

KIC 009764192

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})
009764192-01	OBS	No	262.094853	336.527901	489.3	2.877	12.6	7.3	0.88	5783	2.01	1.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009764192-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_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.

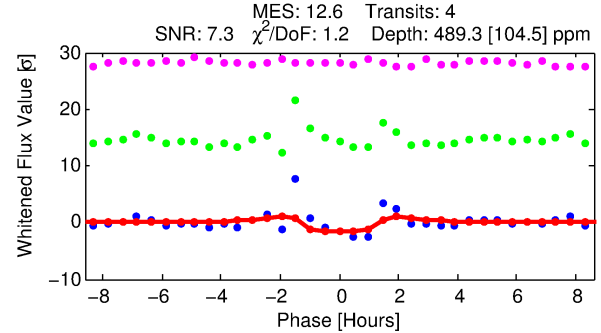
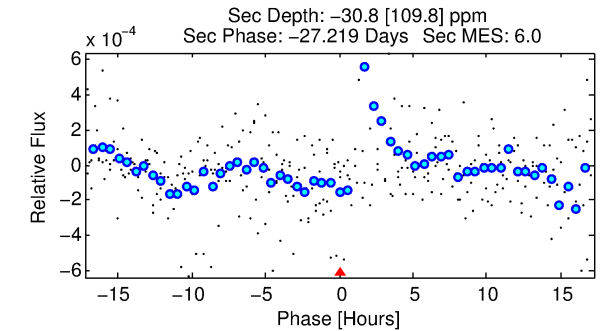
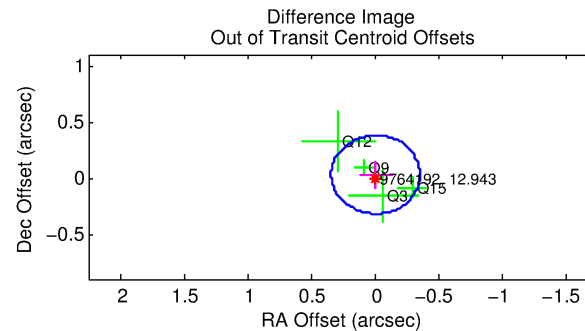
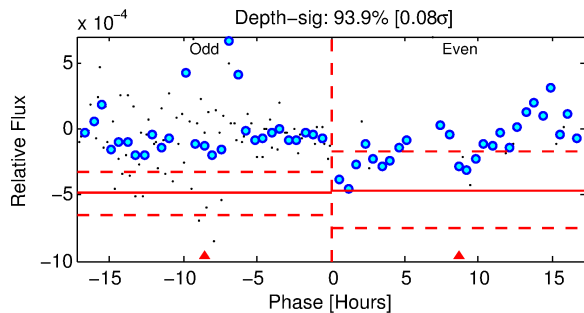
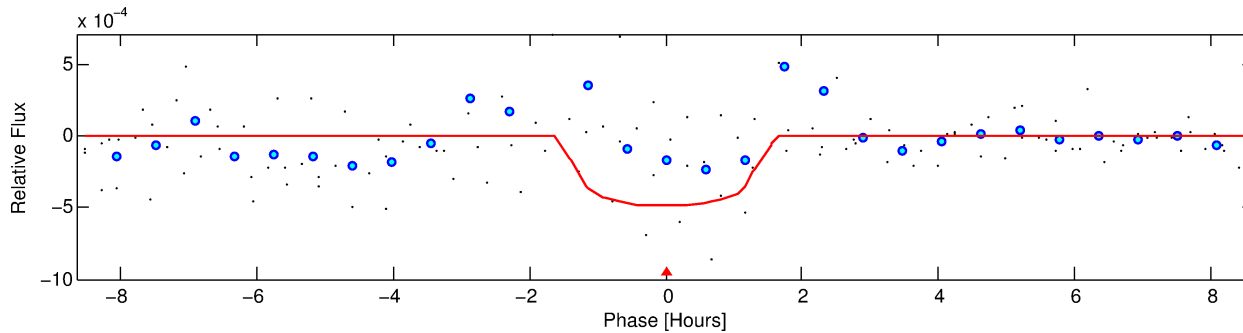
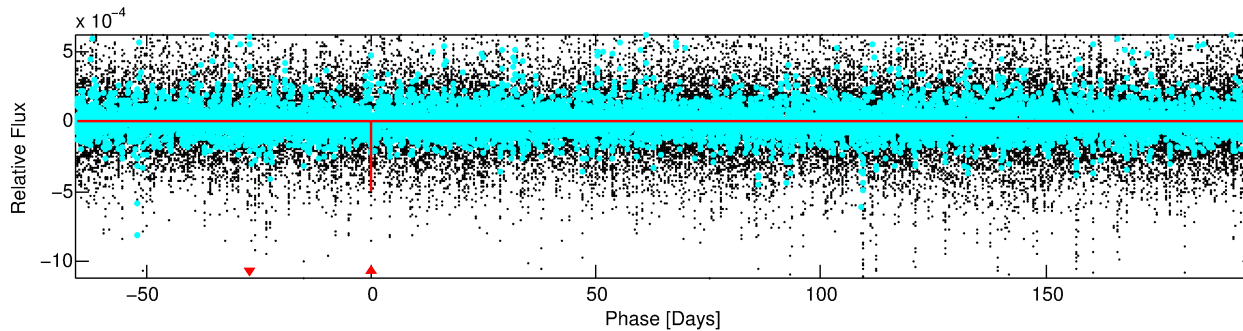
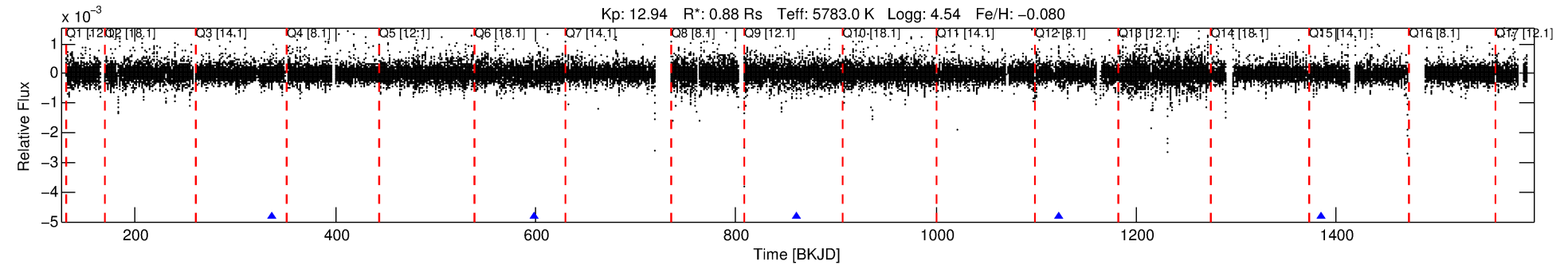
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009764192-01

No Significant Match Found

DV One-Page Summary

KIC: 9764192 Candidate: 1 of 1 Period: 262.095 d



DV Fit Results:

Period = 262.09485 [0.00294] d
Epoch = 336.5279 [0.0090] BKJD
Rp/R* = 0.0209 [0.0354]
a/R* = 595.94 [4478.14]
b = 0.56 [9.42]
Seff = 1.23 [0.45]
Teq = 268 [25] K
Rp = 2.01 [3.44] Re
a = 0.7955 [0.1896] AU
Ag = N/A
Teffp = N/A

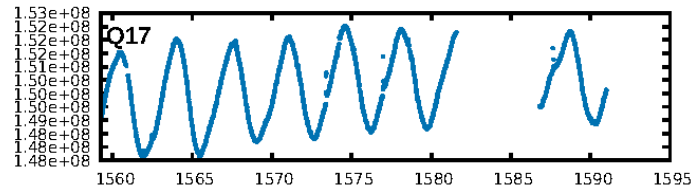
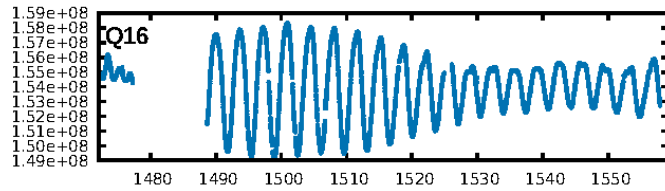
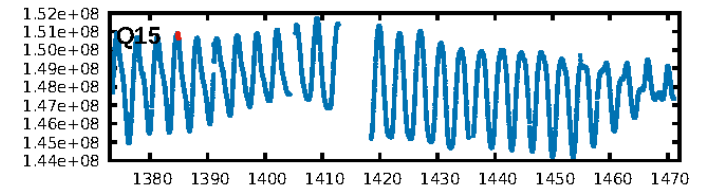
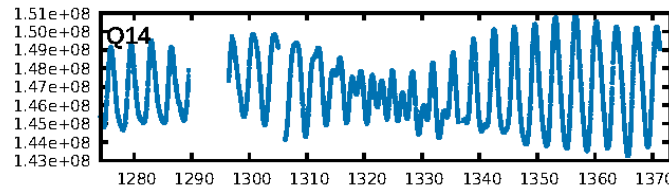
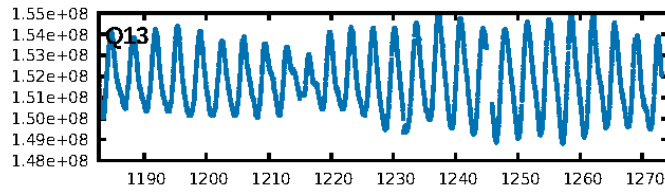
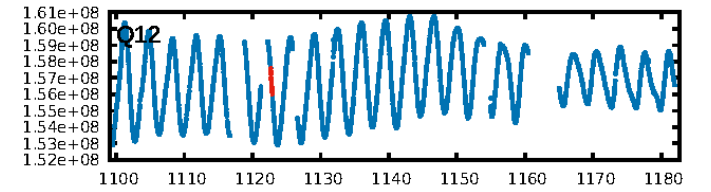
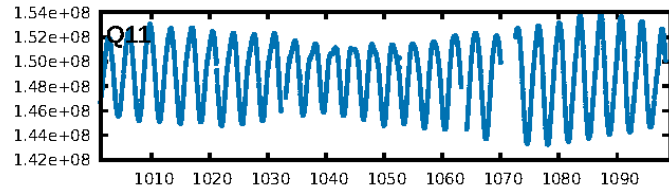
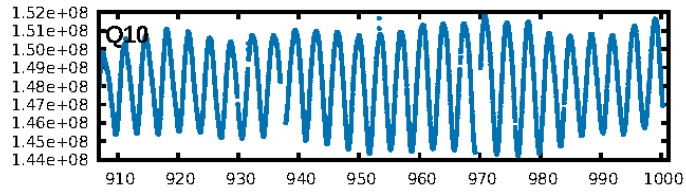
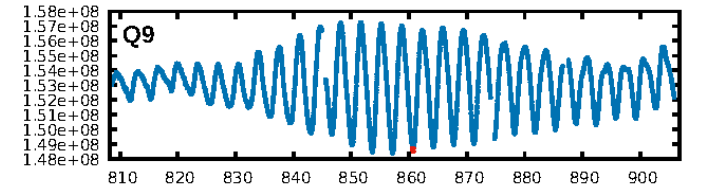
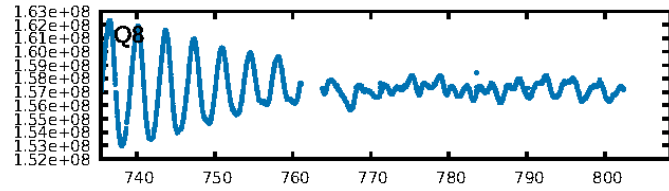
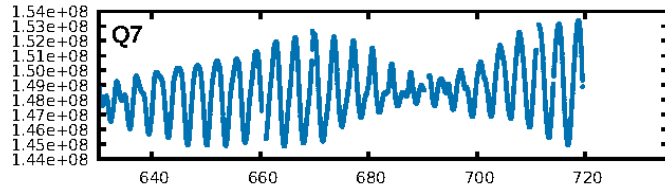
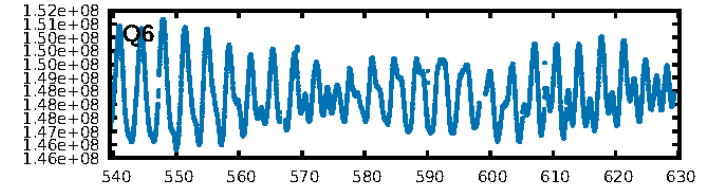
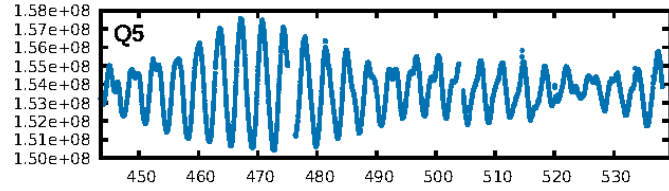
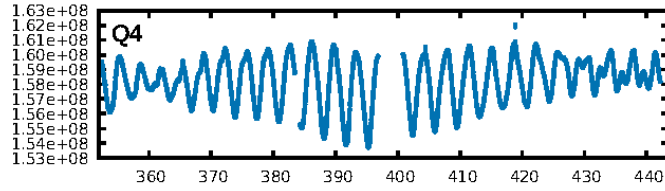
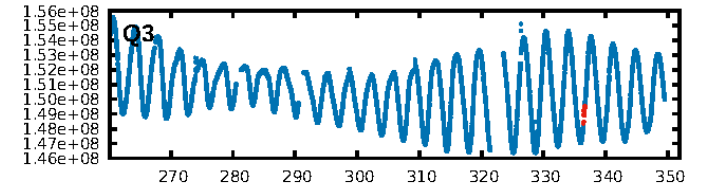
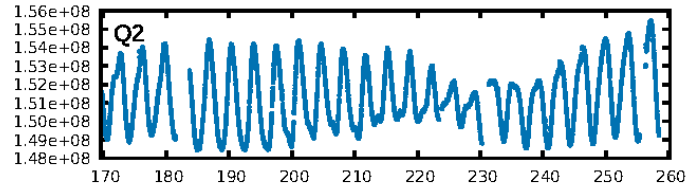
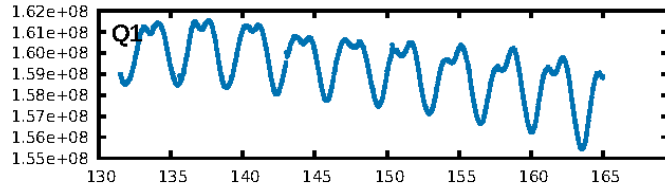
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 84.6%
ModelChiSquareGof-sig: 93.7%
Bootstrap-pfa: 2.33e-11
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.6693
Centroid-sig: 32.4%
Centroid-so: 0.623 arcsec [0.88 σ]
OotOffset-rm: 0.031 arcsec [0.26 σ]
OotOffset-st: 0/2/1/1 [4]
KicOffset-rm: 0.146 arcsec [1.07 σ]
KicOffset-st: 0/2/1/1 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 1.00 [4/4]

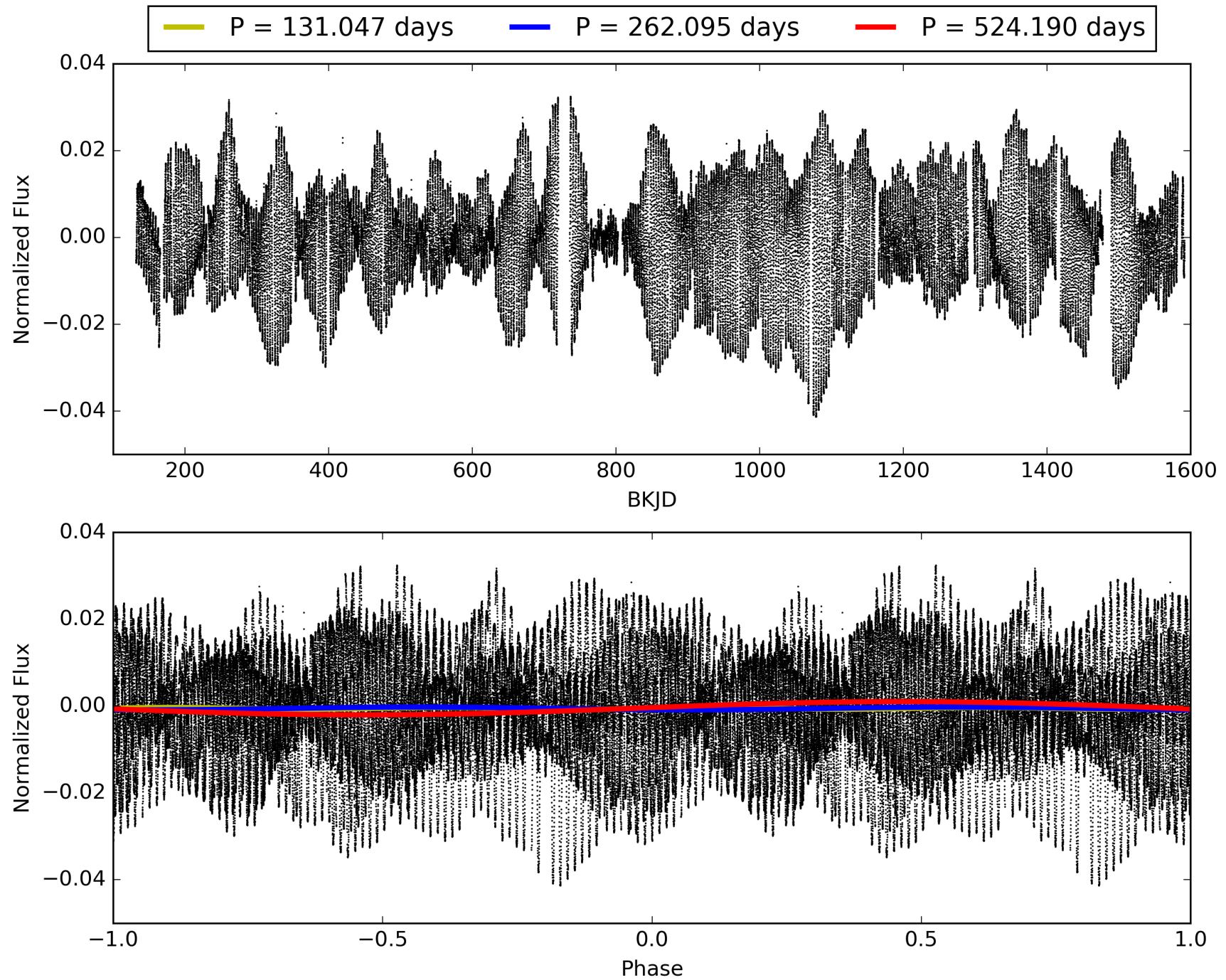
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:16:26 Z

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

TCE 009764192-01, PDC Light Curves

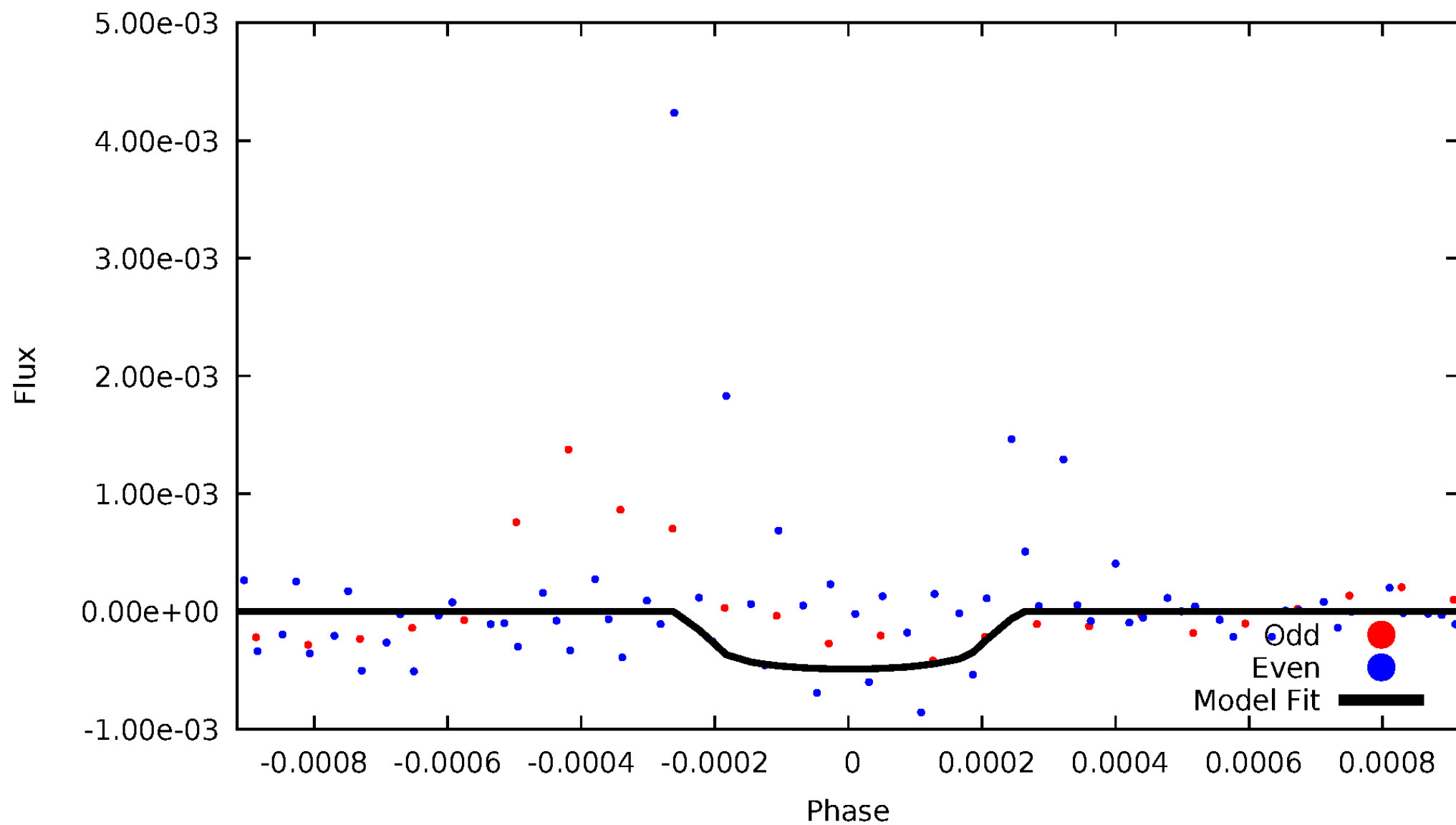


TCE 009764192-01



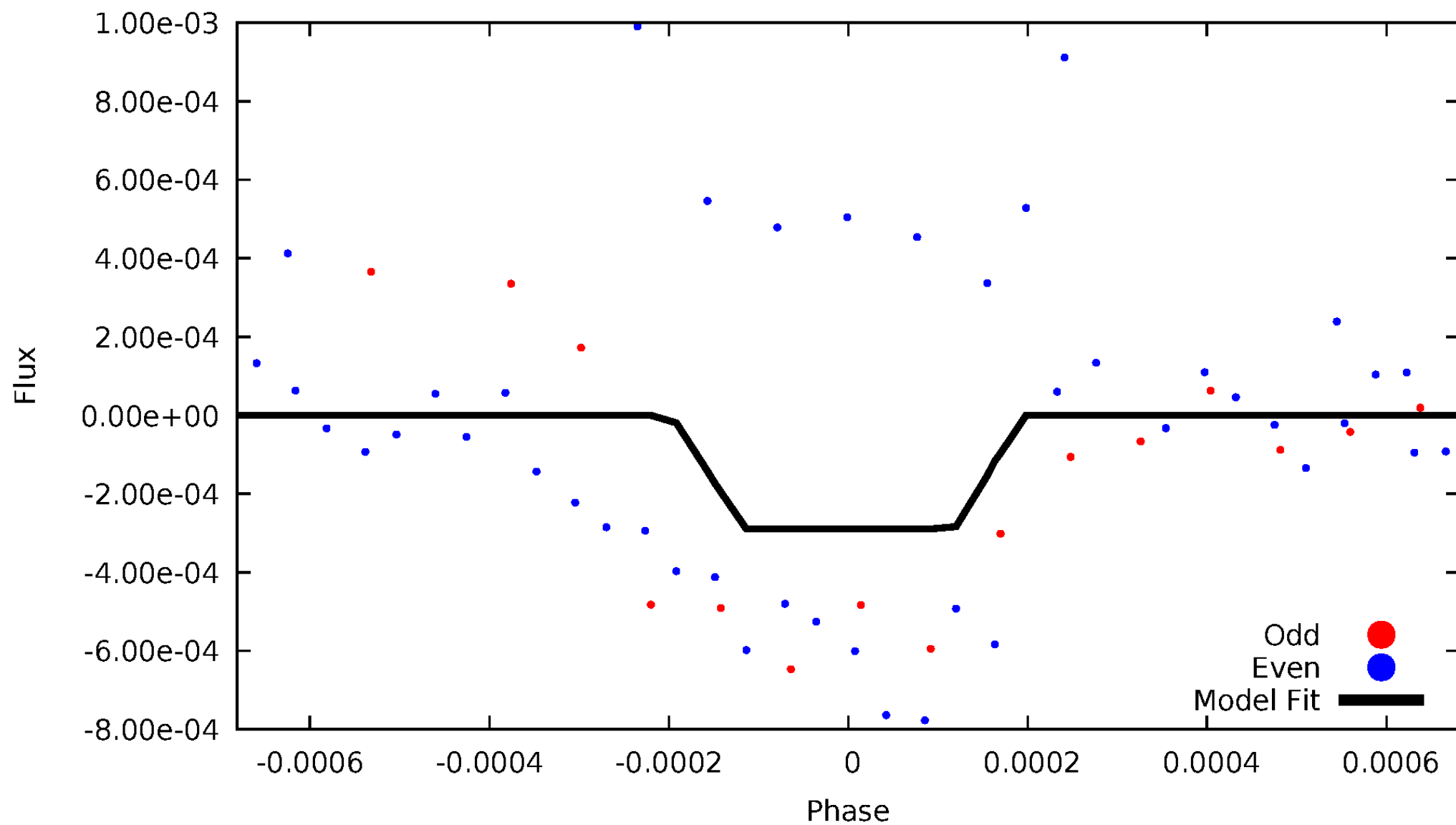
DV Odd/Even

TCE 009764192-01

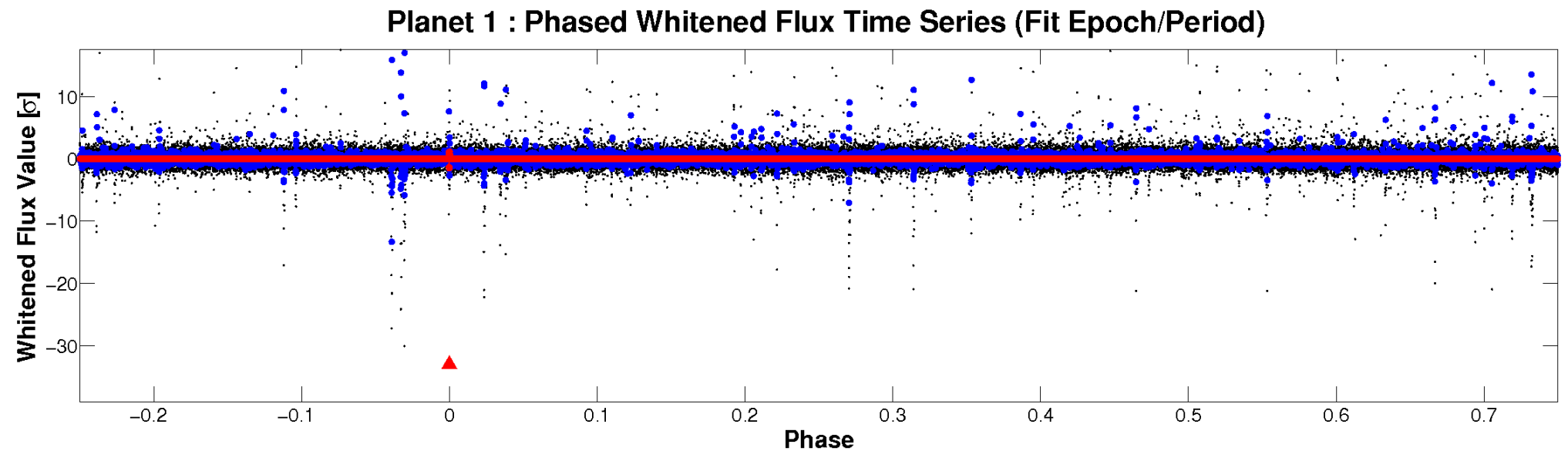
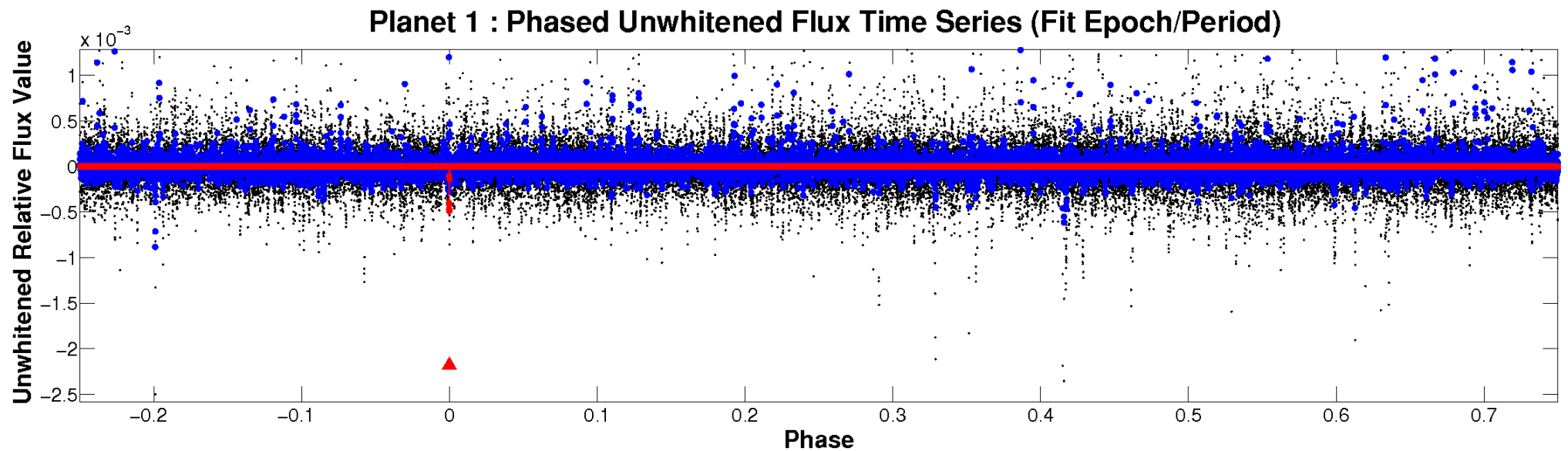


ALT Odd/Even

TCE 009764192-01

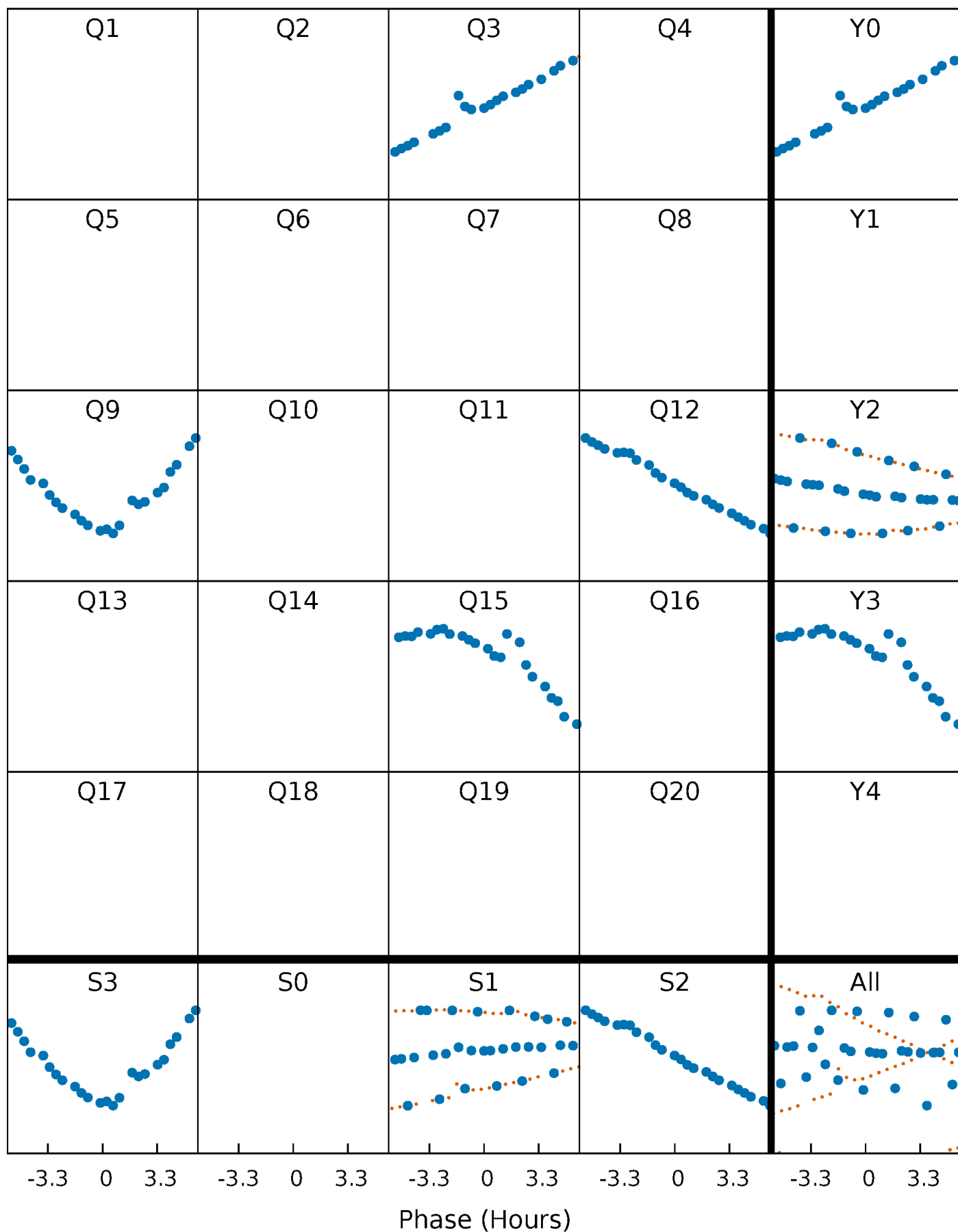


Non-Whitened Vs. Whitened Light Curve



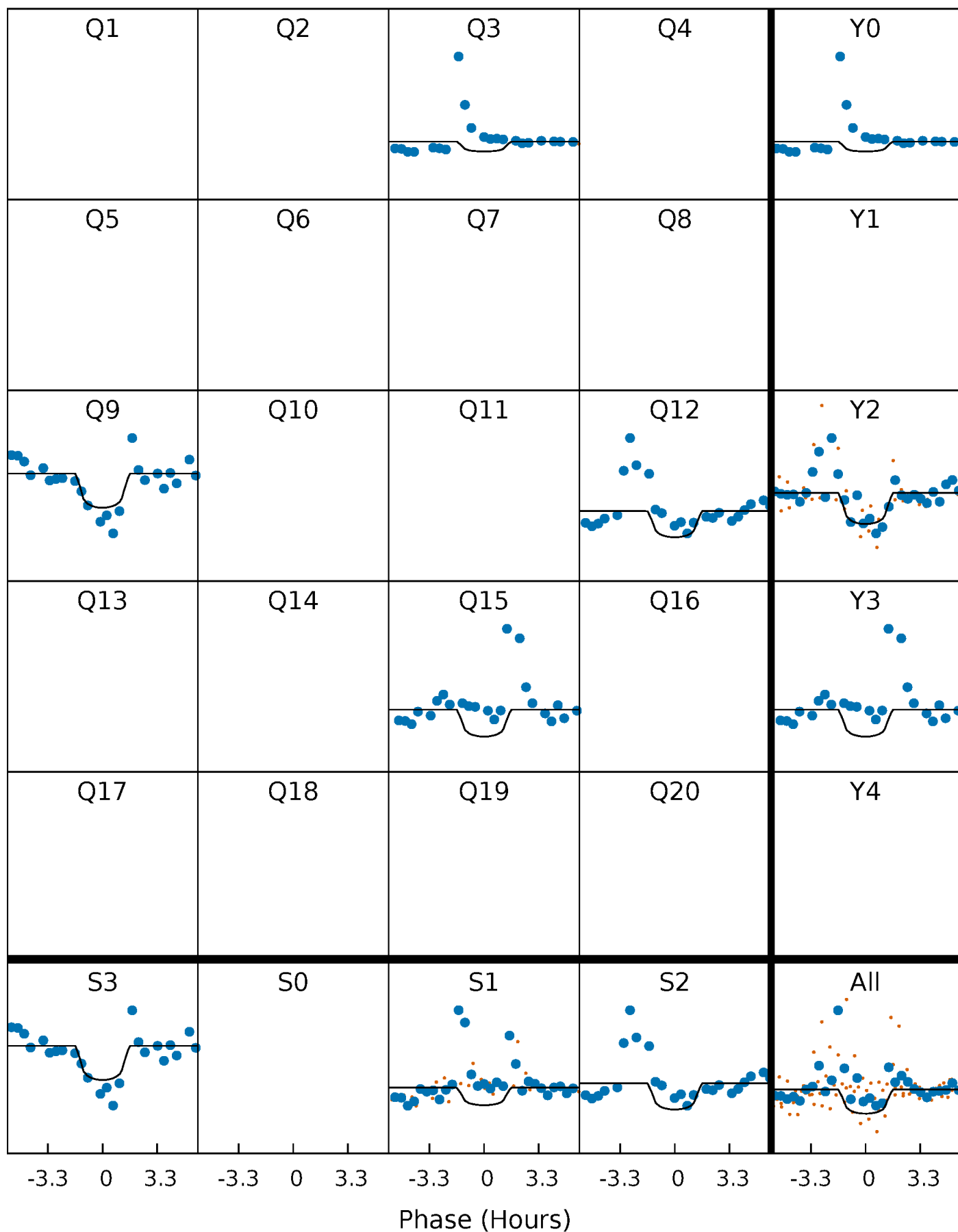
PDC Quarter-Phased Transit Curves

TCE 009764192-01 P=262.094853 Days $T_0=336.527901$ (BKJD)



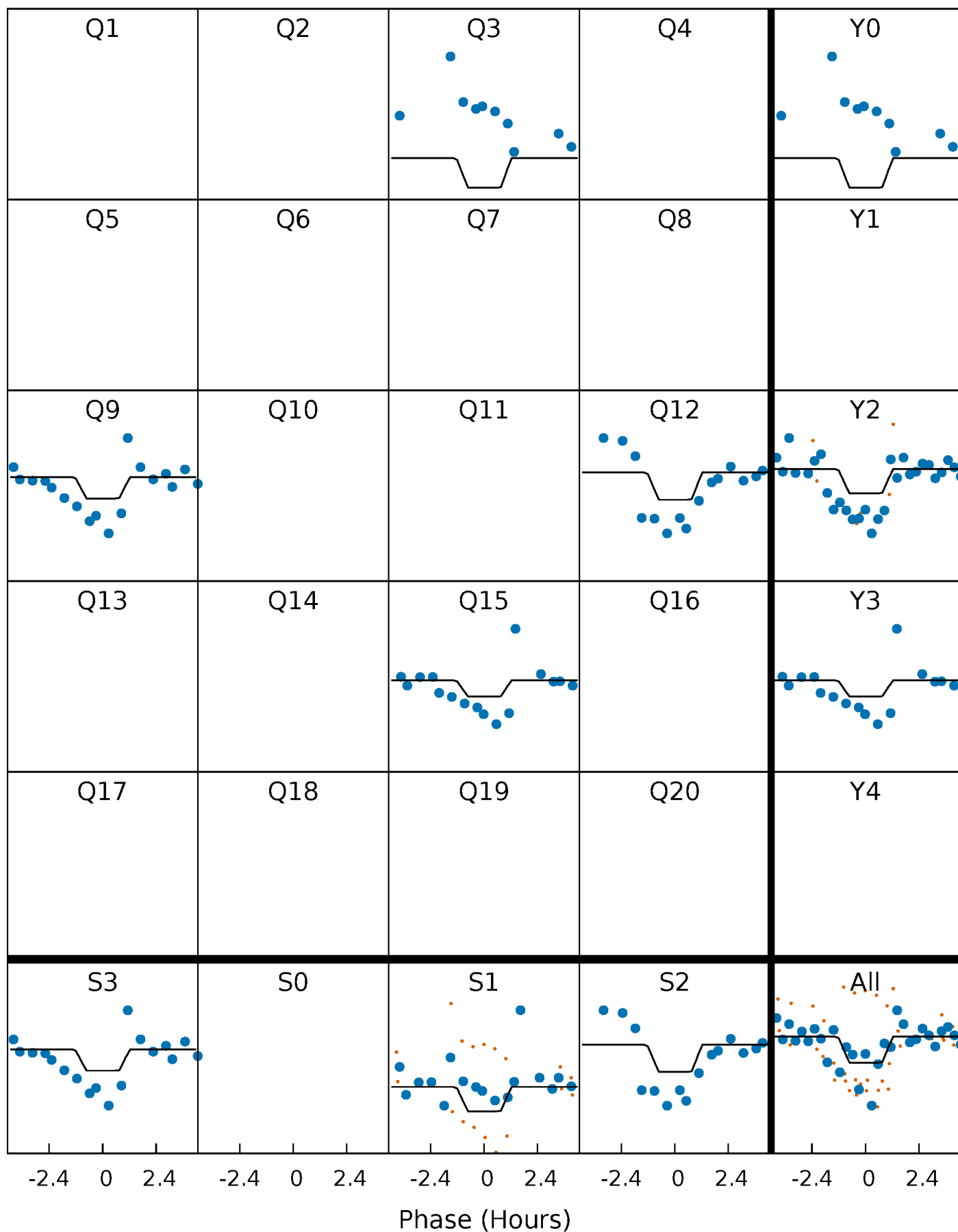
DV Quarter-Phased Transit Curves

TCE 009764192-01 $P=262.094853$ Days $T_0=336.527901$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

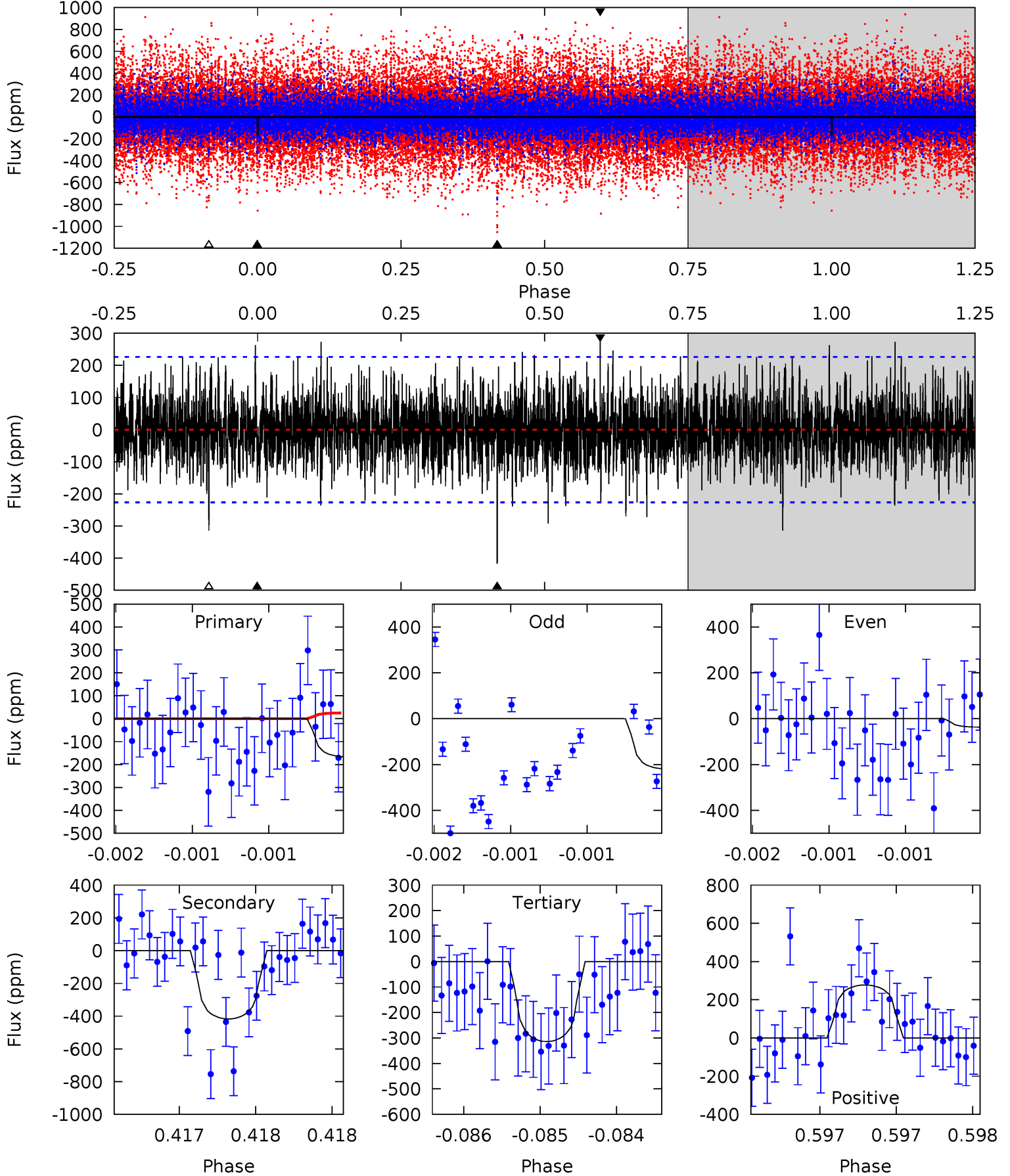
TCE 009764192-01 P=262.086496 Days $T_0=336.562089$ (BKJD)



DV Model-Shift Uniqueness Test

009764192-01, P = 262.094853 Days, E = 74.433048 Days

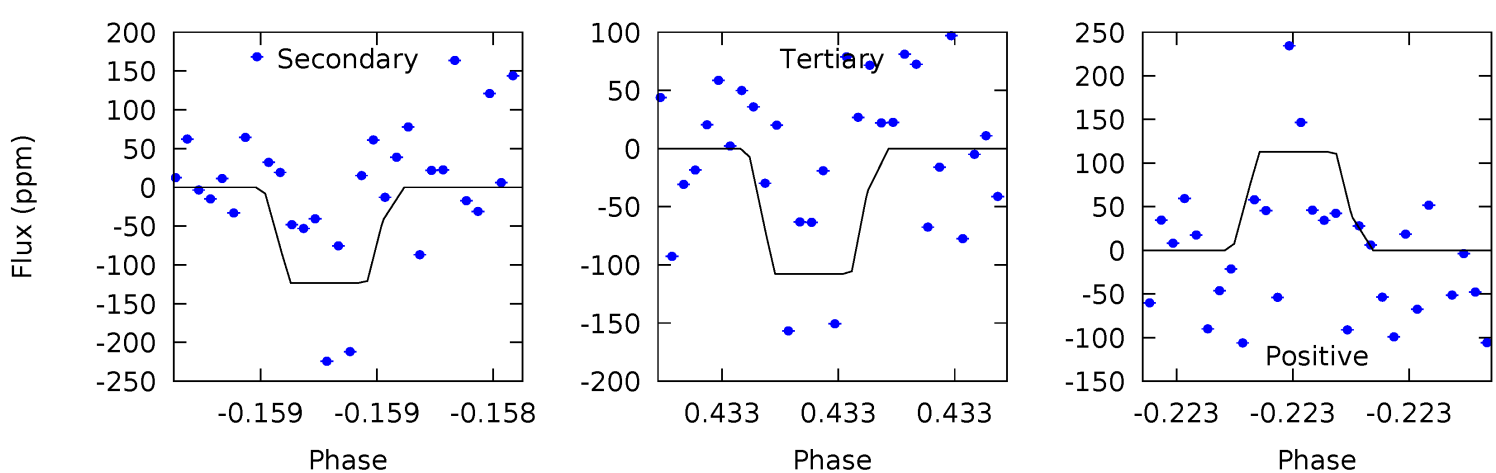
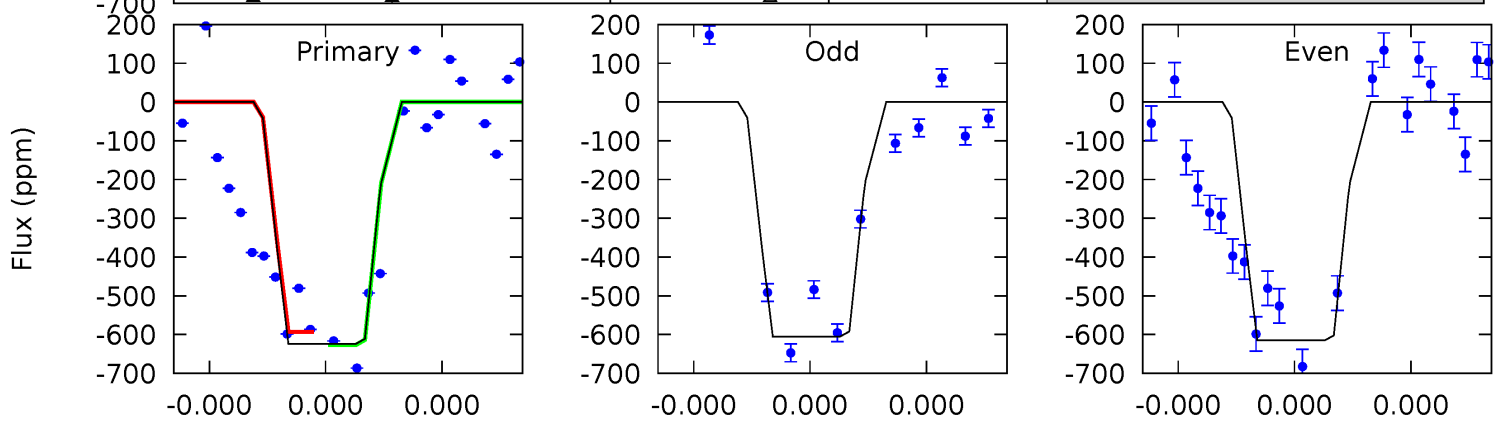
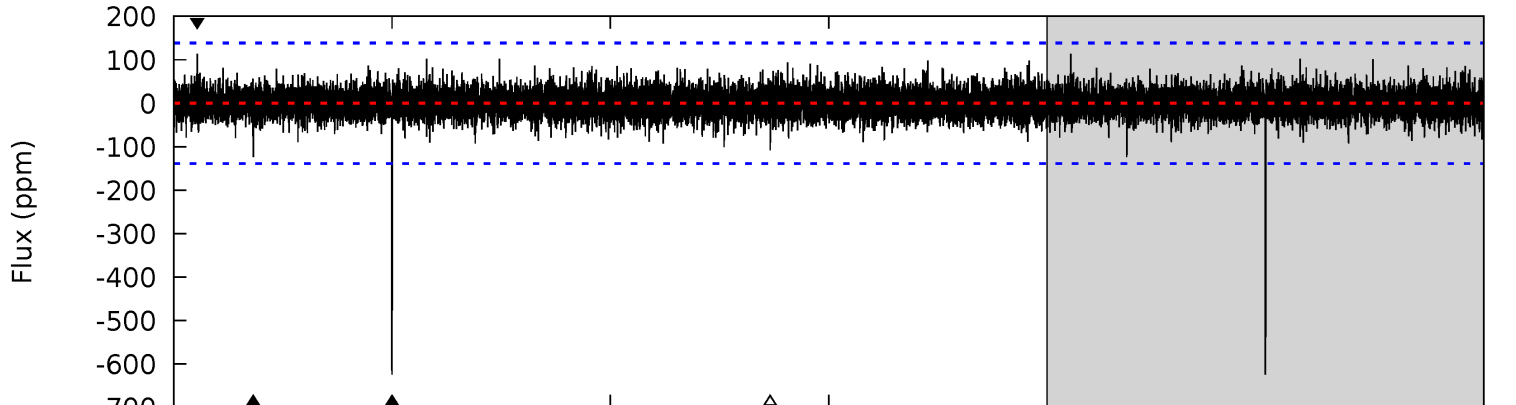
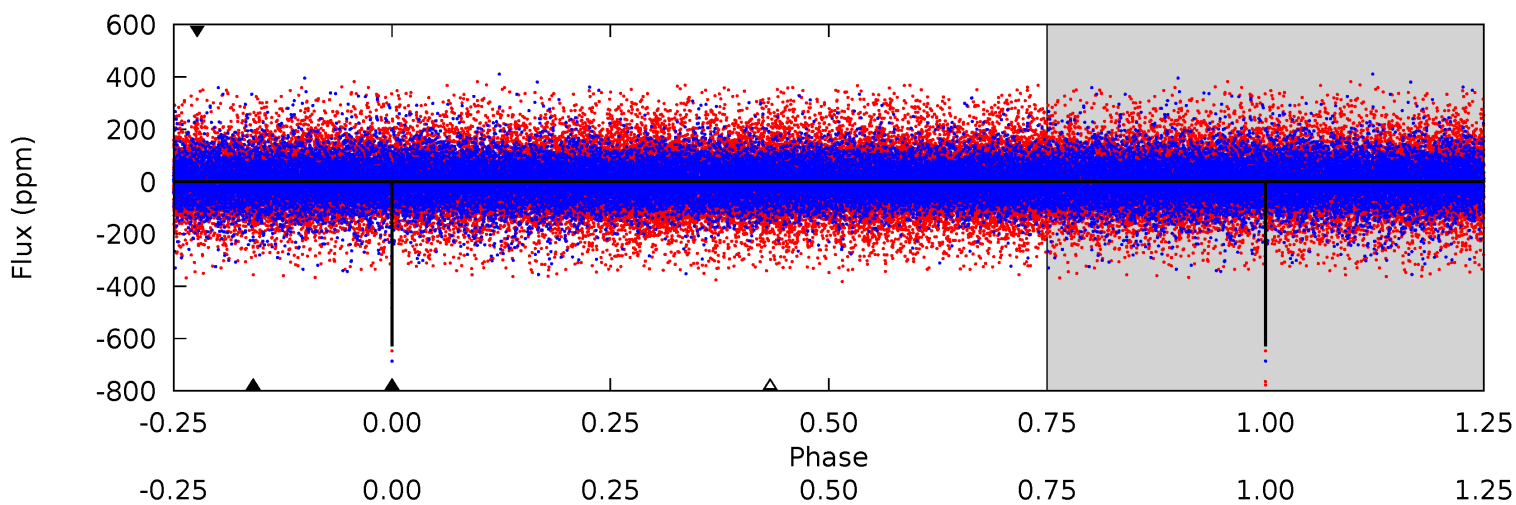
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.07	10.3	7.72	6.82	5.56	3.47	1.73	-3.64	-2.74	2.54	3.44	1.82	0.75	0.40	1.96



Alt Model-Shift Uniqueness Test

009764192-01, P = 262.086496 Days, E = 74.475593 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.3	5.00	4.38	4.59	5.63	3.57	0.95	21.0	20.7	0.63	0.42	0.19	0.55	0.15	0



Stellar Parameters For KIC 009764192

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5783^{+138}_{-156}	$4.539^{+0.035}_{-0.196}$	$-0.080^{+0.300}_{-0.300}$	$0.880^{+0.244}_{-0.081}$	$0.977^{+0.102}_{-0.125}$	$2.021^{+0.385}_{-1.013}$
	+2%/-3%	+1%/-4%	+375%/-375%	+28%/-9%	+10%/-13%	+19%/-50%
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 009764192-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-417 ± 41	$3.30^{+3.24}_{-2.33}$	384^{+26}_{-16}	4687^{+4166}_{-980}	$13172^{+131533}_{-9890}$
Alt.	-123 ± 25	$3.30^{+3.07}_{-2.17}$	384^{+26}_{-16}	3755^{+2103}_{-697}	3891^{+29694}_{-2900}

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 $A_{obs} \gg 1.0$

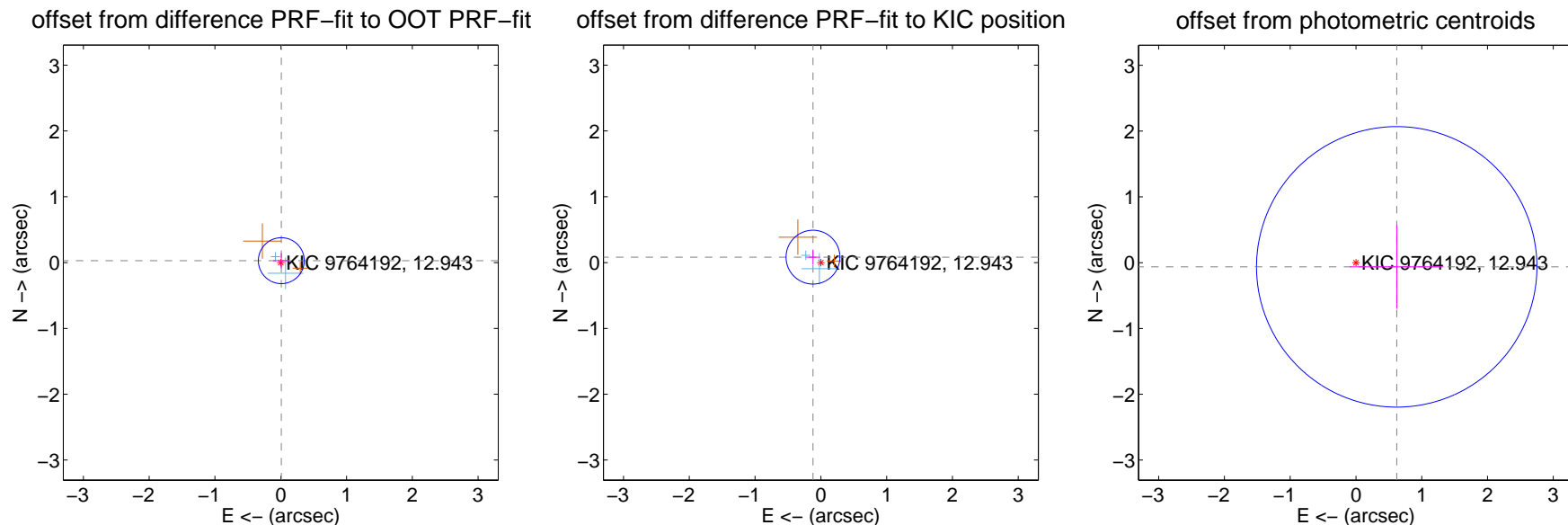
DV Centroid Data

Supplemental centroid analysis for 009764192-01. Kepler magnitude: 12.94. Transit SNR 7.31

There are 2 quarters with good PRF difference image offsets

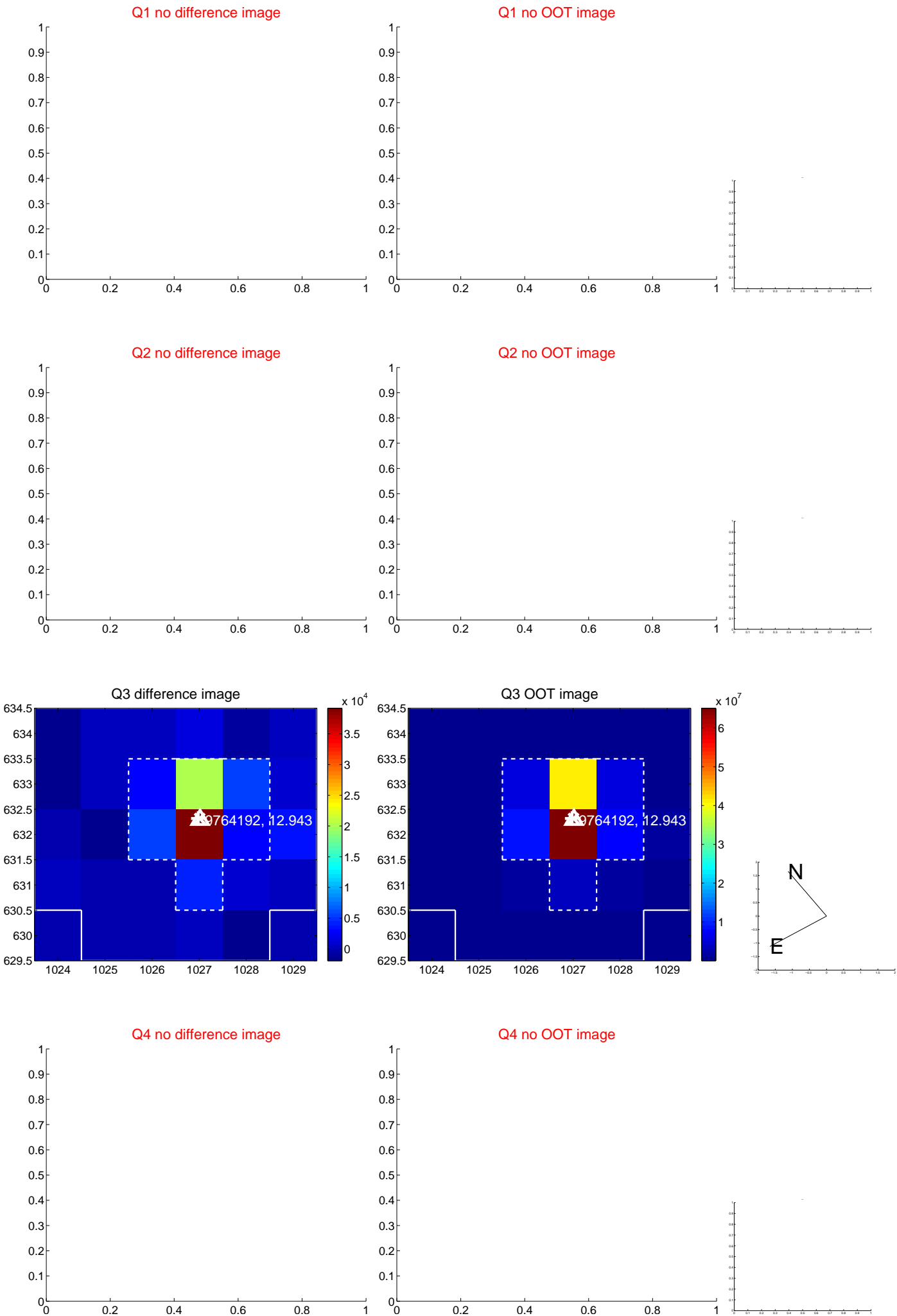
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.031 ± 0.116	0.26	-0.009 ± 0.124	0.029 ± 0.116
PRF-fit source offset from KIC position	0.146 ± 0.136	1.07	0.120 ± 0.108	0.083 ± 0.116
photometric centroid source offset	0.62 ± 0.71	0.88	-0.62 ± 0.71	-0.06 ± 0.64



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.

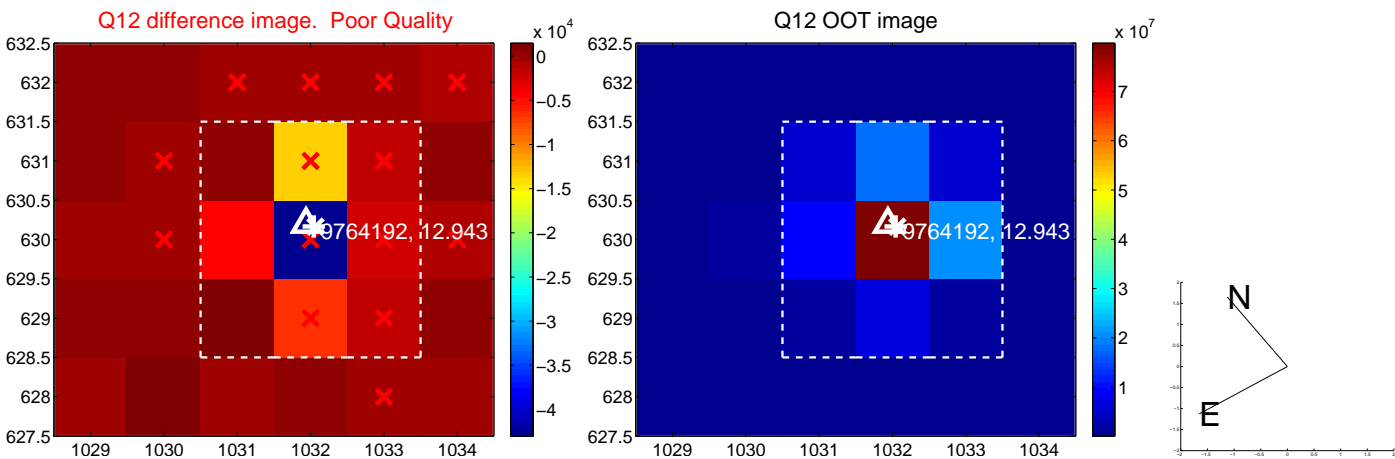
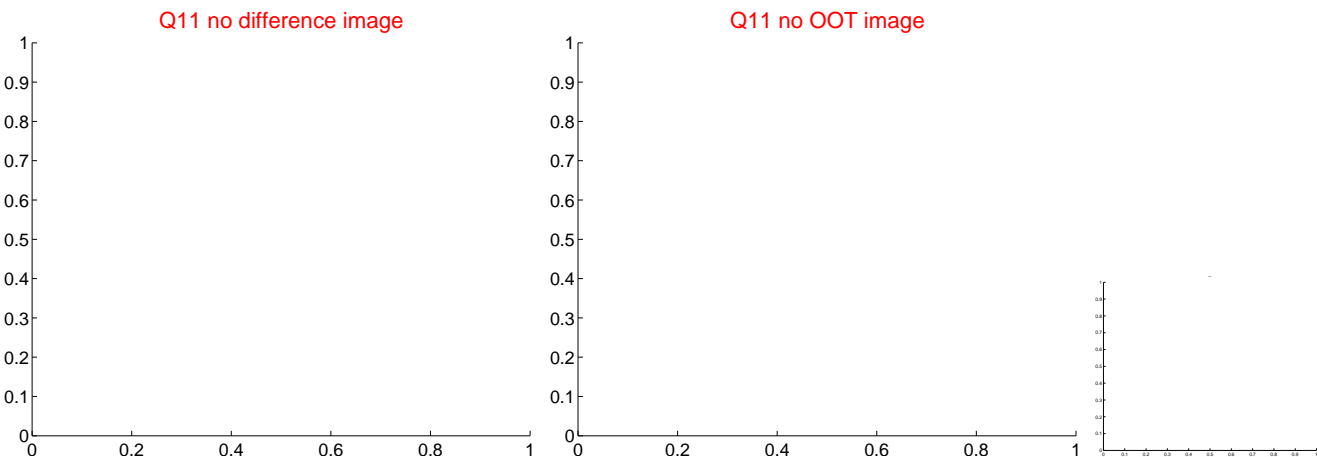
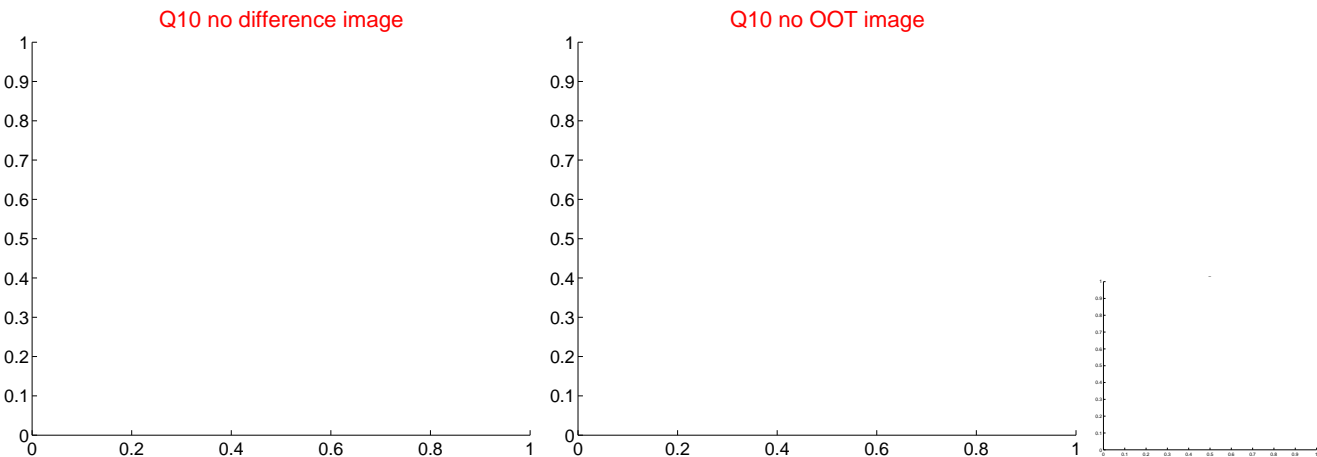
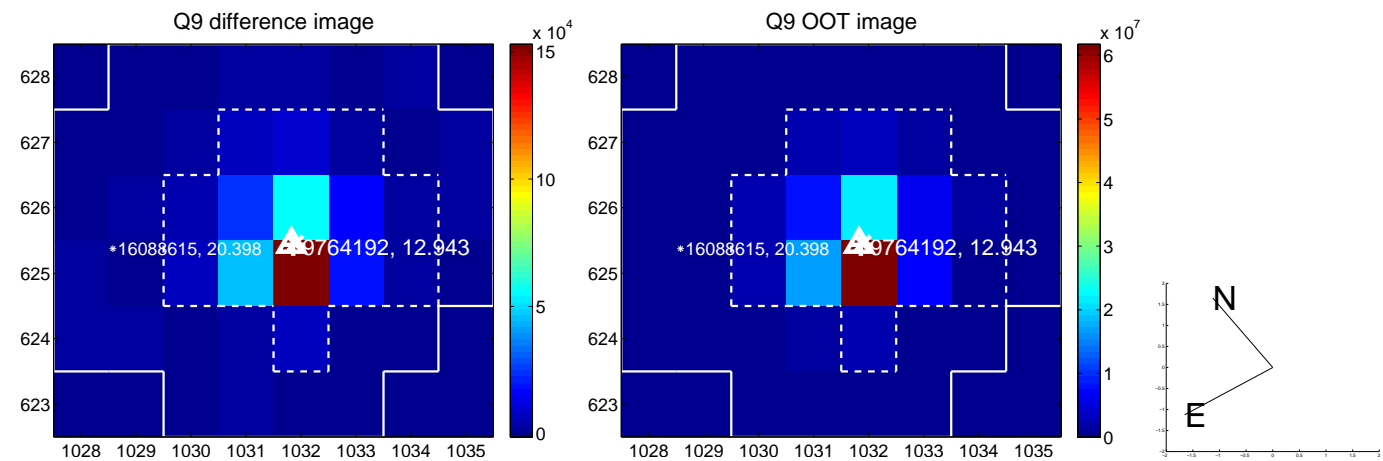
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



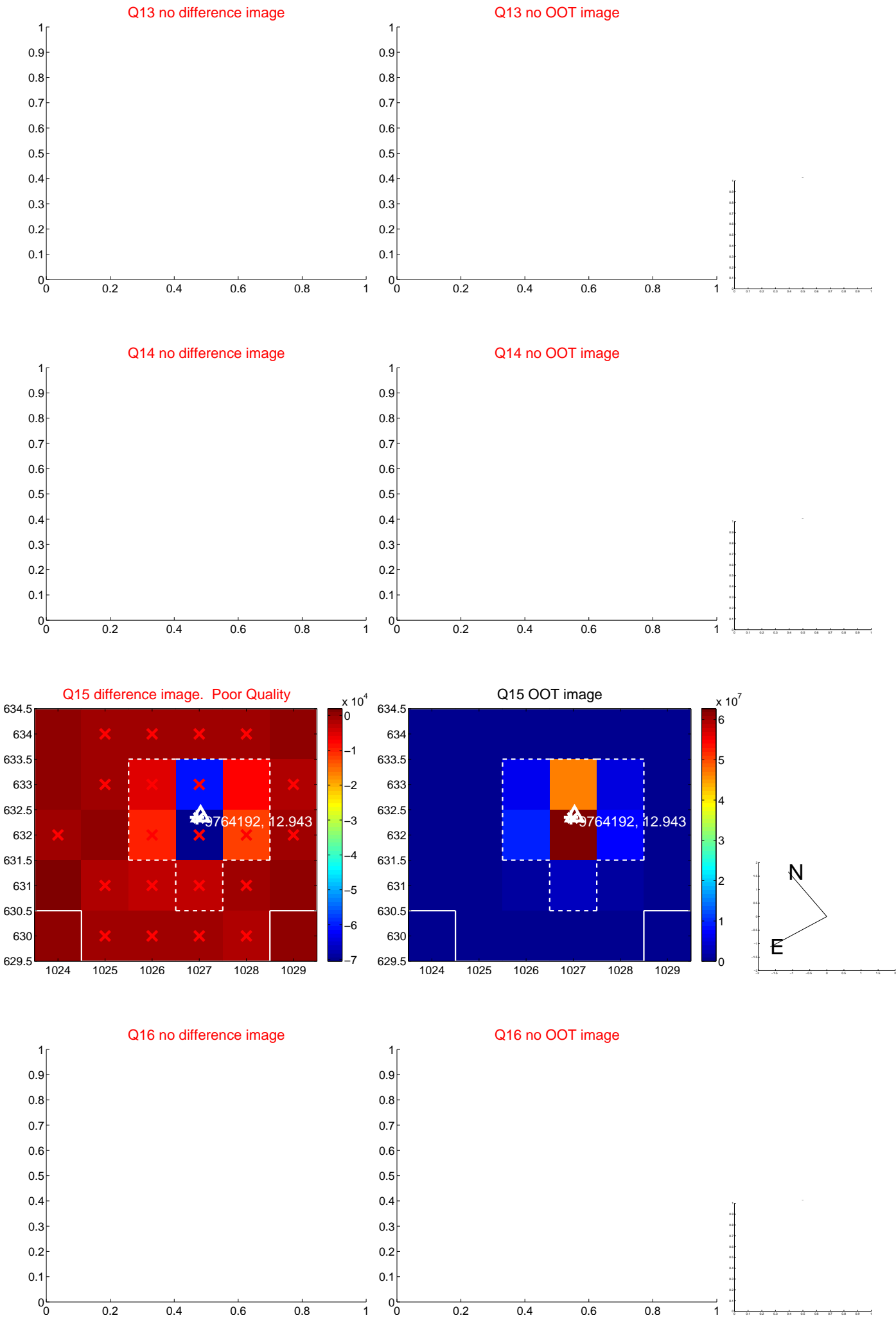
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



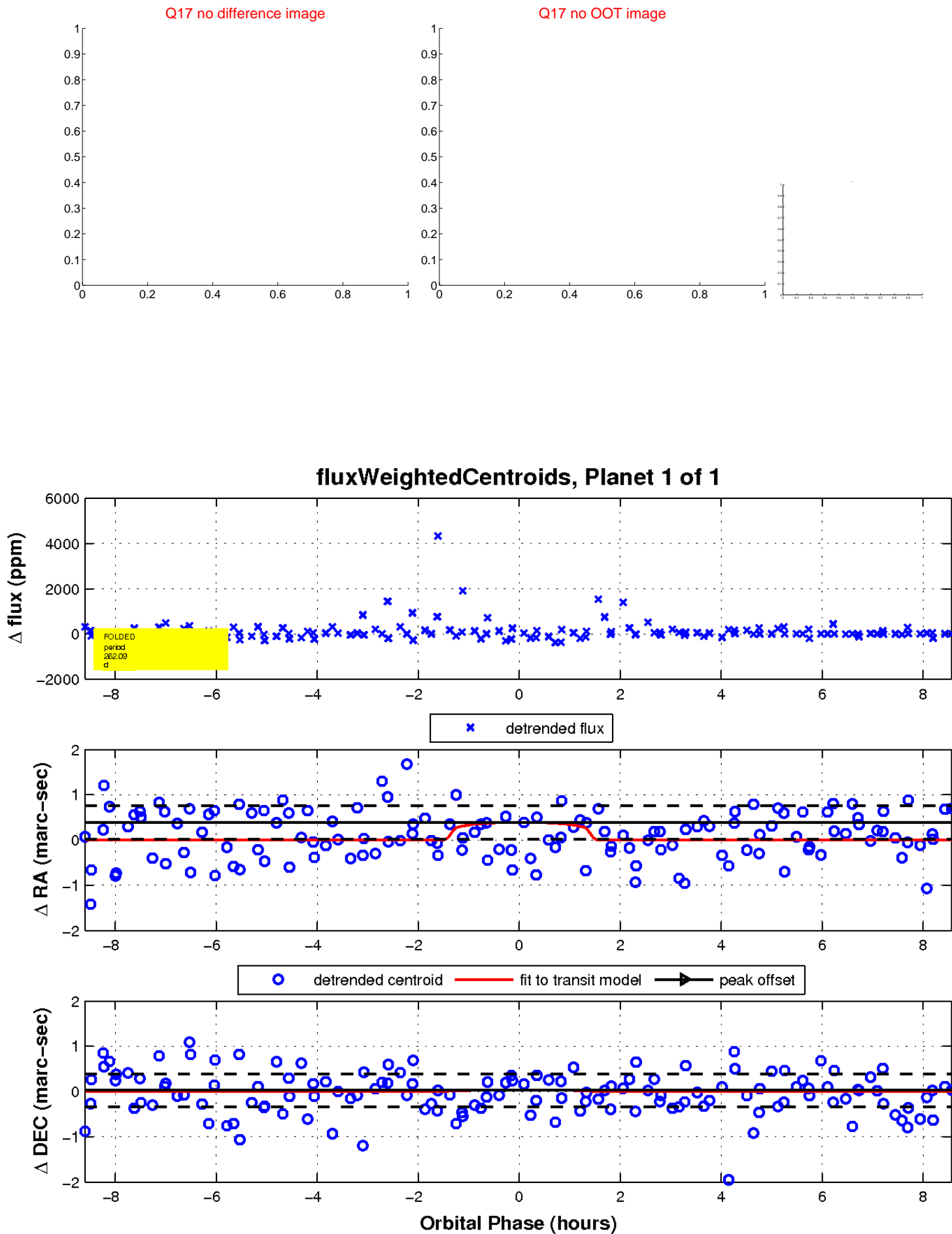
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

