

KIC 005892169

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})
005892169-01	OBS	No	387.154211	168.583944	128.2	9.438	7.9	5.0	3.12	5227	4.26	4.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005892169-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_SATURATED

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

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

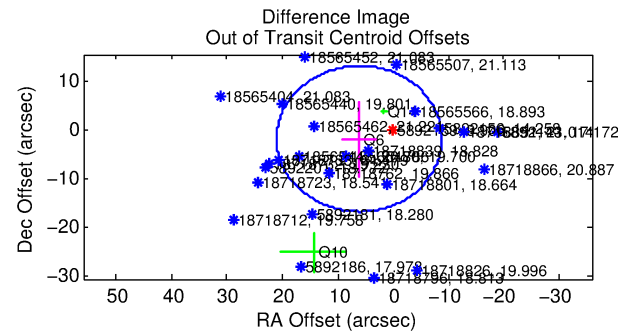
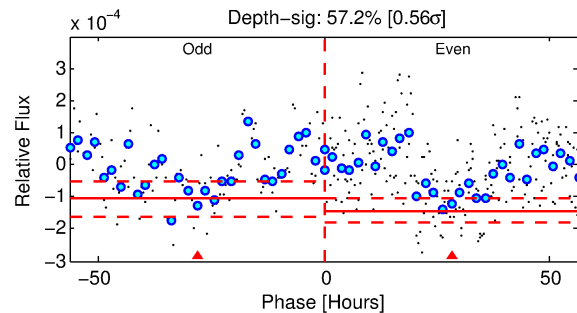
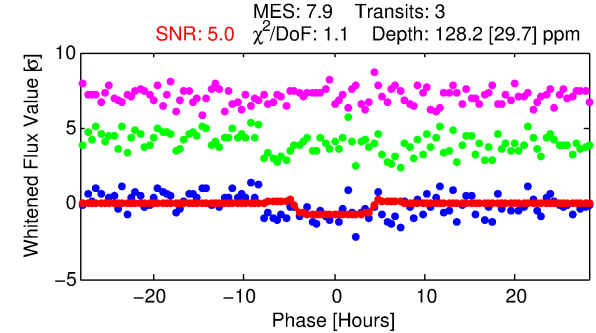
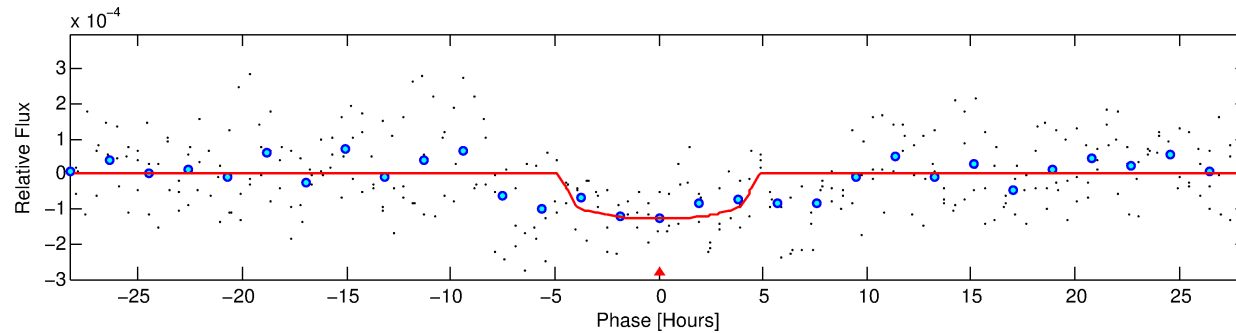
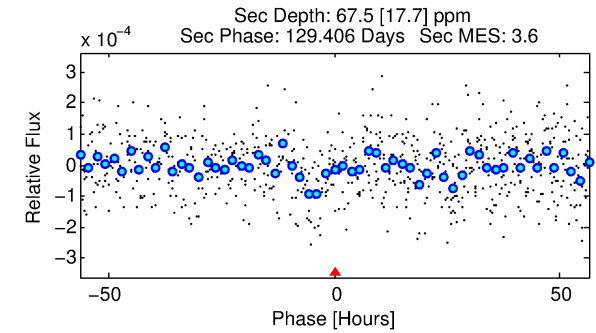
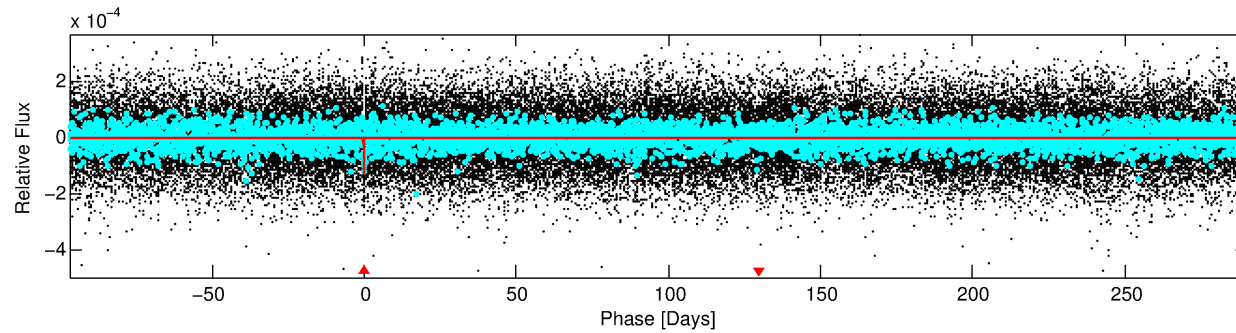
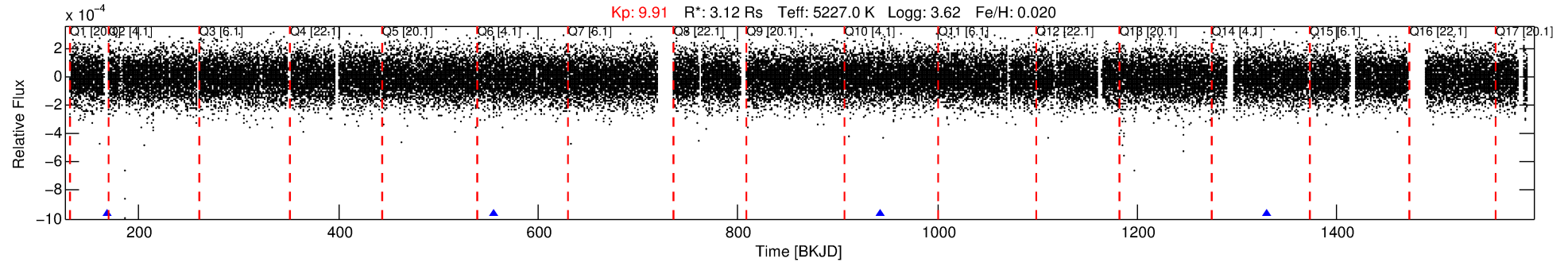
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005892169-01

No Significant Match Found

DV One-Page Summary

KIC: 5892169 Candidate: 1 of 1 Period: 387.154 d



DV Fit Results:

Period = 387.15421 [0.01407] d
Epoch = 168.5839 [0.0332] BKJD
Rp/R* = 0.0125 [0.0077]
a/R* = 145.39 [376.29]
b = 0.90 [0.55]
Seff = 4.67 [0.46]
Teq = 375 [9] K
Rp = 4.26 [2.65] Re
a = 1.1797 [0.0576] AU
Ag = 2848.20 [3604.54] [0.79σ]
Teffp = 4234 [1341] K [2.88σ]

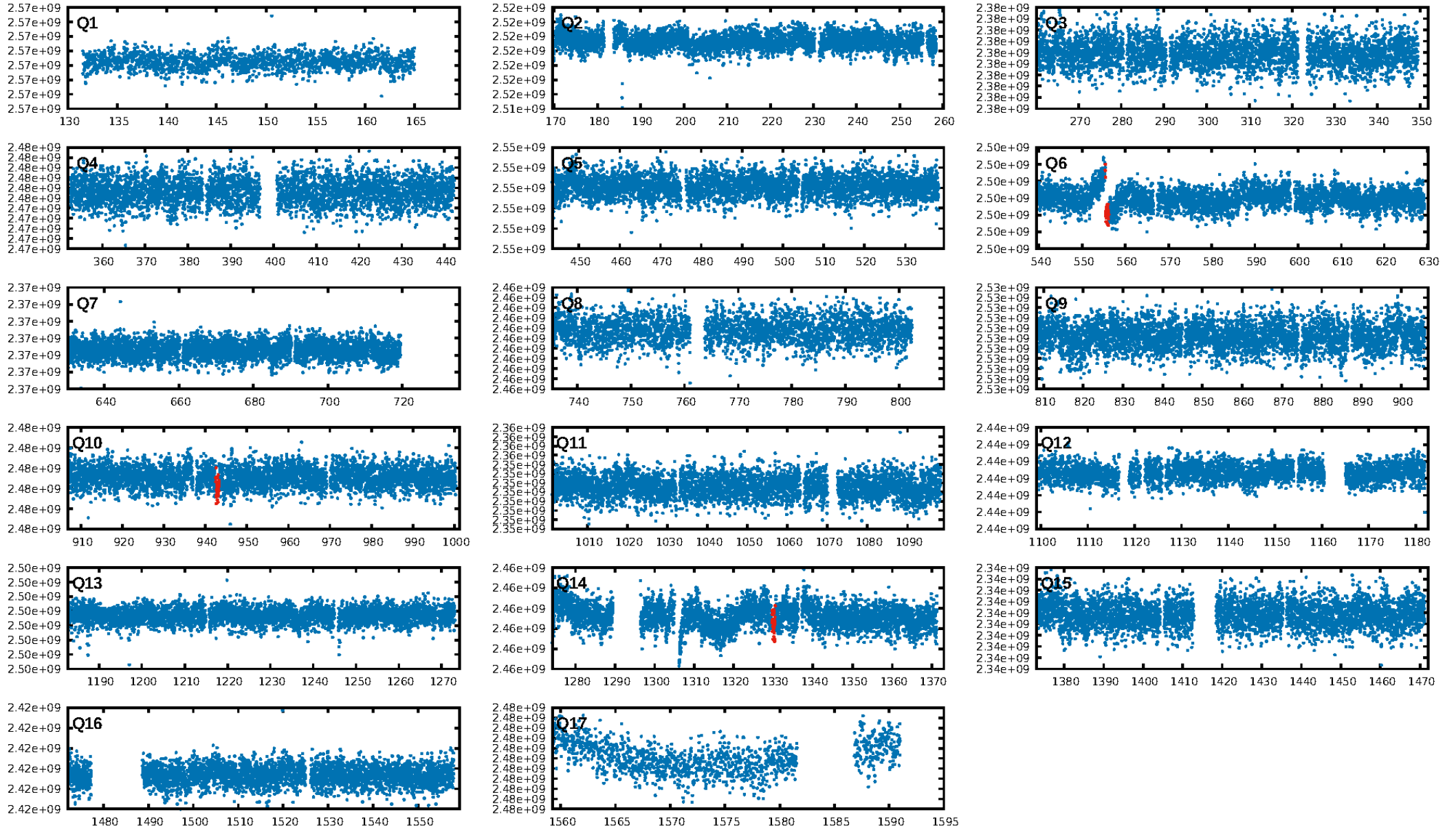
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 27.9%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.13e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 59.0%
Centroid-so: 1.596 arcsec [0.49σ]
OotOffset-rm: 6.364 arcsec [1.28σ]
KicOffset-rm: 5.645 arcsec [1.09σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

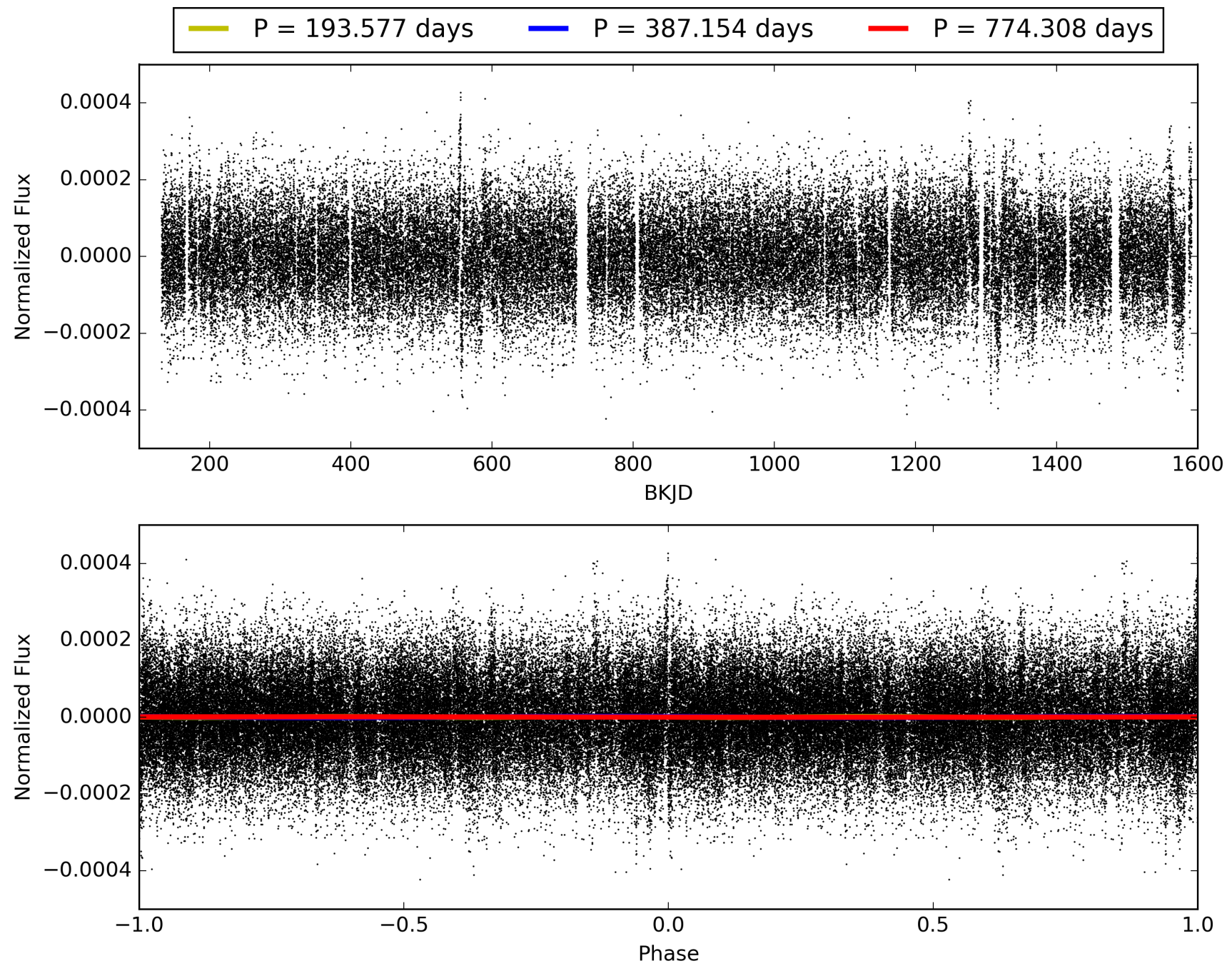
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:02:03 Z

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

TCE 005892169-01, PDC Light Curves

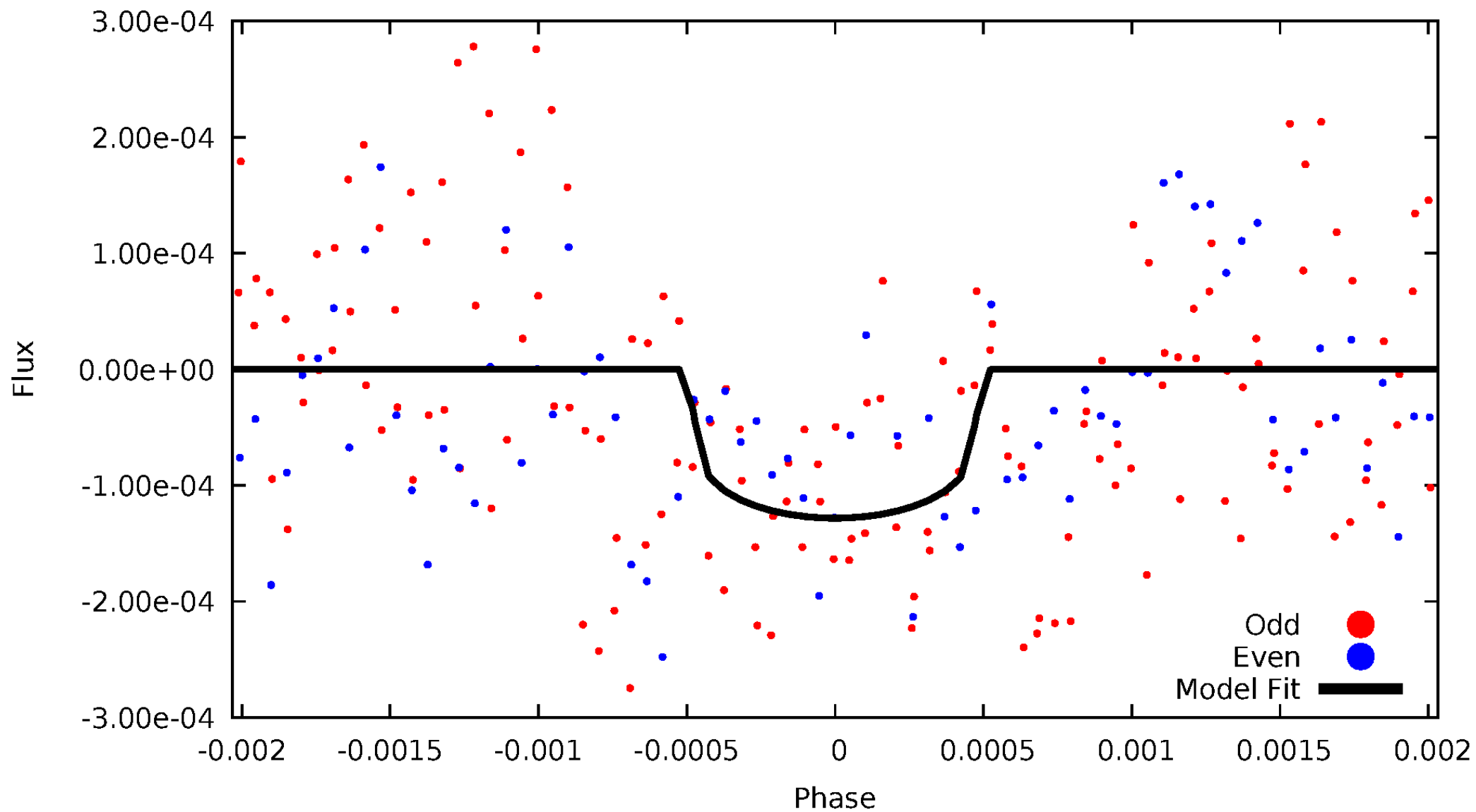


TCE 005892169-01



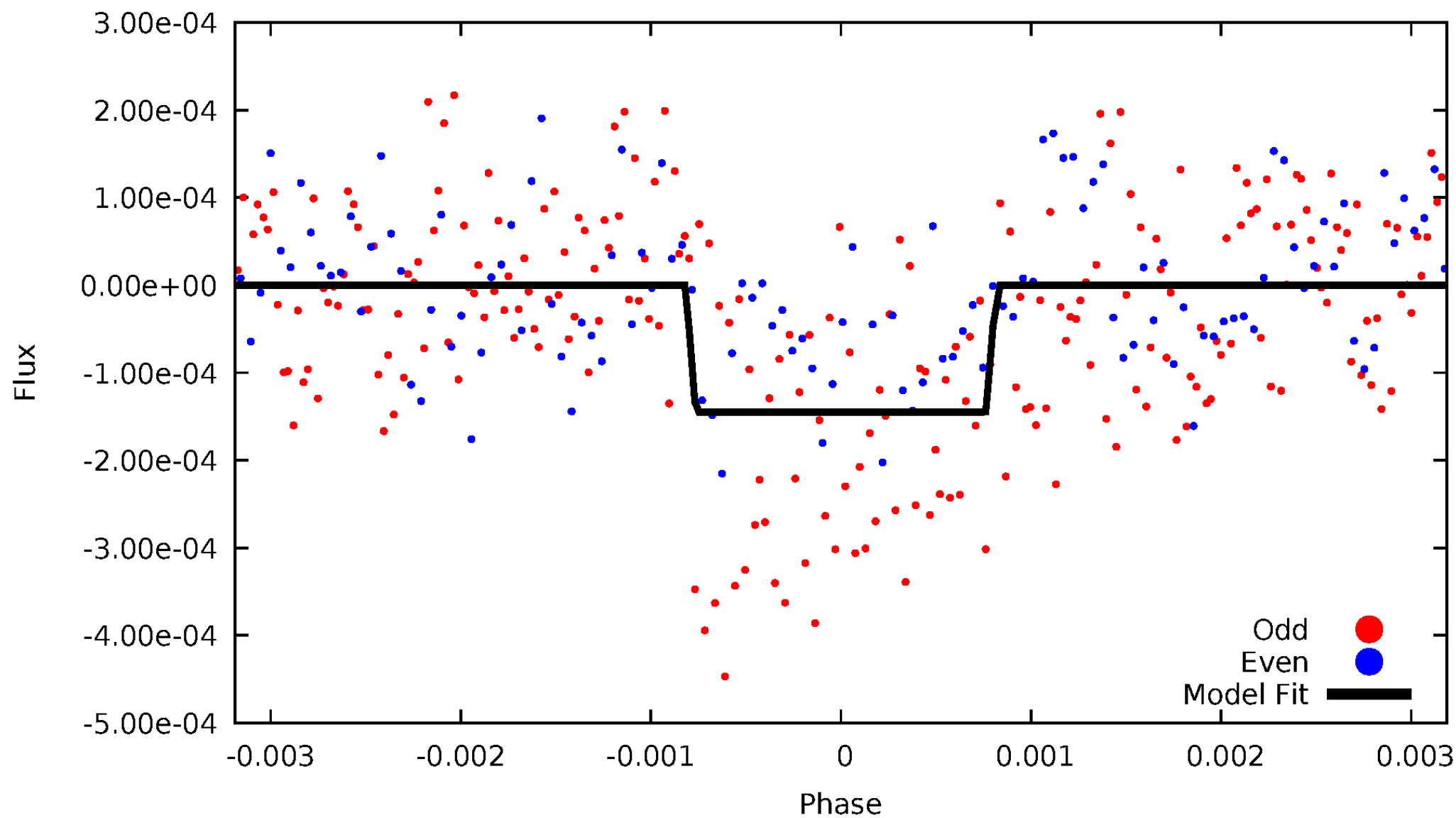
DV Odd/Even

TCE 005892169-01



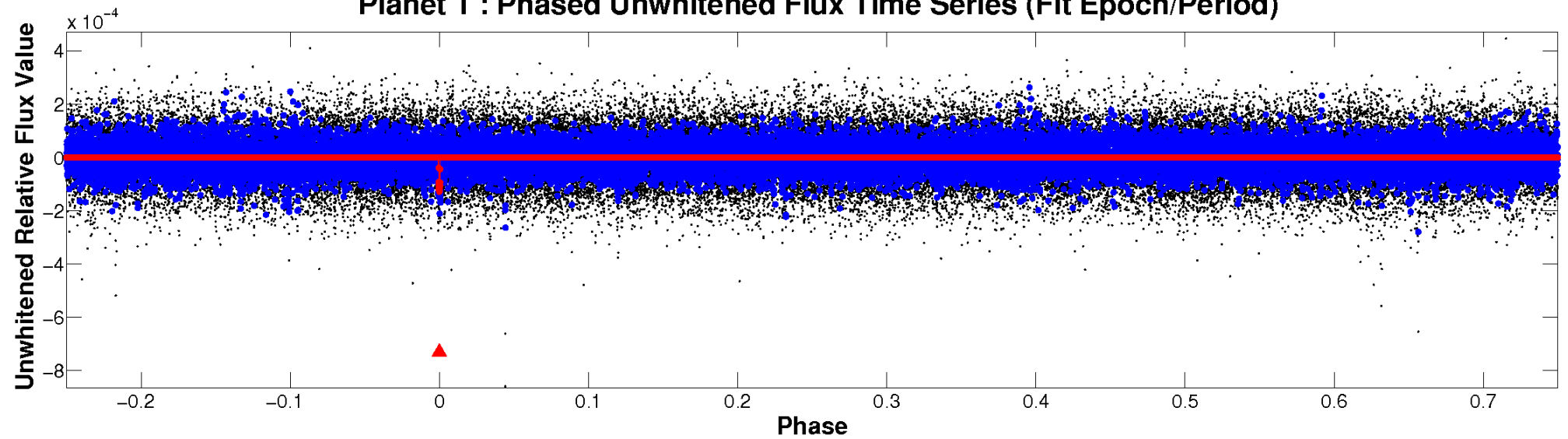
ALT Odd/Even

TCE 005892169-01

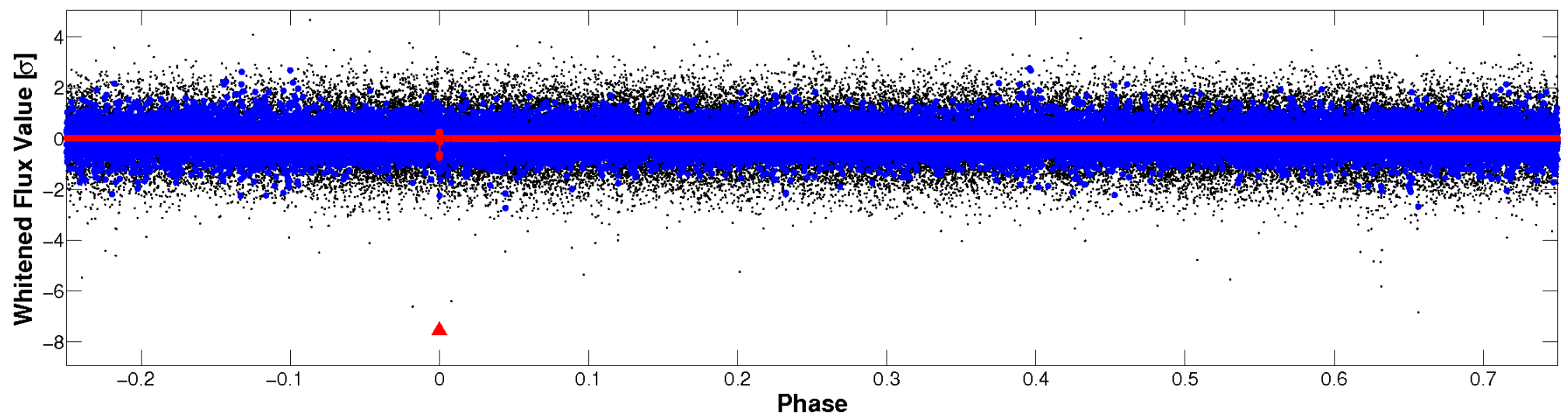


Non-Whitened Vs. Whitened Light Curve

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

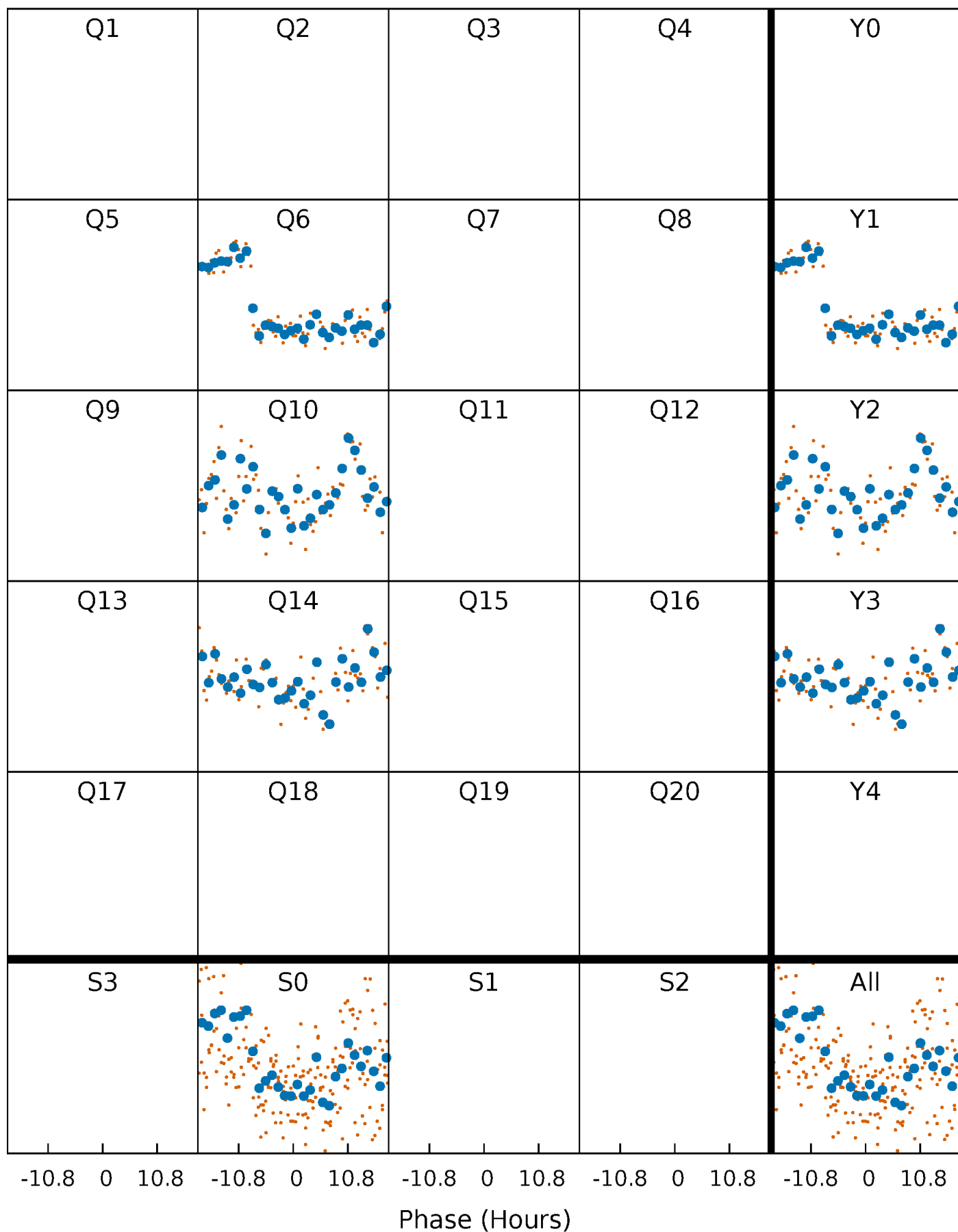


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



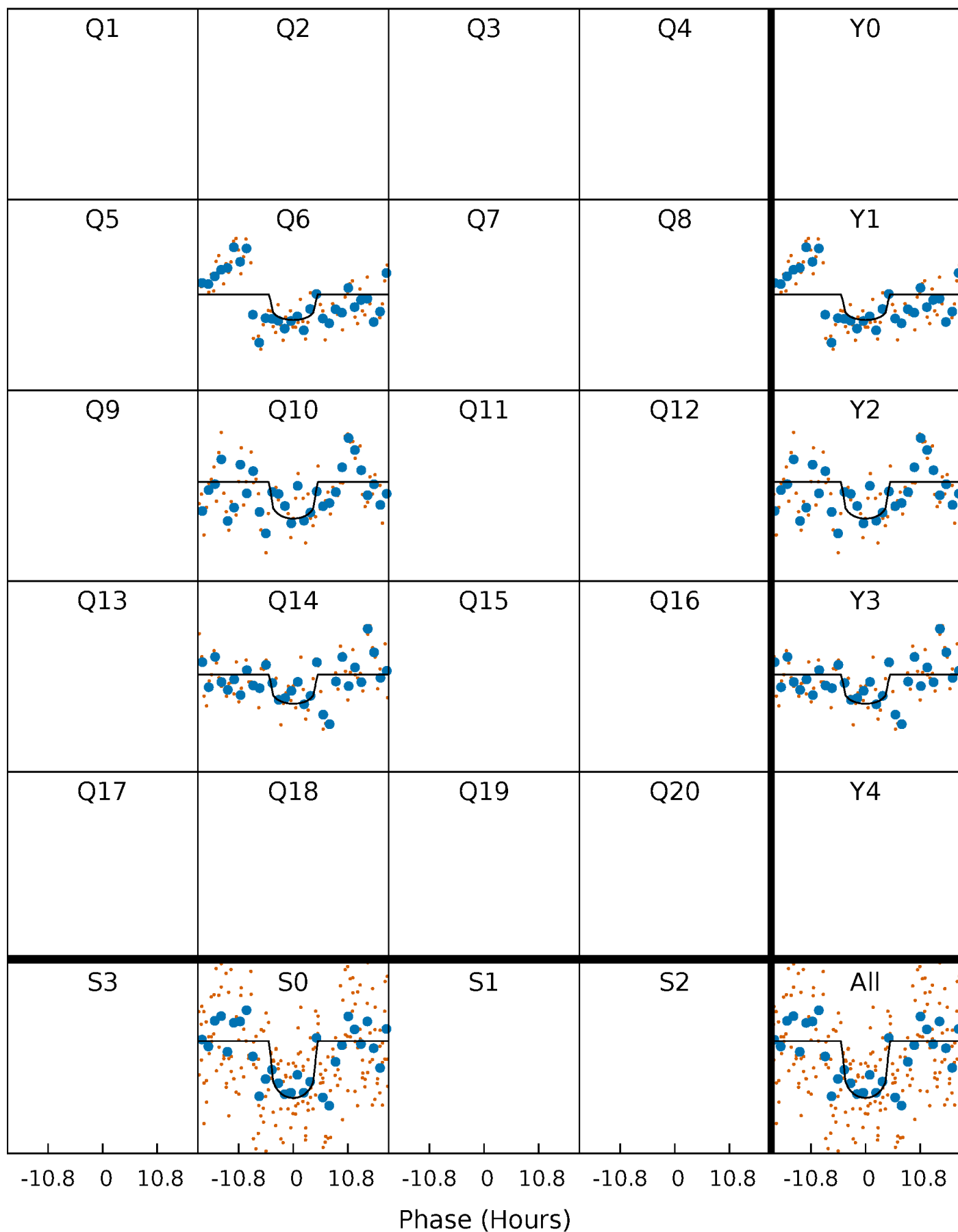
PDC Quarter-Phased Transit Curves

TCE 005892169-01 P=387.154211 Days $T_0=168.583944$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005892169-01 P=387.154211 Days $T_0=168.583944$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

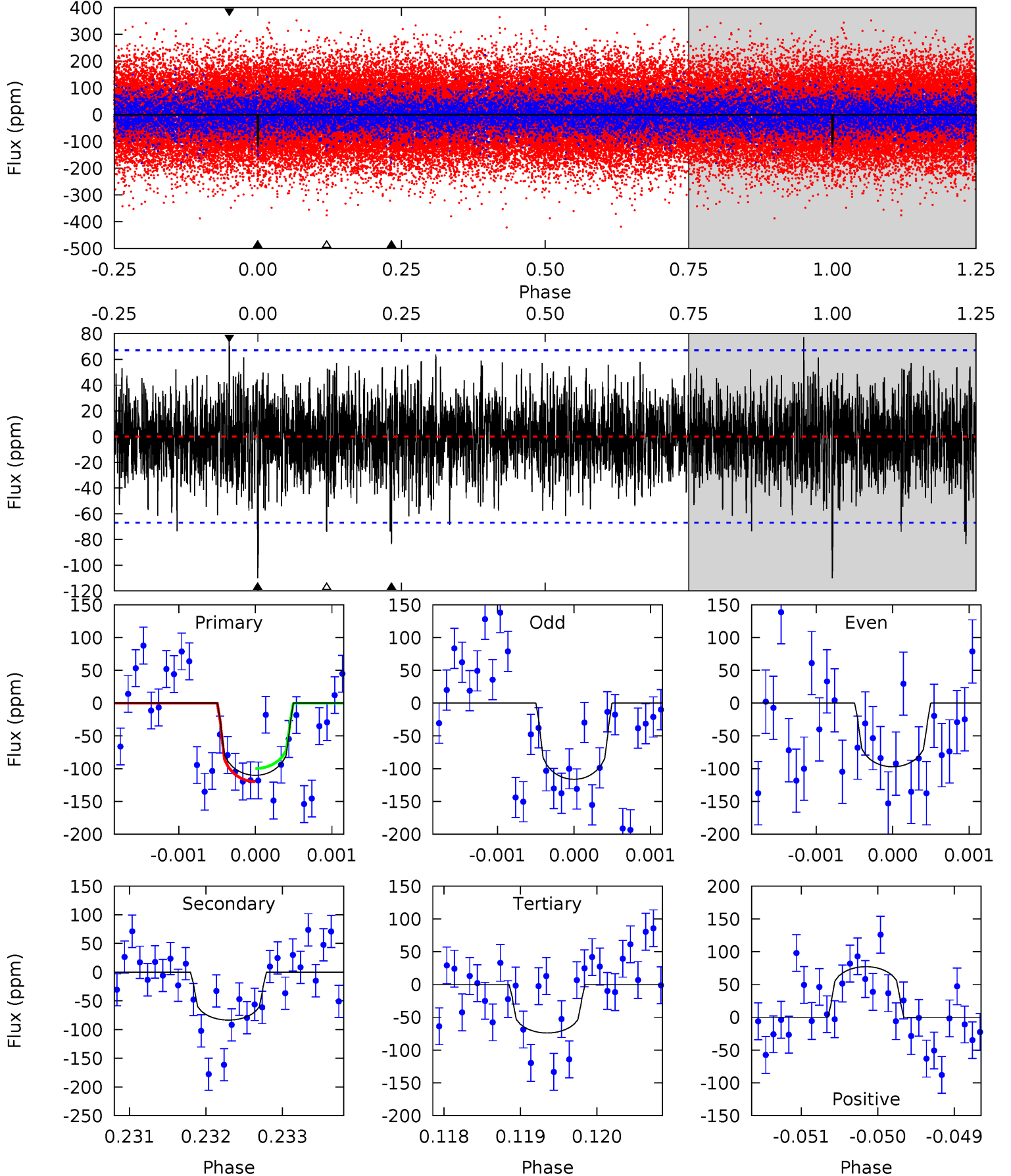
TCE 005892169-01 P=387.202340 Days $T_0=168.504330$ (BKJD)



DV Model-Shift Uniqueness Test

005892169-01, $P = 387.154211$ Days, $E = 168.583944$ Days

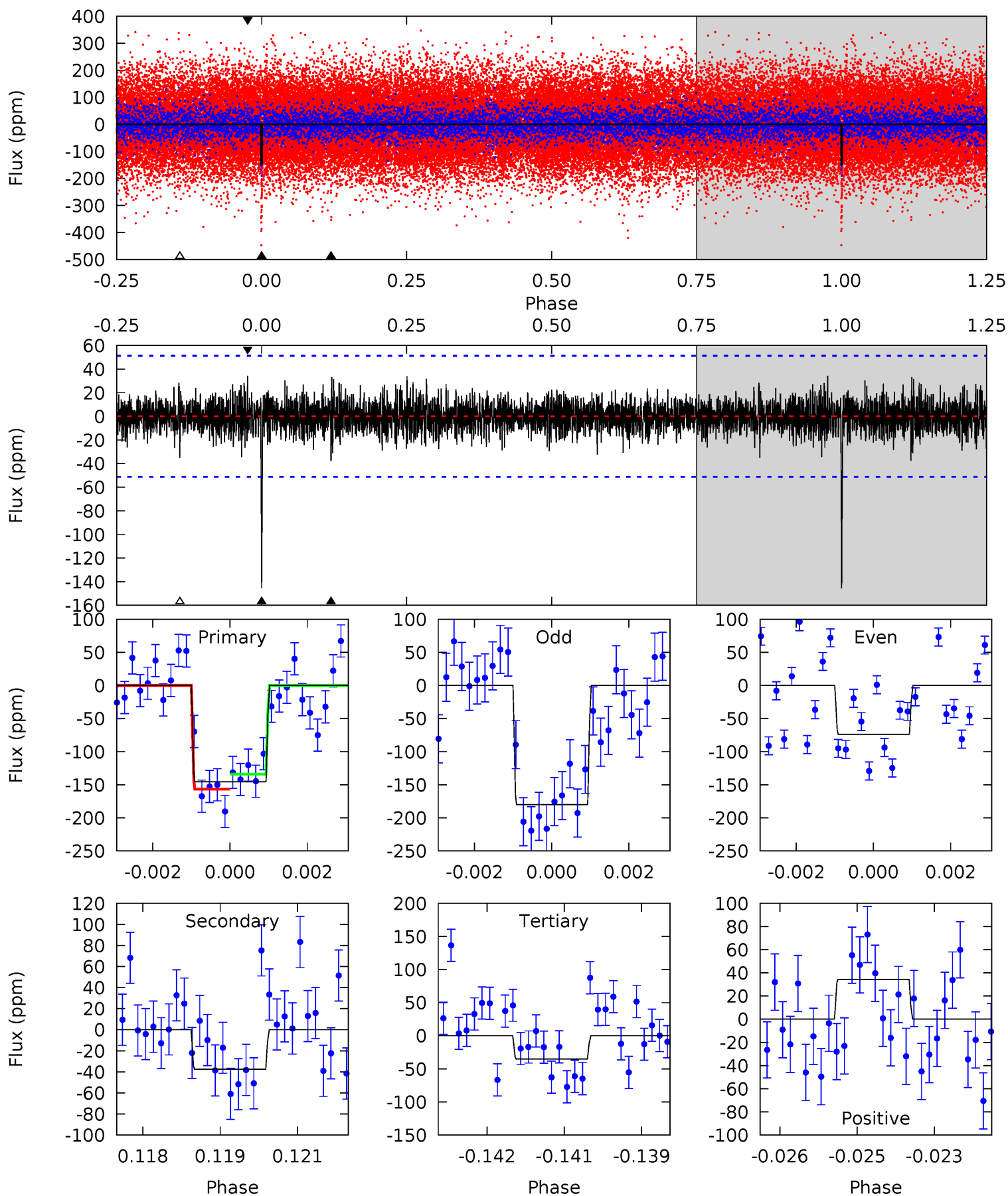
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.95	6.78	6.01	6.27	5.44	3.28	1.68	2.94	2.68	0.78	0.52	0.73	1.13	0.41	0.81



Alt Model-Shift Uniqueness Test

005892169-01, P = 387.202340 Days, E = 168.504330 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.2	3.93	3.69	3.59	5.36	3.15	0.97	11.5	11.6	0.25	0.34	5.23	1.64	0.19	1.20



Stellar Parameters For KIC 005892169

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5227^{+70}_{-109}	$3.615^{+0.012}_{-0.012}$	$0.020^{+0.150}_{-0.200}$	$3.117^{+0.131}_{-0.224}$	$1.461^{+0.102}_{-0.205}$	$0.068^{+0.006}_{-0.004}$
	+1%/-2%	+0%/-0%	+750%/-1000%	+4%/-7%	+7%/-14%	+9%/-5%
Source	SPE72	AST10	SPE72	DSEP		

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

Secondary Eclipse Parameters for KIC 005892169-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-84 ± 12	$4.28^{+2.52}_{-2.35}$	523^{+9}_{-11}	4599^{+2023}_{-775}	3612^{+13664}_{-2248}
Alt.	-38 ± 10	$4.41^{+2.71}_{-2.32}$	524^{+9}_{-12}	3890^{+1293}_{-564}	1455^{+4713}_{-895}

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 $A_{obs} \gg 1.0$

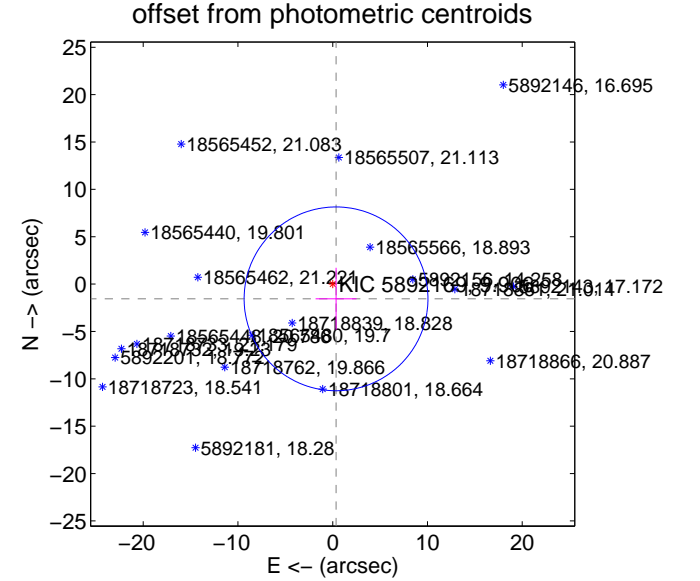
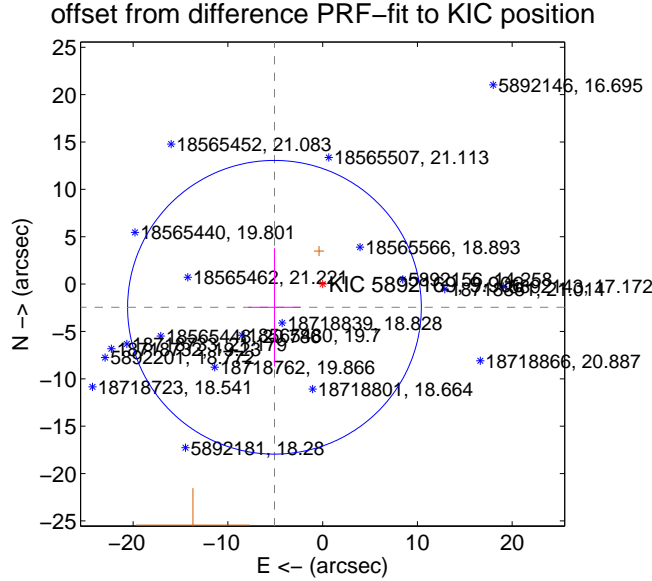
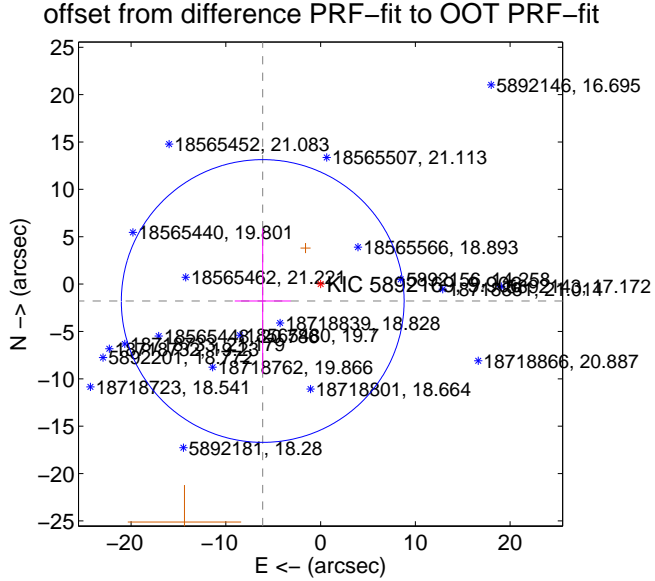
DV Centroid Data

Supplemental centroid analysis for 005892169-01. **Kepler magnitude: 9.91.** Transit SNR 4.98

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.364 ± 4.974	1.28	6.109 ± 2.957	-1.783 ± 7.660
PRF-fit source offset from KIC position	5.645 ± 5.167	1.09	5.088 ± 2.754	-2.445 ± 6.239
photometric centroid source offset	1.60 ± 3.23	0.49	-0.35 ± 2.16	-1.56 ± 3.28

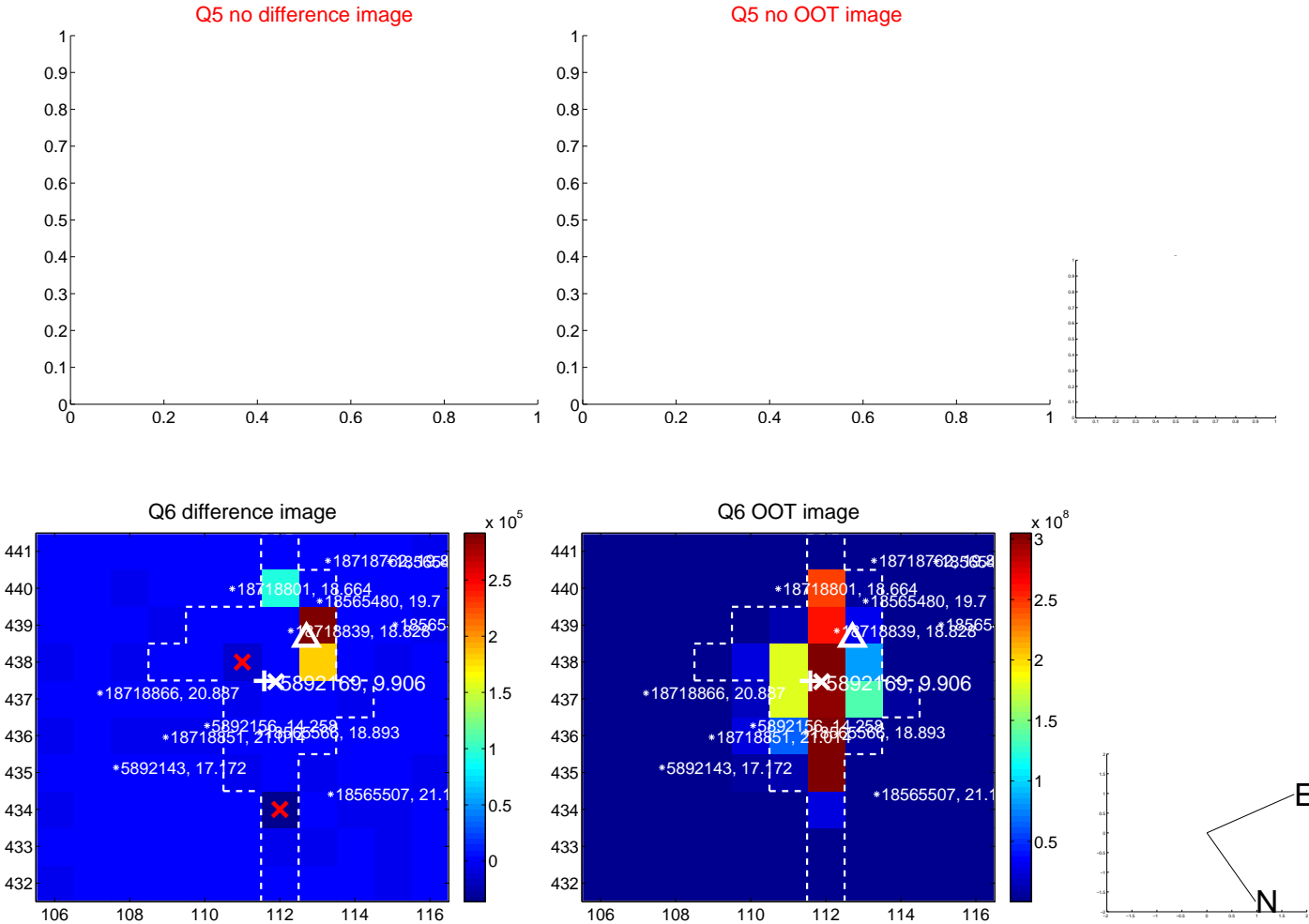


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

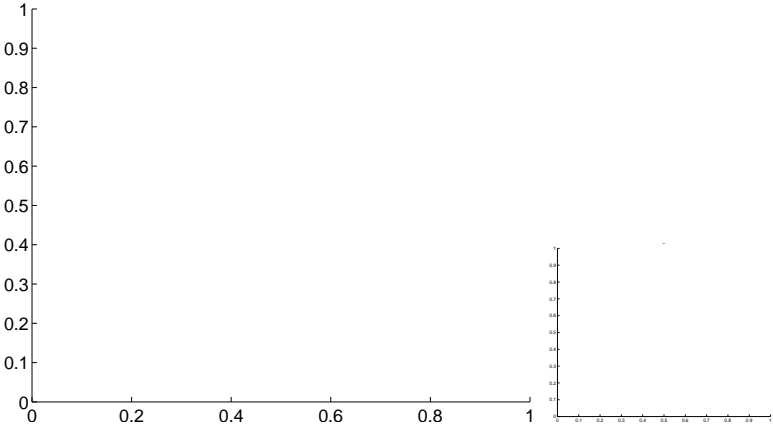


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

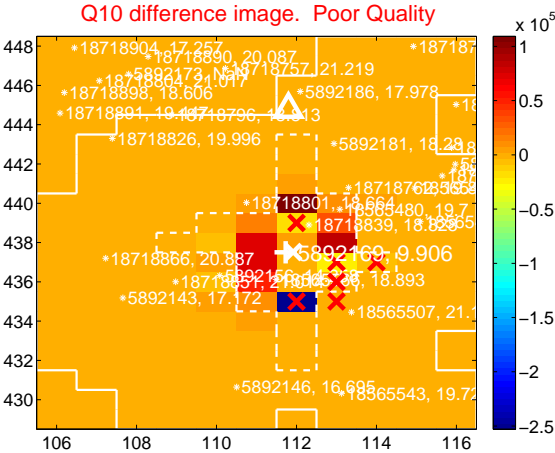
Q9 no difference image



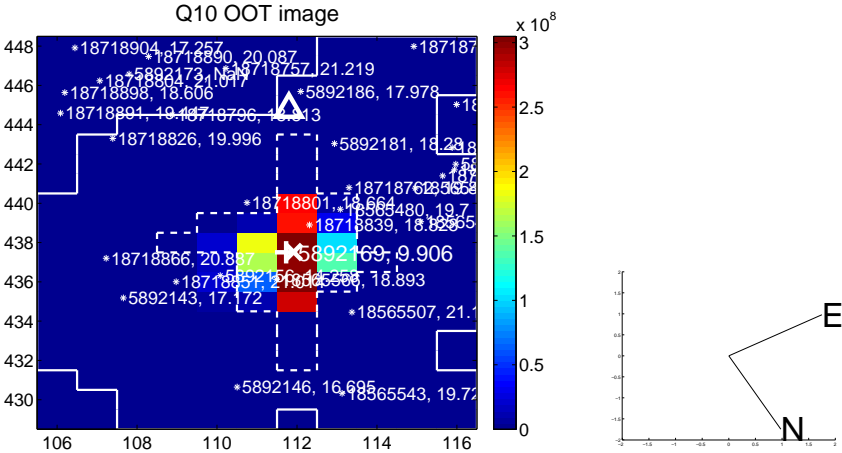
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



Q12 no difference image



Q12 no OOT image



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

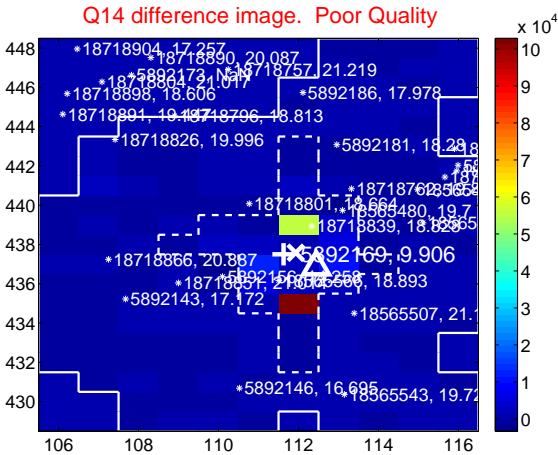
Q13 no difference image



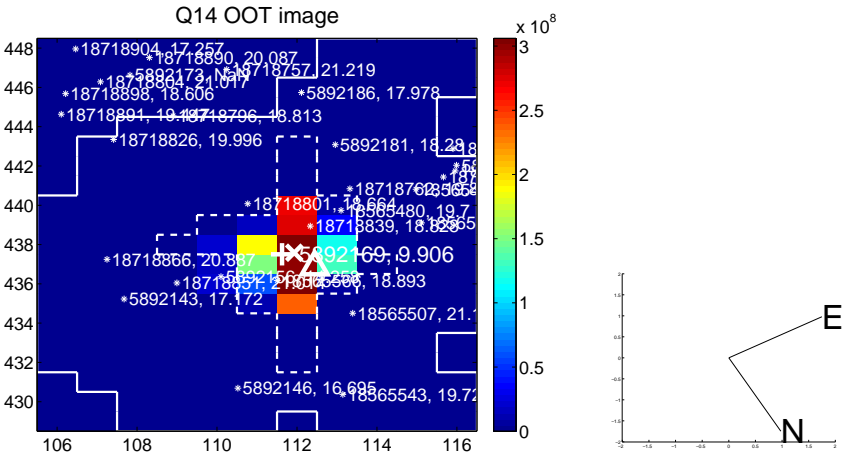
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



Q15 no difference image



Q15 no OOT image



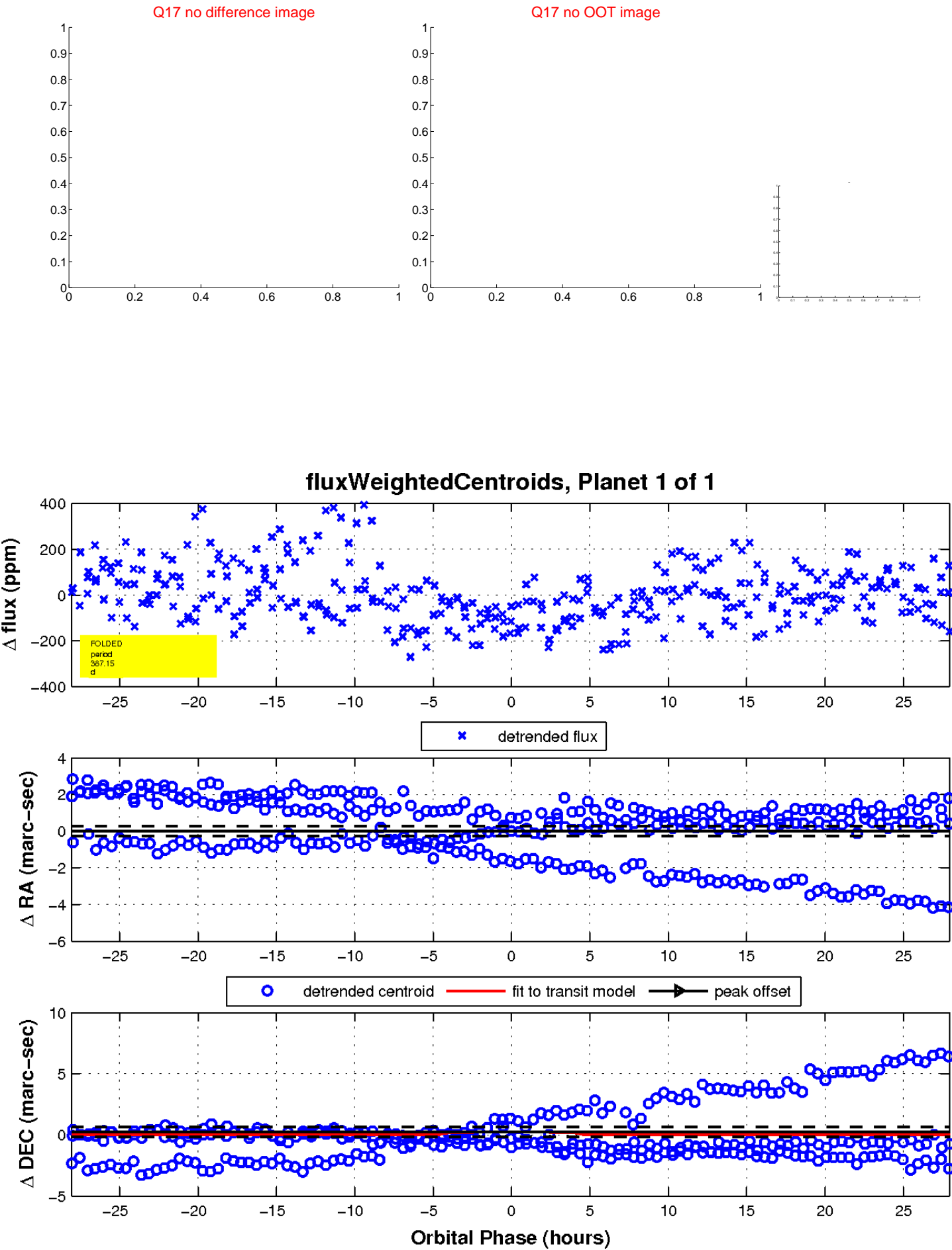
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

