

KIC 005699984

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})
005699984-01	OBS	No	198.313966	299.771351	925.5	13.000	7.2	7.2	0.56	4515	1.78	0.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005699984-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

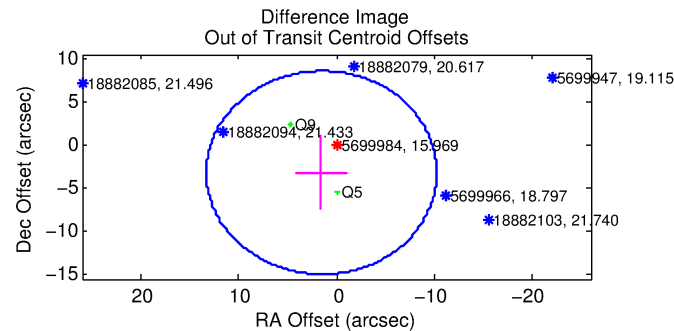
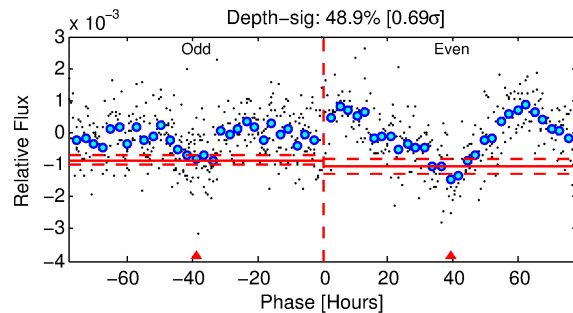
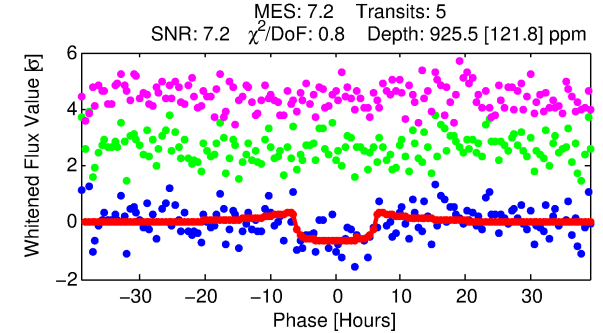
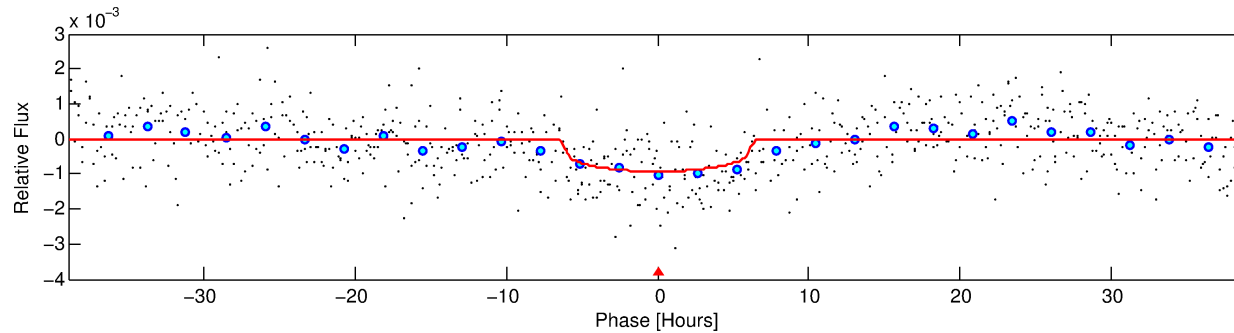
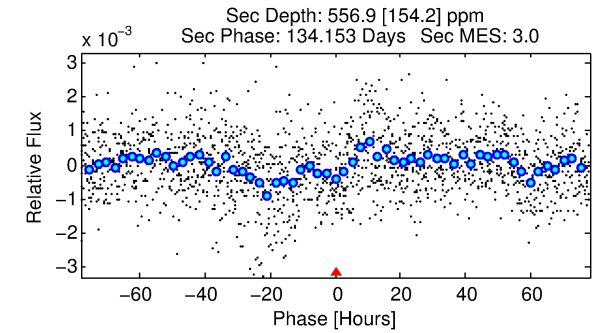
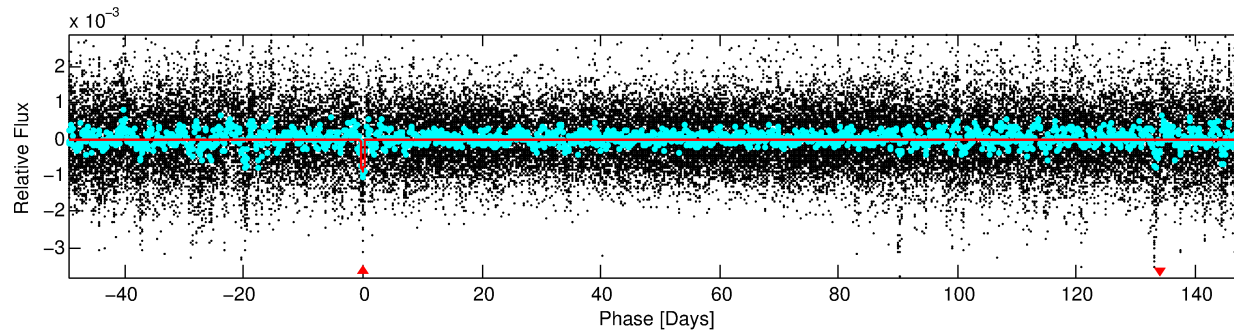
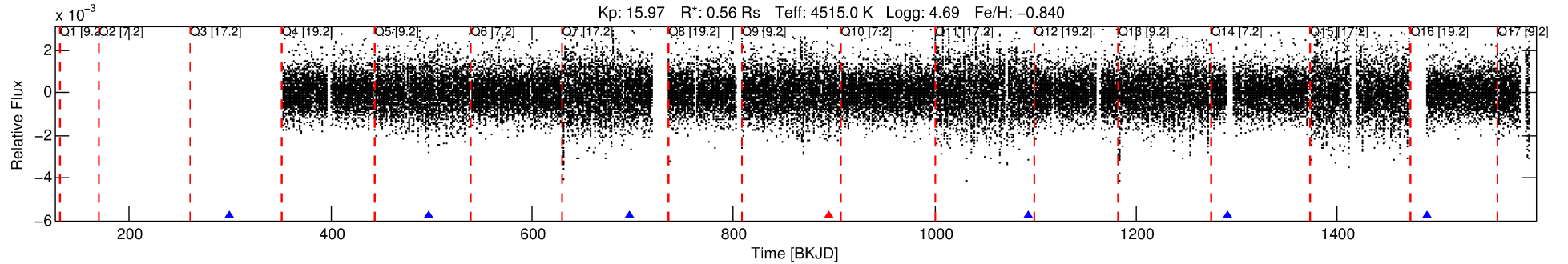
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005699984-01

No Significant Match Found

DV One-Page Summary

KIC: 5699984 Candidate: 1 of 1 Period: 198.314 d



DV Fit Results:

Period = 198.31397 [0.00564] d
Epoch = 299.7714 [0.0220] BKJD
Rp/R* = 0.0293 [0.0112]
a/R* = 92.16 [119.63]
b = 0.66 [1.13]
Seff = 0.39 [0.07]
Teq = 201 [9] K
Rp = 1.78 [0.70] Re
a = 0.5458 [0.0396] AU
Ag = 28733.44 [23643.14] [1.22σ]
Teffp = 4054 [840] K [4.59σ]

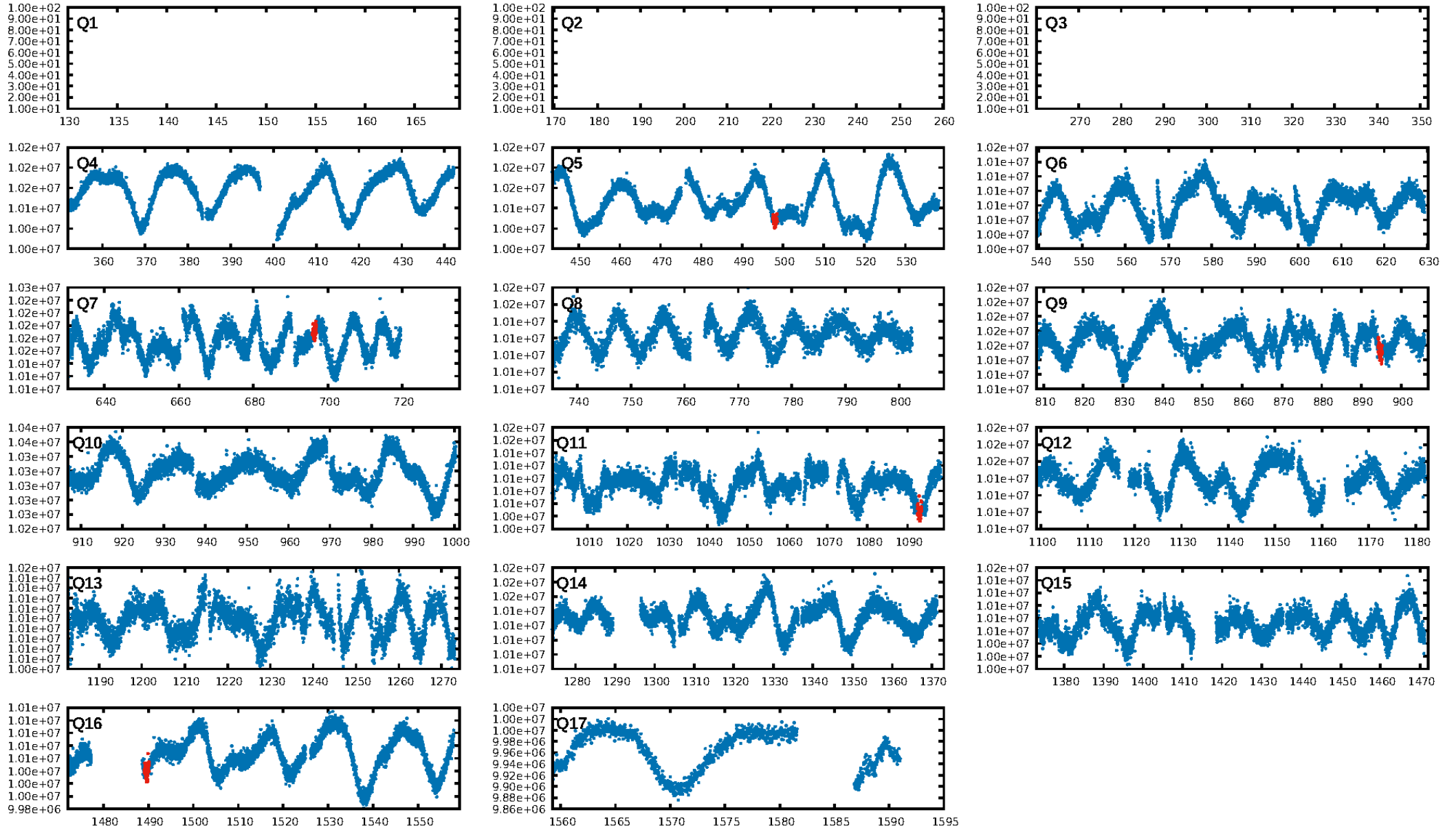
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 85.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.12e-10
RollingBand-fgt: 0.80 [4/5]
GhostDiagnostic-chr: 10.31
Centroid-sig: 94.6%
Centroid-so: 0.629 arcsec [0.30σ]
OotOffset-rm: 3.545 arcsec [0.90σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-rm: 3.652 arcsec [0.92σ]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

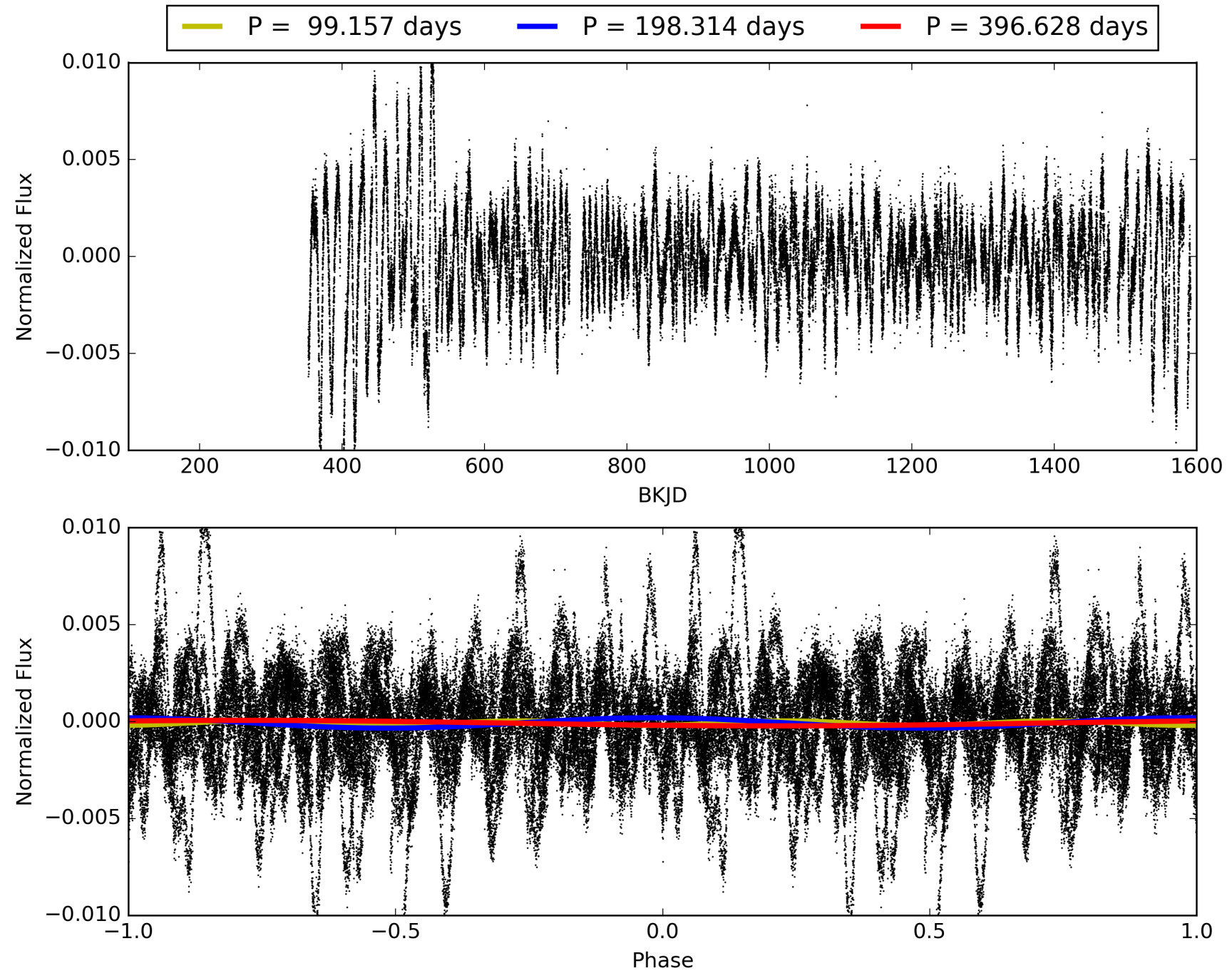
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:52:26 Z

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

TCE 005699984-01, PDC Light Curves

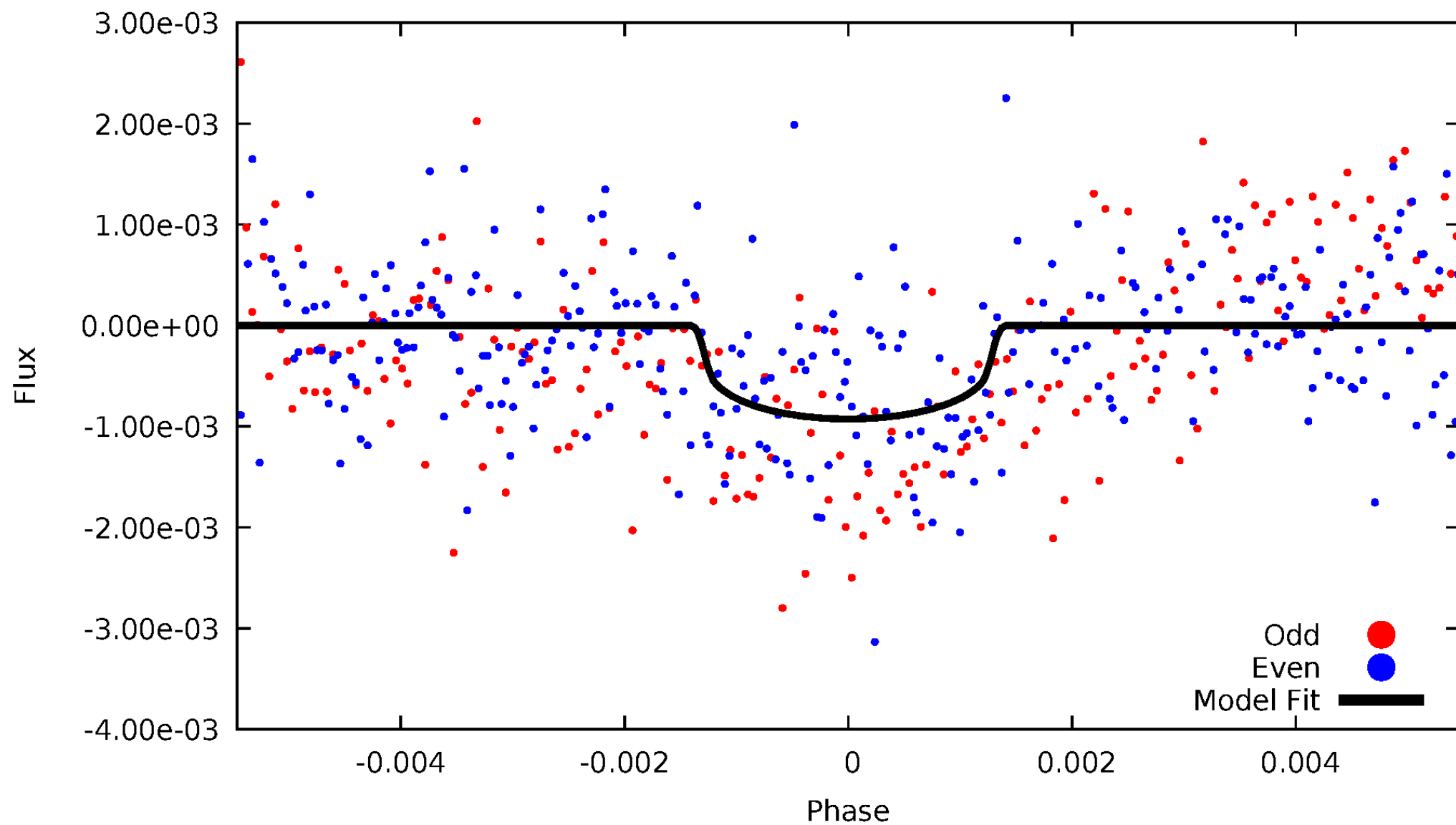


TCE 005699984-01



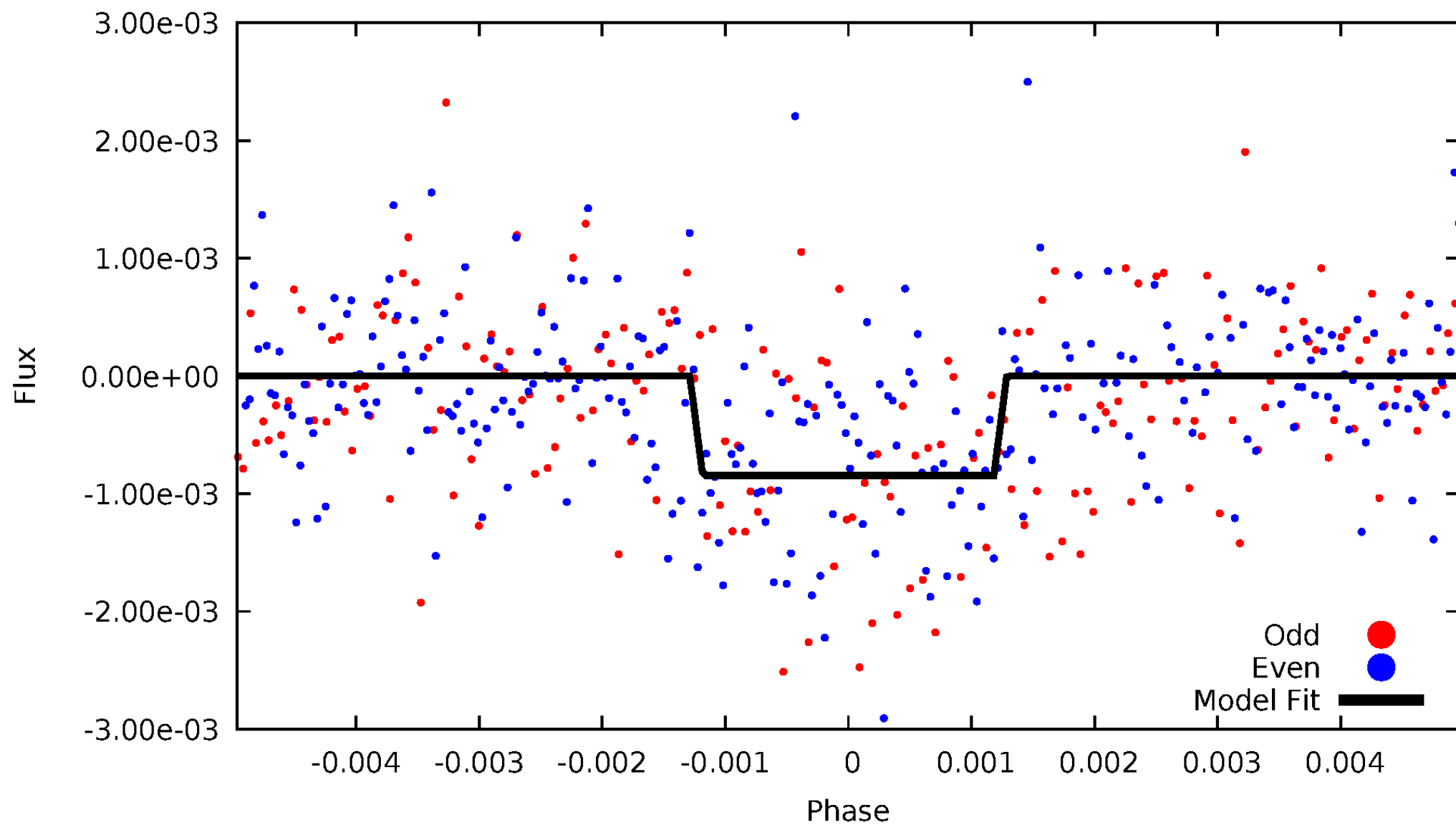
DV Odd/Even

TCE 005699984-01

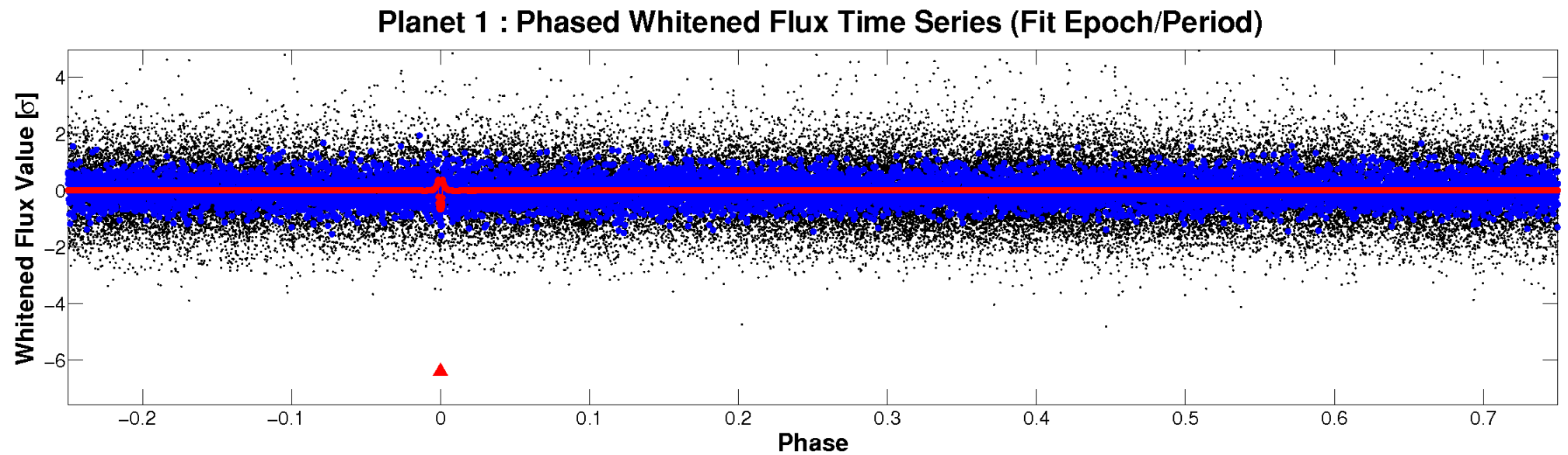
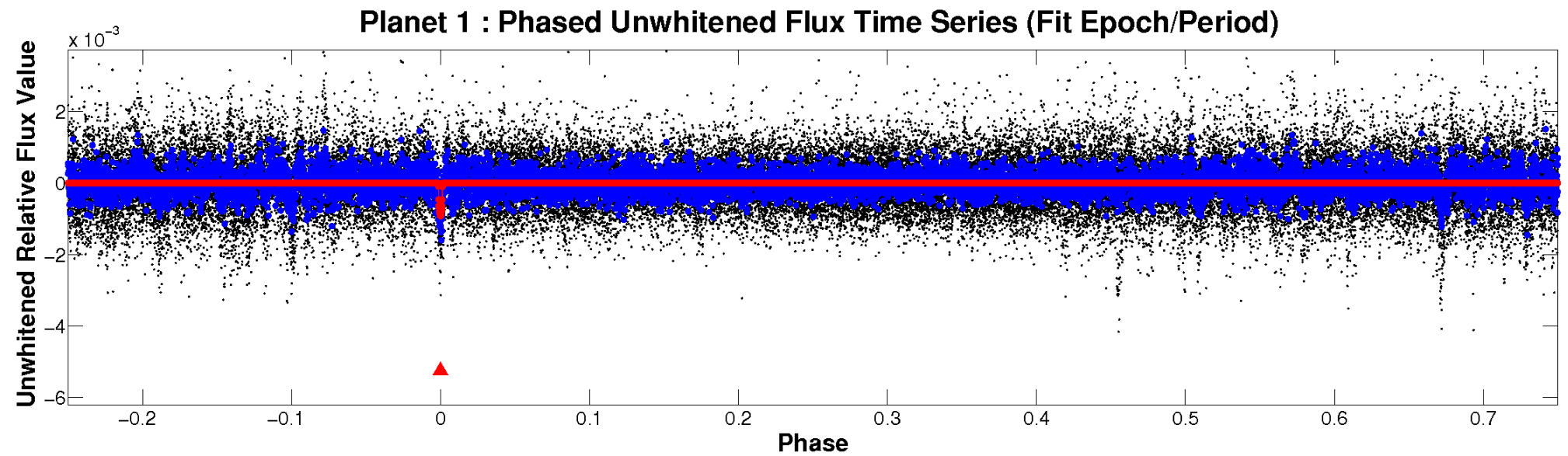


ALT Odd/Even

TCE 005699984-01

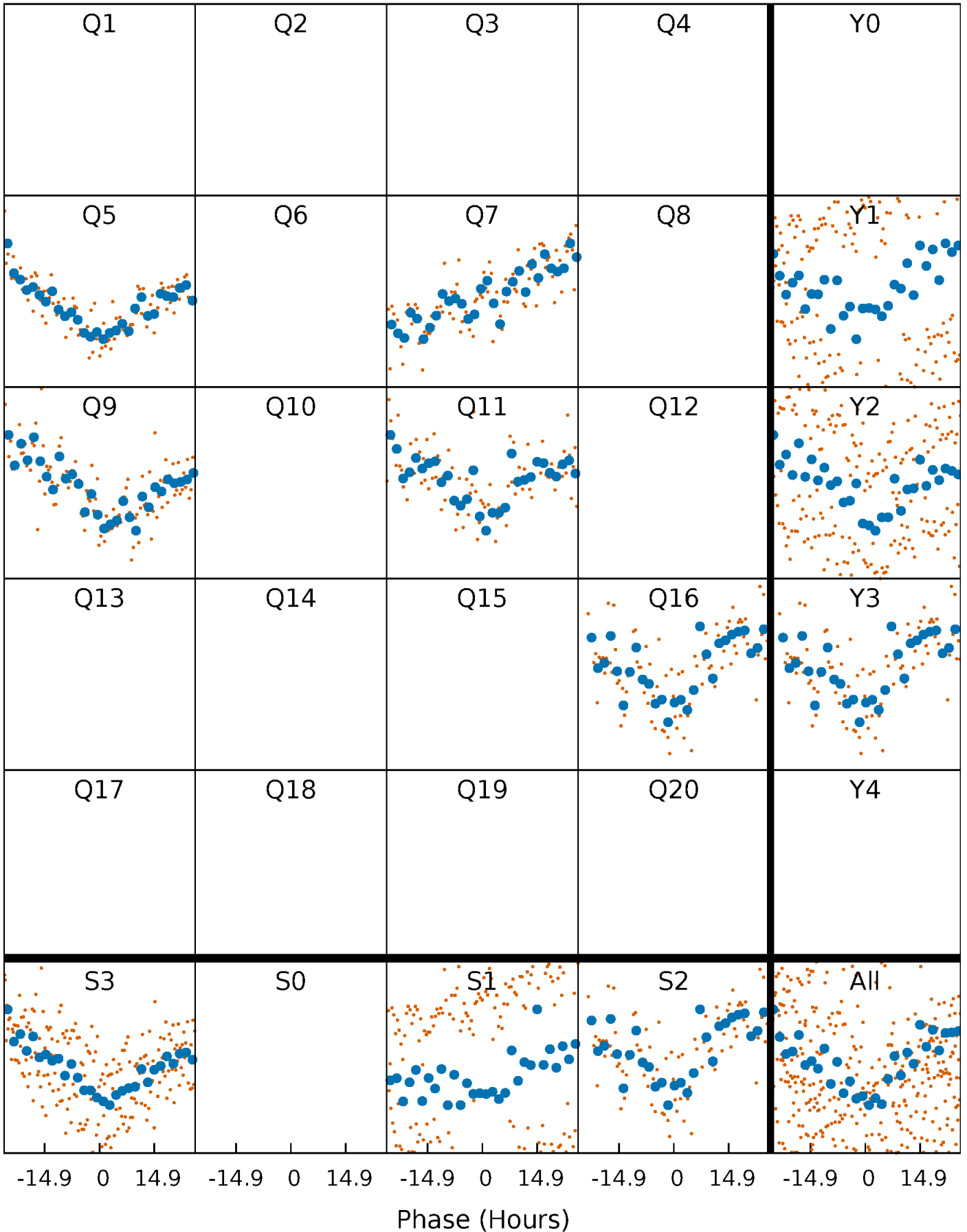


Non-Whitened Vs. Whitened Light Curve



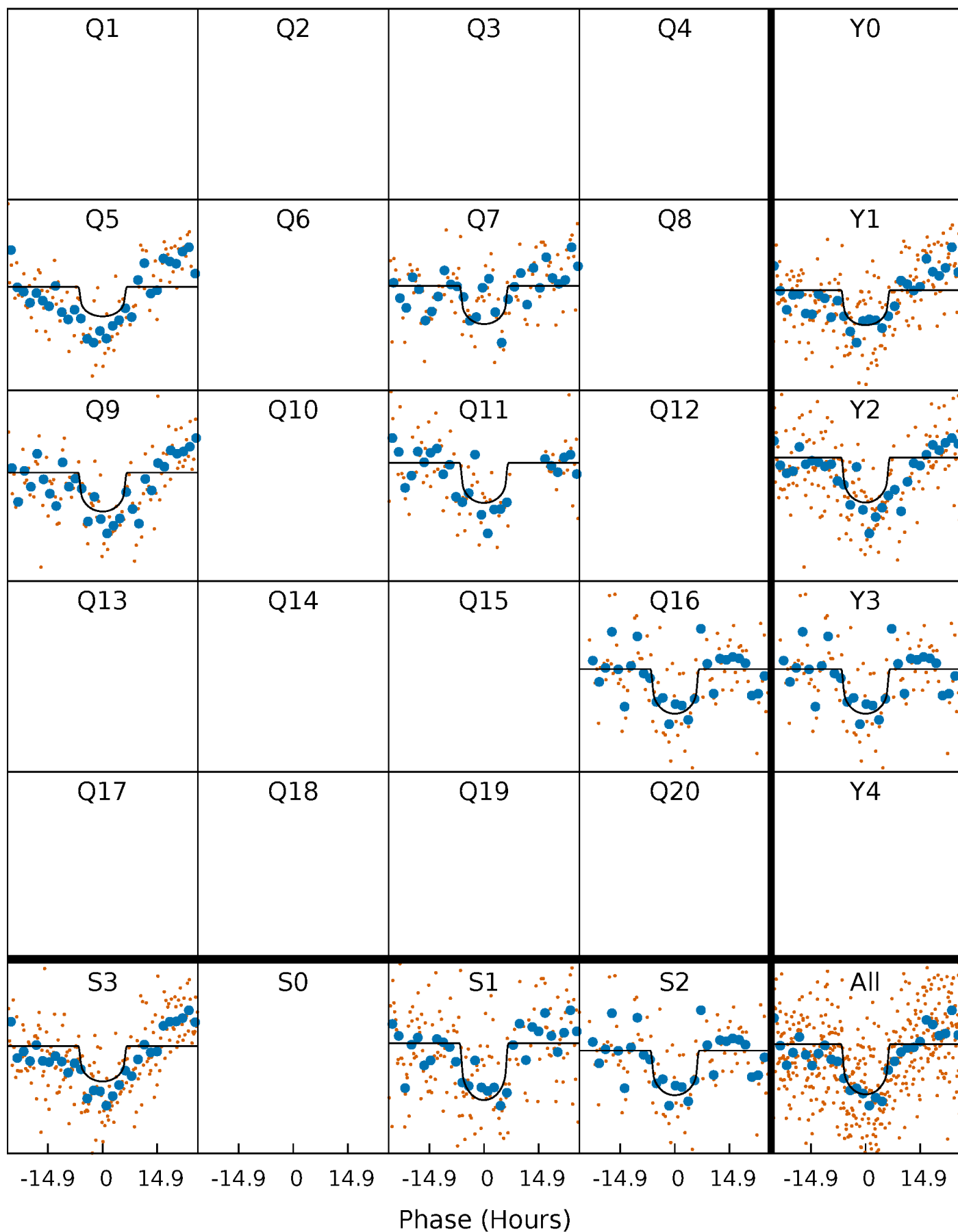
PDC Quarter-Phased Transit Curves

TCE 005699984-01 P=198.313966 Days $T_0=299.771351$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005699984-01 $P=198.313966$ Days $T_0=299.771351$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

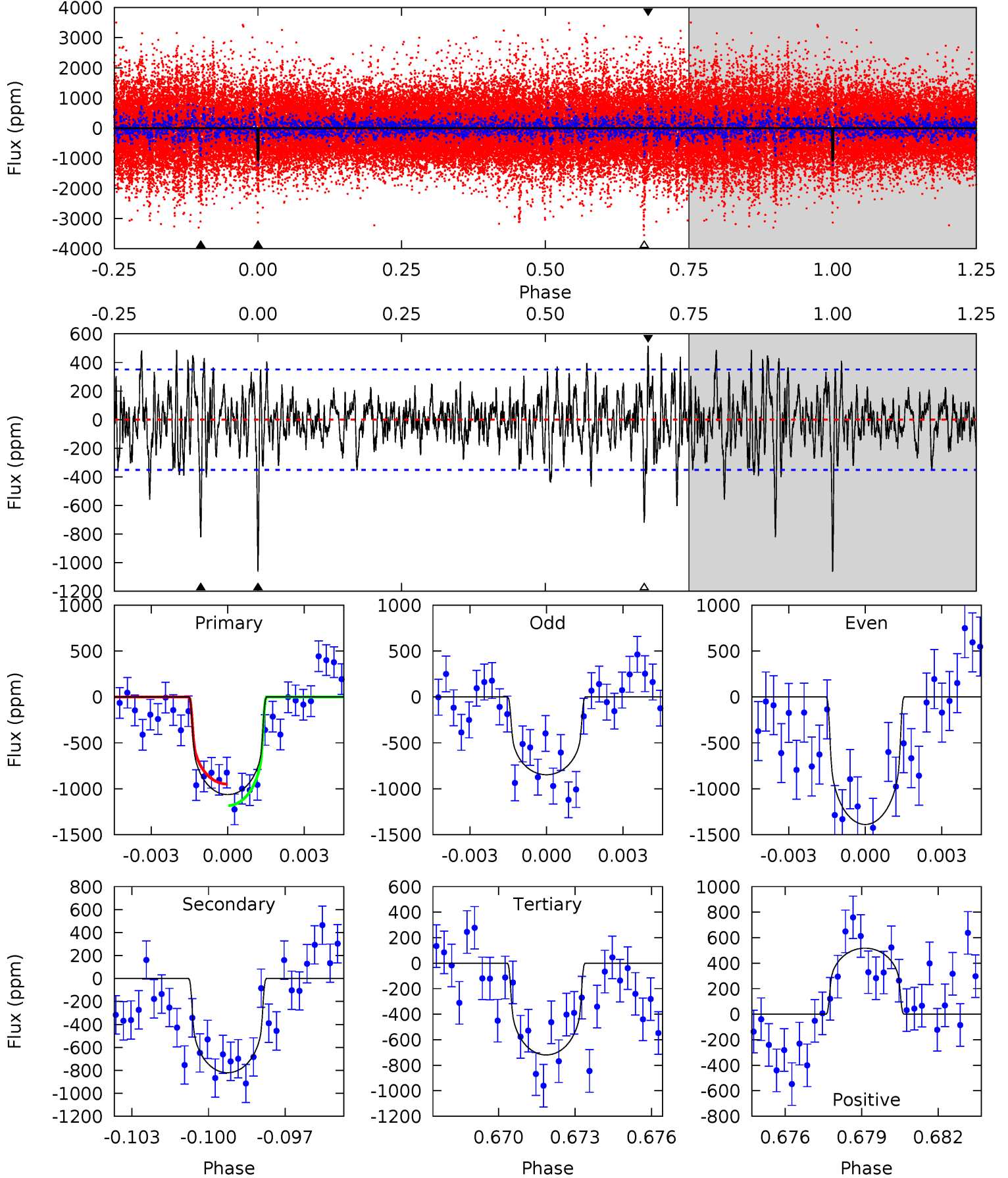
TCE 005699984-01 P=198.314511 Days $T_0=299.758865$ (BKJD)



DV Model-Shift Uniqueness Test

005699984-01, P = 198.313966 Days, E = 299.771351 Days

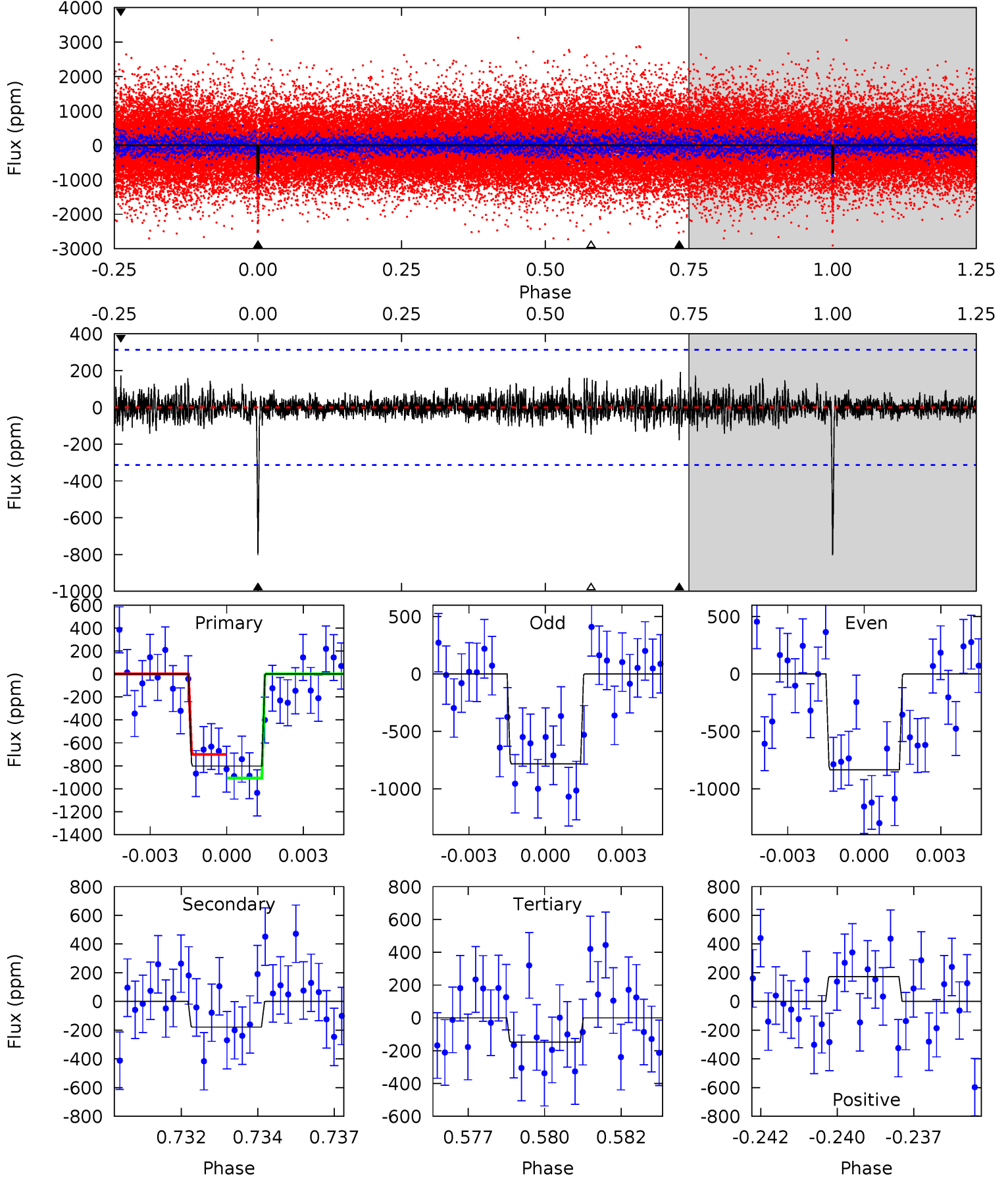
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.0	12.3	10.8	7.77	5.27	2.99	2.33	5.16	8.19	1.52	4.55	4.01	1.04	0.33	1.75



Alt Model-Shift Uniqueness Test

005699984-01, P = 198.314511 Days, E = 299.758865 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	3.01	2.49	2.92	5.28	3.01	0.69	11.0	10.6	0.53	0.09	0.43	1.15	0.19	1.73



Stellar Parameters For KIC 005699984

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4515^{+161}_{-161}	$4.686^{+0.056}_{-0.032}$	$-0.840^{+0.300}_{-0.300}$	$0.558^{+0.044}_{-0.049}$	$0.550^{+0.053}_{-0.035}$	$4.468^{+1.118}_{-0.573}$
	+4%/-4%	+1%/-1%	+36%/-36%	+8%/-9%	+10%/-6%	+25%/-13%
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 005699984-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-821 ± 67	$1.79^{+0.64}_{-0.67}$	280^{+12}_{-11}	4472^{+985}_{-512}	42061^{+63767}_{-19081}
Alt.	-179 ± 59	$1.80^{+0.67}_{-0.71}$	280^{+12}_{-12}	3396^{+648}_{-342}	8823^{+15888}_{-4369}

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

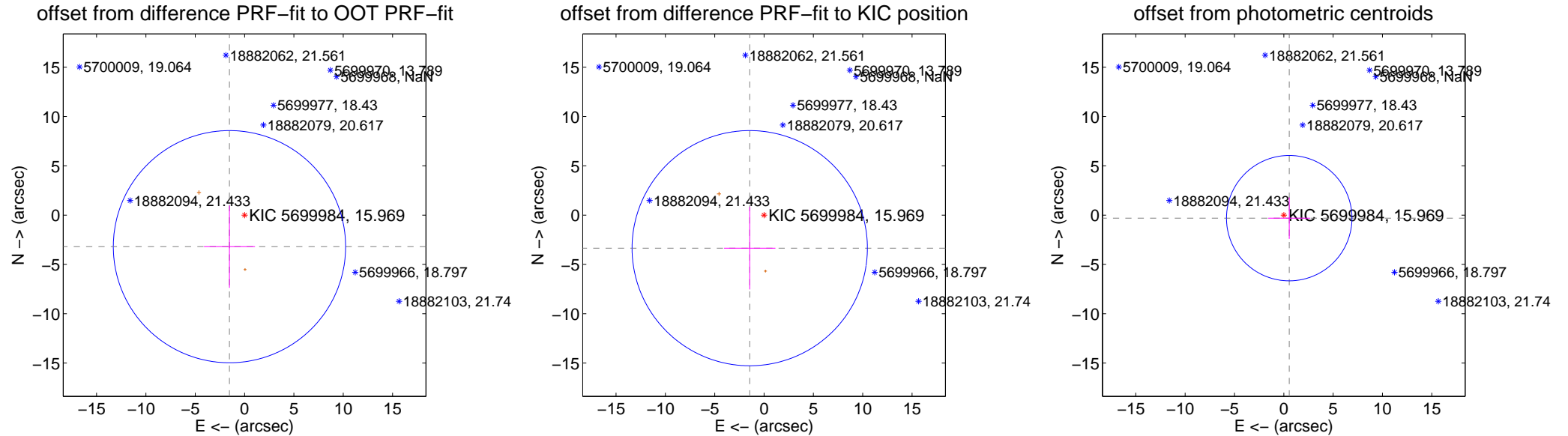
DV Centroid Data

Supplemental centroid analysis for 005699984-01. Kepler magnitude: 15.97. Transit SNR 7.22

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.545 ± 3.923	0.90	1.531 ± 2.583	-3.198 ± 4.169
PRF-fit source offset from KIC position	3.652 ± 3.974	0.92	1.452 ± 2.603	-3.351 ± 4.181
photometric centroid source offset	0.63 ± 2.12	0.30	-0.55 ± 2.13	-0.31 ± 2.10

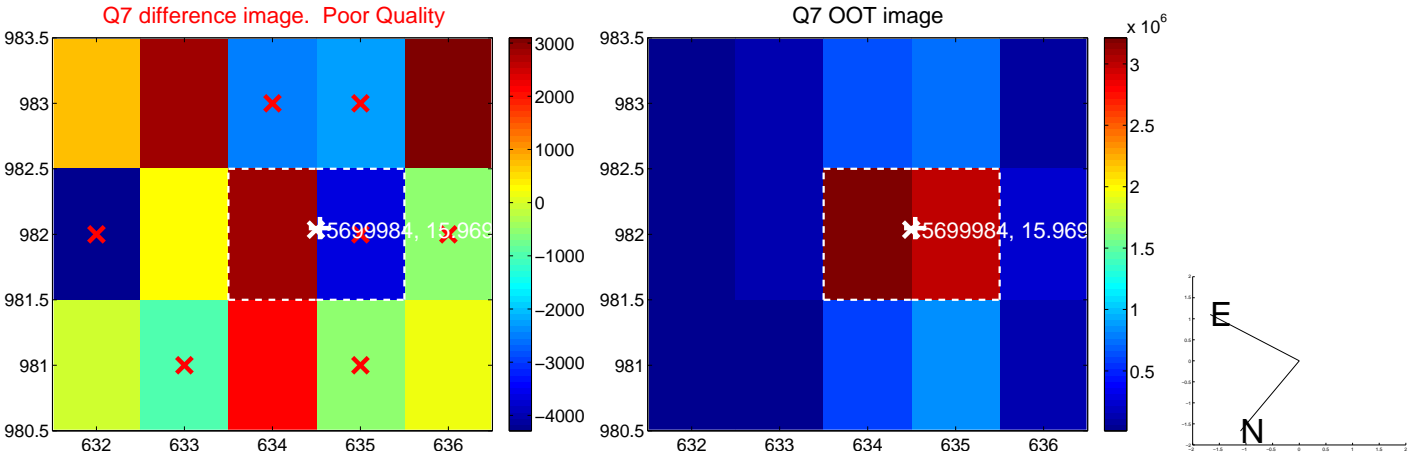
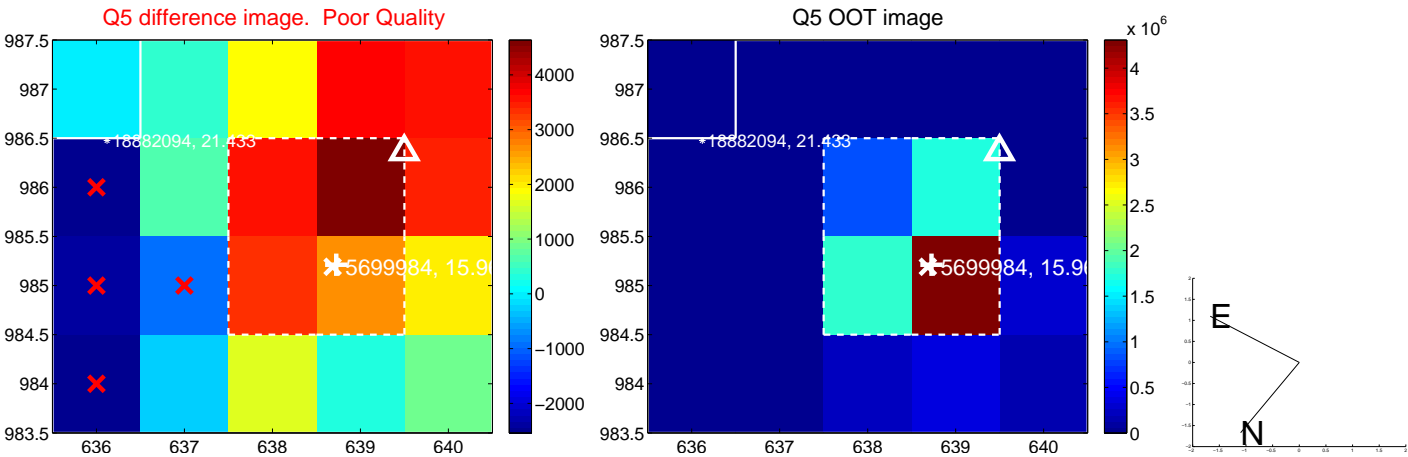


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

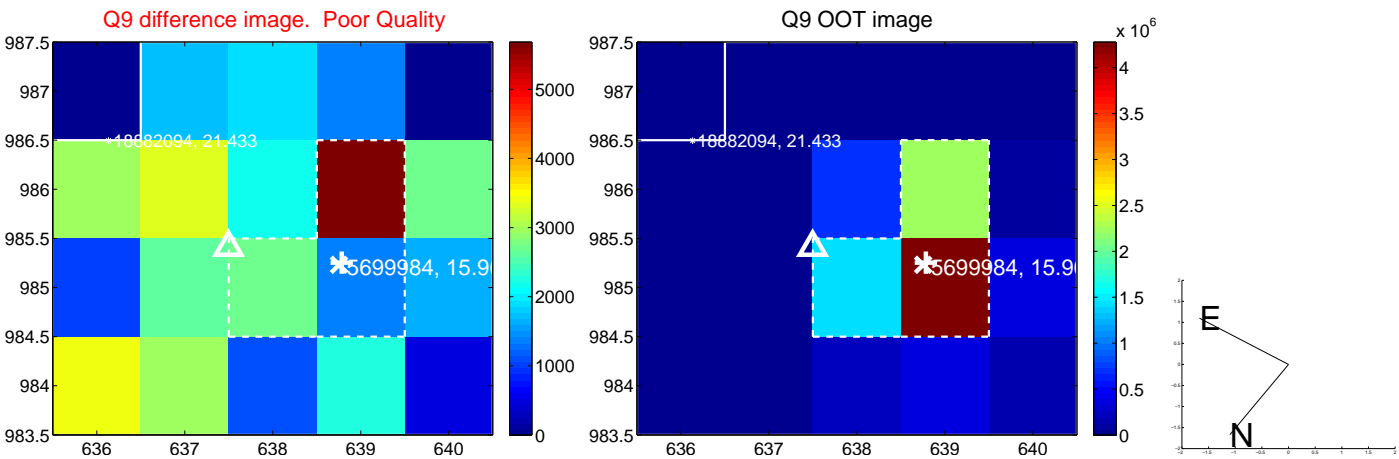
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



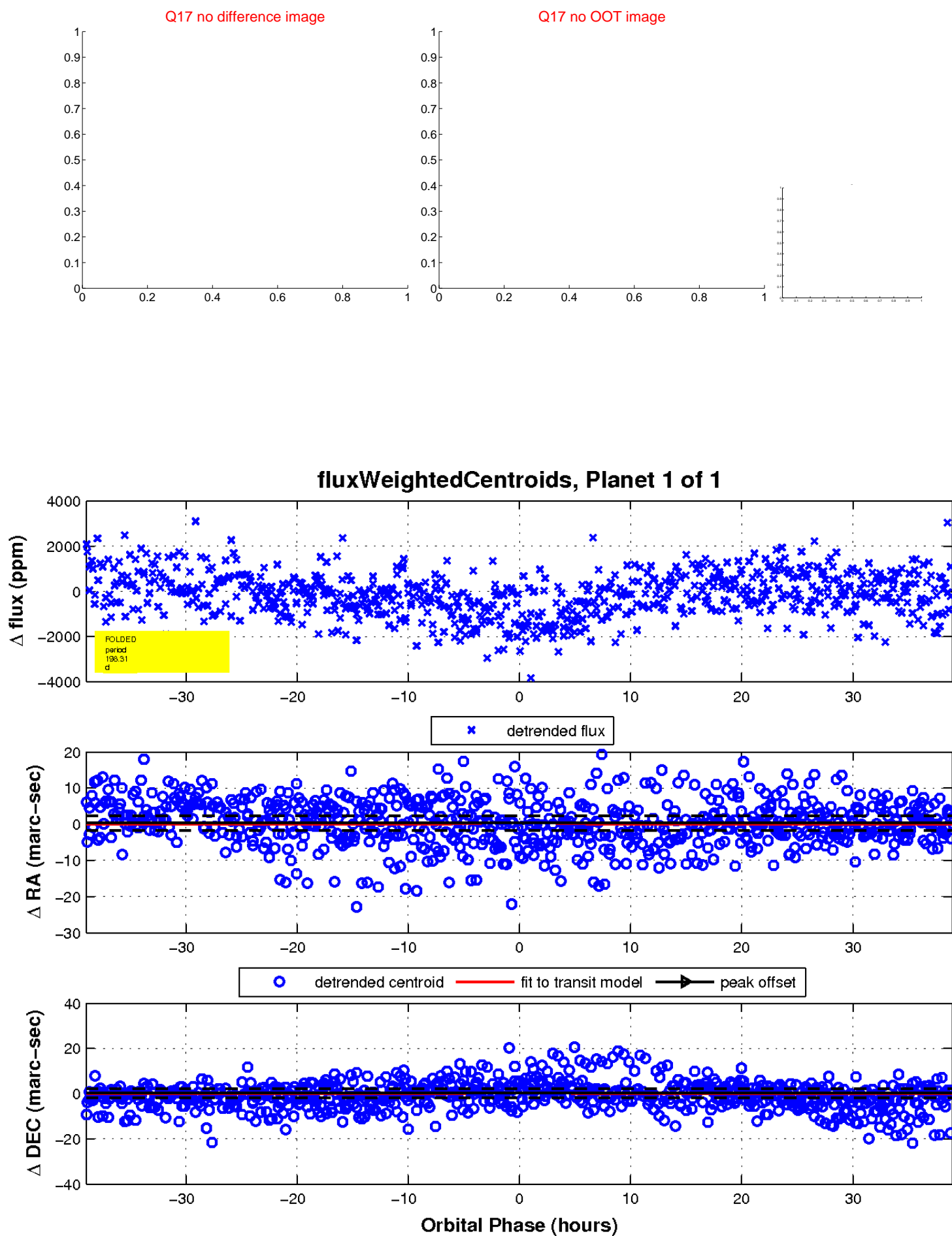
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

