

KIC 008779464

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})
008779464-01	OBS	No	372.260254	248.354515	341.9	25.392	8.1	6.2	2.94	5593	9.96	6.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008779464-01	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.

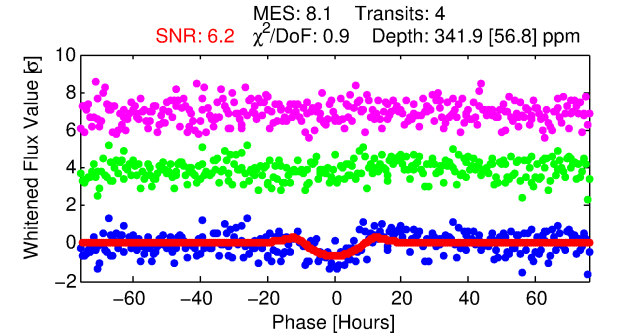
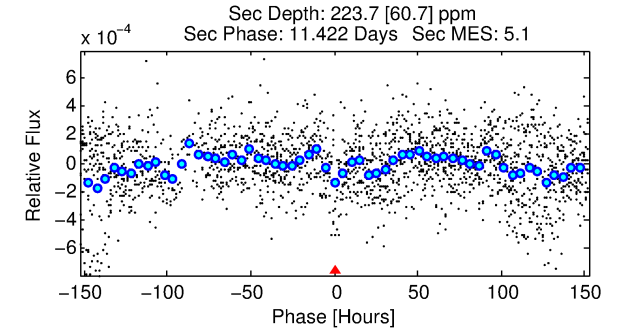
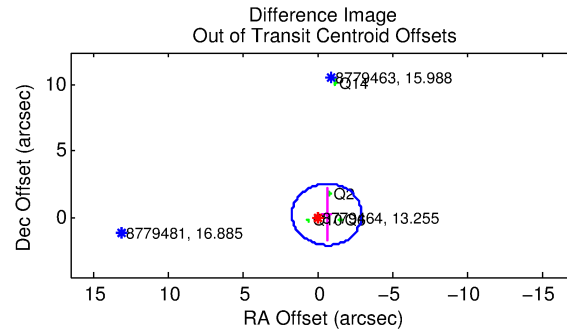
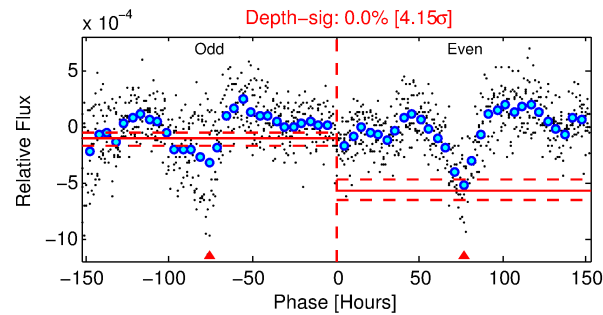
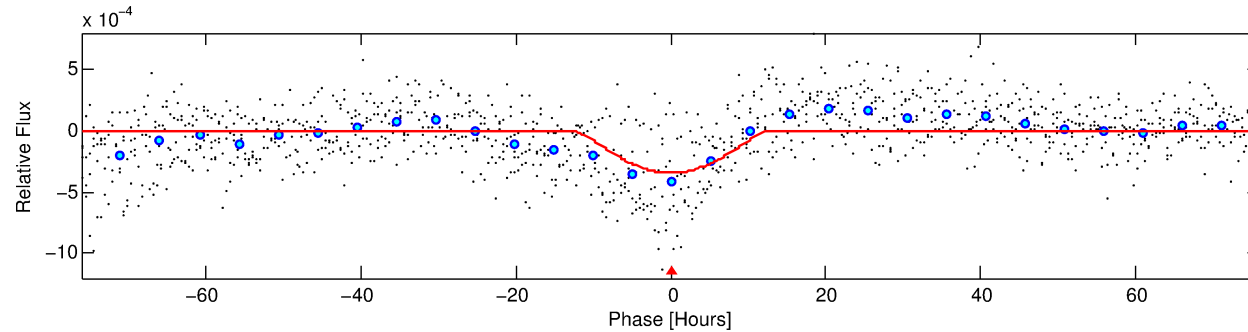
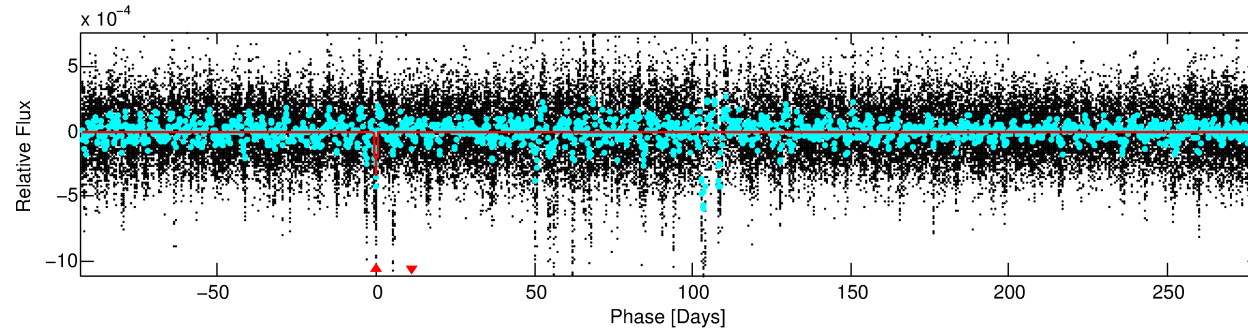
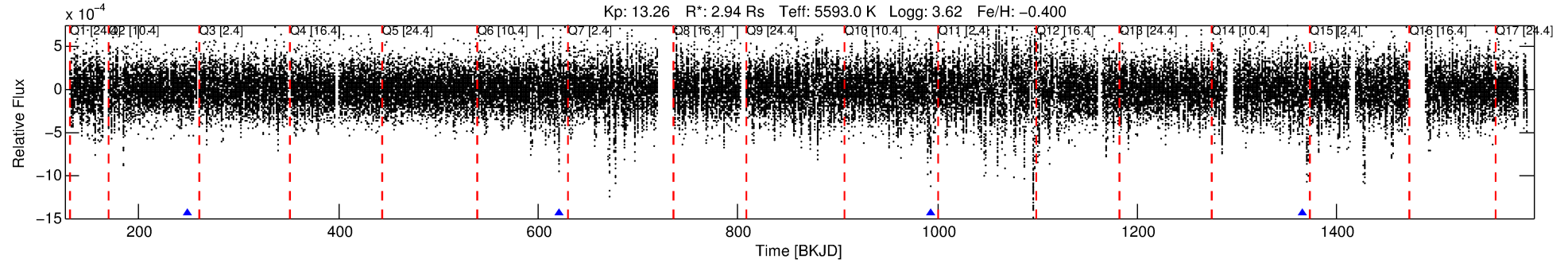
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008779464-01

No Significant Match Found

DV One-Page Summary

KIC: 8779464 Candidate: 1 of 1 Period: 372.260 d



DV Fit Results:

Period = 372.26025 [0.02805] d
Epoch = 248.3545 [0.0448] BKJD
Rp/R* = 0.0310 [0.0477]
a/R* = 30.20 [13.47]
b = 1.00 [0.08]
Seff = 6.12 [8.14]
Teq = 401 [133] K
Rp = 9.96 [16.77] Re
a = 1.1140 [0.8579] AU
Ag = 1540.16 [5173.81] [0.30σ]
Teffp = 3885 [3003] K [1.16σ]

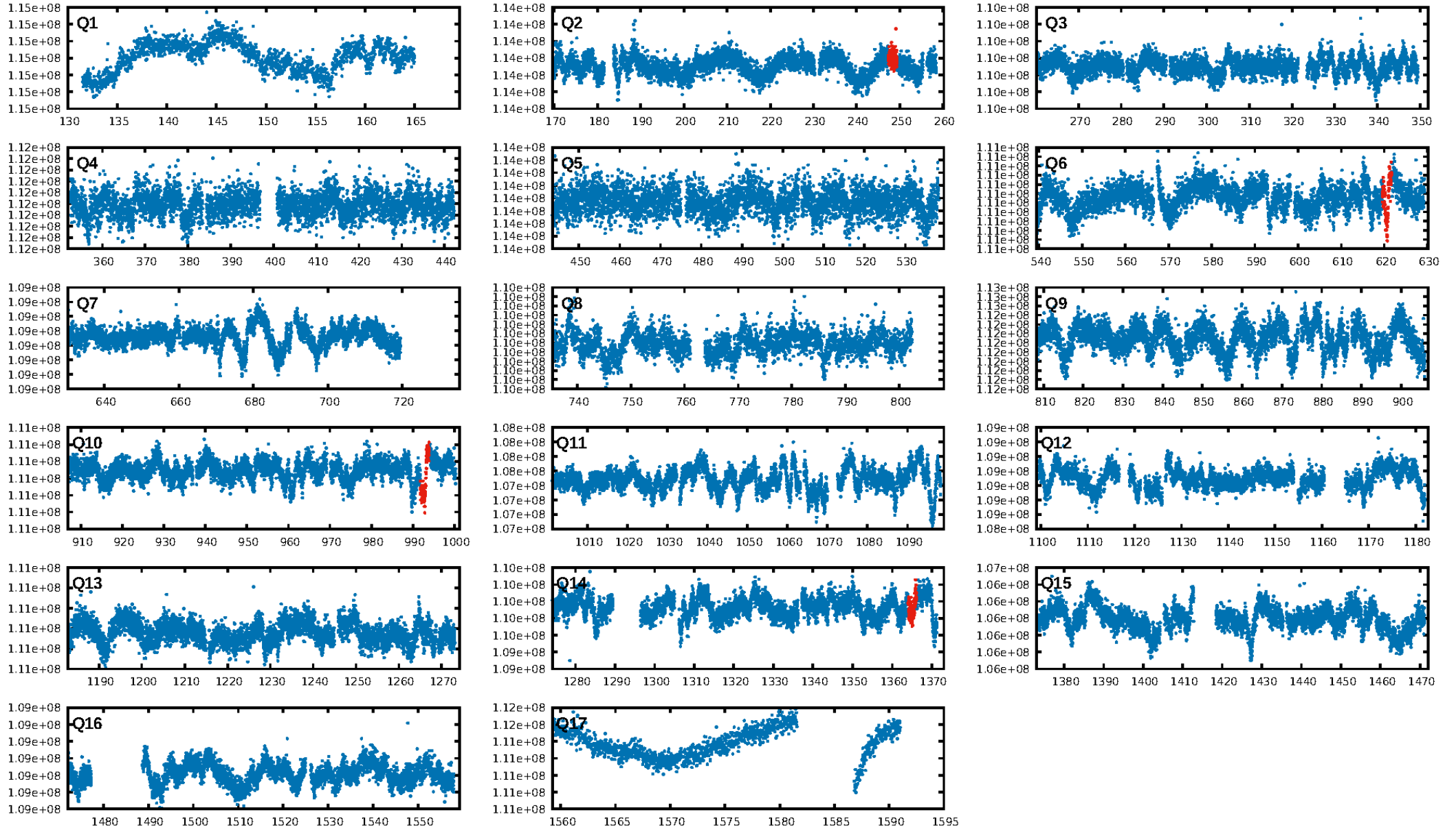
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.93e-09
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.9437
Centroid-sig: 0.1%
Centroid-so: 9.084 arcsec [1.88σ]
OotOffset-rm: 0.680 arcsec [0.87σ]
KicOffset-rm: 0.702 arcsec [0.44σ]
OotOffset-st: 4/0/0/0 [4]
KicOffset-st: 4/0/0/0 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

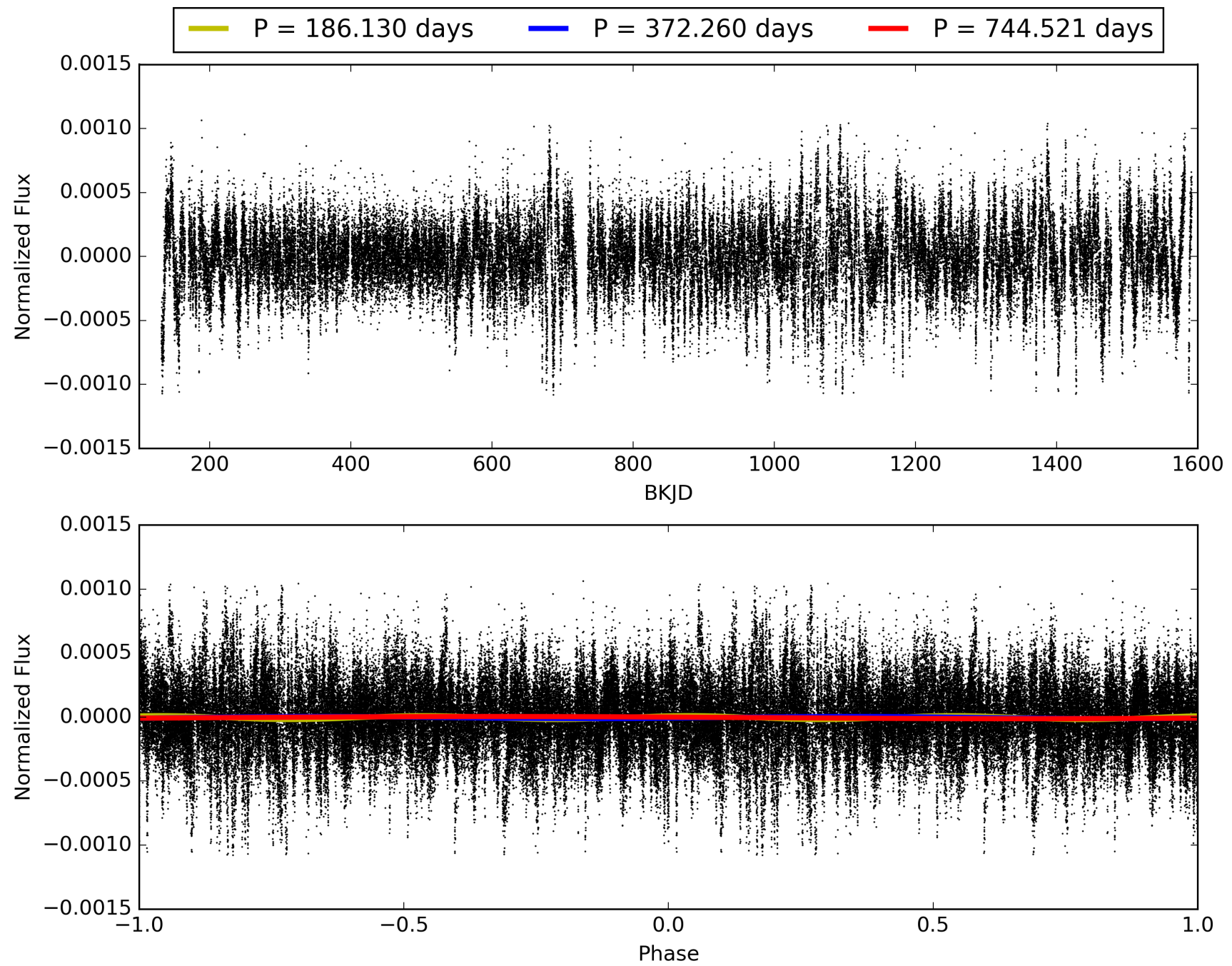
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:48:23 Z

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

TCE 008779464-01, PDC Light Curves

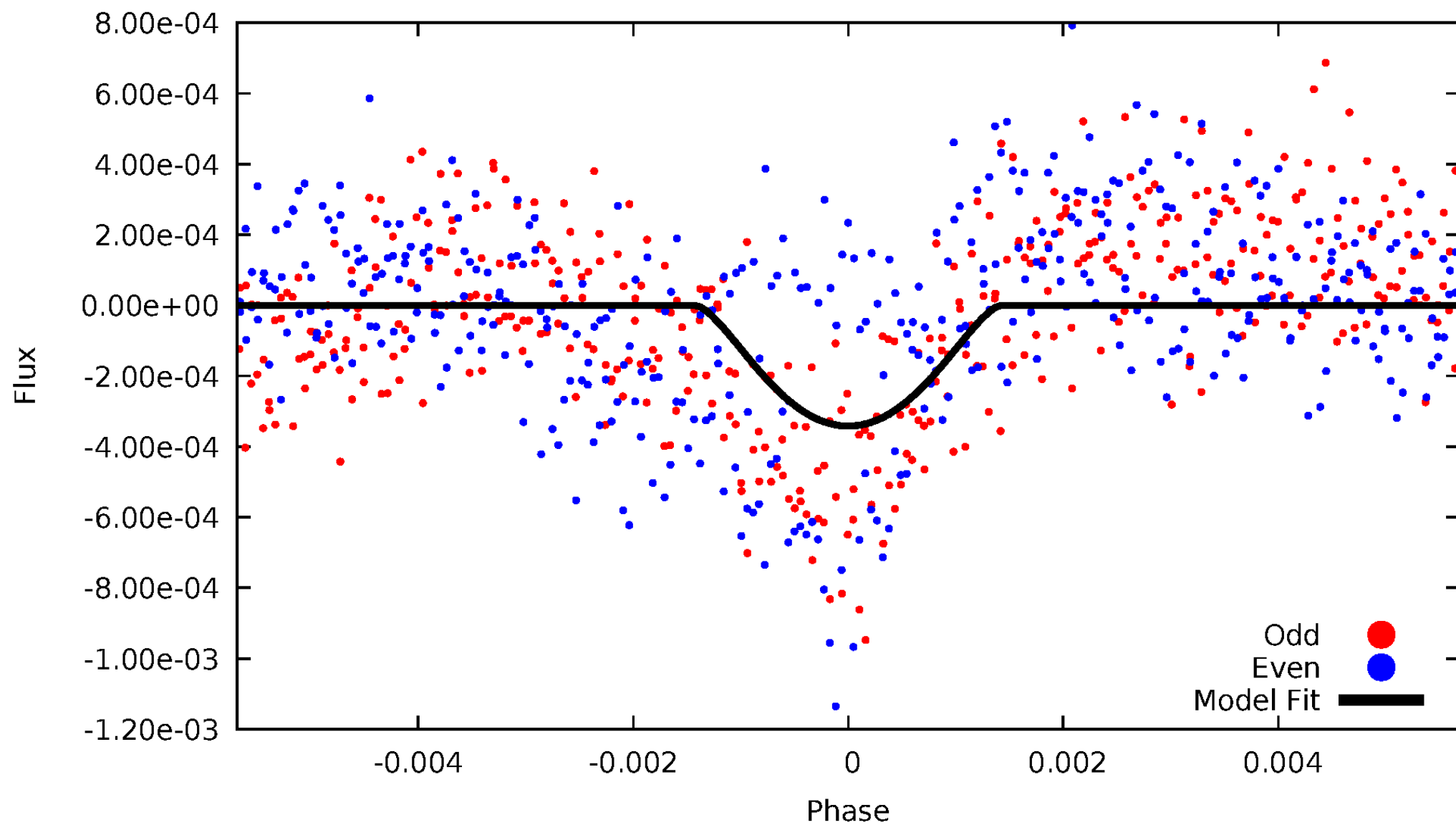


TCE 008779464-01



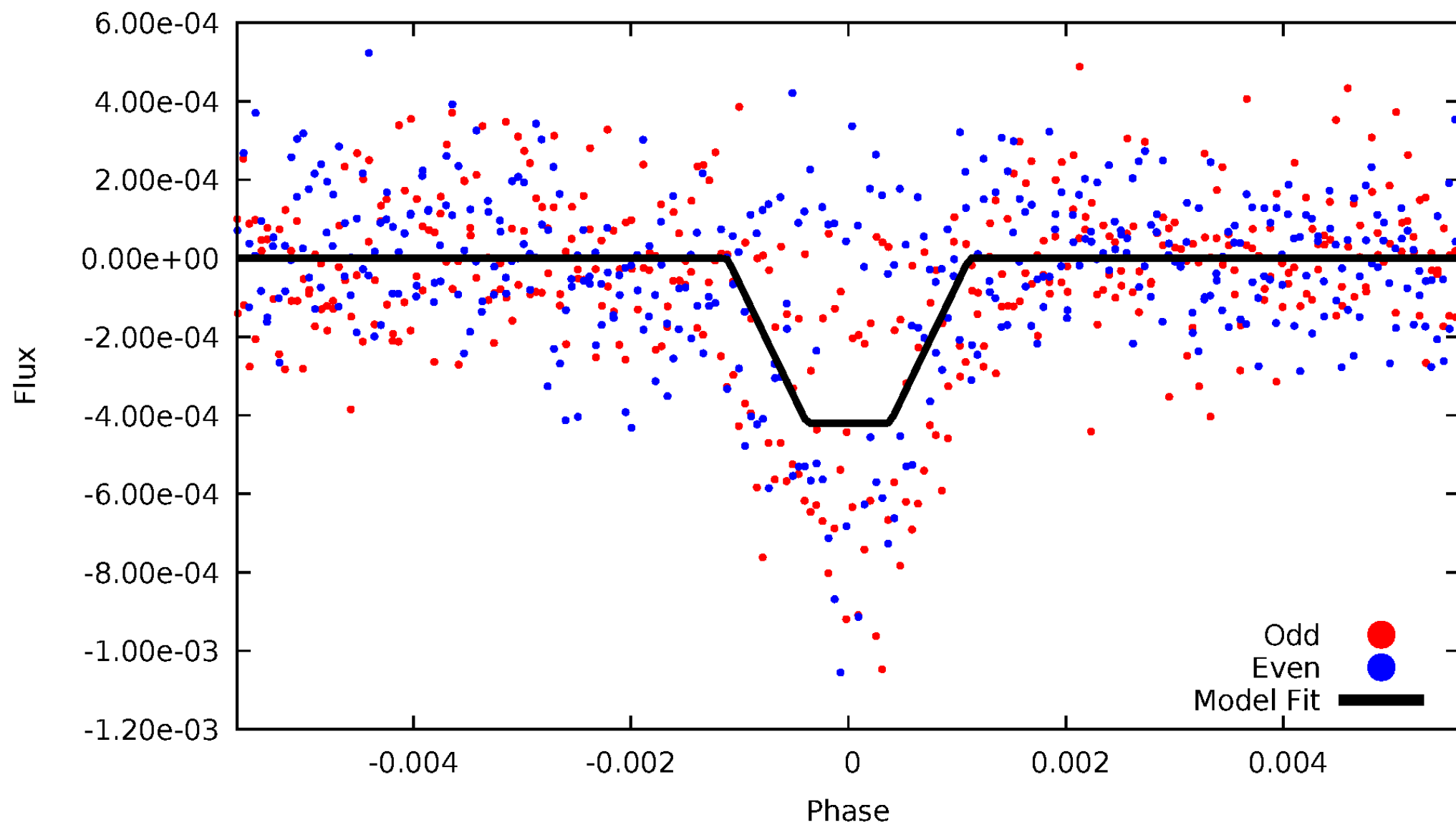
DV Odd/Even

TCE 008779464-01

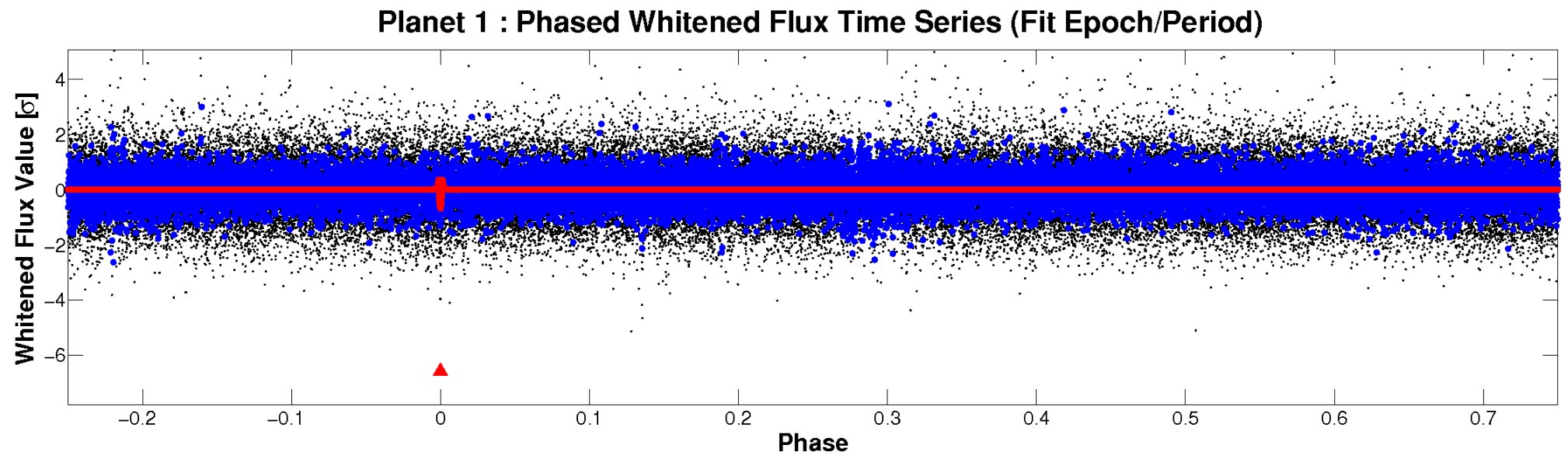
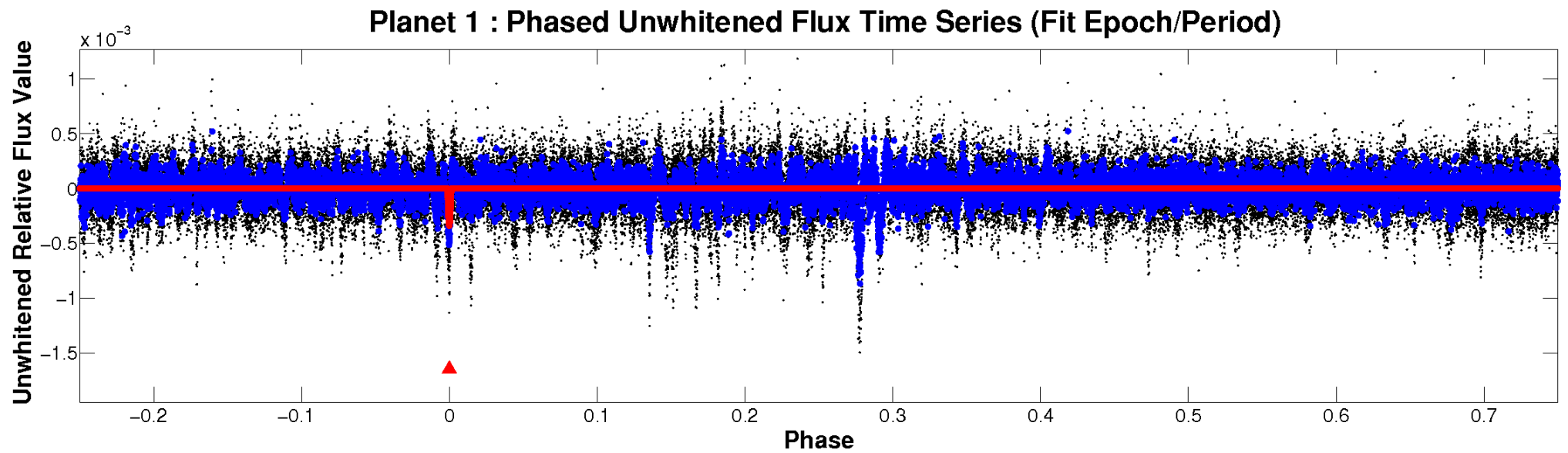


ALT Odd/Even

TCE 008779464-01

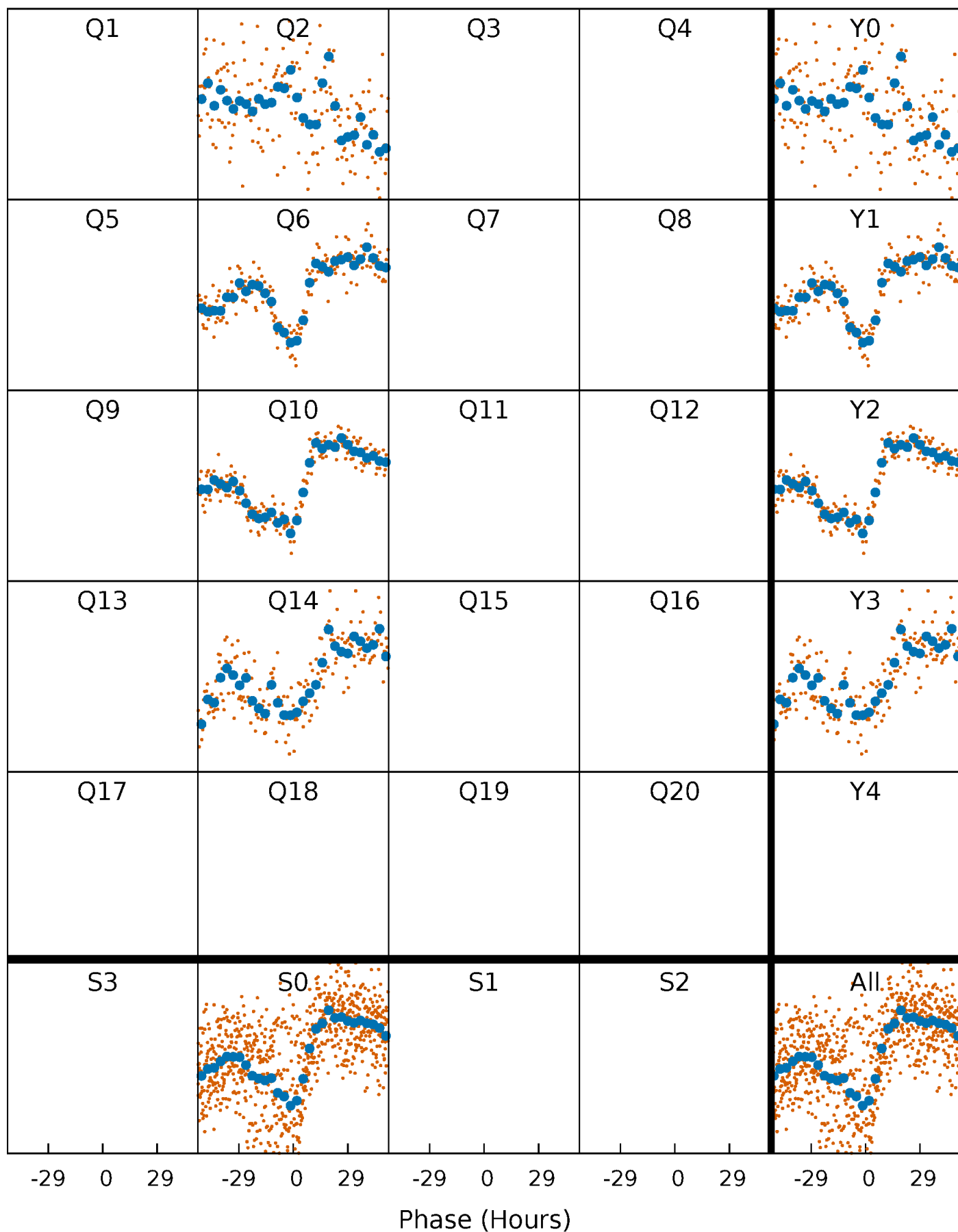


Non-Whitened Vs. Whitened Light Curve



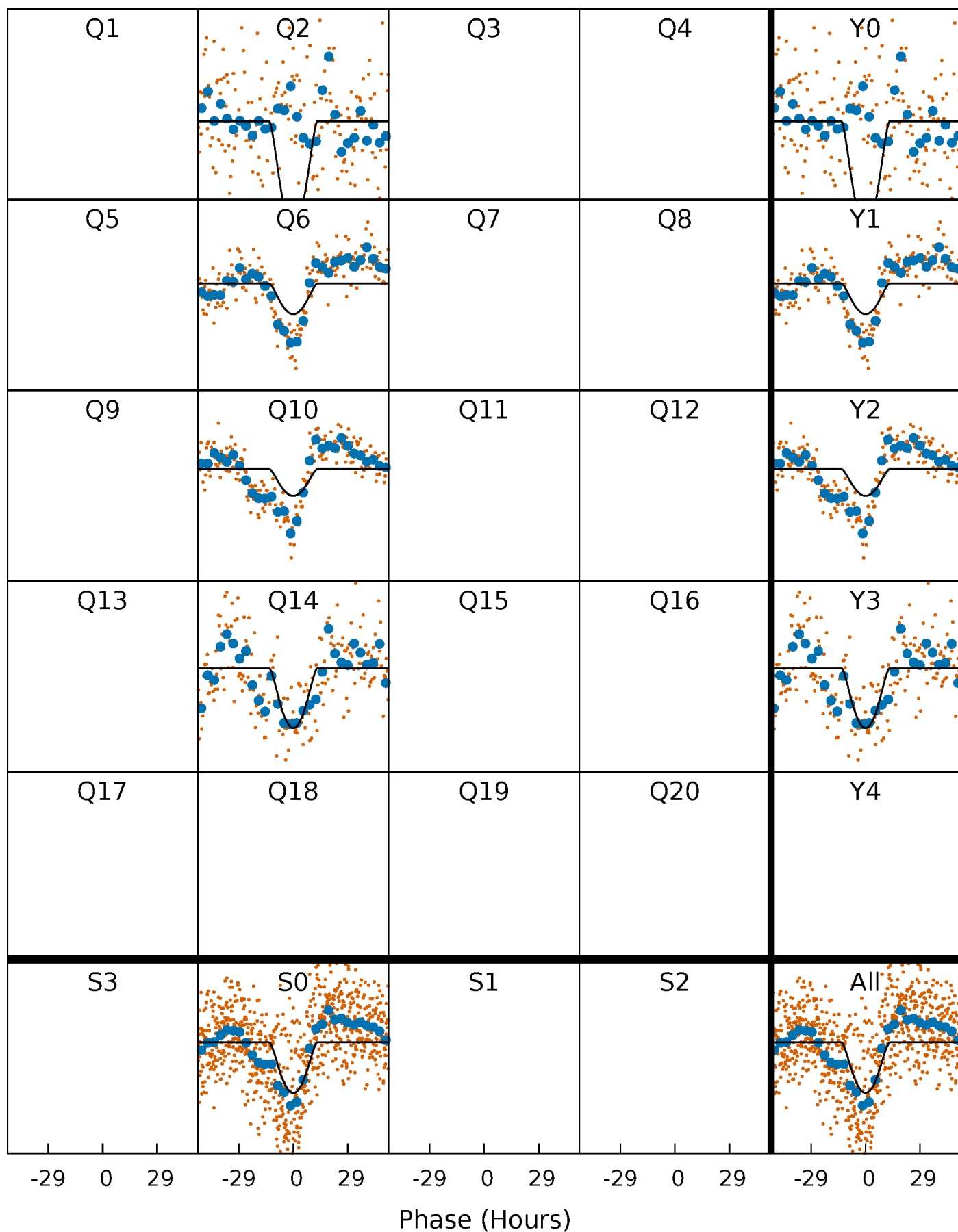
PDC Quarter-Phased Transit Curves

TCE 008779464-01 P=372.260253 Days $T_0=248.354515$ (BKJD)



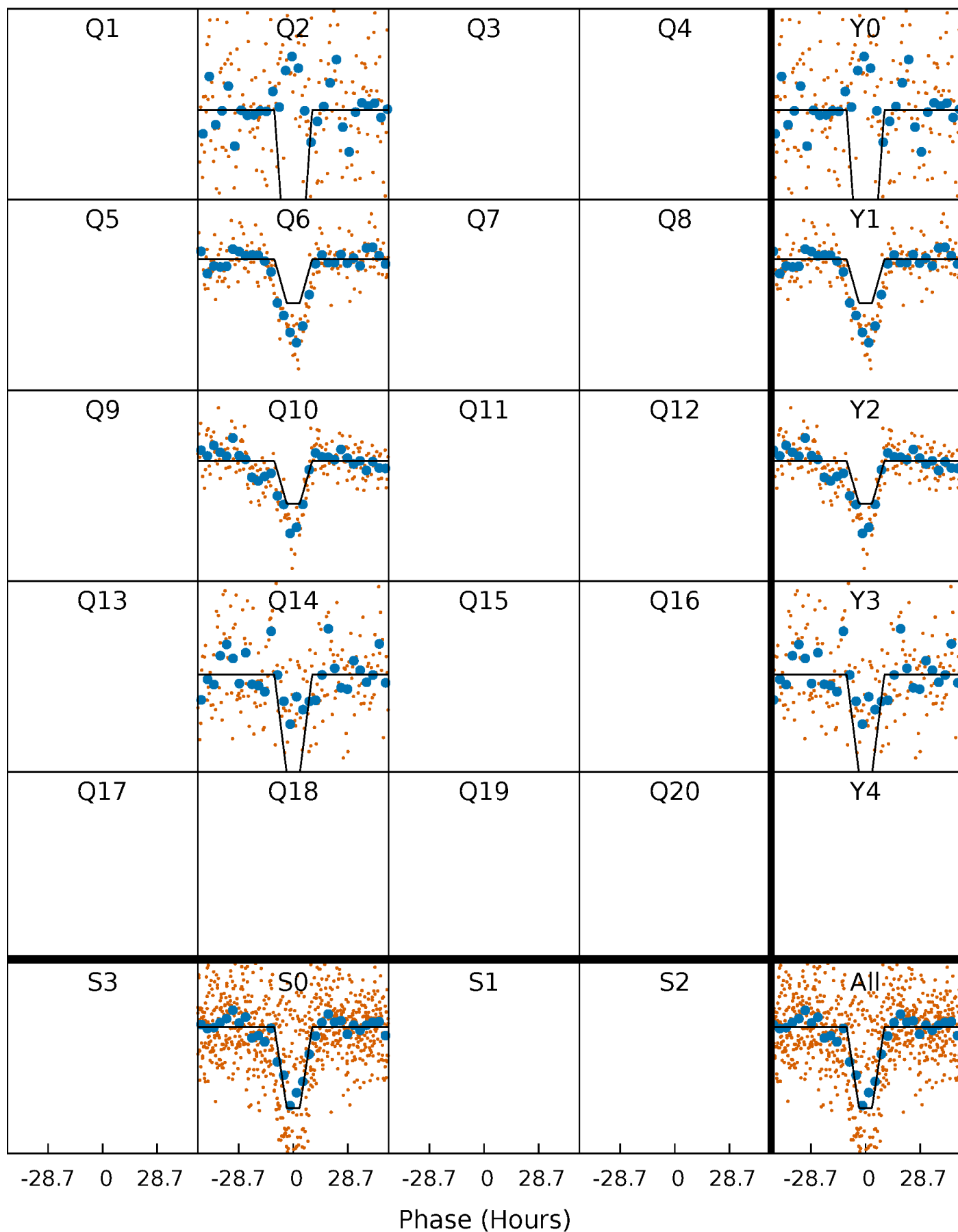
DV Quarter-Phased Transit Curves

TCE 008779464-01 P=372.260253 Days $T_0=248.354515$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

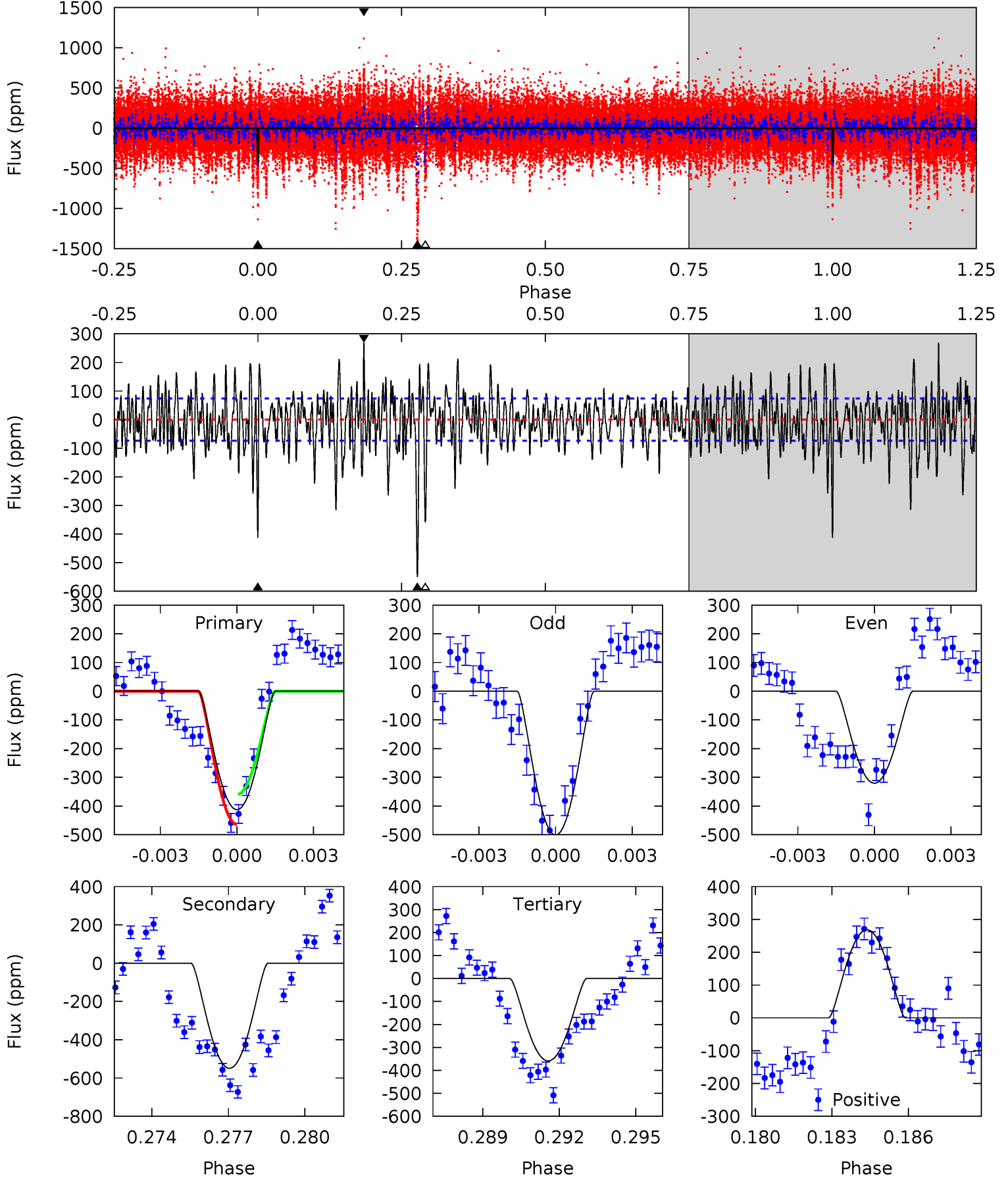
TCE 008779464-01 P=372.299463 Days $T_0=248.258967$ (BKJD)



DV Model-Shift Uniqueness Test

008779464-01, P = 372.260253 Days, E = 248.354515 Days

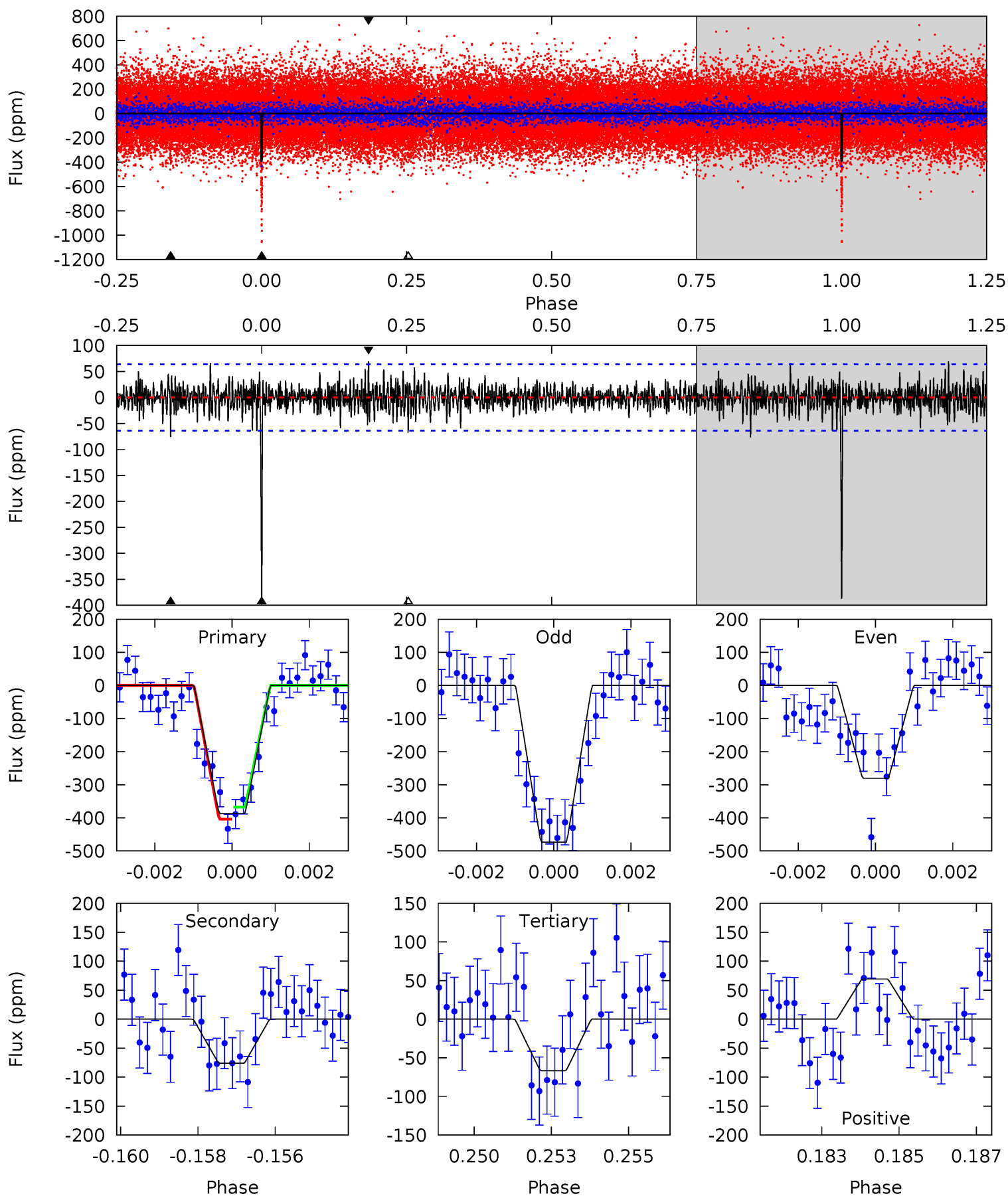
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.3	39.0	25.5	19.1	5.26	2.98	5.41	3.83	10.3	13.5	20.0	6.42	0.82	0.33	3.70



Alt Model-Shift Uniqueness Test

008779464-01, P = 372.299463 Days, E = 248.258967 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.2	6.31	5.53	5.76	5.30	3.05	1.43	26.6	26.4	0.78	0.54	8.04	0.93	0.15	1.51



Stellar Parameters For KIC 008779464

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5593^{+195}_{-175}	$3.624^{+0.808}_{-0.202}$	$-0.400^{+0.350}_{-0.250}$	$2.944^{+0.864}_{-2.016}$	$1.330^{+0.168}_{-0.471}$	$0.073^{+1.348}_{-0.038}$
	+3%/-3%	+22%/-6%	+87%/-62%	+29%/-68%	+13%/-35%	+1837%/-51%
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 008779464-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-550 ± 14	$12.48^{+13.47}_{-8.55}$	548^{+62}_{-102}	4209^{+2777}_{-790}	2292^{+21526}_{-1750}
Alt.	-76 ± 12	$10.95^{+13.01}_{-7.49}$	551^{+56}_{-97}	3198^{+1408}_{-565}	416^{+3668}_{-330}

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 $A_{obs} \gg 1.0$

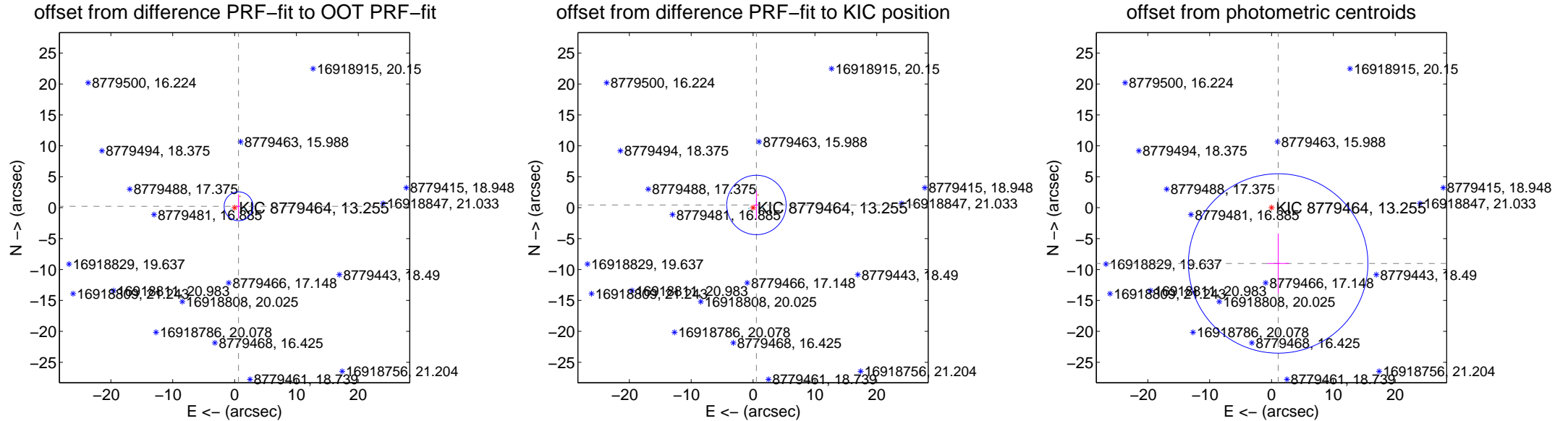
DV Centroid Data

Supplemental centroid analysis for 008779464-01. Kepler magnitude: 13.26. Transit SNR 6.23

There are 3 quarters with good PRF difference image offsets

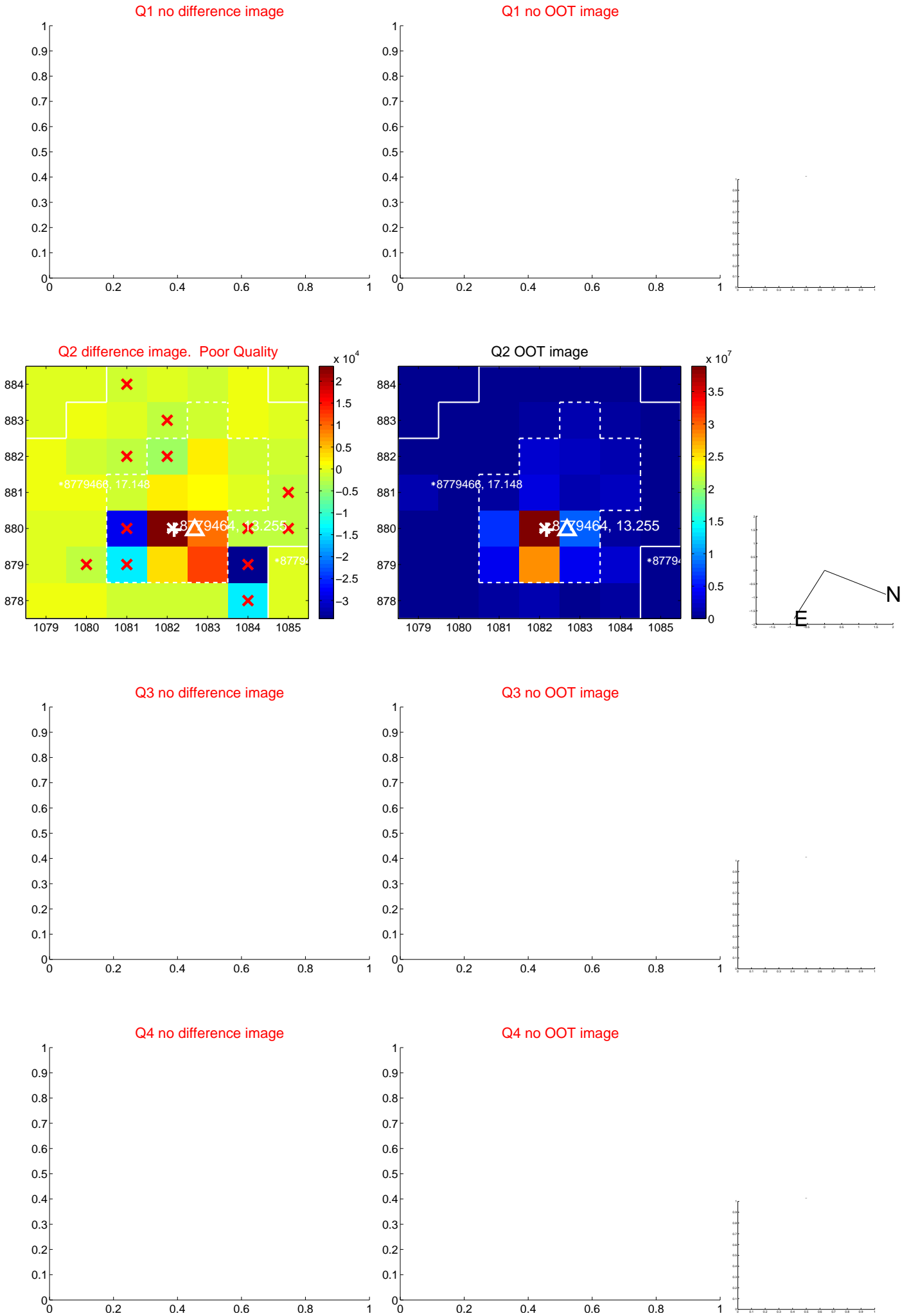
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.680 ± 0.777	0.87	-0.641 ± 0.305	0.225 ± 1.970
PRF-fit source offset from KIC position	0.702 ± 1.601	0.44	-0.548 ± 0.385	0.440 ± 2.284
photometric centroid source offset	9.08 ± 4.84	1.88	-1.07 ± 1.73	-9.02 ± 4.87

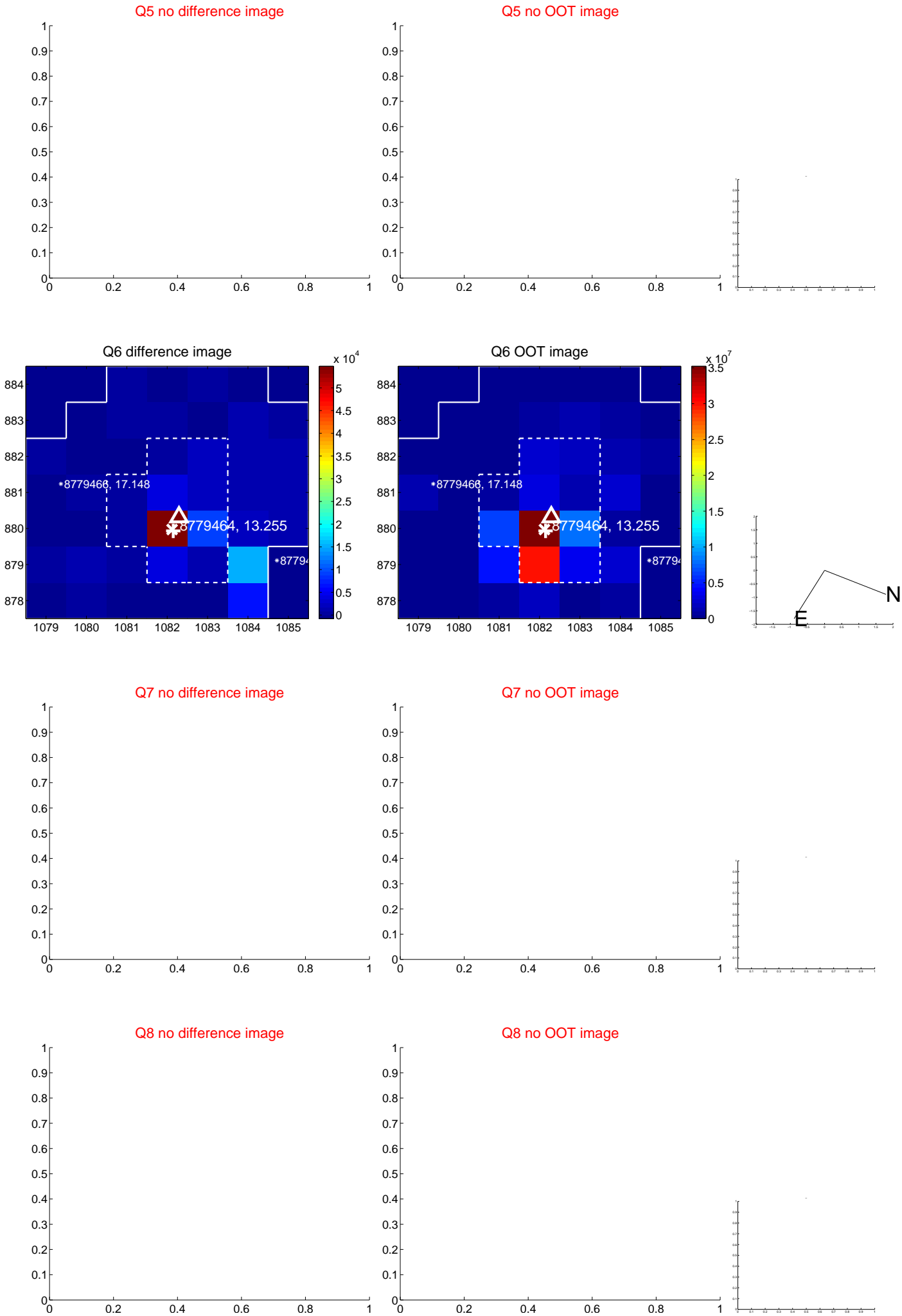


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

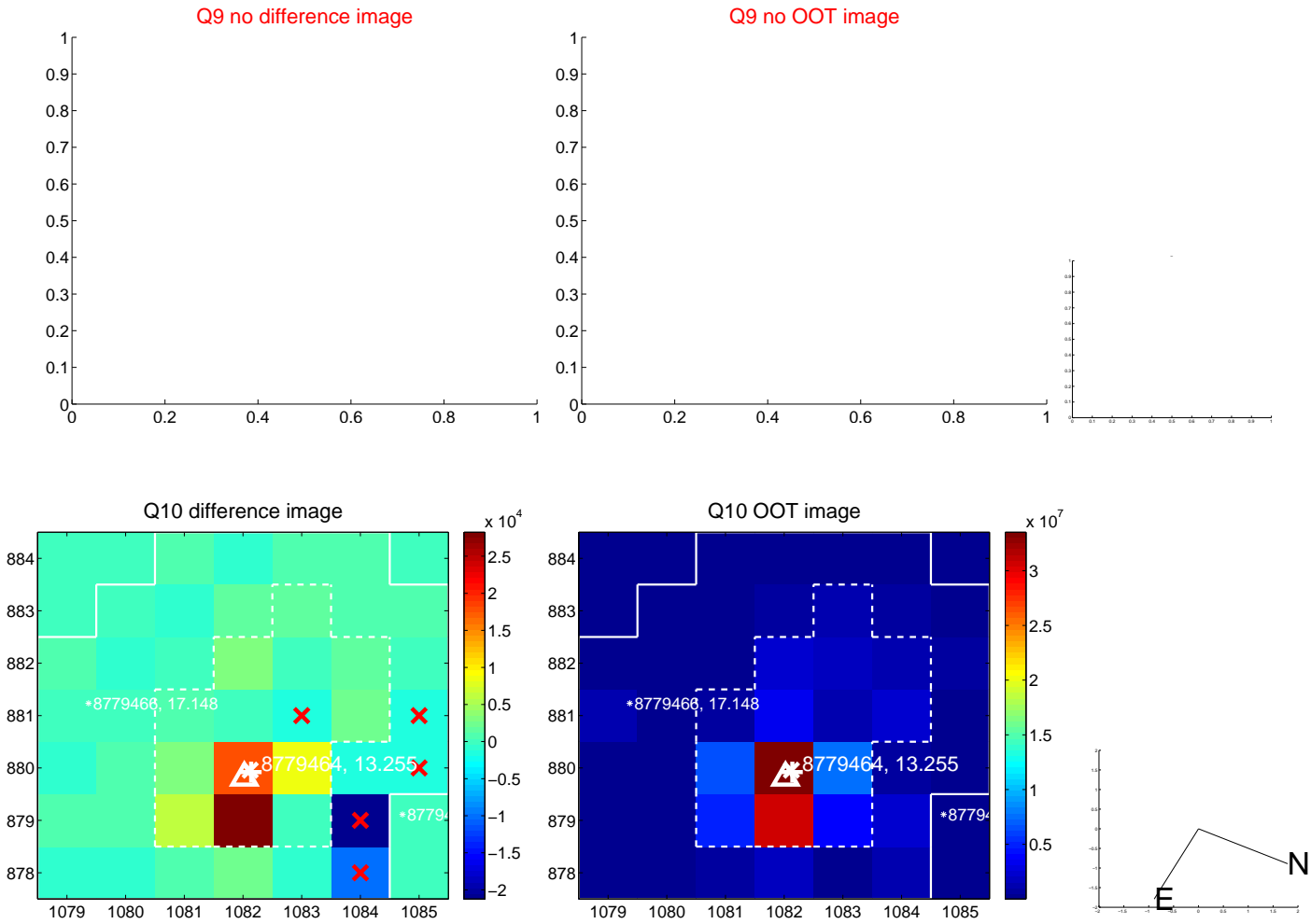
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



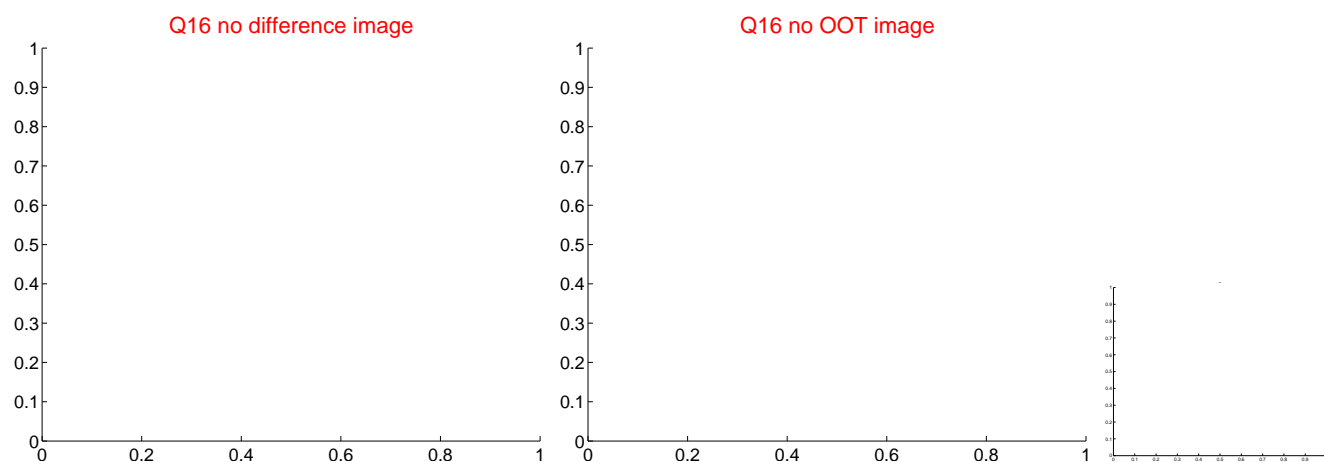
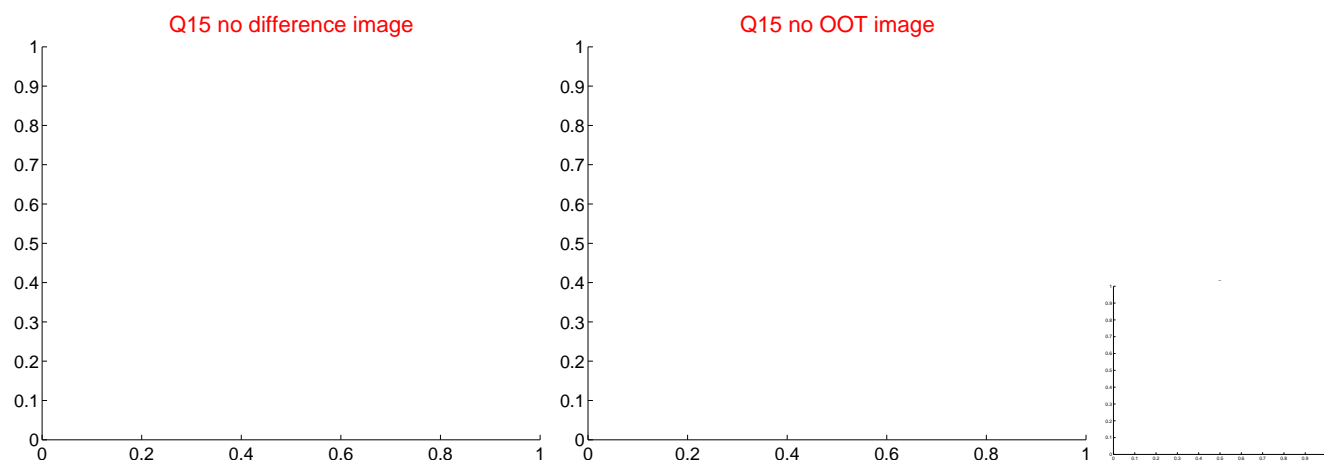
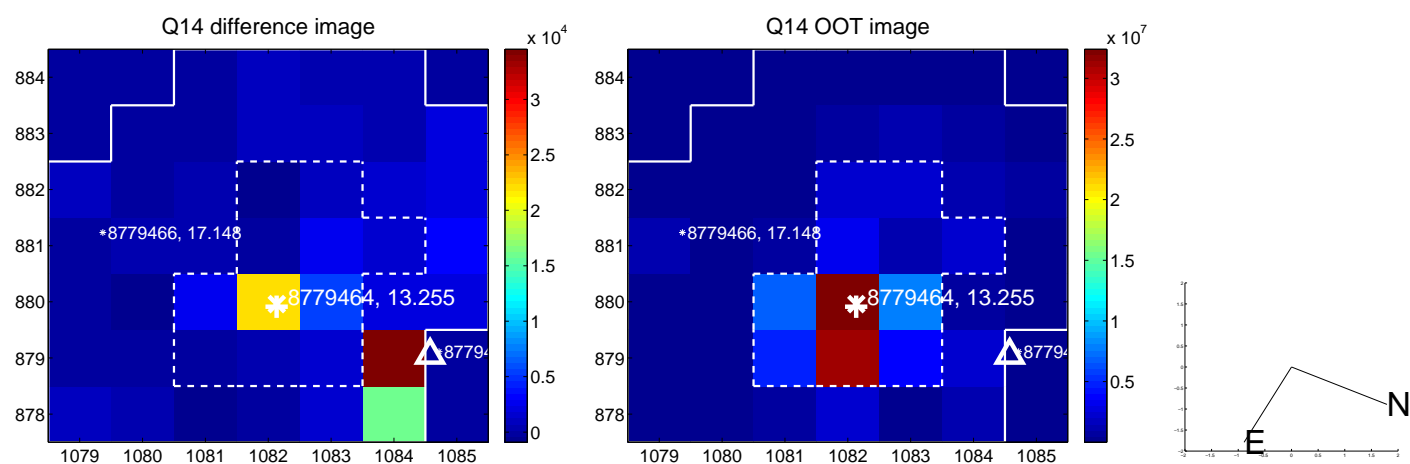
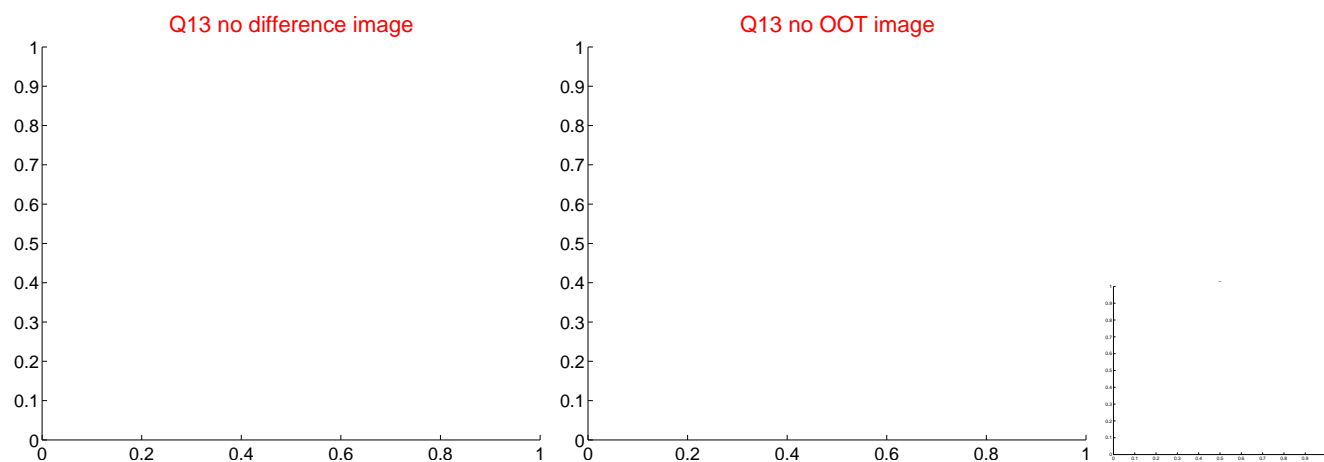
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



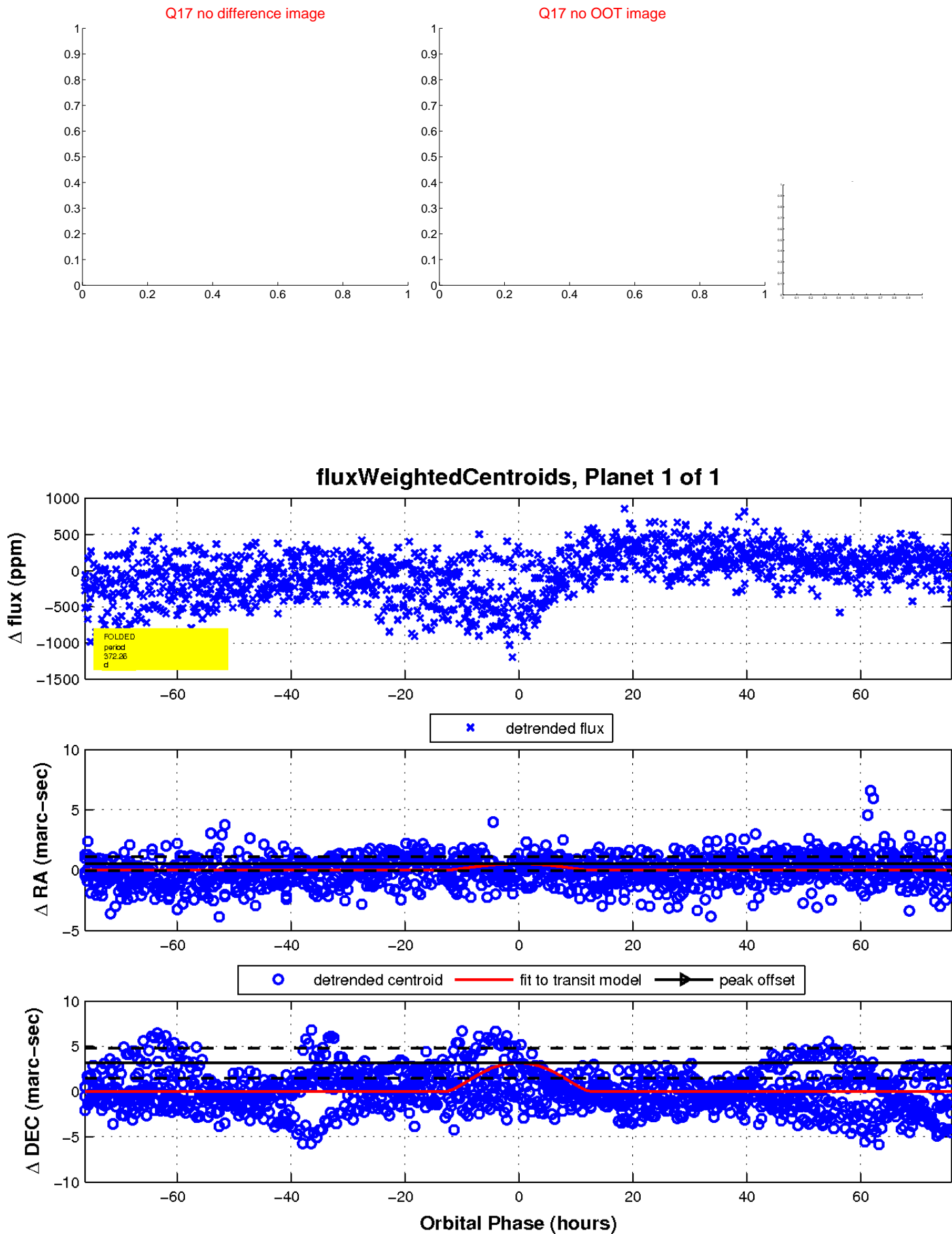
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UKIRT Image

Declination

