

KIC 011962496

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})
011962496-01	OBS	No	329.536941	437.483499	133.9	15.087	8.2	7.0	2.33	6461	3.05	7.36

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011962496-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

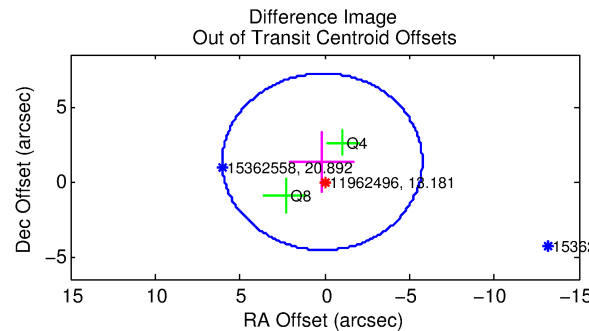
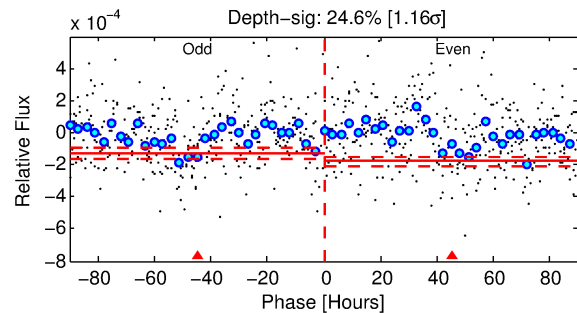
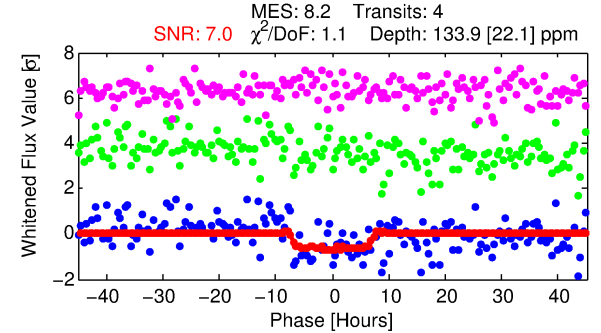
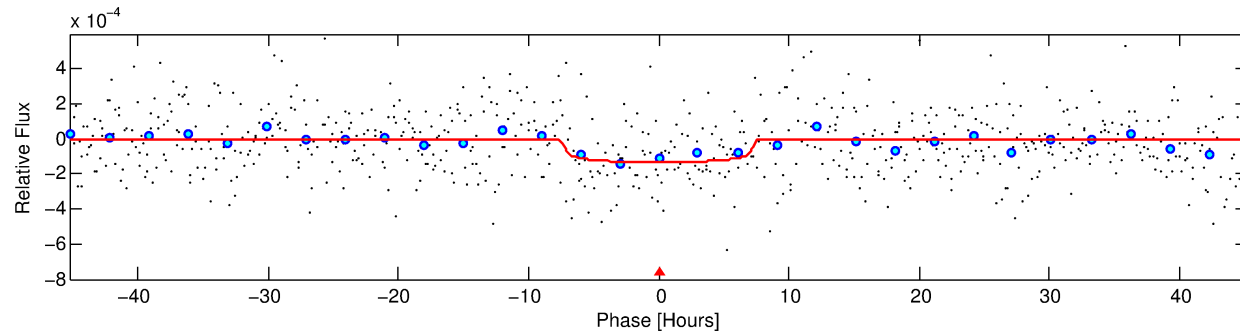
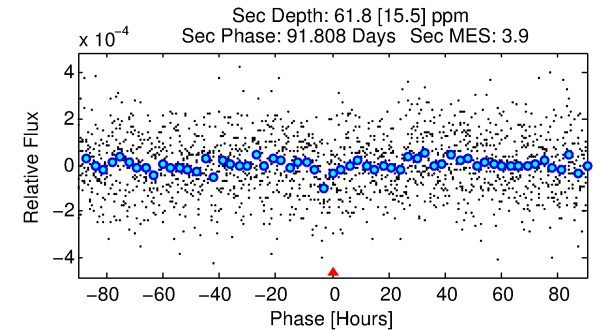
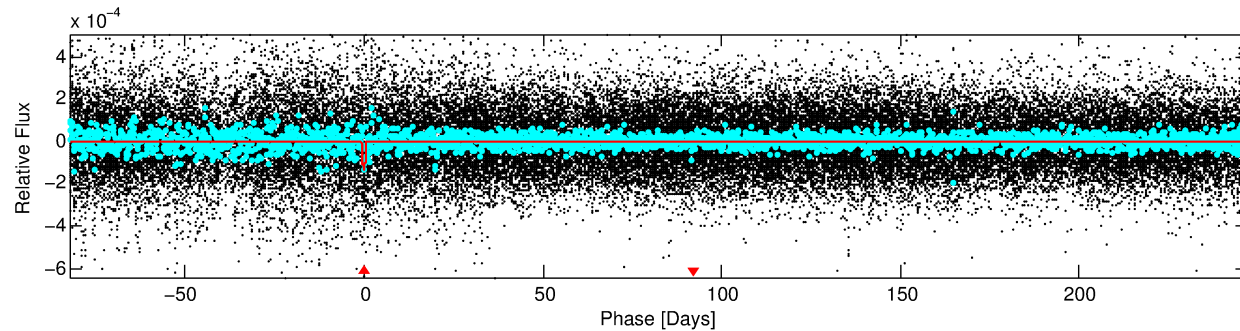
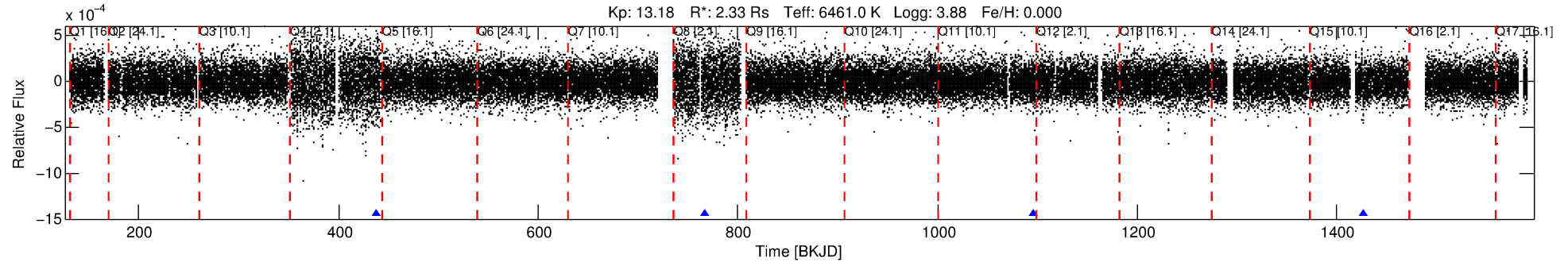
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011962496-01

No Significant Match Found

DV One-Page Summary

KIC: 11962496 Candidate: 1 of 1 Period: 329.537 d



DV Fit Results:

Period = 329.53694 [0.01671] d
Epoch = 437.4835 [0.0368] BKJD
Rp/R* = 0.0120 [0.0035]
a/R* = 91.94 [145.93]
b = 0.85 [0.52]
Seff = 7.36 [3.83]
Teq = 420 [55] K
Rp = 3.05 [1.40] Re
a = 1.0746 [0.3493] AU
Ag = 4217.84 [3425.47] [1.23σ]
Teffp = 5233 [845] K [5.68σ]

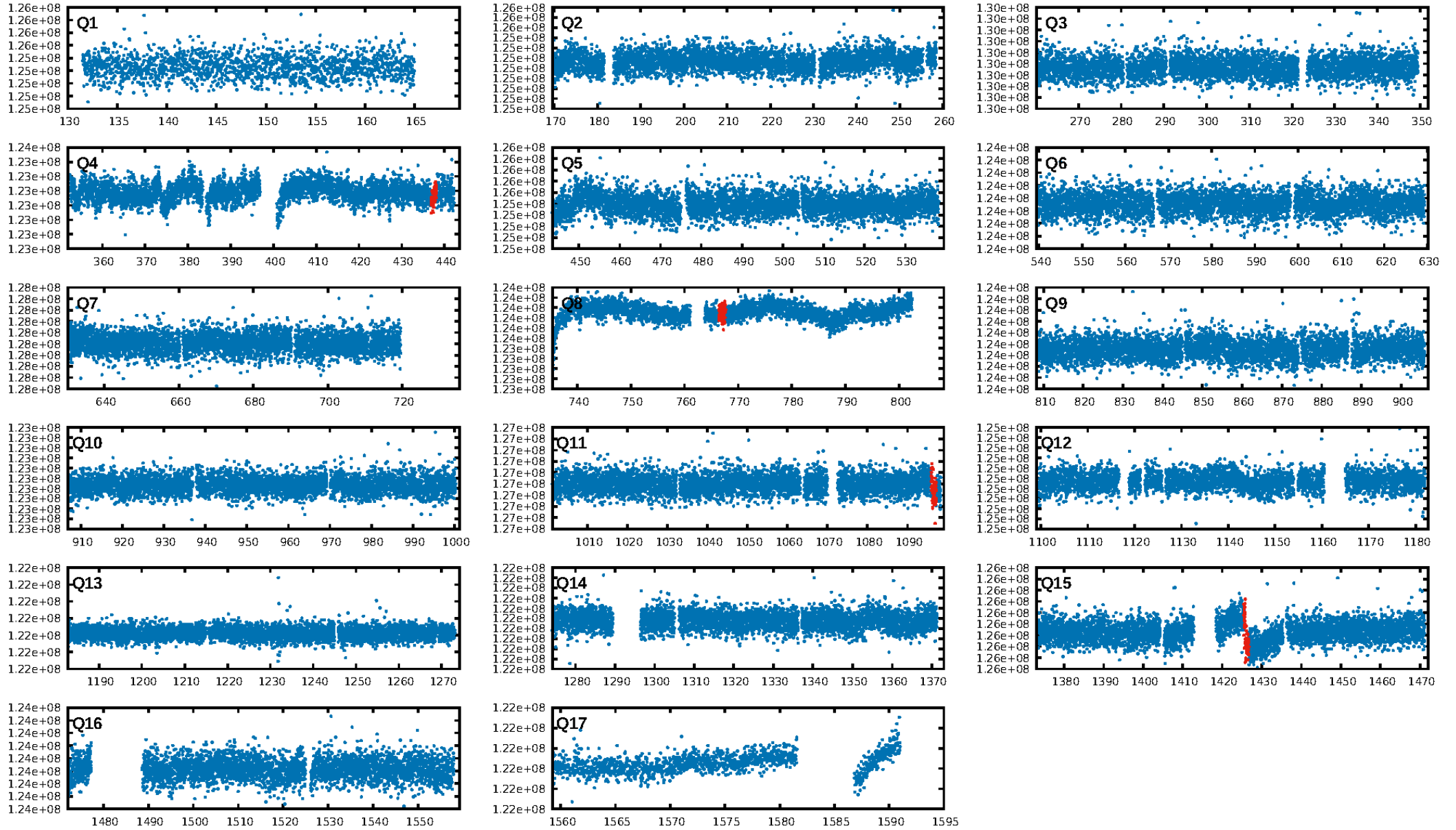
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 20.1%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.38e-14
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.7372
Centroid-sig: 2.3%
Centroid-so: 1.935 arcsec [1.46σ]
OotOffset-rm: 1.330 arcsec [0.68σ]
KicOffset-rm: 1.217 arcsec [0.63σ]
OotOffset-st: 0/0/2/0 [2]
KicOffset-st: 0/0/2/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

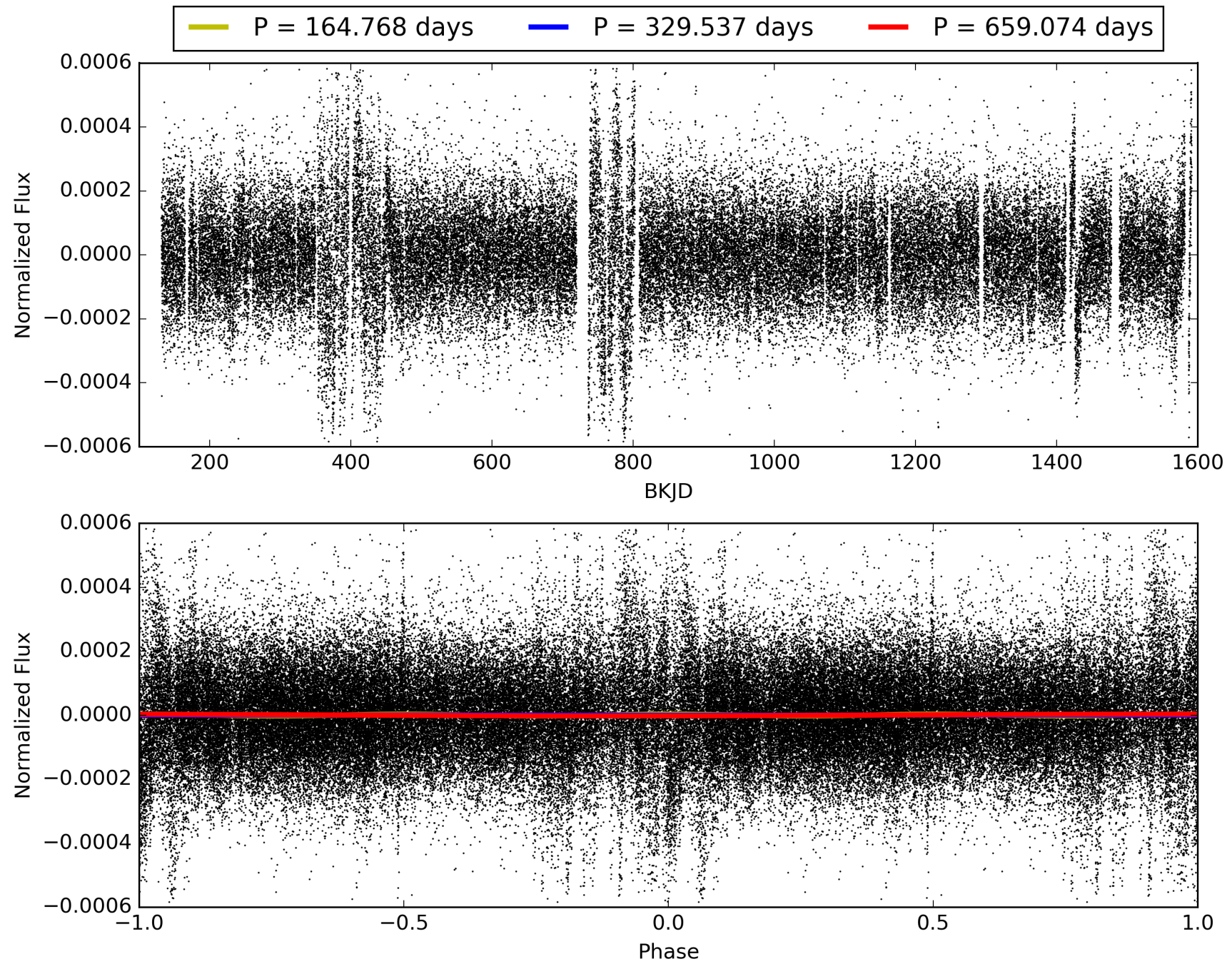
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 19:48:33 Z

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

TCE 011962496-01, PDC Light Curves

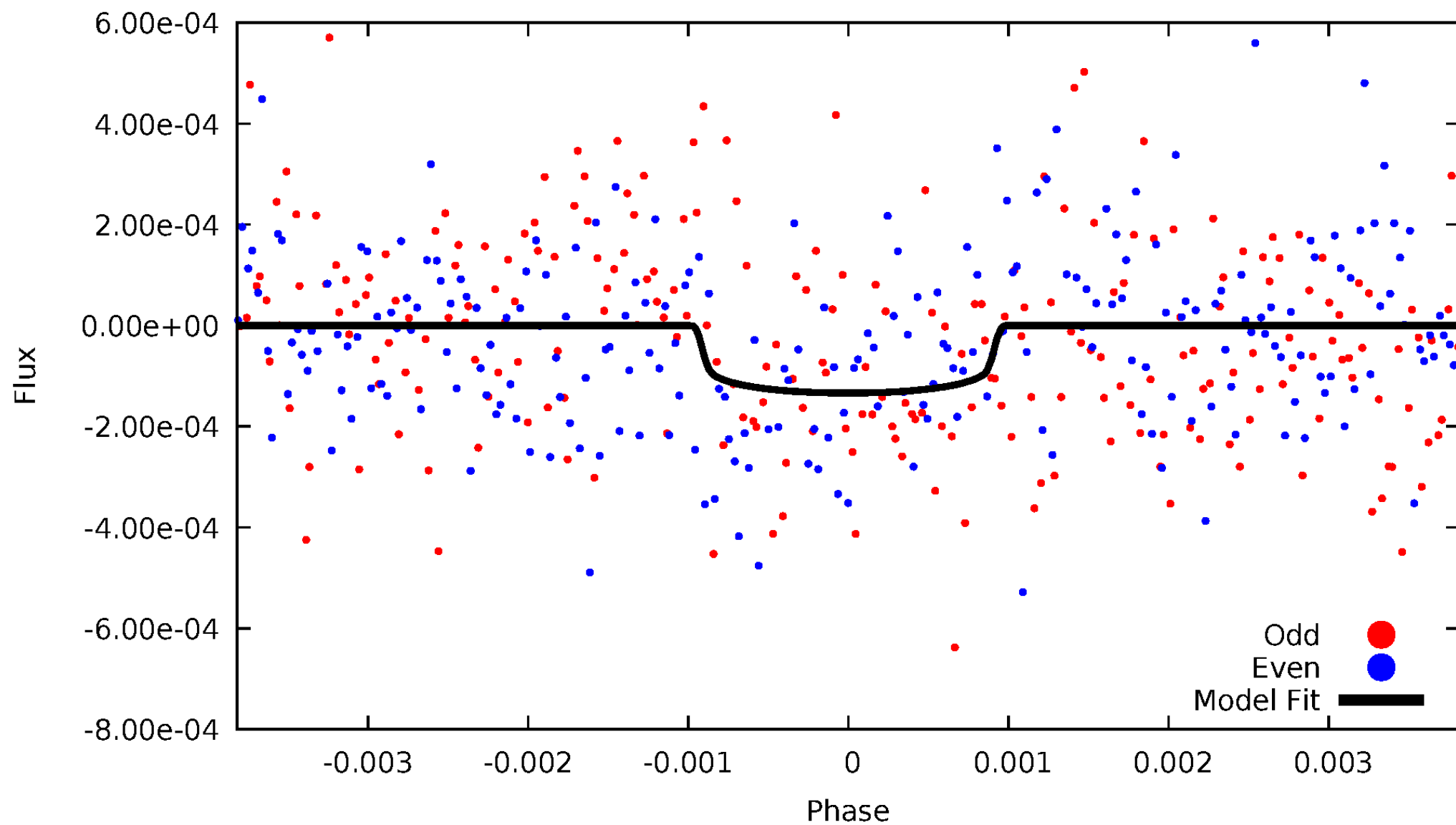


TCE 011962496-01



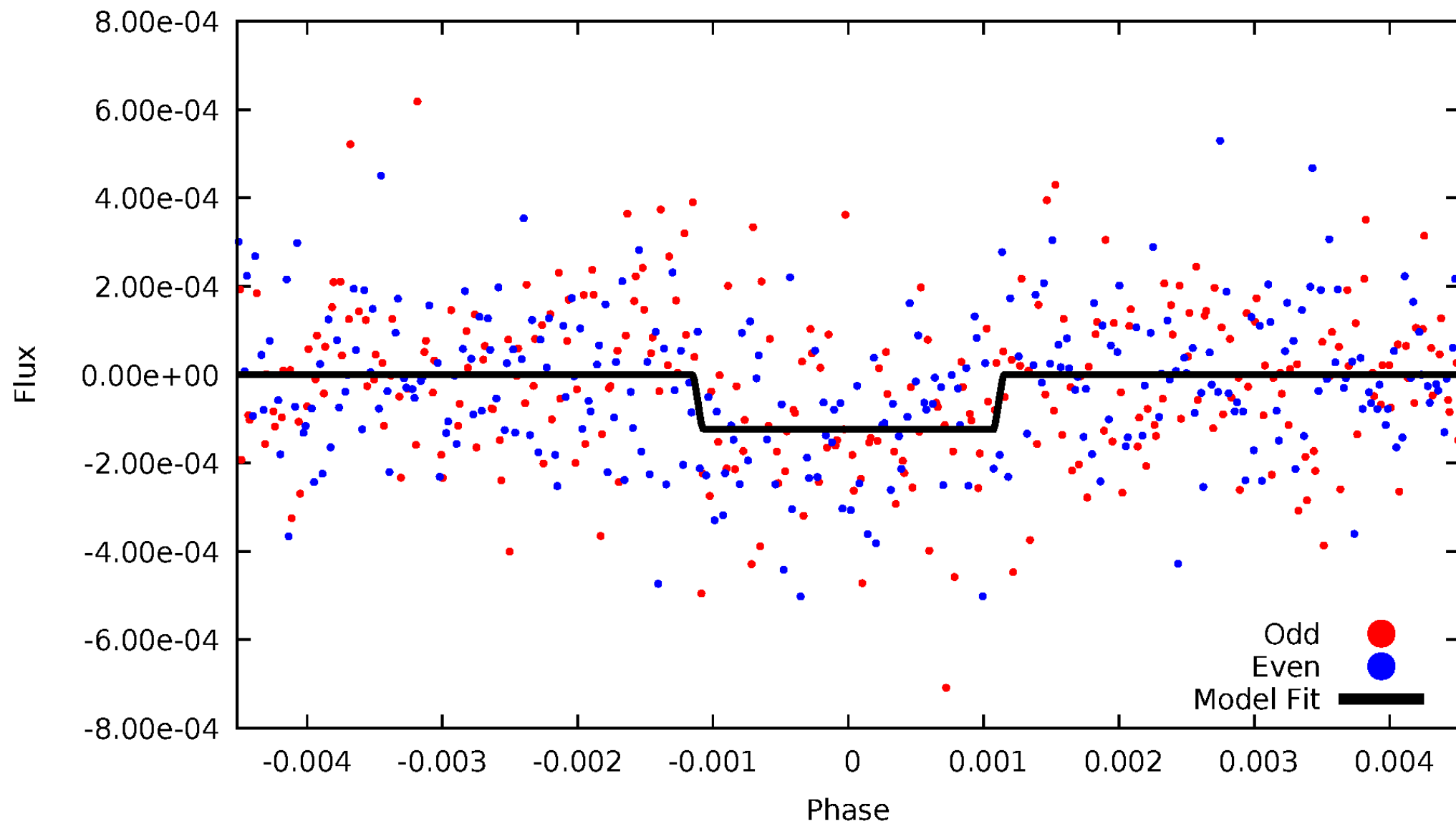
DV Odd/Even

TCE 011962496-01

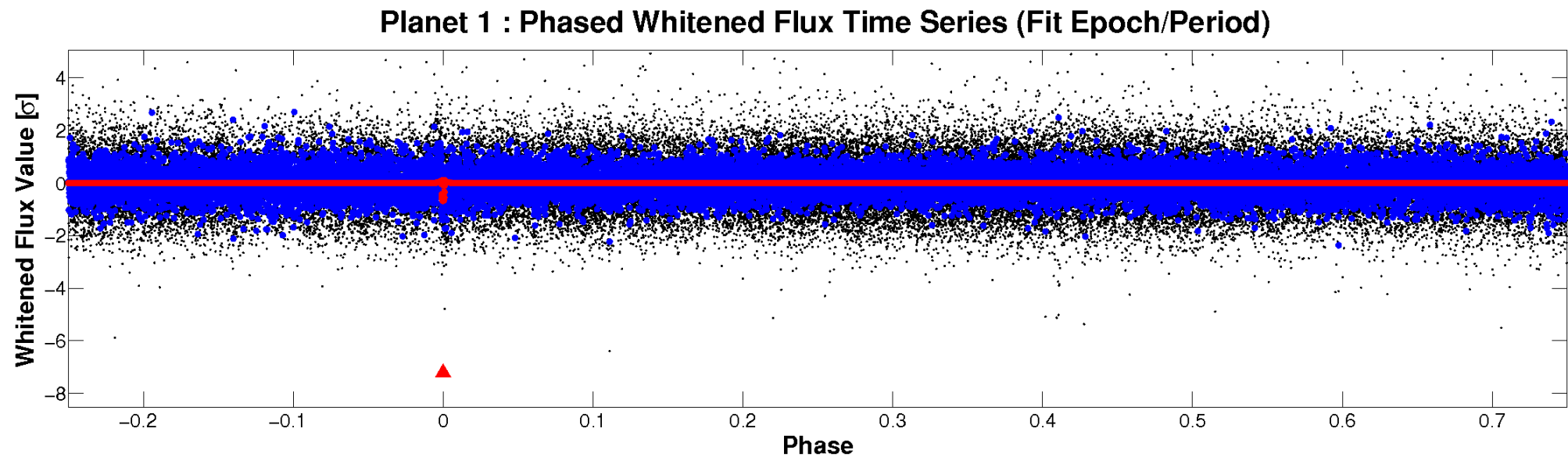
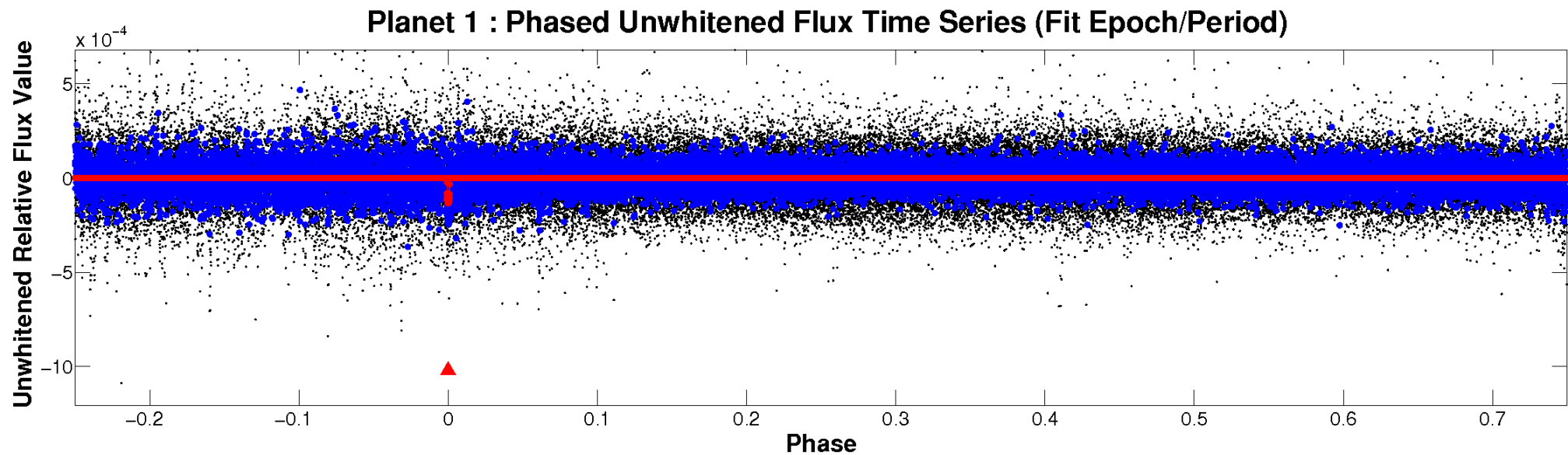


ALT Odd/Even

TCE 011962496-01



Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 011962496-01 P=329.536941 Days $T_0=437.483499$ (BKJD)



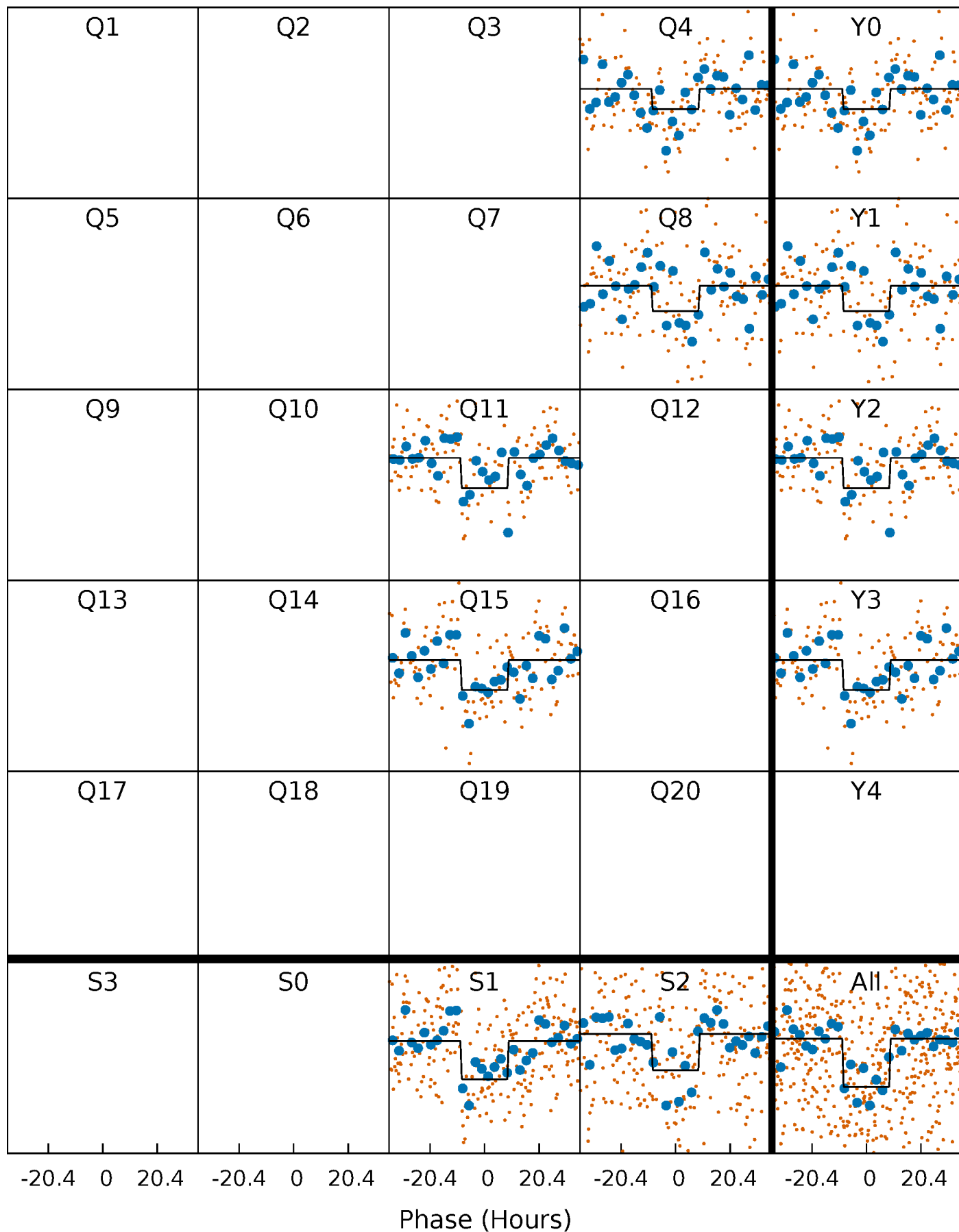
DV Quarter-Phased Transit Curves

TCE 011962496-01 P=329.536941 Days $T_0=437.483499$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

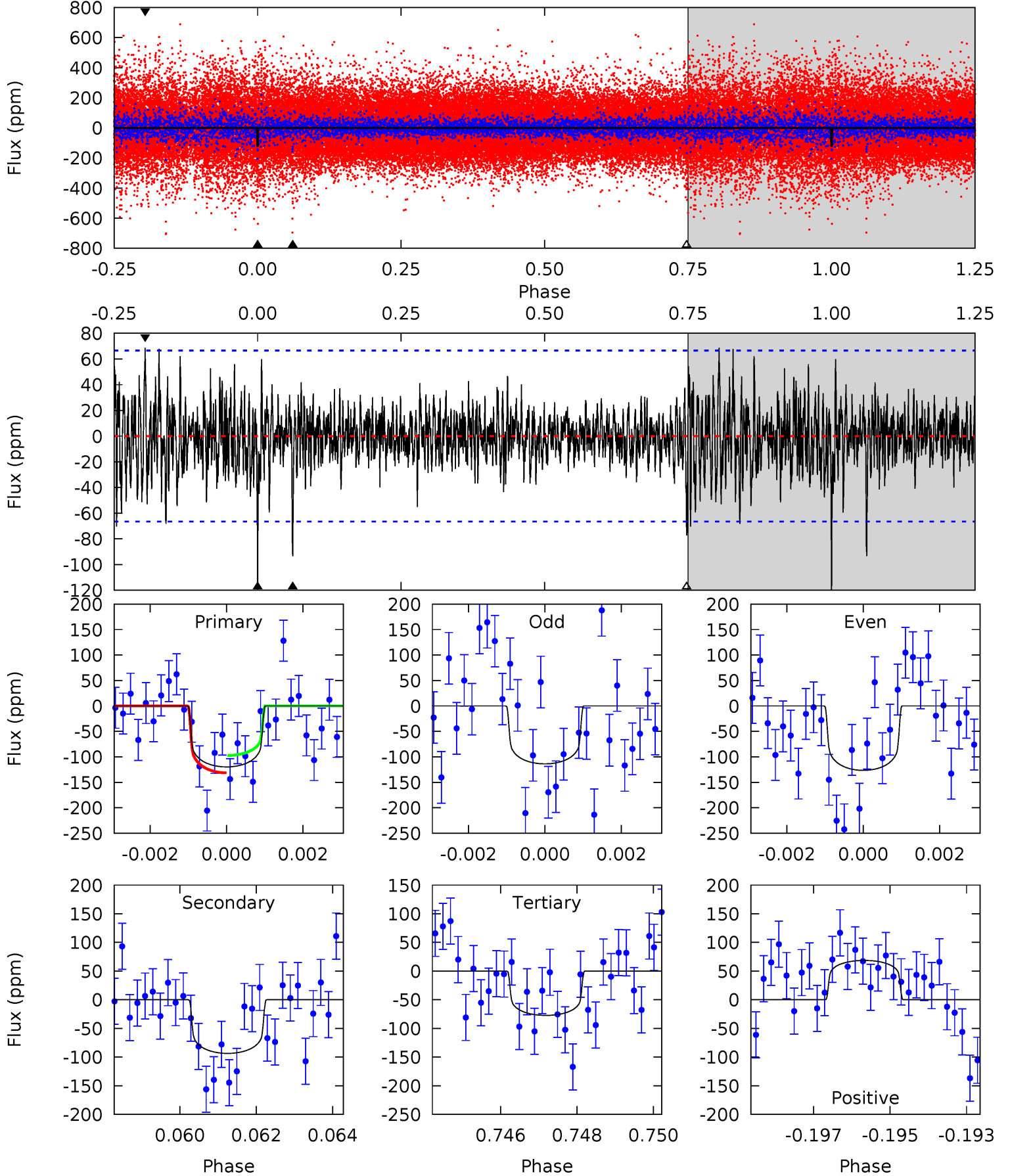
TCE 011962496-01 P=329.586512 Days $T_0=437.415271$ (BKJD)



DV Model-Shift Uniqueness Test

011962496-01, P = 329.536941 Days, E = 107.946558 Days

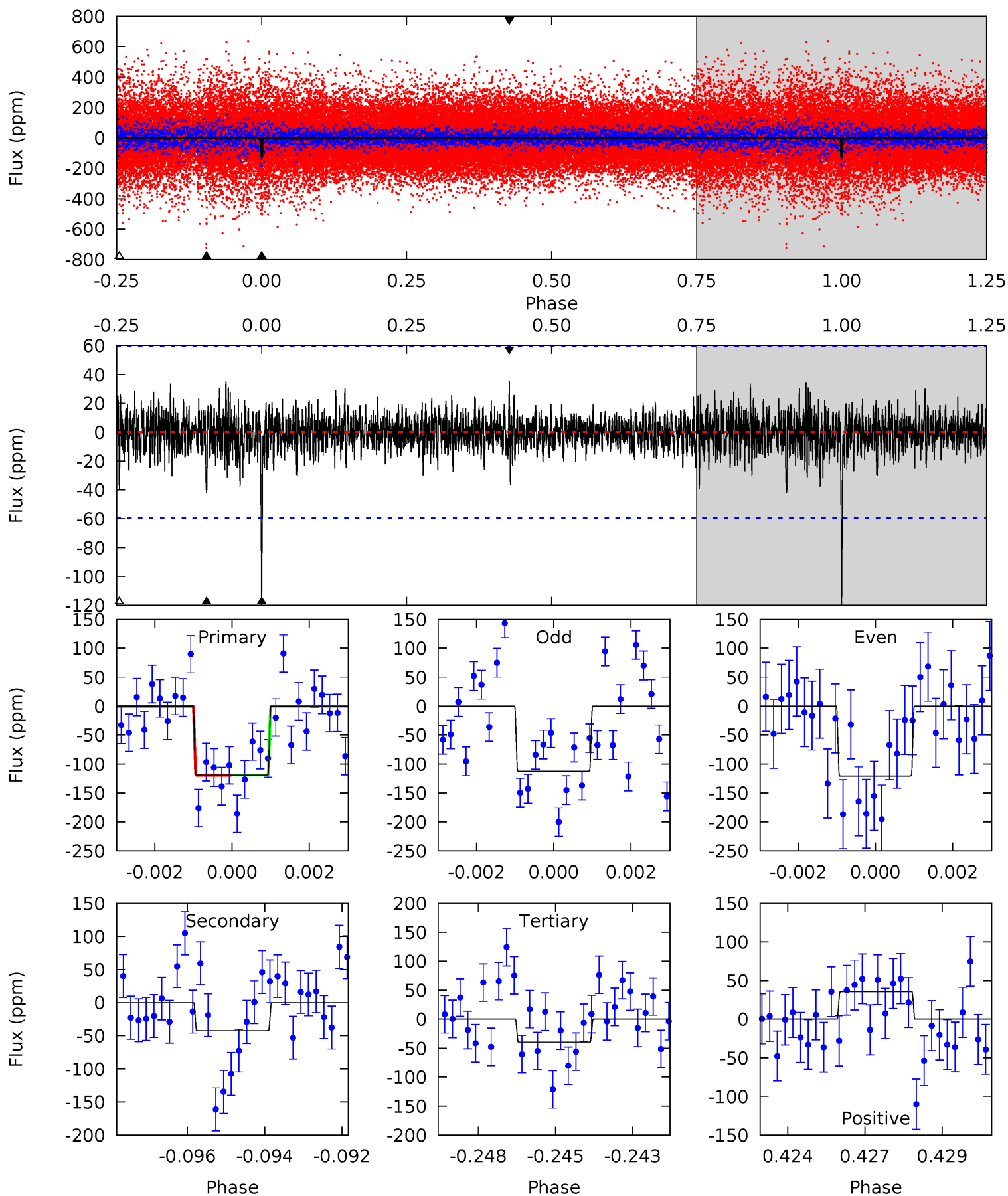
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.60	7.50	6.19	5.50	5.33	3.10	1.38	3.40	4.10	1.31	2.00	0.51	0.95	0.36	1.35



Alt Model-Shift Uniqueness Test

011962496-01, $P = 329.586512$ Days, $E = 107.828759$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	3.77	3.51	3.17	5.30	3.05	0.81	7.13	7.48	0.25	0.60	0.37	0.99	0.23	0.02



Stellar Parameters For KIC 011962496

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6461^{+162}_{-194}	$3.885^{+0.292}_{-0.117}$	$0.000^{+0.250}_{-0.250}$	$2.333^{+0.444}_{-0.824}$	$1.525^{+0.174}_{-0.348}$	$0.169^{+0.319}_{-0.062}$
	+3%/-3%	+8%/-3%	+inf%/-inf%	+19%/-35%	+11%/-23%	+189%/-36%
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 011962496-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-94 ± 12	$2.90^{+1.06}_{-0.99}$	578^{+38}_{-52}	5766^{+1186}_{-659}	6903^{+9117}_{-3111}
Alt.	-42 ± 11	$2.60^{+1.06}_{-0.84}$	575^{+38}_{-48}	5028^{+948}_{-632}	3824^{+5125}_{-2055}

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

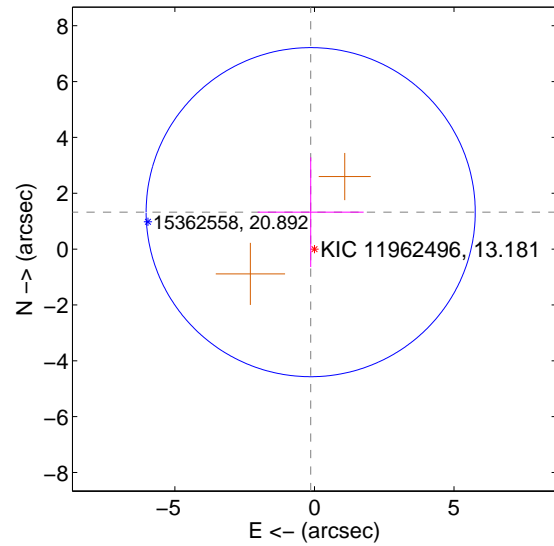
Supplemental centroid analysis for 011962496-01. Kepler magnitude: 13.18. Transit SNR 6.97

There are 0 quarters with good PRF difference image offsets

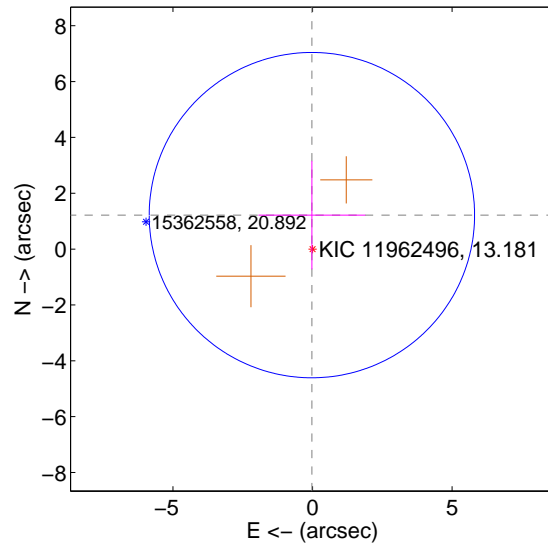
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.330 ± 1.965	0.68	0.134 ± 1.898	1.323 ± 1.965
PRF-fit source offset from KIC position	1.217 ± 1.942	0.63	0.023 ± 1.917	1.217 ± 1.942
photometric centroid source offset	1.93 ± 1.33	1.46	0.80 ± 1.07	-1.76 ± 1.37

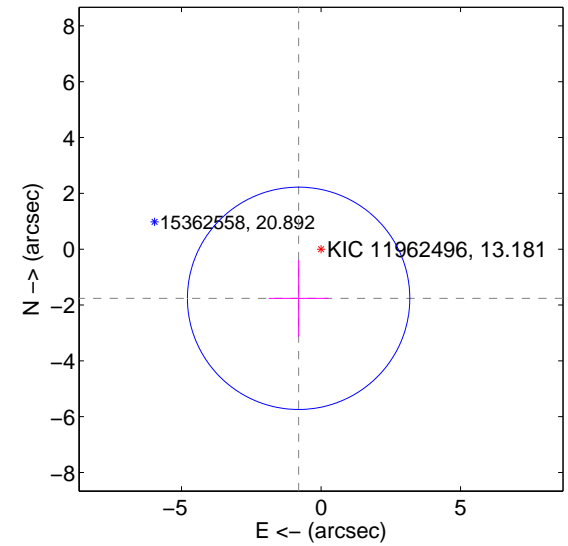
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

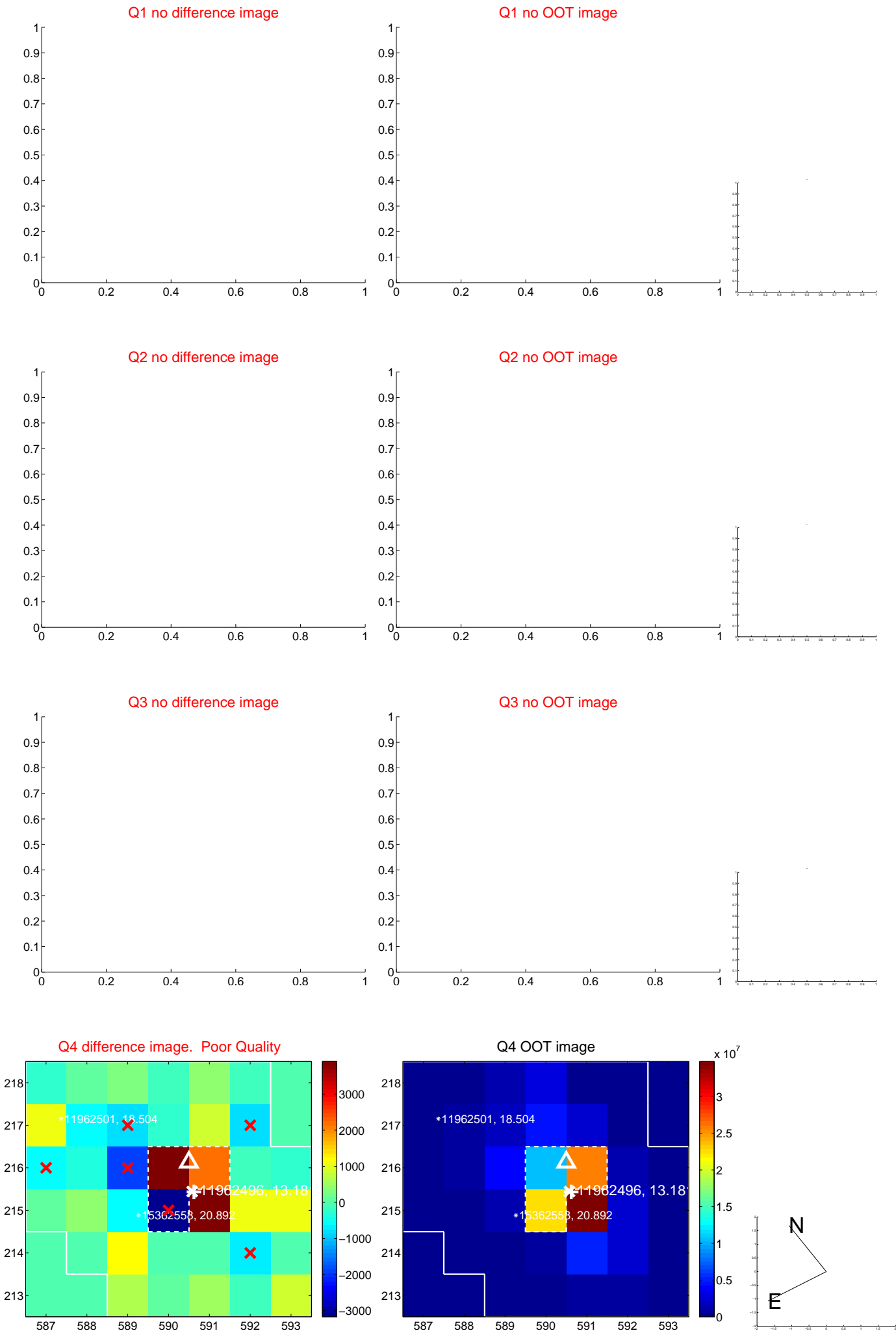


offset from photometric centroids

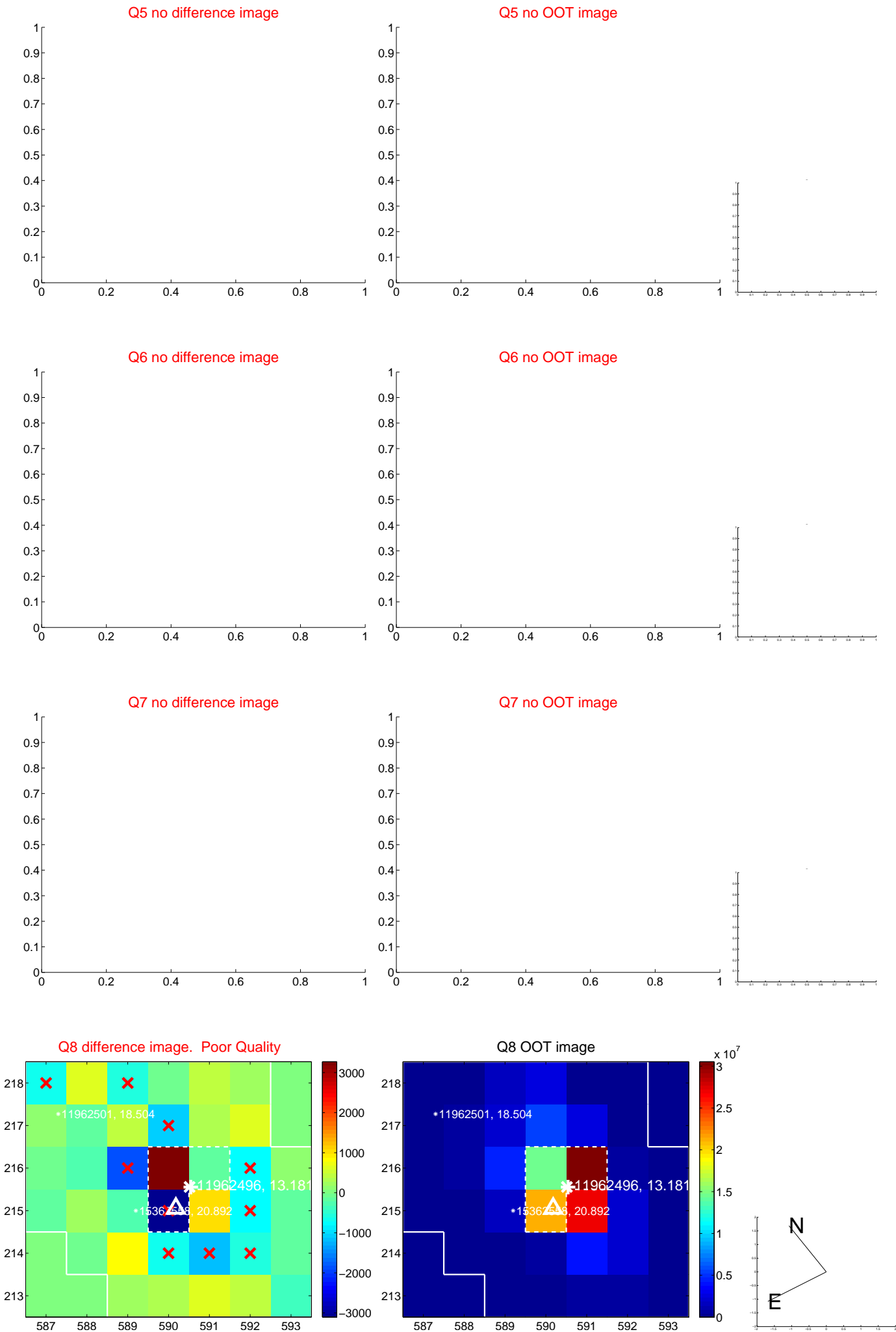


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



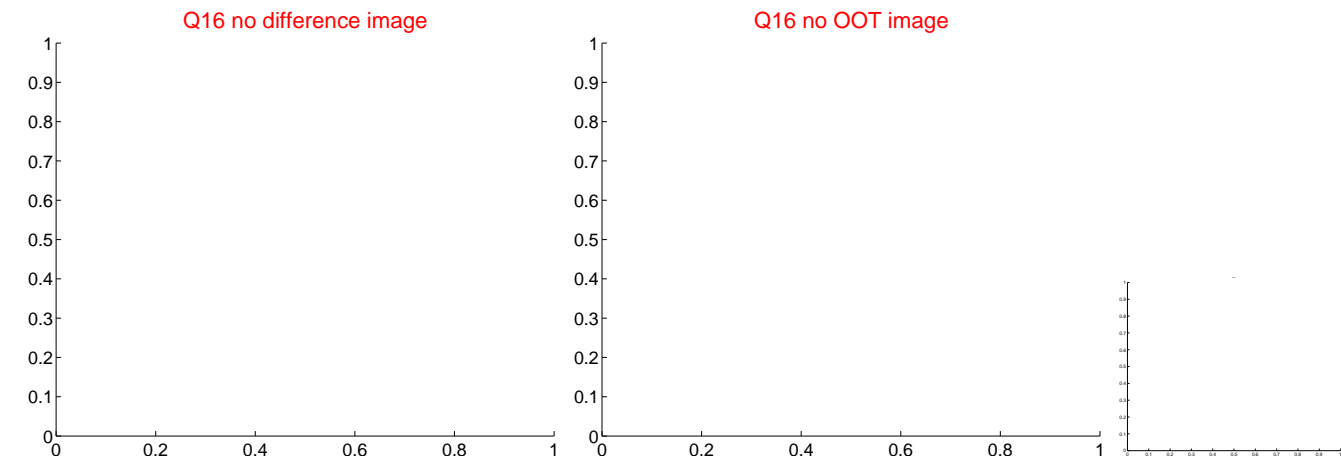
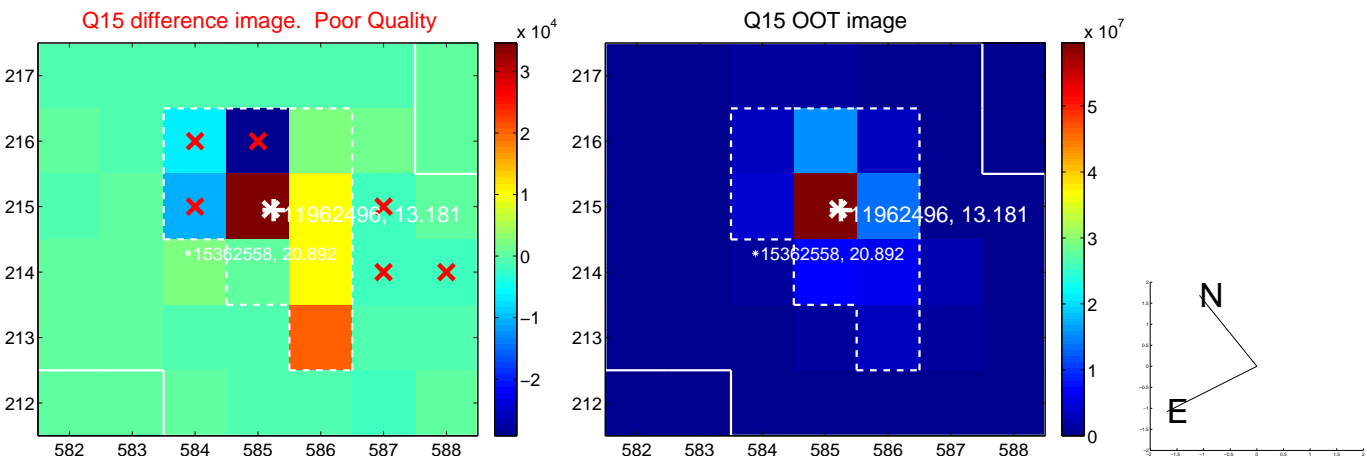
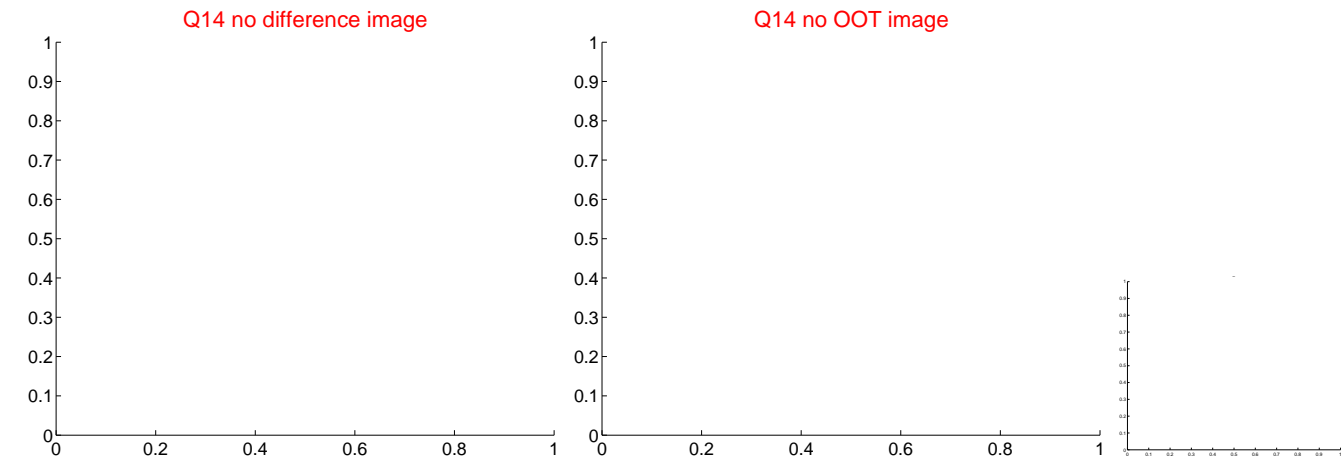
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



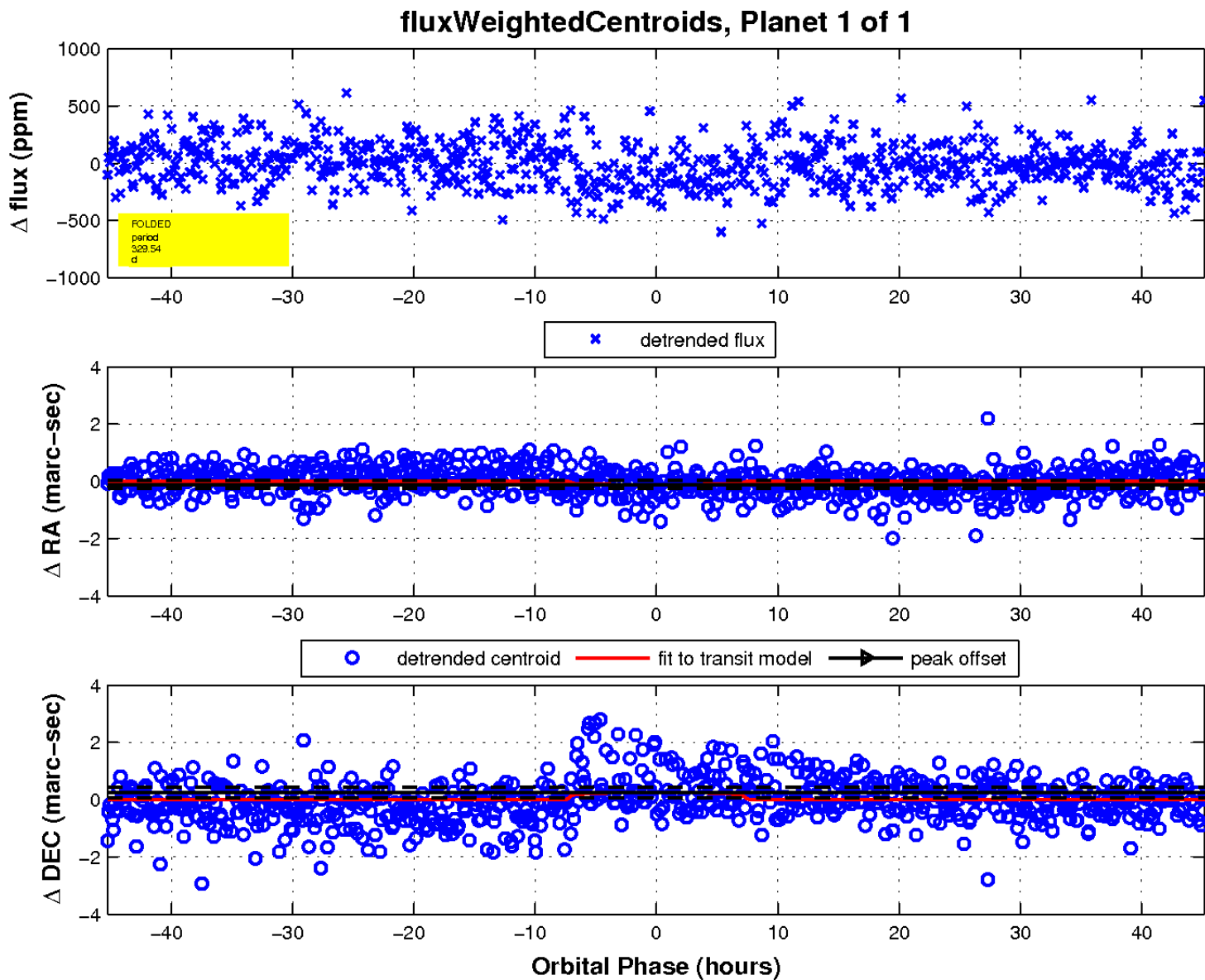
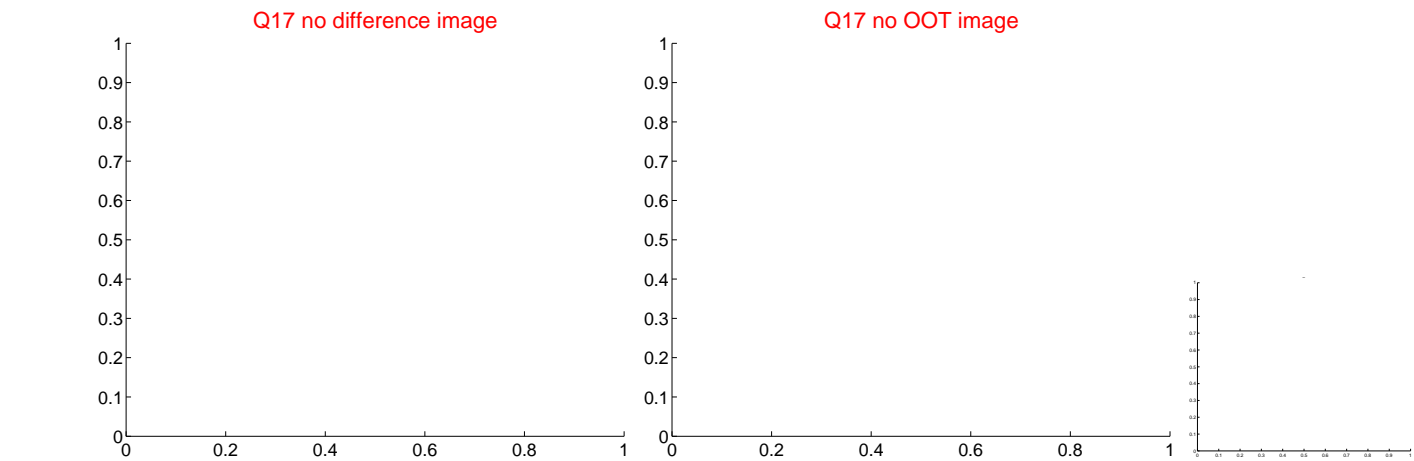
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UKIRT Image

Declination

