

KIC 006679504

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})
006679504-01	OBS	7788.01	0.798452	132.053844	97.5	0.790	7.3	7.2	0.73	5575	0.87	2065.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006679504-01	OBS	FP	0.02	1	0	0	0	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.

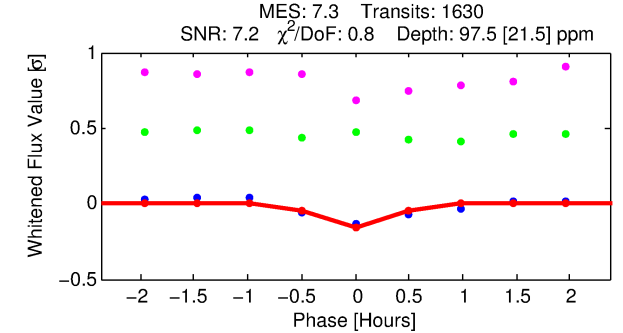
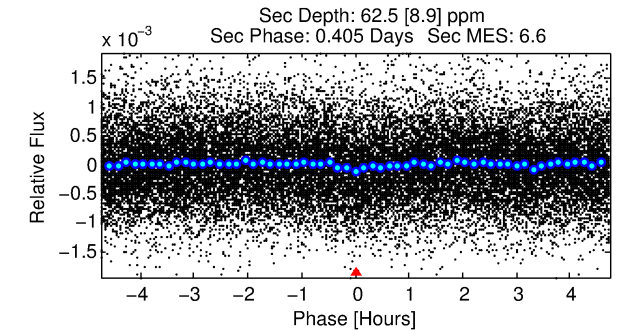
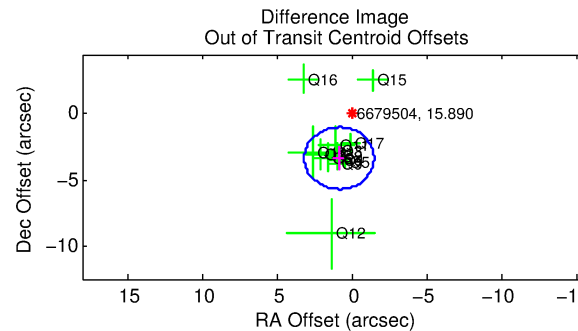
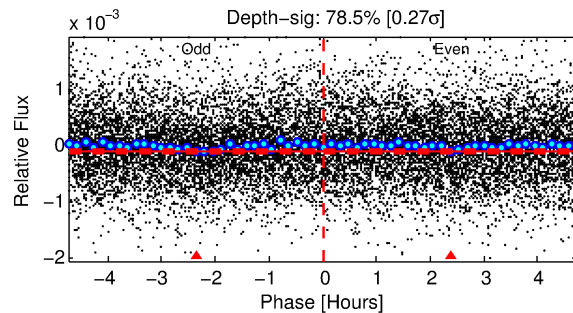
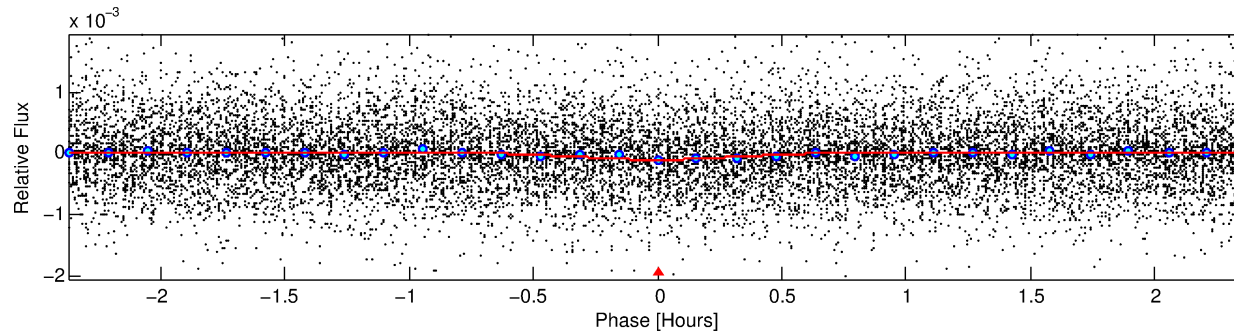
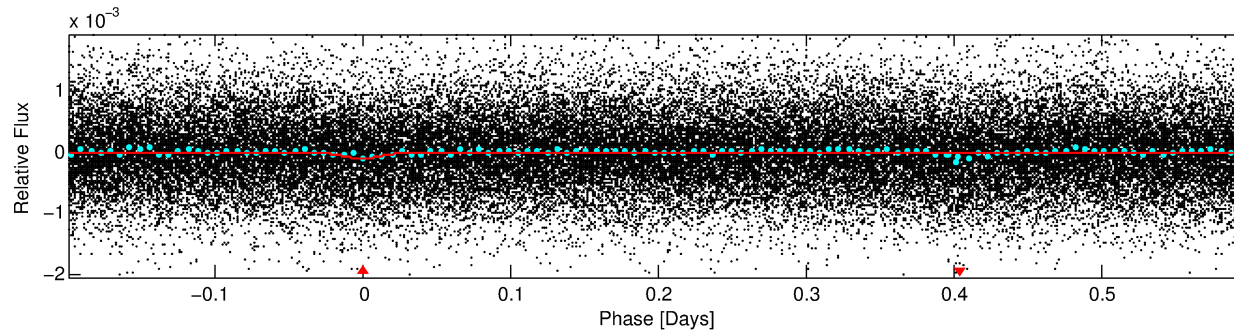
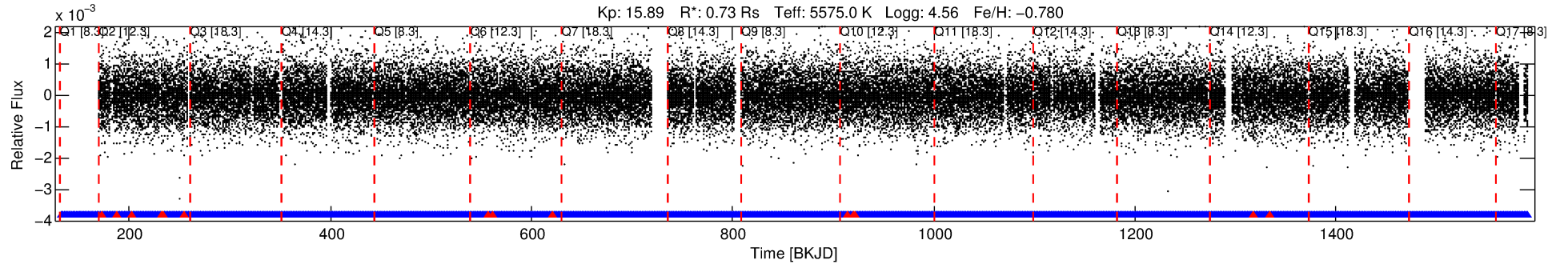
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006679504-01

No Significant Match Found

DV One-Page Summary

KIC: 6679504 Candidate: 1 of 1 Period: 0.798 d



DV Fit Results:

Period = 0.79845 [0.00001] d
Epoch = 132.0538 [0.0021] BKJD
Rp/R* = 0.0109 [0.0055]
a/R* = 3.65 [8.45]
b = 0.90 [0.53]
Seff = 2065.12 [439.41]
Teff = 1719 [91] K
Rp = 0.87 [0.46] Re
a = 0.0150 [0.0018] AU
Ag = 10.25 [10.65] [0.87 σ]
Teffp = 4755 [1229] K [2.46 σ]

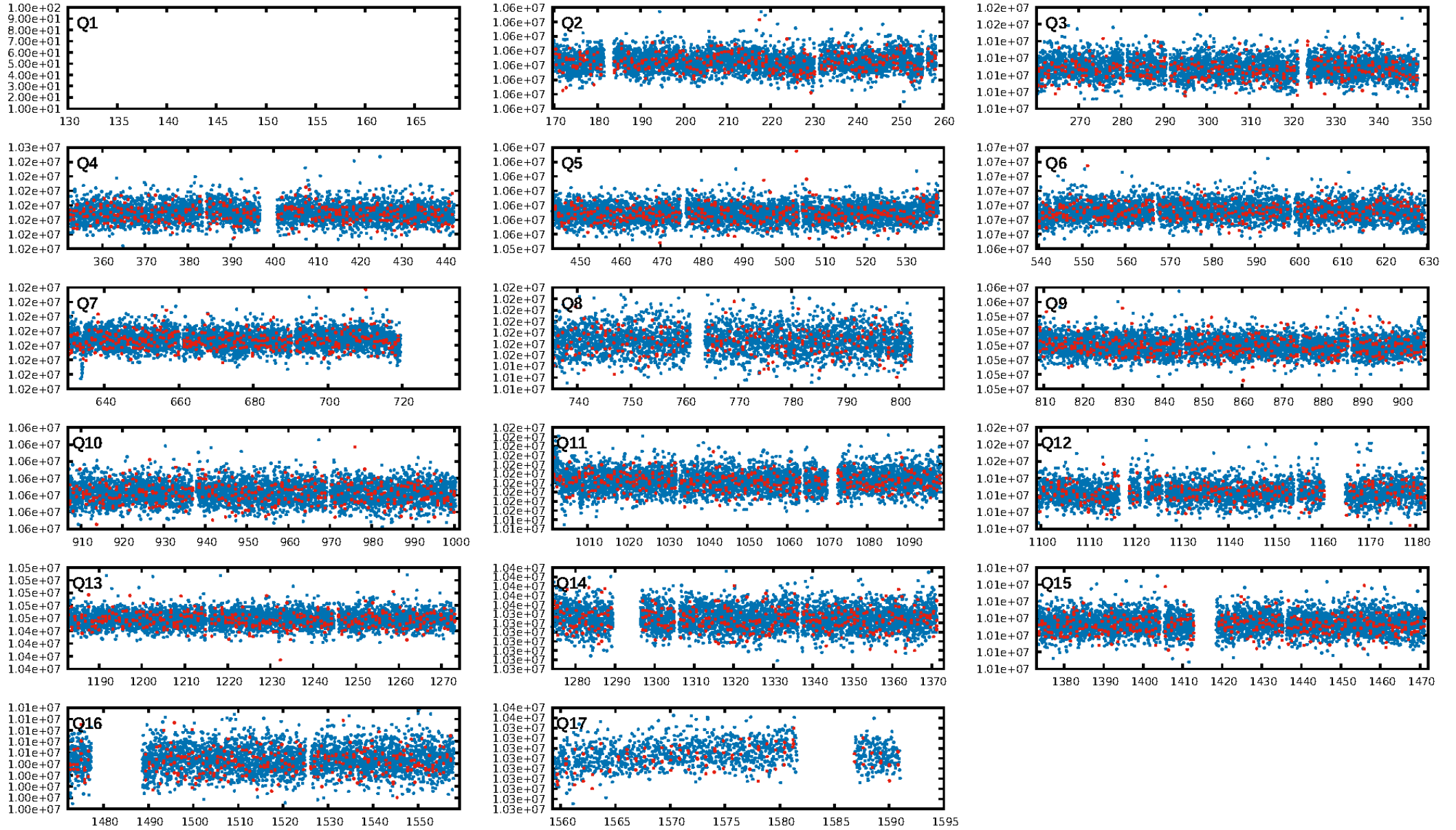
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.16e-14
RollingBand-fgm: 0.99 [1582/1596]
GhostDiagnostic-chr: 0.5804
Centroid-sig: 0.0%
Centroid-so: 7.683 arcsec [3.77 σ]
OotOffset-rm: 3.465 arcsec [4.44 σ]
KicOffset-rm: 3.386 arcsec [4.47 σ]
OotOffset-st: 3/3/3/4 [13]
KicOffset-st: 3/3/3/4 [13]
DiffImageQuality-fgm: 0.62 [8/13]
DiffImageOverlap-fno: 1.00 [16/16]

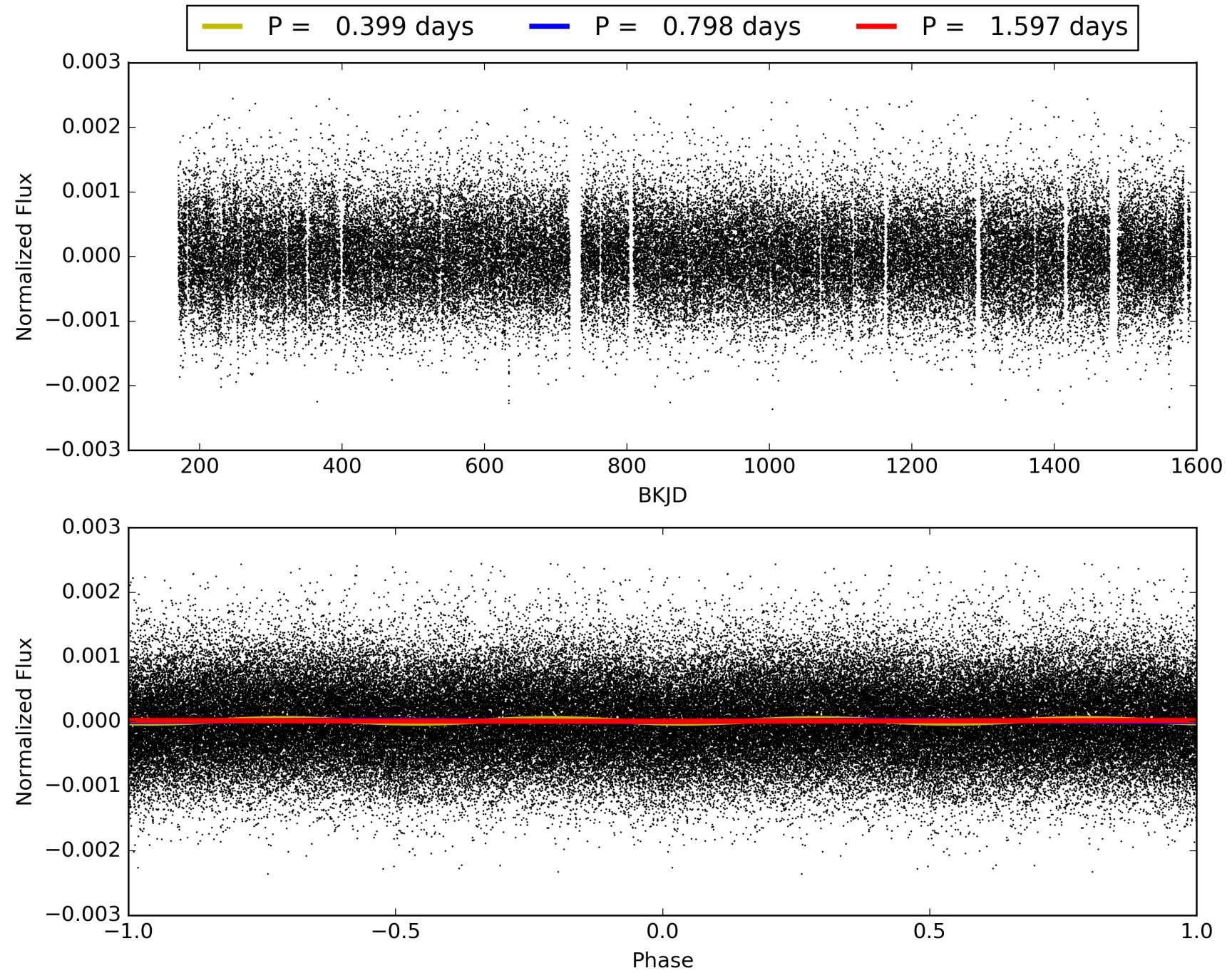
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:33:30 Z

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

TCE 006679504-01, PDC Light Curves

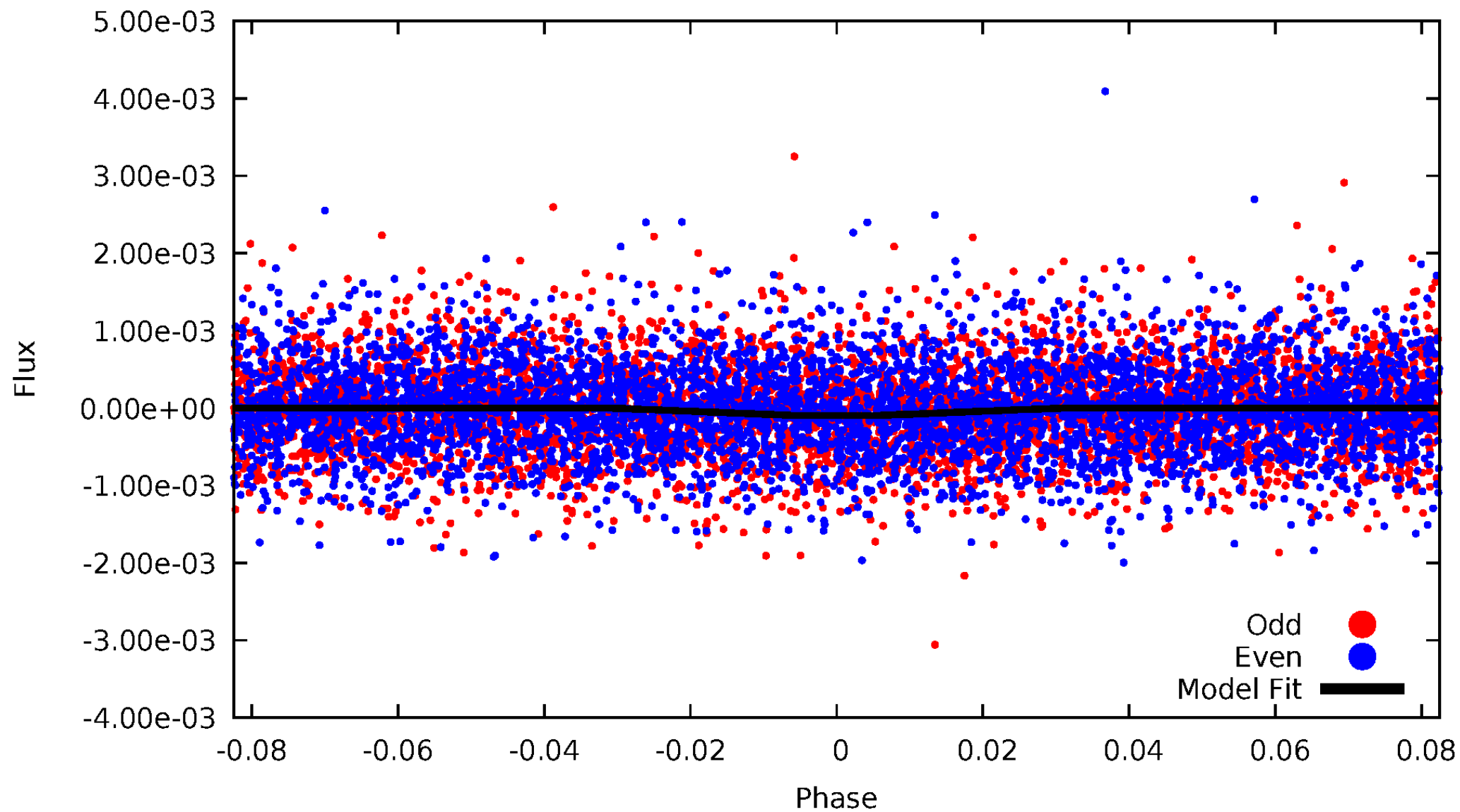


TCE 006679504-01



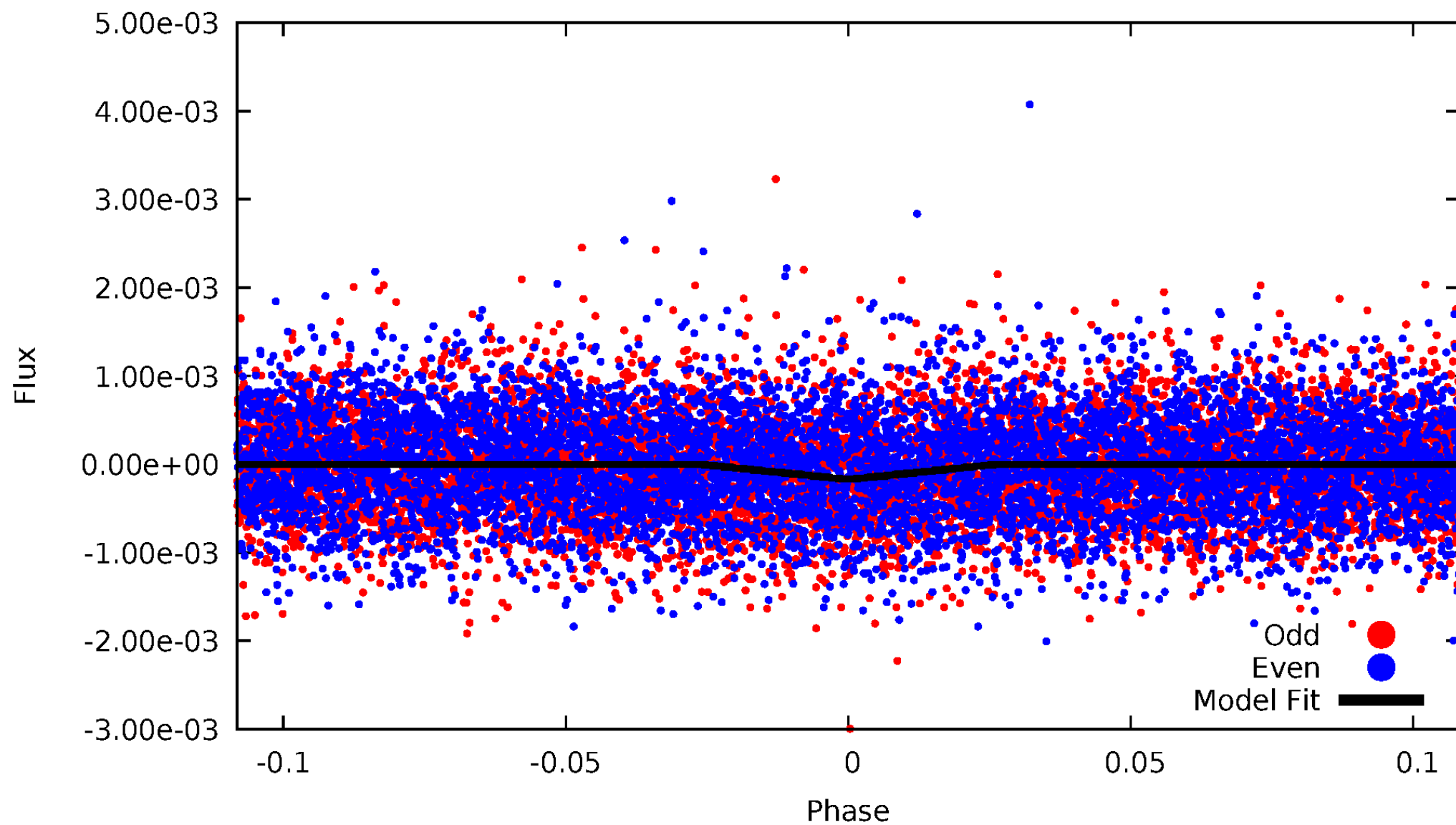
DV Odd/Even

TCE 006679504-01



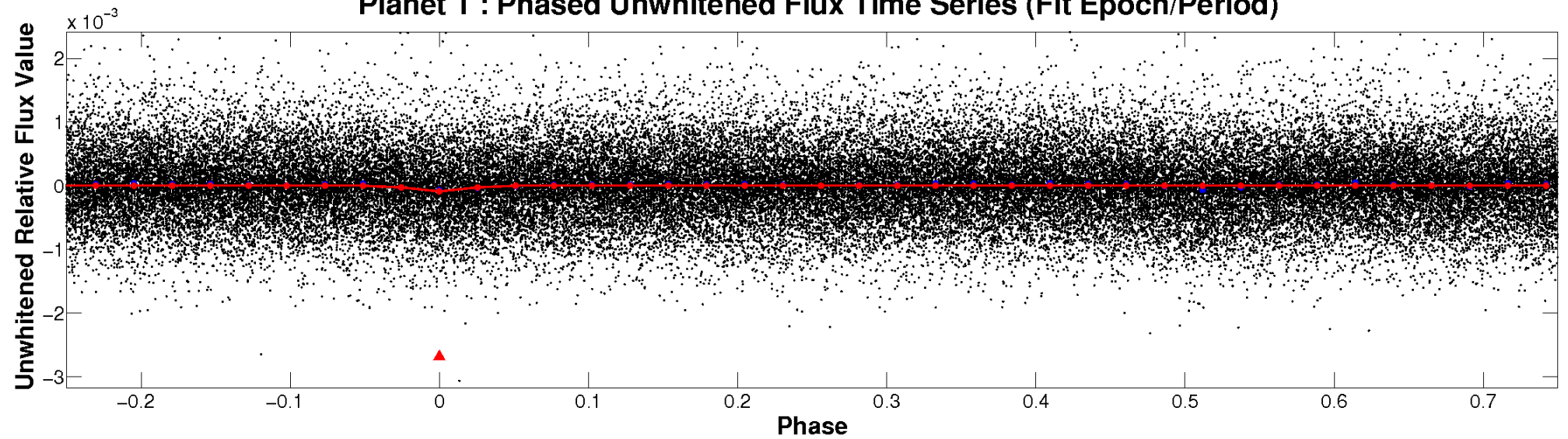
ALT Odd/Even

TCE 006679504-01

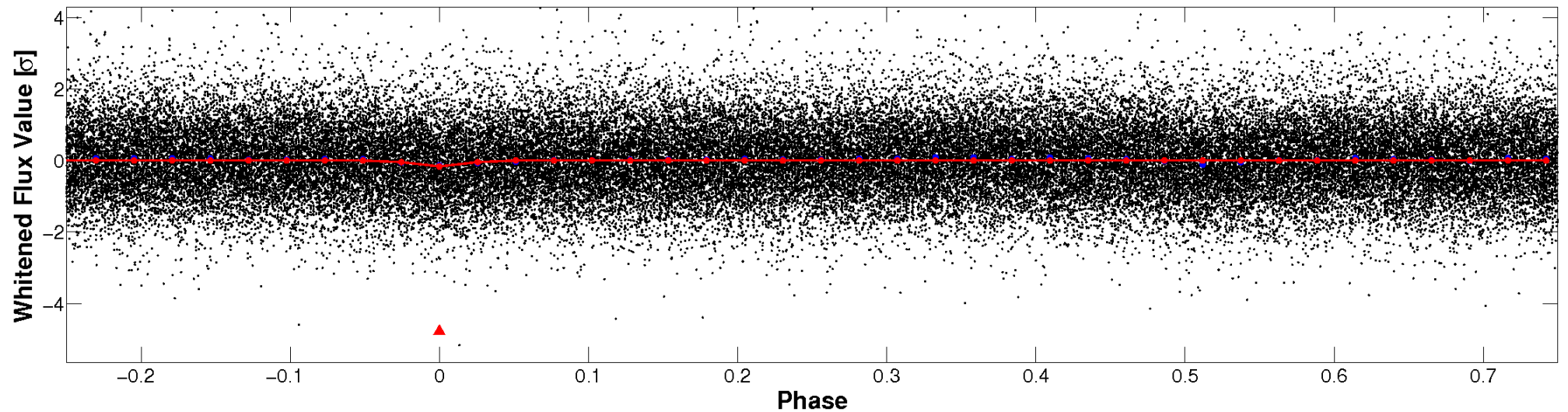


Non-Whitened Vs. Whitened Light Curve

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

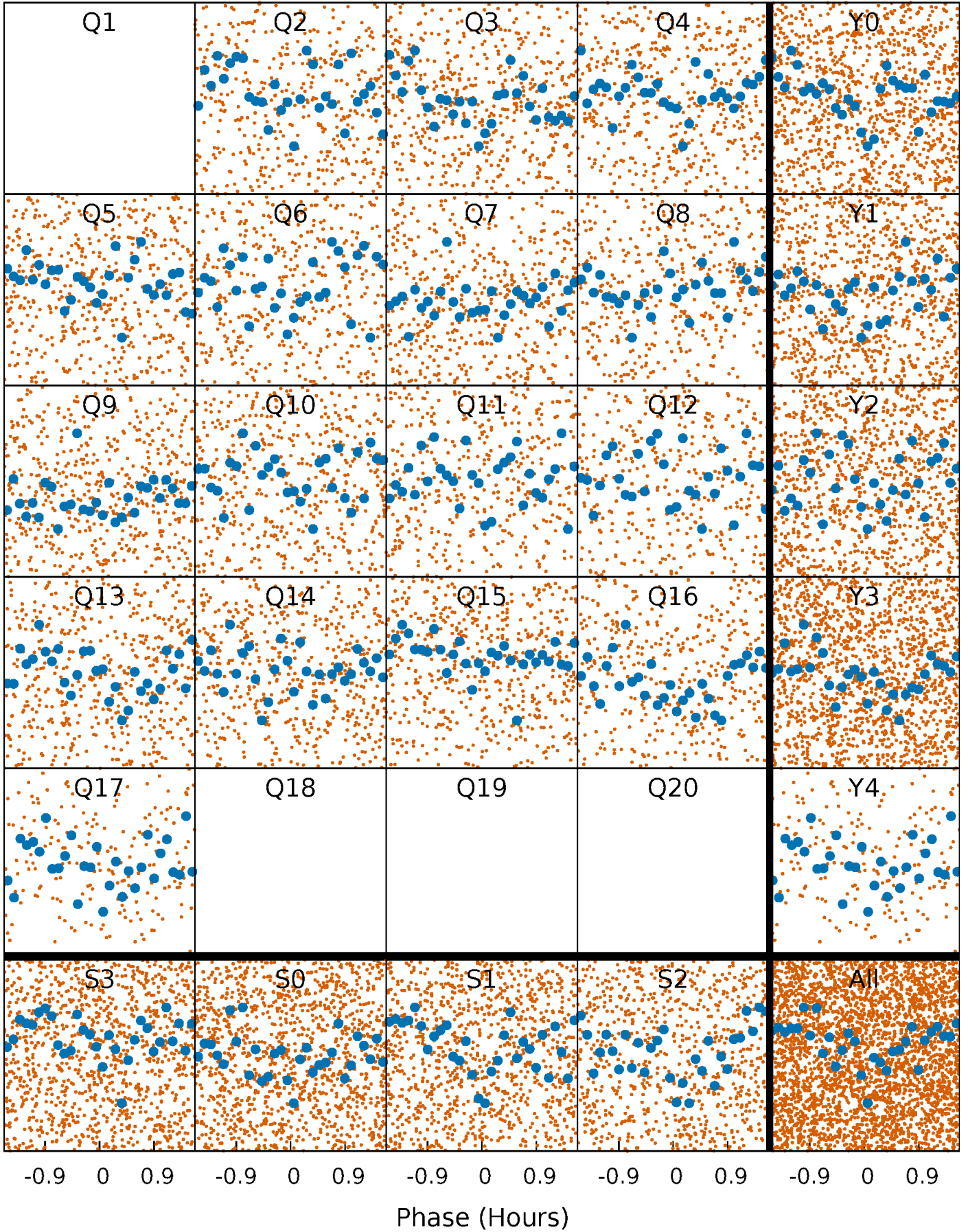


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



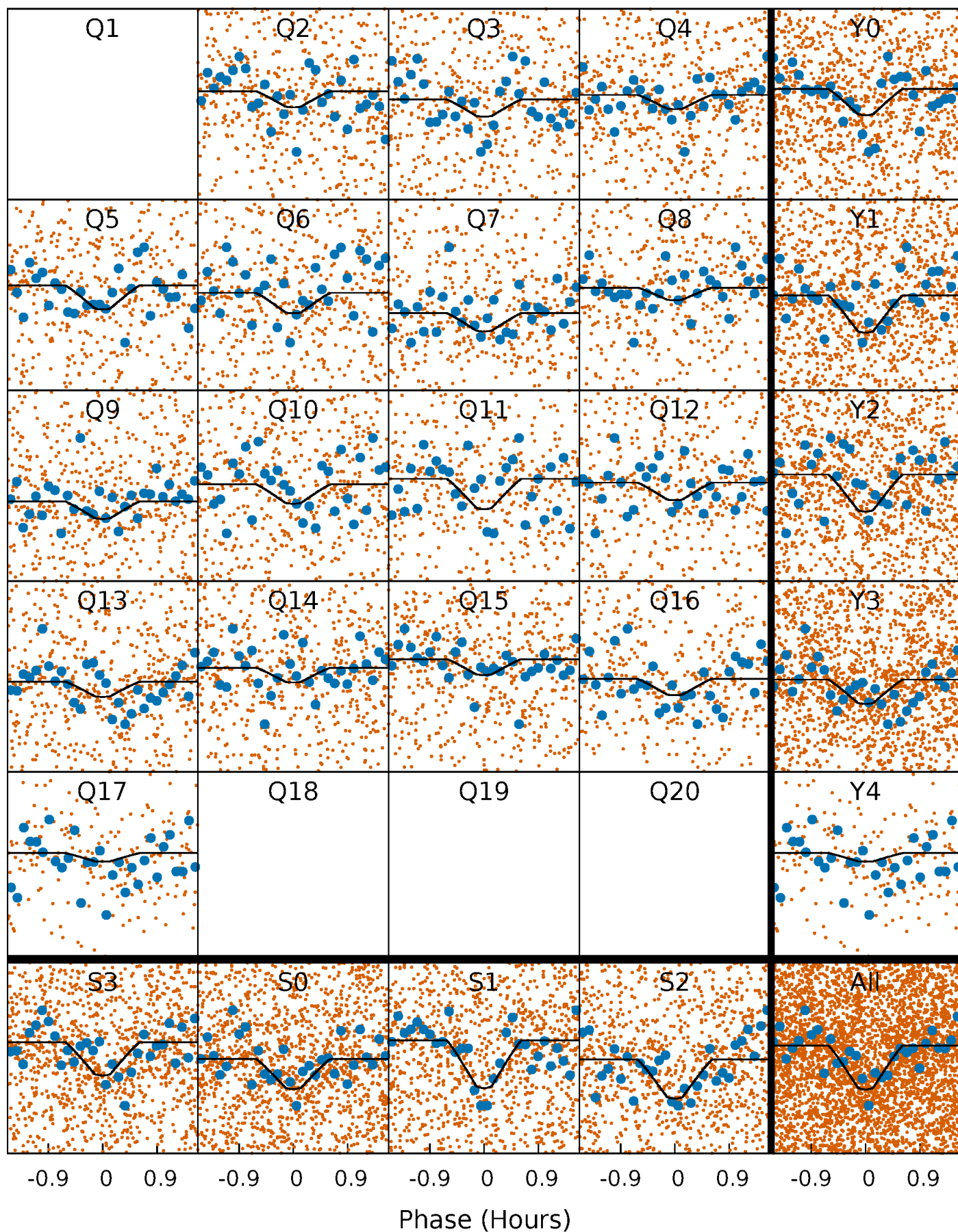
PDC Quarter-Phased Transit Curves

TCE 006679504-01 P= 0.798452 Days $T_0=132.053844$ (BKJD)



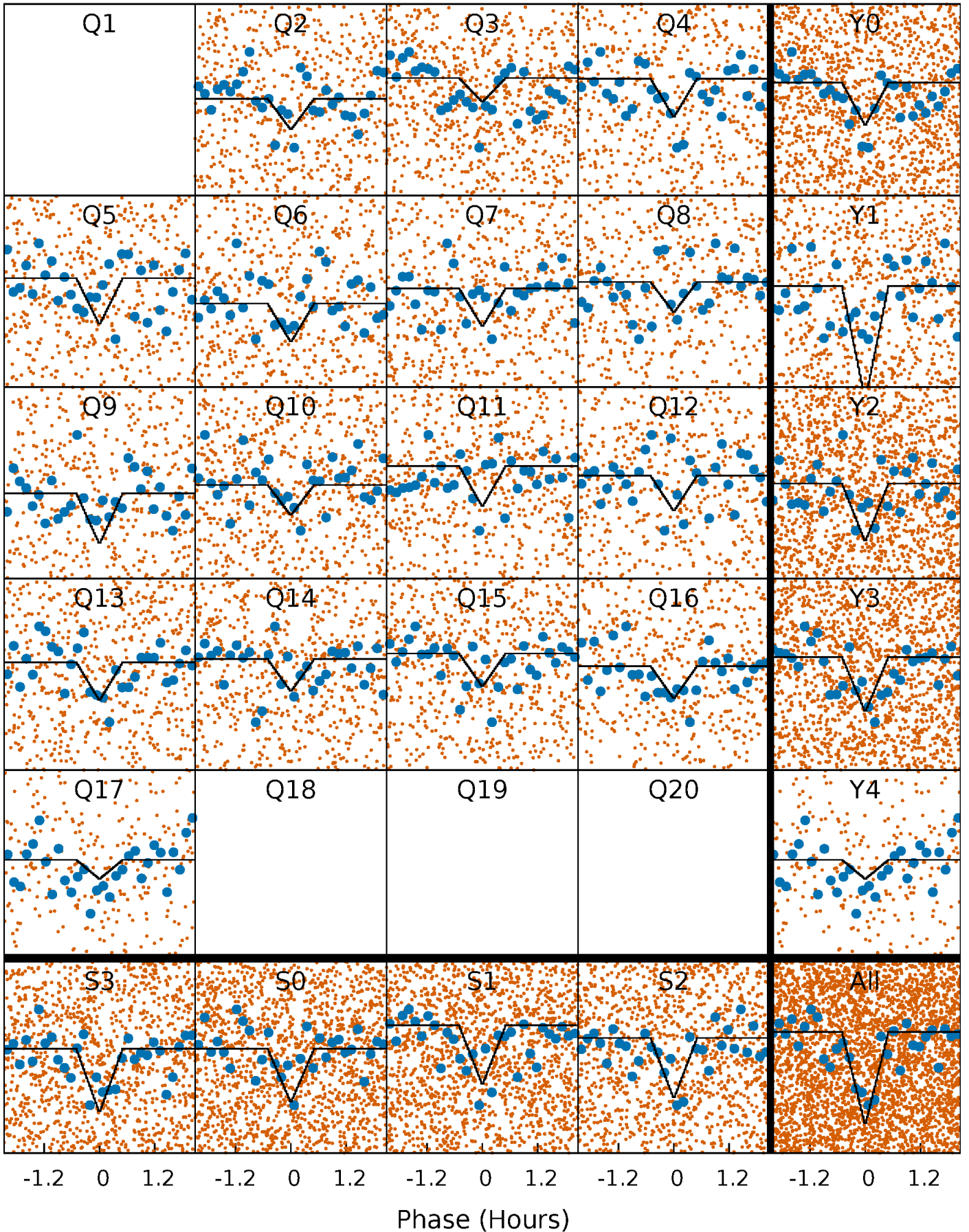
DV Quarter-Phased Transit Curves

TCE 006679504-01 P= 0.798452 Days $T_0=132.053844$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

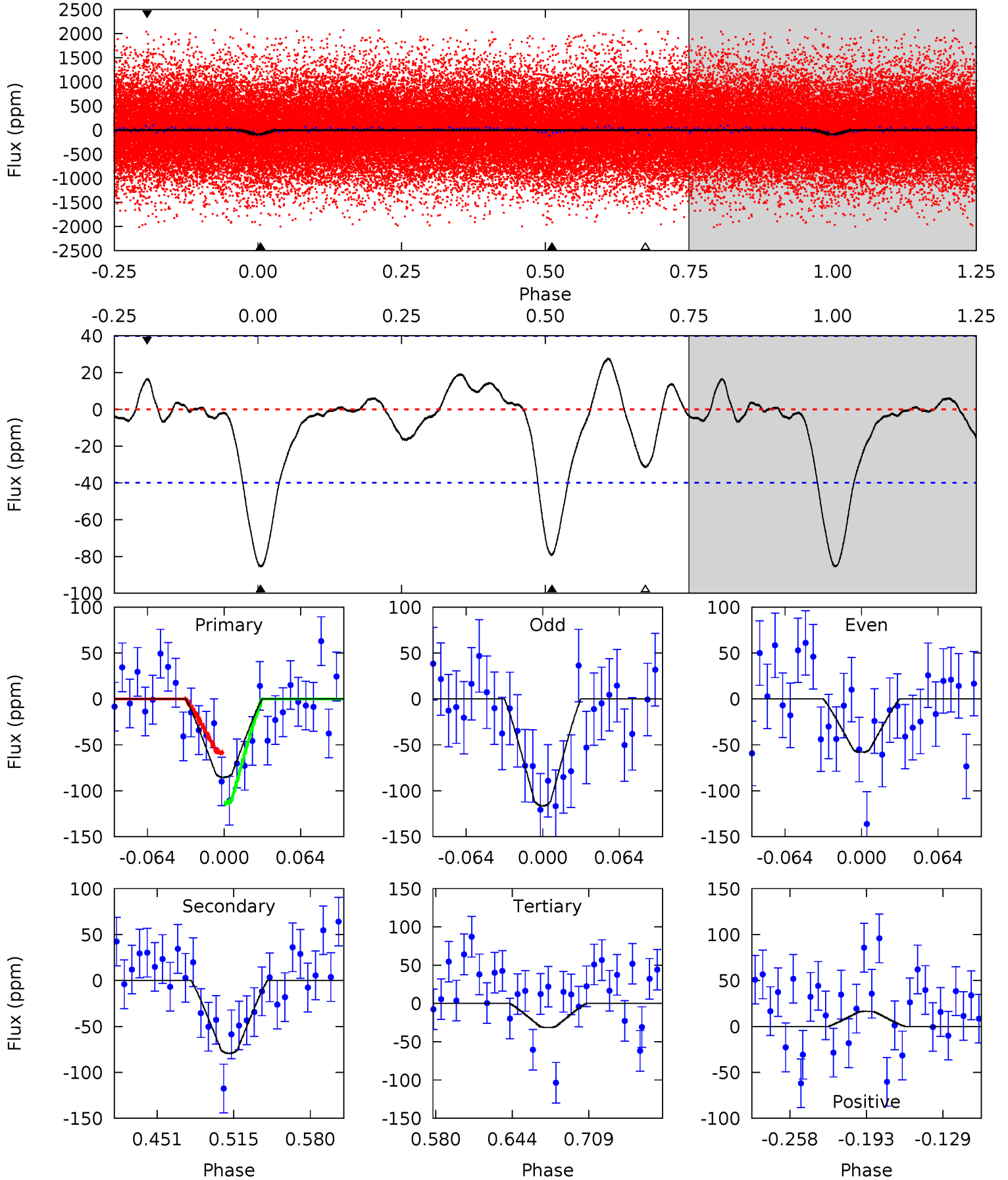
TCE 006679504-01 P= 0.798459 Days $T_0=132.054069$ (BKJD)



DV Model-Shift Uniqueness Test

006679504-01, P = 0.798452 Days, E = 132.053844 Days

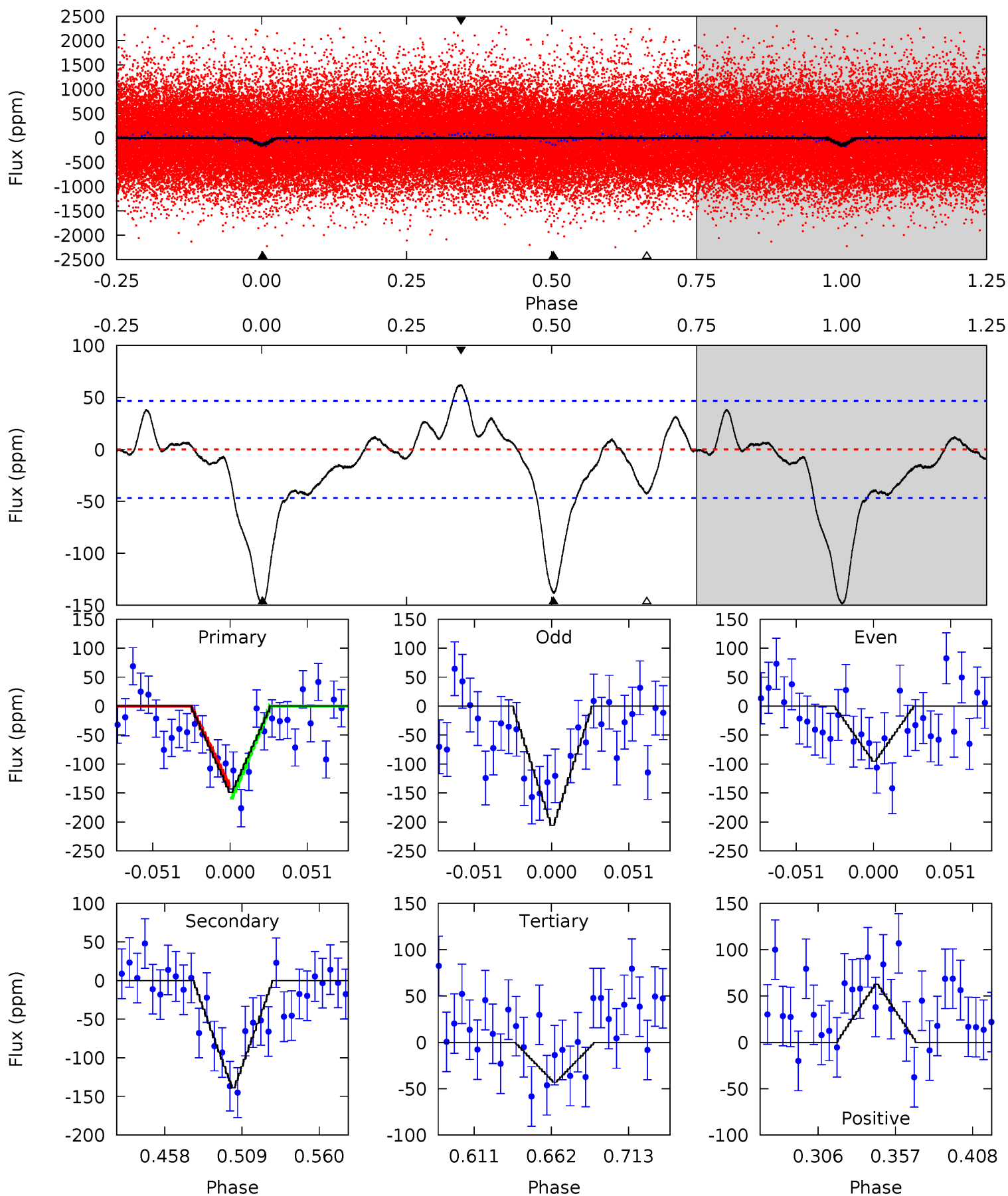
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.98	9.25	3.67	1.93	4.66	1.85	1.29	6.31	8.05	5.58	7.32	3.41	0.82	0.24	3.24



Alt Model-Shift Uniqueness Test

006679504-01, P = 0.798459 Days, E = 132.054069 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	14.0	4.34	6.31	4.70	1.95	2.22	10.7	8.70	9.66	7.69	5.57	0.89	0.30	1.02



Stellar Parameters For KIC 006679504

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5575^{+183}_{-166}	$4.557^{+0.081}_{-0.090}$	$-0.780^{+0.300}_{-0.300}$	$0.733^{+0.104}_{-0.076}$	$0.706^{+0.084}_{-0.039}$	$2.528^{+0.819}_{-0.735}$
	+3%/-3%	+2%/-2%	+38%/-38%	+14%/-10%	+12%/-6%	+32%/-29%
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 006679504-01 / KOI 7788.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-79 ± 9	$0.90^{+0.45}_{-0.41}$	2409^{+109}_{-112}	4984^{+1831}_{-715}	12^{+31}_{-7}
Alt.	-139 ± 10	$1.01^{+0.47}_{-0.42}$	2400^{+110}_{-100}	5344^{+1802}_{-782}	17^{+32}_{-9}

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 $A_{obs} \gg 1.0$

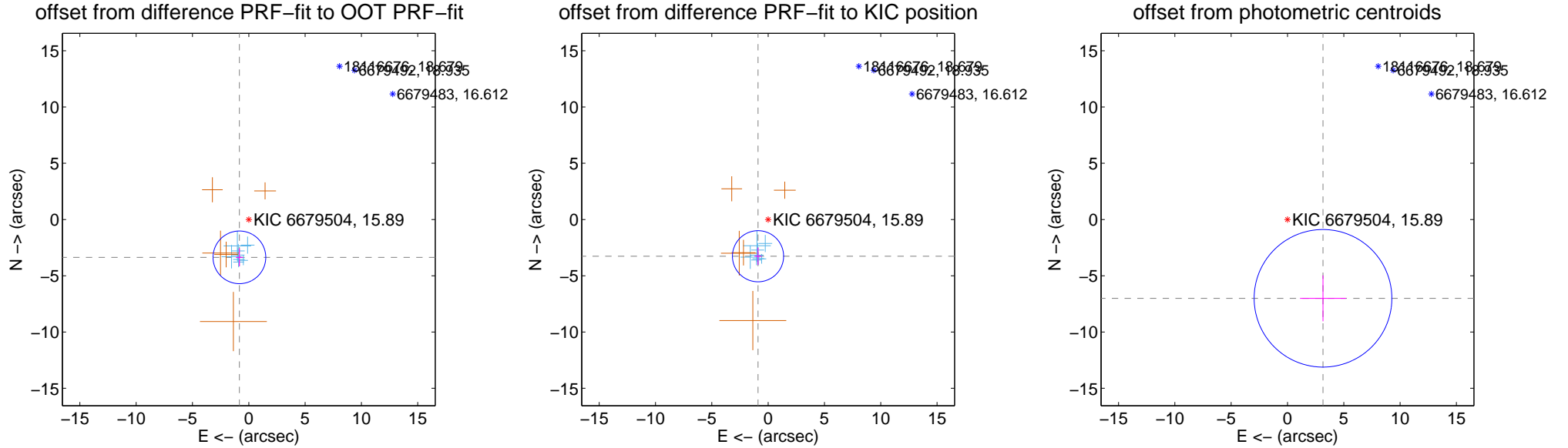
DV Centroid Data

Supplemental centroid analysis for 006679504-01. Kepler magnitude: 15.89. Transit SNR 7.25

There are 8 quarters with good PRF difference image offsets

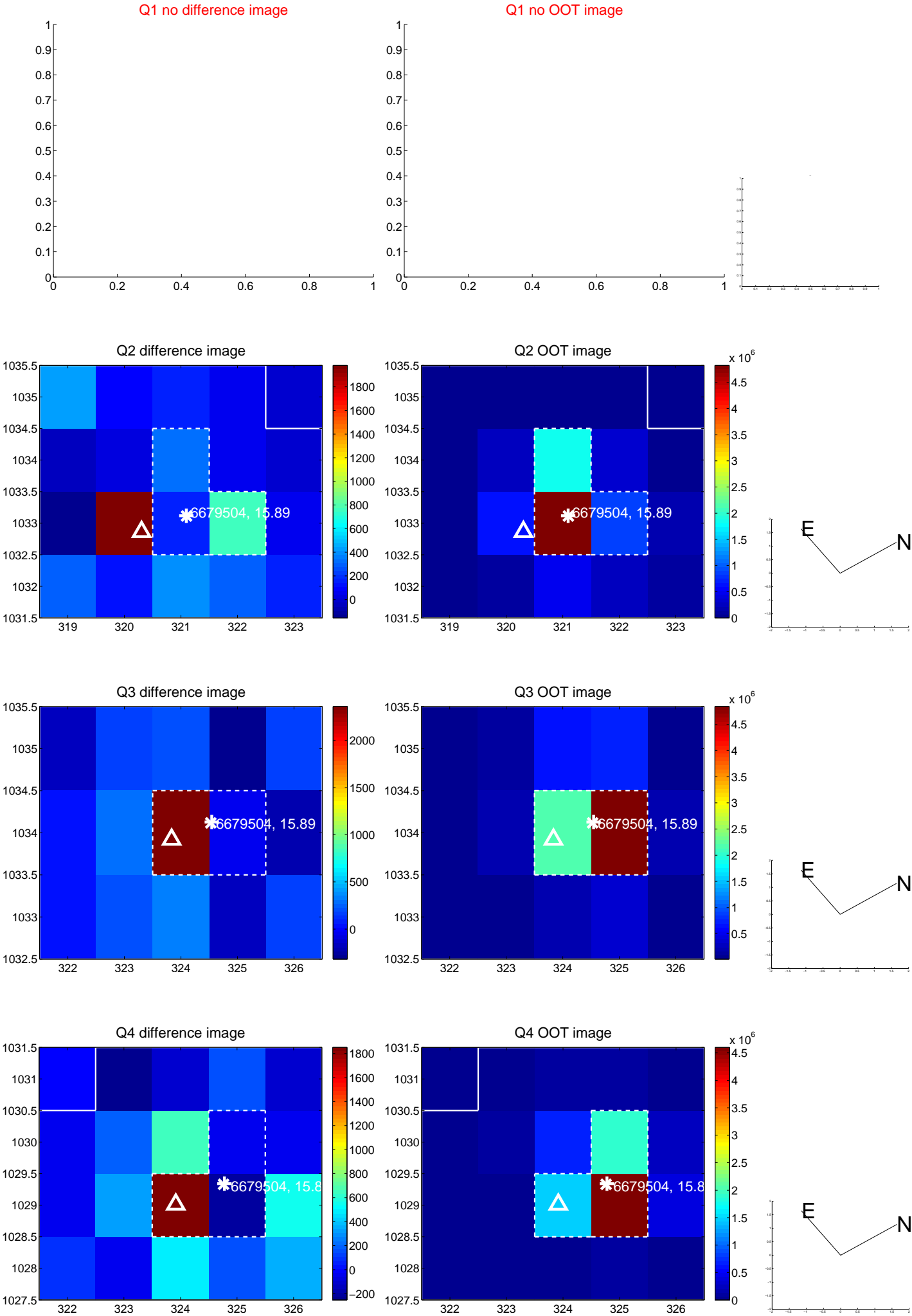
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.465 ± 0.780	4.44	0.834 ± 0.309	-3.363 ± 0.791
PRF-fit source offset from KIC position	3.386 ± 0.757	4.47	0.898 ± 0.323	-3.265 ± 0.764
photometric centroid source offset	7.68 ± 2.04	3.77	-3.15 ± 2.04	-7.01 ± 2.04

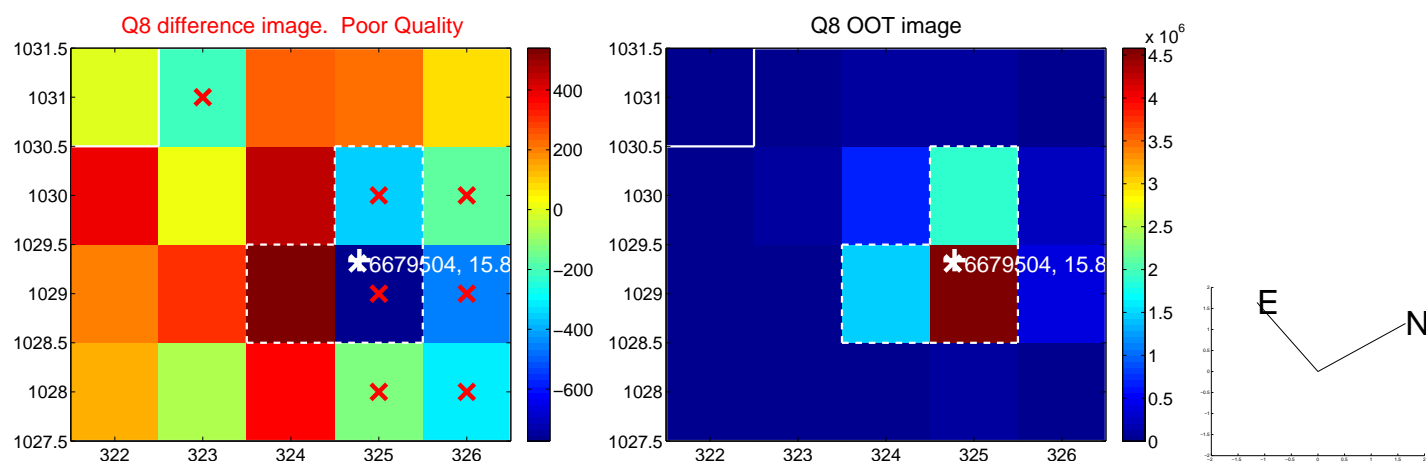
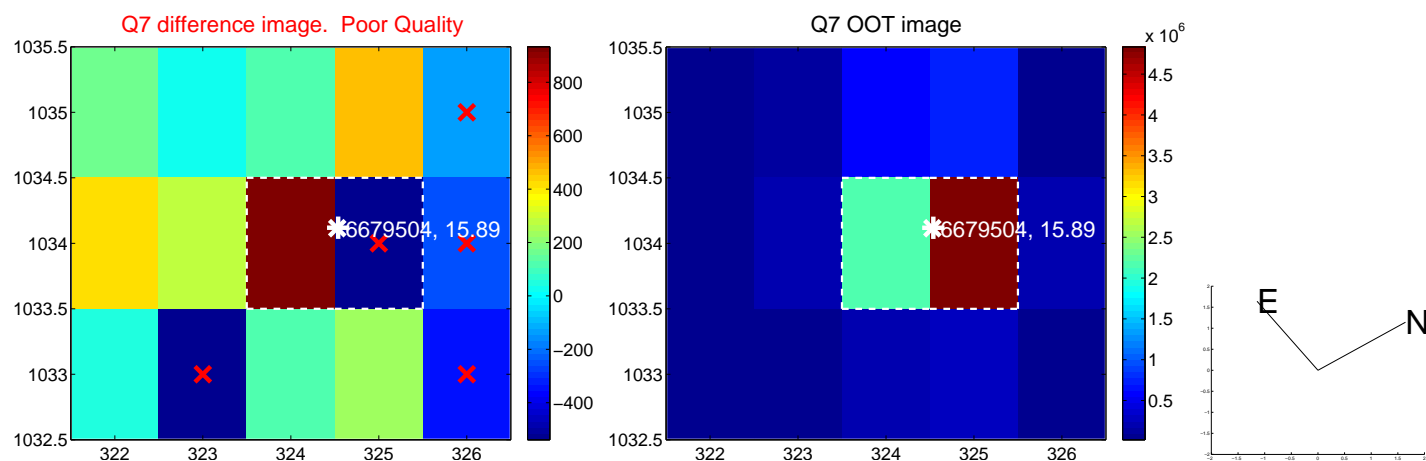
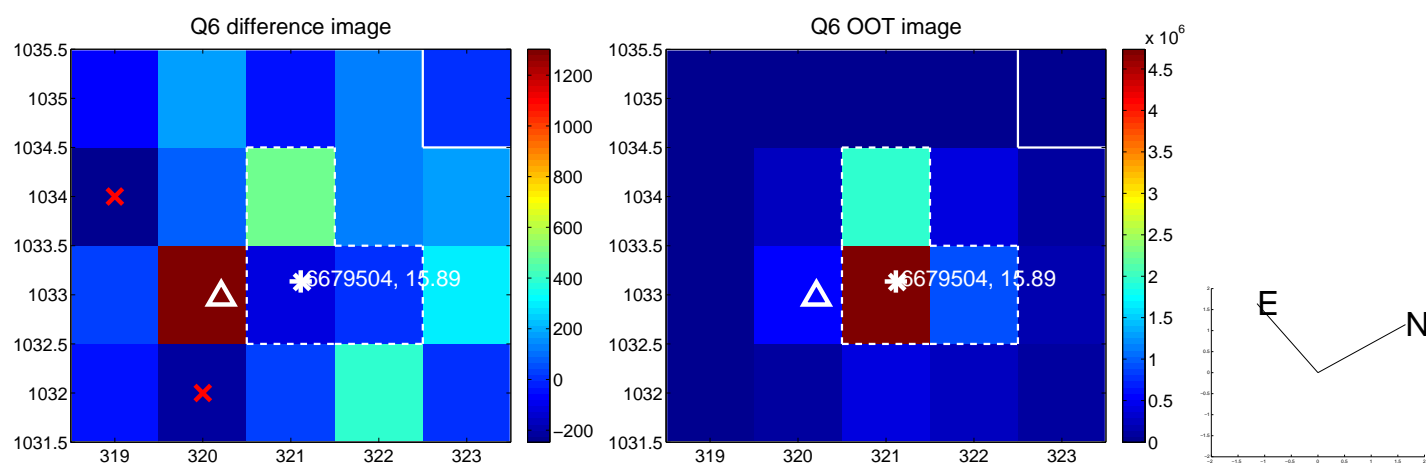
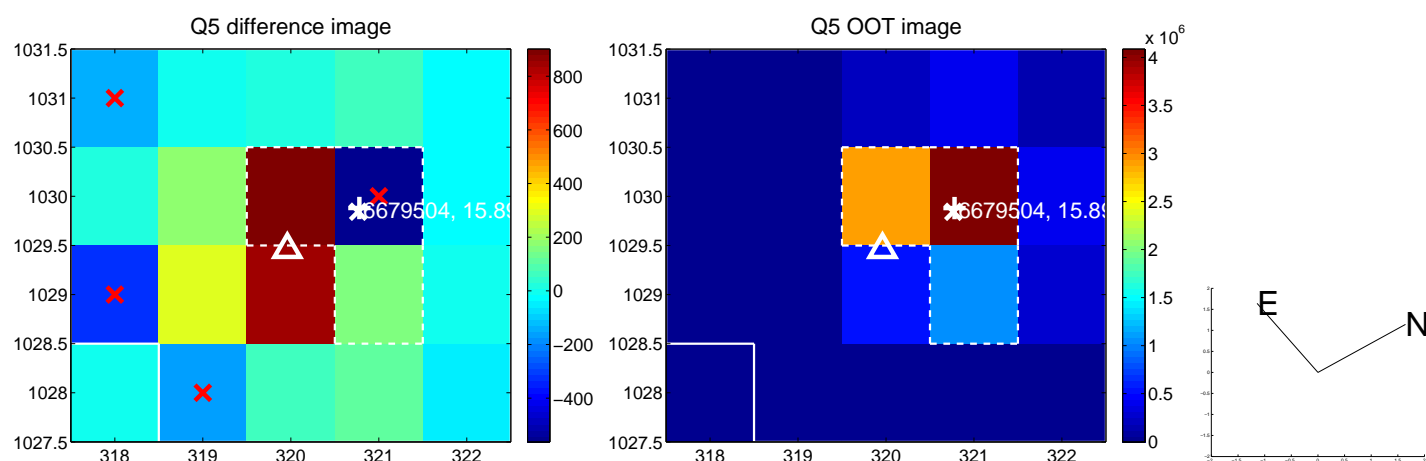


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

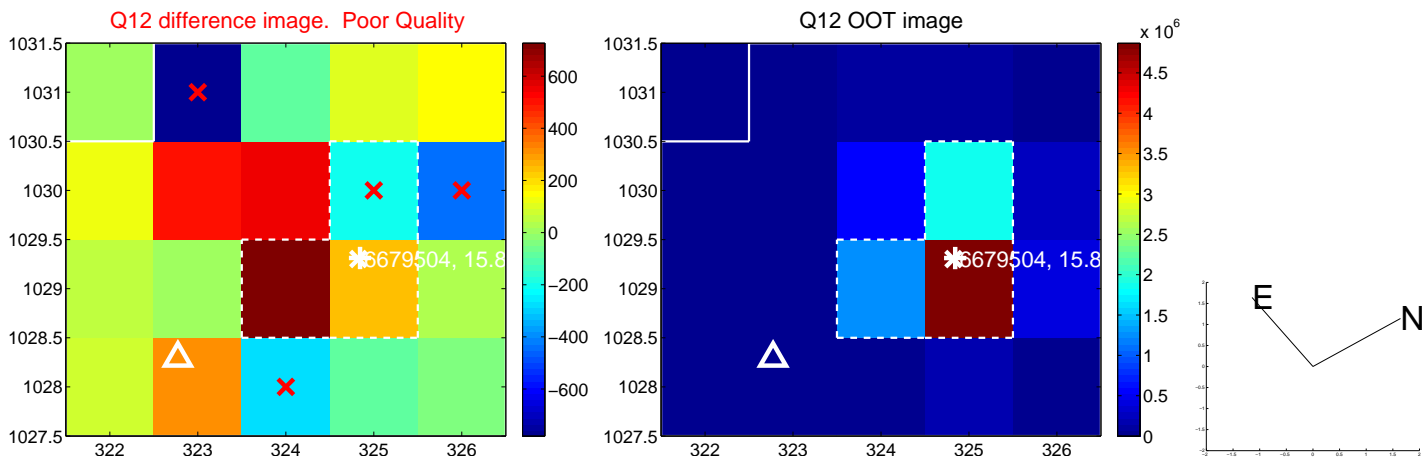
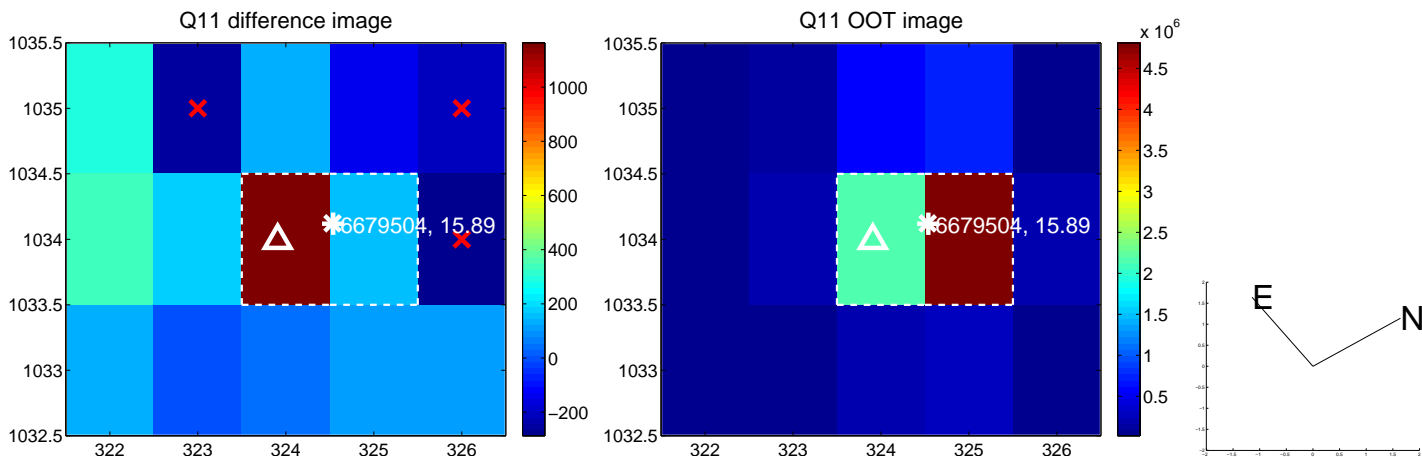
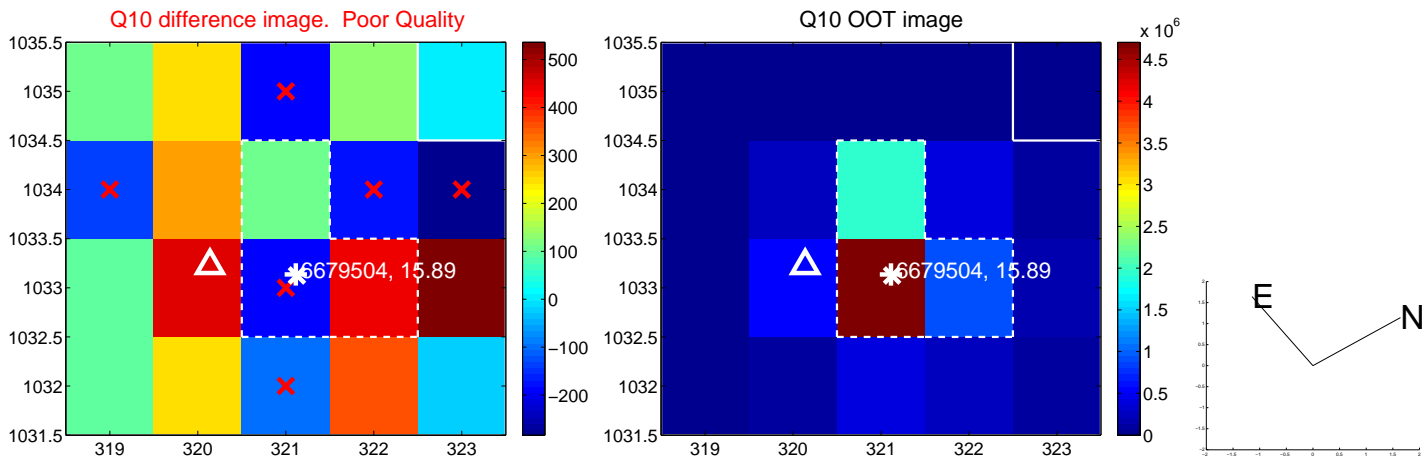
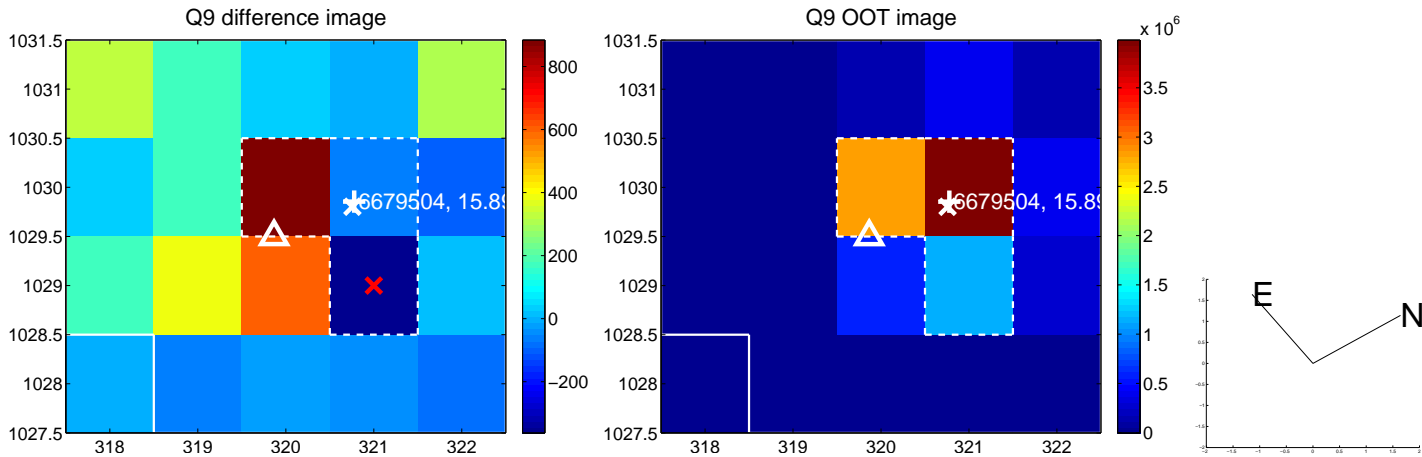
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



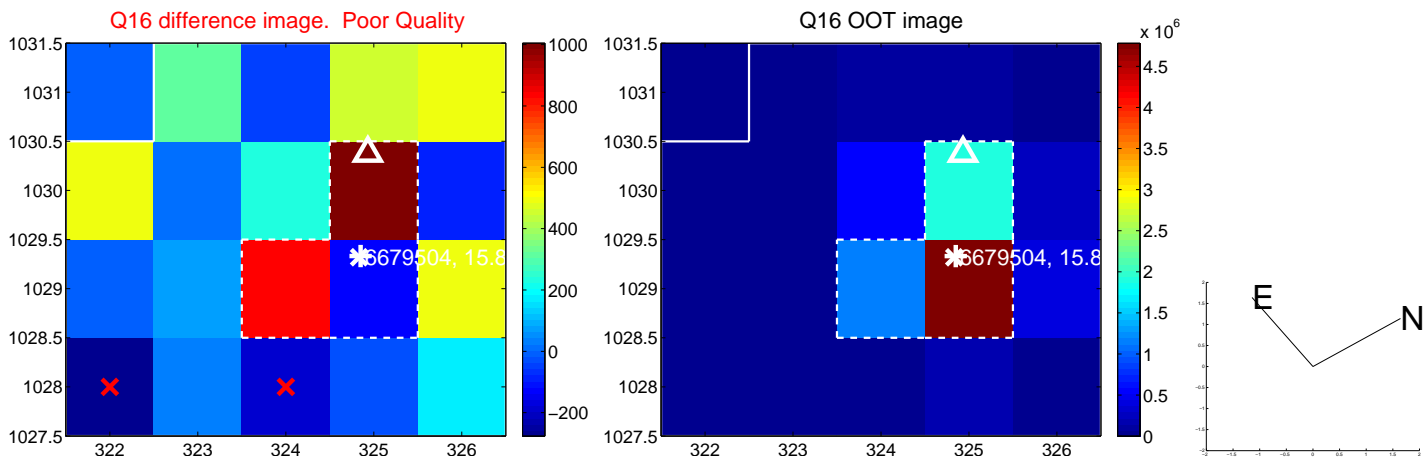
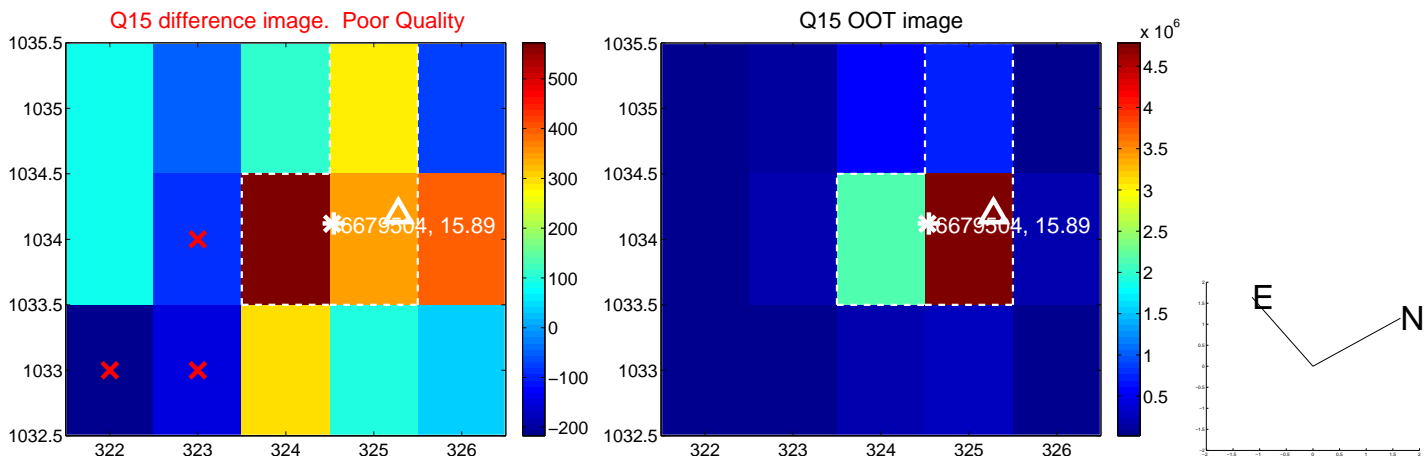
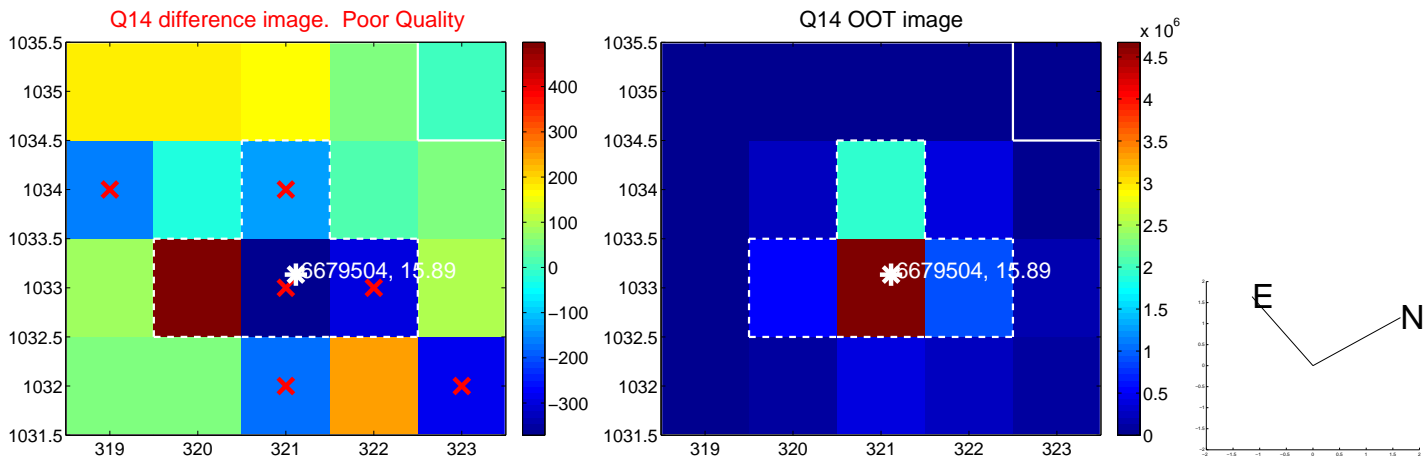
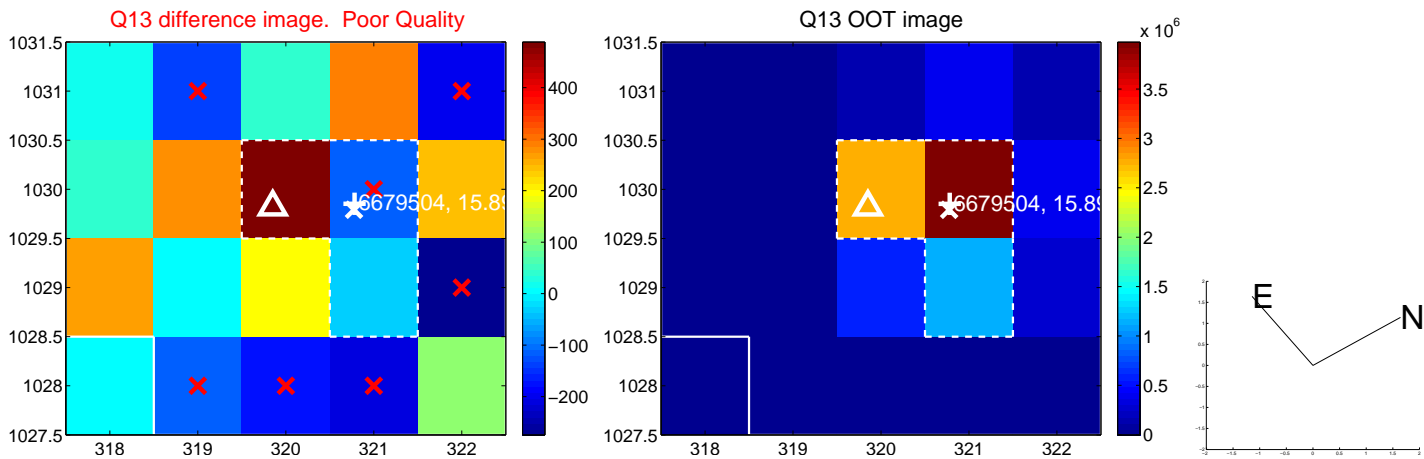
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



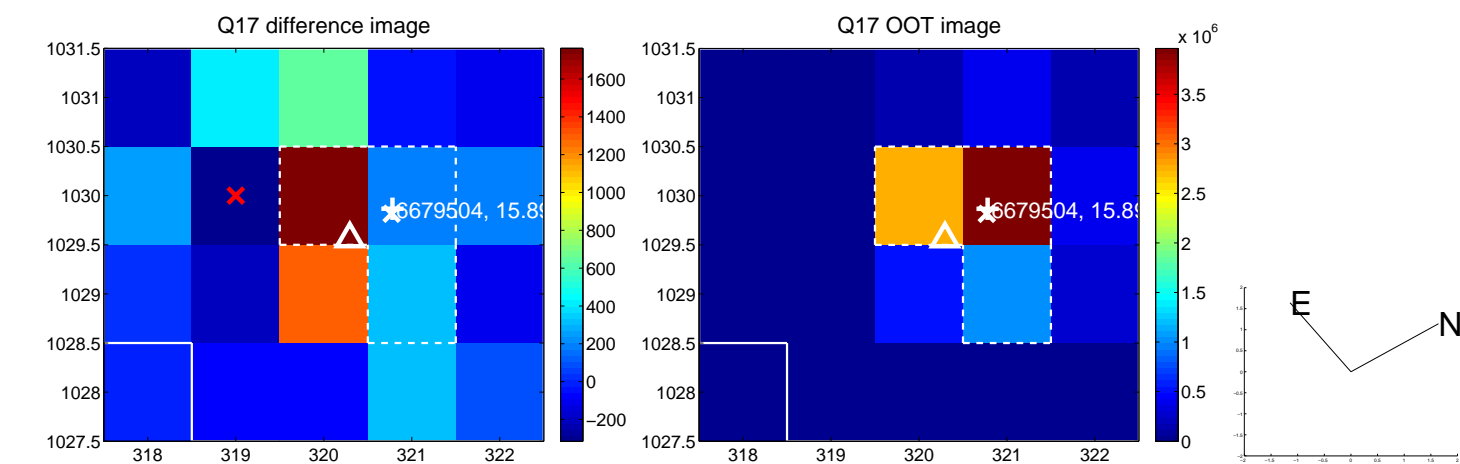
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



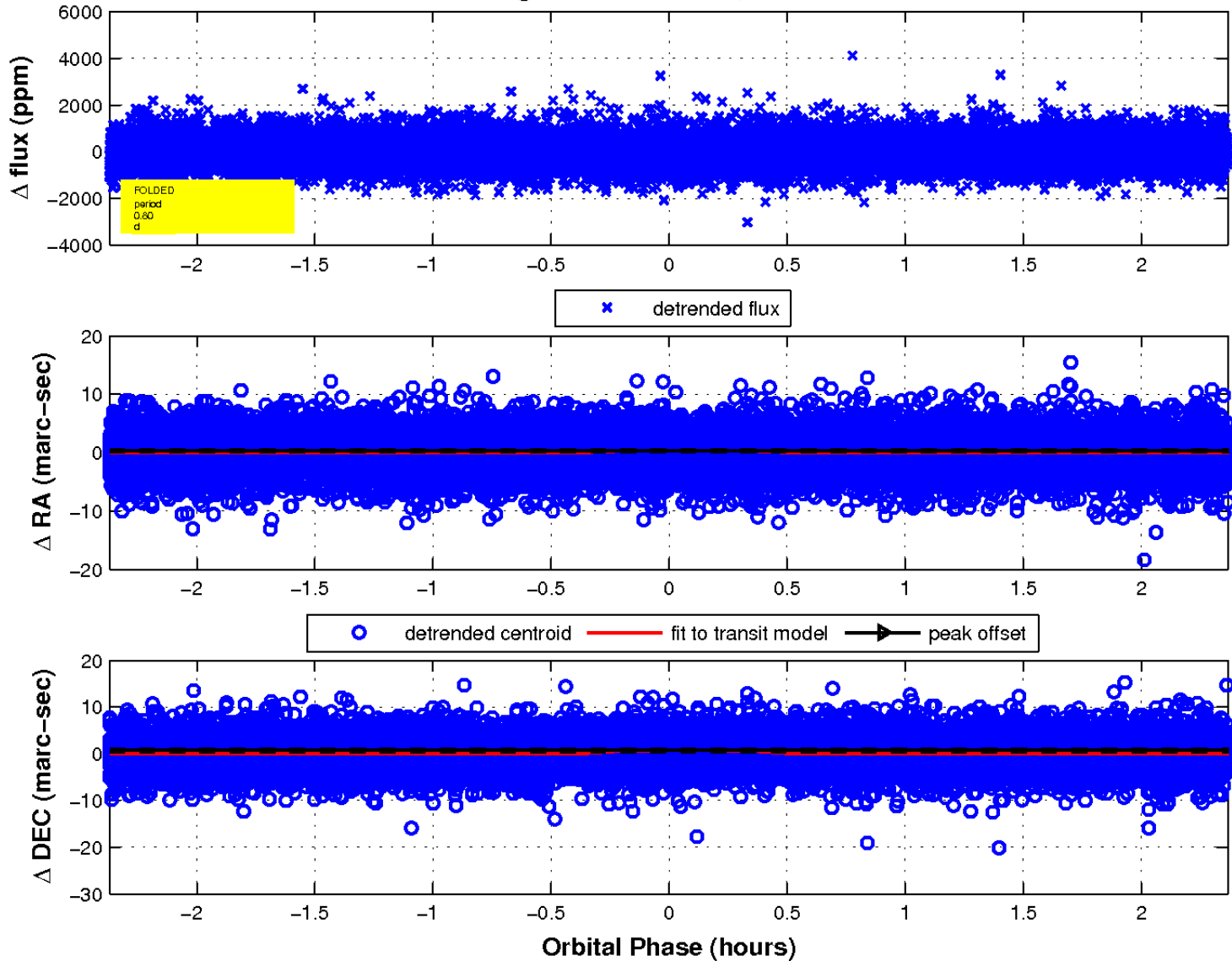
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

