

KIC 011153476

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})
011153476-01	OBS	4601.01	7.940044	135.428312	85.6	3.475	9.7	10.4	1.08	6278	1.14	246.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011153476-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

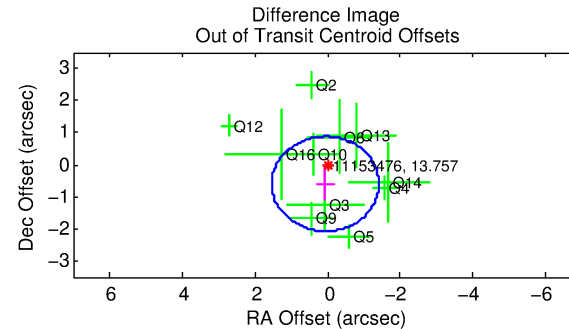
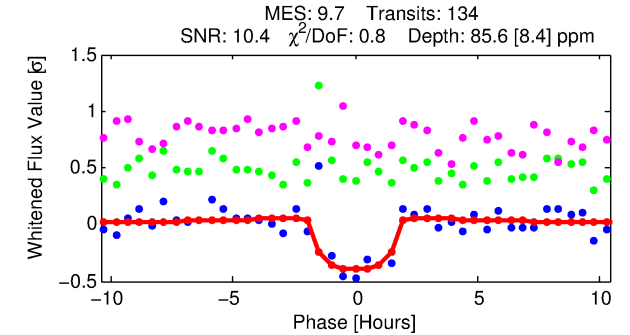
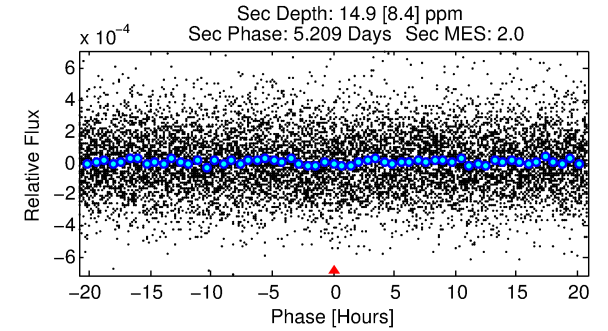
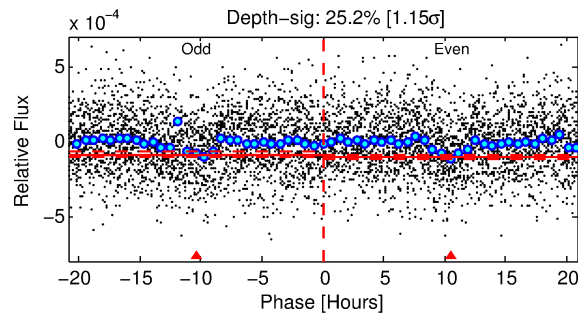
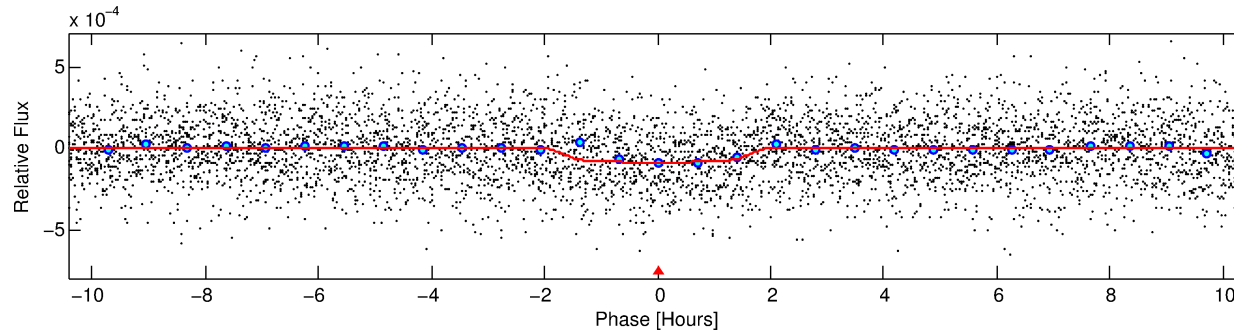
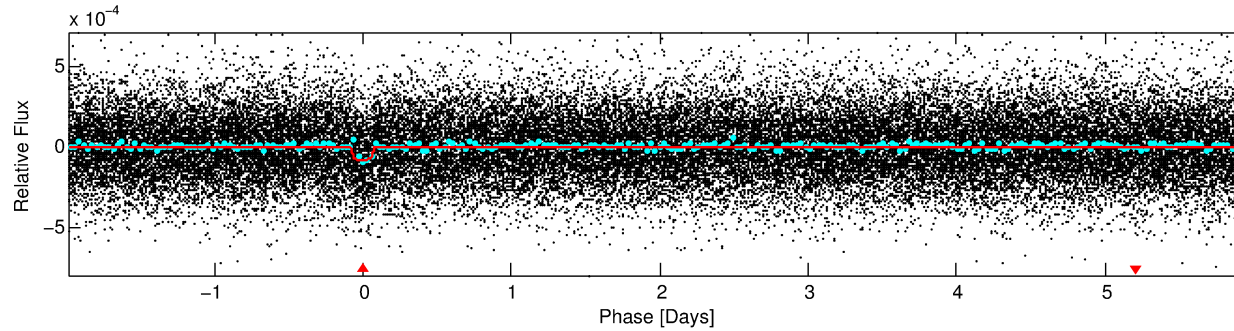
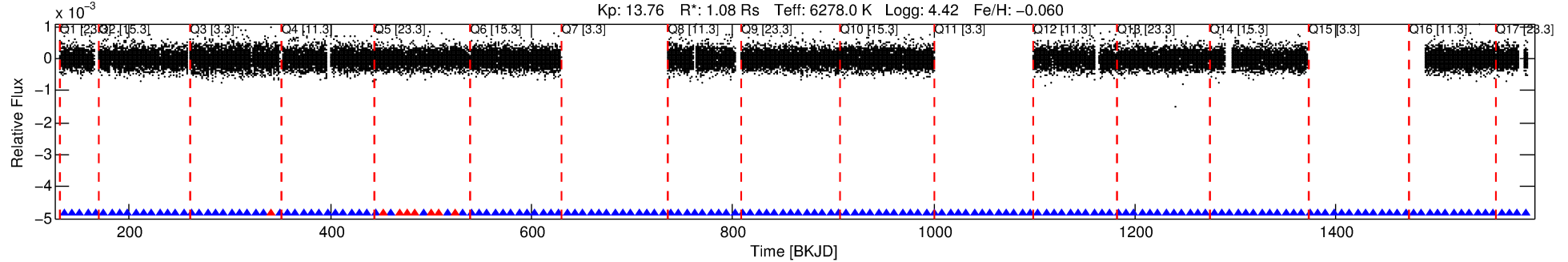
Ephemeris Match Information For 011153476-01

No Significant Match Found

DV One-Page Summary

KIC: 11153476 Candidate: 1 of 1 Period: 7.940 d
KOI: K04601.01 Corr: 0.978

Kp: 13.76 R*: 1.08 Rs Teff: 6278.0 K Logg: 4.42 Fe/H: -0.060



DV Fit Results:

Period = 7.94004 [0.00006] d
Epoch = 135.4283 [0.0059] BKJD
Rp/R* = 0.0096 [0.0050]
a/R* = 9.51 [26.25]
b = 0.85 [0.91]
Seff = 246.40 [102.90]
Teq = 1010 [105] K
Rp = 1.13 [0.70] Re
a = 0.0812 [0.0222] AU
Ag = 42.00 [52.57] [0.78σ]
Teffp = 3976 [1187] K [2.49σ]

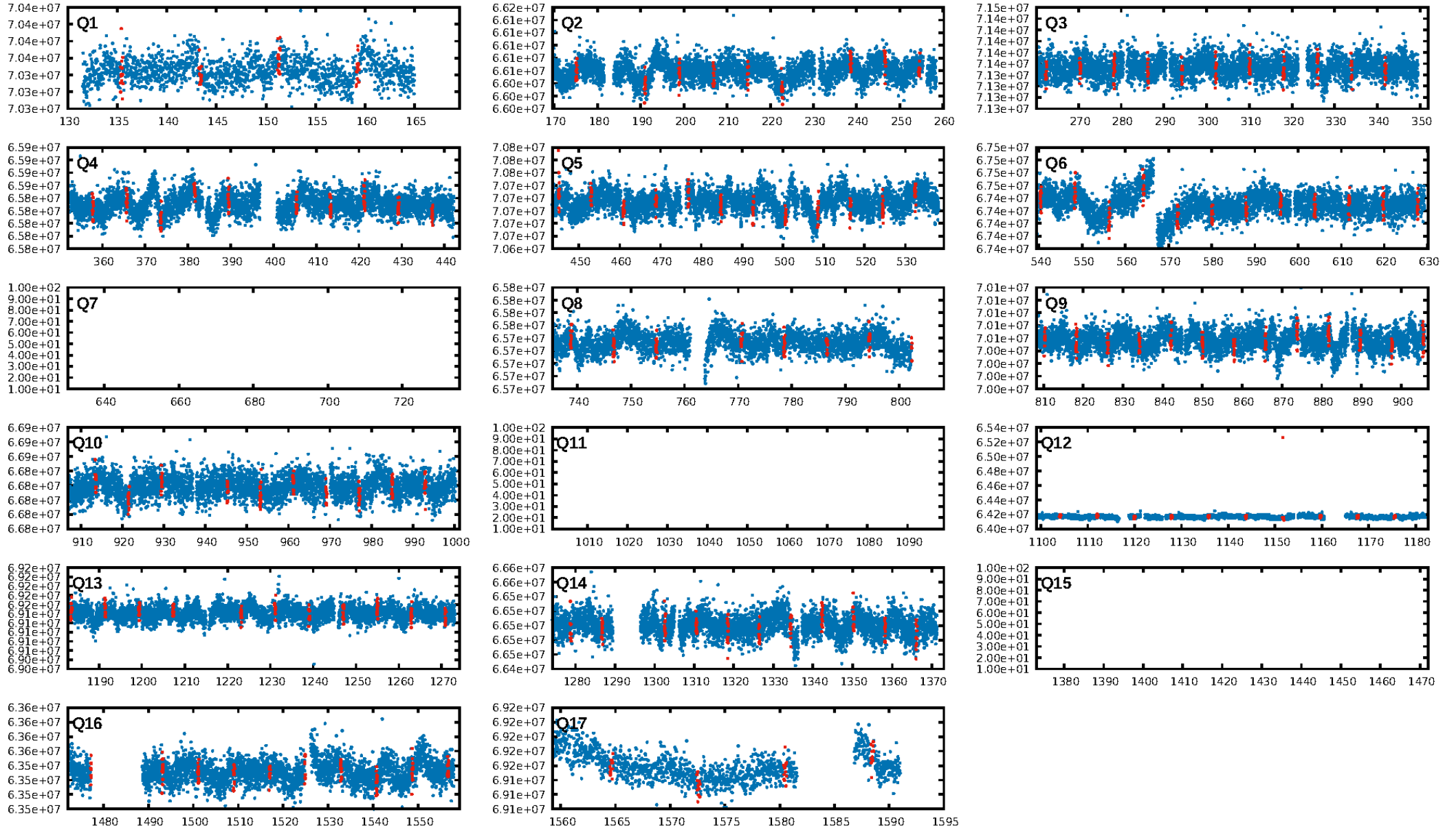
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.97e-22
RollingBand-fgt: 0.94 [118/126]
GhostDiagnostic-chr: 7.027
Centroid-sig: 87.9%
Centroid-so: 0.477 arcsec [0.38σ]
OotOffset-rm: 0.601 arcsec [1.22σ]
KicOffset-rm: 0.463 arcsec [0.92σ]
OotOffset-st: 4/1/3/3 [11]
KicOffset-st: 4/1/3/3 [11]
DiffImageQuality-fgm: 0.82 [9/11]
DiffImageOverlap-fno: 1.00 [14/14]

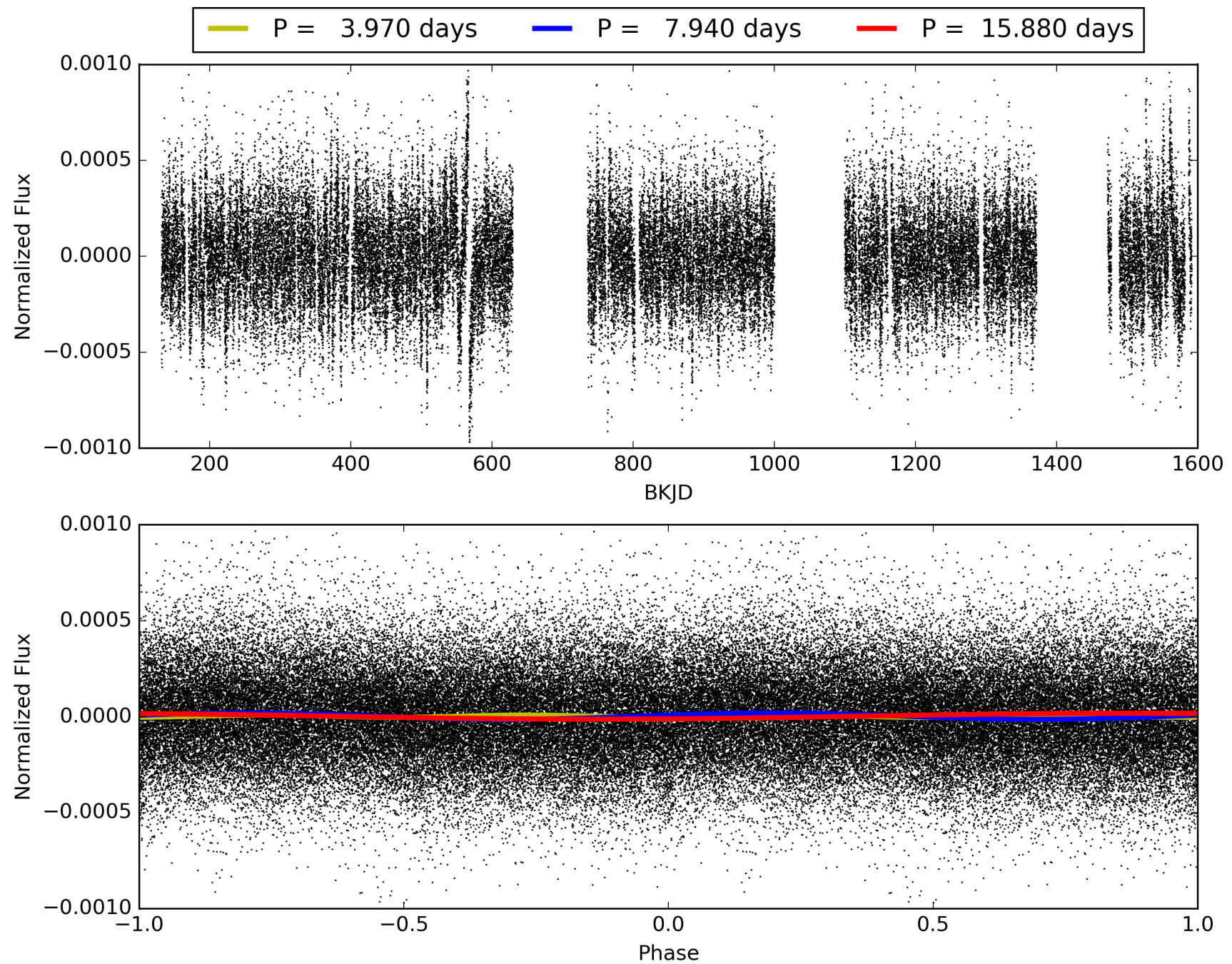
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 01:26:15 Z

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

TCE 011153476-01, PDC Light Curves

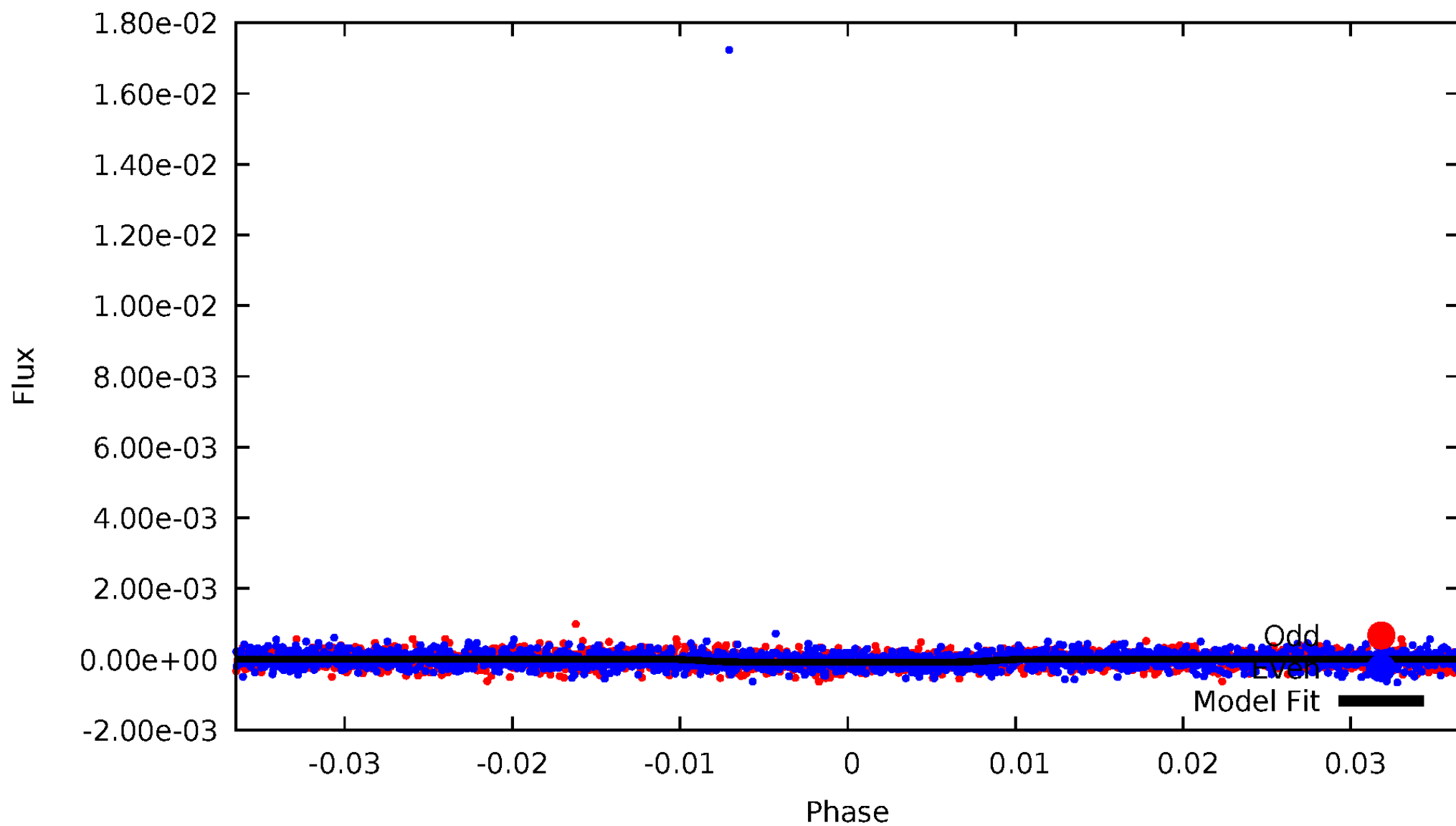


TCE 011153476-01



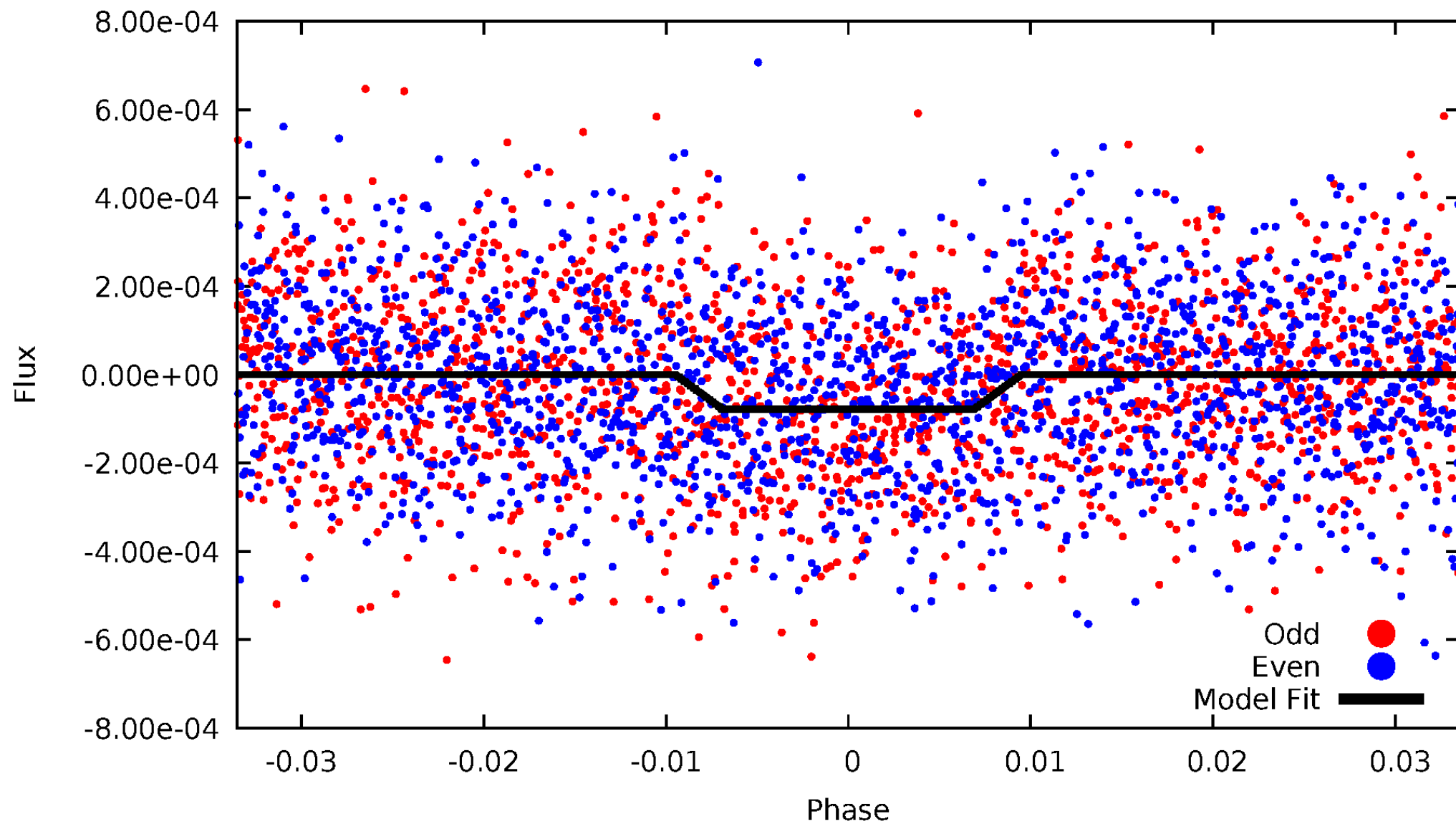
DV Odd/Even

TCE 011153476-01



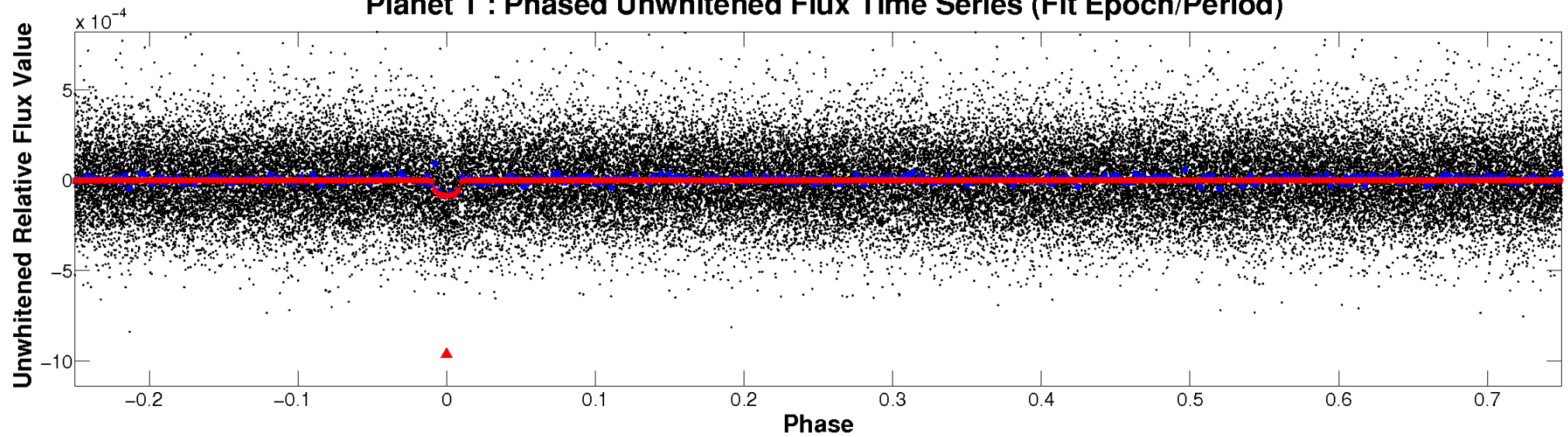
ALT Odd/Even

TCE 011153476-01

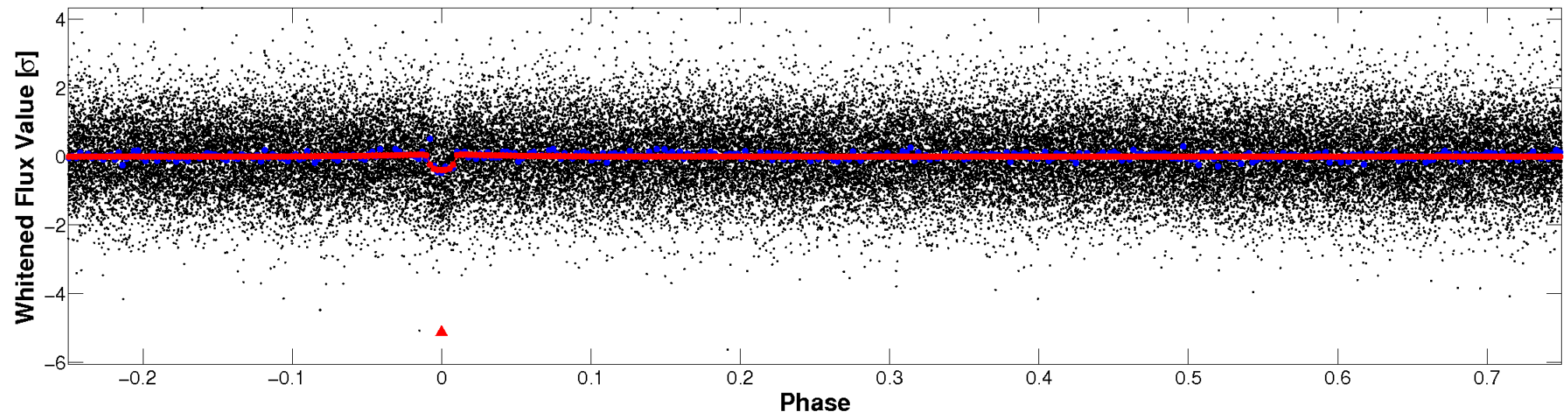


Non-Whitened Vs. Whitened Light Curve

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

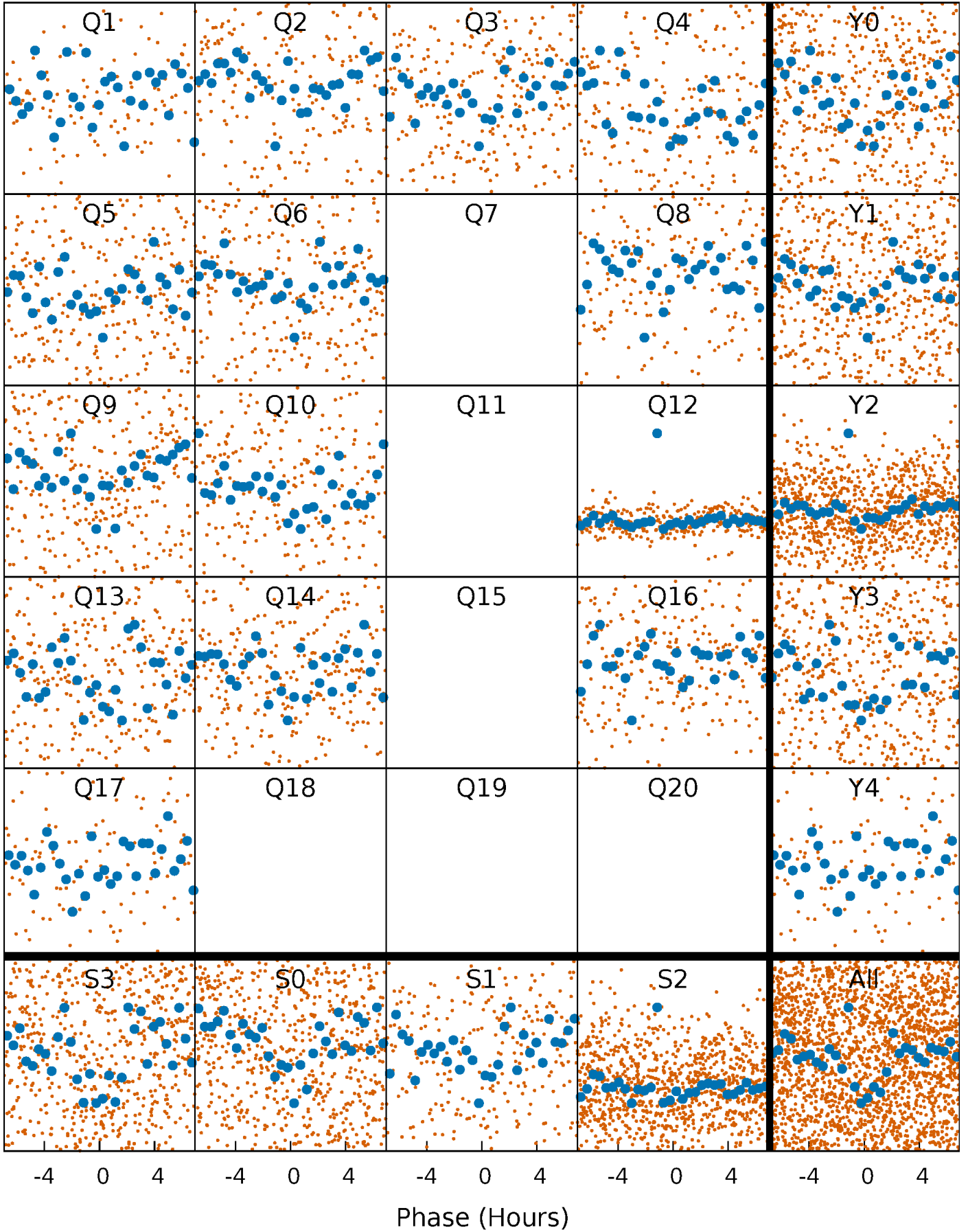


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



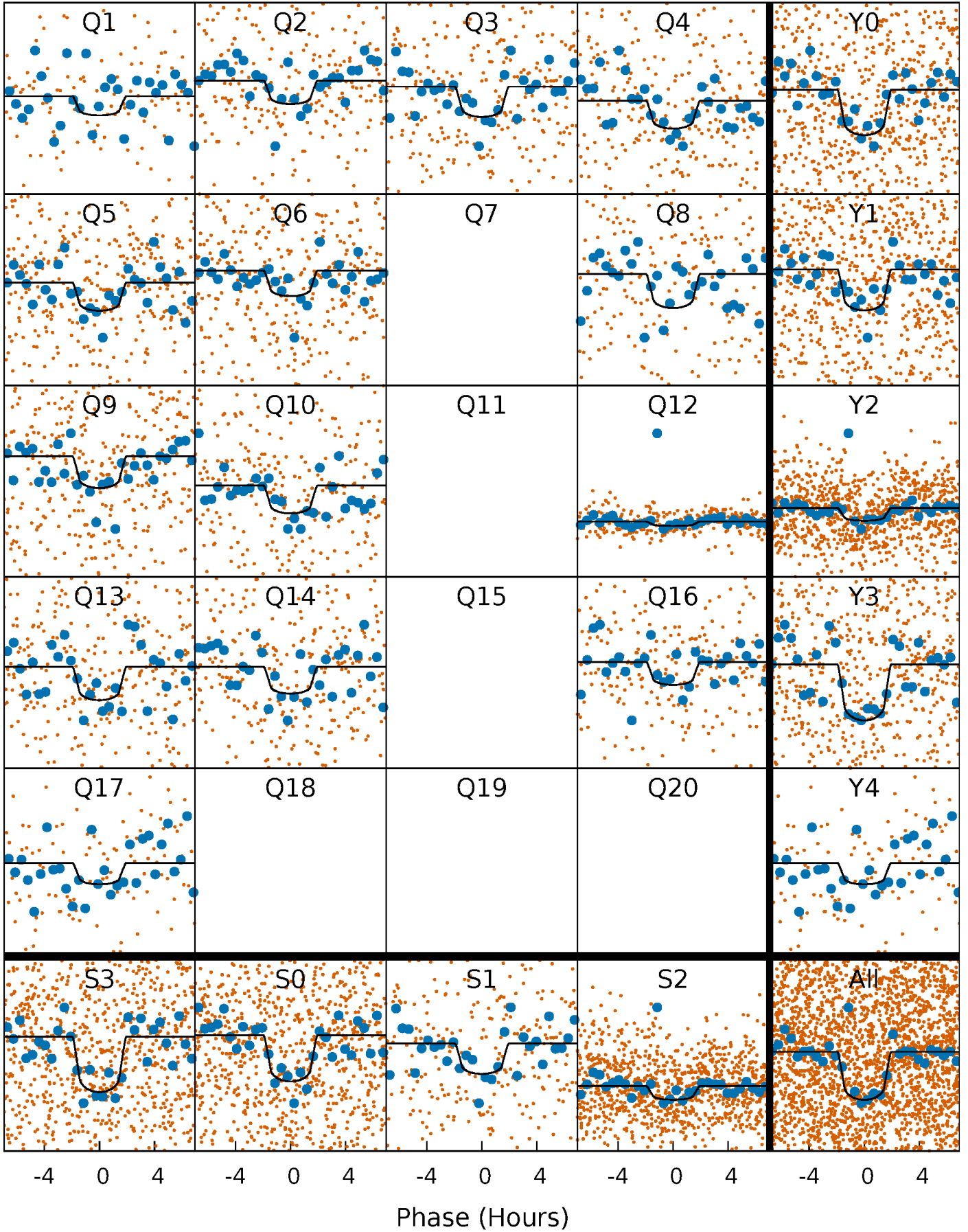
PDC Quarter-Phased Transit Curves

TCE 011153476-01 P= 7.940044 Days $T_0=135.428313$ (BKJD)



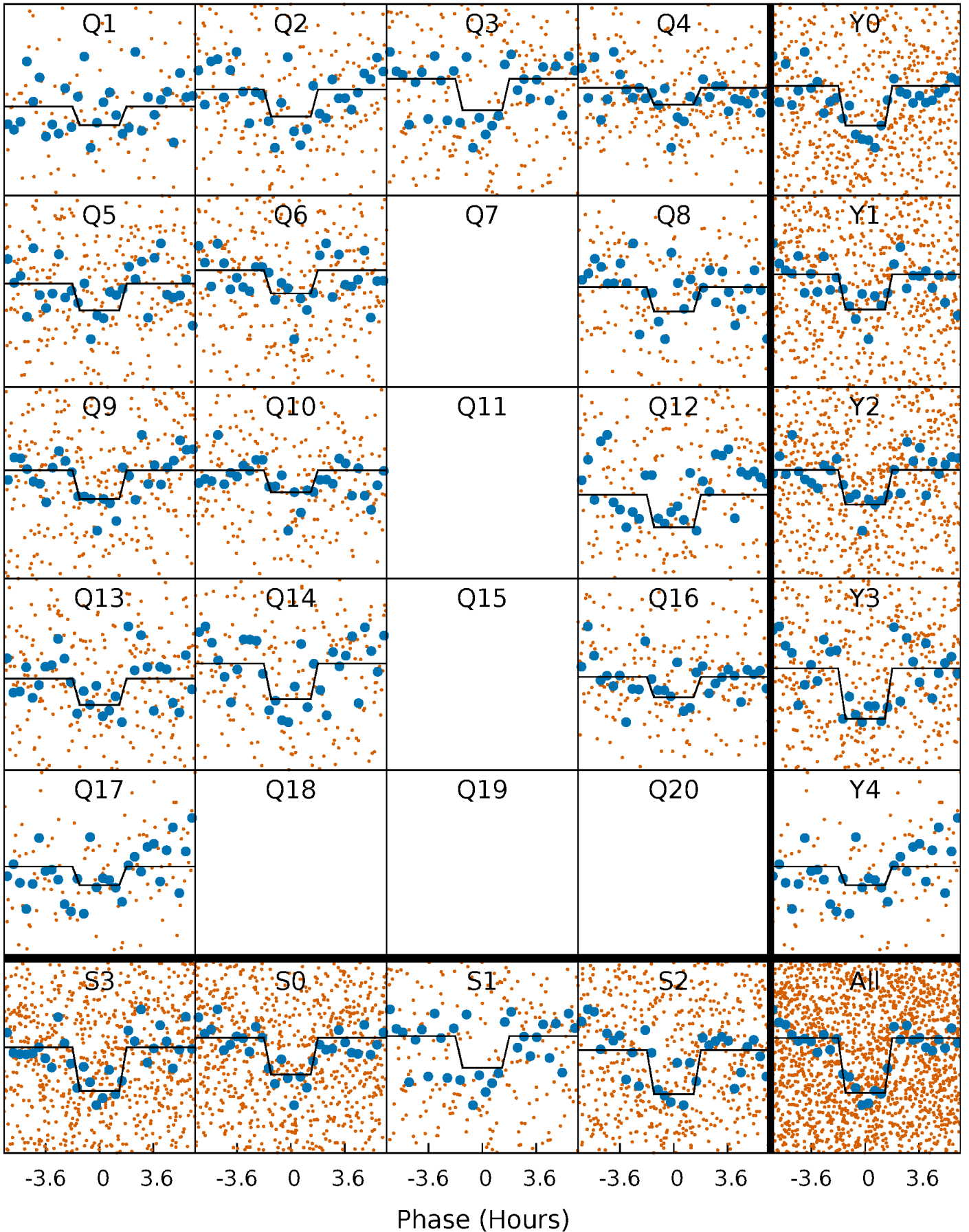
DV Quarter-Phased Transit Curves

TCE 011153476-01 P= 7.940044 Days $T_0=135.428313$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

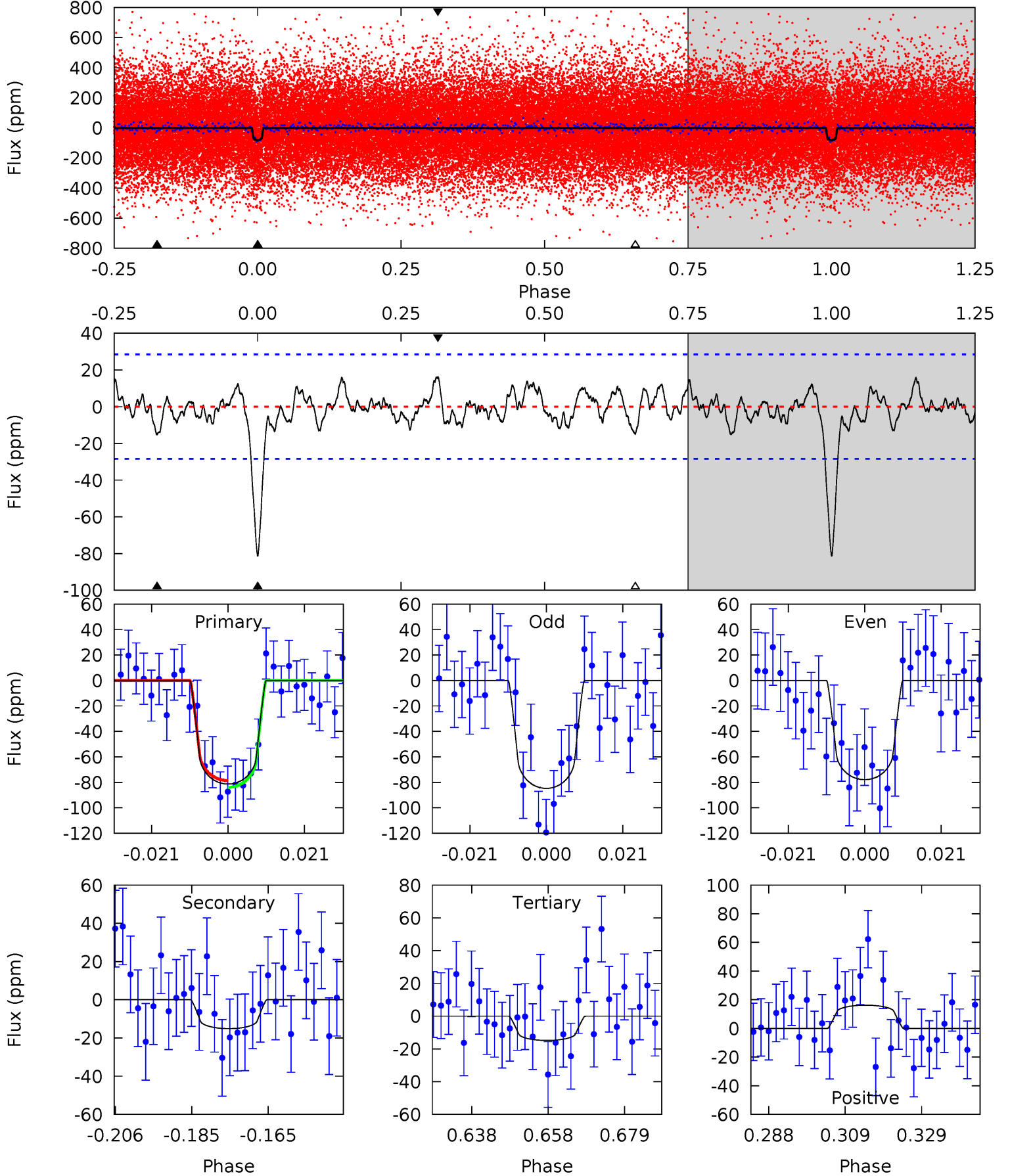
TCE 011153476-01 P= 7.940026 Days $T_0=135.433435$ (BKJD)



DV Model-Shift Uniqueness Test

011153476-01, P = 7.940044 Days, E = 127.488269 Days

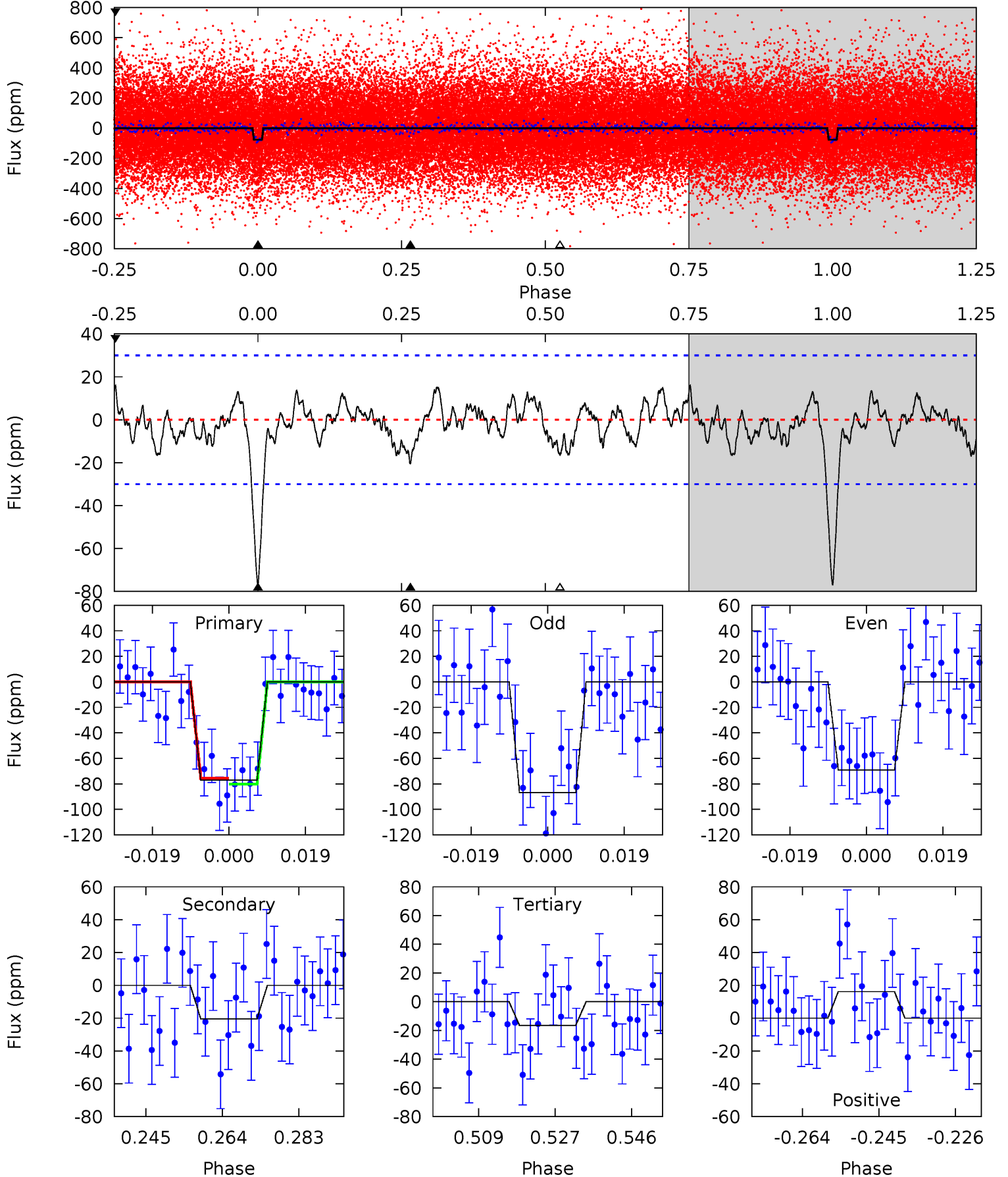
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.0	2.60	2.55	2.79	4.89	2.32	1.11	11.4	11.2	0.05	-0.18	0.59	0.71	0.17	0.46



Alt Model-Shift Uniqueness Test

011153476-01, P = 7.940026 Days, E = 127.493409 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	3.35	2.69	2.64	4.90	2.35	1.13	9.88	9.93	0.65	0.70	1.45	1.00	0.17	0.38



Stellar Parameters For KIC 011153476

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6278^{+149}_{-205}	$4.425^{+0.054}_{-0.216}$	$-0.060^{+0.250}_{-0.300}$	$1.081^{+0.353}_{-0.118}$	$1.132^{+0.159}_{-0.159}$	$1.264^{+0.361}_{-0.667}$
	+2%/-3%	+1%/-5%	+417%/-500%	+33%/-11%	+14%/-14%	+29%/-53%
Source	PHO1	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 011153476-01 / KOI 4601.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-15 ± 6	$1.21^{+0.67}_{-0.59}$	1438^{+106}_{-68}	4143^{+1188}_{-626}	35^{+91}_{-22}
Alt.	-20 ± 6	$1.13^{+0.59}_{-0.57}$	1440^{+99}_{-68}	4559^{+1742}_{-728}	57^{+179}_{-36}

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 $A_{\text{obs}} \gg 1.0$

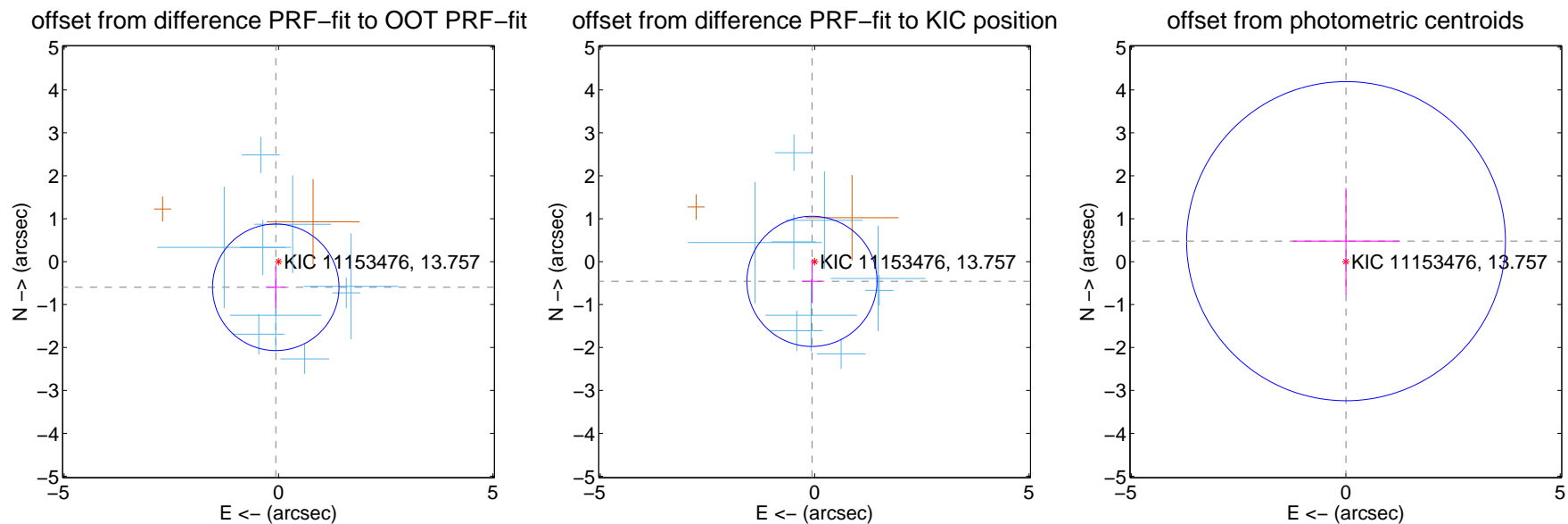
DV Centroid Data

Supplemental centroid analysis for 011153476-01. Kepler magnitude: 13.76. Transit SNR 10.38

There are 9 quarters with good PRF difference image offsets

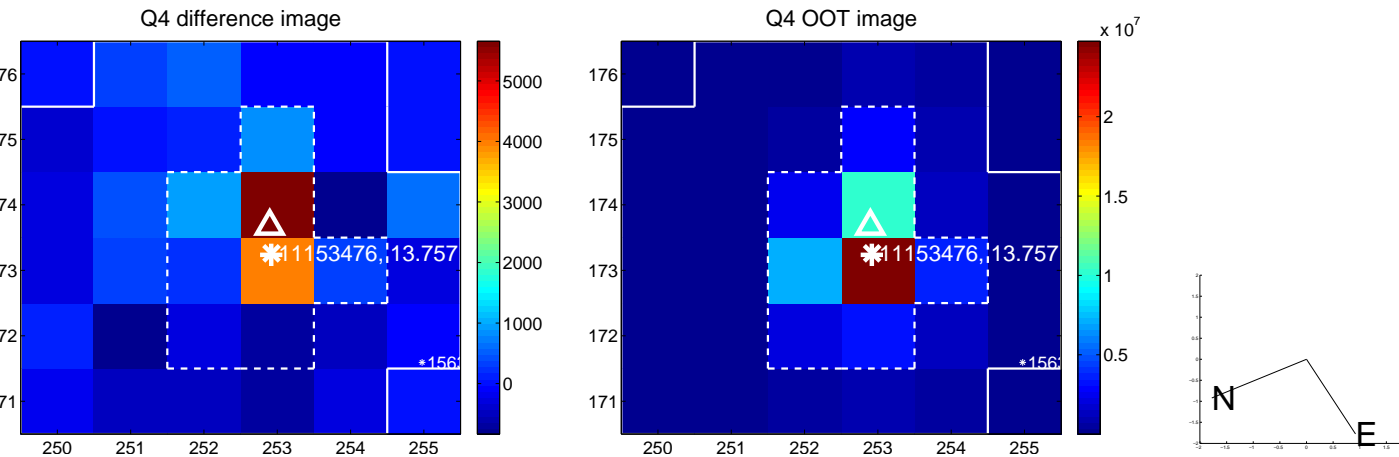
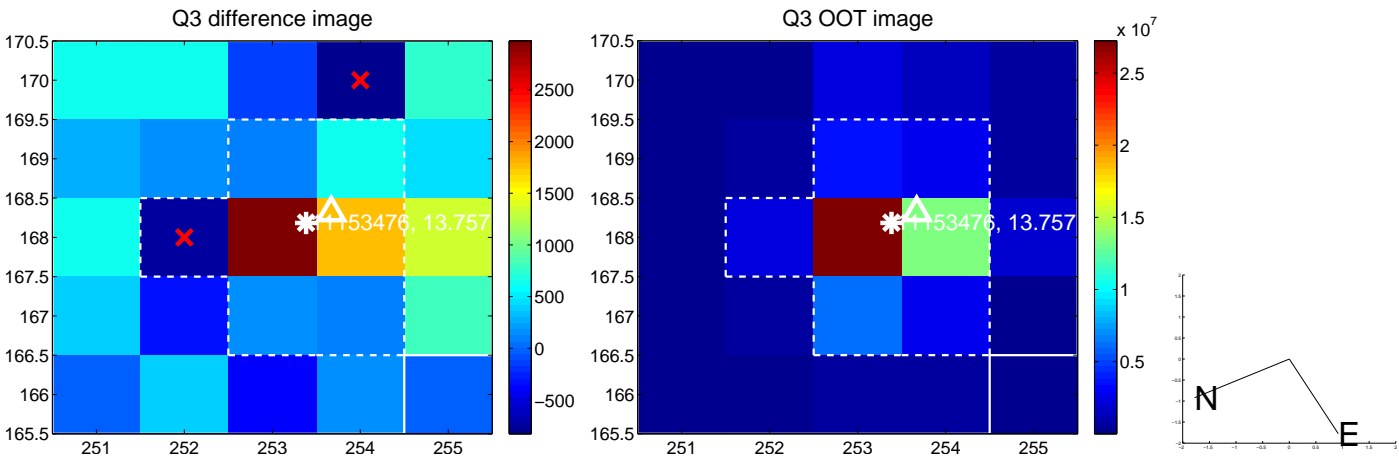
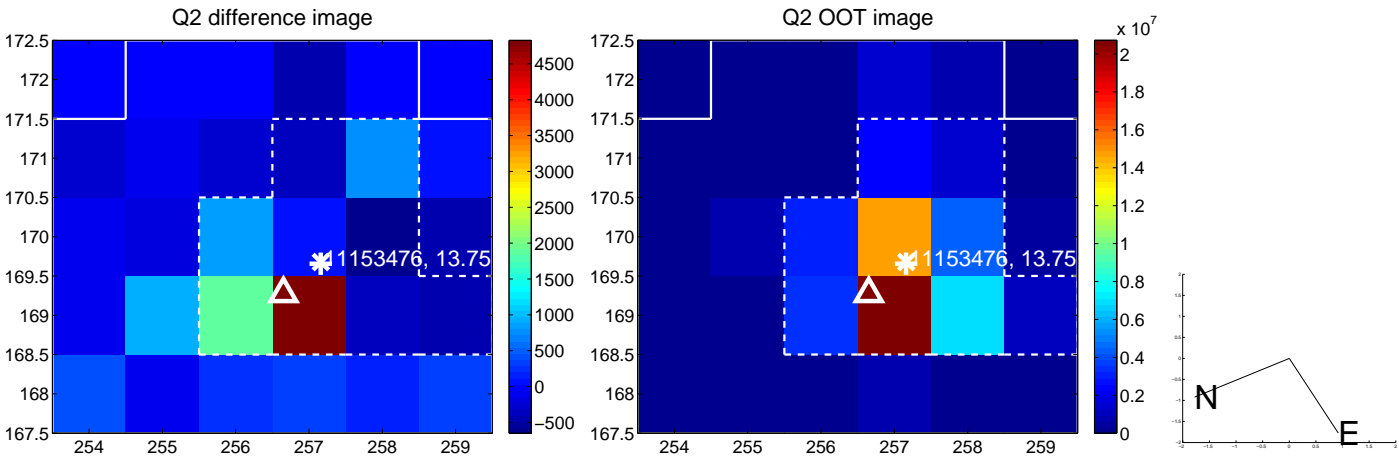
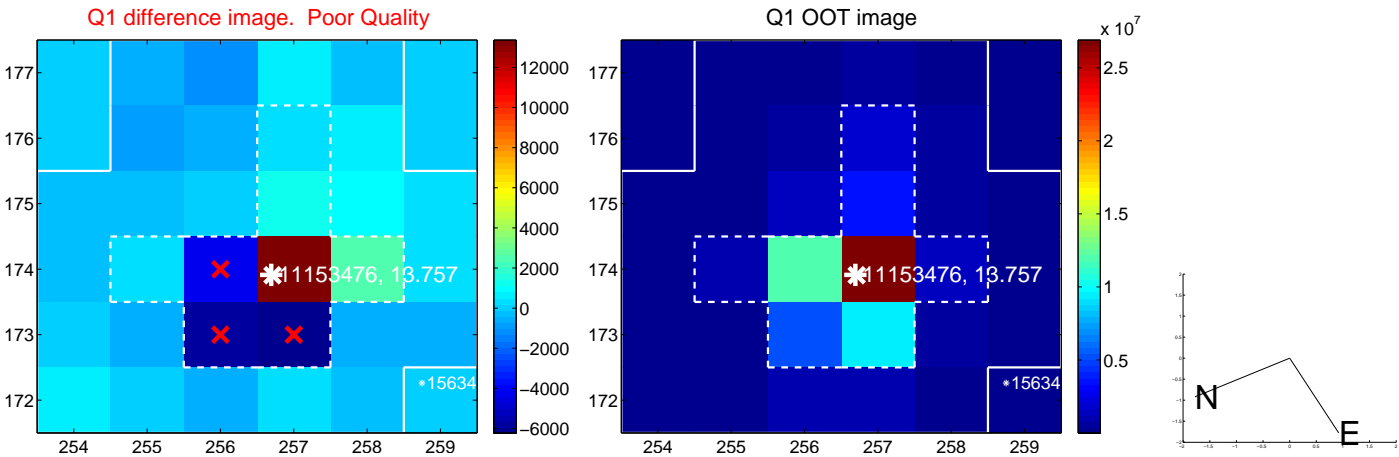
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.601 ± 0.491	1.22	0.064 ± 0.226	-0.598 ± 0.494
PRF-fit source offset from KIC position	0.463 ± 0.506	0.92	0.062 ± 0.237	-0.459 ± 0.509
photometric centroid source offset	0.48 ± 1.24	0.38	-0.00 ± 1.24	0.48 ± 1.24

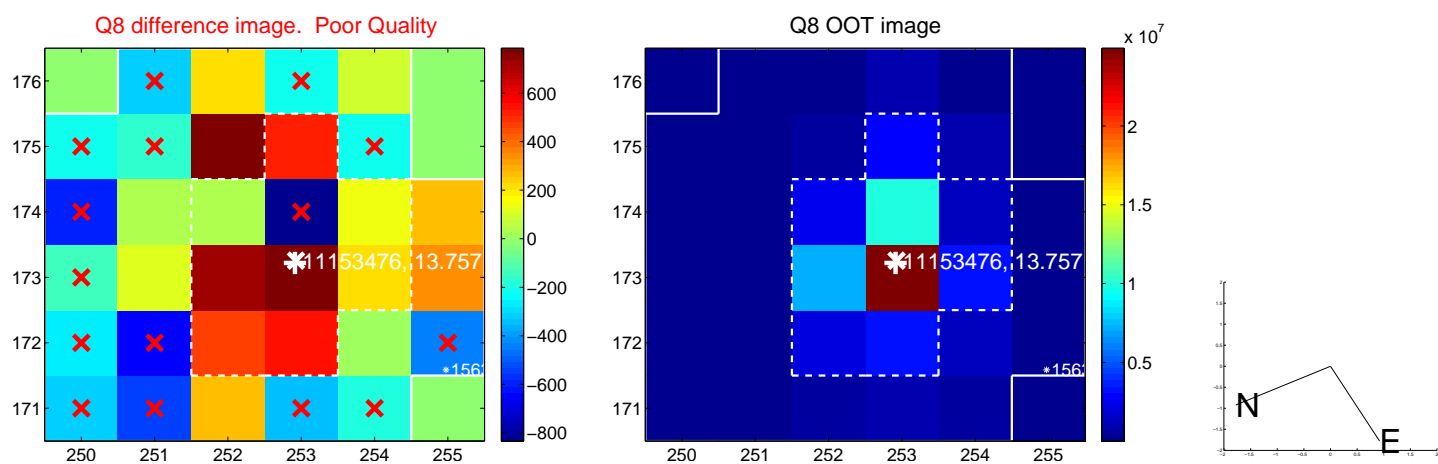
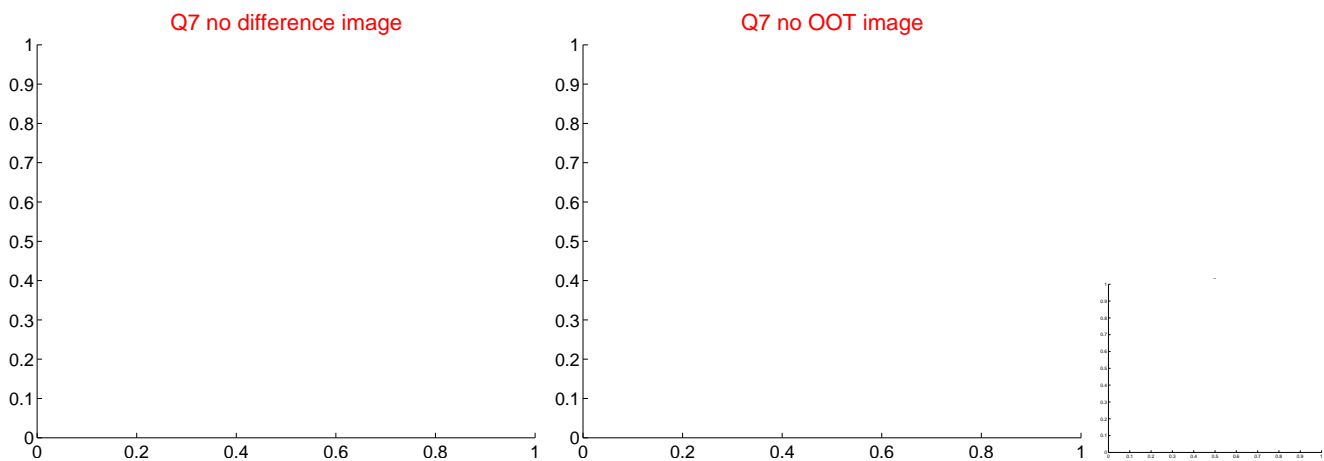
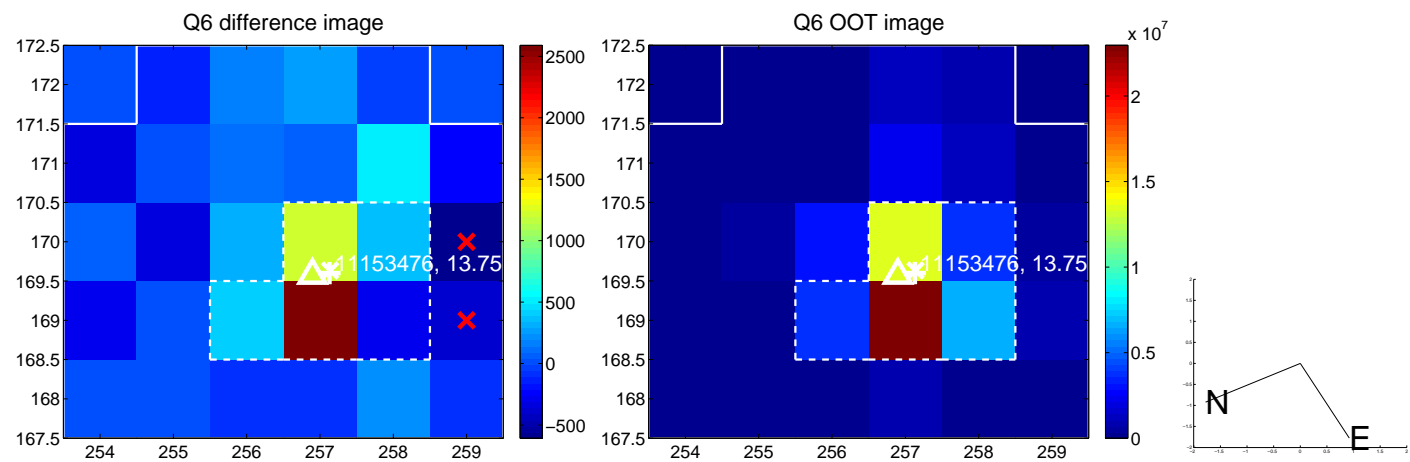
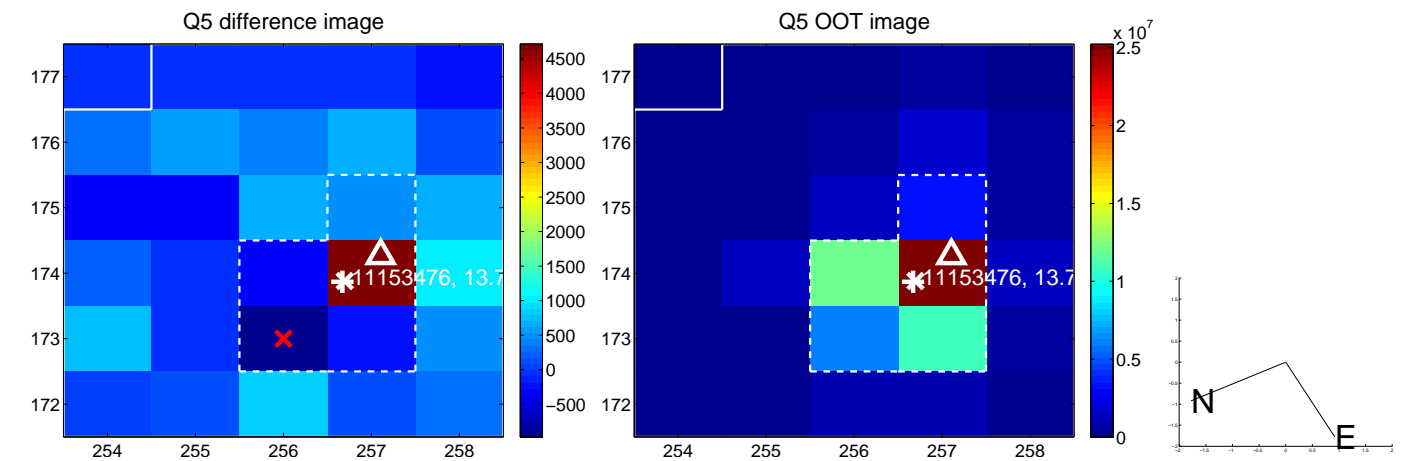


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

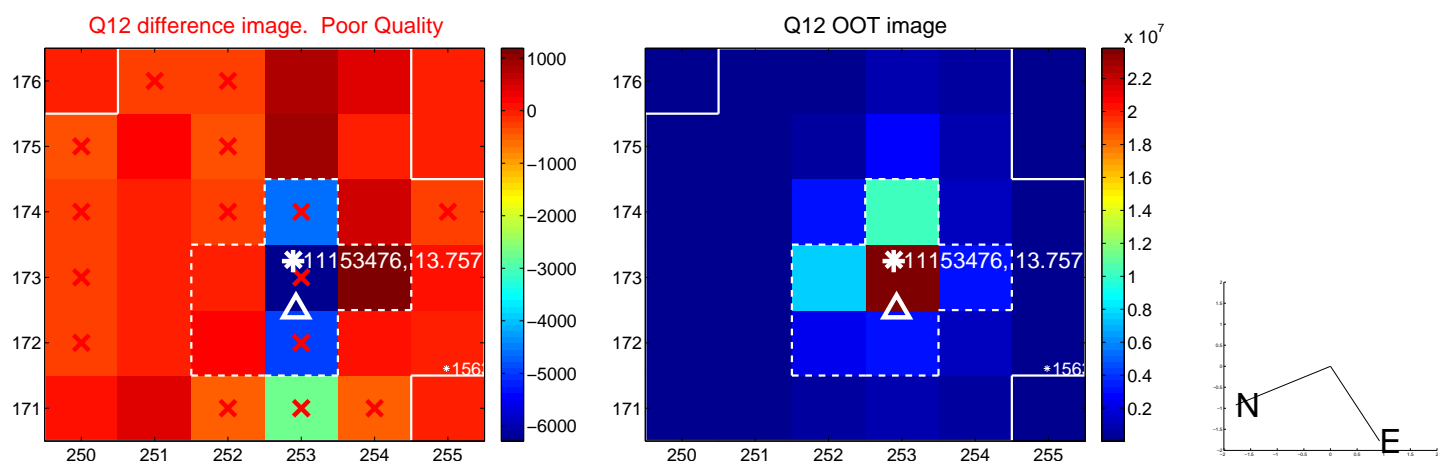
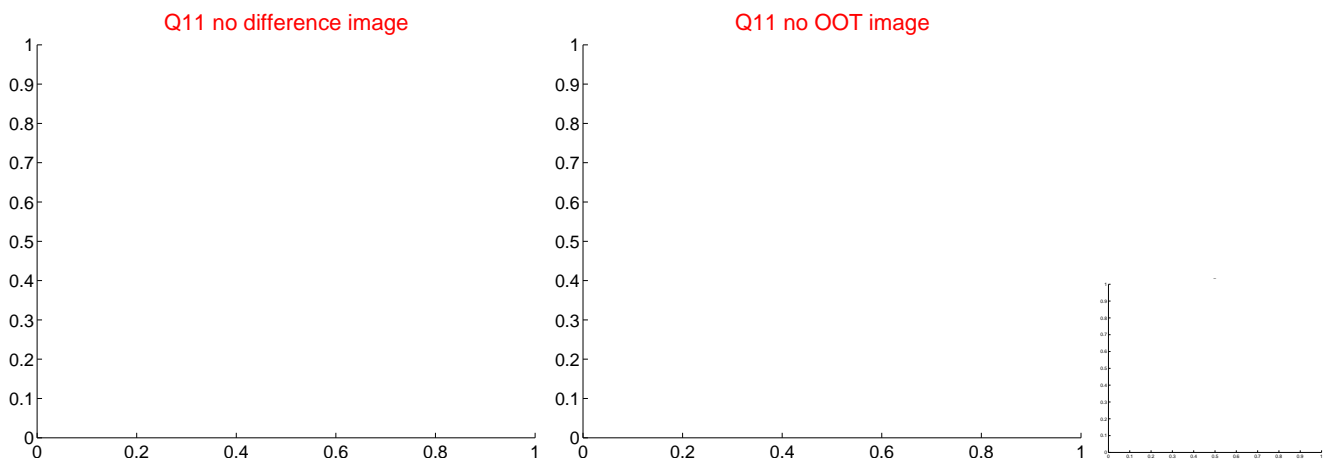
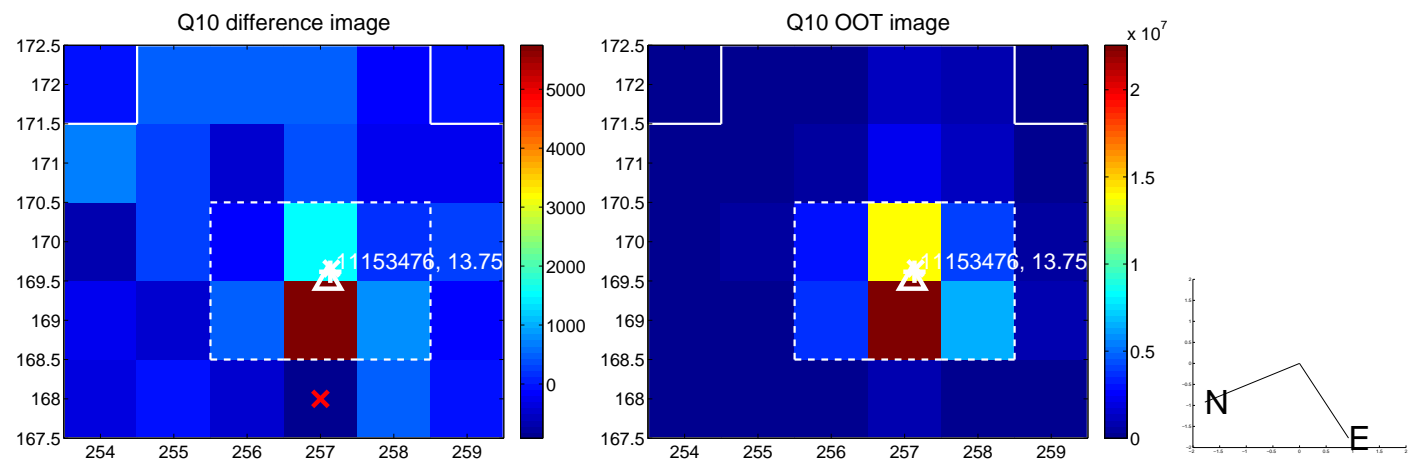
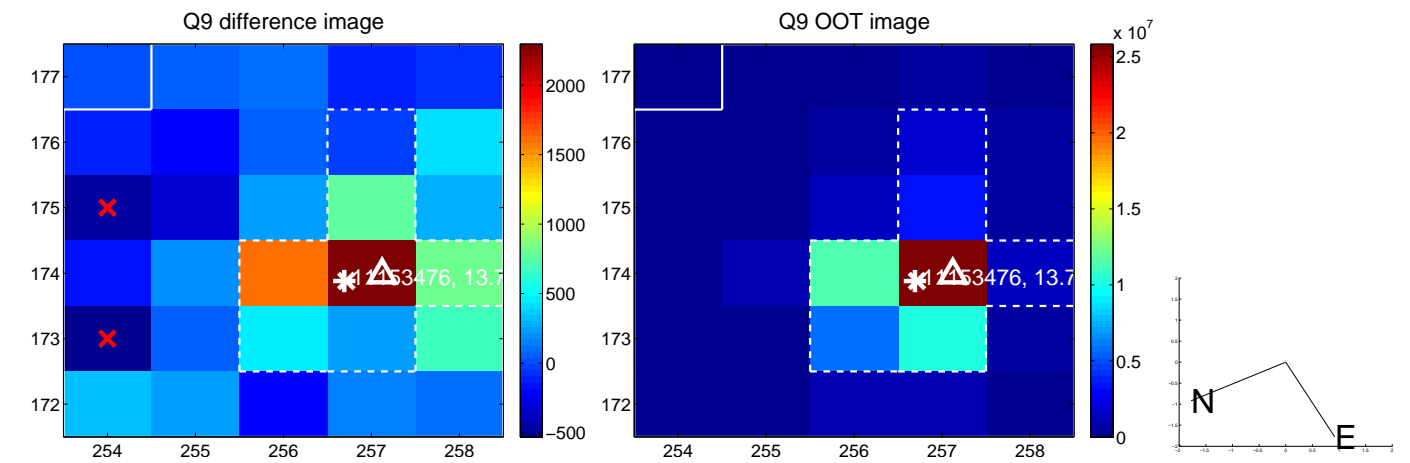
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



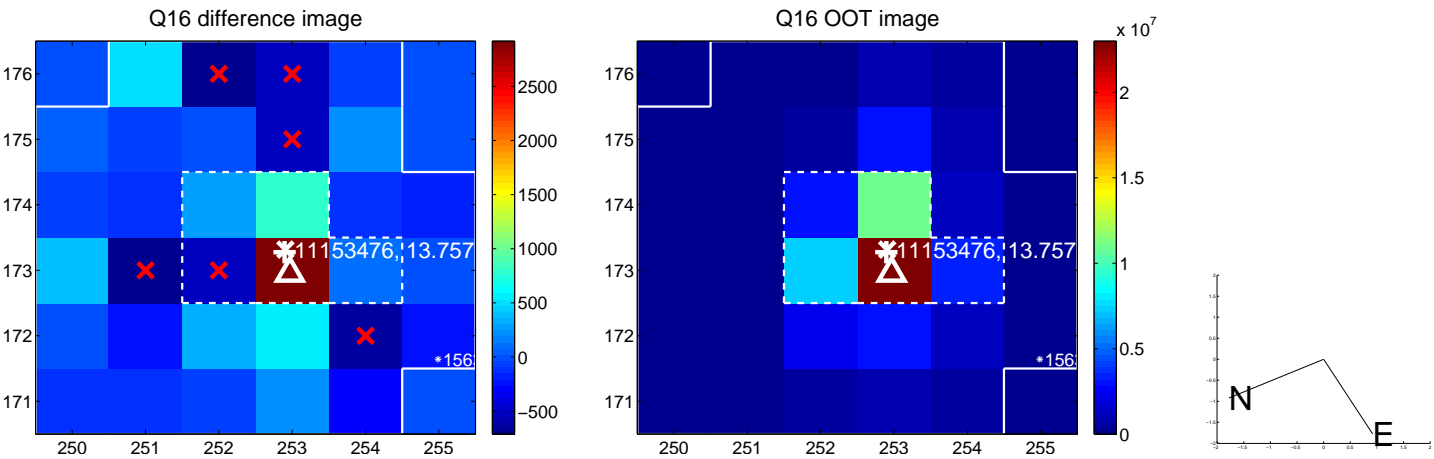
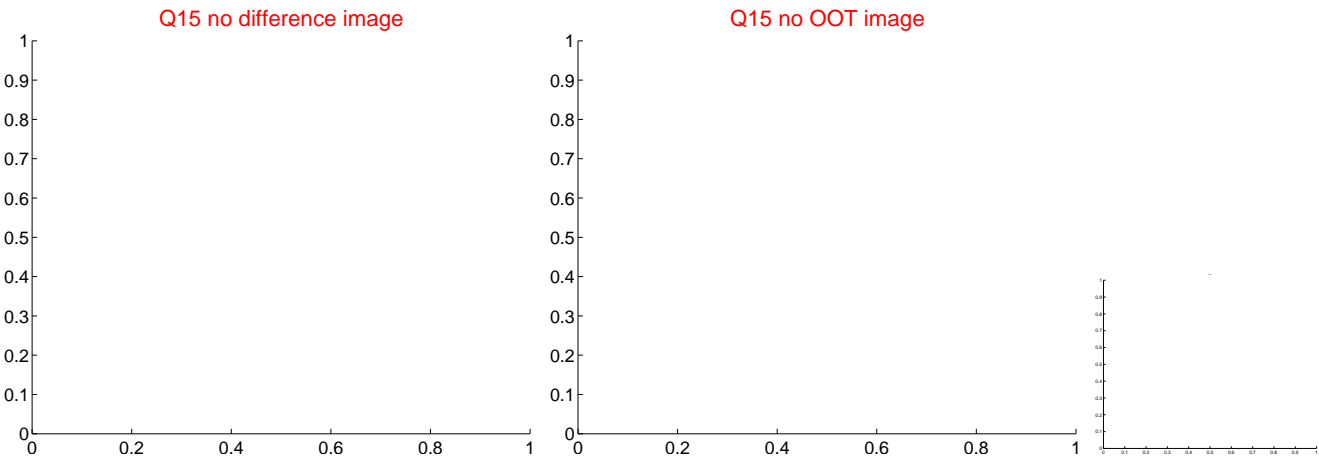
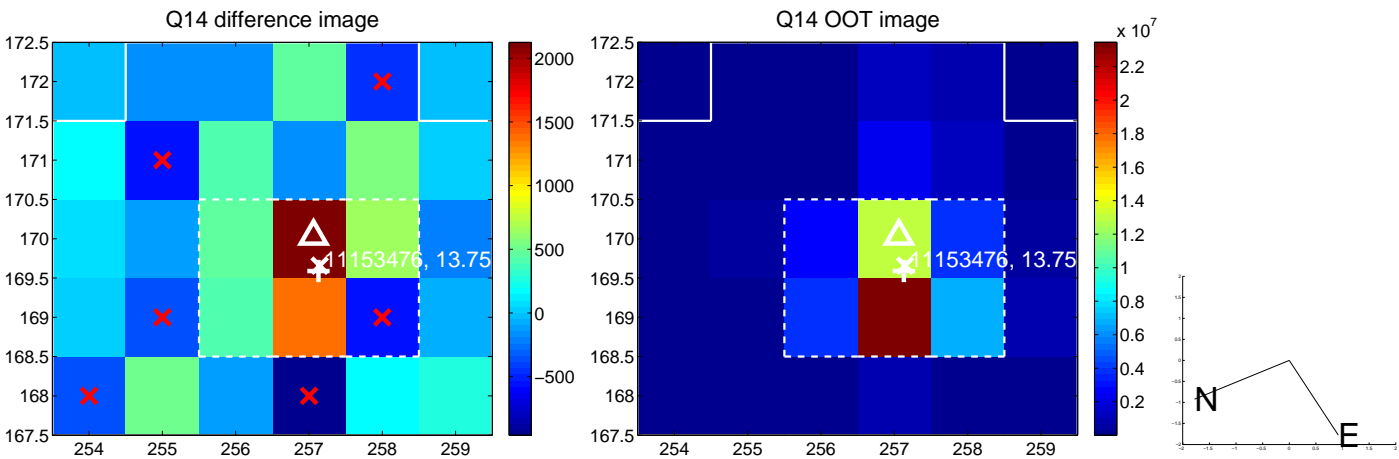
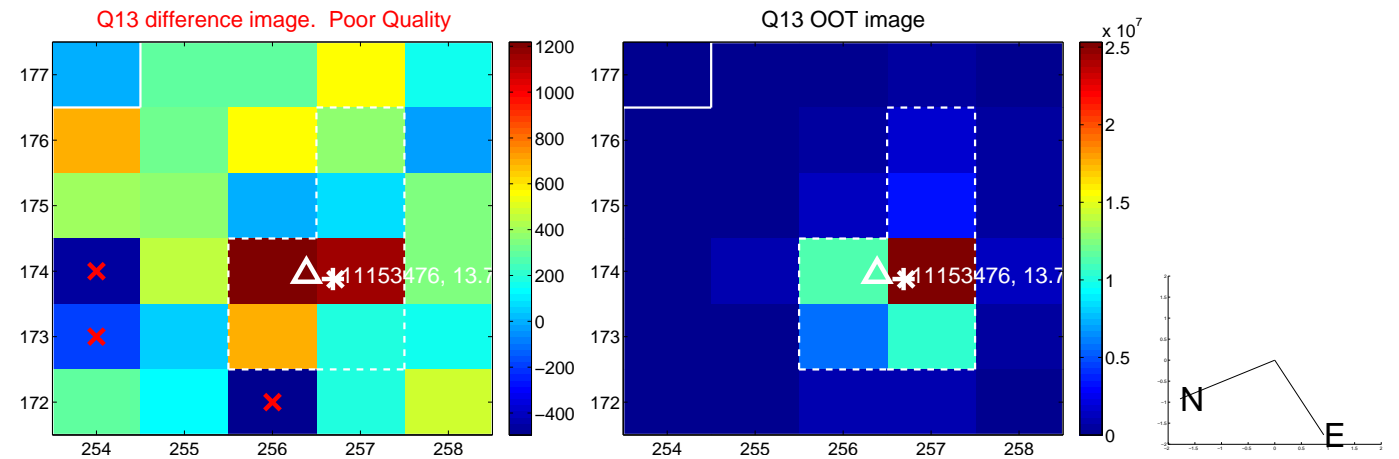
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



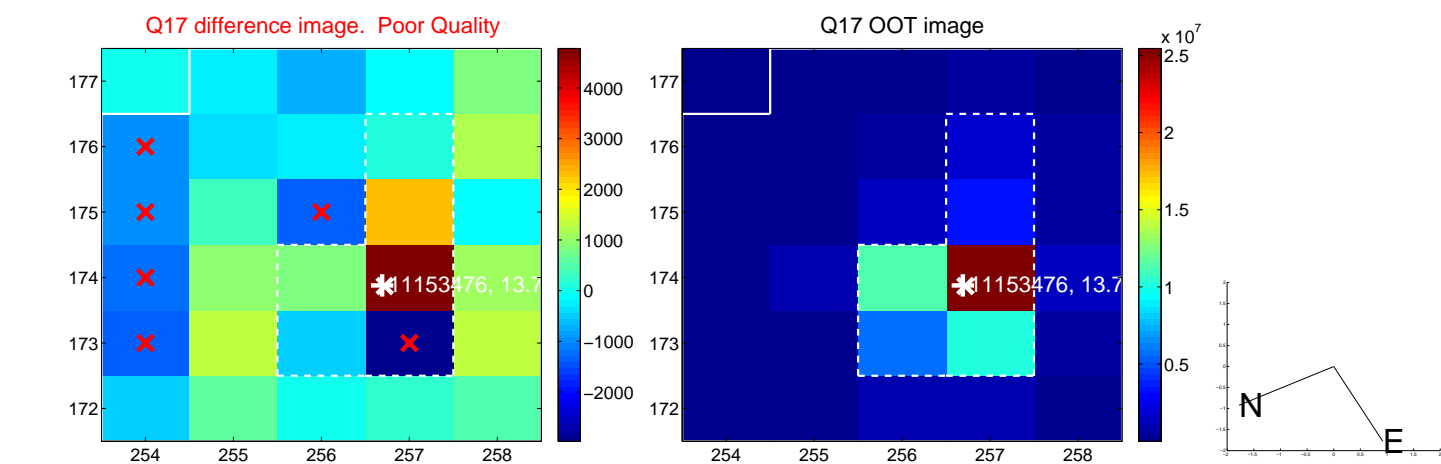
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



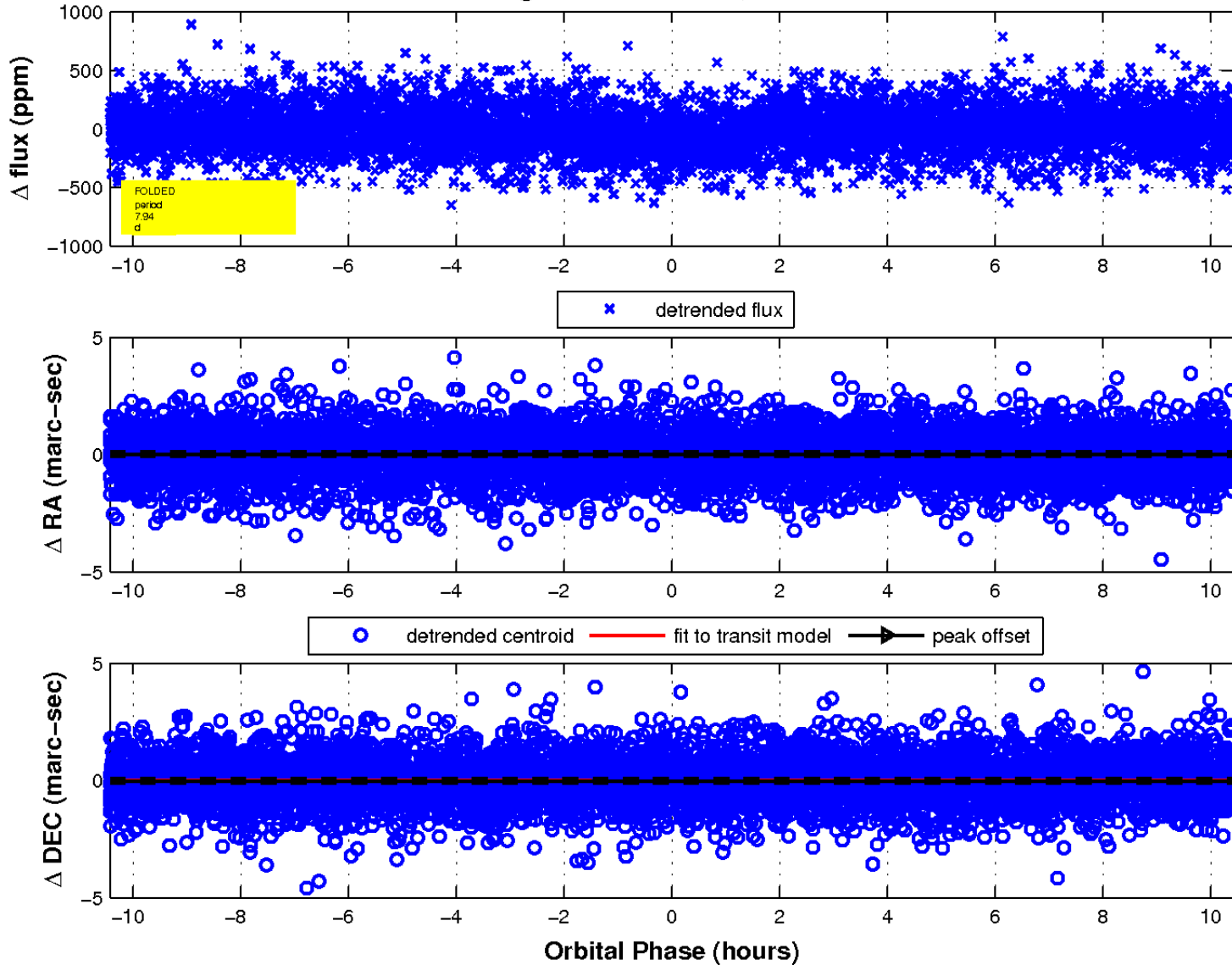
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

