

KIC 011290515

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})
011290515-01	OBS	4716.01	5.894266	134.113333	29.6	3.425	9.4	9.7	1.15	5929	0.74	336.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011290515-01	OBS	PC	0.96	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 011290515-01

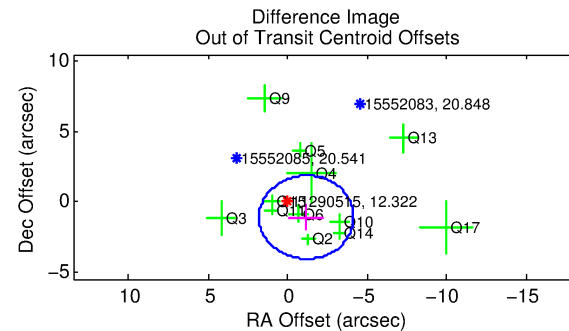
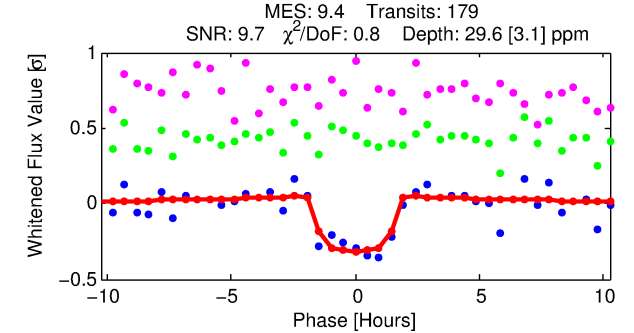
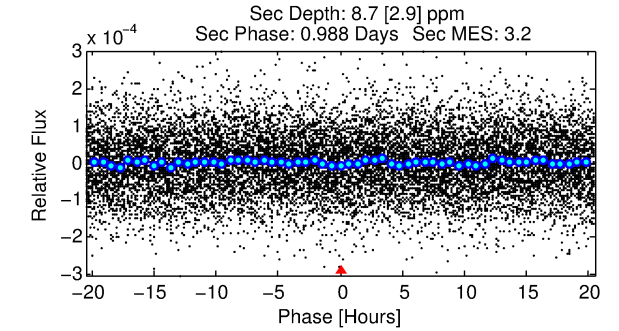
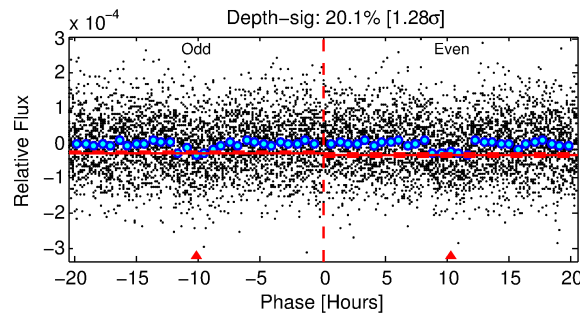
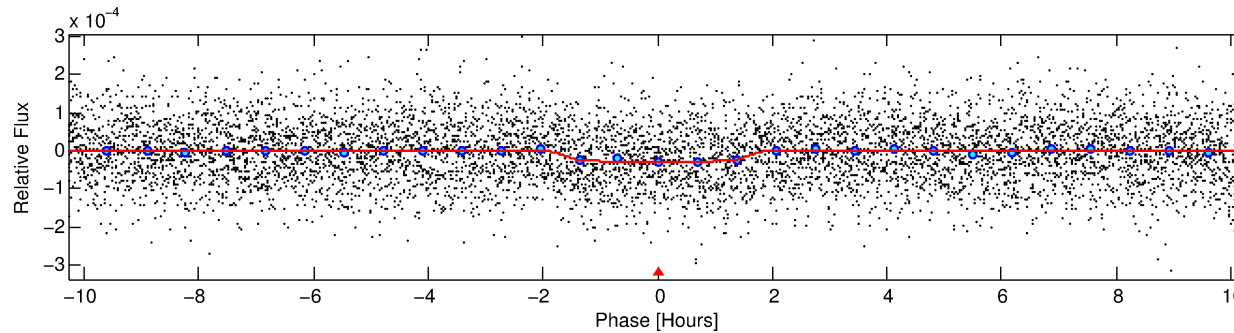
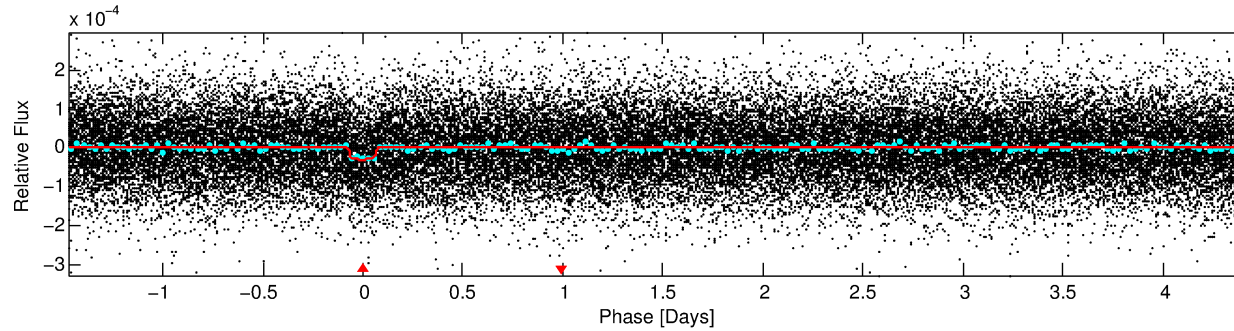
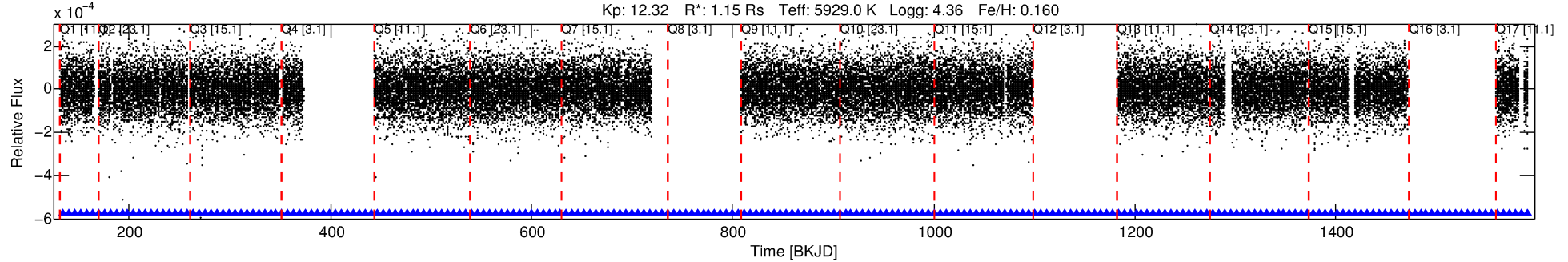
No Significant Match Found

DV One-Page Summary

KIC: 11290515 Candidate: 1 of 1 Period: 5.894 d

KOI: K04716.01 Corr: 0.960

Kp: 12.32 R*: 1.15 Rs Teff: 5929.0 K Logg: 4.36 Fe/H: 0.160



DV Fit Results:

Period = 5.89427 [0.00005] d
Epoch = 134.1133 [0.0056] BKJD
Rp/R* = 0.0059 [0.0030]
a/R* = 5.99 [14.56]
b = 0.90 [0.54]
Seff = 336.34 [91.36]
Teq = 1092 [74] K
Rp = 0.74 [0.40] Re
a = 0.0657 [0.0115] AU
Ag = 37.73 [41.40] [0.89σ]
Teff = 4184 [1115] K [2.77σ]

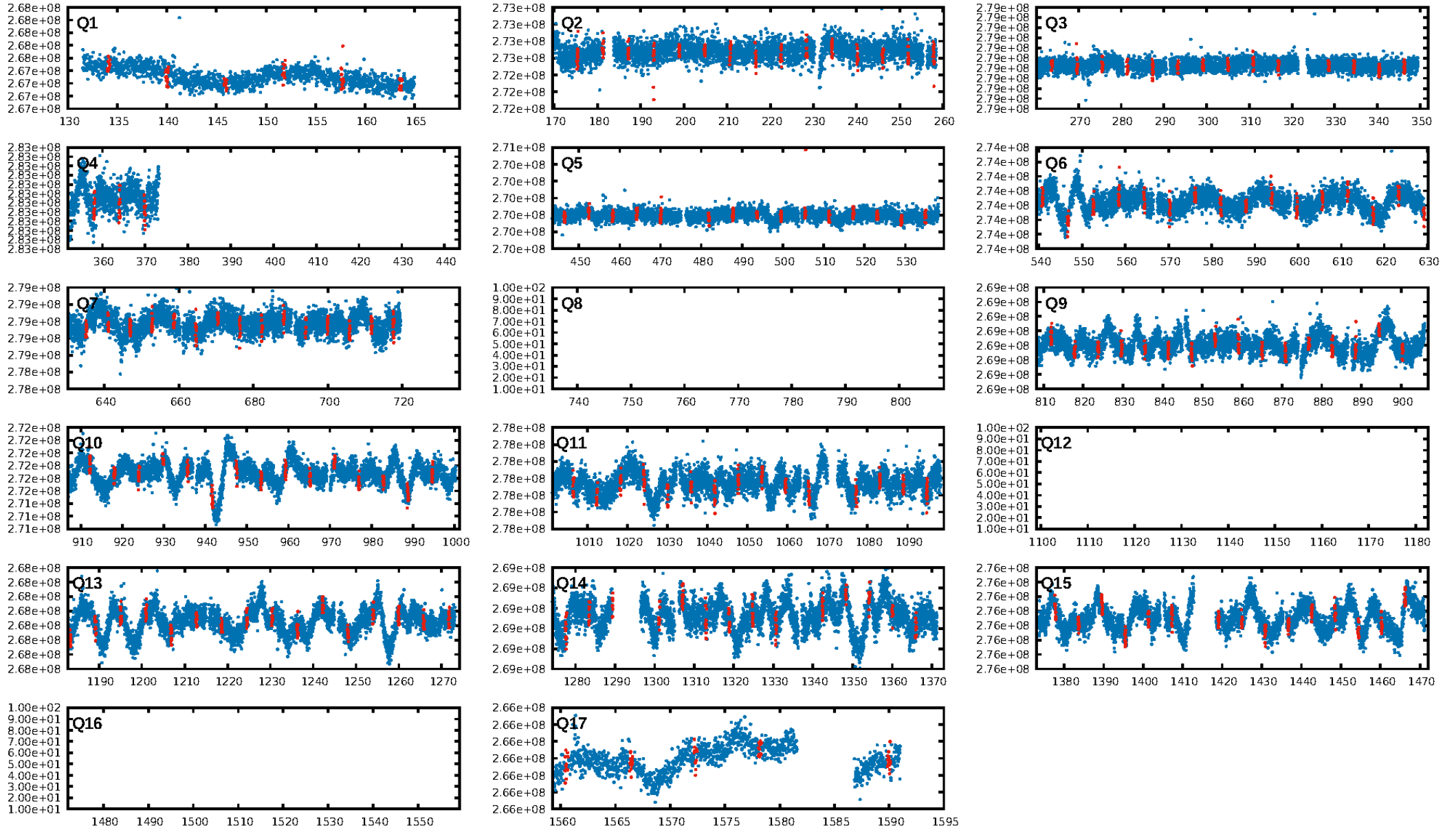
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.17e-21
RollingBand-fgt: 1.00 [165/165]
GhostDiagnostic-chr: 1.437
Centroid-sig: 81.5%
Centroid-so: 0.564 arcsec [0.46σ]
OotOffset-rm: 1.604 arcsec [1.62σ]
KicOffset-rm: 1.633 arcsec [1.55σ]
OotOffset-st: 4/3/1/4 [12]
KicOffset-st: 4/3/1/4 [12]
DiffImageQuality-fgm: 0.42 [5/12]
DiffImageOverlap-fno: 1.00 [14/14]

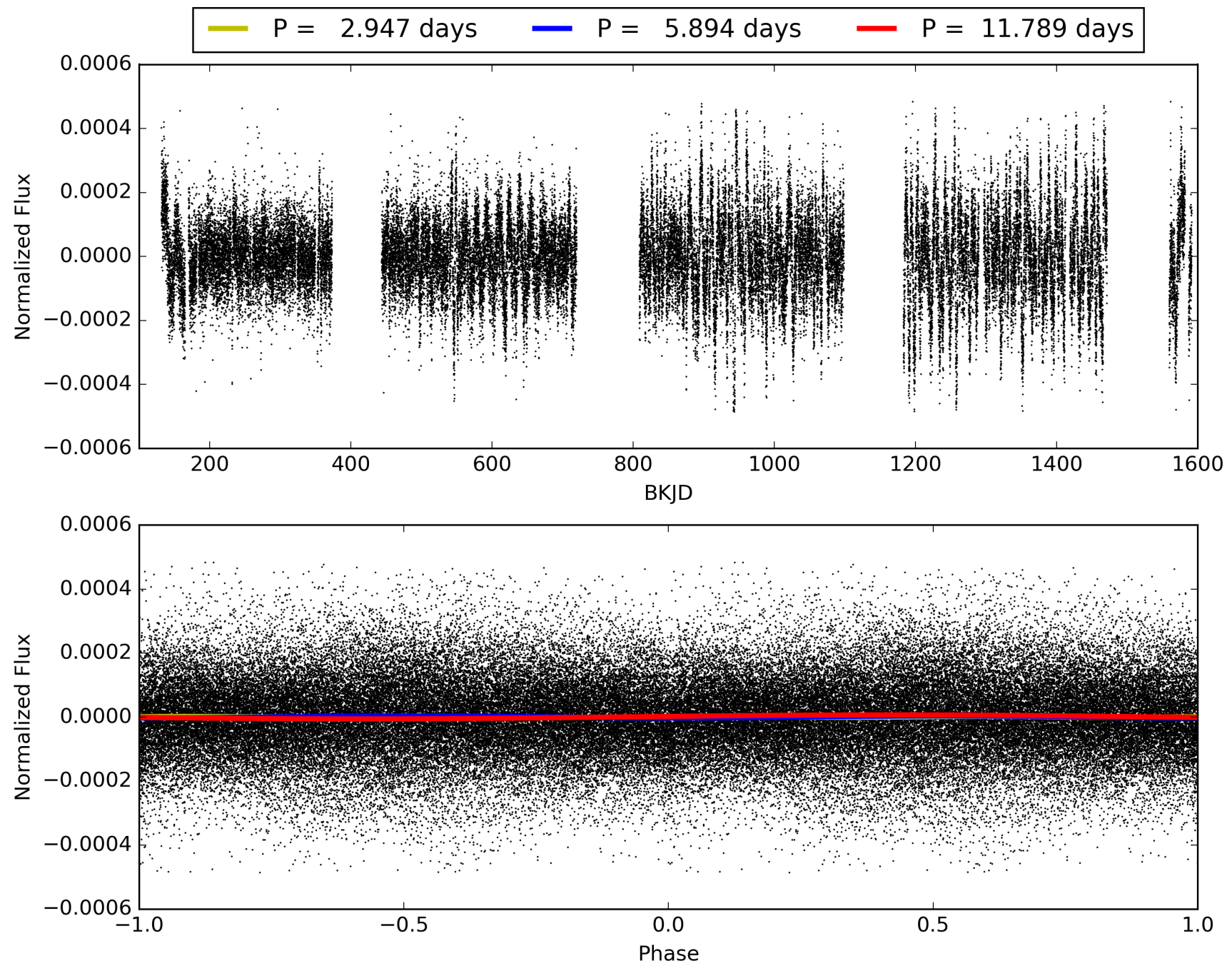
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:32:57 Z

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

TCE 011290515-01, PDC Light Curves

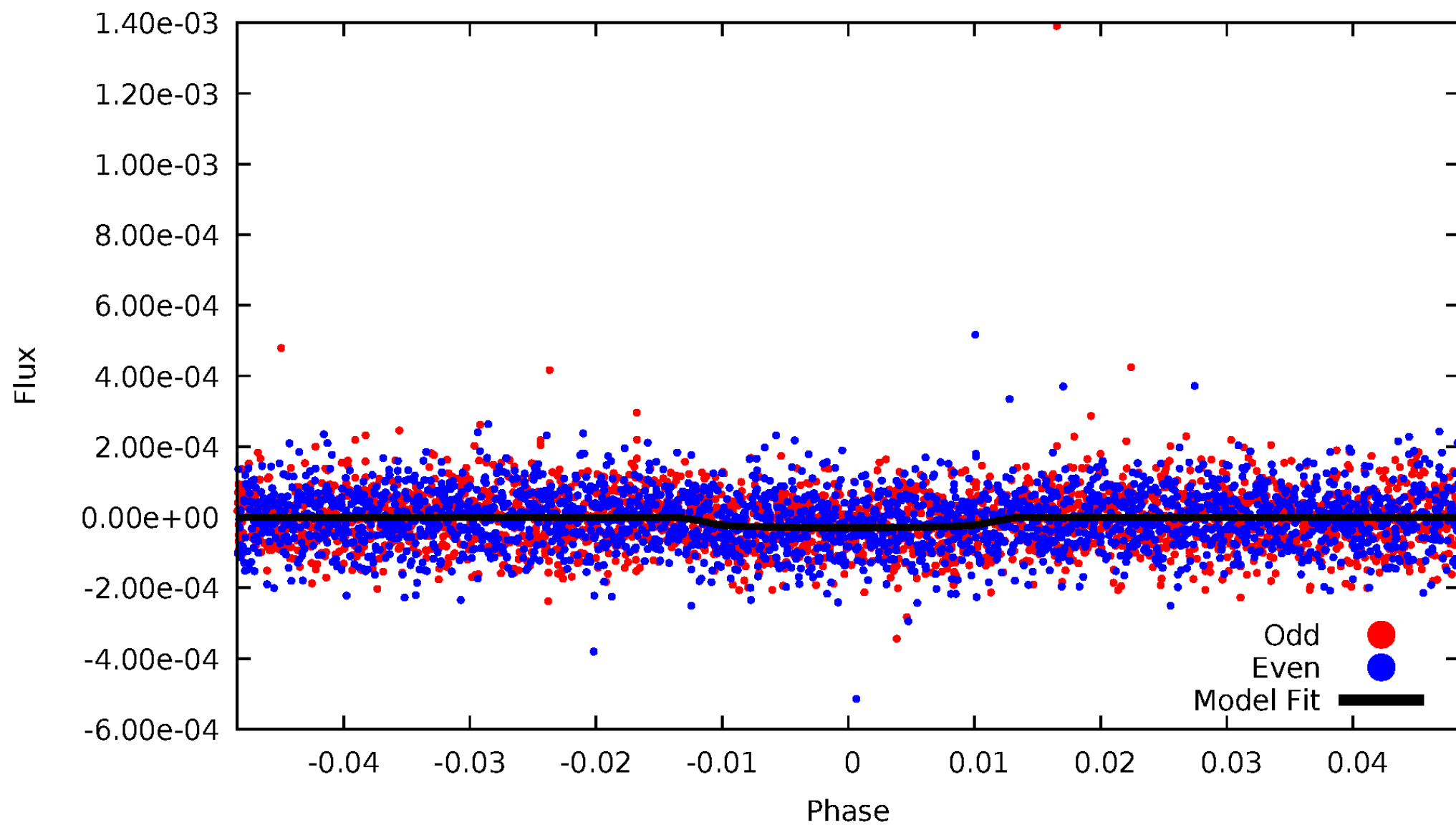


TCE 011290515-01



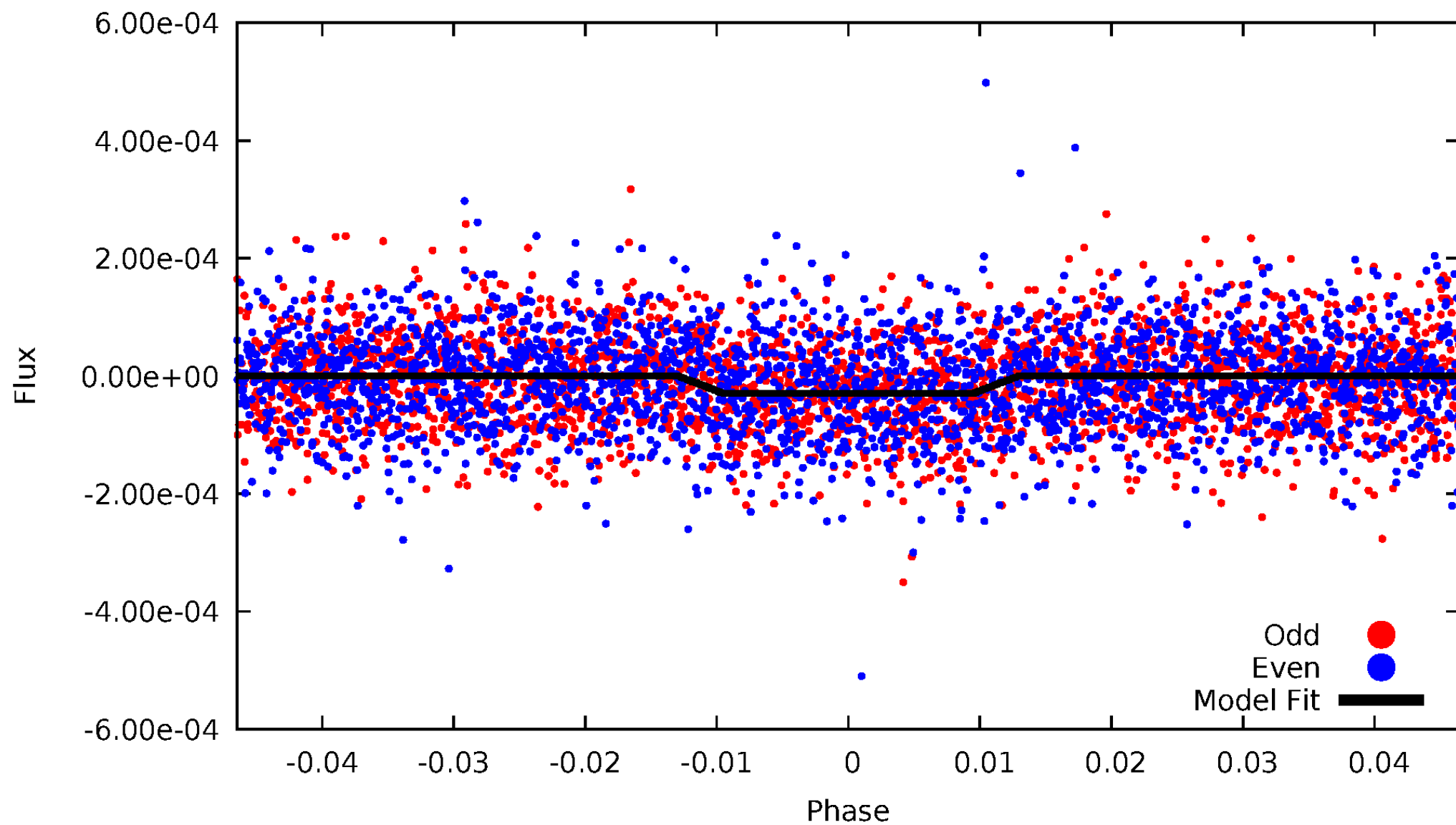
DV Odd/Even

TCE 011290515-01



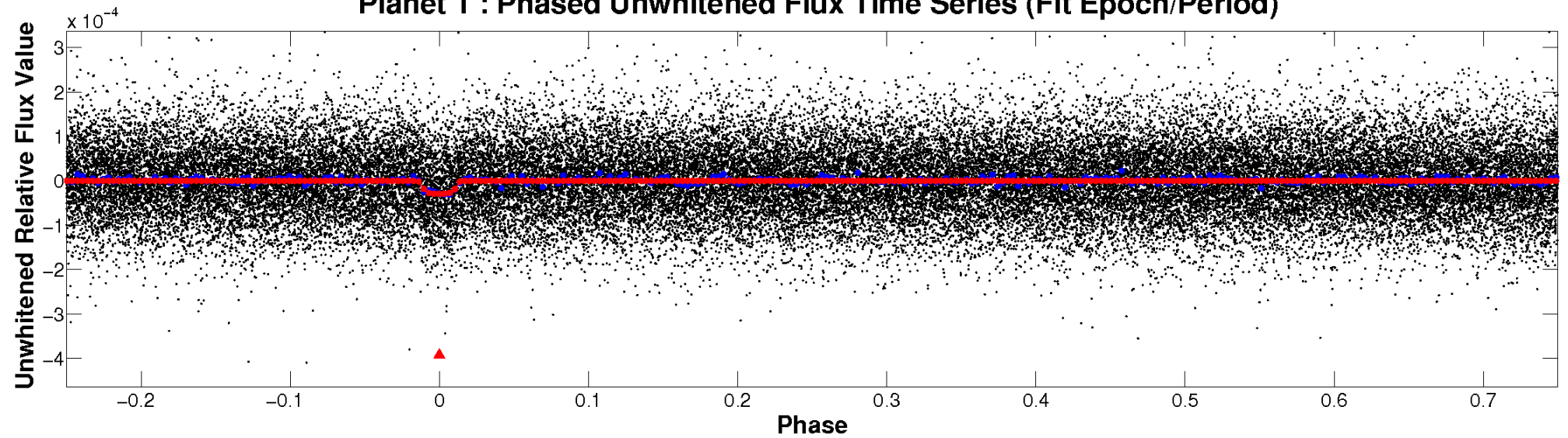
ALT Odd/Even

TCE 011290515-01

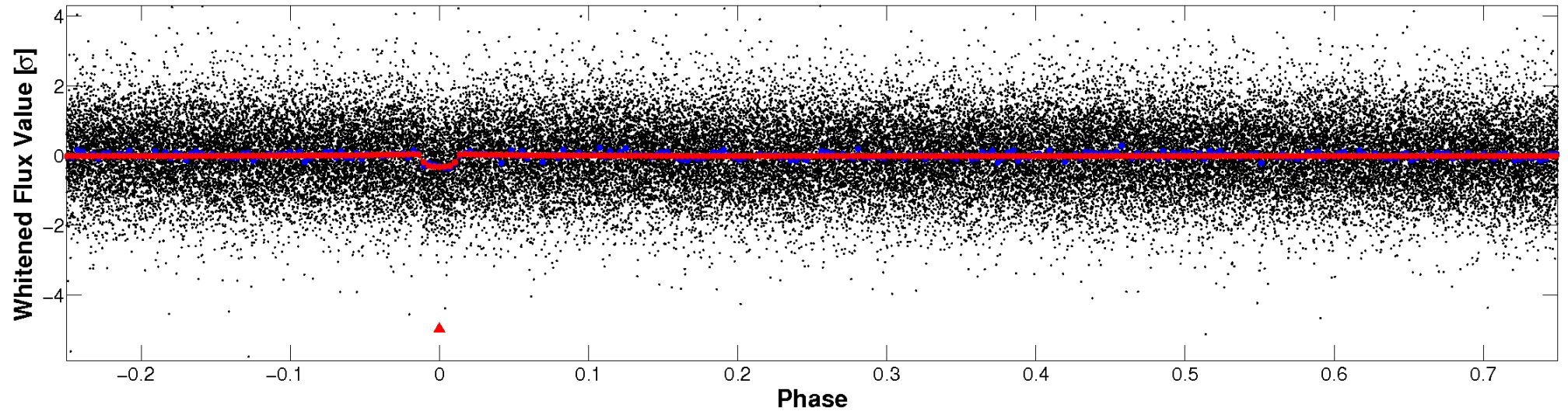


Non-Whitened Vs. Whitened Light Curve

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

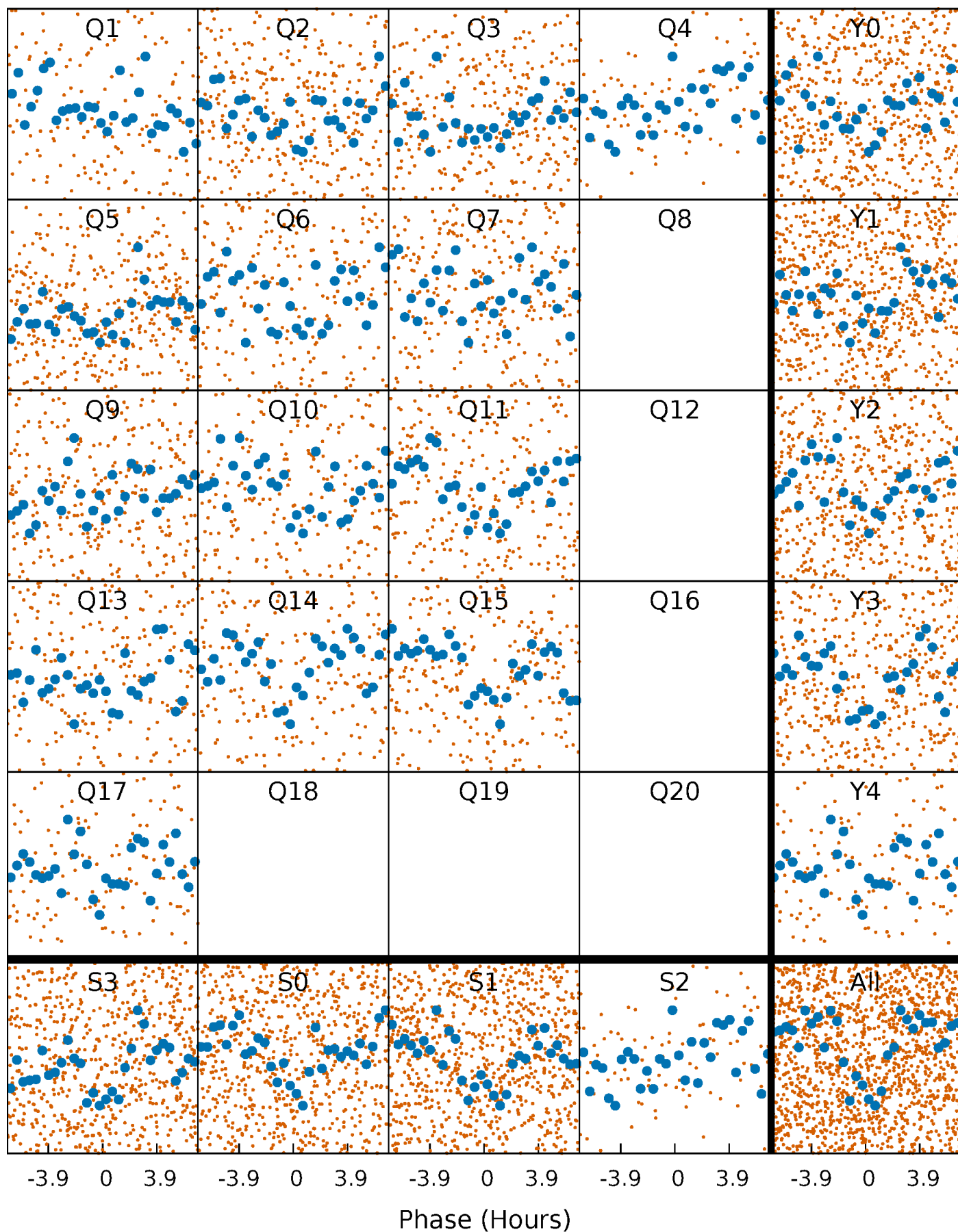


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



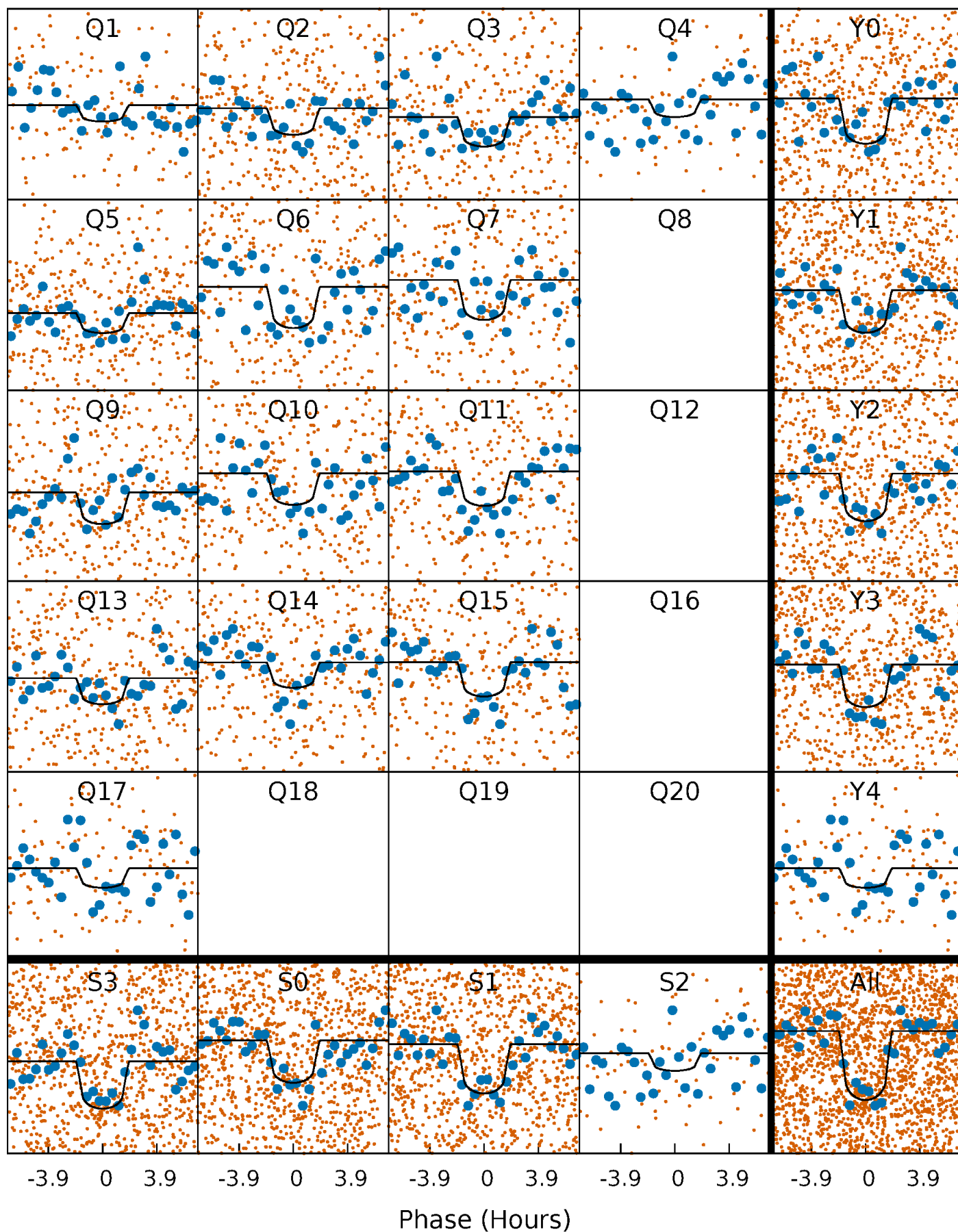
PDC Quarter-Phased Transit Curves

TCE 011290515-01 P= 5.894266 Days $T_0=134.113333$ (BKJD)



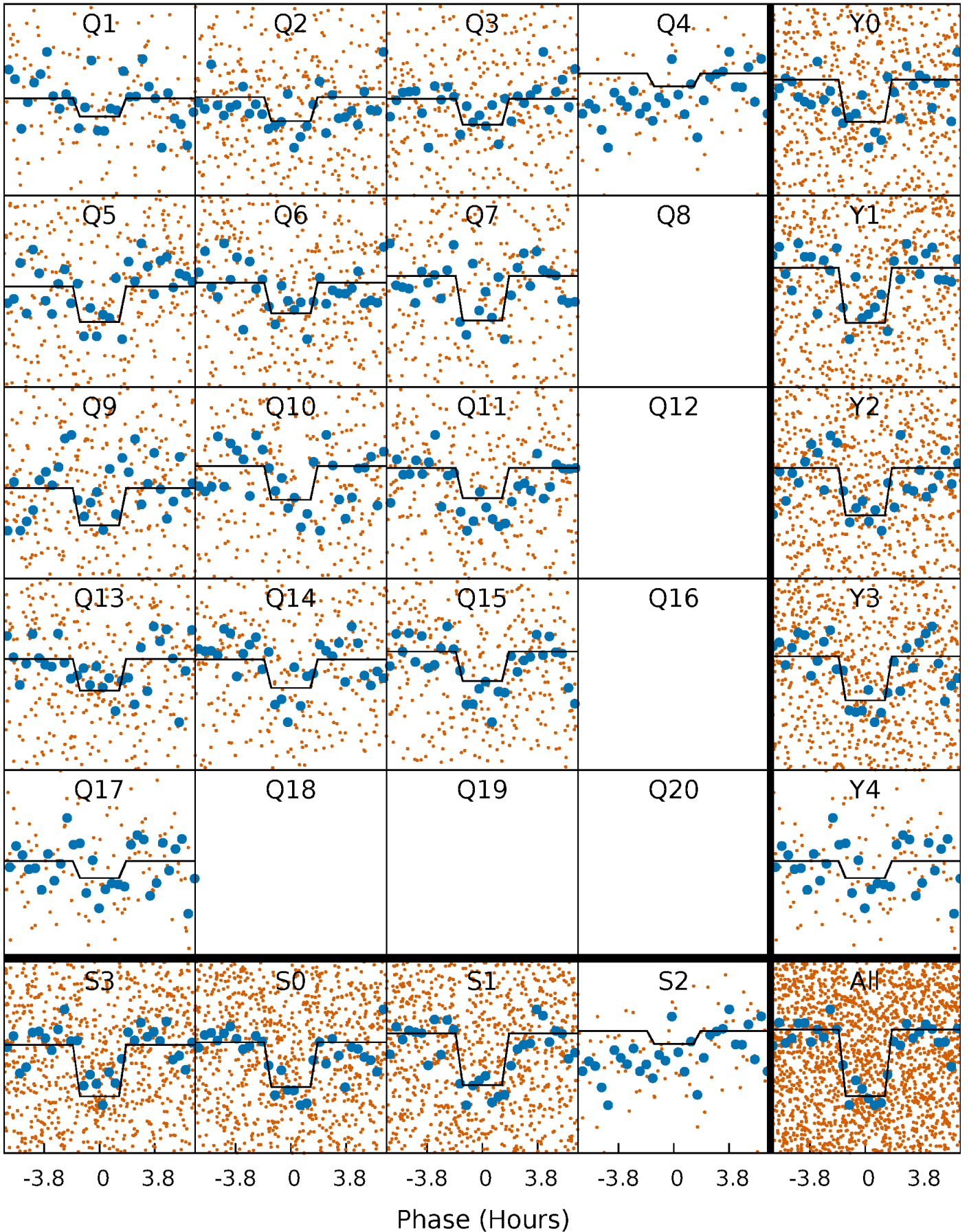
DV Quarter-Phased Transit Curves

TCE 011290515-01 P= 5.894266 Days $T_0=134.113333$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

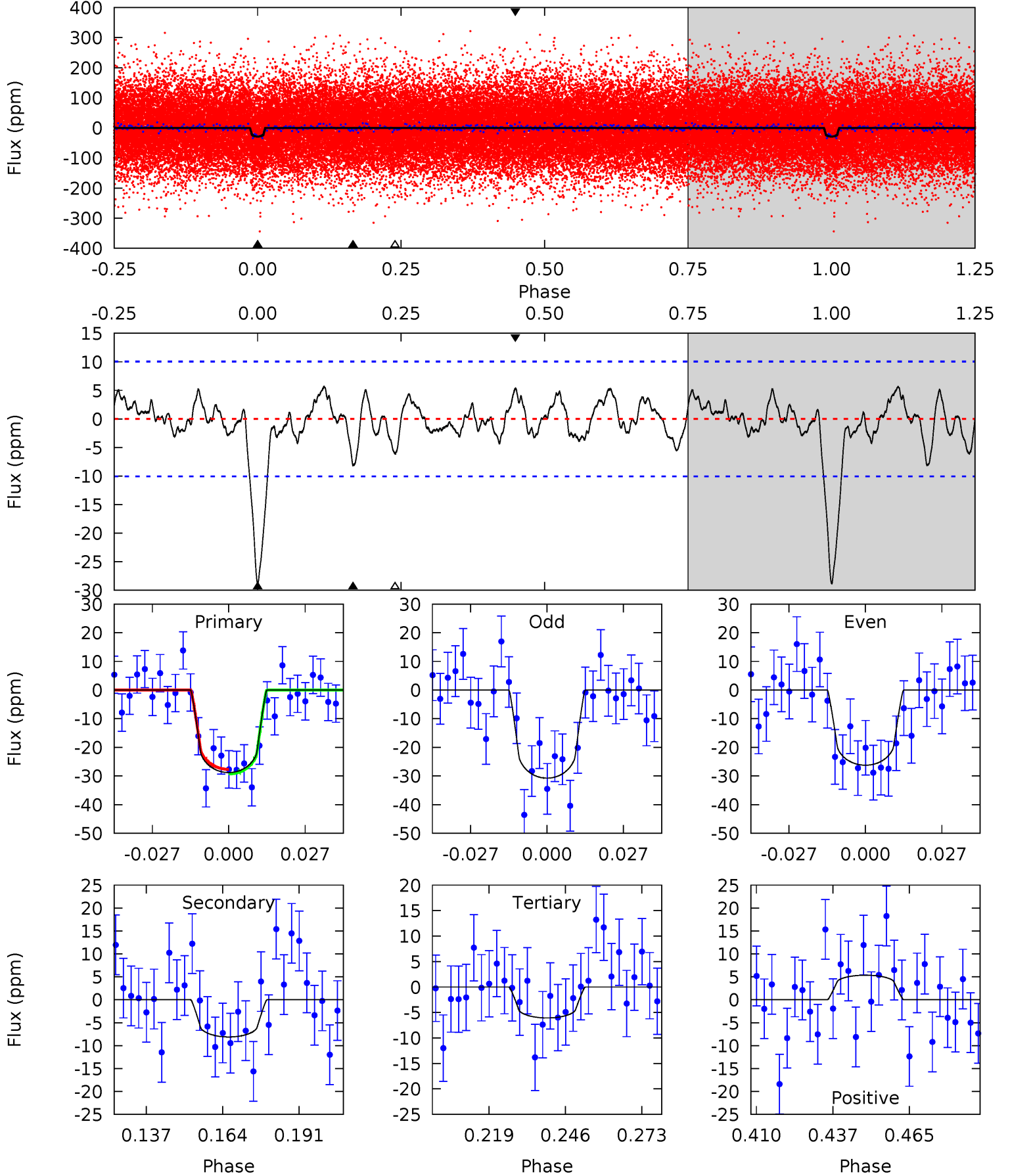
TCE 011290515-01 P= 5.894274 Days $T_0=134.111020$ (BKJD)



DV Model-Shift Uniqueness Test

011290515-01, P = 5.894266 Days, E = 128.219067 Days

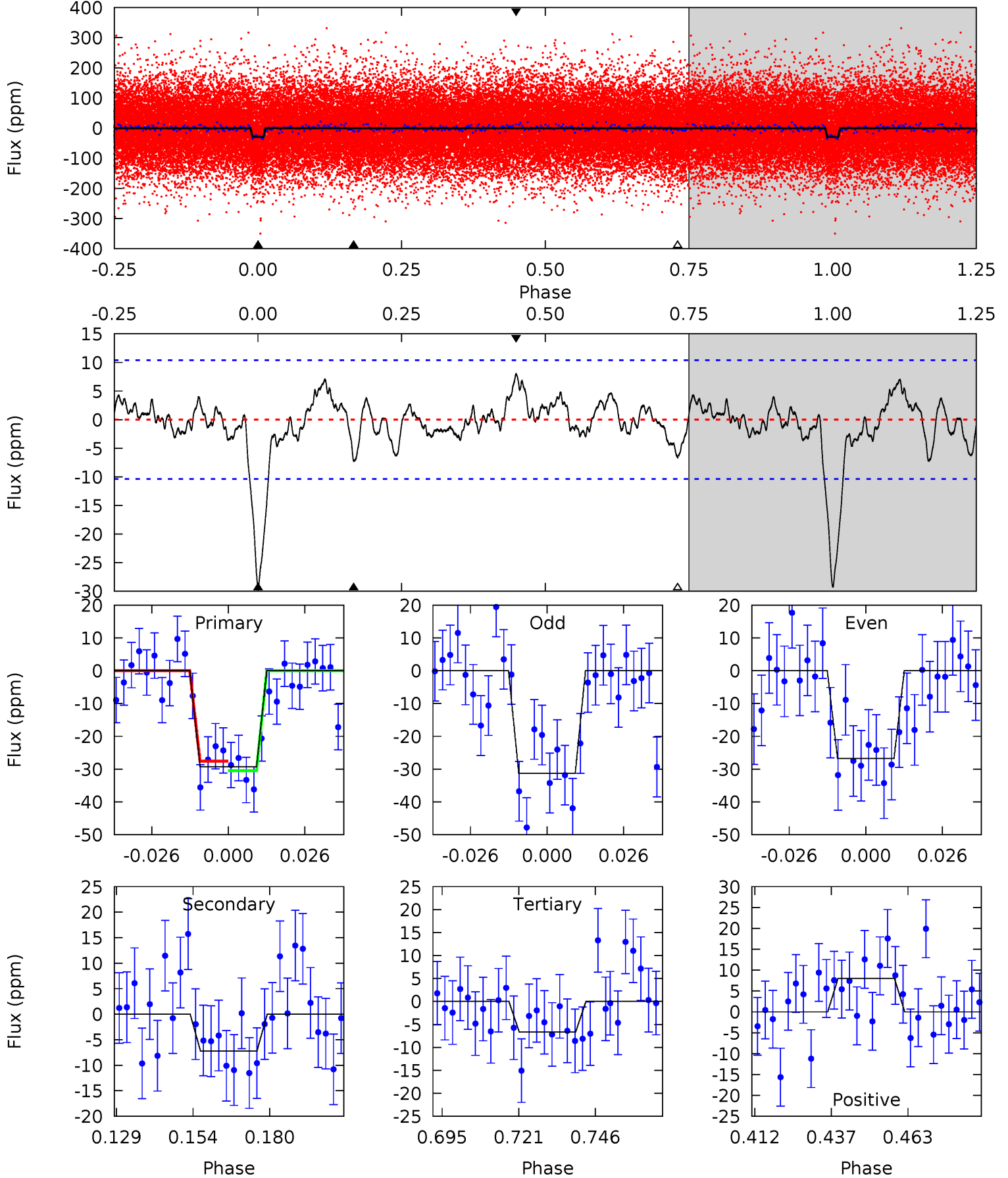
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	3.90	2.92	2.57	4.83	2.21	1.21	10.9	11.3	0.98	1.33	1.09	1.02	0.16	0.39



Alt Model-Shift Uniqueness Test

011290515-01, P = 5.894274 Days, E = 128.216746 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	3.37	3.10	3.75	4.84	2.23	1.25	10.6	9.93	0.28	-0.38	1.07	1.10	0.22	0.68



Stellar Parameters For KIC 011290515

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5929^{+71}_{-83}	$4.357^{+0.081}_{-0.150}$	$0.160^{+0.150}_{-0.150}$	$1.145^{+0.228}_{-0.105}$	$1.087^{+0.080}_{-0.073}$	$1.020^{+0.332}_{-0.415}$
	+1%/-1%	+2%/-3%	+94%/-94%	+20%/-9%	+7%/-7%	+33%/-41%
Source	SPE90	FLK73	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 011290515-01 / KOI 4716.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-8 ± 2	$0.76^{+0.40}_{-0.35}$	1536^{+77}_{-53}	4317^{+1234}_{-625}	34^{+75}_{-20}
Alt.	-7 ± 2	$0.71^{+0.40}_{-0.35}$	1534^{+78}_{-56}	4312^{+1594}_{-666}	34^{+106}_{-21}

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

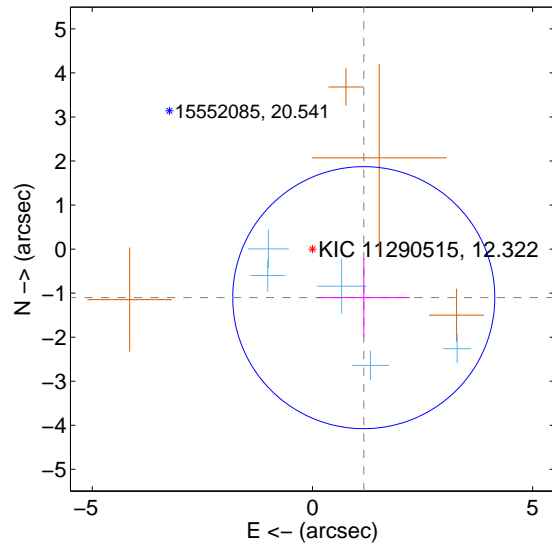
Supplemental centroid analysis for 011290515-01. Kepler magnitude: 12.32. Transit SNR 9.73

There are 5 quarters with good PRF difference image offsets

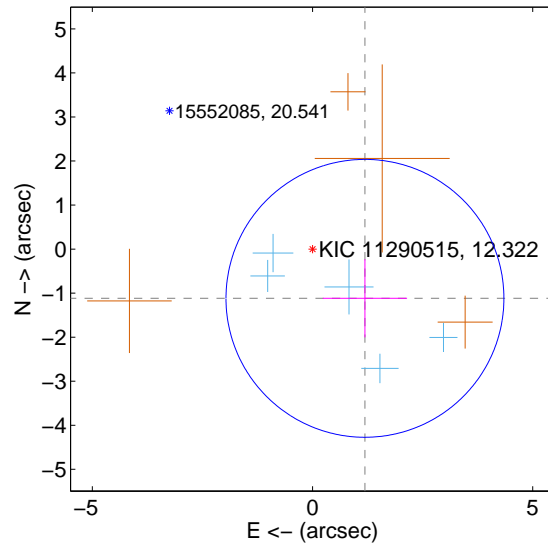
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.604 ± 0.992	1.62	-1.165 ± 1.046	-1.103 ± 0.888
PRF-fit source offset from KIC position	1.633 ± 1.052	1.55	-1.190 ± 0.957	-1.118 ± 0.887
photometric centroid source offset	0.56 ± 1.23	0.46	-0.56 ± 1.23	-0.05 ± 1.14

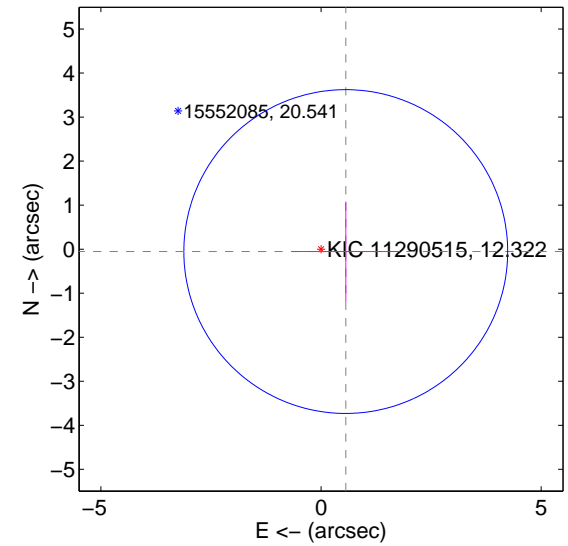
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

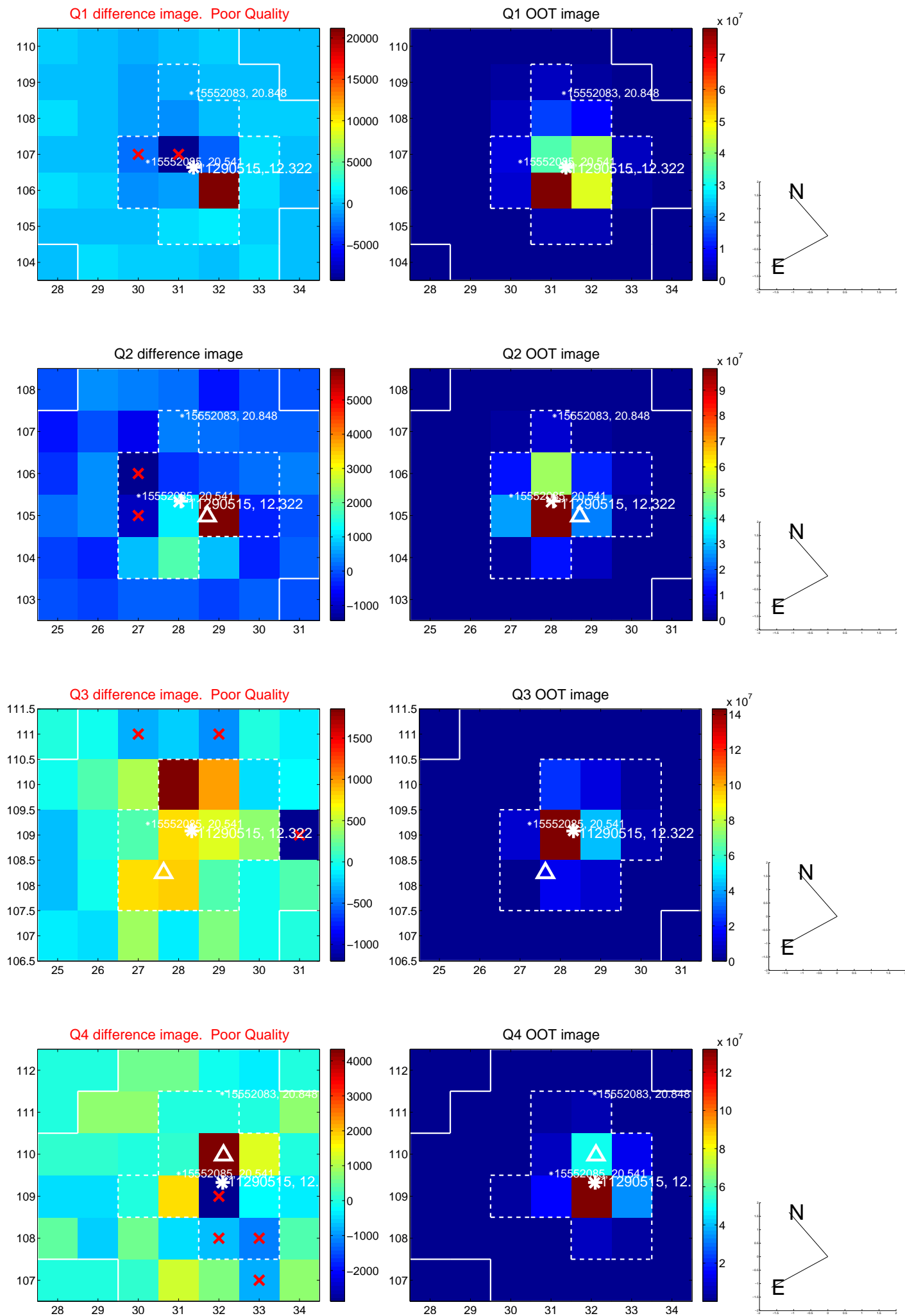


offset from photometric centroids

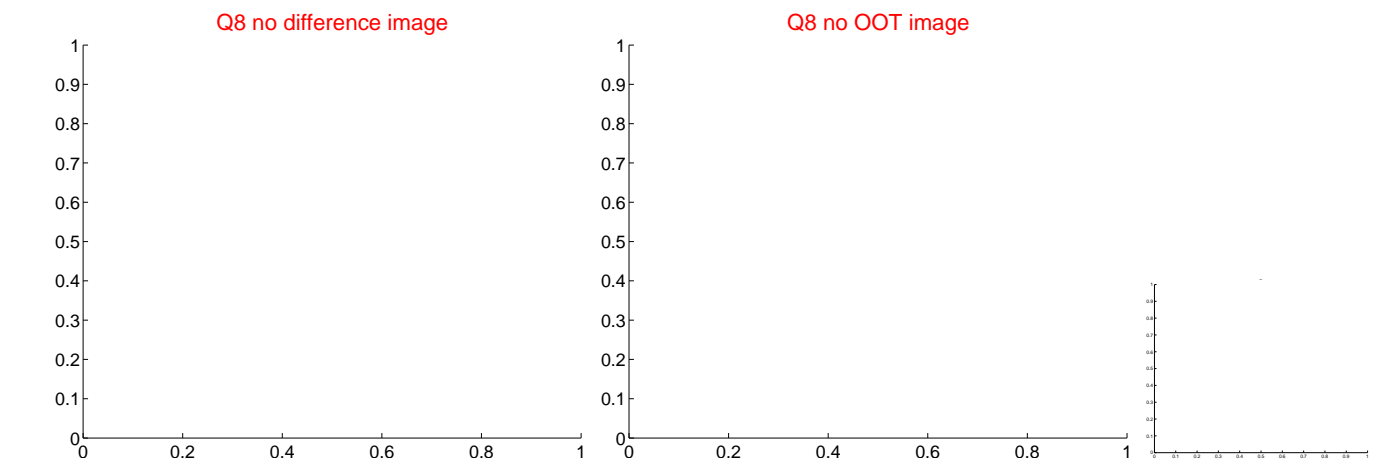
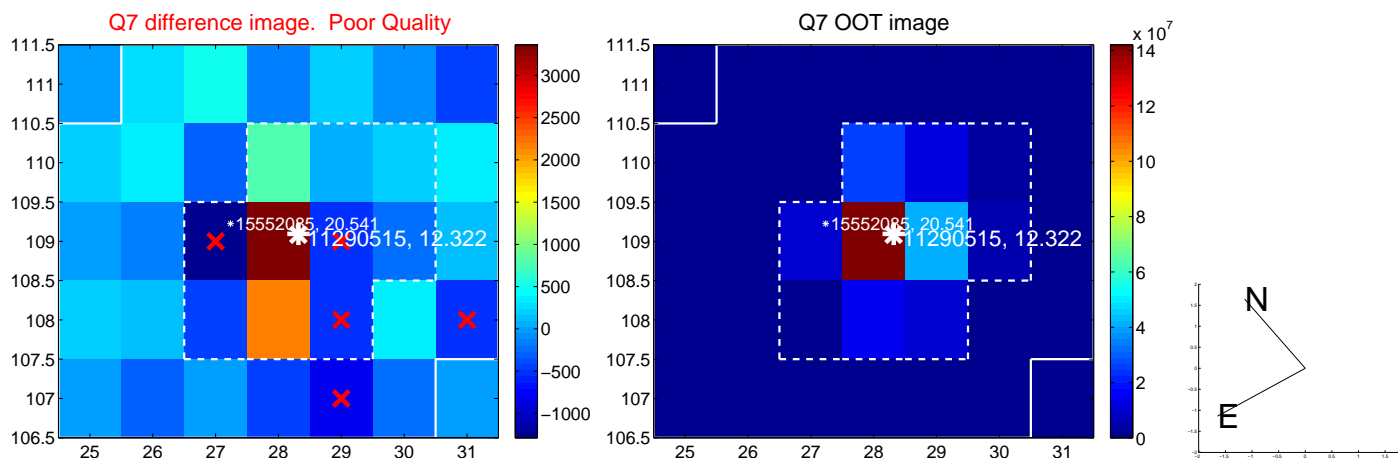
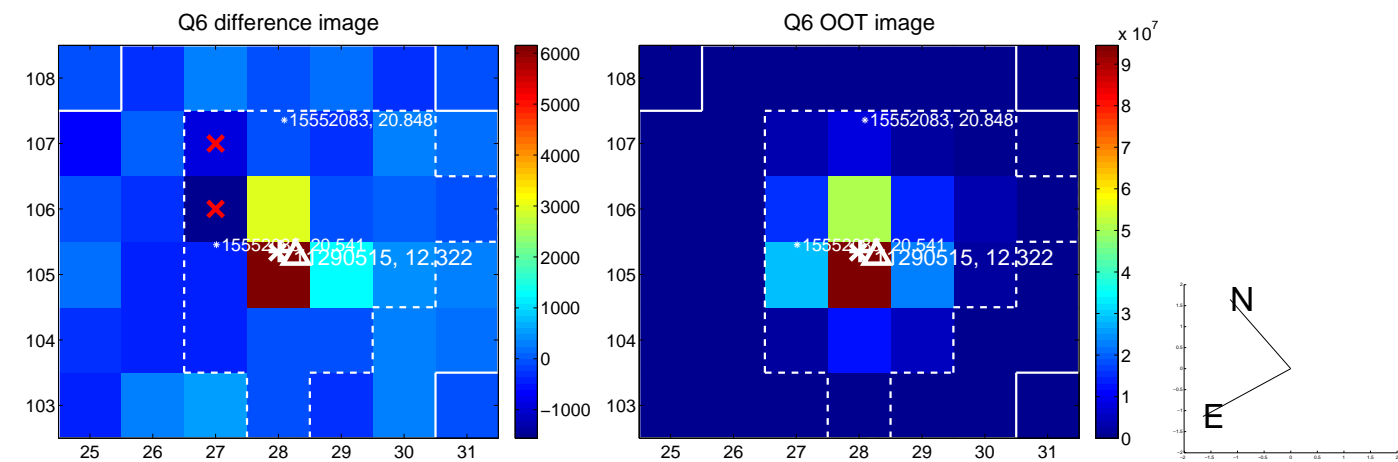
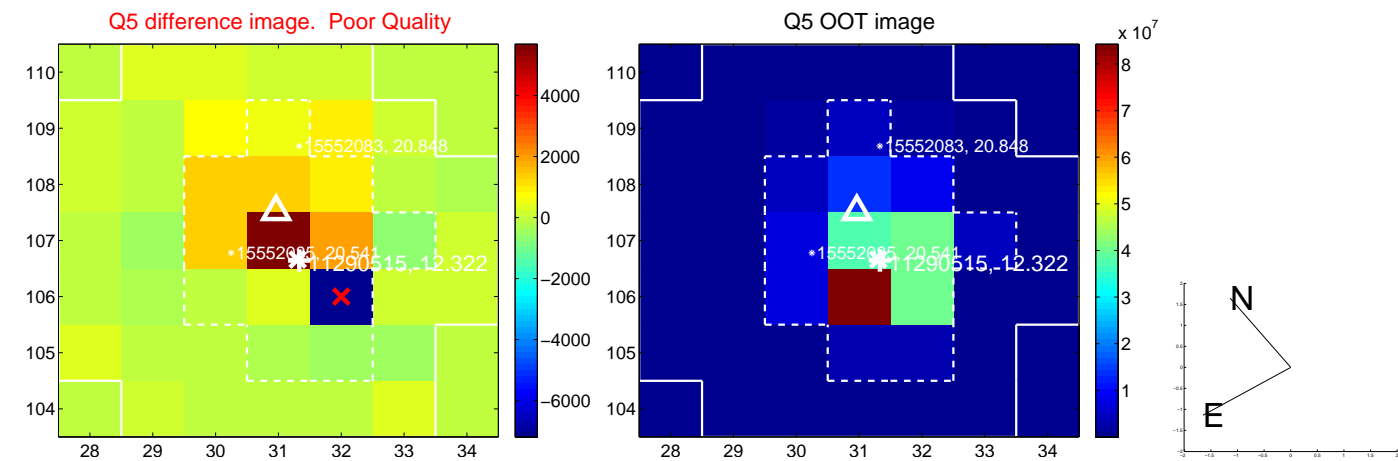


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

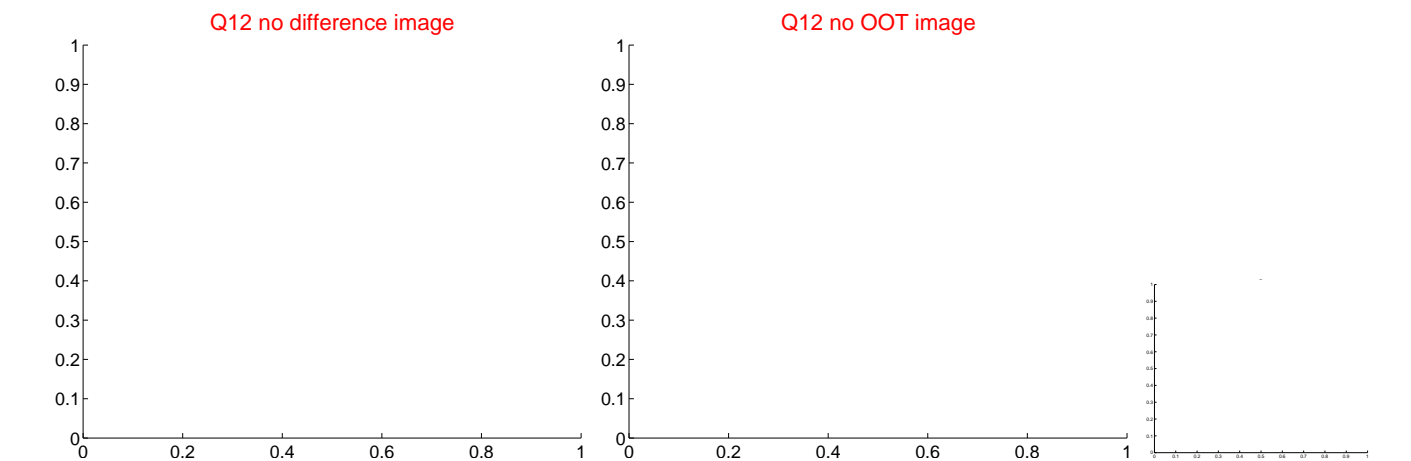
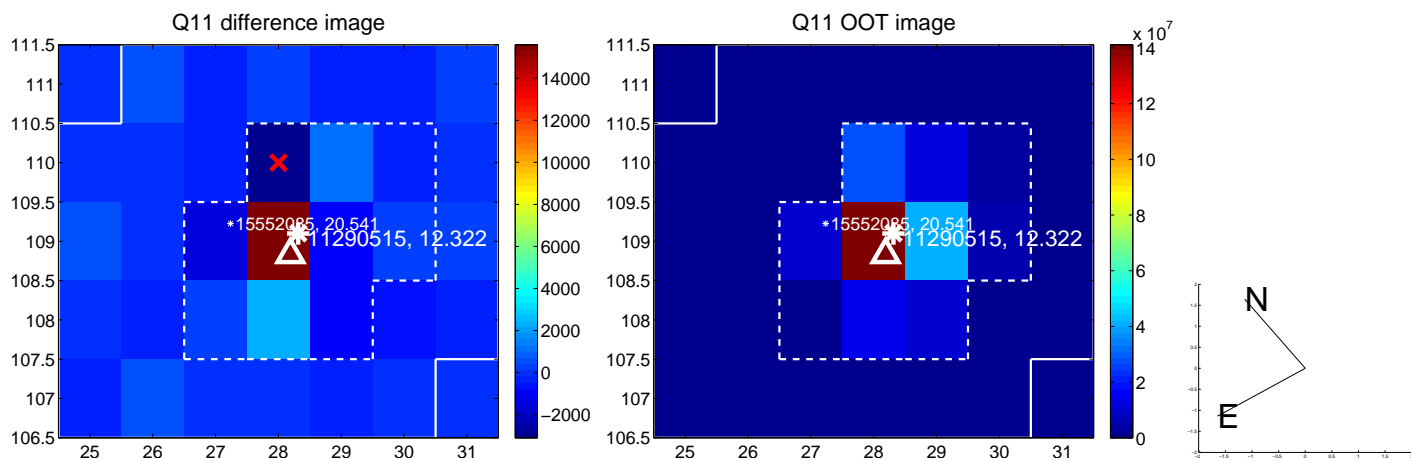
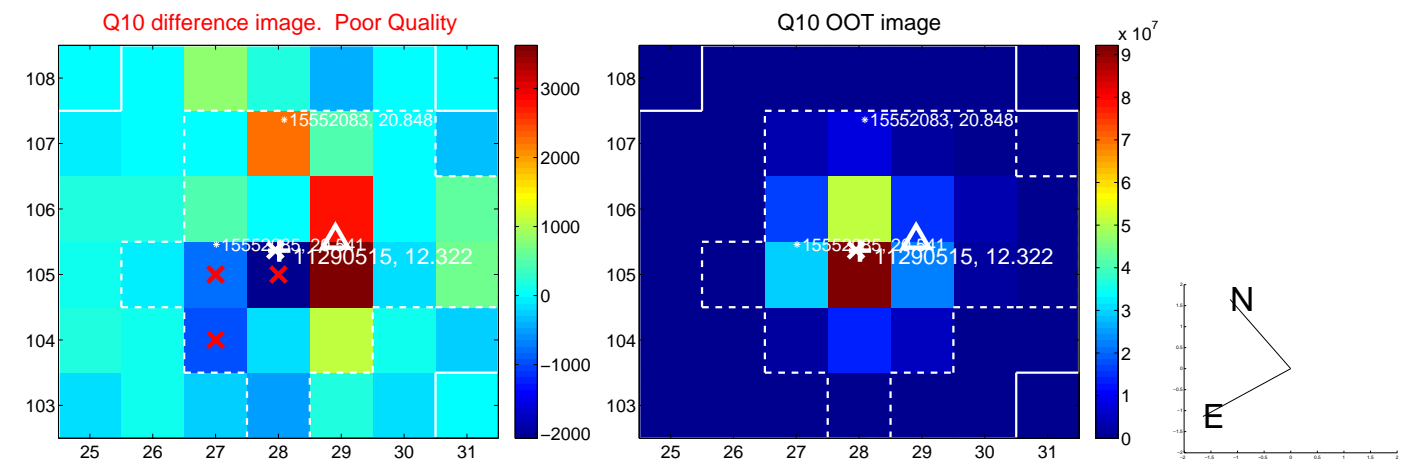
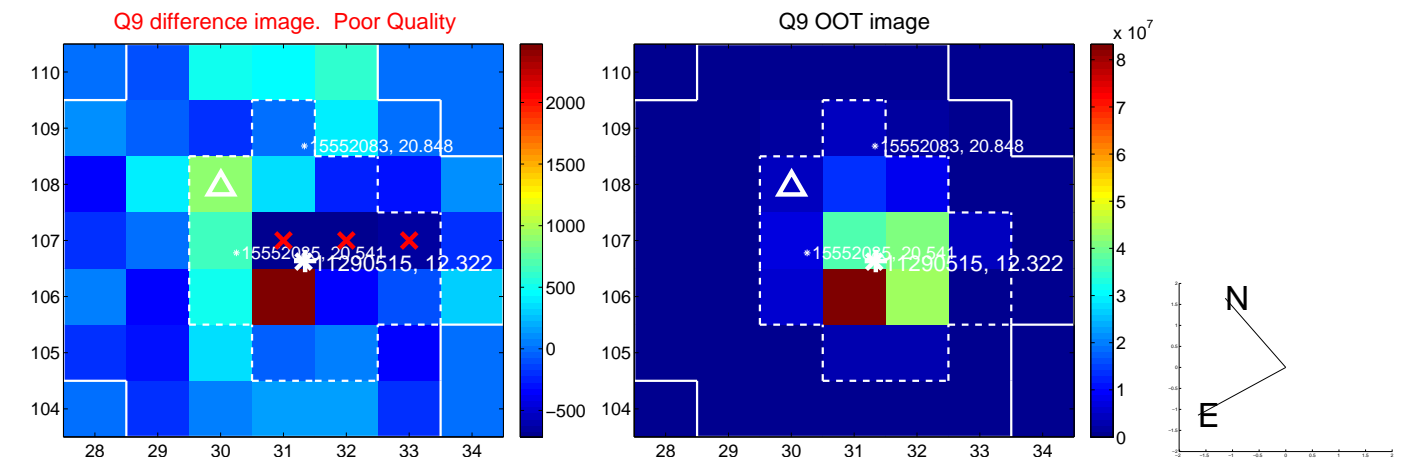
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



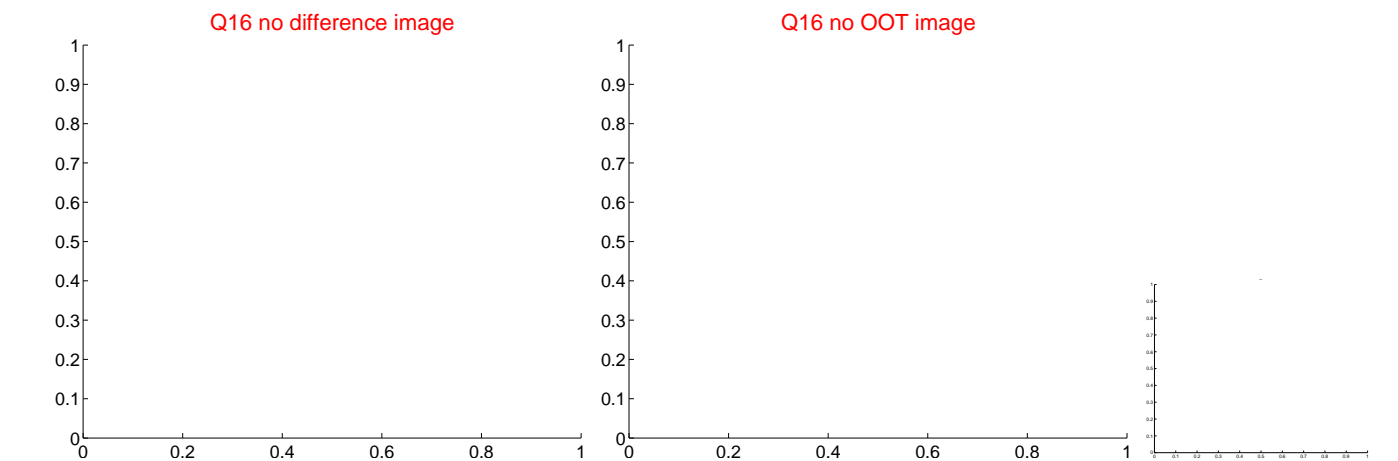
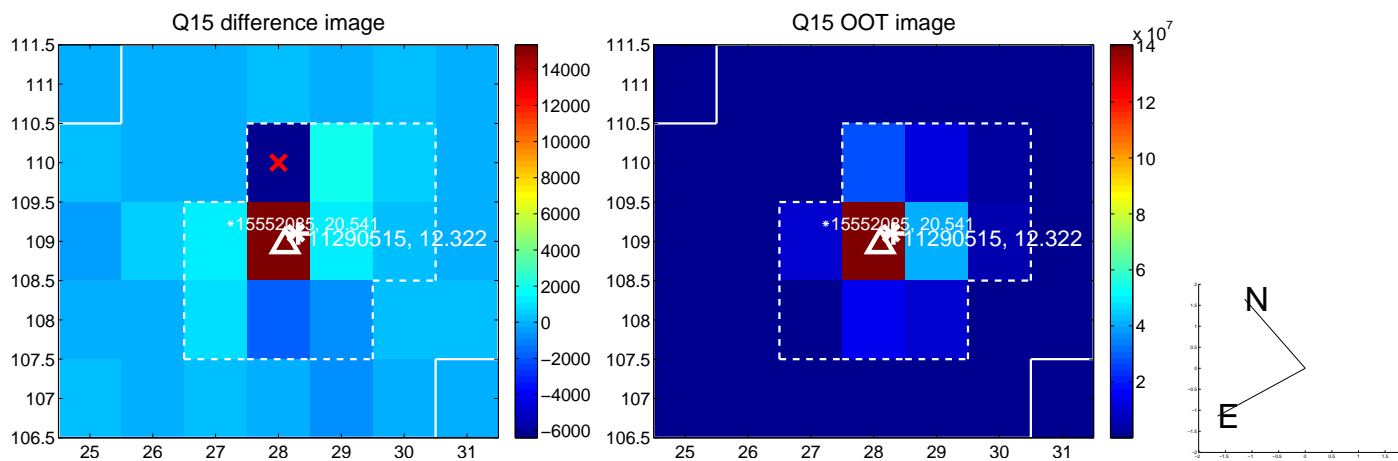
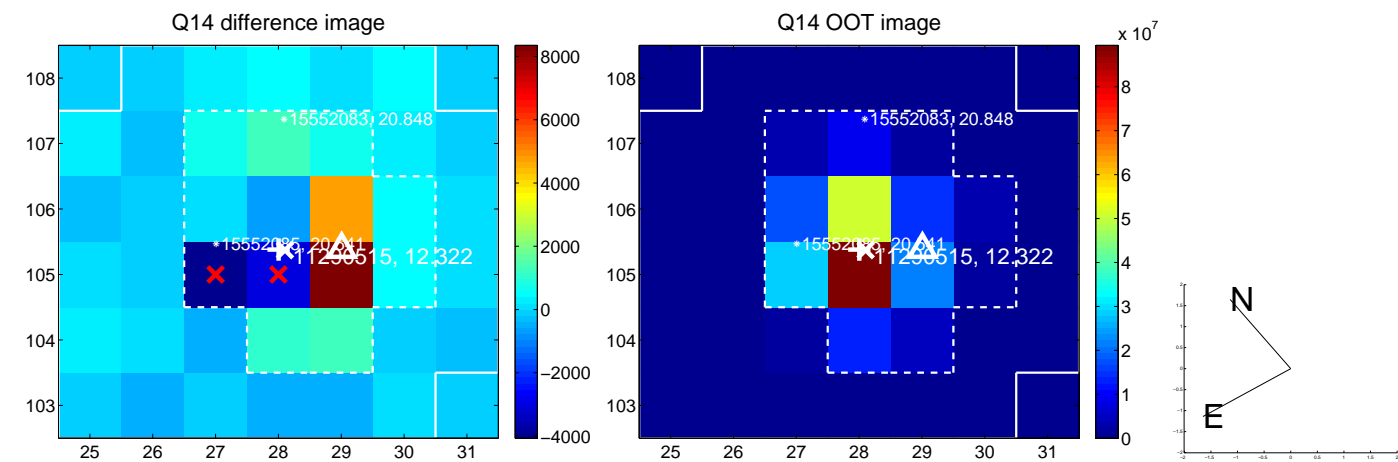
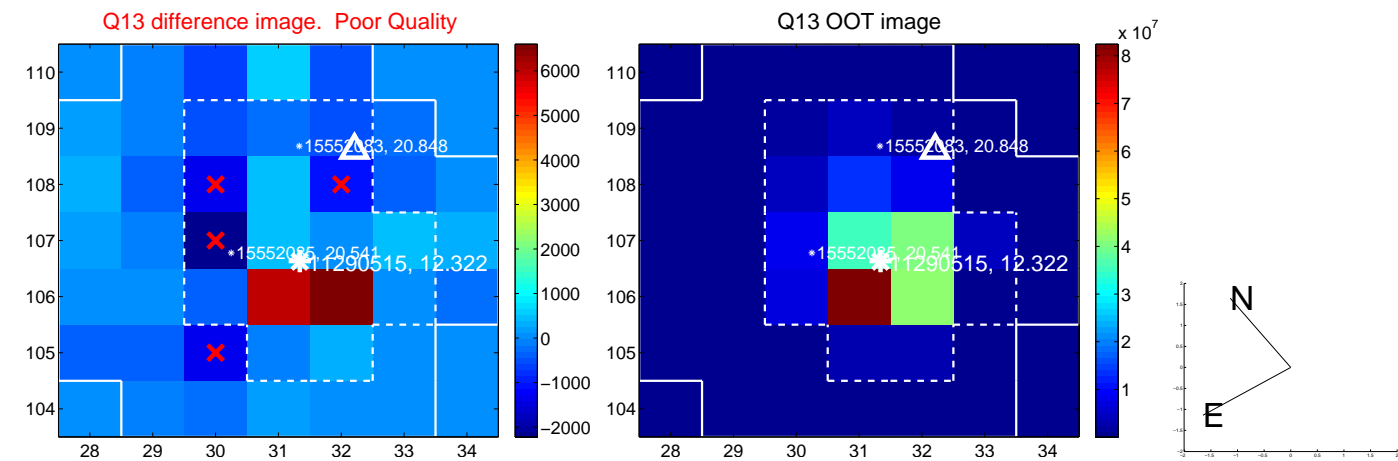
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



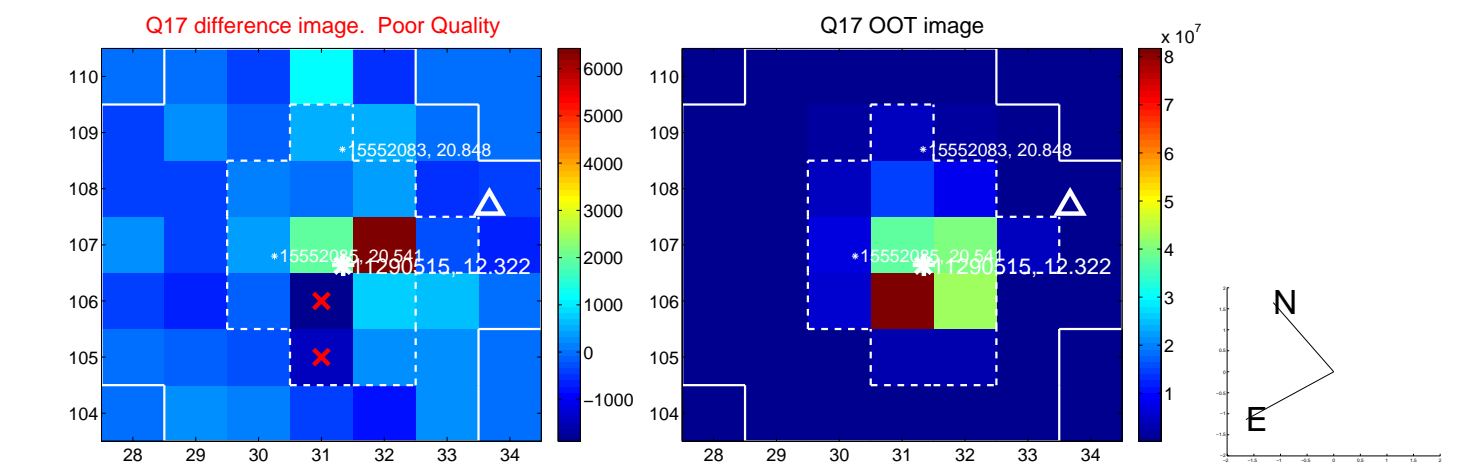
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



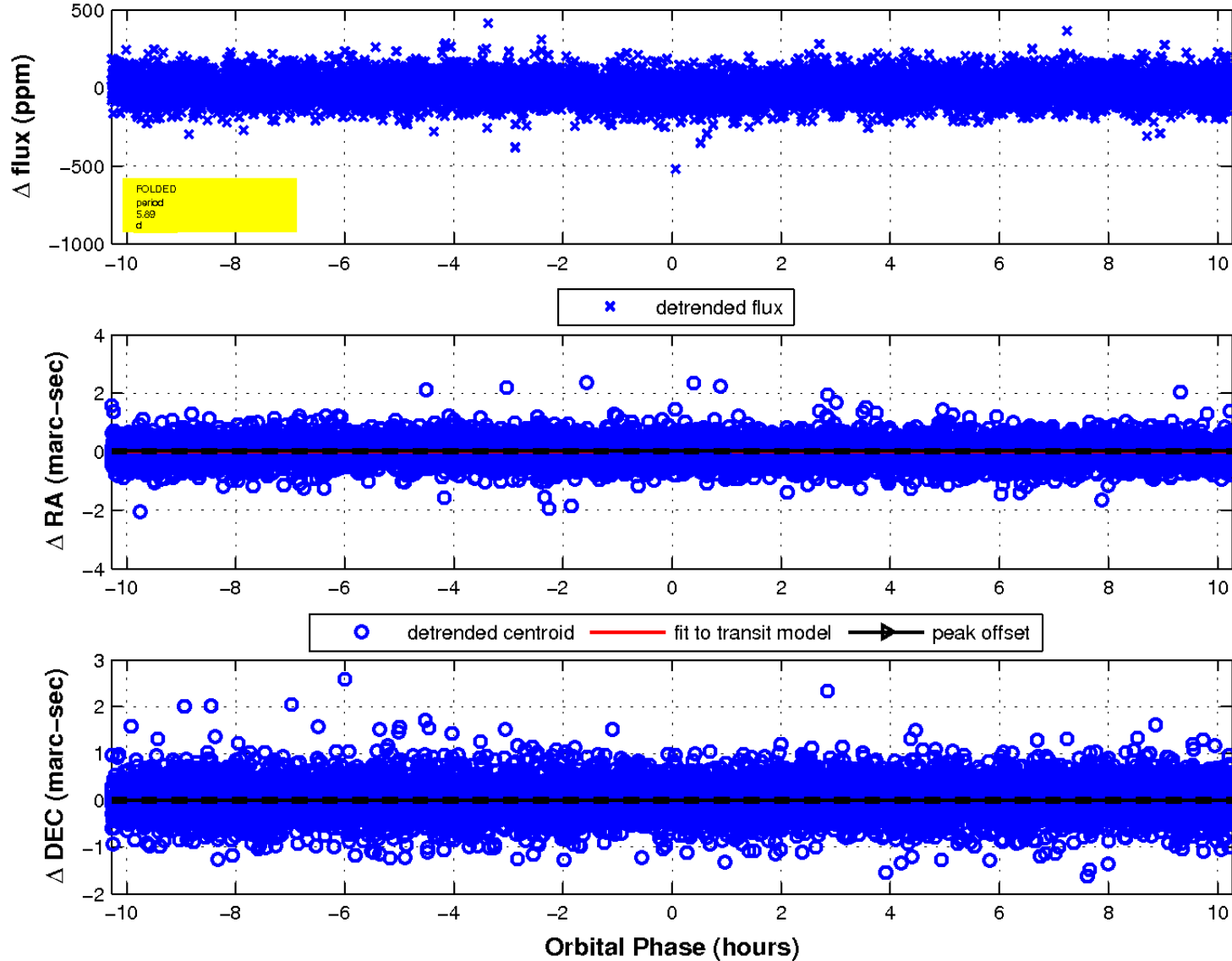
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

