

KIC 008194969

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})
008194969-01	OBS	No	5.965047	133.502628	51.0	27.355	8.0	10.2	1.70	6520	2.46	945.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008194969-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

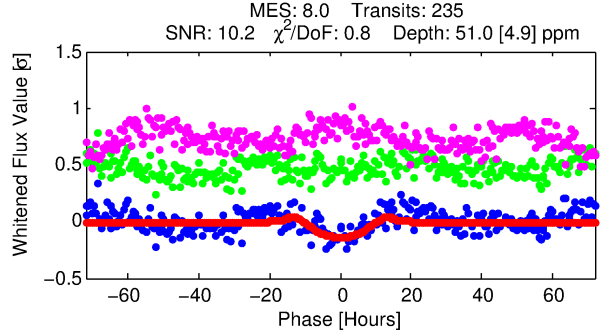
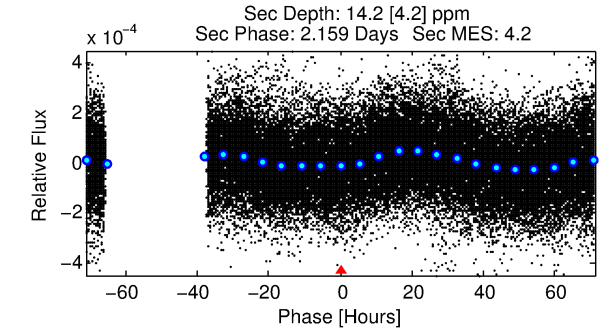
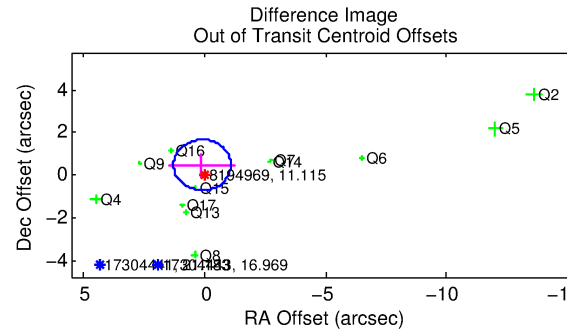
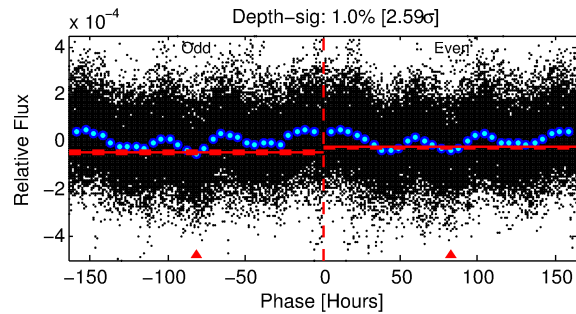
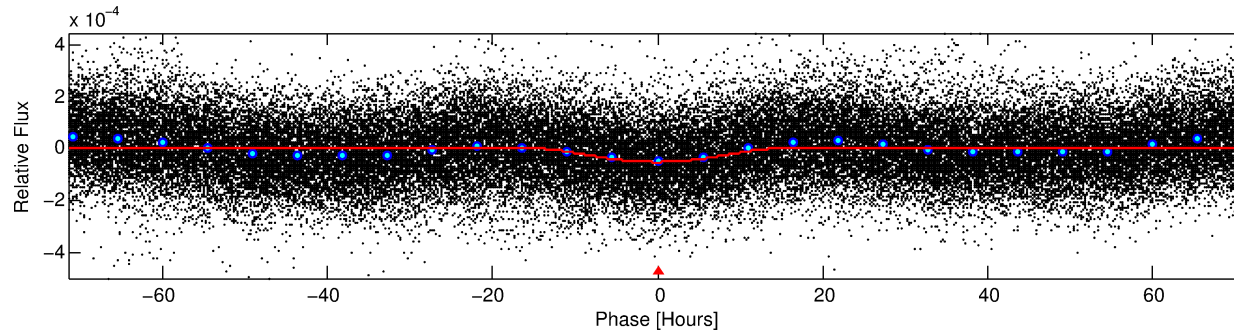
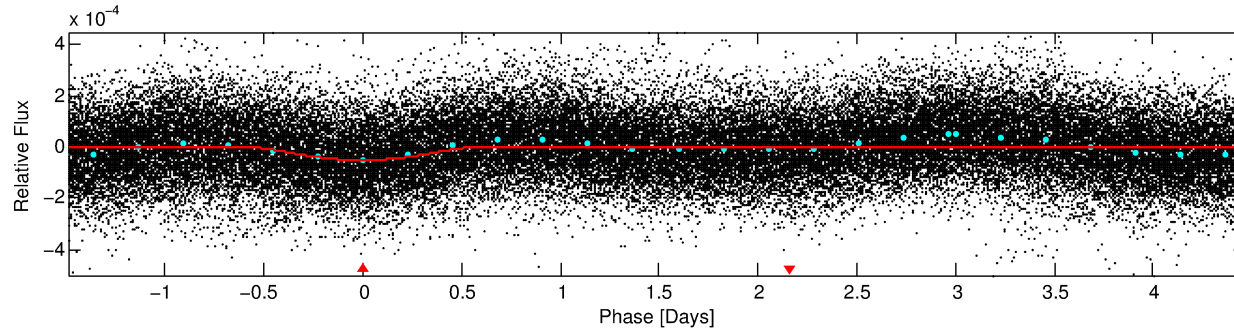
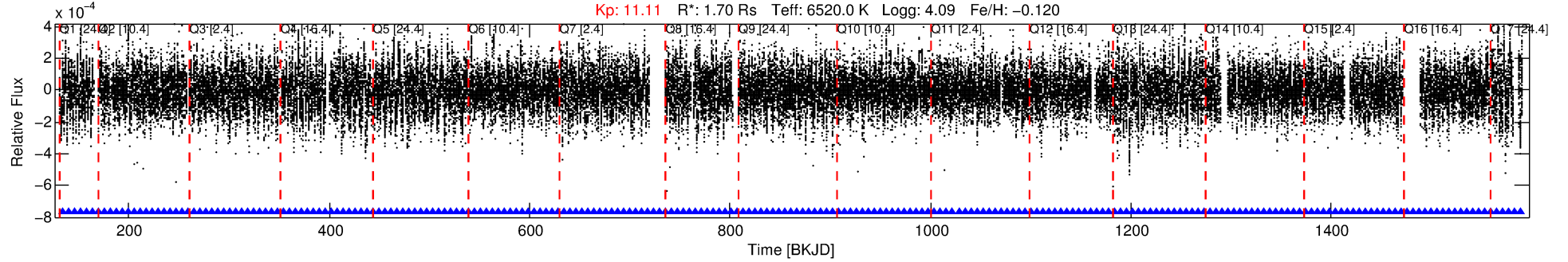
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008194969-01

No Significant Match Found

DV One-Page Summary

KIC: 8194969 Candidate: 1 of 1 Period: 5.965 d



DV Fit Results:

Period = 5.96505 [0.00032] d
Epoch = 133.5026 [0.0450] BKJD
Rp/R* = 0.0133 [0.0153]
a/R* = 1.04 [0.01]
b = 1.00 [0.02]
Seff = 945.97 [410.16]
Teq = 1414 [153] K
Rp = 2.46 [2.95] Re
a = 0.0705 [0.0193] AU
Ag = 6.38 [15.05] [0.36 σ]
Teffp = 3475 [2023] K [1.02 σ]

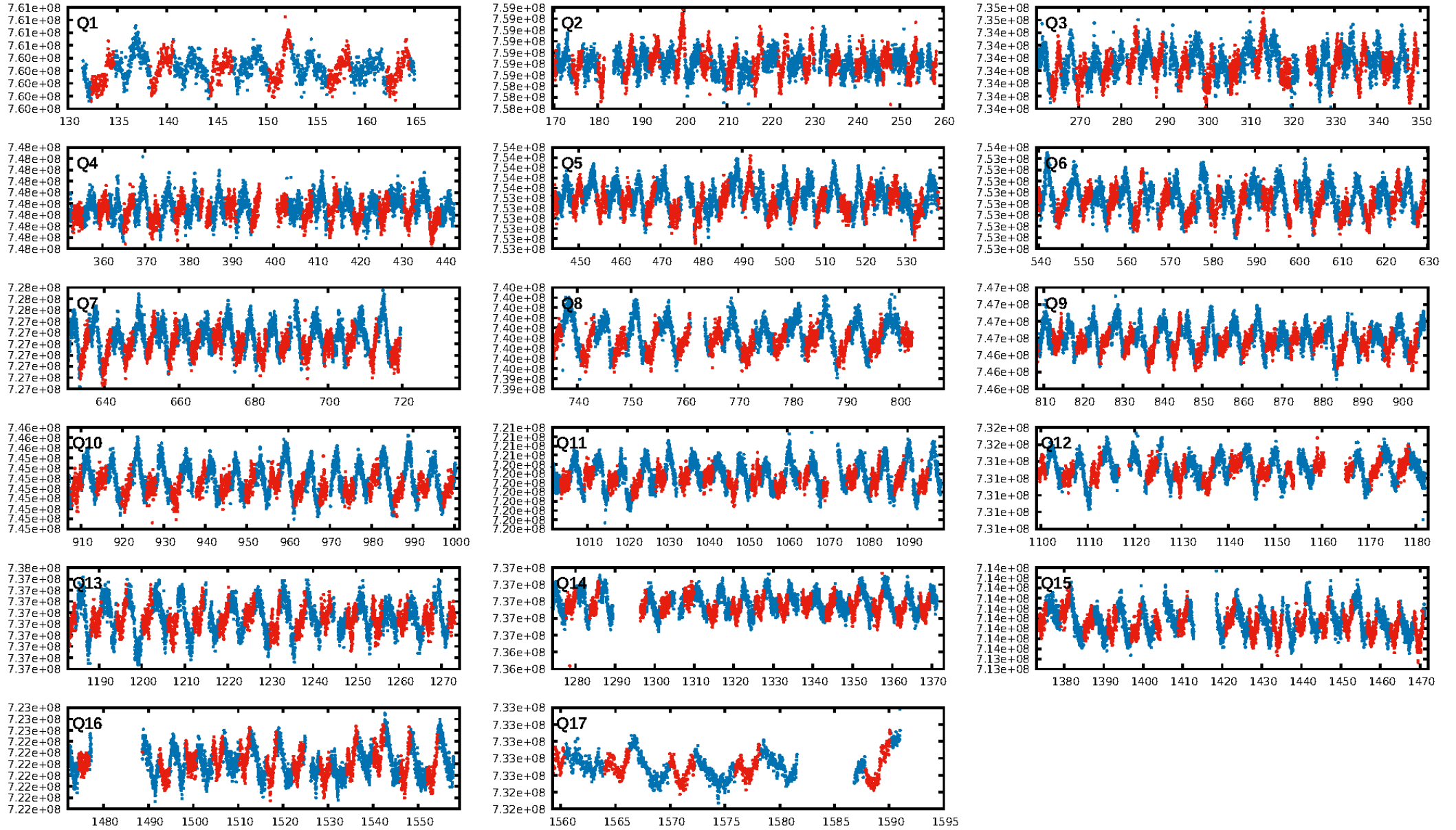
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.07e-15
RollingBand-fgt: 1.00 [224/224]
GhostDiagnostic-chr: 1.247
Centroid-sig: 40.8%
Centroid-so: 0.350 arcsec [0.63 σ]
OotOffset-rm: 0.495 arcsec [1.26 σ]
KicOffset-rm: 0.577 arcsec [1.40 σ]
OotOffset-st: 3/2/3/4 [12]
KicOffset-st: 3/2/3/4 [12]
DiffImageQuality-fgm: 0.67 [8/12]
DiffImageOverlap-fno: 1.00 [17/17]

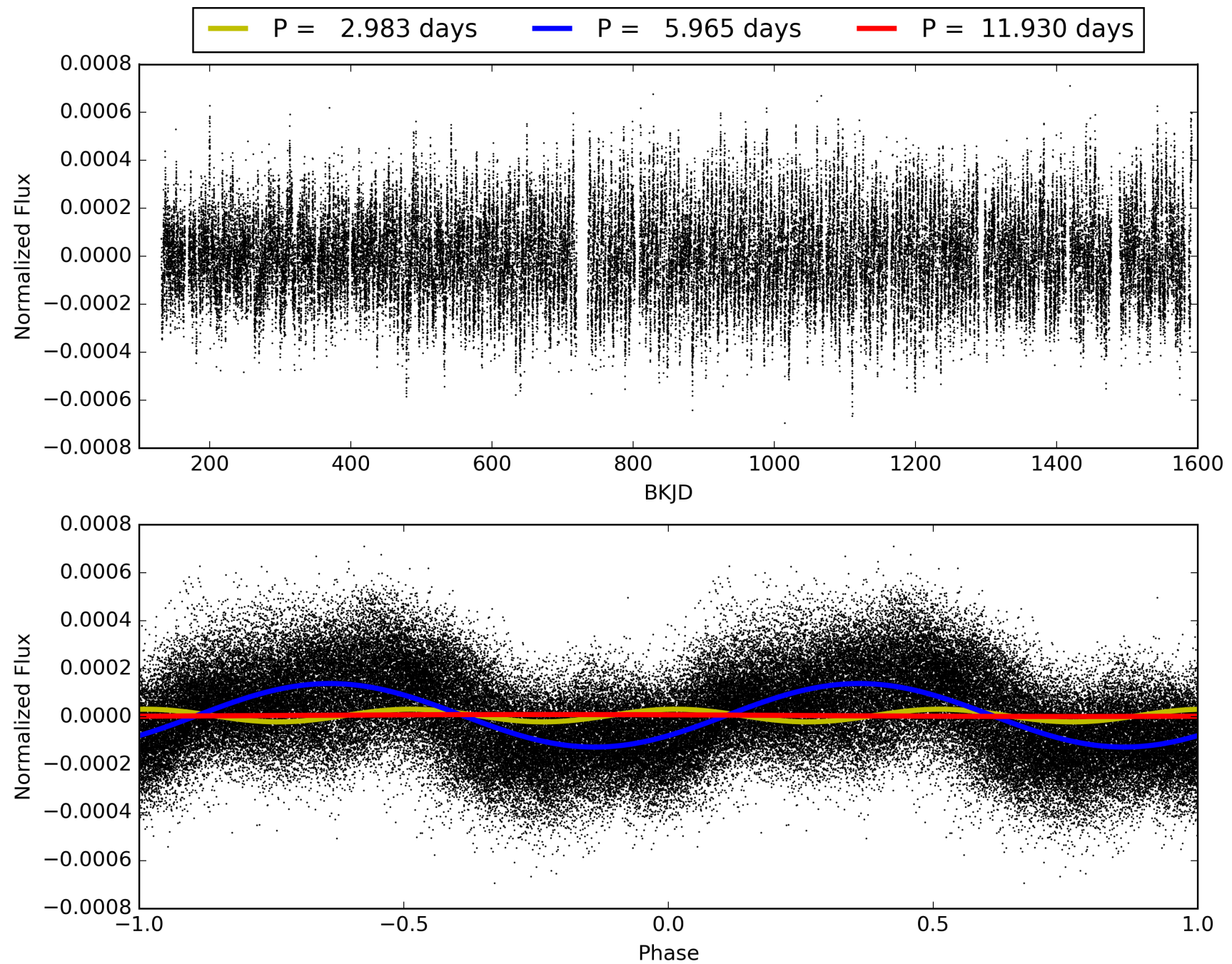
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 22:06:44 Z

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

TCE 008194969-01, PDC Light Curves

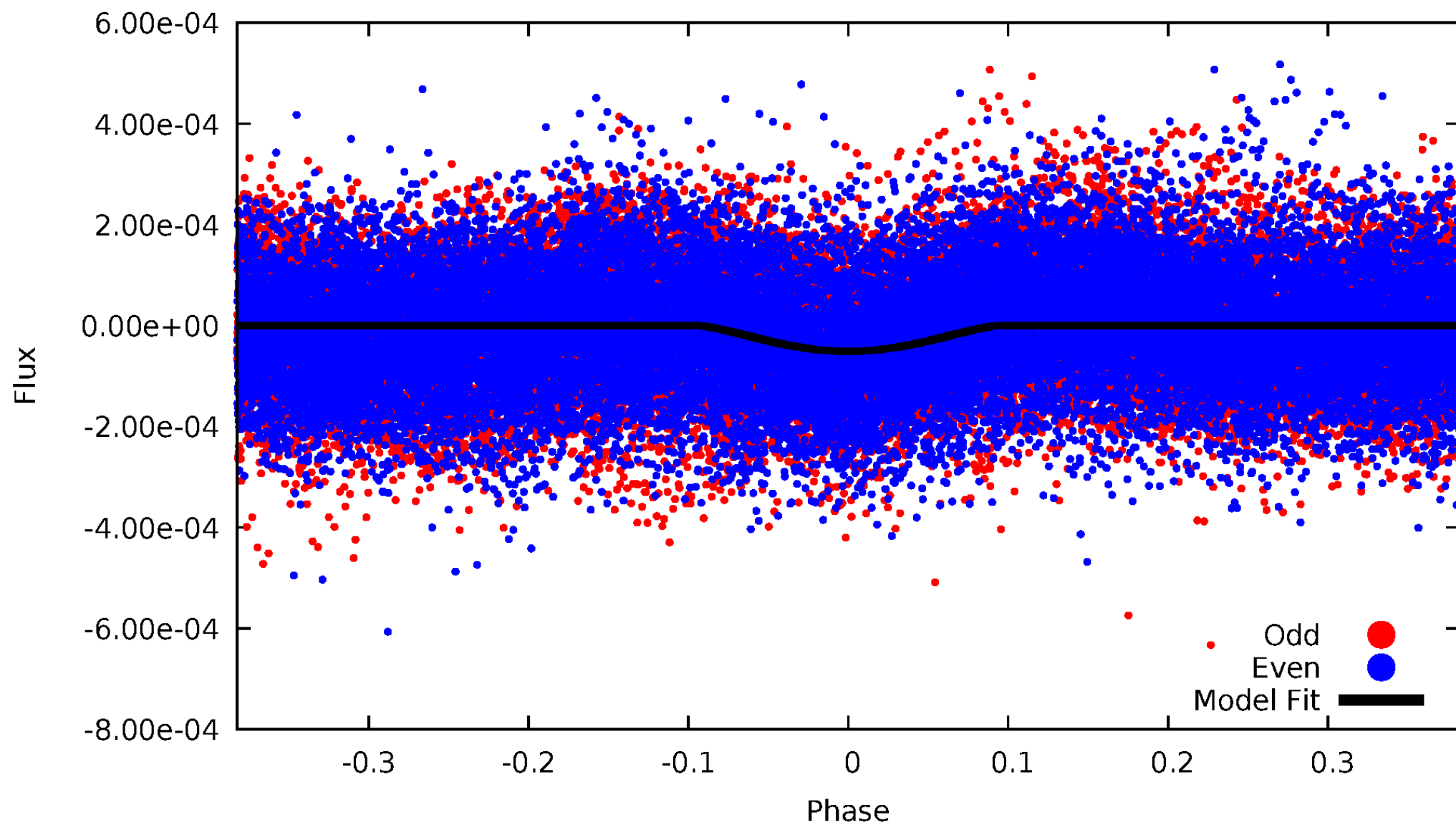


TCE 008194969-01



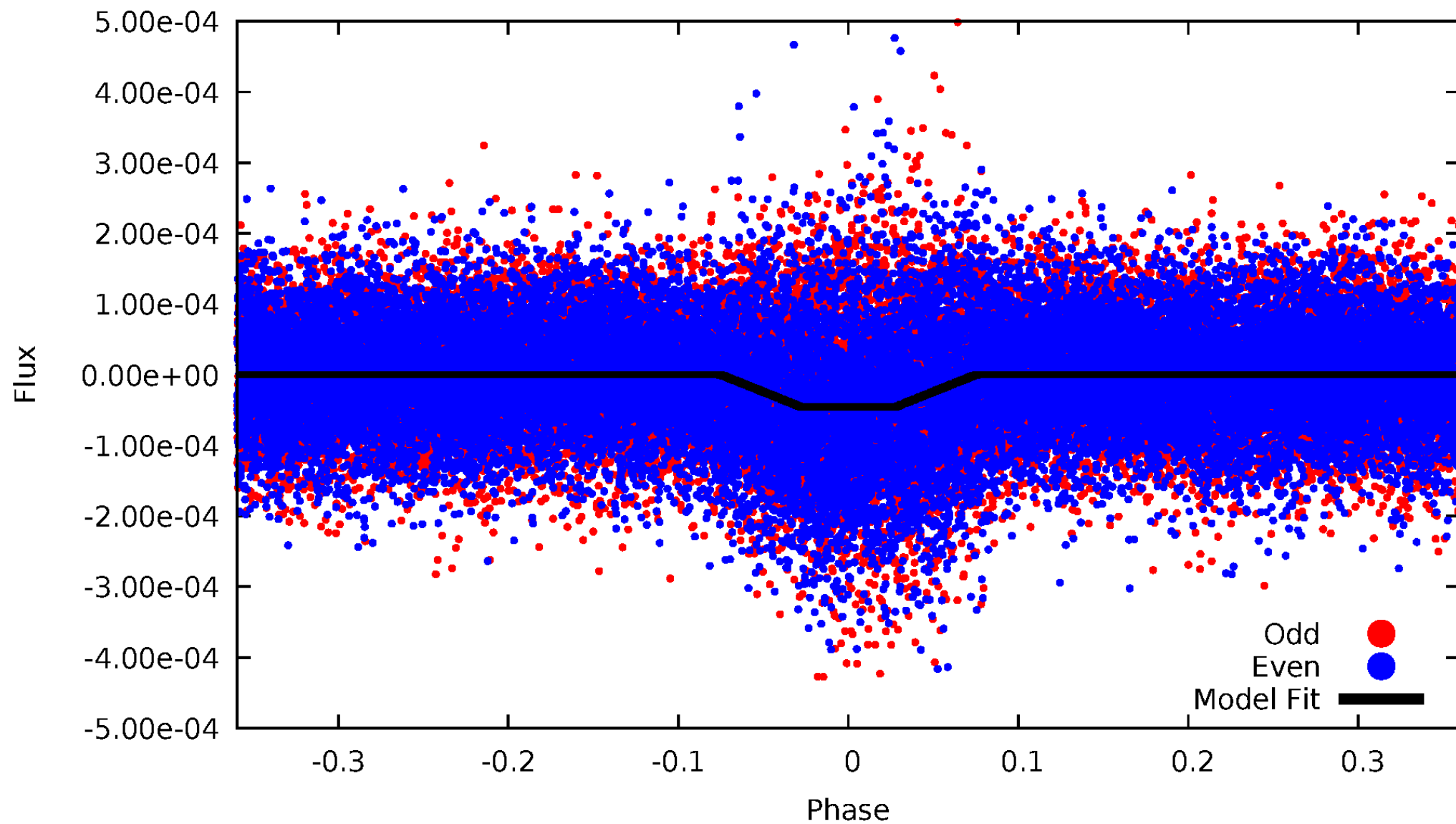
DV Odd/Even

TCE 008194969-01

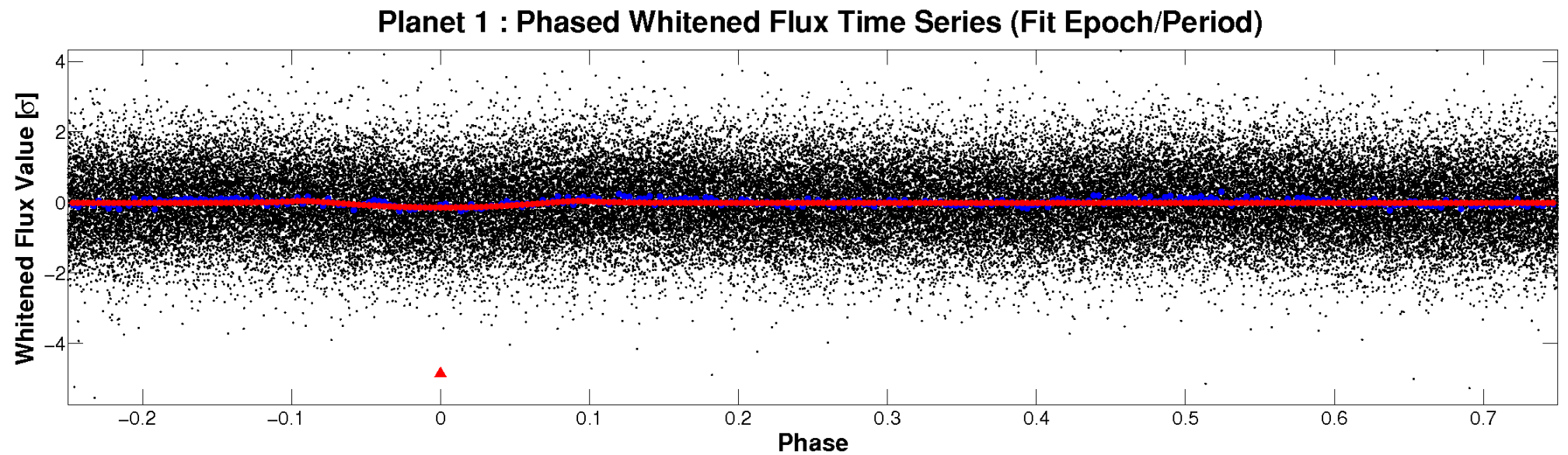
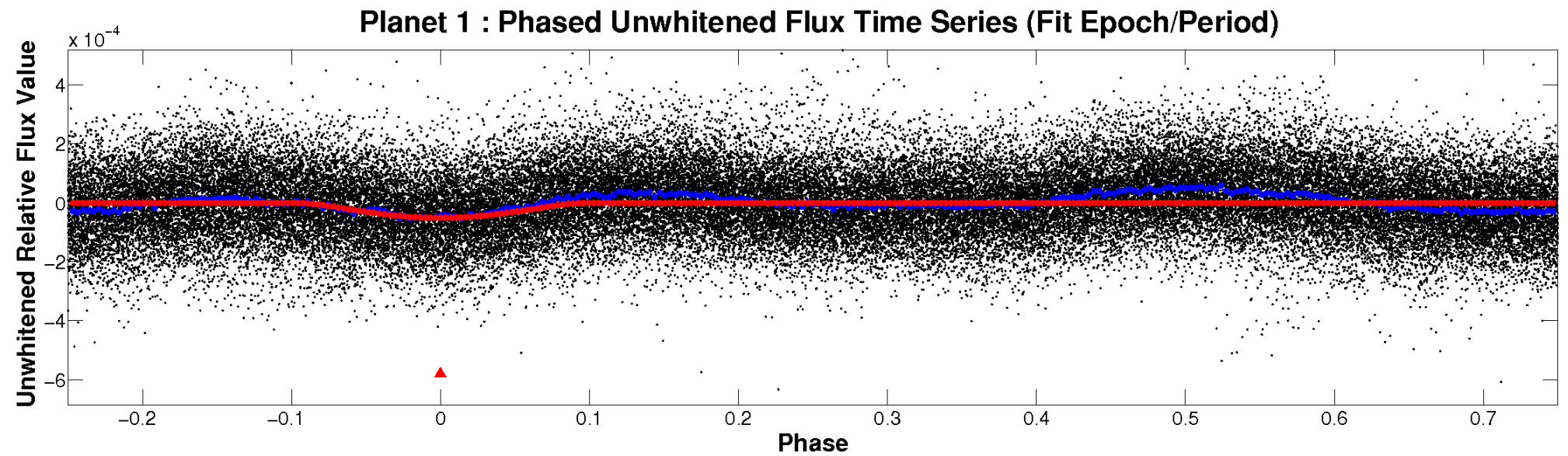


ALT Odd/Even

TCE 008194969-01

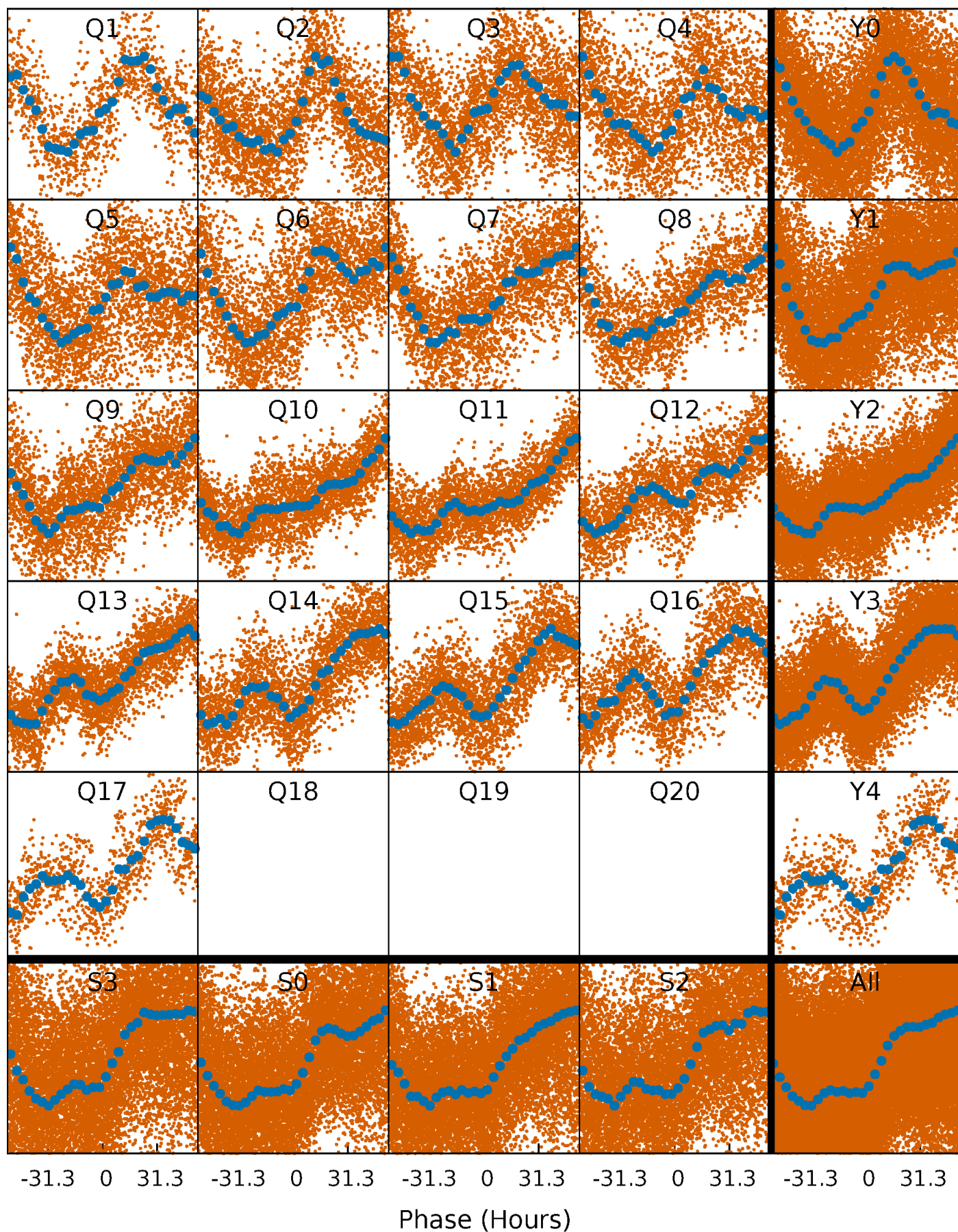


Non-Whitened Vs. Whitened Light Curve



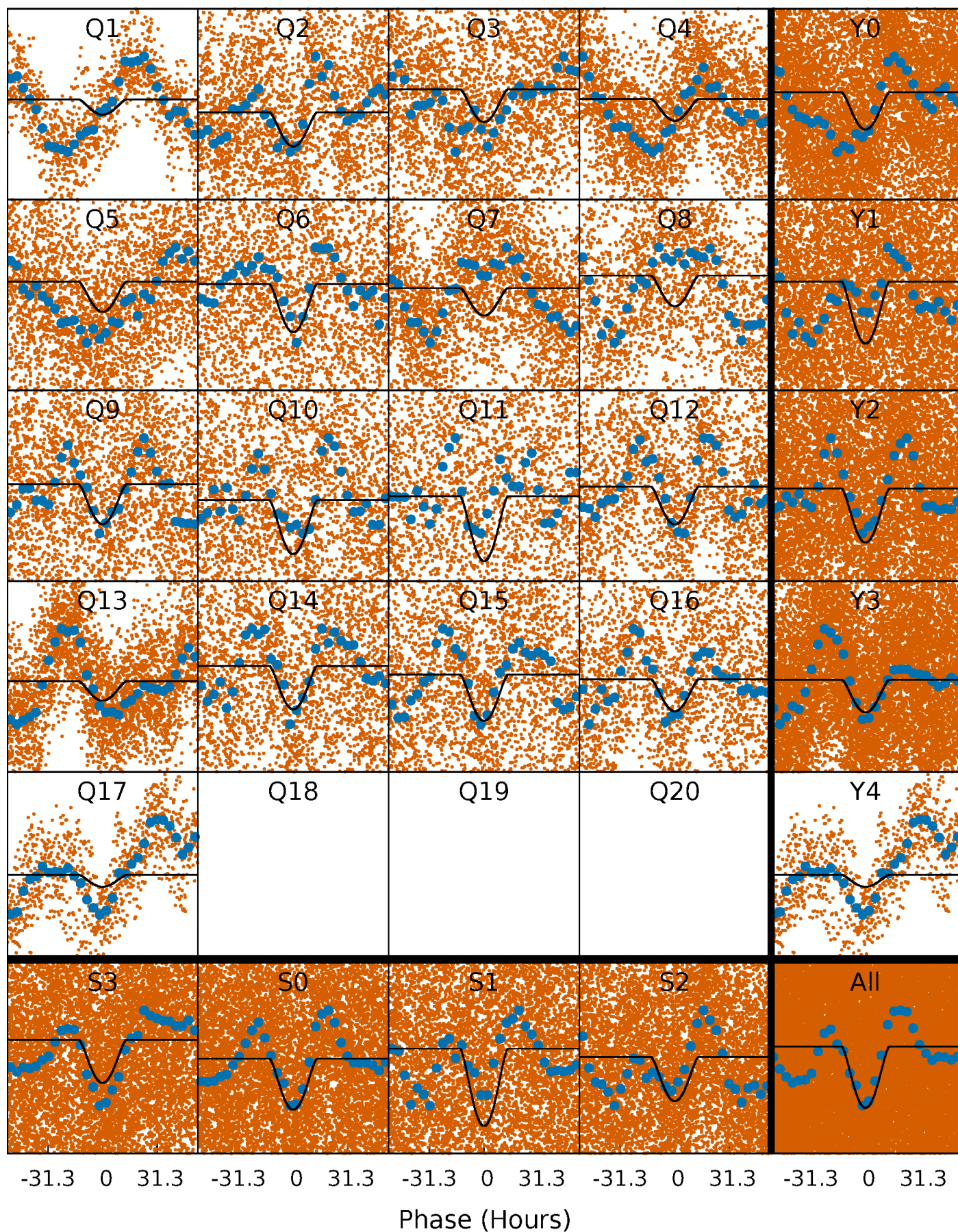
PDC Quarter-Phased Transit Curves

TCE 008194969-01 P= 5.965047 Days $T_0=133.502628$ (BKJD)



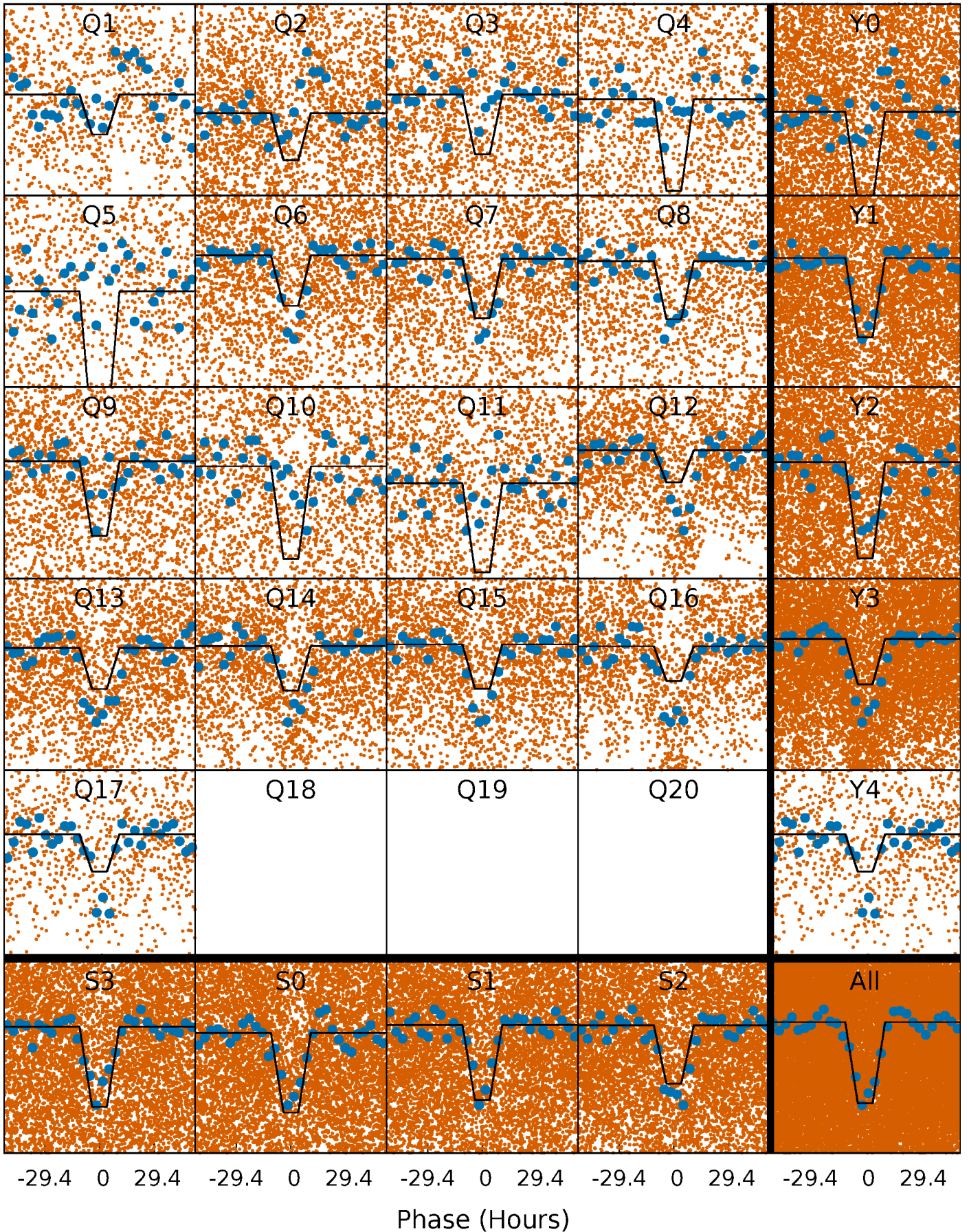
DV Quarter-Phased Transit Curves

TCE 008194969-01 P= 5.965047 Days $T_0=133.502628$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

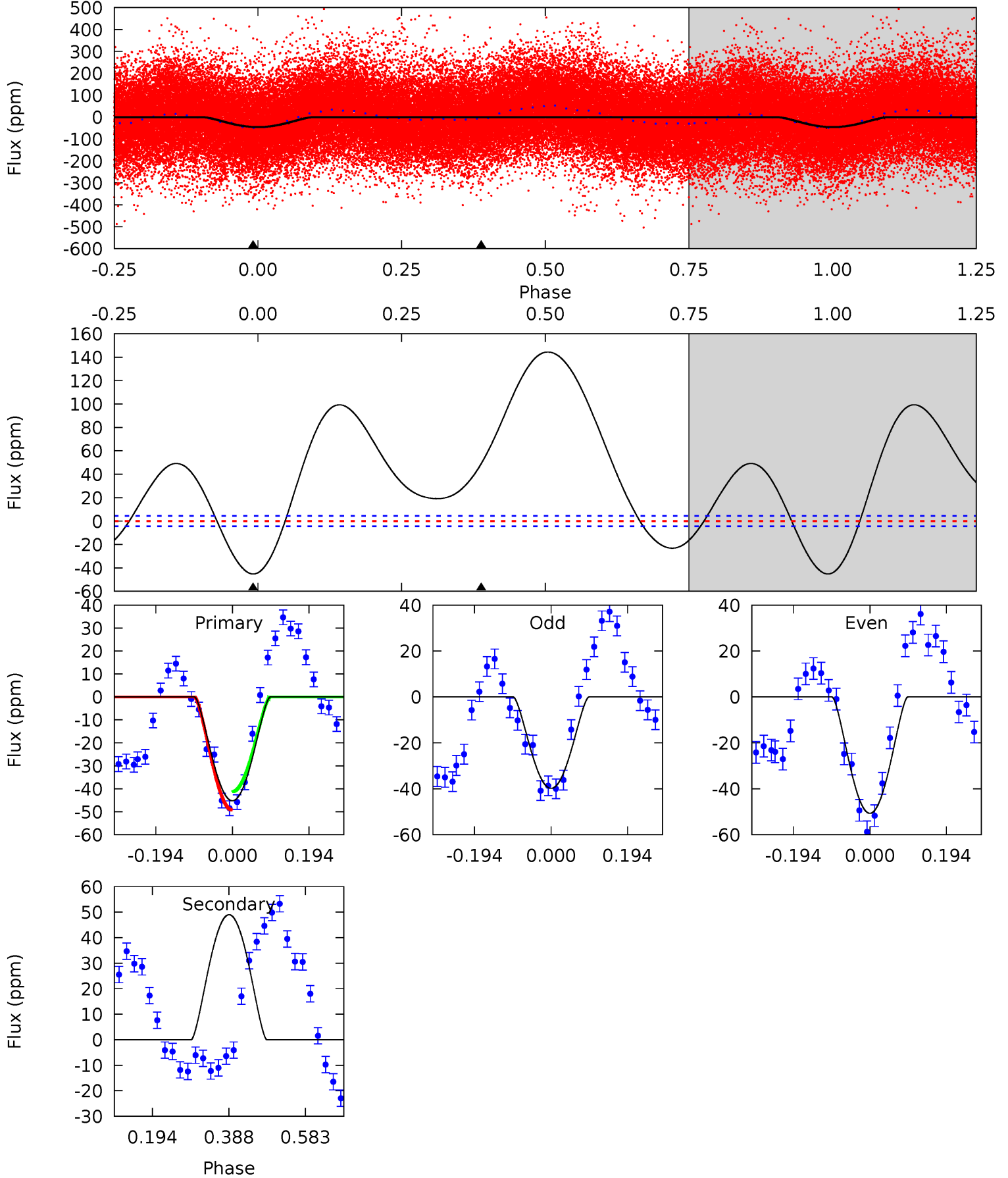
TCE 008194969-01 P= 5.964344 Days $T_0=133.617050$ (BKJD)



DV Model-Shift Uniqueness Test

008194969-01, P = 5.965047 Days, E = 127.537581 Days

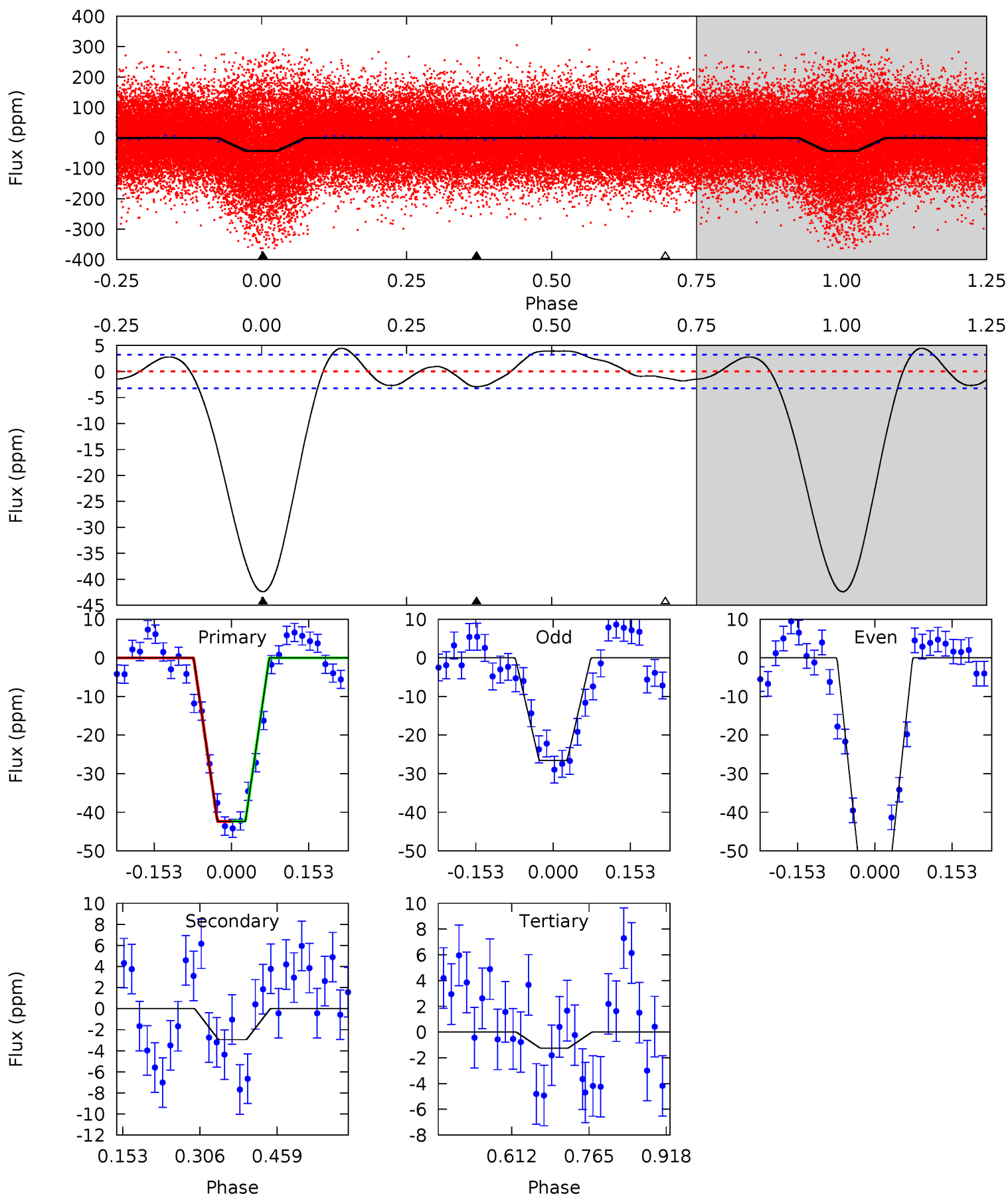
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.0	-48.7	0	0	4.42	1.30	34.1	45.0	45.0	-48.7	-48.7	5.41	1.03	0.76	4.03



Alt Model-Shift Uniqueness Test

008194969-01, P = 5.964344 Days, E = 127.652706 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
58.8	4.08	1.73	0	4.47	1.43	2.60	57.0	58.8	2.35	4.08	21.6	0.97	0.10	0.06



Stellar Parameters For KIC 008194969

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6520^{+181}_{-250}	$4.093^{+0.225}_{-0.164}$	$-0.120^{+0.250}_{-0.300}$	$1.703^{+0.494}_{-0.543}$	$1.316^{+0.182}_{-0.251}$	$0.375^{+0.582}_{-0.174}$
	+3%/-4%	+5%/-4%	+208%/-250%	+29%/-32%	+14%/-19%	+155%/-46%
Source	PHO54	PHO54	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 008194969-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	49 ± 1	$3.03^{+2.61}_{-1.90}$	1958^{+158}_{-165}	-4445^{+855}_{-2324}	$-14.683^{+10.421}_{-86.691}$
Alt.	-3 ± 1	$2.41^{+2.40}_{-1.62}$	1969^{+142}_{-158}	2896^{+1405}_{-1006}	$1.374^{+11.067}_{-1.055}$

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

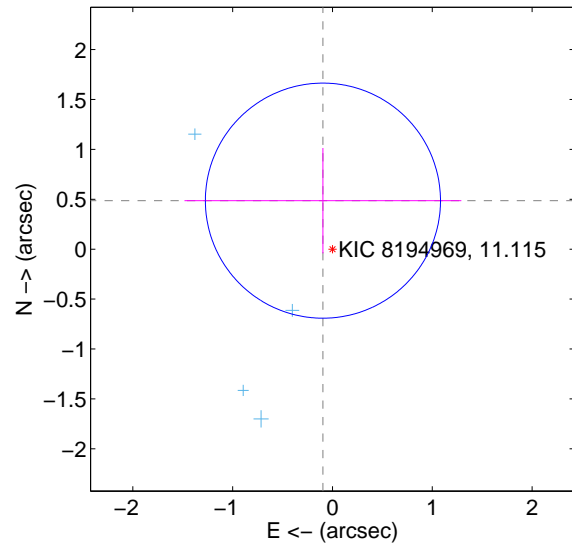
Supplemental centroid analysis for 008194969-01. **Kepler magnitude: 11.12.** Transit SNR 10.23

There are 8 quarters with good PRF difference image offsets

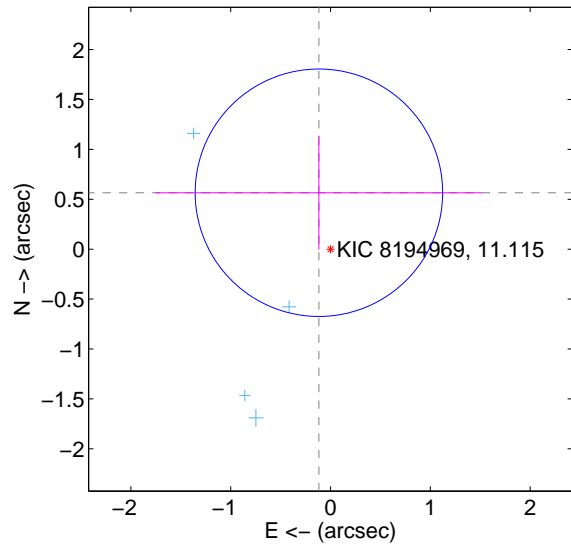
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.495 ± 0.393	1.26	0.096 ± 1.387	0.486 ± 0.528
PRF-fit source offset from KIC position	0.577 ± 0.413	1.40	0.116 ± 1.636	0.565 ± 0.570
photometric centroid source offset	0.35 ± 0.56	0.63	0.31 ± 0.59	-0.16 ± 0.38

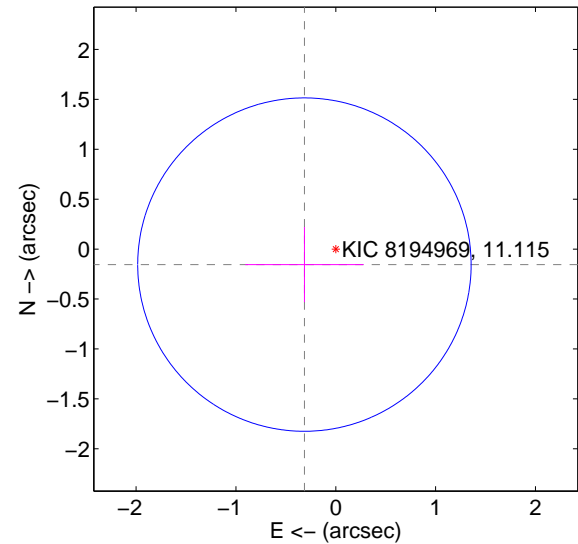
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

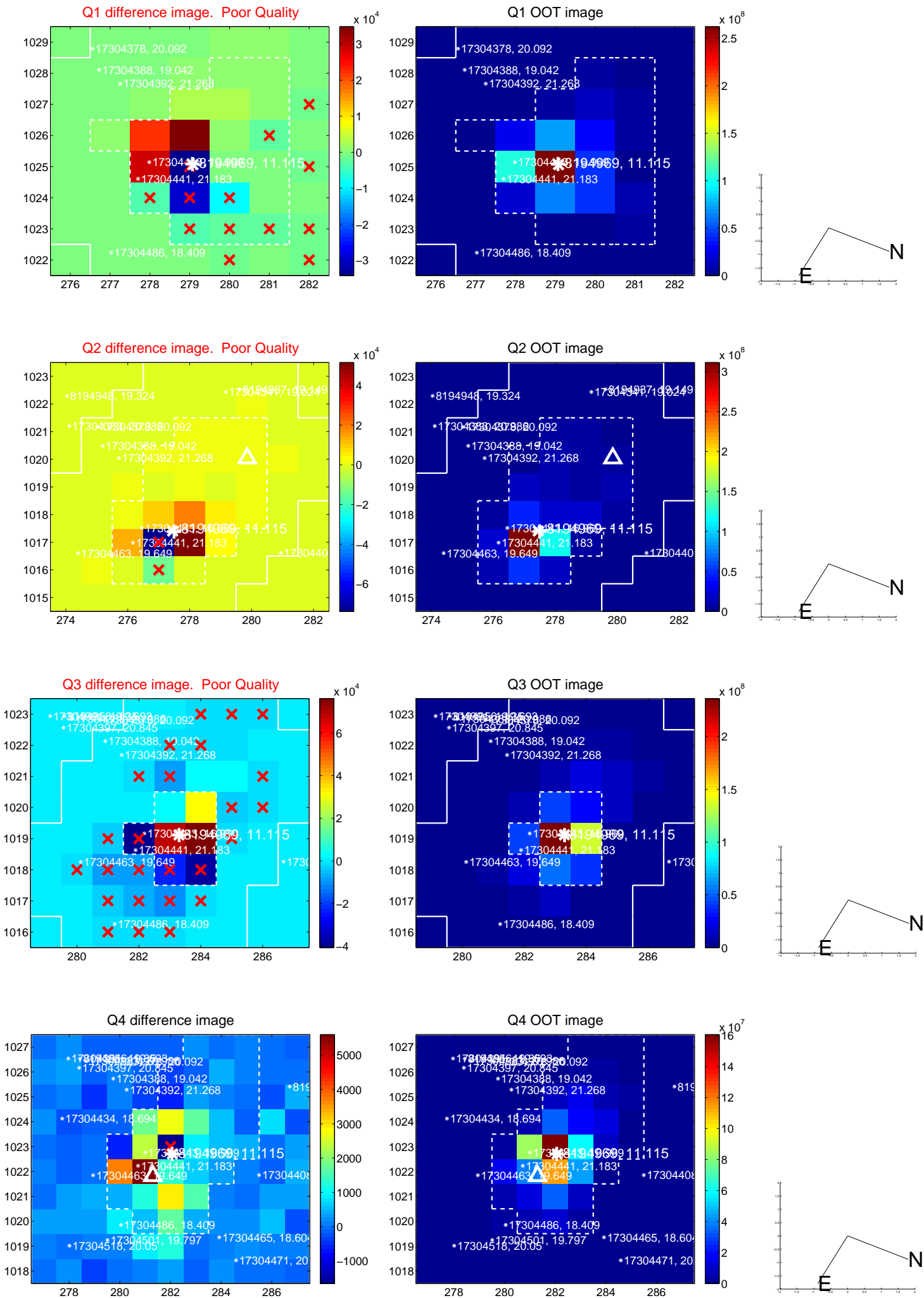


offset from photometric centroids

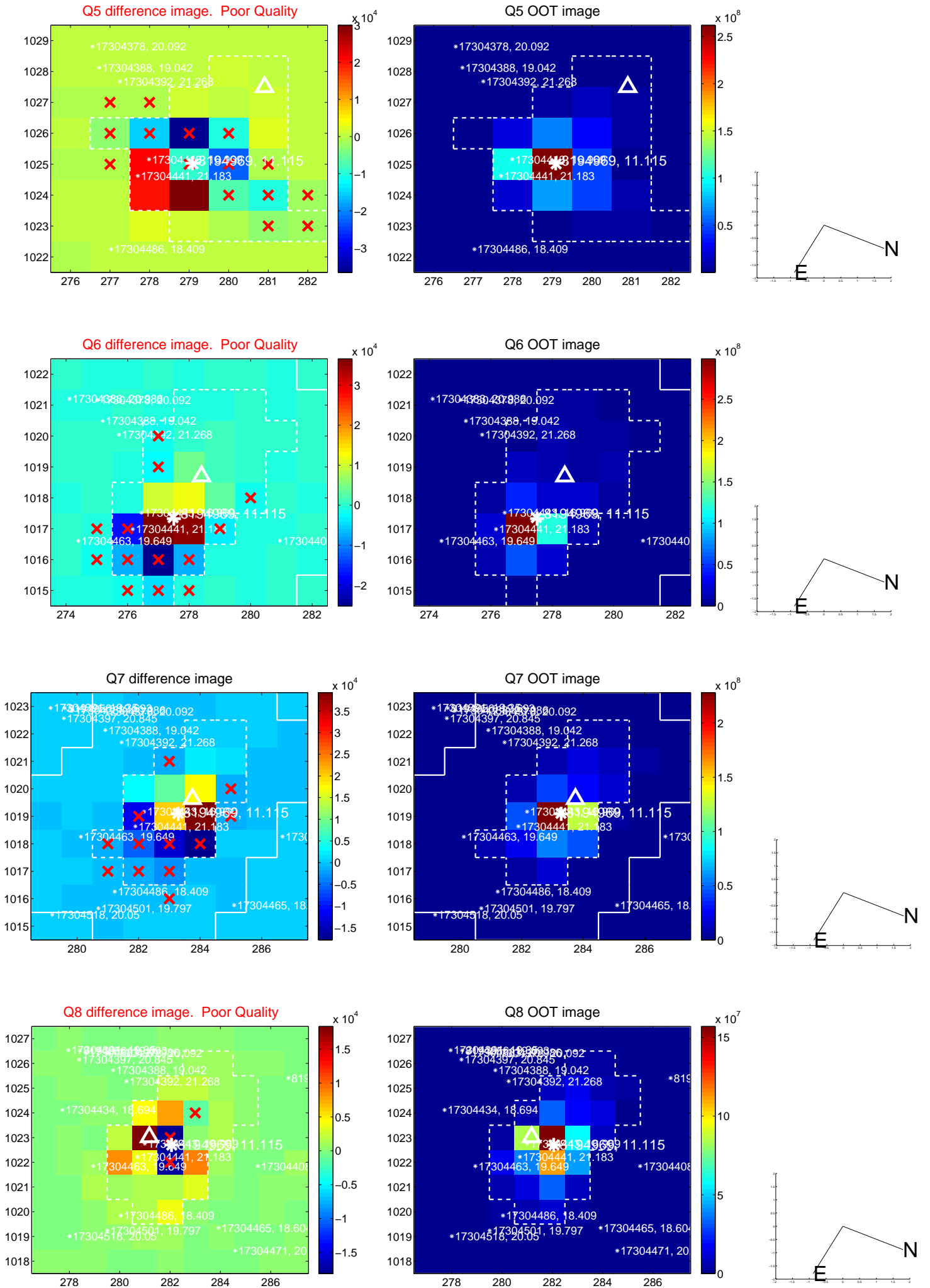


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

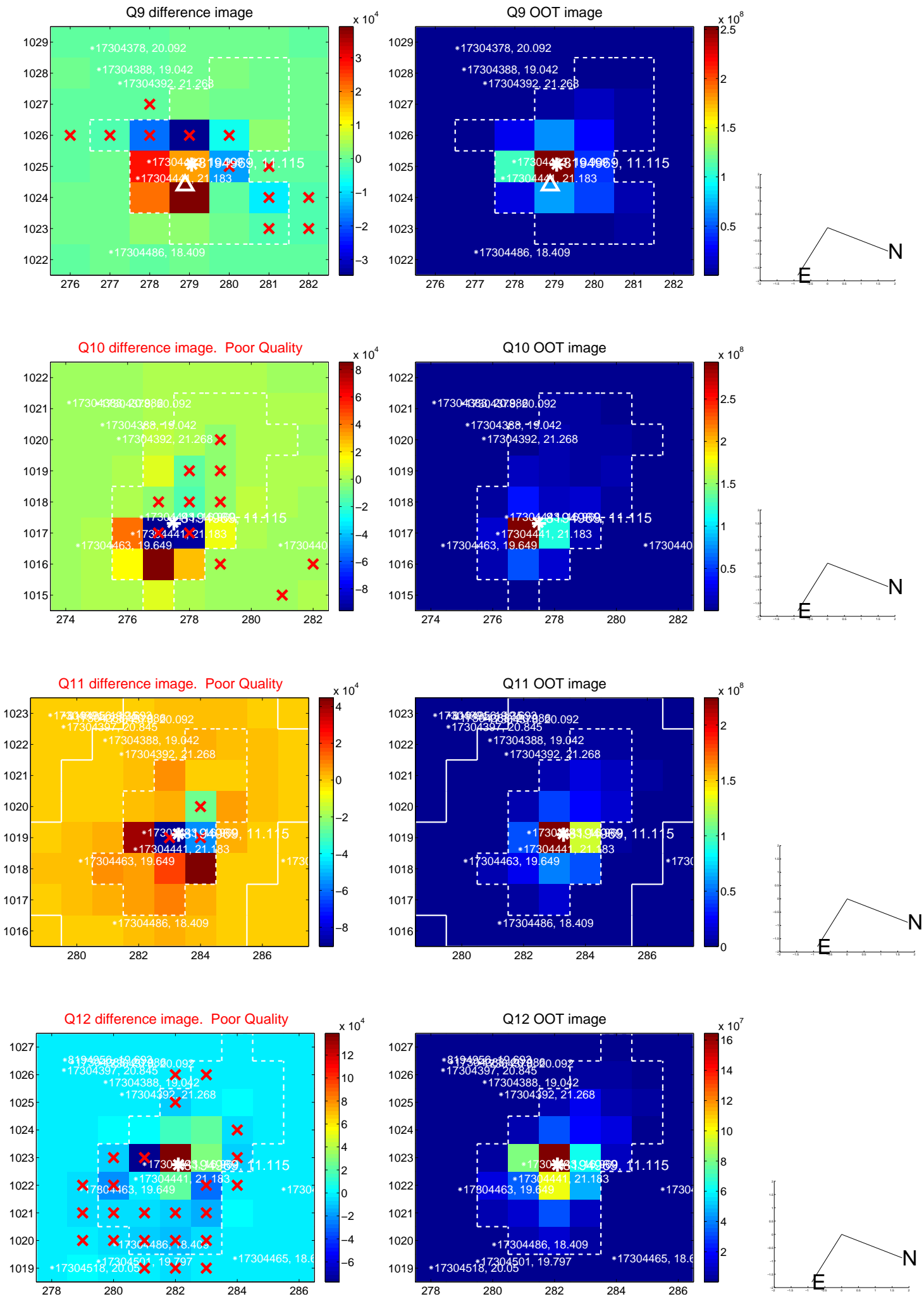
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



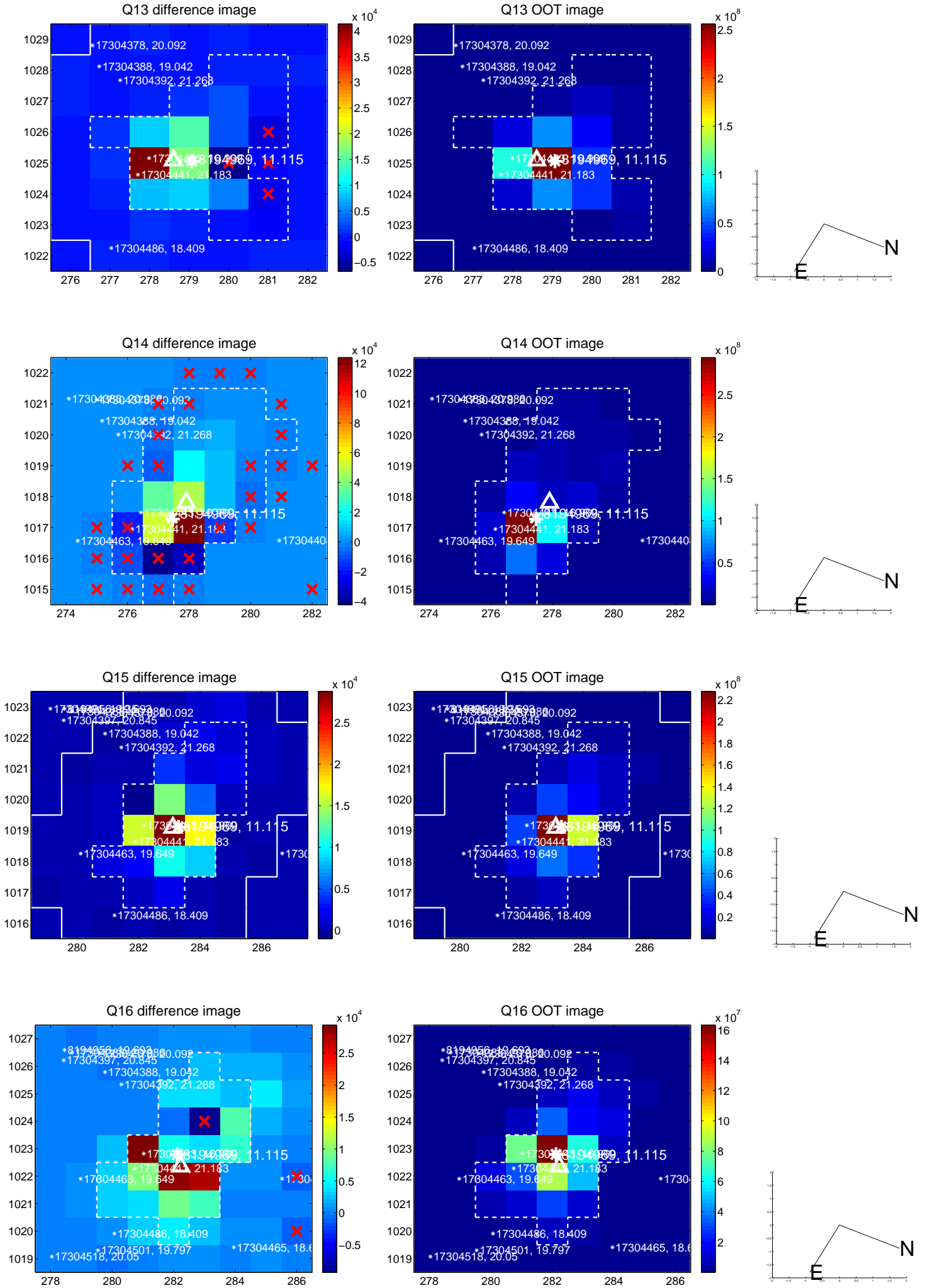
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



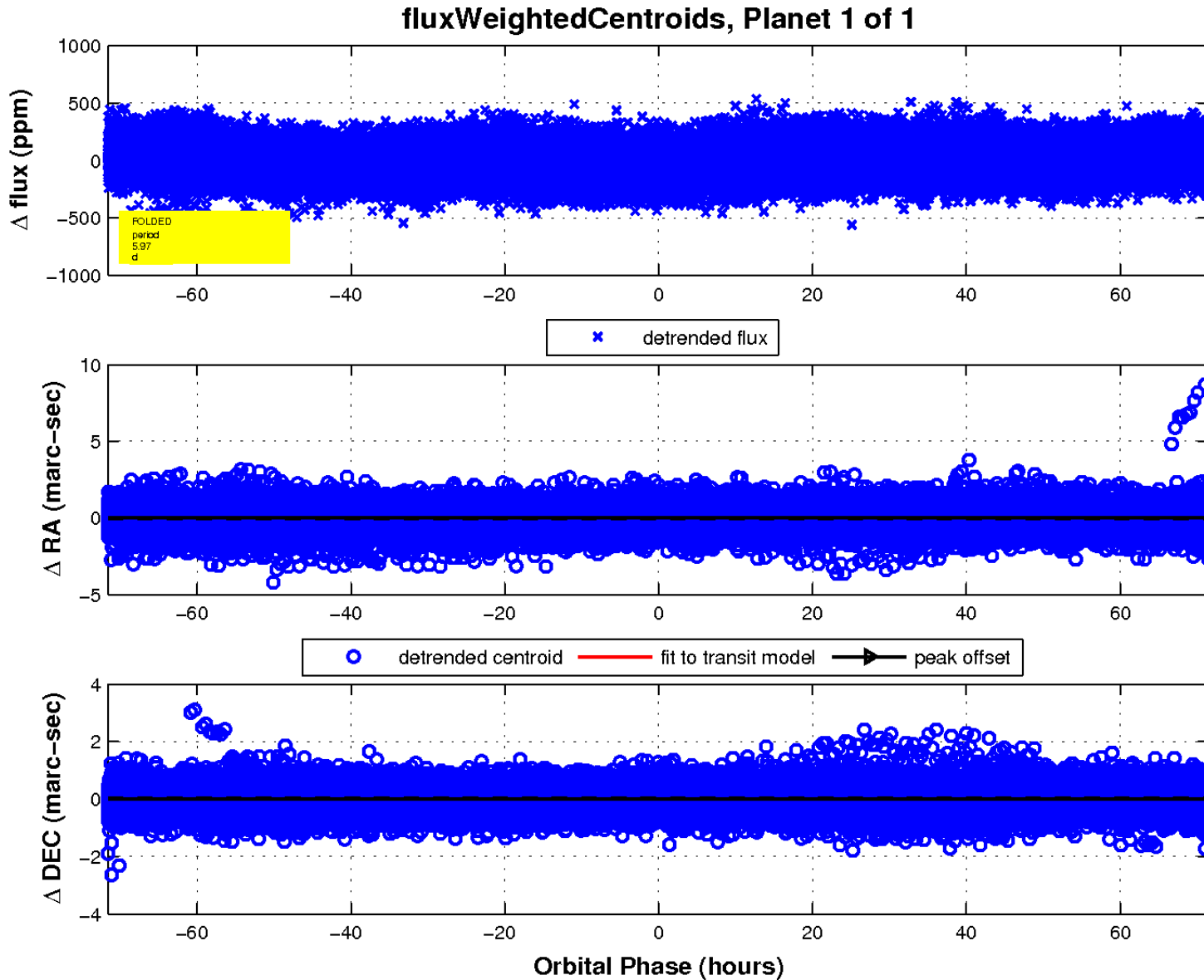
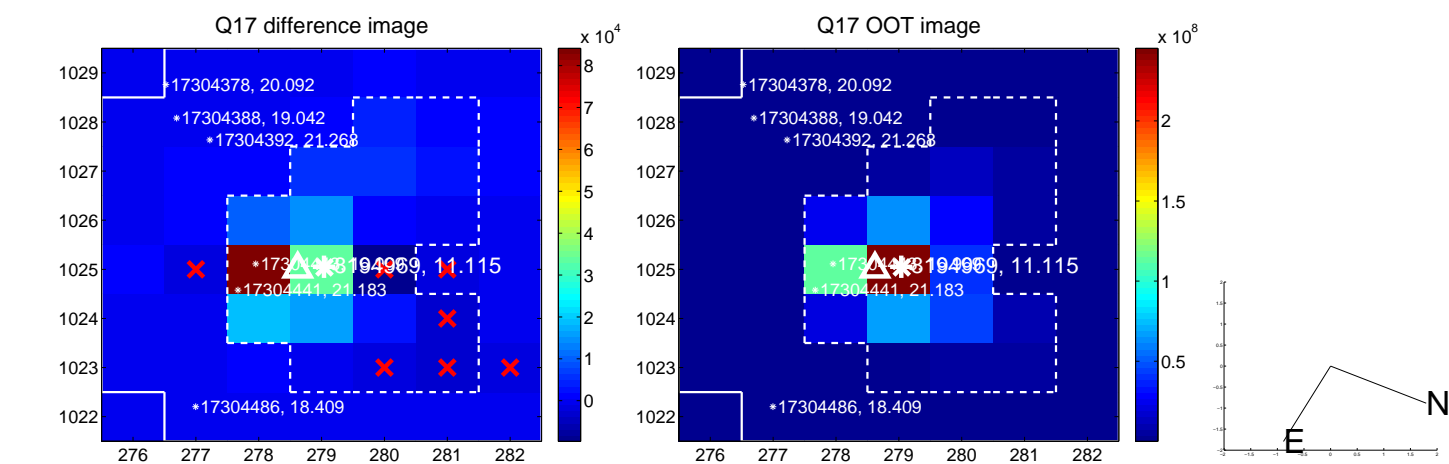
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UKIRT Image

