

KIC 006611476

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})
006611476-01	OBS	No	4.102645	134.134518	75.2	20.462	8.6	6.3	0.98	5981	1.00	449.11

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006611476-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

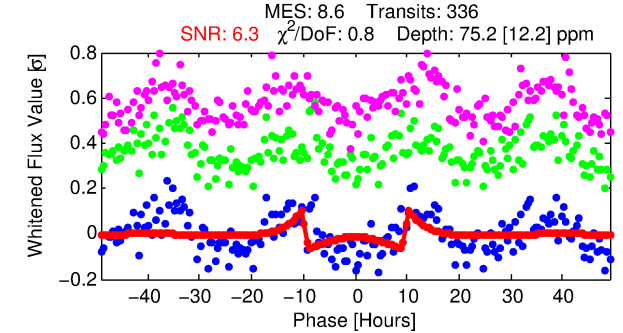
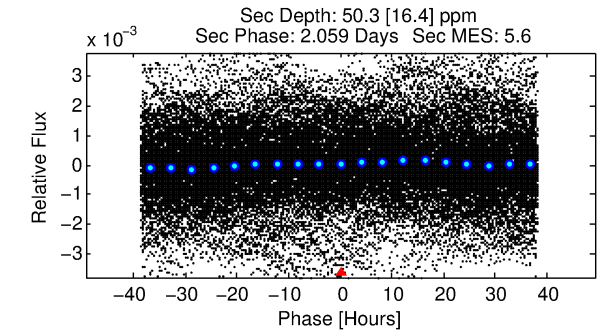
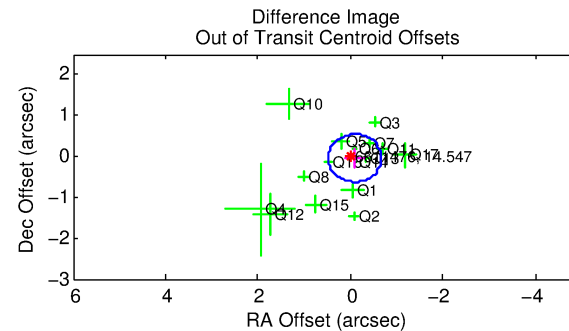
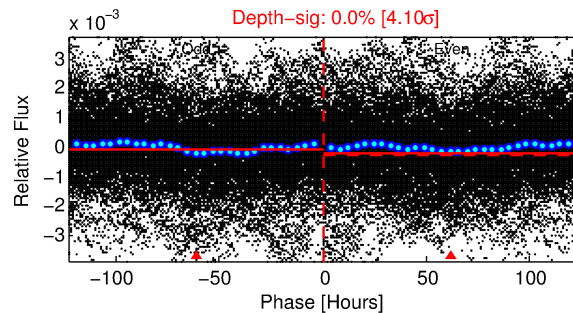
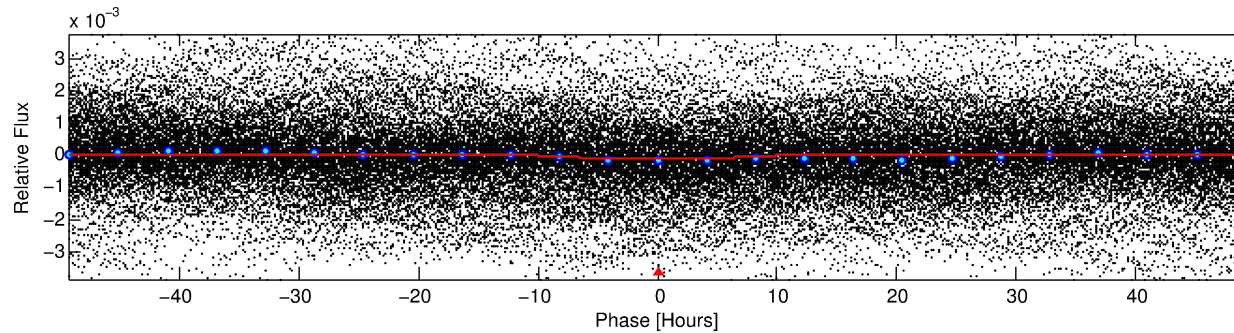
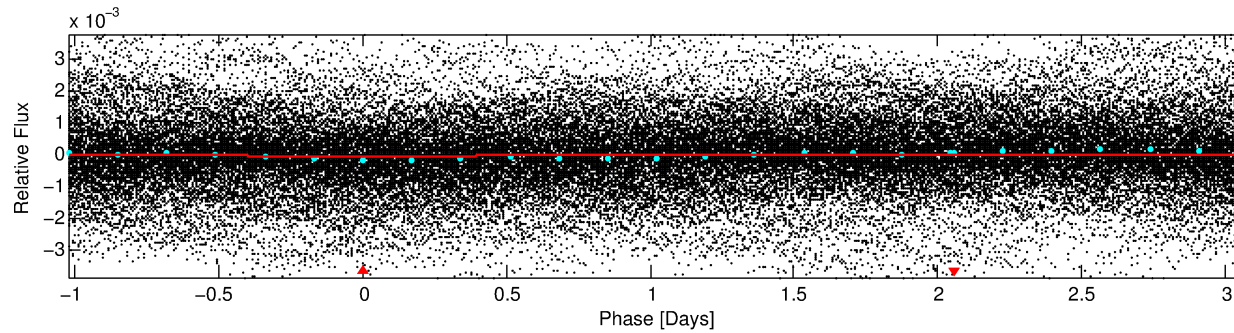
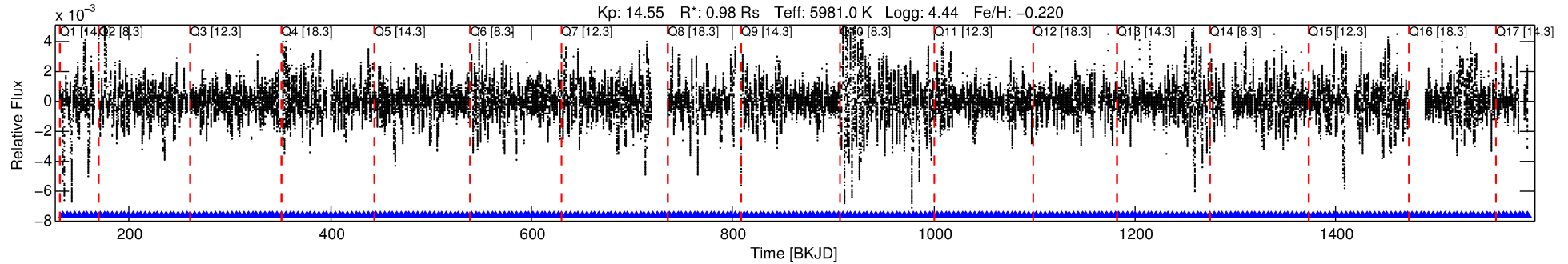
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006611476-01

No Significant Match Found

DV One-Page Summary

KIC: 6611476 Candidate: 1 of 1 Period: 4.103 d



DV Fit Results:

Period = 4.10265 [0.00006] d
Epoch = 134.1345 [0.0110] BKJD
Rp/R* = 0.0093 [0.0010]
a/R* = 1.18 [0.12]
b = 0.89 [0.09]
Seff = 449.11 [169.61]
Teq = 1174 [111] K
Rp = 1.00 [0.31] Re
a = 0.0496 [0.0122] AU
Ag = 68.53 [36.60] [1.85 σ]
Teffp = 5222 [540] K [7.34 σ]

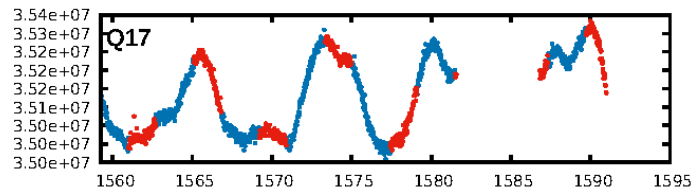
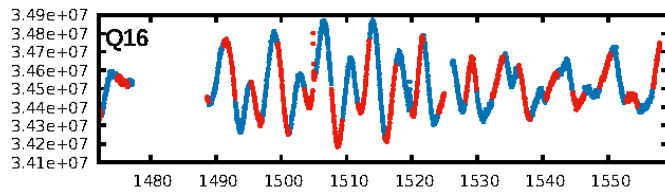
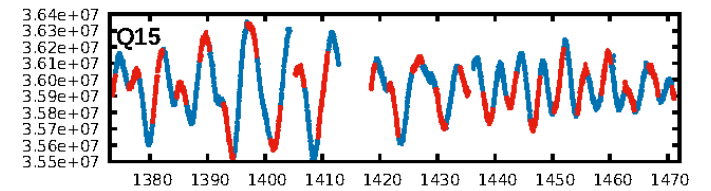
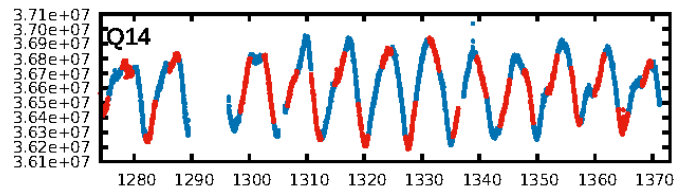
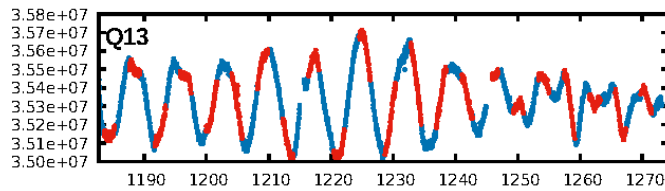
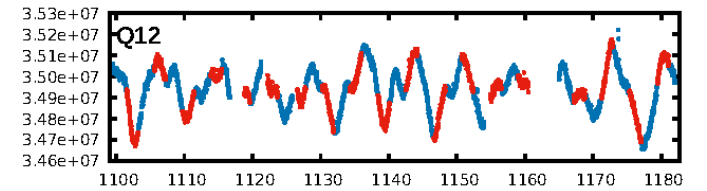
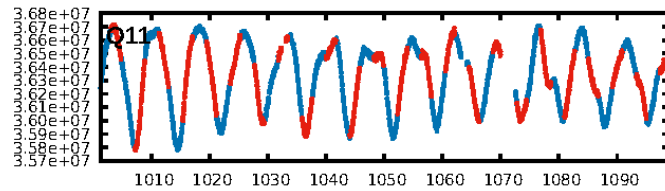
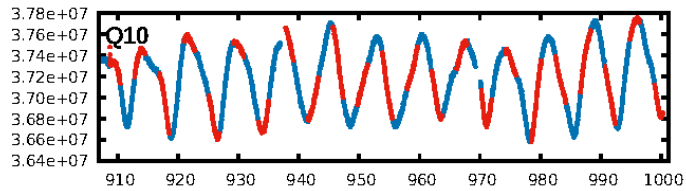
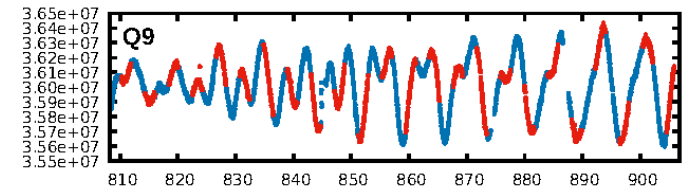
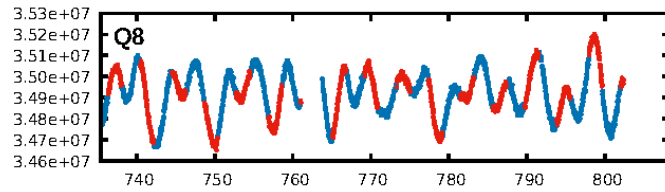
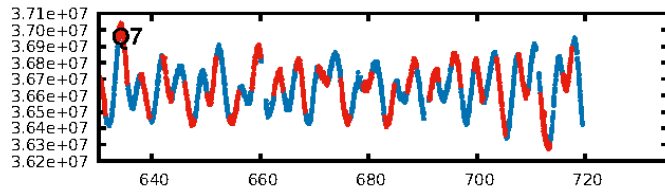
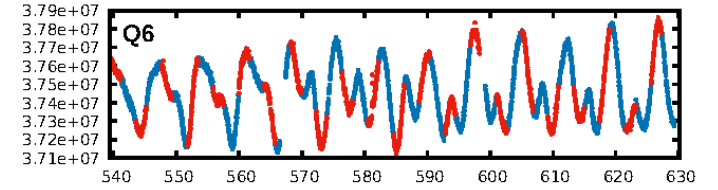
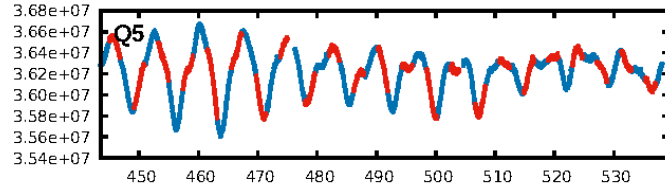
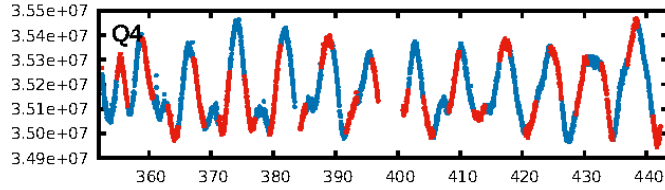
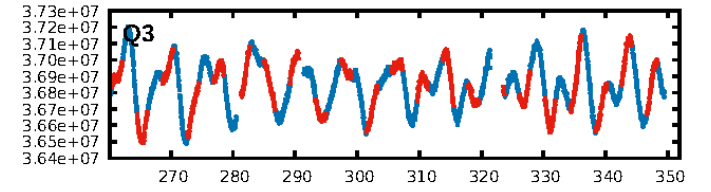
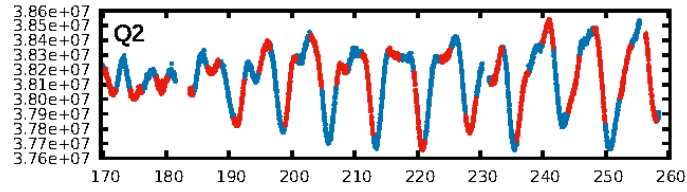
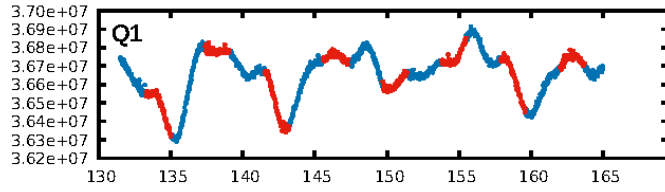
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.32e-20
RollingBand-fgt: 1.00 [321/321]
GhostDiagnostic-chr: 0.4488
Centroid-sig: 66.9%
Centroid-so: 0.352 arcsec [0.53 σ]
OotOffset-rm: 0.096 arcsec [0.49 σ]
KicOffset-rm: 0.124 arcsec [0.51 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.50 [8/16]
DiffImageOverlap-fno: 1.00 [17/17]

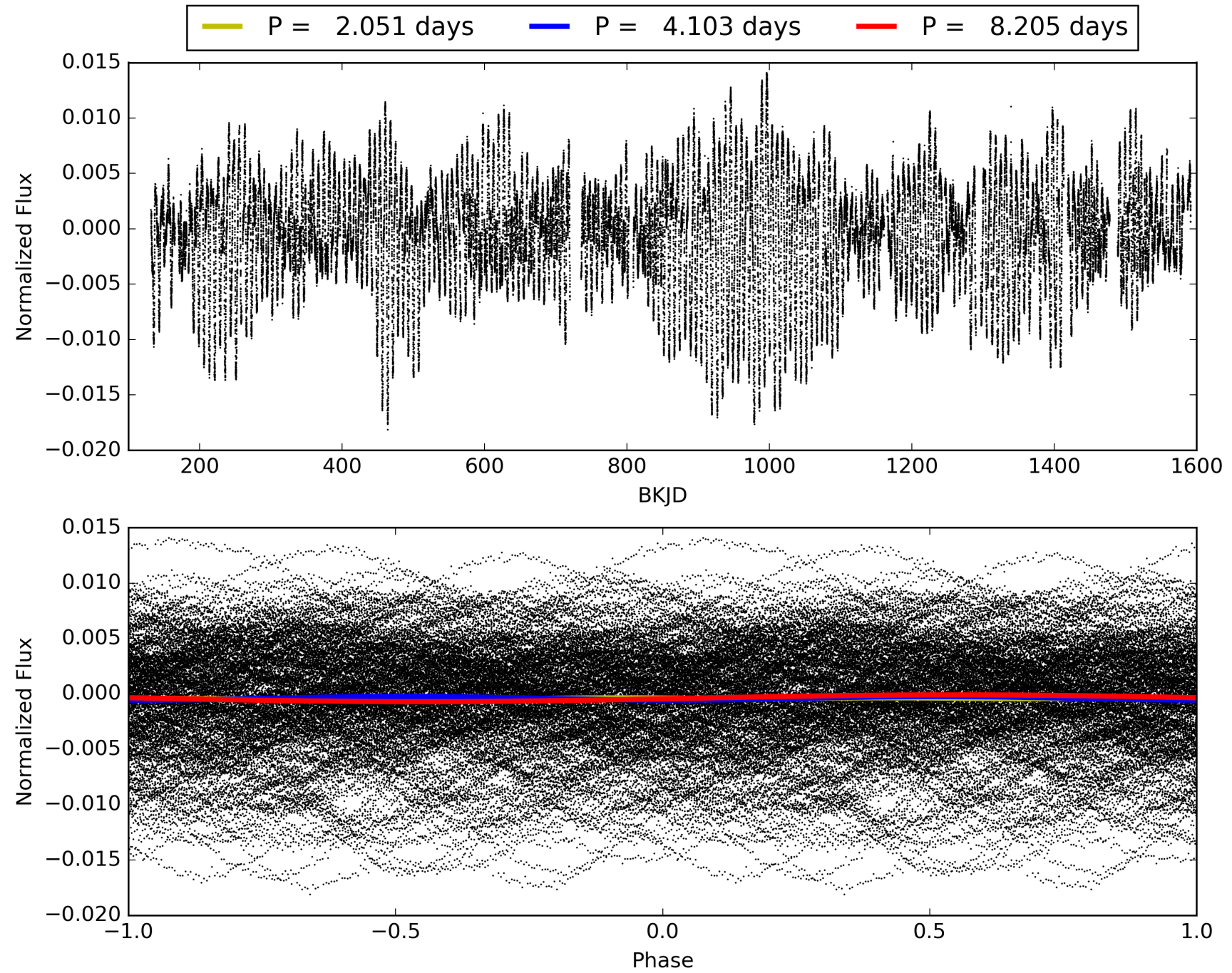
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:49:43 Z

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

TCE 006611476-01, PDC Light Curves

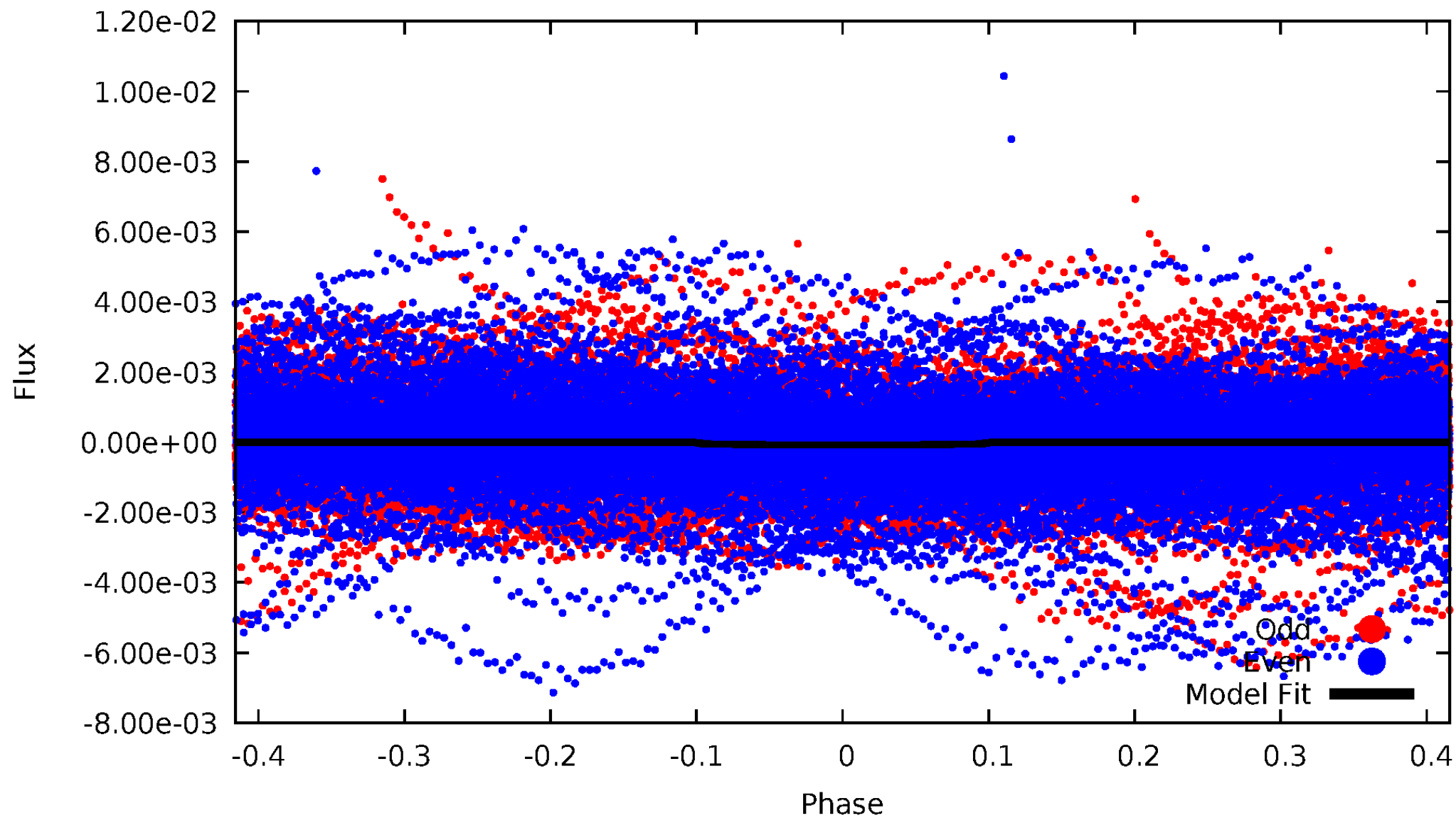


TCE 006611476-01



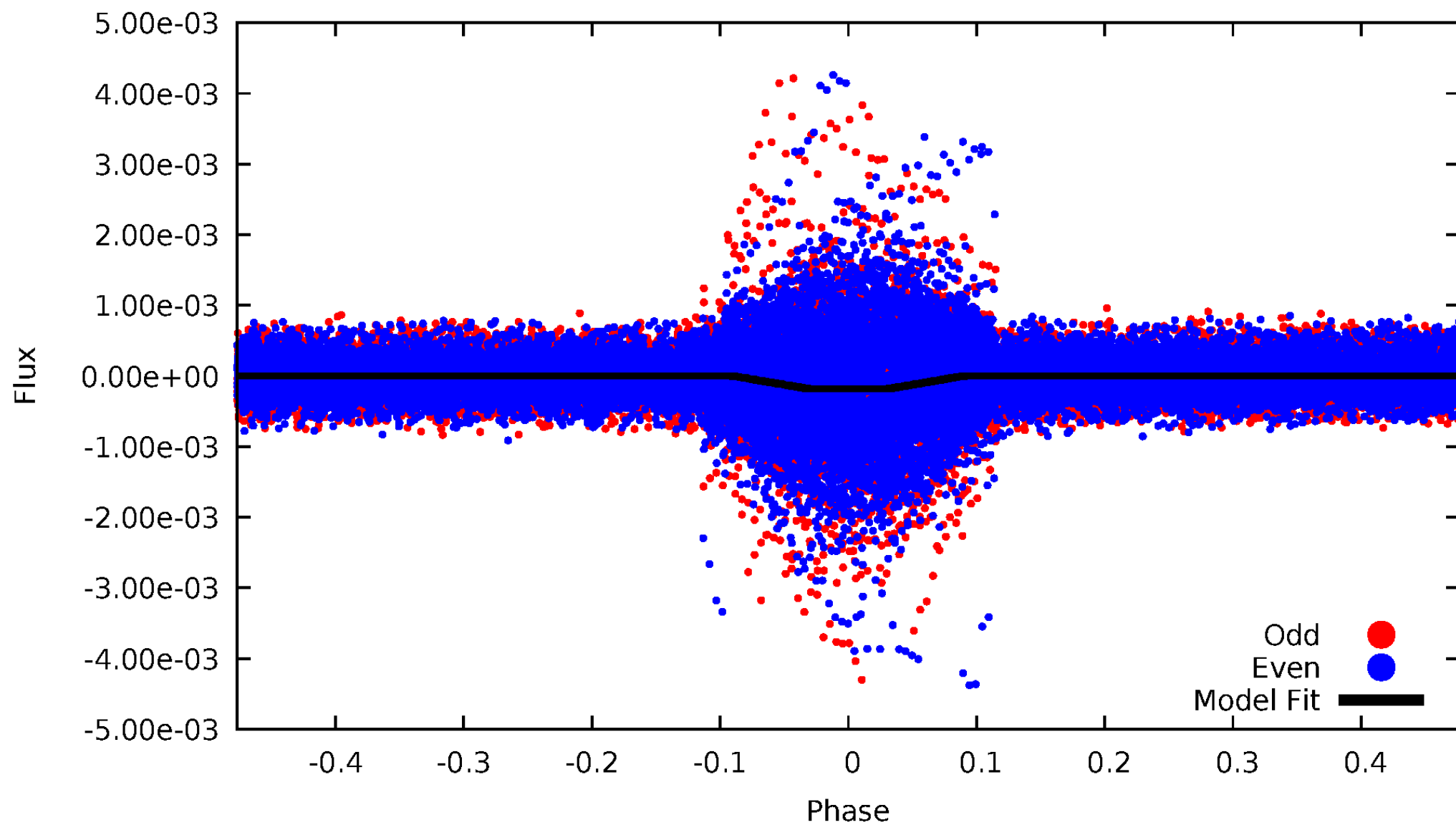
DV Odd/Even

TCE 006611476-01



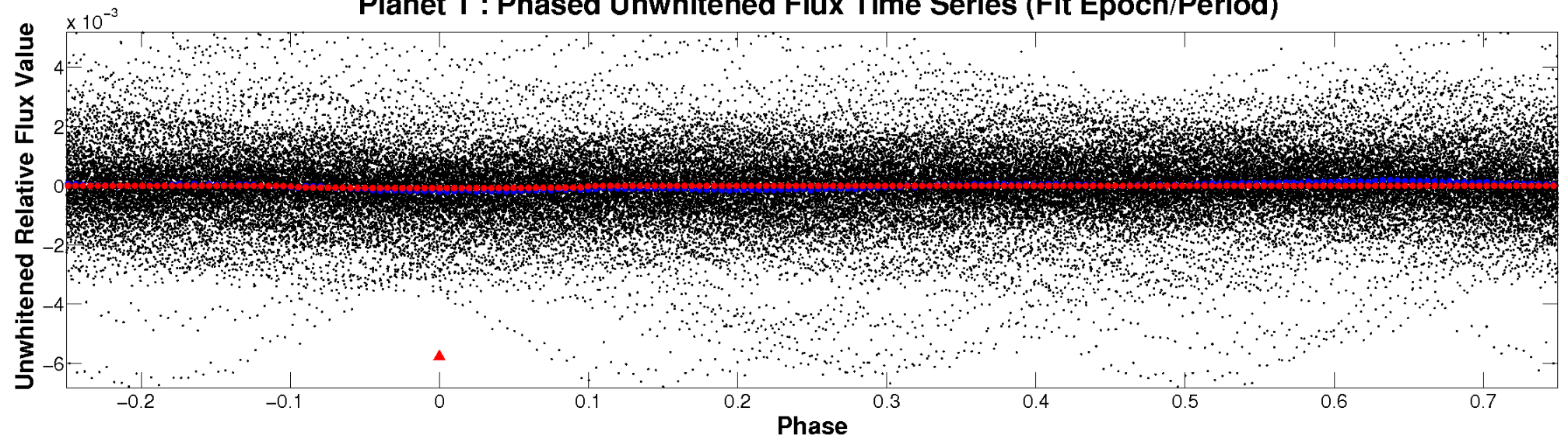
ALT Odd/Even

TCE 006611476-01

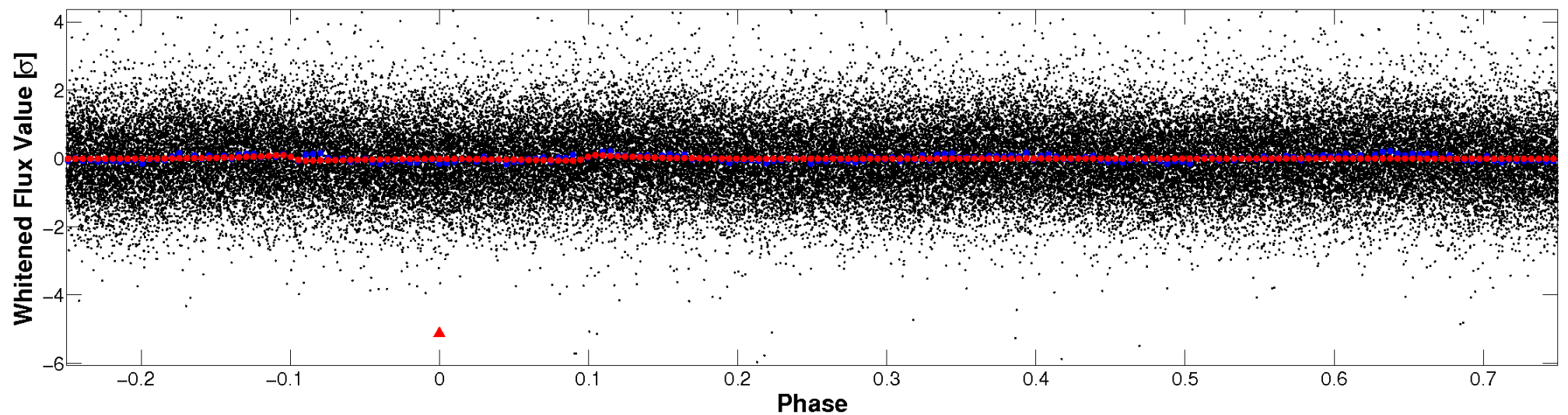


Non-Whitened Vs. Whitened Light Curve

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

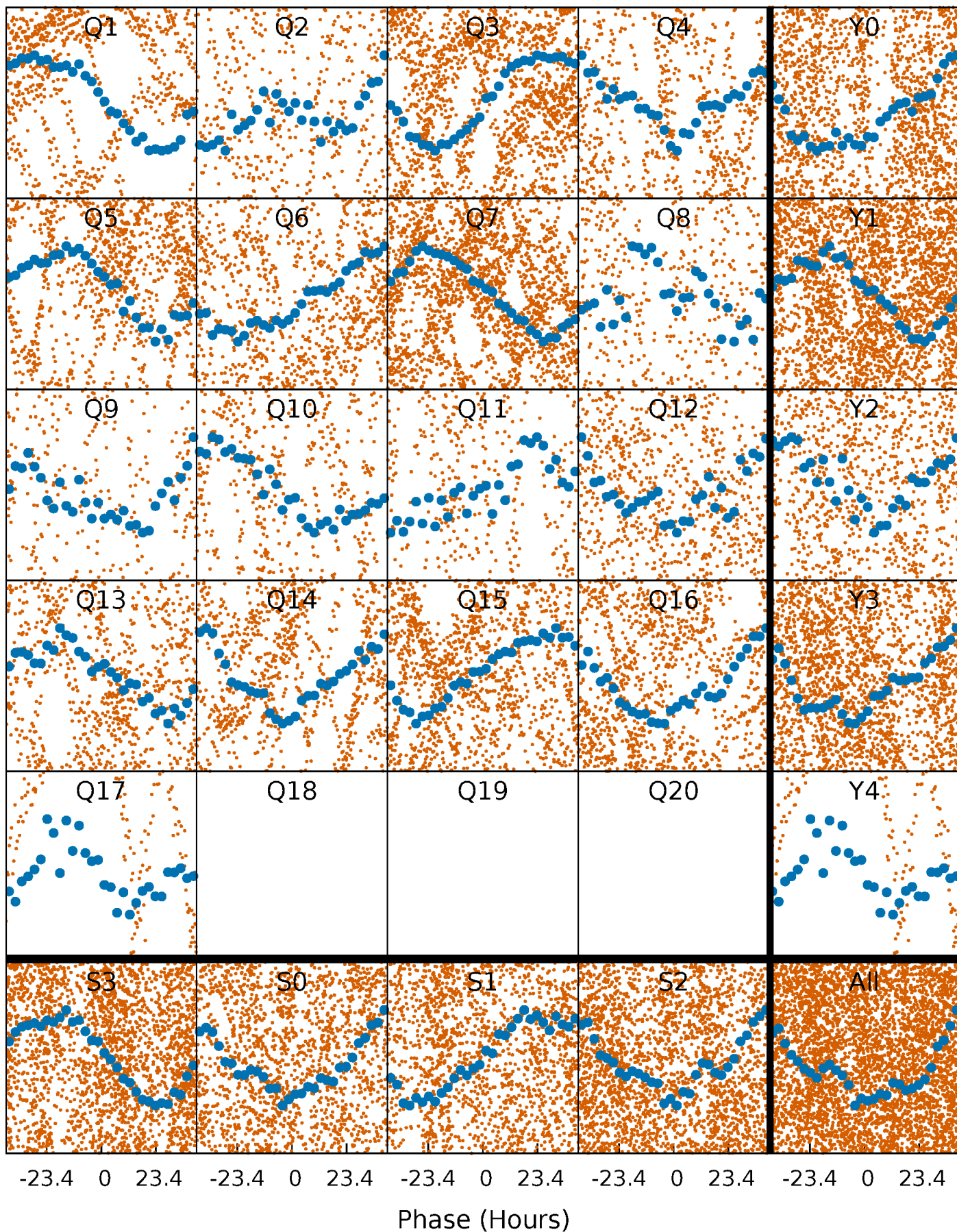


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



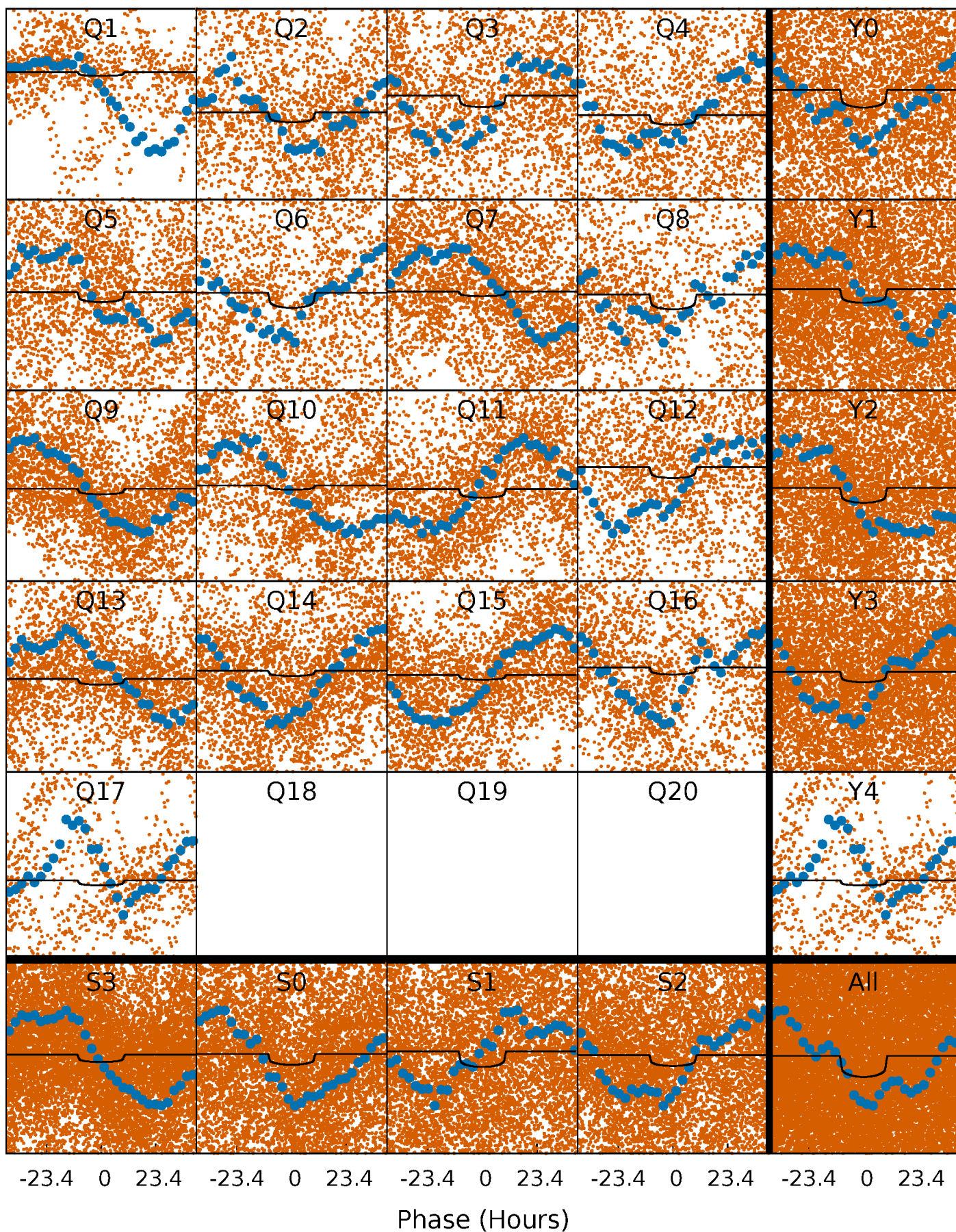
PDC Quarter-Phased Transit Curves

TCE 006611476-01 P= 4.102645 Days $T_0=134.134518$ (BKJD)



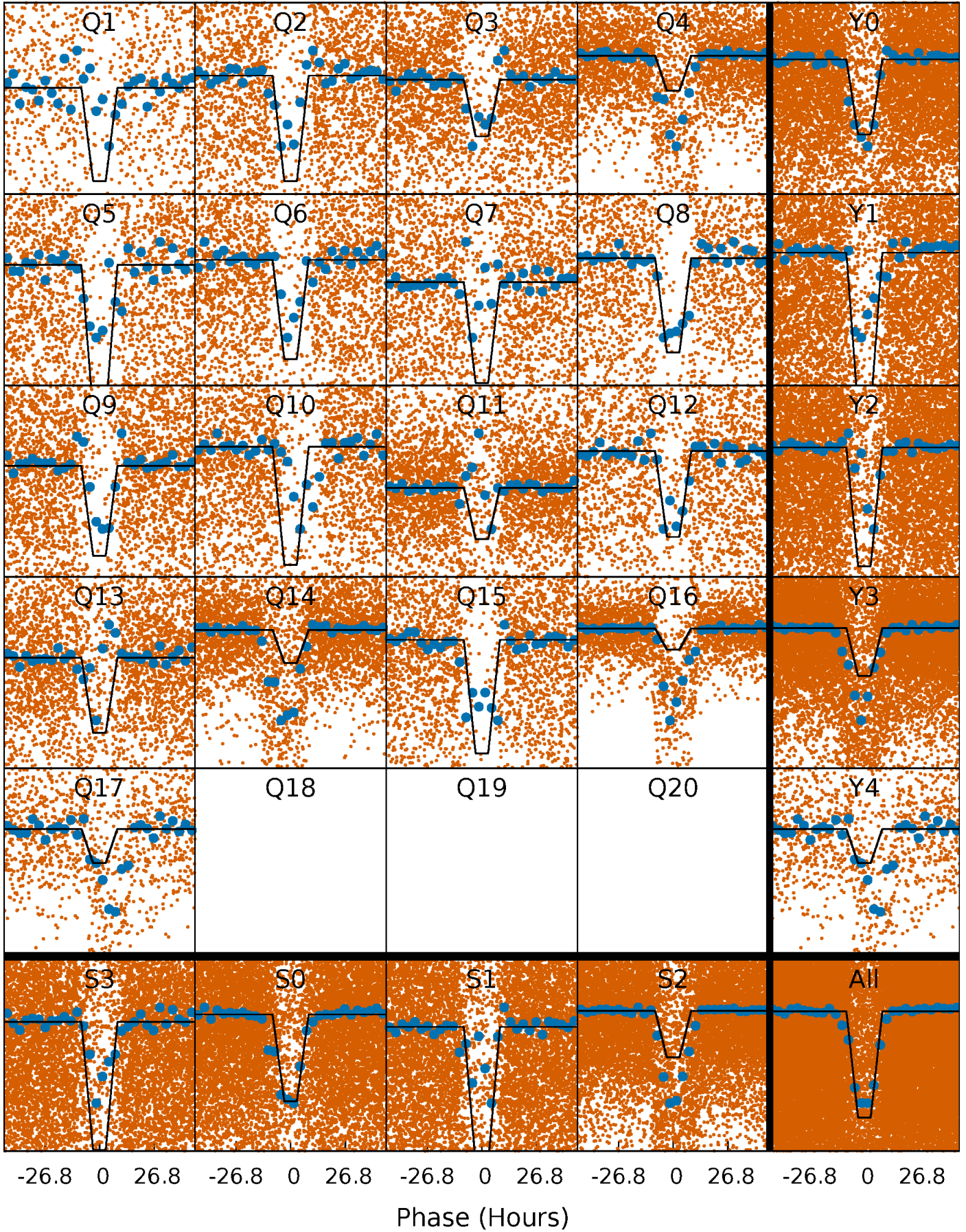
DV Quarter-Phased Transit Curves

TCE 006611476-01 P= 4.102645 Days $T_0=134.134518$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

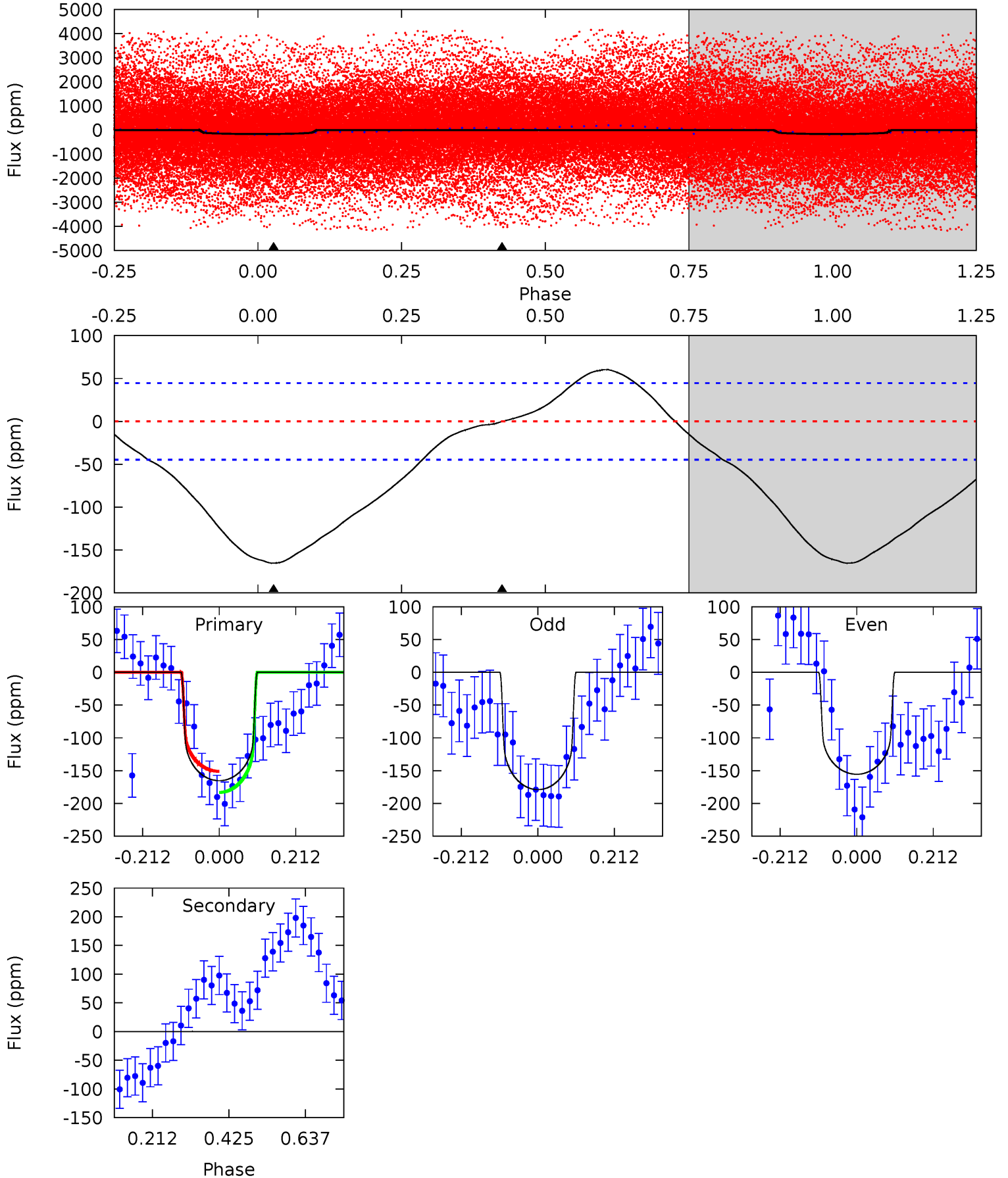
TCE 006611476-01 P= 4.102445 Days $T_0=134.185700$ (BKJD)



DV Model-Shift Uniqueness Test

006611476-01, P = 4.102645 Days, E = 130.031873 Days

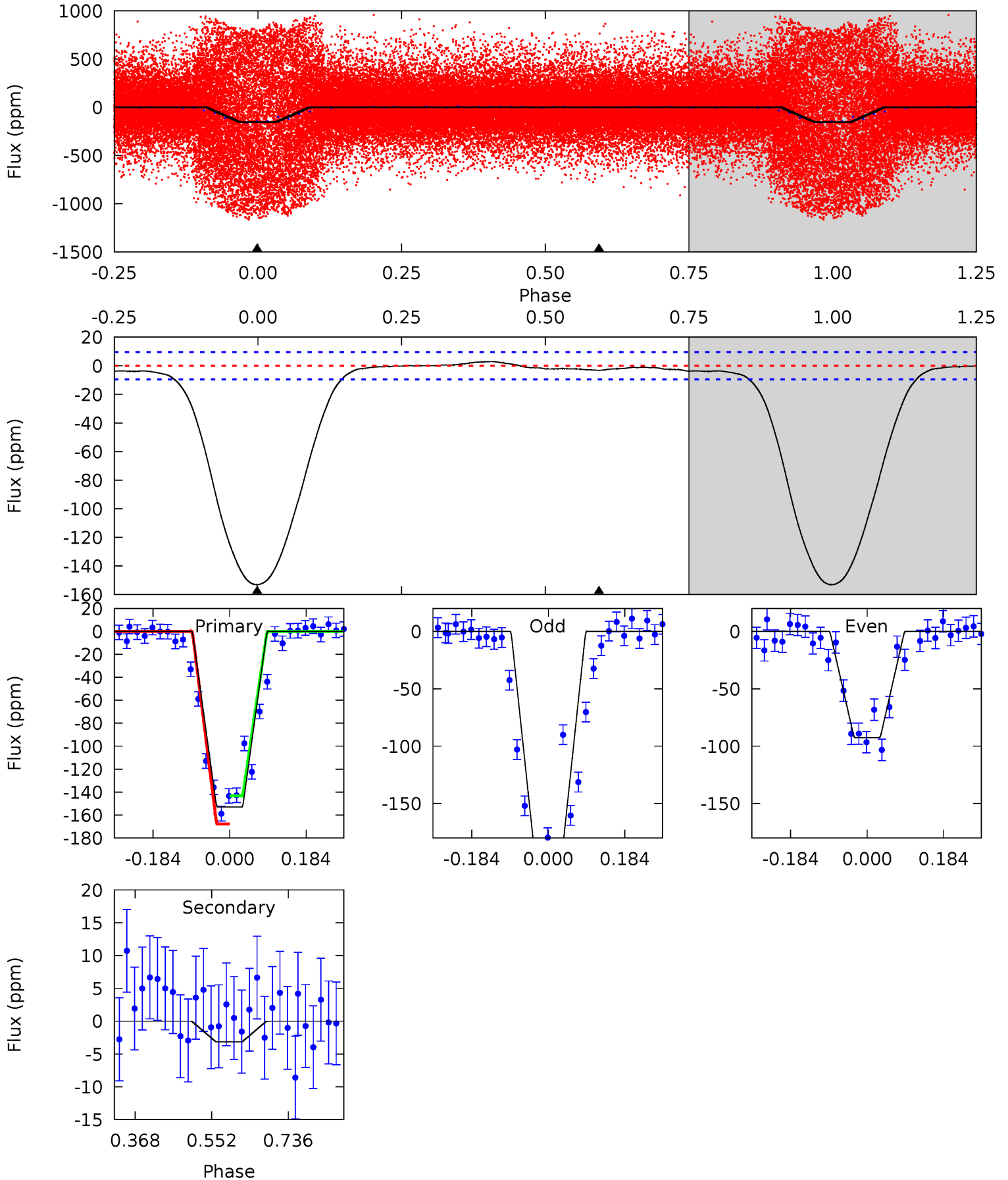
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.3	0.02	0	0	4.40	1.25	3.06	16.3	16.3	0.02	0.02	1.16	1.07	0.27	1.62



Alt Model-Shift Uniqueness Test

006611476-01, P = 4.102445 Days, E = 130.083255 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
71.1	1.47	0	0	4.44	1.33	0.87	71.1	71.1	1.47	1.47	24.5	1.10	0.02	0



Stellar Parameters For KIC 006611476

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5981^{+161}_{-179}	$4.439^{+0.084}_{-0.196}$	$-0.220^{+0.300}_{-0.300}$	$0.981^{+0.286}_{-0.123}$	$0.964^{+0.133}_{-0.109}$	$1.440^{+0.524}_{-0.742}$
	+3%/-3%	+2%/-4%	+136%/-136%	+29%/-13%	+14%/-11%	+36%/-51%
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 006611476-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-0 ± 10	$1.03^{+0.20}_{-0.15}$	1663^{+117}_{-86}	-2387^{+6244}_{-1481}	$-0.077^{+13.159}_{-12.474}$
Alt.	-3 ± 2	$1.47^{+0.26}_{-0.17}$	1667^{+128}_{-91}	2805^{+275}_{-540}	$1.821^{+1.484}_{-1.279}$

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

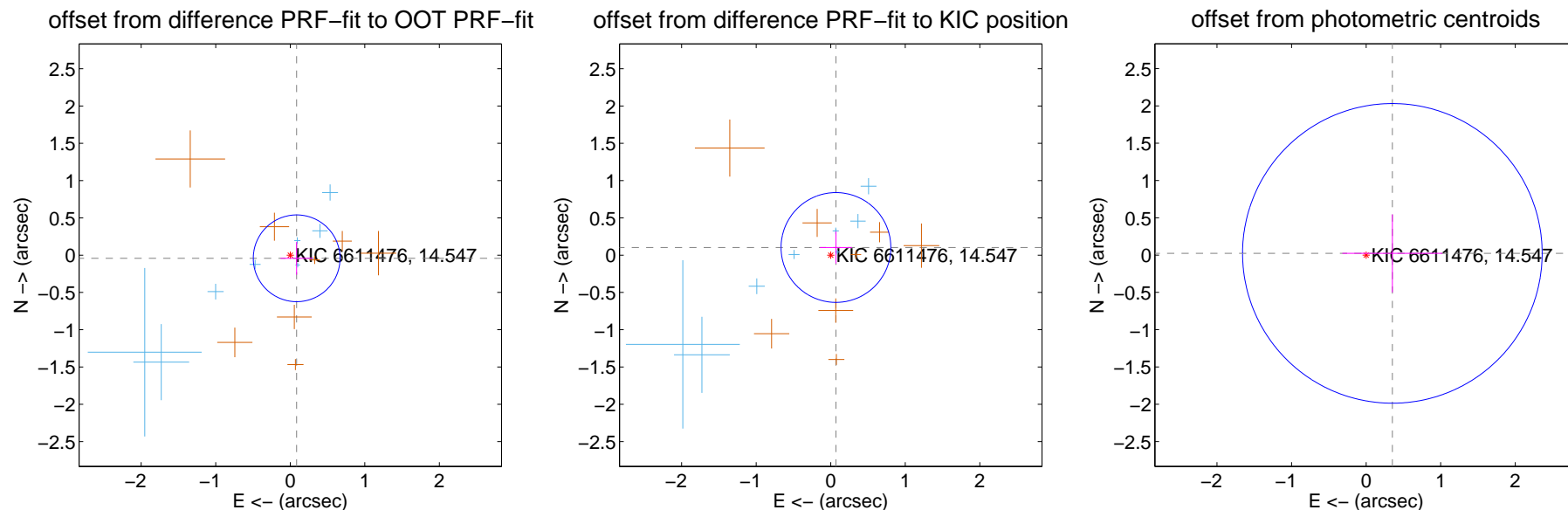
DV Centroid Data

Supplemental centroid analysis for 006611476-01. Kepler magnitude: 14.55. Transit SNR 6.35

There are 8 quarters with good PRF difference image offsets

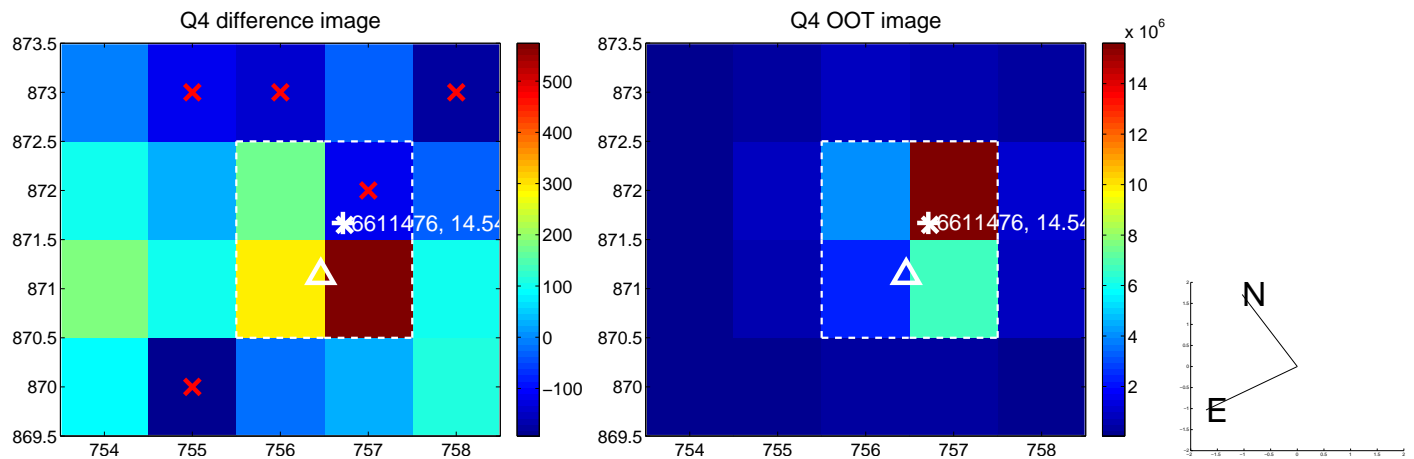
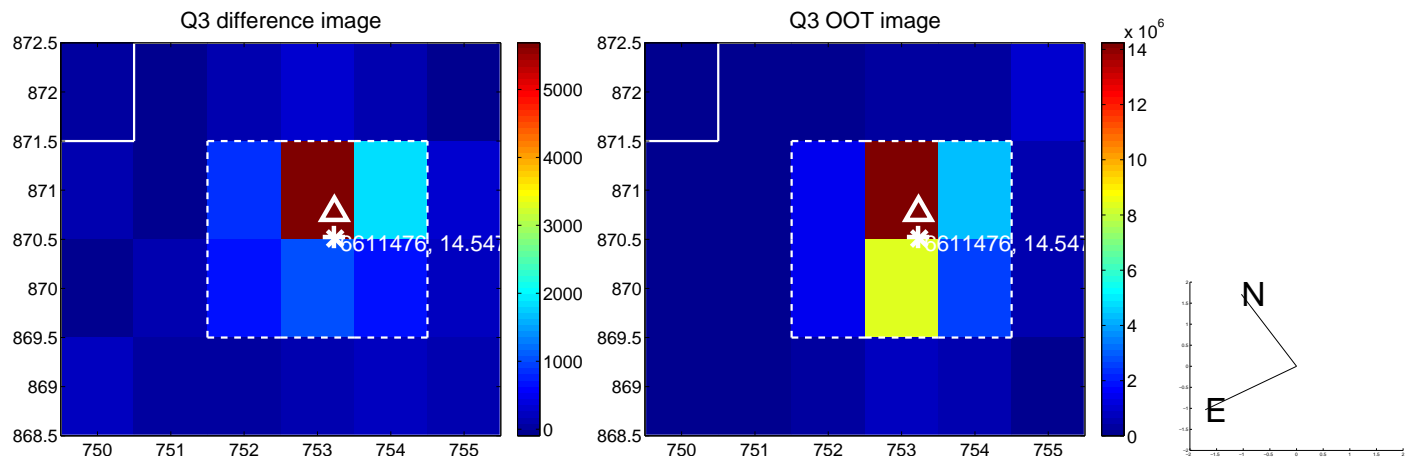
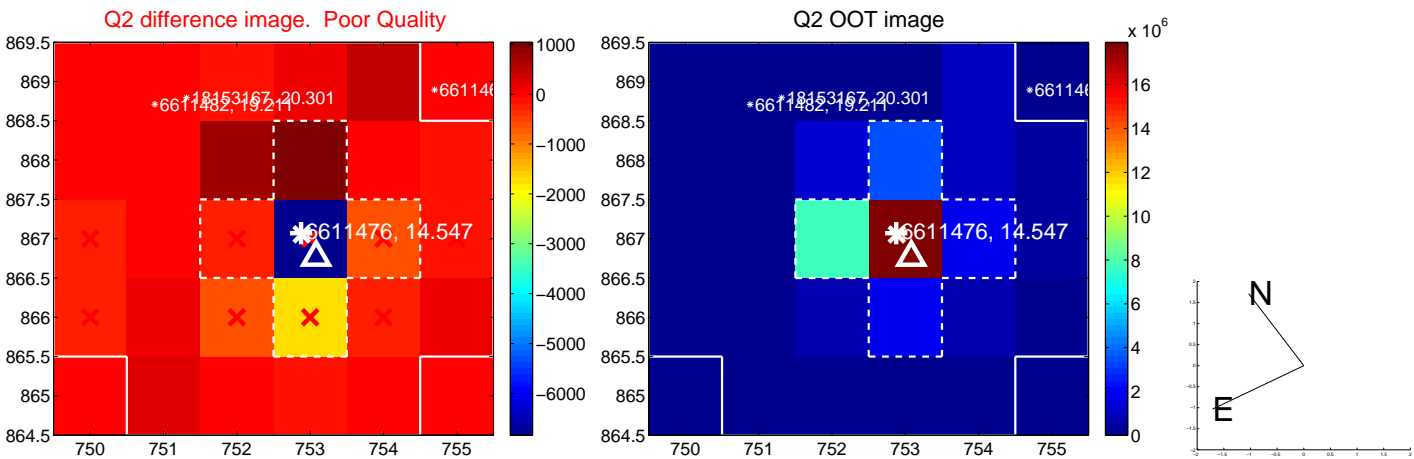
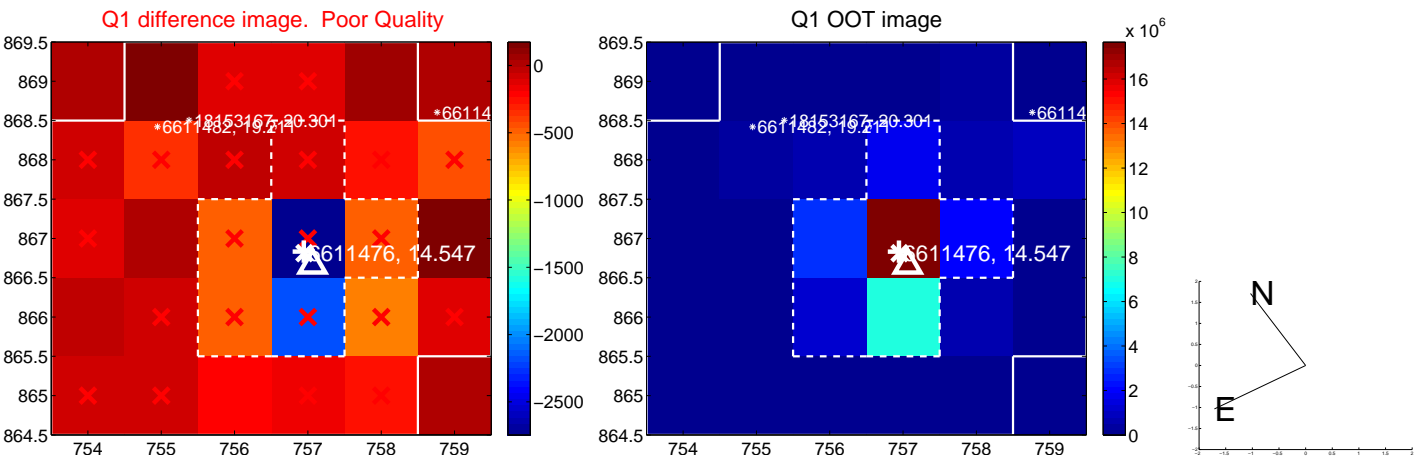
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.096 ± 0.194	0.49	-0.086 ± 0.217	-0.042 ± 0.221
PRF-fit source offset from KIC position	0.124 ± 0.245	0.51	-0.070 ± 0.214	0.103 ± 0.215
photometric centroid source offset	0.35 ± 0.67	0.53	-0.35 ± 0.67	0.02 ± 0.52

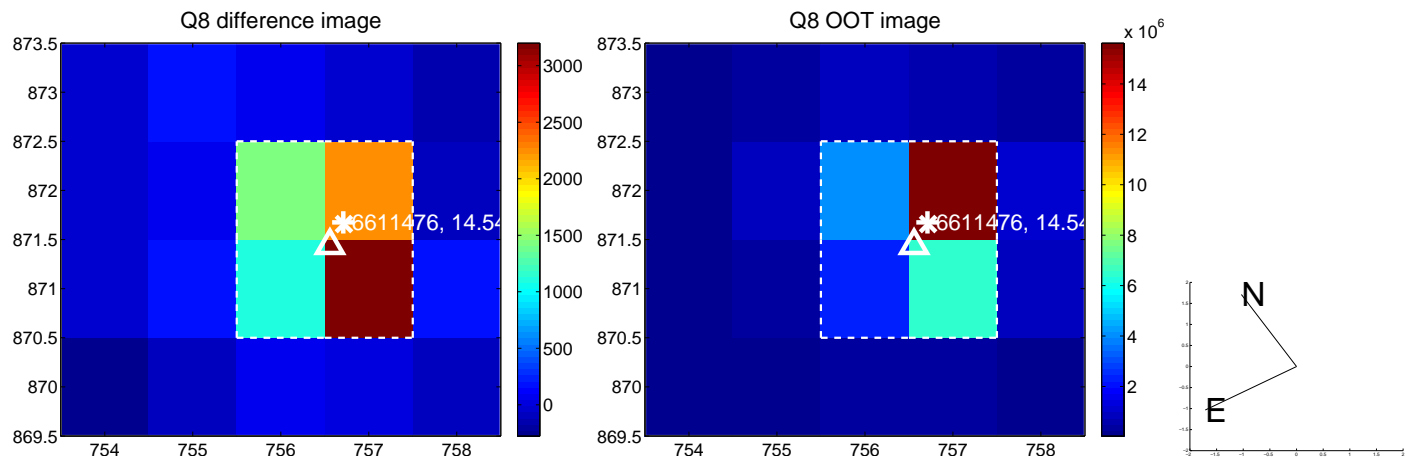
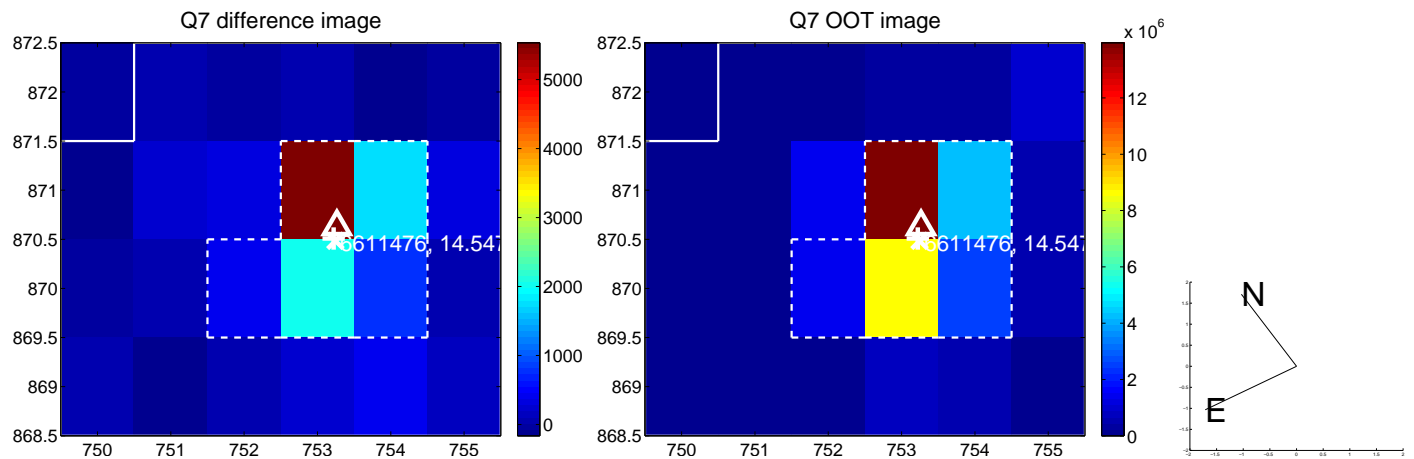
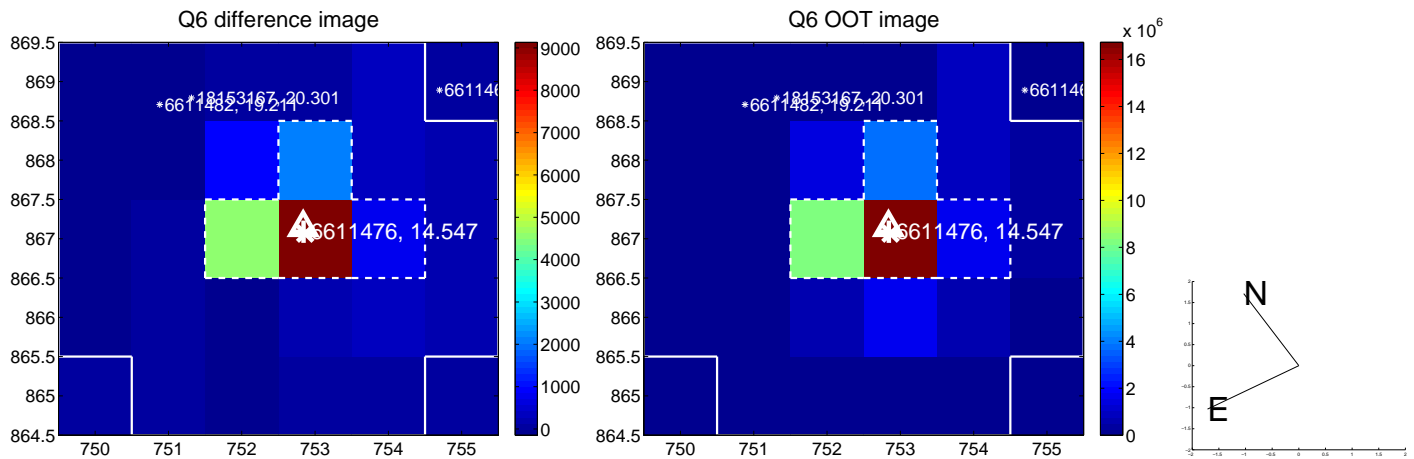
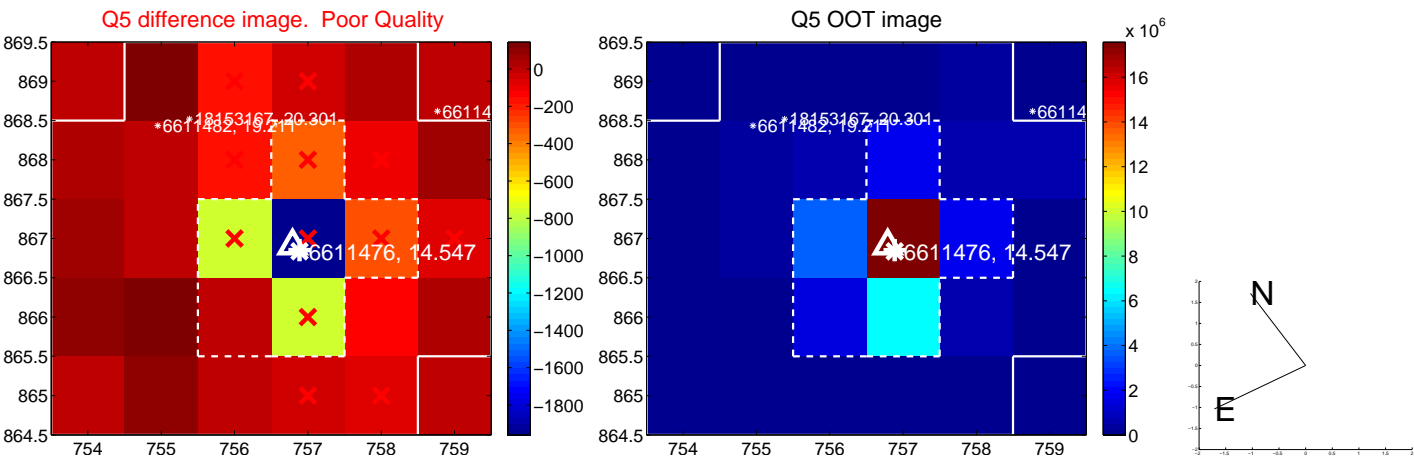


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

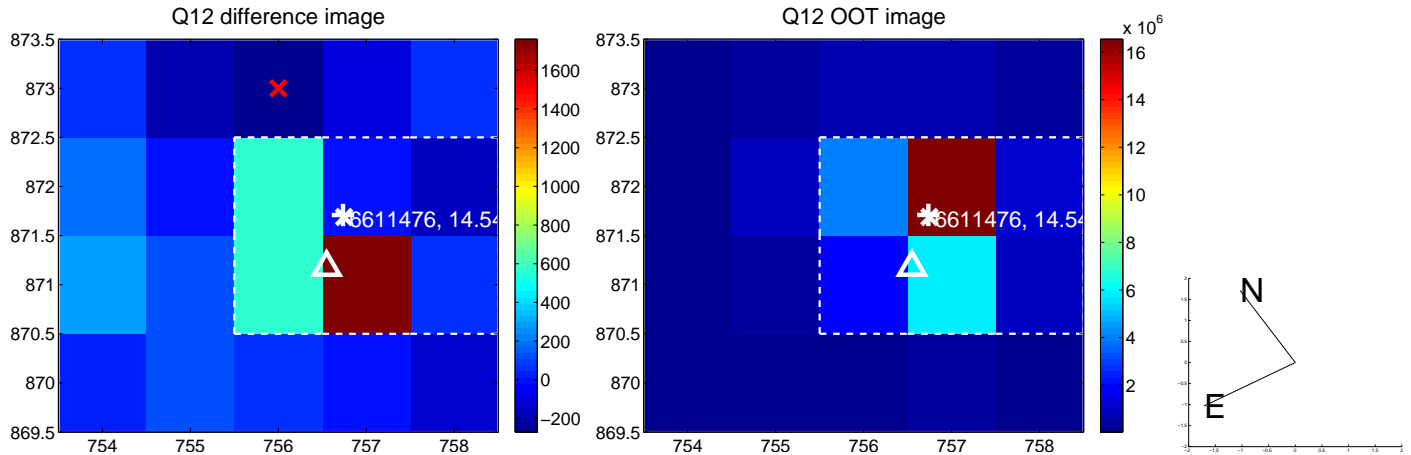
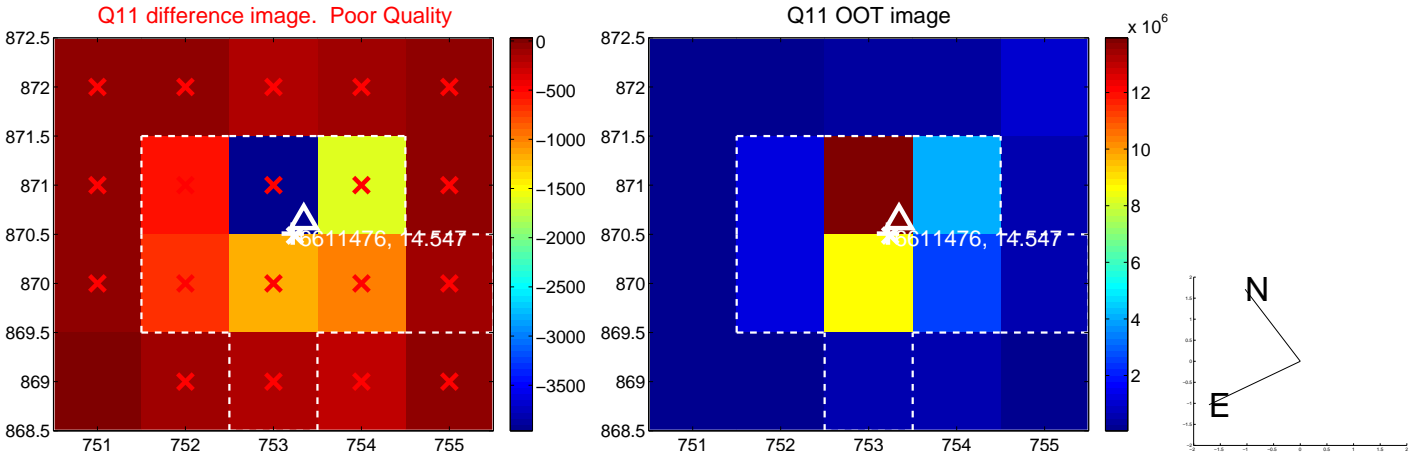
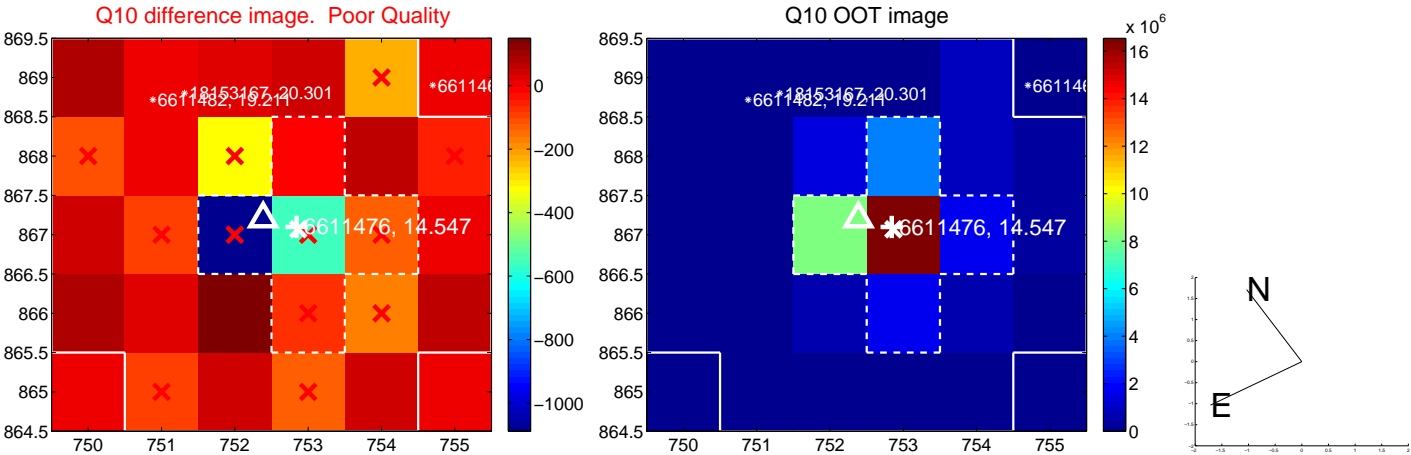
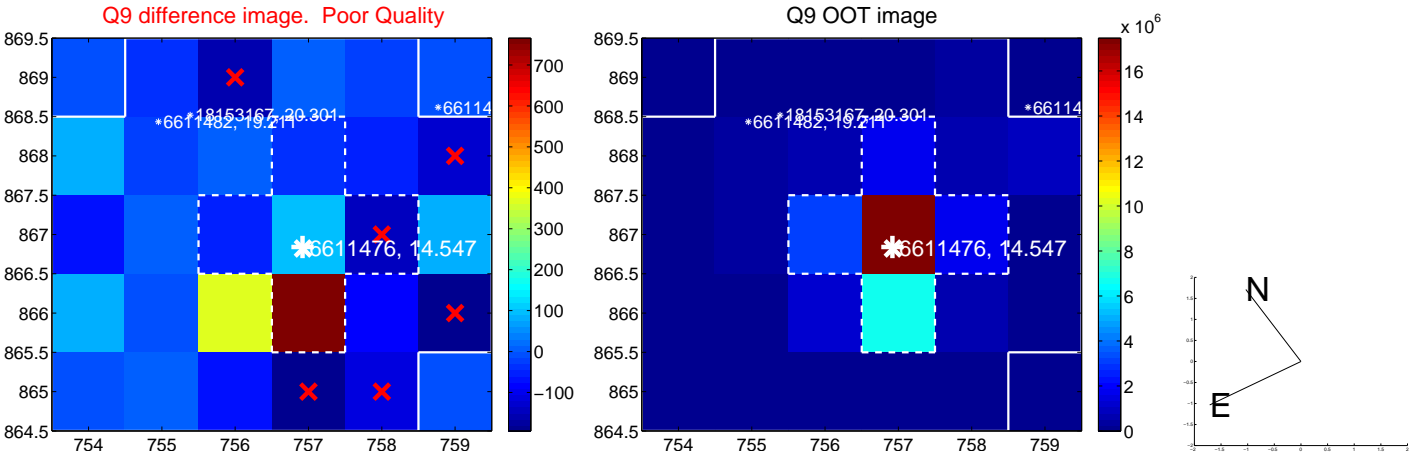
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



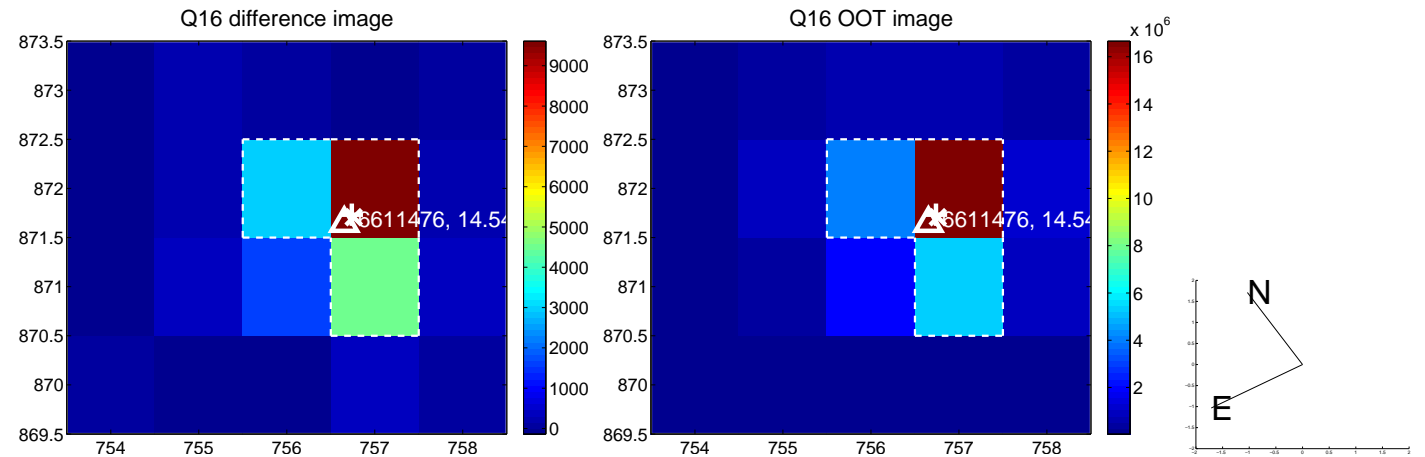
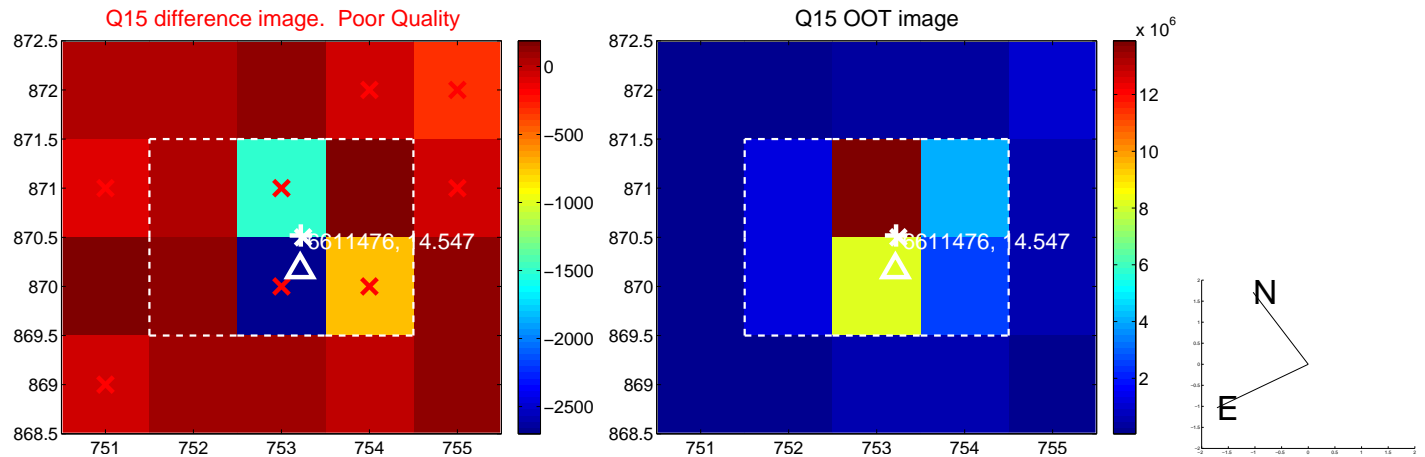
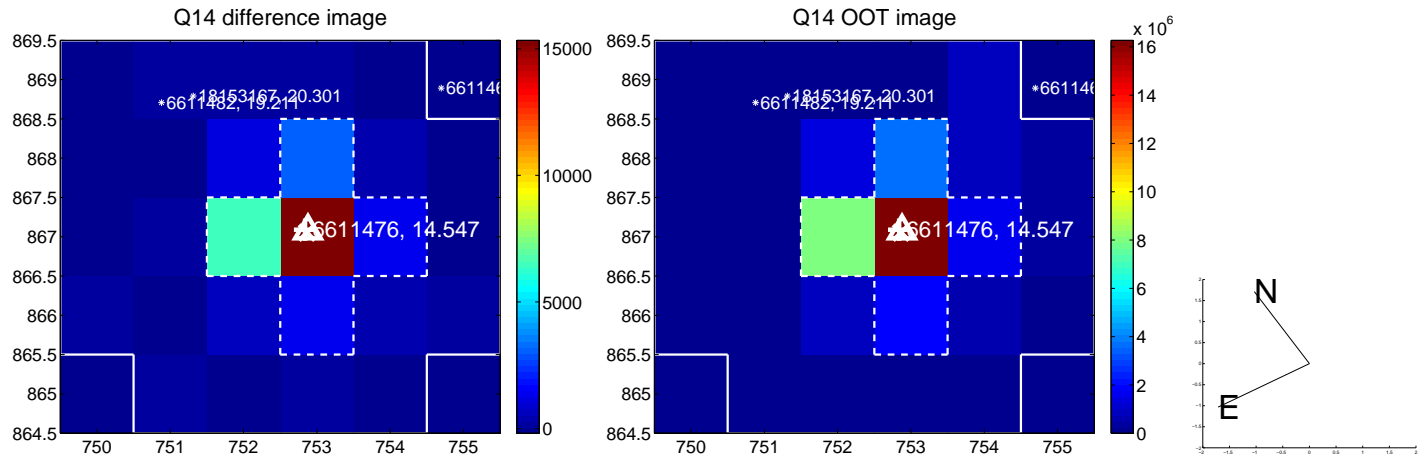
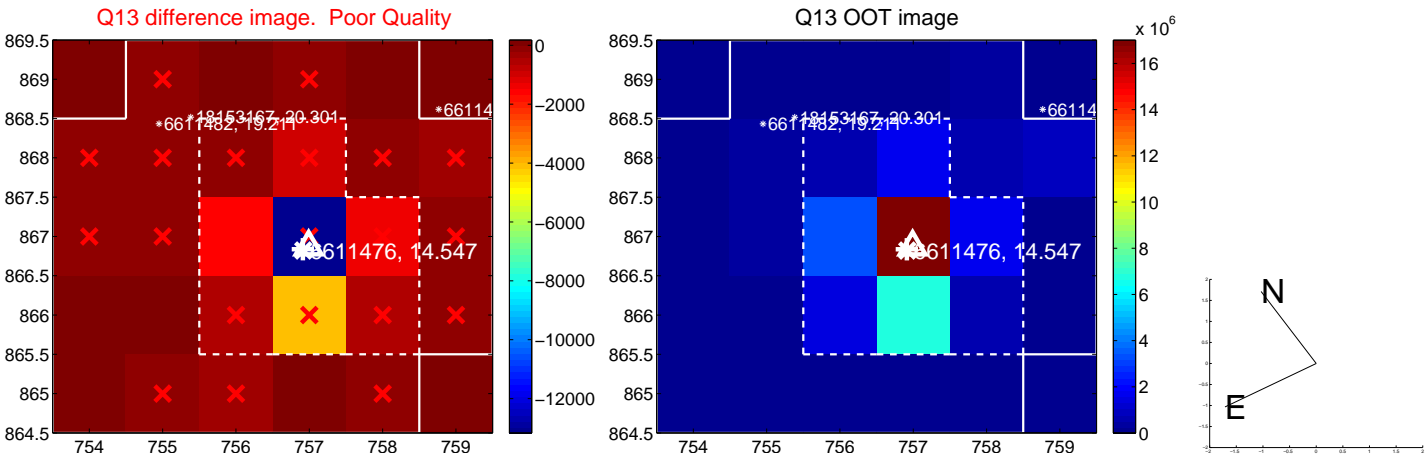
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



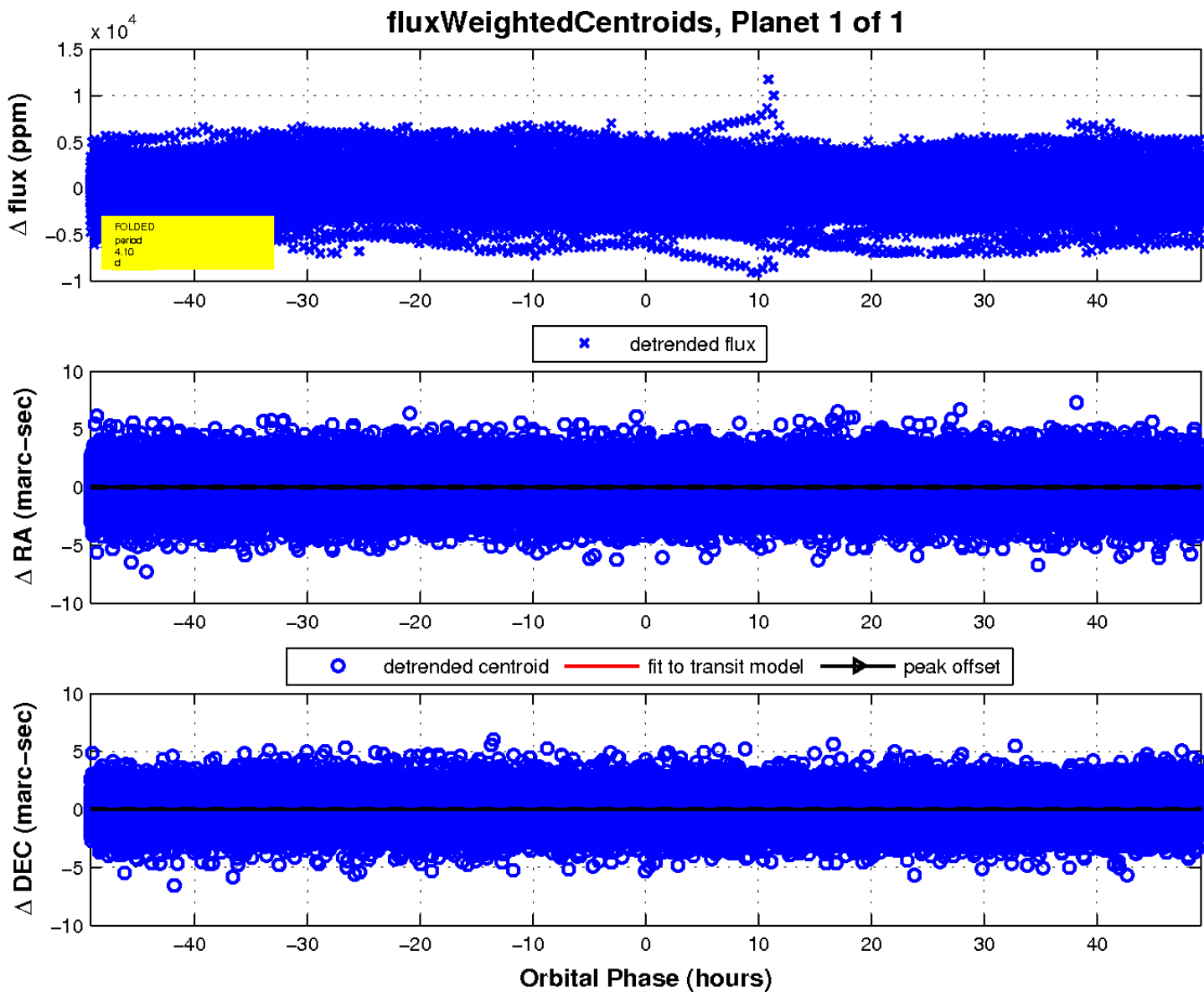
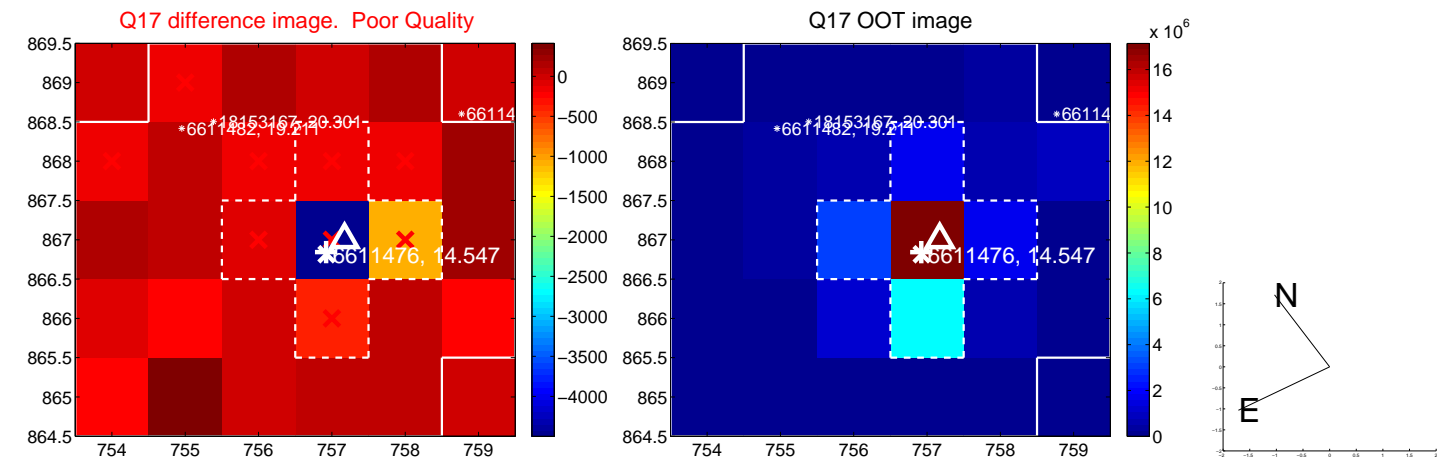
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

