

KIC 008625796

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})
008625796-01	OBS	No	442.134234	214.643102	720.1	20.035	7.5	9.6	0.80	5497	2.19	0.44

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008625796-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—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.

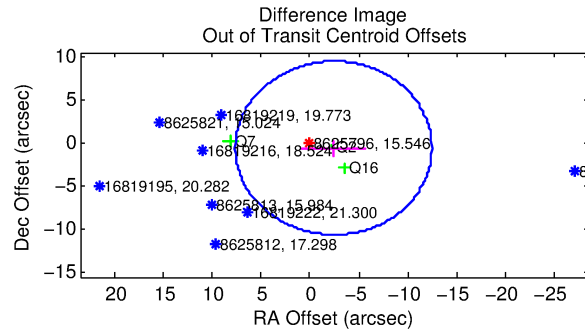
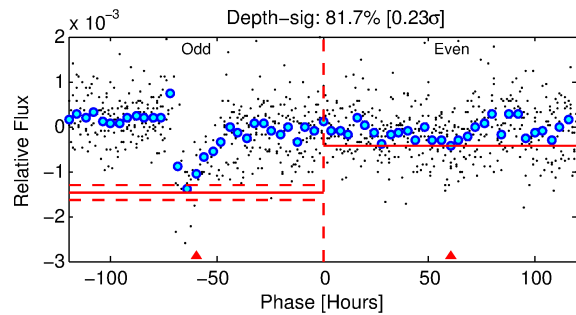
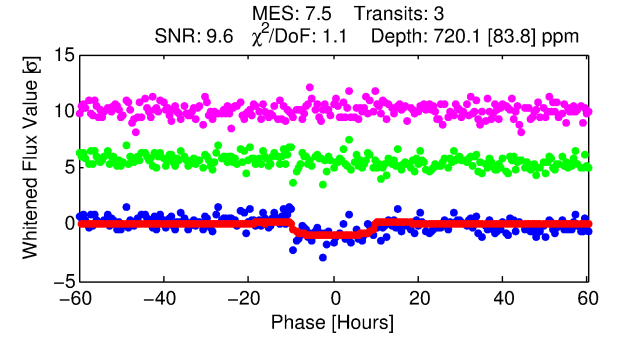
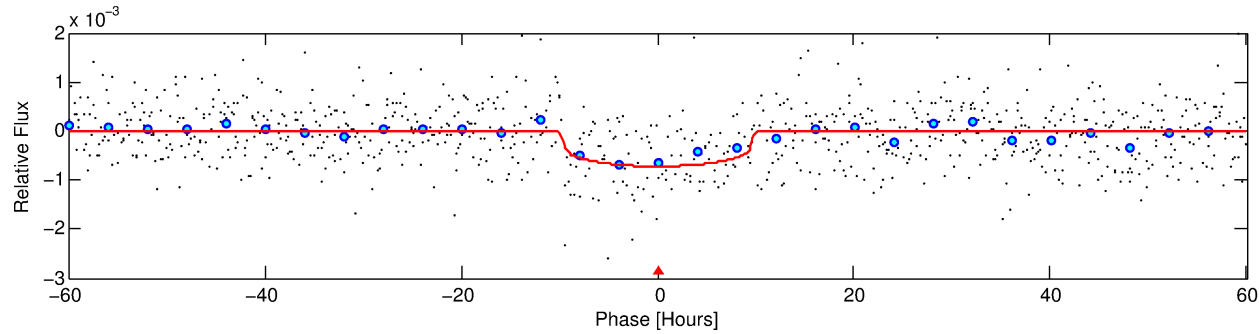
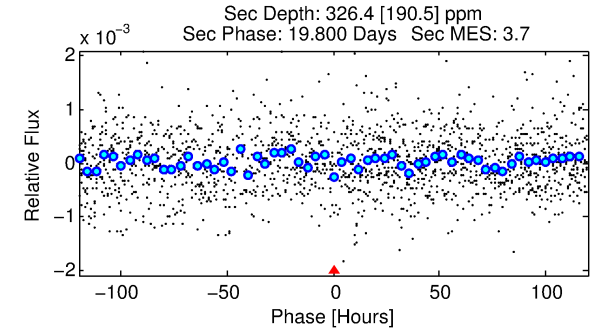
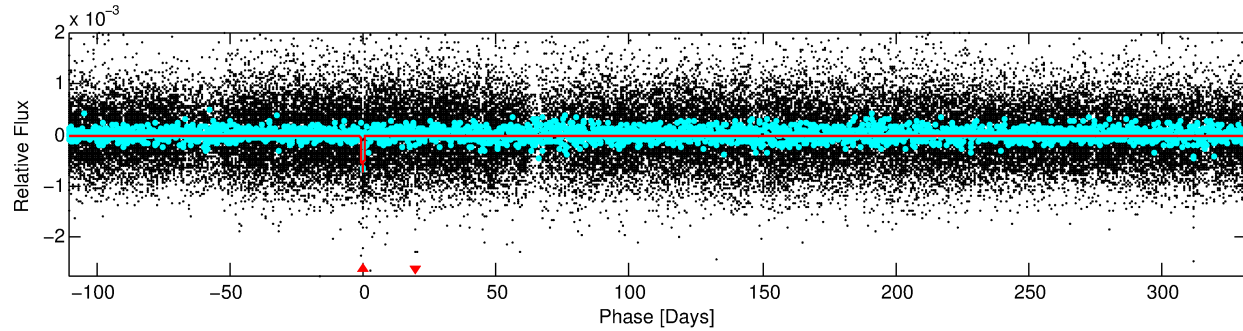
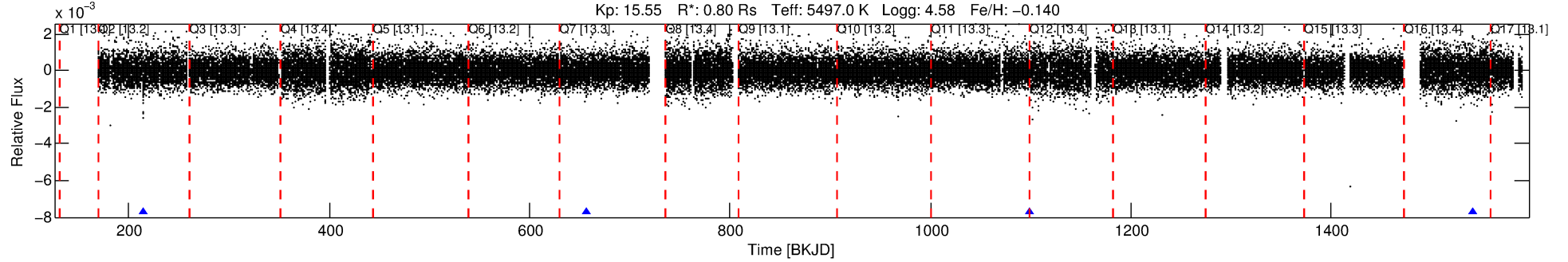
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008625796-01

No Significant Match Found

DV One-Page Summary

KIC: 8625796 Candidate: 1 of 1 Period: 442.134 d



DV Fit Results:

Period = 442.13423 [0.01354] d
Epoch = 214.6431 [0.0218] BKJD
Rp/R* = 0.0251 [0.0110]
a/R* = 148.40 [261.31]
b = 0.53 [2.45]
Seff = 0.44 [0.12]
Teq = 208 [14] K
Rp = 2.19 [1.06] Re
a = 1.0926 [0.1872] AU
Ag = 44509.22 [48034.62] [0.93σ]
Teffp = 4660 [1231] K [3.62σ]

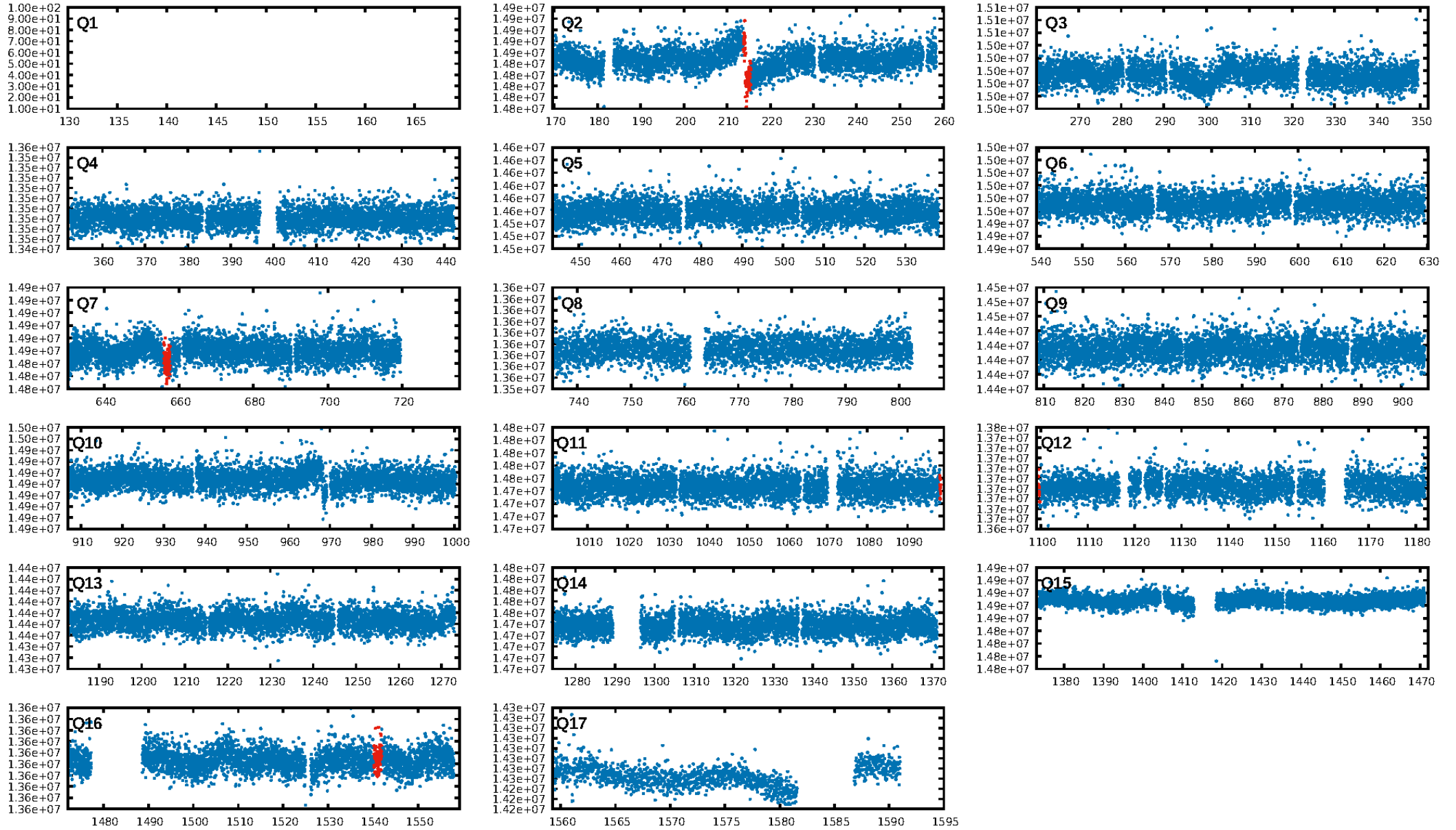
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 98.2%
Bootstrap-pfa: 1.30e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 4.93
Centroid-sig: 0.8%
Centroid-so: 3.110 arcsec [2.13σ]
OotOffset-rm: 2.474 arcsec [0.74σ]
KicOffset-rm: 2.318 arcsec [0.65σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

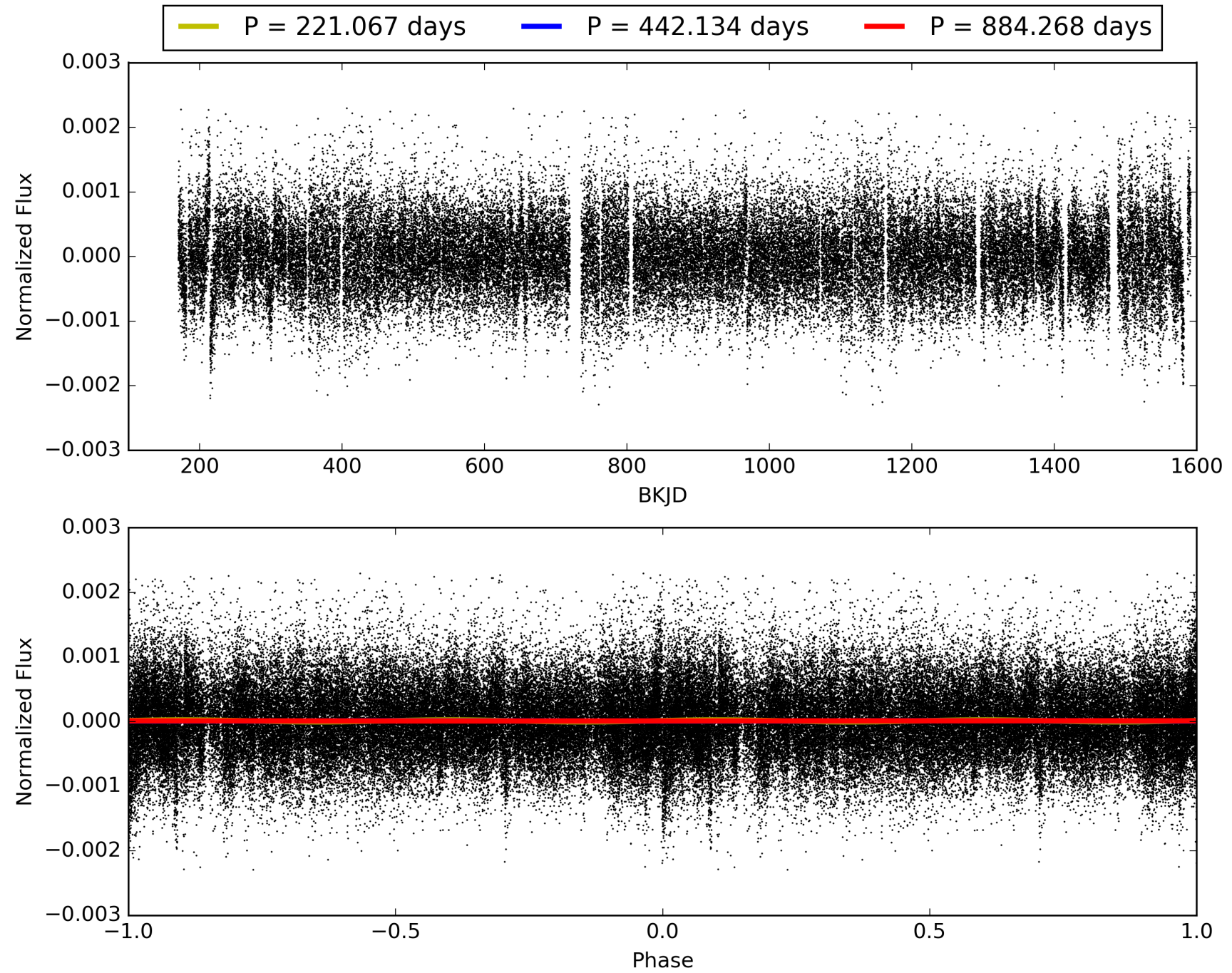
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:04:17 Z

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

TCE 008625796-01, PDC Light Curves

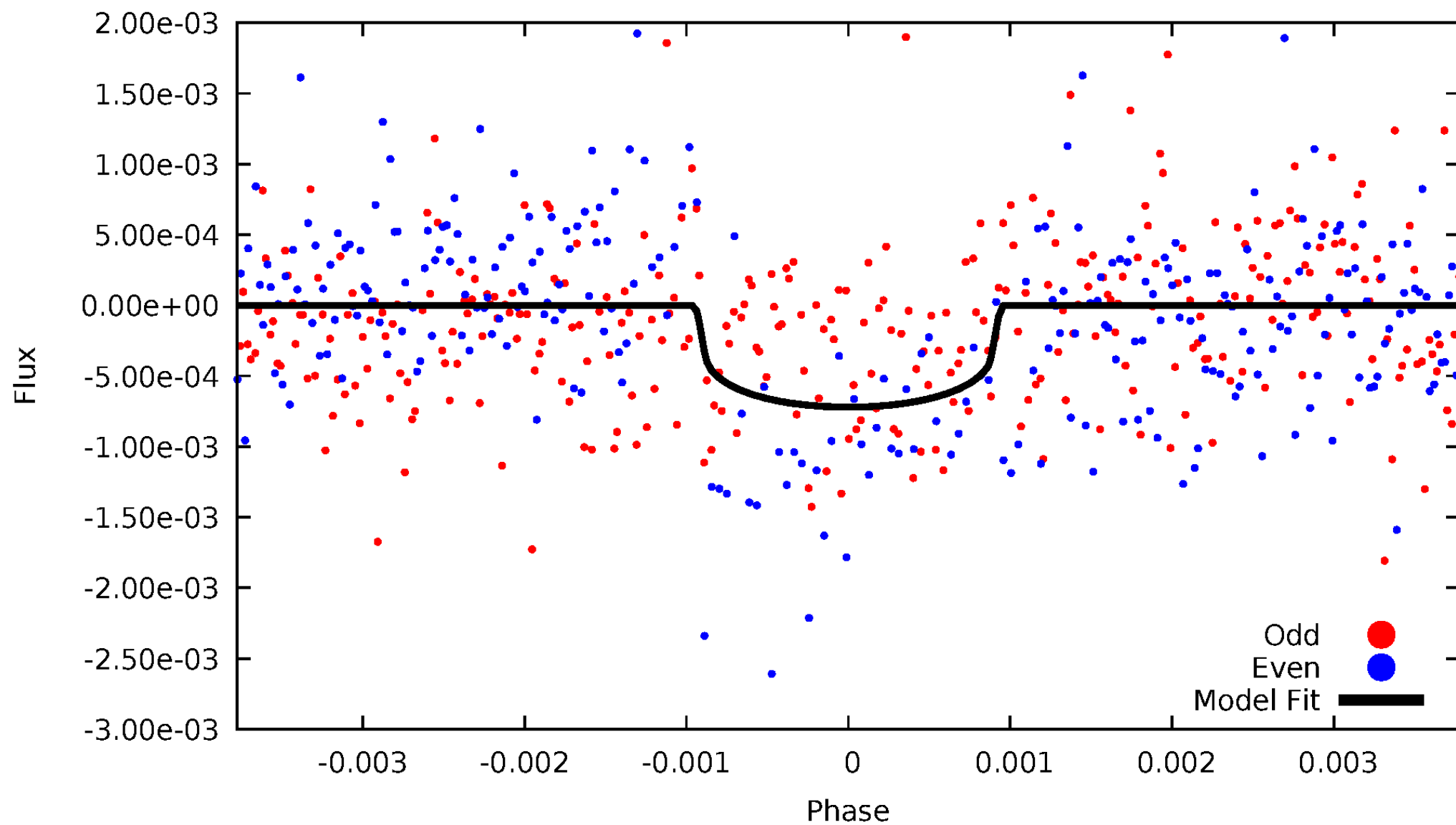


TCE 008625796-01



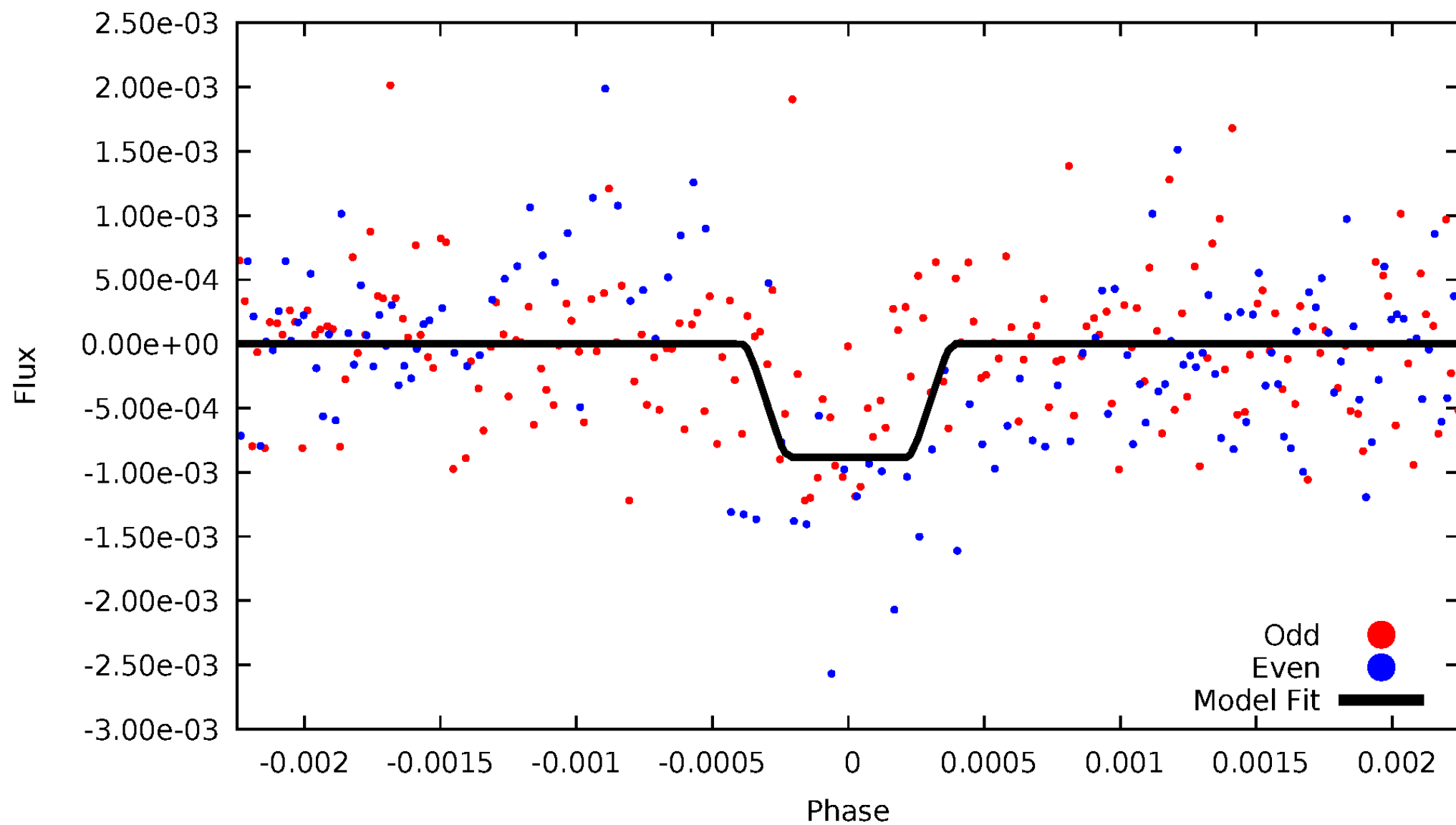
DV Odd/Even

TCE 008625796-01



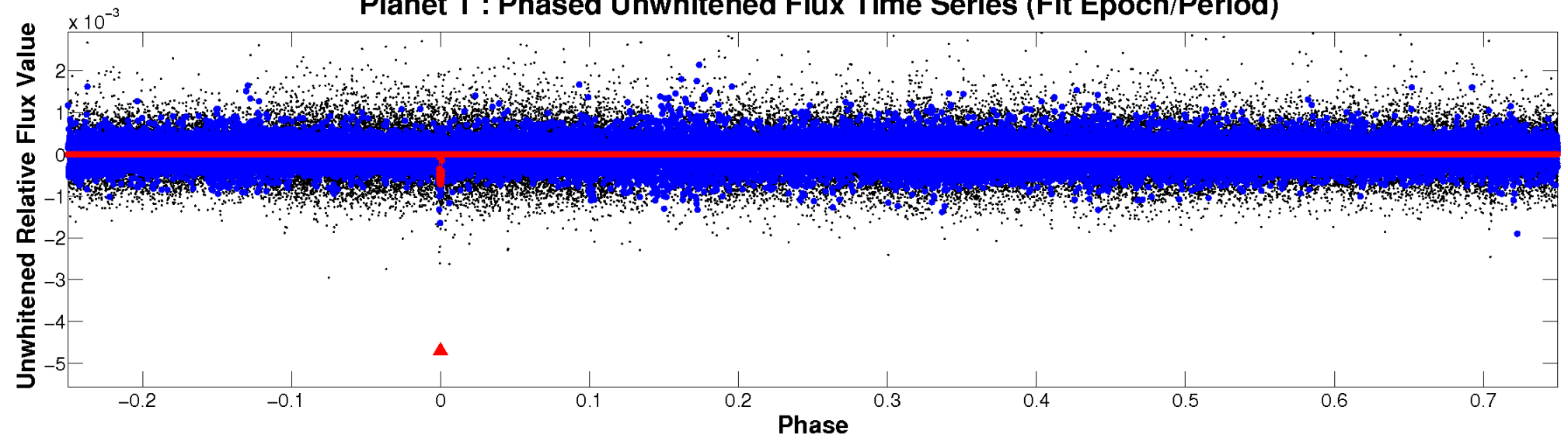
ALT Odd/Even

TCE 008625796-01

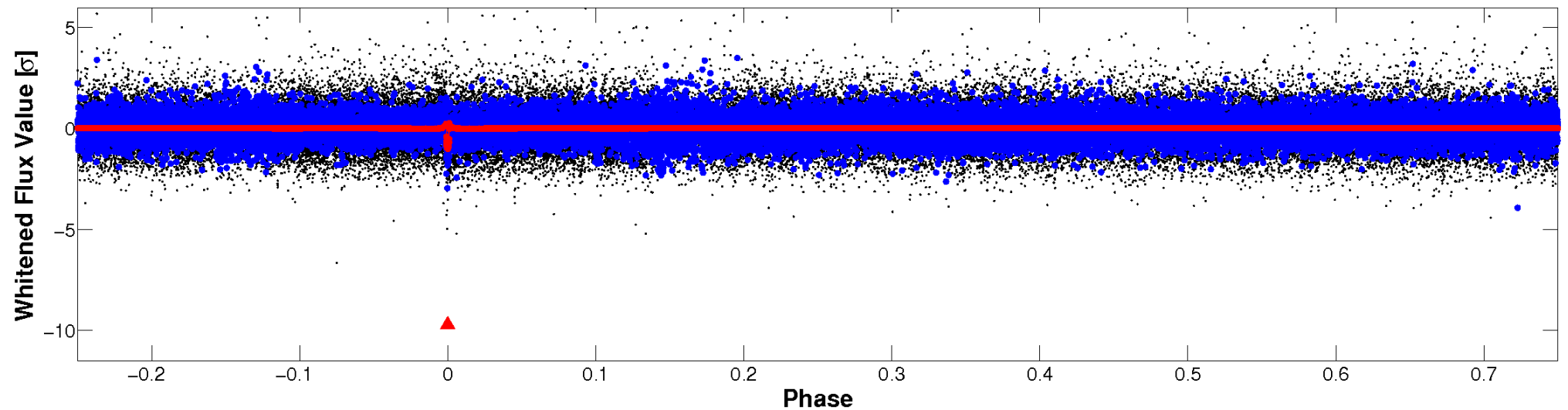


Non-Whitened Vs. Whitened Light Curve

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



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



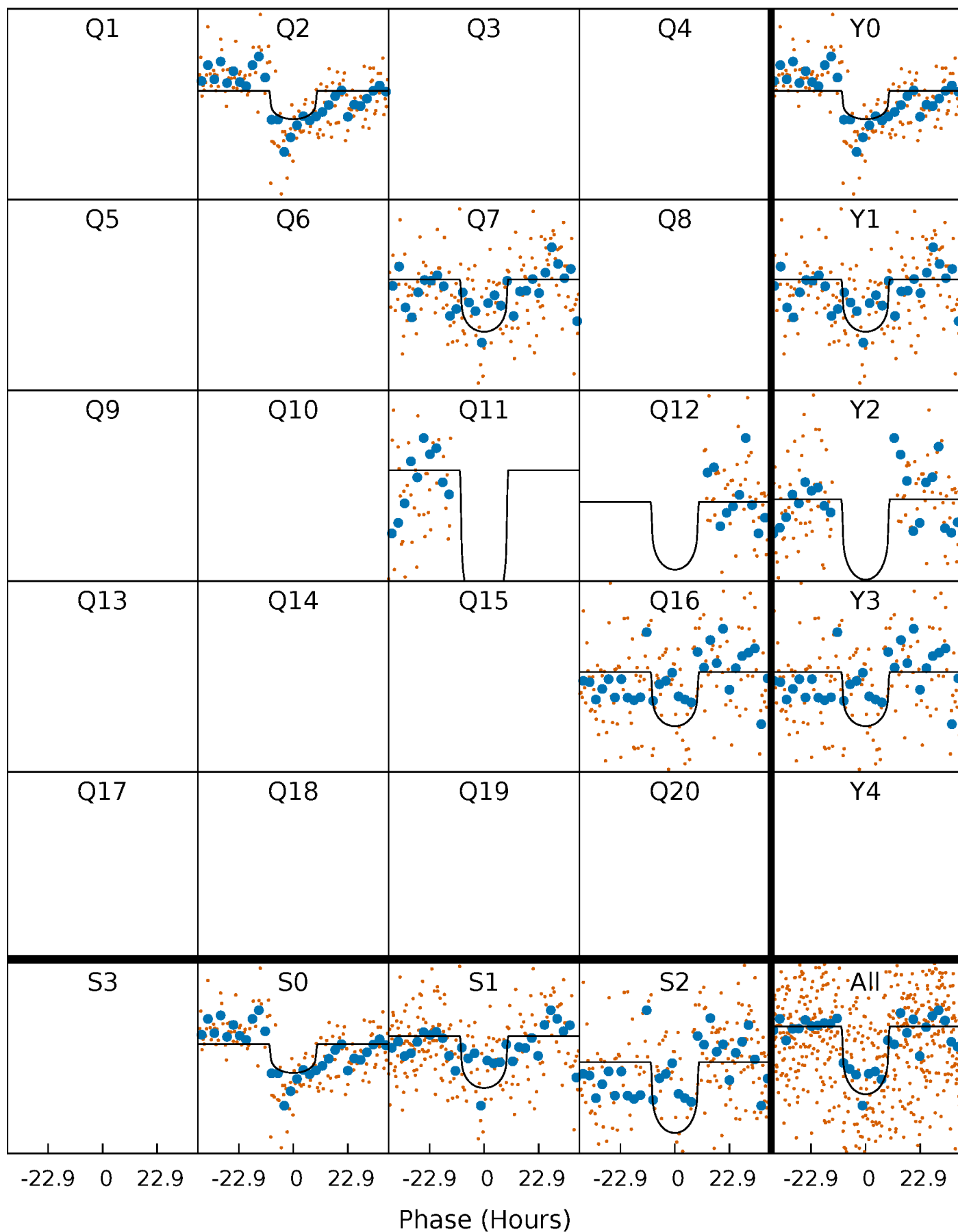
PDC Quarter-Phased Transit Curves

TCE 008625796-01 P=442.134234 Days $T_0=214.643102$ (BKJD)



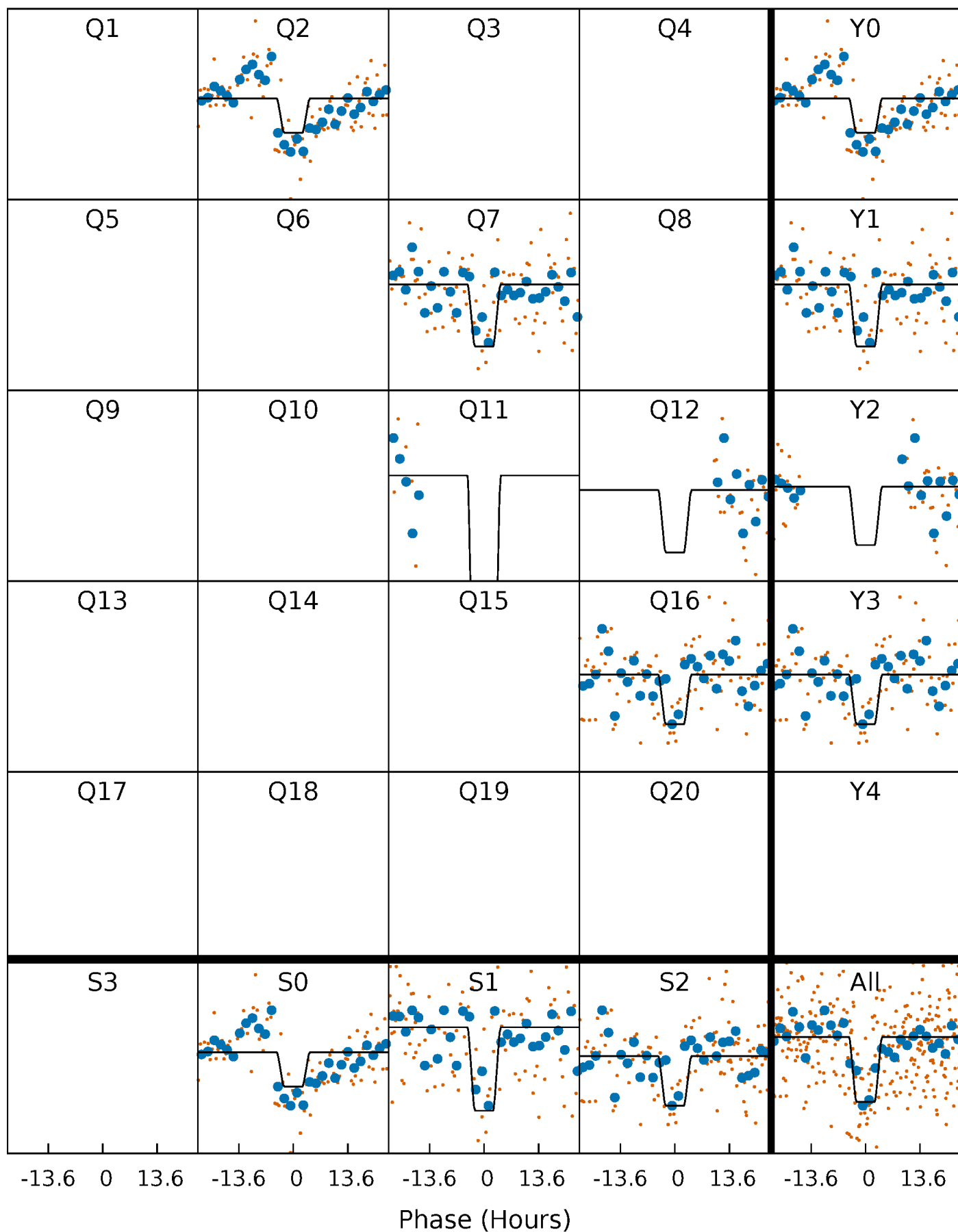
DV Quarter-Phased Transit Curves

TCE 008625796-01 P=442.134234 Days $T_0=214.643102$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

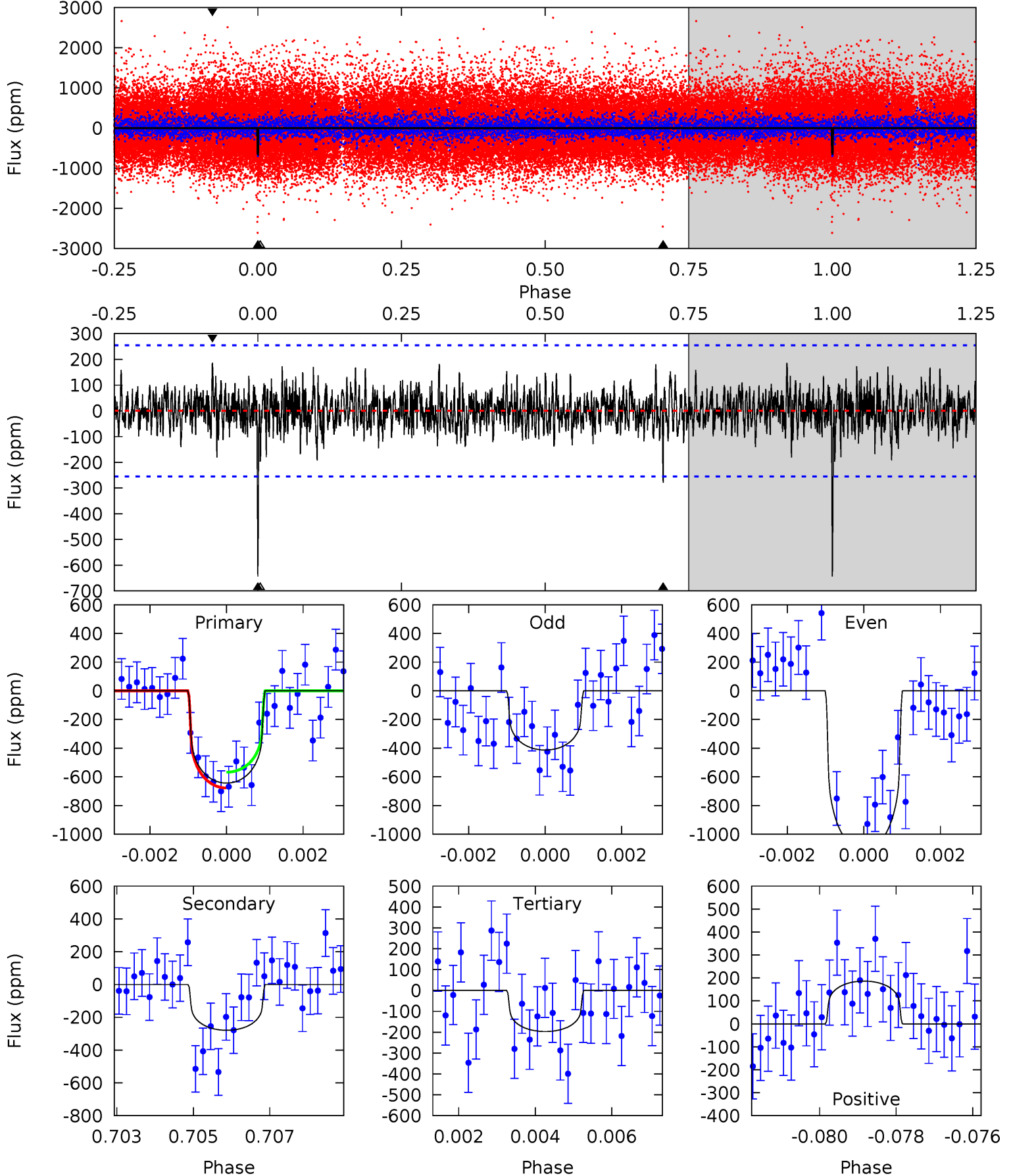
TCE 008625796-01 P=442.277595 Days $T_0=214.461106$ (BKJD)



DV Model-Shift Uniqueness Test

008625796-01, P = 442.134234 Days, E = 214.643102 Days

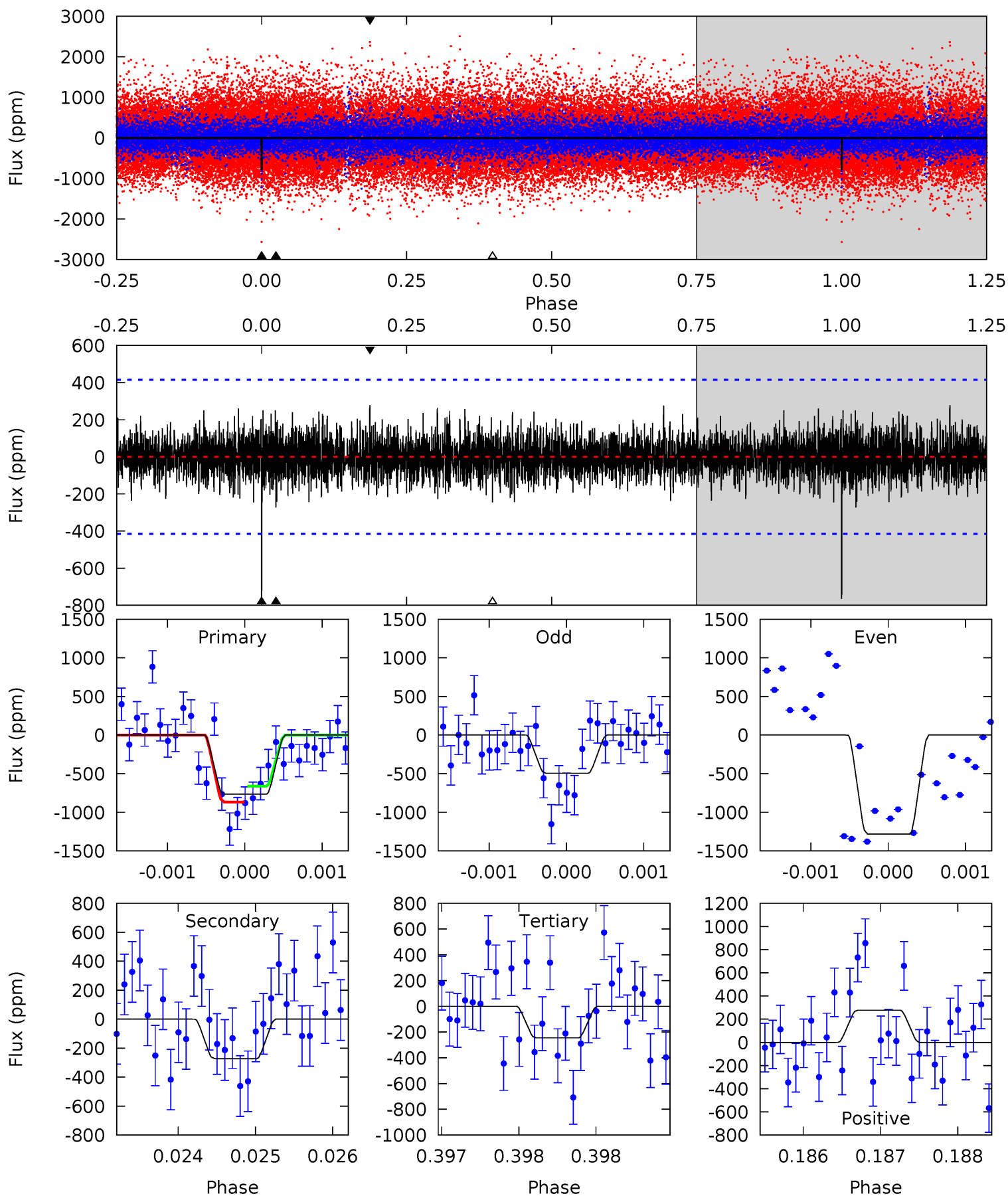
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	5.85	4.12	3.90	5.34	3.10	1.15	9.35	9.58	1.73	1.95	6.84	1.31	0.22	1.15



Alt Model-Shift Uniqueness Test

008625796-01, P = 442.277595 Days, E = 214.461106 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	3.61	3.25	3.68	5.50	3.37	1.01	6.89	6.46	0.36	-0.07	4.94	1.56	0.27	1.37



Stellar Parameters For KIC 008625796

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5497^{+147}_{-164}	$4.581^{+0.034}_{-0.136}$	$-0.140^{+0.300}_{-0.300}$	$0.800^{+0.163}_{-0.070}$	$0.896^{+0.073}_{-0.110}$	$2.467^{+0.453}_{-0.982}$
	+3%/-3%	+1%/-3%	+214%/-214%	+20%/-9%	+8%/-12%	+18%/-40%
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 008625796-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-279 ± 48	$2.28^{+1.04}_{-1.01}$	296^{+14}_{-12}	4617^{+1268}_{-617}	35329^{+67483}_{-19193}
Alt.	-273 ± 75	$2.71^{+0.98}_{-1.04}$	296^{+14}_{-12}	4293^{+917}_{-521}	23879^{+39529}_{-12320}

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

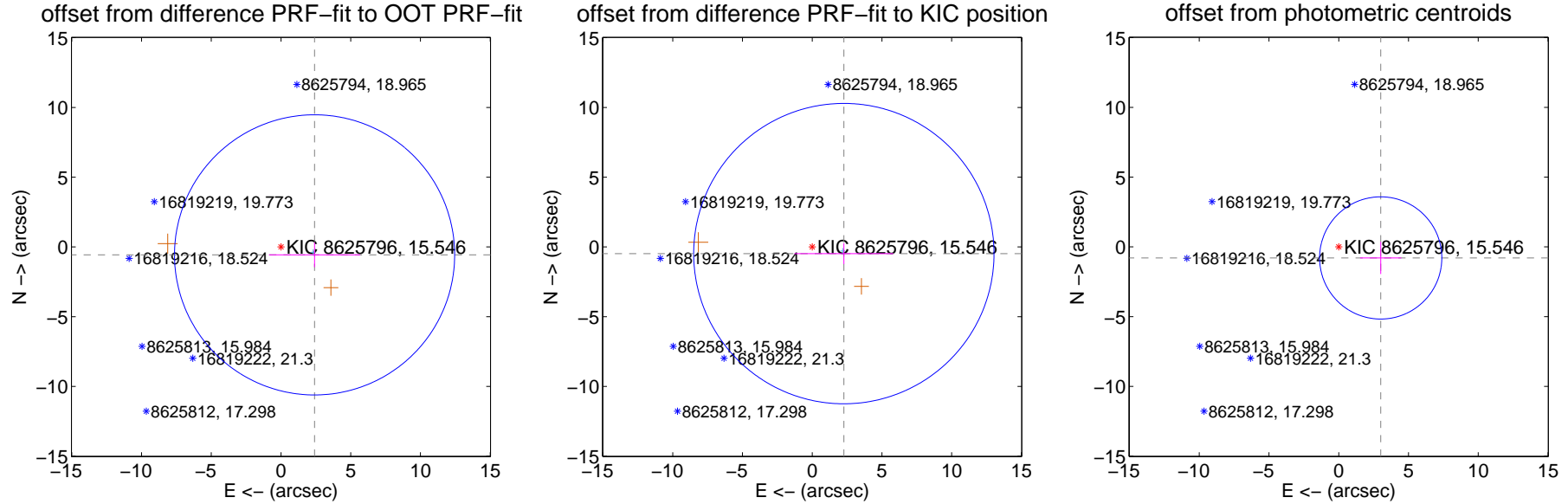
DV Centroid Data

Supplemental centroid analysis for 008625796-01. Kepler magnitude: 15.55. Transit SNR 9.64

There are 1 quarters with good PRF difference image offsets

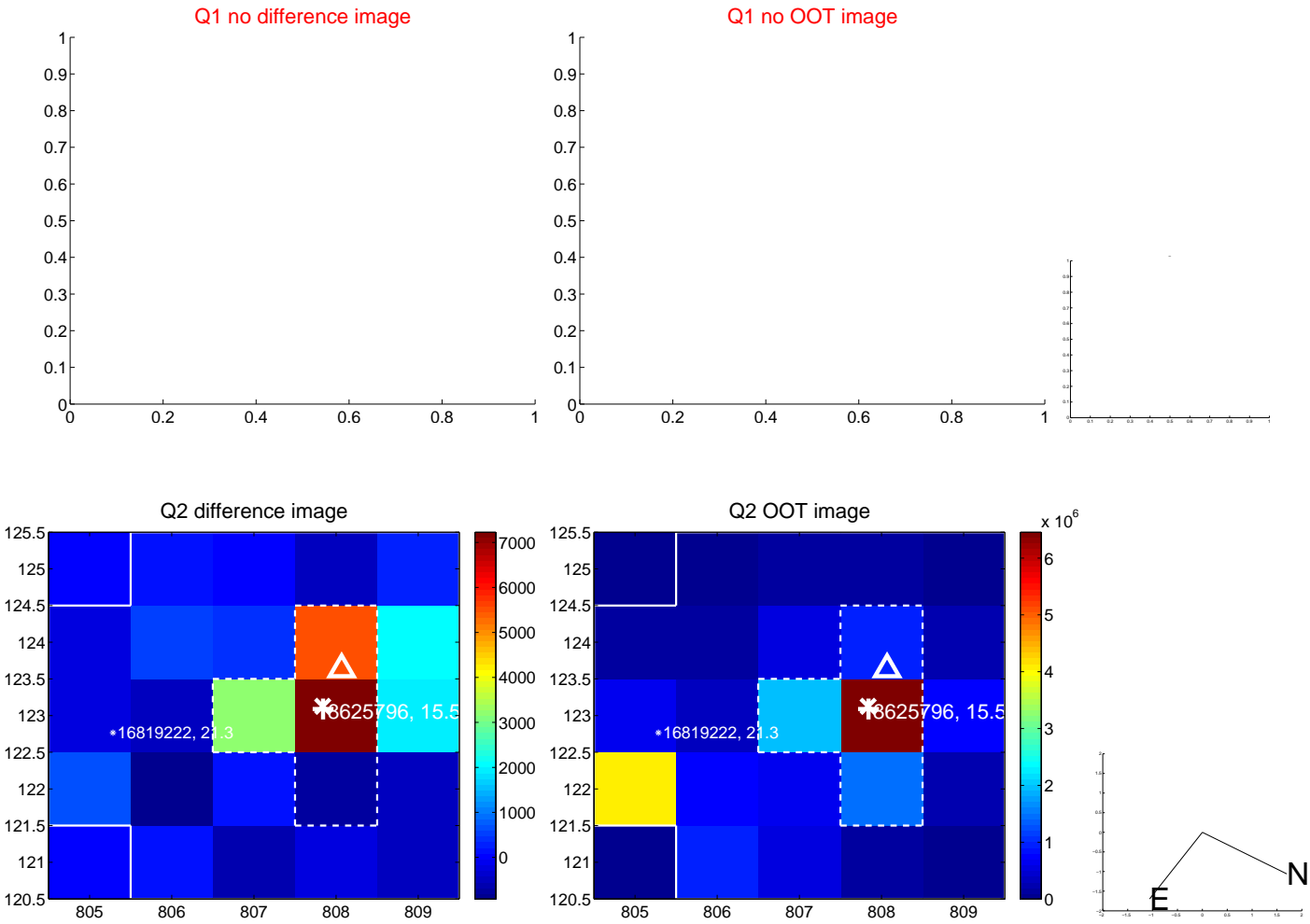
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.474 ± 3.347	0.74	-2.408 ± 3.269	-0.568 ± 0.876
PRF-fit source offset from KIC position	2.318 ± 3.589	0.65	-2.269 ± 3.545	-0.477 ± 0.748
photometric centroid source offset	3.11 ± 1.46	2.13	-3.01 ± 1.48	-0.79 ± 1.16

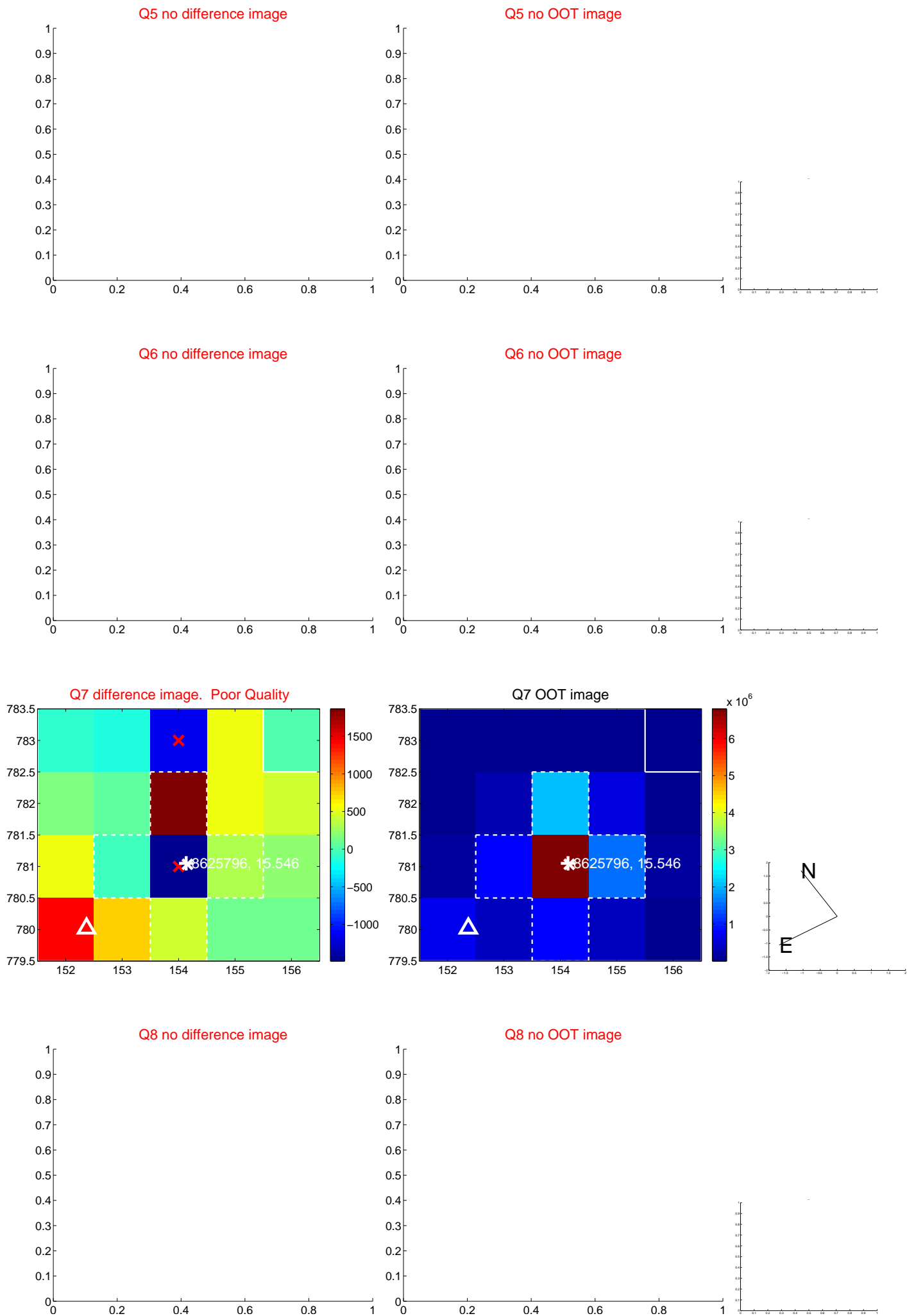


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



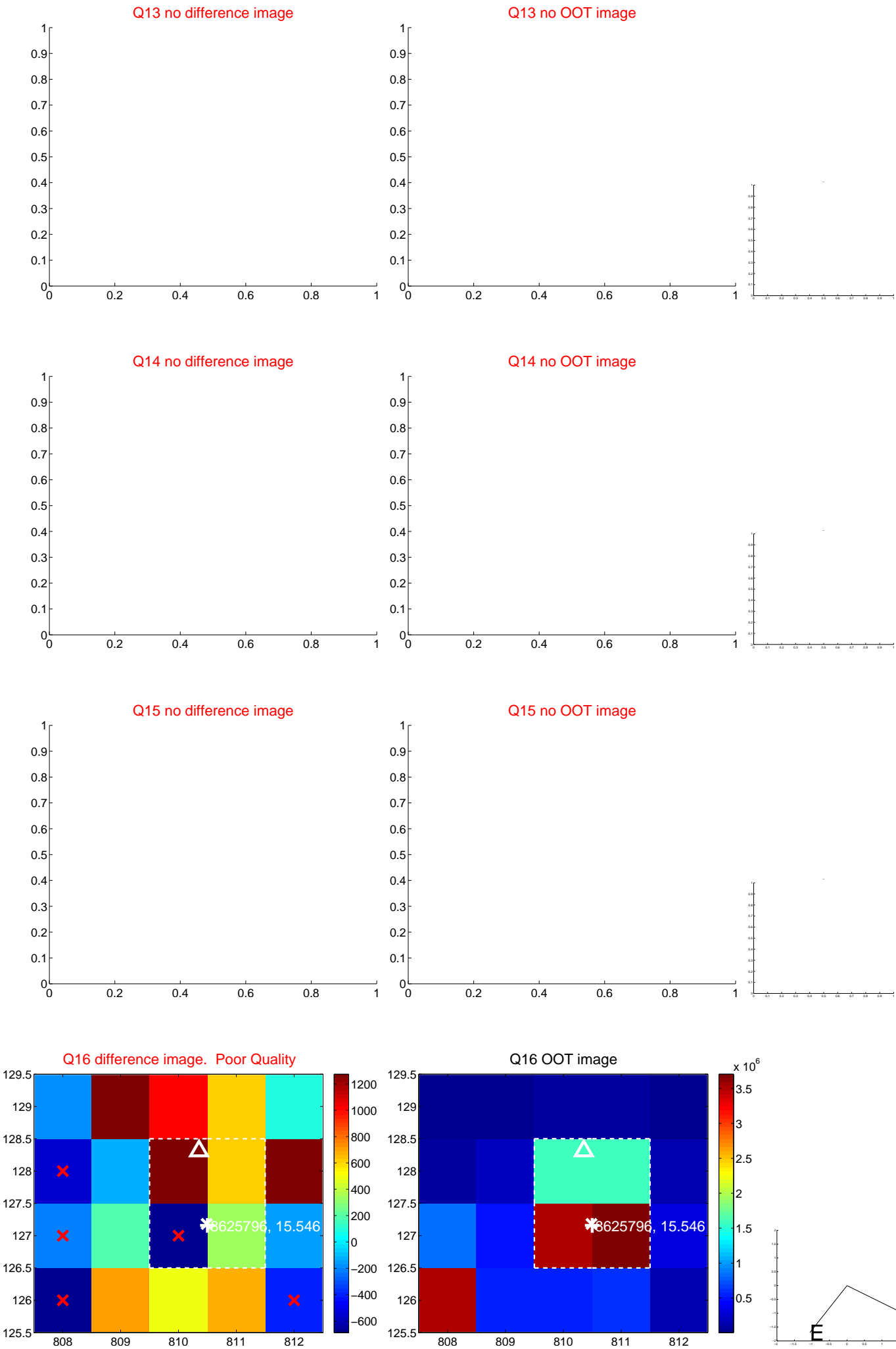
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



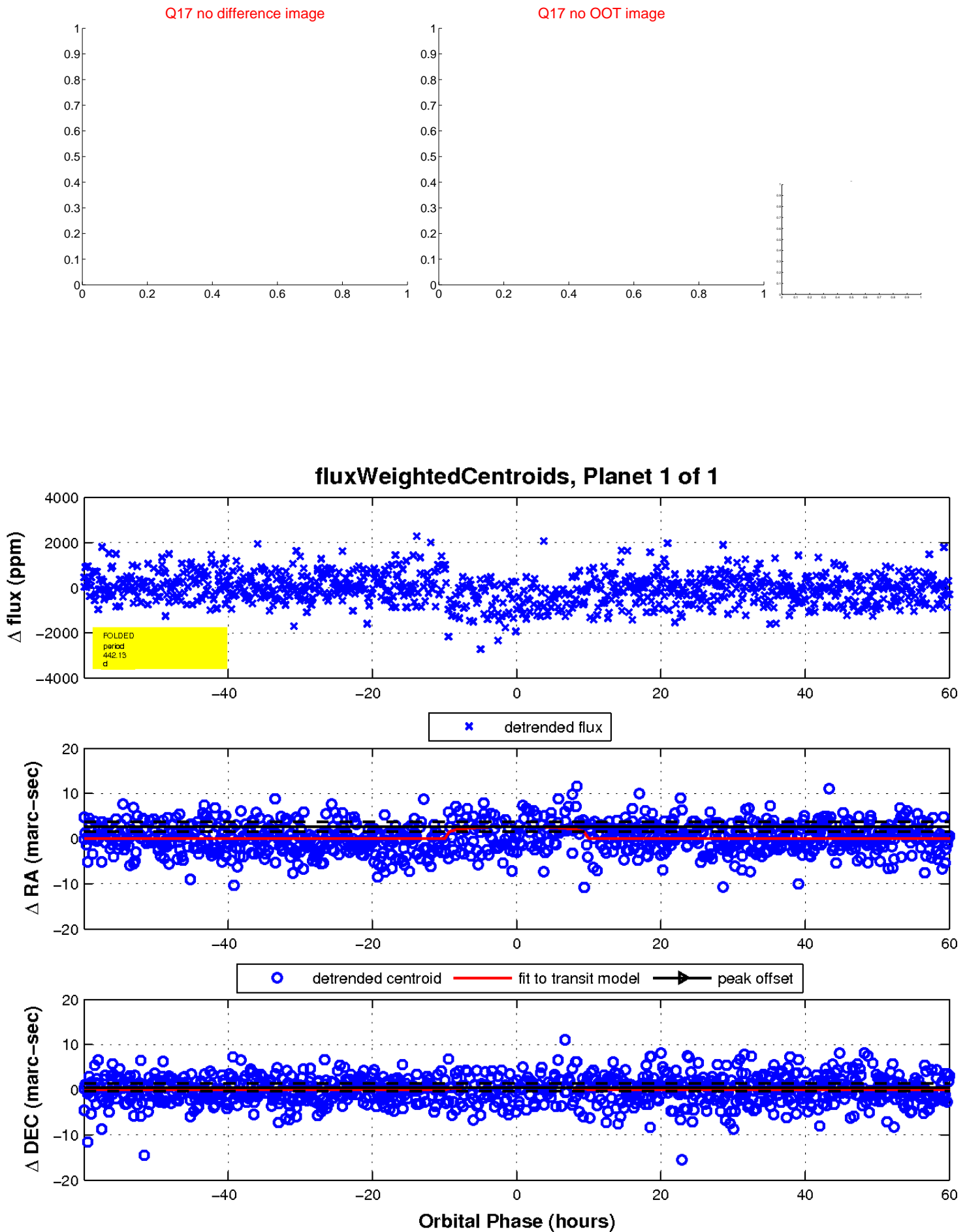
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

