

KIC 006060450

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})
006060450-01	OBS	No	379.980636	371.314261	176.5	16.590	7.6	7.7	2.20	6269	3.38	5.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006060450-01	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.

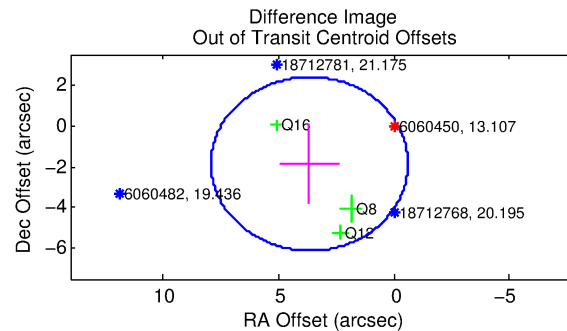
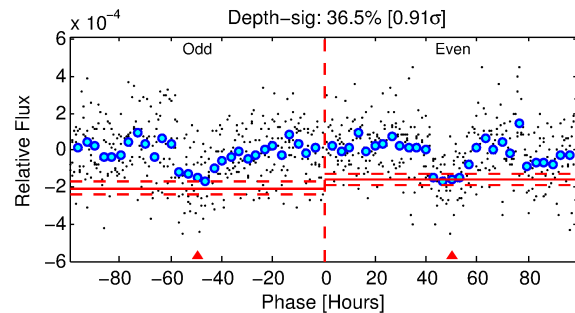
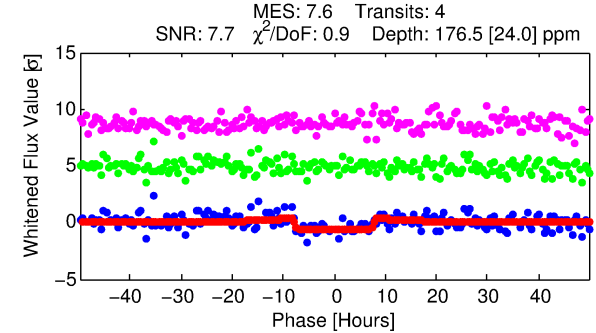
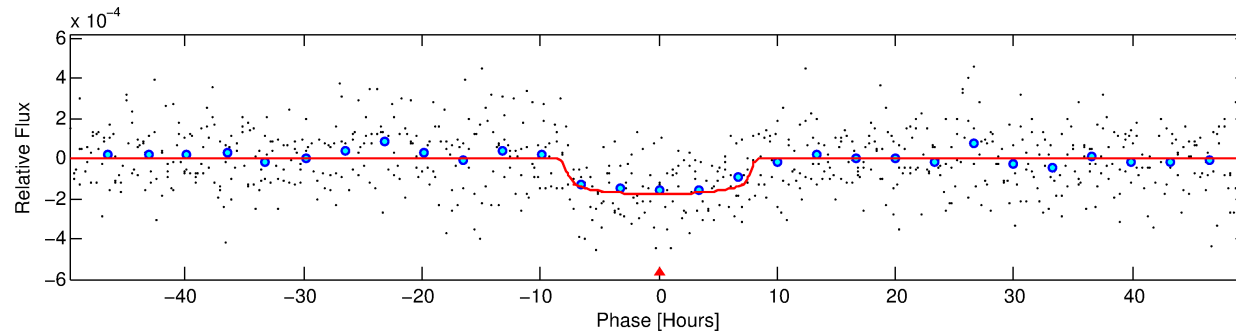
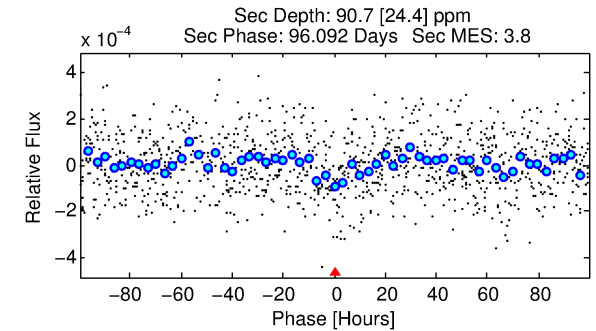
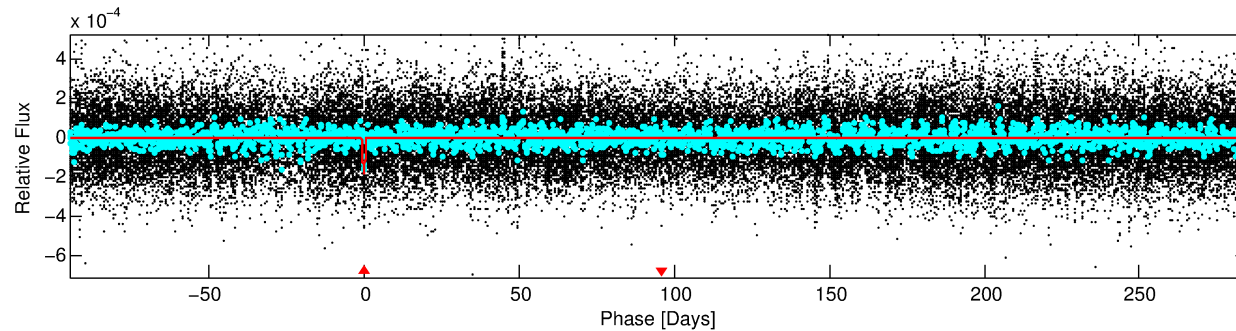
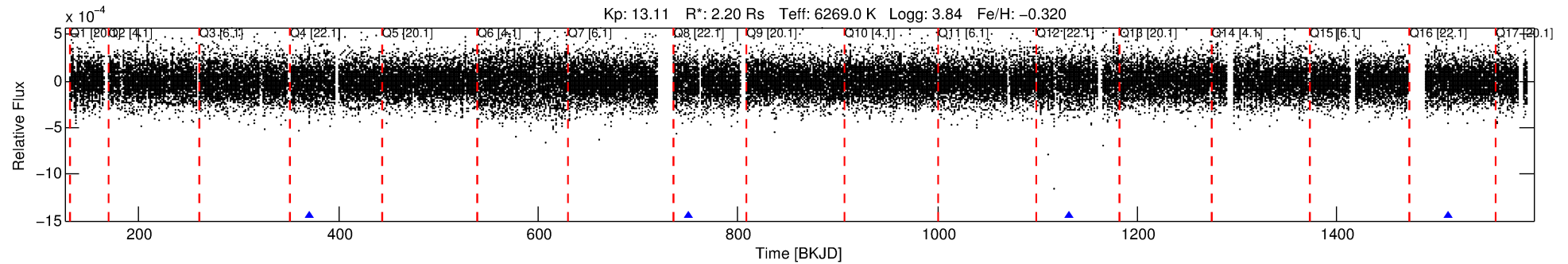
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006060450-01

No Significant Match Found

DV One-Page Summary

KIC: 6060450 Candidate: 1 of 1 Period: 379.981 d



DV Fit Results:

Period = 379.98064 [0.01064] d
Epoch = 371.3143 [0.0209] BKJD
Rp/R* = 0.0141 [0.0018]
a/R* = 86.66 [51.39]
b = 0.88 [0.15]
Seff = 5.57 [3.02]
Teq = 392 [53] K
Rp = 3.38 [1.30] Re
a = 1.0965 [0.3709] AU
Ag = 5251.62 [3415.83] [1.54σ]
Teffp = 5155 [504] K [9.40σ]

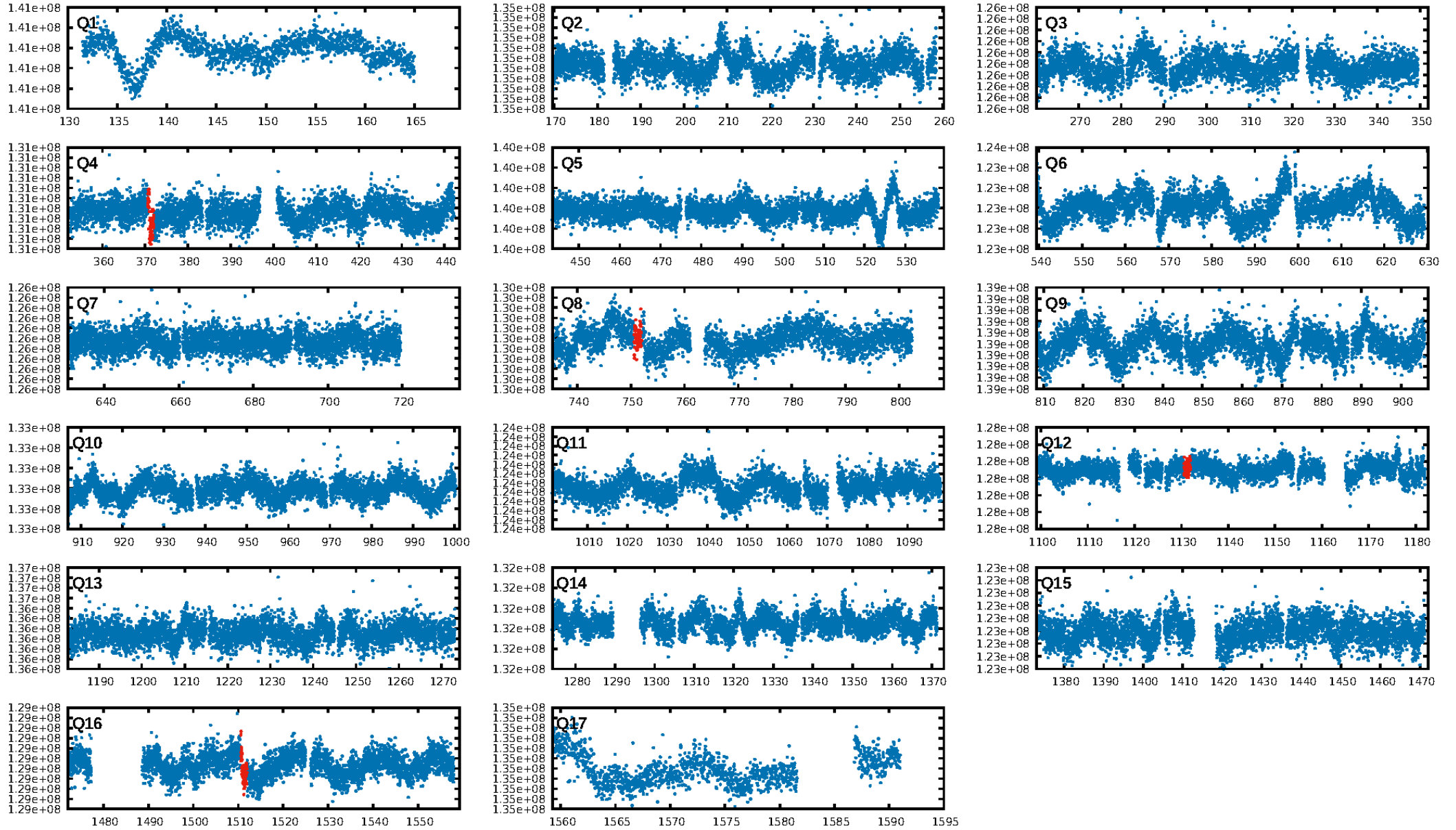
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 5.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.37e-14
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.037
Centroid-sig: 38.0%
Centroid-so: 1.245 arcsec [1.07σ]
OotOffset-rm: 4.103 arcsec [2.89σ]
KicOffset-rm: 4.050 arcsec [2.83σ]
OotOffset-st: 0/0/3/0 [3]
KicOffset-st: 0/0/3/0 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [4/4]

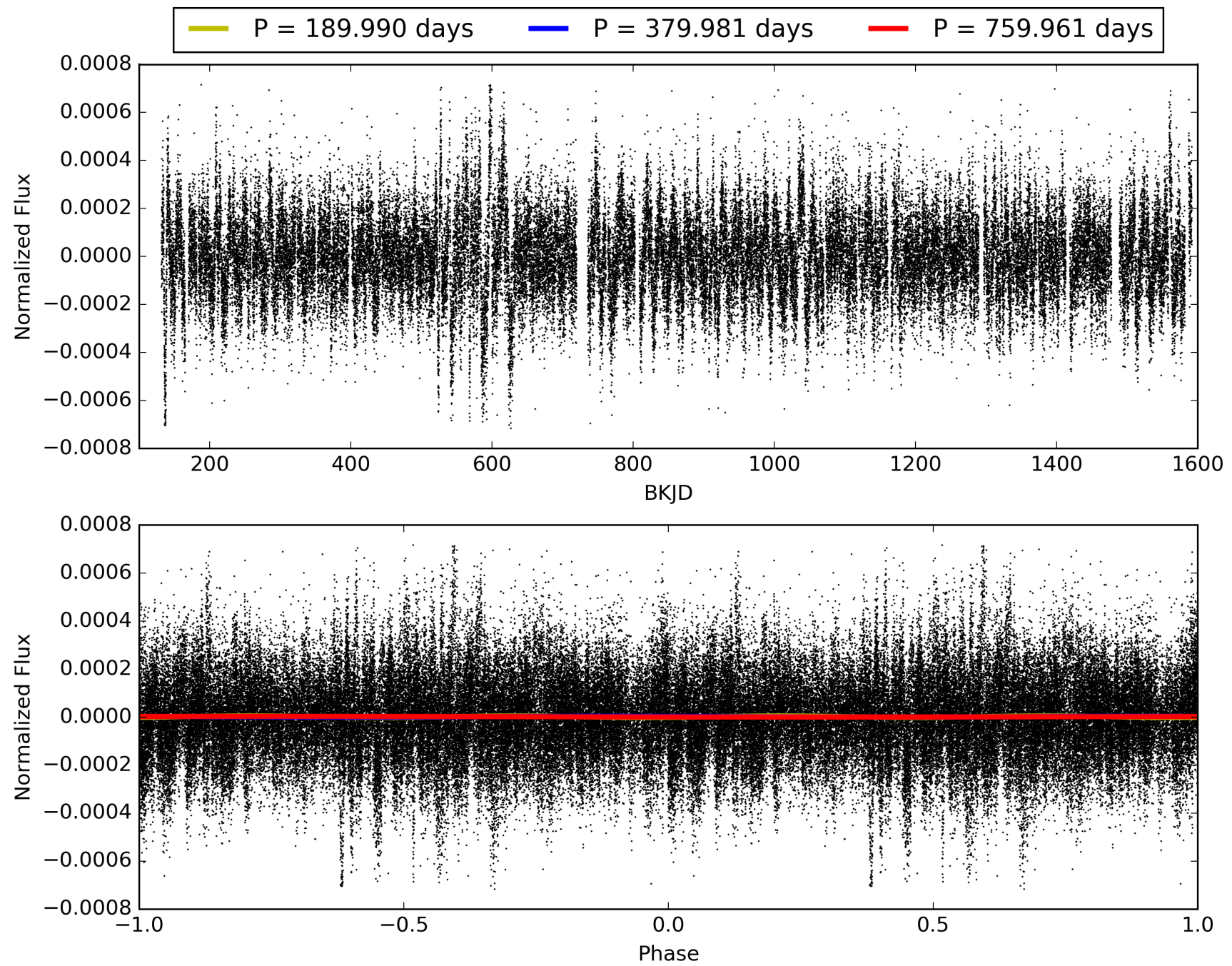
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:31:04 Z

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

TCE 006060450-01, PDC Light Curves

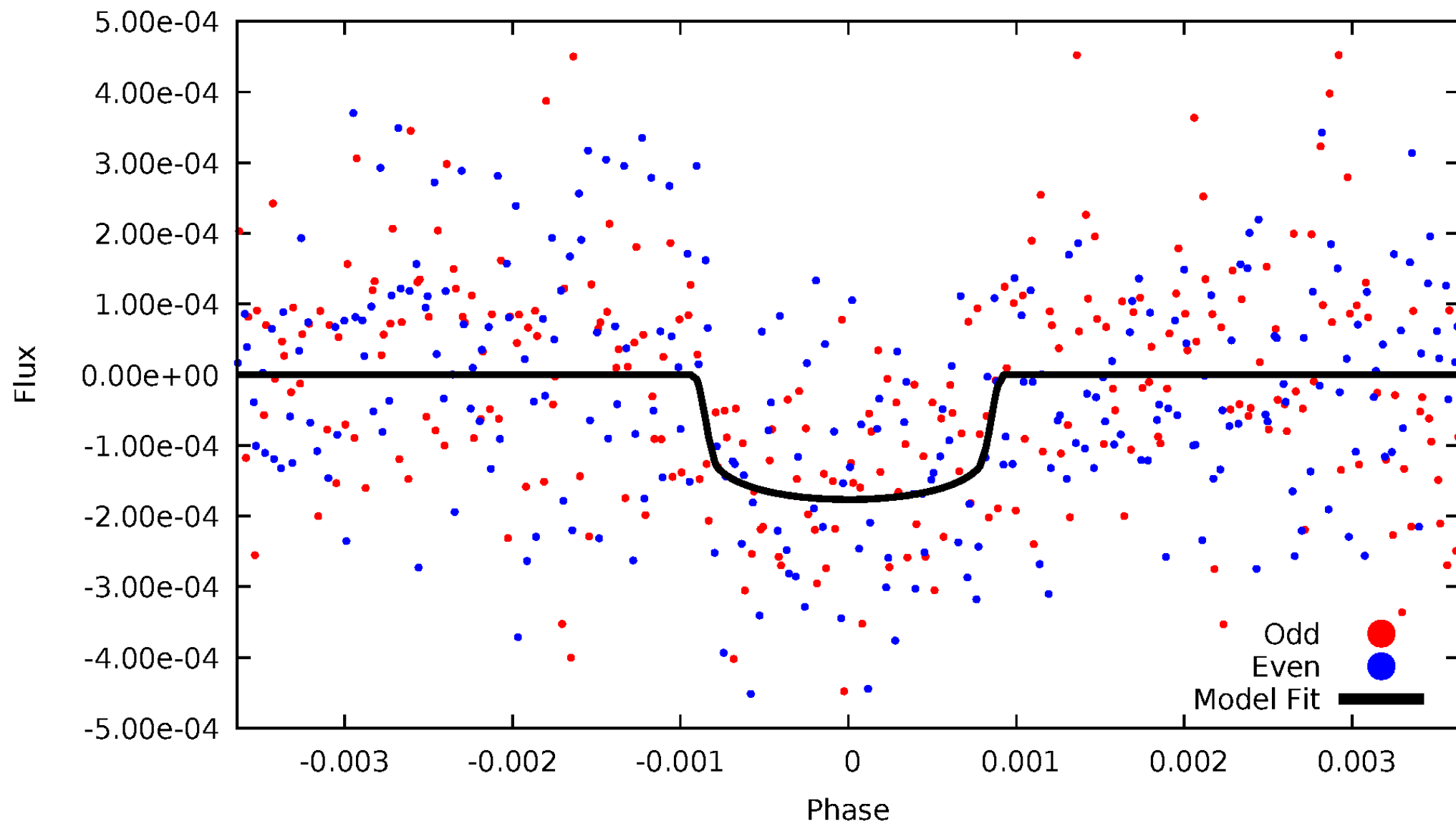


TCE 006060450-01



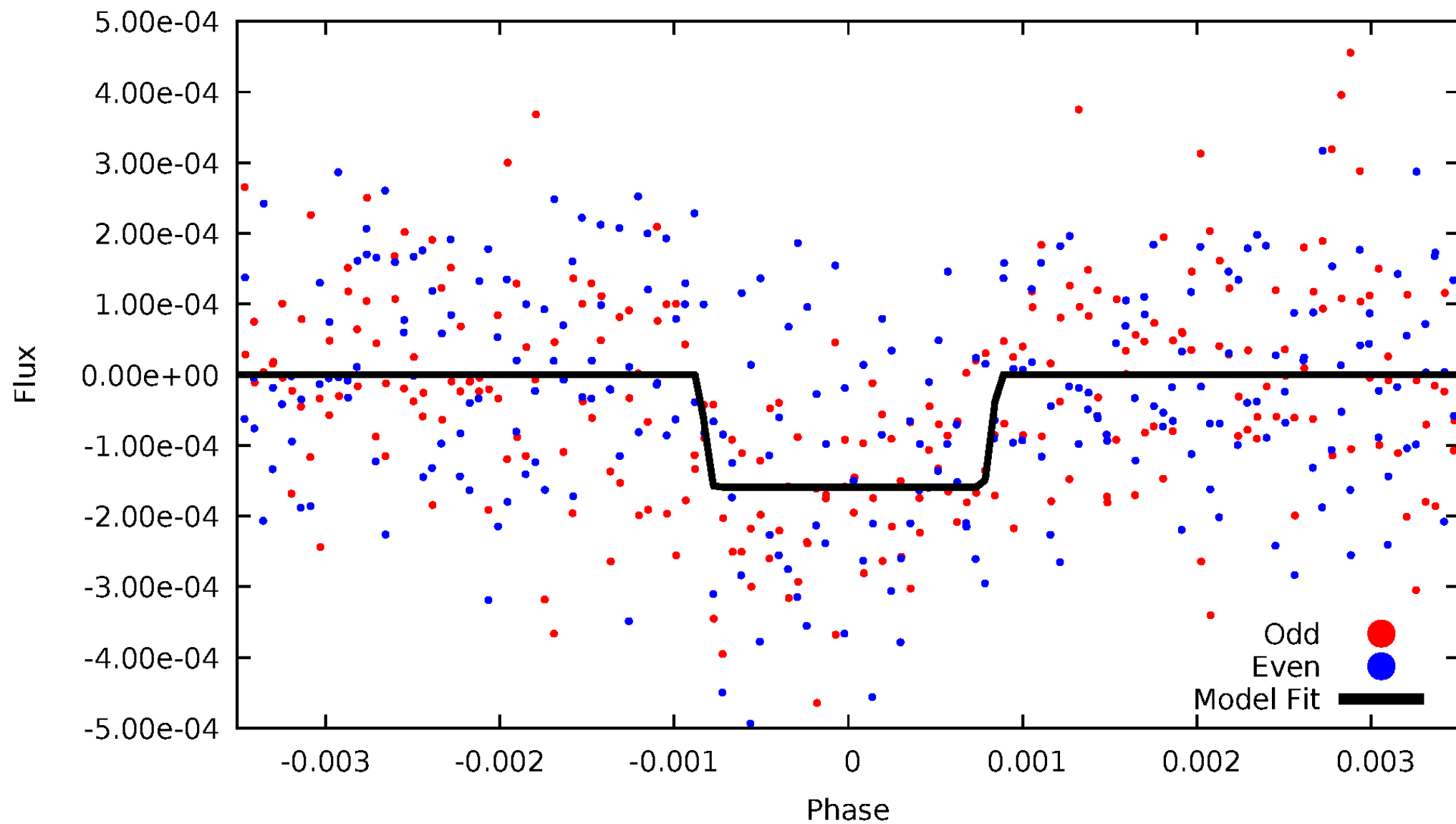
DV Odd/Even

TCE 006060450-01

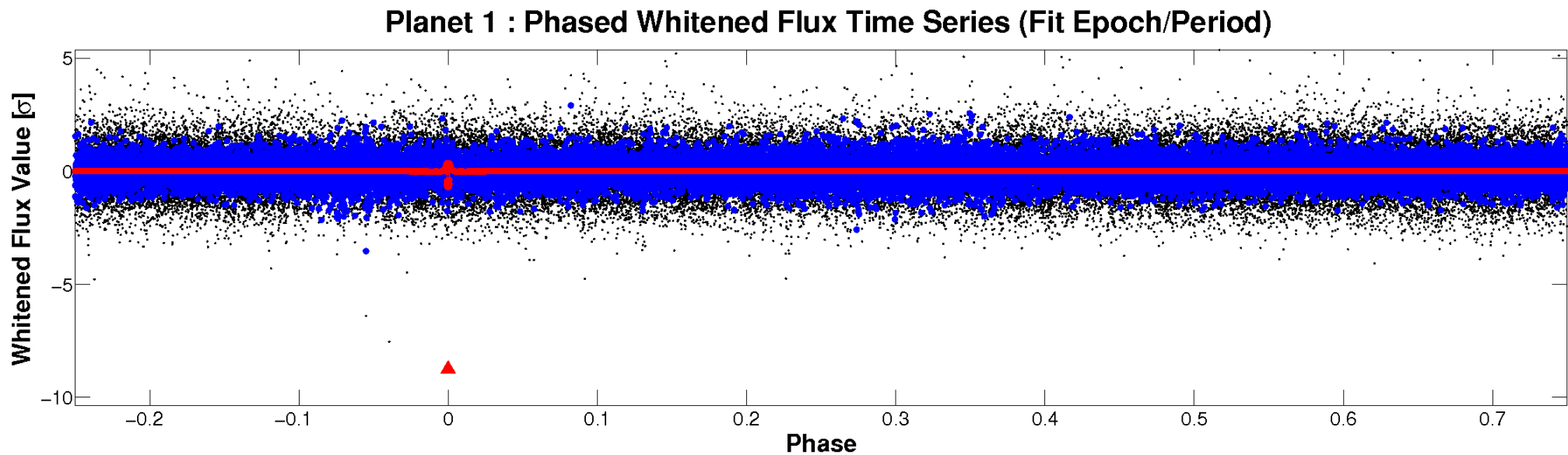
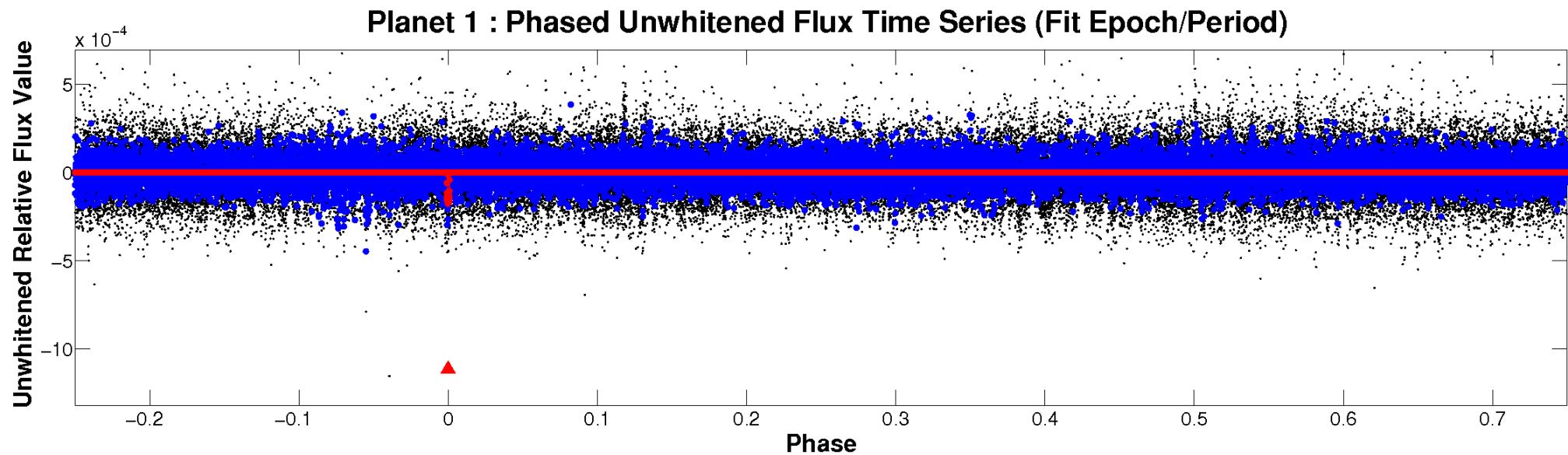


ALT Odd/Even

TCE 006060450-01



Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 006060450-01 P=379.980636 Days $T_0=371.314261$ (BKJD)



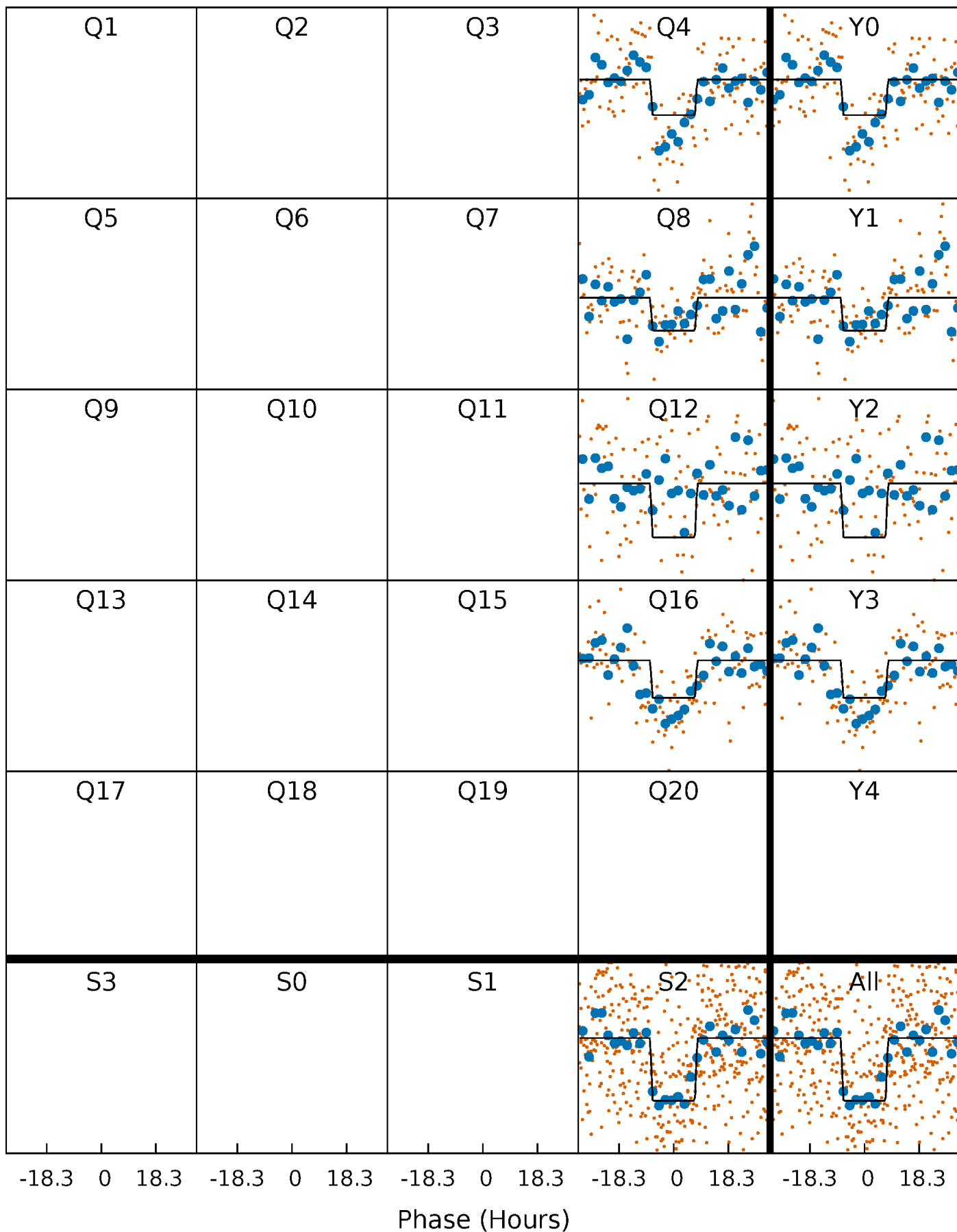
DV Quarter-Phased Transit Curves

TCE 006060450-01 P=379.980636 Days $T_0=371.314261$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

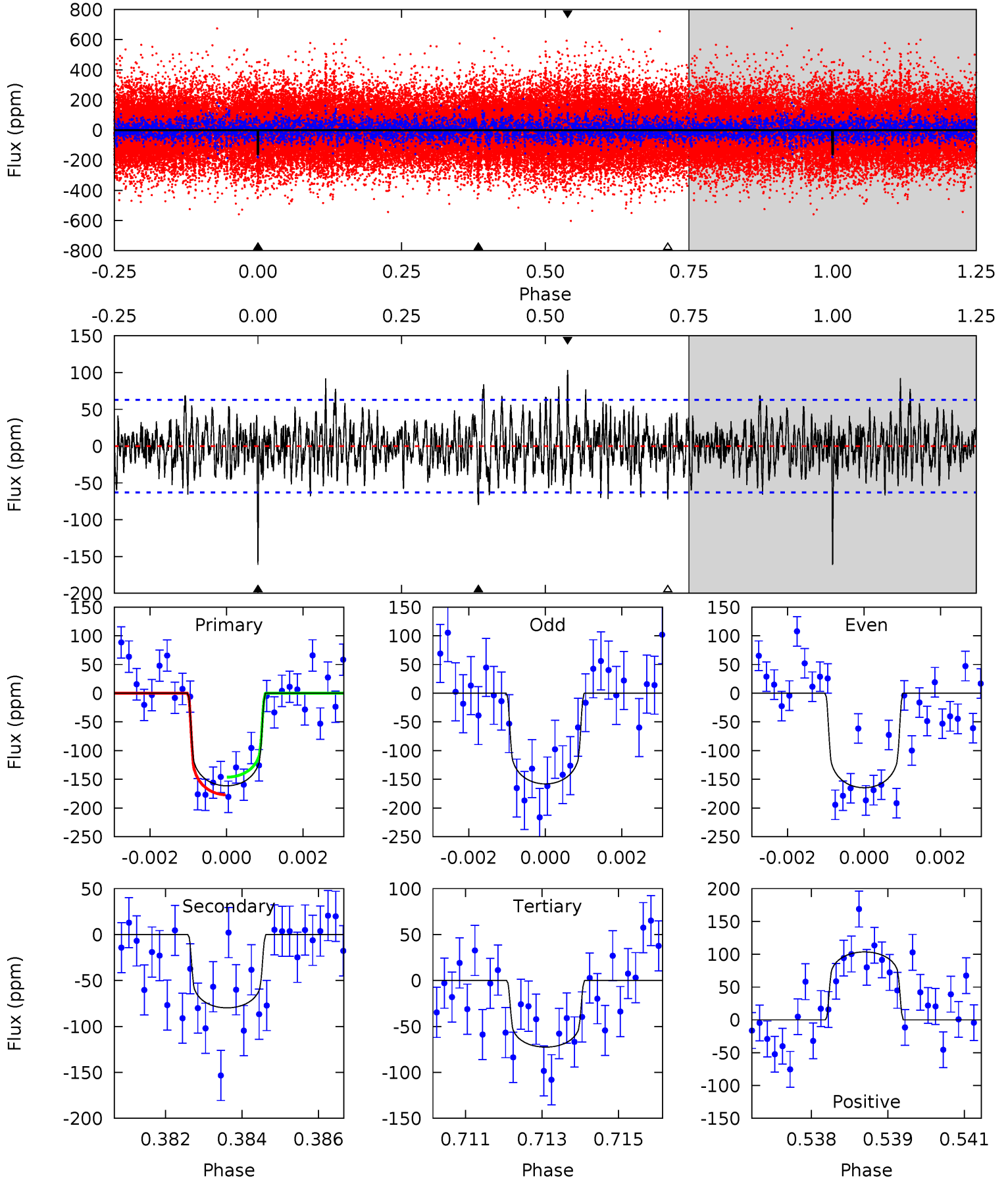
TCE 006060450-01 P=380.002915 Days $T_0=371.306520$ (BKJD)



DV Model-Shift Uniqueness Test

006060450-01, P = 379.980636 Days, E = 371.314261 Days

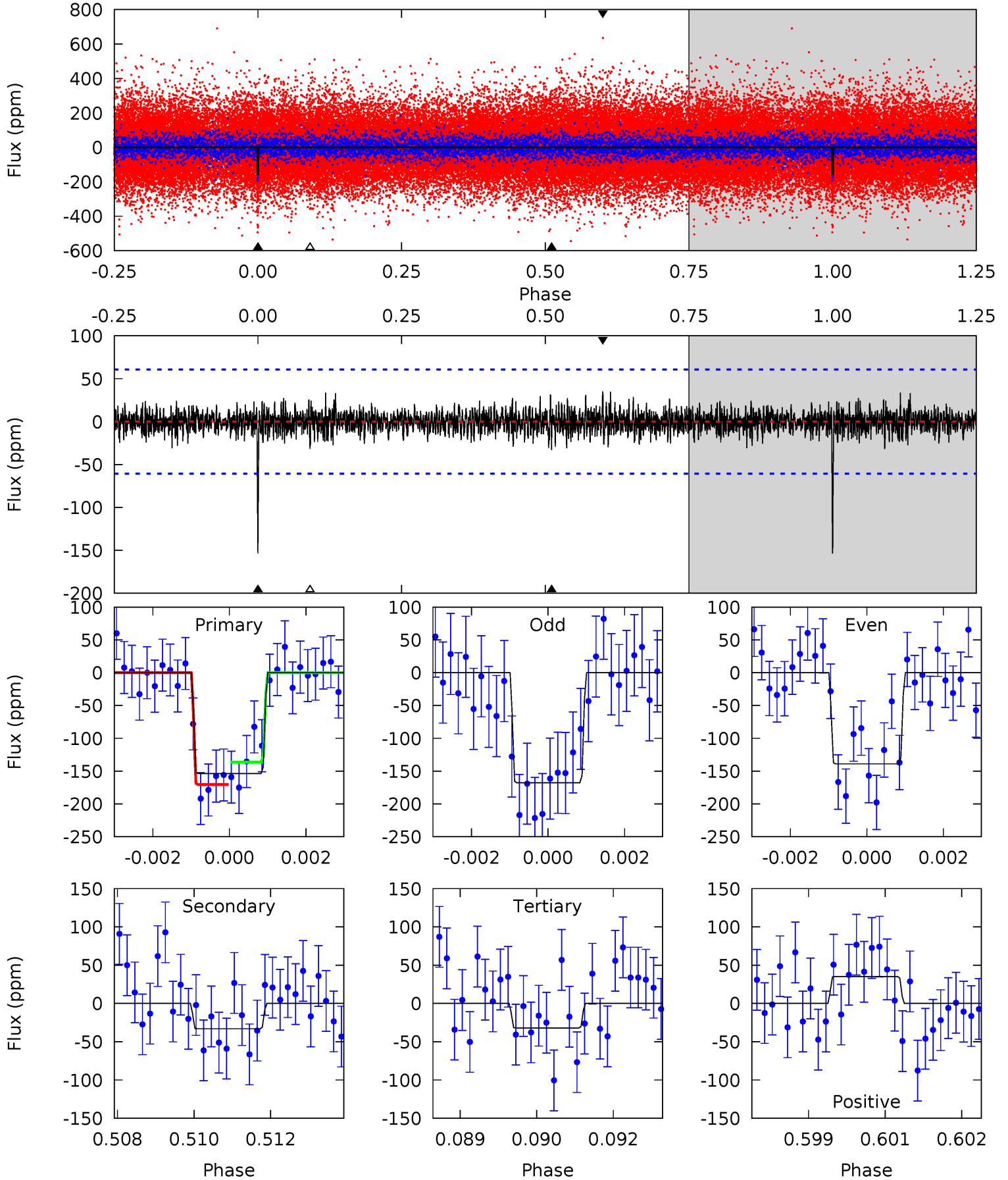
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	6.78	6.16	8.79	5.34	3.12	2.10	7.54	4.91	0.62	-2.01	0.28	1.03	0.39	1.31



Alt Model-Shift Uniqueness Test

006060450-01, P = 380.002915 Days, E = 371.306520 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	2.91	2.82	3.11	5.35	3.13	0.81	10.7	10.4	0.09	-0.19	1.27	0.92	0.19	1.51



Stellar Parameters For KIC 006060450

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6269^{+172}_{-172}	$3.839^{+0.308}_{-0.103}$	$-0.320^{+0.350}_{-0.300}$	$2.199^{+0.430}_{-0.798}$	$1.218^{+0.230}_{-0.230}$	$0.161^{+0.334}_{-0.050}$
	+3%/-3%	+8%/-3%	+109%/-94%	+20%/-36%	+19%/-19%	+207%/-31%
Source	PHO1	FLK73	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 006060450-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-80 ± 12	$3.28^{+0.71}_{-0.66}$	540^{+35}_{-48}	5060^{+385}_{-327}	4953^{+2916}_{-1667}
Alt.	-33 ± 11	$2.90^{+0.66}_{-0.65}$	537^{+33}_{-49}	4407^{+446}_{-383}	2634^{+1891}_{-1087}

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 $A_{obs} \gg 1.0$

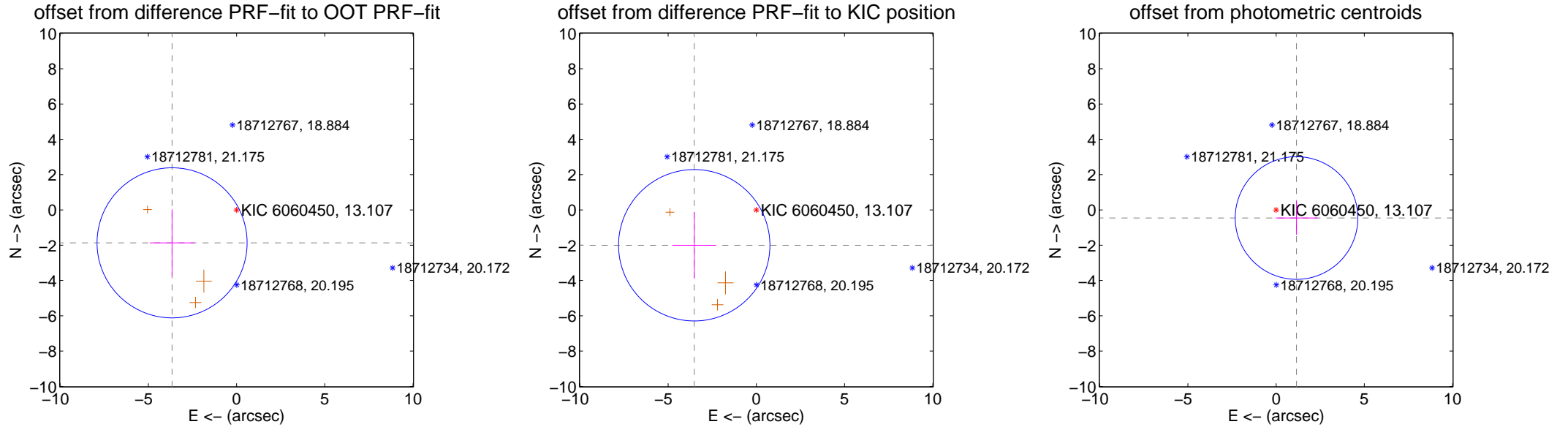
DV Centroid Data

Supplemental centroid analysis for 006060450-01. Kepler magnitude: 13.11. Transit SNR 7.74

There are 0 quarters with good PRF difference image offsets

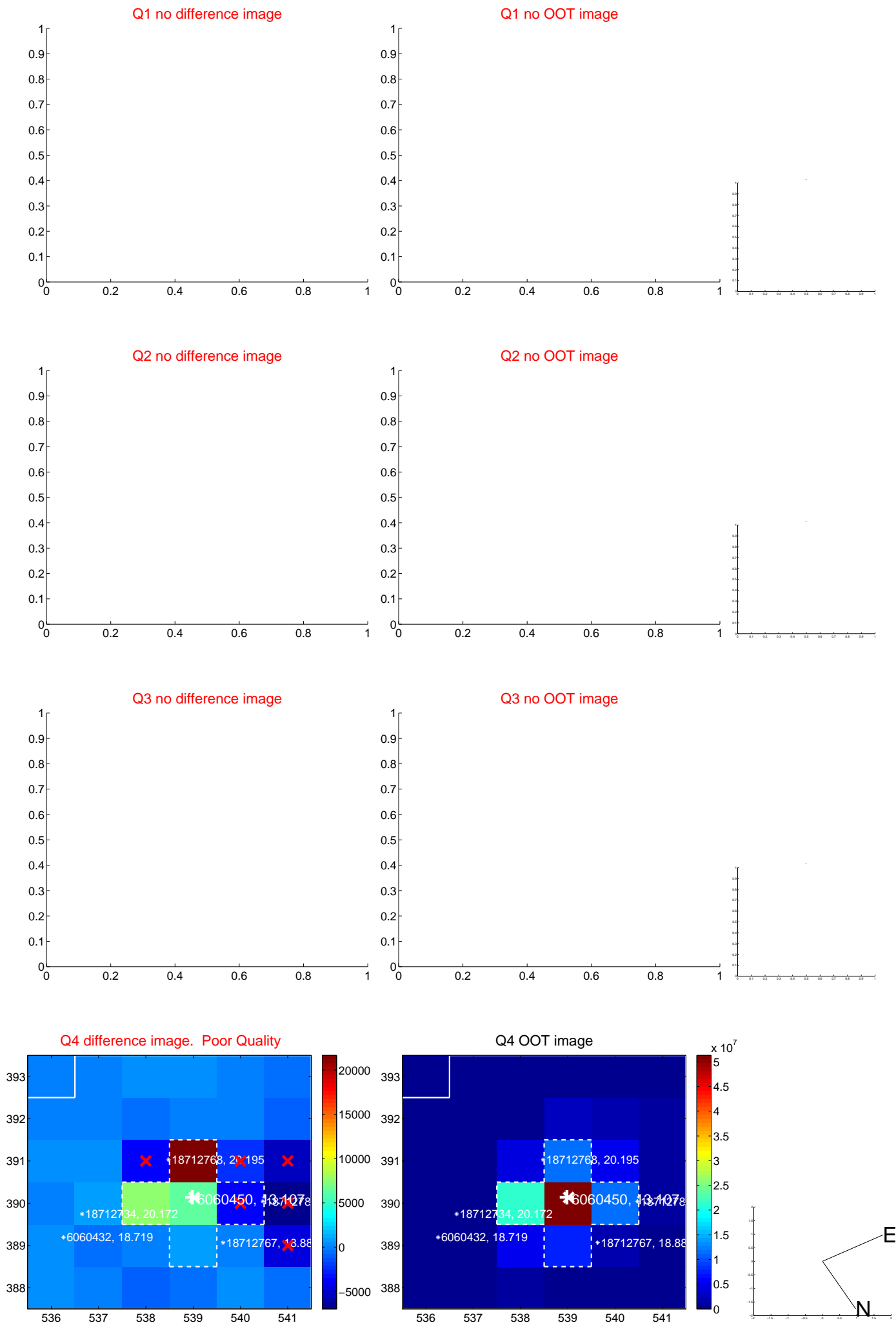
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.103 ± 1.417	2.89	3.655 ± 1.264	-1.865 ± 1.895
PRF-fit source offset from KIC position	4.050 ± 1.430	2.83	3.520 ± 1.248	-2.003 ± 1.883
photometric centroid source offset	1.25 ± 1.16	1.07	-1.16 ± 1.19	-0.46 ± 0.95

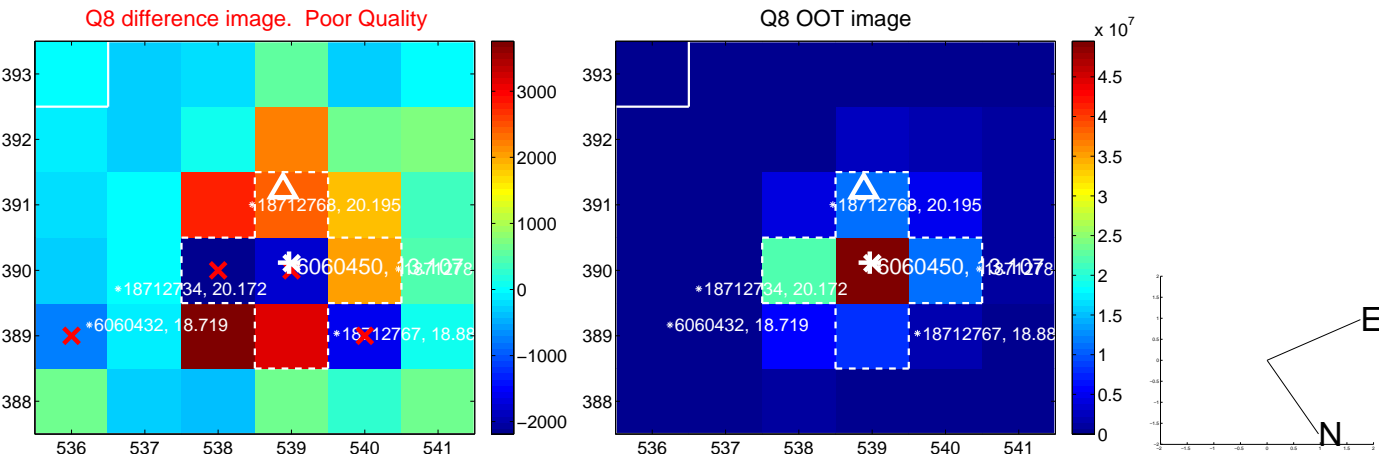


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

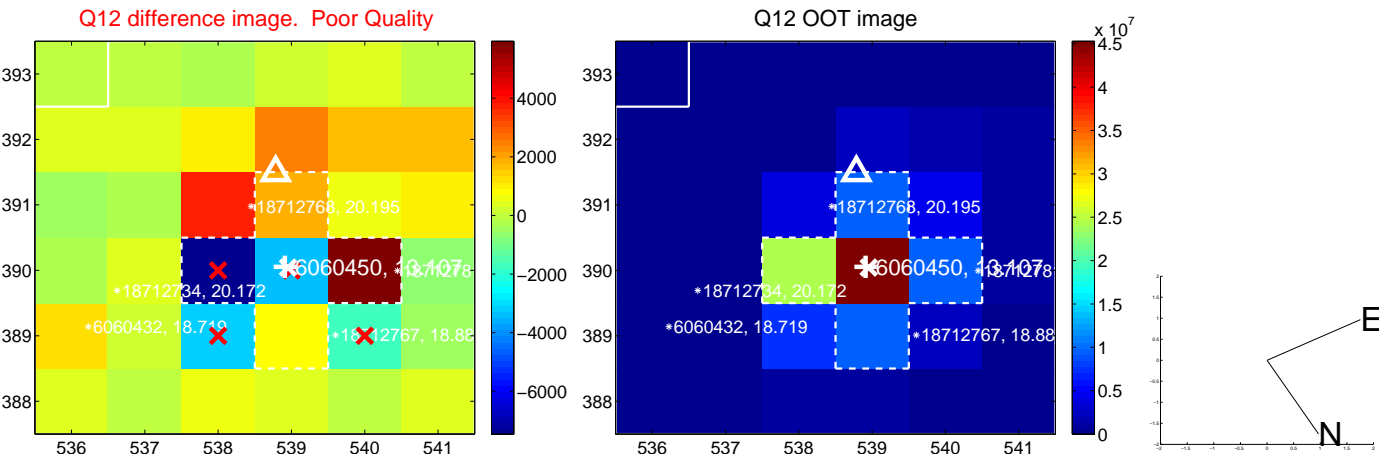
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



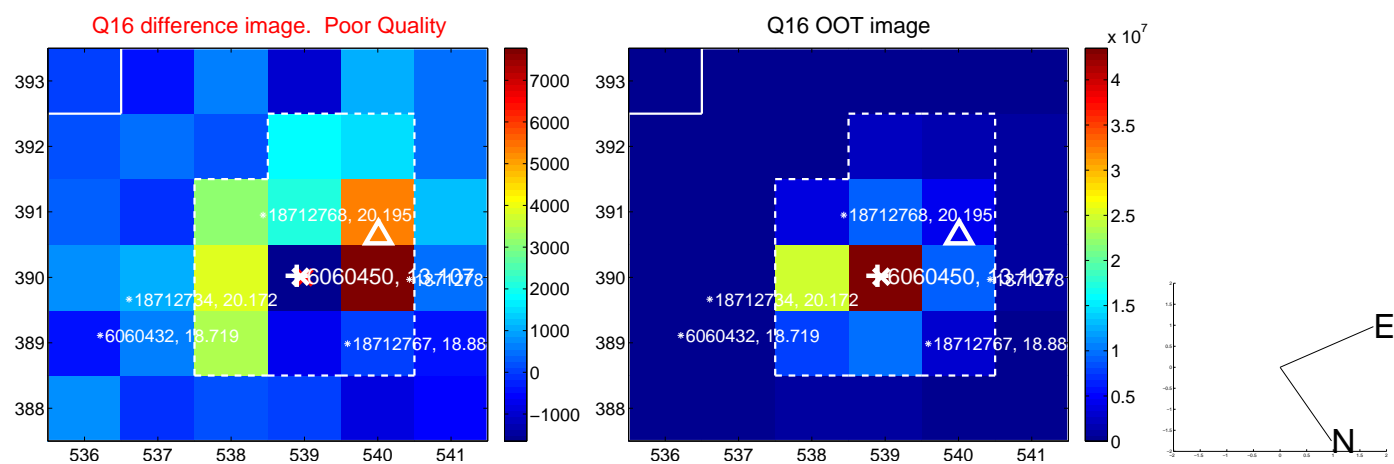
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



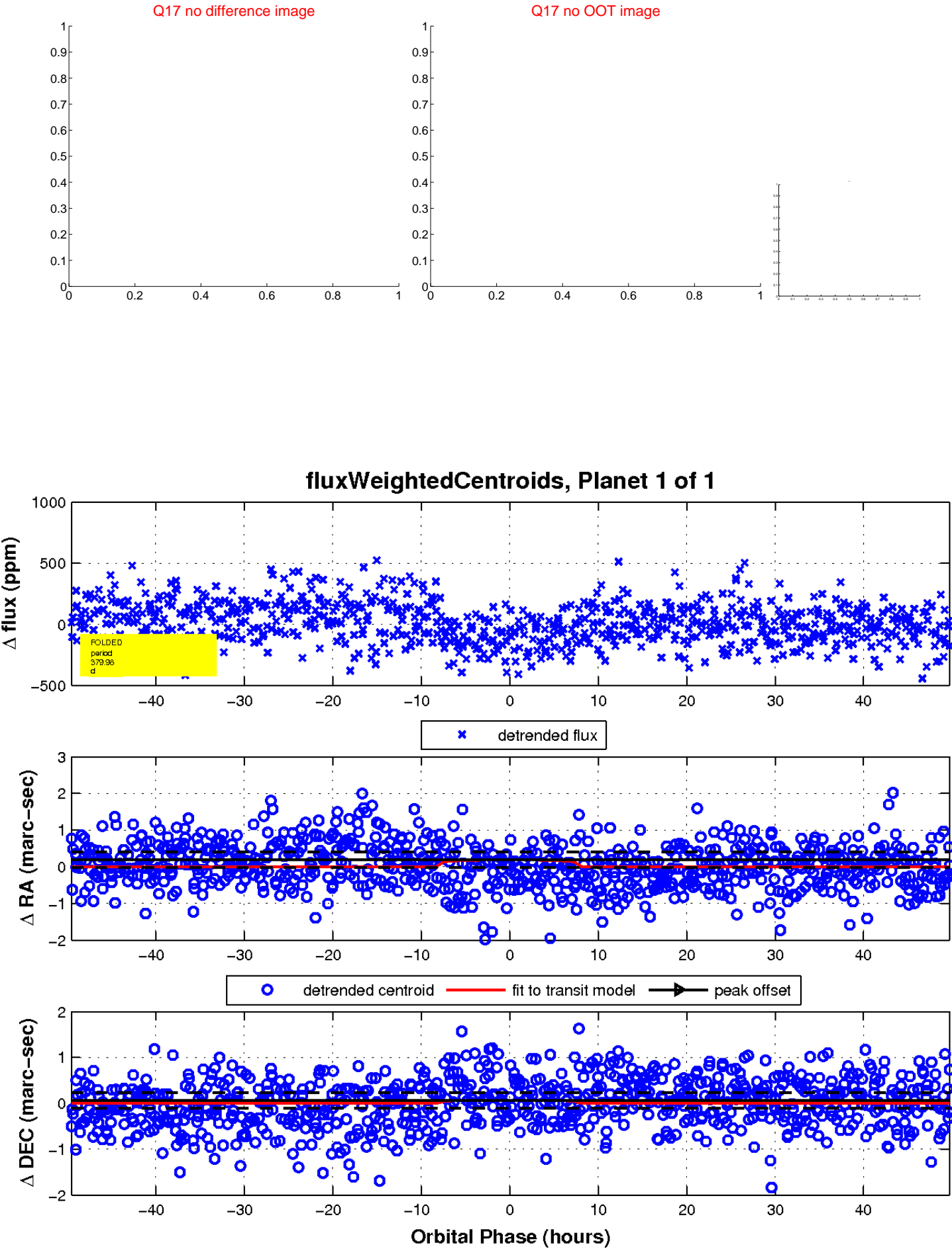
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

