

KIC 008106272

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})
008106272-02	OBS	No	376.341312	361.390706	1451.6	51.939	7.4	10.1	0.81	5953	5.80	0.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008106272-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—MOD_NONUNIQ_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.

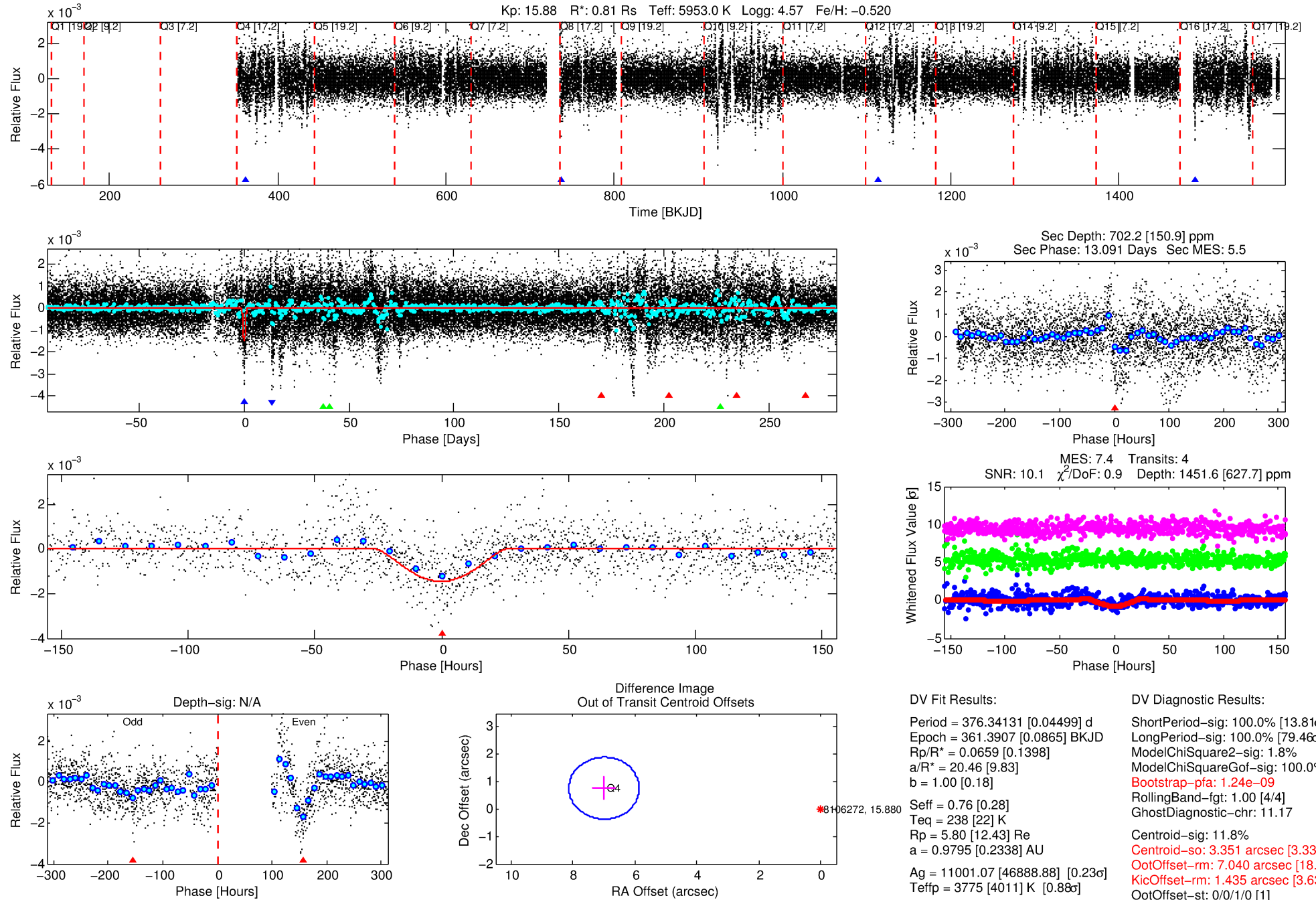
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008106272-02

No Significant Match Found

DV One-Page Summary

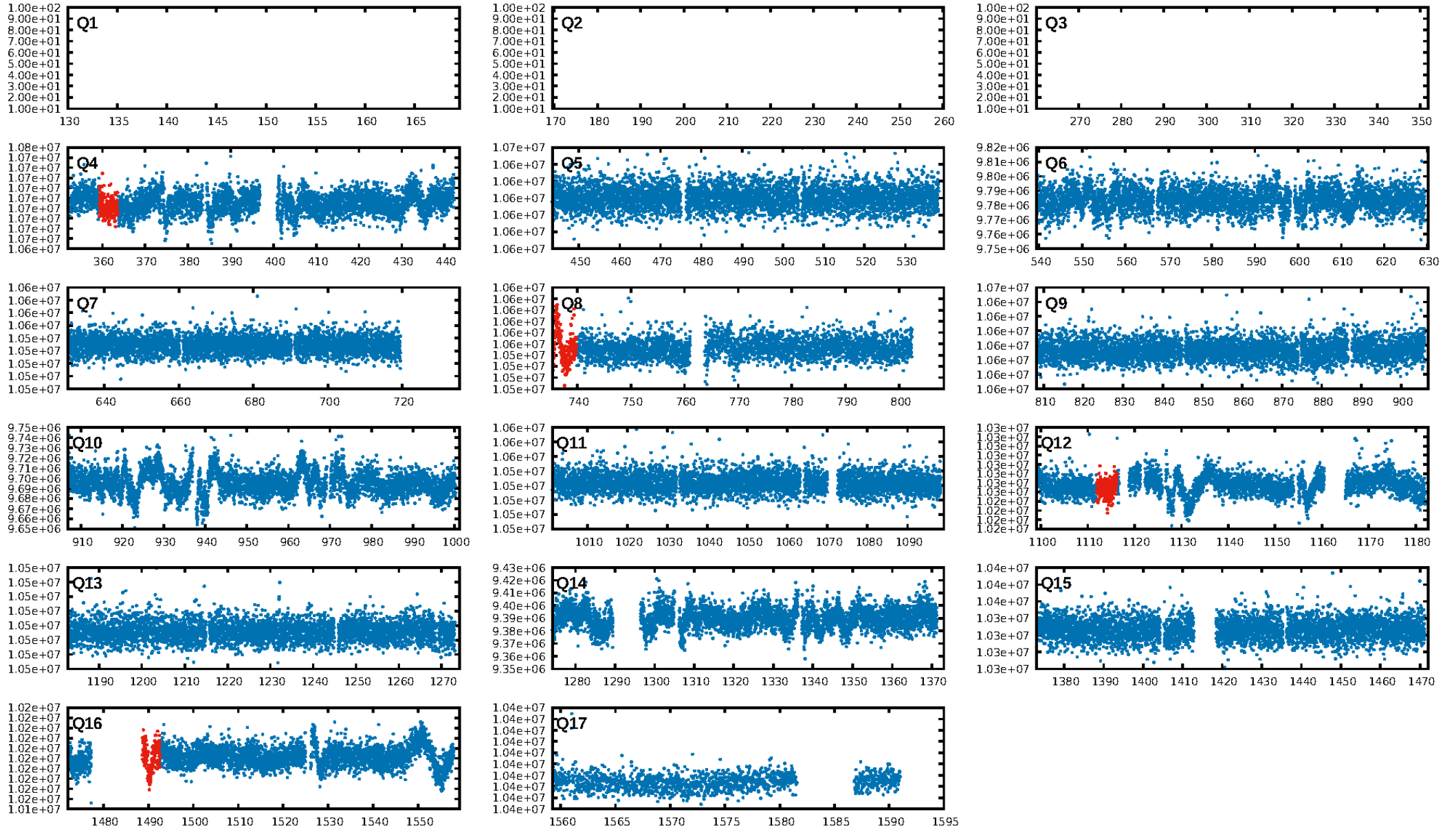
KIC: 8106272 Candidate: 2 of 3 Period: 376.341 d



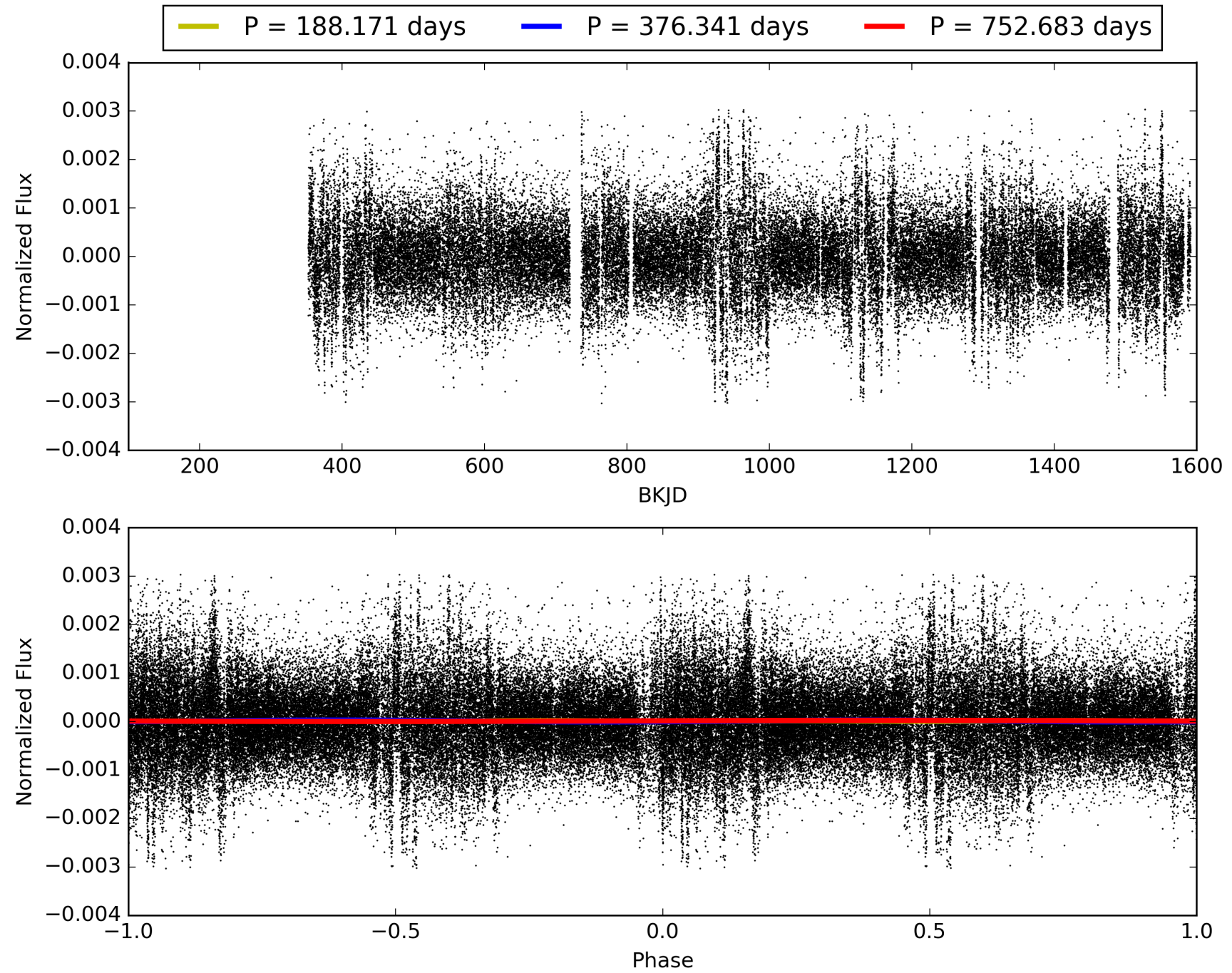
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:41:41 Z

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

TCE 008106272-02, PDC Light Curves

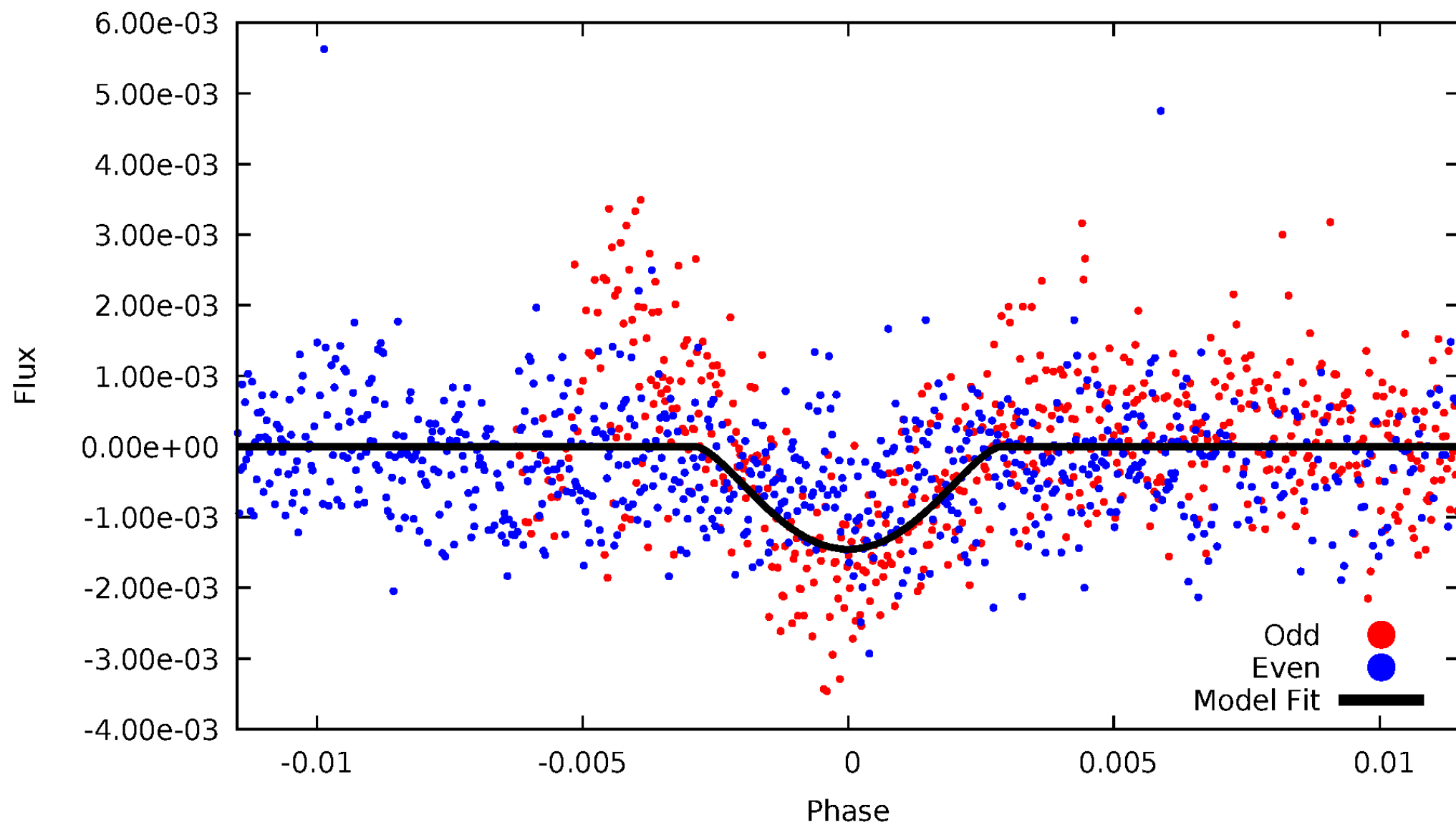


TCE 008106272-02



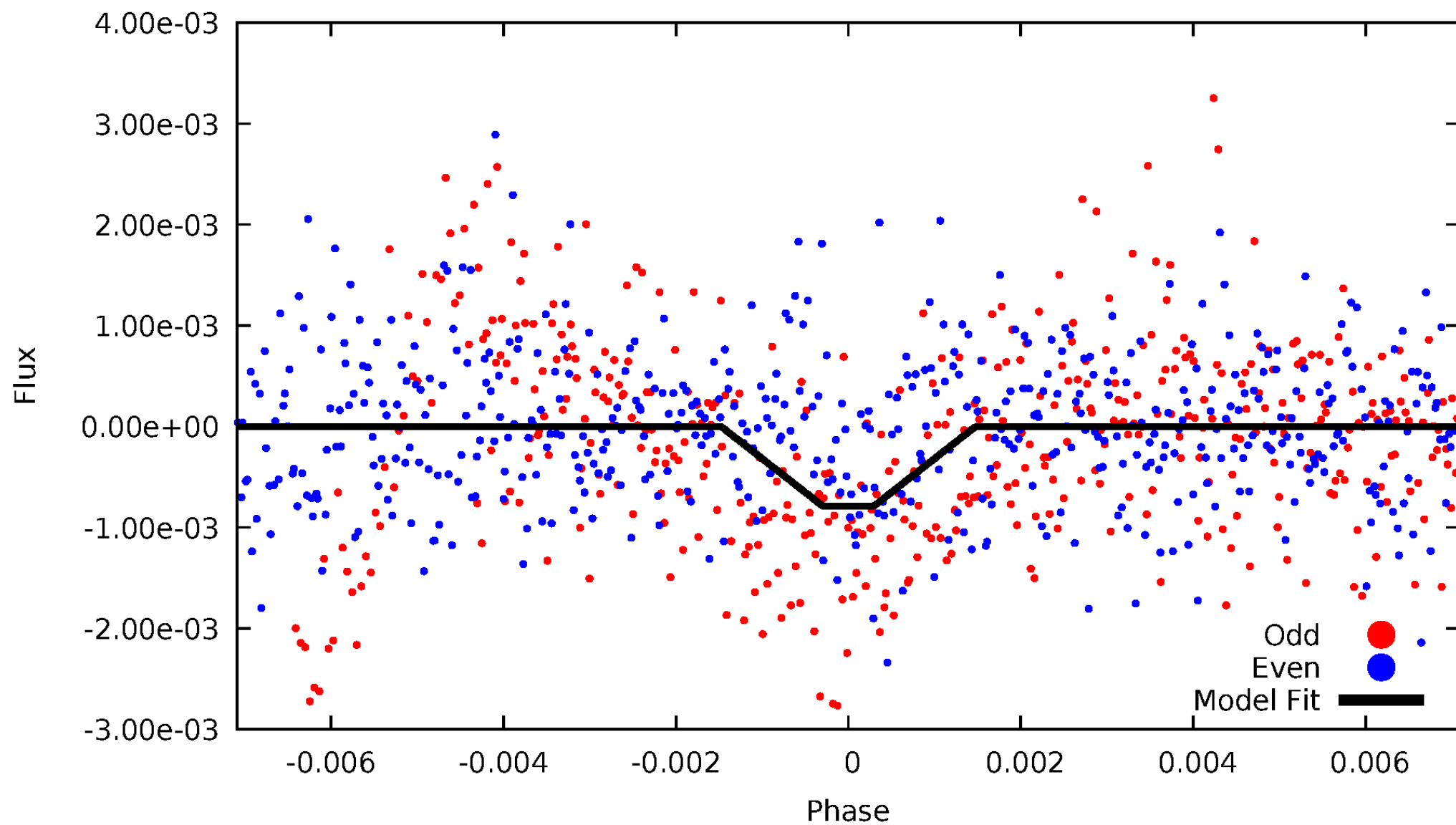
DV Odd/Even

TCE 008106272-02



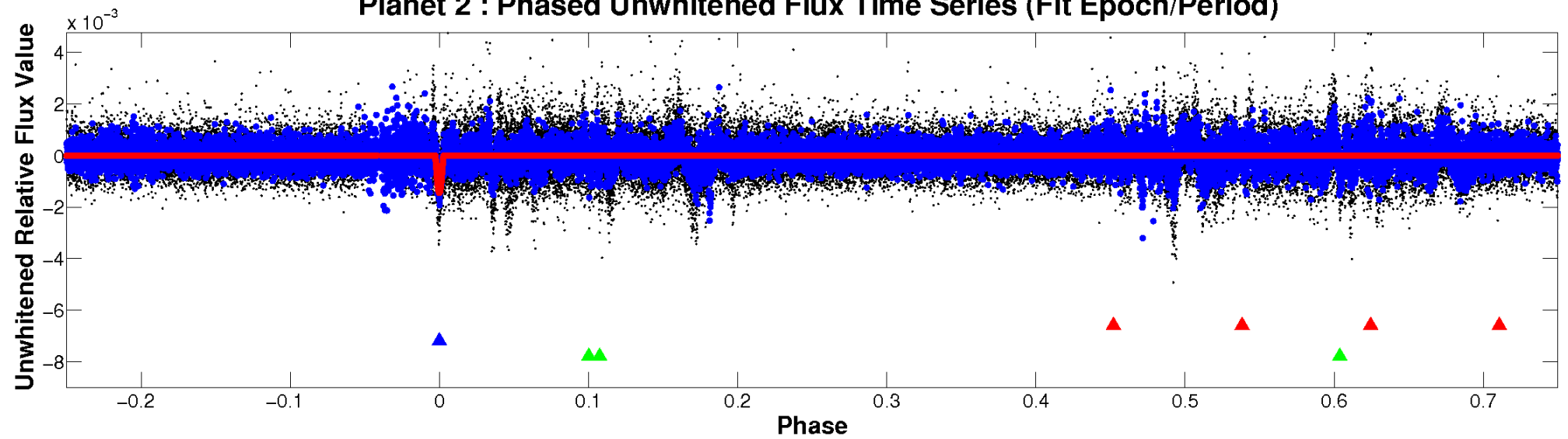
ALT Odd/Even

TCE 008106272-02

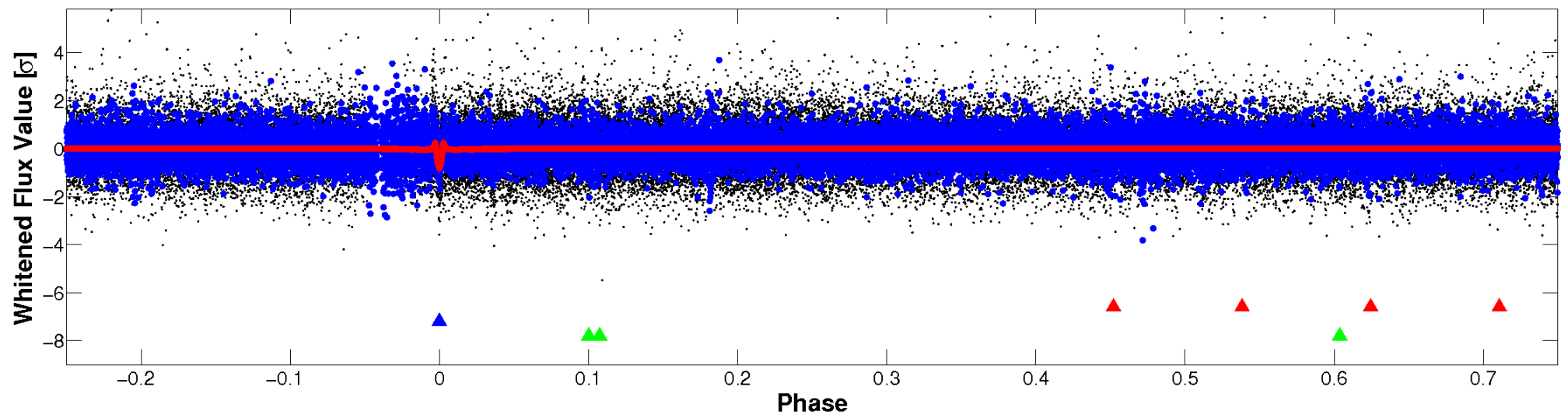


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)



Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 008106272-02 P=376.341312 Days $T_0=361.390706$ (BKJD)



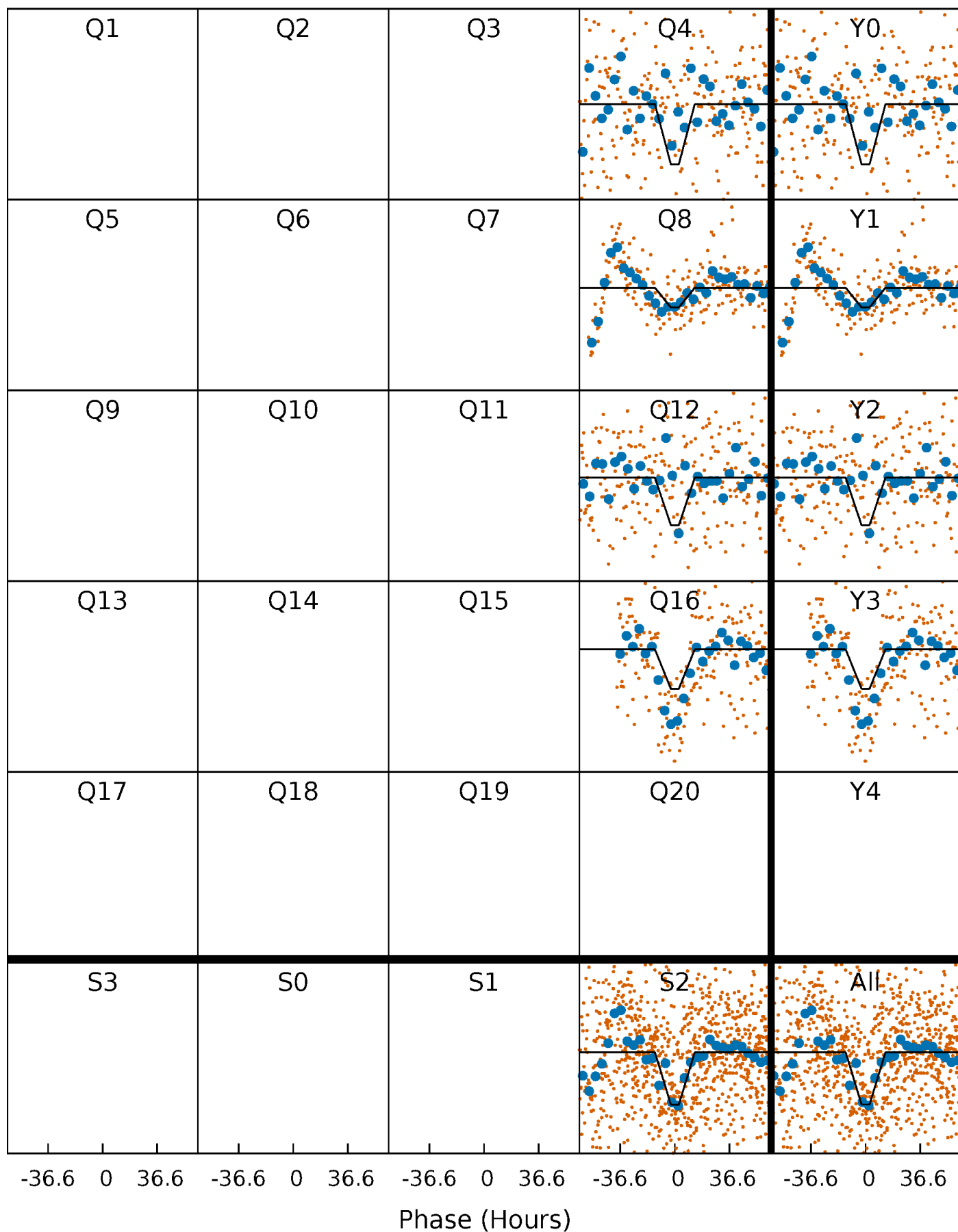
DV Quarter-Phased Transit Curves

TCE 008106272-02 P=376.341312 Days $T_0=361.390706$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

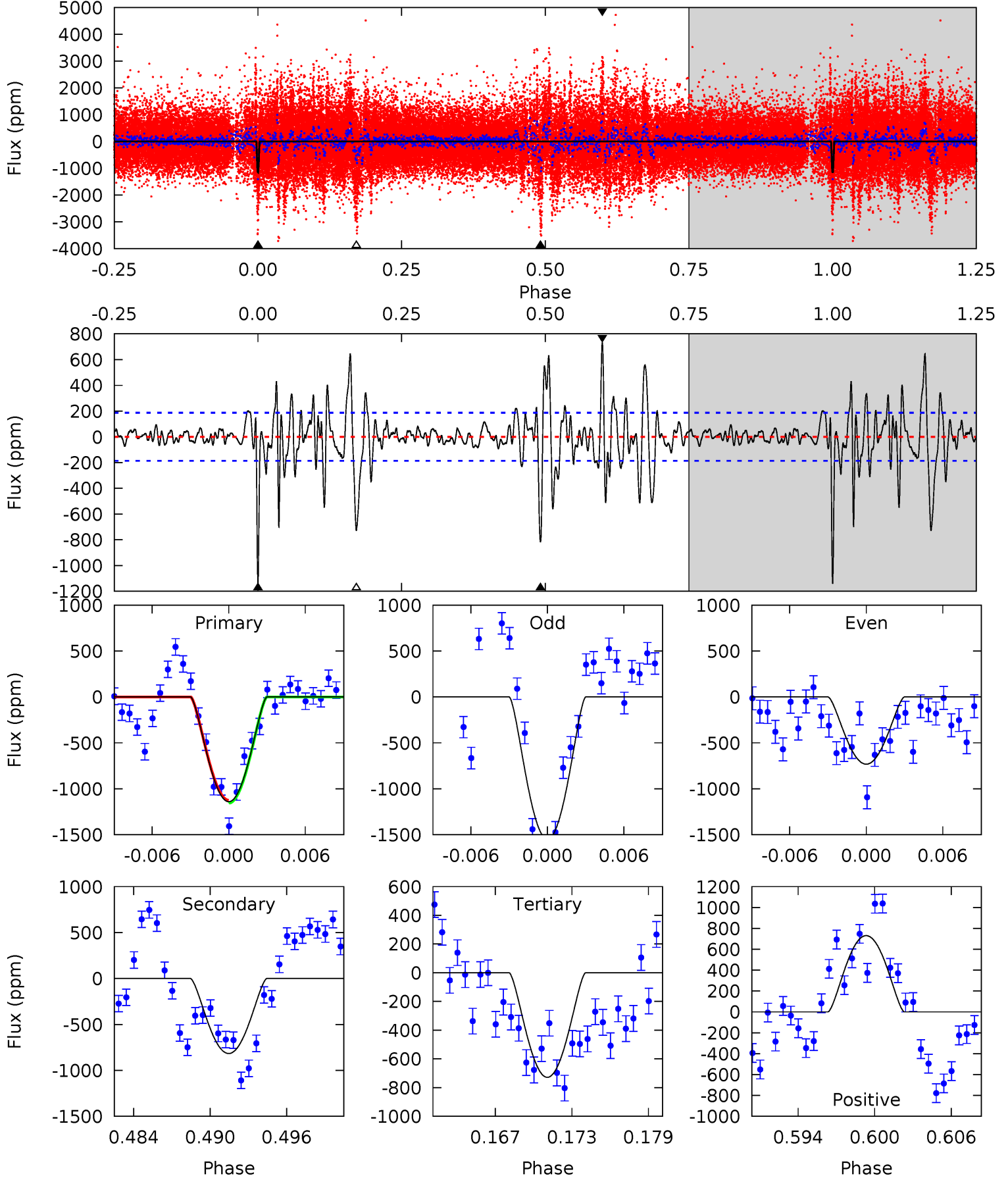
TCE 008106272-02 P=376.256763 Days $T_0=361.538272$ (BKJD)



DV Model-Shift Uniqueness Test

008106272-02, P = 376.341312 Days, E = 361.390706 Days

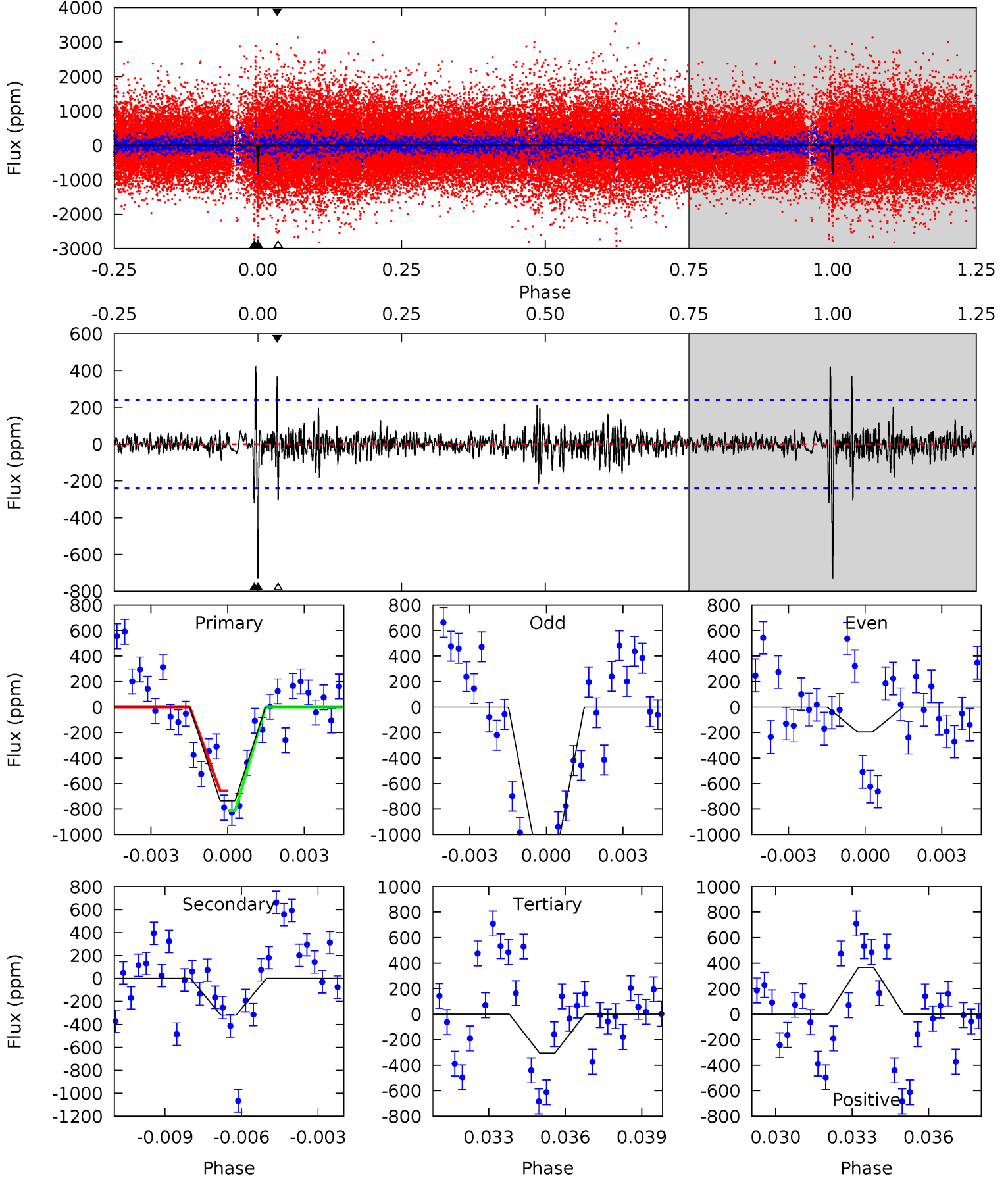
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.4	22.5	20.0	20.1	5.13	2.76	4.92	11.3	11.3	2.42	2.37	11.2	1.07	0.39	0.42



Alt Model-Shift Uniqueness Test

008106272-02, $P = 376.256763$ Days, $E = 361.538272$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.1	7.03	6.71	8.06	5.25	2.97	1.03	9.39	8.04	0.31	-1.04	11.7	1.33	0.36	1.72



Stellar Parameters For KIC 008106272

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5953^{+195}_{-195}	$4.571^{+0.046}_{-0.184}$	$-0.520^{+0.300}_{-0.300}$	$0.807^{+0.233}_{-0.073}$	$0.885^{+0.096}_{-0.096}$	$2.367^{+0.462}_{-1.215}$
	+3%/-3%	+1%/-4%	+58%/-58%	+29%/-9%	+11%/-11%	+19%/-51%
Source	KIC0	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 008106272-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-817 ± 36	$11.56^{+11.10}_{-8.03}$	341^{+22}_{-15}	3375^{+1850}_{-566}	3125^{+31630}_{-2297}
Alt.	-320 ± 45	$9.70^{+10.28}_{-6.61}$	340^{+21}_{-17}	3068^{+1425}_{-522}	1712^{+15337}_{-1304}

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 $A_{obs} \gg 1.0$

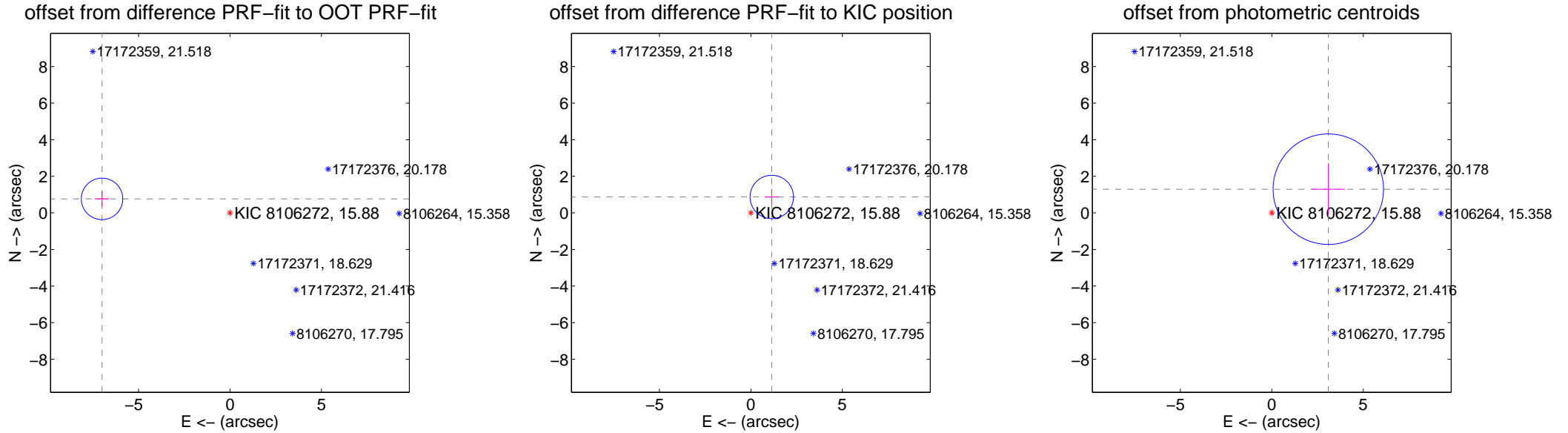
DV Centroid Data

Supplemental centroid analysis for 008106272-02. Kepler magnitude: 15.88. Transit SNR 10.06

There are 0 quarters with good PRF difference image offsets

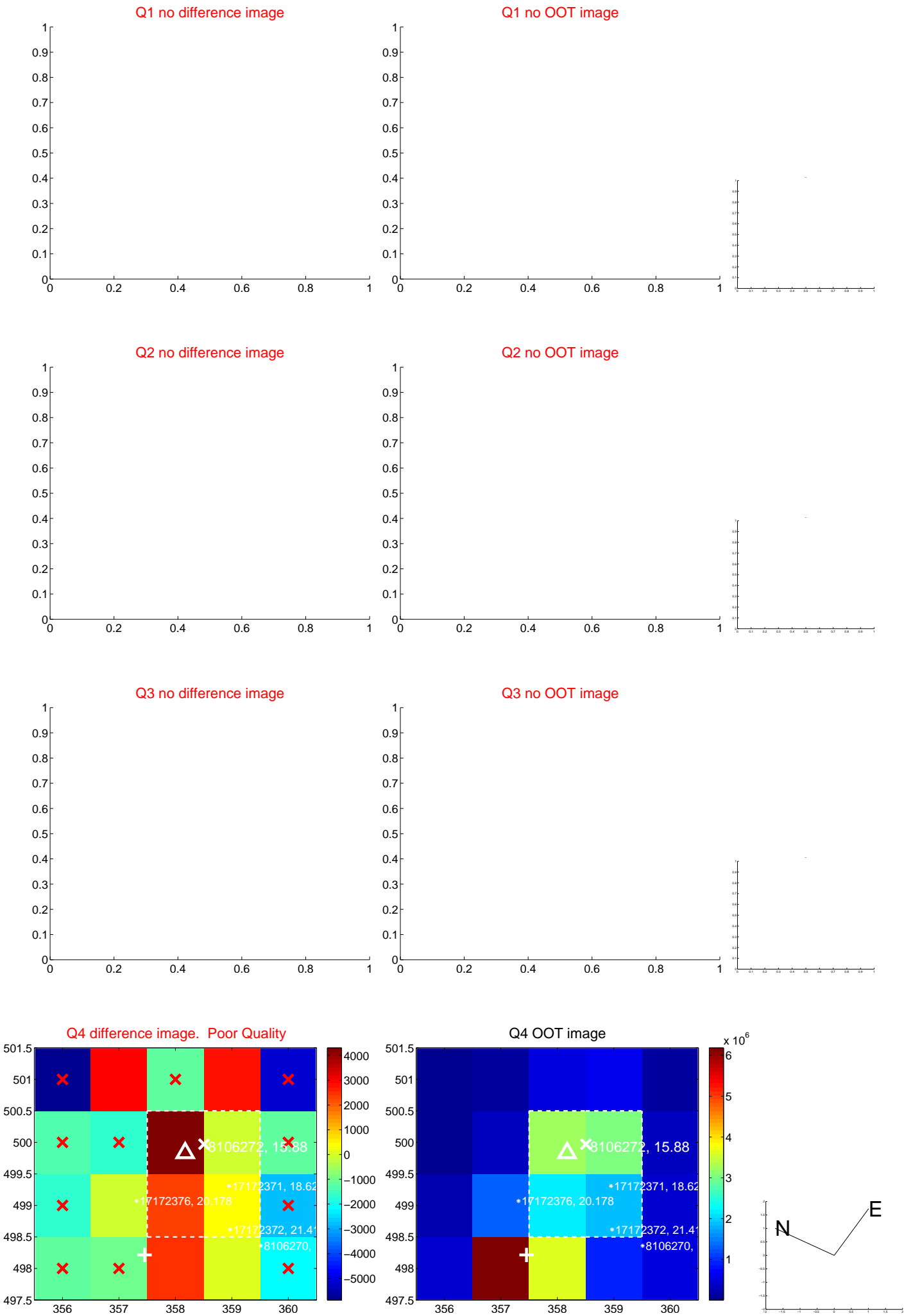
The OOT PRF centroid is offset from the target star catalog position by about 8.14 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.040 ± 0.378	18.63	6.999 ± 0.377	0.765 ± 0.425
PRF-fit source offset from KIC position	1.435 ± 0.396	3.63	-1.142 ± 0.377	0.869 ± 0.425
photometric centroid source offset	3.35 ± 1.01	3.33	-3.09 ± 0.92	1.29 ± 1.41



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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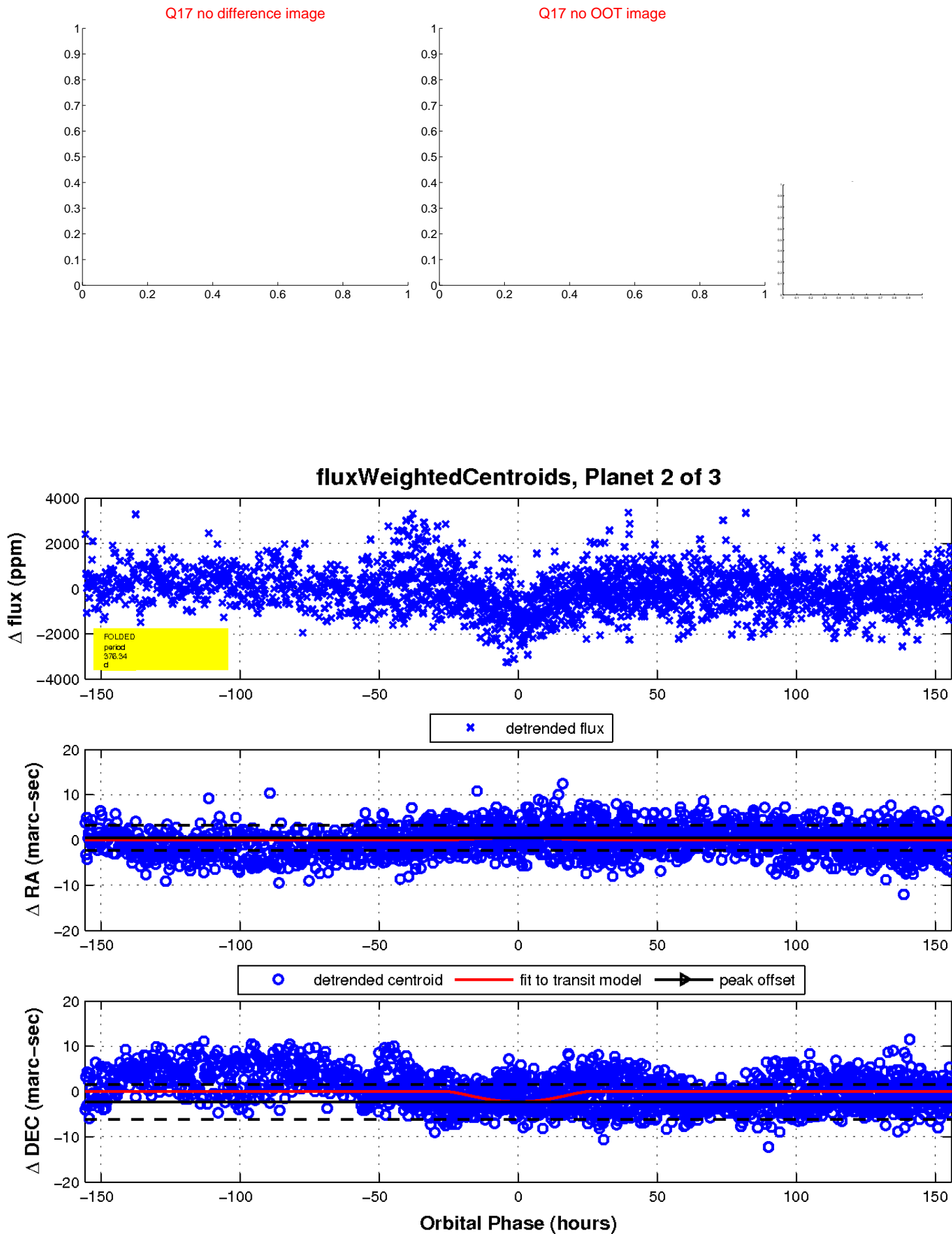
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UKIRT Image

Declination

