

KIC 011773625

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})
011773625-01	OBS	7479.01	7.197016	133.412943	44.7	4.361	8.2	8.8	1.57	5530	1.14	389.44

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011773625-01	OBS	PC	0.88	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

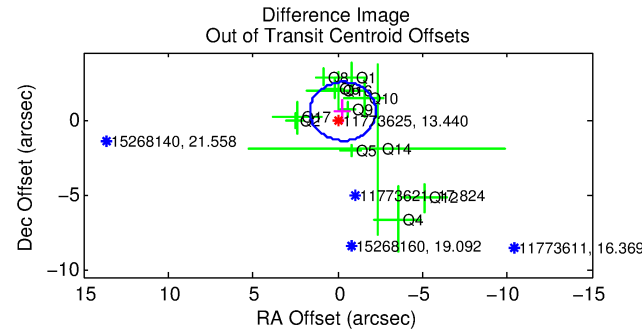
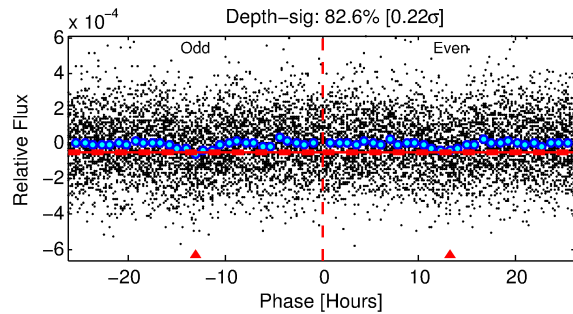
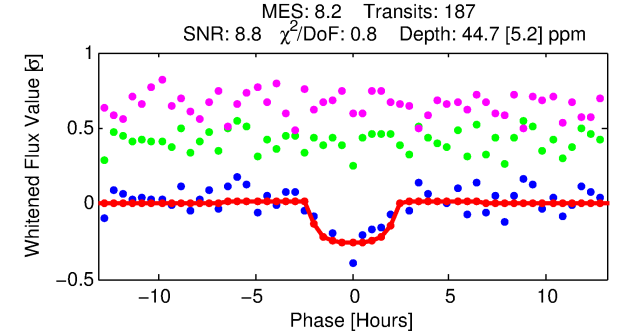
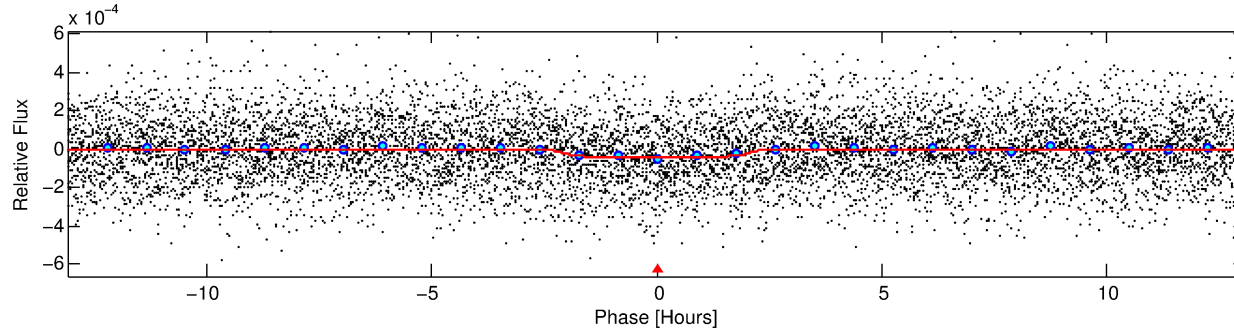
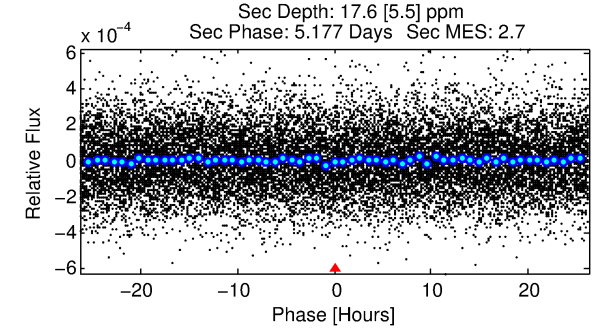
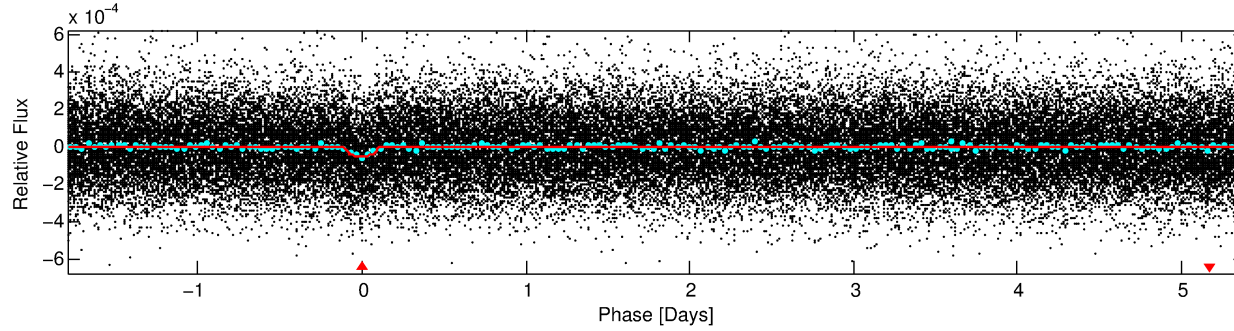
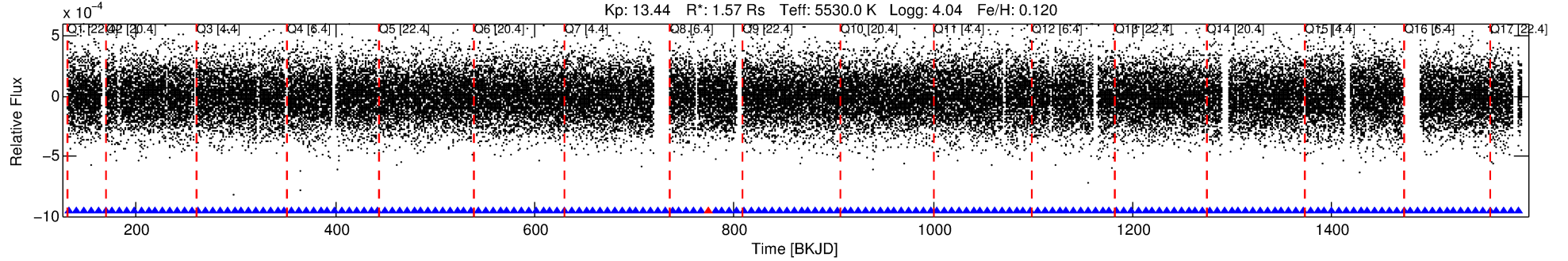
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011773625-01

No Significant Match Found

DV One-Page Summary

KIC: 11773625 Candidate: 1 of 1 Period: 7.197 d
KOI: K07479.01 Corr: 0.899



DV Fit Results:

Period = 7.19702 [0.00008] d
Epoch = 133.4129 [0.0088] BKJD
Rp/R* = 0.0066 [0.0044]
a/R* = 8.61 [23.30]
b = 0.74 [1.69]
Seff = 389.44 [146.54]
Teq = 1133 [107] K
Rp = 1.14 [0.81] Re
a = 0.0731 [0.0171] AU
Ag = 39.54 [56.28] [0.68σ]
Teffp = 4392 [1510] K [2.15σ]

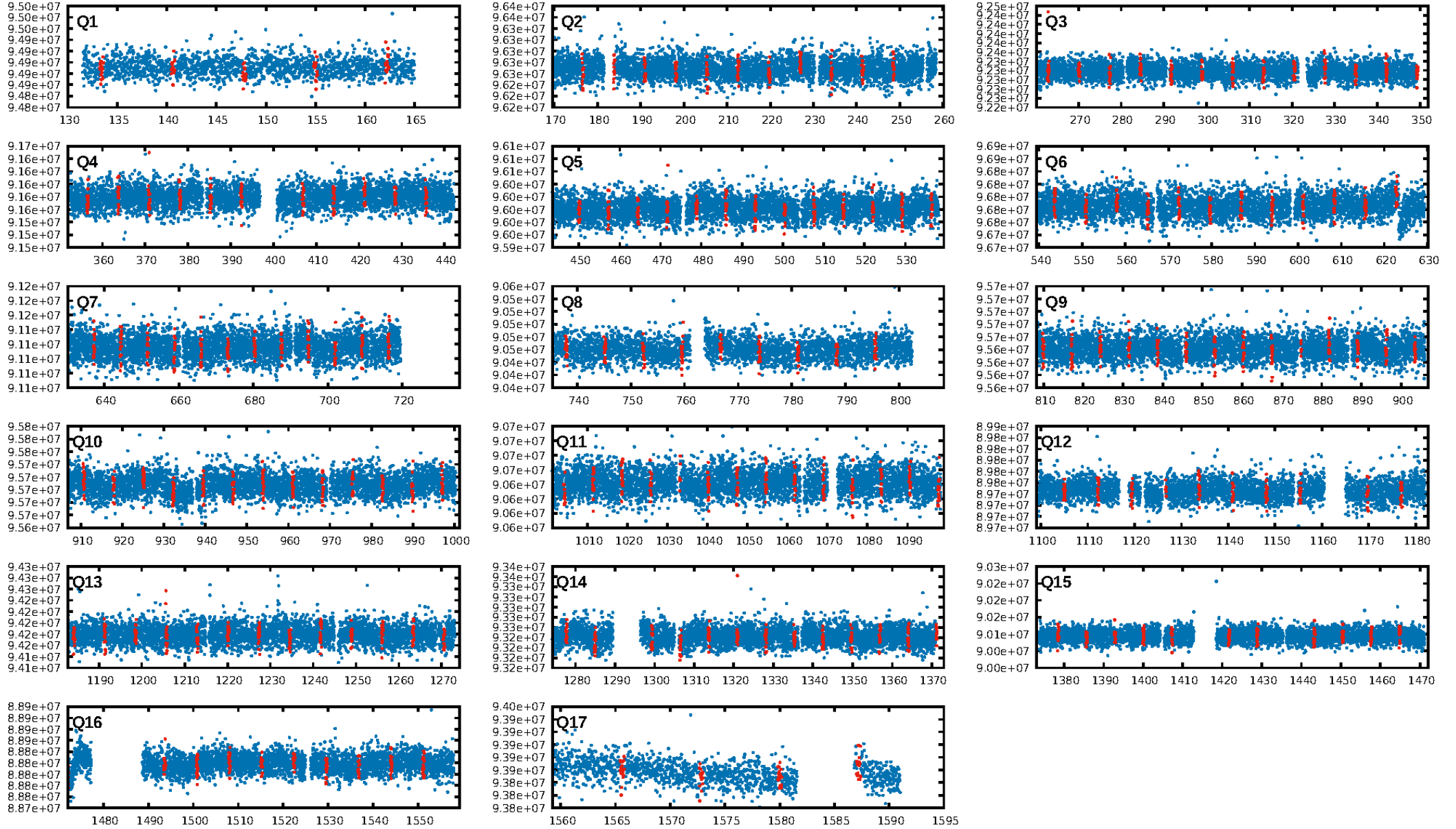
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.05e-16
RollingBand-fgt: 0.99 [177/178]
GhostDiagnostic-chr: 8.459
Centroid-sig: 2.5%
Centroid-so: 2.377 arcsec [1.60σ]
OotOffset-rm: 0.634 arcsec [0.98σ]
KicOffset-rm: 0.849 arcsec [1.24σ]
OotOffset-st: 4/0/4/4 [12]
KicOffset-st: 4/0/4/4 [12]
DiffImageQuality-fgm: 0.33 [4/12]
DiffImageOverlap-fno: 1.00 [17/17]

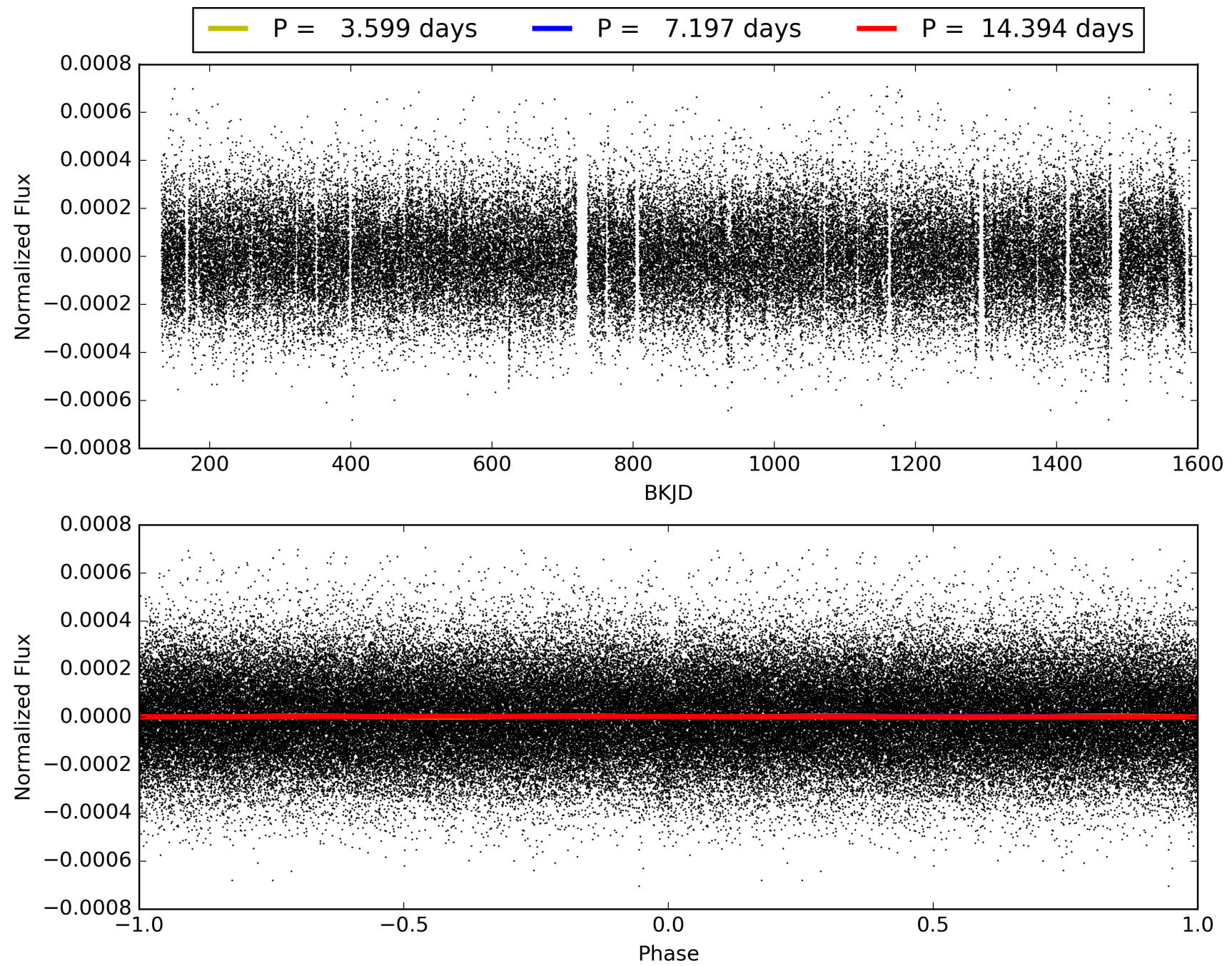
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:35:40 Z

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

TCE 011773625-01, PDC Light Curves

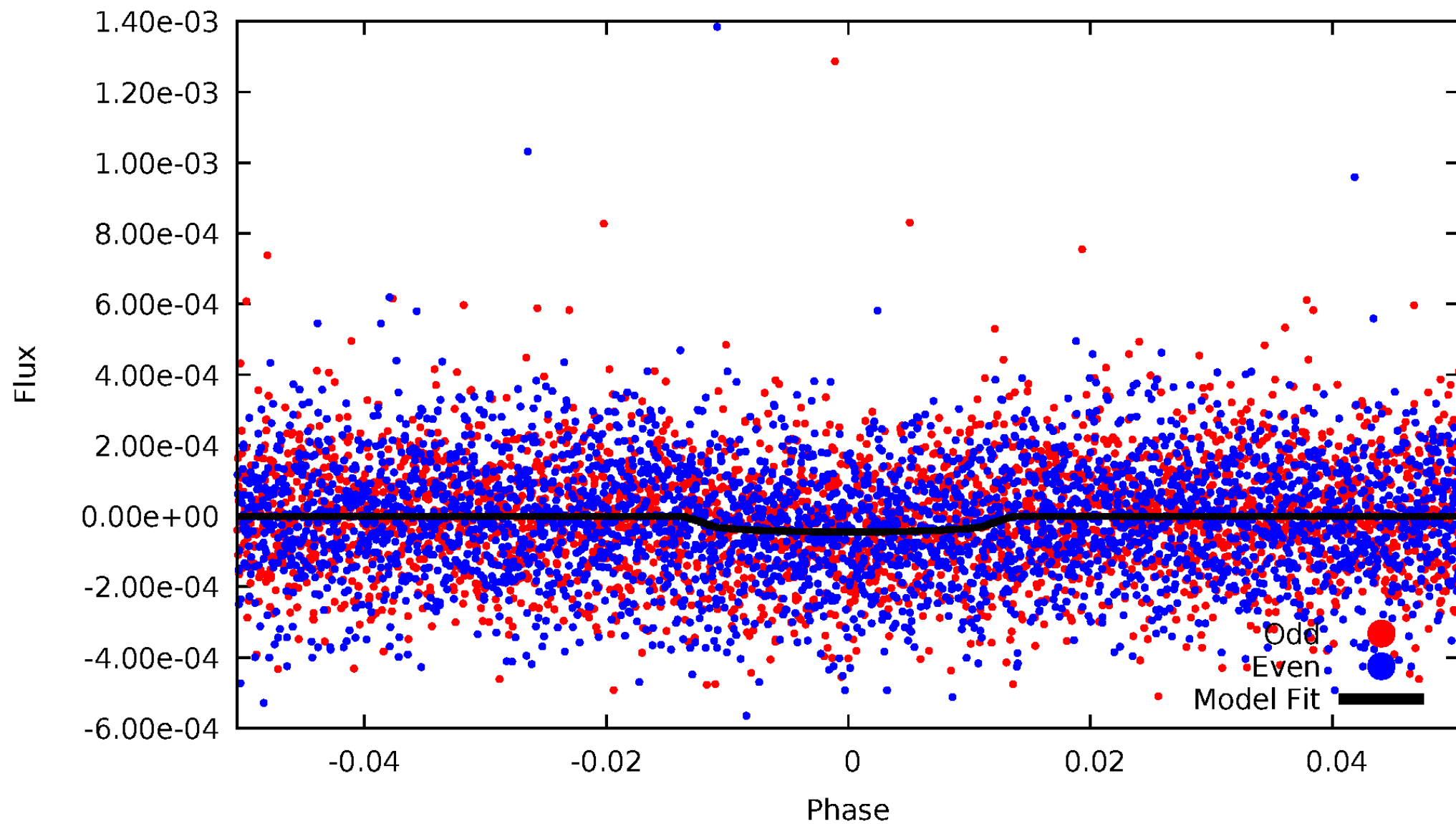


TCE 011773625-01



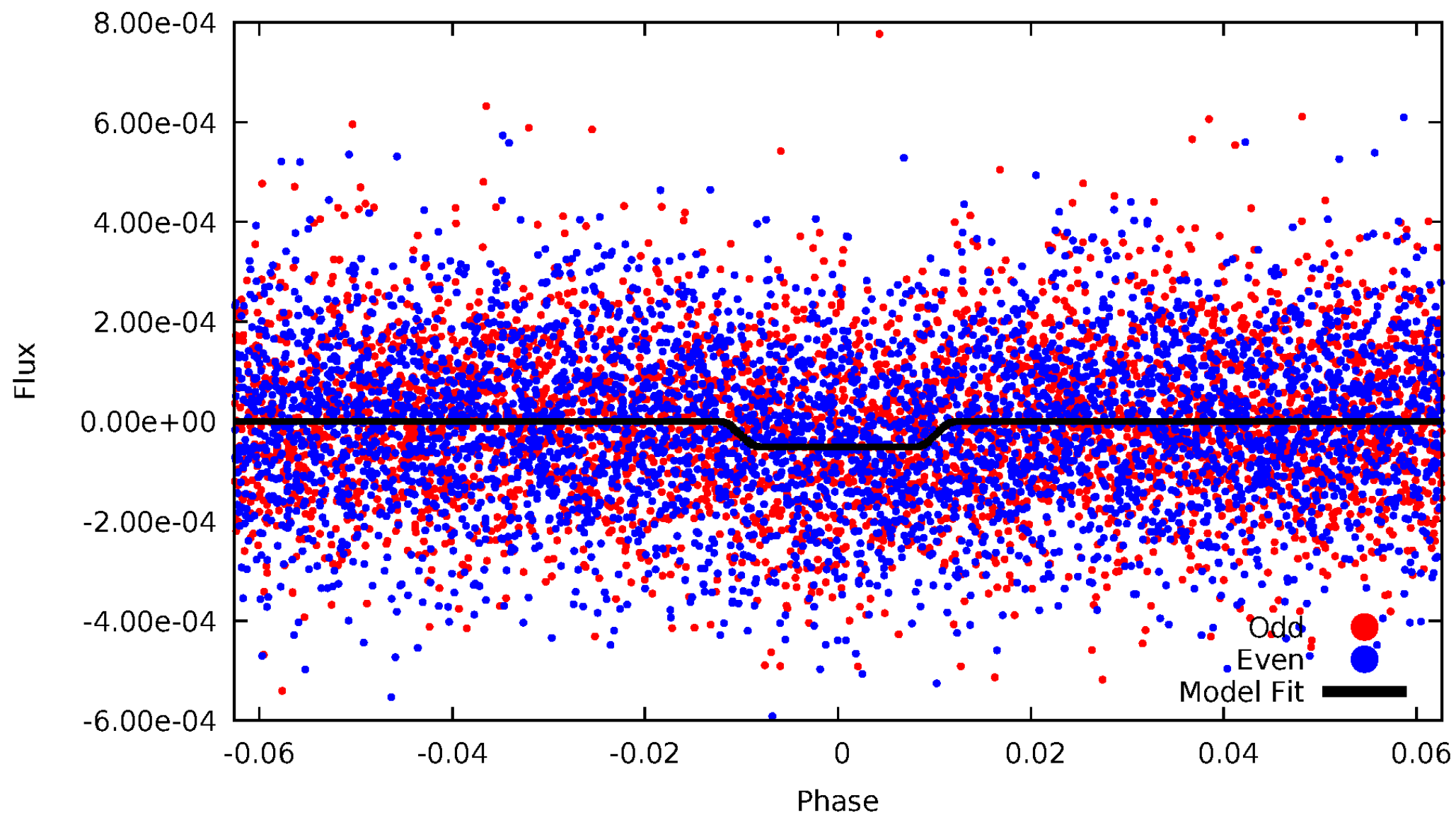
DV Odd/Even

TCE 011773625-01



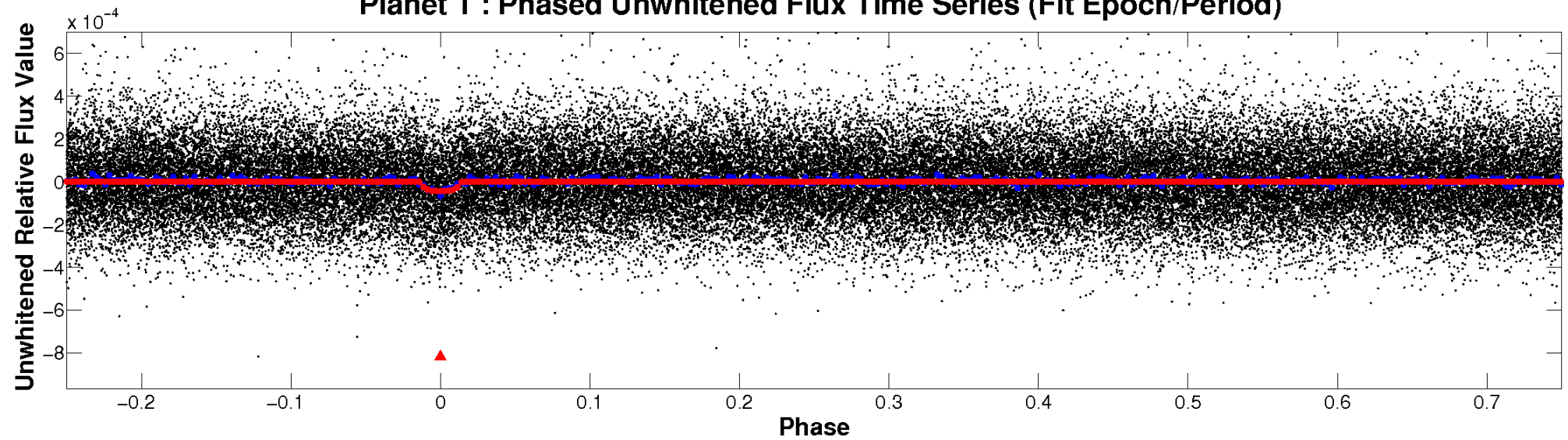
ALT Odd/Even

TCE 011773625-01

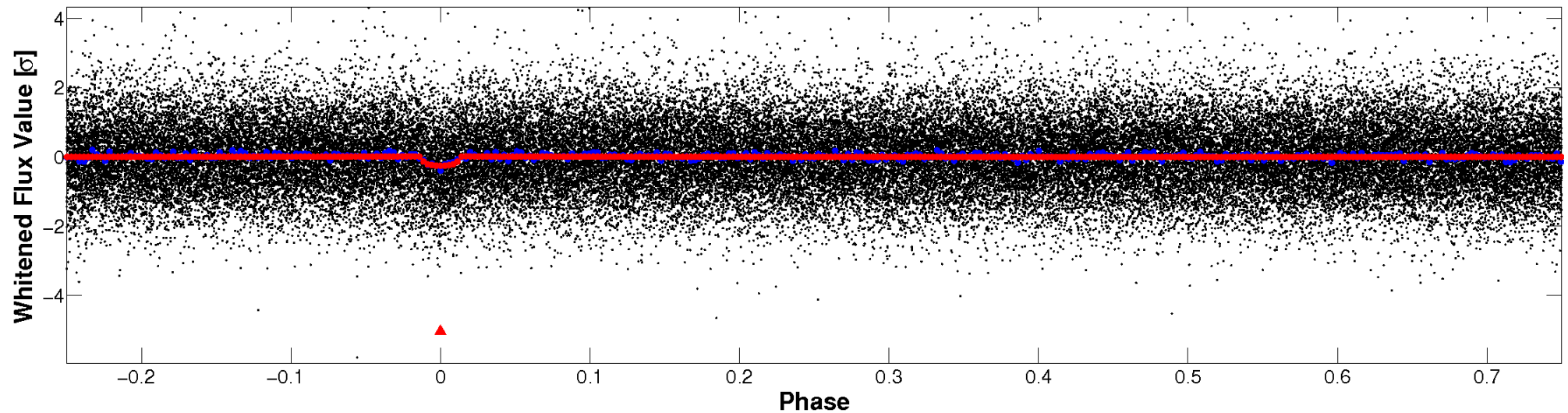


Non-Whitened Vs. Whitened Light Curve

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

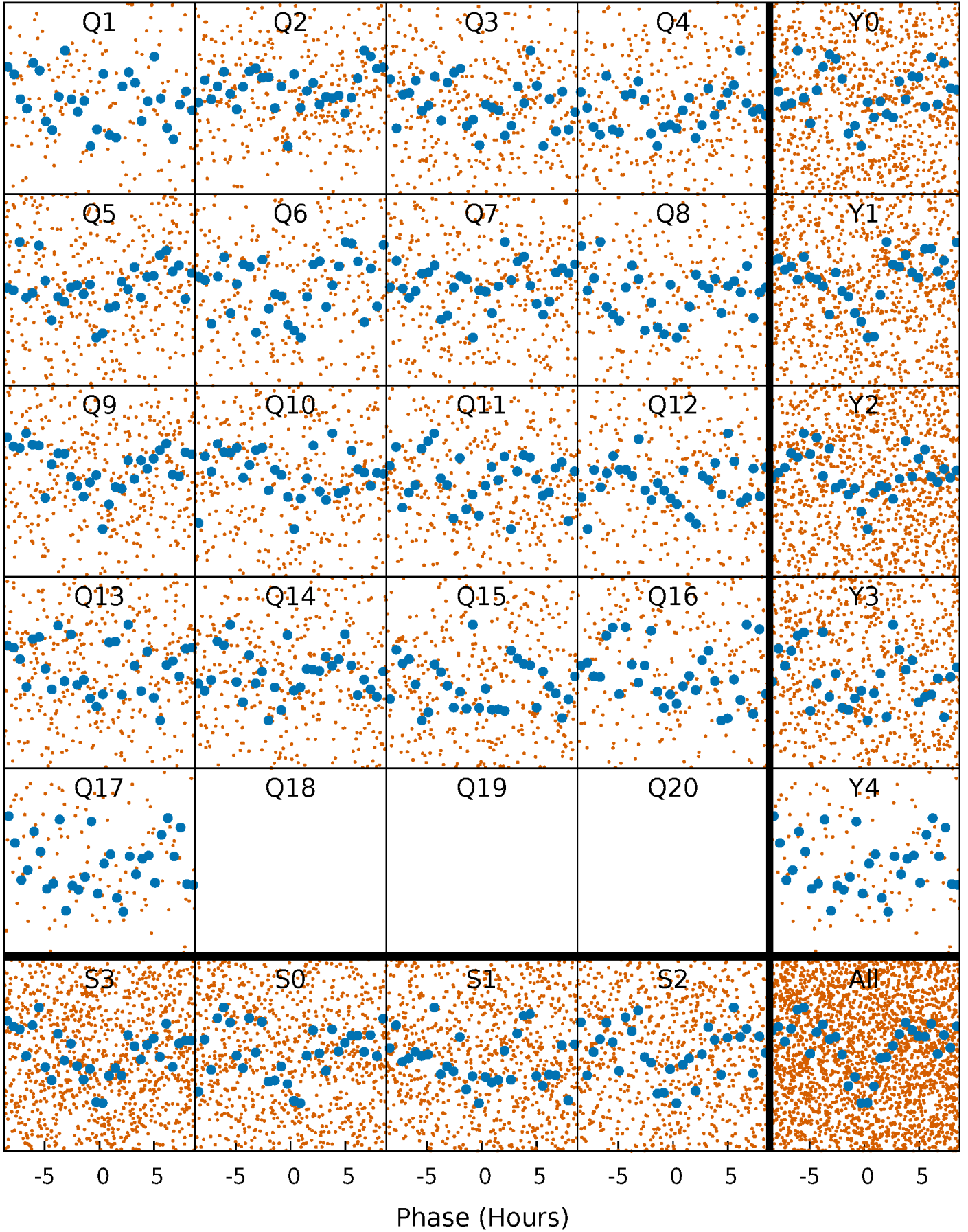


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



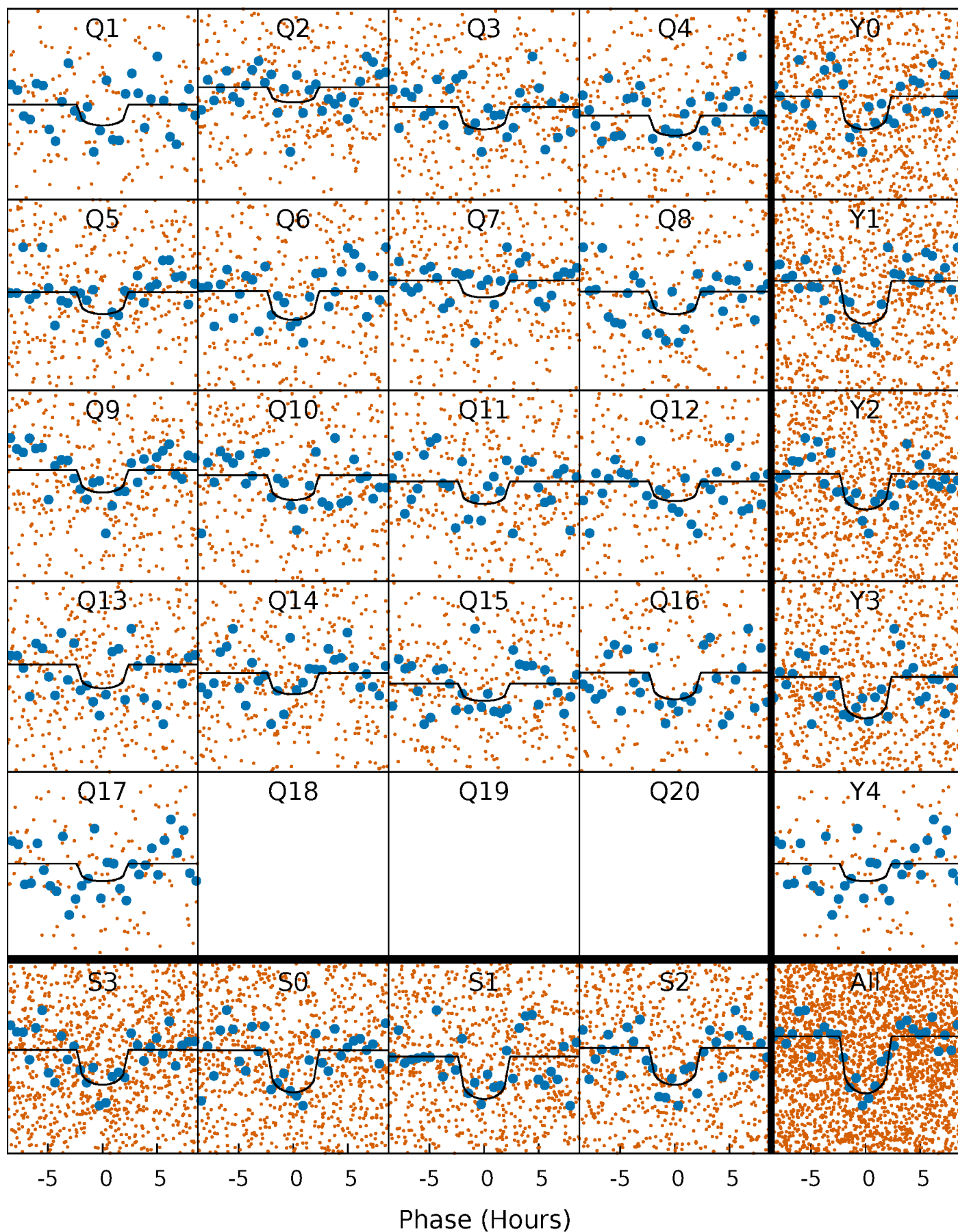
PDC Quarter-Phased Transit Curves

TCE 011773625-01 P= 7.197016 Days $T_0=133.412943$ (BKJD)



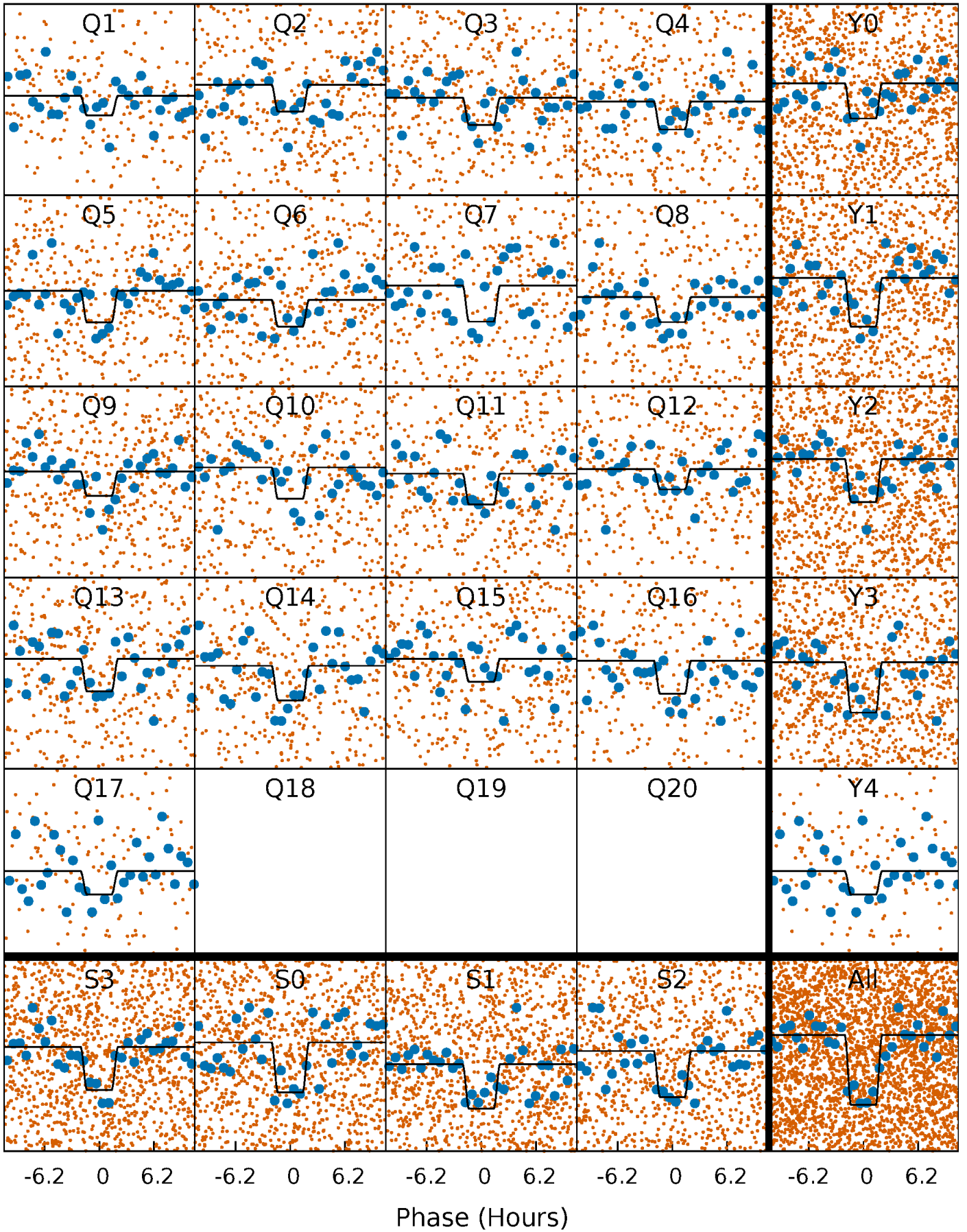
DV Quarter-Phased Transit Curves

TCE 011773625-01 P= 7.197016 Days $T_0=133.412943$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

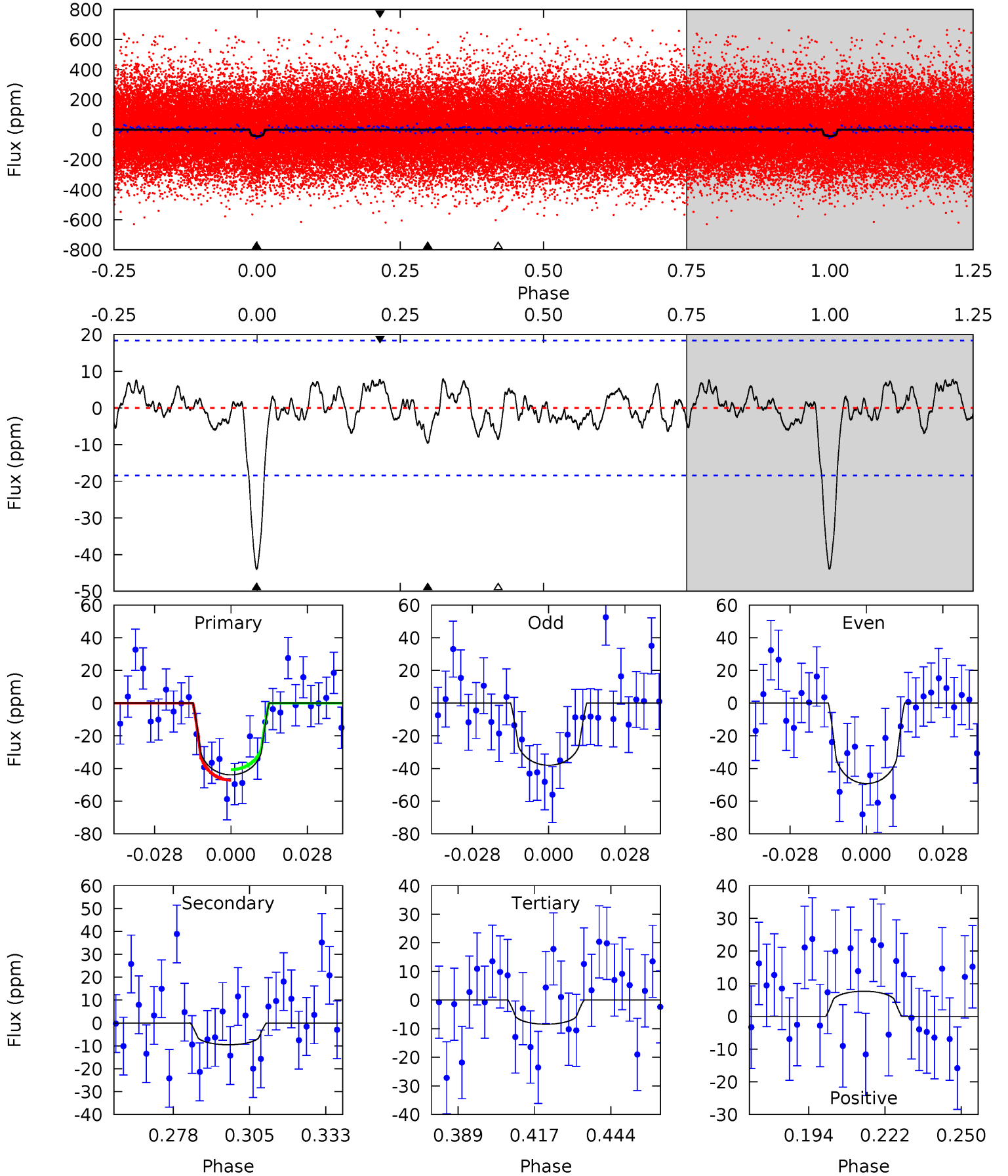
TCE 011773625-01 P= 7.196765 Days $T_0=133.426876$ (BKJD)



DV Model-Shift Uniqueness Test

011773625-01, P = 7.197016 Days, E = 126.215927 Days

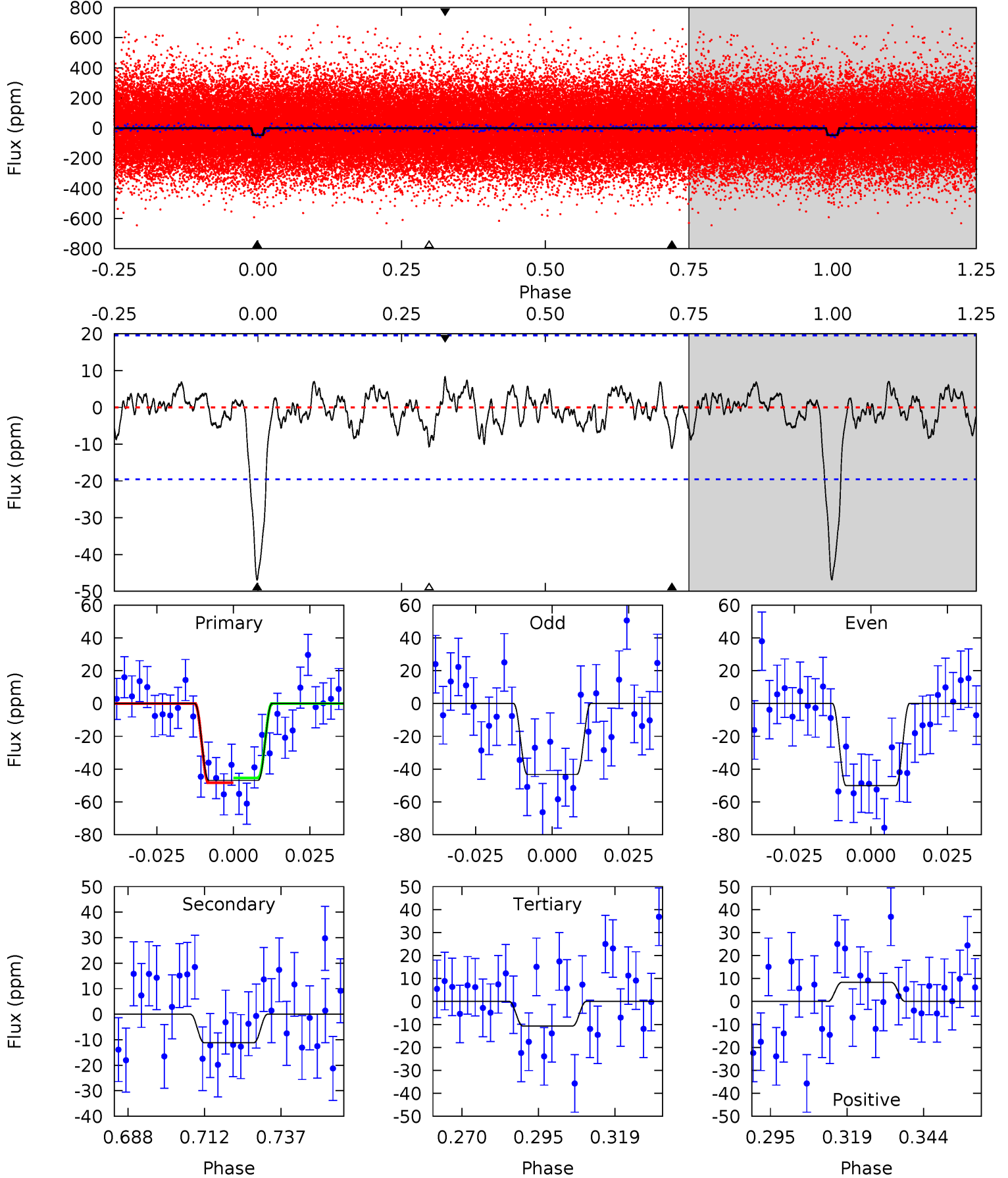
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	2.50	2.21	2.02	4.83	2.20	0.95	9.30	9.50	0.29	0.48	1.47	0.94	0.15	0.85



Alt Model-Shift Uniqueness Test

011773625-01, P = 7.196765 Days, E = 126.230111 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	2.77	2.65	2.06	4.85	2.25	0.90	8.97	9.56	0.12	0.70	0.85	0.92	0.15	0.37



Stellar Parameters For KIC 011773625

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5530^{+82}_{-66}	$4.045^{+0.217}_{-0.093}$	$0.120^{+0.150}_{-0.100}$	$1.575^{+0.259}_{-0.389}$	$1.004^{+0.084}_{-0.076}$	$0.362^{+0.408}_{-0.107}$
	+1%/-1%	+5%/-2%	+125%/-83%	+16%/-25%	+8%/-8%	+113%/-30%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 011773625-01 / KOI 7479.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-10 ± 4	$1.15^{+0.76}_{-0.68}$	1576^{+69}_{-100}	3970^{+1621}_{-662}	21^{+95}_{-14}
Alt.	-11 ± 4	$1.27^{+0.77}_{-0.67}$	1565^{+74}_{-100}	3927^{+1393}_{-635}	20^{+73}_{-13}

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

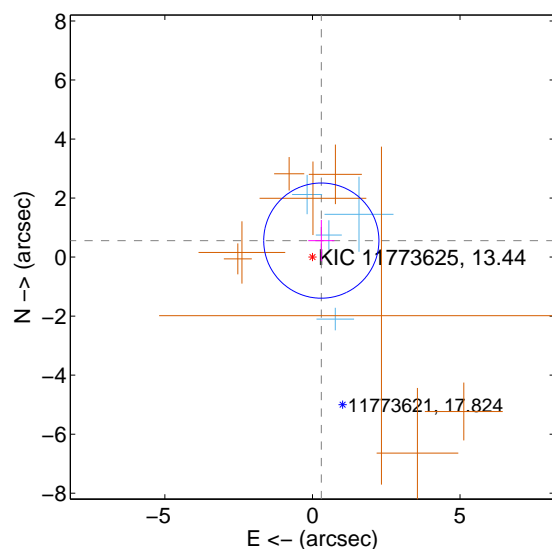
Supplemental centroid analysis for 011773625-01. Kepler magnitude: 13.44. Transit SNR 8.77

There are 4 quarters with good PRF difference image offsets

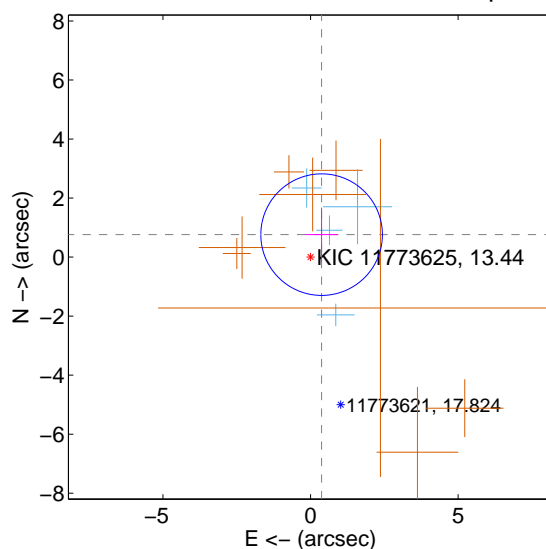
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.634 ± 0.651	0.98	-0.301 ± 0.444	0.559 ± 0.699
PRF-fit source offset from KIC position	0.849 ± 0.687	1.24	-0.375 ± 0.562	0.761 ± 0.917
photometric centroid source offset	2.38 ± 1.49	1.60	-0.98 ± 1.36	2.17 ± 1.51

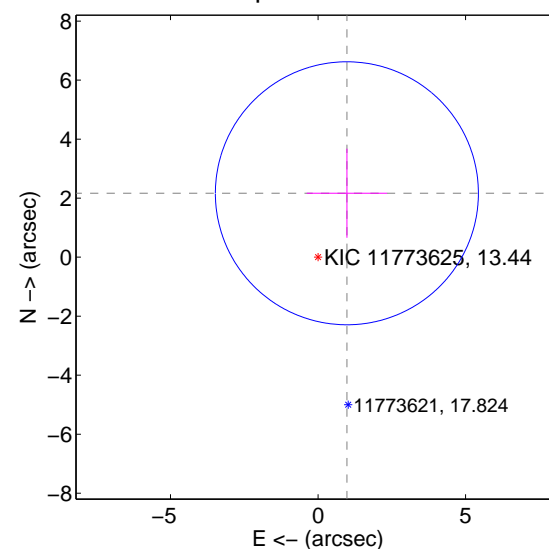
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

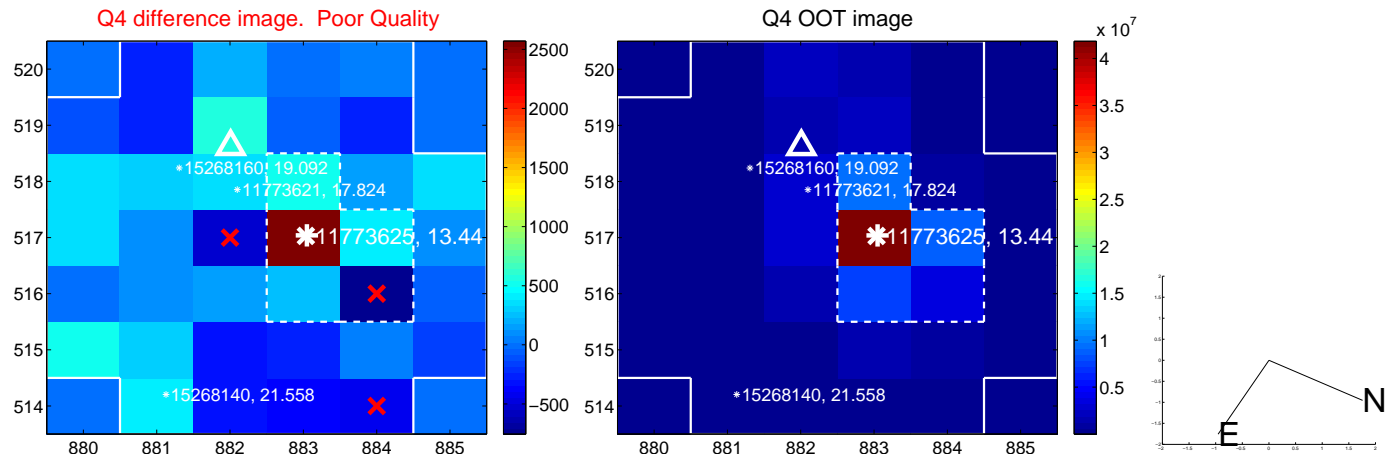
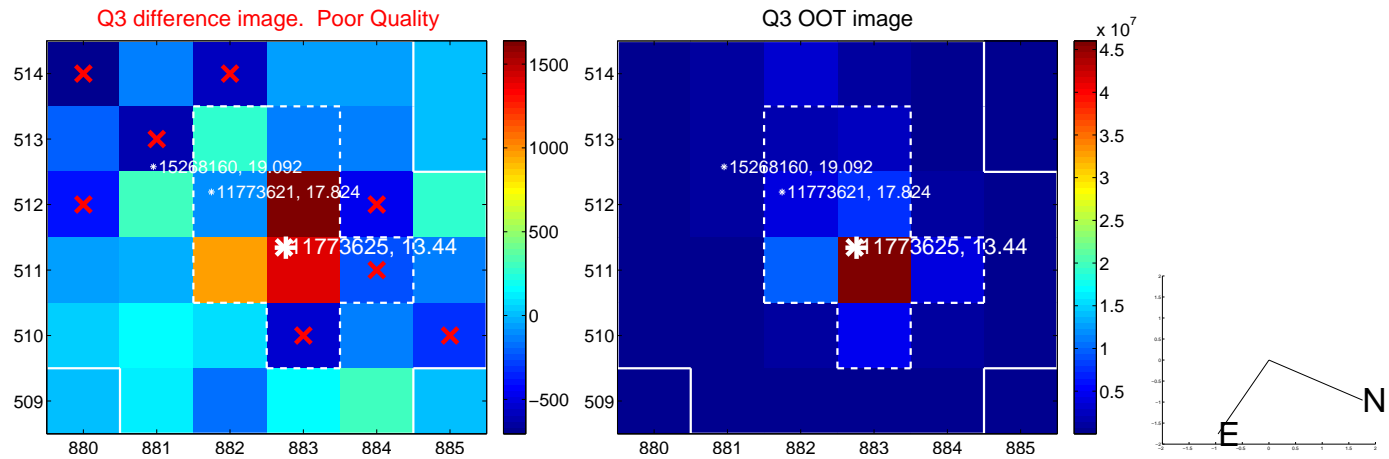
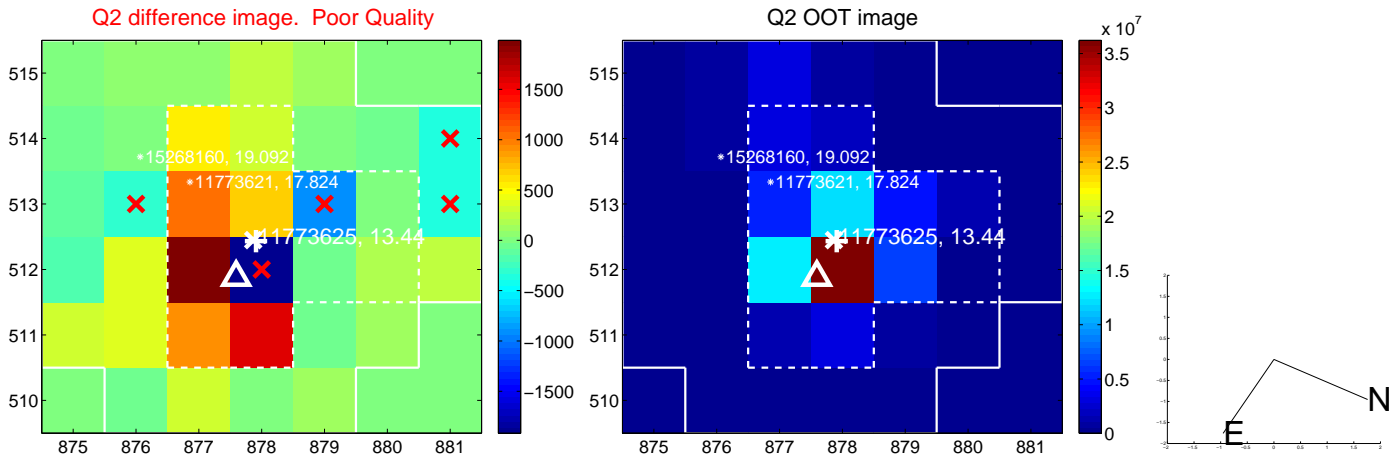
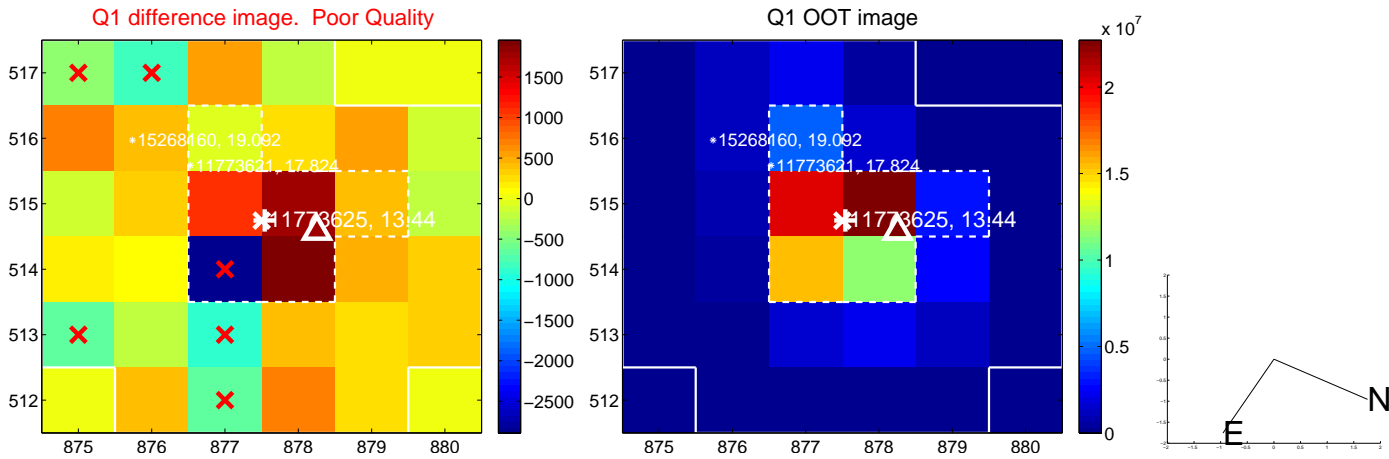


offset from photometric centroids

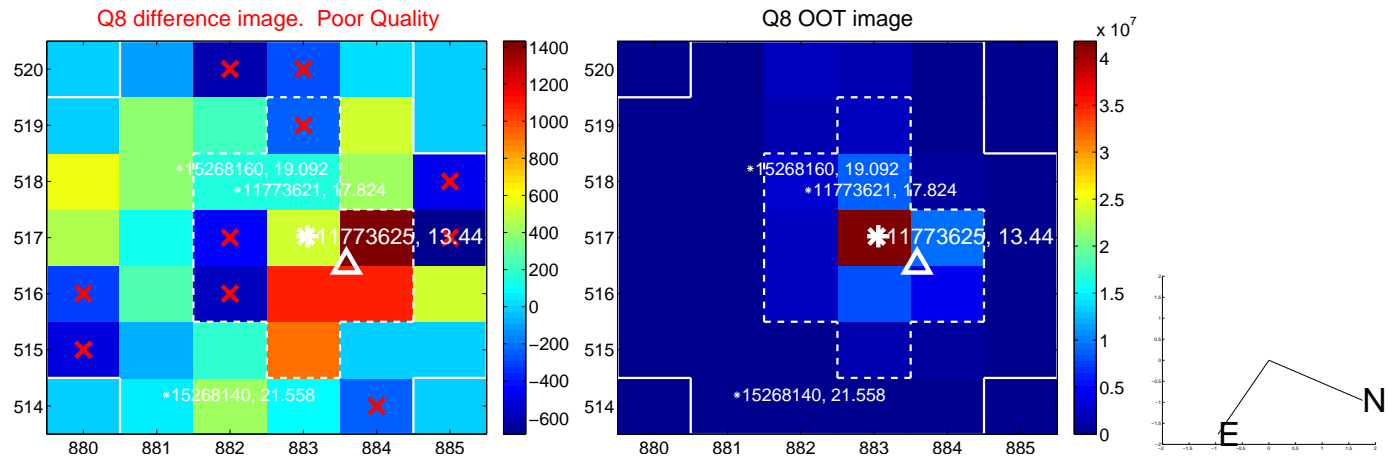
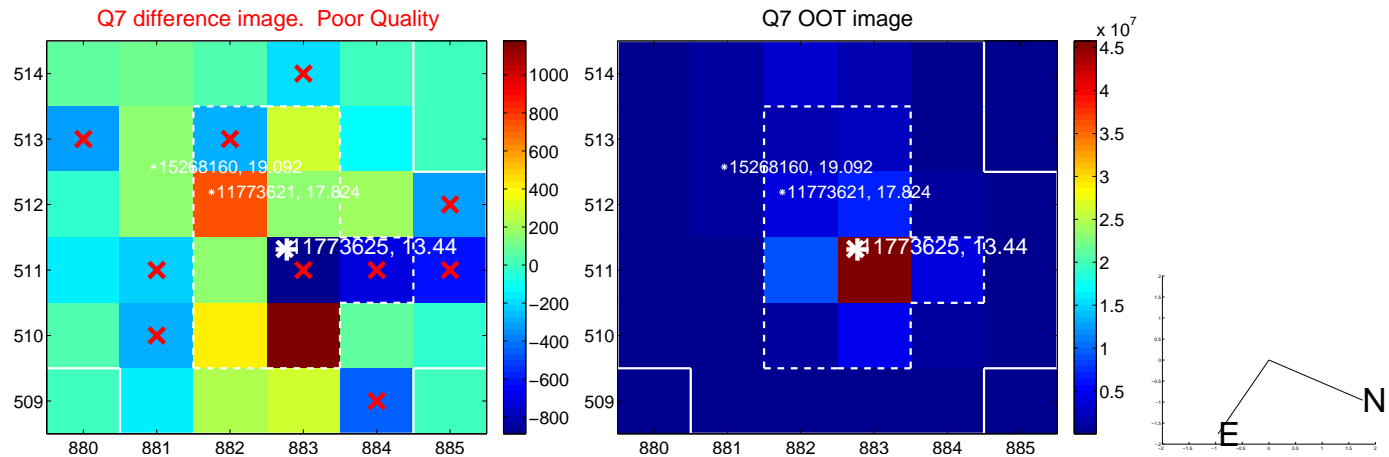
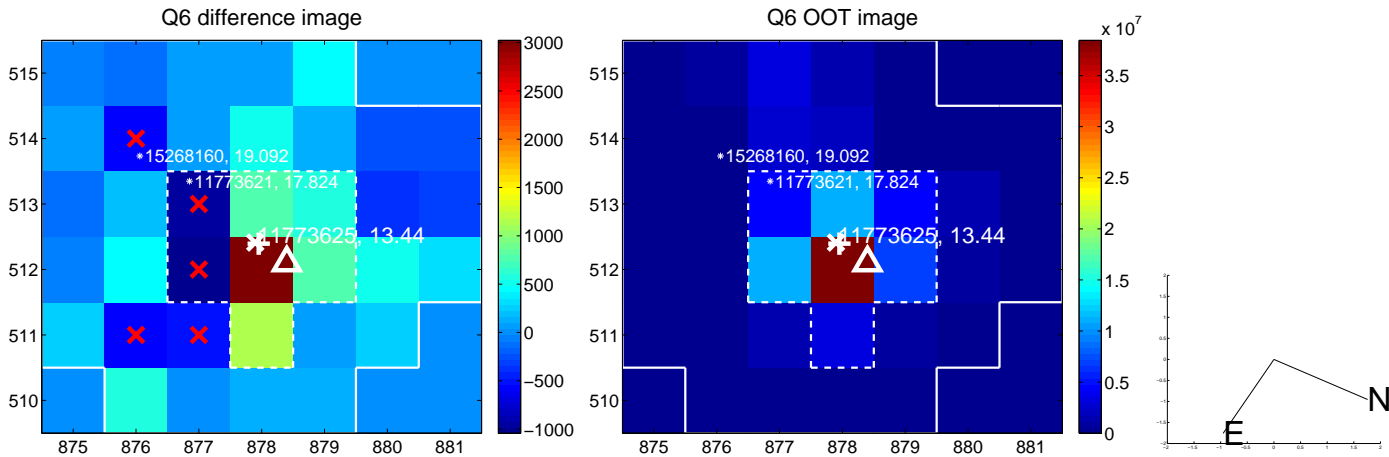
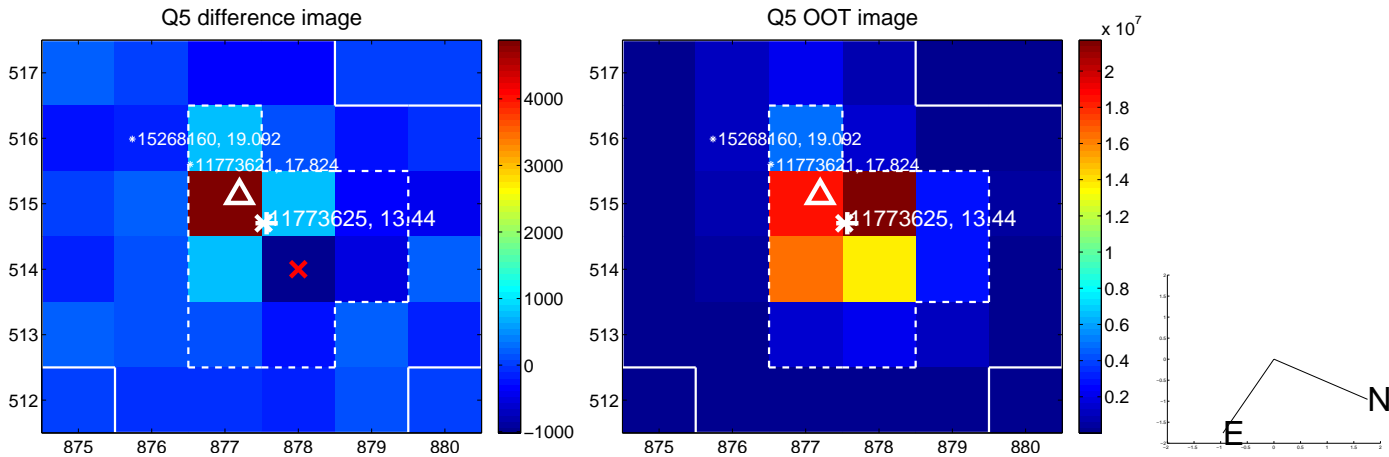


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

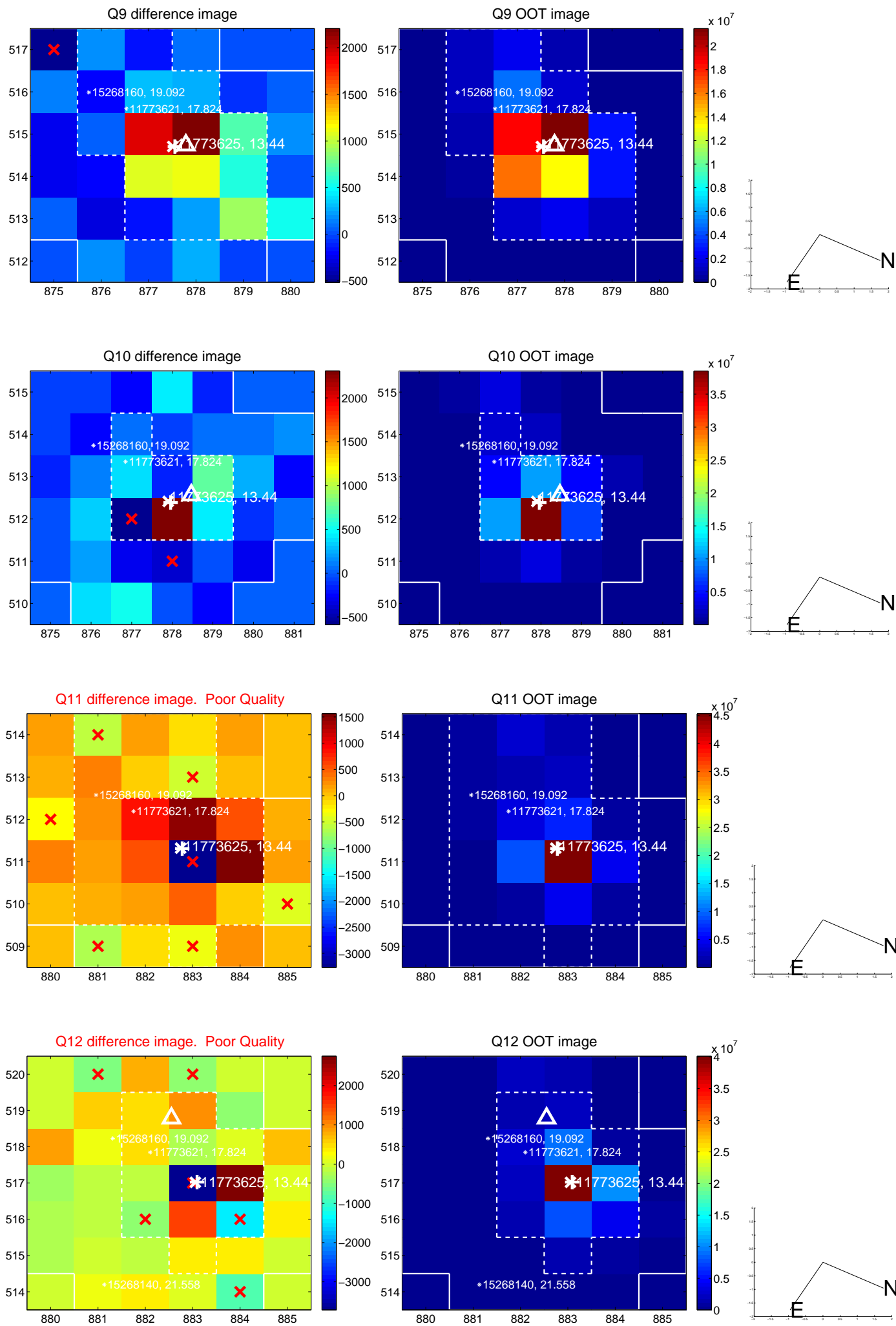
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



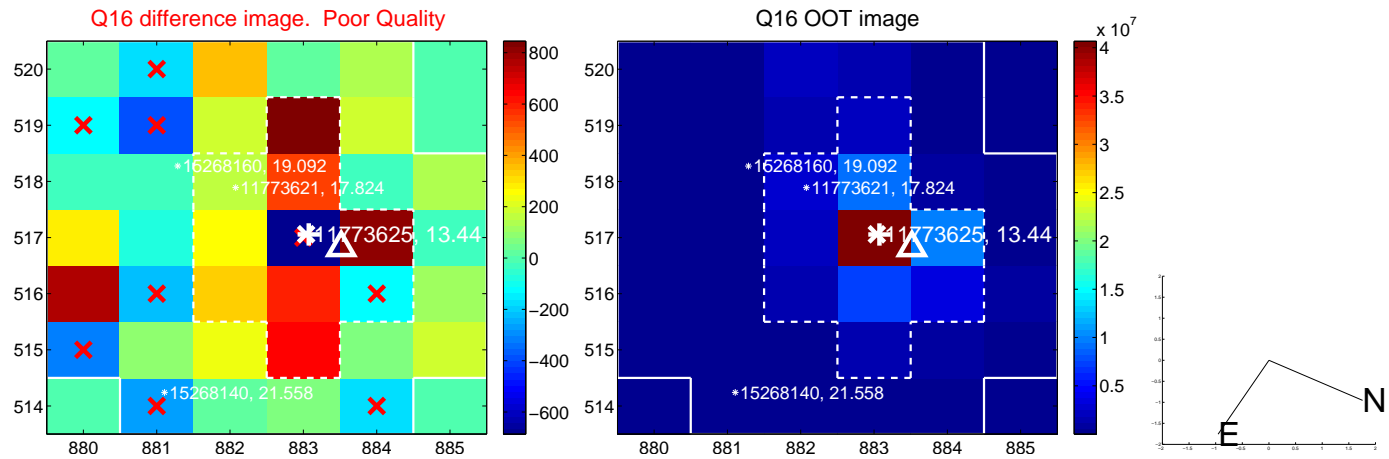
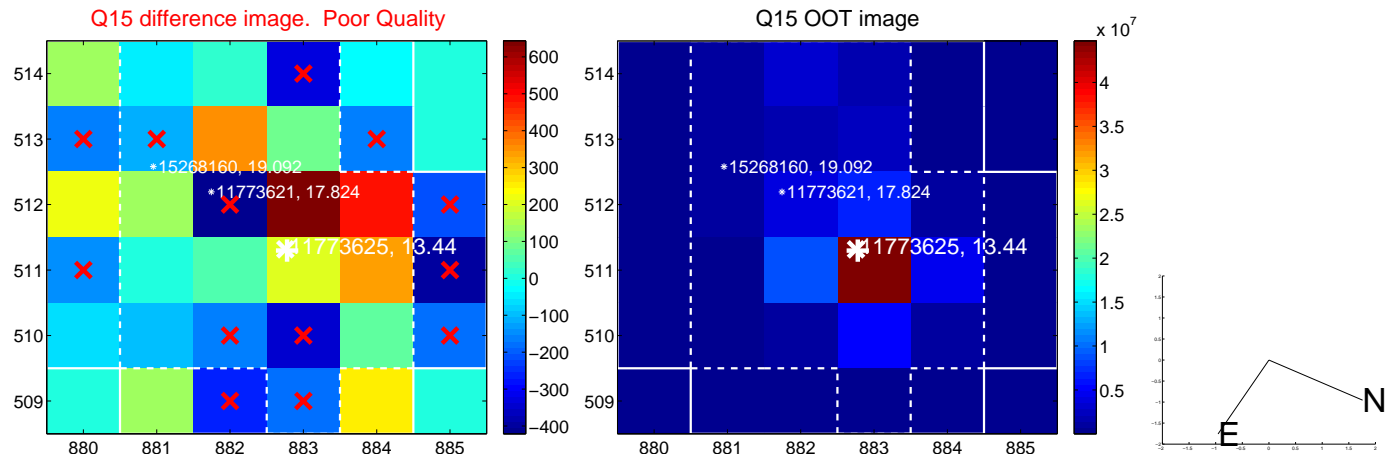
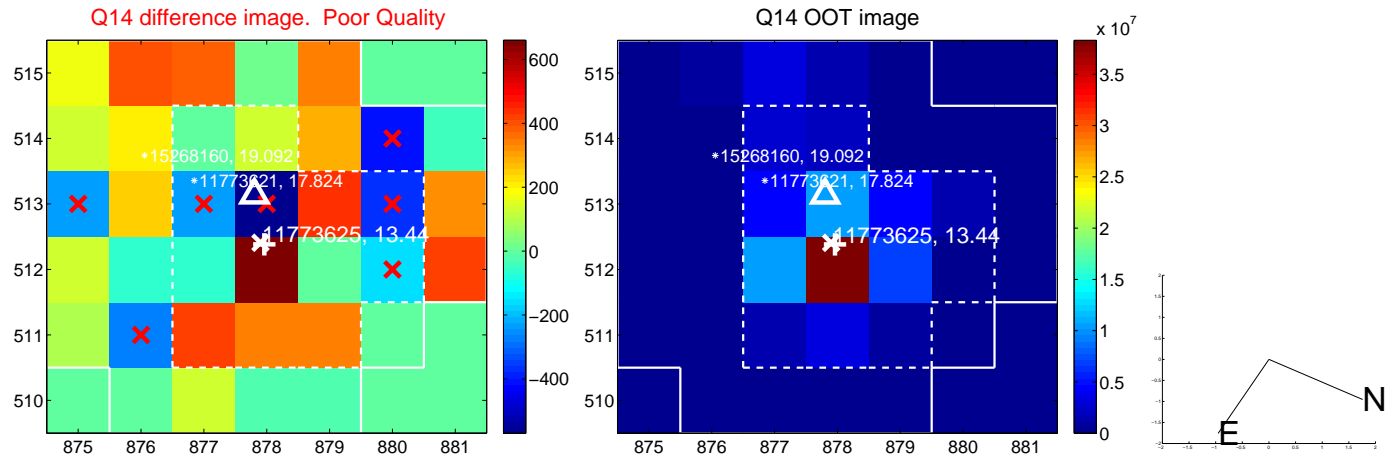
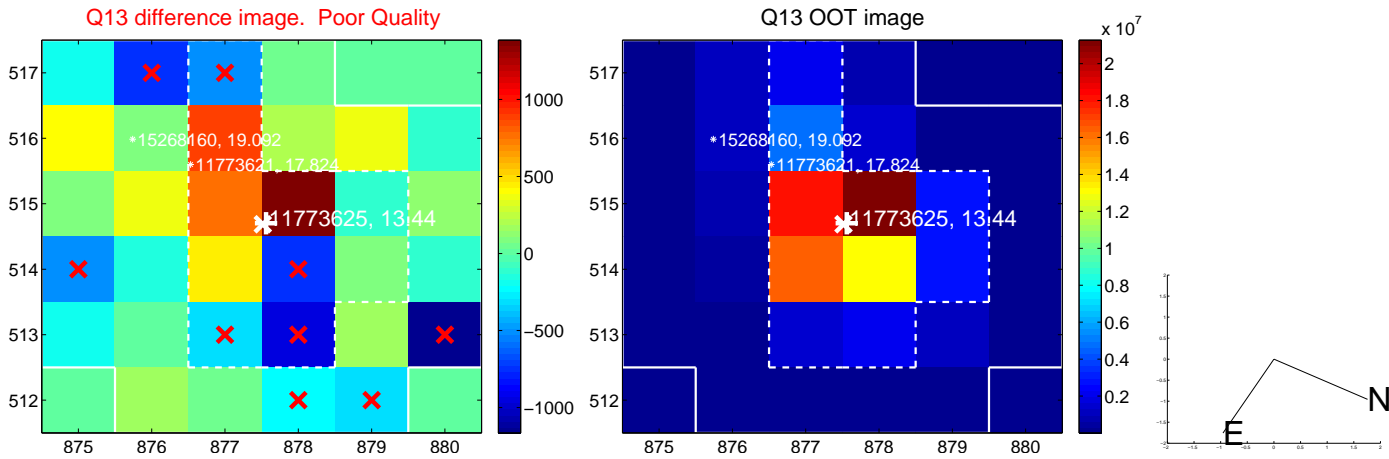
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



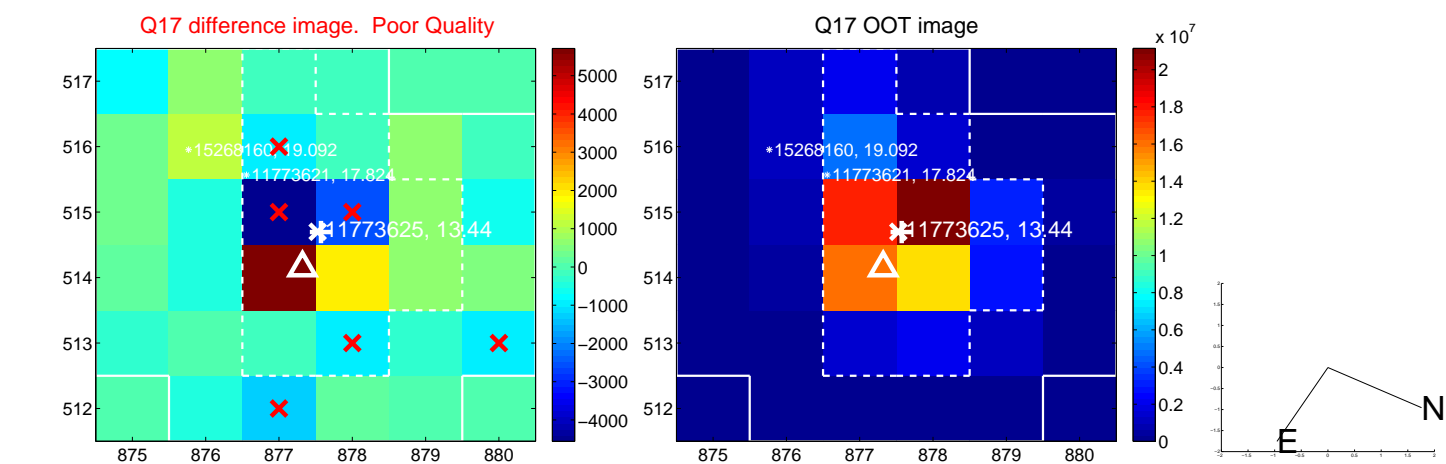
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



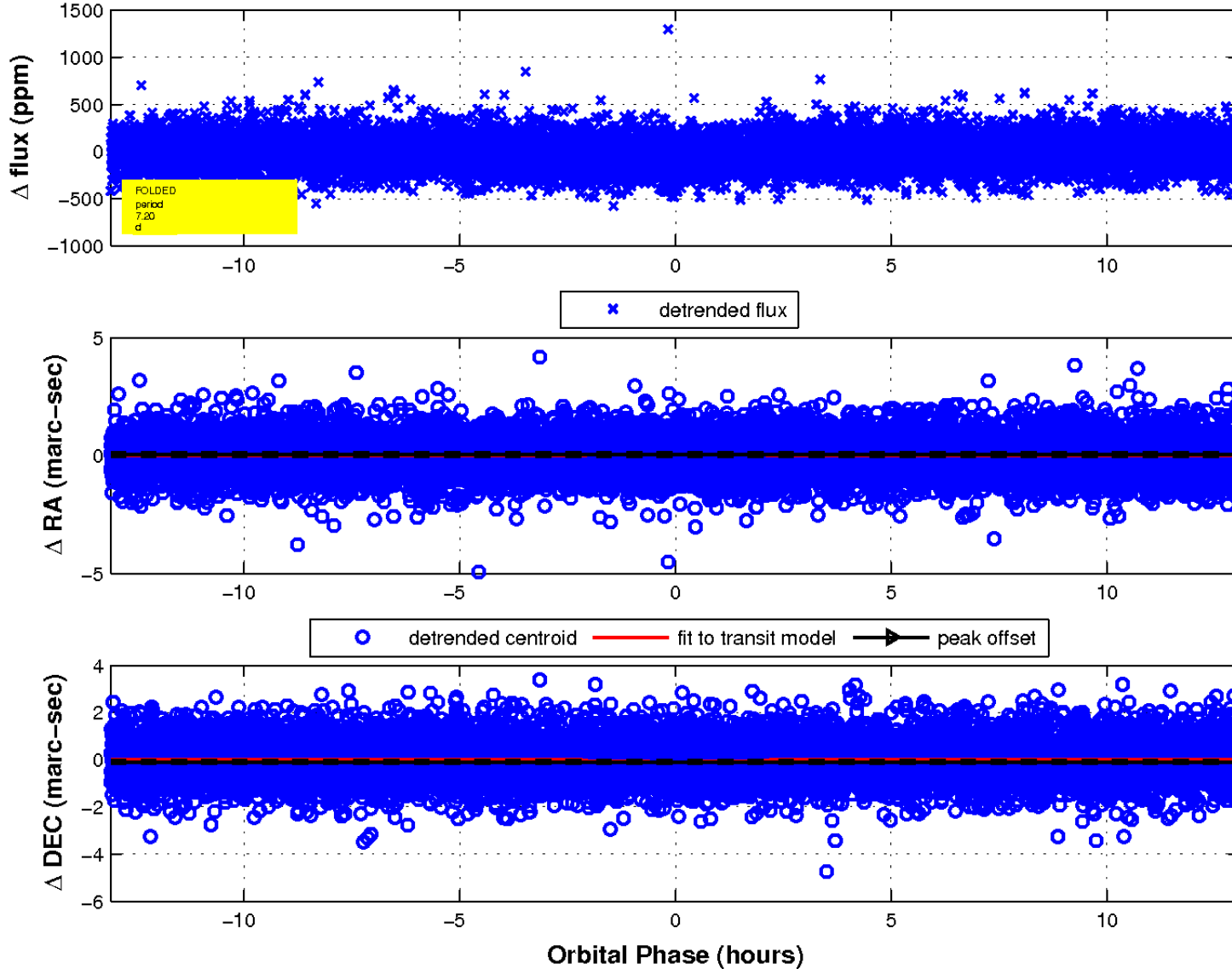
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

