

KIC 005201695

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})
005201695-01	OBS	No	0.507270	131.780964	56.6	1.766	8.2	7.2	0.74	5266	0.67	2790.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005201695-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_CROWDED—HALO_GHOST—EPHEM_MATCH

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.

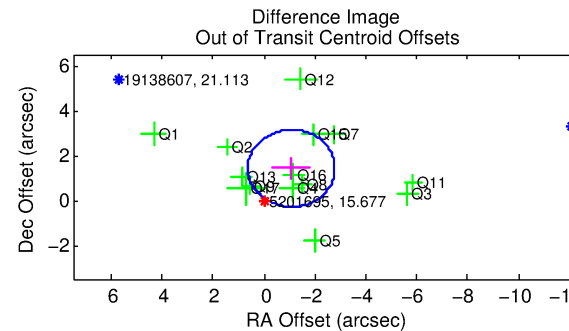
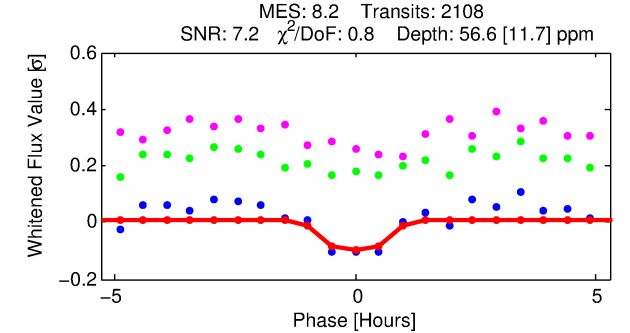
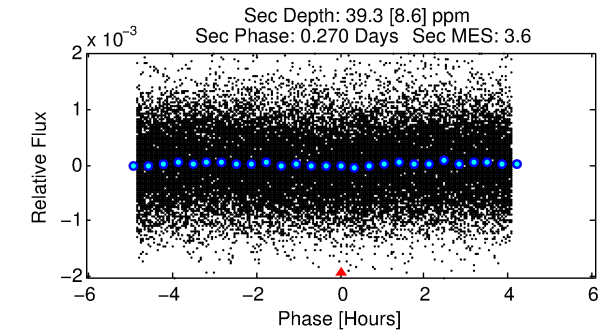
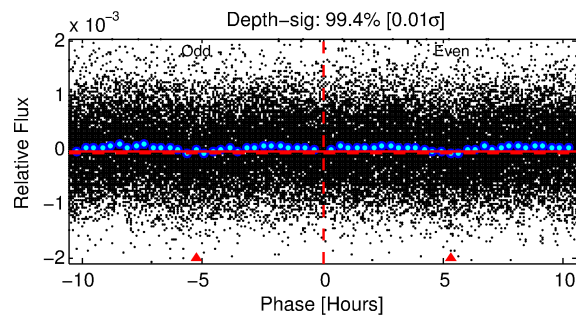
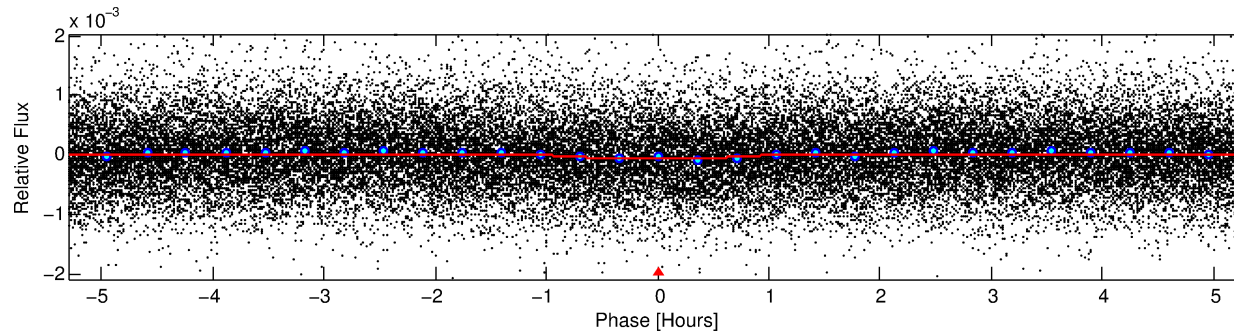
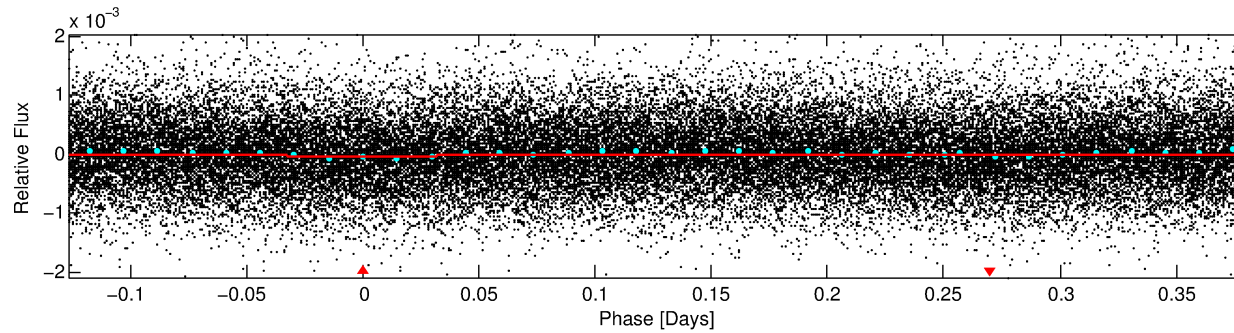
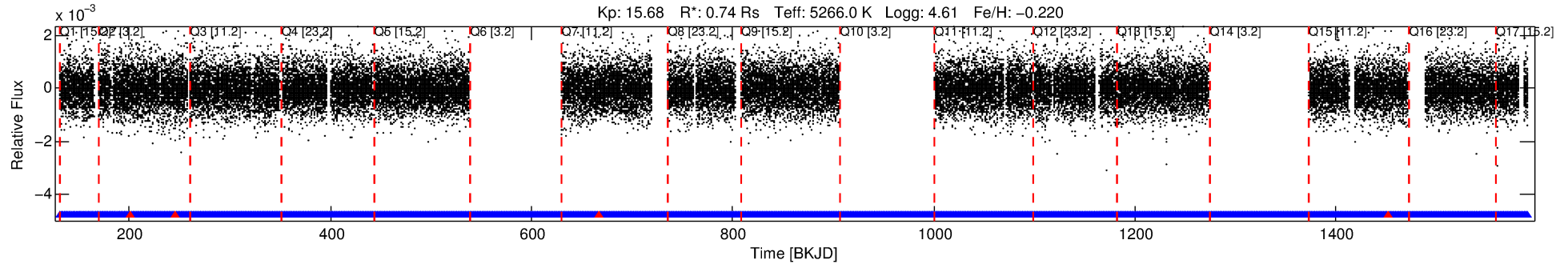
Ephemeris Match Information For 005201695-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
005201695-01	5201695	005201619-pri	5201619	1:1	51.7	3	-12	13.05	15.68	6889.50	Direct-PRF	0	1.48	0.58

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 5201695 Candidate: 1 of 1 Period: 0.507 d



DV Fit Results:

Period = 0.50727 [0.00002] d
Epoch = 131.7810 [0.0035] BKJD
Rp/R* = 0.0083 [0.0092]
a/R* = 1.37 [3.07]
b = 0.90 [1.05]
Seff = 2790.69 [603.26]
Teq = 1853 [100] K
Rp = 0.67 [0.75] Re
a = 0.0116 [0.0015] AU
Ag = 6.47 [14.47] [0.38 σ]
Teffp = 4570 [2550] K [1.06 σ]

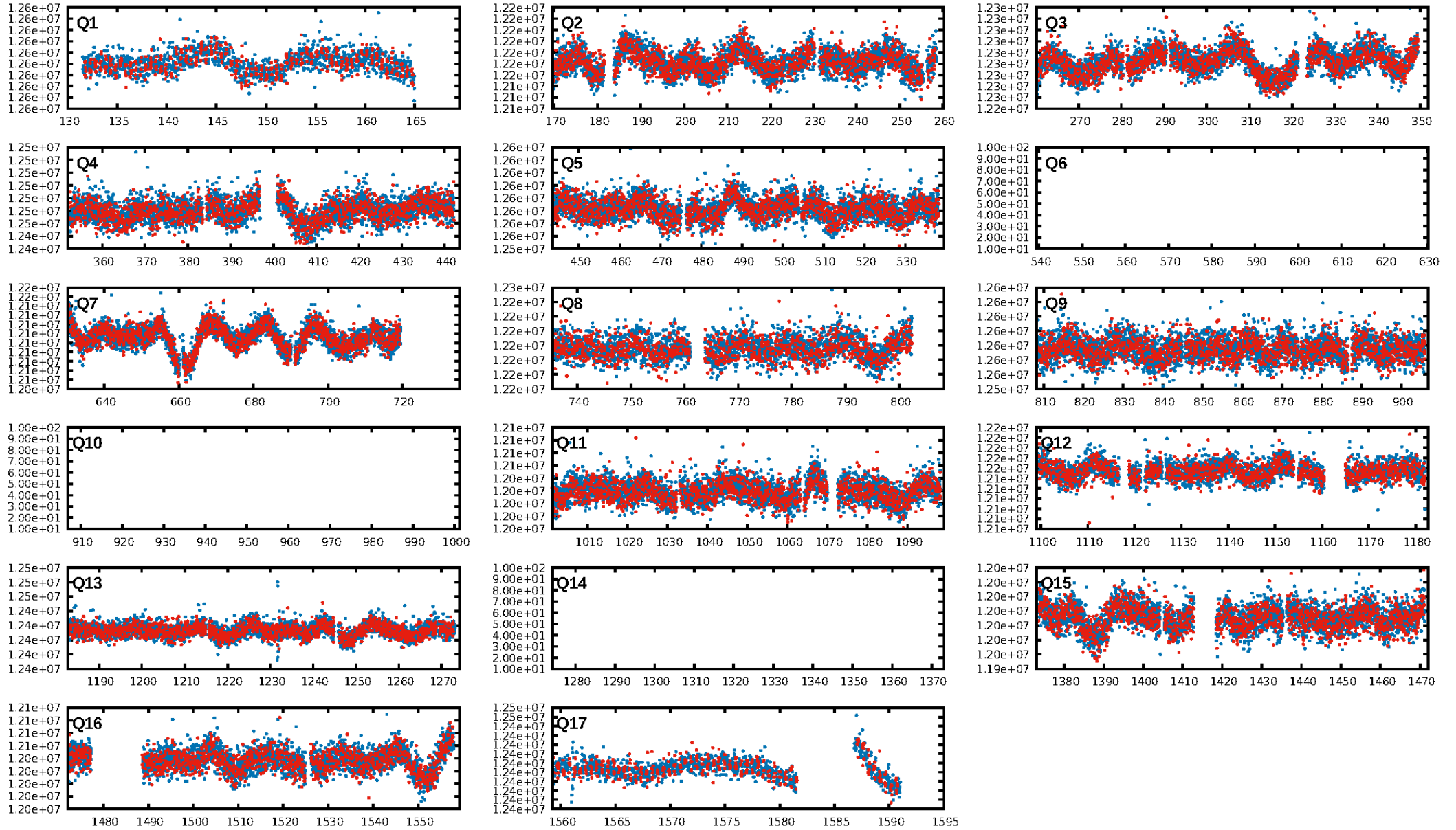
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.10e-15
RollingBand-fgt: 1.00 [1985/1989]
GhostDiagnostic-chr: -0.1962
Centroid-sig: 0.2%
Centroid-so: 4.482 arcsec [2.26 σ]
OotOffset-rm: 1.788 arcsec [3.13 σ]
KicOffset-rm: 1.635 arcsec [2.76 σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 1.00 [14/14]

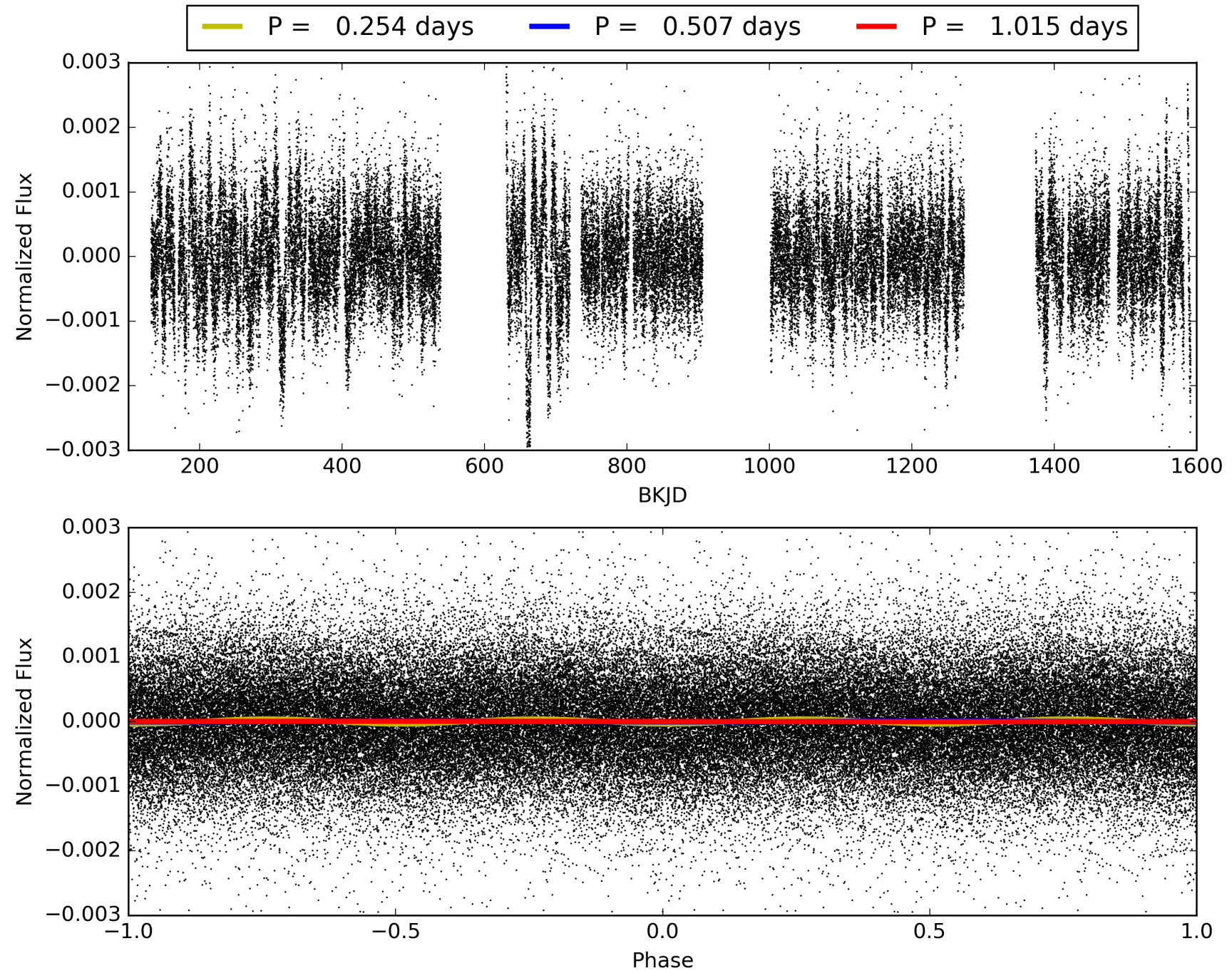
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 00:22:18 Z

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

TCE 005201695-01, PDC Light Curves

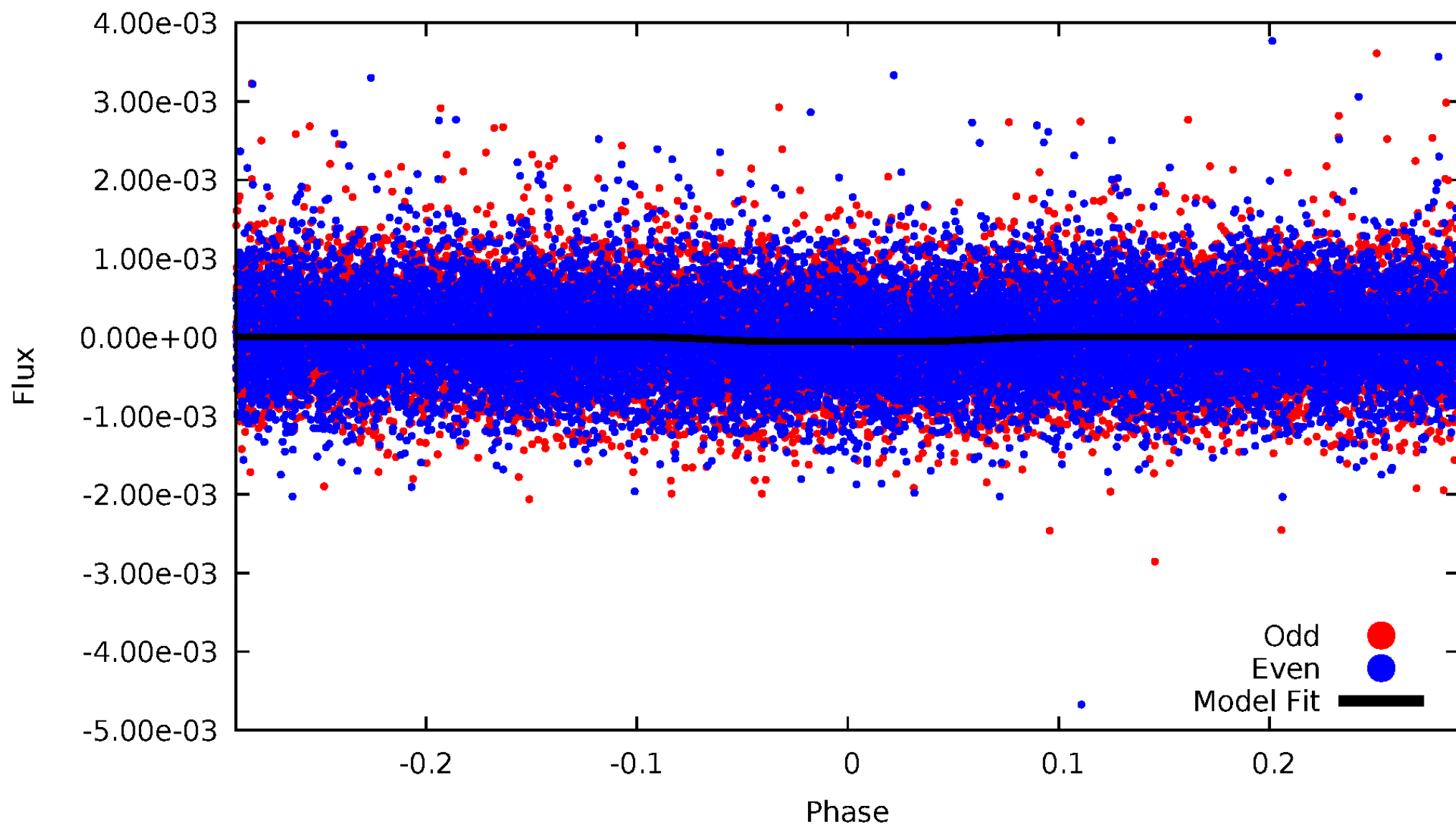


TCE 005201695-01



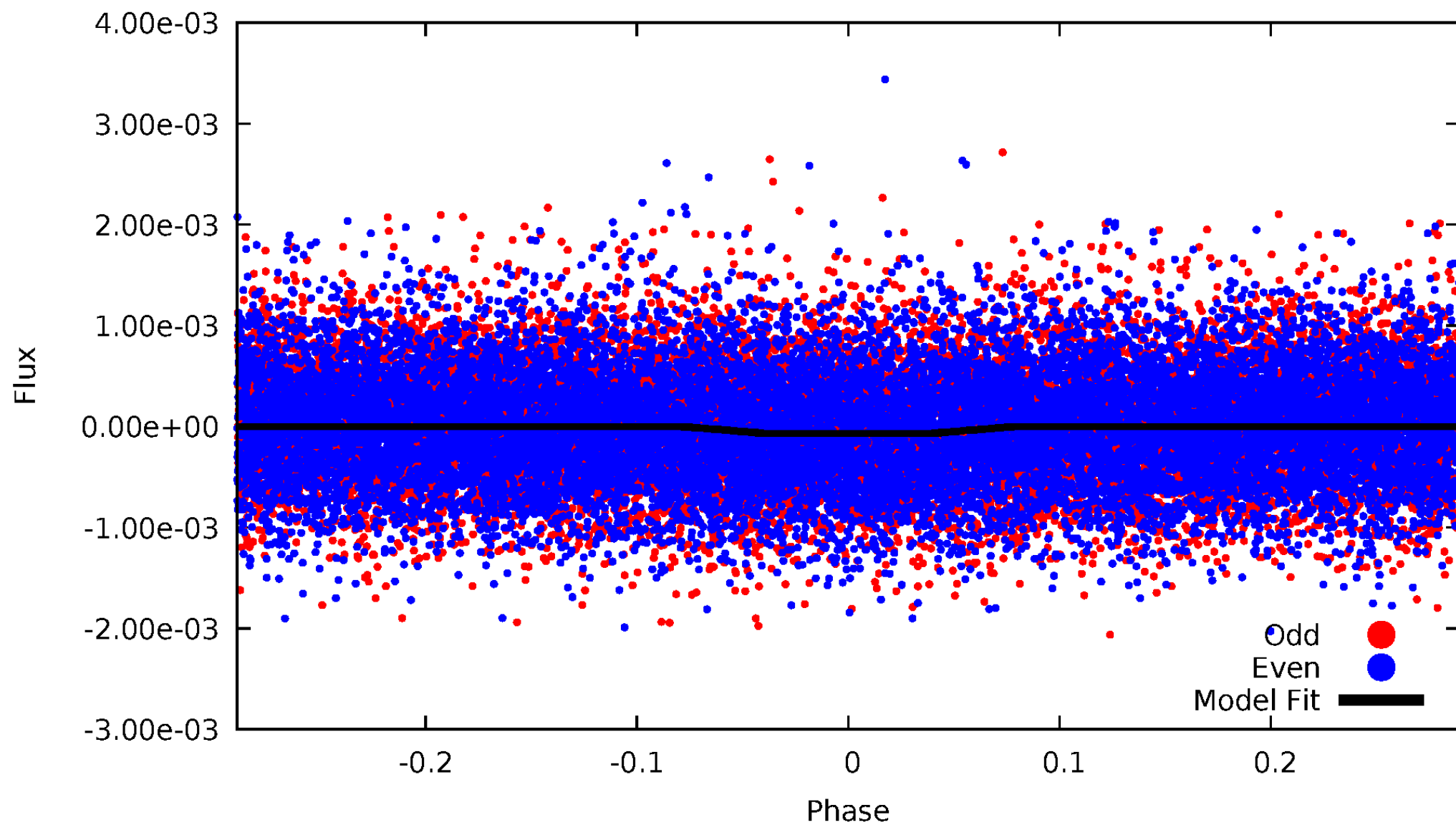
DV Odd/Even

TCE 005201695-01



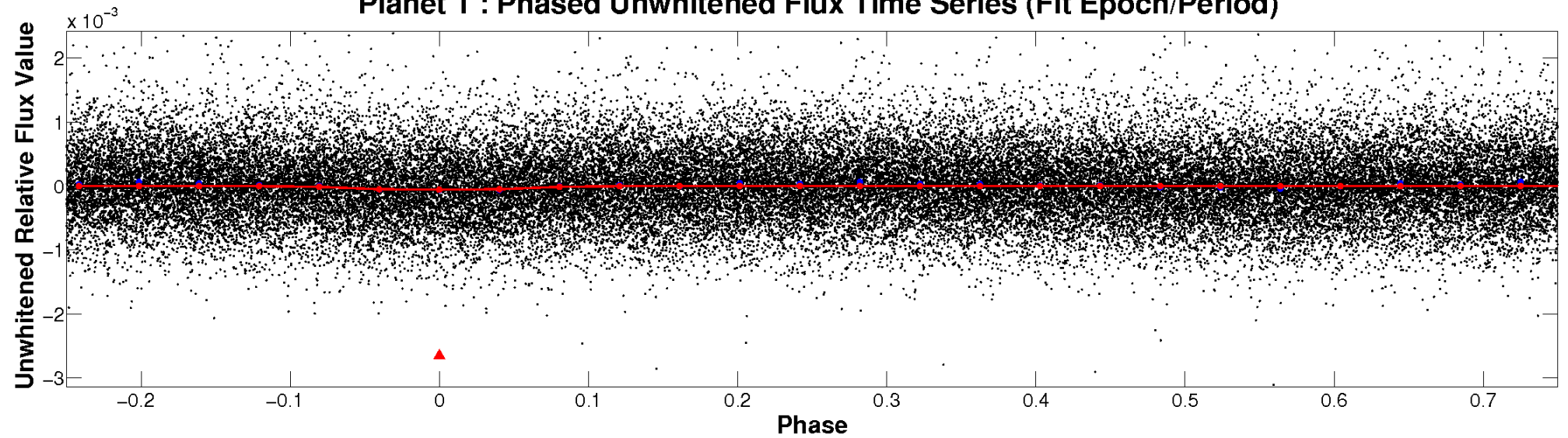
ALT Odd/Even

TCE 005201695-01

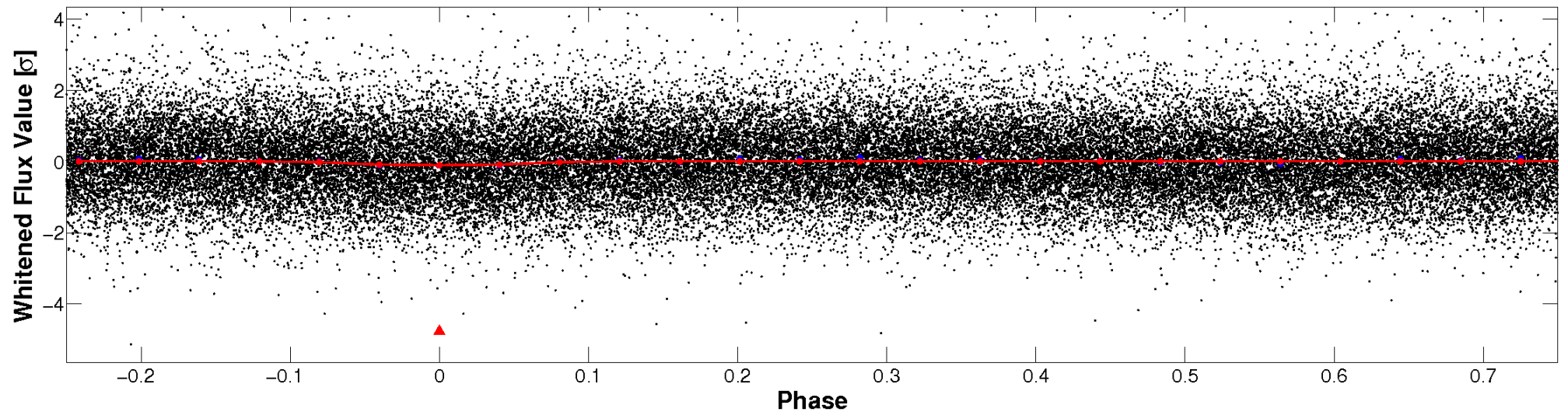


Non-Whitened Vs. Whitened Light Curve

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

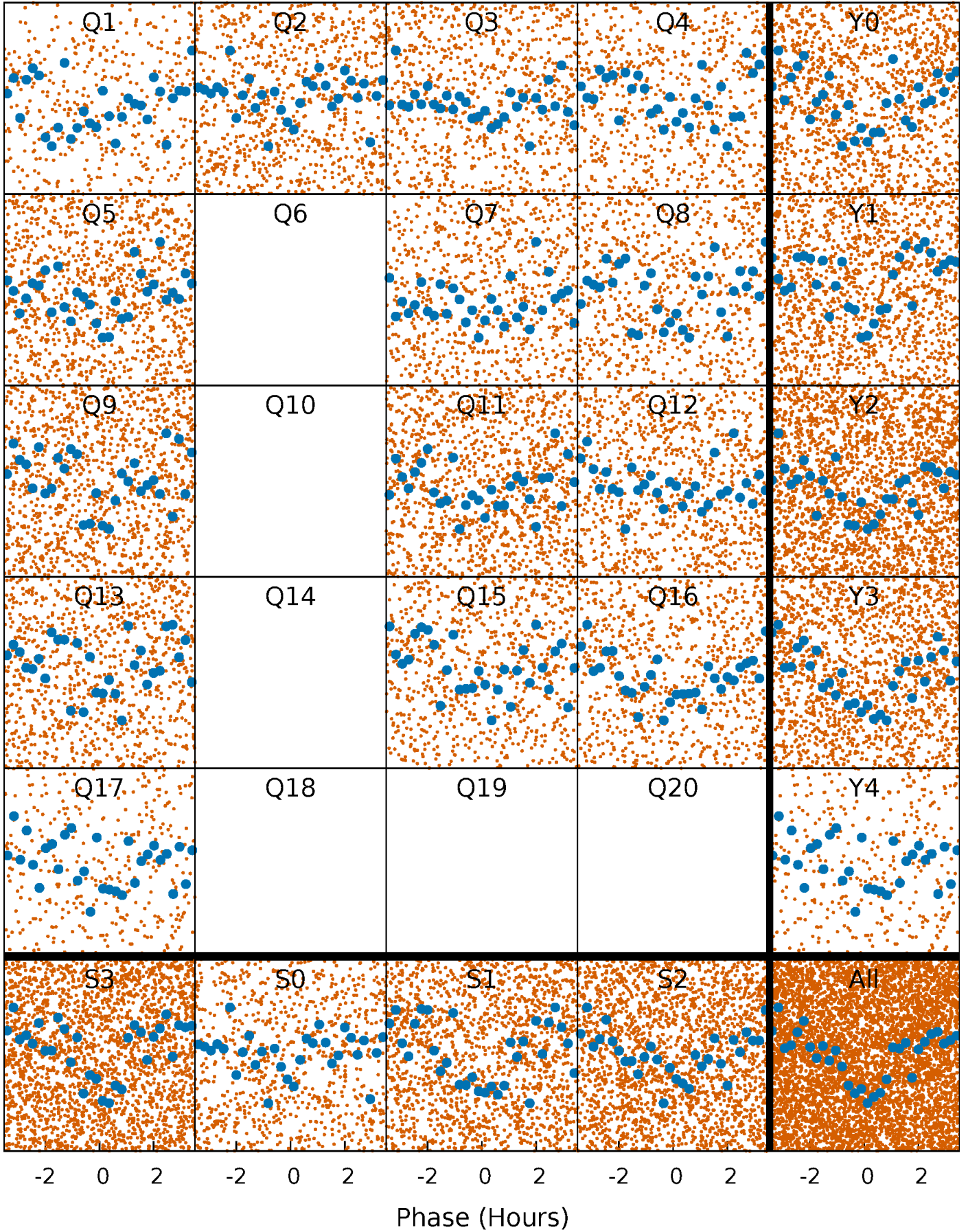


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



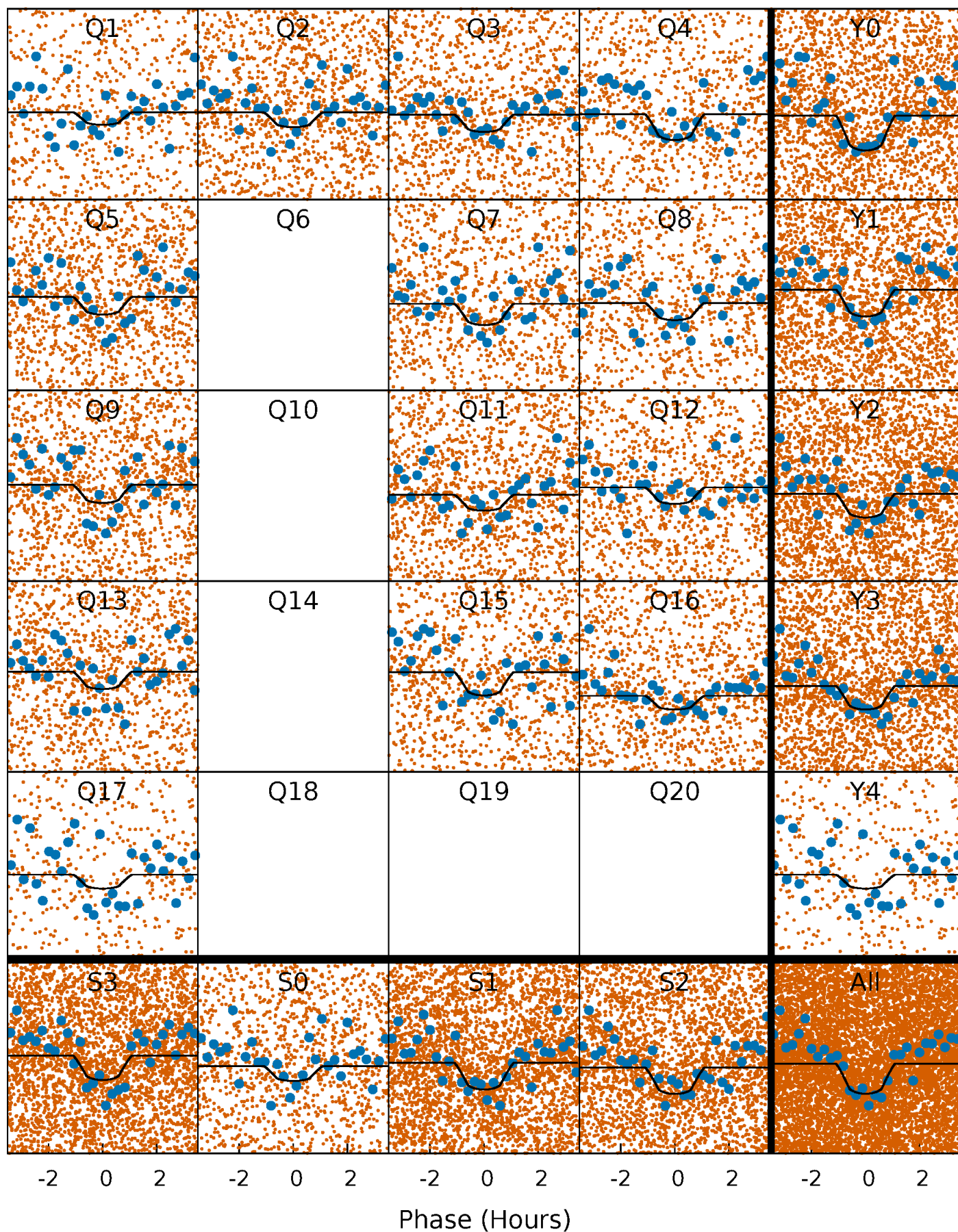
PDC Quarter-Phased Transit Curves

TCE 005201695-01 P= 0.507270 Days $T_0=131.780964$ (BKJD)



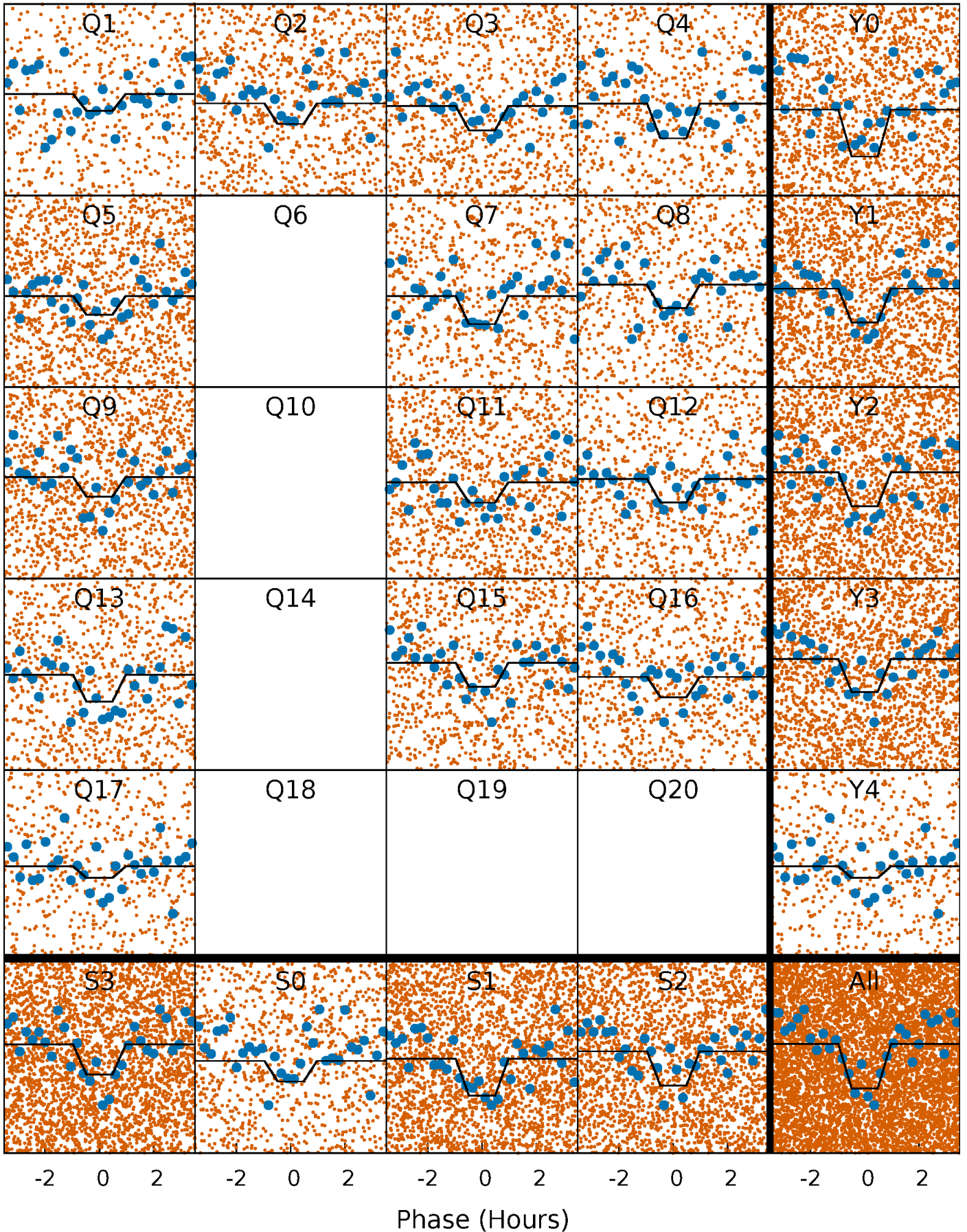
DV Quarter-Phased Transit Curves

TCE 005201695-01 P= 0.507270 Days $T_0=131.780964$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

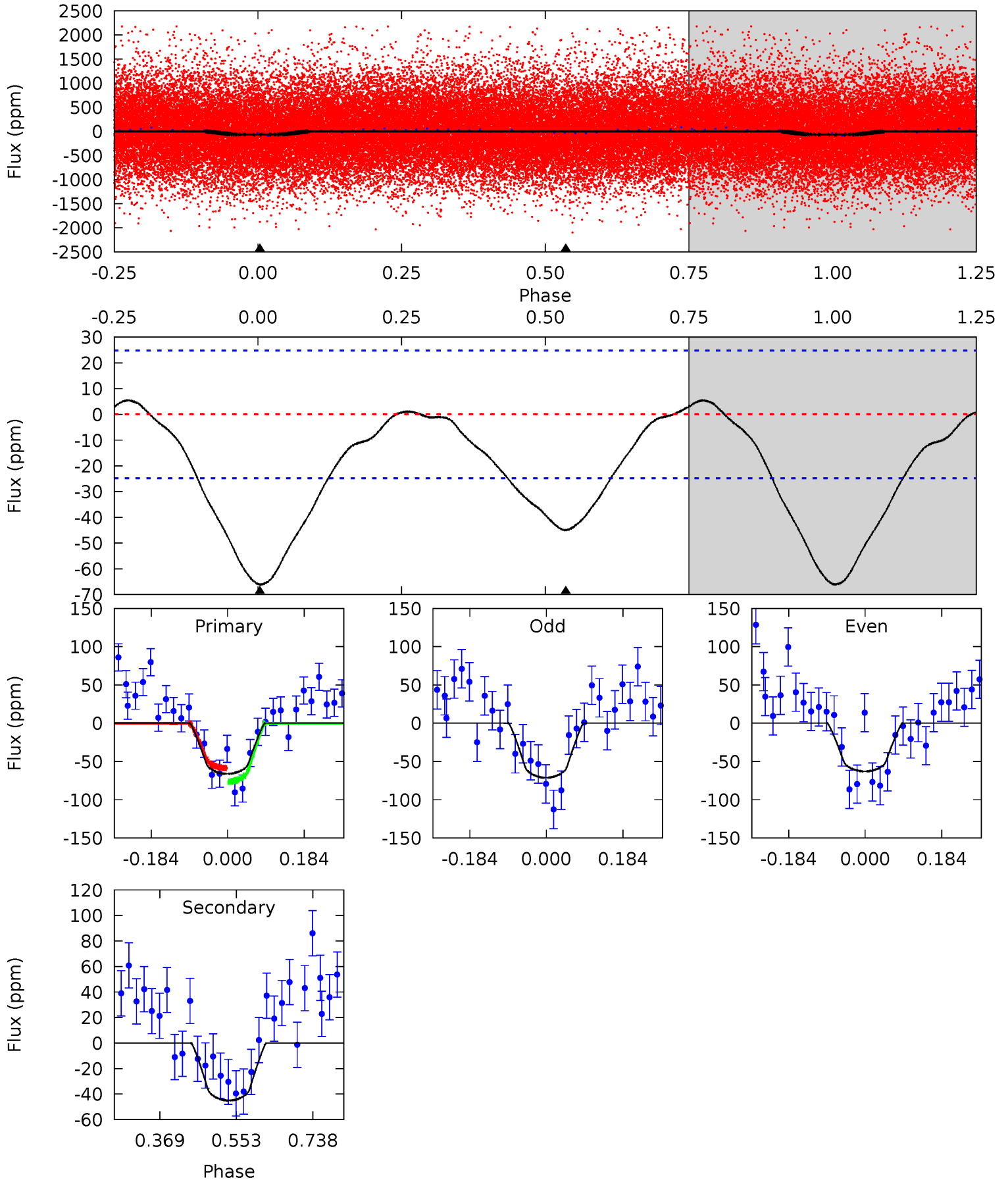
TCE 005201695-01 P= 0.507271 Days $T_0=131.780999$ (BKJD)



DV Model-Shift Uniqueness Test

005201695-01, P = 0.507270 Days, E = 131.273694 Days

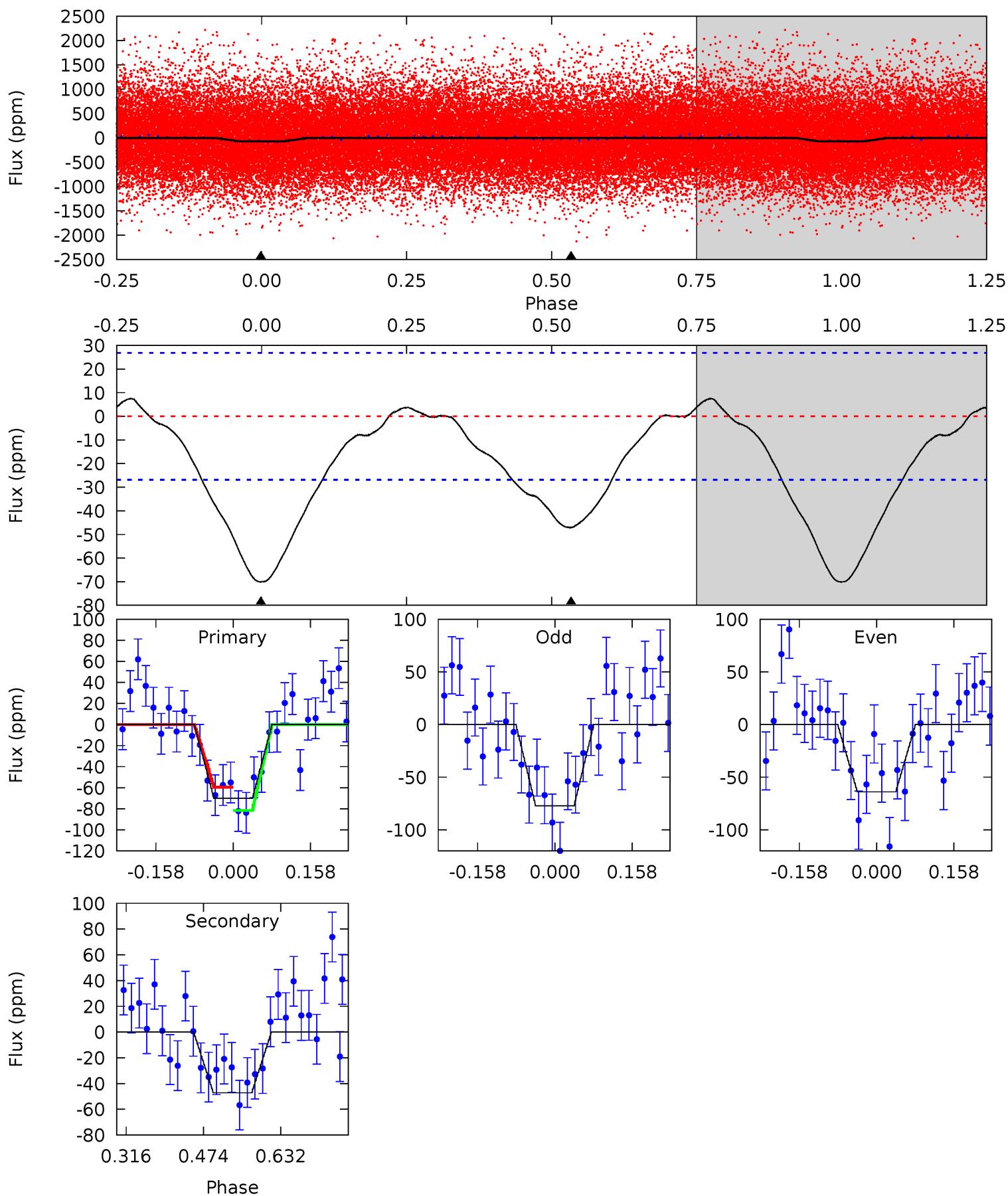
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	8.05	0	0	4.43	1.33	0.66	11.8	11.8	8.05	8.05	0.75	1.00	0.08	1.59



Alt Model-Shift Uniqueness Test

005201695-01, P = 0.507271 Days, E = 131.273728 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	7.84	0	0	4.47	1.41	0.80	11.7	11.7	7.84	7.84	1.10	0.92	0.10	1.82



Stellar Parameters For KIC 005201695

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5266^{+158}_{-158}	$4.611^{+0.032}_{-0.097}$	$-0.220^{+0.300}_{-0.300}$	$0.741^{+0.112}_{-0.060}$	$0.830^{+0.069}_{-0.095}$	$2.868^{+0.472}_{-0.859}$
	+3%/-3%	+1%/-2%	+136%/-136%	+15%/-8%	+8%/-11%	+16%/-30%
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 005201695-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-45 ± 6	$0.84^{+0.73}_{-0.51}$	2628^{+110}_{-100}	4419^{+2529}_{-1008}	$4.785^{+27.464}_{-3.442}$
Alt.	-47 ± 6	$0.87^{+0.71}_{-0.55}$	2619^{+118}_{-104}	4330^{+2604}_{-886}	$4.543^{+30.647}_{-3.146}$

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

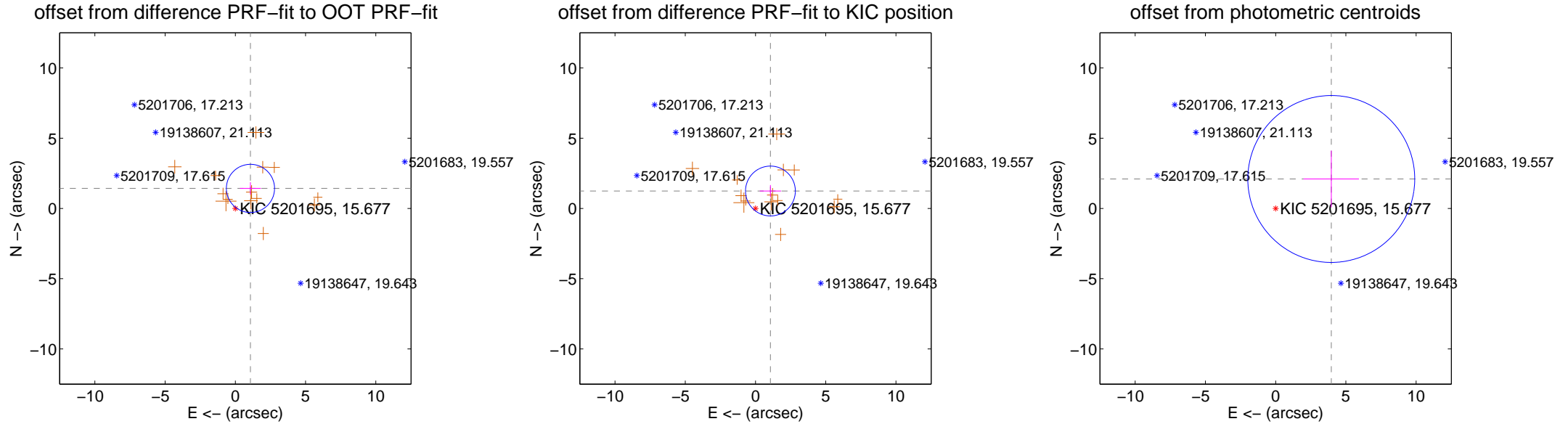
DV Centroid Data

Supplemental centroid analysis for 005201695-01. Kepler magnitude: 15.68. Transit SNR 7.15

There are 0 quarters with good PRF difference image offsets

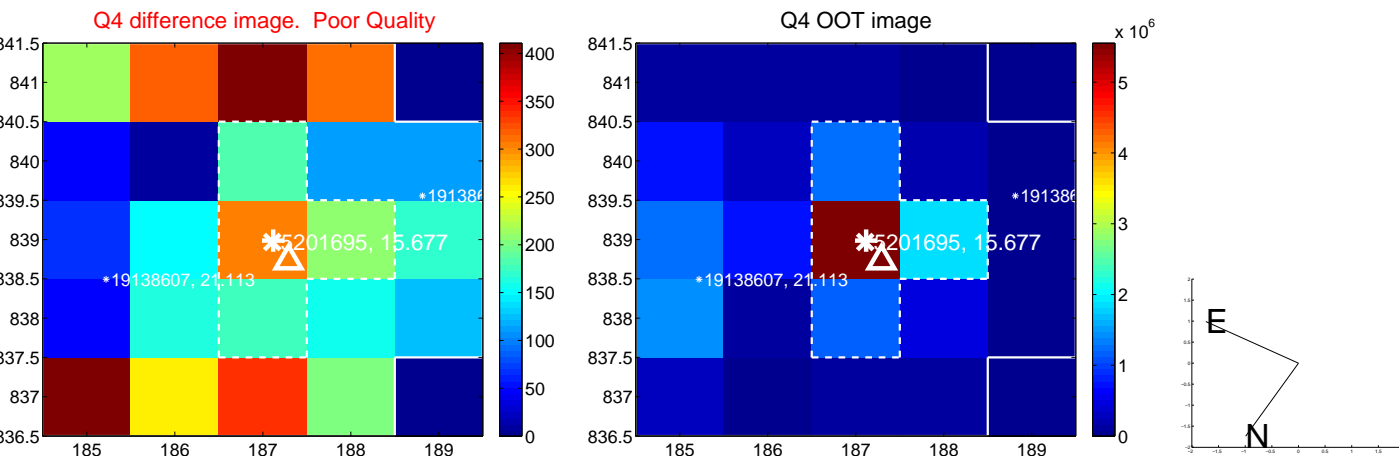
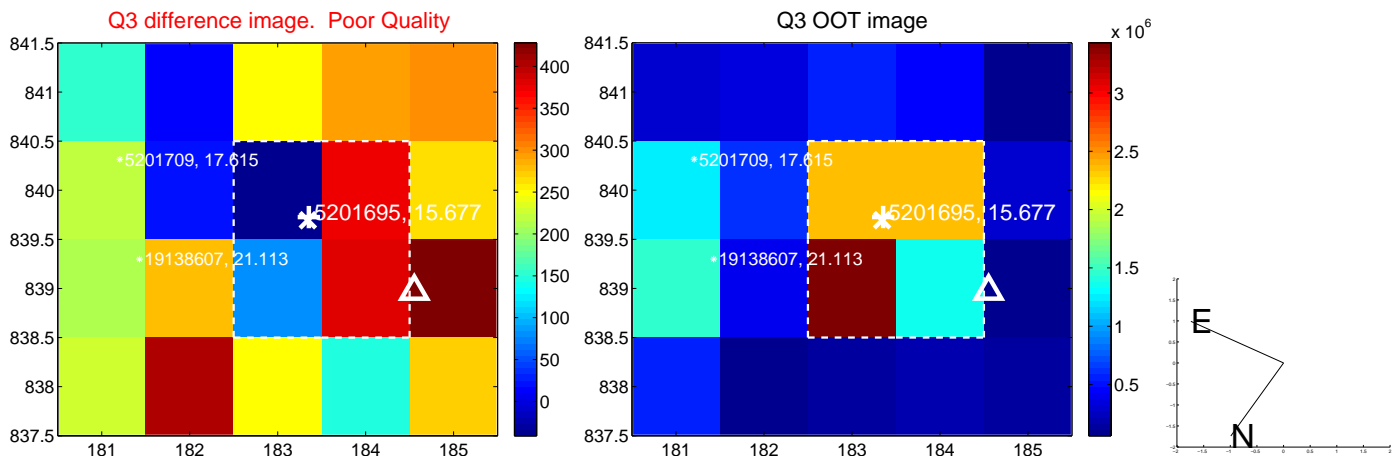
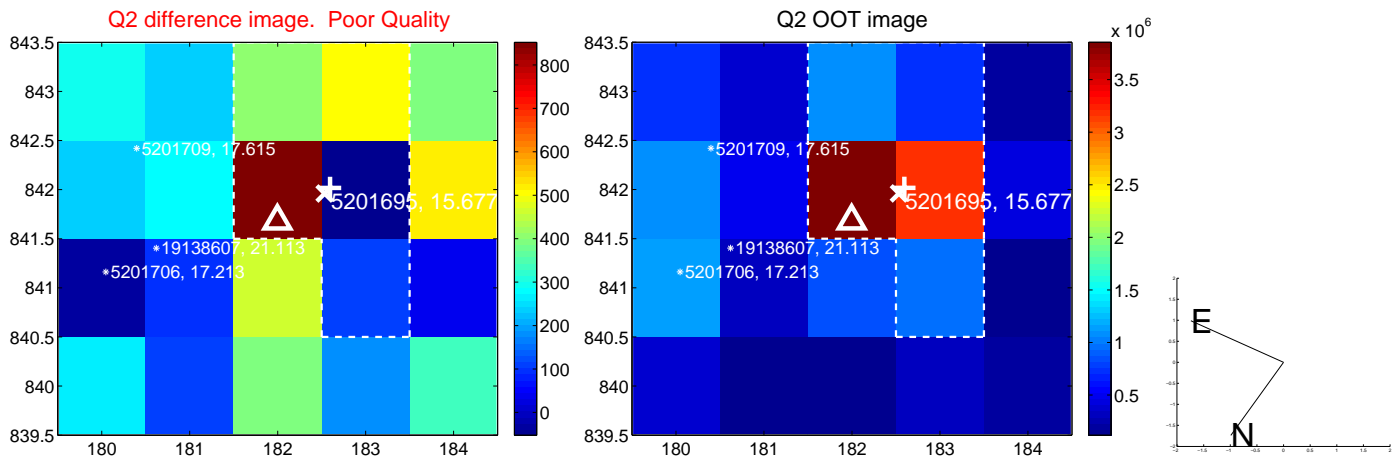
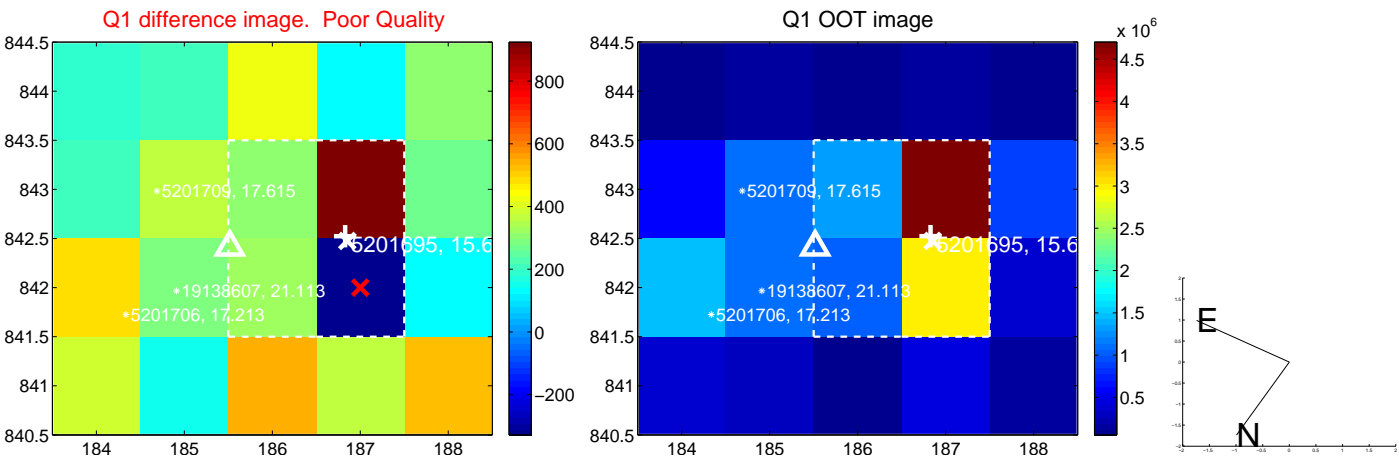
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.788 ± 0.572	3.13	-1.077 ± 0.746	1.427 ± 0.443
PRF-fit source offset from KIC position	1.635 ± 0.591	2.76	-1.064 ± 0.759	1.241 ± 0.428
photometric centroid source offset	4.48 ± 1.98	2.26	-3.96 ± 1.97	2.10 ± 2.02

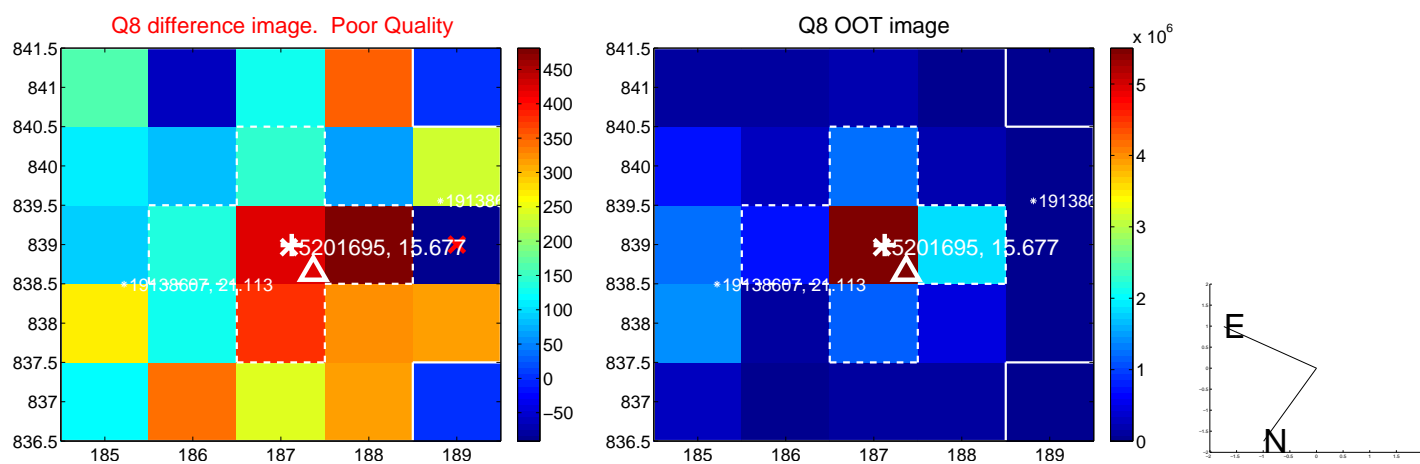
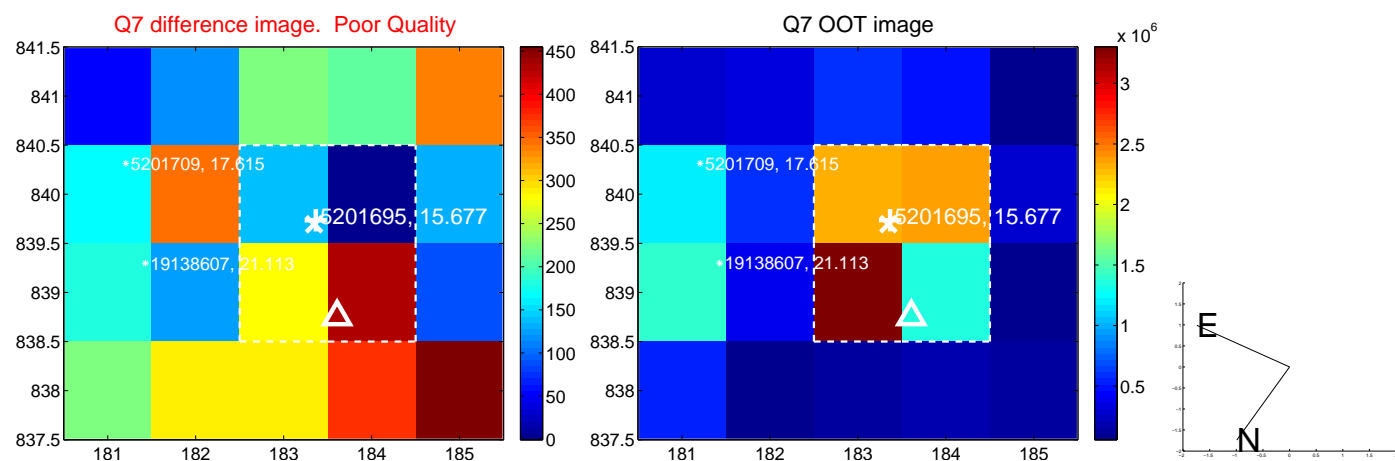
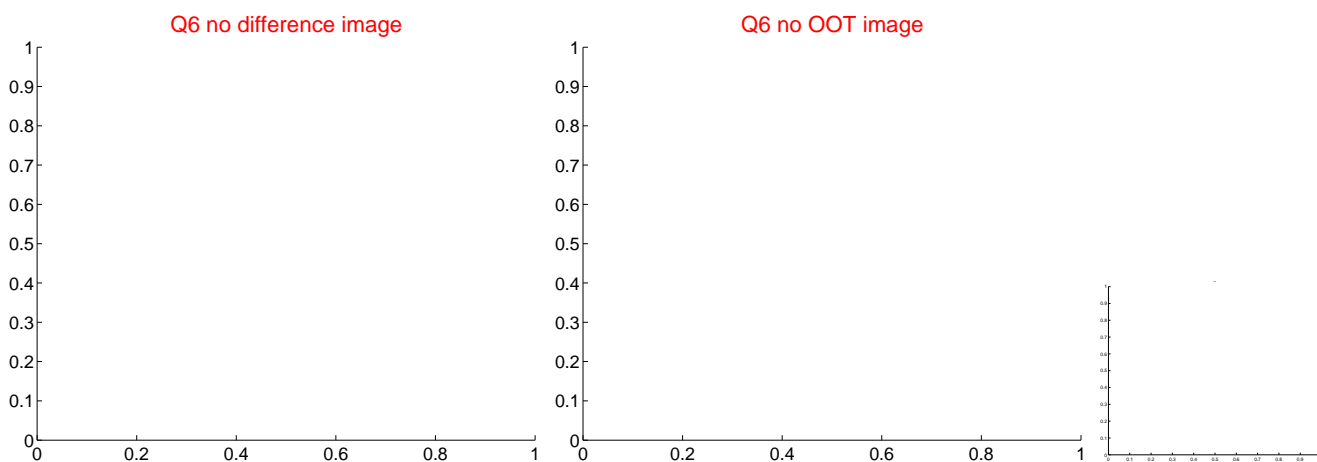
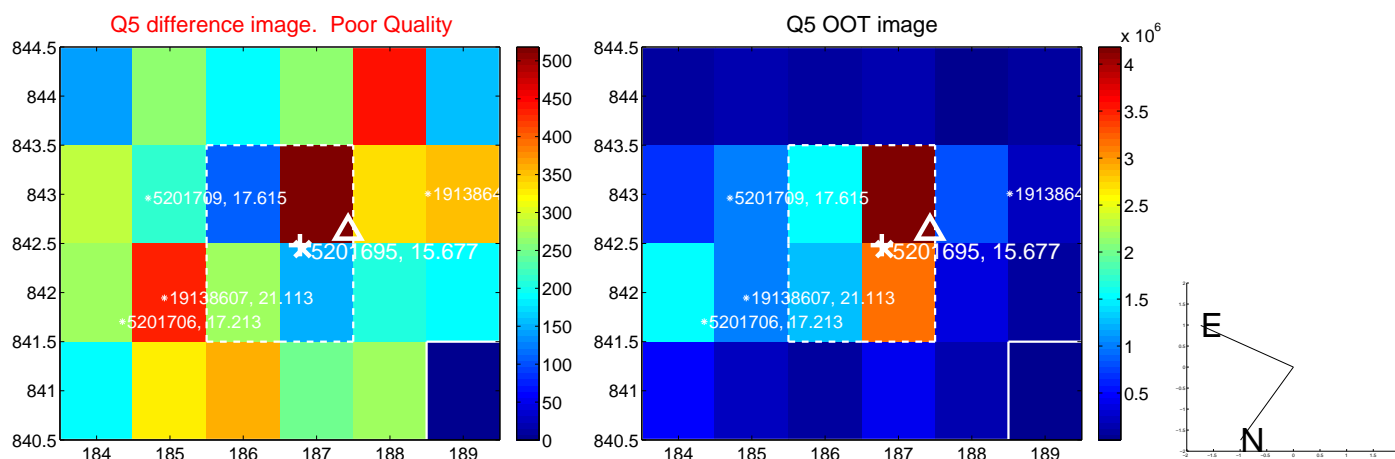


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

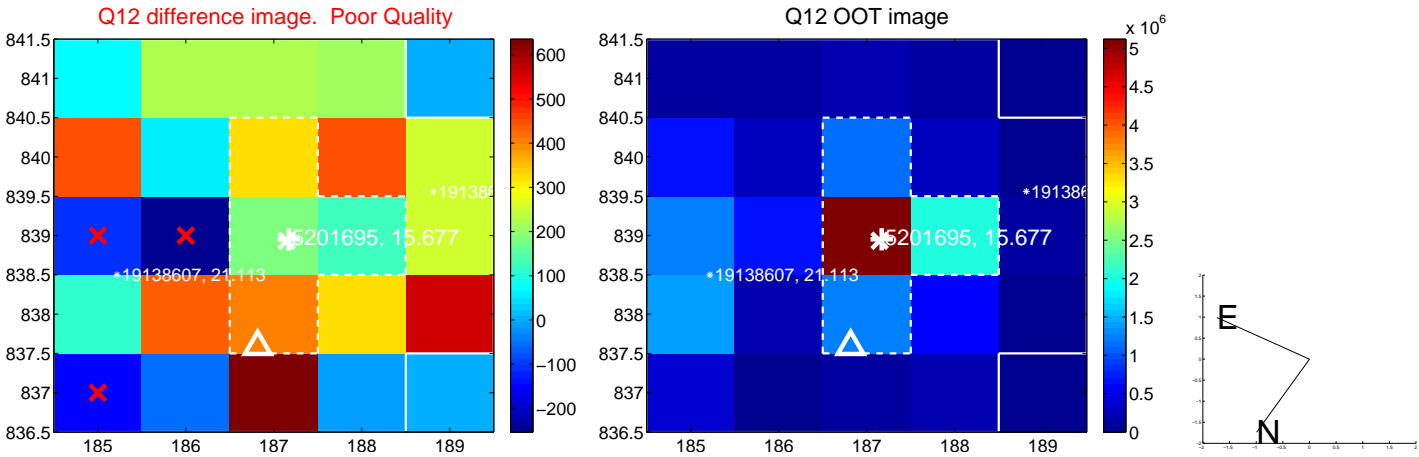
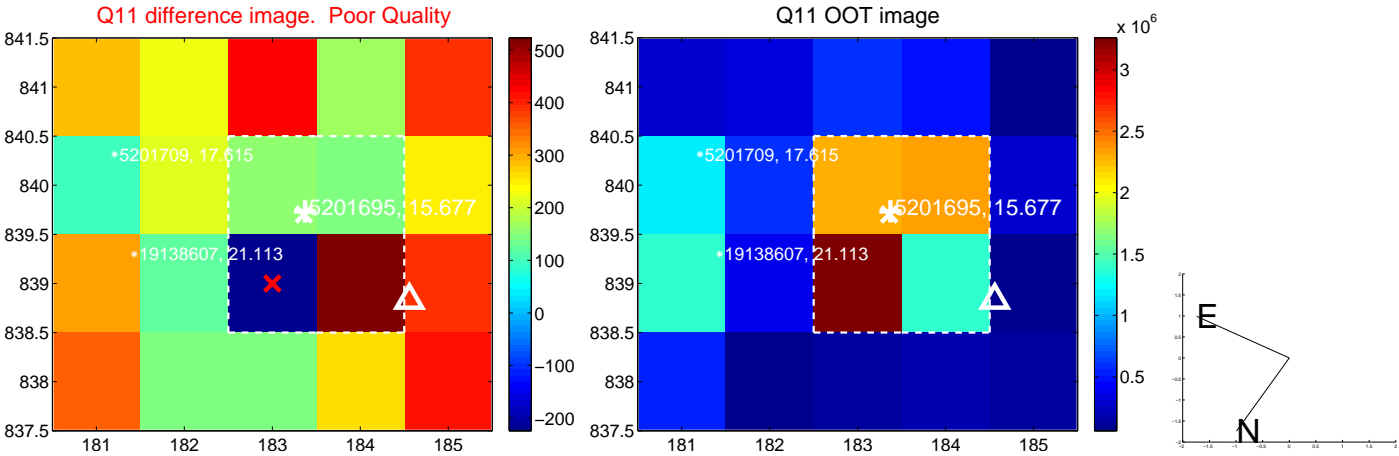
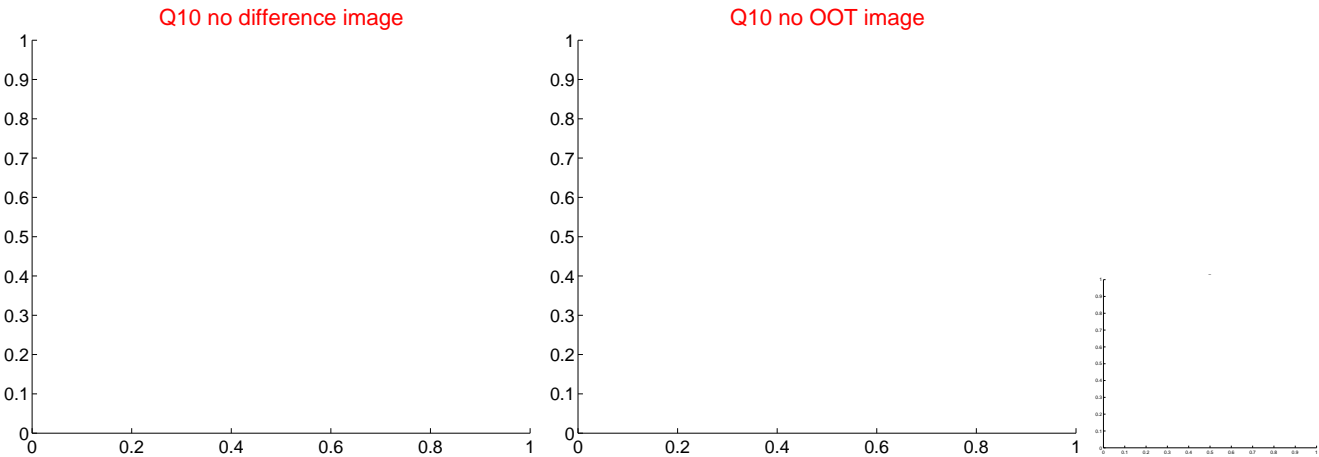
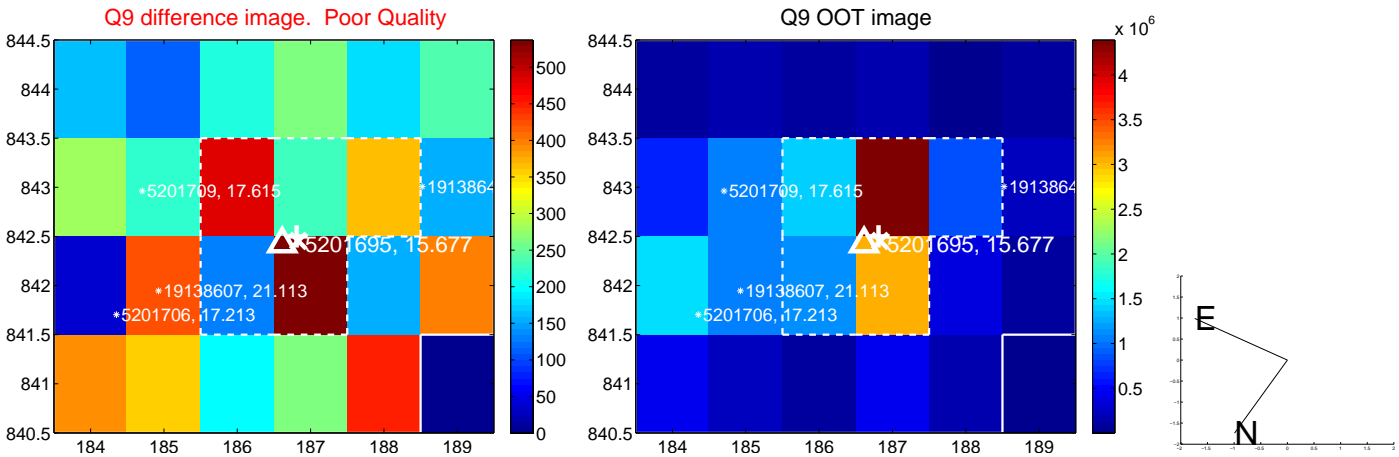
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



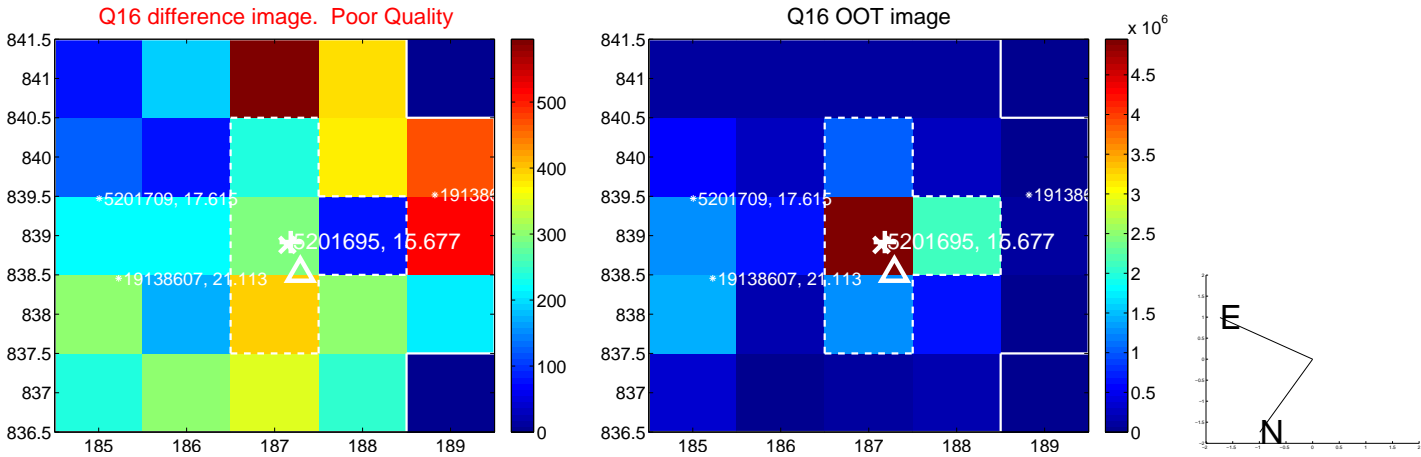
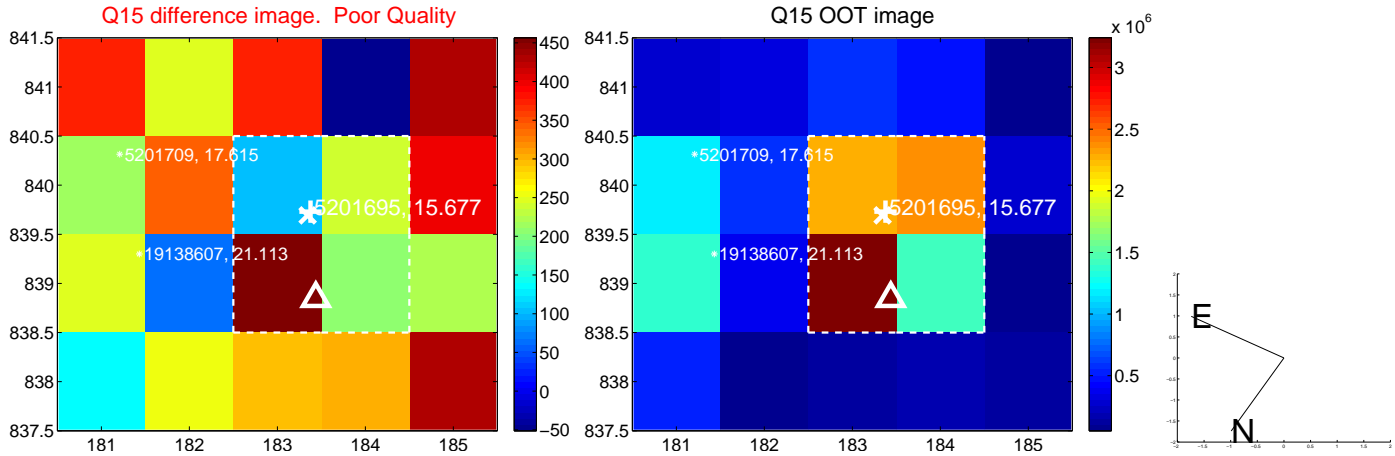
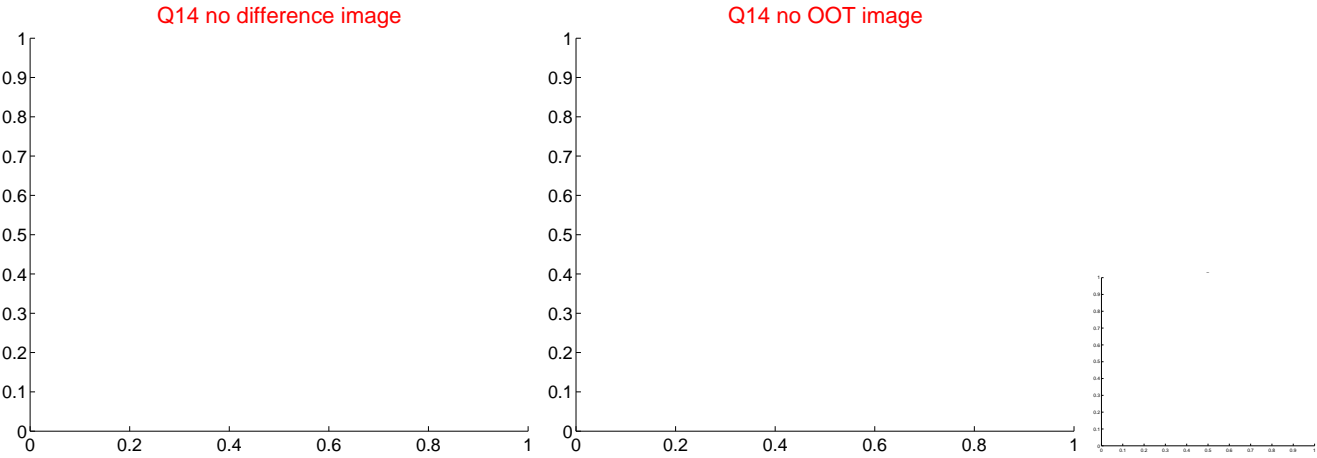
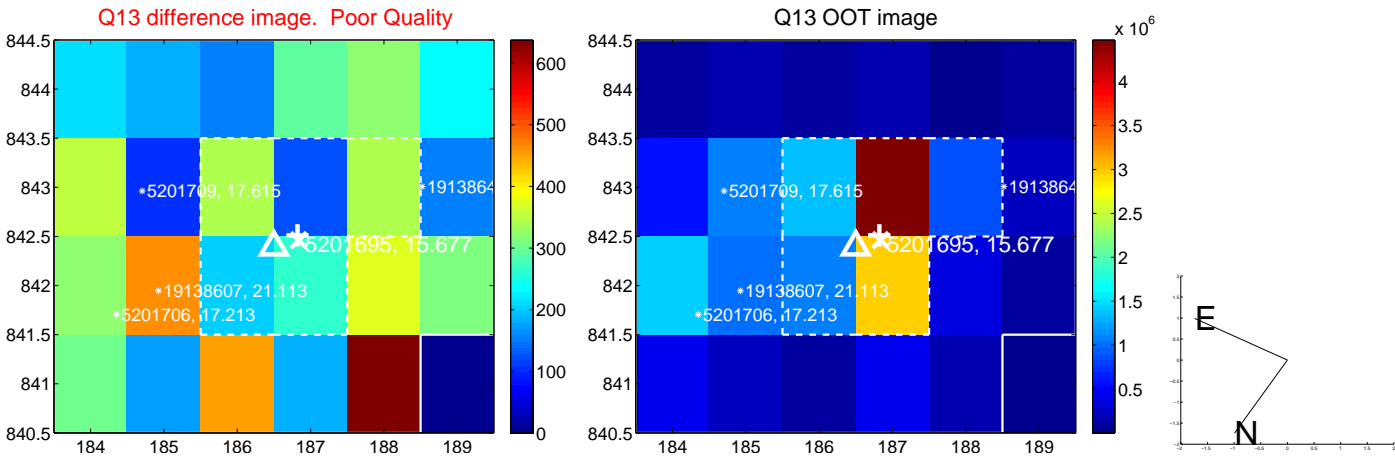
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



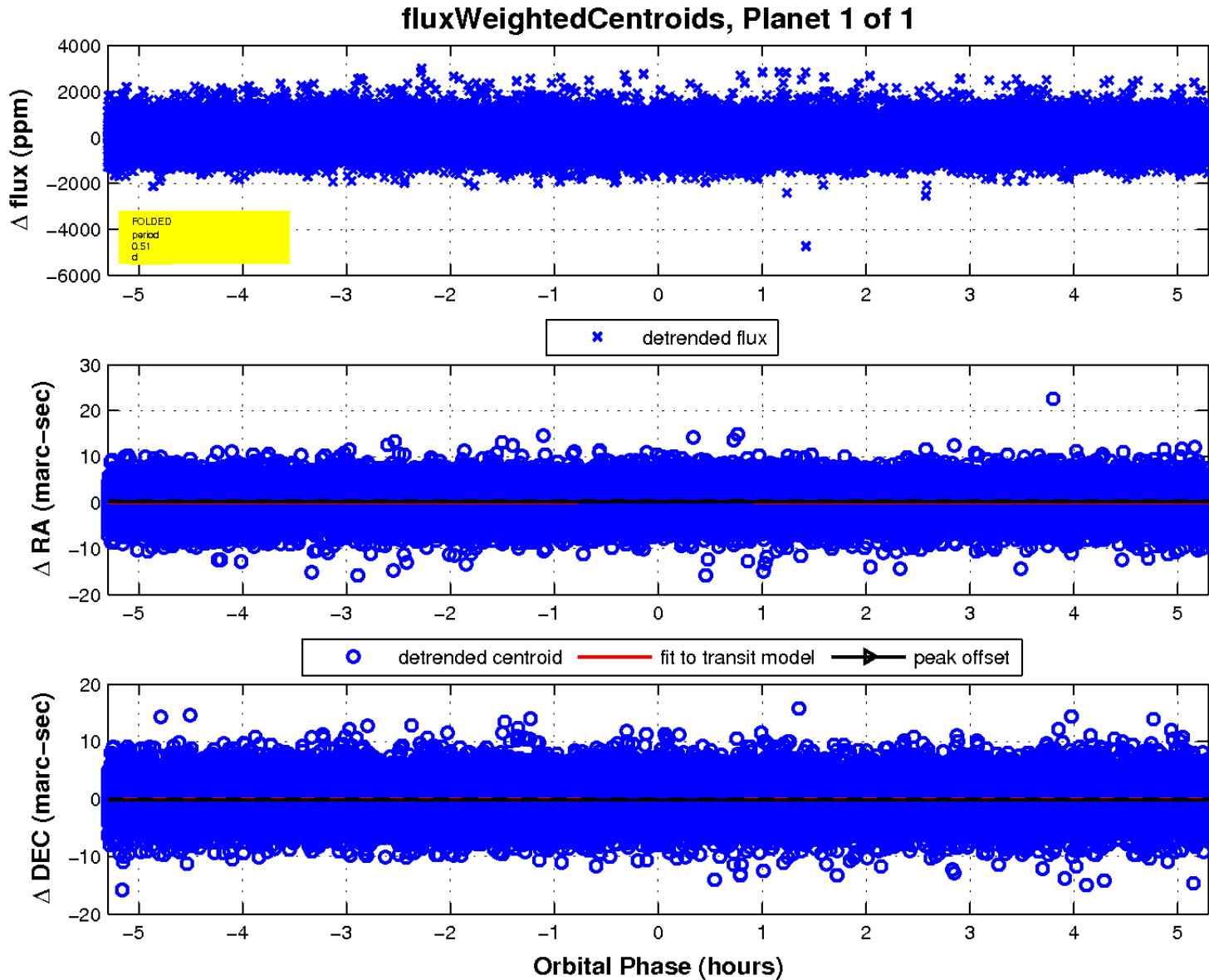
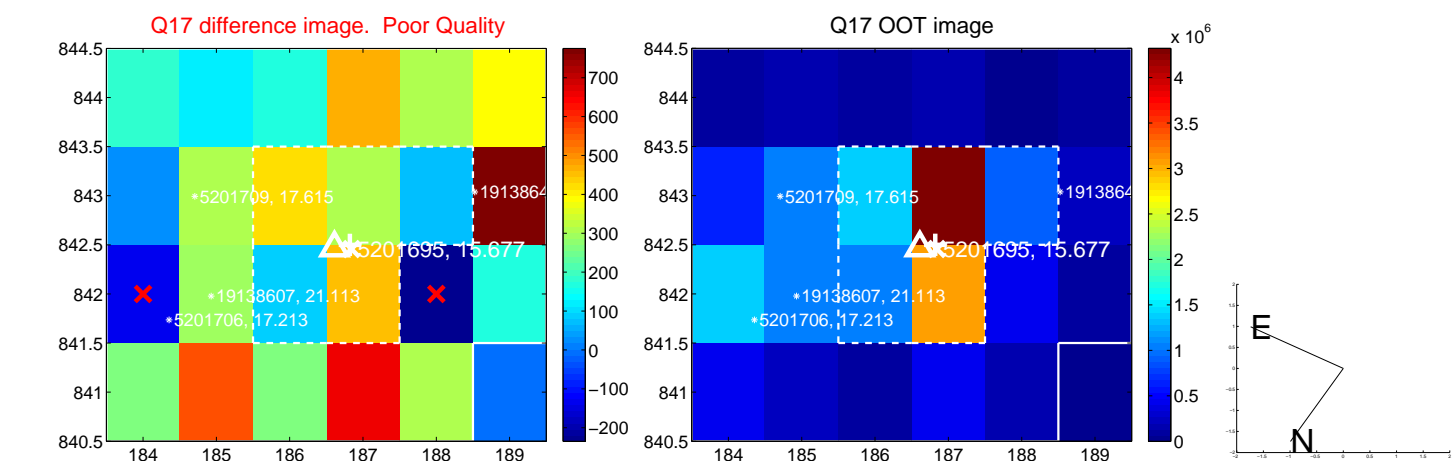
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

