

KIC 006923599

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})
006923599-01	OBS	No	282.964916	255.376882	169.2	20.211	9.8	9.6	1.33	5796	1.87	2.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006923599-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

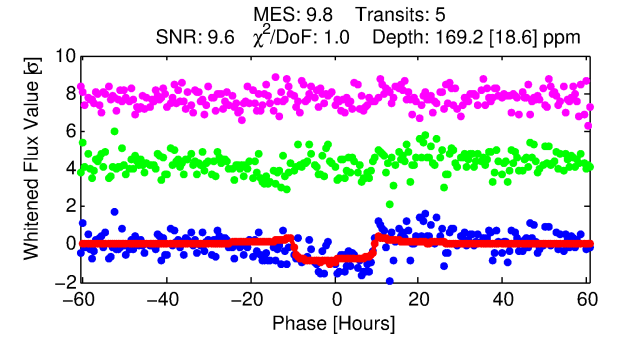
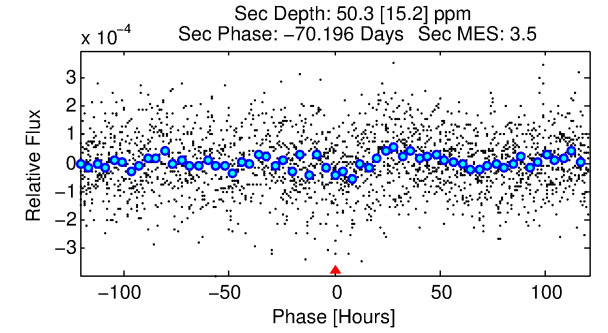
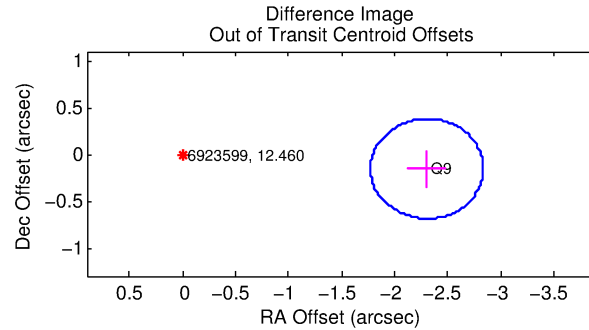
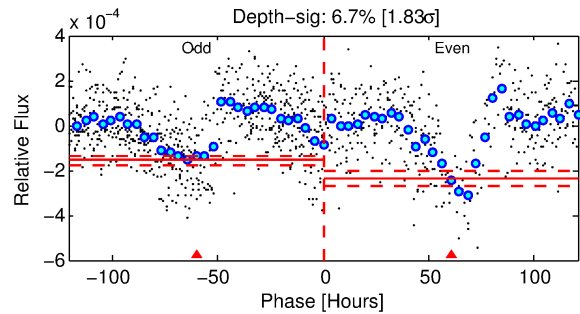
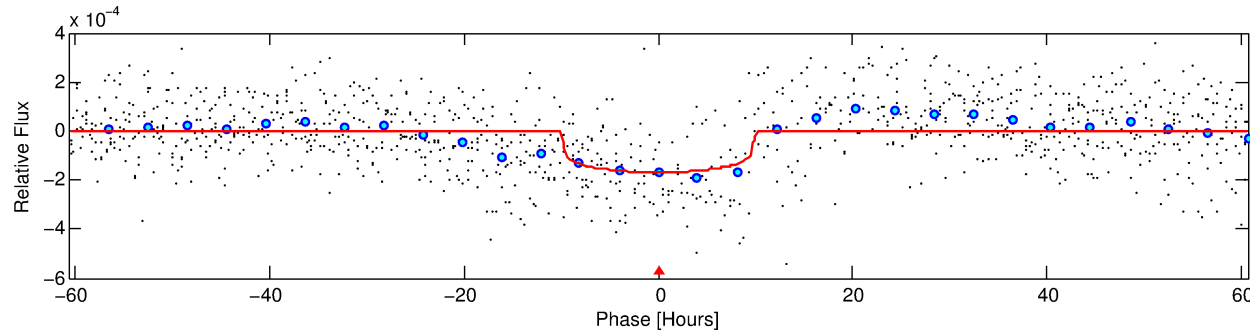
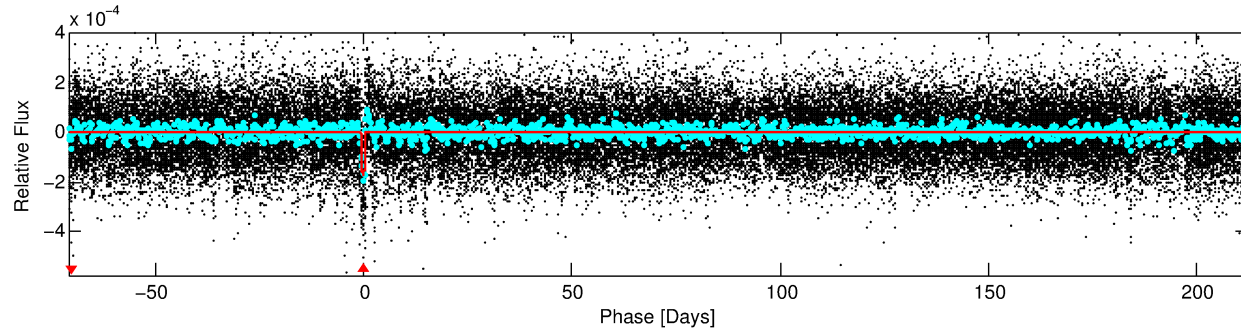
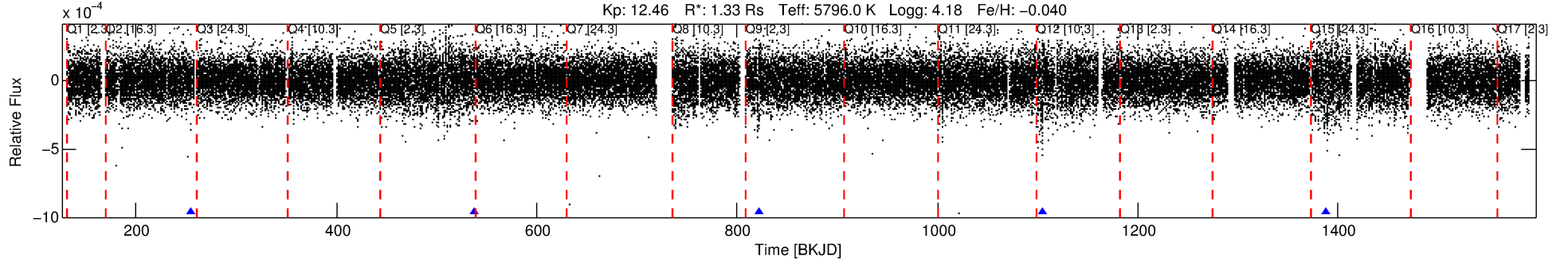
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006923599-01

No Significant Match Found

DV One-Page Summary

KIC: 6923599 Candidate: 1 of 1 Period: 282.965 d



DV Fit Results:

Period = 282.96492 [0.00759] d
Epoch = 255.3769 [0.0221] BKJD
Rp/R* = 0.0129 [0.0042]
a/R* = 73.39 [109.50]
b = 0.75 [0.90]
Seff = 2.55 [1.24]
Teq = 322 [39] K
Rp = 1.87 [0.81] Re
a = 0.8369 [0.2385] AU
Ag = 5532.58 [4768.61] [1.16 σ]
Teffp = 4295 [789] K [5.03 σ]

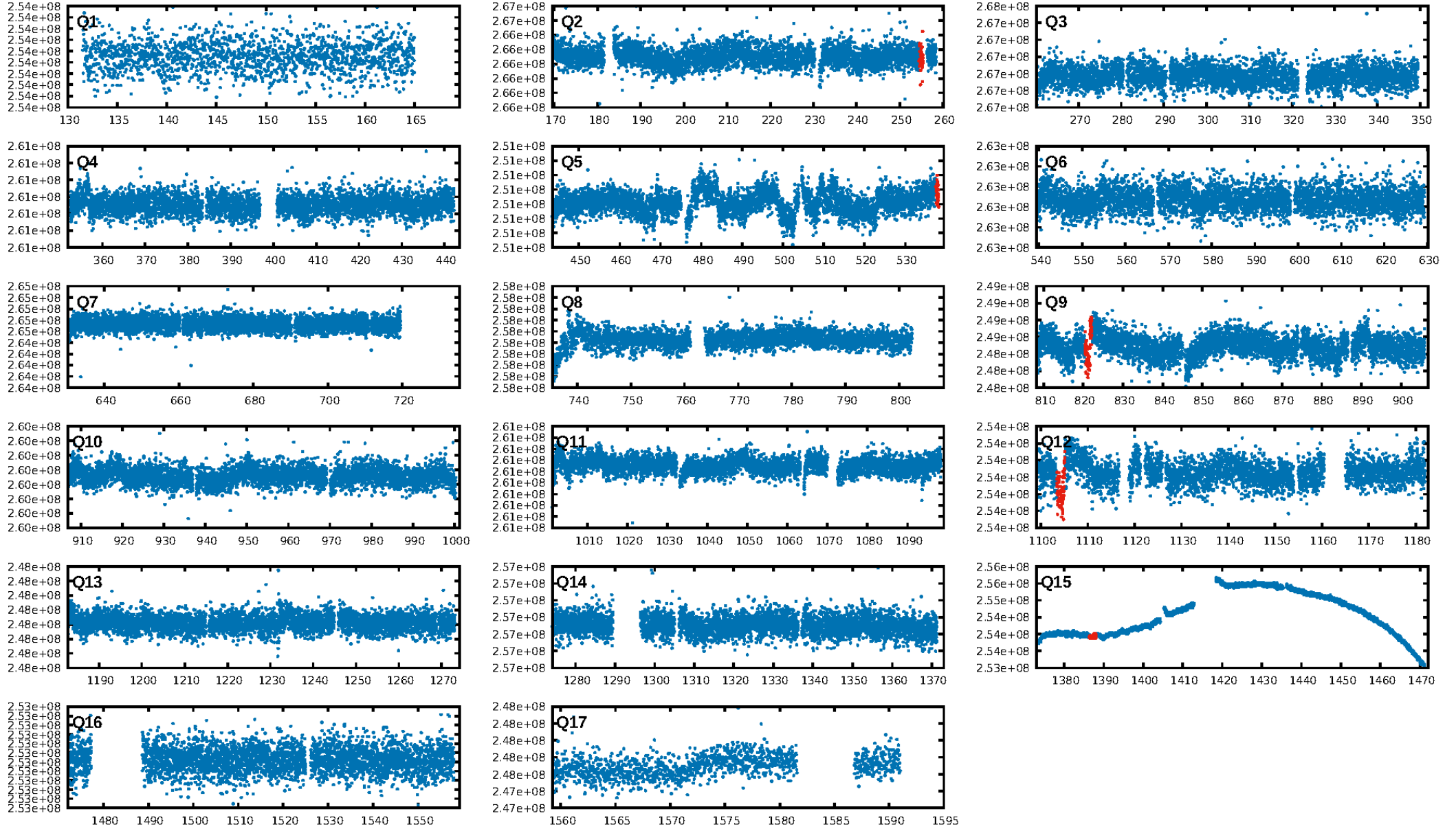
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.88e-16
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -3.537
Centroid-sig: 28.7%
Centroid-so: 1.226 arcsec [1.11 σ]
OotOffset-rm: 2.311 arcsec [13.01 σ]
KicOffset-rm: 2.396 arcsec [13.49 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 [1/1]

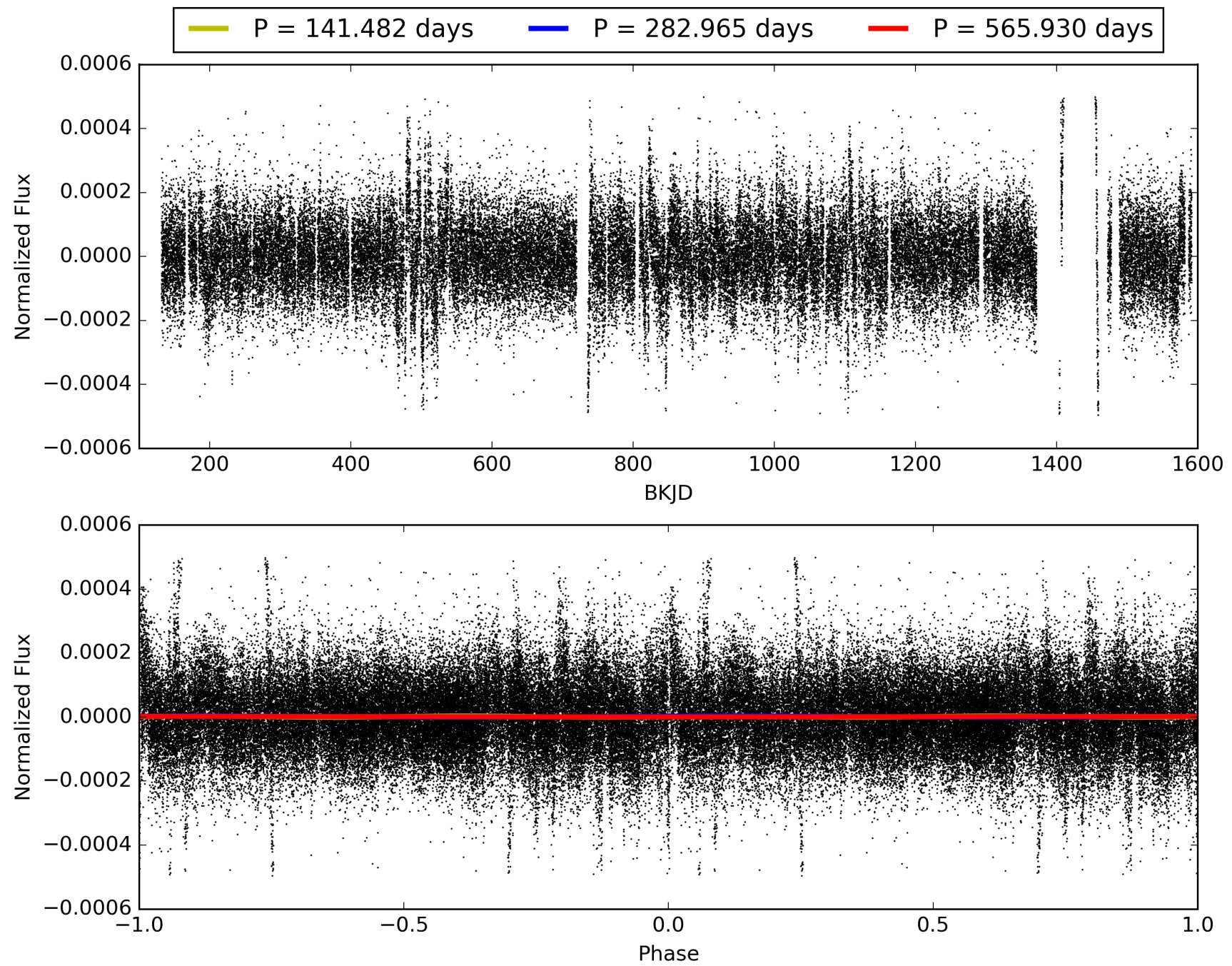
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:57:09 Z

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

TCE 006923599-01, PDC Light Curves

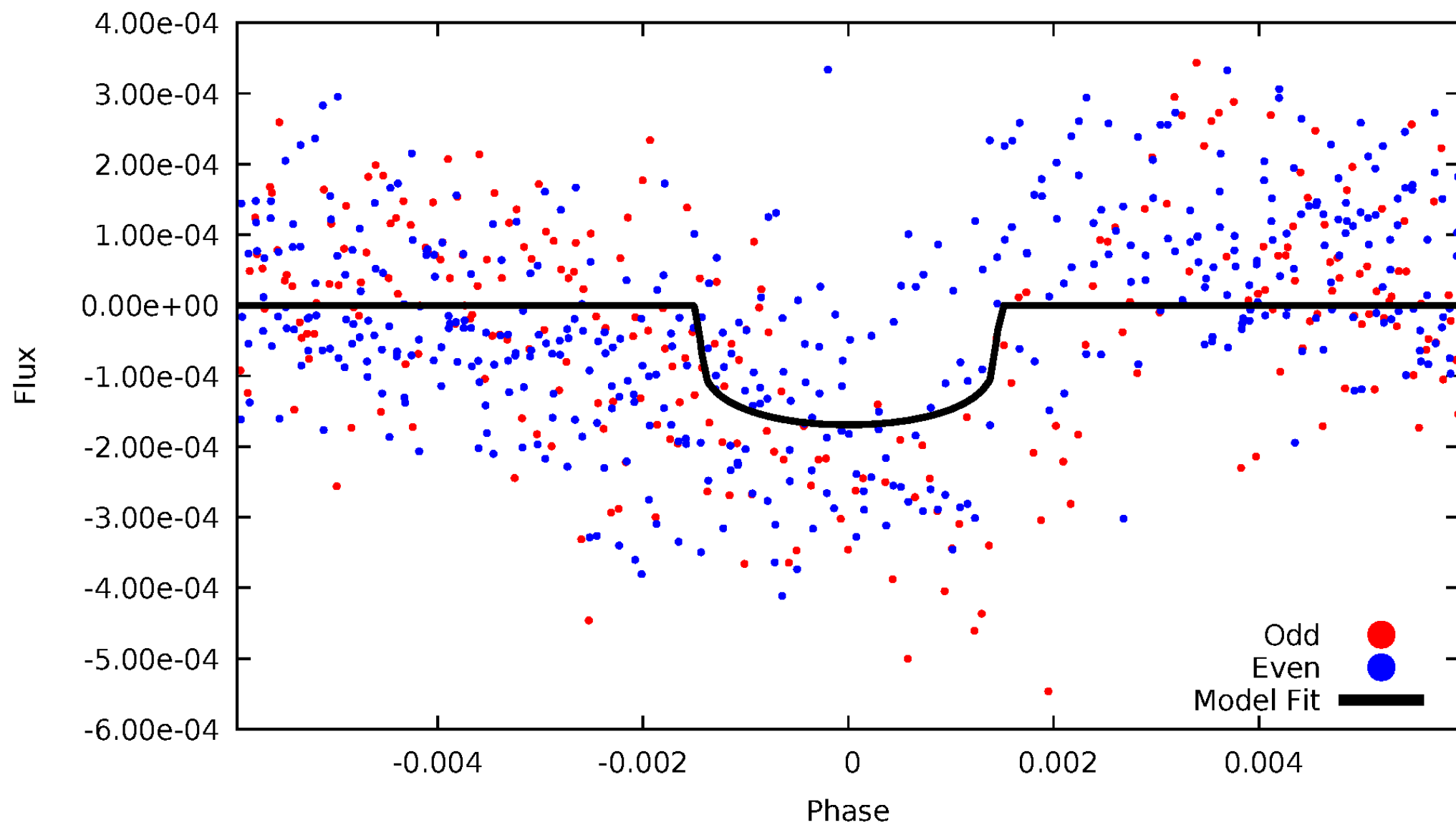


TCE 006923599-01



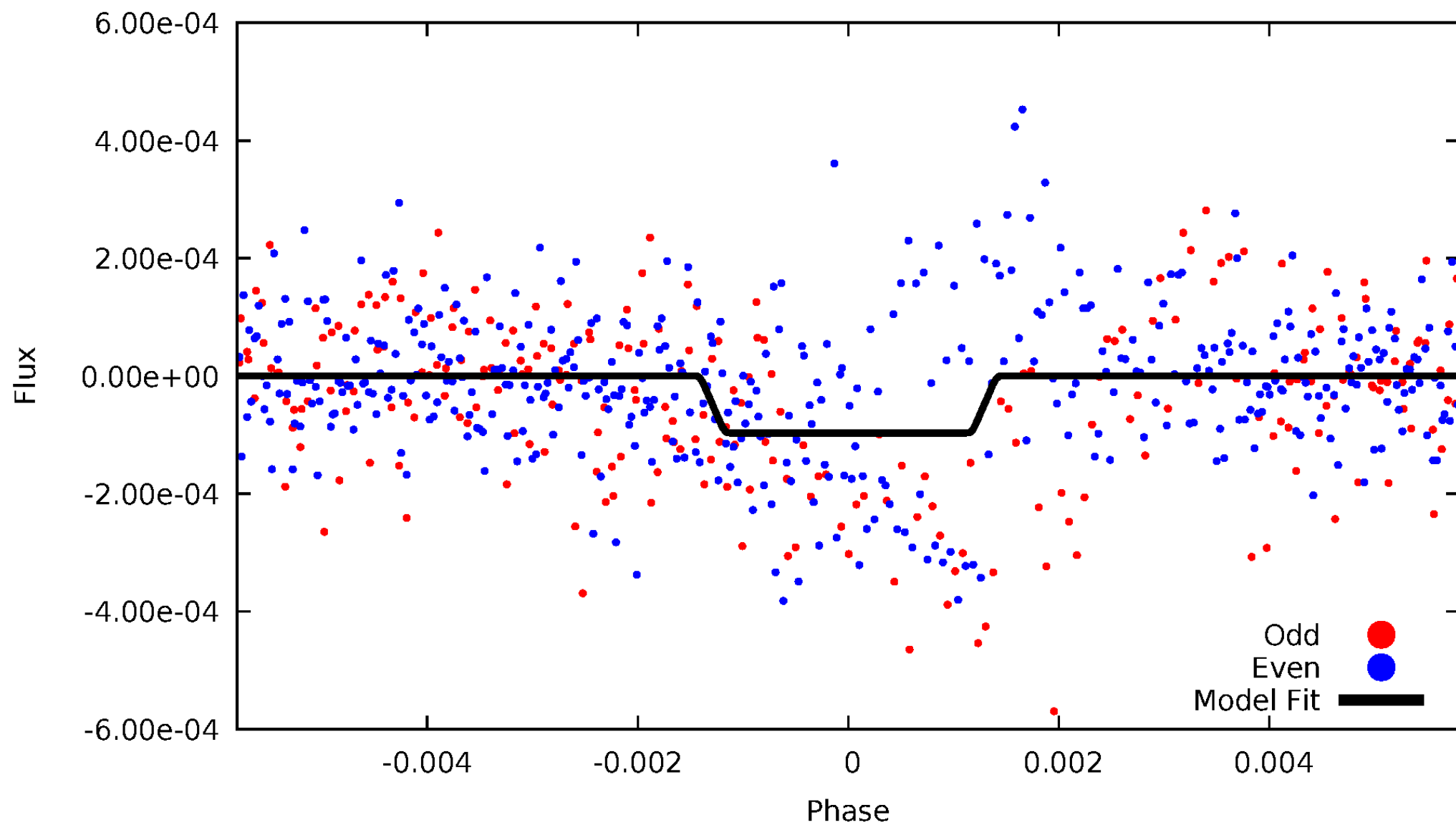
DV Odd/Even

TCE 006923599-01

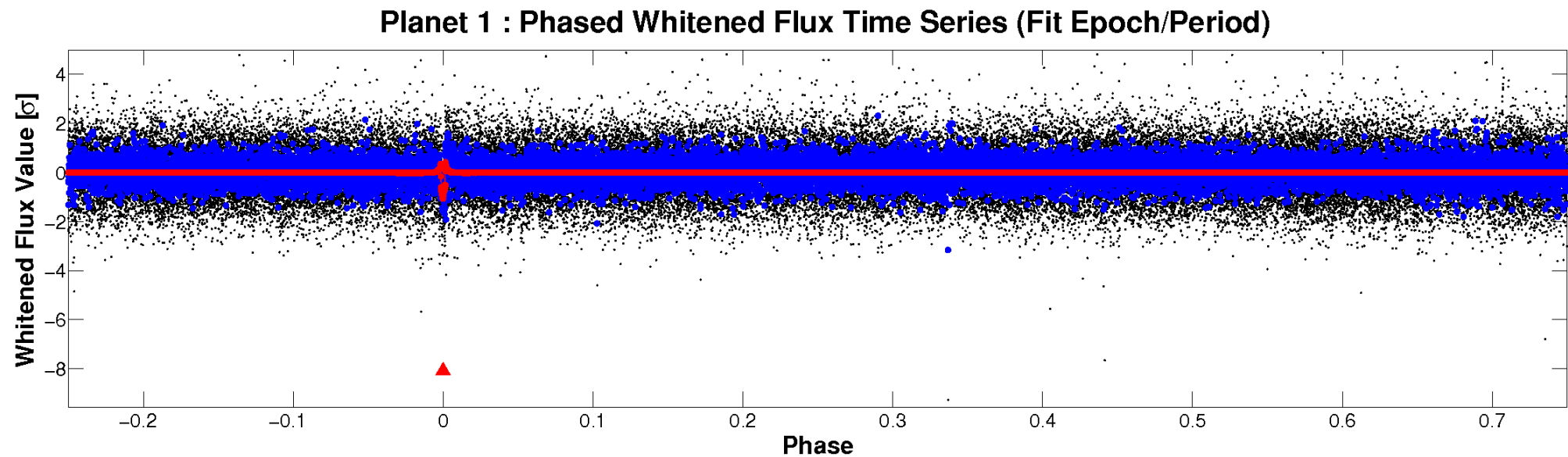
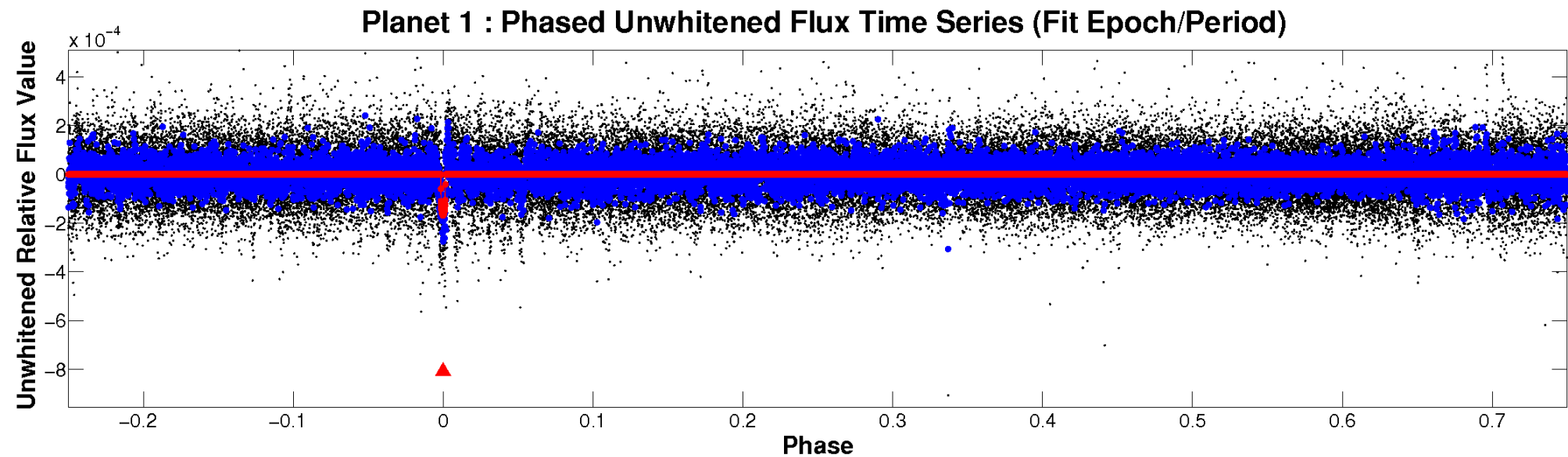


ALT Odd/Even

TCE 006923599-01



Non-Whitened Vs. Whitened Light Curve



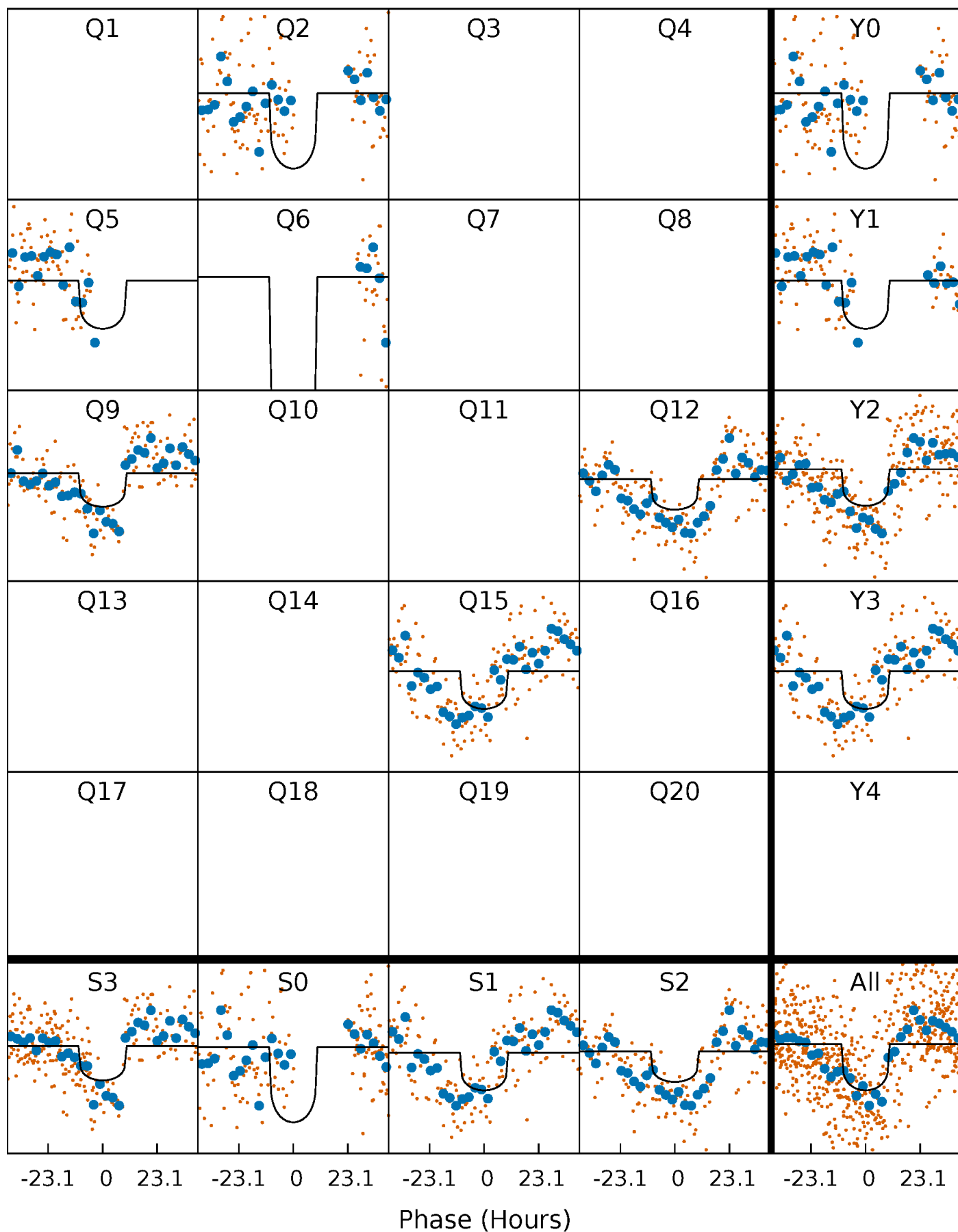
PDC Quarter-Phased Transit Curves

TCE 006923599-01 P=282.964916 Days $T_0=255.376882$ (BKJD)



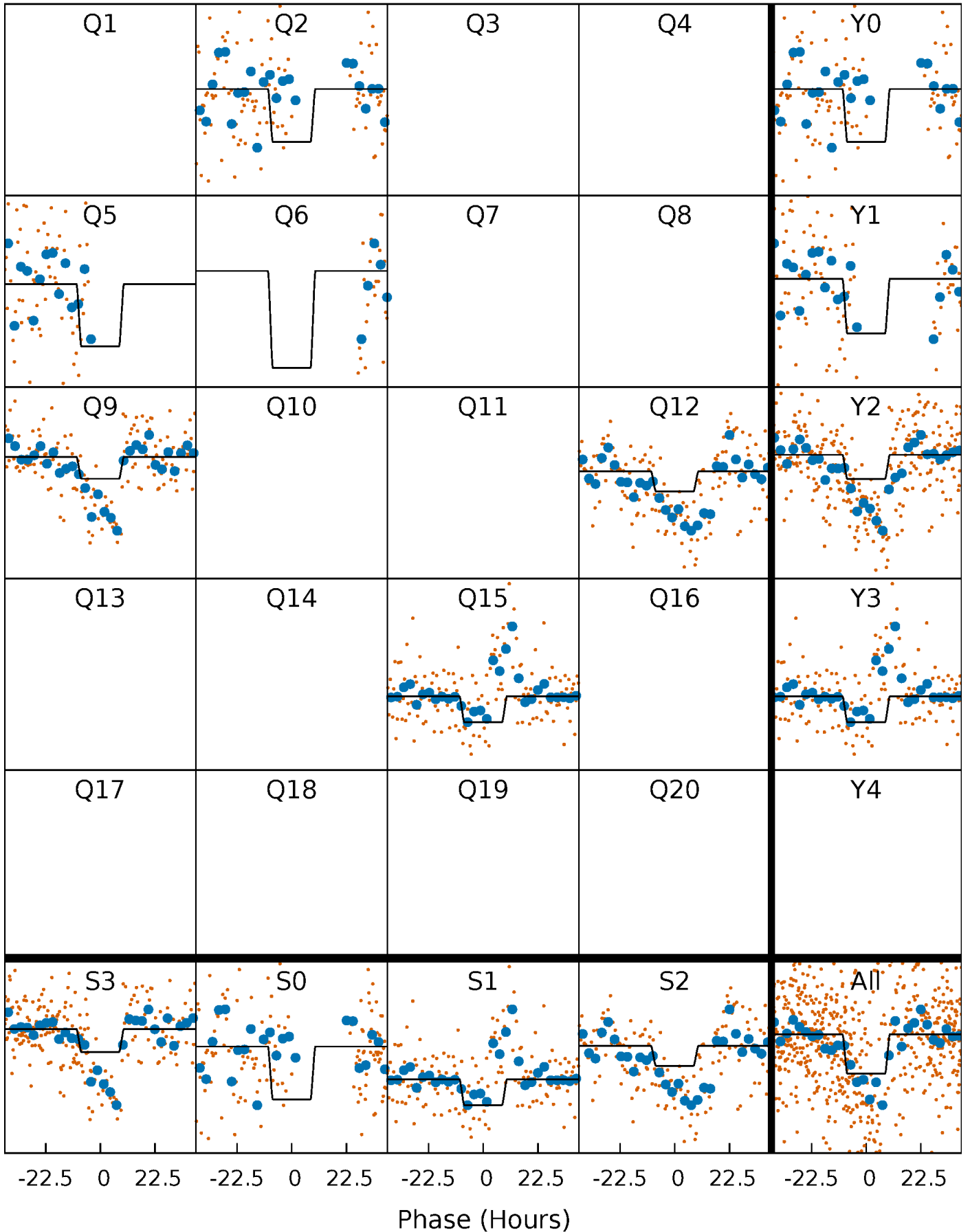
DV Quarter-Phased Transit Curves

TCE 006923599-01 $P=282.964916$ Days $T_0=255.376882$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

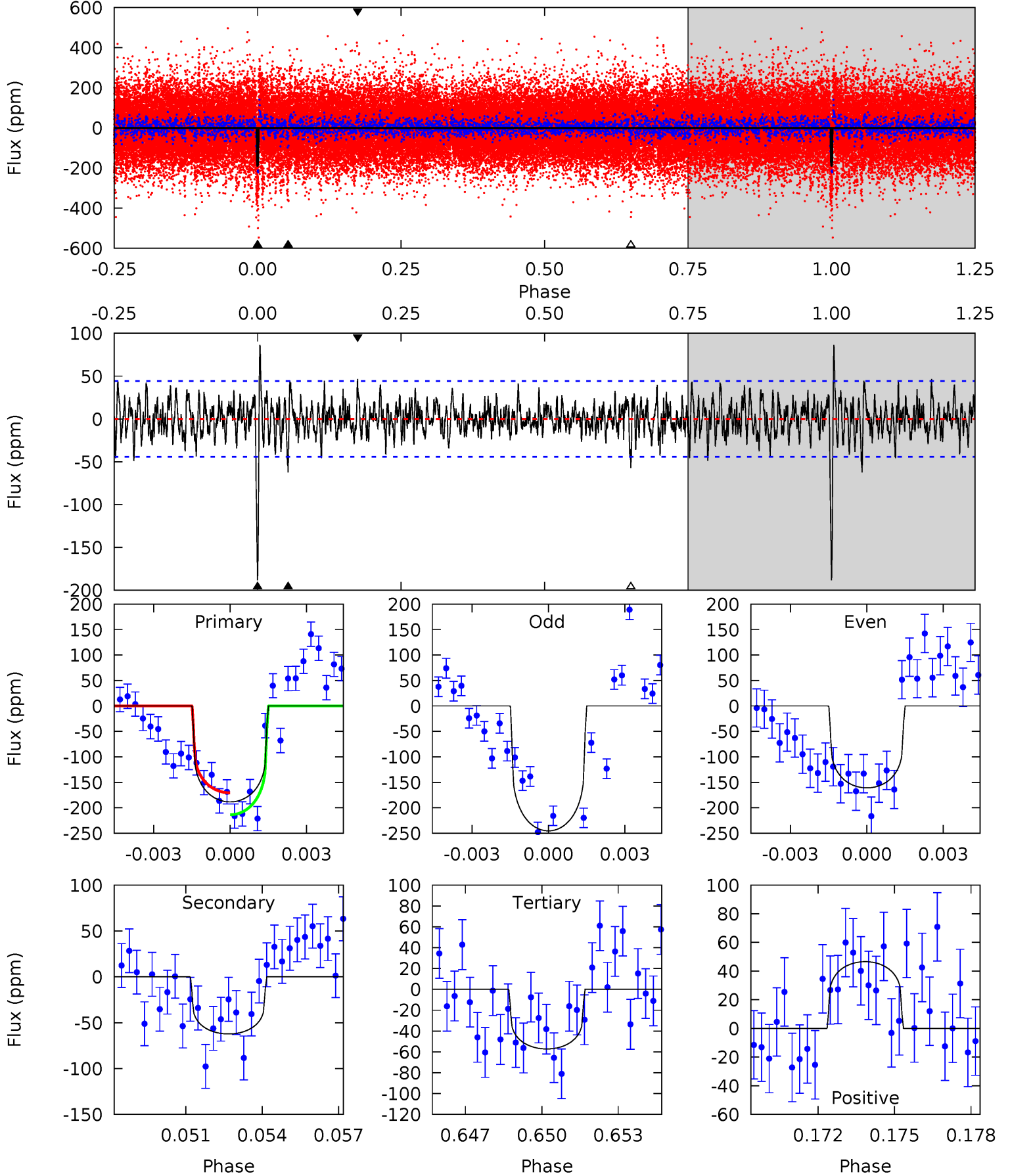
TCE 006923599-01 P=282.970750 Days $T_0=255.357837$ (BKJD)



DV Model-Shift Uniqueness Test

006923599-01, P = 282.964916 Days, E = 255.376882 Days

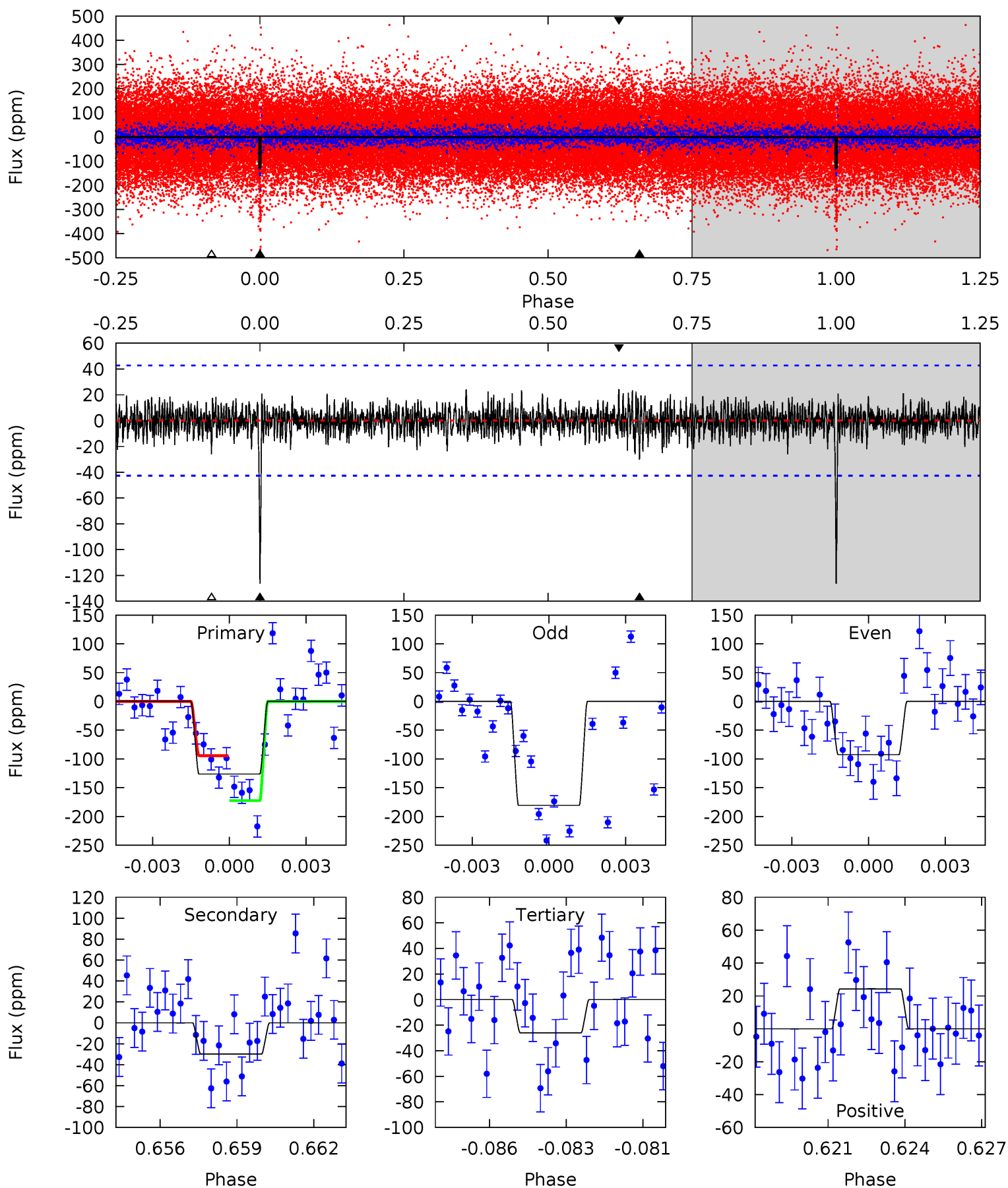
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	7.40	6.80	5.53	5.25	2.97	1.83	15.6	16.9	0.60	1.87	4.73	1.10	0.31	2.51



Alt Model-Shift Uniqueness Test

006923599-01, P = 282.970750 Days, E = 255.357837 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.6	3.69	3.20	2.99	5.26	2.98	0.94	12.4	12.6	0.49	0.70	5.07	4.90	0.16	4.75



Stellar Parameters For KIC 006923599

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5796^{+173}_{-190}	$4.181^{+0.280}_{-0.172}$	$-0.040^{+0.300}_{-0.300}$	$1.328^{+0.373}_{-0.373}$	$0.976^{+0.136}_{-0.112}$	$0.587^{+0.948}_{-0.276}$
	+3%/-3%	+7%/-4%	+750%/-750%	+28%/-28%	+14%/-11%	+162%/-47%
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 006923599-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-62 ± 8	$1.81^{+0.71}_{-0.64}$	446^{+36}_{-38}	4660^{+921}_{-509}	7364^{+10304}_{-3761}
Alt.	-30 ± 8	$1.34^{+0.65}_{-0.58}$	444^{+35}_{-39}	4482^{+1290}_{-611}	6312^{+14426}_{-3794}

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

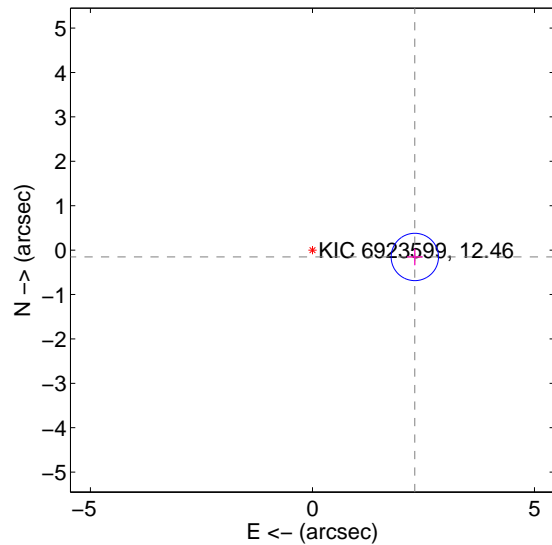
Supplemental centroid analysis for 006923599-01. Kepler magnitude: 12.46. Transit SNR 9.59

There are 0 quarters with good PRF difference image offsets

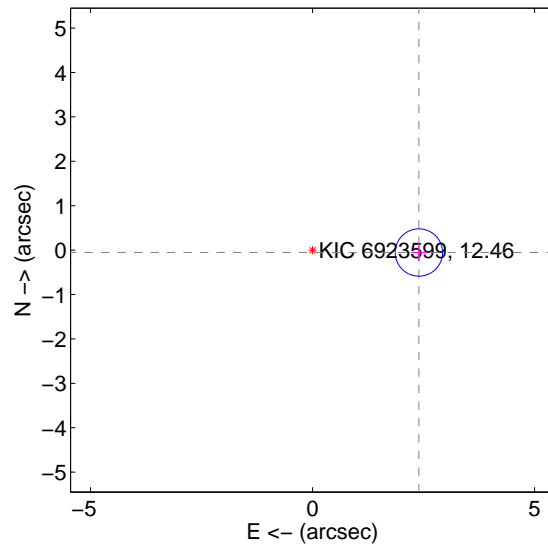
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.311 ± 0.178	13.01	-2.306 ± 0.178	-0.155 ± 0.190
PRF-fit source offset from KIC position	2.396 ± 0.178	13.49	-2.395 ± 0.178	-0.054 ± 0.190
photometric centroid source offset	1.23 ± 1.11	1.11	-0.97 ± 1.18	0.75 ± 0.97

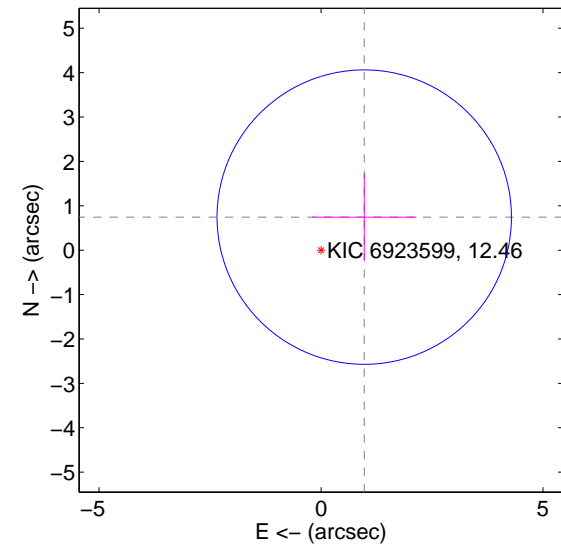
offset from difference PRF-fit to OOT PRF-fit



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.

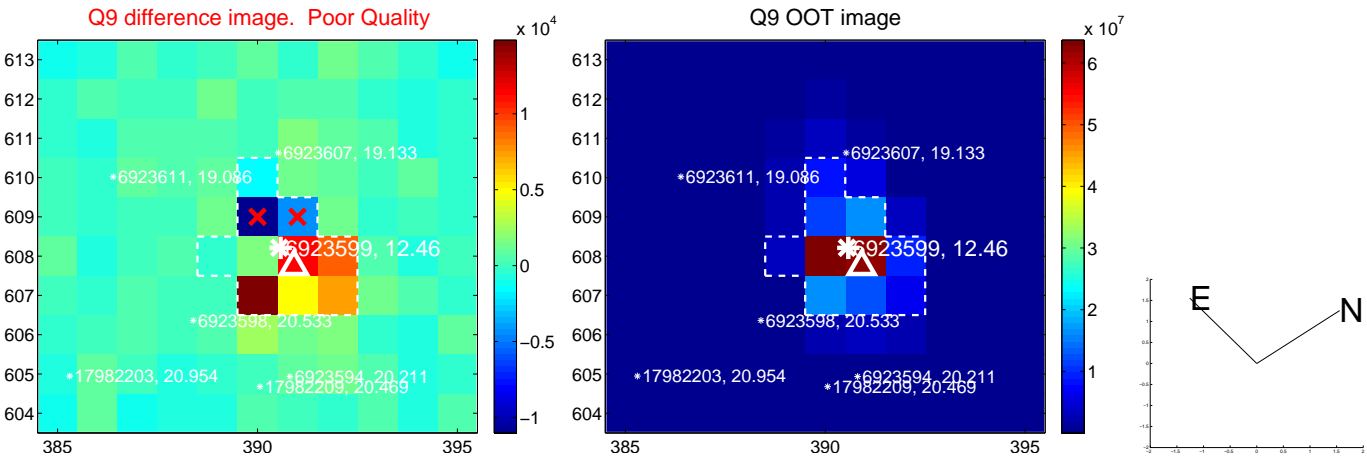
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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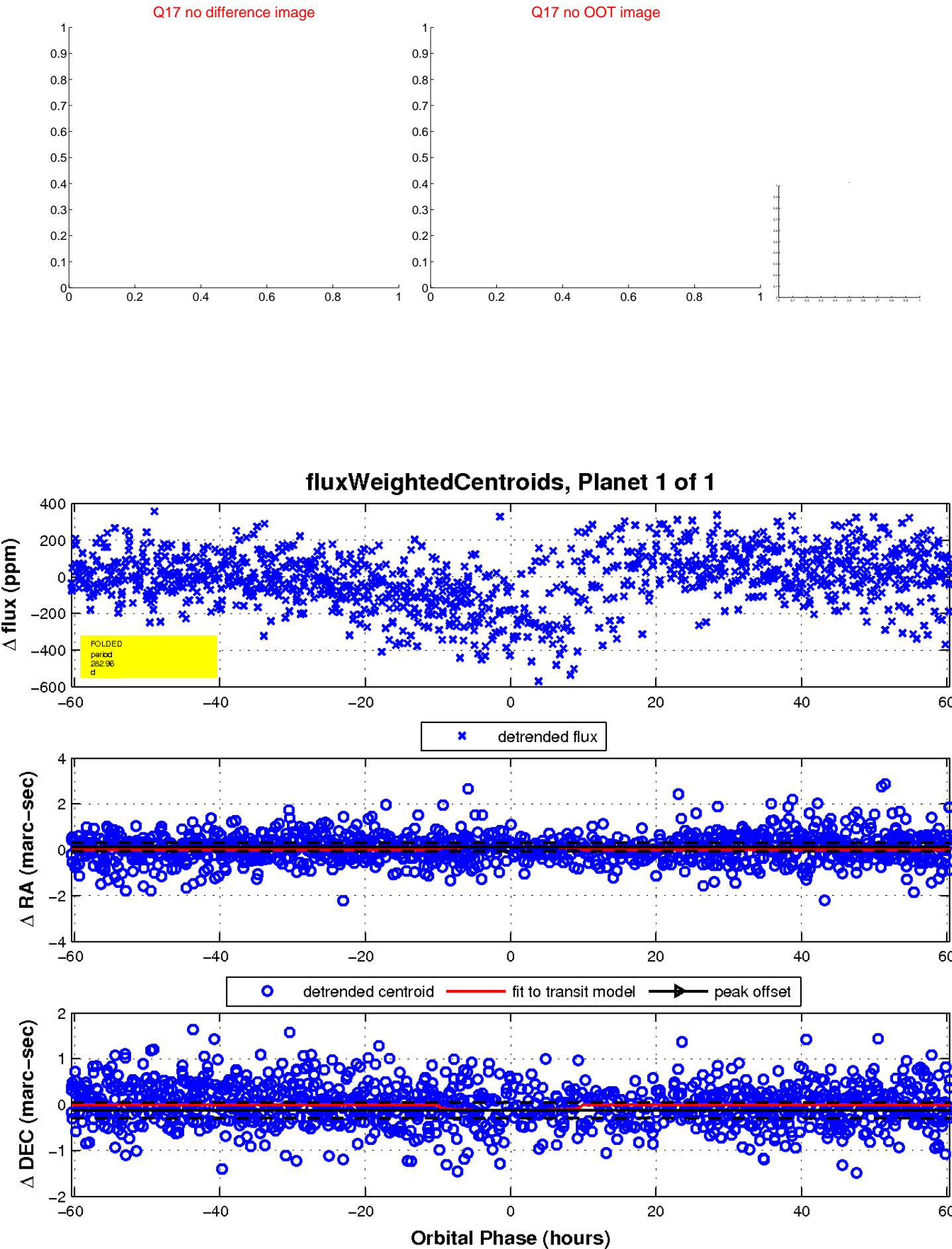
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

