

KIC 007199168

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})
007199168-01	OBS	No	0.566782	131.913277	4736.8	2.000	14.2	-1.0	0.74	5383	5.00	2604.29

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007199168-01	OBS	FP	0.00	1	0	0	1	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS—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.

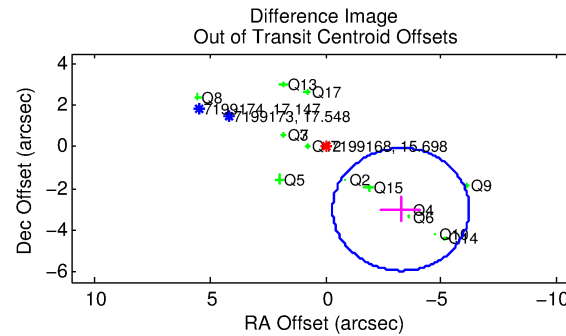
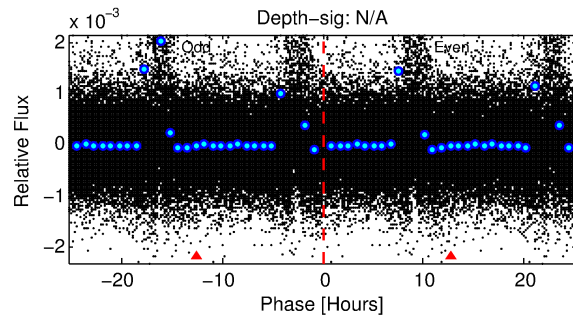
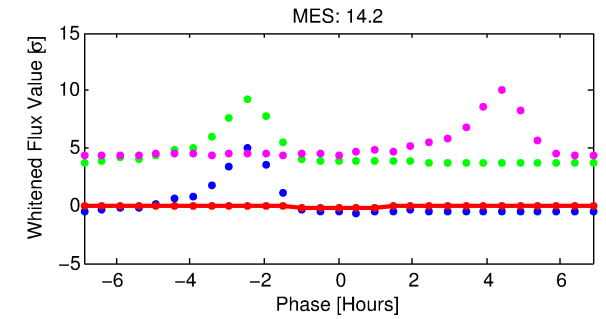
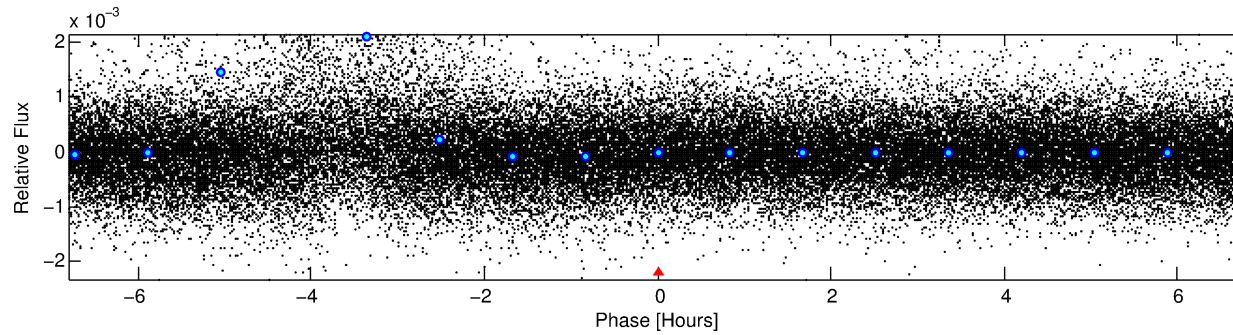
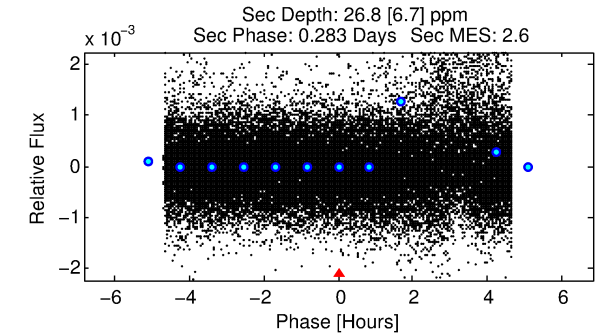
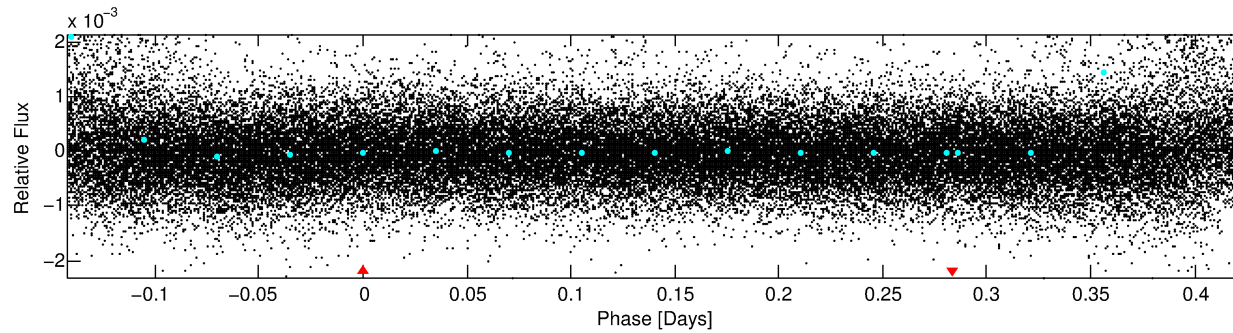
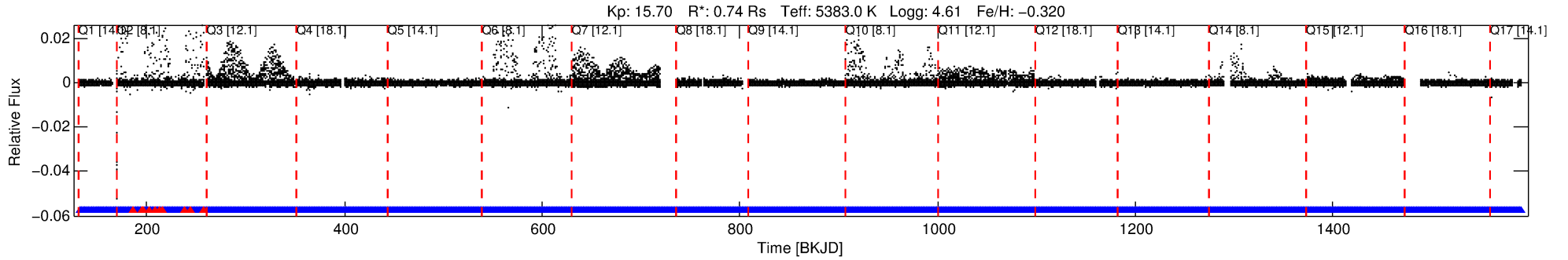
Ephemeris Match Information For 007199168-01

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
007199168-01	7199168	RR-Lyr-pri	7198959	1:1	284.0	71	1	7.86	15.70	131.58	Direct-PRF	0	3.23	11.06

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: 7199168 Candidate: 1 of 1 Period: 0.567 d



TPS TCE Results:

Period = 0.56678 d
Epoch = 131.9133 BKJD

DV fit results are unavailable

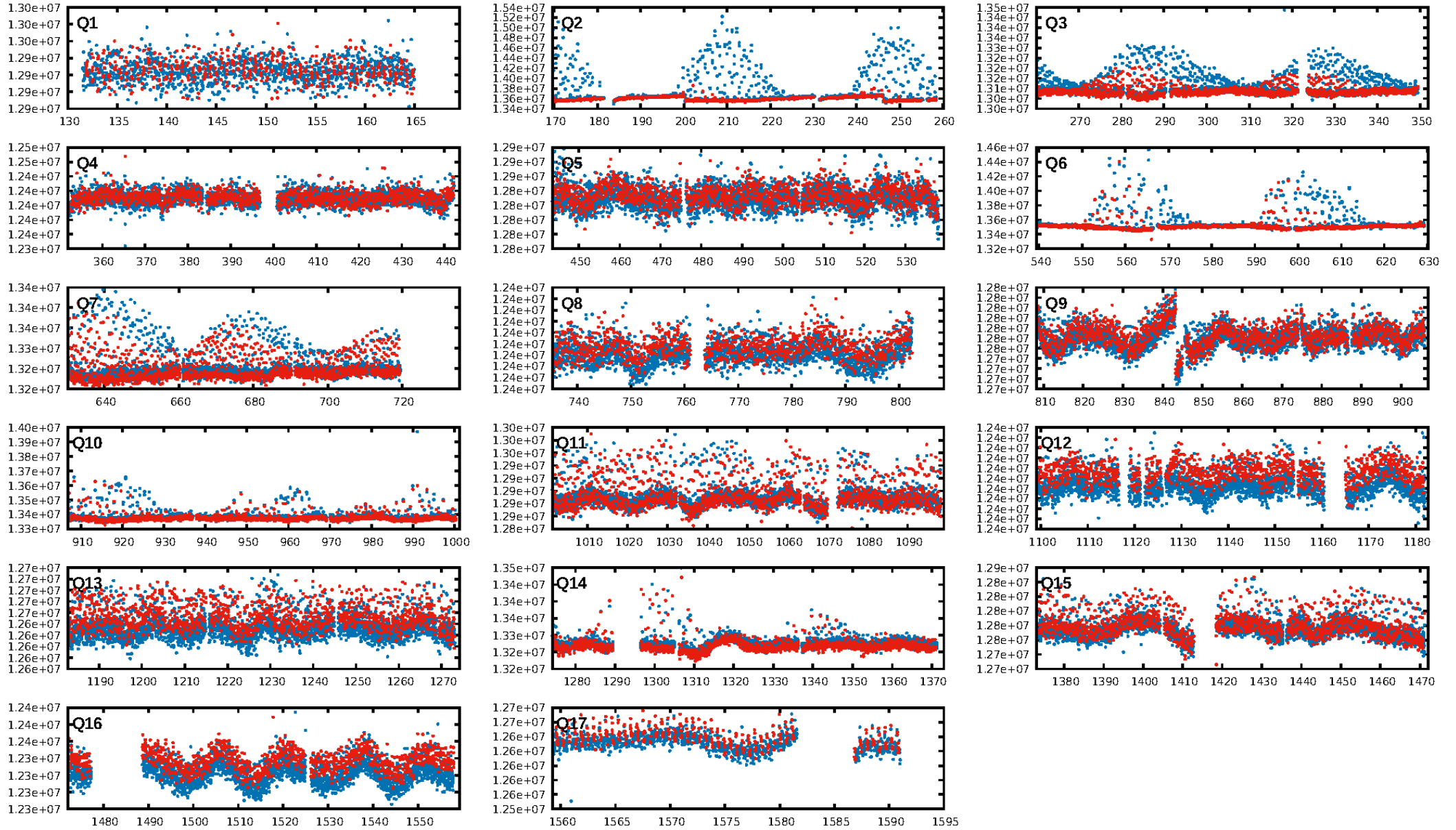
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [2245/2257]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: 0.691 arcsec [1.36σ]
OotOffset-rm: 4.435 arcsec [4.51σ]
KicOffset-rm: 4.240 arcsec [3.92σ]
OotOffset-st: 4/3/3/4 [14]
KicOffset-st: 4/3/3/4 [14]
DiffImageQuality-fgm: 0.07 [1/14]
DiffImageOverlap-fno: 1.00 [17/17]

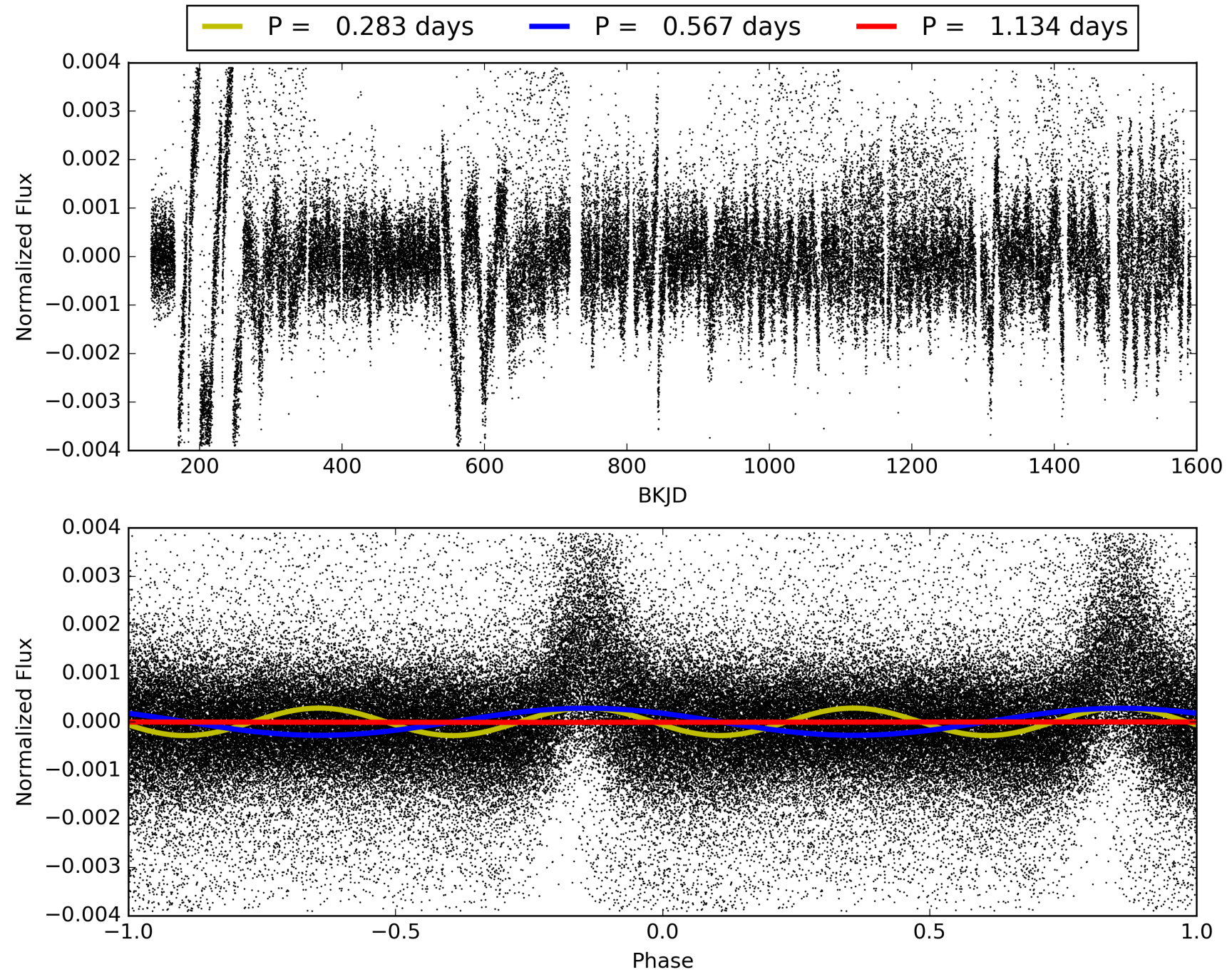
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:27:19 Z

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

TCE 007199168-01, PDC Light Curves

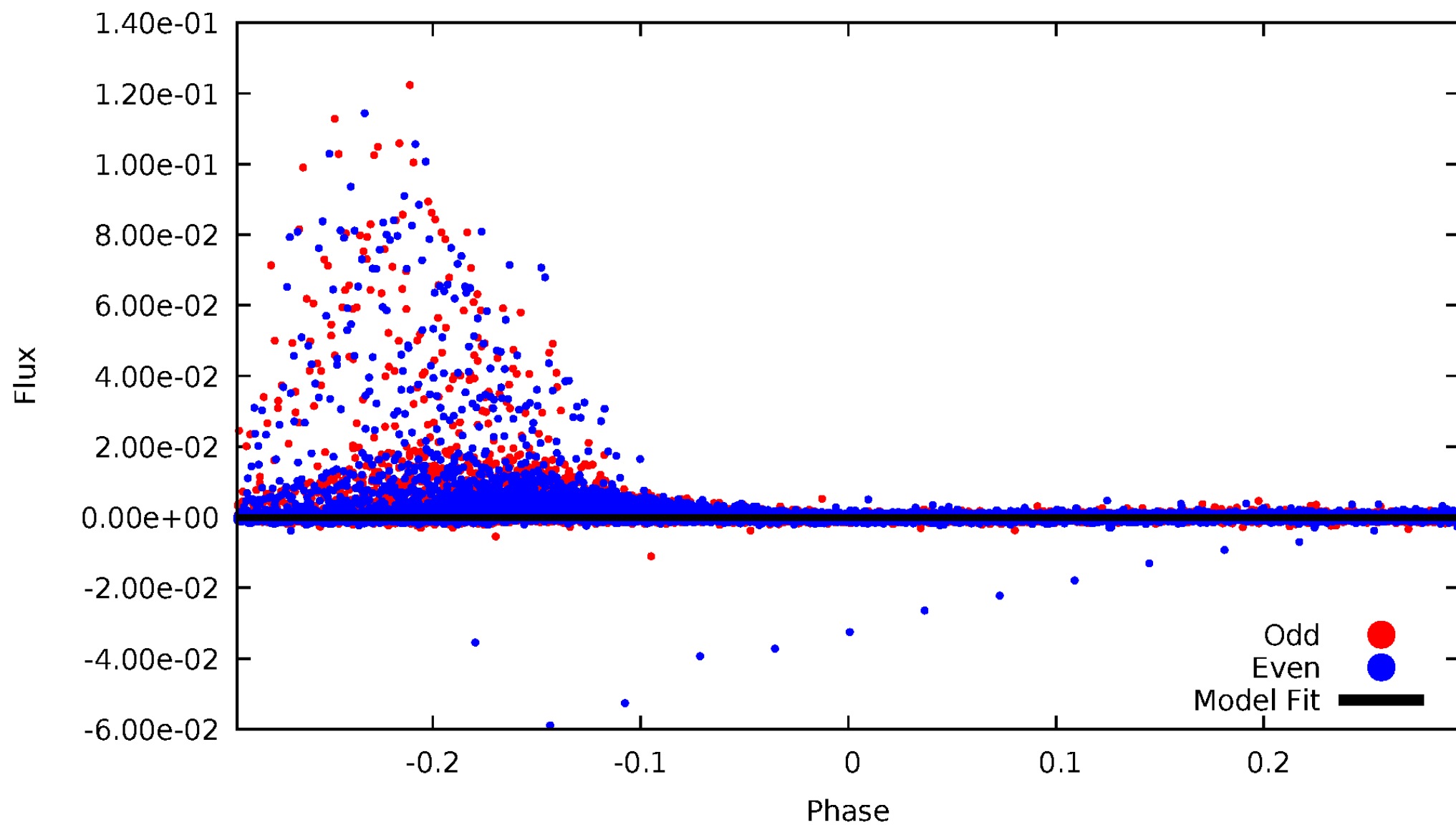


TCE 007199168-01



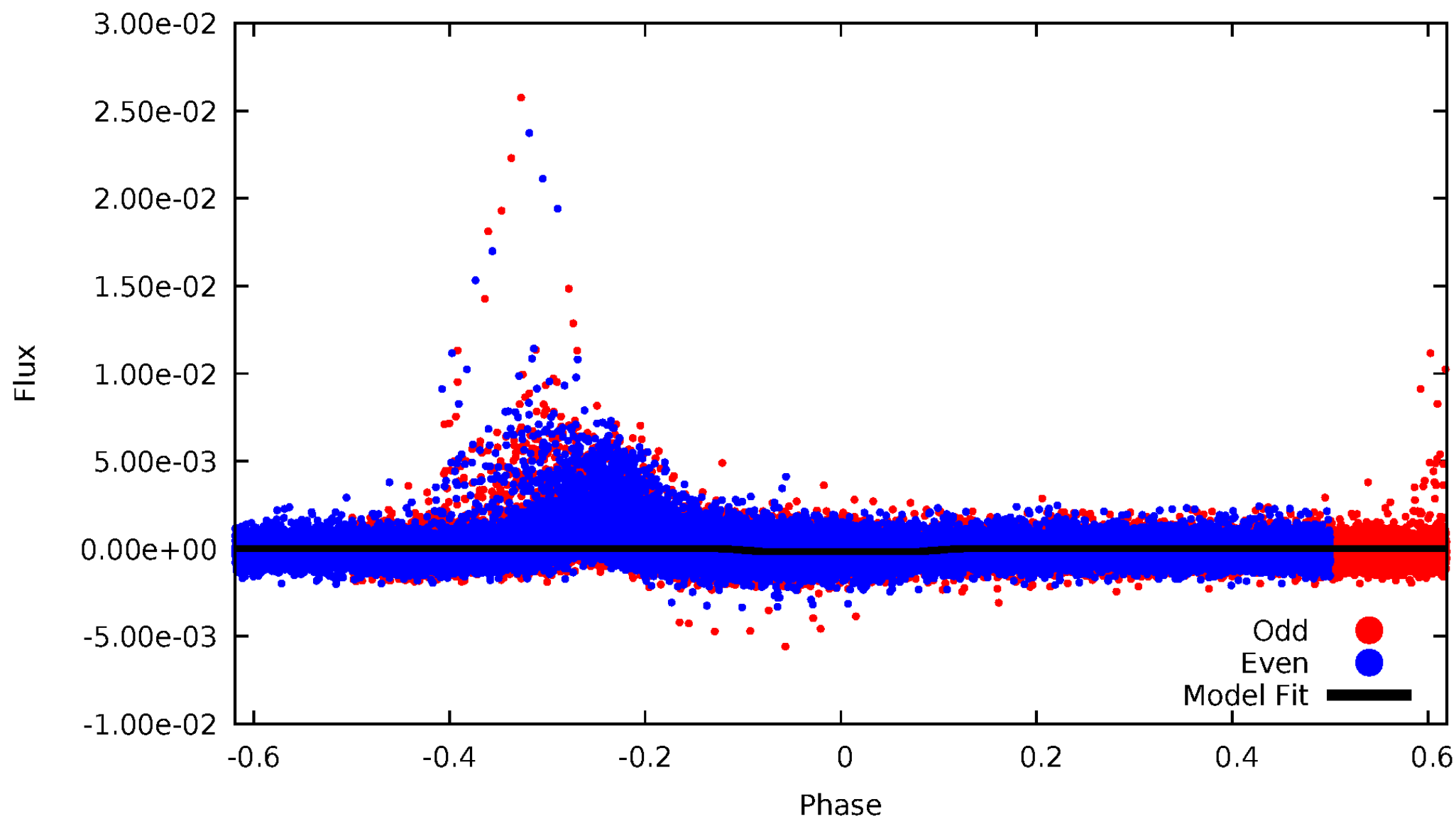
DV Odd/Even

TCE 007199168-01

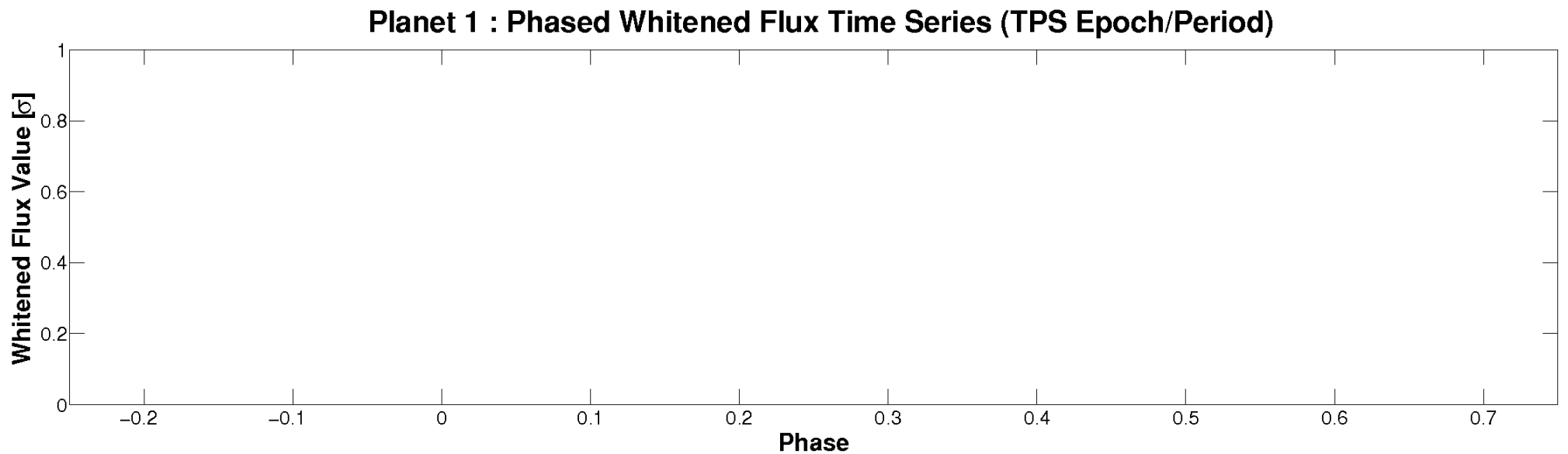
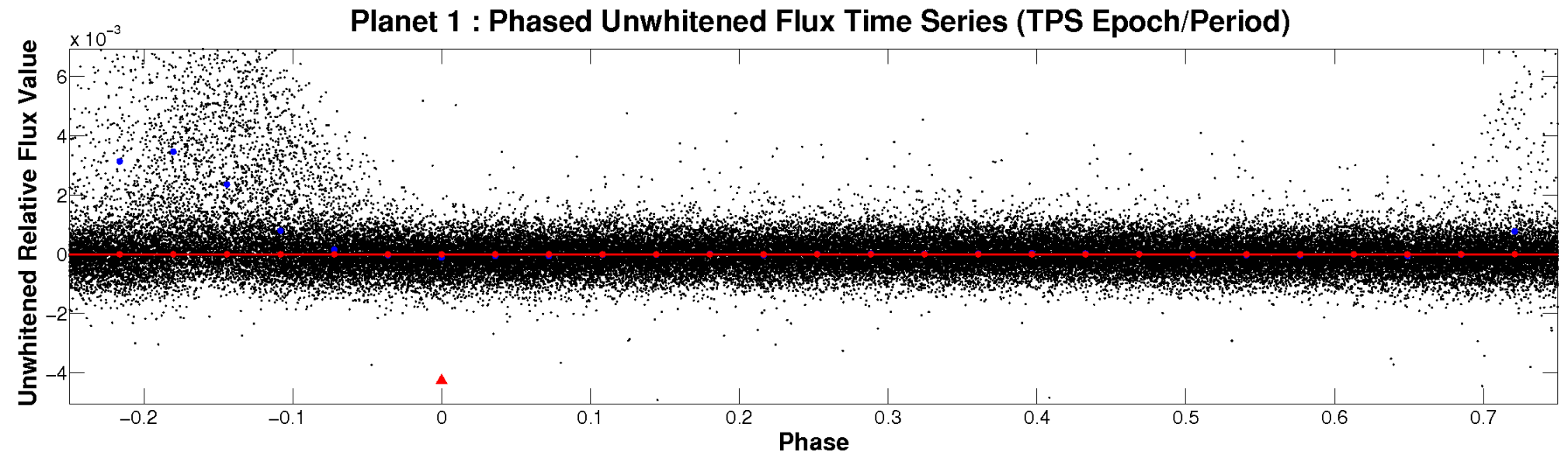


ALT Odd/Even

TCE 007199168-01

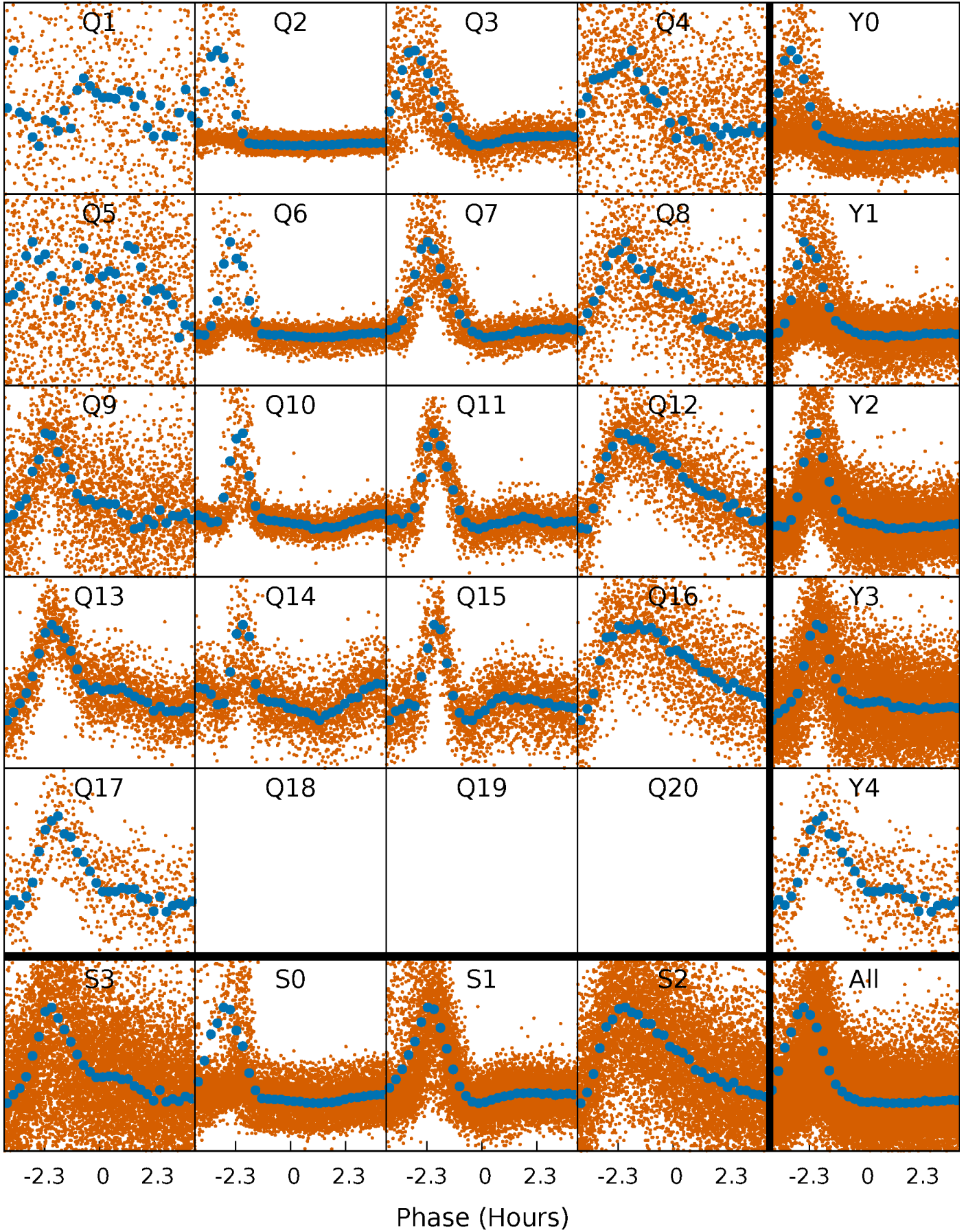


Non-Whitened Vs. Whitened Light Curve



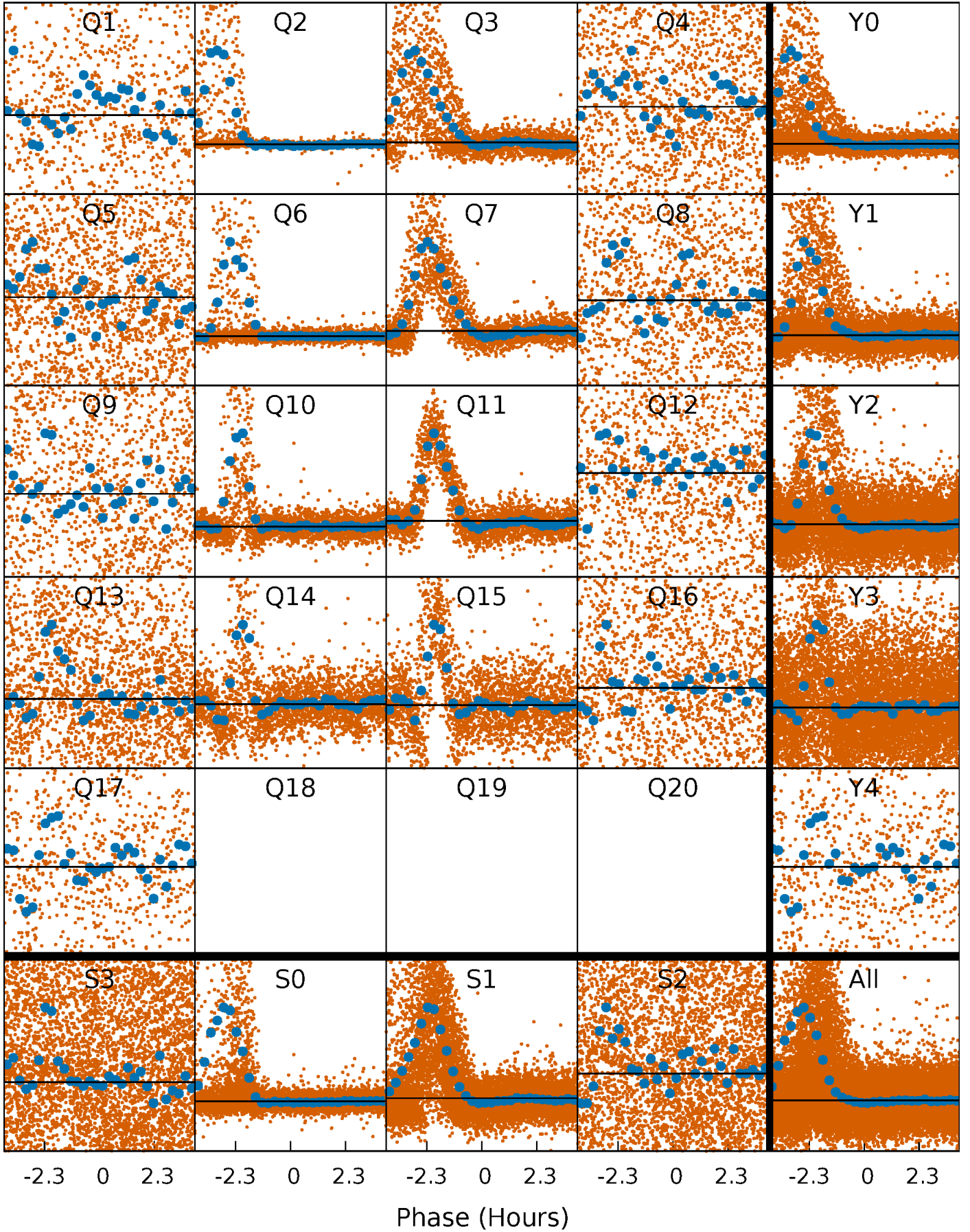
PDC Quarter-Phased Transit Curves

TCE 007199168-01 P= 0.566782 Days $T_0=131.913277$ (BKJD)



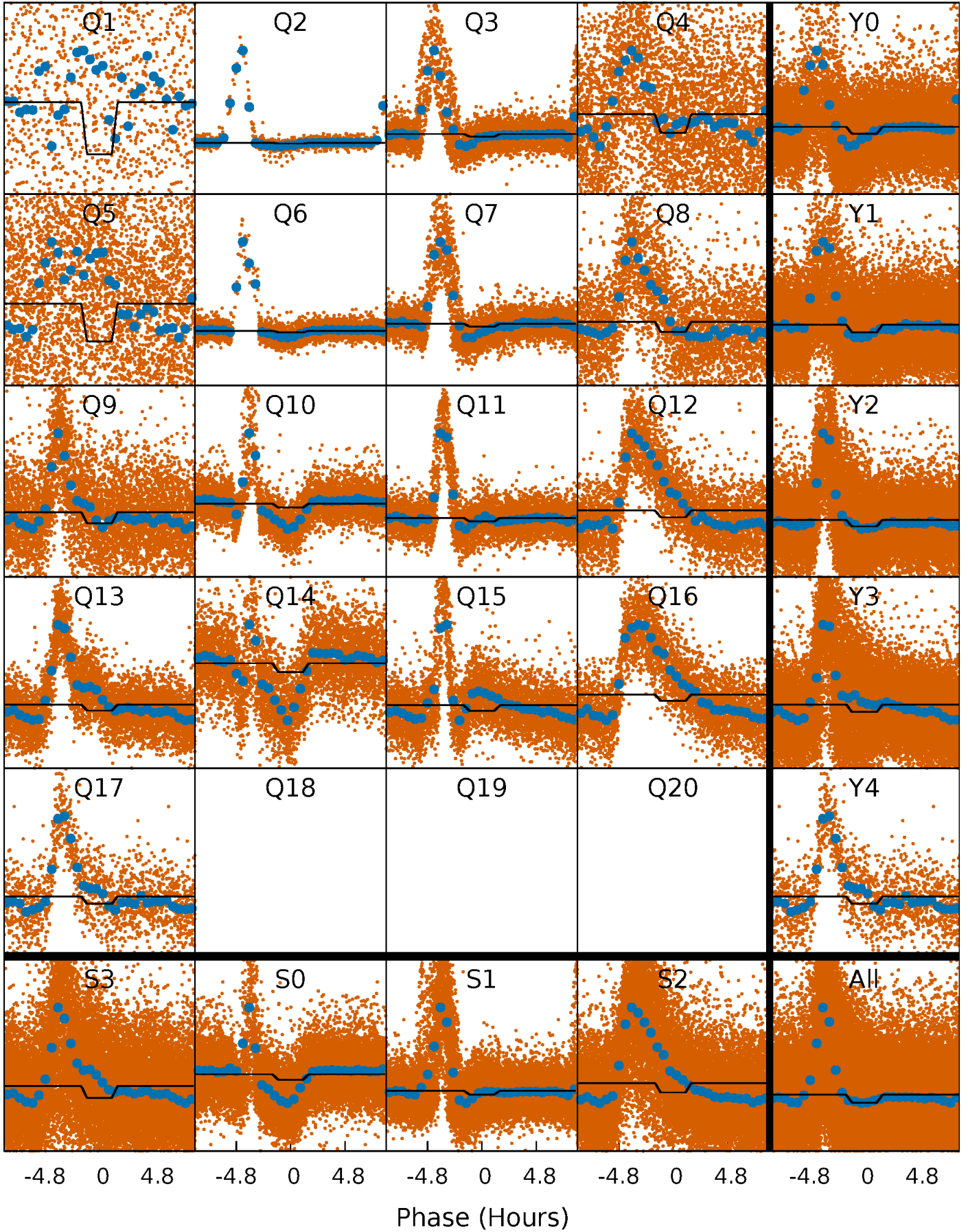
DV Quarter-Phased Transit Curves

TCE 007199168-01 P= 0.566782 Days $T_0=131.913277$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

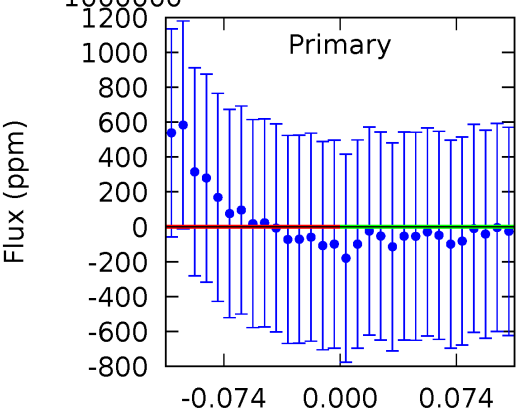
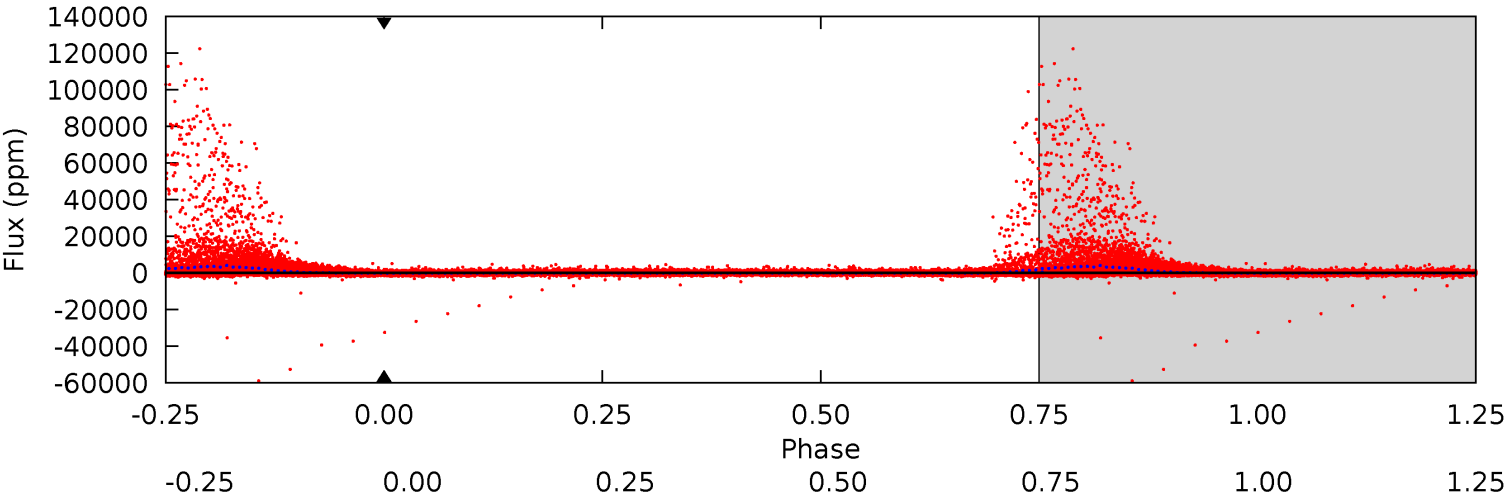
TCE 007199168-01 P= 0.566782 Days $T_0=131.974764$ (BKJD)



DV Model-Shift Uniqueness Test

007199168-01, P = 0.566782 Days, E = 131.346495 Days

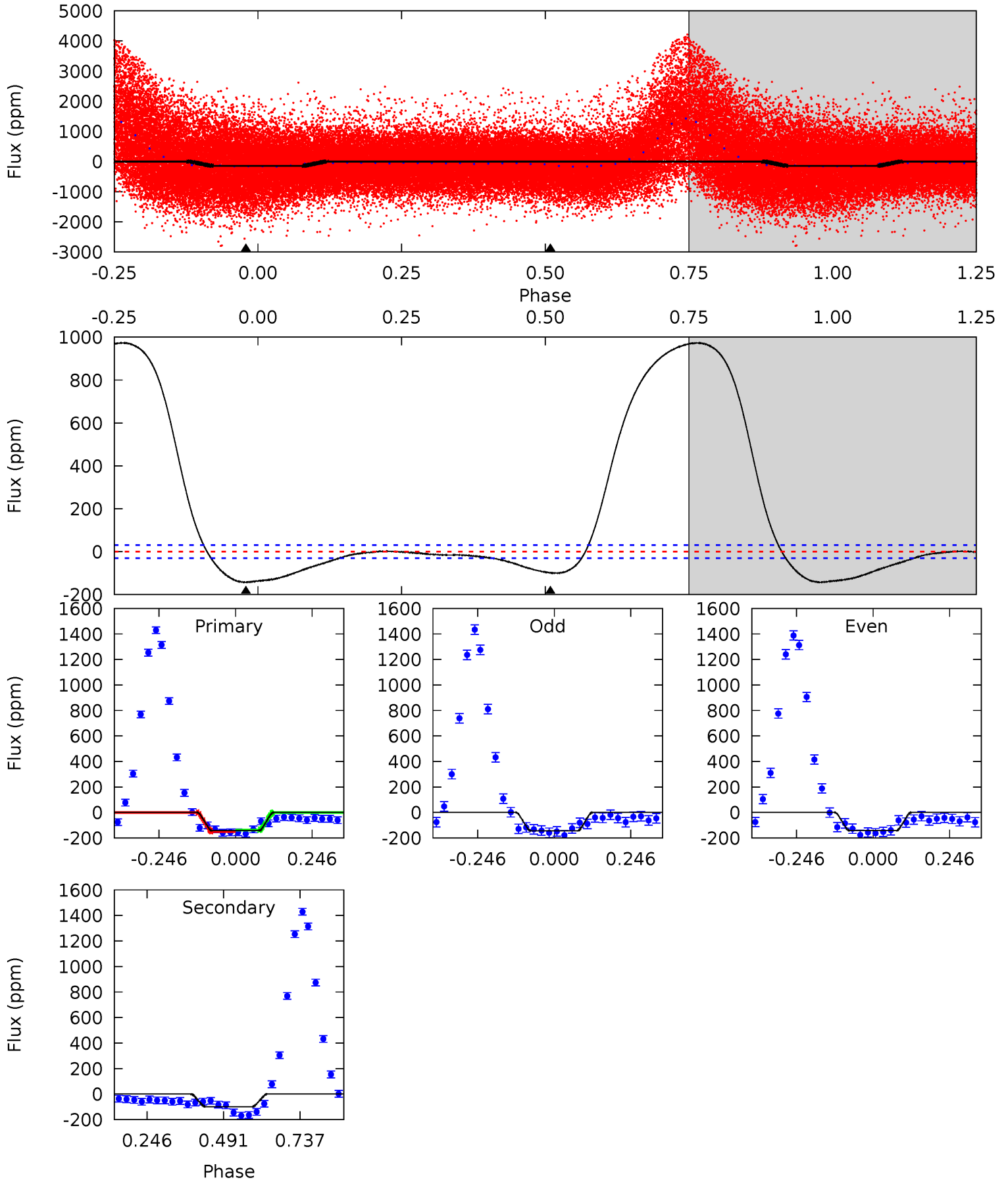
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007199168-01, P = 0.566782 Days, E = 131.407982 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.5	14.2	0	0	4.37	1.16	50.0	20.5	20.5	14.2	14.2	0.09	1.47	0.87	1.01



Stellar Parameters For KIC 007199168

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5383^{+159}_{-143}	$4.614^{+0.032}_{-0.104}$	$-0.320^{+0.300}_{-0.300}$	$0.736^{+0.122}_{-0.057}$	$0.824^{+0.078}_{-0.096}$	$2.906^{+0.436}_{-0.999}$
	+3%/-3%	+1%/-2%	+94%/-94%	+17%/-8%	+9%/-12%	+15%/-34%
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 007199168-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$8.14^{+7.52}_{-5.45}$	2585^{+110}_{-94}	3641^{+10104}_{-15401}	$1.647^{+244.502}_{-177.080}$
Alt.	-99 ± 7	$5.98^{+6.47}_{-4.17}$	2581^{+112}_{-96}	-2309^{+6177}_{-447}	$0.242^{+2.297}_{-0.187}$

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

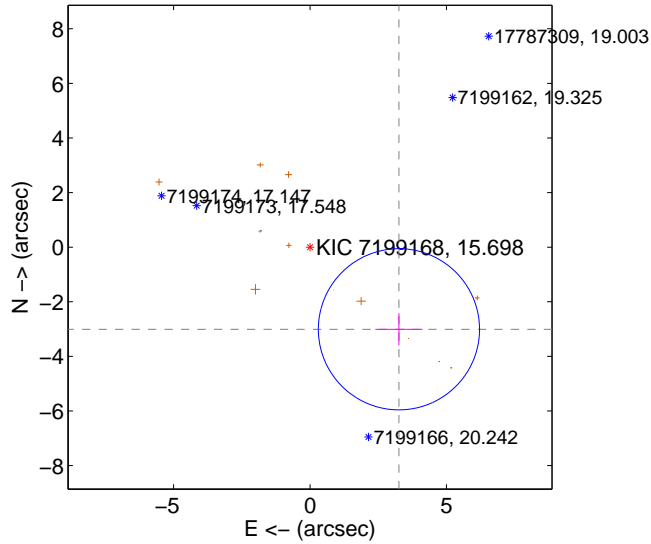
Supplemental centroid analysis for 007199168-01. Kepler magnitude: 15.70. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

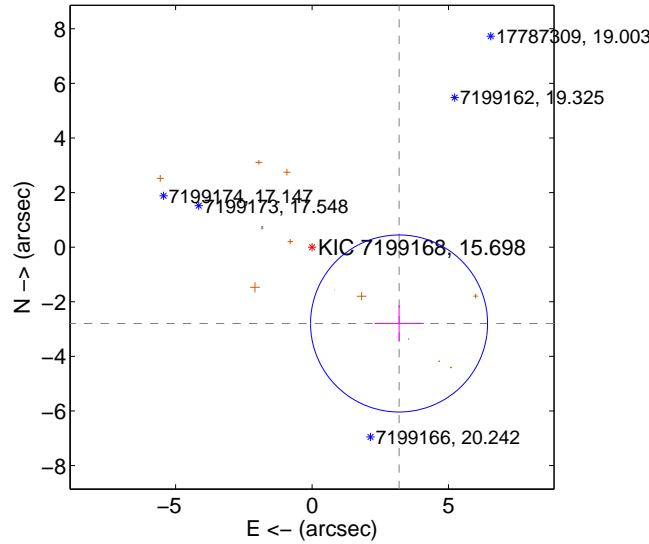
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.435 \pm 0.984	4.51	-3.258 \pm 0.865	-3.009 \pm 0.591
PRF-fit source offset from KIC position	4.240 \pm 1.081	3.92	-3.188 \pm 0.904	-2.796 \pm 0.671
photometric centroid source offset	0.69 \pm 0.51	1.36	-0.63 \pm 0.52	0.29 \pm 0.46

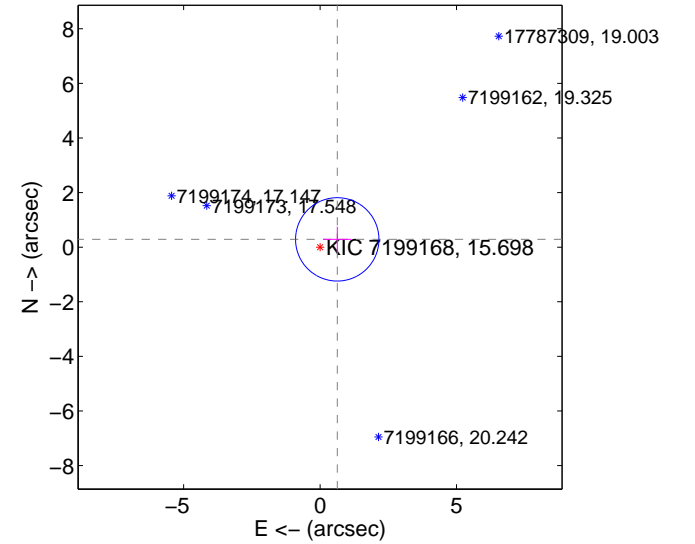
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

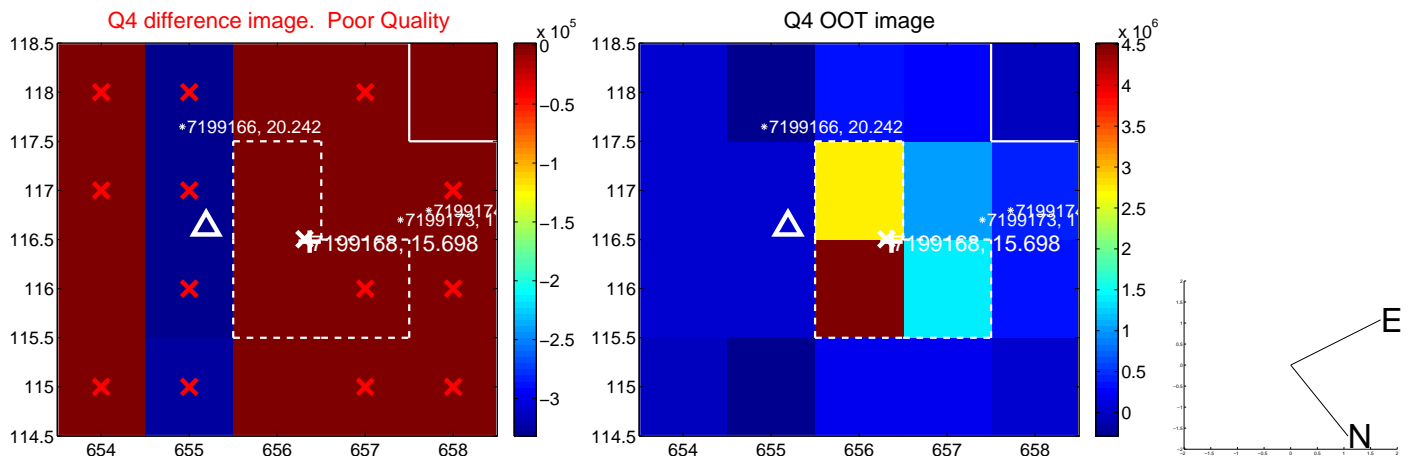
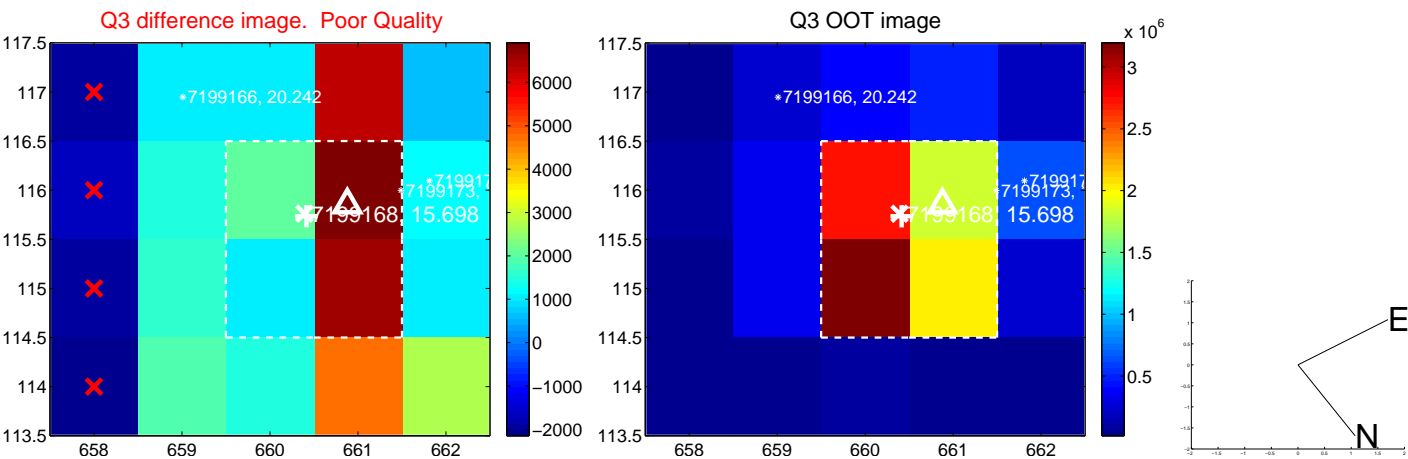
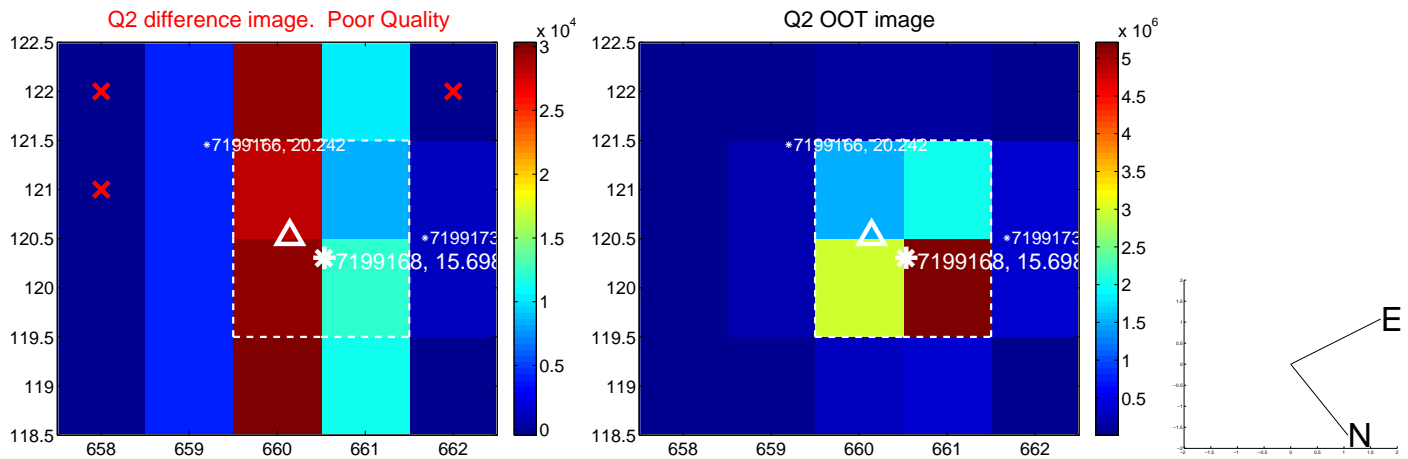
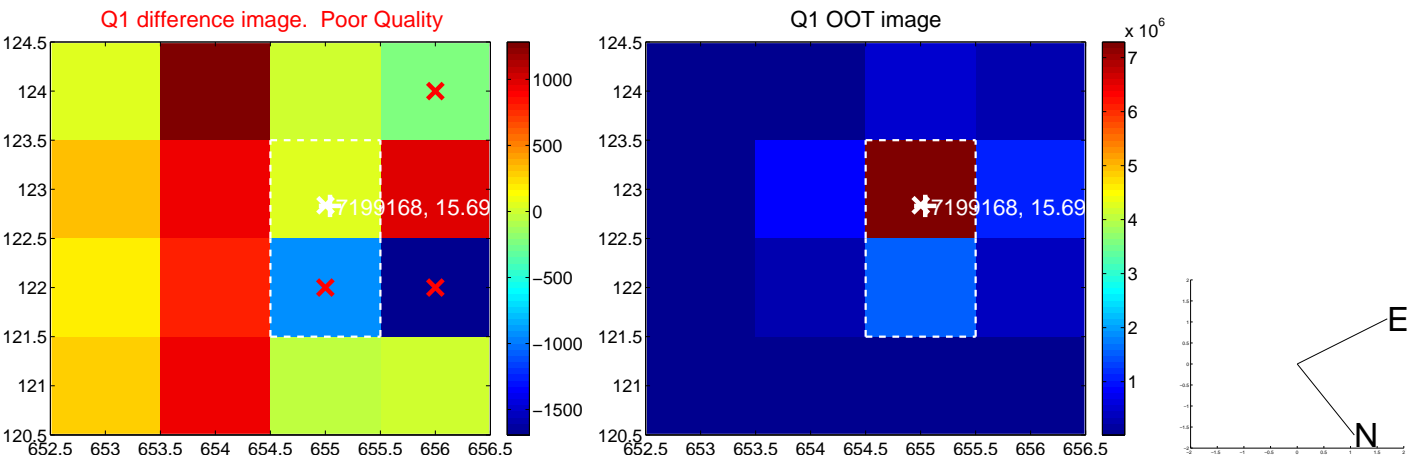


offset from photometric centroids

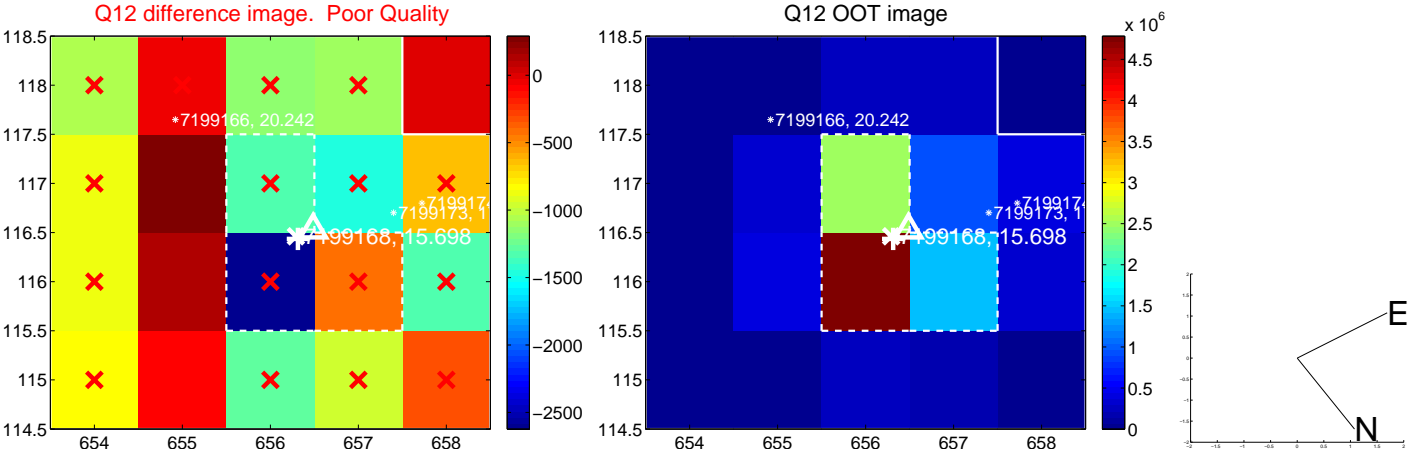
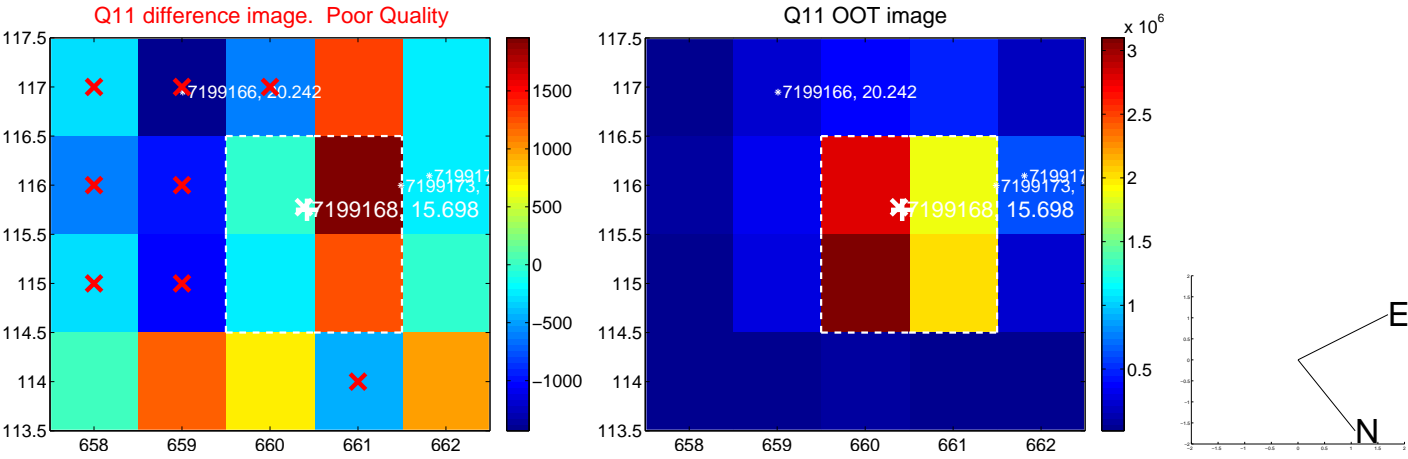
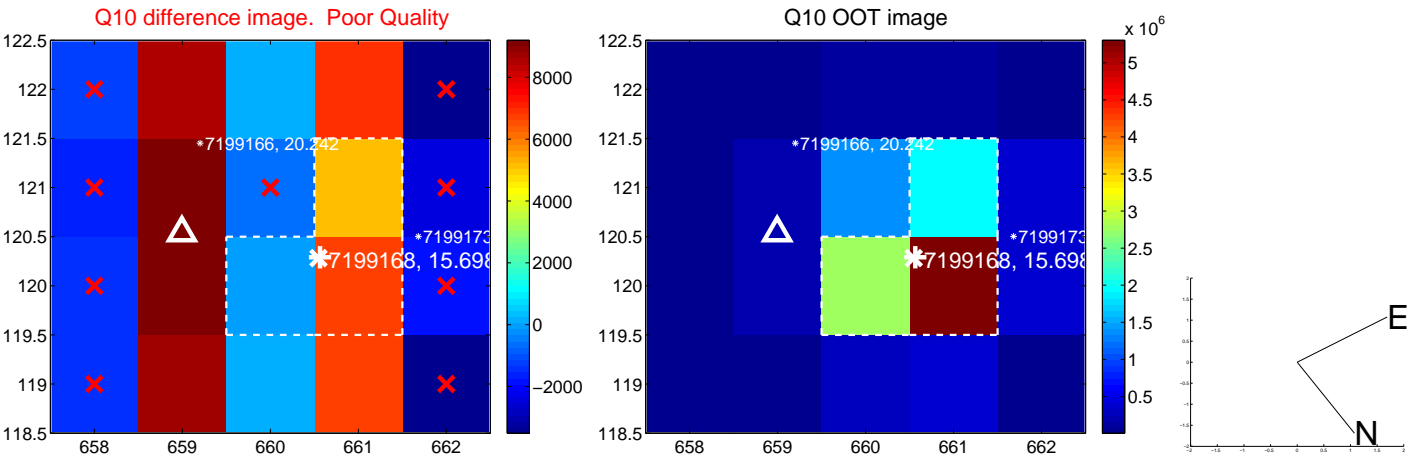
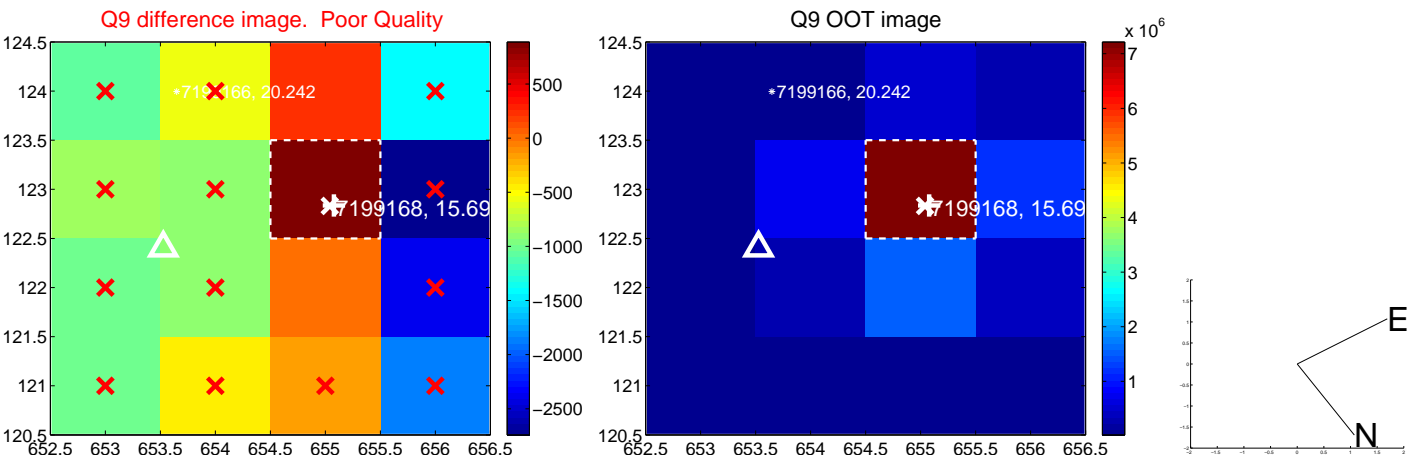


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

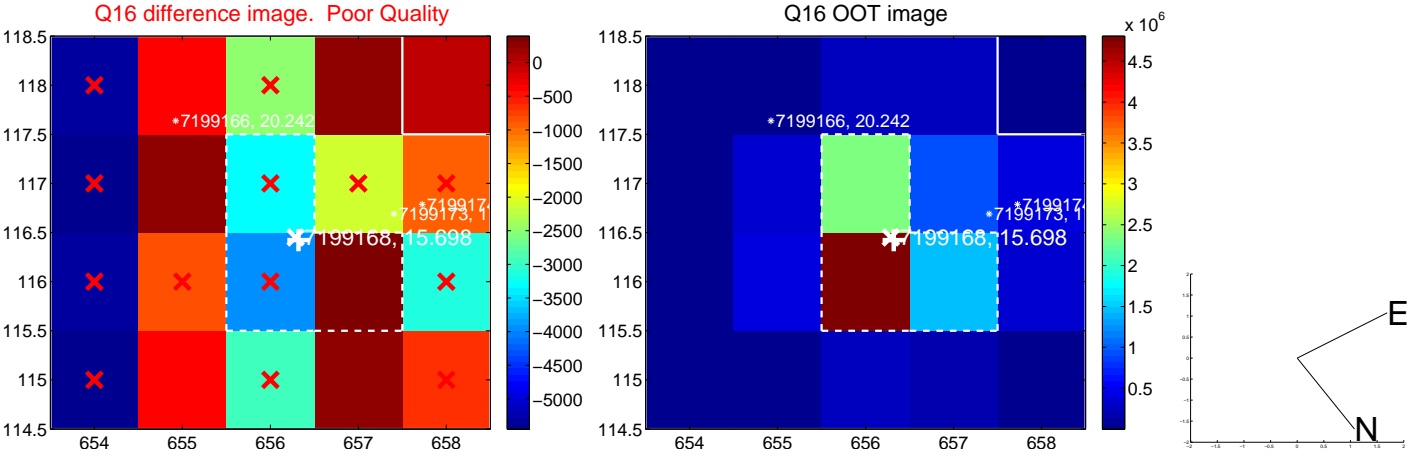
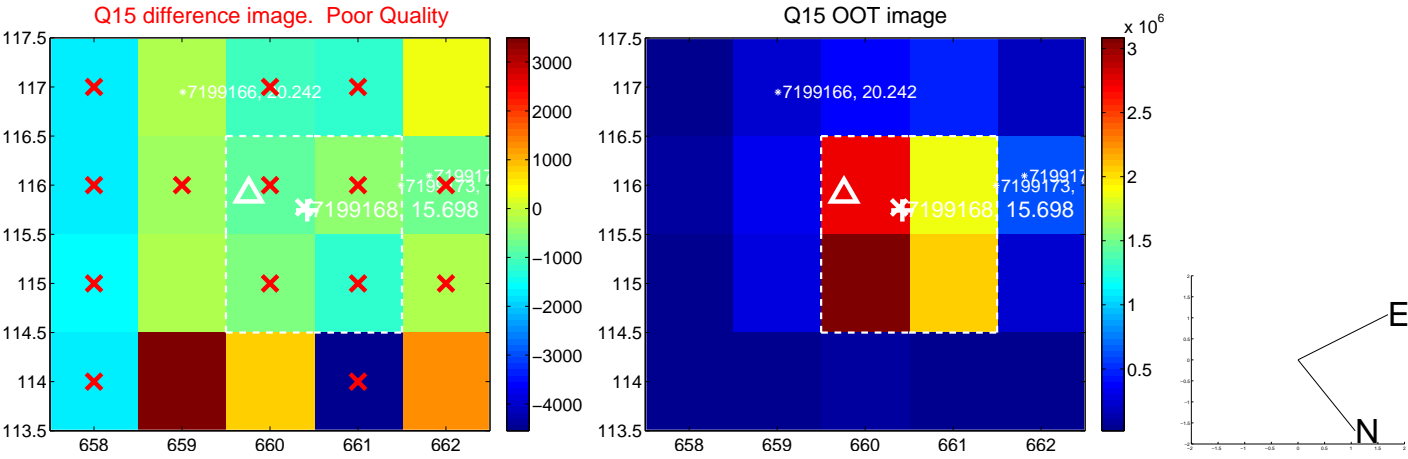
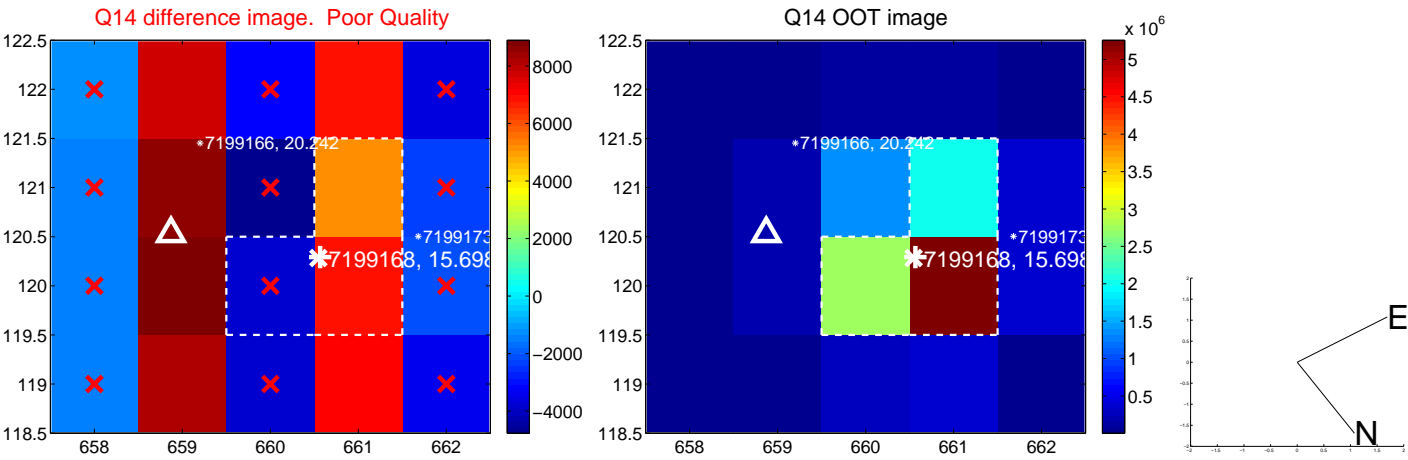
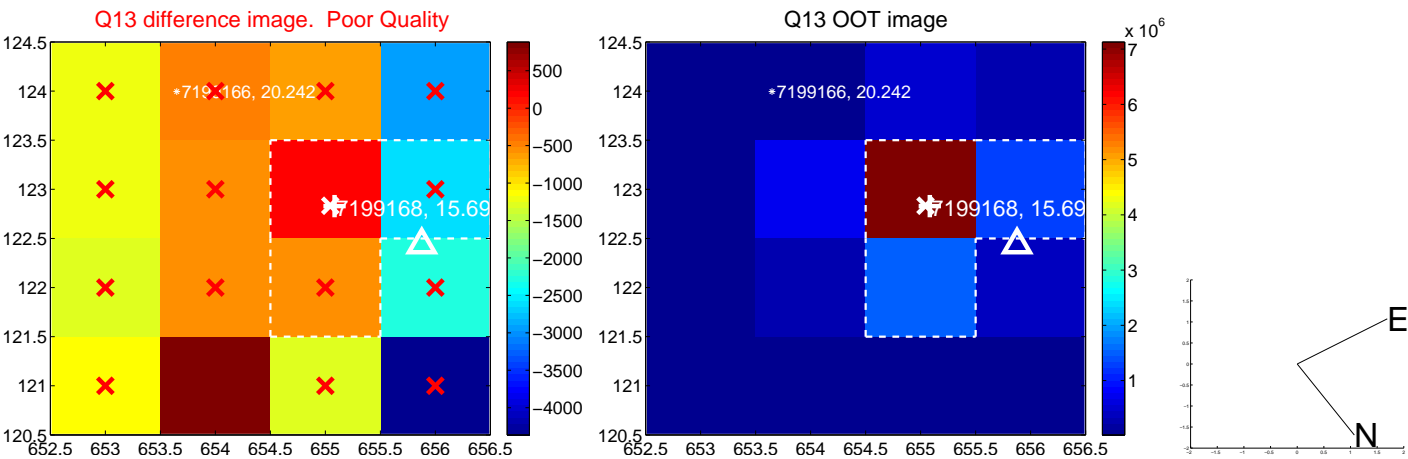
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



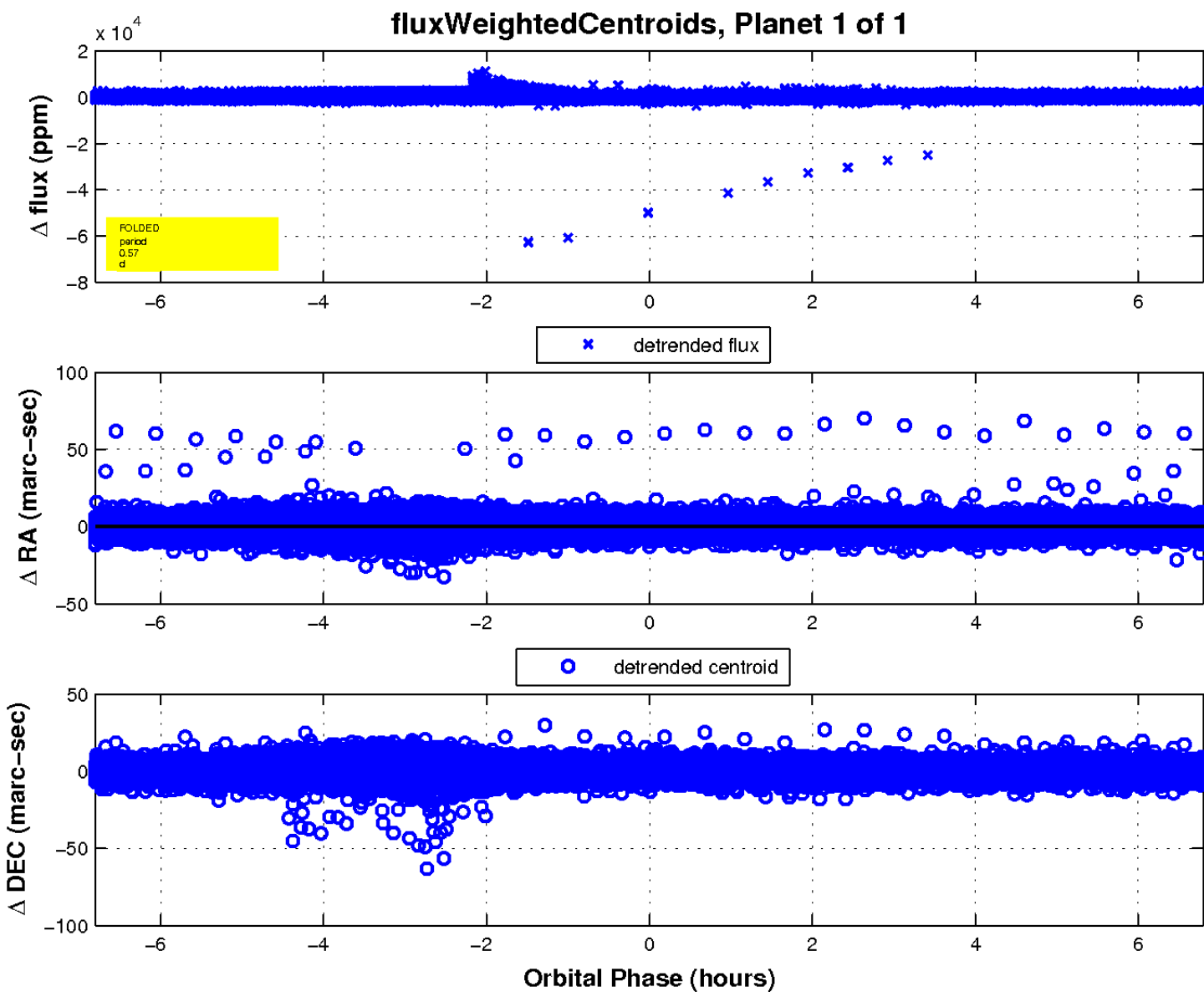
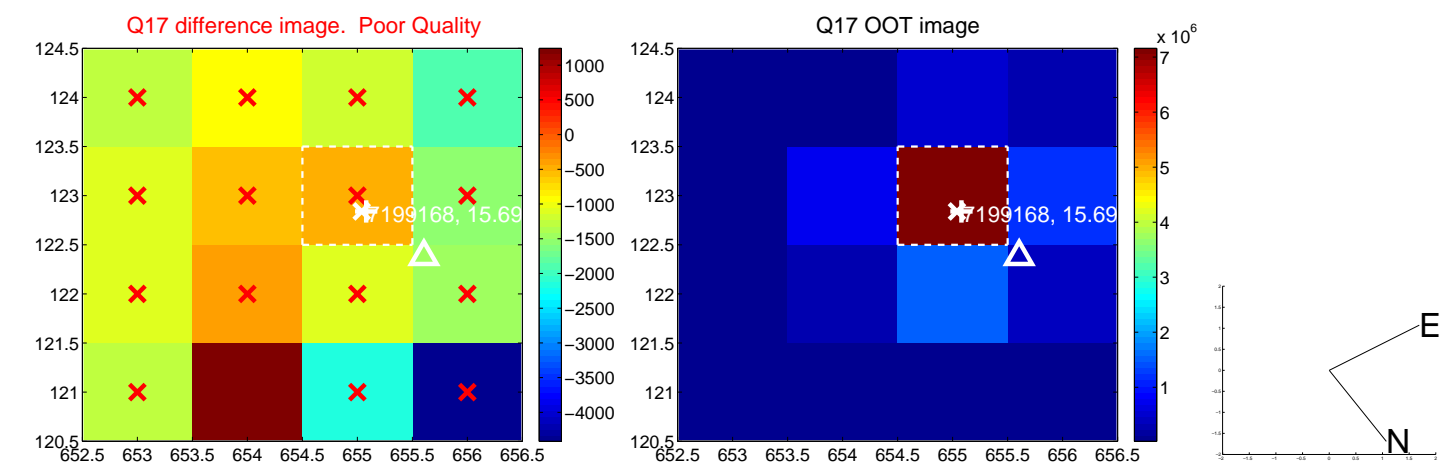
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

