

KIC 003835482

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})
003835482-01	OBS	No	361.971592	230.591398	173.9	34.010	9.0	7.7	1.27	6017	3.43	1.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003835482-01	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.

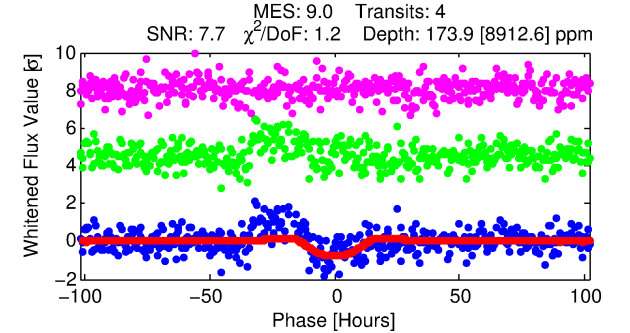
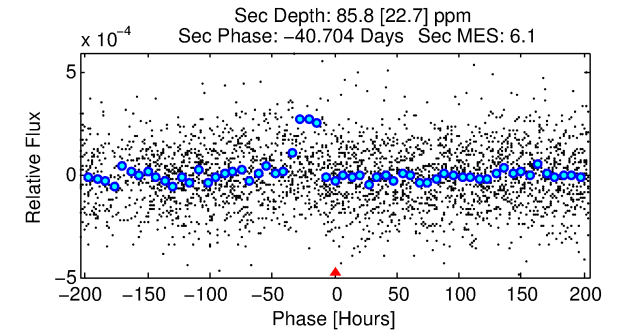
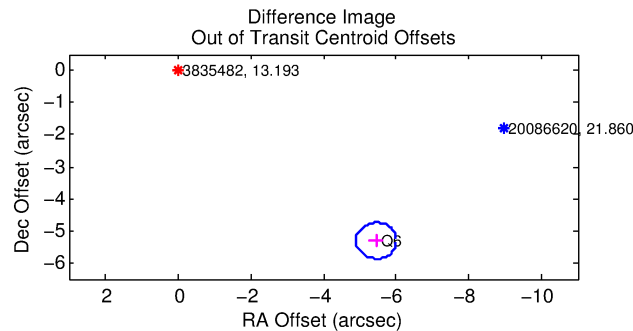
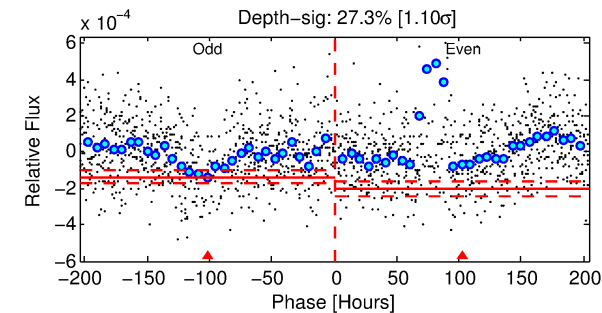
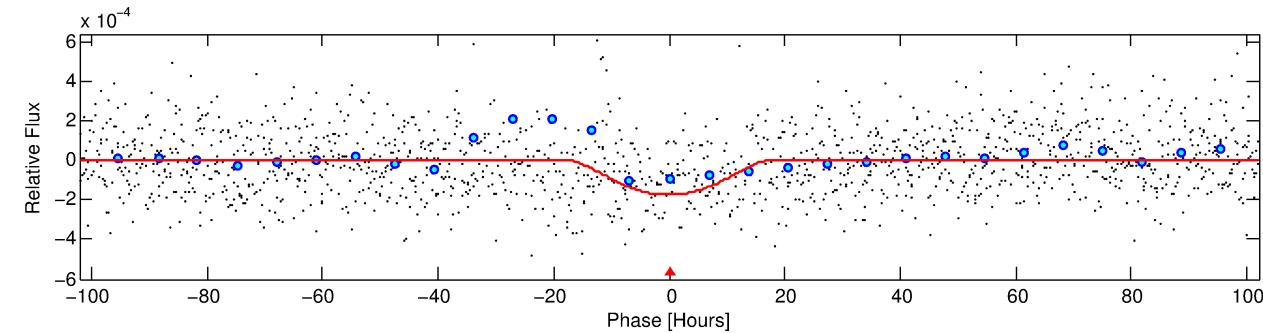
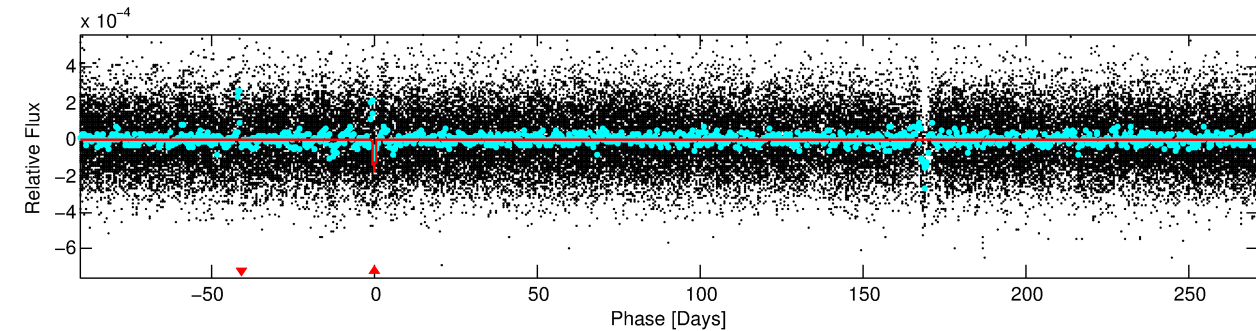
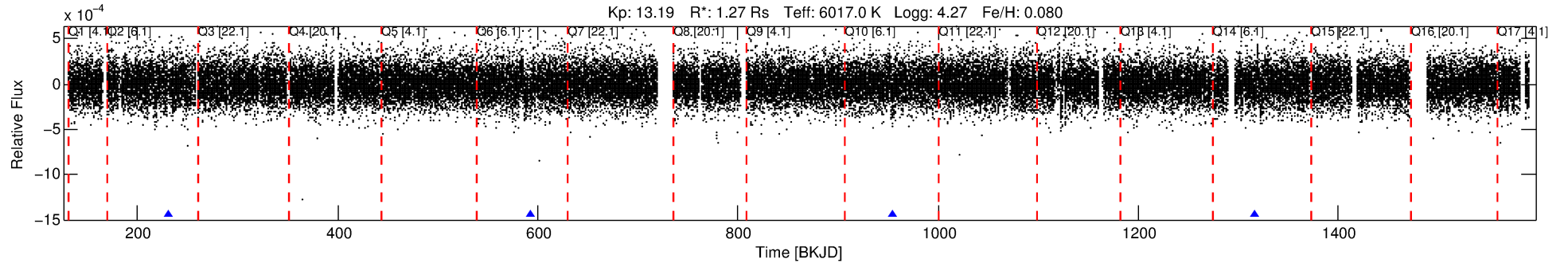
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003835482-01

No Significant Match Found

DV One-Page Summary

KIC: 3835482 Candidate: 1 of 1 Period: 361.972 d



DV Fit Results:

Period = 361.97159 [0.05857] d
Epoch = 230.5914 [0.1180] BKJD
Rp/R* = 0.0246 [0.1090]
a/R* = 18.19 [21.26]
b = 1.00 [0.71]
Seff = 1.81 [0.70]
Teq = 296 [28] K
Rp = 3.43 [15.19] Re
a = 1.0284 [0.2493] AU
Ag = 4244.45 [37570.90] [0.11 σ]
Teffp = 3689 [8157] K [0.42 σ]

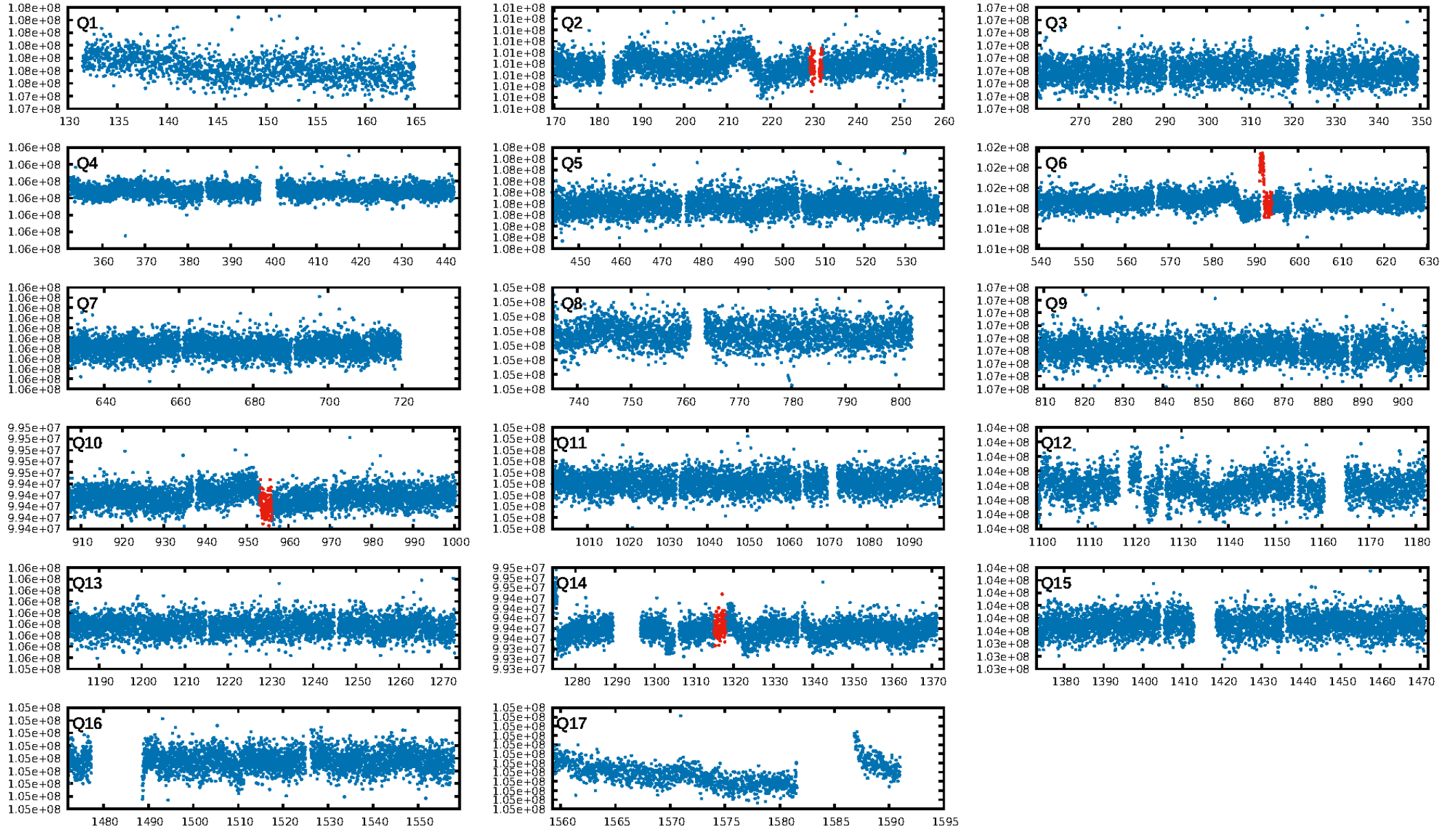
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 9.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.56e-19
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.152
Centroid-sig: 1.7%
Centroid-so: 4.290 arcsec [1.77 σ]
OotOffset-rm: 7.606 arcsec [40.57 σ]
KicOffset-rm: 8.006 arcsec [42.66 σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

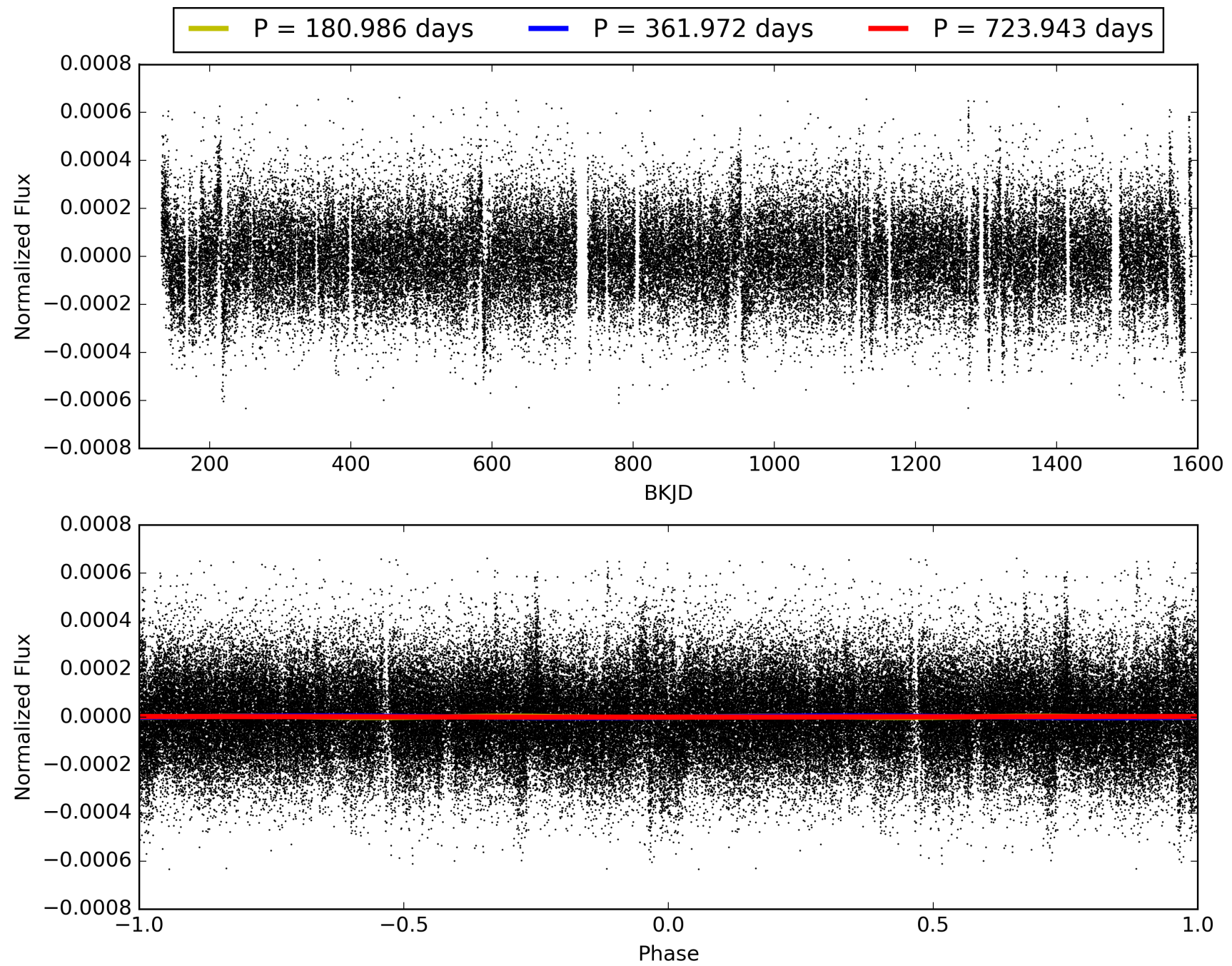
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:42:33 Z

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

TCE 003835482-01, PDC Light Curves

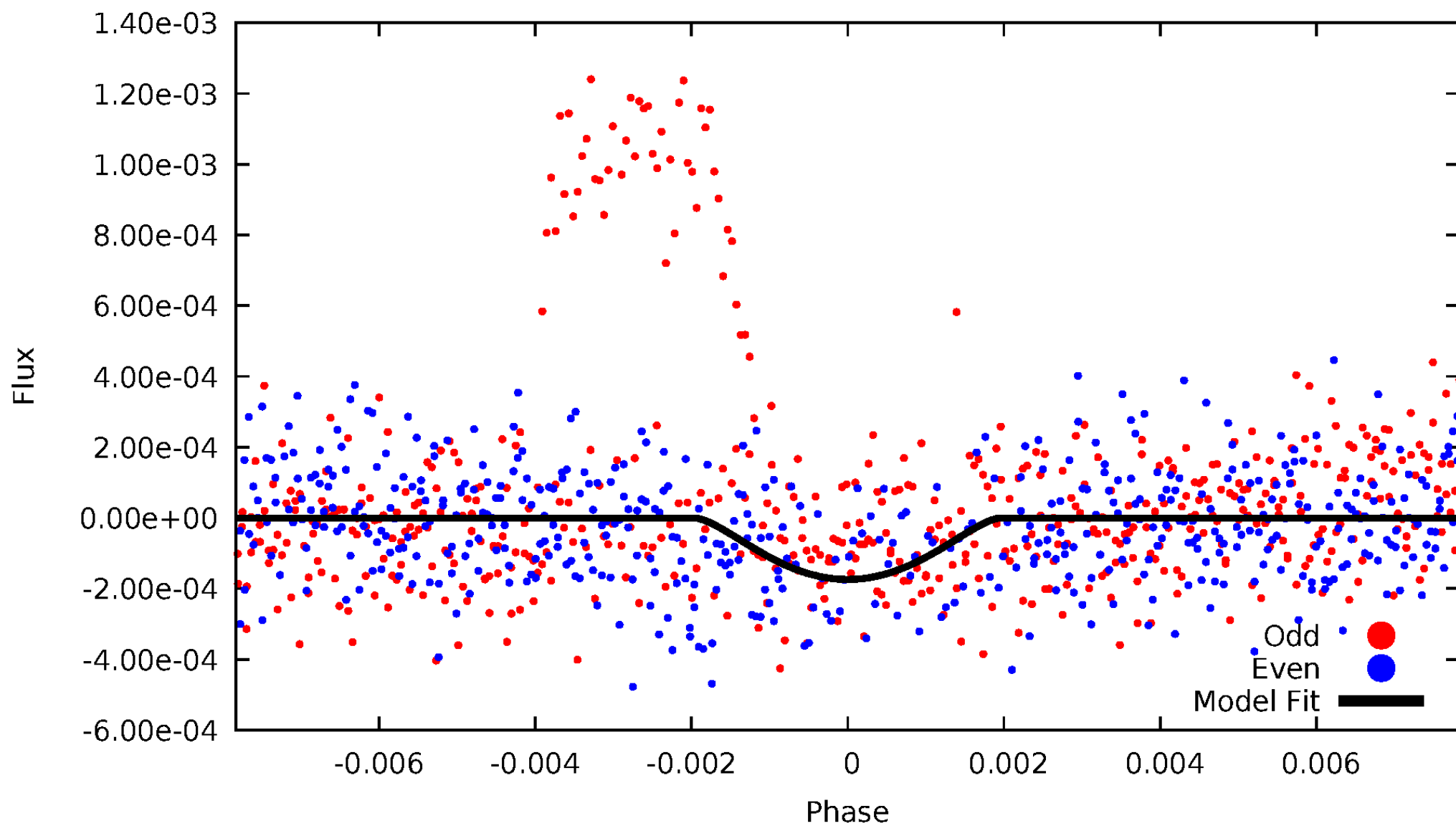


TCE 003835482-01



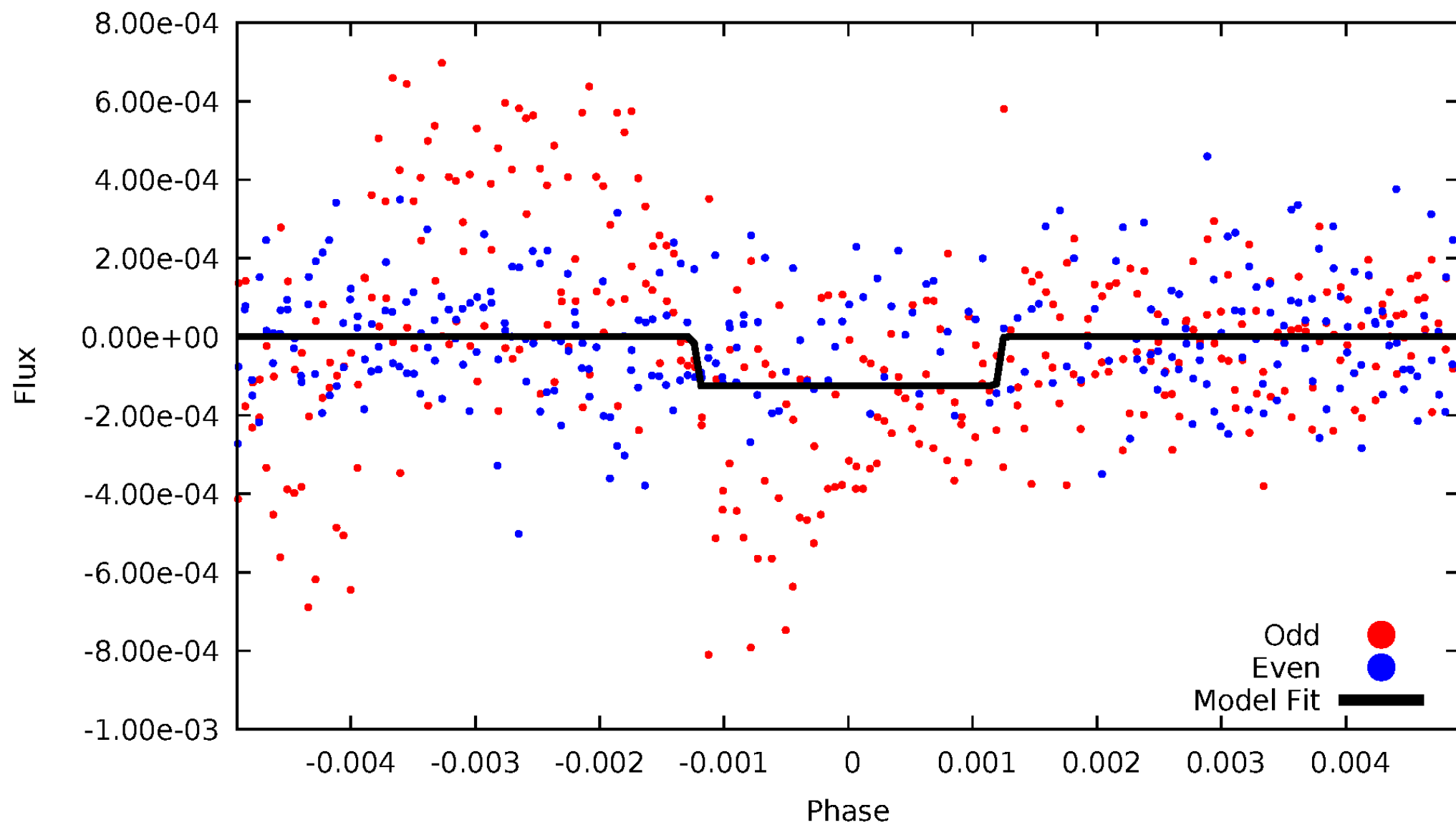
DV Odd/Even

TCE 003835482-01



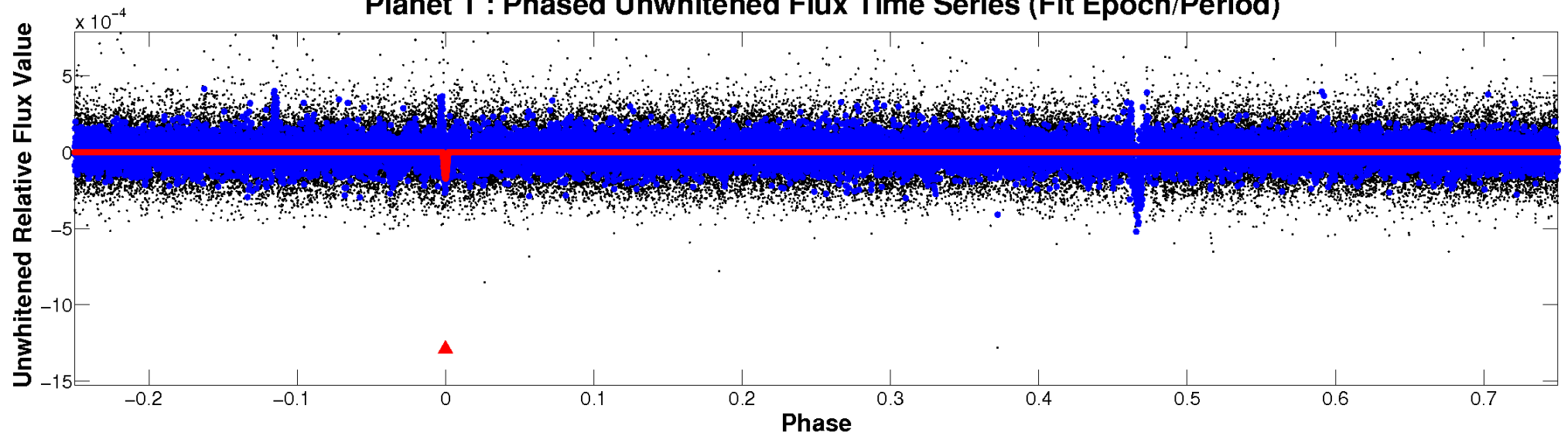
ALT Odd/Even

TCE 003835482-01

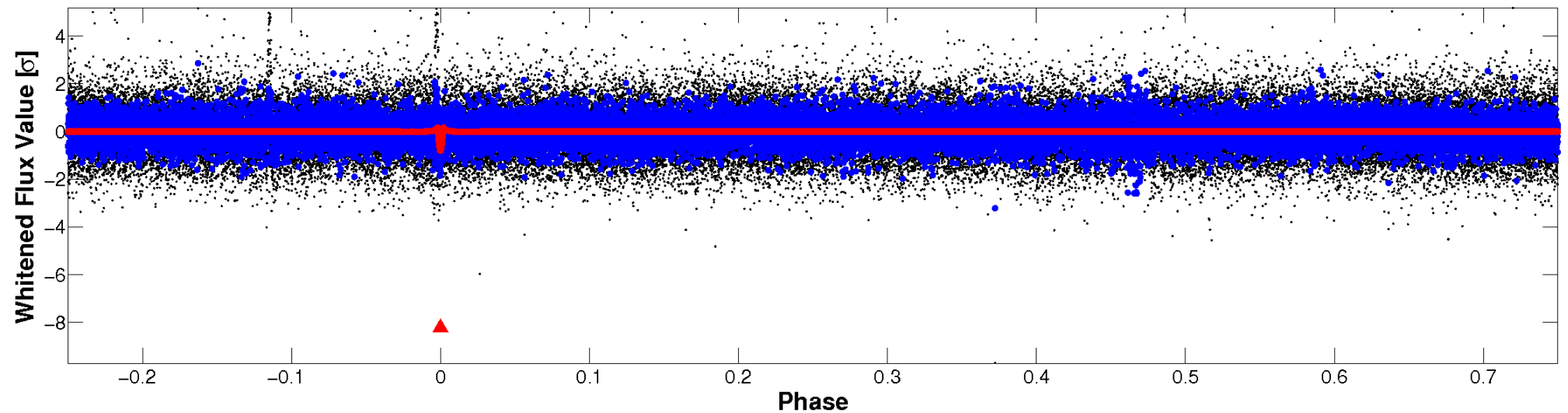


Non-Whitened Vs. Whitened Light Curve

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



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



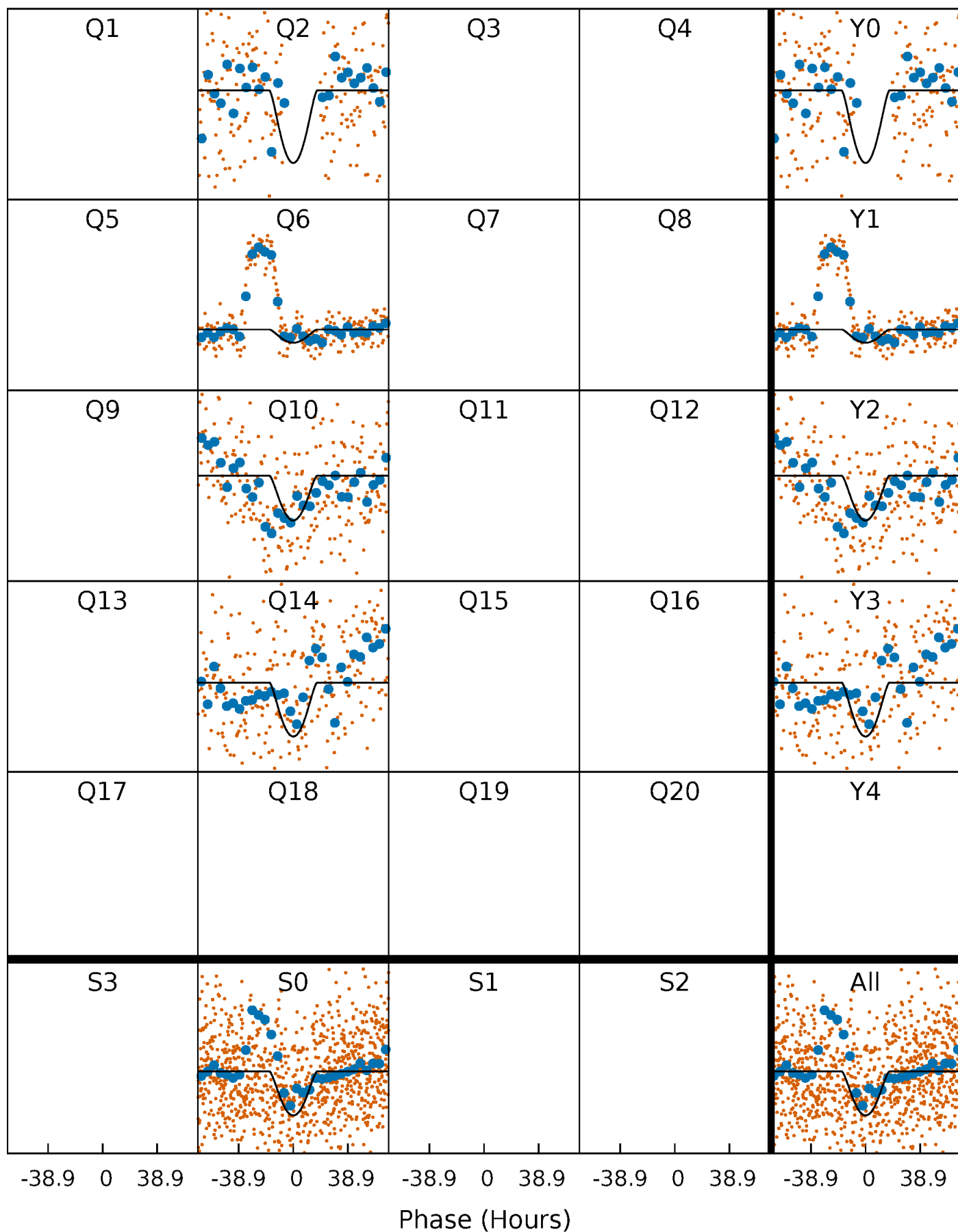
PDC Quarter-Phased Transit Curves

TCE 003835482-01 P=361.971592 Days $T_0=230.591398$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 003835482-01 P=361.971592 Days $T_0=230.591398$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

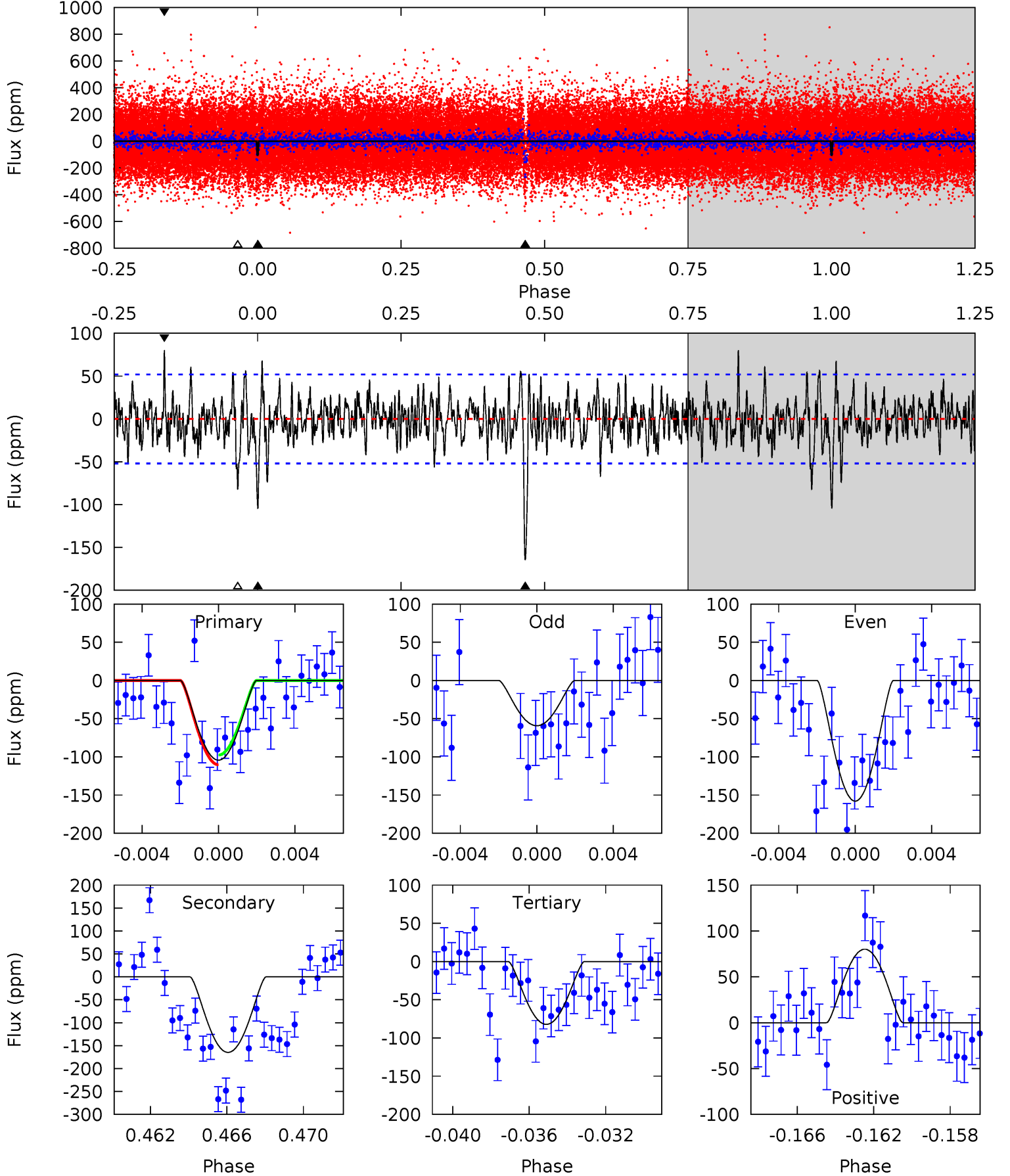
TCE 003835482-01 P=362.000949 Days $T_0=230.555102$ (BKJD)



DV Model-Shift Uniqueness Test

003835482-01, P = 361.971592 Days, E = 230.591398 Days

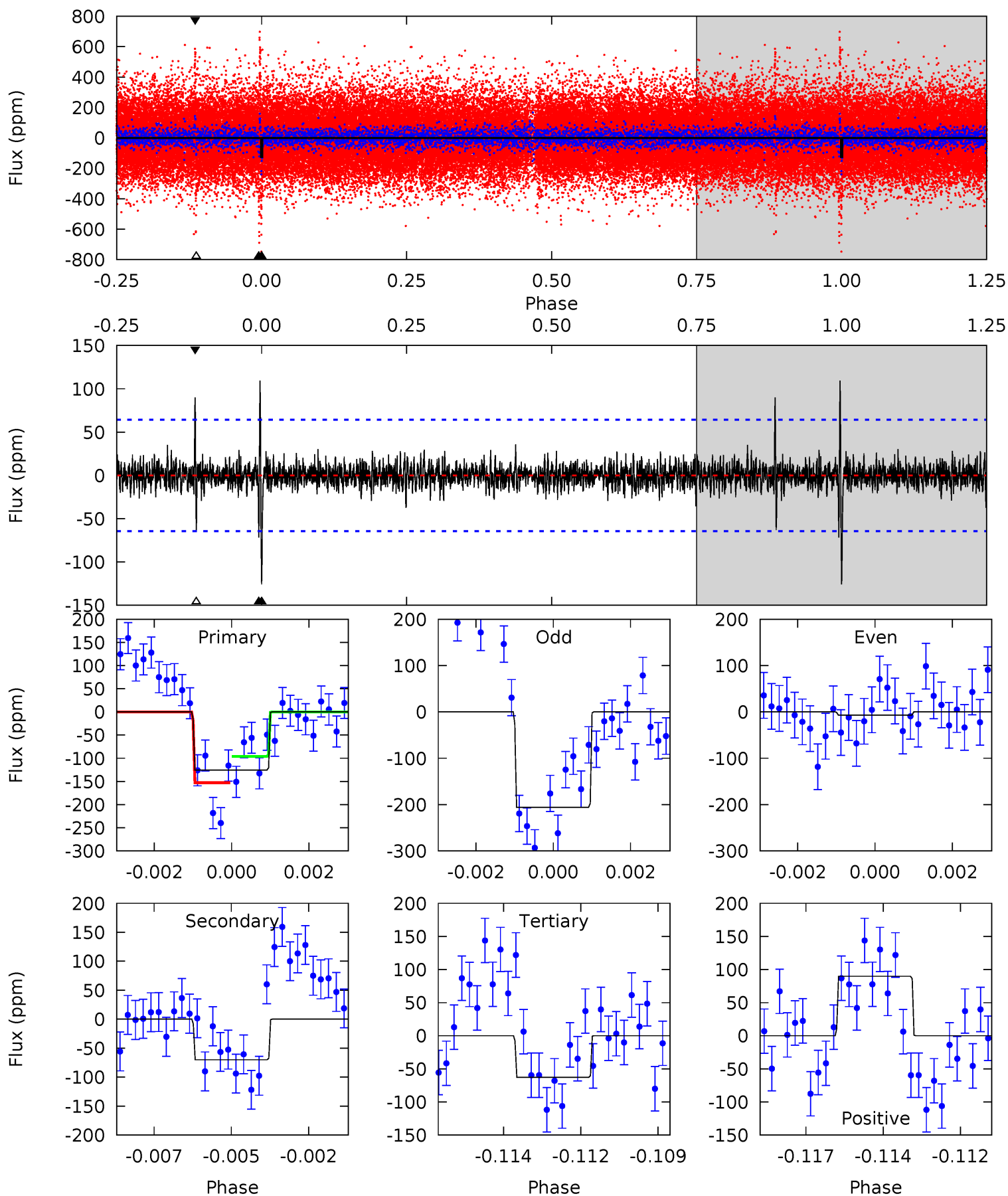
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	16.5	8.24	8.03	5.20	2.88	2.04	2.22	2.42	8.28	8.49	4.87	1.33	0.33	0.64



Alt Model-Shift Uniqueness Test

003835482-01, P = 362.000949 Days, E = 230.555102 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	5.75	5.17	7.38	5.29	3.02	0.82	5.15	2.95	0.58	-1.63	7.97	2.01	0.46	2.32



Stellar Parameters For KIC 003835482

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6017^{+190}_{-232}	$4.271^{+0.158}_{-0.193}$	$0.080^{+0.250}_{-0.300}$	$1.275^{+0.367}_{-0.267}$	$1.106^{+0.151}_{-0.151}$	$0.751^{+0.591}_{-0.382}$
	+3%/-4%	+4%/-5%	+312%/-375%	+29%/-21%	+14%/-14%	+79%/-51%
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 003835482-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-165 ± 10	$11.90^{+11.96}_{-8.64}$	415^{+33}_{-28}	3007^{+1599}_{-500}	657^{+8220}_{-491}
Alt.	-70 ± 12	$10.76^{+12.05}_{-7.84}$	413^{+33}_{-28}	2733^{+1358}_{-439}	337^{+4167}_{-261}

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 $A_{obs} \gg 1.0$

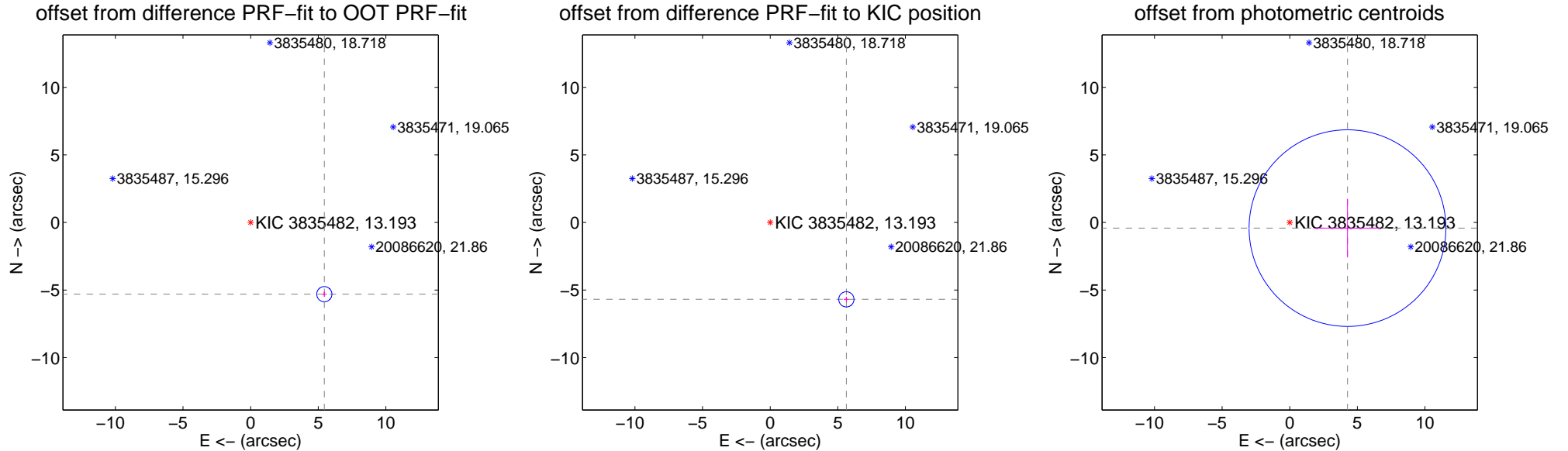
DV Centroid Data

Supplemental centroid analysis for 003835482-01. Kepler magnitude: 13.19. Transit SNR 7.65

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.42 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.606 ± 0.187	40.57	-5.449 ± 0.182	-5.306 ± 0.193
PRF-fit source offset from KIC position	8.006 ± 0.188	42.66	-5.634 ± 0.182	-5.688 ± 0.193
photometric centroid source offset	4.29 ± 2.43	1.77	-4.27 ± 2.43	-0.42 ± 2.17



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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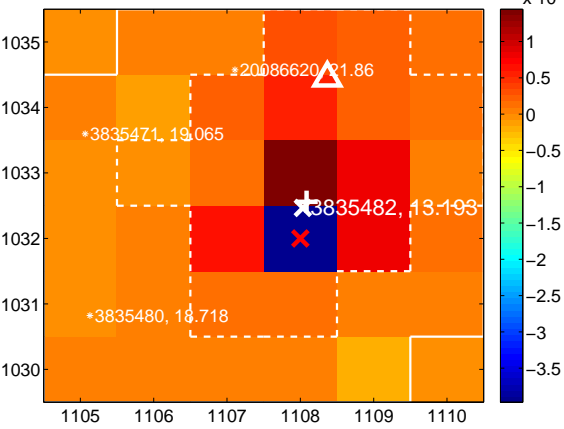
Q5 no difference image



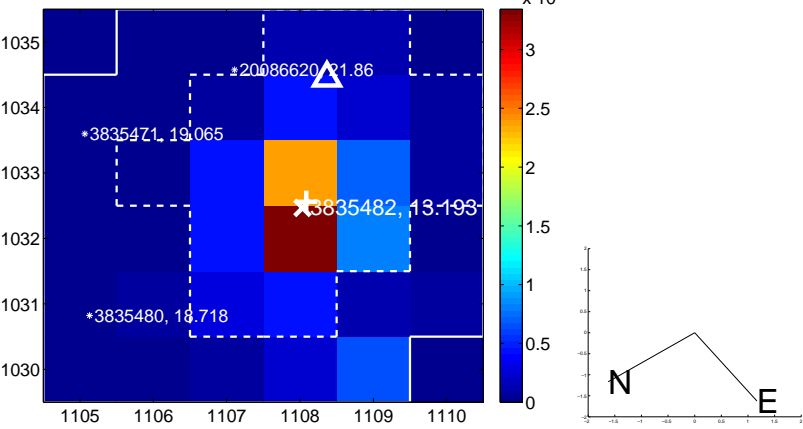
Q5 no OOT image



Q6 difference image. Poor Quality



Q6 OOT image



Q7 no difference image



Q7 no OOT image



Q8 no difference image



Q8 no OOT image



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

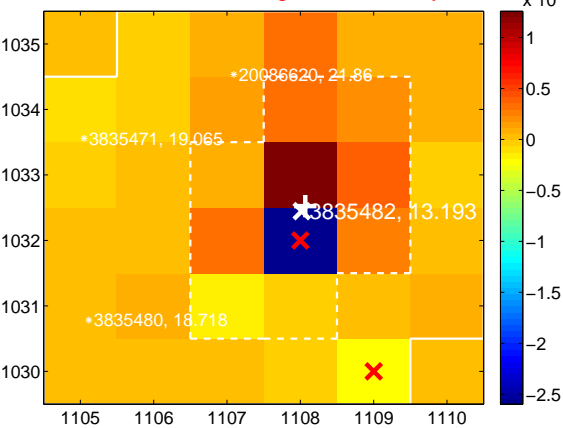
Q9 no difference image



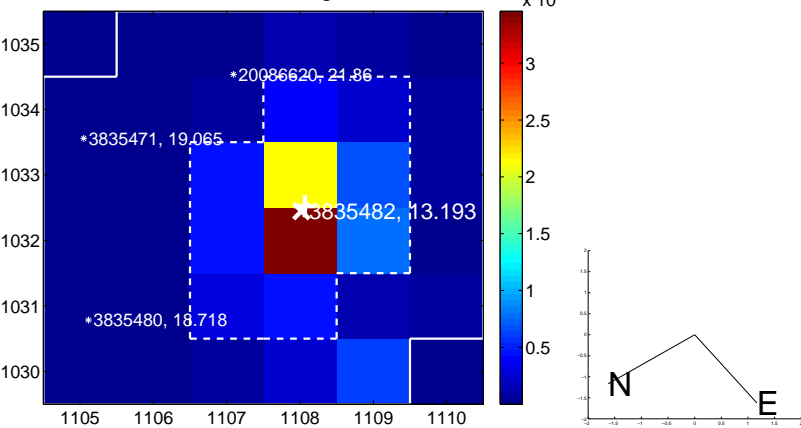
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



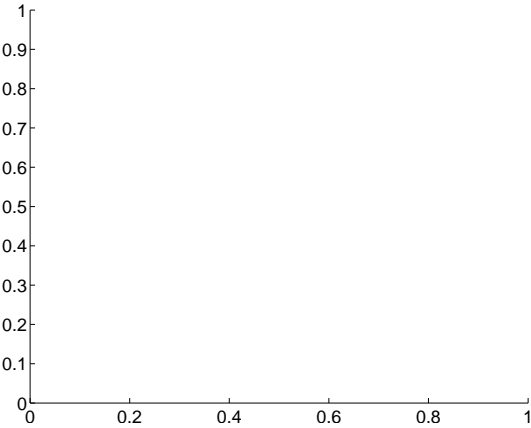
Q11 no difference image



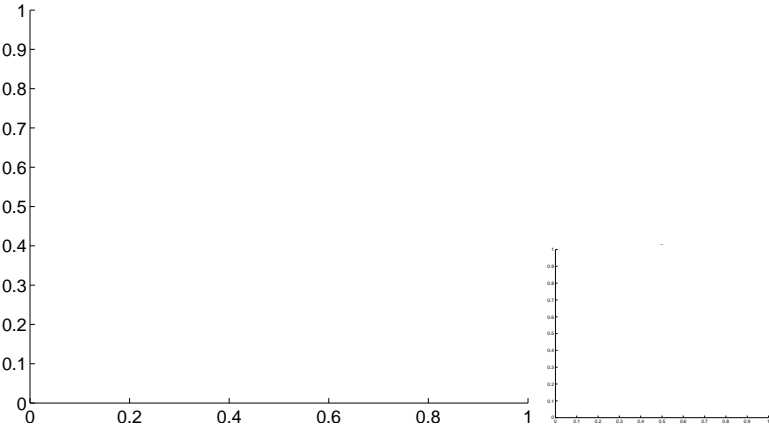
Q11 no OOT image



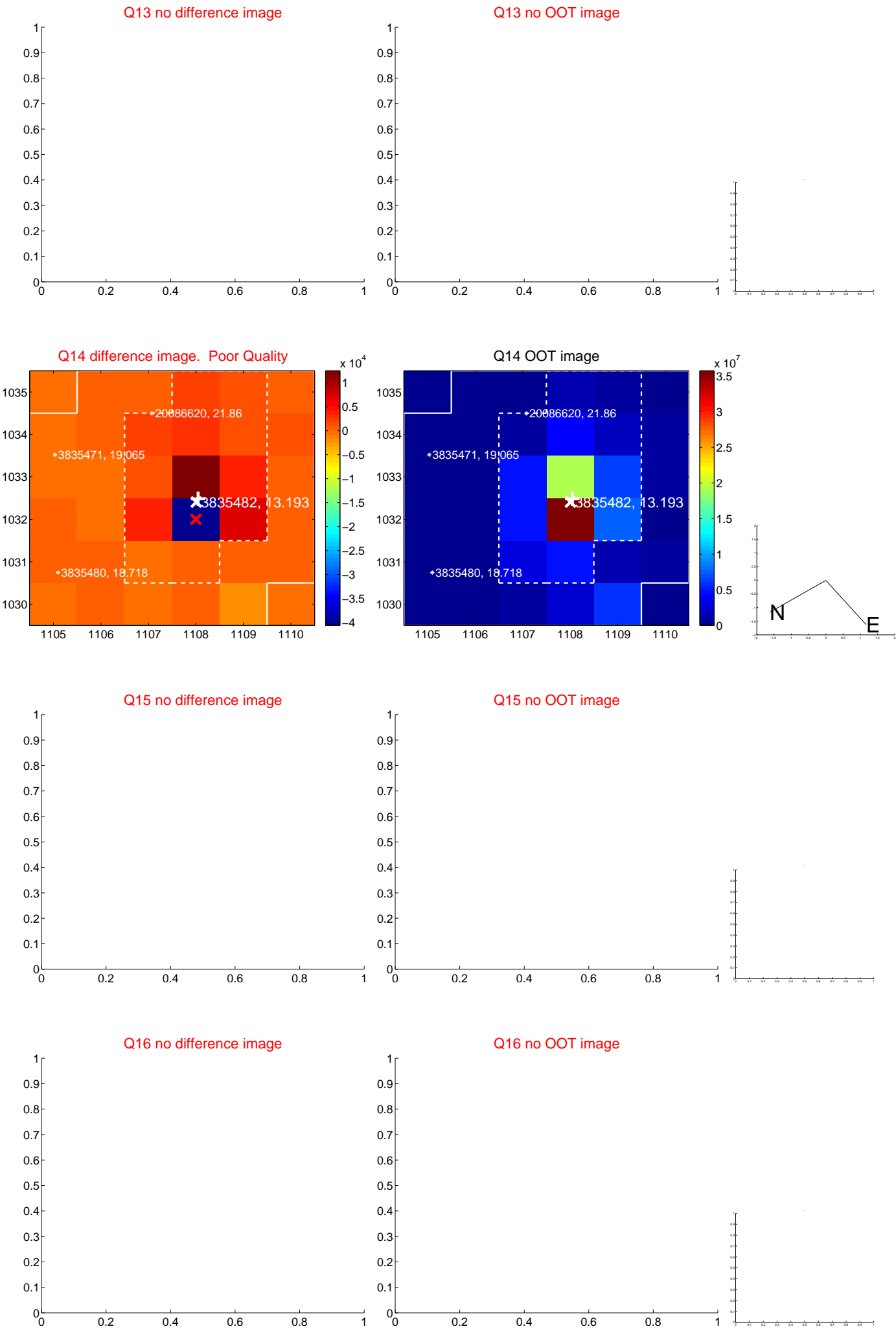
Q12 no difference image



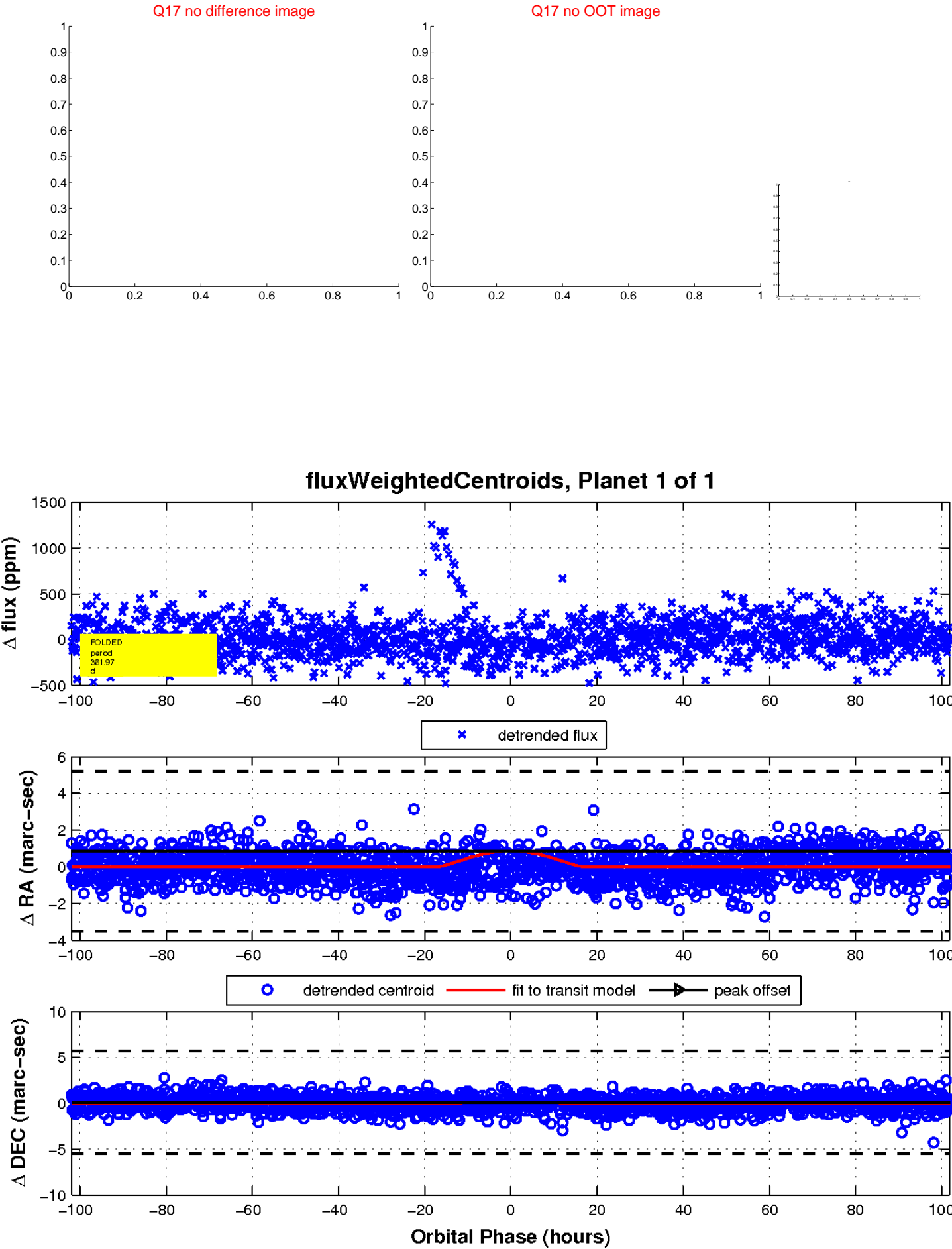
Q12 no OOT image



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



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



UKIRT Image

Declination

