

KIC 008308255

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})
008308255-01	OBS	No	368.303756	235.860494	1247.0	16.574	8.9	9.4	1.15	6061	6.50	1.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008308255-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—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.

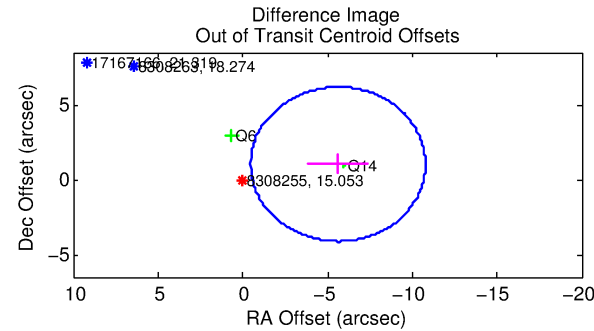
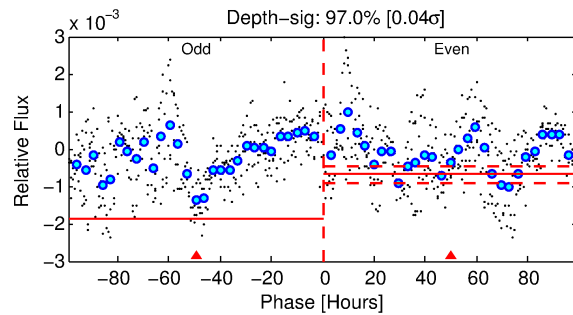
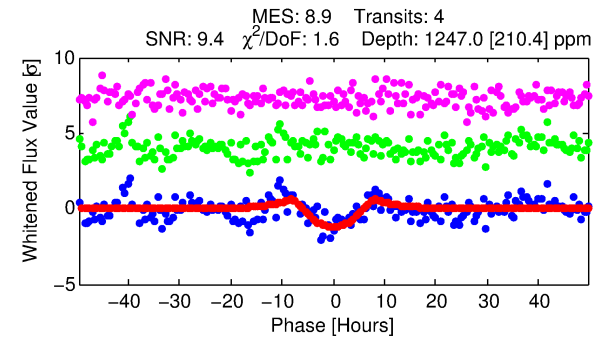
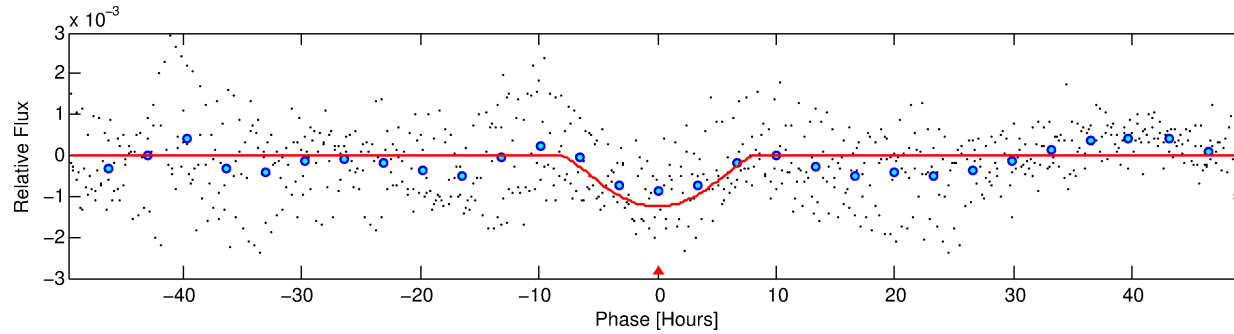
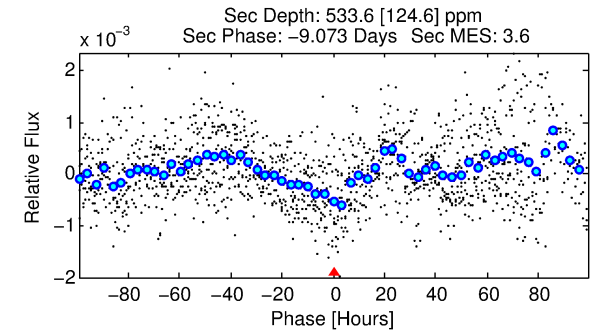
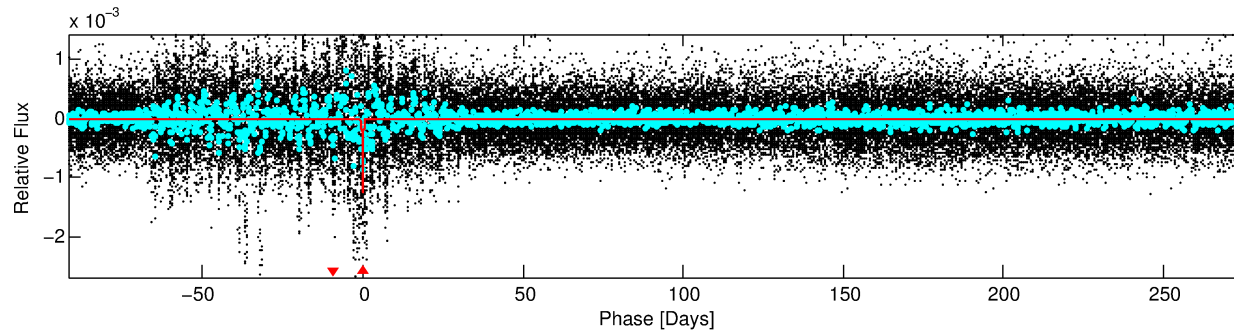
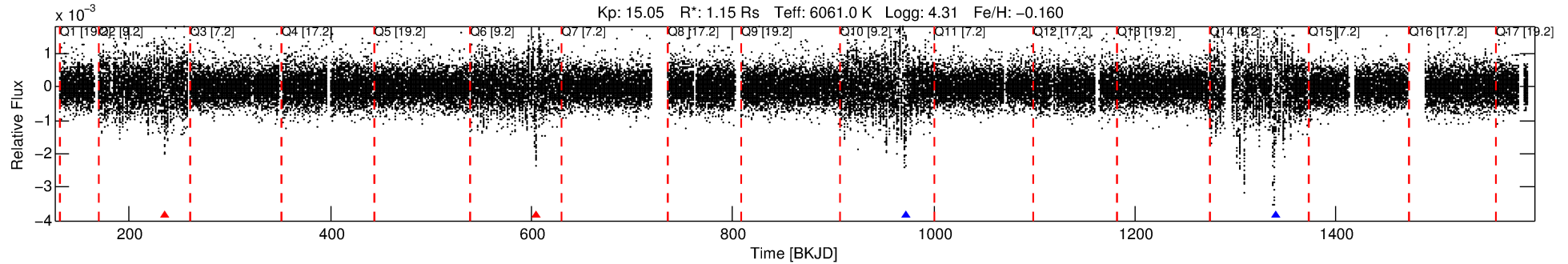
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008308255-01

No Significant Match Found

DV One-Page Summary

KIC: 8308255 Candidate: 1 of 1 Period: 368.304 d



DV Fit Results:

Period = 368.30376 [0.01884] d
Epoch = 235.8605 [0.0366] BKJD
Rp/R* = 0.0517 [0.0726]
a/R* = 62.94 [28.22]
b = 0.98 [0.13]
Seff = 1.59 [0.60]
Teq = 286 [27] K
Rp = 6.50 [9.33] Re
a = 1.0043 [0.2485] AU
Ag = 7010.64 [19886.92] [0.35σ]
Teff = 4050 [2853] K [1.32σ]

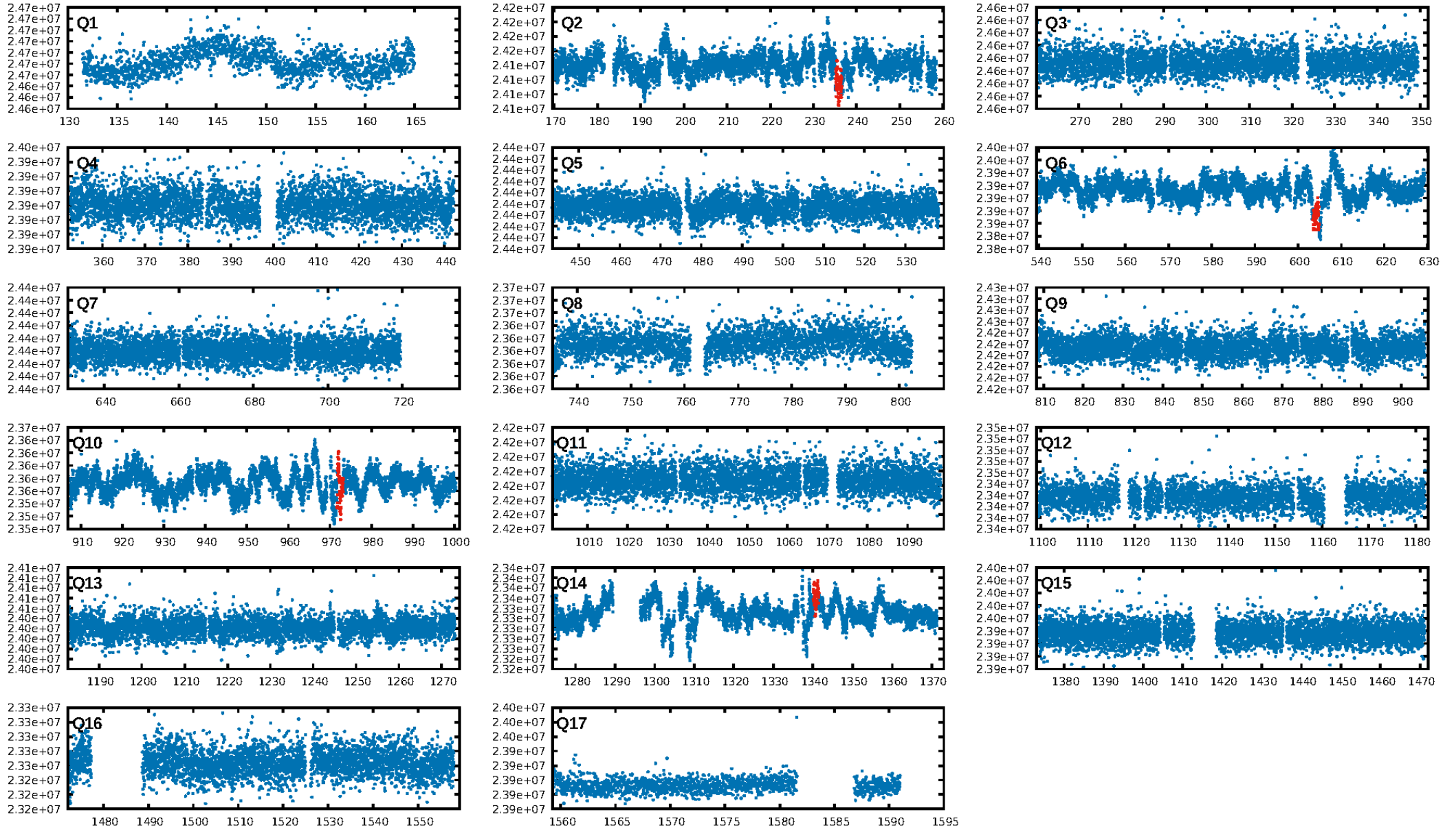
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.4%
ModelChiSquareGof-sig: 81.3%
Bootstrap-pfa: 3.27e-11
RollingBand-fgt: 0.50 [2/4]
GhostDiagnostic-chr: 1.623
Centroid-sig: 44.1%
Centroid-so: 1.468 arcsec [0.68σ]
OotOffset-rm: 5.711 arcsec [3.32σ]
KicOffset-rm: 5.636 arcsec [3.28σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [4/4]

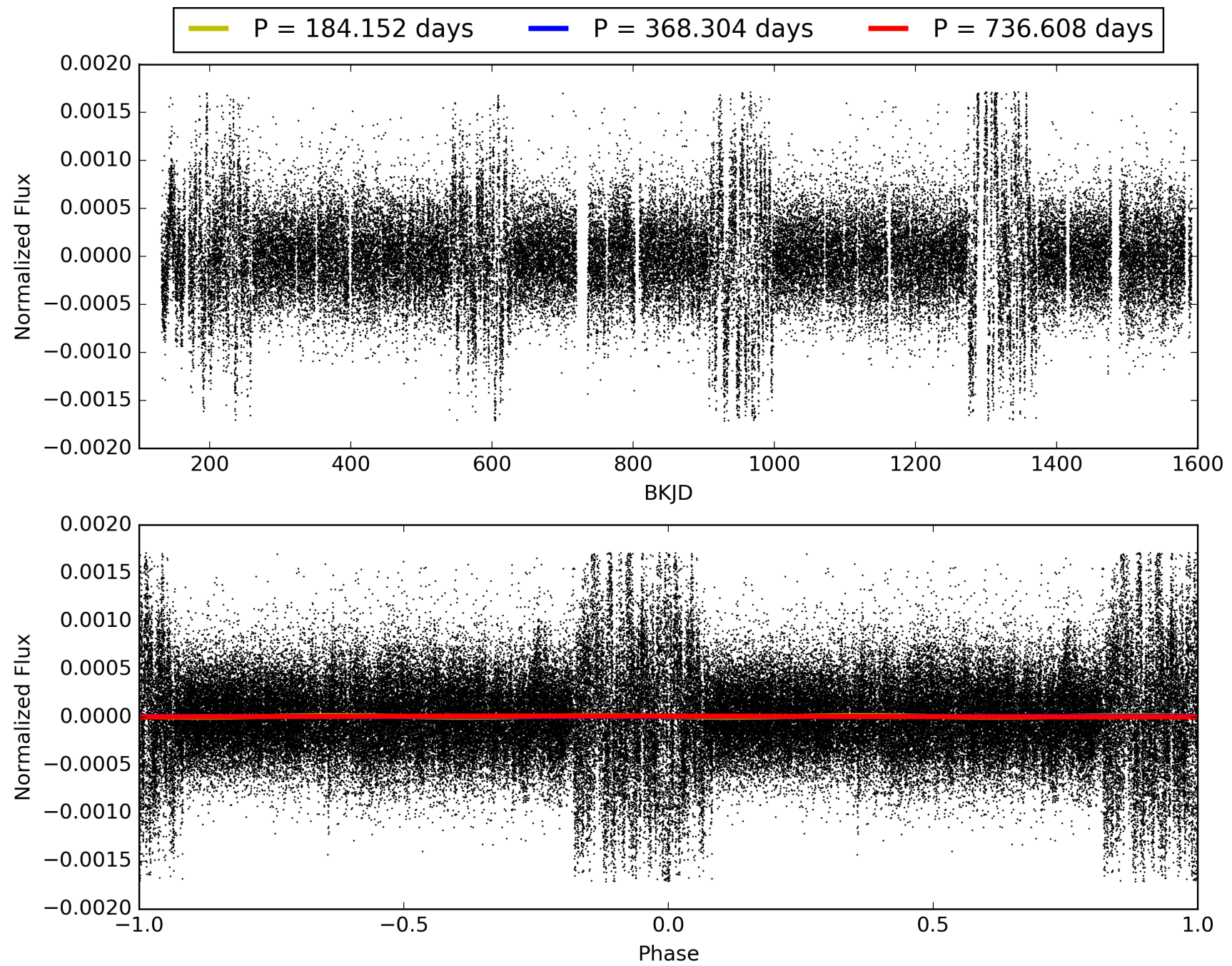
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:04:54 Z

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

TCE 008308255-01, PDC Light Curves

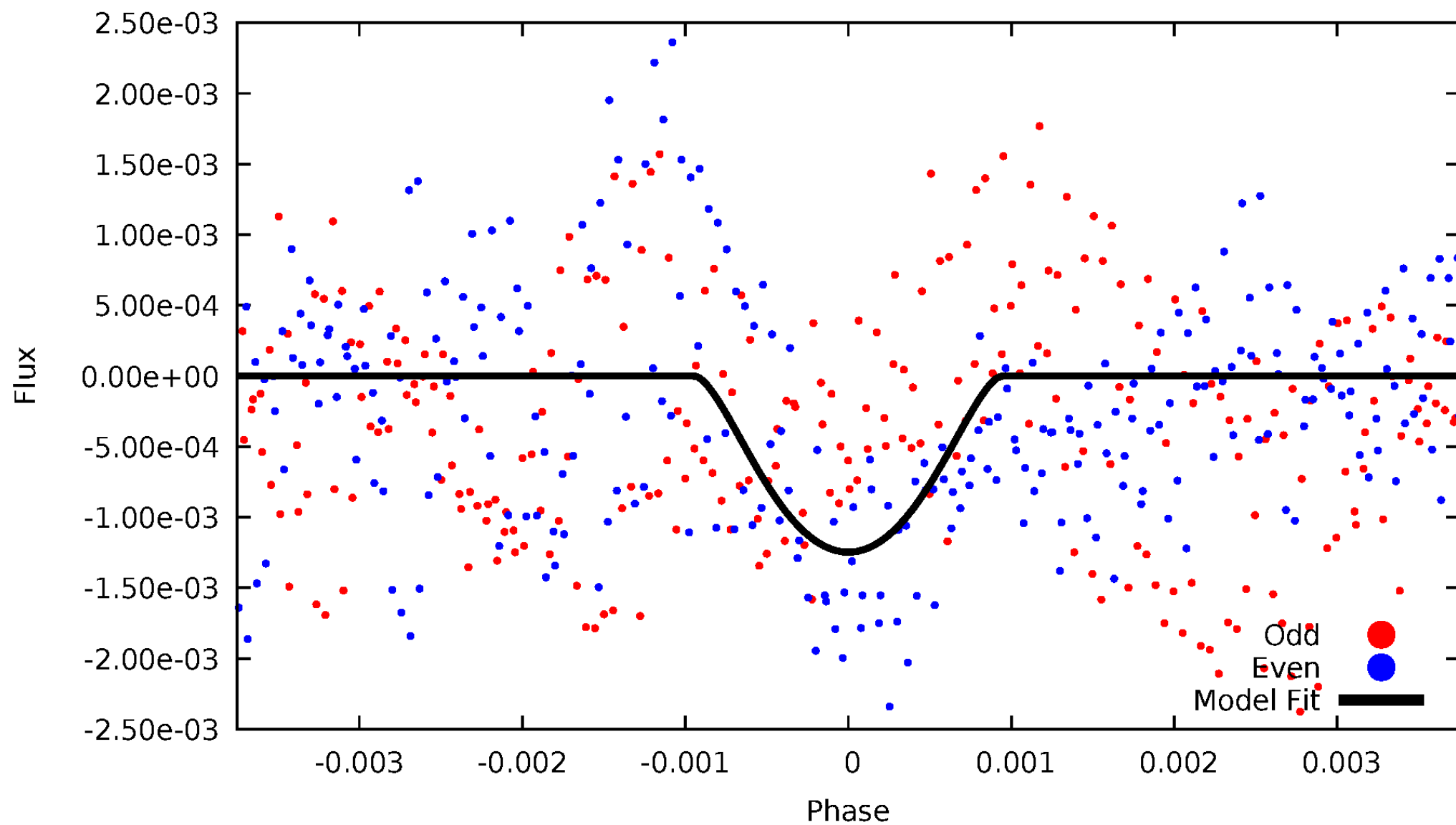


TCE 008308255-01



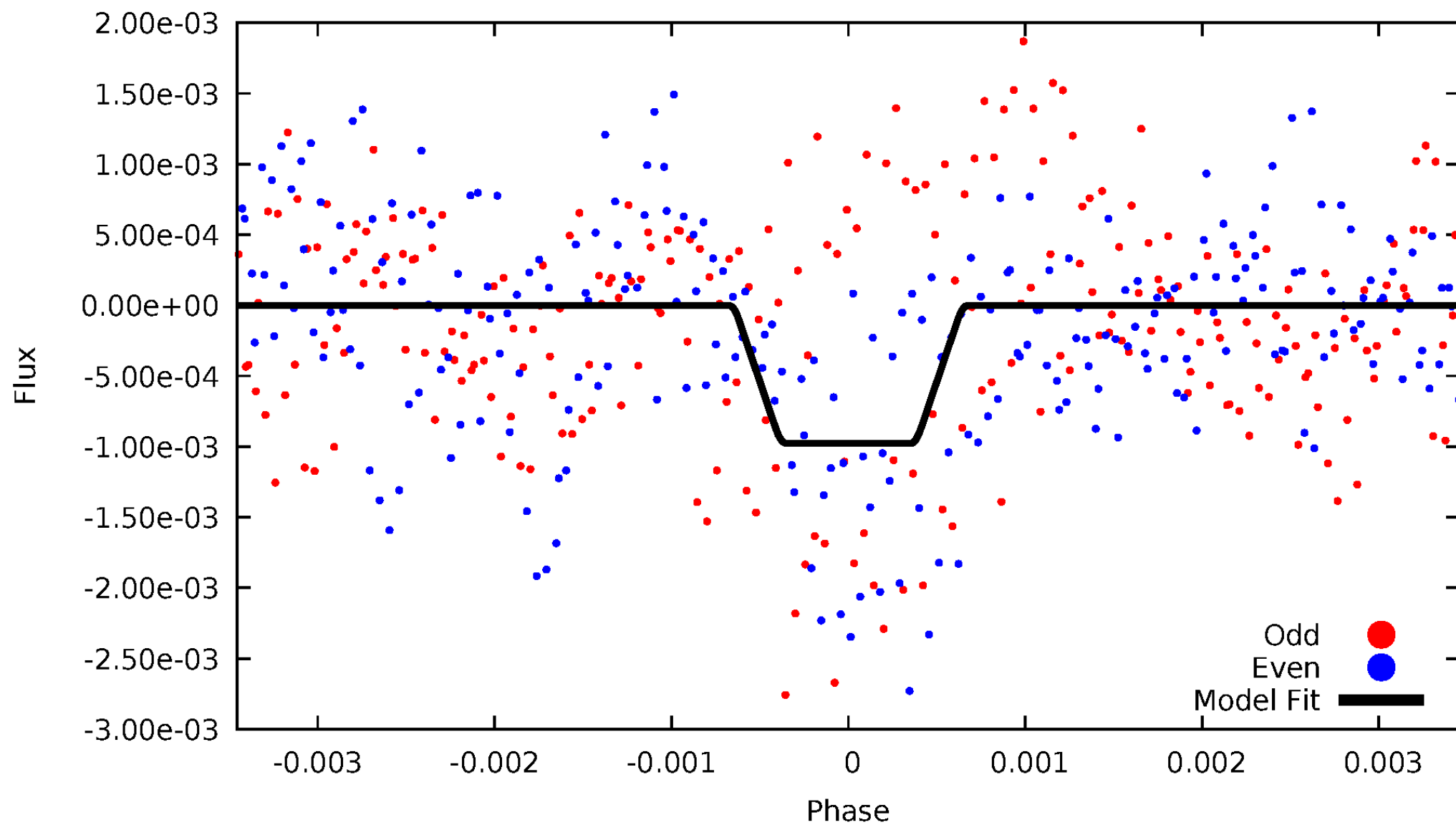
DV Odd/Even

TCE 008308255-01



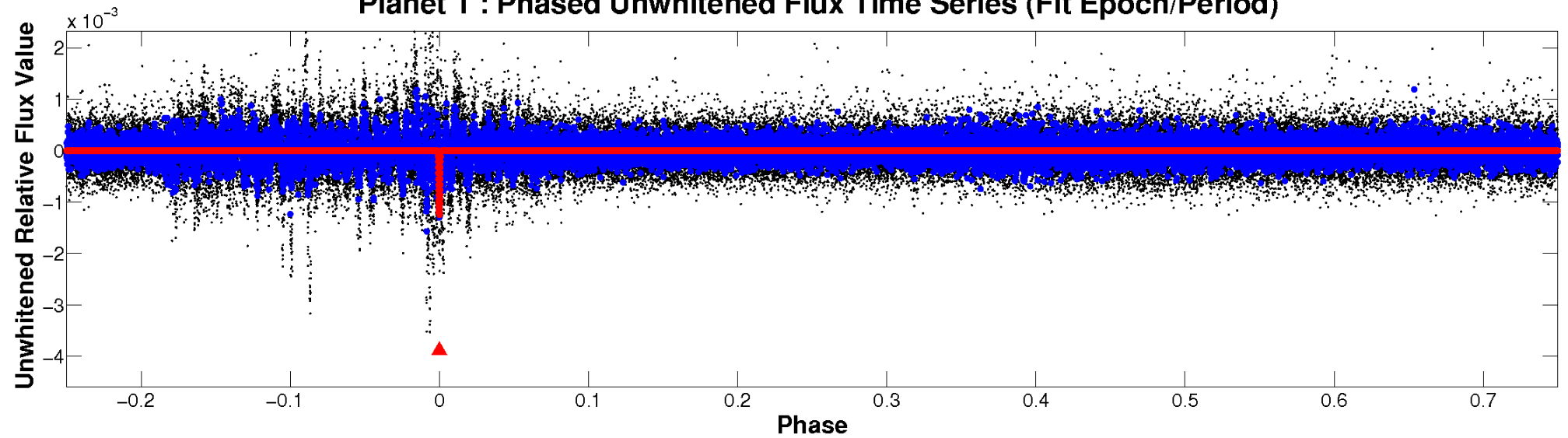
ALT Odd/Even

TCE 008308255-01

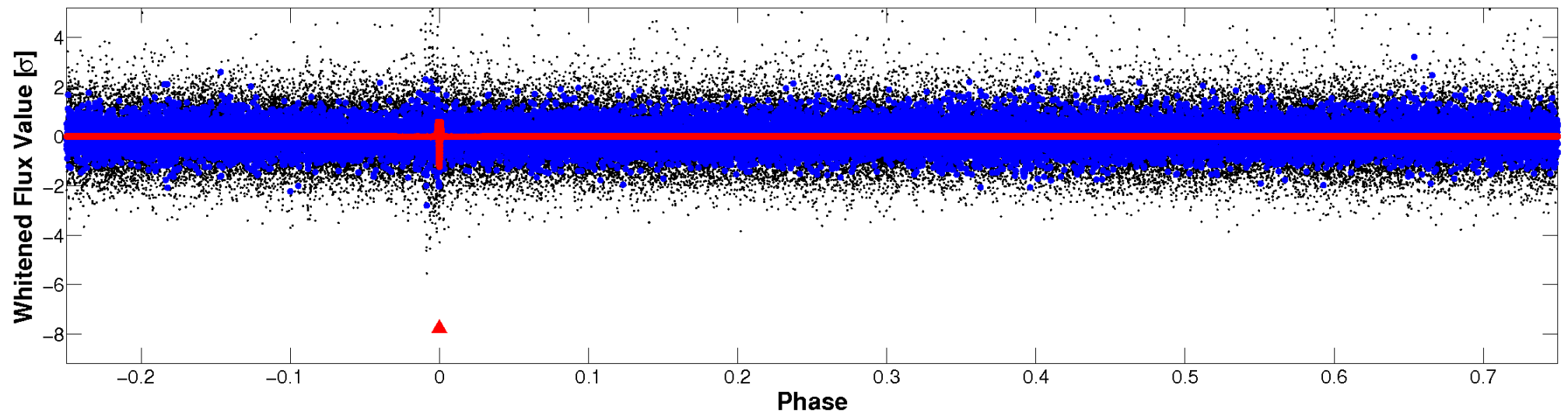


Non-Whitened Vs. Whitened Light Curve

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



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



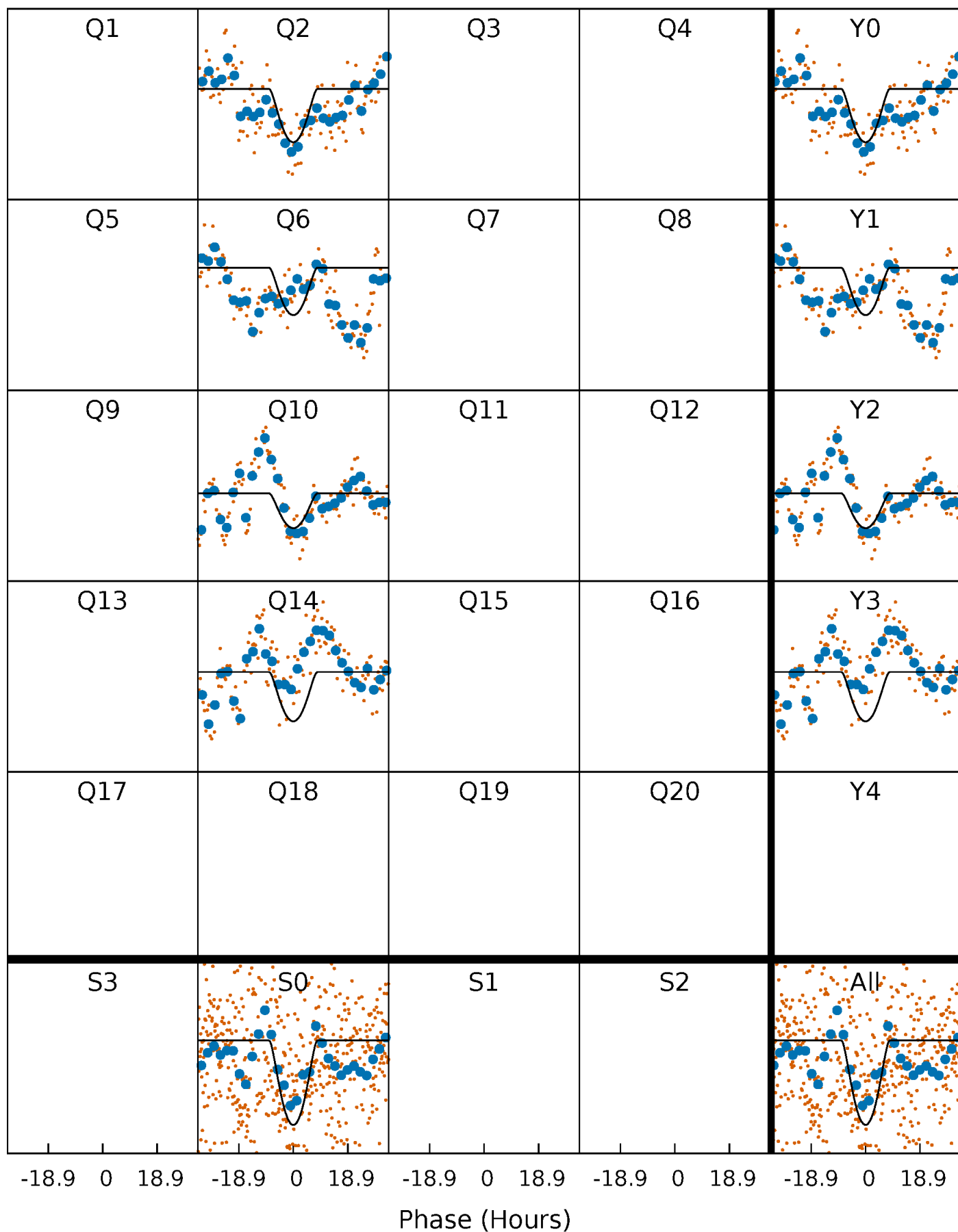
PDC Quarter-Phased Transit Curves

TCE 008308255-01 P=368.303756 Days $T_0=235.860494$ (BKJD)



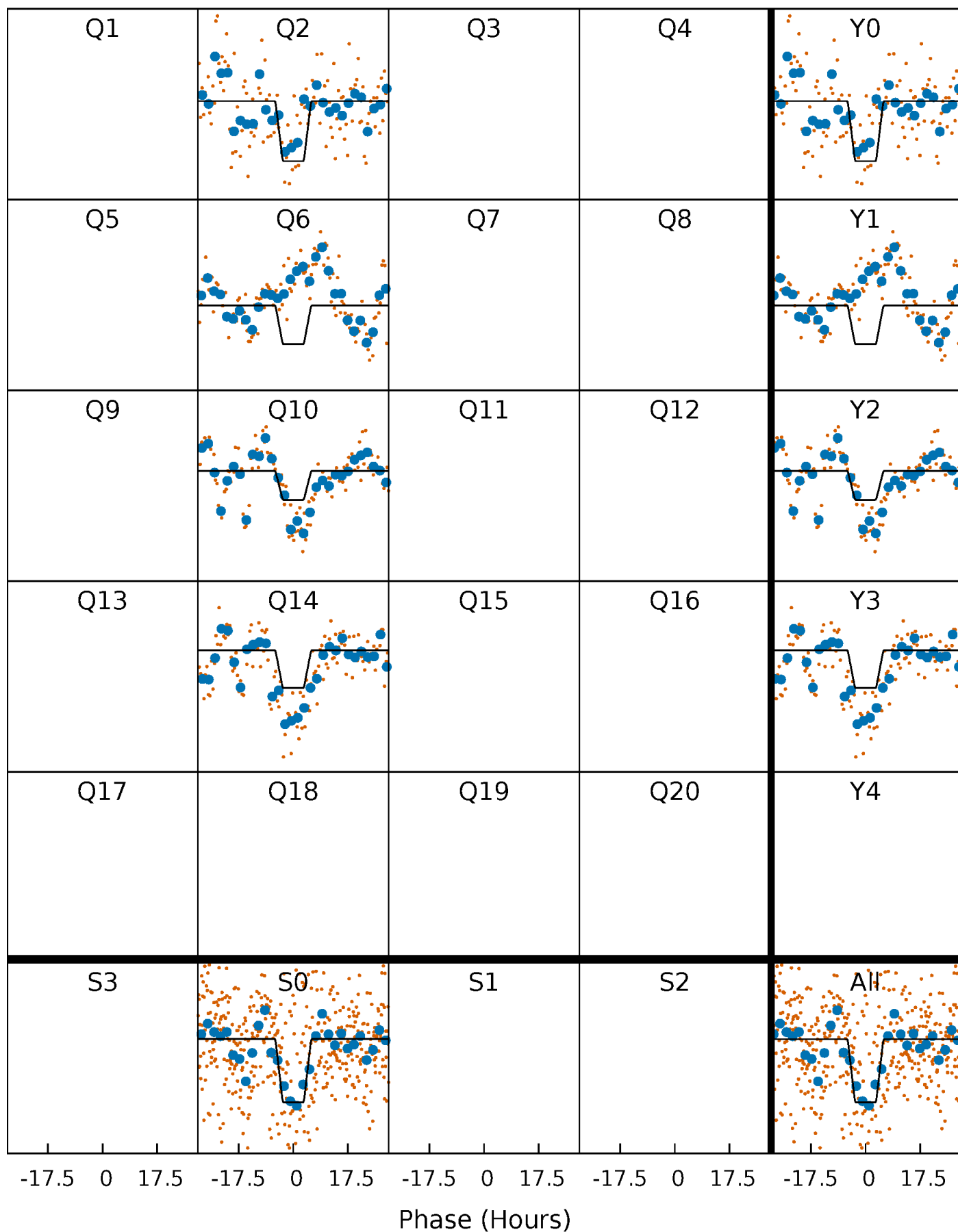
DV Quarter-Phased Transit Curves

TCE 008308255-01 P=368.303756 Days $T_0=235.860494$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

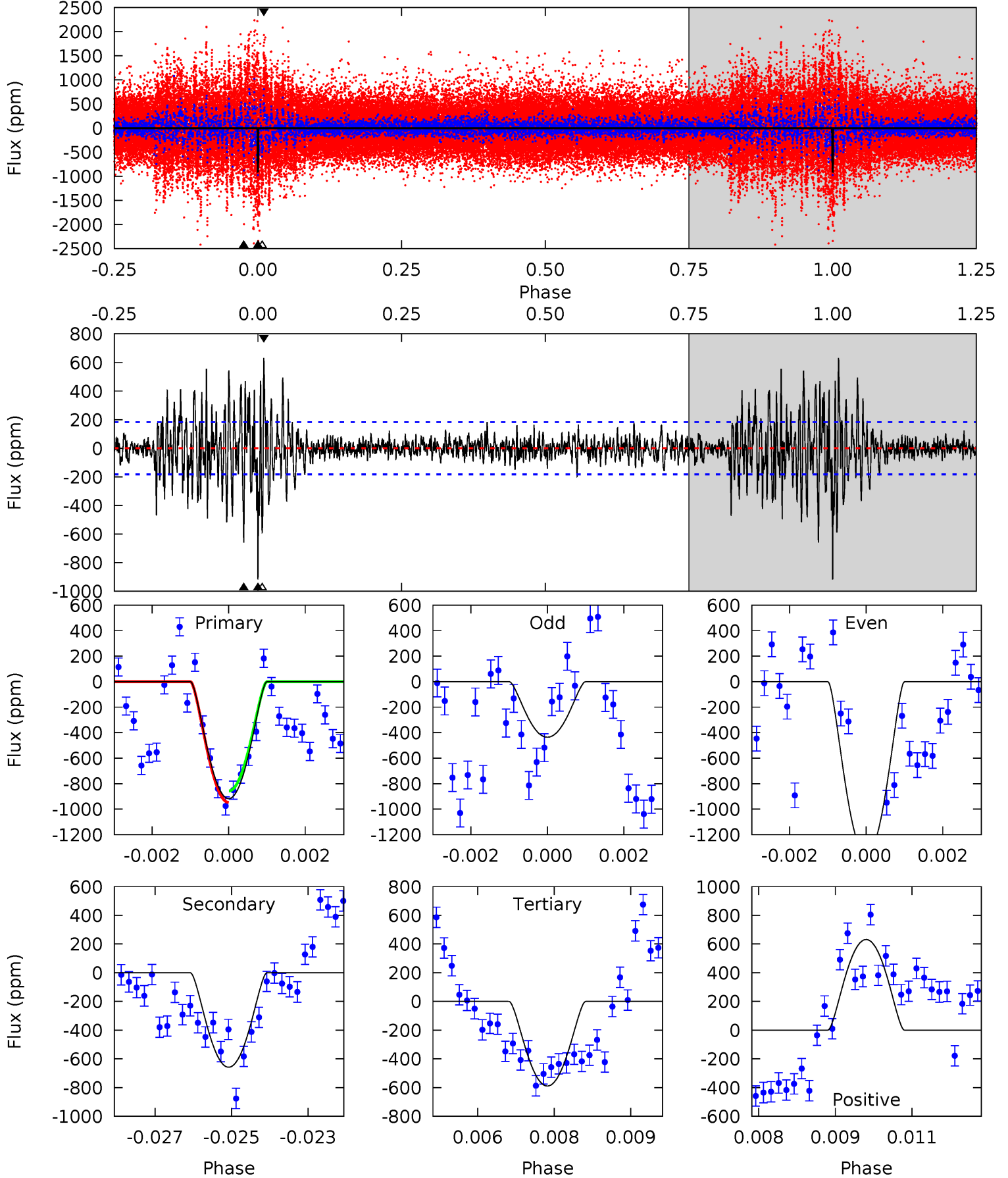
TCE 008308255-01 P=368.267241 Days $T_0=235.899477$ (BKJD)



DV Model-Shift Uniqueness Test

008308255-01, P = 368.303756 Days, E = 235.860494 Days

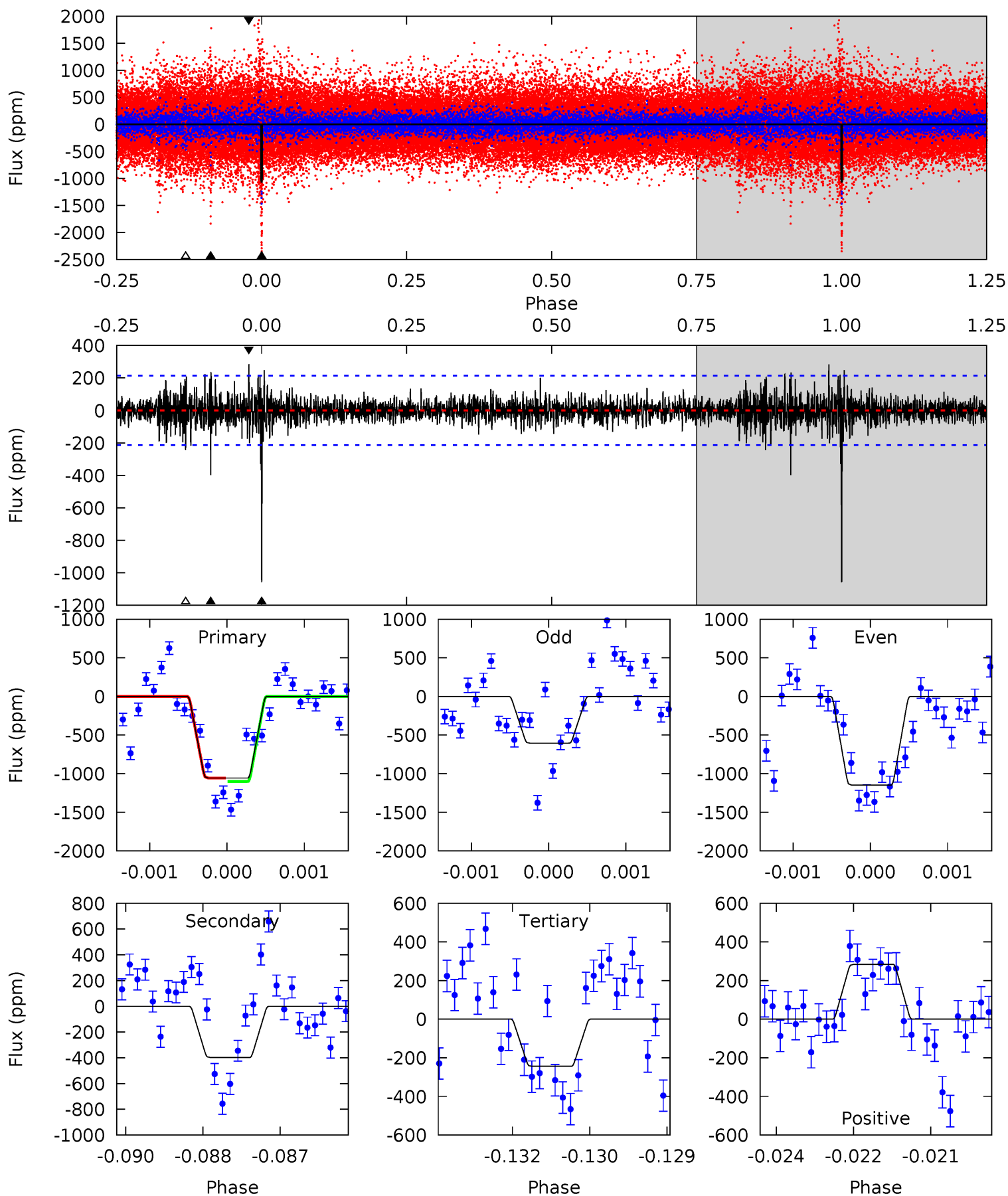
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.8	19.2	17.2	18.5	5.34	3.11	3.49	9.61	8.37	2.02	0.78	13.2	0.88	0.41	1.30



Alt Model-Shift Uniqueness Test

008308255-01, P = 368.267241 Days, E = 235.899477 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.7	10.1	6.16	7.17	5.40	3.21	1.32	20.6	19.6	3.89	2.88	7.25	0.76	0.21	0



Stellar Parameters For KIC 008308255

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6061^{+189}_{-210}	$4.314^{+0.153}_{-0.187}$	$-0.160^{+0.300}_{-0.300}$	$1.151^{+0.348}_{-0.214}$	$0.994^{+0.154}_{-0.126}$	$0.918^{+0.673}_{-0.444}$
	+3%/-3%	+4%/-4%	+188%/-188%	+30%/-19%	+15%/-13%	+73%/-48%
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 008308255-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-658 ± 34	$8.85^{+8.63}_{-5.62}$	400^{+29}_{-27}	3981^{+2004}_{-783}	4591^{+28483}_{-3369}
Alt.	-398 ± 40	$7.55^{+7.74}_{-5.10}$	400^{+30}_{-24}	3831^{+2313}_{-730}	3752^{+33825}_{-2776}

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

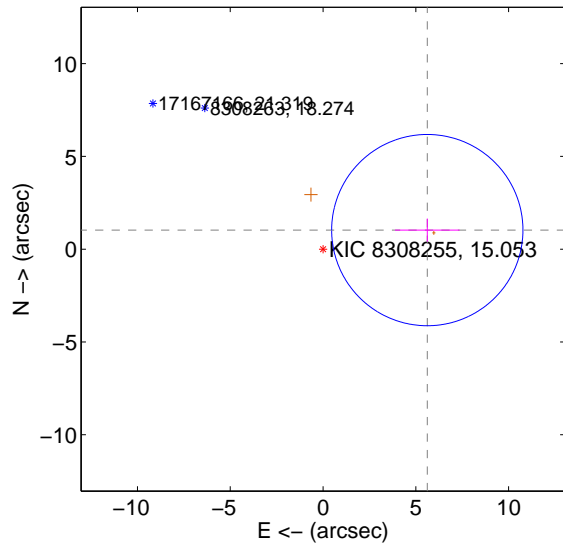
Supplemental centroid analysis for 008308255-01. Kepler magnitude: 15.05. Transit SNR 9.40

There are 0 quarters with good PRF difference image offsets

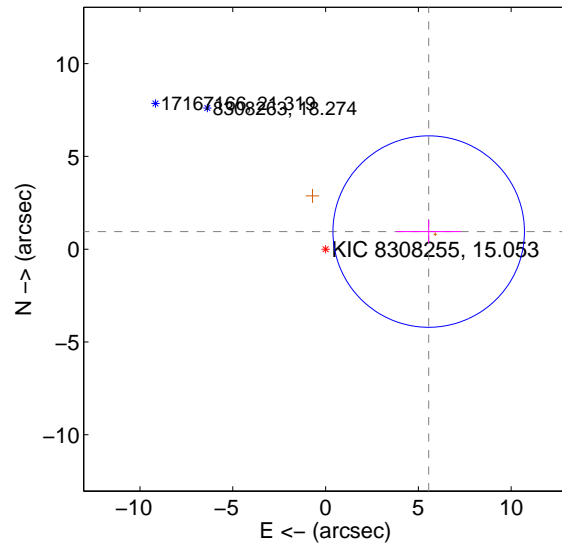
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.711 ± 1.718	3.32	-5.617 ± 1.742	1.028 ± 0.622
PRF-fit source offset from KIC position	5.636 ± 1.719	3.28	-5.555 ± 1.741	0.949 ± 0.626
photometric centroid source offset	1.47 ± 2.17	0.68	0.75 ± 1.74	-1.26 ± 2.30

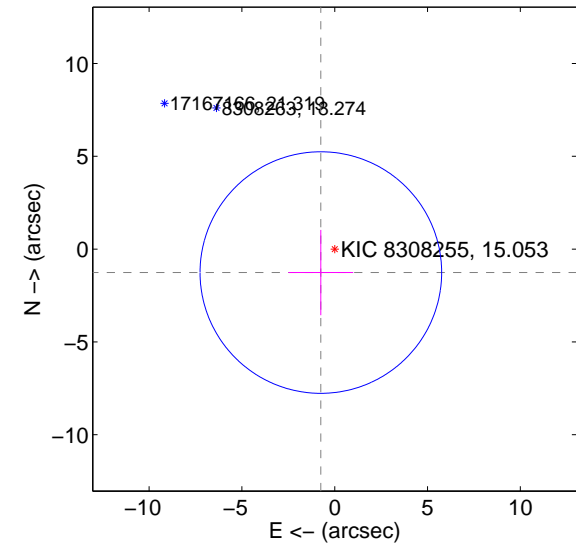
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

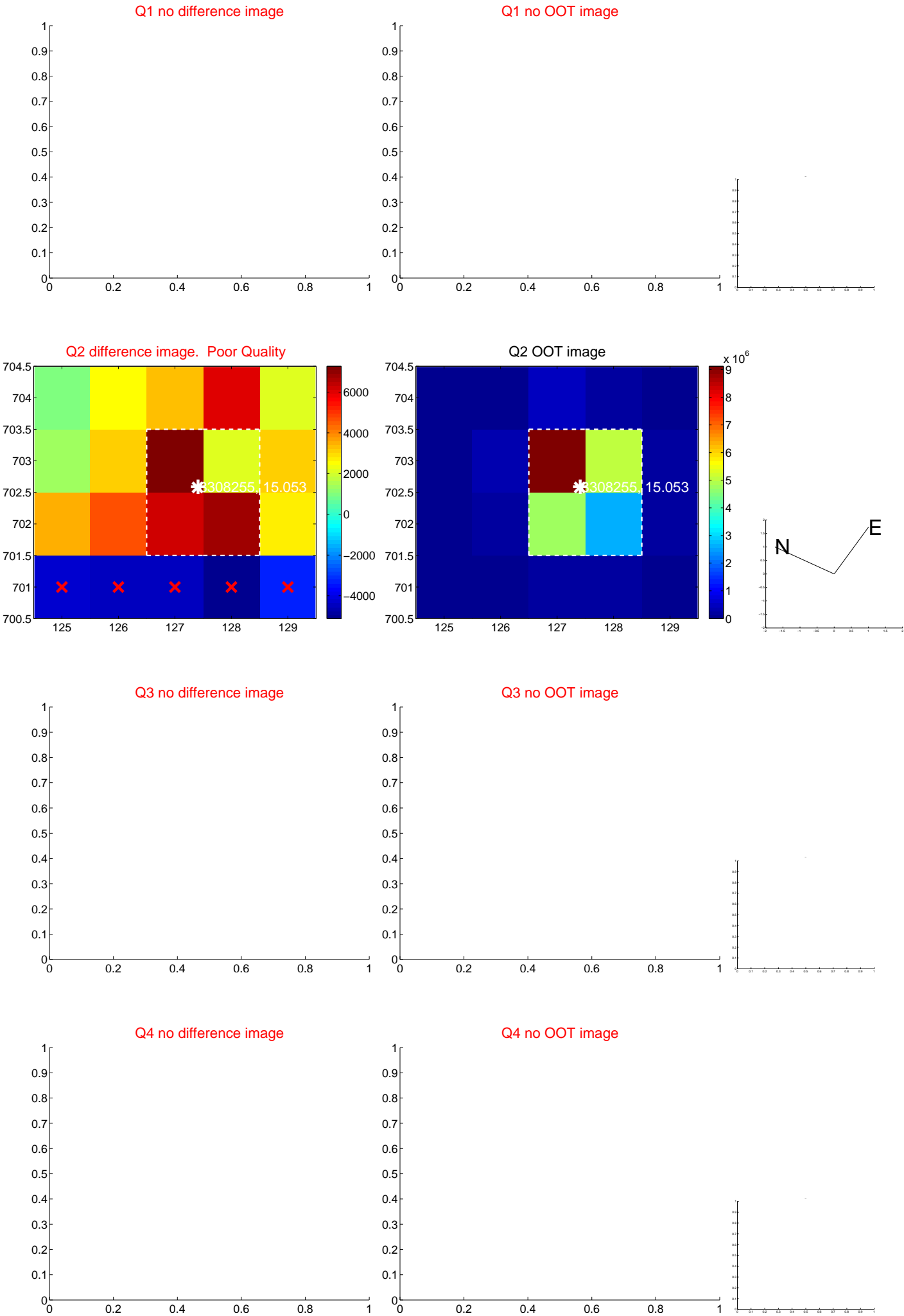


offset from photometric centroids

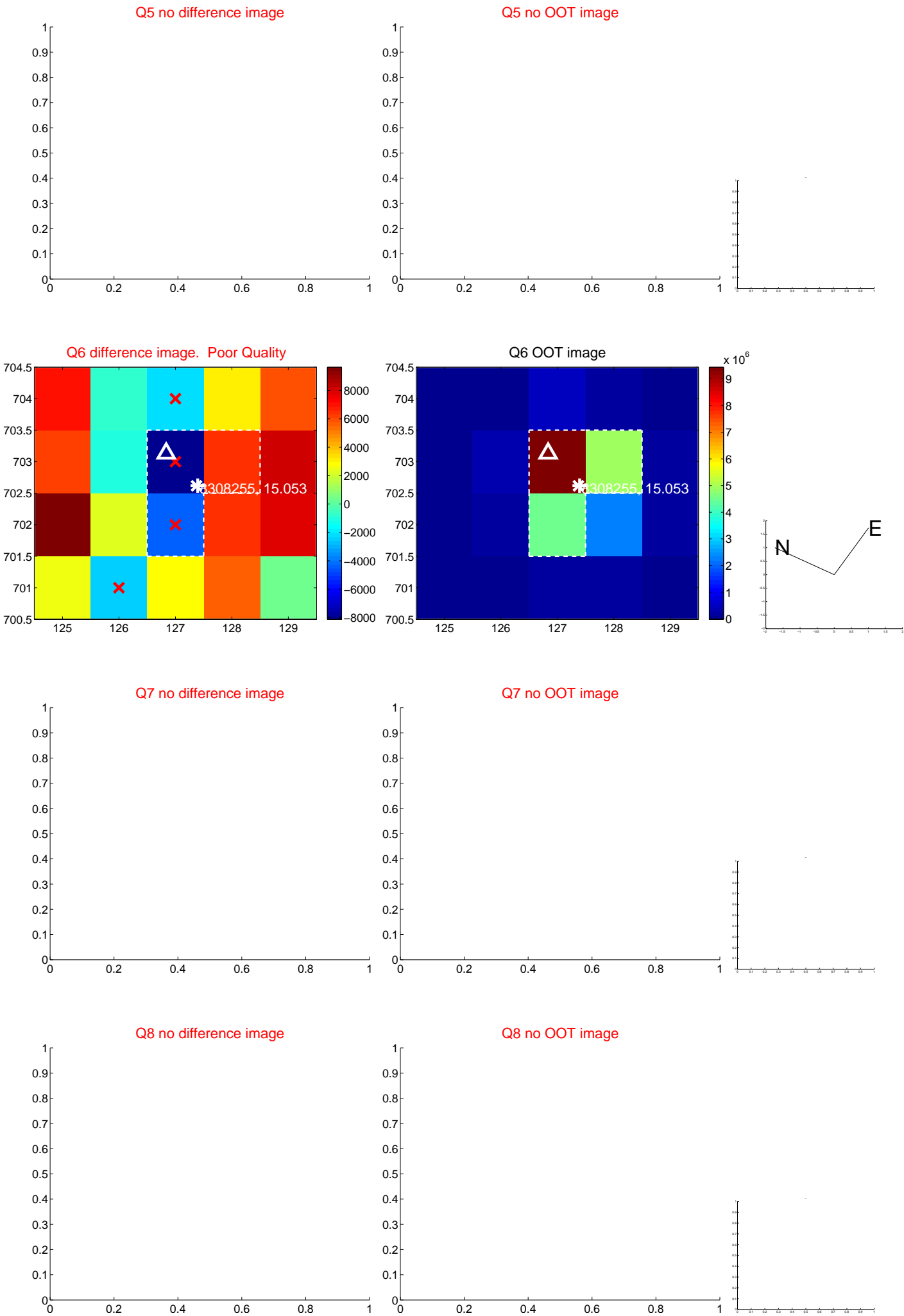


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

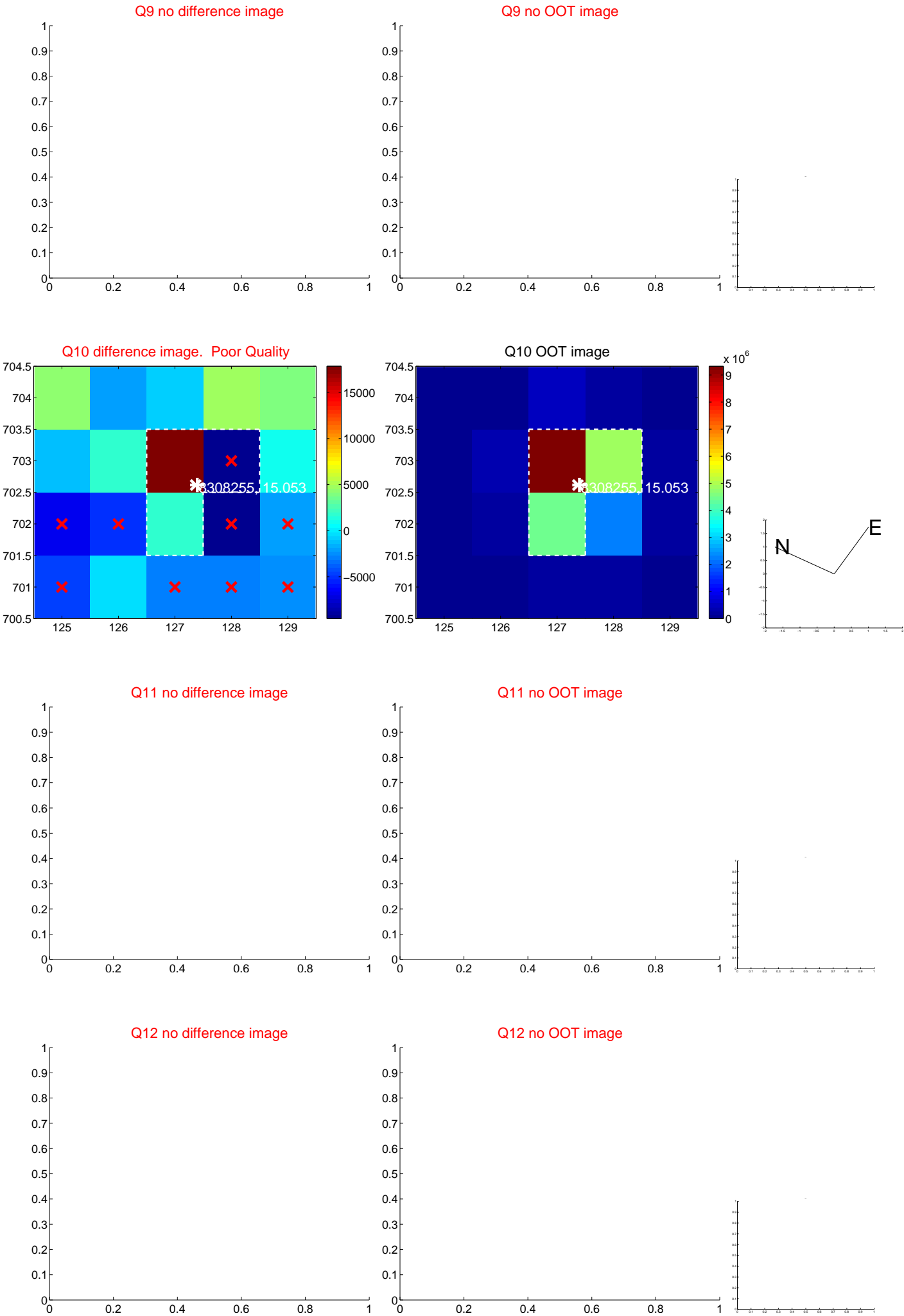
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



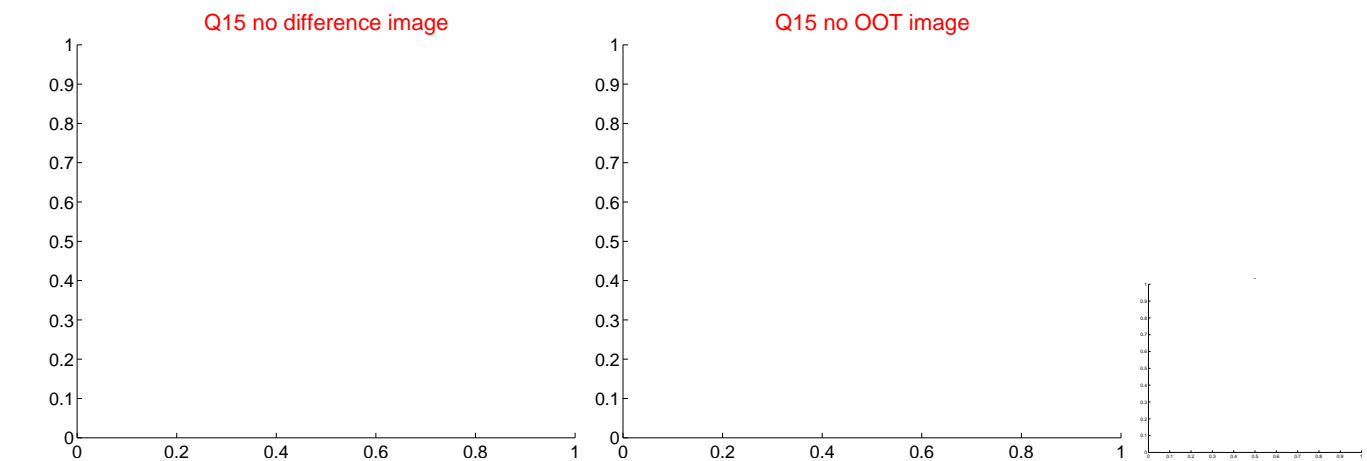
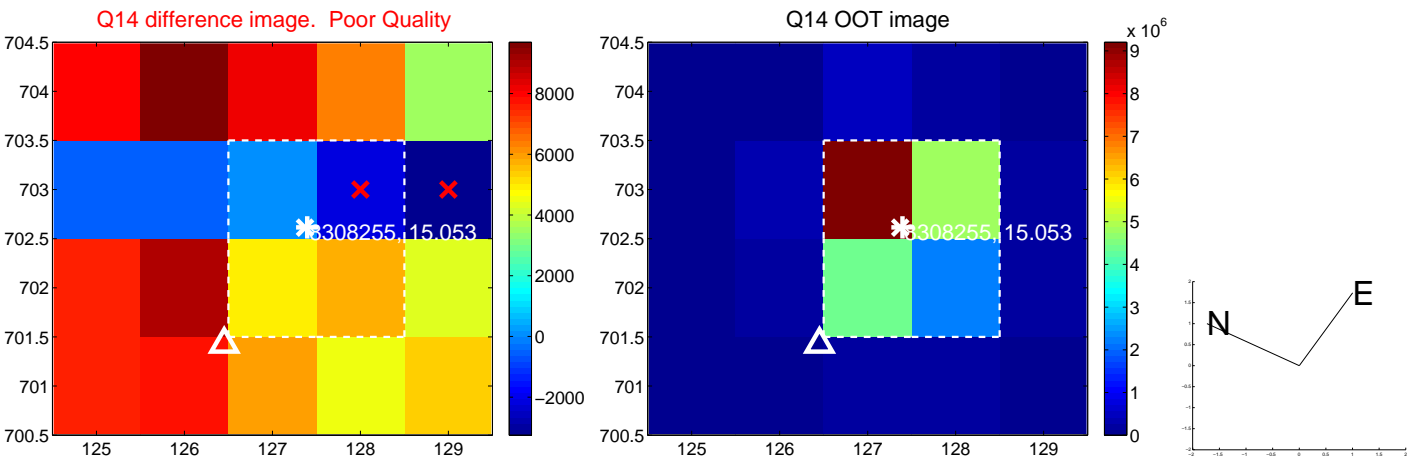
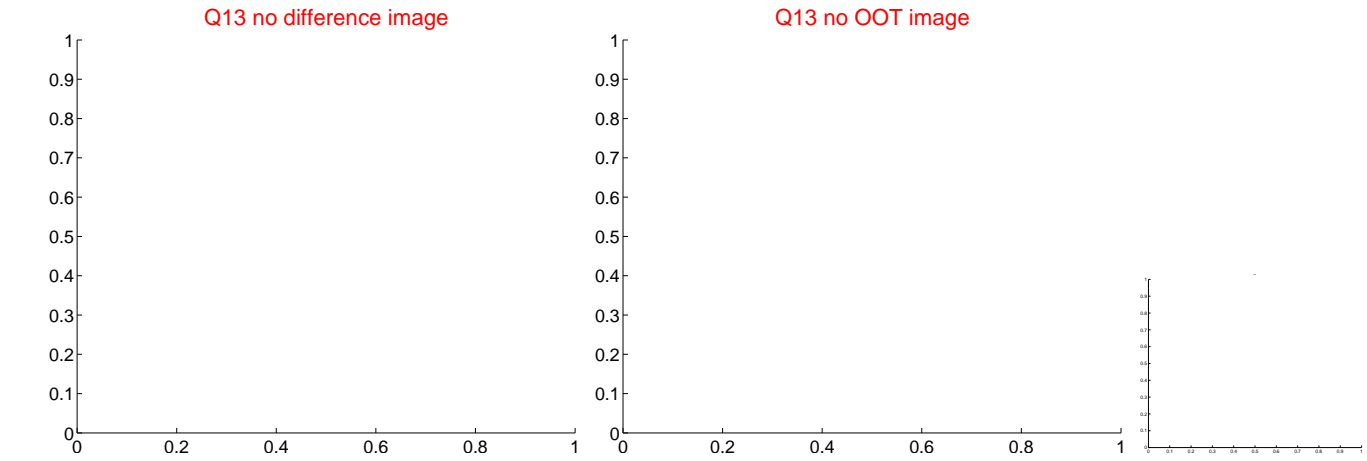
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



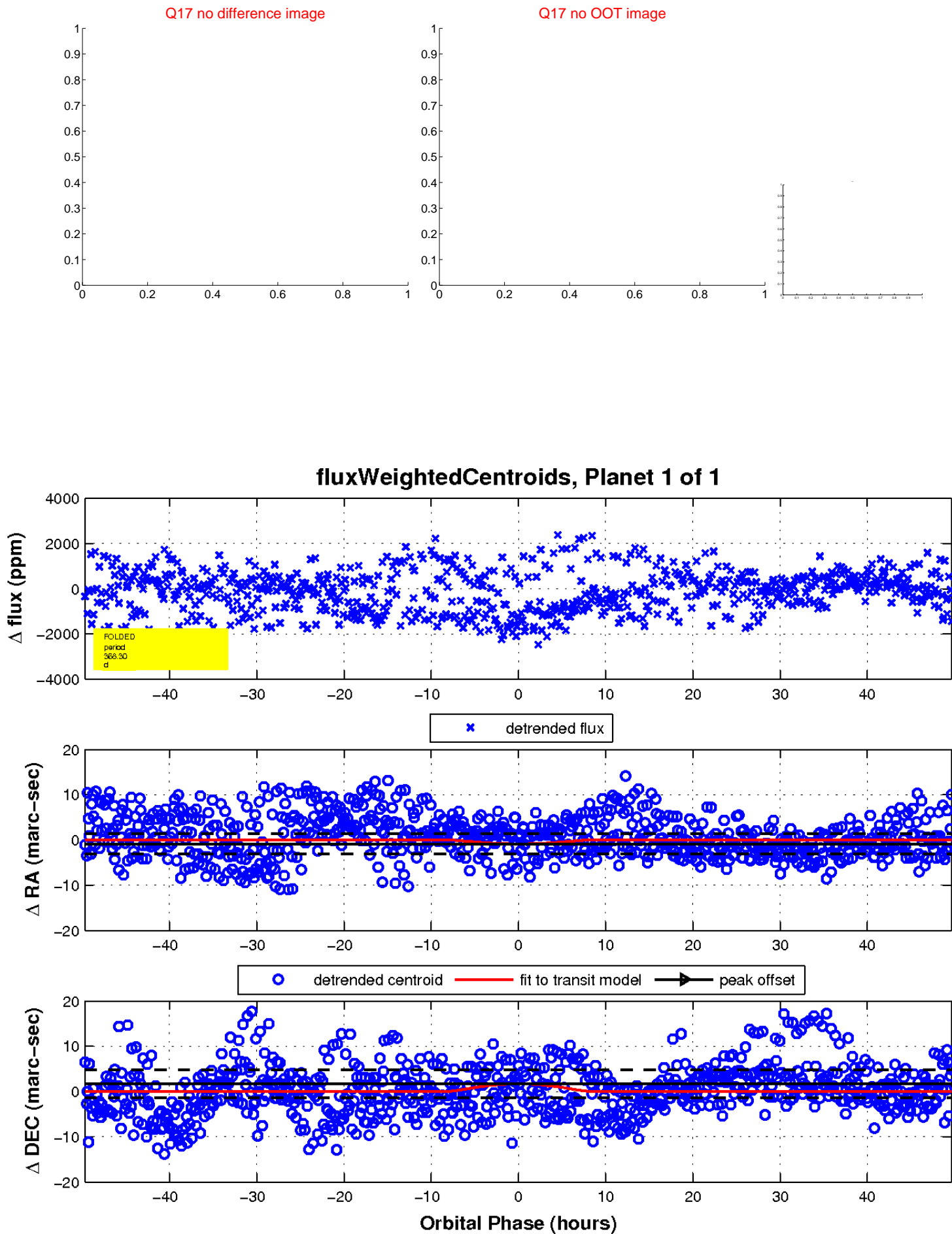
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

