

KIC 007199203

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})
007199203-01	OBS	No	0.566811	131.644143	5.0	4.657	11.3	8.6	1.35	6049	0.36	13079.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007199203-01	OBS	FP	0.00	1	0	0	1	LPP_DV—LPP_ALT—CENT_SATURATED—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.

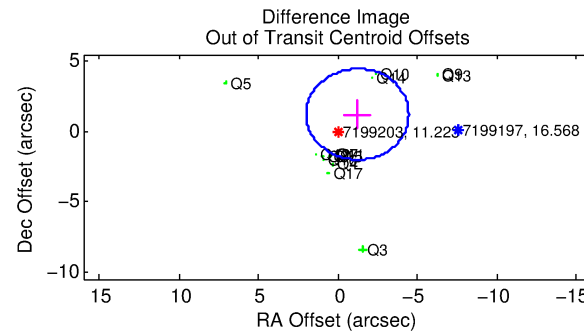
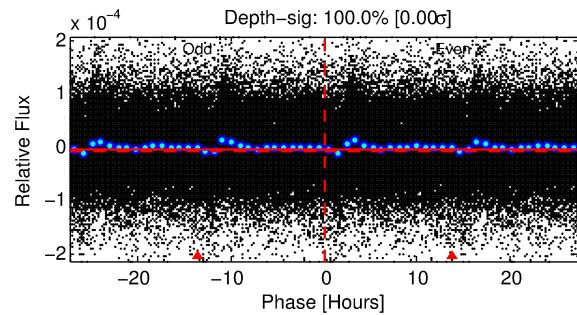
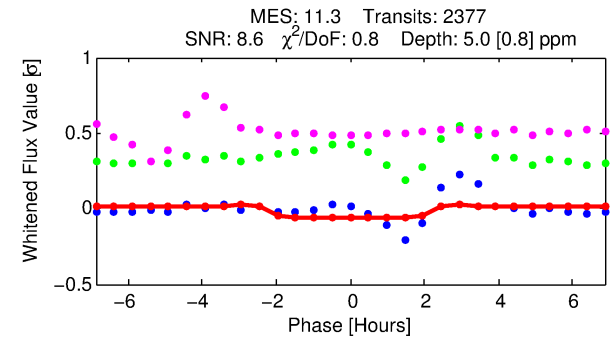
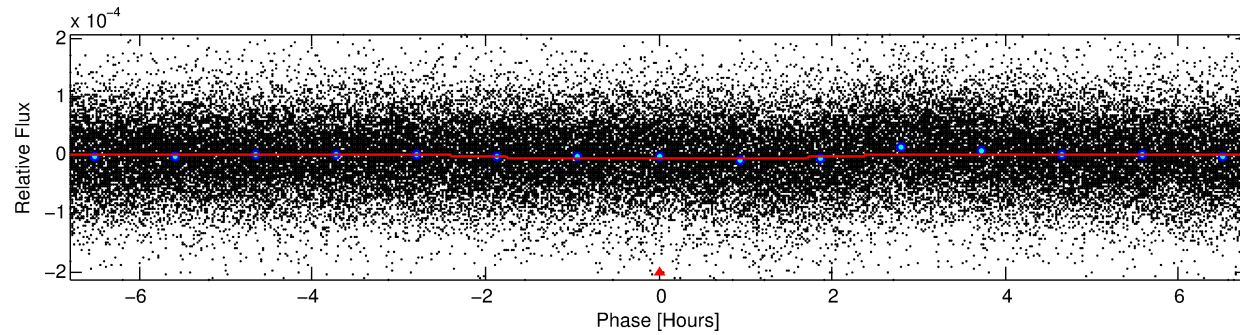
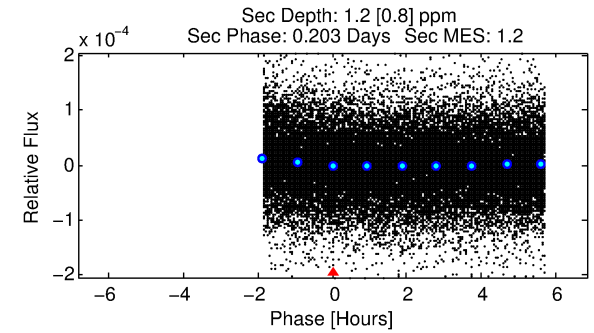
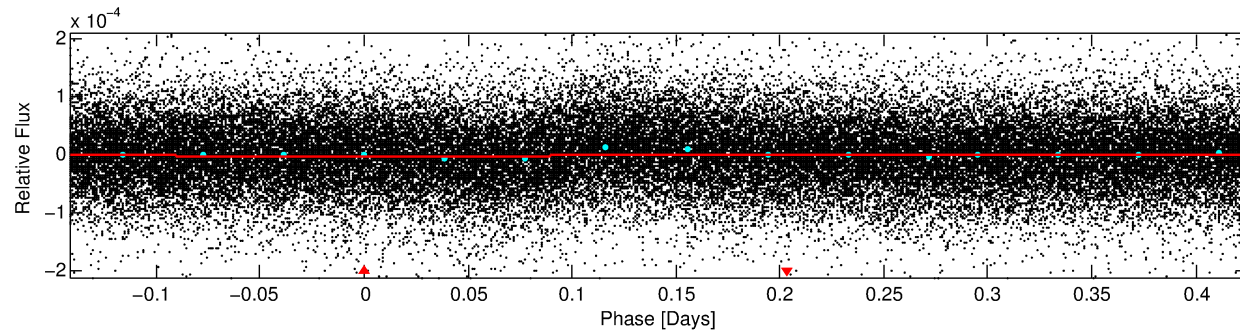
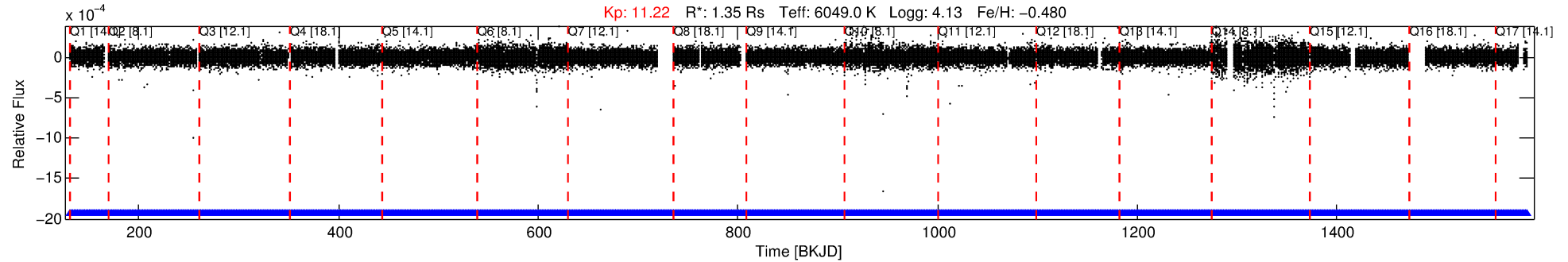
Ephemeris Match Information For 007199203-01

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
007199203-01	7199203	RR-Lyr-pri	7198959	1:1	220.2	50	22	7.86	11.22	124660.00	Direct-PRF	0	3.41	9.30

Notes: P₁:P₂ 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. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ 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: 7199203 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56681 [0.00001] d
Epoch = 131.6441 [0.0044] BKJD
Rp/R* = 0.0024 [0.0016]
a/R* = 1.03 [0.21]
b = 0.90 [0.77]
Seff = 13079.05 [7474.95]
Teq = 2727 [390] K
Rp = 0.36 [0.26] Re
a = 0.0130 [0.0044] AU
Ag = 0.87 [1.37] [-0.10σ]
Teffp = 4067 [1514] K [0.86σ]

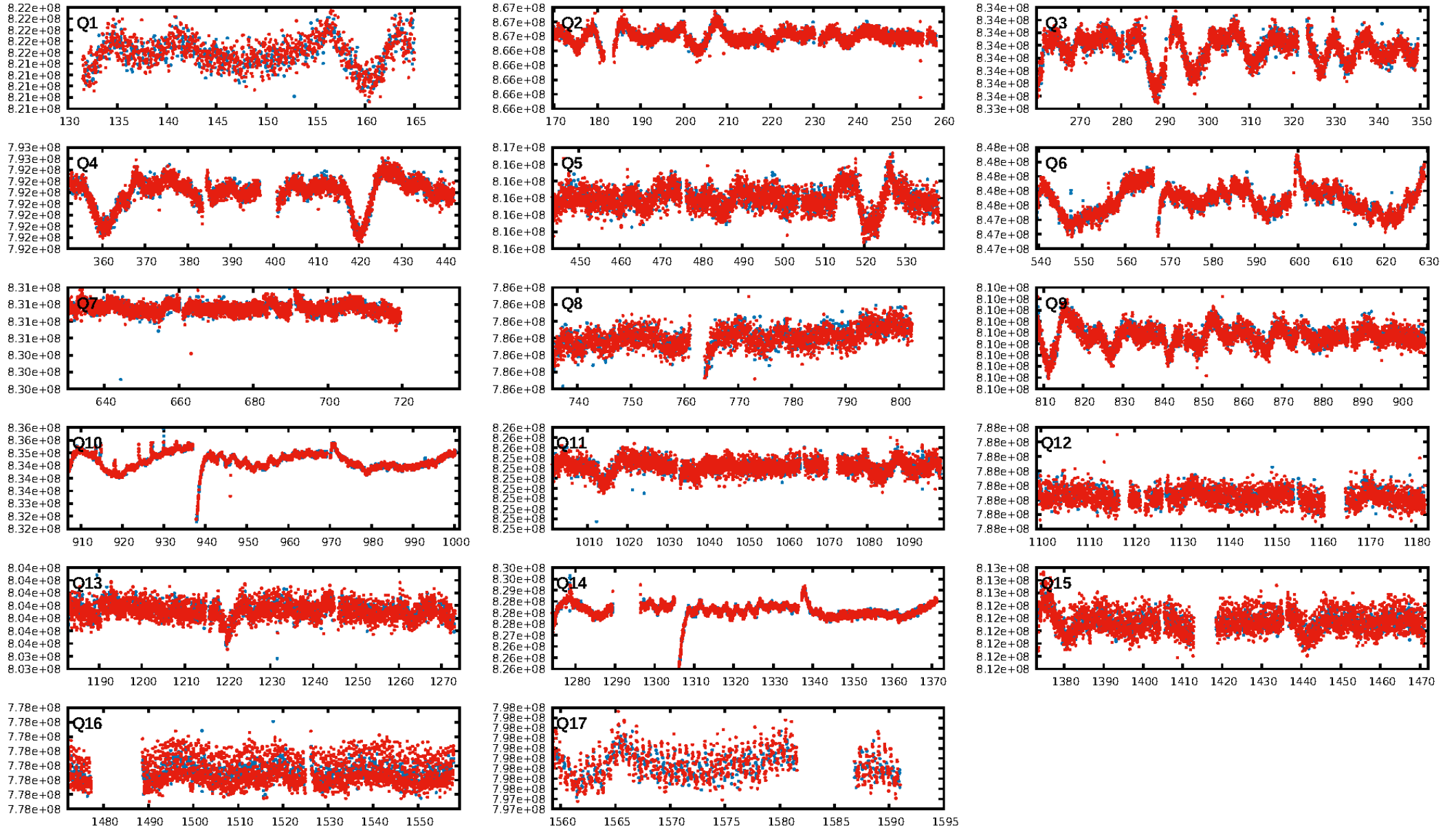
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2270/2270]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.747 arcsec [1.62σ]
KicOffset-rm: 1.640 arcsec [1.51σ]
OotOffset-st: 2/4/4/4 [14]
KicOffset-st: 2/4/4/4 [14]
DiffImageQuality-fgm: 0.21 [3/14]
DiffImageOverlap-fno: 1.00 [17/17]

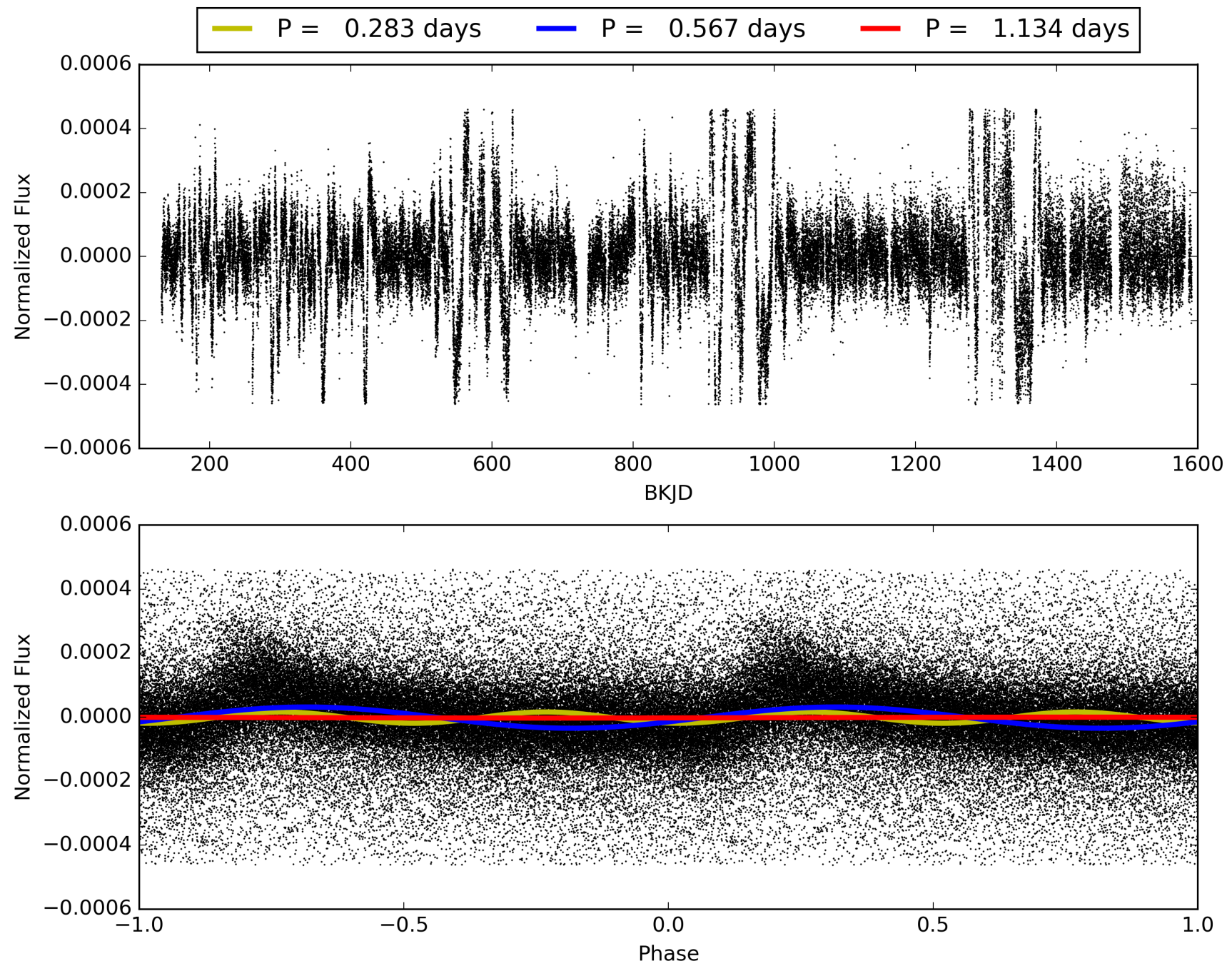
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:18:16 Z

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

TCE 007199203-01, PDC Light Curves

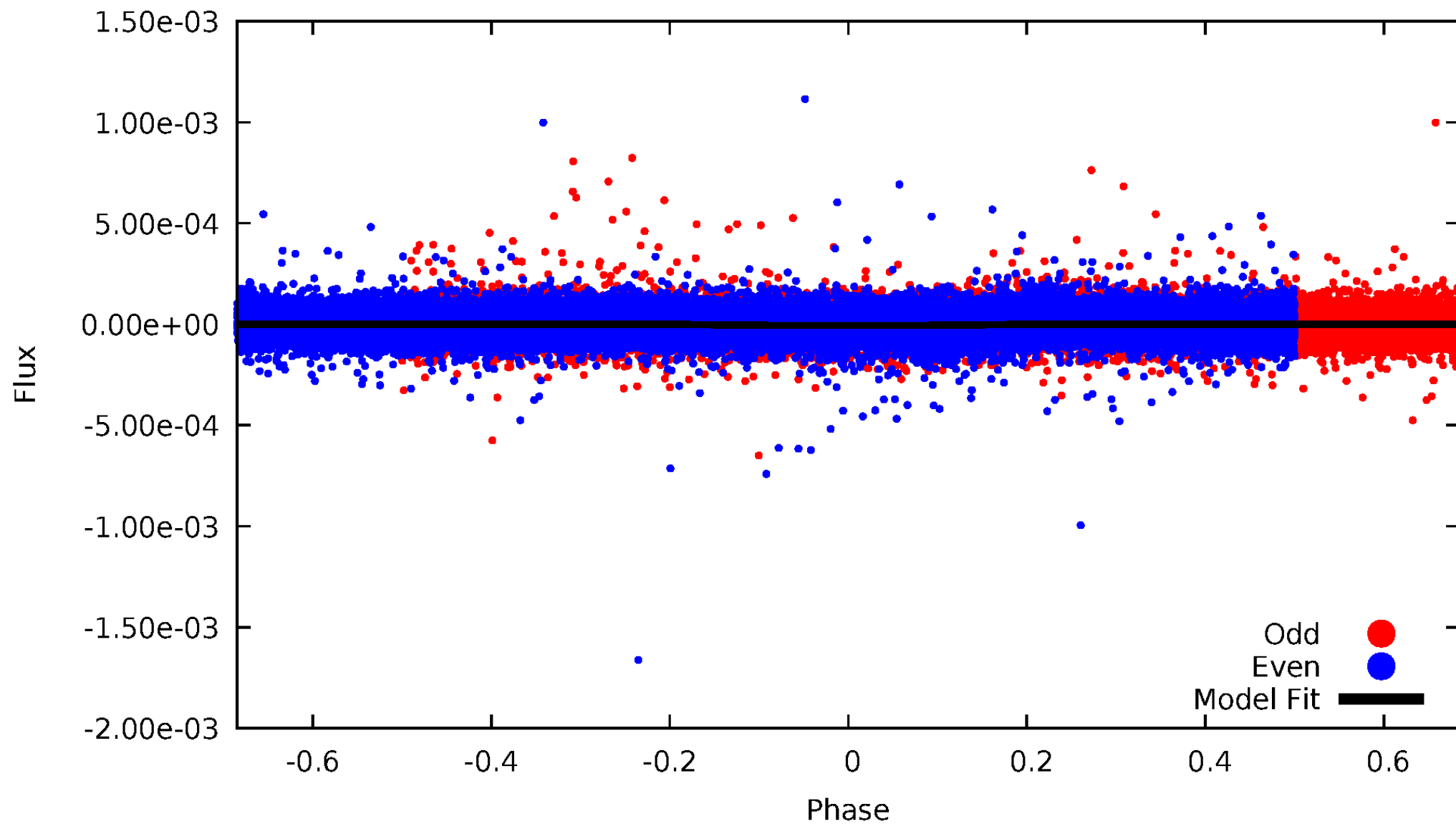


TCE 007199203-01



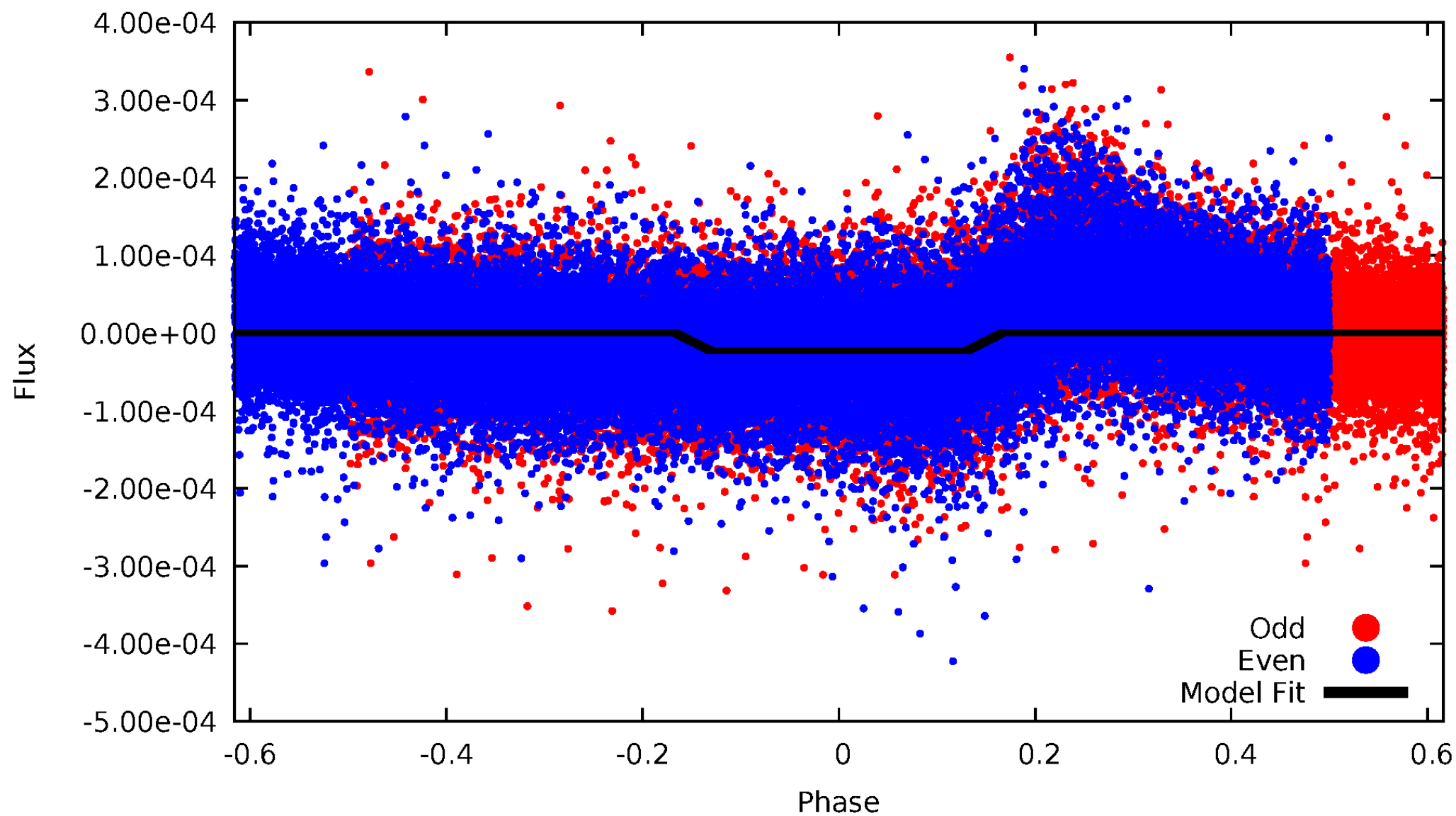
DV Odd/Even

TCE 007199203-01



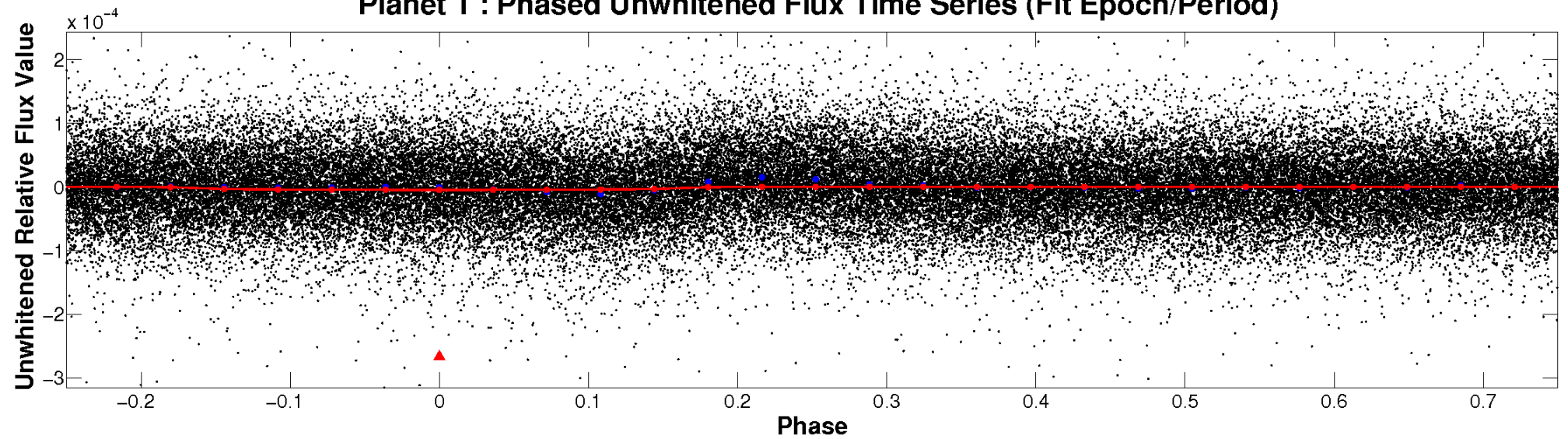
ALT Odd/Even

TCE 007199203-01

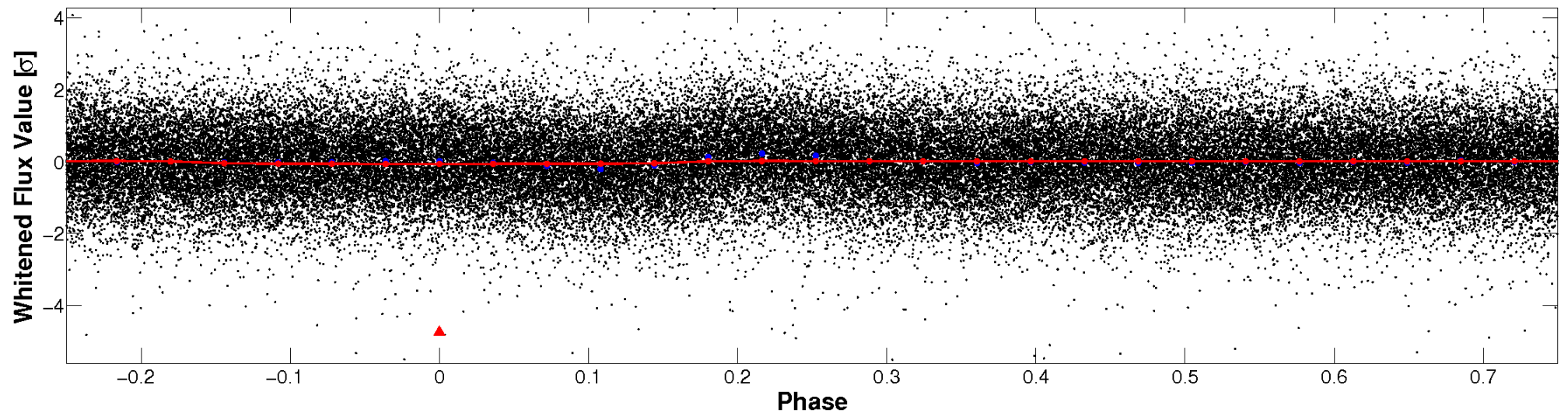


Non-Whitened Vs. Whitened Light Curve

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

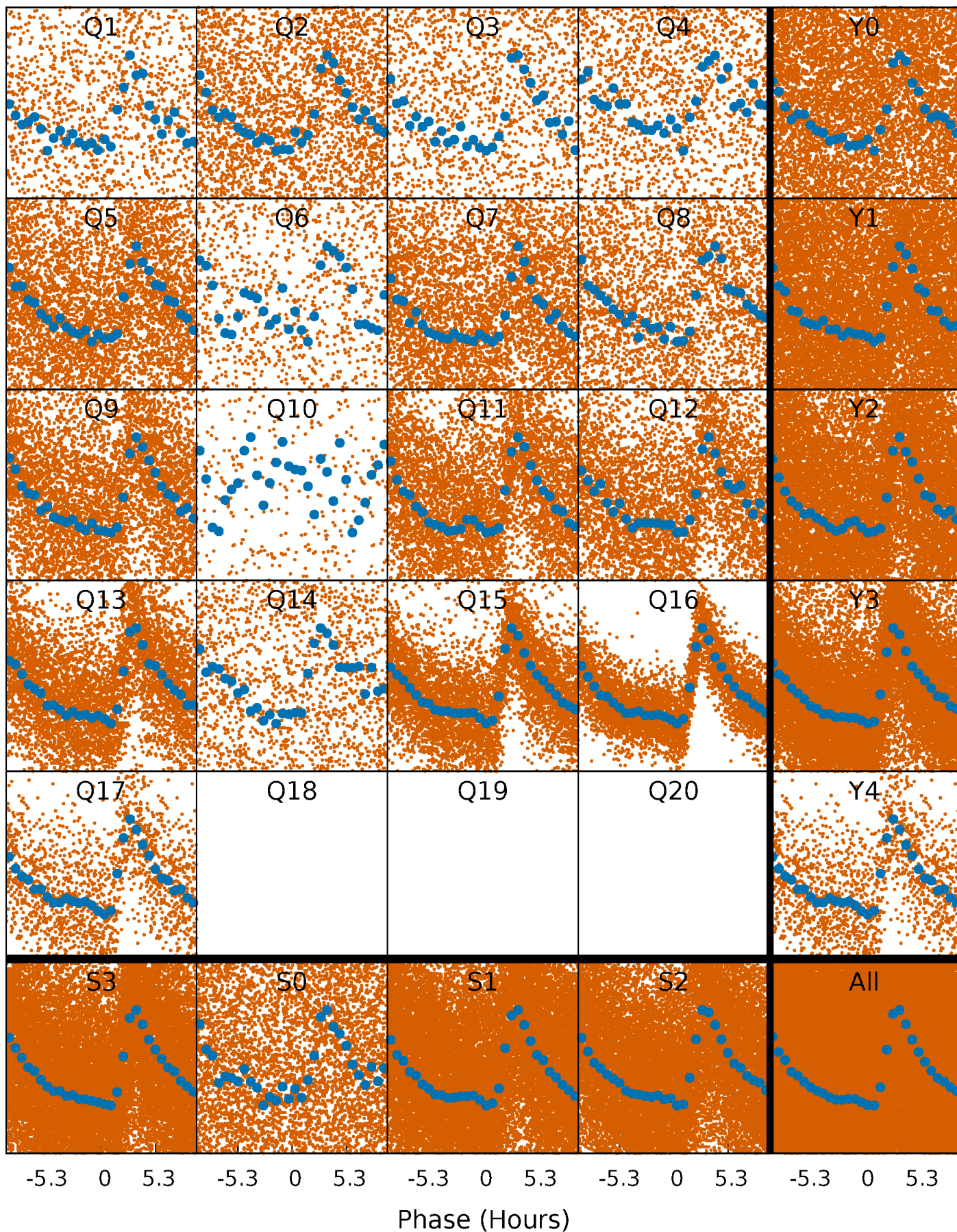


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



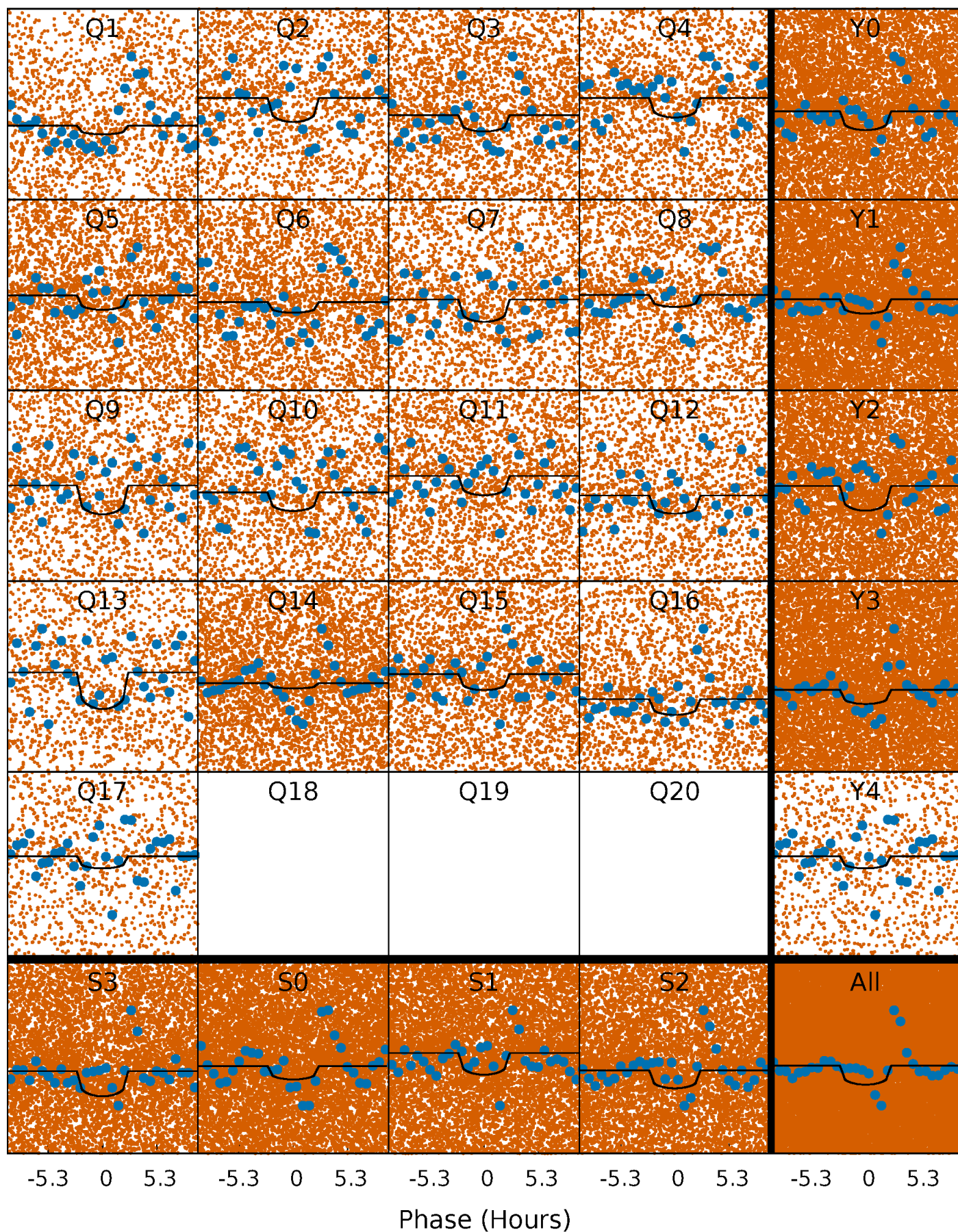
PDC Quarter-Phased Transit Curves

TCE 007199203-01 P= 0.566811 Days $T_0=131.644143$ (BKJD)



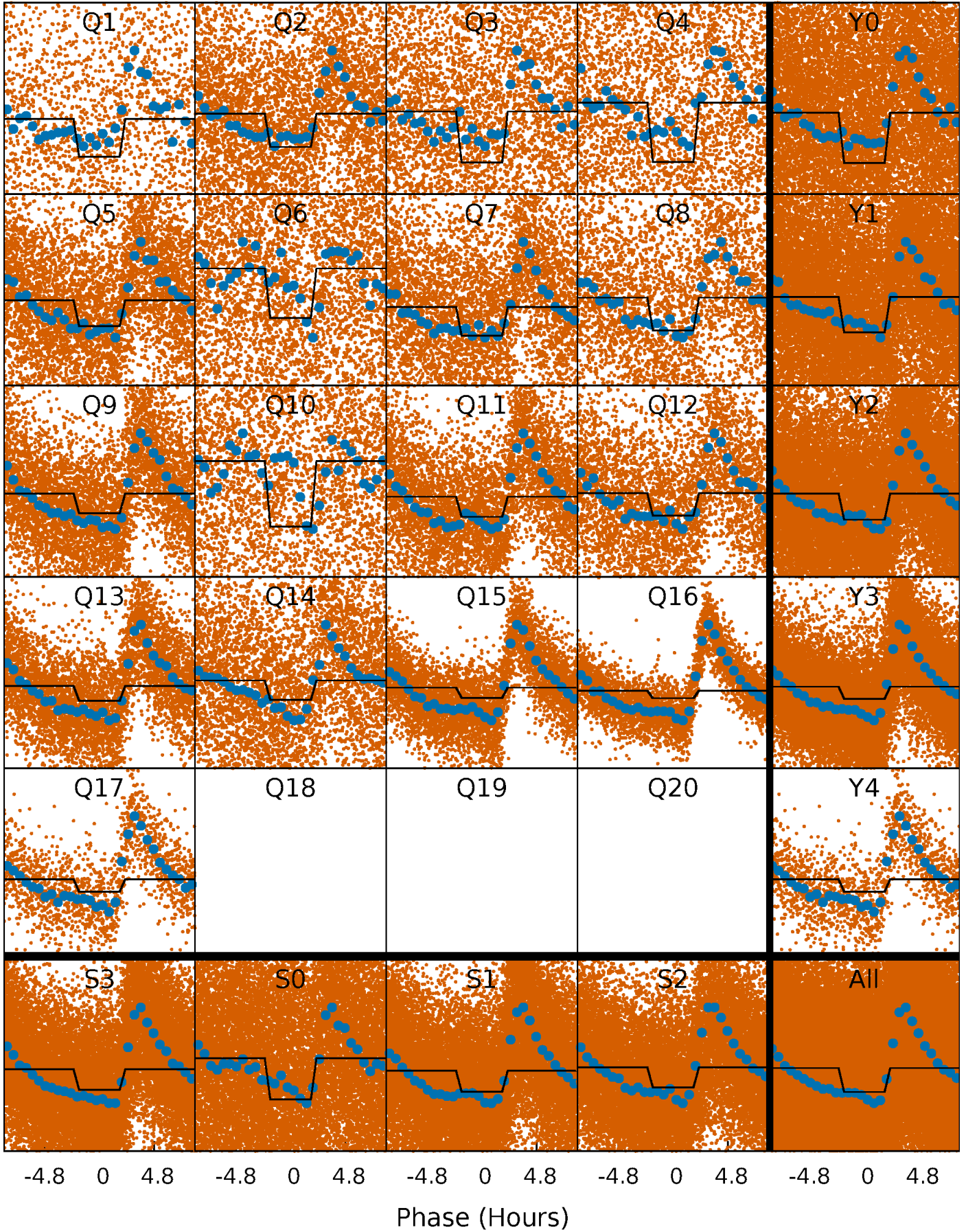
DV Quarter-Phased Transit Curves

TCE 007199203-01 P= 0.566811 Days $T_0=131.644143$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

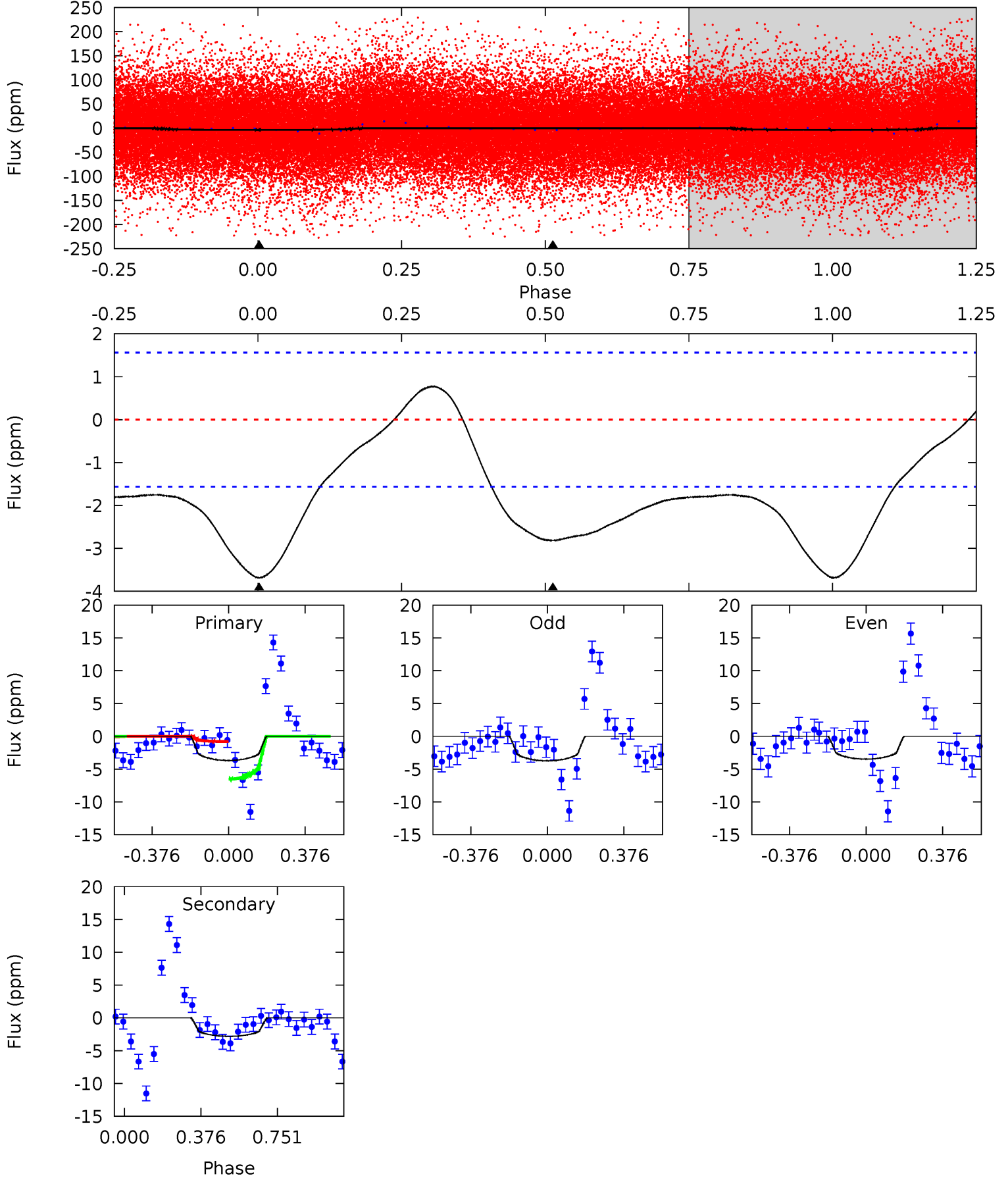
TCE 007199203-01 P= 0.566808 Days $T_0=131.638223$ (BKJD)



DV Model-Shift Uniqueness Test

007199203-01, P = 0.566811 Days, E = 131.077332 Days

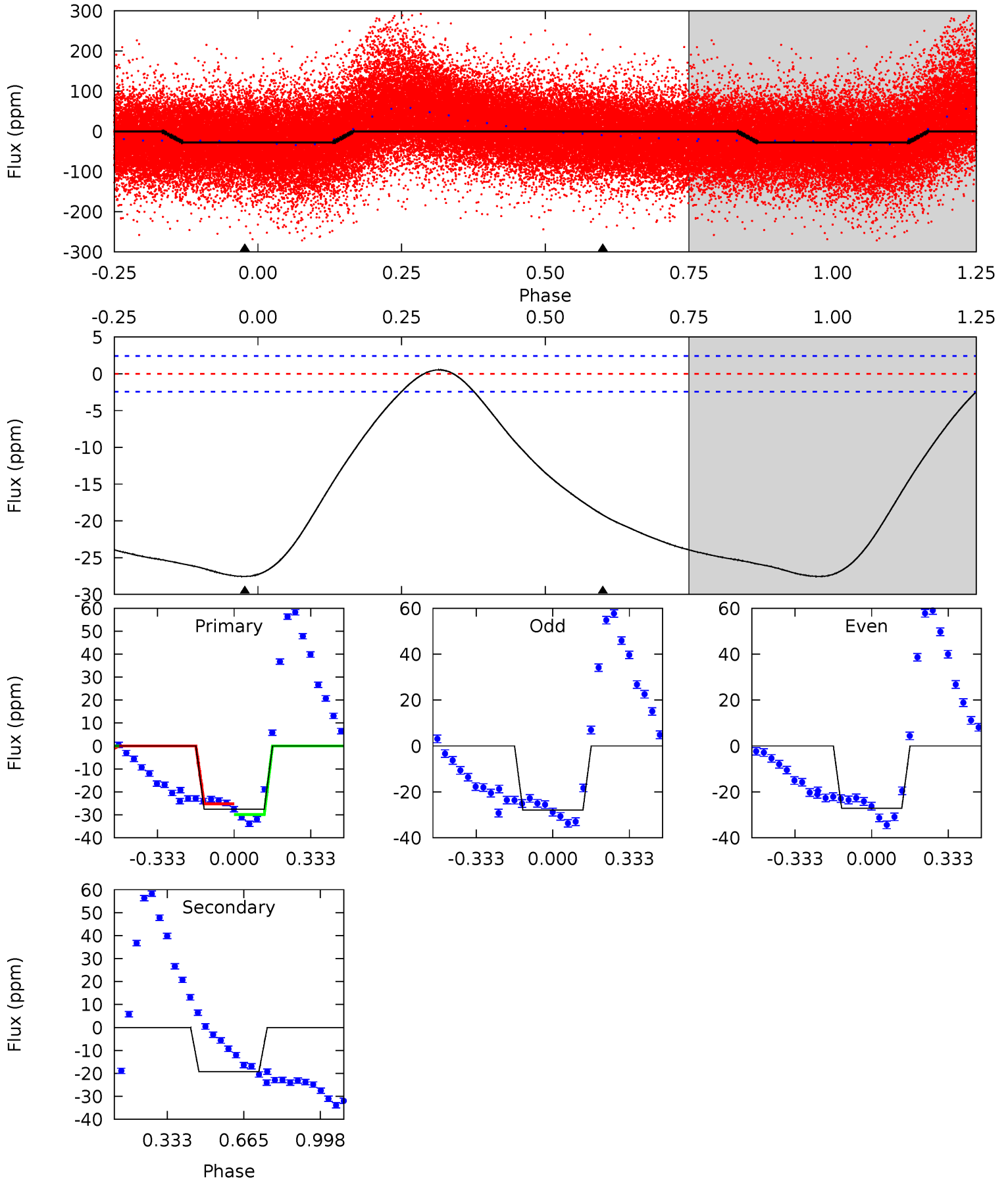
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	7.71	0	0	4.28	0.89	2.89	10.1	10.1	7.71	7.71	0.36	1.37	0.17	7.75



Alt Model-Shift Uniqueness Test

007199203-01, P = 0.566808 Days, E = 131.071415 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
48.9	34.0	0	0	4.31	0.97	2.05	48.9	48.9	34.0	34.0	0.67	1.03	0.02	4.47



Stellar Parameters For KIC 007199203

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6049^{+199}_{-199}	$4.131^{+0.331}_{-0.178}$	$-0.480^{+0.300}_{-0.300}$	$1.353^{+0.376}_{-0.459}$	$0.904^{+0.130}_{-0.097}$	$0.514^{+1.115}_{-0.235}$
	+3%/-3%	+8%/-4%	+62%/-62%	+28%/-34%	+14%/-11%	+217%/-46%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007199203-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-3 ± 0	$0.35^{+0.25}_{-0.19}$	3756^{+327}_{-354}	4869^{+2437}_{-1059}	$2.174^{+8.086}_{-1.442}$
Alt.	-19 ± 1	$0.68^{+0.27}_{-0.23}$	3782^{+326}_{-364}	5708^{+1309}_{-764}	$3.855^{+4.780}_{-1.870}$

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 $A_{obs} \gg 1.0$

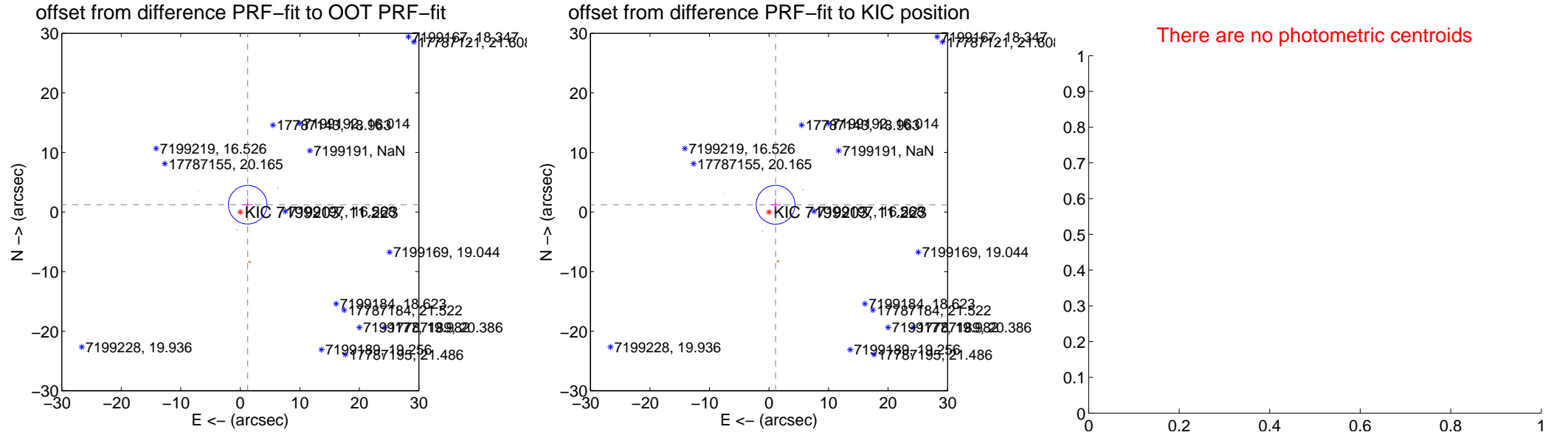
DV Centroid Data

Supplemental centroid analysis for 007199203-01. **Kepler magnitude: 11.22.** Transit SNR 8.64

There are 3 quarters with good PRF difference image offsets

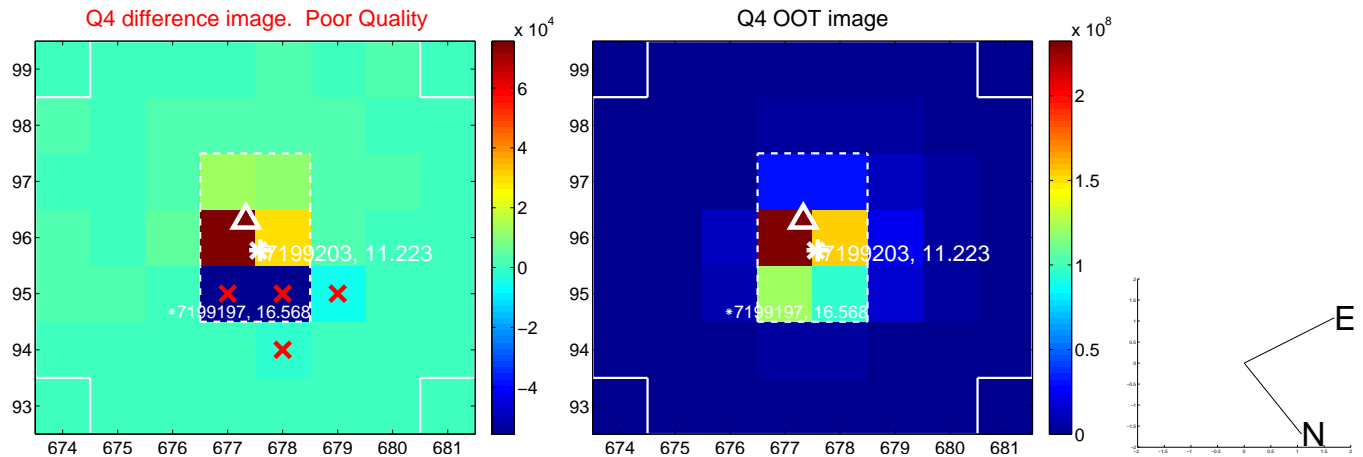
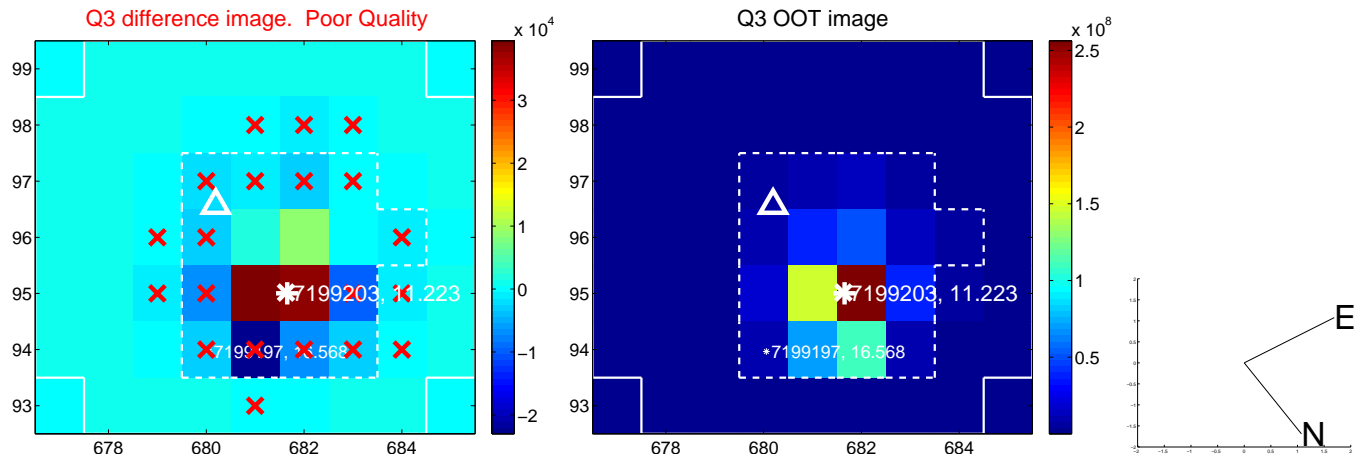
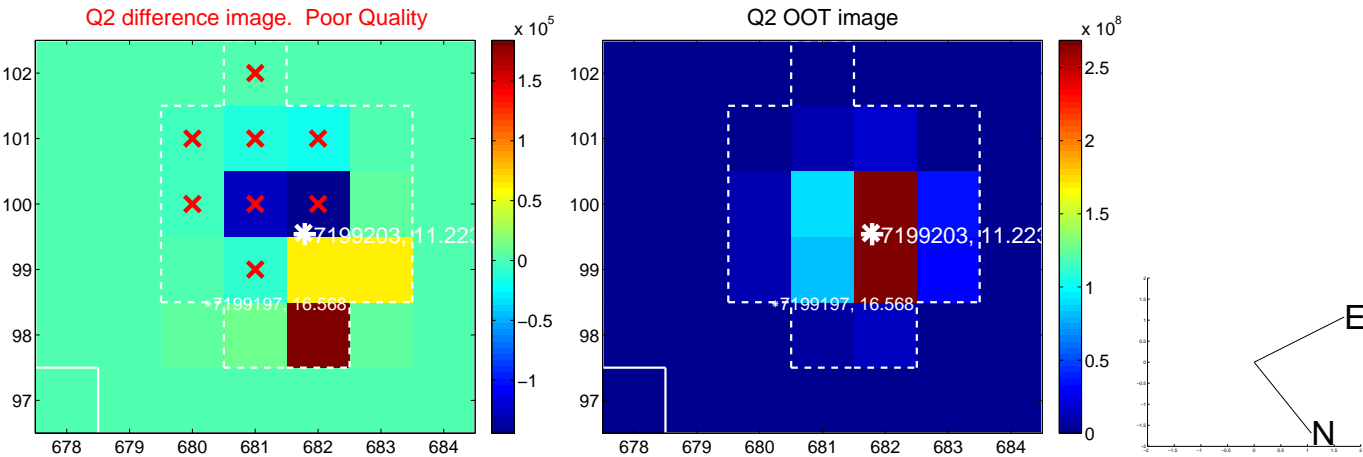
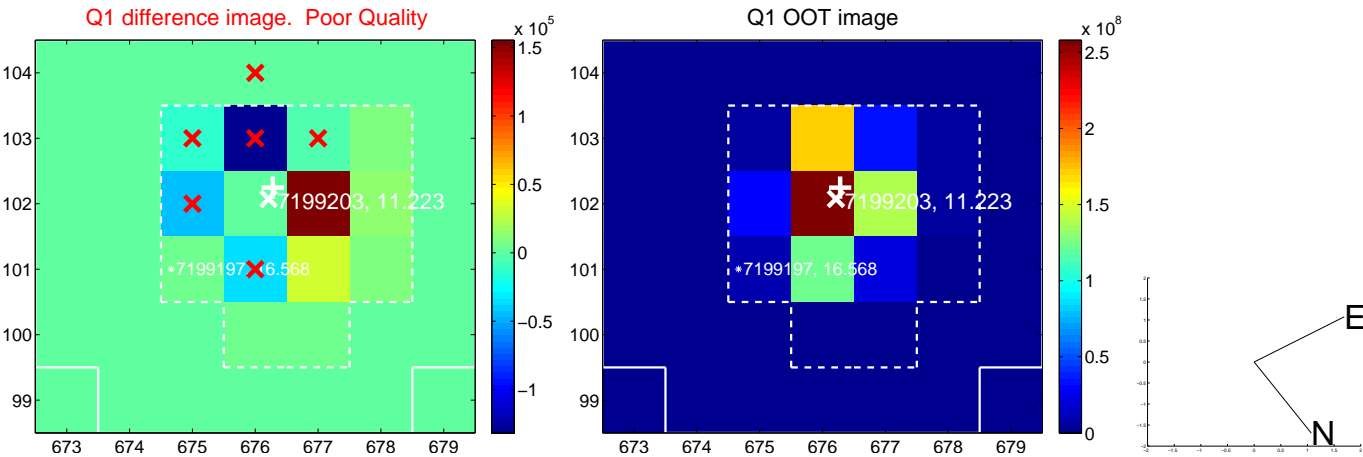
The direct PRF centroid is offset from the target star catalog position by about 0.62 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.747 ± 1.078	1.62	-1.241 ± 0.867	1.230 ± 1.009
PRF-fit source offset from KIC position	1.640 ± 1.086	1.51	-1.097 ± 0.932	1.219 ± 0.984
photometric centroid source offset	—	—	—	—

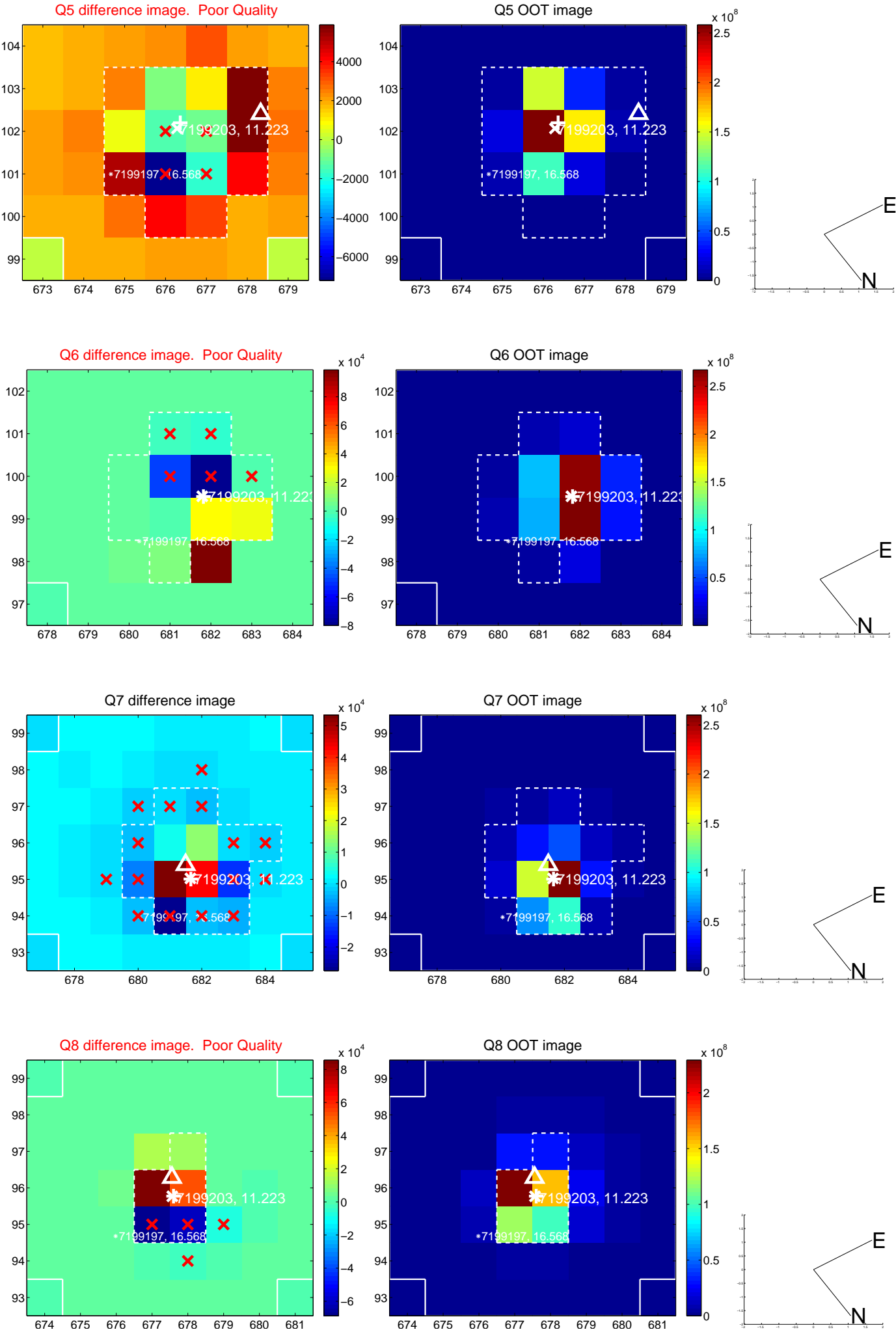


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

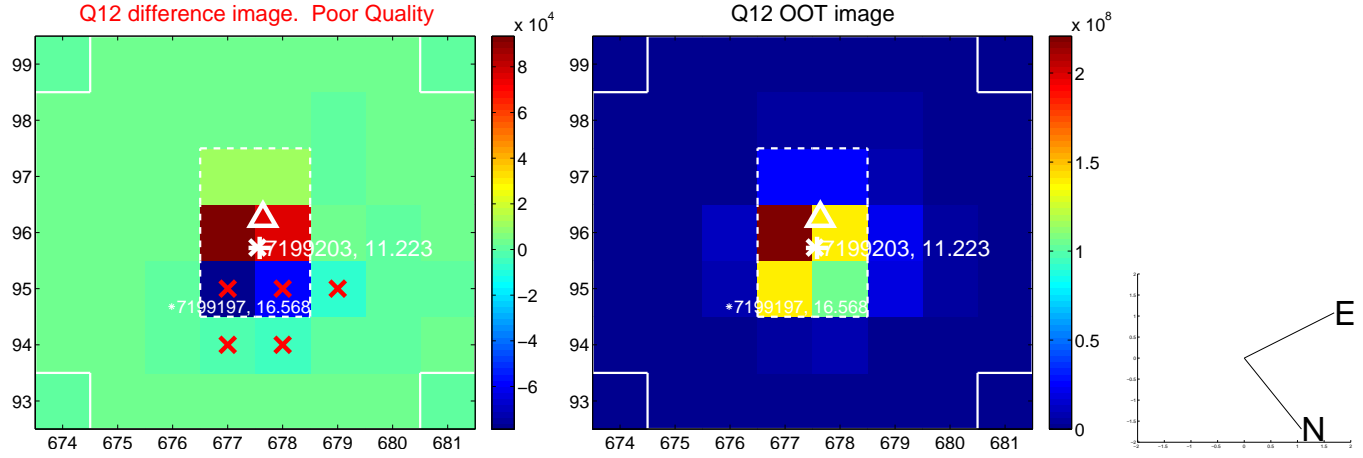
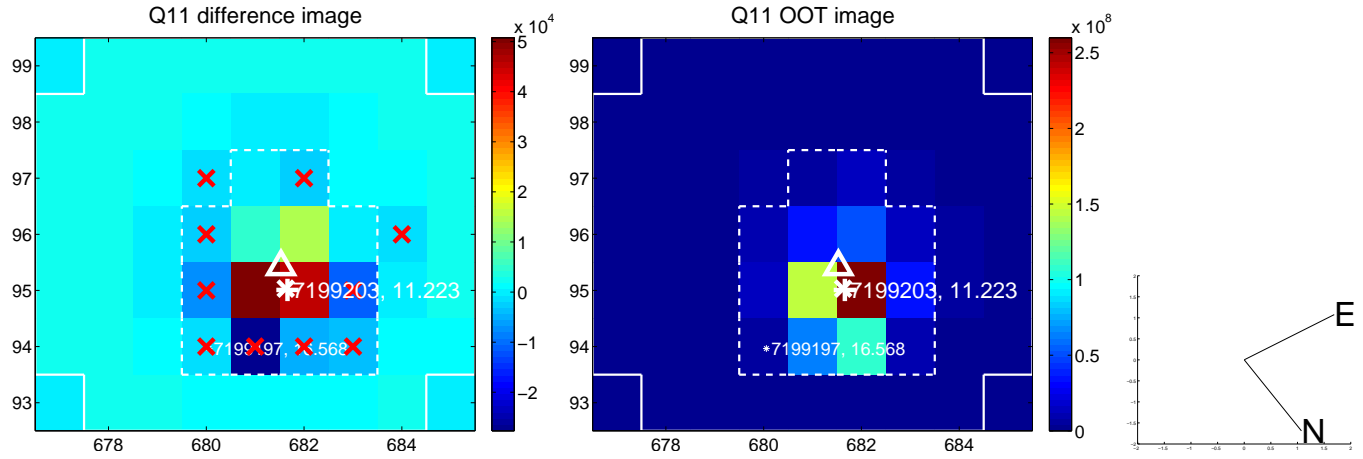
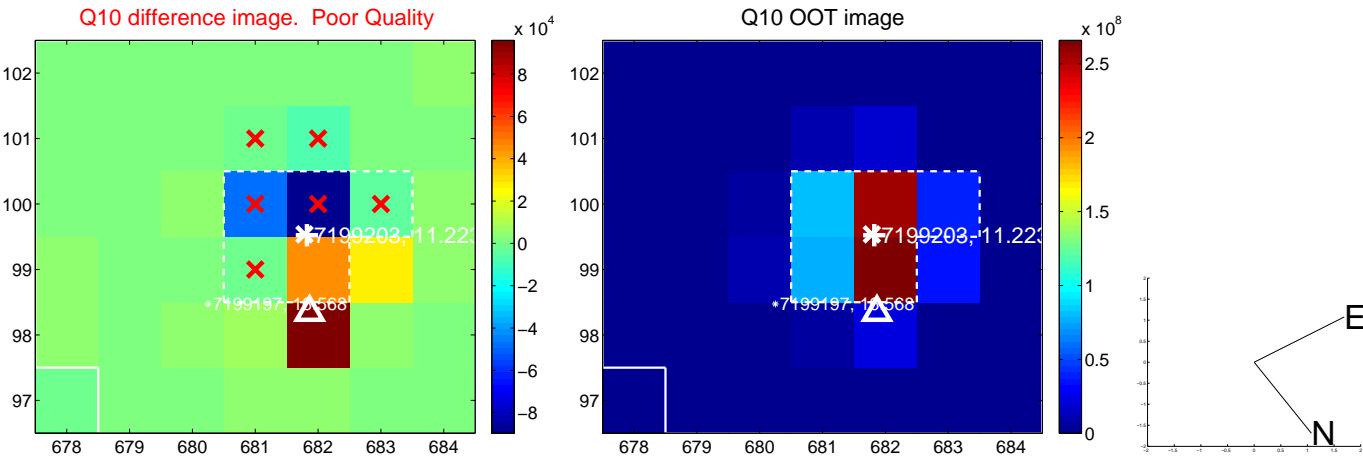
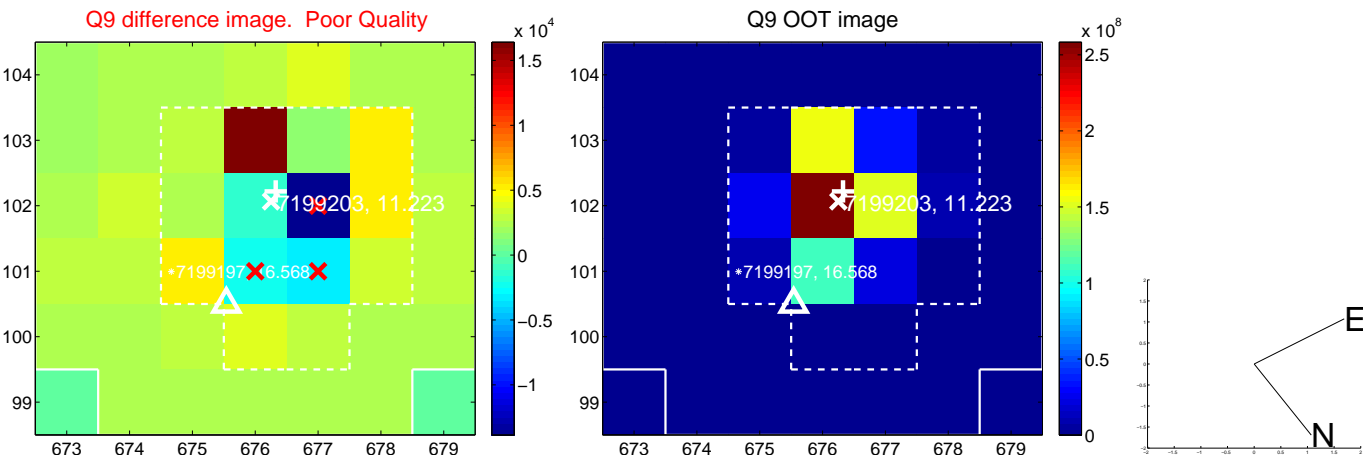
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



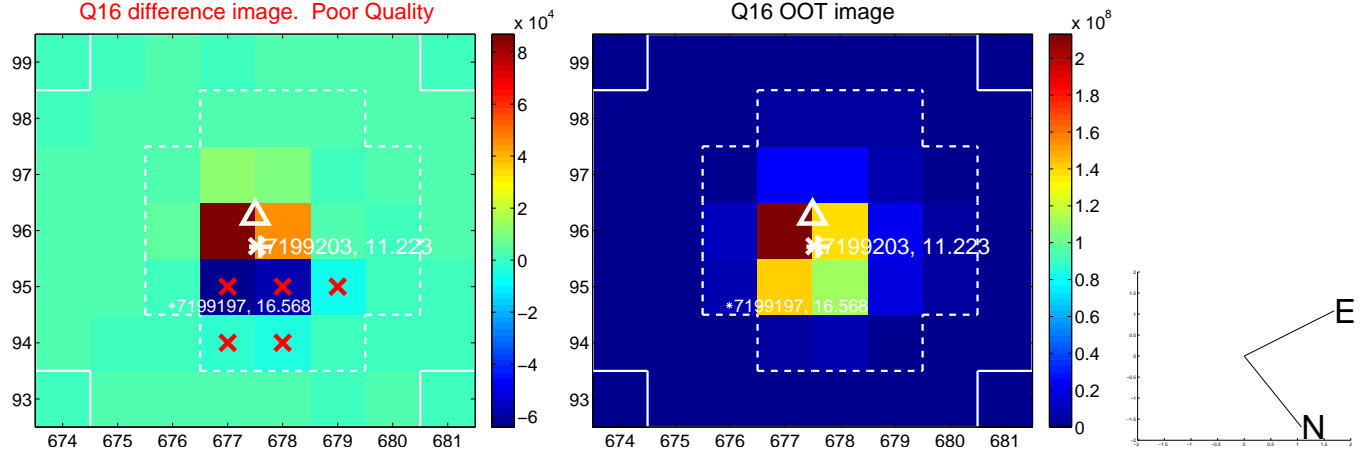
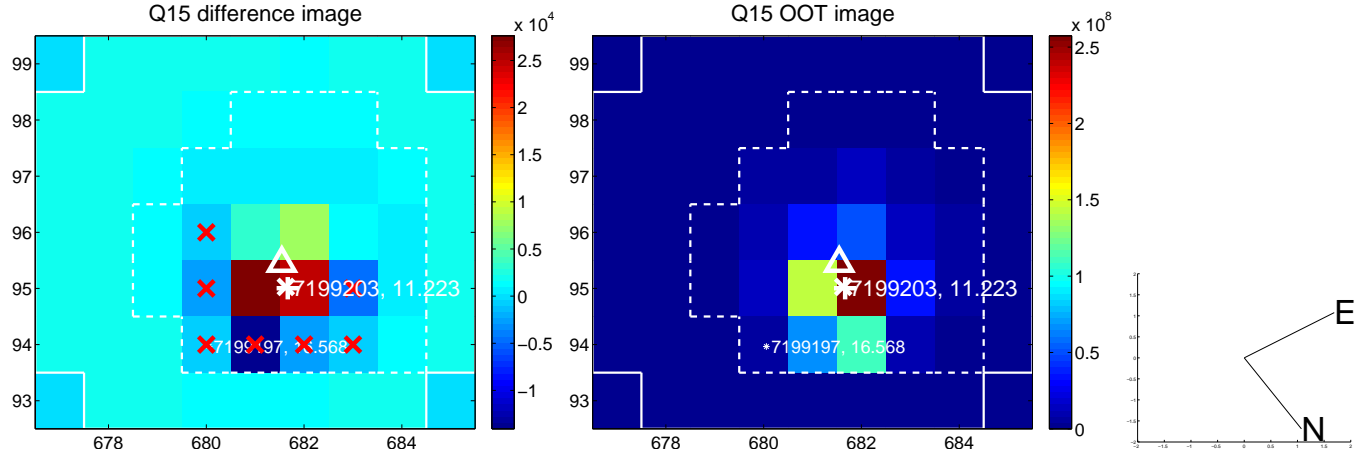
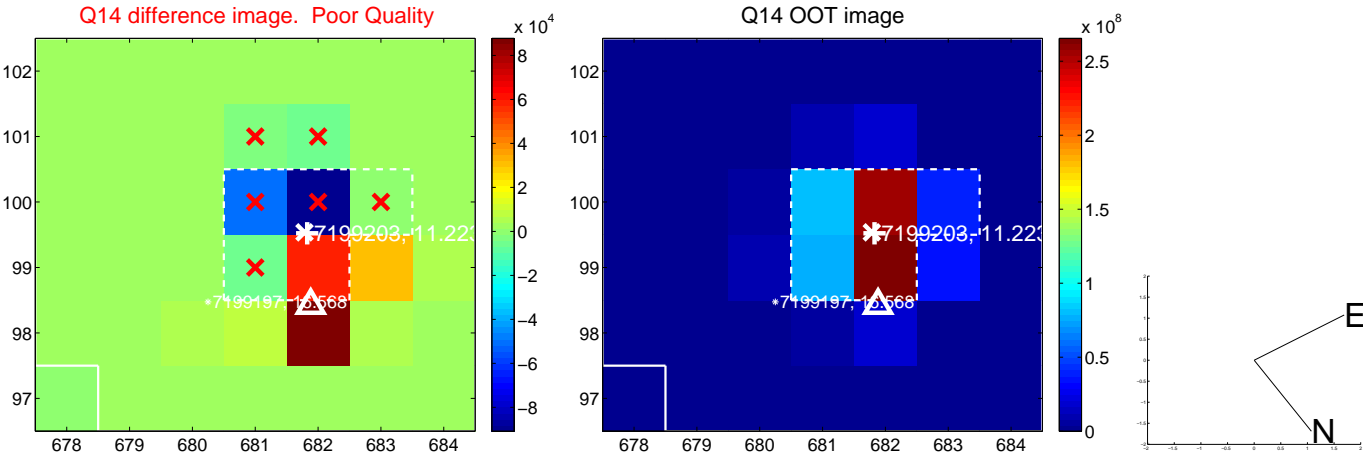
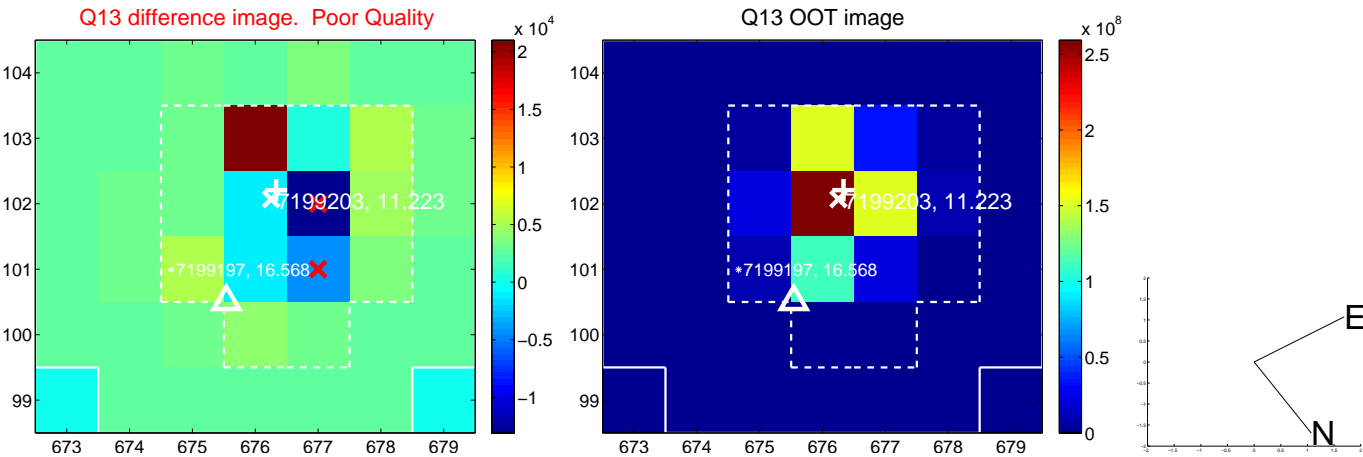
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



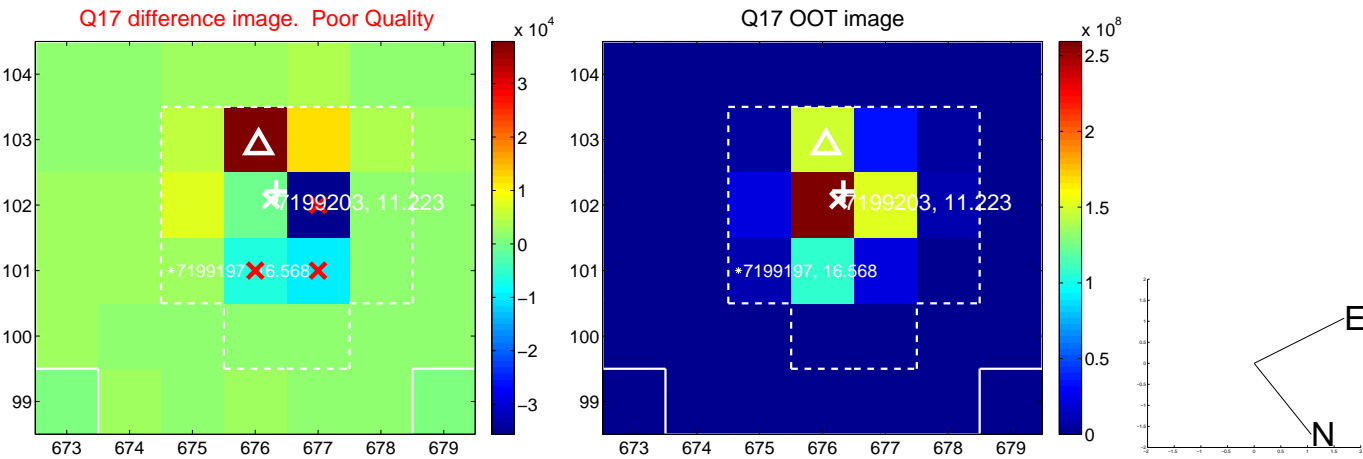
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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folded centroid time series figure for this object.

UKIRT Image

