

KIC 005184761

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})
005184761-01	OBS	No	374.653242	371.118091	306.2	15.755	7.8	6.7	1.08	6249	2.04	1.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005184761-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

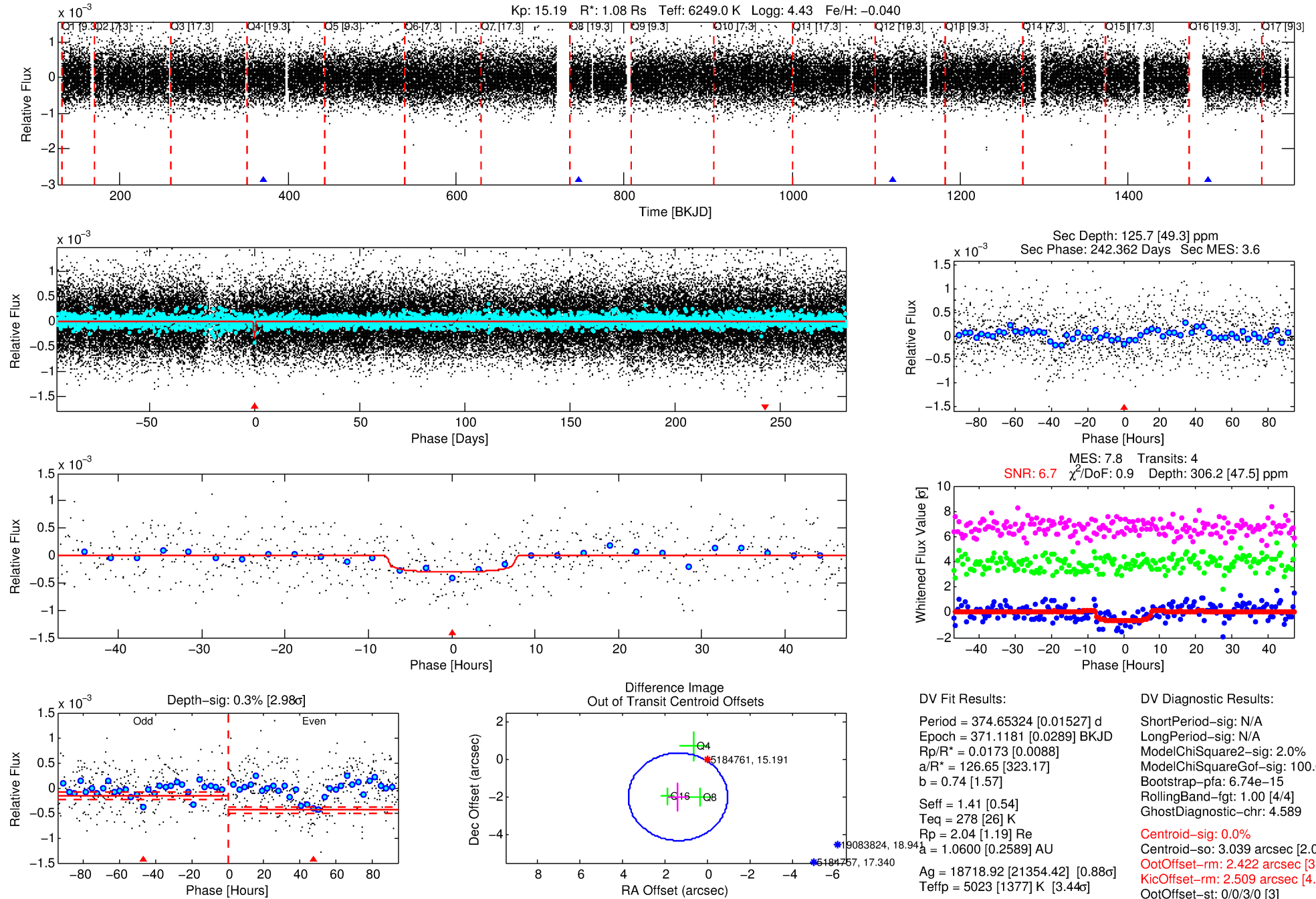
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005184761-01

No Significant Match Found

DV One-Page Summary

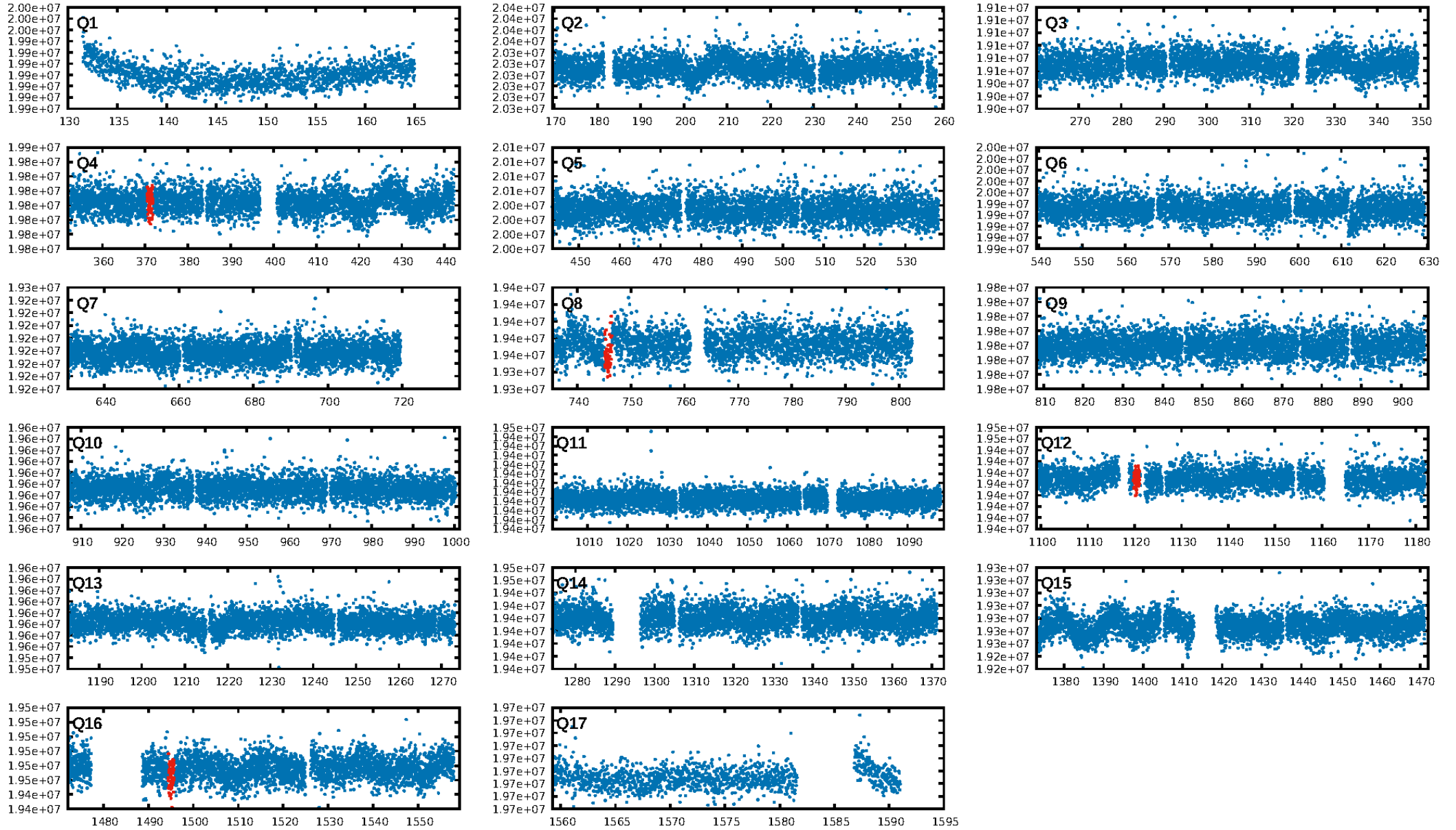
KIC: 5184761 Candidate: 1 of 1 Period: 374.653 d



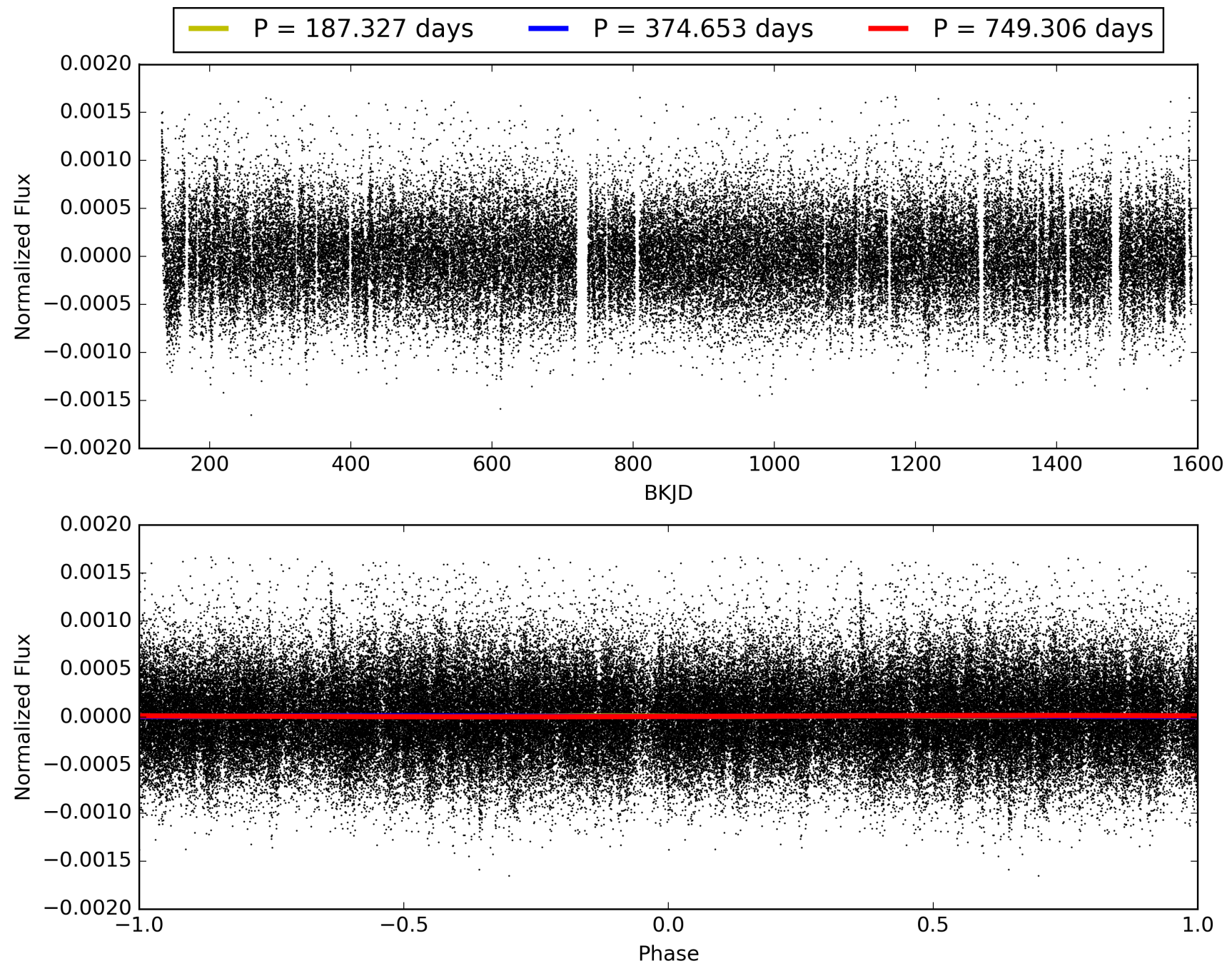
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:17:00 Z

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

TCE 005184761-01, PDC Light Curves

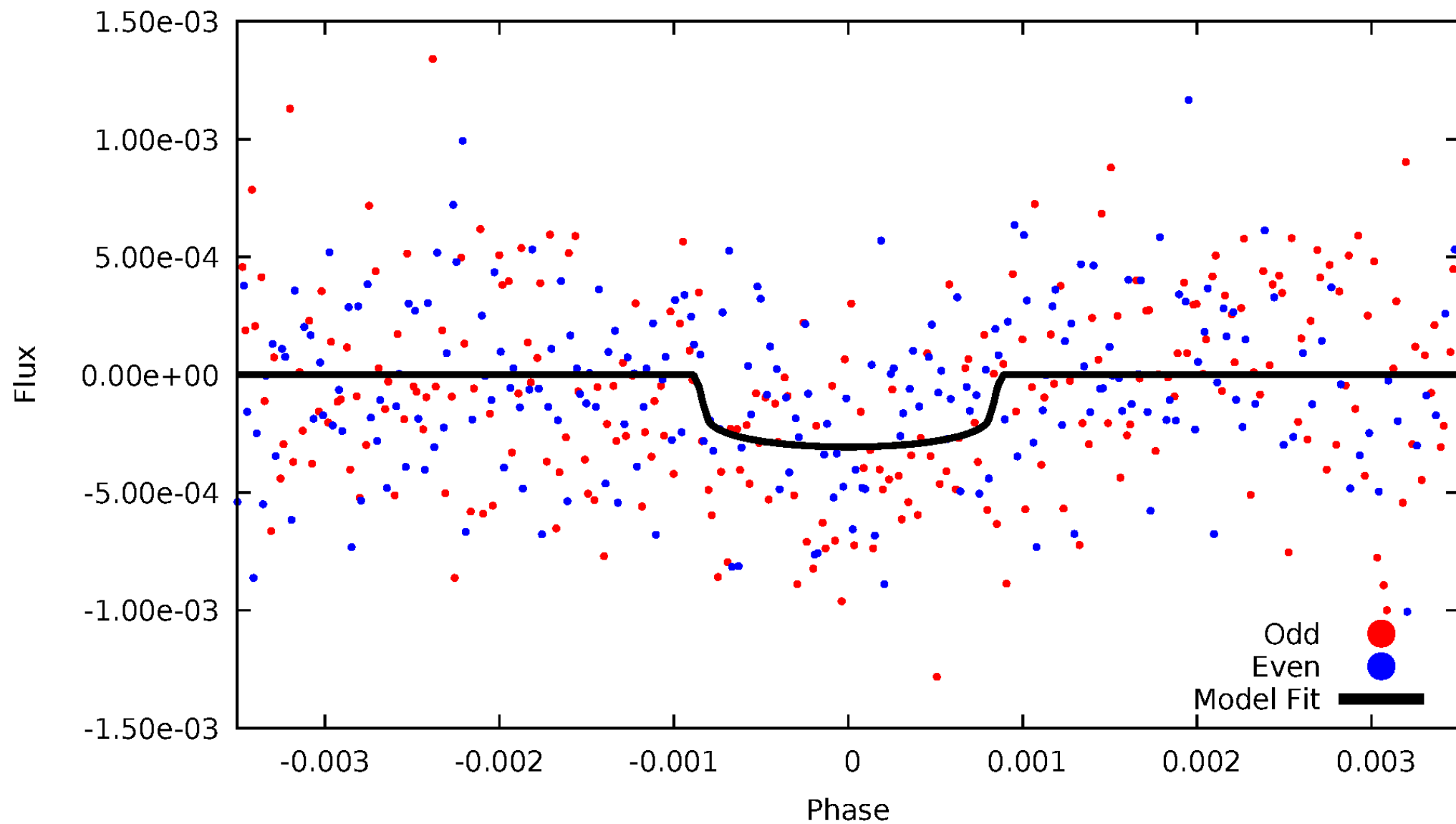


TCE 005184761-01



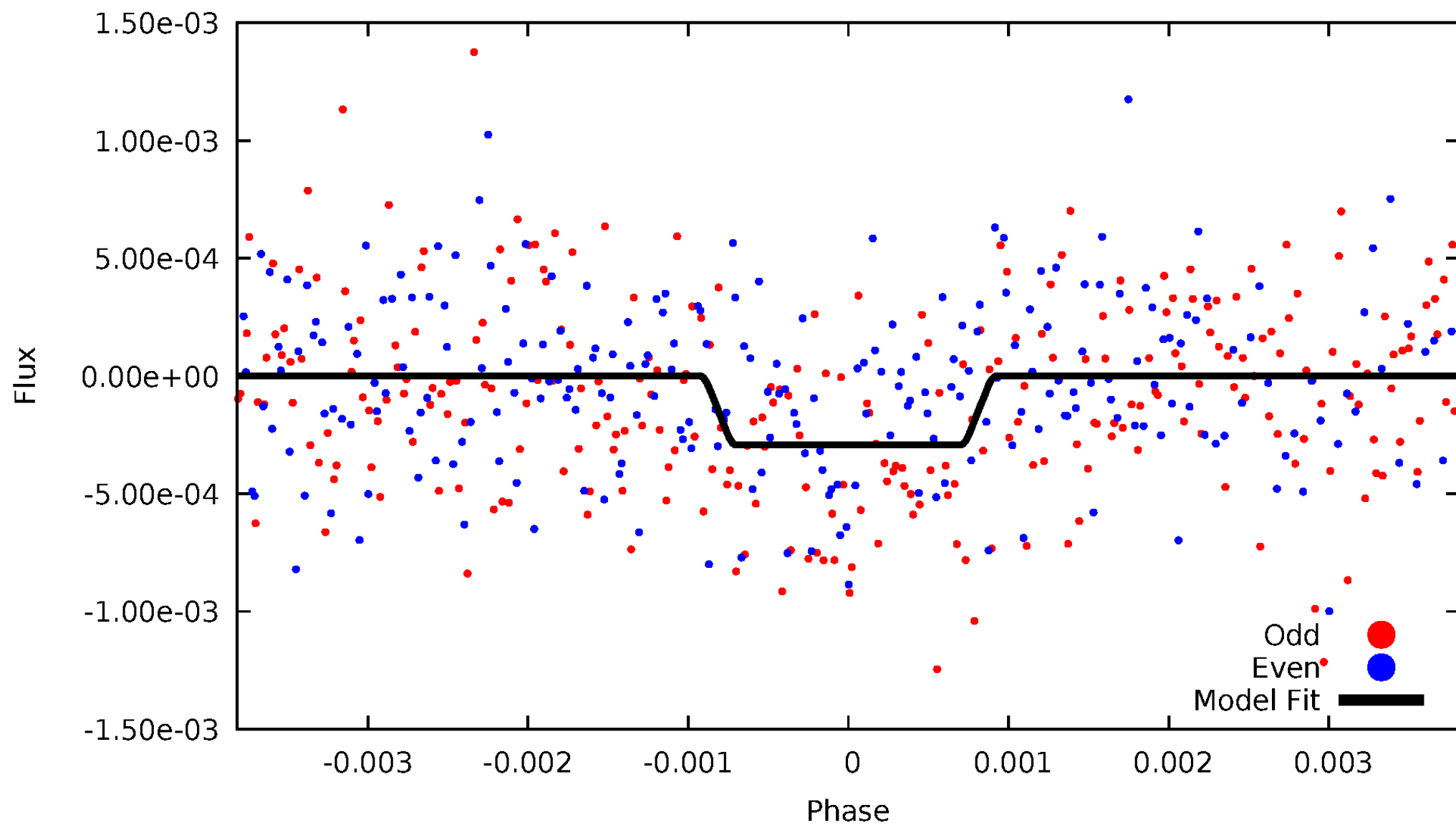
DV Odd/Even

TCE 005184761-01



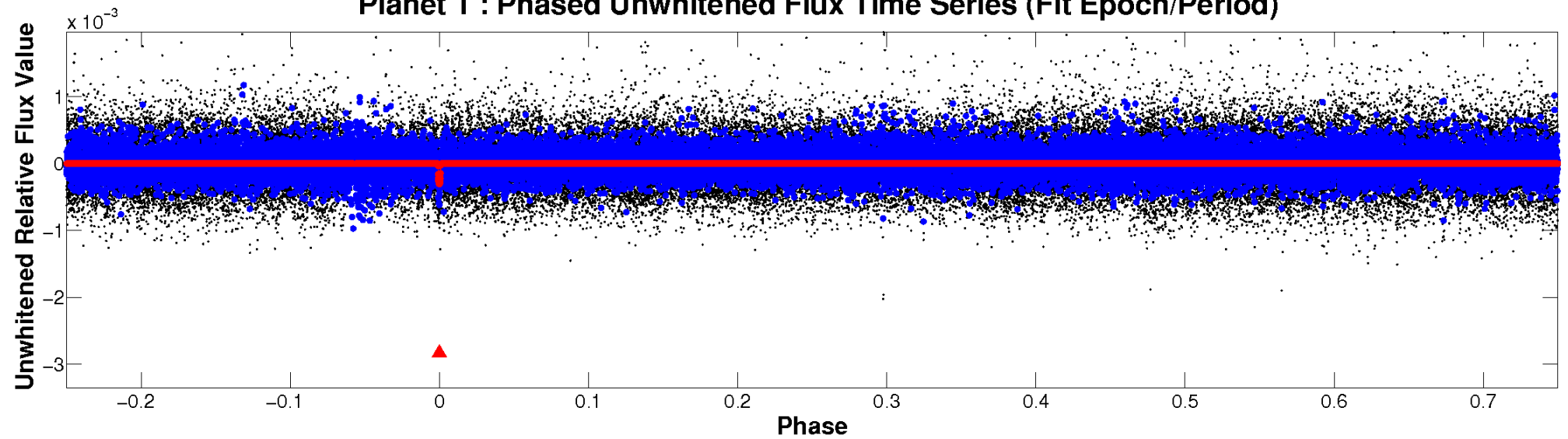
ALT Odd/Even

TCE 005184761-01

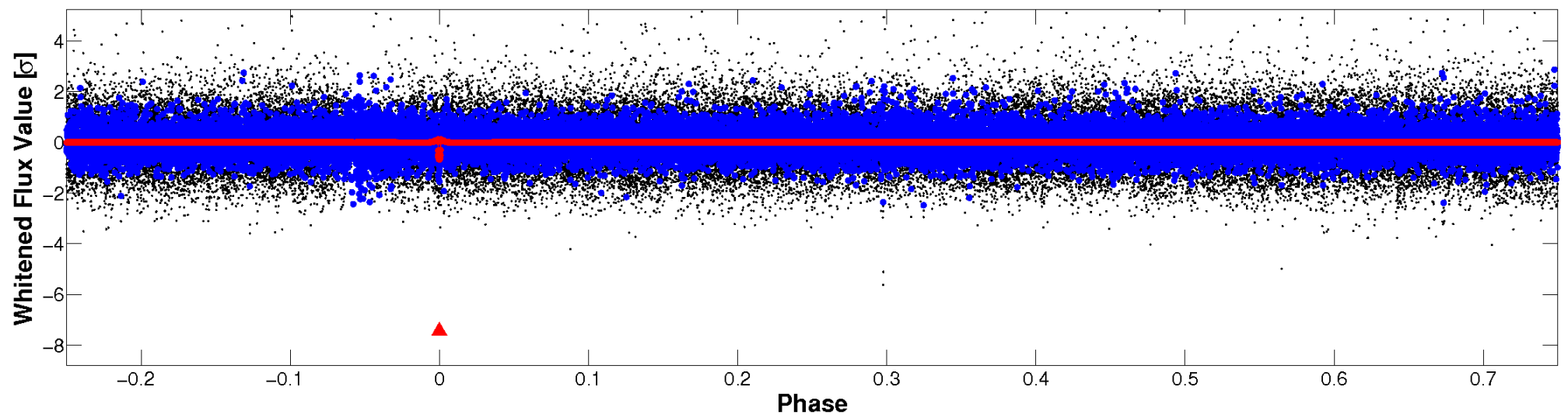


Non-Whitened Vs. Whitened Light Curve

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



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



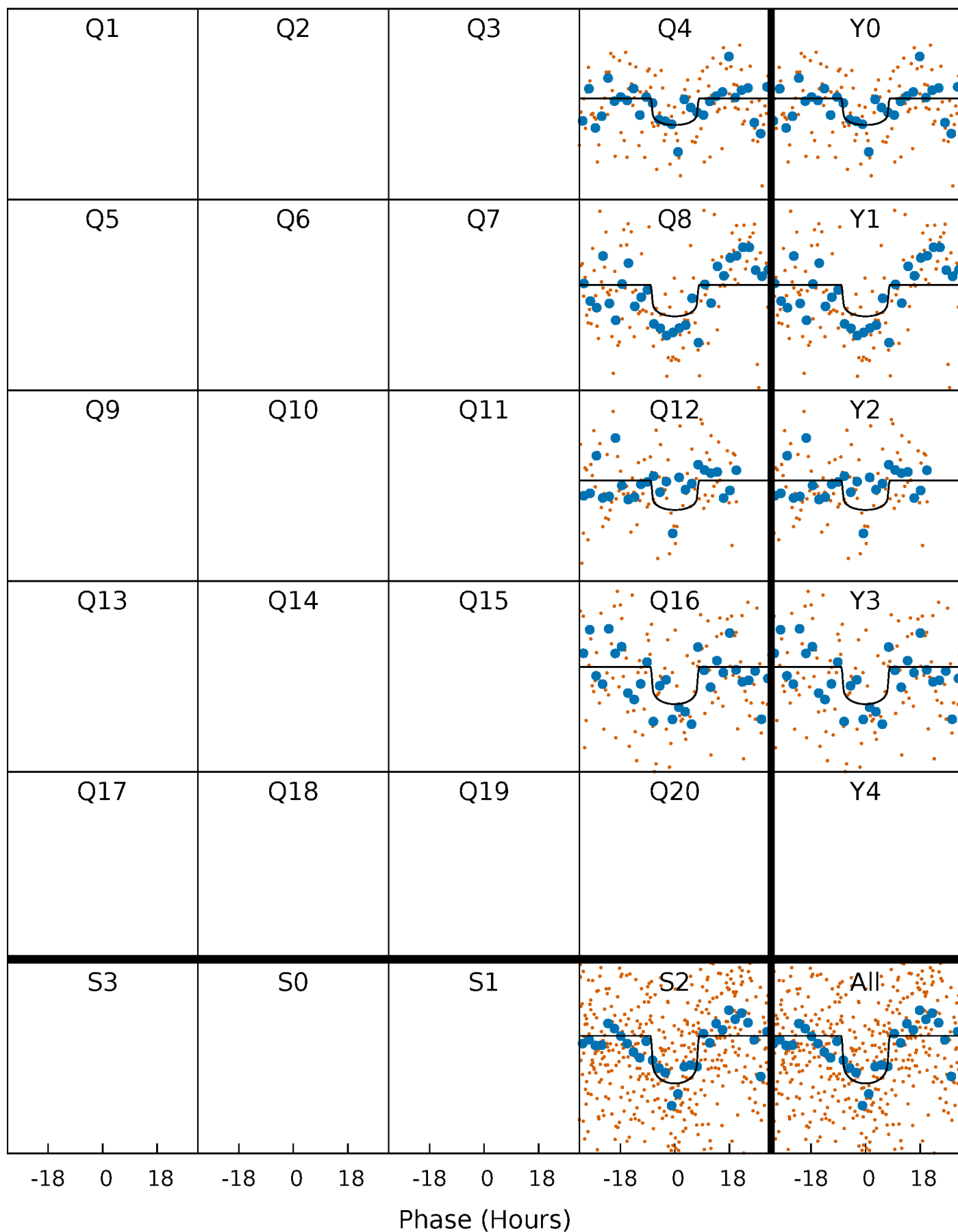
PDC Quarter-Phased Transit Curves

TCE 005184761-01 P=374.653242 Days $T_0=371.118091$ (BKJD)



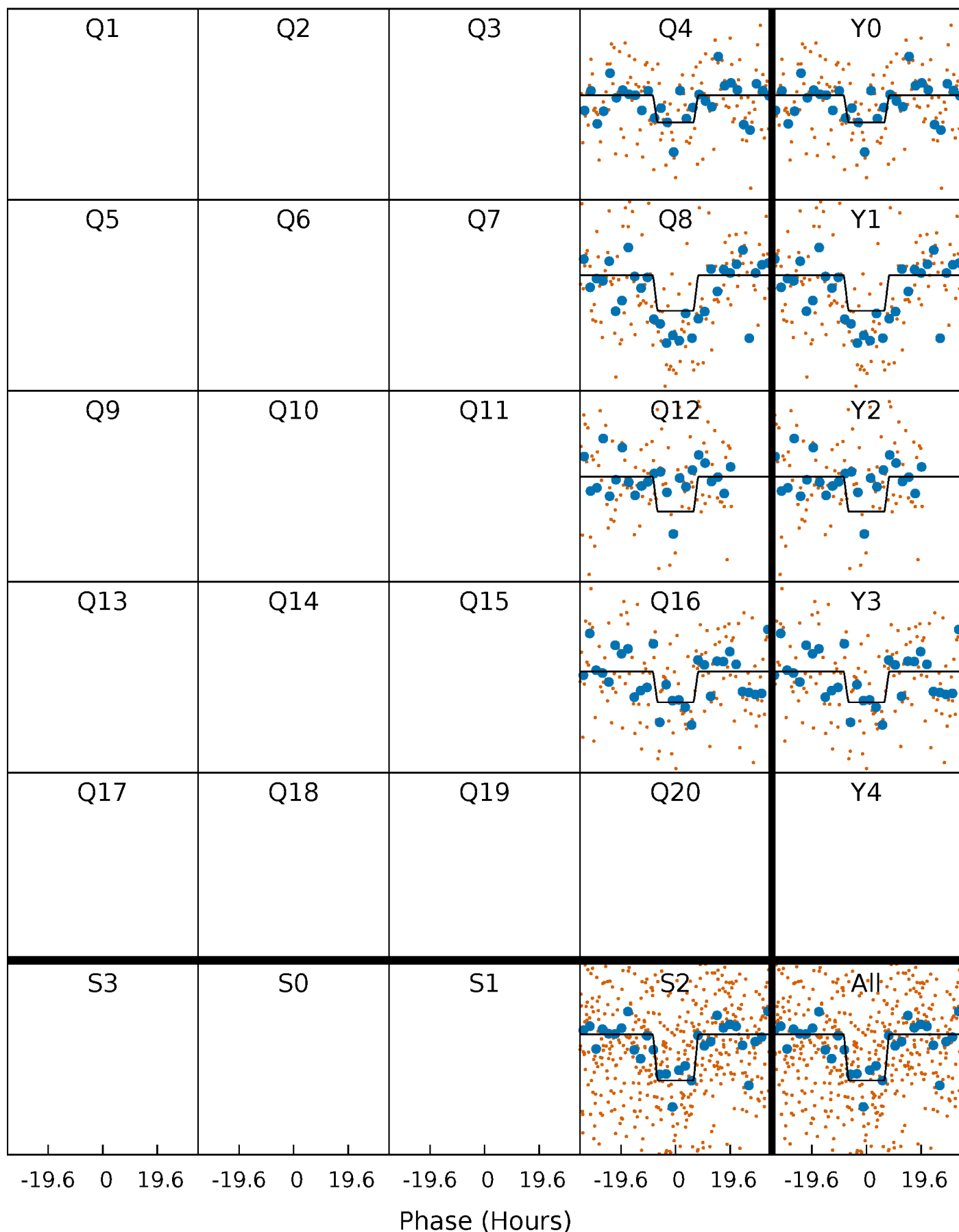
DV Quarter-Phased Transit Curves

TCE 005184761-01 P=374.653242 Days $T_0=371.118091$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

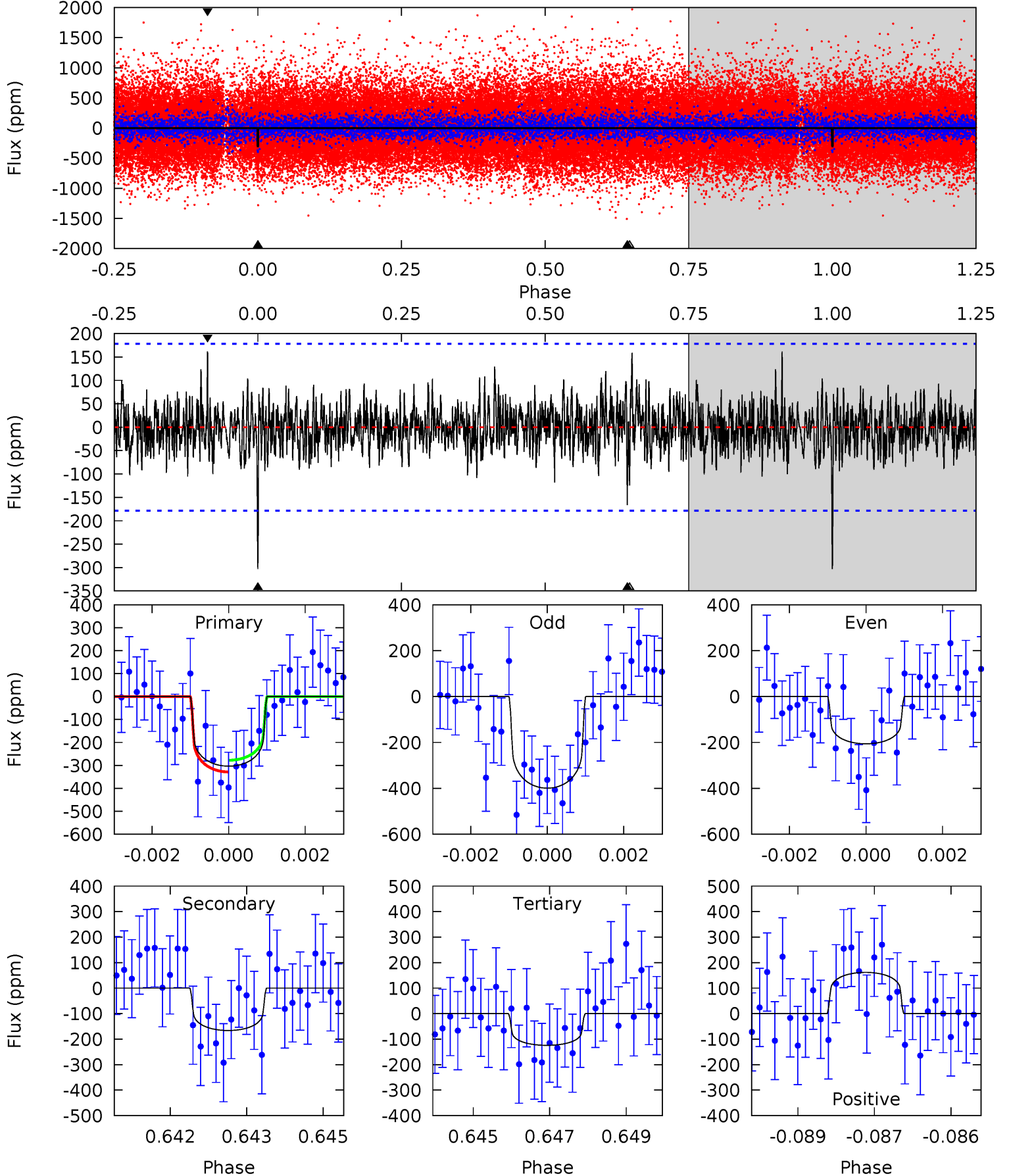
TCE 005184761-01 P=374.622078 Days $T_0=371.194219$ (BKJD)



DV Model-Shift Uniqueness Test

005184761-01, $P = 374.653242$ Days, $E = 371.118091$ Days

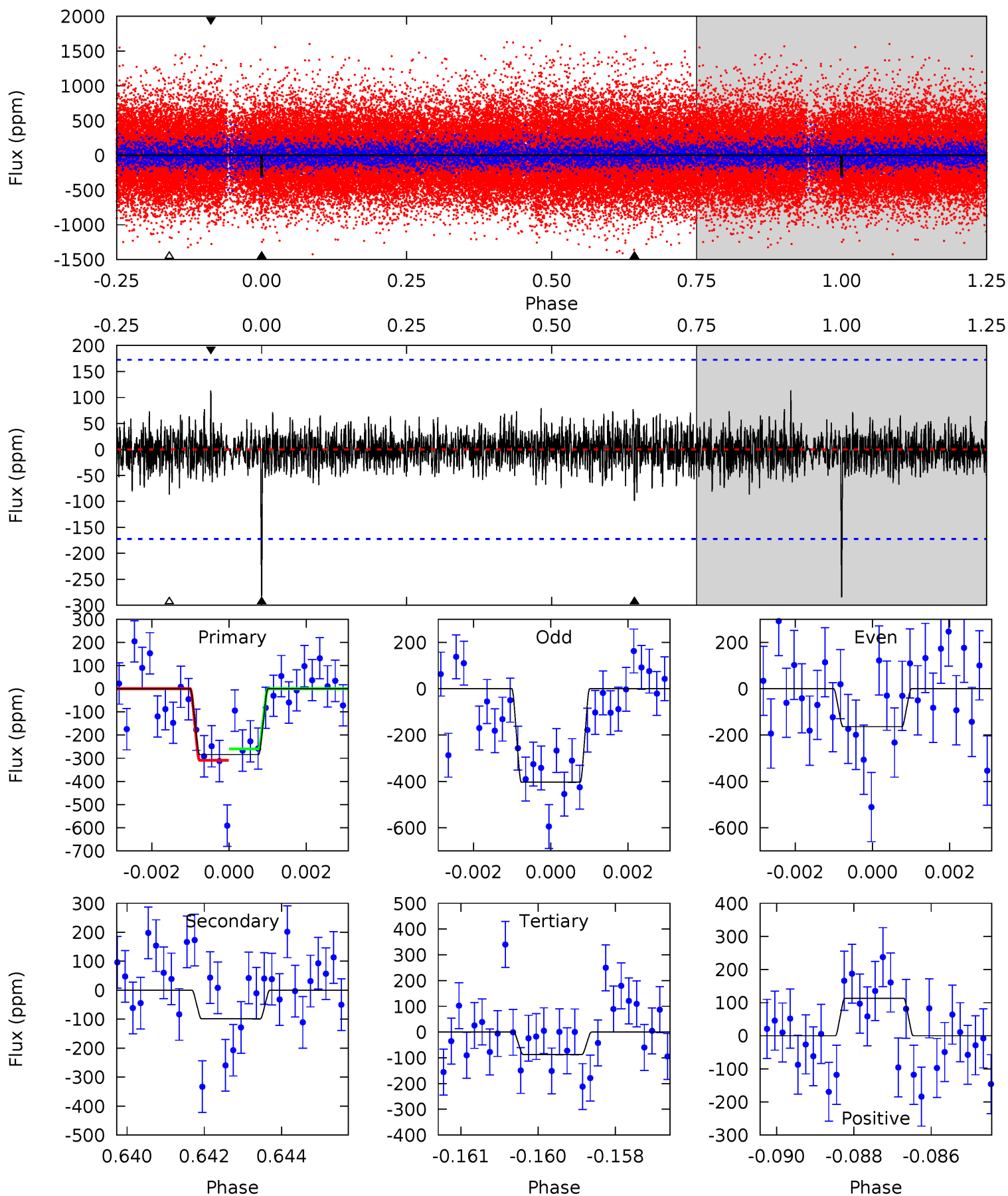
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.10	4.98	3.73	4.85	5.35	3.12	1.16	5.37	4.25	1.26	0.13	2.91	0.93	0.35	0.77



Alt Model-Shift Uniqueness Test

005184761-01, P = 374.622078 Days, E = 371.194219 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.81	3.05	2.69	3.51	5.34	3.12	0.77	6.11	5.30	0.36	-0.46	3.71	1.04	0.28	0.76



Stellar Parameters For KIC 005184761

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6249^{+174}_{-239}	$4.428^{+0.062}_{-0.188}$	$-0.040^{+0.250}_{-0.300}$	$1.076^{+0.318}_{-0.127}$	$1.130^{+0.141}_{-0.157}$	$1.279^{+0.352}_{-0.632}$
	+3%/-4%	+1%/-4%	+625%/-750%	+30%/-12%	+12%/-14%	+27%/-49%
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 005184761-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-166 ± 33	$2.13^{+1.14}_{-0.99}$	396^{+26}_{-22}	5387^{+2099}_{-887}	22267^{+54869}_{-13333}
Alt.	-99 ± 32	$2.14^{+1.10}_{-1.02}$	394^{+26}_{-20}	4770^{+1688}_{-761}	13025^{+33131}_{-7883}

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

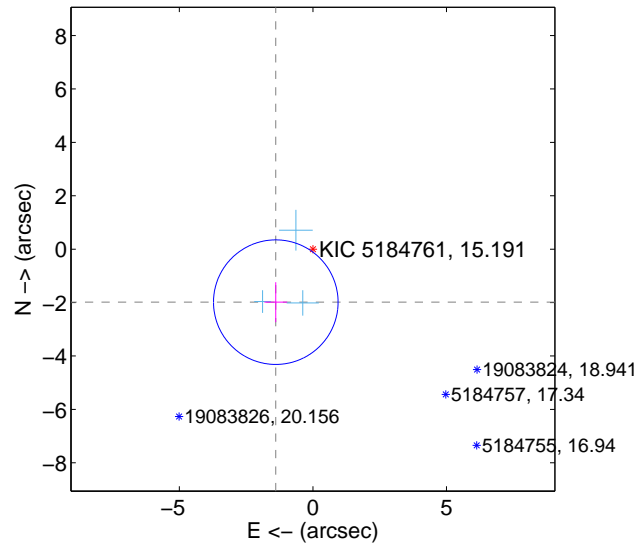
Supplemental centroid analysis for 005184761-01. Kepler magnitude: 15.19. Transit SNR 6.72

There are 3 quarters with good PRF difference image offsets

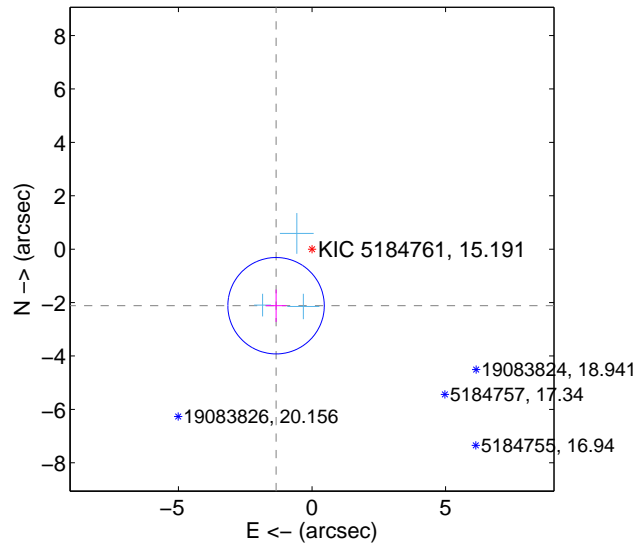
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.422 ± 0.777	3.12	1.389 ± 0.425	-1.984 ± 0.749
PRF-fit source offset from KIC position	2.509 ± 0.602	4.17	1.346 ± 0.384	-2.117 ± 0.606
photometric centroid source offset	3.04 ± 1.50	2.02	0.19 ± 1.55	3.03 ± 1.50

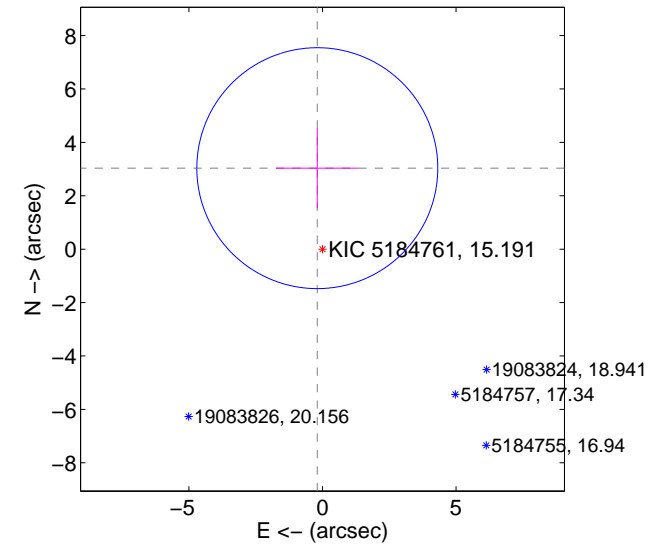
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

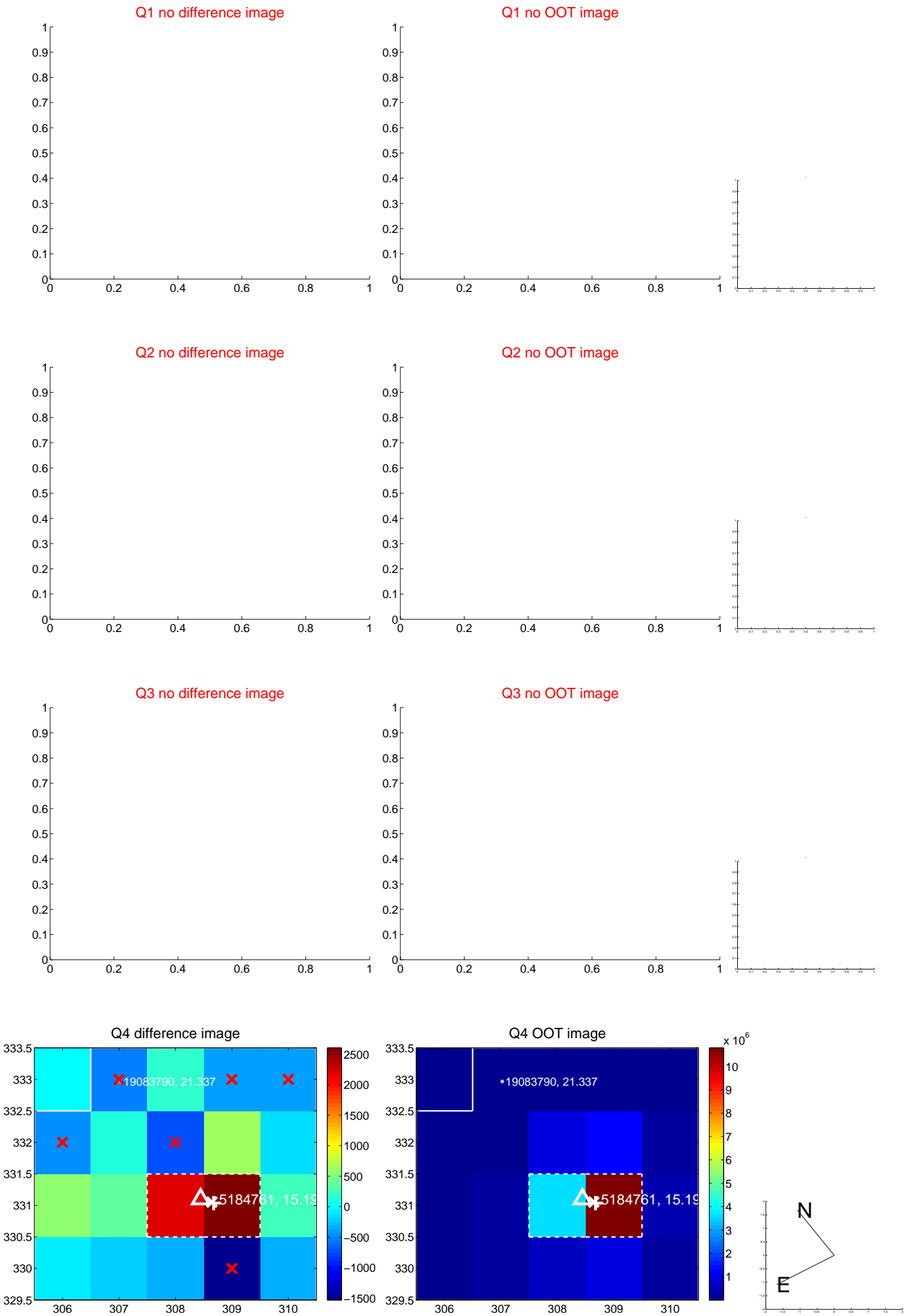


offset from photometric centroids

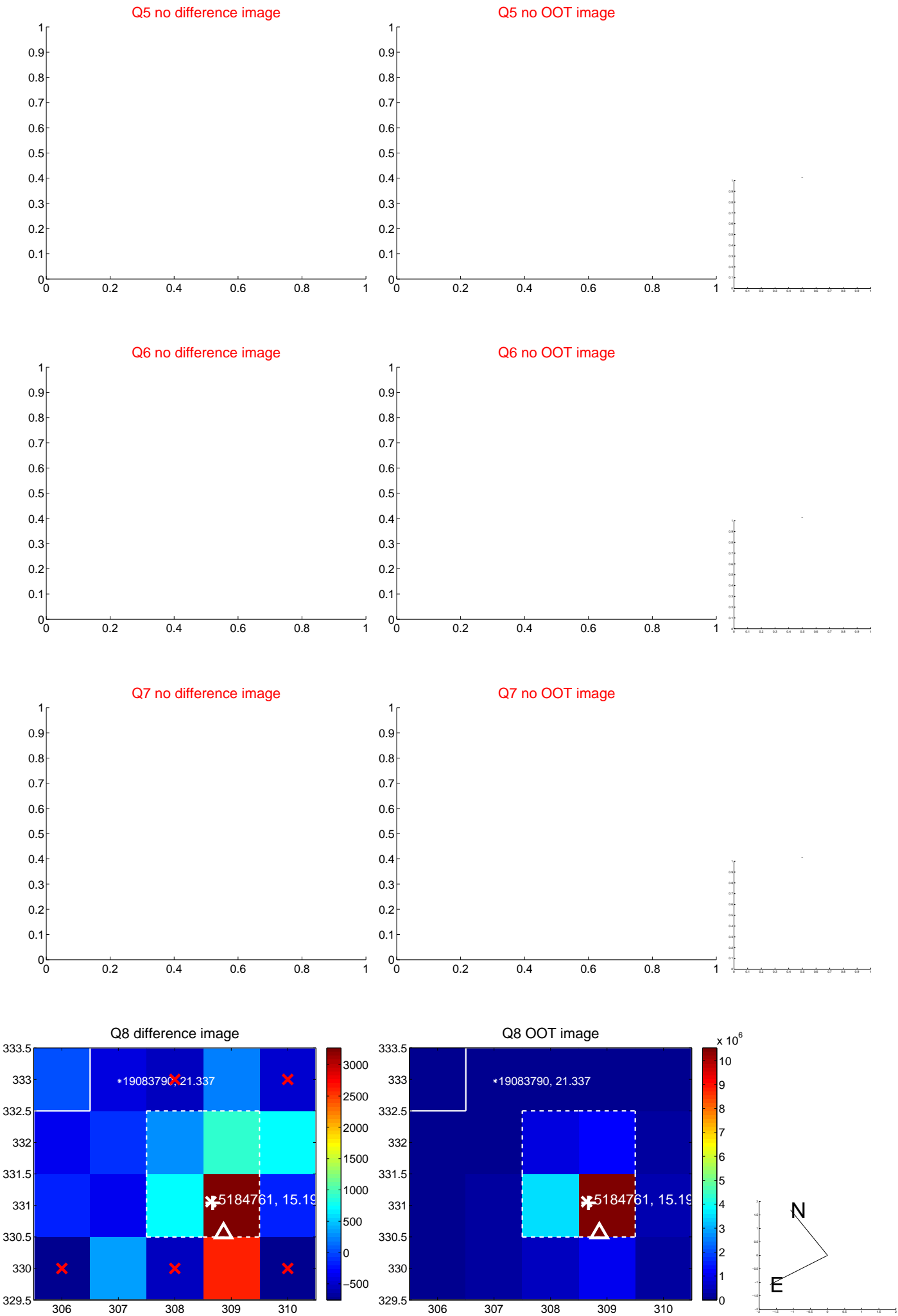


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



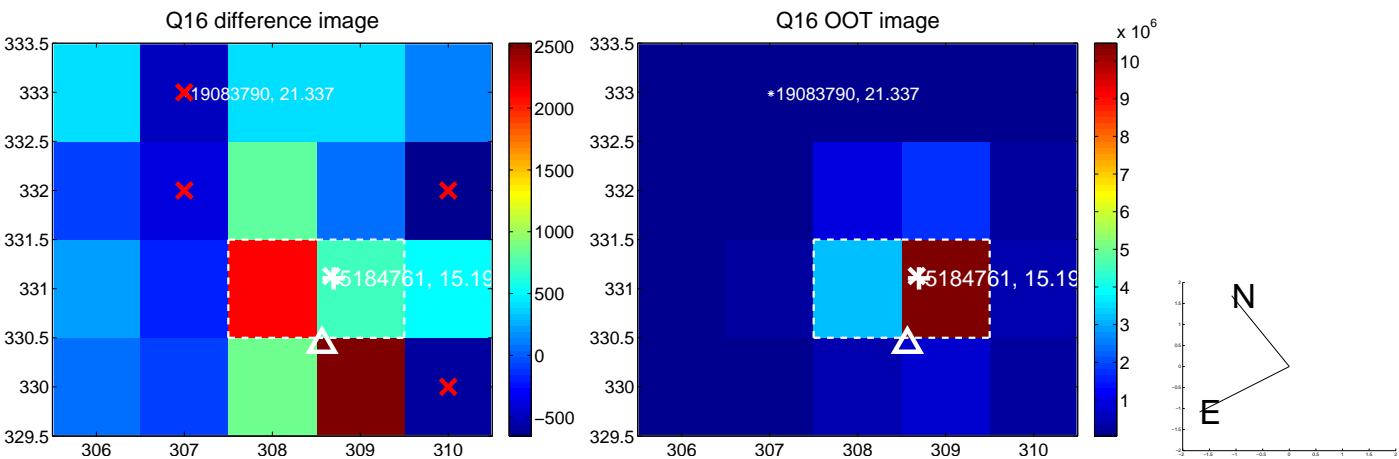
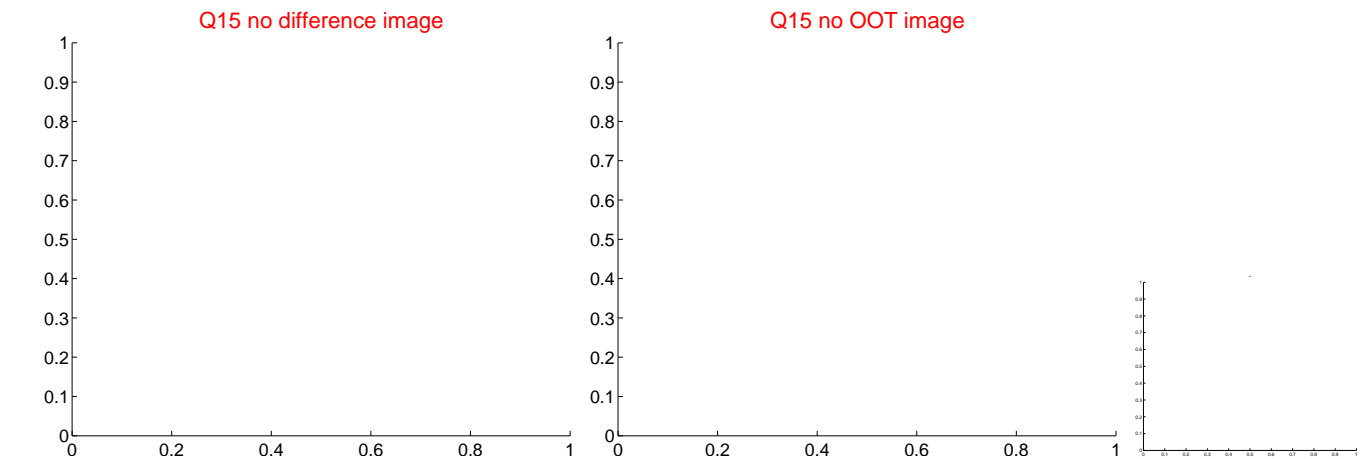
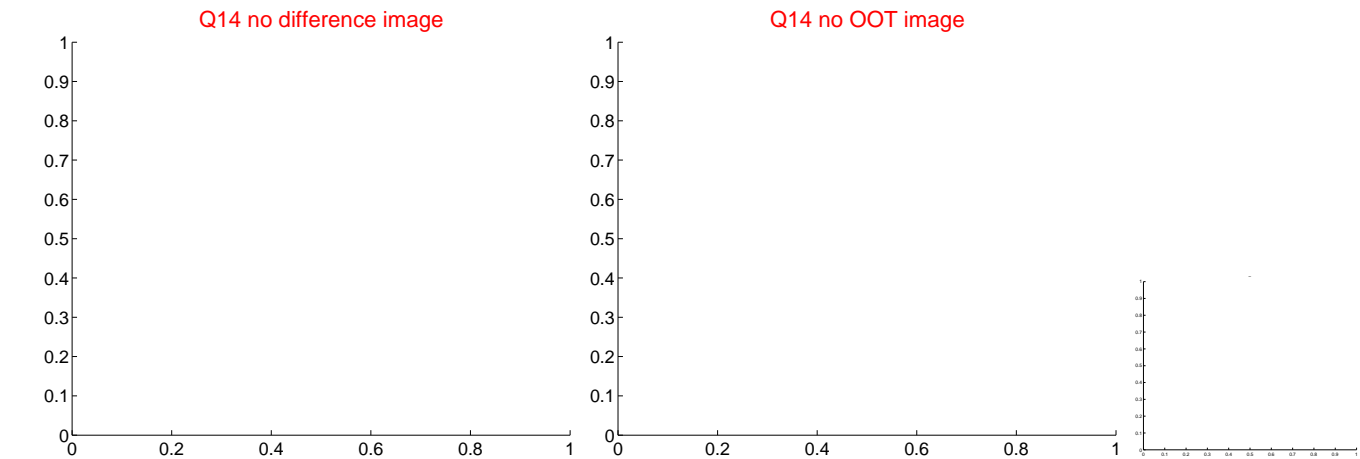
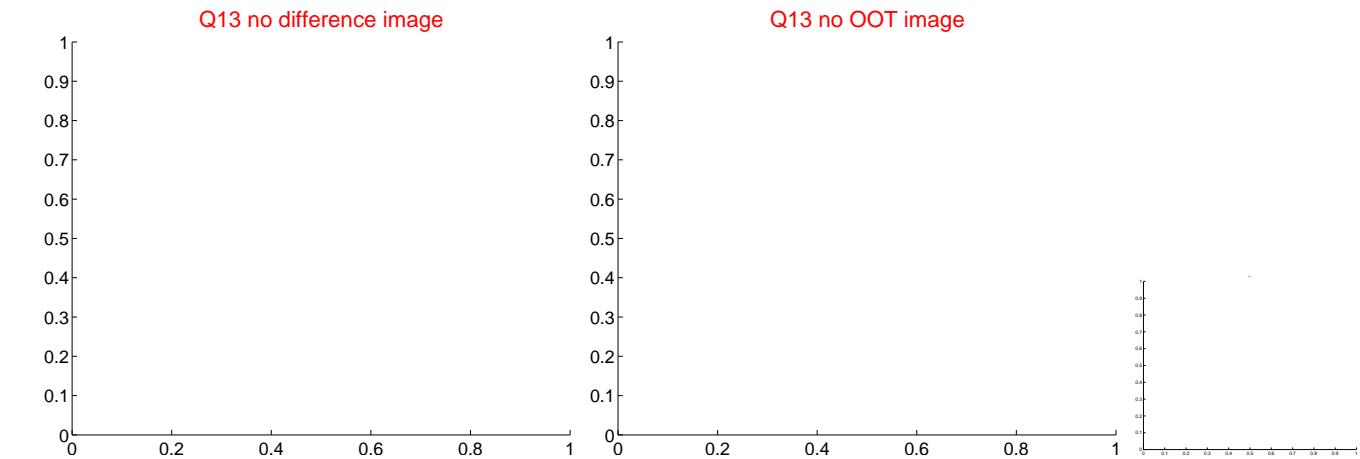
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



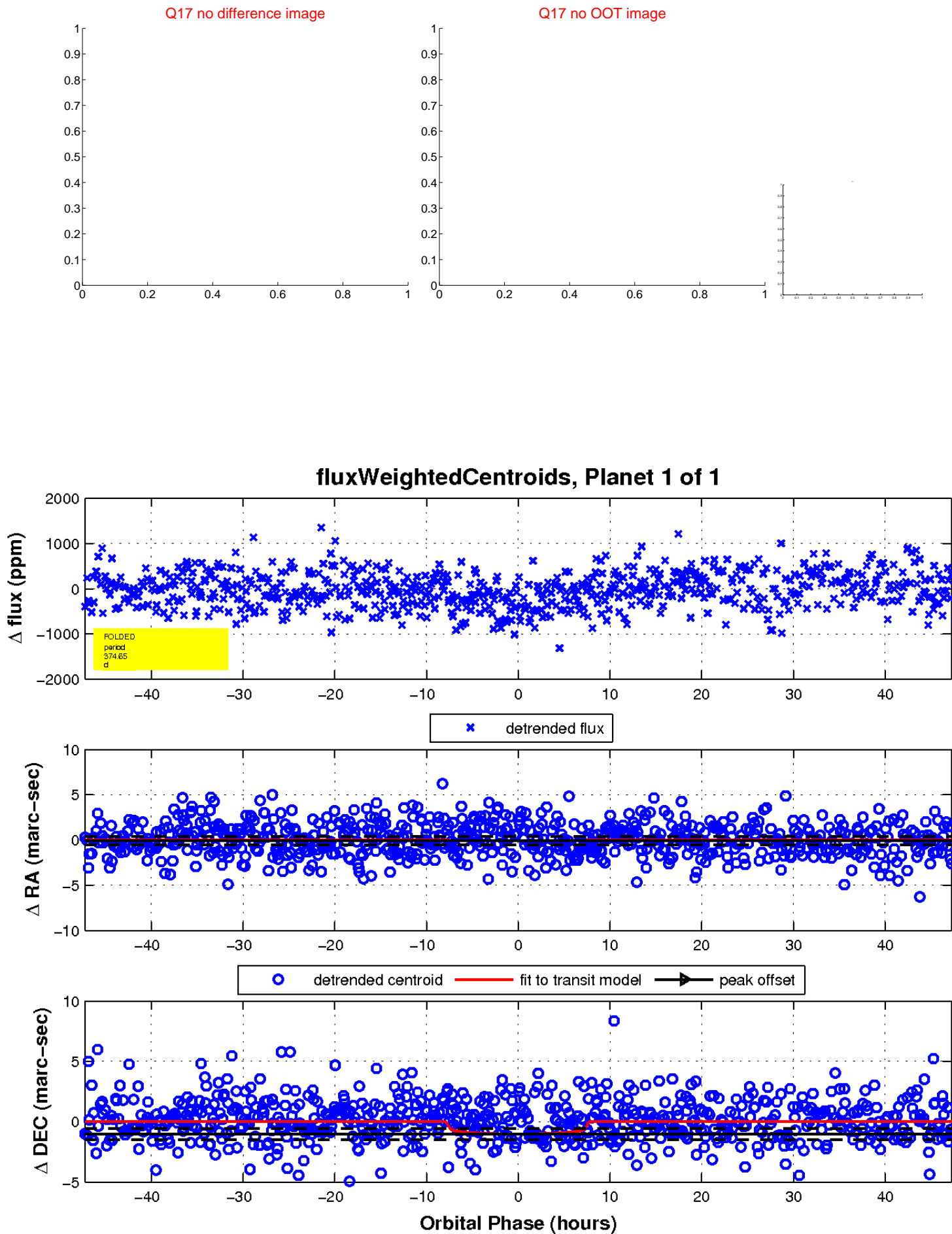
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UKIRT Image

Declination

