

KIC 005119619

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})
005119619-01	OBS	4789.01	1.112058	132.012549	95.5	1.714	14.6	14.0	0.93	6098	1.07	2479.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005119619-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET

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.

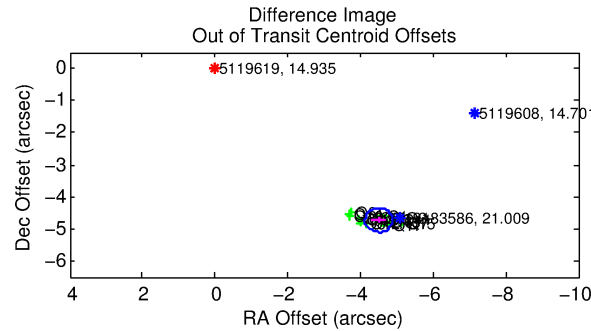
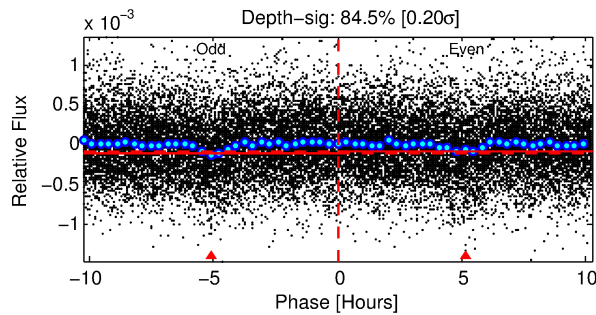
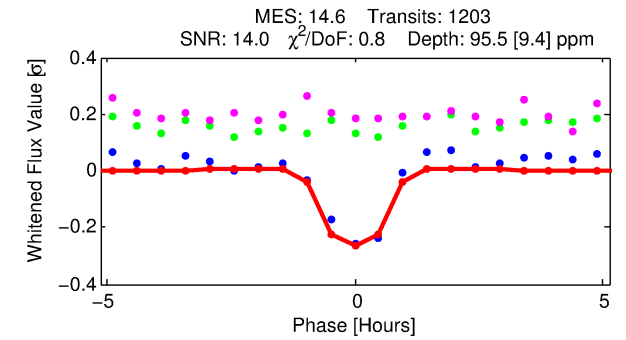
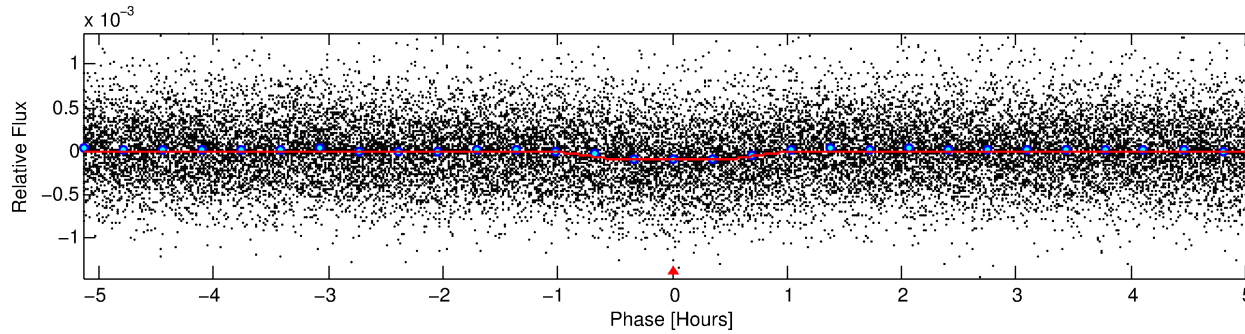
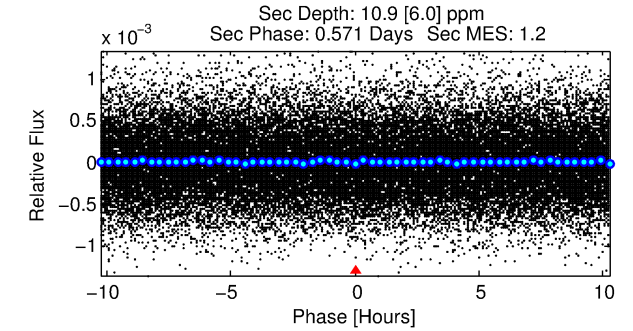
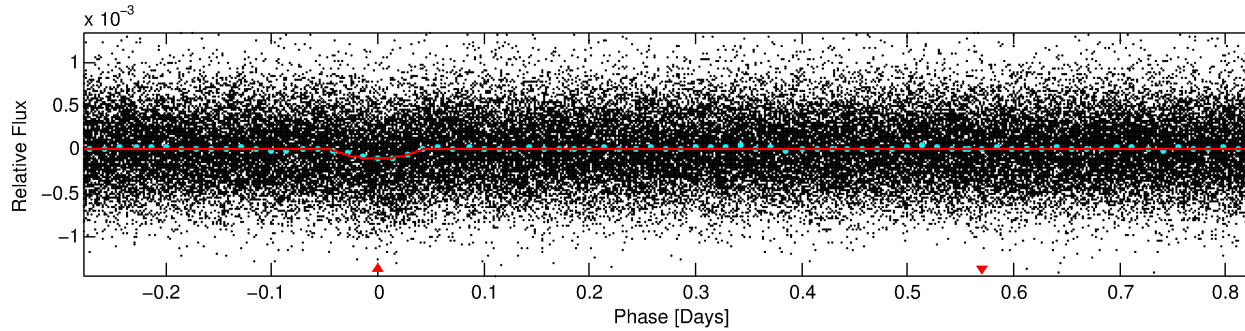
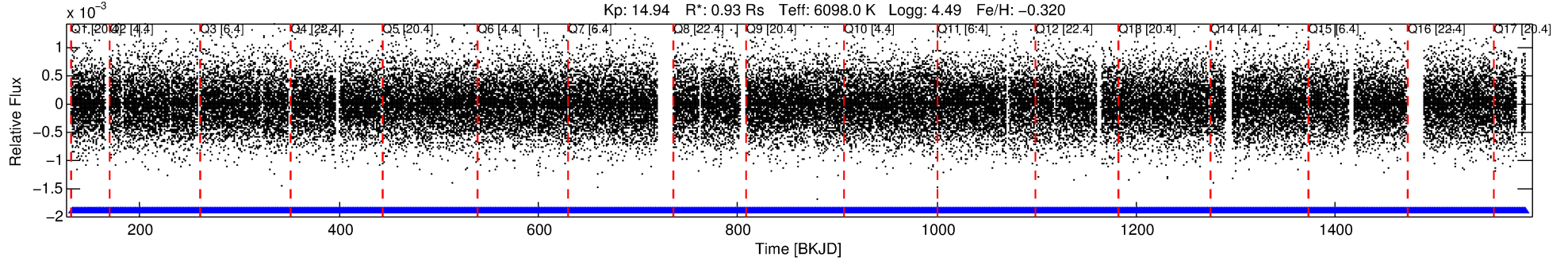
Ephemeris Match Information For 005119619-01

No Significant Match Found

DV One-Page Summary

KIC: 5119619 Candidate: 1 of 1 Period: 1.112 d
KOI: K04789.01 Corr: 0.939

Kp: 14.94 R*: 0.93 Rs Teff: 6098.0 K Logg: 4.49 Fe/H: -0.320



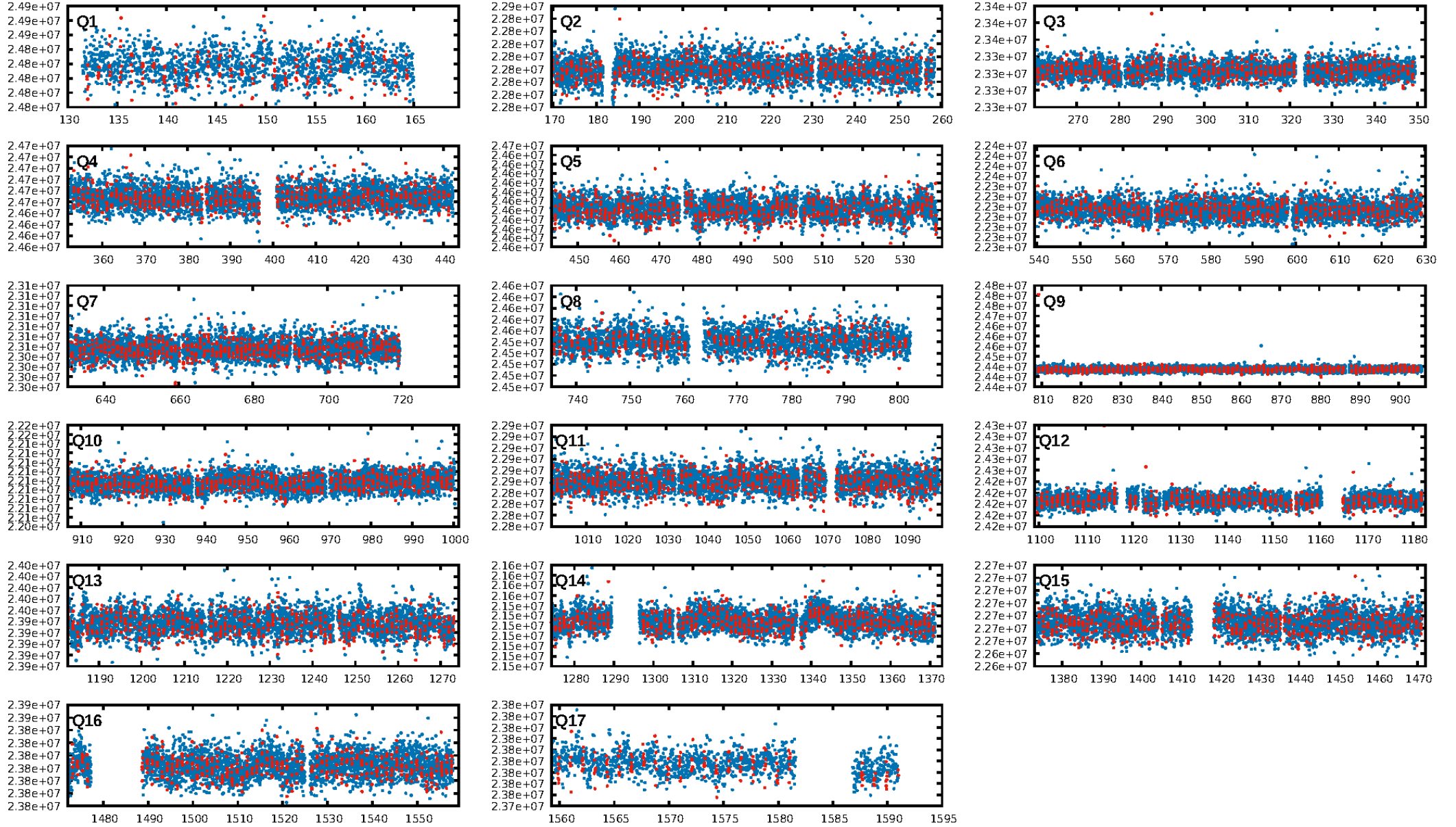
DV Fit Results:

Period = 1.11206 [0.00001] d
Epoch = 132.0125 [0.0019] BKJD
Rp/R* = 0.0106 [0.0050]
a/R* = 2.44 [5.20]
b = 0.90 [0.53]
Seff = 2479.81 [985.13]
Teq = 1799 [179] K
Rp = 1.08 [0.61] Re
a = 0.0208 [0.0054] AU
Ag = 2.26 [2.61] [0.48σ]
Teffp = 3410 [940] K [1.68σ]

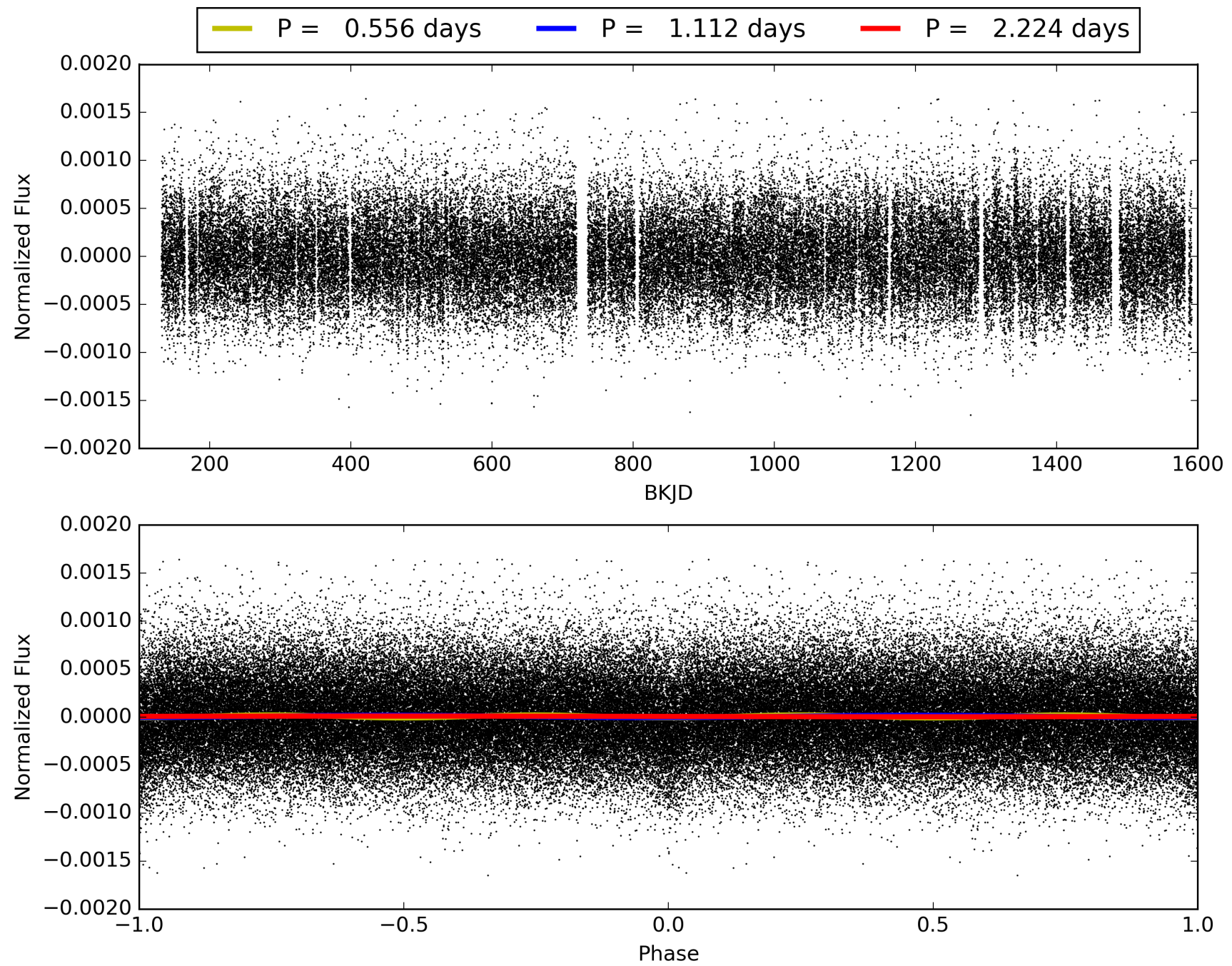
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.43e-46
RollingBand-fgt: 1.00 [1149/1149]
GhostDiagnostic-chr: -0.3402
Centroid-sig: 0.0%
Centroid-so: 19.419 arcsec [22.10σ]
OotOffset-rm: 6.525 arcsec [51.91σ]
KicOffset-rm: 7.092 arcsec [93.76σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005119619-01, PDC Light Curves

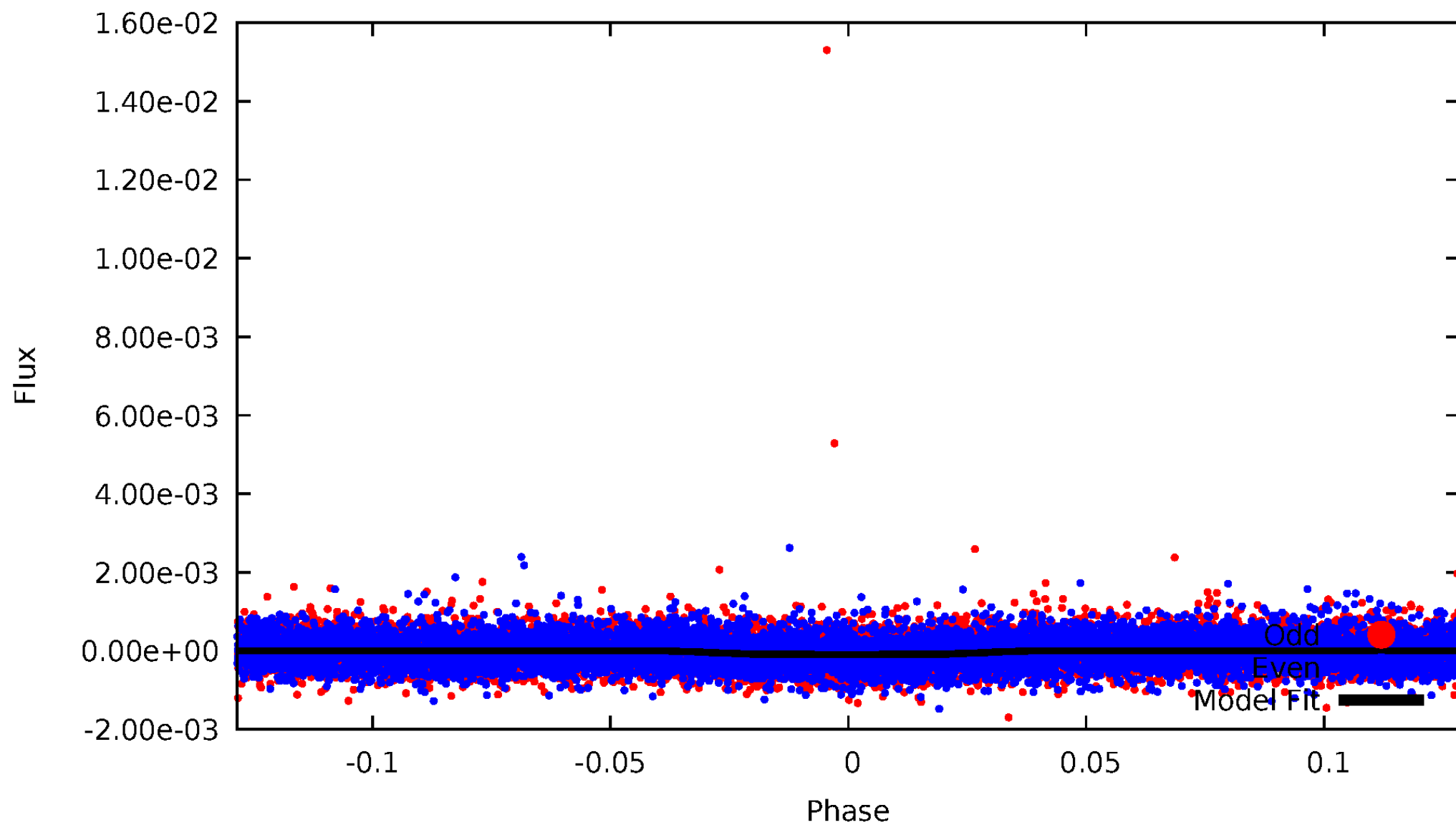


TCE 005119619-01



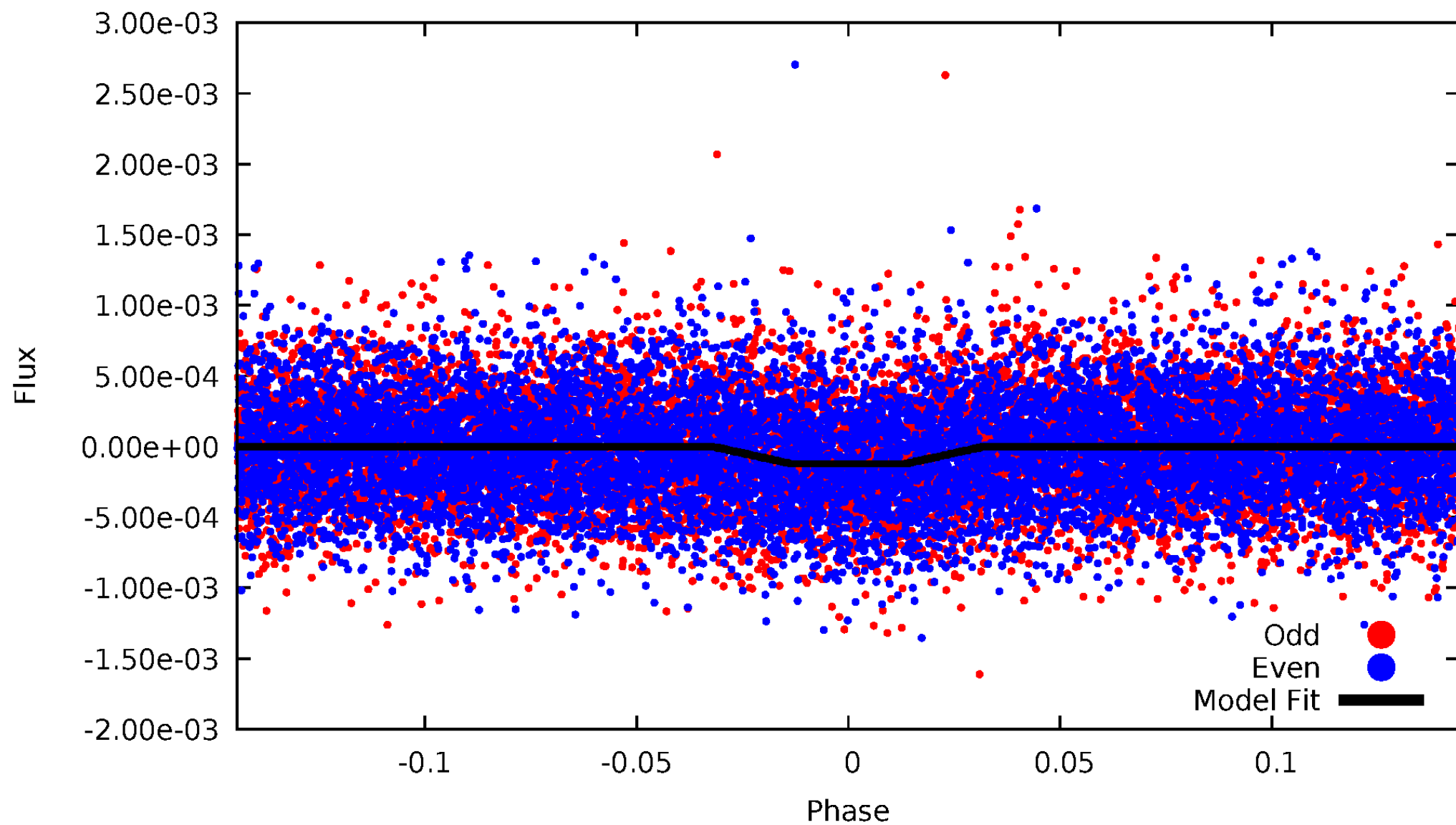
DV Odd/Even

TCE 005119619-01



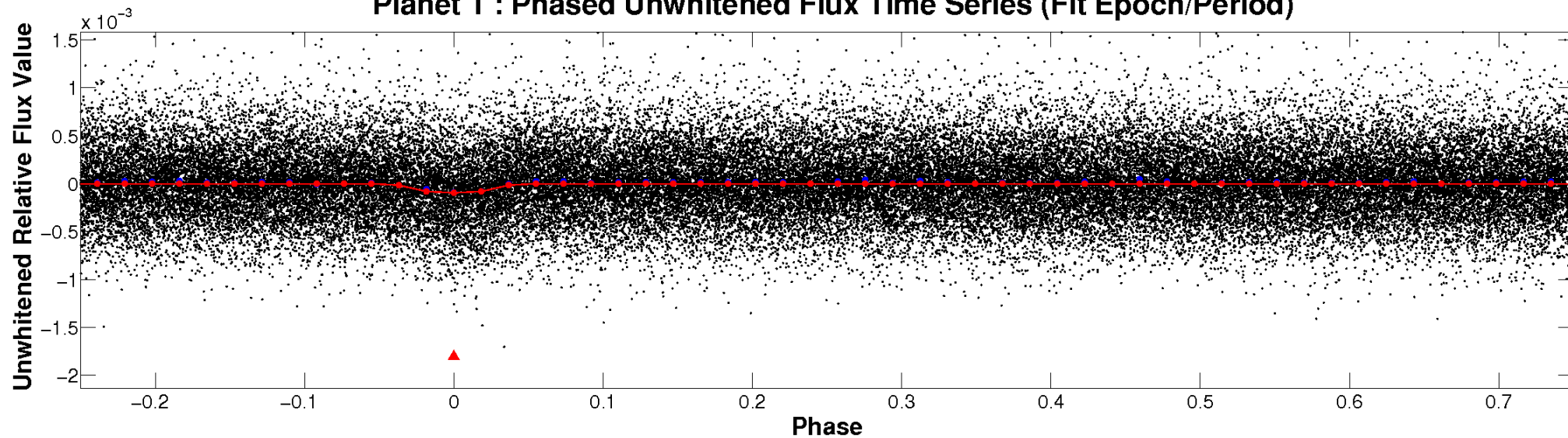
ALT Odd/Even

TCE 005119619-01

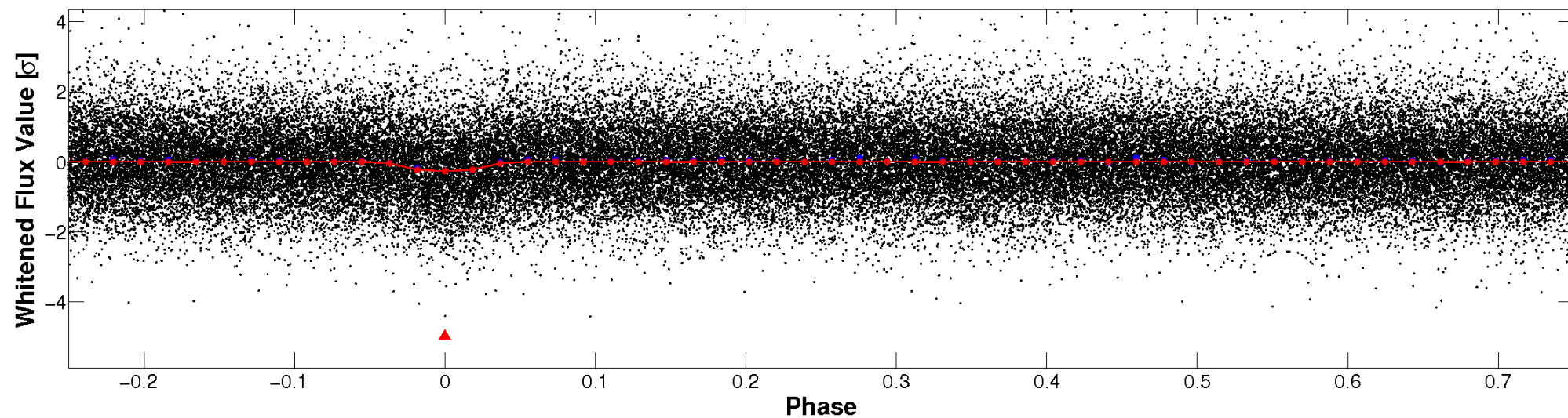


Non-Whitened Vs. Whitened Light Curve

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

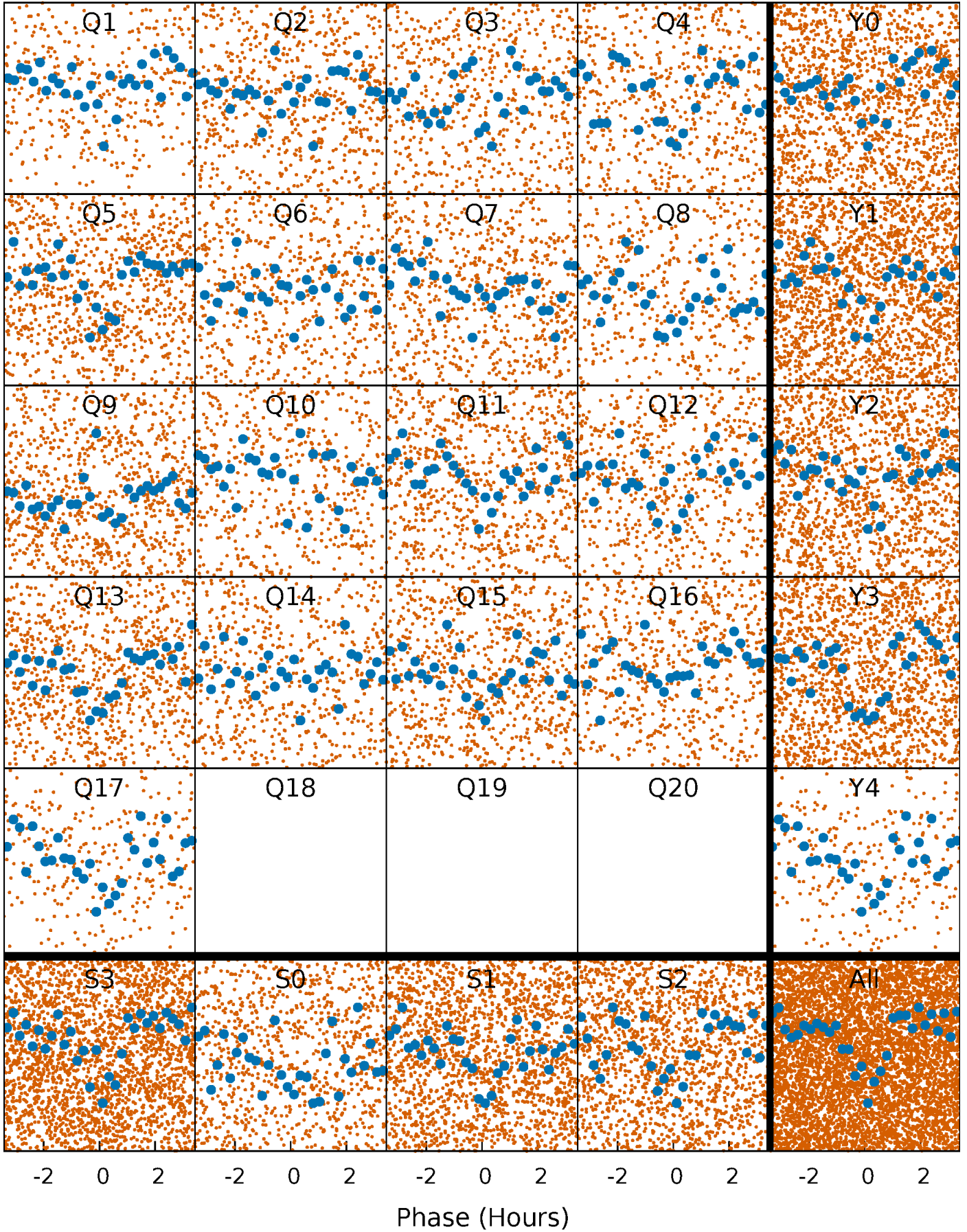


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



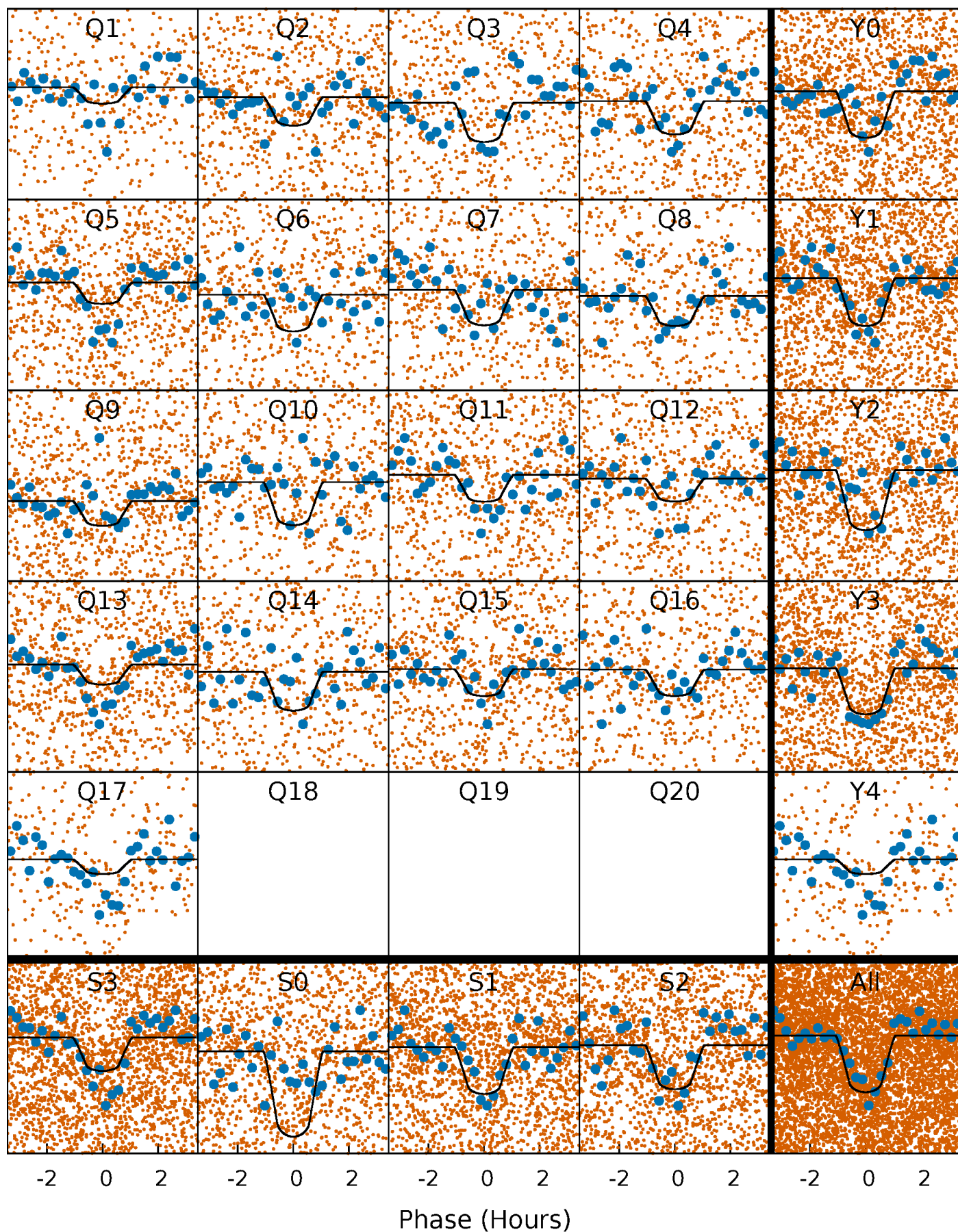
PDC Quarter-Phased Transit Curves

TCE 005119619-01 P= 1.112058 Days $T_0=132.012549$ (BKJD)



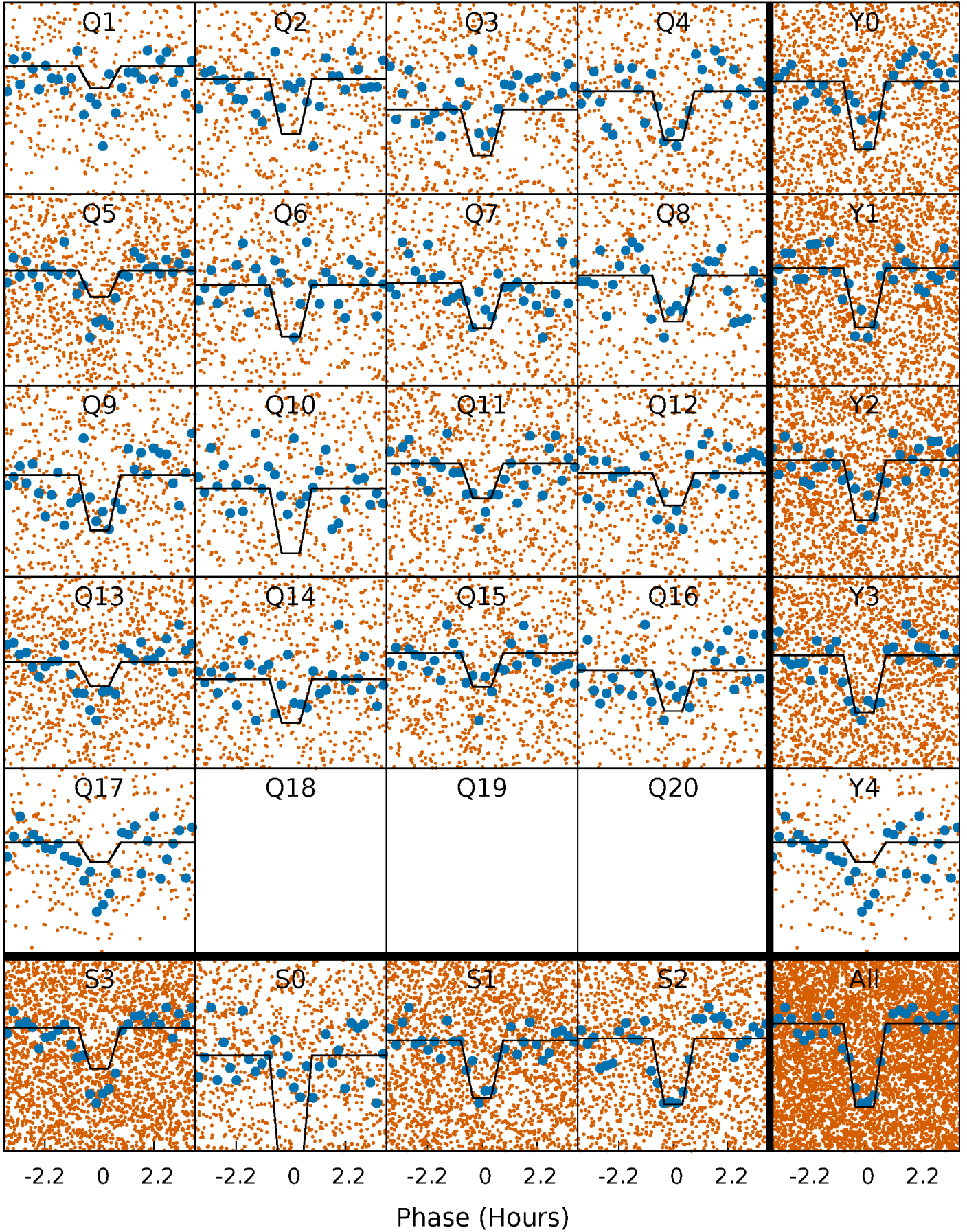
DV Quarter-Phased Transit Curves

TCE 005119619-01 P= 1.112058 Days $T_0=132.012549$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

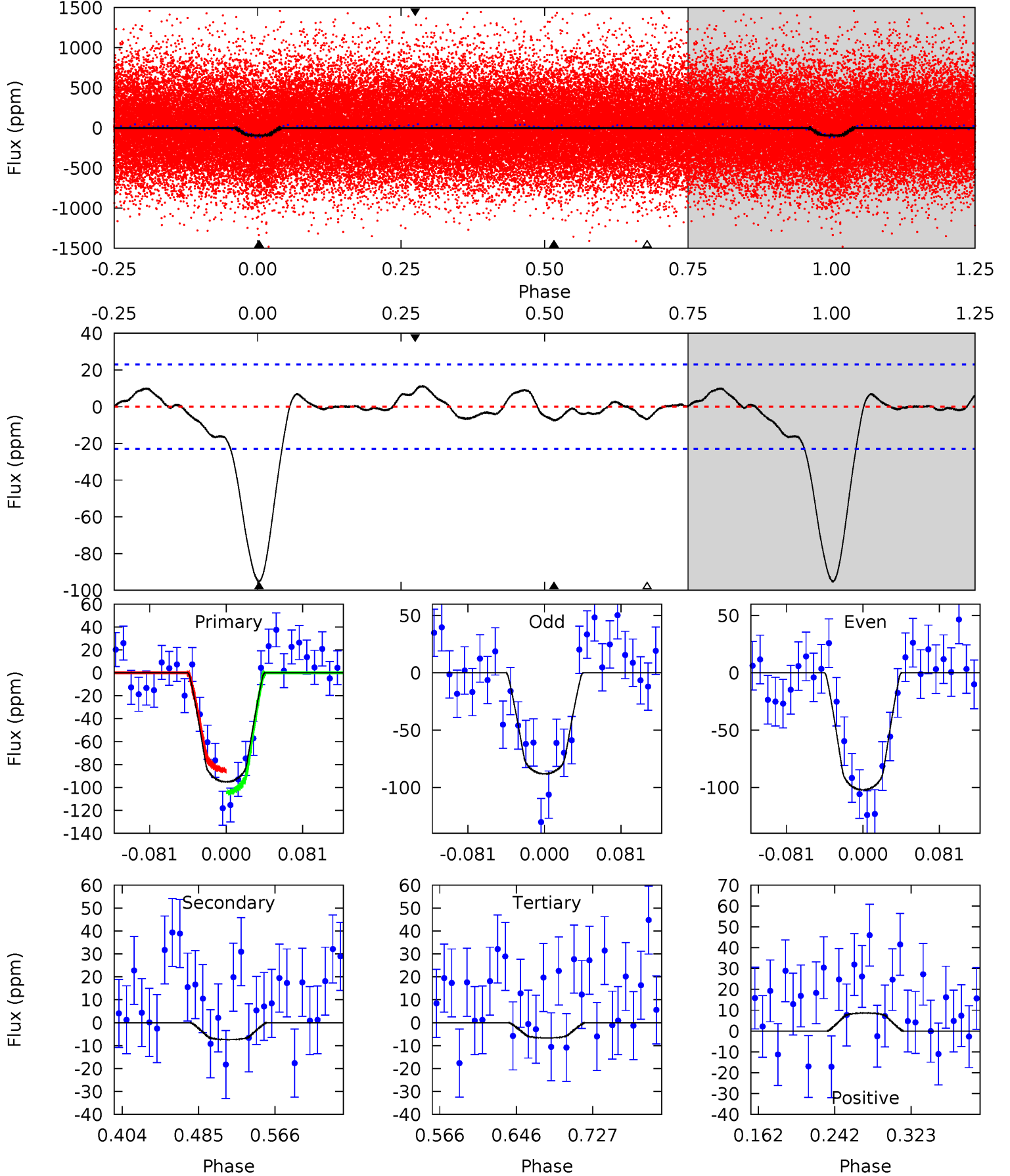
TCE 005119619-01 P= 1.112063 Days $T_0=132.012116$ (BKJD)



DV Model-Shift Uniqueness Test

005119619-01, P = 1.112058 Days, E = 130.900491 Days

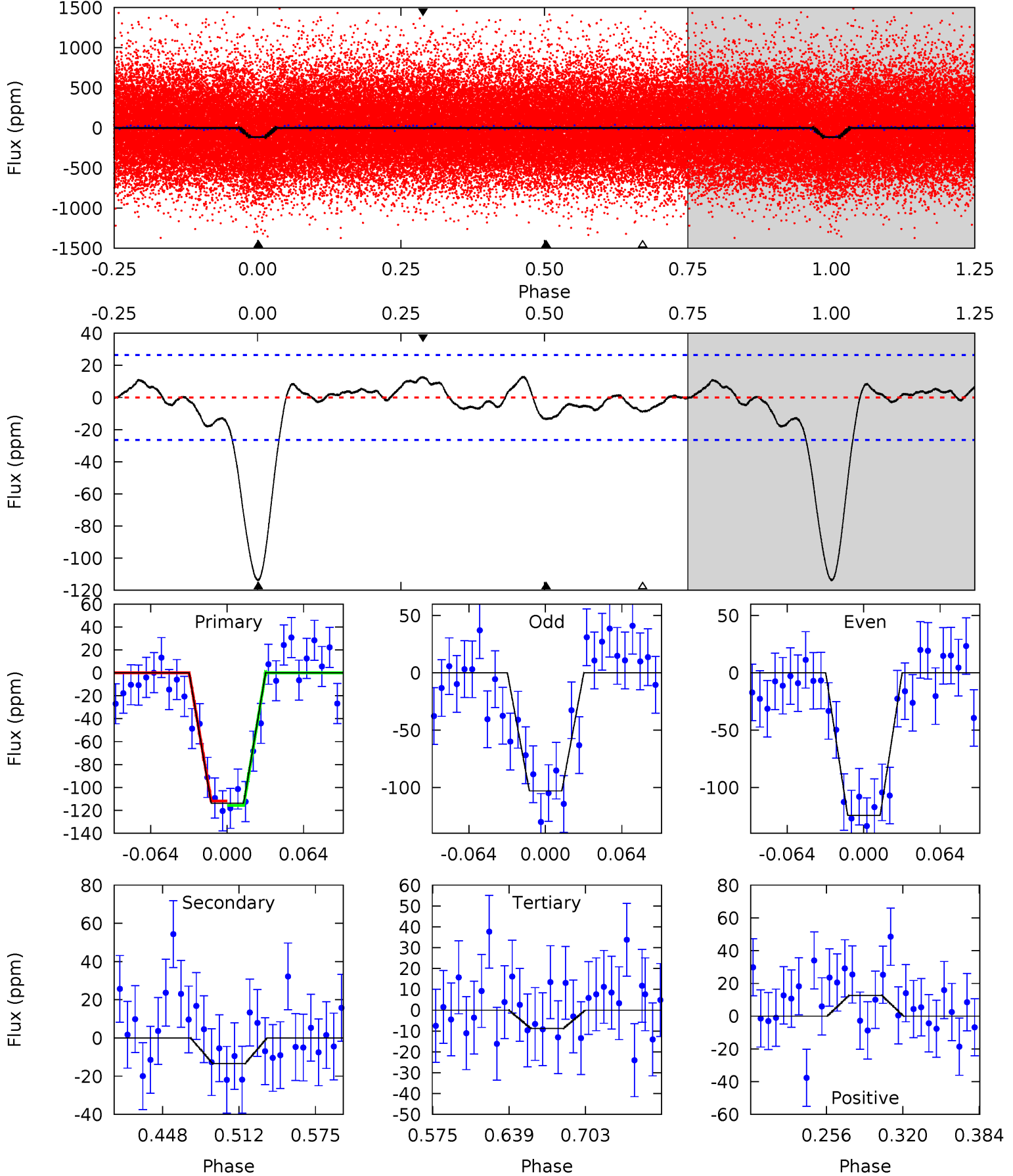
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.1	1.49	1.34	1.74	4.61	1.75	0.98	17.8	17.4	0.15	-0.25	1.41	0.85	0.11	1.94



Alt Model-Shift Uniqueness Test

005119619-01, P = 1.112063 Days, E = 130.900053 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.1	2.36	1.55	2.24	4.66	1.85	1.11	18.5	17.8	0.82	0.13	1.88	1.01	0.10	0.35



Stellar Parameters For KIC 005119619

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6098^{+192}_{-213}	$4.488^{+0.067}_{-0.202}$	$-0.320^{+0.300}_{-0.300}$	$0.932^{+0.287}_{-0.096}$	$0.976^{+0.130}_{-0.130}$	$1.696^{+0.478}_{-0.891}$
	+3%/-3%	+1%/-5%	+94%/-94%	+31%/-10%	+13%/-13%	+28%/-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 005119619-01 / KOI 4789.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-7 ± 5	$1.15^{+0.56}_{-0.51}$	2551^{+193}_{-118}	3294^{+958}_{-554}	$1.179^{+2.806}_{-0.925}$
Alt.	-13 ± 6	$1.22^{+0.49}_{-0.57}$	2556^{+186}_{-127}	3699^{+1007}_{-613}	$2.088^{+4.871}_{-1.245}$

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

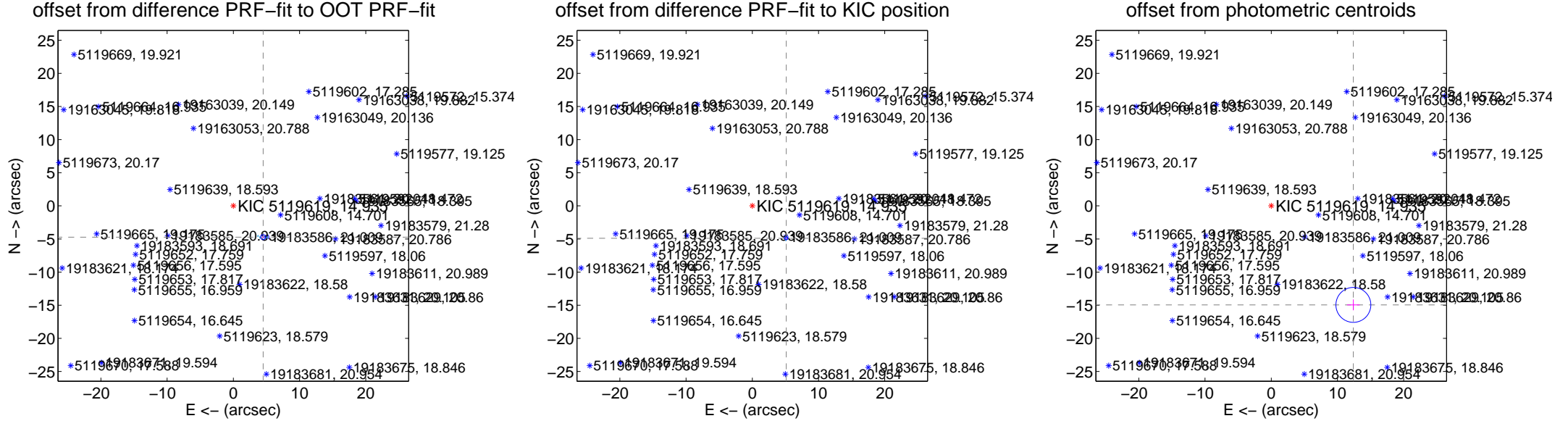
DV Centroid Data

Supplemental centroid analysis for 005119619-01. Kepler magnitude: 14.94. Transit SNR 13.99

There are 17 quarters with good PRF difference image offsets

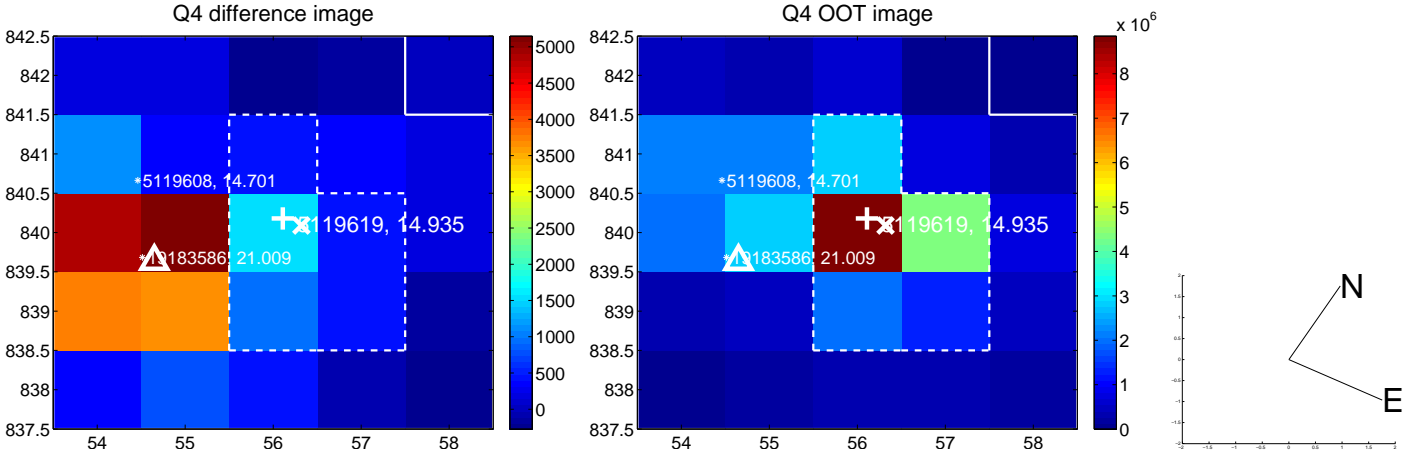
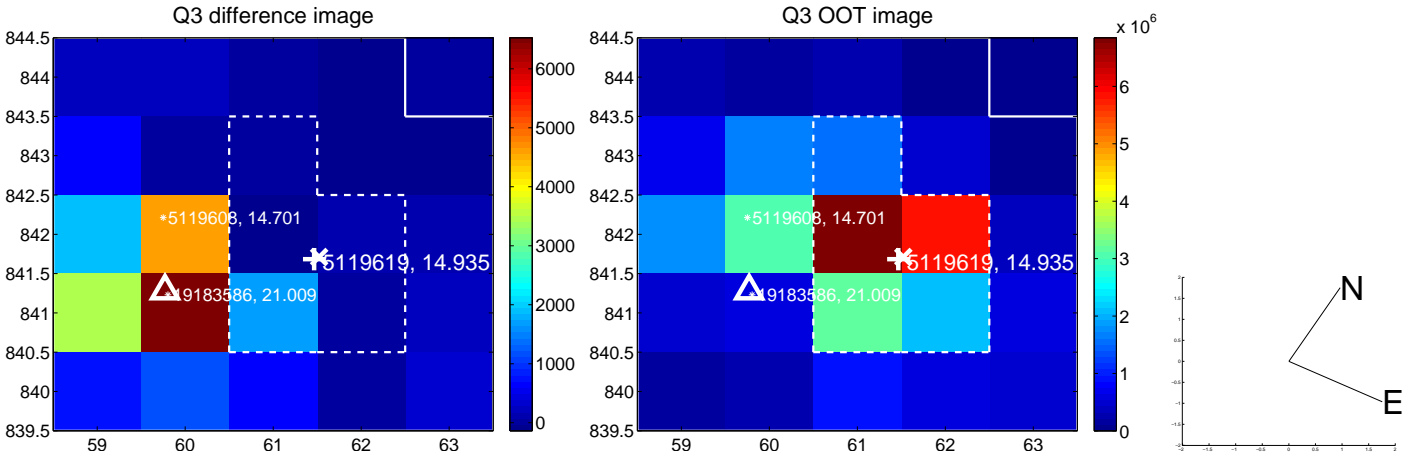
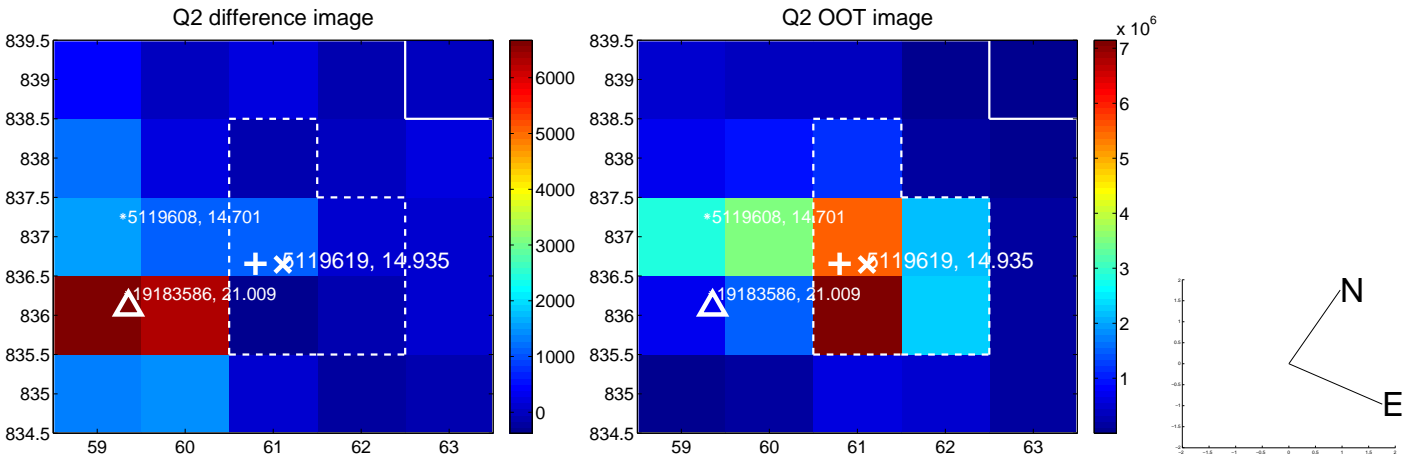
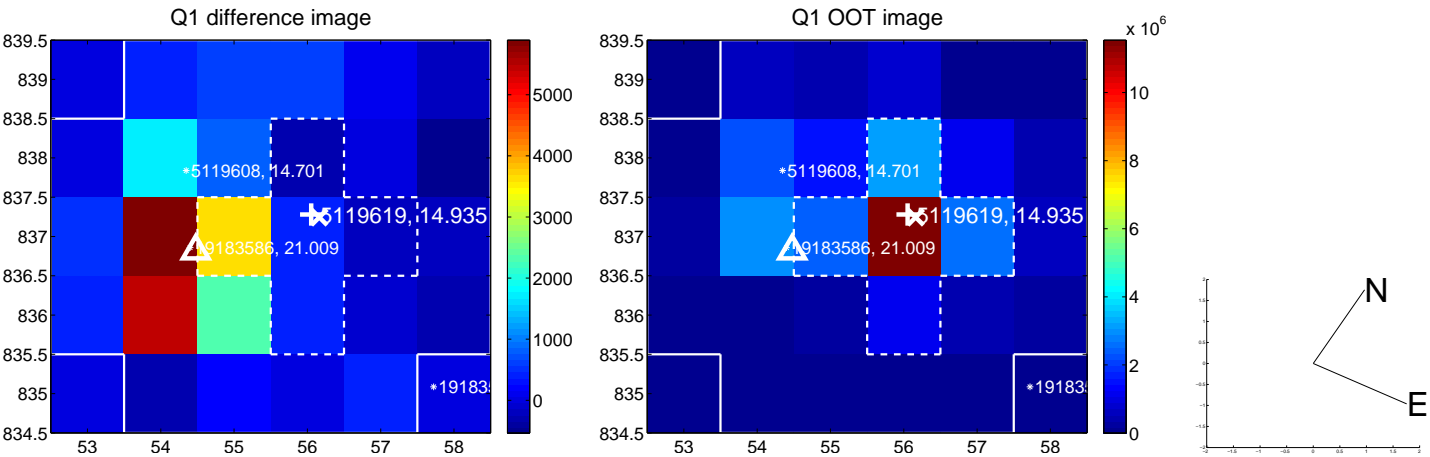
The direct PRF centroid is offset from the target star catalog position by about 0.51 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.525 ± 0.126	51.91	-4.498 ± 0.166	-4.726 ± 0.071
PRF-fit source offset from KIC position	7.092 ± 0.076	93.76	-5.134 ± 0.074	-4.893 ± 0.077
photometric centroid source offset	19.42 ± 0.88	22.10	-12.40 ± 0.96	-14.95 ± 0.82

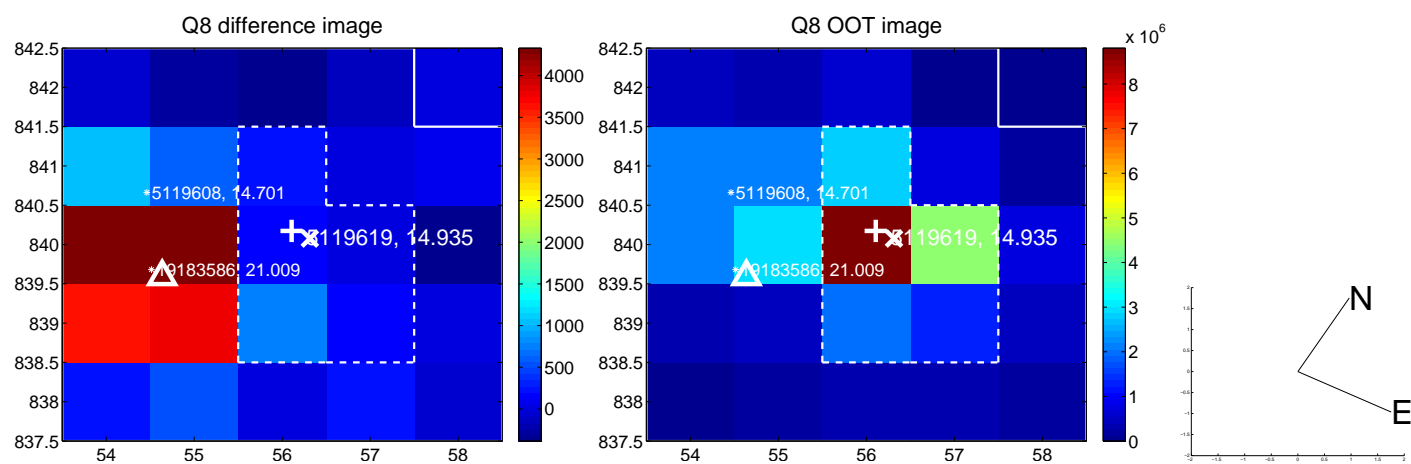
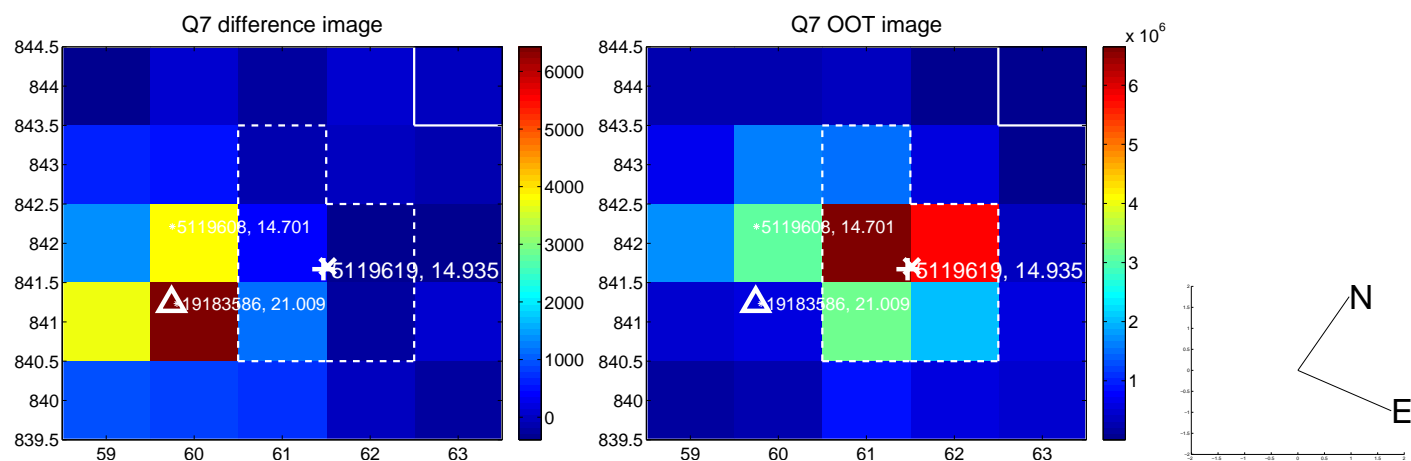
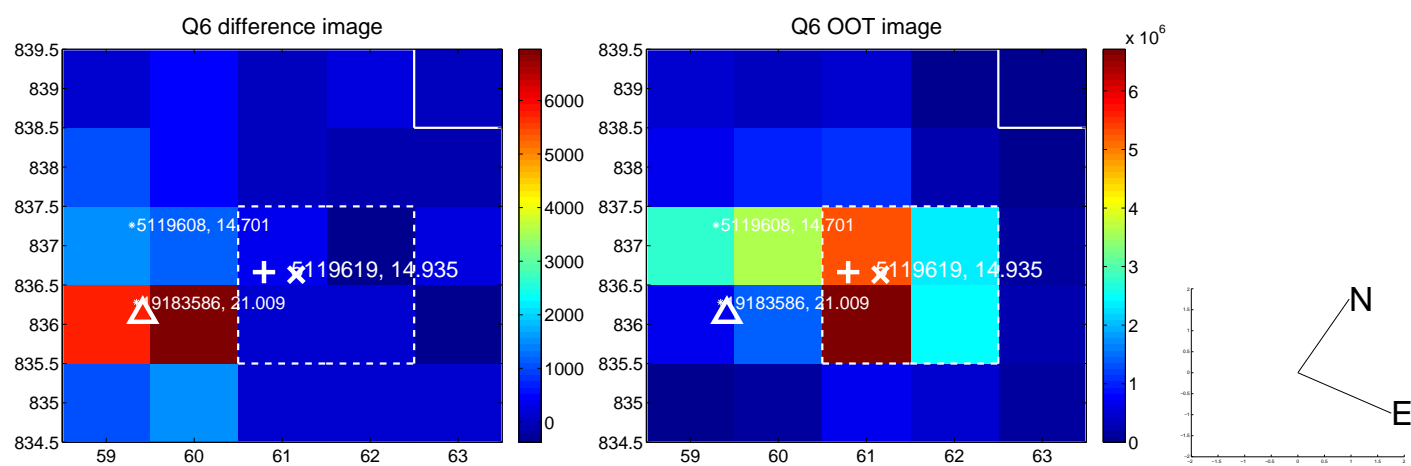
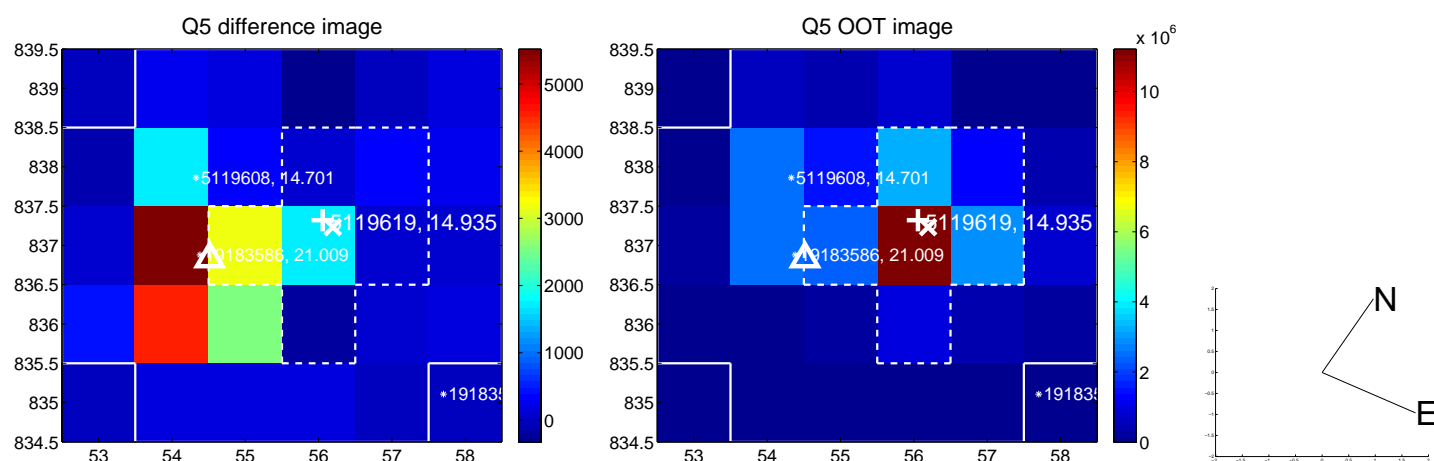


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

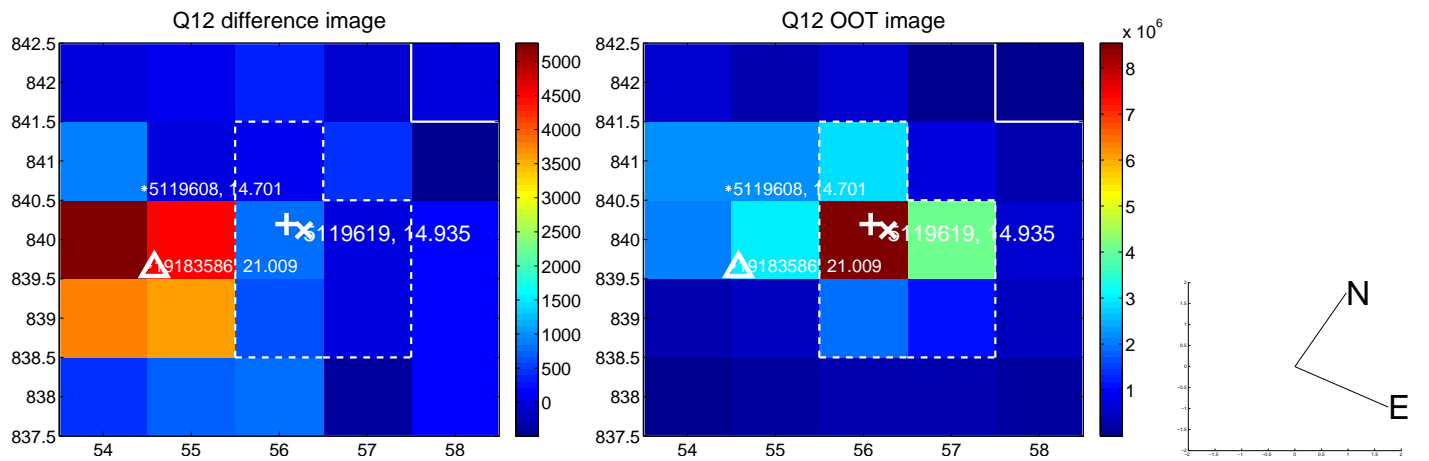
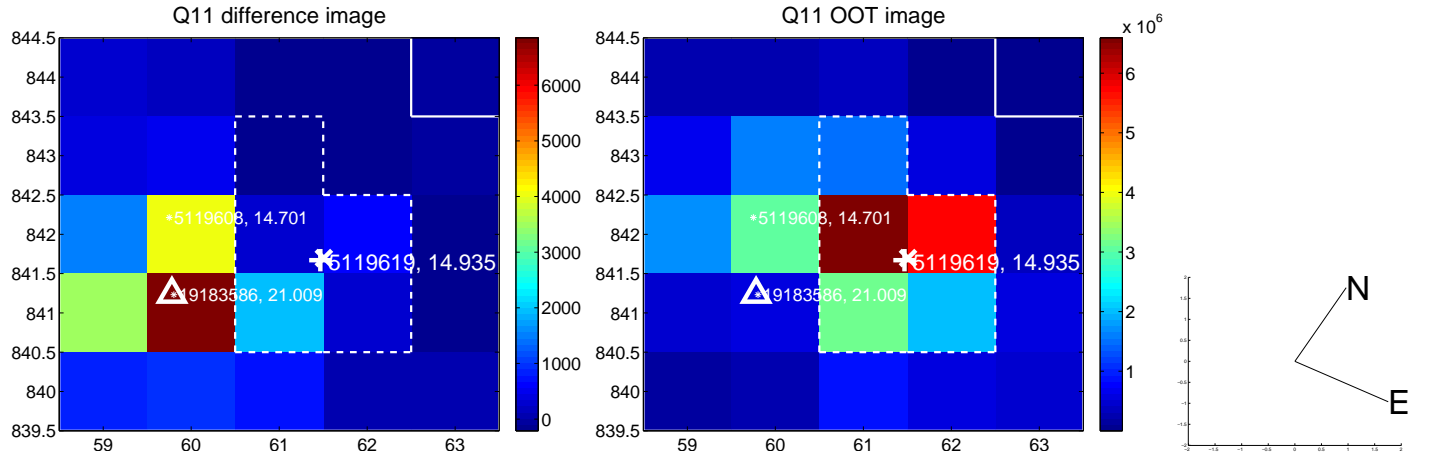
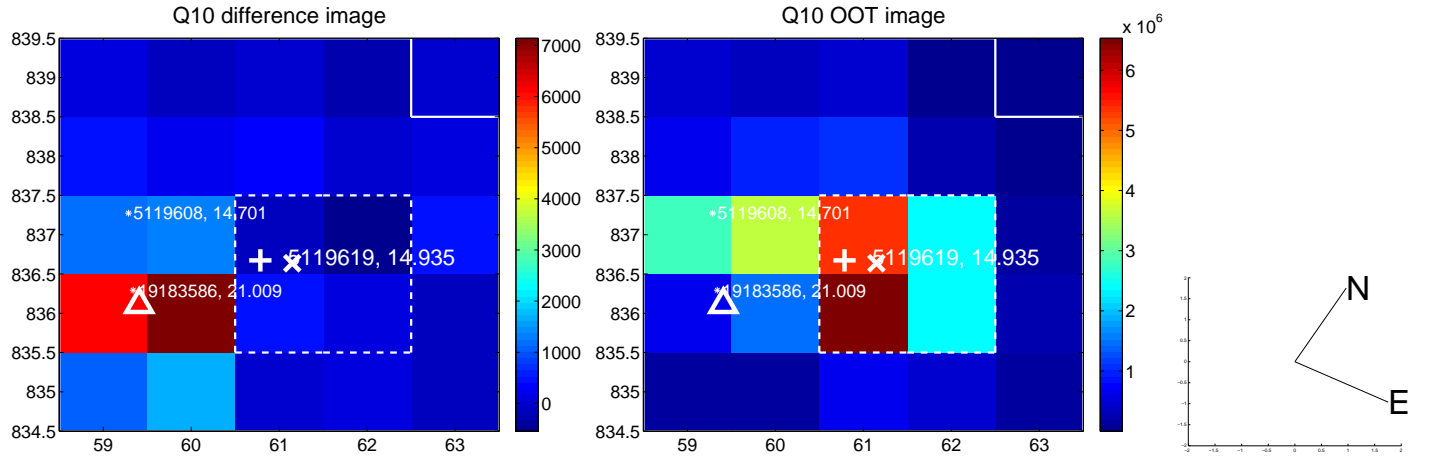
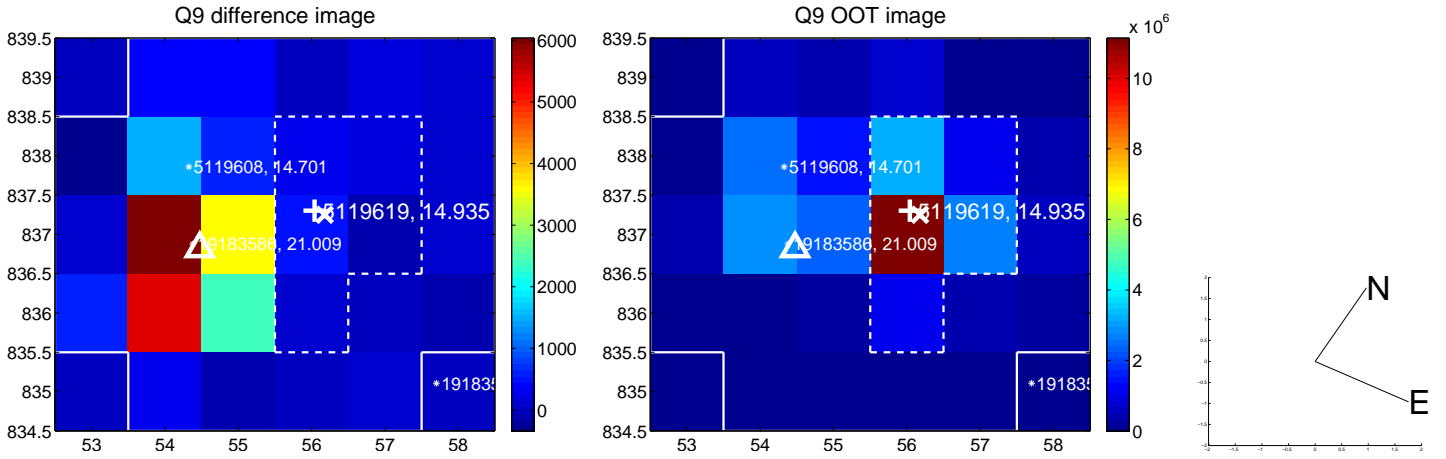
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



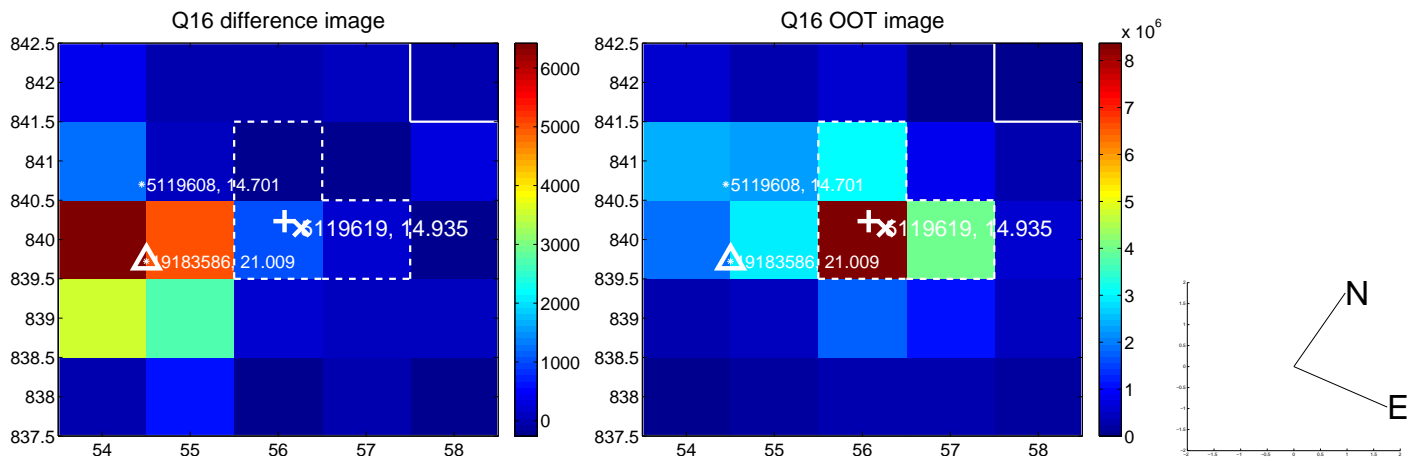
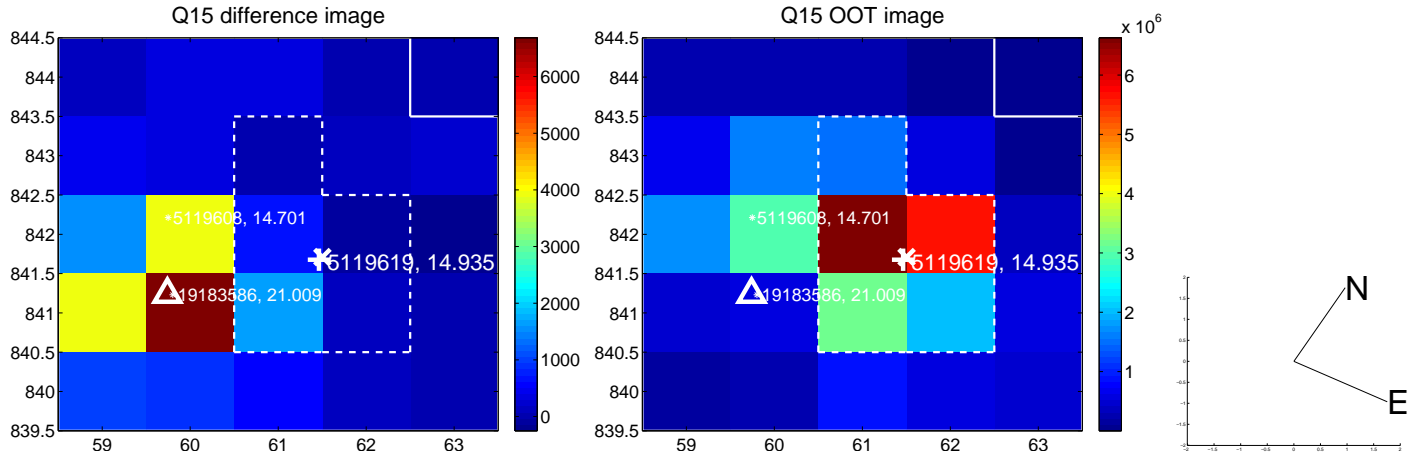
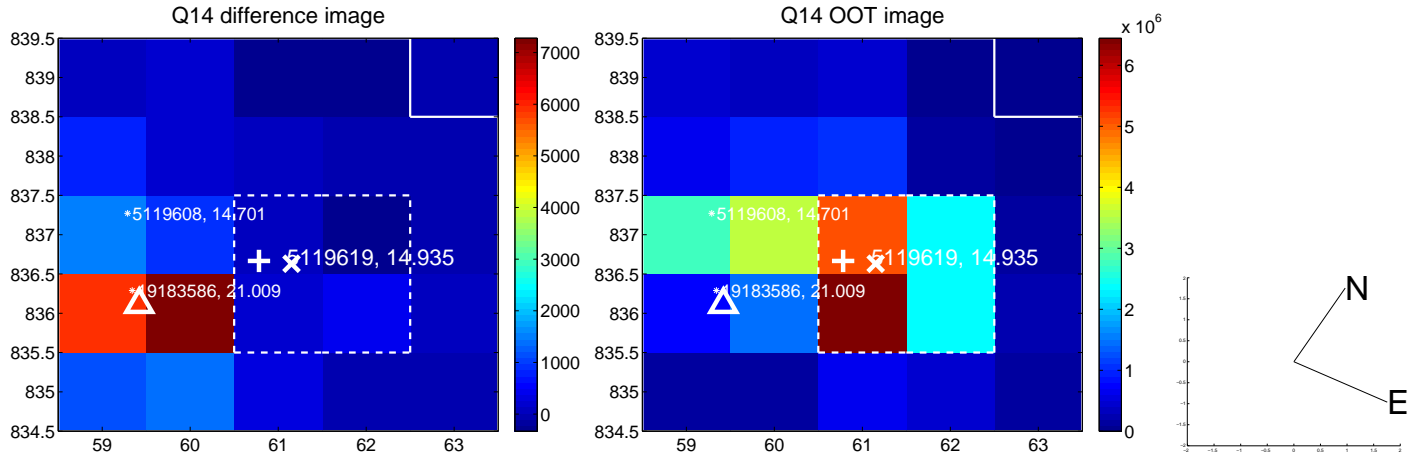
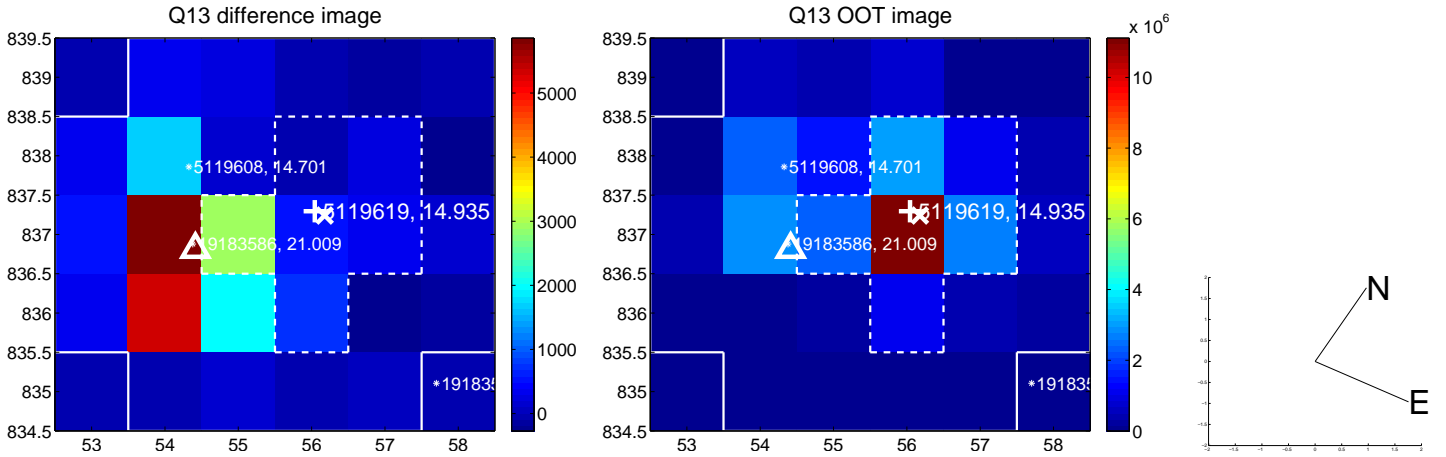
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

