

KIC 007135699

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})
007135699-01	OBS	No	495.089866	251.121653	212.8	3.620	7.3	6.6	1.95	5738	3.19	2.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007135699-01	OBS	FP	0.00	1	0	0	0	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.

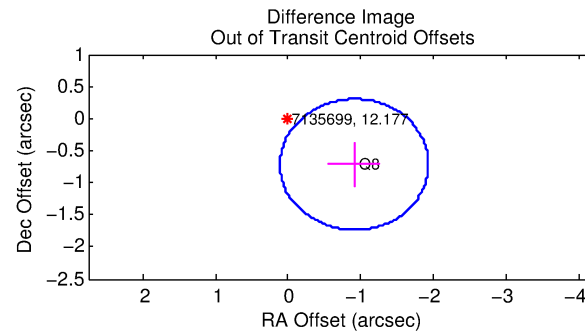
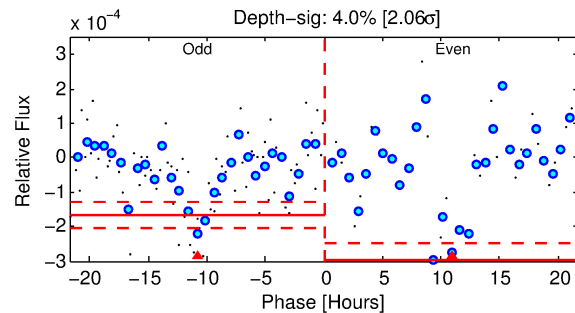
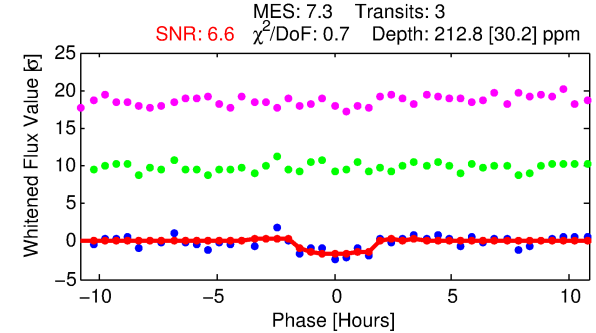
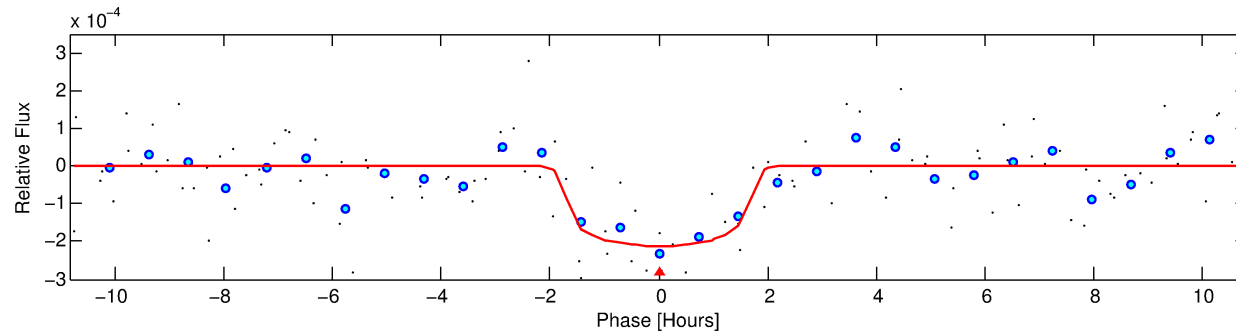
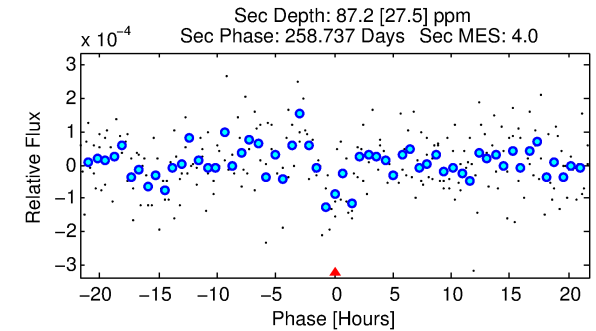
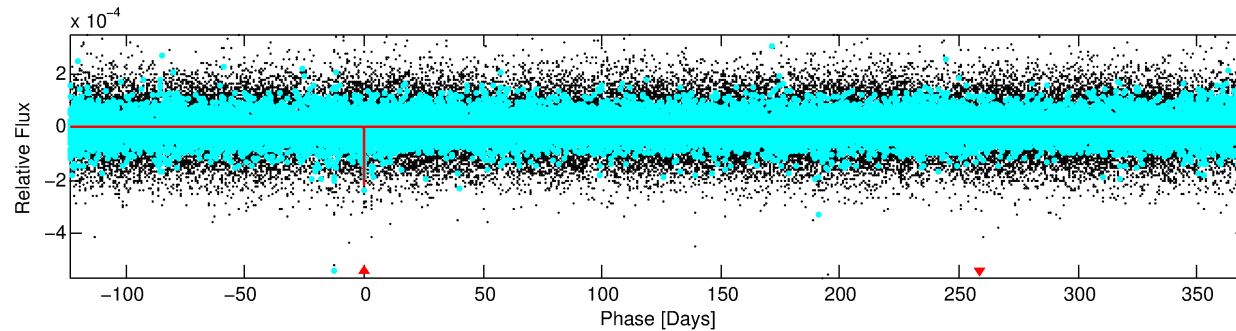
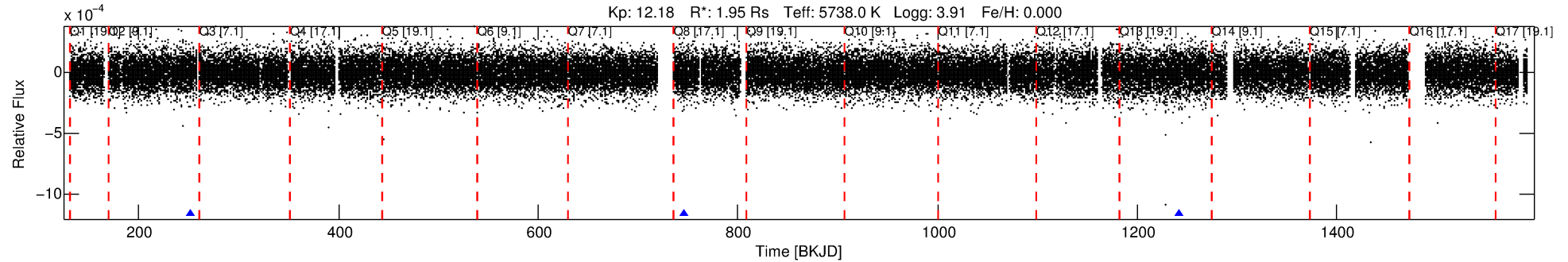
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007135699-01

No Significant Match Found

DV One-Page Summary

KIC: 7135699 Candidate: 1 of 1 Period: 495.090 d



DV Fit Results:

Period = 495.08987 [0.00675] d
Epoch = 251.1217 [0.0066] BKJD
Rp/R* = 0.0150 [0.0156]
a/R* = 630.78 [2975.68]
b = 0.82 [1.96]
Seff = 2.27 [1.19]
Teq = 313 [41] K
Rp = 3.19 [3.49] Re
a = 1.2787 [0.4067] AU
Ag = 7702.19 [16719.98] [0.46 σ]
Teffp = 4532 [2395] K [1.76 σ]

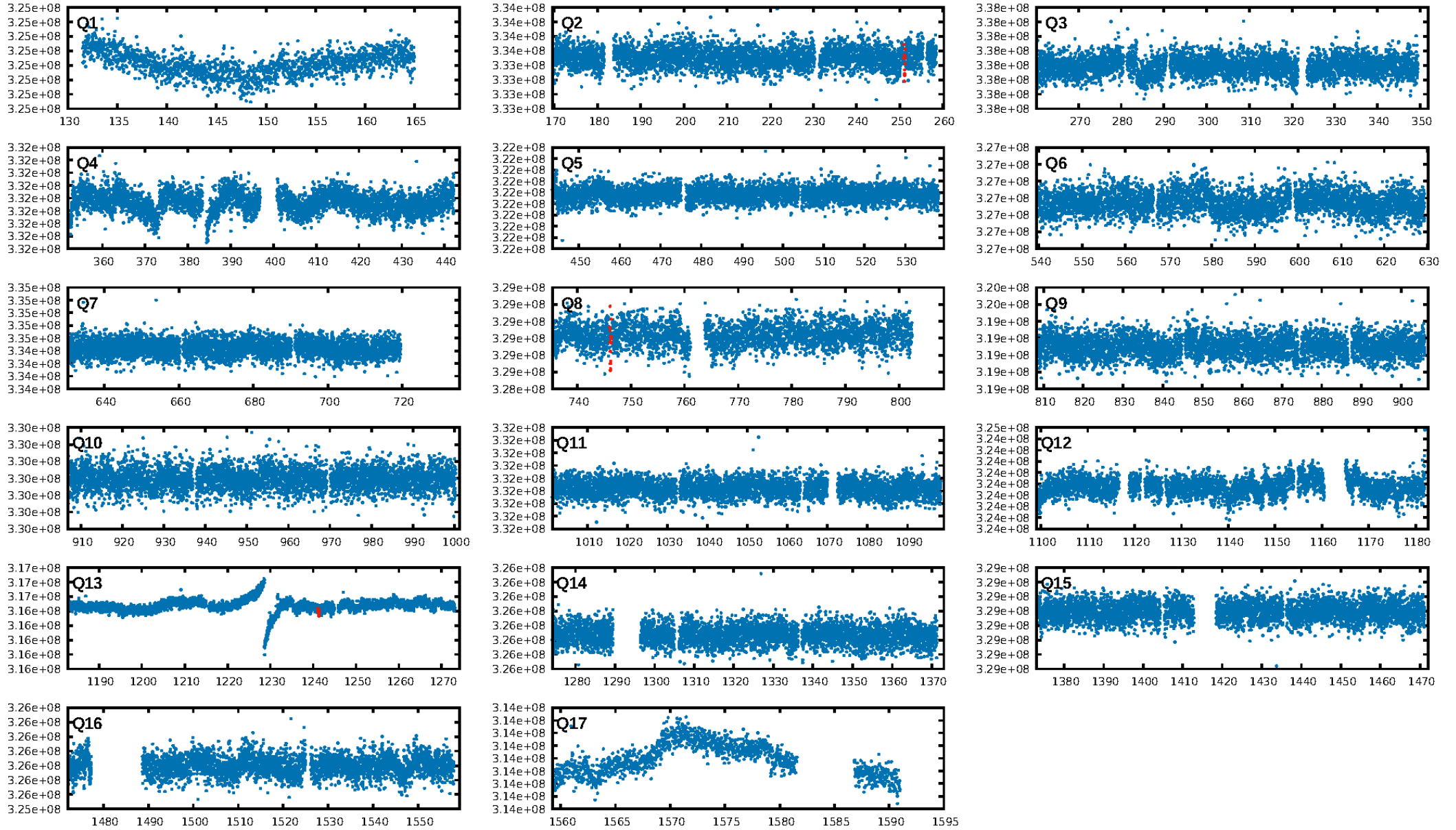
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 32.9%
ModelChiSquareGof-sig: 98.3%
Bootstrap-pfa: 2.47e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.333
Centroid-sig: 43.8%
Centroid-so: 1.048 arcsec [0.90 σ]
OotOffset-rm: 1.158 arcsec [3.40 σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-rm: 0.846 arcsec [2.50 σ]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

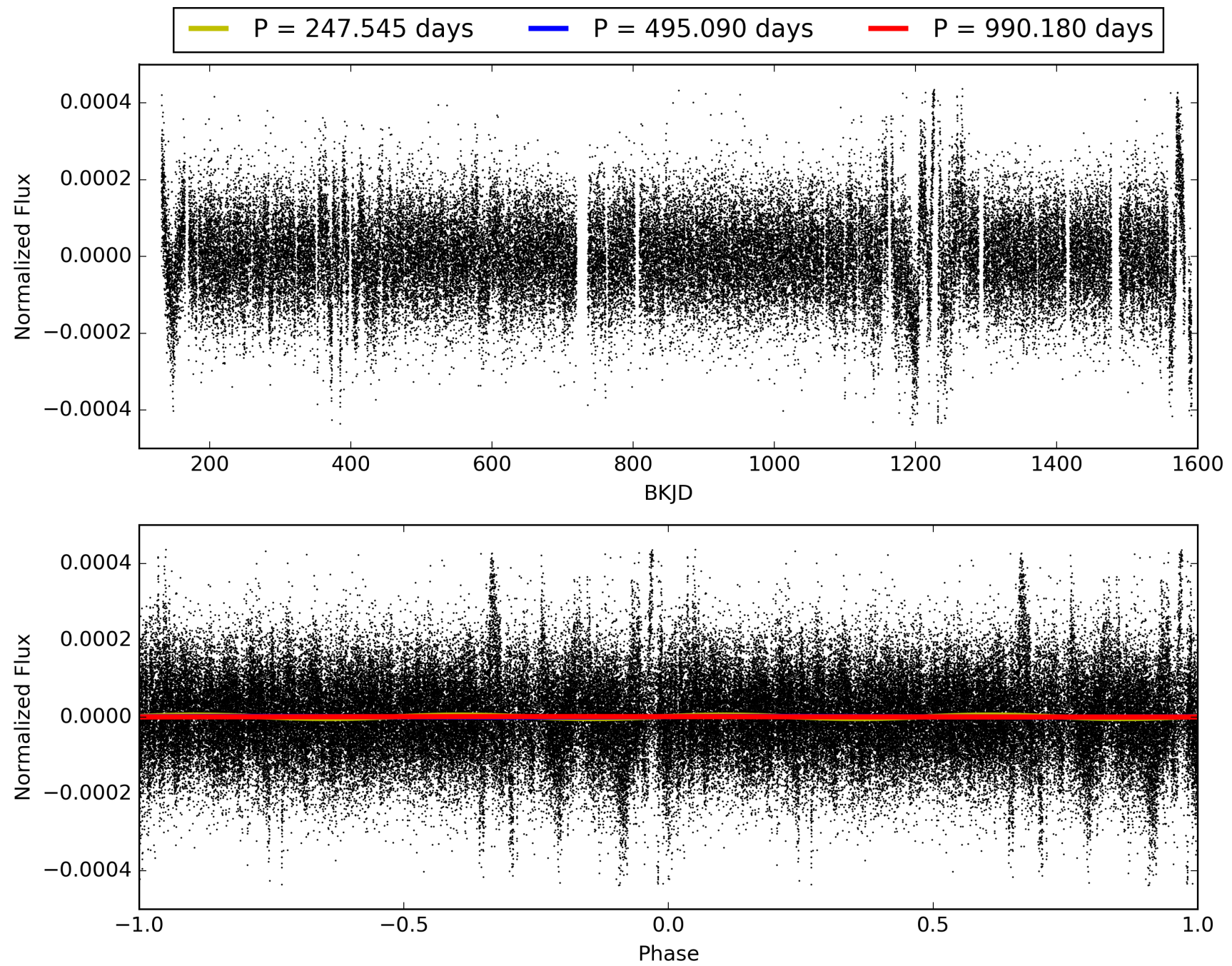
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:21:36 Z

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

TCE 007135699-01, PDC Light Curves

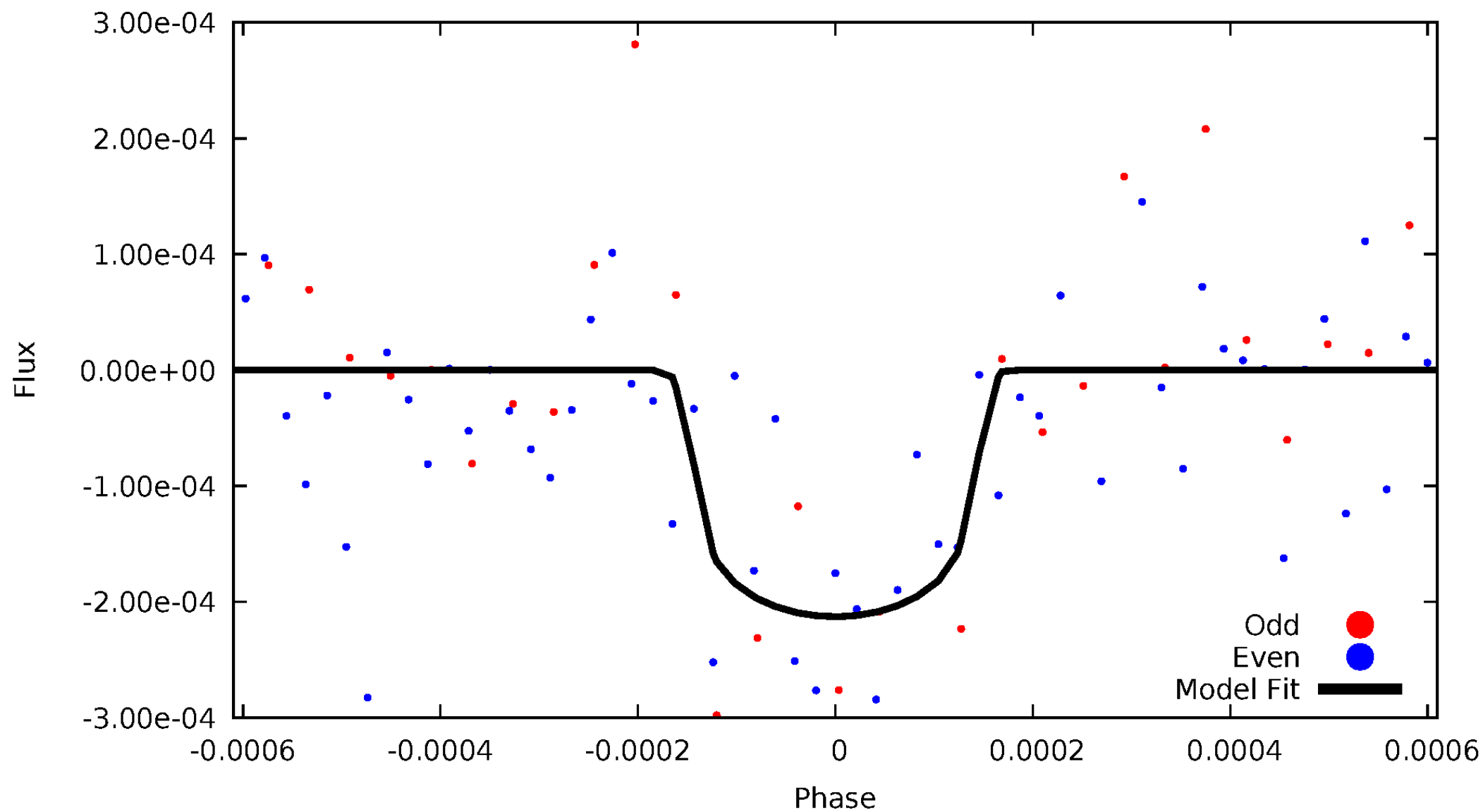


TCE 007135699-01



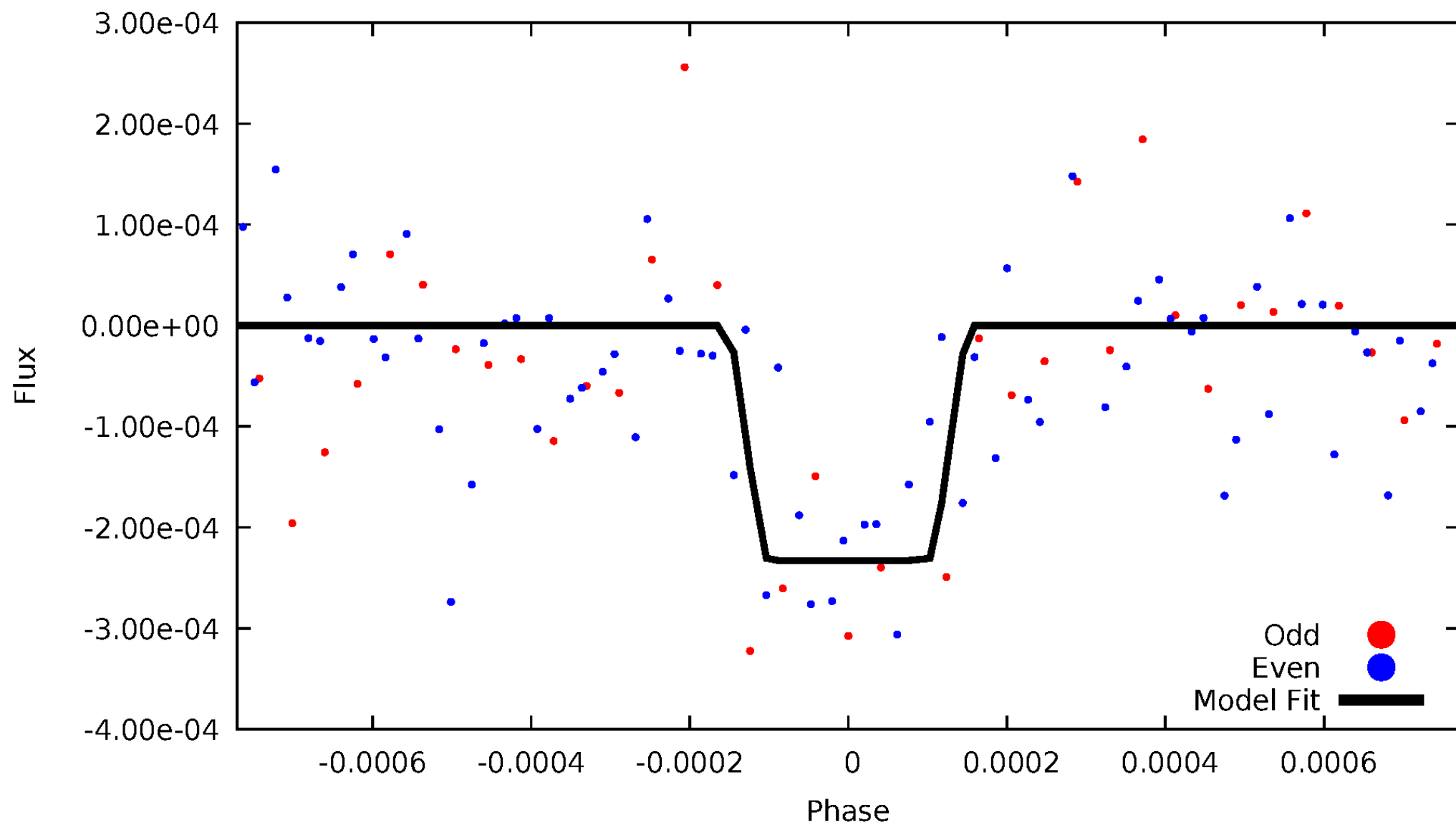
DV Odd/Even

TCE 007135699-01

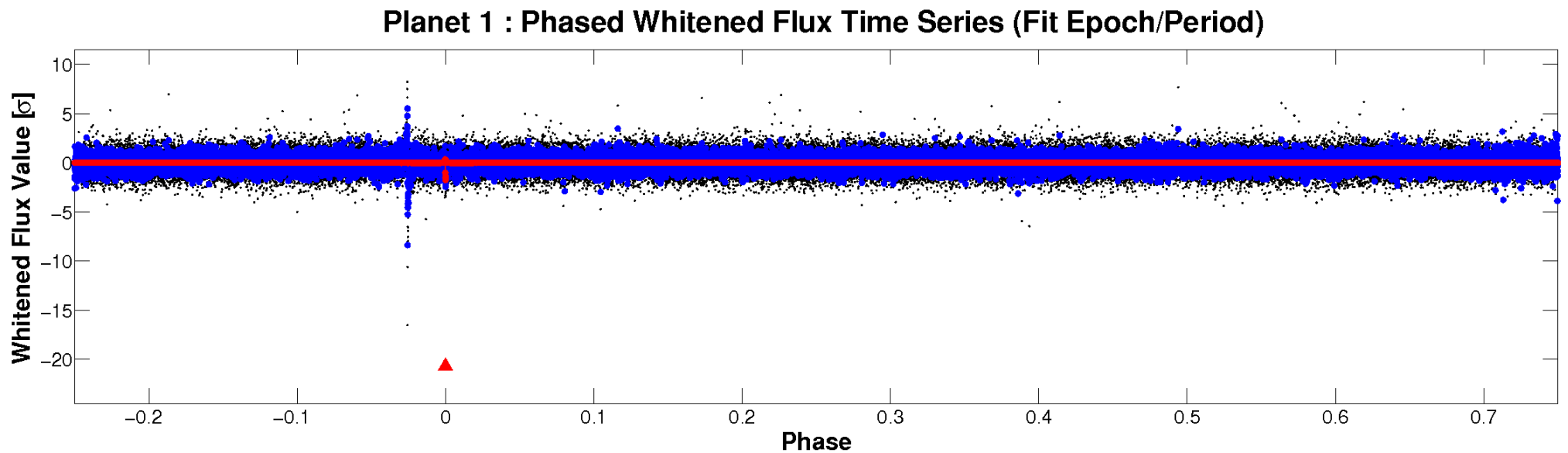
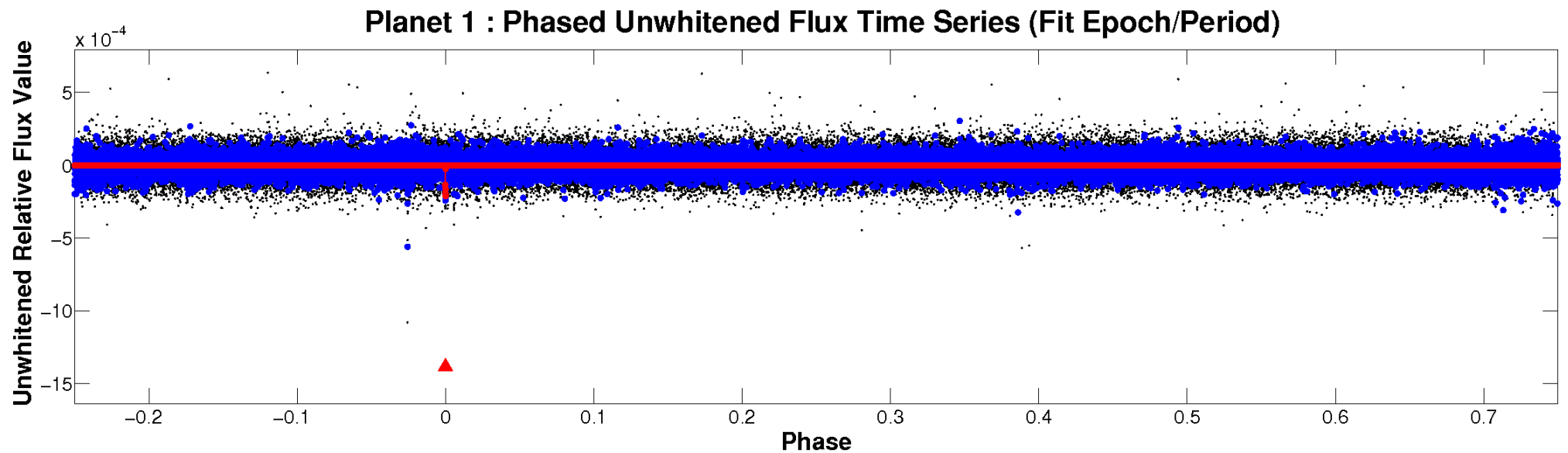


ALT Odd/Even

TCE 007135699-01

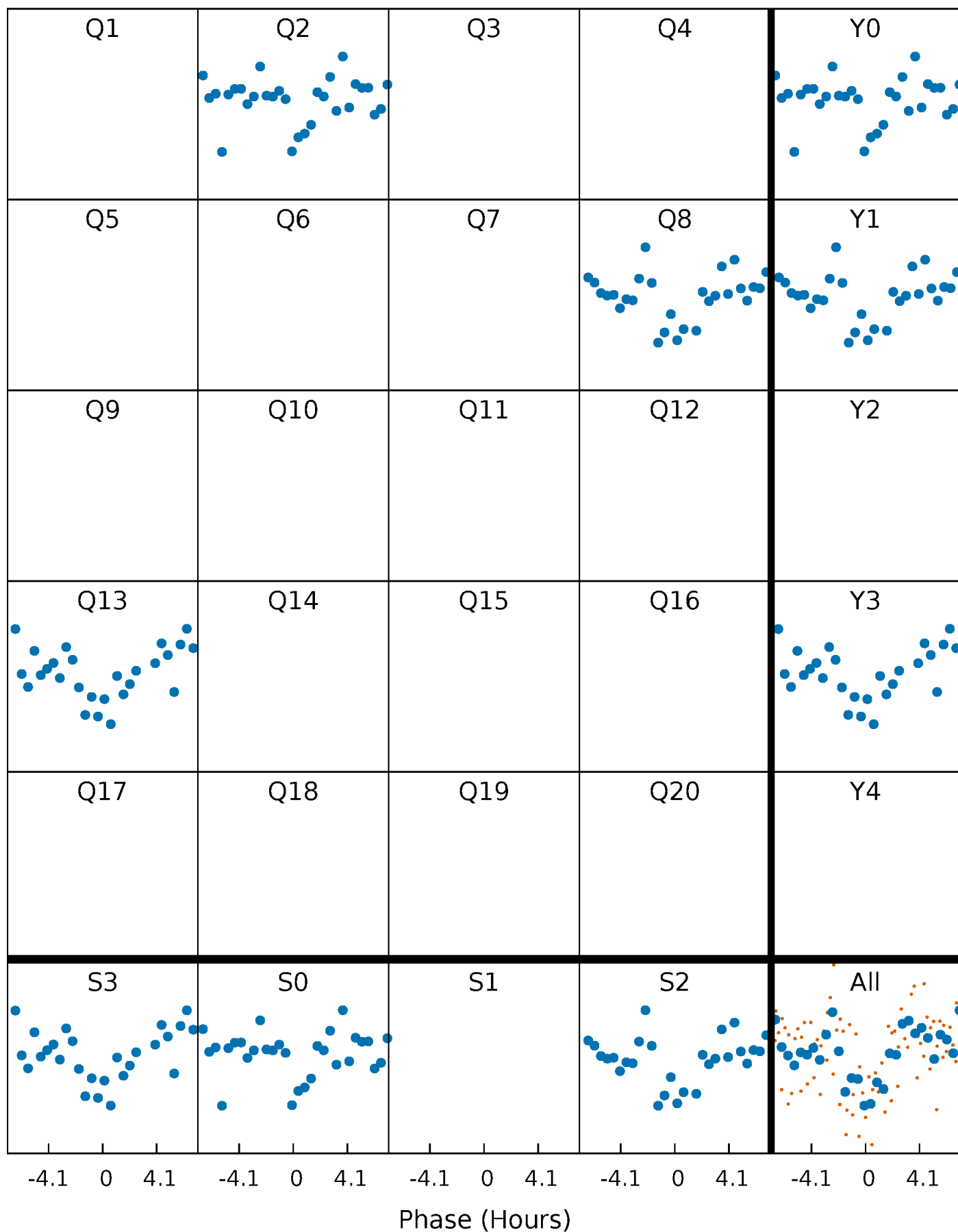


Non-Whitened Vs. Whitened Light Curve



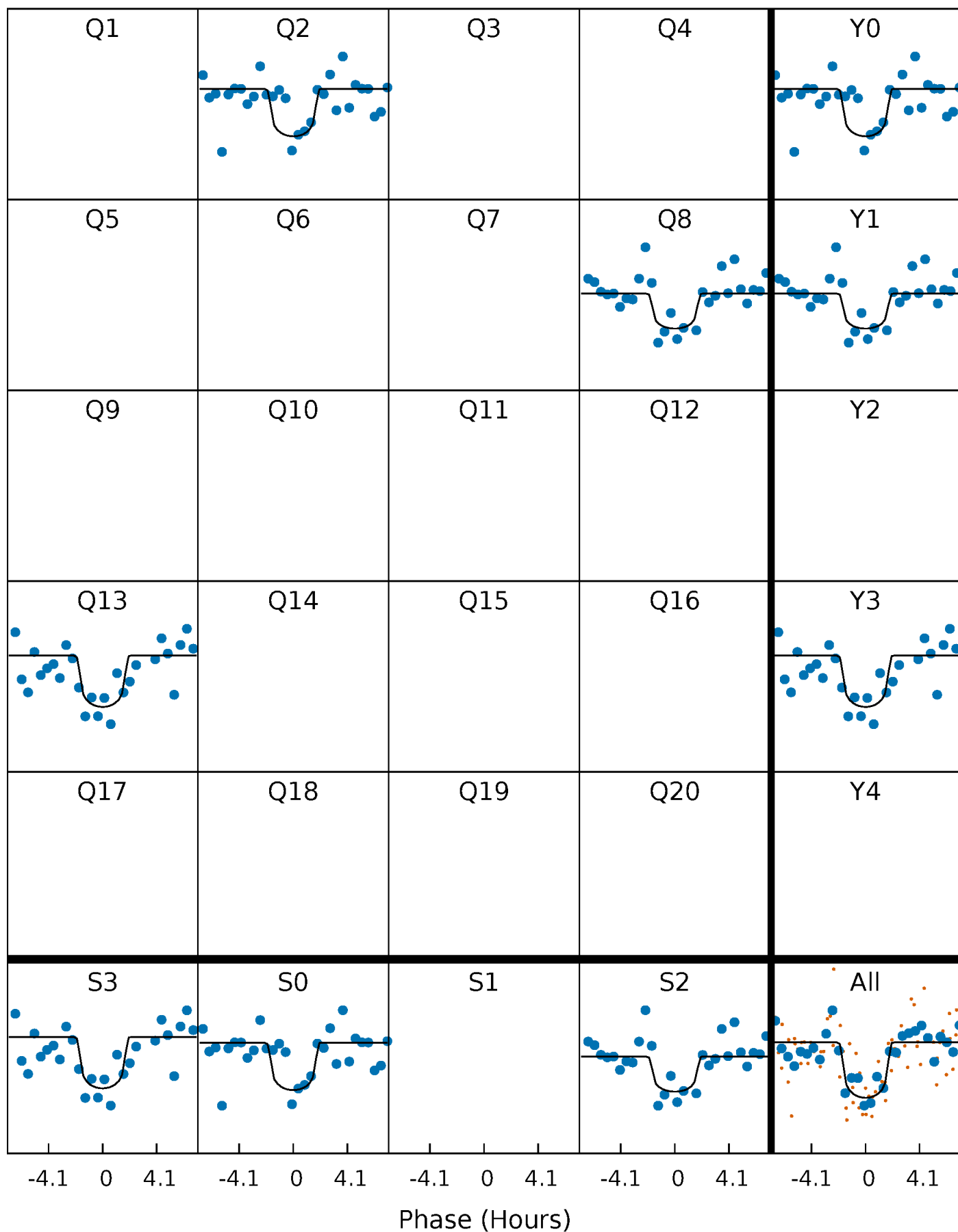
PDC Quarter-Phased Transit Curves

TCE 007135699-01 P=495.089866 Days $T_0=251.121653$ (BKJD)



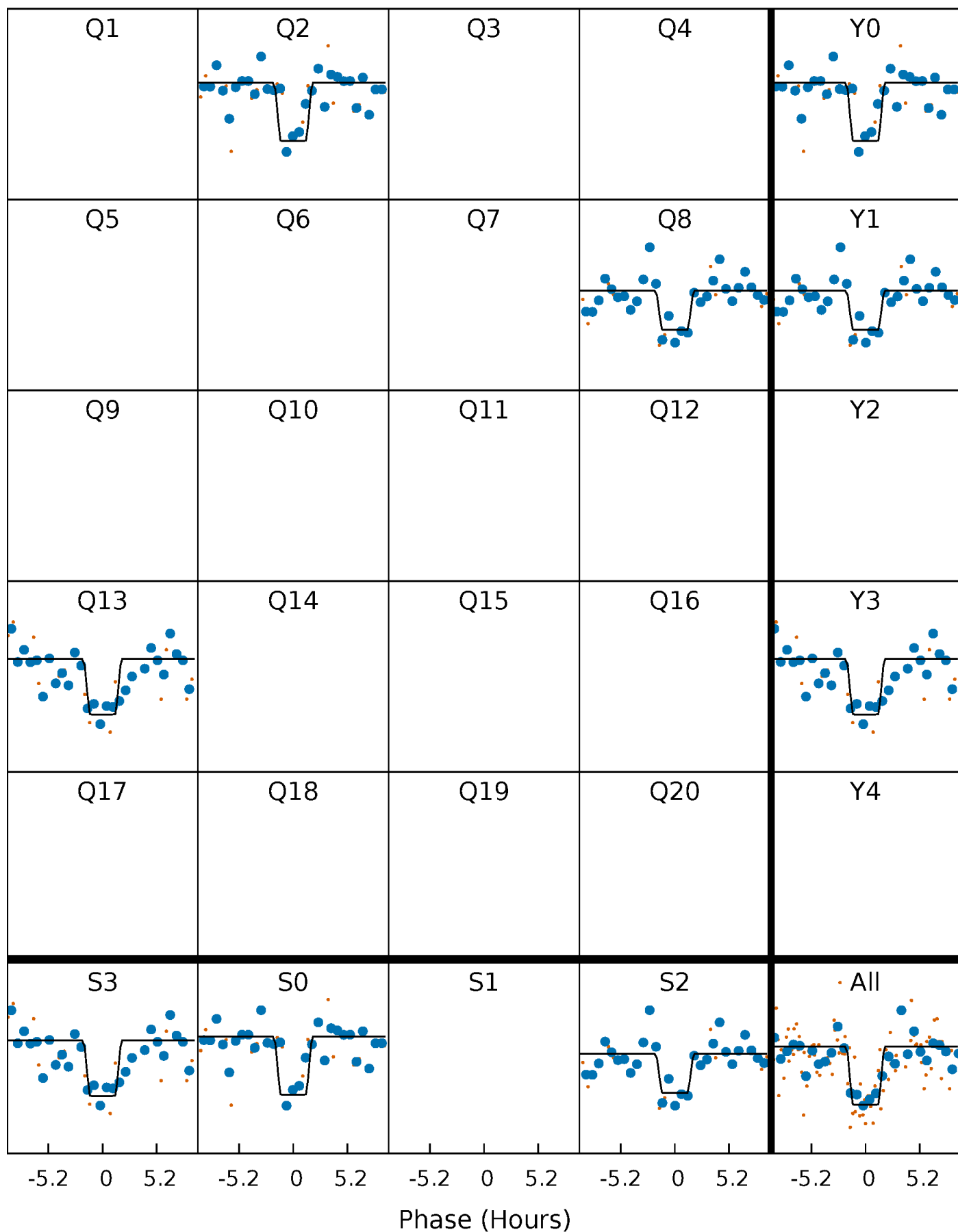
DV Quarter-Phased Transit Curves

TCE 007135699-01 P=495.089866 Days $T_0=251.121653$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

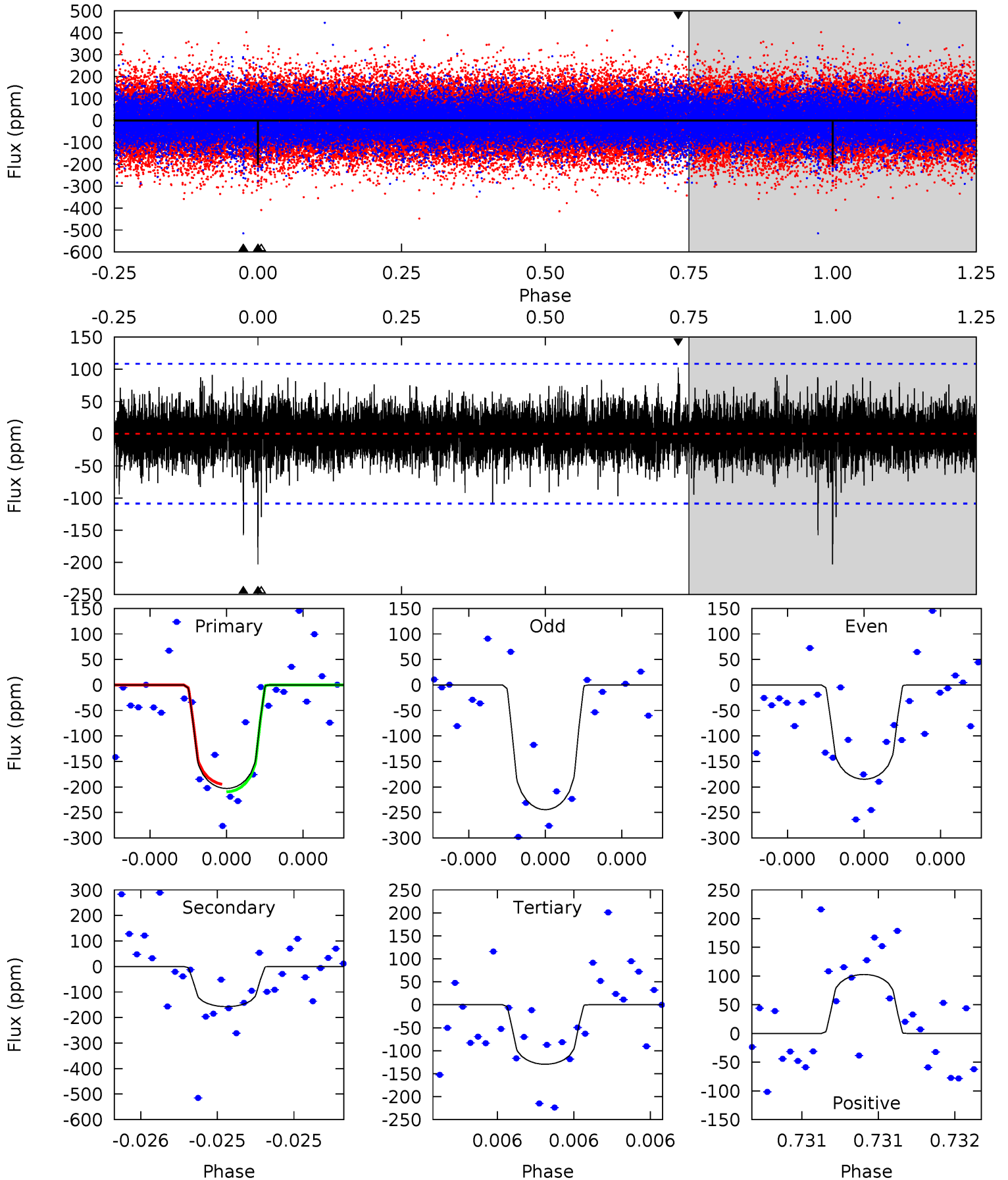
TCE 007135699-01 P=495.077914 Days $T_0=251.135461$ (BKJD)



DV Model-Shift Uniqueness Test

007135699-01, P = 495.089866 Days, E = 251.121653 Days

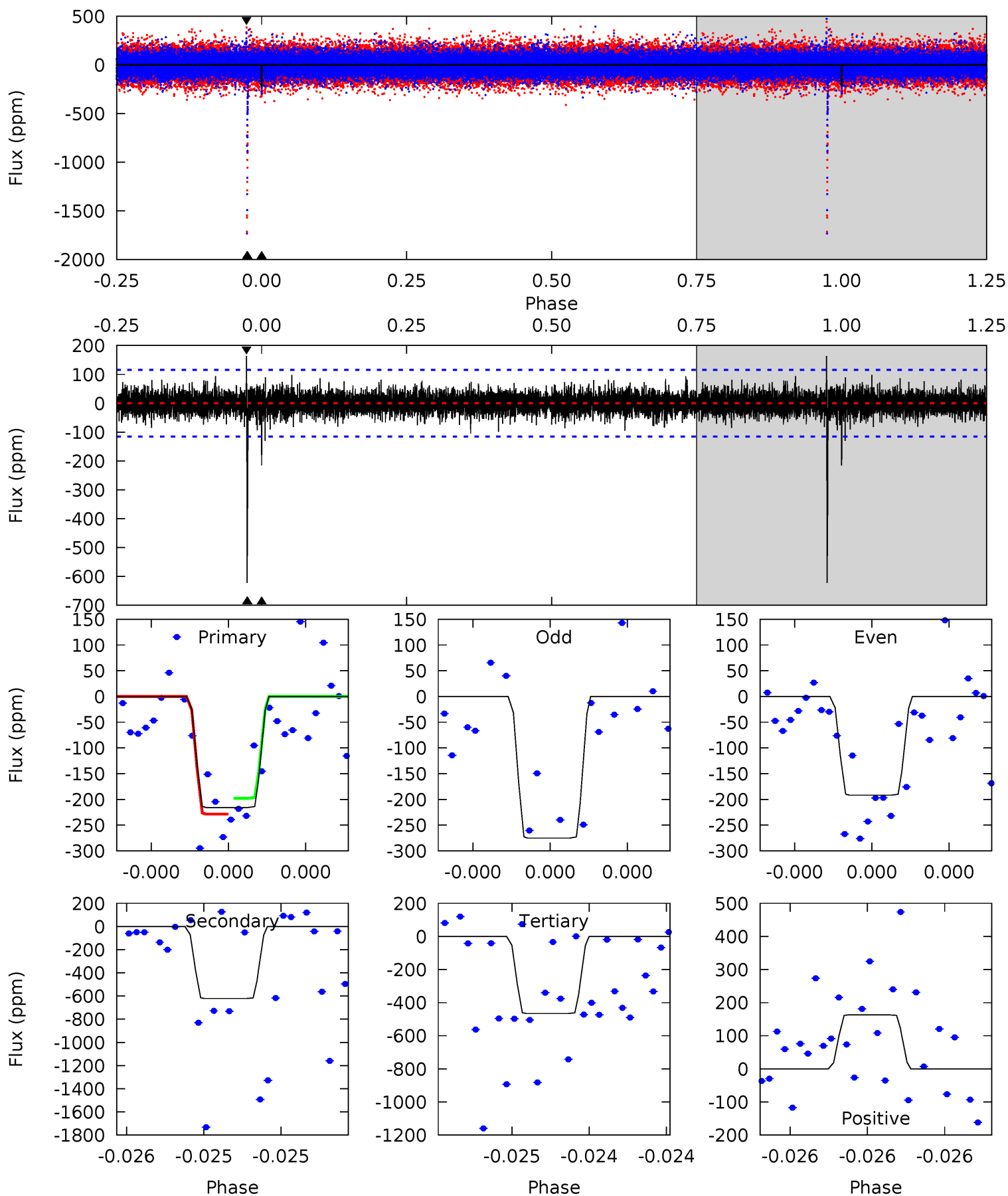
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	8.19	6.74	5.35	5.65	3.59	1.28	3.82	5.21	1.45	2.85	1.39	0.95	0.34	0.38



Alt Model-Shift Uniqueness Test

007135699-01, P = 495.077914 Days, E = 251.135461 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	30.5	22.8	7.99	5.66	3.61	1.32	-12.3	2.59	7.65	22.5	1.90	0.96	0.21	0.75



Stellar Parameters For KIC 007135699

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5738^{+173}_{-139}	$3.912^{+0.300}_{-0.100}$	$0.000^{+0.300}_{-0.250}$	$1.954^{+0.346}_{-0.643}$	$1.136^{+0.170}_{-0.188}$	$0.214^{+0.447}_{-0.067}$
	+3%/-2%	+8%/-3%	+inf%/-inf%	+18%/-33%	+15%/-17%	+208%/-31%
Source	PHO1	FLK73	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 007135699-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-157 ± 19	$3.59^{+2.91}_{-2.30}$	429^{+28}_{-36}	4896^{+3369}_{-940}	10860^{+78771}_{-7529}
Alt.	-622 ± 20	$3.51^{+3.14}_{-2.24}$	431^{+25}_{-36}	6903^{+7520}_{-1779}	$46415^{+317014}_{-33884}$

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

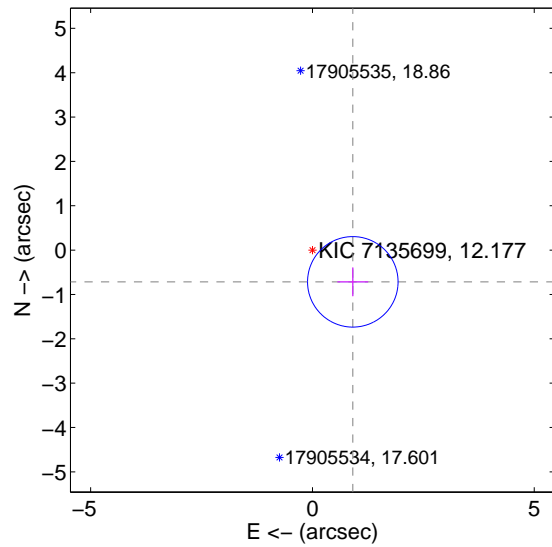
Supplemental centroid analysis for 007135699-01. Kepler magnitude: 12.18. Transit SNR 6.57

There are 1 quarters with good PRF difference image offsets

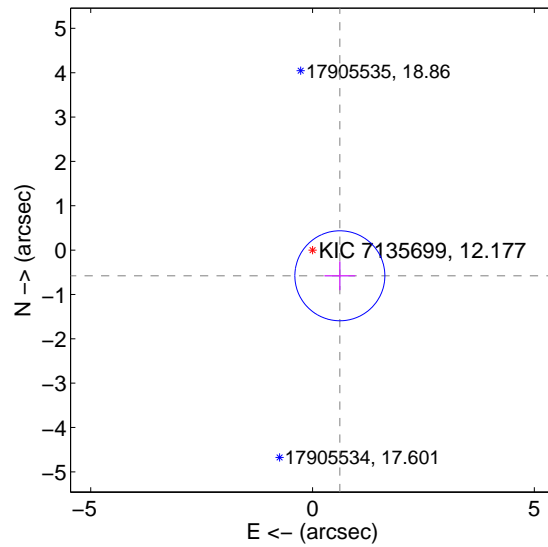
The direct PRF centroid is offset from the target star catalog position by about 0.32 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.158 ± 0.340	3.40	-0.910 ± 0.349	-0.716 ± 0.326
PRF-fit source offset from KIC position	0.846 ± 0.338	2.50	-0.616 ± 0.349	-0.579 ± 0.326
photometric centroid source offset	1.05 ± 1.17	0.90	-1.02 ± 1.16	0.23 ± 1.34

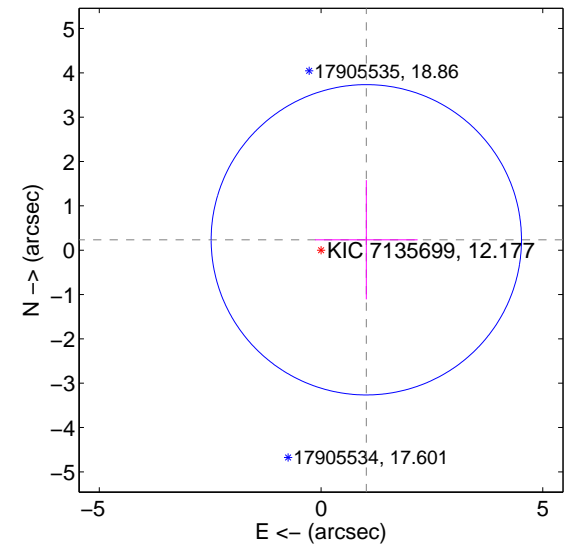
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

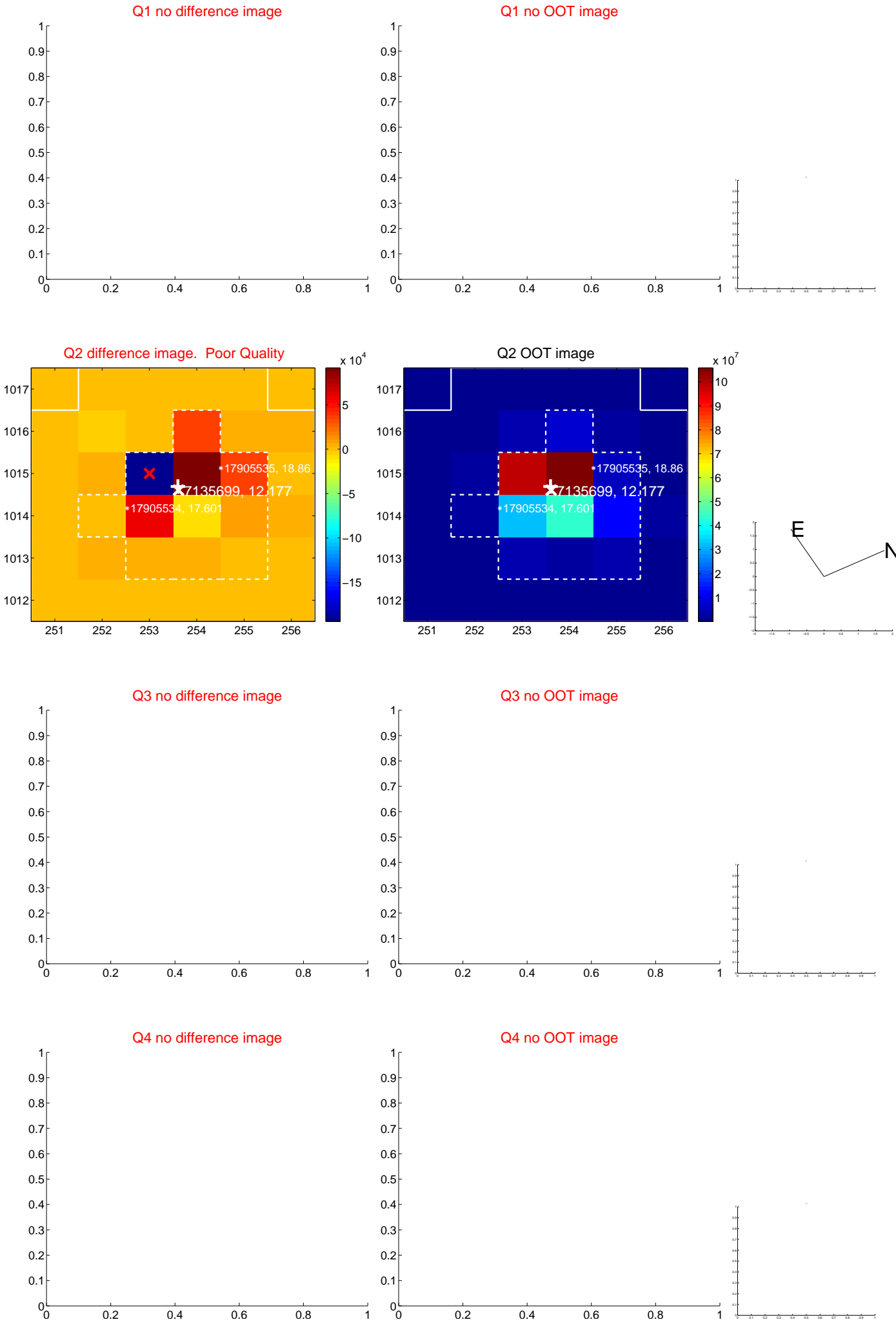


offset from photometric centroids



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.

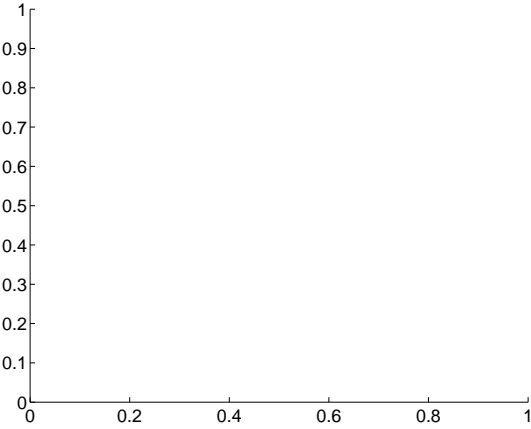
Q5 no difference image



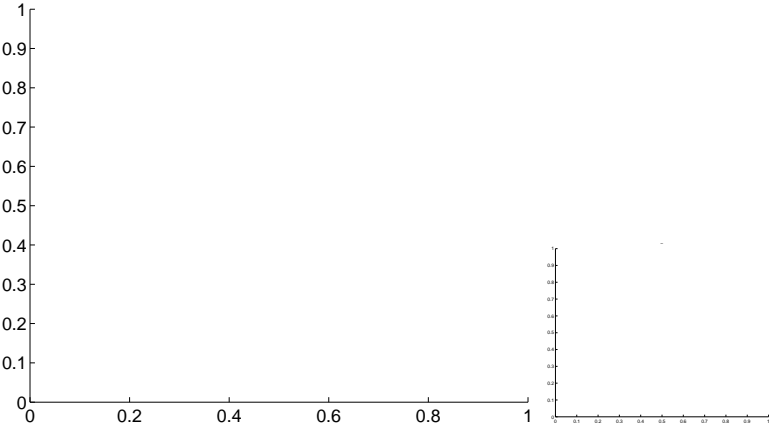
Q5 no OOT image



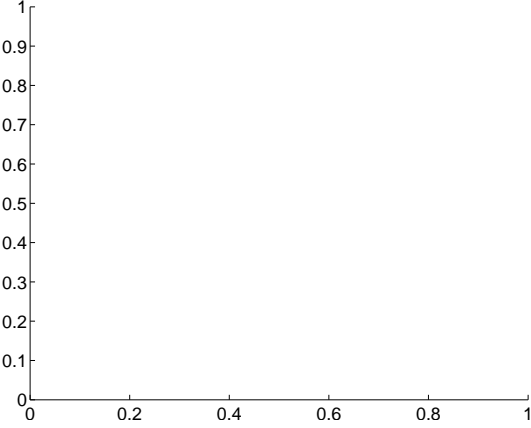
Q6 no difference image



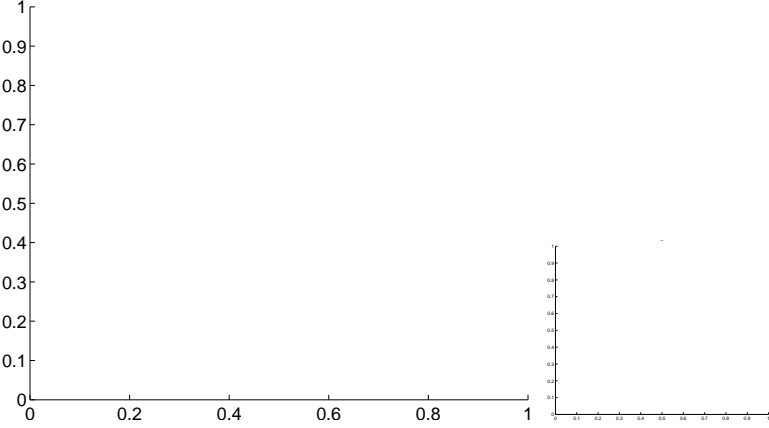
Q6 no OOT image



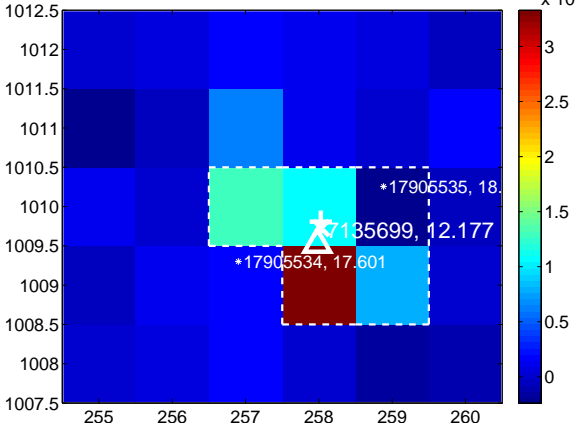
Q7 no difference image



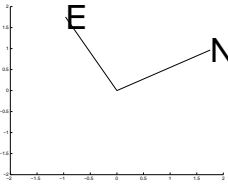
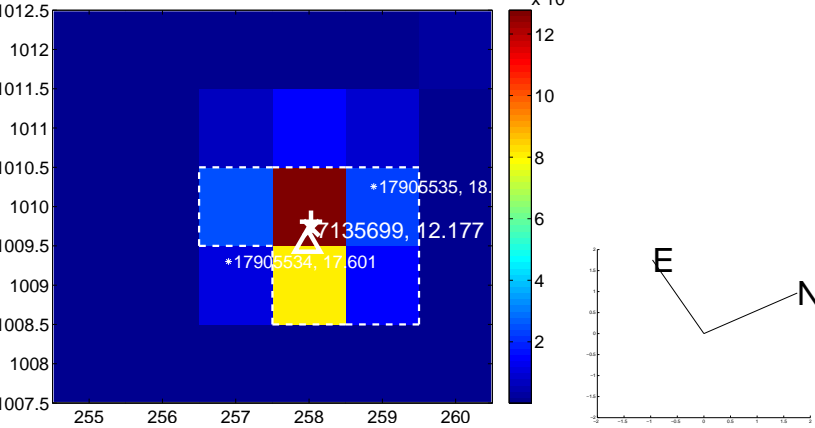
Q7 no OOT image



Q8 difference image



Q8 OOT image



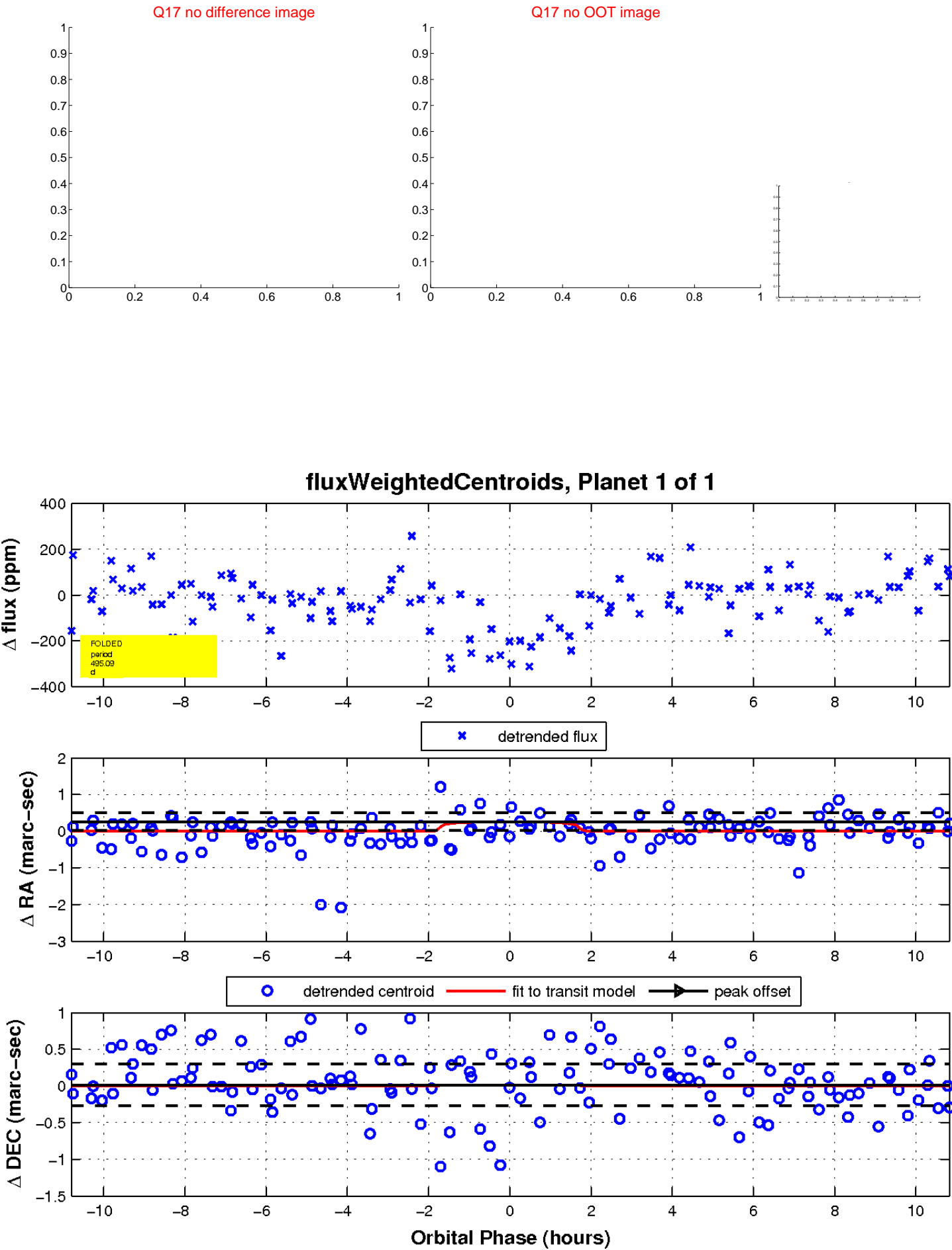
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

