

KIC 007692405

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})
007692405-01	OBS	No	479.513806	380.807809	416.0	15.729	7.7	7.9	0.92	6086	2.04	0.72

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007692405-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

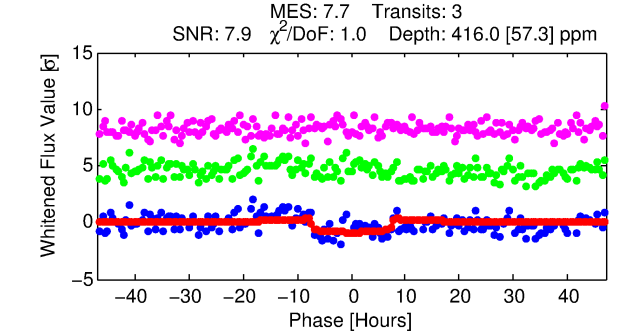
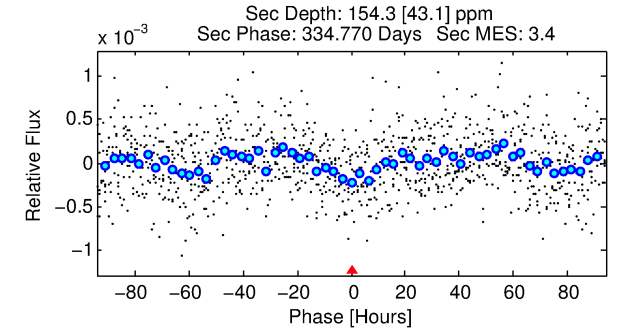
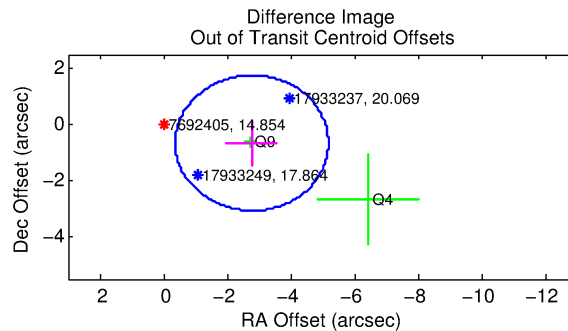
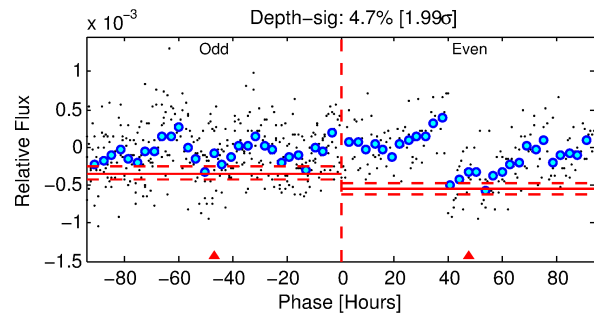
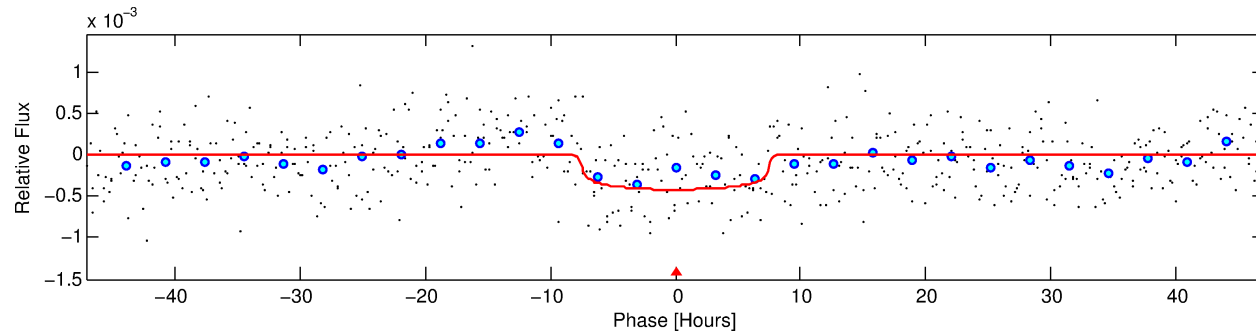
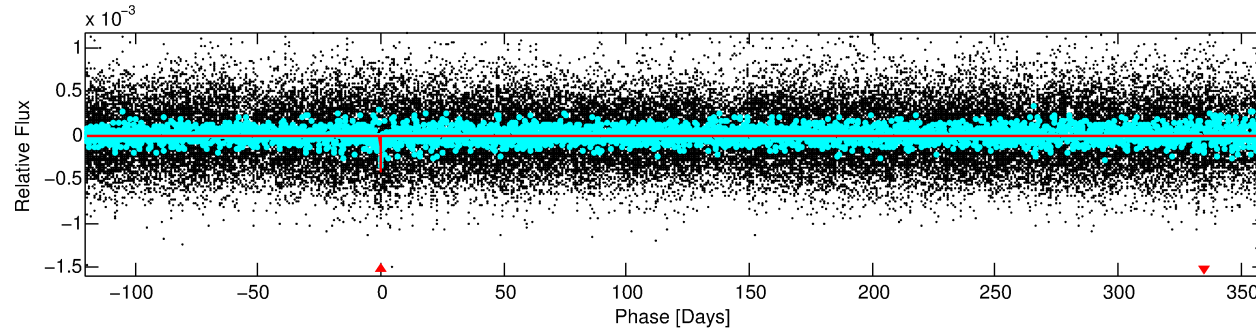
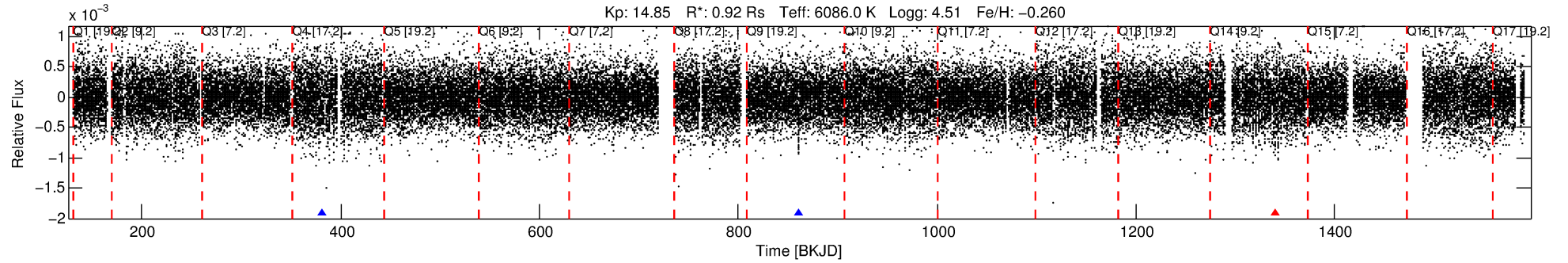
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007692405-01

No Significant Match Found

DV One-Page Summary

KIC: 7692405 Candidate: 1 of 1 Period: 479.514 d



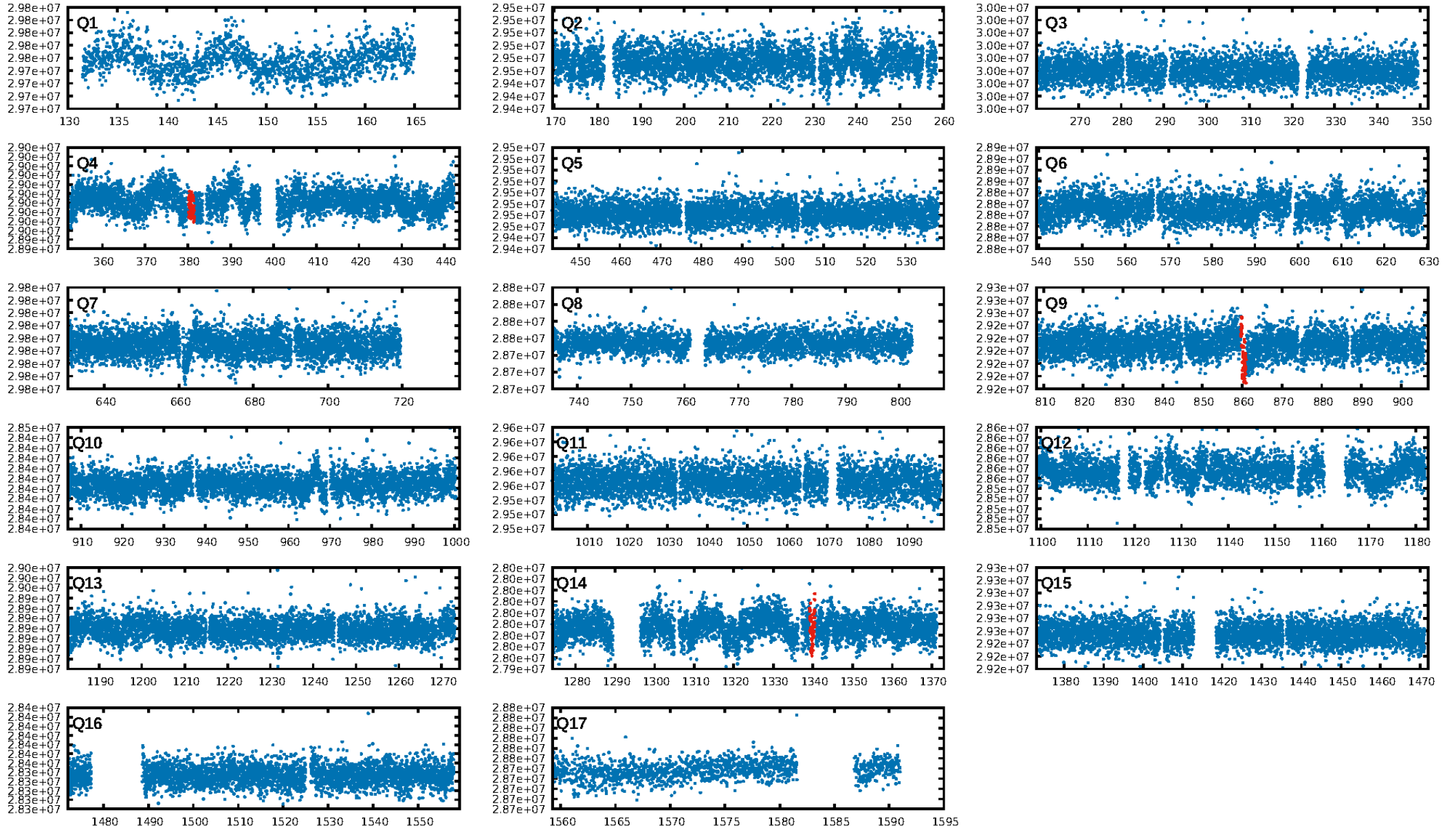
DV Fit Results:

Period = 479.51381 [0.01830] d
Epoch = 380.8078 [0.0240] BKJD
Rp/R* = 0.0203 [0.0057]
a/R* = 160.98 [219.73]
b = 0.75 [0.80]
Seff = 0.72 [0.29]
Teq = 235 [23] K
Rp = 2.04 [0.84] Re
a = 1.2006 [0.3064] AU
Ag = 29447.71 [21602.11] [1.36σ]
Teffp = 4763 [766] K [5.91σ]

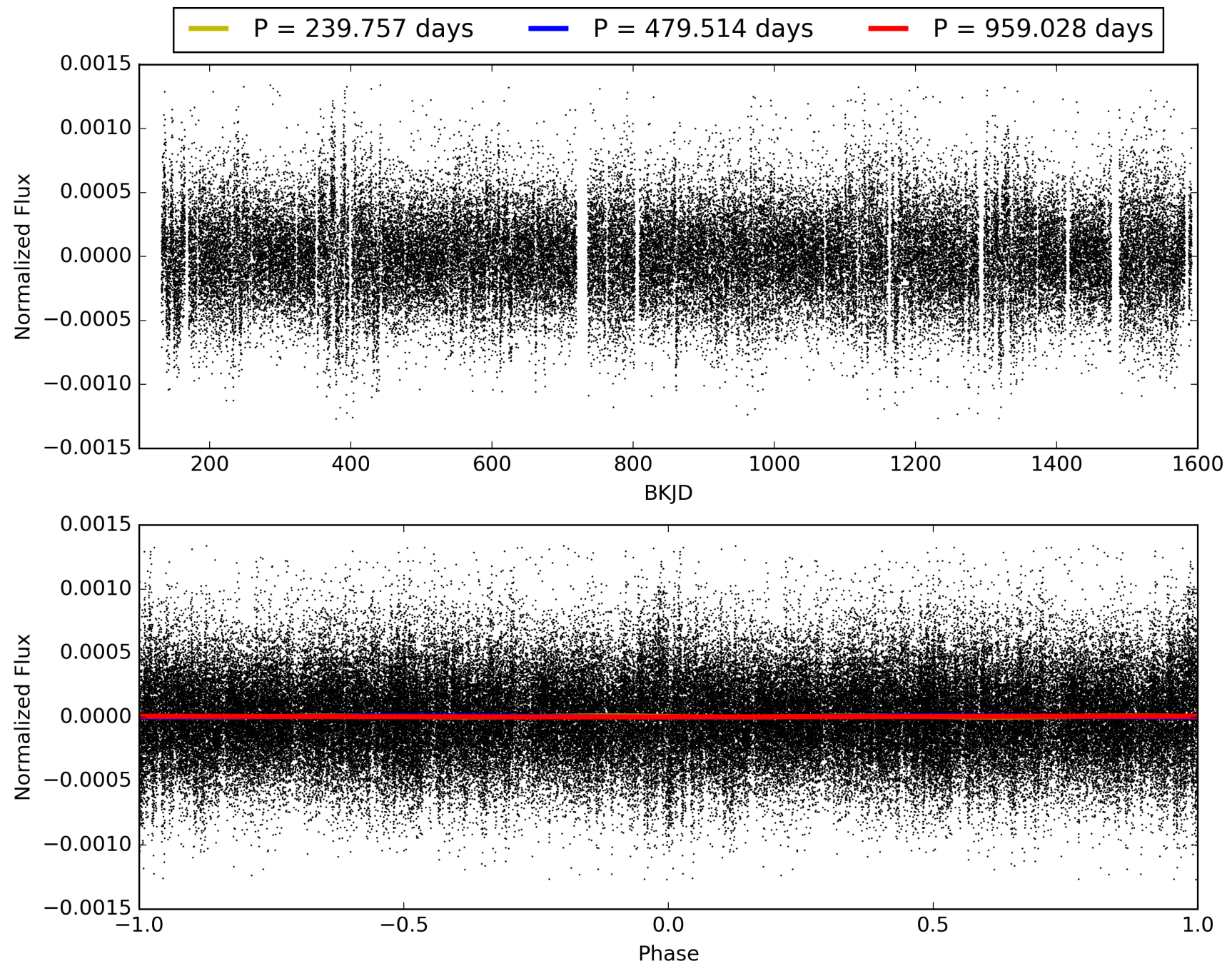
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 7.1%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: 5.60e-09
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 3.773
Centroid-sig: 26.5%
Centroid-so: 1.694 arcsec [0.85σ]
OotOffset-rm: 2.856 arcsec [3.56σ]
KicOffset-rm: 2.875 arcsec [2.44σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 007692405-01, PDC Light Curves

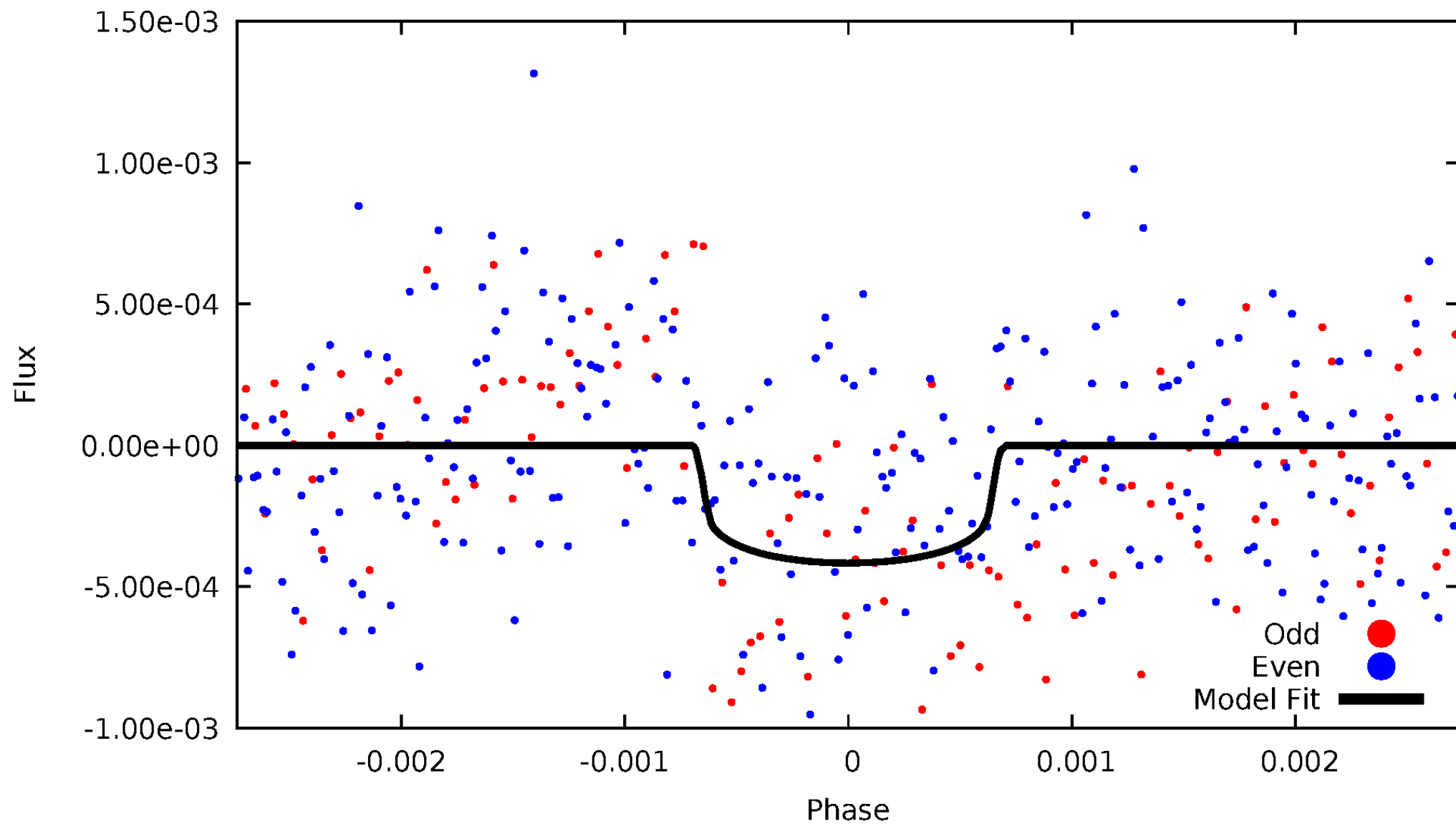


TCE 007692405-01



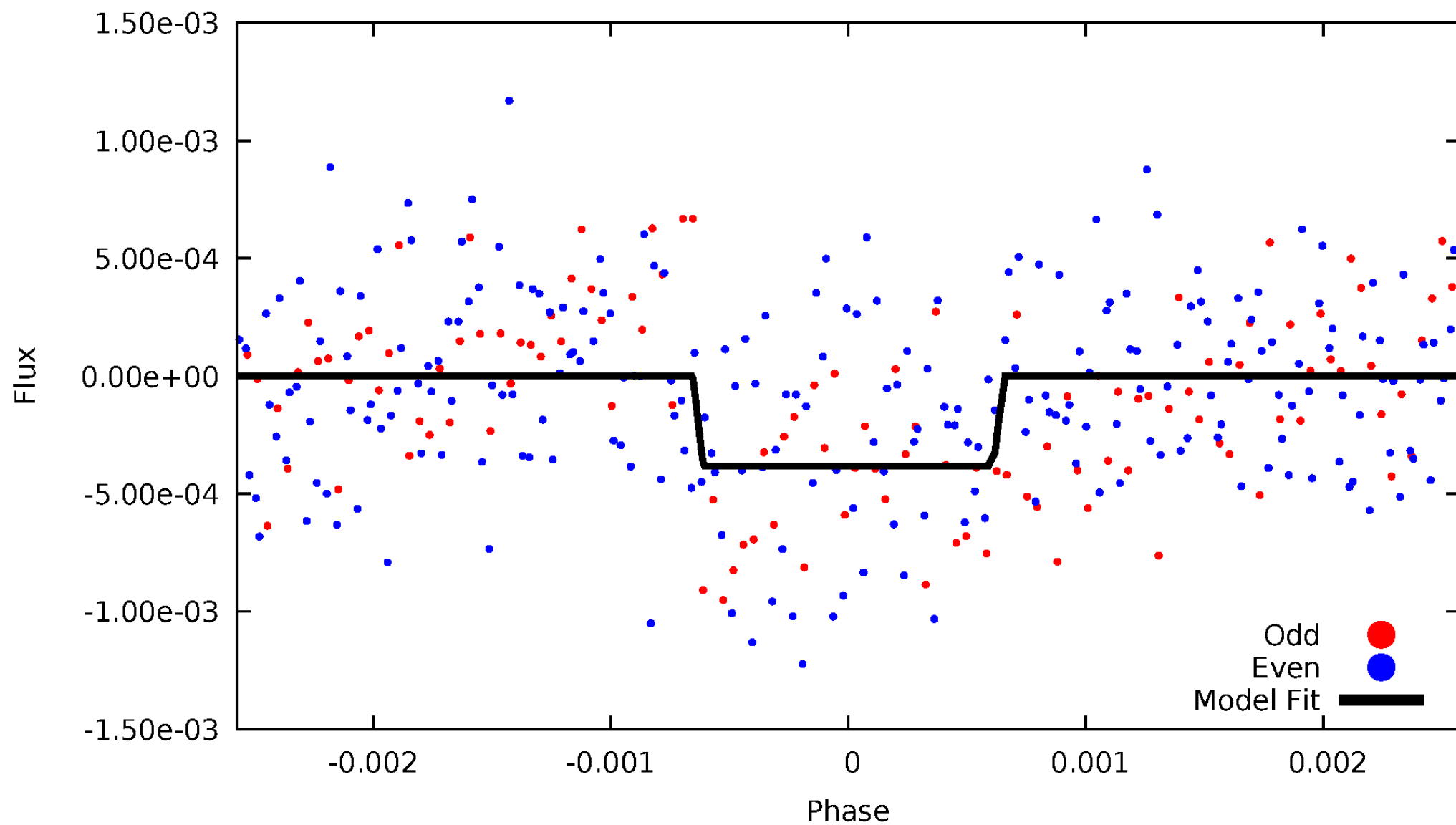
DV Odd/Even

TCE 007692405-01



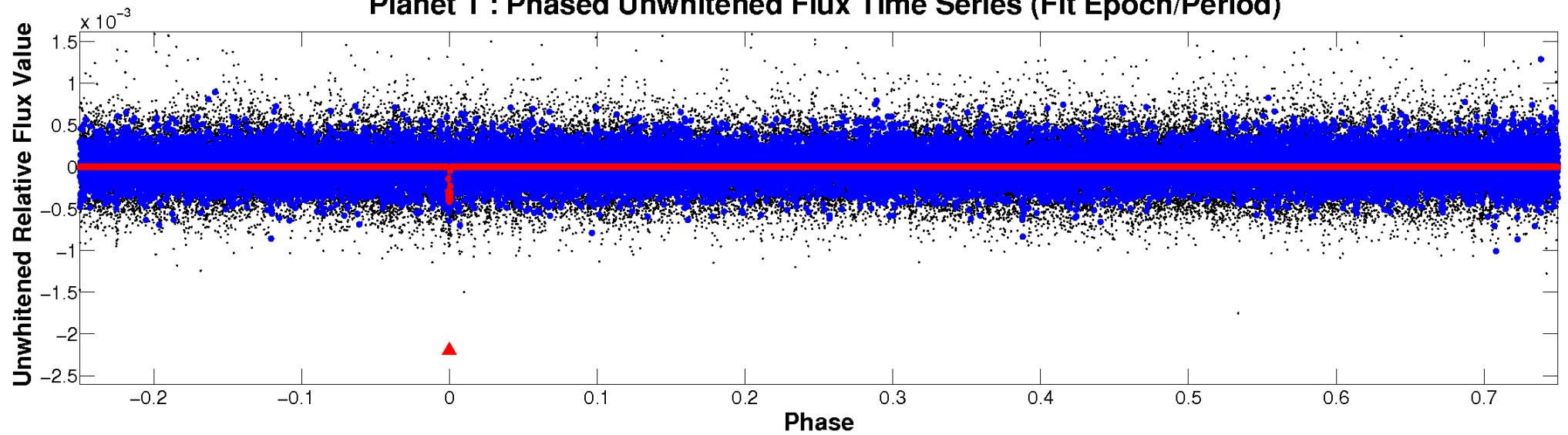
ALT Odd/Even

TCE 007692405-01

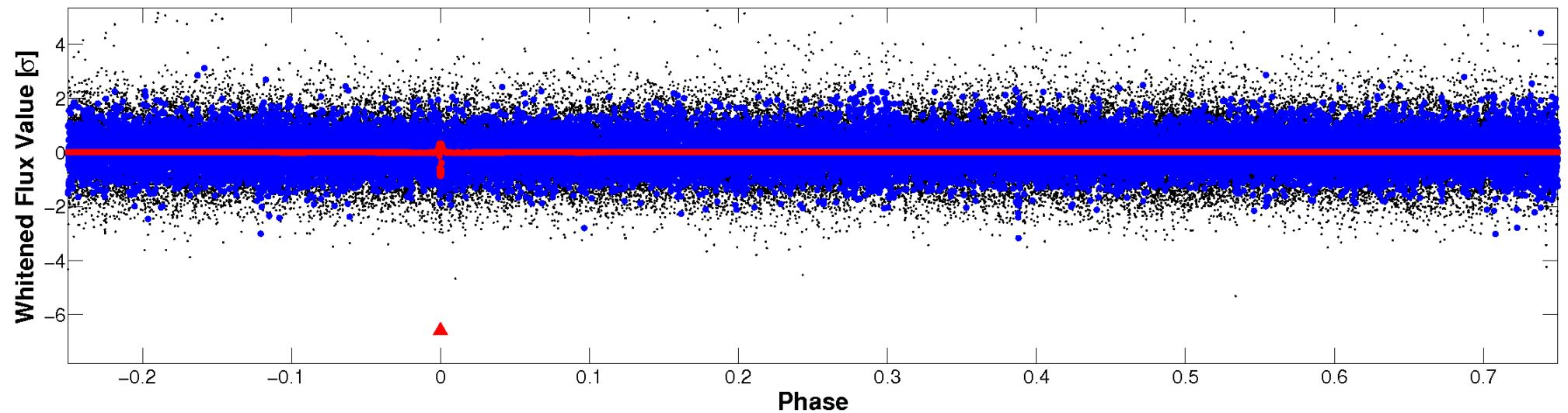


Non-Whitened Vs. Whitened Light Curve

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



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



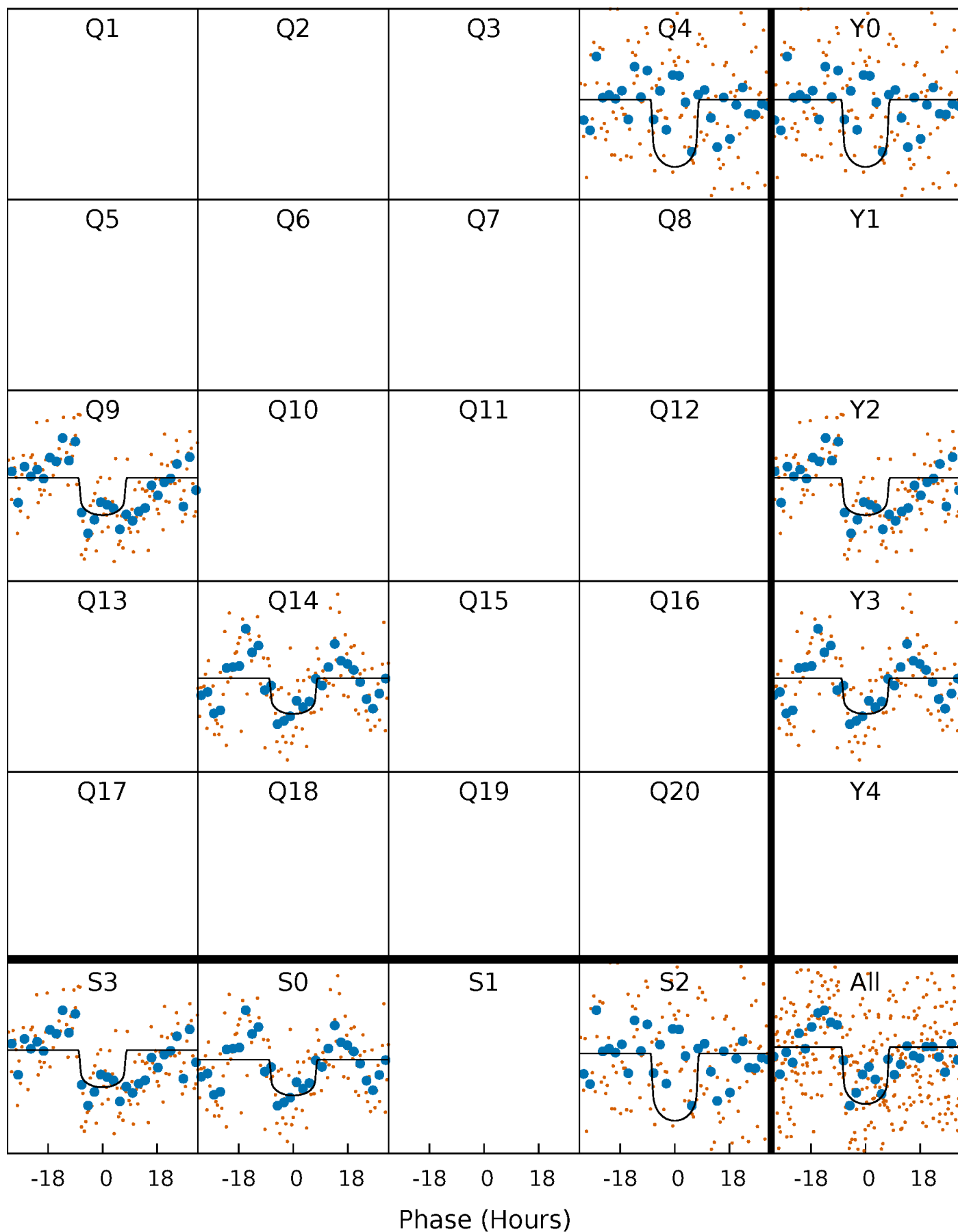
PDC Quarter-Phased Transit Curves

TCE 007692405-01 P=479.513806 Days $T_0=380.807809$ (BKJD)



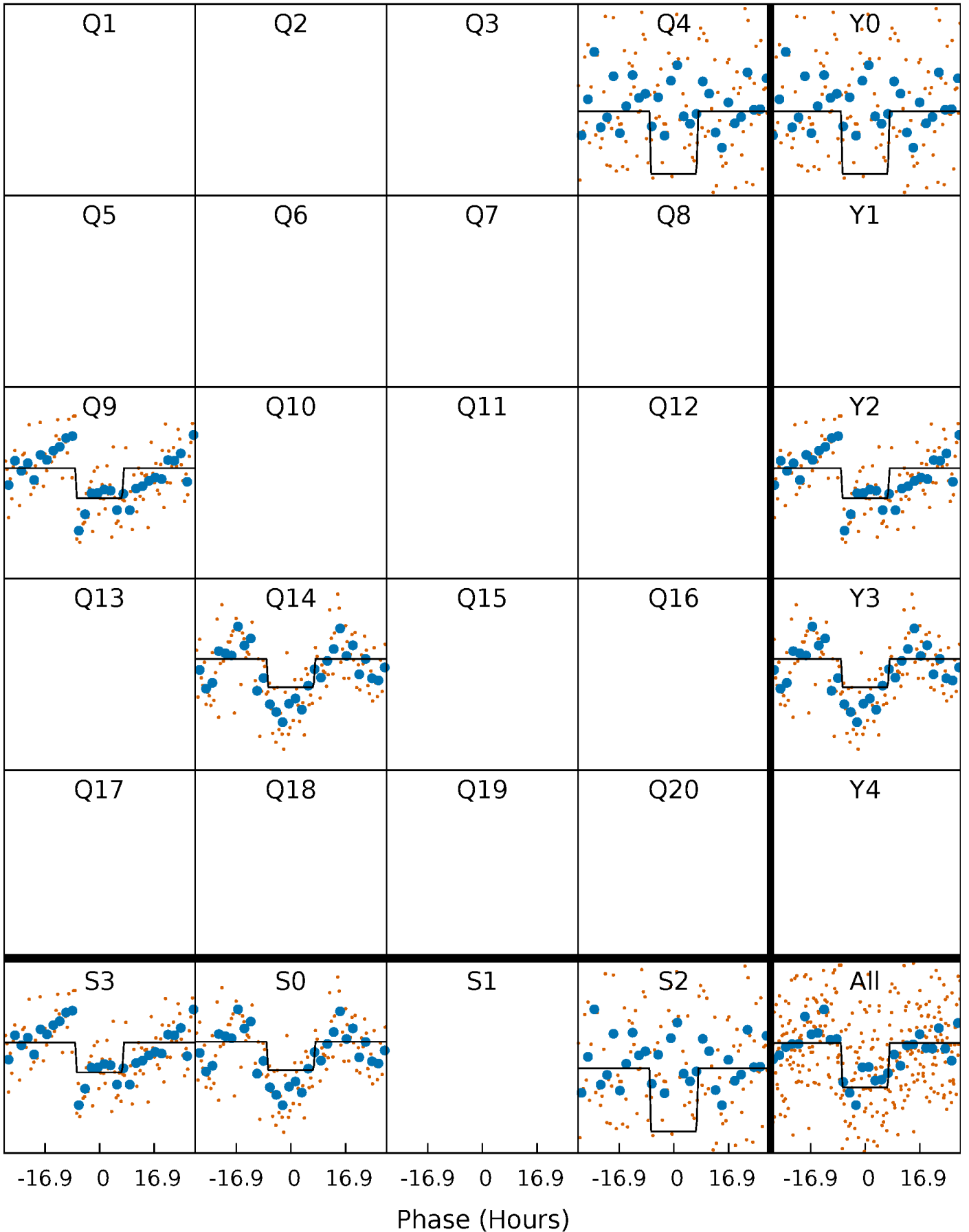
DV Quarter-Phased Transit Curves

TCE 007692405-01 P=479.513806 Days $T_0=380.807809$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

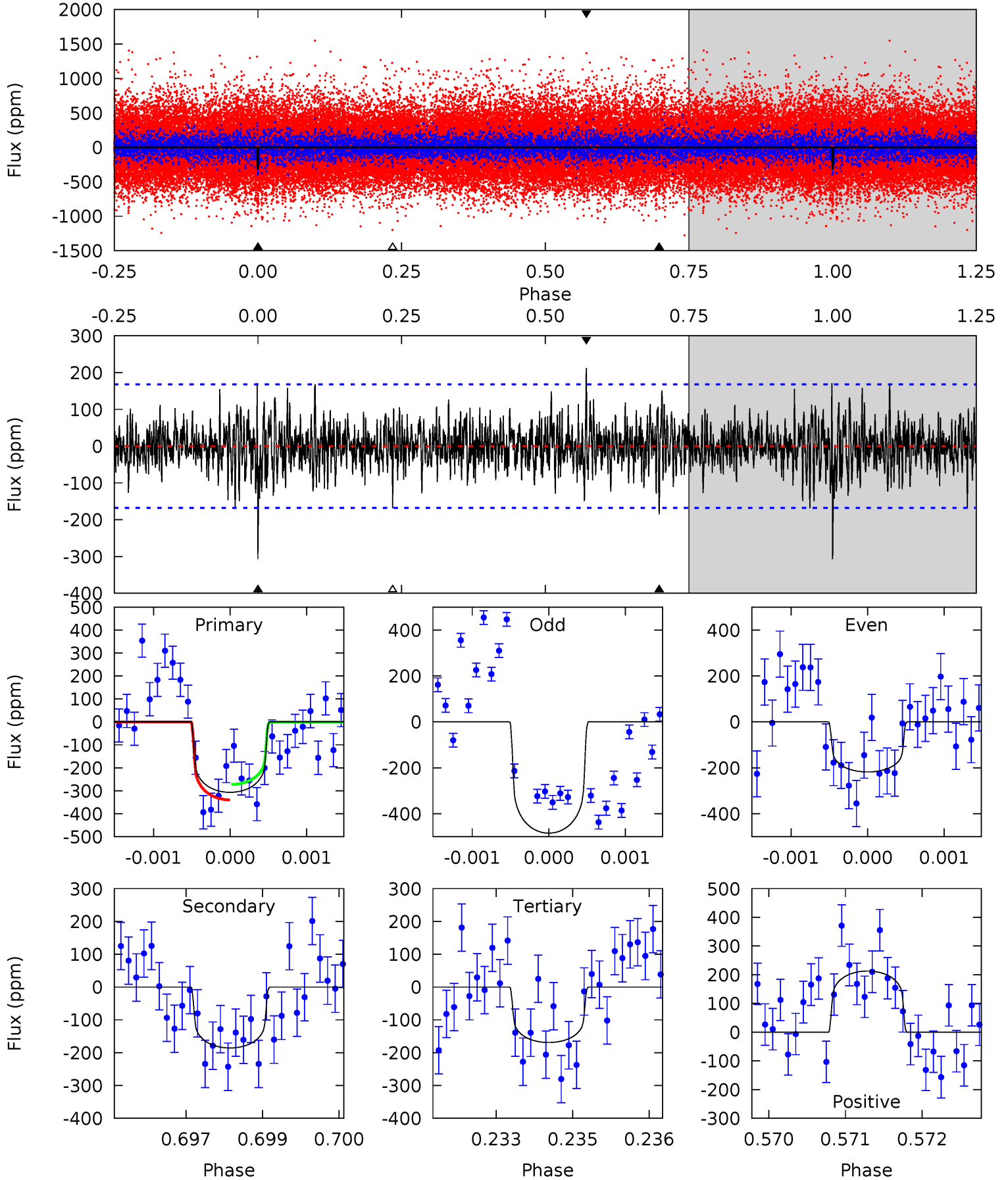
TCE 007692405-01 P=479.521164 Days $T_0=380.802771$ (BKJD)



DV Model-Shift Uniqueness Test

007692405-01, P = 479.513806 Days, E = 380.807809 Days

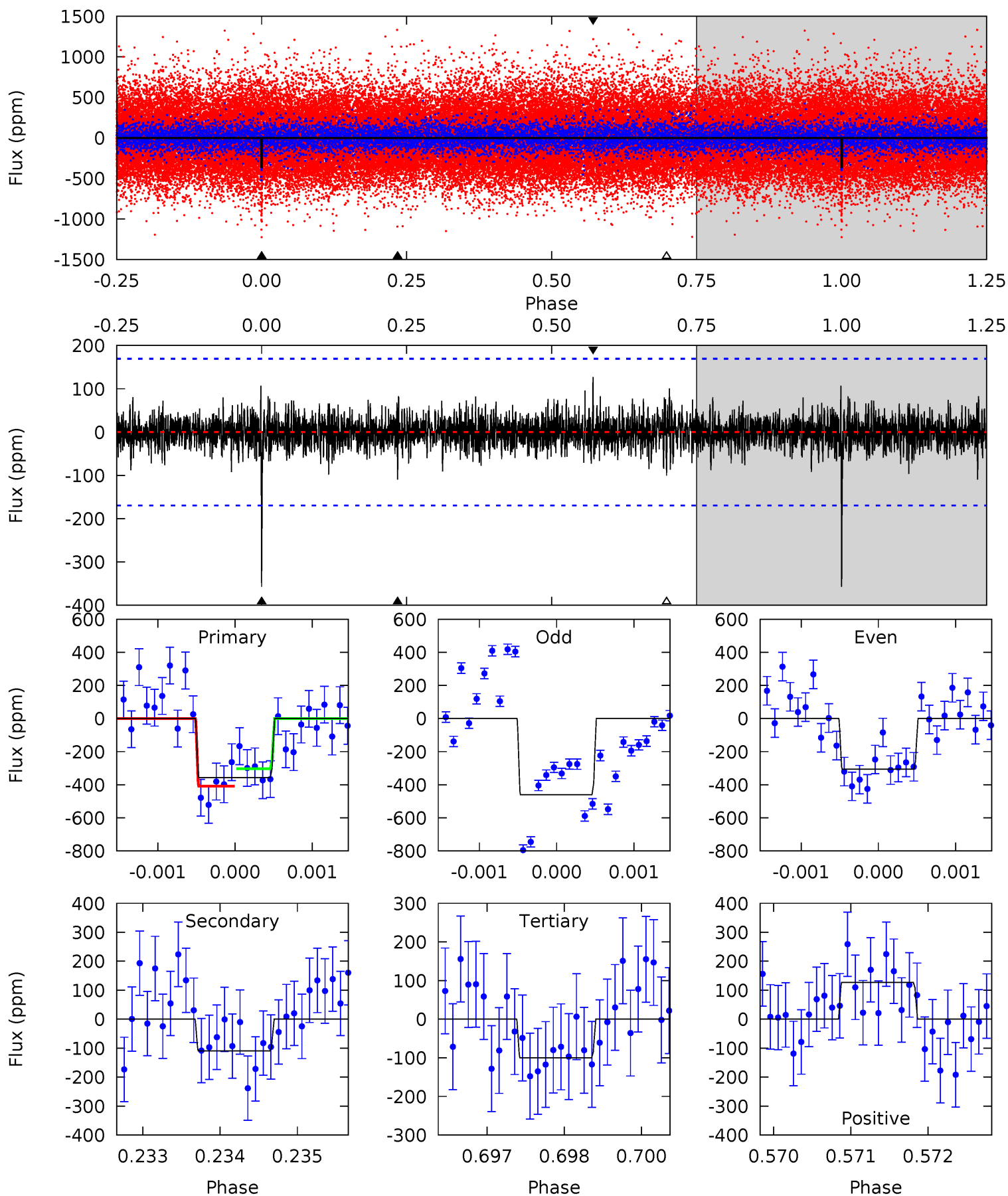
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.85	5.96	5.42	6.83	5.39	3.20	1.50	4.43	3.02	0.54	-0.87	4.13	0.77	0.41	1.08



Alt Model-Shift Uniqueness Test

007692405-01, P = 479.521164 Days, E = 380.802771 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	3.50	3.20	4.07	5.41	3.22	0.82	8.20	7.33	0.30	-0.57	2.37	0.77	0.26	1.67



Stellar Parameters For KIC 007692405

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6086^{+181}_{-200}	$4.511^{+0.052}_{-0.208}$	$-0.260^{+0.300}_{-0.300}$	$0.921^{+0.275}_{-0.092}$	$1.003^{+0.129}_{-0.129}$	$1.808^{+0.380}_{-0.969}$
	+3%/-3%	+1%/-5%	+115%/-115%	+30%/-10%	+13%/-13%	+21%/-54%
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 007692405-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-186 ± 31	$2.12^{+0.72}_{-0.59}$	336^{+23}_{-17}	5044^{+857}_{-515}	31210^{+30031}_{-13395}
Alt.	-110 ± 31	$2.06^{+0.64}_{-0.61}$	335^{+22}_{-16}	4599^{+710}_{-514}	19828^{+21649}_{-9371}

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

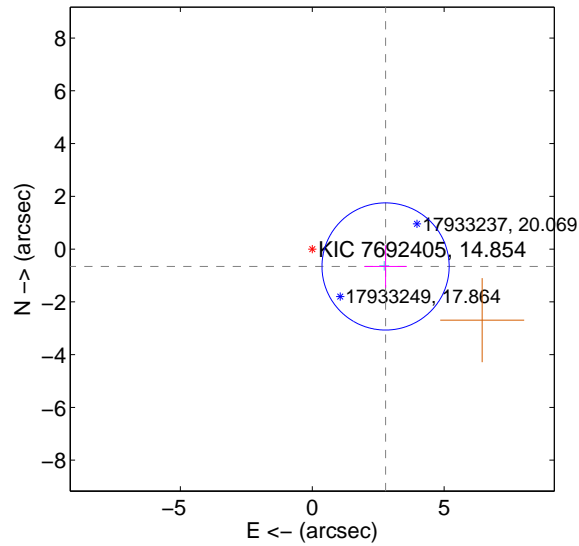
Supplemental centroid analysis for 007692405-01. Kepler magnitude: 14.85. Transit SNR 7.89

There are 1 quarters with good PRF difference image offsets

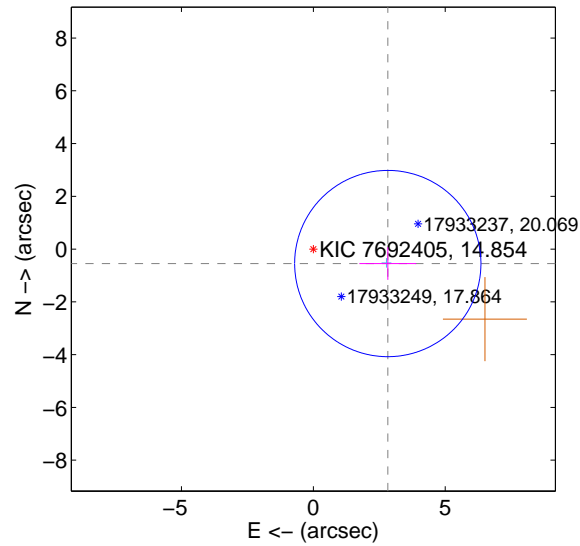
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.856 ± 0.803	3.56	-2.779 ± 0.803	-0.658 ± 0.805
PRF-fit source offset from KIC position	2.875 ± 1.177	2.44	-2.822 ± 1.079	-0.548 ± 0.619
photometric centroid source offset	1.69 ± 1.98	0.85	1.08 ± 1.91	-1.30 ± 2.03

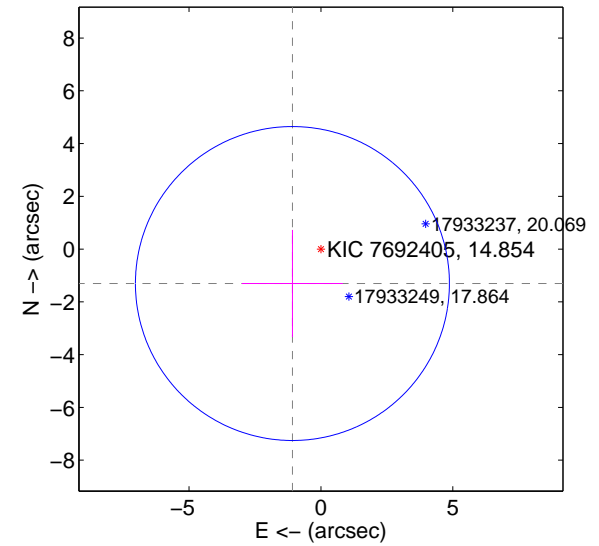
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

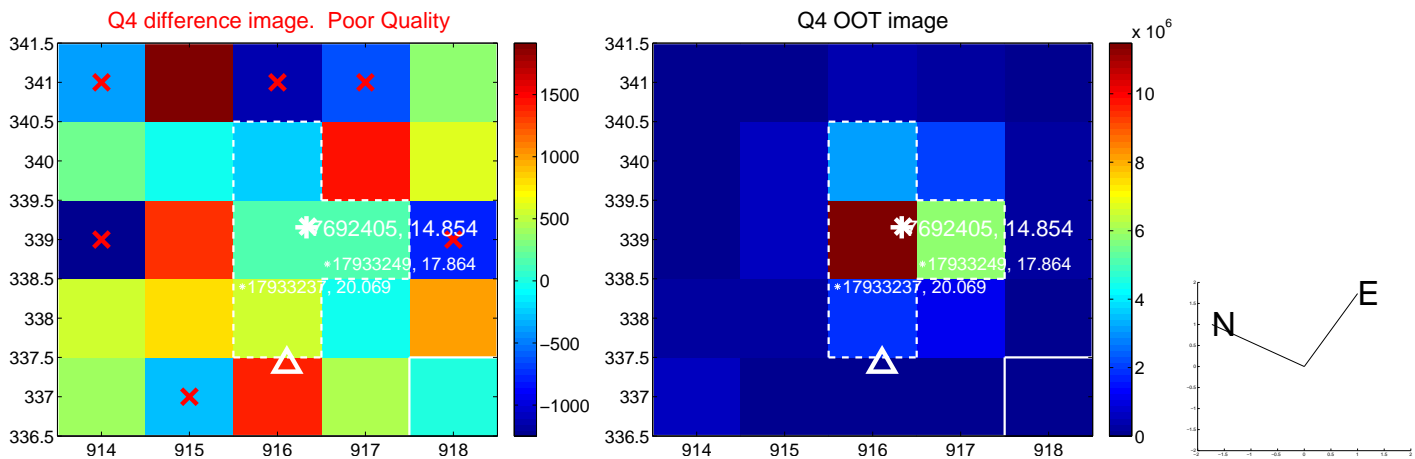
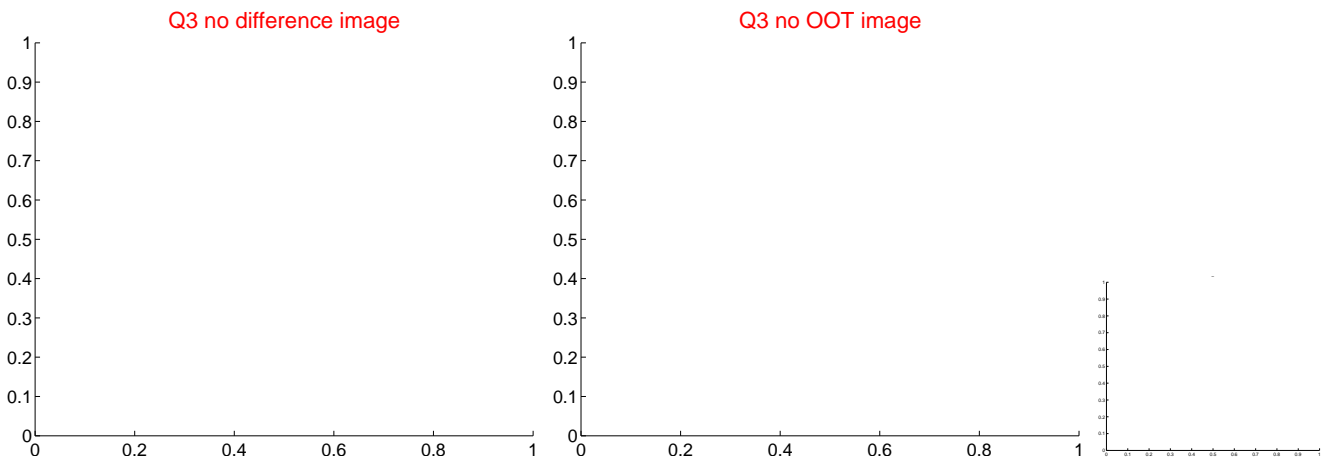
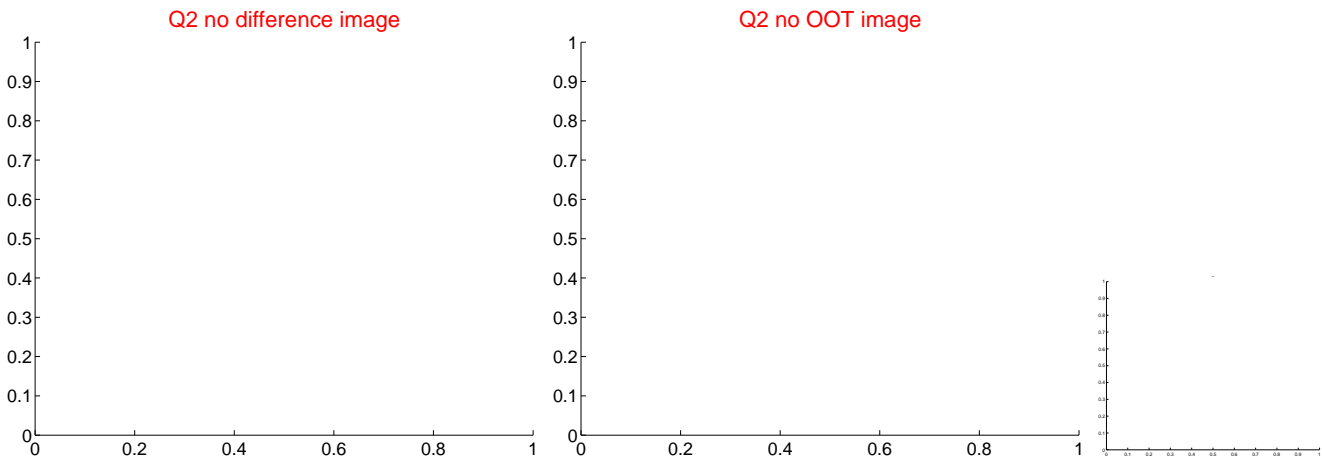
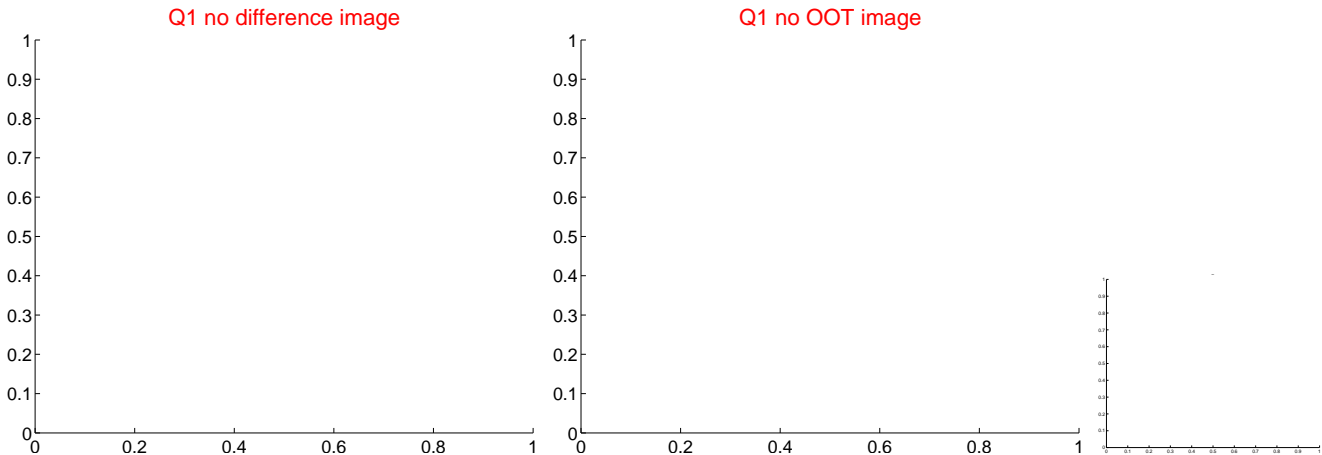


offset from photometric centroids



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.

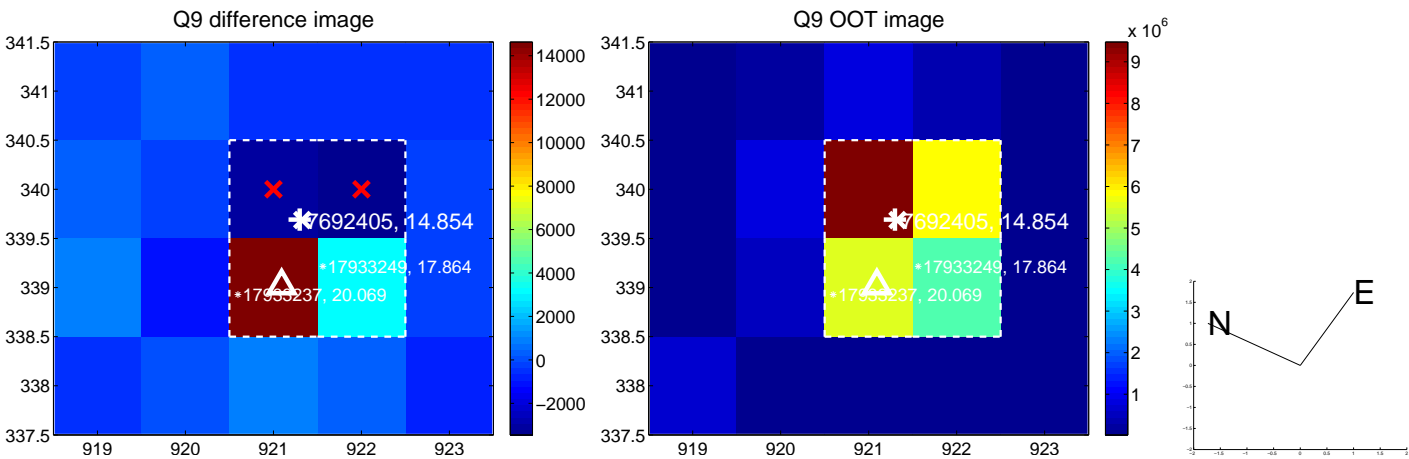
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



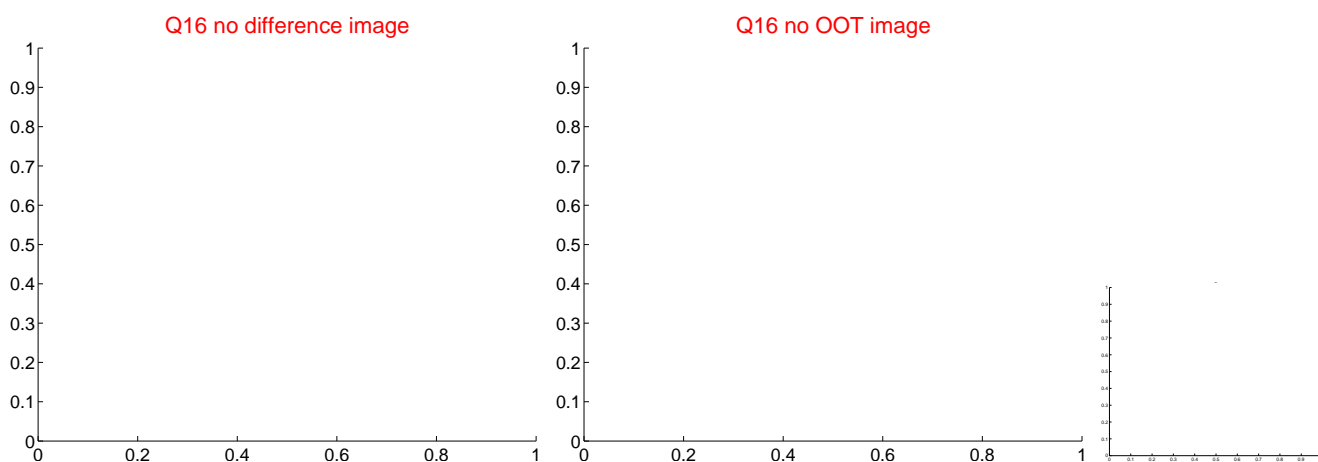
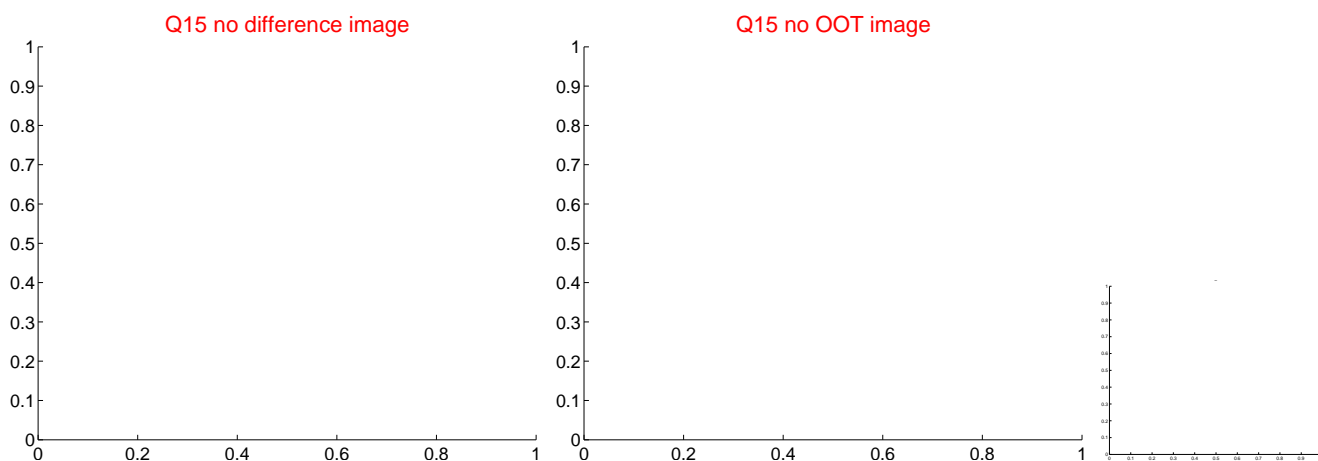
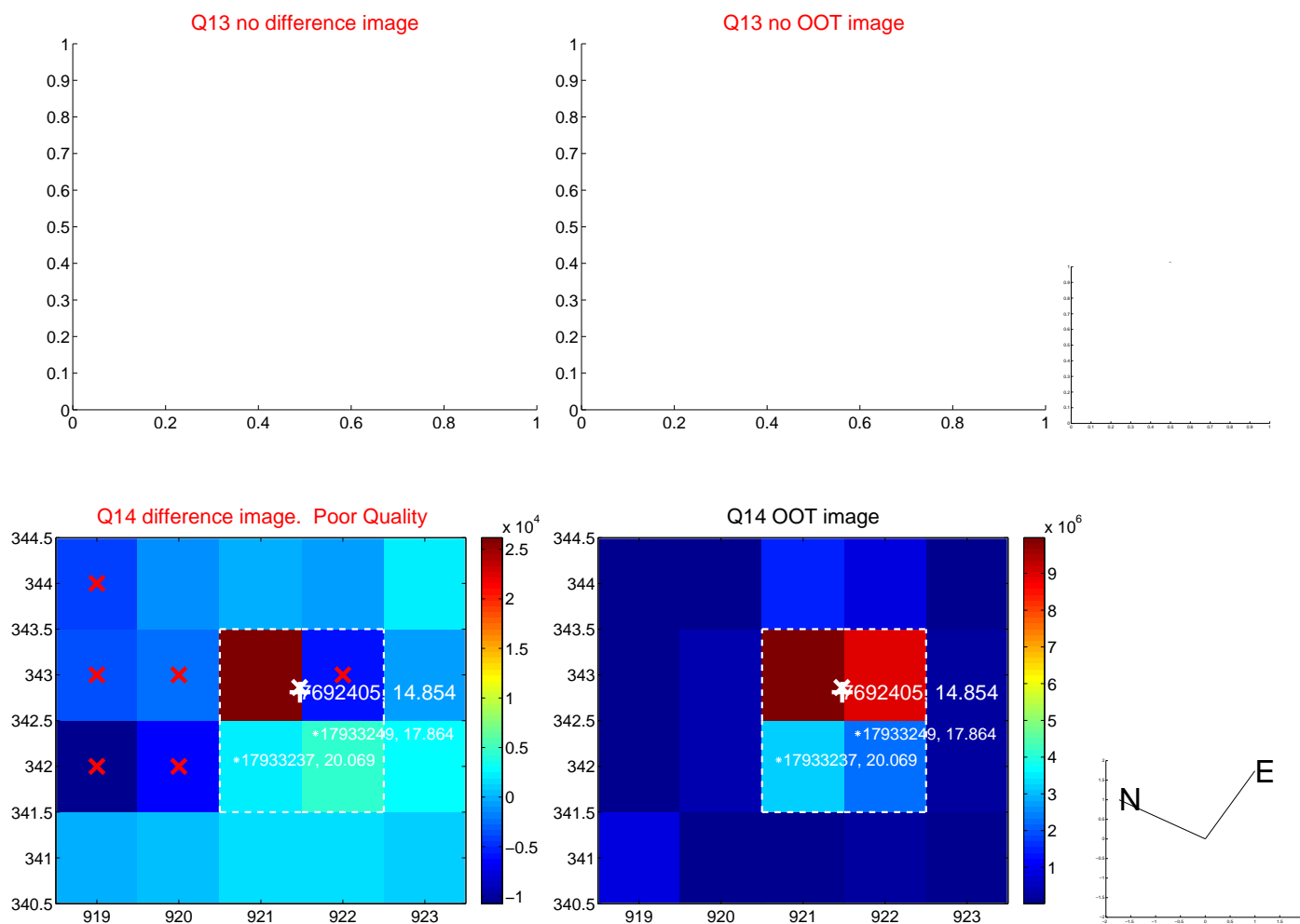
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



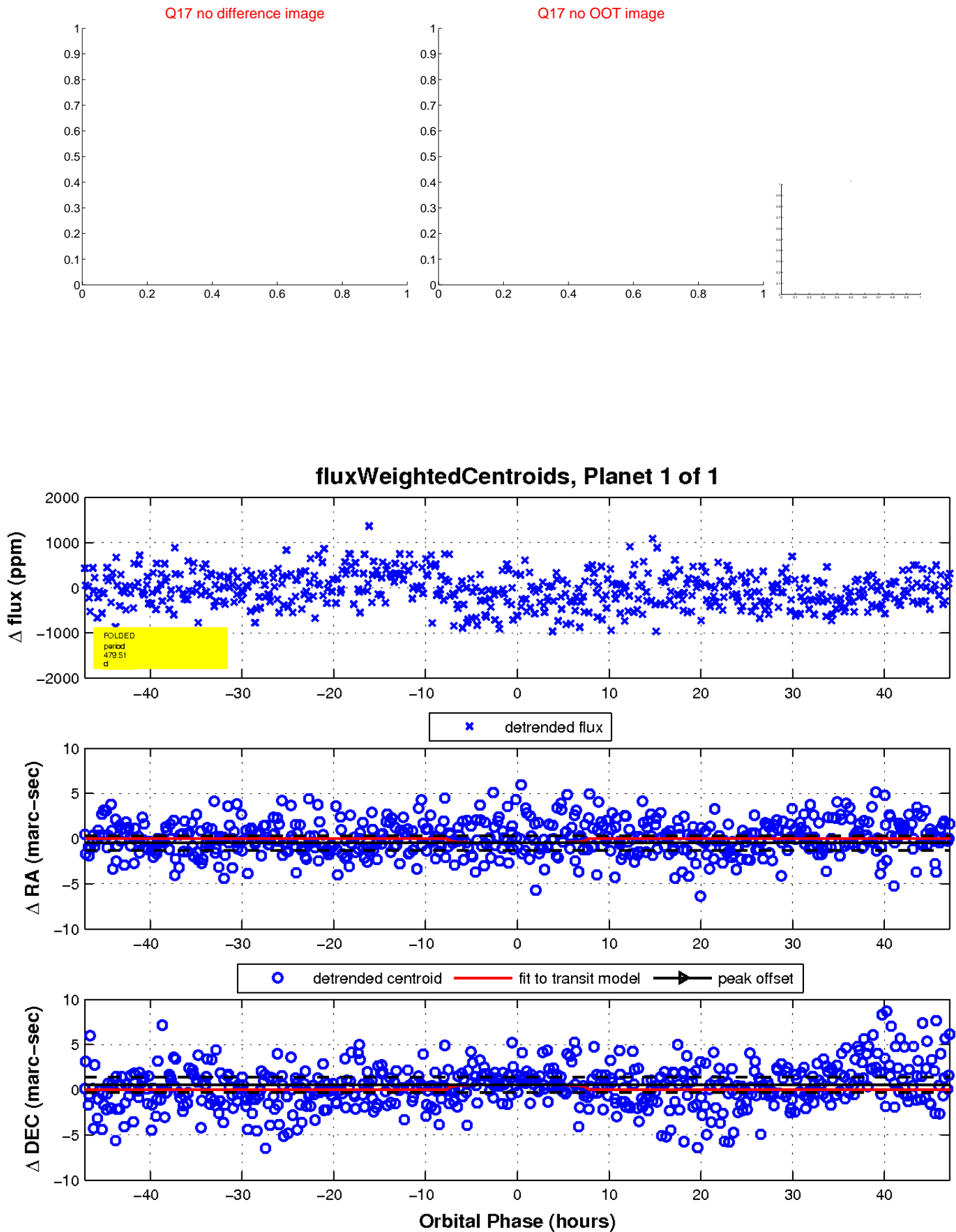
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UKIRT Image

Declination

