

KIC 006890260

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})
006890260-01	OBS	No	438.113638	378.000126	133.1	24.170	7.3	7.8	1.98	9172	2.50	11.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006890260-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—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.

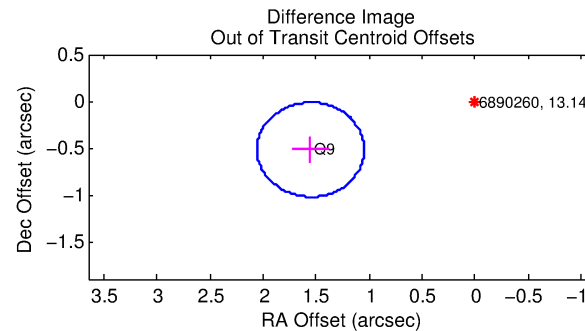
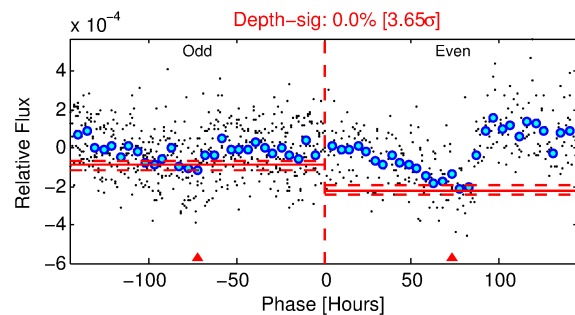
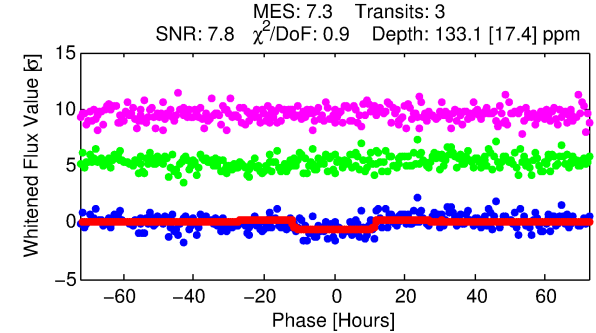
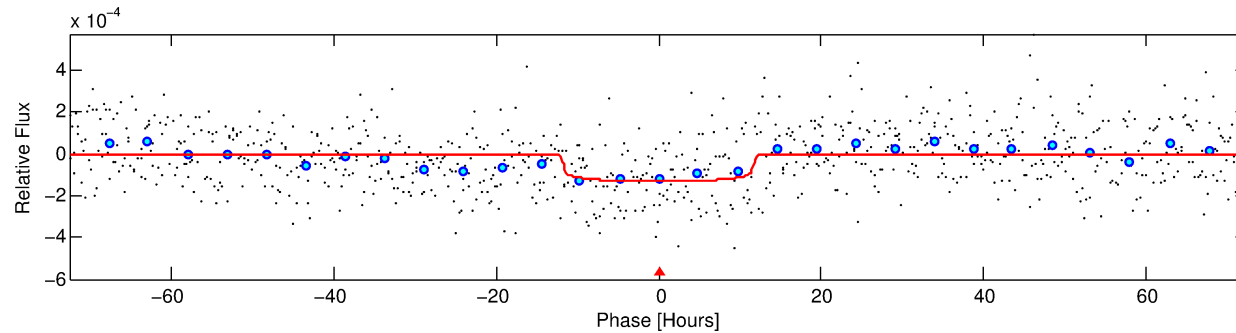
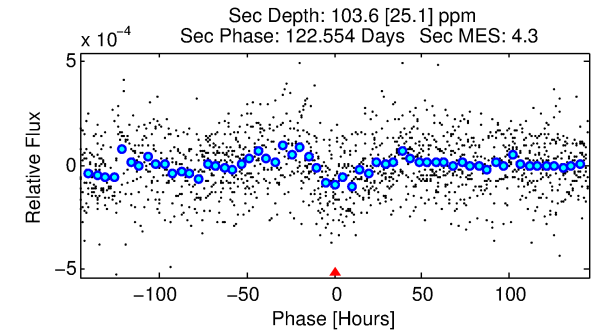
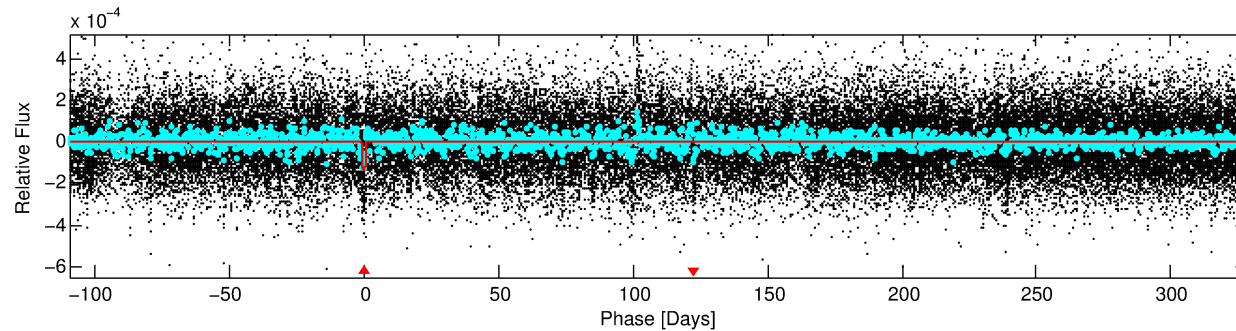
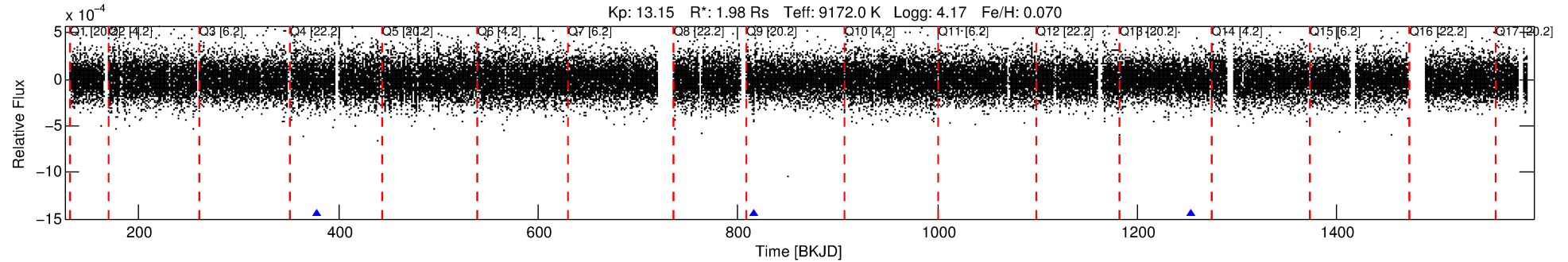
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006890260-01

No Significant Match Found

DV One-Page Summary

KIC: 6890260 Candidate: 1 of 1 Period: 438.114 d



DV Fit Results:

Period = 438.11364 [0.01919] d
Epoch = 378.0001 [0.0262] BKJD
Rp/R* = 0.0115 [0.0019]
a/R* = 90.57 [93.68]
b = 0.77 [0.54]
Seff = 11.83 [5.11]
Teq = 473 [51] K
Rp = 2.50 [1.01] Re
a = 1.4520 [0.4191] AU
Ag = 19244.06 [10858.03] [1.77σ]
Teffp = 8611 [973] K [8.35σ]

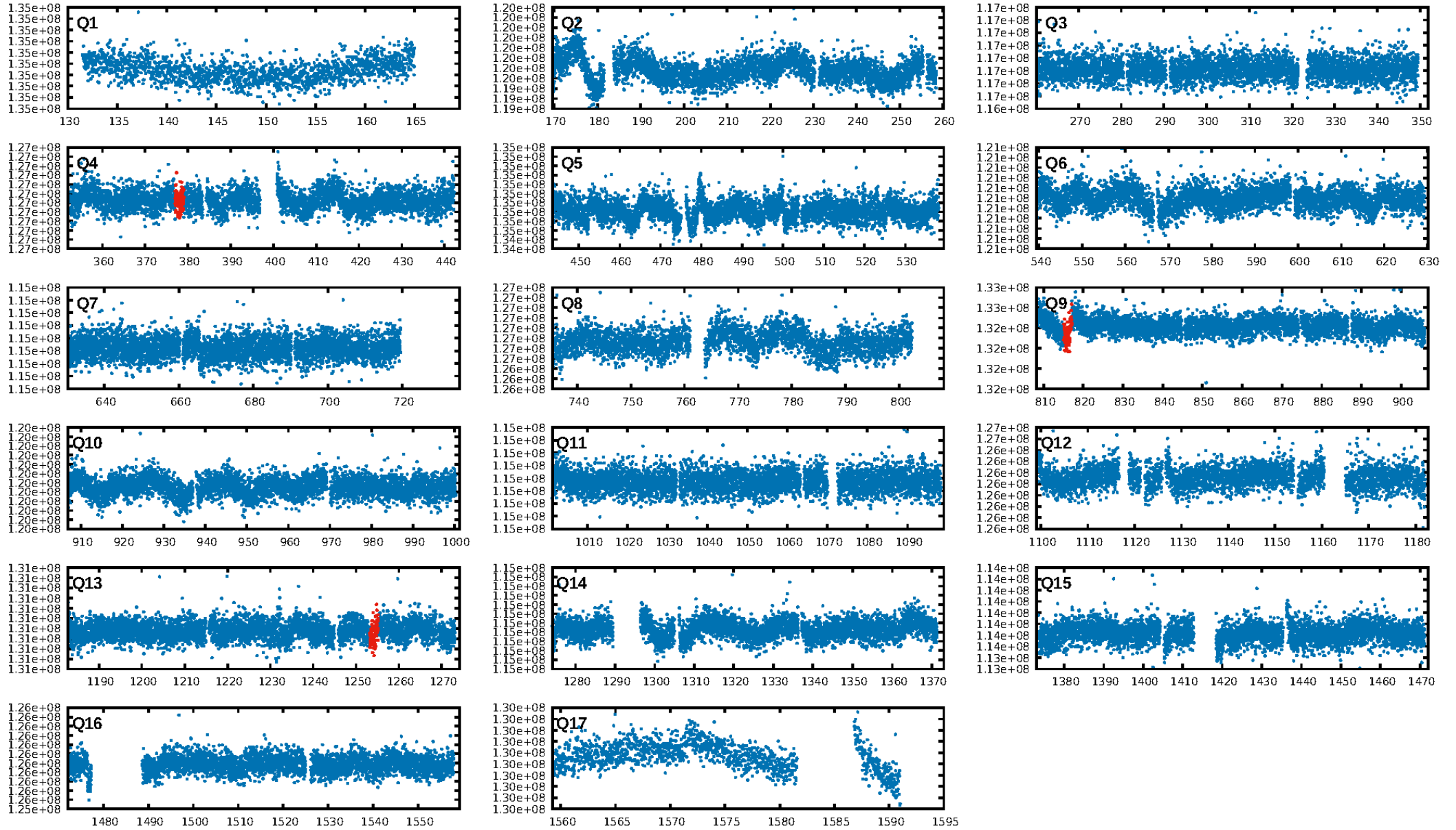
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.0%
ModelChiSquareGof-sig: 98.8%
Bootstrap-pfa: 1.74e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.329
Centroid-sig: 0.4%
Centroid-so: 3.149 arcsec [1.92σ]
OotOffset-rm: 1.638 arcsec [9.73σ]
KicOffset-rm: 1.556 arcsec [9.18σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [3/3]

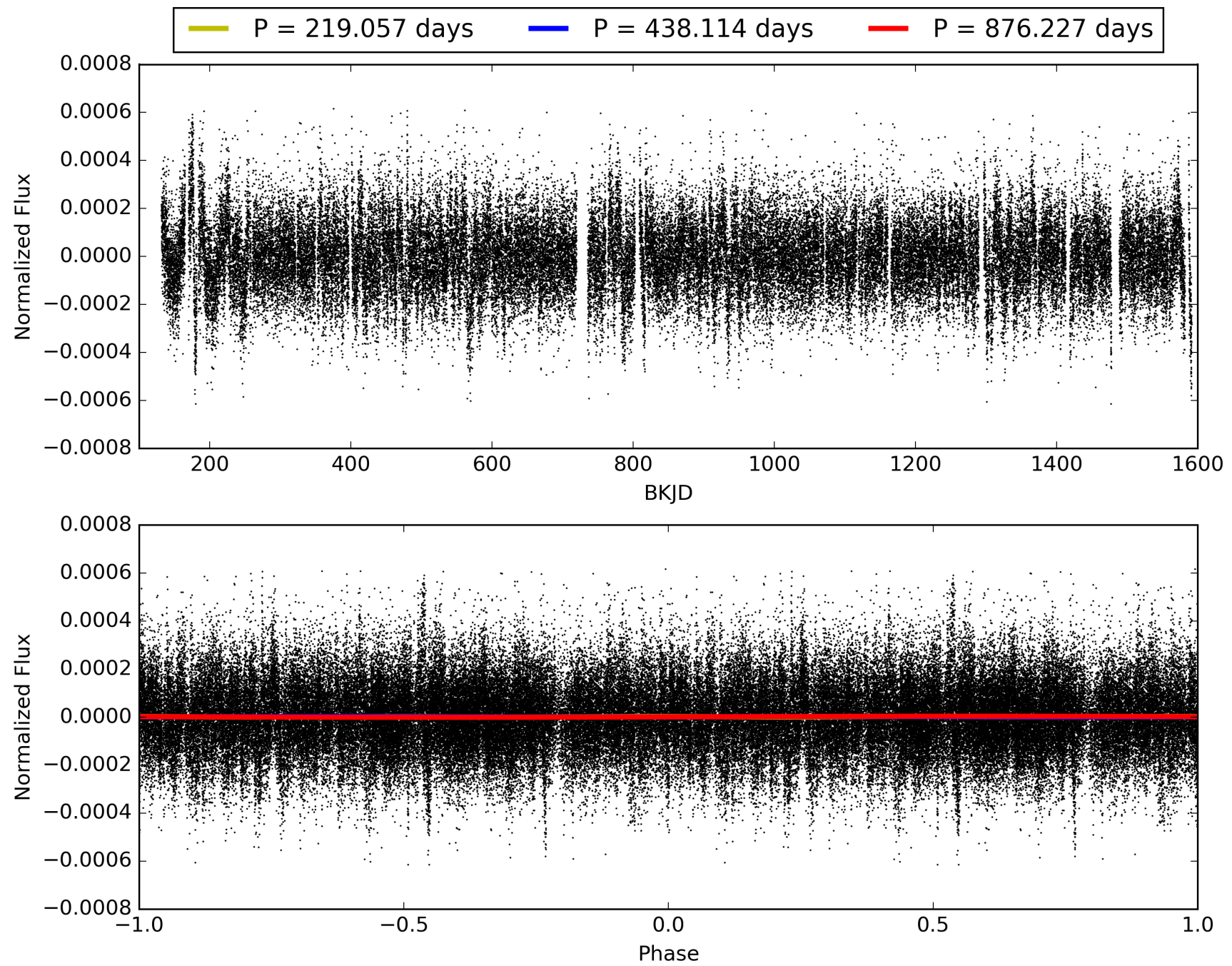
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:35:58 Z

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

TCE 006890260-01, PDC Light Curves

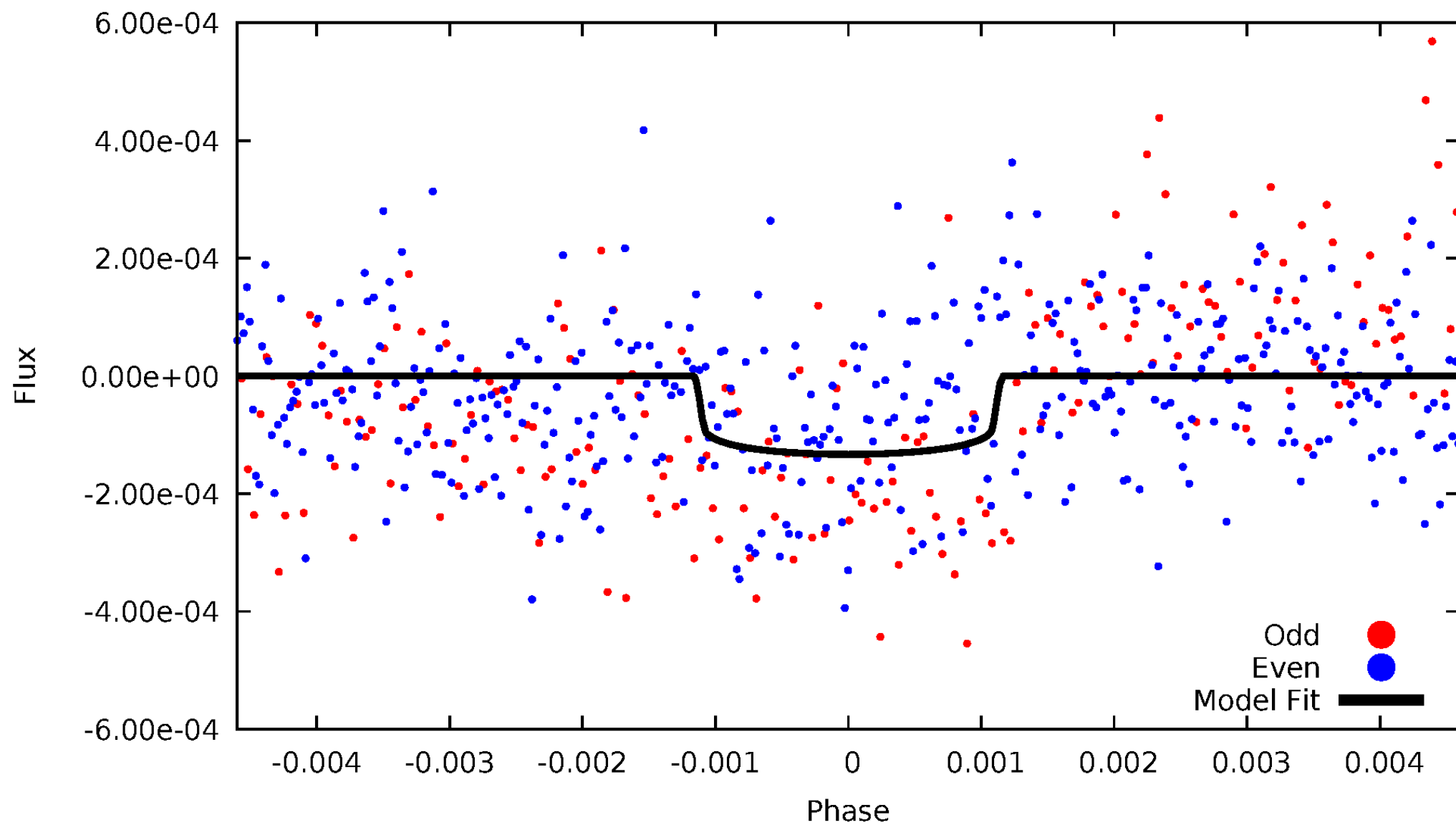


TCE 006890260-01



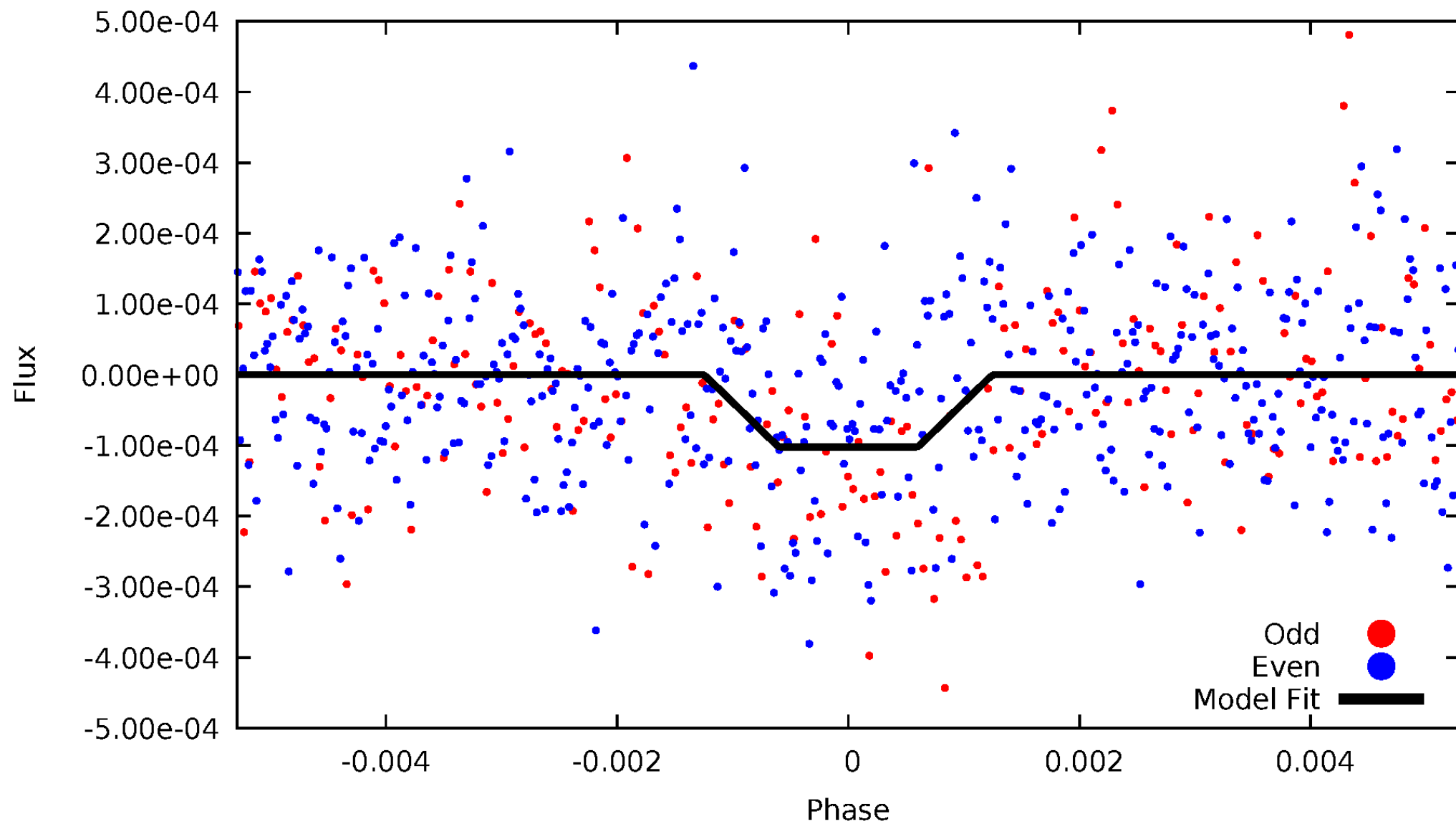
DV Odd/Even

TCE 006890260-01

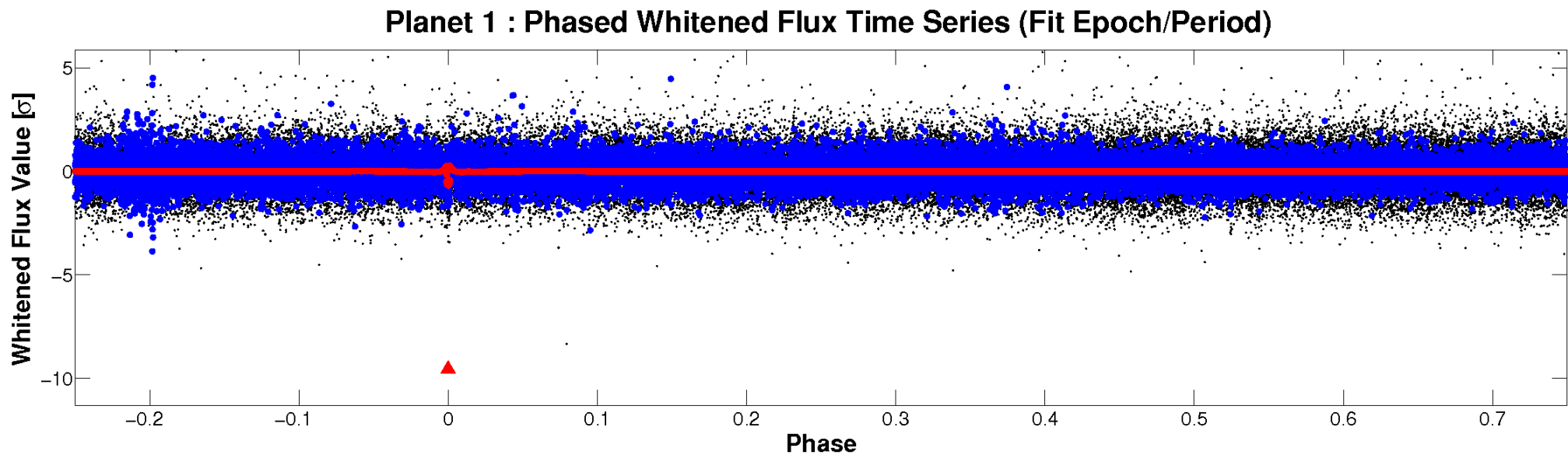
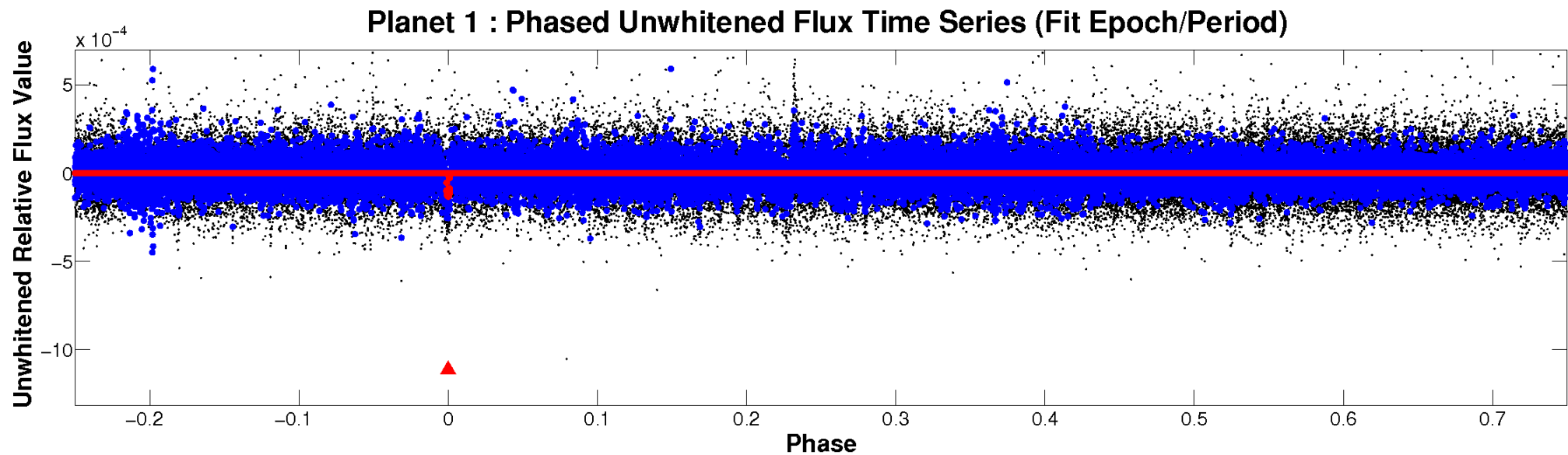


ALT Odd/Even

TCE 006890260-01



Non-Whitened Vs. Whitened Light Curve



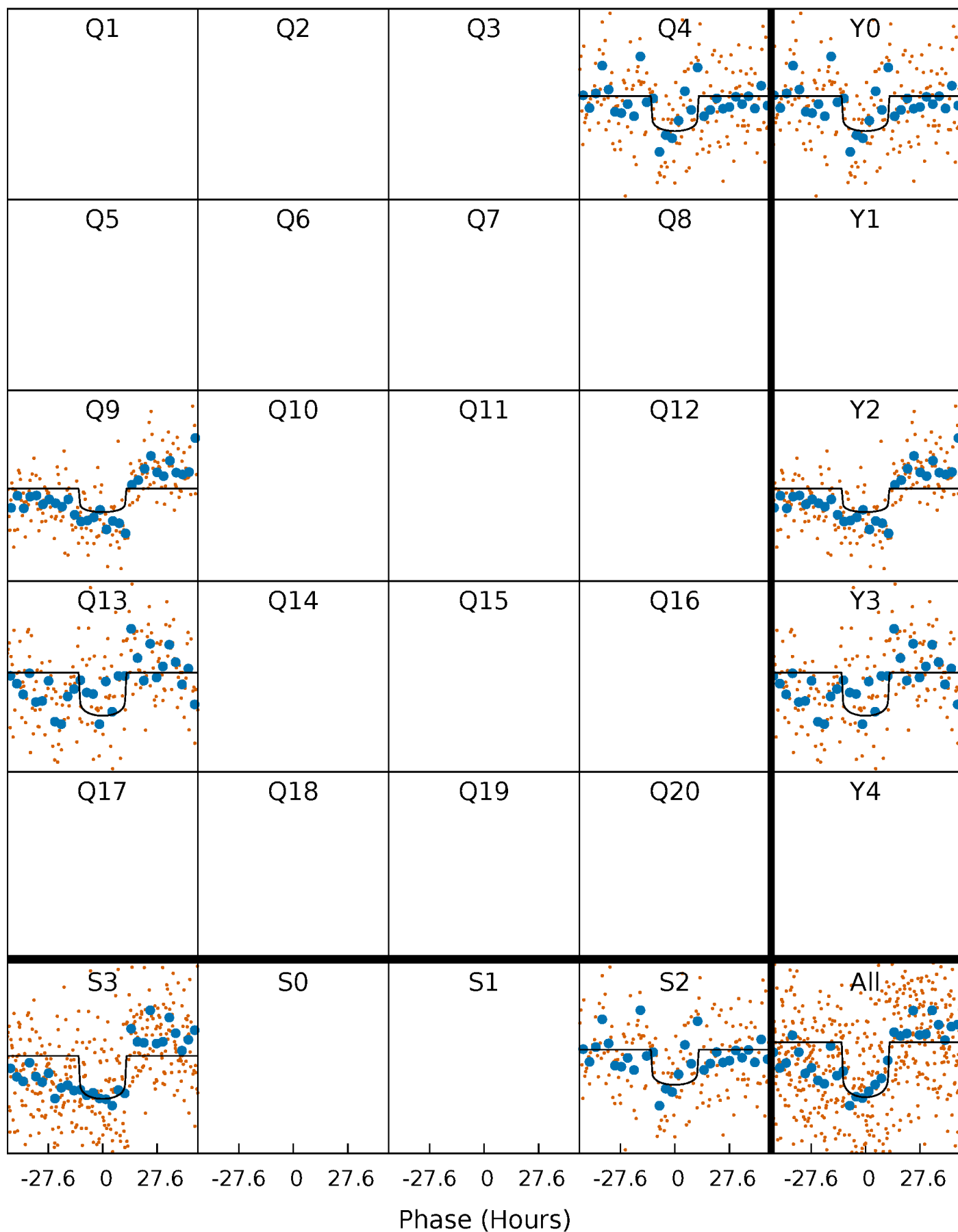
PDC Quarter-Phased Transit Curves

TCE 006890260-01 $P=438.113638$ Days $T_0=378.000126$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006890260-01 $P=438.113638$ Days $T_0=378.000126$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

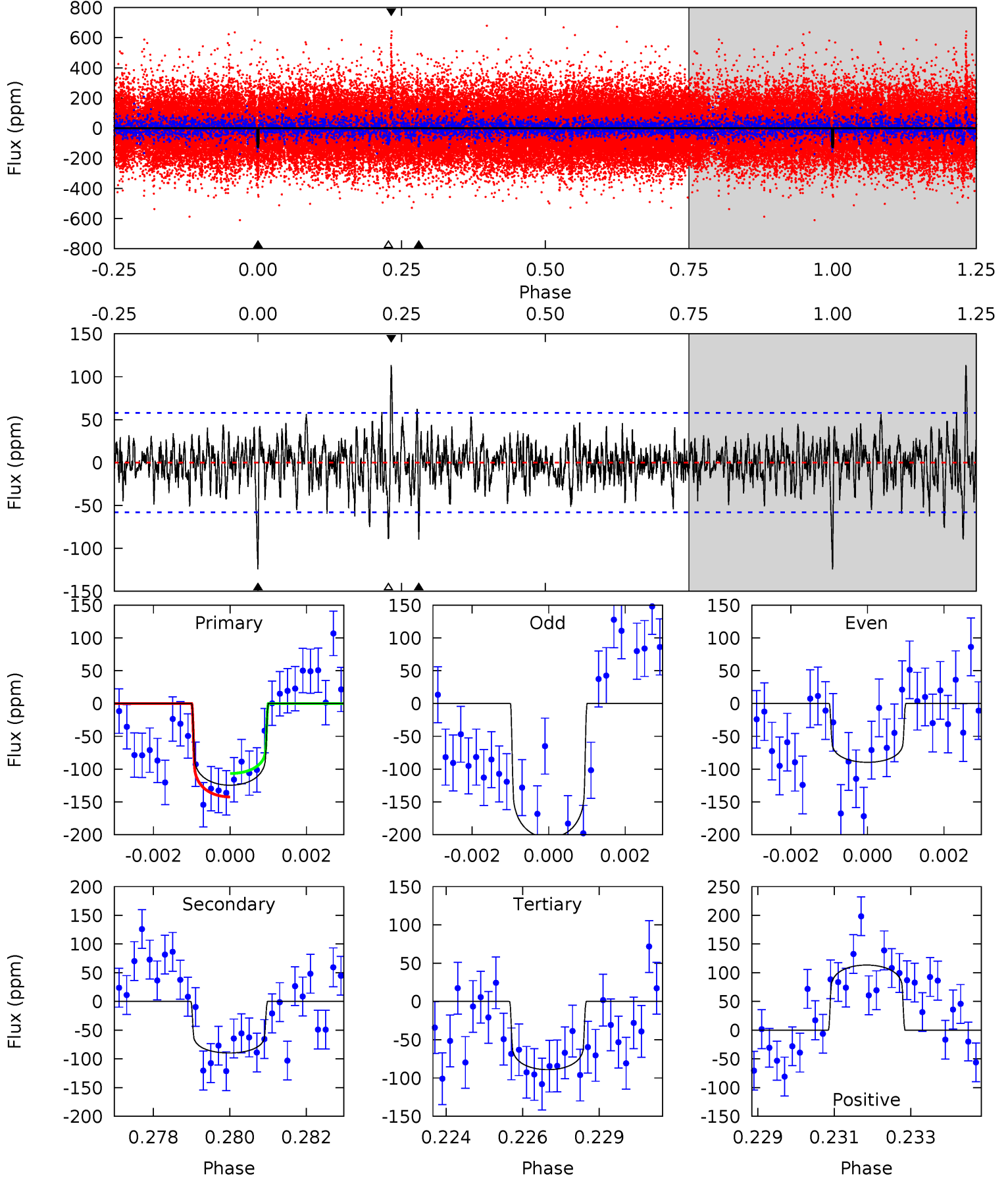
TCE 006890260-01 P=438.224939 Days $T_0=377.914072$ (BKJD)



DV Model-Shift Uniqueness Test

006890260-01, P = 438.113638 Days, E = 378.000126 Days

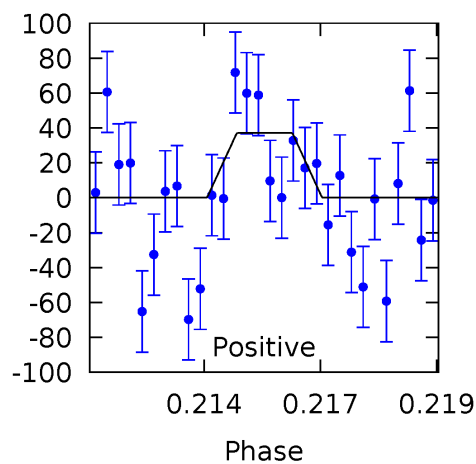
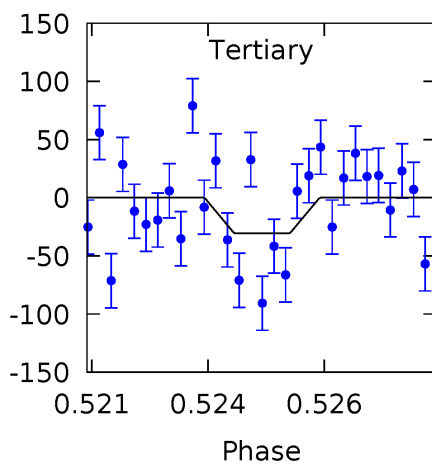
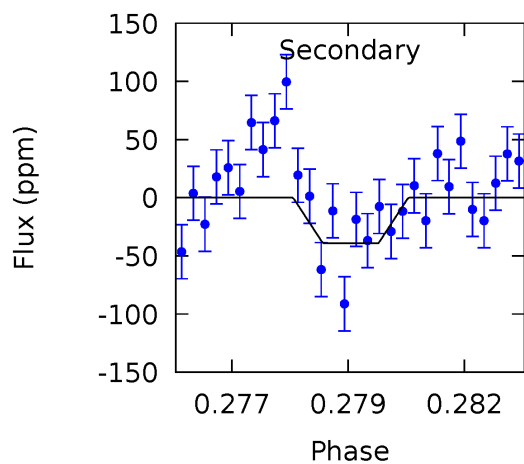
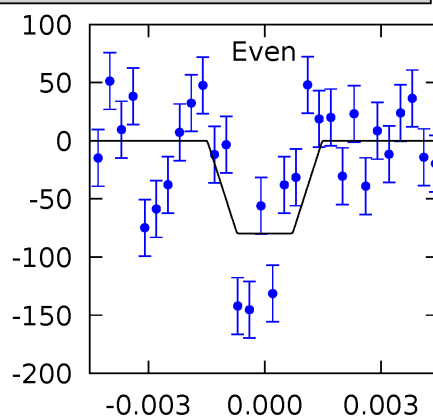
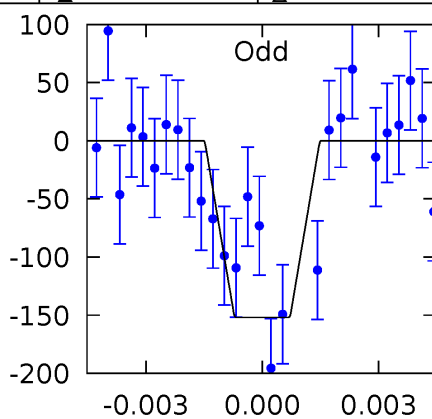
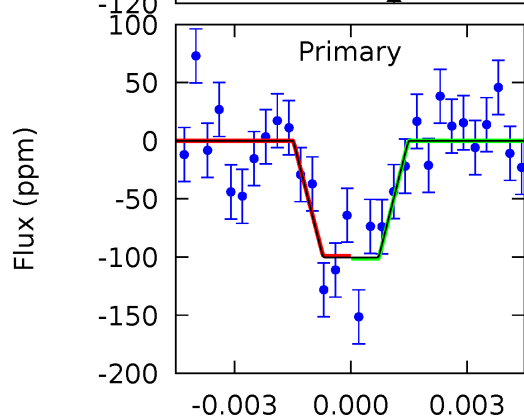
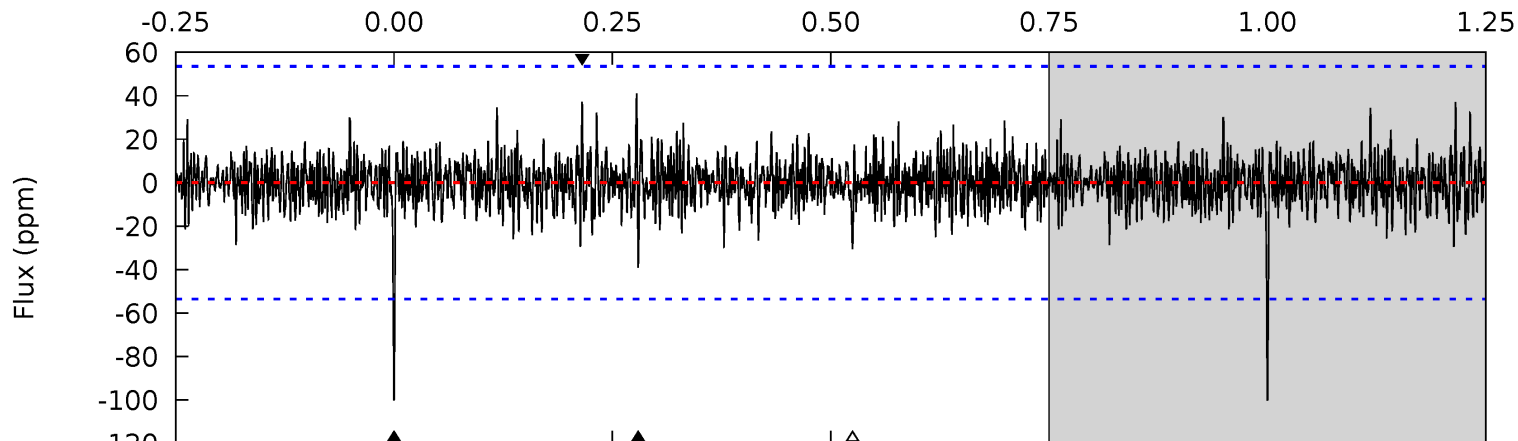
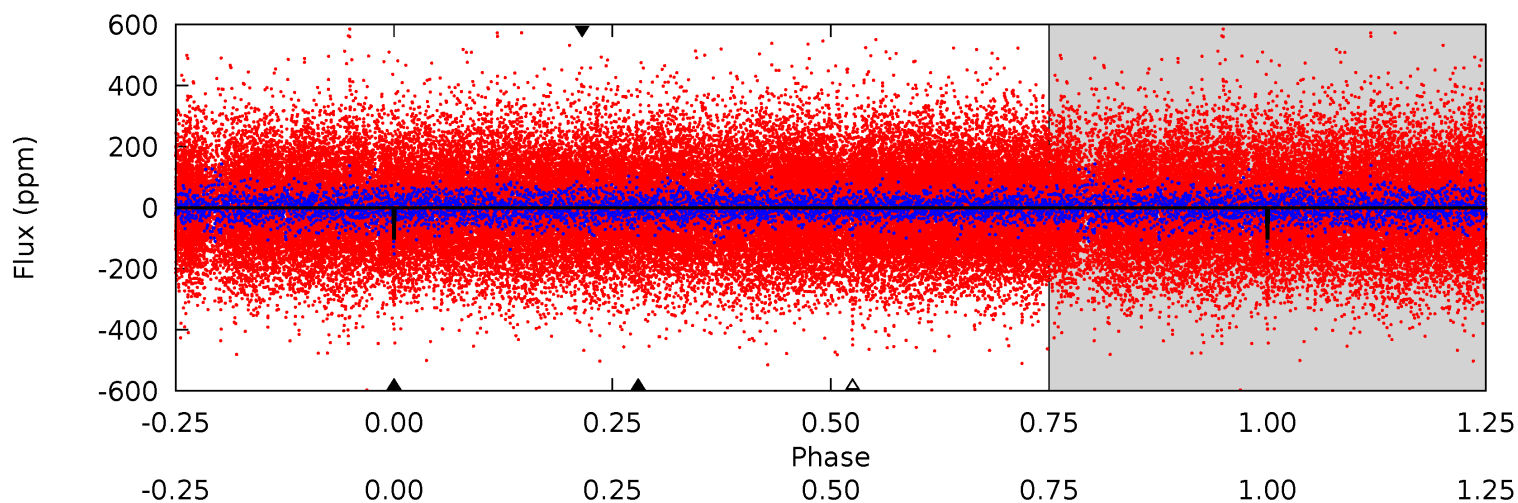
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	8.22	8.16	10.4	5.30	3.04	1.80	3.24	1.02	0.06	-2.17	4.95	1.23	0.48	1.63



Alt Model-Shift Uniqueness Test

006890260-01, P = 438.224939 Days, E = 377.914072 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.90	3.87	3.02	3.67	5.28	3.02	0.88	6.88	6.23	0.84	0.20	3.34	1.00	0.29	0.12



Stellar Parameters For KIC 006890260

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9172^{+255}_{-438}	$4.171^{+0.105}_{-0.195}$	$0.070^{+0.200}_{-0.650}$	$1.983^{+0.734}_{-0.395}$	$2.124^{+0.407}_{-0.542}$	$0.384^{+0.251}_{-0.205}$
	+3%/-5%	+3%/-5%	+286%/-929%	+37%/-20%	+19%/-26%	+65%/-53%
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 006890260-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-90 ± 11	$2.55^{+0.66}_{-0.53}$	666^{+50}_{-42}	7961^{+1142}_{-747}	15511^{+8827}_{-5227}
Alt.	-39 ± 10	$2.24^{+0.55}_{-0.56}$	665^{+55}_{-45}	6773^{+1053}_{-757}	8641^{+6482}_{-3459}

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 $A_{obs} \gg 1.0$

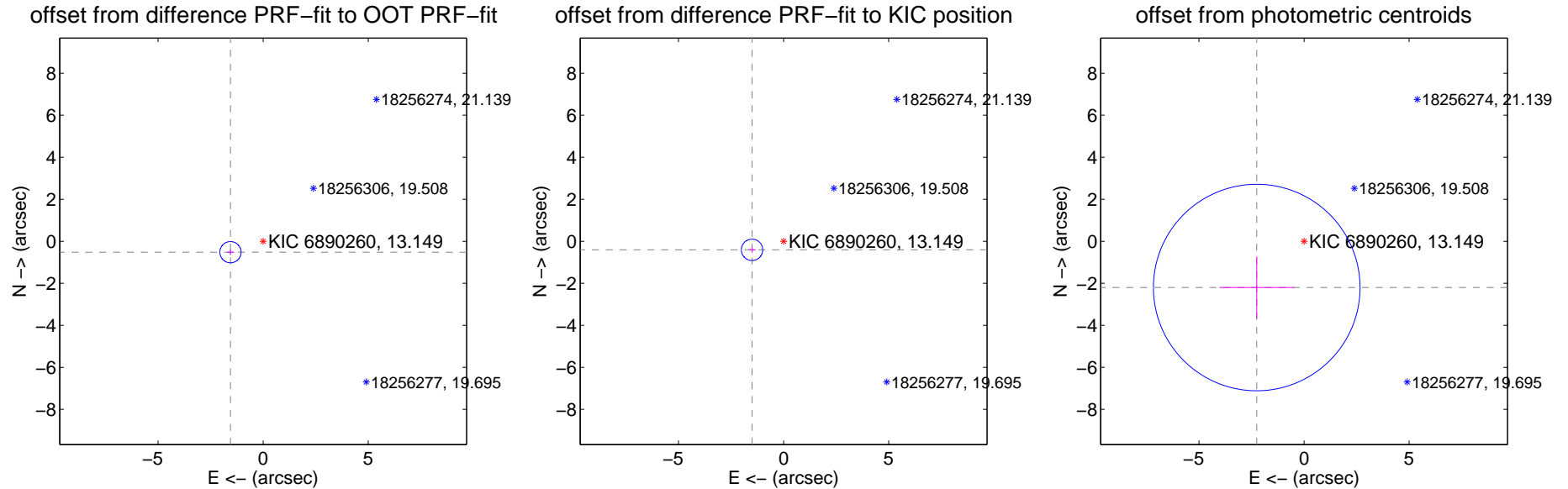
DV Centroid Data

Supplemental centroid analysis for 006890260-01. Kepler magnitude: 13.15. Transit SNR 7.81

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.638 ± 0.168	9.73	1.554 ± 0.172	-0.519 ± 0.132
PRF-fit source offset from KIC position	1.556 ± 0.169	9.18	1.502 ± 0.172	-0.407 ± 0.132
photometric centroid source offset	3.15 ± 1.64	1.92	2.25 ± 1.78	-2.20 ± 1.48



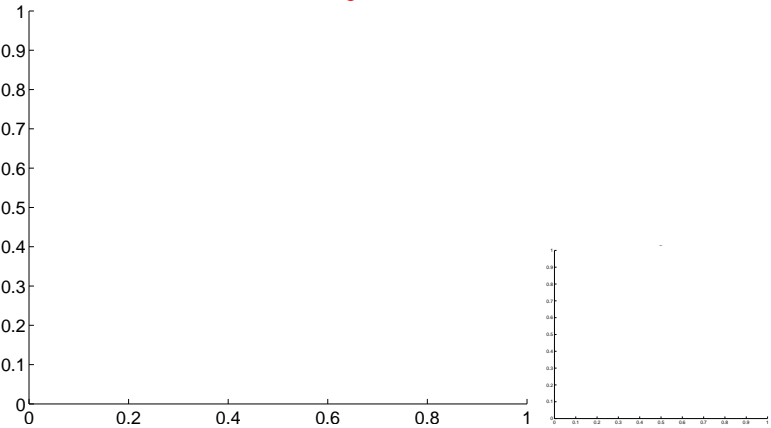
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

Q1 no difference image



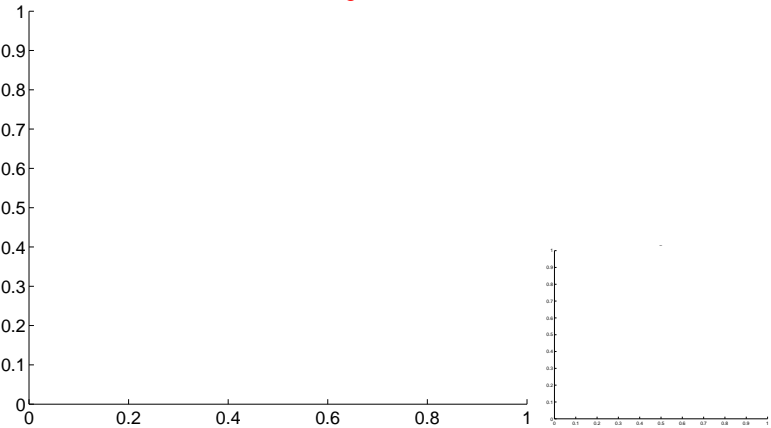
Q1 no OOT image



Q2 no difference image



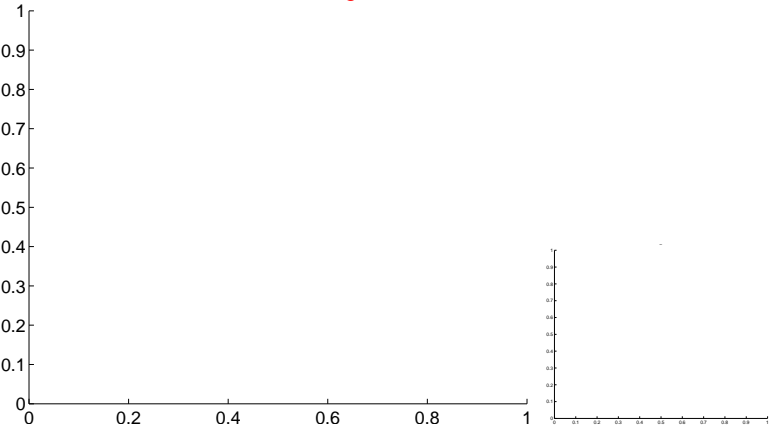
Q2 no OOT image



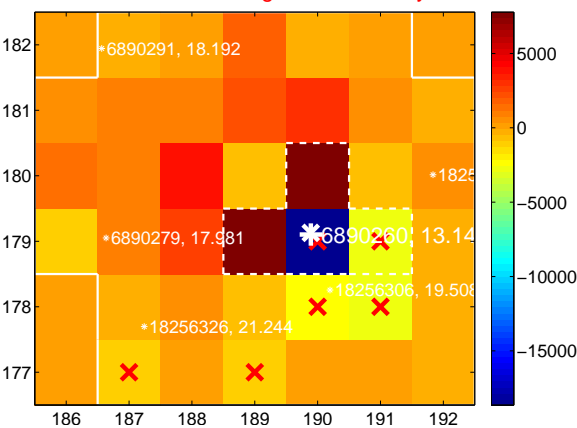
Q3 no difference image



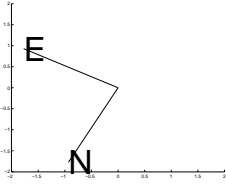
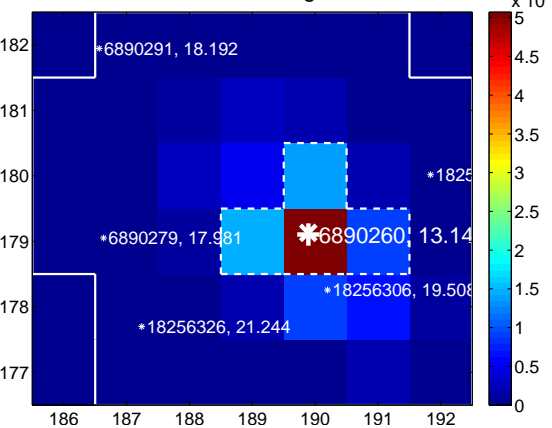
Q3 no OOT image



Q4 difference image. Poor Quality



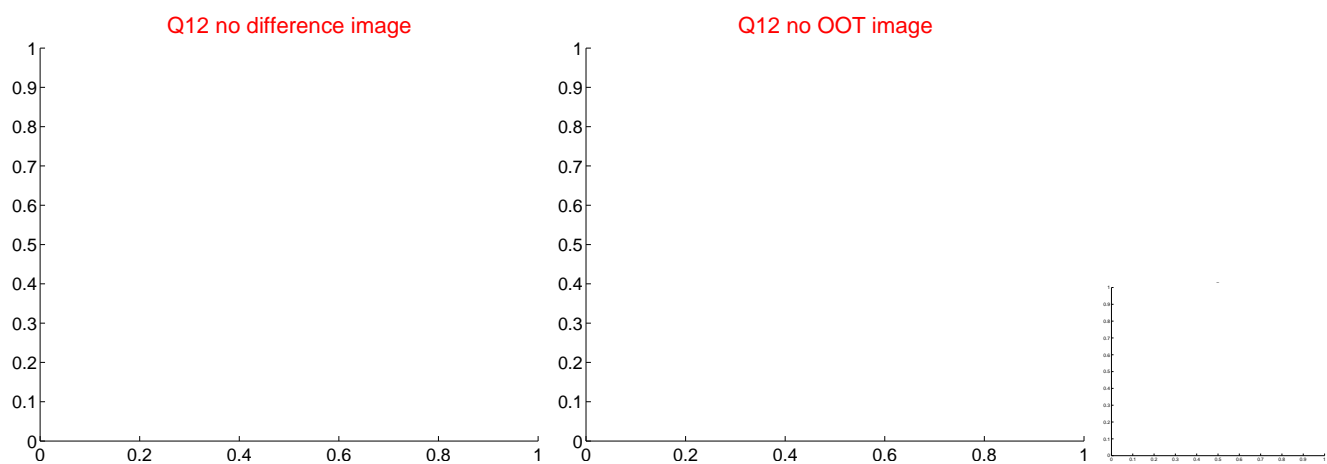
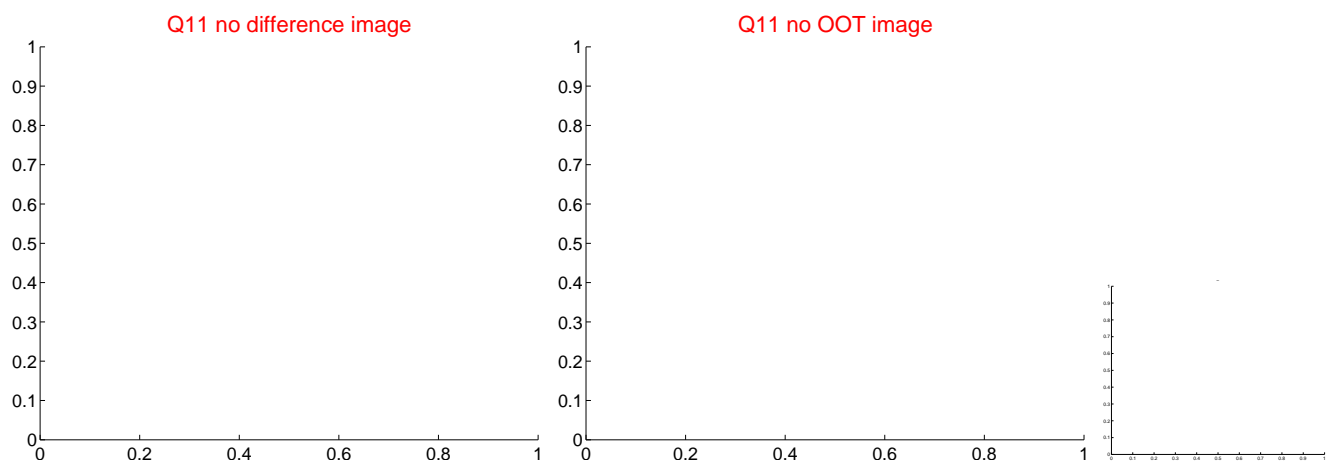
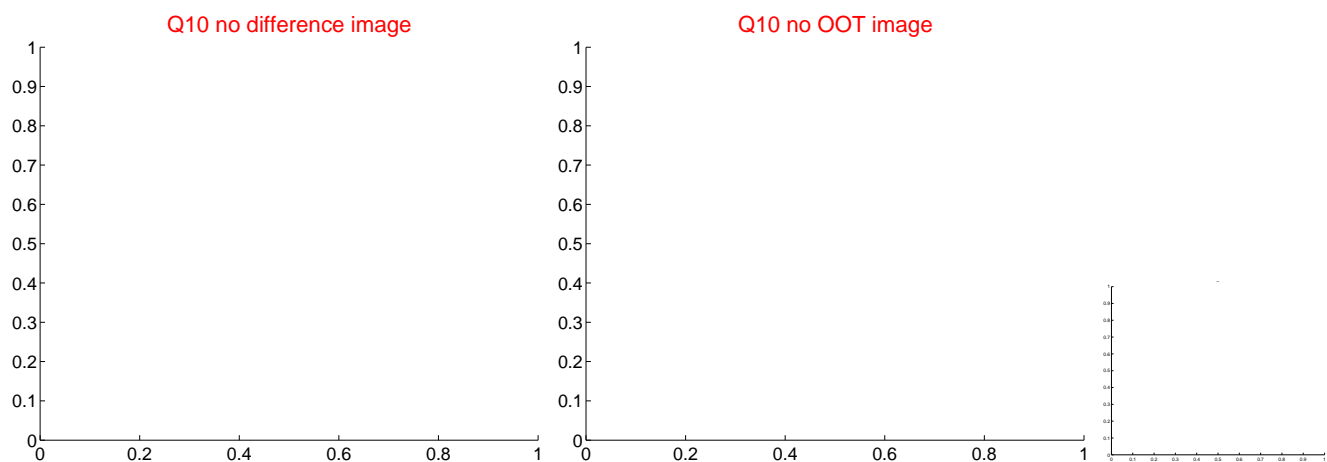
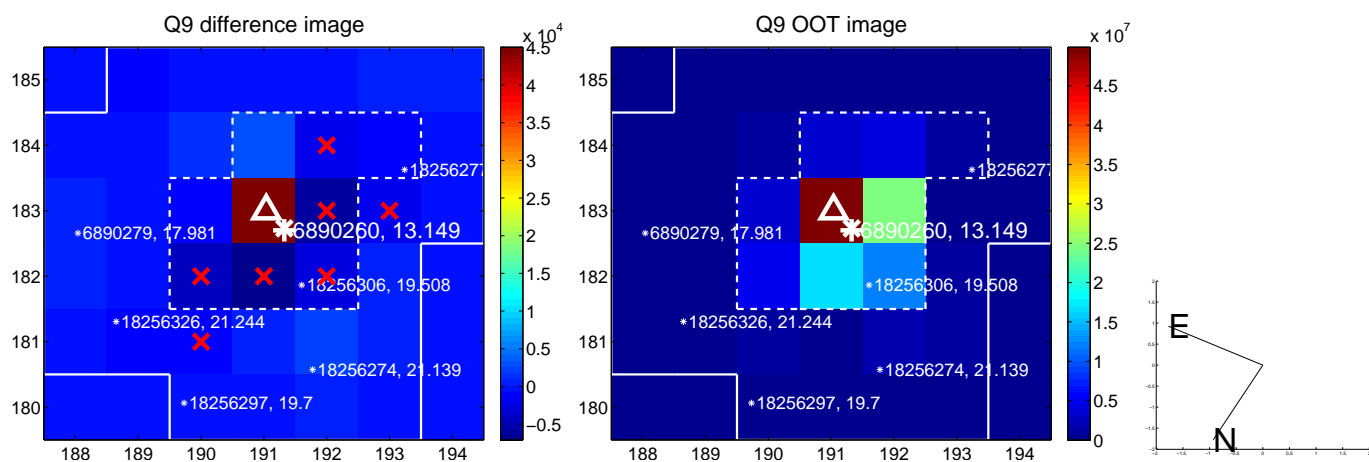
Q4 OOT image



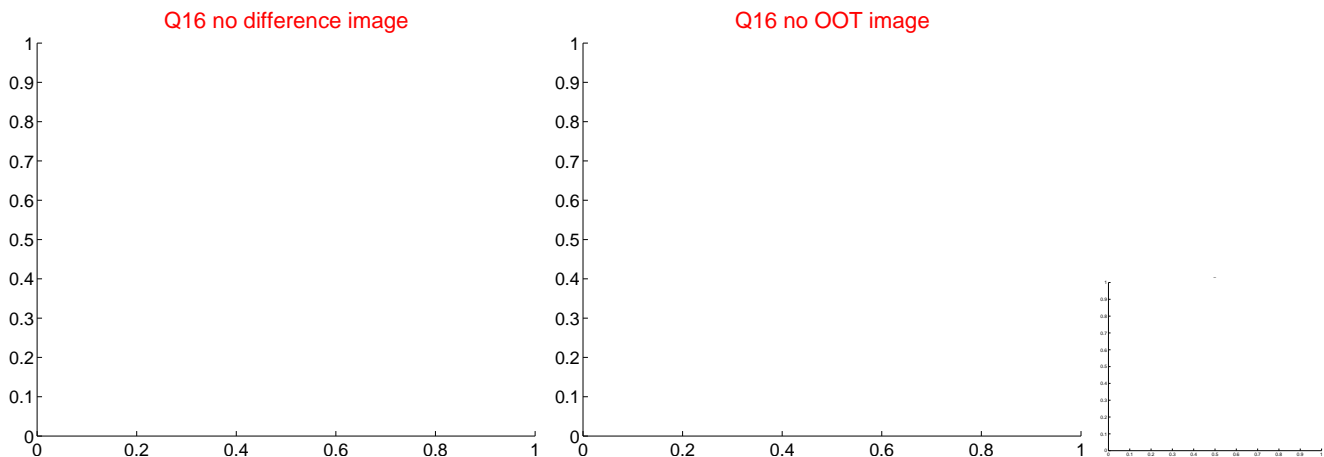
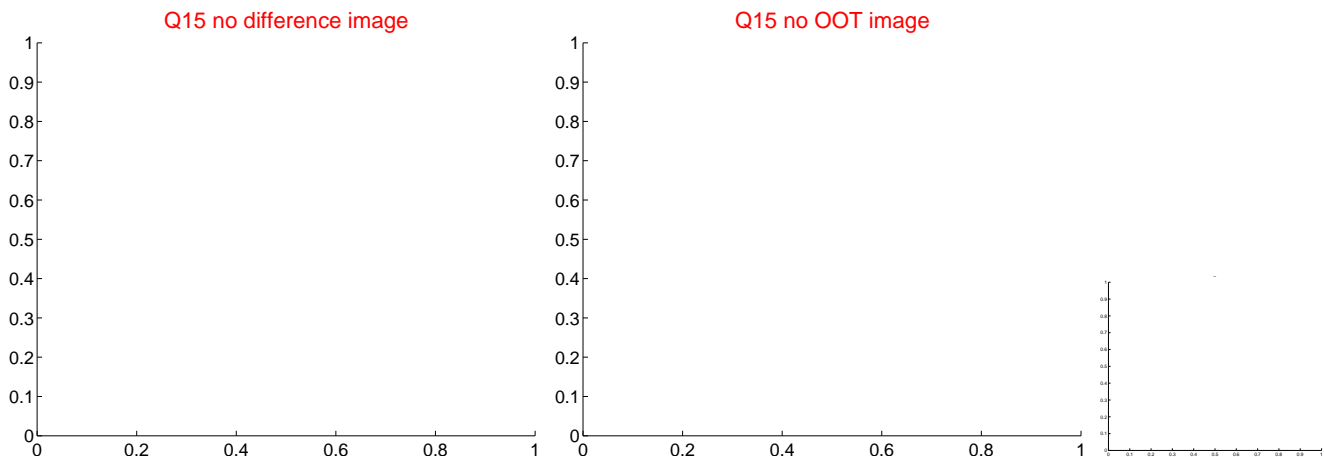
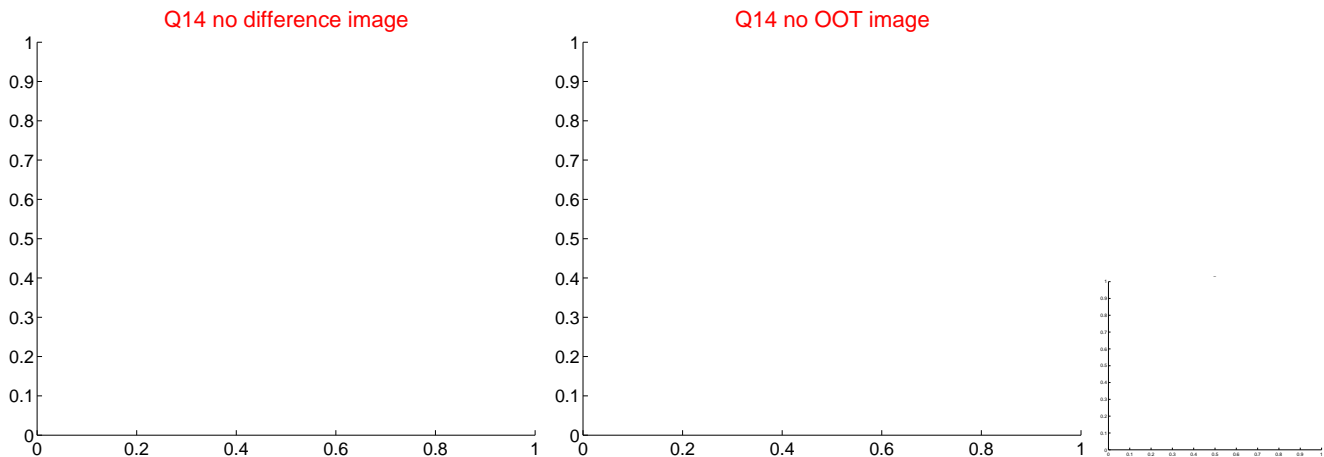
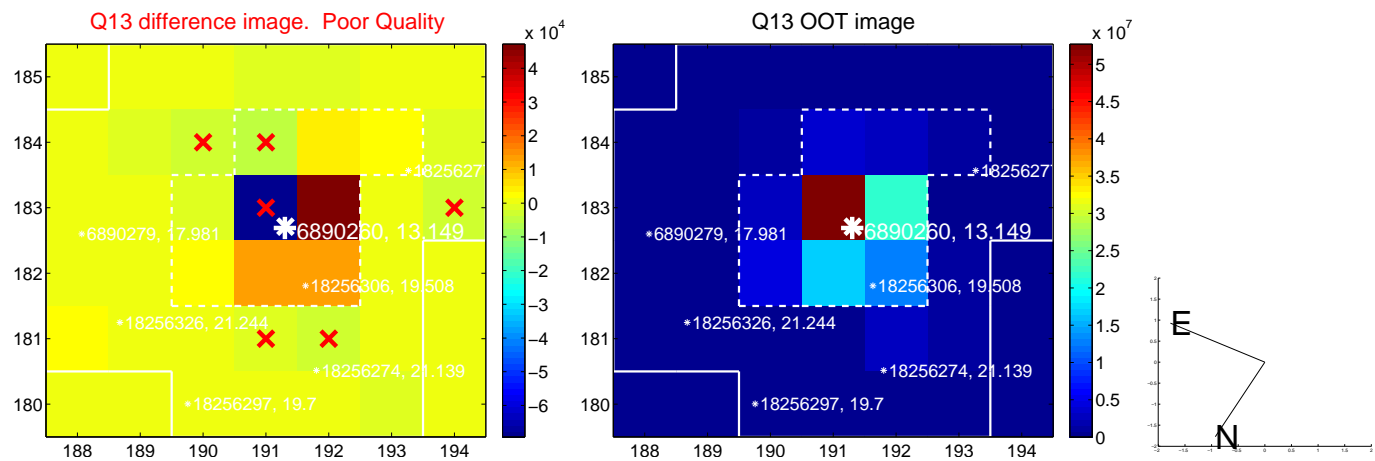
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



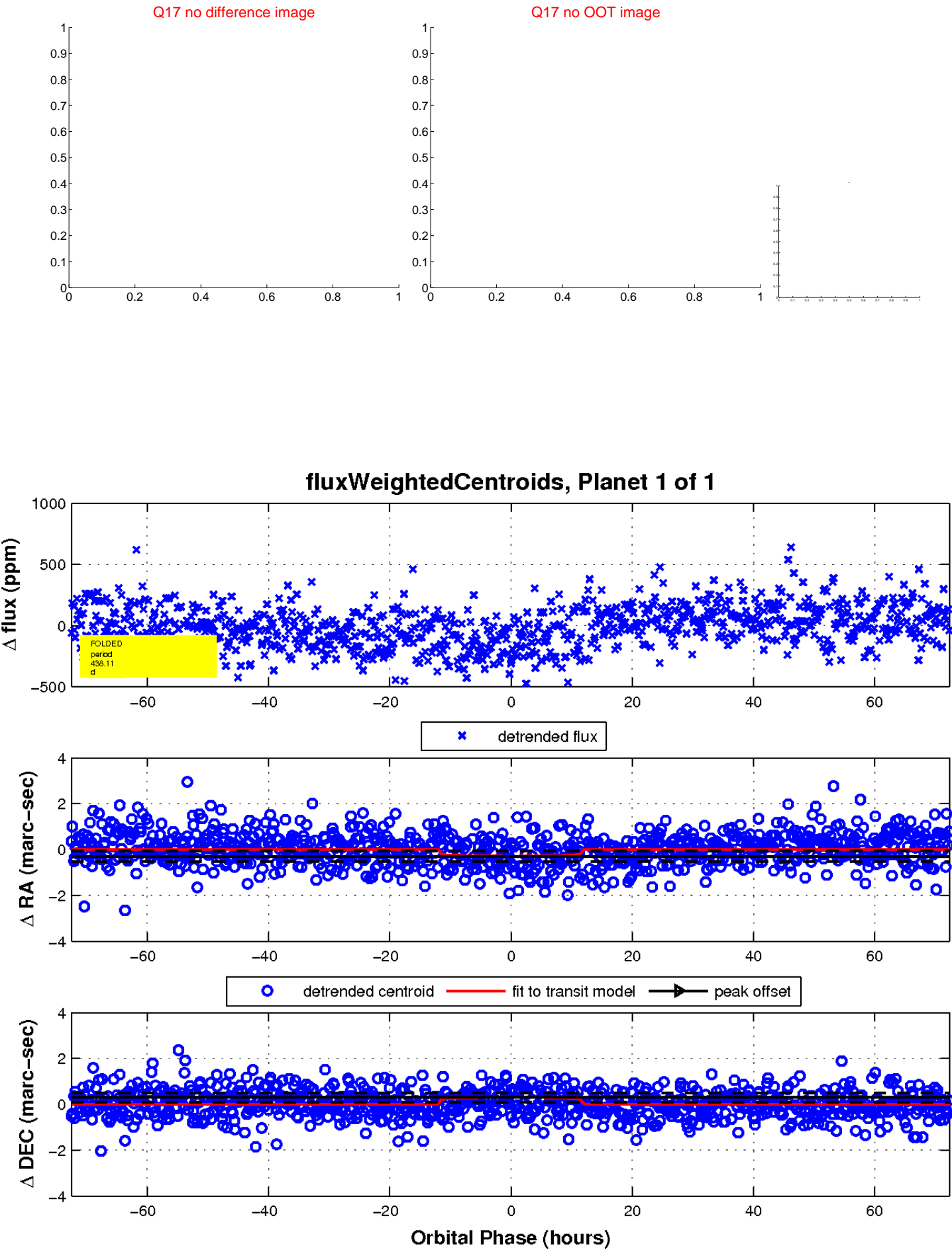
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

