

KIC 005966669

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})
005966669-01	OBS	No	90.366979	164.241307	1143.8	19.117	7.7	4.5	0.18	3312	0.65	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005966669-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—CENT_KIC_POS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

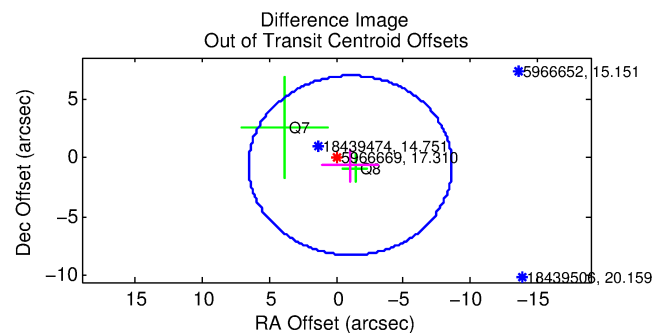
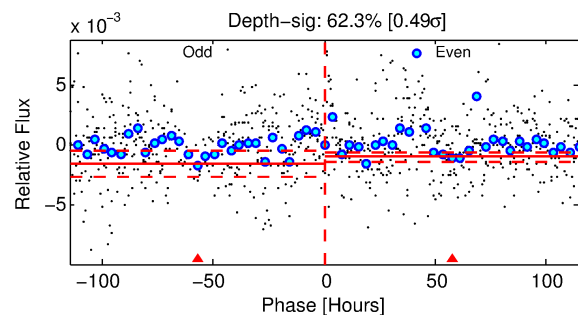
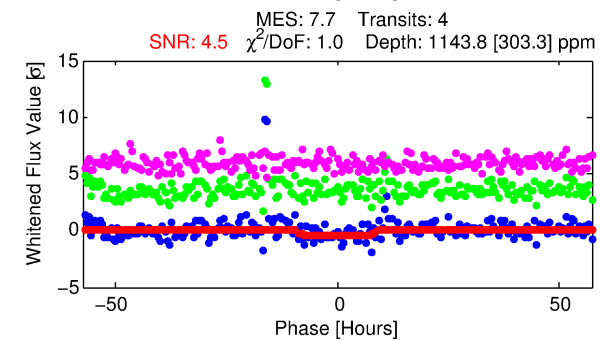
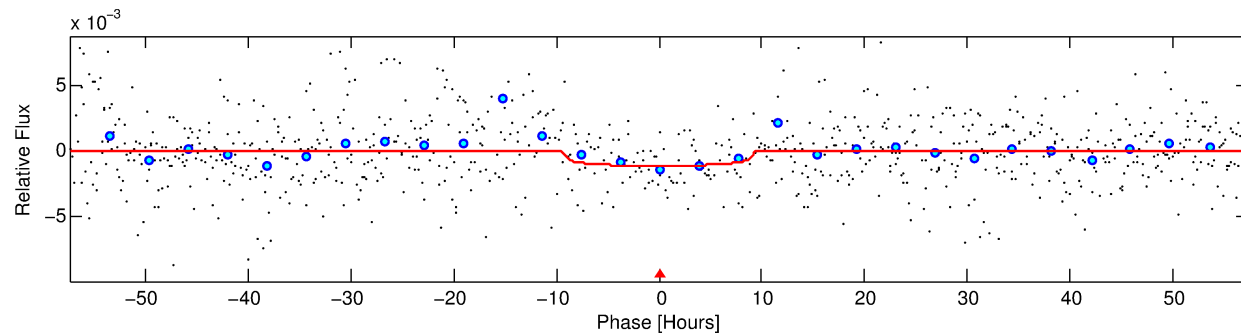
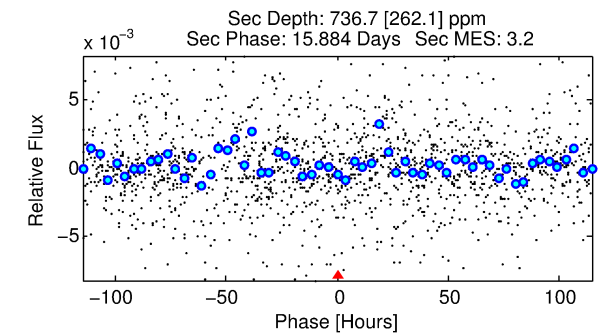
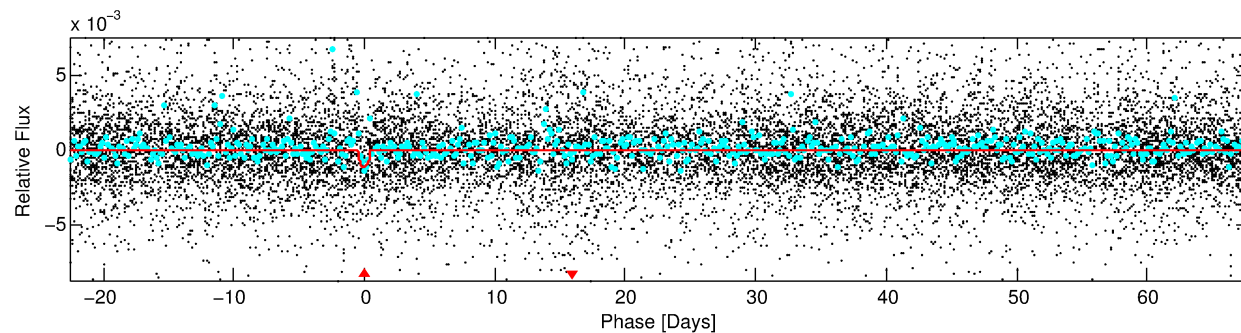
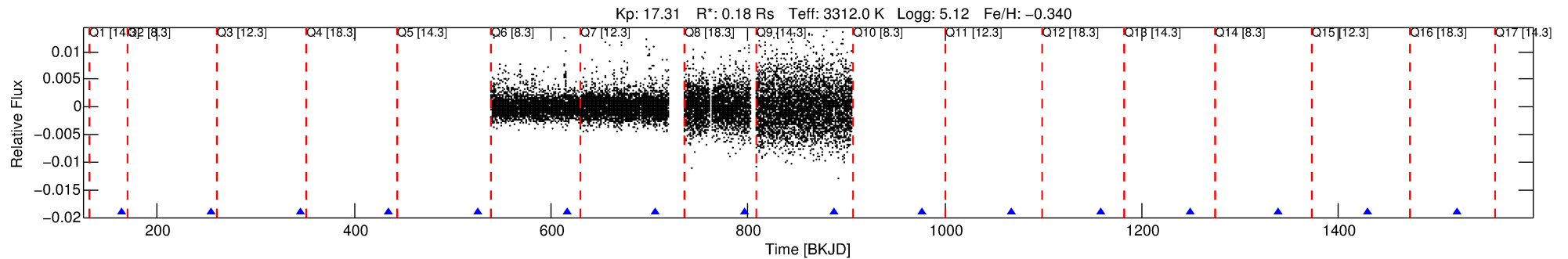
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005966669-01

No Significant Match Found

DV One-Page Summary

KIC: 5966669 Candidate: 1 of 1 Period: 90.367 d



DV Fit Results:

Period = 90.36698 [0.04339] d
Epoch = 164.2413 [0.2444] BKJD
Rp/R* = 0.0321 [0.0179]
a/R* = 31.07 [79.30]
b = 0.57 [3.03]
Seff = 0.08 [0.03]
Teq = 135 [14] K
Rp = 0.65 [0.48] Re
a = 0.2158 [0.0744] AU
Ag = 45043.85 [55726.84] [0.81 σ]
Teff = 3047 [901] K [3.23 σ]

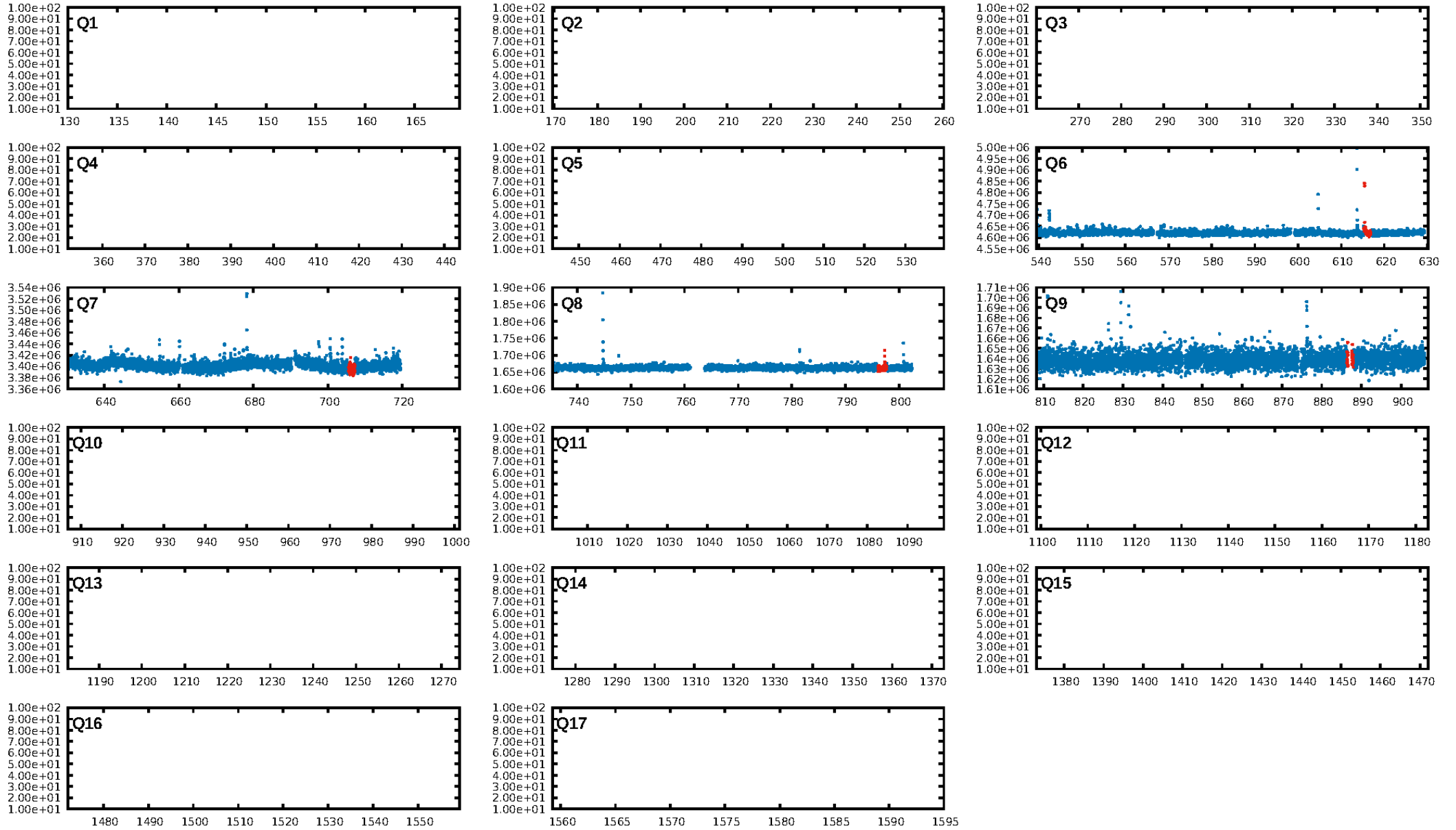
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 45.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.69e-13
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 6.251
Centroid-sig: 0.5%
Centroid-so: 3.075 arcsec [2.28 σ]
OotOffset-rm: 1.240 arcsec [0.49 σ]
KicOffset-rm: 2.348 arcsec [1.72 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

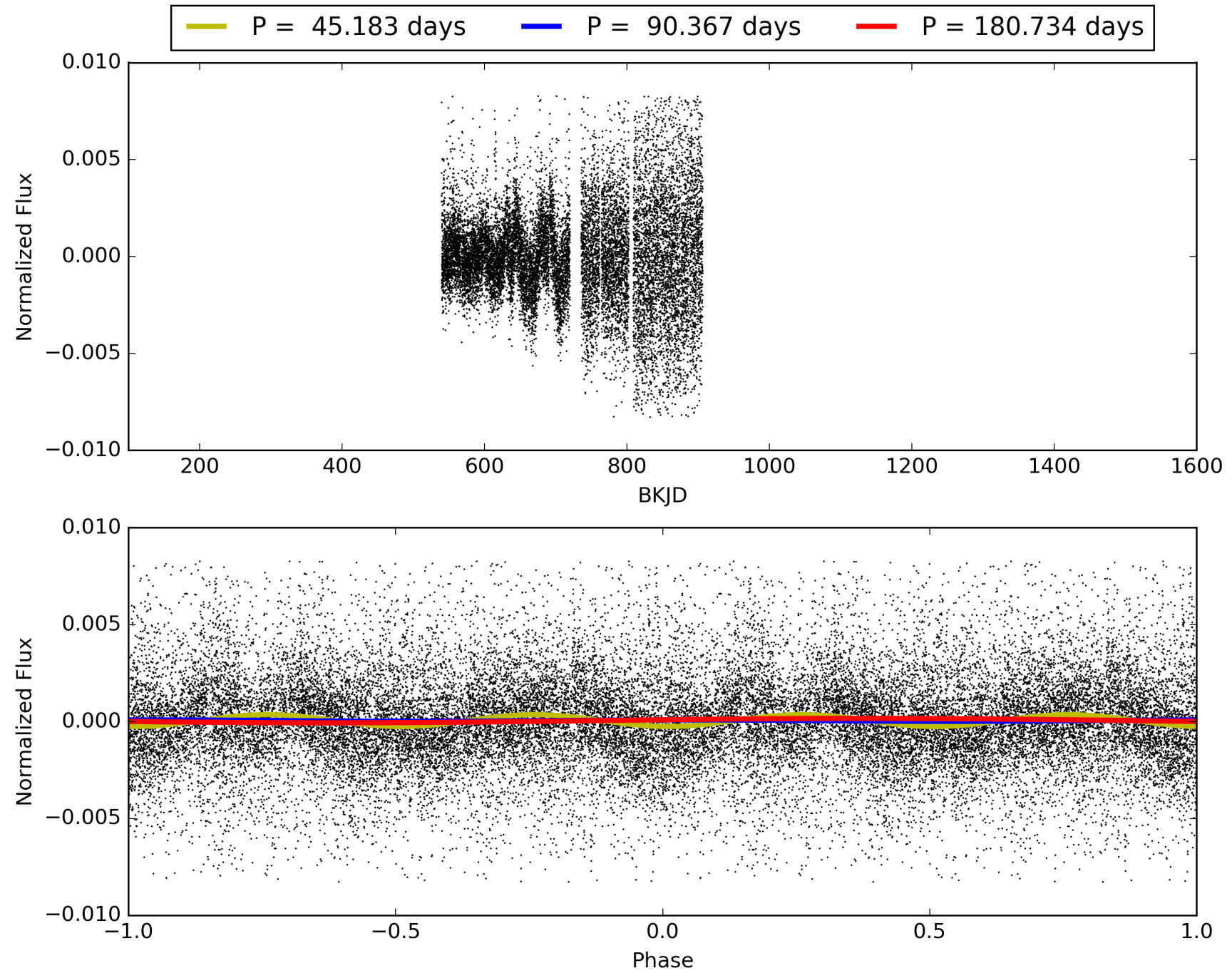
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:22:30 Z

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

TCE 005966669-01, PDC Light Curves

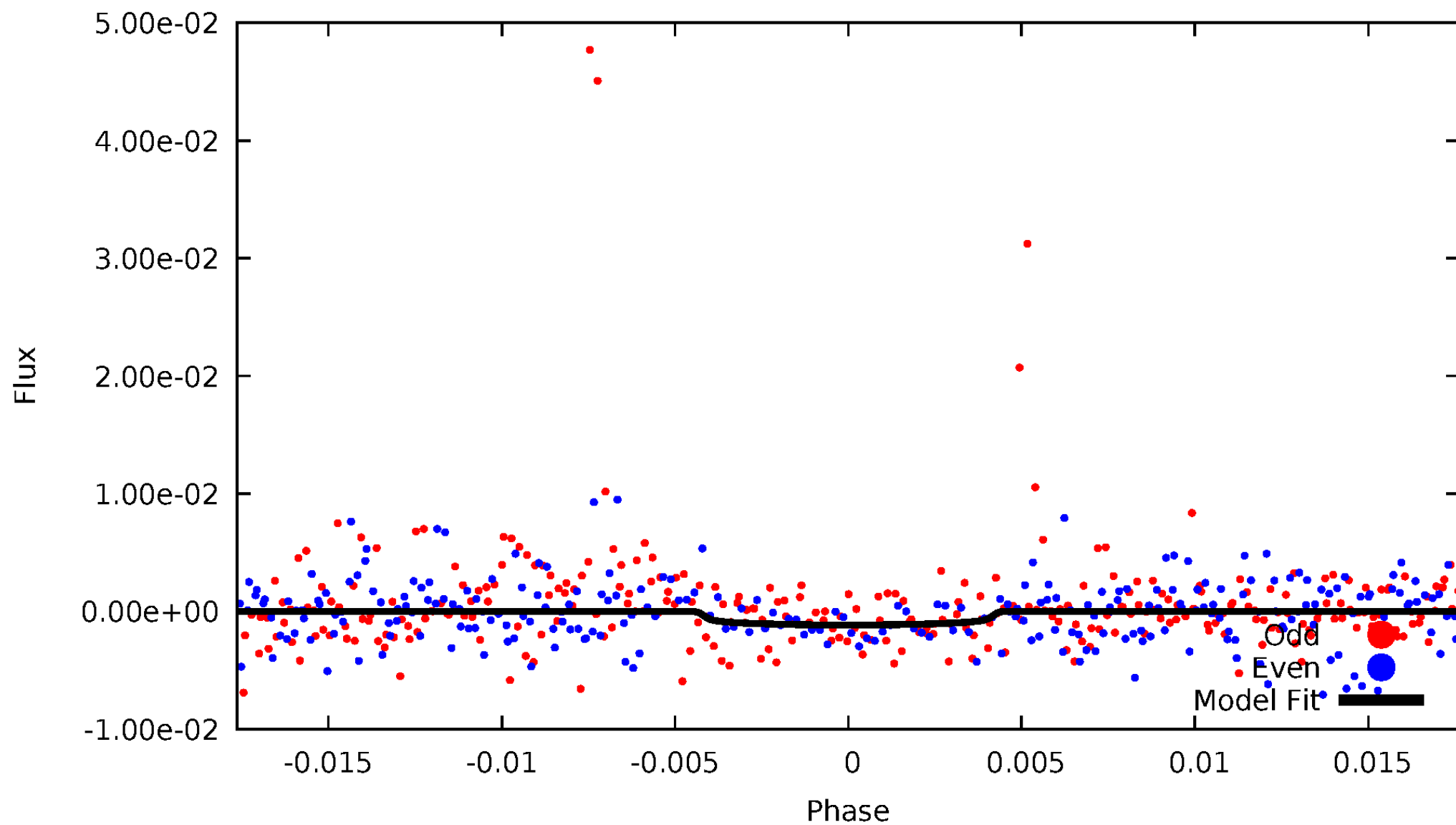


TCE 005966669-01



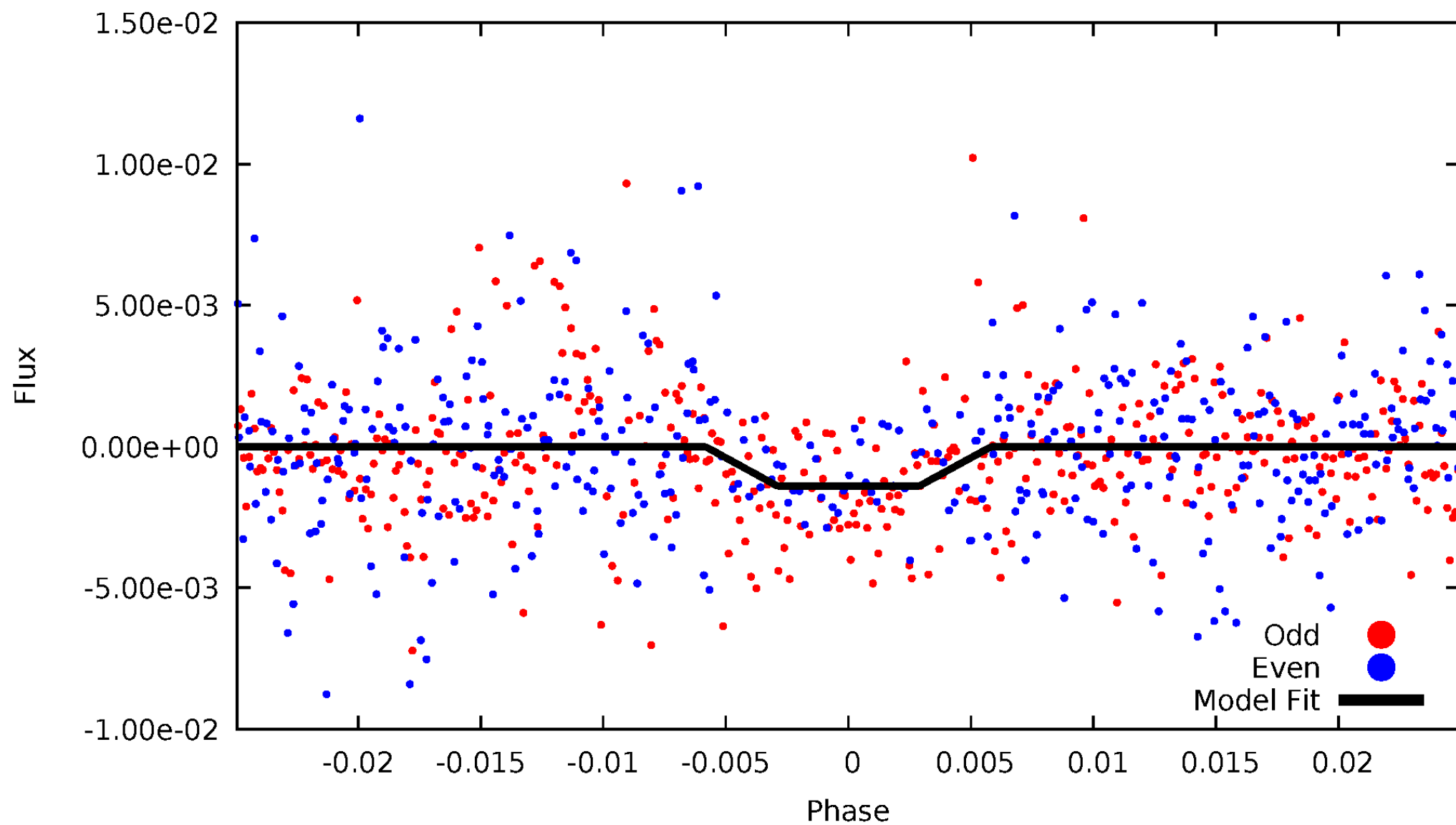
DV Odd/Even

TCE 005966669-01



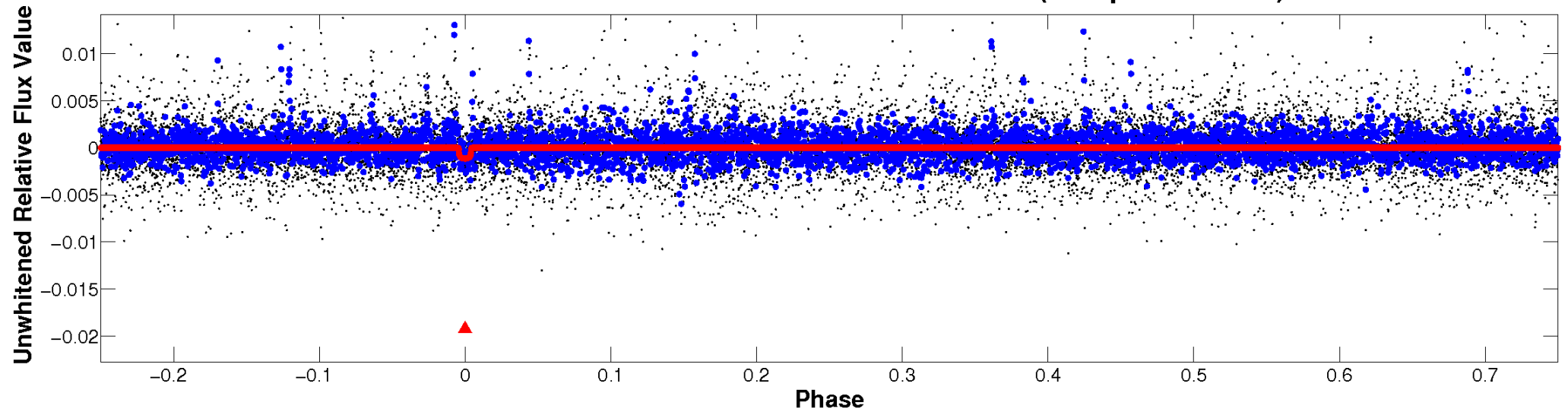
ALT Odd/Even

TCE 005966669-01

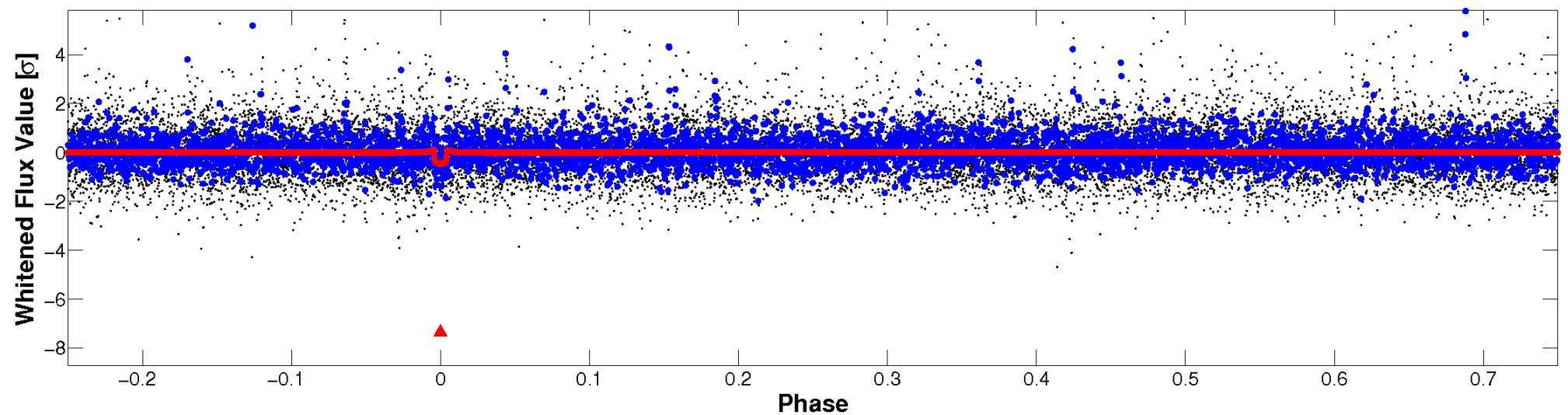


Non-Whitened Vs. Whitened Light Curve

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

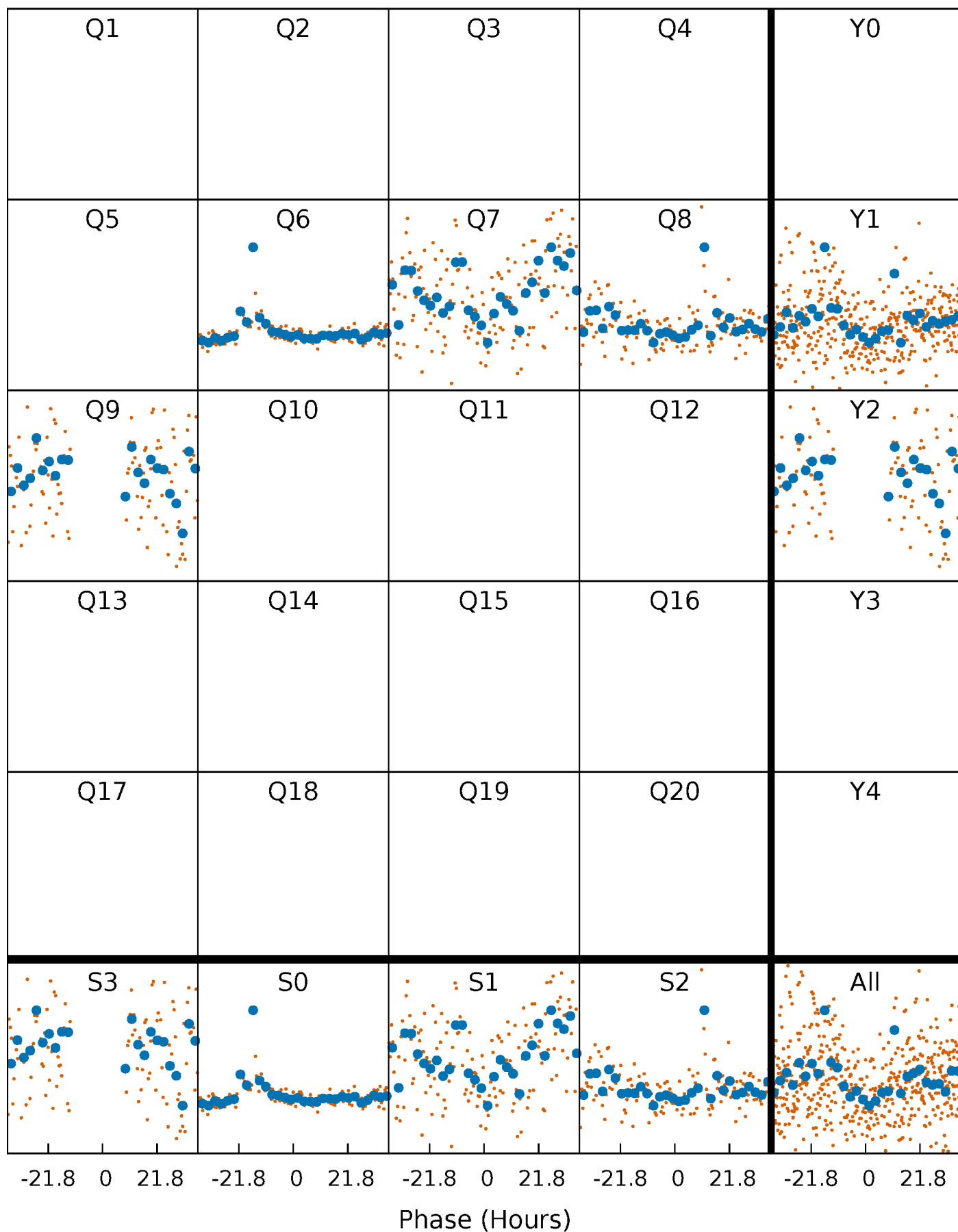


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



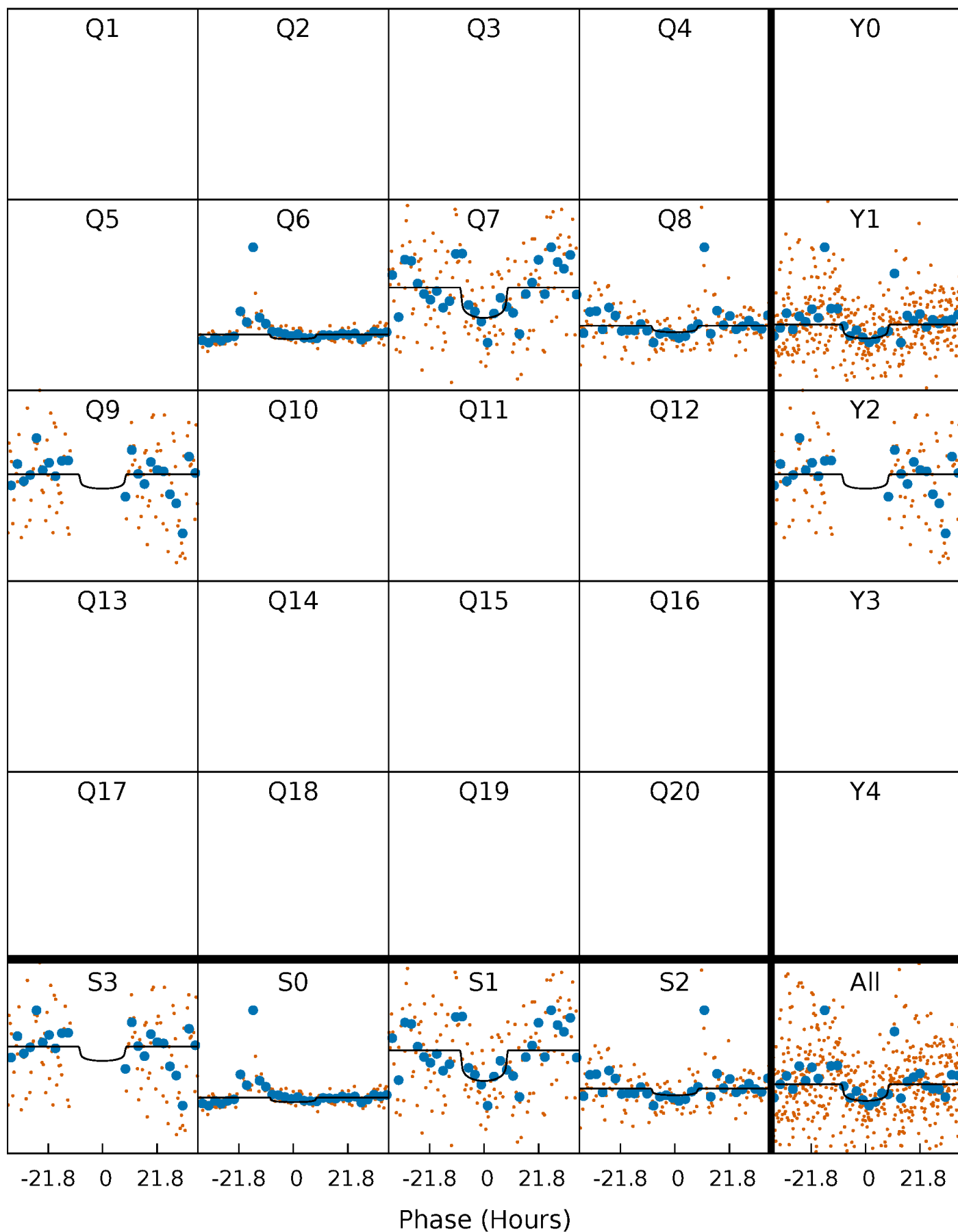
PDC Quarter-Phased Transit Curves

TCE 005966669-01 P= 90.366979 Days $T_0=164.241308$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005966669-01 P= 90.366979 Days $T_0=164.241308$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

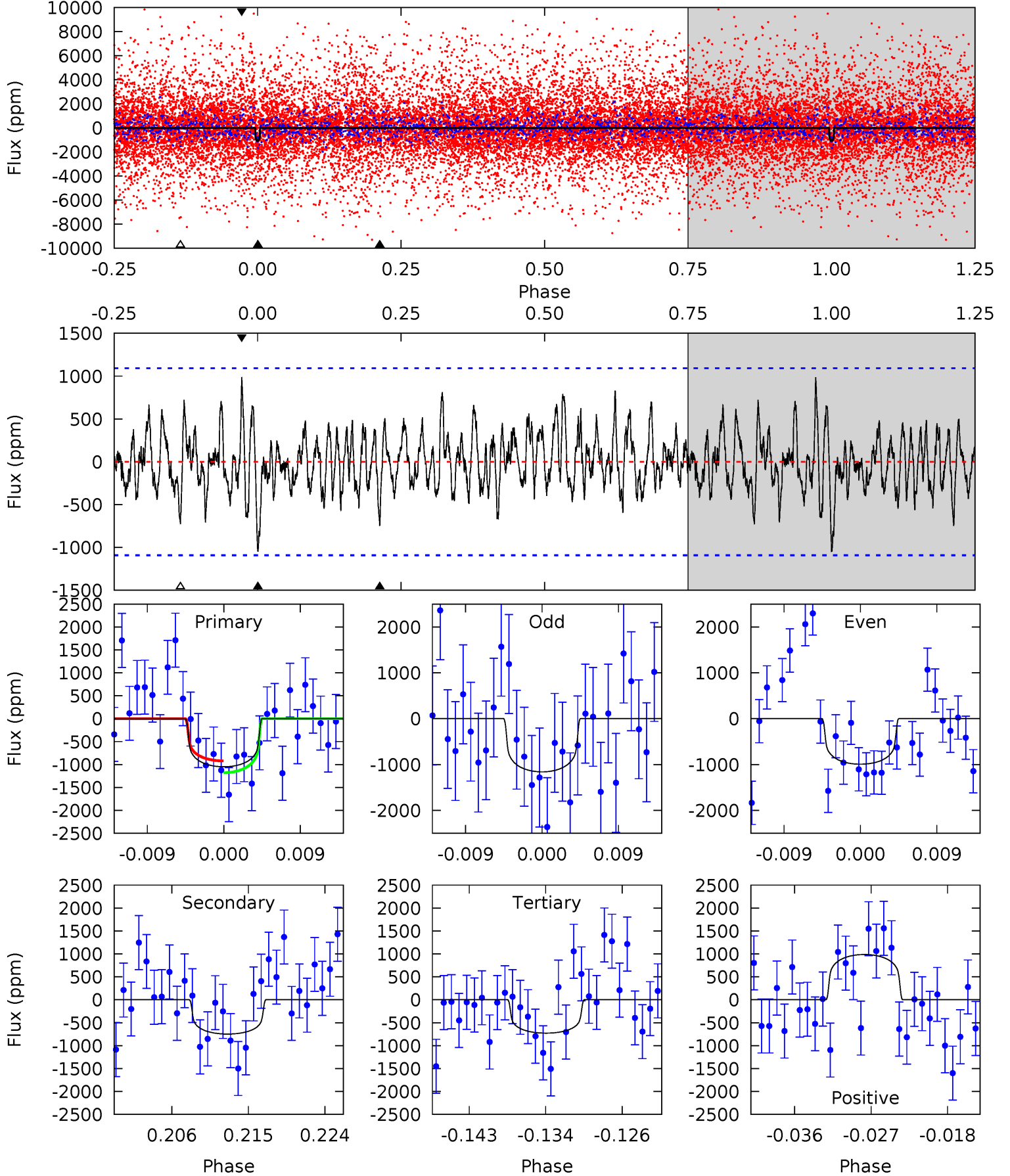
TCE 005966669-01 P= 90.289090 Days $T_0=164.815282$ (BKJD)



DV Model-Shift Uniqueness Test

005966669-01, P = 90.366979 Days, E = 164.241308 Days

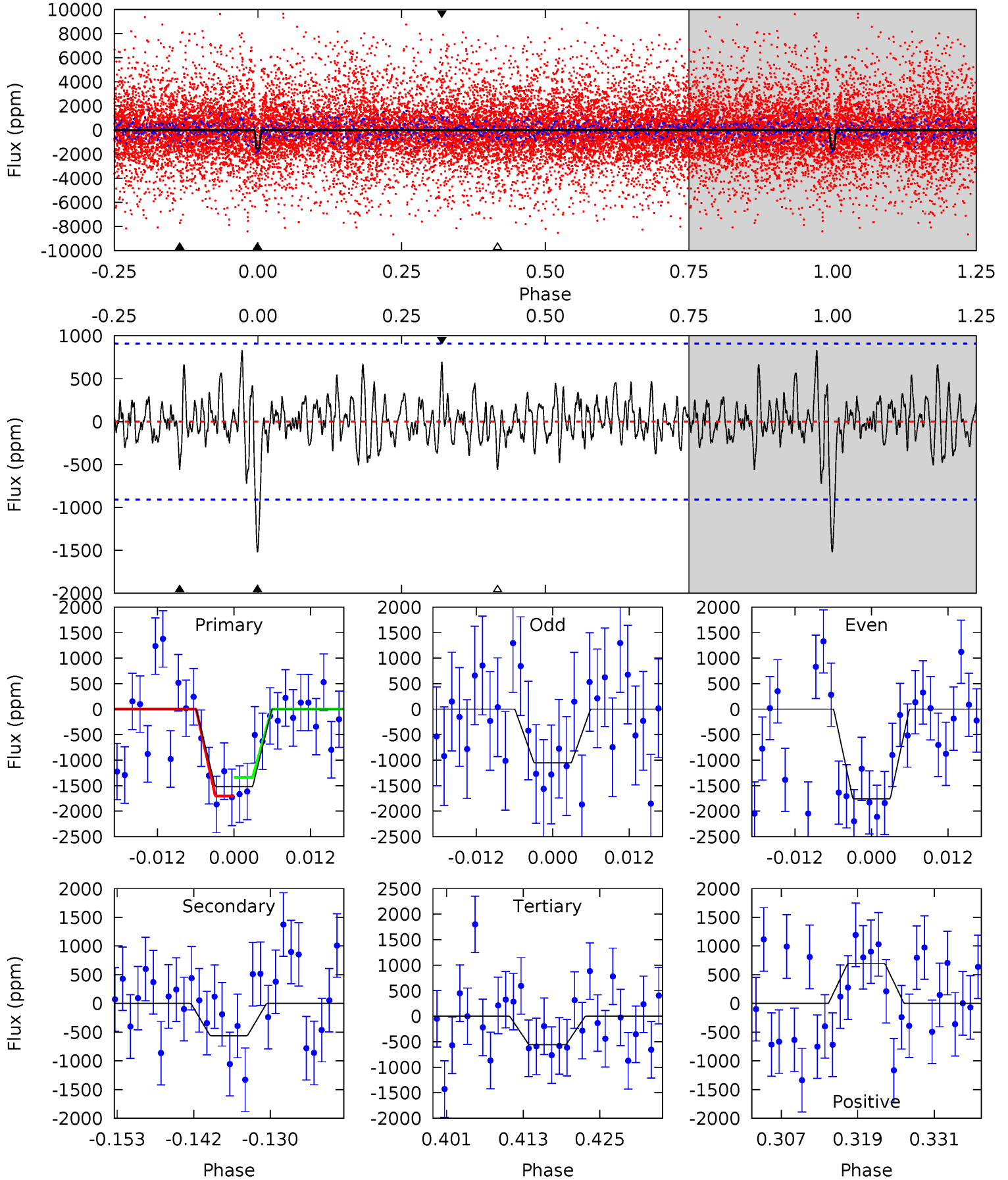
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.85	3.46	3.37	4.56	5.05	2.61	1.33	1.49	0.29	0.09	-1.10	0.34	0.90	0.48	0.60



Alt Model-Shift Uniqueness Test

005966669-01, P = 90.289090 Days, E = 164.815282 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.36	3.08	3.06	3.82	4.99	2.52	1.14	5.30	4.54	0.02	-0.73	1.83	1.27	0.35	1.02



Stellar Parameters For KIC 005966669

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3312^{+114}_{-57}	$5.119^{+0.092}_{-0.138}$	$-0.340^{+0.350}_{-0.250}$	$0.185^{+0.091}_{-0.039}$	$0.165^{+0.108}_{-0.036}$	$36.490^{+21.510}_{-19.370}$
	+3%/-2%	+2%/-3%	+103%/-74%	+49%/-21%	+65%/-22%	+59%/-53%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005966669-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-748 ± 216	$0.67^{+0.41}_{-0.34}$	193^{+13}_{-10}	3157^{+836}_{-378}	$41845^{+131950}_{-25551}$
Alt.	-561 ± 182	$0.77^{+0.44}_{-0.34}$	192^{+12}_{-10}	2888^{+552}_{-311}	22496^{+50165}_{-13159}

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 $A_{obs} \gg 1.0$

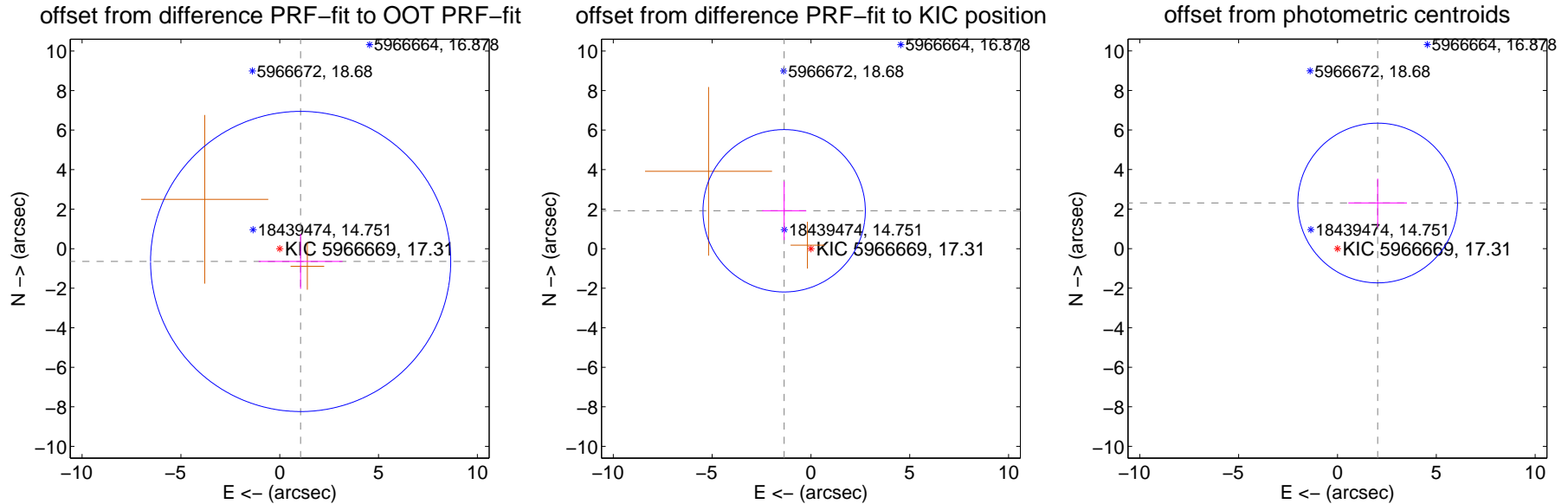
DV Centroid Data

Supplemental centroid analysis for 005966669-01. Kepler magnitude: 17.31. Transit SNR 4.46

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.91 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.240 ± 2.531	0.49	-1.058 ± 2.121	-0.646 ± 1.384
PRF-fit source offset from KIC position	2.348 ± 1.369	1.72	1.355 ± 1.114	1.918 ± 1.480
photometric centroid source offset	3.07 ± 1.35	2.28	-2.03 ± 1.48	2.31 ± 1.23

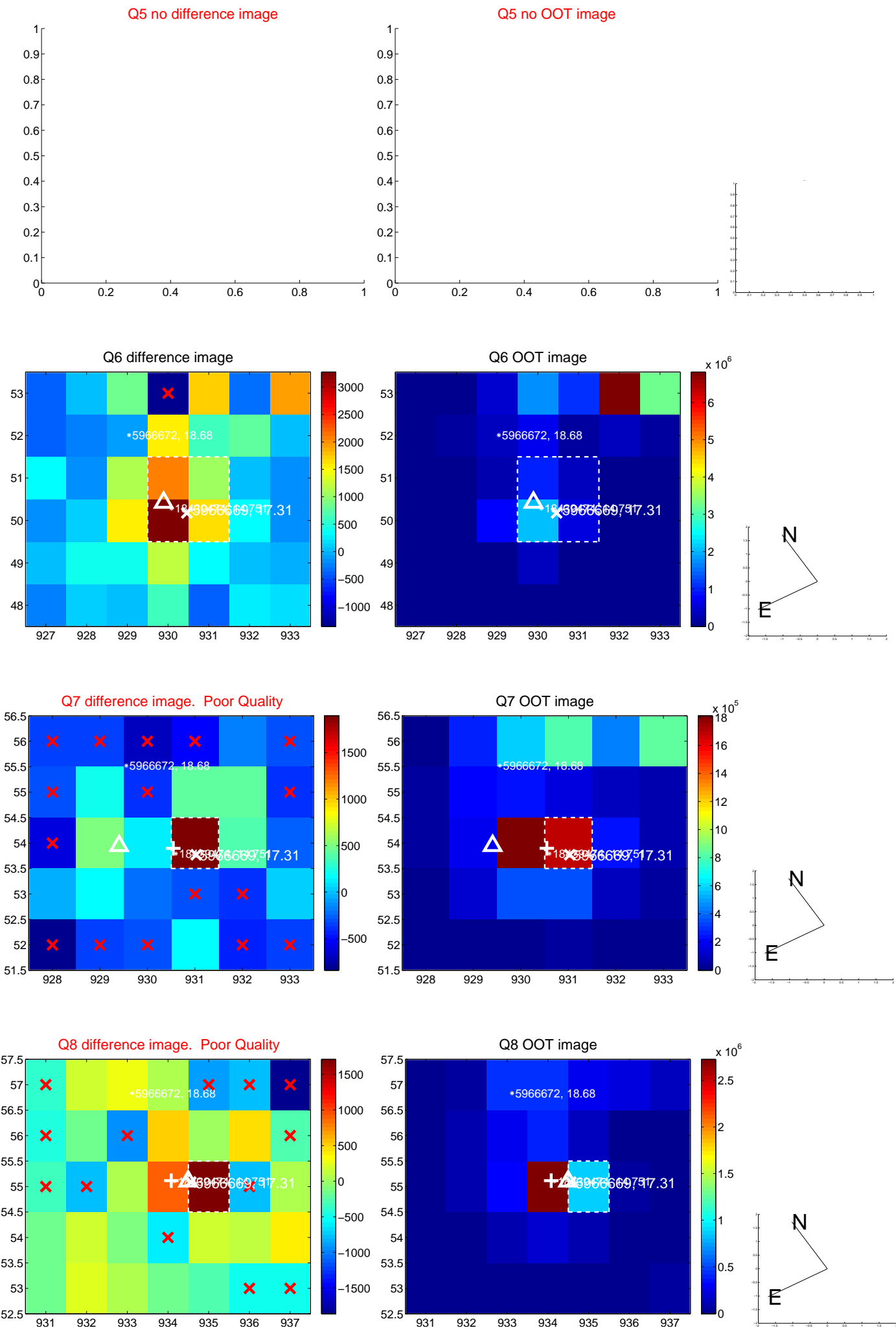


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



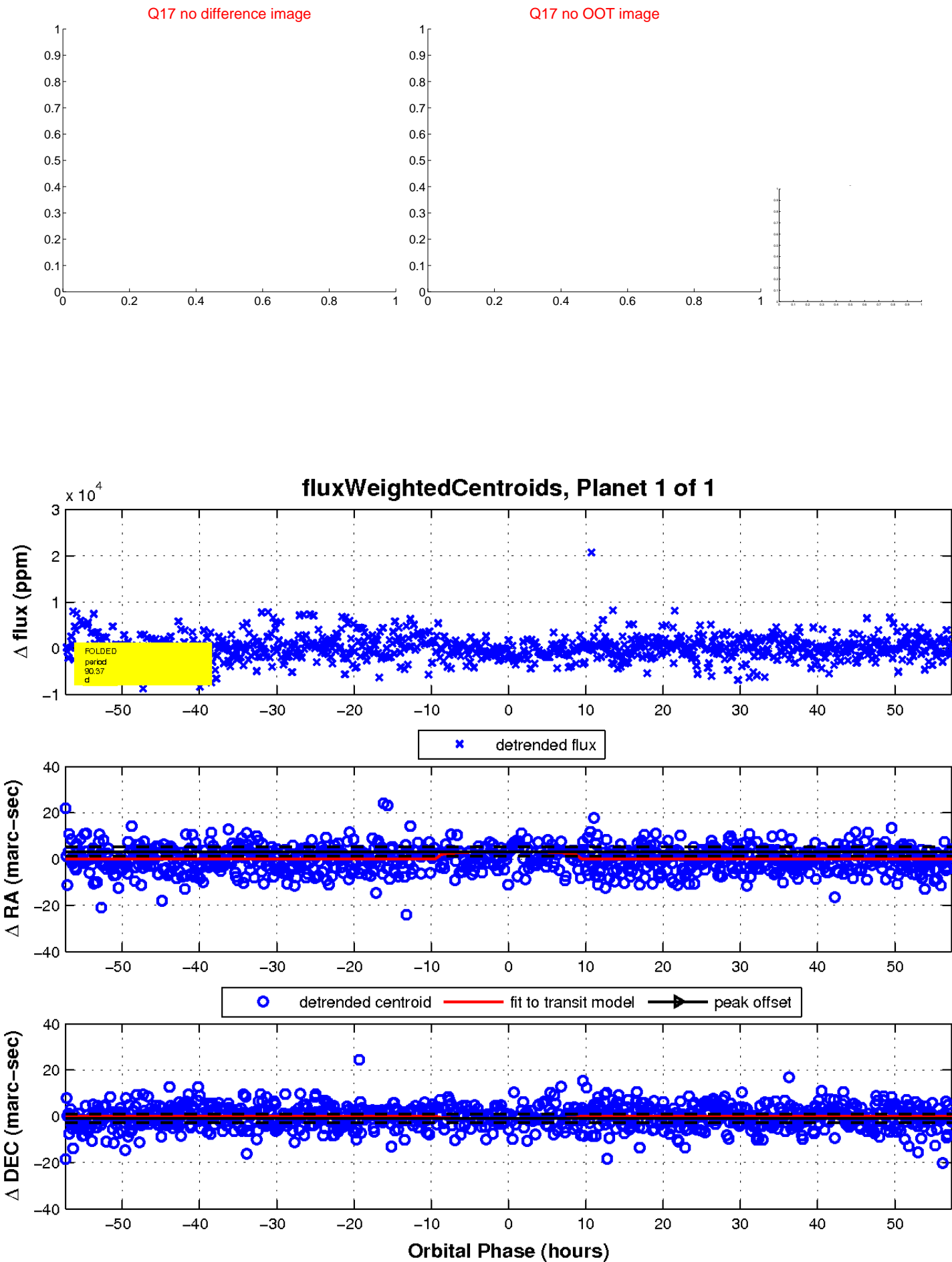
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

