

KIC 005732847

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})
005732847-01	OBS	No	375.225756	373.146884	352.6	23.071	10.7	12.0	151.74	3298	427.29	2168.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005732847-01	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

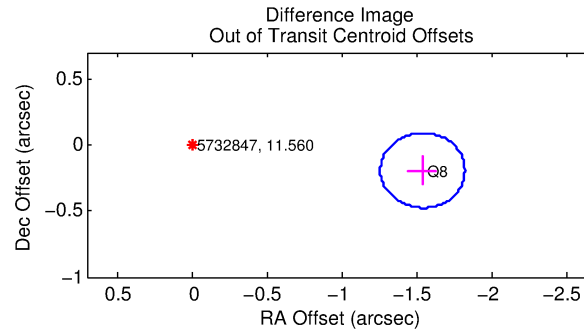
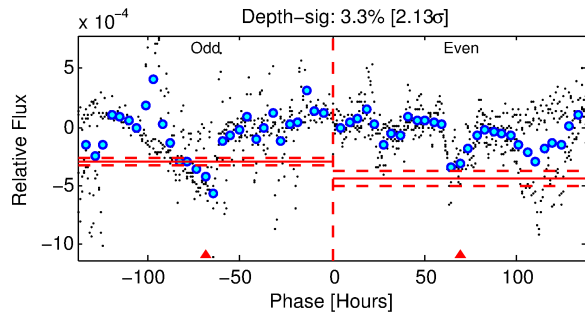
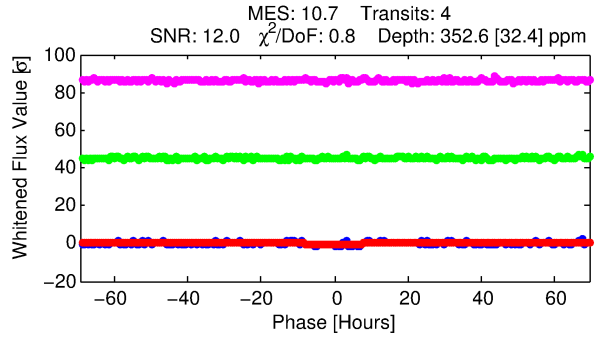
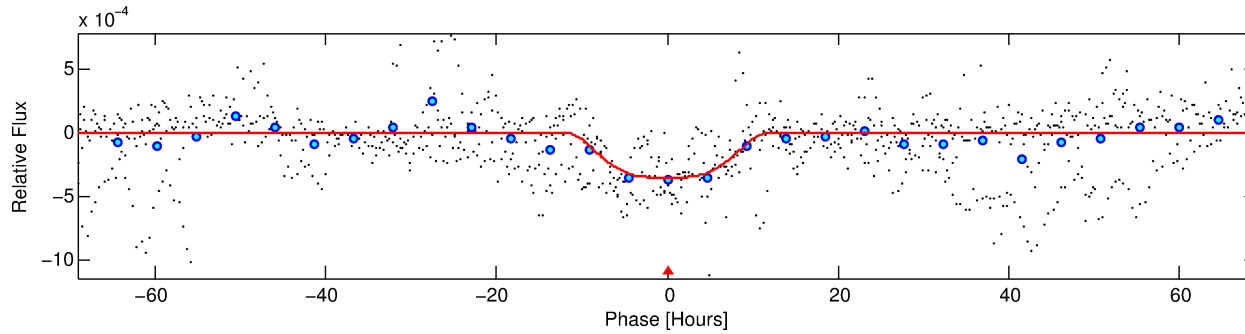
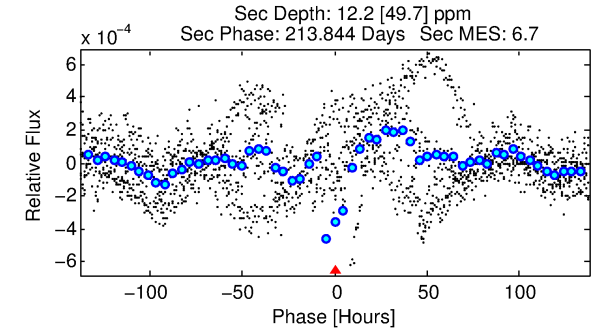
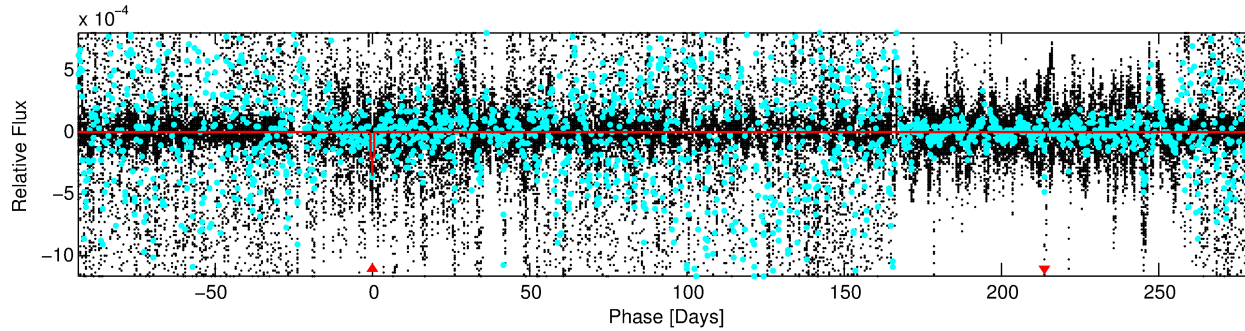
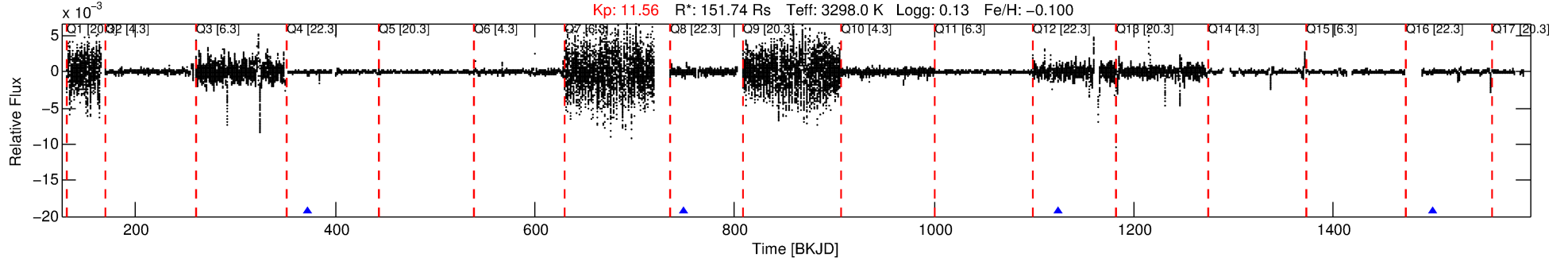
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005732847-01

No Significant Match Found

DV One-Page Summary

KIC: 5732847 Candidate: 1 of 1 Period: 375.226 d



DV Fit Results:

Period = 375.22576 [0.00845] d
Epoch = 373.1469 [0.0138] BKJD
Rp/R* = 0.0258 [0.0015]
a/R* = 42.48 [3.06]
b = 0.97 [0.01]
Seff = 2168.92 [820.96]
Teq = 1740 [165] K
Rp = 427.29 [87.55] Re
a = 1.0608 [0.2218] AU
Ag = 0.04 [0.17] [-5.66σ]
Teffp = 1213 [1238] K [-0.42σ]

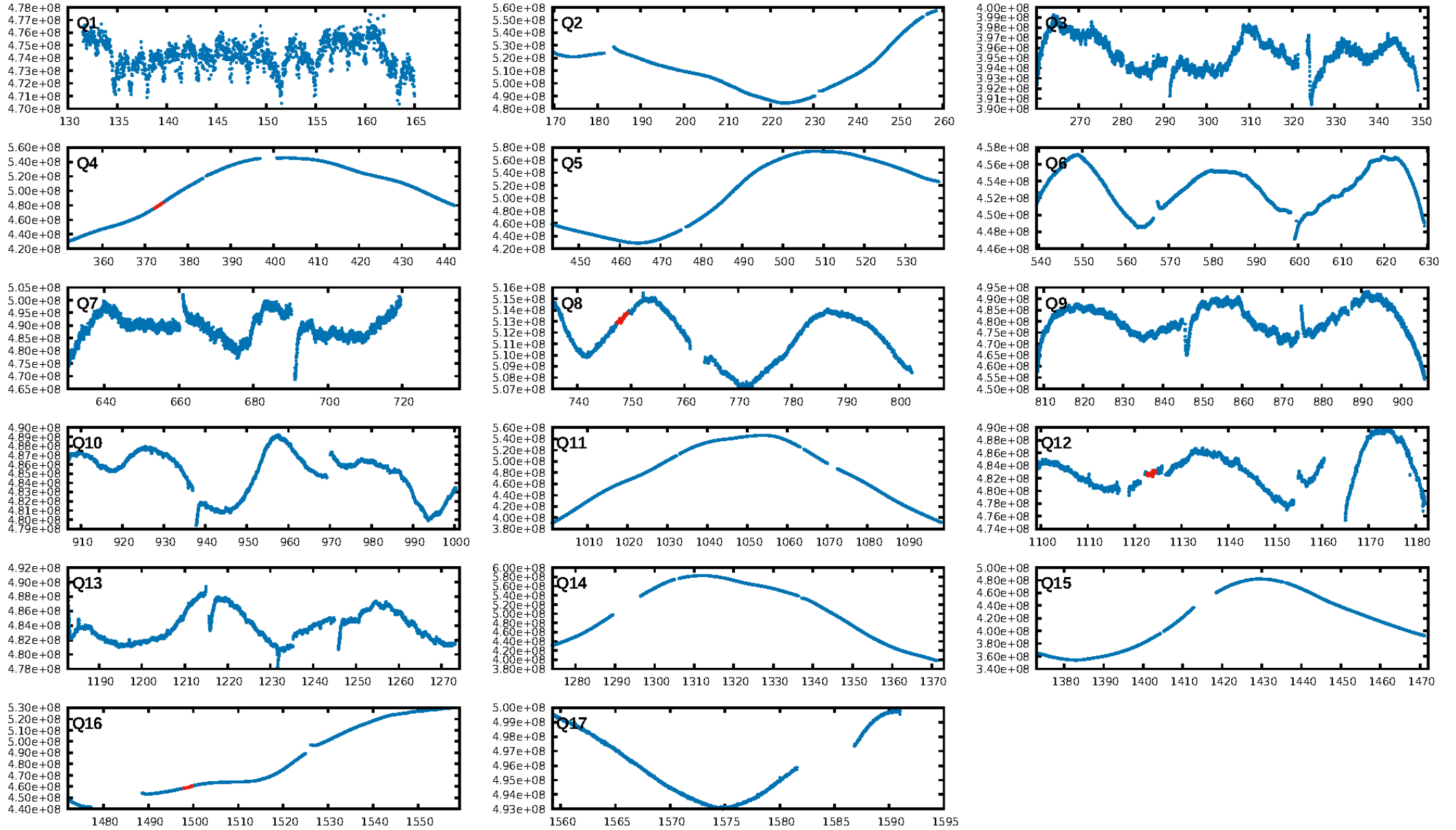
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 36.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.62e-05
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.4844
Centroid-sig: 0.0%
Centroid-so: 1.861 arcsec [3.47σ]
OotOffset-rm: 1.554 arcsec [16.49σ]
KicOffset-rm: 1.638 arcsec [16.97σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

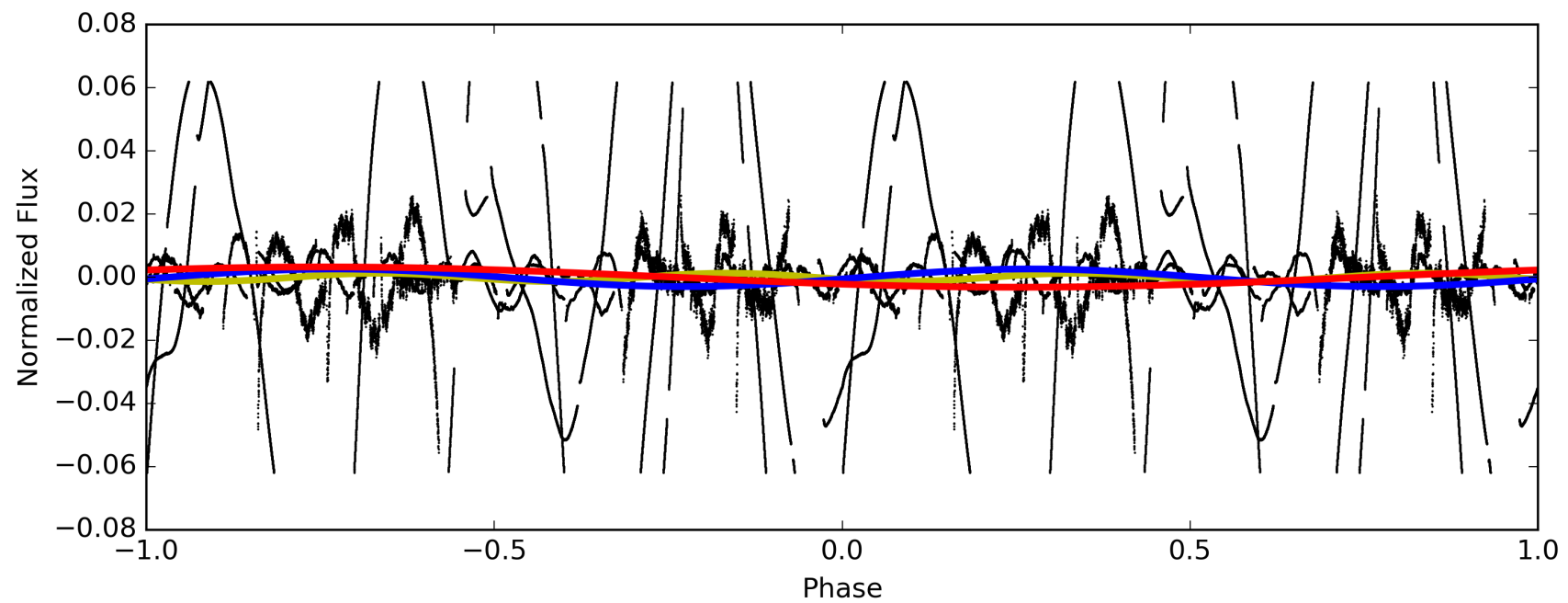
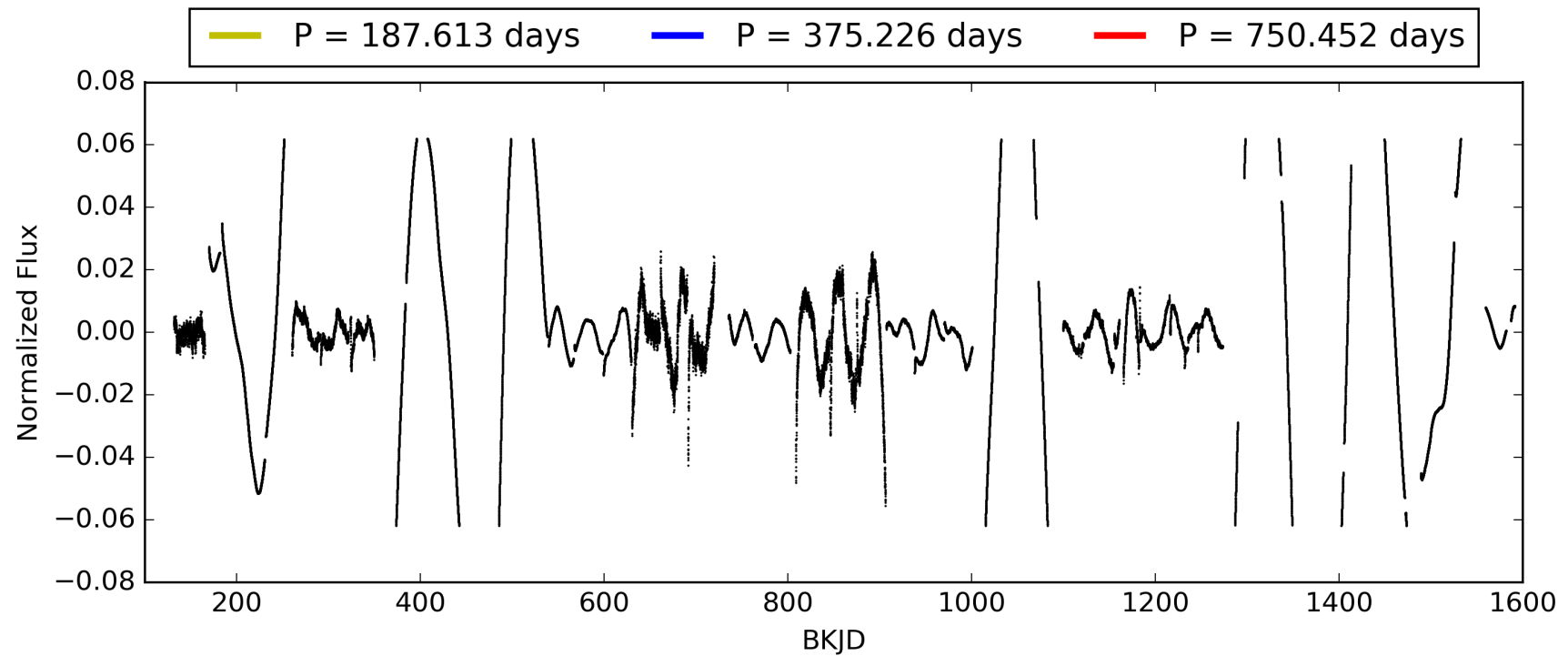
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 10:49:06 Z

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

TCE 005732847-01, PDC Light Curves

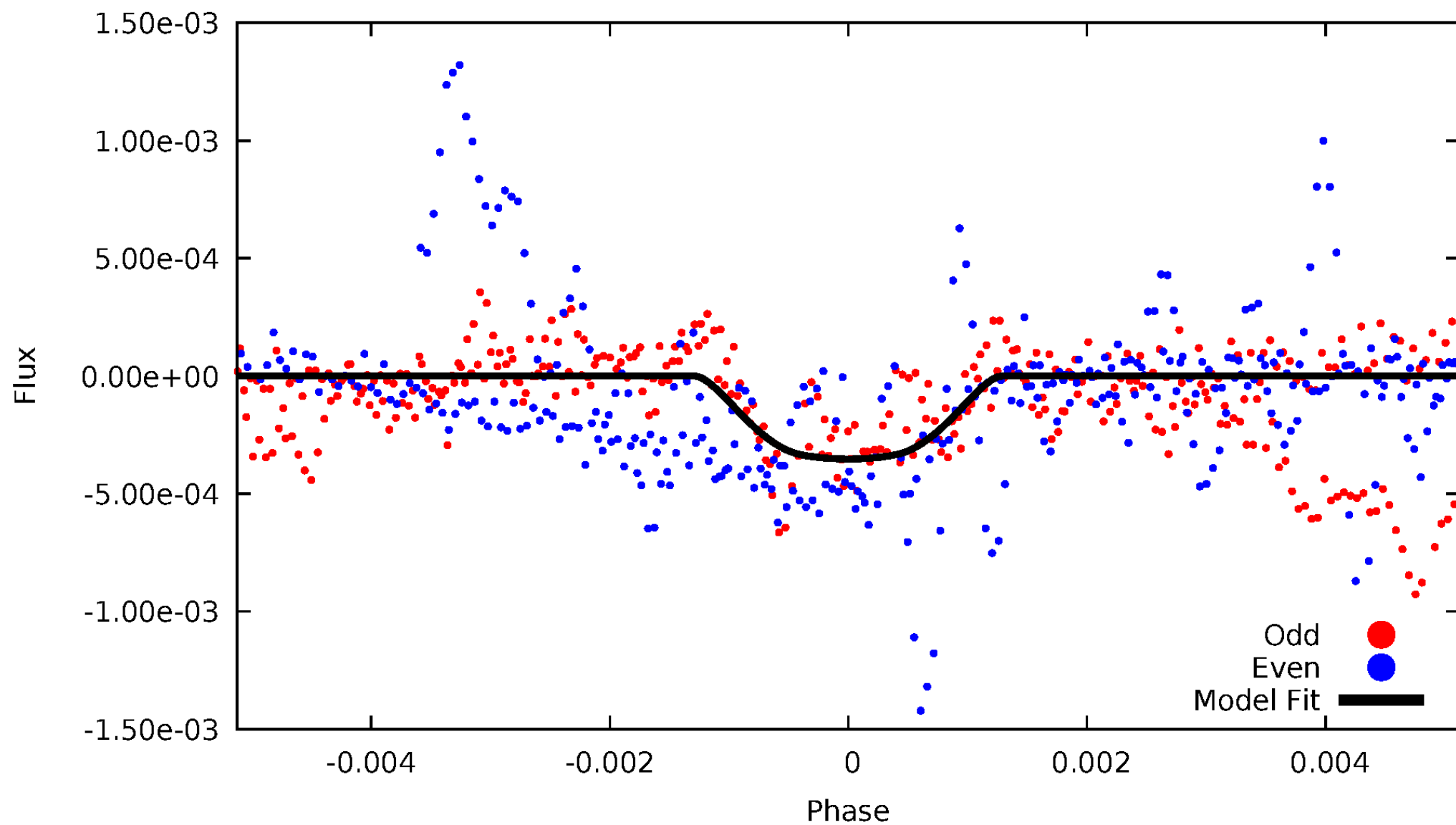


TCE 005732847-01



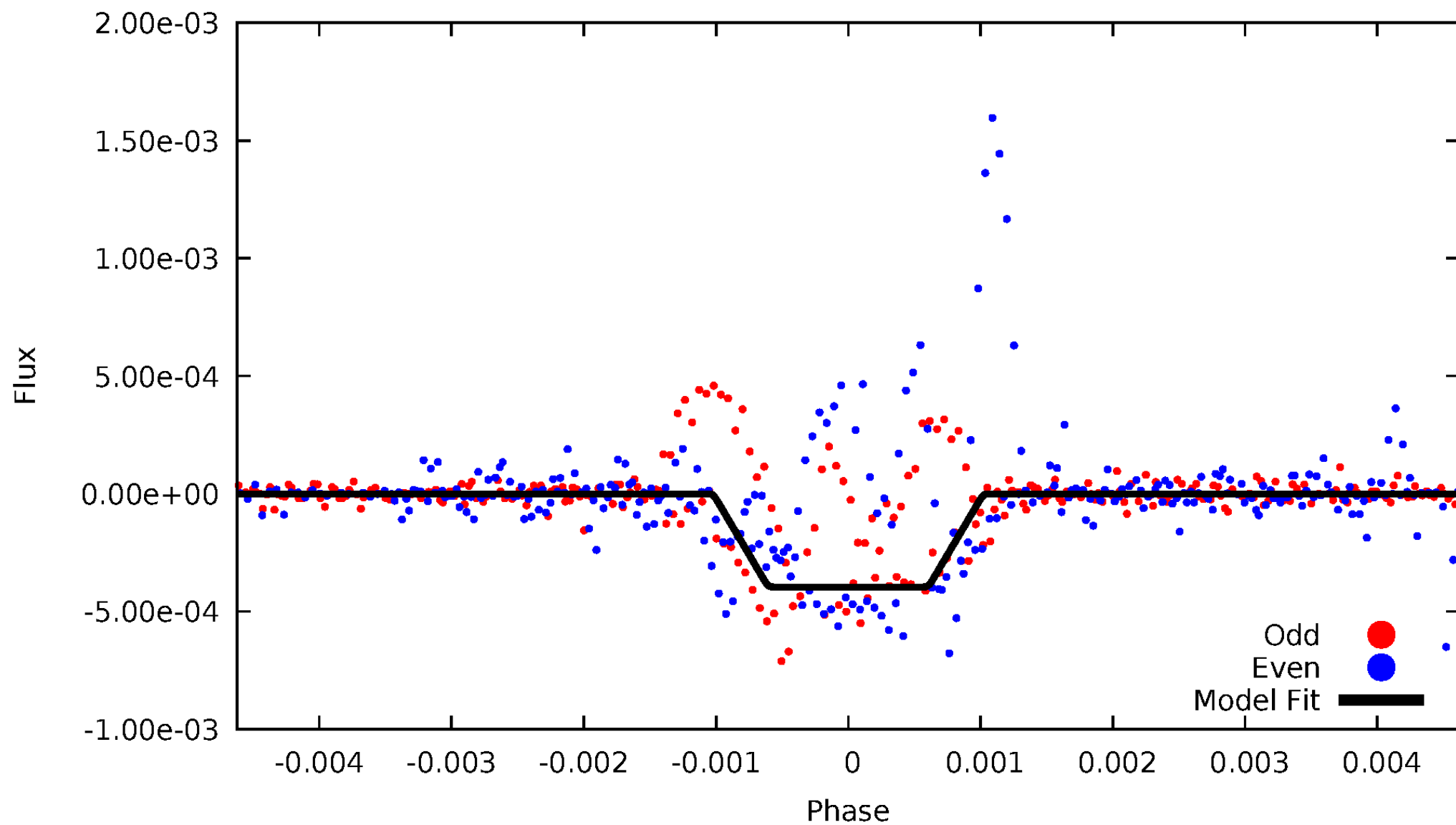
DV Odd/Even

TCE 005732847-01



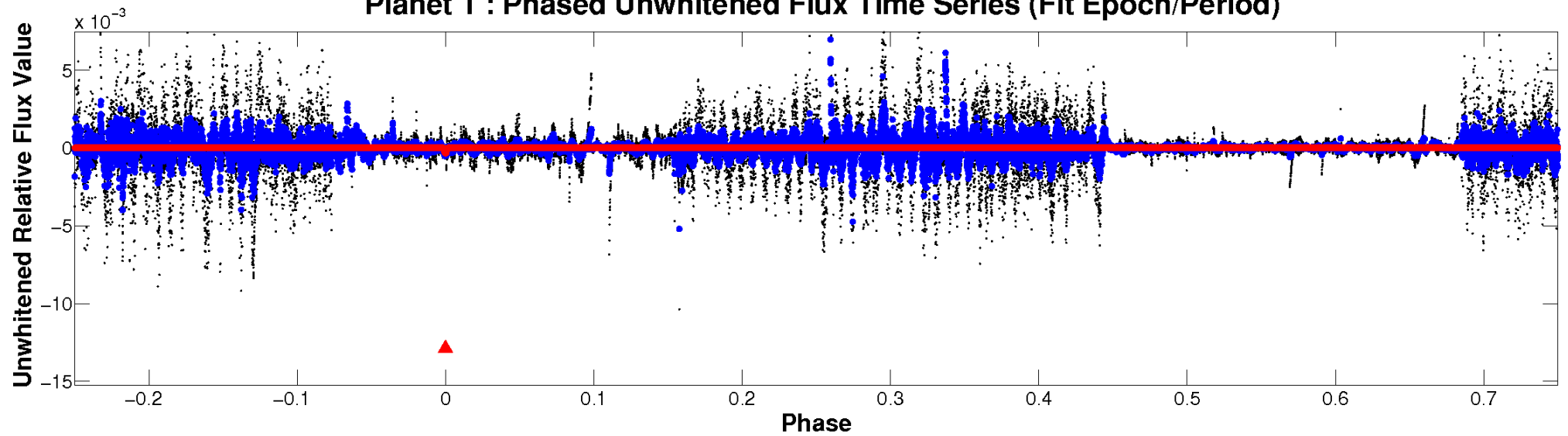
ALT Odd/Even

TCE 005732847-01

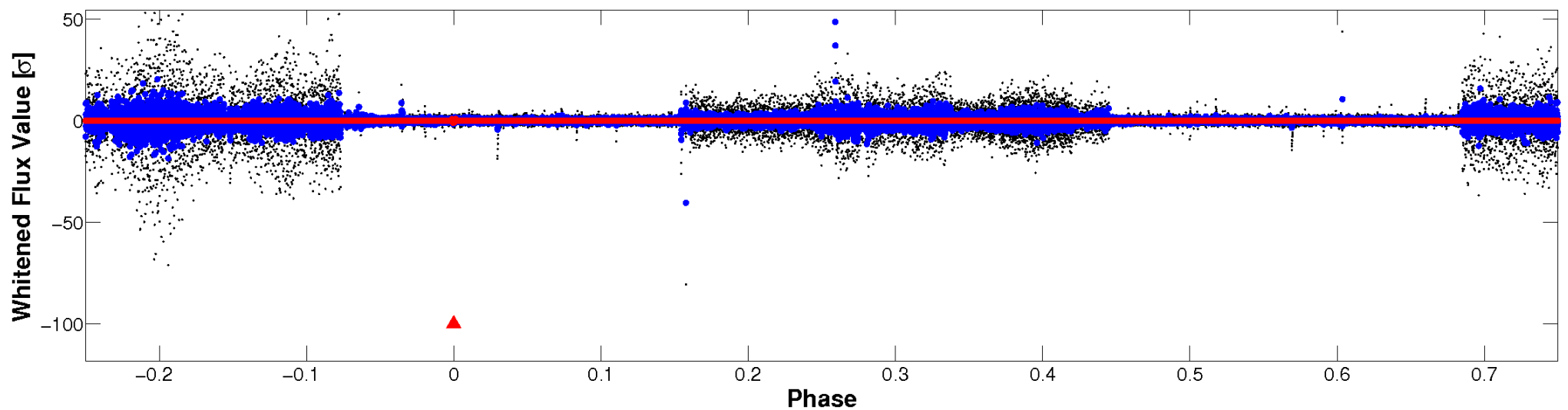


Non-Whitened Vs. Whitened Light Curve

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

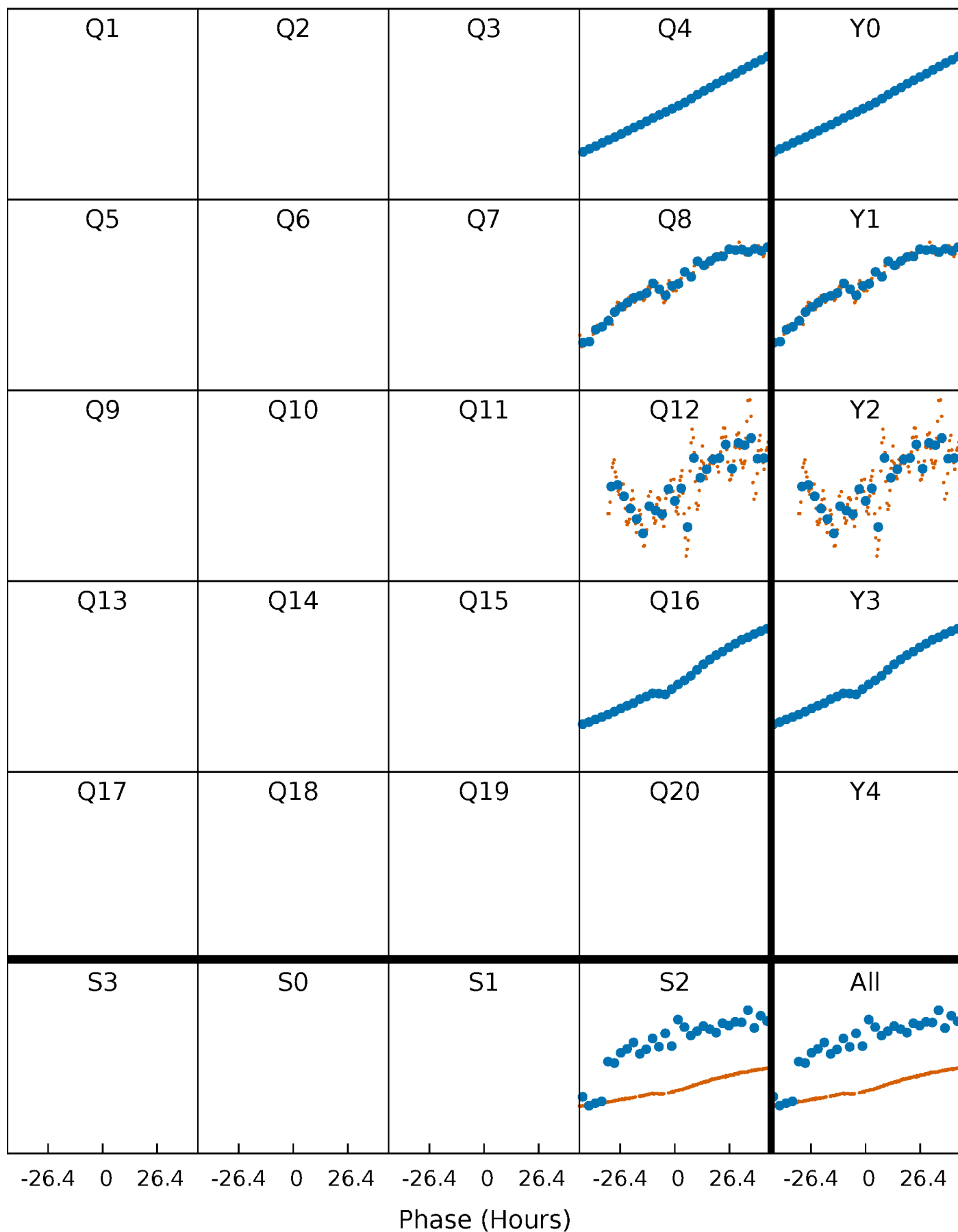


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



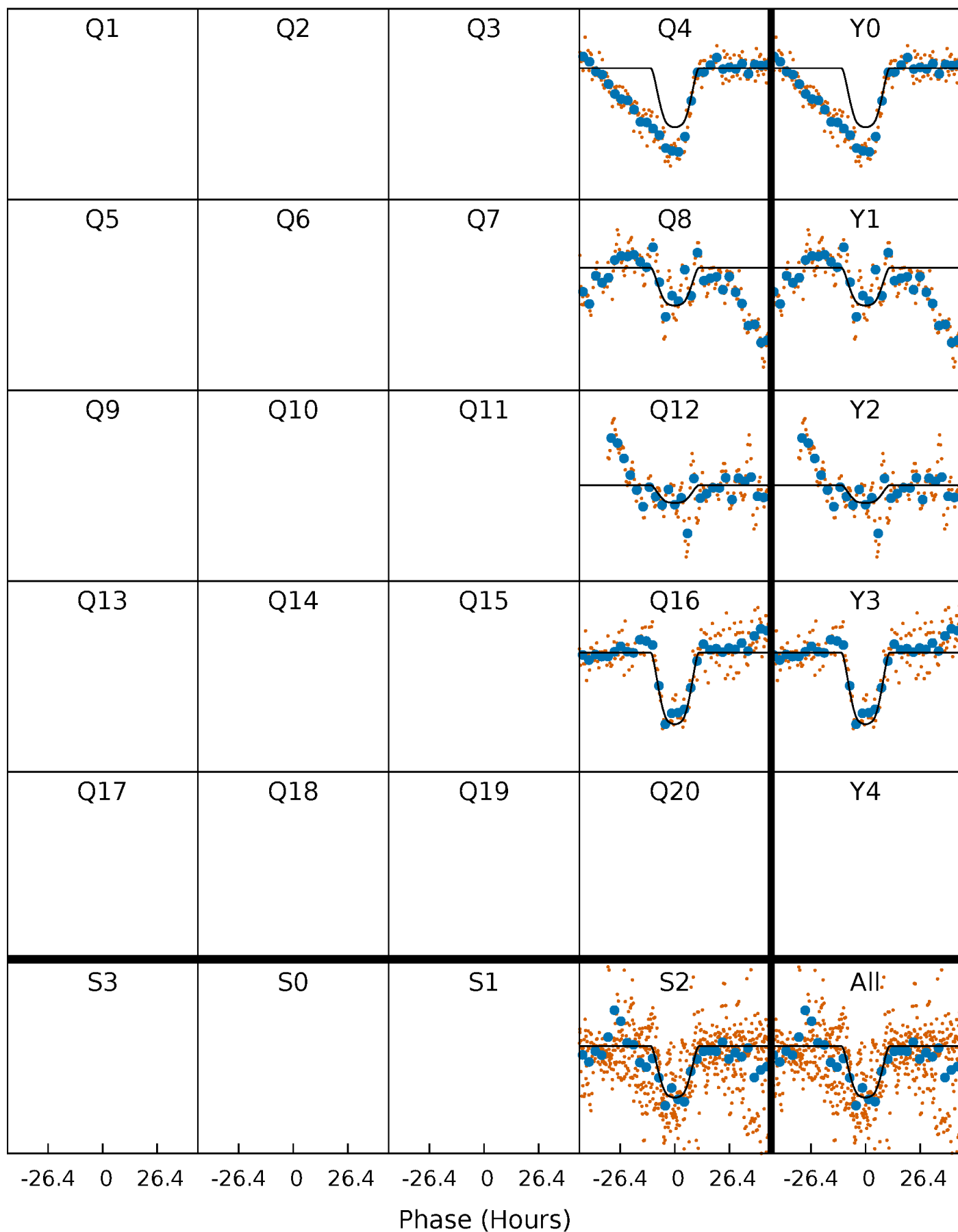
PDC Quarter-Phased Transit Curves

TCE 005732847-01 P=375.225756 Days $T_0=373.146884$ (BKJD)



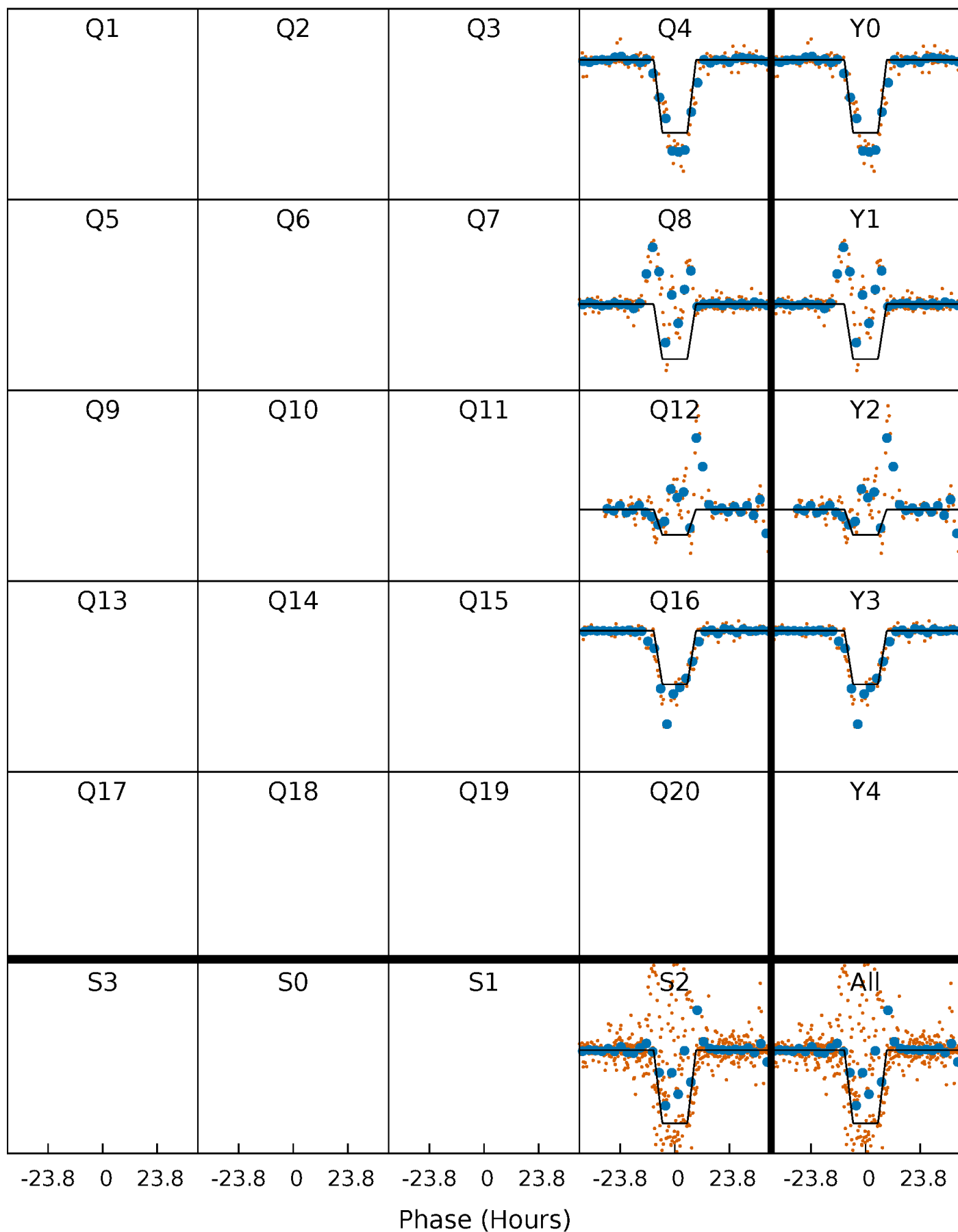
DV Quarter-Phased Transit Curves

TCE 005732847-01 P=375.225756 Days $T_0=373.146884$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

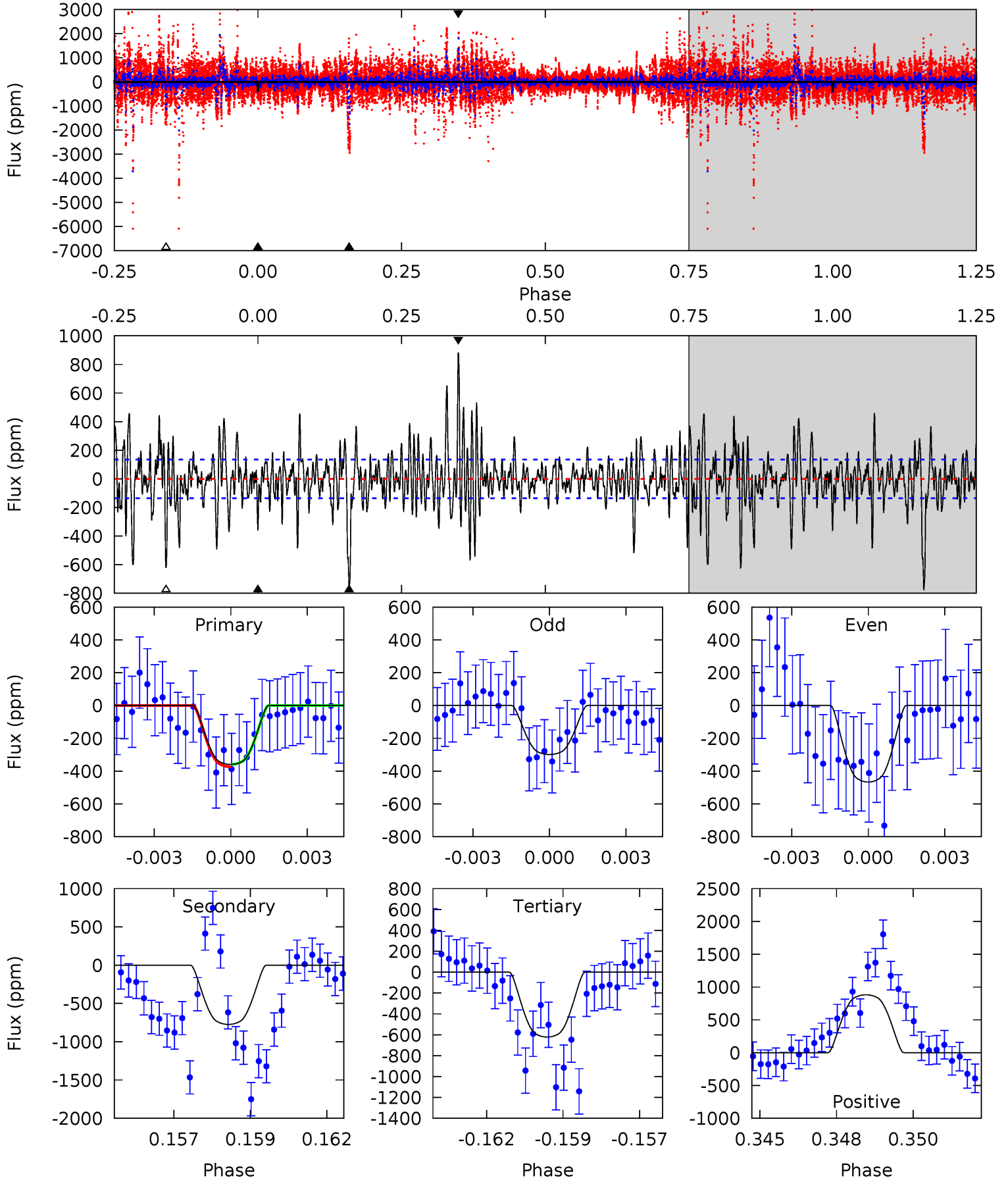
TCE 005732847-01 P=375.228274 Days $T_0=373.083227$ (BKJD)



DV Model-Shift Uniqueness Test

005732847-01, P = 375.225756 Days, E = 373.146884 Days

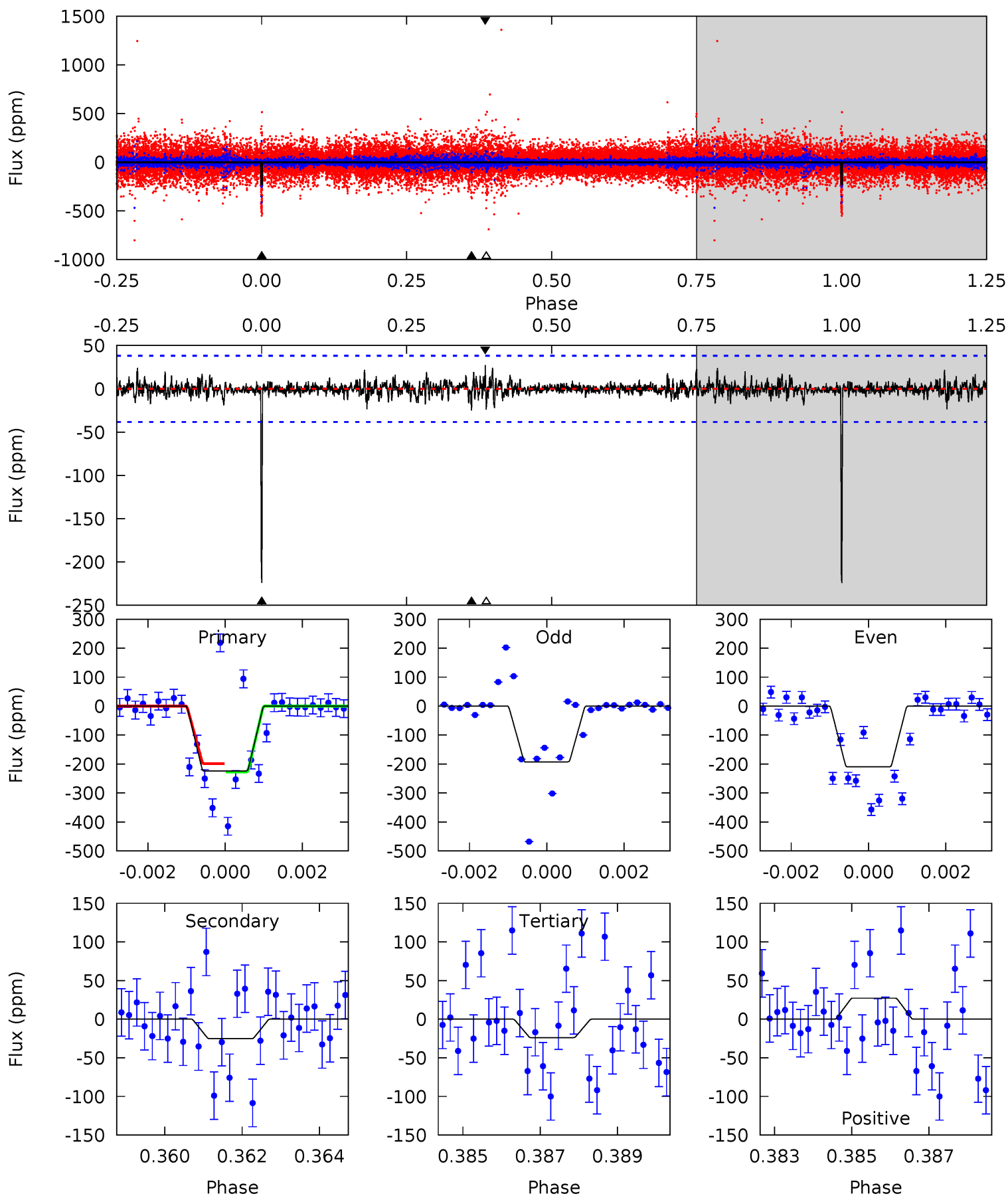
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.0	30.2	24.3	34.4	5.28	3.01	5.79	-10.2	-20.4	5.92	-4.21	1.36	1.05	0.53	0.29



Alt Model-Shift Uniqueness Test

005732847-01, P = 375.228274 Days, E = 373.083227 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.1	3.50	3.32	3.78	5.32	3.08	0.70	27.8	27.4	0.18	-0.28	0.65	0.96	0.11	2.01



Stellar Parameters For KIC 005732847

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3298^{+117}_{-78}	$0.129^{+0.212}_{-0.050}$	$-0.100^{+0.250}_{-0.150}$	$151.742^{+7.966}_{-29.874}$	$1.130^{+0.206}_{-0.137}$	$0.000^{+0.000}_{-0.000}$
	+4%/-2%	+164%/-39%	+250%/-150%	+5%/-20%	+18%/-12%	+99%/-11%
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 005732847-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-774 ± 26	$416.24^{+38.56}_{-48.67}$	2390^{+105}_{-131}	3331^{+130}_{-122}	$2.885^{+0.705}_{-0.477}$
Alt.	-25 ± 7	$320.51^{+34.11}_{-41.84}$	2387^{+108}_{-125}	-2277^{+183}_{-121}	$0.158^{+0.064}_{-0.050}$

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 $A_{obs} \gg 1.0$

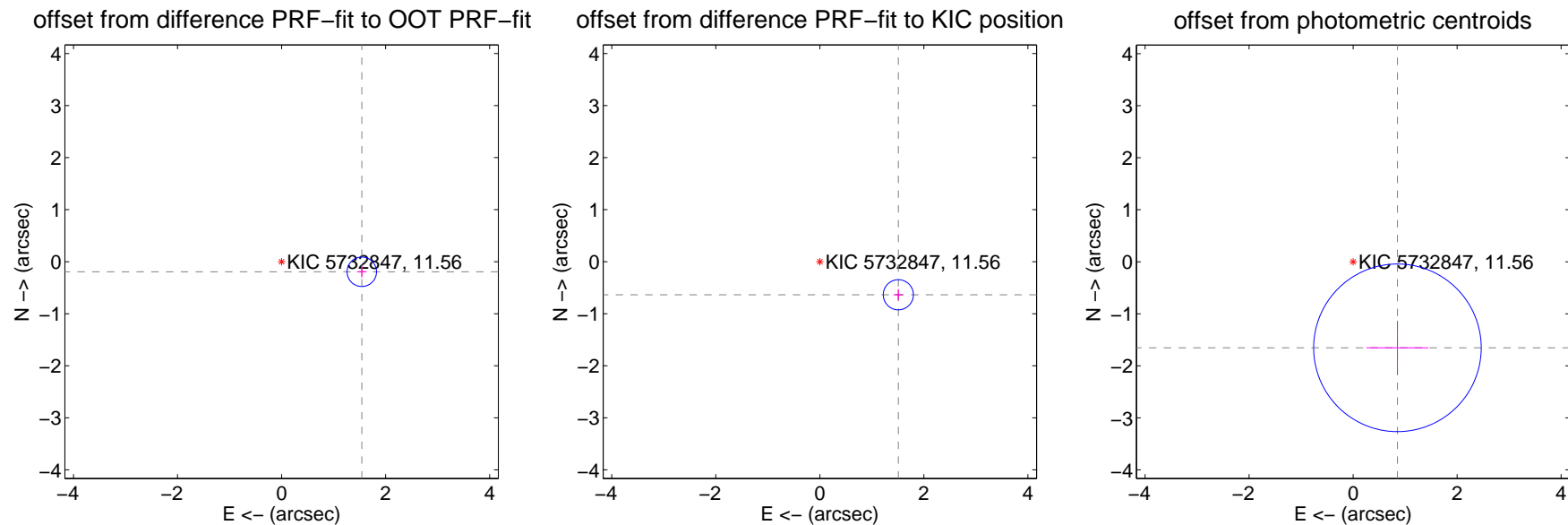
DV Centroid Data

Supplemental centroid analysis for 005732847-01. **Kepler magnitude: 11.56.** Transit SNR 12.03

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.44 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.554 ± 0.094	16.49	-1.542 ± 0.094	-0.194 ± 0.109
PRF-fit source offset from KIC position	1.638 ± 0.097	16.97	-1.509 ± 0.094	-0.636 ± 0.109
photometric centroid source offset	1.86 ± 0.54	3.47	-0.85 ± 0.60	-1.65 ± 0.52

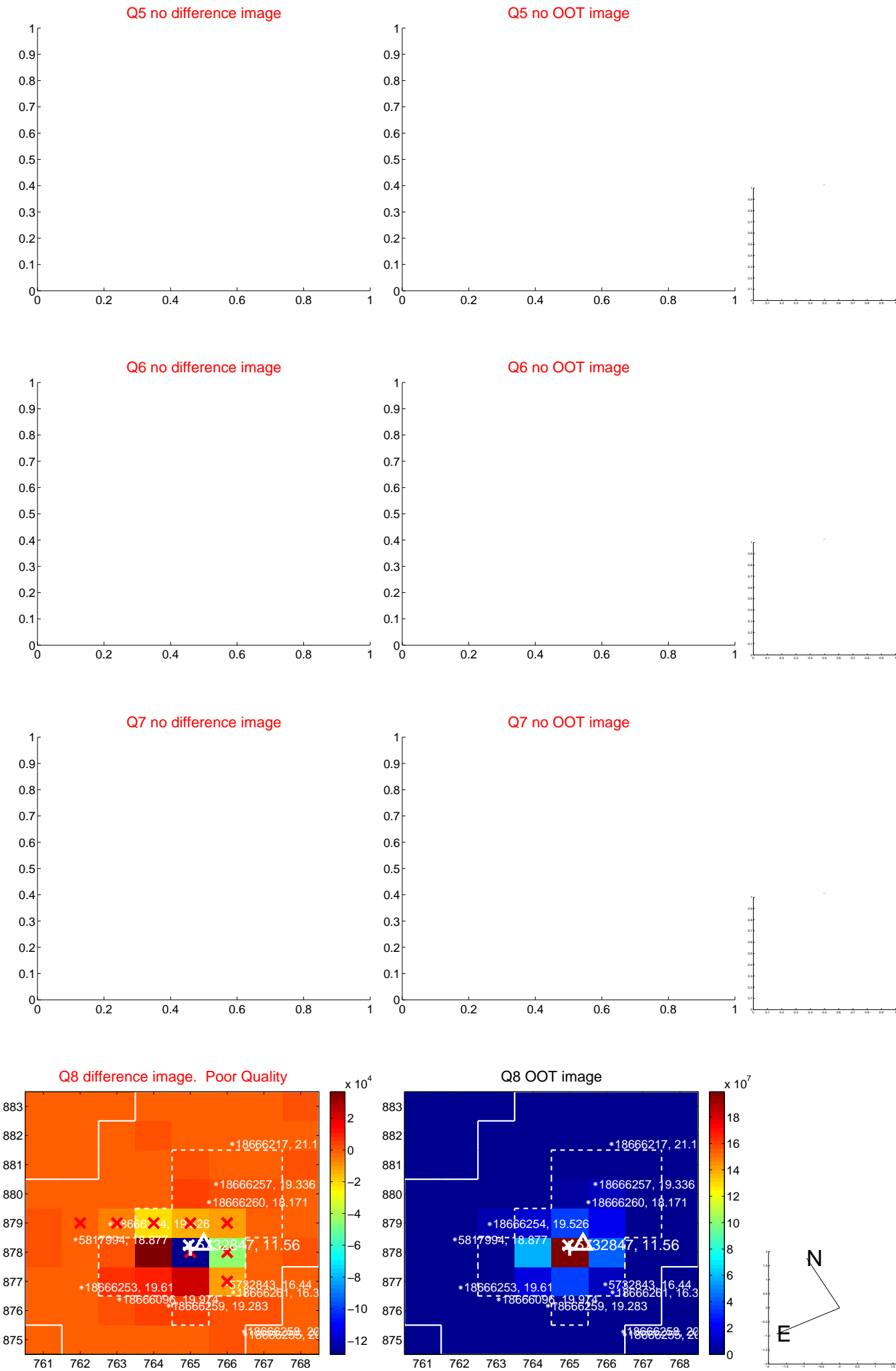


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



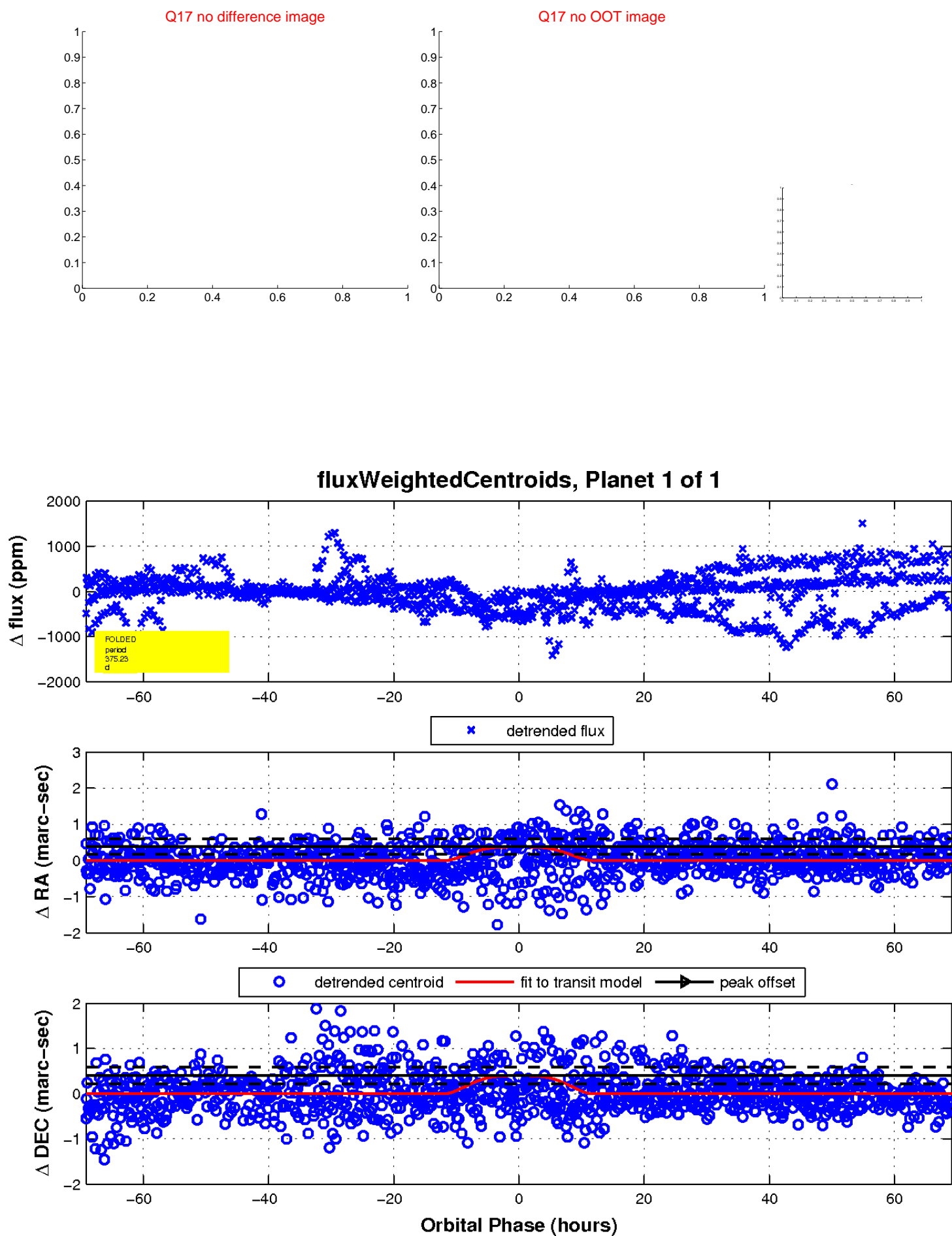
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

