

KIC 011962284

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})
011962284-01	OBS	2647.01	8.839233	135.545614	278.8	1.674	12.4	13.7	0.87	5330	1.42	86.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011962284-01	OBS	PC	1.00	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.

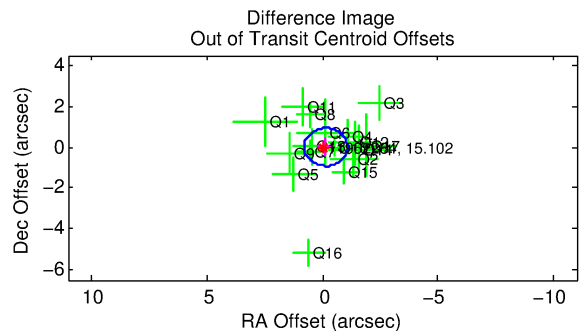
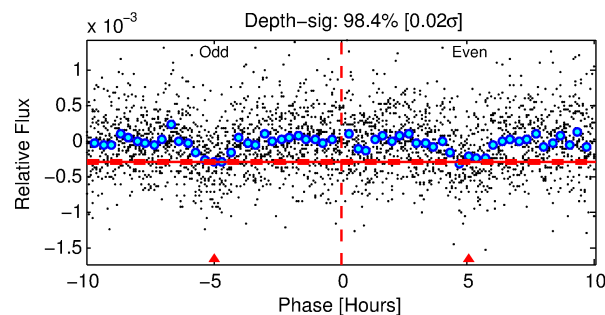
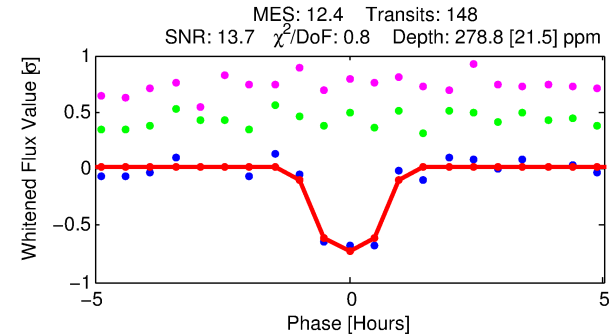
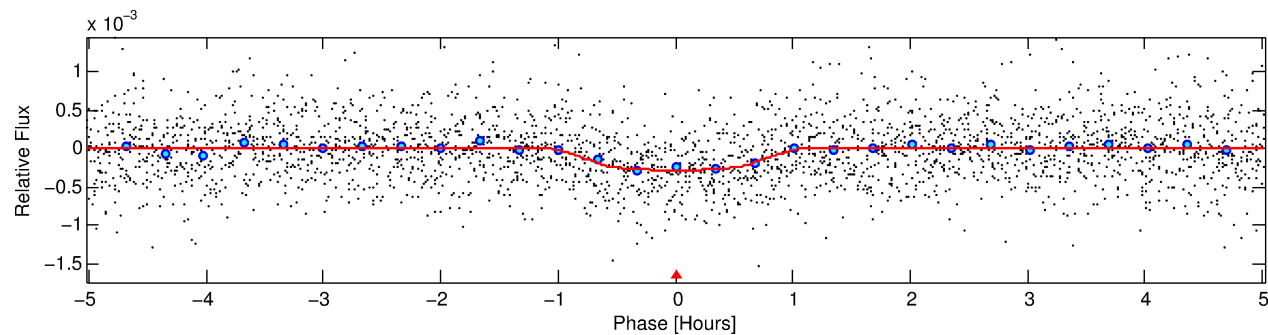
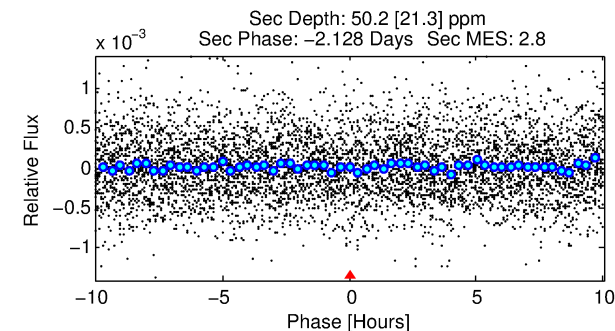
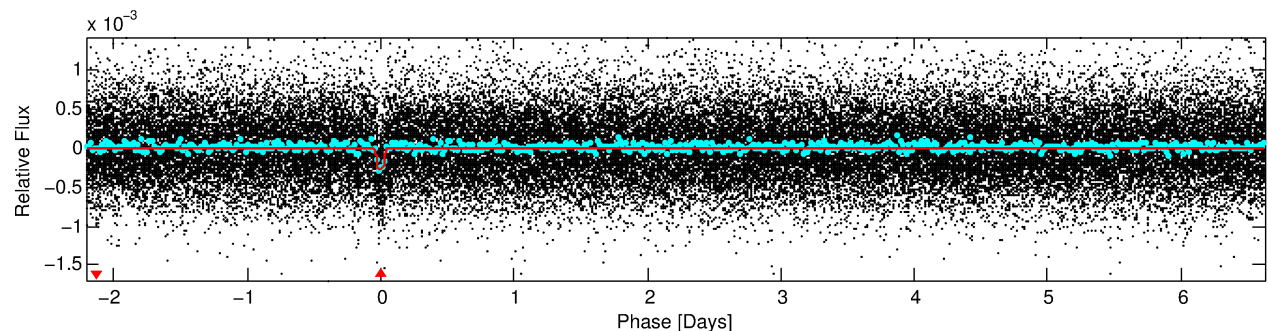
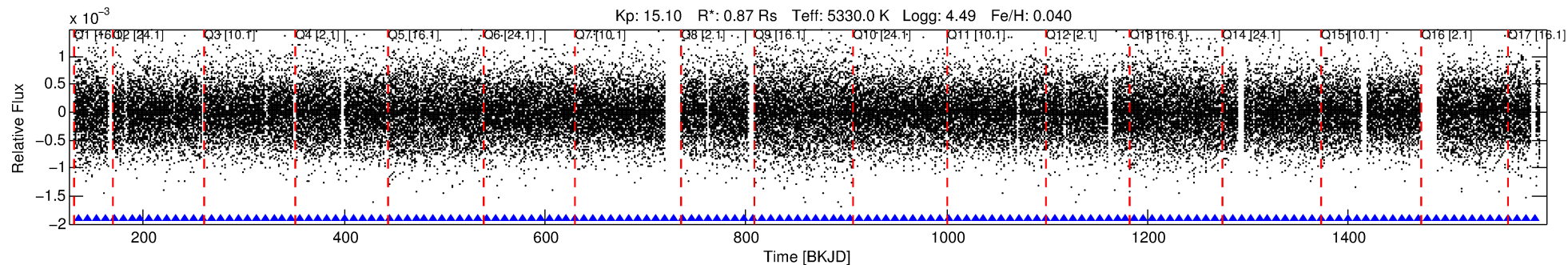
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011962284-01

No Significant Match Found

DV One-Page Summary

KIC: 11962284 Candidate: 1 of 1 Period: 8.839 d
KOI: K02647.01 Corr: 0.963



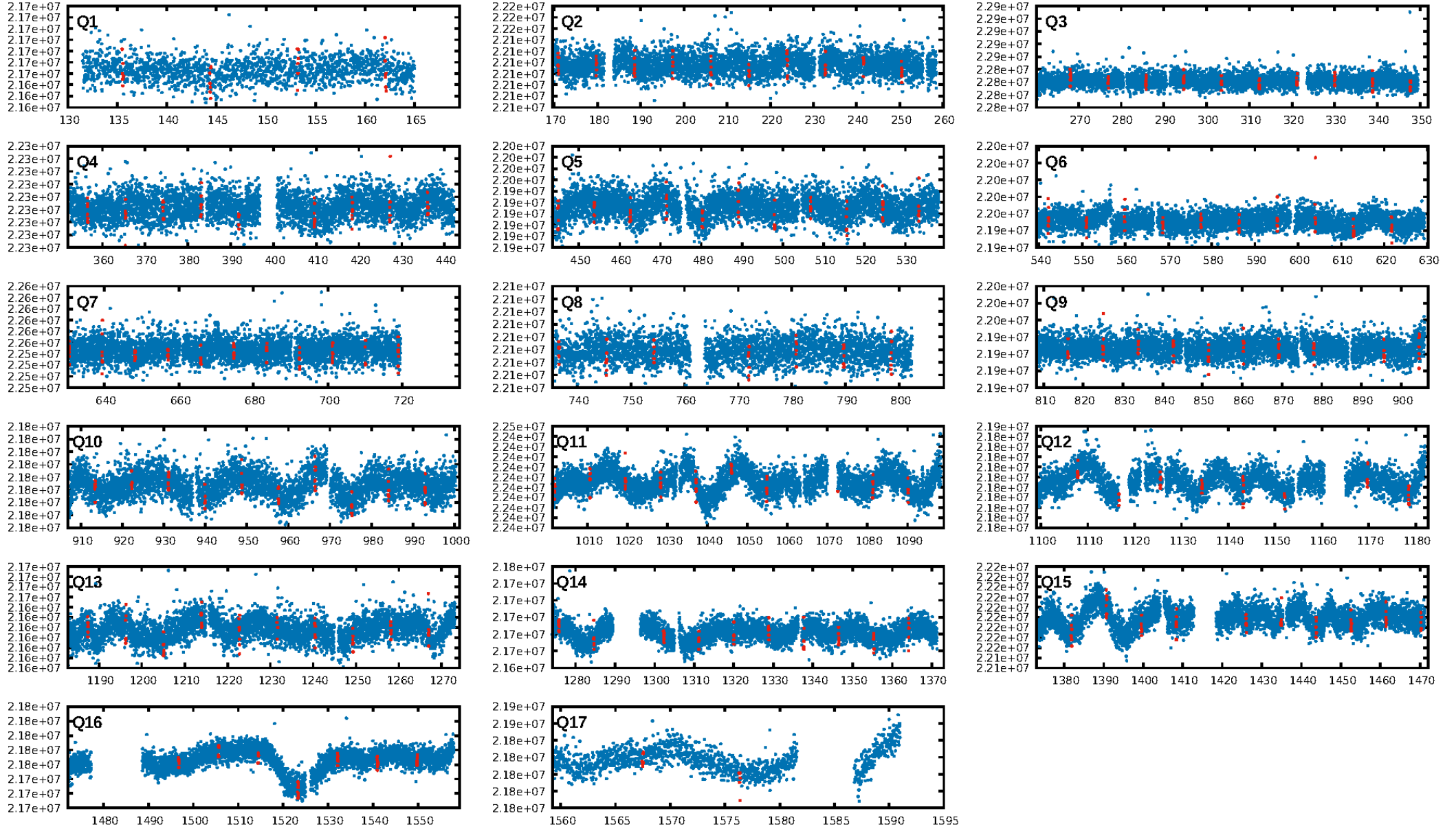
DV Fit Results:

Period = 8.83923 [0.00004] d
Epoch = 135.5456 [0.0032] BKJD
Rp/R* = 0.0150 [0.0219]
a/R* = 40.93 [225.66]
b = 0.03 [180.52]
Seff = 86.75 [22.31]
Teff = 778 [50] K
Rp = 1.42 [2.09] Re
a = 0.0794 [0.0123] AU
Ag = 86.11 [254.70] [0.33σ]
Teffp = 3665 [2704] K [1.07σ]

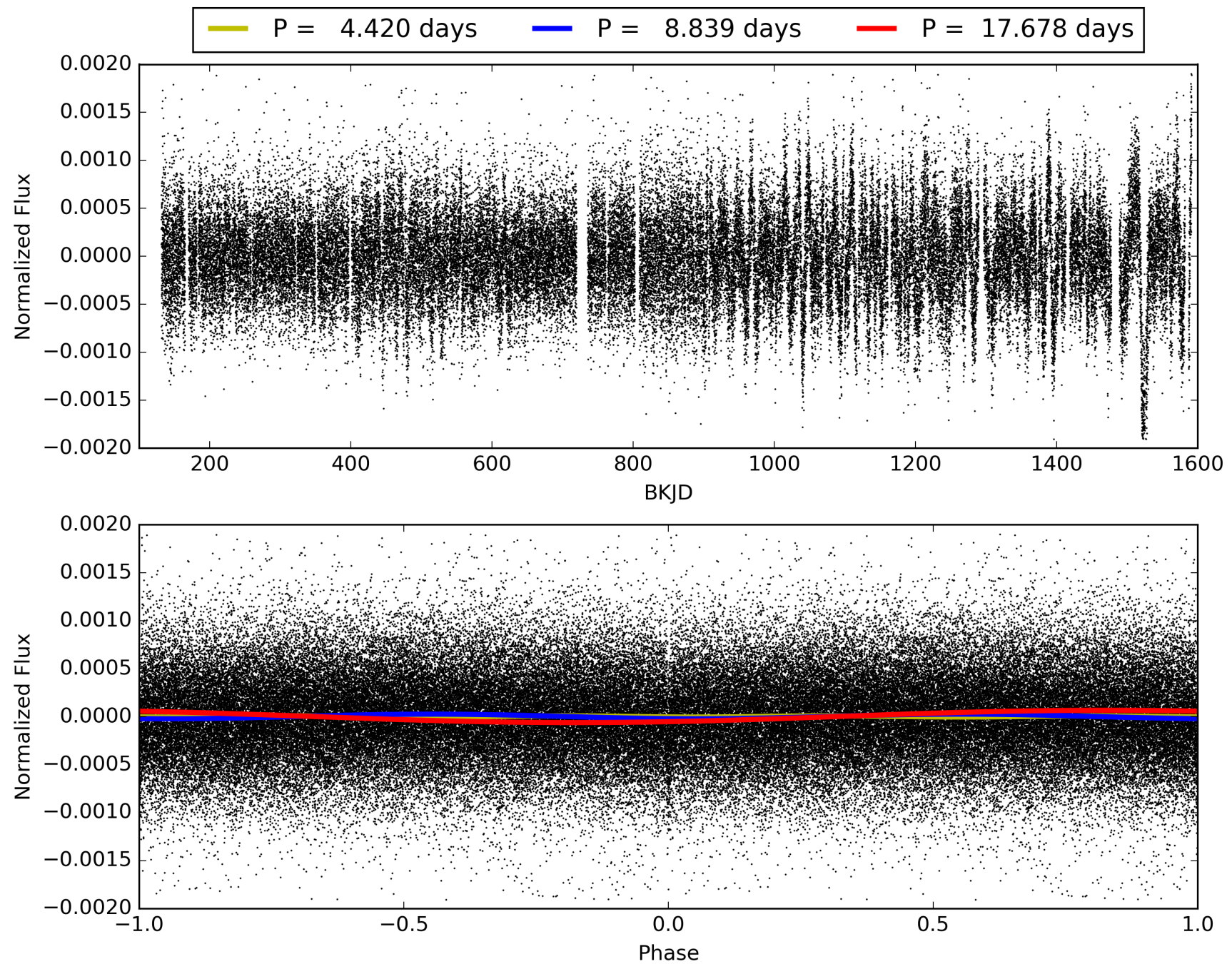
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.24e-34
RollingBand-fgt: 1.00 [142/142]
GhostDiagnostic-chr: 2.661
Centroid-sig: 0.8%
Centroid-so: 1.904 arcsec [1.78σ]
OotOffset-rm: 0.141 arcsec [0.46σ]
KicOffset-rm: 0.160 arcsec [0.48σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.41 [7/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 011962284-01, PDC Light Curves

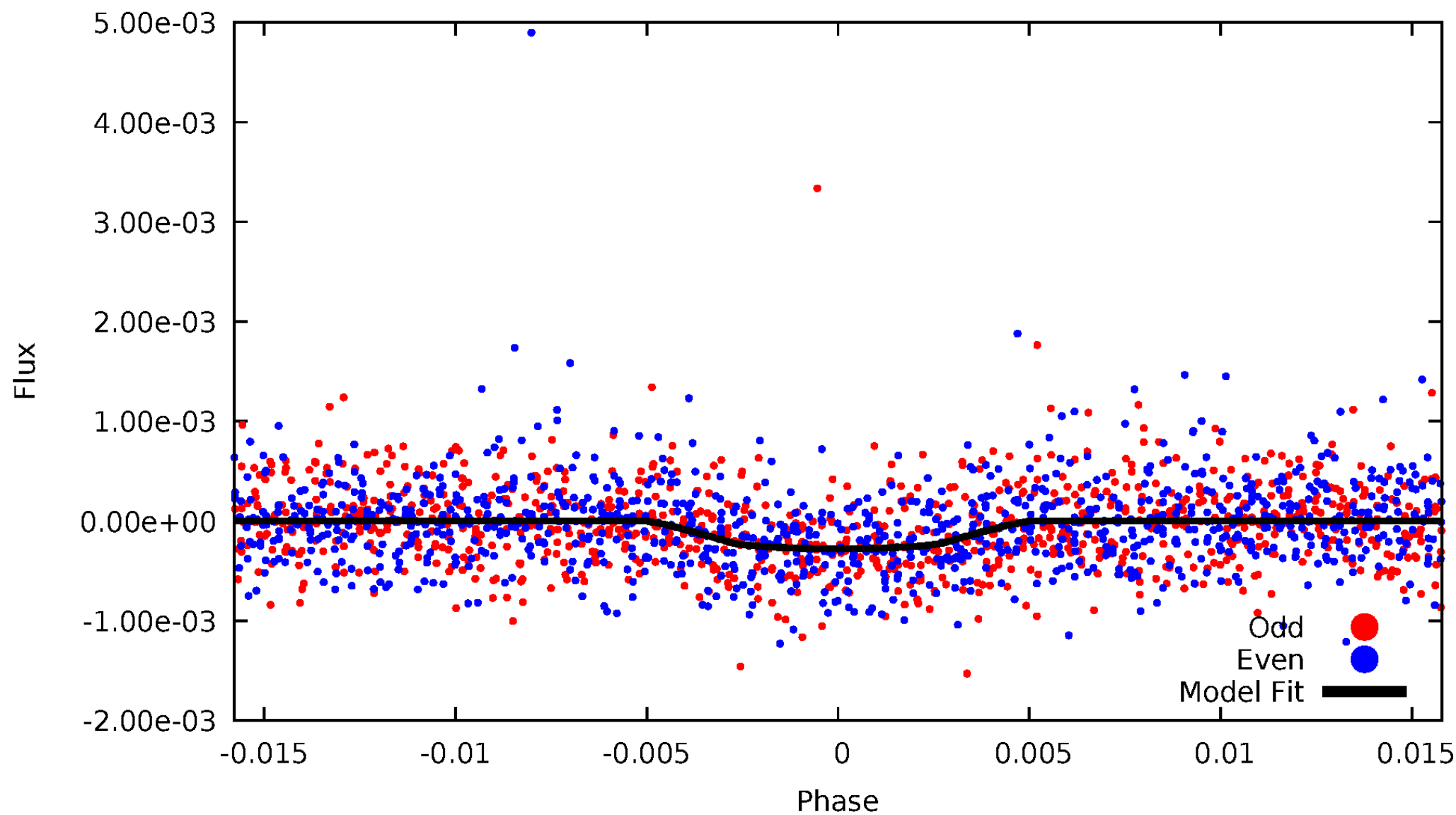


TCE 011962284-01



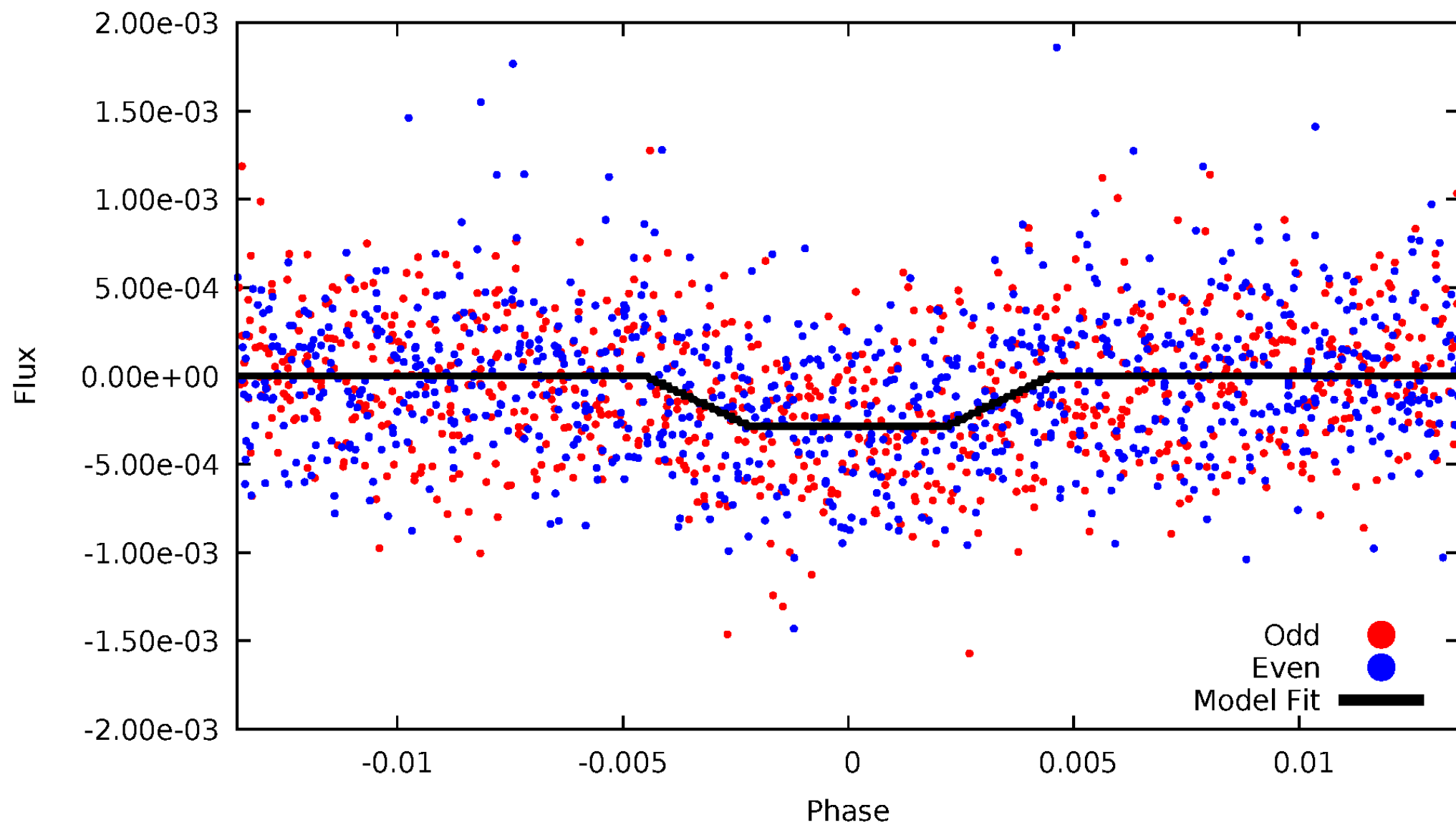
DV Odd/Even

TCE 011962284-01



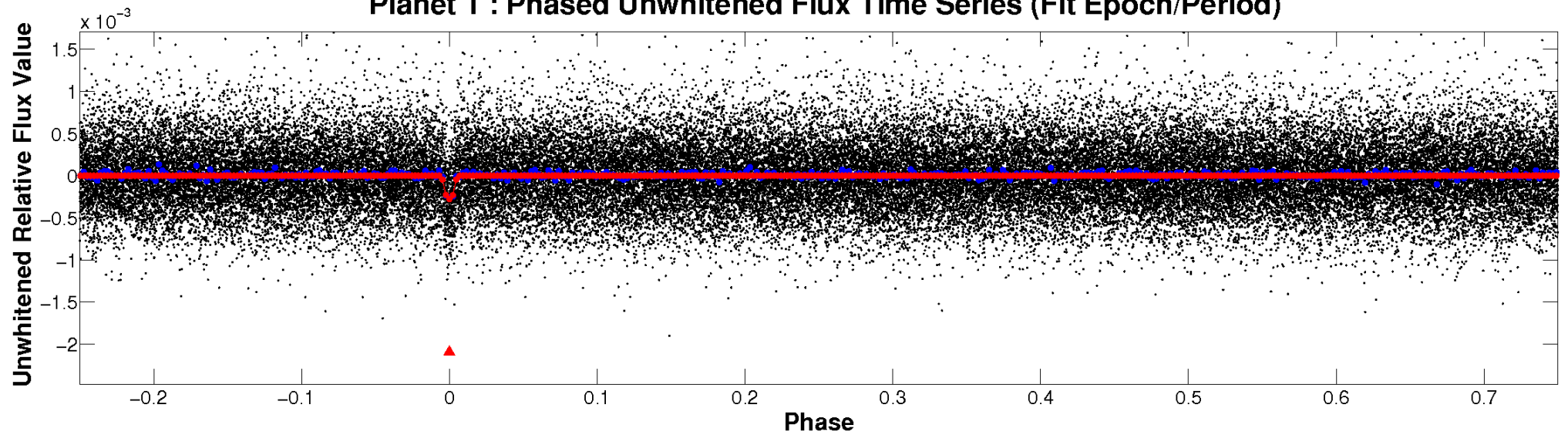
ALT Odd/Even

TCE 011962284-01

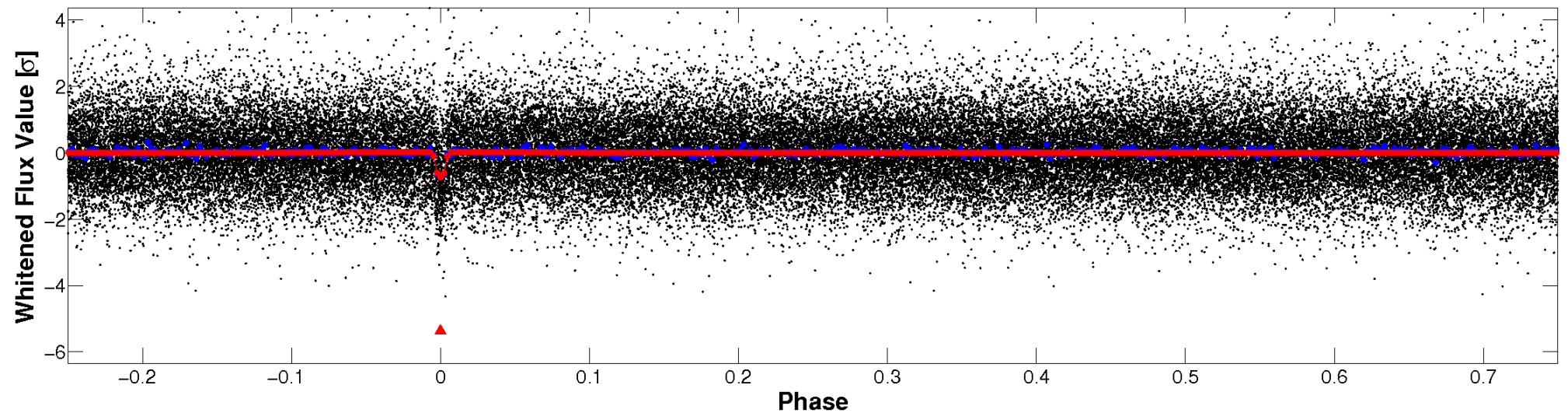


Non-Whitened Vs. Whitened Light Curve

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

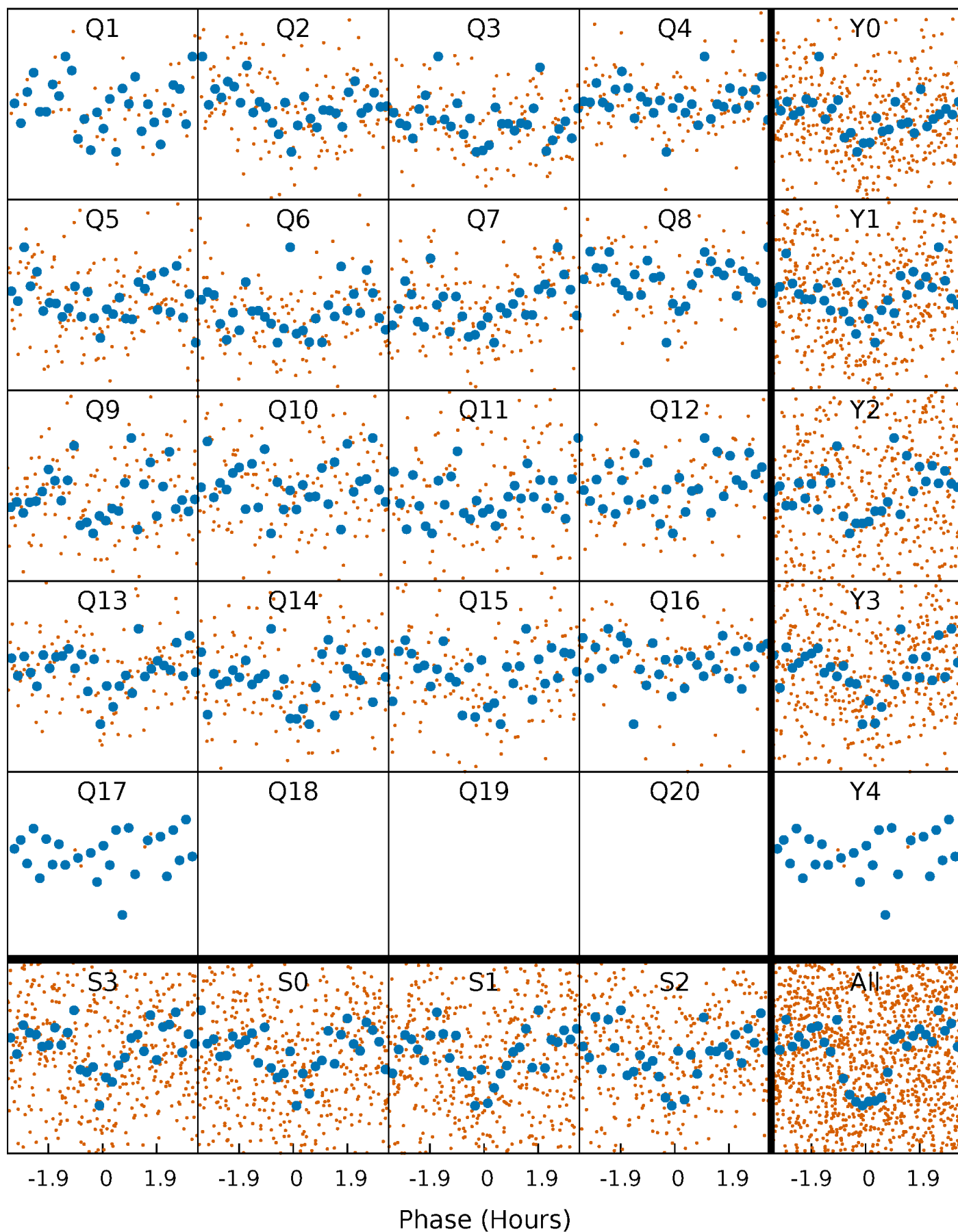


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



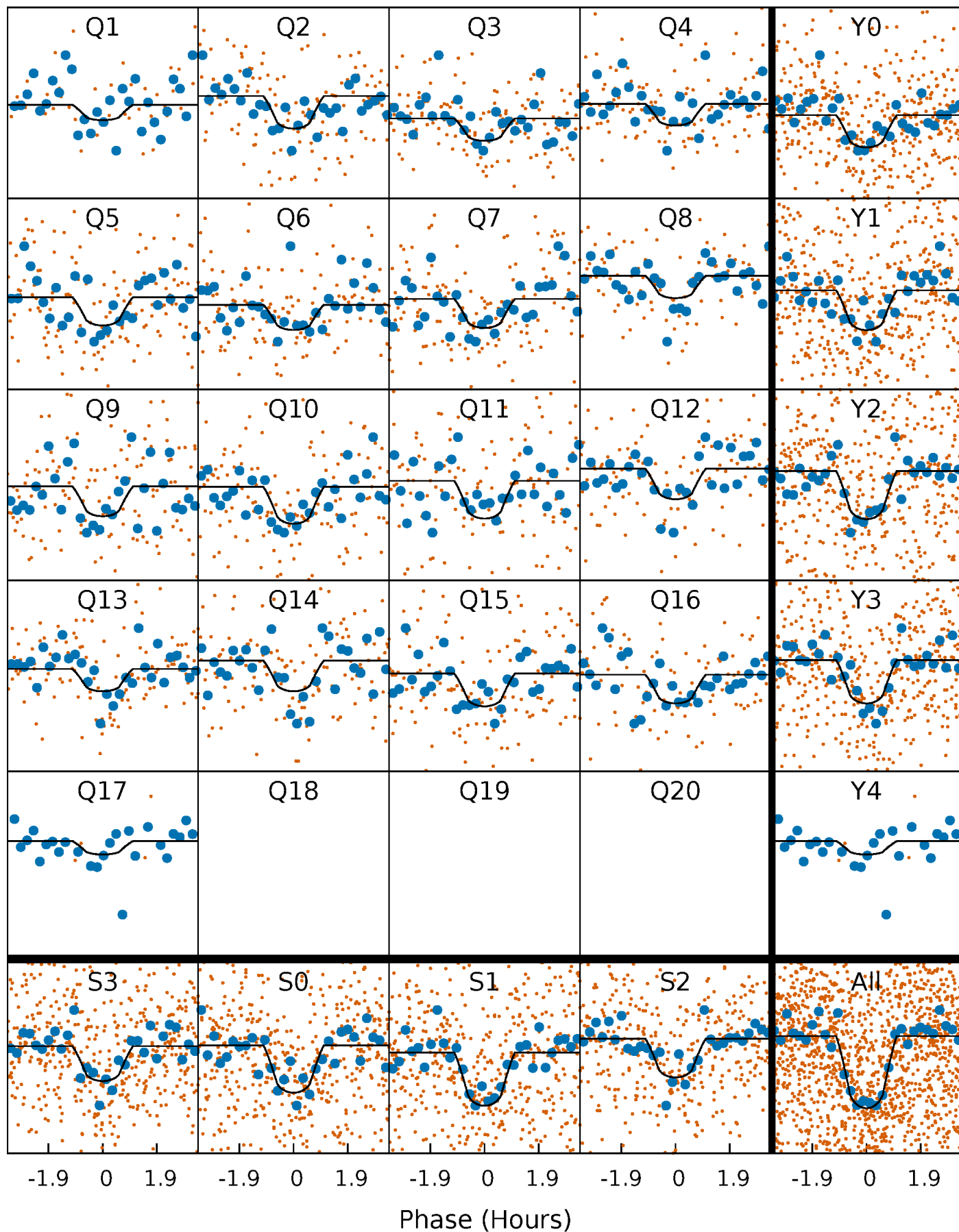
PDC Quarter-Phased Transit Curves

TCE 011962284-01 P= 8.839233 Days $T_0=135.545614$ (BKJD)



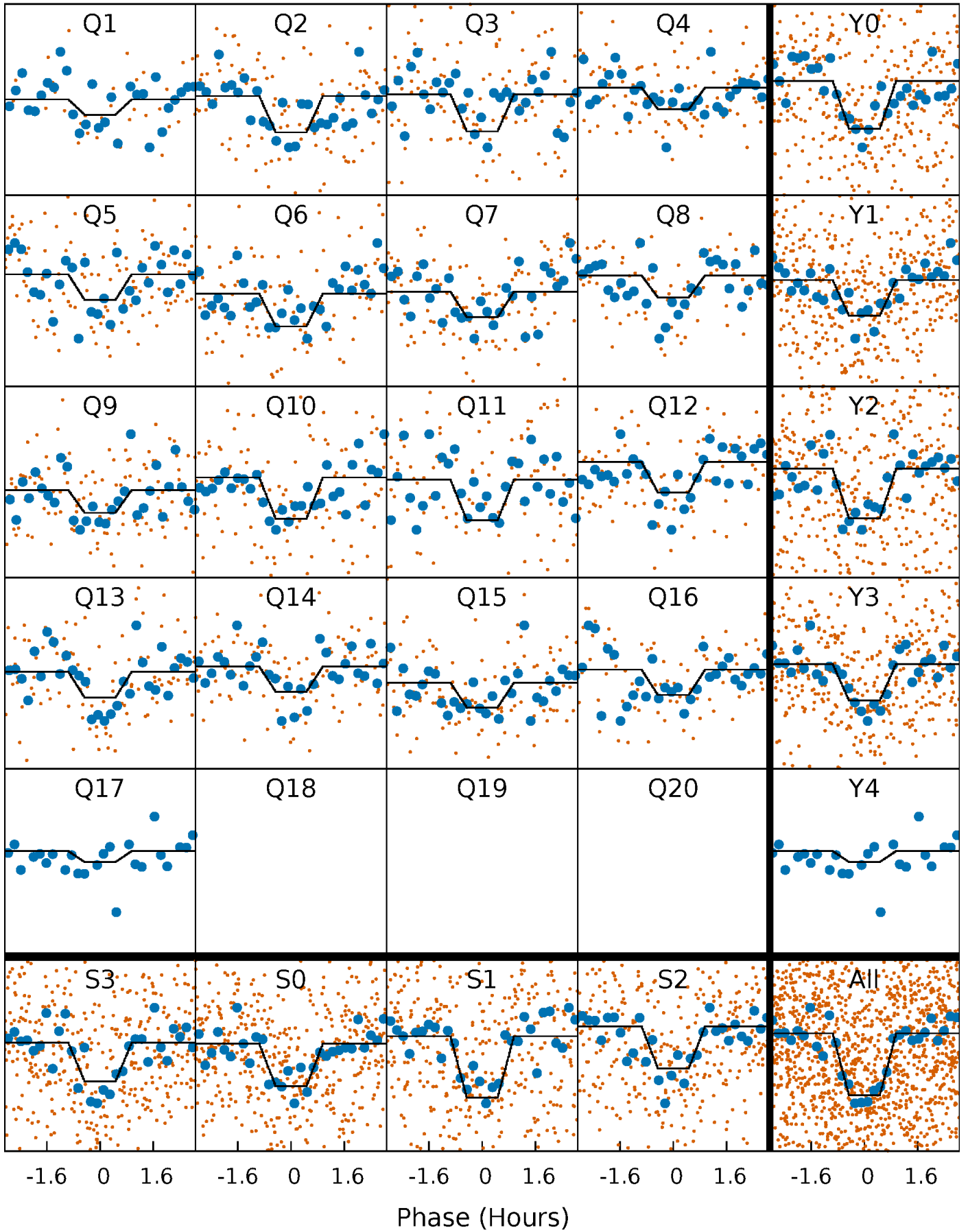
DV Quarter-Phased Transit Curves

TCE 011962284-01 P= 8.839233 Days $T_0=135.545614$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

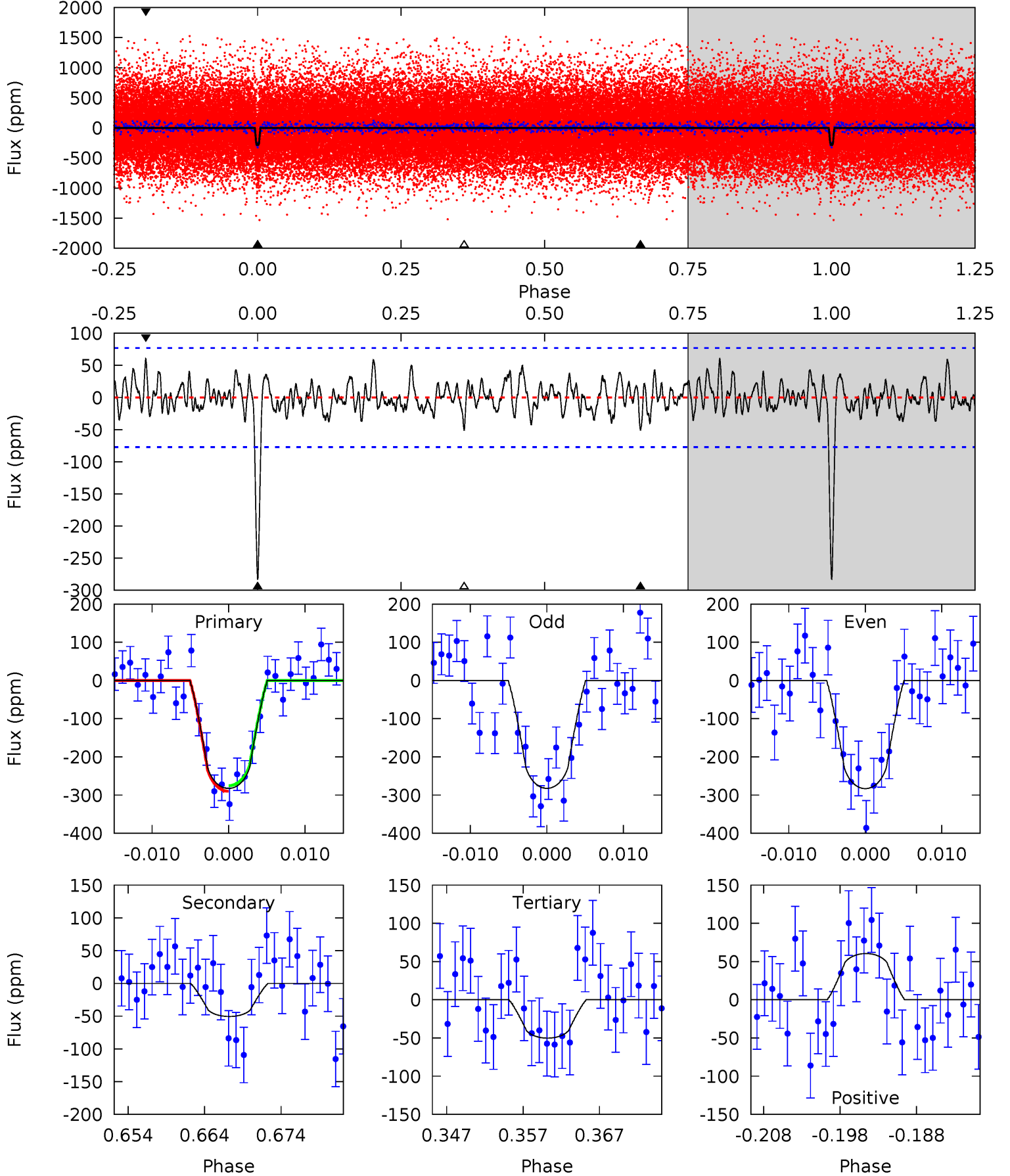
TCE 011962284-01 P= 8.839297 Days $T_0=135.541263$ (BKJD)



DV Model-Shift Uniqueness Test

011962284-01, P = 8.839233 Days, E = 126.706381 Days

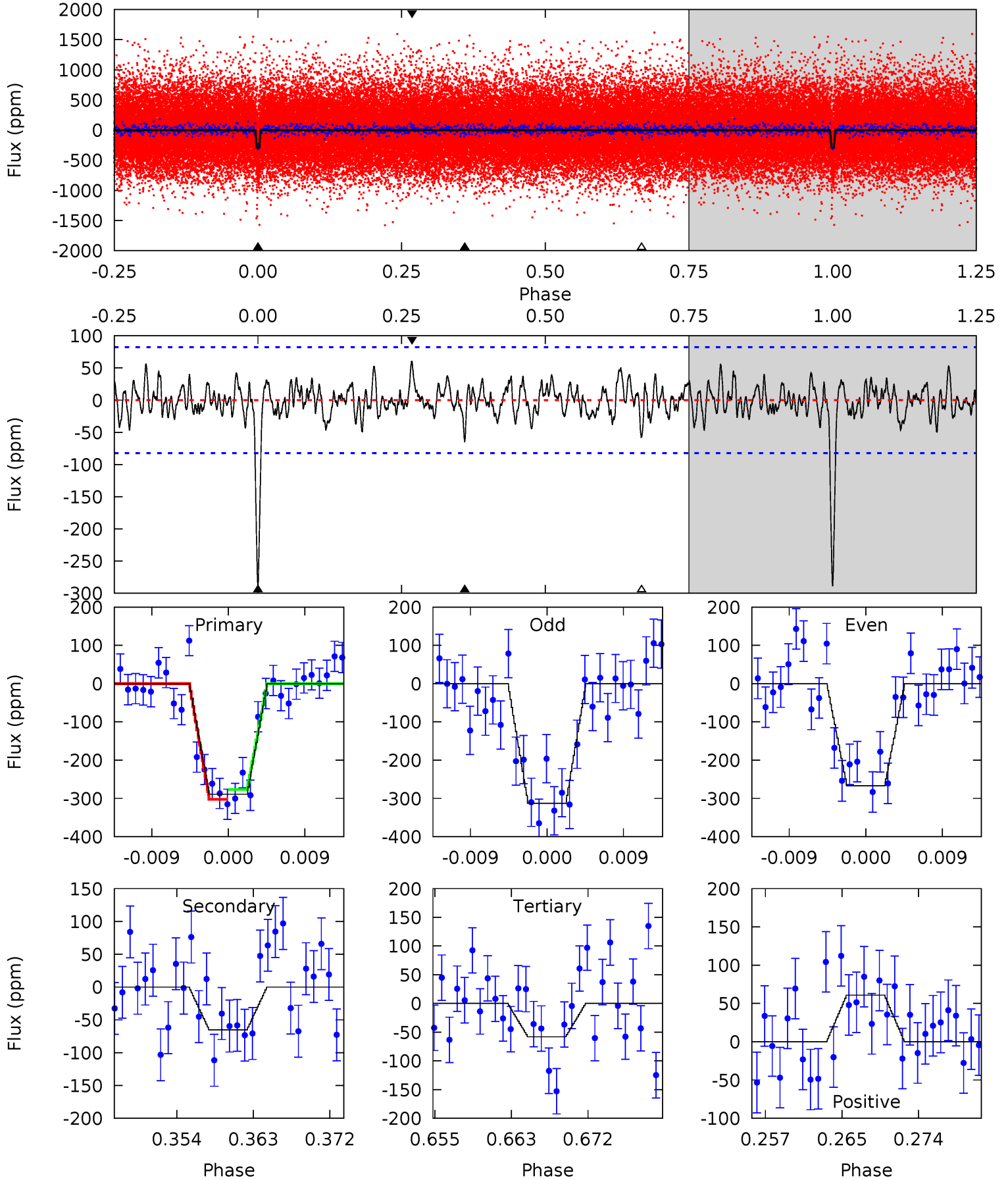
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.4	3.29	3.27	3.94	5.03	2.58	1.23	15.2	14.5	0.02	-0.65	0.02	1.12	0.18	0.47



Alt Model-Shift Uniqueness Test

011962284-01, P = 8.839297 Days, E = 126.701966 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.8	4.01	3.57	3.73	5.05	2.62	1.20	14.2	14.0	0.44	0.28	1.42	1.03	0.17	0.78



Stellar Parameters For KIC 011962284

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5330^{+159}_{-159}	$4.491^{+0.074}_{-0.126}$	$0.040^{+0.250}_{-0.300}$	$0.870^{+0.157}_{-0.092}$	$0.855^{+0.090}_{-0.074}$	$1.830^{+0.543}_{-0.660}$
	+3%/-3%	+2%/-3%	+625%/-750%	+18%/-11%	+11%/-9%	+30%/-36%
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 011962284-01 / KOI 2647.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-51 ± 15	$2.07^{+1.88}_{-1.39}$	1094^{+59}_{-47}	3499^{+1767}_{-631}	39^{+312}_{-29}
Alt.	-65 ± 16	$2.22^{+1.80}_{-1.42}$	1094^{+54}_{-47}	3591^{+1767}_{-612}	47^{+350}_{-33}

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 $A_{obs} \gg 1.0$

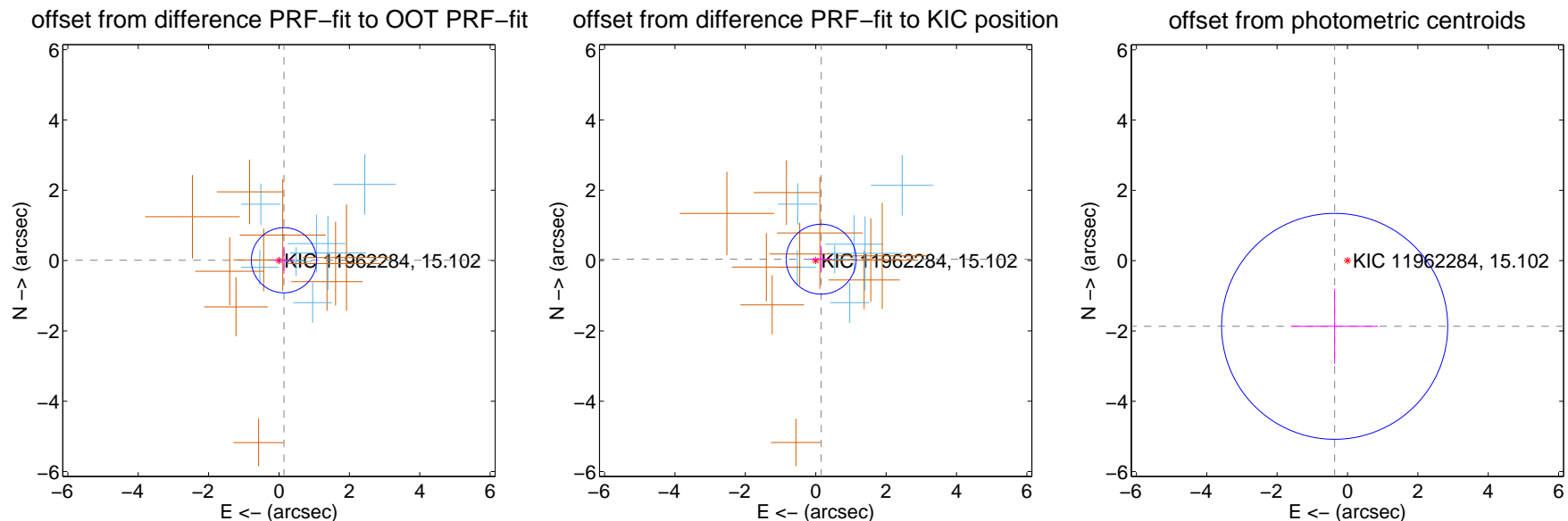
DV Centroid Data

Supplemental centroid analysis for 011962284-01. Kepler magnitude: 15.10. Transit SNR 13.71

There are 7 quarters with good PRF difference image offsets

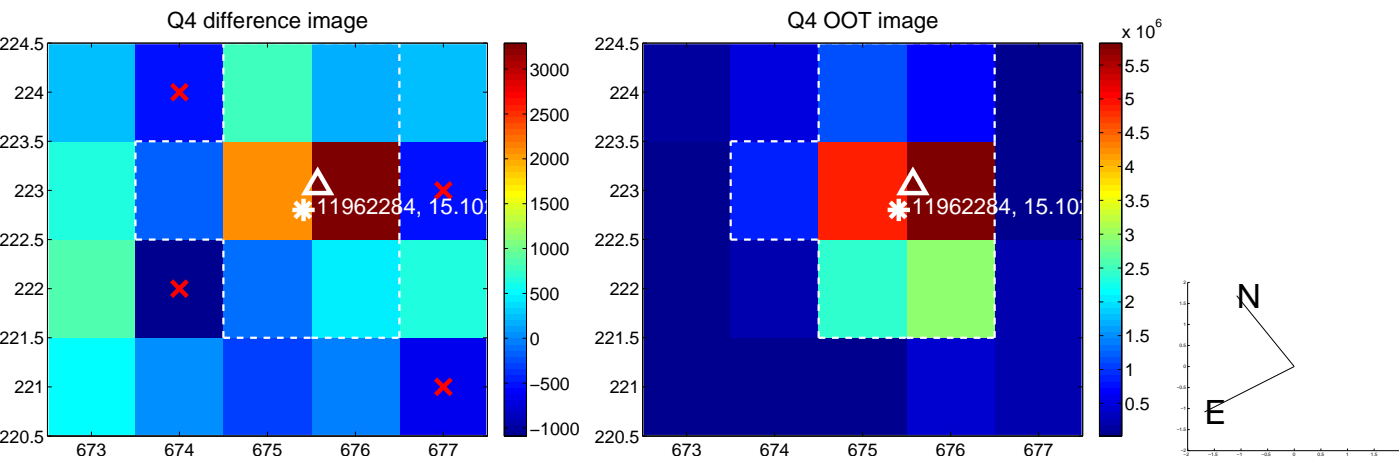
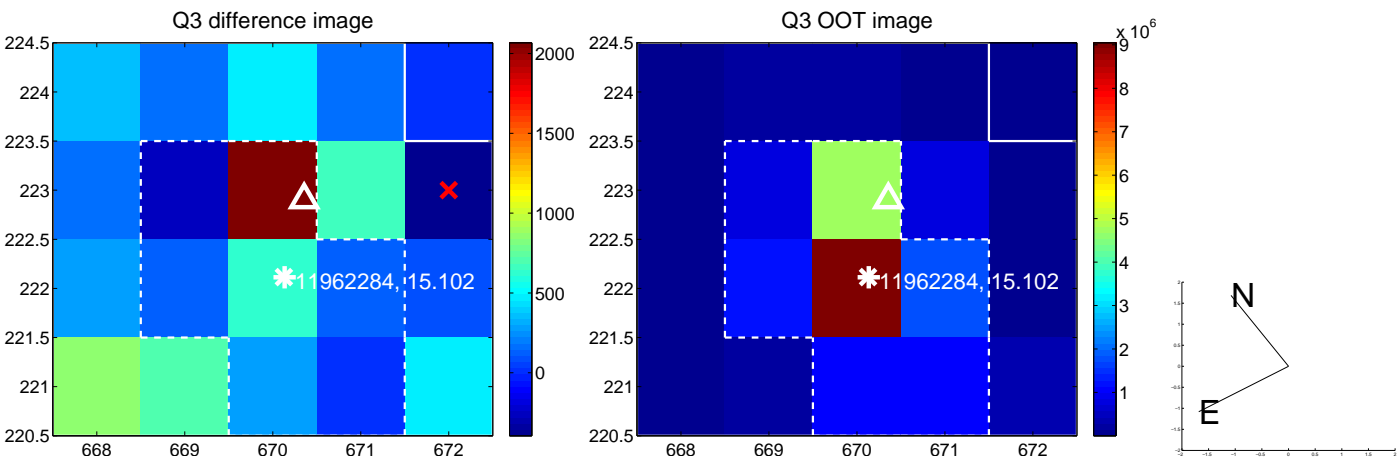
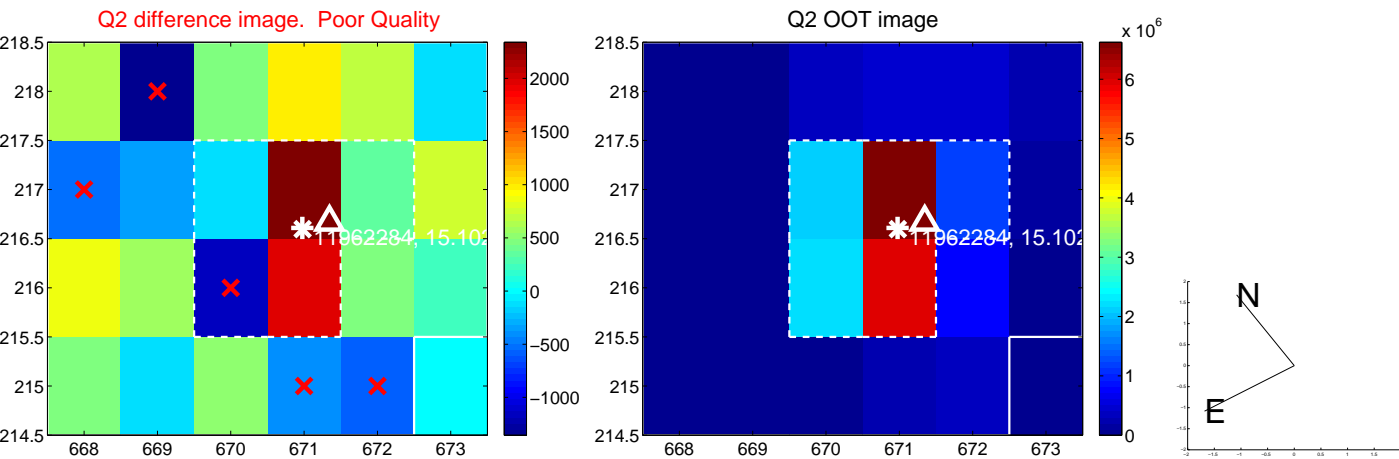
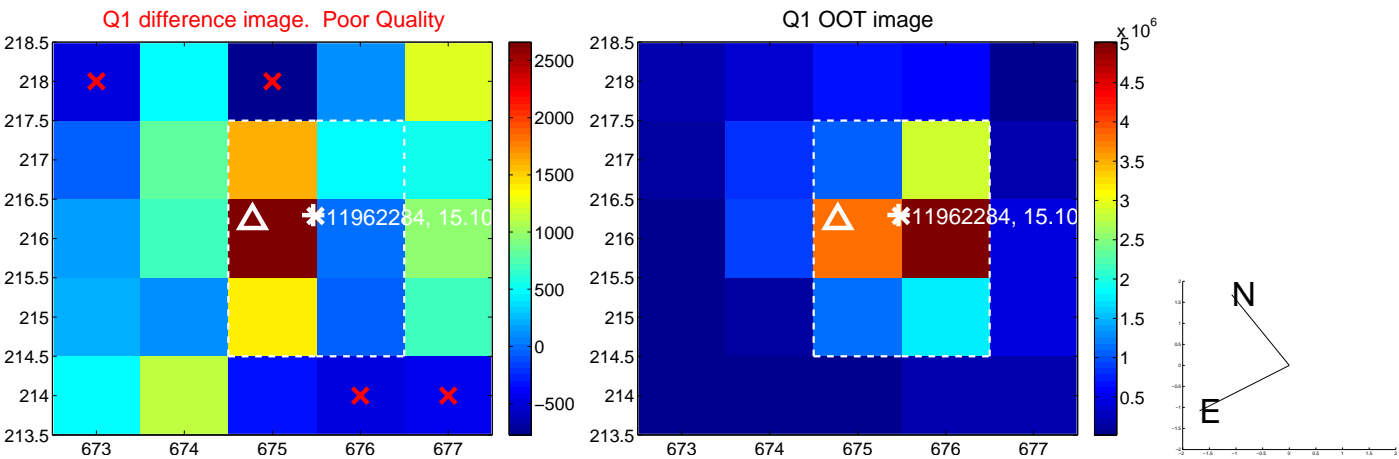
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.141 ± 0.309	0.46	-0.141 ± 0.305	0.010 ± 0.382
PRF-fit source offset from KIC position	0.160 ± 0.332	0.48	-0.155 ± 0.314	0.040 ± 0.380
photometric centroid source offset	1.90 ± 1.07	1.78	0.36 ± 1.23	-1.87 ± 1.06

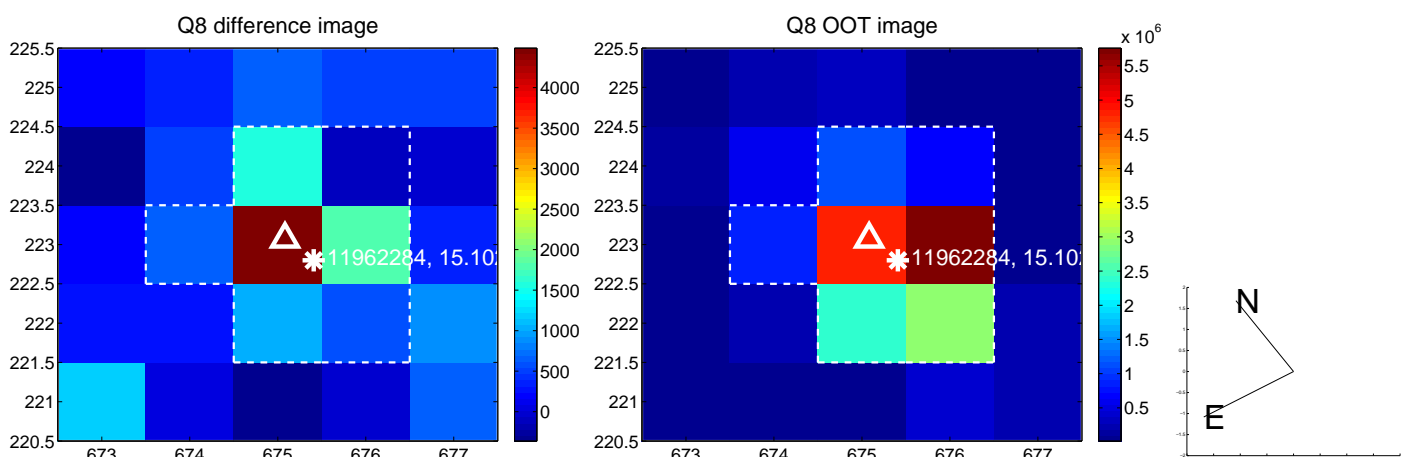
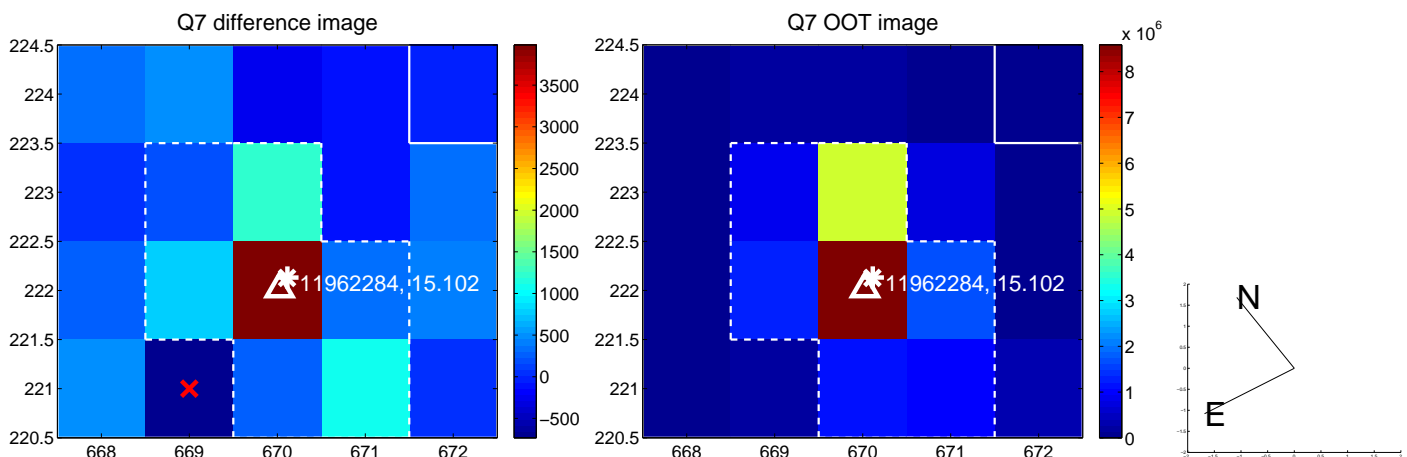
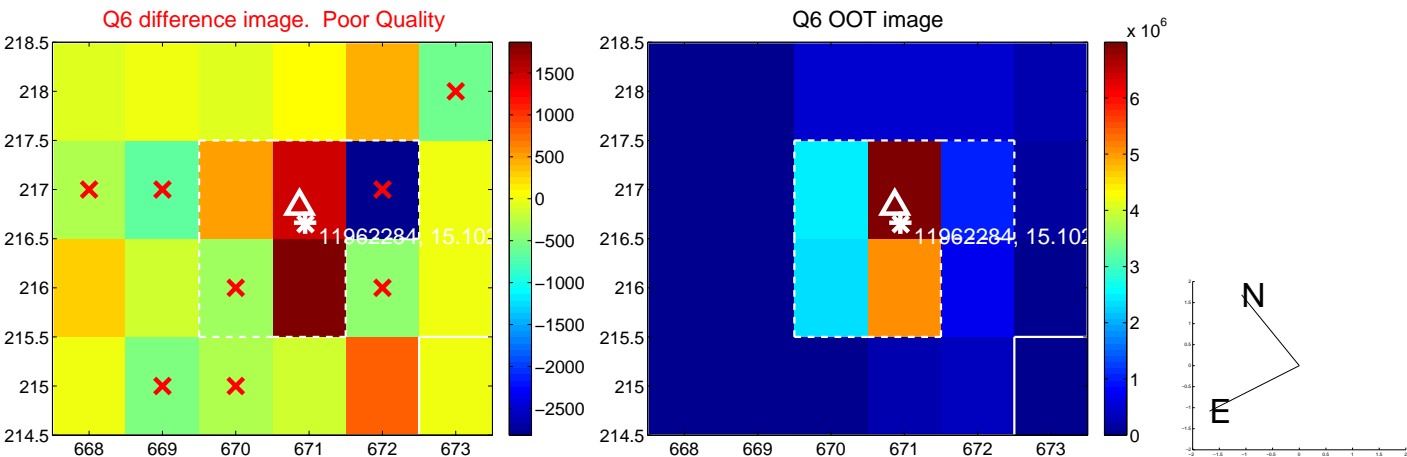
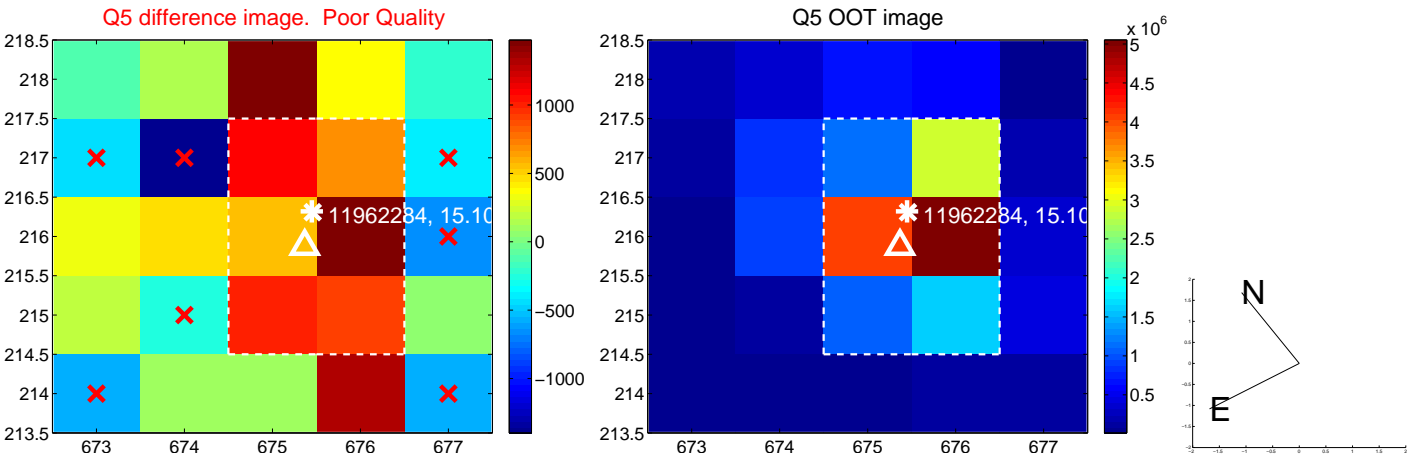


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

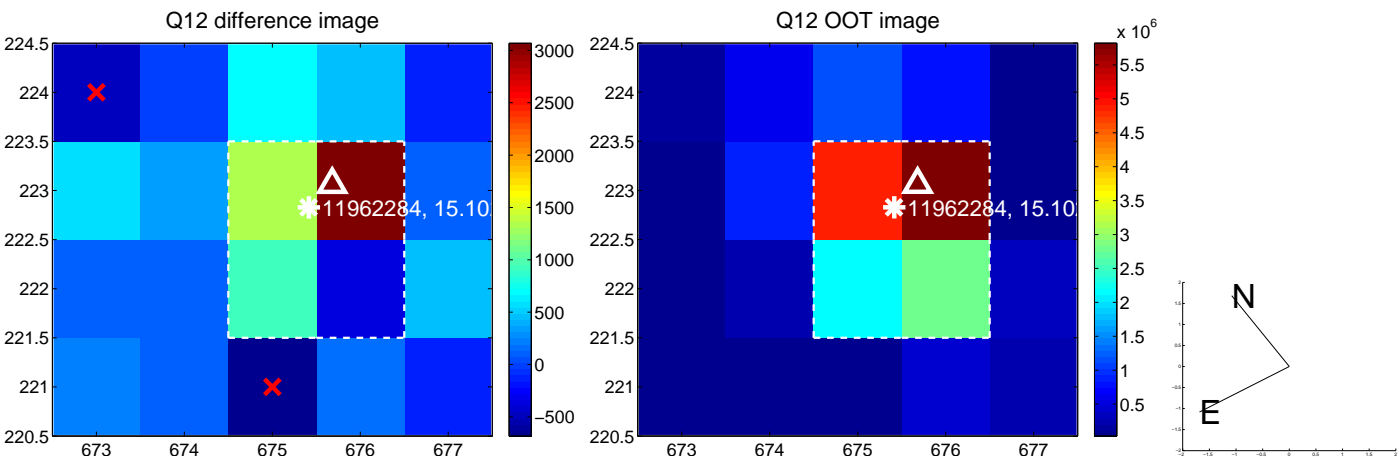
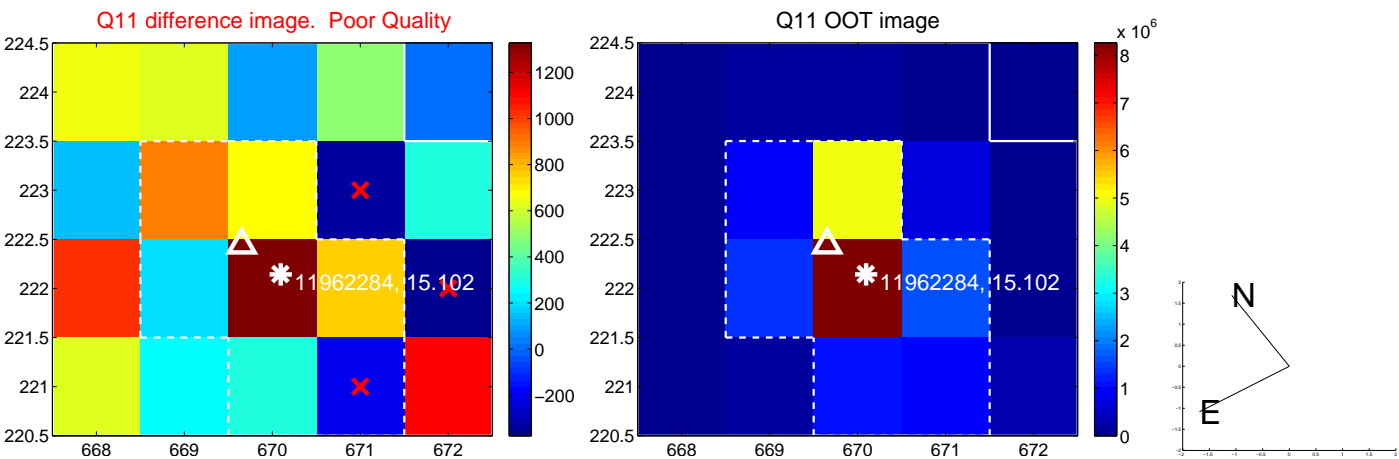
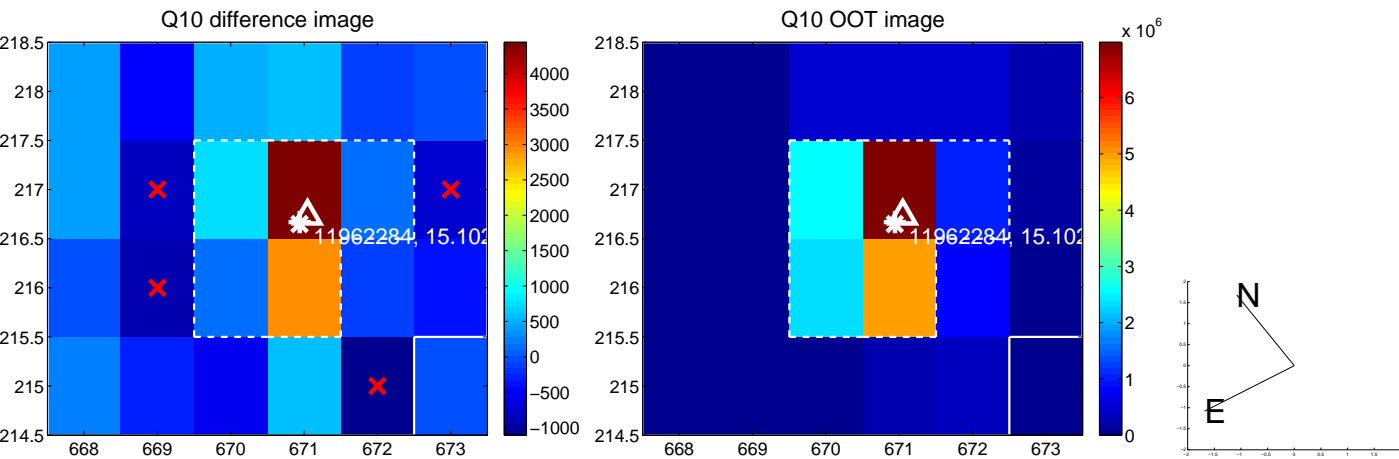
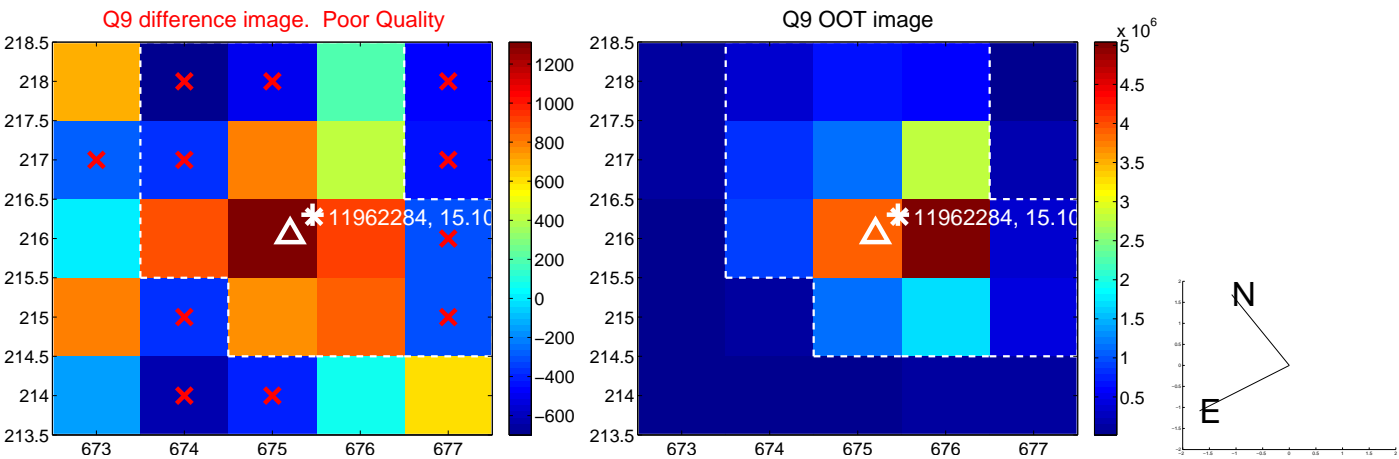
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



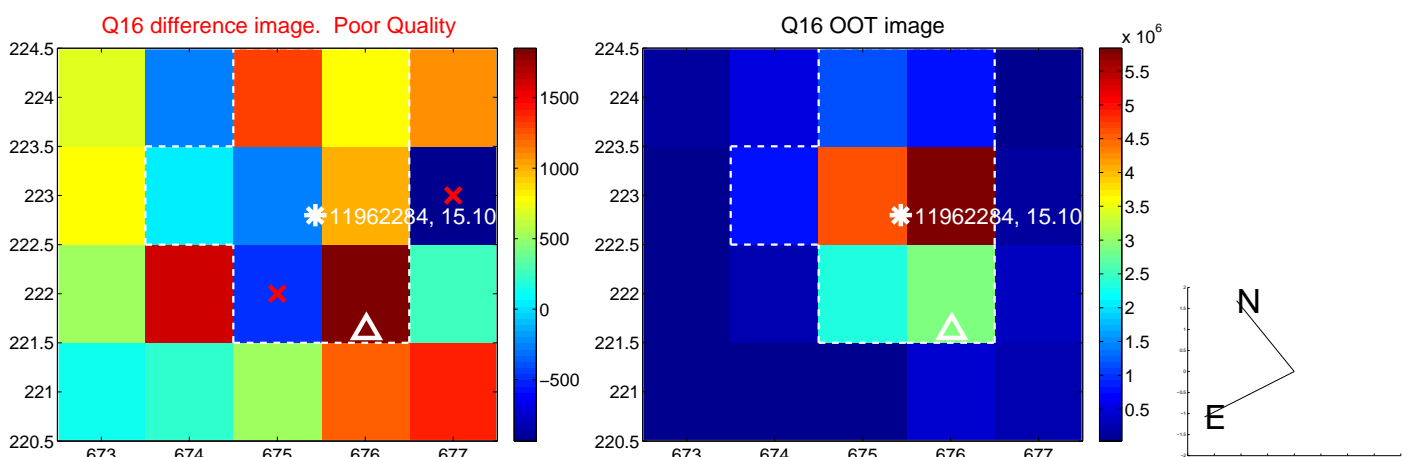
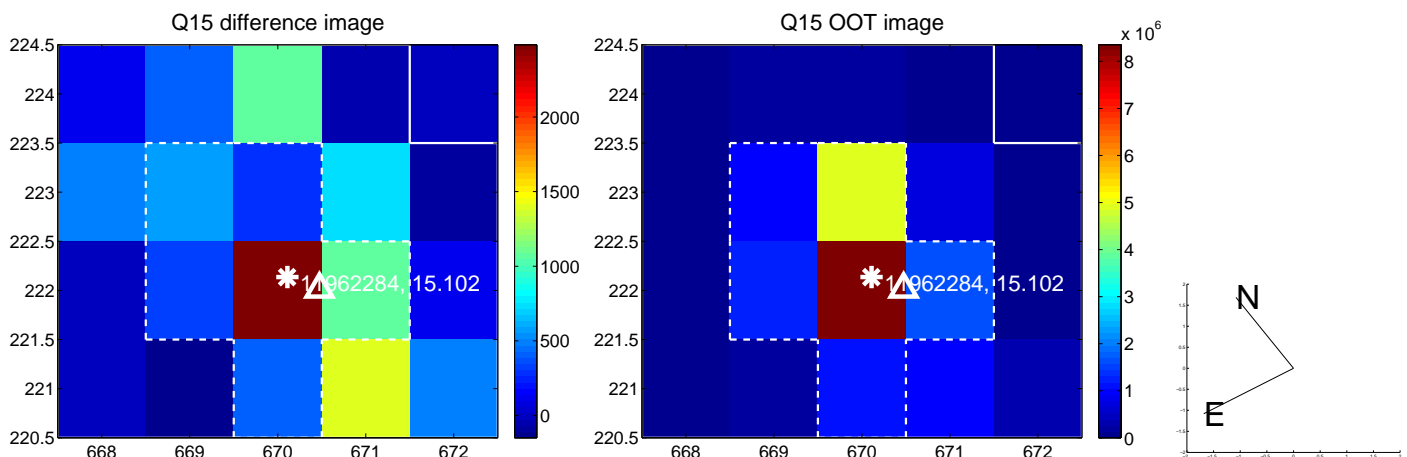
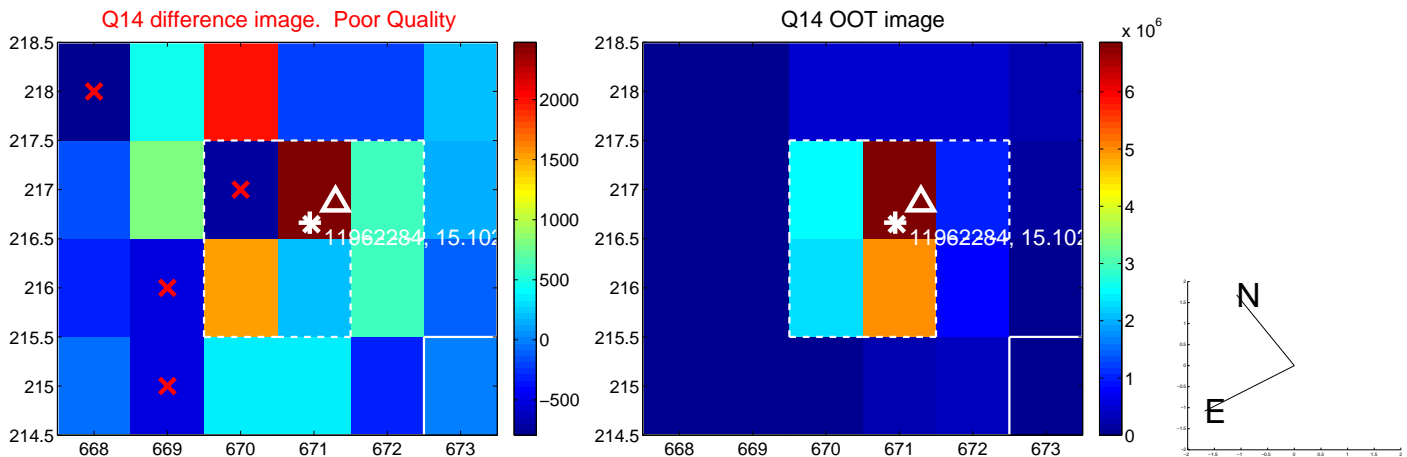
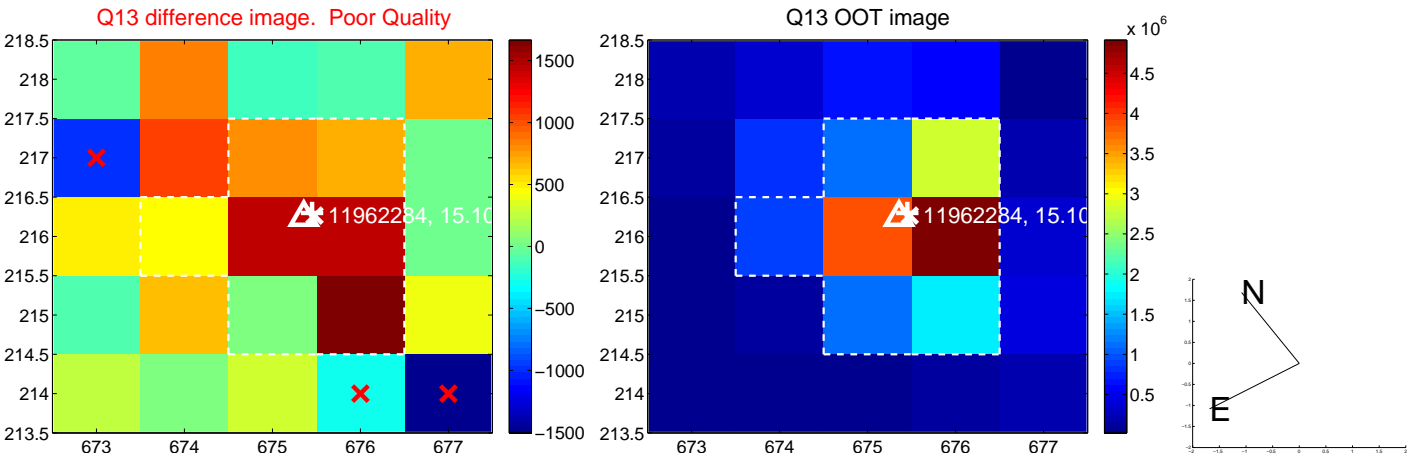
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



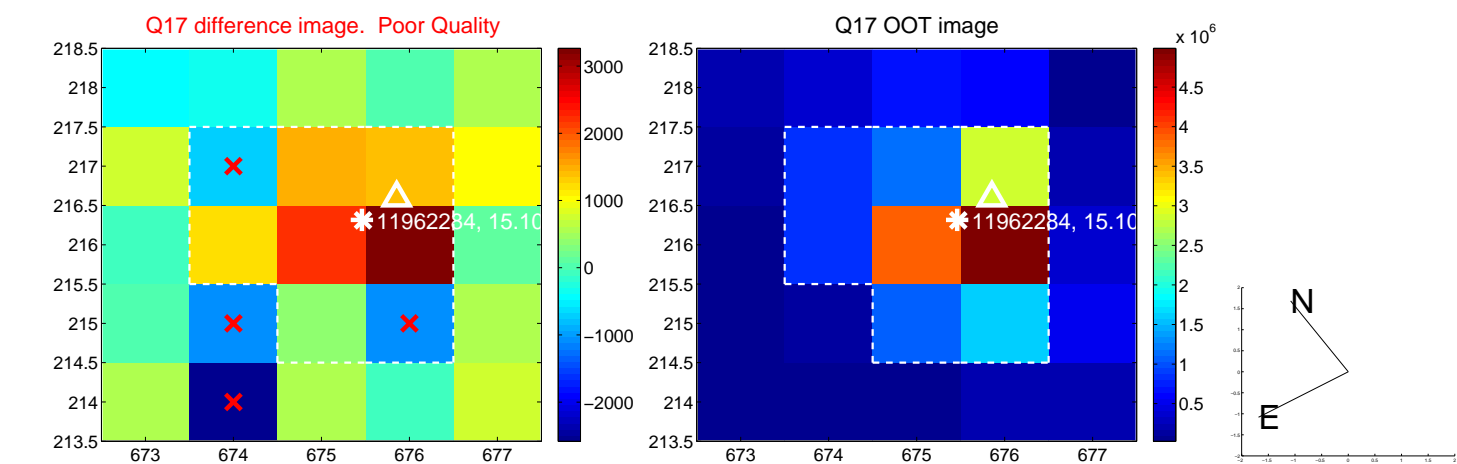
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



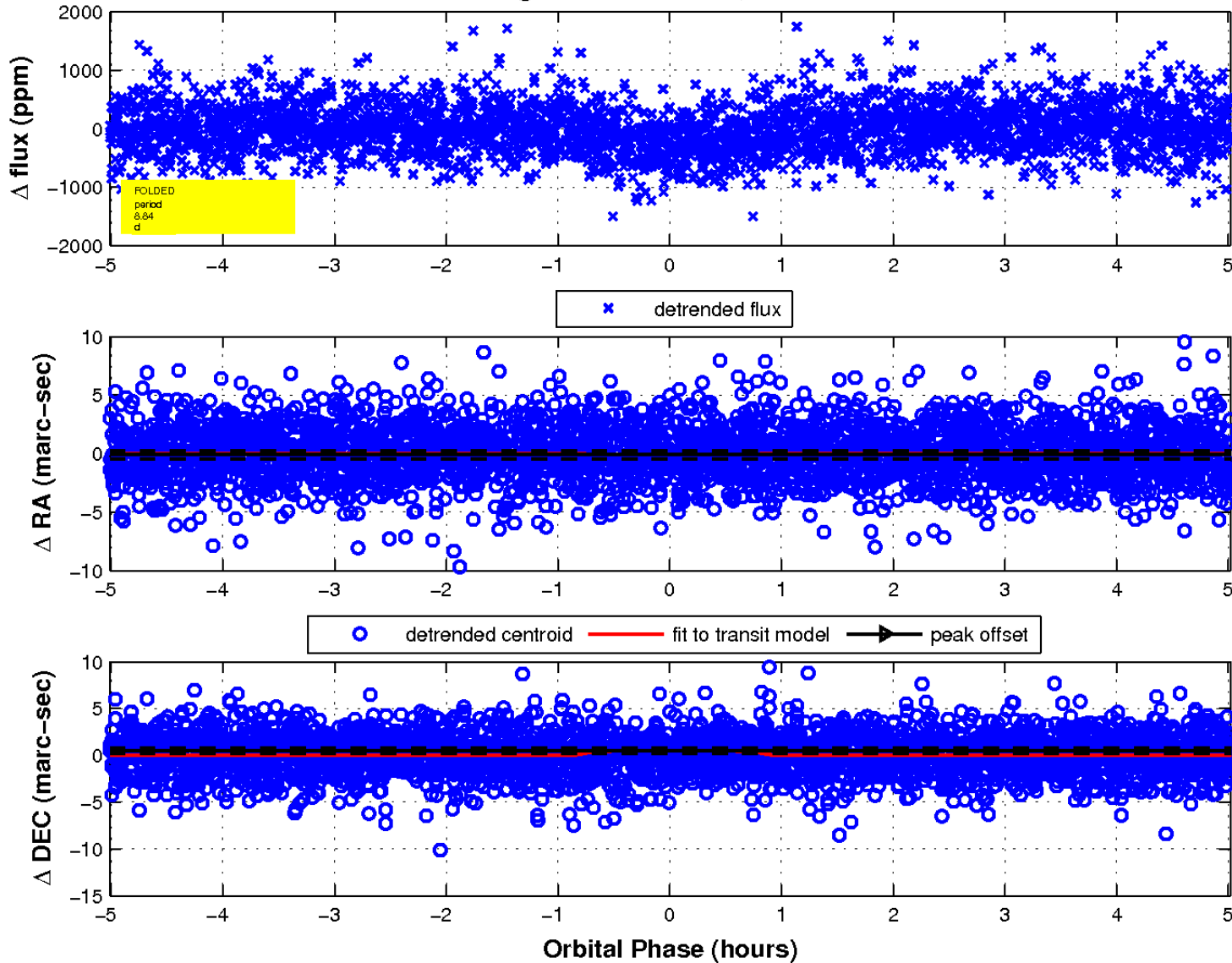
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

