

KIC 007363684

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})
007363684-01	OBS	No	0.728547	131.768869	0.5	6.690	11.7	0.0	0.55	4813	0.04	849.71

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007363684-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

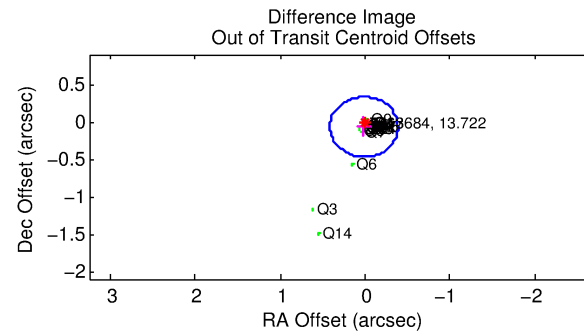
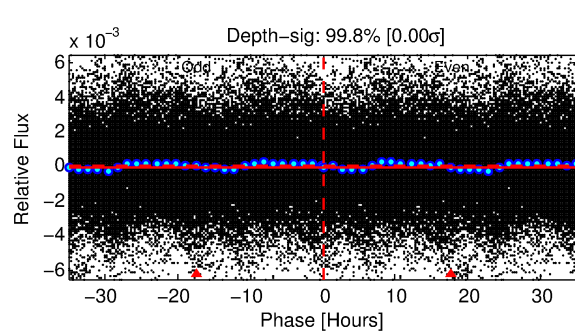
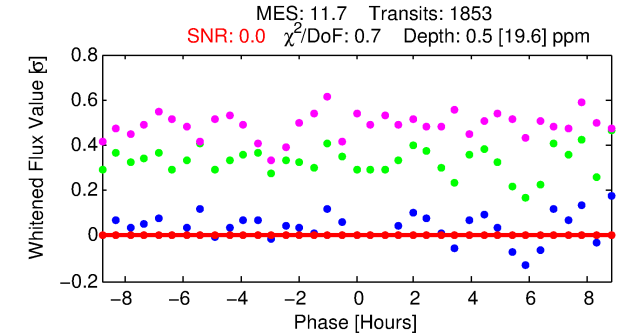
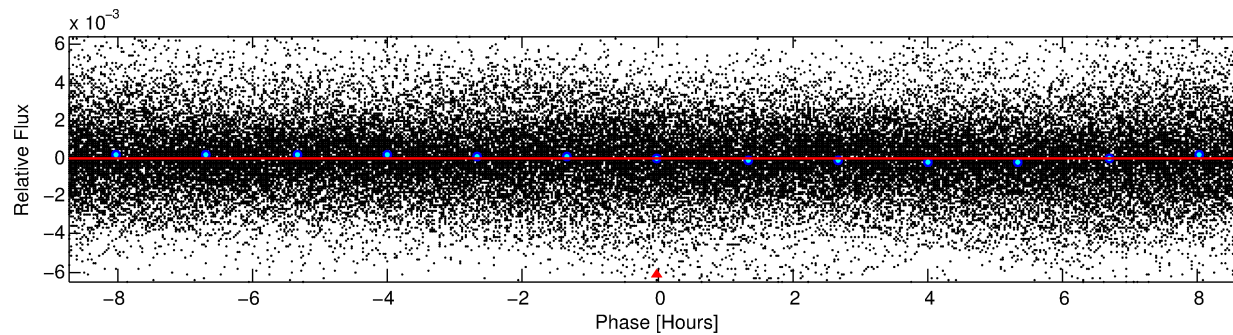
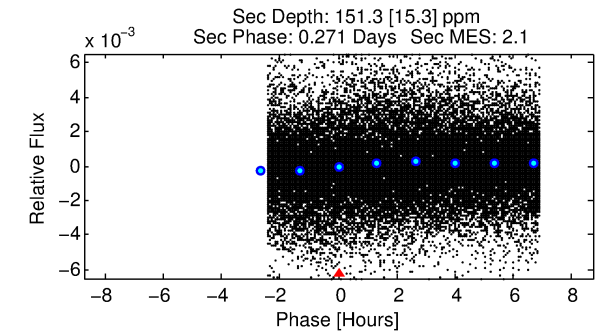
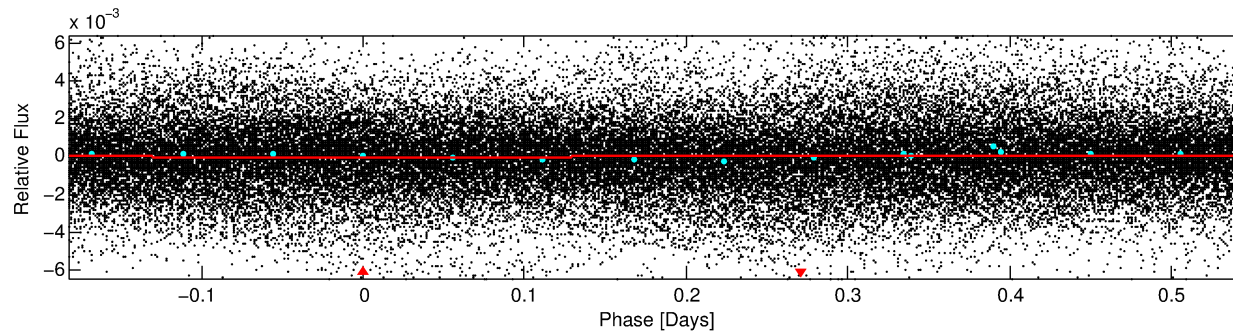
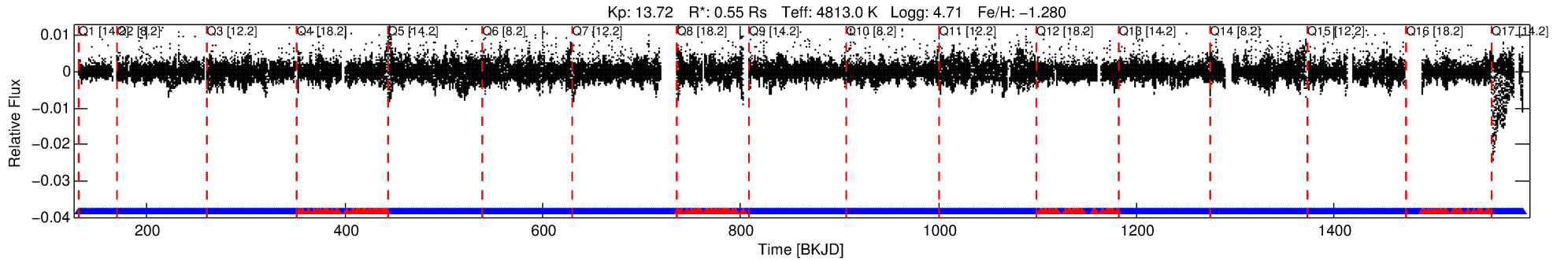
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007363684-01

No Significant Match Found

DV One-Page Summary

KIC: 7363684 Candidate: 1 of 1 Period: 0.729 d



DV Fit Results:

Period = 0.72855 [0.00390] d
Epoch = 131.7689 [0.5720] BKJD
Rp/R* = 0.0006 [0.0579]
a/R* = 1.07 [54.58]
b = 0.22 [1771.77]
Seff = 849.71 [133.12]
Teff = 1377 [54] K
Rp = 0.04 [3.46] Re
a = 0.0130 [0.0007] AU
Ag = 10540.84 [1994073.31] [0.01σ]
Teffp = 21568 [1020033] K [0.02σ]

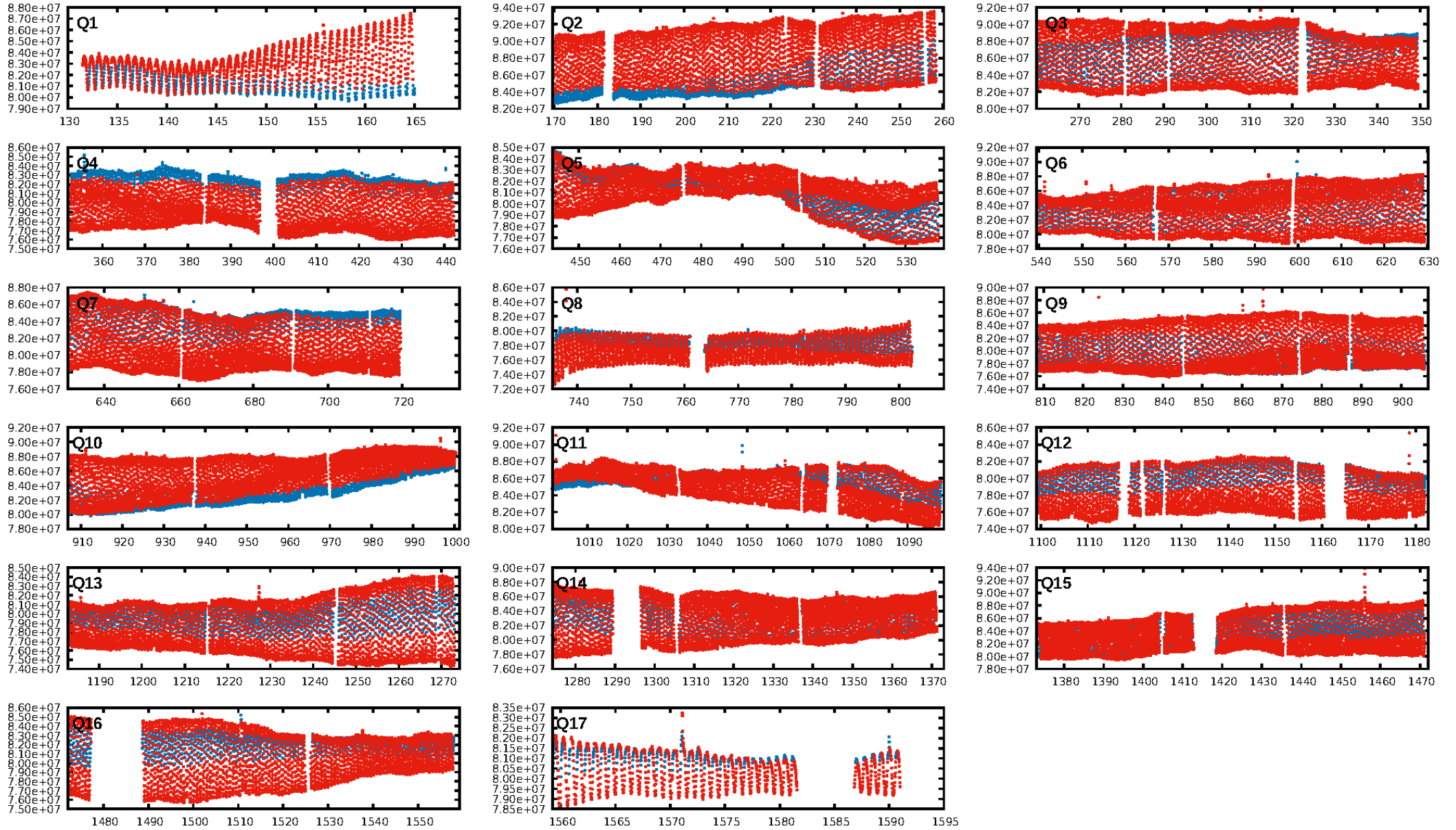
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.93 [1652/1770]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.071 arcsec [0.53σ]
KicOffset-rm: 0.190 arcsec [1.57σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 1.00 [17/17]

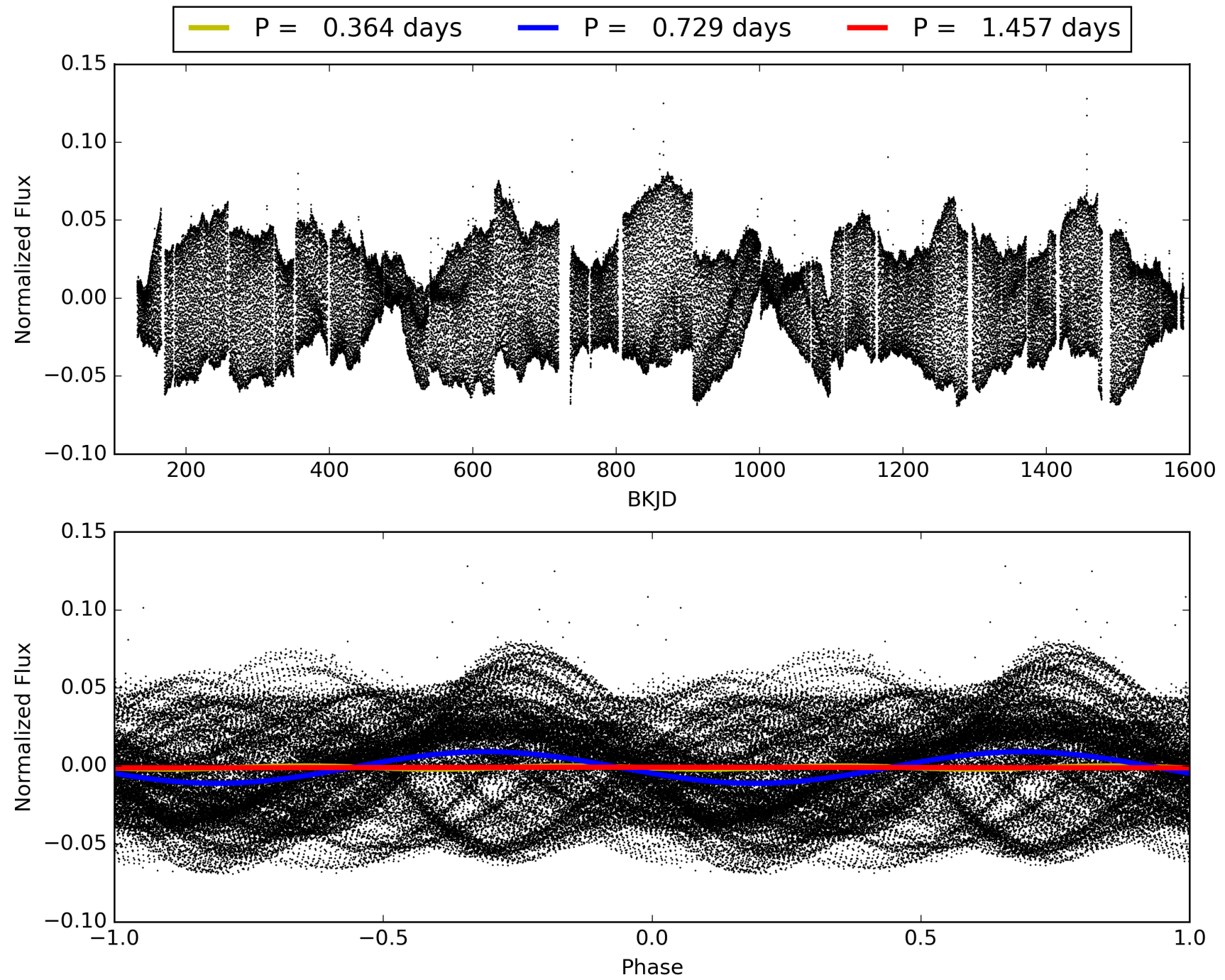
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 08:36:37 Z

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

TCE 007363684-01, PDC Light Curves

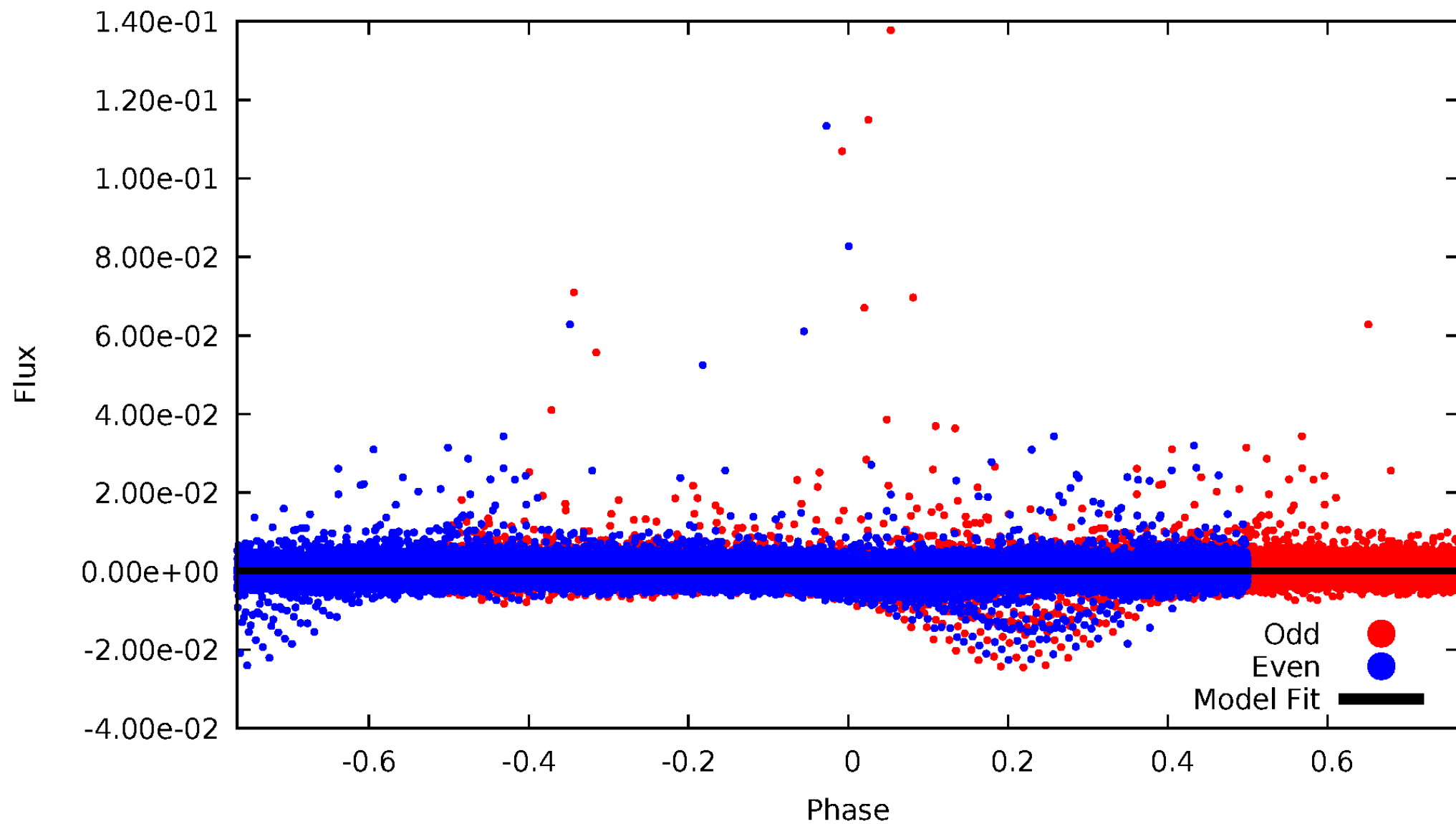


TCE 007363684-01



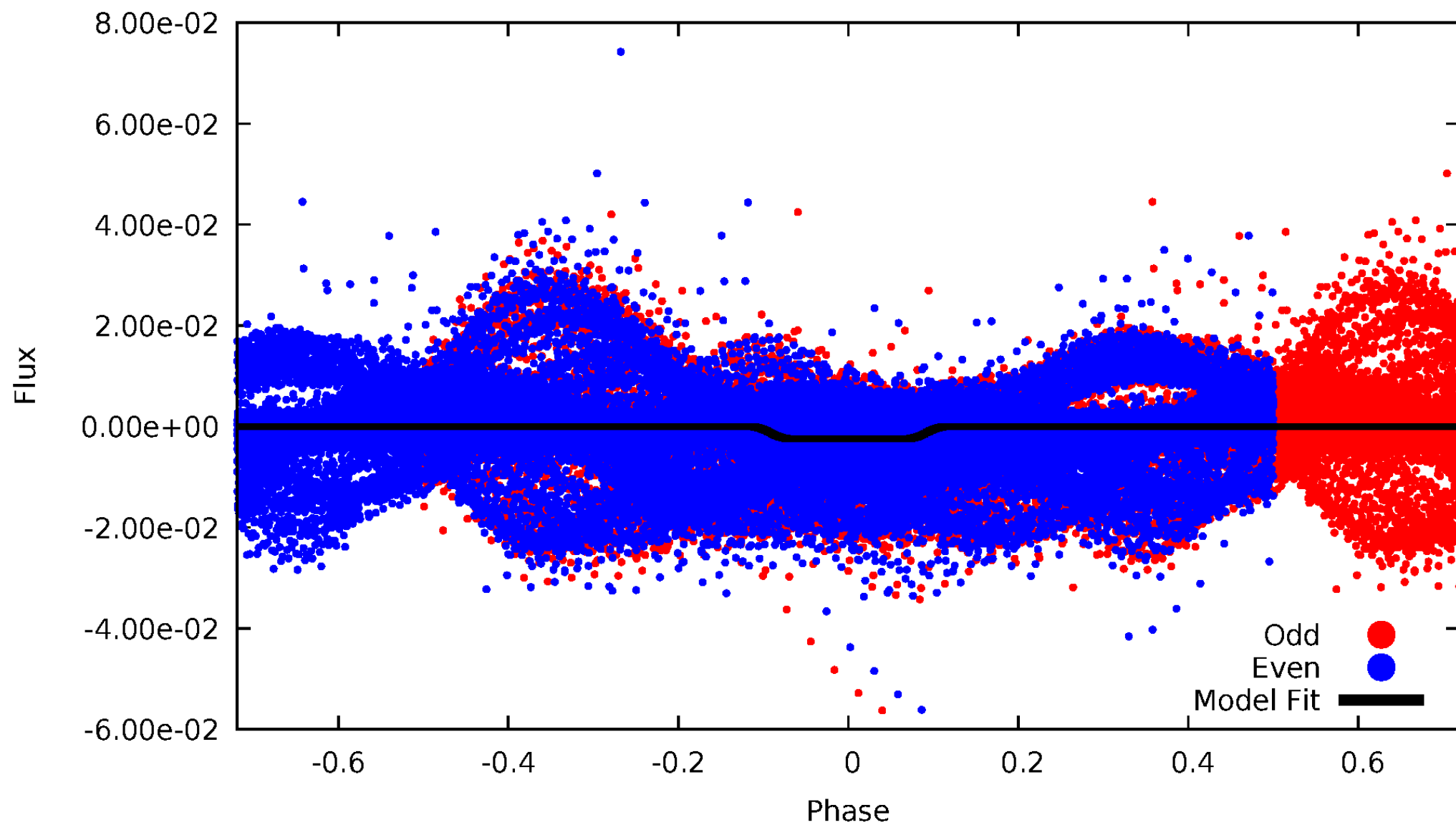
DV Odd/Even

TCE 007363684-01



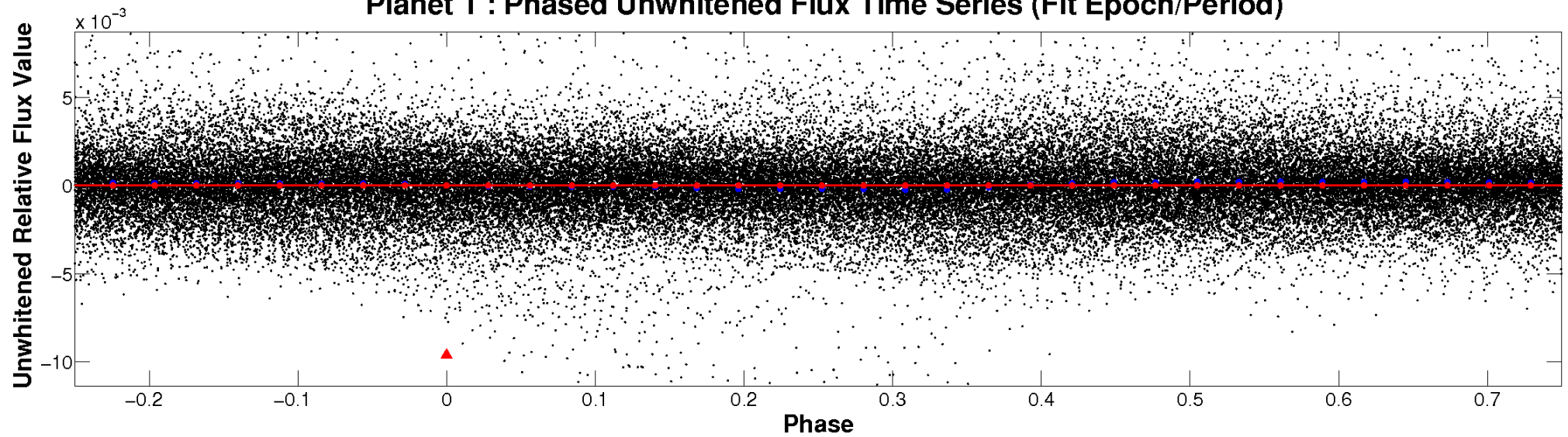
ALT Odd/Even

TCE 007363684-01

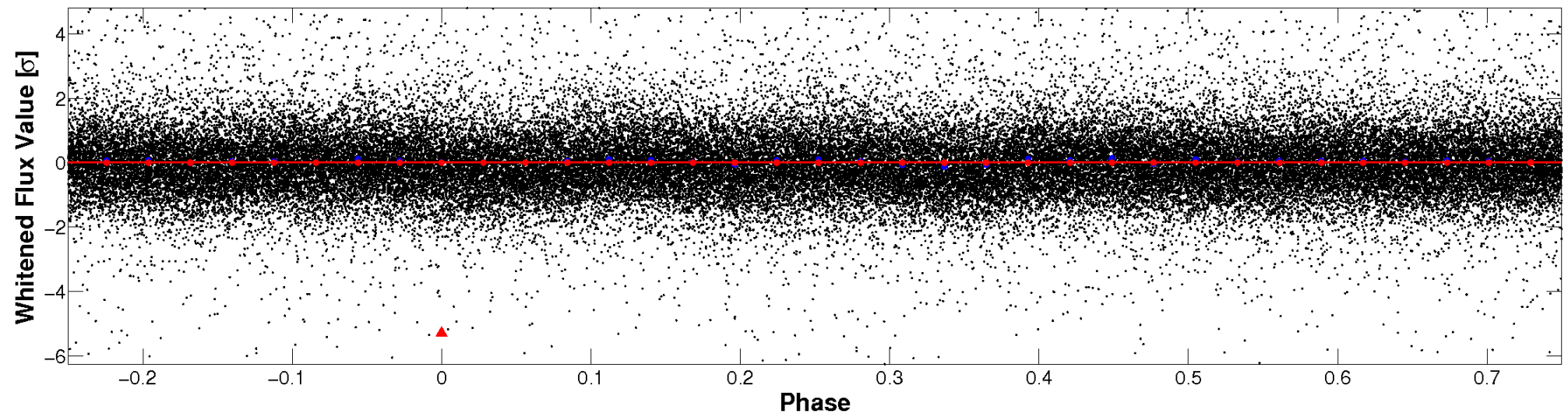


Non-Whitened Vs. Whitened Light Curve

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

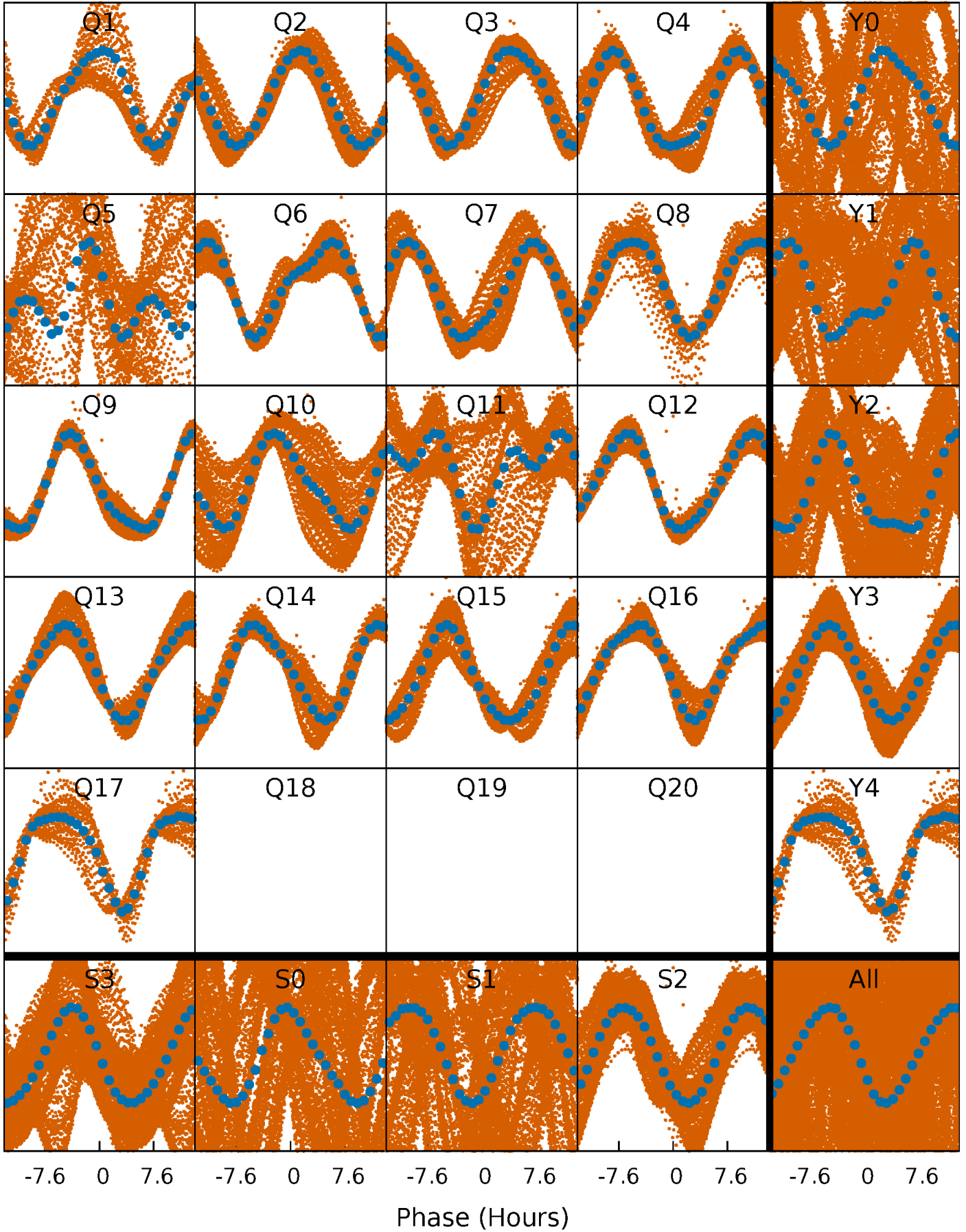


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



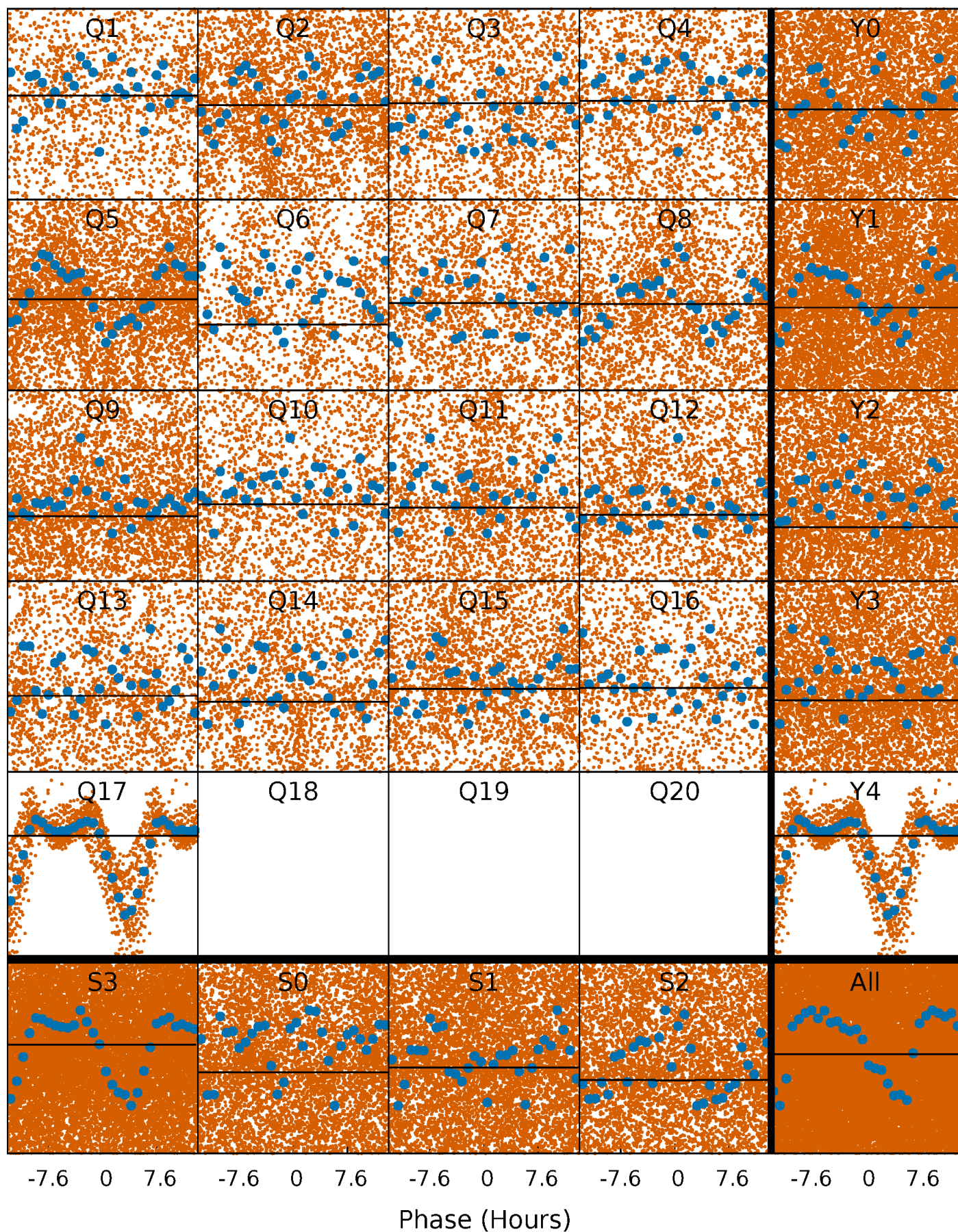
PDC Quarter-Phased Transit Curves

TCE 007363684-01 P= 0.728547 Days $T_0=131.768869$ (BKJD)



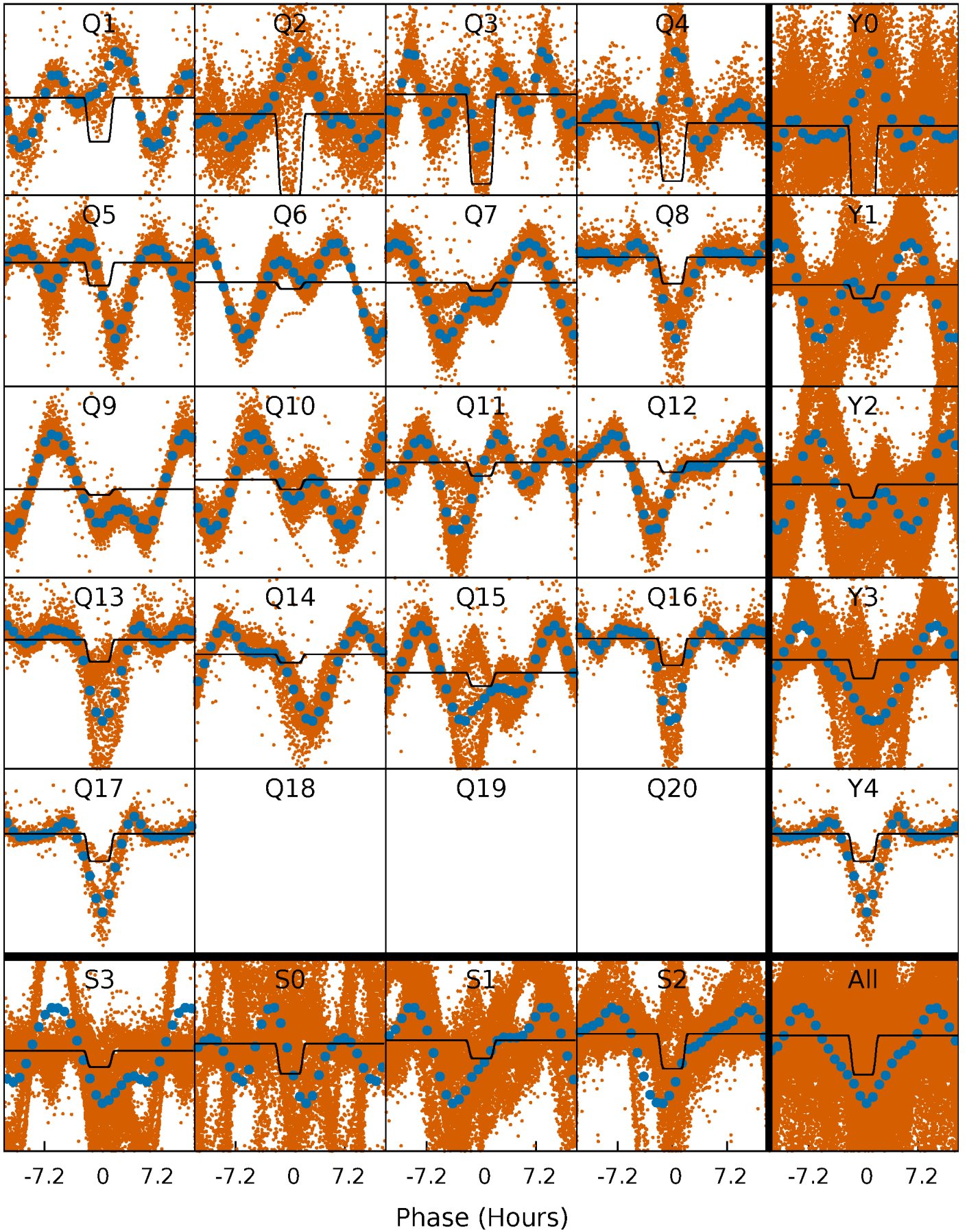
DV Quarter-Phased Transit Curves

TCE 007363684-01 P= 0.728547 Days $T_0=131.768869$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

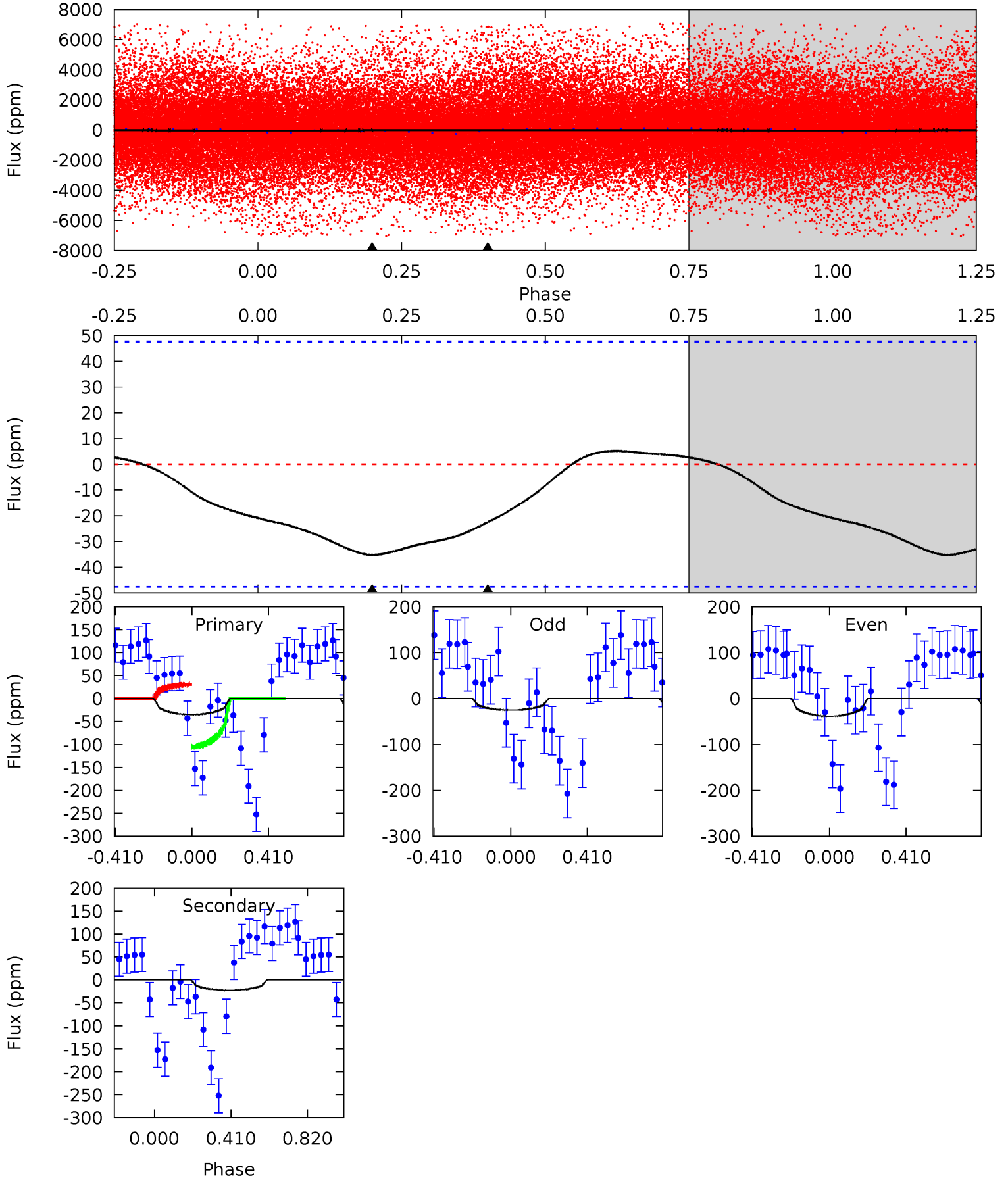
TCE 007363684-01 P= 0.728622 Days $T_0=131.755013$ (BKJD)



DV Model-Shift Uniqueness Test

007363684-01, P = 0.728547 Days, E = 131.040322 Days

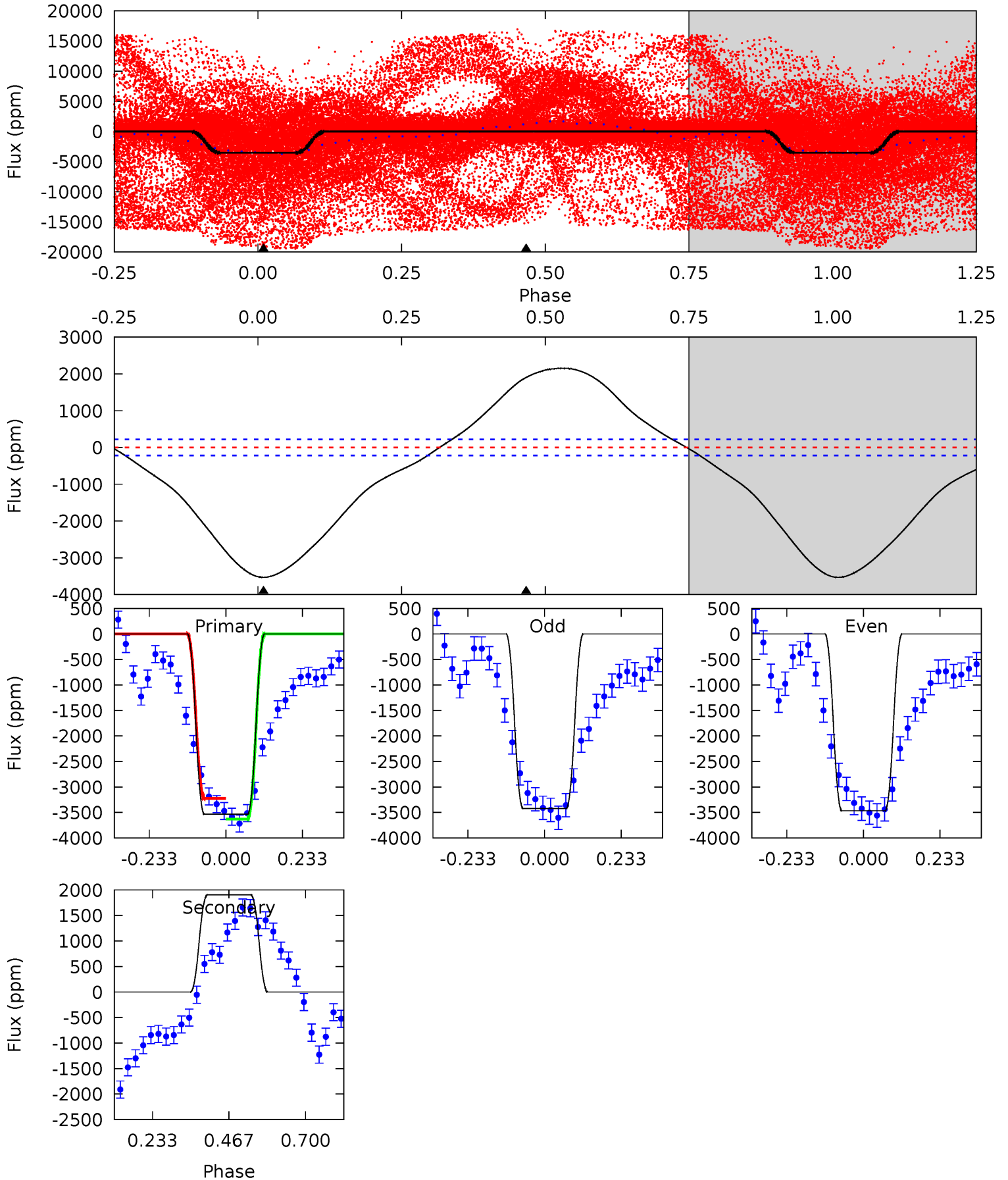
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.15	2.01	0	0	4.26	0.82	0.21	3.15	3.15	2.01	2.01	0.60	0.36	0.13	3.15



Alt Model-Shift Uniqueness Test

007363684-01, P = 0.728622 Days, E = 131.026391 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
70.9	-38.2	0	0	4.38	1.19	6.81	70.9	70.9	-38.2	-38.2	0.48	1.35	0.38	4.14



Stellar Parameters For KIC 007363684

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4813^{+144}_{-158}	$4.705^{+0.048}_{-0.028}$	$-1.280^{+0.300}_{-0.300}$	$0.547^{+0.029}_{-0.035}$	$0.552^{+0.036}_{-0.022}$	$4.752^{+0.934}_{-0.472}$
	+3%/-3%	+1%/-1%	+23%/-23%	+5%/-6%	+7%/-4%	+20%/-10%
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 007363684-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-22 ± 11	$2.49^{+2.53}_{-1.72}$	1916^{+66}_{-70}	1871^{+1492}_{-4208}	$0.331^{+3.525}_{-0.261}$
Alt.	1904 ± 50	$4.00^{+3.08}_{-2.66}$	1916^{+71}_{-63}	-4099^{+682}_{-2352}	$-10.925^{+7.396}_{-85.666}$

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

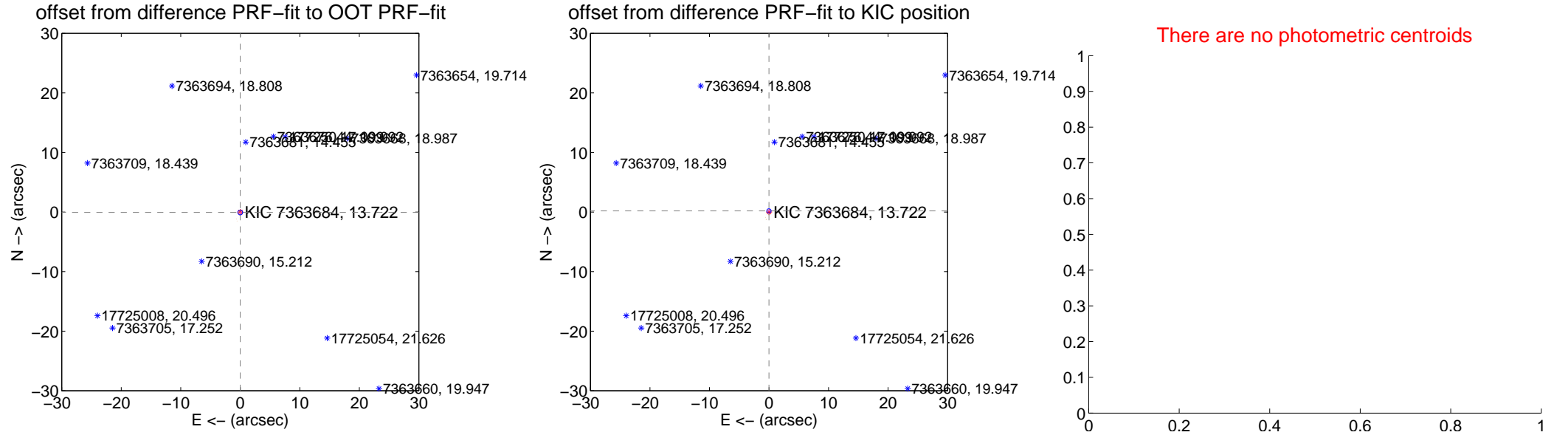
DV Centroid Data

Supplemental centroid analysis for 007363684-01. Kepler magnitude: 13.72. Transit SNR 0.03

There are 9 quarters with good PRF difference image offsets

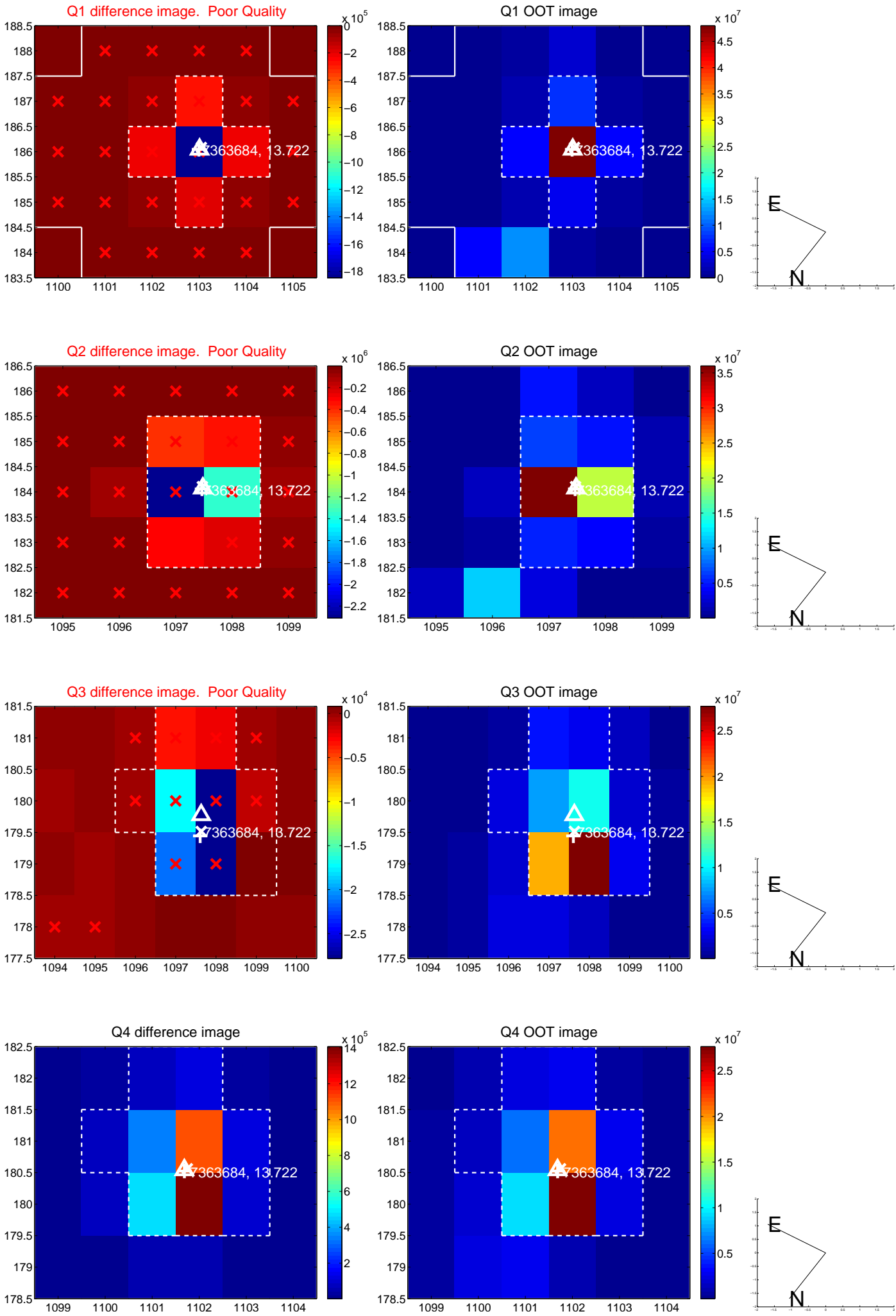
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.071 ± 0.134	0.53	0.010 ± 0.082	-0.071 ± 0.129
PRF-fit source offset from KIC position	0.190 ± 0.121	1.57	0.014 ± 0.081	0.189 ± 0.123
photometric centroid source offset	—	—	—	—

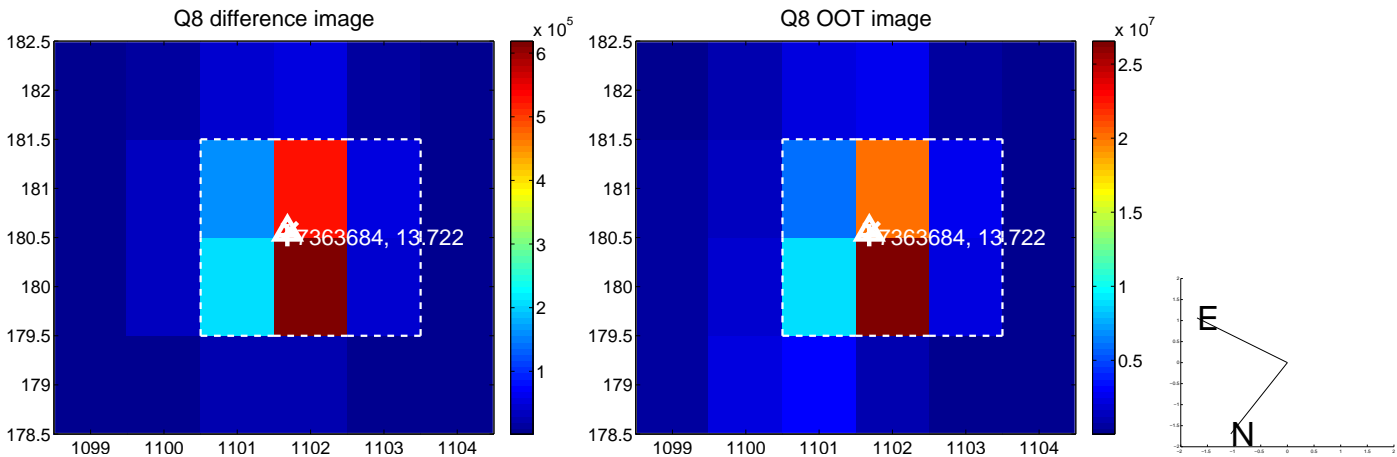
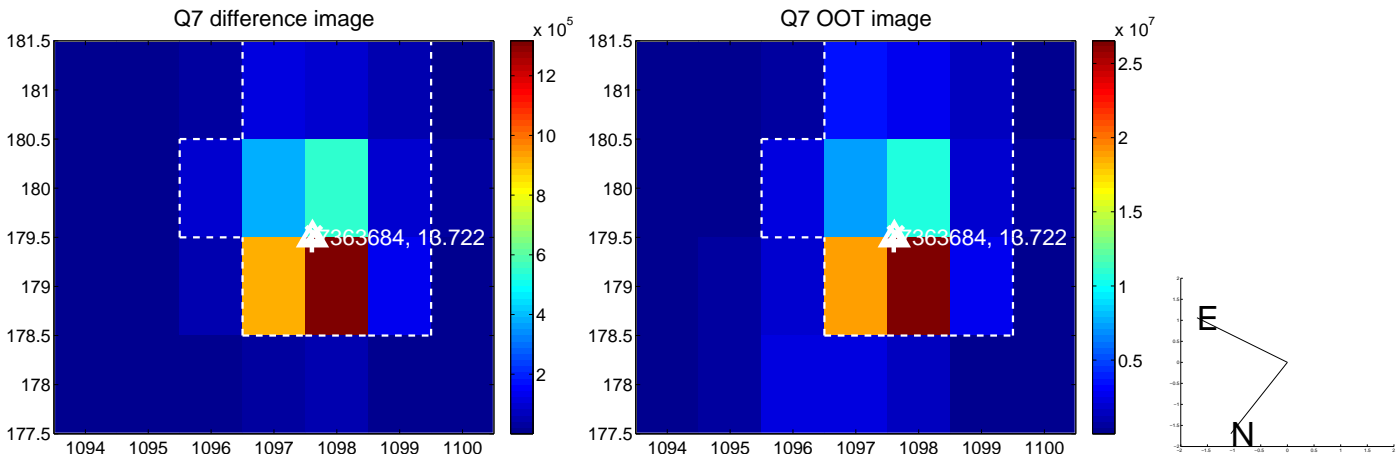
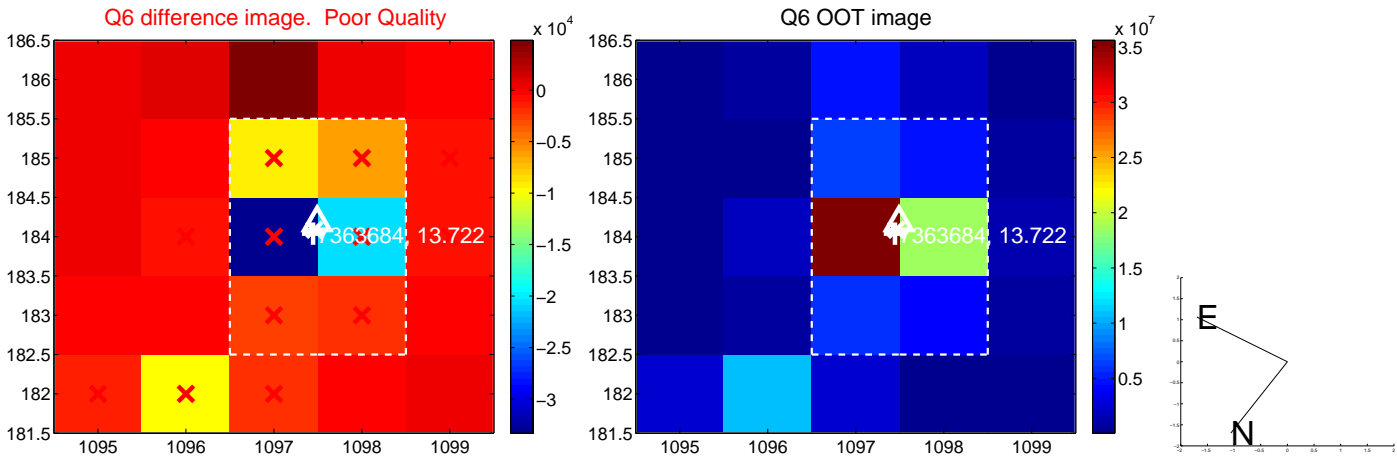
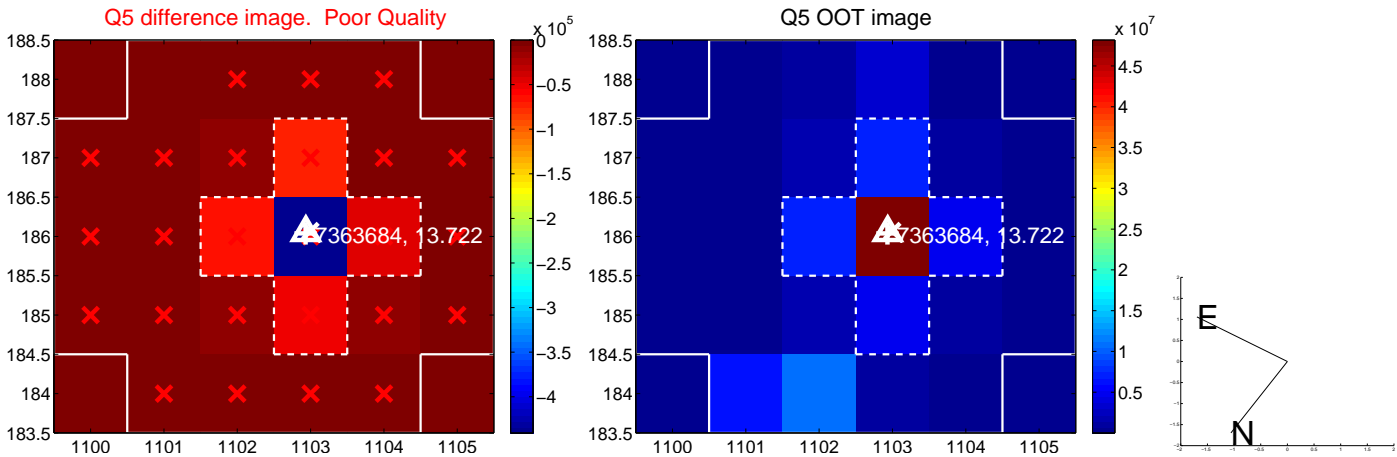


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

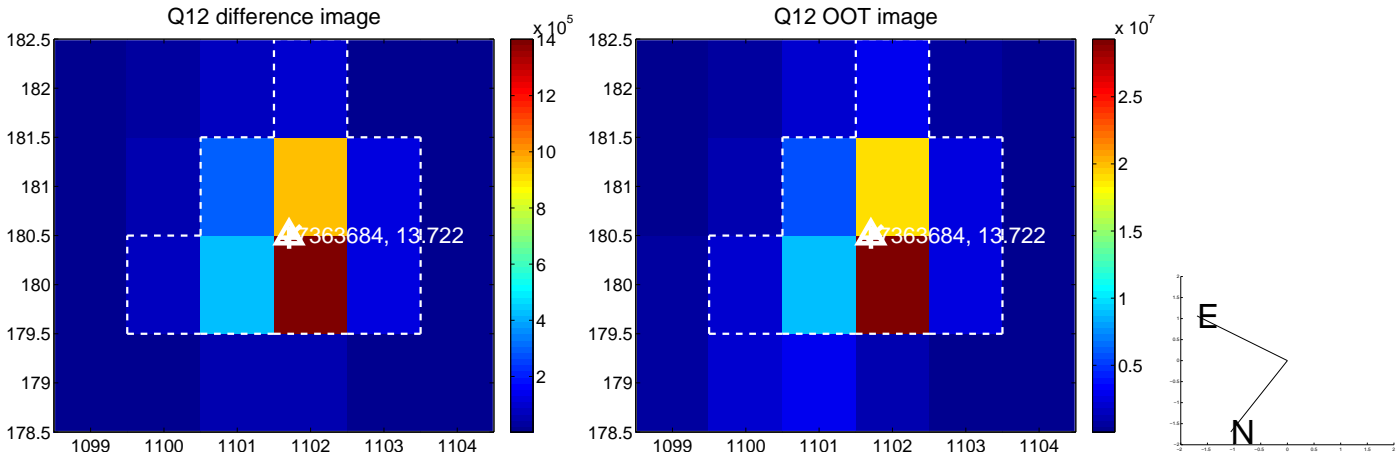
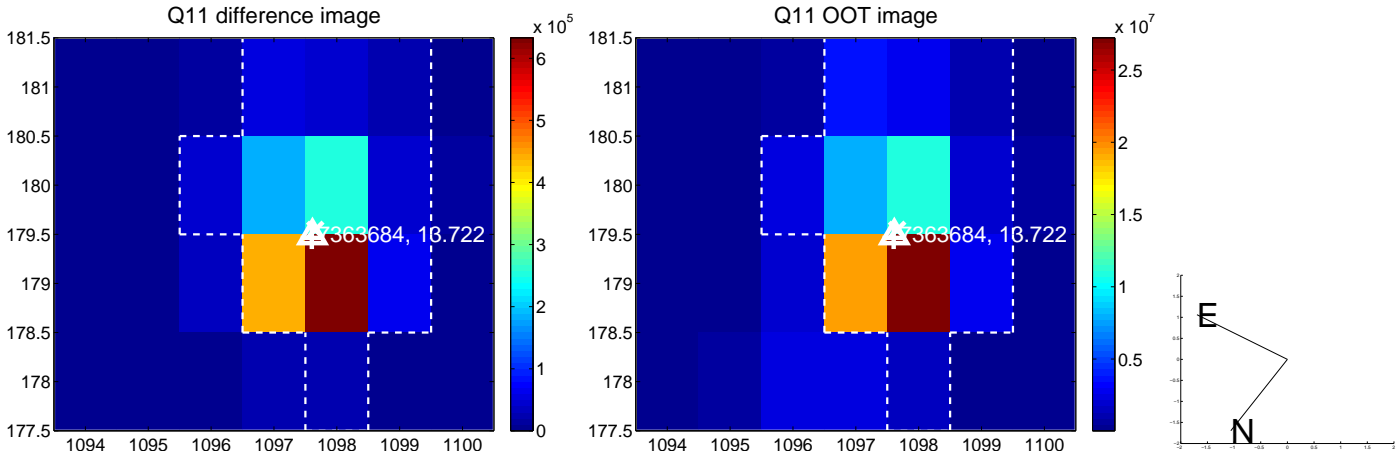
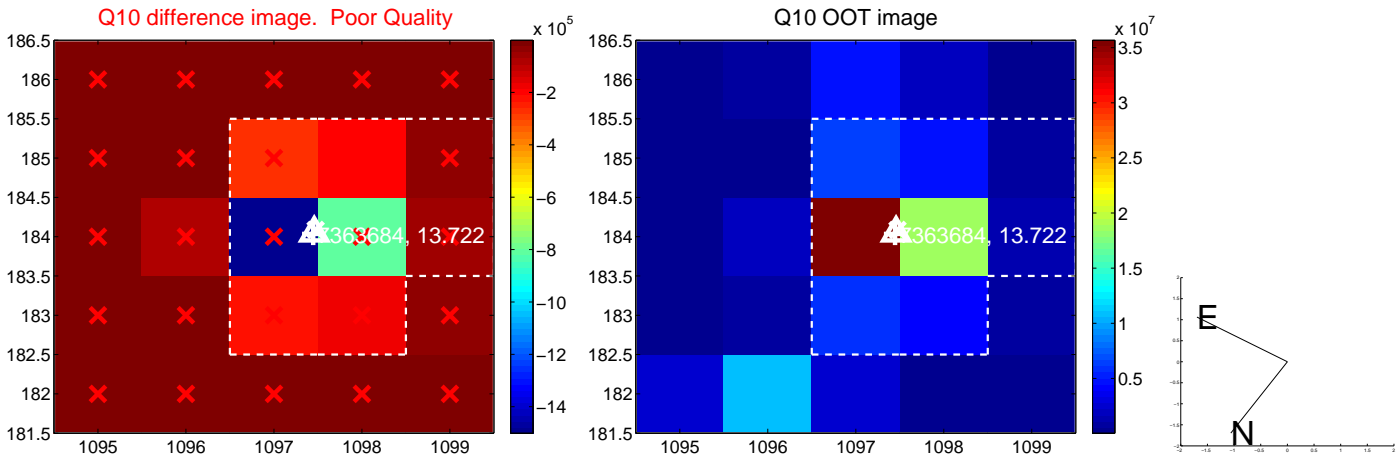
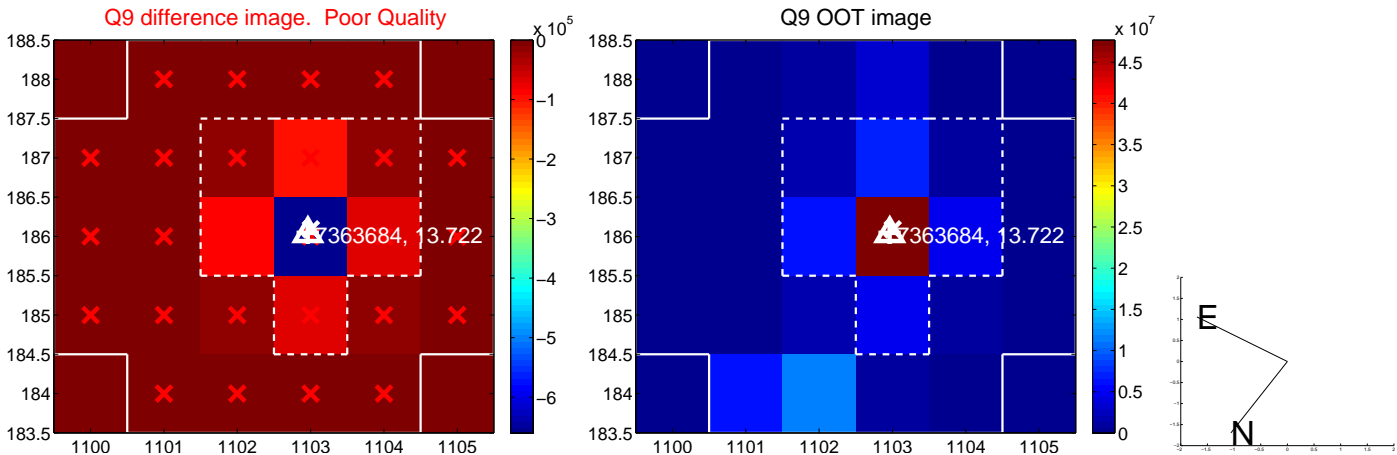
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



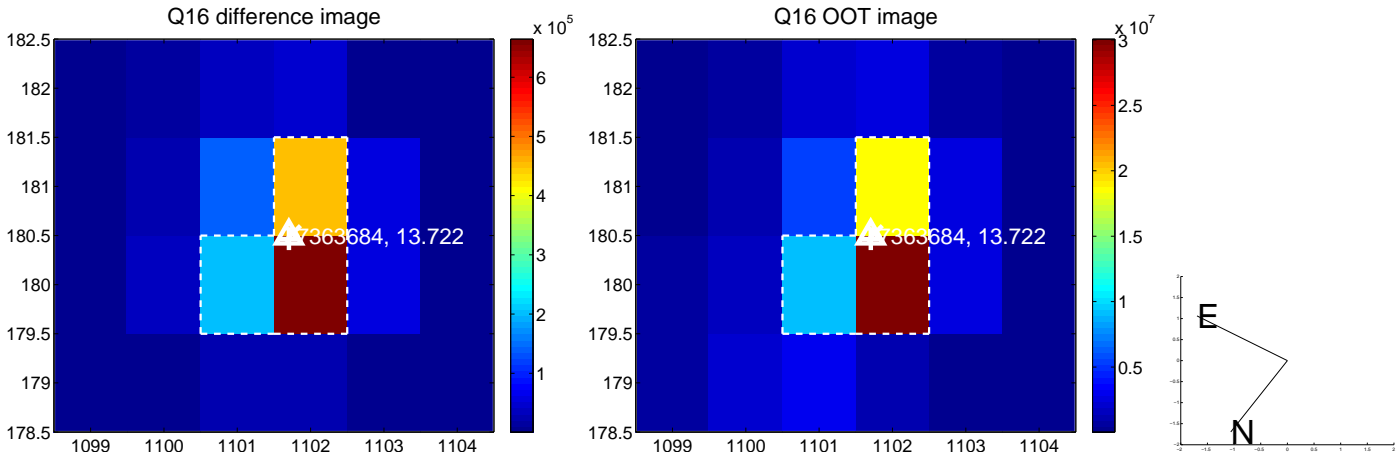
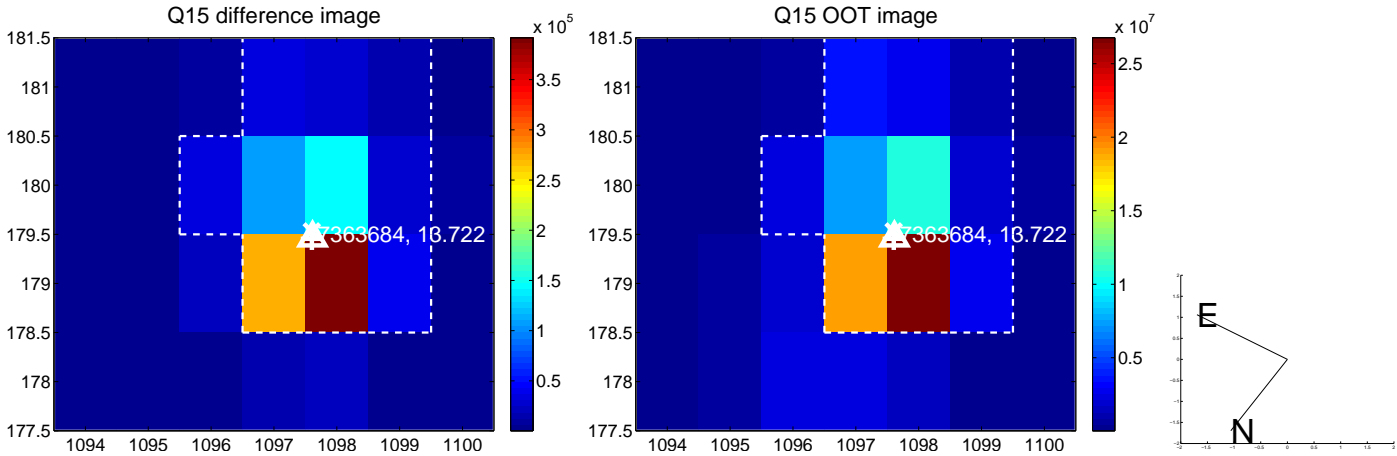
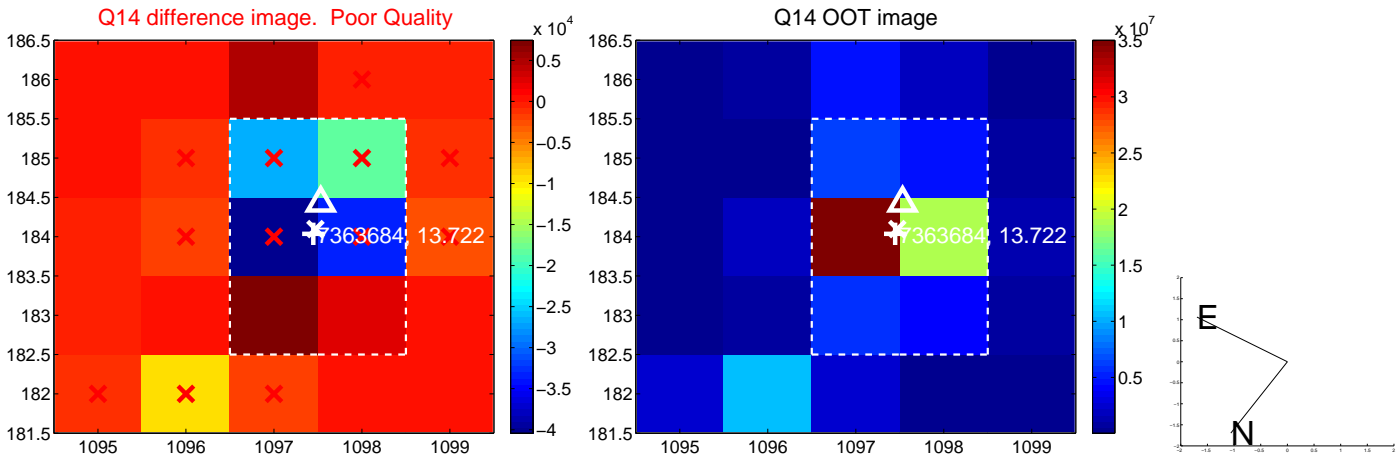
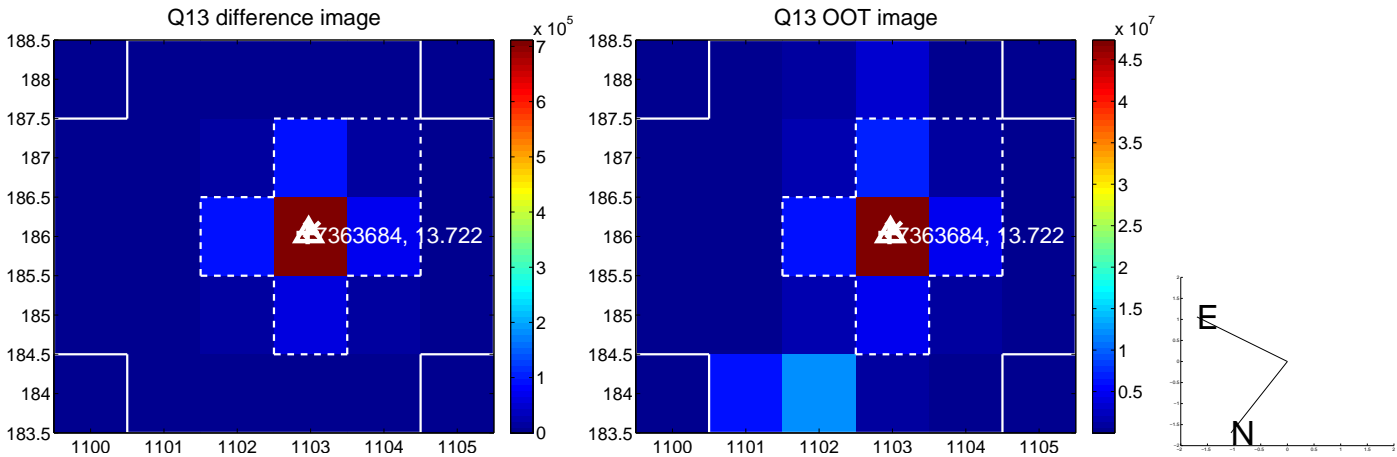
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



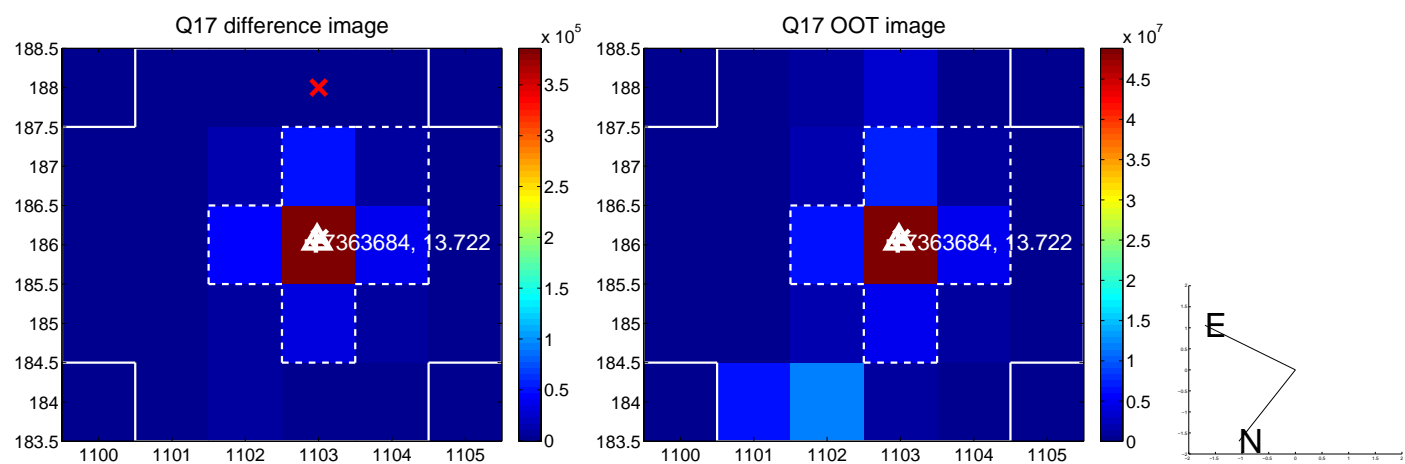
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

