

KIC 007764677

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})
007764677-01	OBS	No	465.901008	448.747635	187.6	14.235	7.6	7.8	1.27	6011	1.88	1.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007764677-01	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.

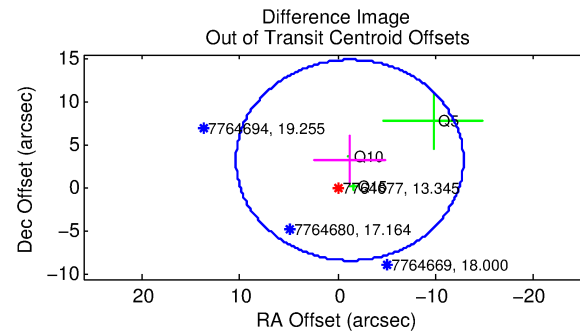
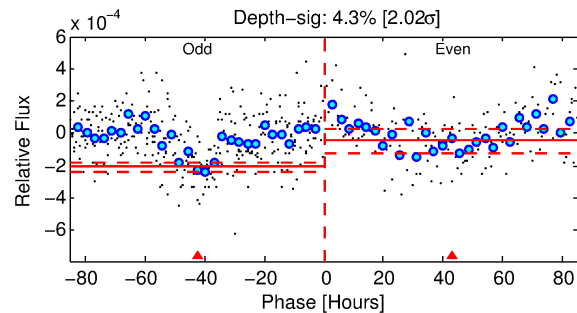
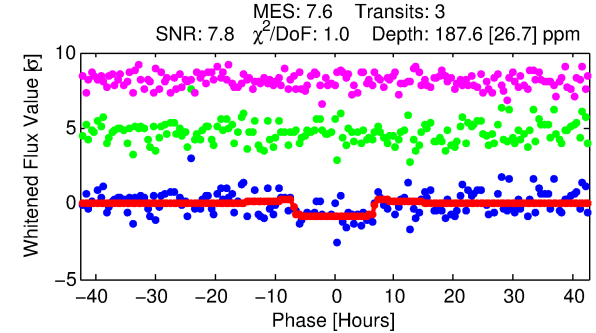
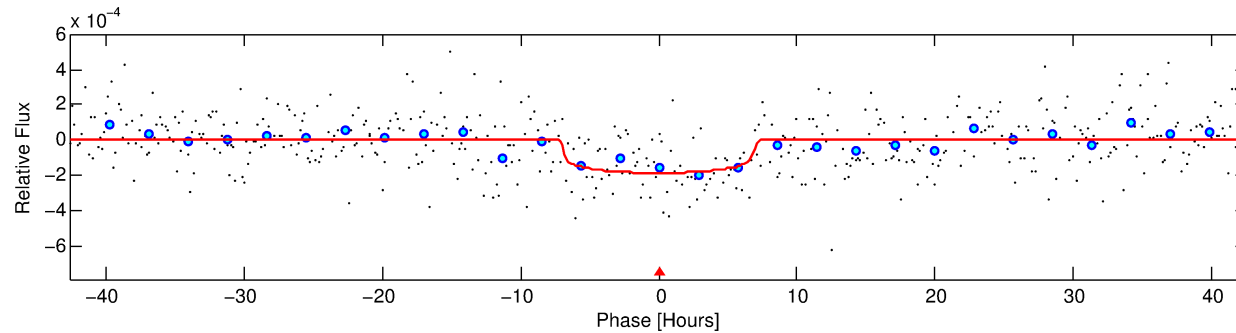
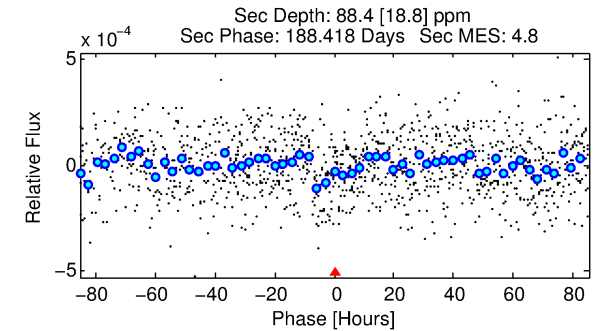
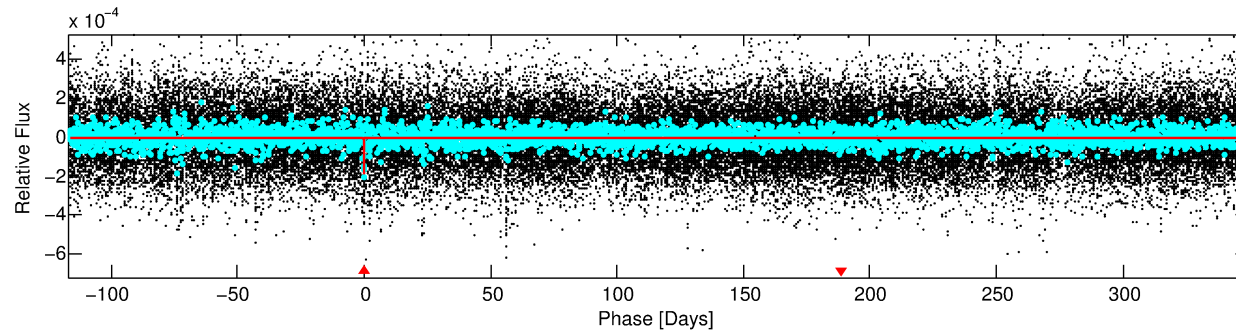
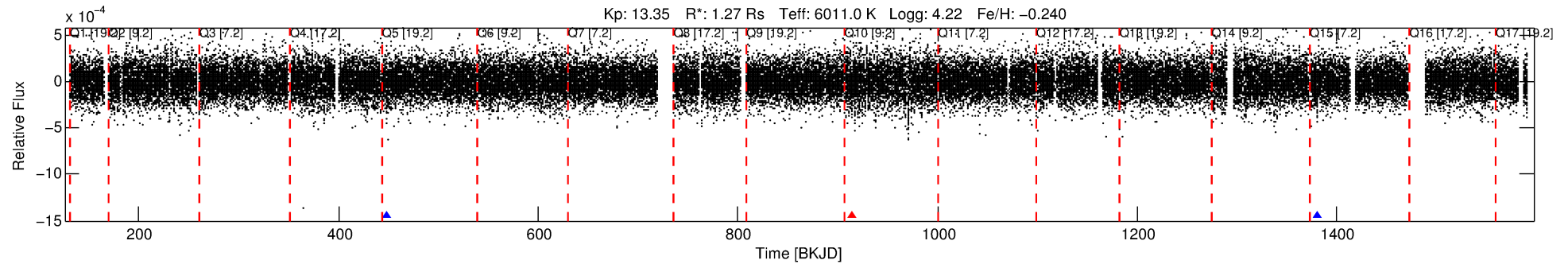
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007764677-01

No Significant Match Found

DV One-Page Summary

KIC: 7764677 Candidate: 1 of 1 Period: 465.901 d



DV Fit Results:

Period = 465.90101 [0.01603] d
Epoch = 448.7476 [0.0196] BKJD
Rp/R* = 0.0136 [0.0045]
a/R* = 173.05 [280.22]
b = 0.74 [0.99]
Seff = 1.39 [0.61]
Teq = 277 [31] K
Rp = 1.88 [0.81] Re
a = 1.1625 [0.3032] AU
Ag = 18656.74 [15250.14] [1.22σ]
Teffp = 5002 [895] K [5.27σ]

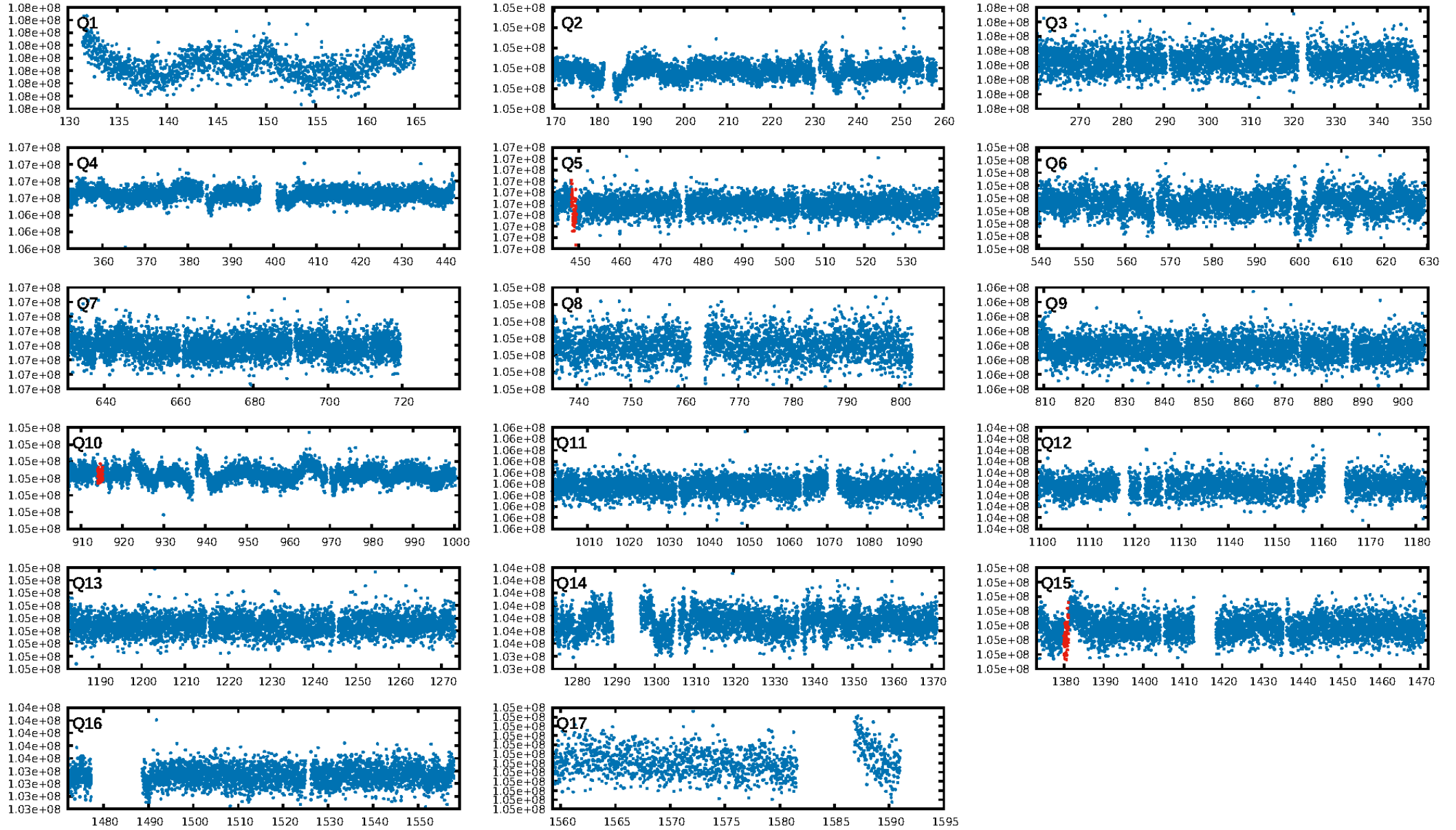
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 20.2%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 4.75e-09
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 15.55
Centroid-sig: 0.1%
Centroid-so: 3.786 arcsec [2.35σ]
OotOffset-rm: 3.482 arcsec [0.90σ]
KicOffset-rm: 3.551 arcsec [1.54σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

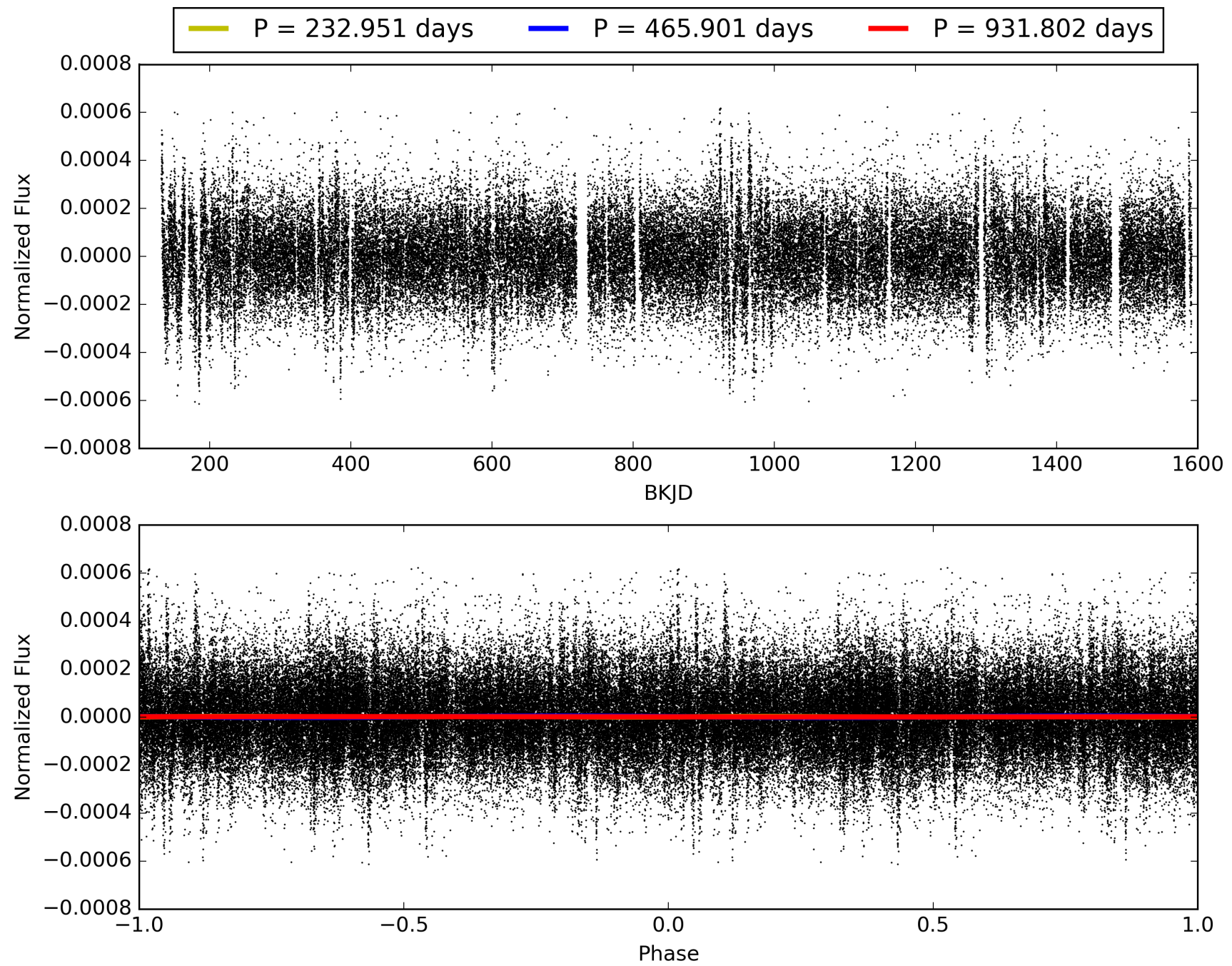
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:44:55 Z

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

TCE 007764677-01, PDC Light Curves

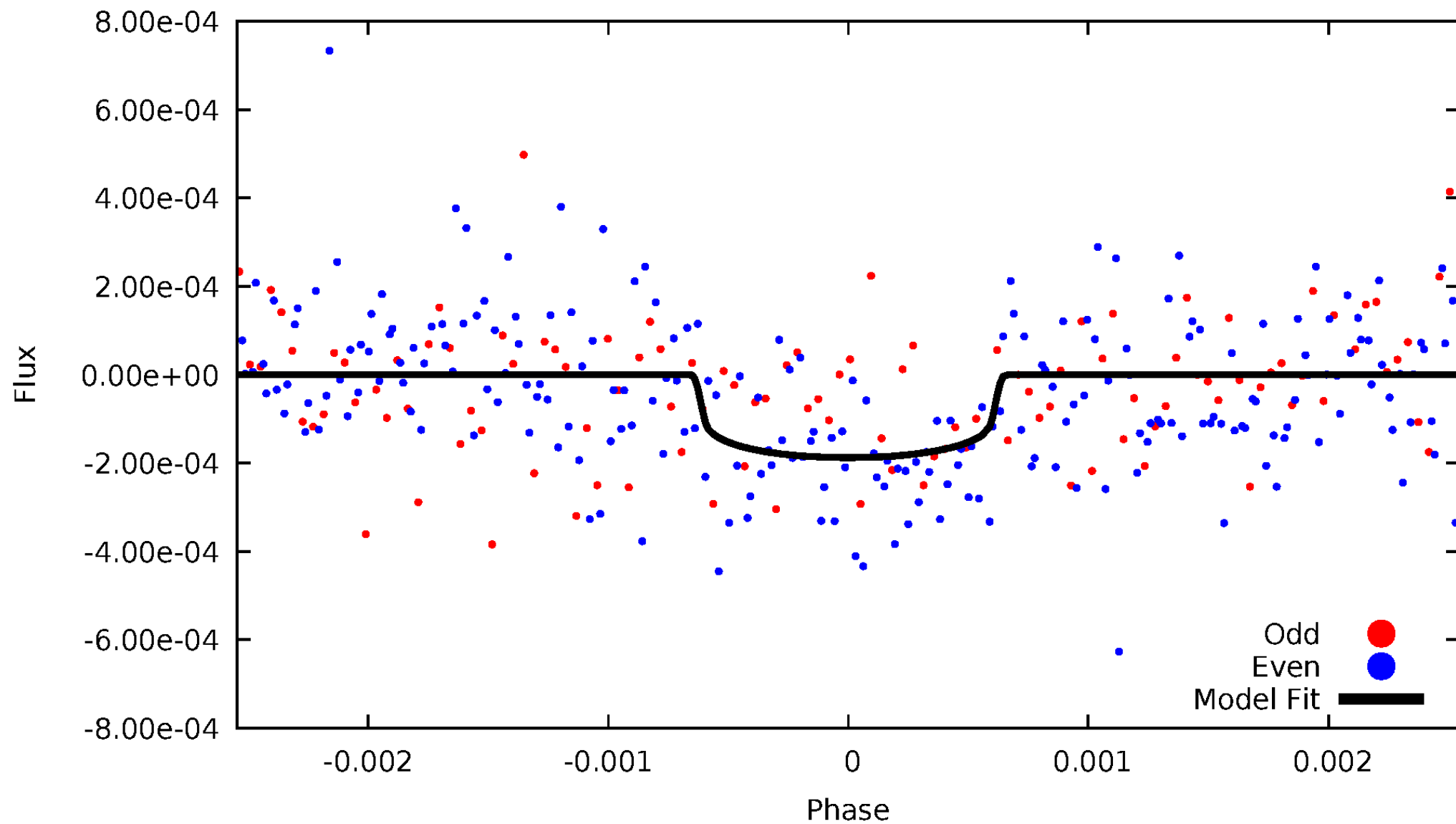


TCE 007764677-01



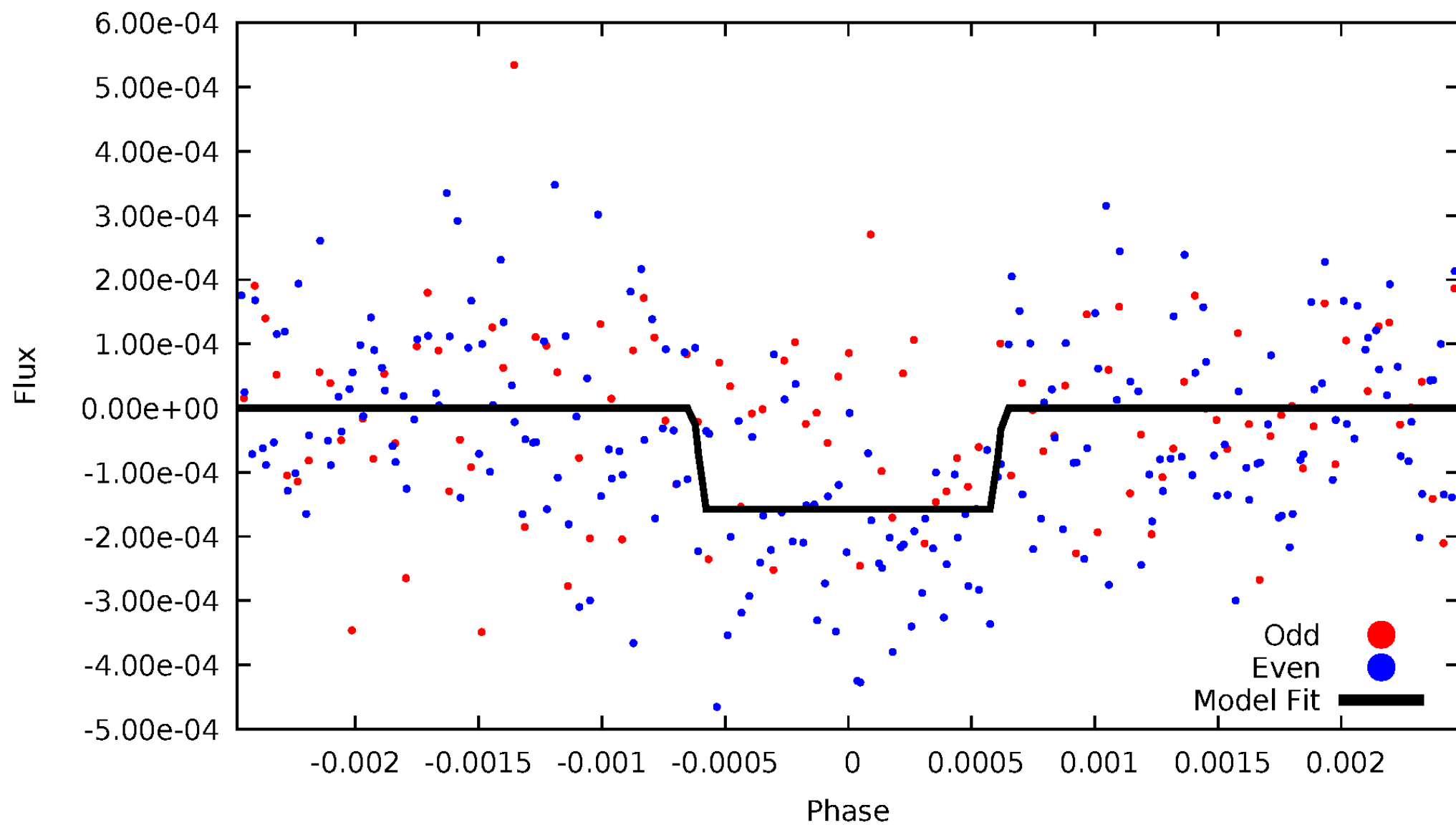
DV Odd/Even

TCE 007764677-01

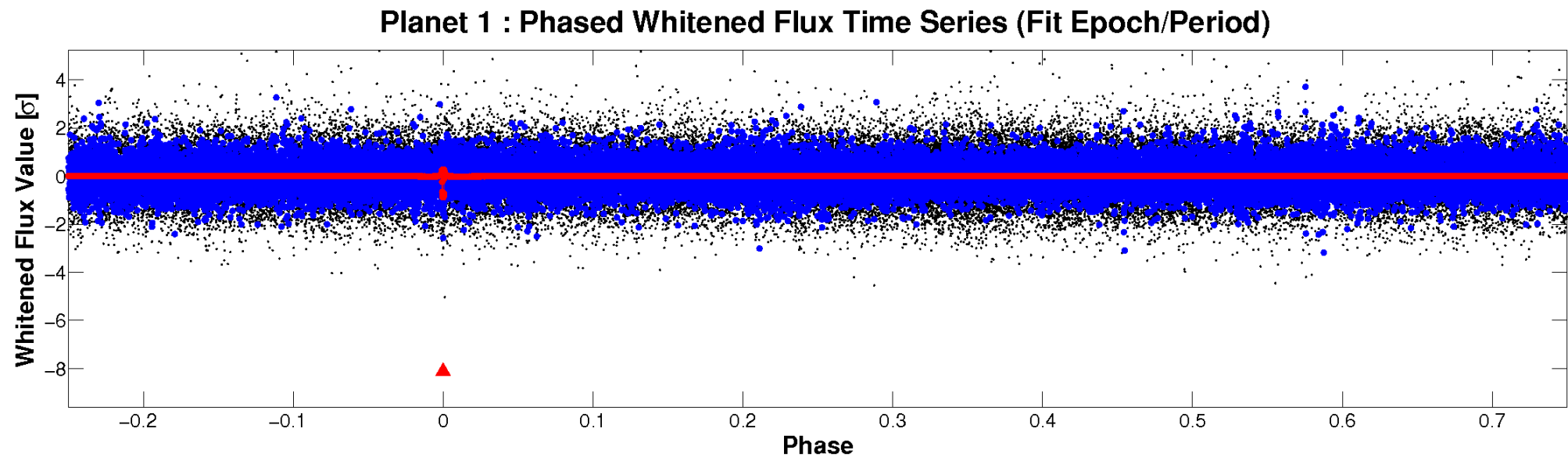
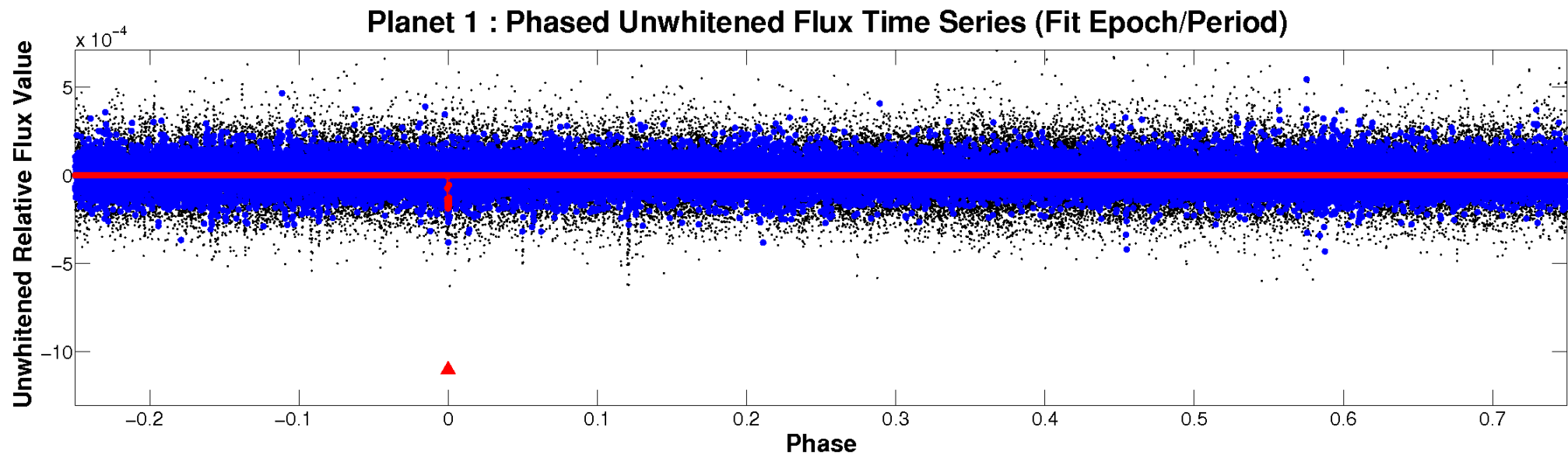


ALT Odd/Even

TCE 007764677-01



Non-Whitened Vs. Whitened Light Curve



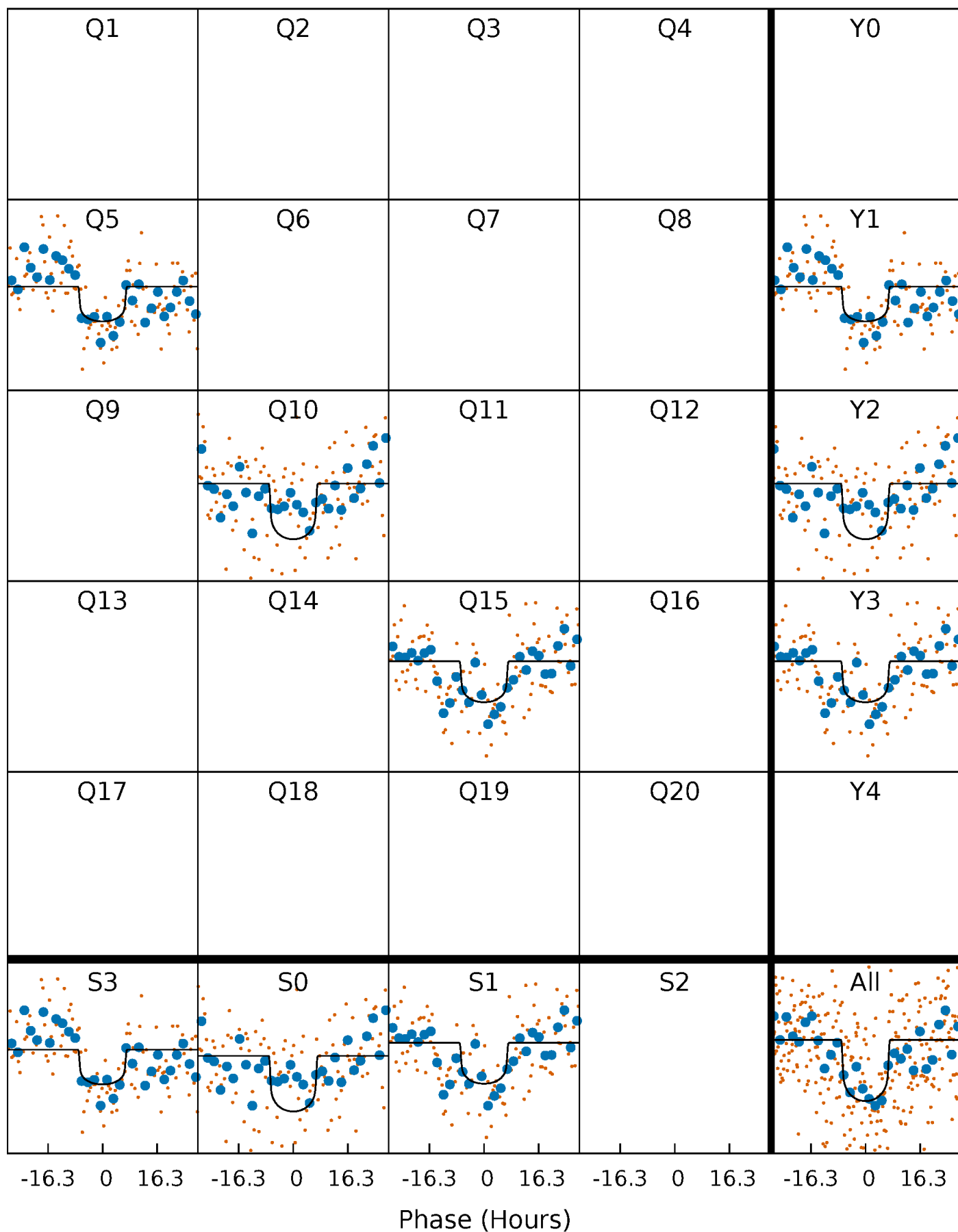
PDC Quarter-Phased Transit Curves

TCE 007764677-01 P=465.901008 Days $T_0=448.747635$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007764677-01 P=465.901008 Days $T_0=448.747635$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

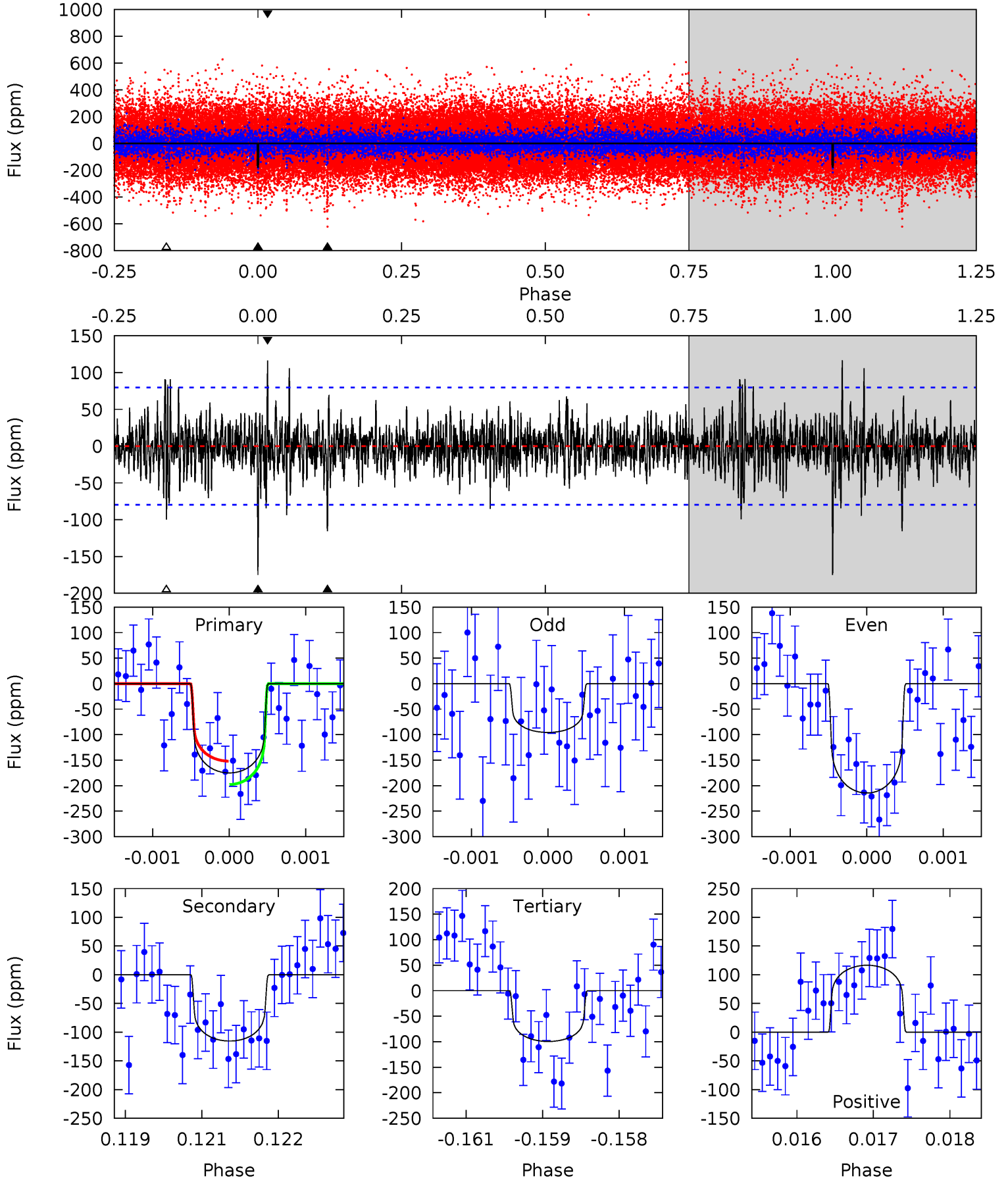
TCE 007764677-01 P=465.905601 Days $T_0=448.744816$ (BKJD)



DV Model-Shift Uniqueness Test

007764677-01, P = 465.901008 Days, E = 448.747635 Days

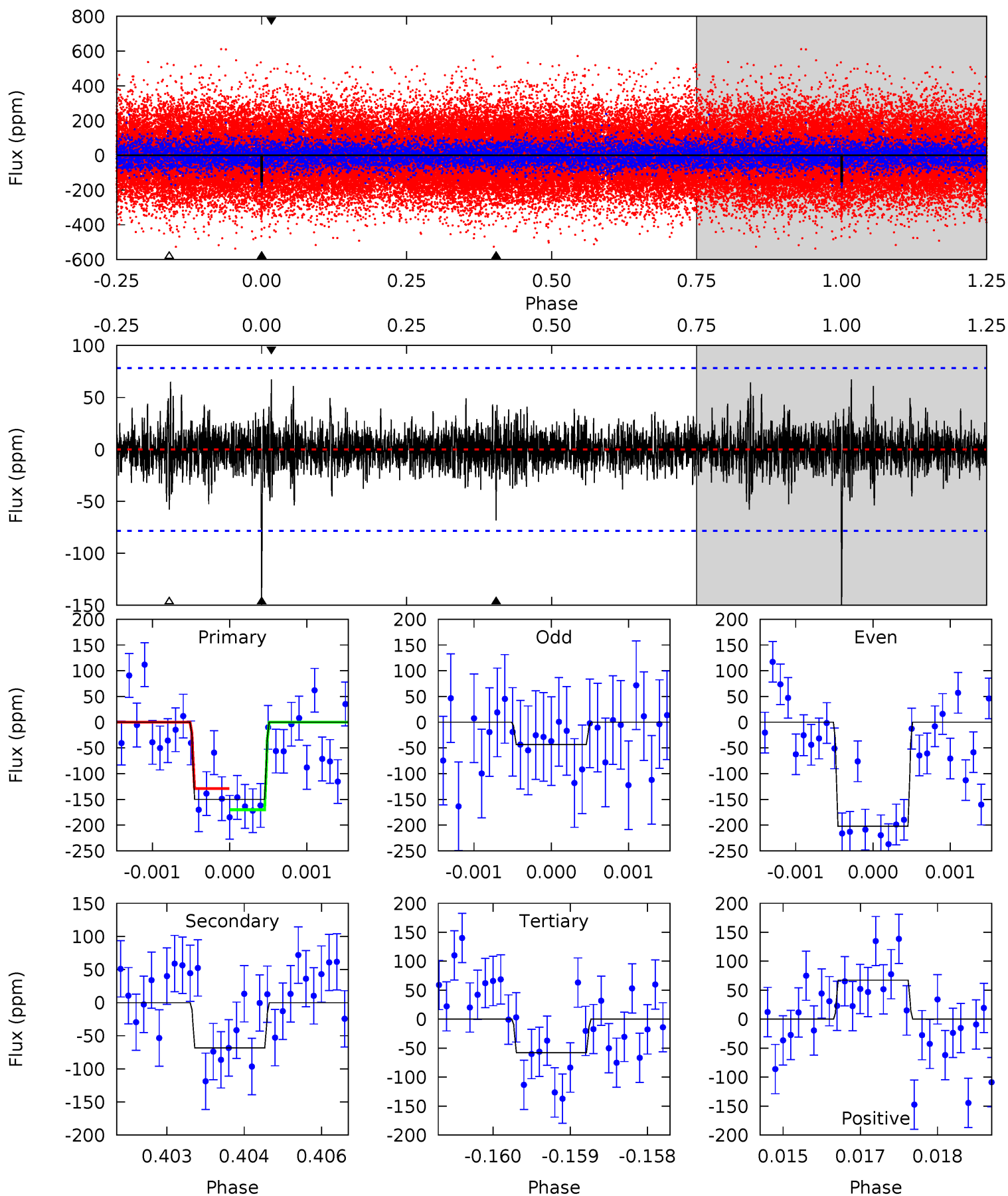
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	7.83	6.74	7.90	5.41	3.22	1.54	5.12	3.97	1.08	-0.07	3.77	0.89	0.40	1.55



Alt Model-Shift Uniqueness Test

007764677-01, P = 465.905601 Days, E = 448.744816 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	4.70	3.99	4.65	5.41	3.22	0.93	6.35	5.69	0.71	0.06	5.16	0.82	0.31	1.42



Stellar Parameters For KIC 007764677

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6011^{+210}_{-210}	$4.217^{+0.246}_{-0.164}$	$-0.240^{+0.300}_{-0.300}$	$1.267^{+0.342}_{-0.342}$	$0.966^{+0.154}_{-0.112}$	$0.669^{+0.946}_{-0.319}$
	+3%/-3%	+6%/-4%	+125%/-125%	+27%/-27%	+16%/-12%	+141%/-48%
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 007764677-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-115 ± 15	$1.84^{+0.70}_{-0.58}$	383^{+32}_{-31}	5357^{+1140}_{-608}	25658^{+29889}_{-12561}
Alt.	-68 ± 14	$1.66^{+0.76}_{-0.63}$	385^{+32}_{-32}	5001^{+1272}_{-696}	17962^{+30042}_{-9640}

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 $A_{obs} \gg 1.0$

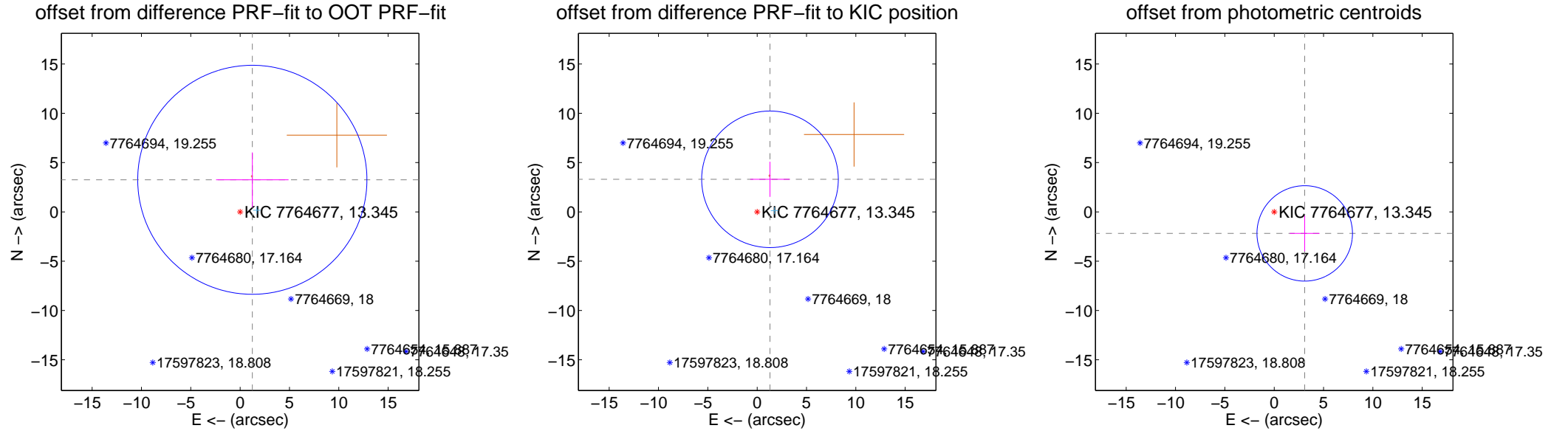
DV Centroid Data

Supplemental centroid analysis for 007764677-01. Kepler magnitude: 13.35. Transit SNR 7.80

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

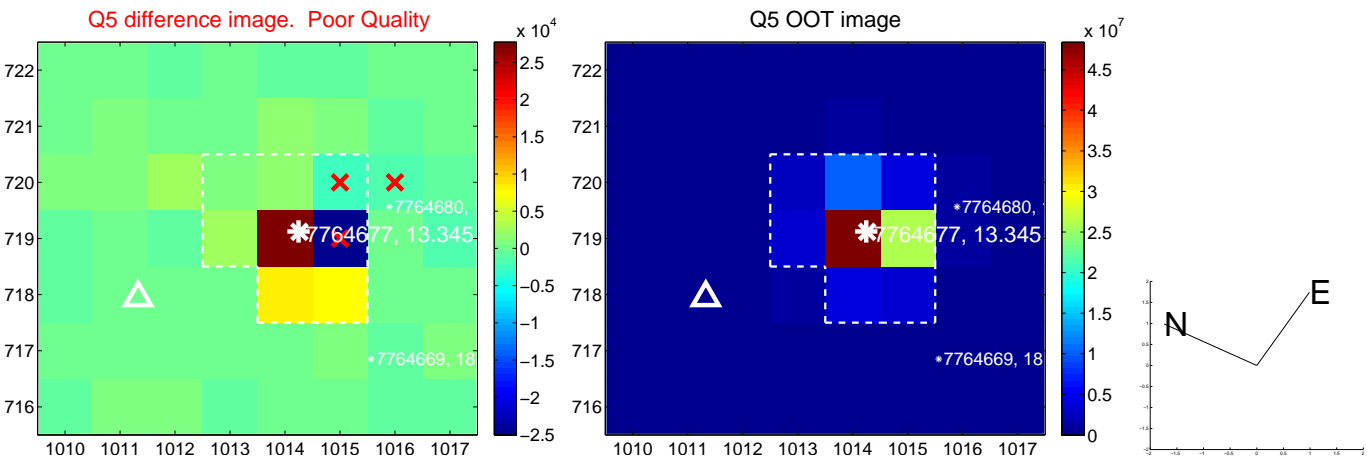
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.482 ± 3.871	0.90	-1.236 ± 3.673	3.255 ± 2.775
PRF-fit source offset from KIC position	3.551 ± 2.308	1.54	-1.300 ± 2.001	3.304 ± 1.782
photometric centroid source offset	3.79 ± 1.61	2.35	-3.09 ± 1.51	-2.18 ± 1.81



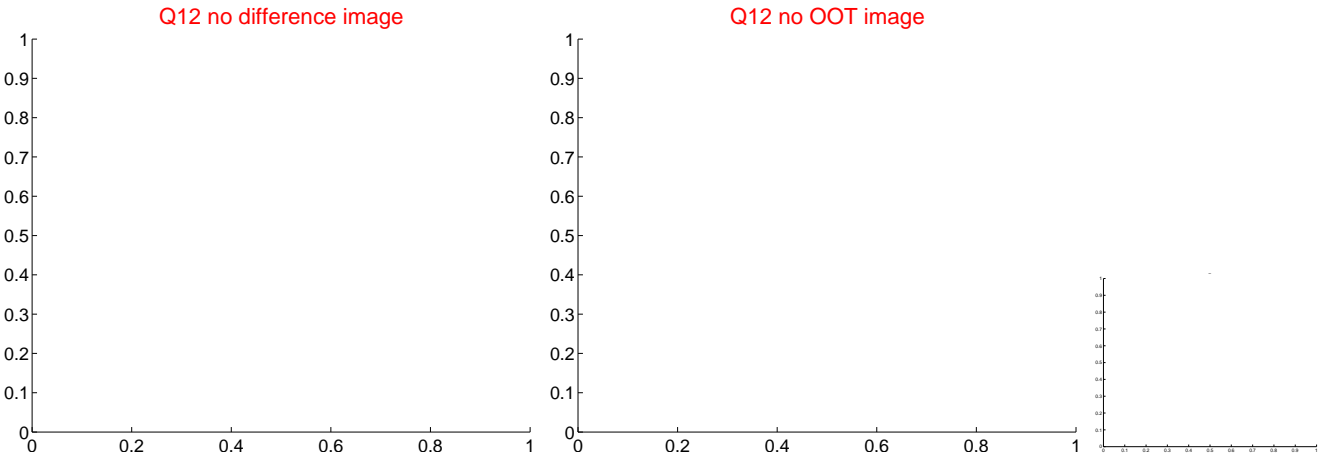
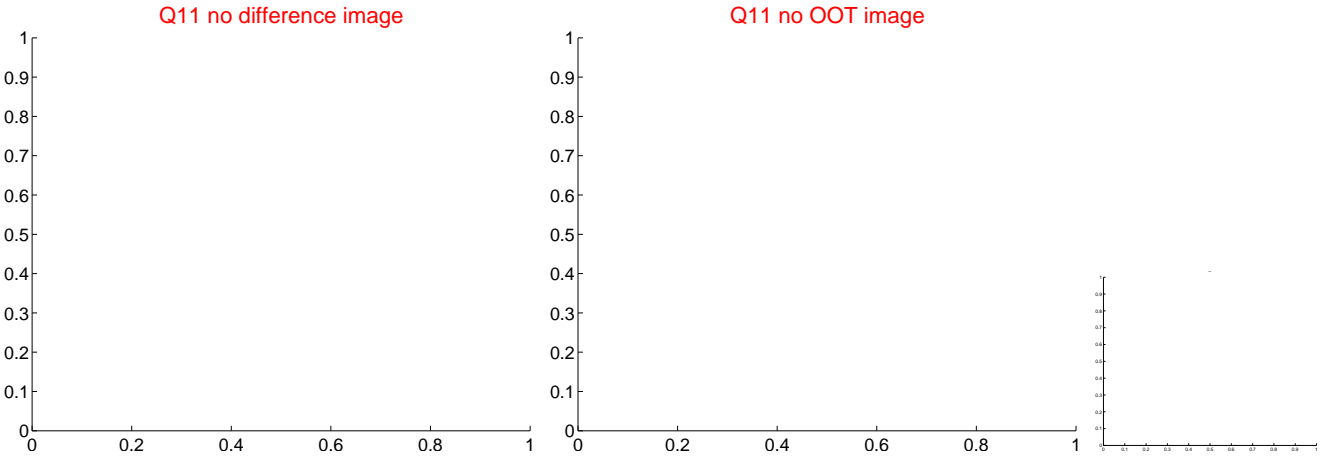
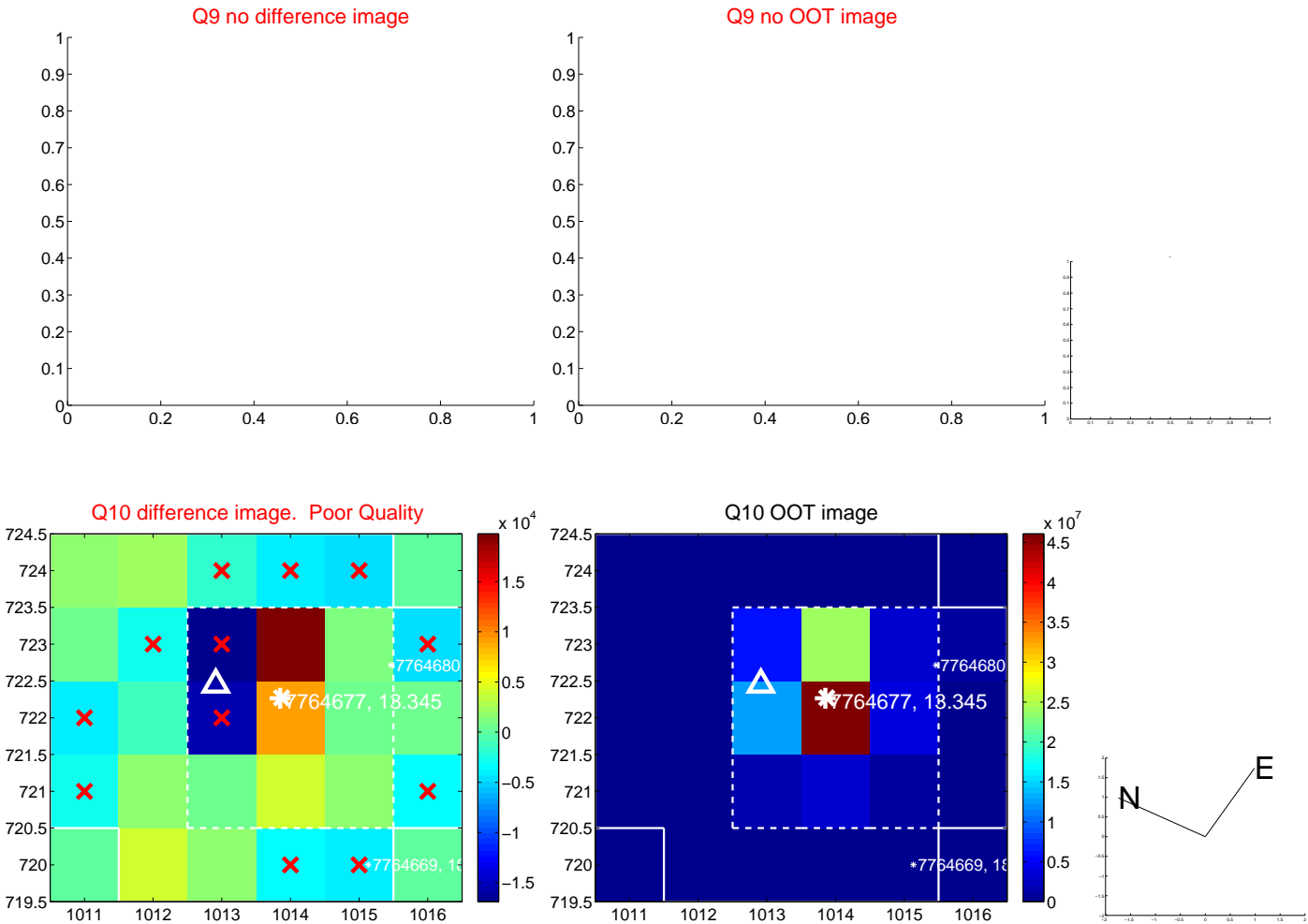
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



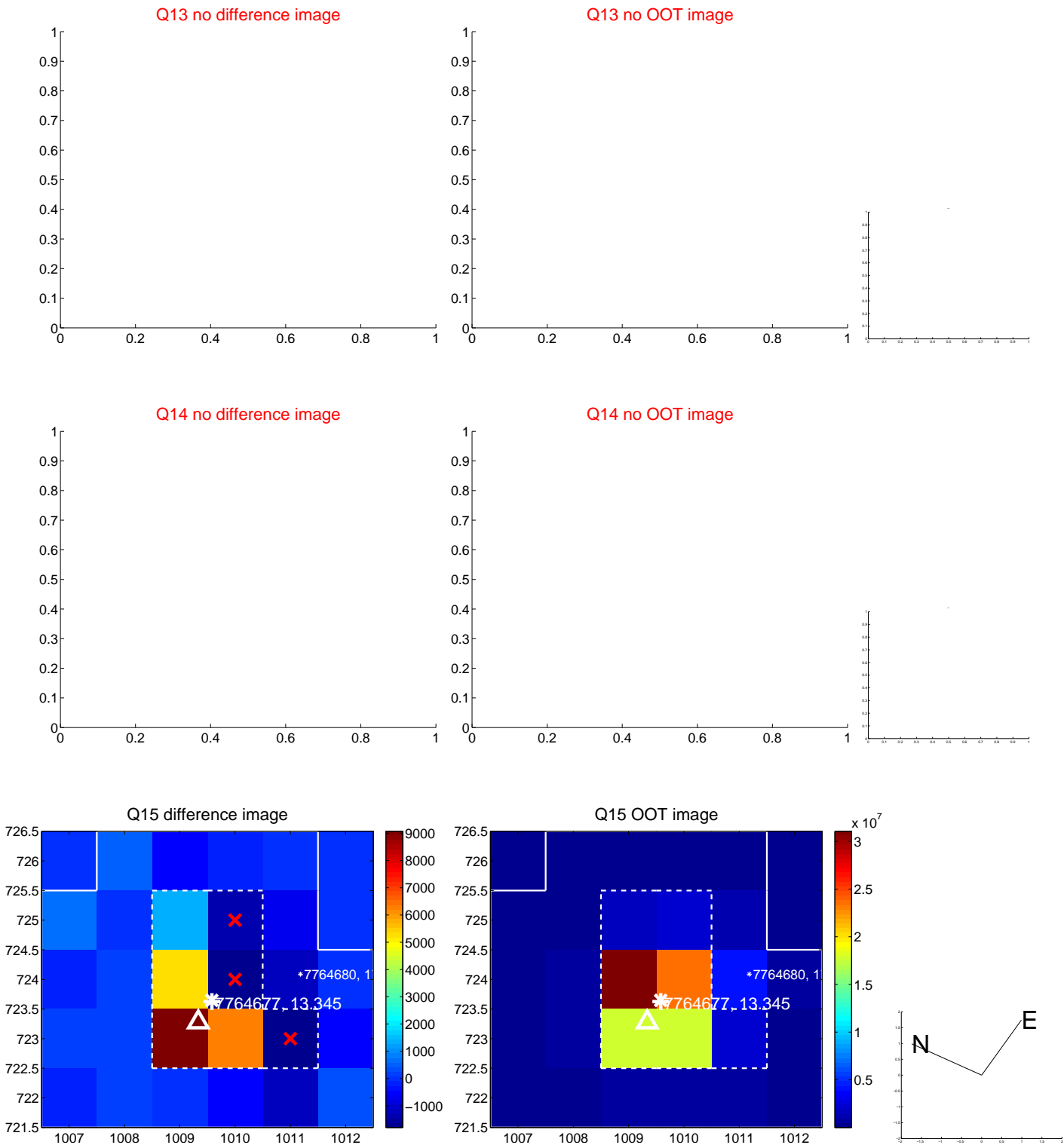
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



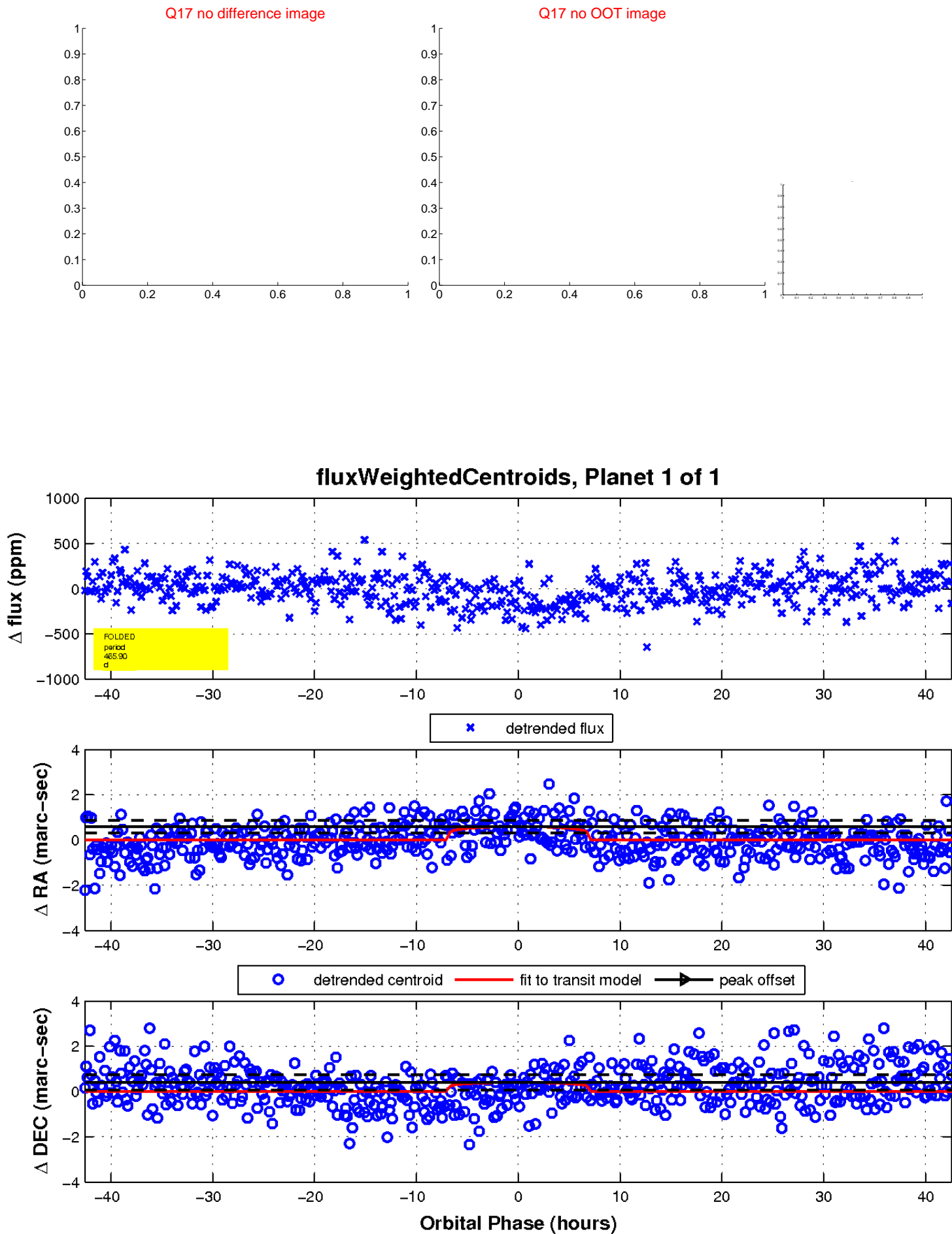
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

