

KIC 007288383

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})
007288383-01	OBS	No	628.853694	283.364106	367.1	11.550	9.0	8.6	0.56	4422	1.20	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007288383-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

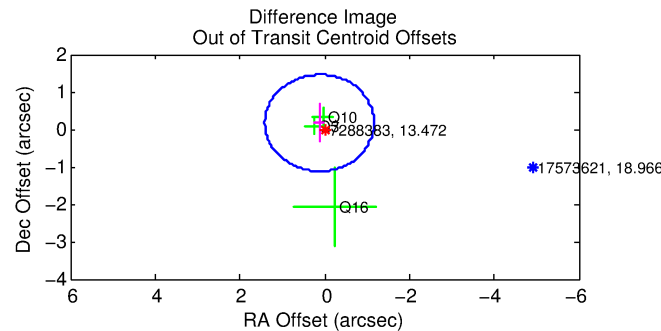
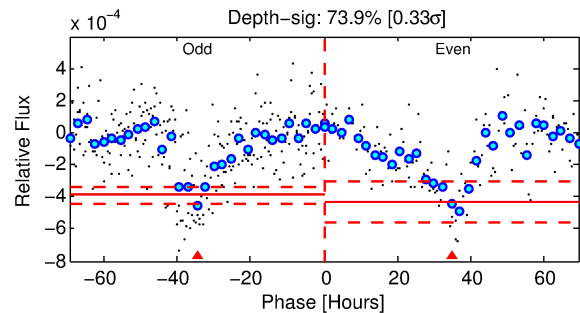
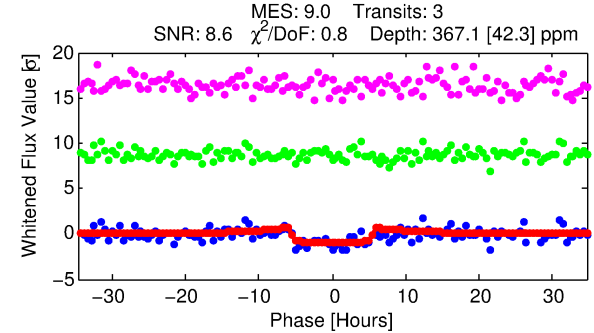
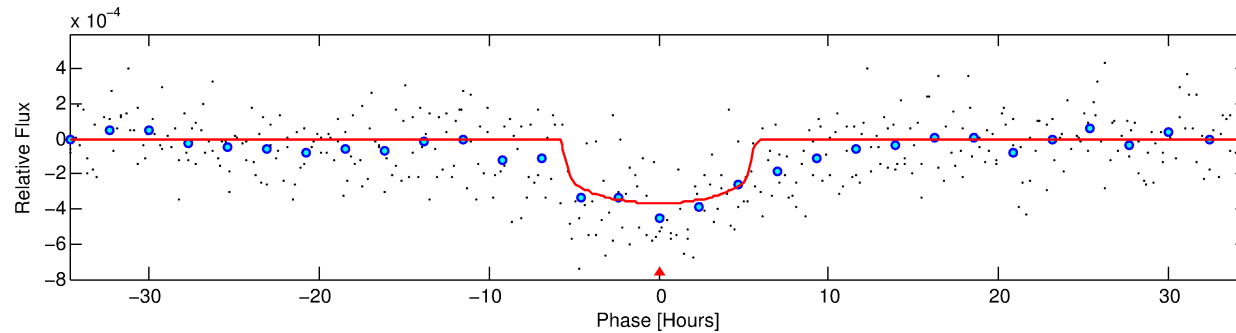
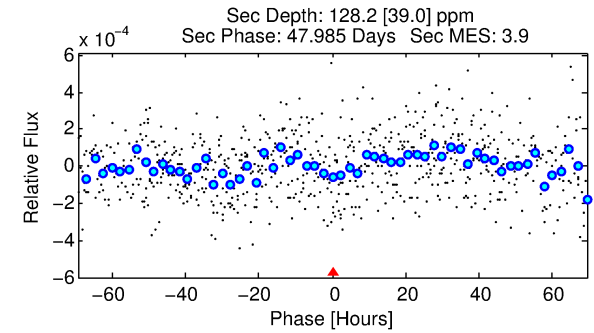
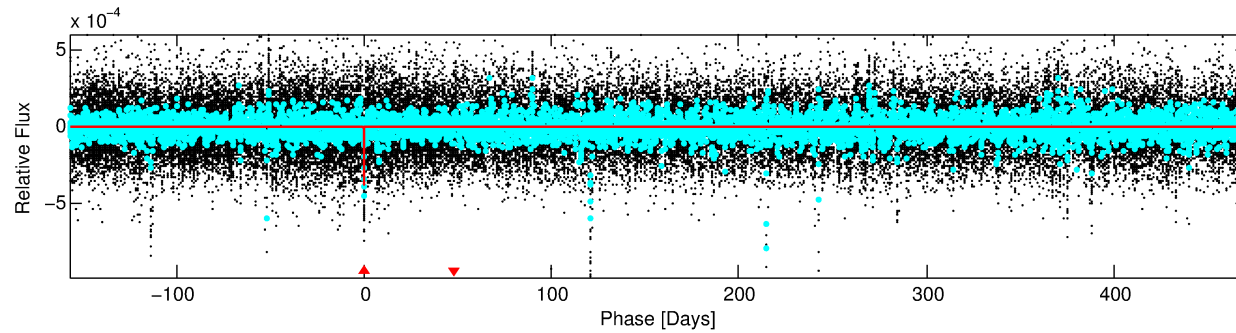
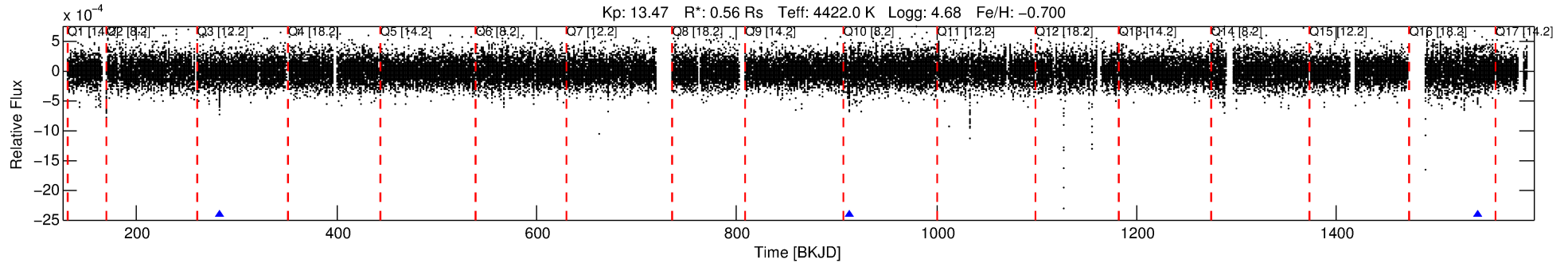
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007288383-01

No Significant Match Found

DV One-Page Summary

KIC: 7288383 Candidate: 1 of 1 Period: 628.854 d



DV Fit Results:

Period = 628.85369 [0.00993] d
Epoch = 283.3641 [0.0110] BKJD
Rp/R* = 0.0195 [0.0048]
a/R* = 268.87 [240.03]
b = 0.79 [0.44]
Seff = 0.08 [0.01]
Teff = 135 [5] K
Rp = 1.20 [0.32] Re
a = 1.1797 [0.0851] AU
Ag = 67824.20 [39931.54] [1.70σ]
Teffp = 3369 [499] K [6.48σ]

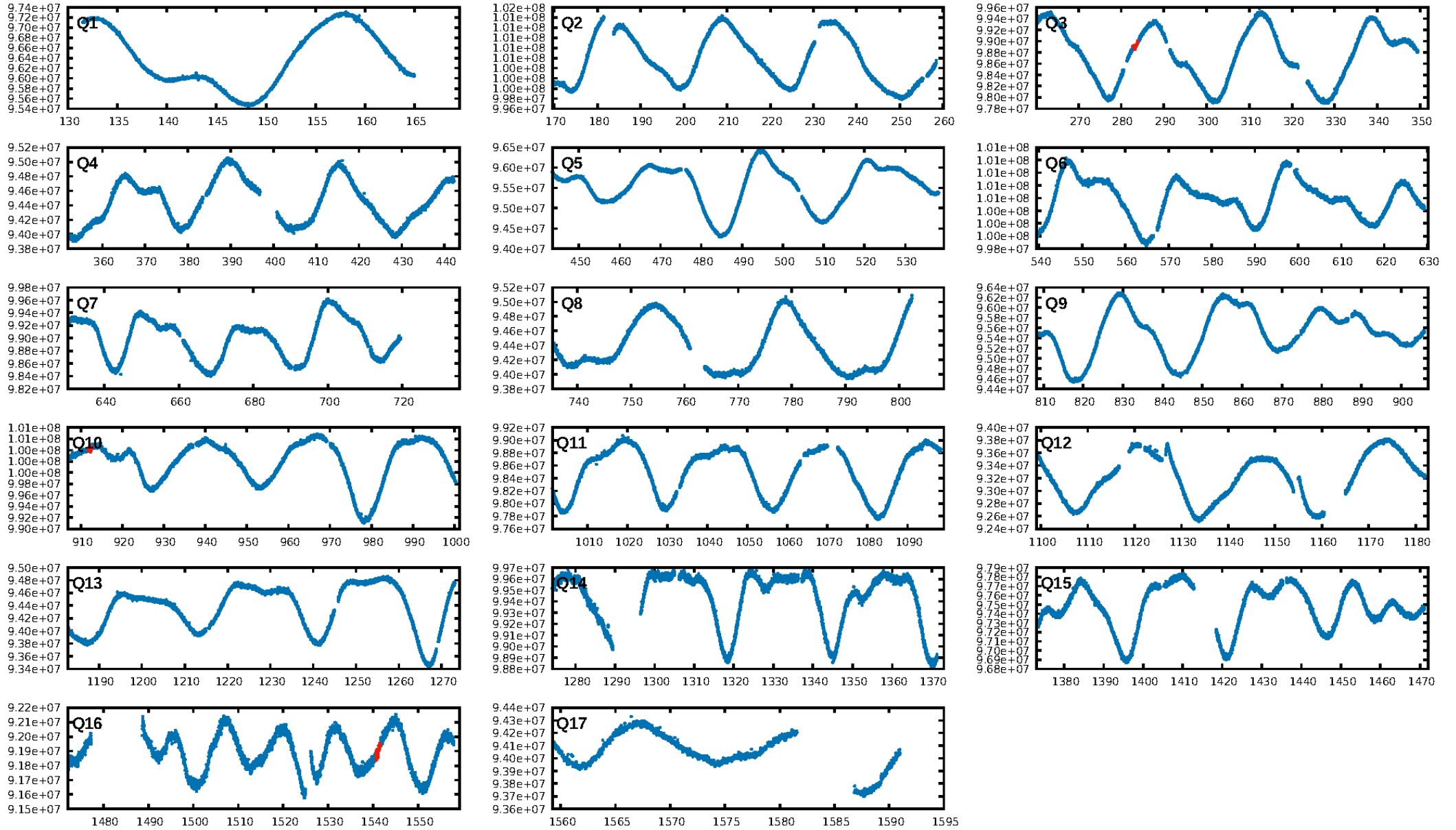
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.5%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 3.86e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.917
Centroid-sig: 68.8%
Centroid-so: 0.735 arcsec [0.94σ]
OotOffset-rm: 0.209 arcsec [0.49σ]
KicOffset-rm: 0.373 arcsec [0.96σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

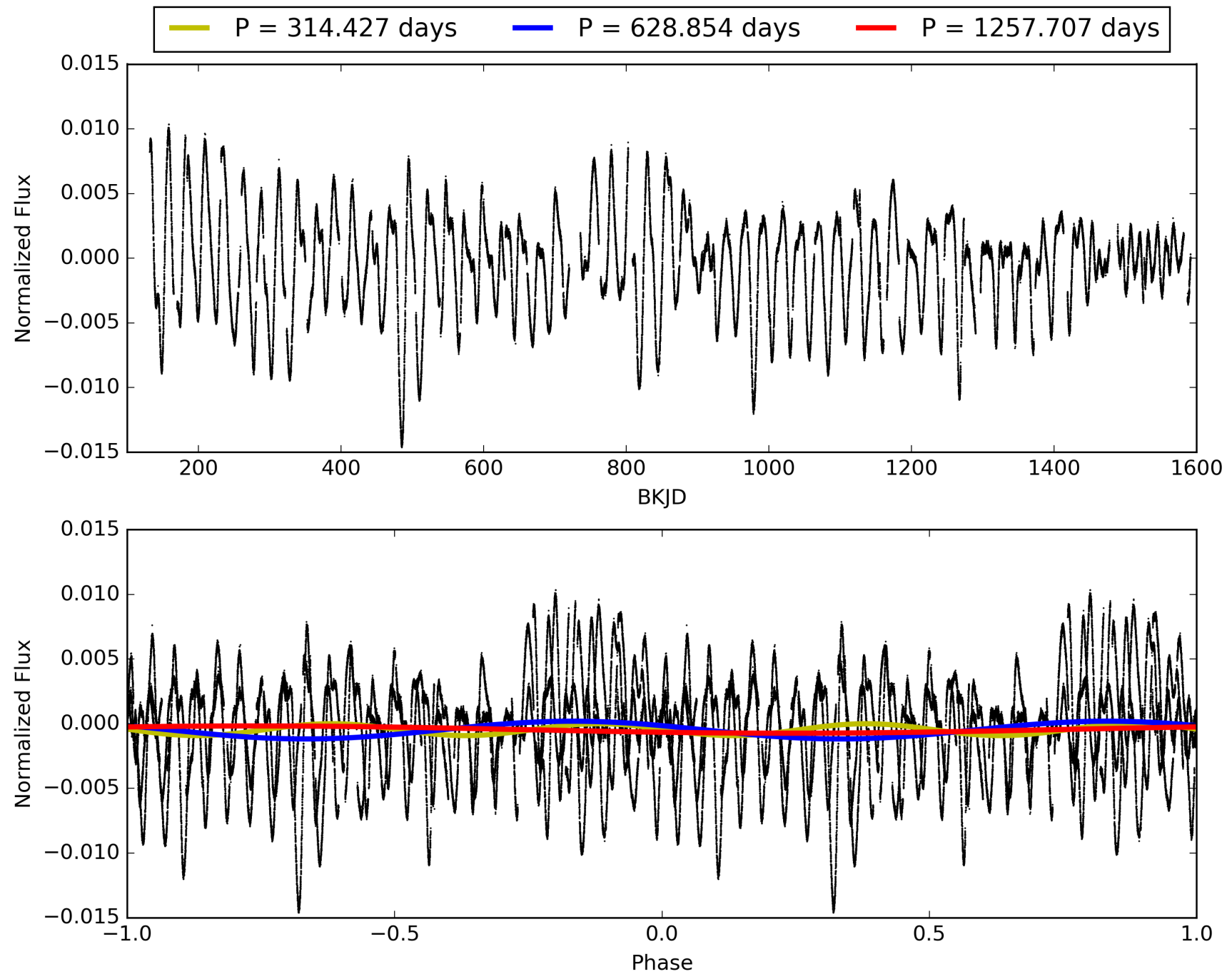
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 04:13:53 Z

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

TCE 007288383-01, PDC Light Curves

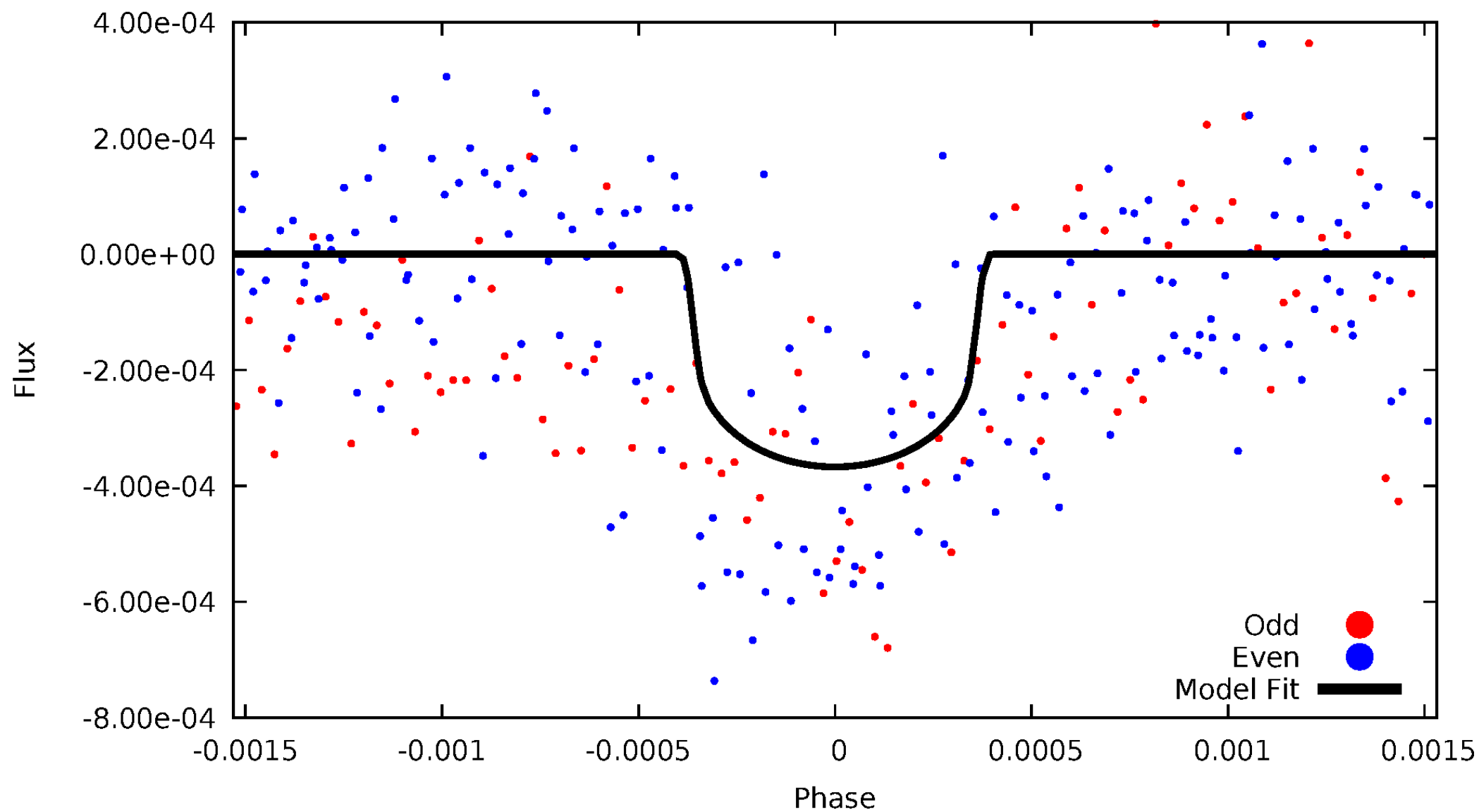


TCE 007288383-01



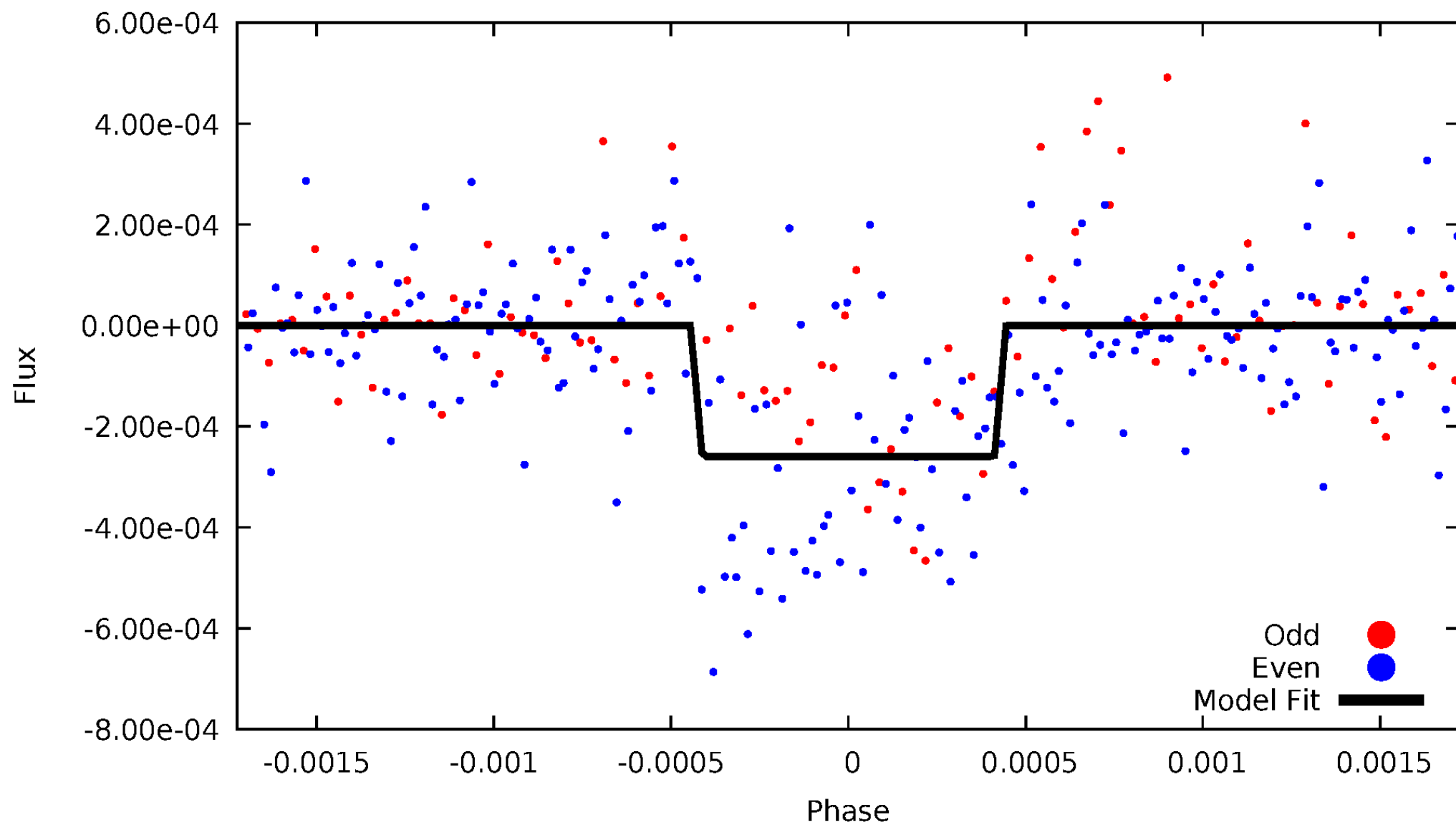
DV Odd/Even

TCE 007288383-01



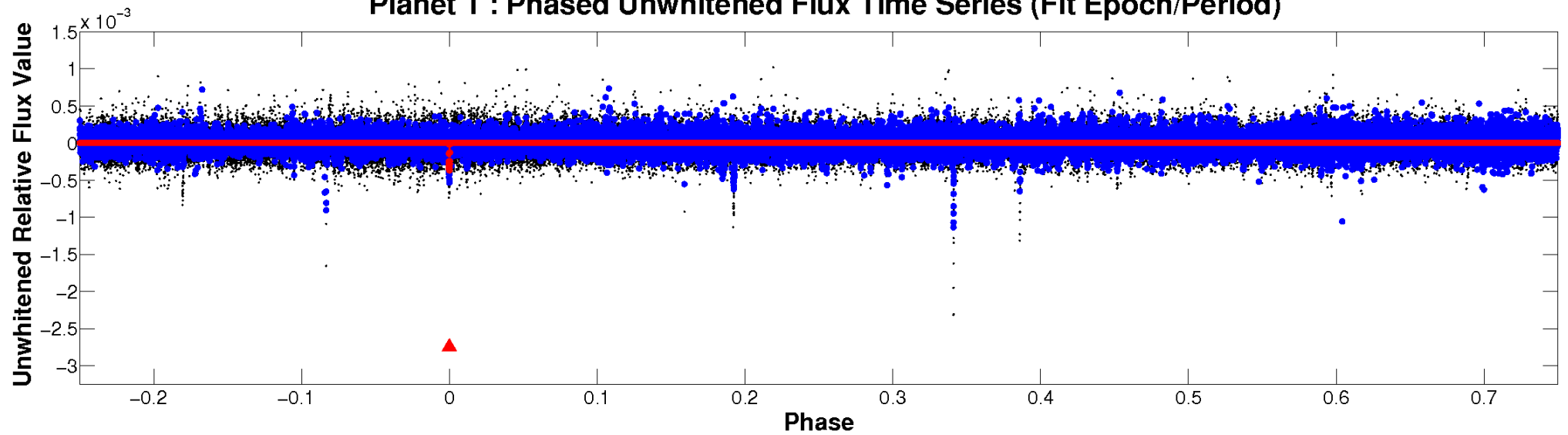
ALT Odd/Even

TCE 007288383-01

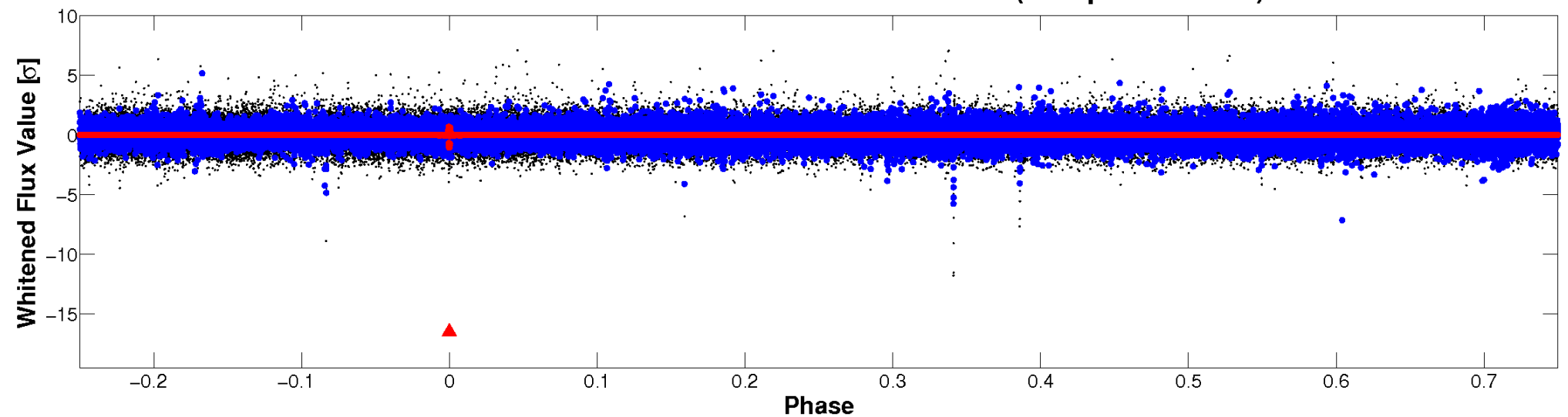


Non-Whitened Vs. Whitened Light Curve

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

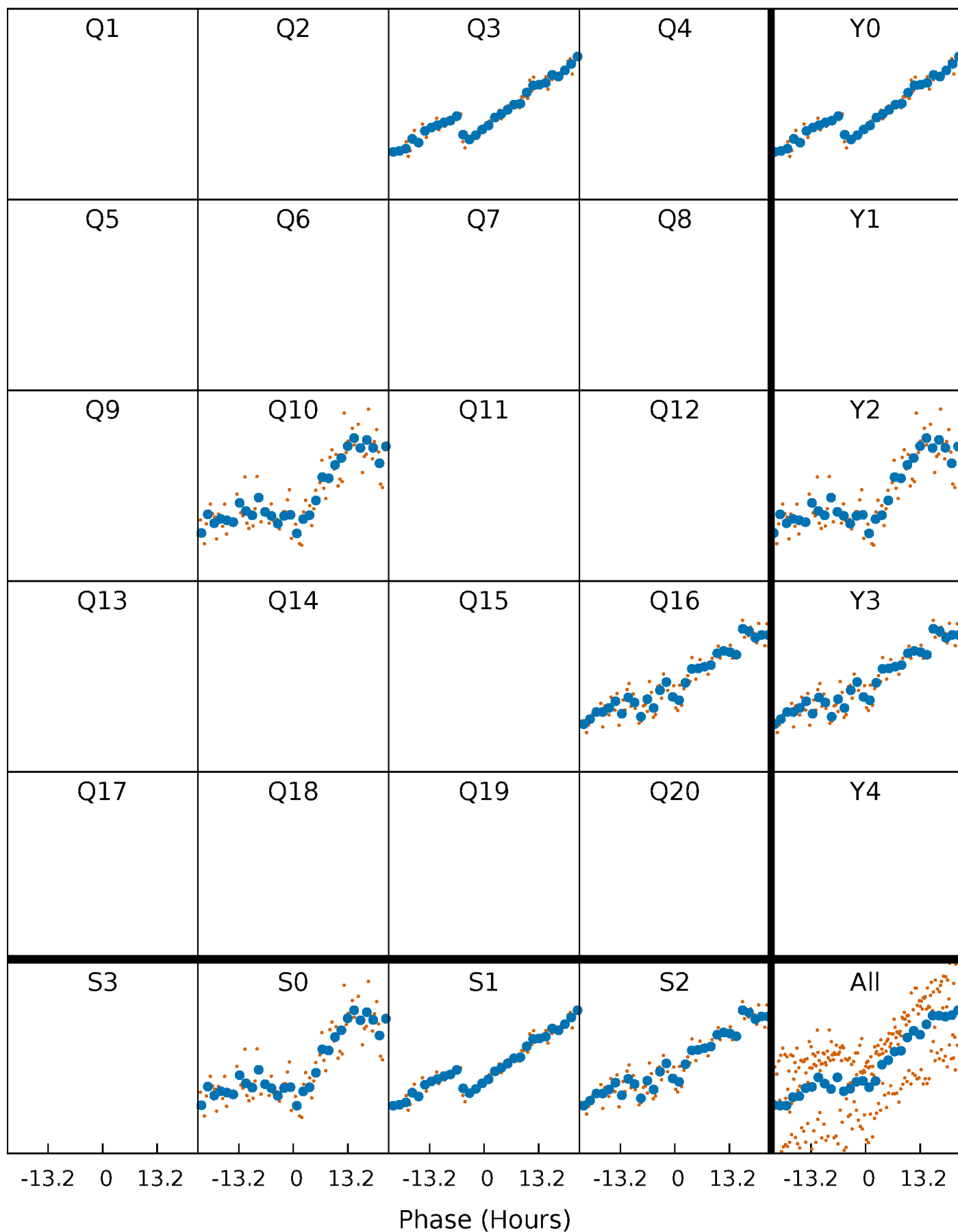


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



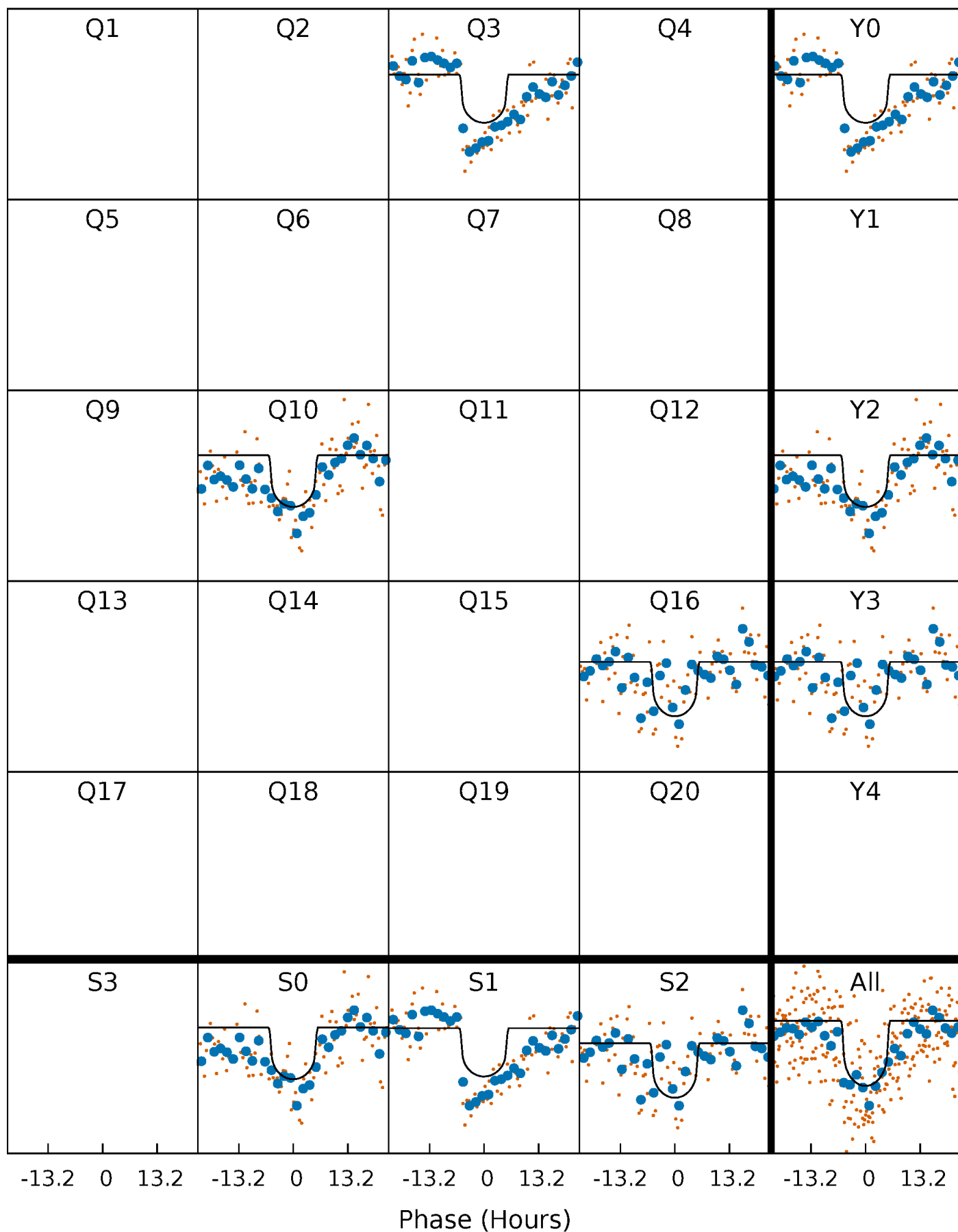
PDC Quarter-Phased Transit Curves

TCE 007288383-01 P=628.853694 Days $T_0=283.364106$ (BKJD)



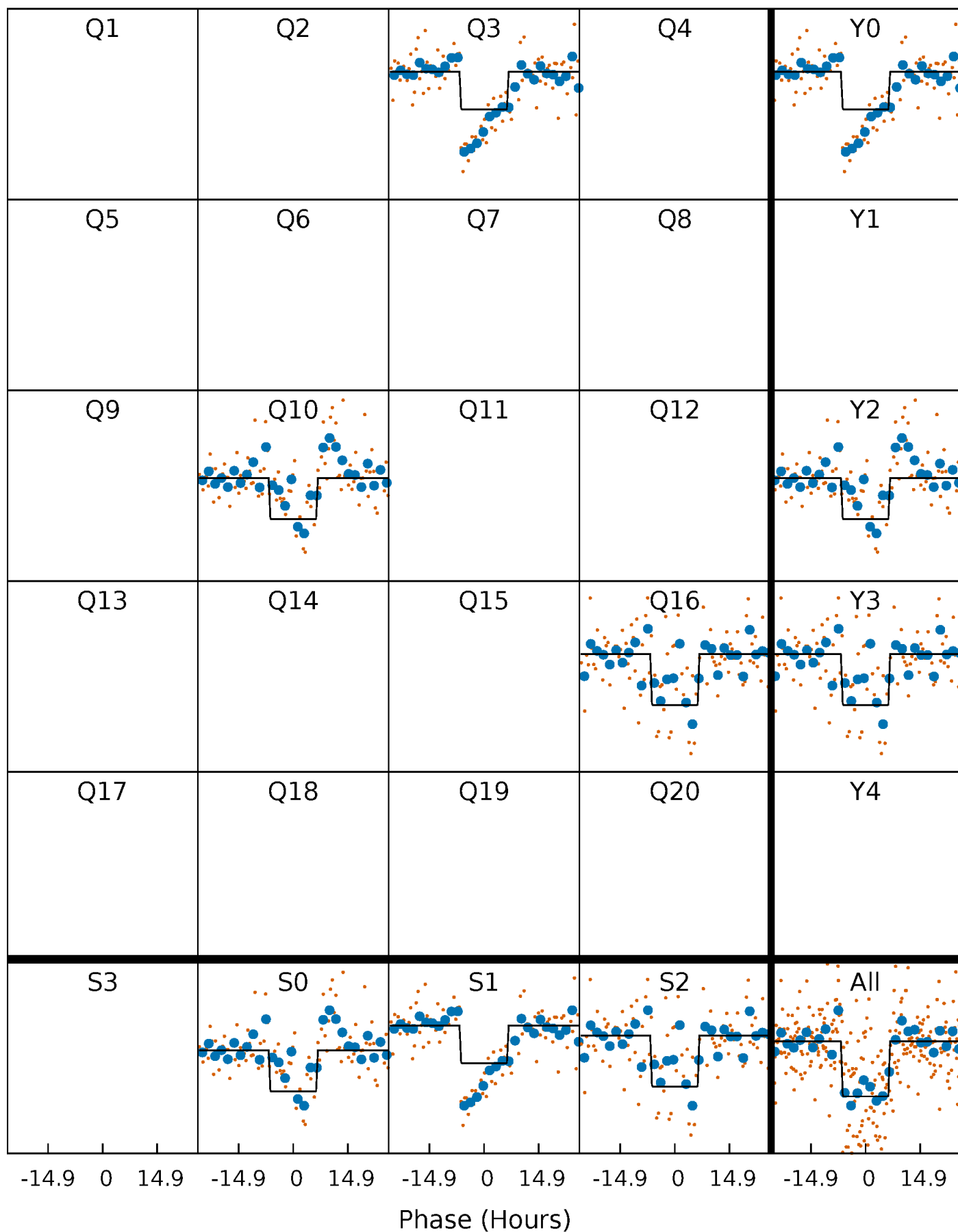
DV Quarter-Phased Transit Curves

TCE 007288383-01 P=628.853694 Days $T_0=283.364106$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

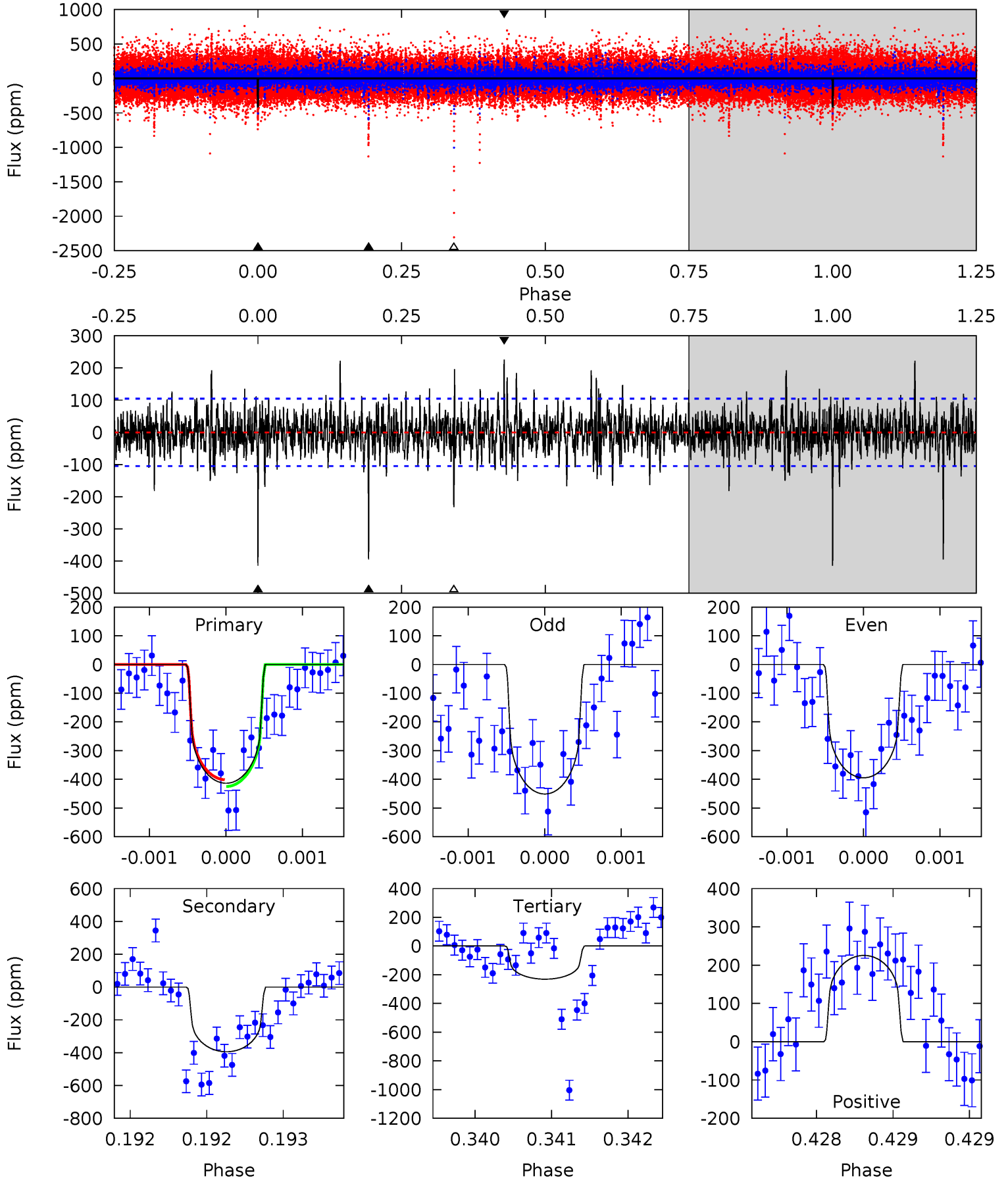
TCE 007288383-01 P=628.754263 Days $T_0=283.410737$ (BKJD)



DV Model-Shift Uniqueness Test

007288383-01, P = 628.853694 Days, E = 283.364106 Days

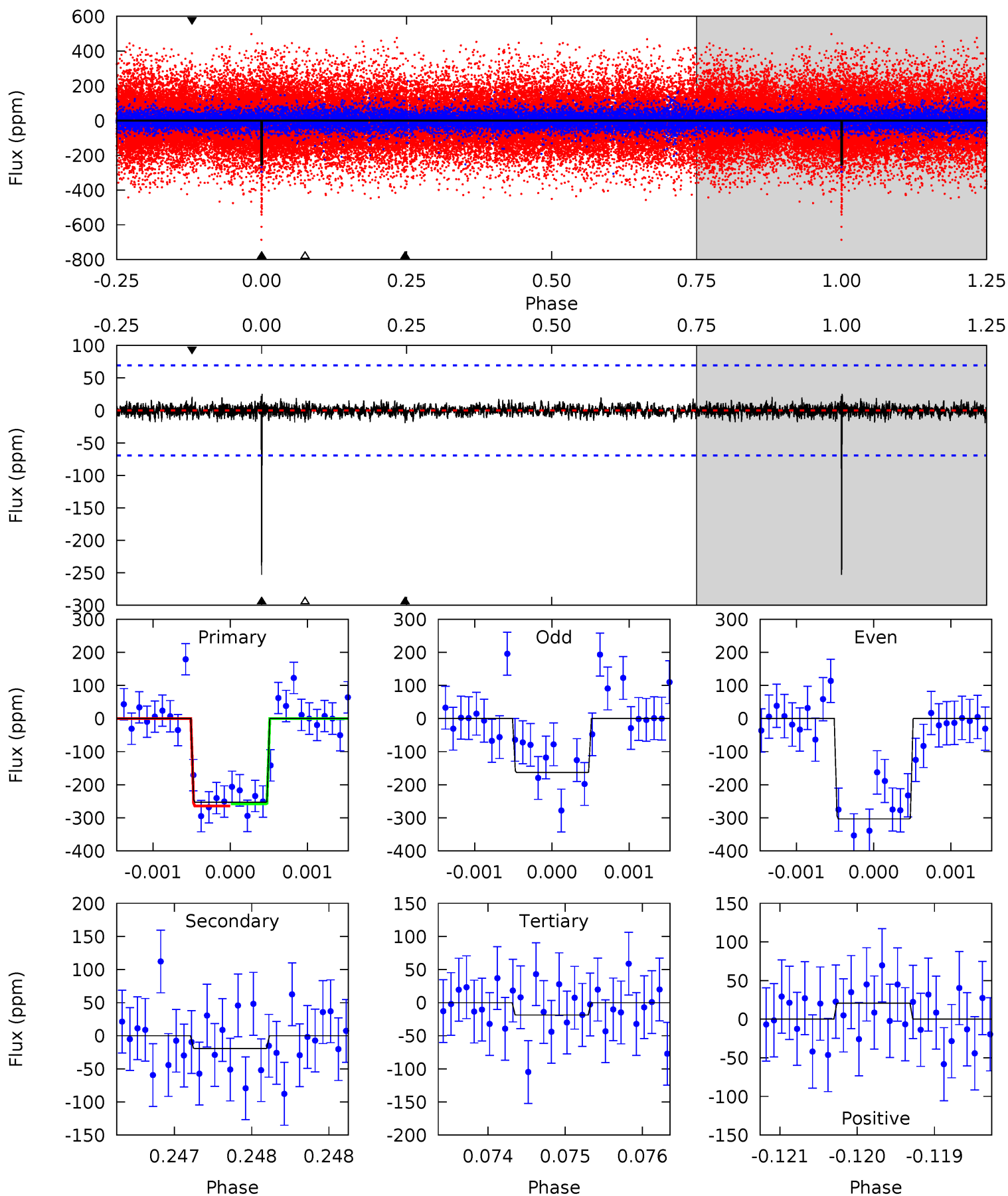
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.7	20.7	12.1	11.8	5.50	3.36	2.50	9.61	9.90	8.60	8.88	1.39	0.92	0.35	0.62



Alt Model-Shift Uniqueness Test

007288383-01, P = 628.754263 Days, E = 283.410737 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.0	1.52	1.48	1.64	5.48	3.33	0.40	18.5	18.4	0.04	-0.12	5.28	1.40	0.09	0.25



Stellar Parameters For KIC 007288383

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4422^{+119}_{-132}	$4.677^{+0.054}_{-0.027}$	$-0.700^{+0.300}_{-0.300}$	$0.565^{+0.045}_{-0.050}$	$0.554^{+0.056}_{-0.033}$	$4.317^{+1.090}_{-0.559}$
	+3%/-3%	+1%/-1%	+43%/-43%	+8%/-9%	+10%/-6%	+25%/-13%
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 007288383-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-394 ± 19	$1.18^{+0.30}_{-0.29}$	188^{+6}_{-7}	4462^{+563}_{-370}	$218295^{+171600}_{-80506}$
Alt.	-19 ± 13	$0.98^{+0.28}_{-0.27}$	188^{+6}_{-6}	2885^{+402}_{-414}	14412^{+20773}_{-9996}

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

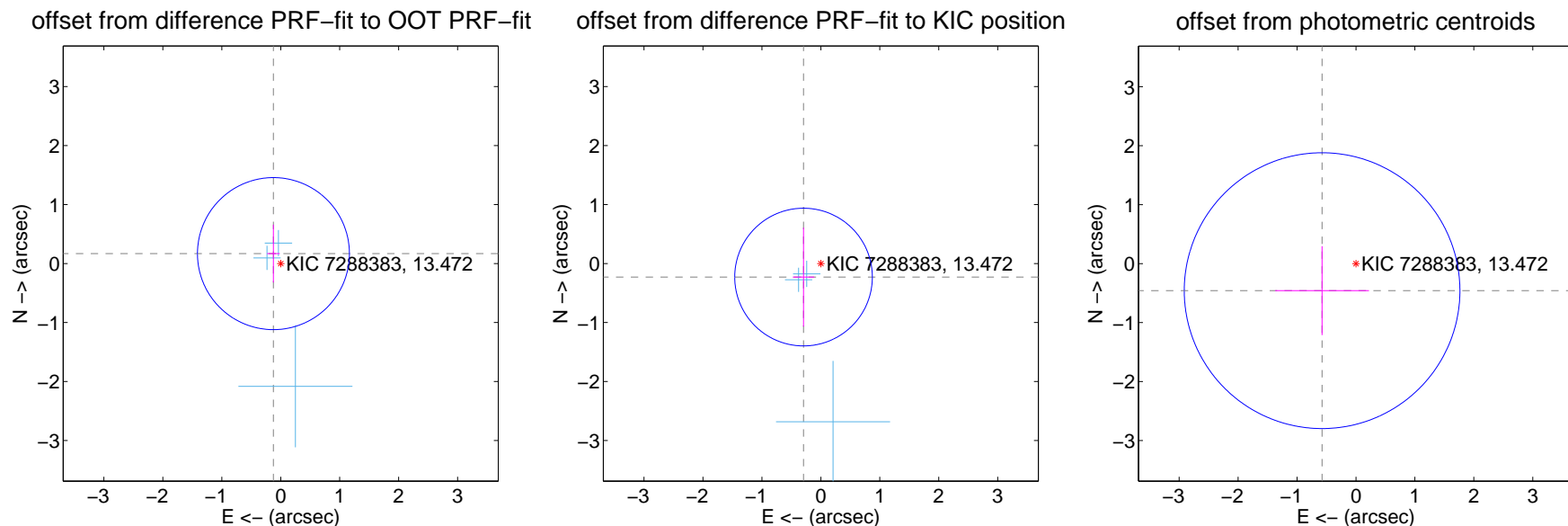
DV Centroid Data

Supplemental centroid analysis for 007288383-01. Kepler magnitude: 13.47. Transit SNR 8.57

There are 3 quarters with good PRF difference image offsets

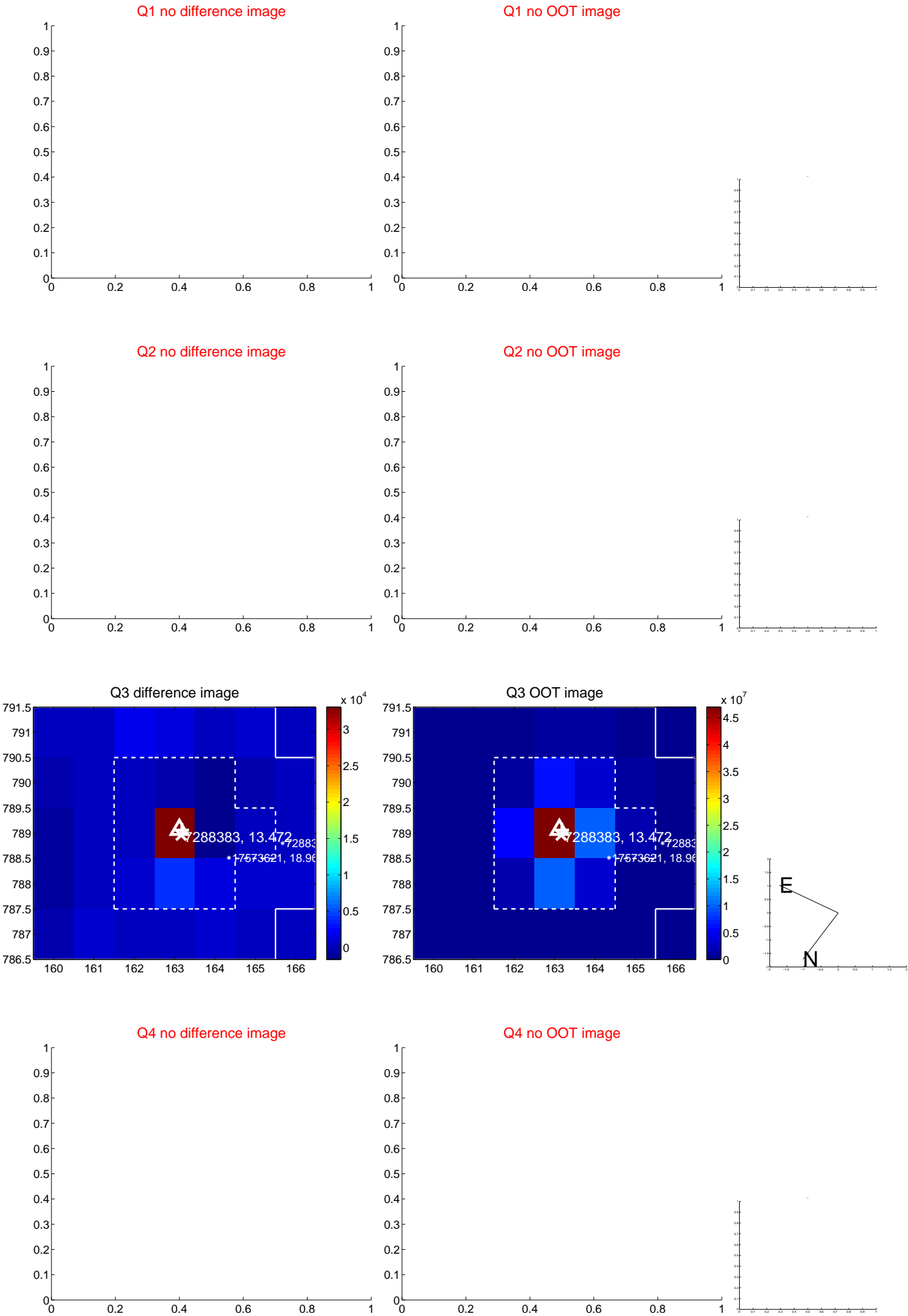
The direct PRF centroid is offset from the target star catalog position by about 0.60 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.209 ± 0.429	0.49	0.124 ± 0.107	0.168 ± 0.490
PRF-fit source offset from KIC position	0.373 ± 0.389	0.96	0.294 ± 0.182	-0.229 ± 0.838
photometric centroid source offset	0.74 ± 0.78	0.94	0.57 ± 0.79	-0.46 ± 0.75



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.

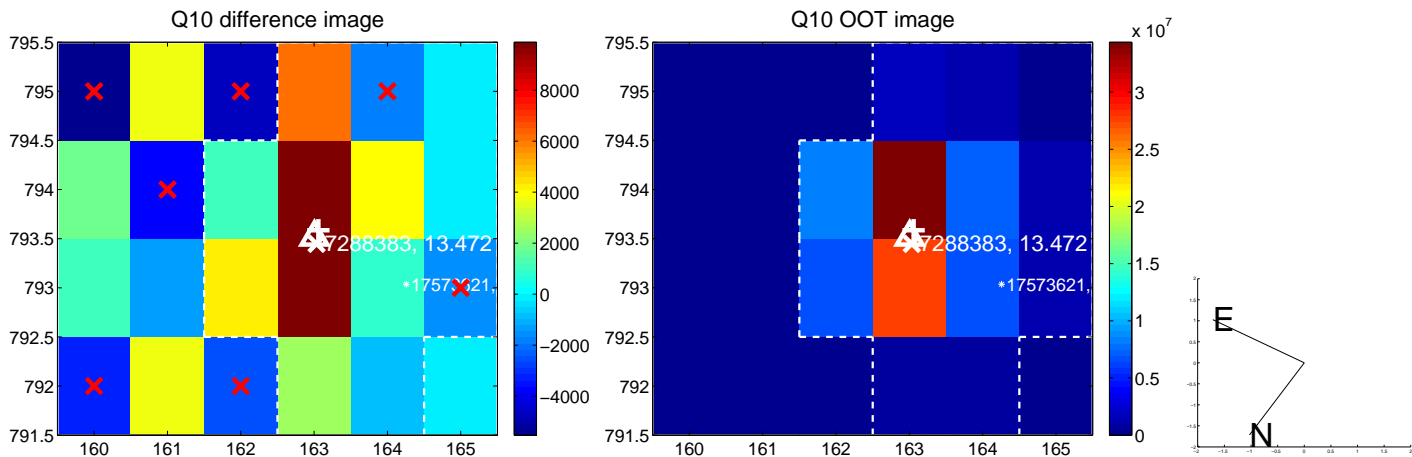
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



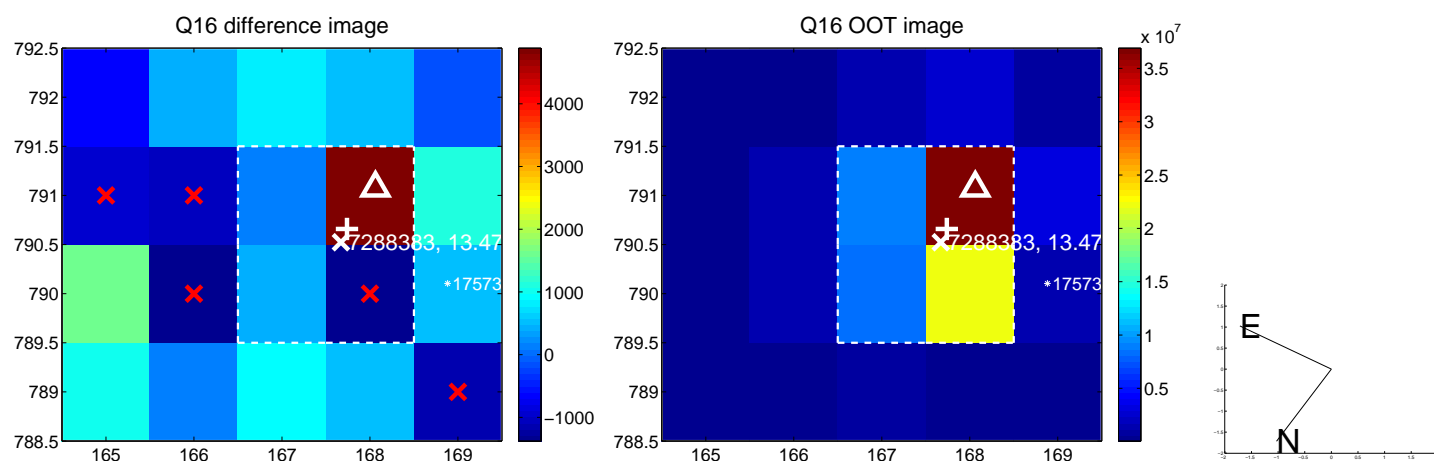
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



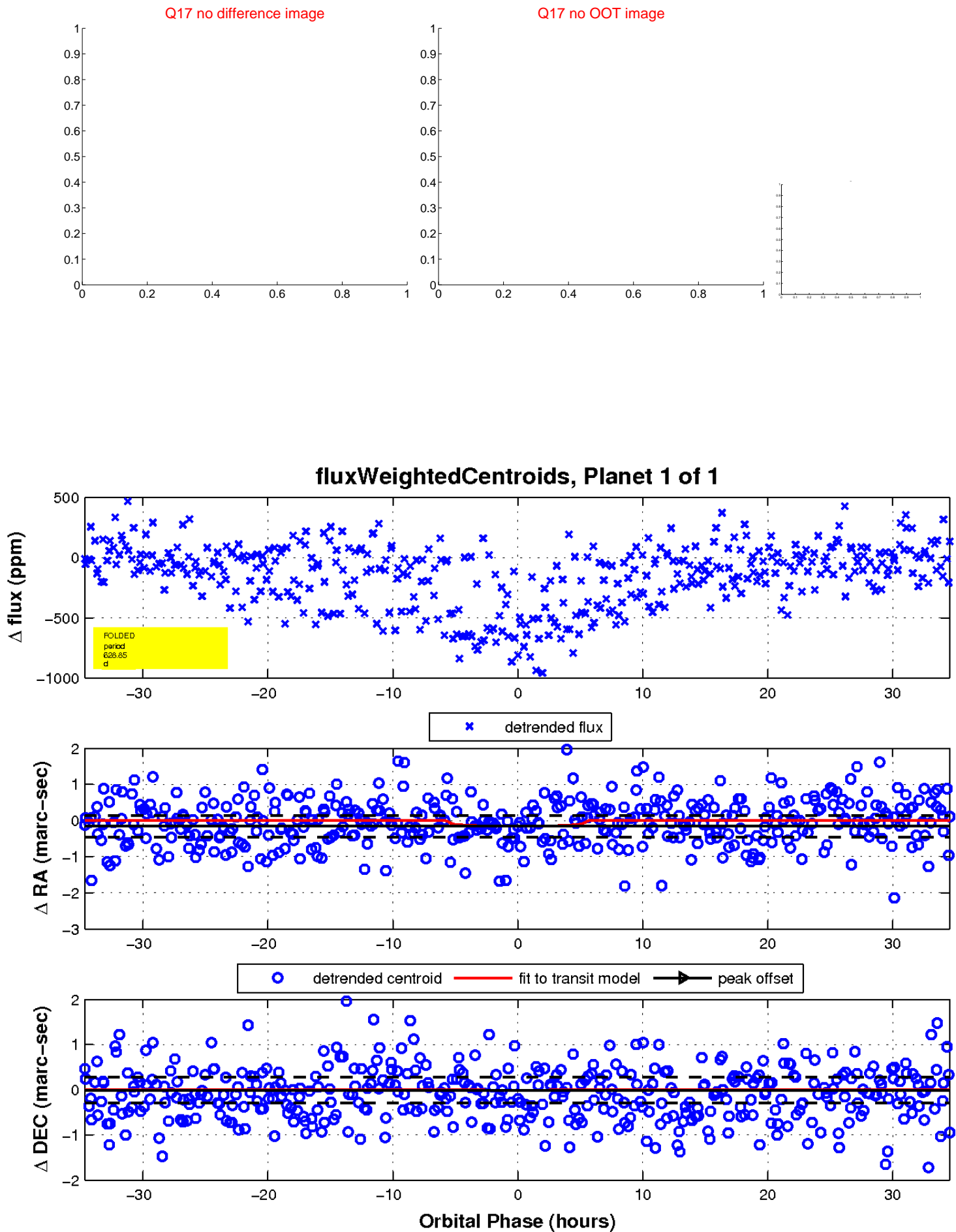
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

