

KIC 007199002

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})
007199002-01	OBS	No	0.566713	131.759505	0.3	4.405	19.0	0.1	1.09	6367	0.06	8918.72

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007199002-01	OBS	FP	0.00	1	0	0	1	SWEET_NTL—LPP_DV—LPP_ALT—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.

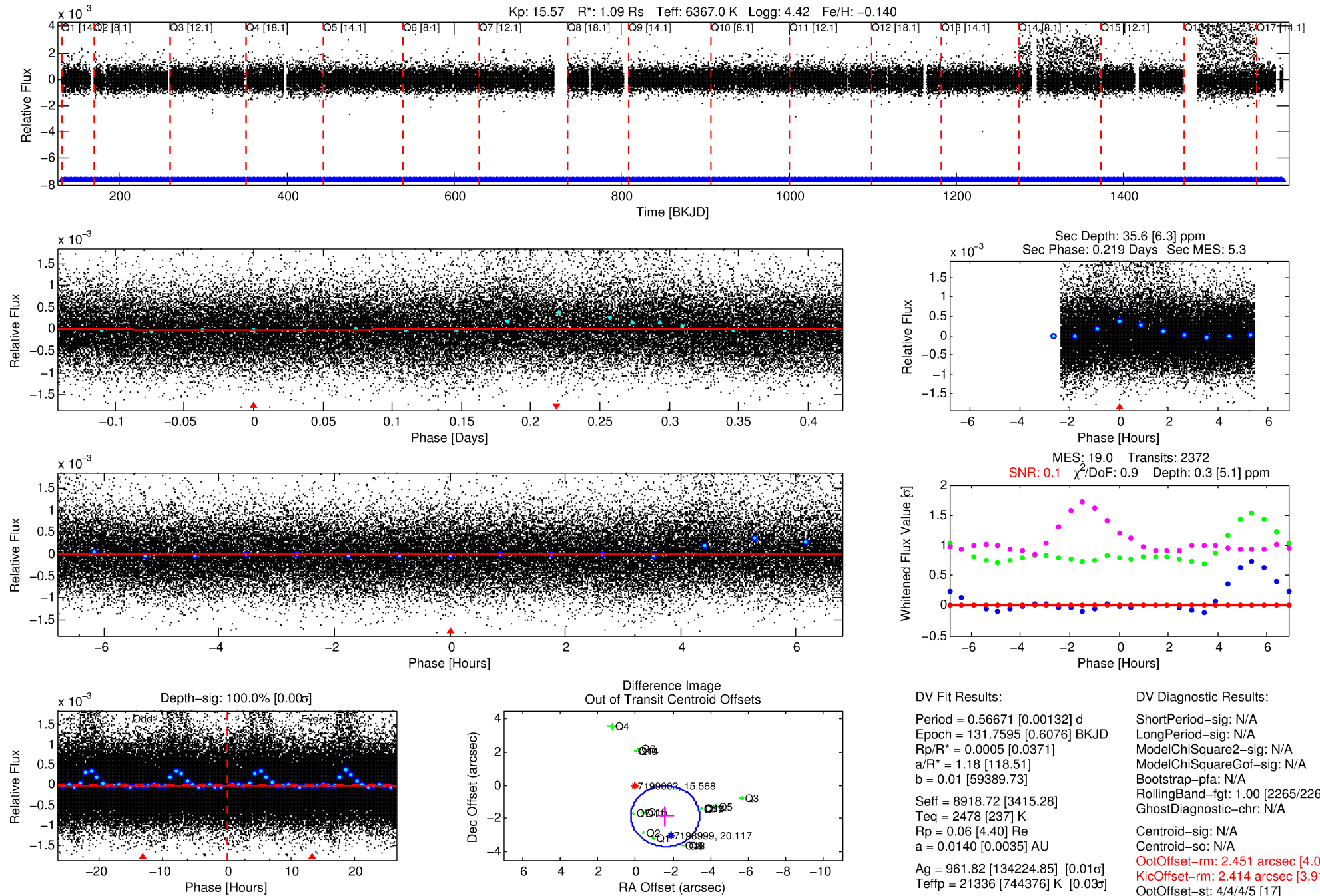
Ephemeris Match Information For 007199002-01

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
007199002-01	7199002	RR-Lyr-pri	7198959	1:1	175.6	39	-21	7.86	15.57	623300.00	Direct-PRF	0	0.93	25.00

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: 7199002 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56671 [0.00132] d
Epoch = 131.7595 [0.6076] BKJD
Rp/R* = 0.0005 [0.0371]
a/R* = 1.18 [118.51]
b = 0.01 [59389.73]
Seff = 8918.72 [3415.28]
Teq = 2478 [237] K
Rp = 0.06 [4.40] Re
a = 0.0140 [0.0035] AU
Ag = 961.82 [134224.85] [0.01 σ]
Teffp = 21336 [744376] K [0.03 σ]

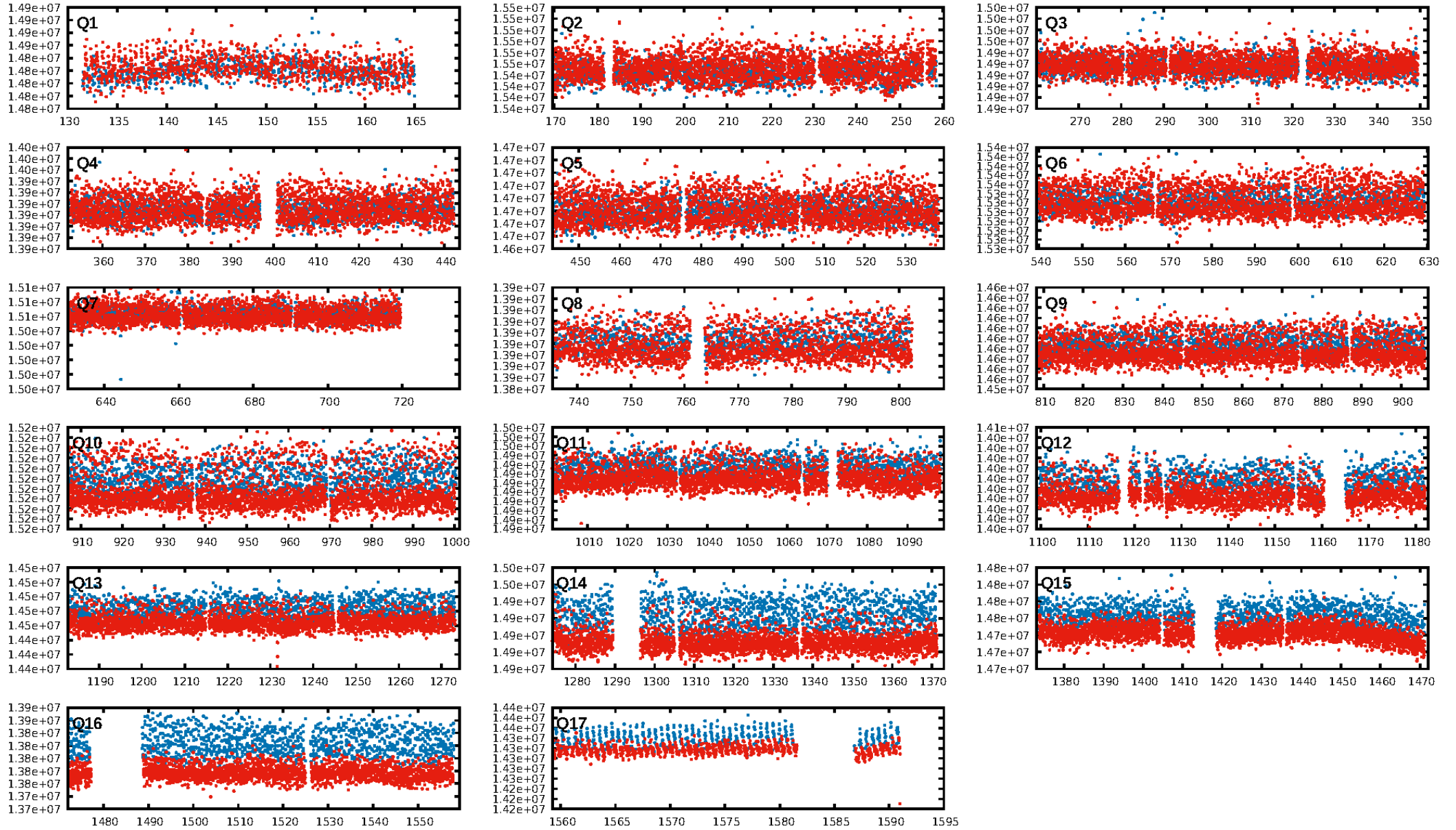
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2265/2265]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.451 arcsec [4.03 σ]
KicOffset-rm: 2.414 arcsec [3.91 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.12 [2/17]
DiffImageOverlap-fno: 1.00 [17/17]

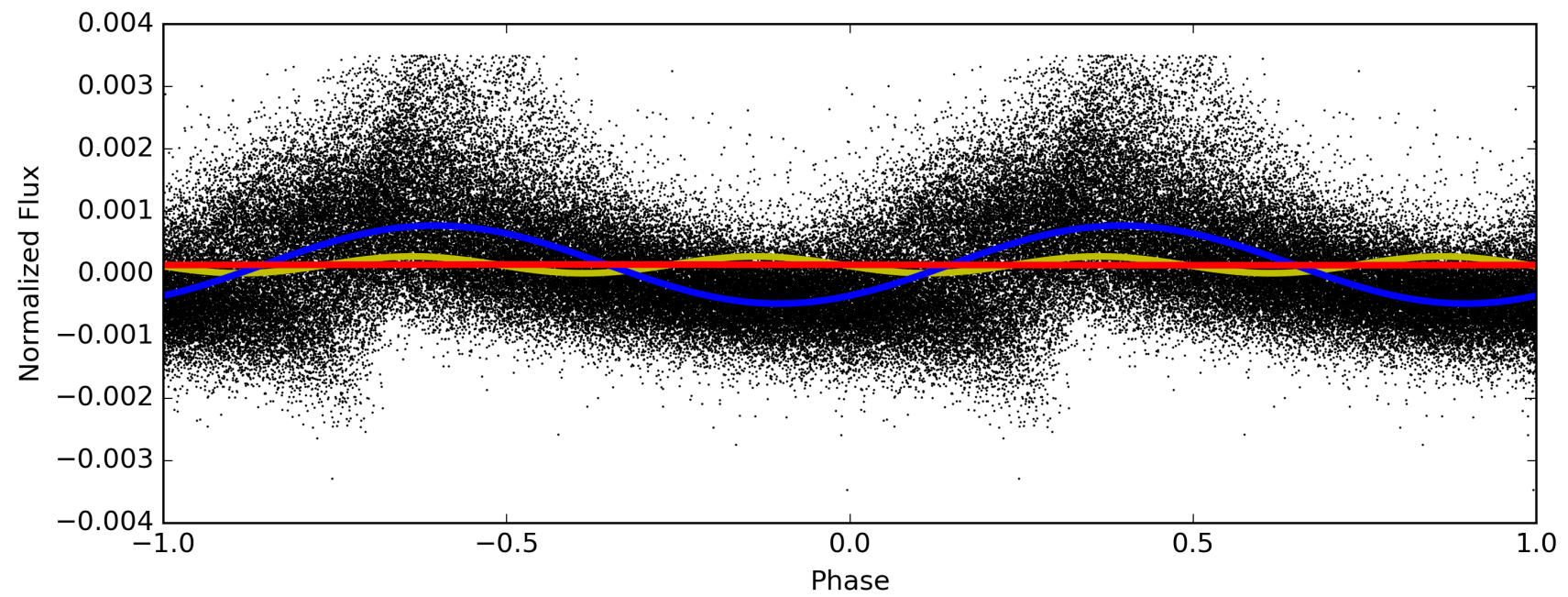
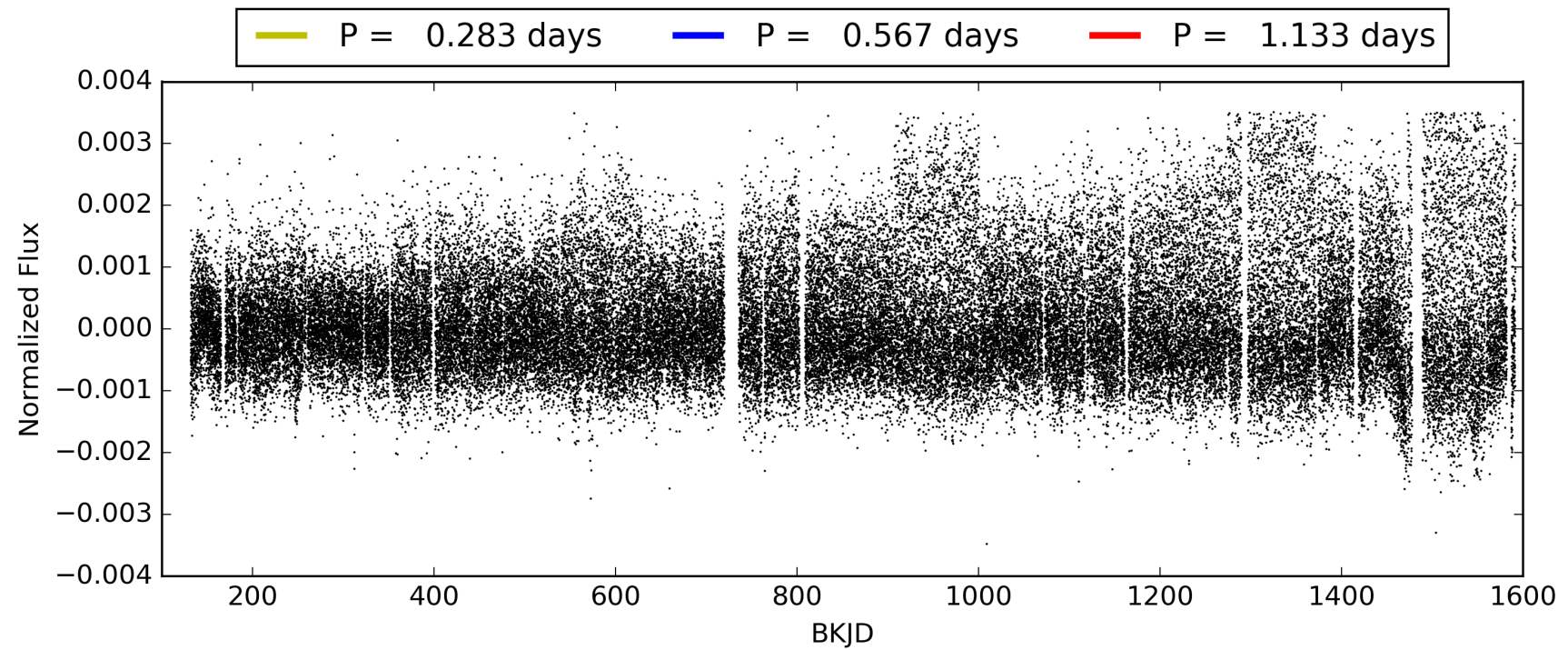
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:24:35 Z

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

TCE 007199002-01, PDC Light Curves

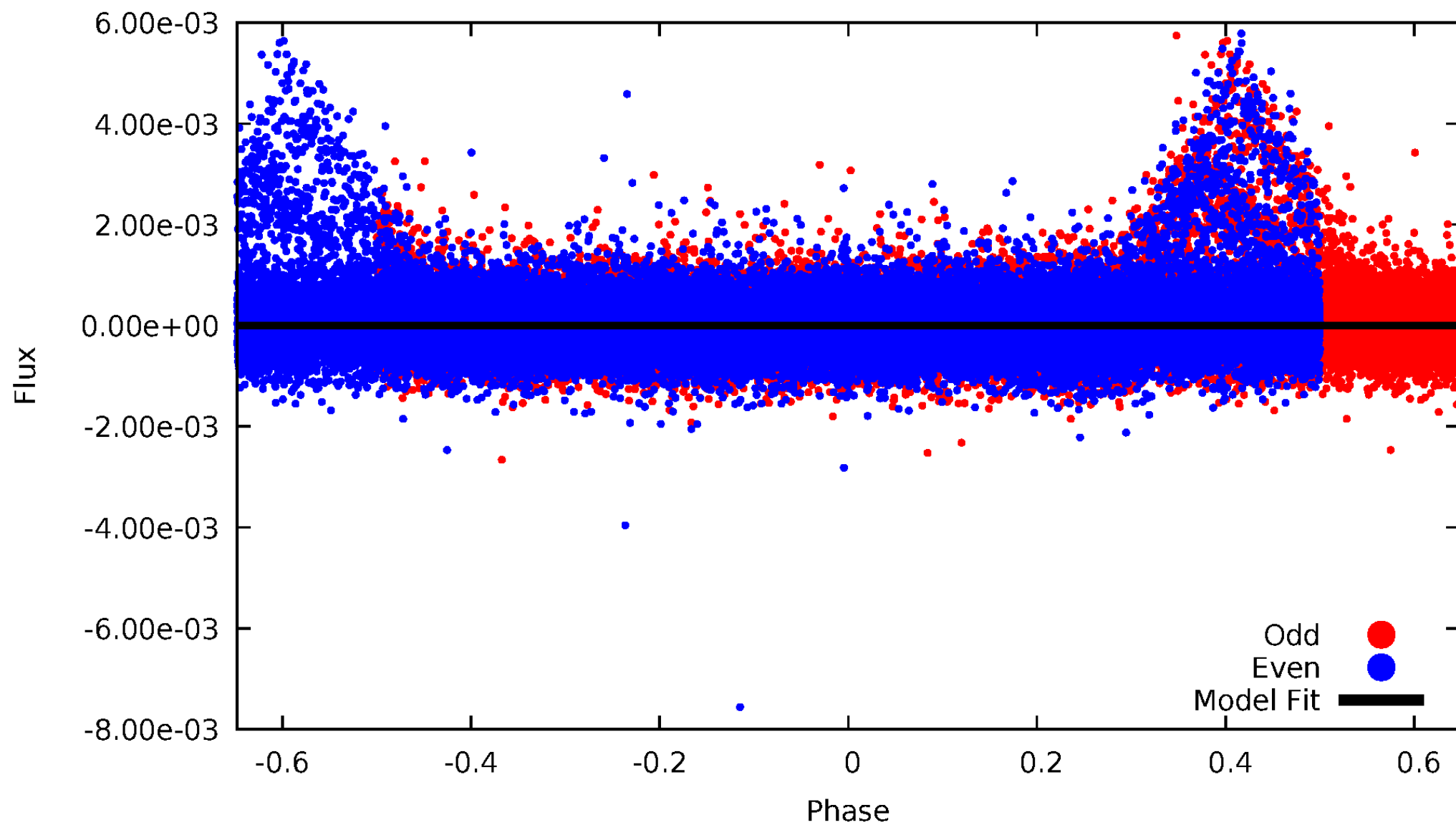


TCE 007199002-01



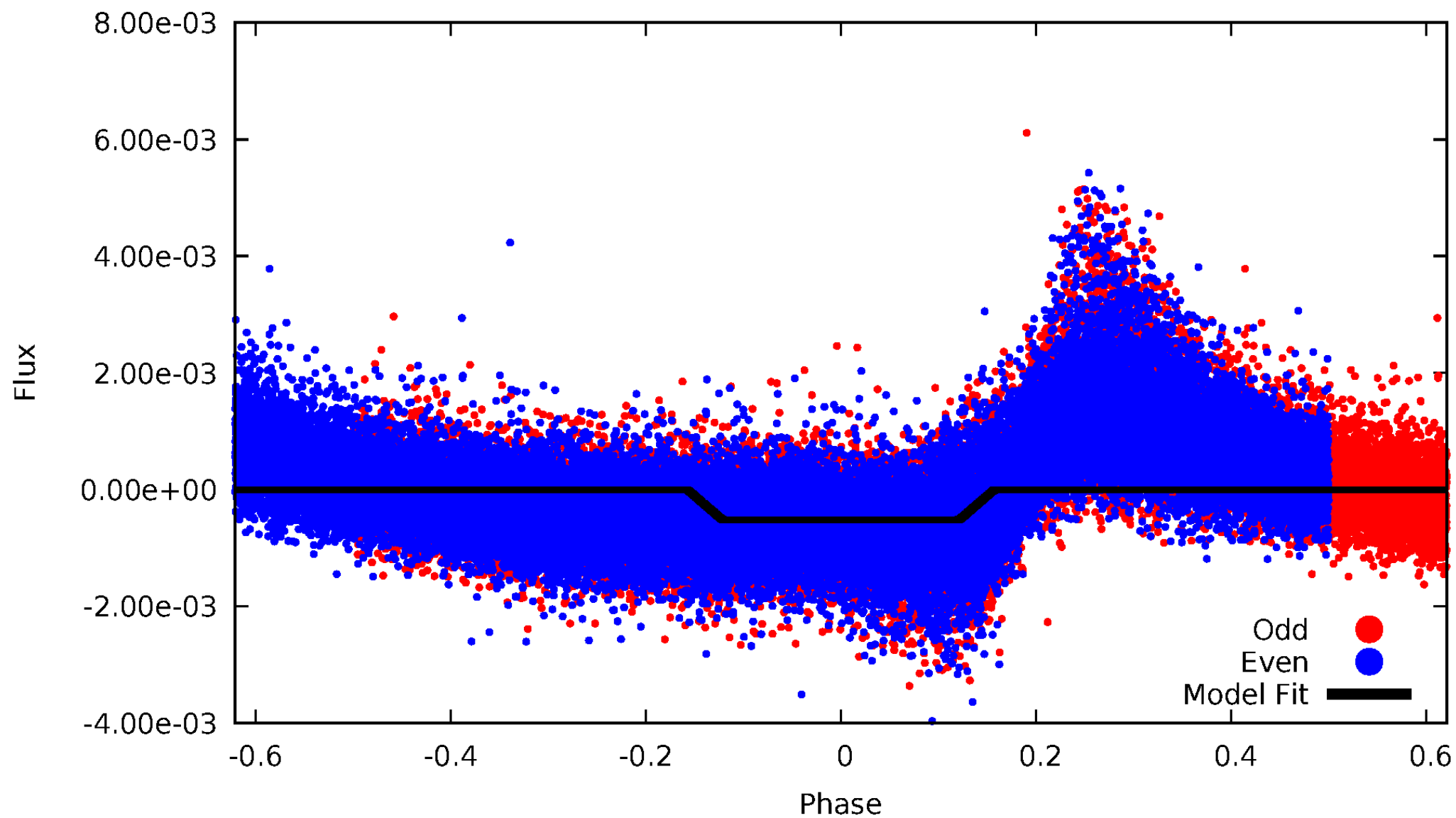
DV Odd/Even

TCE 007199002-01



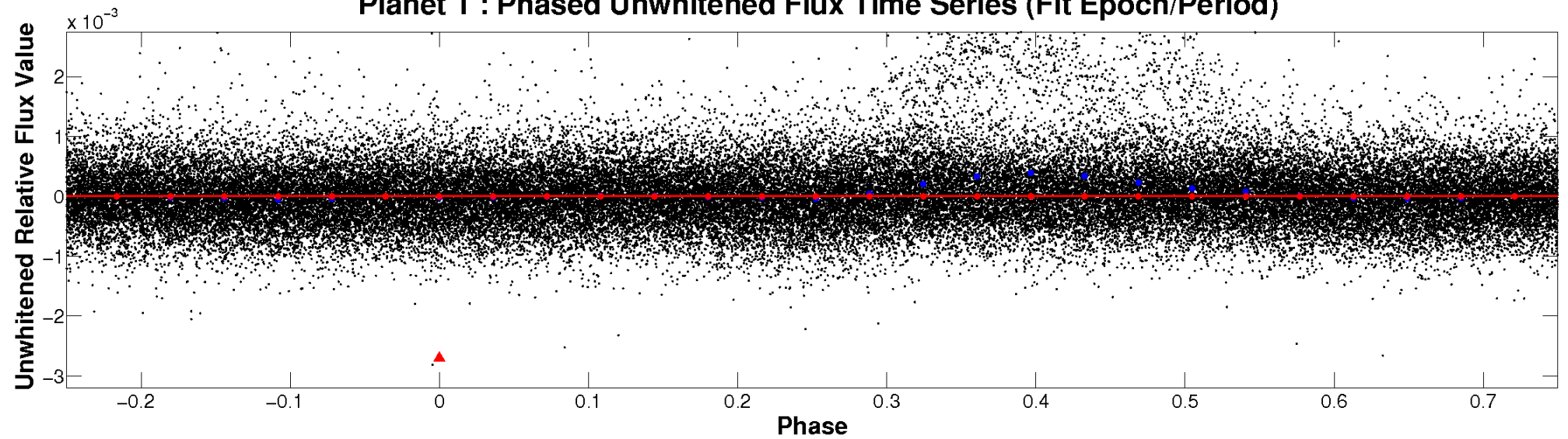
ALT Odd/Even

TCE 007199002-01

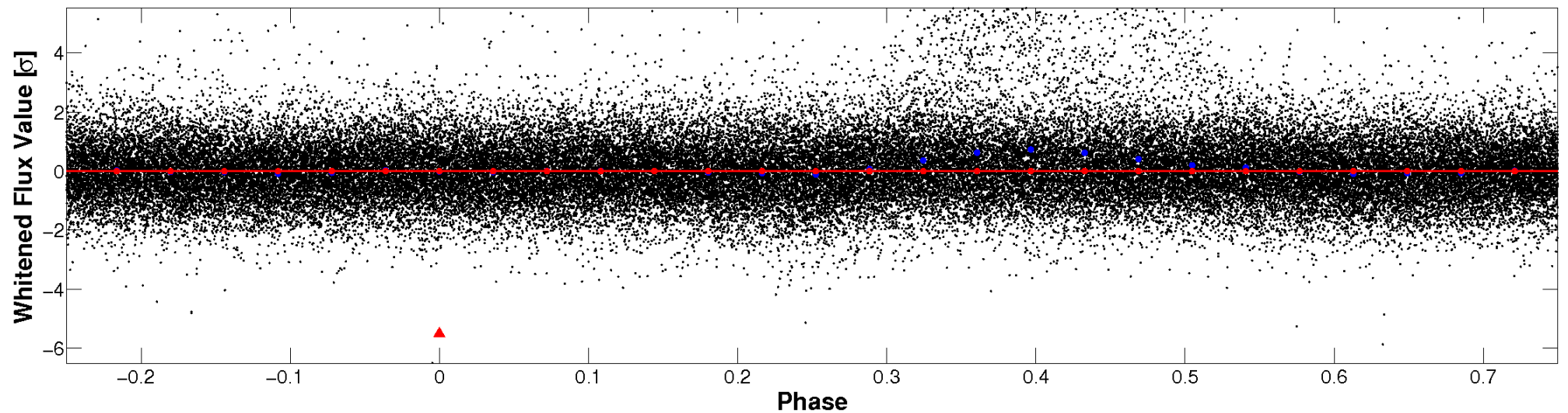


Non-Whitened Vs. Whitened Light Curve

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

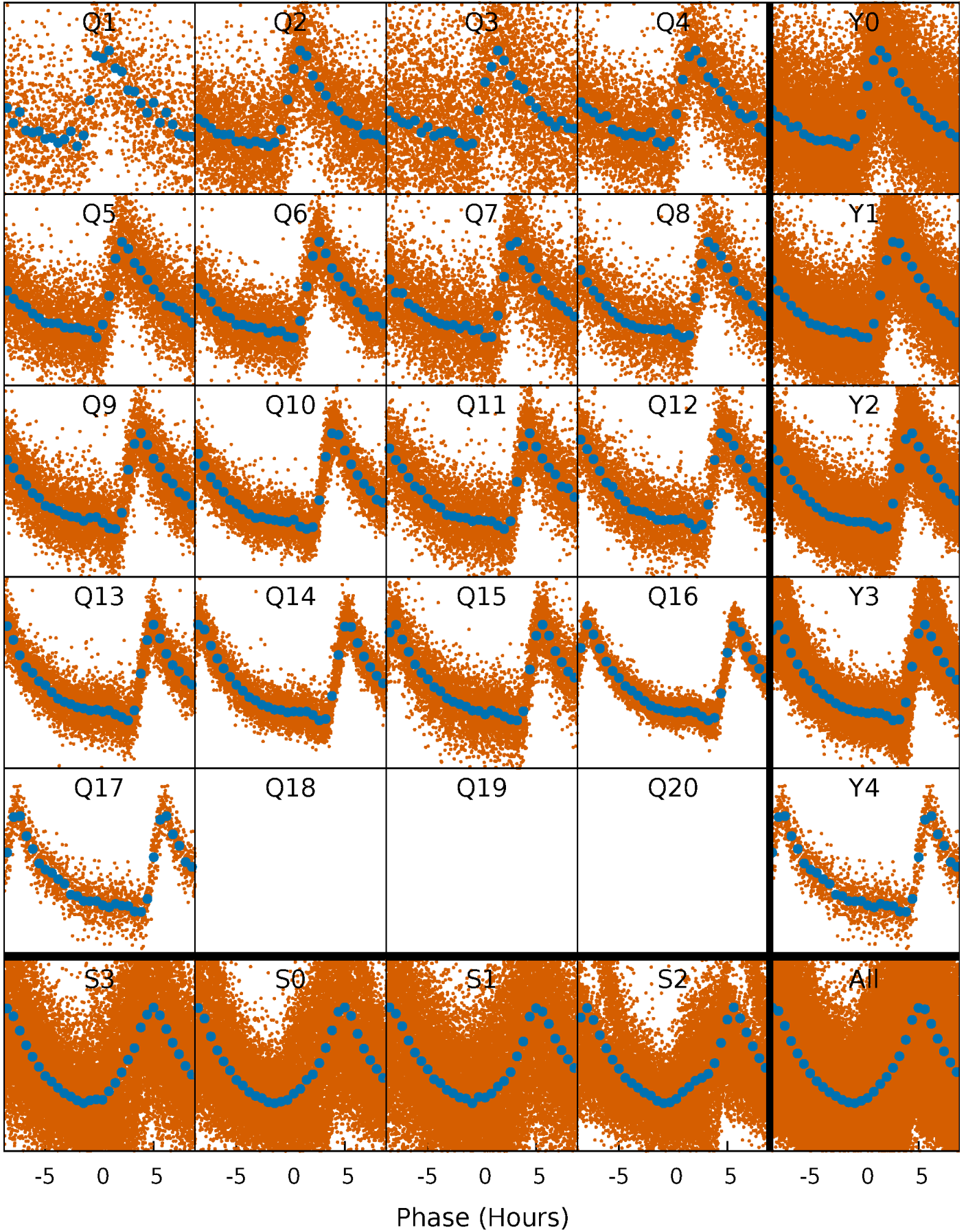


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



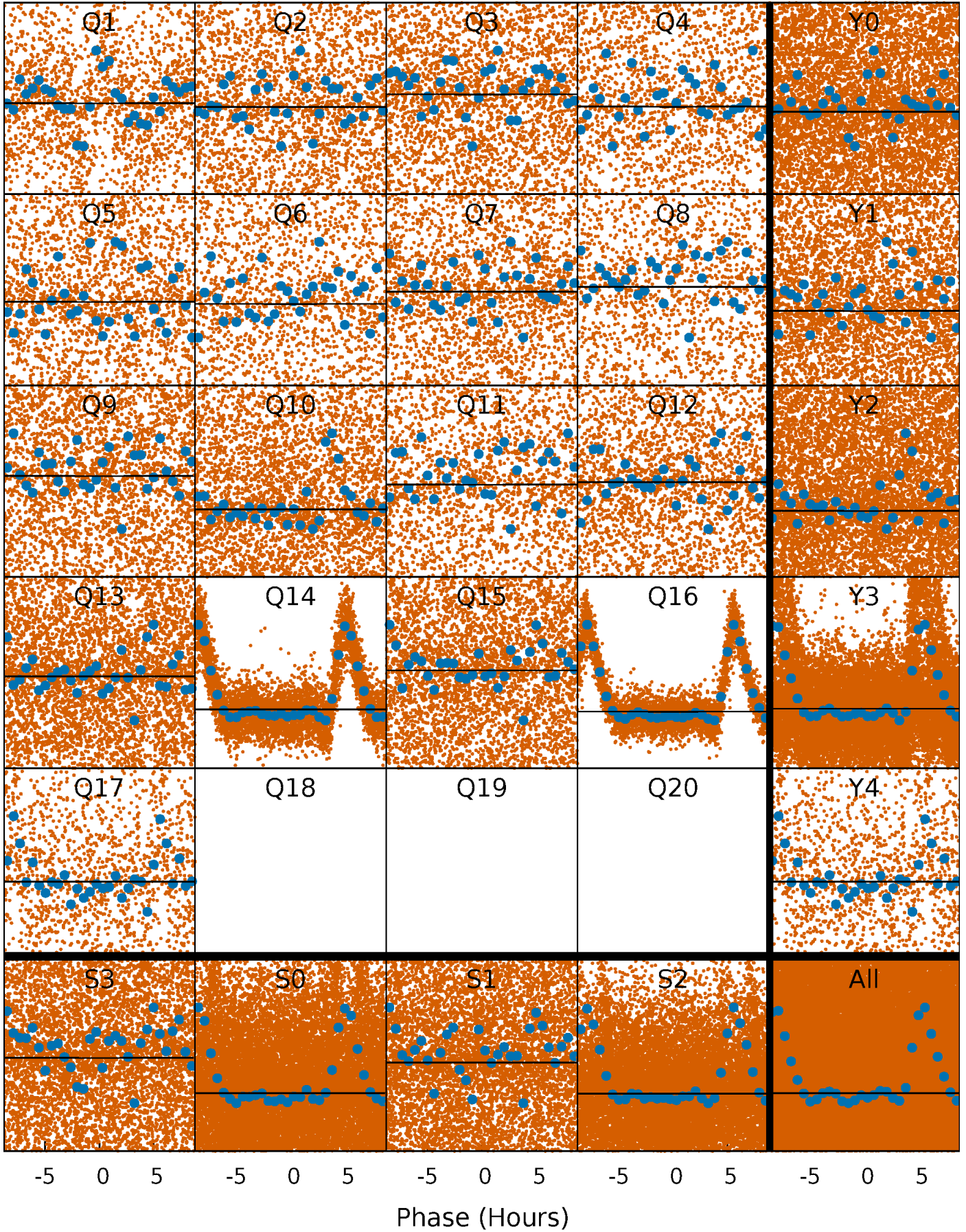
PDC Quarter-Phased Transit Curves

TCE 007199002-01 P= 0.566713 Days $T_0=131.759504$ (BKJD)



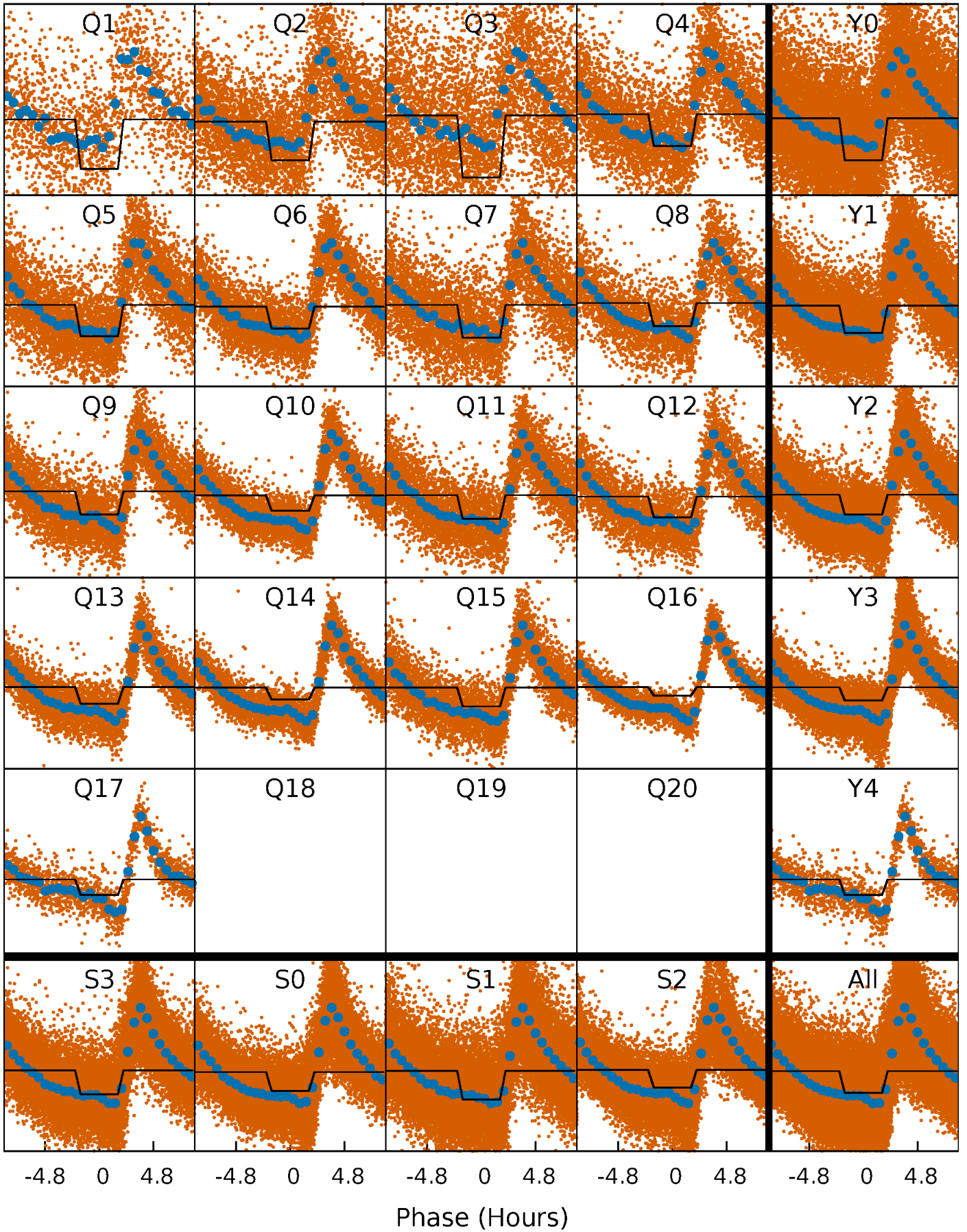
DV Quarter-Phased Transit Curves

TCE 007199002-01 P= 0.566713 Days $T_0=131.759504$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

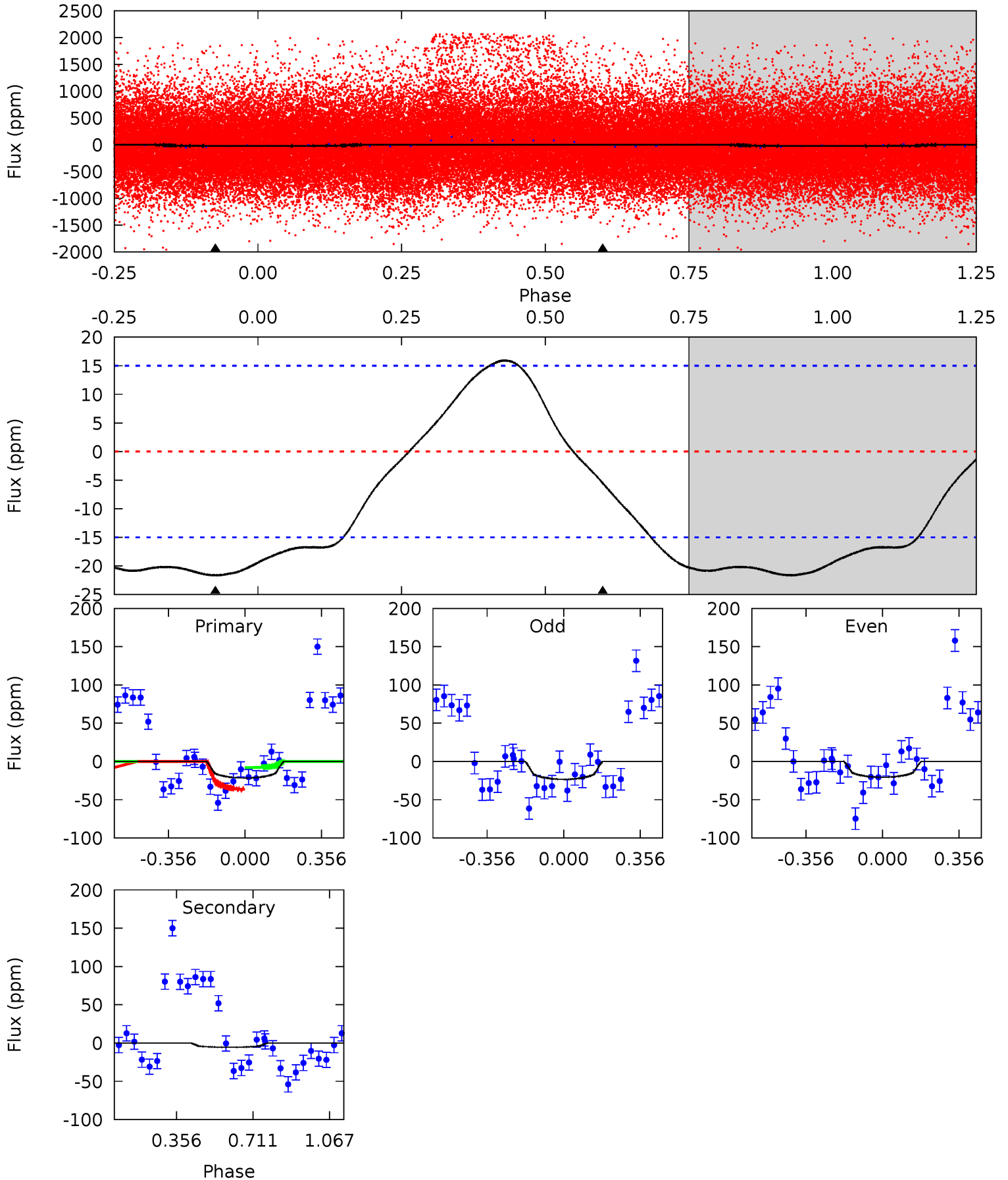
TCE 007199002-01 P= 0.566789 Days $T_0=131.662910$ (BKJD)



DV Model-Shift Uniqueness Test

007199002-01, P = 0.566713 Days, E = 131.192791 Days

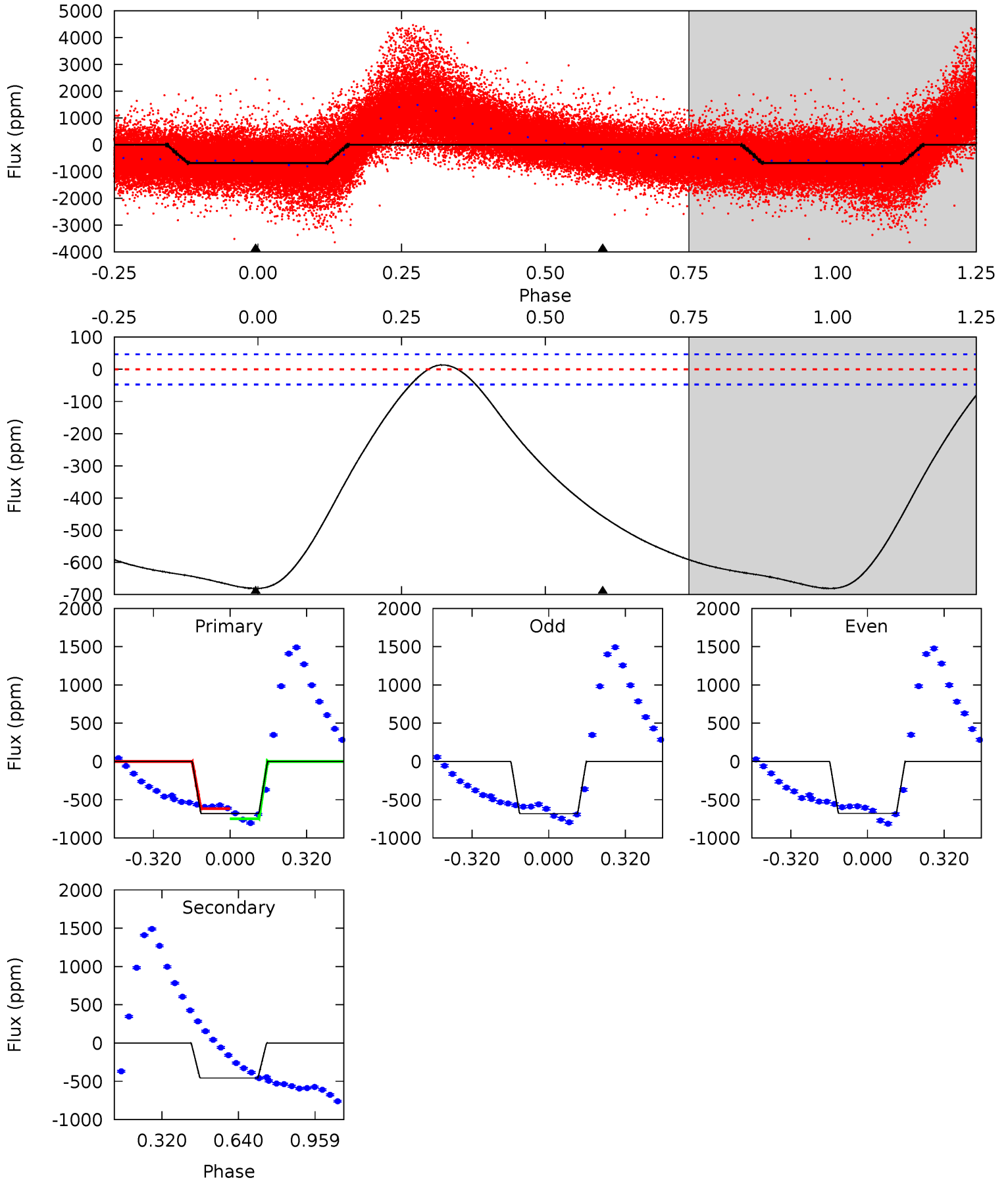
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.20	1.58	0	0	4.29	0.92	0.88	6.20	6.20	1.58	1.58	0.39	1.00	0.42	4.13



Alt Model-Shift Uniqueness Test

007199002-01, P = 0.566789 Days, E = 131.096121 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
62.6	42.0	0	0	4.31	0.99	2.73	62.6	62.6	42.0	42.0	0.15	1.03	0.02	7.44



Stellar Parameters For KIC 007199002

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6367^{+172}_{-230}	$4.419^{+0.062}_{-0.188}$	$-0.140^{+0.250}_{-0.300}$	$1.087^{+0.336}_{-0.134}$	$1.131^{+0.150}_{-0.150}$	$1.241^{+0.402}_{-0.623}$
	+3%/-4%	+1%/-4%	+179%/-214%	+31%/-12%	+13%/-13%	+32%/-50%
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 007199002-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-6 ± 3	$3.20^{+3.52}_{-2.22}$	3502^{+257}_{-177}	-3265^{+6745}_{-210}	$0.046^{+0.570}_{-0.038}$
Alt.	-457 ± 11	$4.19^{+4.54}_{-2.78}$	3522^{+247}_{-166}	4998^{+4305}_{-1522}	$2.796^{+21.546}_{-2.153}$

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

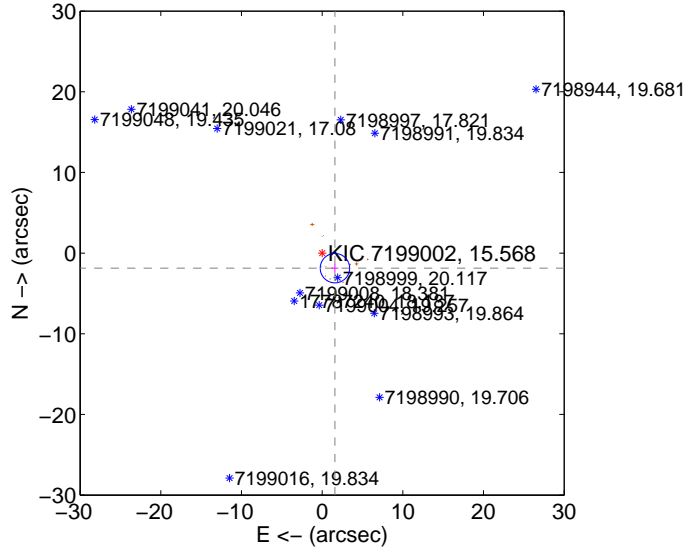
Supplemental centroid analysis for 007199002-01. Kepler magnitude: 15.57. Transit SNR 0.08

There are 2 quarters with good PRF difference image offsets

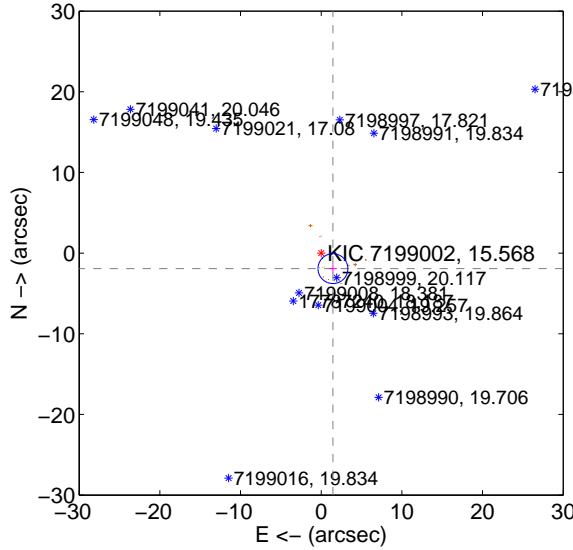
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.451 ± 0.608	4.03	-1.587 ± 0.443	-1.868 ± 0.540
PRF-fit source offset from KIC position	2.414 ± 0.617	3.91	-1.455 ± 0.495	-1.926 ± 0.523
photometric centroid source offset	—	—	—	—

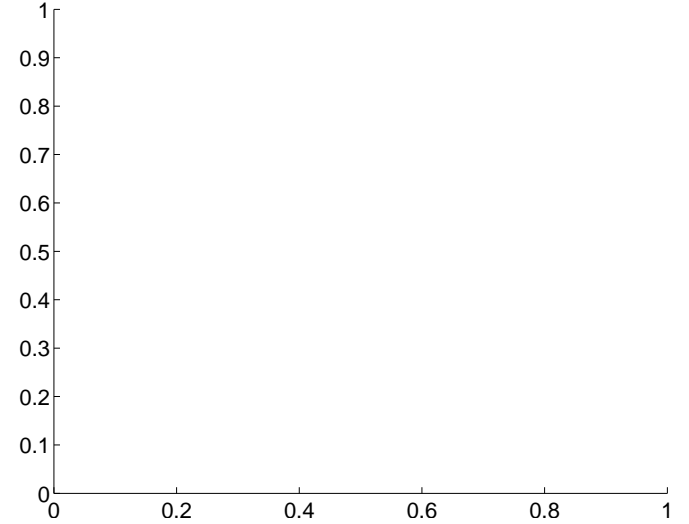
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

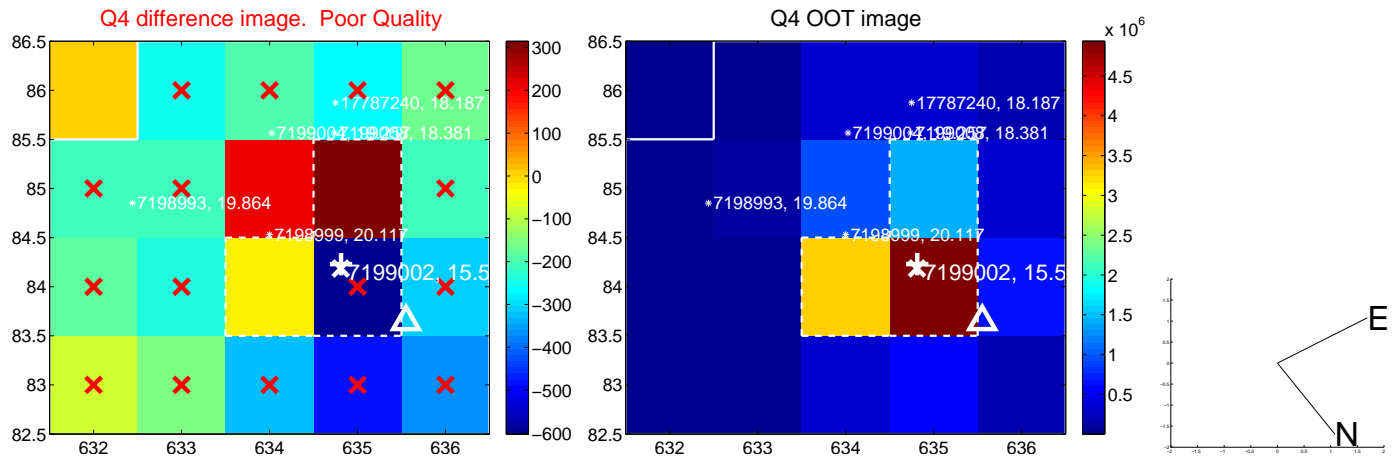
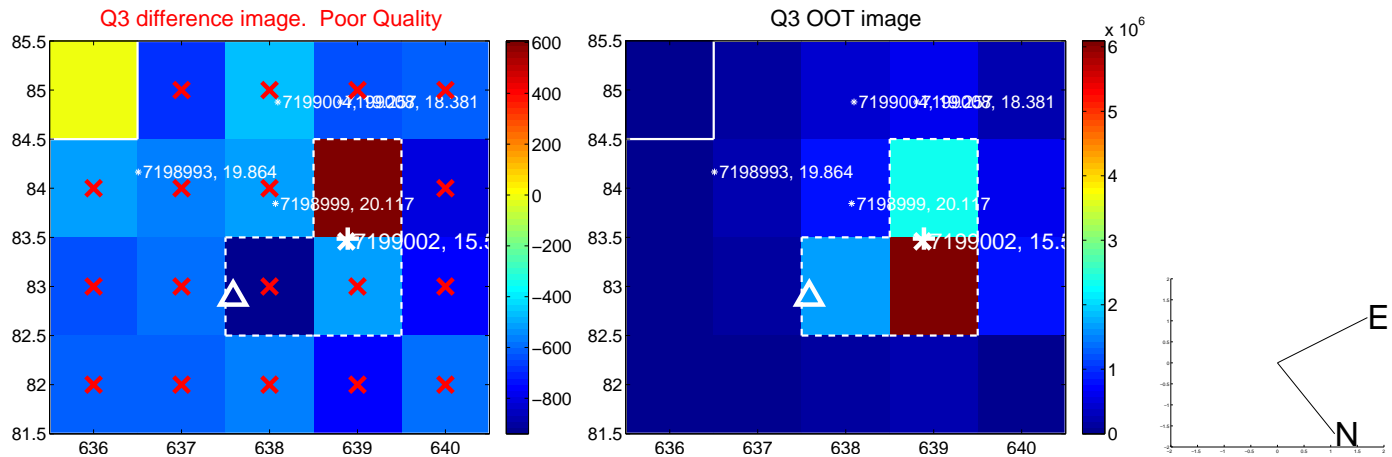
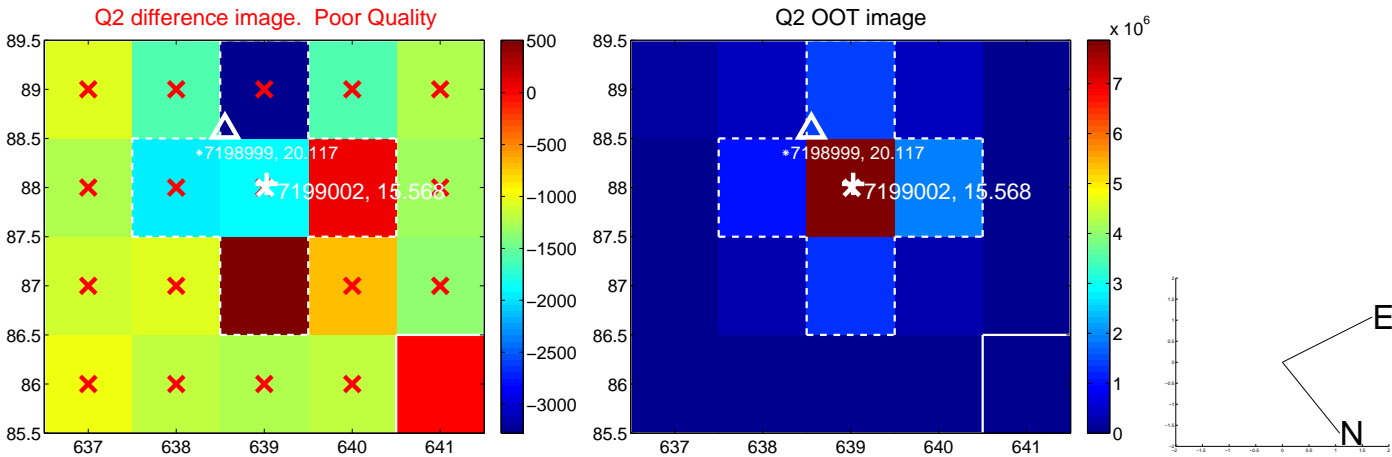
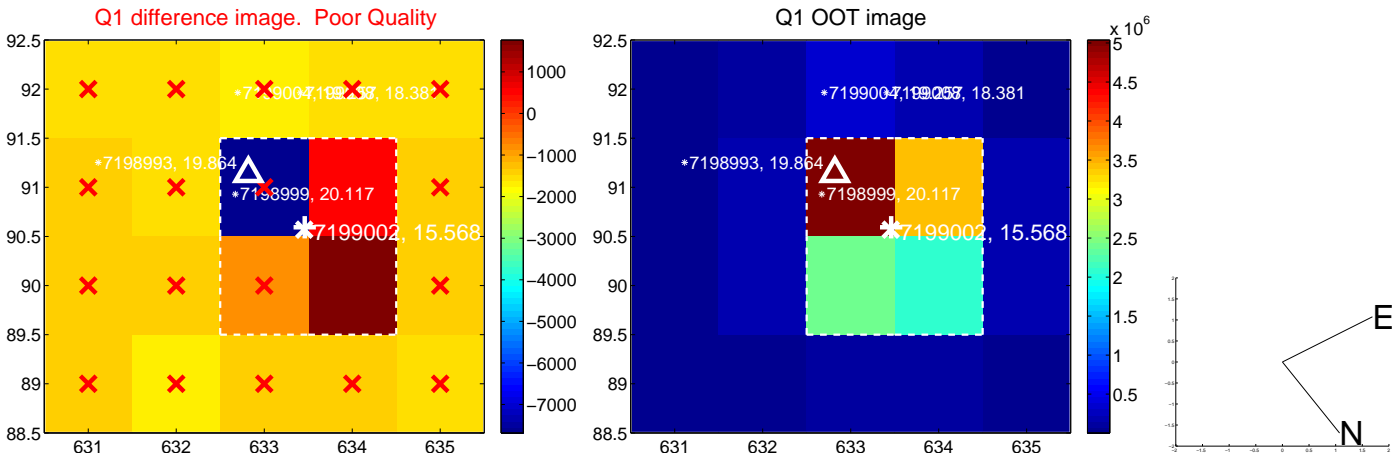


There are no photometric centroids

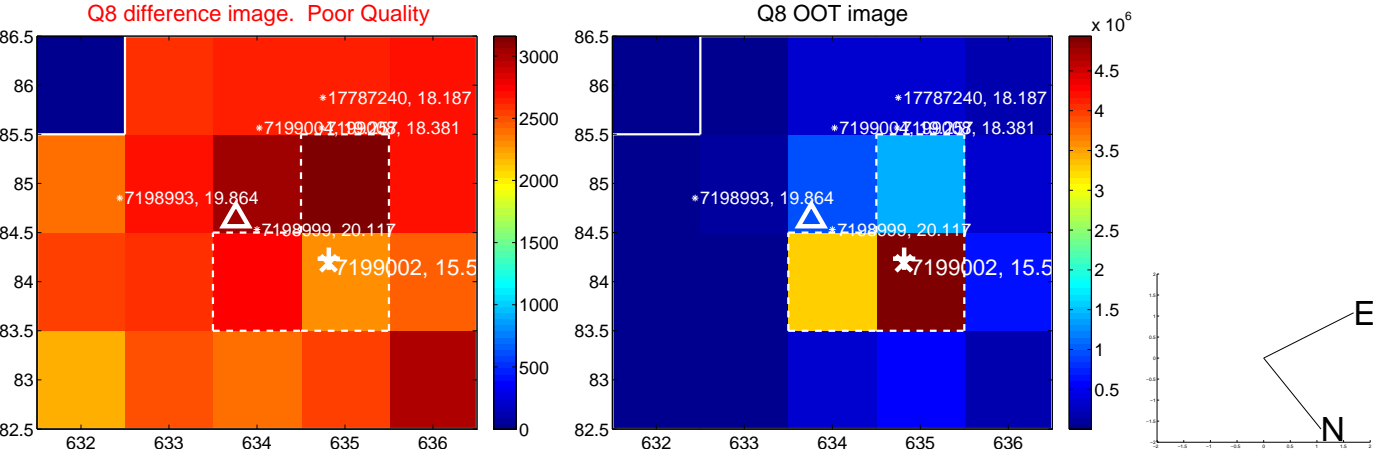
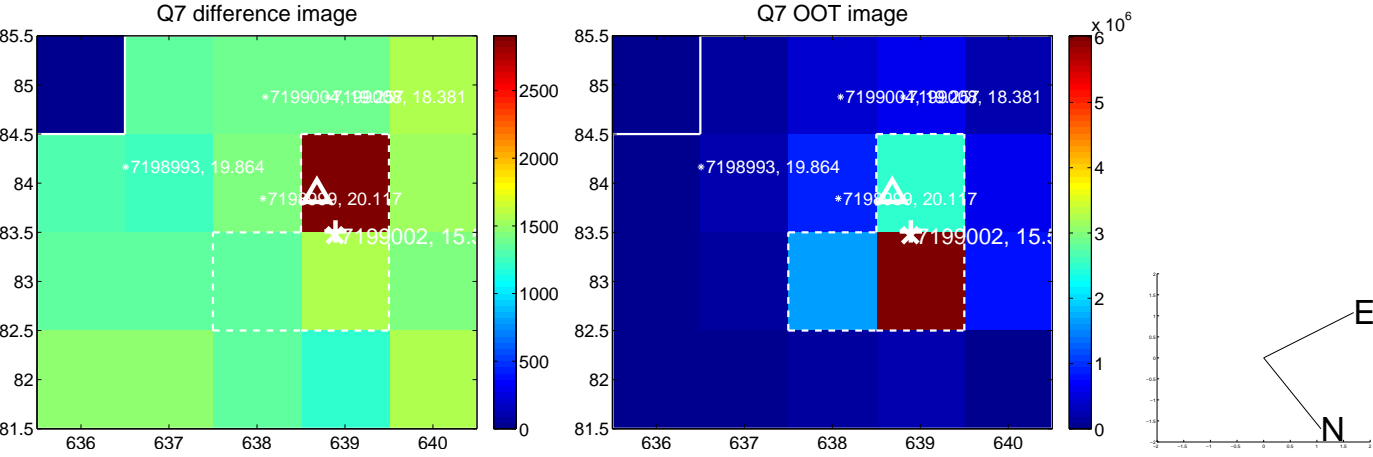
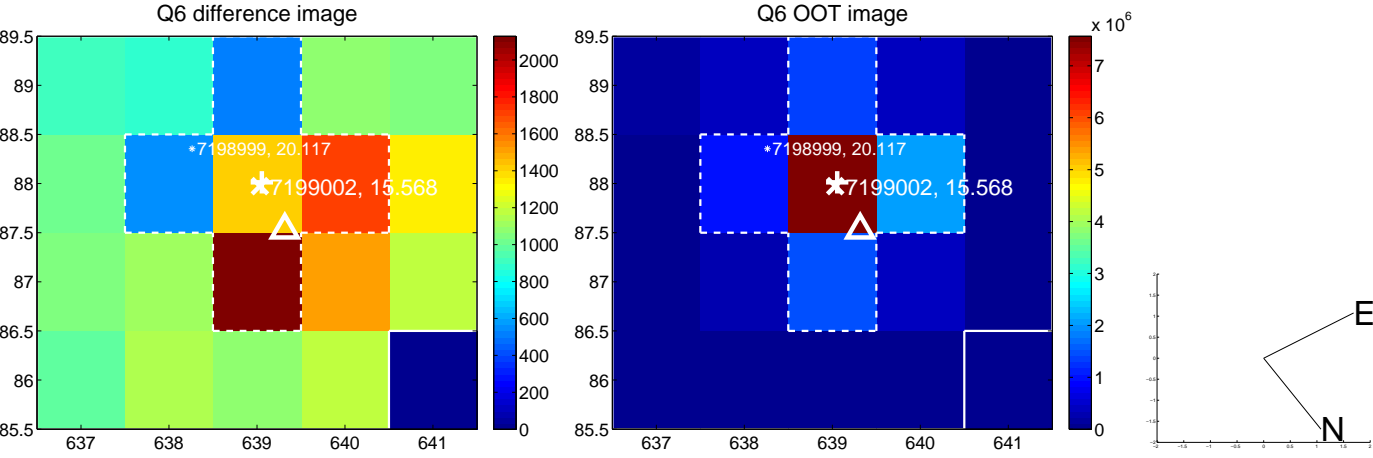
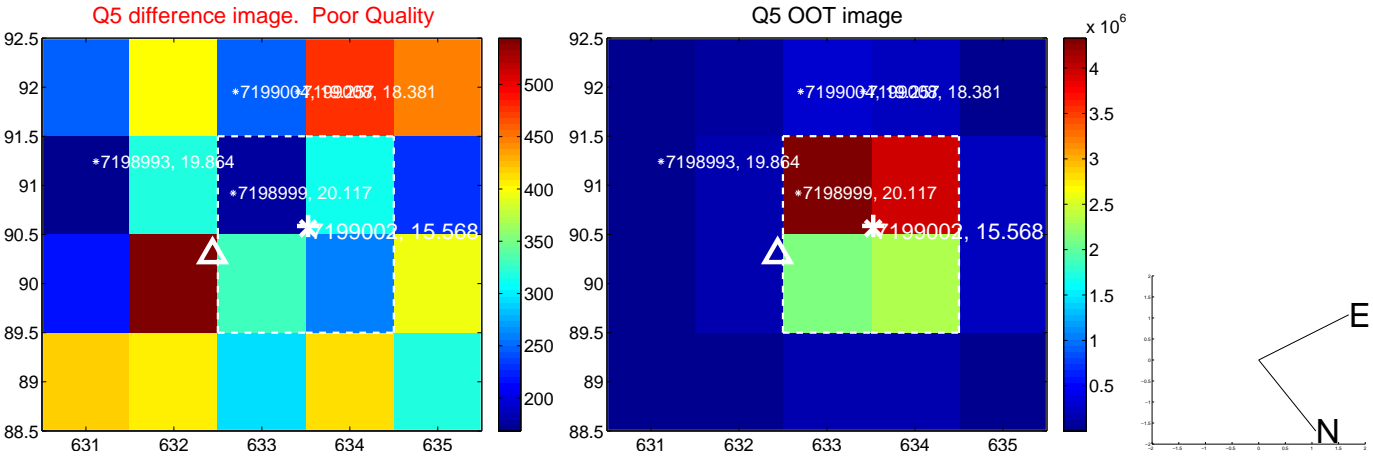


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

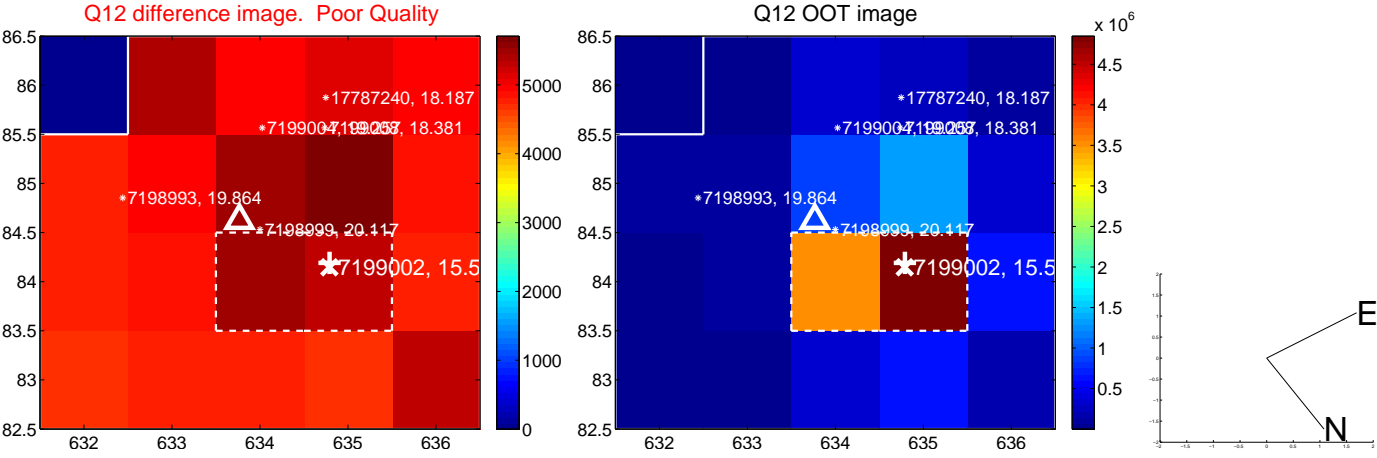
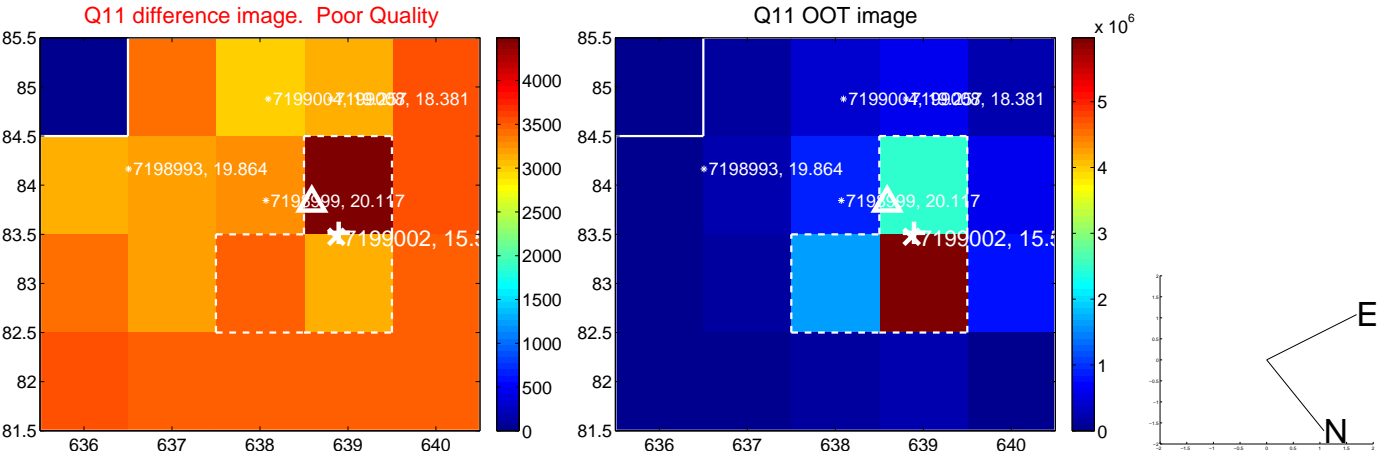
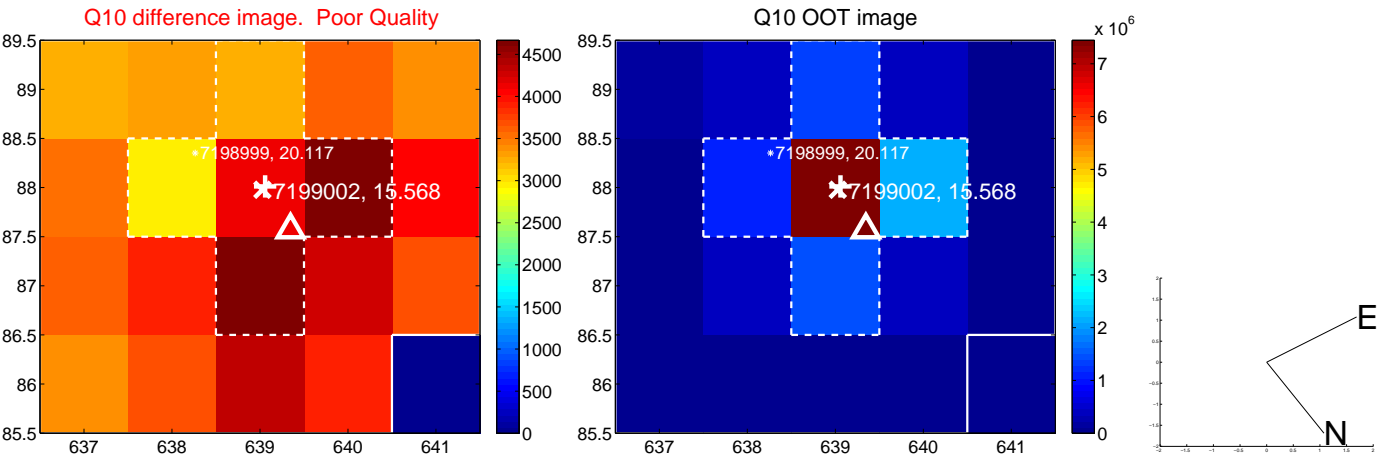
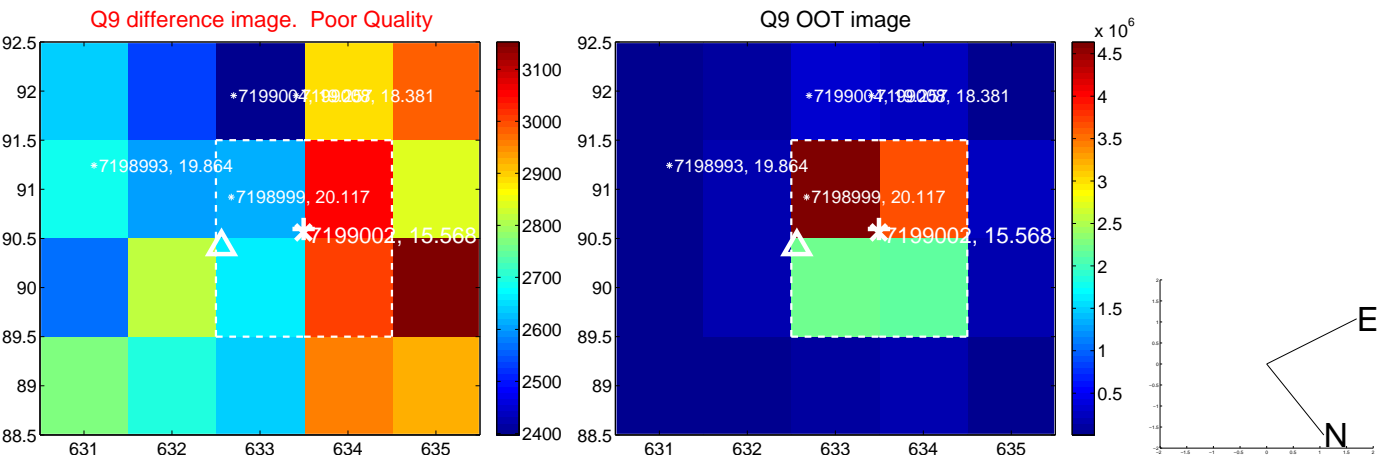
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



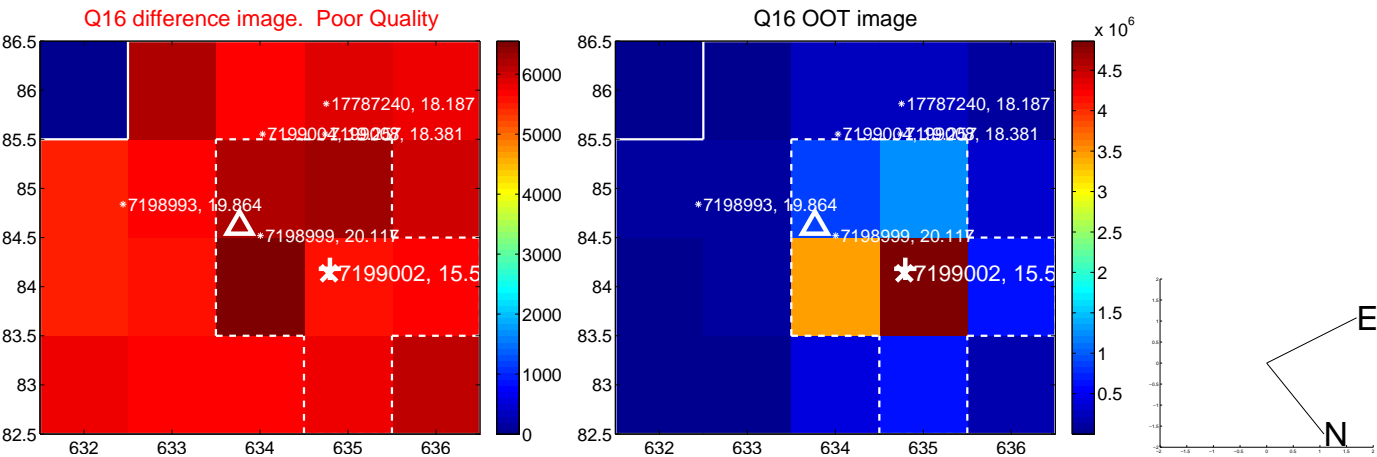
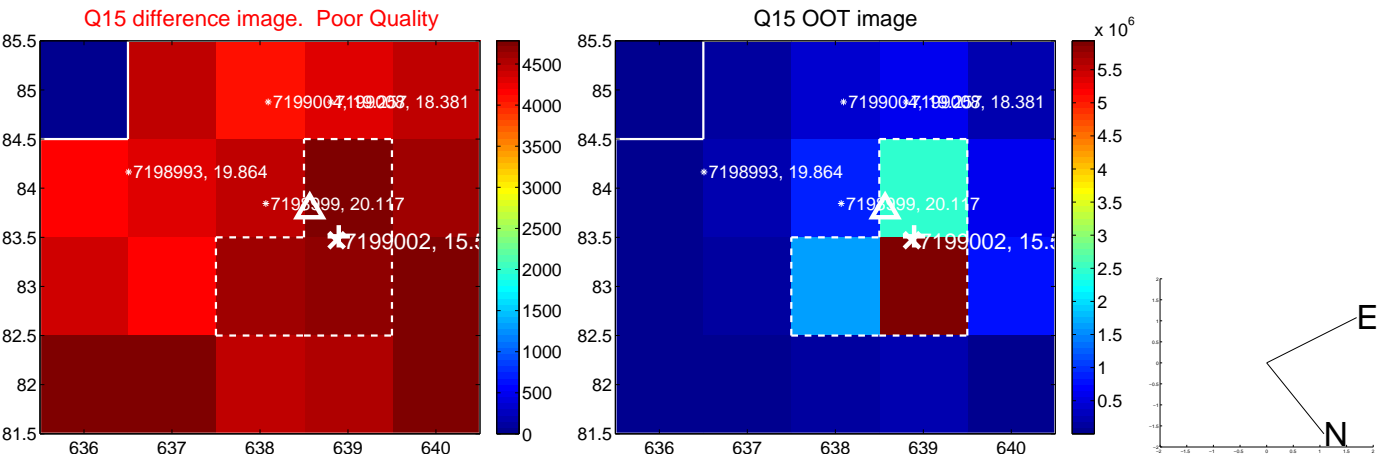
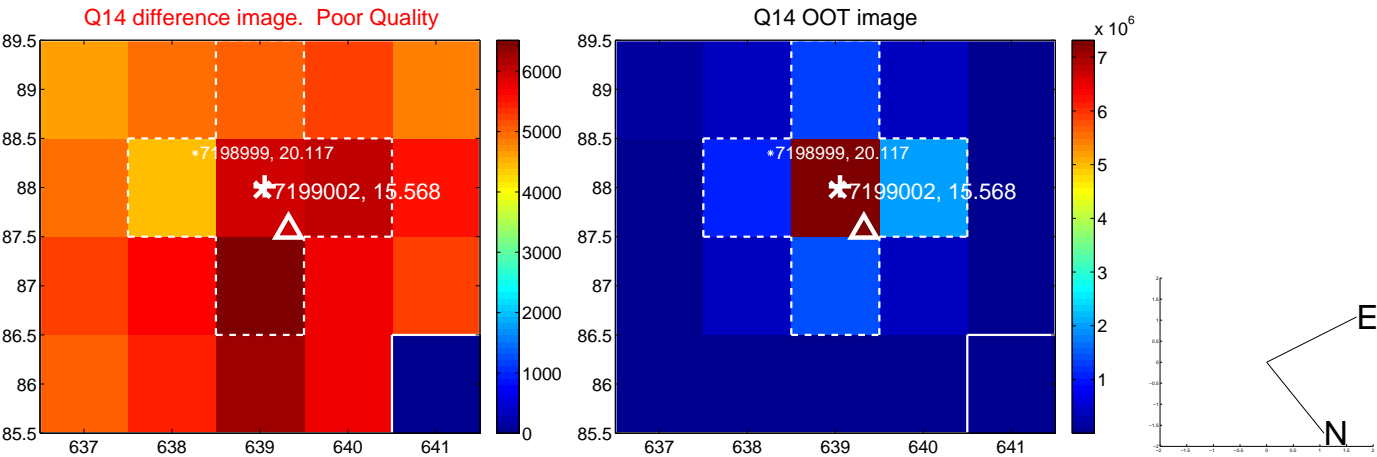
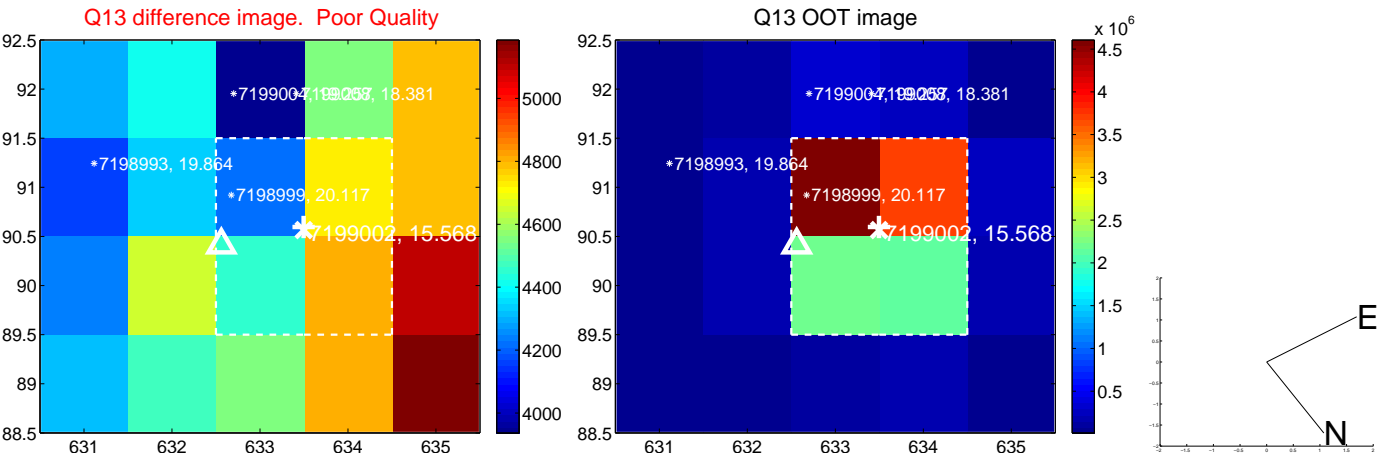
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



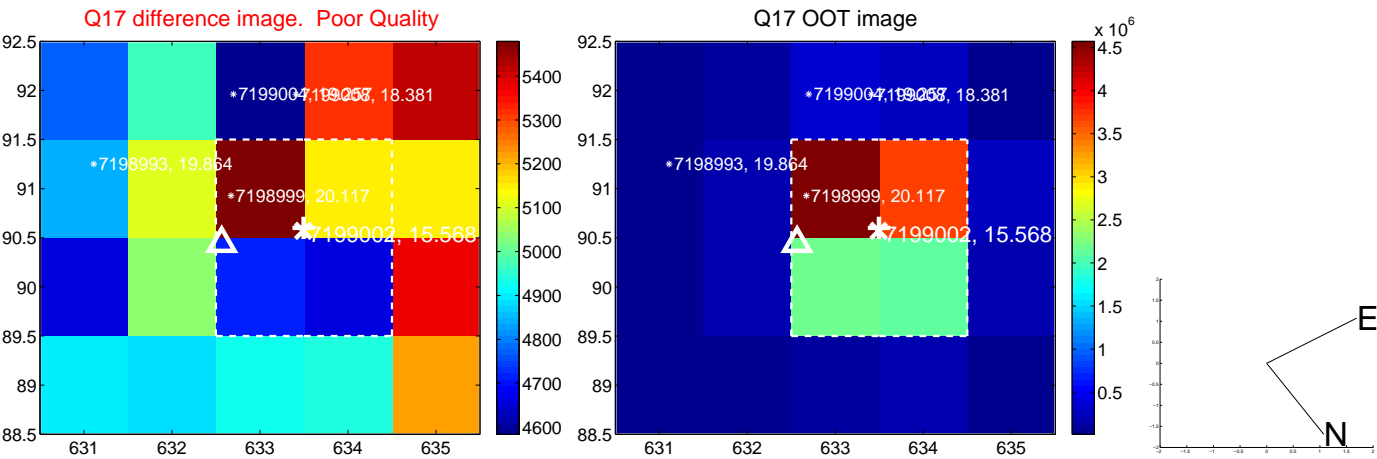
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

Declination

