

KIC 006294819

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})
006294819-01	OBS	2852.01	0.675646	131.681603	150.5	2.012	17.4	17.4	0.96	5966	1.40	4471.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006294819-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

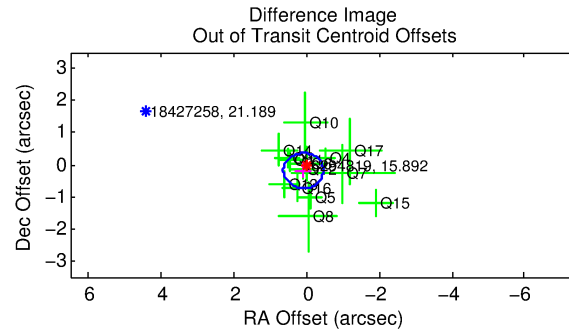
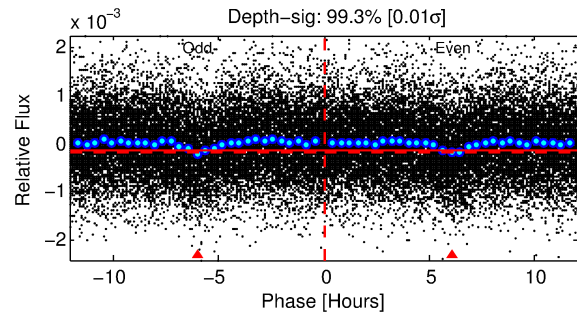
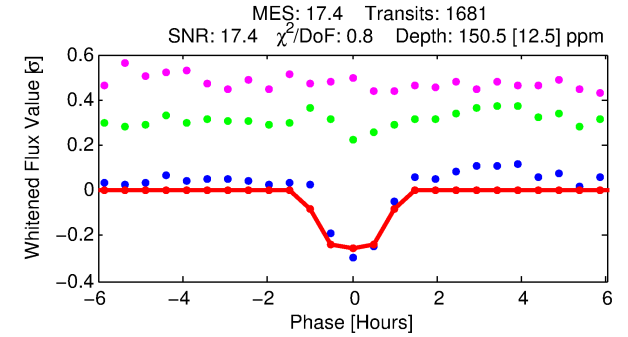
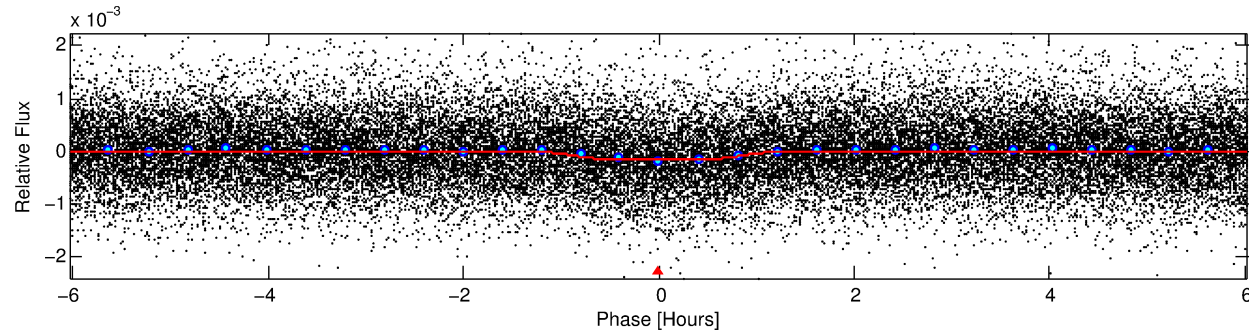
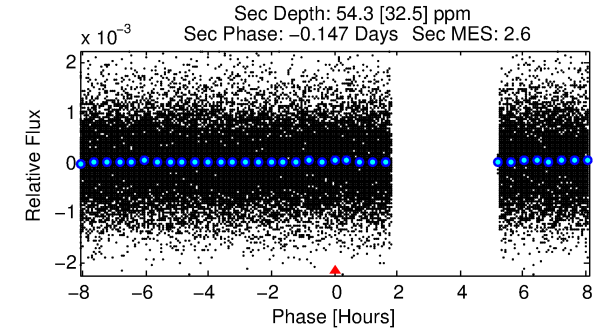
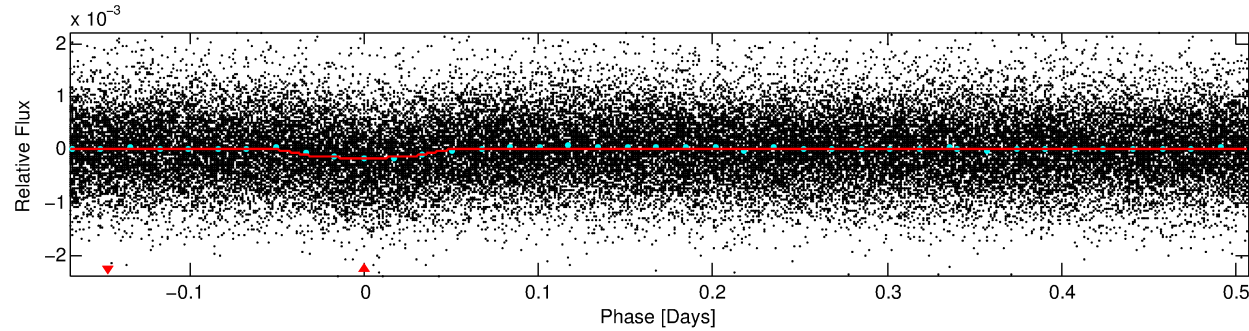
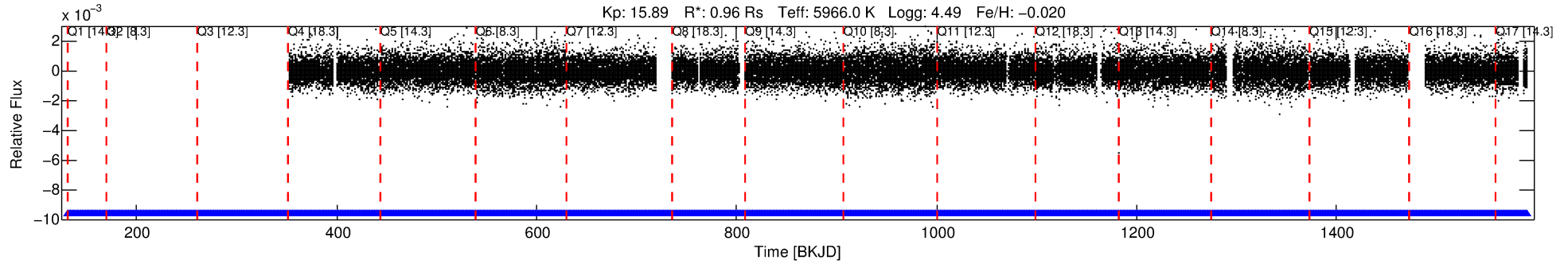
Ephemeris Match Information For 006294819-01

No Significant Match Found

DV One-Page Summary

KIC: 6294819 Candidate: 1 of 1 Period: 0.676 d

KOI: K02852.01 Corr: 0.954



DV Fit Results:

Period = 0.67565 [0.00001] d
Epoch = 131.6816 [0.0016] BKJD
Rp/R* = 0.0134 [0.0058]
a/R* = 1.51 [1.86]
b = 0.90 [0.46]
Seff = 4471.81 [1879.50]
Teq = 2085 [219] K
Rp = 1.40 [0.77] Re
a = 0.0153 [0.0042] AU
Ag = 3.57 [4.04] [0.64σ]
Teffp = 4431 [1185] K [1.95σ]

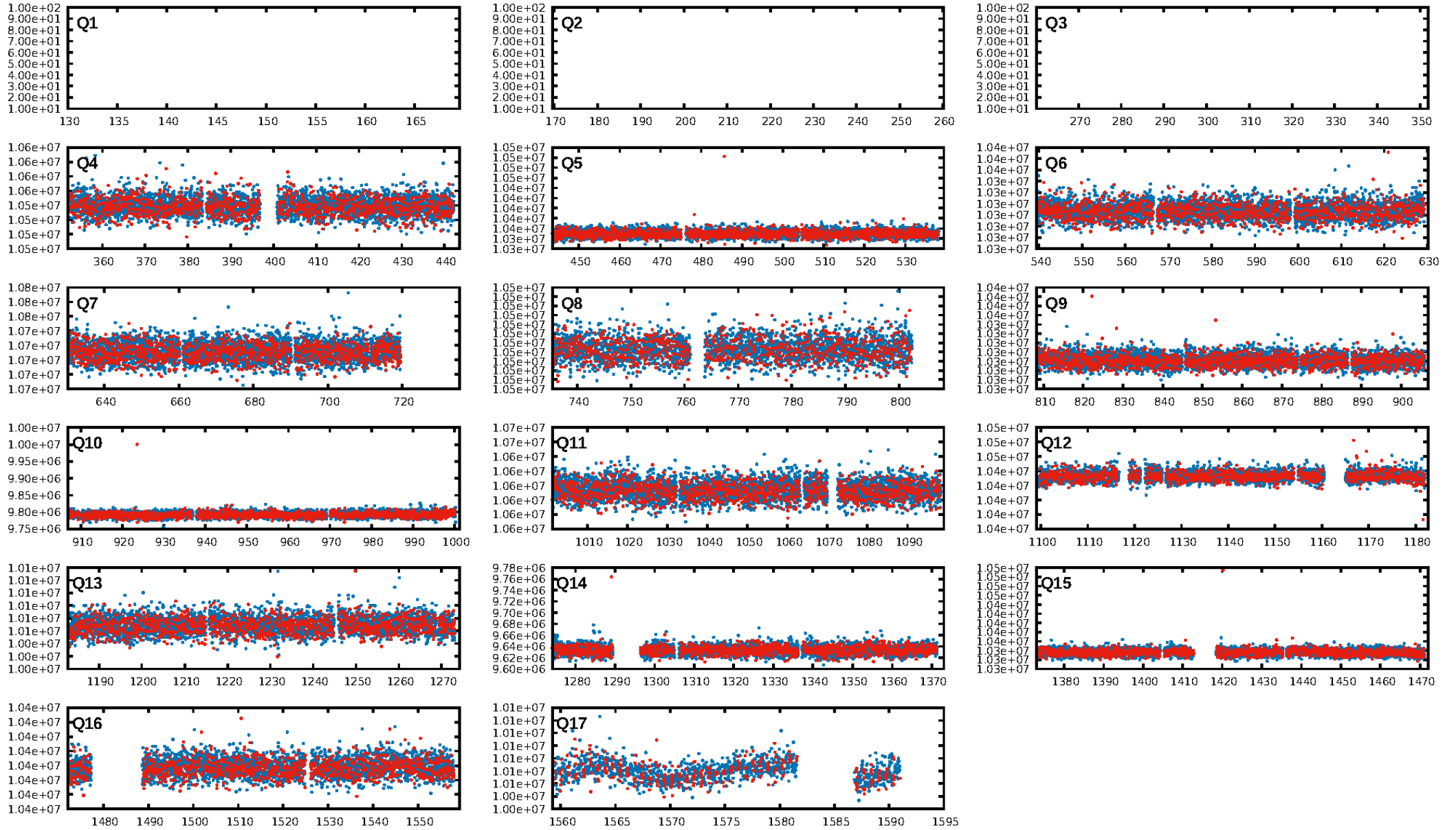
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.71e-63
RollingBand-fgt: 1.00 [1641/1641]
GhostDiagnostic-chr: 2.934
Centroid-sig: 0.0%
Centroid-so: 1.919 arcsec [2.49σ]
OotOffset-rm: 0.209 arcsec [1.14σ]
KicOffset-rm: 0.296 arcsec [1.45σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 0.93 [13/14]
DiffImageOverlap-fno: 1.00 [14/14]

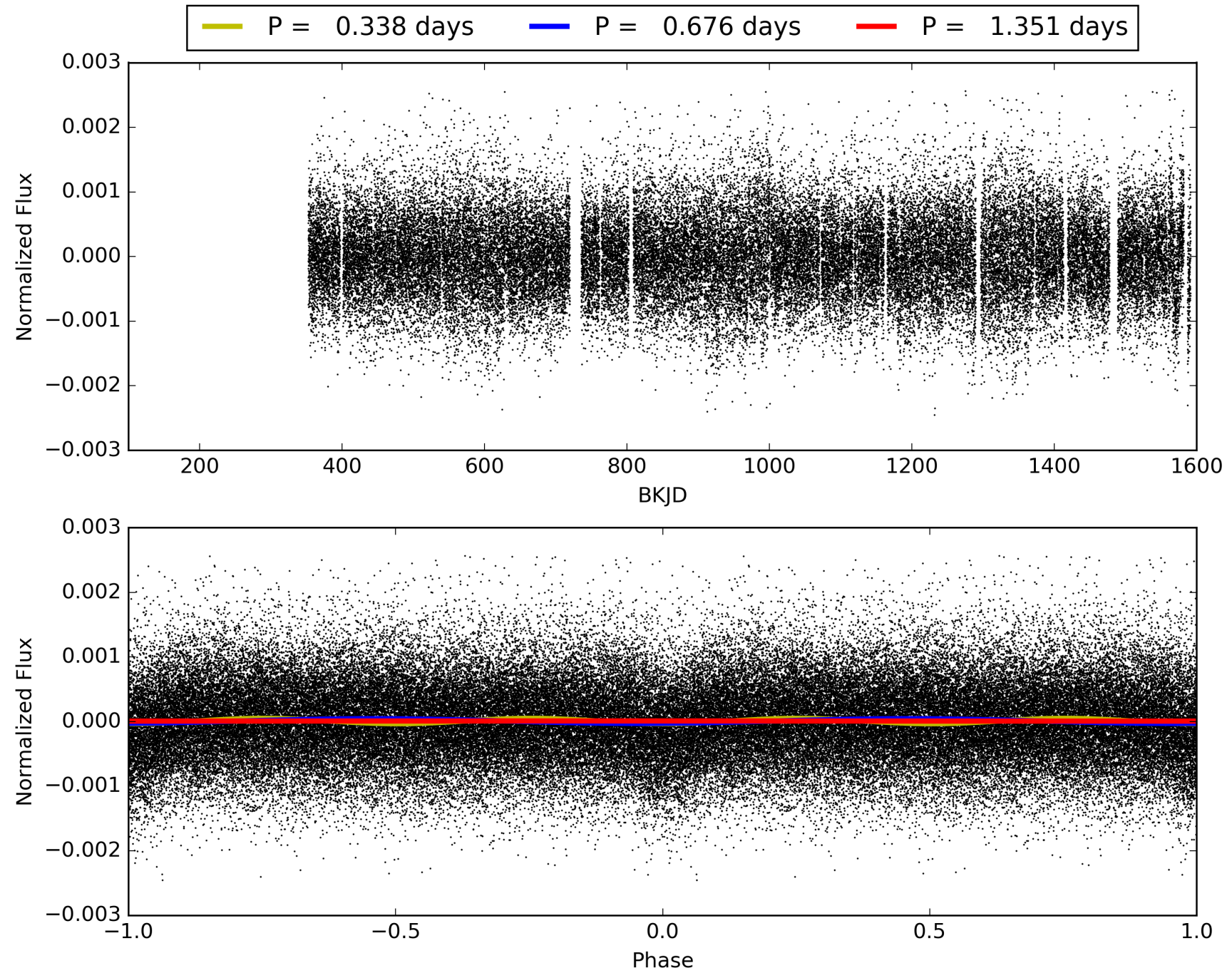
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:17:11 Z

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

TCE 006294819-01, PDC Light Curves

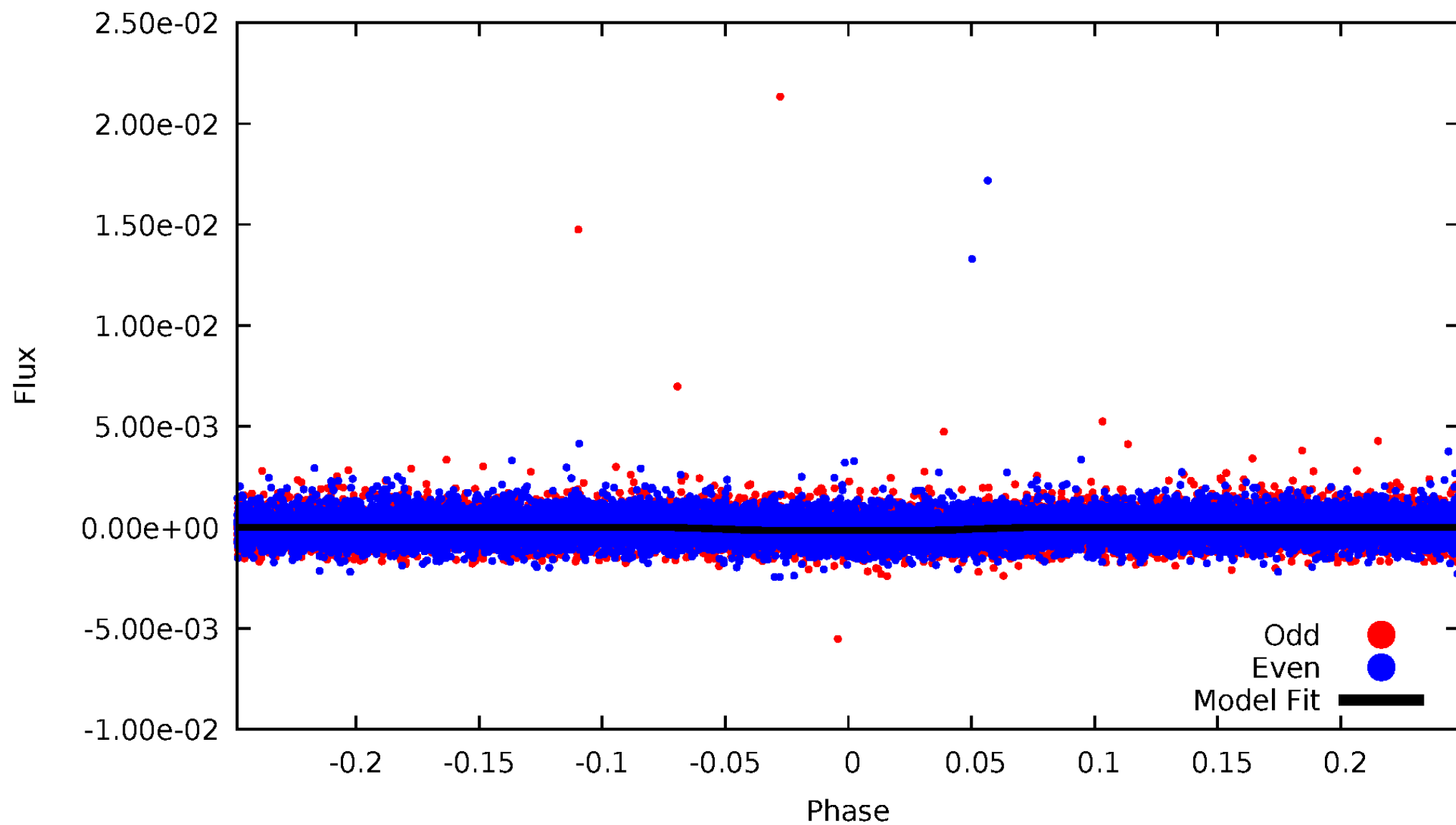


TCE 006294819-01



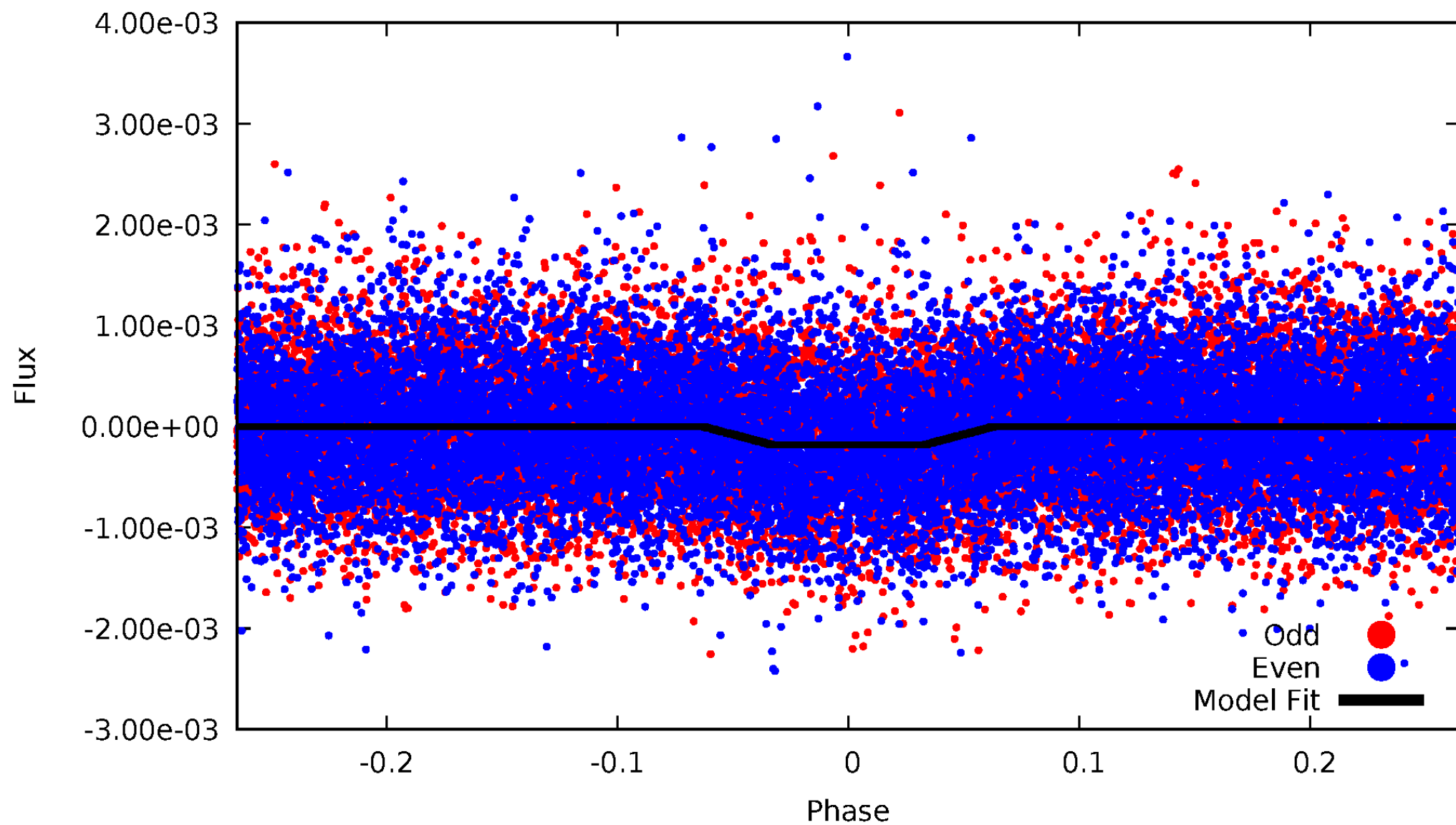
DV Odd/Even

TCE 006294819-01

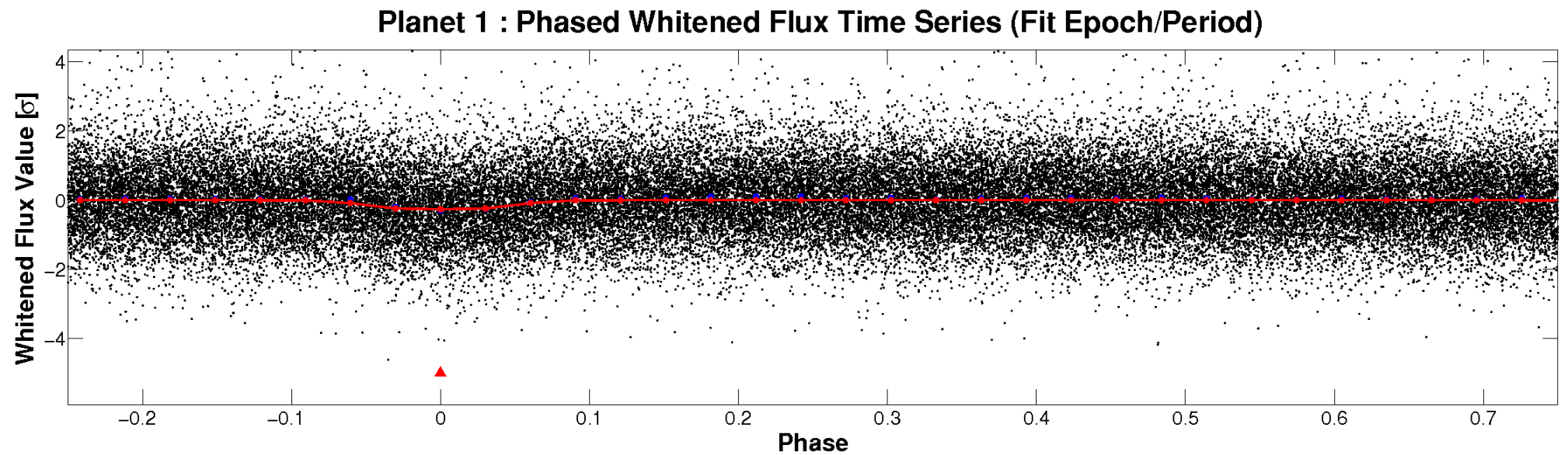
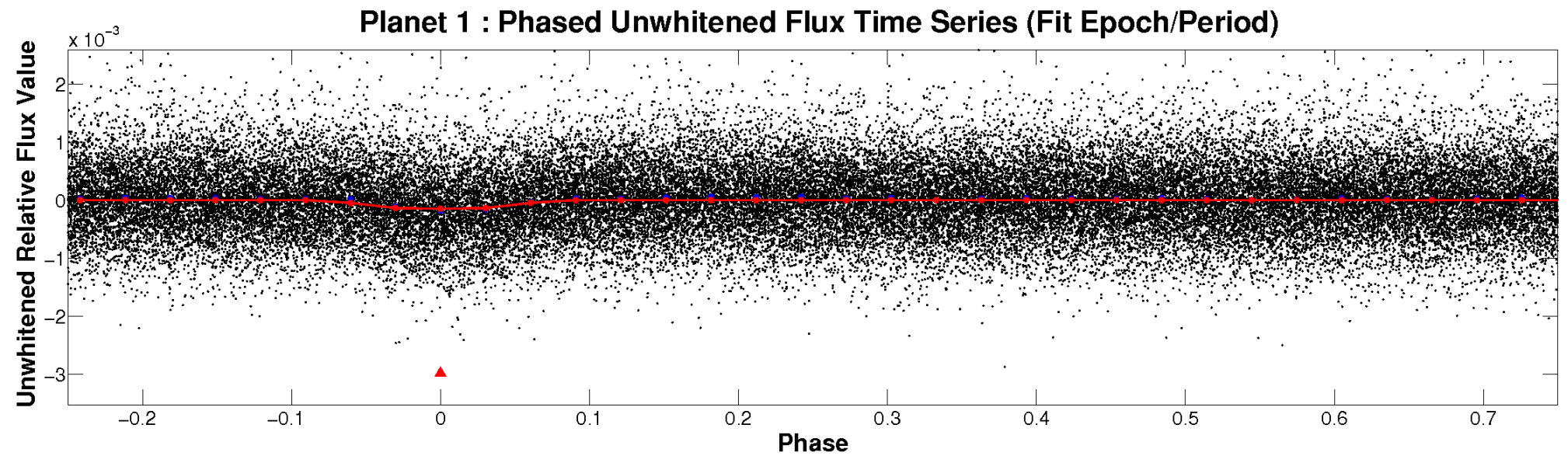


ALT Odd/Even

TCE 006294819-01

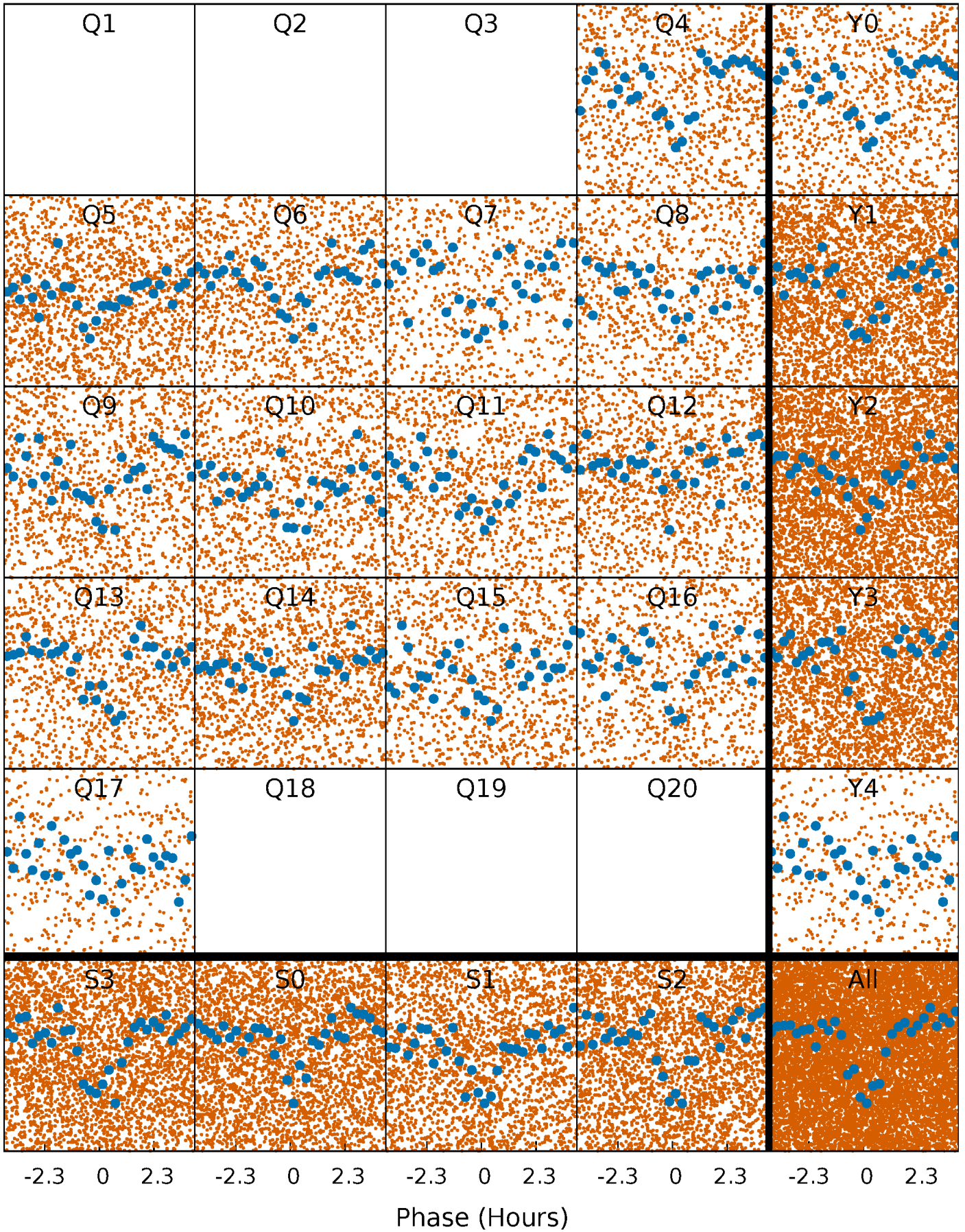


Non-Whitened Vs. Whitened Light Curve



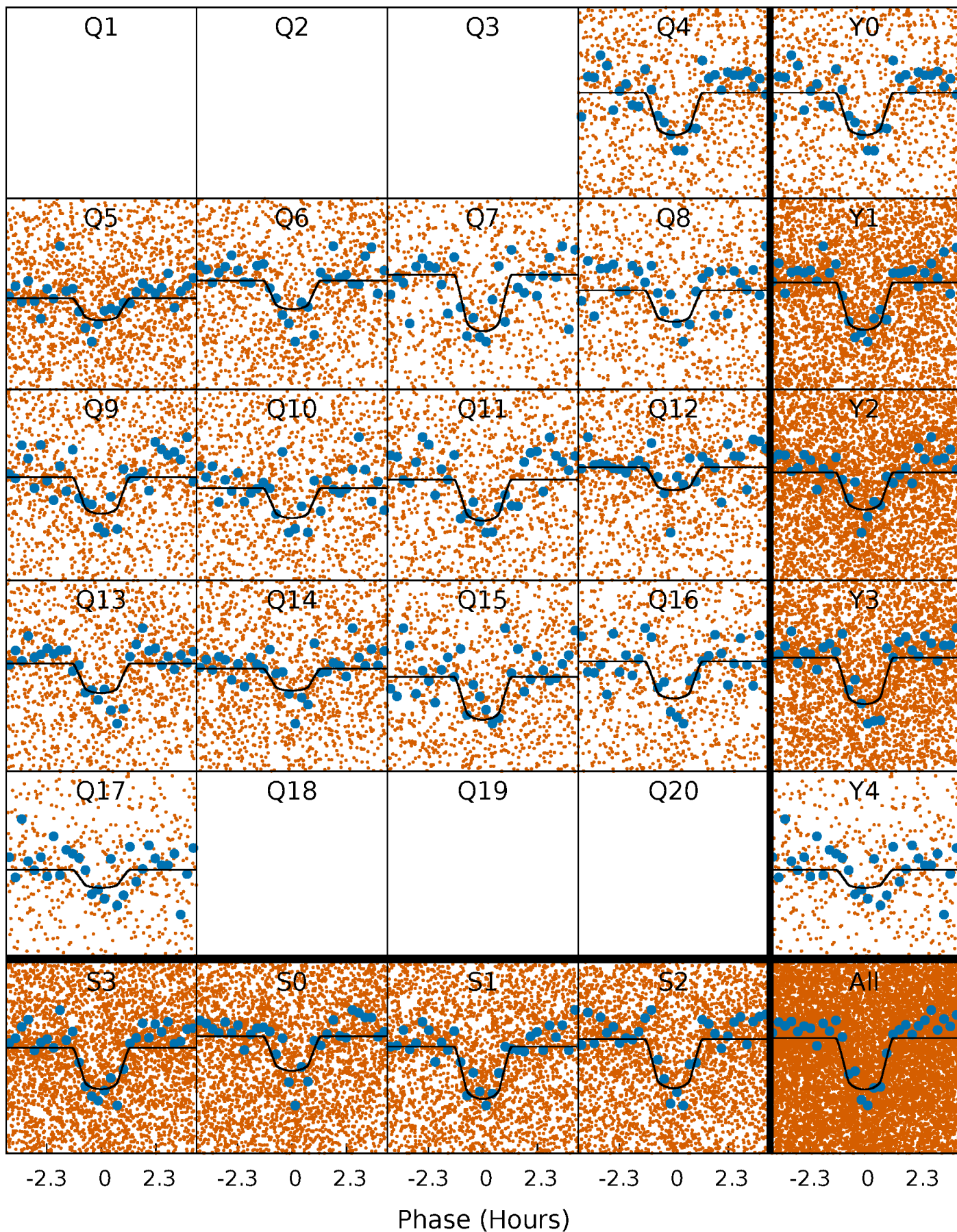
PDC Quarter-Phased Transit Curves

TCE 006294819-01 P= 0.675646 Days $T_0=131.681603$ (BKJD)



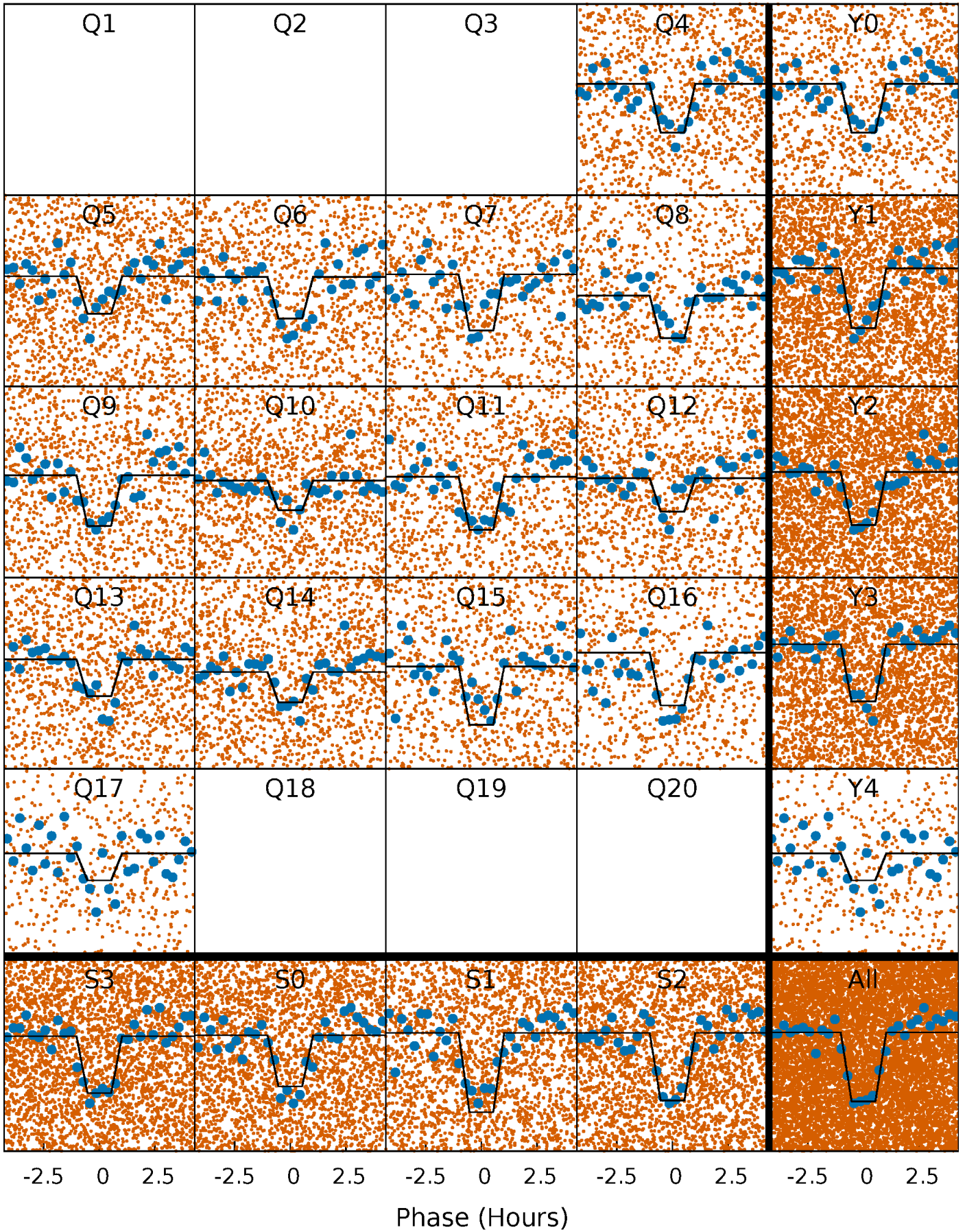
DV Quarter-Phased Transit Curves

TCE 006294819-01 P= 0.675646 Days $T_0=131.681603$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

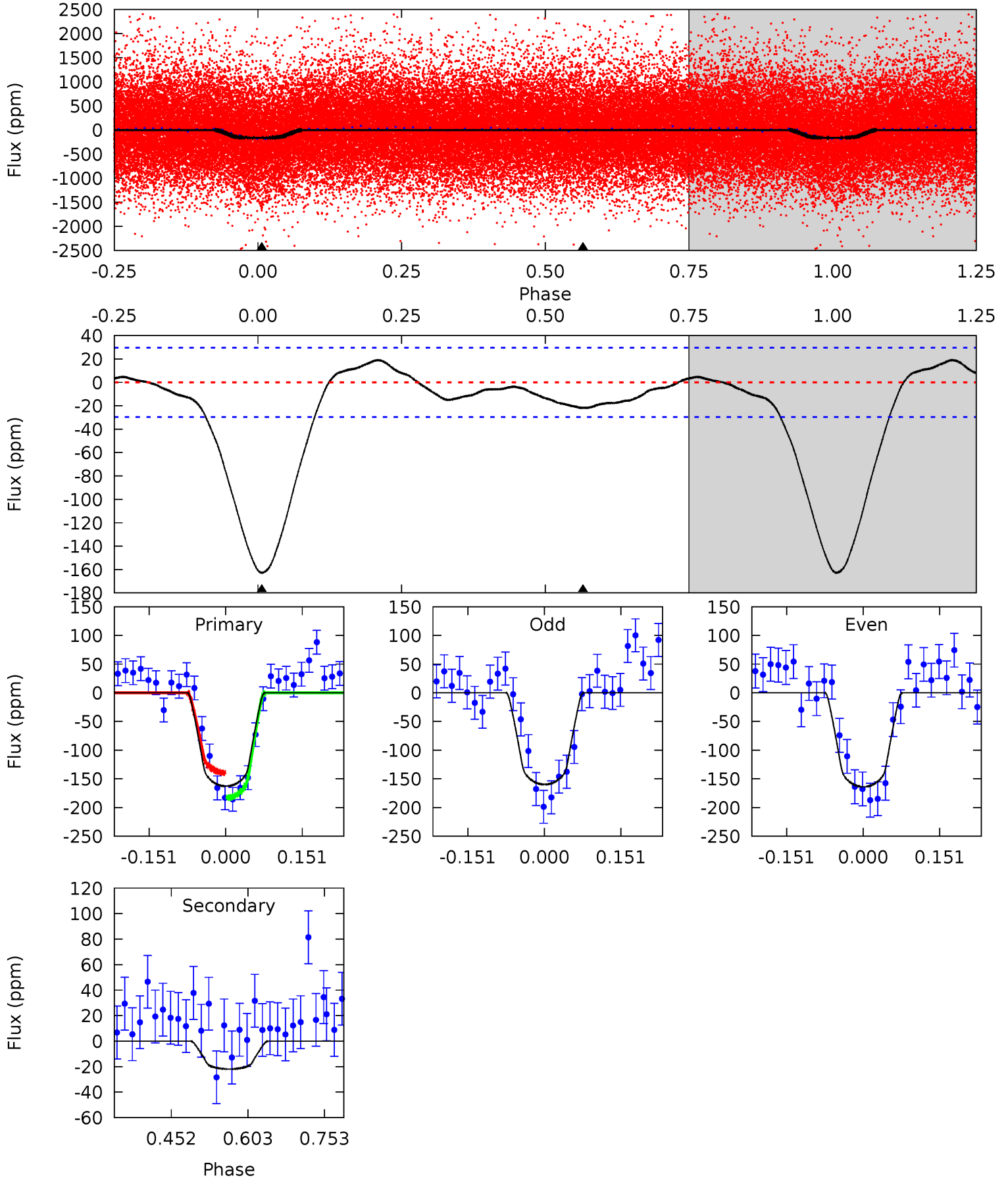
TCE 006294819-01 P= 0.675650 Days $T_0=131.681450$ (BKJD)



DV Model-Shift Uniqueness Test

006294819-01, P = 0.675646 Days, E = 131.681603 Days

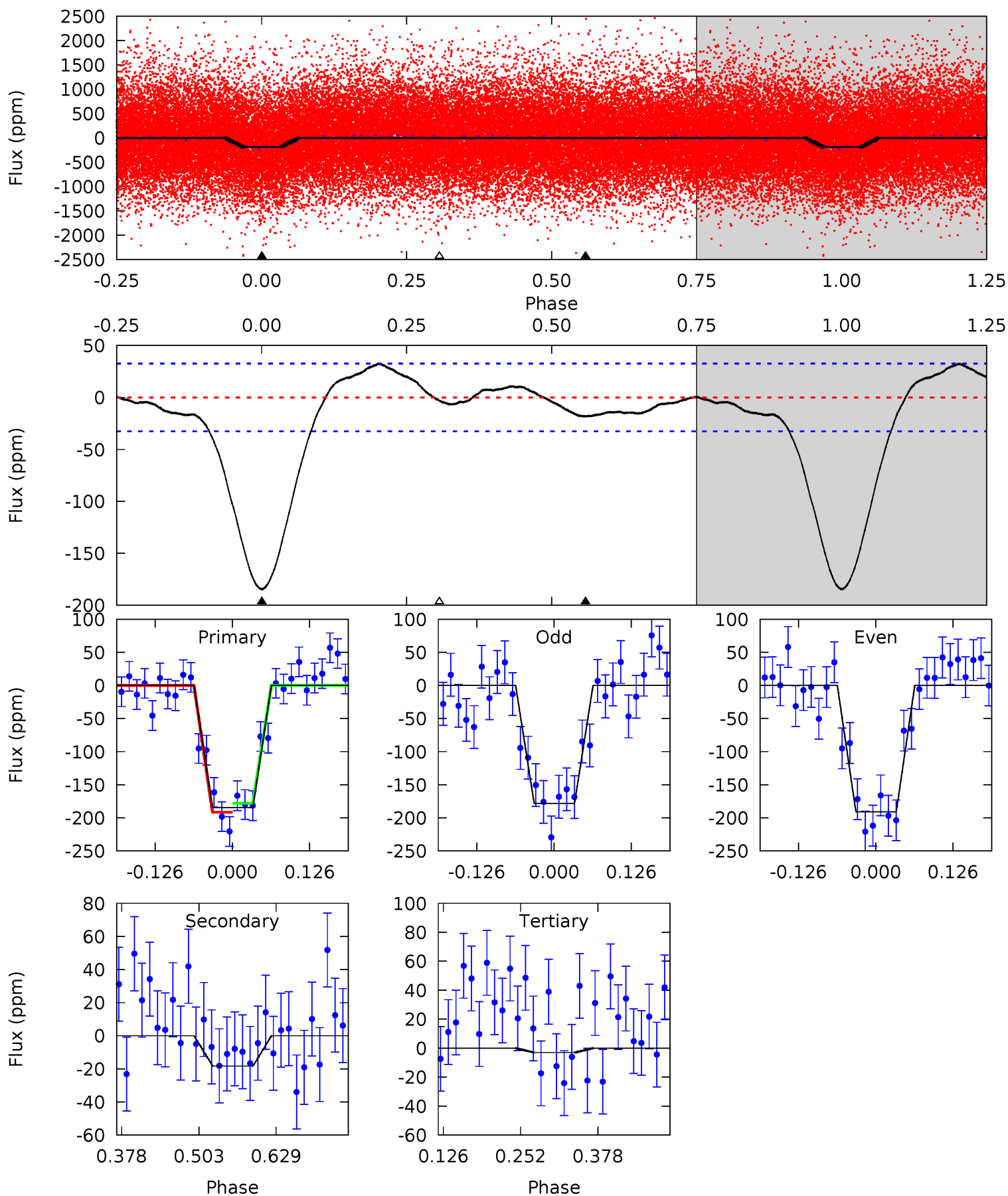
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.6	3.32	0	0	4.48	1.44	1.46	24.6	24.6	3.32	3.32	0.31	0.94	0.10	3.31



Alt Model-Shift Uniqueness Test

006294819-01, P = 0.675650 Days, E = 131.681450 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.6	2.54	0.42	0	4.52	1.53	1.87	25.2	25.6	2.11	2.54	0.87	0.95	0.15	0.94



Stellar Parameters For KIC 006294819

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5966^{+207}_{-207}	$4.493^{+0.054}_{-0.216}$	$-0.020^{+0.250}_{-0.300}$	$0.961^{+0.314}_{-0.105}$	$1.049^{+0.140}_{-0.140}$	$1.665^{+0.366}_{-0.915}$
	+3%/-3%	+1%/-5%	+1250%/-1500%	+33%/-11%	+13%/-13%	+22%/-55%
Source	KIC0	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 006294819-01 / KOI 2852.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-22 ± 7	$1.44^{+0.75}_{-0.62}$	2985^{+232}_{-155}	3728^{+1061}_{-765}	$1.316^{+3.032}_{-0.800}$
Alt.	-18 ± 7	$1.48^{+0.73}_{-0.61}$	2995^{+231}_{-166}	3503^{+997}_{-912}	$0.984^{+2.309}_{-0.604}$

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 $A_{obs} \gg 1.0$

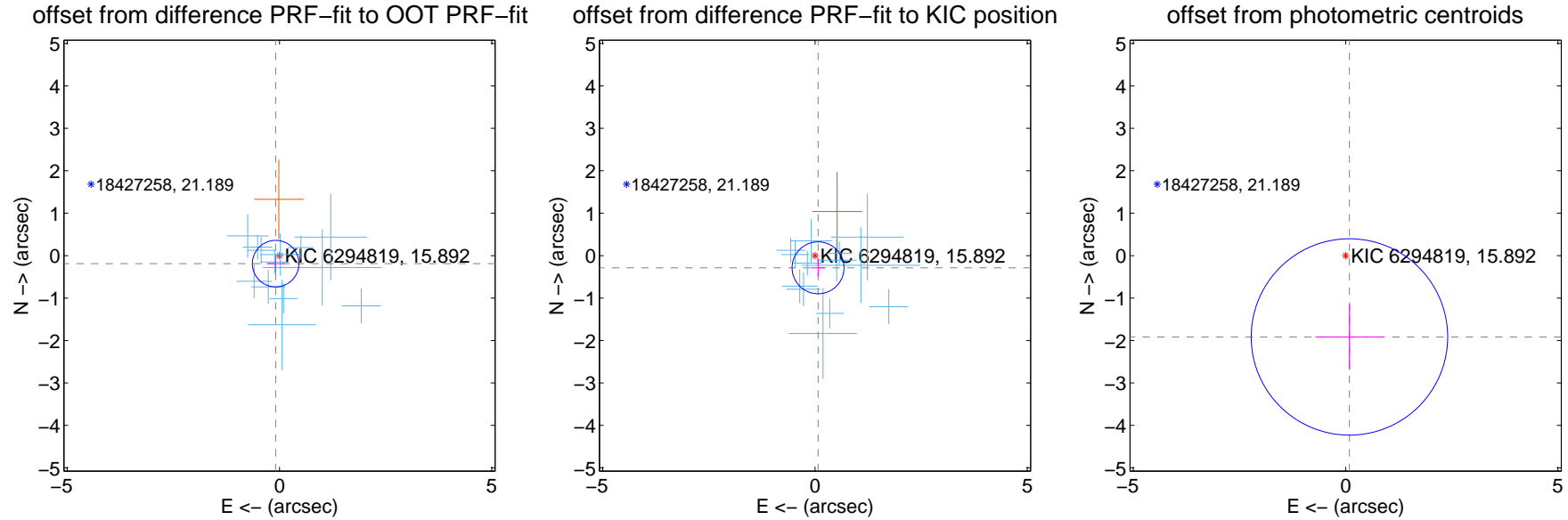
DV Centroid Data

Supplemental centroid analysis for 006294819-01. Kepler magnitude: 15.89. Transit SNR 17.45

There are 13 quarters with good PRF difference image offsets

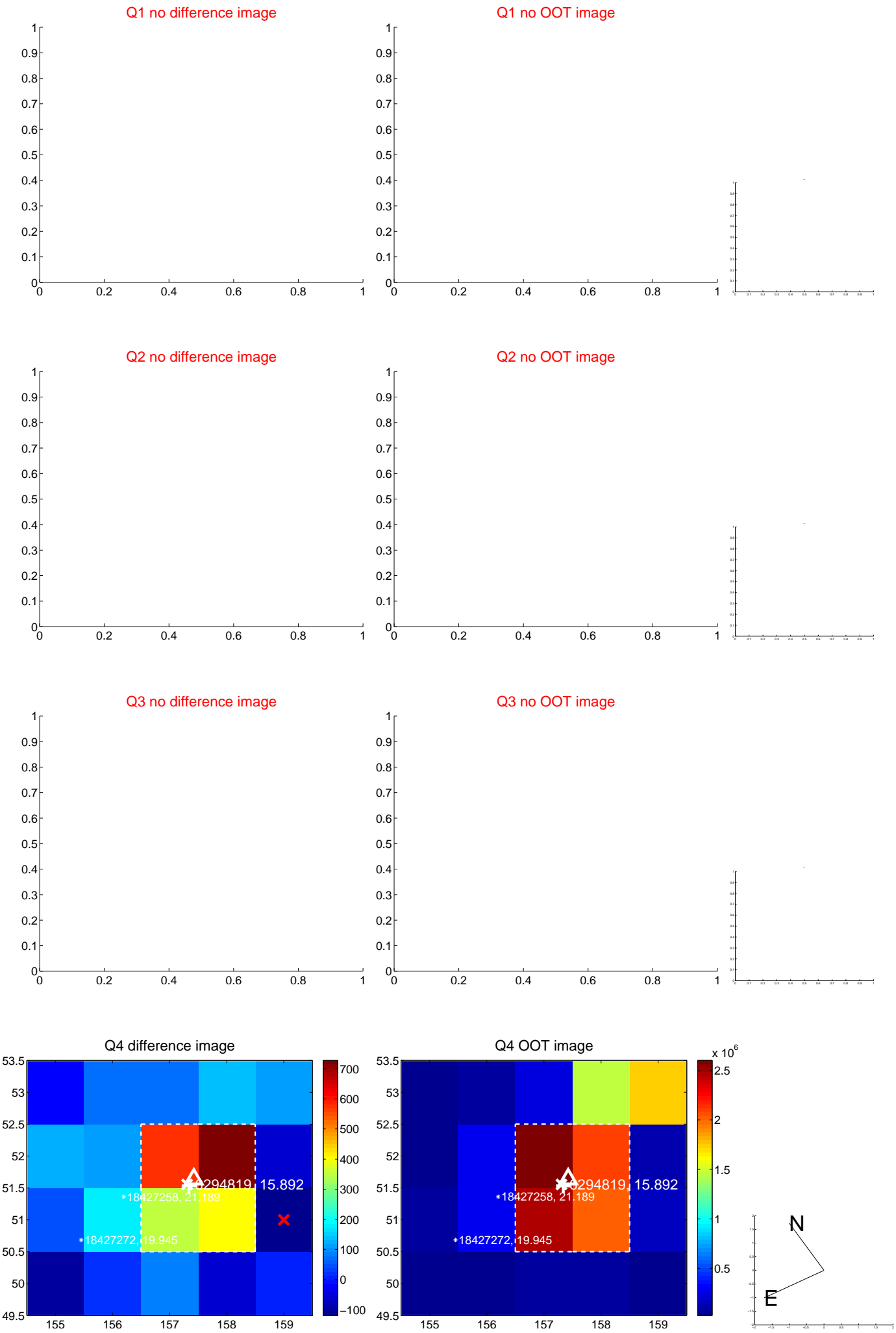
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.209 ± 0.183	1.14	0.090 ± 0.207	-0.188 ± 0.207
PRF-fit source offset from KIC position	0.296 ± 0.204	1.45	-0.072 ± 0.171	-0.287 ± 0.206
photometric centroid source offset	1.92 ± 0.77	2.49	-0.09 ± 0.80	-1.92 ± 0.77

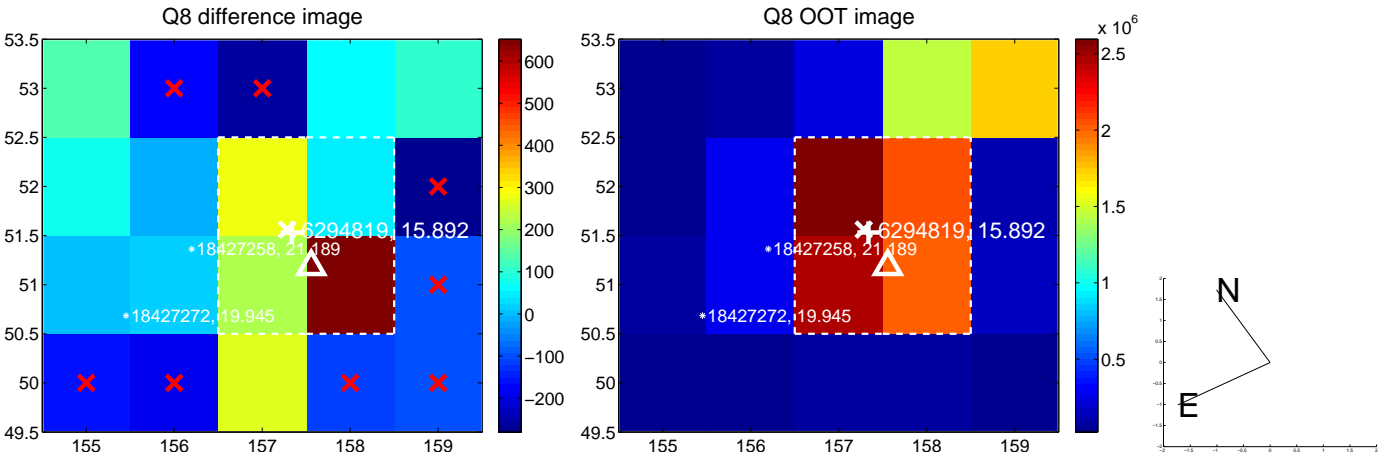
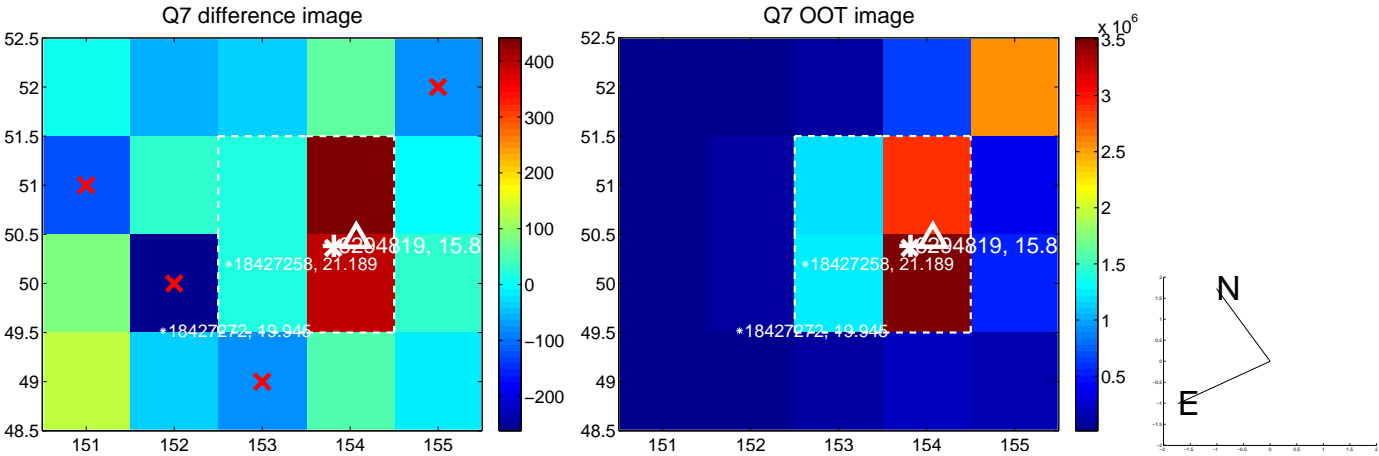
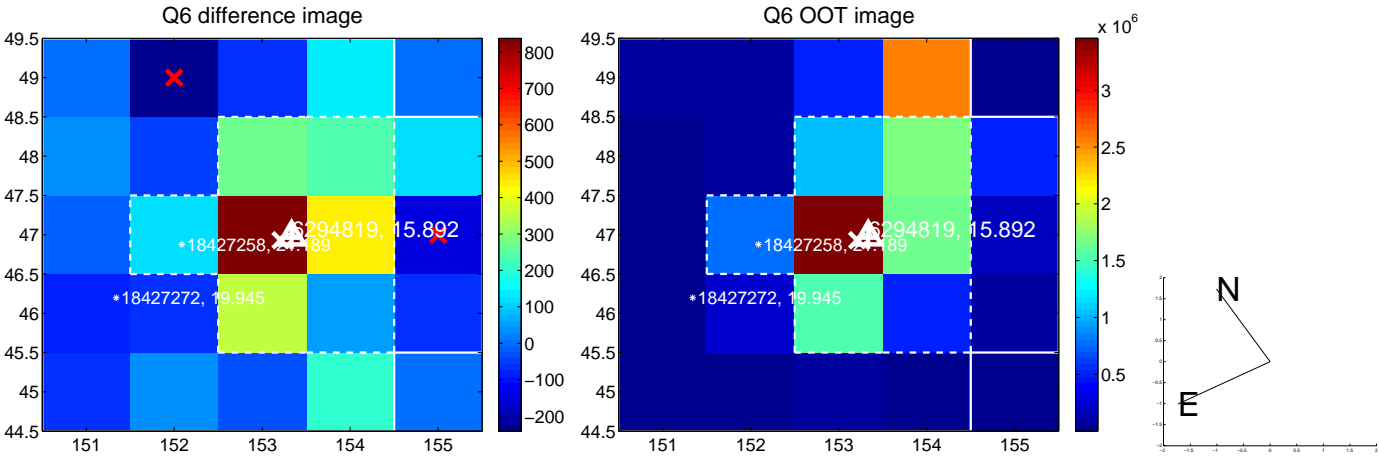
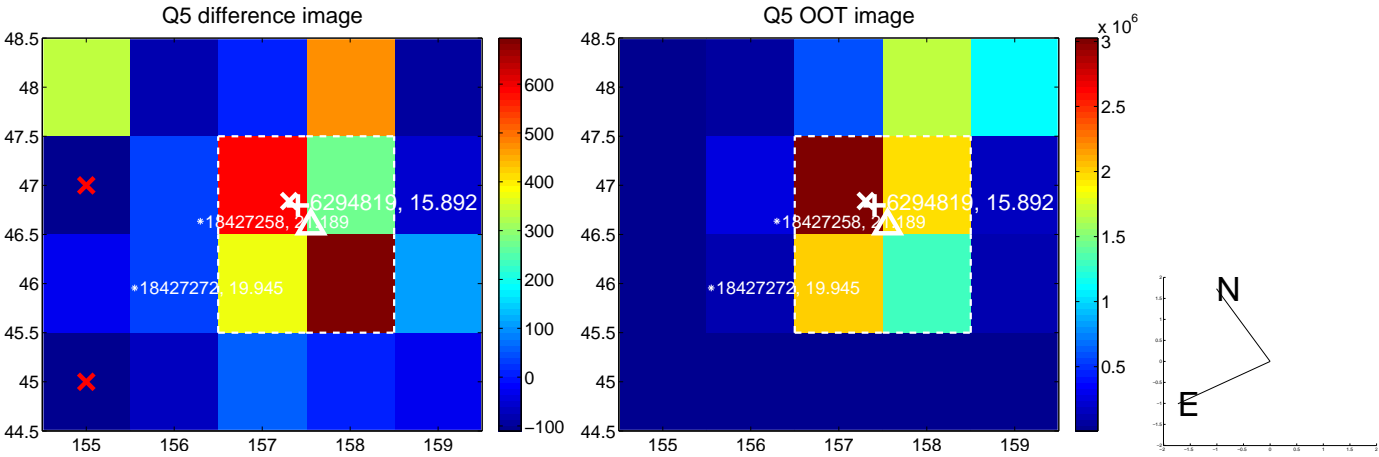


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

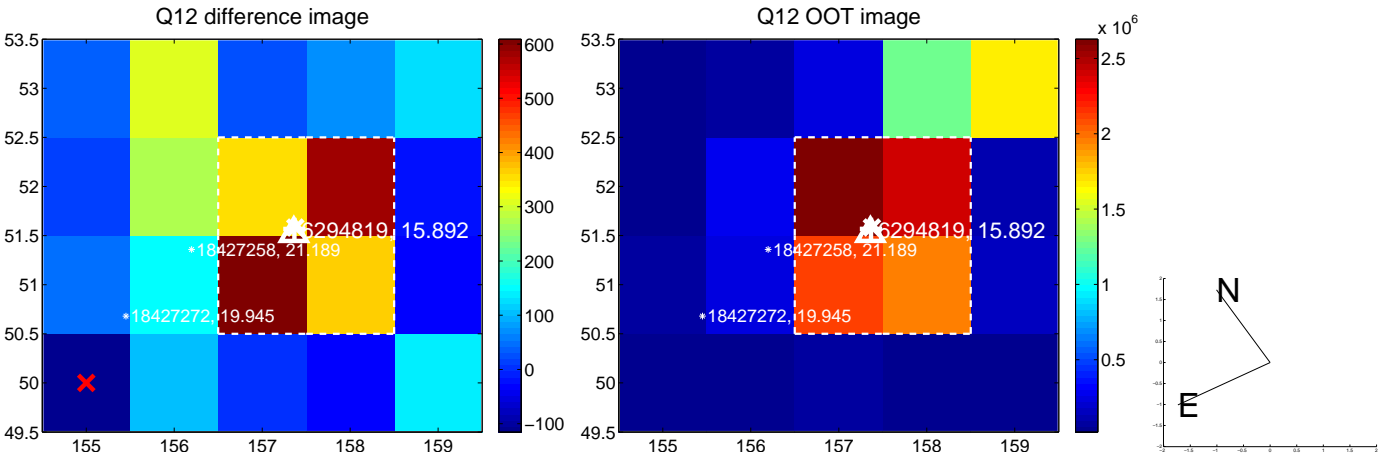
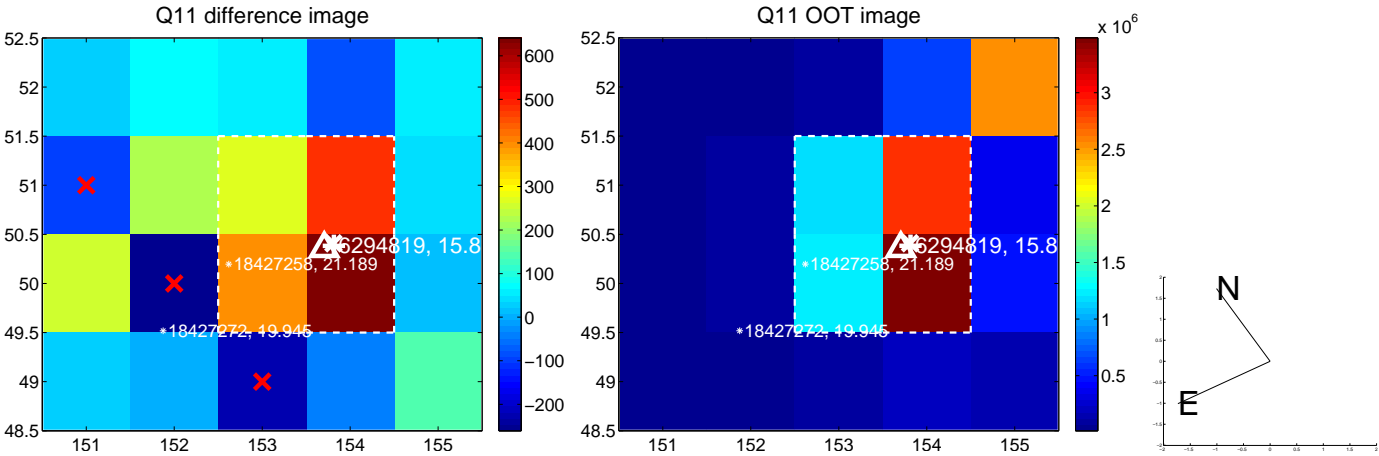
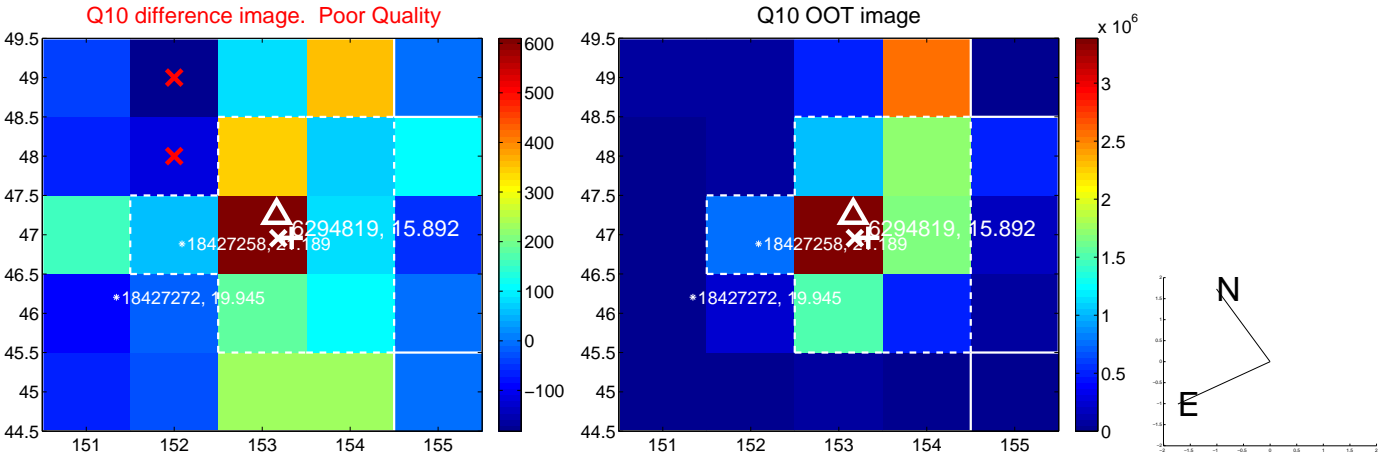
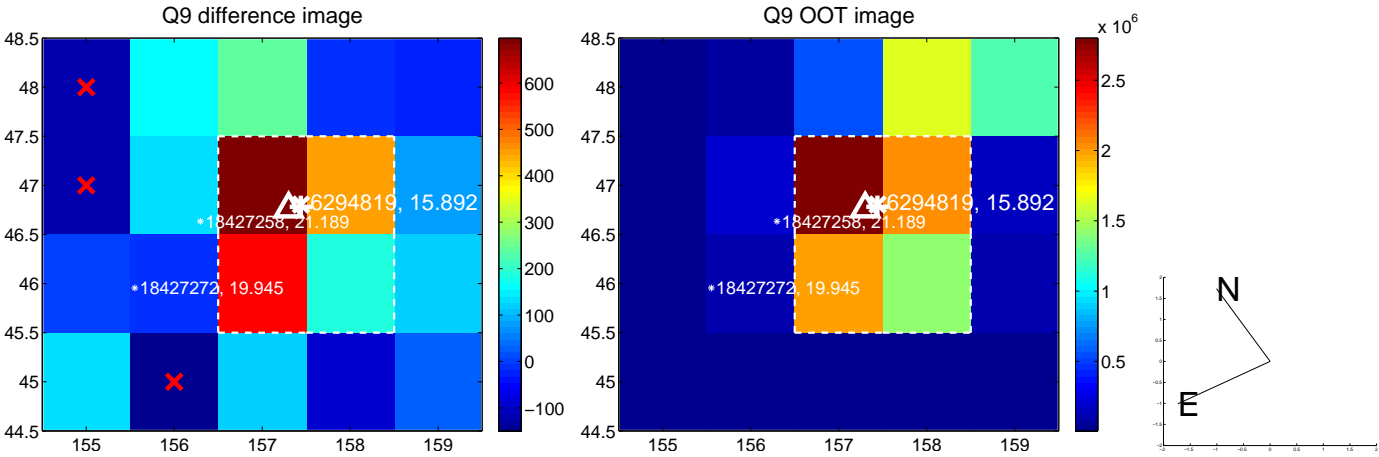
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



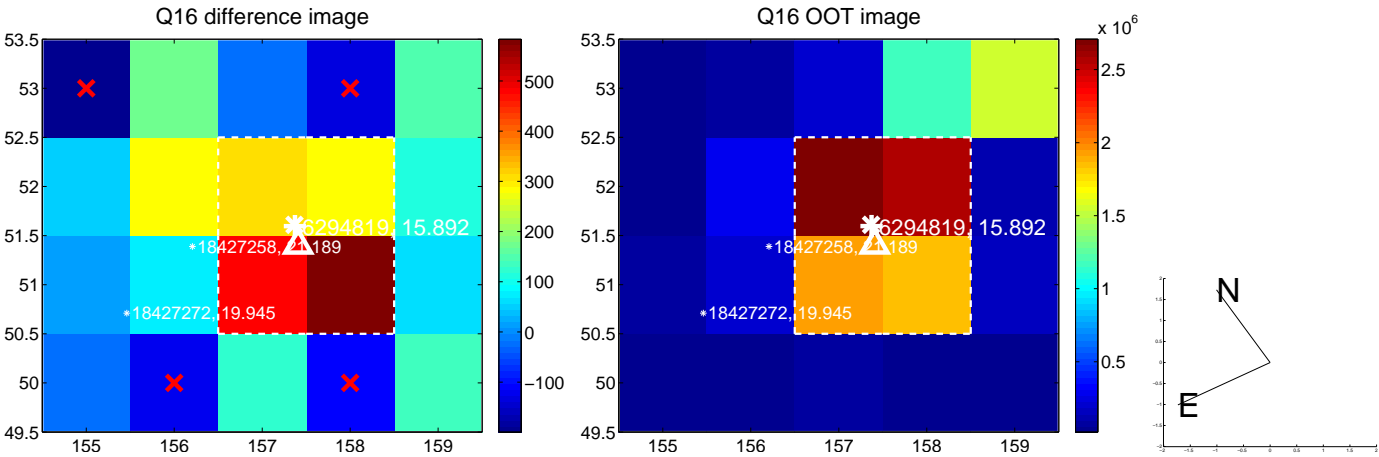
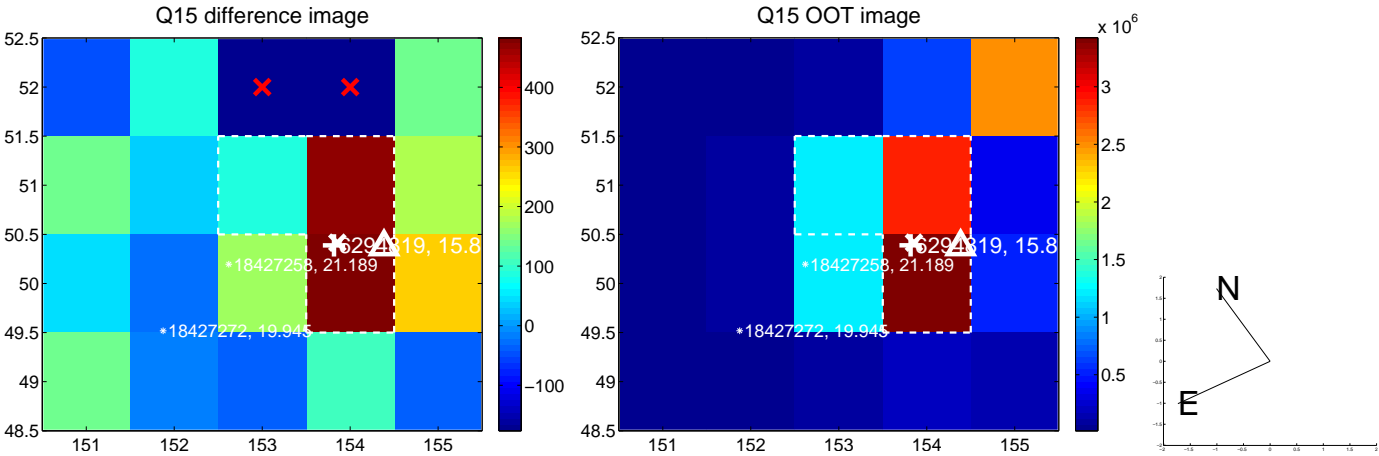
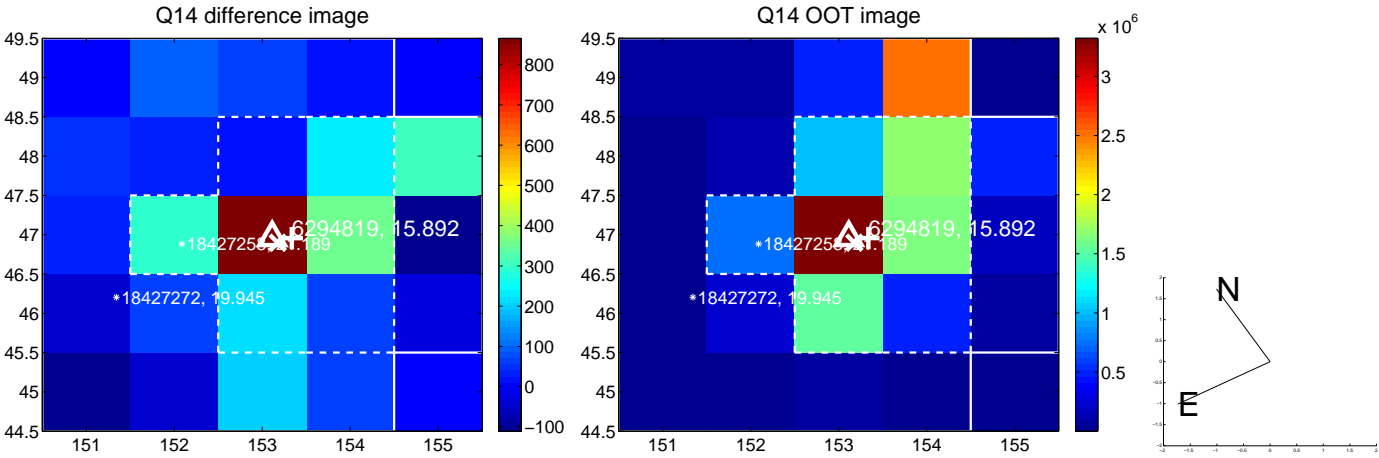
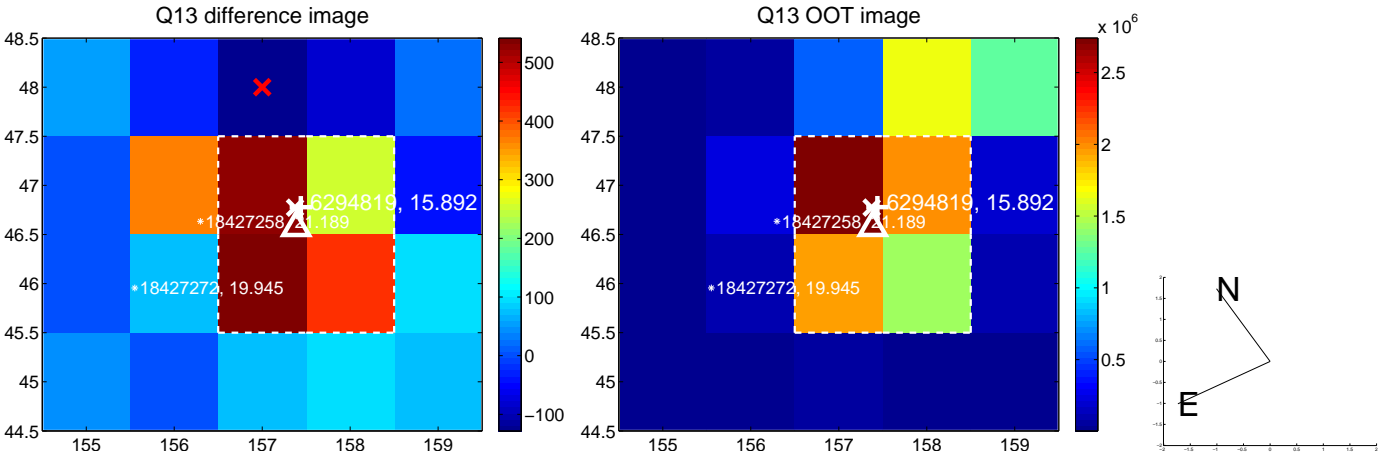
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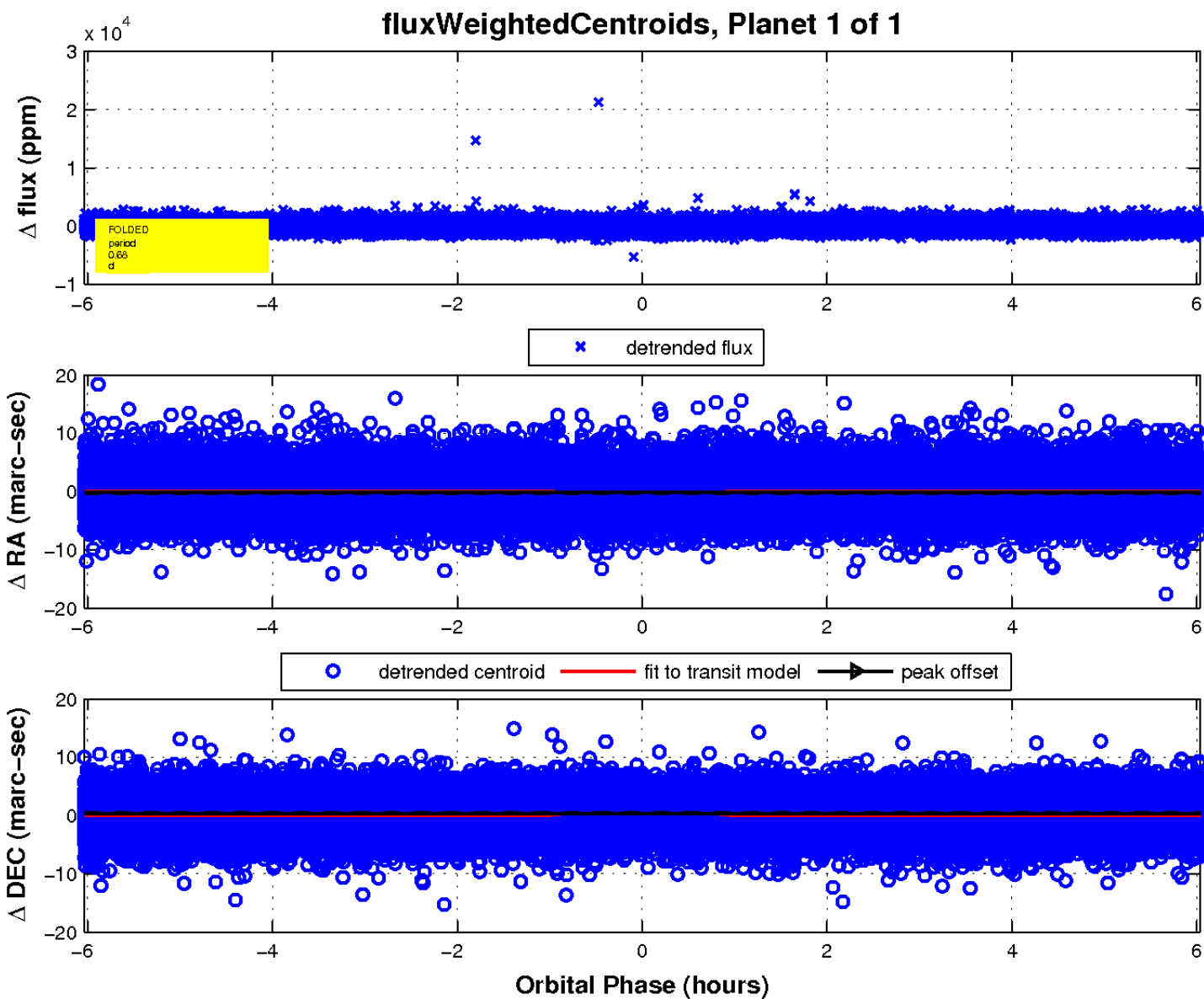
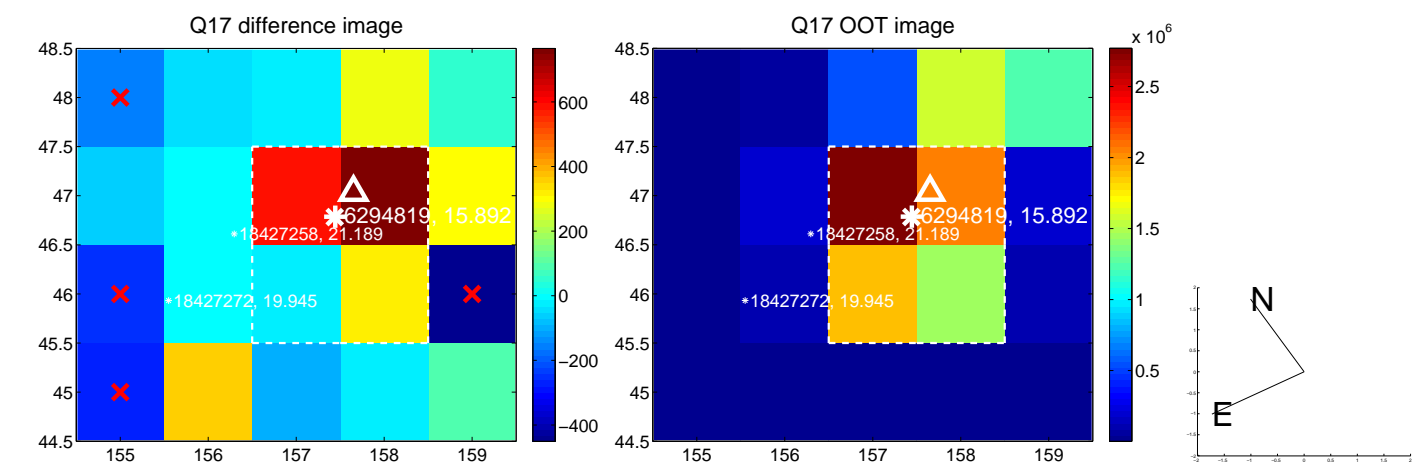
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

