

KIC 011389737

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})
011389737-01	OBS	No	1.217895	132.611854	22.1	5.822	8.8	8.9	1.89	7443	0.92	15651.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011389737-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

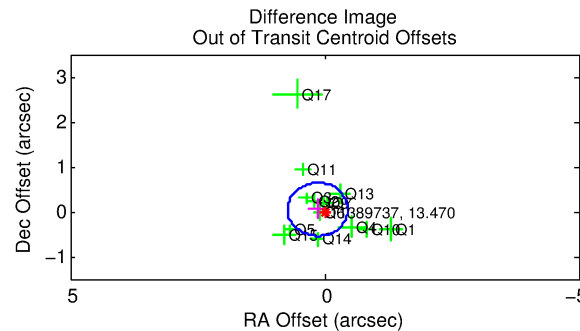
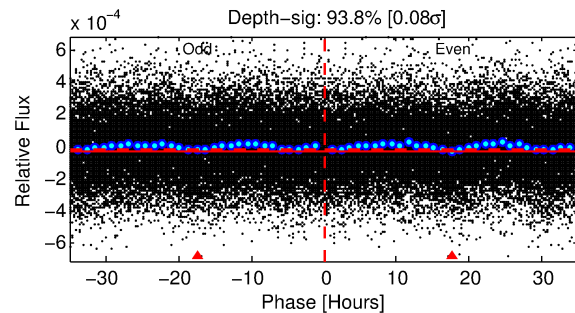
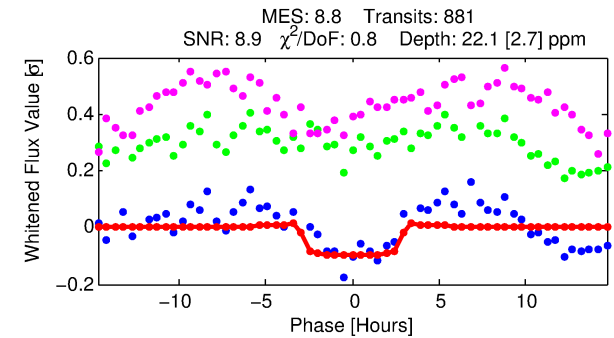
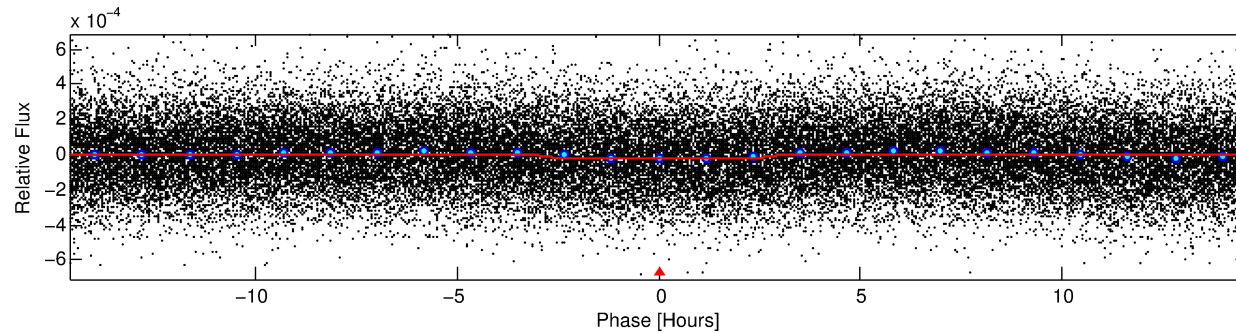
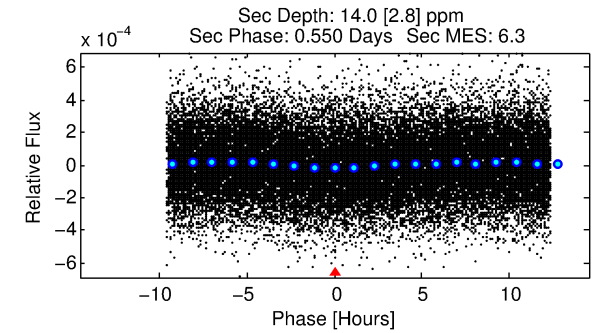
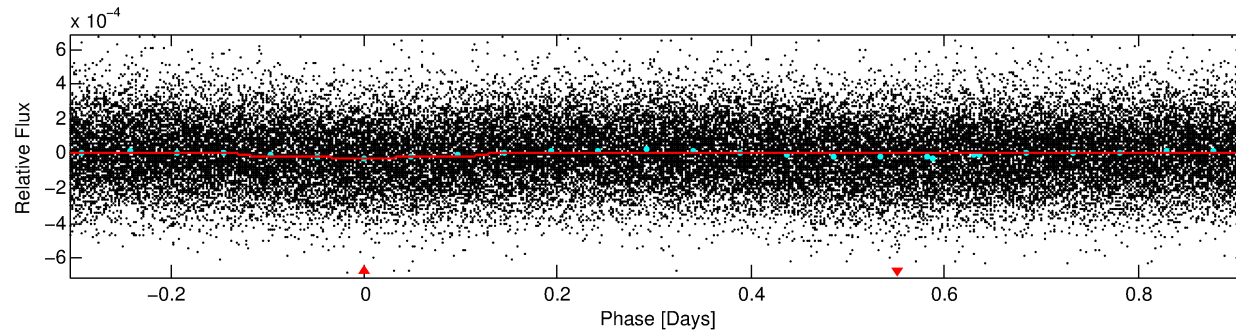
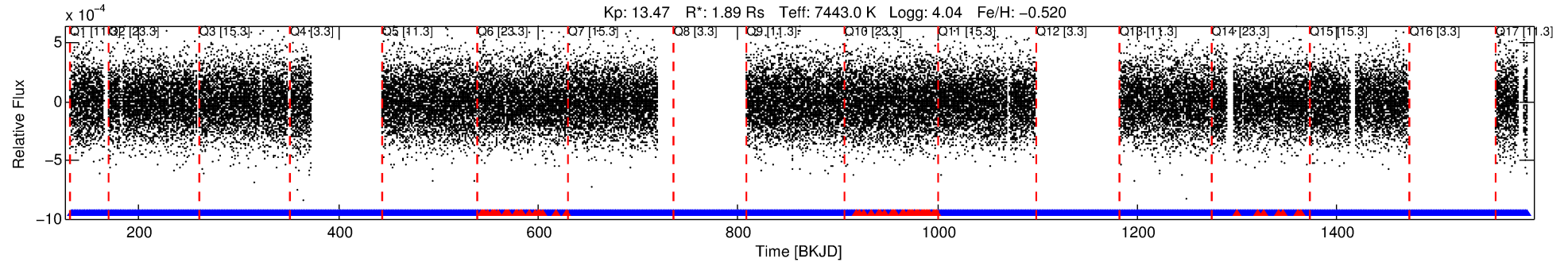
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011389737-01

No Significant Match Found

DV One-Page Summary

KIC: 11389737 Candidate: 1 of 1 Period: 1.218 d



DV Fit Results:

Period = 1.21789 [0.00002] d
Epoch = 132.6119 [0.0059] BKJD
Rp/R* = 0.0045 [0.0017]
a/R* = 1.58 [2.15]
b = 0.49 [3.60]
Seff = 15651.70 [7670.53]
Teq = 2852 [349] K
Rp = 0.92 [0.47] Re
a = 0.0250 [0.0076] AU
Ag = 5.70 [5.12] [0.92σ]
Teffp = 6815 [1344] K [2.85σ]

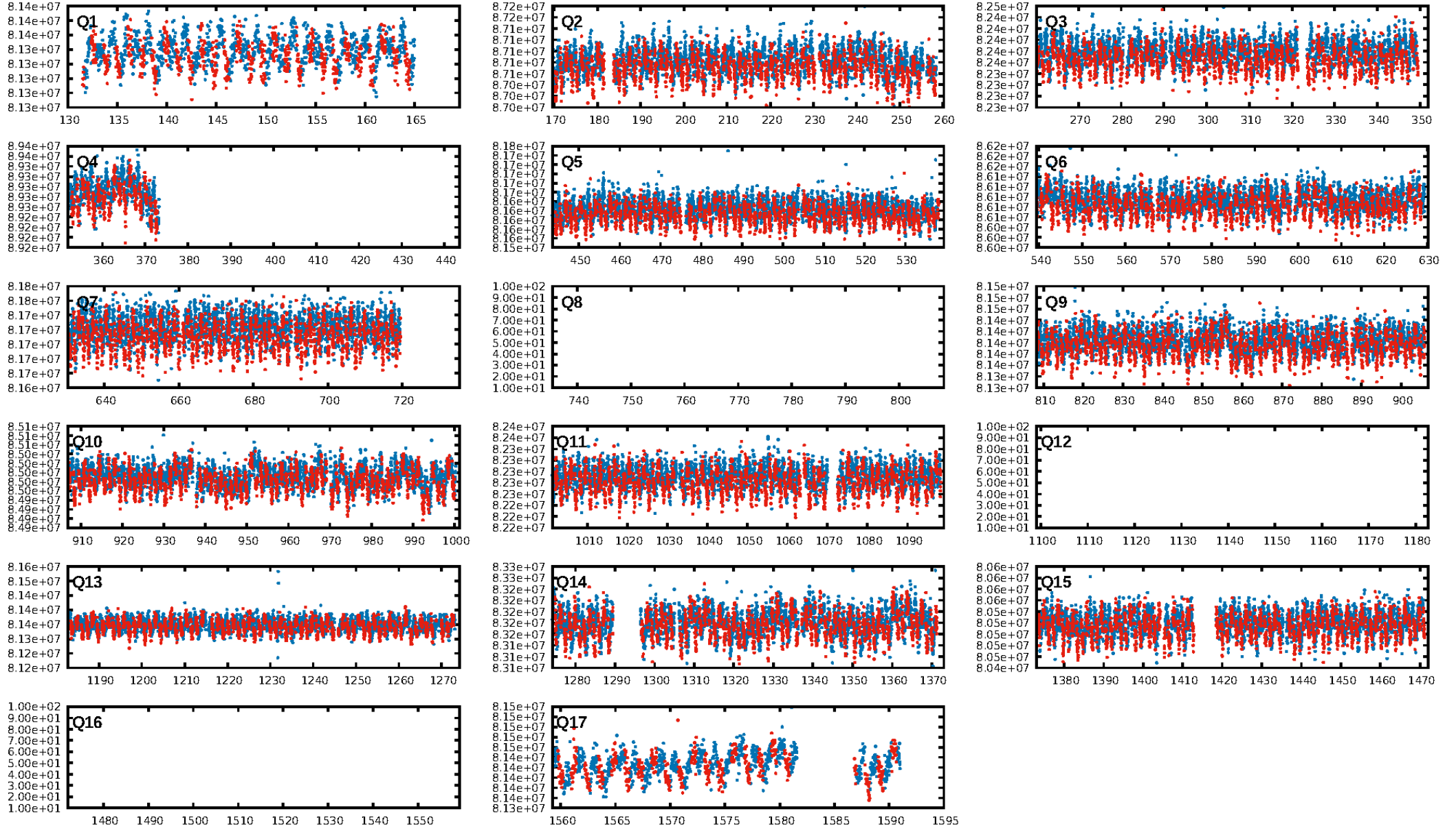
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 1.35e-12
RollingBand-fgt: 0.92 [751/814]
GhostDiagnostic-chr: 0.6431
Centroid-sig: 10.6%
Centroid-so: 1.963 arcsec [1.68σ]
OotOffset-rm: 0.147 arcsec [0.75σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-rm: 0.045 arcsec [0.26σ]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

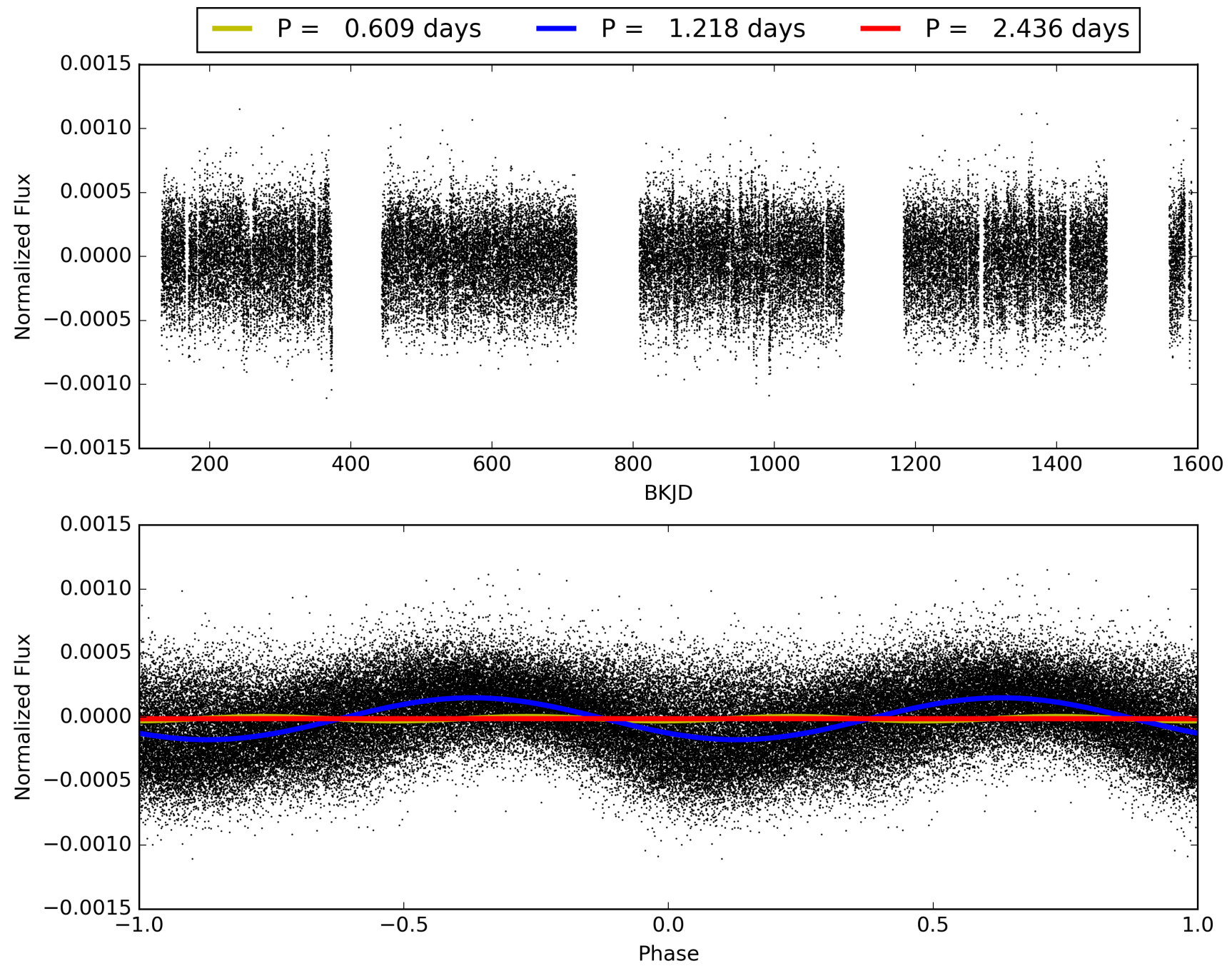
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:46:09 Z

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

TCE 011389737-01, PDC Light Curves

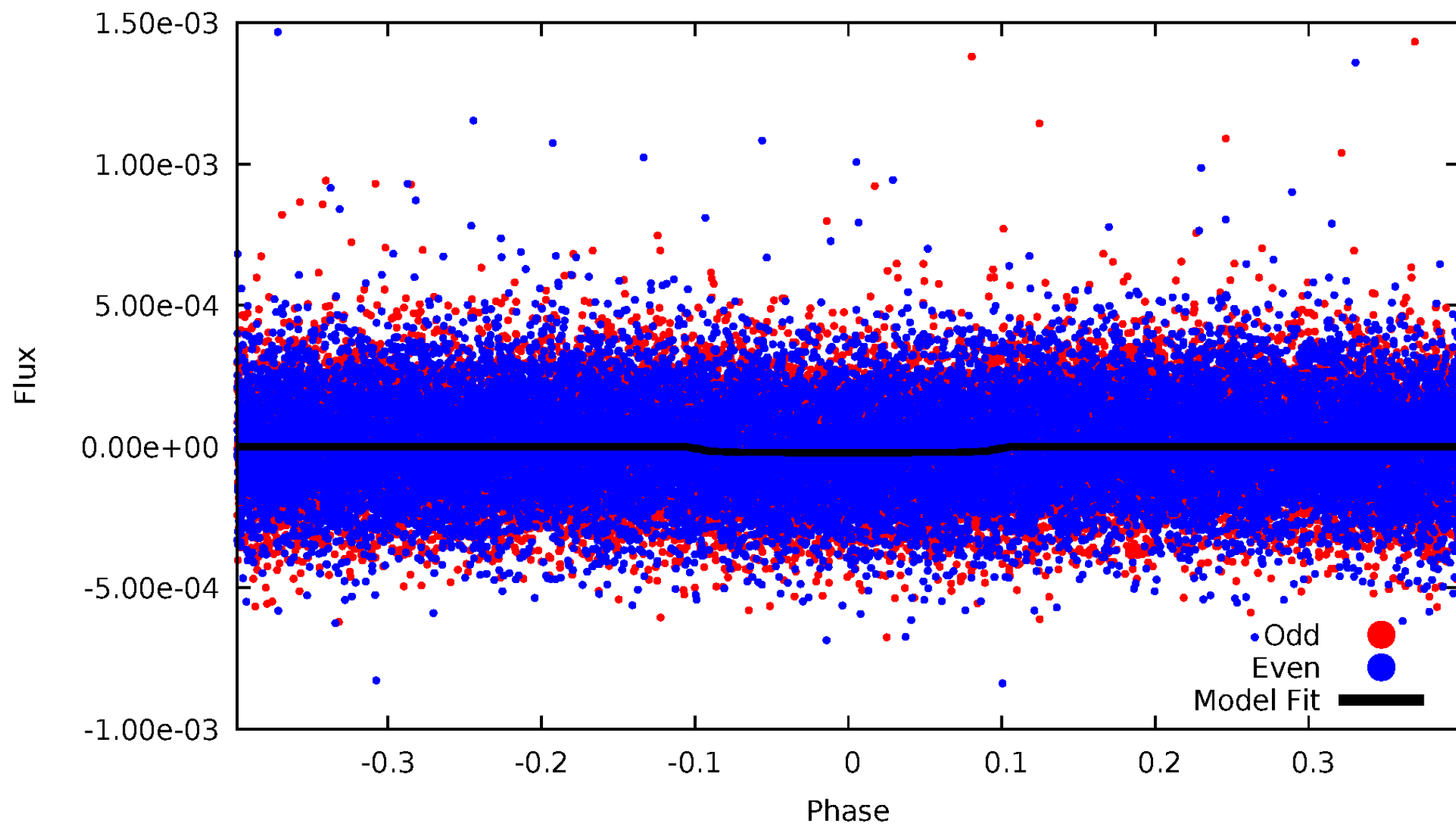


TCE 011389737-01



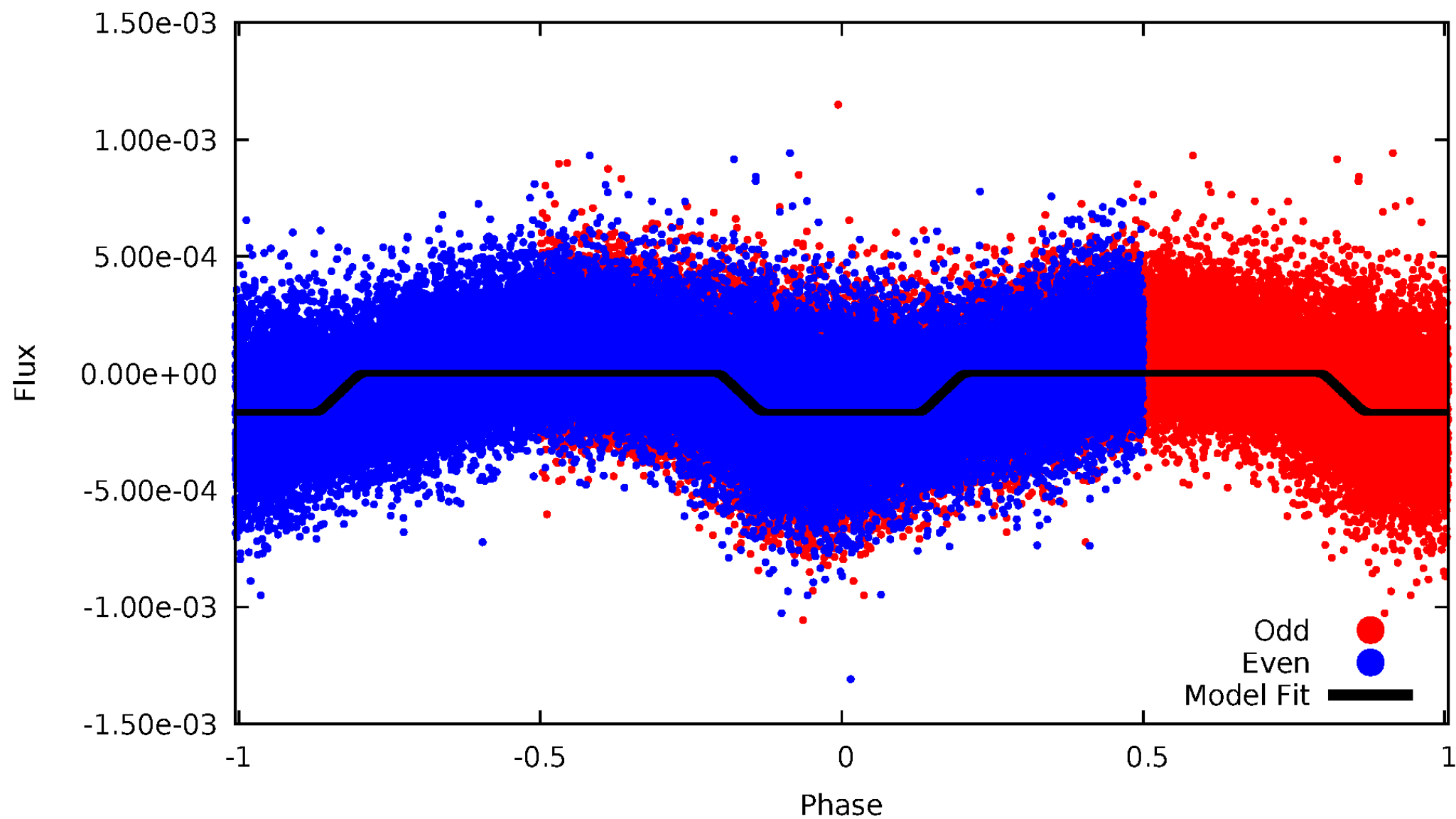
DV Odd/Even

TCE 011389737-01

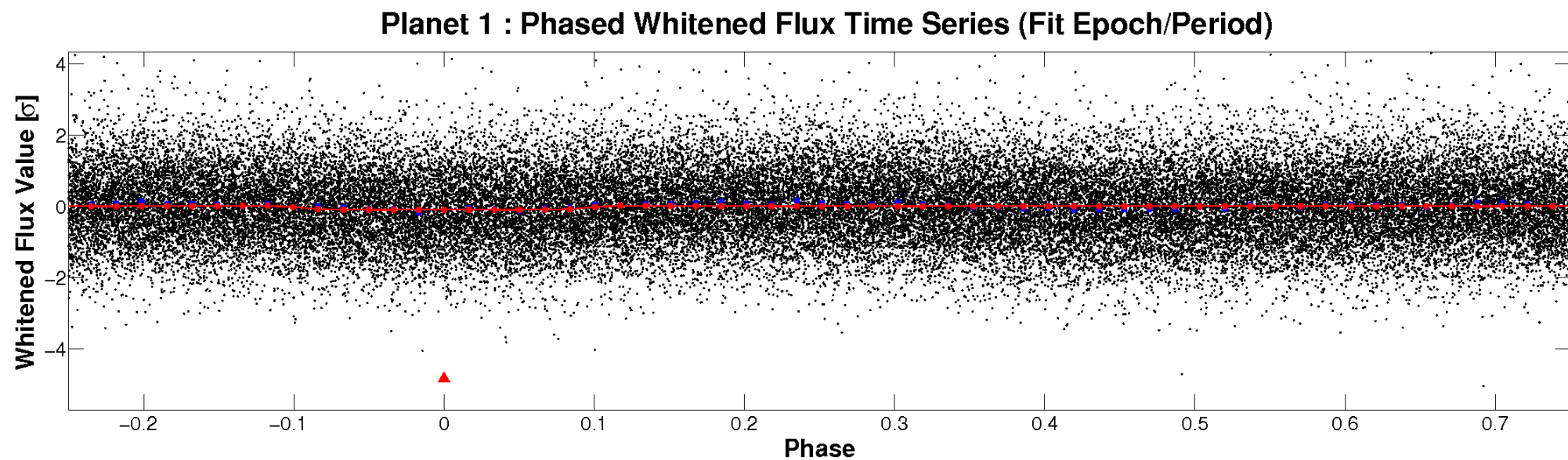
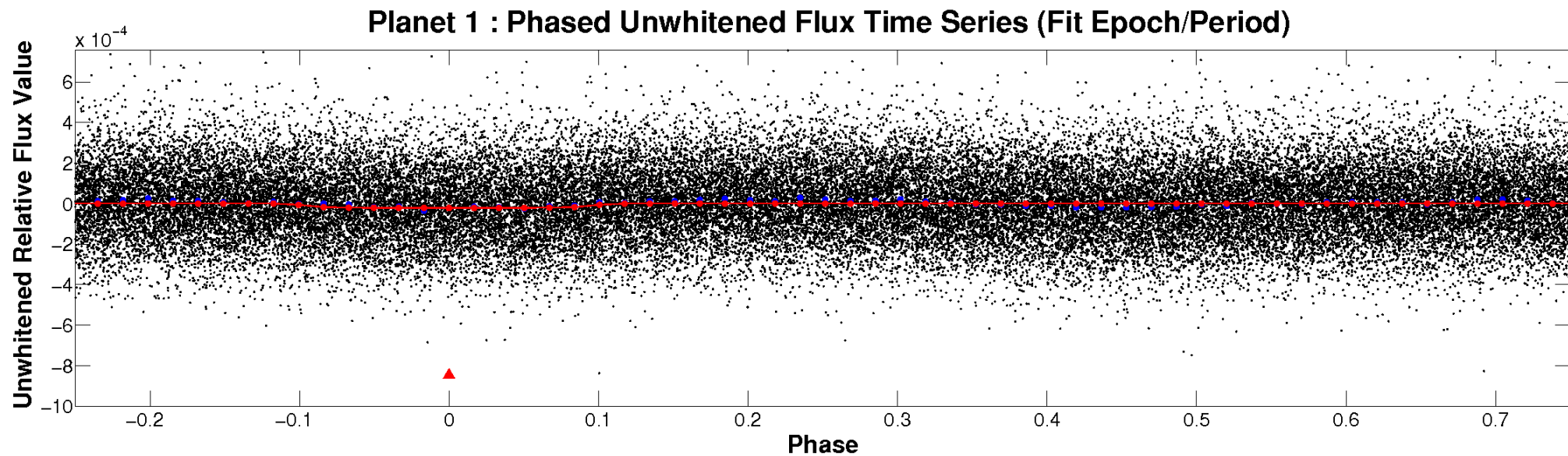


ALT Odd/Even

TCE 011389737-01

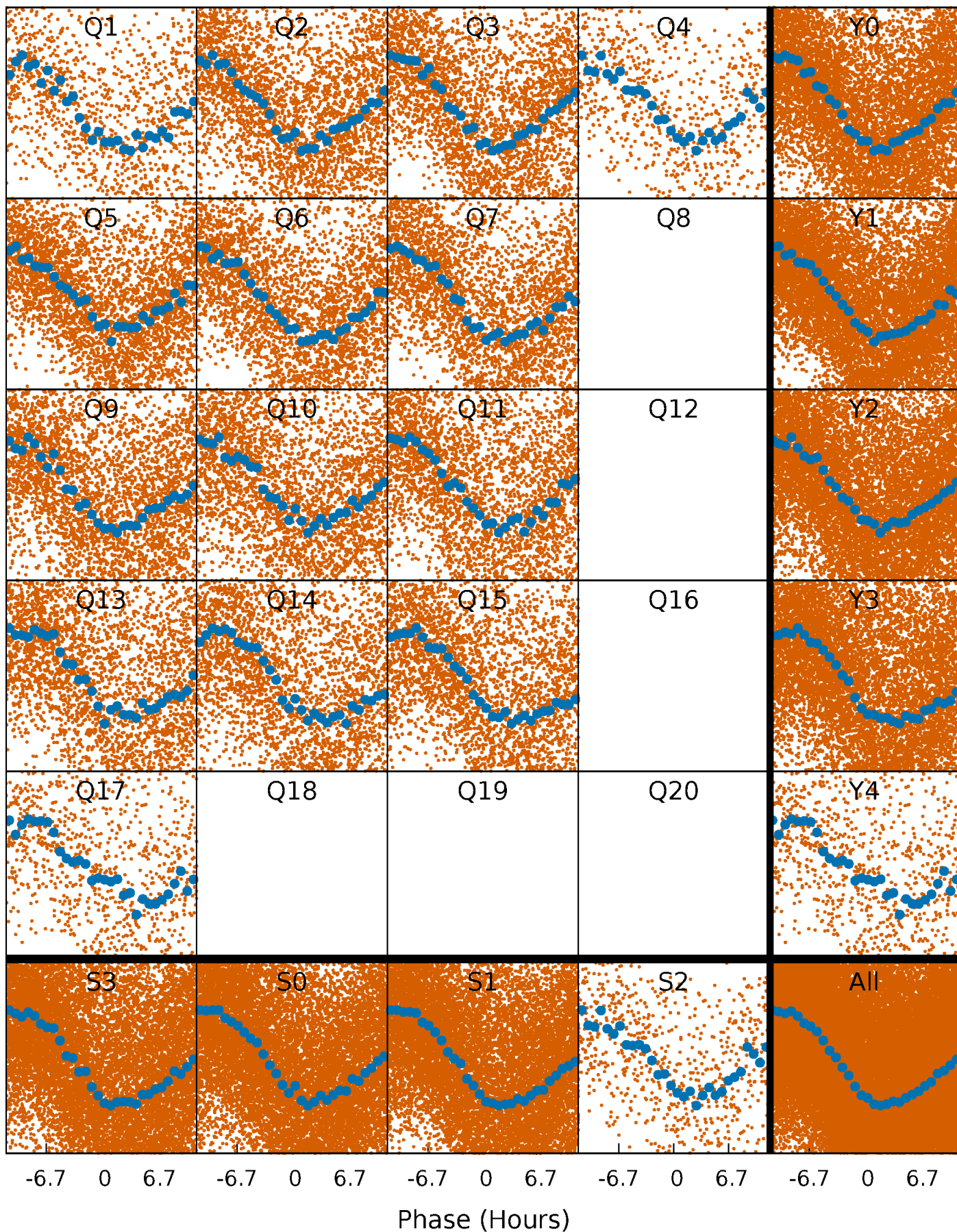


Non-Whitened Vs. Whitened Light Curve



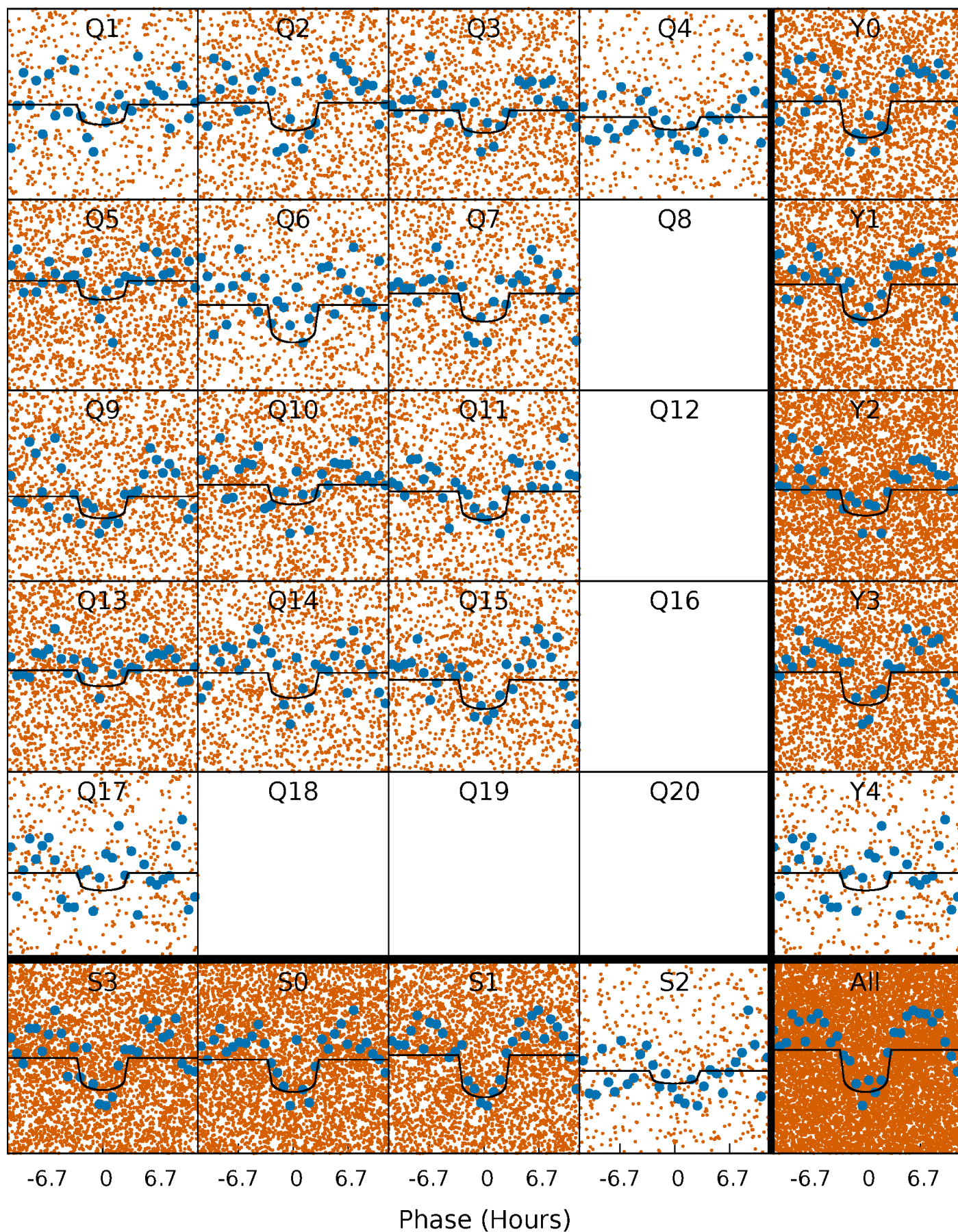
PDC Quarter-Phased Transit Curves

TCE 011389737-01 P= 1.217895 Days $T_0=132.611854$ (BKJD)



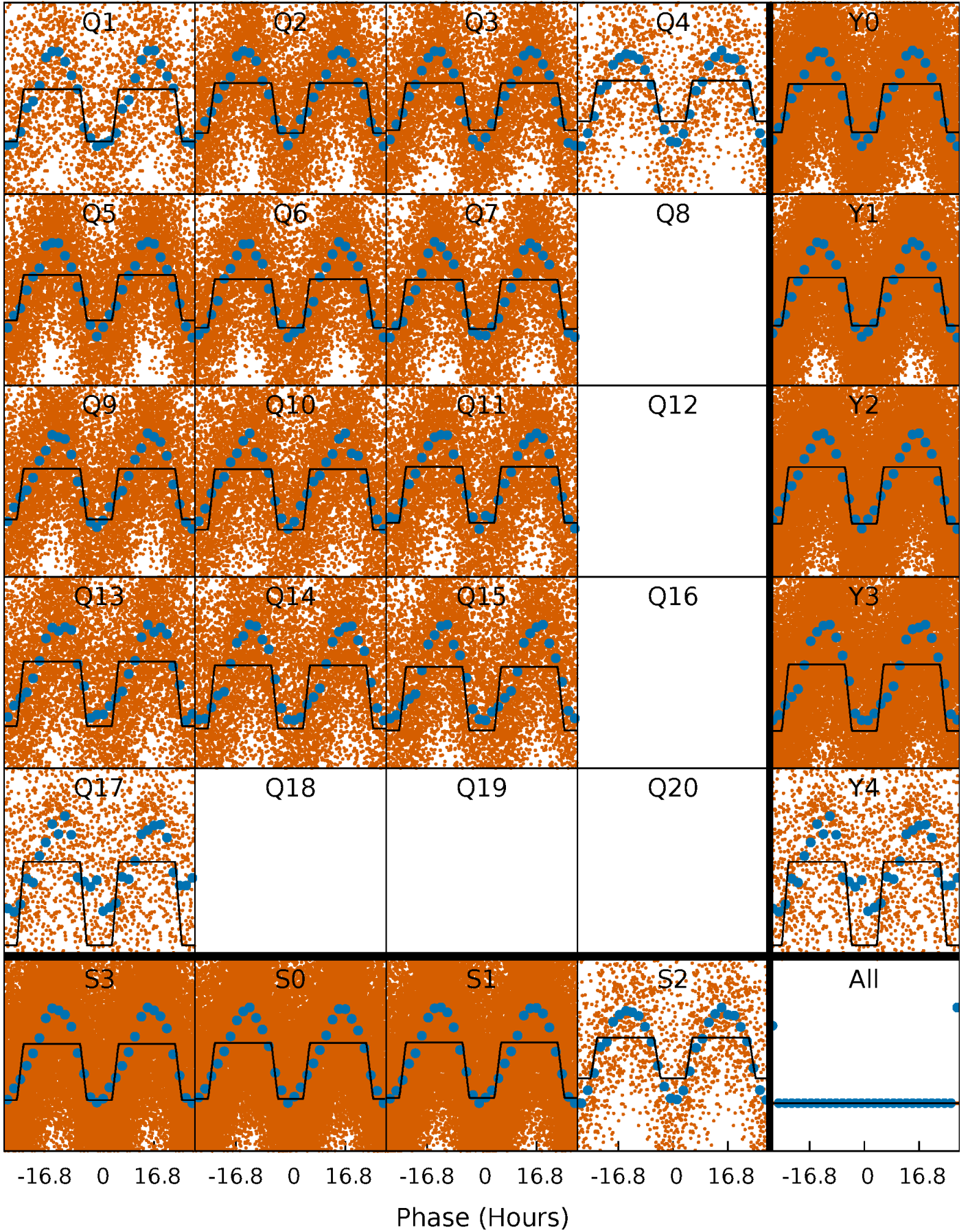
DV Quarter-Phased Transit Curves

TCE 011389737-01 P= 1.217895 Days $T_0=132.611854$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

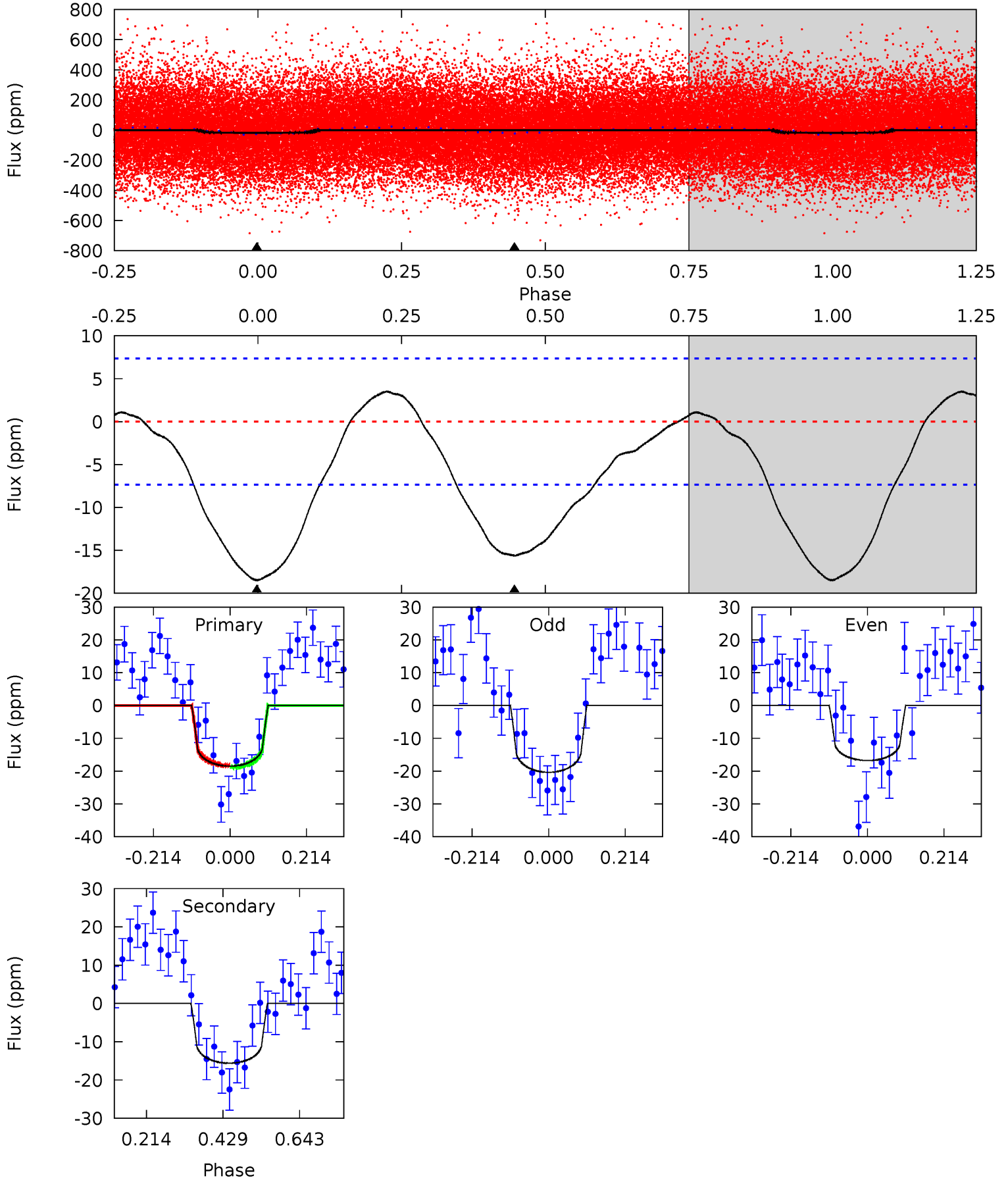
TCE 011389737-01 P= 1.217901 Days $T_0=132.714848$ (BKJD)



DV Model-Shift Uniqueness Test

011389737-01, P = 1.217895 Days, E = 131.393959 Days

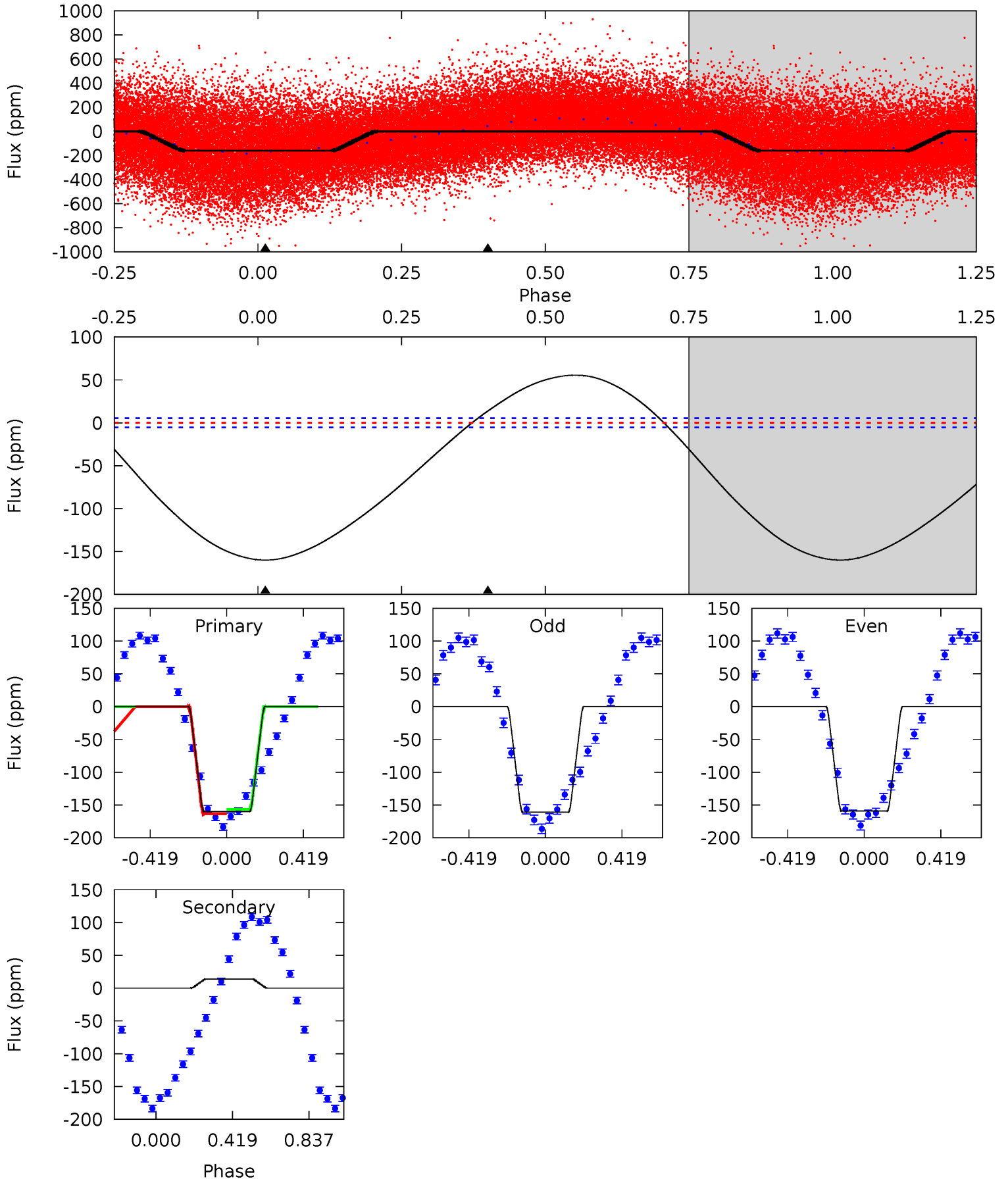
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	9.35	0	0	4.40	1.24	1.10	11.1	11.1	9.35	9.35	1.08	0.93	0.16	0.17



Alt Model-Shift Uniqueness Test

011389737-01, P = 1.217901 Days, E = 131.496947 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
126.2	-10.8	0	0	4.25	0.81	15.2	126.2	126.2	-10.8	-10.8	0.75	0.95	0.26	2.57



Stellar Parameters For KIC 011389737

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7443^{+233}_{-311}	$4.035^{+0.260}_{-0.140}$	$-0.520^{+0.250}_{-0.300}$	$1.889^{+0.489}_{-0.652}$	$1.410^{+0.187}_{-0.257}$	$0.294^{+0.502}_{-0.120}$
	+3%/-4%	+6%/-3%	+48%/-58%	+26%/-35%	+13%/-18%	+170%/-41%
Source	KIC0	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 011389737-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 2	$0.90^{+0.36}_{-0.32}$	3954^{+291}_{-357}	6771^{+2179}_{-1085}	$6.483^{+9.594}_{-3.110}$
Alt.	14 ± 1	$2.59^{+0.56}_{-0.55}$	3920^{+319}_{-324}	-4478^{+200}_{-252}	$-0.688^{+0.217}_{-0.442}$

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 $A_{obs} \gg 1.0$

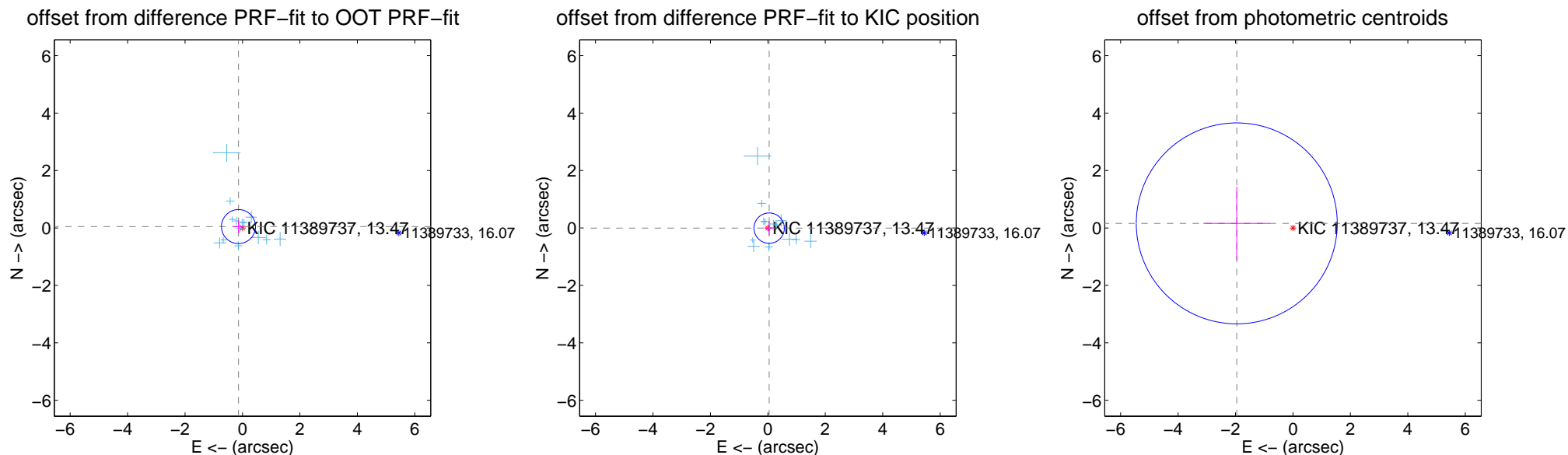
DV Centroid Data

Supplemental centroid analysis for 011389737-01. Kepler magnitude: 13.47. Transit SNR 8.90

There are 14 quarters with good PRF difference image offsets

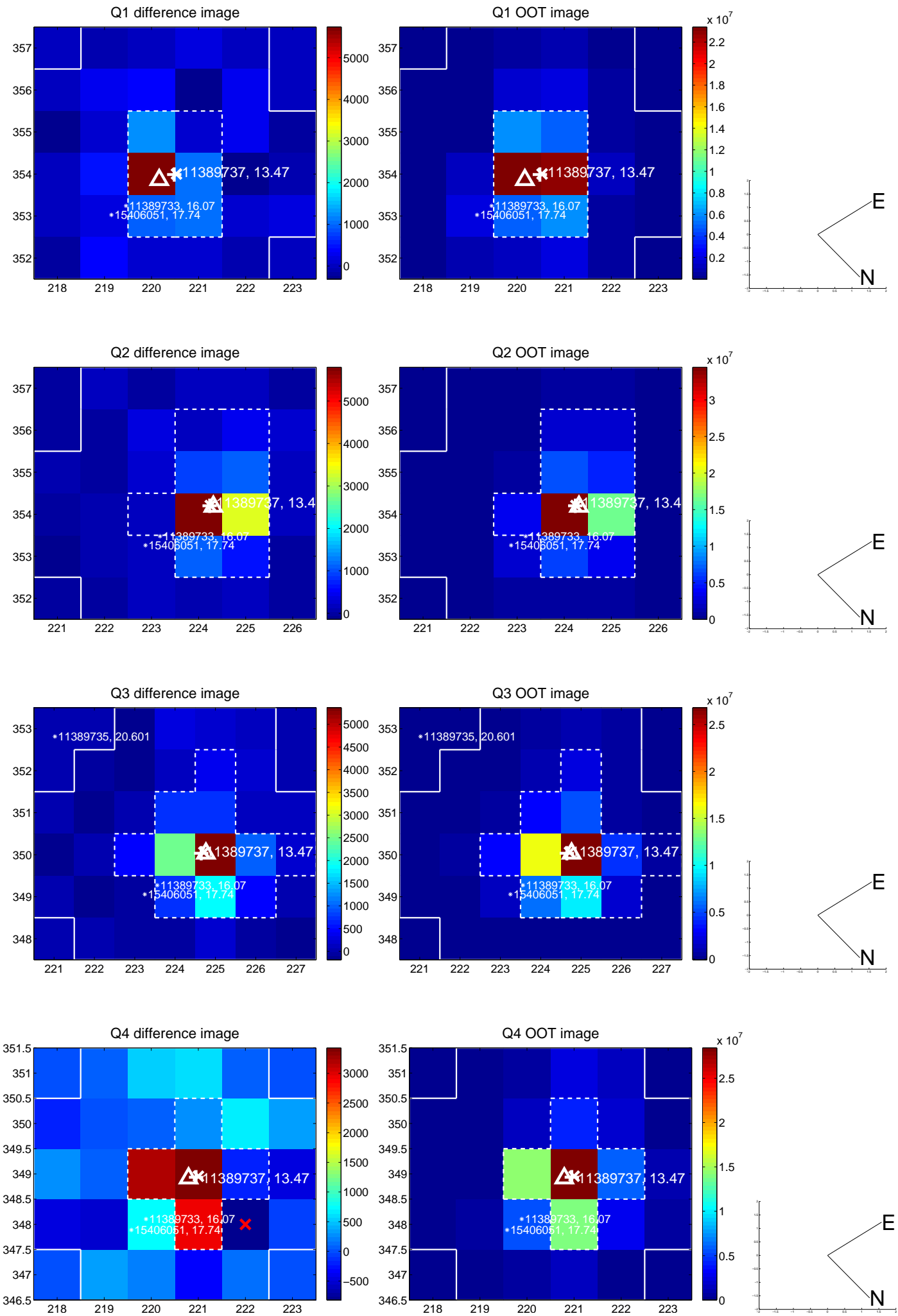
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.147 ± 0.198	0.75	0.139 ± 0.174	0.048 ± 0.212
PRF-fit source offset from KIC position	0.045 ± 0.176	0.26	-0.045 ± 0.167	-0.005 ± 0.245
photometric centroid source offset	1.96 ± 1.17	1.68	1.96 ± 1.17	0.16 ± 1.28

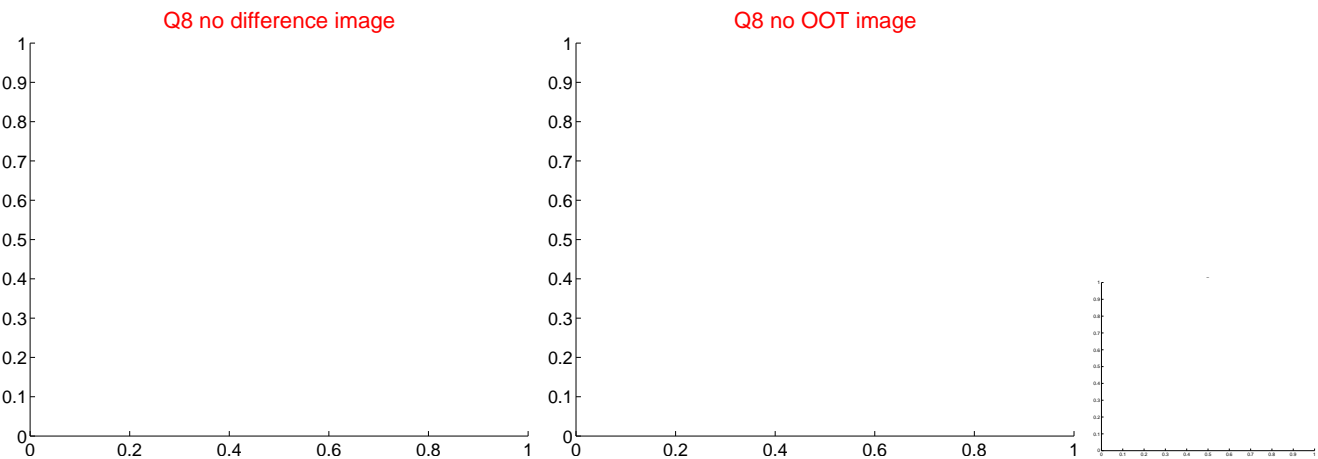
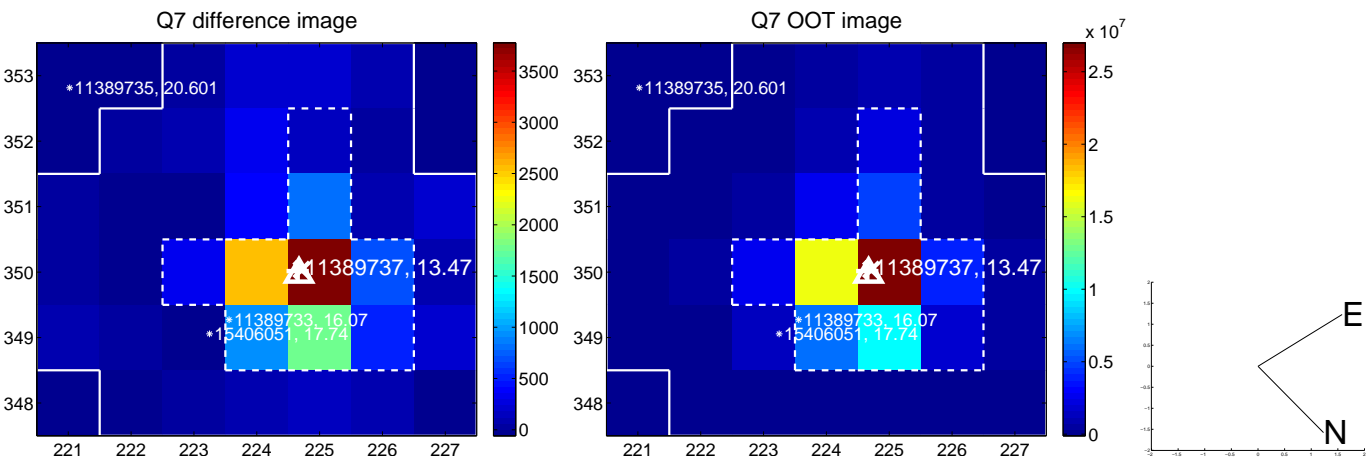
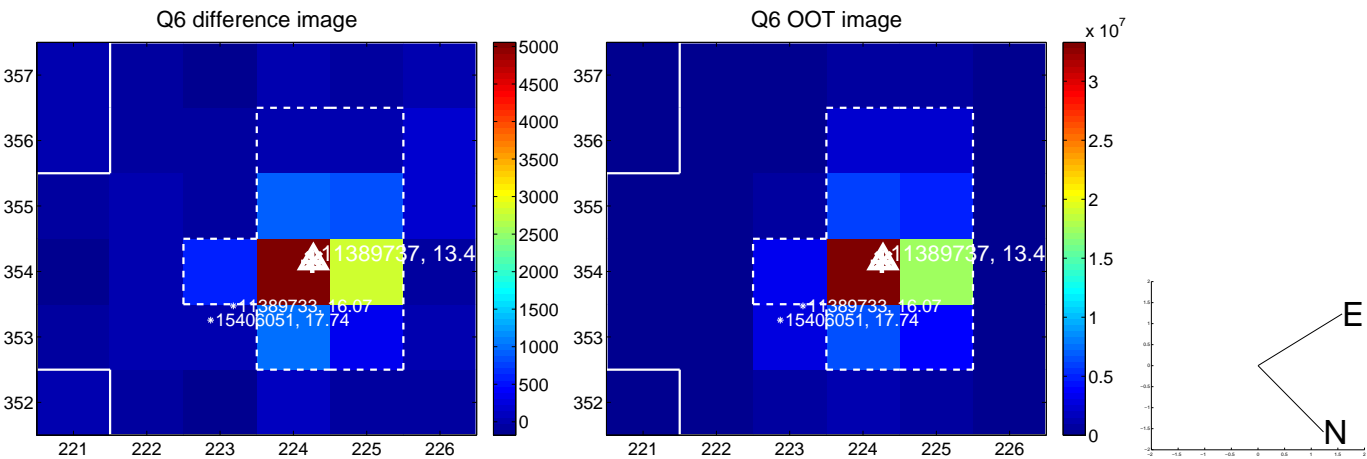
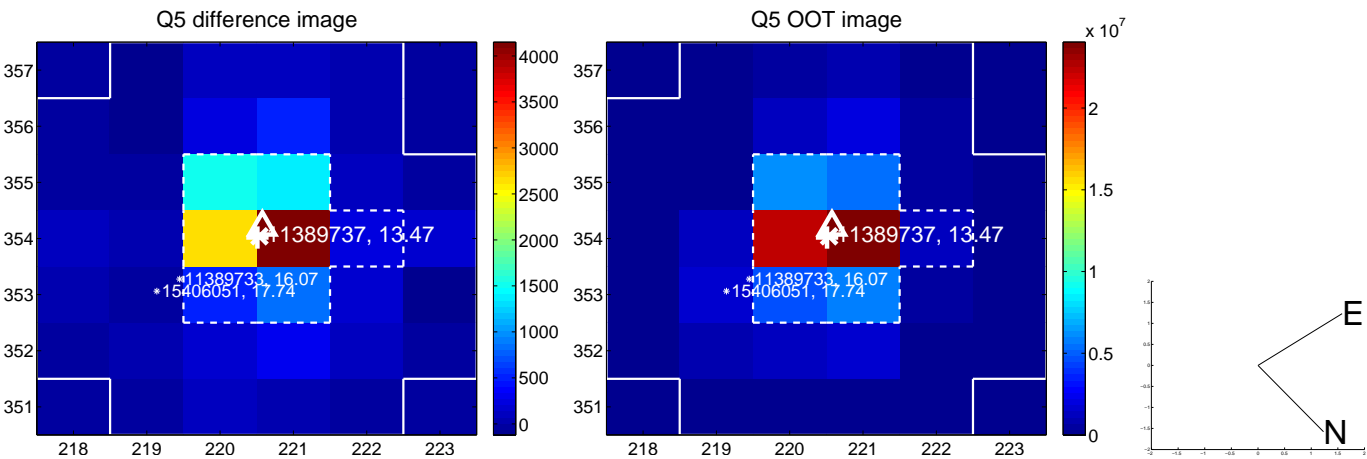


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

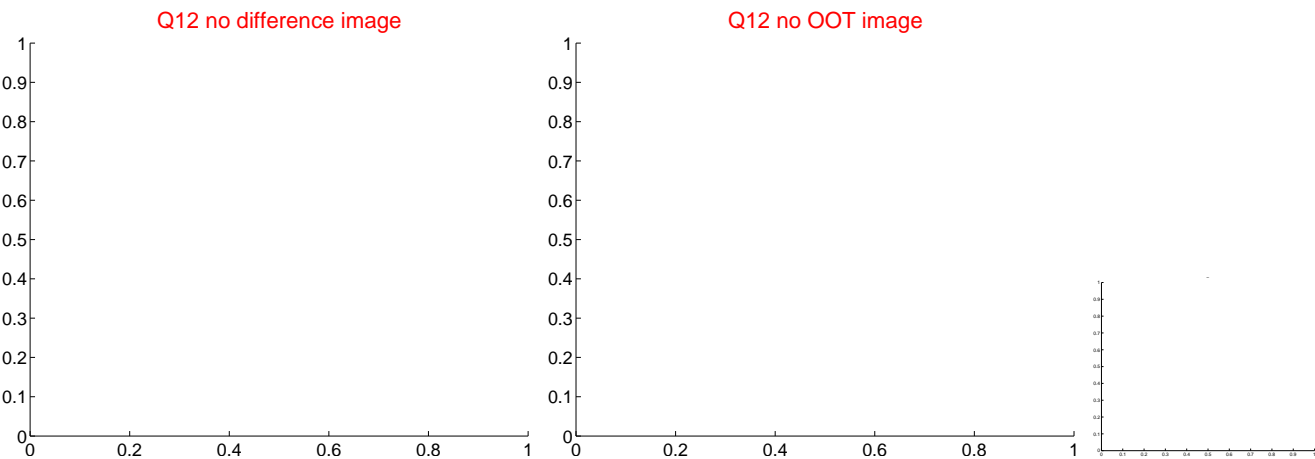
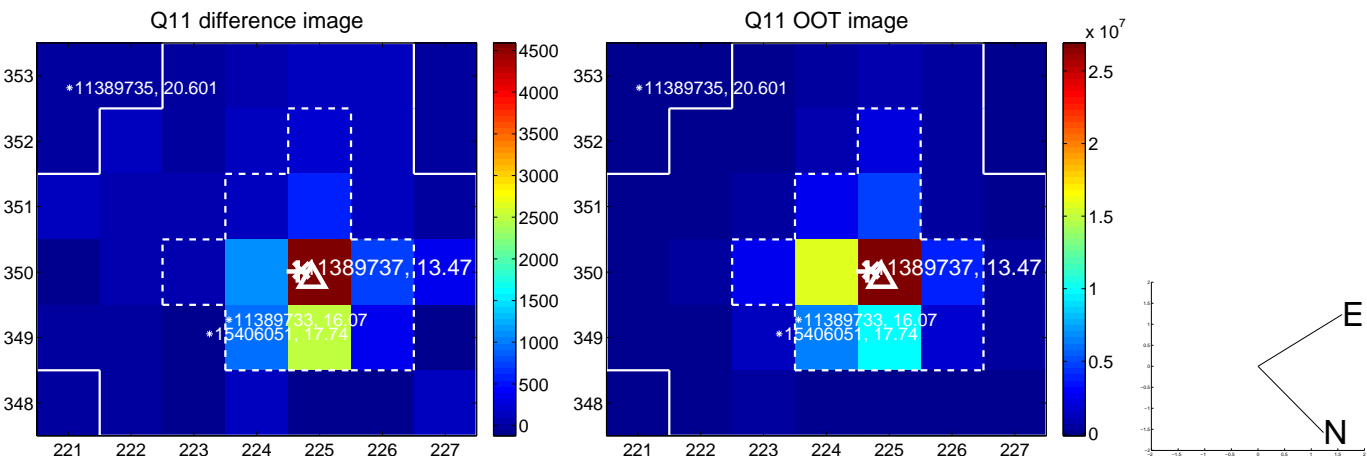
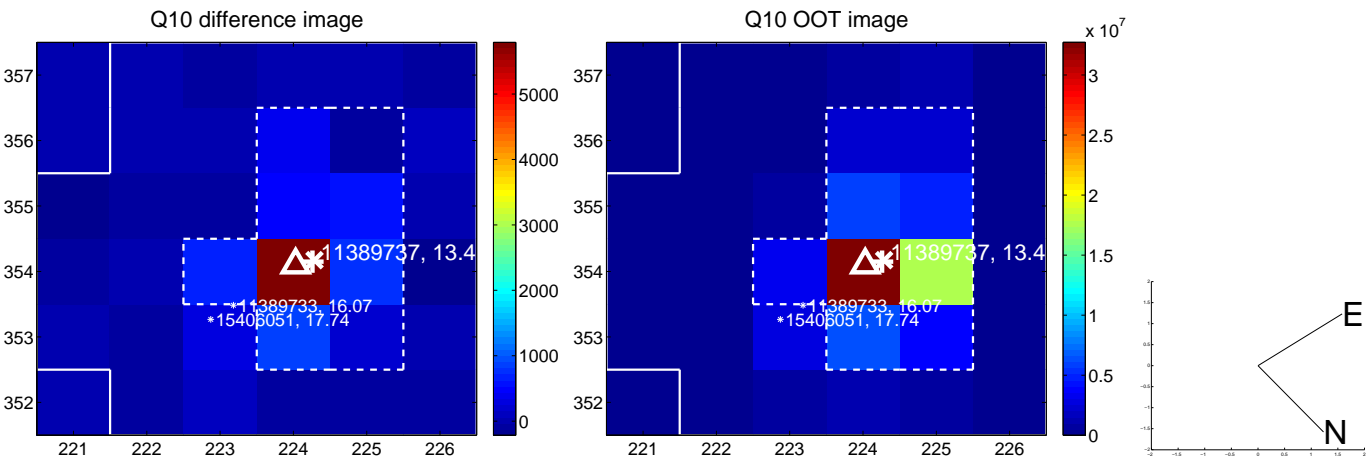
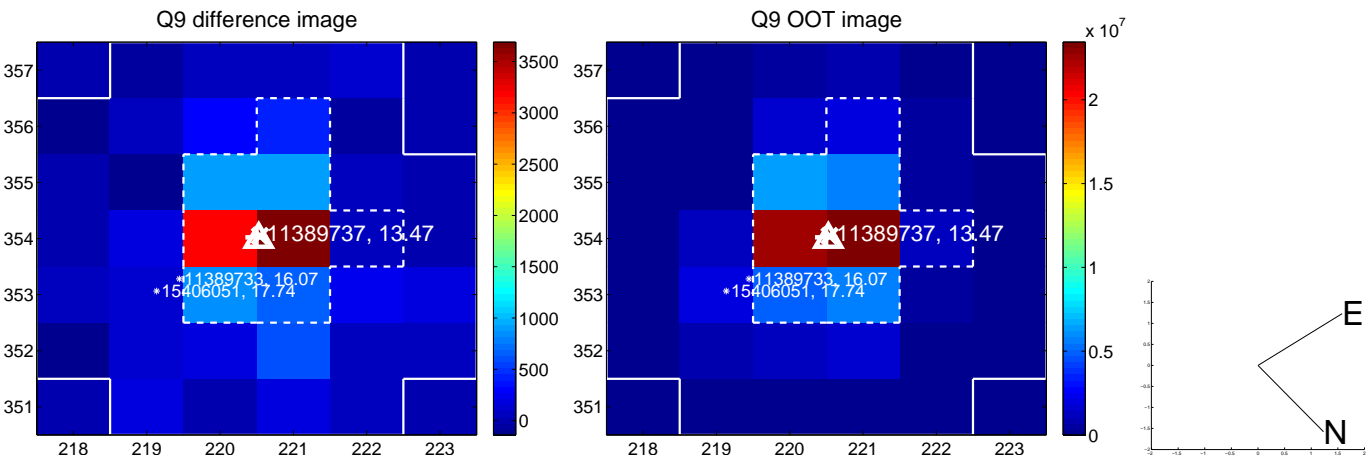
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



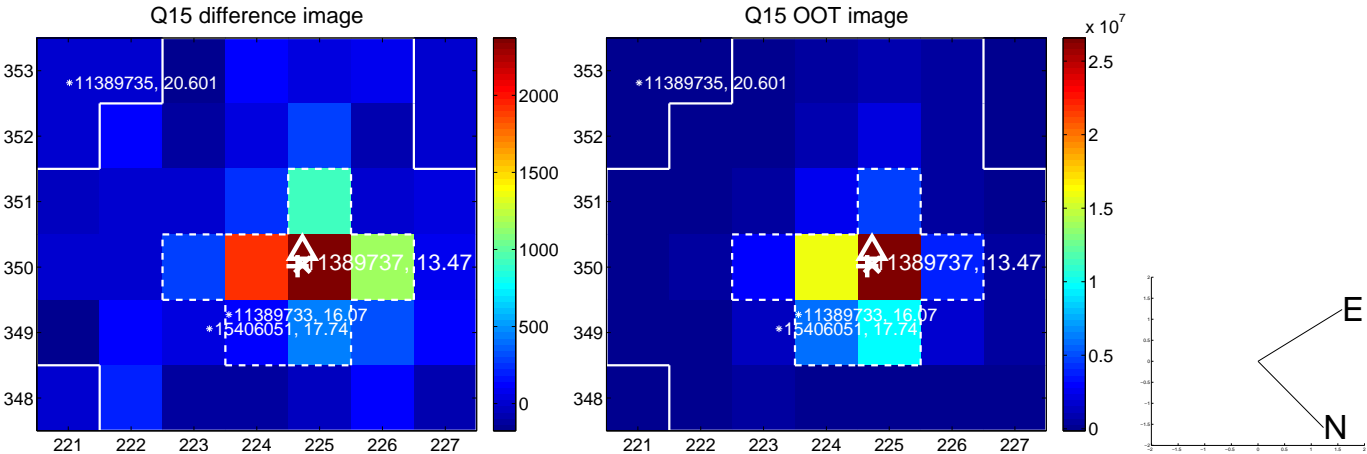
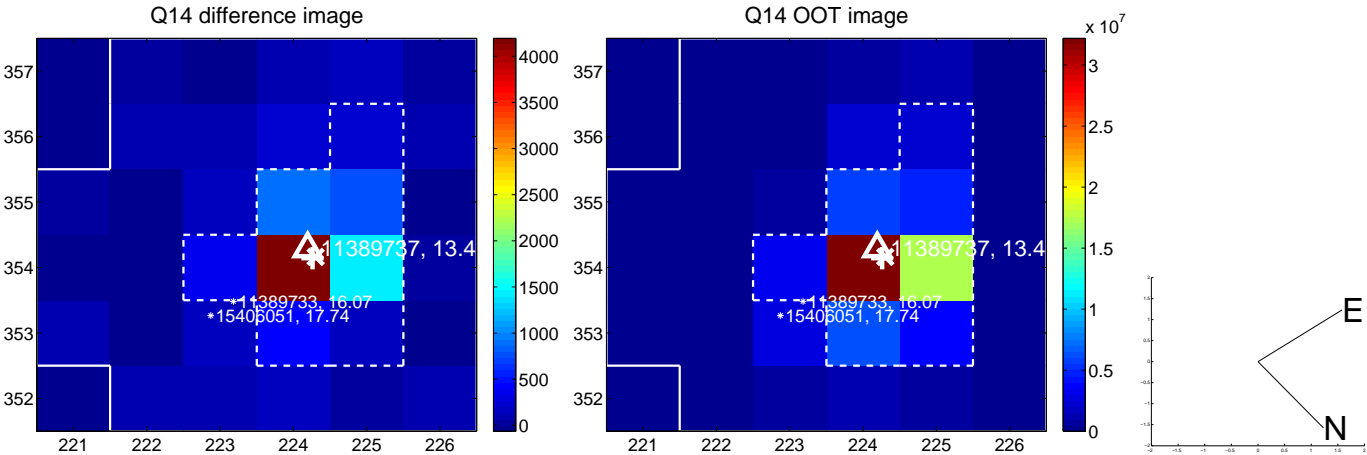
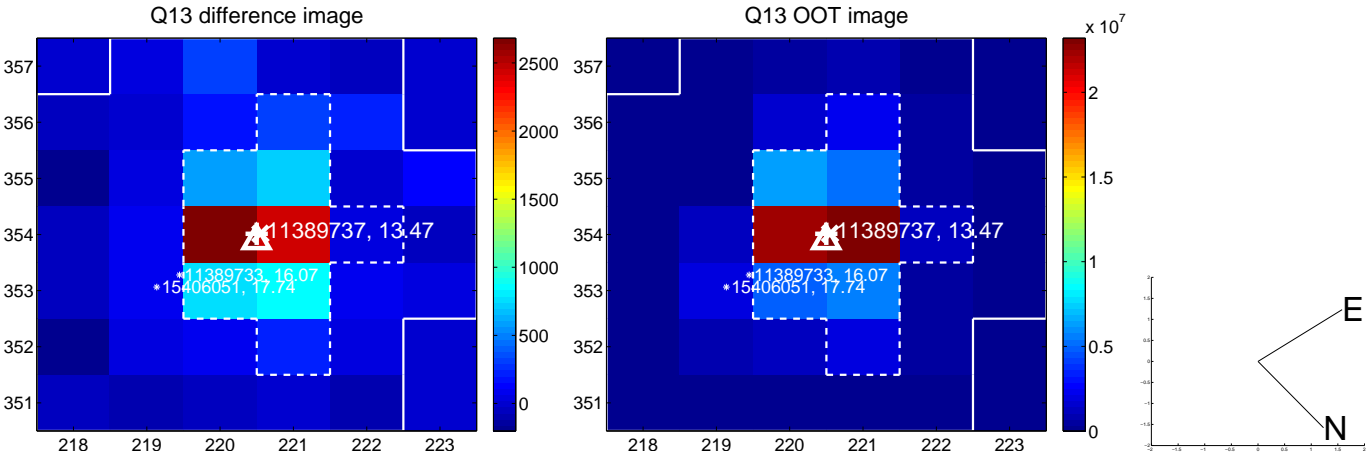
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



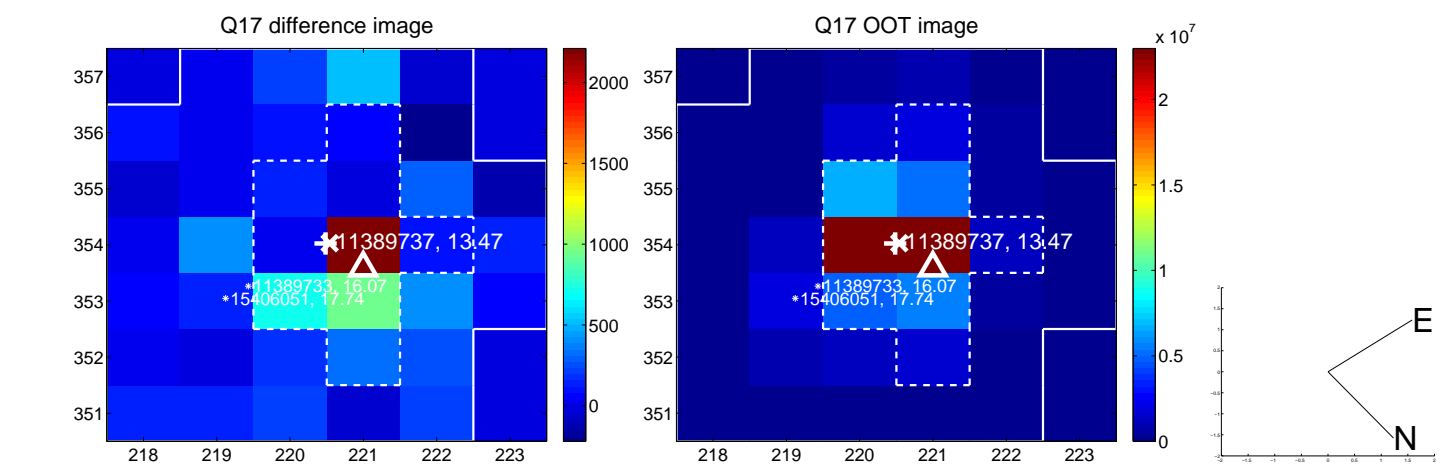
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



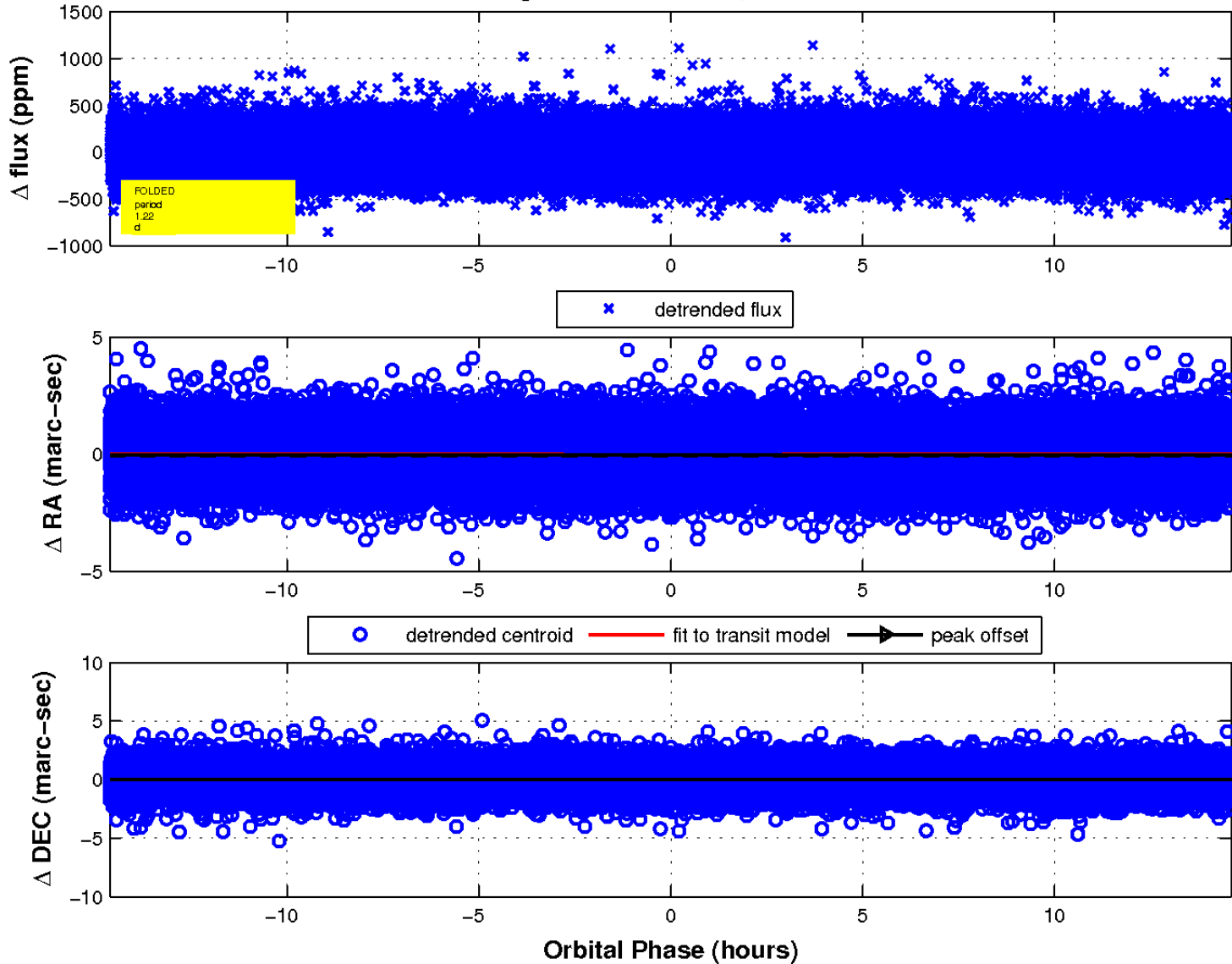
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

