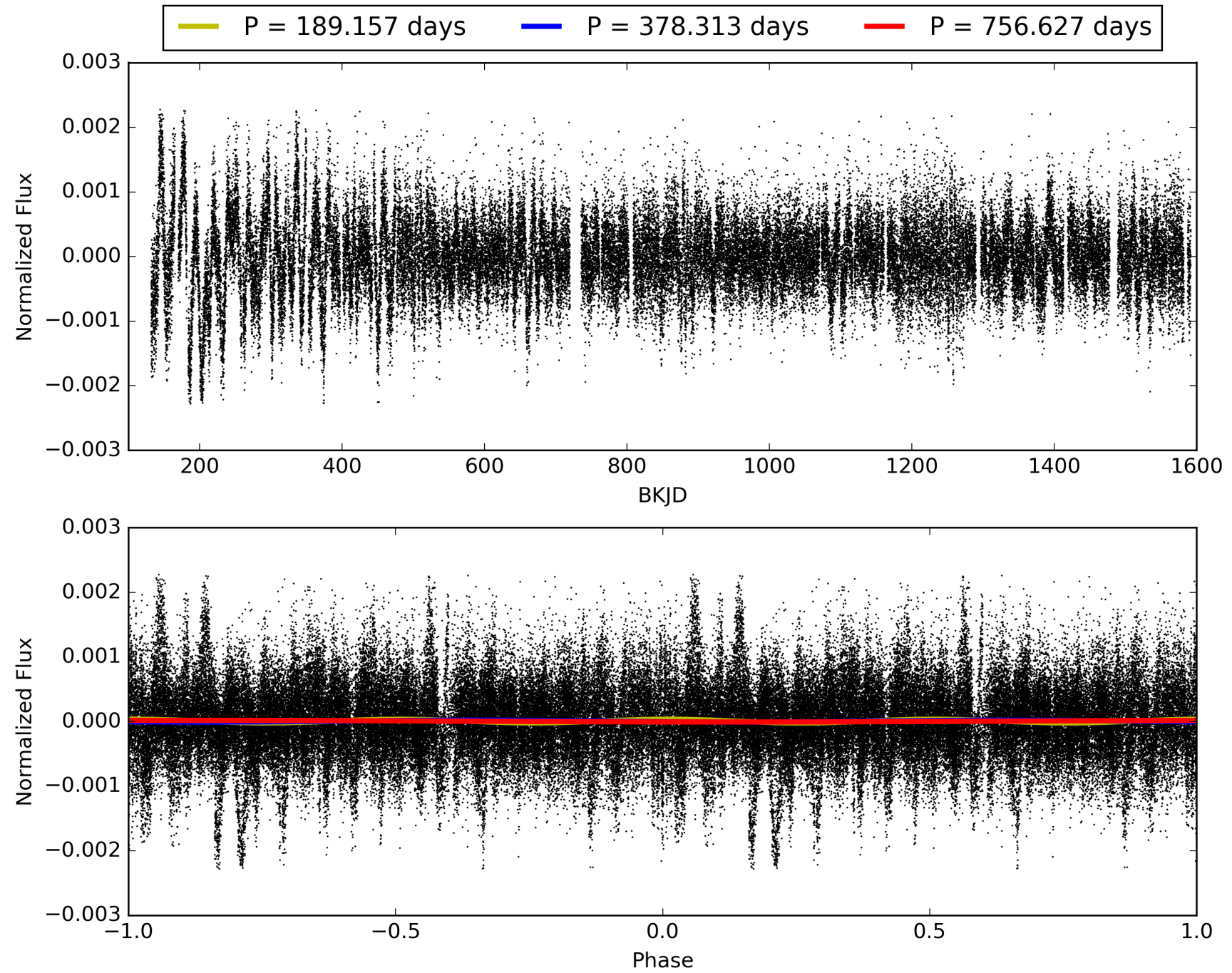
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:33:21 Z

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

TCE 008492337-01, PDC Light Curves

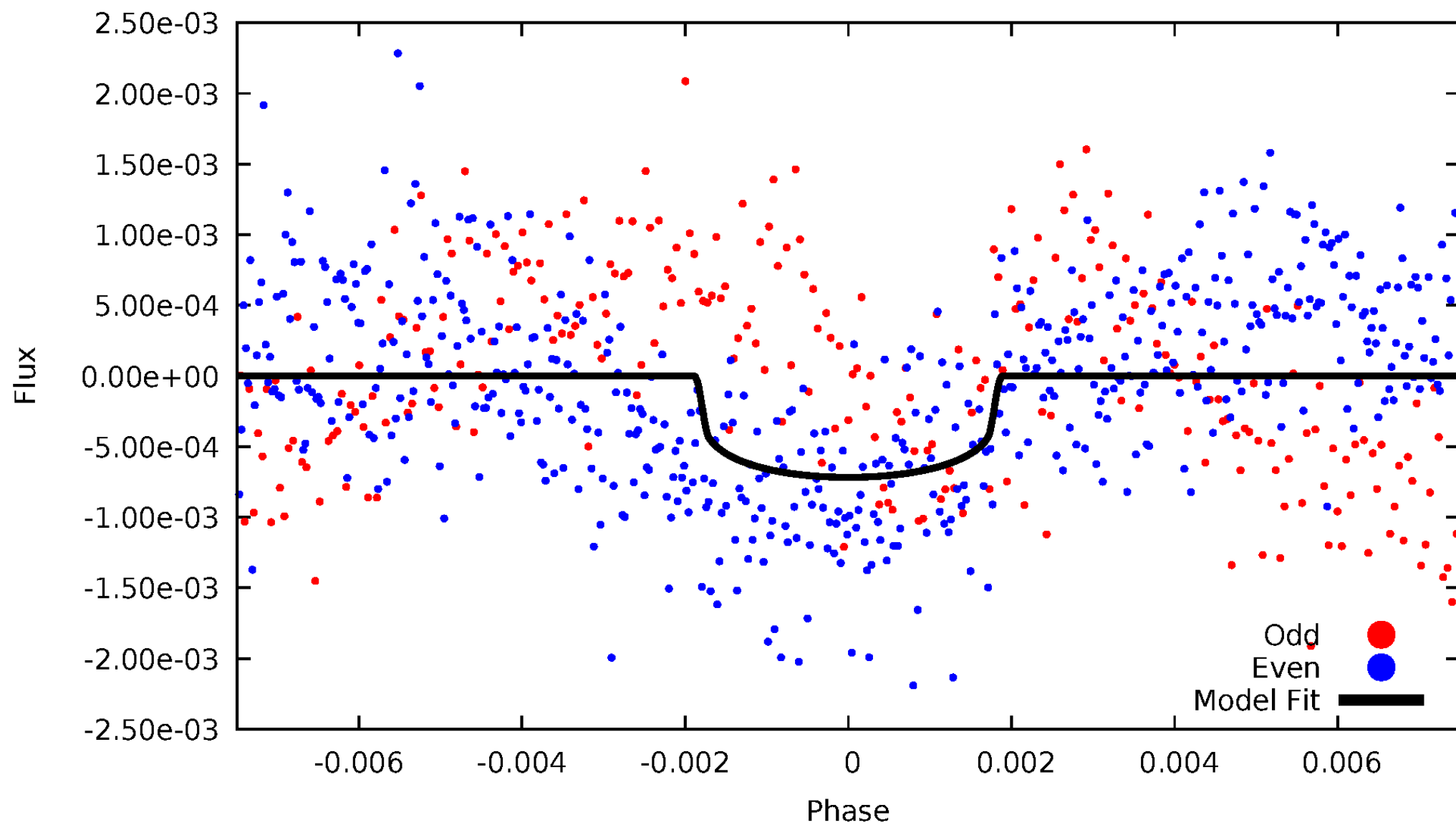


TCE 008492337-01



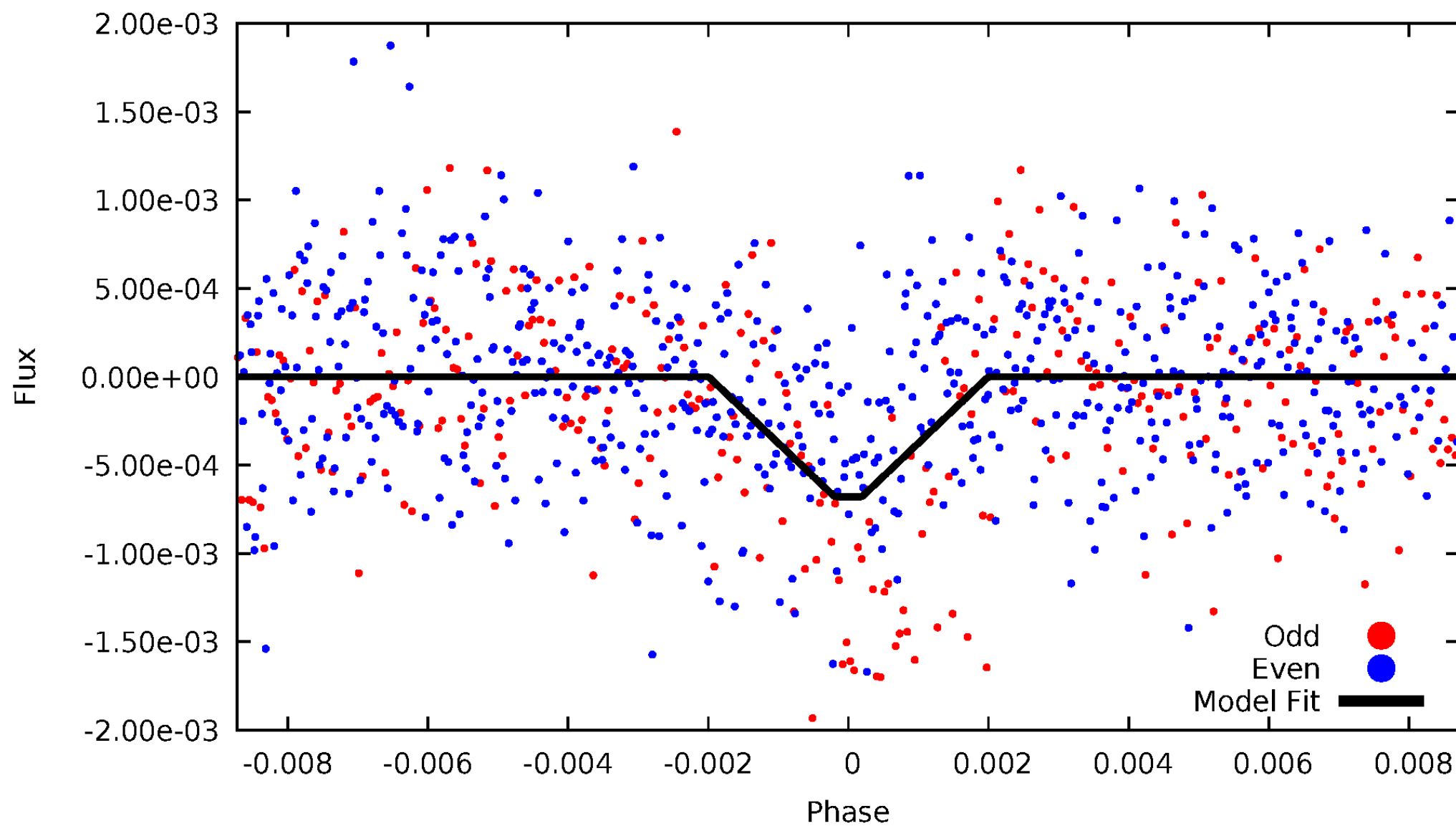
DV Odd/Even

TCE 008492337-01

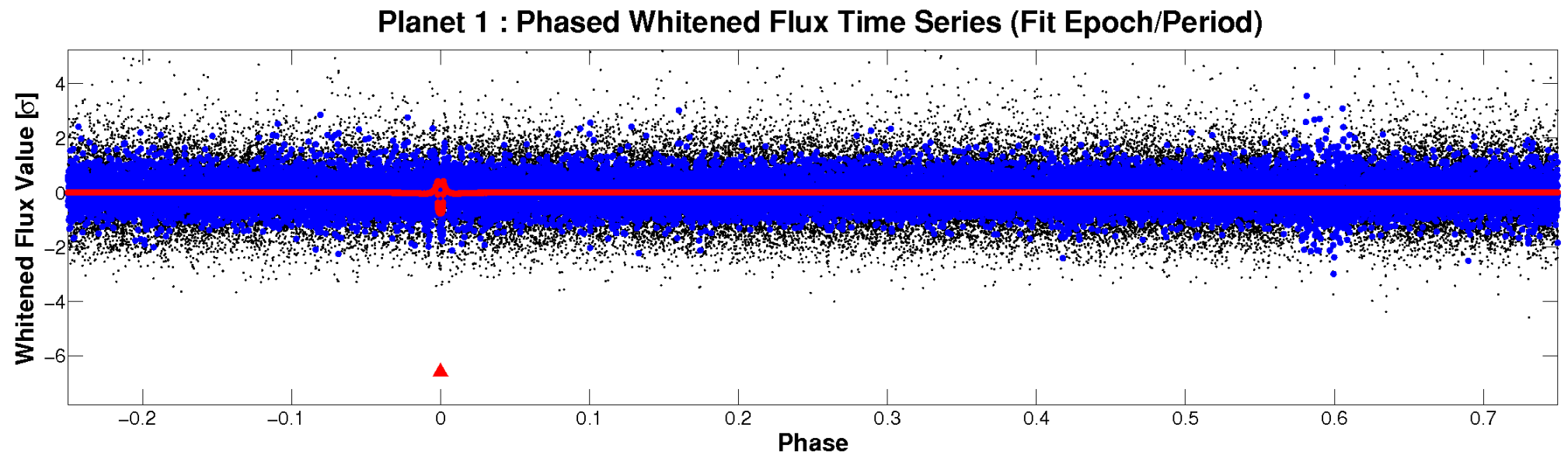
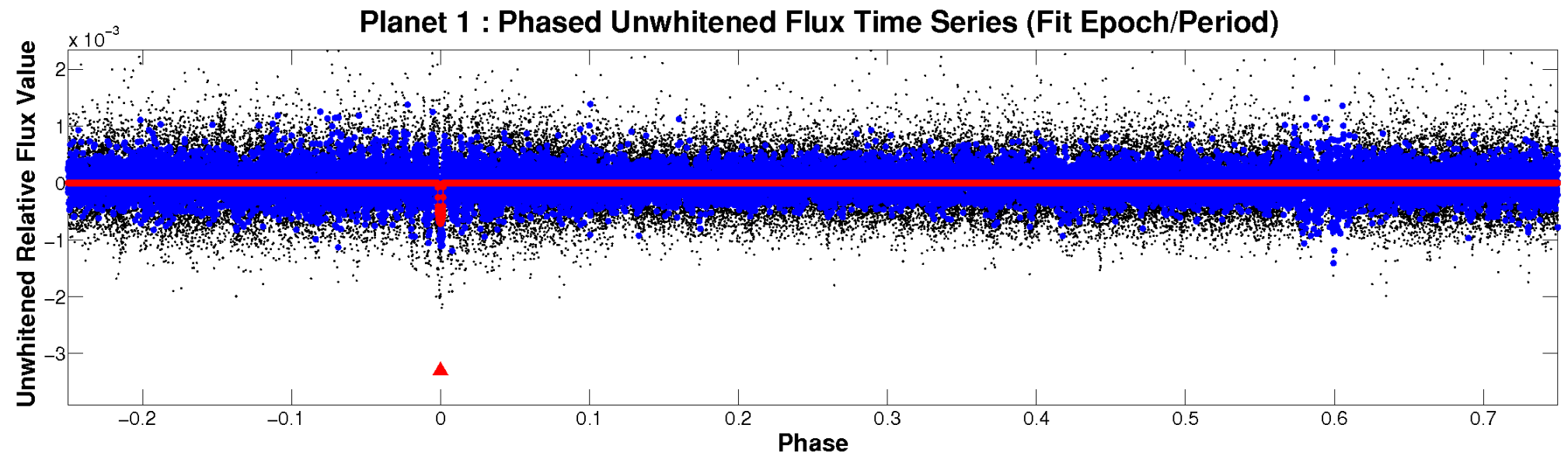


ALT Odd/Even

TCE 008492337-01

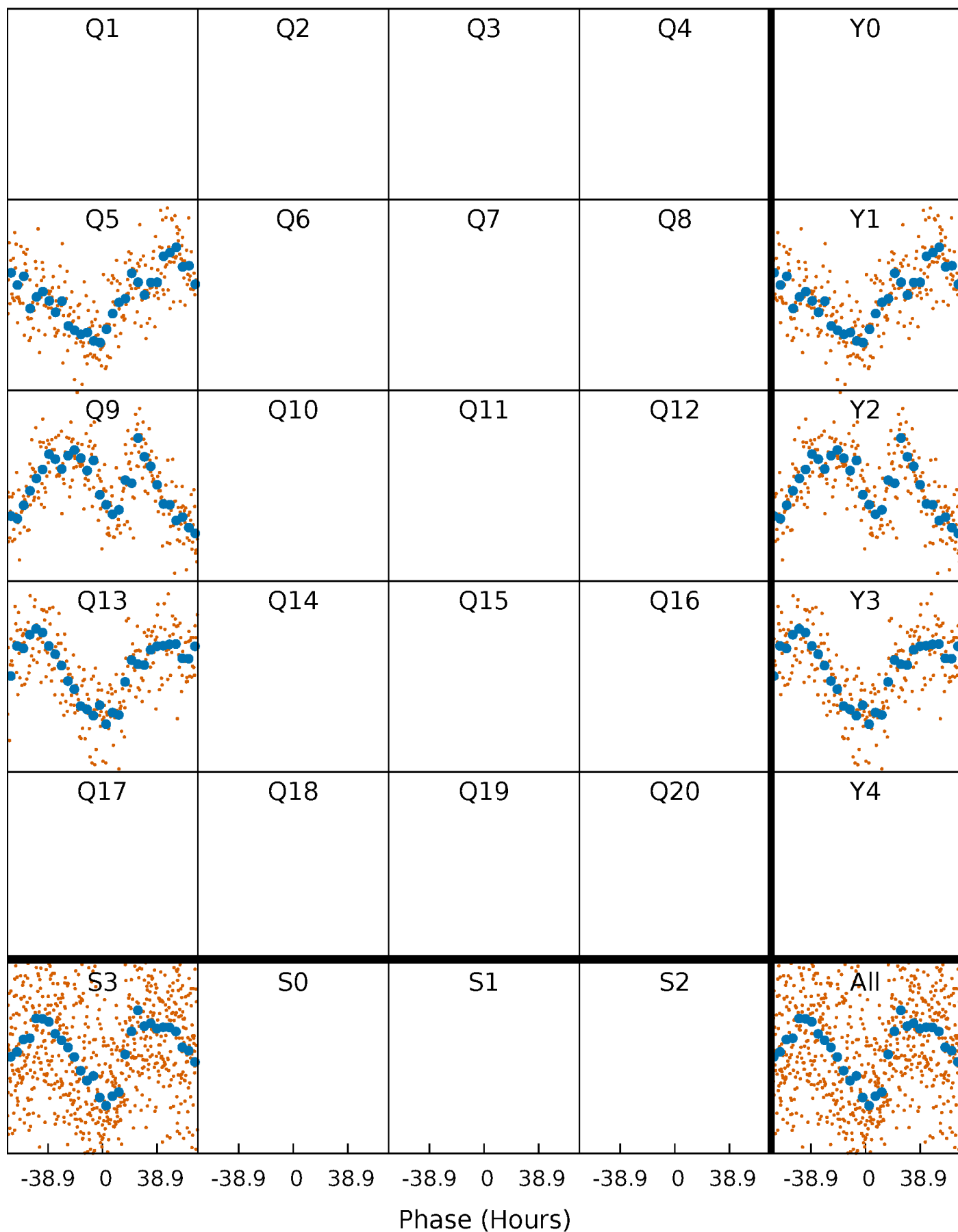


Non-Whitened Vs. Whitened Light Curve



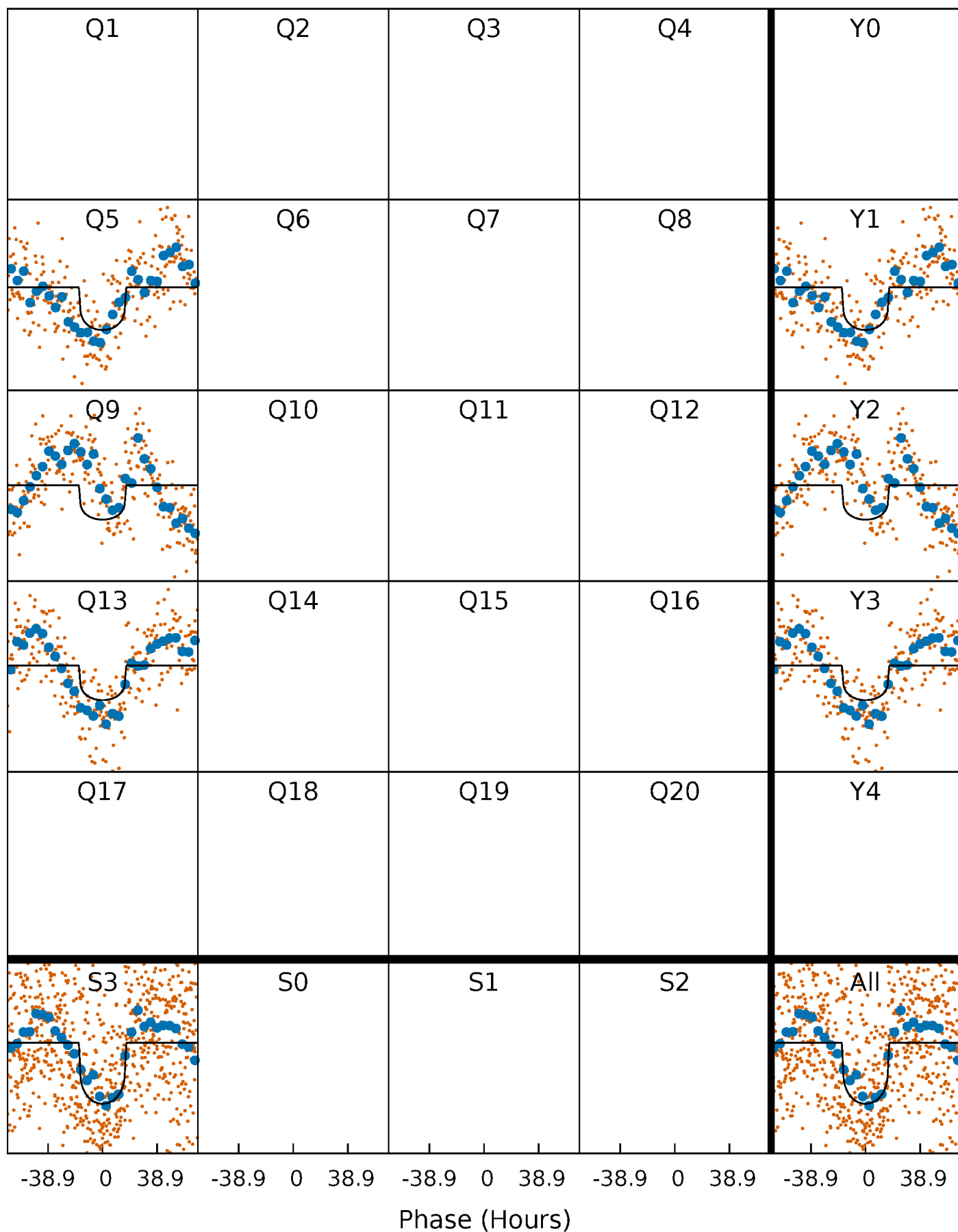
PDC Quarter-Phased Transit Curves

TCE 008492337-01 P=378.313272 Days $T_0=501.109687$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008492337-01 P=378.313272 Days $T_0=501.109687$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

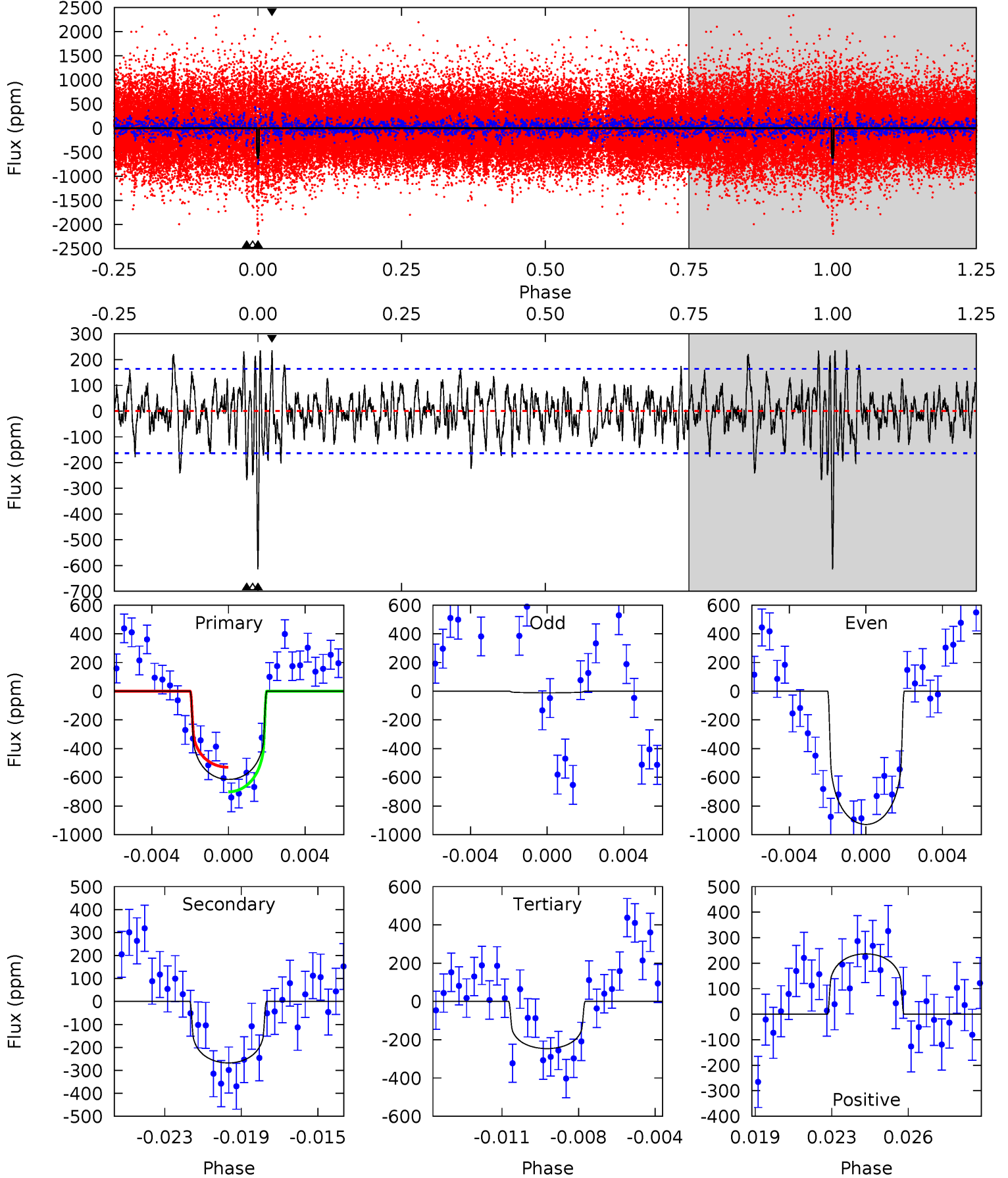
TCE 008492337-01 P=378.524888 Days $T_0=501.070445$ (BKJD)



DV Model-Shift Uniqueness Test

008492337-01, P = 378.313272 Days, E = 122.796415 Days

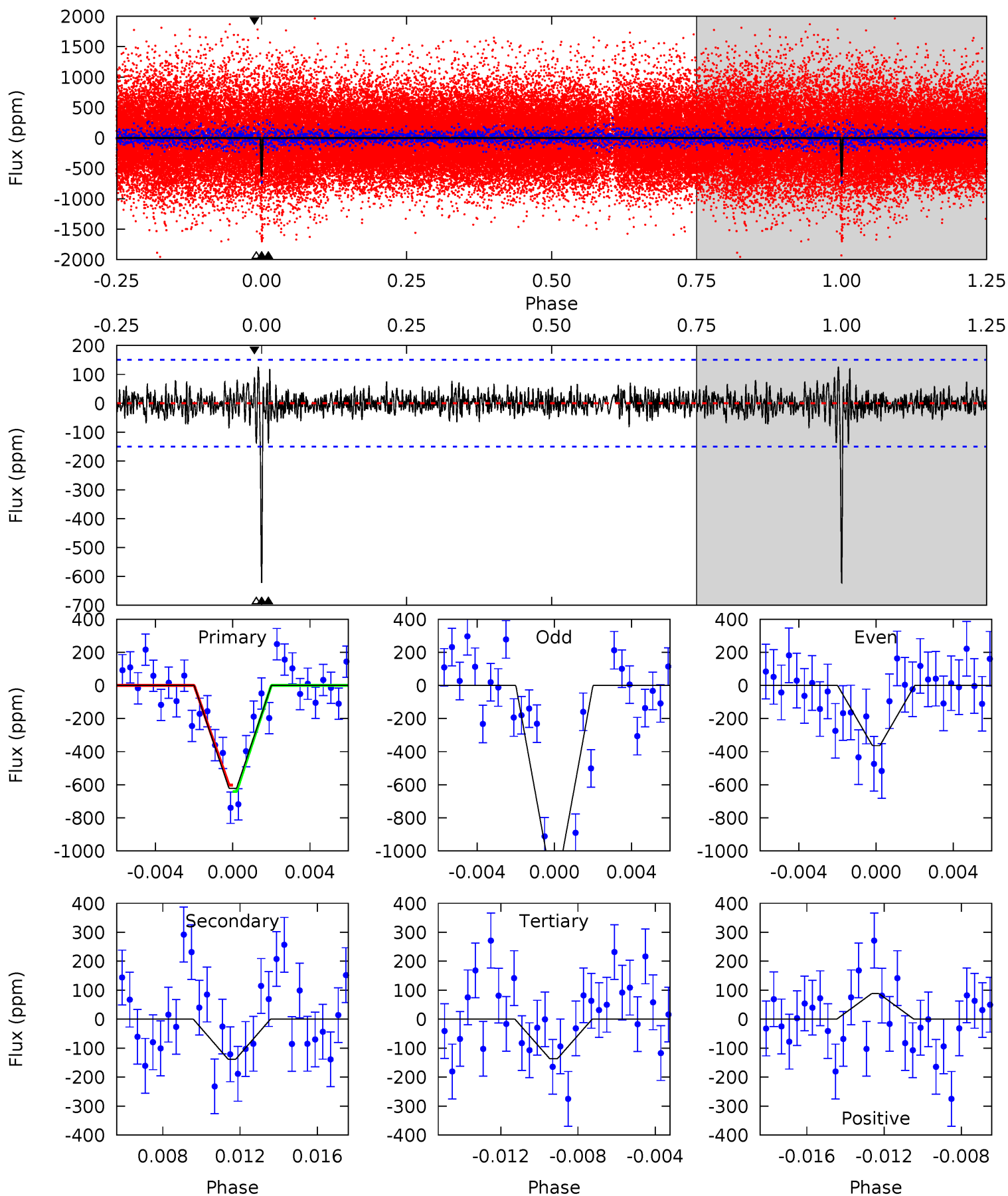
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.6	8.51	7.84	7.53	5.21	2.90	2.20	11.7	12.0	0.68	0.99	13.8	0.81	0.28	2.72



Alt Model-Shift Uniqueness Test

008492337-01, $P = 378.524888$ Days, $E = 122.545557$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.5	4.79	4.73	3.04	5.20	2.88	0.94	16.8	18.5	0.06	1.74	13.0	1.43	0.17	0.69



Stellar Parameters For KIC 008492337

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5589^{+167}_{-167}	$4.516^{+0.063}_{-0.158}$	$-0.220^{+0.300}_{-0.300}$	$0.845^{+0.196}_{-0.098}$	$0.855^{+0.109}_{-0.082}$	$1.997^{+0.543}_{-0.856}$
	+3%/-3%	+1%/-3%	+136%/-136%	+23%/-12%	+13%/-10%	+27%/-43%
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 008492337-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-268 ± 31	$2.44^{+0.56}_{-0.55}$	327^{+19}_{-14}	4629^{+503}_{-350}	23166^{+15364}_{-8265}
Alt.	-138 ± 29	$2.50^{+0.63}_{-0.55}$	326^{+20}_{-15}	4058^{+418}_{-314}	11625^{+7973}_{-4521}

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

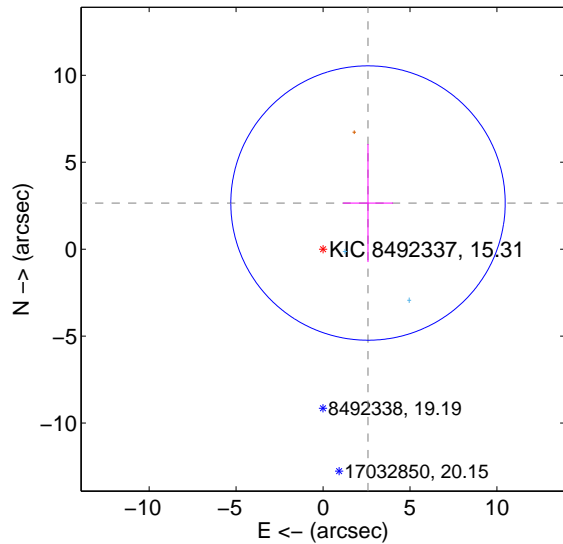
Supplemental centroid analysis for 008492337-01. Kepler magnitude: 15.31. Transit SNR 10.12

There are 2 quarters with good PRF difference image offsets

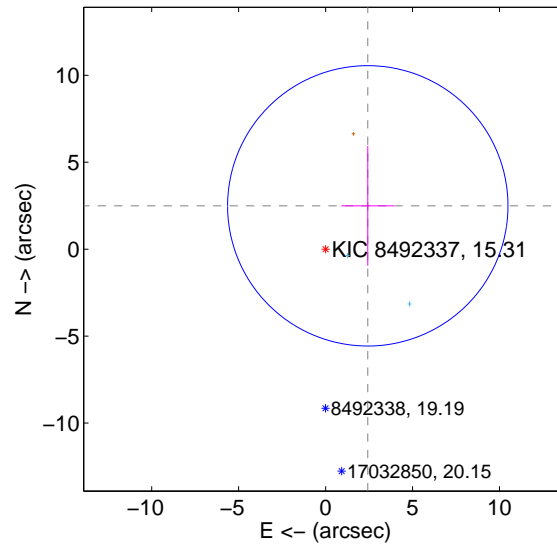
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.706 ± 2.630	1.41	-2.587 ± 1.443	2.654 ± 3.393
PRF-fit source offset from KIC position	3.480 ± 2.688	1.29	-2.427 ± 1.520	2.493 ± 3.447
photometric centroid source offset	1.49 ± 1.76	0.85	-0.60 ± 1.18	-1.37 ± 1.85

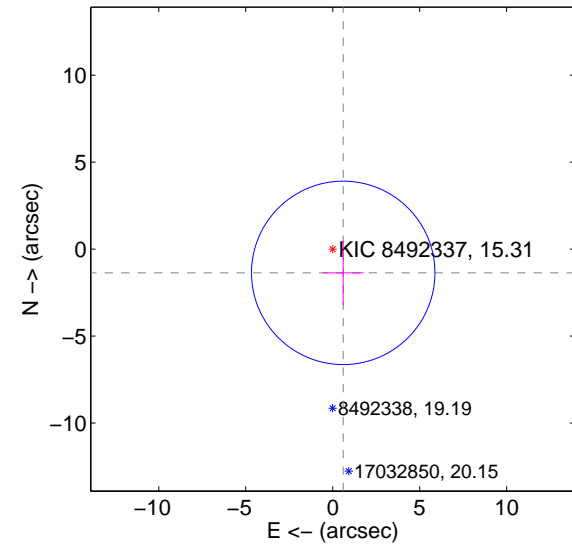
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

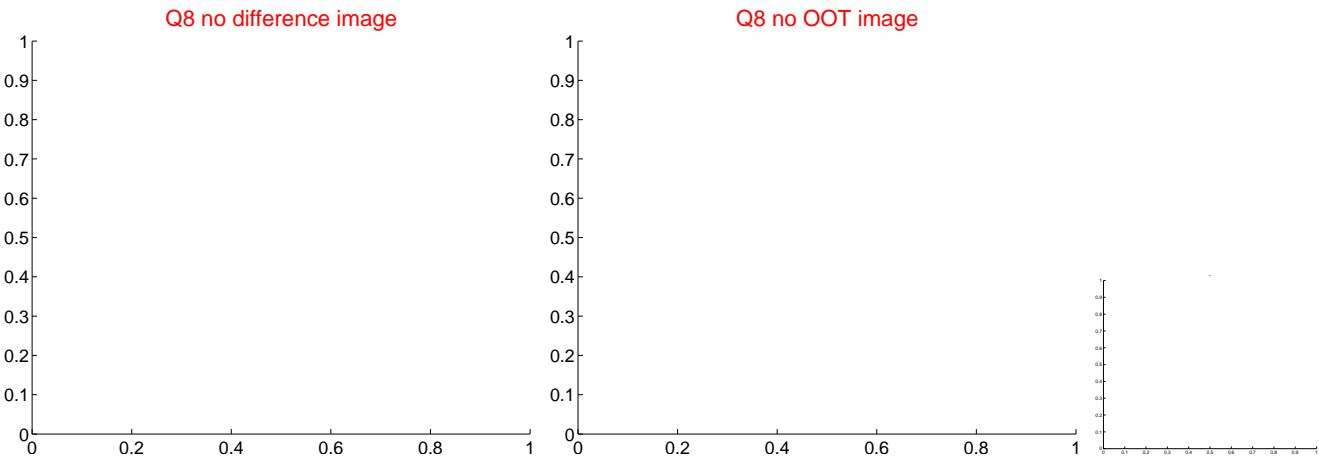
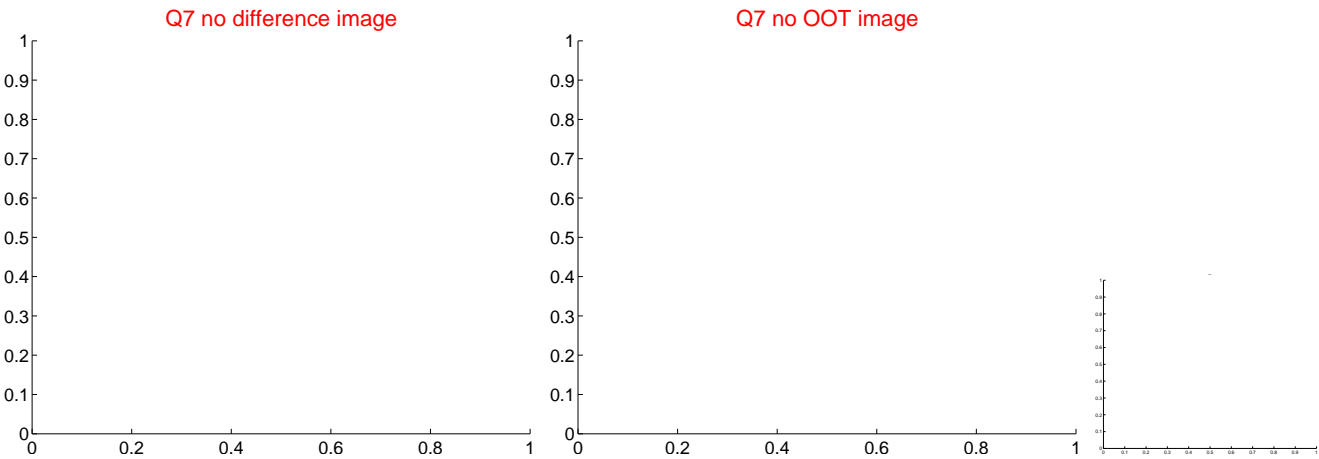
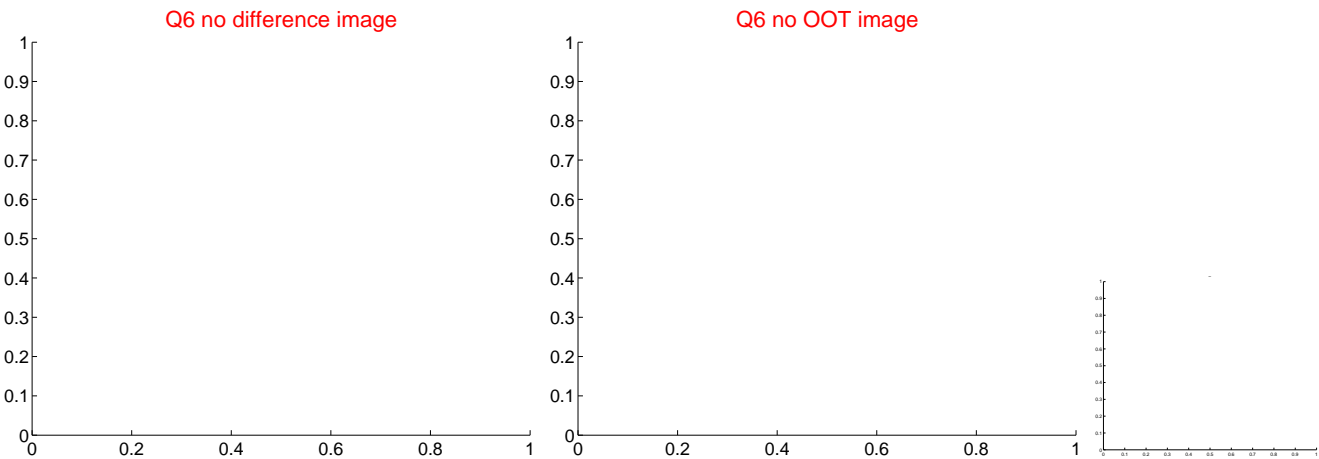
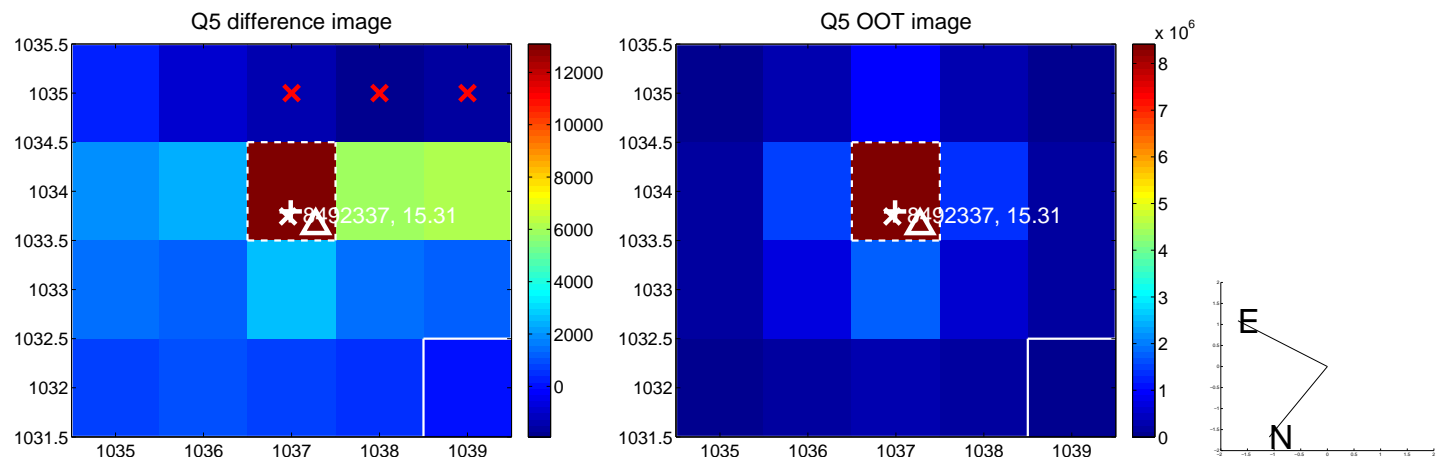


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

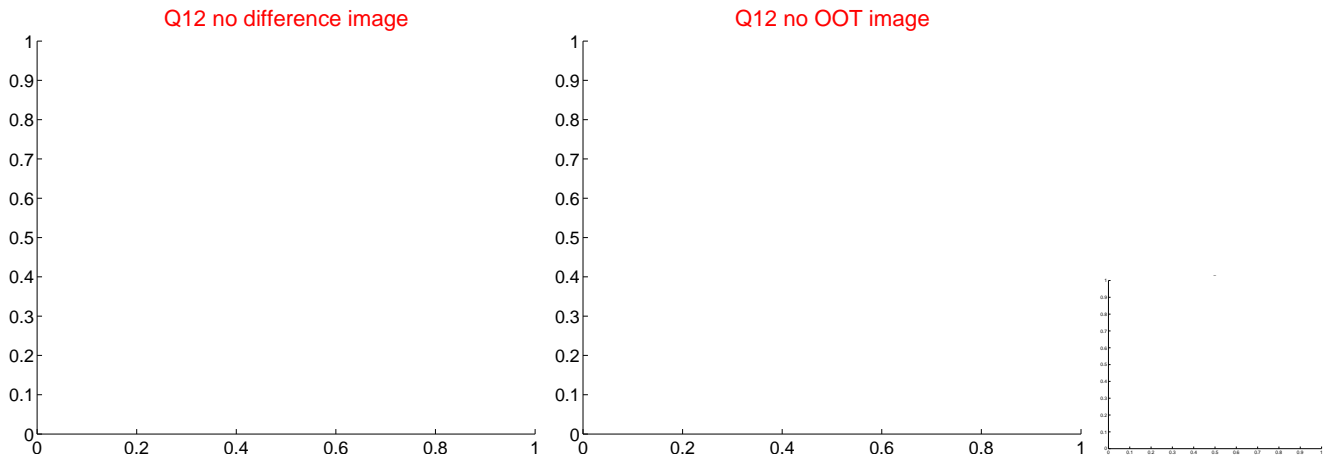
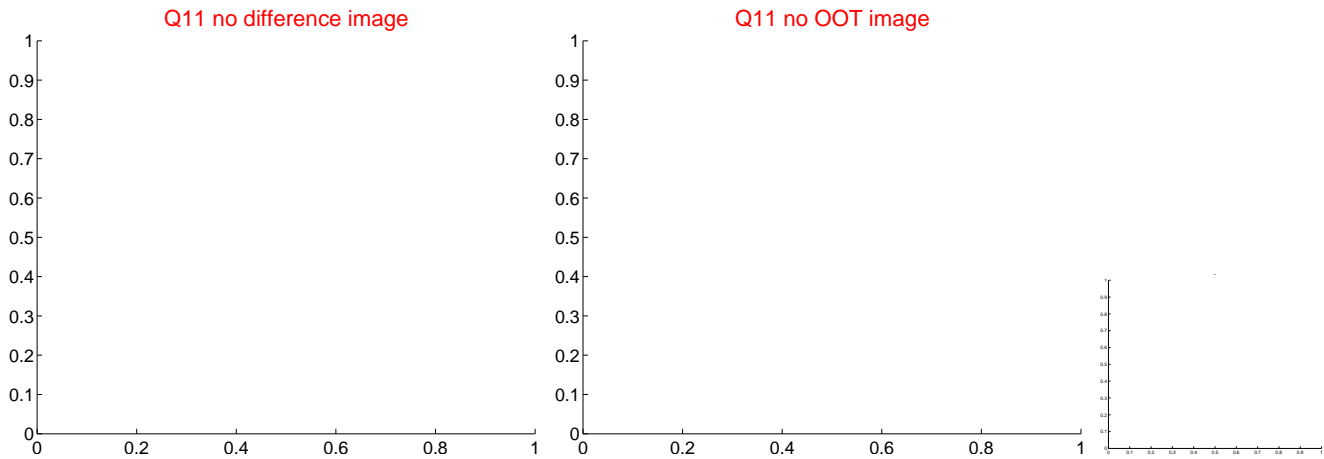
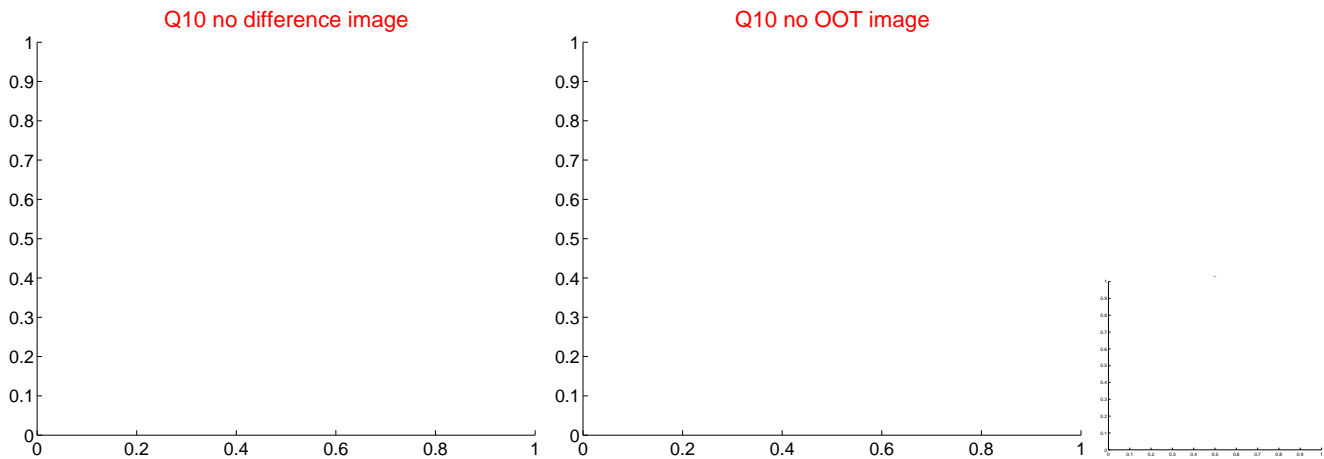
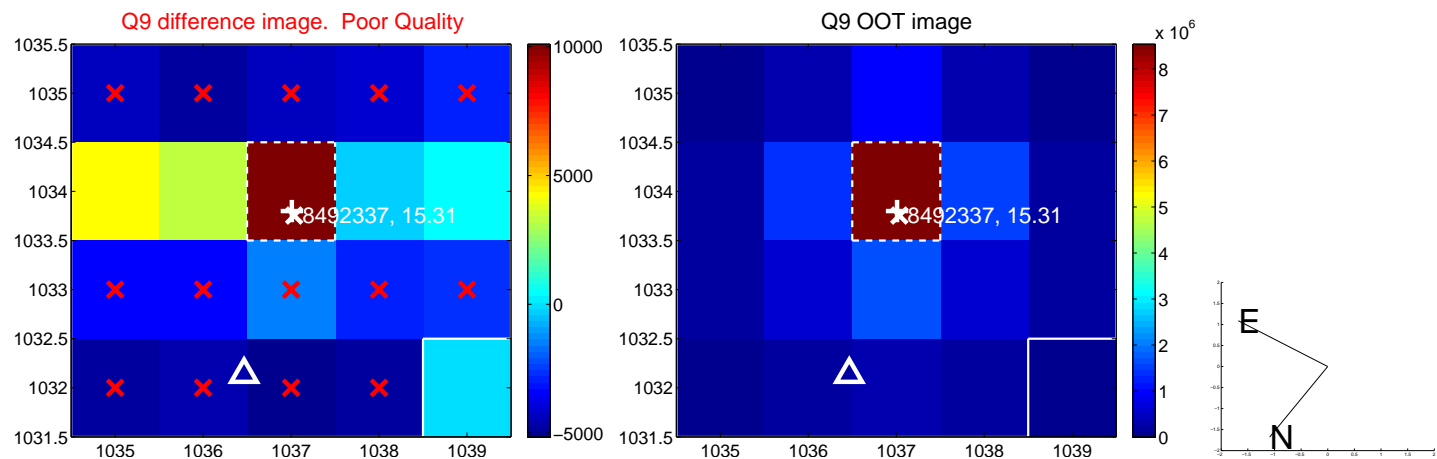
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



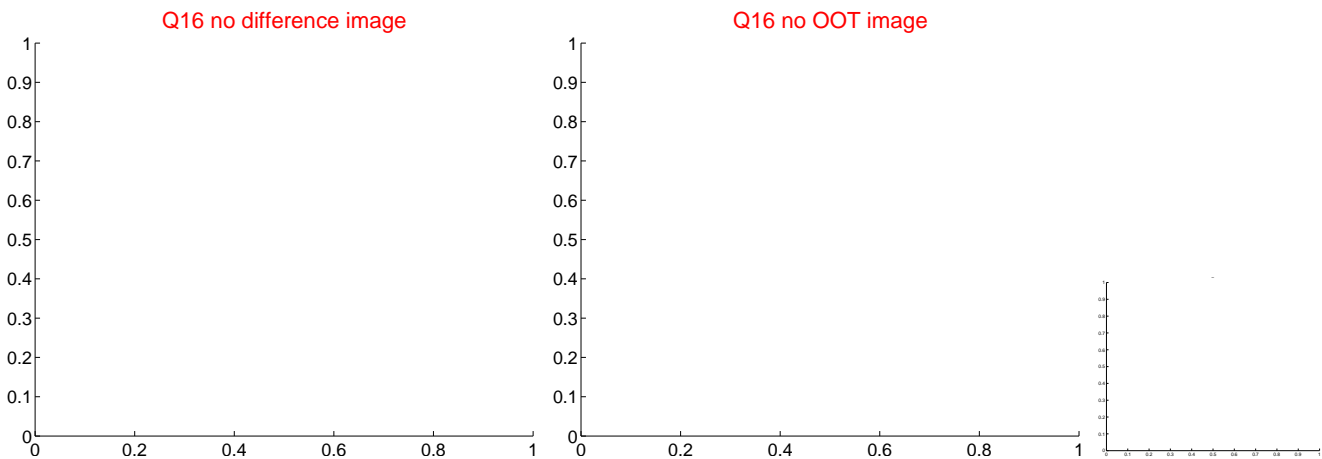
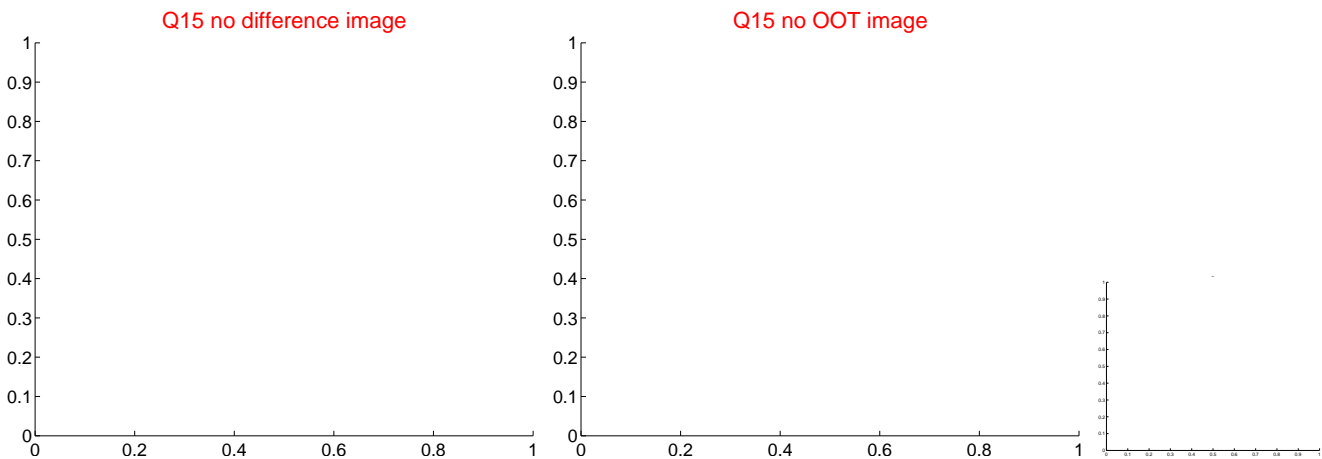
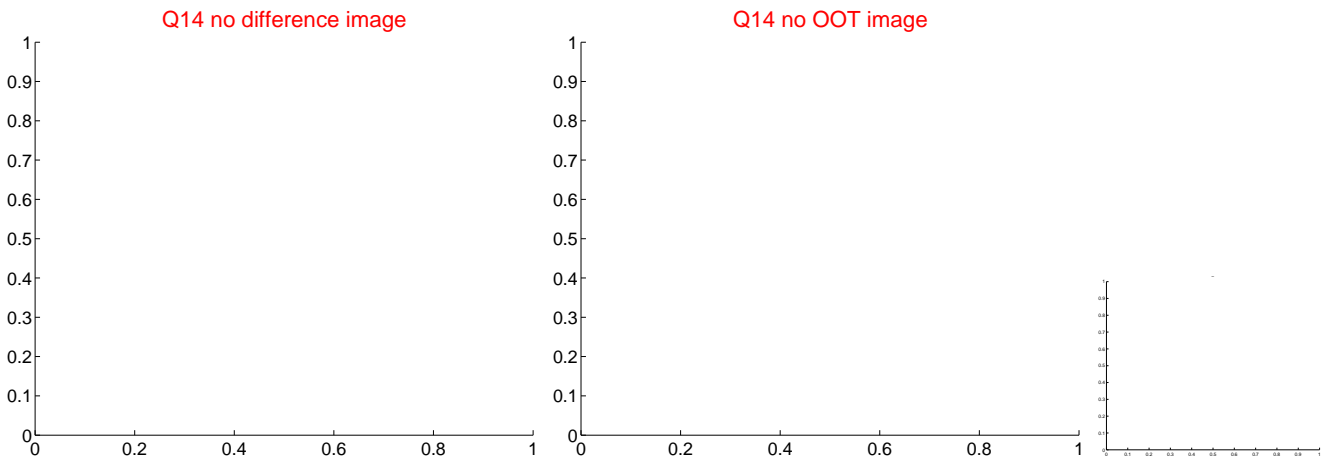
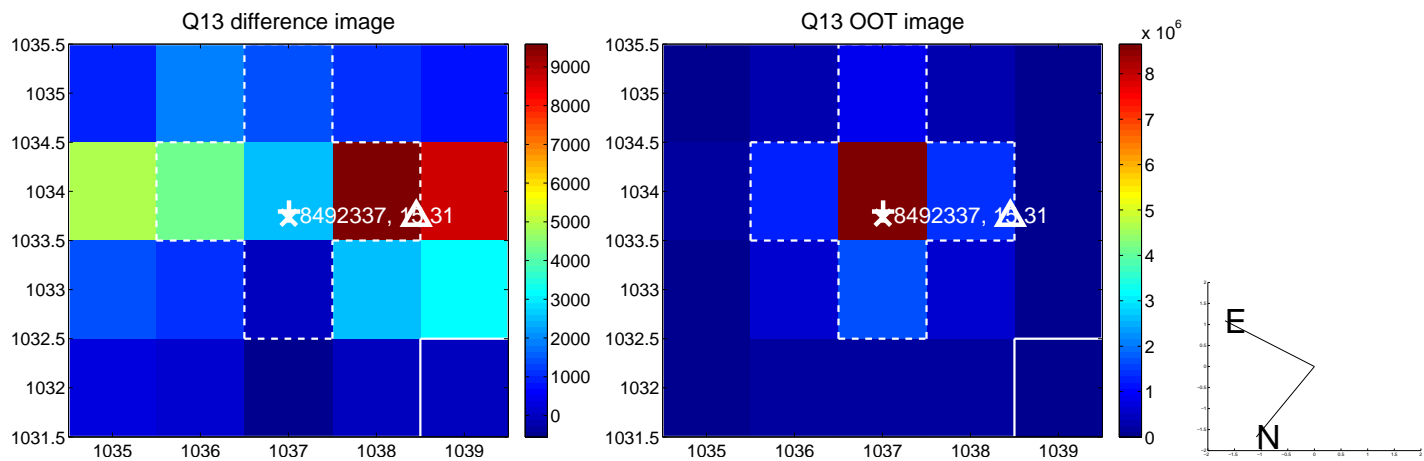
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



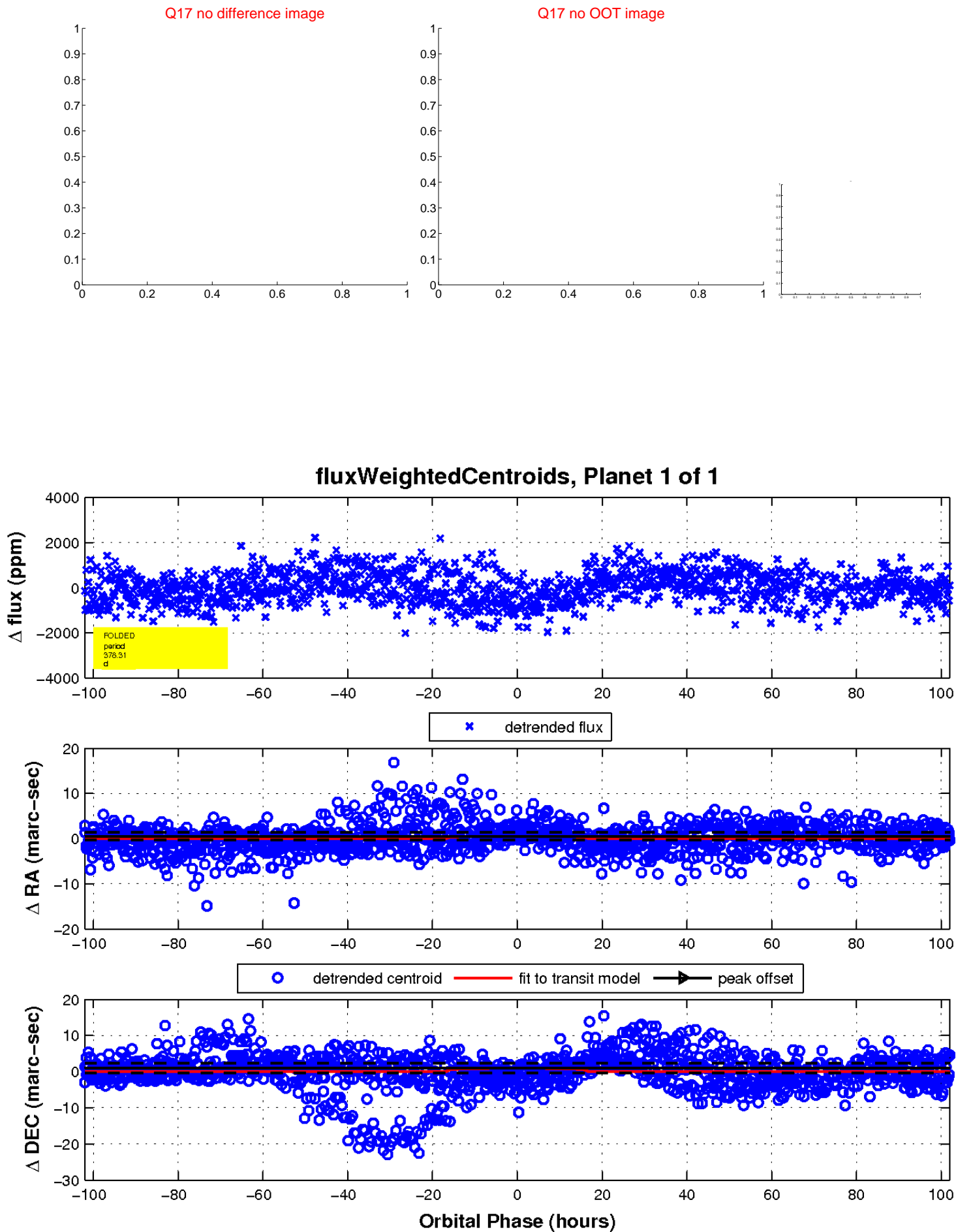
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



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



UKIRT Image

Declination

