

KIC 007198734

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})
007198734-01	OBS	No	0.566808	131.704744	366.7	1.500	12.2	-1.0	1.60	7075	3.11	24820.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007198734-01	OBS	FP	0.00	1	0	0	1	LPP_DV—LPP_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.

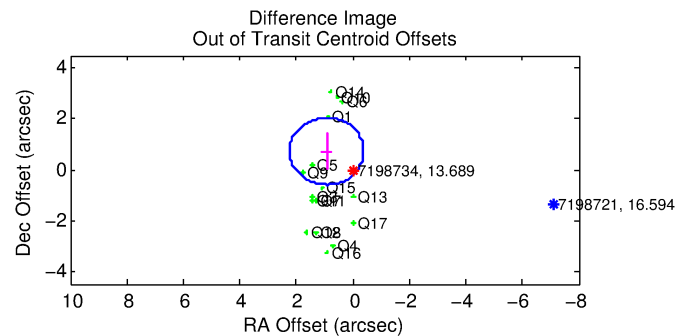
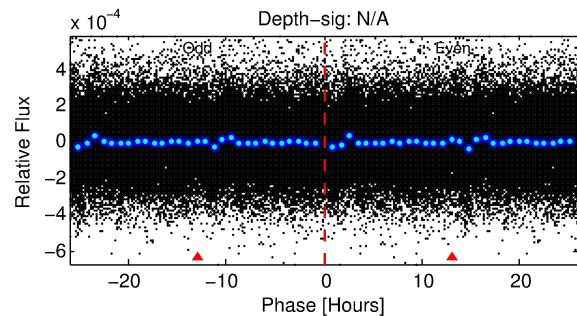
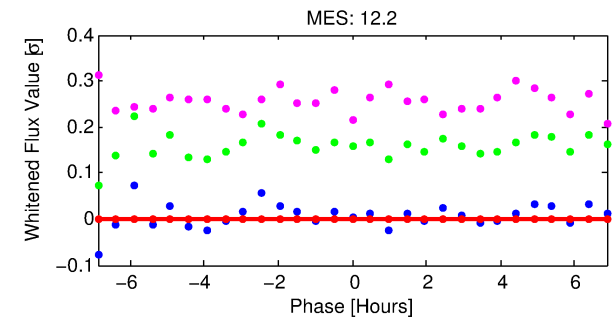
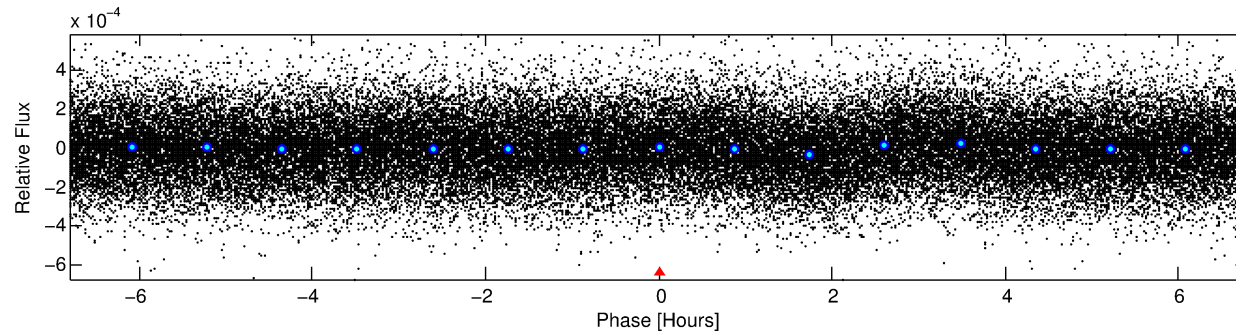
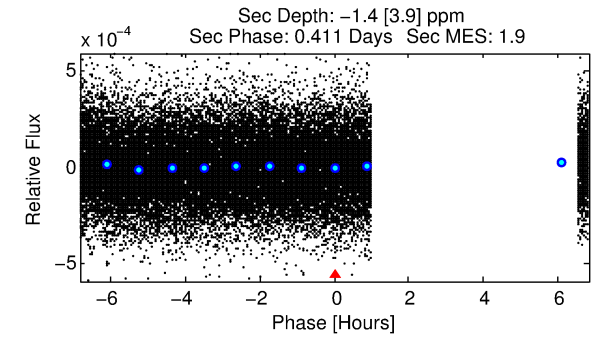
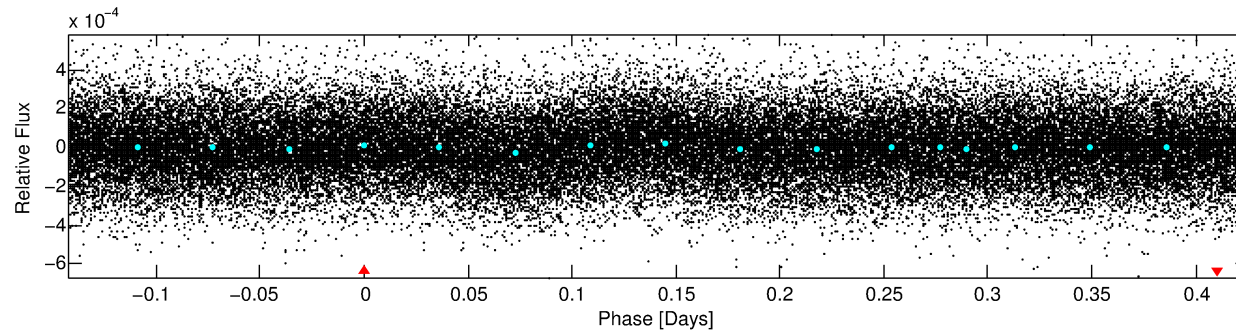
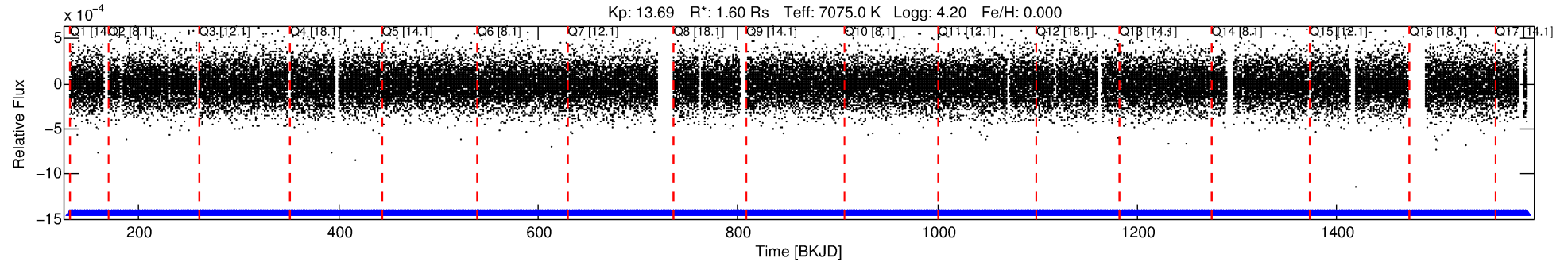
Ephemeris Match Information For 007198734-01

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
007198734-01	7198734	RR-Lyr-pri	7198959	1:1	194.5	0	-49	7.86	13.69	1698.40	Direct-PRF	0	3.98	14.75

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: 7198734 Candidate: 1 of 1 Period: 0.567 d



TPS TCE Results:

Period = 0.56681 d
Epoch = 131.7047 BKJD

DV fit results are unavailable

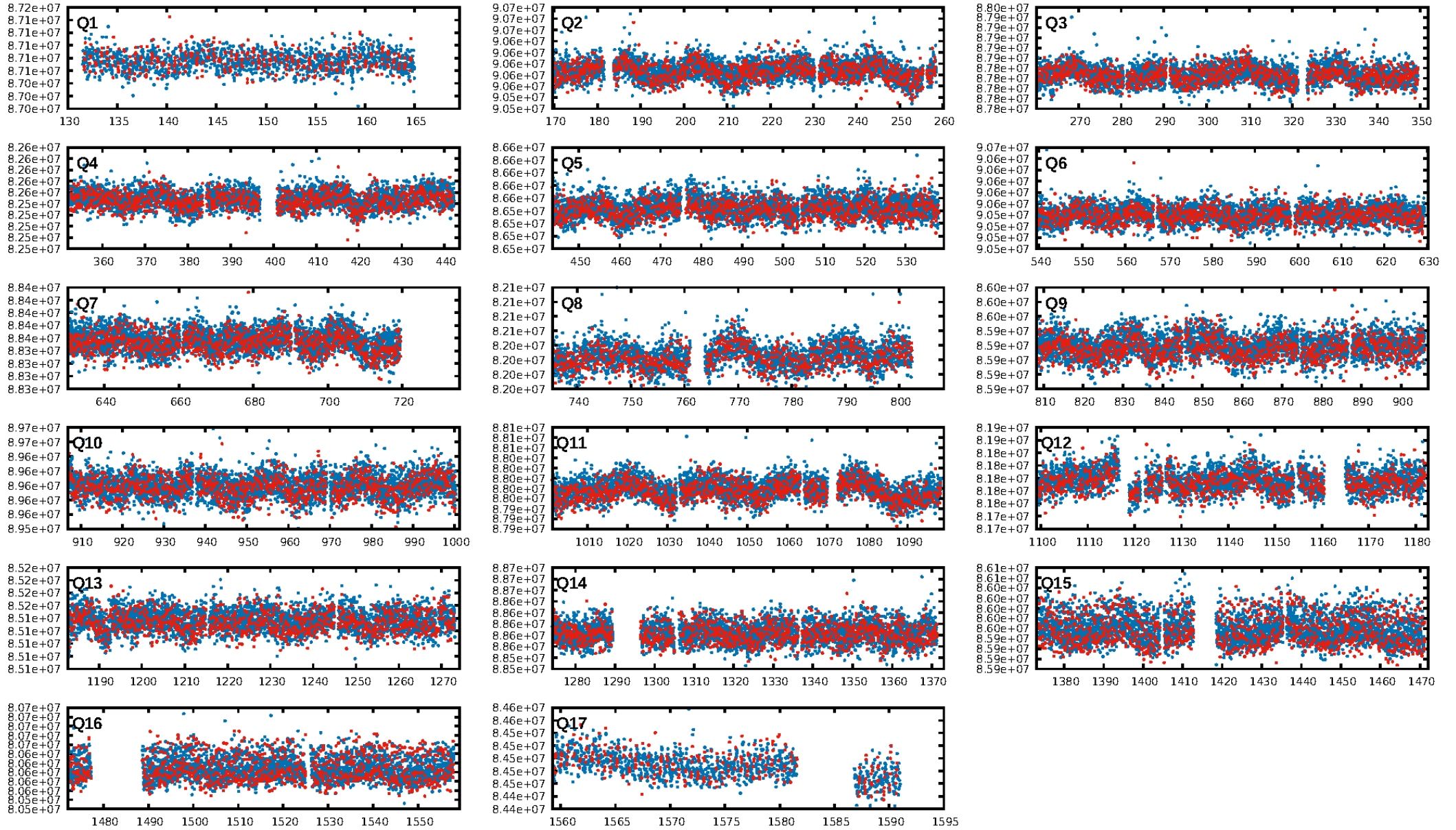
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.57e-33
RollingBand-fgt: 1.00 [2266/2266]
GhostDiagnostic-chr: 1.437
Centroid-sig: 9.6%
Centroid-so: 0.301 arcsec [1.95σ]
OotOffset-rm: 1.179 arcsec [2.68σ]
KicOffset-rm: 1.056 arcsec [2.37σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.81 [13/16]
DiffImageOverlap-fno: 1.00 [17/17]

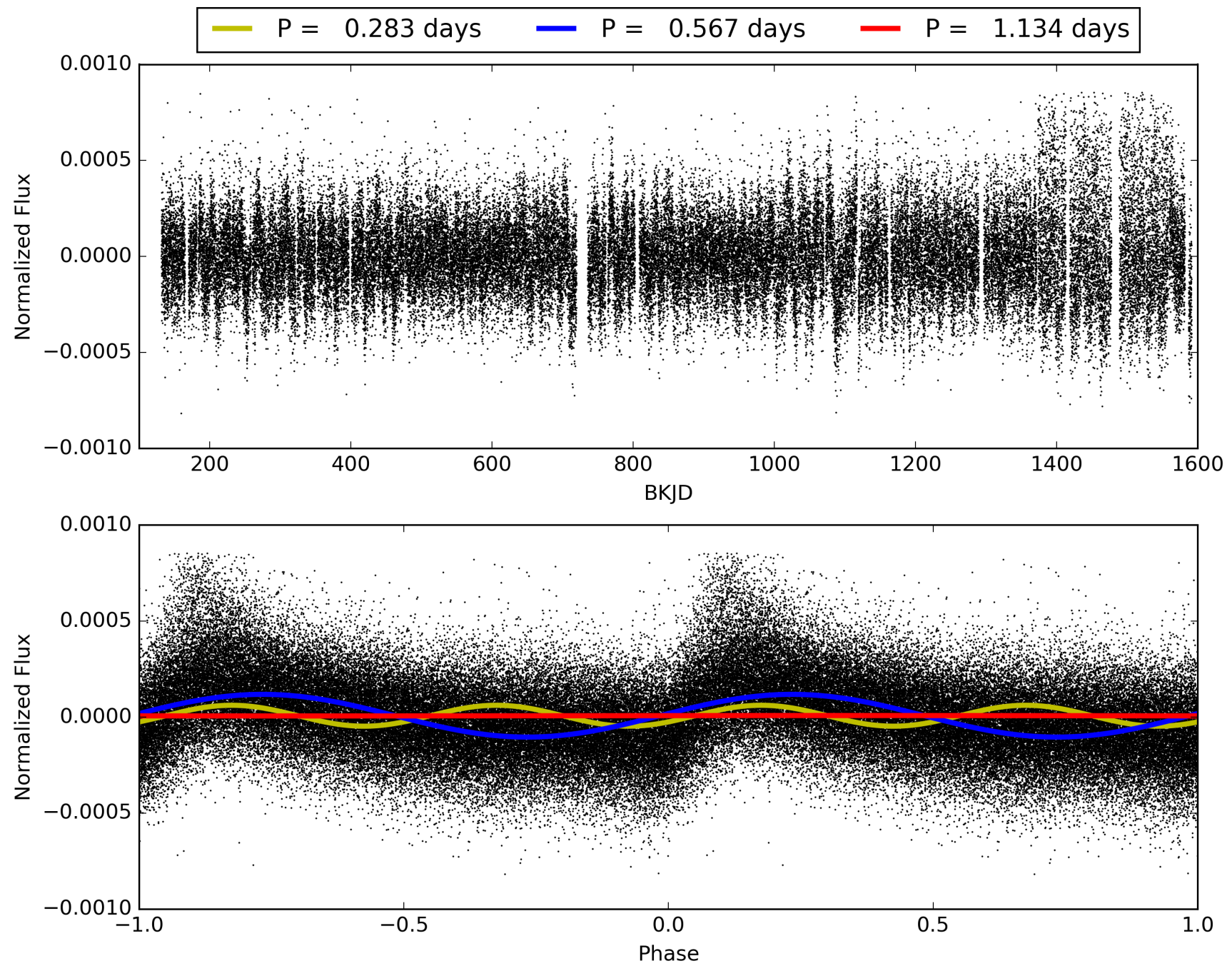
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:06:33 Z

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

TCE 007198734-01, PDC Light Curves

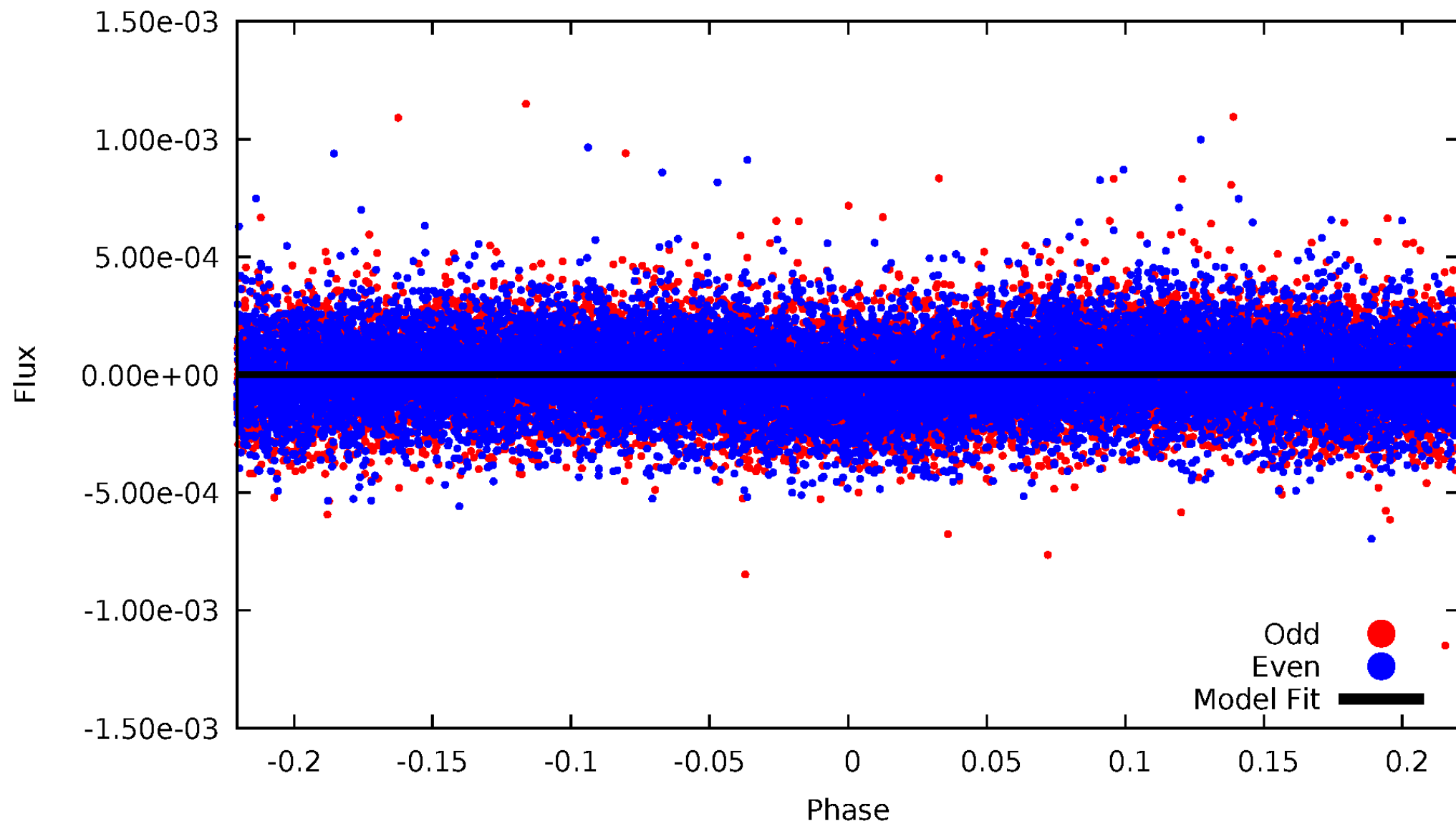


TCE 007198734-01



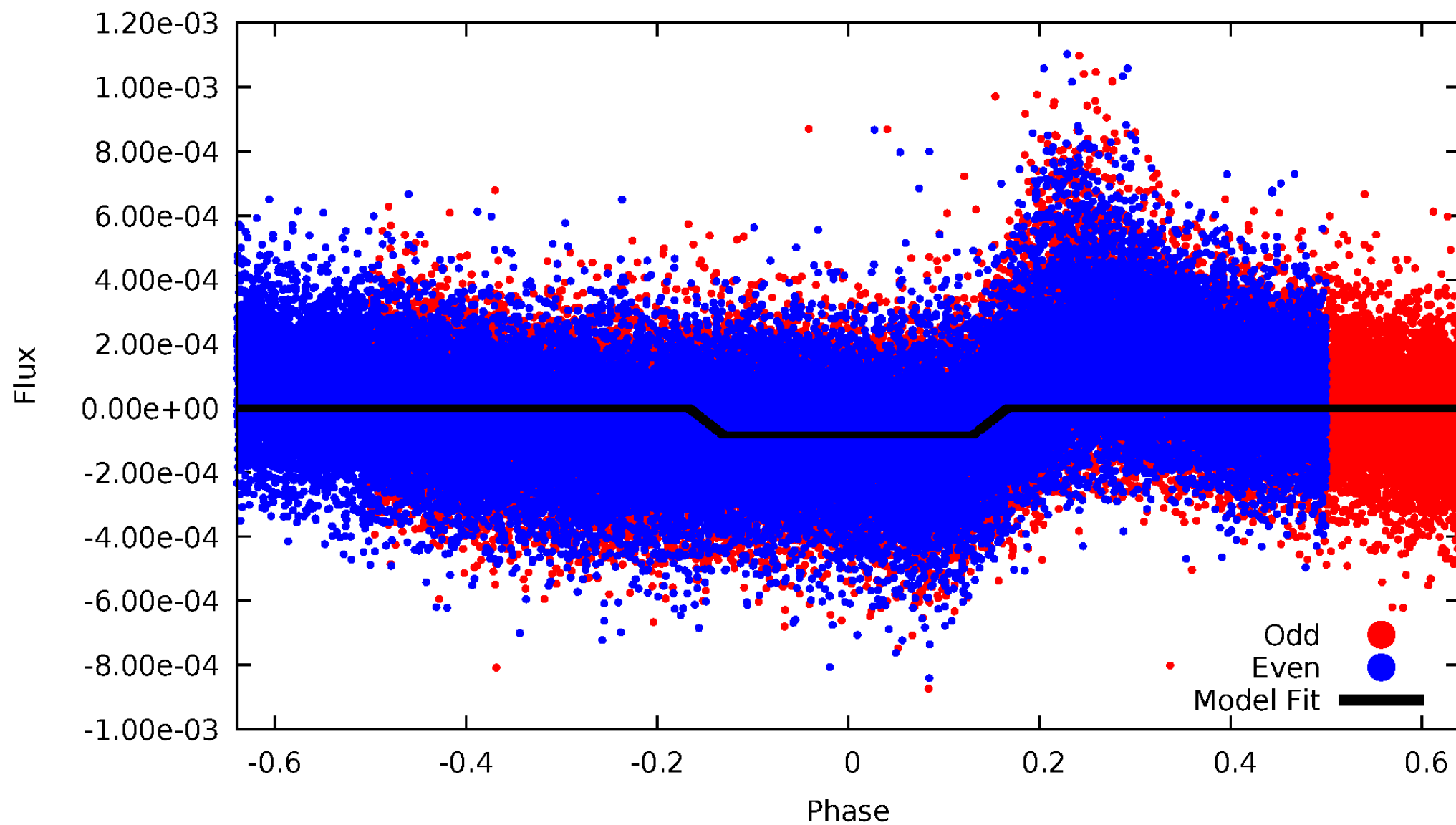
DV Odd/Even

TCE 007198734-01

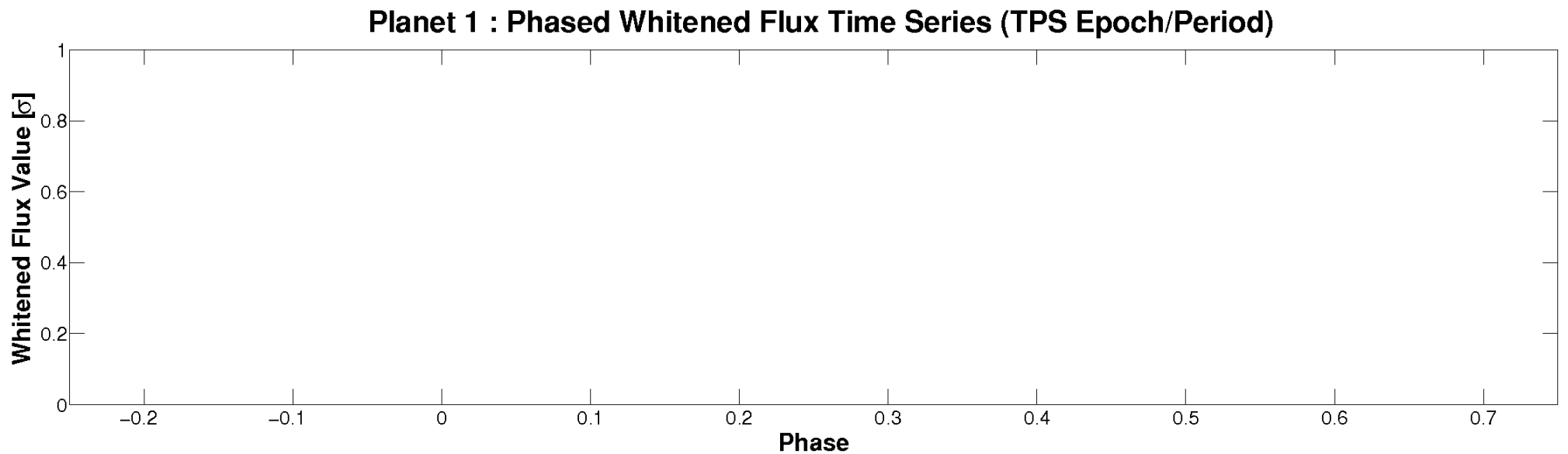
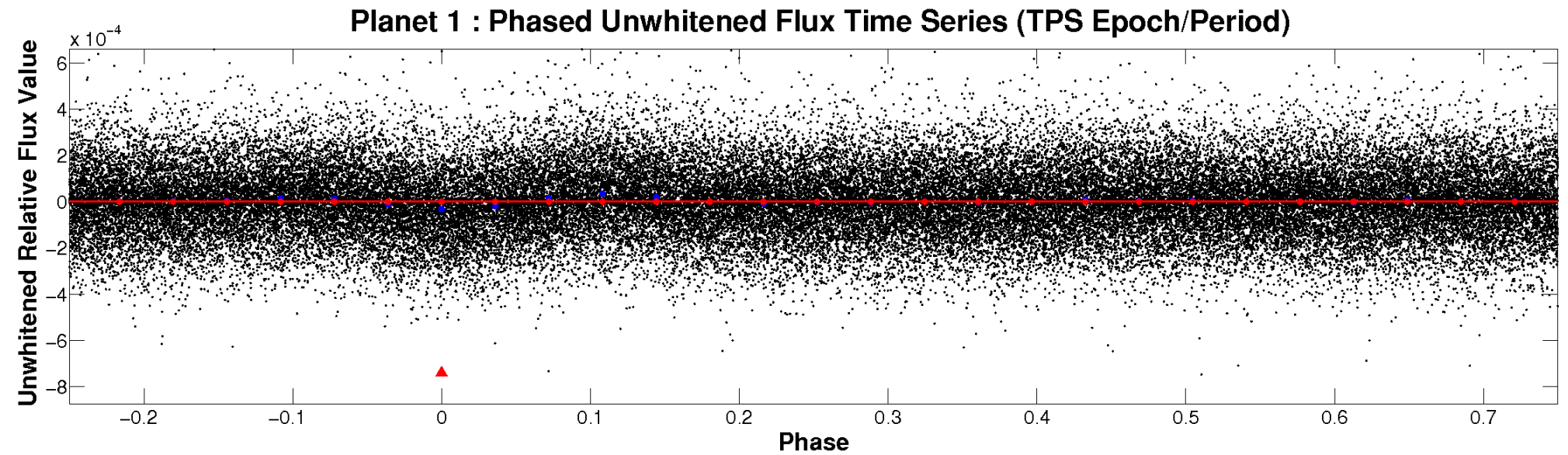


ALT Odd/Even

TCE 007198734-01

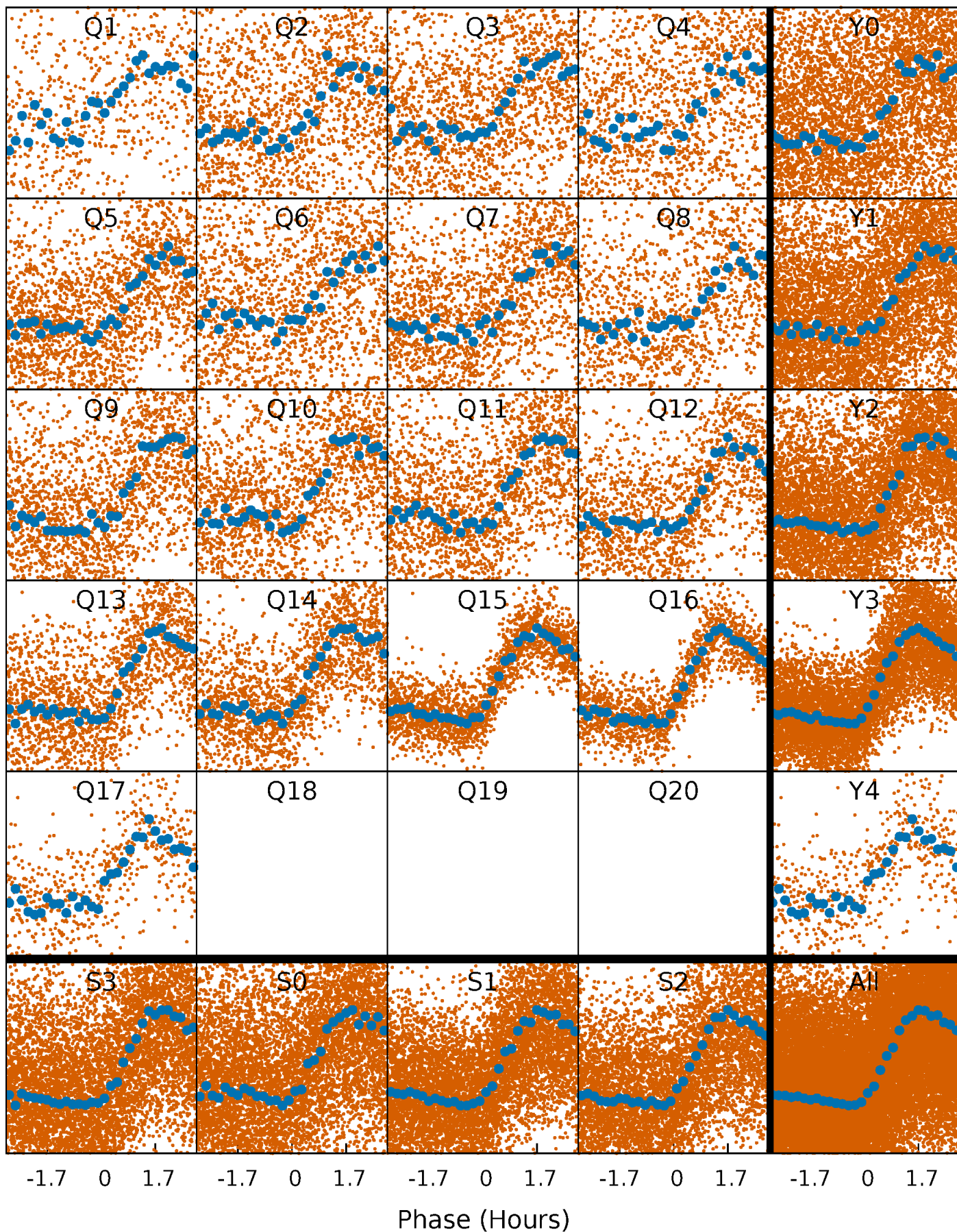


Non-Whitened Vs. Whitened Light Curve



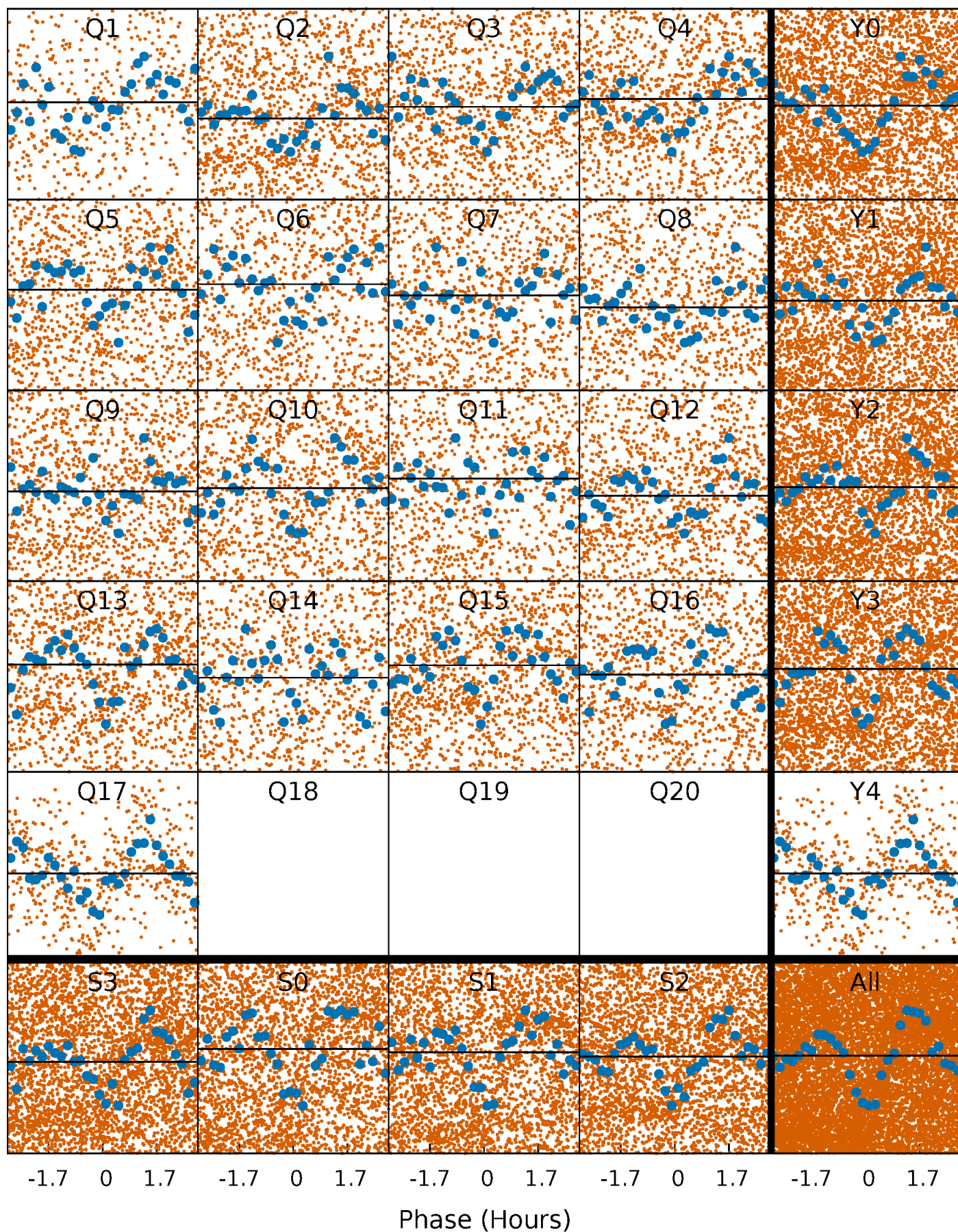
PDC Quarter-Phased Transit Curves

TCE 007198734-01 P= 0.566808 Days $T_0=131.704744$ (BKJD)



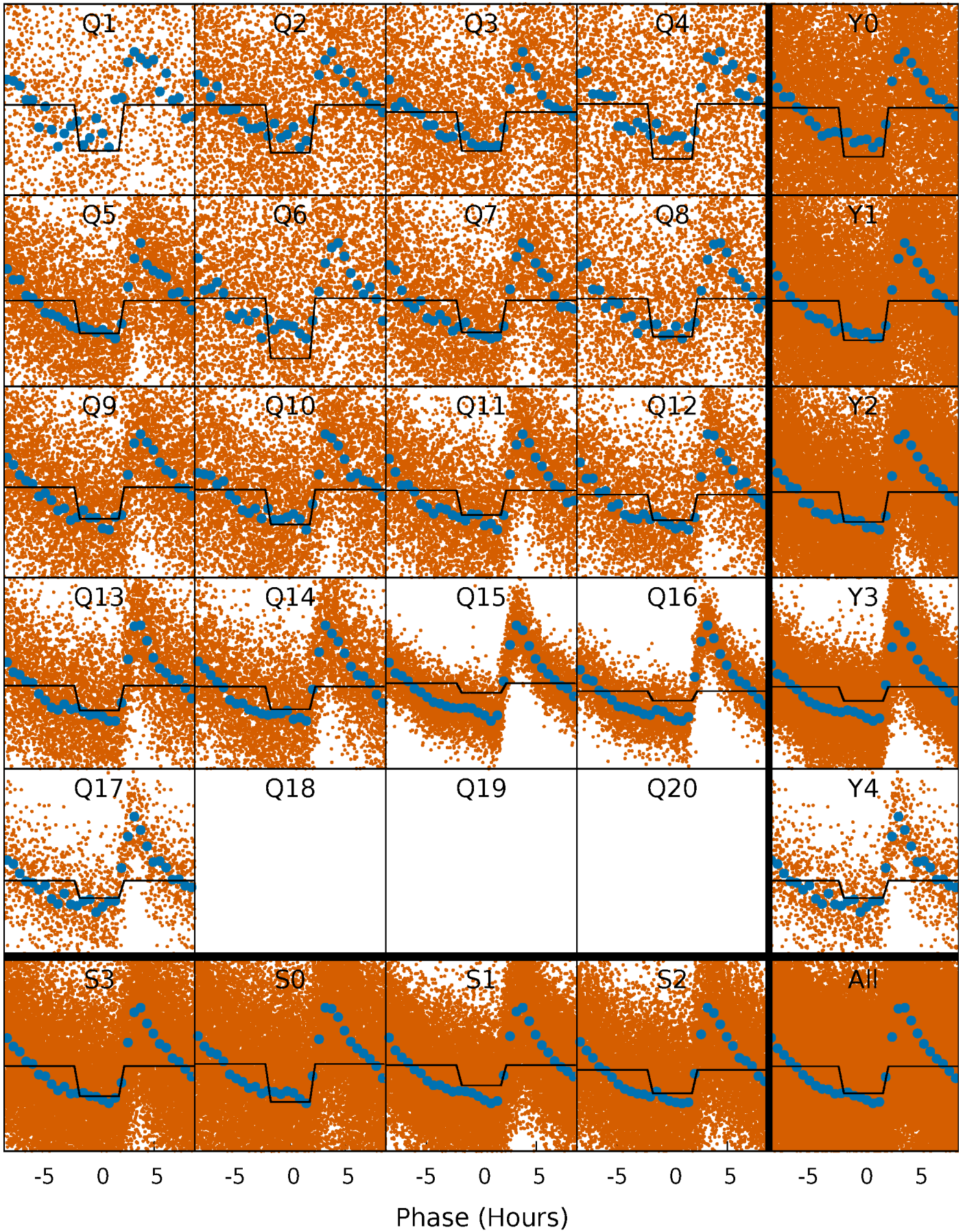
DV Quarter-Phased Transit Curves

TCE 007198734-01 P= 0.566808 Days $T_0=131.704744$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

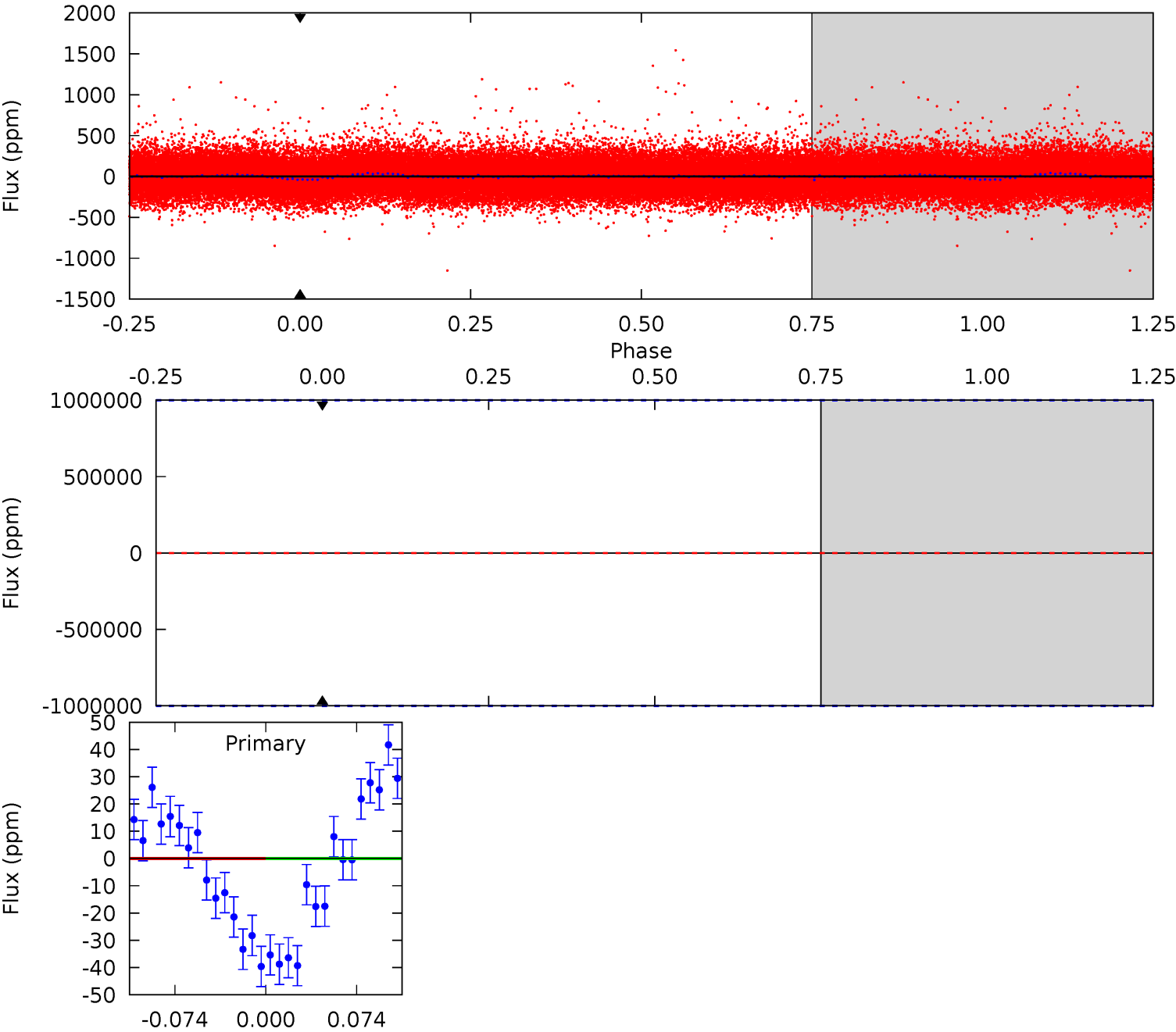
TCE 007198734-01 P= 0.566808 Days $T_0=131.636070$ (BKJD)



DV Model-Shift Uniqueness Test

007198734-01, P = 0.566808 Days, E = 131.137936 Days

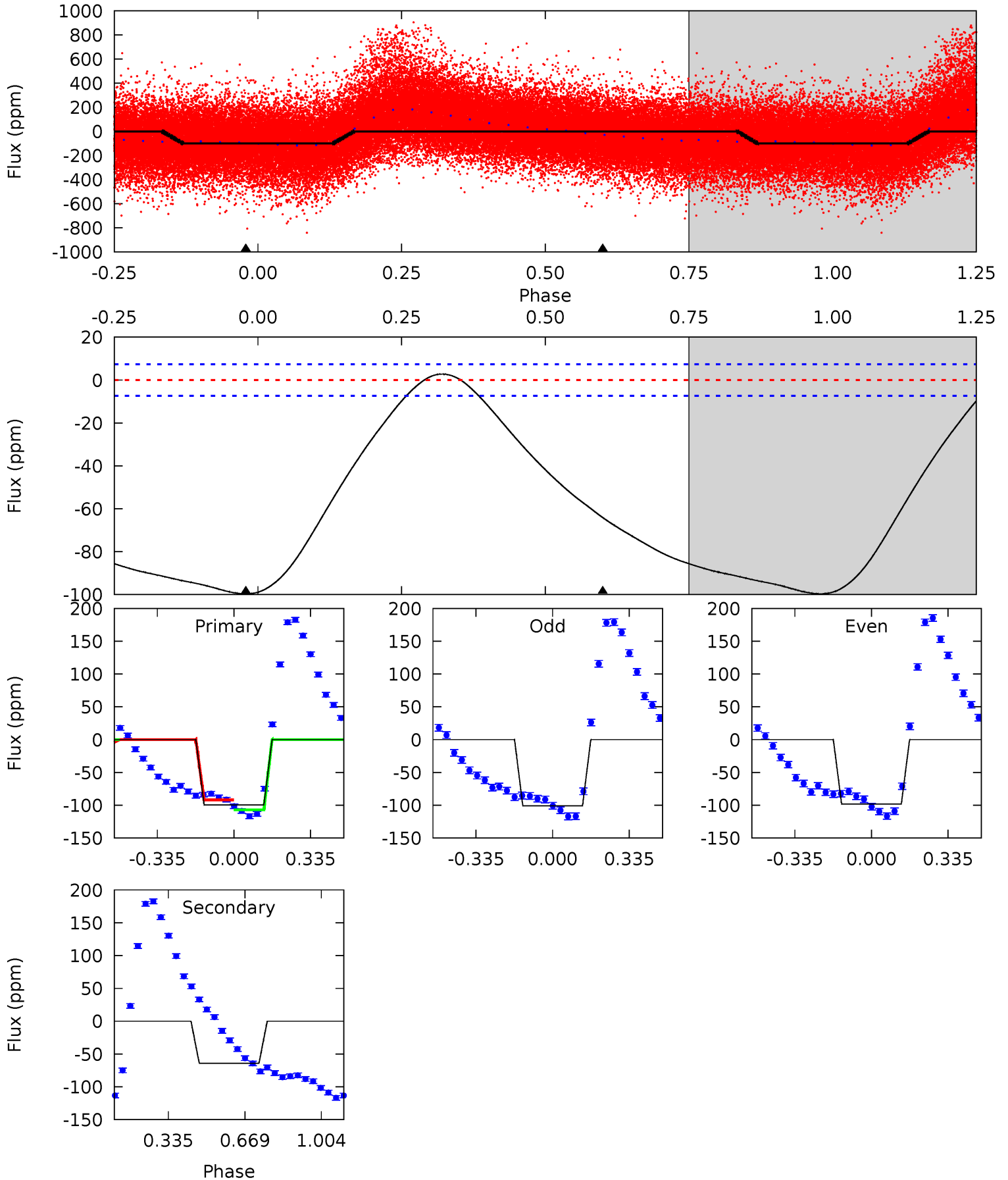
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007198734-01, P = 0.566808 Days, E = 131.069262 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
58.5	37.6	0	0	4.30	0.96	2.93	58.5	58.5	37.6	37.6	0.79	1.09	0.03	6.38



Stellar Parameters For KIC 007198734

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7075^{+197}_{-296}	$4.195^{+0.105}_{-0.195}$	$0.000^{+0.200}_{-0.350}$	$1.601^{+0.535}_{-0.288}$	$1.464^{+0.220}_{-0.220}$	$0.503^{+0.251}_{-0.266}$
	+3%/-4%	+3%/-5%	+inf%/-inf%	+33%/-18%	+15%/-15%	+50%/-53%
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 007198734-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$12.51^{+14.17}_{-8.23}$	4513^{+359}_{-271}	5036^{+31044}_{-33761}	$1.330^{+145.146}_{-102.745}$
Alt.	-64 ± 2	$13.22^{+13.94}_{-9.21}$	4514^{+385}_{-295}	-3807^{+7591}_{-278}	$0.046^{+0.464}_{-0.035}$

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

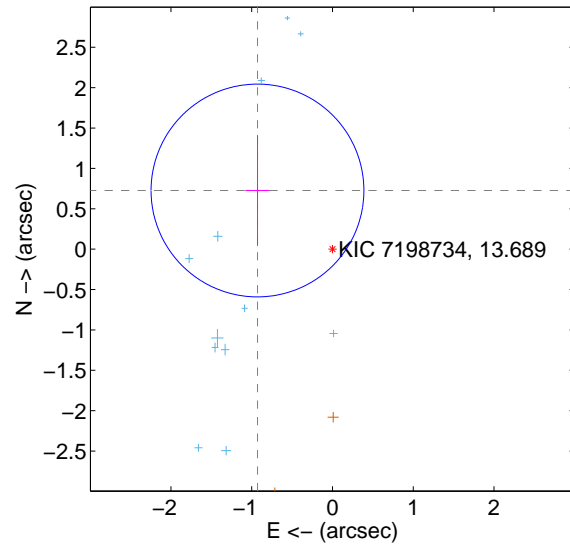
Supplemental centroid analysis for 007198734-01. Kepler magnitude: 13.69. Transit SNR -1.00

There are 13 quarters with good PRF difference image offsets

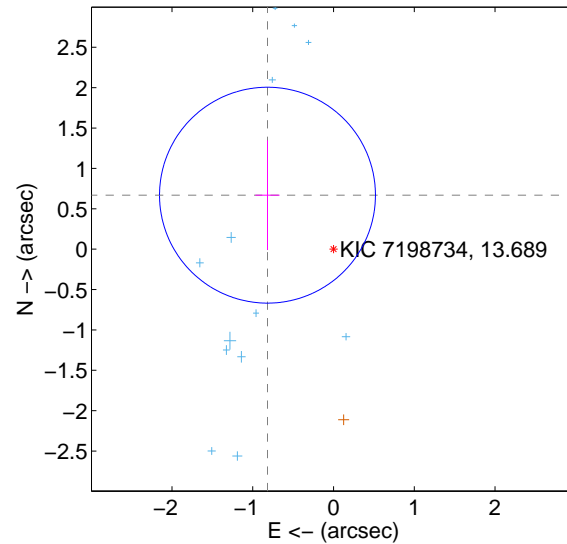
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.179 ± 0.439	2.68	0.929 ± 0.151	0.727 ± 0.686
PRF-fit source offset from KIC position	1.056 ± 0.446	2.37	0.818 ± 0.149	0.669 ± 0.680
photometric centroid source offset	0.30 ± 0.15	1.95	-0.20 ± 0.16	0.23 ± 0.15

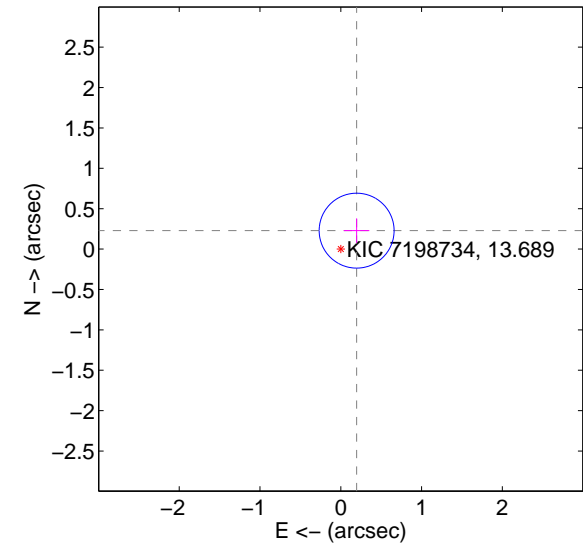
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

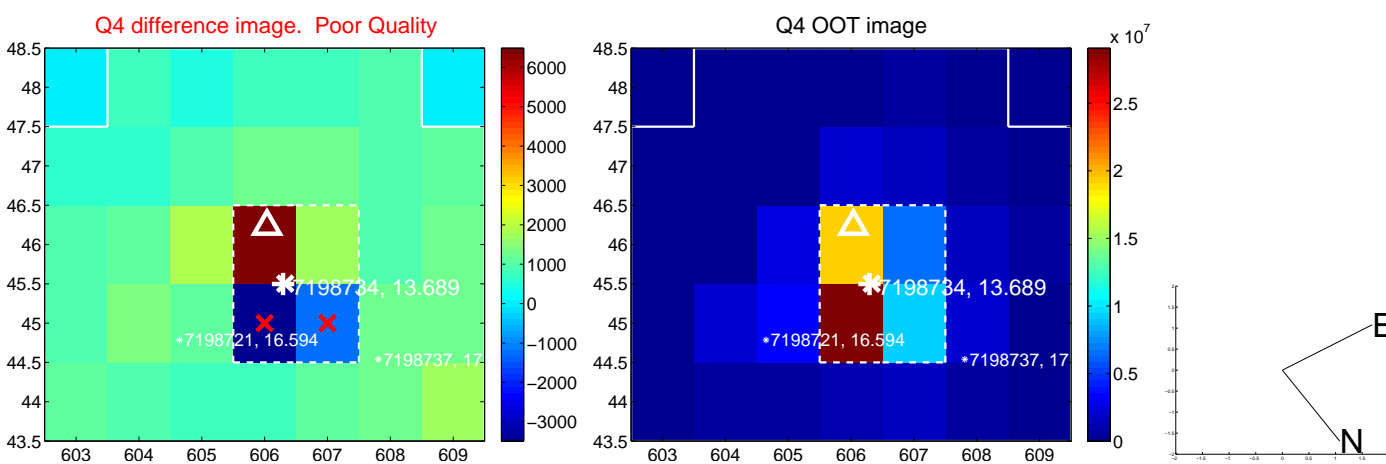
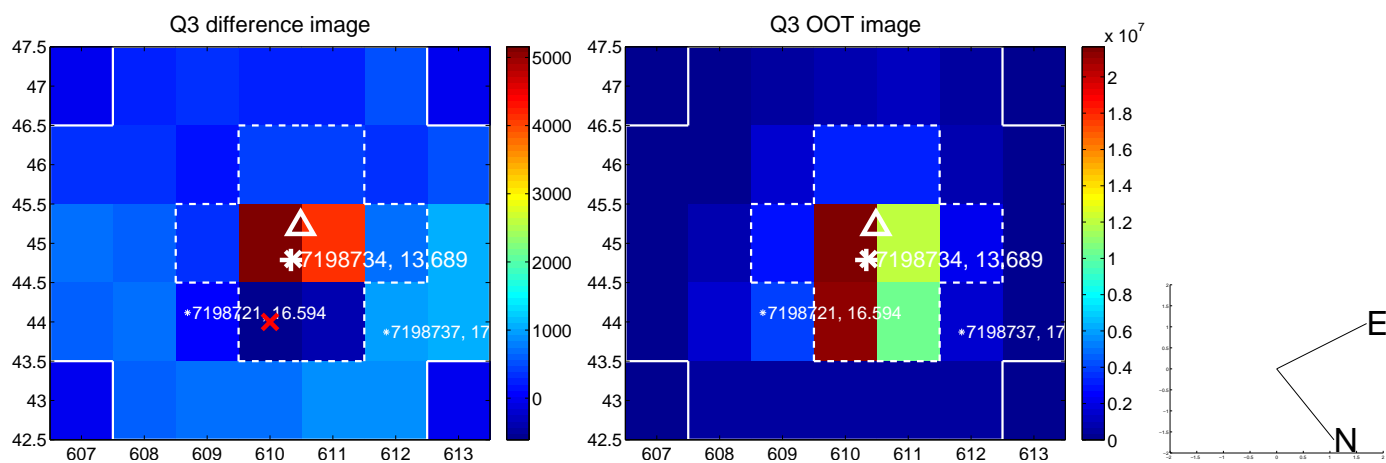
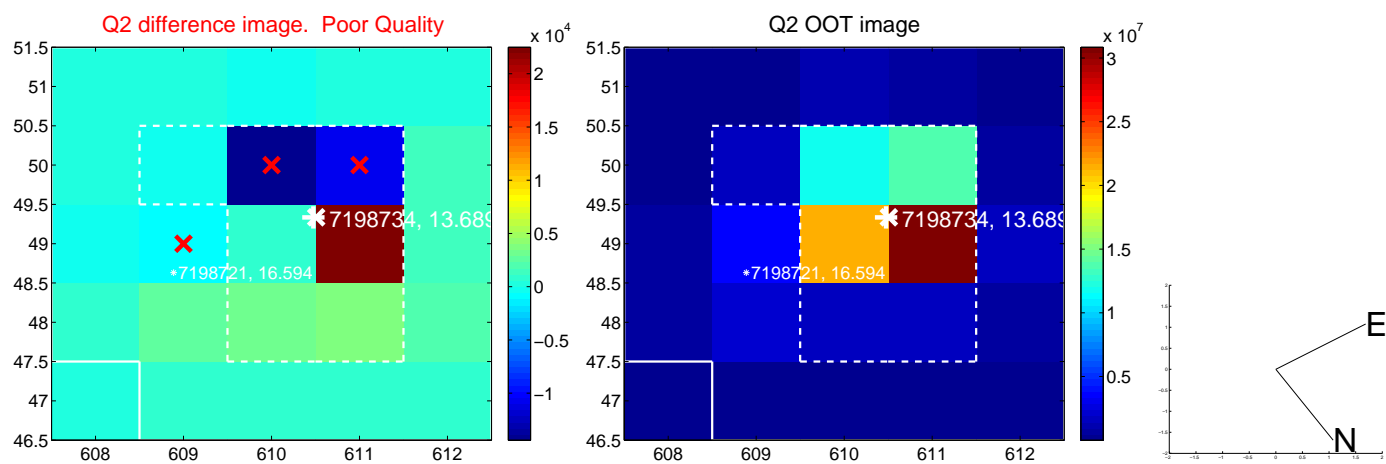
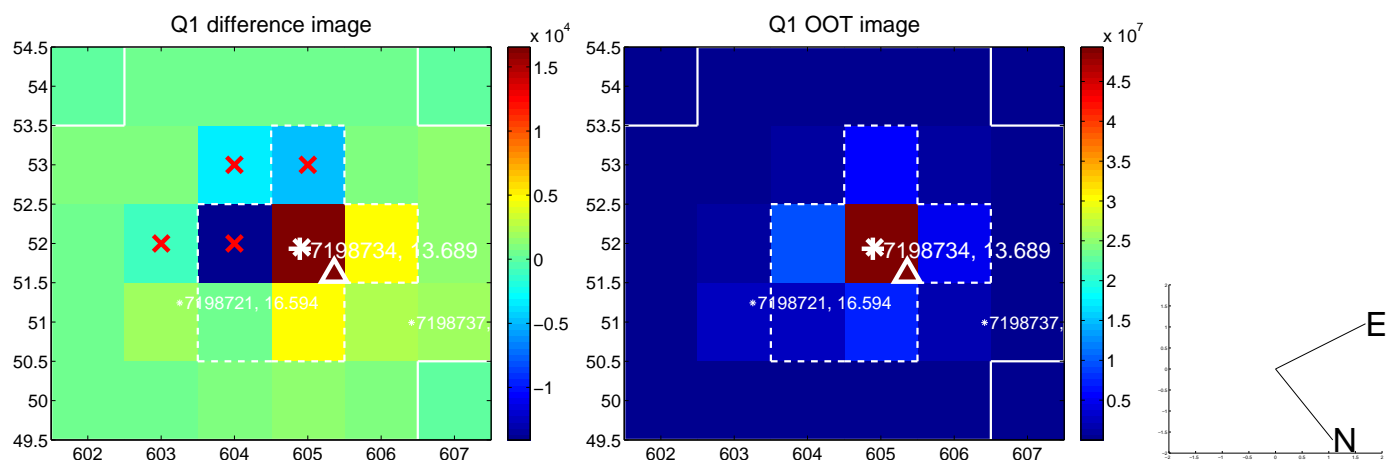


offset from photometric centroids

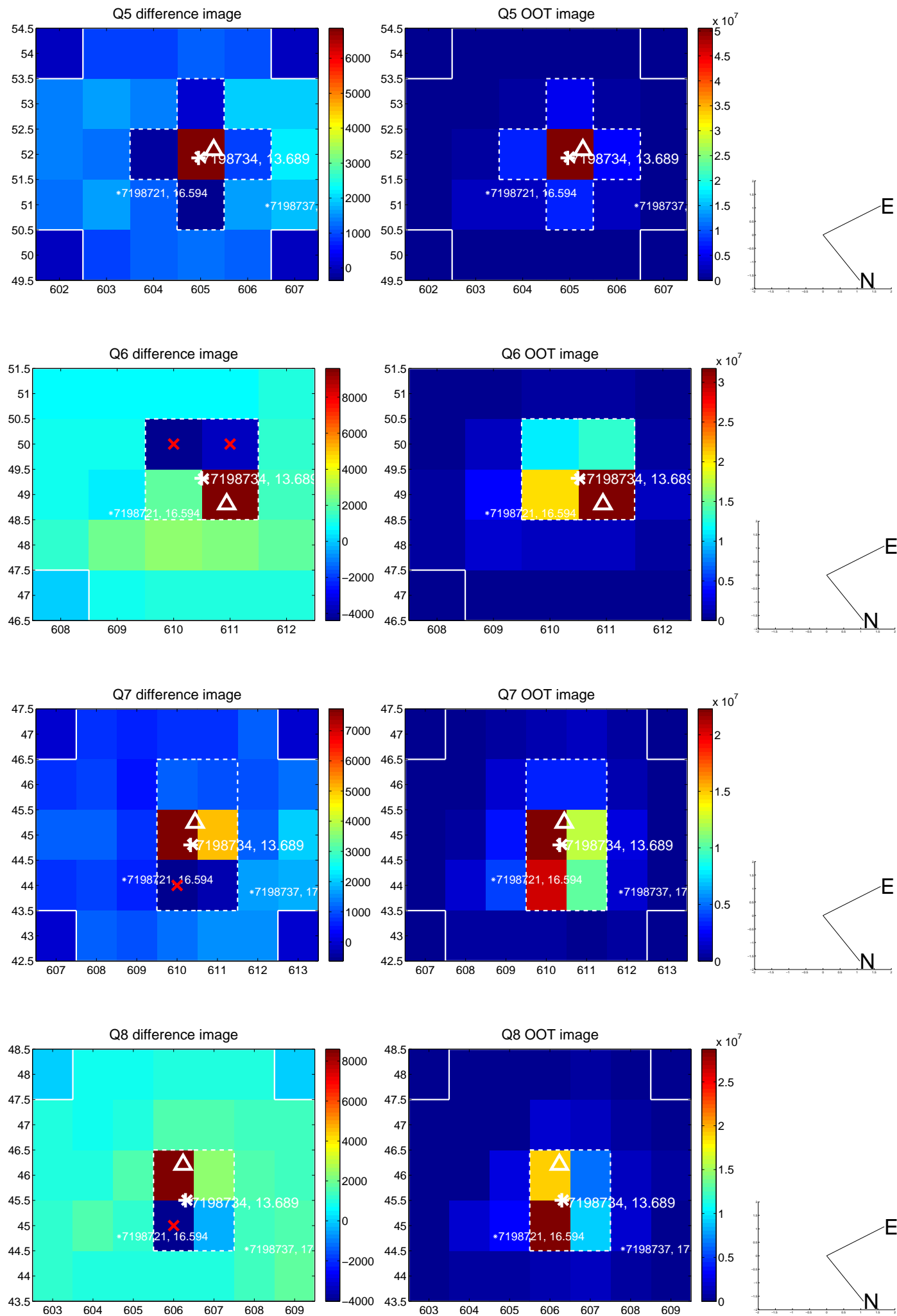


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

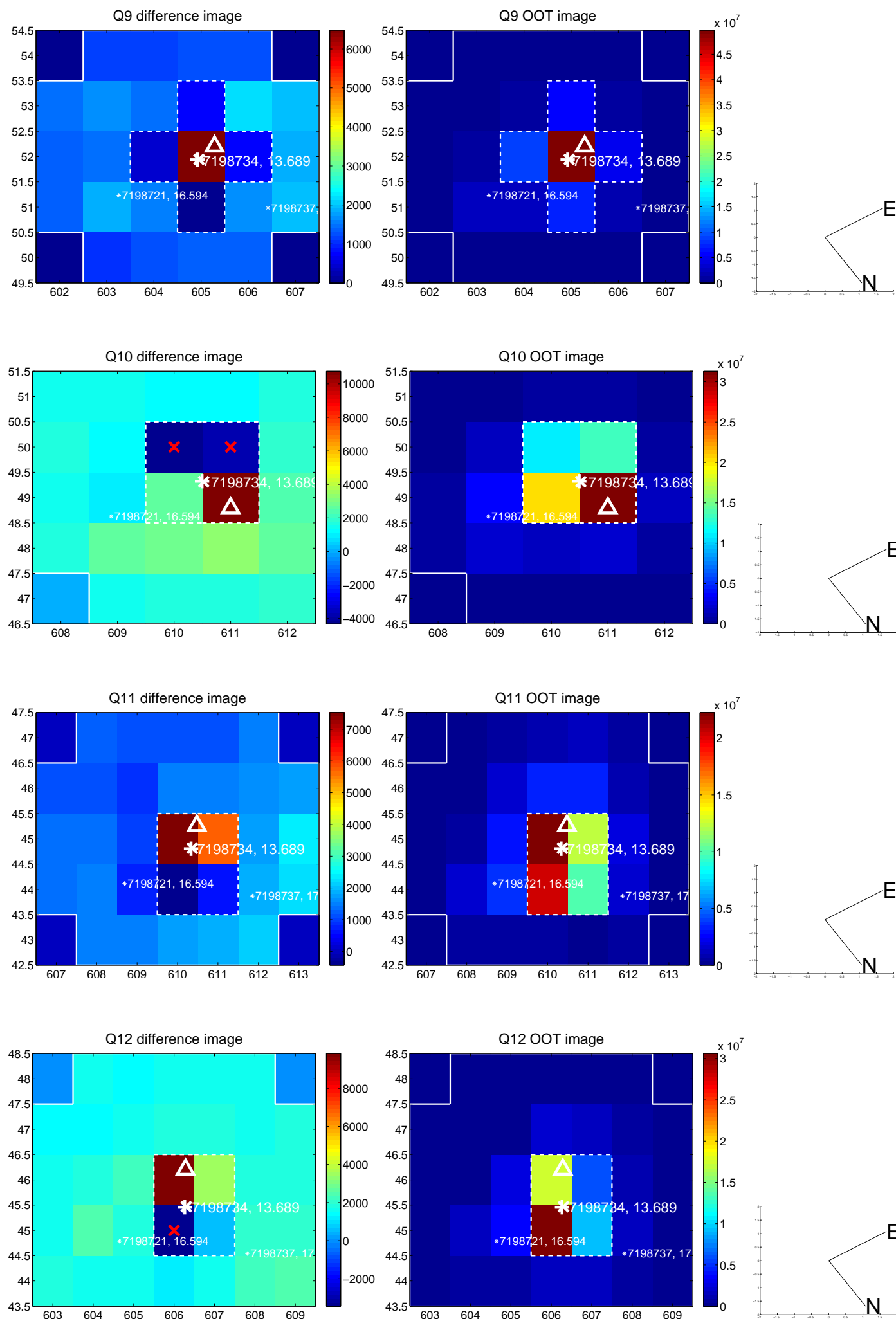
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



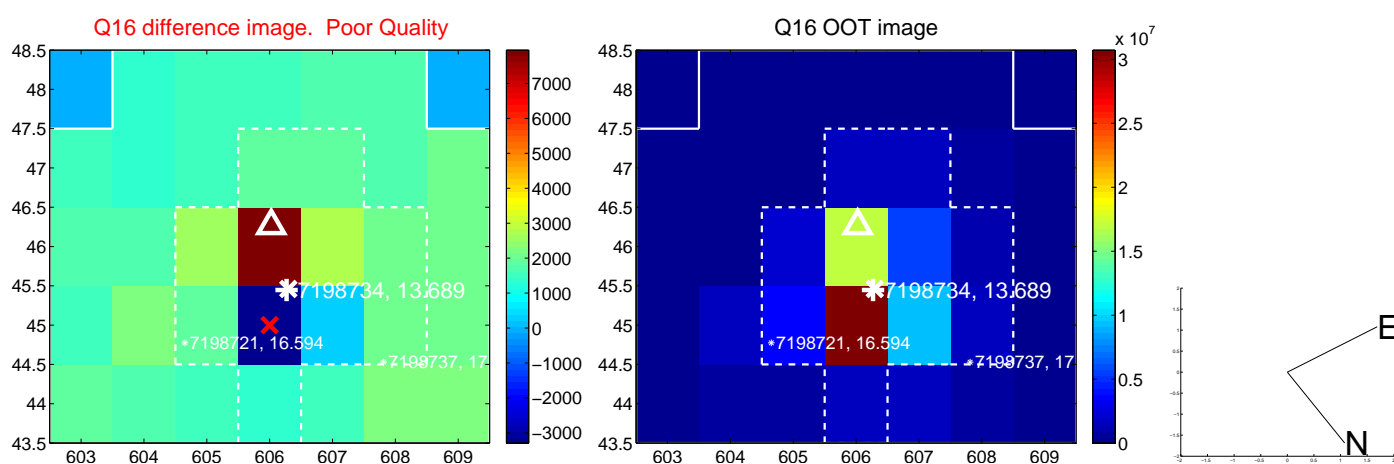
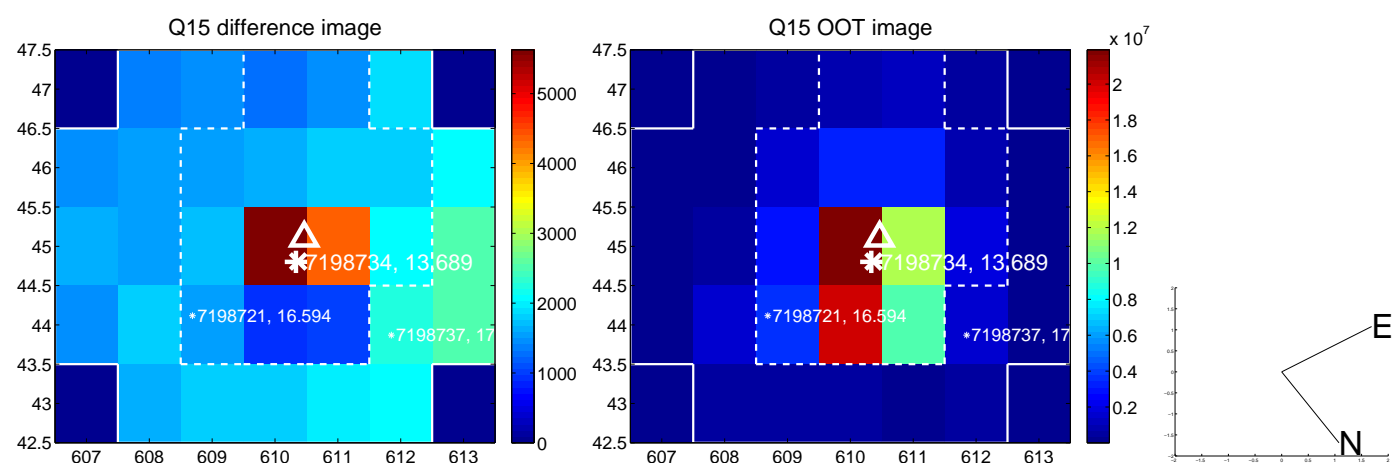
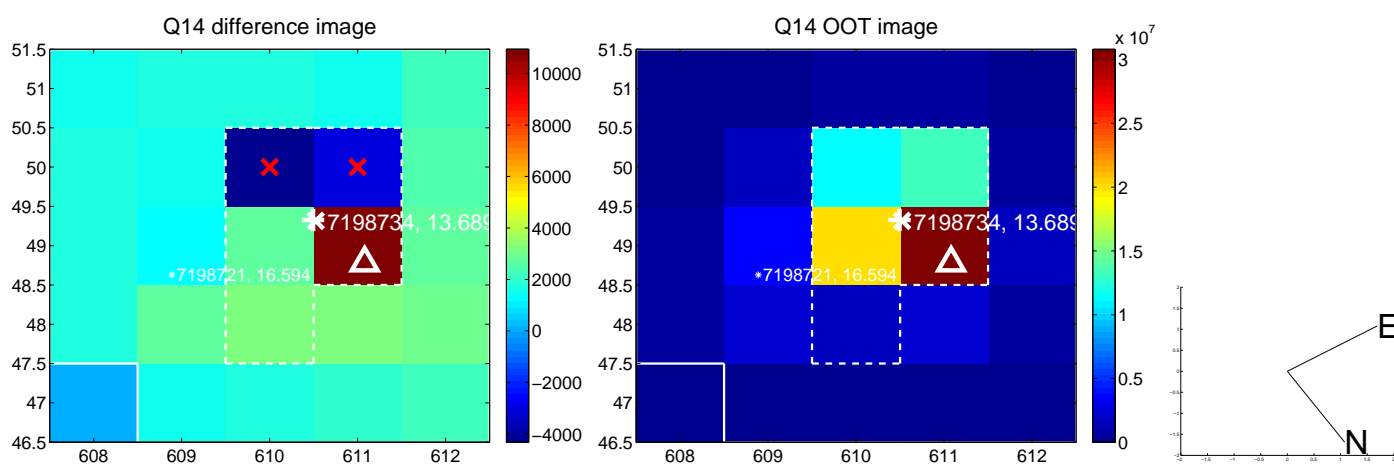
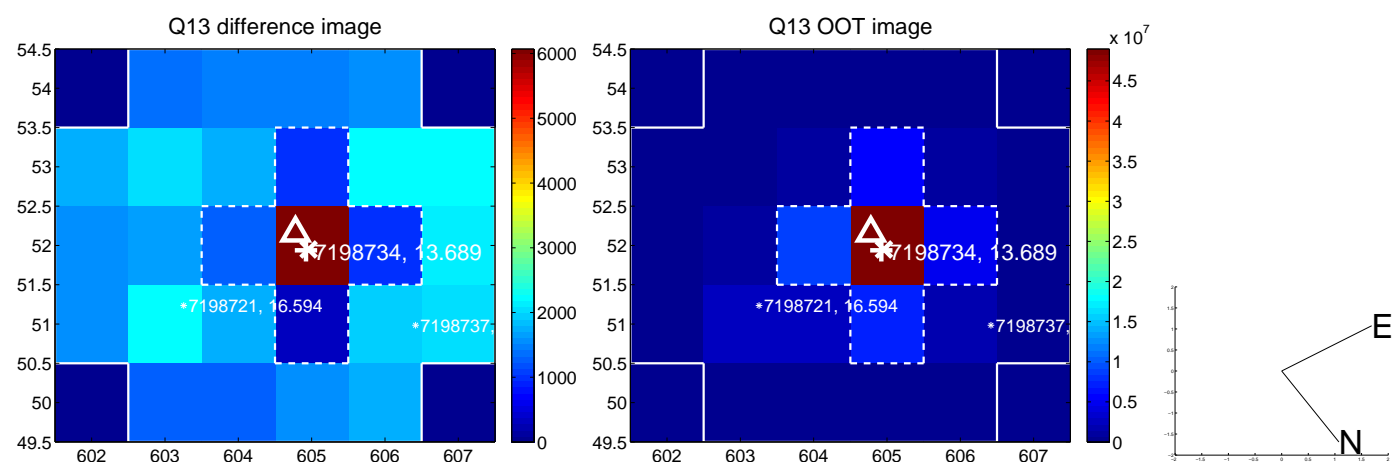
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



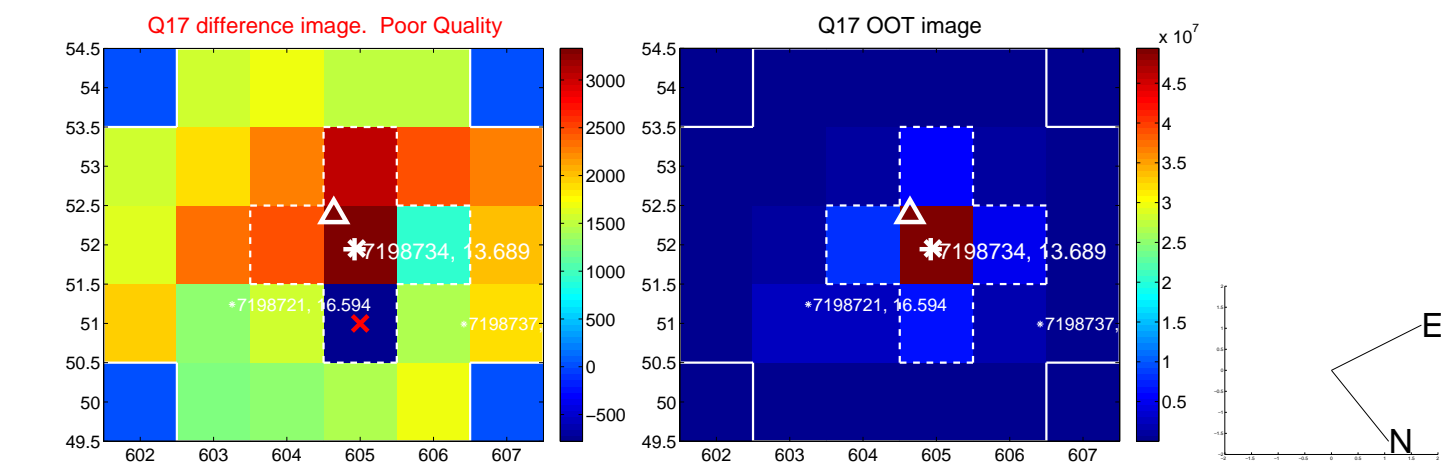
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



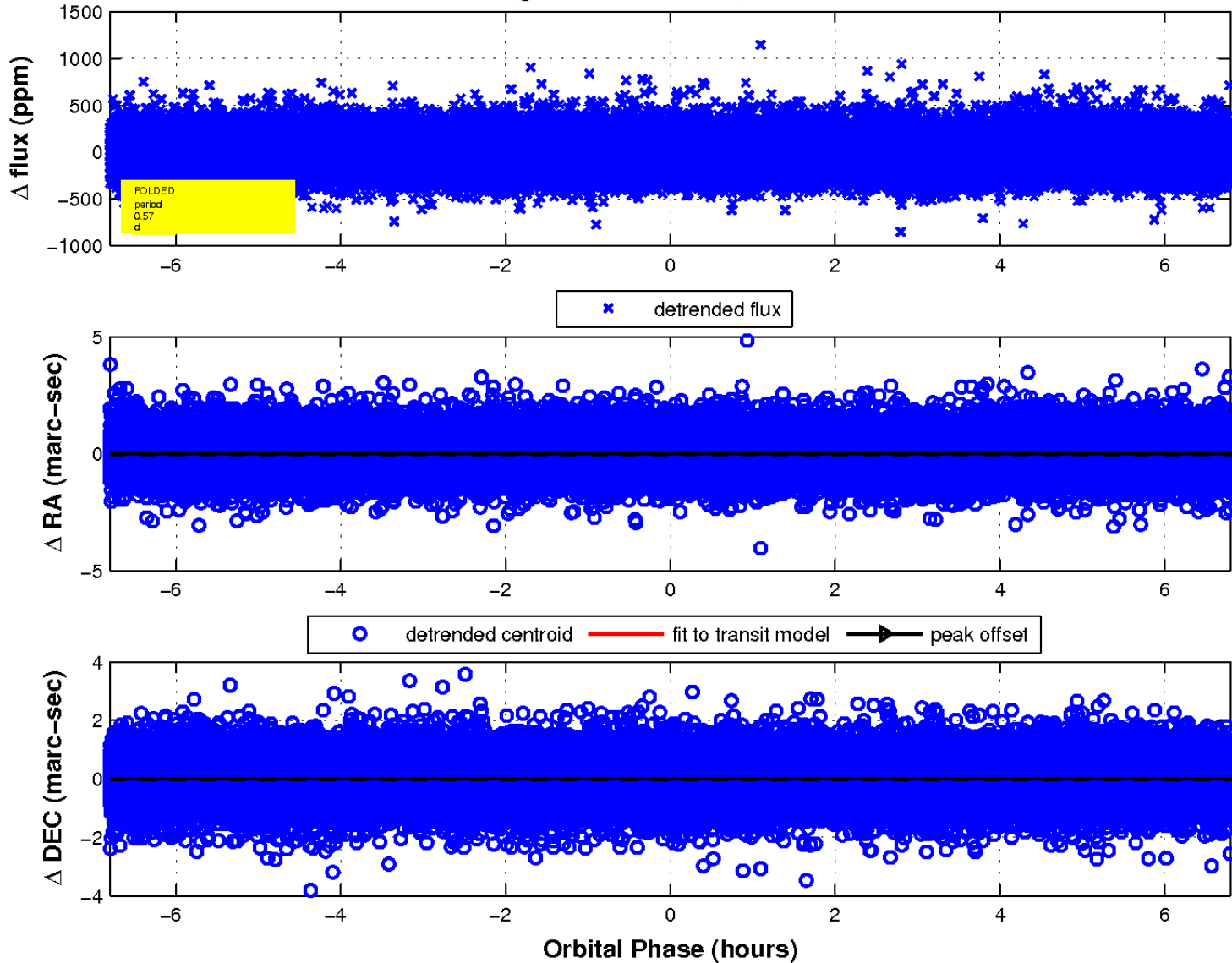
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

