

KIC 006200699

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})
006200699-01	OBS	No	355.583033	166.333977	959.4	16.412	7.9	7.7	0.80	4942	2.44	0.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006200699-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

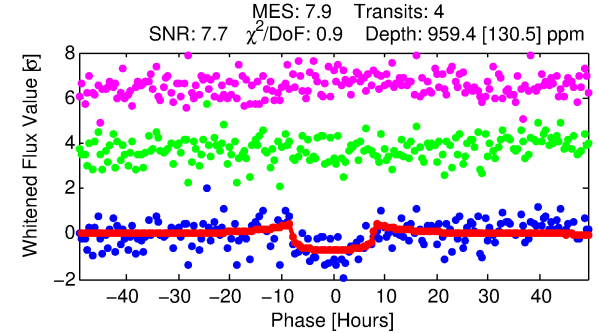
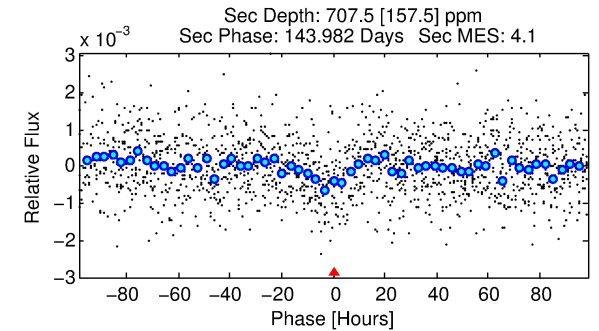
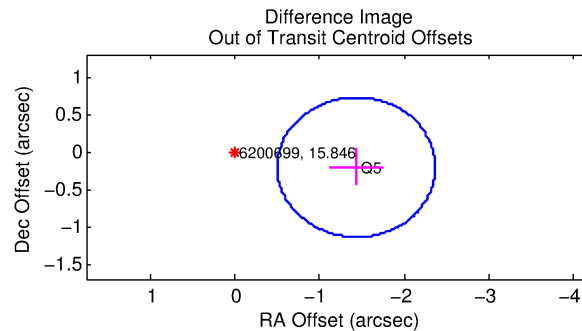
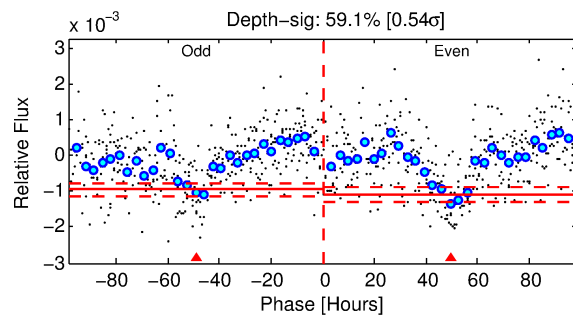
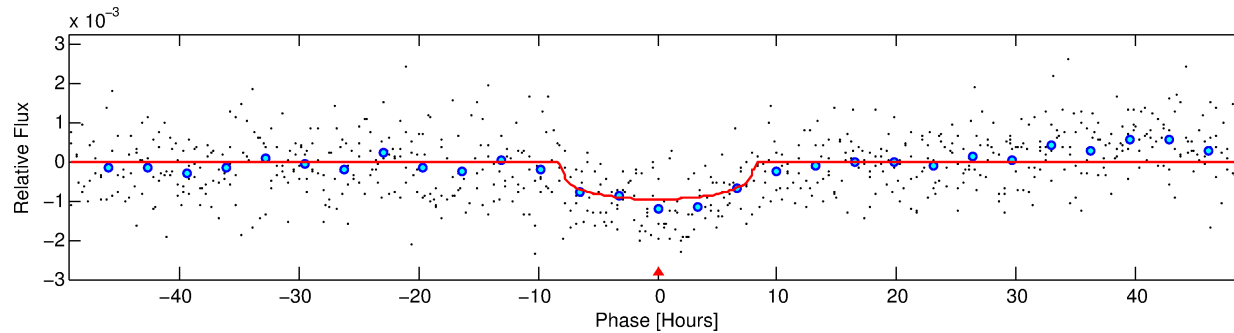
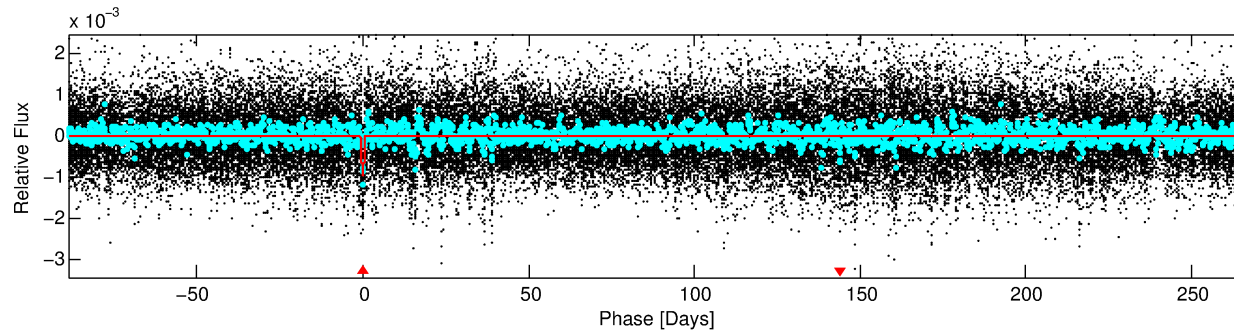
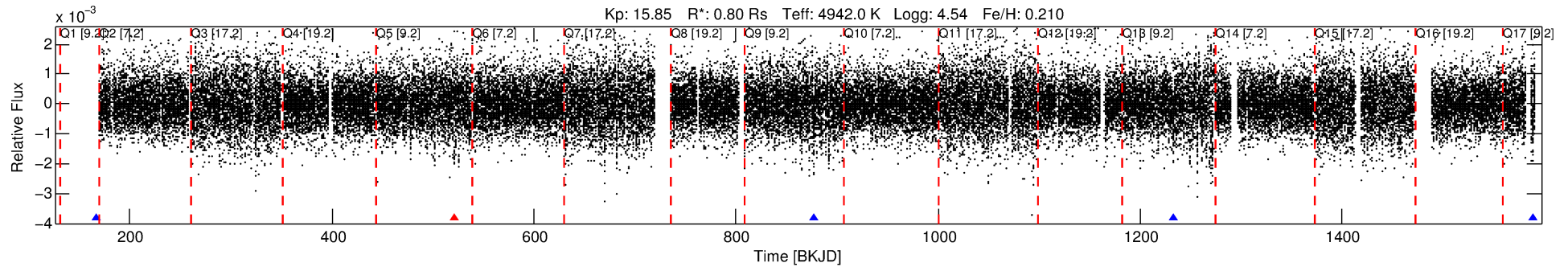
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006200699-01

No Significant Match Found

DV One-Page Summary

KIC: 6200699 Candidate: 1 of 1 Period: 355.583 d



DV Fit Results:

Period = 355.58303 [0.01041] d
Epoch = 166.3340 [0.0286] BKJD
Rp/R* = 0.0279 [0.0203]
a/R* = 159.49 [378.31]
b = 0.36 [5.83]
Seff = 0.41 [0.06]
Teq = 204 [8] K
Rp = 2.44 [1.79] Re
a = 0.9172 [0.0628] AU
Ag = 54782.62 [80875.69] [0.68 σ]
Teff = 4825 [1783] K [2.59 σ]

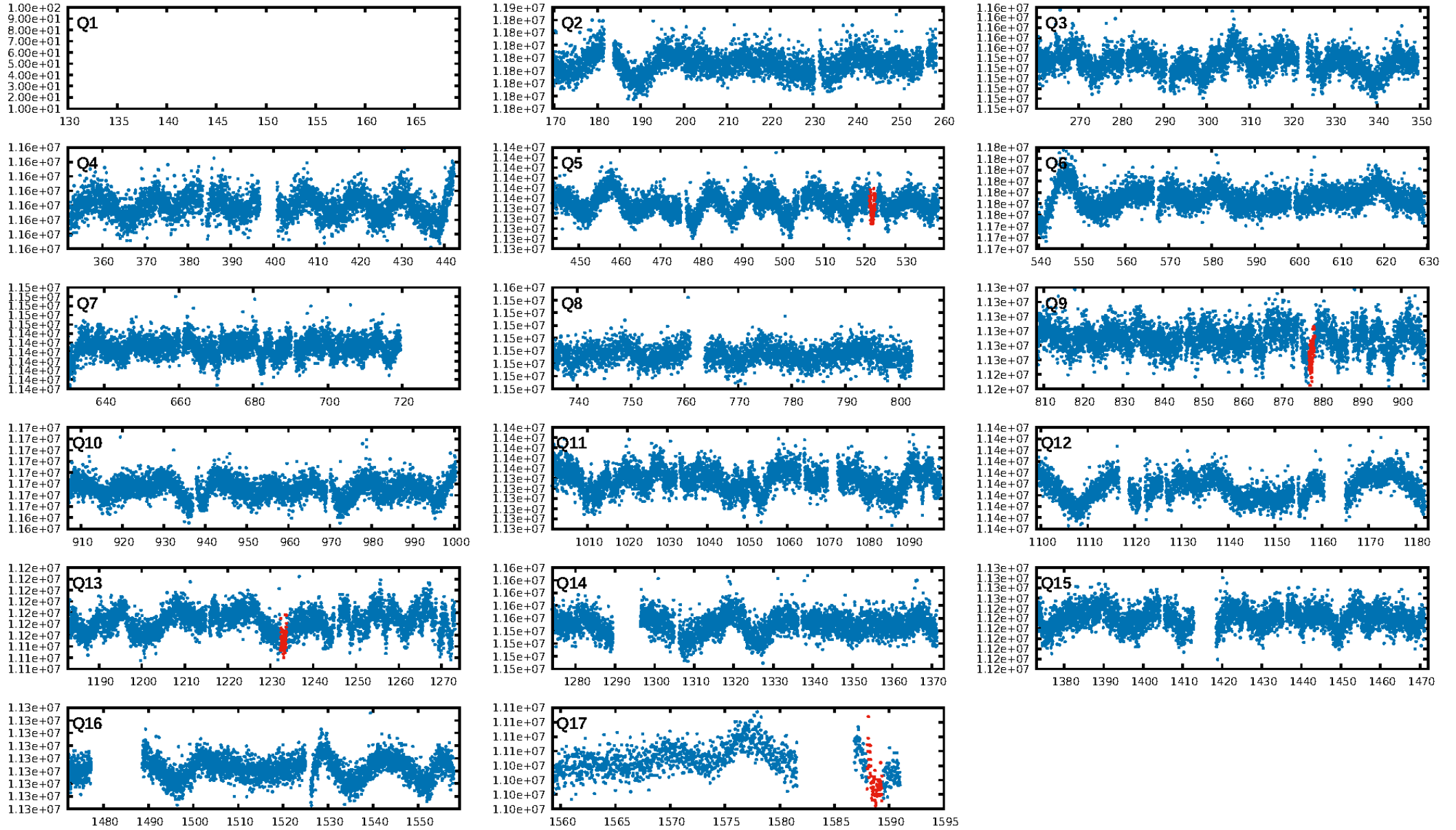
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 33.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.53e-10
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 7.186
Centroid-sig: 57.7%
Centroid-so: 1.707 arcsec [0.73 σ]
OotOffset-rm: 1.451 arcsec [4.67 σ]
KicOffset-rm: 1.507 arcsec [4.85 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

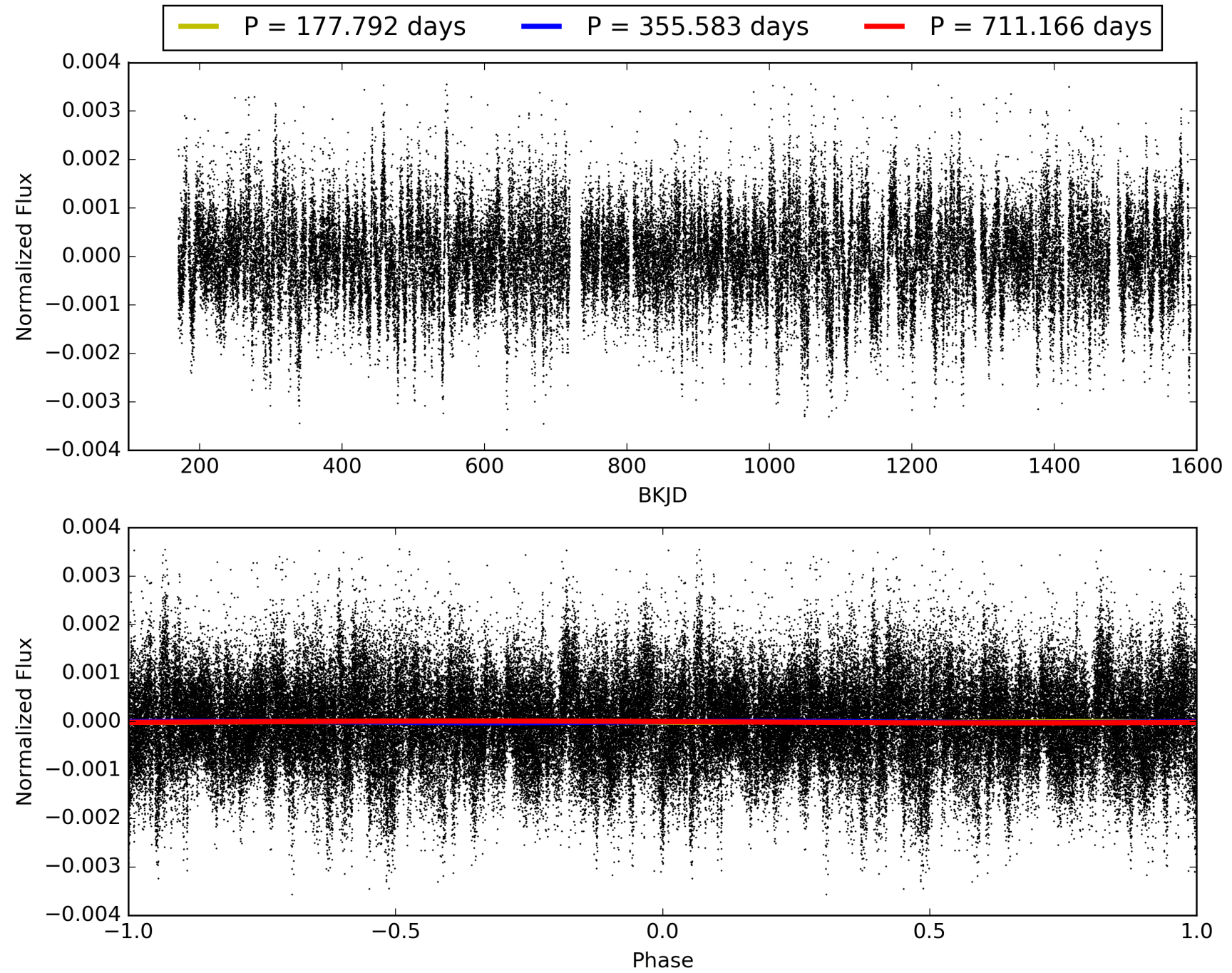
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:20:31 Z

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

TCE 006200699-01, PDC Light Curves

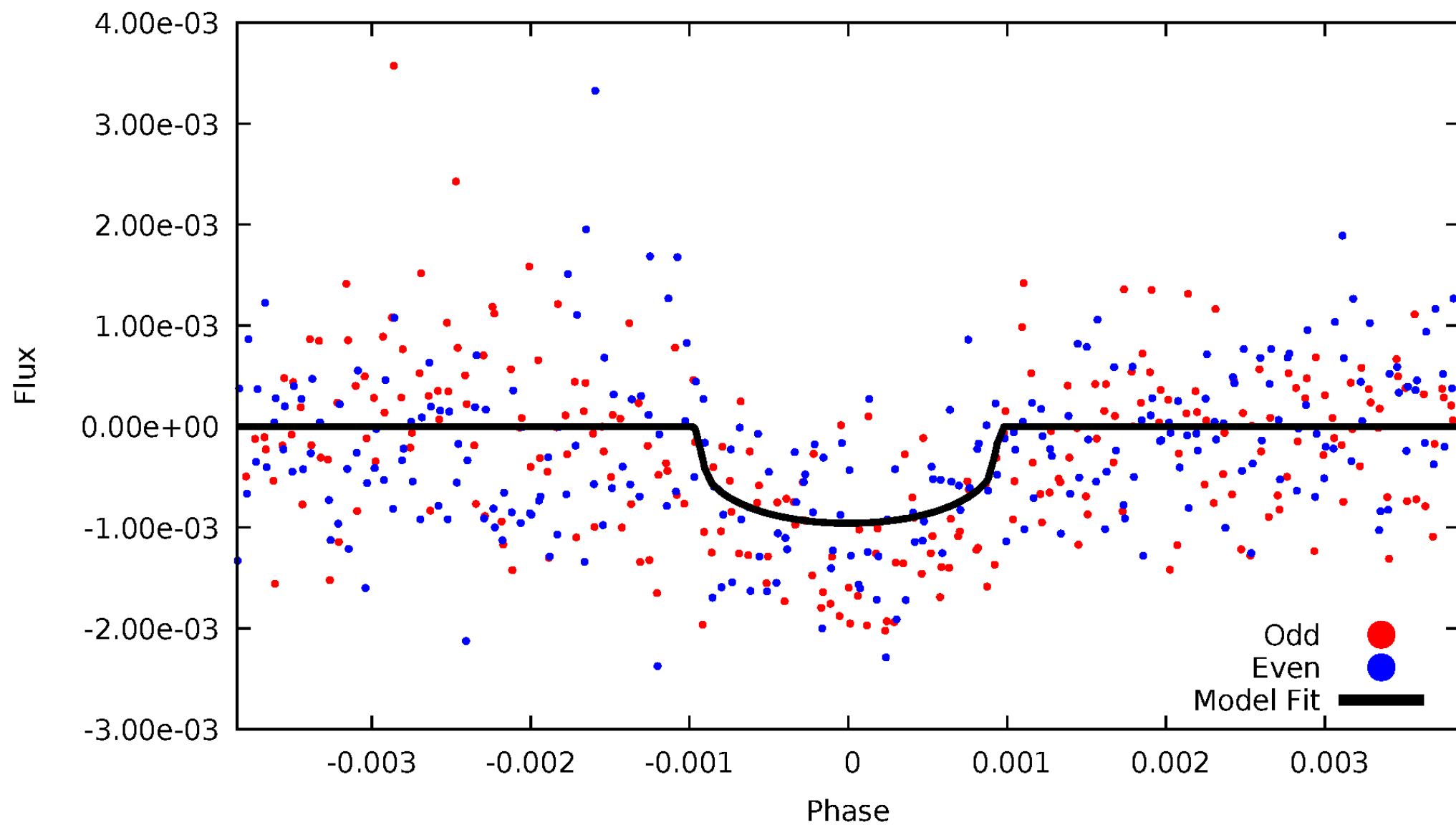


TCE 006200699-01



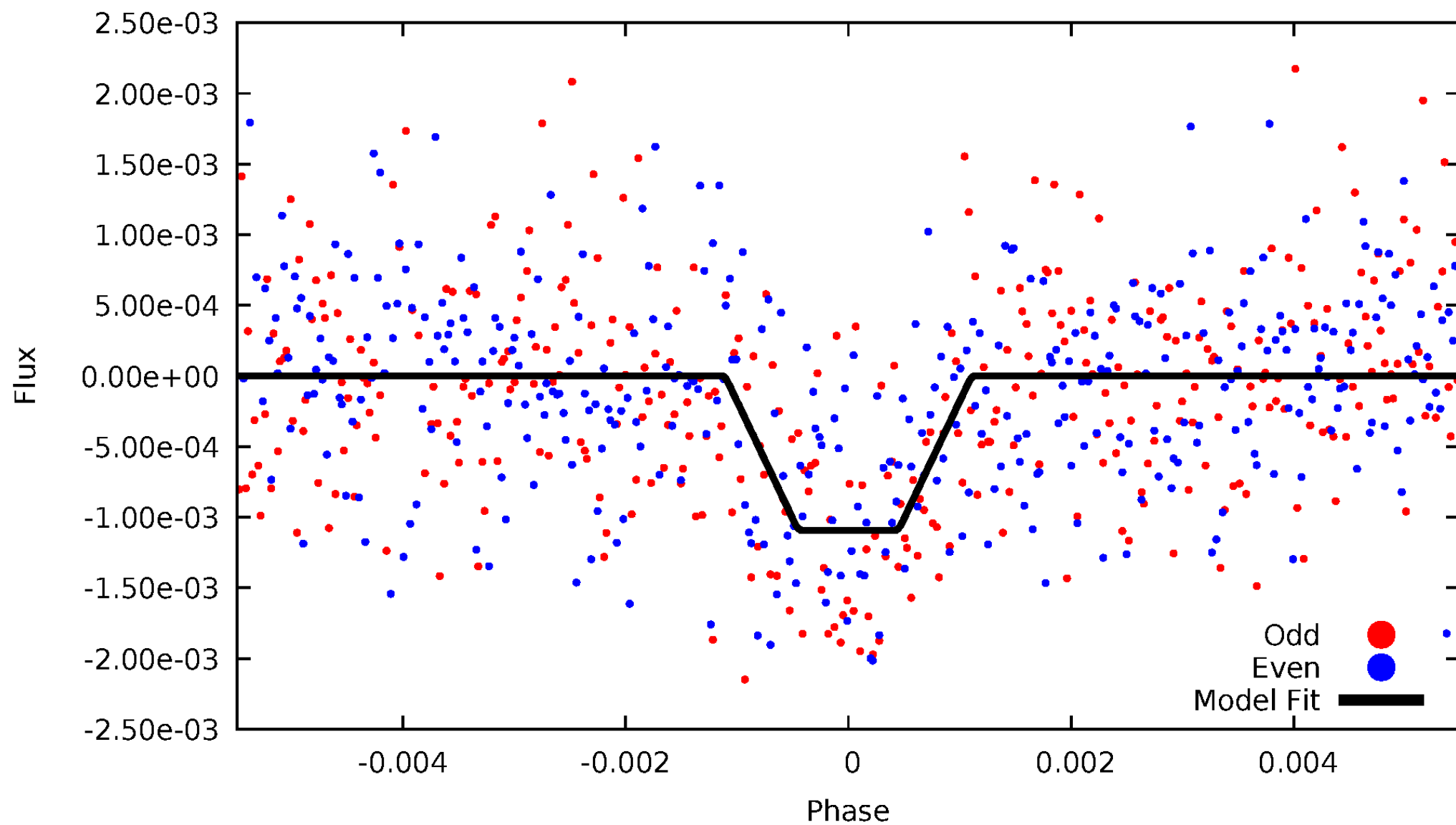
DV Odd/Even

TCE 006200699-01



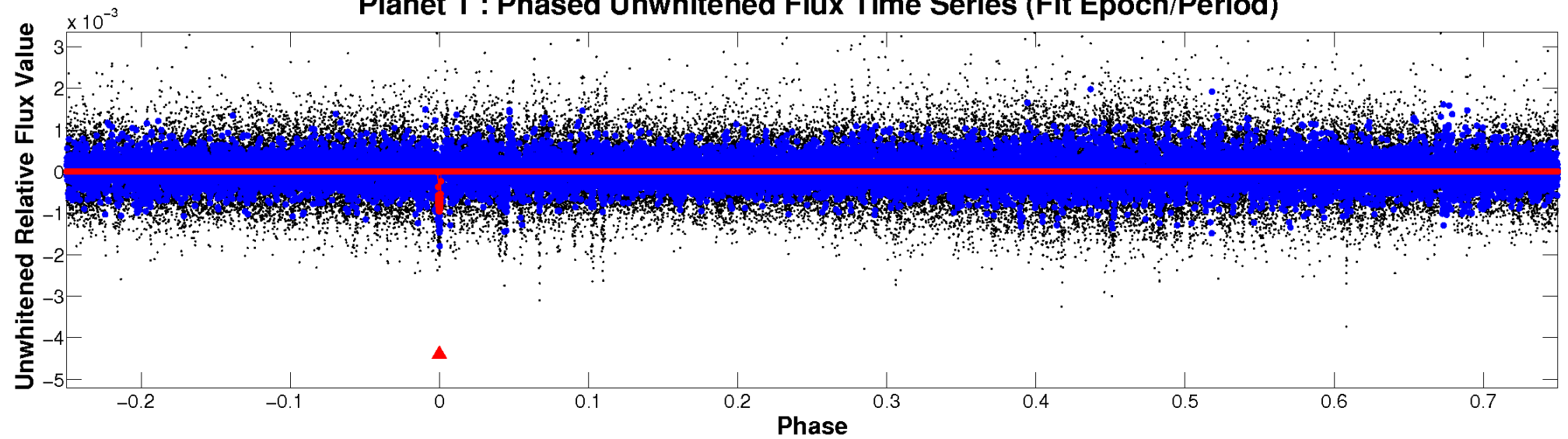
ALT Odd/Even

TCE 006200699-01

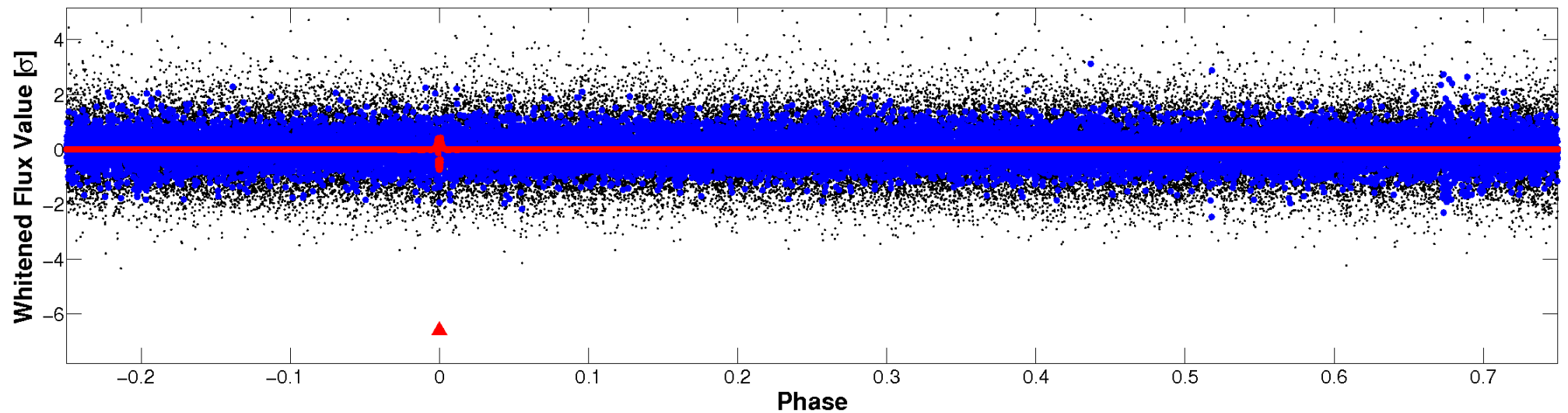


Non-Whitened Vs. Whitened Light Curve

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

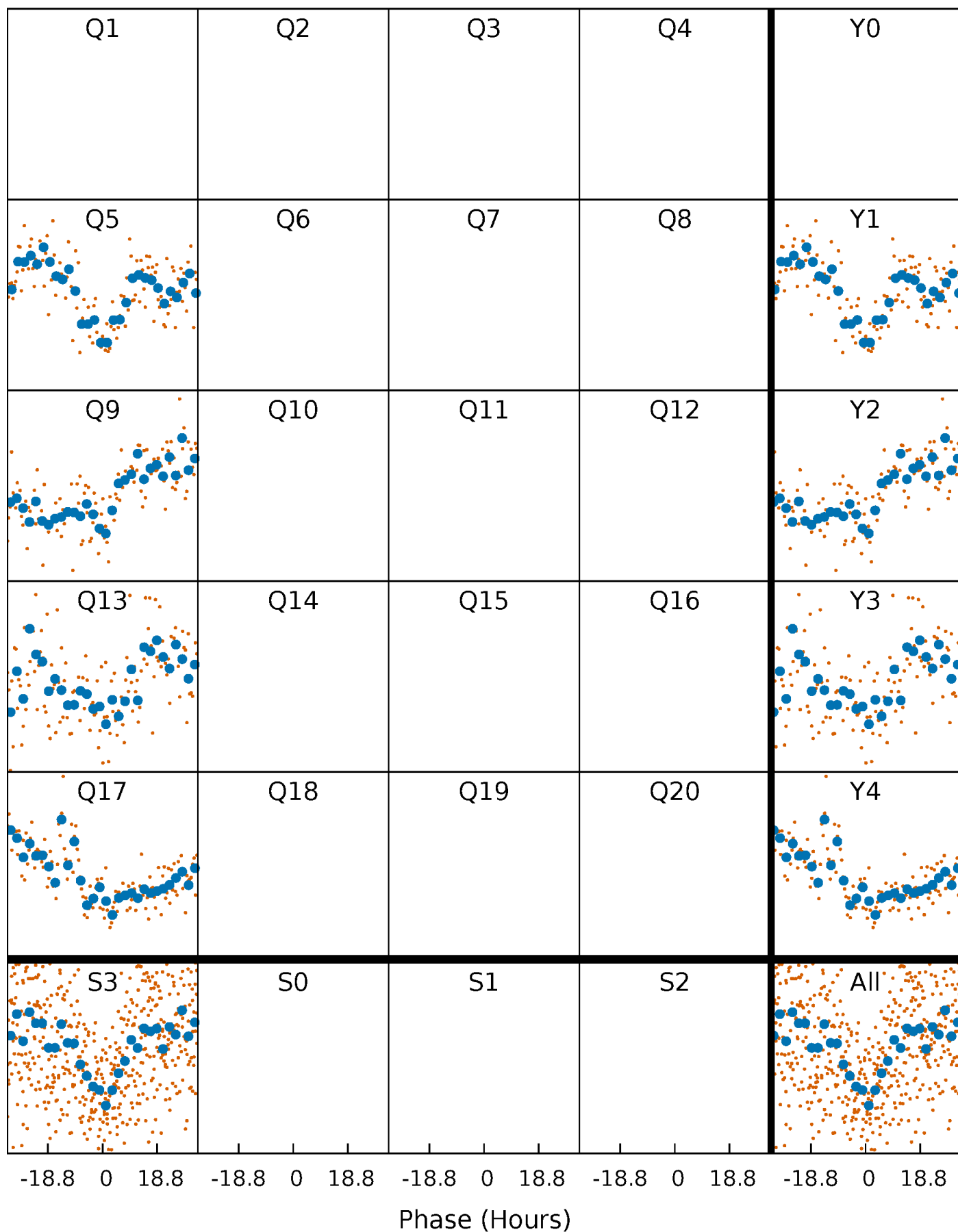


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



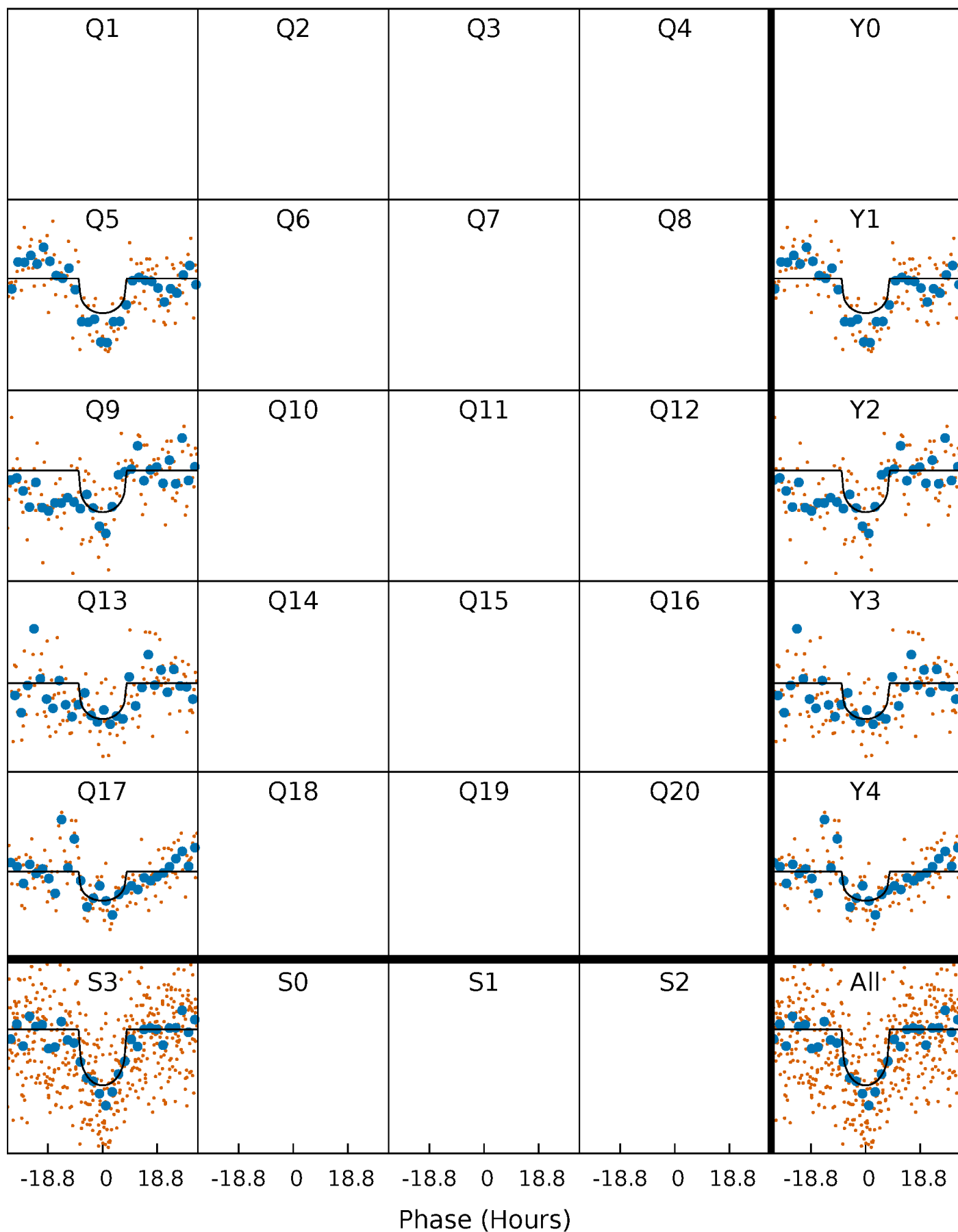
PDC Quarter-Phased Transit Curves

TCE 006200699-01 $P=355.583033$ Days $T_0=166.333977$ (BKJD)



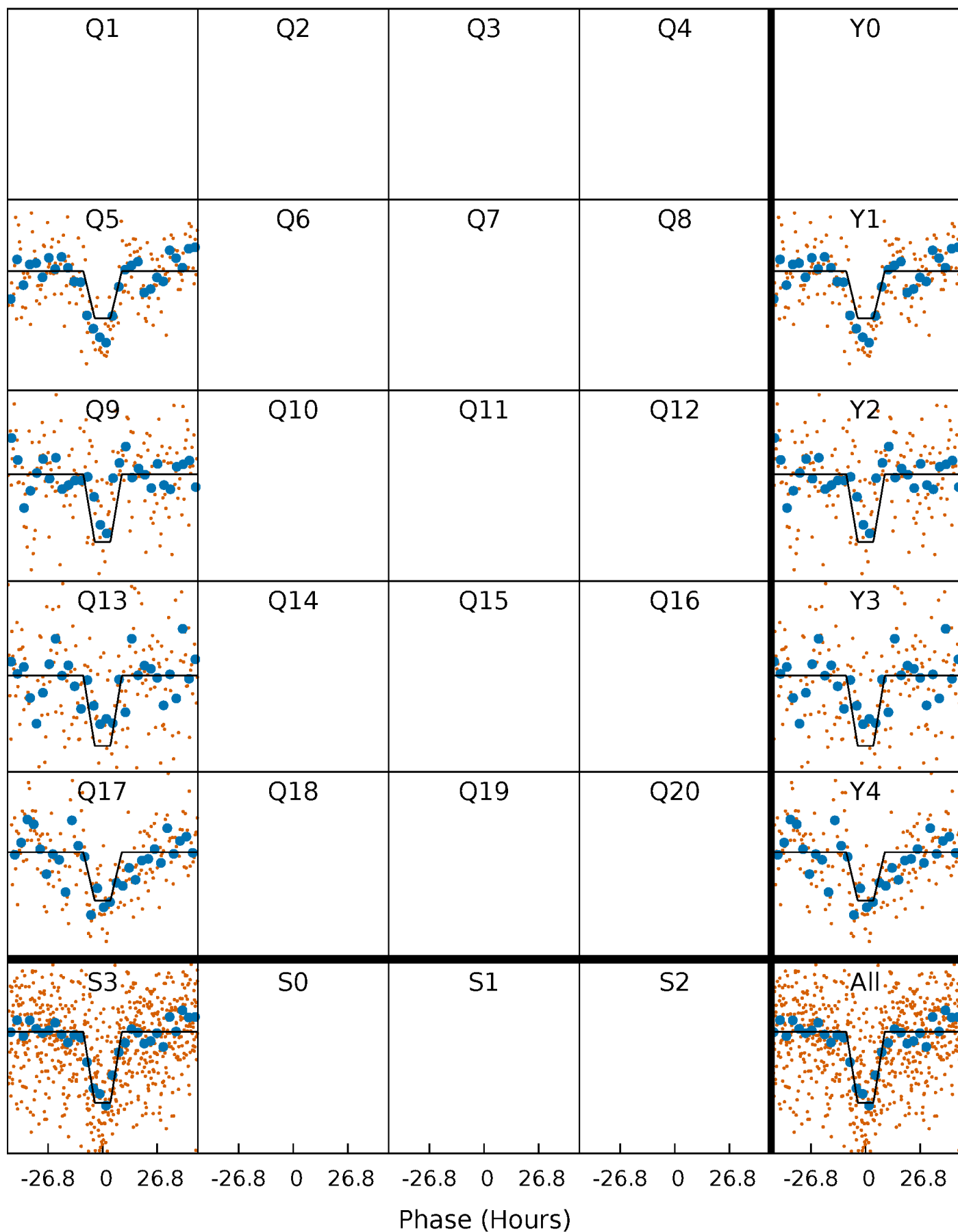
DV Quarter-Phased Transit Curves

TCE 006200699-01 $P=355.583033$ Days $T_0=166.333977$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

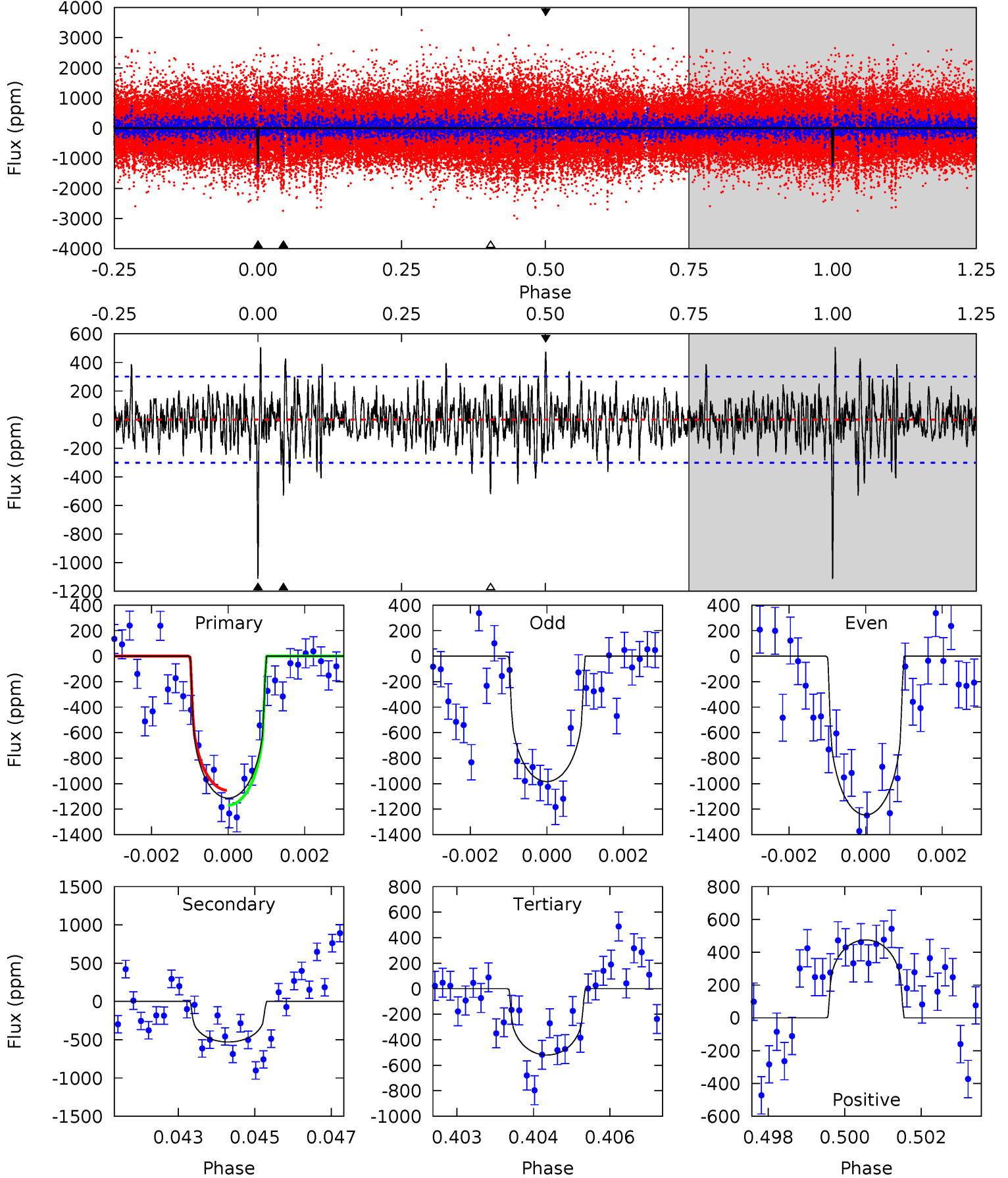
TCE 006200699-01 $P=355.591622$ Days $T_0=166.329495$ (BKJD)



DV Model-Shift Uniqueness Test

006200699-01, P = 355.583033 Days, E = 166.333977 Days

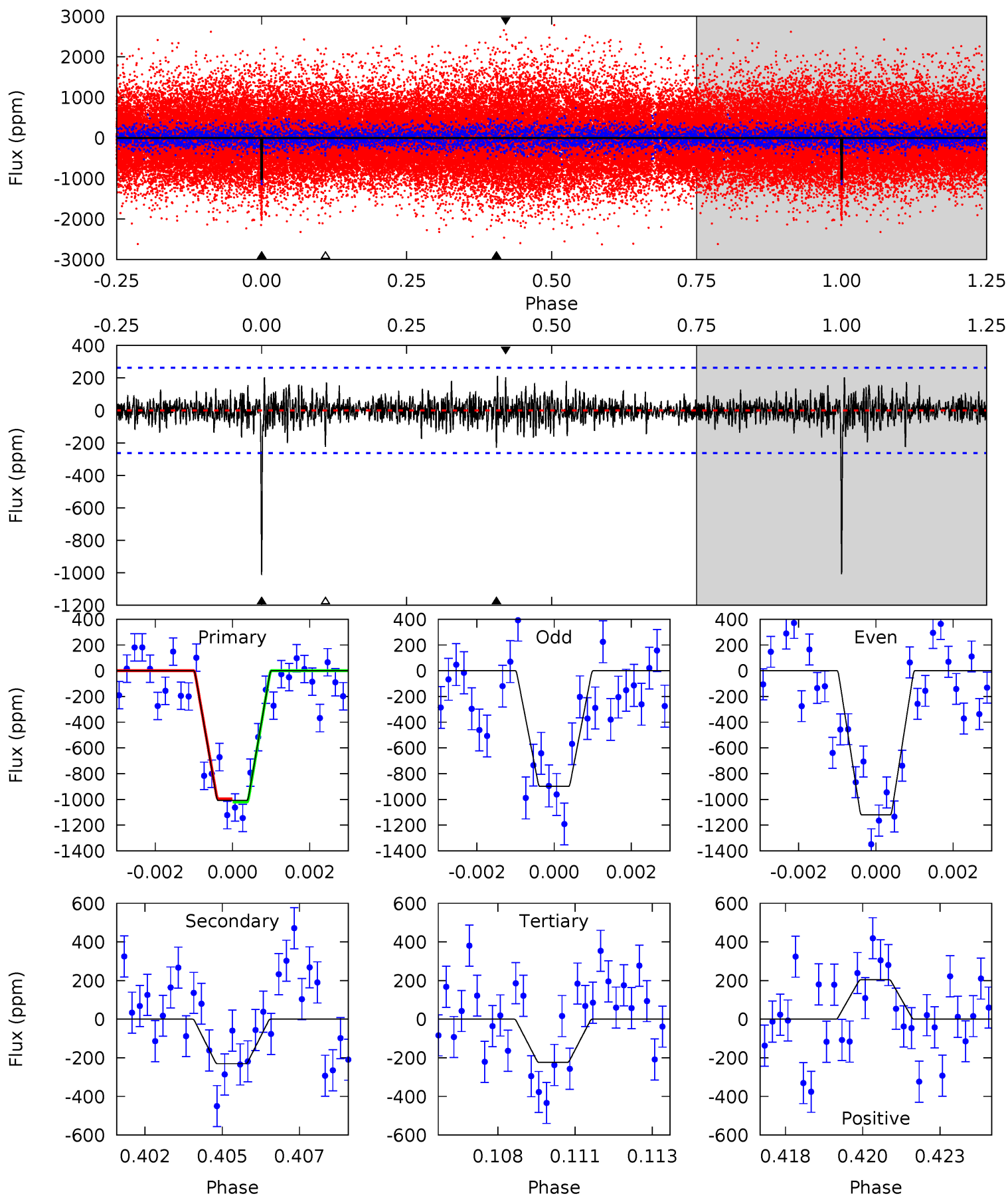
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.7	9.37	9.21	8.41	5.33	3.10	2.18	10.5	11.3	0.16	0.96	2.32	1.13	0.31	1.03



Alt Model-Shift Uniqueness Test

006200699-01, P = 355.591622 Days, E = 166.329495 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	4.64	4.51	4.11	5.30	3.05	1.08	15.8	16.2	0.13	0.53	2.23	1.06	0.17	0.24



Stellar Parameters For KIC 006200699

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4942^{+148}_{-148}	$4.539^{+0.055}_{-0.050}$	$0.210^{+0.200}_{-0.300}$	$0.803^{+0.059}_{-0.065}$	$0.814^{+0.055}_{-0.061}$	$2.211^{+0.532}_{-0.358}$
	+3%/-3%	+1%/-1%	+95%/-143%	+7%/-8%	+7%/-7%	+24%/-16%
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 006200699-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-529 ± 56	$2.69^{+1.73}_{-1.57}$	284^{+11}_{-10}	4376^{+2078}_{-695}	$33098^{+156151}_{-20608}$
Alt.	-230 ± 50	$3.07^{+1.70}_{-1.66}$	286^{+10}_{-11}	3634^{+1220}_{-494}	11192^{+42657}_{-6728}

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

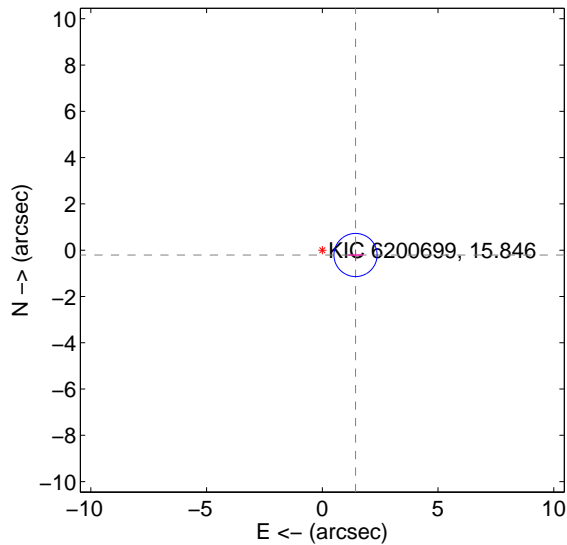
Supplemental centroid analysis for 006200699-01. Kepler magnitude: 15.85. Transit SNR 7.69

There are 0 quarters with good PRF difference image offsets

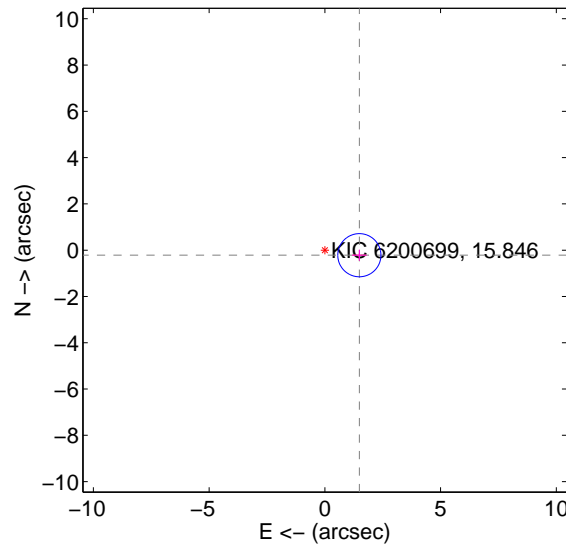
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.451 ± 0.311	4.67	-1.436 ± 0.312	-0.208 ± 0.238
PRF-fit source offset from KIC position	1.507 ± 0.311	4.85	-1.491 ± 0.312	-0.218 ± 0.238
photometric centroid source offset	1.71 ± 2.33	0.73	1.65 ± 2.35	-0.42 ± 2.03

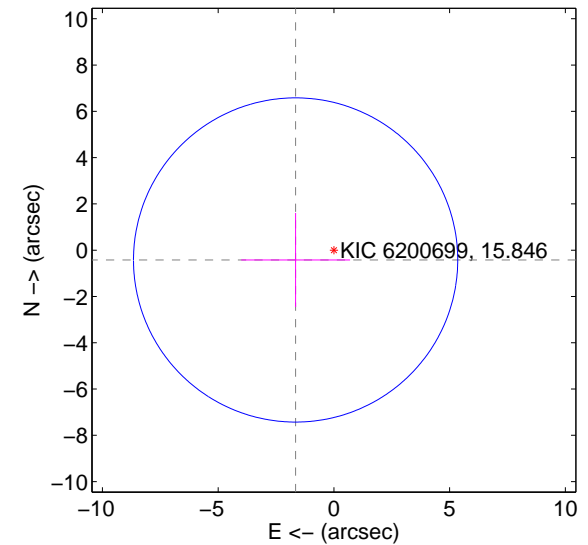
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

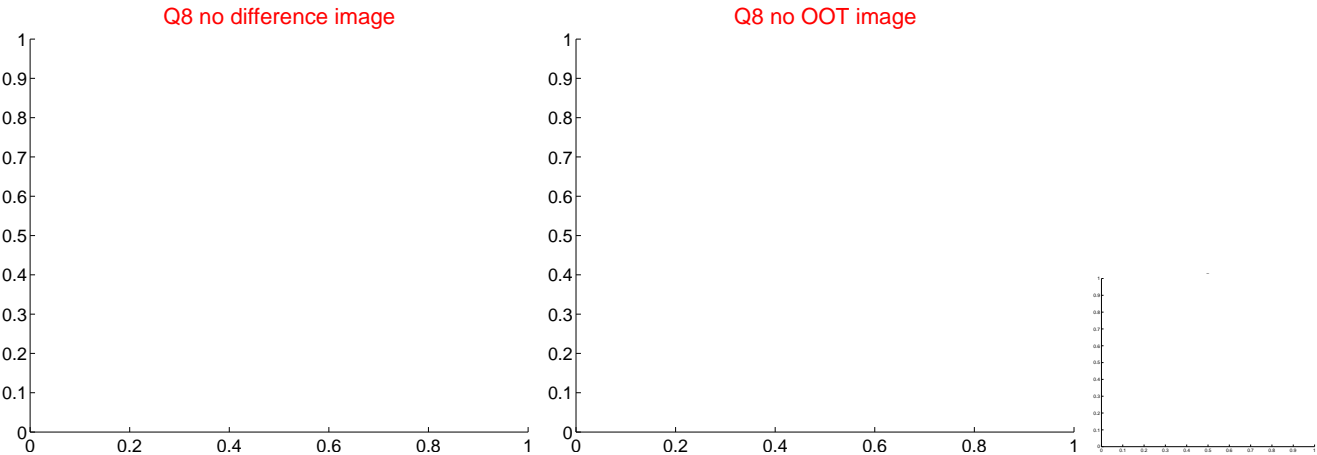
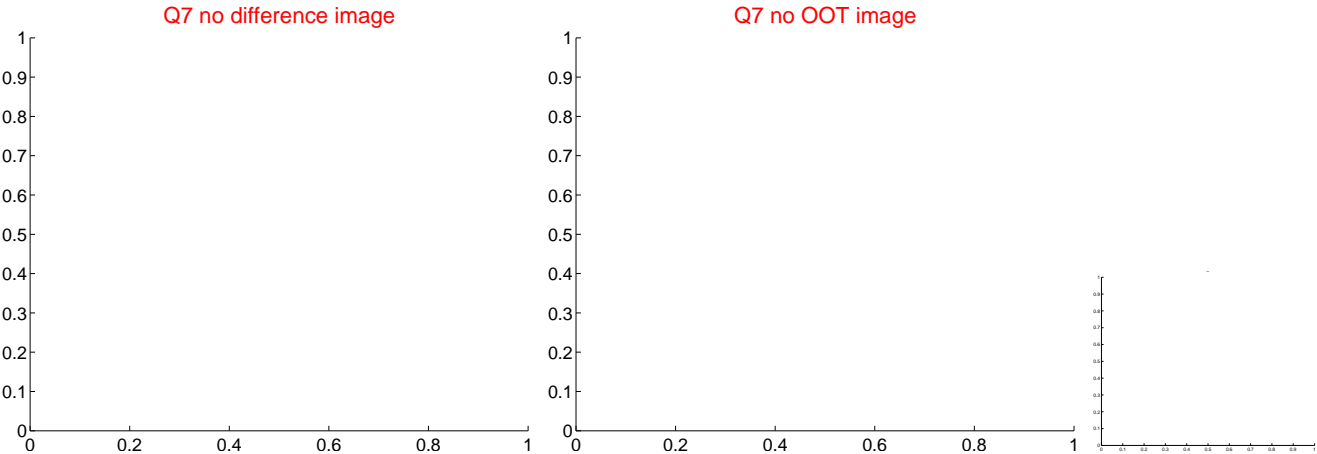
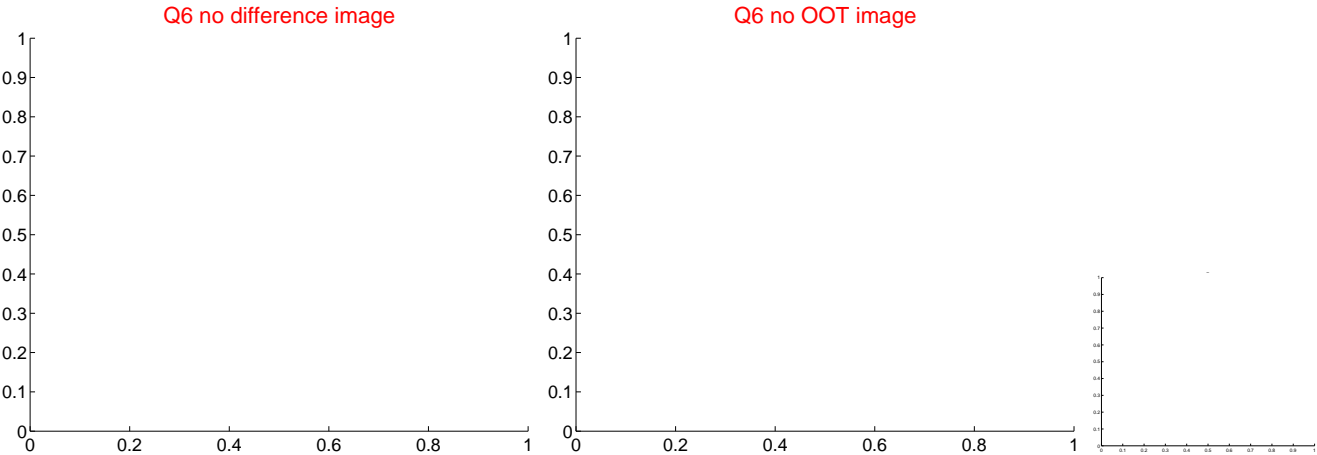
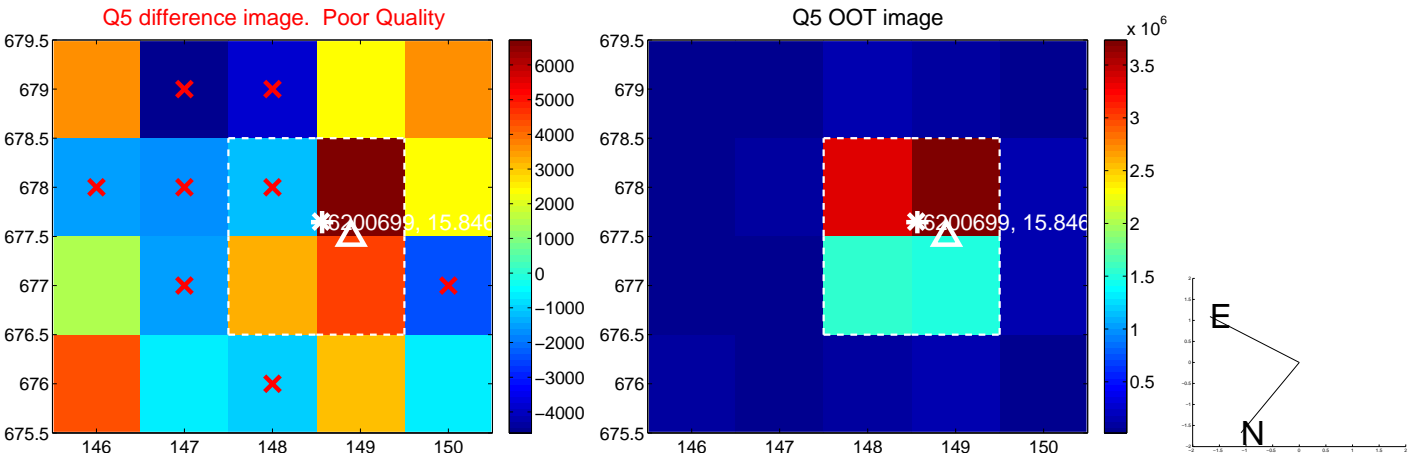


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

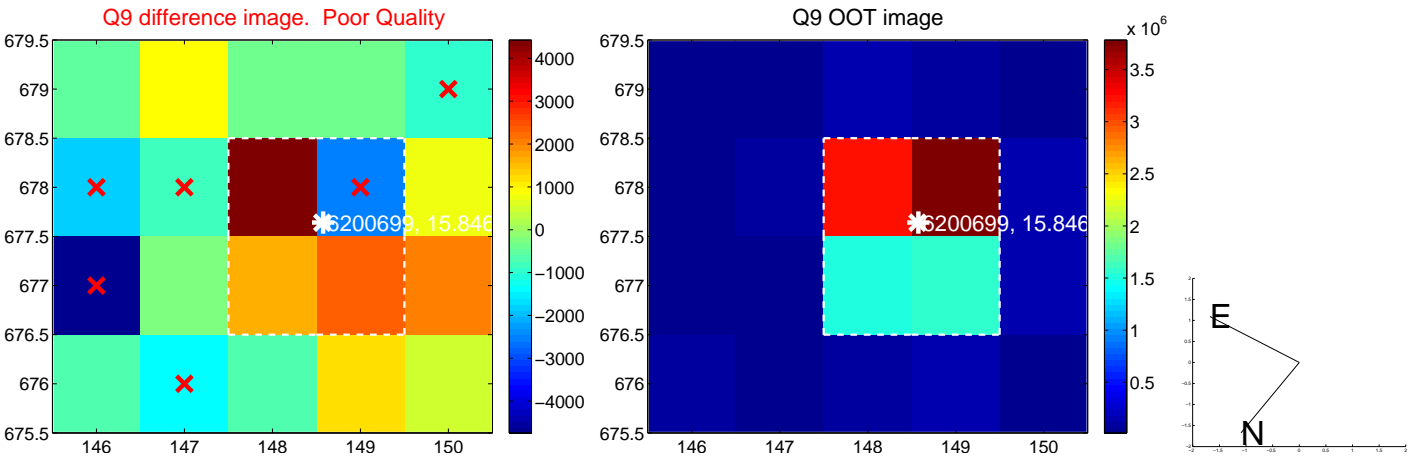
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



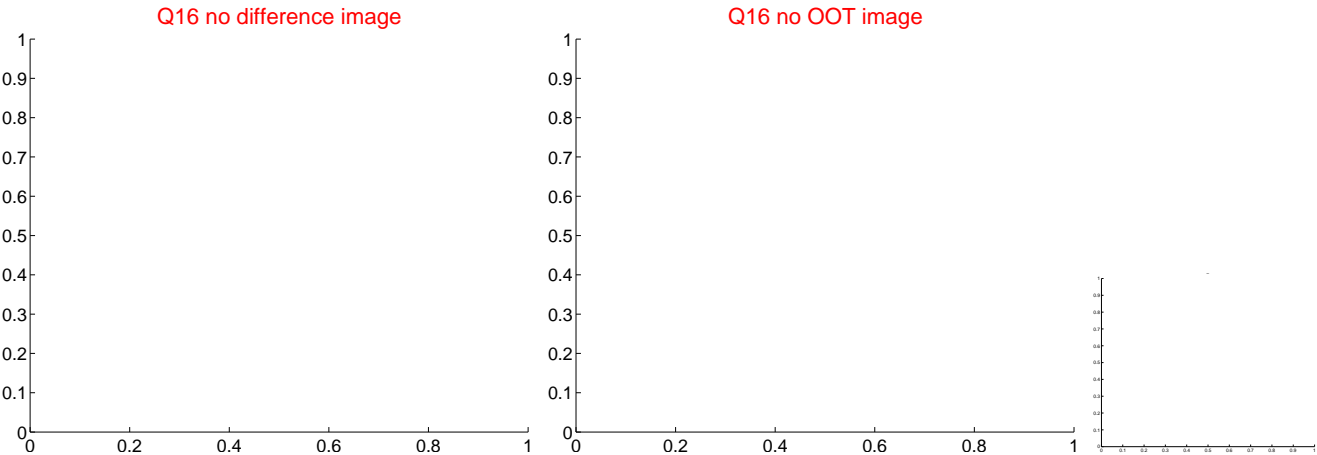
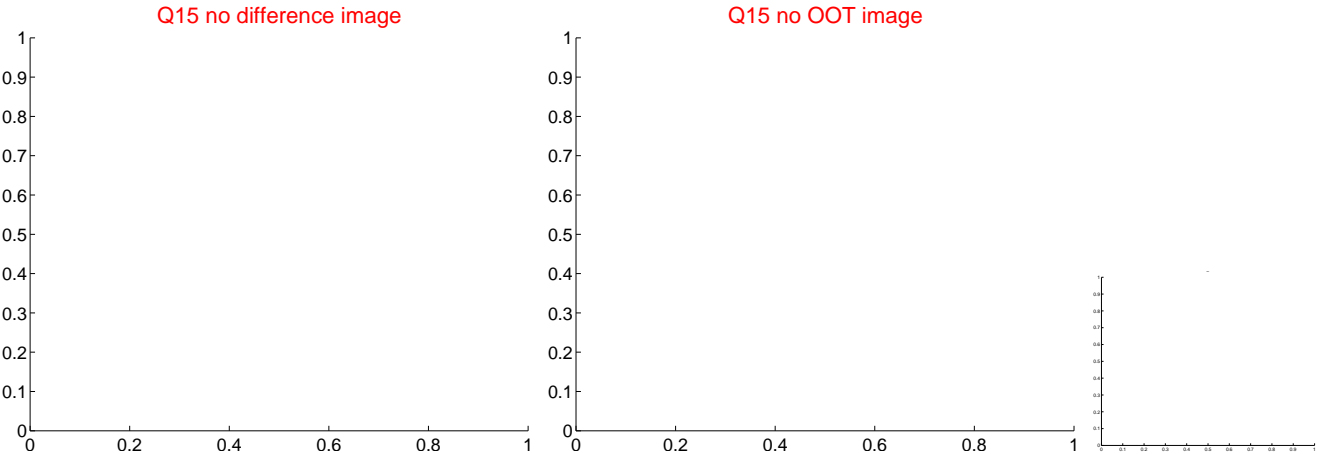
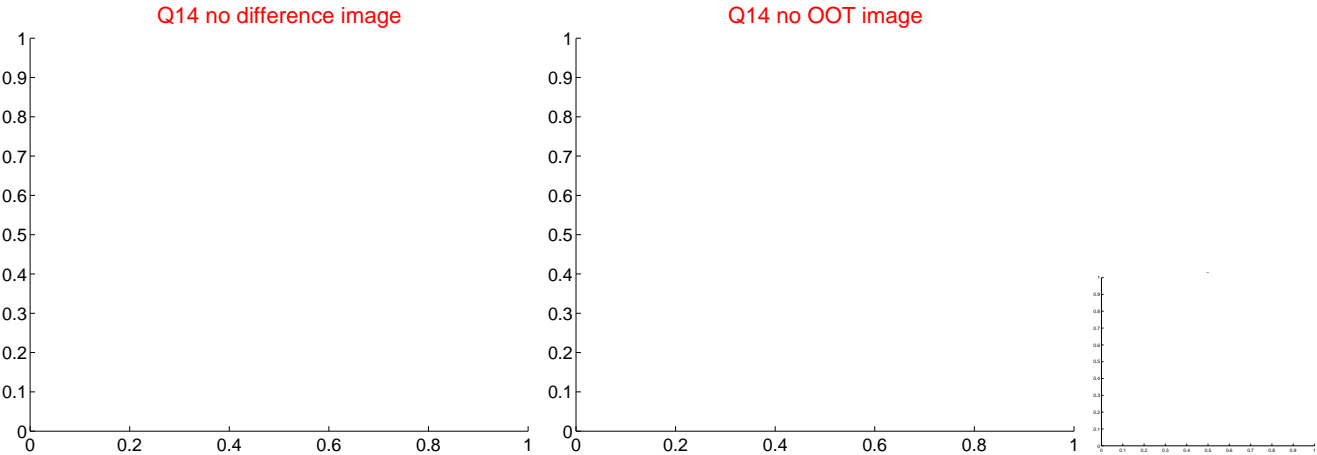
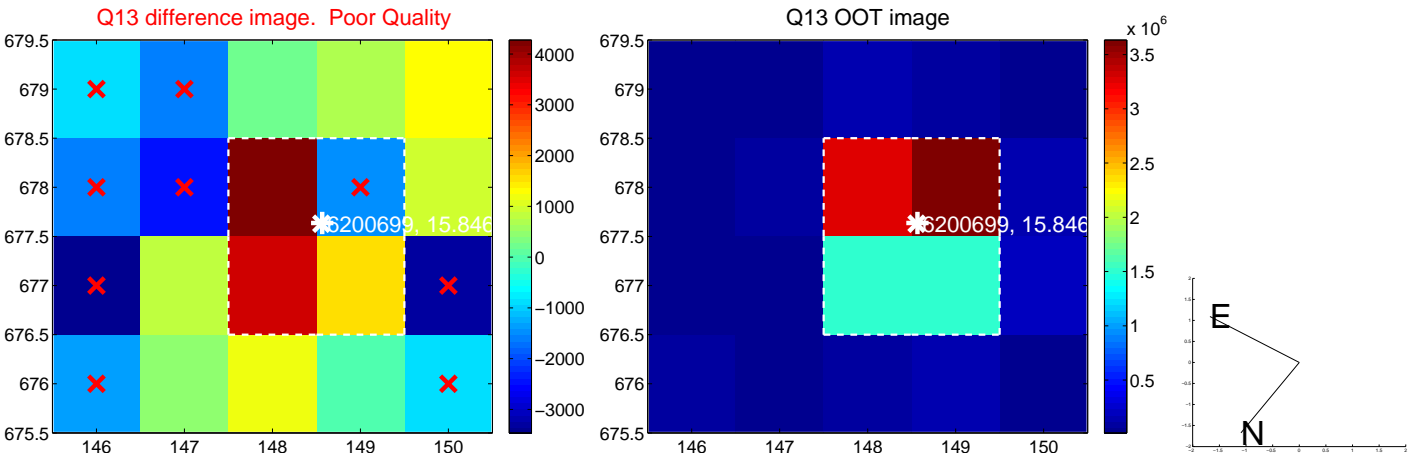
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



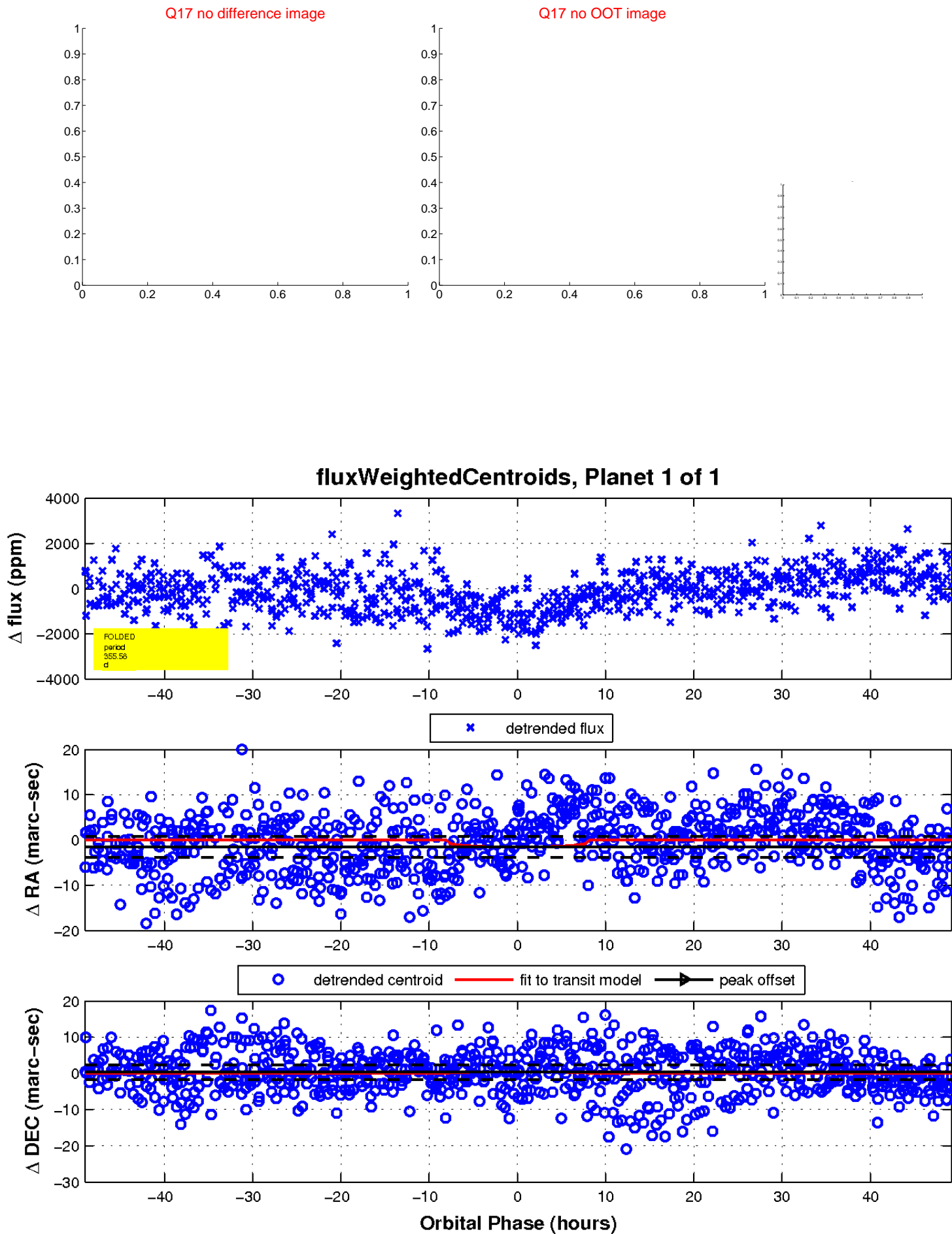
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



UKIRT Image

Declination

