

KIC 011702248

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})
011702248-01	OBS	No	586.596698	224.163177	211.7	7.046	8.5	8.4	2.14	6215	3.44	3.03

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011702248-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_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.

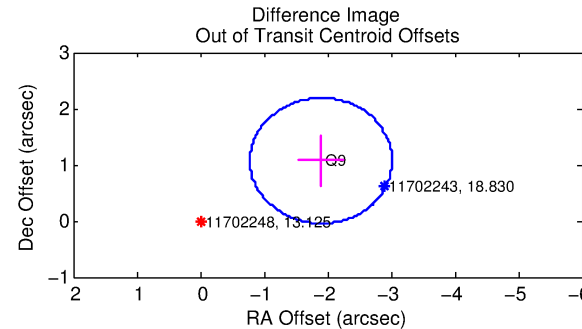
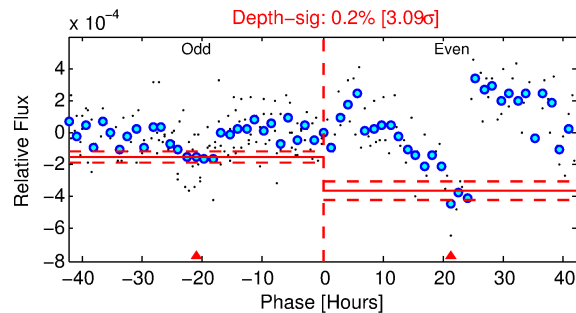
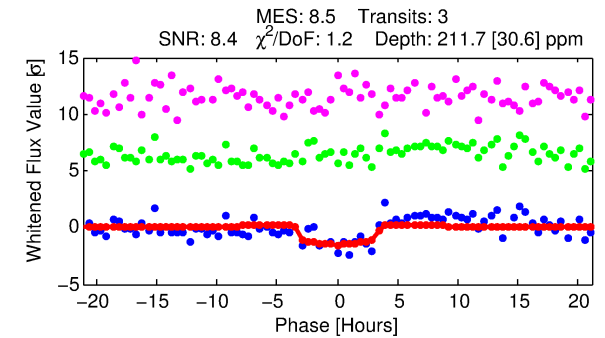
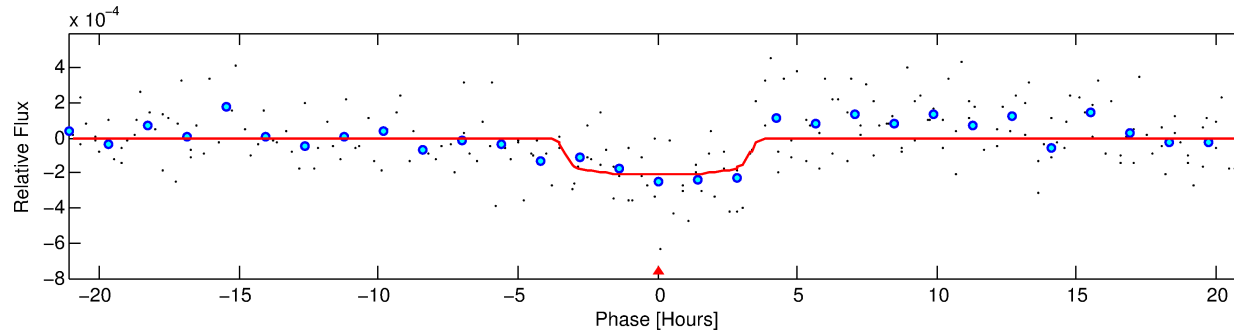
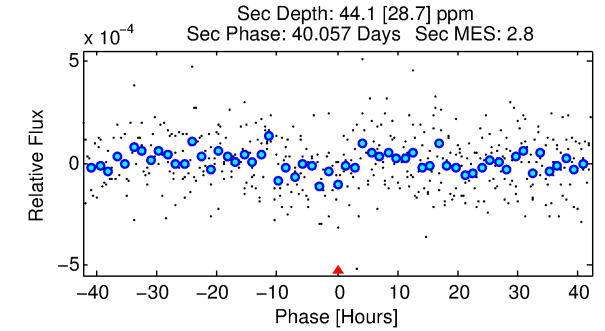
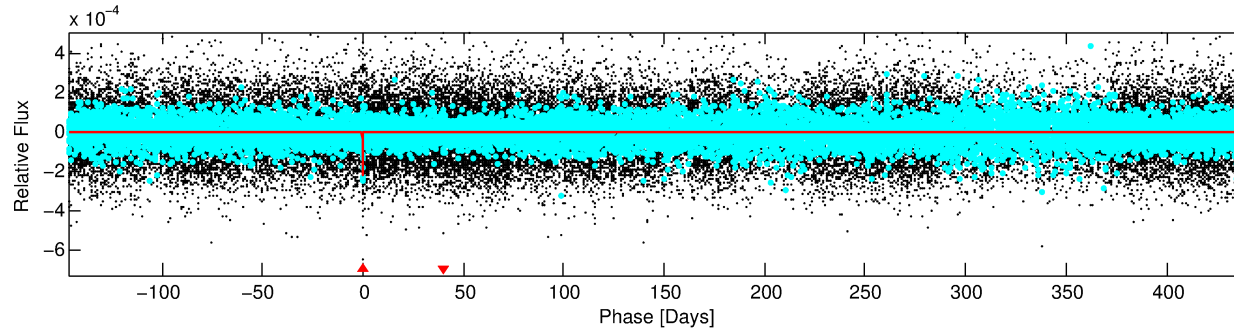
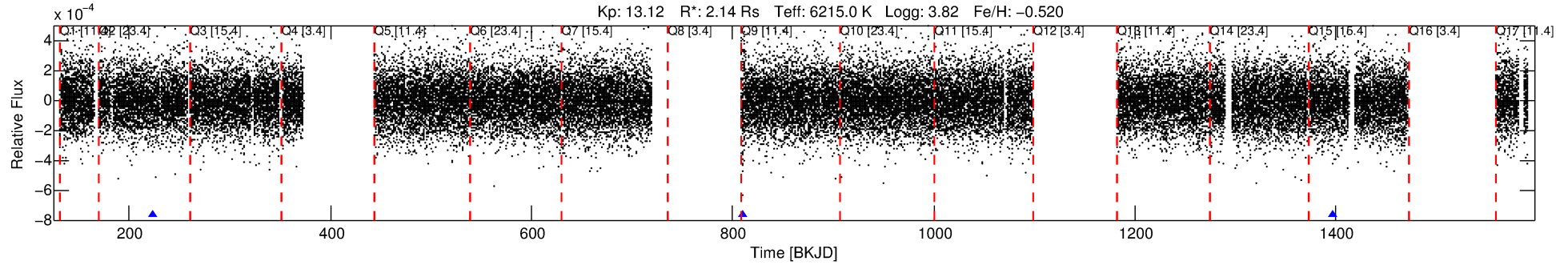
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011702248-01

No Significant Match Found

DV One-Page Summary

KIC: 11702248 Candidate: 1 of 1 Period: 586.597 d



DV Fit Results:

Period = 586.59670 [0.01052] d
Epoch = 224.1632 [0.0149] BKJD
Rp/R* = 0.0147 [0.0161]
a/R* = 399.19 [2357.85]
b = 0.80 [2.74]
Seff = 3.03 [1.70]
Teq = 336 [47] K
Rp = 3.44 [3.97] Re
a = 1.4219 [0.4905] AU
Ag = 4154.52 [9772.69] [0.43σ]
Teffp = 4175 [2390] K [1.61σ]

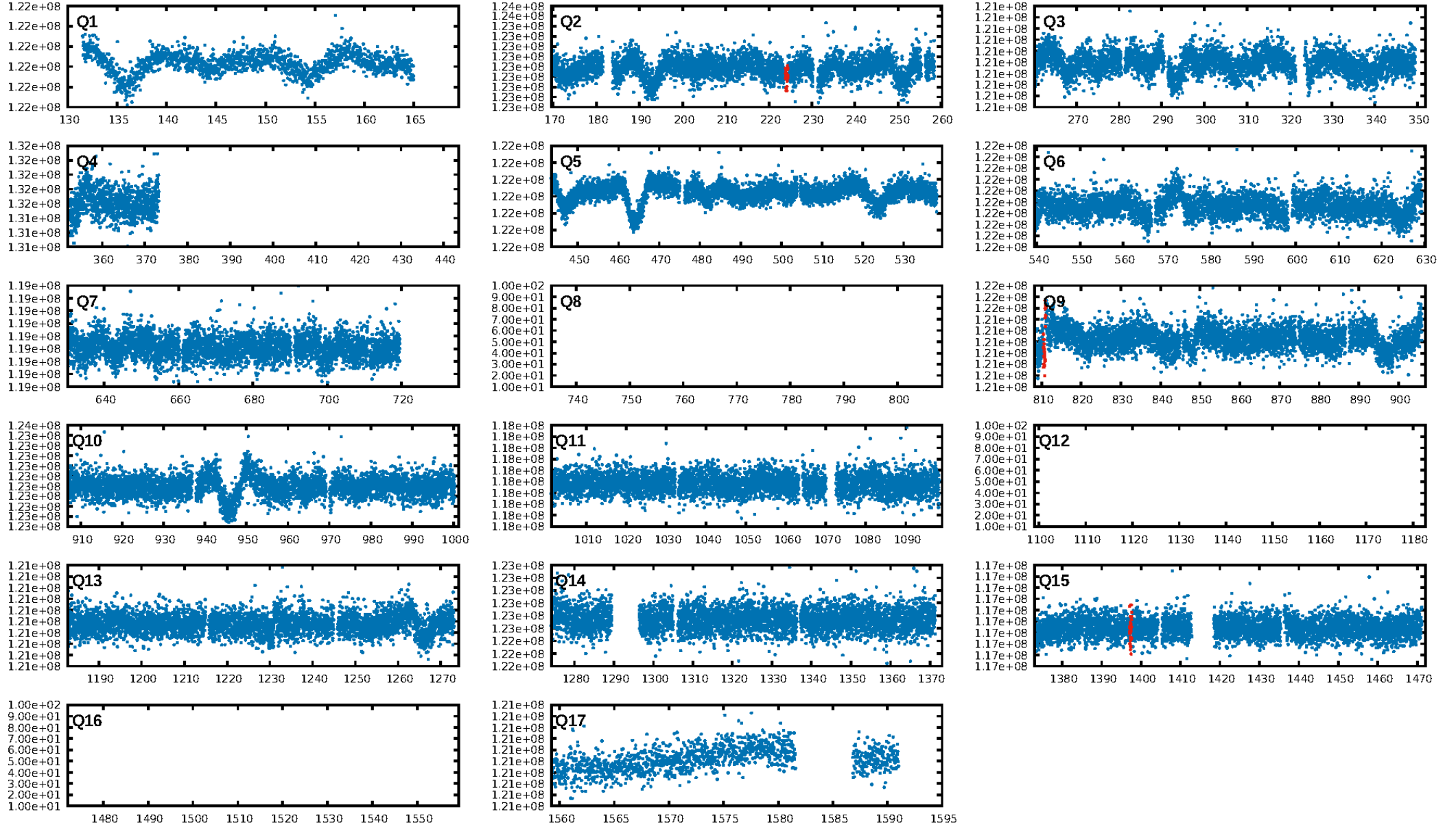
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 3.4%
ModelChiSquareGof-sig: 74.4%
Bootstrap-pfa: 2.75e-18
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -19.46
Centroid-sig: 22.6%
Centroid-so: 2.078 arcsec [1.06σ]
OotOffset-rm: 2.177 arcsec [5.85σ]
KicOffset-rm: 2.089 arcsec [5.57σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [1/1]

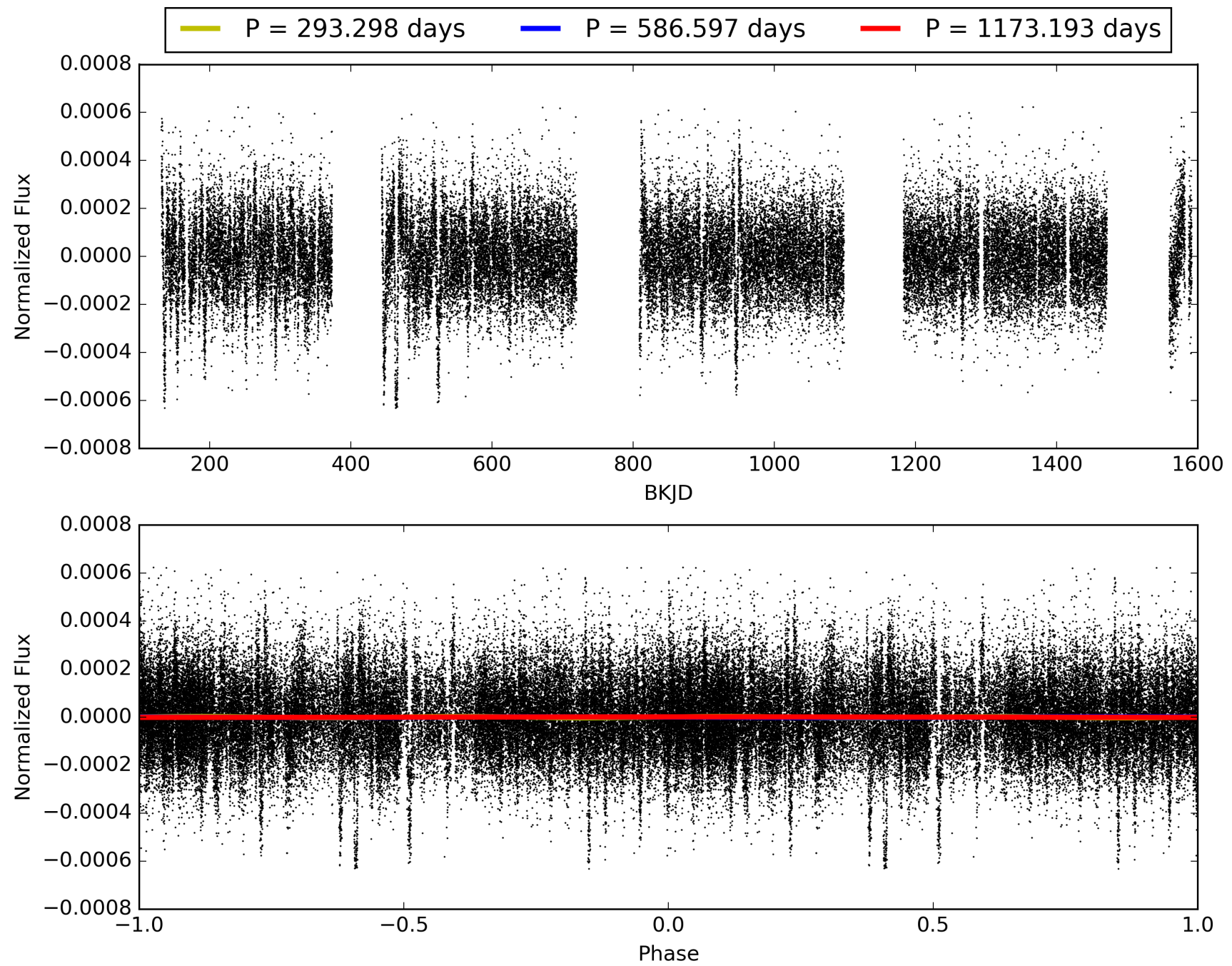
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:27:53 Z

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

TCE 011702248-01, PDC Light Curves

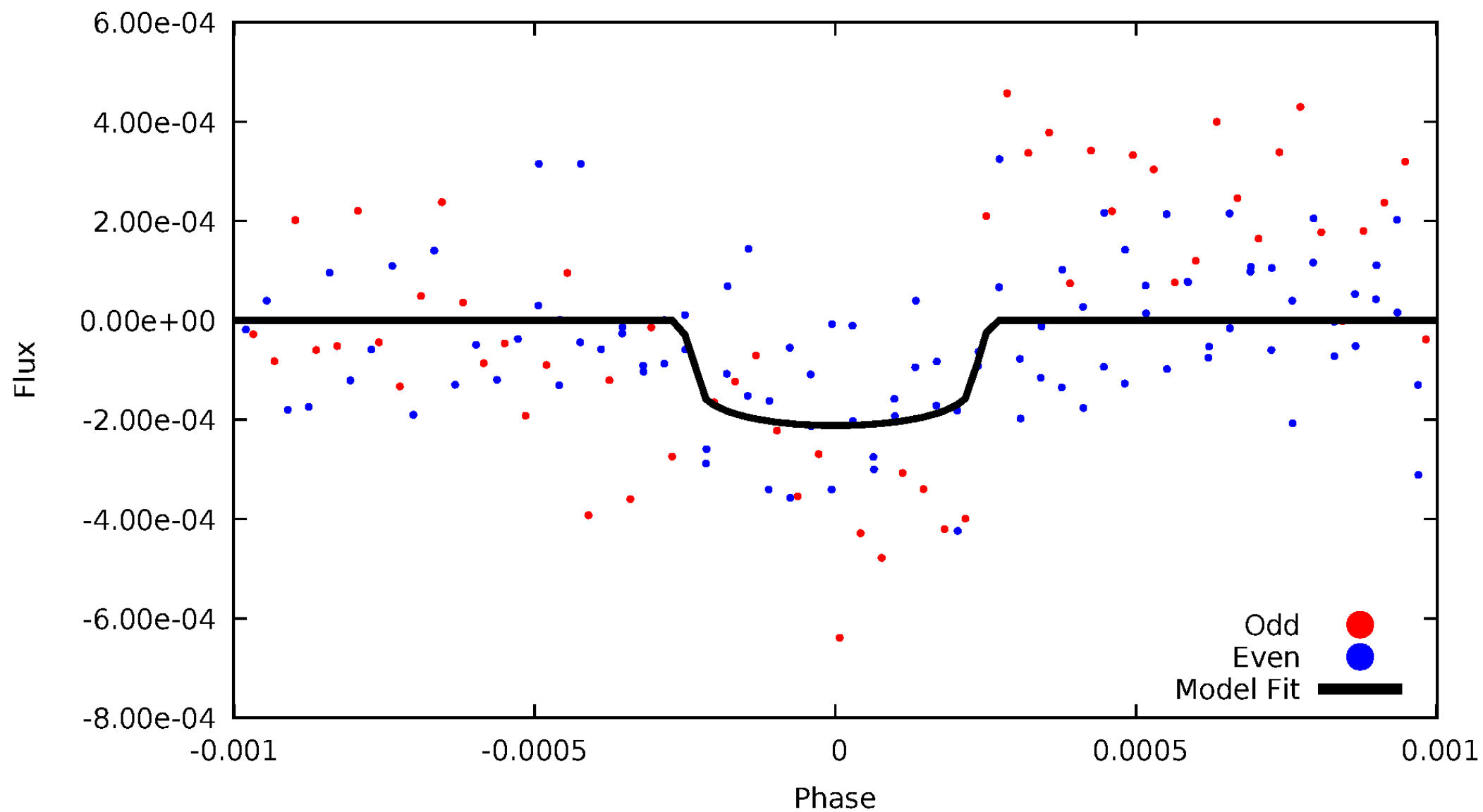


TCE 011702248-01



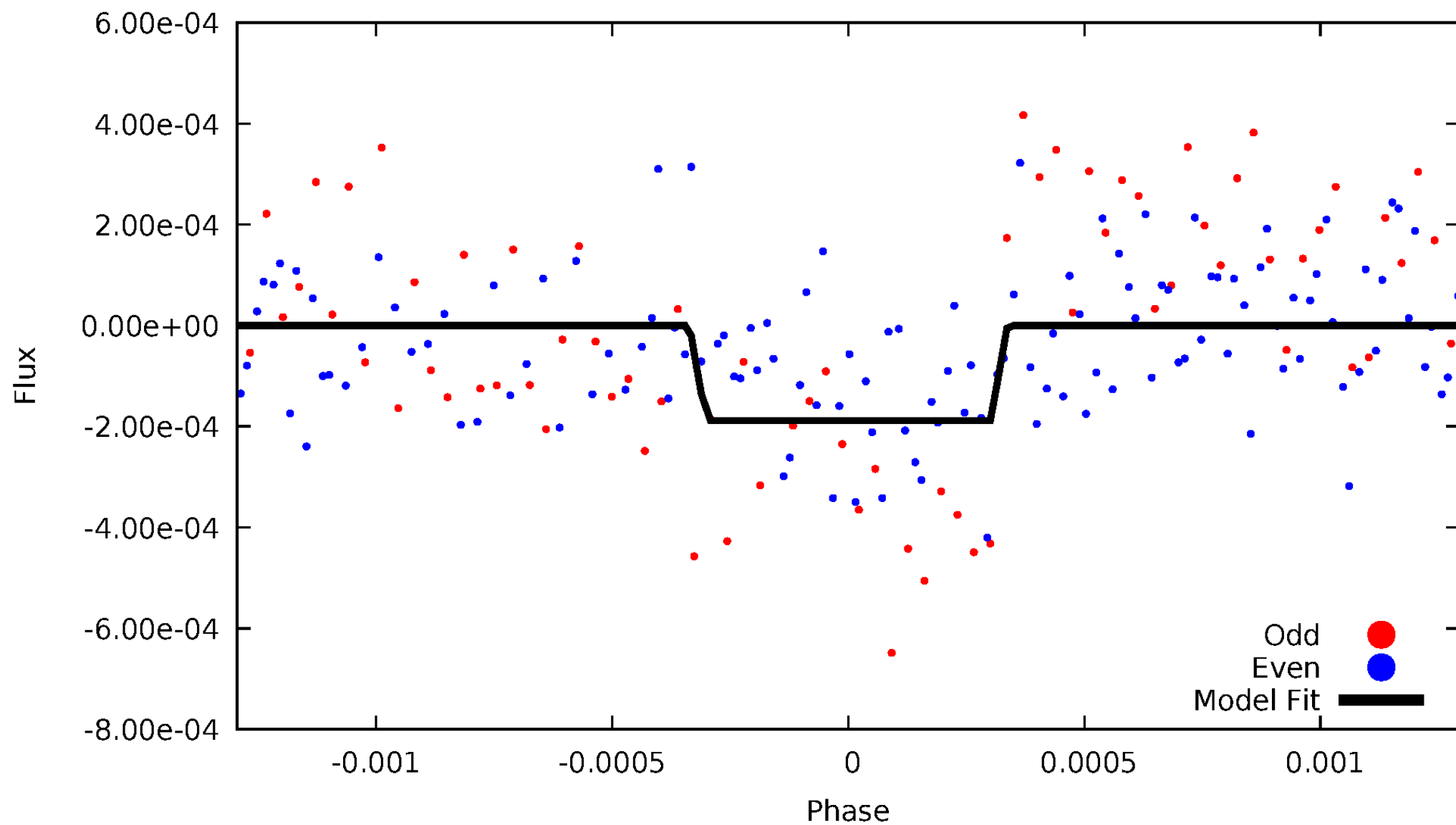
DV Odd/Even

TCE 011702248-01

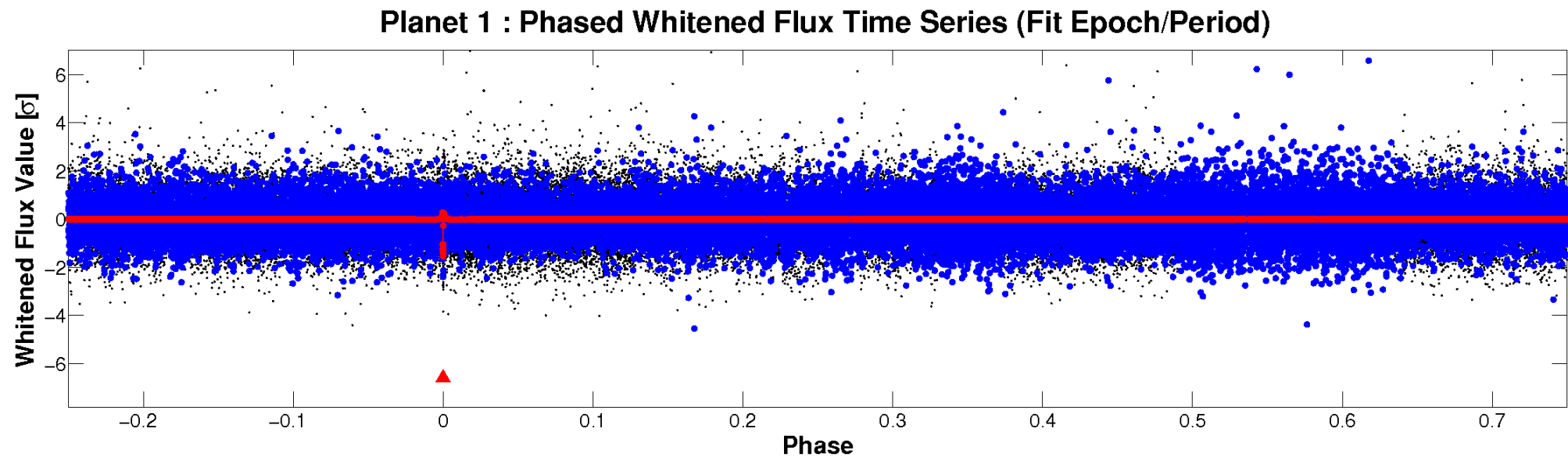
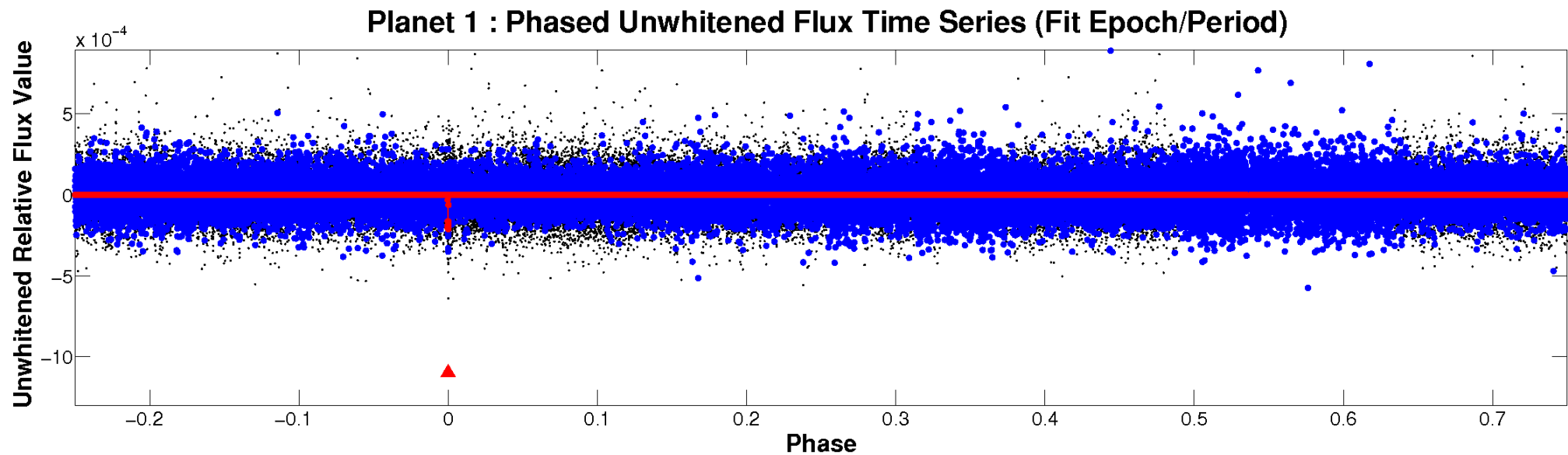


ALT Odd/Even

TCE 011702248-01

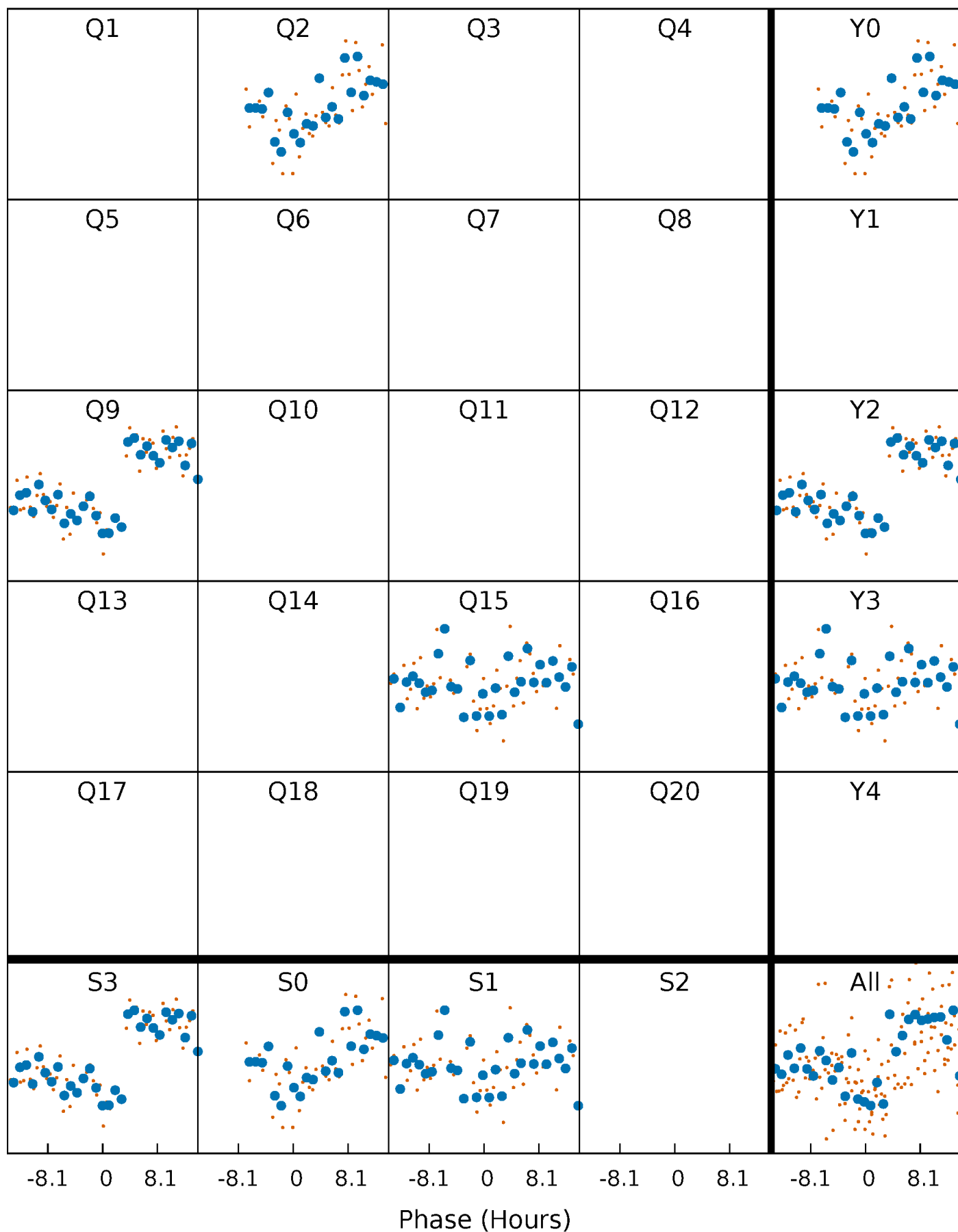


Non-Whitened Vs. Whitened Light Curve



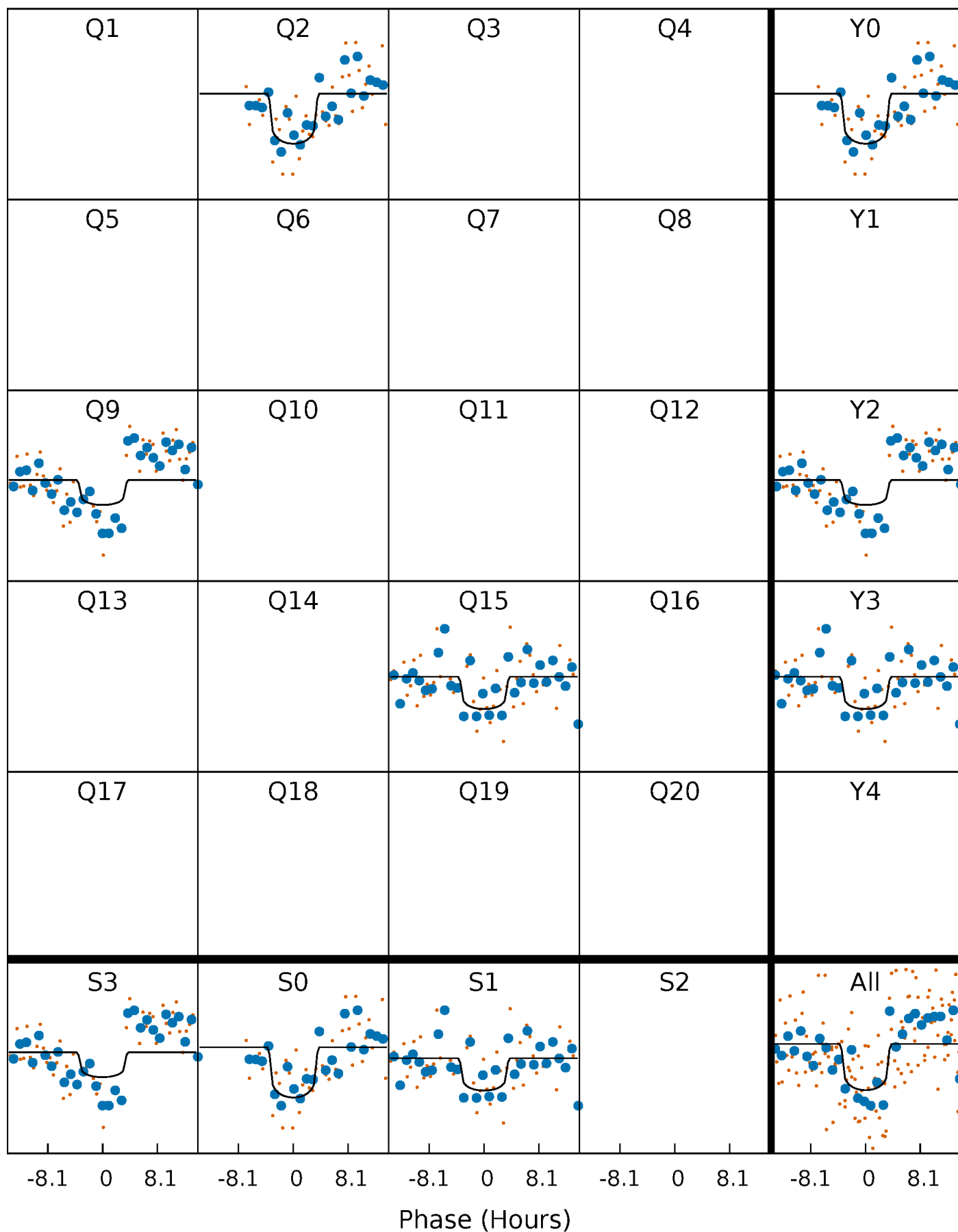
PDC Quarter-Phased Transit Curves

TCE 011702248-01 P=586.596698 Days $T_0=224.163177$ (BKJD)



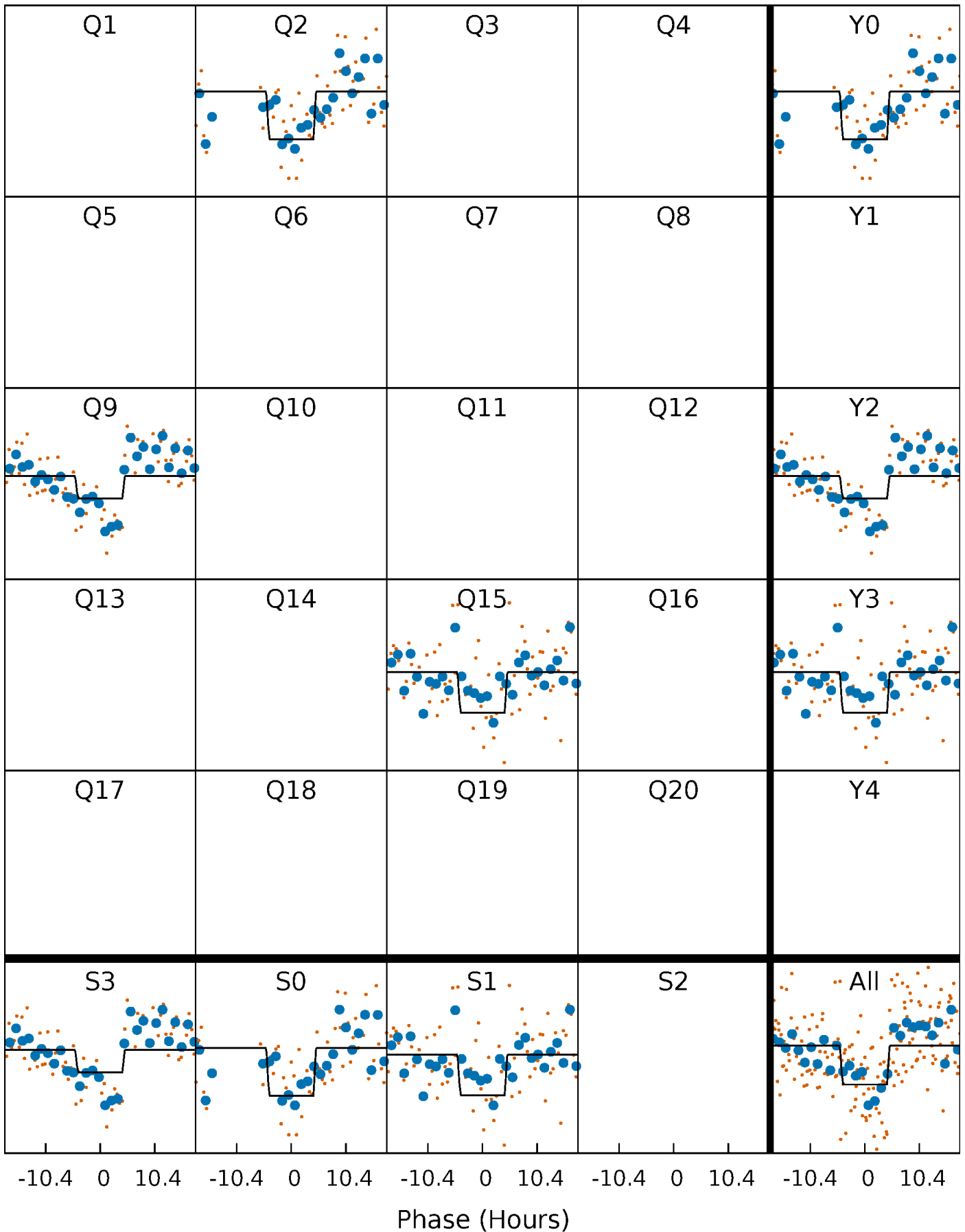
DV Quarter-Phased Transit Curves

TCE 011702248-01 P=586.596698 Days $T_0=224.163177$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

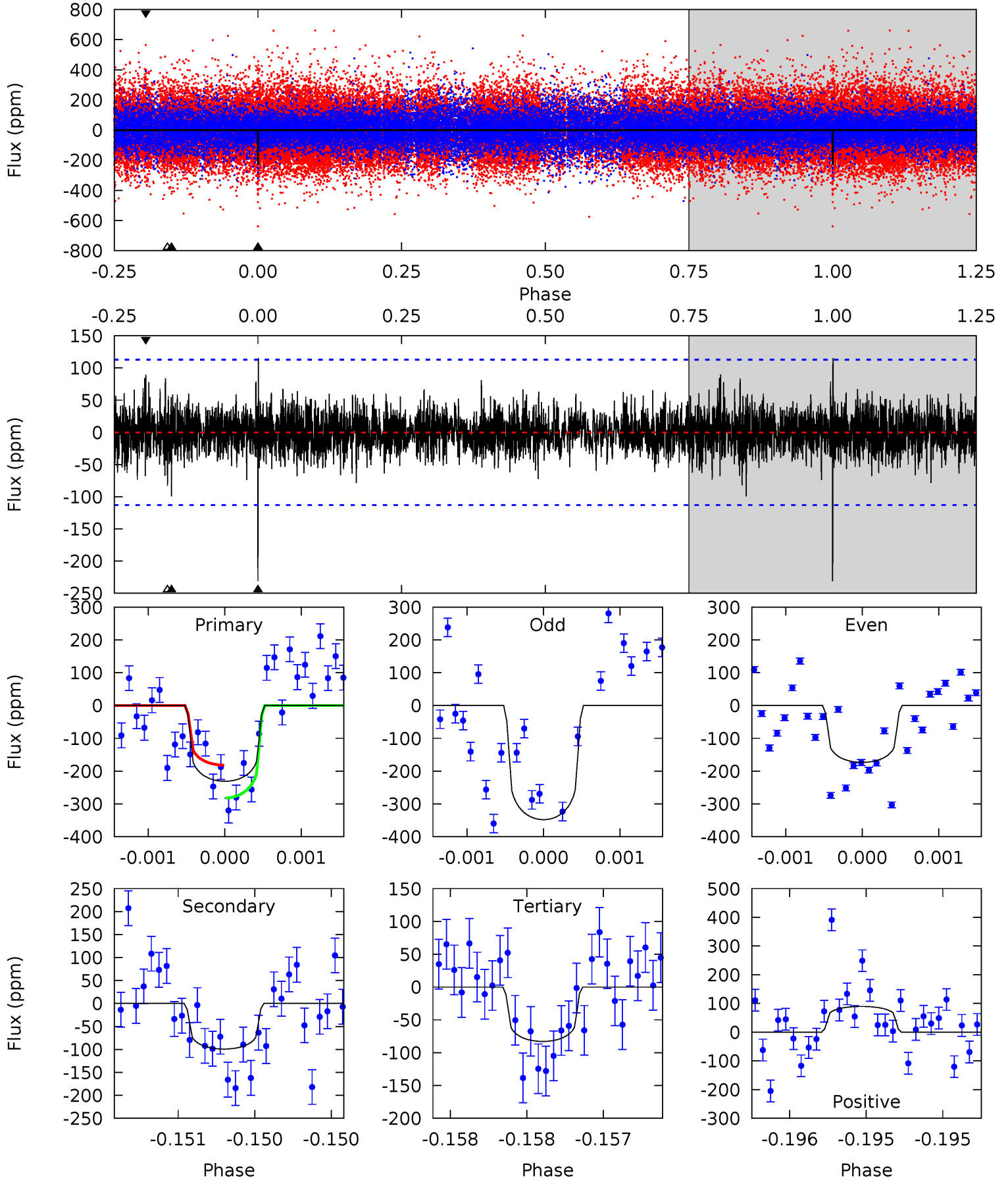
TCE 011702248-01 P=586.593018 Days $T_0=224.117362$ (BKJD)



DV Model-Shift Uniqueness Test

011702248-01, P = 586.596698 Days, E = 224.163177 Days

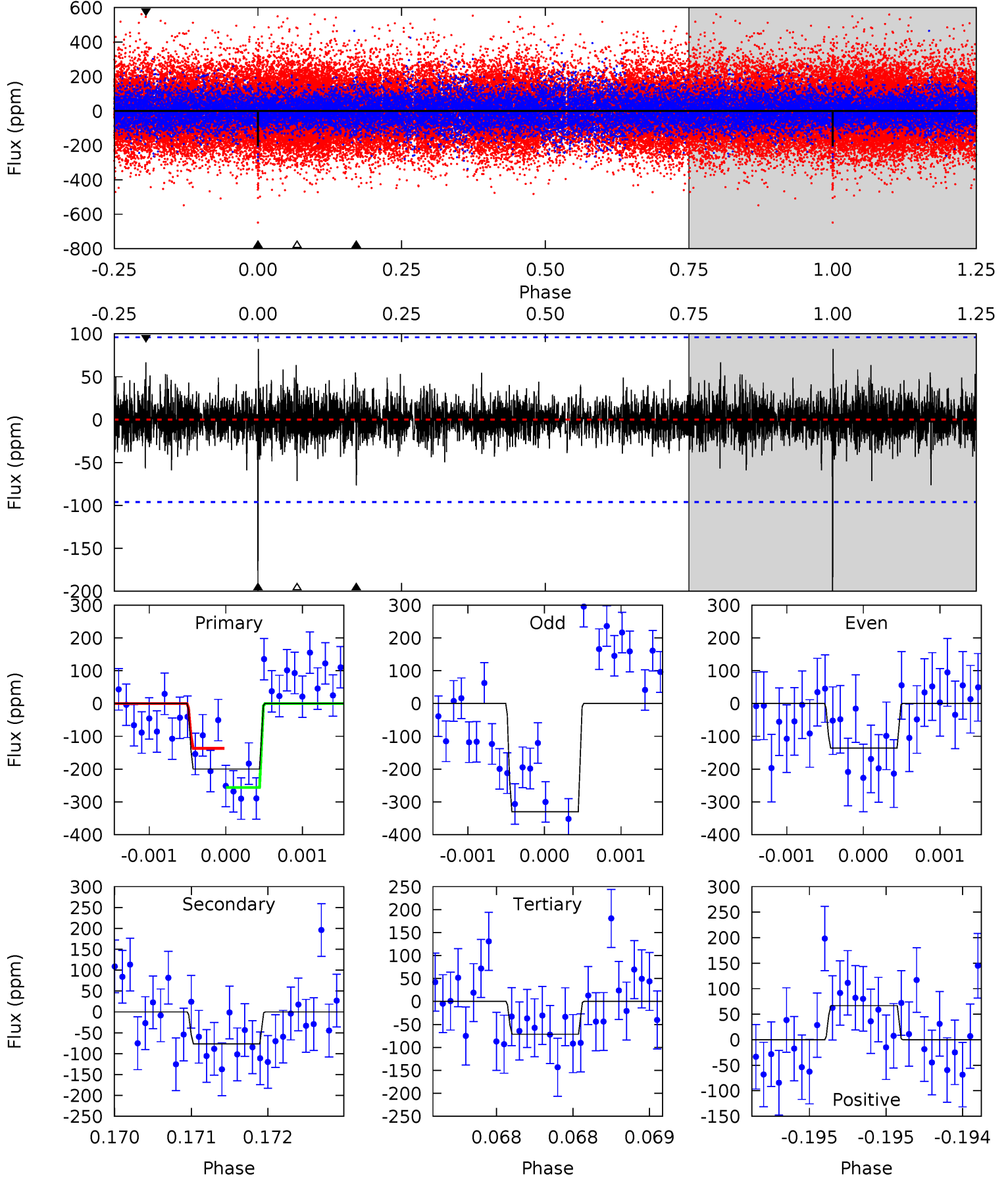
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	4.89	4.09	4.42	5.57	3.47	1.08	7.31	6.98	0.81	0.47	4.07	1.24	0.33	2.47



Alt Model-Shift Uniqueness Test

011702248-01, P = 586.593018 Days, E = 224.117362 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	4.40	4.10	3.84	5.52	3.40	0.86	7.39	7.65	0.29	0.56	5.28	1.41	0.29	3.43



Stellar Parameters For KIC 011702248

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6215^{+167}_{-167}	$3.824^{+0.323}_{-0.108}$	$-0.520^{+0.350}_{-0.250}$	$2.140^{+0.415}_{-0.770}$	$1.114^{+0.185}_{-0.206}$	$0.160^{+0.370}_{-0.053}$
	+3%/-3%	+8%/-3%	+67%/-48%	+19%/-36%	+17%/-18%	+231%/-33%
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 011702248-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-99 ± 20	$3.72^{+3.59}_{-2.33}$	460^{+31}_{-42}	4814^{+3023}_{-1025}	7638^{+47539}_{-5670}
Alt.	-76 ± 17	$4.12^{+3.39}_{-2.58}$	462^{+30}_{-42}	4372^{+2565}_{-742}	4844^{+30887}_{-3262}

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 $A_{obs} \gg 1.0$

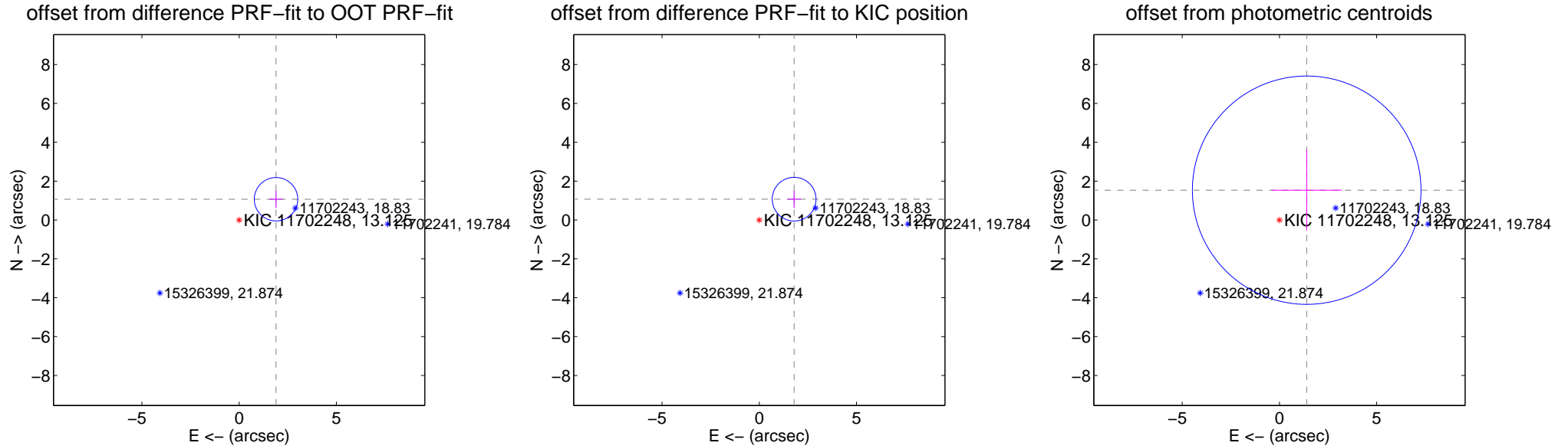
DV Centroid Data

Supplemental centroid analysis for 011702248-01. Kepler magnitude: 13.12. Transit SNR 8.41

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.177 ± 0.372	5.85	-1.897 ± 0.345	1.069 ± 0.447
PRF-fit source offset from KIC position	2.089 ± 0.375	5.57	-1.792 ± 0.345	1.073 ± 0.447
photometric centroid source offset	2.08 ± 1.96	1.06	-1.40 ± 1.81	1.53 ± 2.08



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.

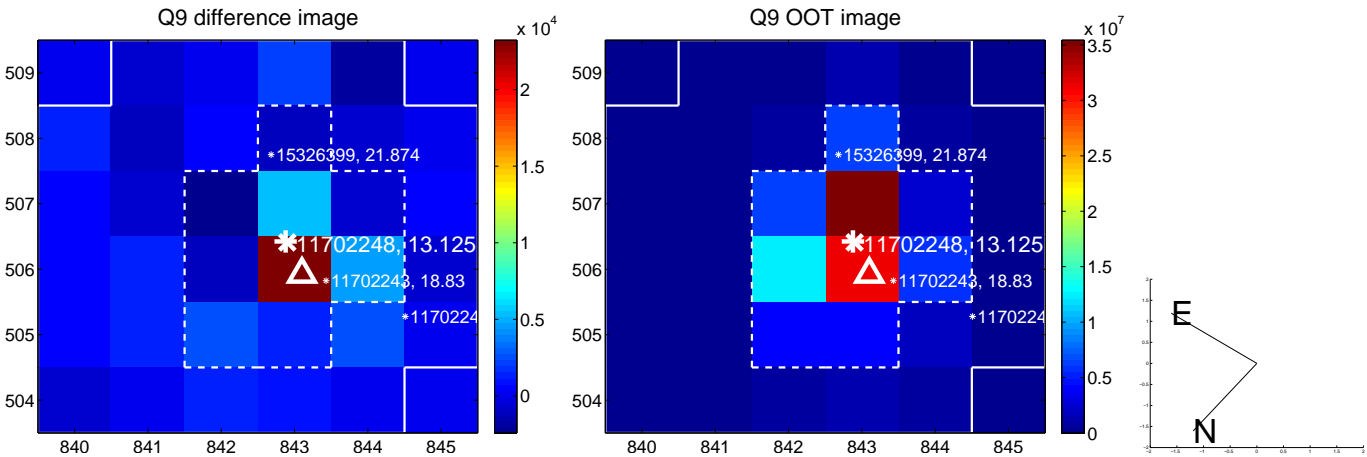
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



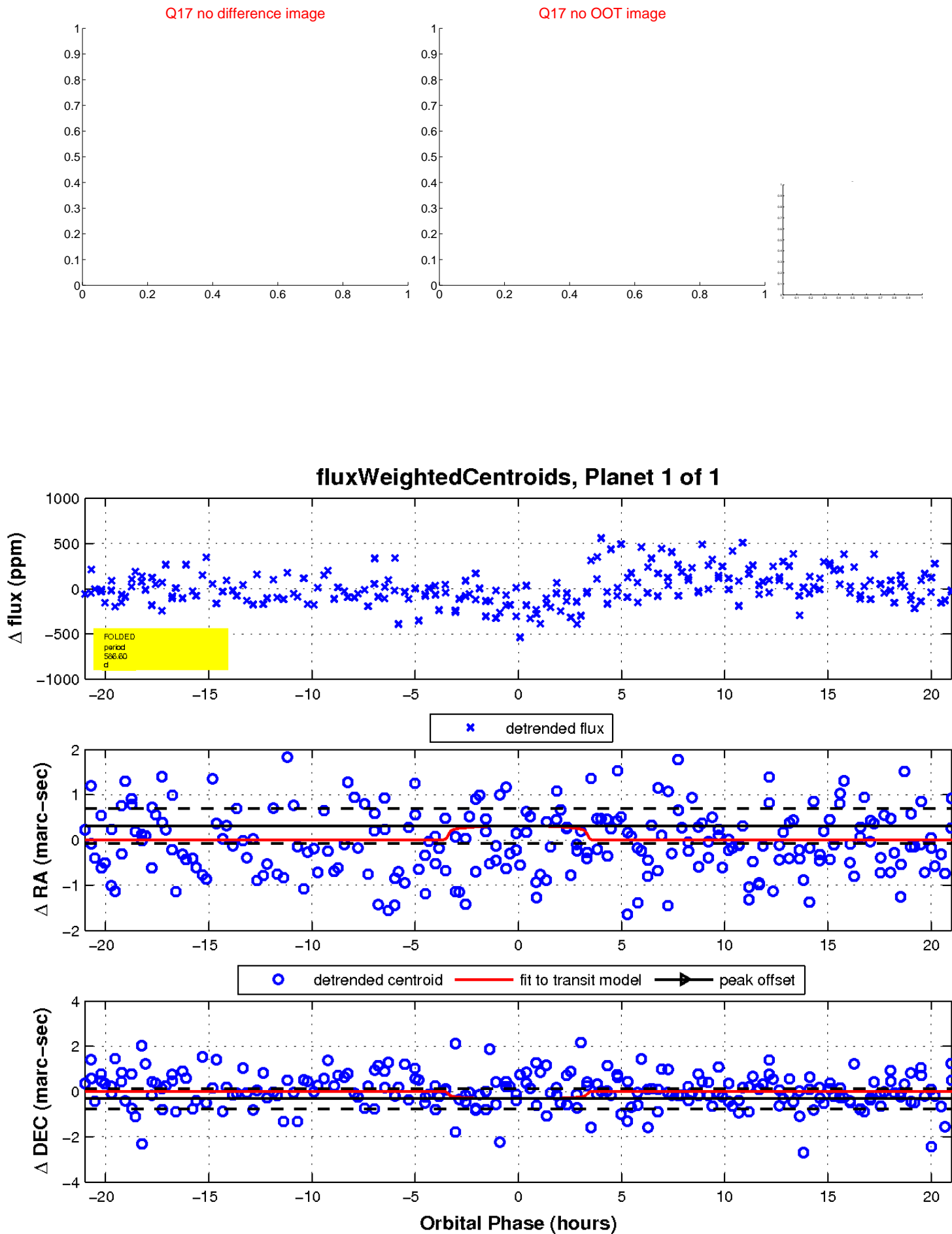
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

