

KIC 006751337

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})
006751337-01	OBS	No	13.188718	141.144234	82.7	32.368	7.9	10.7	1.58	6739	1.62	360.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006751337-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

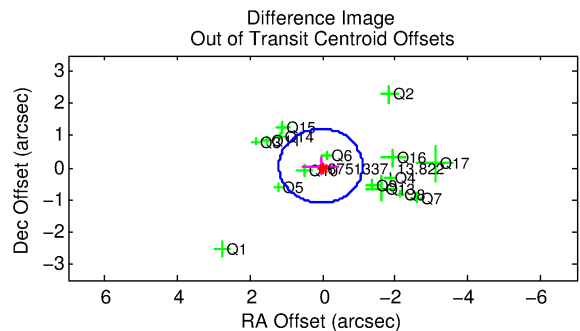
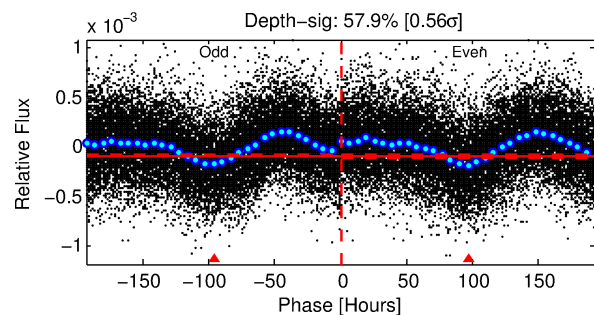
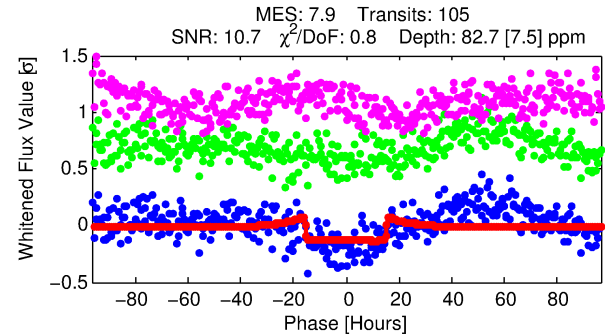
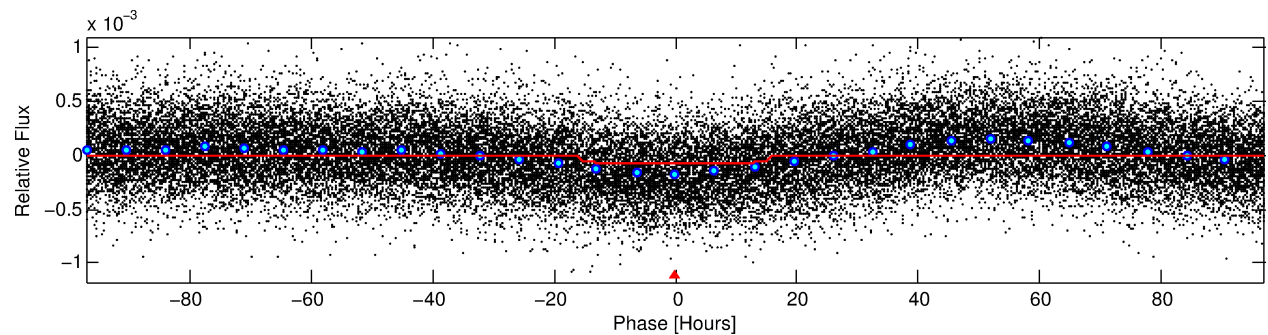
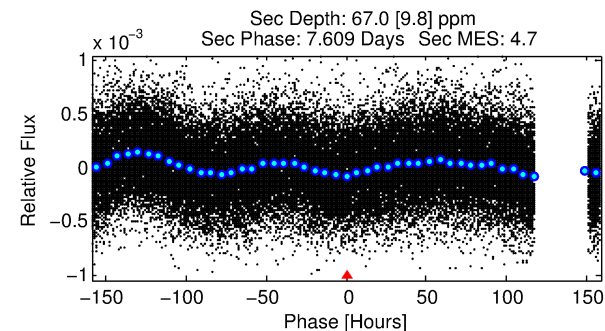
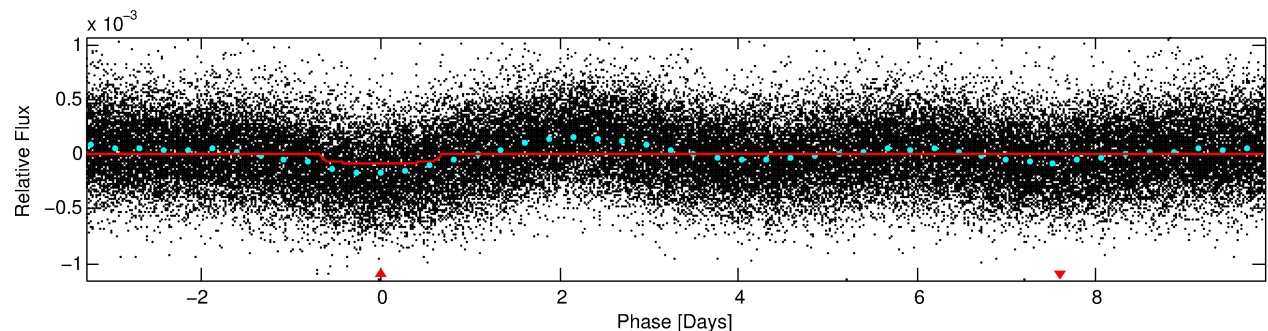
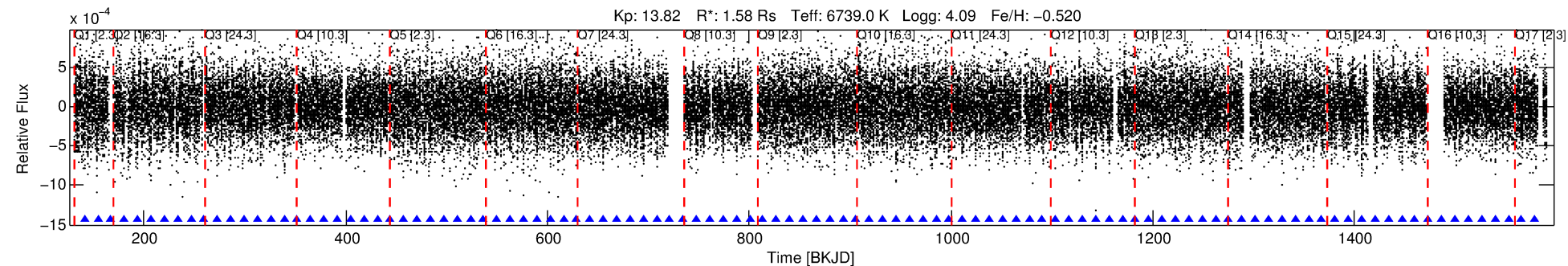
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006751337-01

No Significant Match Found

DV One-Page Summary

KIC: 6751337 Candidate: 1 of 1 Period: 13.189 d



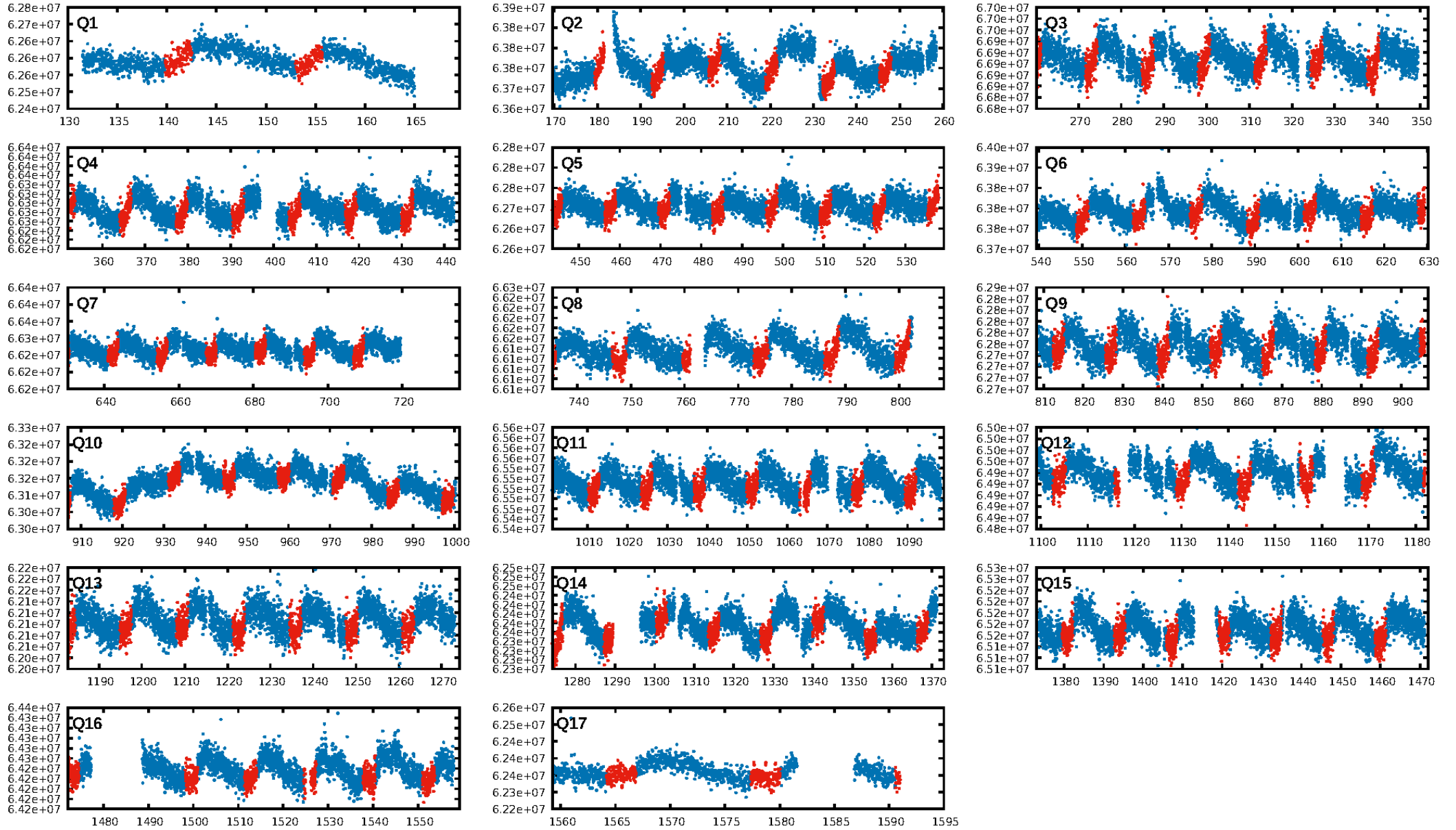
DV Fit Results:

Period = 13.18872 [0.00035] d
Epoch = 141.1442 [0.0217] BKJD
Rp/R* = 0.0094 [0.0007]
a/R* = 1.93 [0.49]
b = 0.85 [0.11]
Seff = 360.05 [167.66]
Teq = 1111 [129] K
Rp = 1.62 [0.52] Re
a = 0.1135 [0.0324] AU
Ag = 179.95 [88.84] [2.01σ]
Teffp = 6290 [392] K [12.54σ]

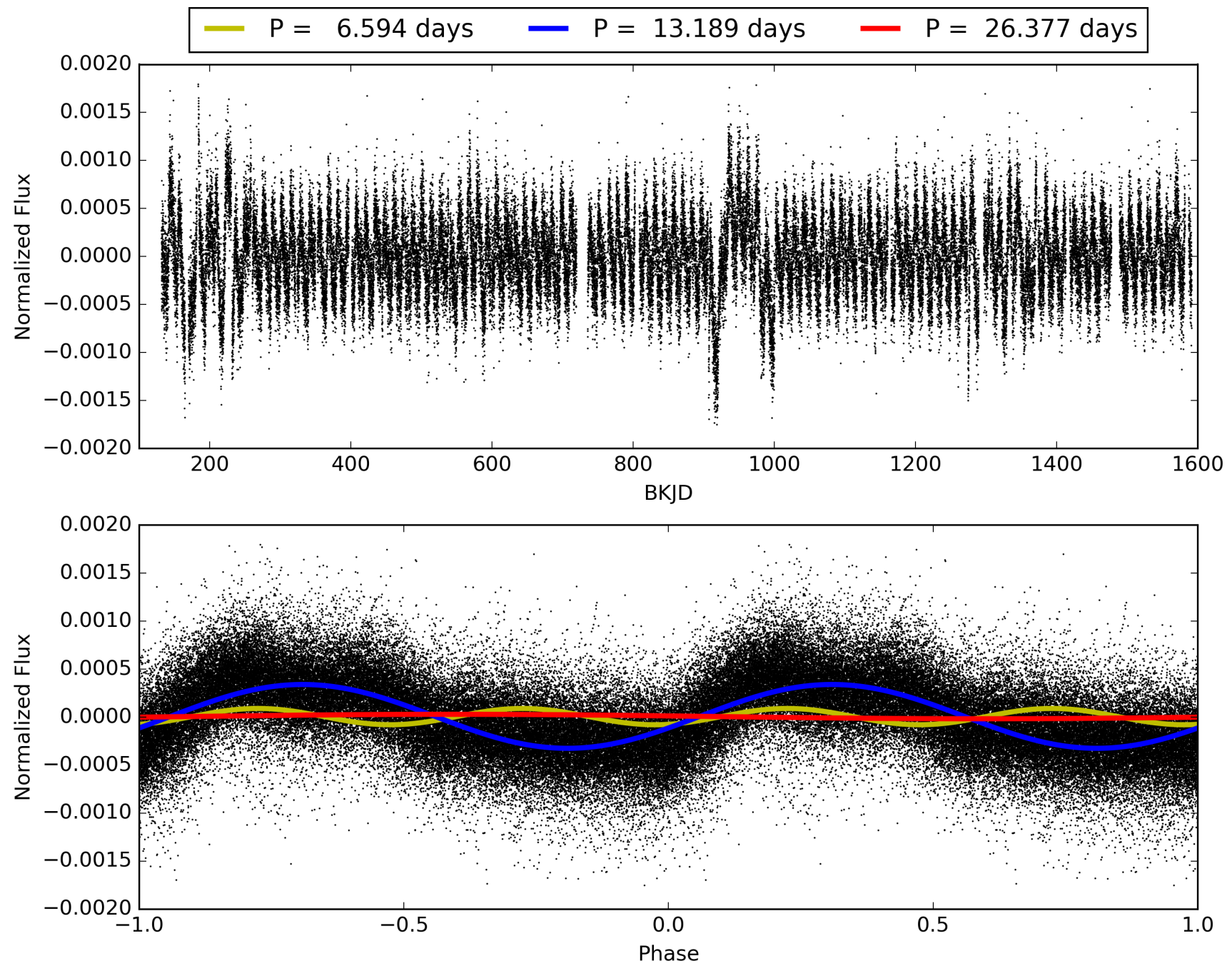
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.05e-14
RollingBand-fgt: 1.00 [101/101]
GhostDiagnostic-chr: 14.47
Centroid-sig: 0.1%
Centroid-so: 2.194 arcsec [3.45σ]
OotOffset-rm: 0.074 arcsec [0.19σ]
KicOffset-rm: 0.133 arcsec [0.28σ]
OotOffset-st: 4/4/3/5 [16]
KicOffset-st: 4/4/3/5 [16]
DiffImageQuality-fgm: 0.88 [14/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006751337-01, PDC Light Curves

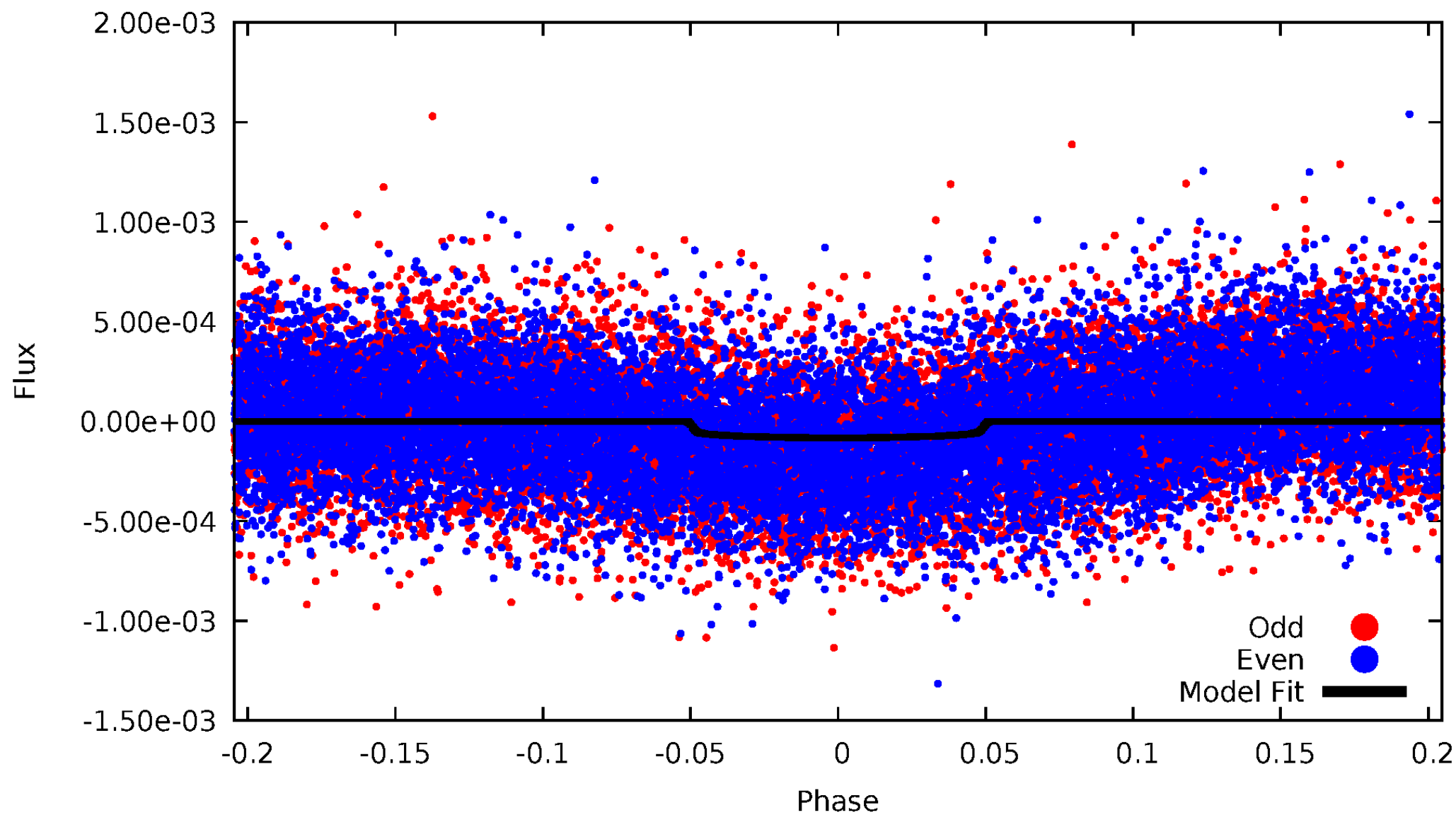


TCE 006751337-01



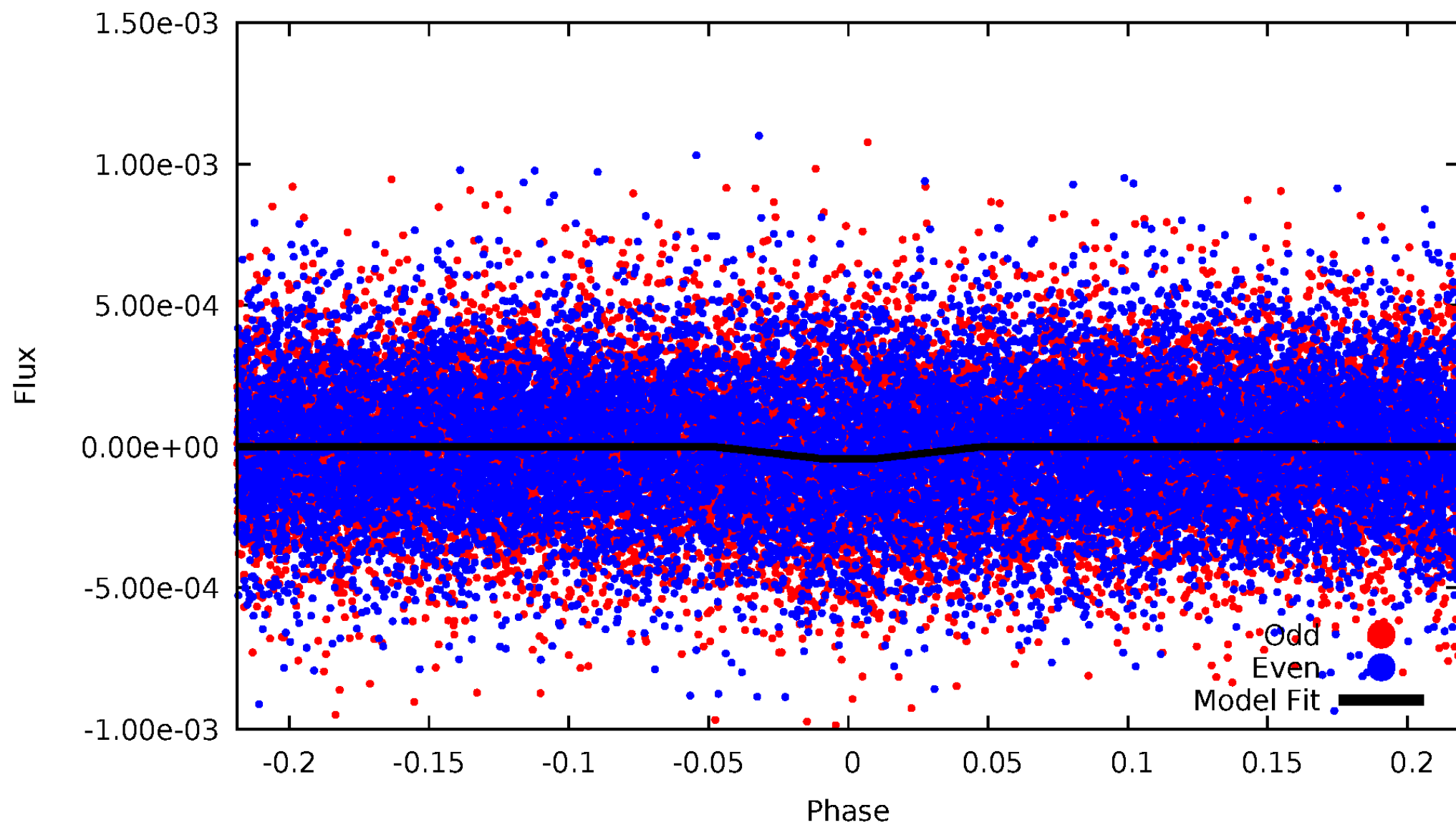
DV Odd/Even

TCE 006751337-01

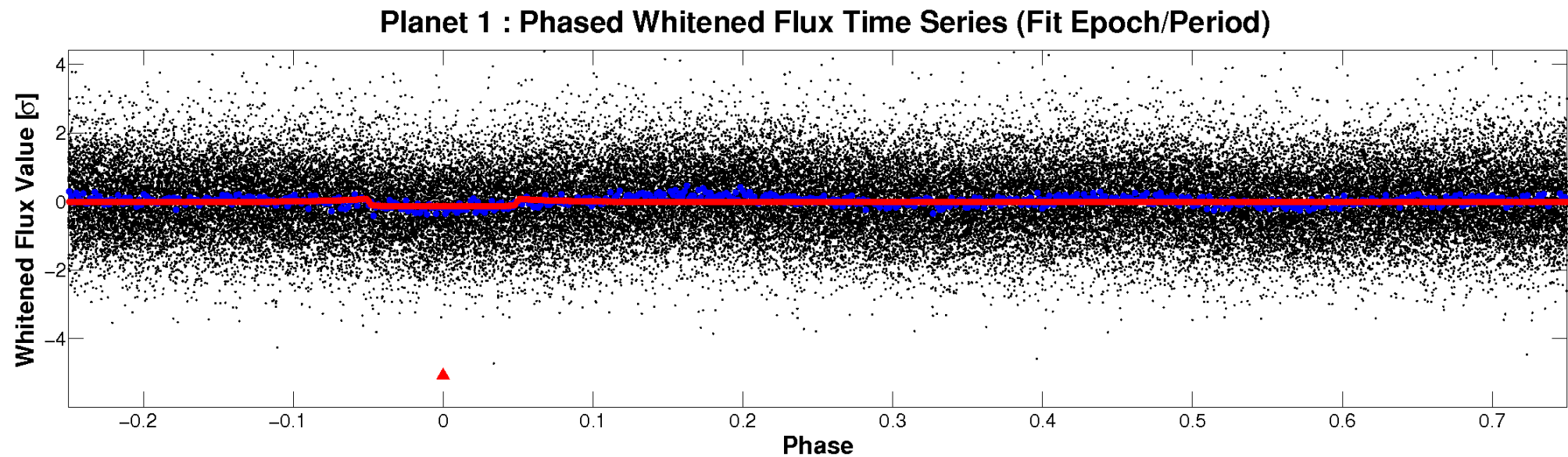
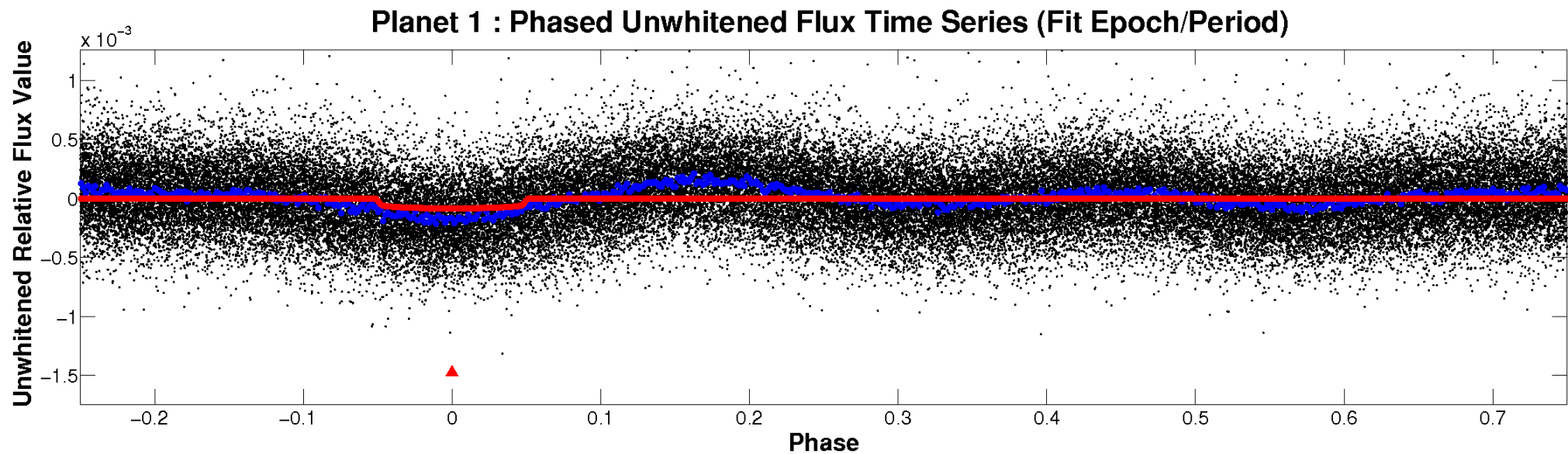


ALT Odd/Even

TCE 006751337-01

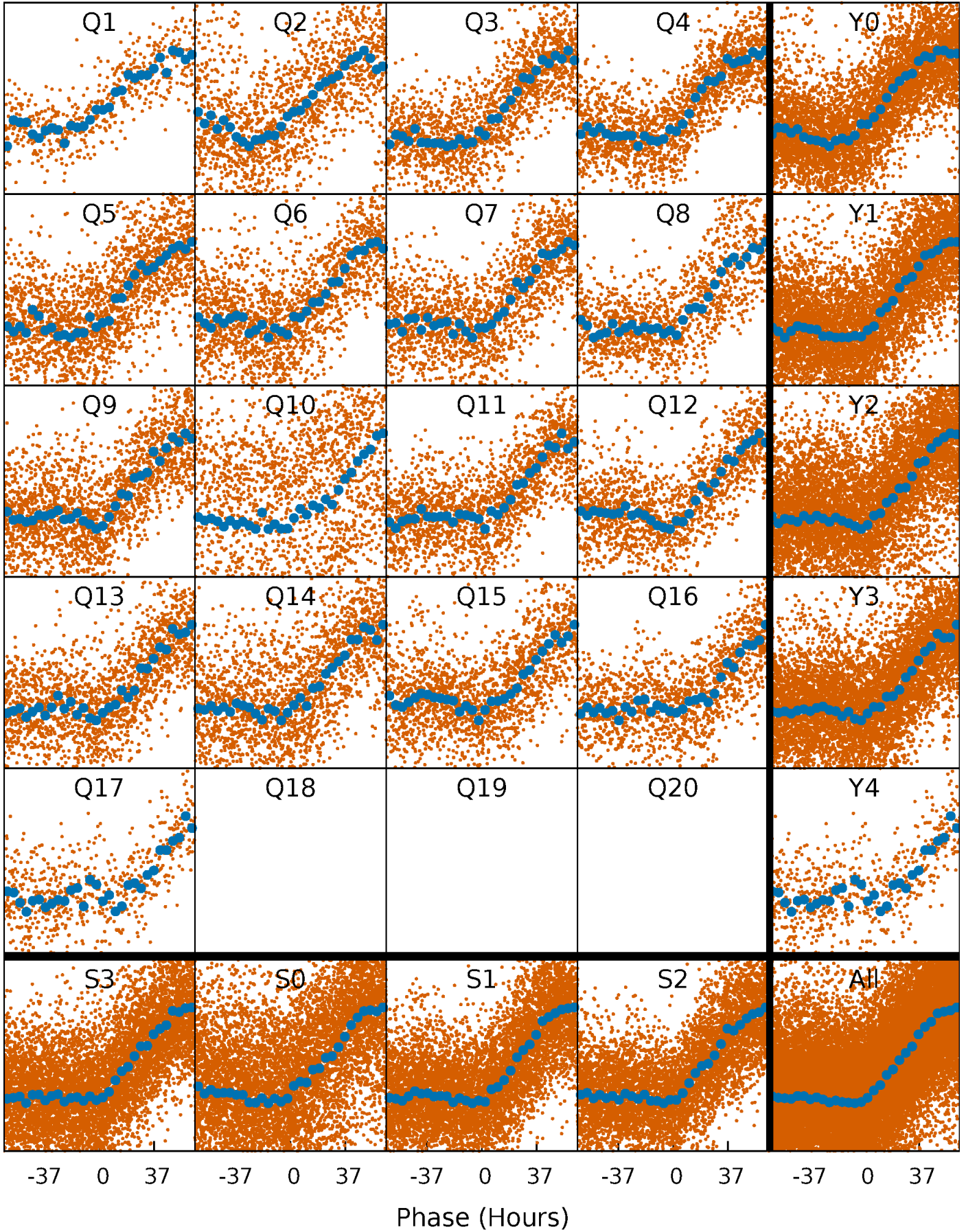


Non-Whitened Vs. Whitened Light Curve



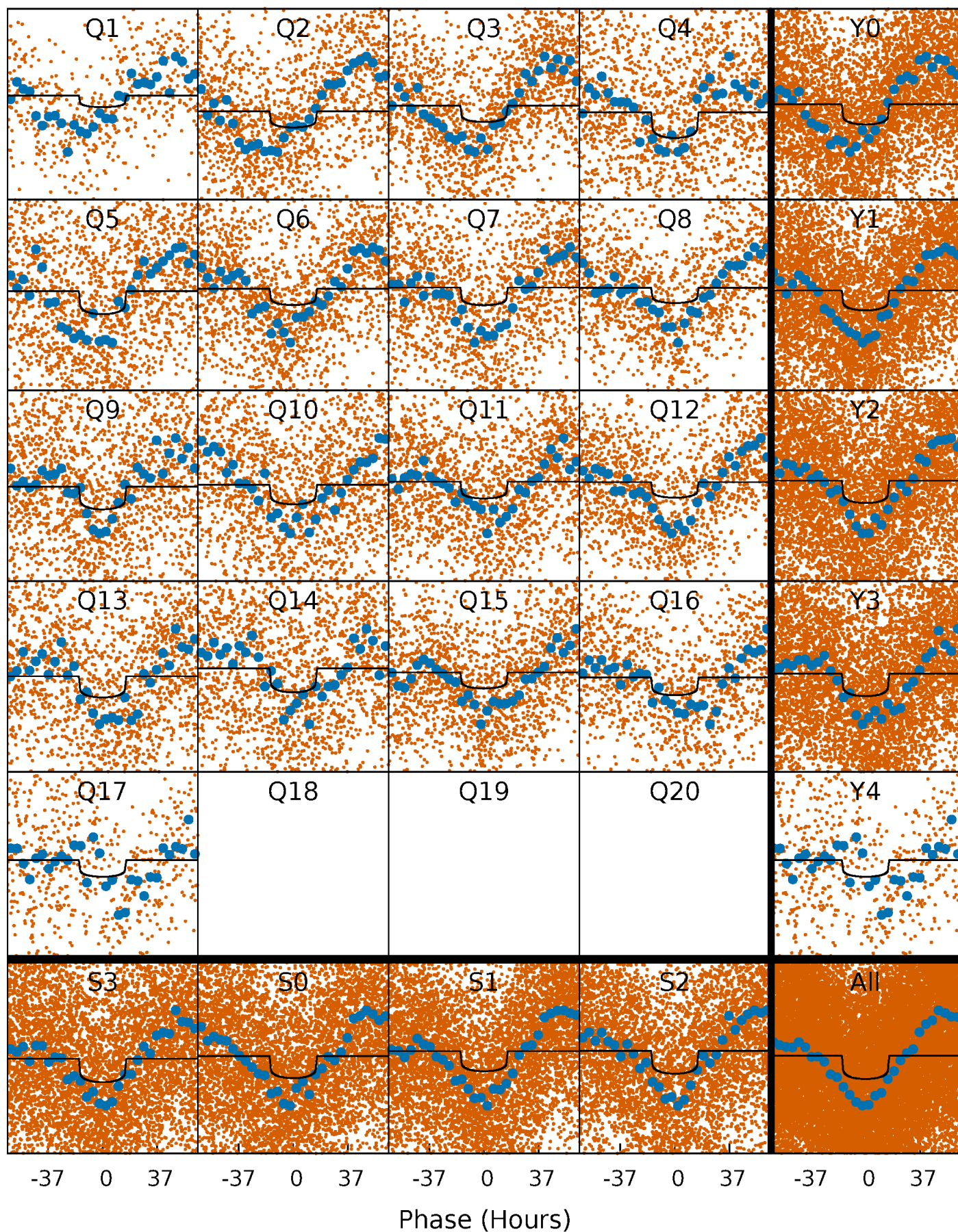
PDC Quarter-Phased Transit Curves

TCE 006751337-01 P= 13.188718 Days $T_0=141.144234$ (BKJD)



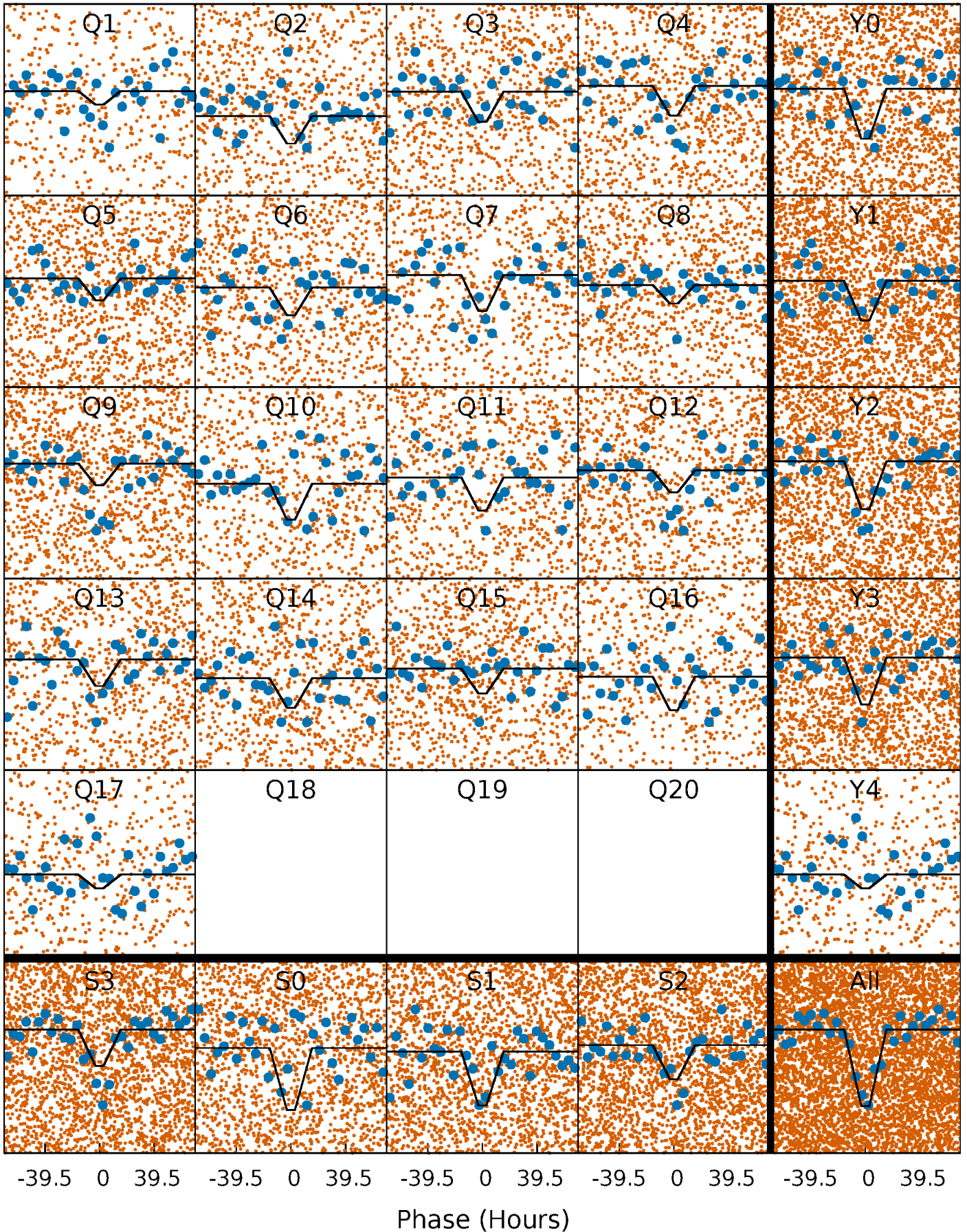
DV Quarter-Phased Transit Curves

TCE 006751337-01 P= 13.188718 Days $T_0=141.144234$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

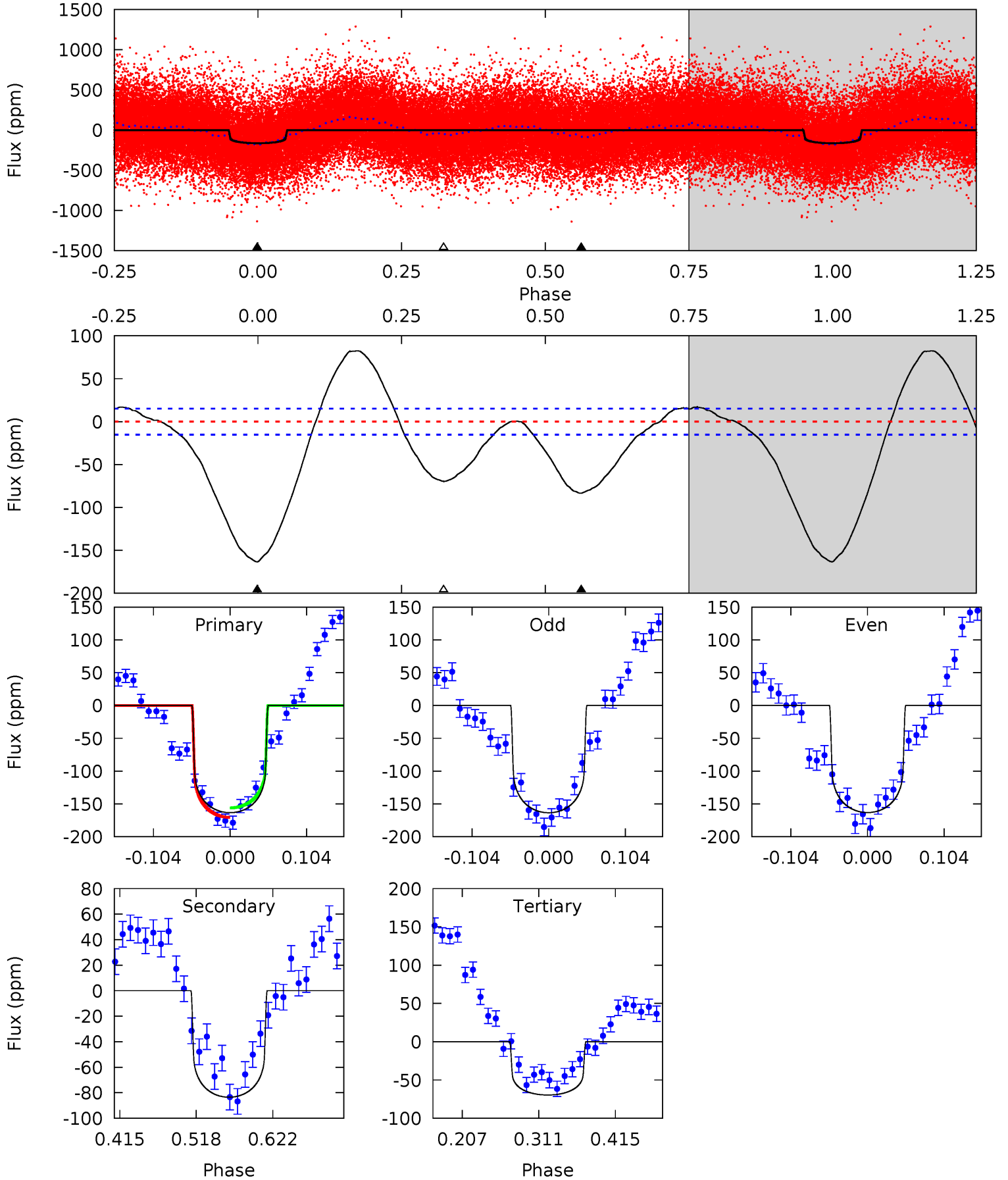
TCE 006751337-01 P= 13.187646 Days $T_0=141.220917$ (BKJD)



DV Model-Shift Uniqueness Test

006751337-01, P = 13.188718 Days, E = 127.955516 Days

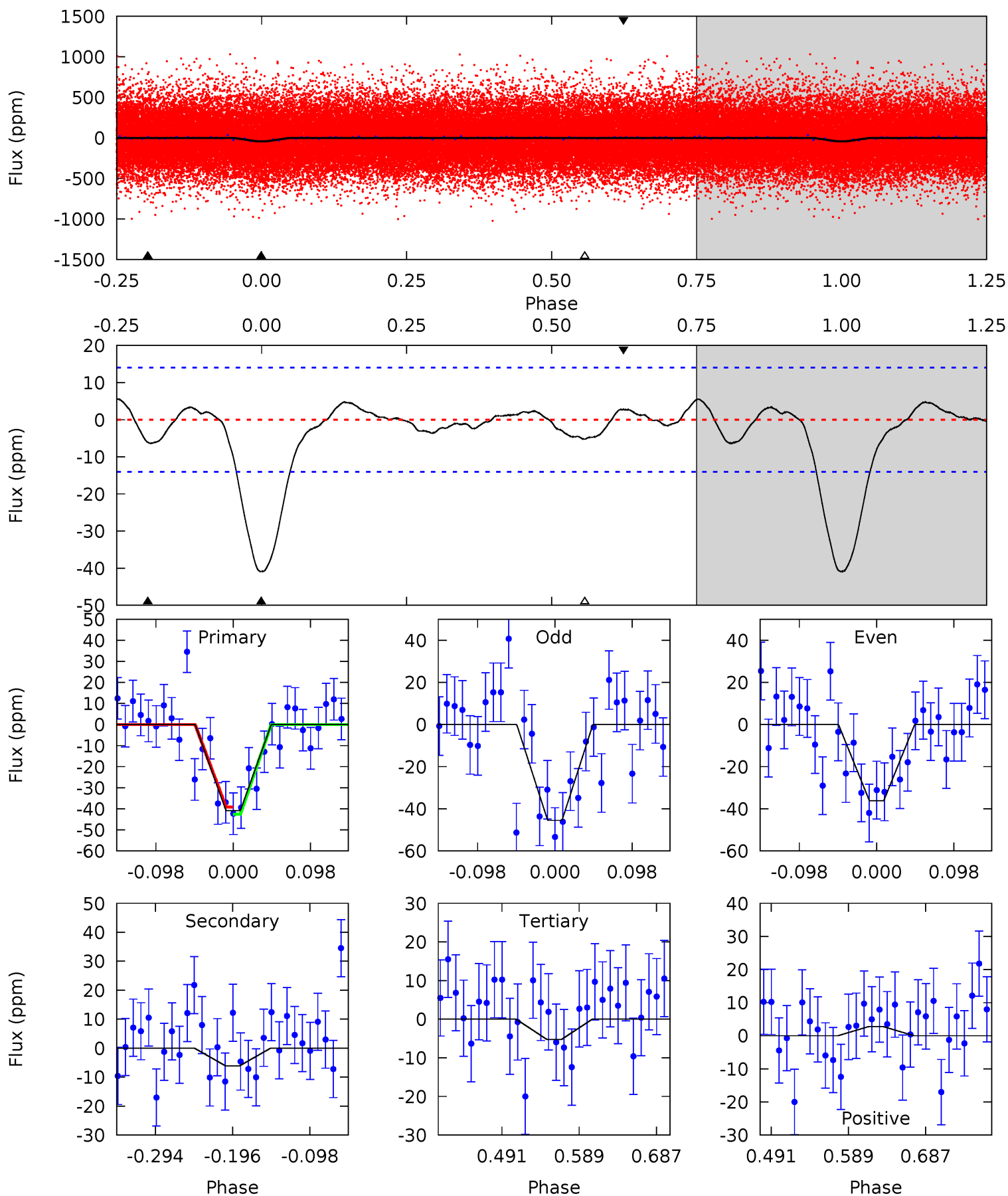
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.2	25.1	21.0	0	4.56	1.63	12.1	28.2	49.2	4.18	25.1	0.05	1.03	0.34	2.19



Alt Model-Shift Uniqueness Test

006751337-01, $P = 13.187646$ Days, $E = 128.033271$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	1.98	1.72	0.90	4.57	1.65	0.80	11.6	12.4	0.26	1.08	1.52	1.39	0.12	0.56



Stellar Parameters For KIC 006751337

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6739^{+183}_{-224}	$4.088^{+0.258}_{-0.172}$	$-0.520^{+0.250}_{-0.300}$	$1.585^{+0.444}_{-0.489}$	$1.121^{+0.176}_{-0.140}$	$0.397^{+0.617}_{-0.184}$
	+3%/-3%	+6%/-4%	+48%/-58%	+28%/-31%	+16%/-12%	+156%/-46%
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 006751337-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-83 ± 3	$1.61^{+0.29}_{-0.30}$	1539^{+122}_{-130}	6648^{+362}_{-327}	233^{+108}_{-62}
Alt.	-6 ± 3	$1.14^{+0.21}_{-0.22}$	1547^{+113}_{-139}	4343^{+413}_{-539}	34^{+26}_{-18}

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 $A_{obs} \gg 1.0$

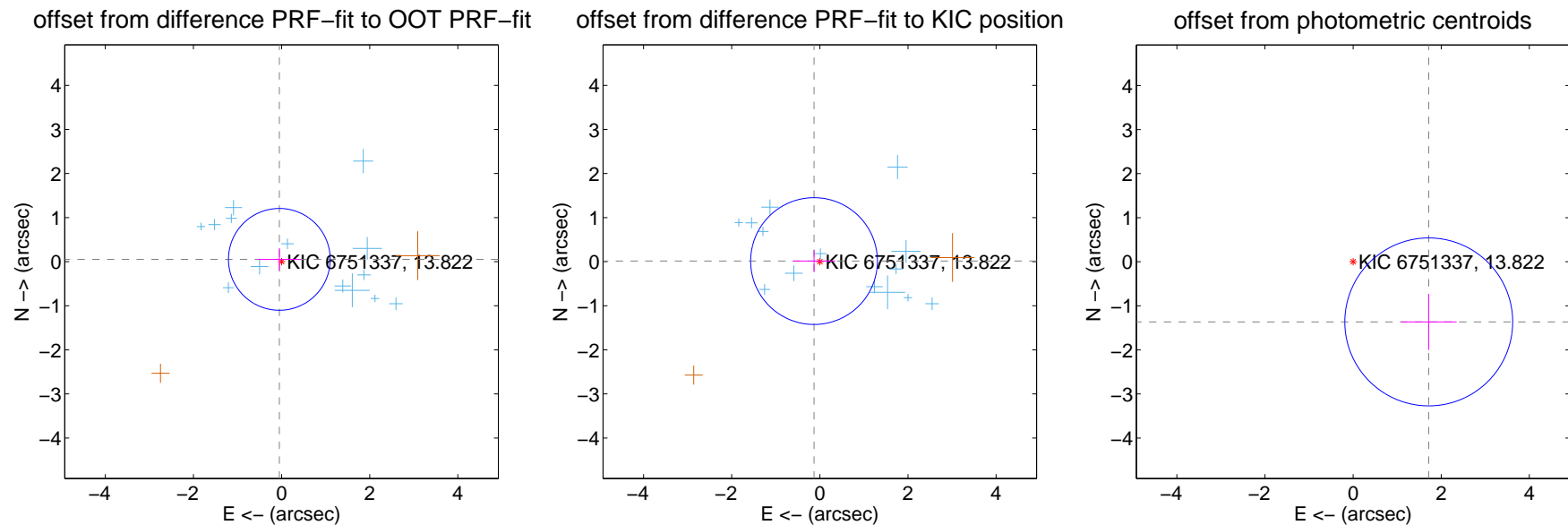
DV Centroid Data

Supplemental centroid analysis for 006751337-01. Kepler magnitude: 13.82. Transit SNR 10.67

There are 14 quarters with good PRF difference image offsets

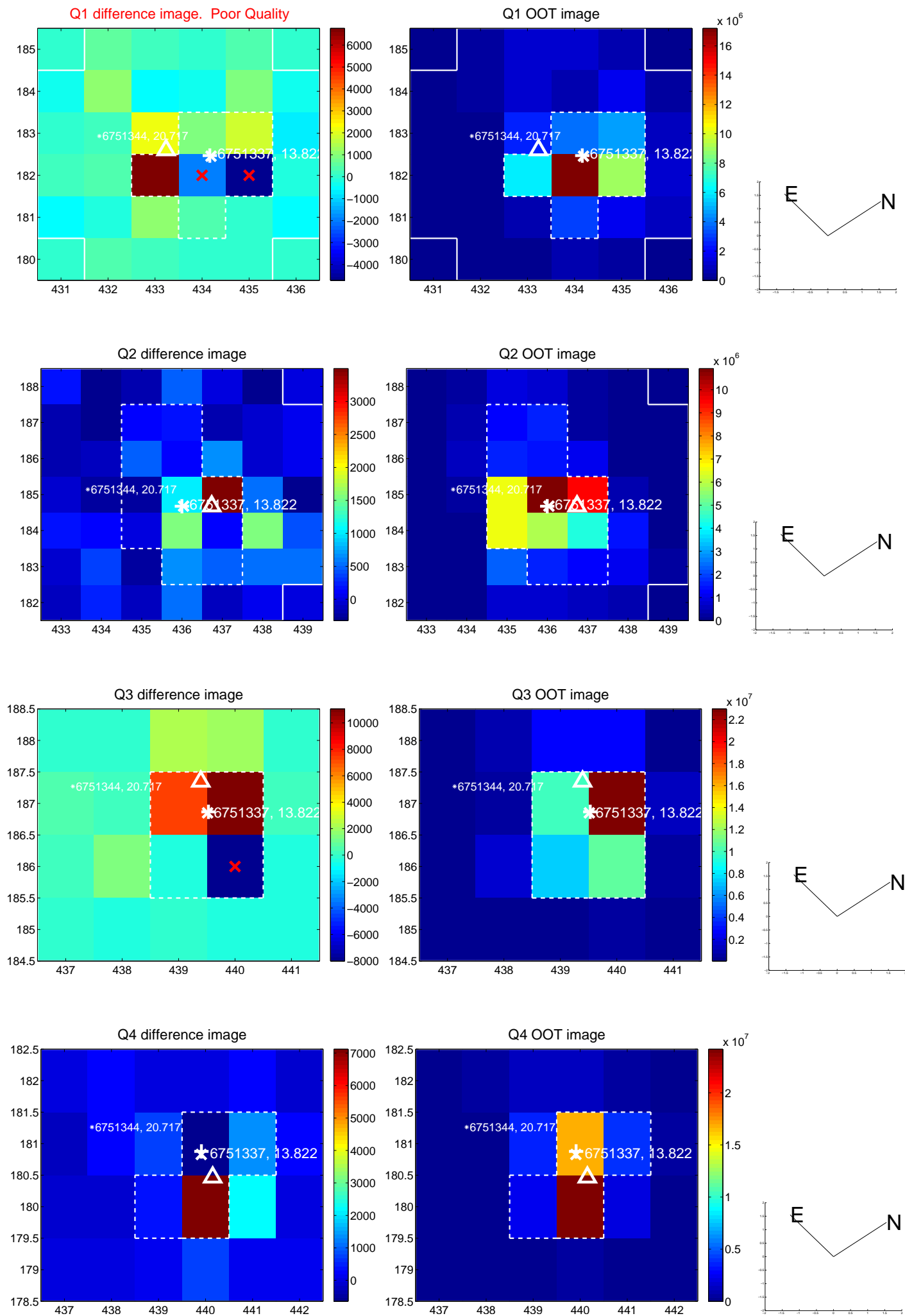
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.074 ± 0.385	0.19	0.051 ± 0.489	0.053 ± 0.254
PRF-fit source offset from KIC position	0.133 ± 0.479	0.28	0.132 ± 0.481	0.014 ± 0.245
photometric centroid source offset	2.19 ± 0.64	3.45	-1.72 ± 0.63	-1.36 ± 0.64

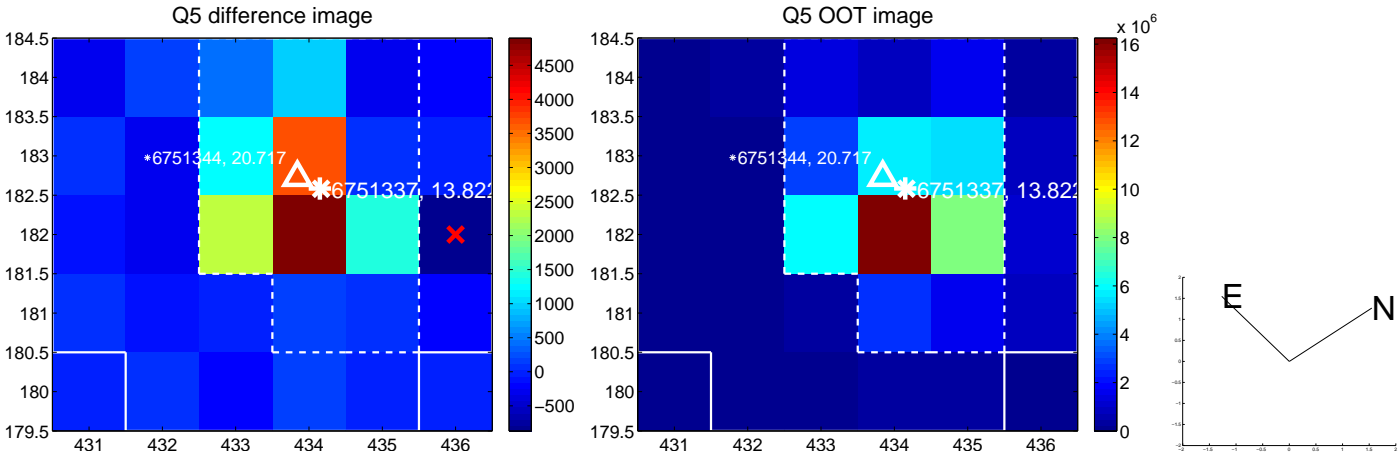


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

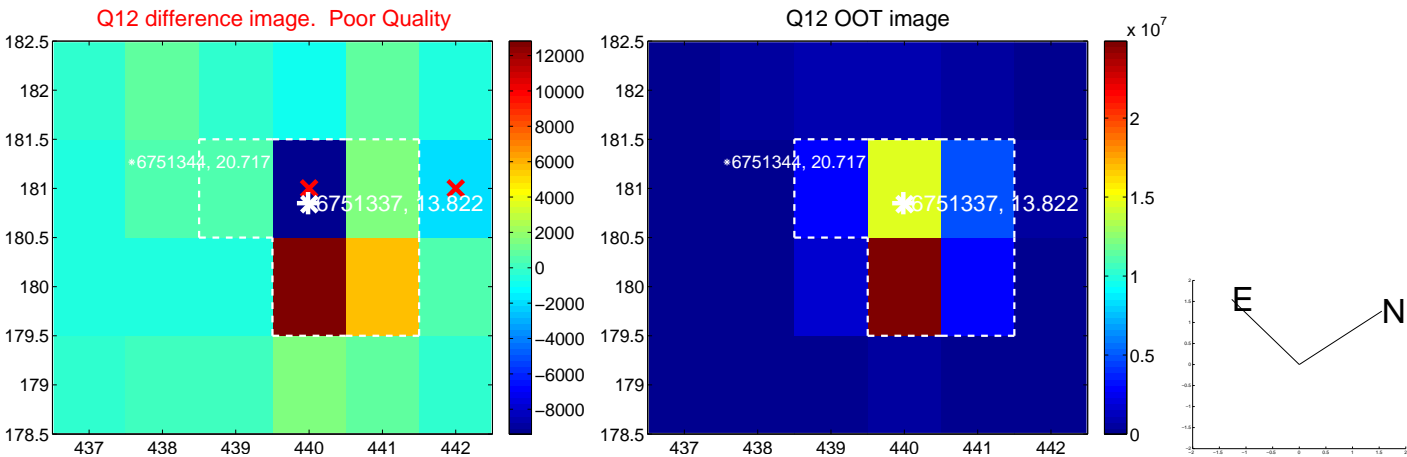
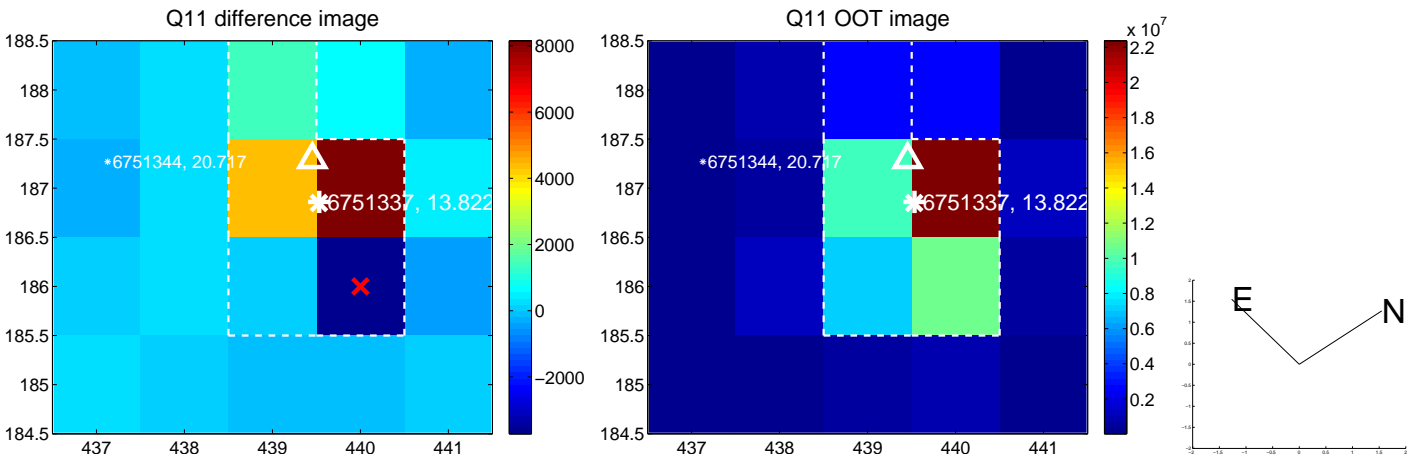
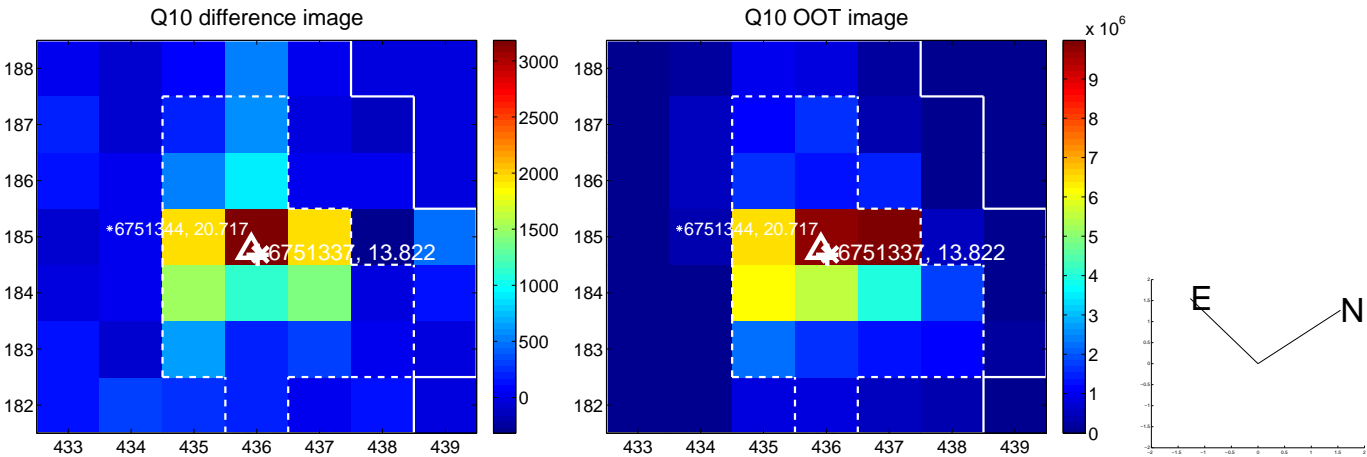
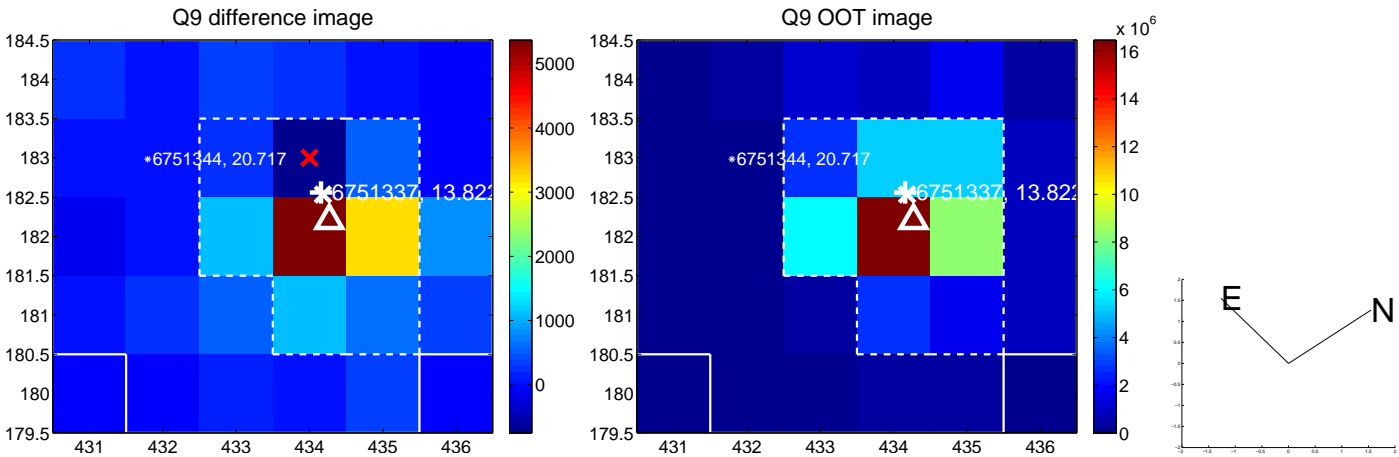
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



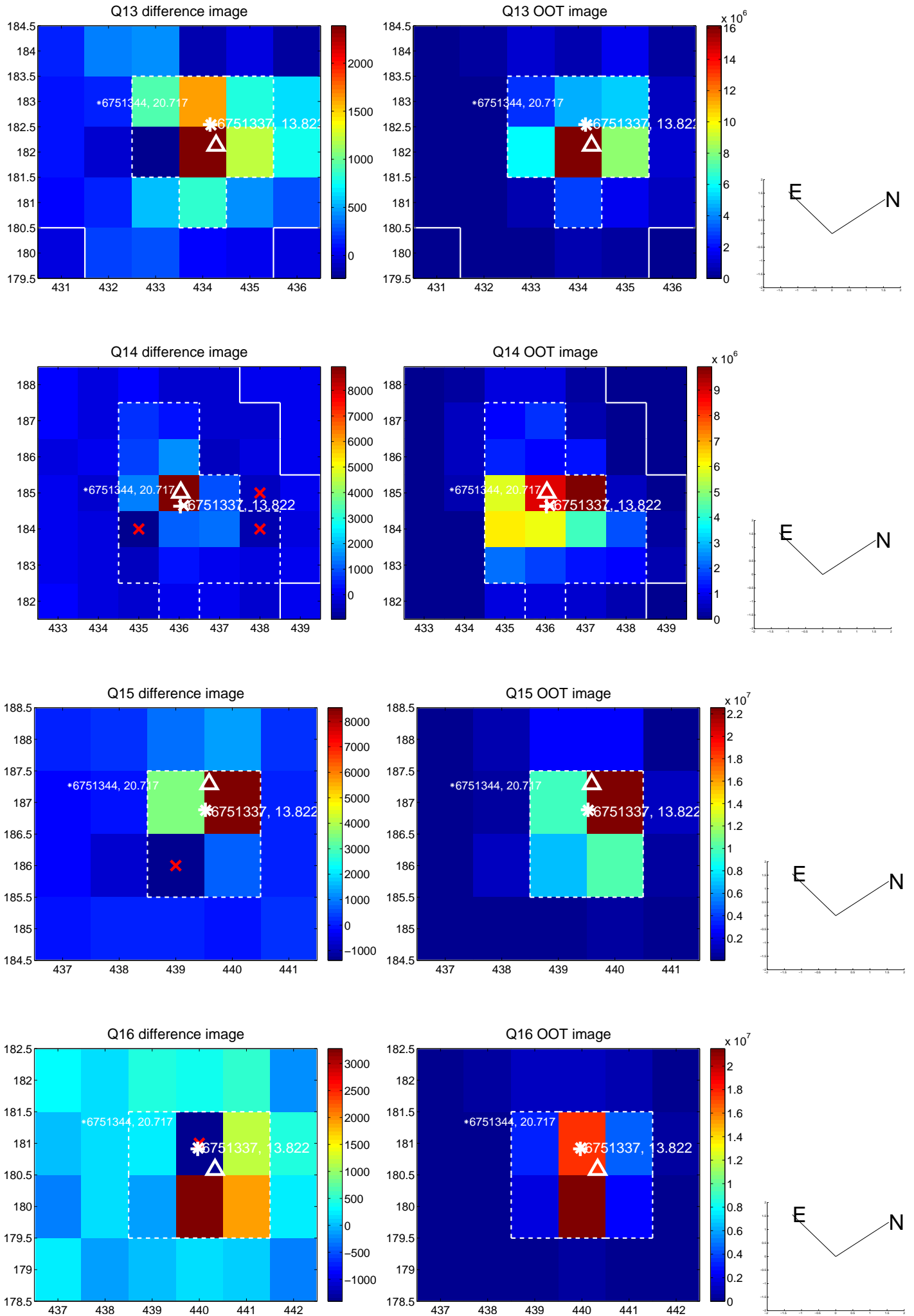
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



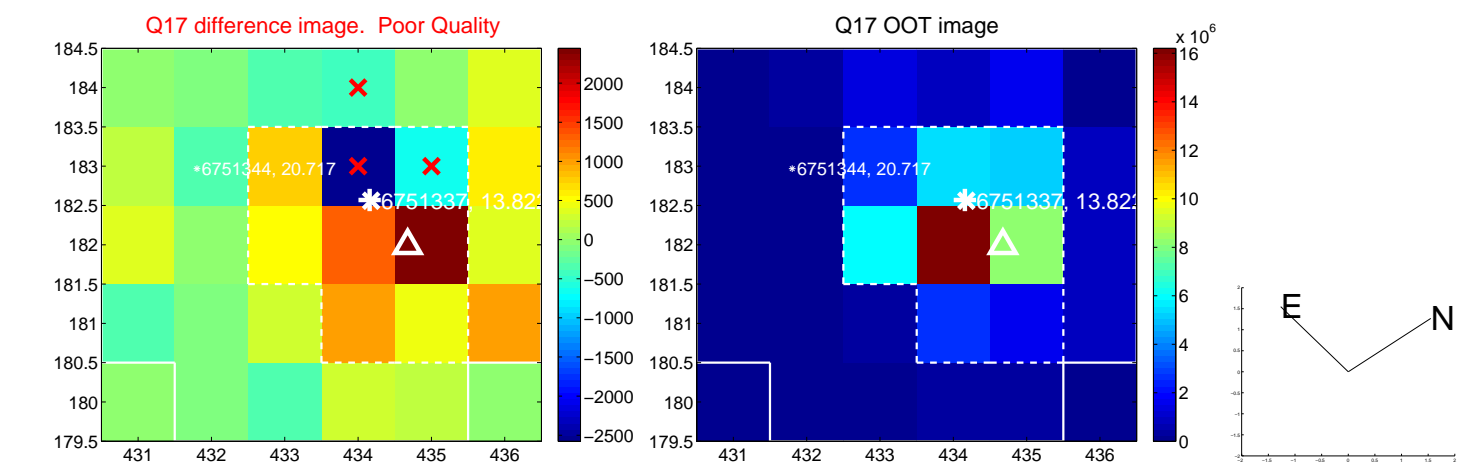
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



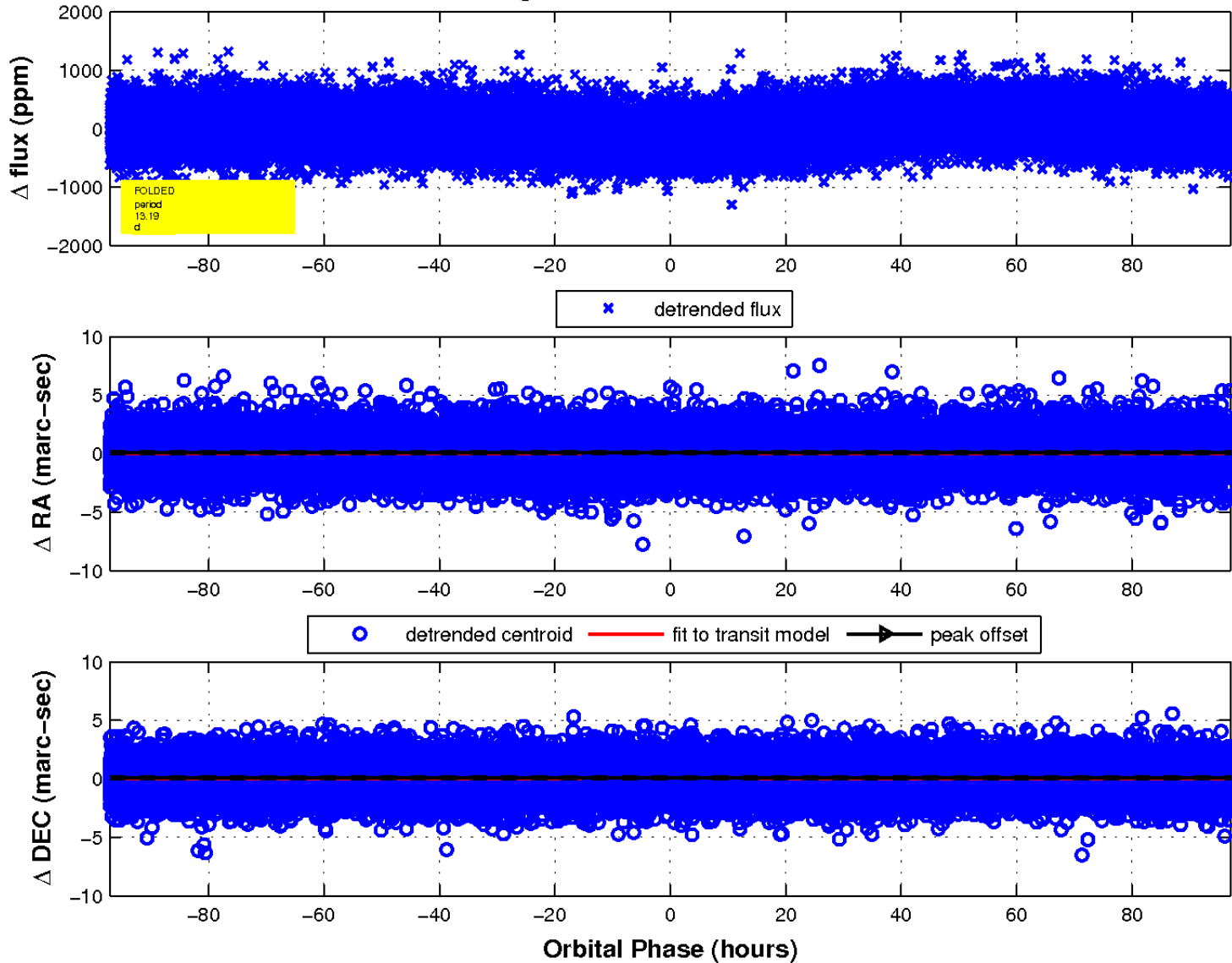
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

