

KIC 011068340

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})
011068340-01	OBS	No	2.971151	133.478815	67.3	5.530	7.3	7.6	130.38	3434	98.83	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011068340-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT

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

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

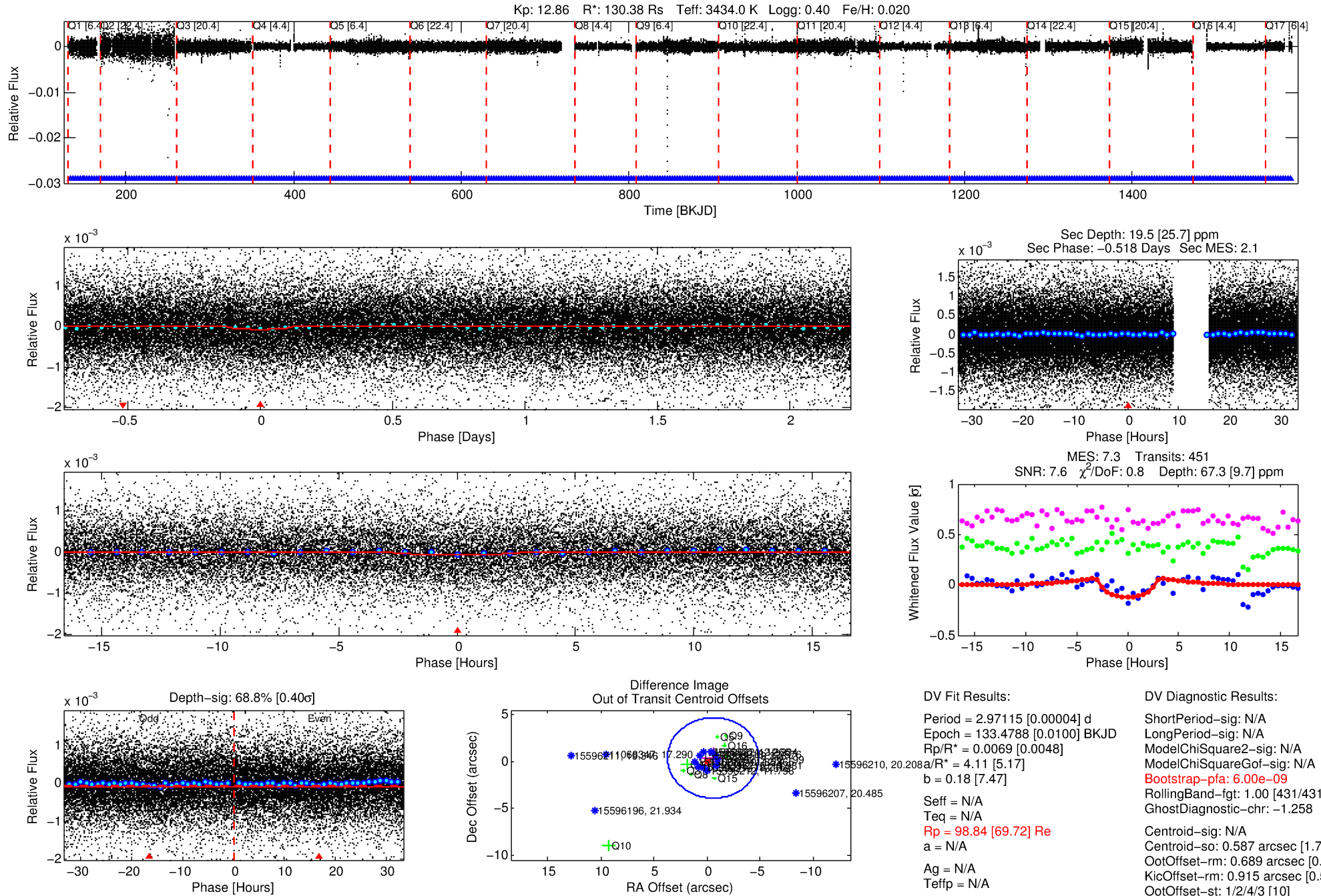
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011068340-01

No Significant Match Found

DV One-Page Summary

KIC: 11068340 Candidate: 1 of 1 Period: 2.971 d



DV Fit Results:

Period = 2.97115 [0.00004] d
Epoch = 133.4788 [0.0100] BKJD
Rp/R* = 0.0069 [0.0048]
b = 0.18 [7.47]
Seff = N/A
Teq = N/A
Rp = 98.84 [69.72] Re
a = N/A
Ag = N/A
Teffp = N/A

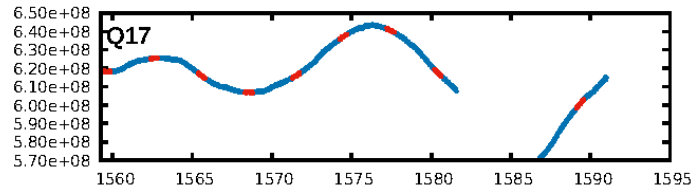
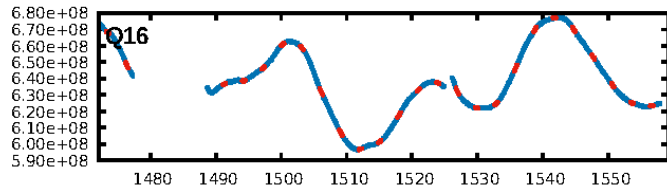
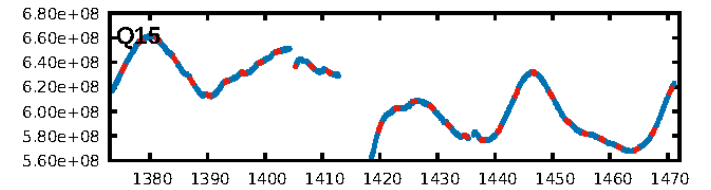
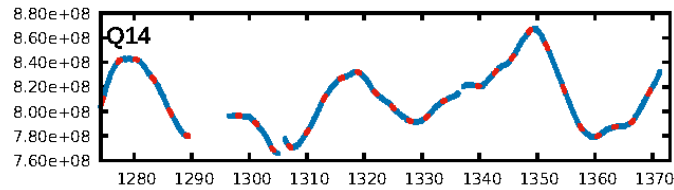
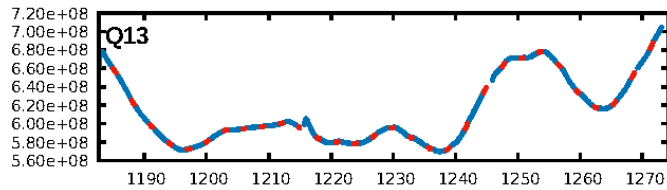
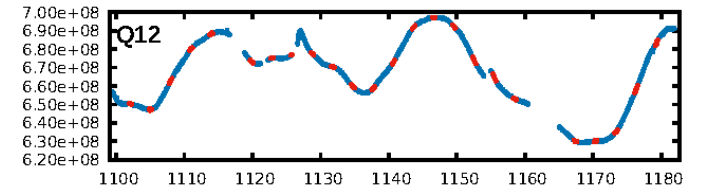
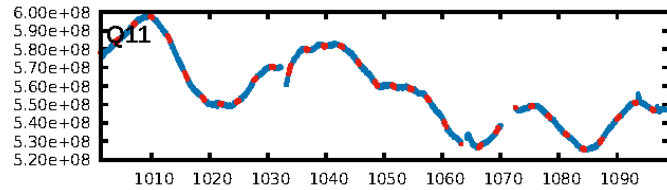
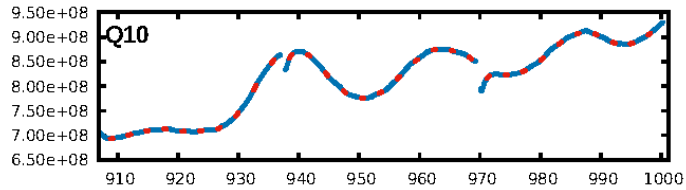
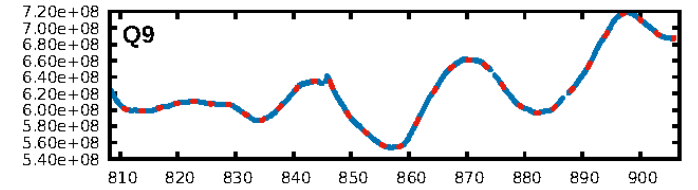
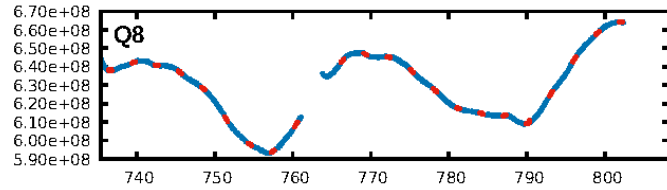
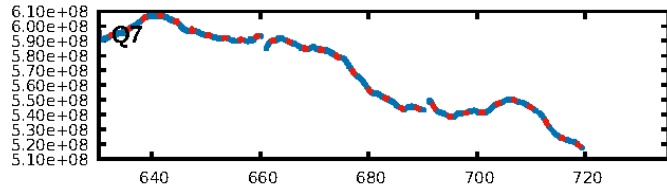
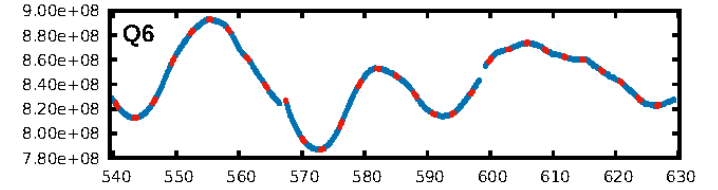
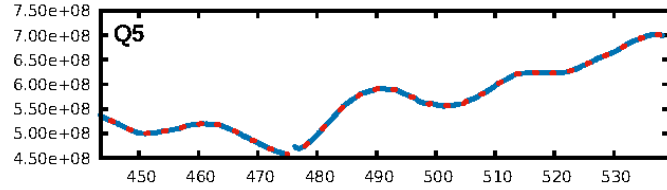
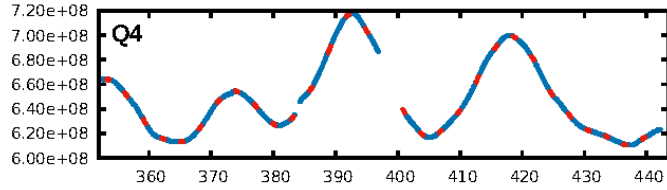
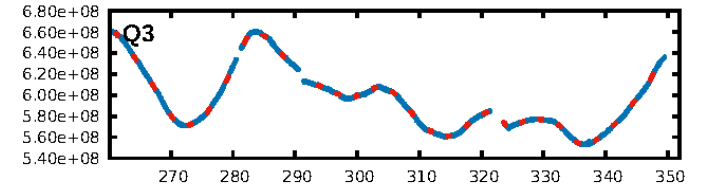
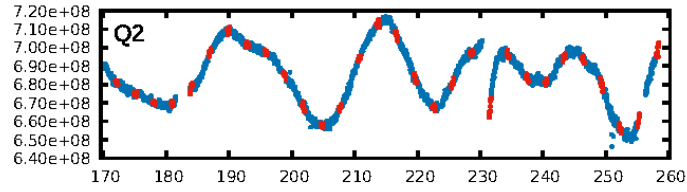
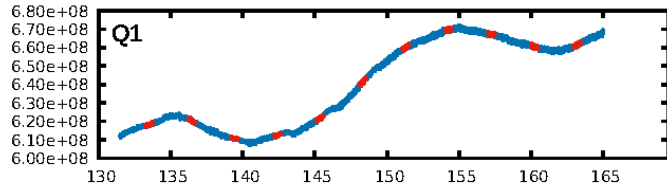
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.00e-09
RollingBand-fgt: 1.00 [431/431]
GhostDiagnostic-chr: -1.258
Centroid-sig: N/A
Centroid-so: 0.587 arcsec [1.76σ]
OotOffset-rm: 0.689 arcsec [0.48σ]
KicOffset-rm: 0.915 arcsec [0.58σ]
OotOffset-st: 1/2/4/3 [10]
KicOffset-st: 1/2/4/3 [10]
DiffImageQuality-fgm: 0.30 [3/10]
DiffImageOverlap-fno: 1.00 [17/17]

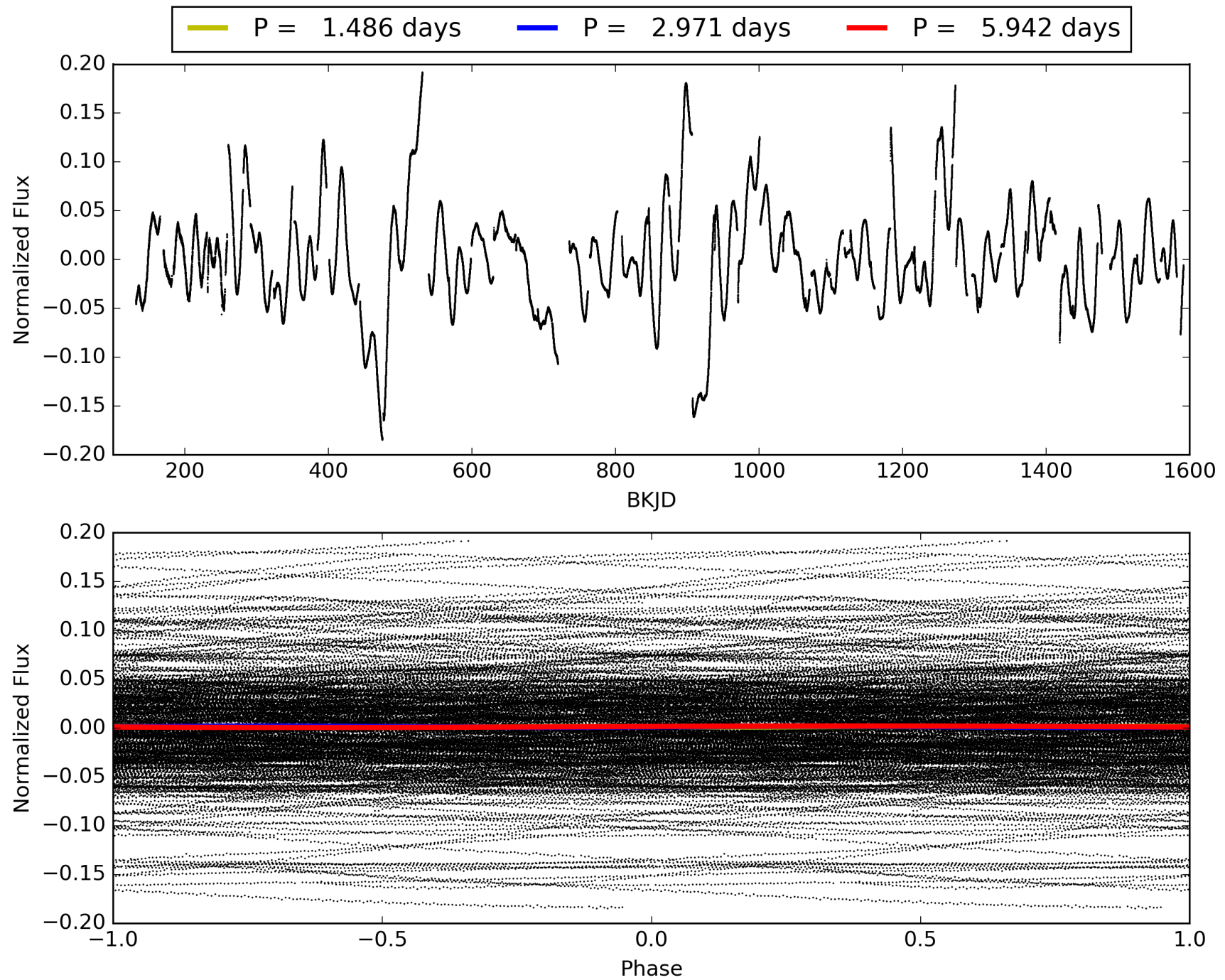
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 19:10:26 Z

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

TCE 011068340-01, PDC Light Curves

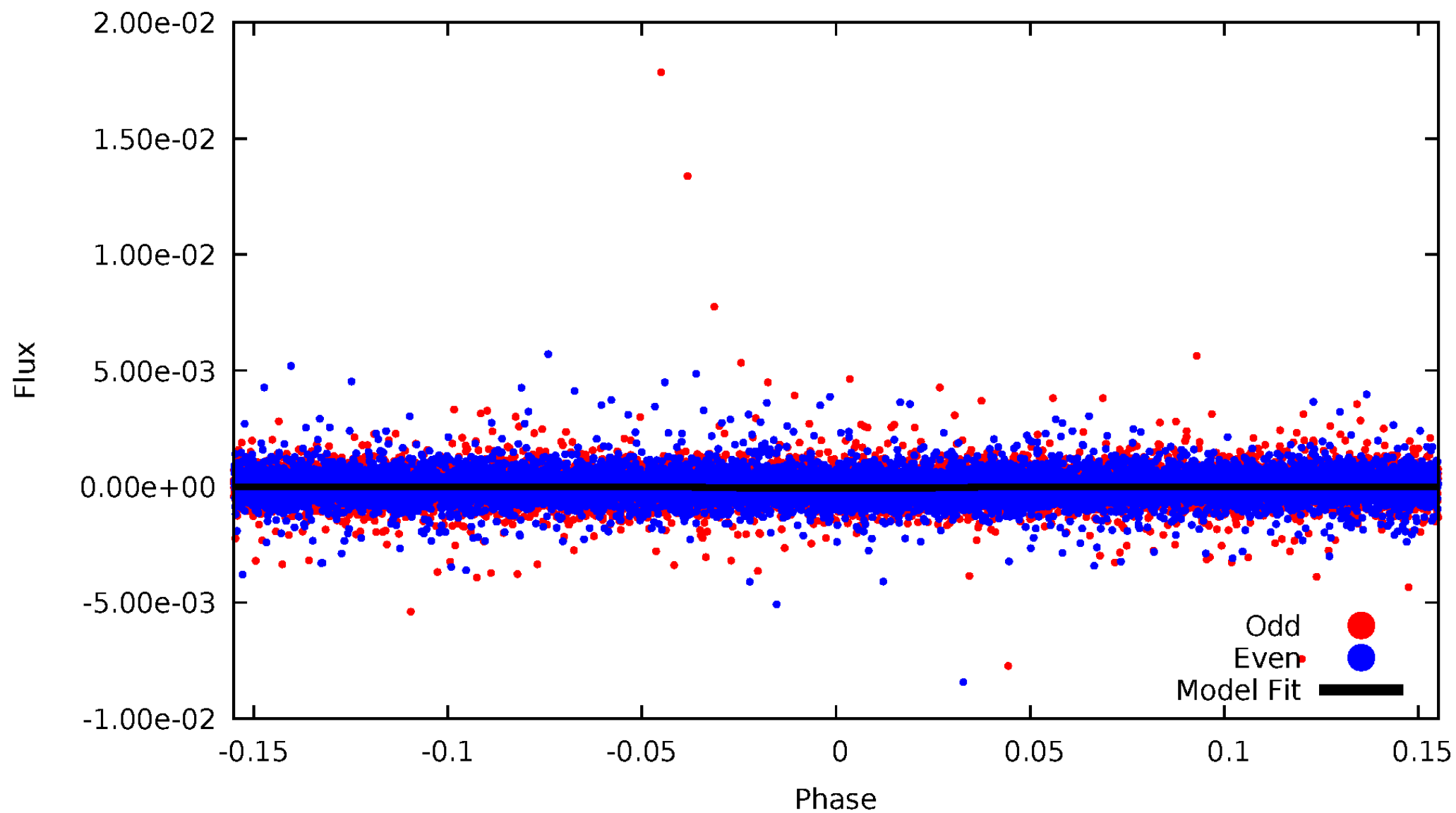


TCE 011068340-01



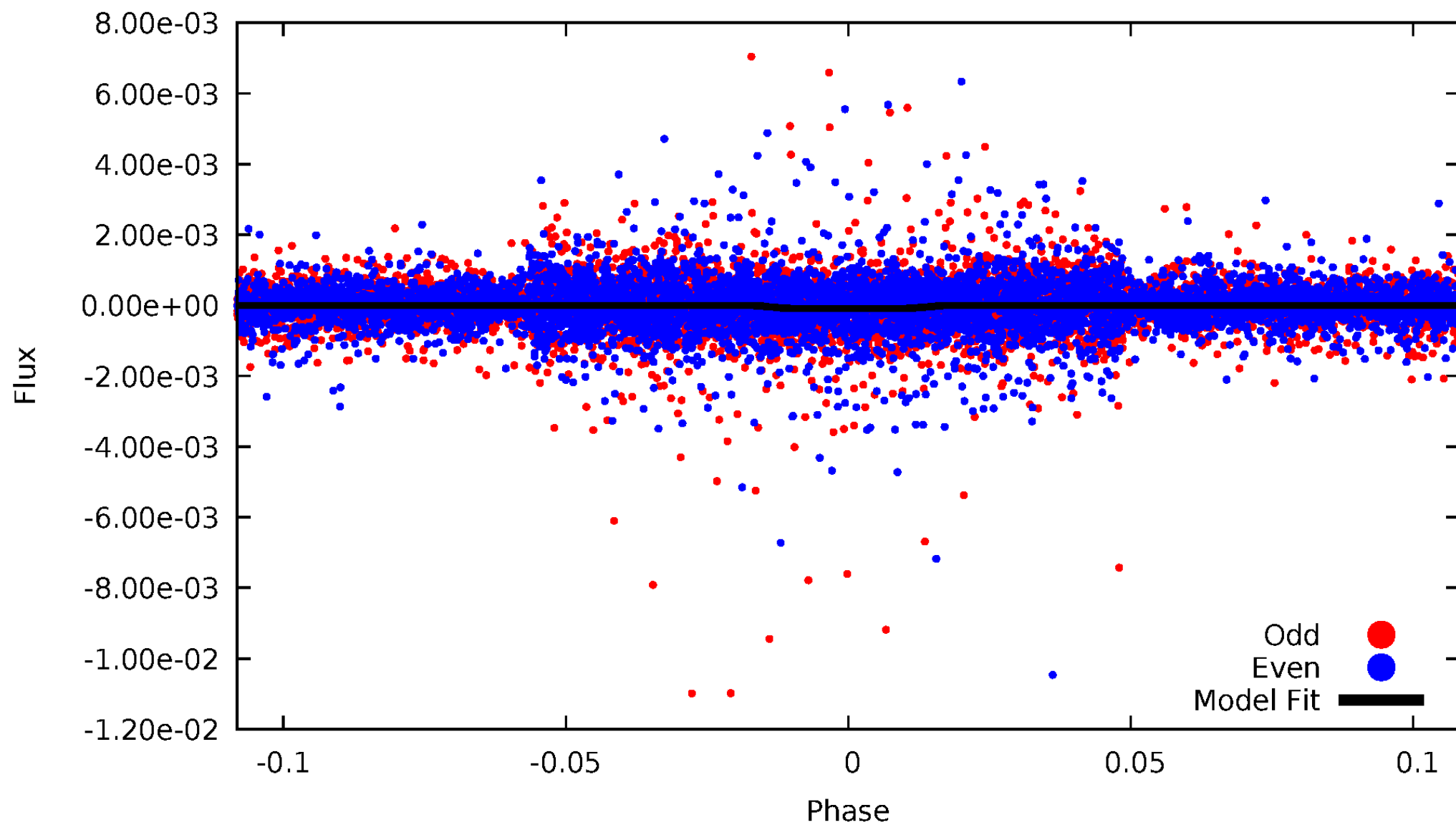
DV Odd/Even

TCE 011068340-01



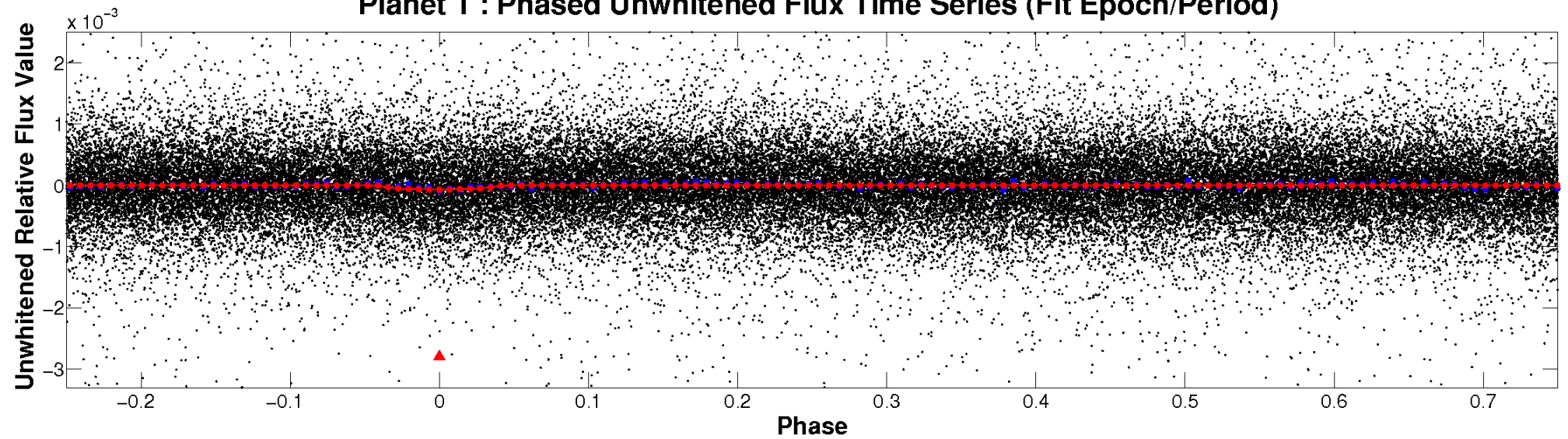
ALT Odd/Even

TCE 011068340-01

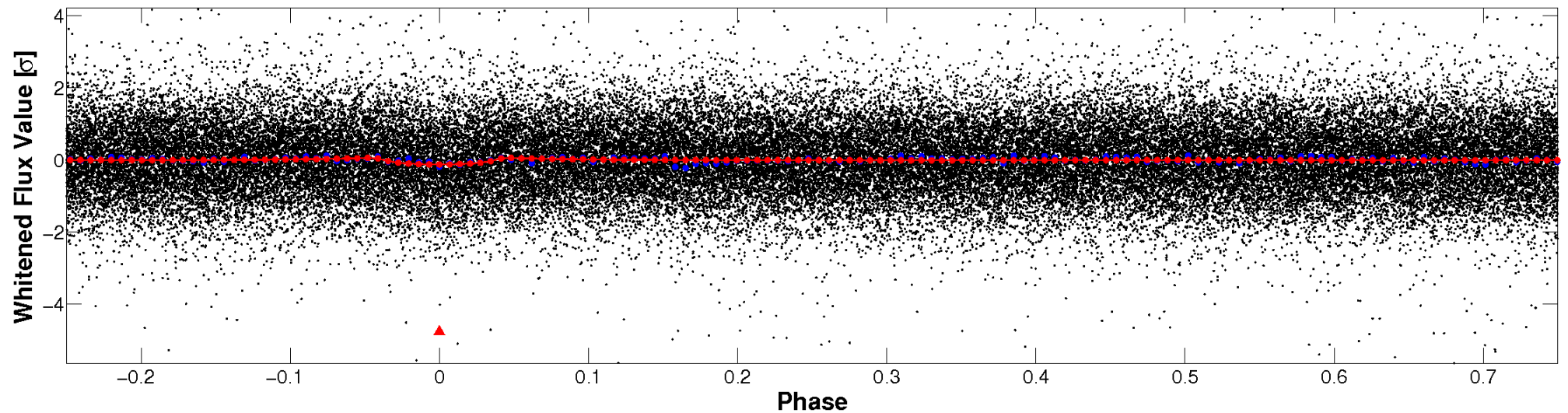


Non-Whitened Vs. Whitened Light Curve

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

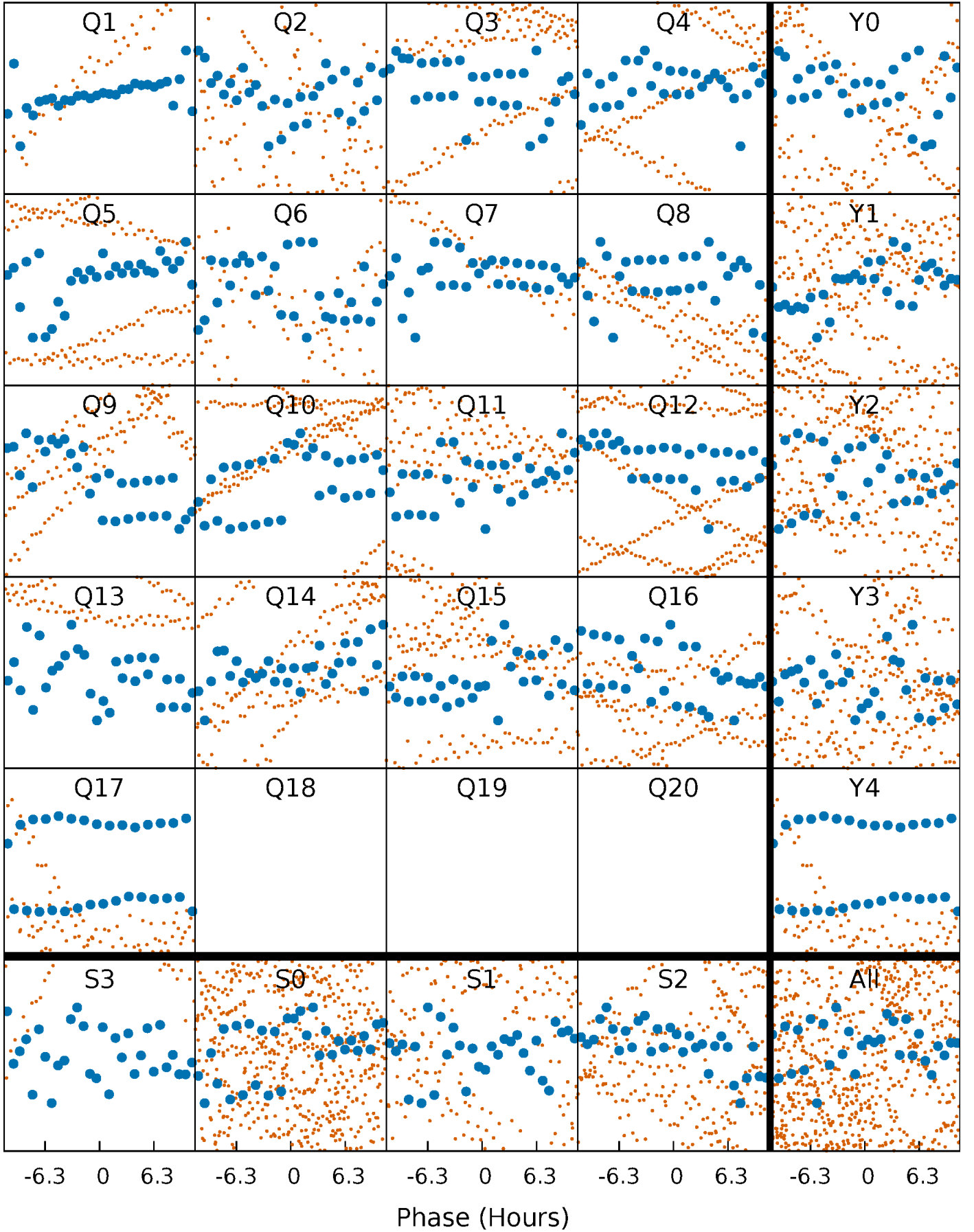


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



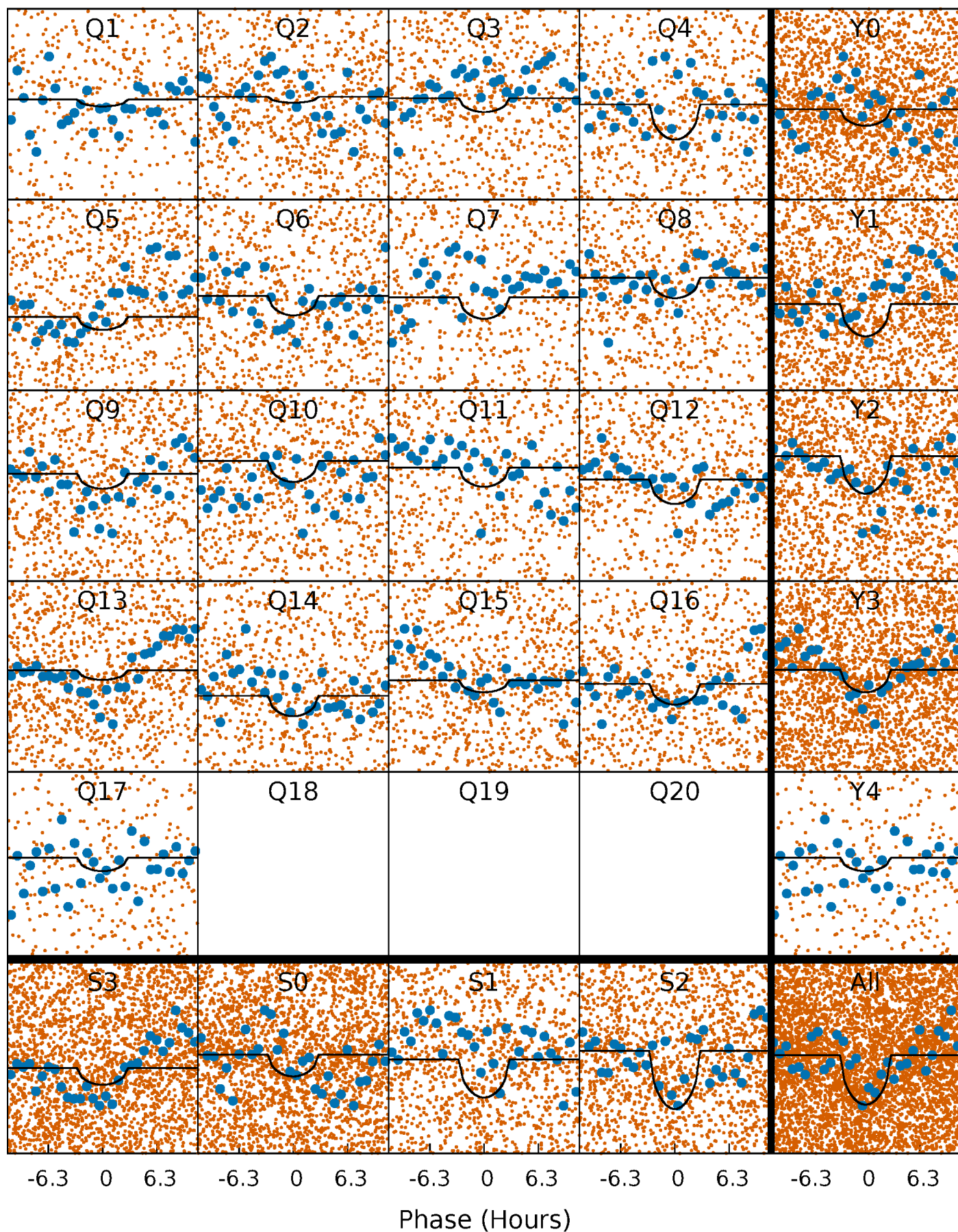
PDC Quarter-Phased Transit Curves

TCE 011068340-01 P= 2.971151 Days $T_0=133.478815$ (BKJD)



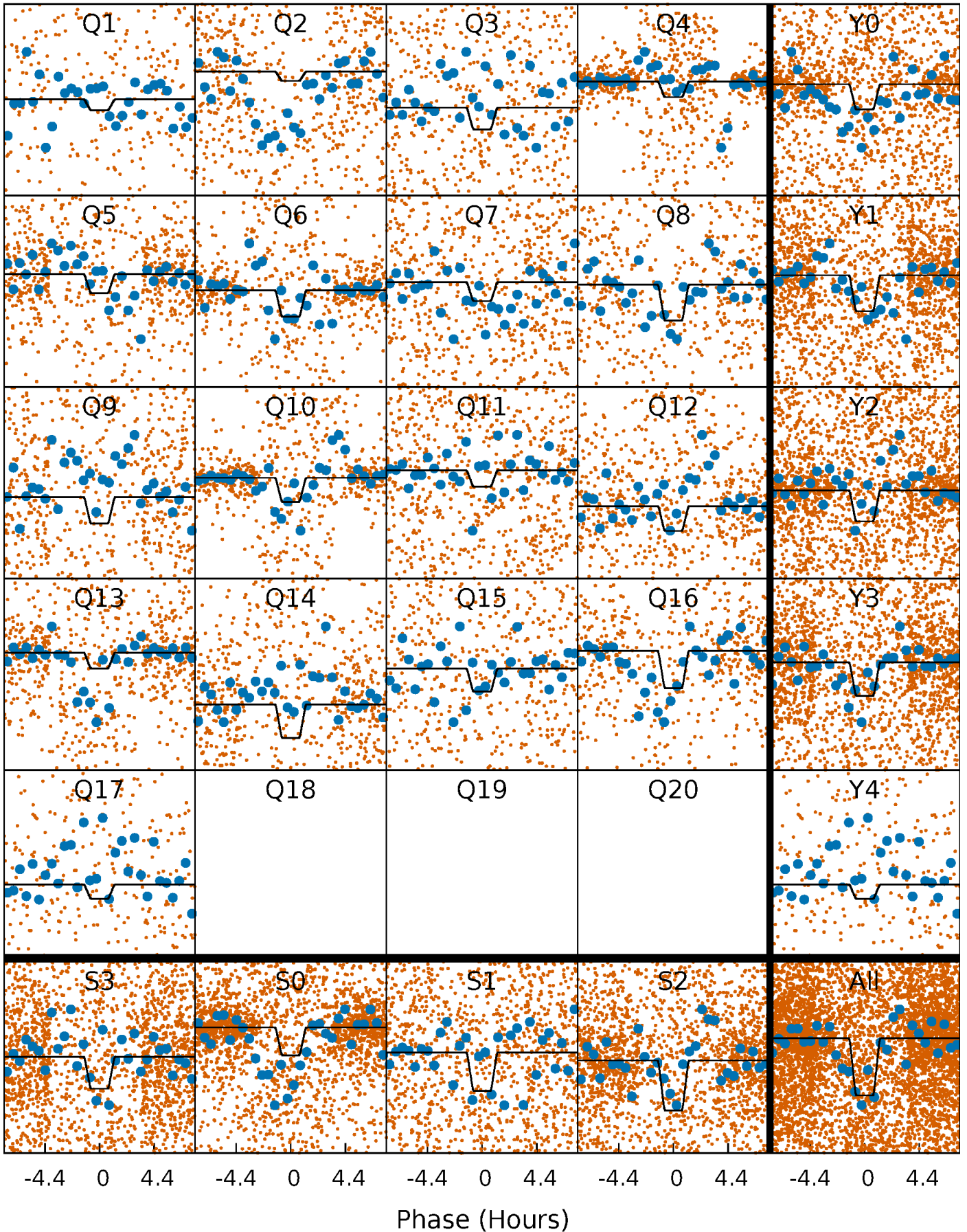
DV Quarter-Phased Transit Curves

TCE 011068340-01 P= 2.971151 Days $T_0=133.478815$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

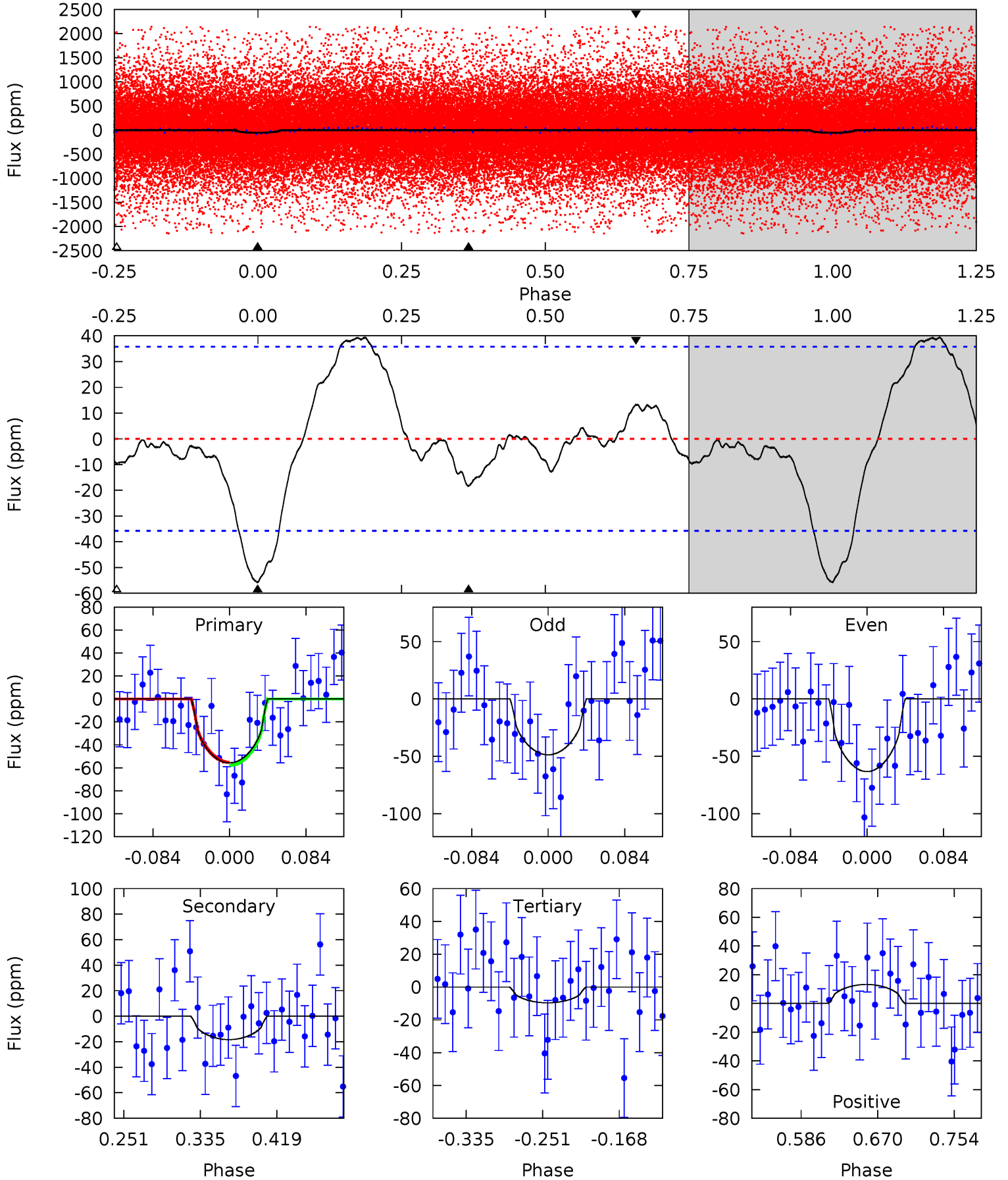
TCE 011068340-01 P= 2.971224 Days $T_0=133.465666$ (BKJD)



DV Model-Shift Uniqueness Test

011068340-01, P = 2.971151 Days, E = 130.507664 Days

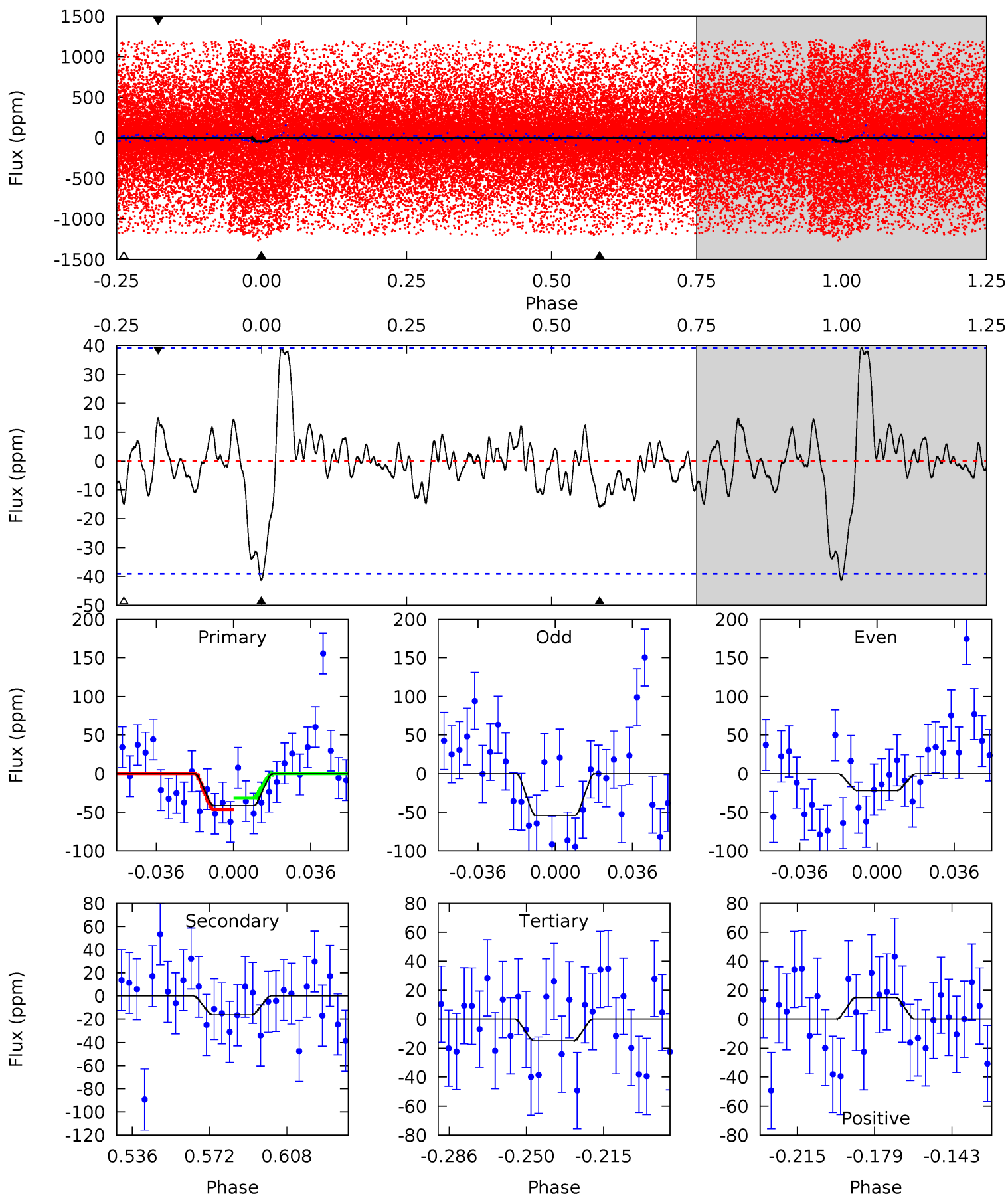
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.17	2.36	1.24	1.70	4.60	1.73	1.87	5.93	5.47	1.12	0.66	0.95	0.66	0.41	0.18



Alt Model-Shift Uniqueness Test

011068340-01, P = 2.971224 Days, E = 130.494442 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.05	1.97	1.82	1.81	4.78	2.10	0.96	3.22	3.23	0.15	0.15	1.98	2.24	0.49	0.93



Stellar Parameters For KIC 011068340

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3434^{+86}_{-86}	$0.403^{+0.030}_{-0.033}$	$0.020^{+0.200}_{-0.250}$	$130.378^{+3.904}_{-20.820}$	$1.569^{+0.076}_{-0.431}$	$0.000^{+0.000}_{-0.000}$
	+3%/-3%	+7%/-8%	+1000%/-1250%	+3%/-16%	+5%/-27%	+21%/-11%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011068340-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-18 ± 8	$105.23^{+65.44}_{-55.66}$	11167^{+298}_{-313}	-7935^{+419}_{-409}	$0.002^{+0.007}_{-0.001}$
Alt.	-16 ± 8	$136.33^{+74.52}_{-62.24}$	11195^{+287}_{-330}	-7982^{+432}_{-411}	$0.001^{+0.003}_{-0.001}$

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

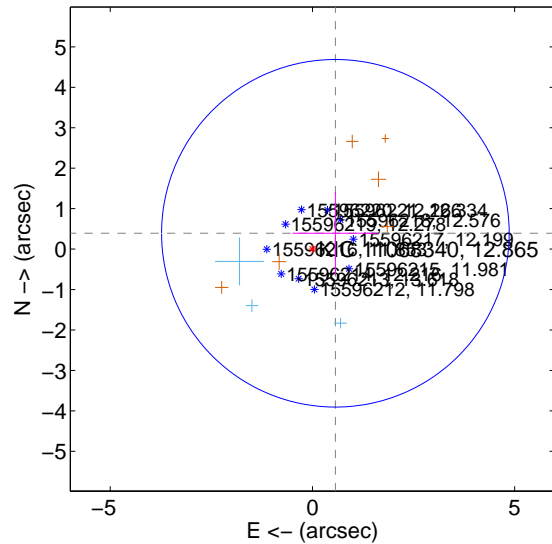
Supplemental centroid analysis for 011068340-01. Kepler magnitude: 12.87. Transit SNR 7.63

There are 3 quarters with good PRF difference image offsets

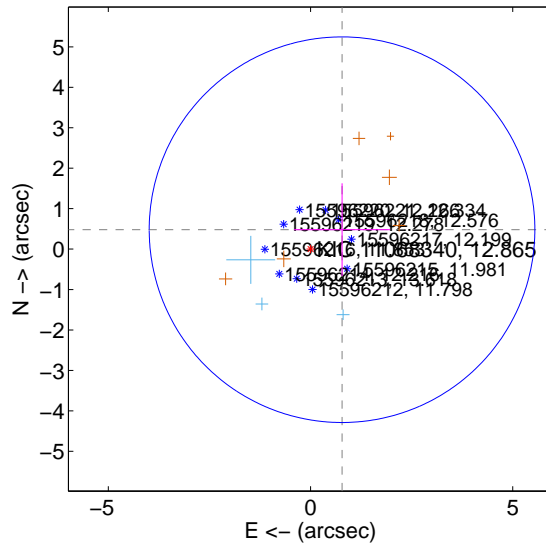
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.689 ± 1.433	0.48	-0.568 ± 1.062	0.391 ± 1.022
PRF-fit source offset from KIC position	0.915 ± 1.589	0.58	-0.779 ± 1.189	0.480 ± 1.147
photometric centroid source offset	0.59 ± 0.33	1.76	0.56 ± 0.33	-0.18 ± 0.38

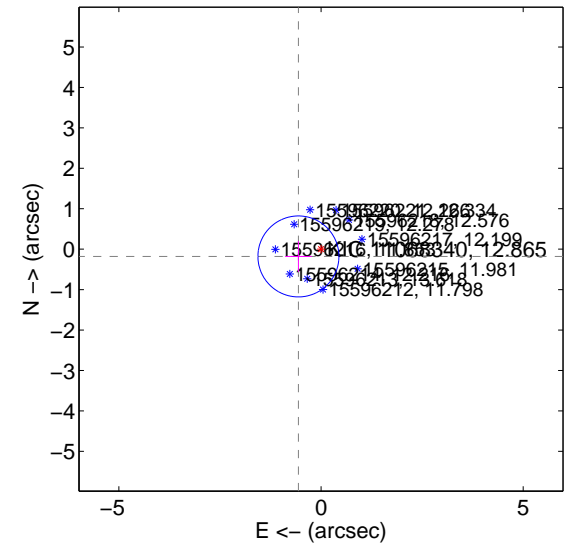
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

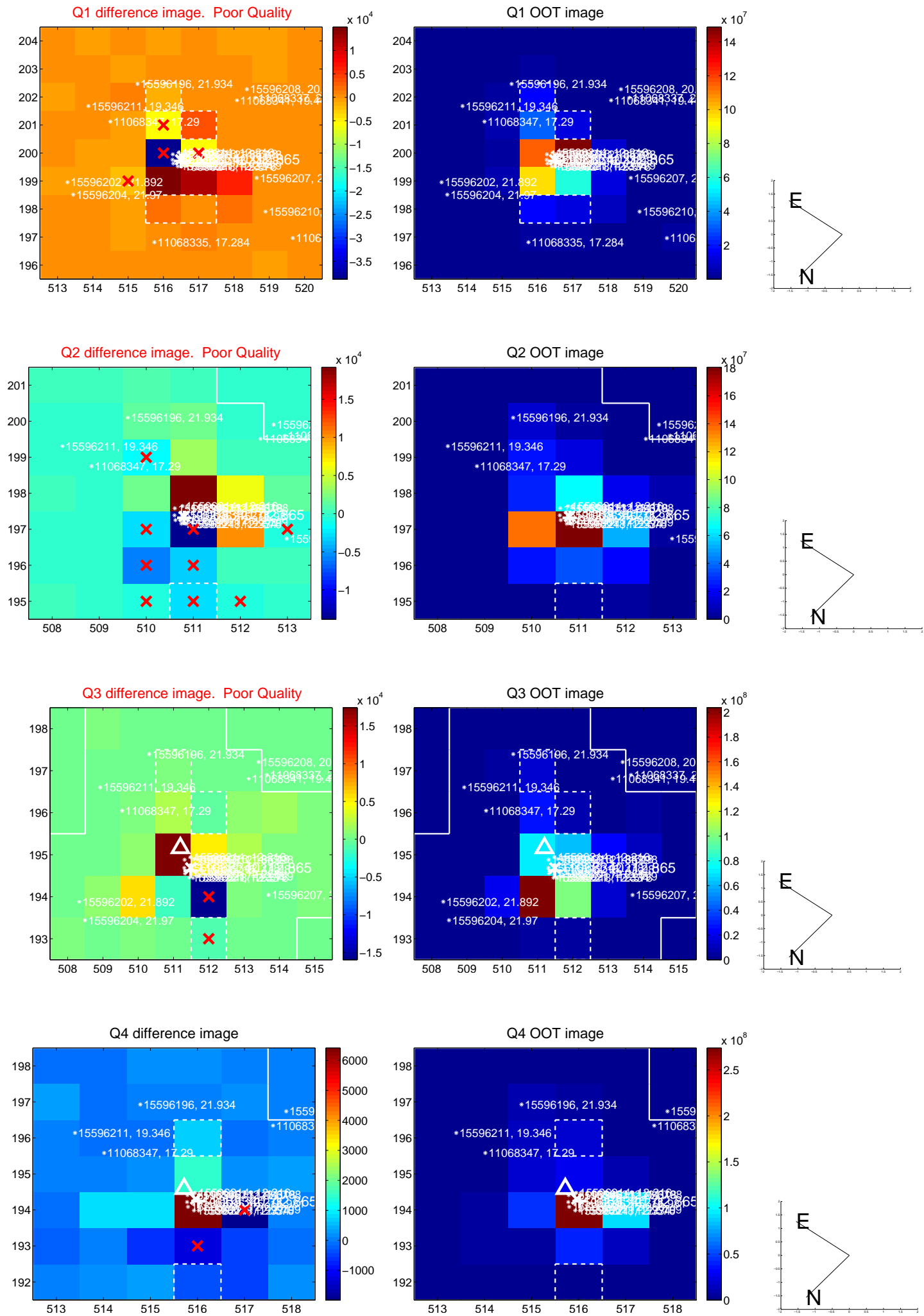


offset from photometric centroids

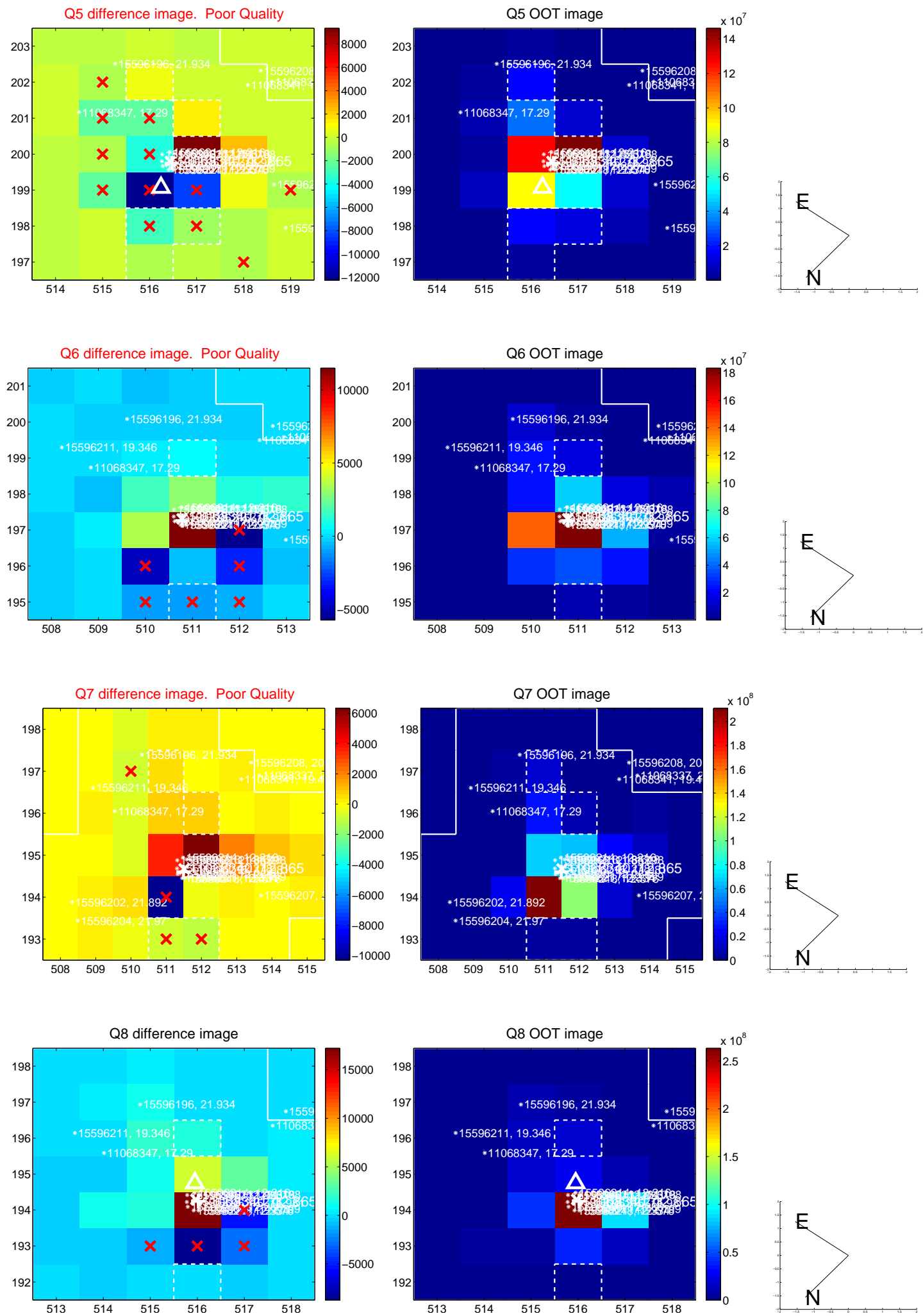


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

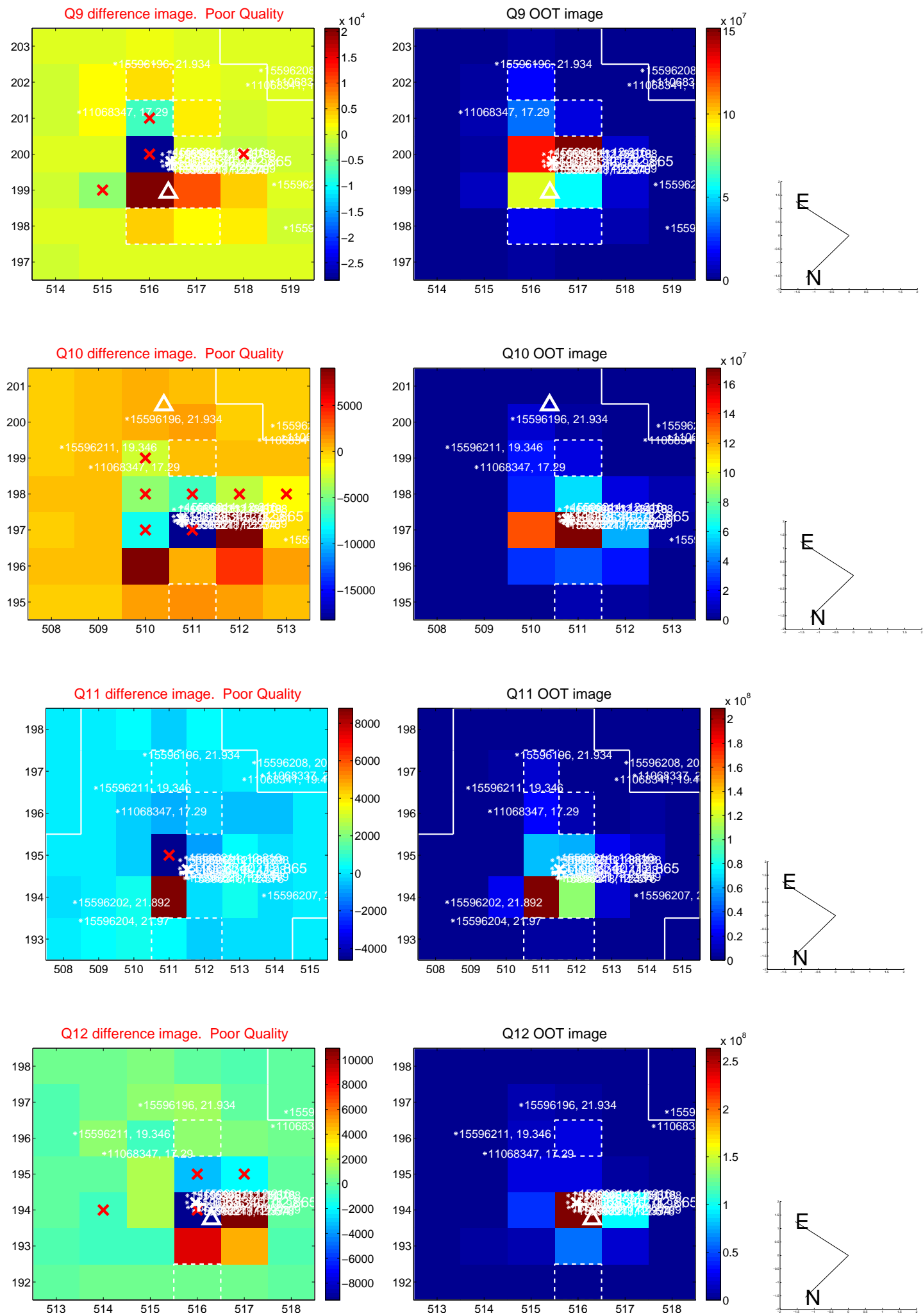
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



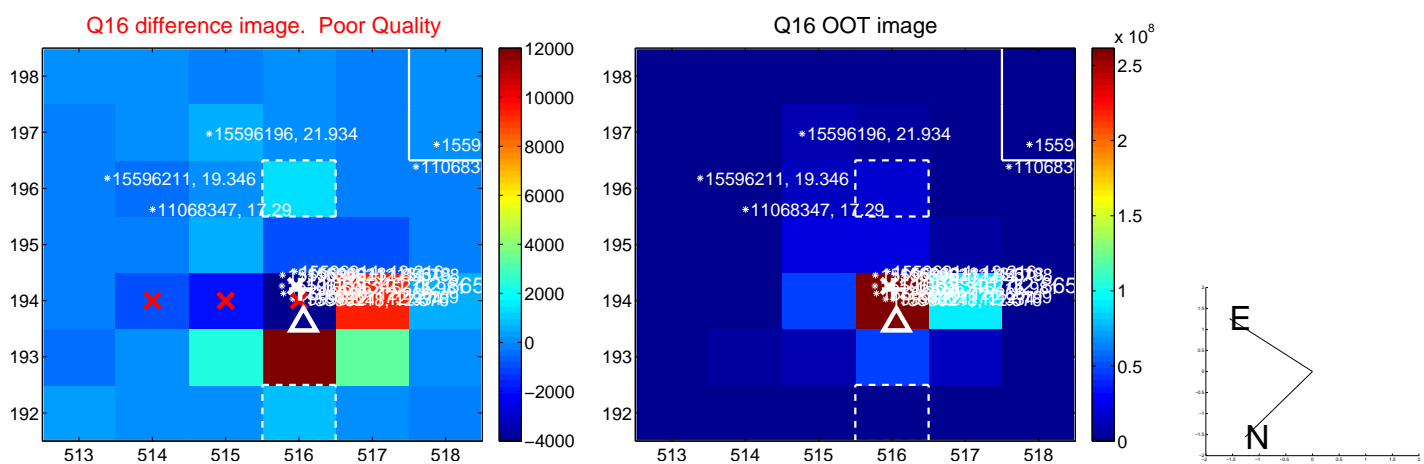
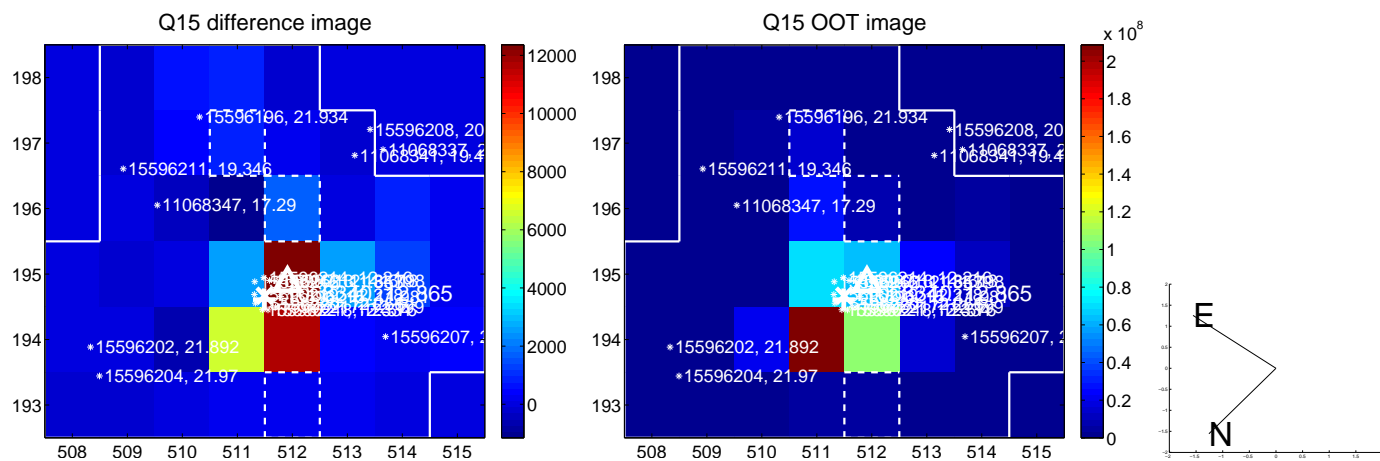
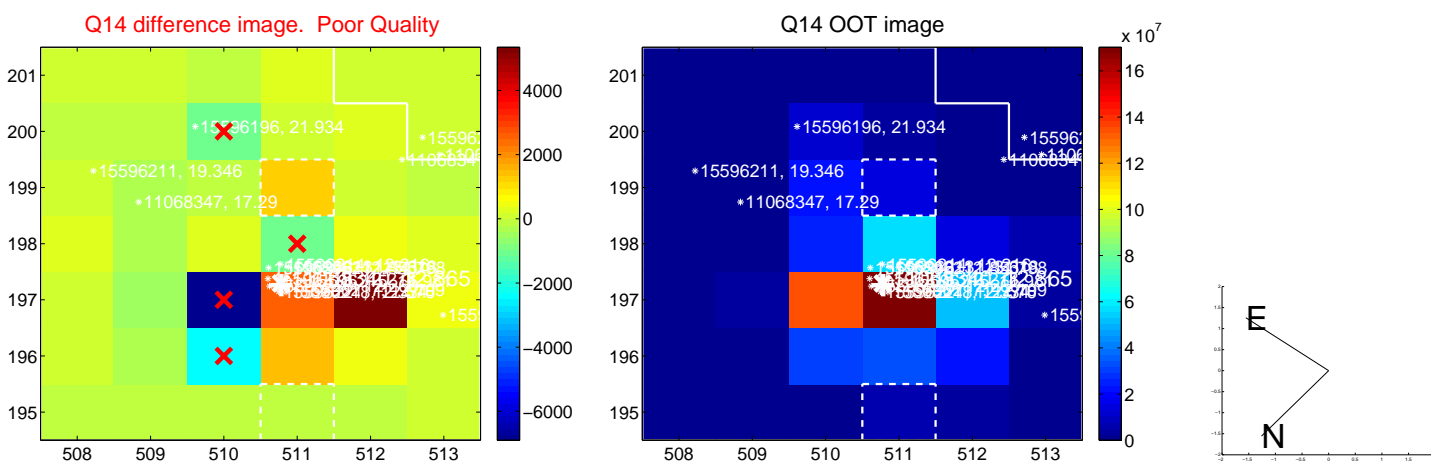
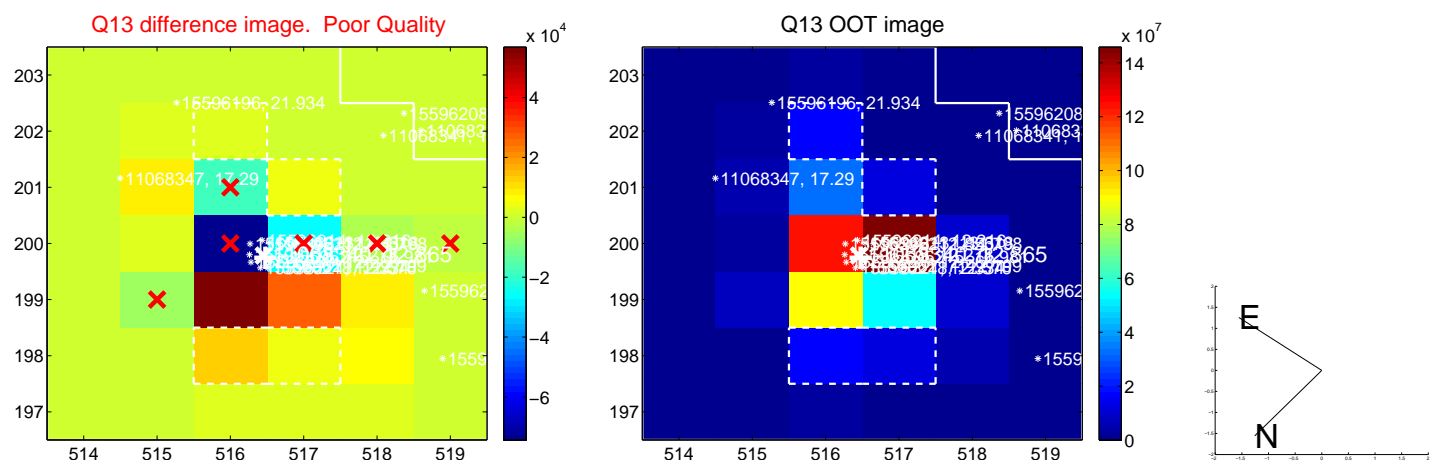
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

