

KIC 007198791

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})
007198791-01	OBS	No	0.566577	131.821174	0.0	4.788	11.2	0.0	1.00	6108	0.00	6585.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007198791-01	OBS	FP	0.00	1	0	0	1	LPP_DV—LPP_ALT—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.

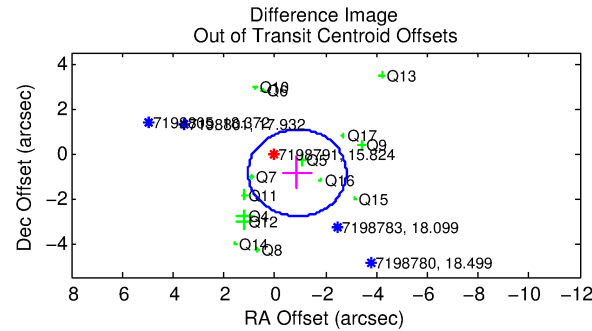
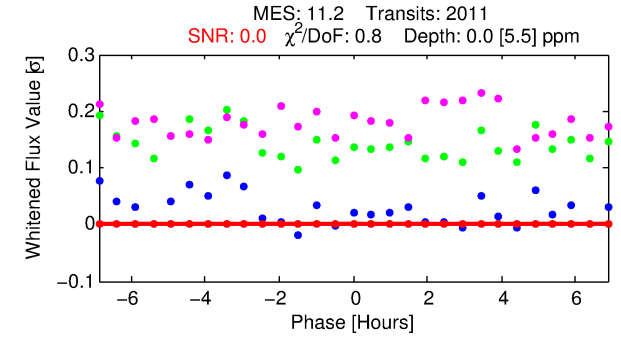
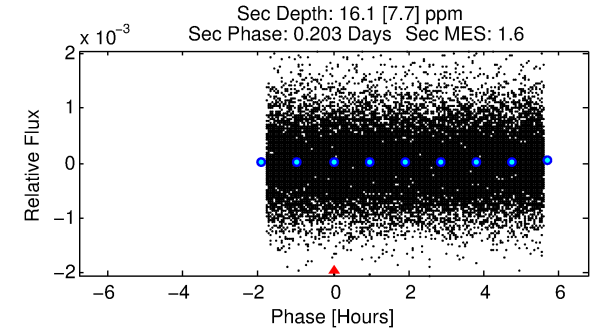
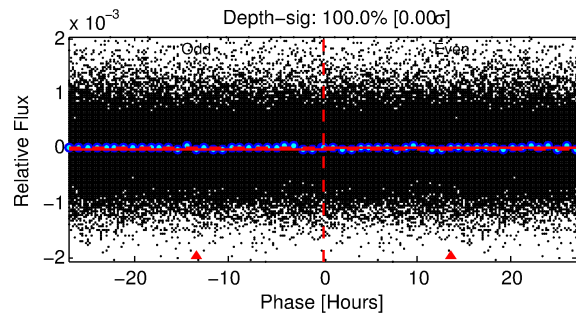
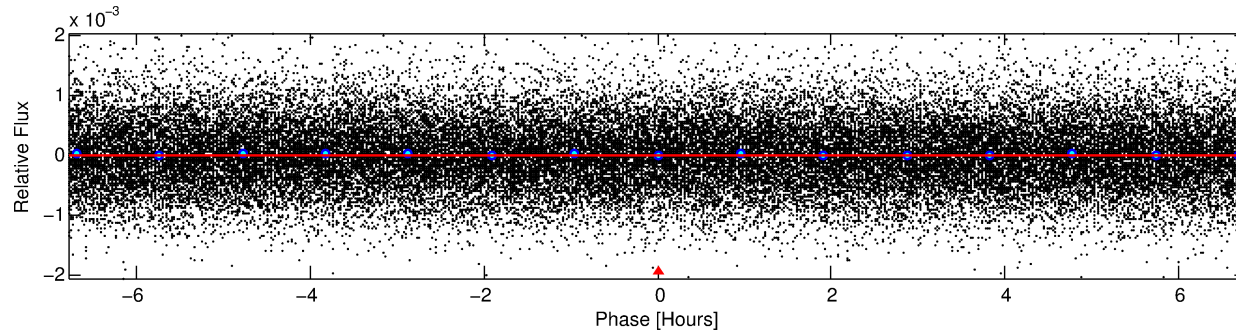
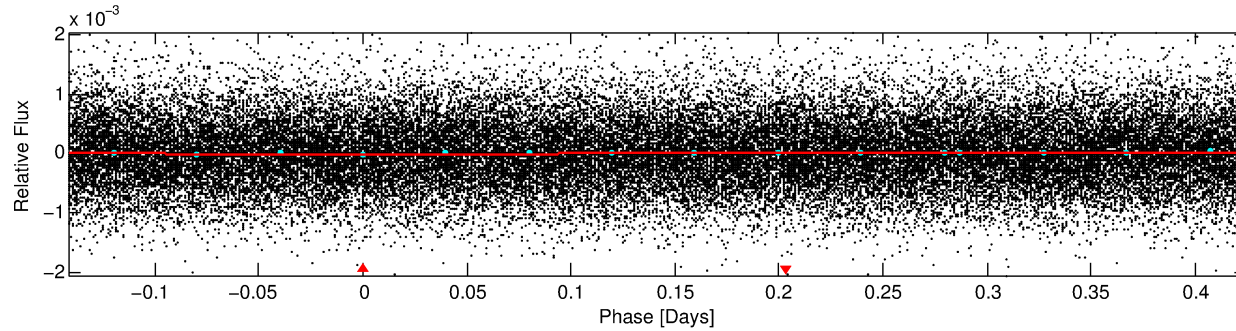
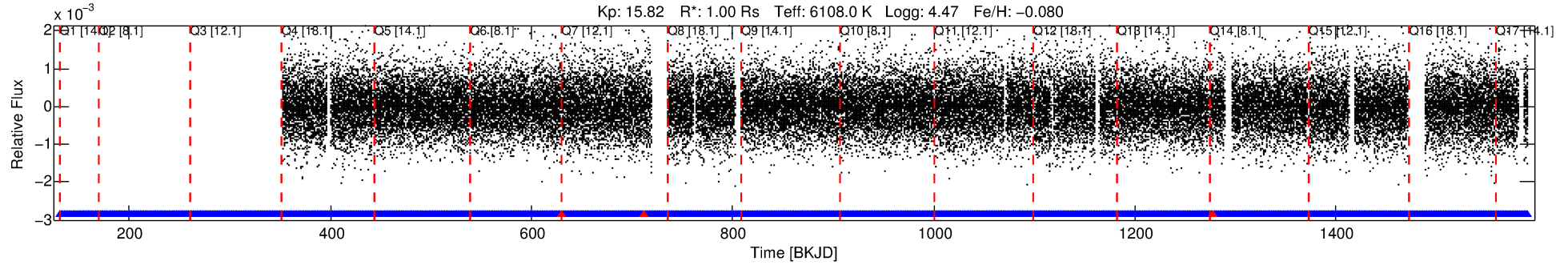
Ephemeris Match Information For 007198791-01

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
007198791-01	7198791	RR-Lyr-pri	7198959	1:1	233.3	25	-53	7.86	15.82	623300.00	Direct-PRF	0	2.29	25.01

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: 7198791 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56658 [1.60872] d
Epoch = 131.8212 [853.0697] BKJD
Rp/R* = 0.0000 [0.1615]
a/R* = 1.06 [580.22]
b = 0.70 [6223.67]
Seff = 6585.81 [25089.54]
Teq = 2297 [2188] K
Rp = 0.00 [17.57] Re
a = 0.0137 [0.0262] AU
Ag = 500659.17 [9636815355.40] [0.00σ]
Teffp = 94472 [454659592] K [0.00σ]

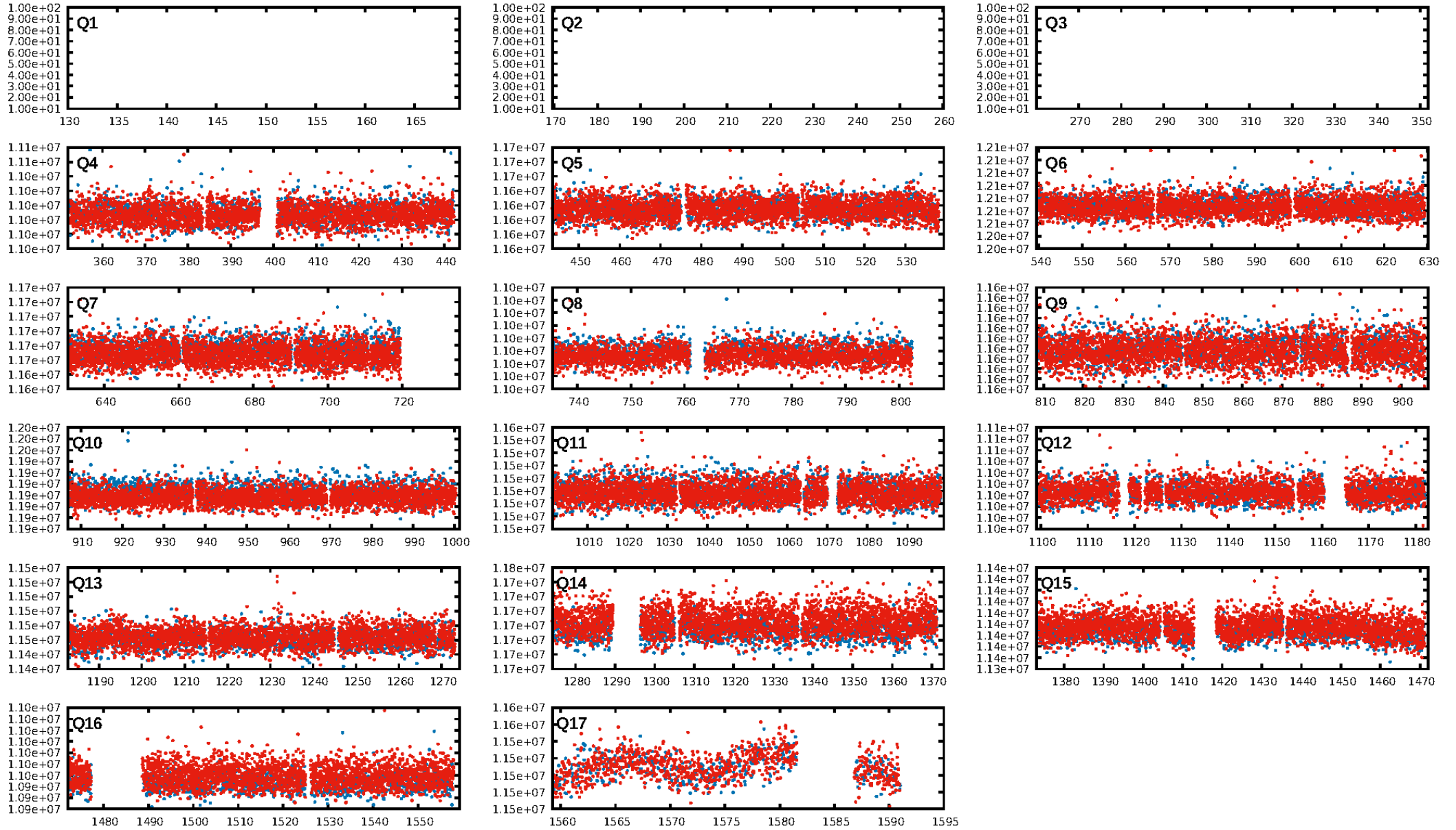
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1960/1963]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.239 arcsec [1.93σ]
KicOffset-rm: 0.987 arcsec [1.61σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 1.00 [14/14]

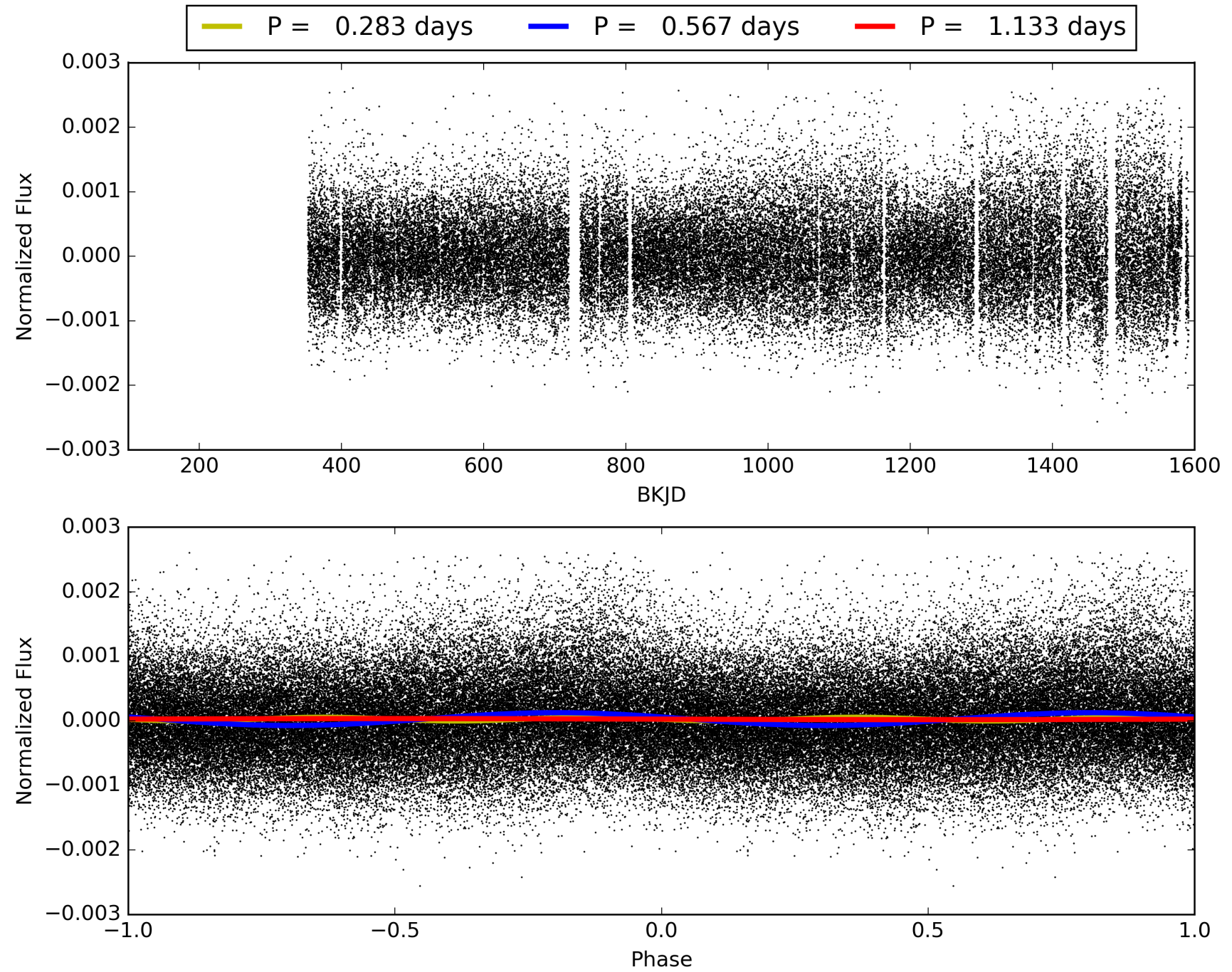
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:42:37 Z

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

TCE 007198791-01, PDC Light Curves

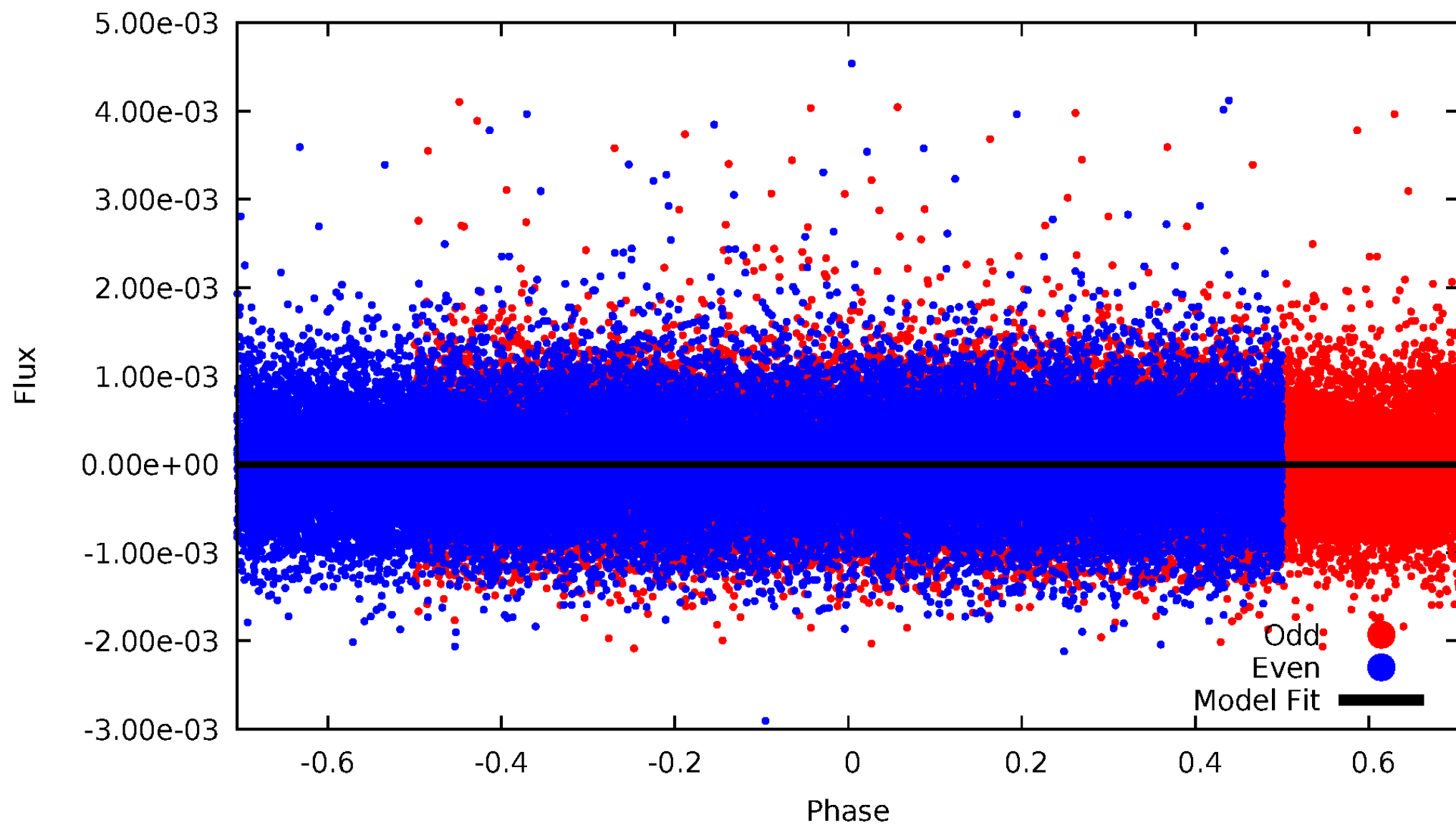


TCE 007198791-01



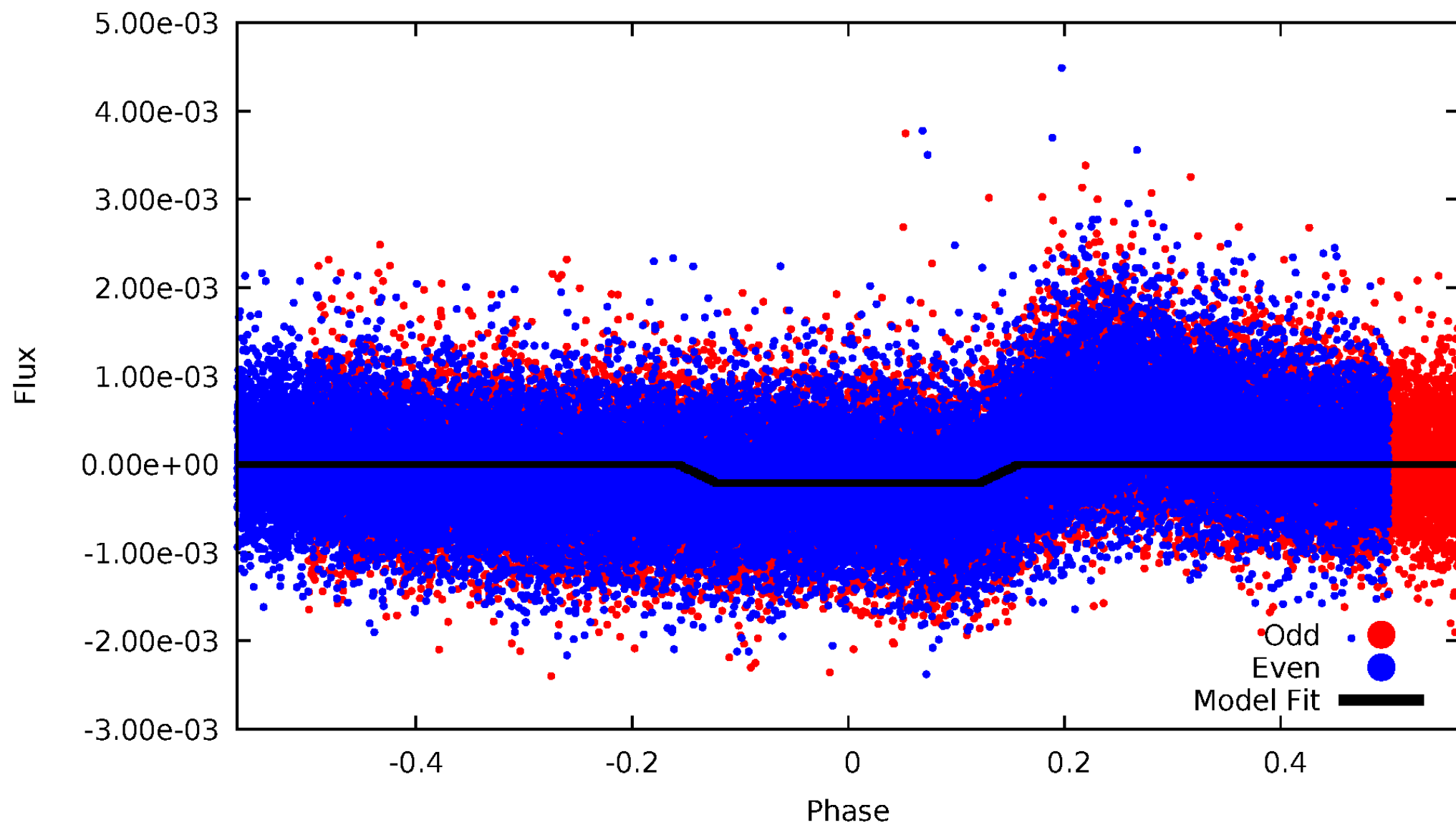
DV Odd/Even

TCE 007198791-01



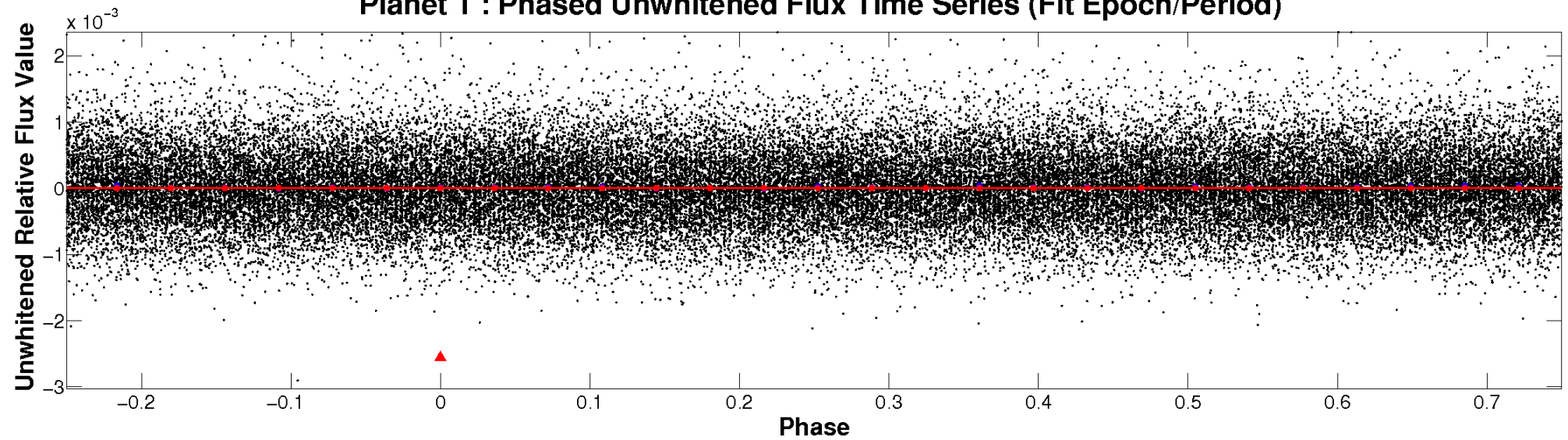
ALT Odd/Even

TCE 007198791-01

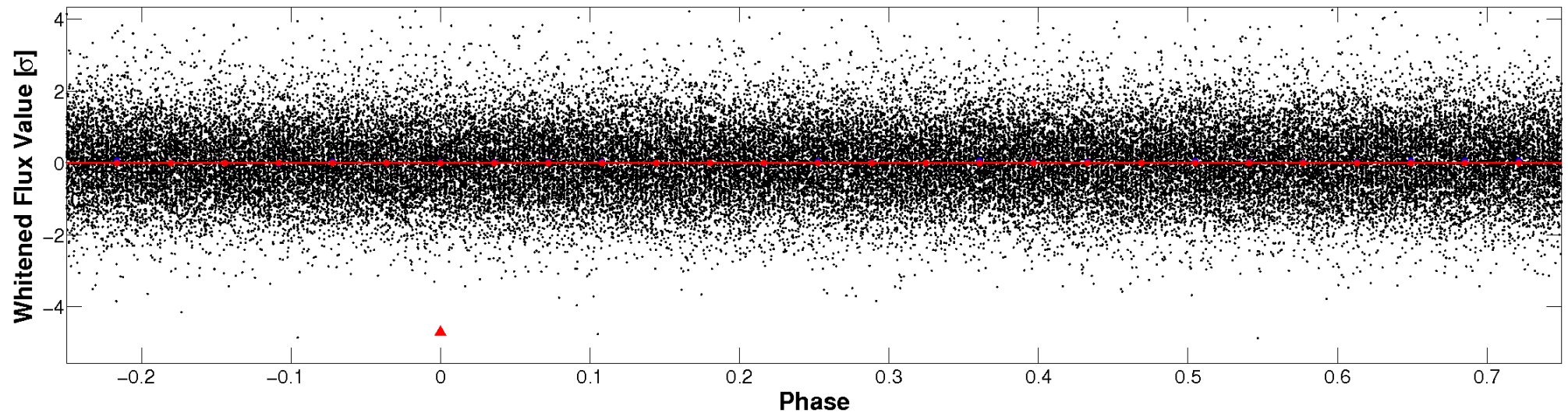


Non-Whitened Vs. Whitened Light Curve

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

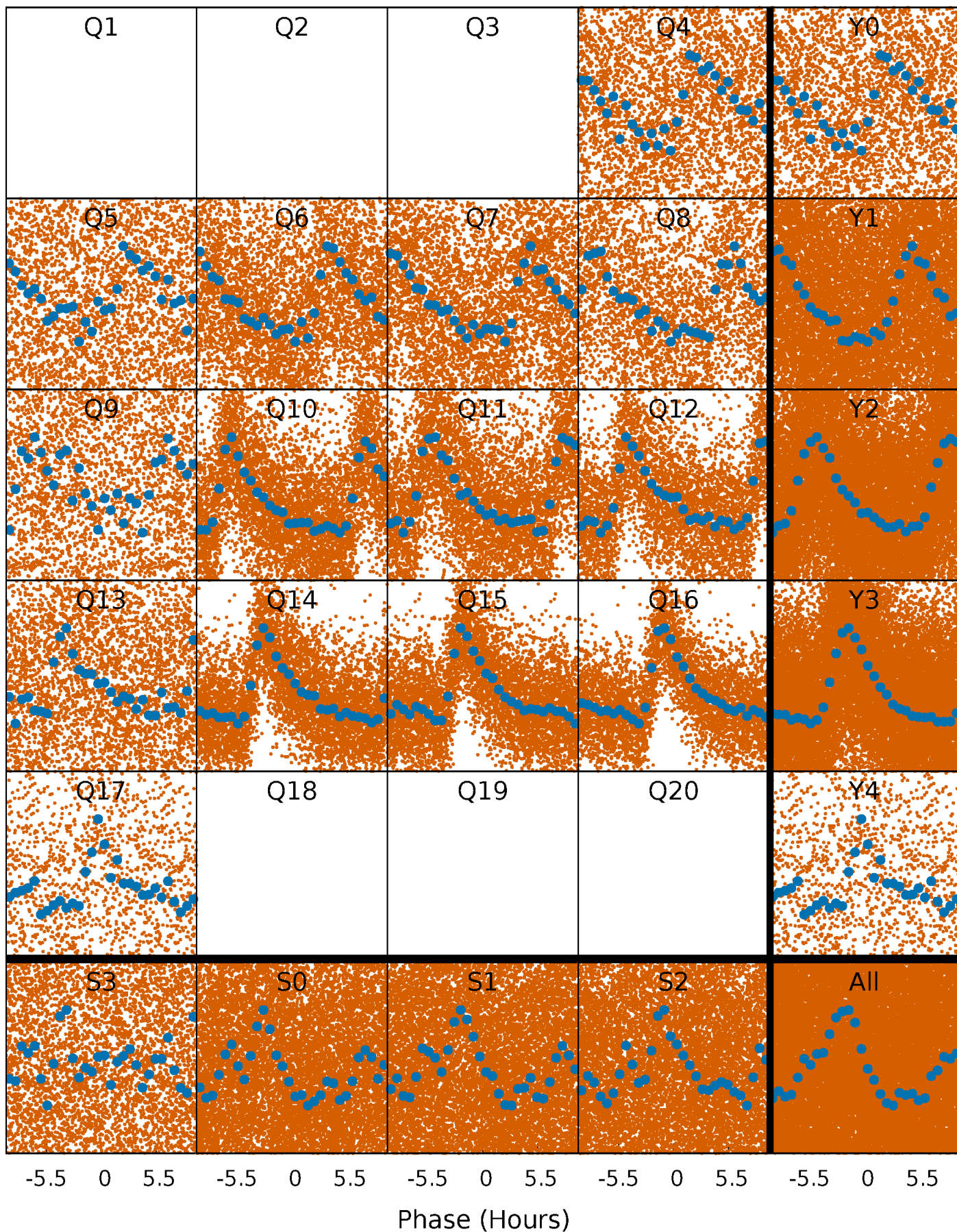


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



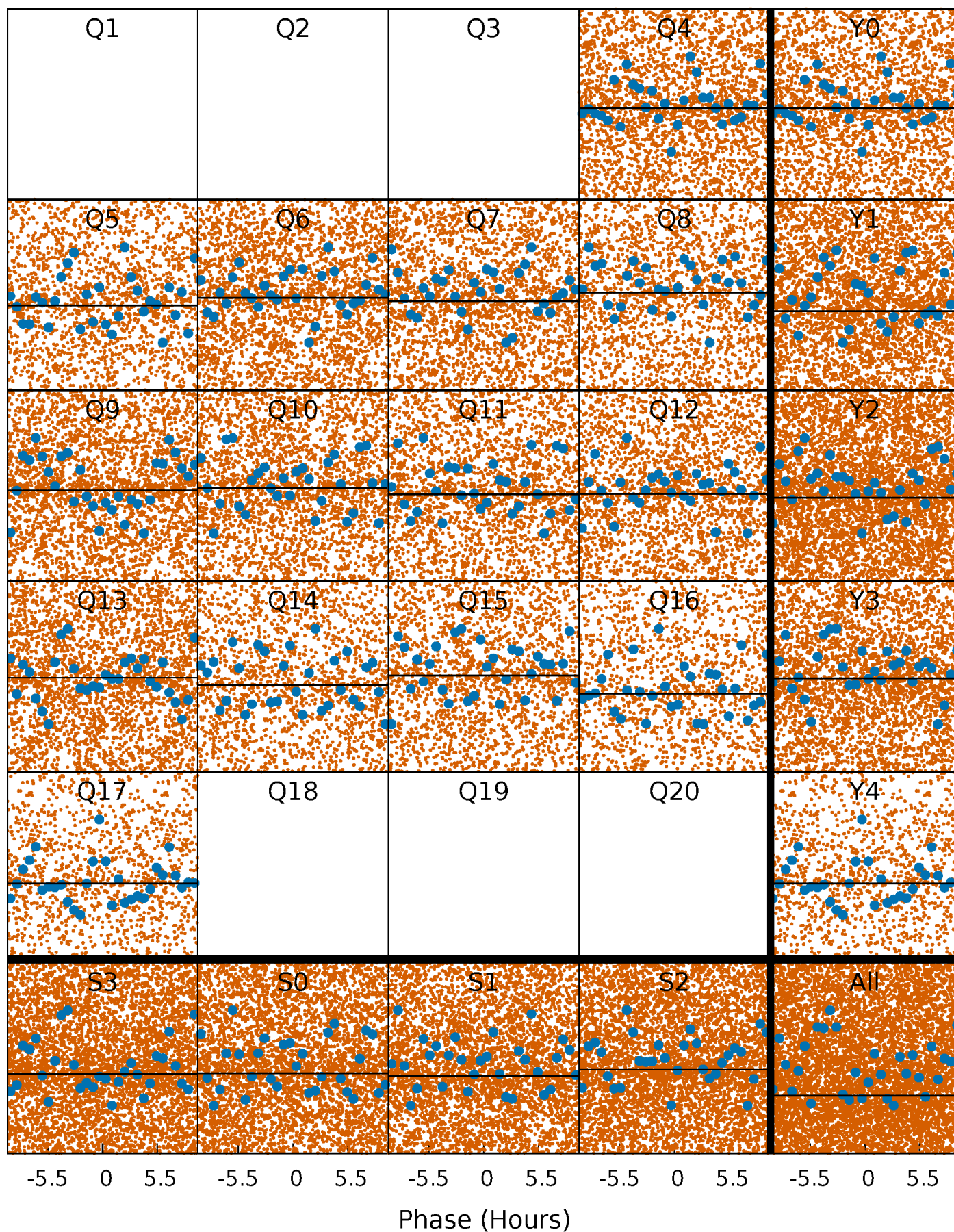
PDC Quarter-Phased Transit Curves

TCE 007198791-01 P= 0.566576 Days $T_0=131.821174$ (BKJD)



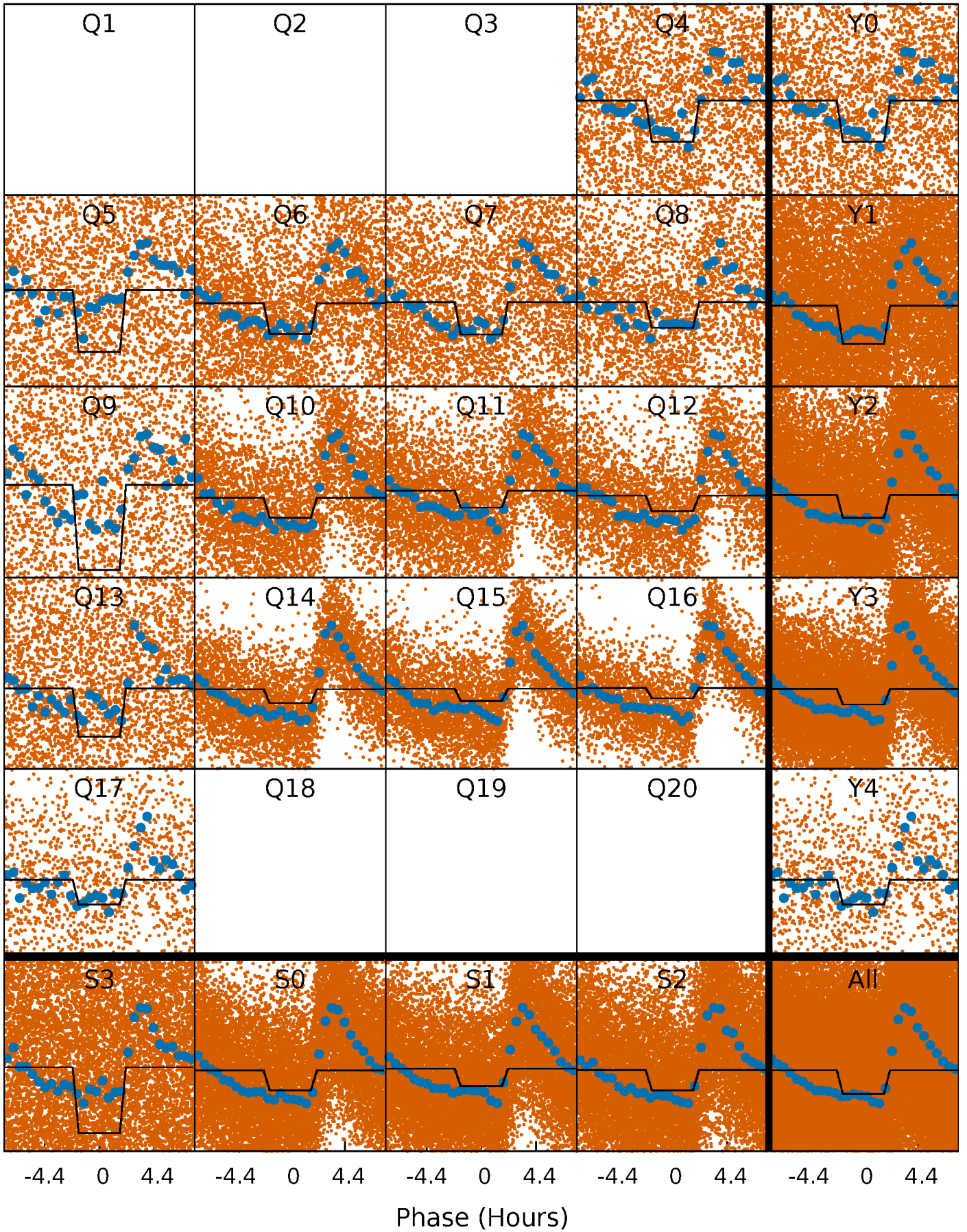
DV Quarter-Phased Transit Curves

TCE 007198791-01 P= 0.566576 Days $T_0=131.821174$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

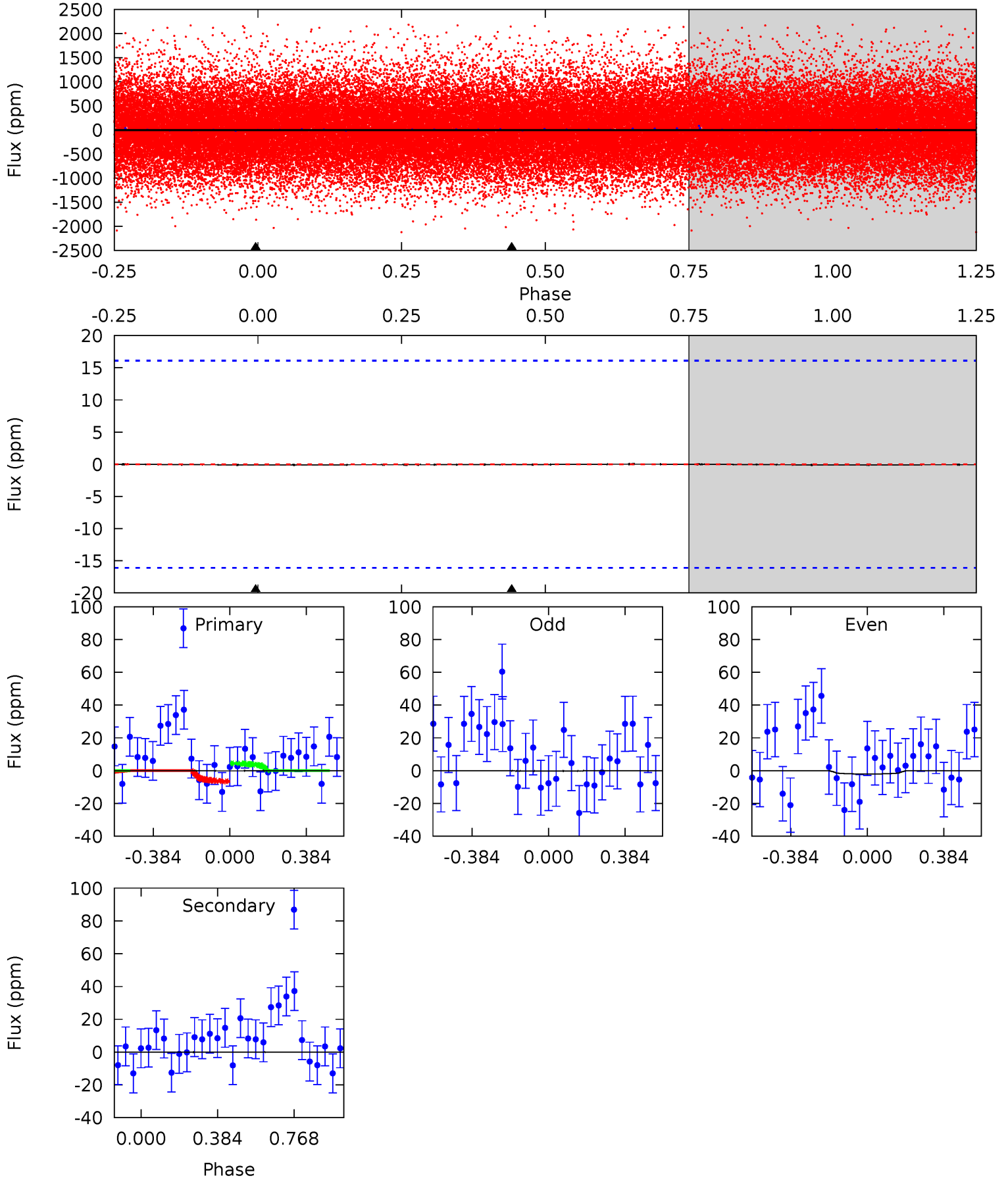
TCE 007198791-01 P= 0.566803 Days $T_0=131.649550$ (BKJD)



DV Model-Shift Uniqueness Test

007198791-01, P = 0.566576 Days, E = 131.821174 Days

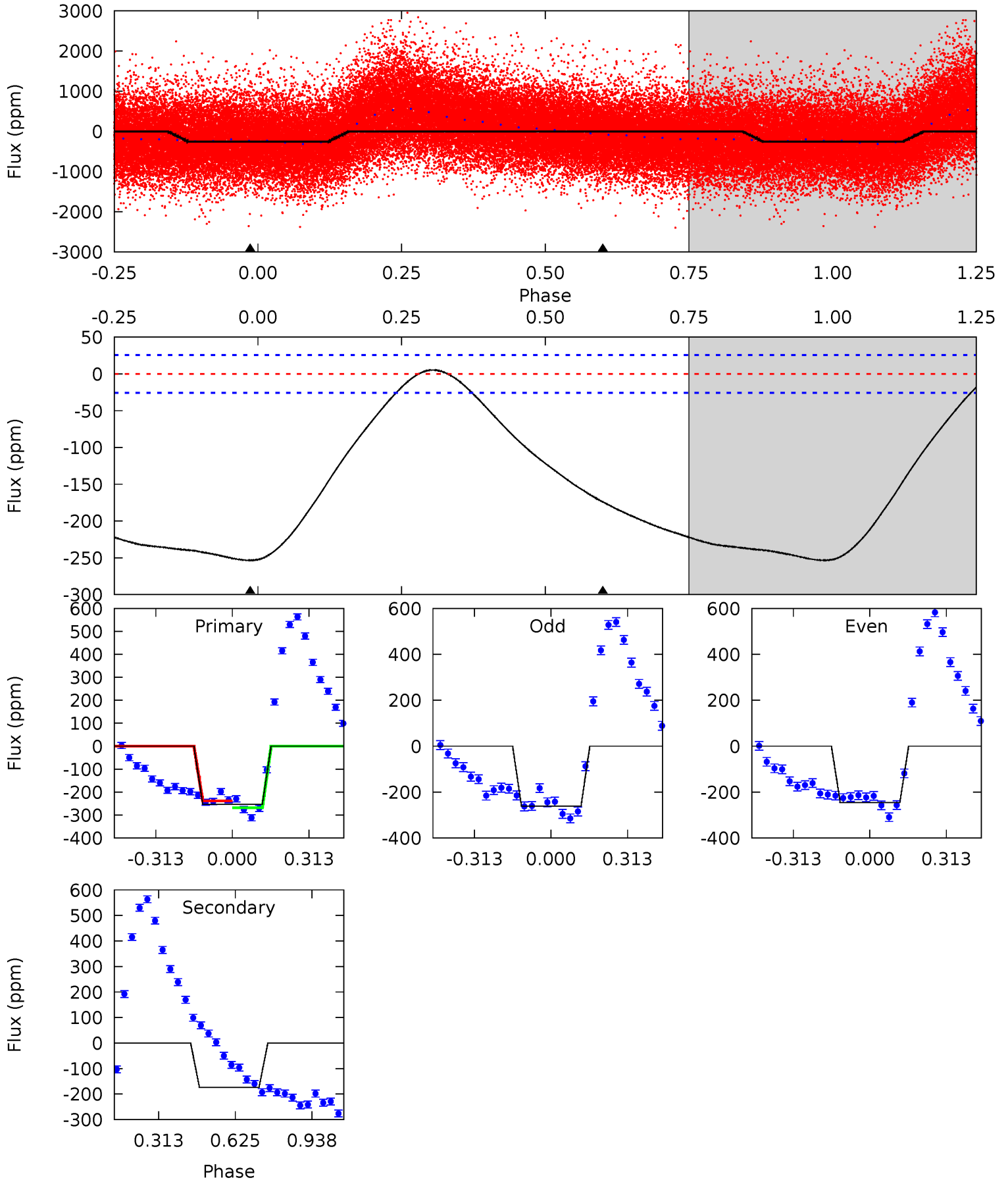
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.03	0.01	0	0	4.27	0.87	0.00	0.03	0.03	0.01	0.01	0.24	2.48	0.17	0.29



Alt Model-Shift Uniqueness Test

007198791-01, P = 0.566803 Days, E = 131.649550 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.7	29.3	0	0	4.32	1.01	1.32	42.7	42.7	29.3	29.3	1.33	1.04	0.02	2.72



Stellar Parameters For KIC 007198791

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6108^{+193}_{-236}	$4.471^{+0.054}_{-0.216}$	$-0.080^{+0.250}_{-0.300}$	$0.997^{+0.324}_{-0.108}$	$1.072^{+0.153}_{-0.139}$	$1.525^{+0.433}_{-0.799}$
	+3%/-4%	+1%/-5%	+312%/-375%	+32%/-11%	+14%/-13%	+28%/-52%
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 007198791-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-0 ± 4	$12.66^{+15.33}_{-8.96}$	2501^{+1222}_{-545}	-2808^{+365}_{-781}	$0.000^{+0.013}_{-0.009}$
Alt.	-174 ± 6	$13.80^{+12.68}_{-10.07}$	2490^{+1180}_{-529}	-1857^{+5903}_{-1374}	$0.281^{+3.552}_{-0.243}$

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

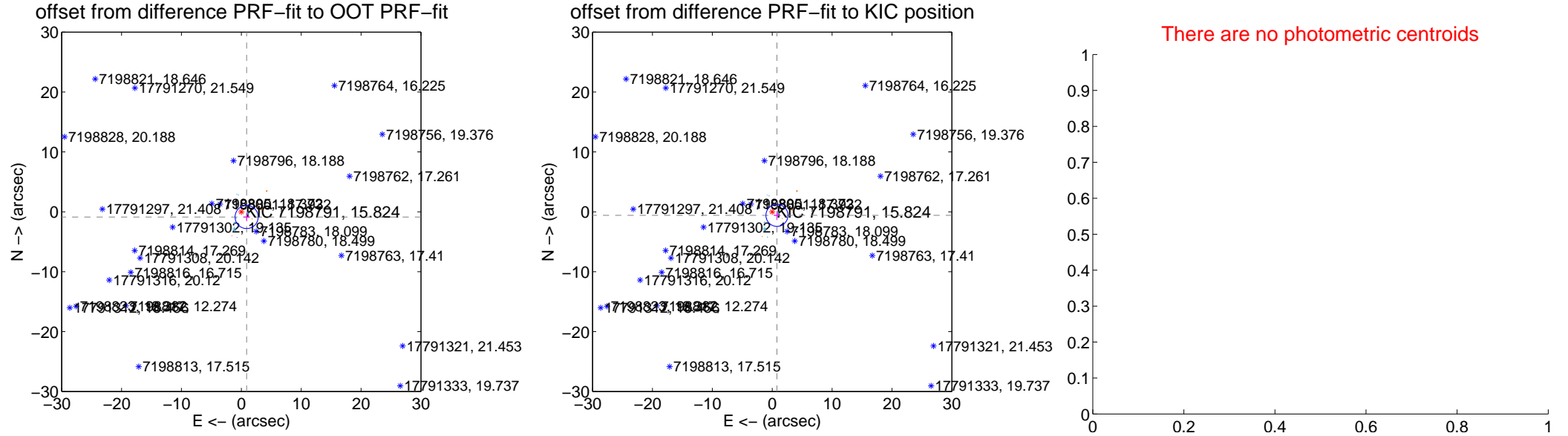
DV Centroid Data

Supplemental centroid analysis for 007198791-01. Kepler magnitude: 15.82. Transit SNR 0.00

There are 8 quarters with good PRF difference image offsets

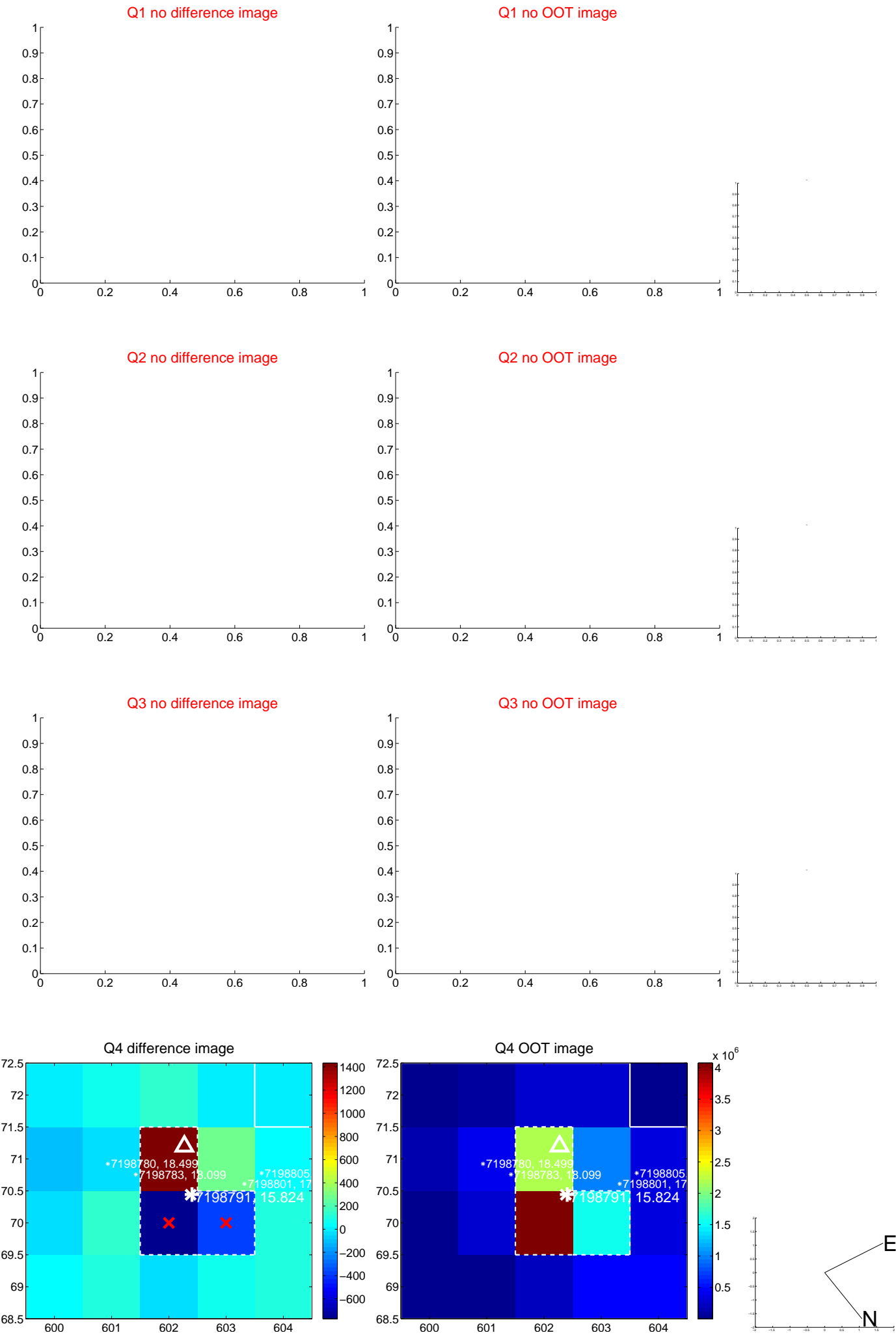
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.239 ± 0.643	1.93	-0.886 ± 0.569	-0.867 ± 0.713
PRF-fit source offset from KIC position	0.987 ± 0.614	1.61	-0.791 ± 0.564	-0.590 ± 0.695
photometric centroid source offset	—	—	—	—

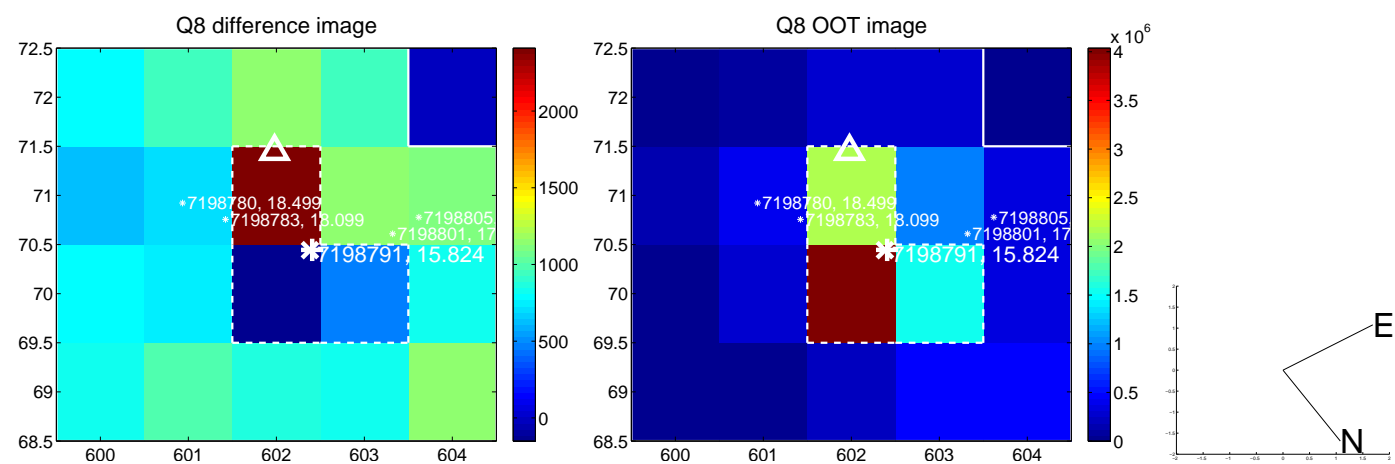
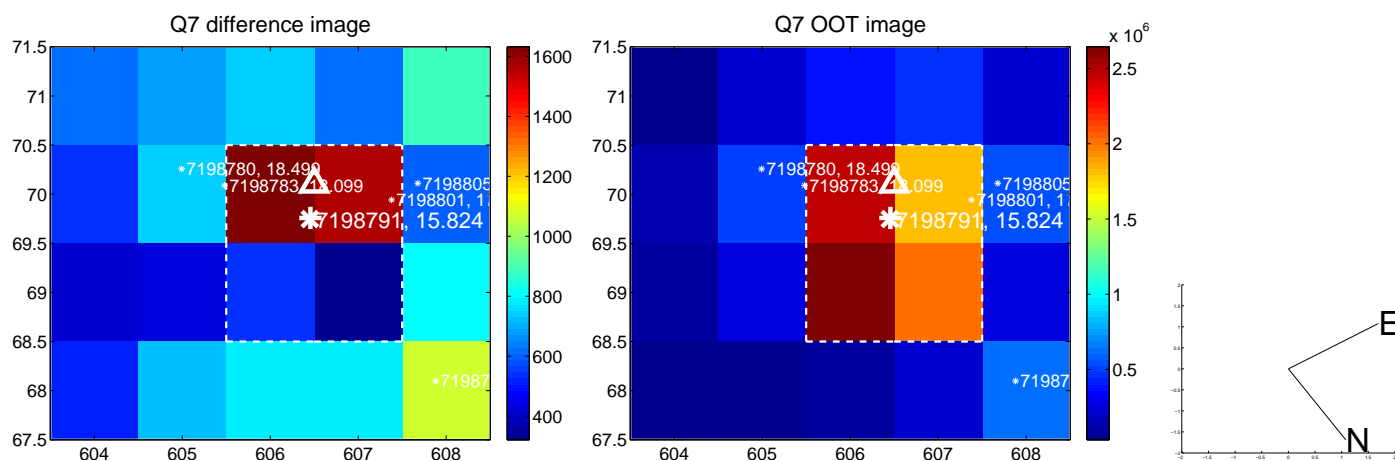
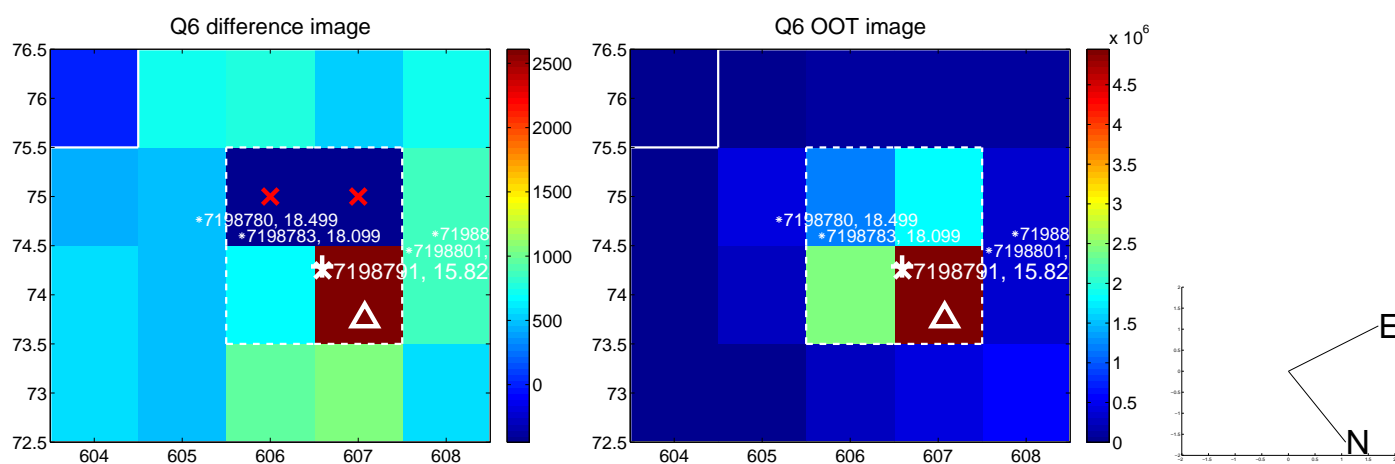
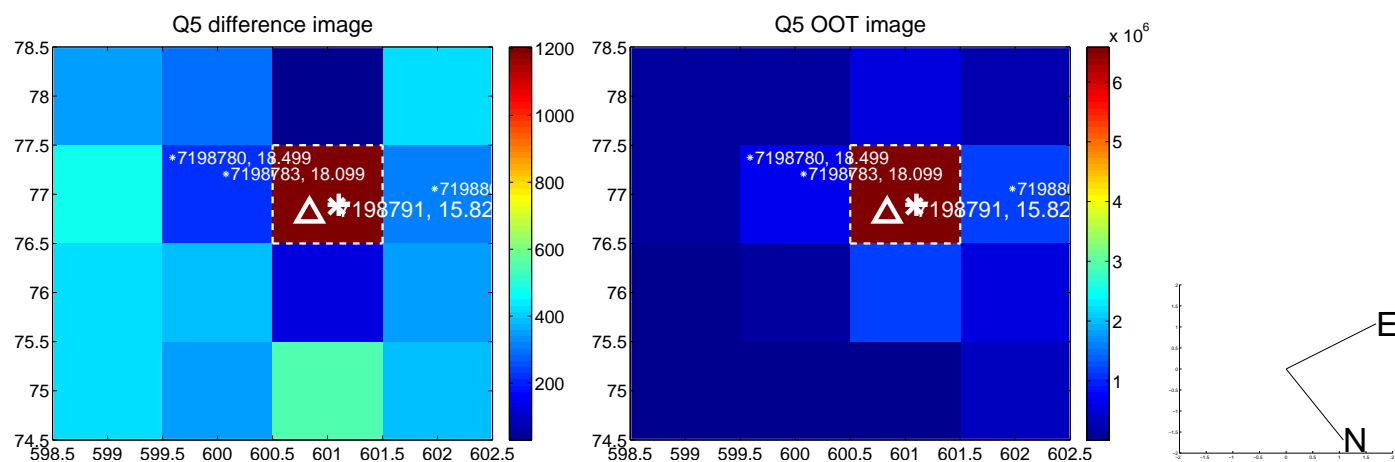


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

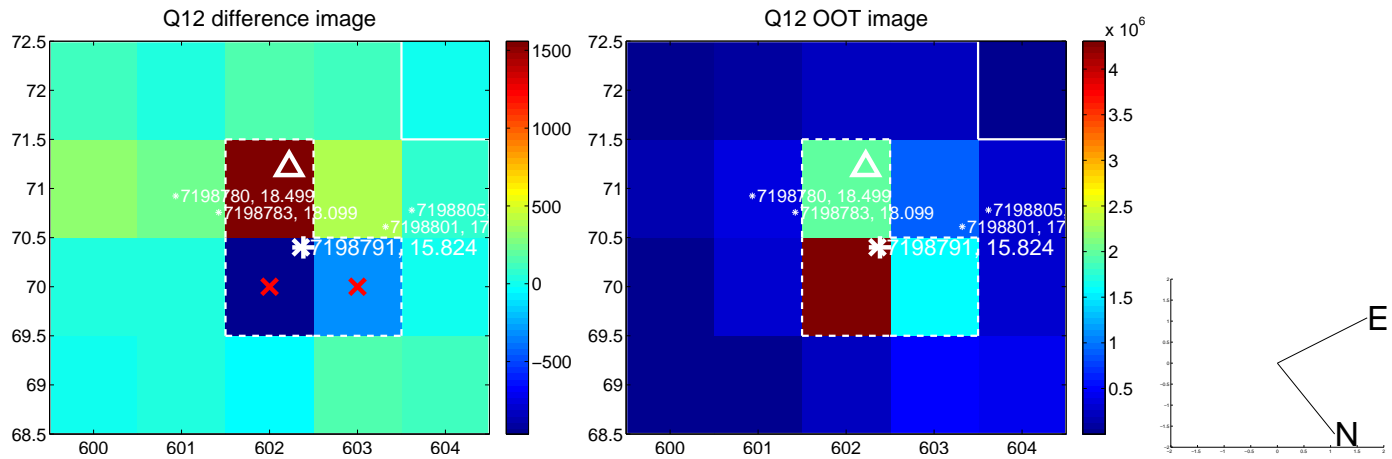
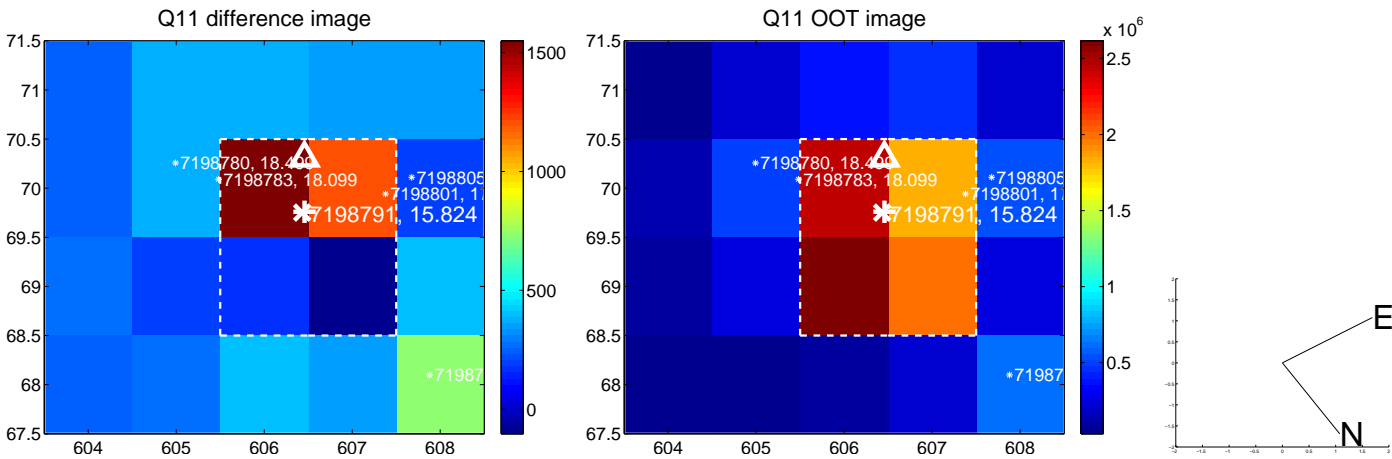
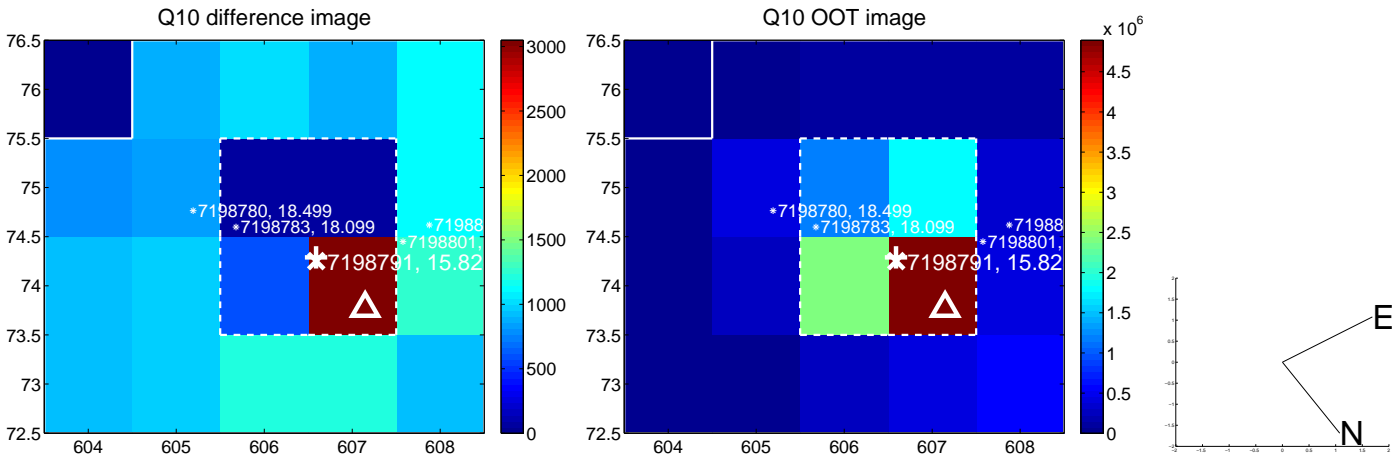
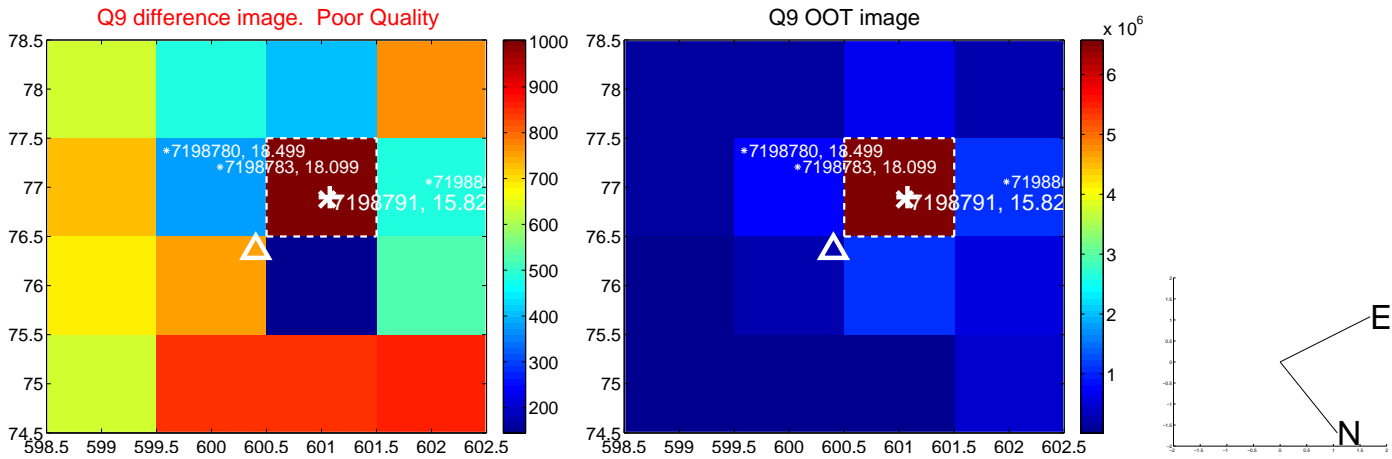
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



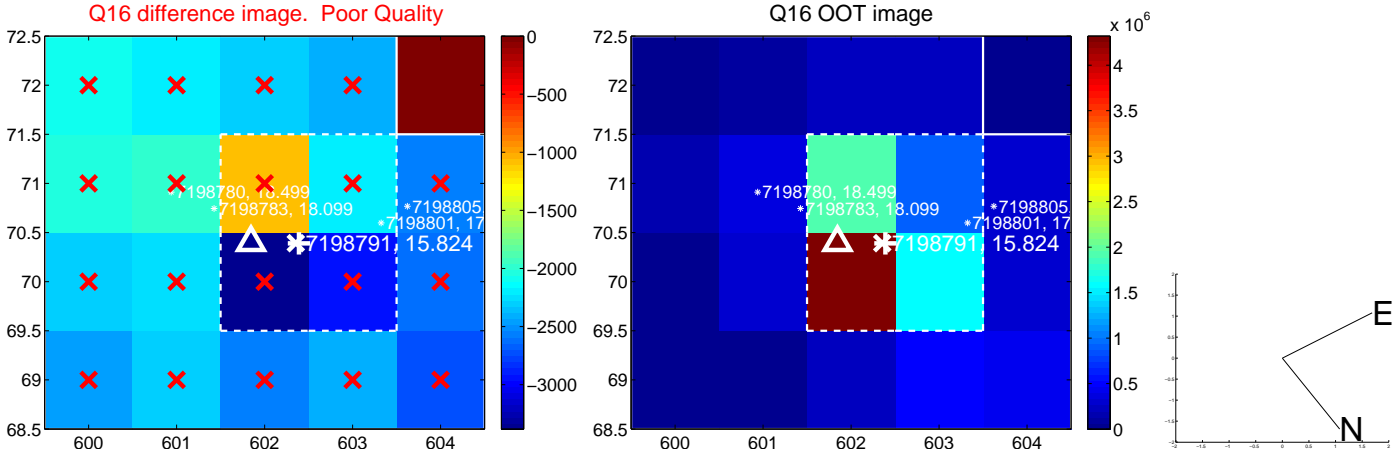
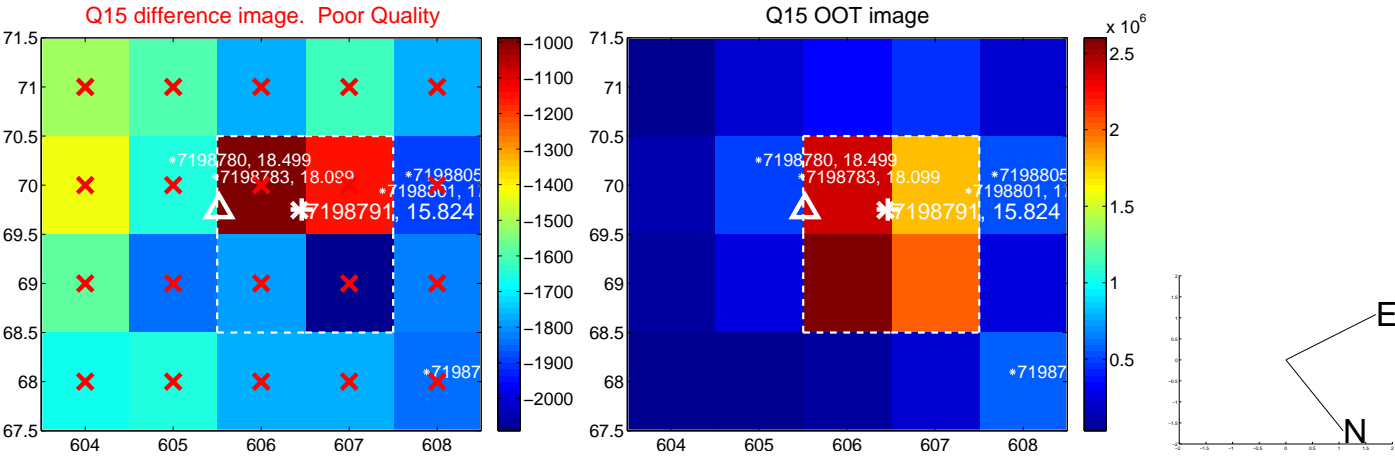
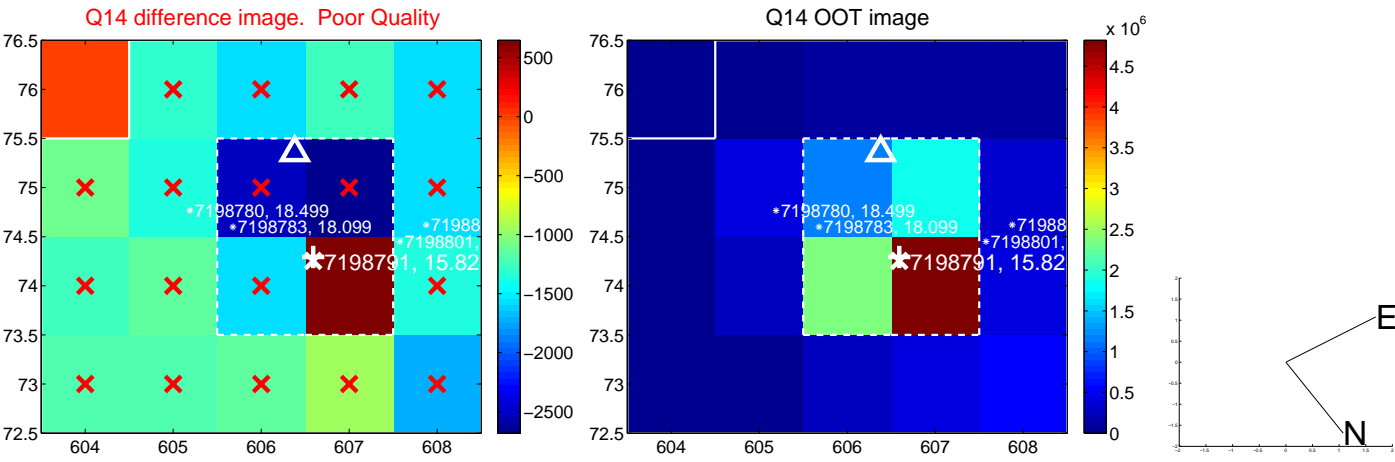
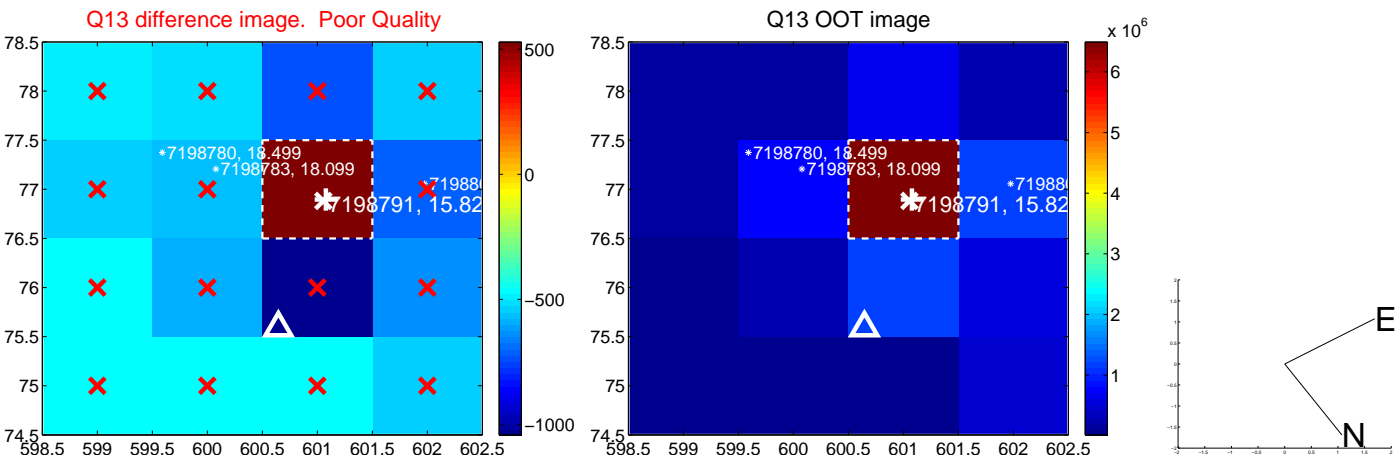
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



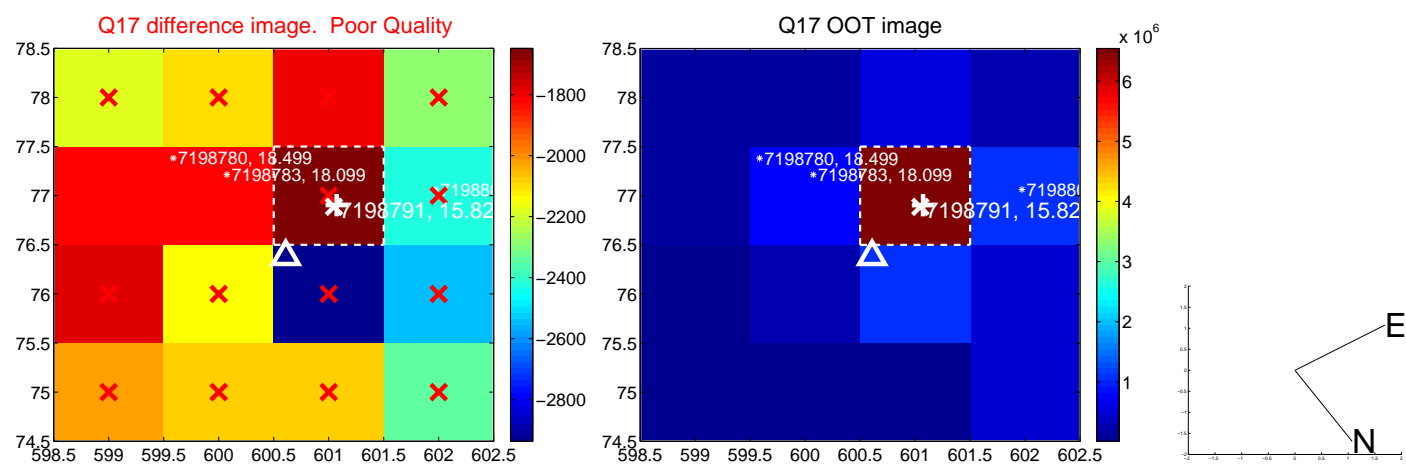
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white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.



UKIRT Image

Declination

