

KIC 005783468

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})
005783468-01	OBS	No	371.578960	307.271047	329.9	18.223	8.8	8.7	0.84	5697	1.54	0.71

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005783468-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_TER_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.

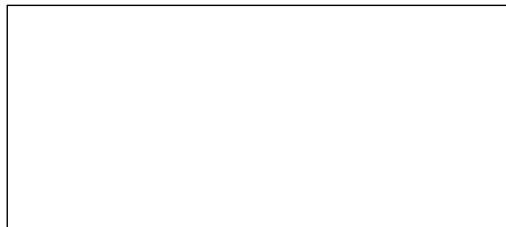
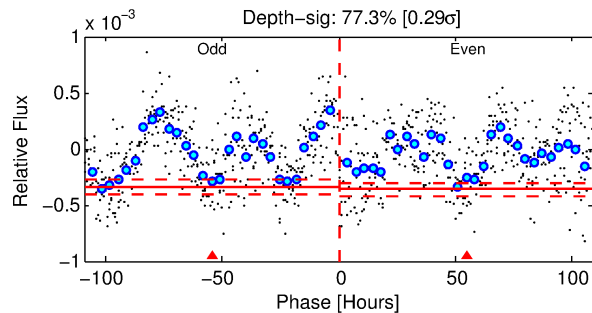
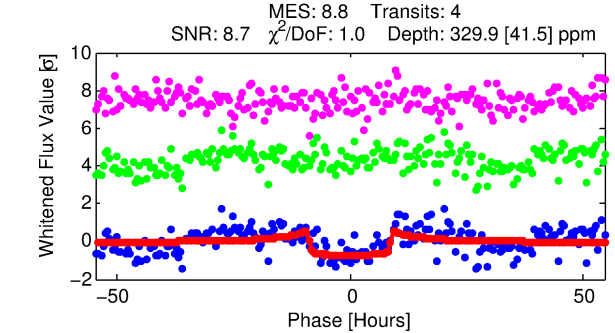
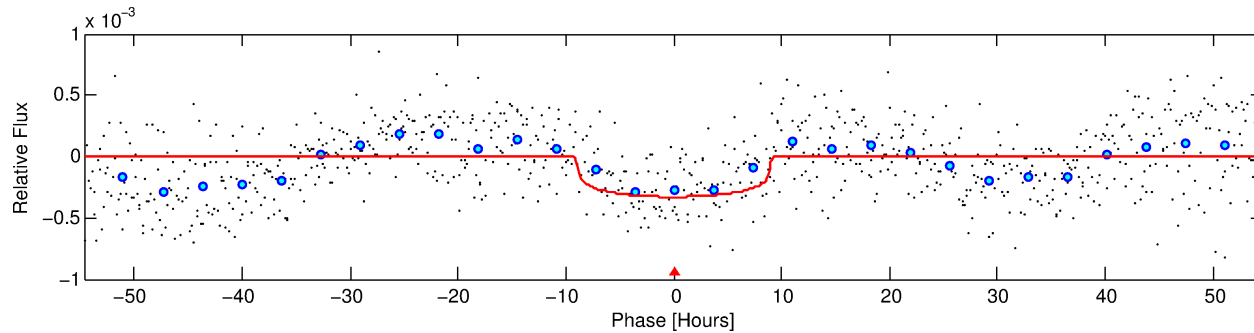
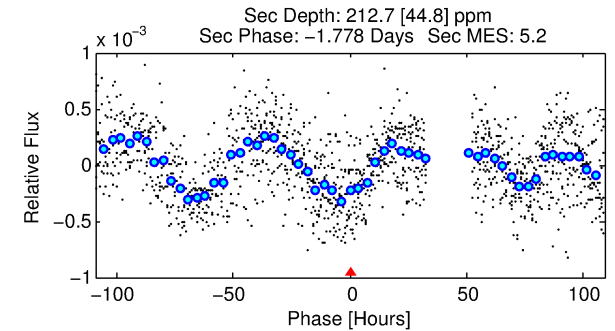
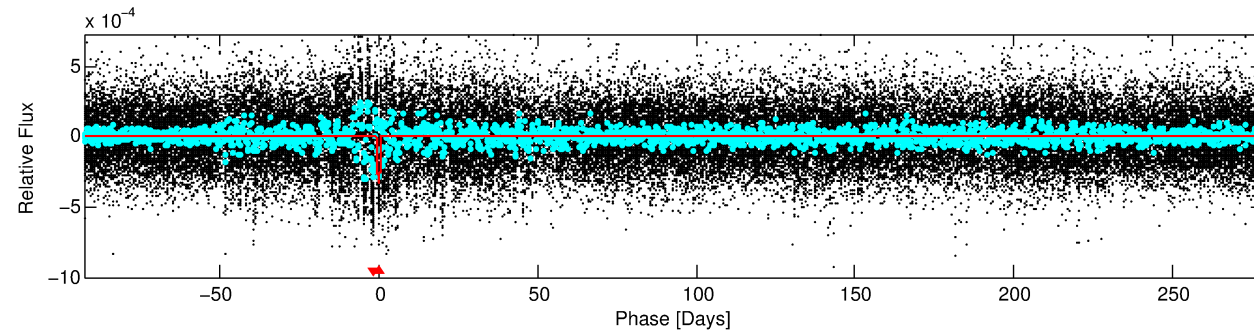
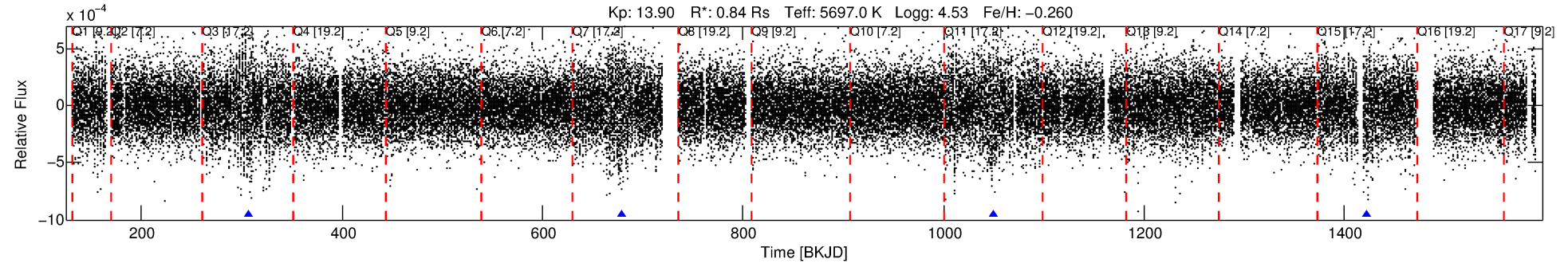
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005783468-01

No Significant Match Found

DV One-Page Summary

KIC: 5783468 Candidate: 1 of 1 Period: 371.579 d



DV Fit Results:

Period = 371.57896 [0.00911] d
Epoch = 307.2710 [0.0170] BKJD
Rp/R* = 0.0168 [0.0115]
a/R* = 144.73 [436.32]
b = 0.41 [6.09]
Seff = 0.71 [0.13]
Teq = 234 [11] K
Rp = 1.54 [1.07] Re
a = 0.9696 [0.1113] AU
Ag = 46240.85 [64274.68] [0.72σ]
Teffp = 5304 [1829] K [2.77σ]

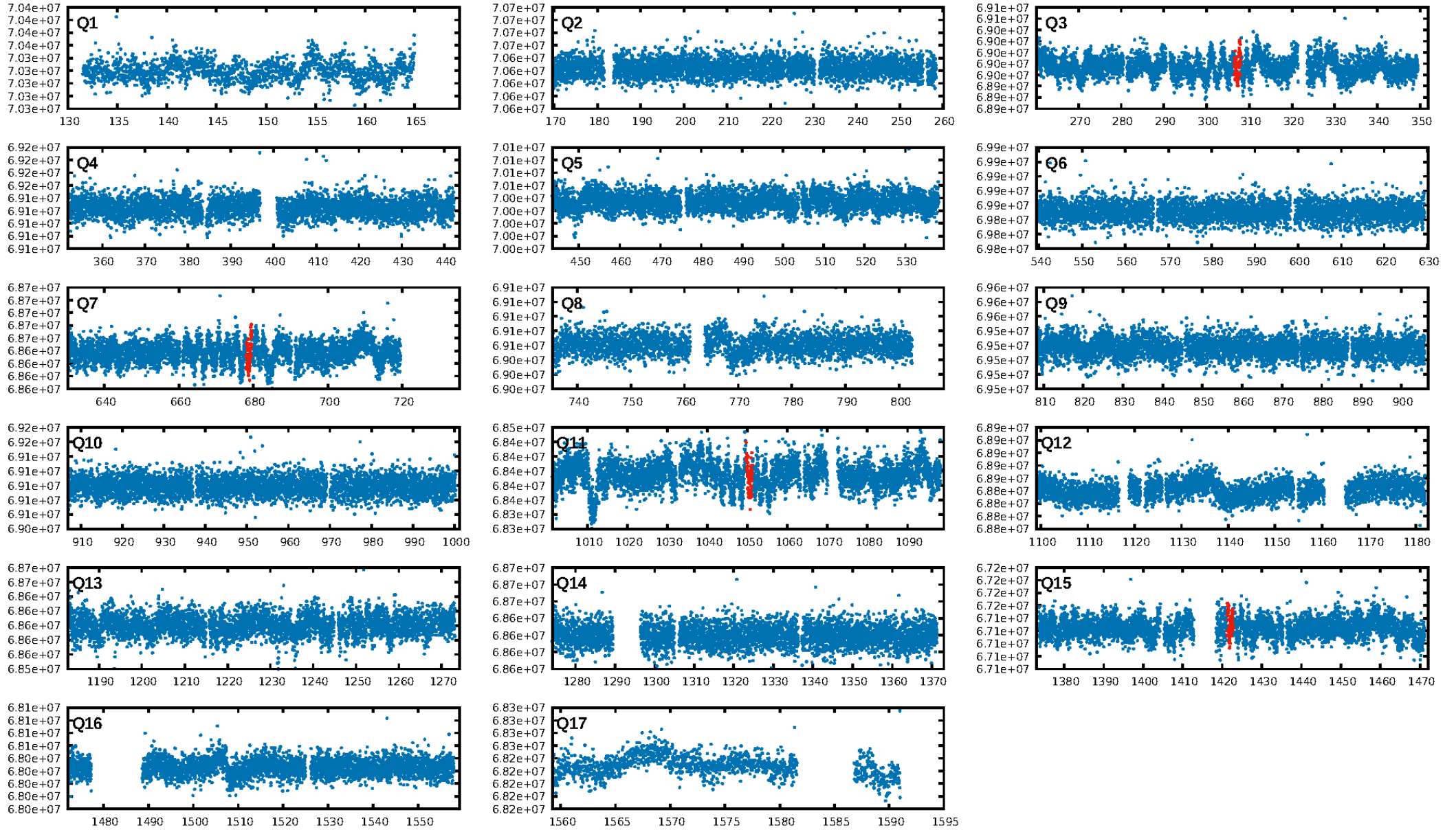
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.0%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 3.48e-11
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 3.869
Centroid-sig: 0.0%
Centroid-so: 10.578 arcsec [5.79σ]
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 [4/4]

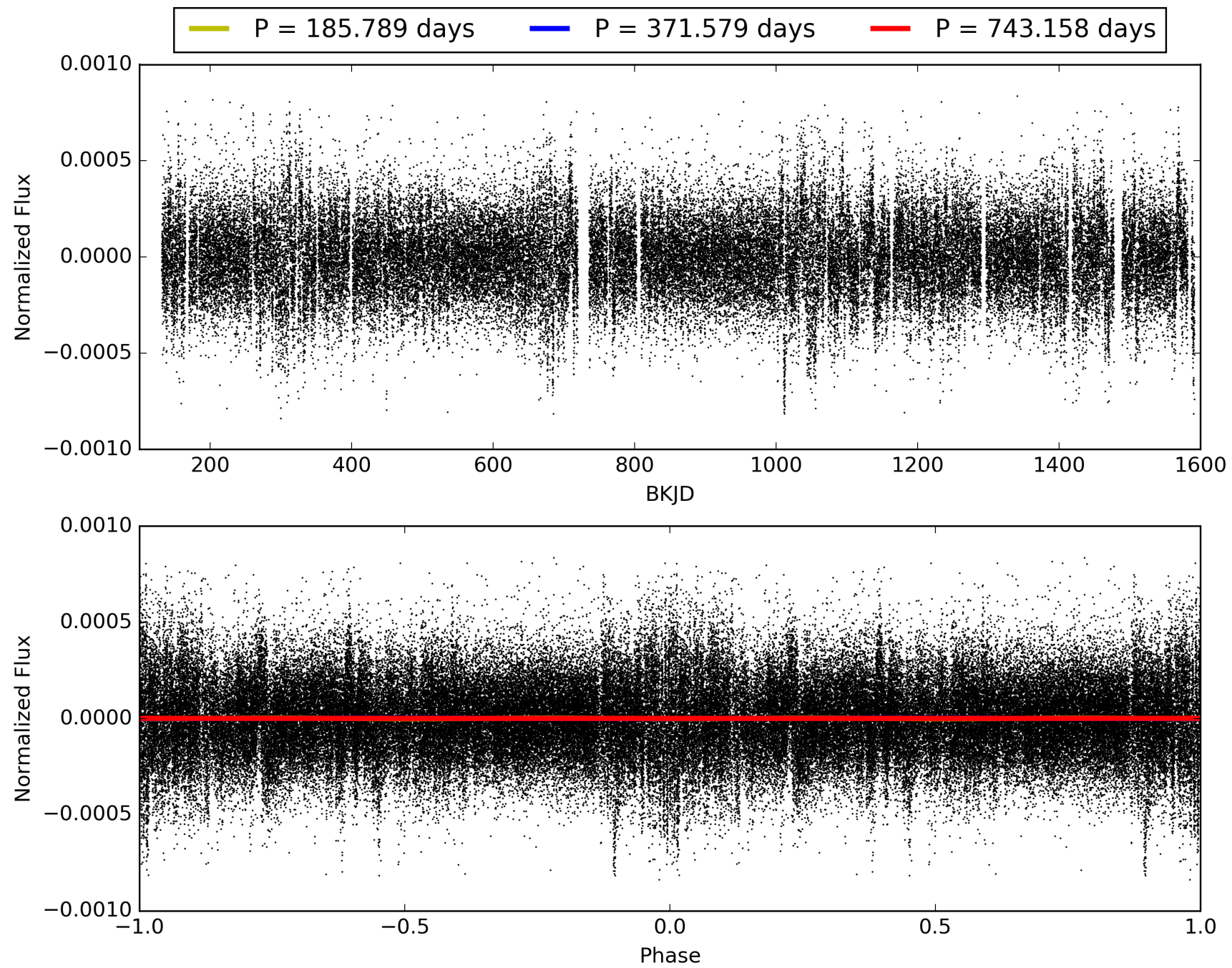
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:25:06 Z

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

TCE 005783468-01, PDC Light Curves

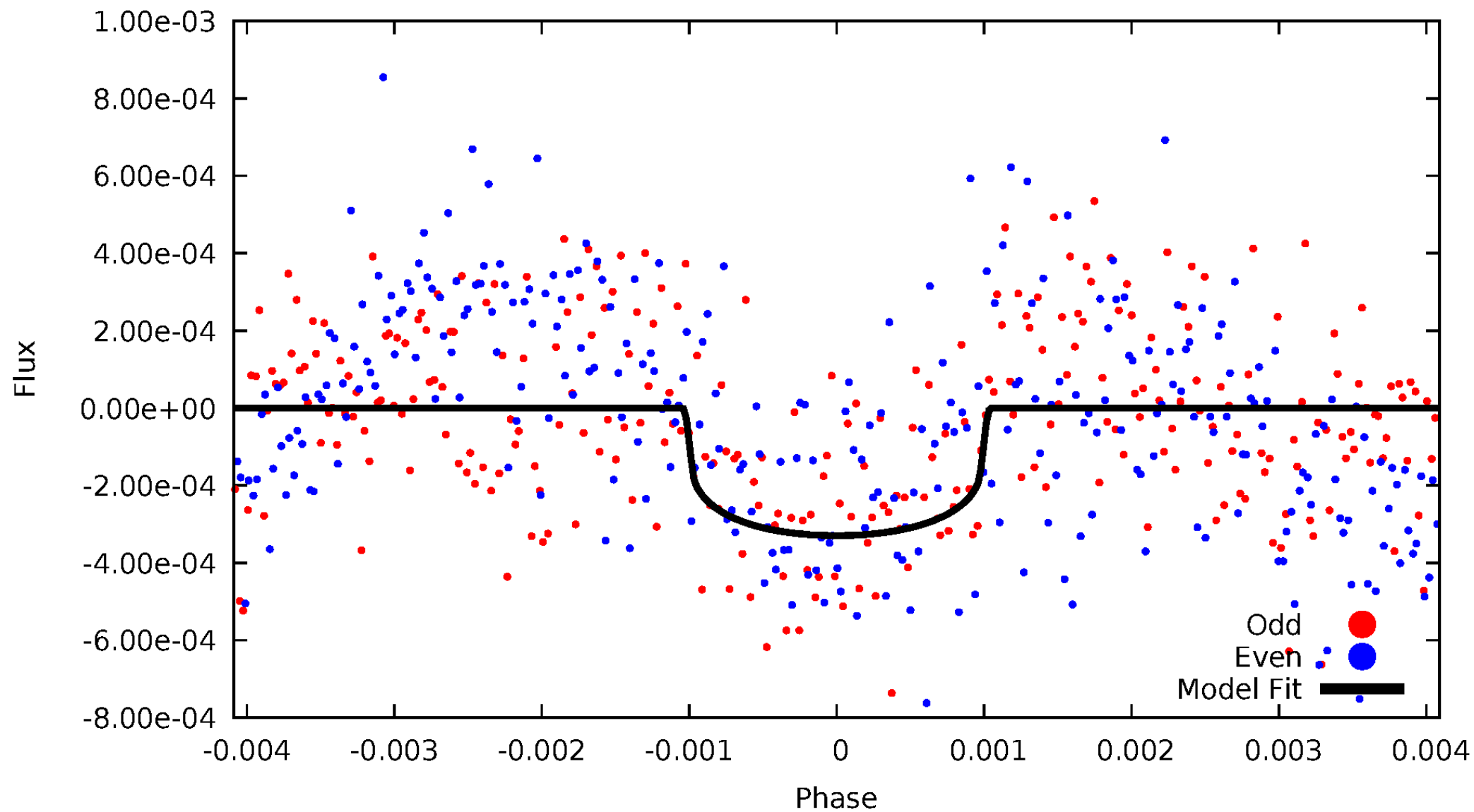


TCE 005783468-01



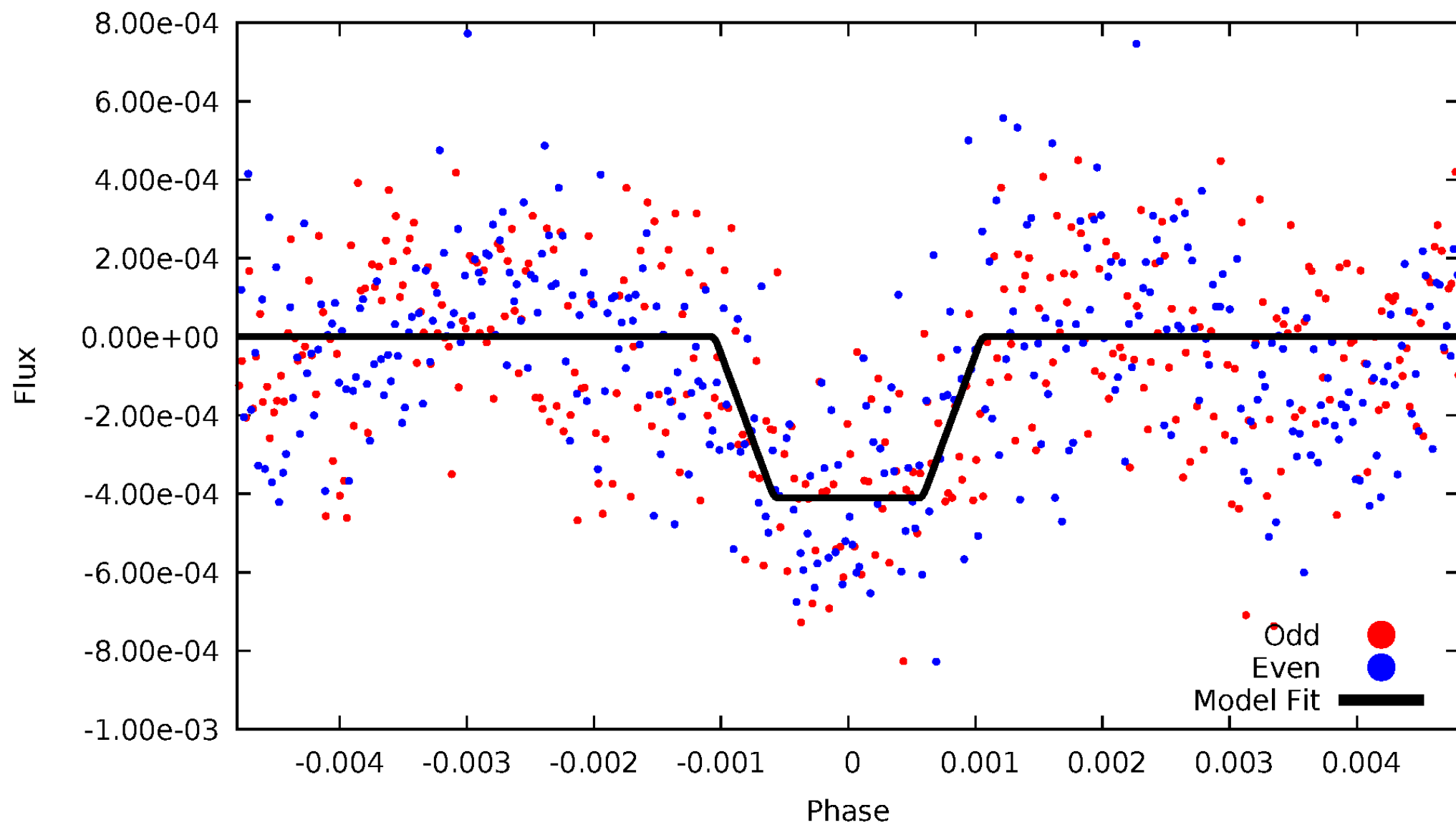
DV Odd/Even

TCE 005783468-01



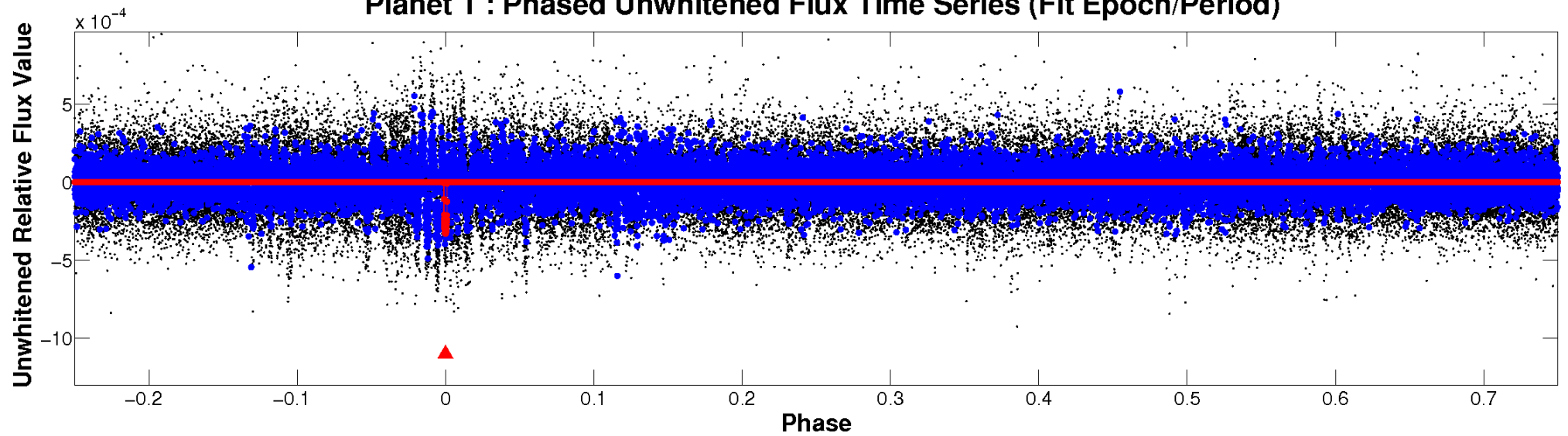
ALT Odd/Even

TCE 005783468-01

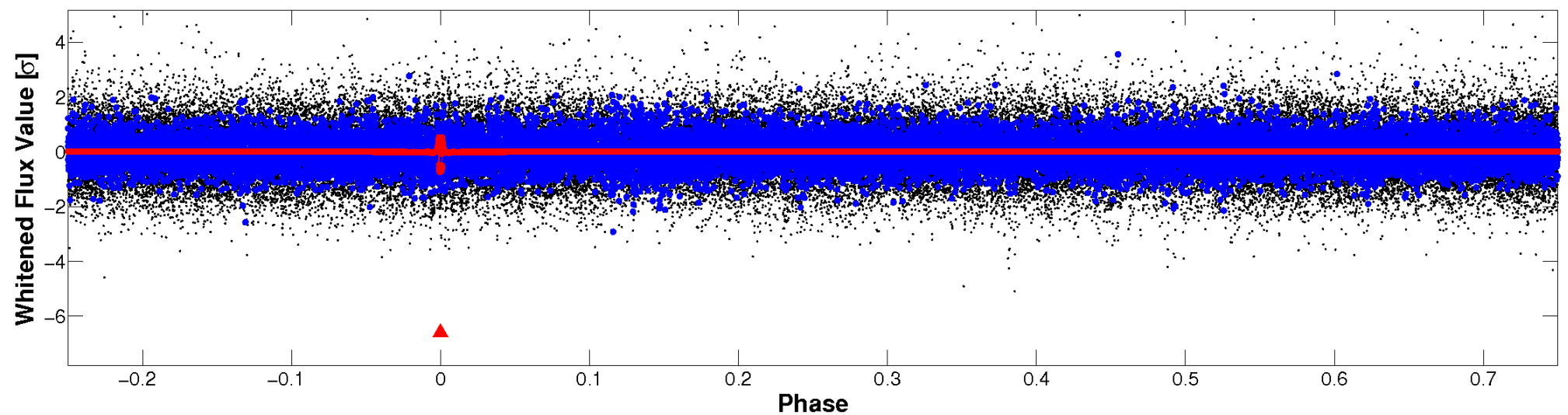


Non-Whitened Vs. Whitened Light Curve

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

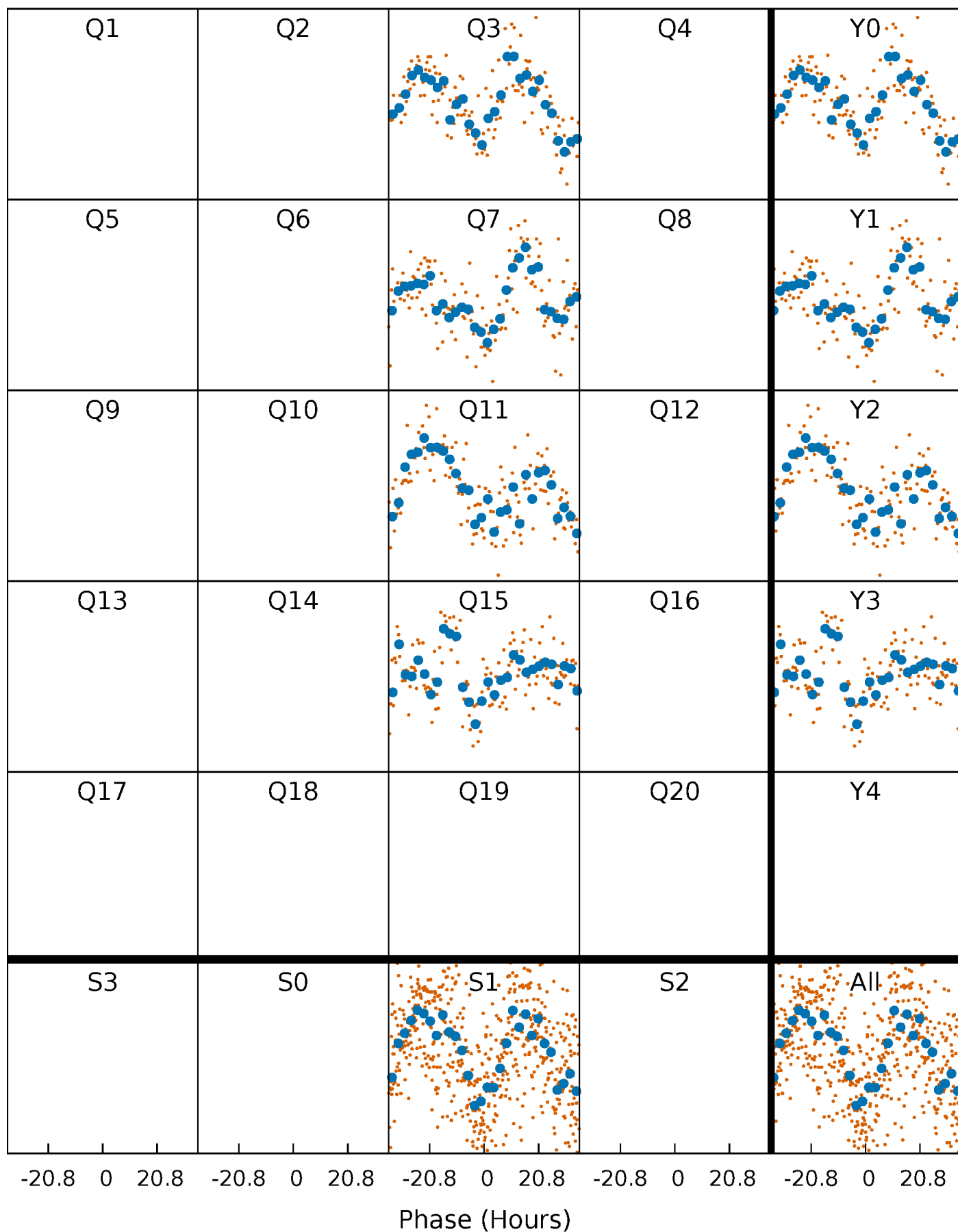


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



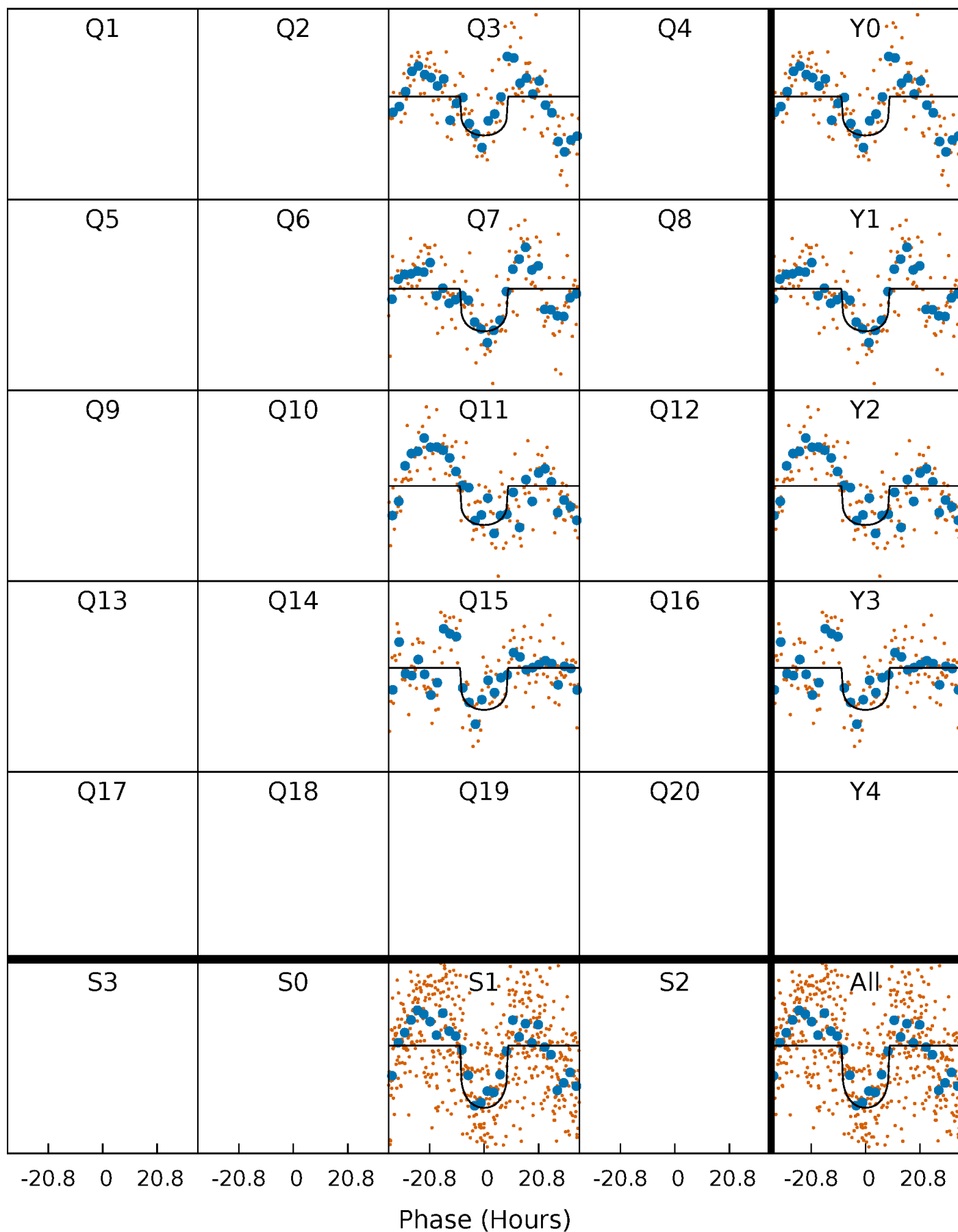
PDC Quarter-Phased Transit Curves

TCE 005783468-01 P=371.578959 Days $T_0=307.271047$ (BKJD)



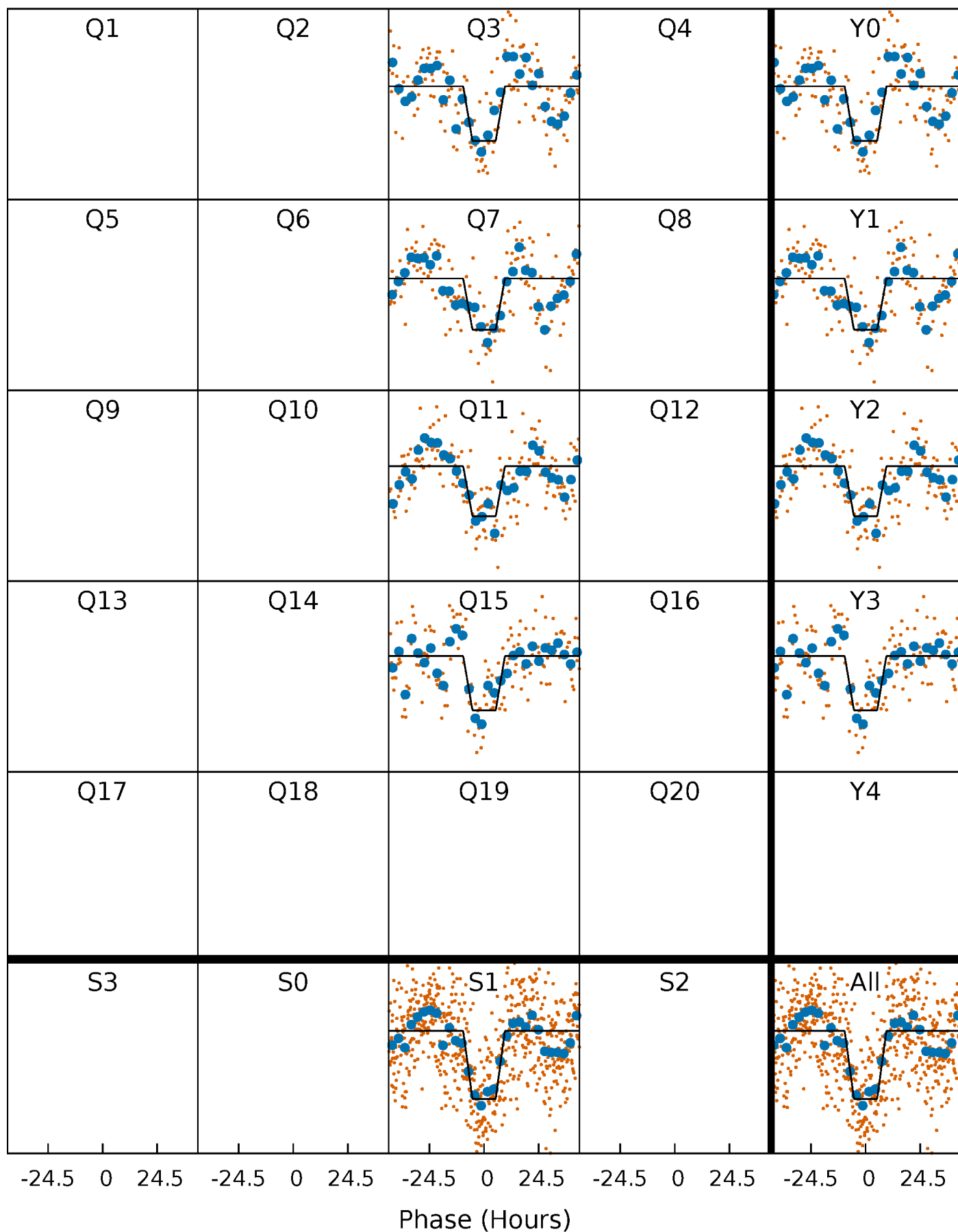
DV Quarter-Phased Transit Curves

TCE 005783468-01 P=371.578959 Days $T_0=307.271047$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

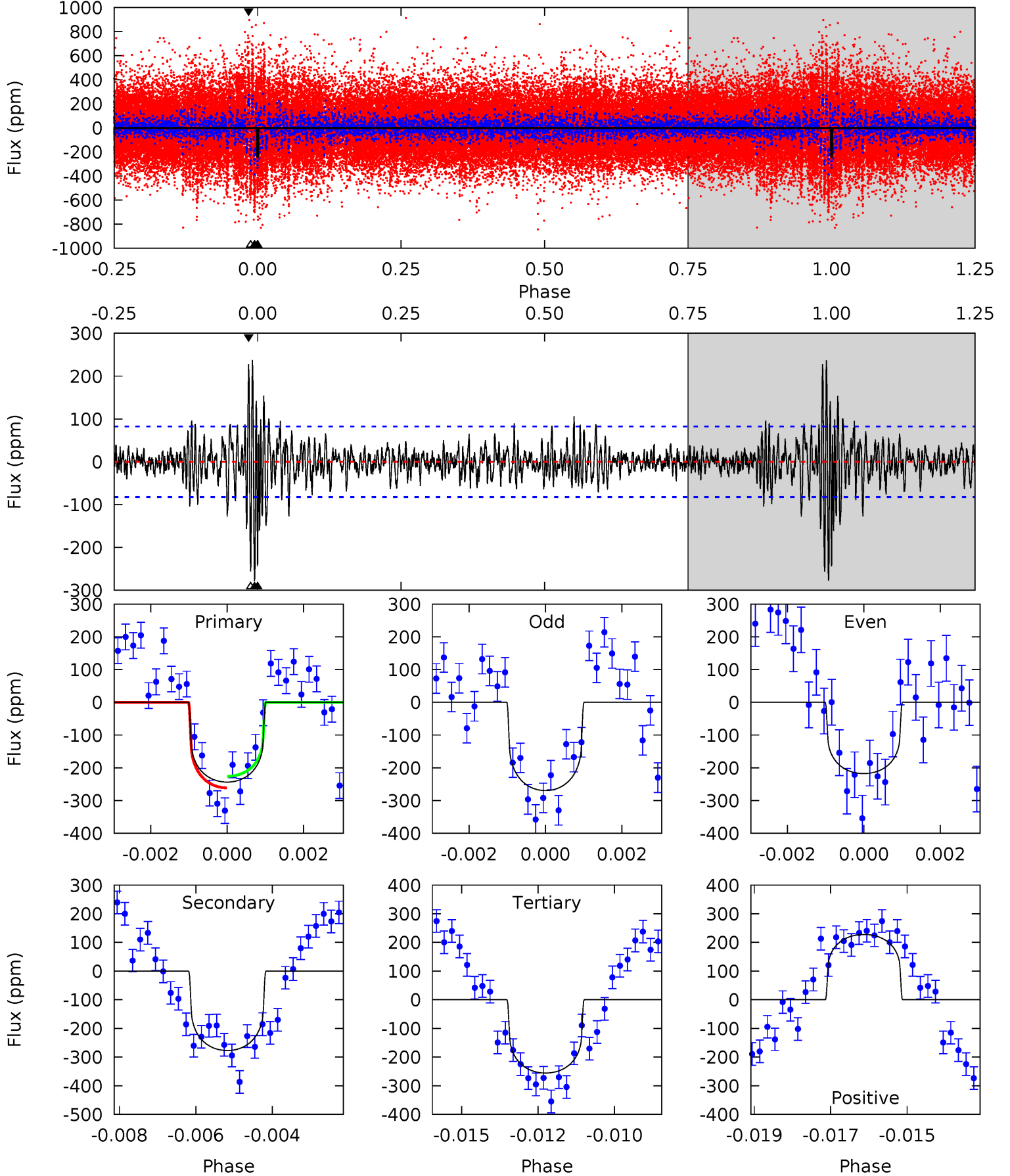
TCE 005783468-01 P=371.570666 Days $T_0=307.257499$ (BKJD)



DV Model-Shift Uniqueness Test

005783468-01, P = 371.578959 Days, E = 307.271047 Days

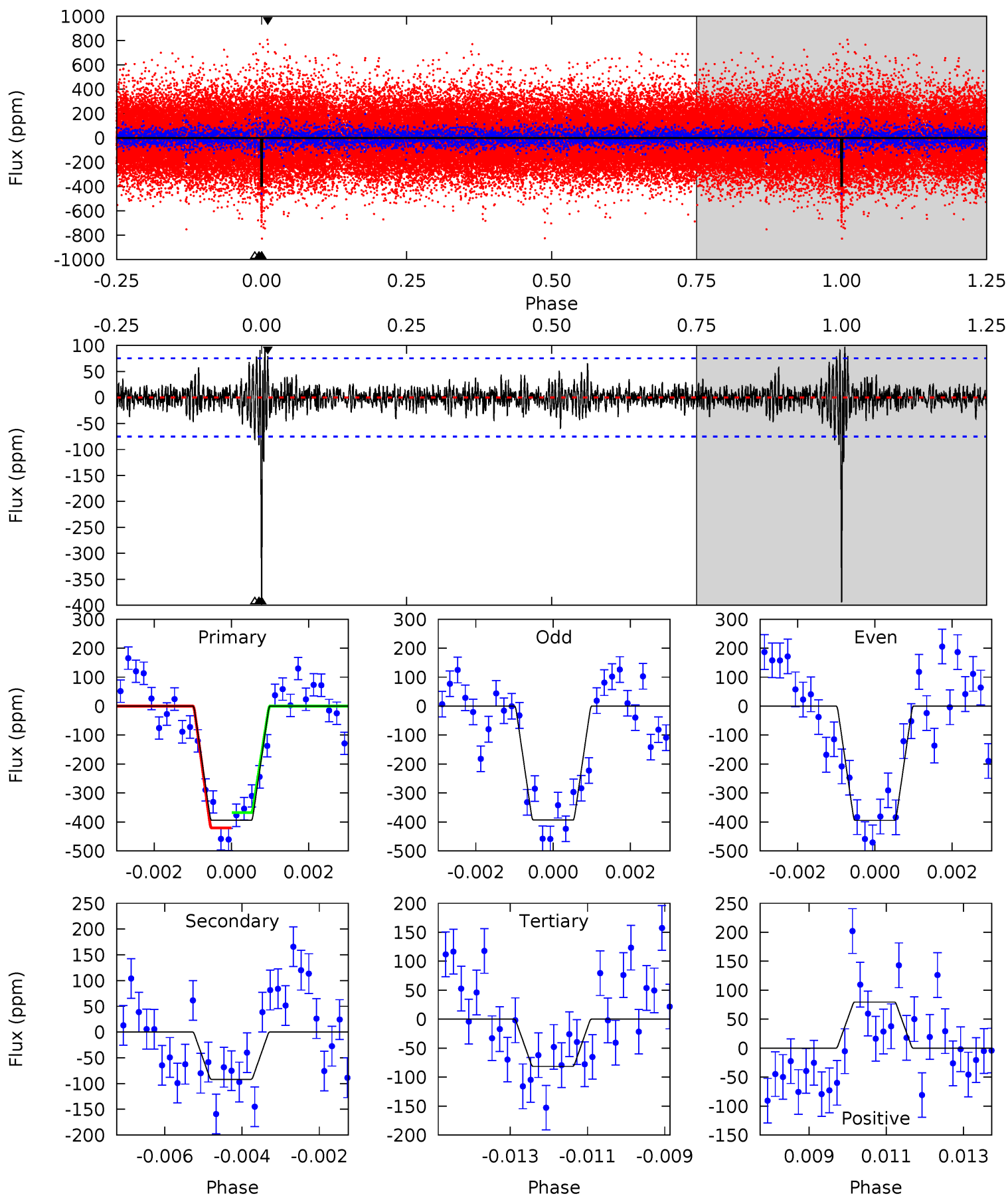
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.8	17.9	16.5	14.7	5.32	3.08	2.33	-0.78	1.03	1.39	3.20	1.68	1.01	0.46	1.14



Alt Model-Shift Uniqueness Test

005783468-01, P = 371.570666 Days, E = 307.257499 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.8	6.46	5.74	5.61	5.31	3.07	1.17	22.0	22.2	0.72	0.86	0.04	1.00	0.20	1.86



Stellar Parameters For KIC 005783468

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5697^{+77}_{-77}	$4.534^{+0.038}_{-0.105}$	$-0.260^{+0.150}_{-0.150}$	$0.840^{+0.103}_{-0.044}$	$0.880^{+0.049}_{-0.059}$	$2.090^{+0.323}_{-0.630}$
	+1%/-1%	+1%/-2%	+58%/-58%	+12%/-5%	+6%/-7%	+15%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005783468-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-277 ± 15	$1.71^{+0.94}_{-0.92}$	329^{+11}_{-8}	5430^{+2902}_{-897}	$48896^{+180599}_{-28643}$
Alt.	-92 ± 14	$1.93^{+1.00}_{-0.94}$	329^{+11}_{-8}	4150^{+1331}_{-572}	12740^{+37183}_{-7412}

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

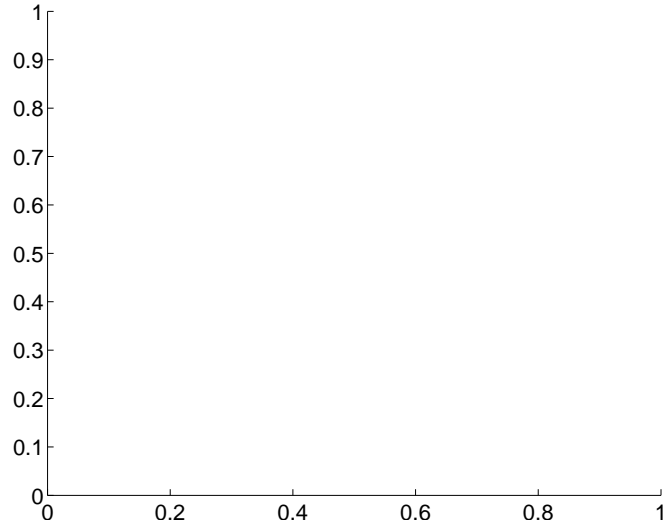
Supplemental centroid analysis for 005783468-01. Kepler magnitude: 13.90. Transit SNR 8.75

There are 0 quarters with good PRF difference image offsets

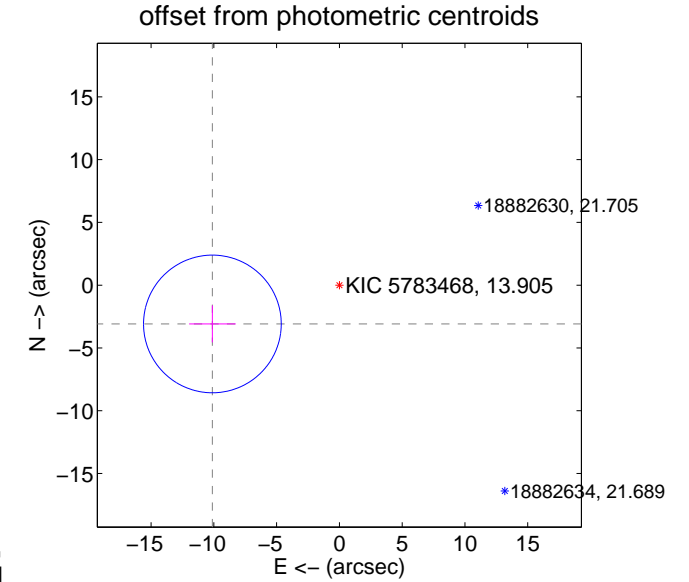
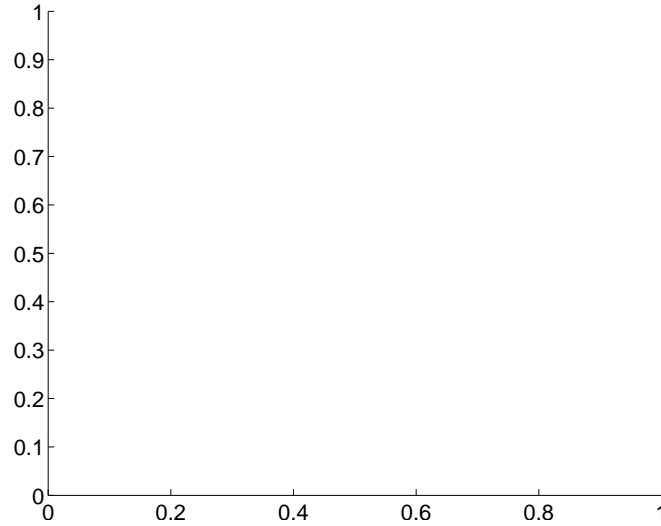
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	10.58 ± 1.83	5.79	10.12 ± 1.86	-3.09 ± 1.47

There is no PRF-fit offset from OOT-fit

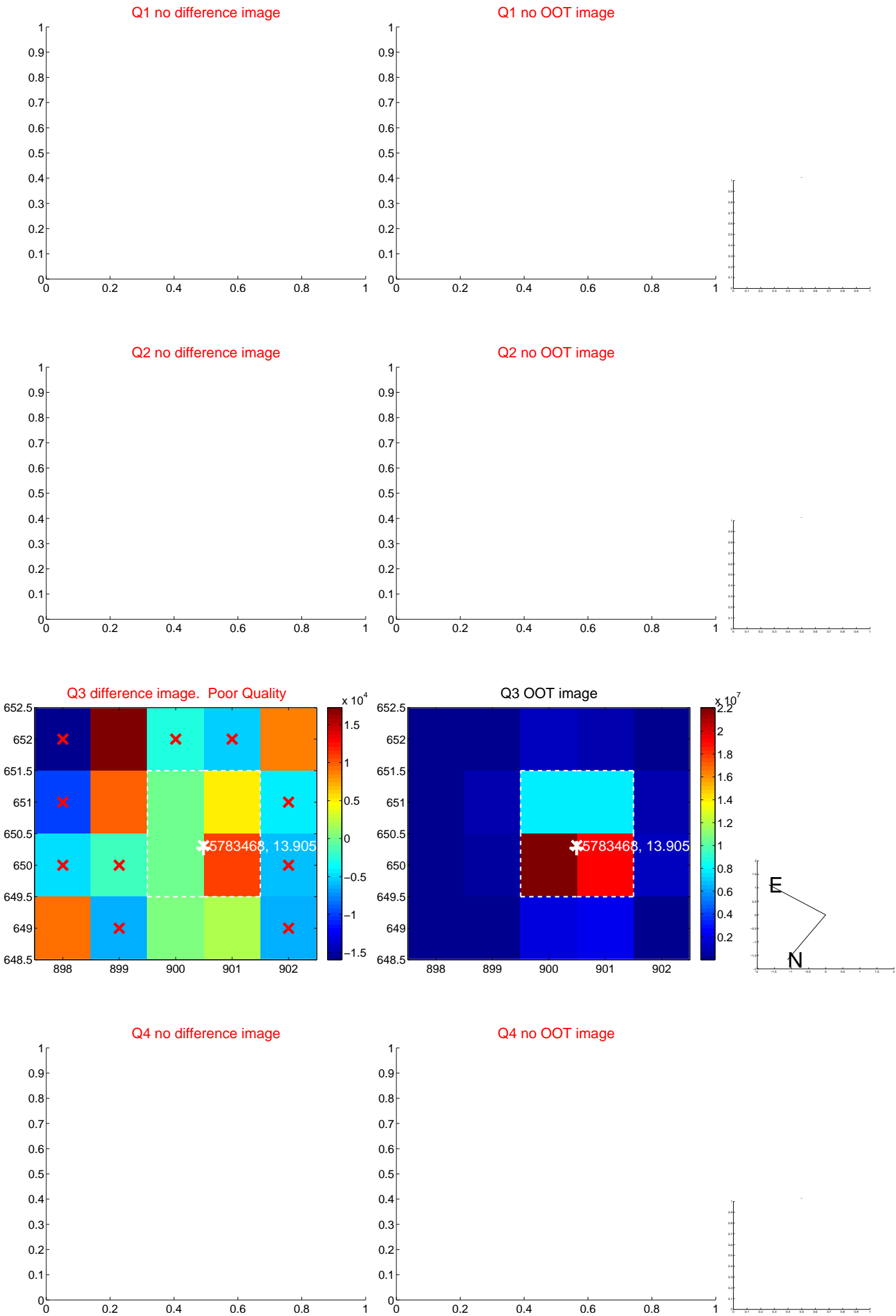


There is no PRF-fit offset from KIC

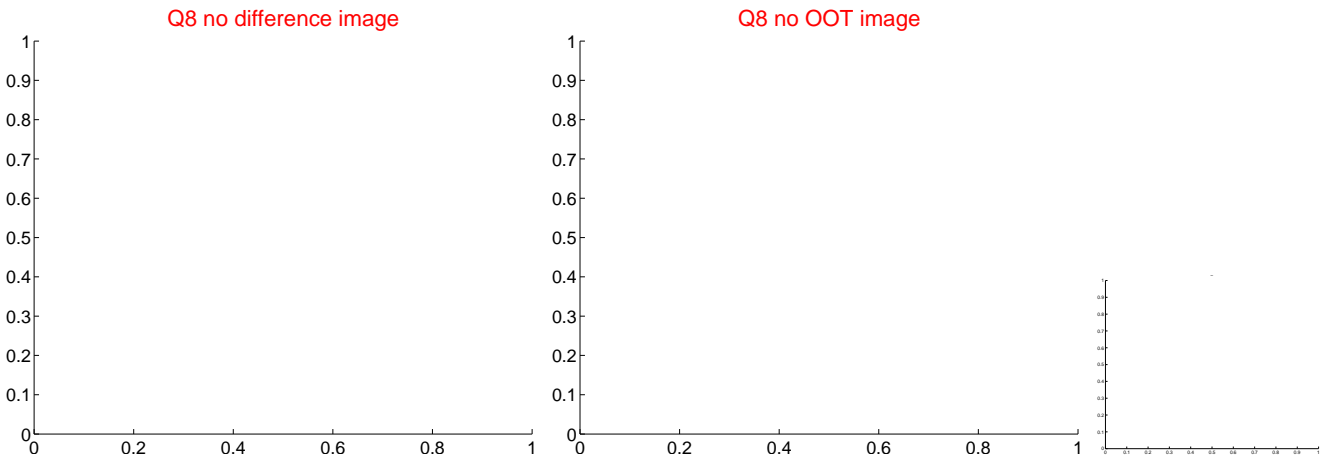
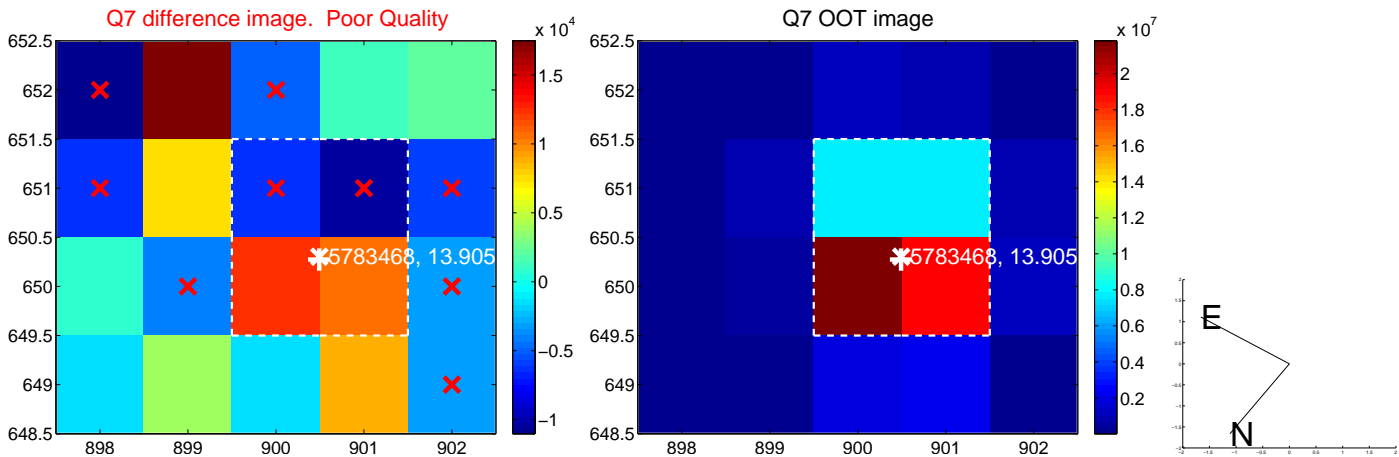
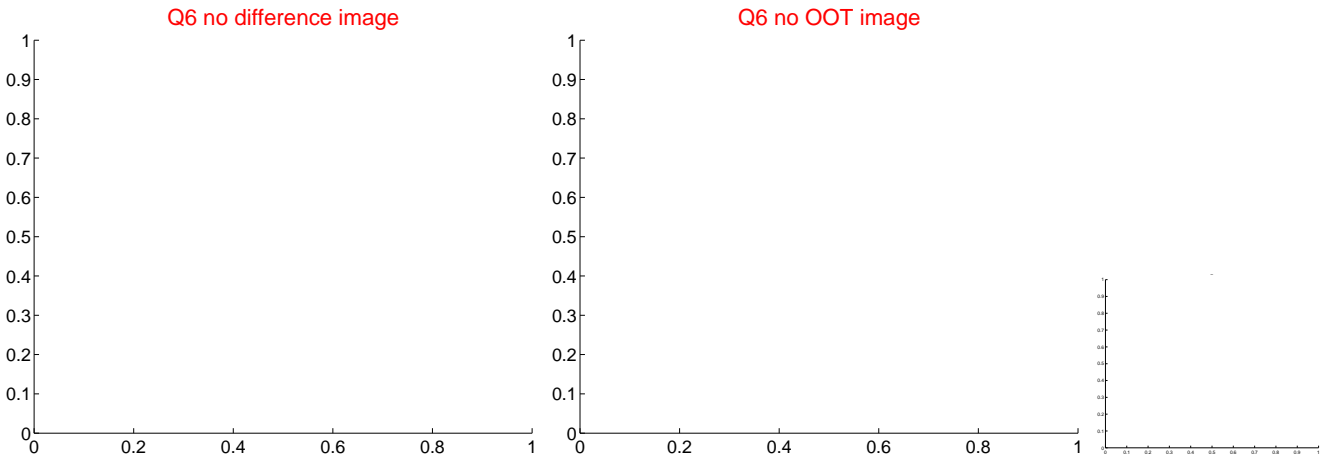
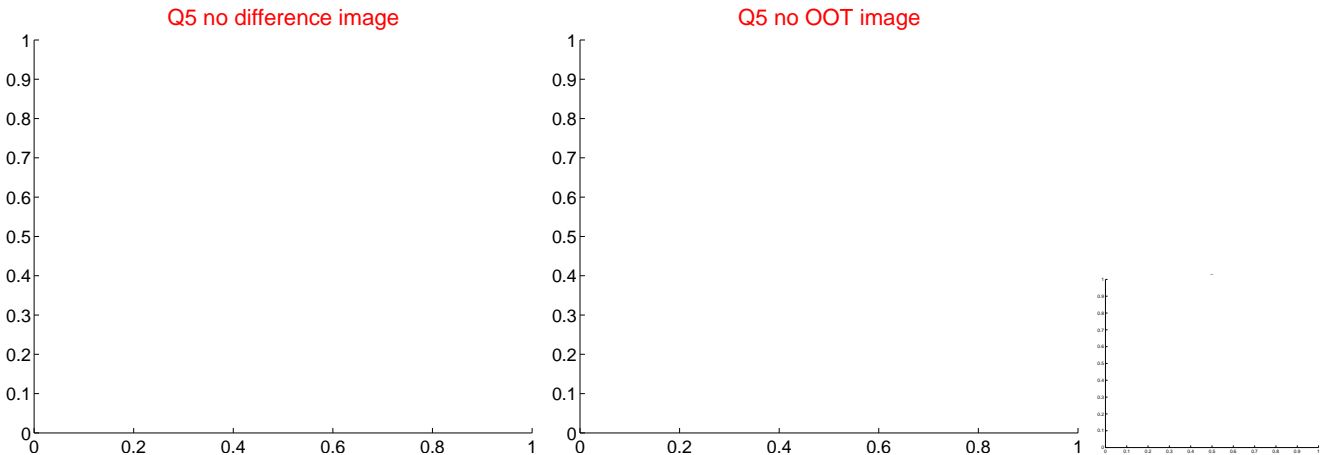


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

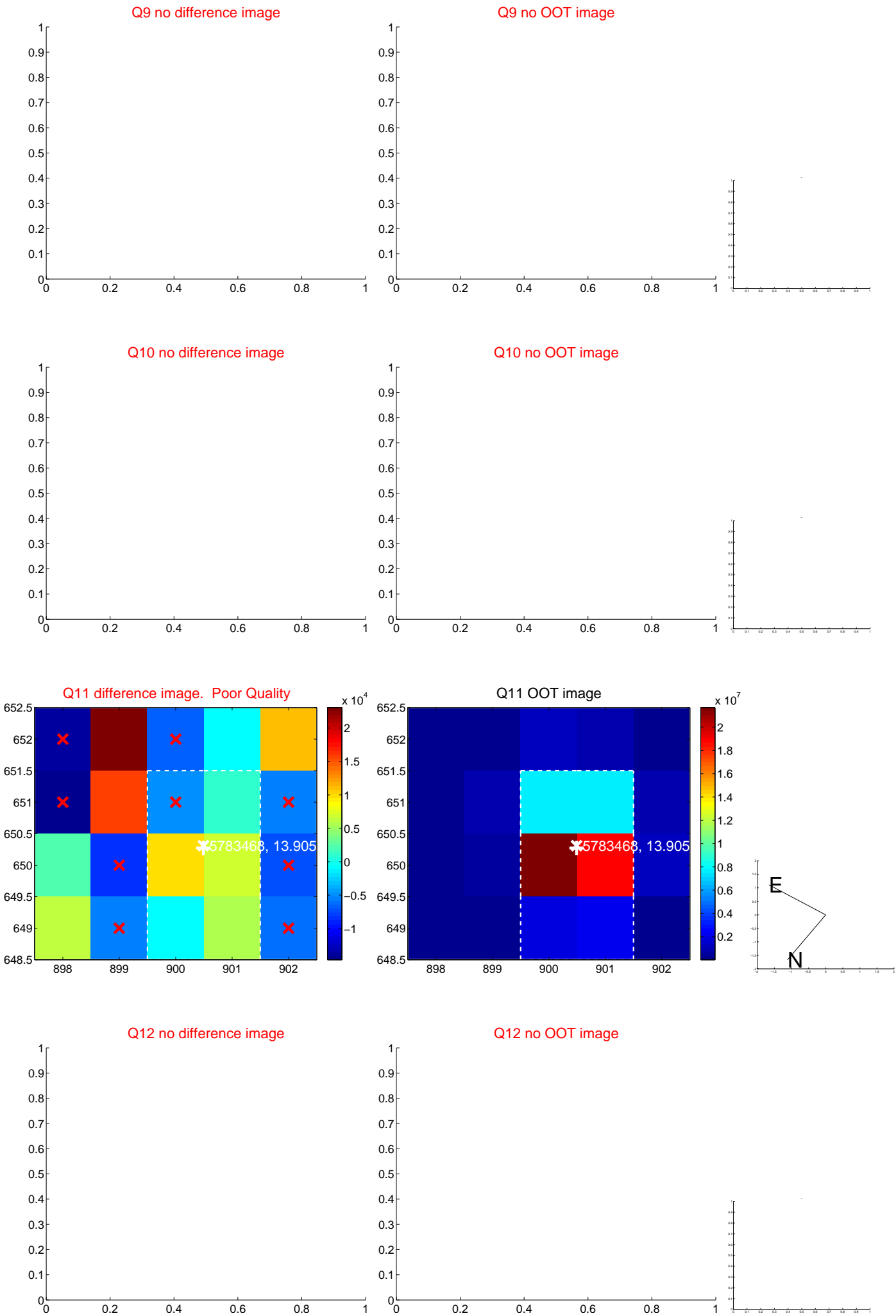
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



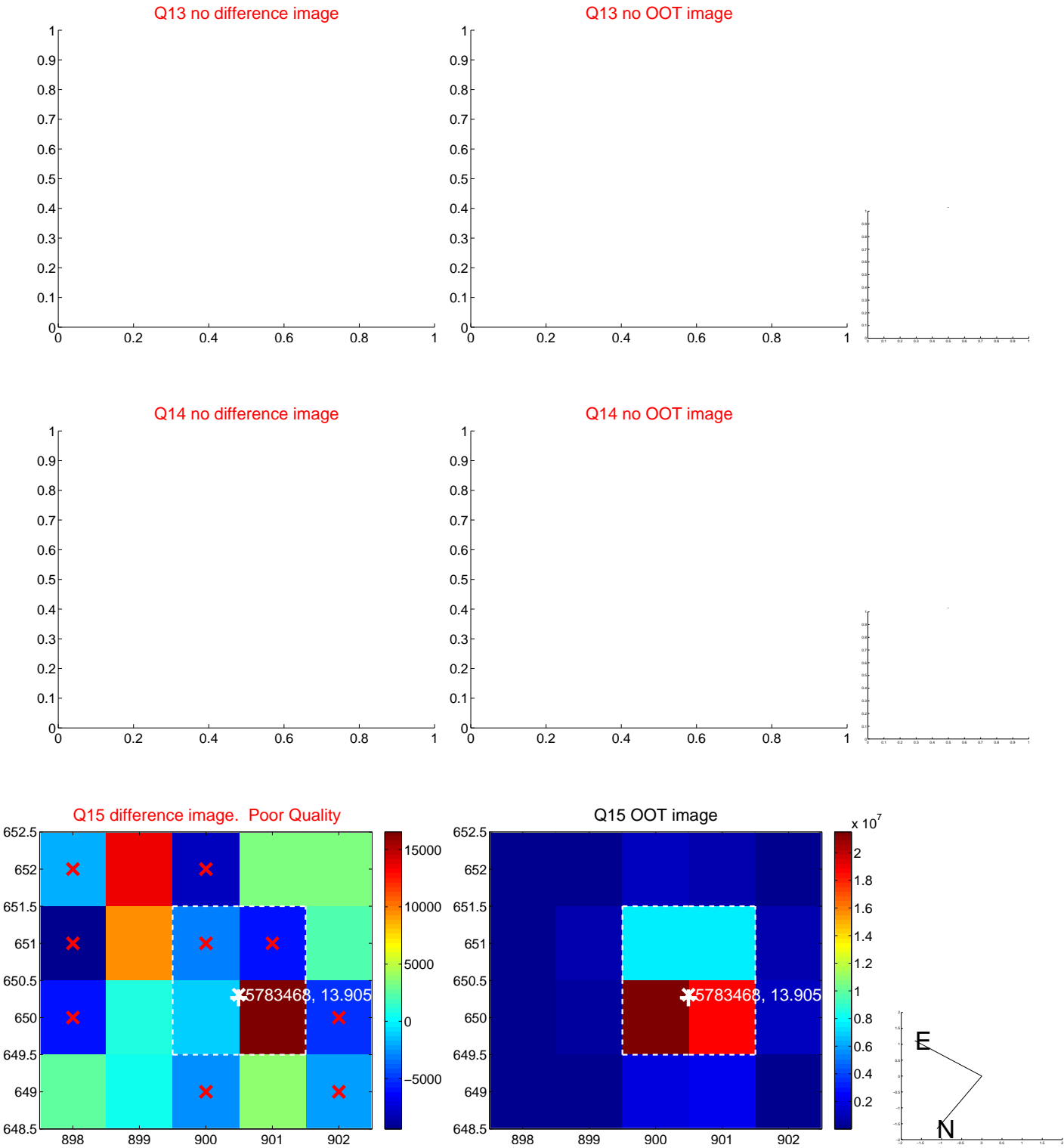
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



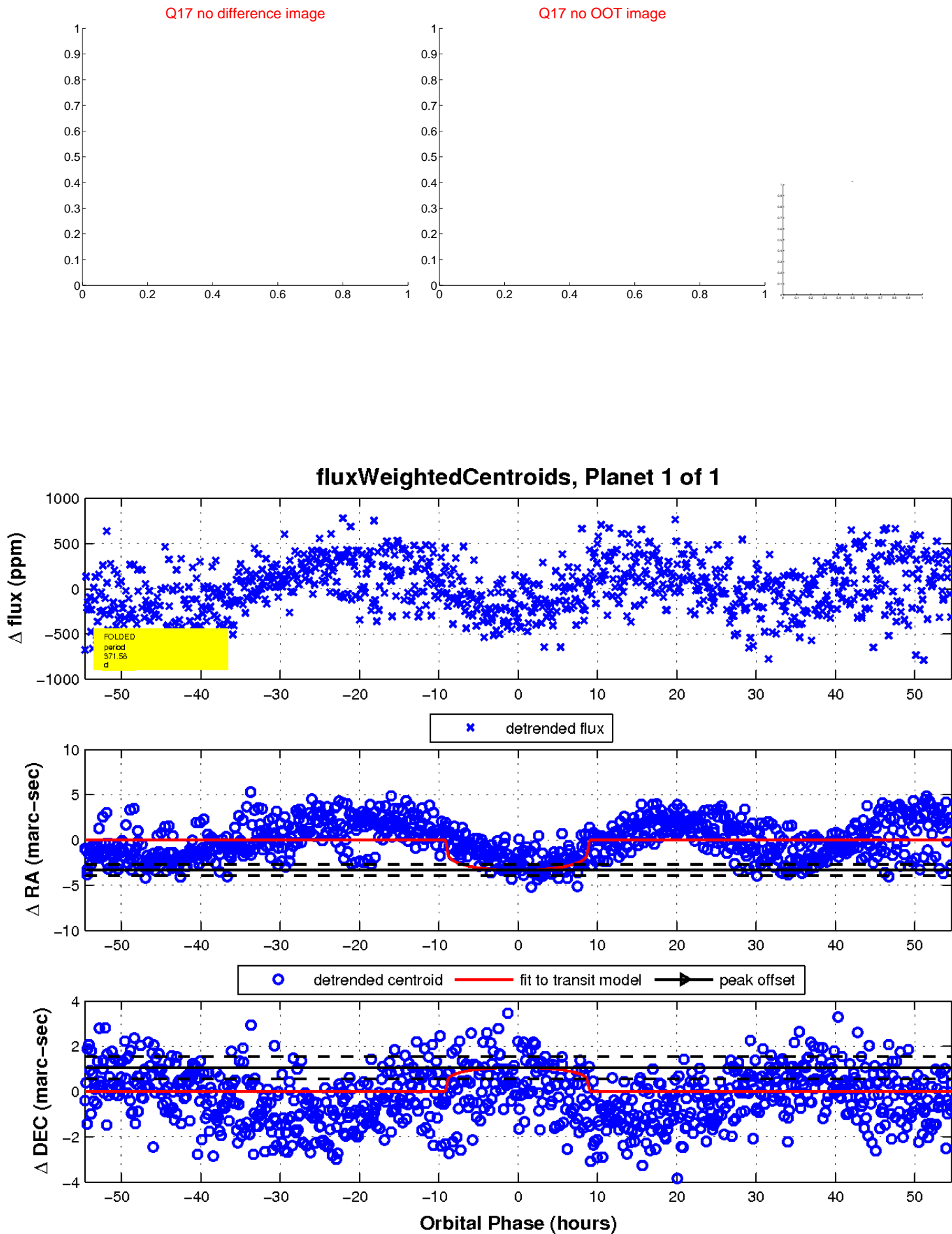
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

