

KIC 007199989

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})
007199989-01	OBS	No	0.566758	131.893024	3.0	5.335	9.2	3.1	2.23	7027	0.45	43428.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007199989-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—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.

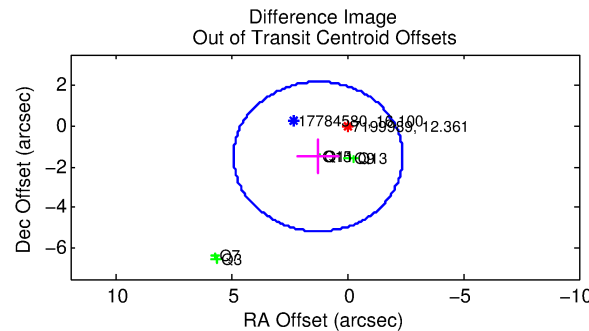
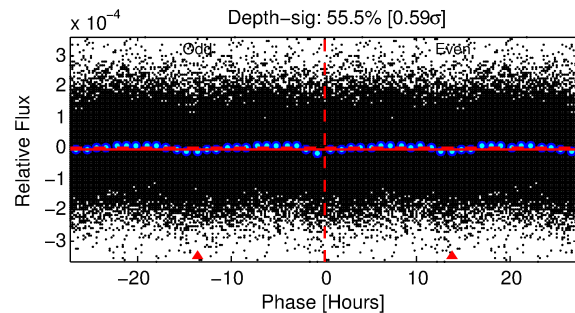
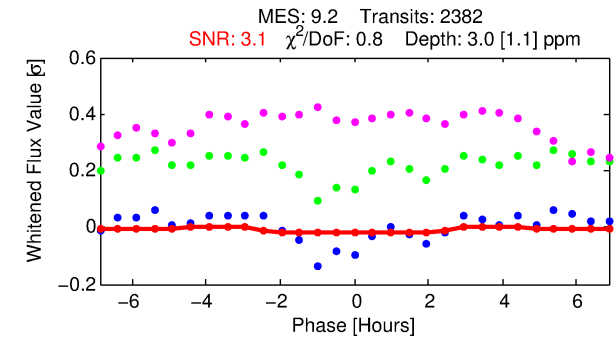
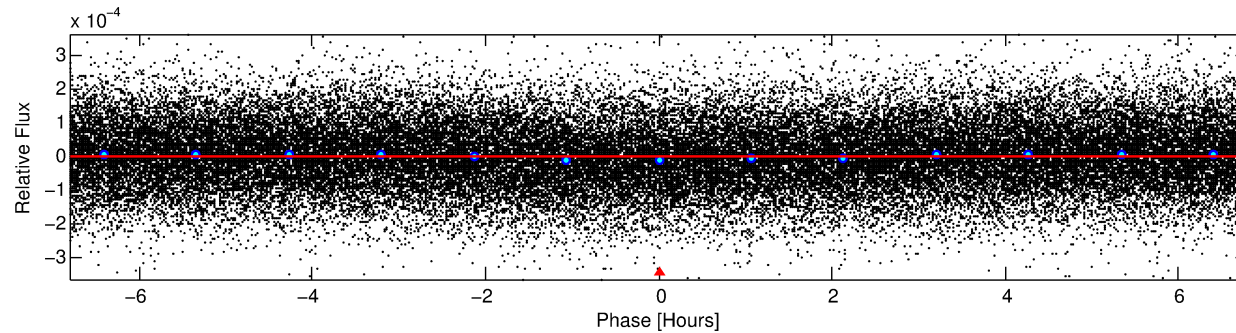
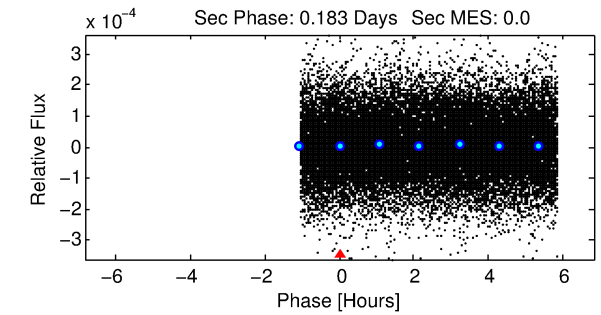
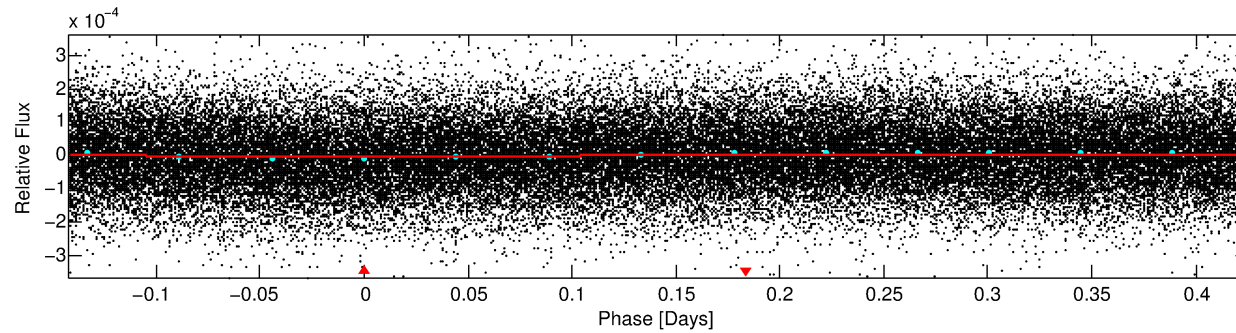
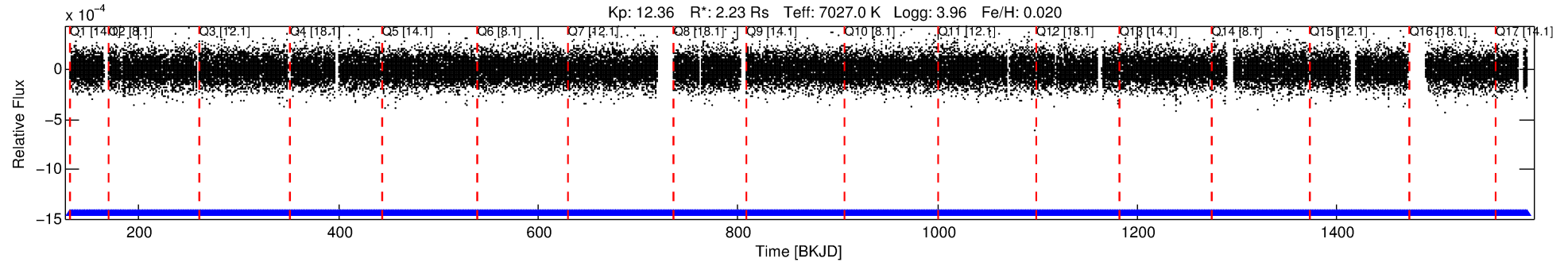
Ephemeris Match Information For 007199989-01

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
007199989-01	7199989	RR-Lyr-pri	7198959	1:1	808.6	111	170	7.86	12.36	207770.00	Direct-PRF	0	2.01	19.42

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: 7199989 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56676 [0.00004] d
Epoch = 131.8930 [0.0126] BKJD
Rp/R* = 0.0018 [0.0037]
a/R* = 1.01 [0.36]
b = 0.89 [2.95]
Seff = 43428.74 [15972.73]
Teff = 3681 [338] K
Rp = 0.45 [0.90] Re
a = 0.0158 [0.0035] AU
Ag = N/A
Teffp = N/A

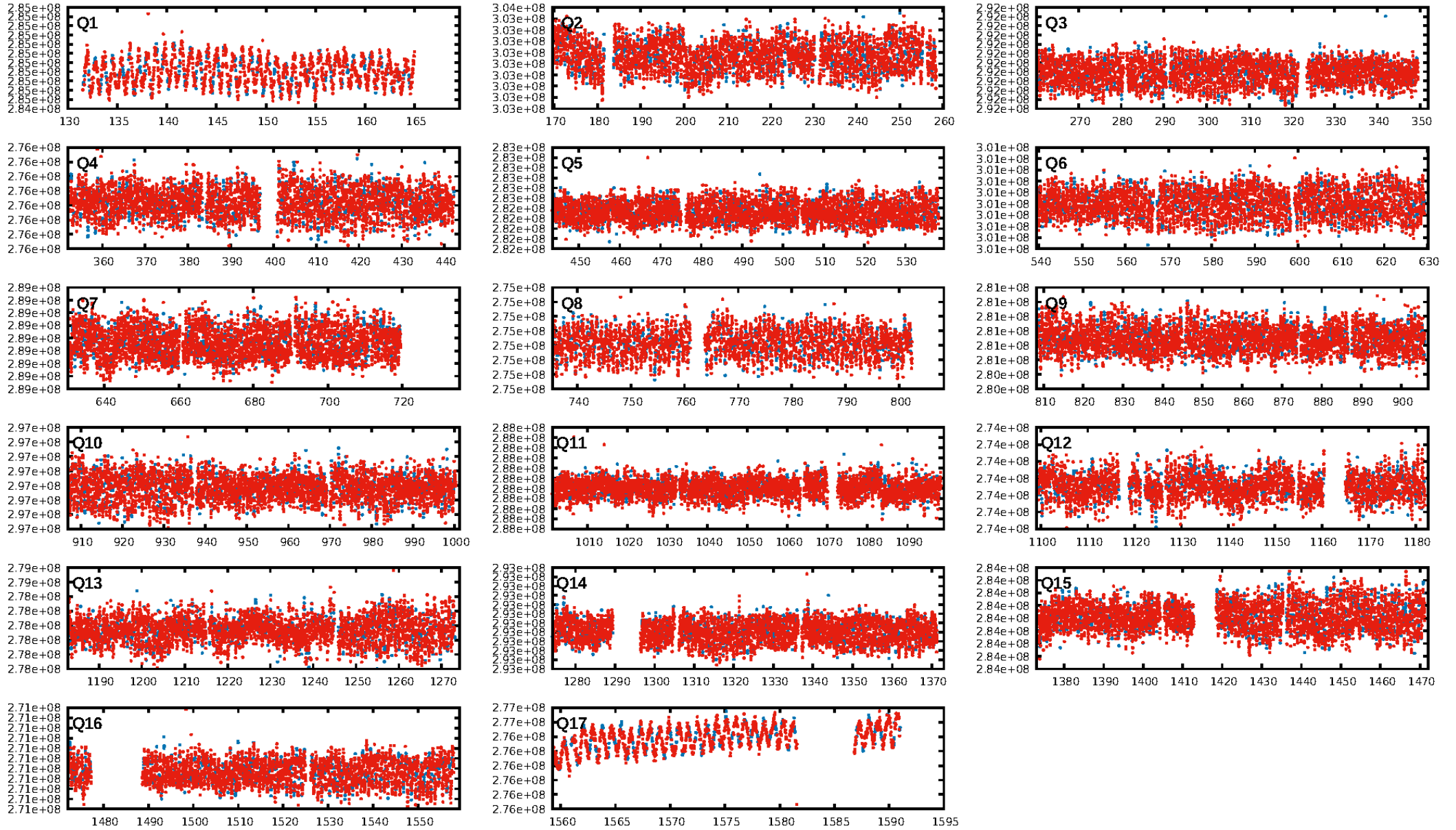
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2275/2275]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.977 arcsec [1.62σ]
KicOffset-rm: 1.913 arcsec [1.48σ]
OotOffset-st: 0/4/0/2 [6]
KicOffset-st: 0/4/0/2 [6]
DiffImageQuality-fgm: 0.33 [2/6]
DiffImageOverlap-fno: 1.00 [17/17]

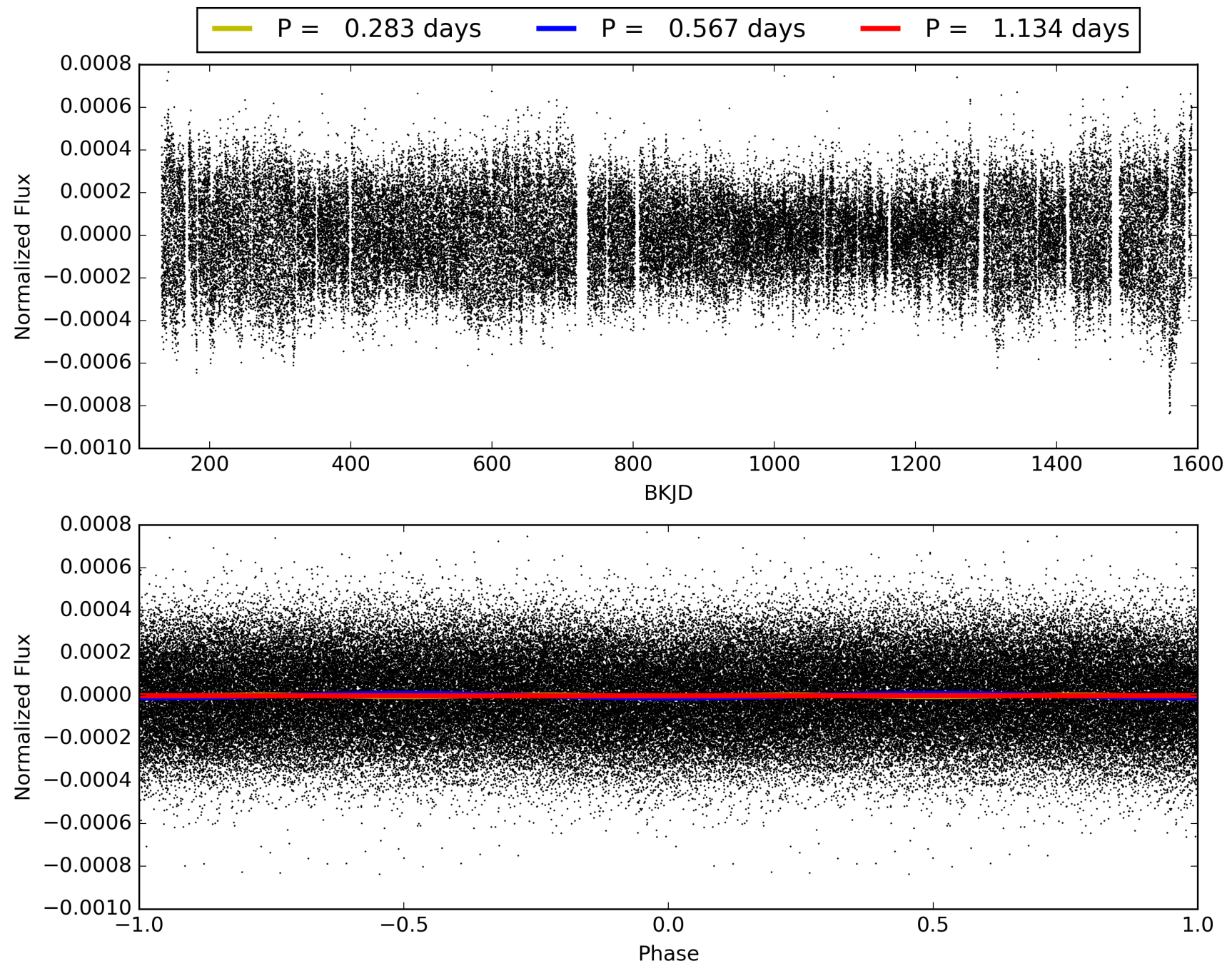
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:44:39 Z

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

TCE 007199989-01, PDC Light Curves

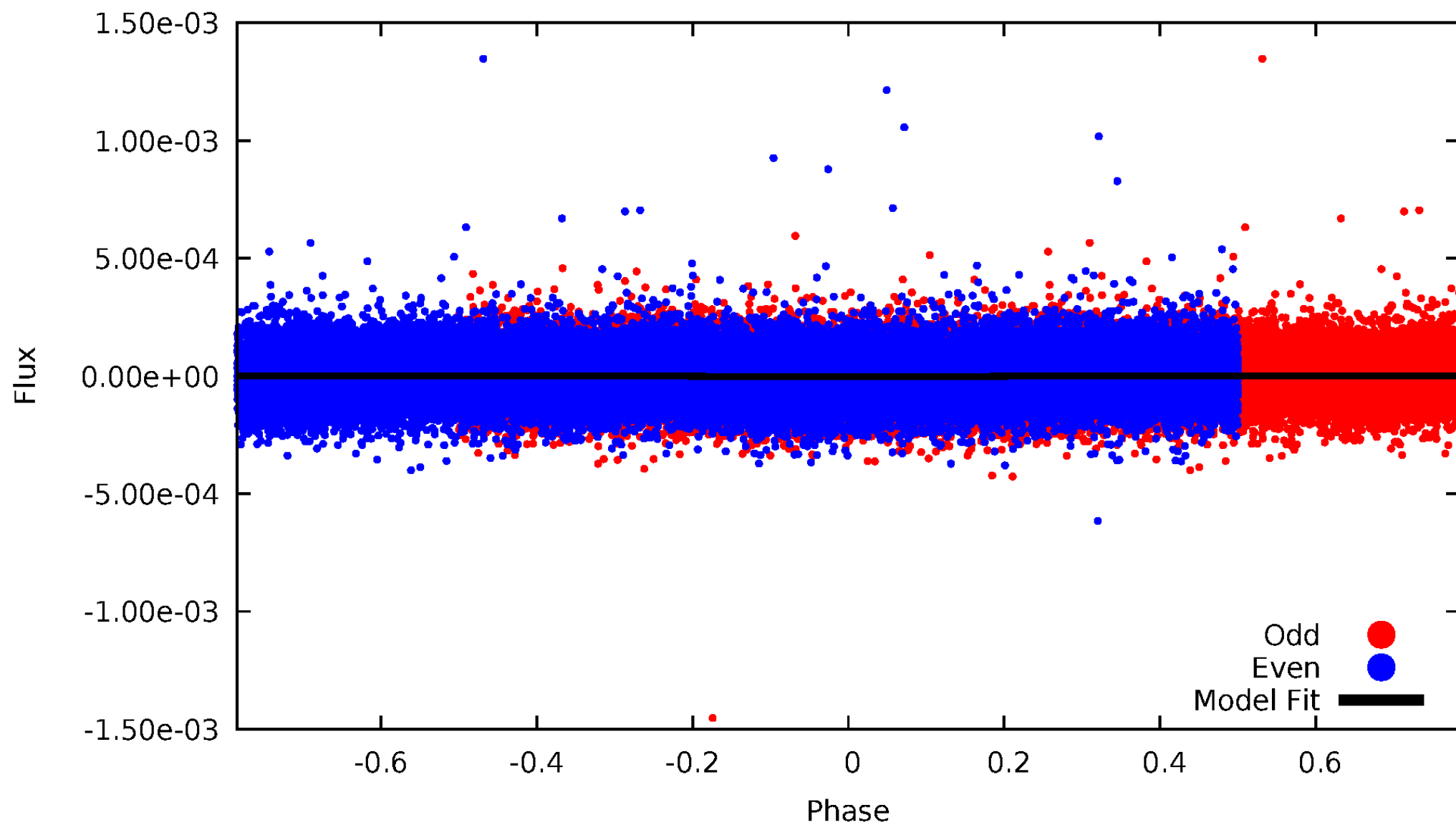


TCE 007199989-01



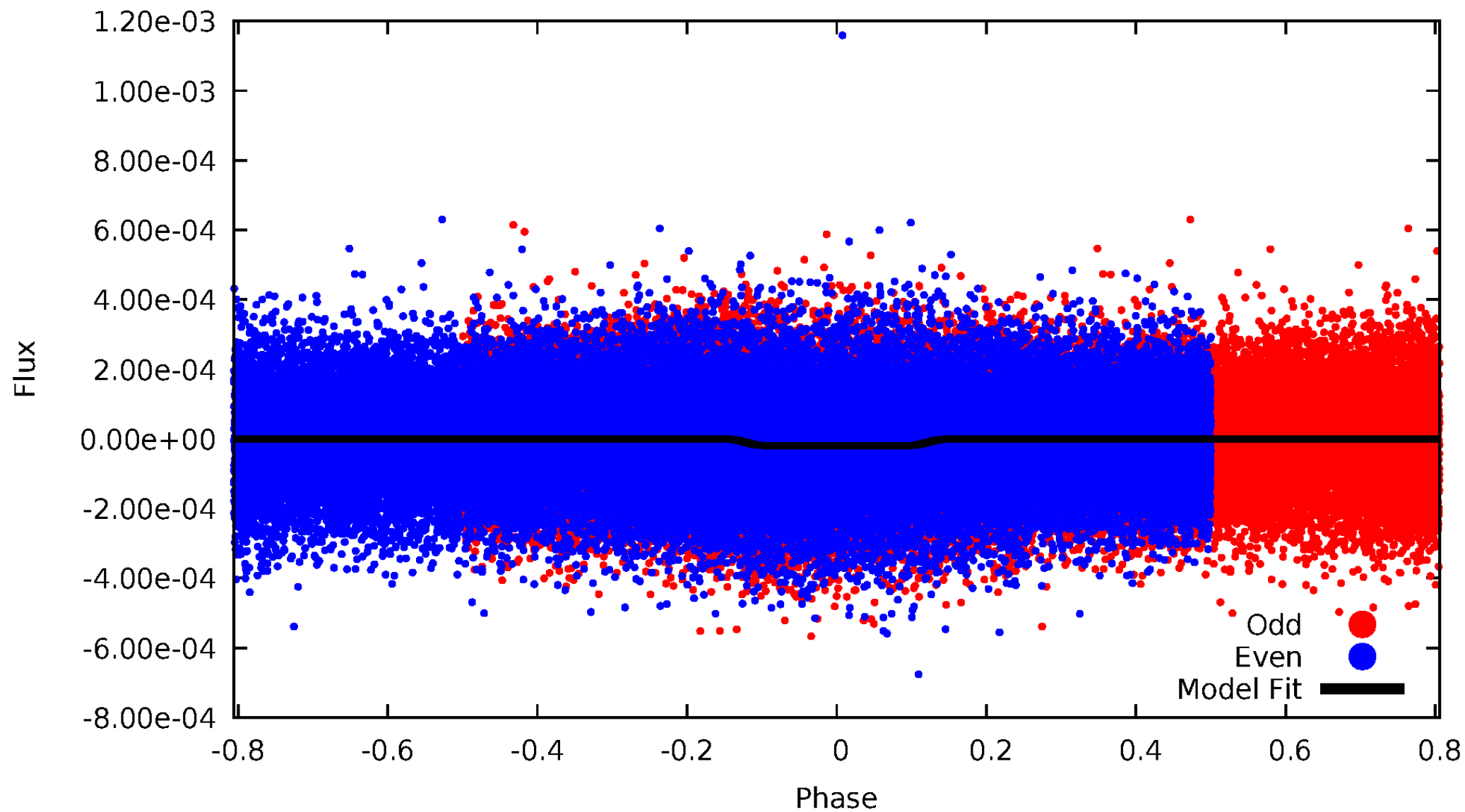
DV Odd/Even

TCE 007199989-01



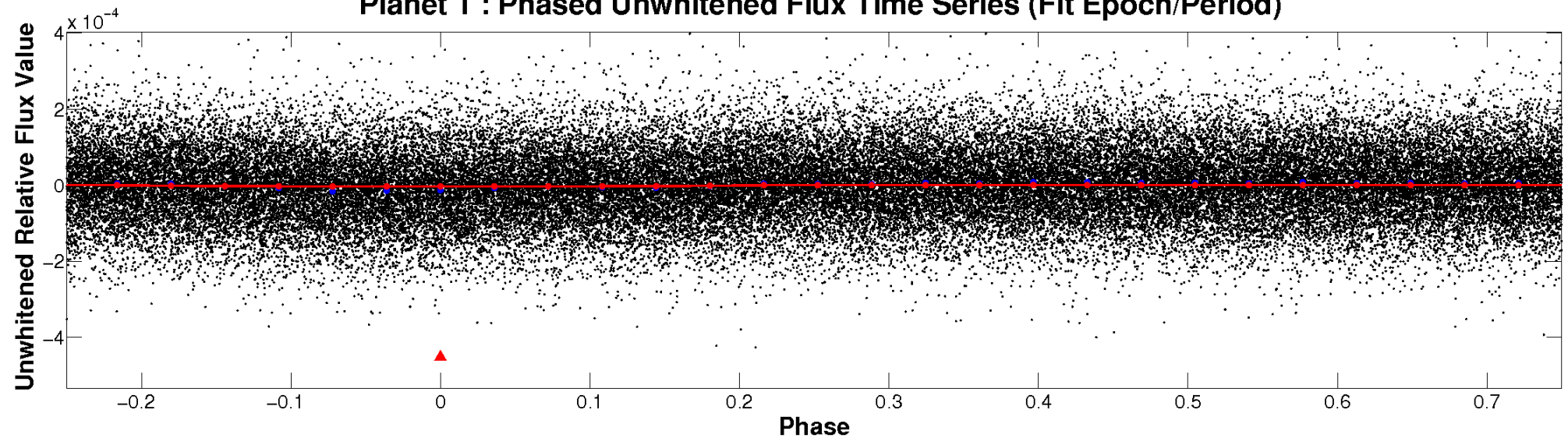
ALT Odd/Even

TCE 007199989-01

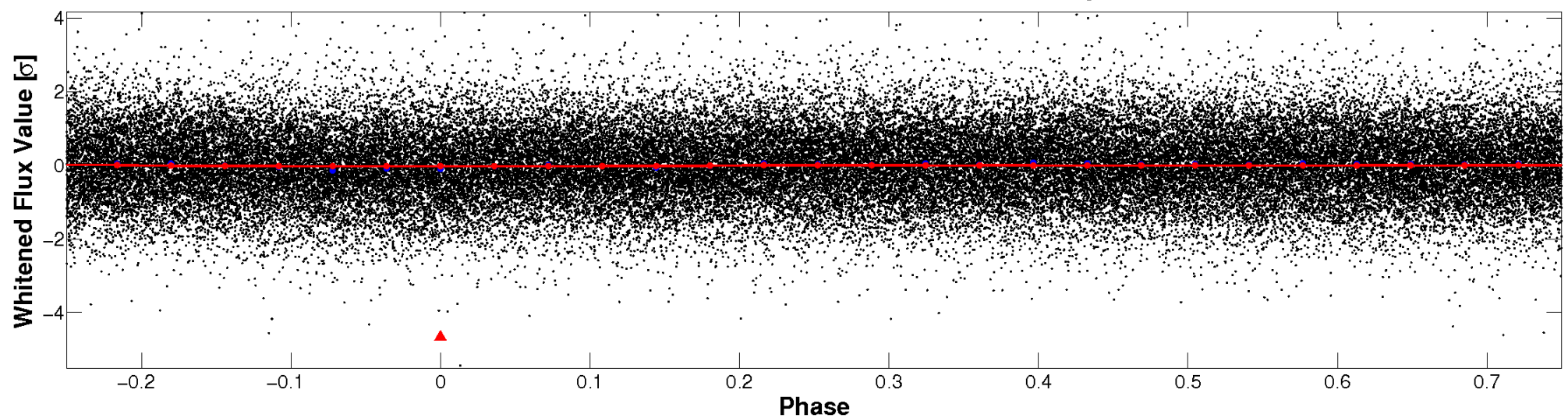


Non-Whitened Vs. Whitened Light Curve

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

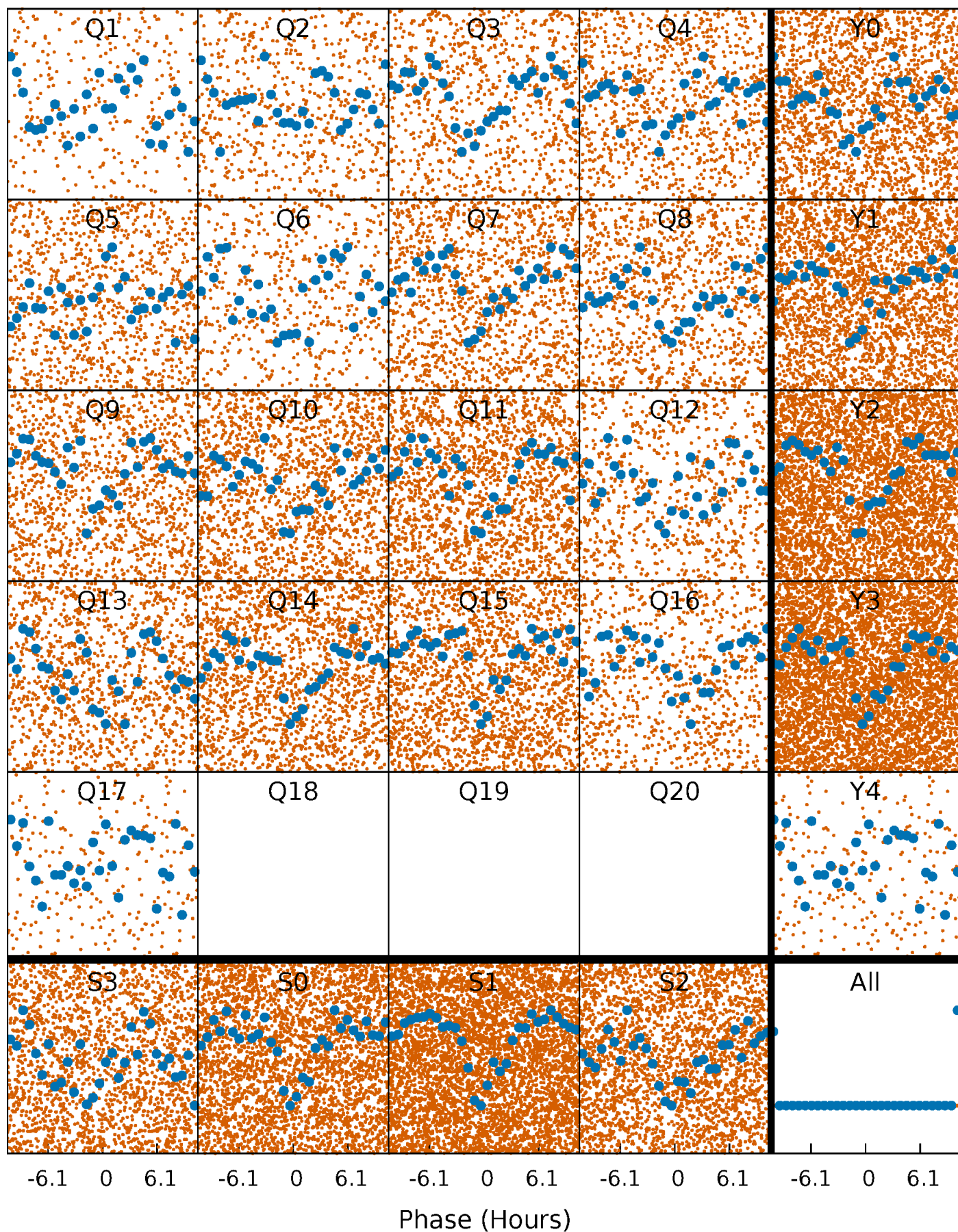


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



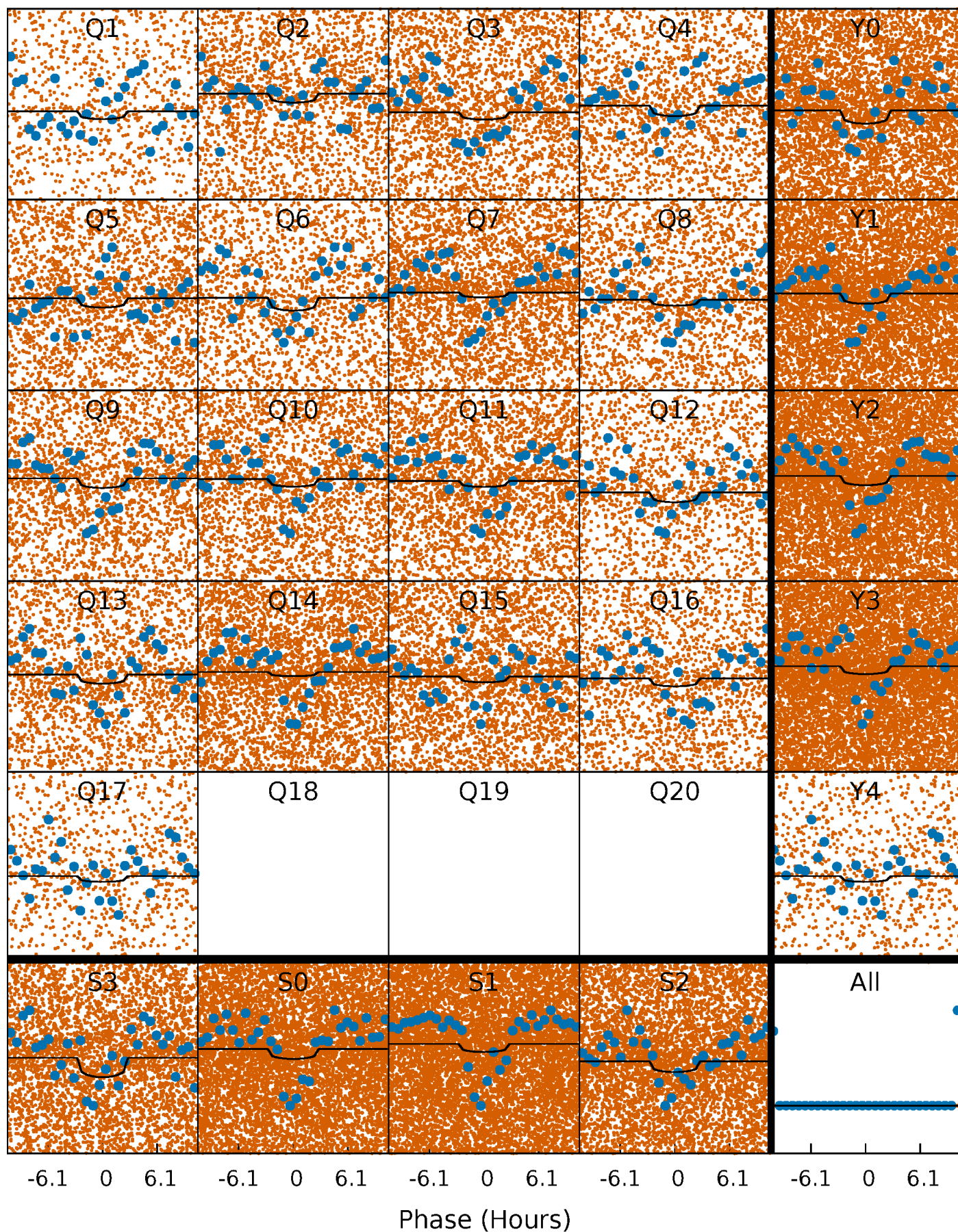
PDC Quarter-Phased Transit Curves

TCE 007199989-01 P= 0.566758 Days $T_0=131.893024$ (BKJD)



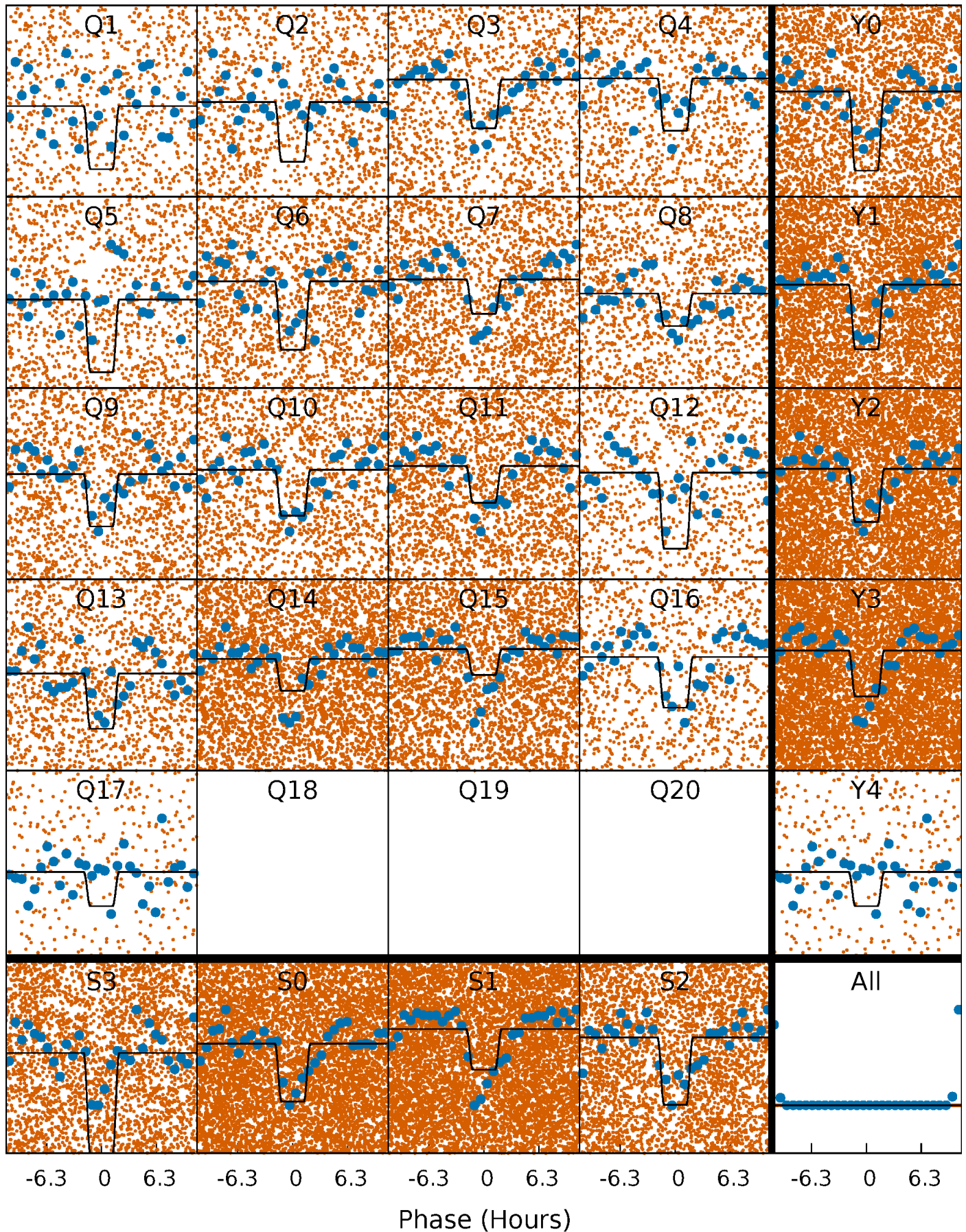
DV Quarter-Phased Transit Curves

TCE 007199989-01 P= 0.566758 Days $T_0=131.893024$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

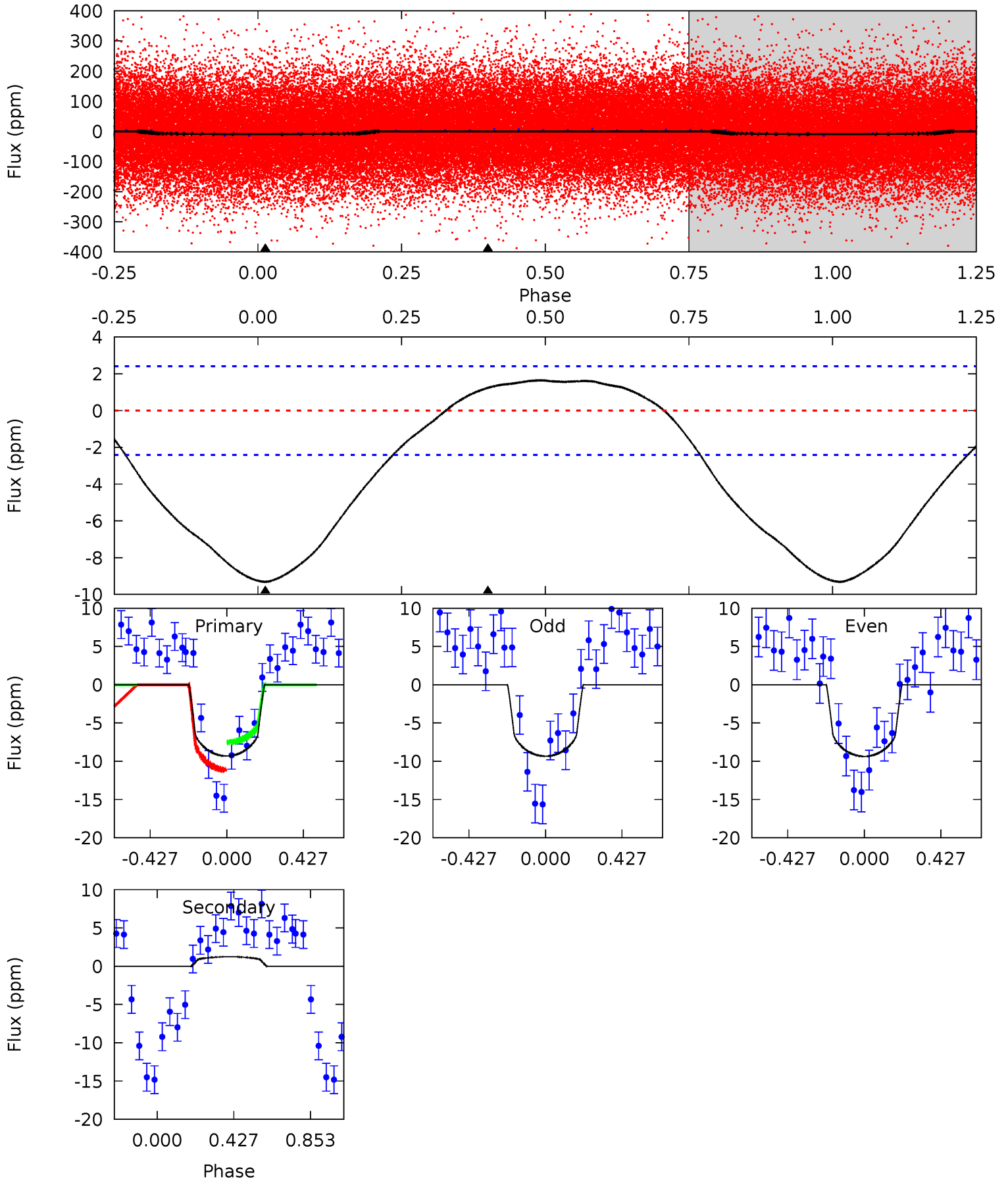
TCE 007199989-01 P= 0.566795 Days $T_0=131.827381$ (BKJD)



DV Model-Shift Uniqueness Test

007199989-01, P = 0.566758 Days, E = 131.326266 Days

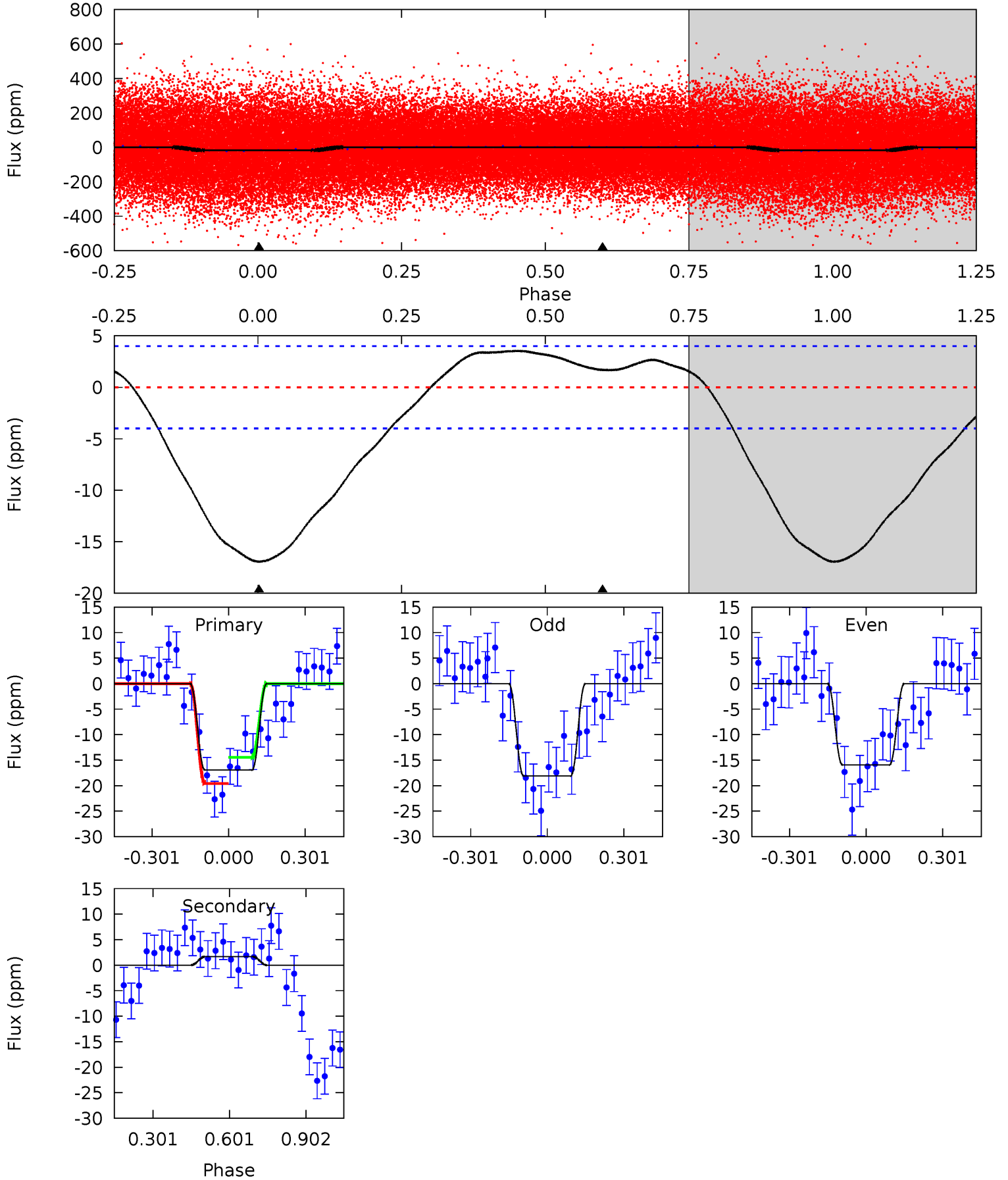
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.4	-2.18	0	0	4.25	0.80	1.45	16.4	16.4	-2.18	-2.18	0.03	0.93	0.15	3.13



Alt Model-Shift Uniqueness Test

007199989-01, P = 0.566795 Days, E = 131.260586 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.4	-1.82	0	0	4.33	1.04	1.72	18.4	18.4	-1.82	-1.82	1.18	1.10	0.17	2.57



Stellar Parameters For KIC 007199989

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7027^{+188}_{-230}	$3.957^{+0.198}_{-0.132}$	$0.020^{+0.250}_{-0.300}$	$2.231^{+0.483}_{-0.537}$	$1.644^{+0.188}_{-0.251}$	$0.208^{+0.230}_{-0.081}$
	+3%/-3%	+5%/-3%	+1250%/-1500%	+22%/-24%	+11%/-15%	+110%/-39%
Source	PHO1	FLK73	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 007199989-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	1 ± 1	$0.77^{+0.76}_{-0.53}$	5126^{+316}_{-346}	-4991^{+469}_{-2518}	$-0.248^{+0.188}_{-2.428}$
Alt.	2 ± 1	$1.16^{+0.85}_{-0.67}$	5094^{+316}_{-360}	-4770^{+350}_{-1123}	$-0.161^{+0.125}_{-0.831}$

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

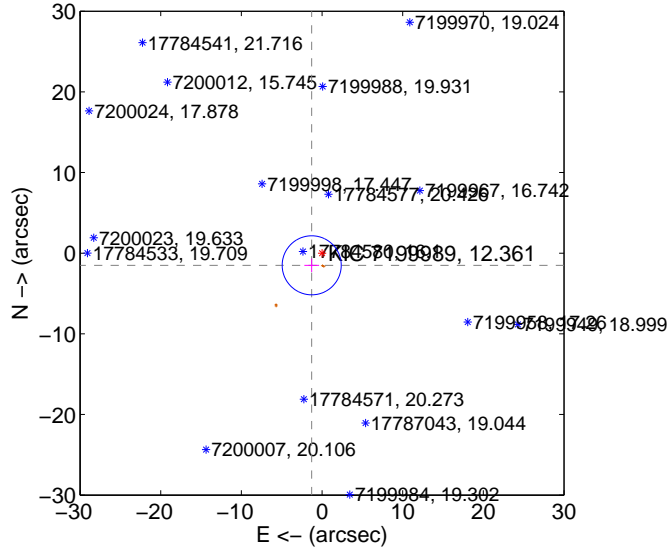
Supplemental centroid analysis for 007199989-01. Kepler magnitude: 12.36. Transit SNR 3.12

There are 2 quarters with good PRF difference image offsets

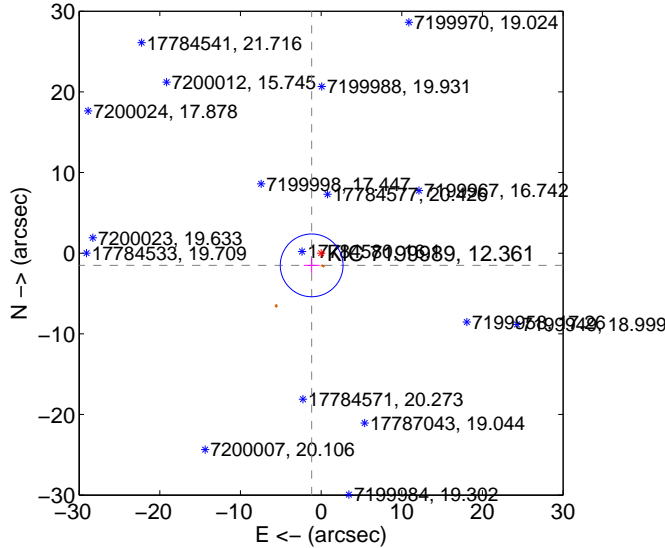
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.977 ± 1.220	1.62	1.280 ± 0.920	-1.506 ± 0.832
PRF-fit source offset from KIC position	1.913 ± 1.297	1.48	1.172 ± 0.975	-1.512 ± 0.902
photometric centroid source offset	—	—	—	—

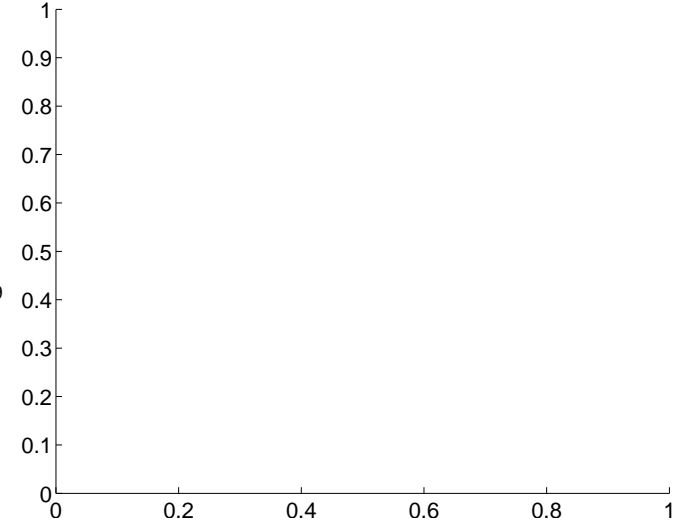
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

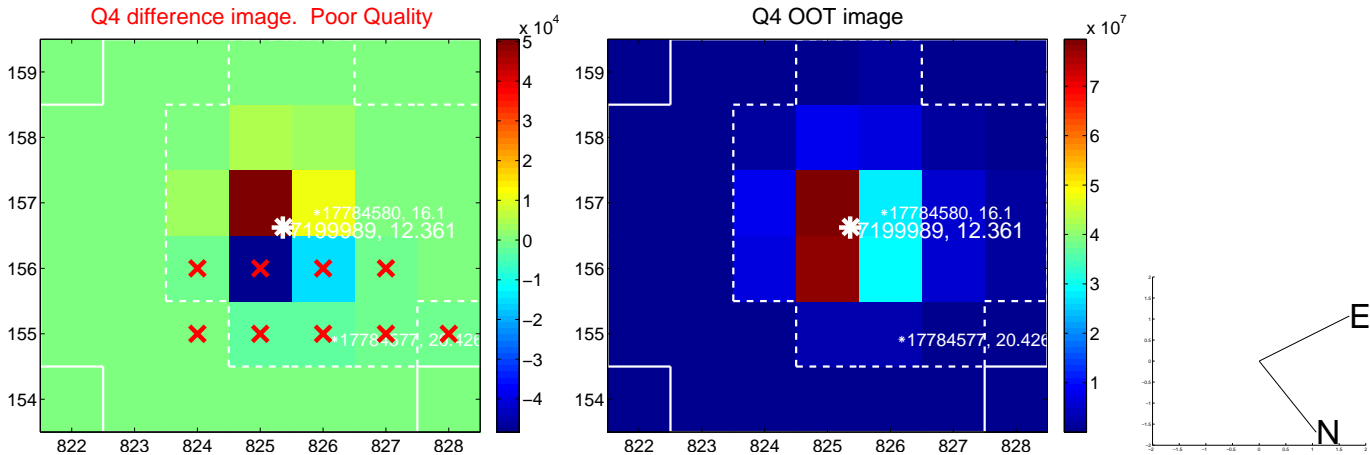
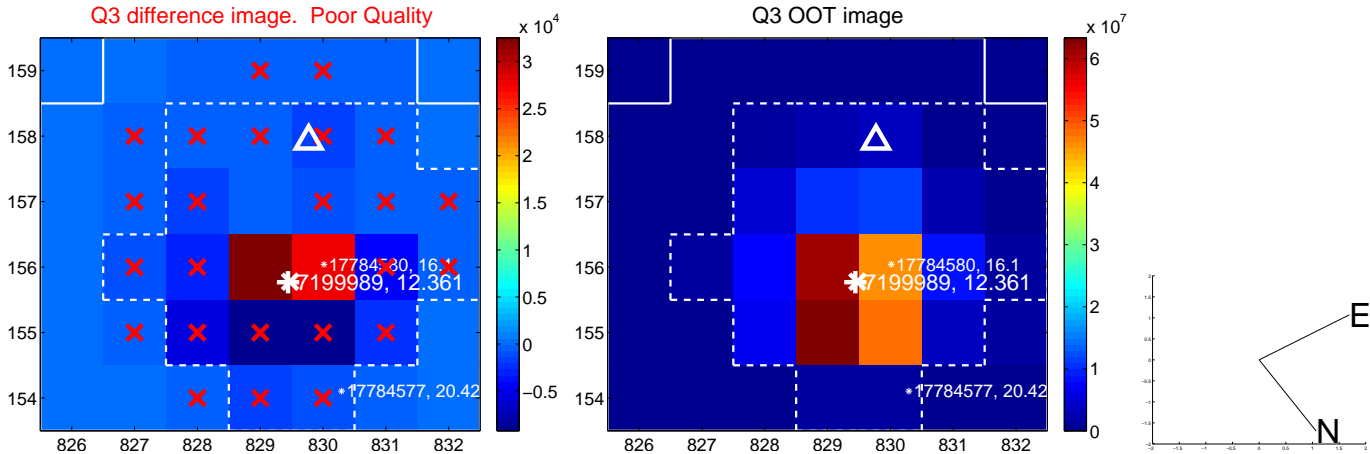
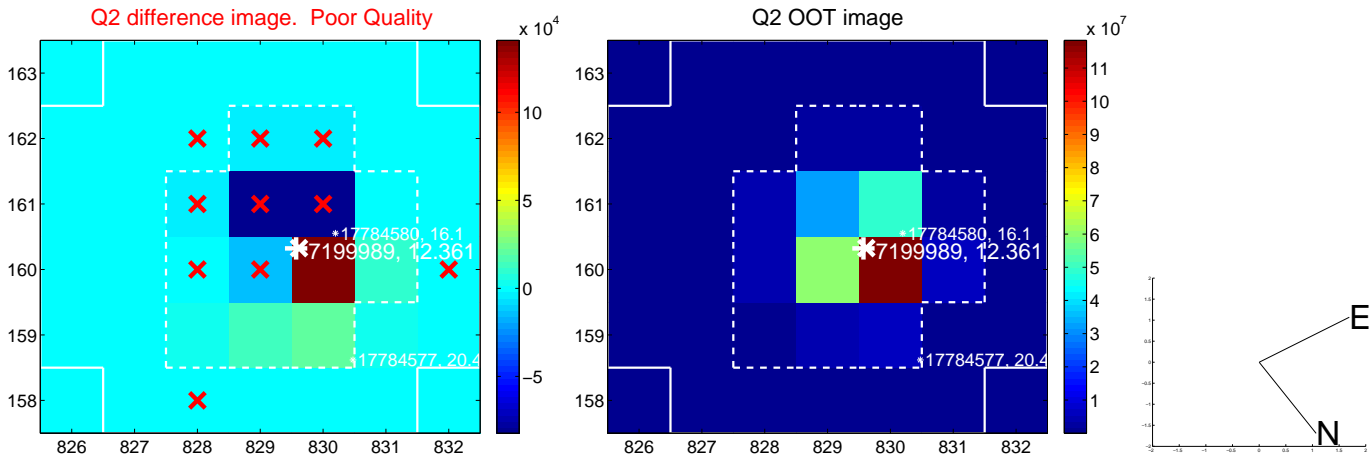
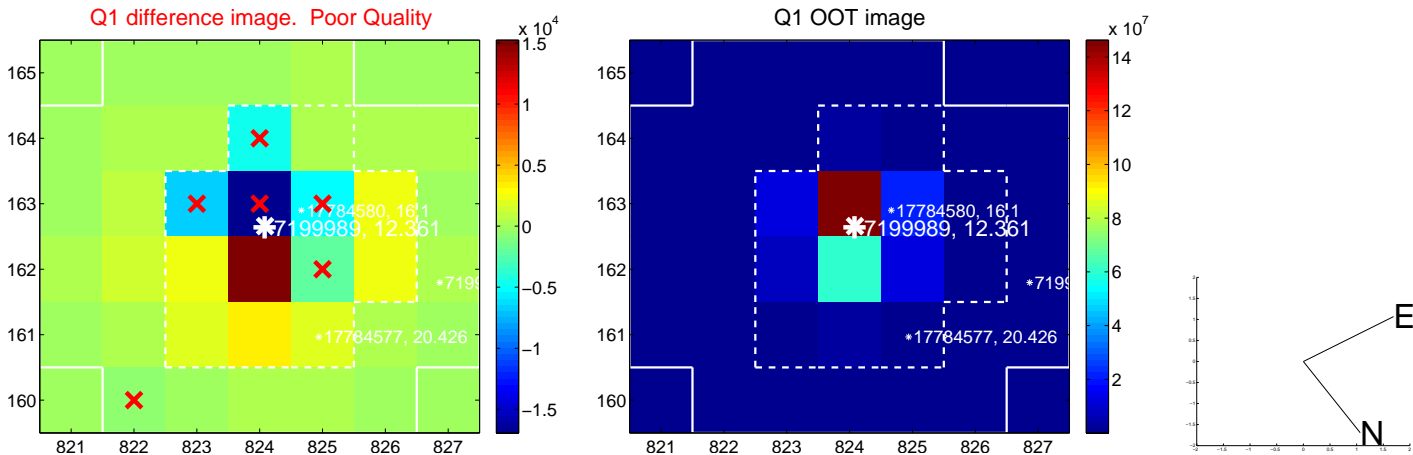


There are no photometric centroids

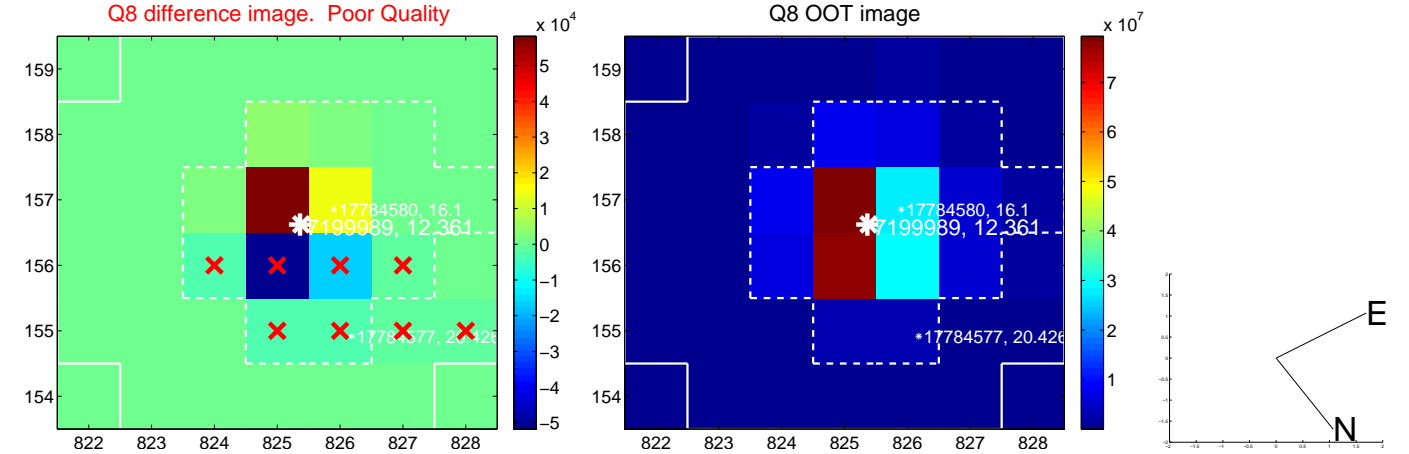
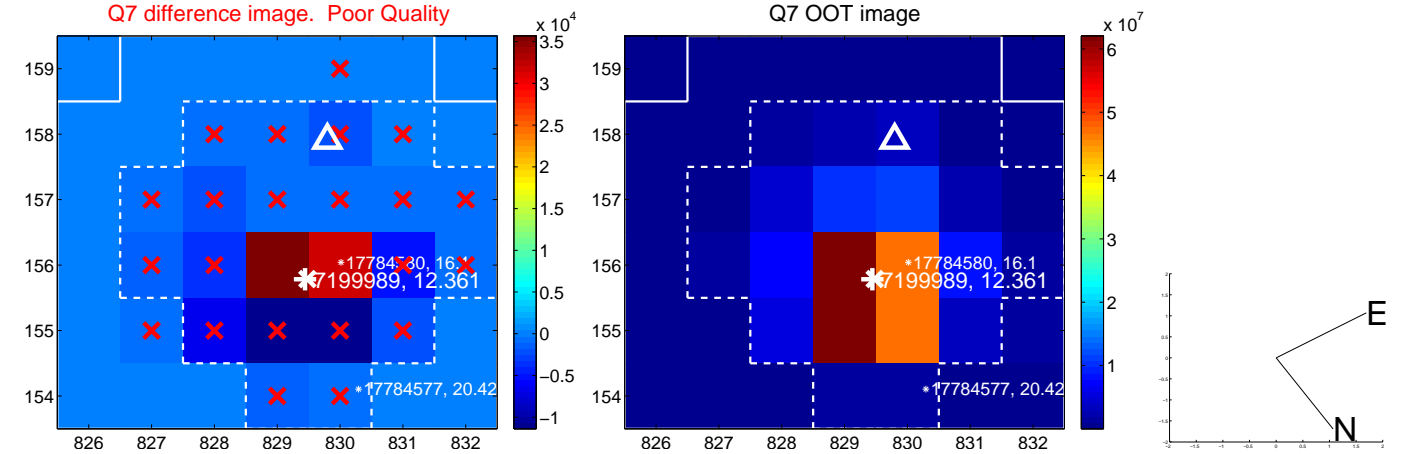
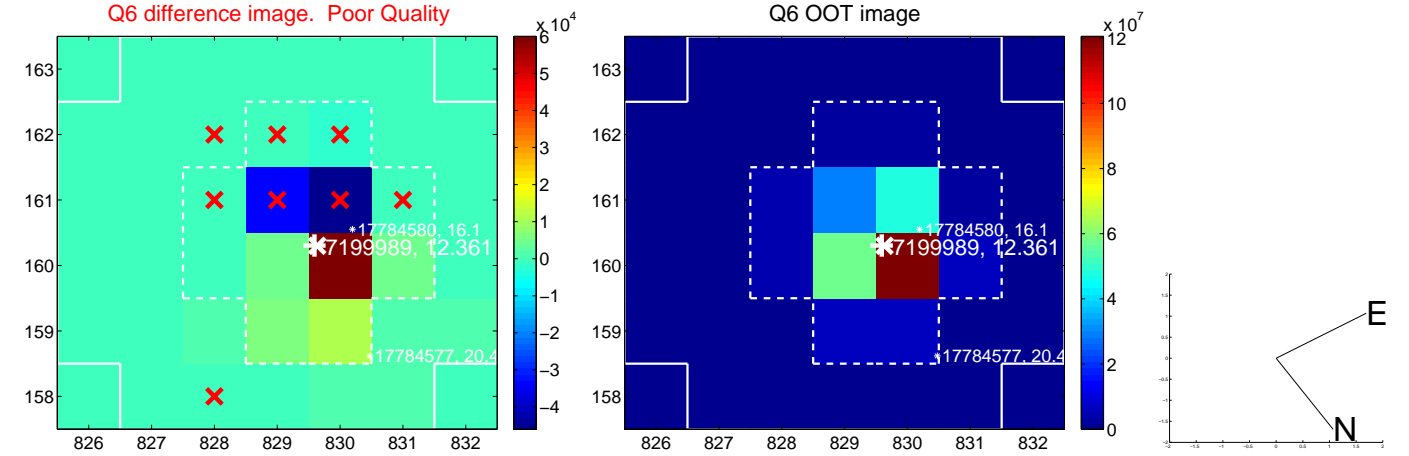
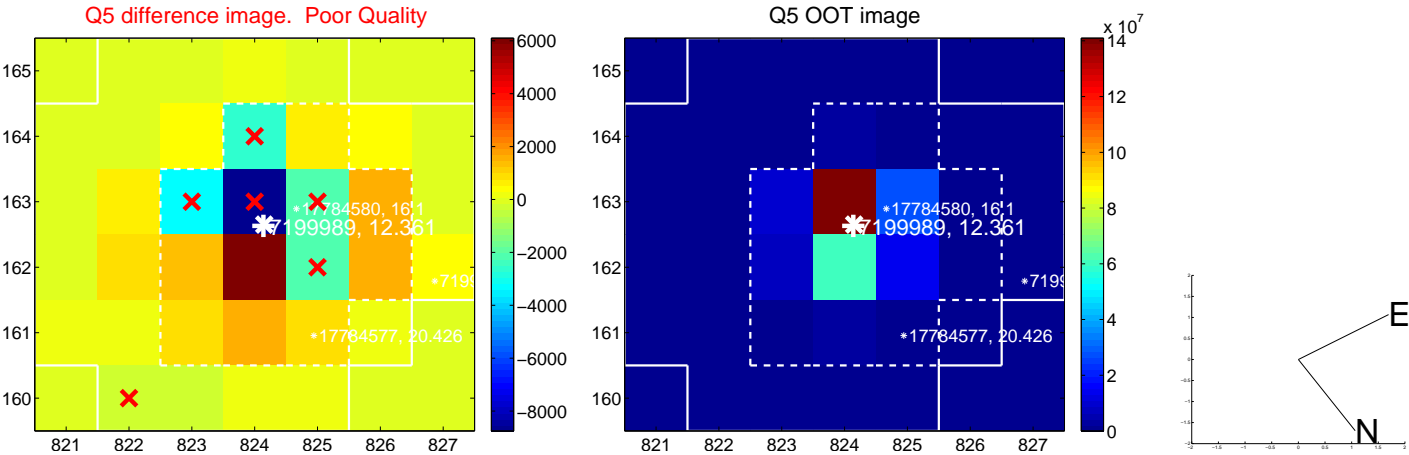


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

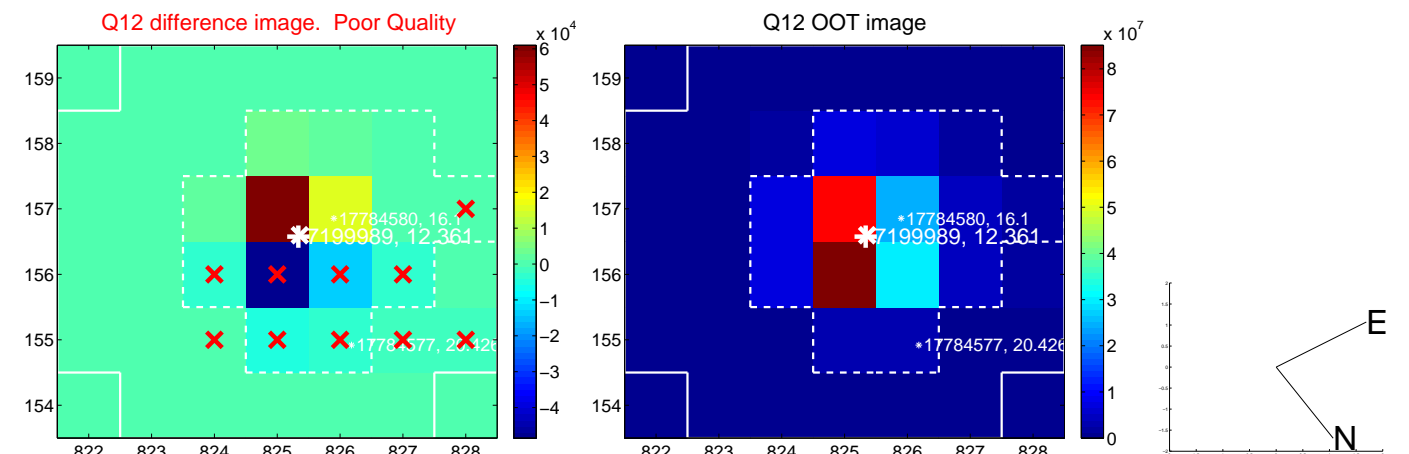
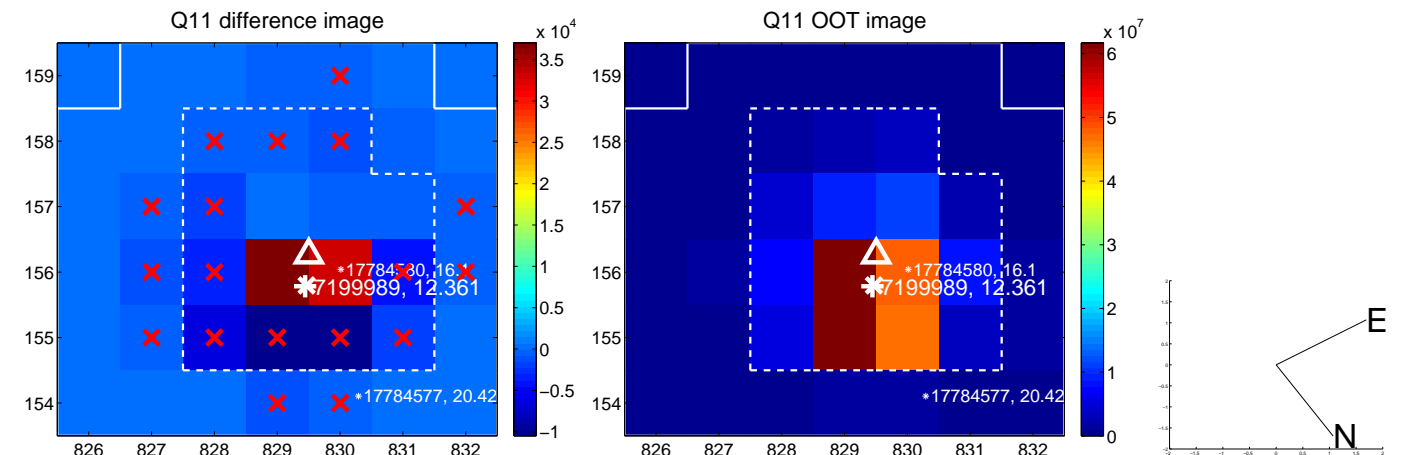
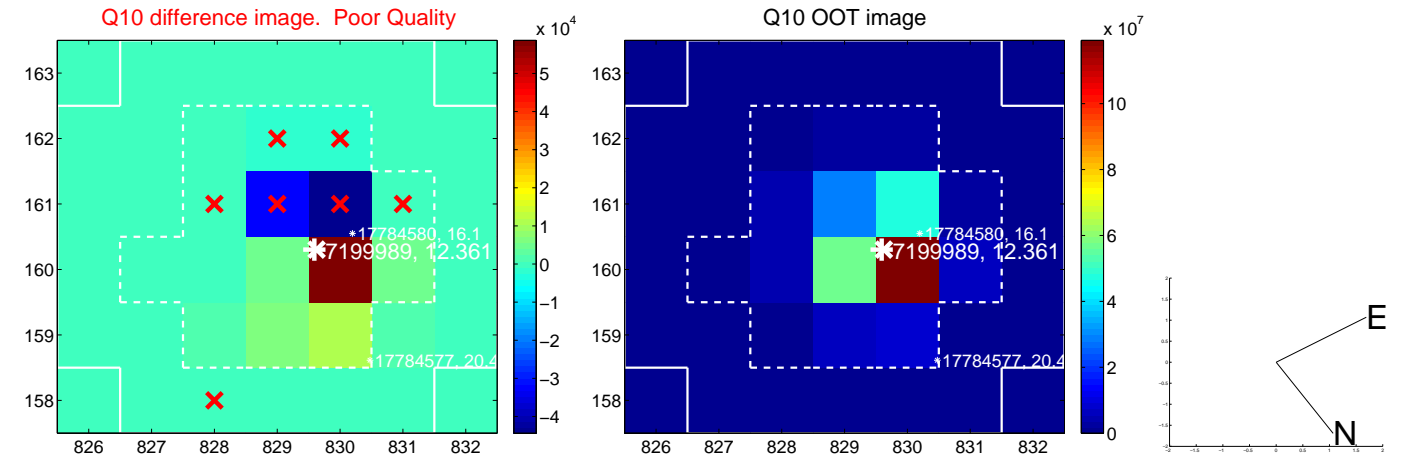
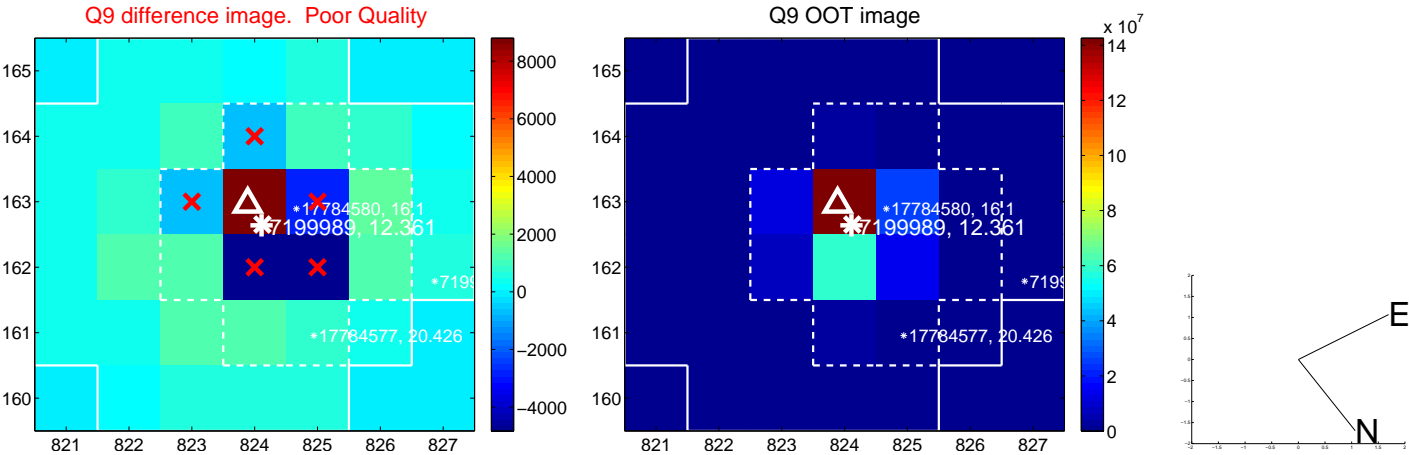
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



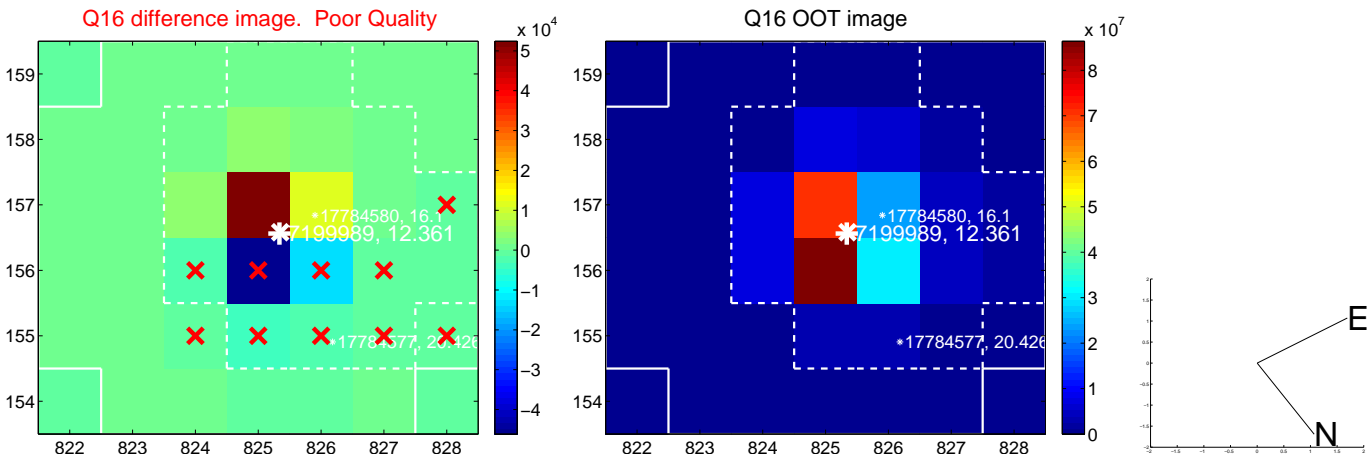
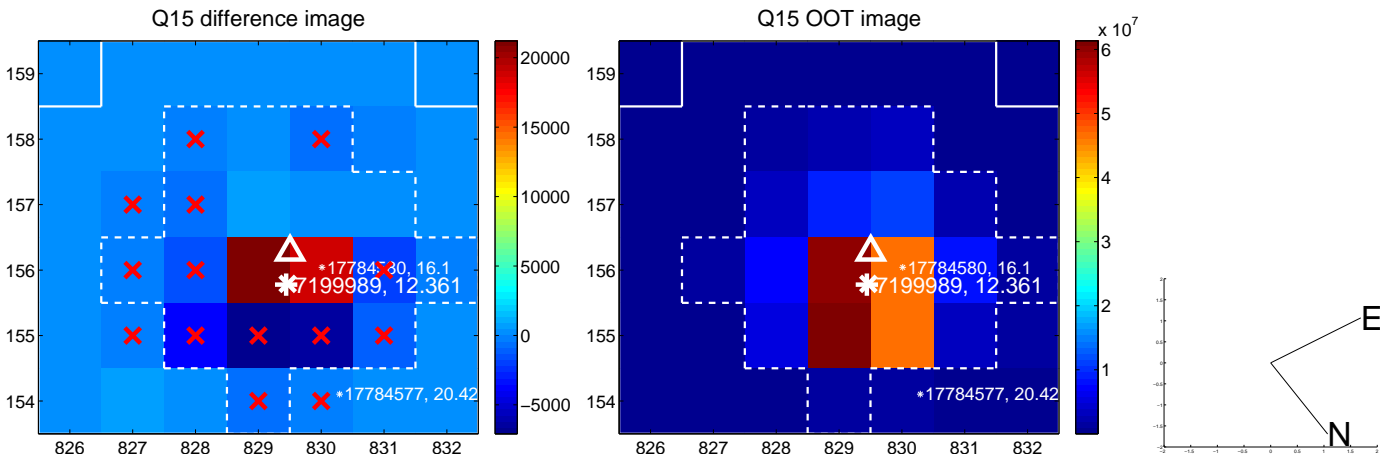
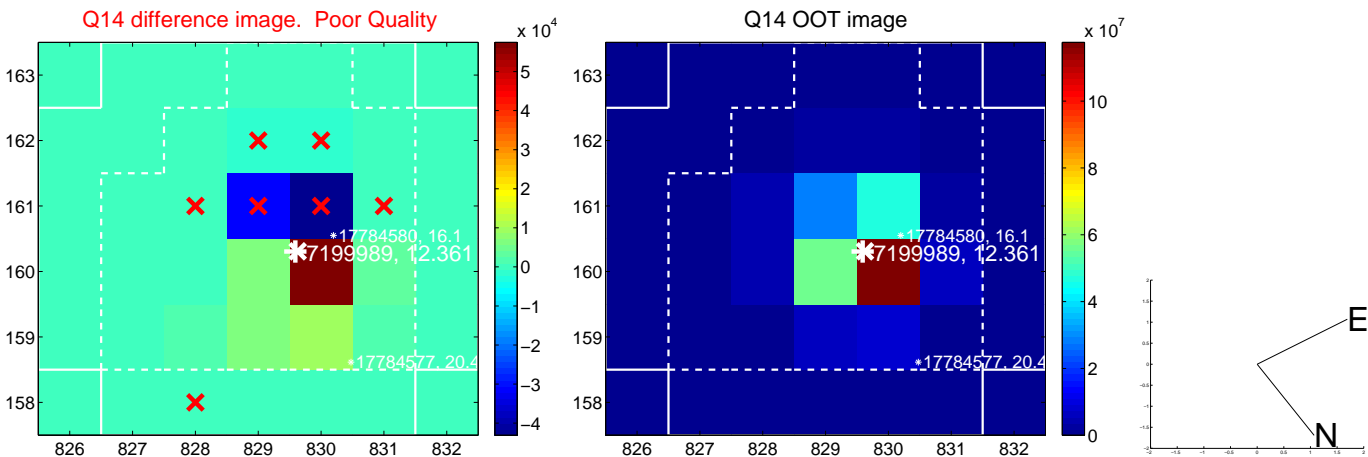
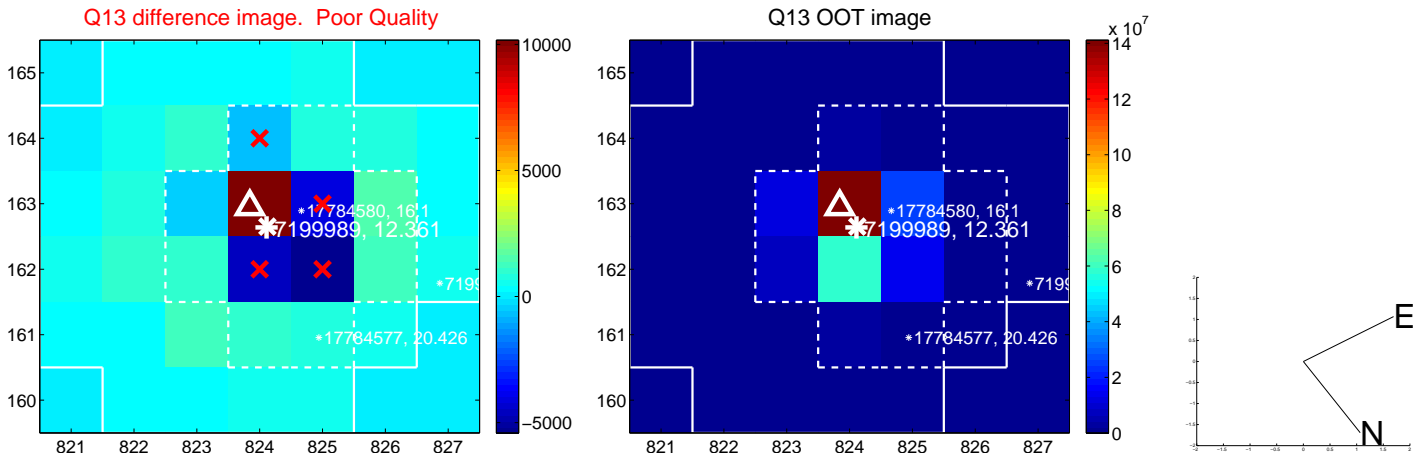
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



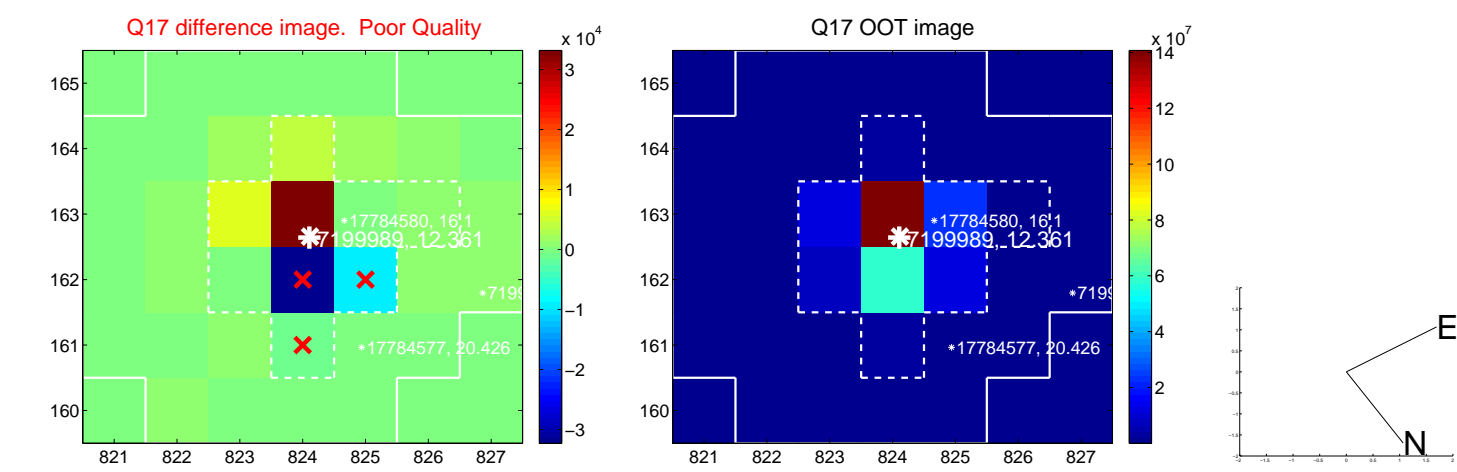
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

