

KIC 008741296

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})
008741296-01	OBS	No	361.636588	389.200929	865.9	3.487	7.3	7.3	0.62	5002	1.99	0.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008741296-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

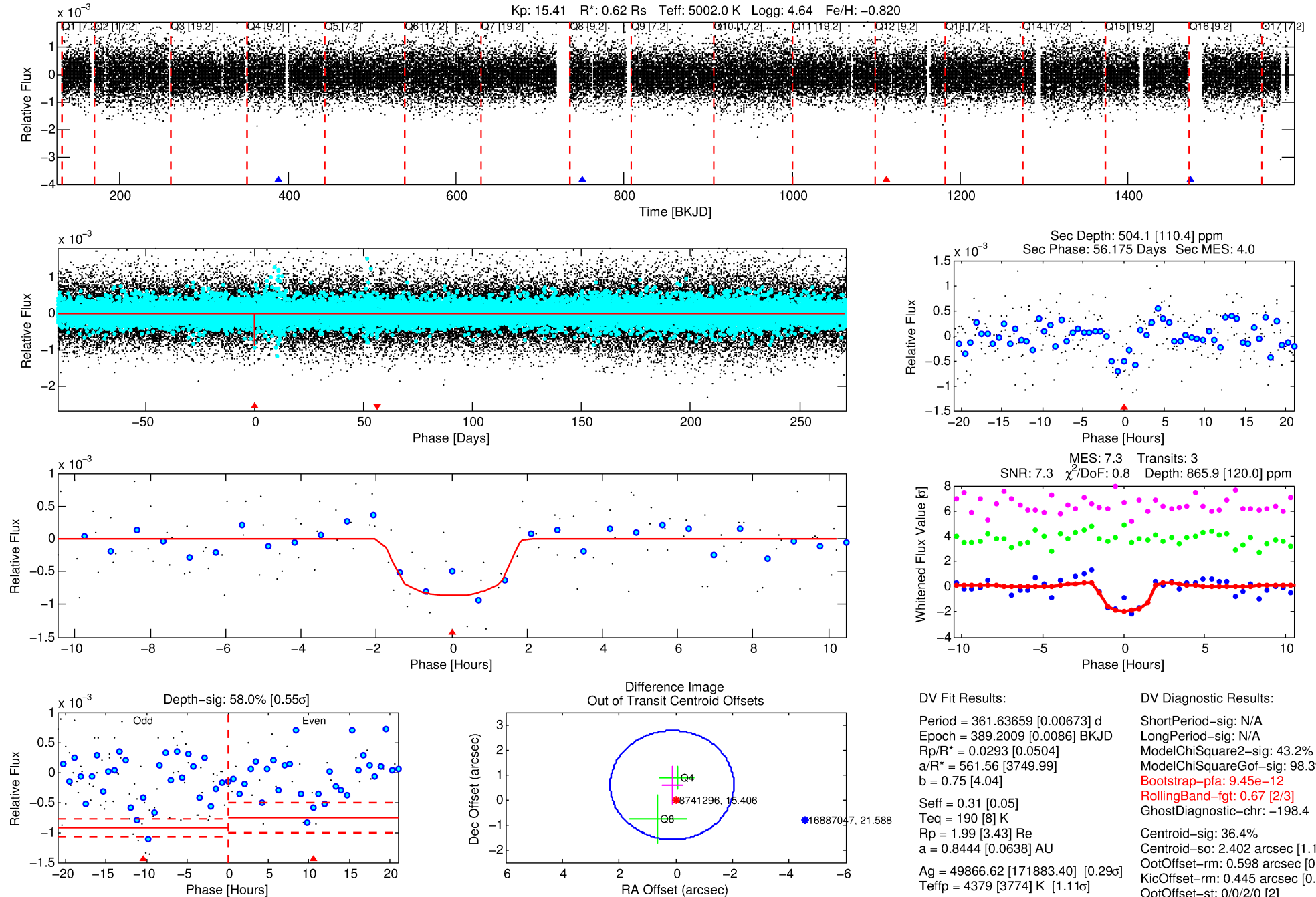
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008741296-01

No Significant Match Found

DV One-Page Summary

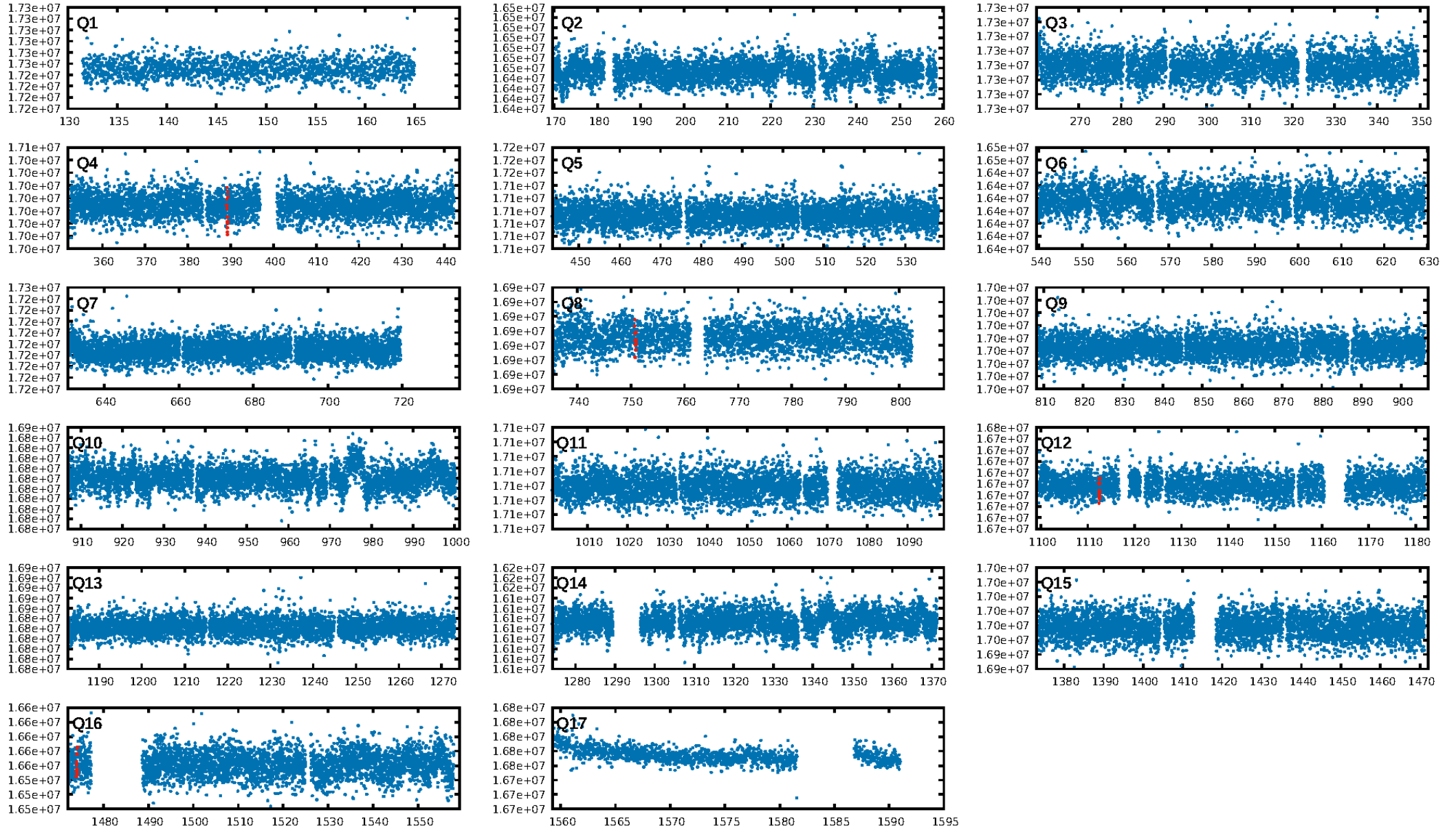
KIC: 8741296 Candidate: 1 of 1 Period: 361.637 d



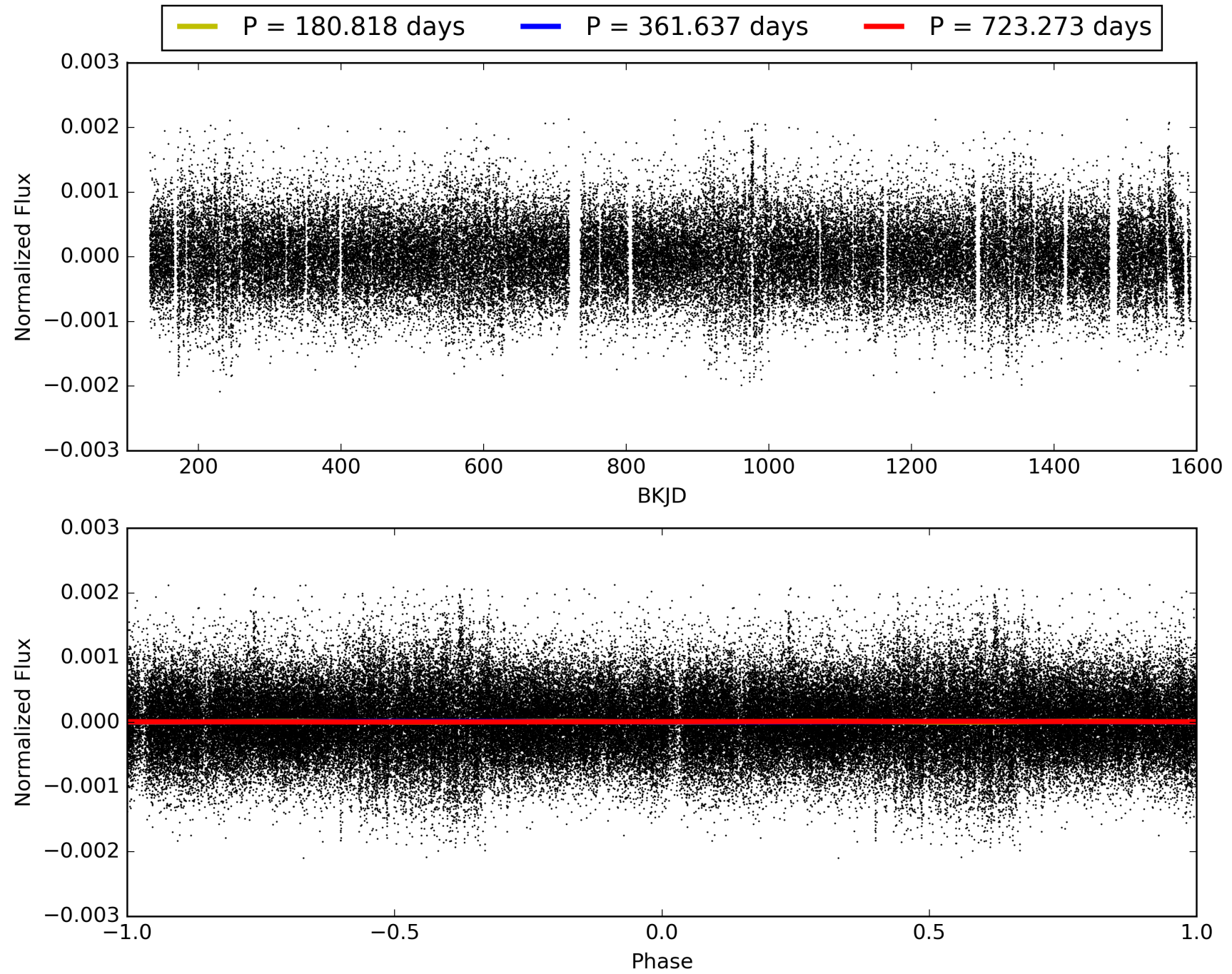
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 19:38:28 Z

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

TCE 008741296-01, PDC Light Curves

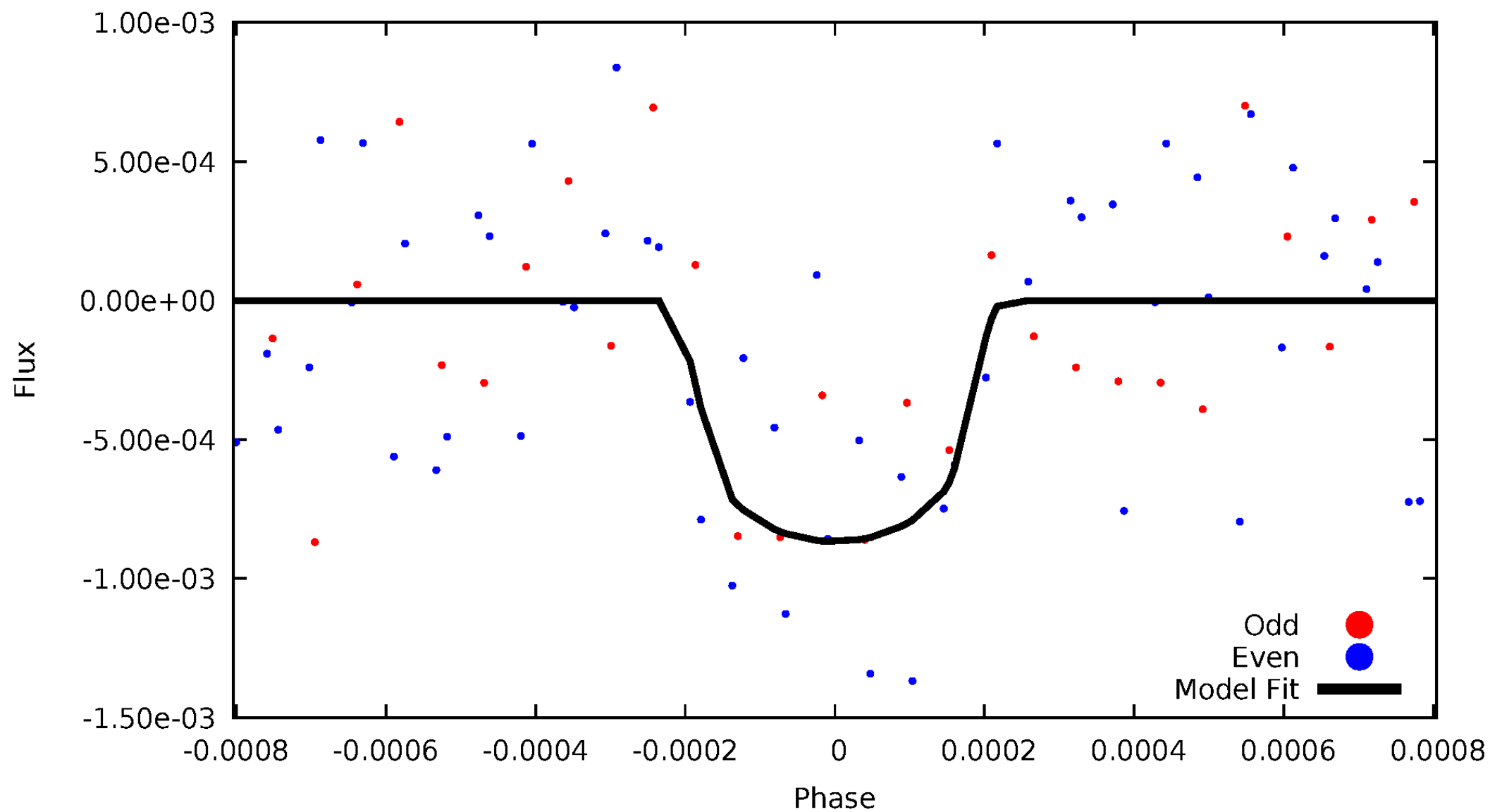


TCE 008741296-01



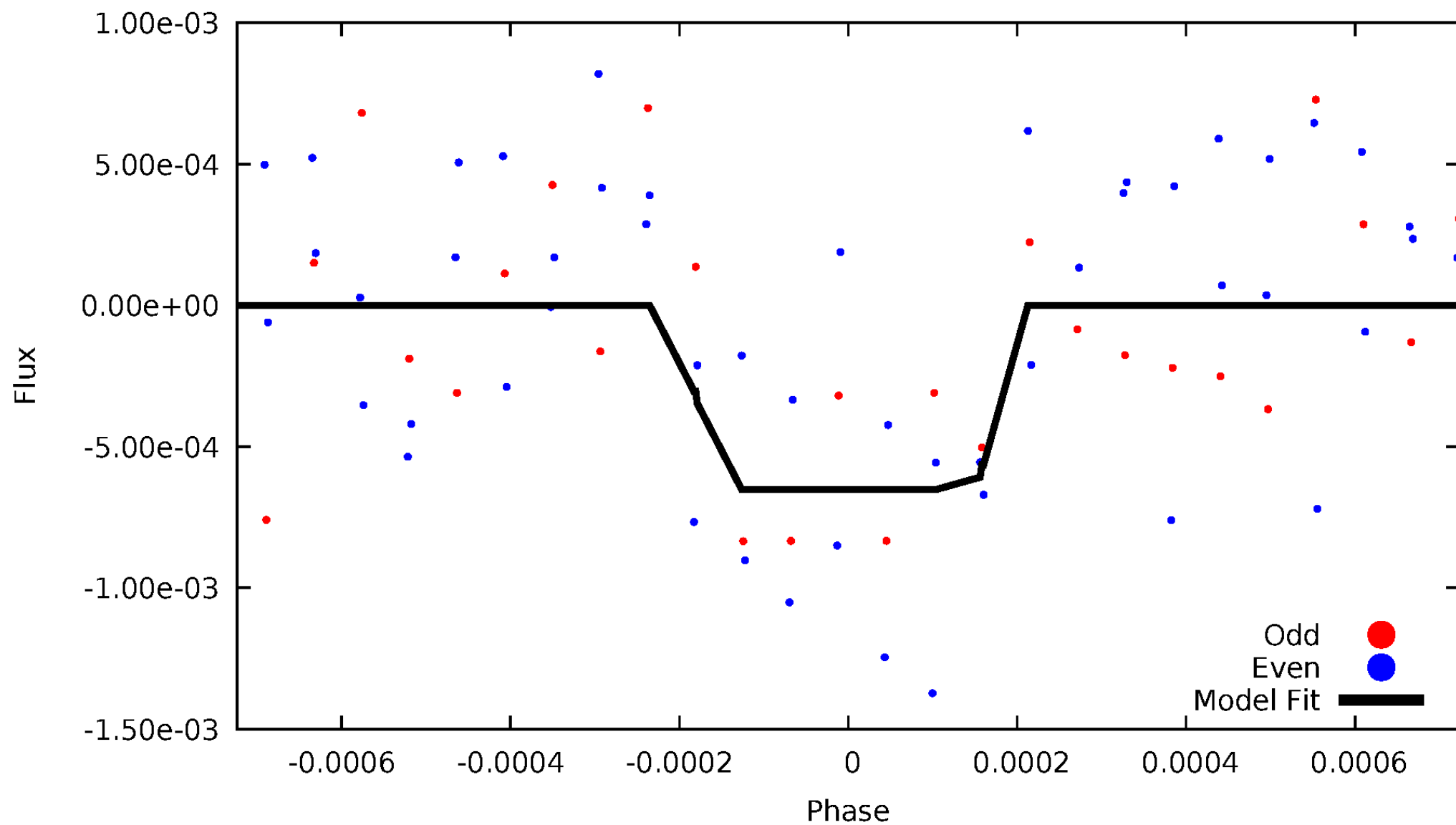
DV Odd/Even

TCE 008741296-01

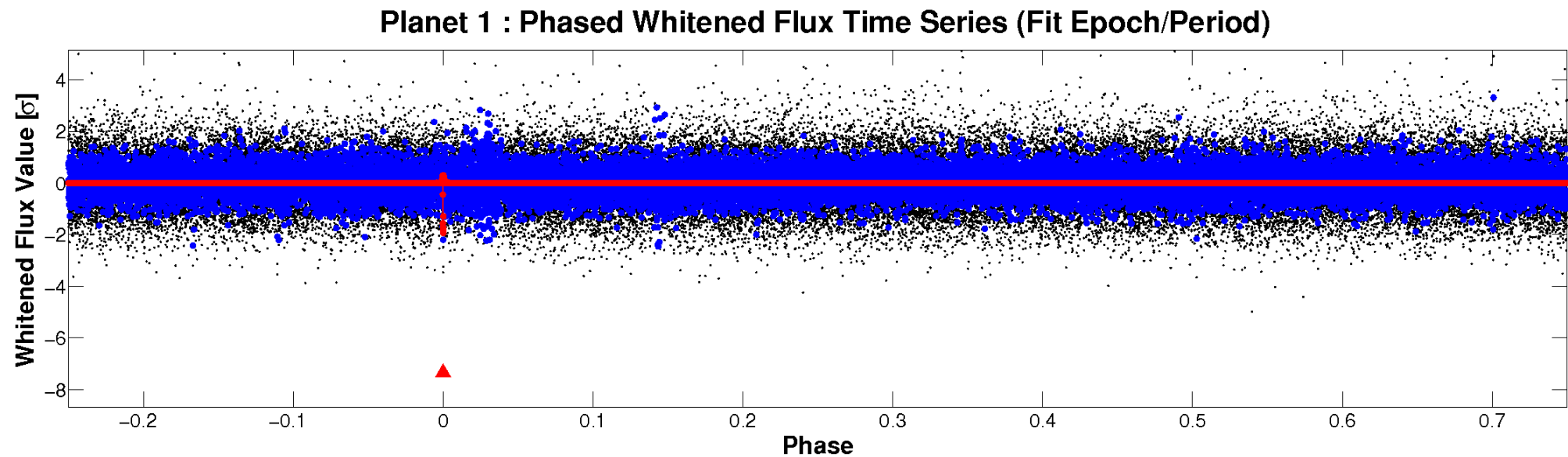
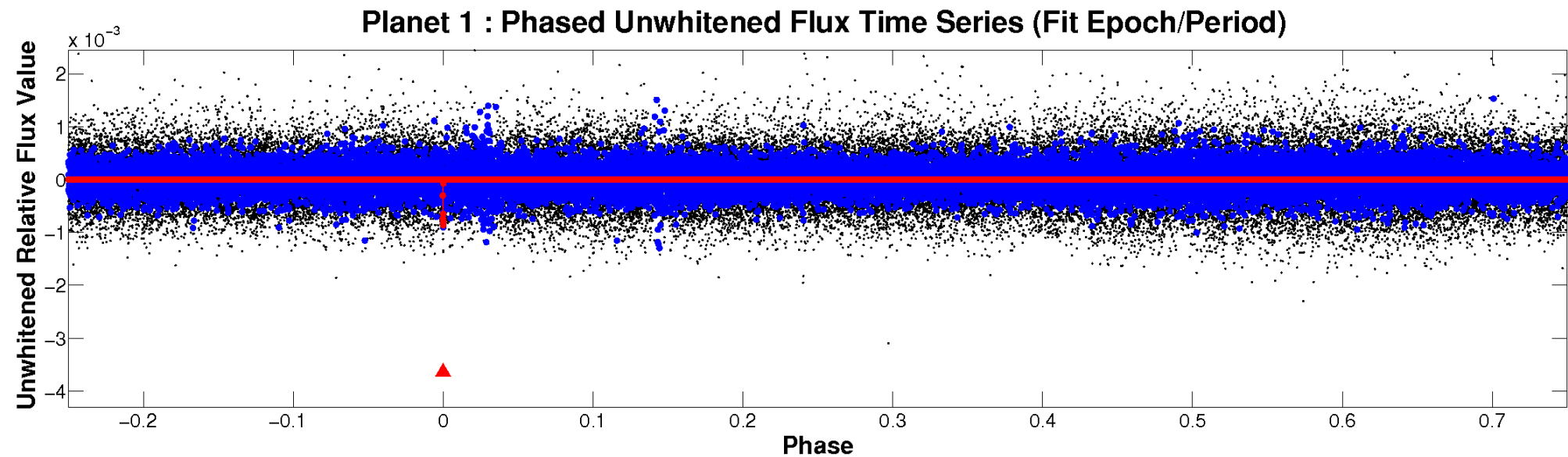


ALT Odd/Even

TCE 008741296-01

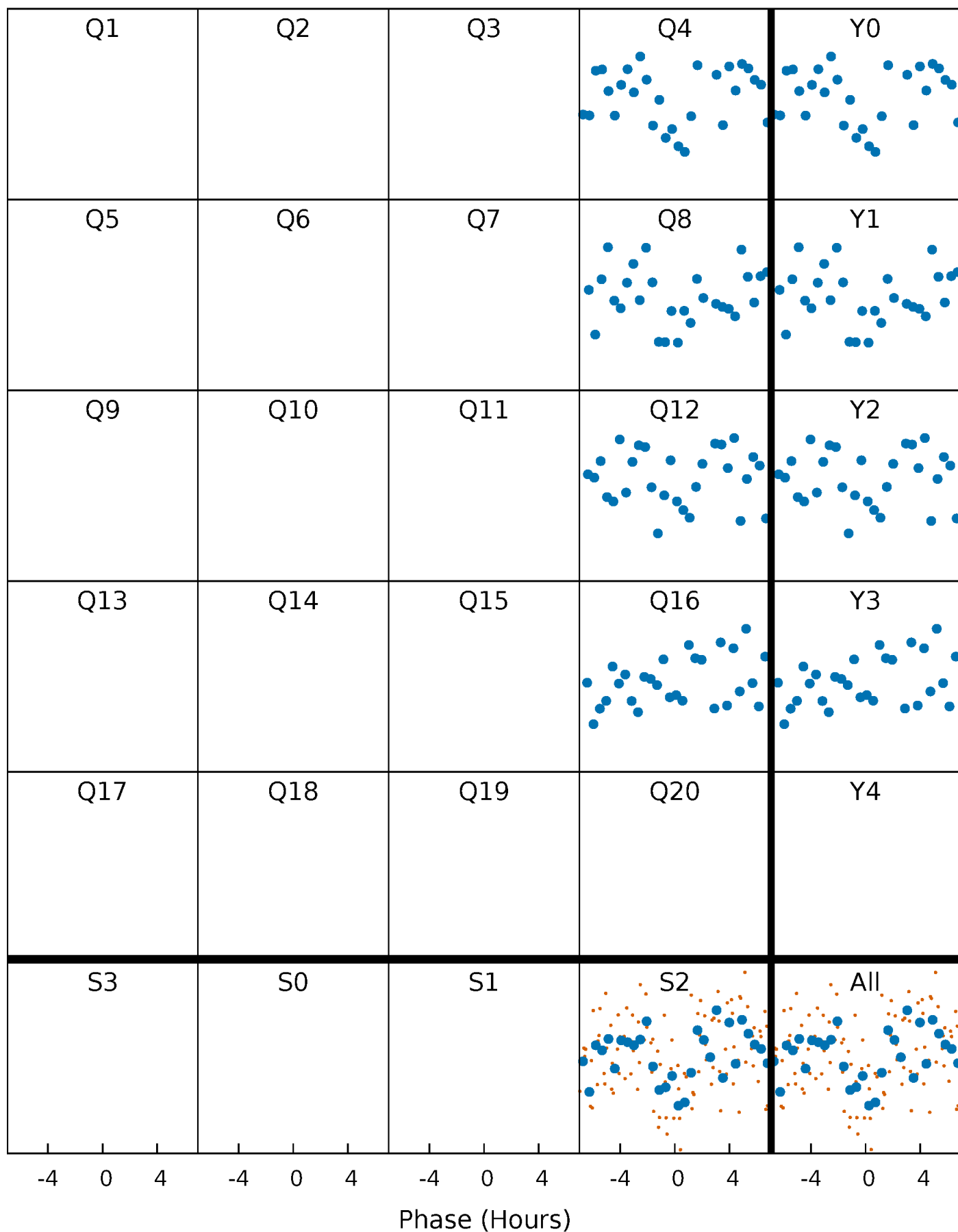


Non-Whitened Vs. Whitened Light Curve



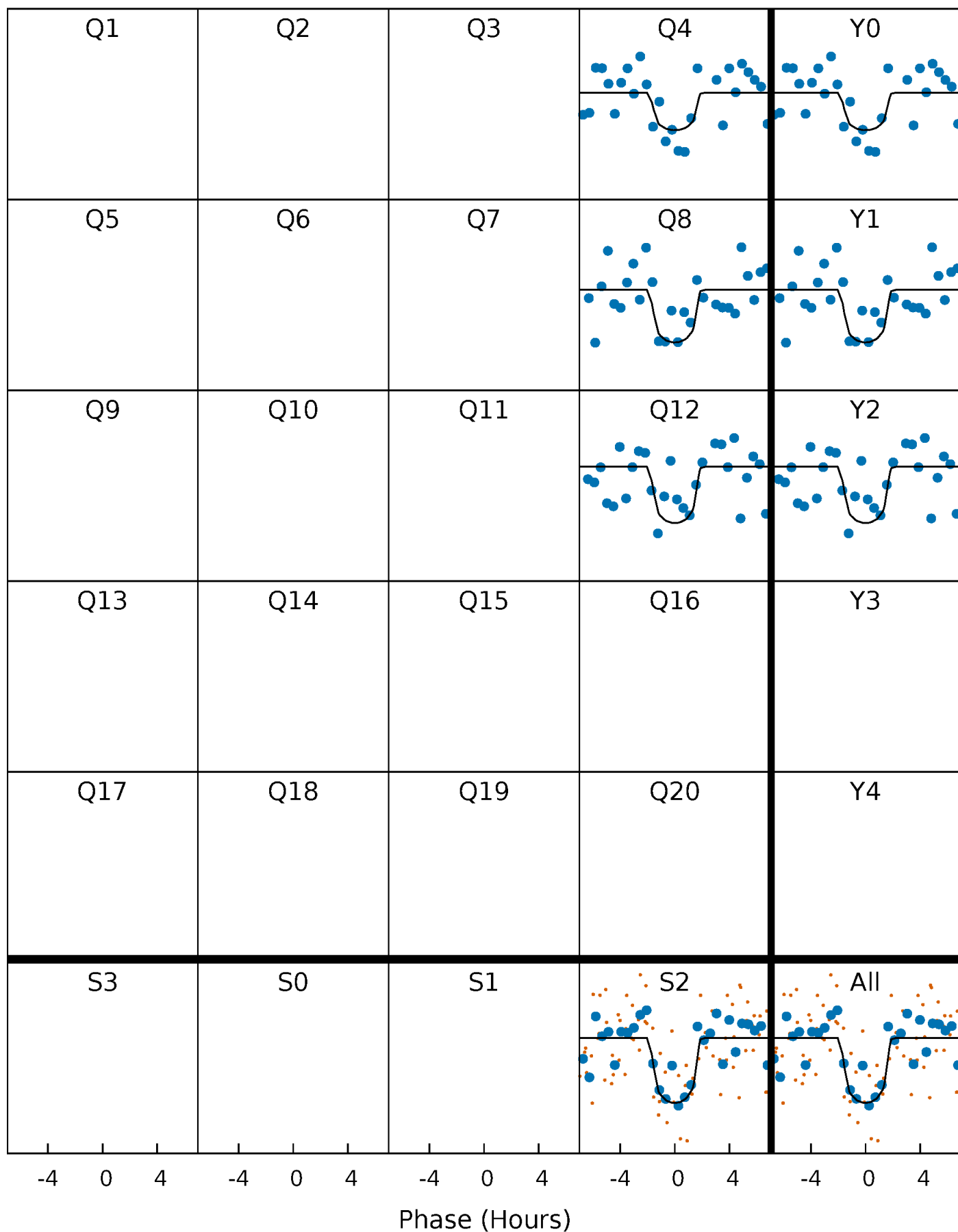
PDC Quarter-Phased Transit Curves

TCE 008741296-01 P=361.636588 Days $T_0=389.200929$ (BKJD)



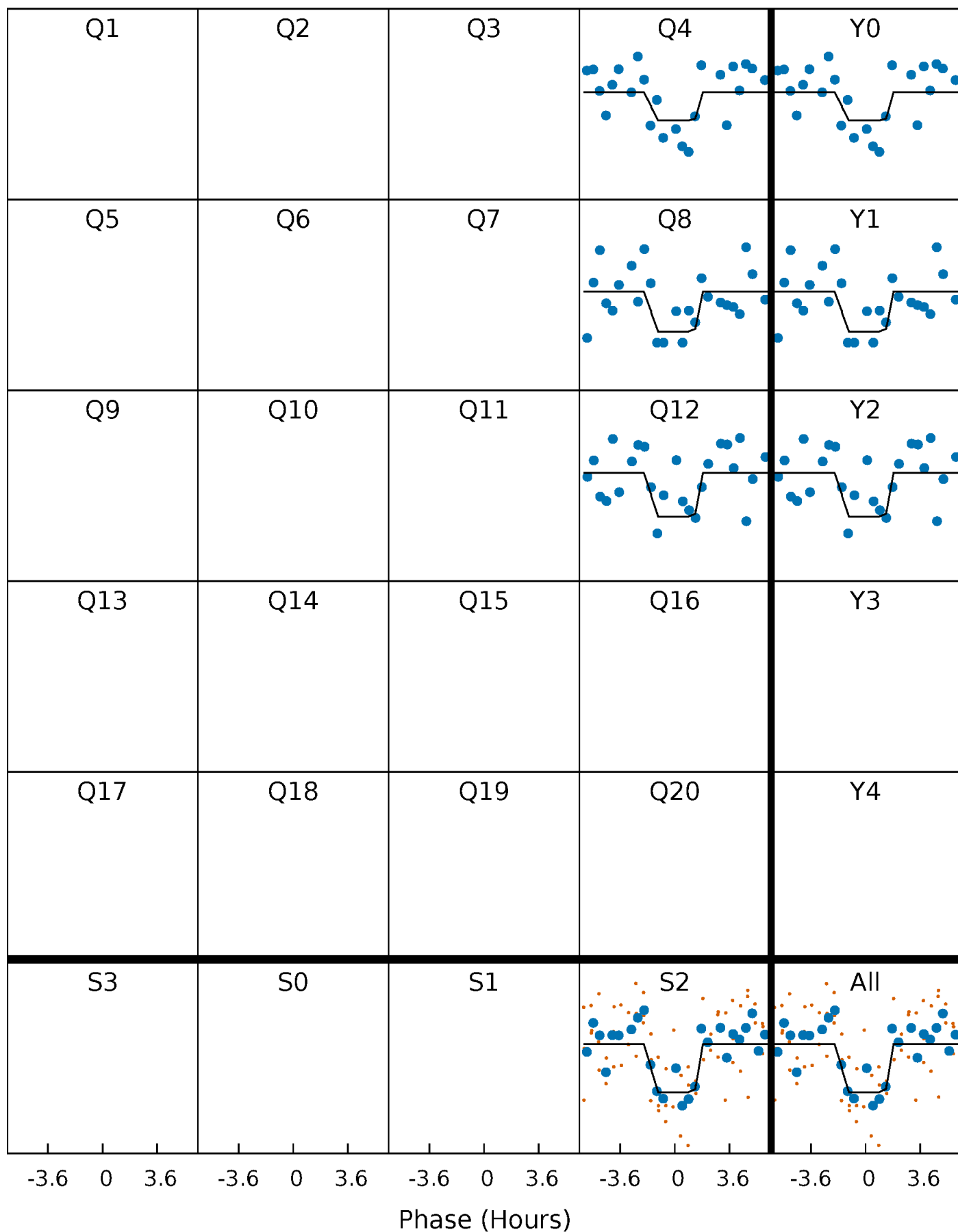
DV Quarter-Phased Transit Curves

TCE 008741296-01 $P=361.636588$ Days $T_0=389.200929$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

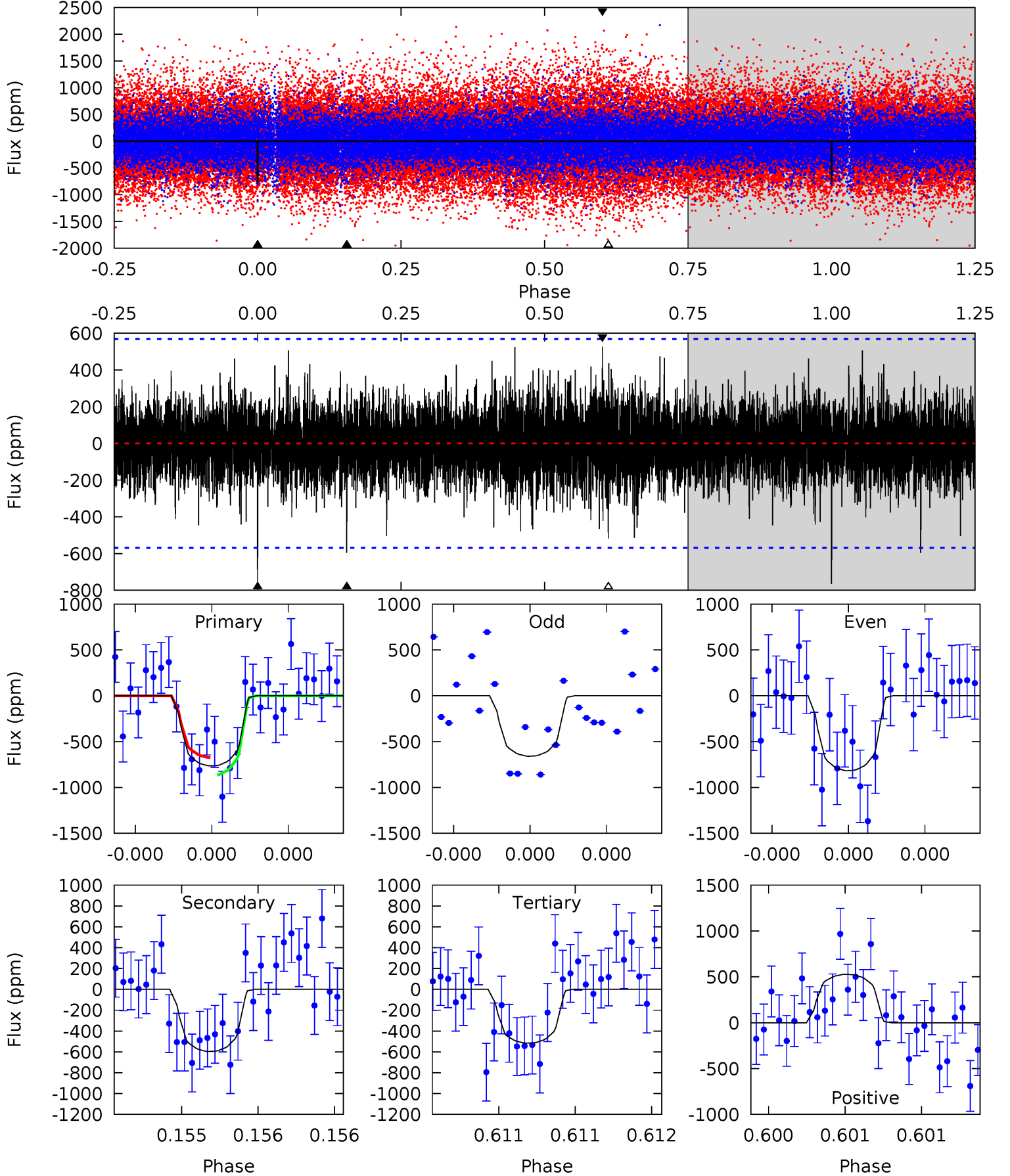
TCE 008741296-01 P=361.633186 Days $T_0=389.202381$ (BKJD)



DV Model-Shift Uniqueness Test

008741296-01, $P = 361.636588$ Days, $E = 27.564341$ Days

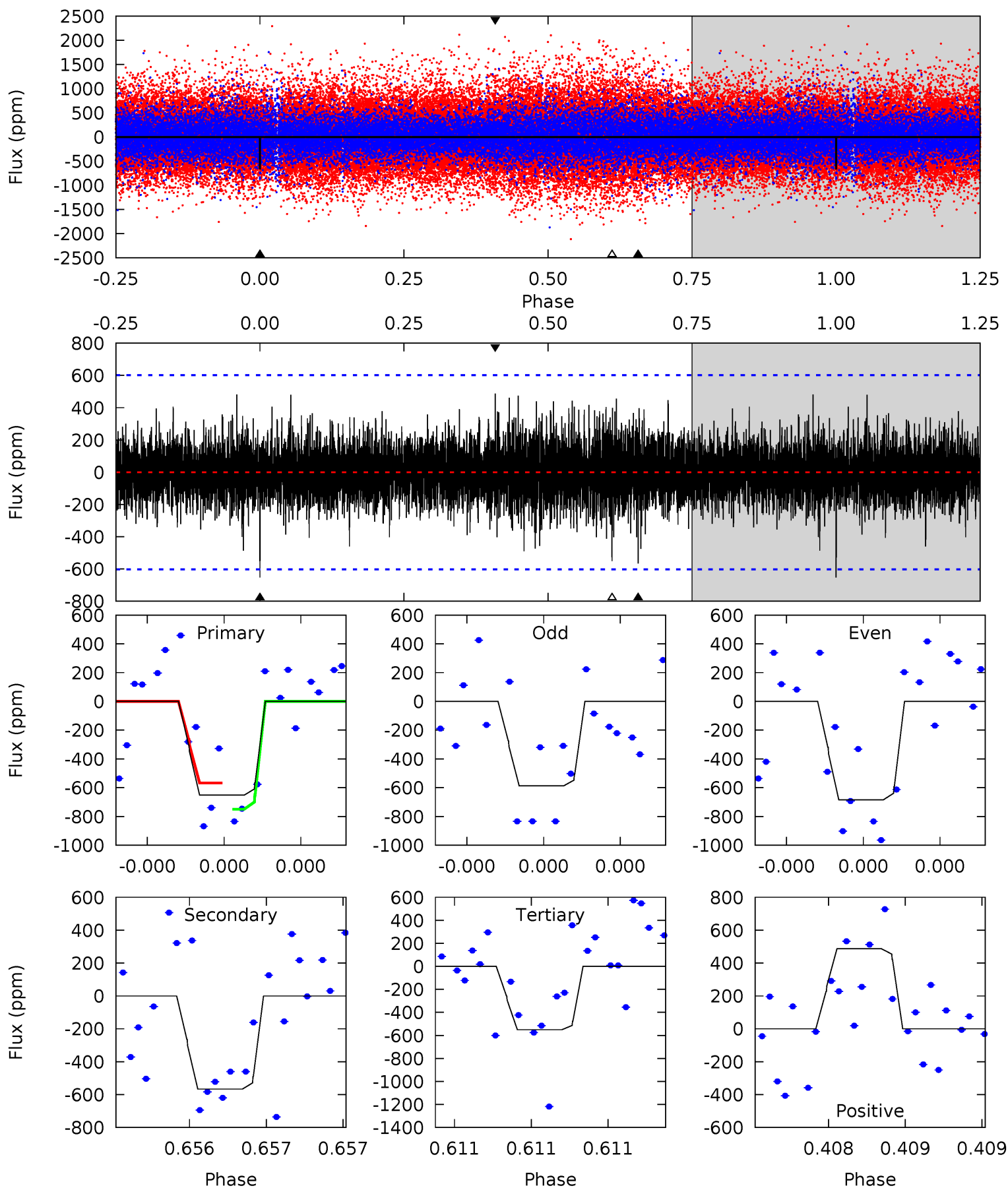
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.53	5.87	5.09	5.19	5.59	3.51	1.24	2.45	2.35	0.79	0.69	0.72	1.16	0.41	0.93



Alt Model-Shift Uniqueness Test

008741296-01, P = 361.633186 Days, E = 27.569195 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.08	5.28	5.14	4.54	5.61	3.54	1.14	0.94	1.54	0.15	0.74	0.43	1.11	0.43	0.84



Stellar Parameters For KIC 008741296

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5002^{+150}_{-135}	$4.637^{+0.065}_{-0.035}$	$-0.820^{+0.300}_{-0.300}$	$0.623^{+0.053}_{-0.048}$	$0.613^{+0.061}_{-0.026}$	$3.576^{+0.877}_{-0.542}$
	+3%/-3%	+1%/-1%	+37%/-37%	+9%/-8%	+10%/-4%	+25%/-15%
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 008741296-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-597 ± 102	$3.26^{+2.91}_{-2.09}$	263^{+9}_{-9}	3839^{+1965}_{-708}	$22547^{+153311}_{-16532}$
Alt.	-566 ± 107	$3.19^{+2.59}_{-2.20}$	263^{+10}_{-8}	3873^{+2405}_{-695}	$22963^{+208757}_{-16407}$

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

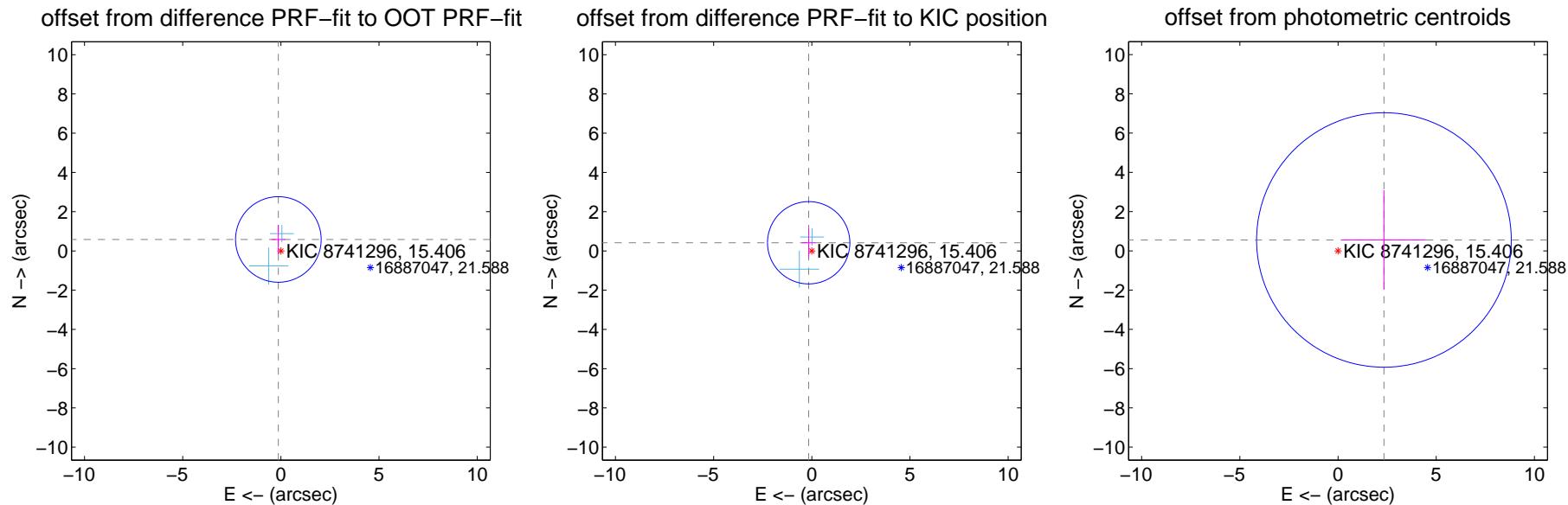
DV Centroid Data

Supplemental centroid analysis for 008741296-01. Kepler magnitude: 15.41. Transit SNR 7.33

There are 2 quarters with good PRF difference image offsets

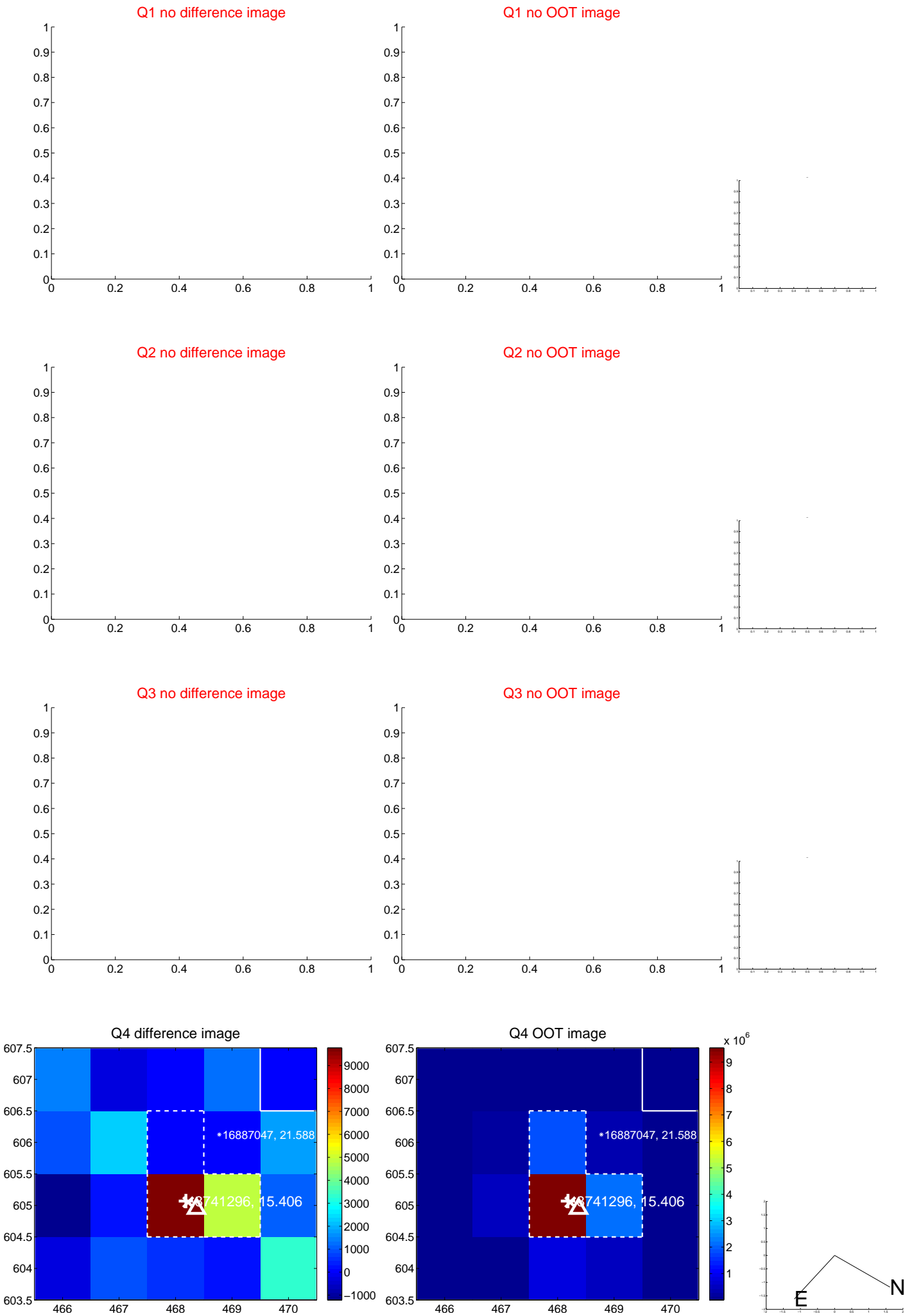
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.598 ± 0.727	0.82	0.128 ± 0.354	0.584 ± 0.740
PRF-fit source offset from KIC position	0.445 ± 0.699	0.64	0.159 ± 0.343	0.416 ± 0.737
photometric centroid source offset	2.40 ± 2.16	1.11	-2.34 ± 2.14	0.55 ± 2.53

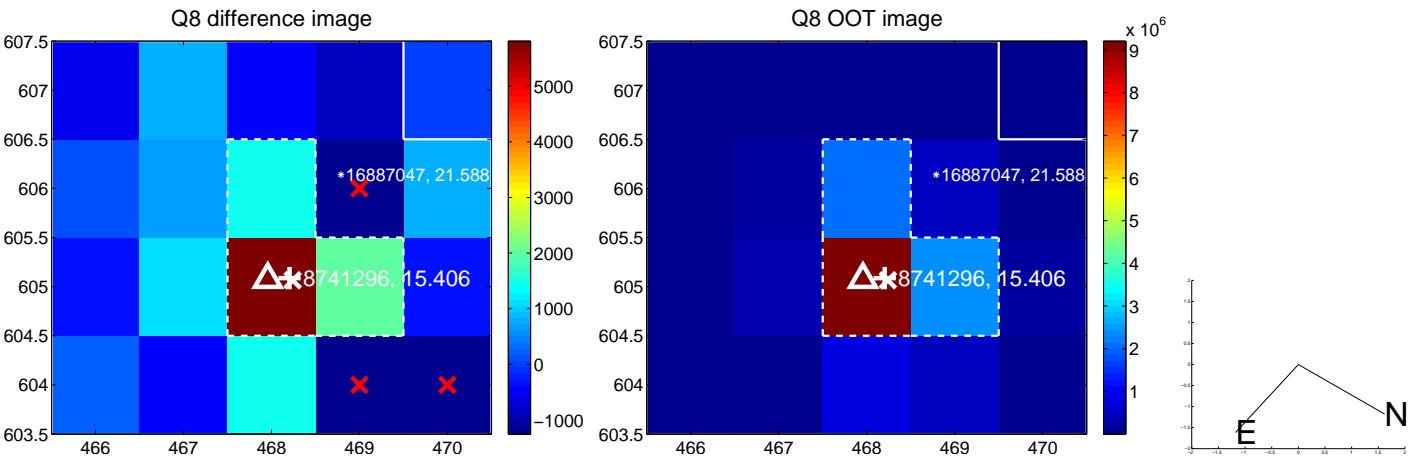


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

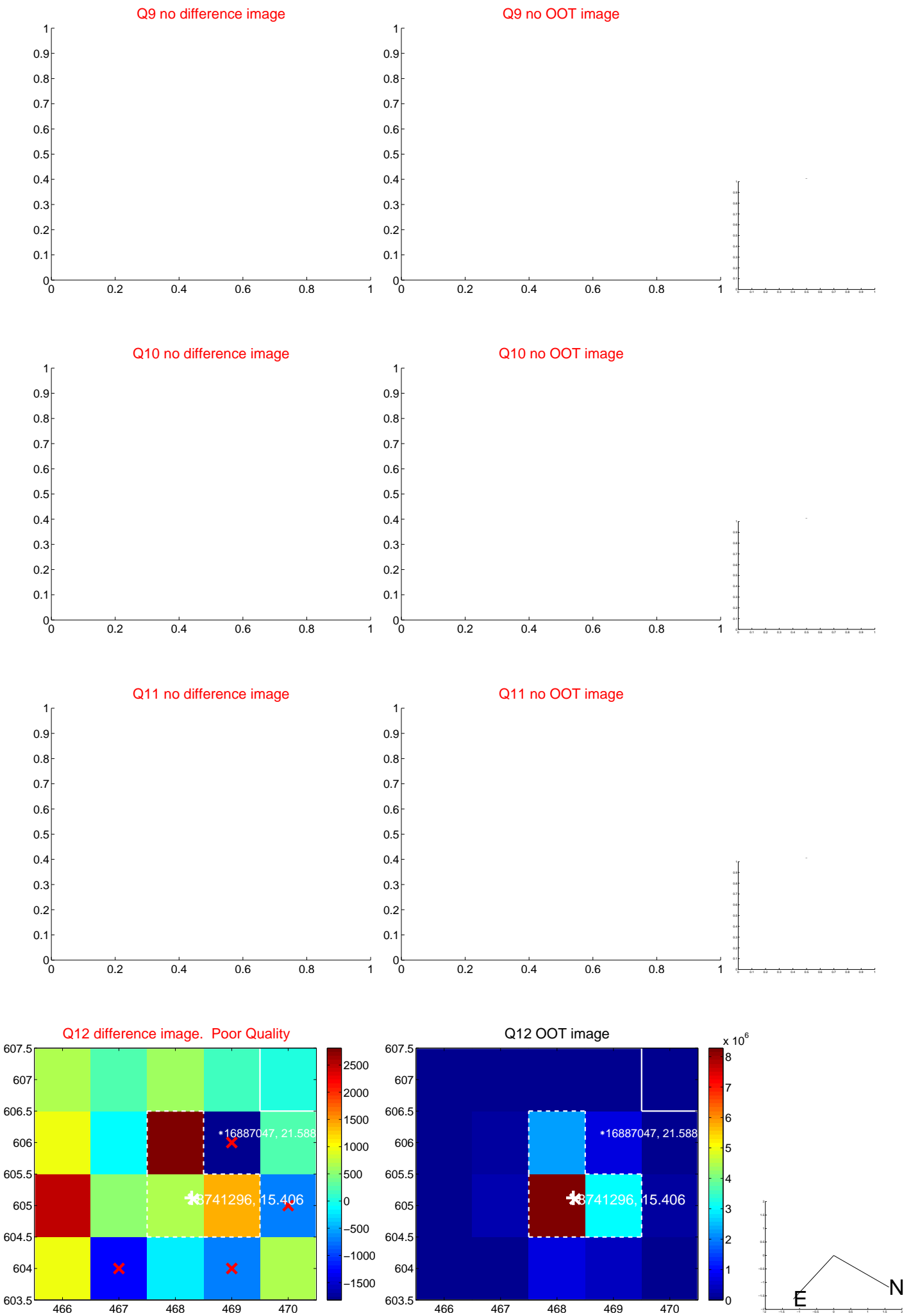
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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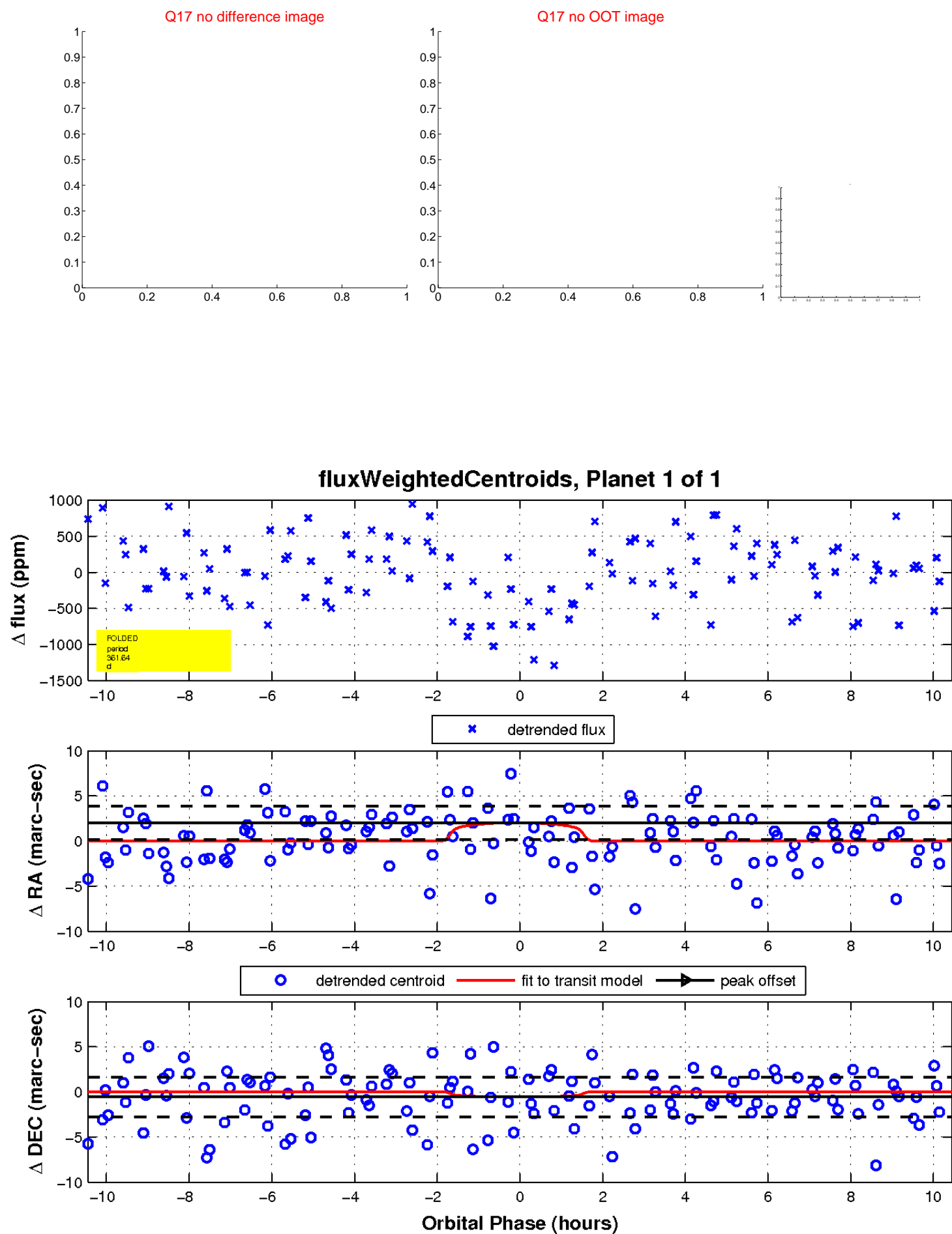
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UKIRT Image

Declination

