

KIC 008034983

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})
008034983-01	OBS	No	362.844351	402.419466	903.8	12.282	10.2	10.1	1.04	6222	3.22	1.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008034983-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE--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.

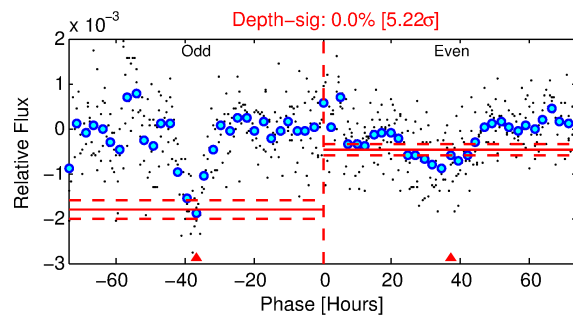
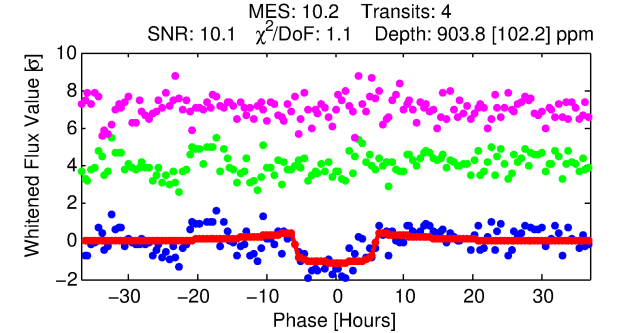
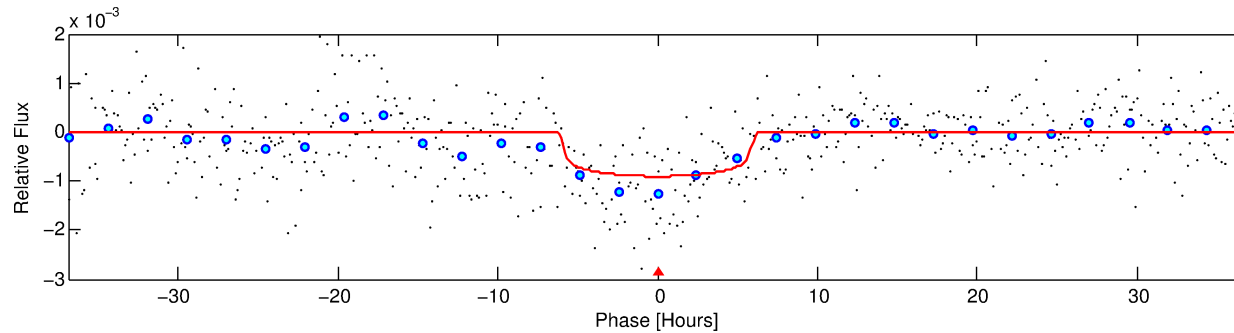
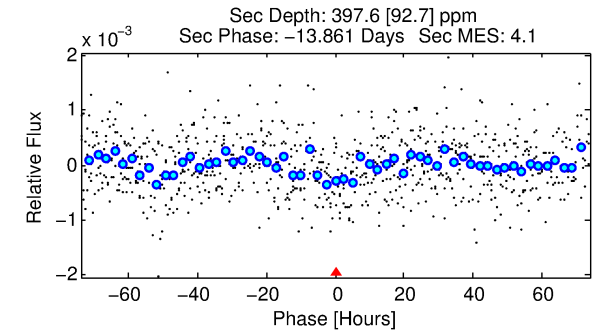
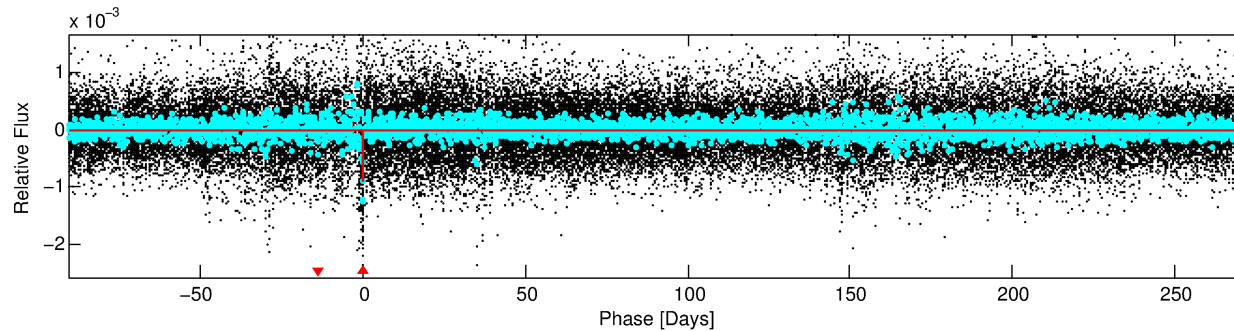
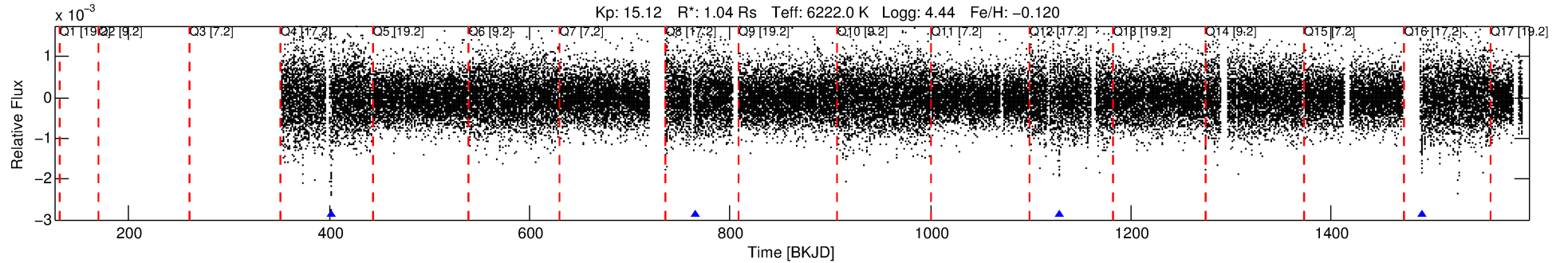
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008034983-01

No Significant Match Found

DV One-Page Summary

KIC: 8034983 Candidate: 1 of 1 Period: 362.844 d



DV Fit Results:

Period = 362.84435 [0.00792] d
Epoch = 402.4195 [0.0151] BKJD
Rp/R* = 0.0283 [0.0110]
a/R* = 203.69 [388.62]
b = 0.49 [2.95]
Seff = 1.39 [0.62]
Teq = 277 [31] K
Rp = 3.22 [1.65] Re
a = 1.0228 [0.2884] AU
Ag = 22097.36 [20104.02] [1.10σ]
Teffp = 5220 [1082] K [4.57σ]

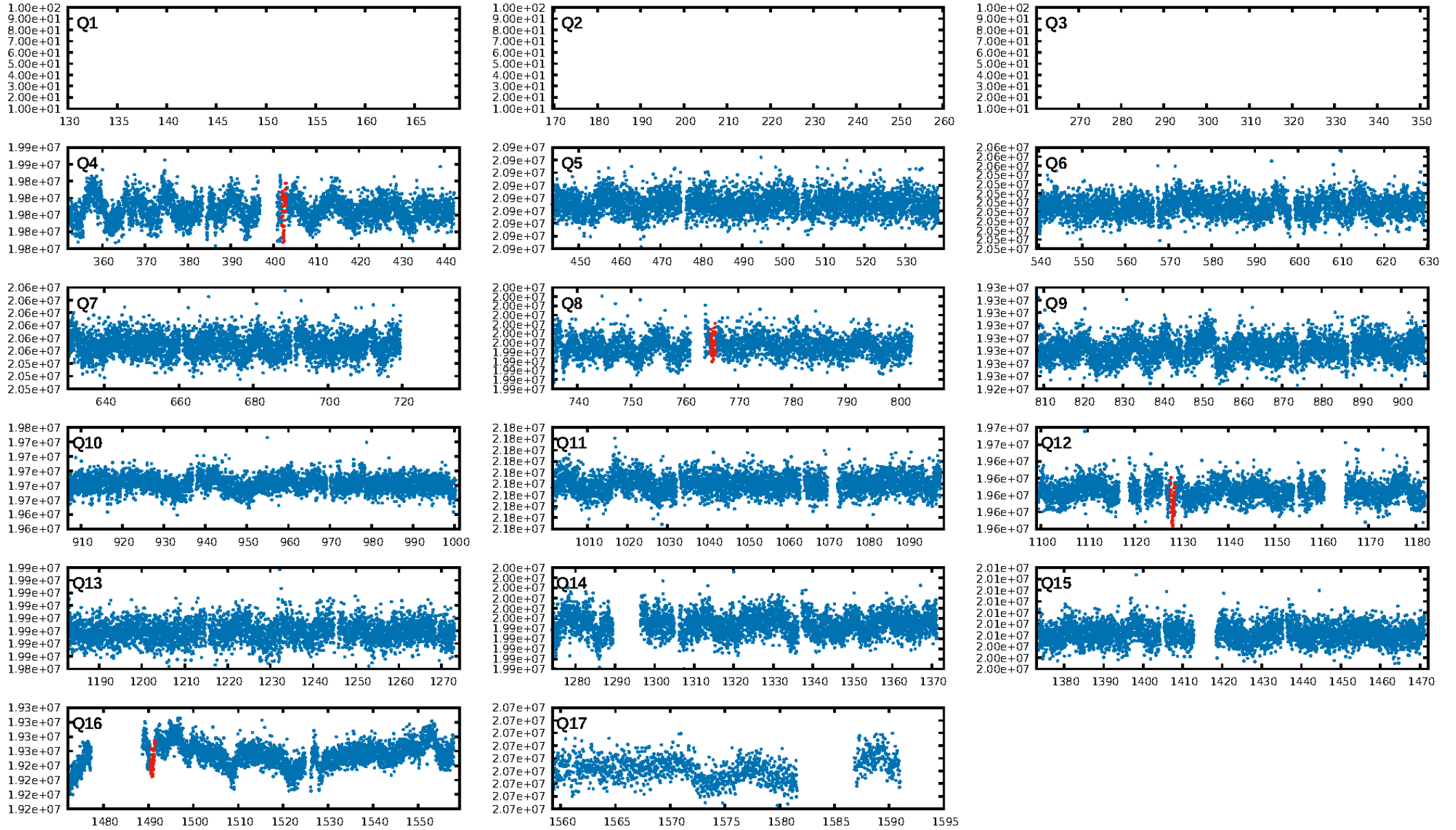
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.2%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: 7.90e-14
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 52.37
Centroid-sig: 49.8%
Centroid-so: 1.839 arcsec [1.92σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

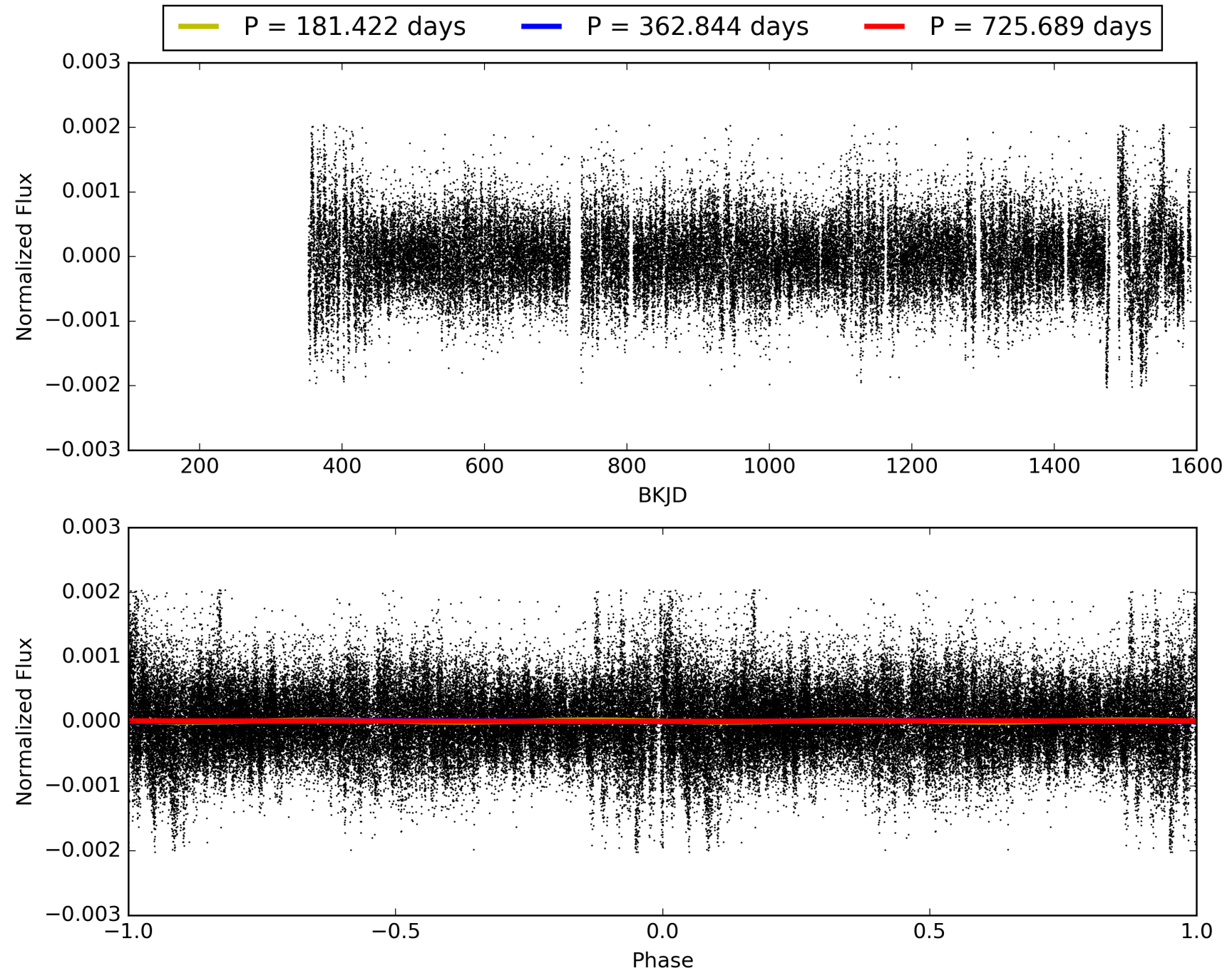
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:16:12 Z

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

TCE 008034983-01, PDC Light Curves

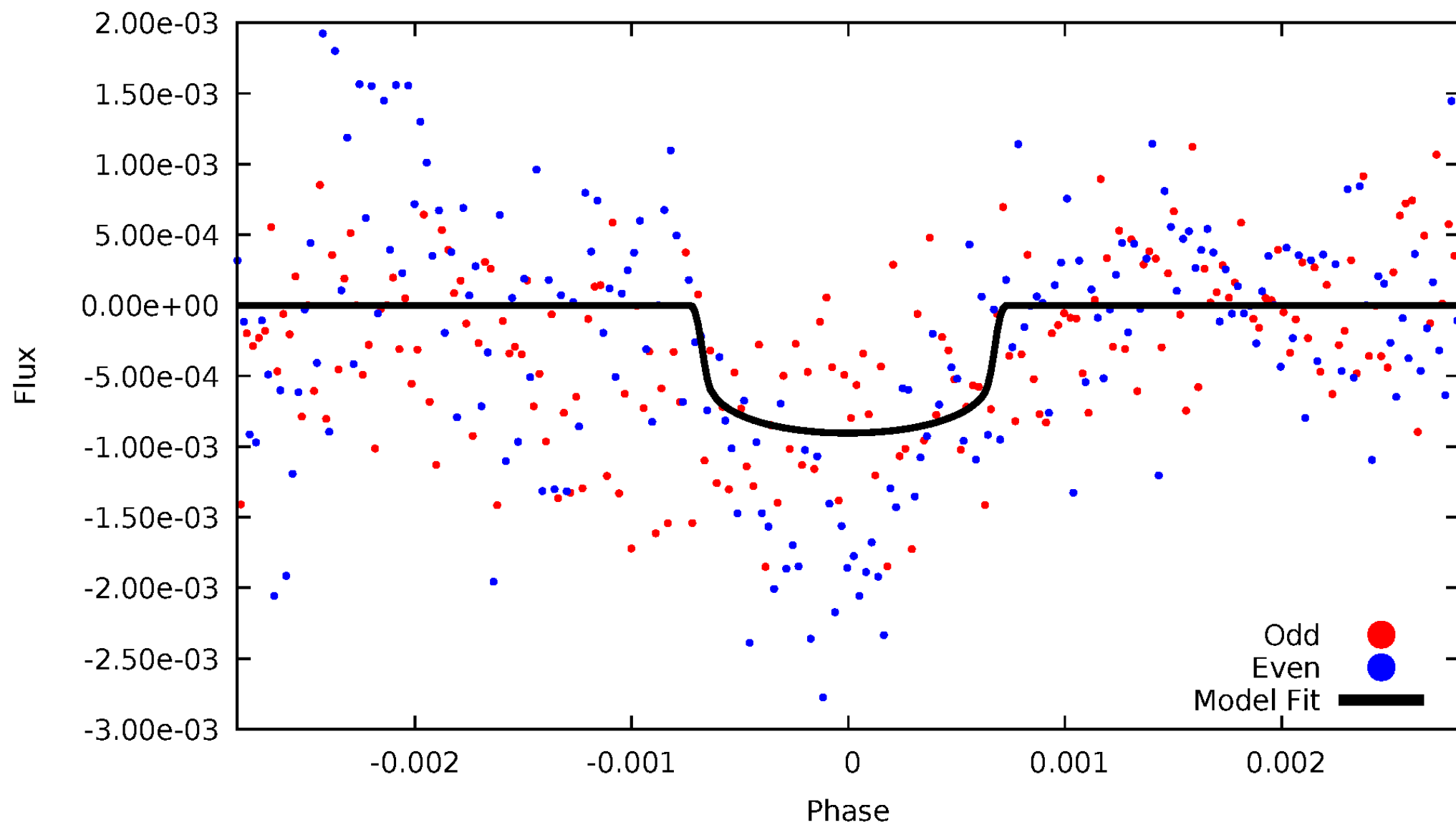


TCE 008034983-01



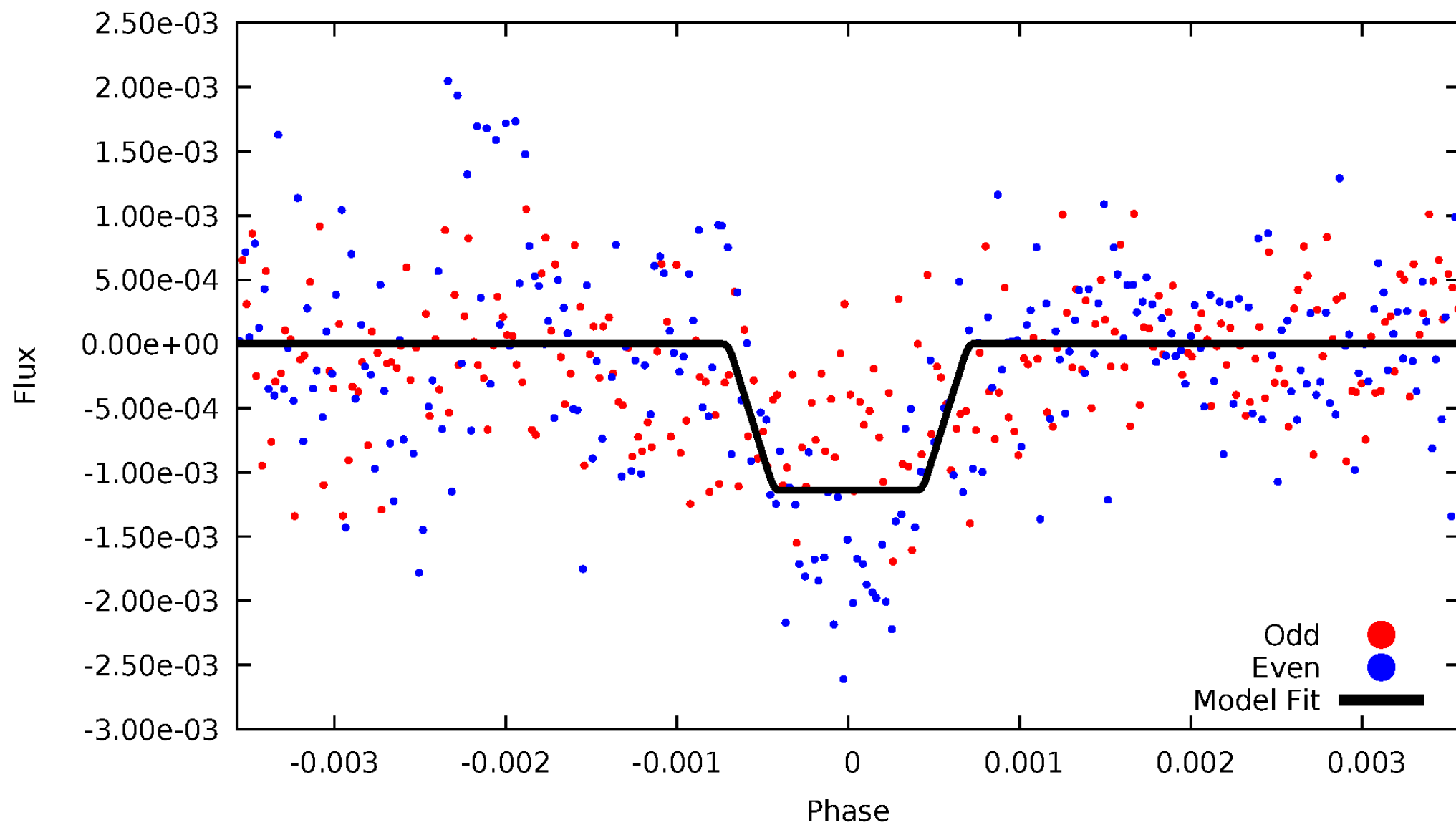
DV Odd/Even

TCE 008034983-01

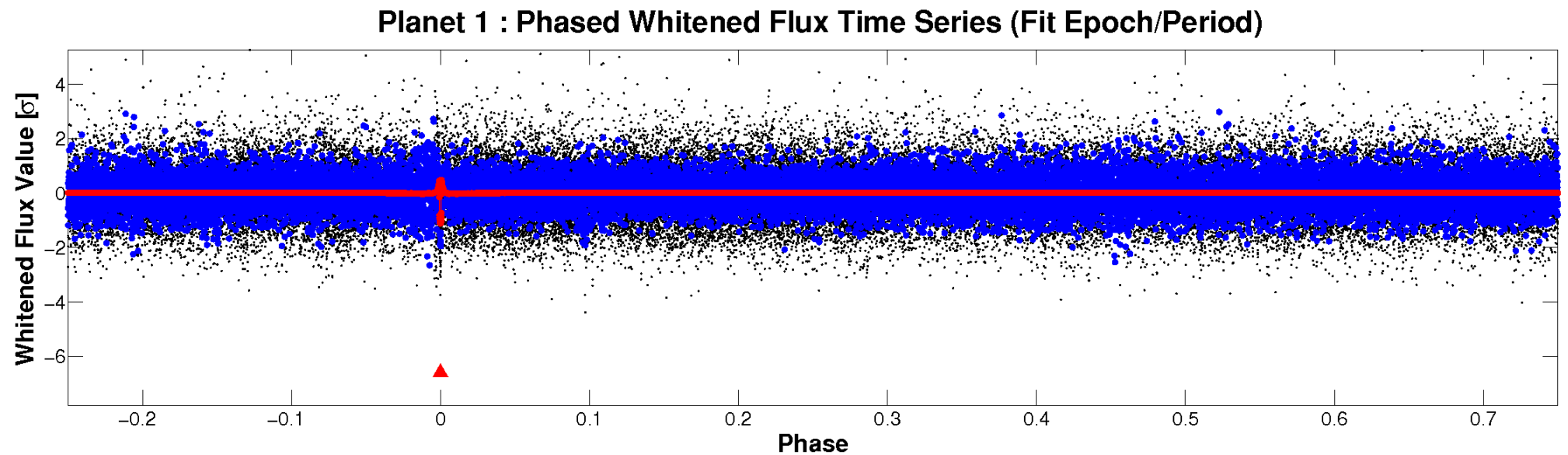
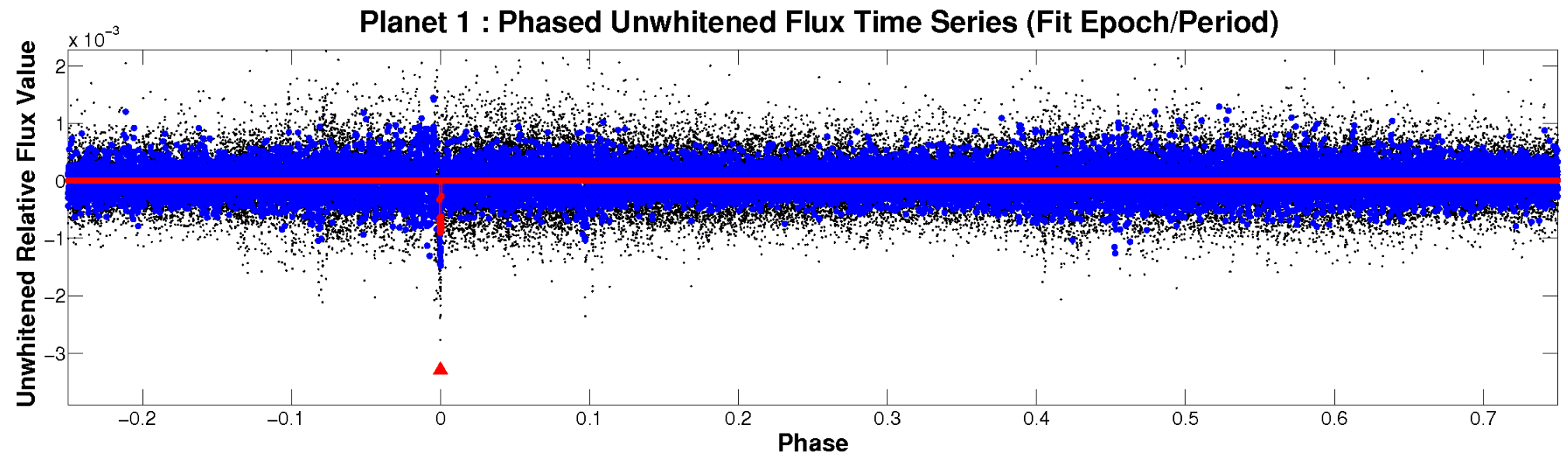


ALT Odd/Even

TCE 008034983-01

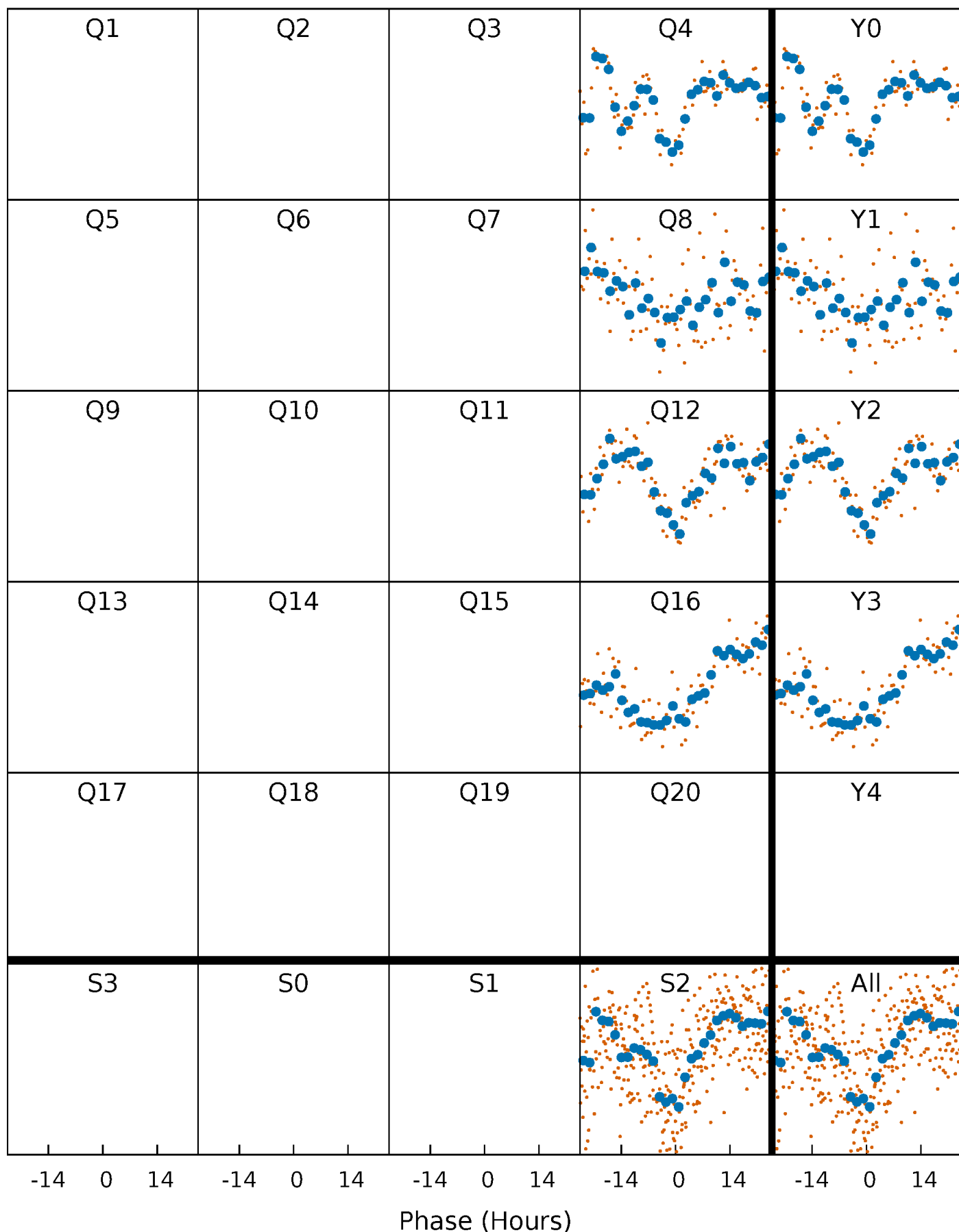


Non-Whitened Vs. Whitened Light Curve



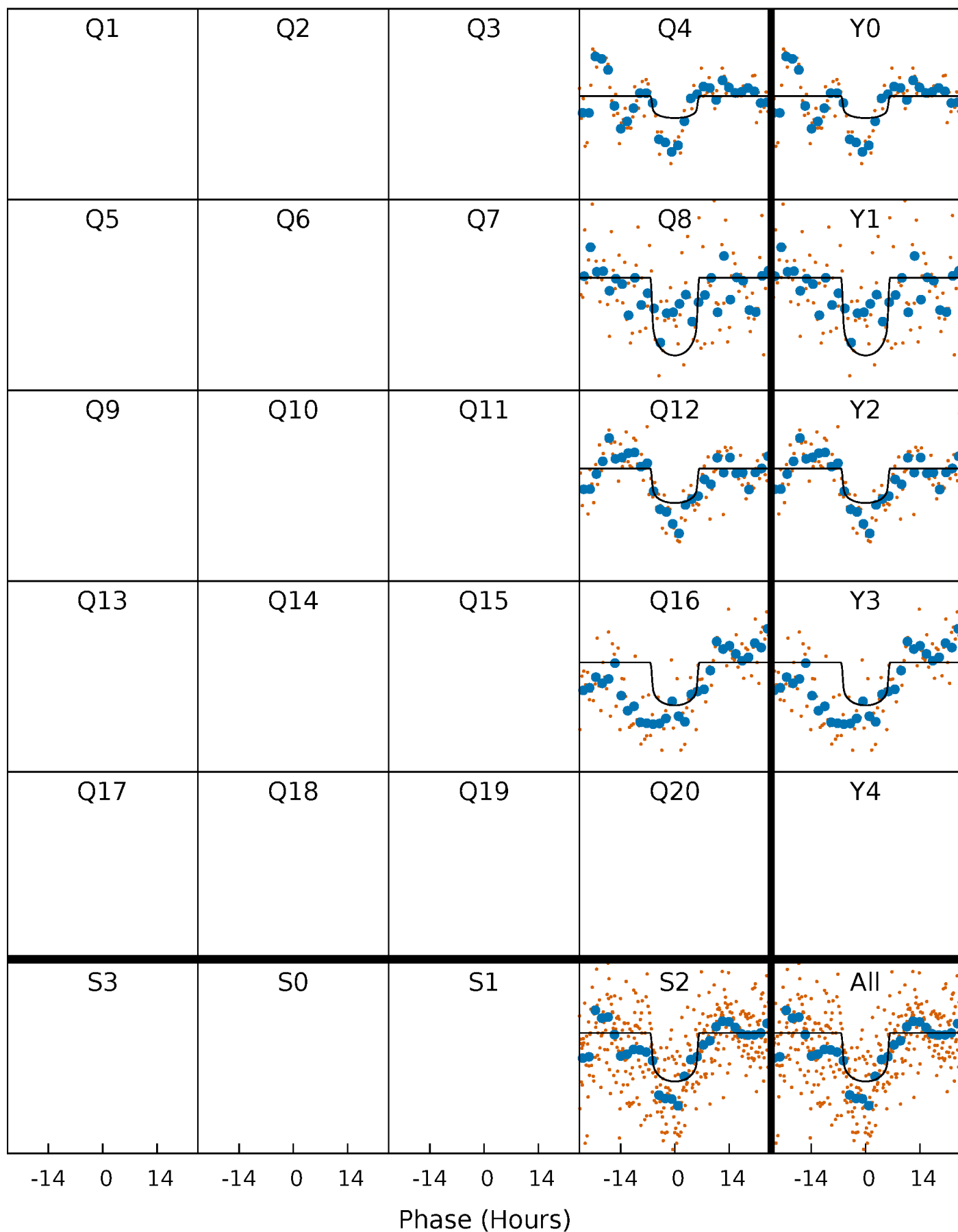
PDC Quarter-Phased Transit Curves

TCE 008034983-01 P=362.844351 Days $T_0=402.419466$ (BKJD)



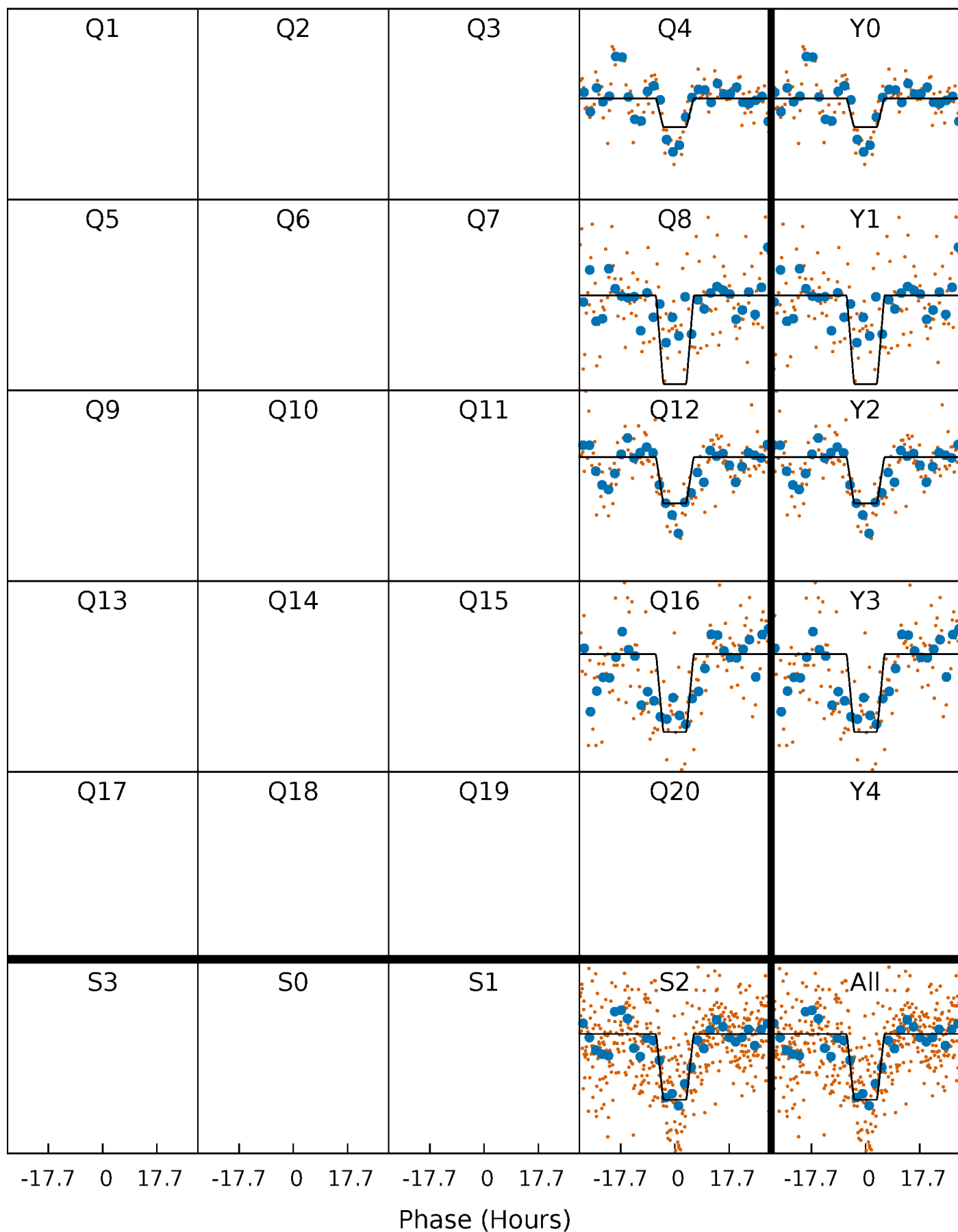
DV Quarter-Phased Transit Curves

TCE 008034983-01 P=362.844351 Days $T_0=402.419466$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

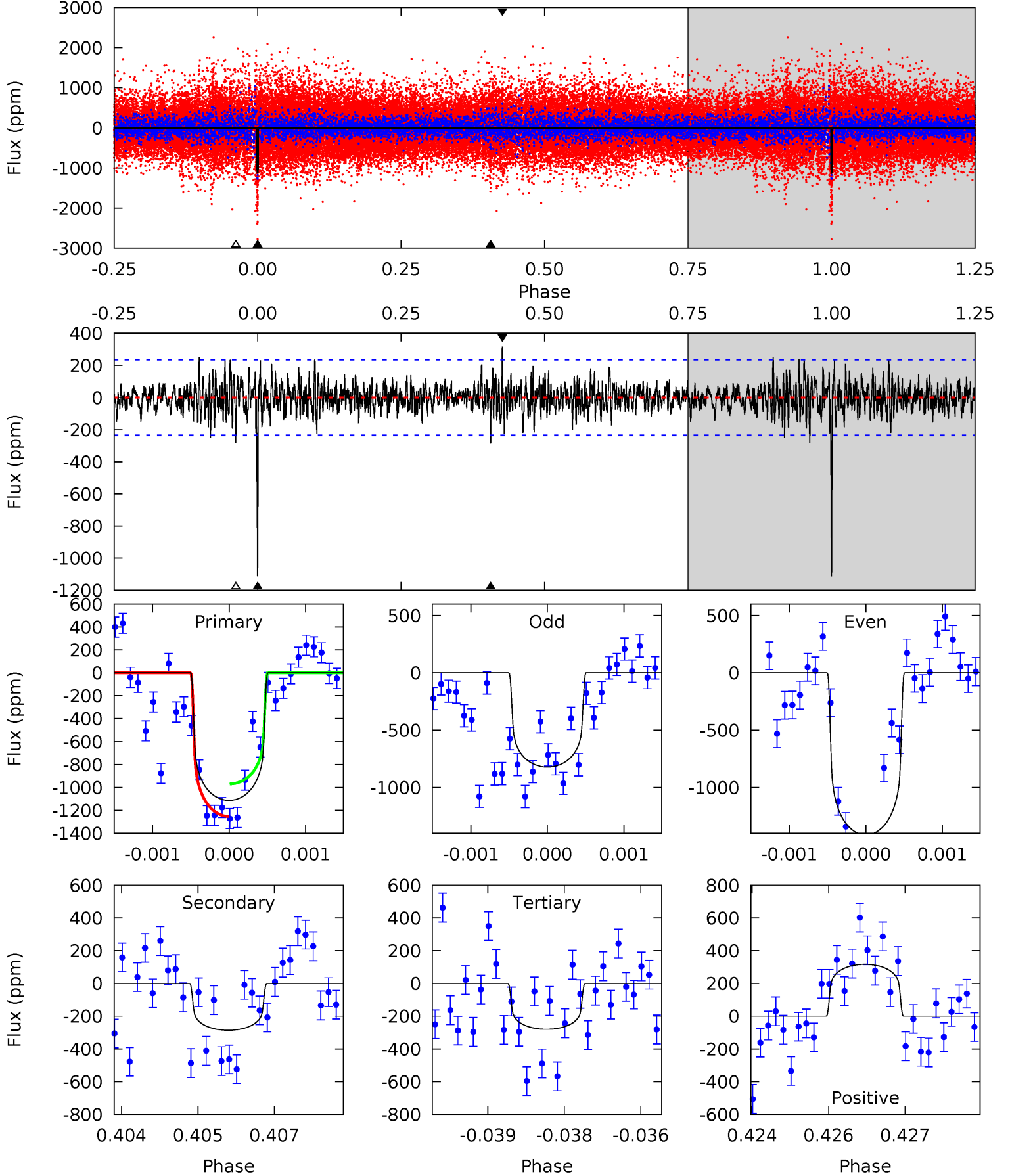
TCE 008034983-01 P=362.845536 Days $T_0=402.387160$ (BKJD)



DV Model-Shift Uniqueness Test

008034983-01, $P = 362.844351$ Days, $E = 39.575115$ Days

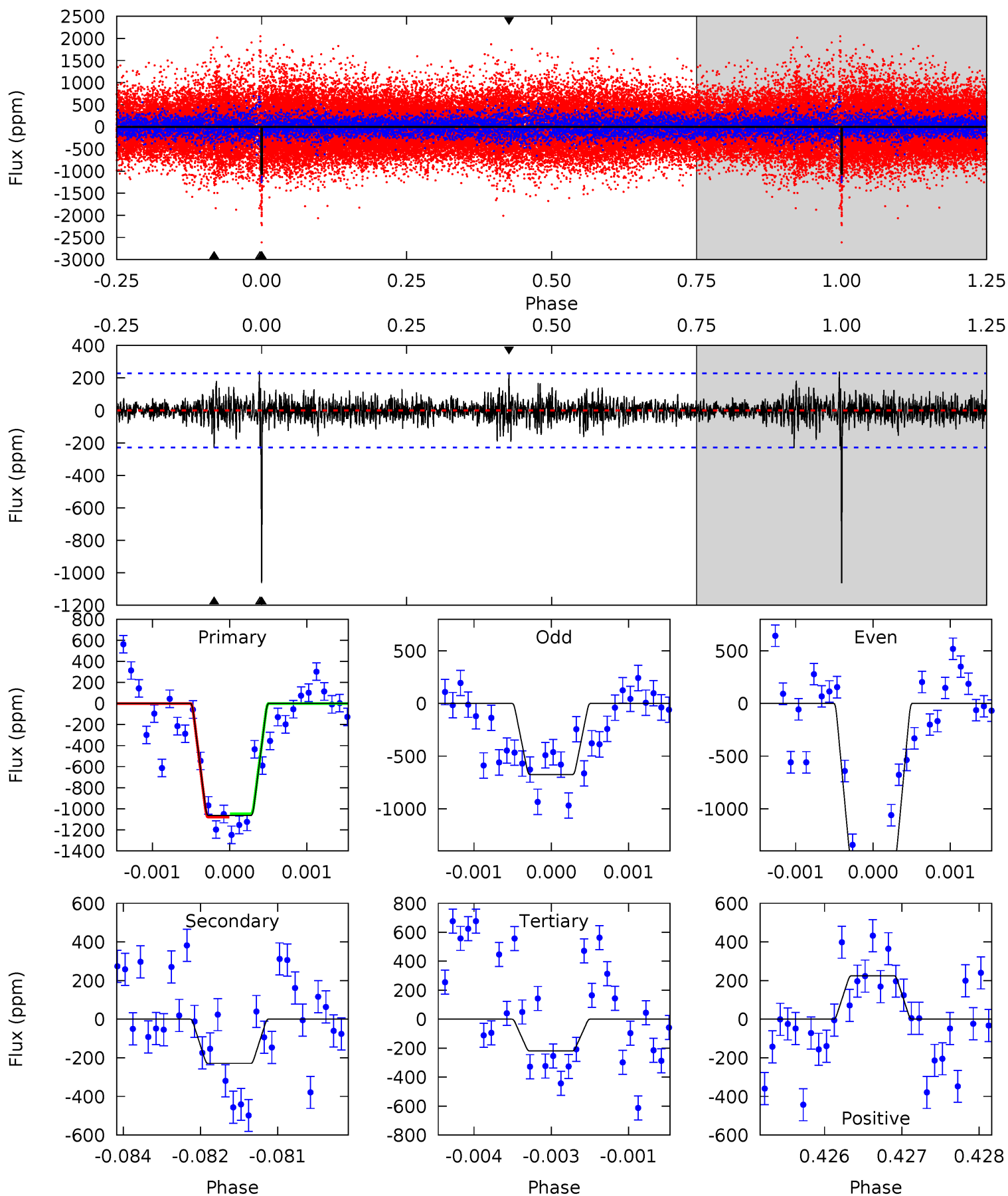
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.4	6.54	6.40	7.23	5.39	3.18	1.57	19.0	18.2	0.13	-0.69	6.76	0.93	0.22	3.25



Alt Model-Shift Uniqueness Test

008034983-01, P = 362.845536 Days, E = 39.541624 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	5.40	5.17	5.30	5.39	3.19	1.10	19.9	19.8	0.23	0.11	9.30	0.92	0.18	0.37



Stellar Parameters For KIC 008034983

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6222^{+194}_{-259}	$4.438^{+0.070}_{-0.224}$	$-0.120^{+0.250}_{-0.300}$	$1.041^{+0.349}_{-0.116}$	$1.083^{+0.153}_{-0.153}$	$1.350^{+0.430}_{-0.769}$
	+3%/-4%	+2%/-5%	+208%/-250%	+34%/-11%	+14%/-14%	+32%/-57%
Source	KIC0	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 008034983-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-286 ± 44	$3.36^{+1.42}_{-1.24}$	394^{+30}_{-22}	4850^{+1207}_{-575}	13894^{+22447}_{-6962}
Alt.	-229 ± 42	$3.97^{+1.37}_{-1.36}$	394^{+32}_{-24}	4383^{+792}_{-494}	7969^{+11226}_{-3765}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

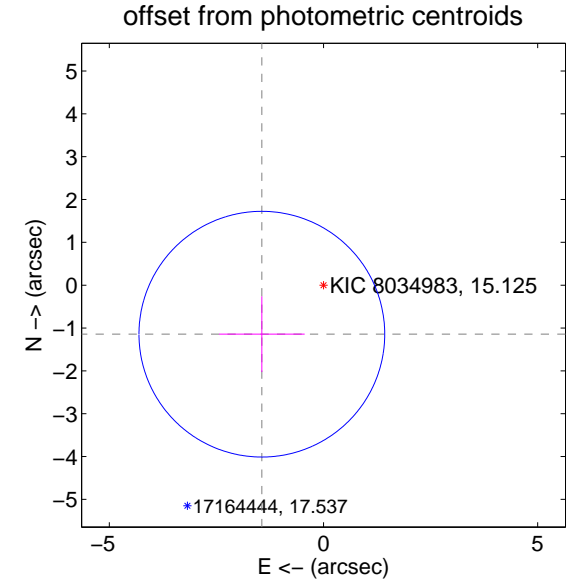
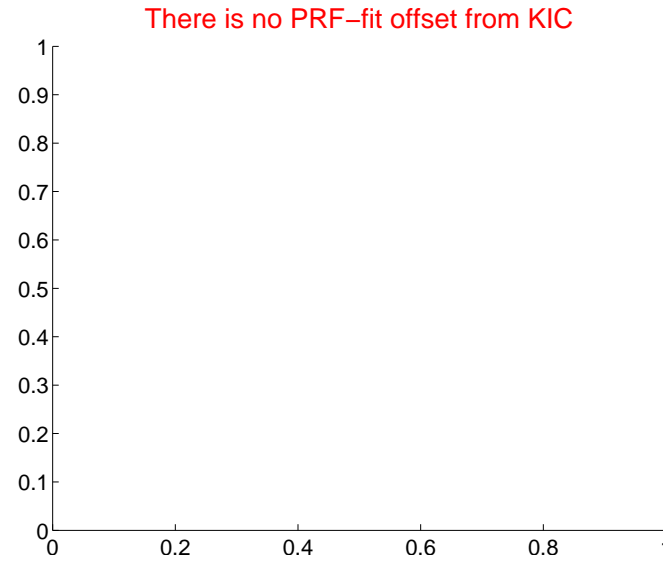
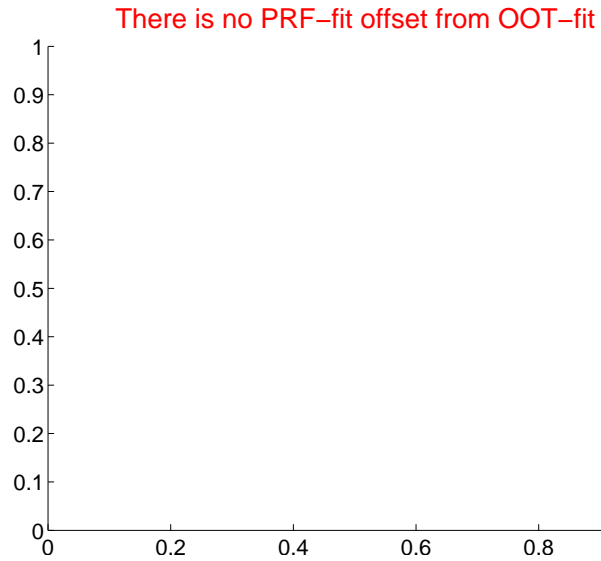
DV Centroid Data

Supplemental centroid analysis for 008034983-01. Kepler magnitude: 15.12. Transit SNR 10.14

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.84 ± 0.96	1.92	1.44 ± 1.00	-1.14 ± 0.88

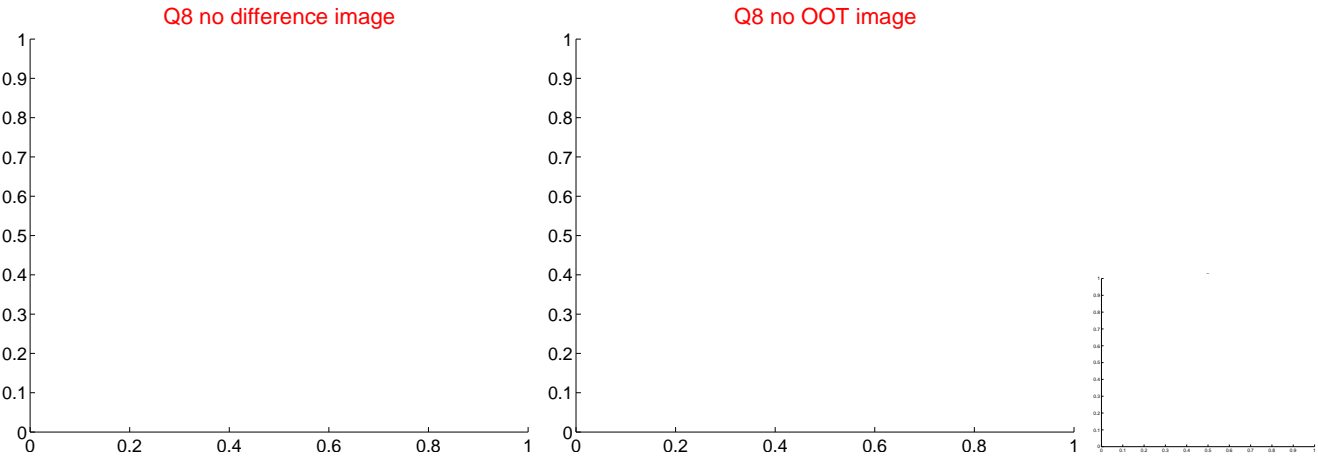
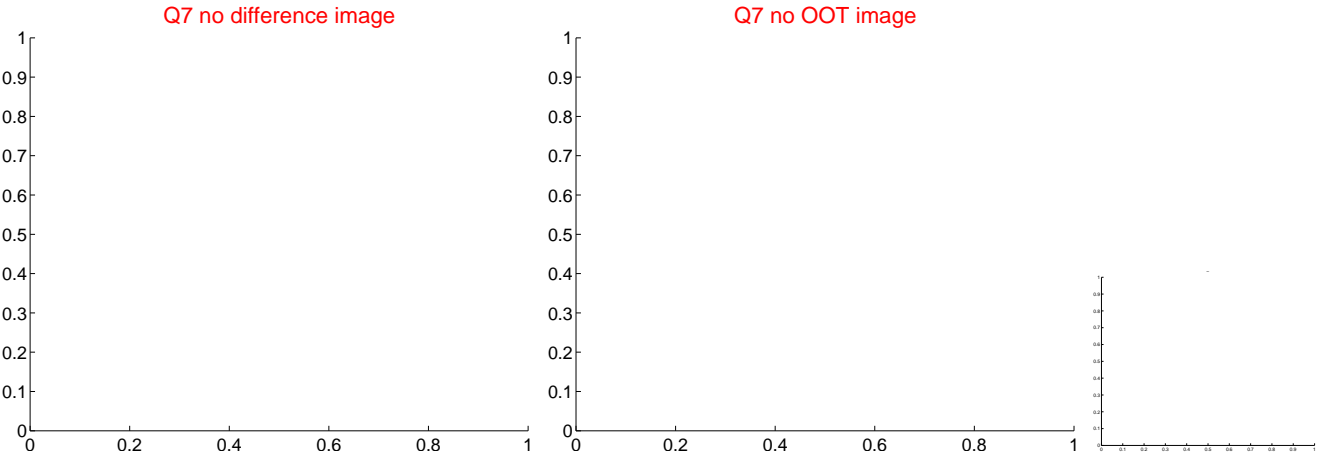
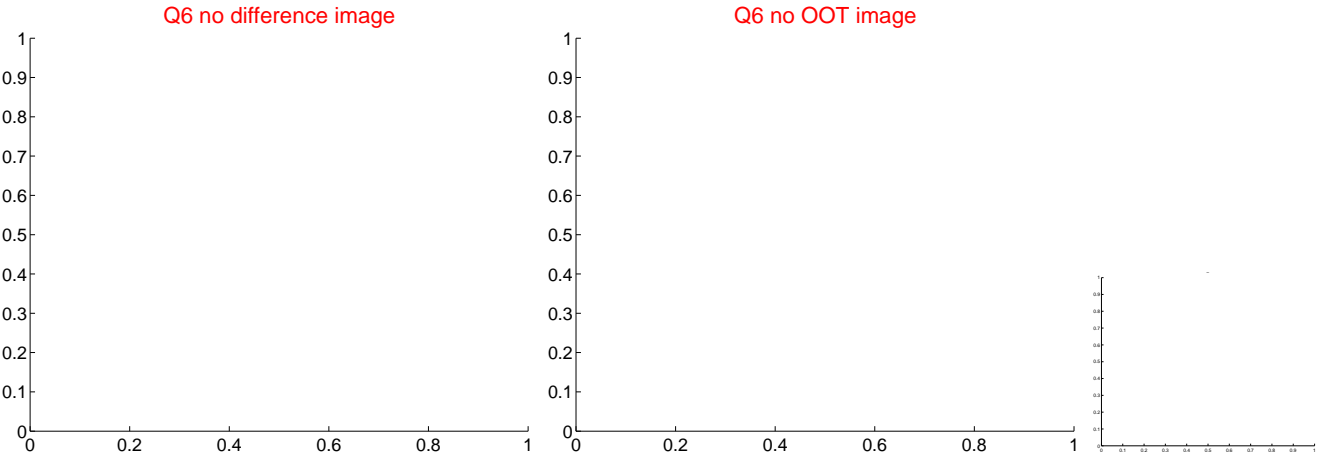
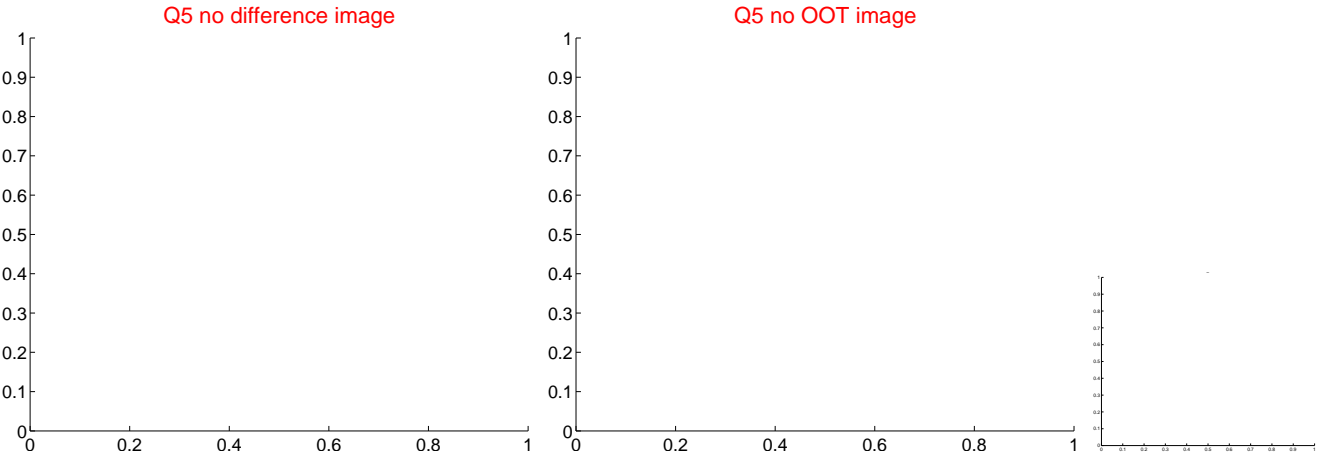


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



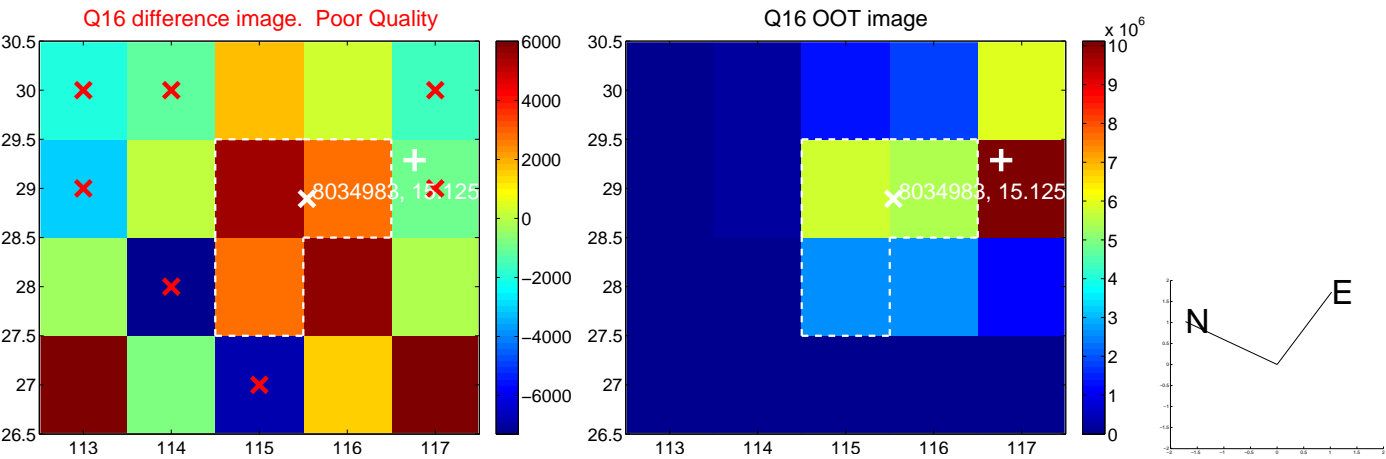
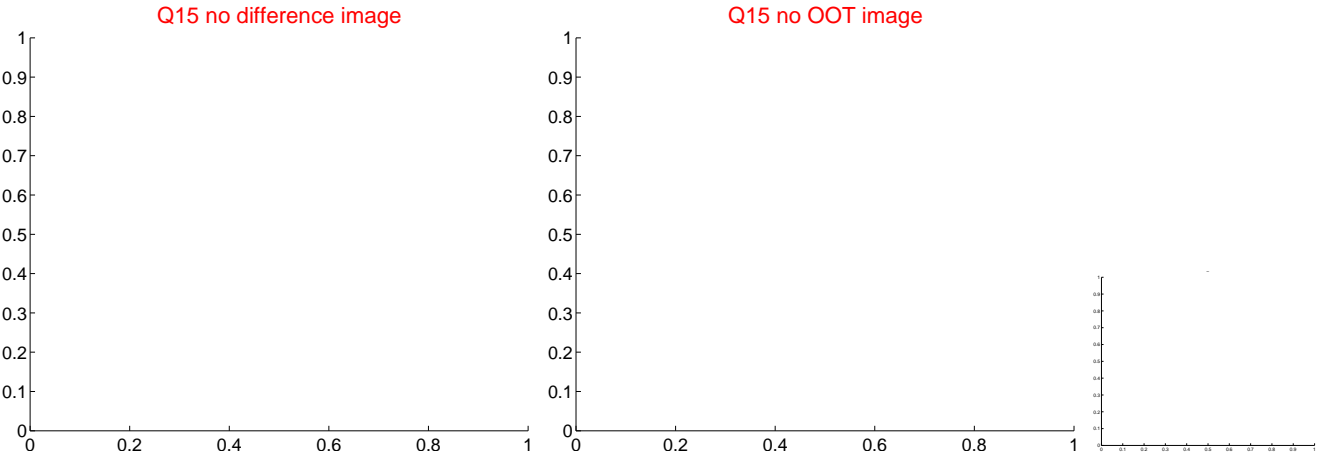
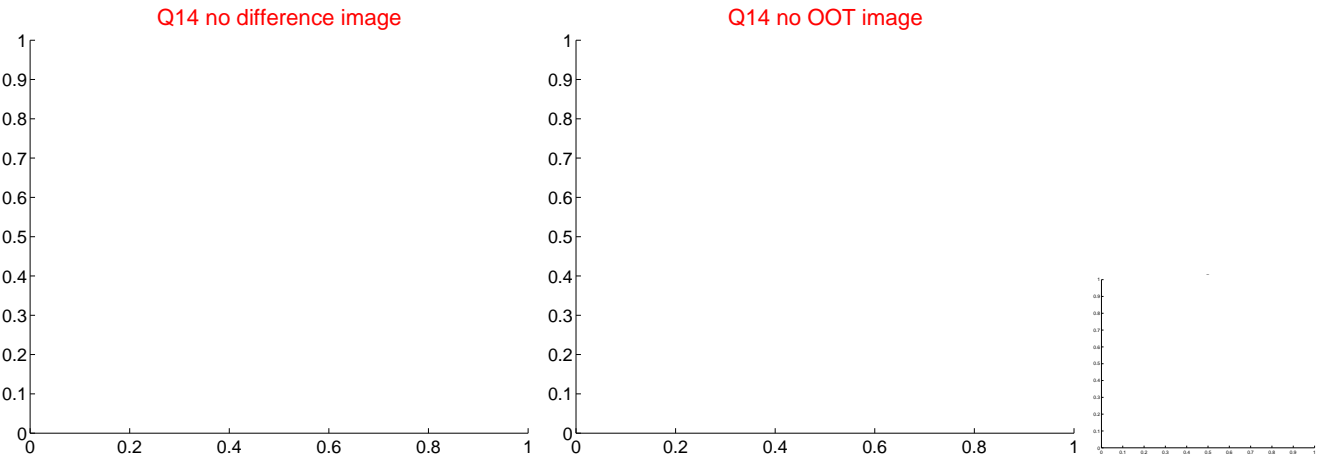
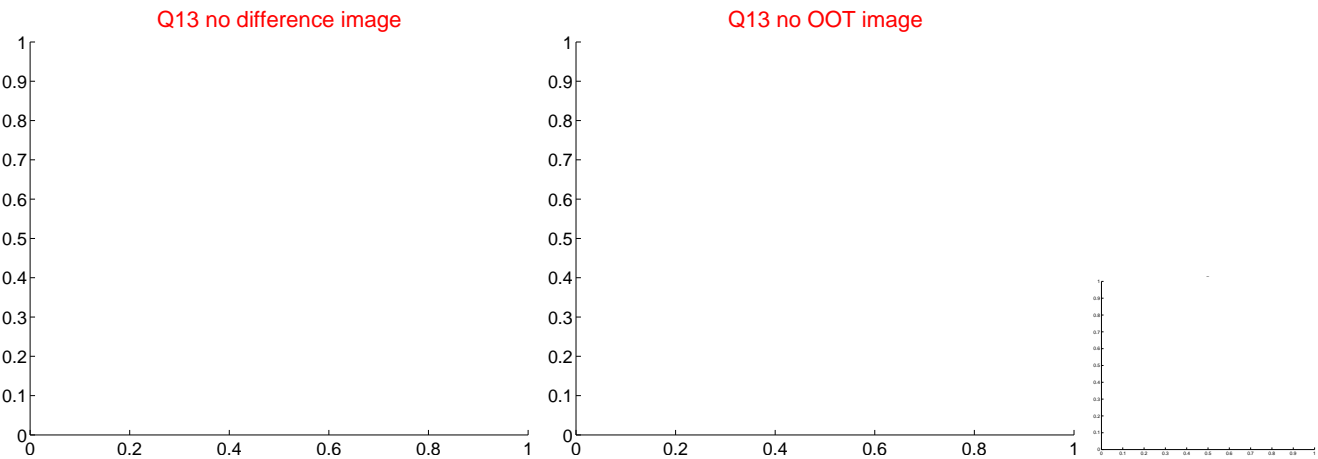
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



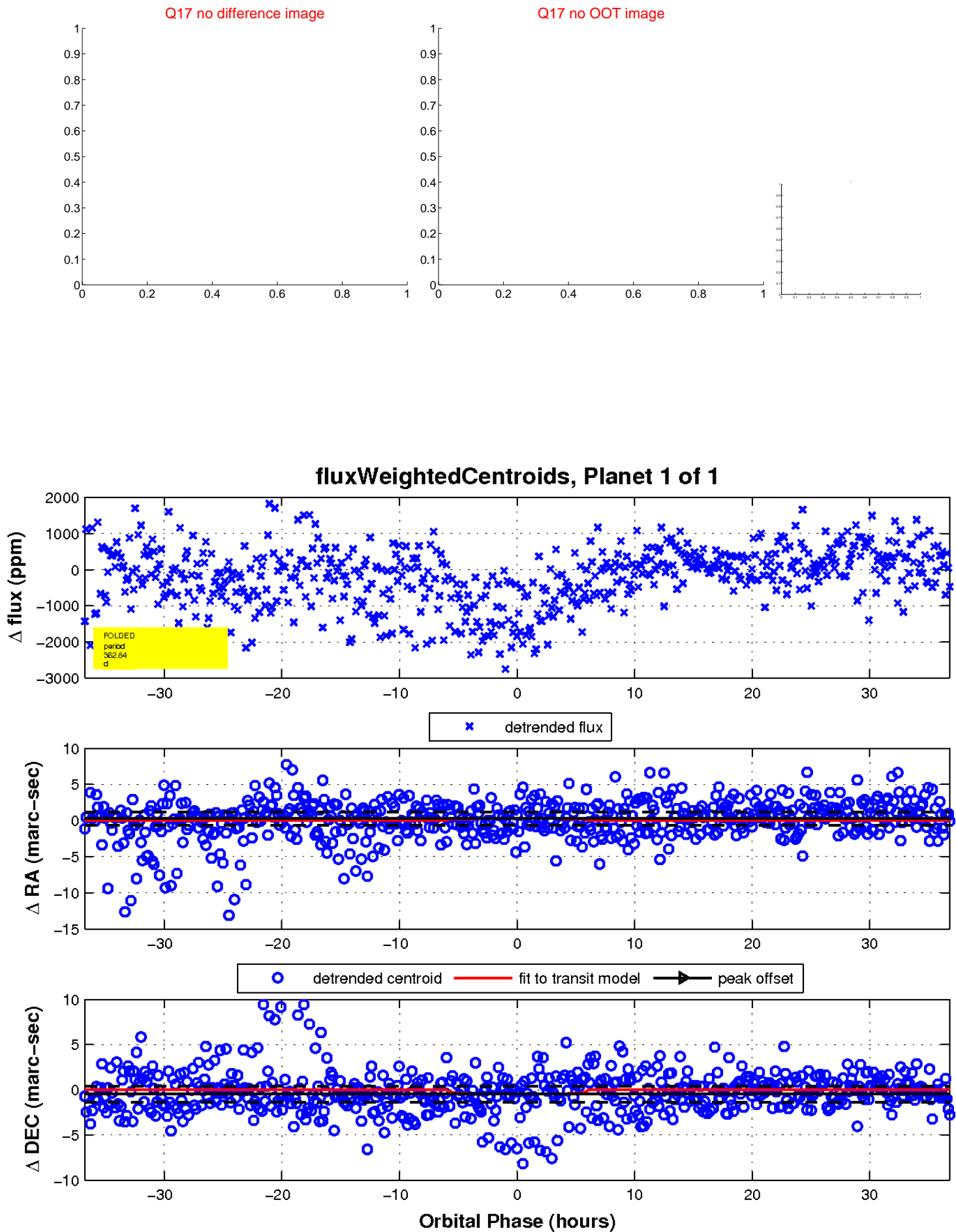
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

