

KIC 008106697

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})
008106697-01	OBS	No	430.040381	491.384507	401.9	13.139	8.0	7.7	0.91	5360	2.00	0.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008106697-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

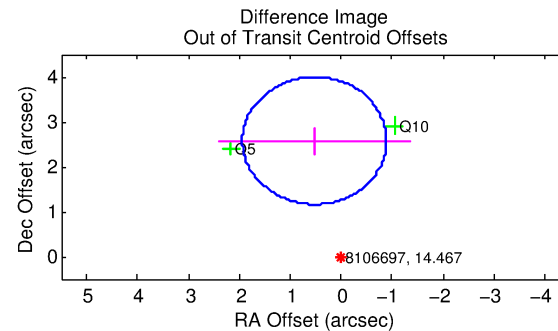
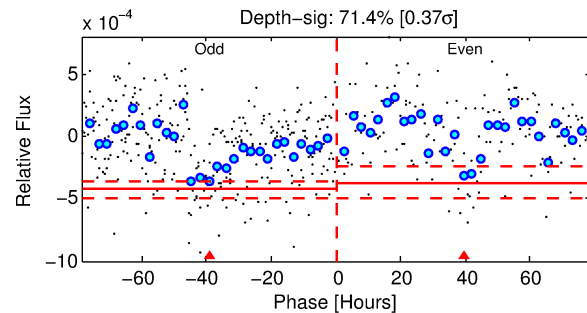
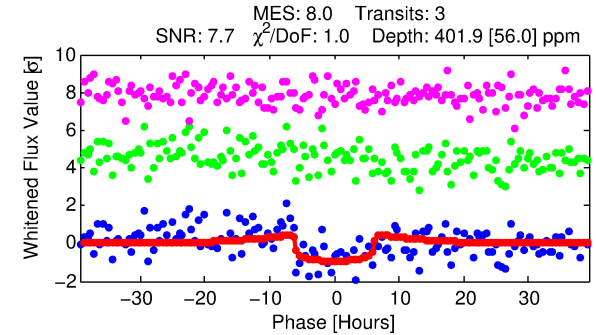
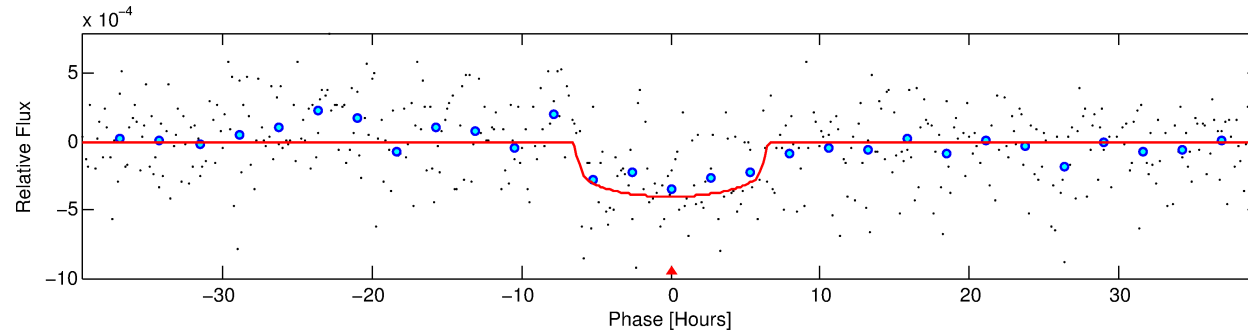
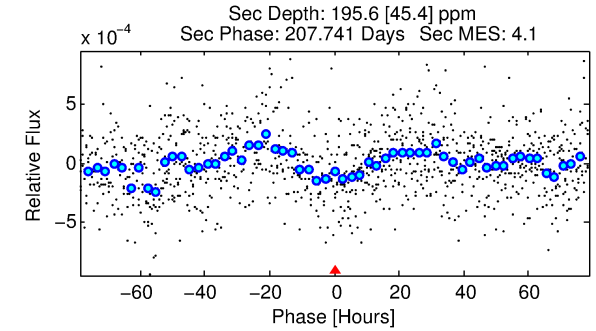
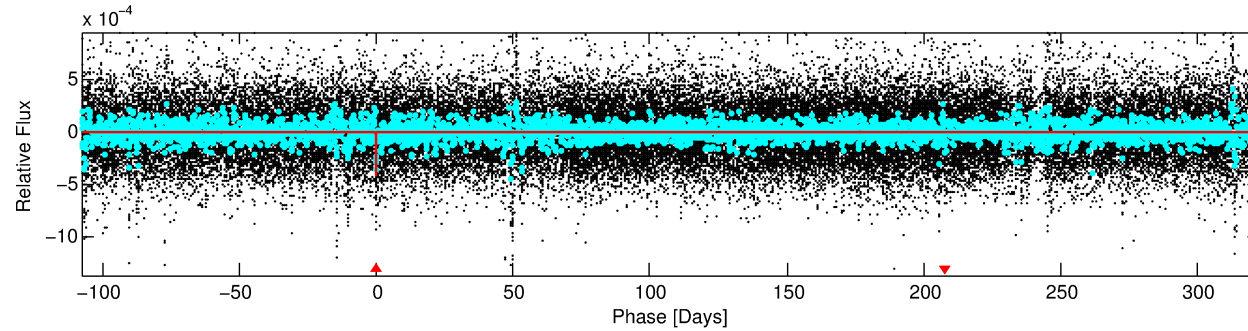
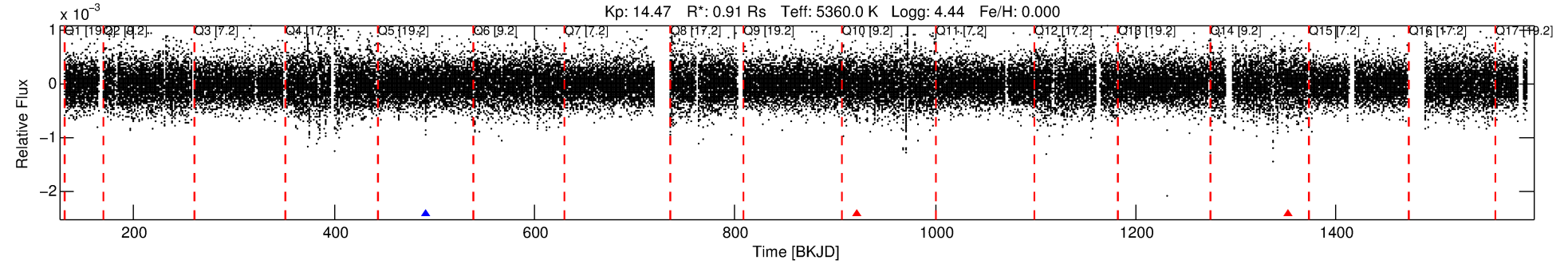
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008106697-01

No Significant Match Found

DV One-Page Summary

KIC: 8106697 Candidate: 1 of 1 Period: 430.040 d



DV Fit Results:

Period = 430.04038 [0.01408] d
Epoch = 491.3845 [0.0175] BKJD
Rp/R* = 0.0202 [0.0075]
a/R* = 166.05 [238.15]
b = 0.77 [0.75]
Seff = 0.55 [0.17]
Teq = 220 [17] K
Rp = 2.00 [0.86] Re
a = 1.0497 [0.1940] AU
Ag = 29519.83 [24380.65] [1.21σ]
Teffp = 4459 [877] K [4.83σ]

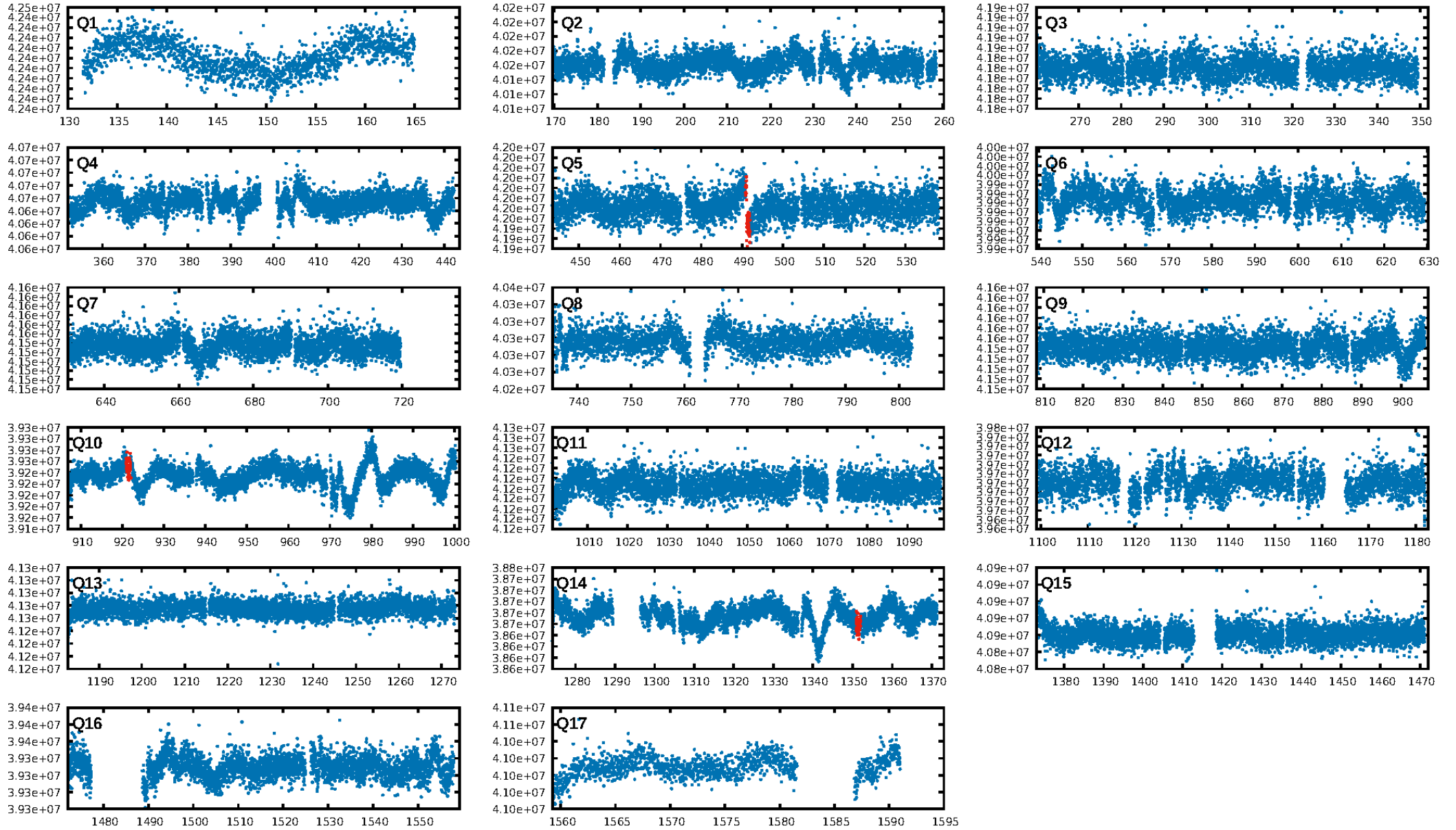
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 15.1%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 4.96e-08
RollingBand-fgt: 0.33 [1/3]
GhostDiagnostic-chr: 2.425
Centroid-sig: 0.0%
Centroid-so: 3.855 arcsec [2.06σ]
OotOffset-rm: 2.630 arcsec [5.57σ]
KicOffset-rm: 2.383 arcsec [7.00σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

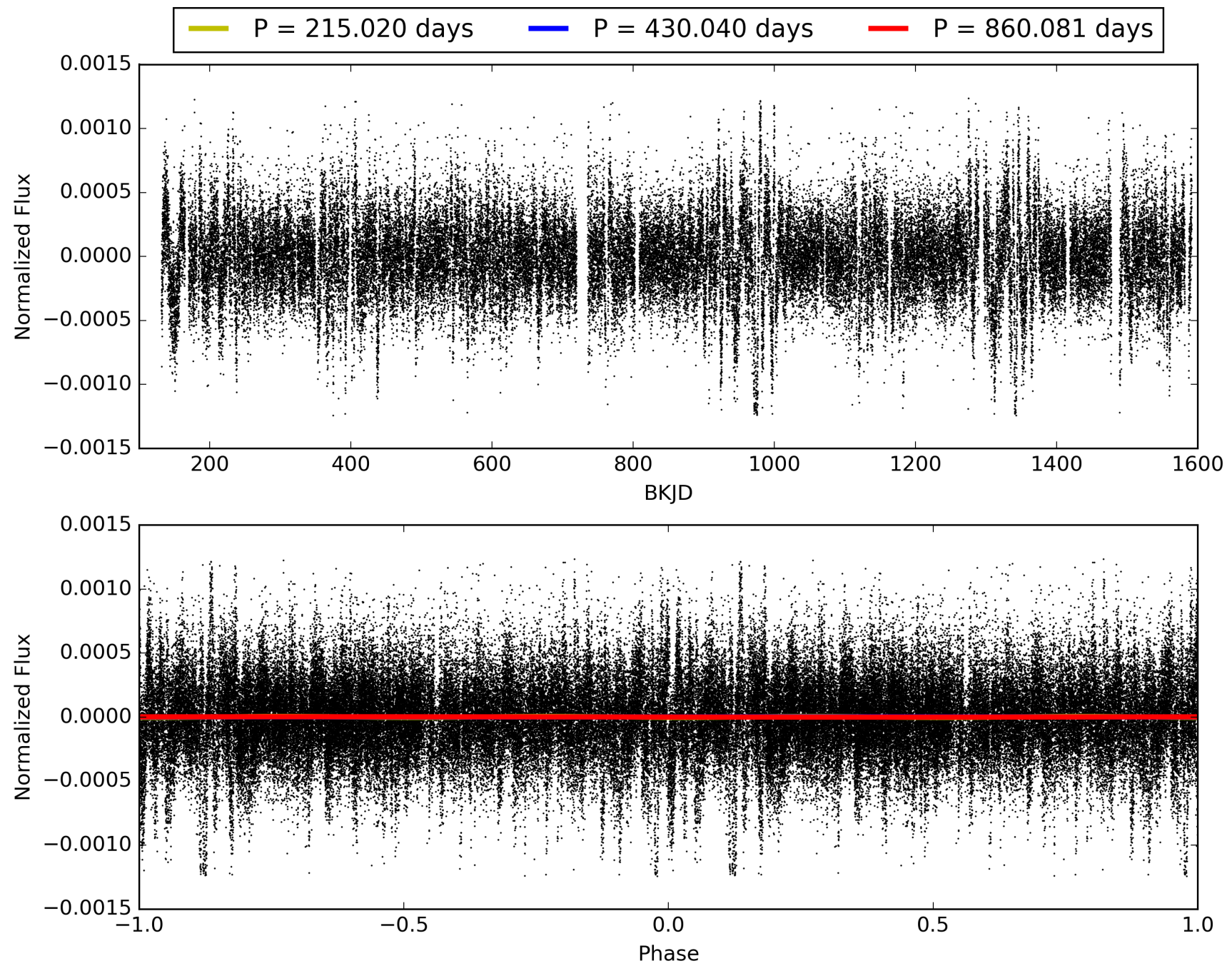
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:25:41 Z

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

TCE 008106697-01, PDC Light Curves

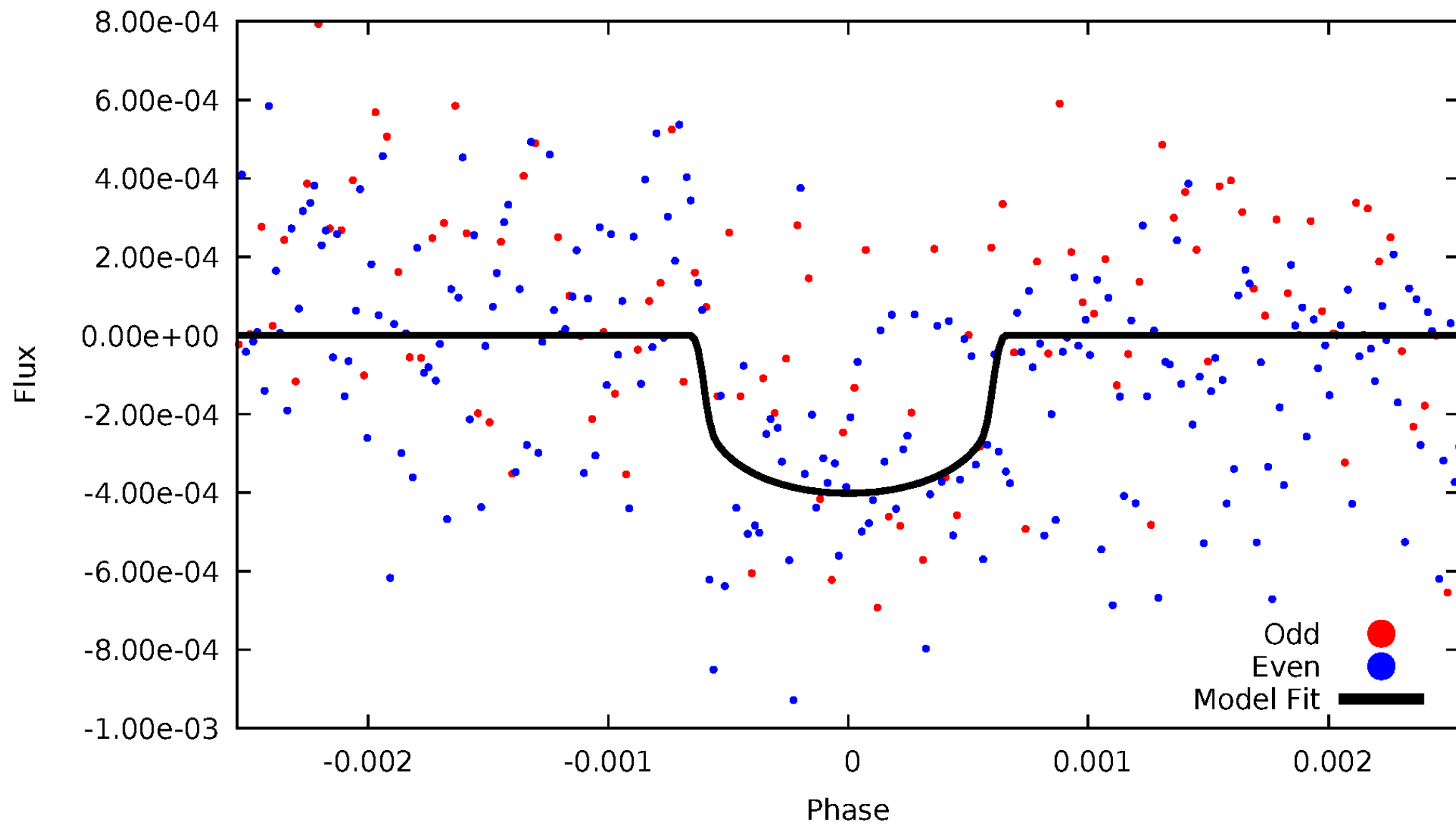


TCE 008106697-01



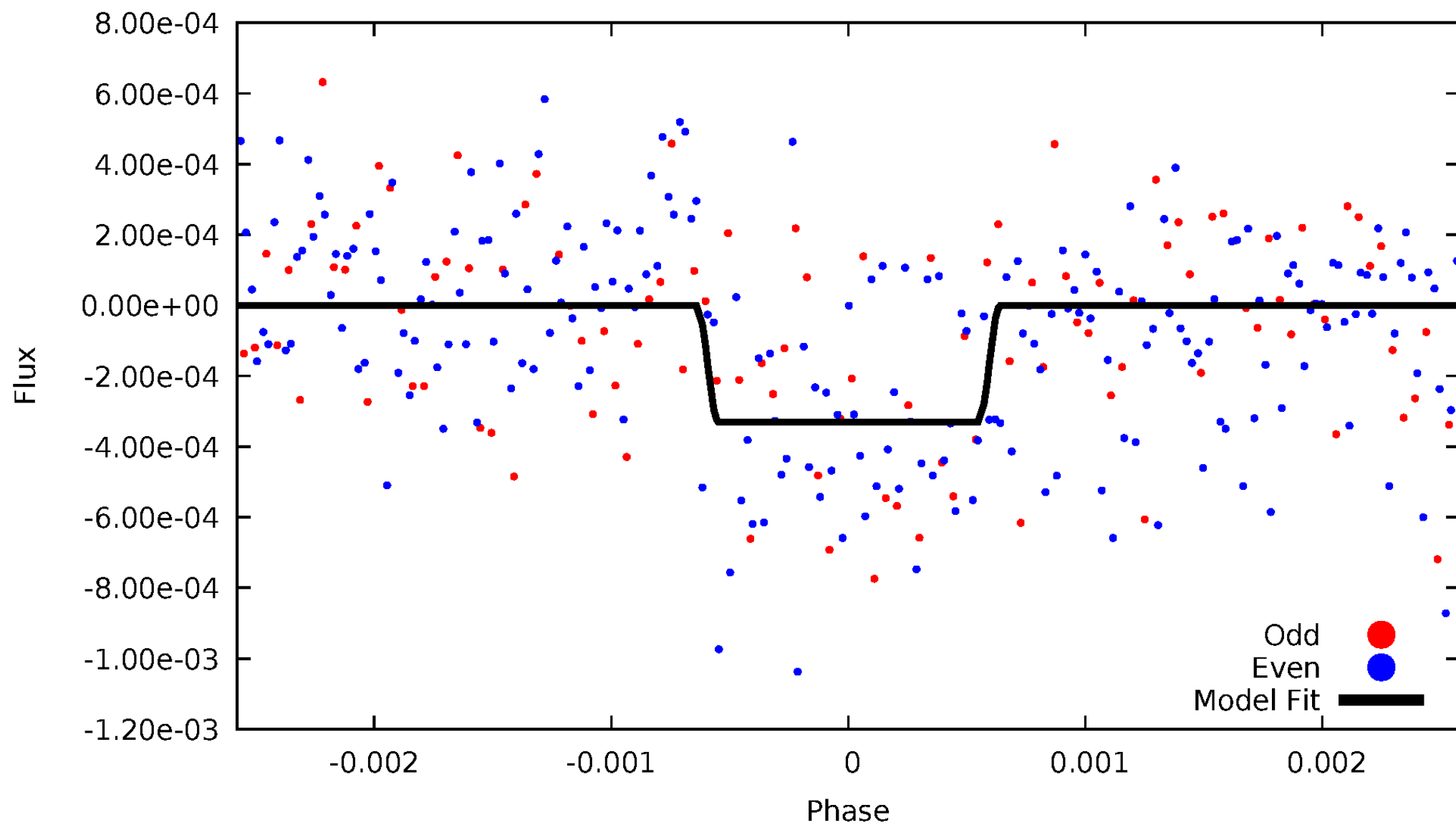
DV Odd/Even

TCE 008106697-01

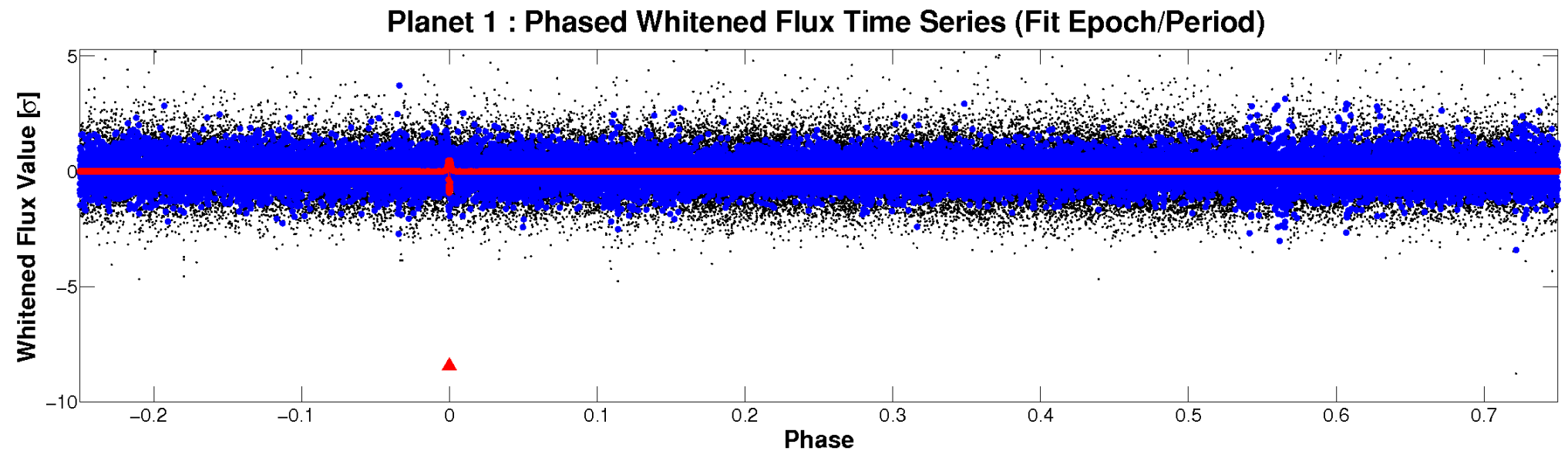
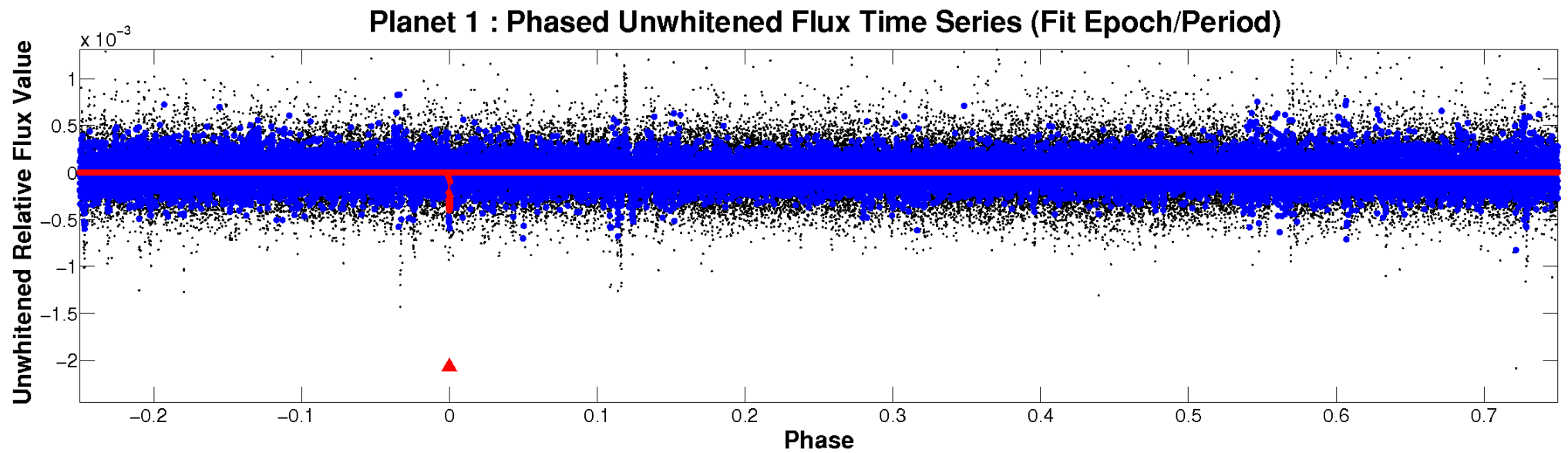


ALT Odd/Even

TCE 008106697-01

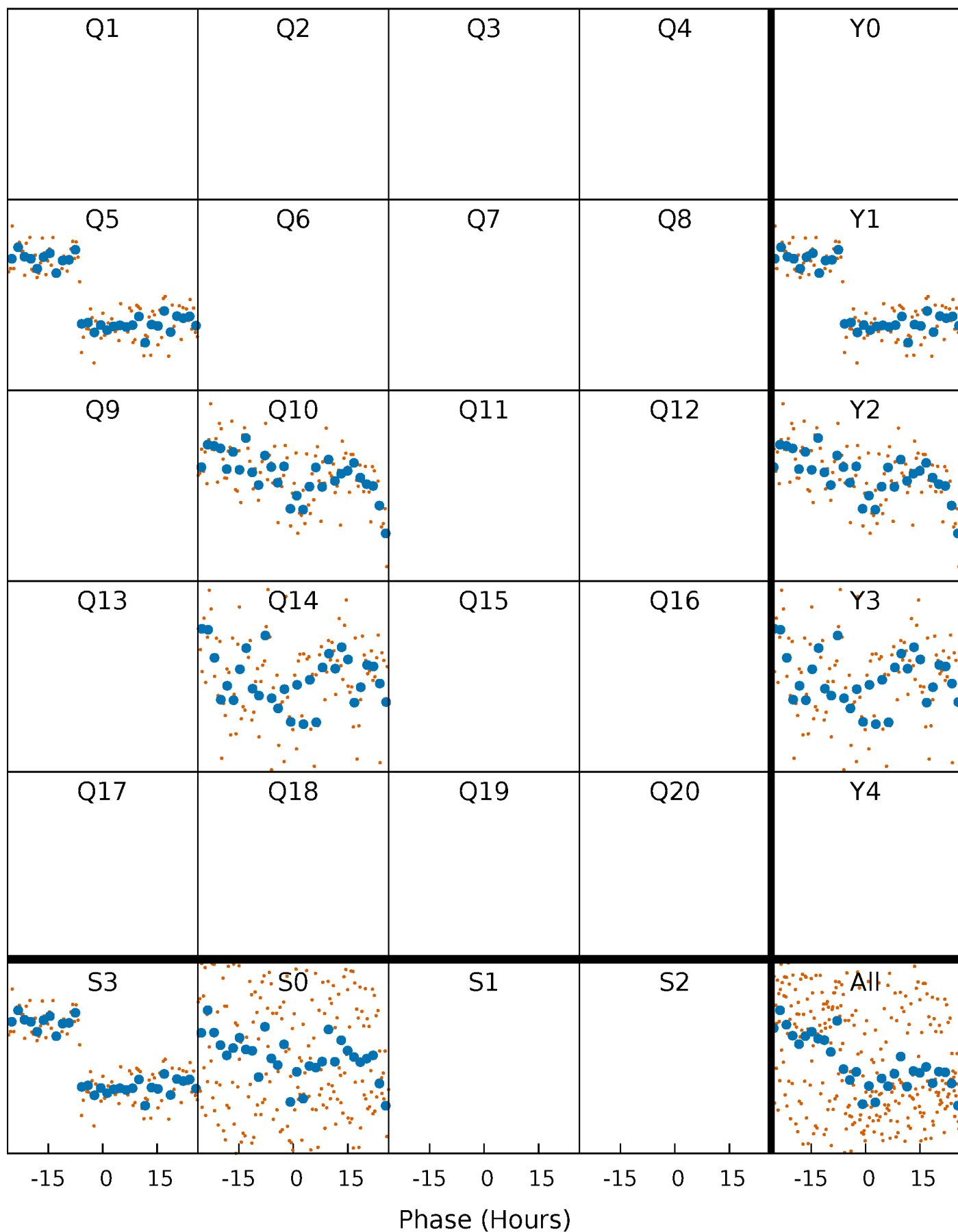


Non-Whitened Vs. Whitened Light Curve



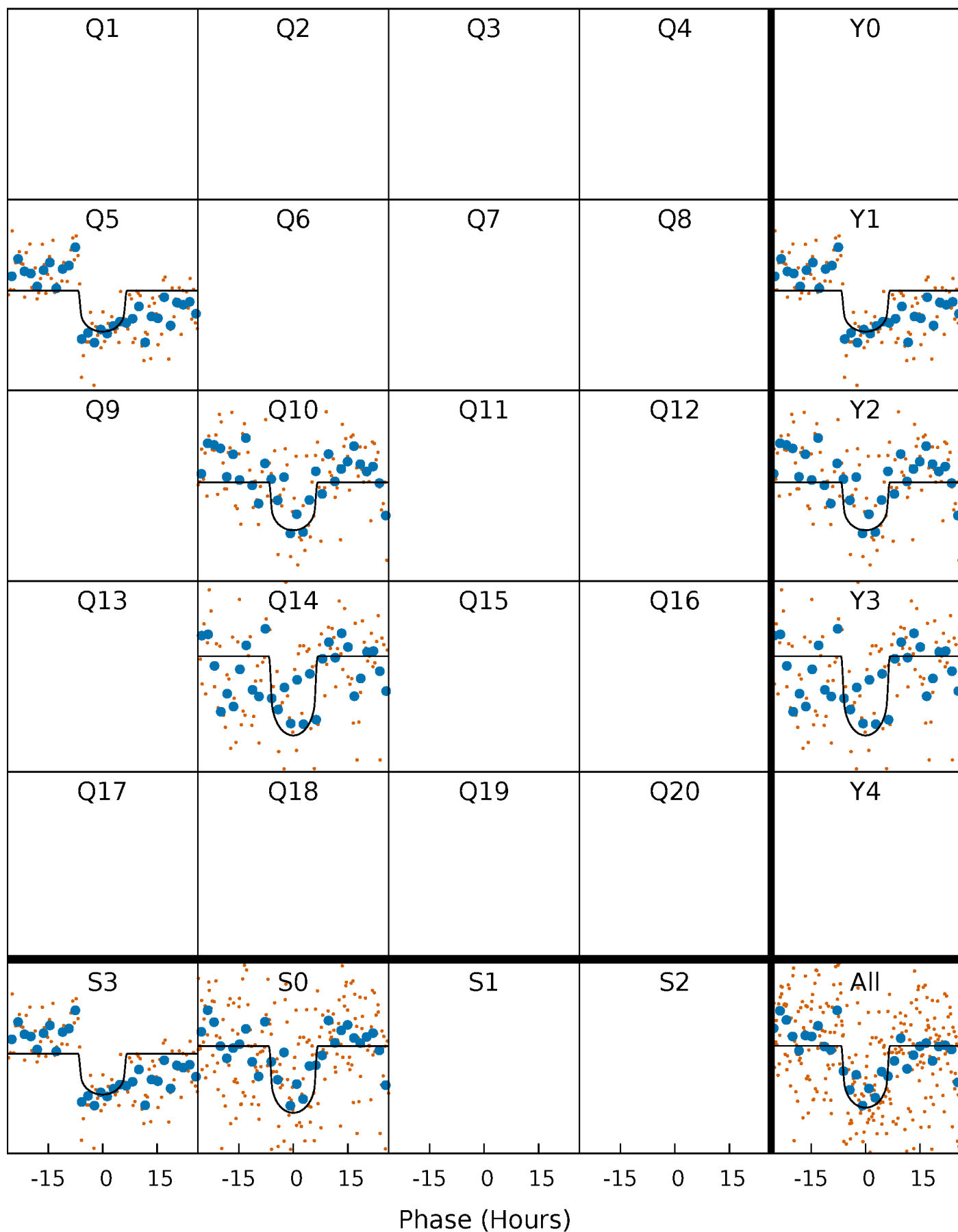
PDC Quarter-Phased Transit Curves

TCE 008106697-01 $P=430.040381$ Days $T_0=491.384507$ (BKJD)



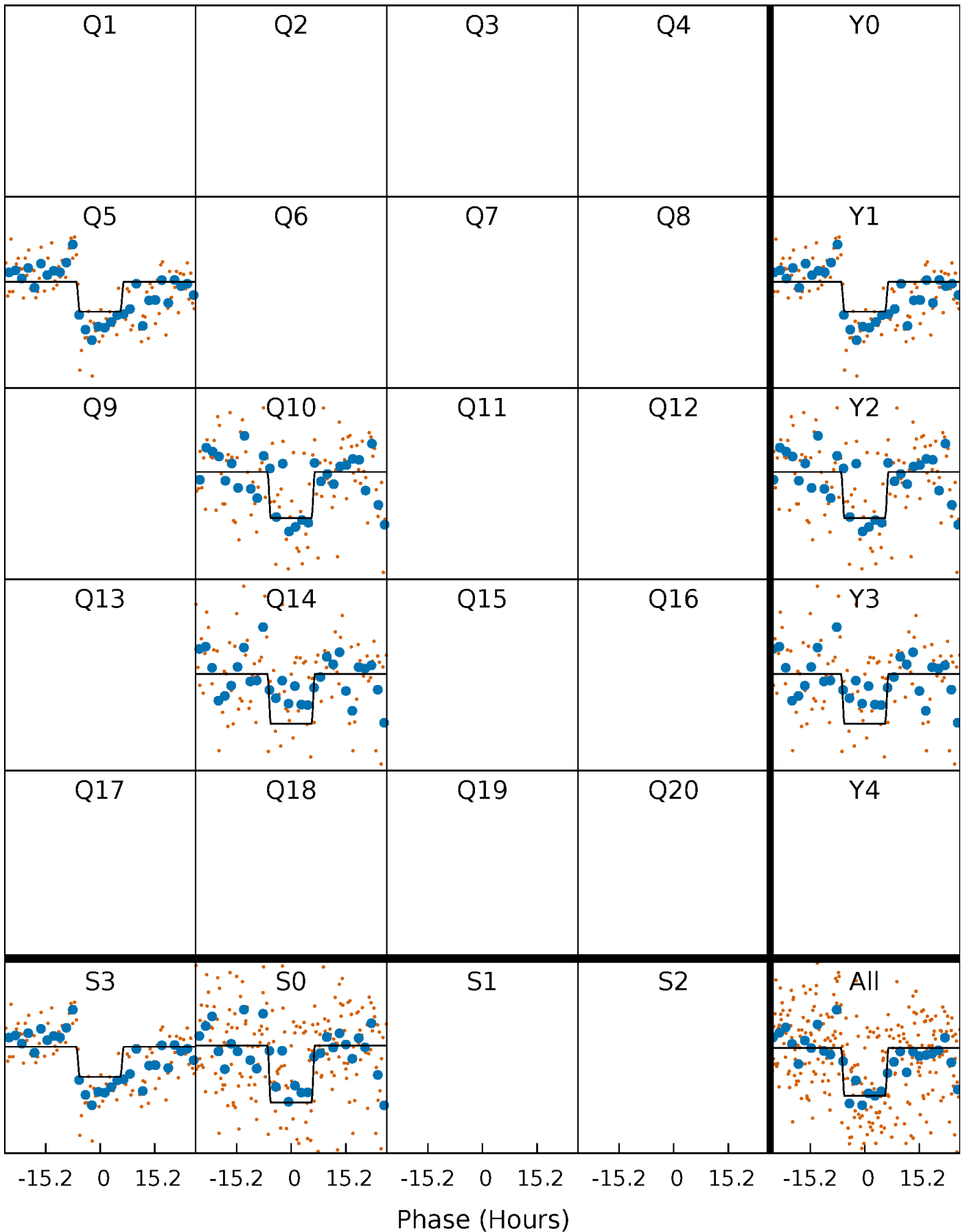
DV Quarter-Phased Transit Curves

TCE 008106697-01 P=430.040381 Days $T_0=491.384507$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

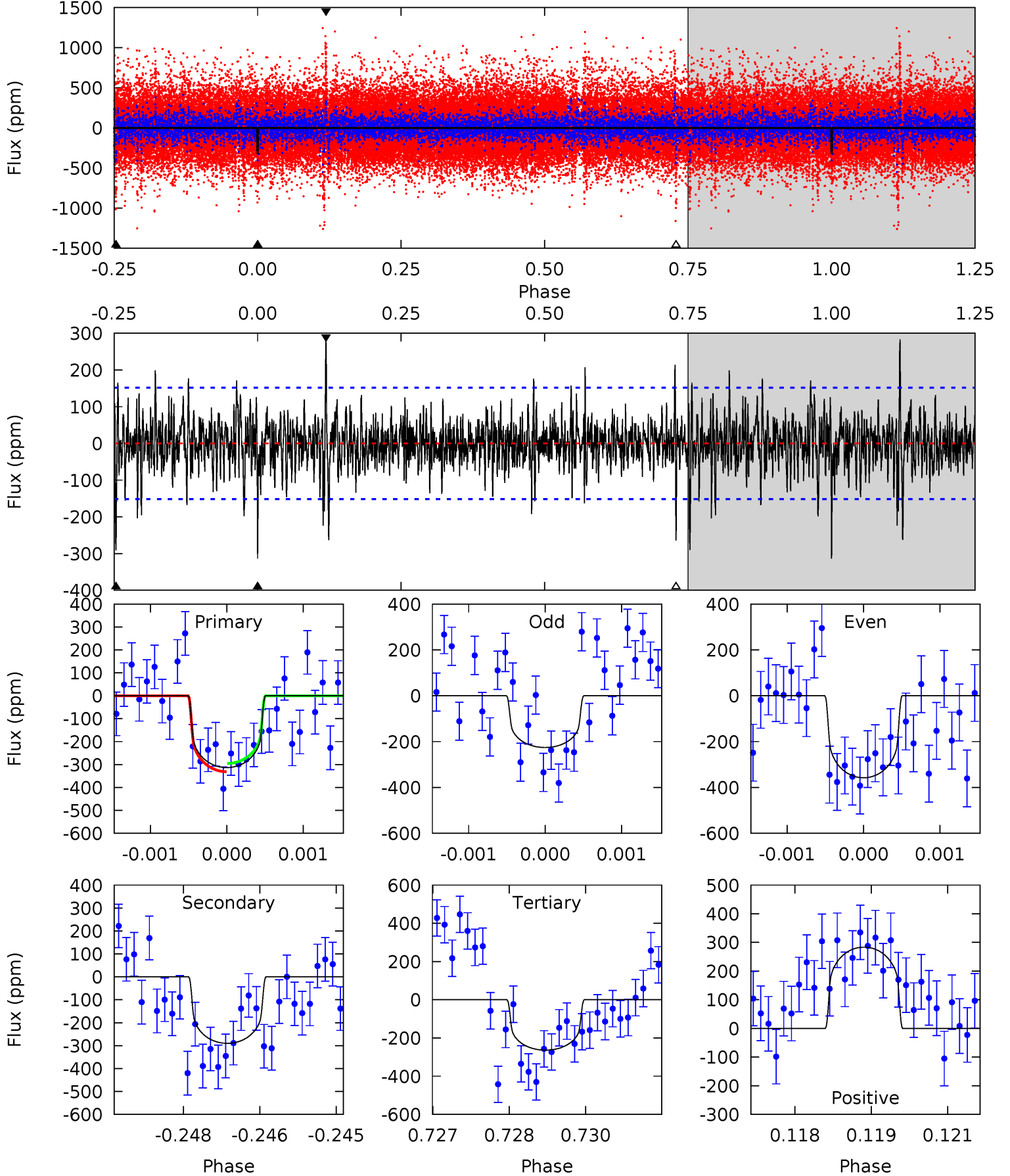
TCE 008106697-01 P=430.051515 Days $T_0=491.377895$ (BKJD)



DV Model-Shift Uniqueness Test

008106697-01, P = 430.040381 Days, E = 61.344126 Days

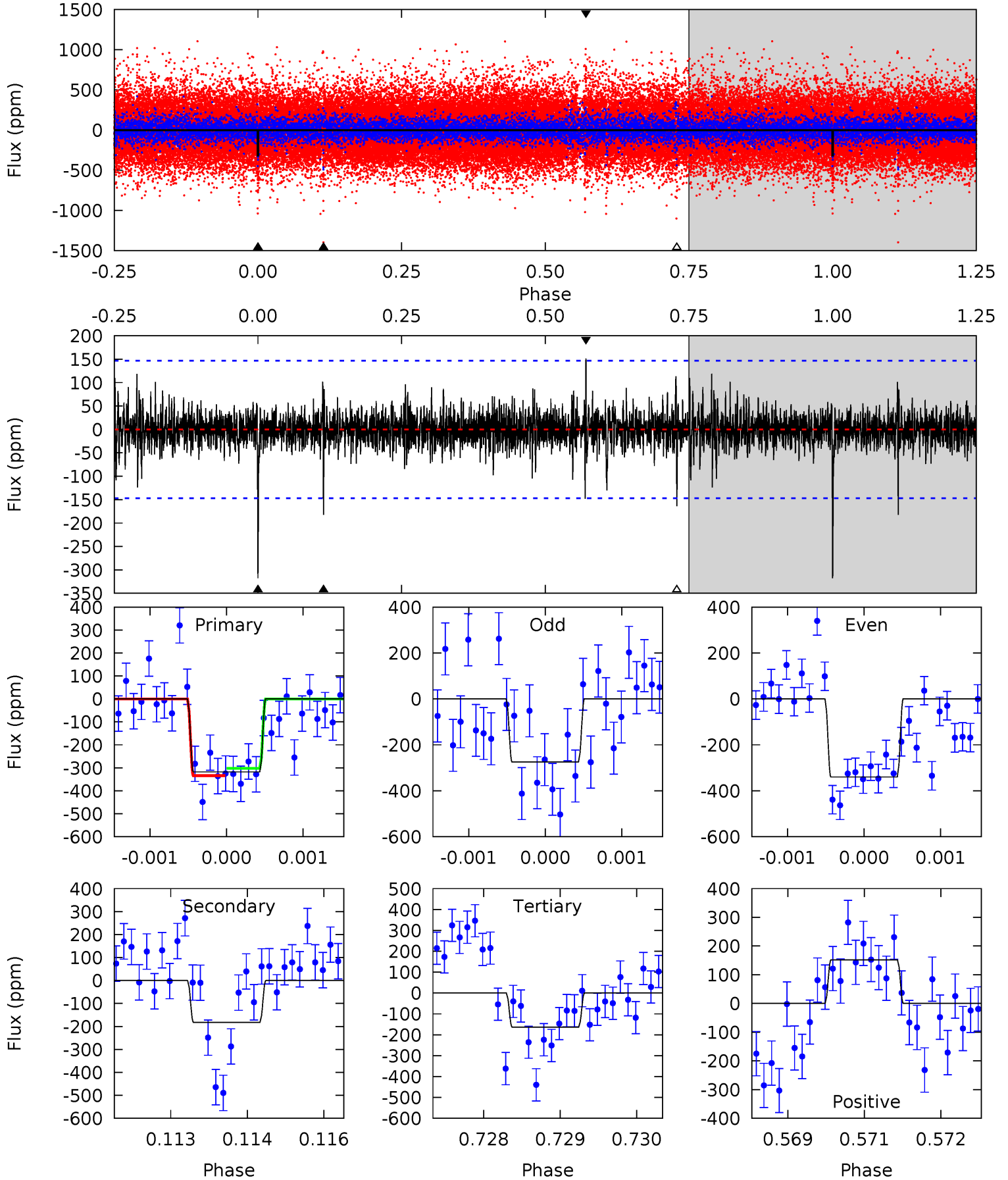
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	10.3	9.39	10.1	5.41	3.22	1.86	1.76	1.06	0.94	0.23	2.22	1.26	0.48	0.64



Alt Model-Shift Uniqueness Test

008106697-01, $P = 430.051515$ Days, $E = 61.326380$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	6.72	6.02	5.59	5.41	3.23	1.00	5.68	6.12	0.69	1.13	1.15	1.15	0.32	0.59



Stellar Parameters For KIC 008106697

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5360^{+160}_{-160}	$4.442^{+0.104}_{-0.156}$	$0.000^{+0.300}_{-0.250}$	$0.909^{+0.192}_{-0.128}$	$0.836^{+0.106}_{-0.071}$	$1.566^{+0.793}_{-0.655}$
	+3%/-3%	+2%/-4%	+inf%/-inf%	+21%/-14%	+13%/-8%	+51%/-42%
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 008106697-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-290 ± 28	$2.05^{+0.84}_{-0.71}$	311^{+19}_{-17}	4979^{+1072}_{-611}	41429^{+58982}_{-19951}
Alt.	-182 ± 27	$1.87^{+0.80}_{-0.75}$	309^{+20}_{-15}	4690^{+1137}_{-609}	32017^{+54592}_{-17060}

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 $A_{obs} \gg 1.0$

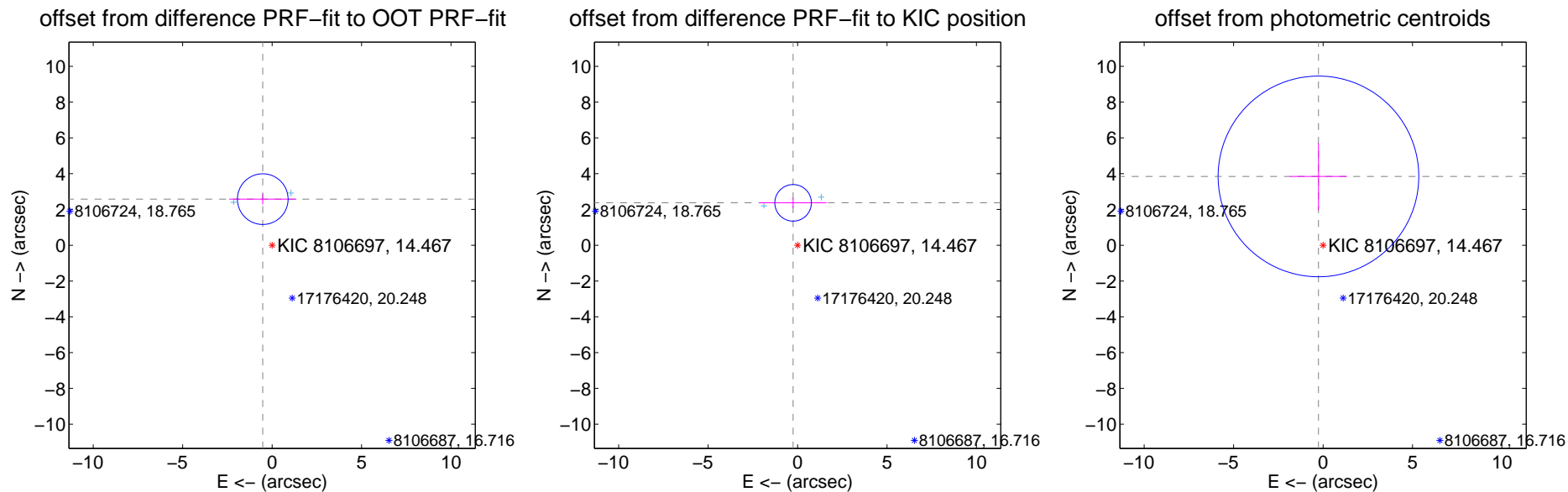
DV Centroid Data

Supplemental centroid analysis for 008106697-01. Kepler magnitude: 14.47. Transit SNR 7.74

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.35 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.630 ± 0.472	5.57	0.523 ± 1.877	2.577 ± 0.295
PRF-fit source offset from KIC position	2.383 ± 0.341	7.00	0.250 ± 1.874	2.370 ± 0.280
photometric centroid source offset	3.86 ± 1.87	2.06	0.26 ± 1.59	3.85 ± 1.87

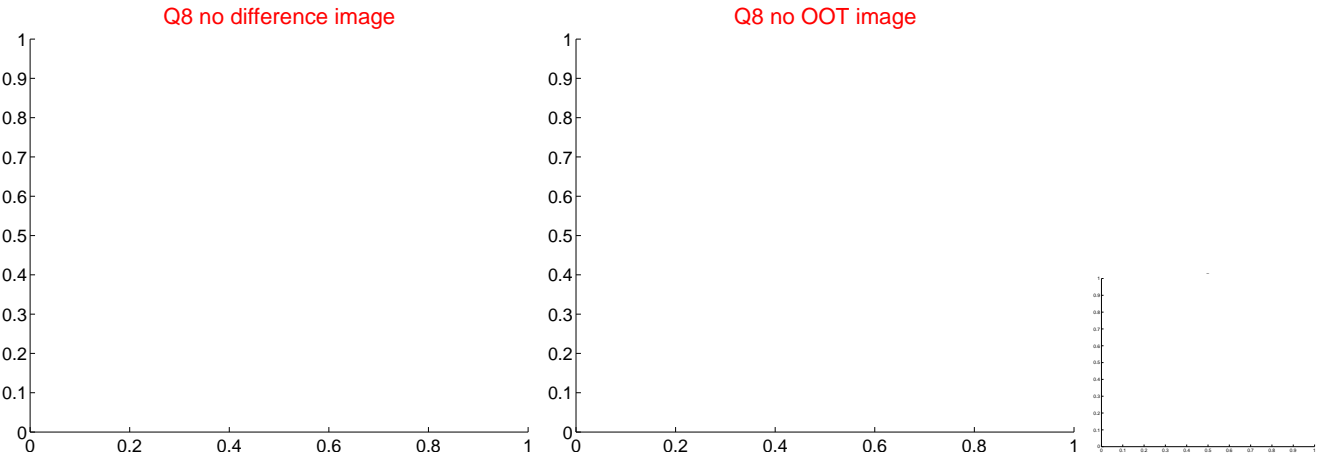
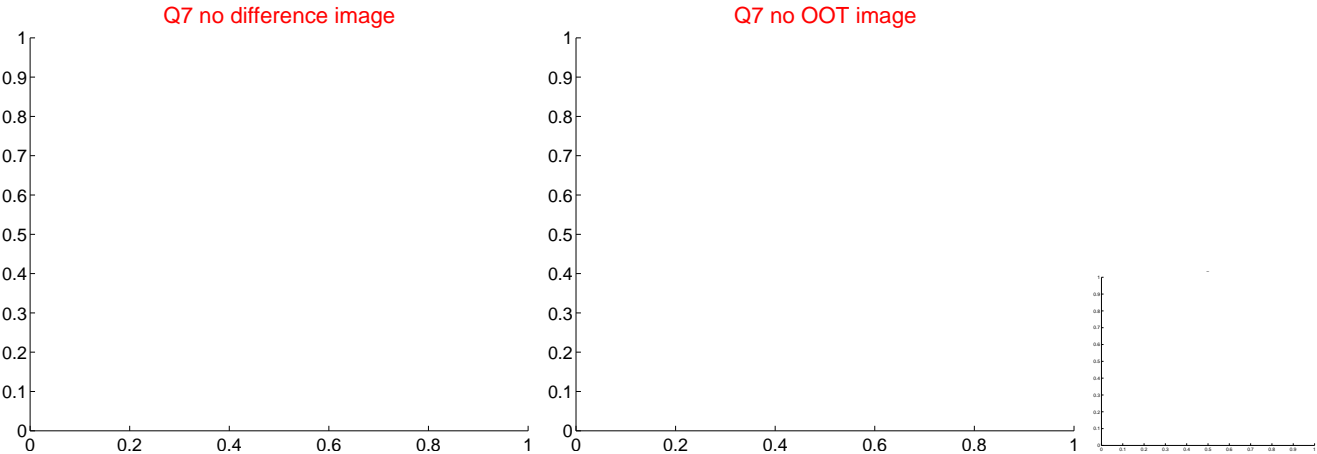
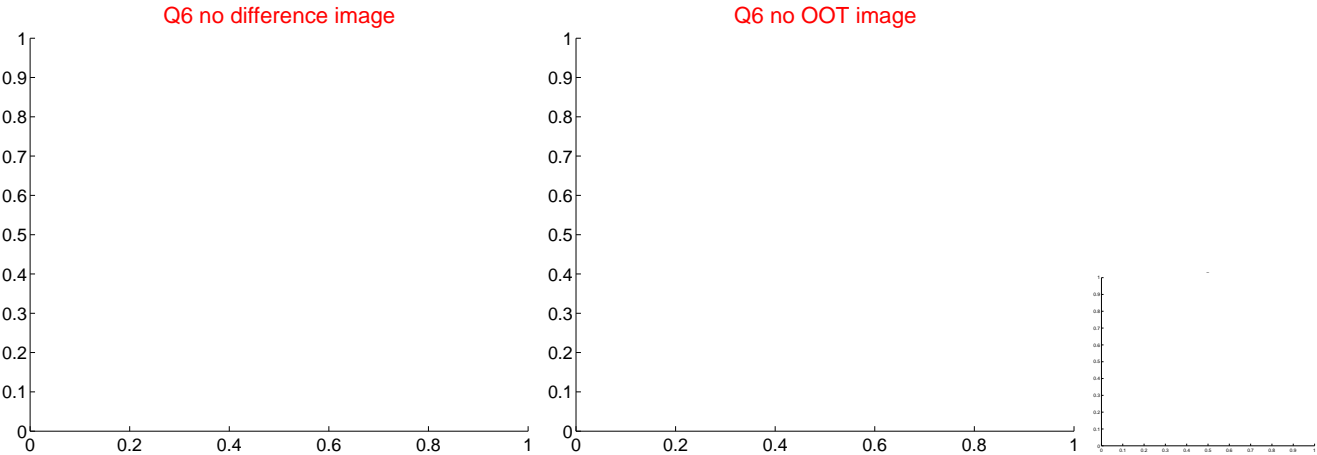
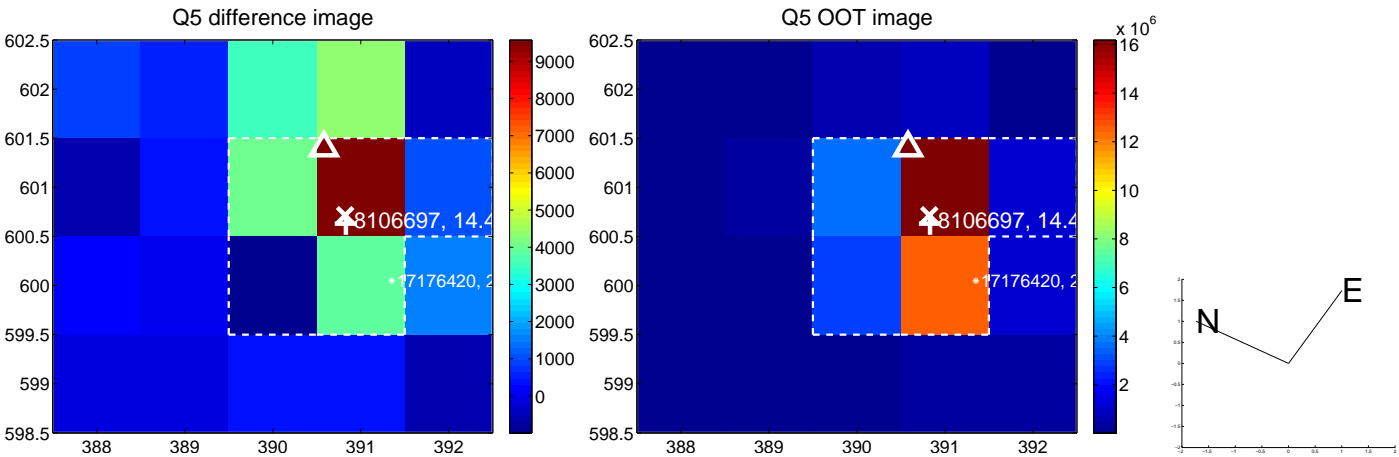


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

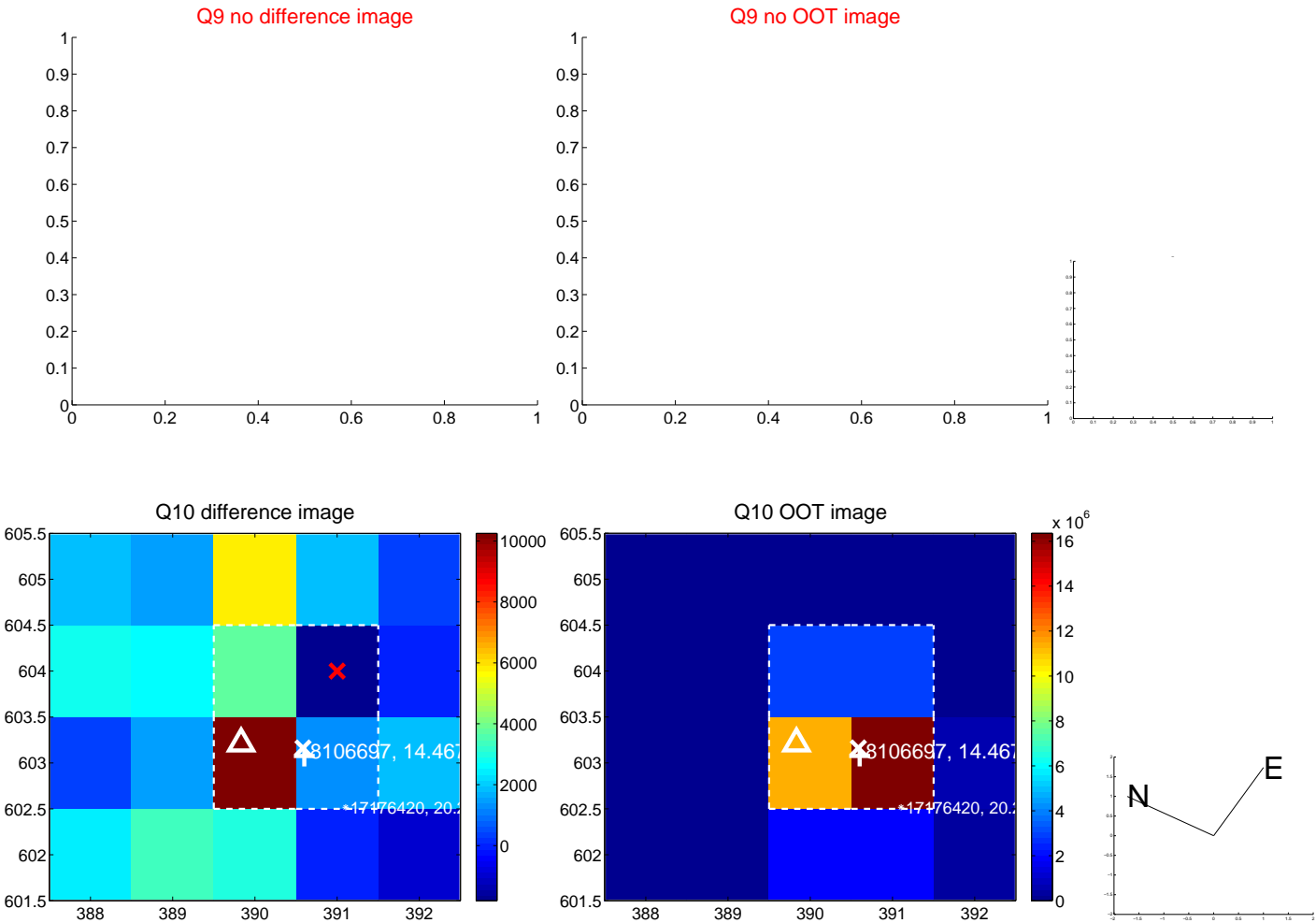
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



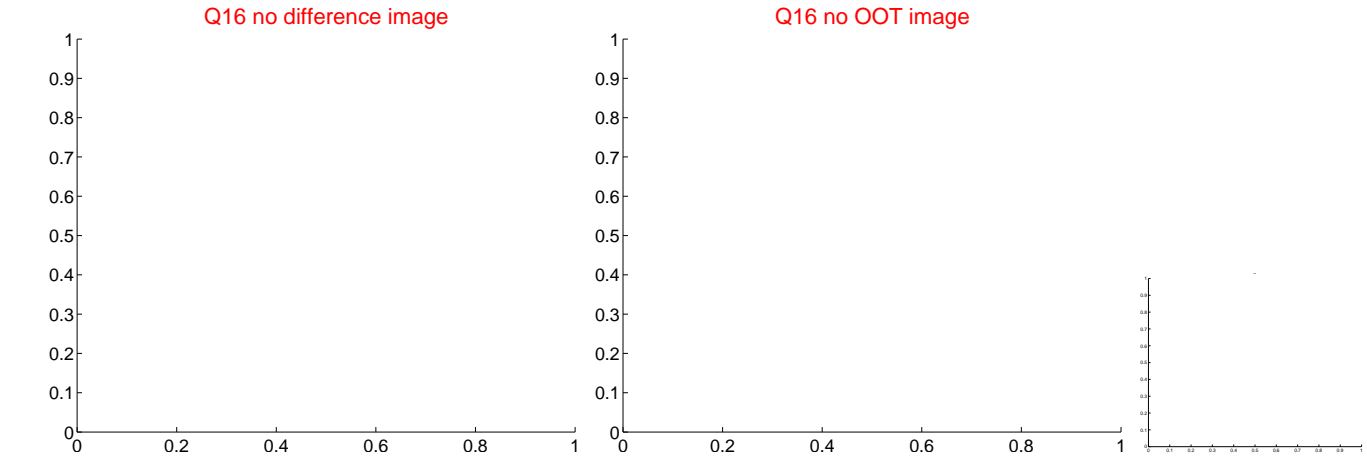
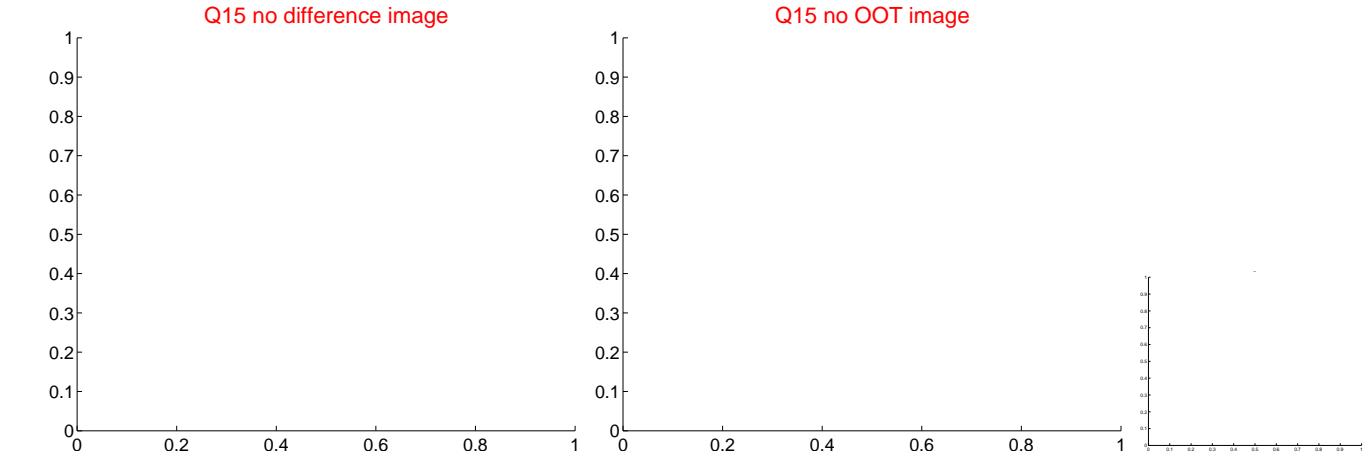
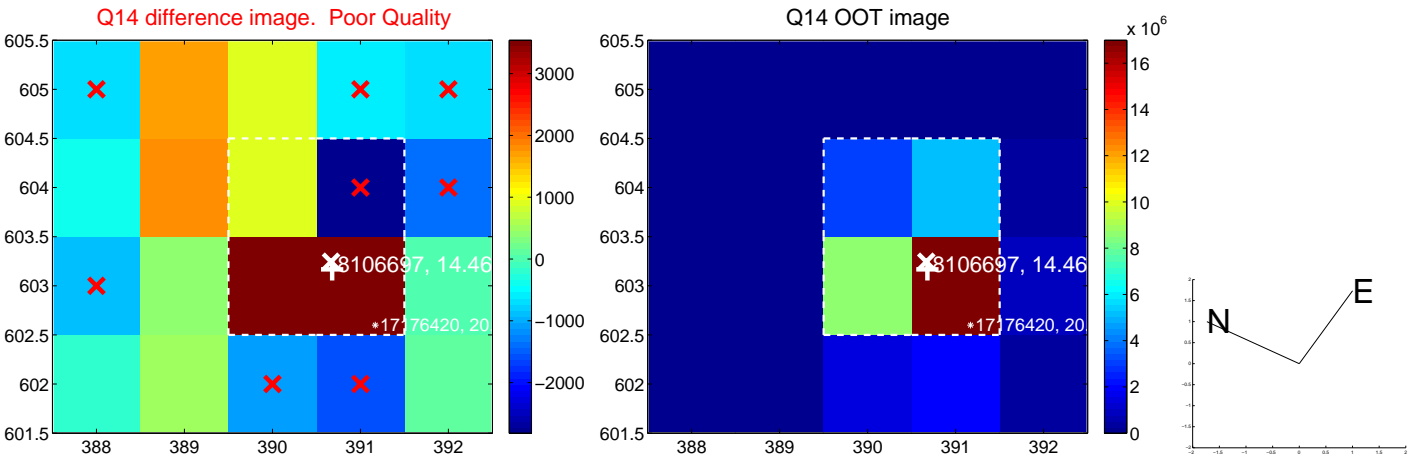
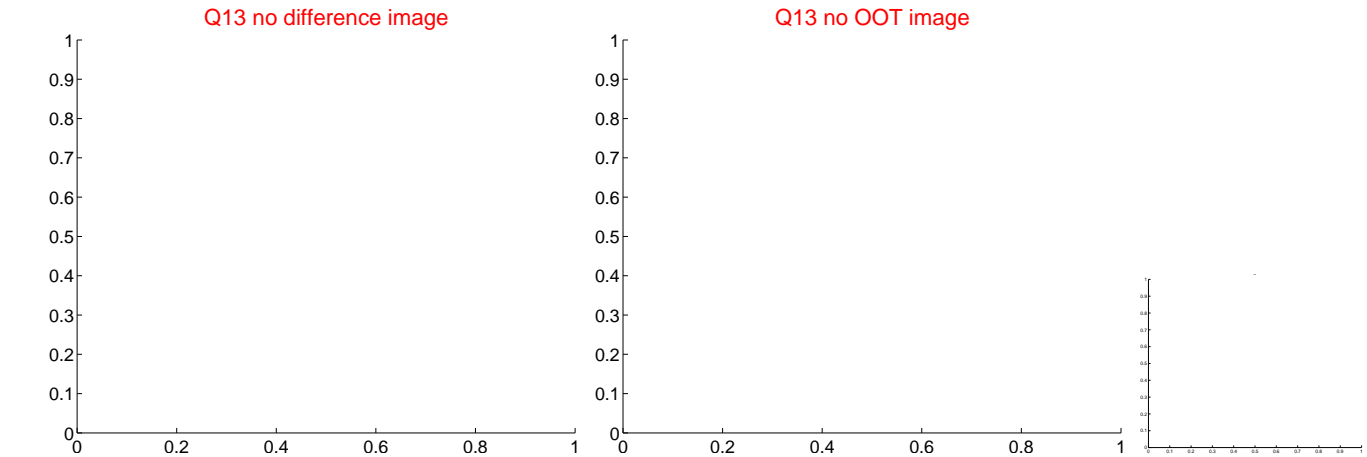
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



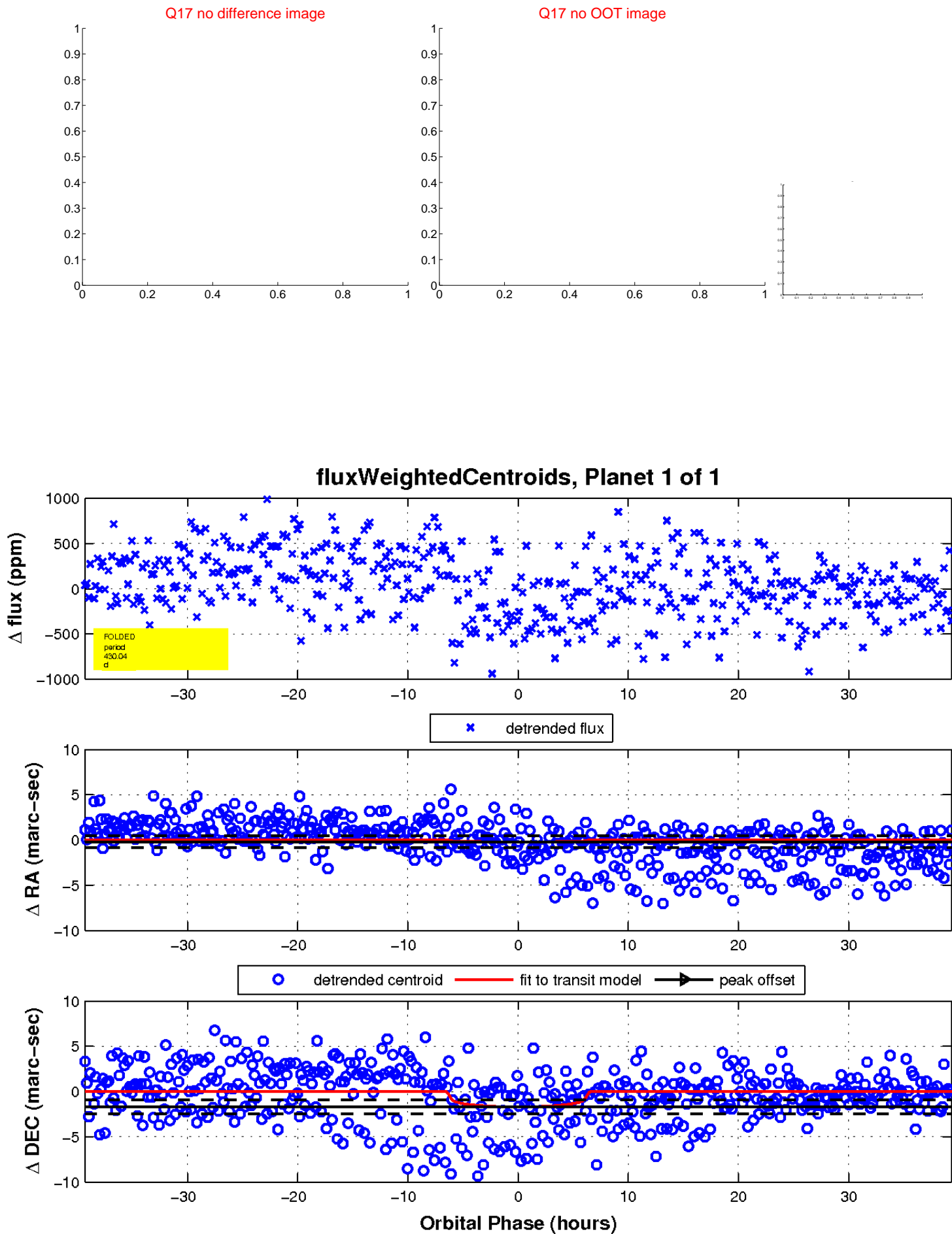
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

