

KIC 005708018

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})
005708018-01	OBS	No	293.449254	216.466248	416.8	11.611	9.5	8.4	0.68	5485	1.50	0.61

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005708018-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

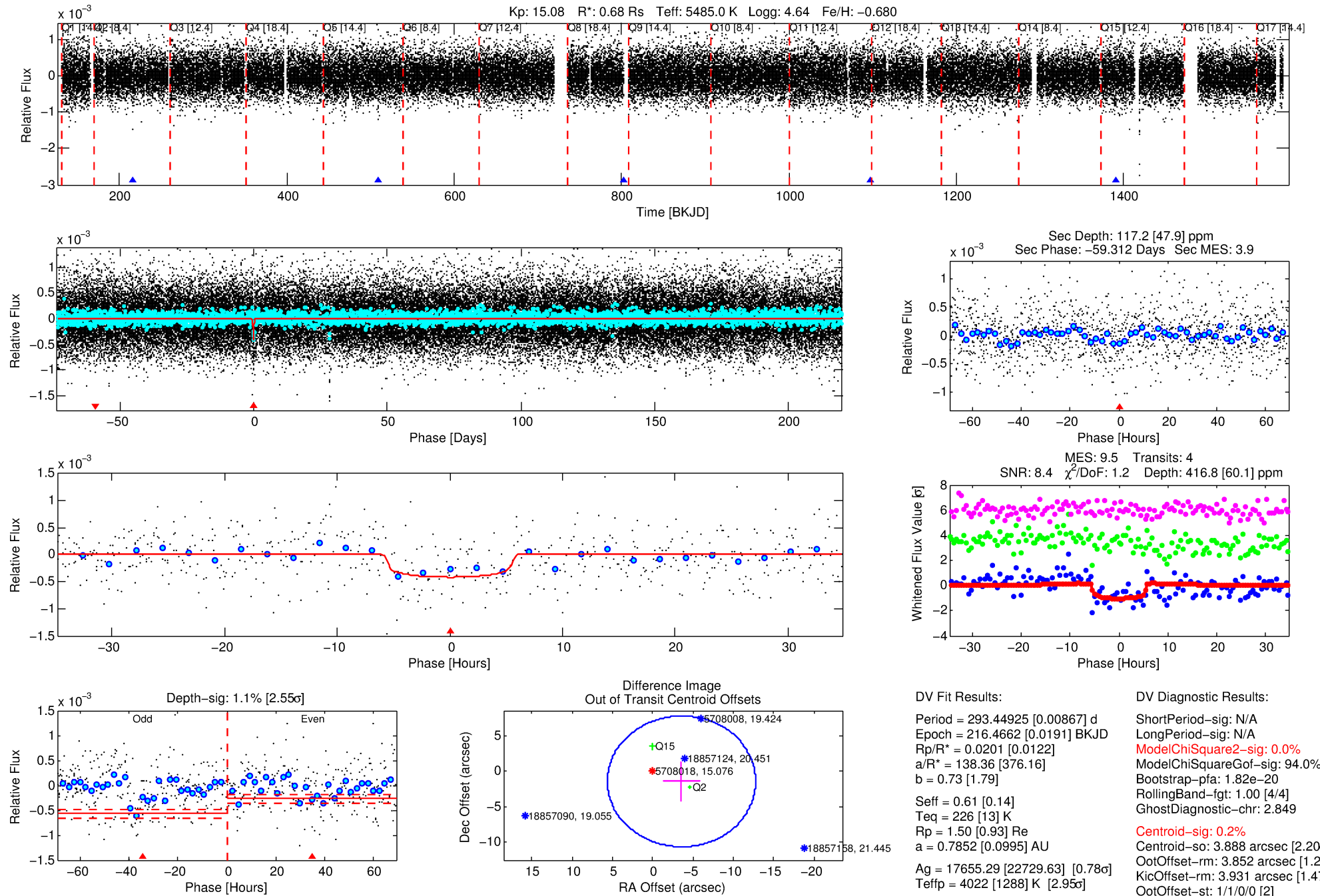
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005708018-01

No Significant Match Found

DV One-Page Summary

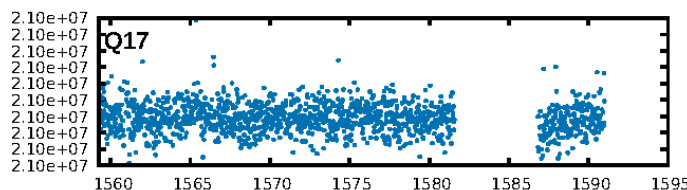
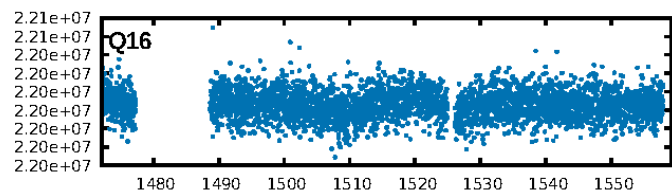
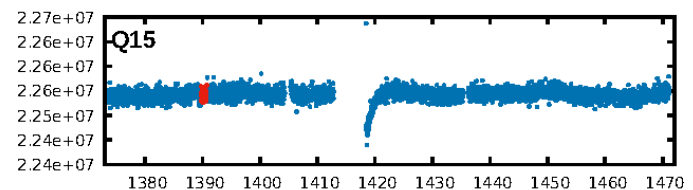
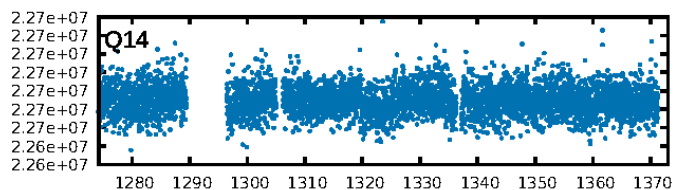
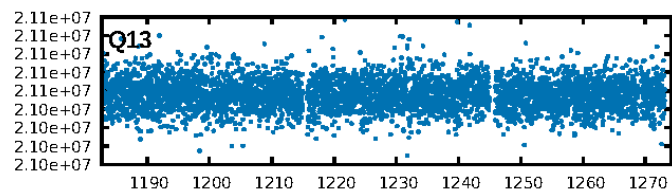
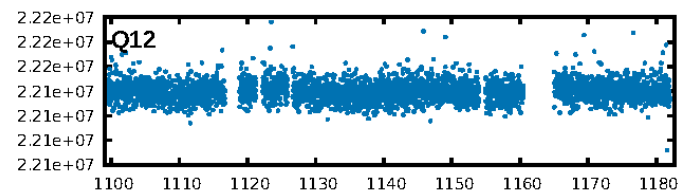
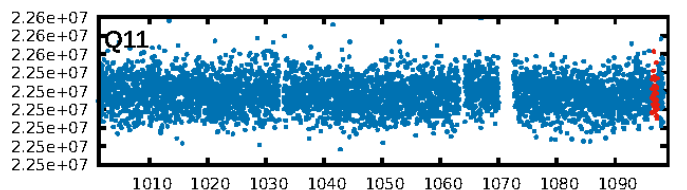
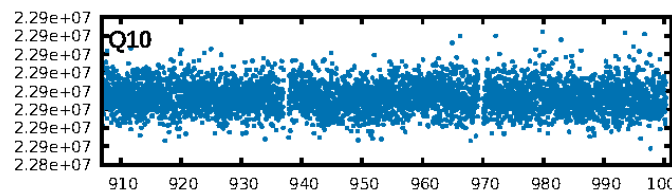
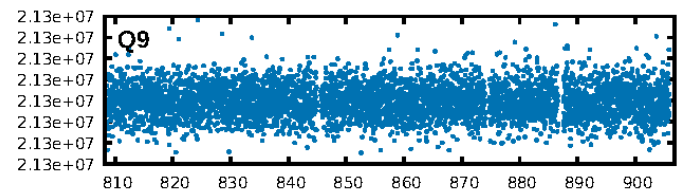
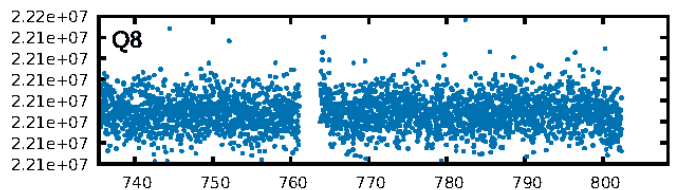
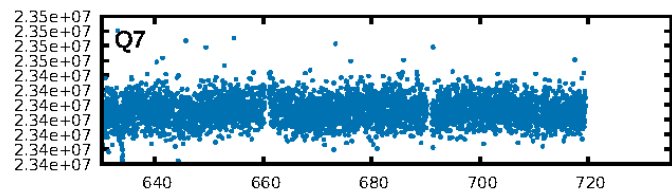
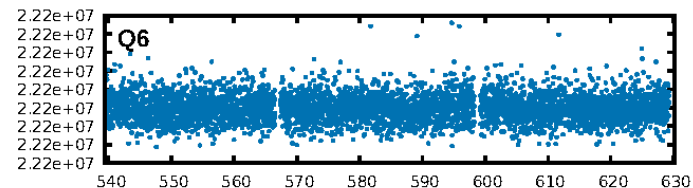
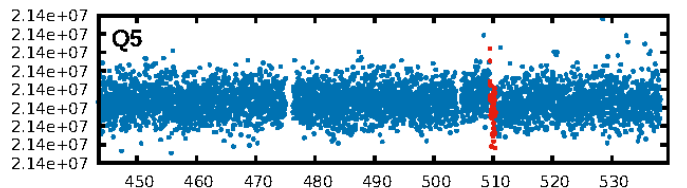
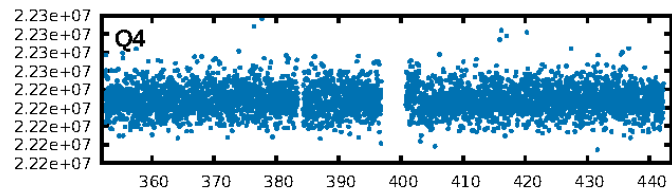
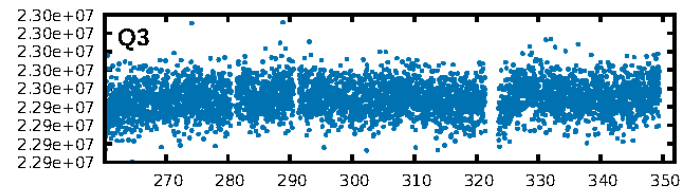
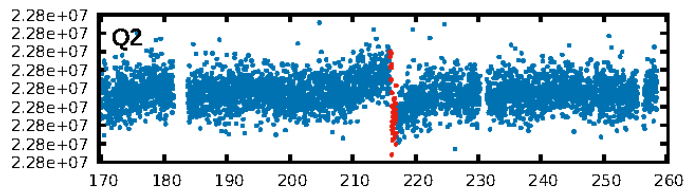
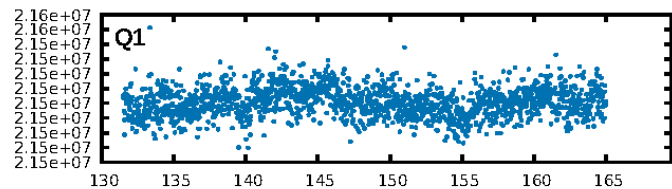
KIC: 5708018 Candidate: 1 of 1 Period: 293.449 d



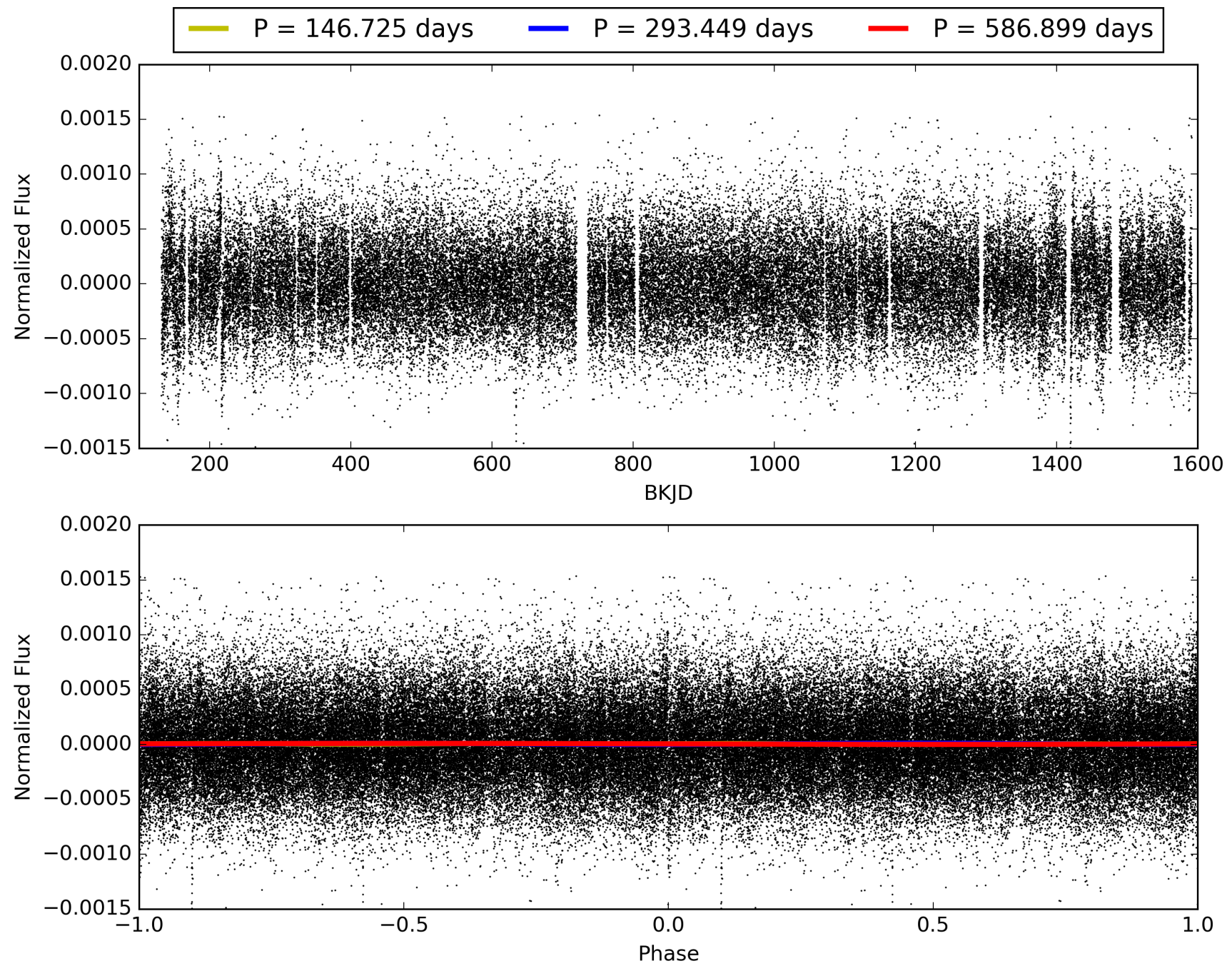
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:48:23 Z

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

TCE 005708018-01, PDC Light Curves

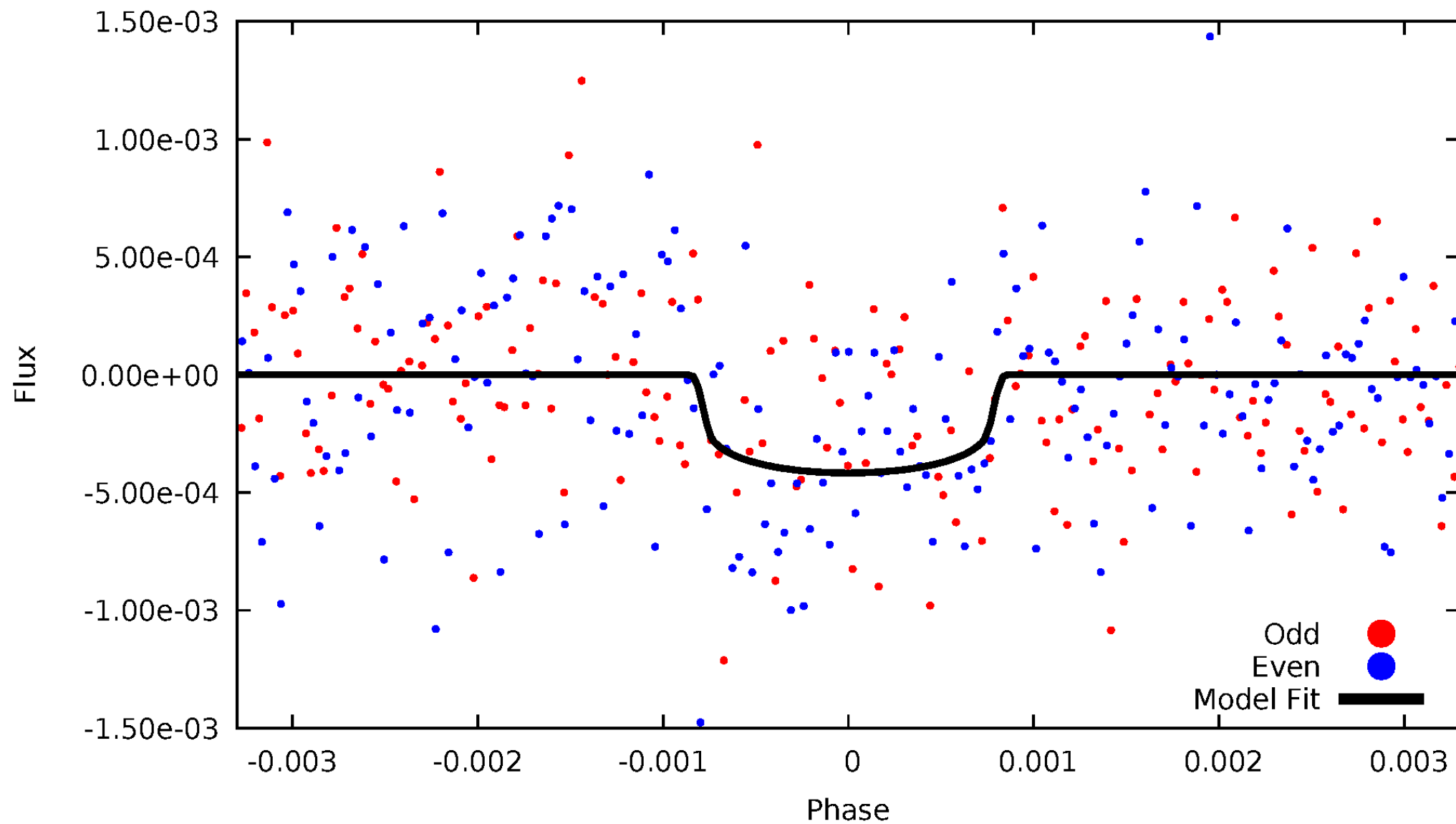


TCE 005708018-01



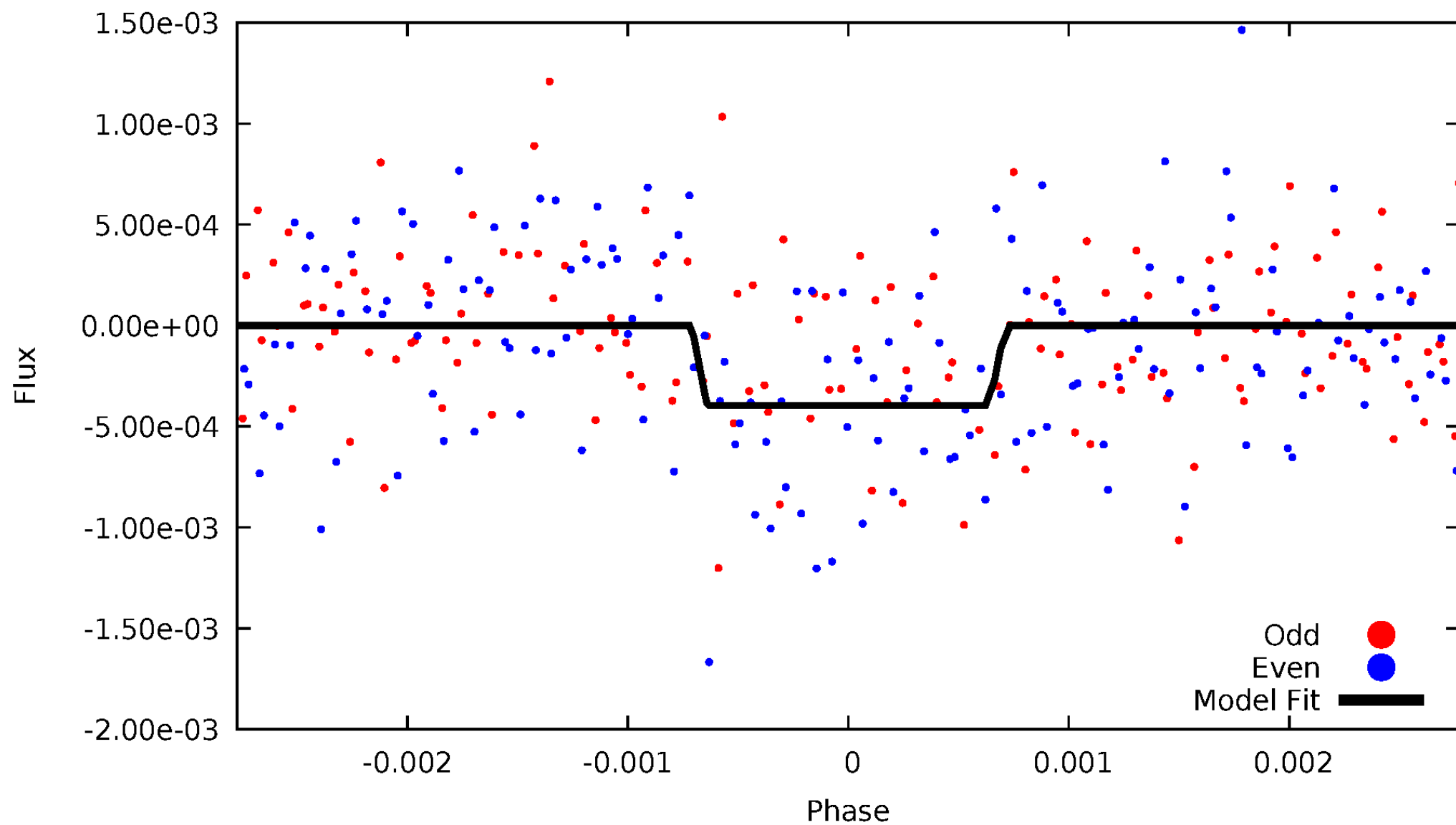
DV Odd/Even

TCE 005708018-01



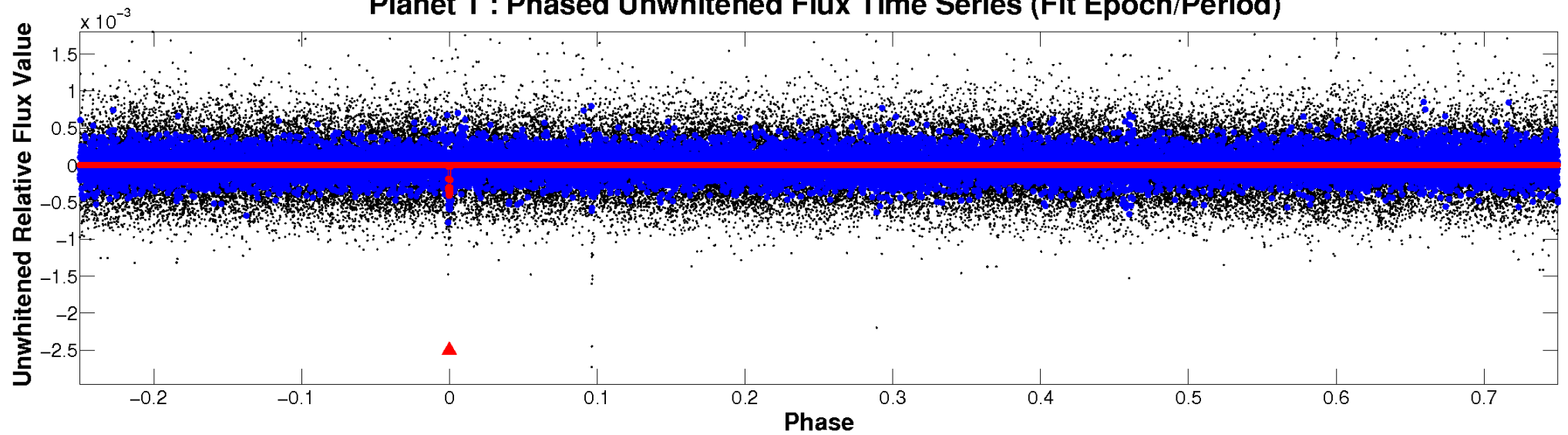
ALT Odd/Even

TCE 005708018-01

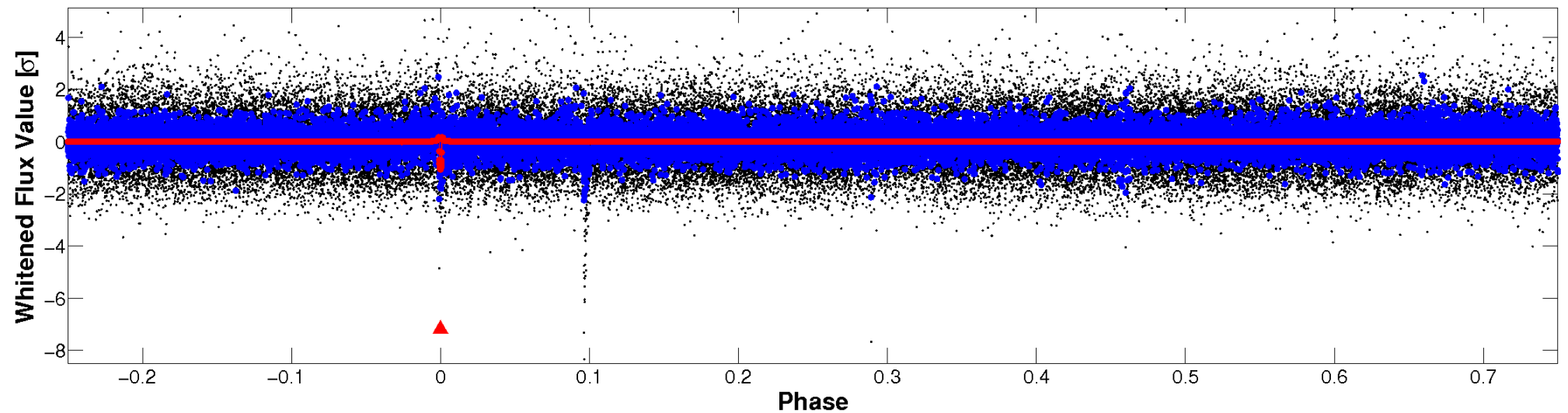


Non-Whitened Vs. Whitened Light Curve

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

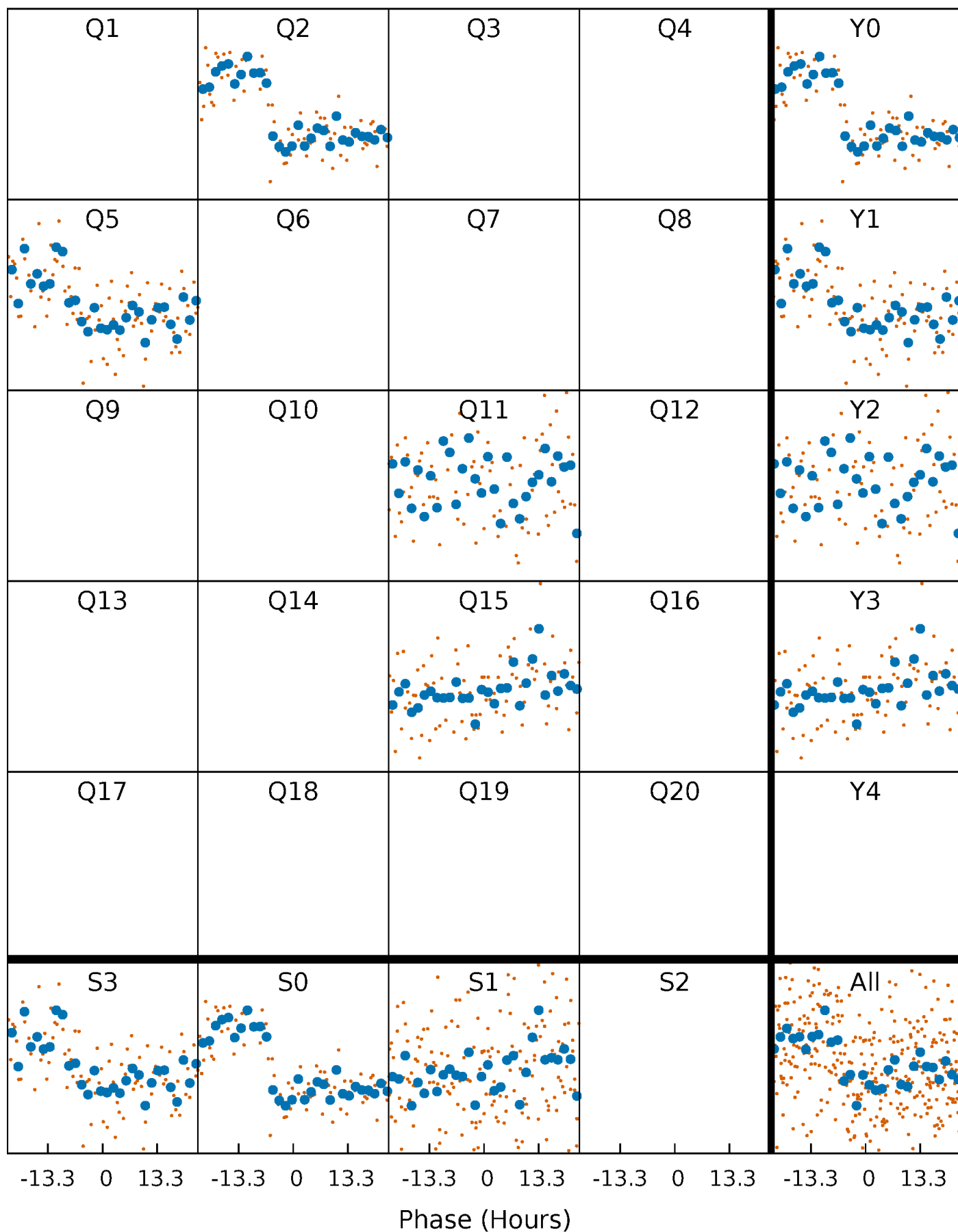


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



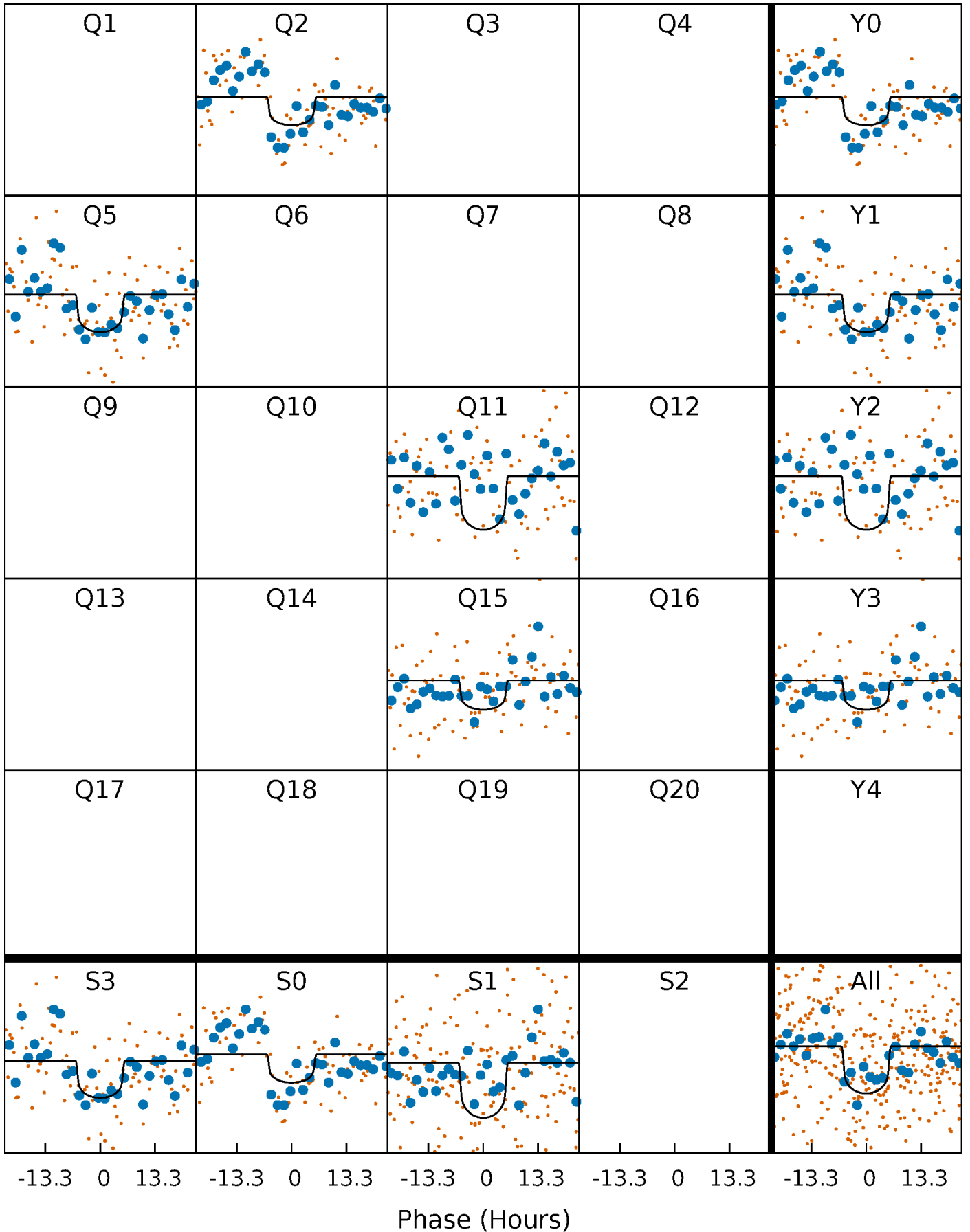
PDC Quarter-Phased Transit Curves

TCE 005708018-01 P=293.449254 Days $T_0=216.466248$ (BKJD)



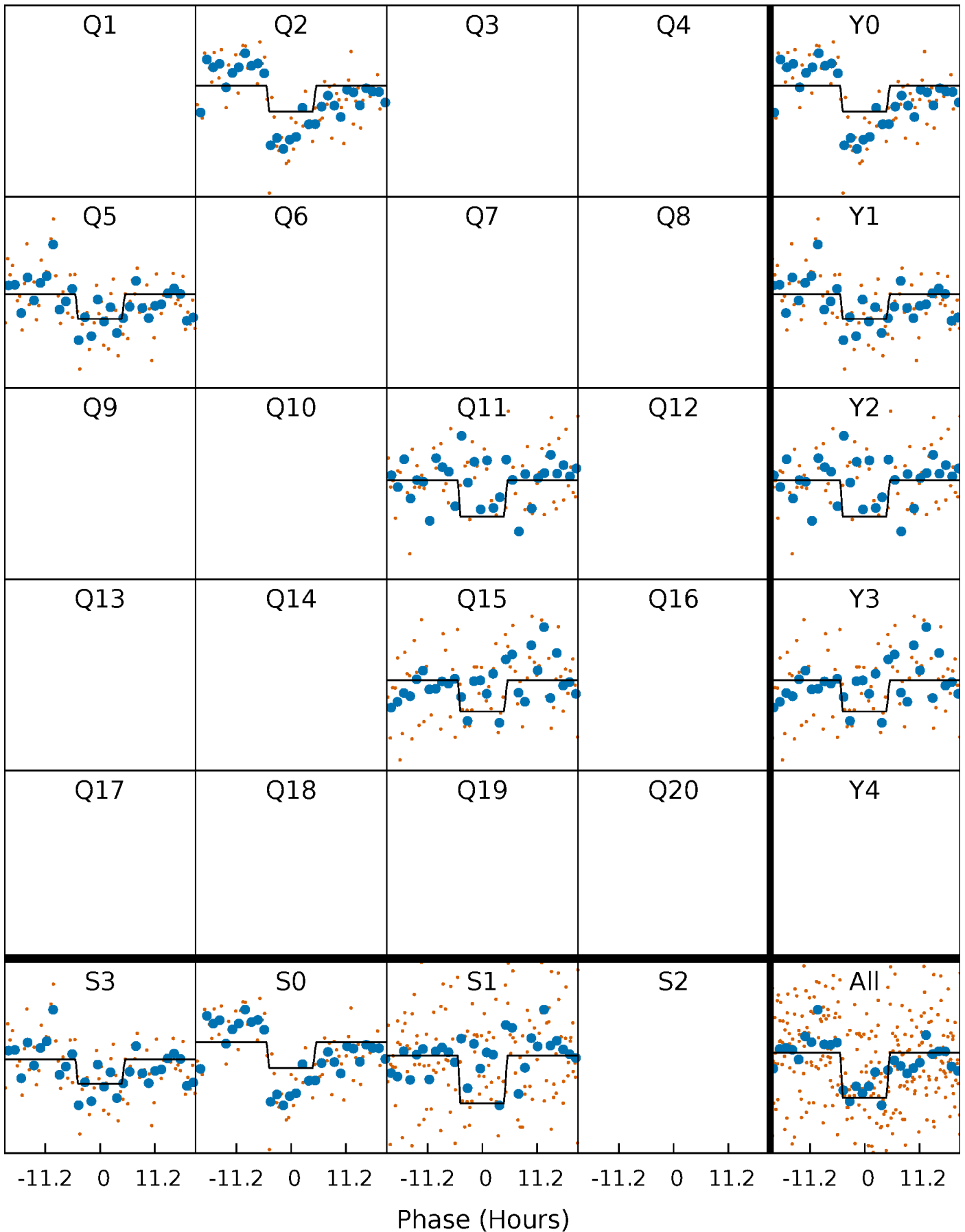
DV Quarter-Phased Transit Curves

TCE 005708018-01 $P=293.449254$ Days $T_0=216.466248$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

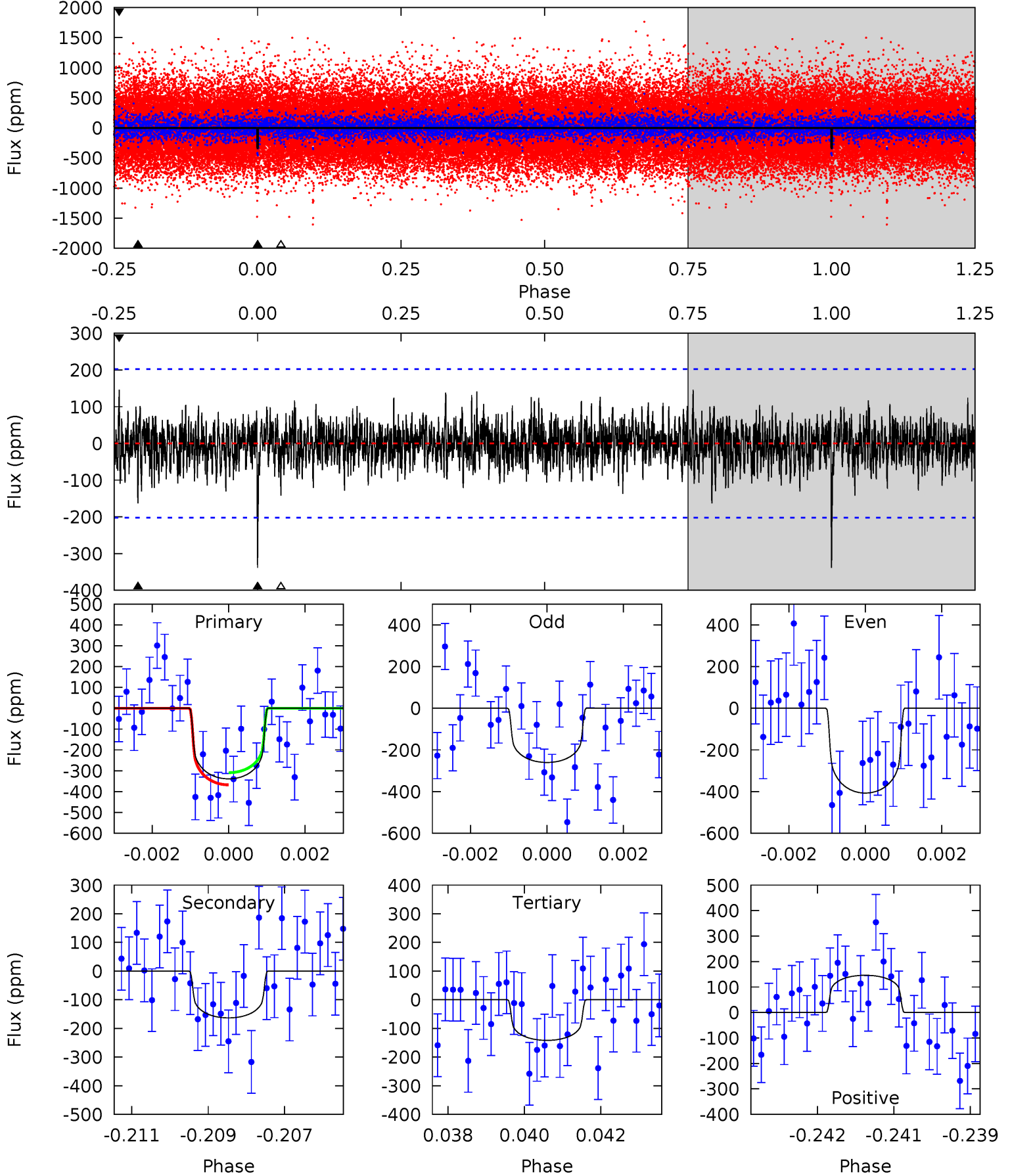
TCE 005708018-01 P=293.473600 Days $T_0=216.417642$ (BKJD)



DV Model-Shift Uniqueness Test

005708018-01, P = 293.449254 Days, E = 216.466248 Days

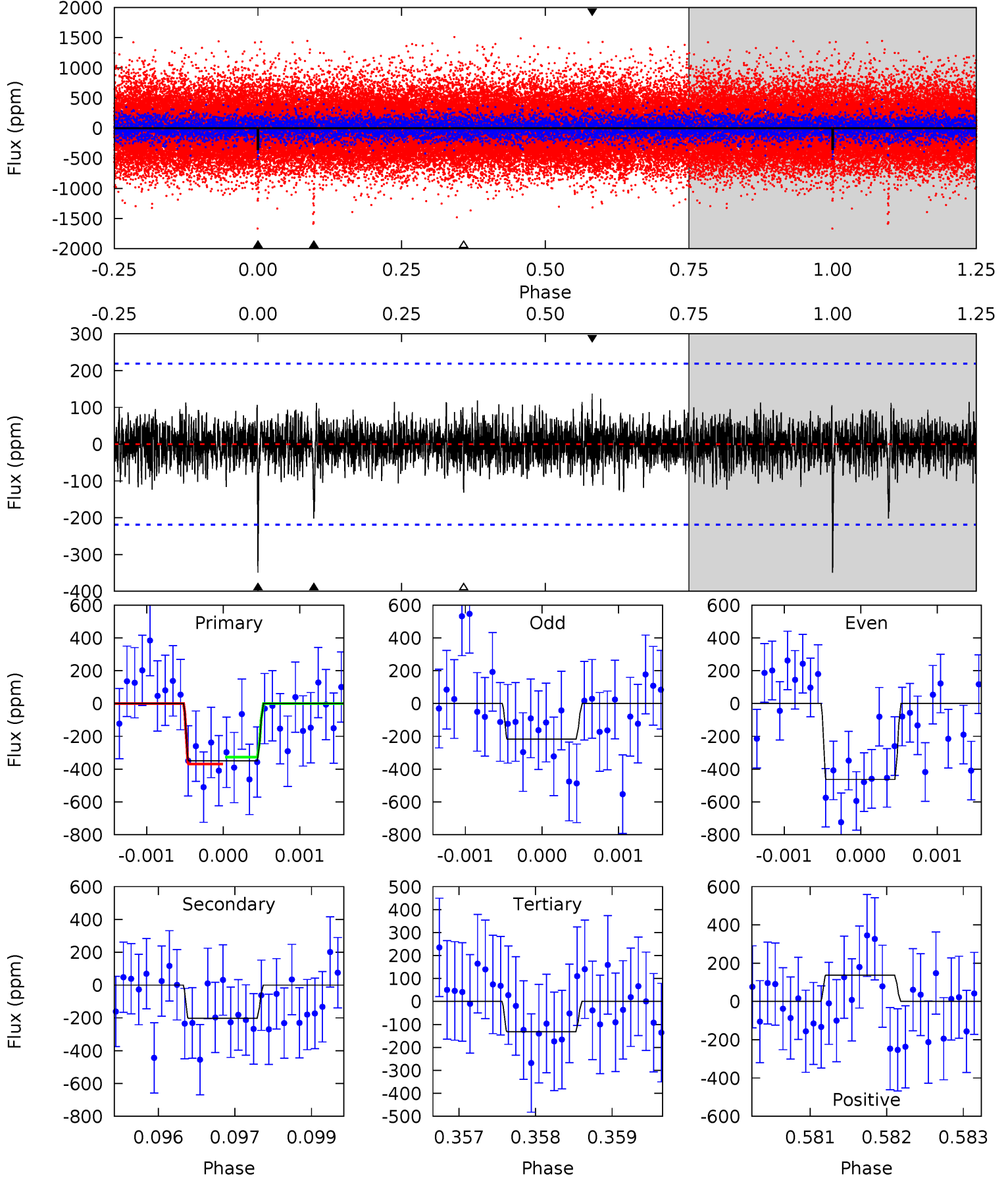
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.98	4.33	3.76	3.87	5.36	3.14	1.11	5.22	5.11	0.57	0.46	1.95	0.88	0.30	0.78



Alt Model-Shift Uniqueness Test

005708018-01, P = 293.473600 Days, E = 216.417642 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.59	4.97	3.24	3.37	5.39	3.20	0.90	5.35	5.22	1.74	1.60	3.02	1.06	0.28	0.50



Stellar Parameters For KIC 005708018

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5485^{+180}_{-147}	$4.644^{+0.032}_{-0.097}$	$-0.680^{+0.300}_{-0.300}$	$0.683^{+0.105}_{-0.042}$	$0.764^{+0.066}_{-0.074}$	$3.380^{+0.458}_{-1.071}$
	+3%/-3%	+1%/-2%	+44%/-44%	+15%/-6%	+9%/-10%	+14%/-32%
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 005708018-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-163 ± 38	$1.62^{+0.88}_{-0.86}$	320^{+13}_{-12}	4439^{+1781}_{-696}	20996^{+74175}_{-12800}
Alt.	-202 ± 41	$1.64^{+0.96}_{-0.84}$	320^{+13}_{-12}	4576^{+1682}_{-658}	24457^{+75054}_{-14142}

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 $A_{obs} \gg 1.0$

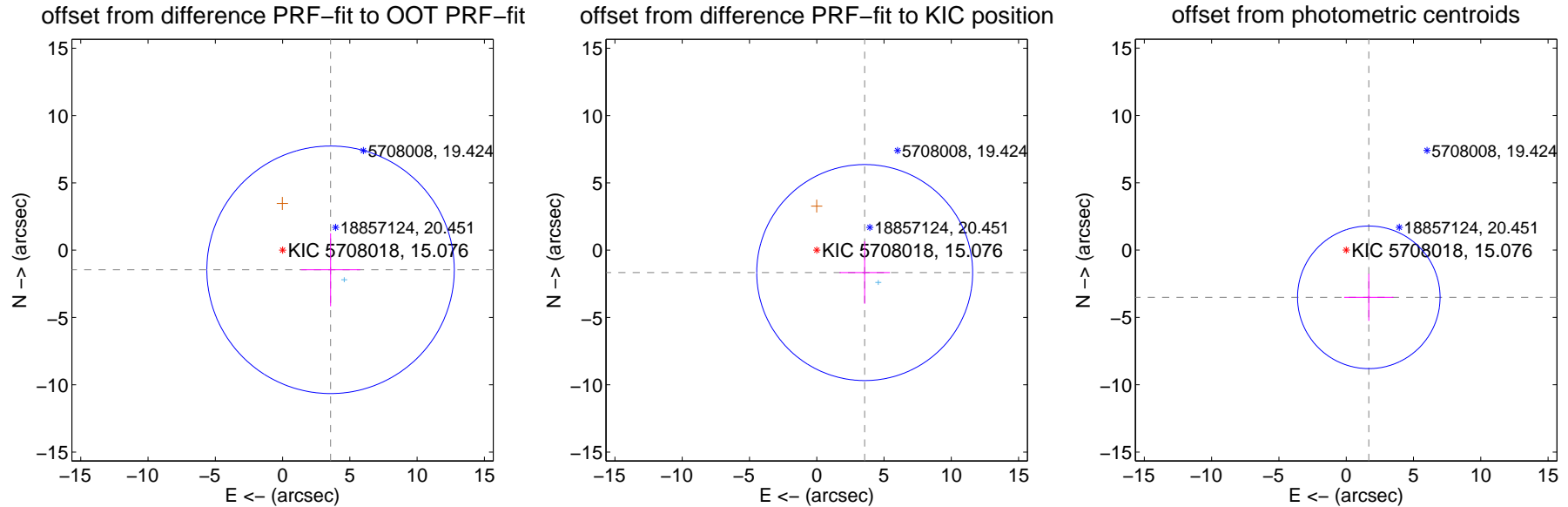
DV Centroid Data

Supplemental centroid analysis for 005708018-01. Kepler magnitude: 15.08. Transit SNR 8.38

There are 1 quarters with good PRF difference image offsets

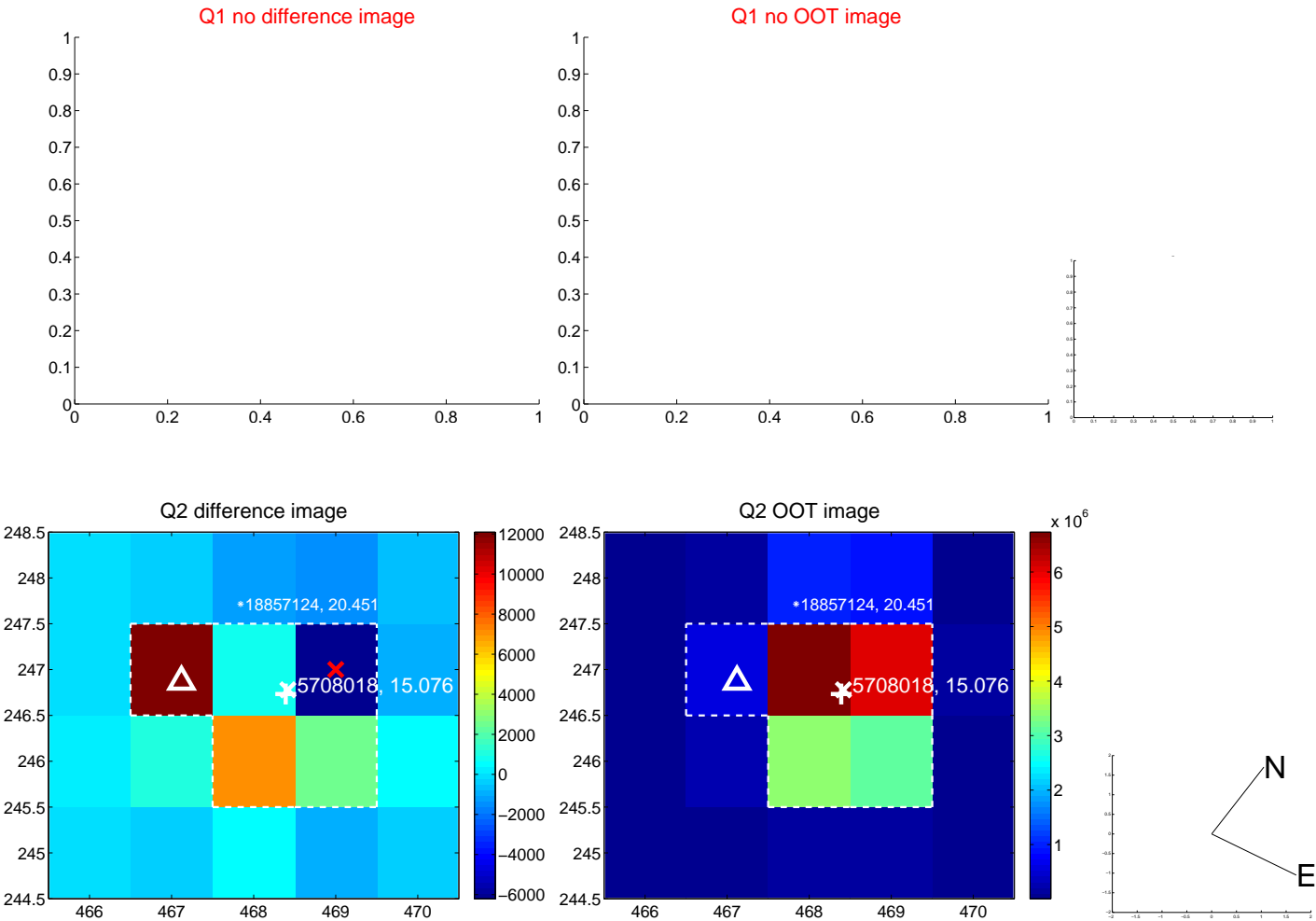
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.852 ± 3.064	1.26	-3.565 ± 2.202	-1.458 ± 2.713
PRF-fit source offset from KIC position	3.931 ± 2.674	1.47	-3.563 ± 1.870	-1.662 ± 2.317
photometric centroid source offset	3.89 ± 1.76	2.20	-1.68 ± 1.83	-3.51 ± 1.75

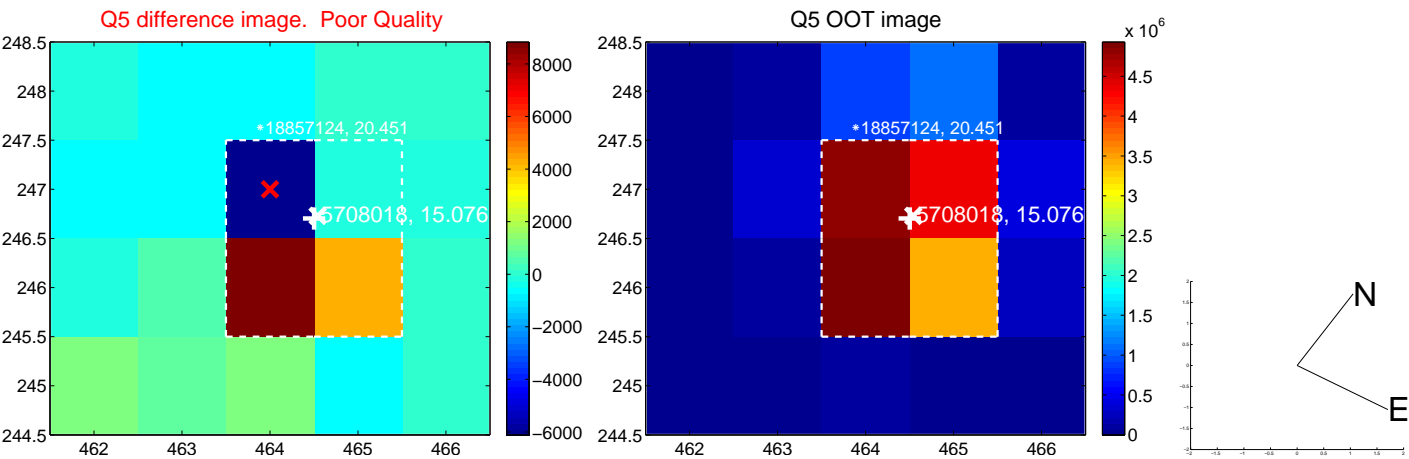


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



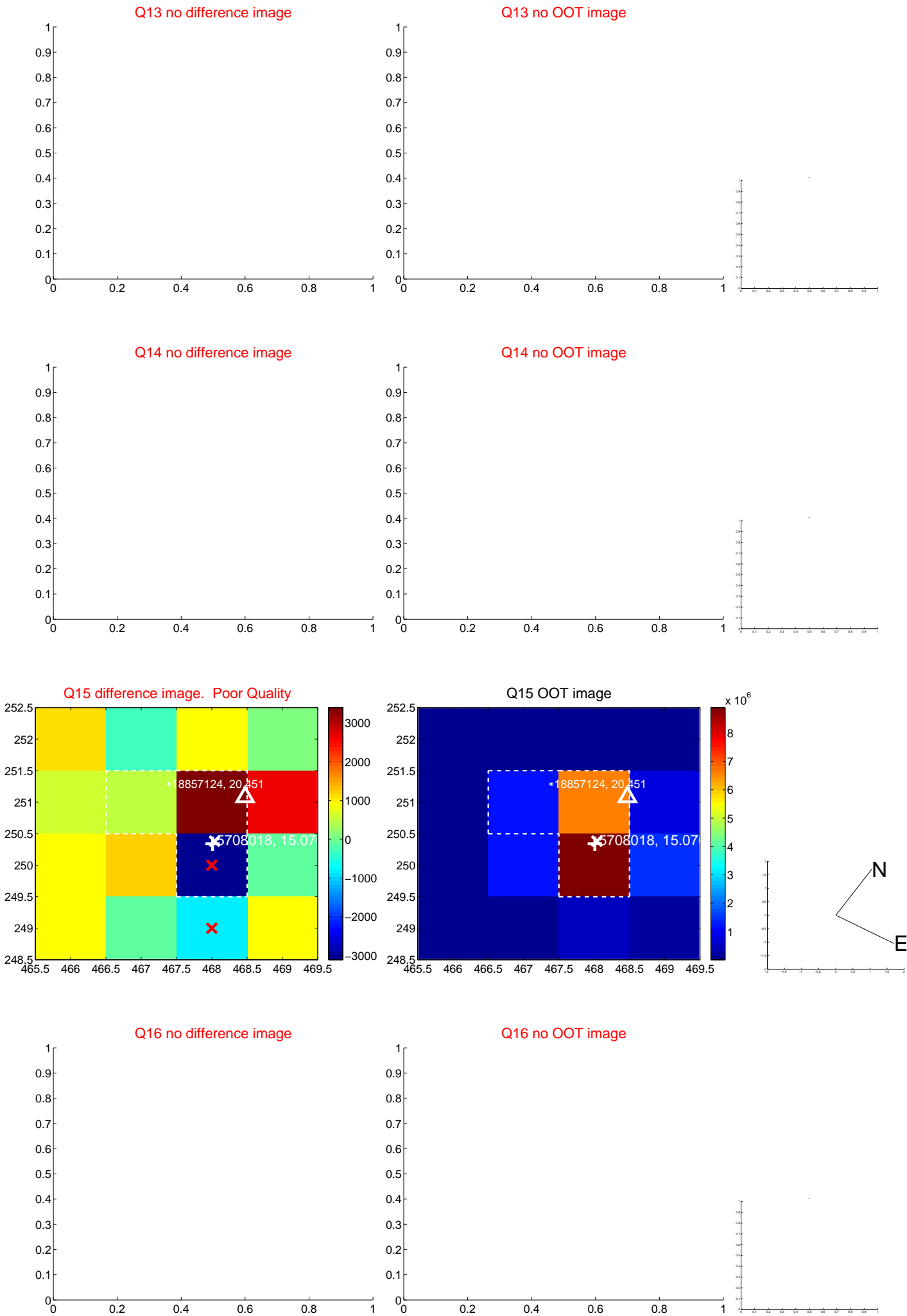
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



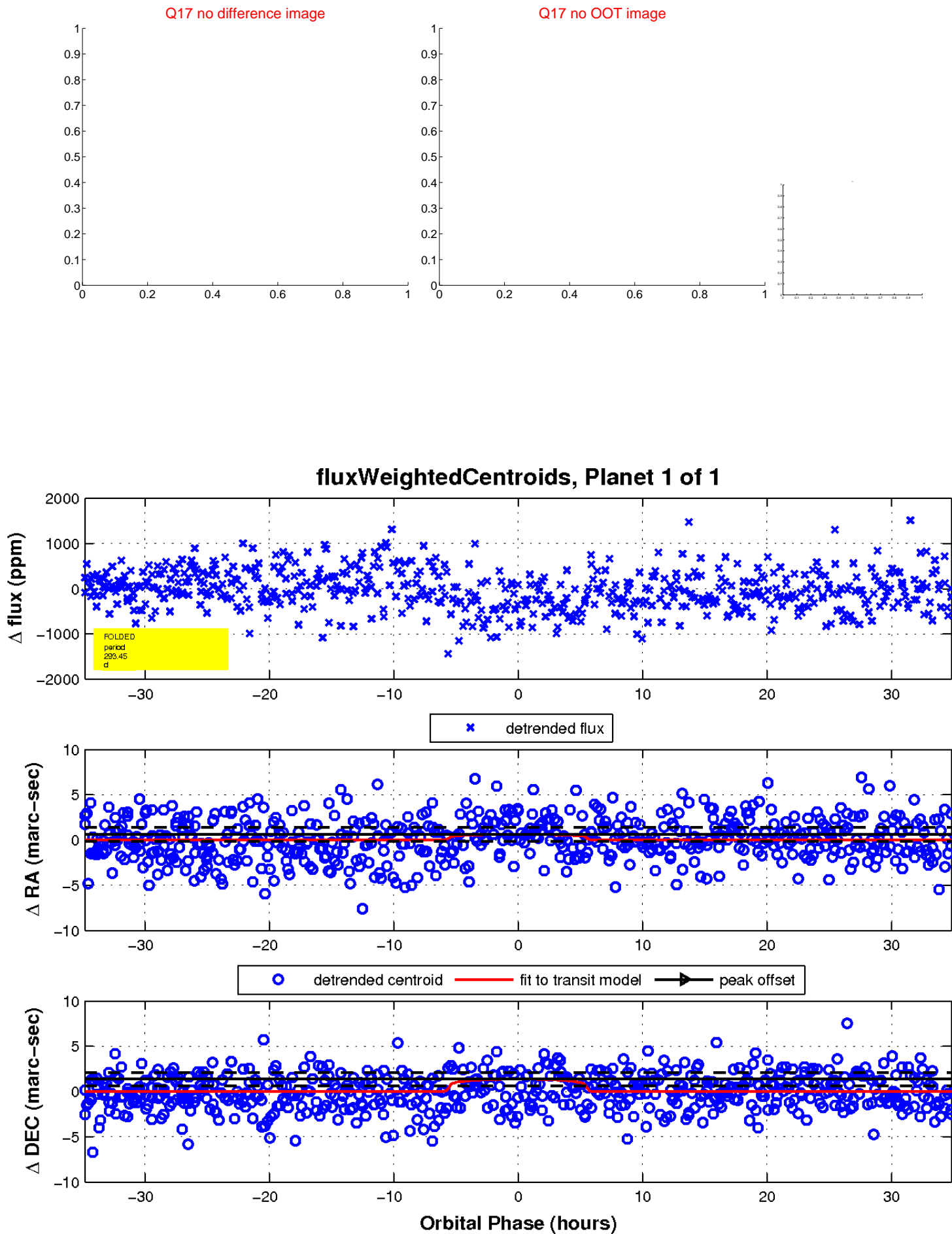
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

