

KIC 007605093

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})
007605093-01	OBS	2817.01	0.634006	131.891429	289.8	0.823	14.5	18.4	0.75	5226	1.28	2042.47

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007605093-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 007605093-01

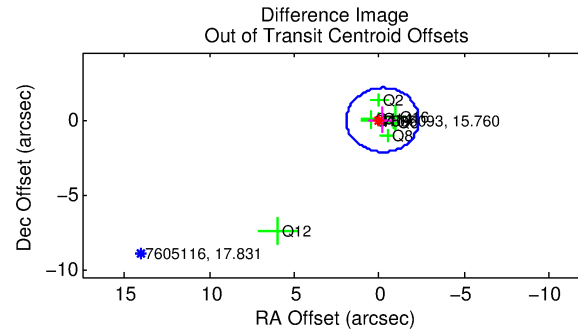
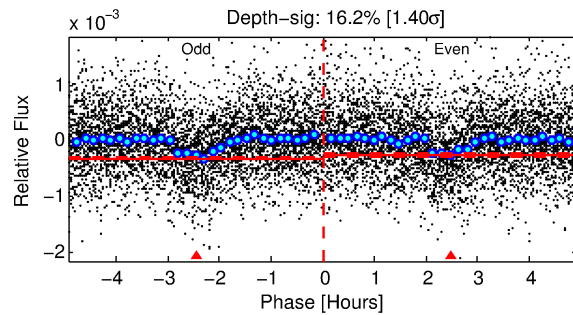
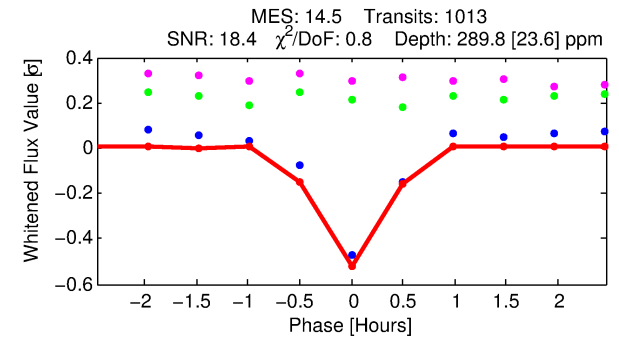
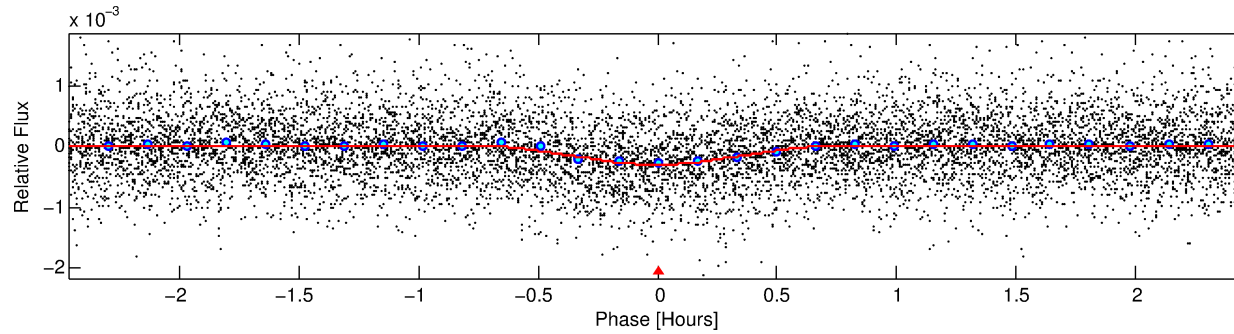
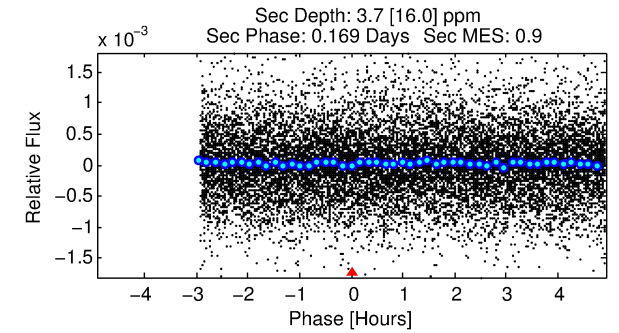
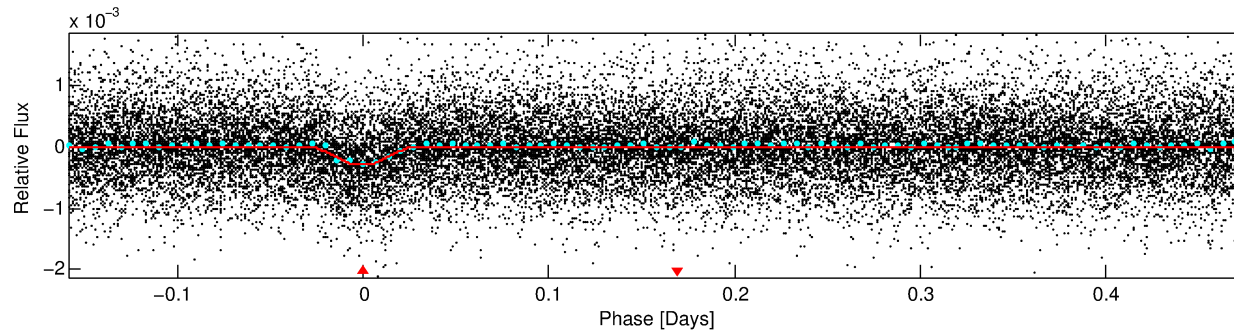
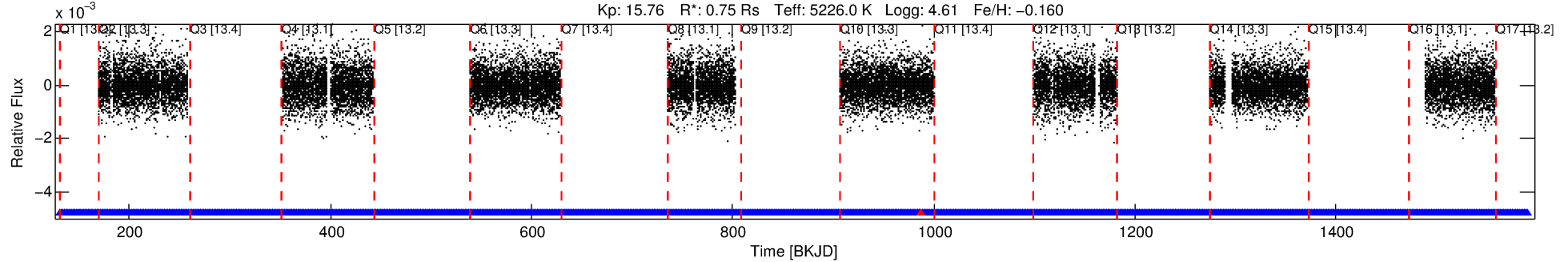
No Significant Match Found

DV One-Page Summary

KIC: 7605093 Candidate: 1 of 1 Period: 0.634 d

KOI: K02817.01 Corr: 0.935

Kp: 15.76 R*: 0.75 Rs Teff: 5226.0 K Logg: 4.61 Fe/H: -0.160



DV Fit Results:

Period = 0.63401 [0.00001] d
Epoch = 131.8914 [0.0008] BKJD
Rp/R* = 0.0156 [0.0138]
a/R* = 5.81 [18.81]
b = 0.26 [11.84]
Seff = 2042.47 [457.38]
Teff = 1714 [96] K
Rp = 1.28 [1.15] Re
a = 0.0136 [0.0016] AU
Ag = 0.23 [1.07] [-0.72σ]
Teffp = 1833 [2141] K [0.06σ]

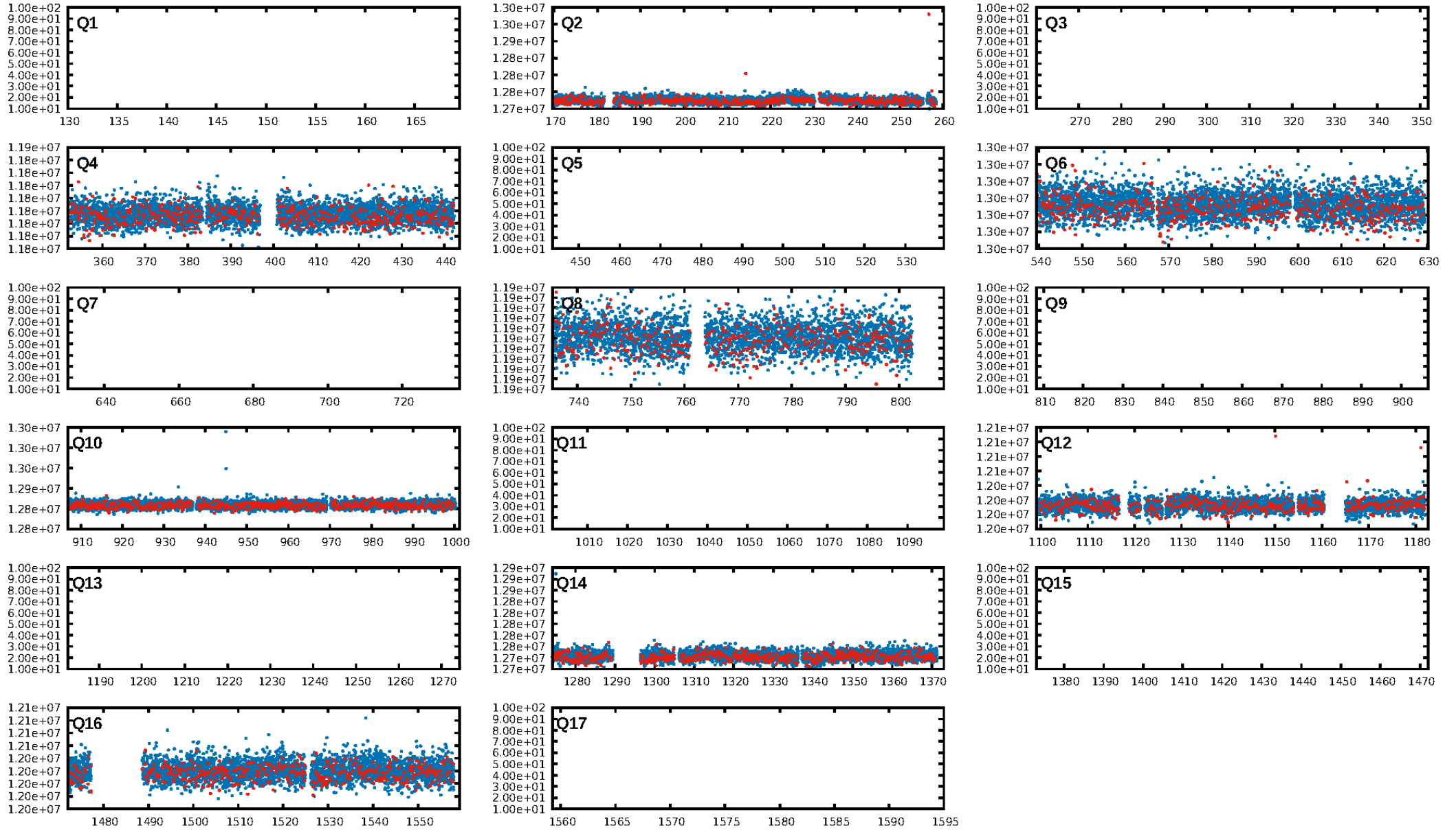
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.85e-47
RollingBand-fgt: 1.00 [1012/1013]
GhostDiagnostic-chr: 1.671
Centroid-sig: 0.1%
Centroid-so: 1.786 arcsec [2.23σ]
OotOffset-rm: 0.209 arcsec [0.29σ]
KicOffset-rm: 0.262 arcsec [0.94σ]
OotOffset-st: 4/0/4/0 [8]
KicOffset-st: 4/0/4/0 [8]
DiffImageQuality-fgm: 0.88 [7/8]
DiffImageOverlap-fno: 1.00 [8/8]

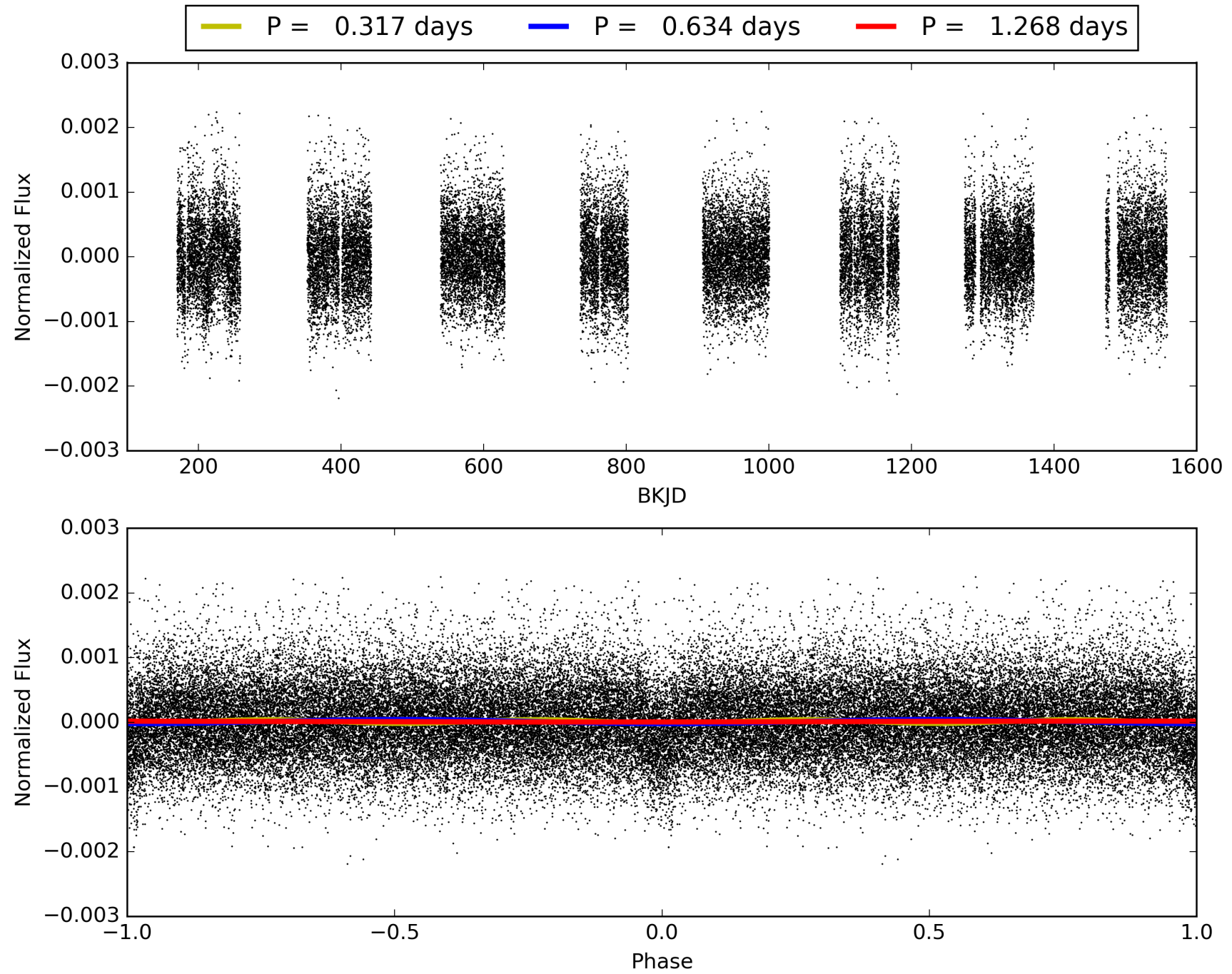
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 23:58:11 Z

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

TCE 007605093-01, PDC Light Curves

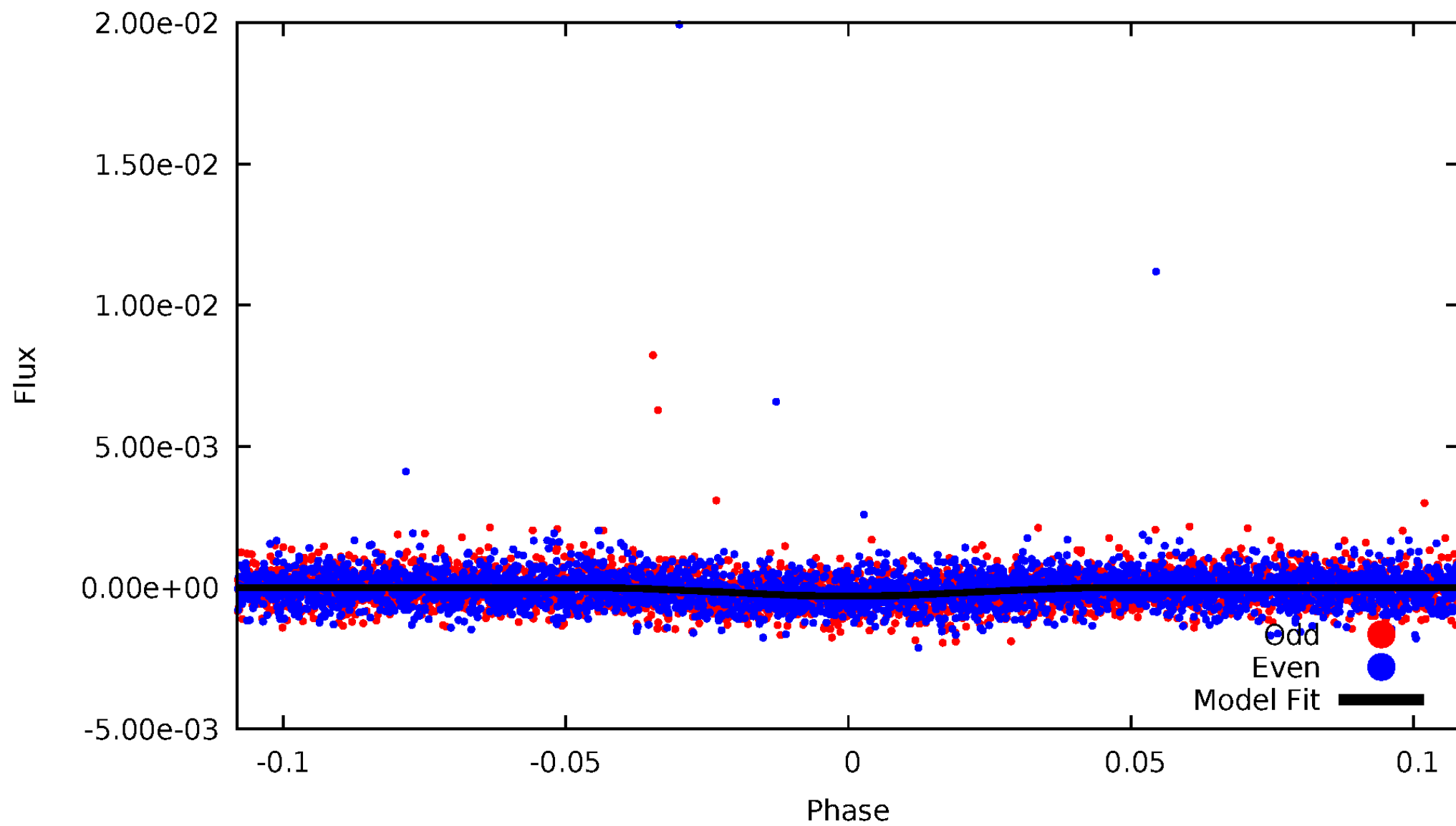


TCE 007605093-01



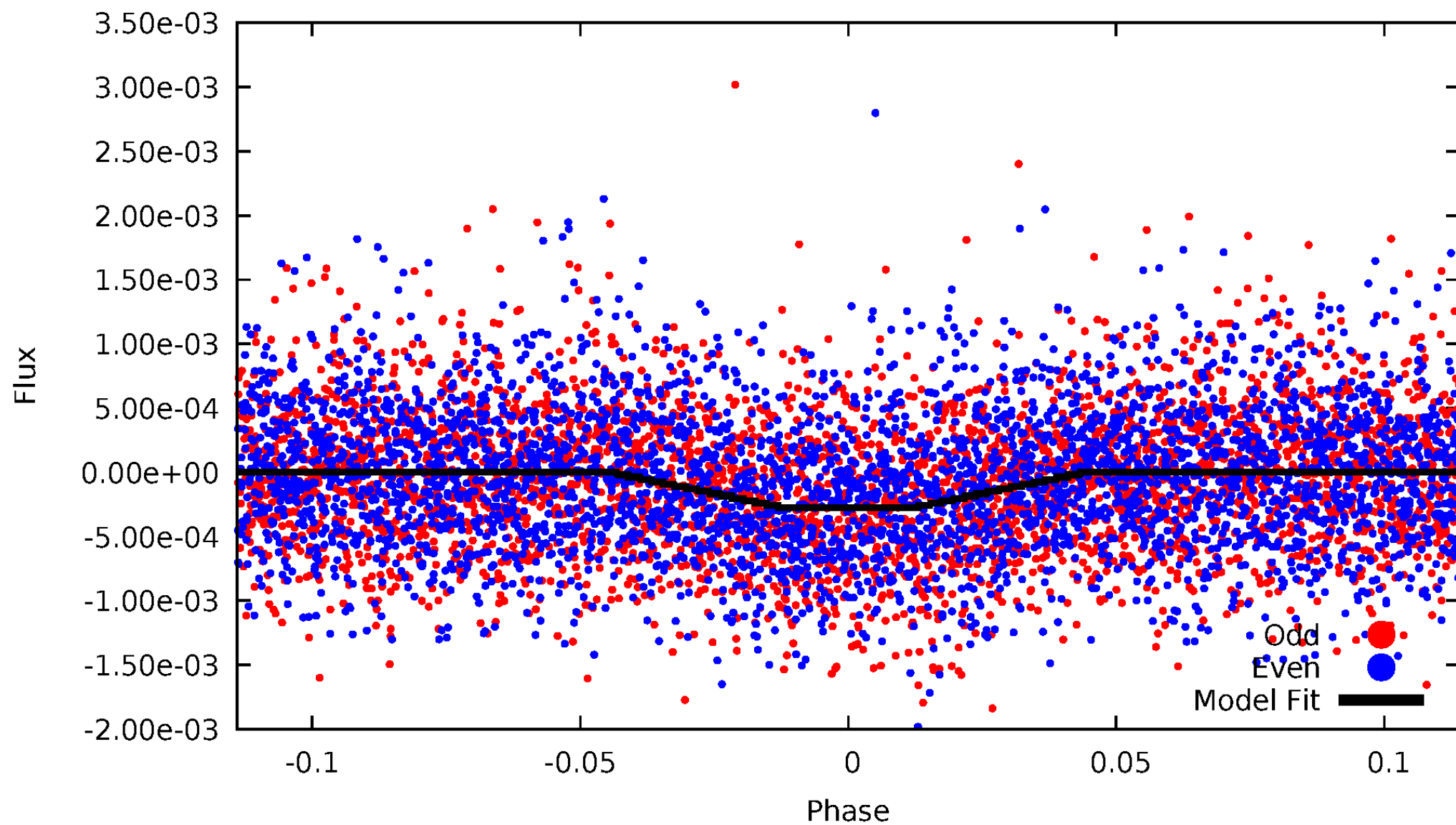
DV Odd/Even

TCE 007605093-01

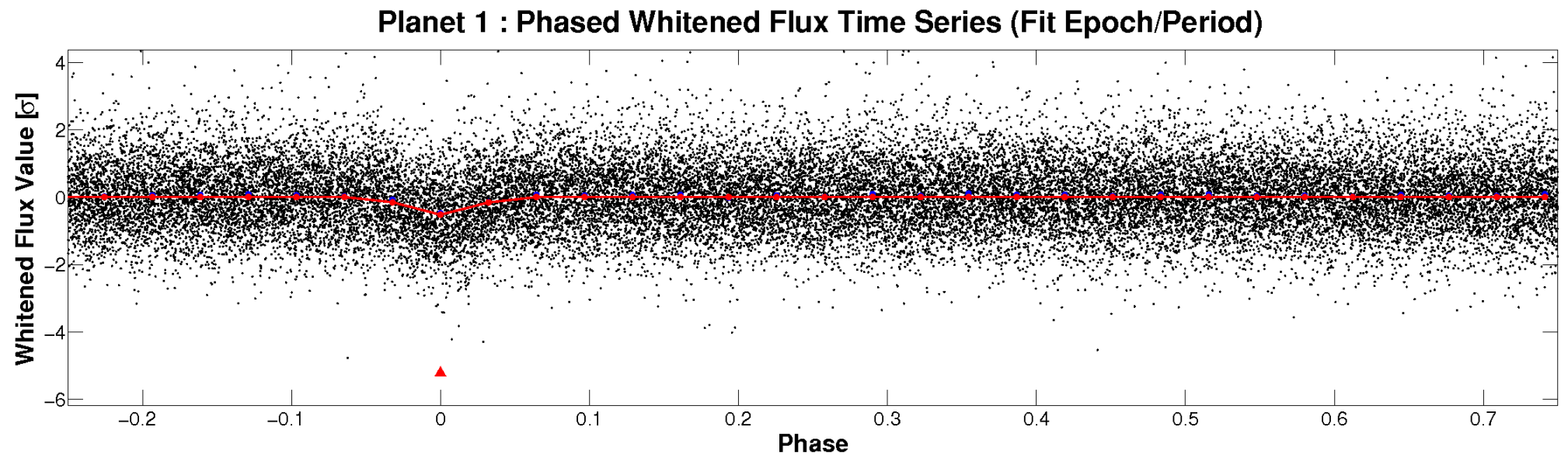
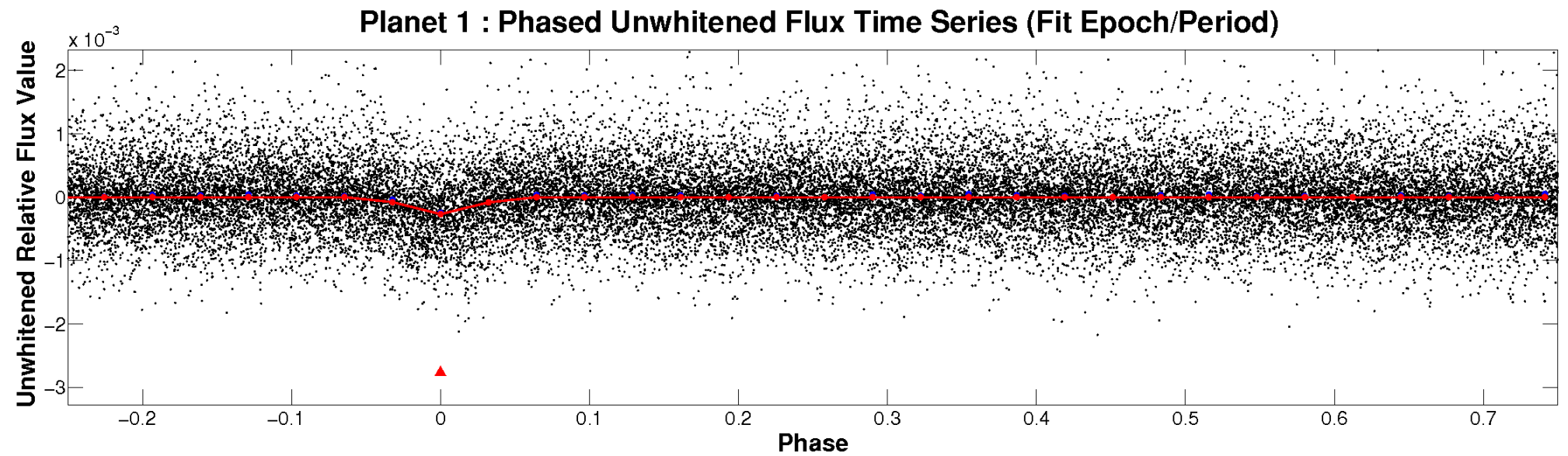


ALT Odd/Even

TCE 007605093-01

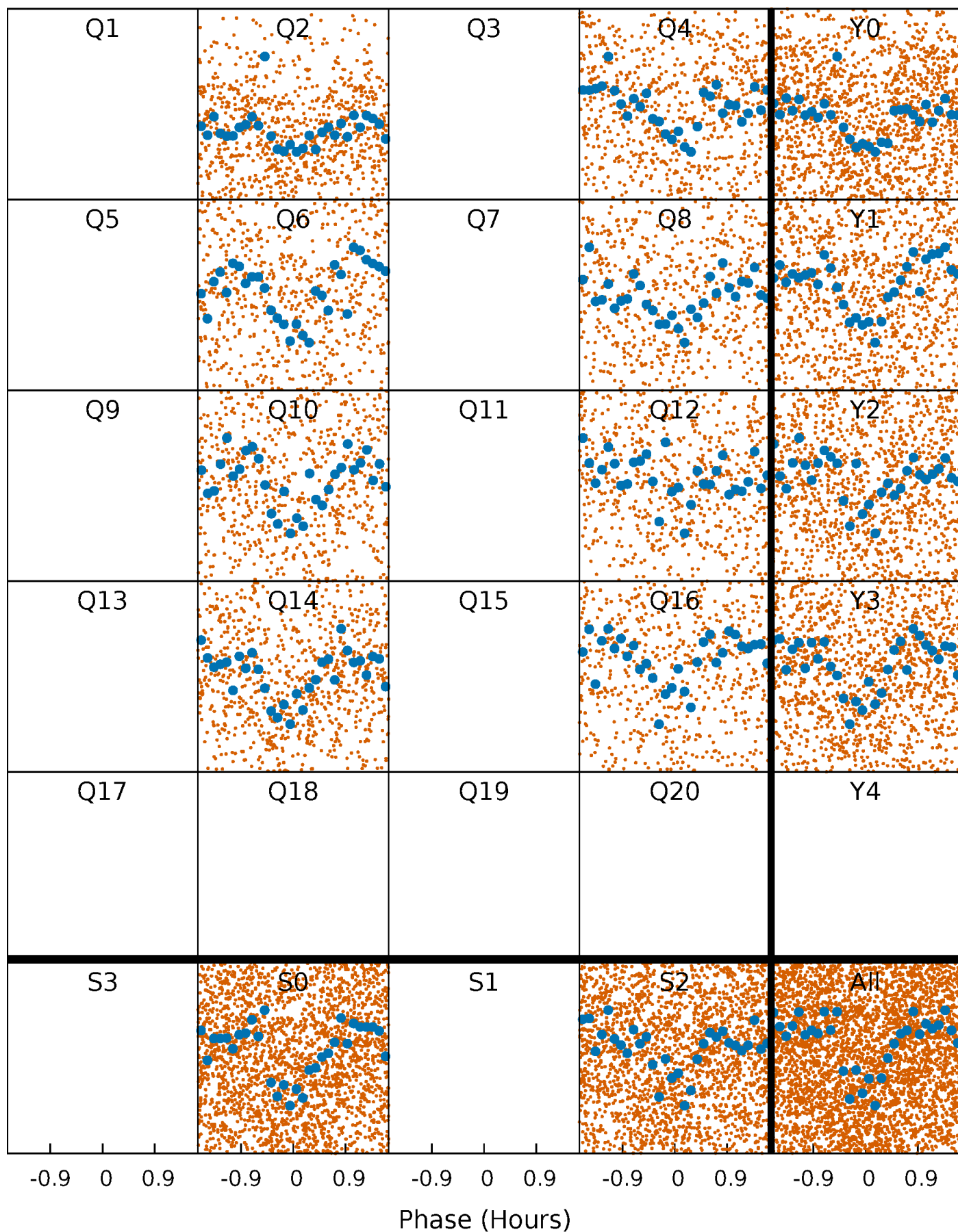


Non-Whitened Vs. Whitened Light Curve



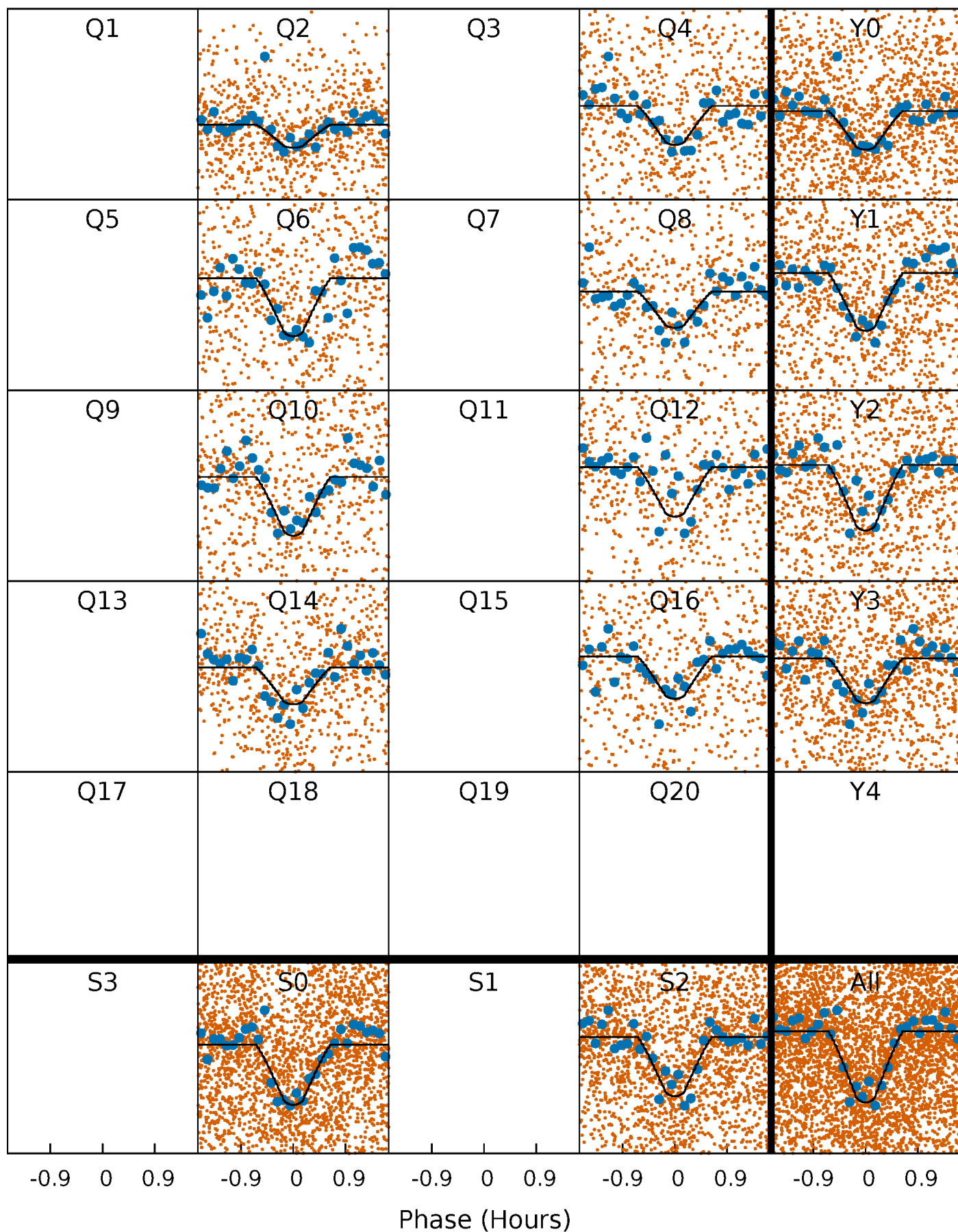
PDC Quarter-Phased Transit Curves

TCE 007605093-01 P= 0.634006 Days $T_0=131.891429$ (BKJD)



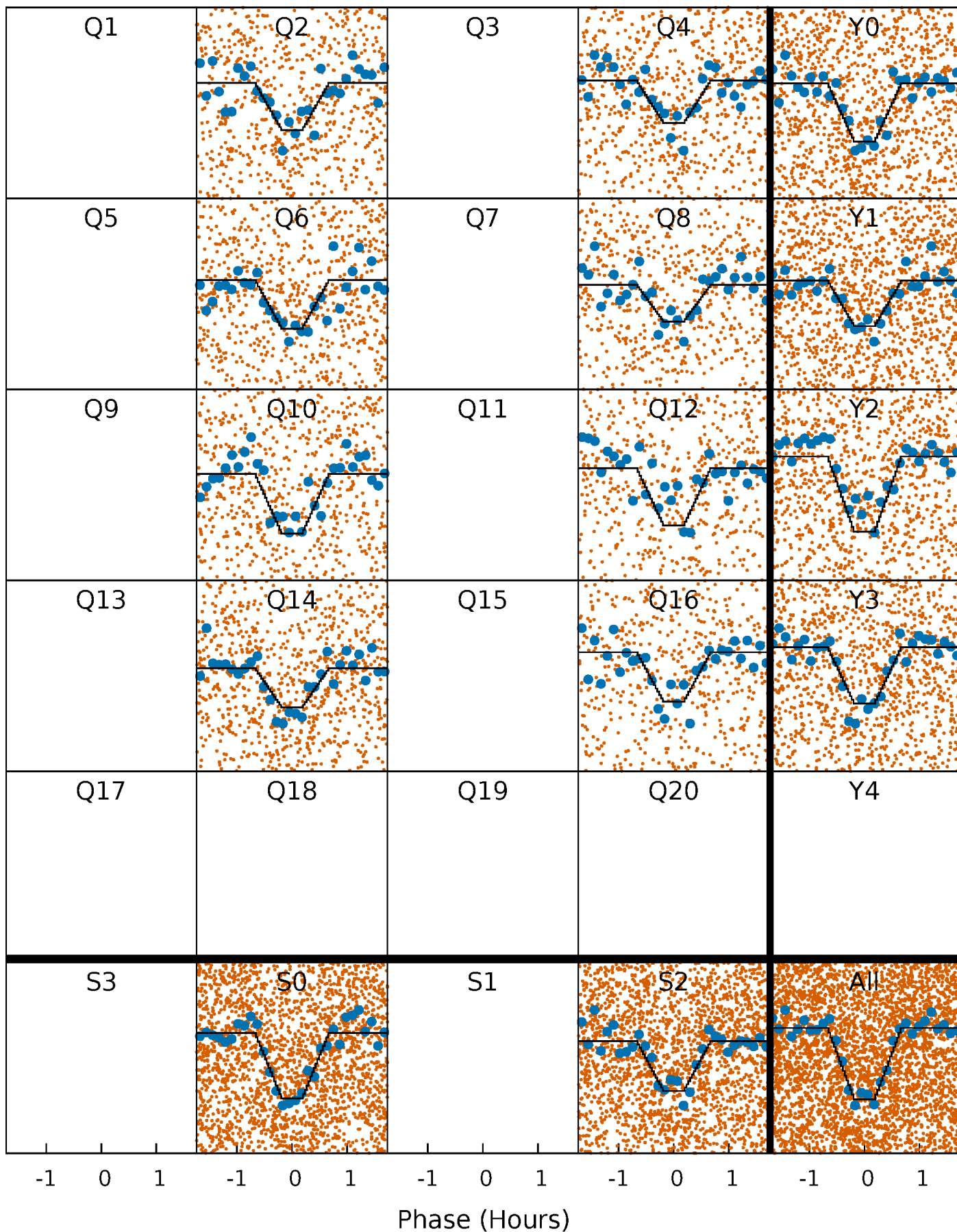
DV Quarter-Phased Transit Curves

TCE 007605093-01 P= 0.634006 Days $T_0=131.891429$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

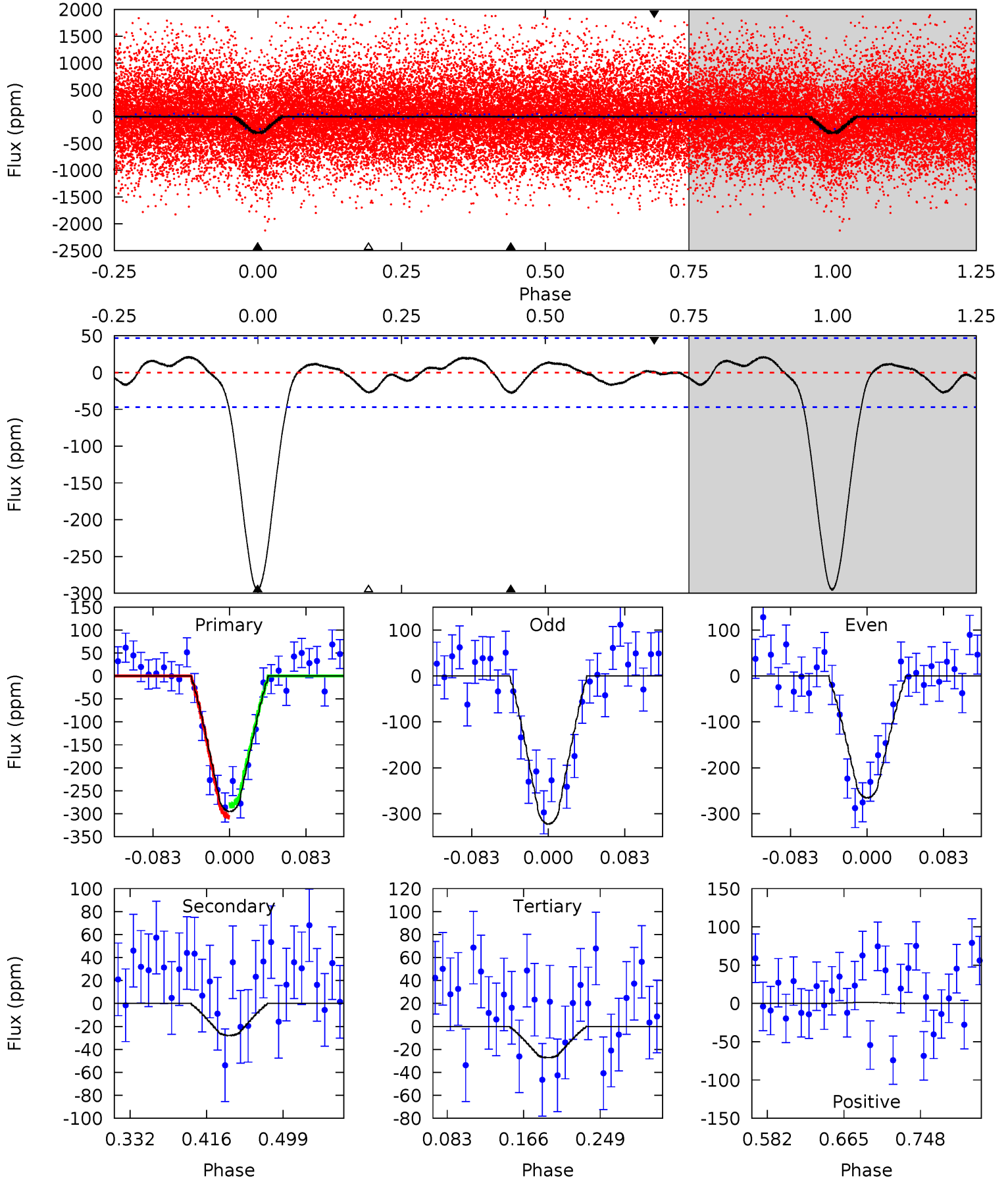
TCE 007605093-01 P= 0.634004 Days $T_0=131.892955$ (BKJD)



DV Model-Shift Uniqueness Test

007605093-01, P = 0.634006 Days, E = 131.891429 Days

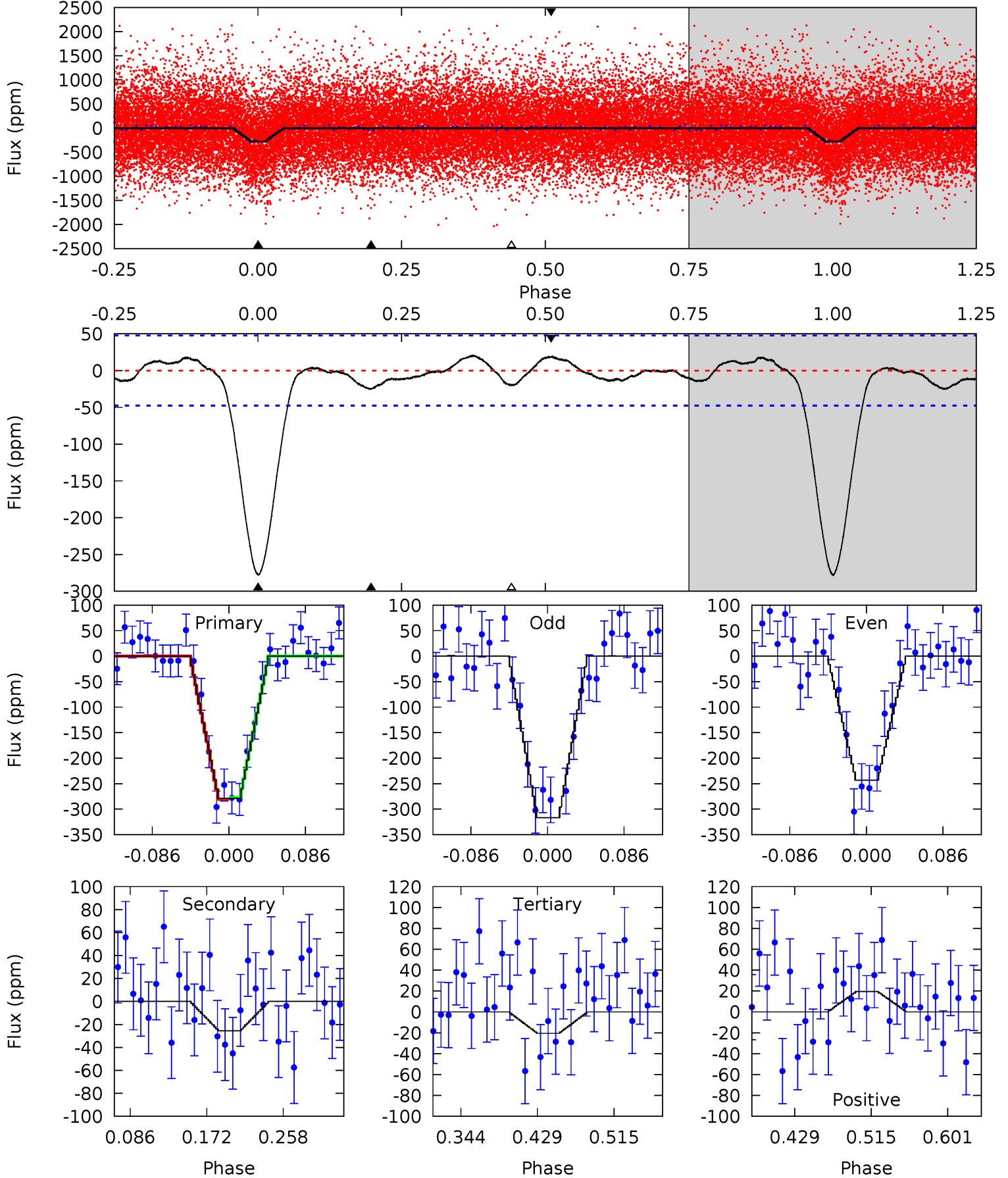
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.9	2.73	2.66	0.13	4.60	1.73	1.11	26.3	28.8	0.07	2.61	2.80	0.96	0.07	1.21



Alt Model-Shift Uniqueness Test

007605093-01, P = 0.634004 Days, E = 131.892955 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.9	2.47	1.98	1.87	4.60	1.72	1.03	24.9	25.0	0.48	0.59	3.55	0.91	0.07	0.18



Stellar Parameters For KIC 007605093

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5226^{+190}_{-190}	$4.606^{+0.036}_{-0.090}$	$-0.160^{+0.300}_{-0.300}$	$0.750^{+0.112}_{-0.060}$	$0.840^{+0.069}_{-0.103}$	$2.800^{+0.487}_{-0.876}$
	+4%/-4%	+1%/-2%	+188%/-188%	+15%/-8%	+8%/-12%	+17%/-31%
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 007605093-01 / KOI 2817.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-28 ± 10	$1.58^{+1.03}_{-0.93}$	2419^{+113}_{-104}	3148^{+1253}_{-921}	$1.133^{+5.331}_{-0.780}$
Alt.	-26 ± 10	$1.57^{+1.00}_{-0.87}$	2422^{+114}_{-106}	3075^{+1208}_{-1090}	$0.992^{+4.221}_{-0.672}$

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

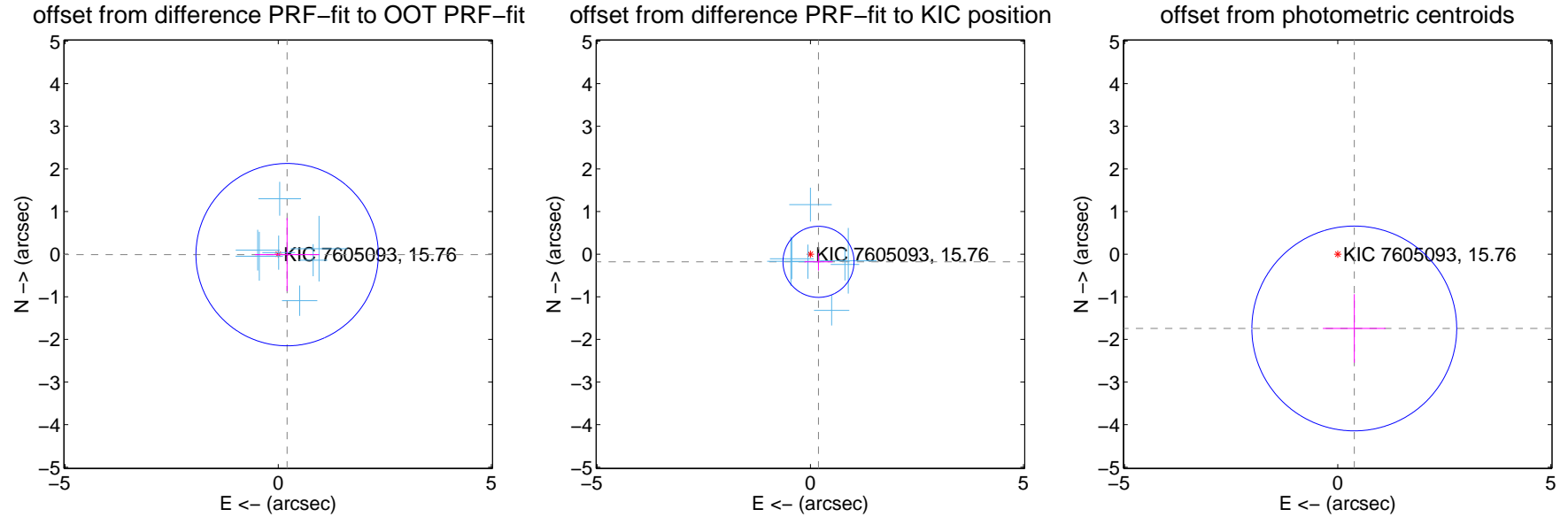
DV Centroid Data

Supplemental centroid analysis for 007605093-01. Kepler magnitude: 15.76. Transit SNR 18.38

There are 7 quarters with good PRF difference image offsets

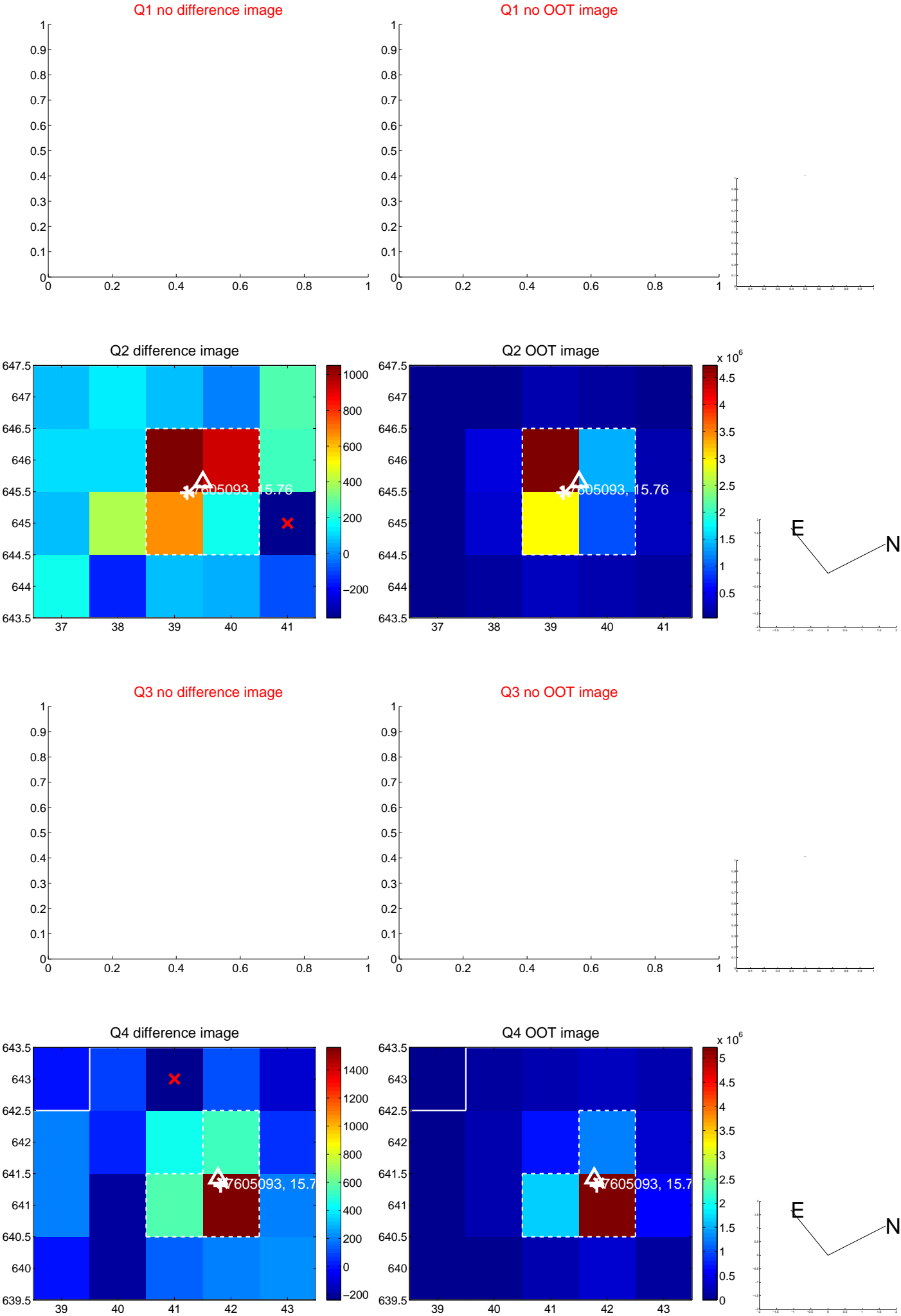
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.209 ± 0.713	0.29	-0.209 ± 0.757	-0.011 ± 0.857
PRF-fit source offset from KIC position	0.262 ± 0.278	0.94	-0.190 ± 0.329	-0.180 ± 0.206
photometric centroid source offset	1.79 ± 0.80	2.23	-0.39 ± 0.74	-1.74 ± 0.80



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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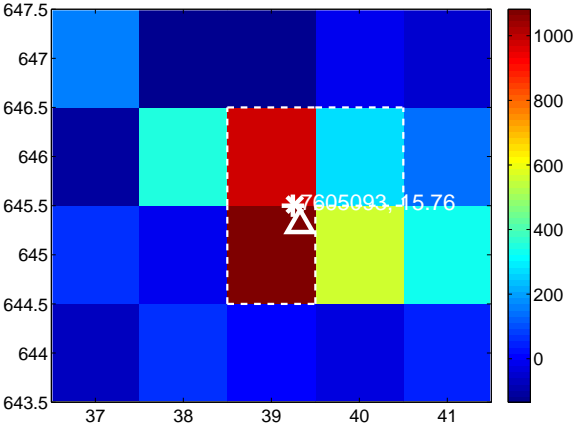
Q5 no difference image



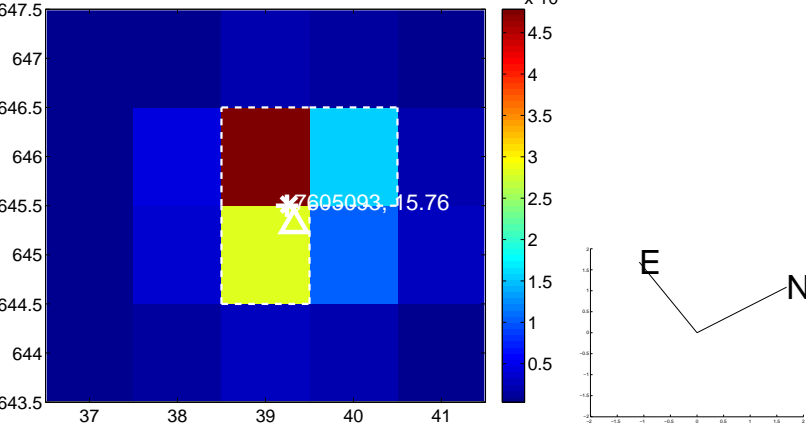
Q5 no OOT image



Q6 difference image



Q6 OOT image



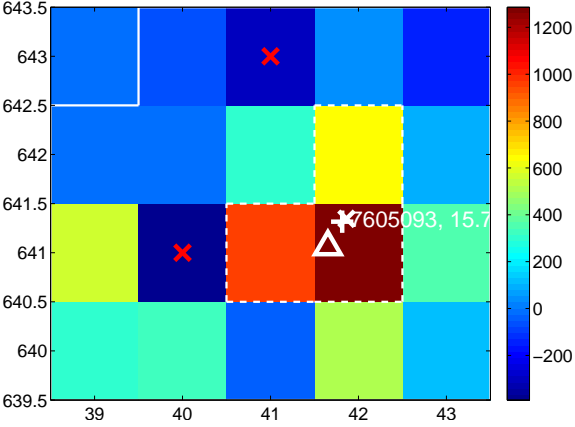
Q7 no difference image



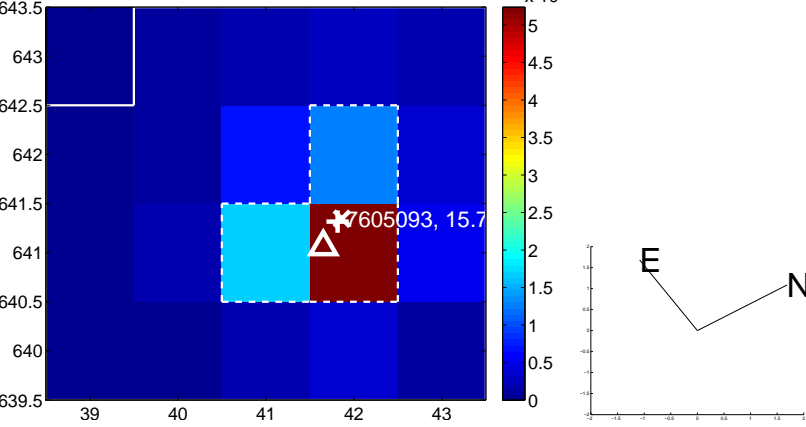
Q7 no OOT image



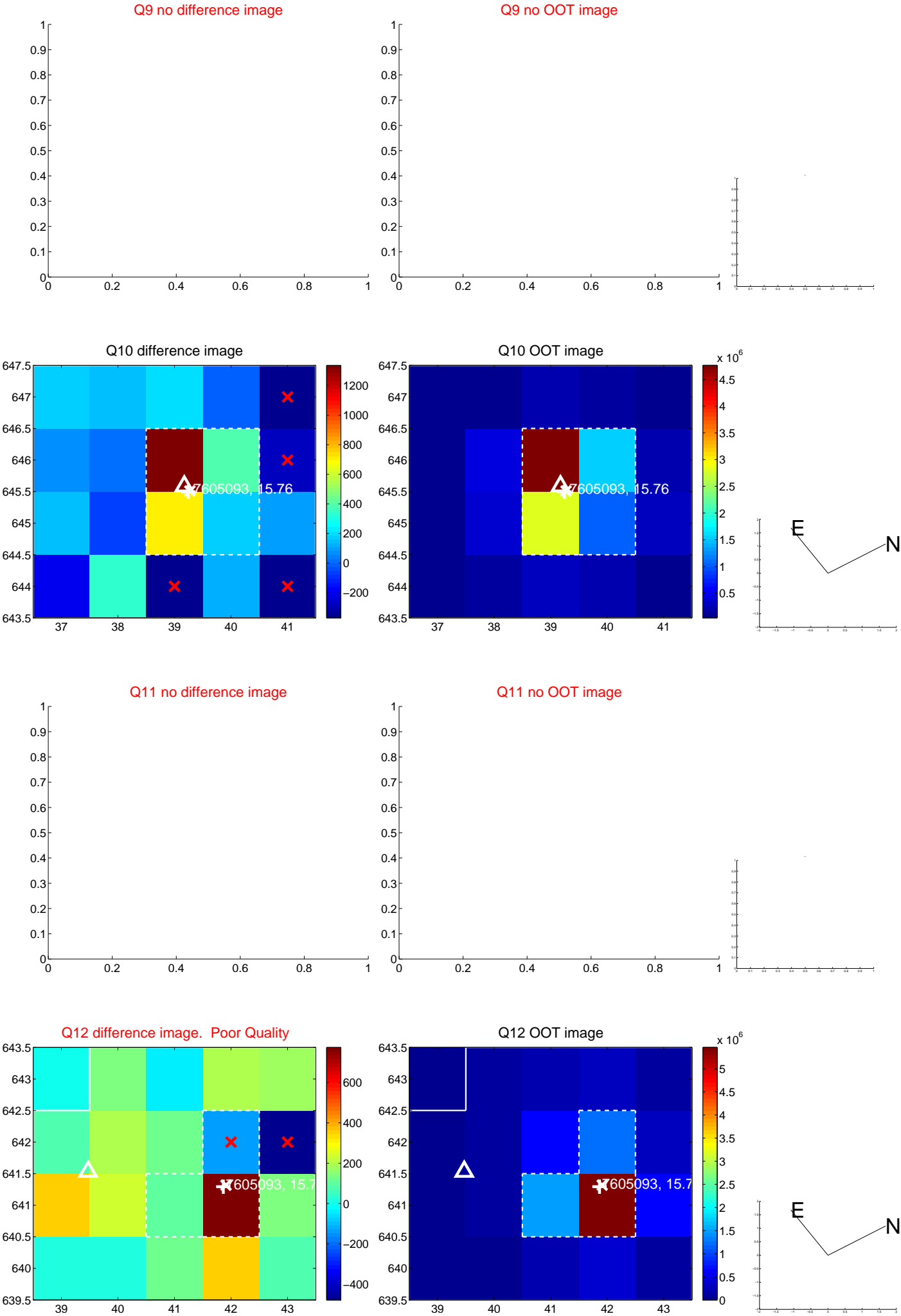
Q8 difference image



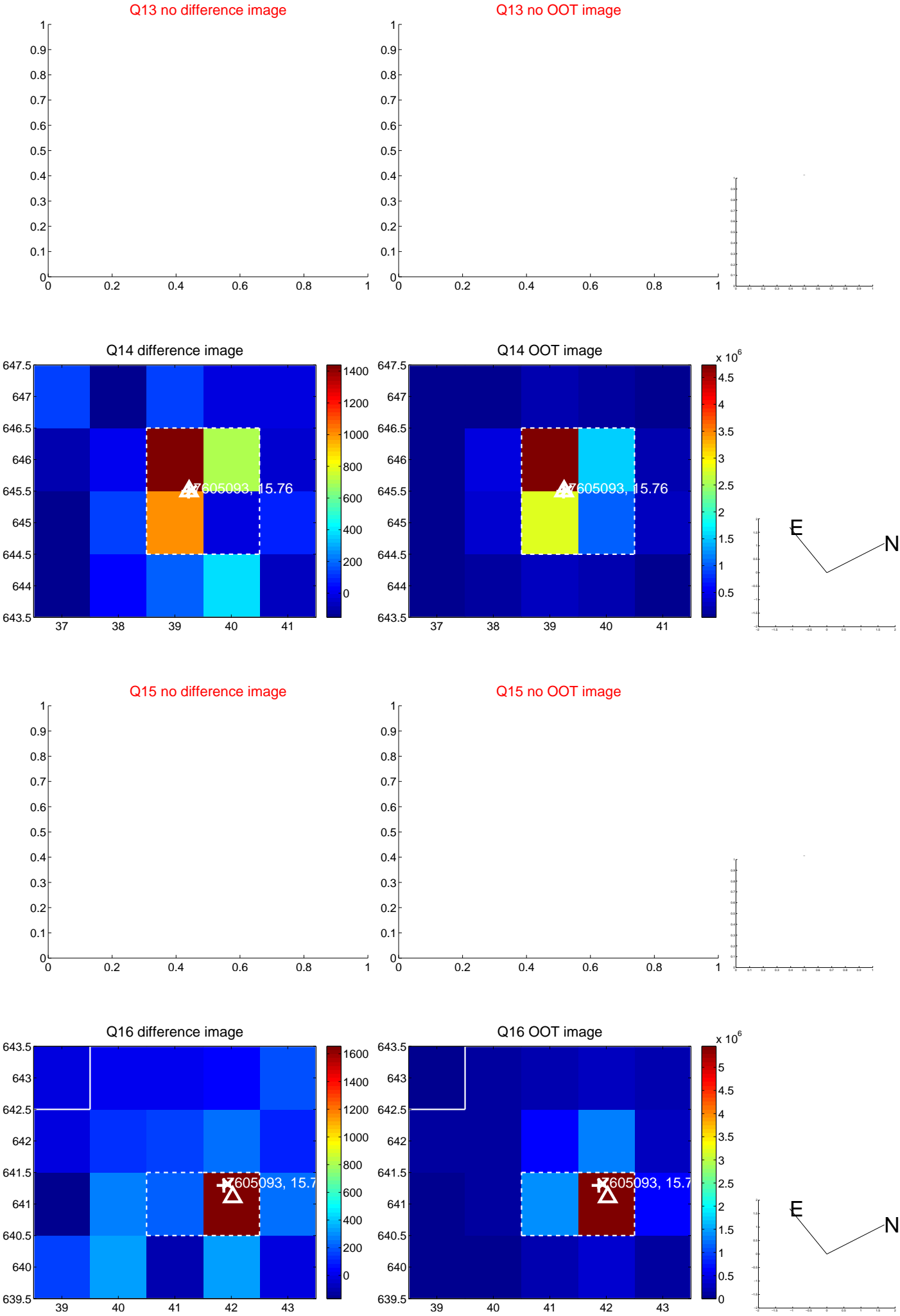
Q8 OOT image



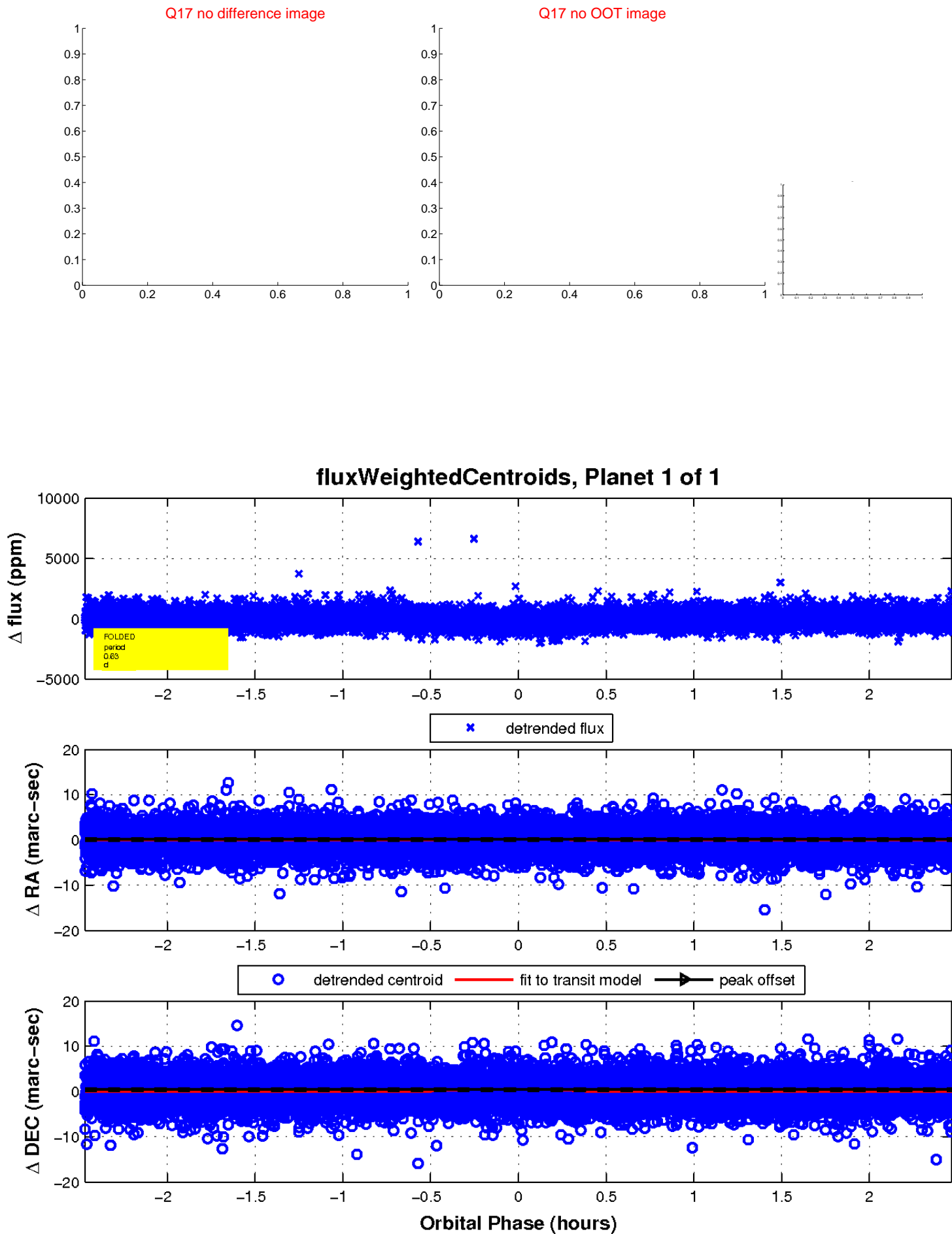
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



Declination