

KIC 004446192

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})
004446192-01	OBS	No	412.776565	267.783726	89.0	29.701	8.5	7.7	1.84	6309	1.88	3.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004446192-01	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.

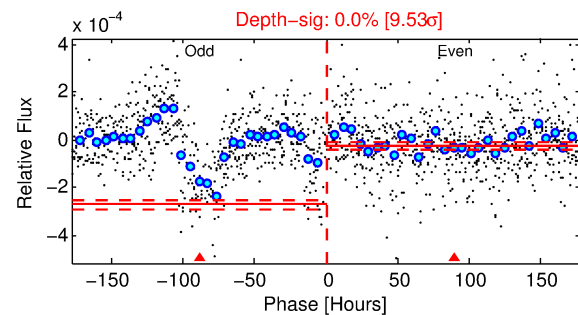
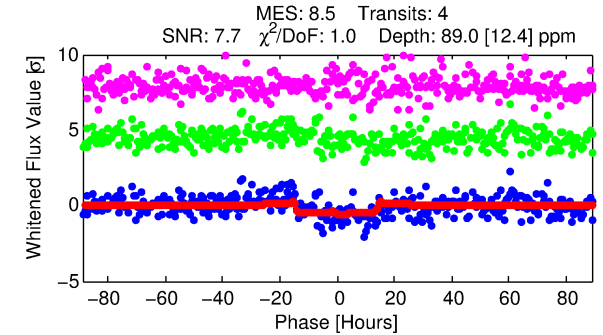
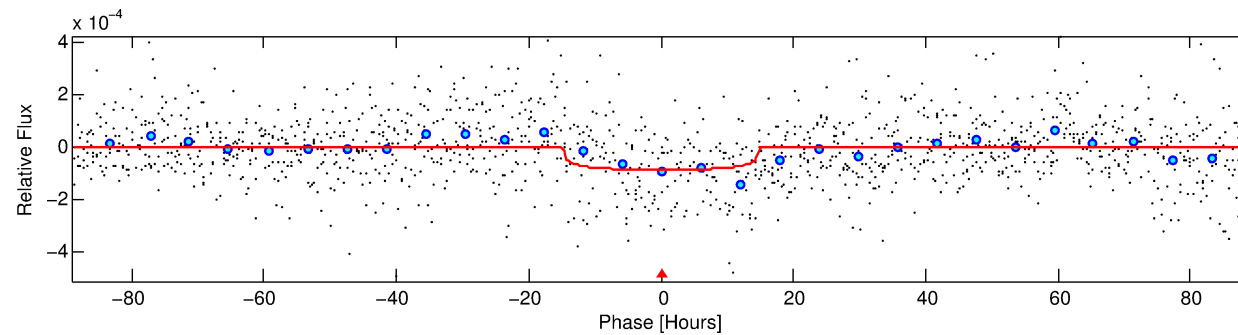
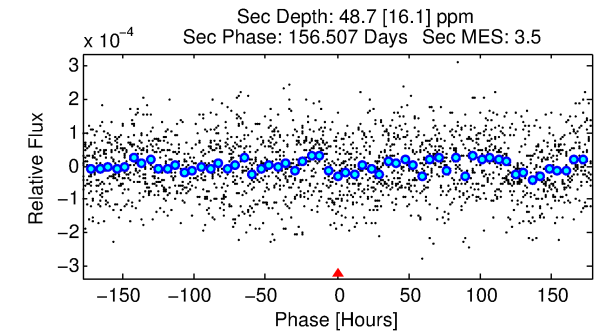
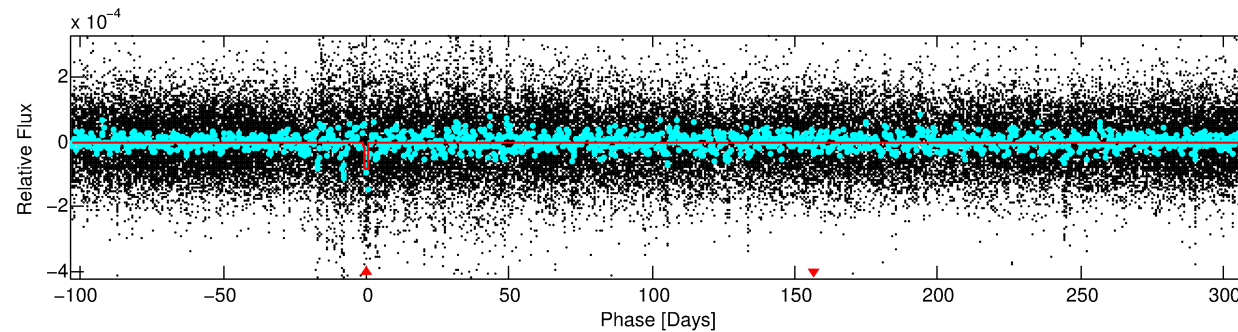
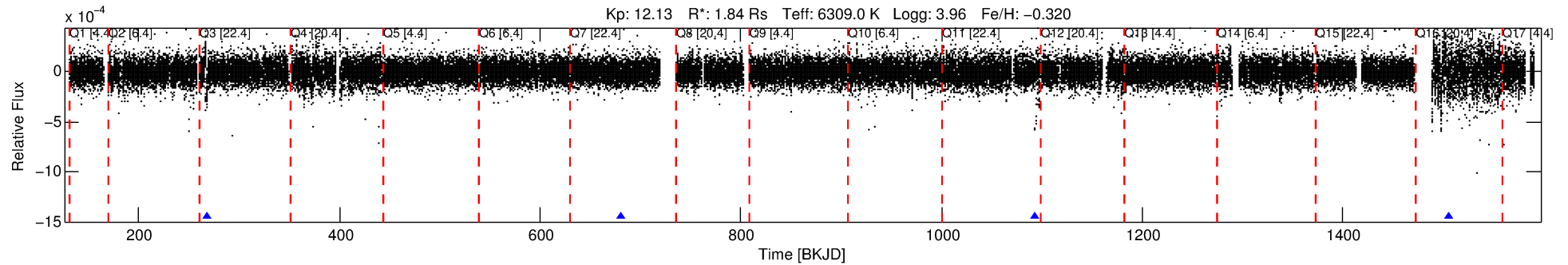
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004446192-01

No Significant Match Found

DV One-Page Summary

KIC: 4446192 Candidate: 1 of 1 Period: 412.777 d



DV Fit Results:

Period = 412.77657 [0.01806] d
Epoch = 267.7837 [0.0276] BKJD
Rp/R* = 0.0093 [0.0017]
a/R* = 73.18 [63.86]
b = 0.74 [0.55]
Seff = 3.77 [1.88]
Teq = 355 [44] K
Rp = 1.88 [0.68] Re
a = 1.1316 [0.3435] AU
Ag = 9714.69 [6700.85] [1.45σ]
Teffp = 5454 [685] K [7.43σ]

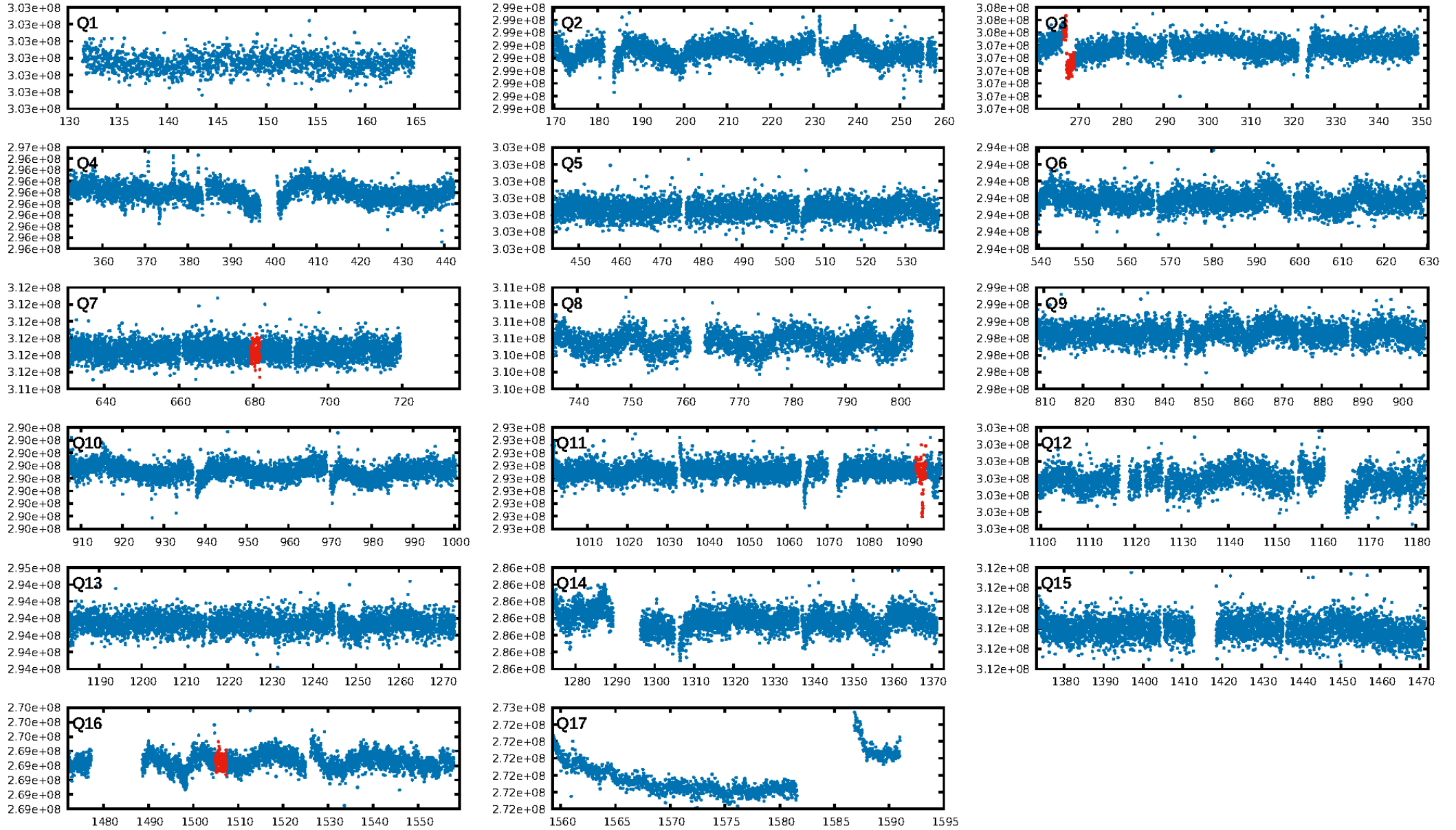
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 5.67e-12
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.436
Centroid-sig: 39.9%
Centroid-so: 0.733 arcsec [0.42σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-rm: N/A
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

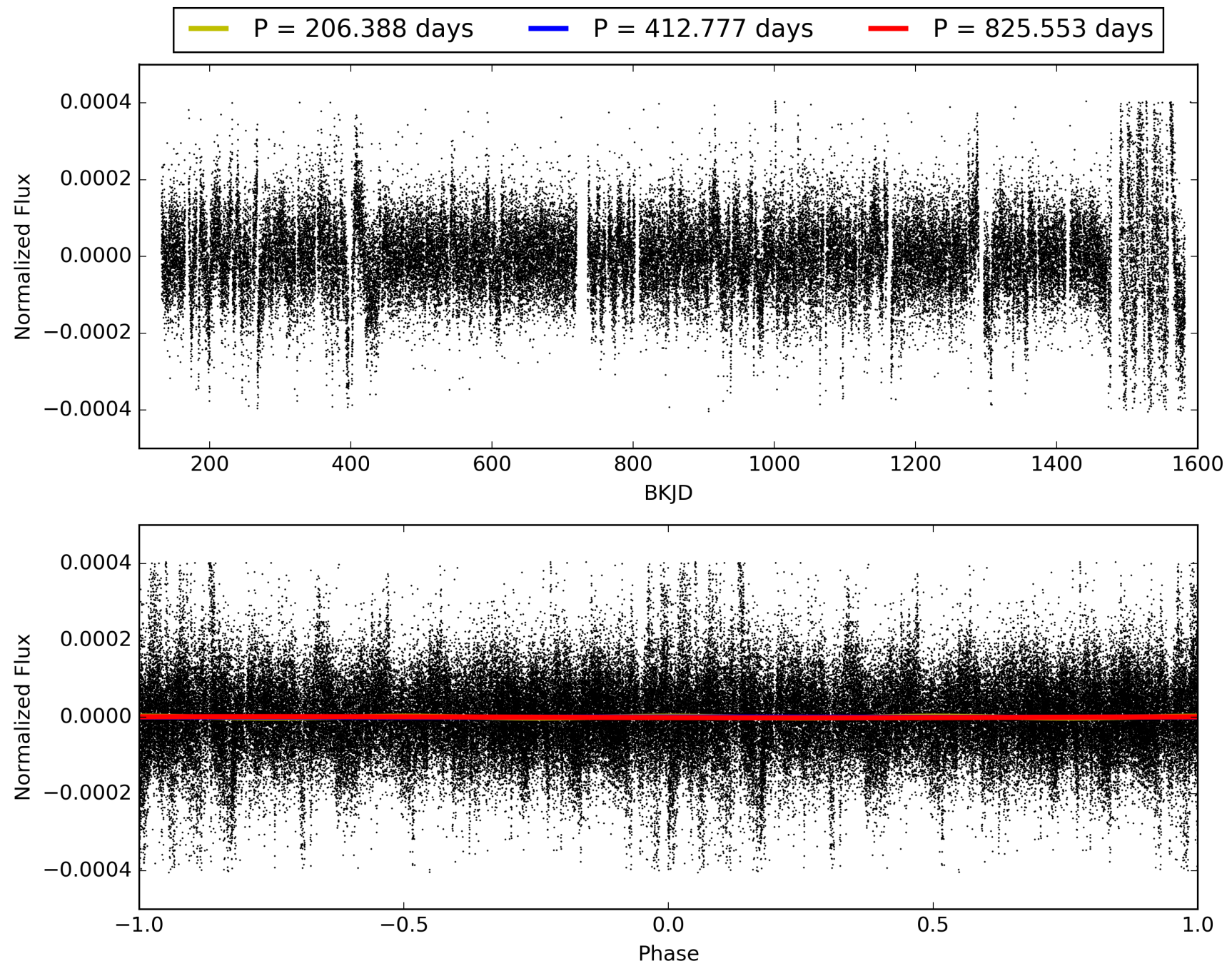
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:51:13 Z

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

TCE 004446192-01, PDC Light Curves

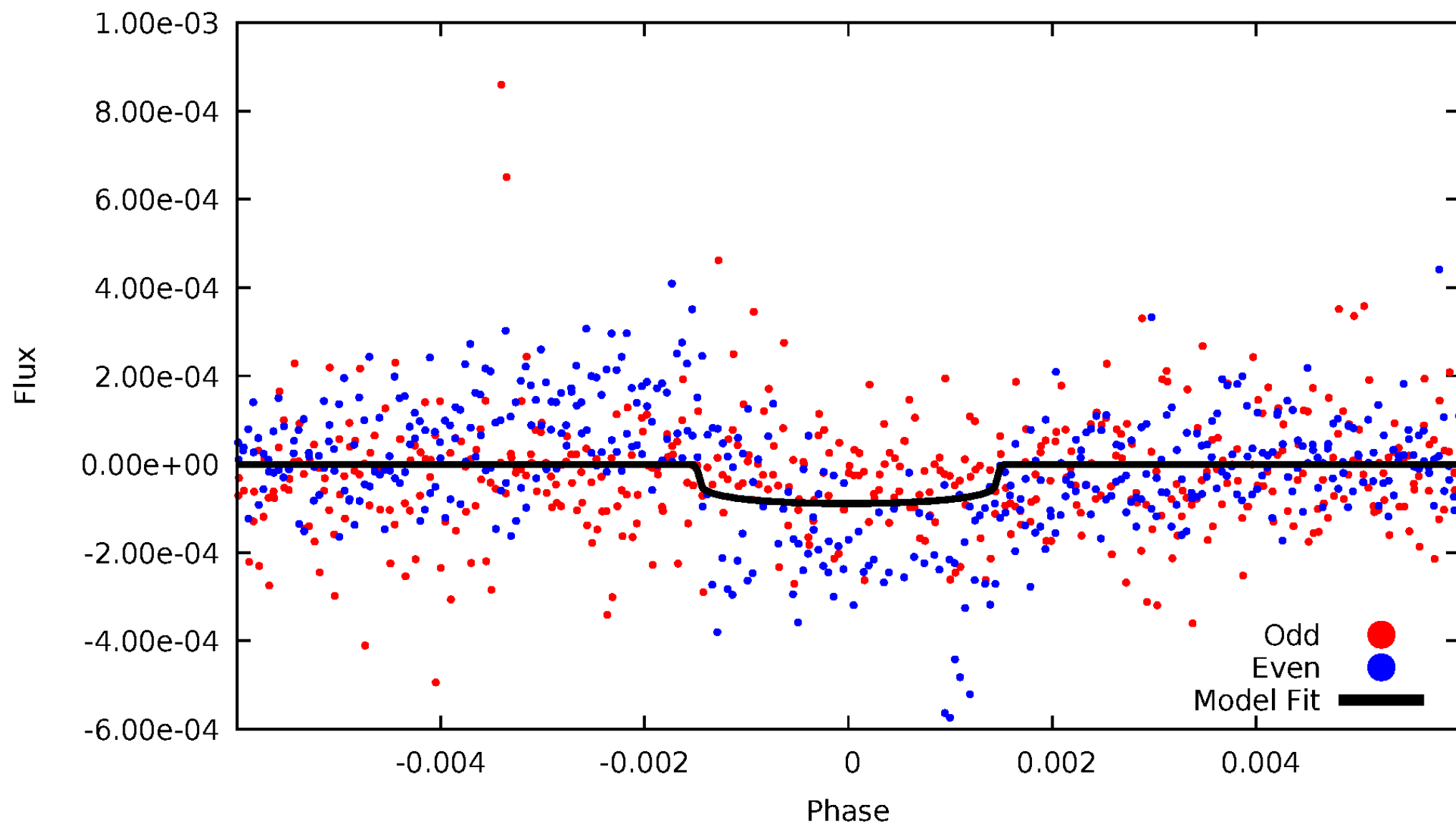


TCE 004446192-01



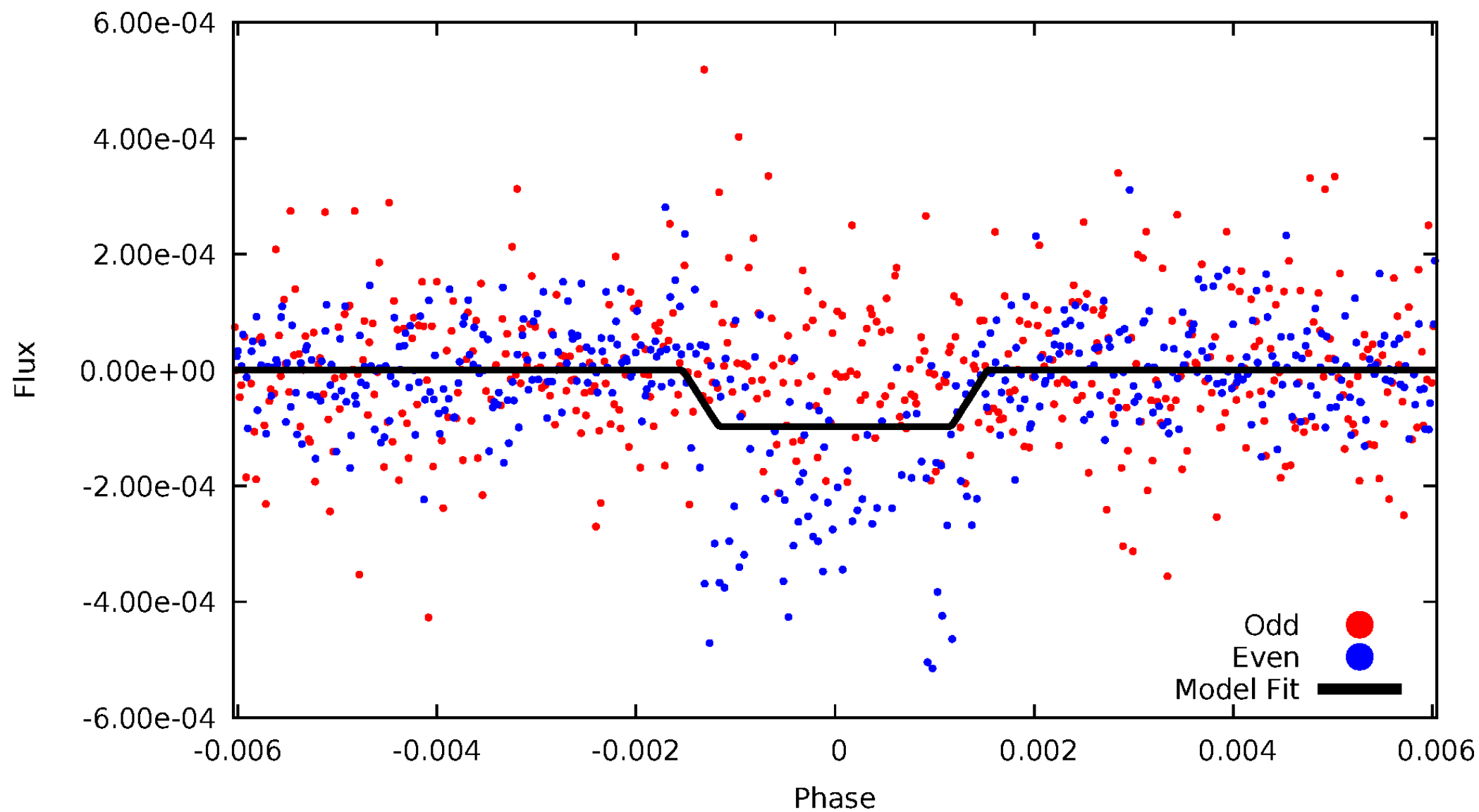
DV Odd/Even

TCE 004446192-01



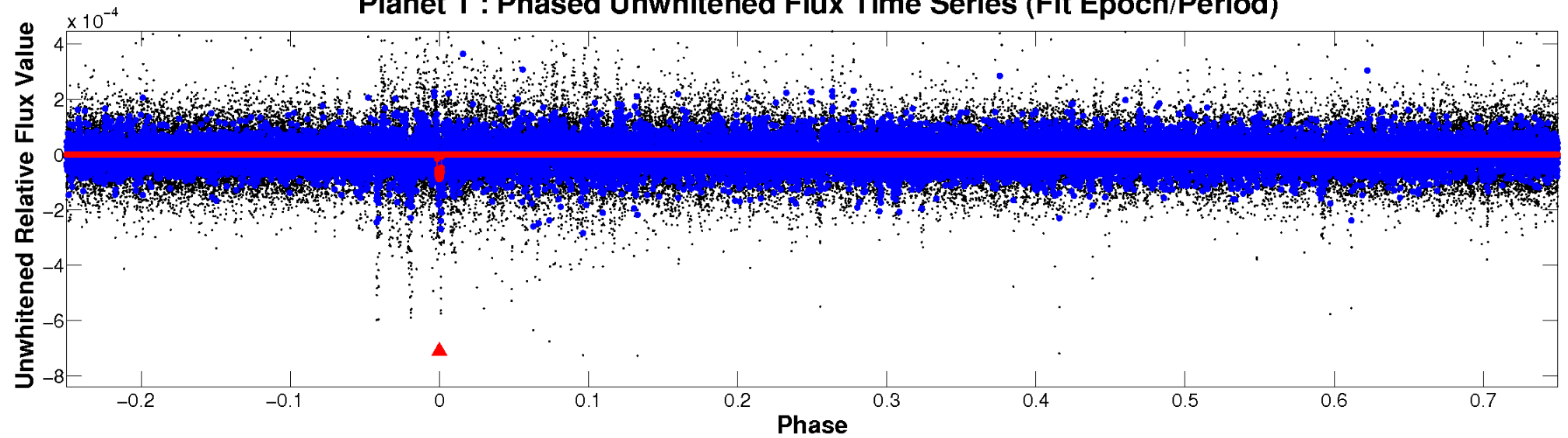
ALT Odd/Even

TCE 004446192-01

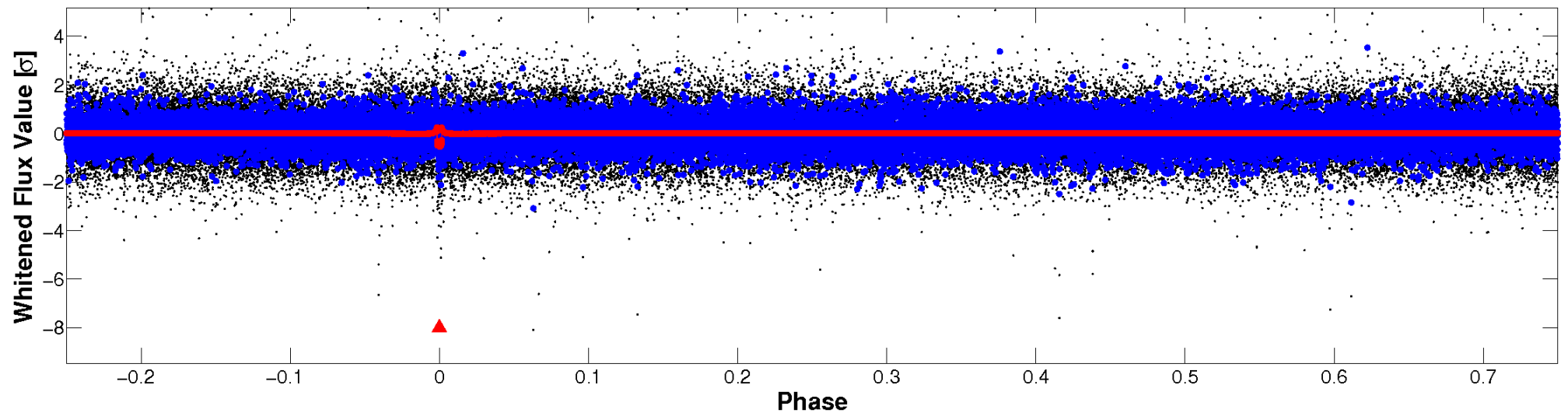


Non-Whitened Vs. Whitened Light Curve

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

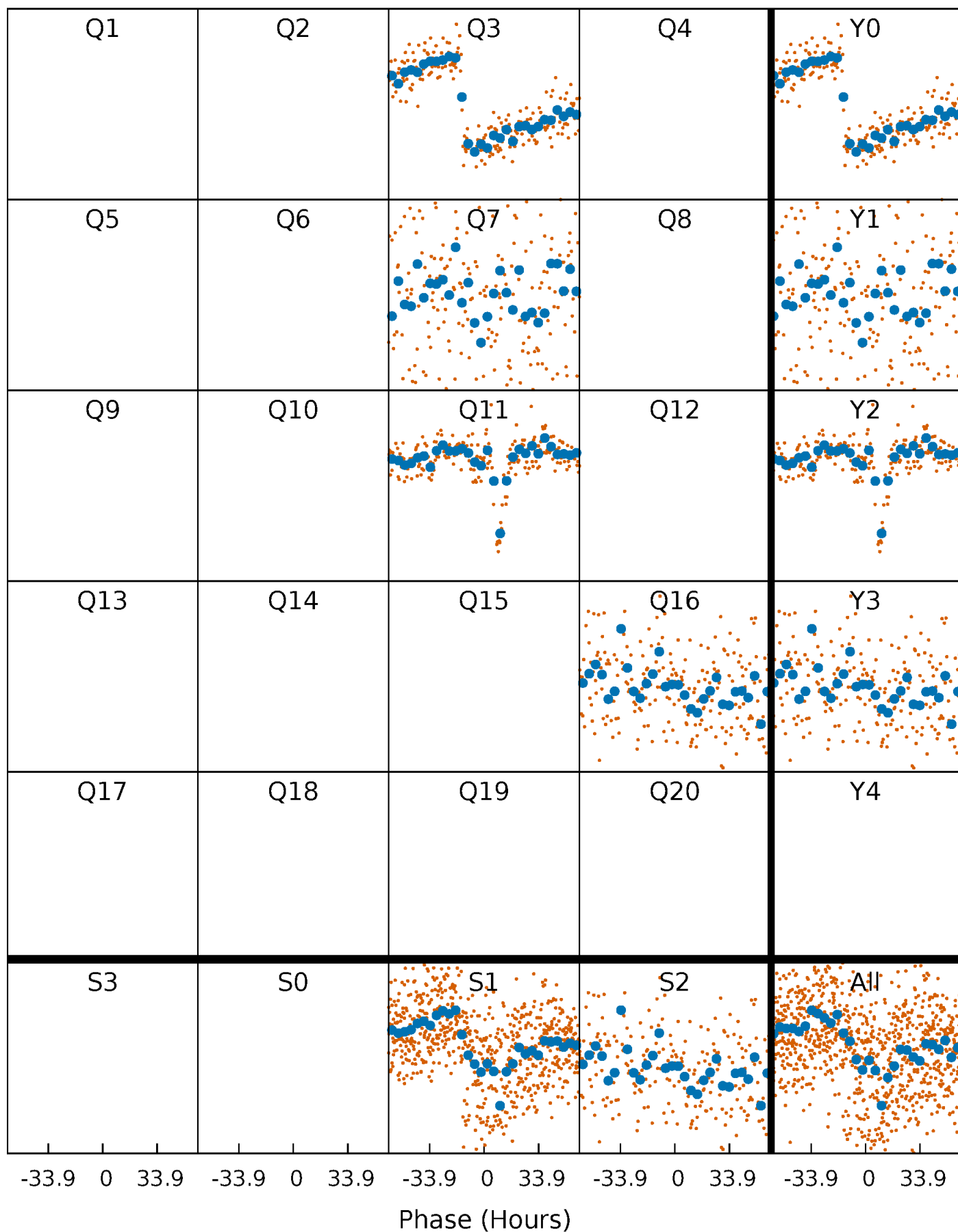


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 004446192-01 P=412.776565 Days $T_0=267.783726$ (BKJD)



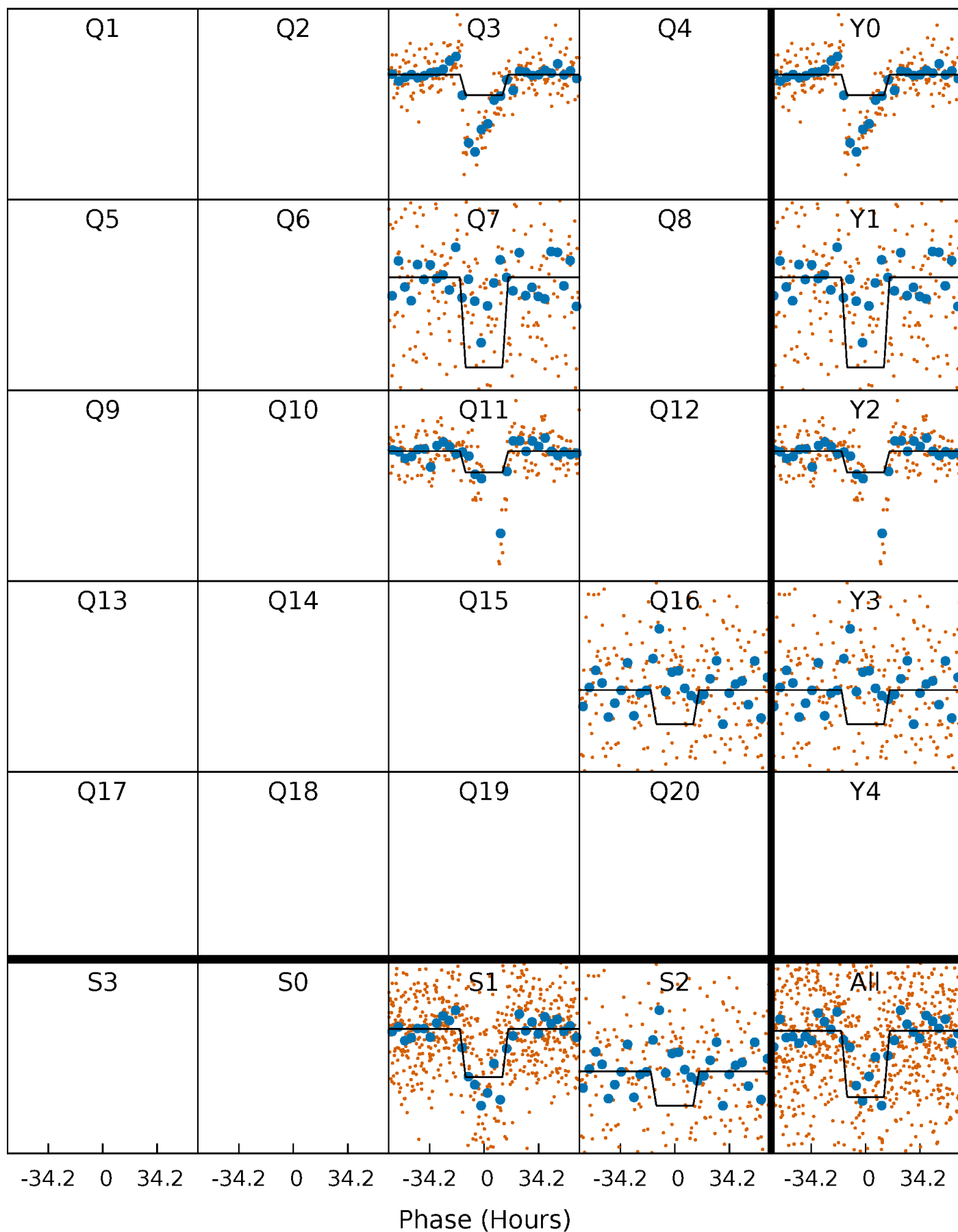
DV Quarter-Phased Transit Curves

TCE 004446192-01 P=412.776565 Days $T_0=267.783726$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

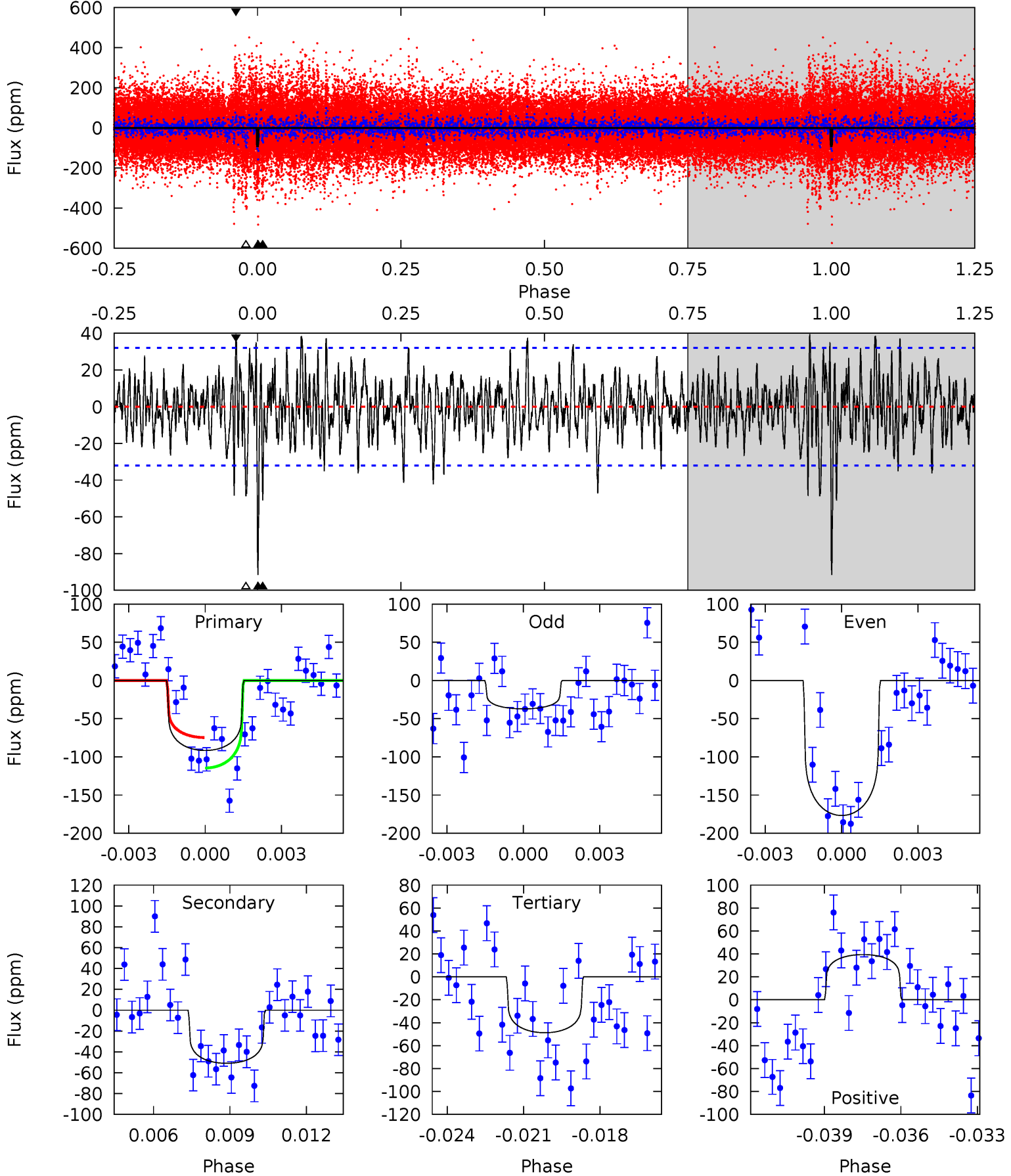
TCE 004446192-01 P=412.785157 Days $T_0=267.773568$ (BKJD)



DV Model-Shift Uniqueness Test

004446192-01, P = 412.776565 Days, E = 267.783726 Days

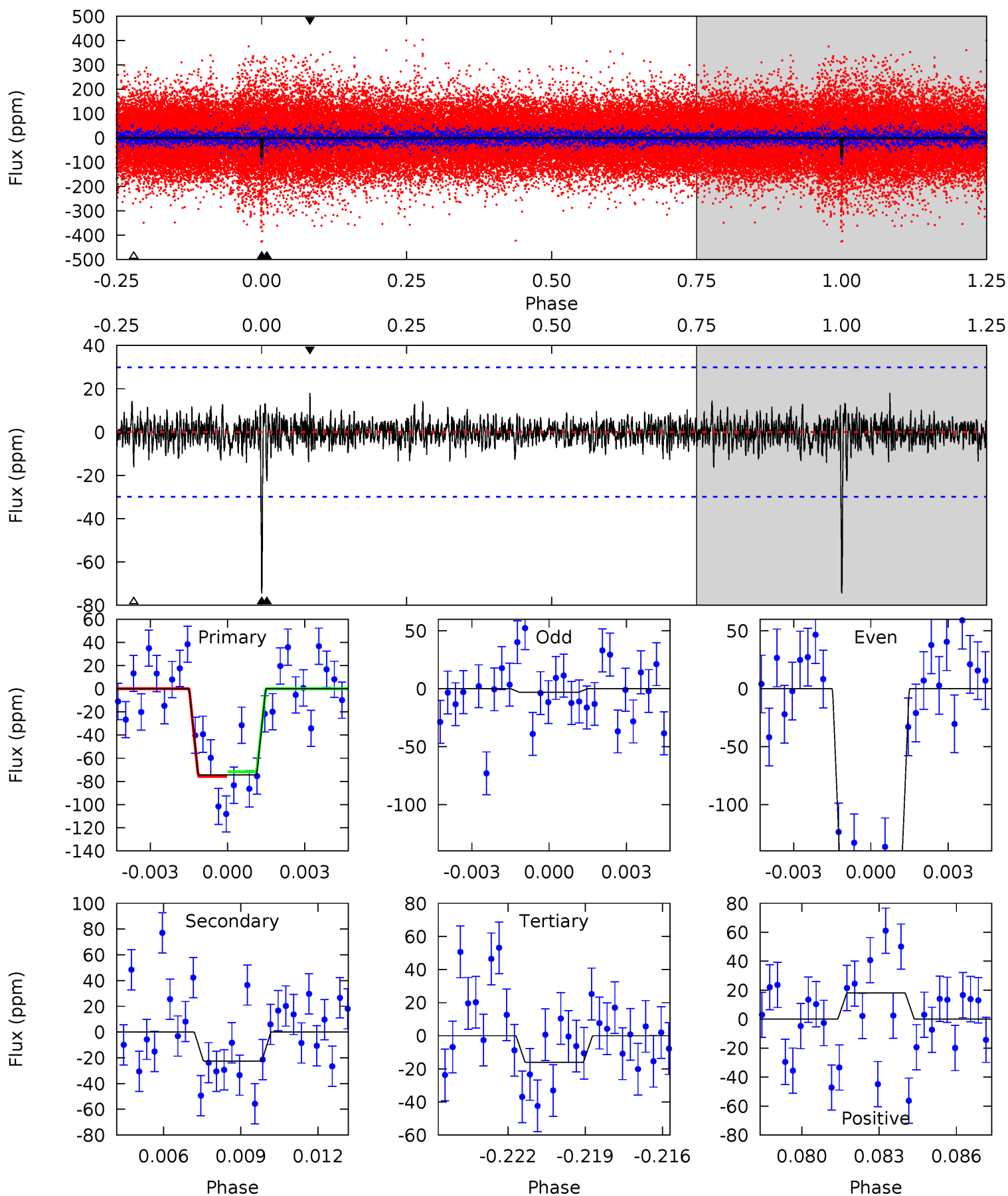
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	8.36	7.99	6.46	5.25	2.97	2.10	7.03	8.56	0.36	1.90	11.4	1.24	0.30	3.24



Alt Model-Shift Uniqueness Test

004446192-01, P = 412.785157 Days, E = 267.773568 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	3.96	2.82	3.17	5.25	2.96	0.75	10.2	9.89	1.14	0.79	16.4	1.05	0.20	0.36



Stellar Parameters For KIC 004446192

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6309^{+174}_{-174}	$3.961^{+0.285}_{-0.114}$	$-0.320^{+0.300}_{-0.300}$	$1.844^{+0.388}_{-0.582}$	$1.133^{+0.208}_{-0.170}$	$0.254^{+0.435}_{-0.087}$
	+3%/-3%	+7%/-3%	+94%/-94%	+21%/-32%	+18%/-15%	+171%/-34%
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 004446192-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-51 ± 6	$1.80^{+0.42}_{-0.43}$	489^{+33}_{-40}	5556^{+561}_{-447}	11153^{+7864}_{-3844}
Alt.	-23 ± 6	$1.93^{+0.41}_{-0.45}$	490^{+30}_{-43}	4541^{+439}_{-378}	4322^{+3314}_{-1691}

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 $A_{\text{obs}} \gg 1.0$

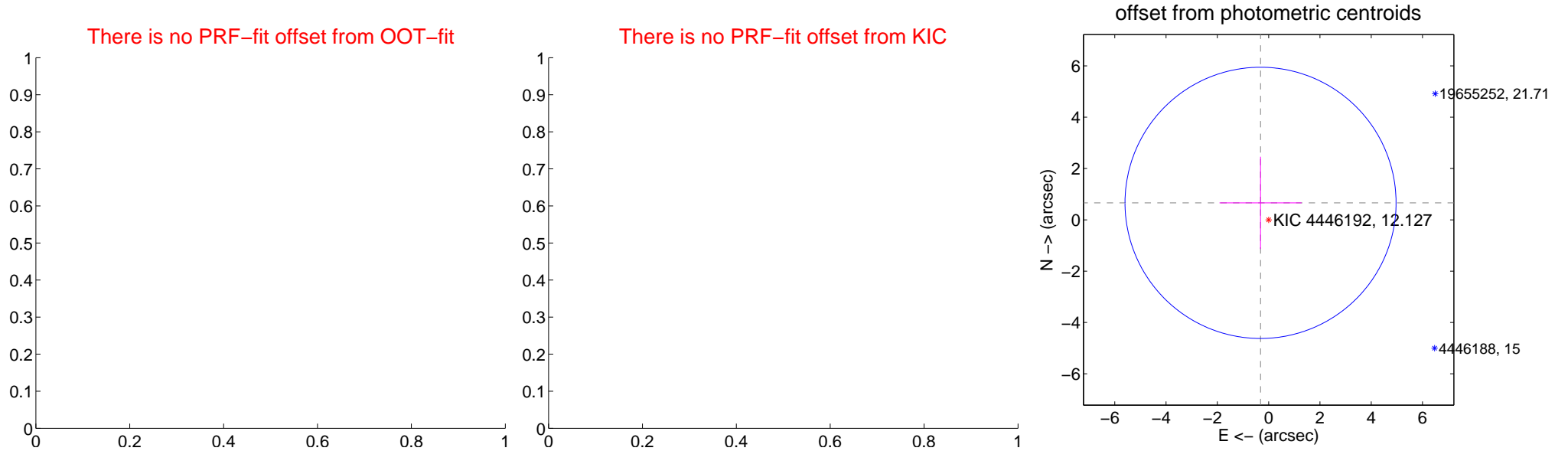
DV Centroid Data

Supplemental centroid analysis for 004446192-01. Kepler magnitude: 12.13. Transit SNR 7.69

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	0.73 ± 1.76	0.42	0.32 ± 1.60	0.66 ± 1.80

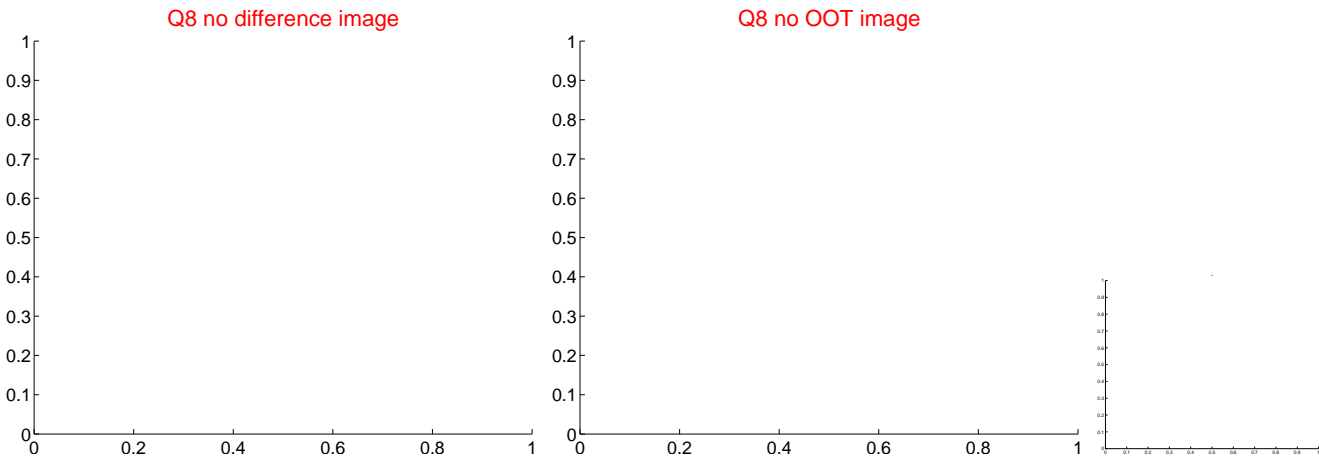
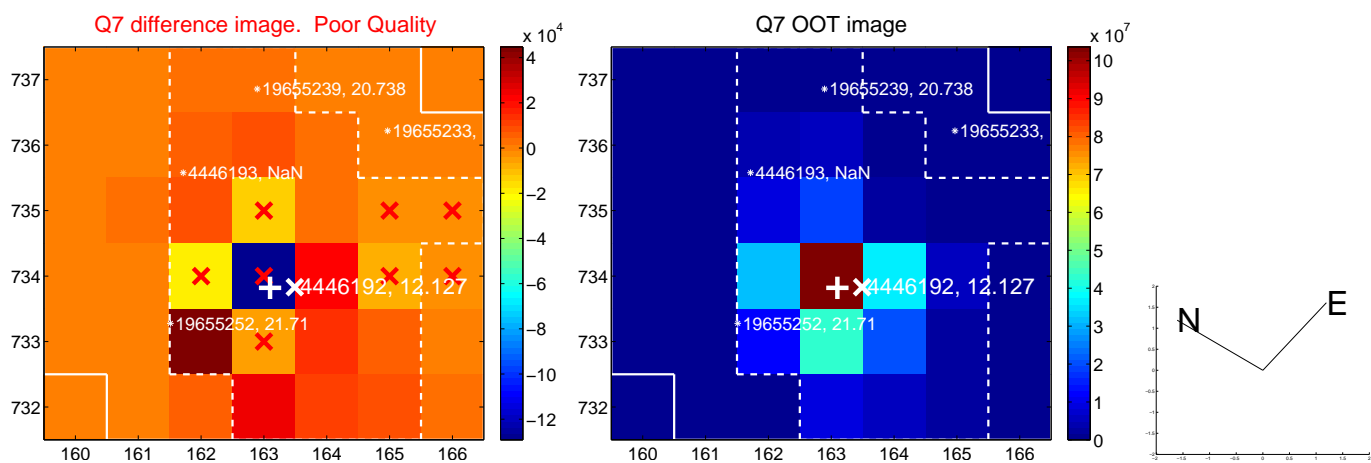
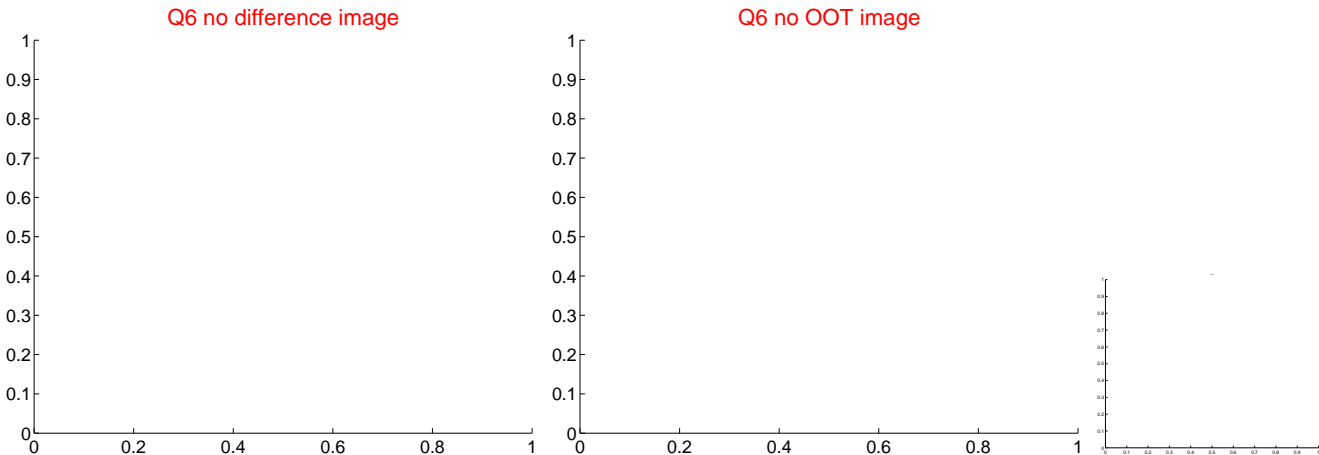
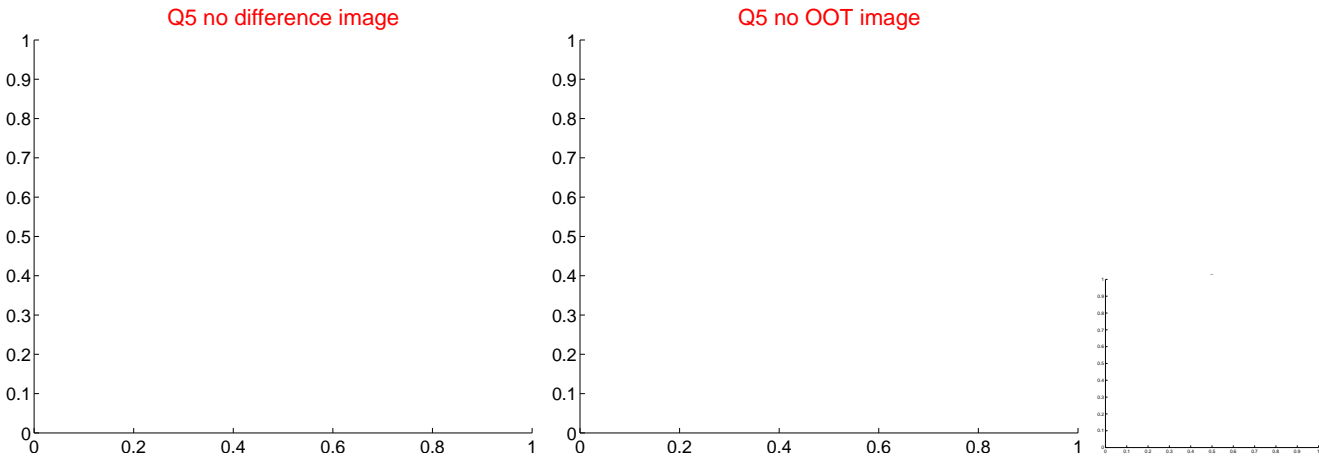


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



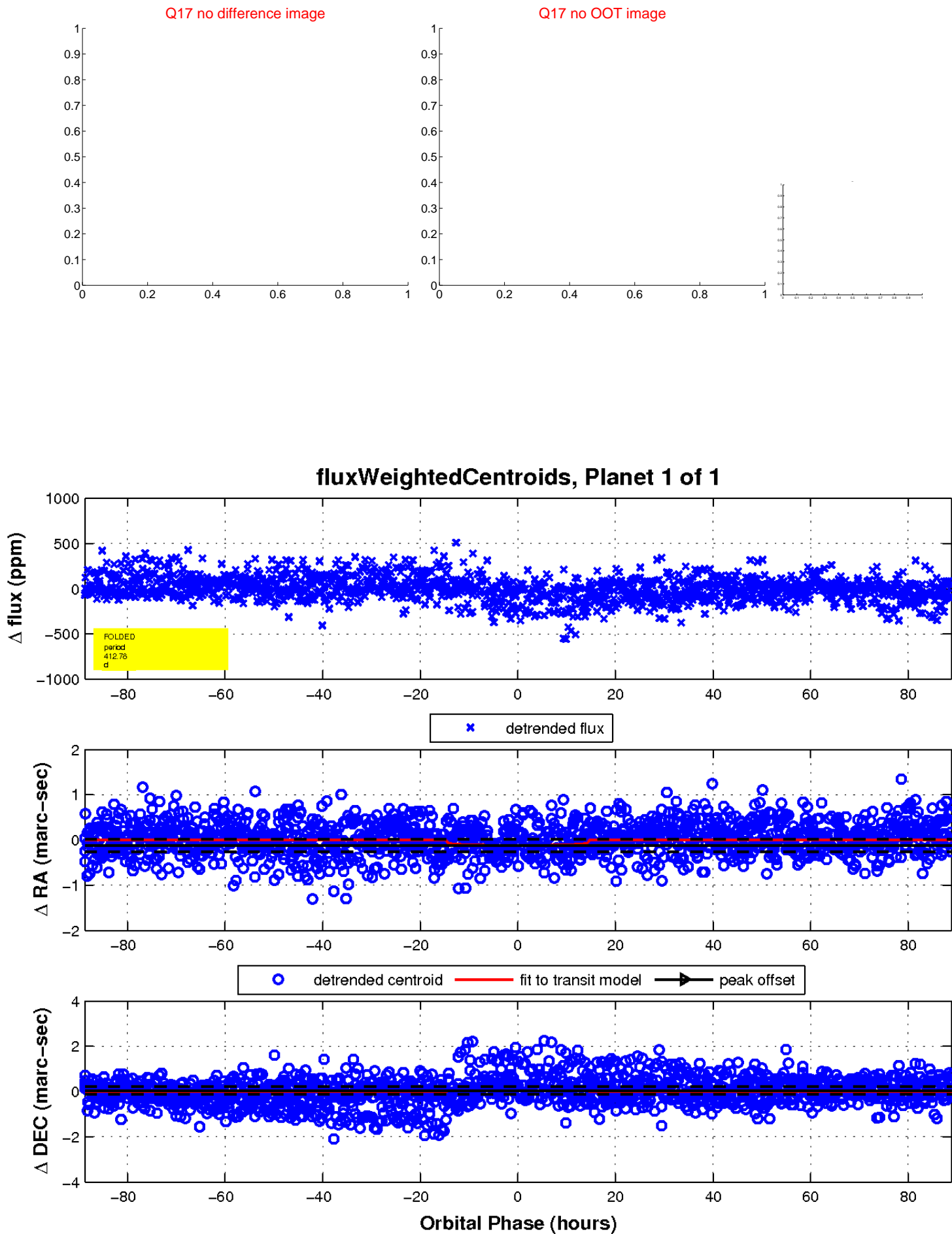
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

