

KIC 011043484

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})
011043484-01	OBS	No	259.538037	343.266665	1312.3	21.827	8.2	9.0	0.54	3921	2.57	0.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011043484-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

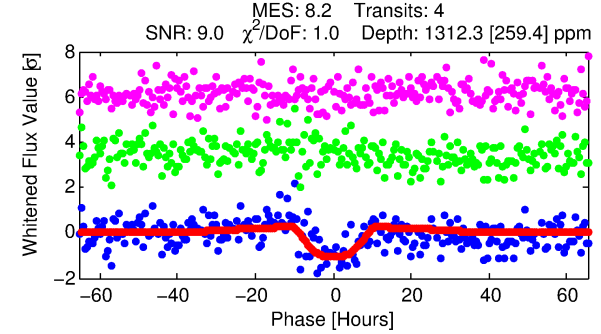
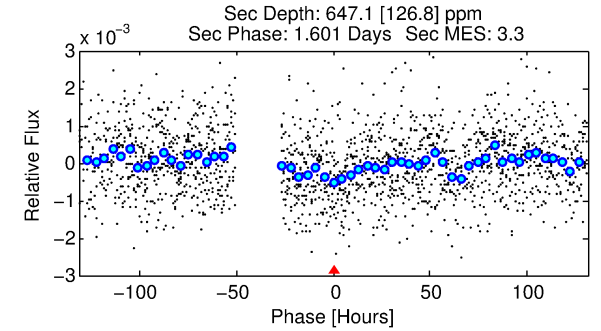
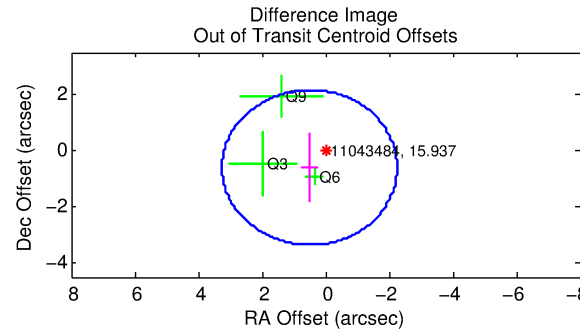
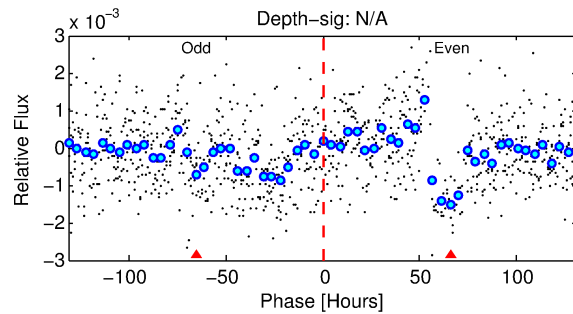
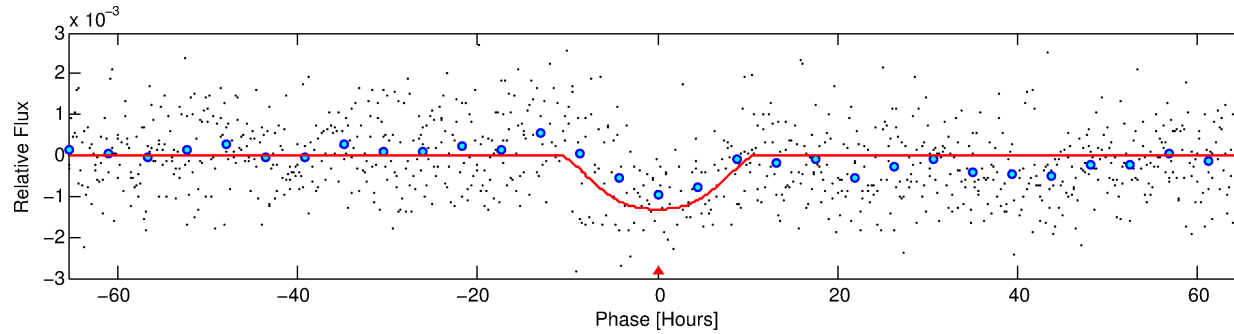
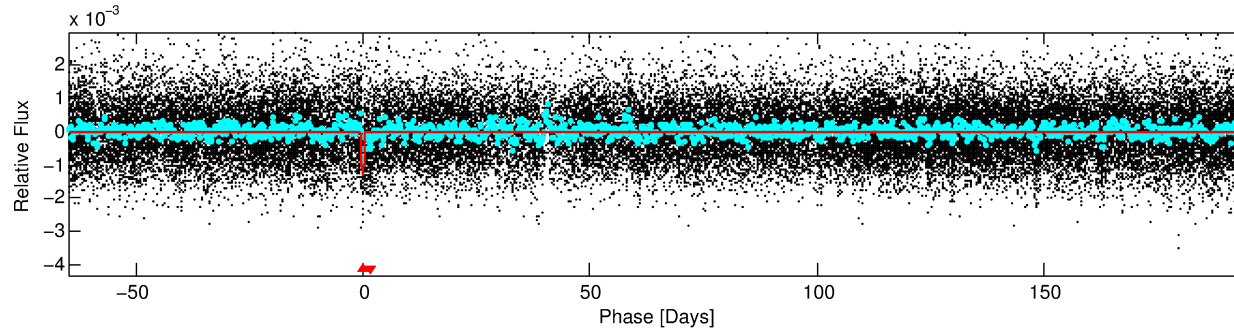
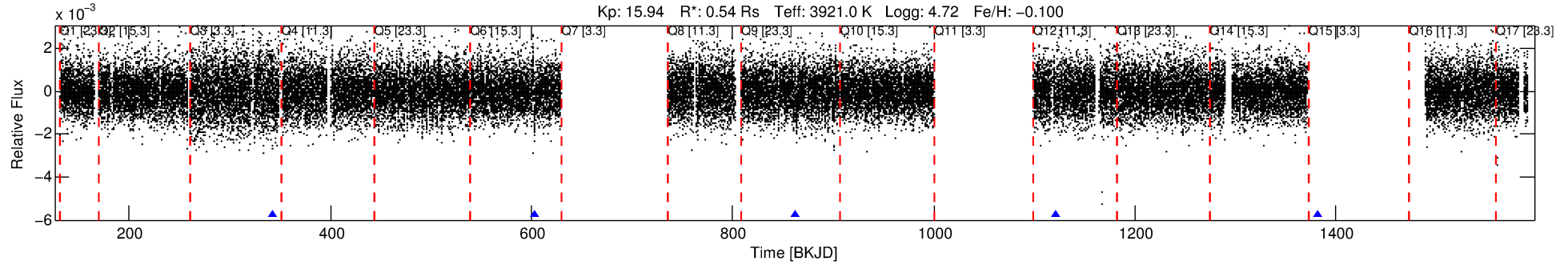
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011043484-01

No Significant Match Found

DV One-Page Summary

KIC: 11043484 Candidate: 1 of 1 Period: 259.538 d



DV Fit Results:

Period = 259.53804 [0.03195] d
Epoch = 343.2667 [0.0431] BKJD
Rp/R* = 0.0435 [0.0072]
a/R* = 38.07 [7.69]
b = 0.96 [0.03]
Seff = 0.14 [0.01]
Teq = 157 [3] K
Rp = 2.57 [0.44] Re
a = 0.6566 [0.0209] AU
Ag = 23286.31 [9006.05] [2.59σ]
Teffp = 2999 [291] K [9.78σ]

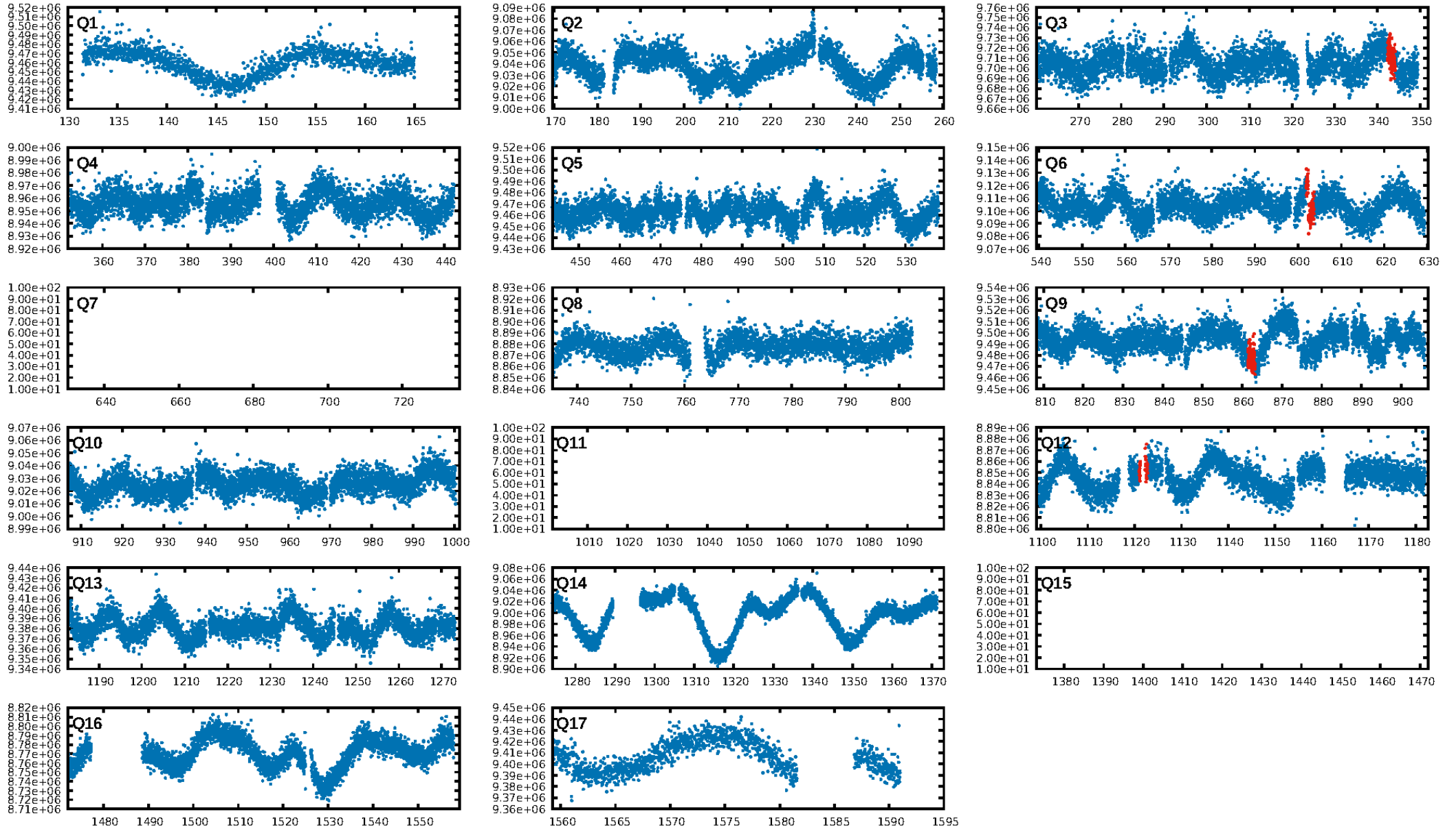
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.59e-14
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 8.24
Centroid-sig: 28.6%
Centroid-so: 1.539 arcsec [1.18σ]
OotOffset-rm: 0.783 arcsec [0.85σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-rm: 0.886 arcsec [1.16σ]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

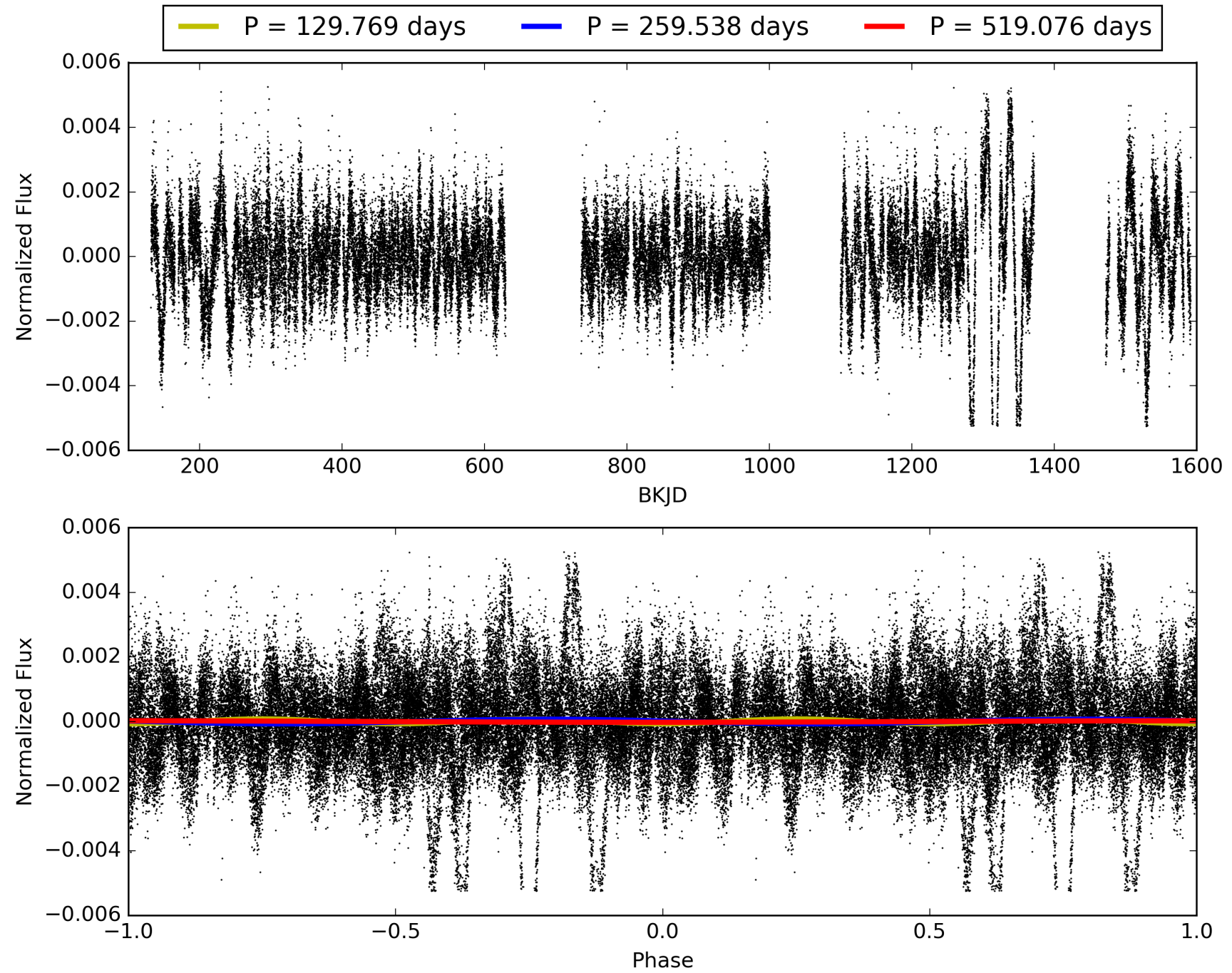
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:11:21 Z

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

TCE 011043484-01, PDC Light Curves

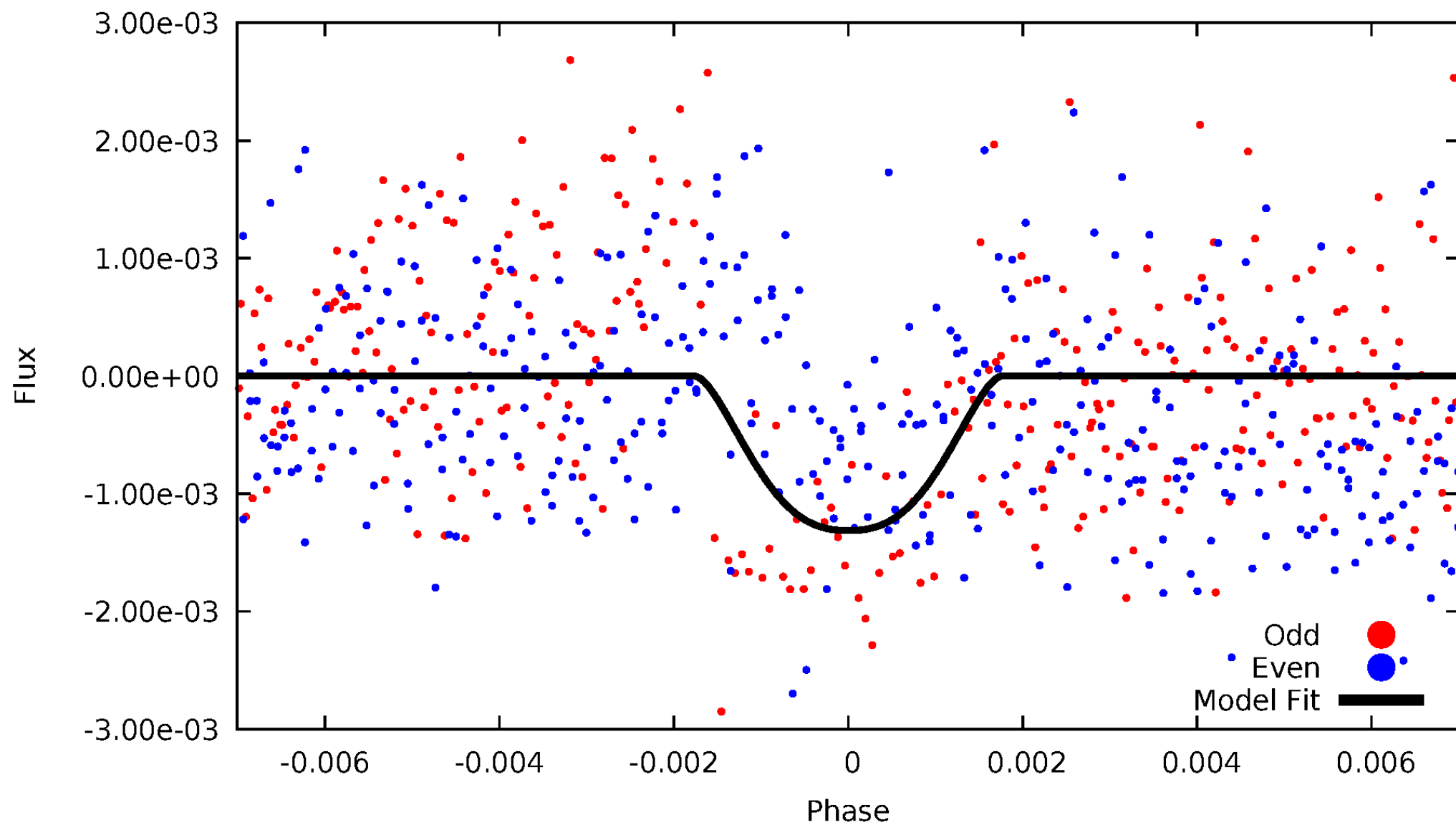


TCE 011043484-01



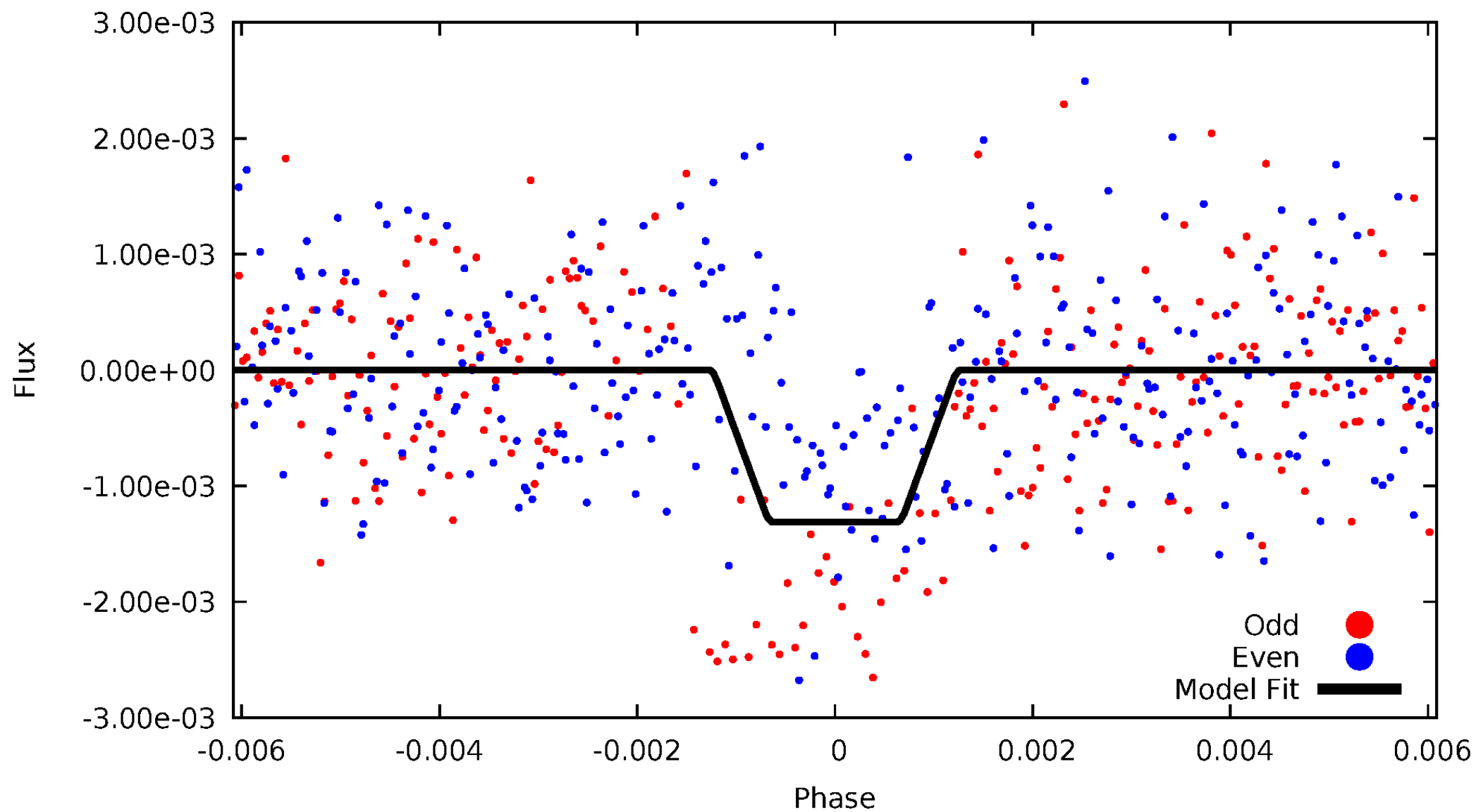
DV Odd/Even

TCE 011043484-01

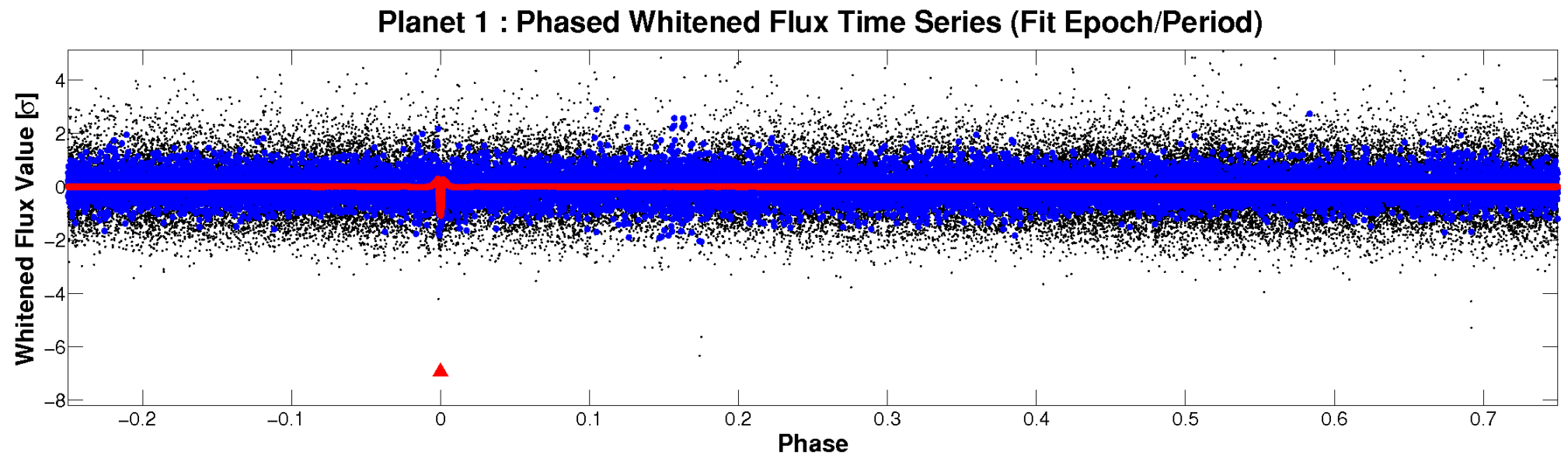
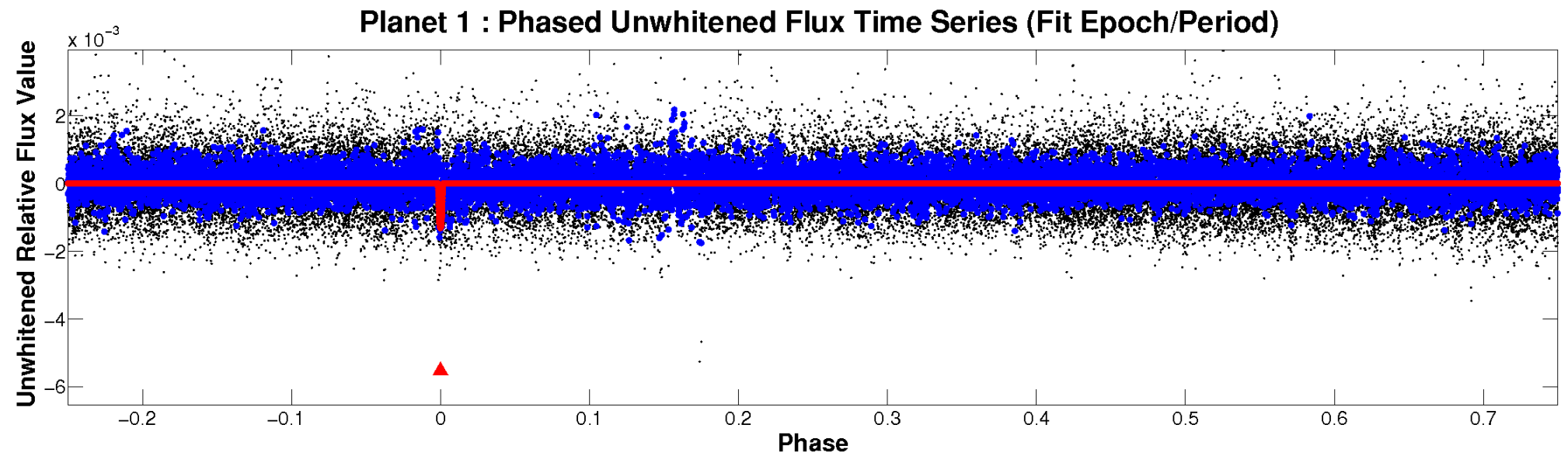


ALT Odd/Even

TCE 011043484-01



Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 011043484-01 P=259.538037 Days $T_0=343.266665$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011043484-01 P=259.538037 Days $T_0=343.266665$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

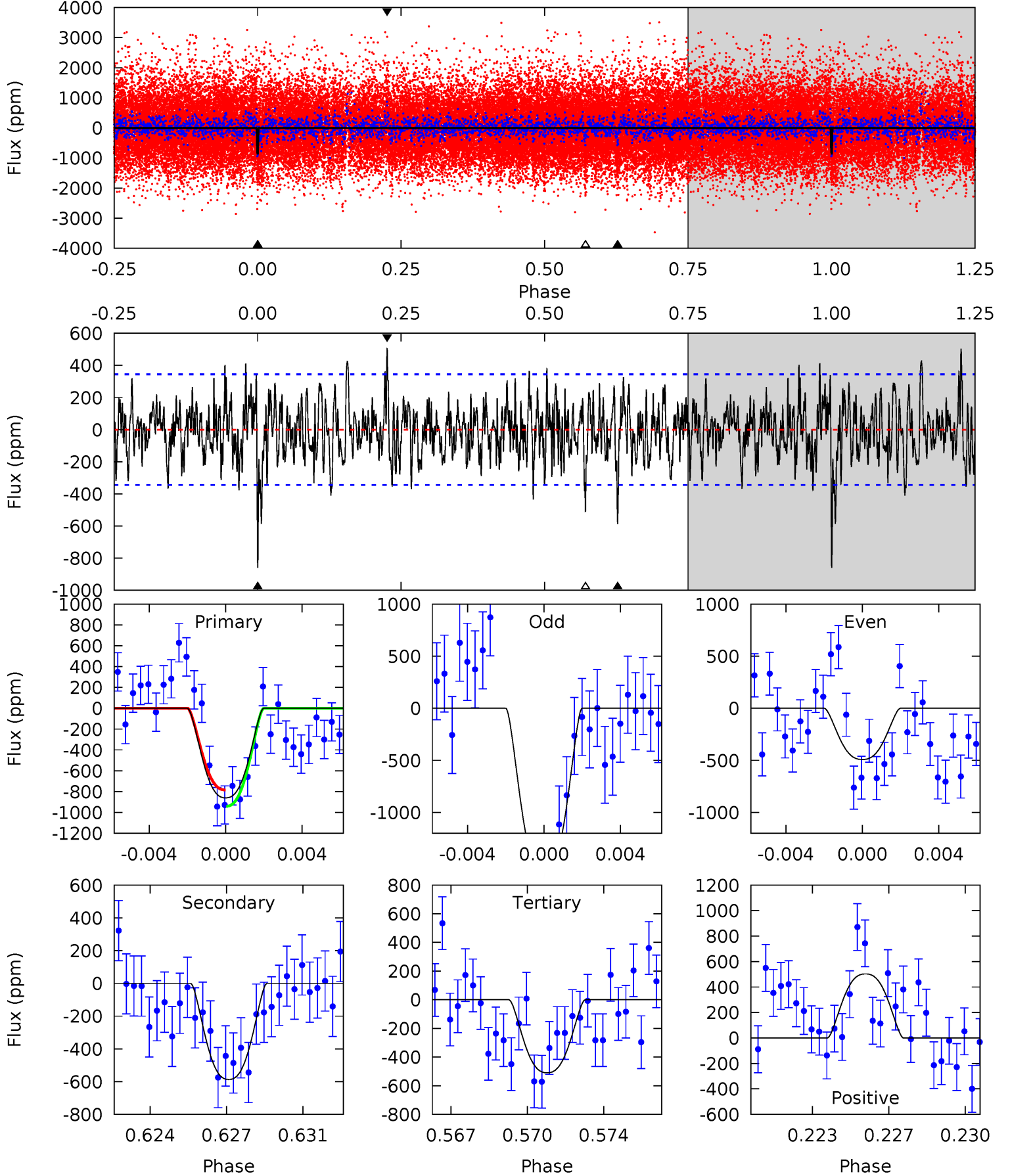
TCE 011043484-01 P=259.581135 Days $T_0=343.195062$ (BKJD)



DV Model-Shift Uniqueness Test

011043484-01, P = 259.538037 Days, E = 83.728628 Days

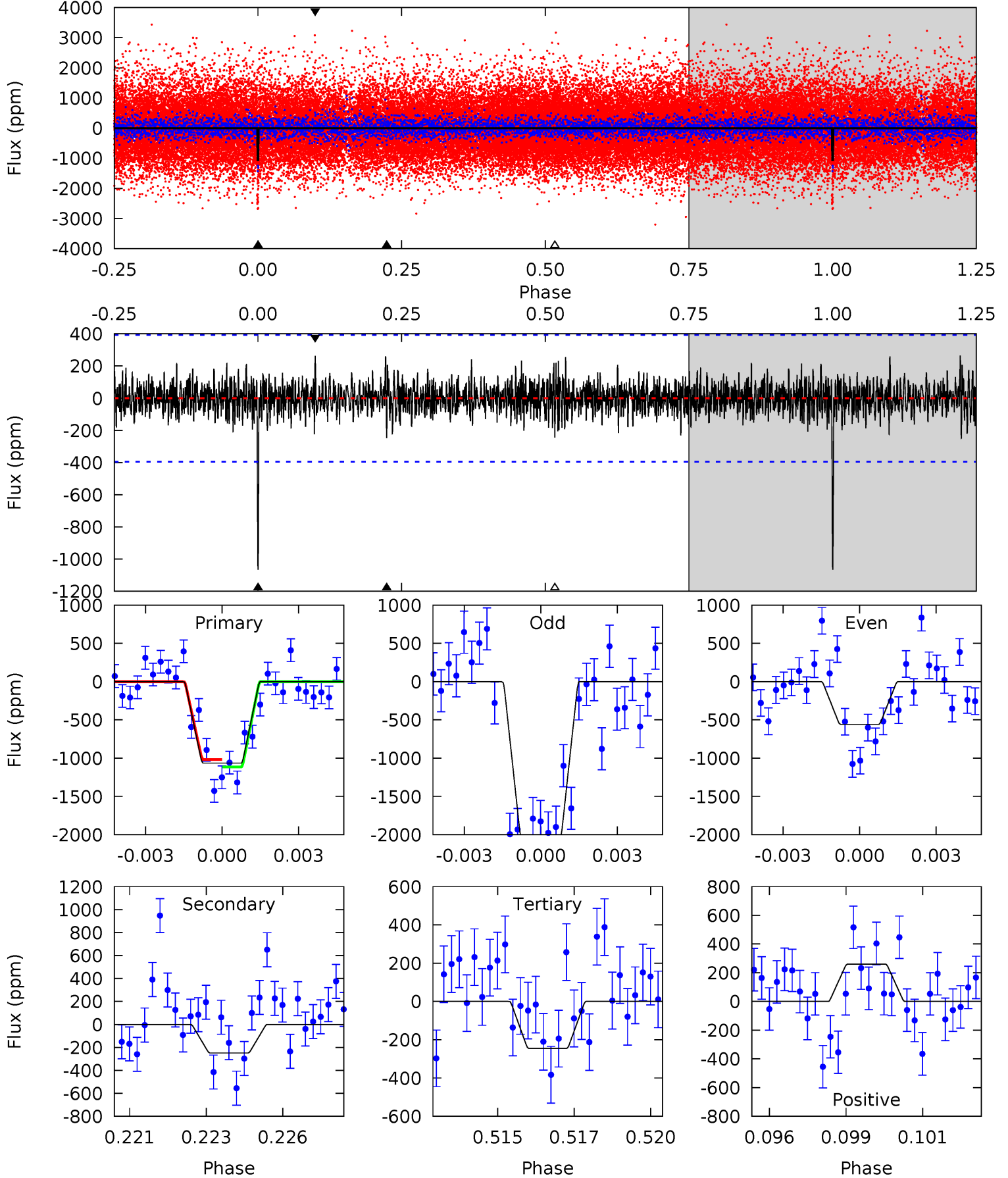
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	8.89	7.72	7.62	5.22	2.92	2.16	5.31	5.41	1.17	1.27	8.17	0.23	0.37	1.19



Alt Model-Shift Uniqueness Test

011043484-01, P = 259.581135 Days, E = 83.613927 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	3.33	3.28	3.48	5.28	3.02	0.98	11.0	10.8	0.05	-0.15	9.63	1.75	0.20	0.66



Stellar Parameters For KIC 011043484

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3921^{+46}_{-50}	$4.720^{+0.018}_{-0.024}$	$-0.100^{+0.100}_{-0.100}$	$0.541^{+0.021}_{-0.021}$	$0.561^{+0.020}_{-0.025}$	$4.987^{+0.429}_{-0.395}$
	+1%/-1%	+0%/-1%	+100%/-100%	+4%/-4%	+4%/-4%	+9%/-8%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 011043484-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-587 ± 66	$2.58^{+0.46}_{-0.41}$	219^{+3}_{-3}	3241^{+184}_{-163}	20920^{+8653}_{-6285}
Alt.	-248 ± 75	$2.14^{+0.45}_{-0.43}$	220^{+3}_{-3}	3028^{+245}_{-211}	12940^{+8831}_{-5160}

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

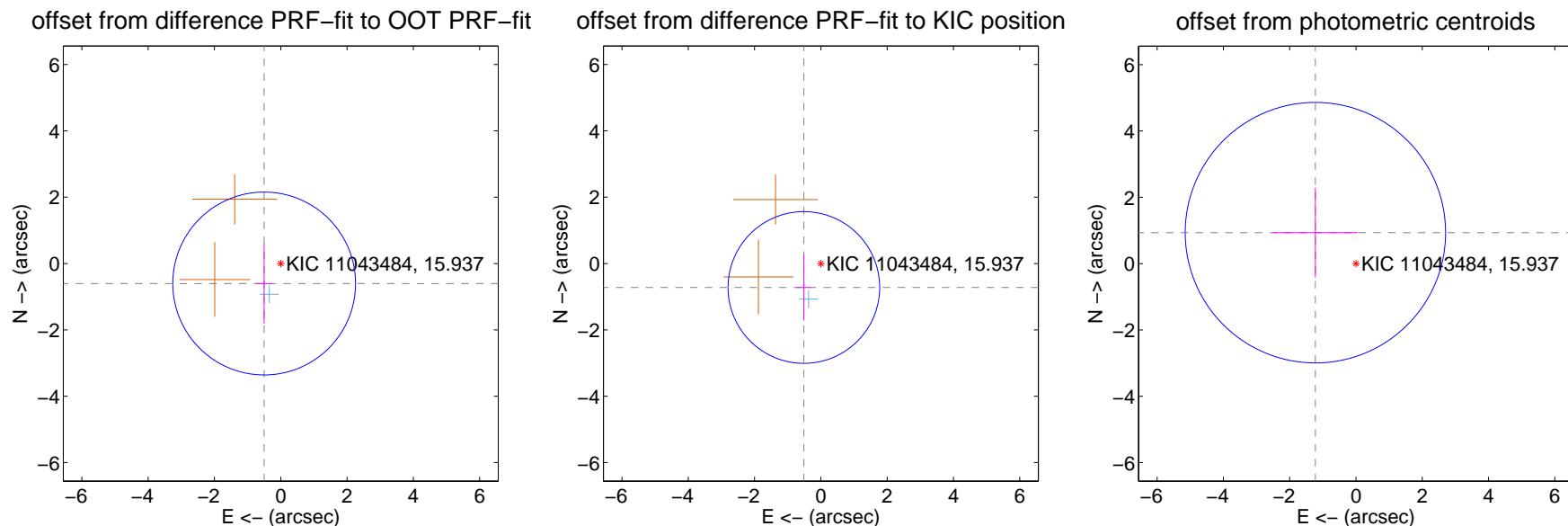
DV Centroid Data

Supplemental centroid analysis for 011043484-01. Kepler magnitude: 15.94. Transit SNR 8.99

There are 1 quarters with good PRF difference image offsets

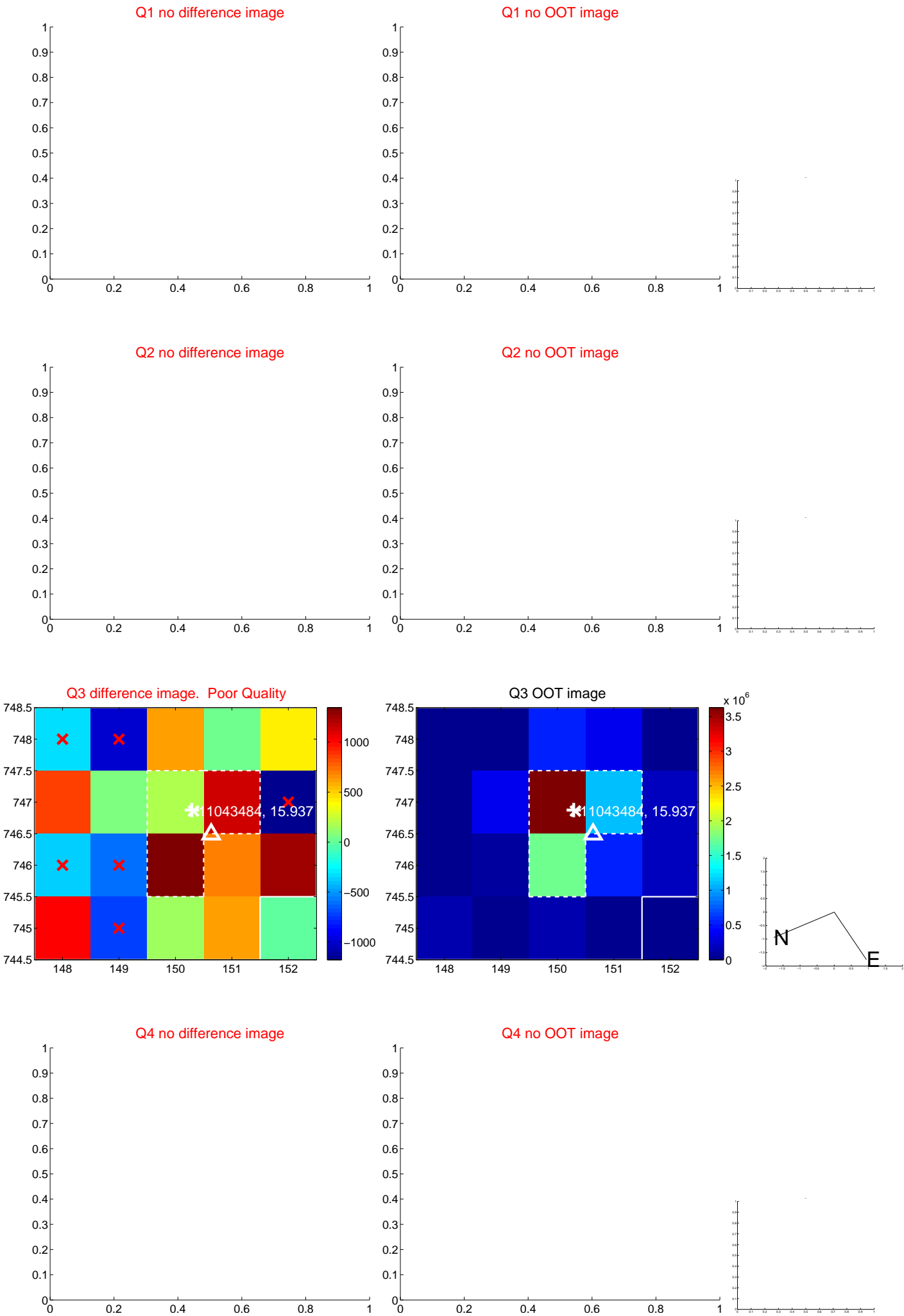
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.783 ± 0.919	0.85	0.500 ± 0.243	-0.602 ± 1.213
PRF-fit source offset from KIC position	0.886 ± 0.762	1.16	0.513 ± 0.215	-0.722 ± 1.000
photometric centroid source offset	1.54 ± 1.31	1.18	1.22 ± 1.28	0.93 ± 1.35

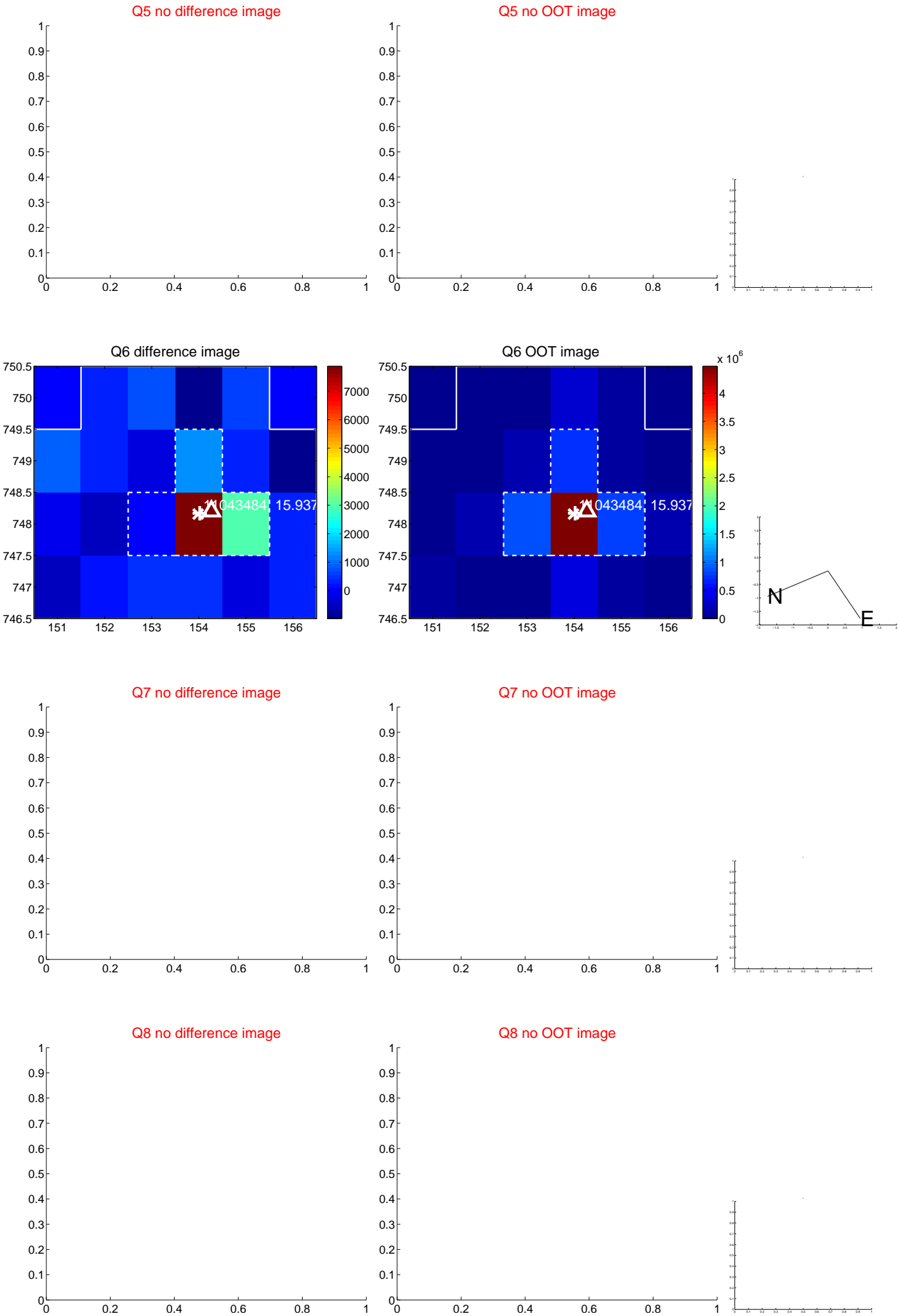


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

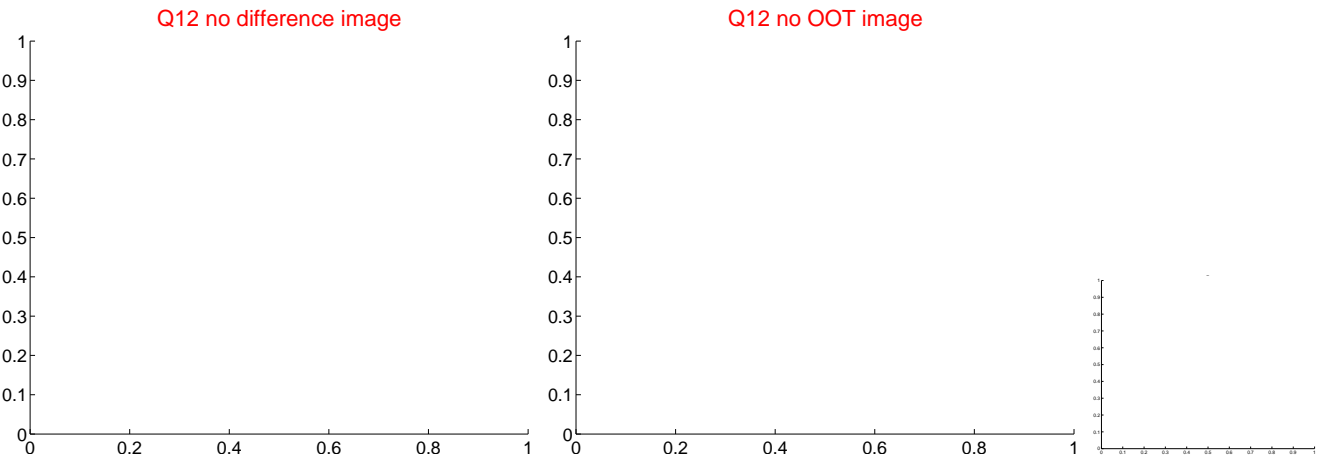
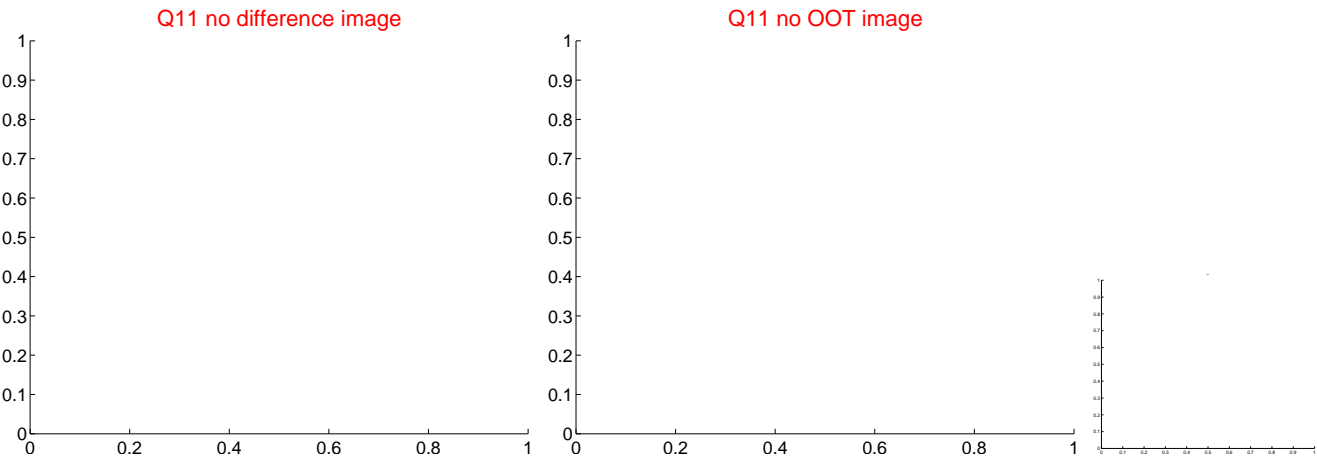
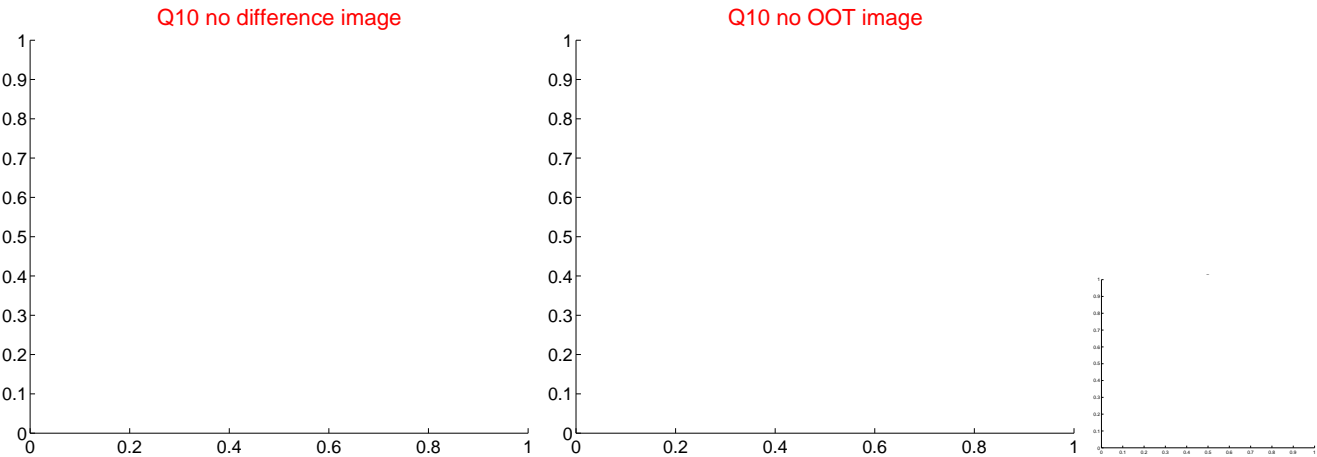
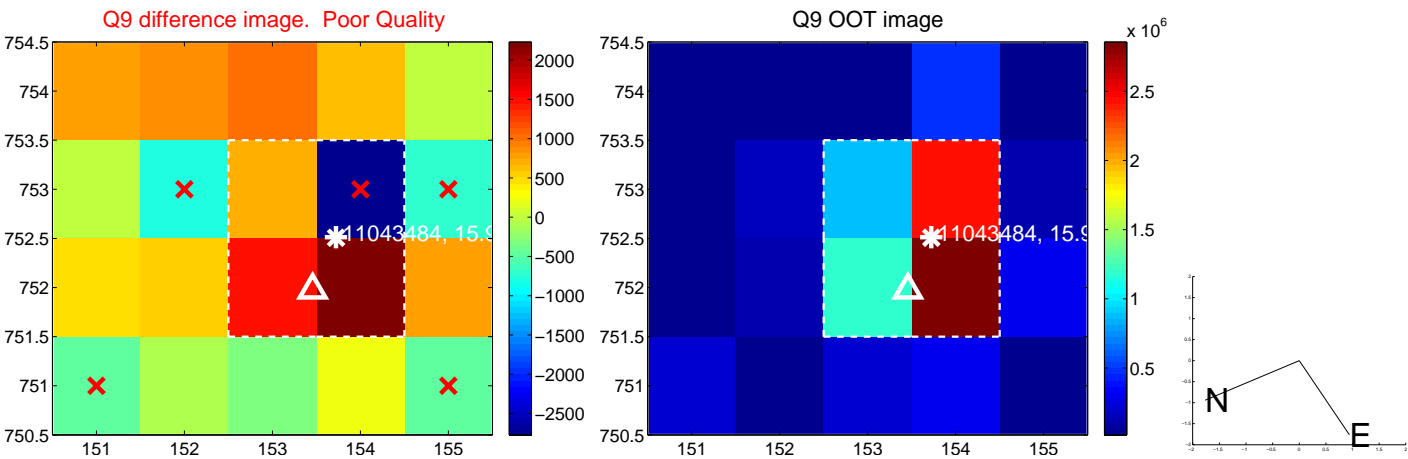
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



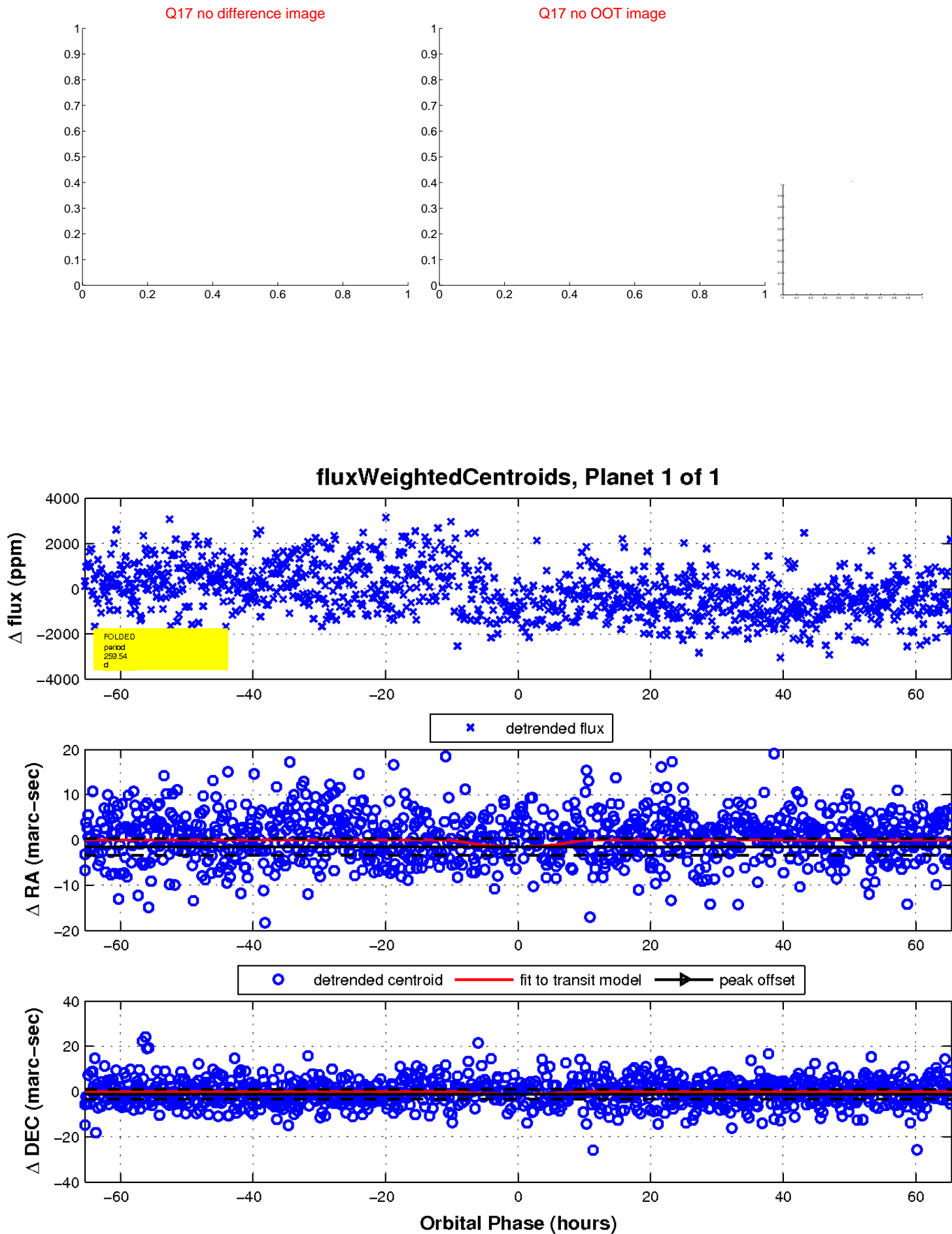
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

