

KIC 005196864

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})
005196864-01	OBS	2695.01	2.503428	131.945841	1156.8	1.499	42.0	51.5	0.84	5174	4.71	409.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005196864-01	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.

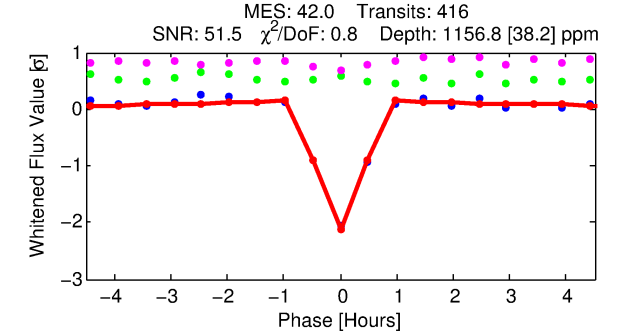
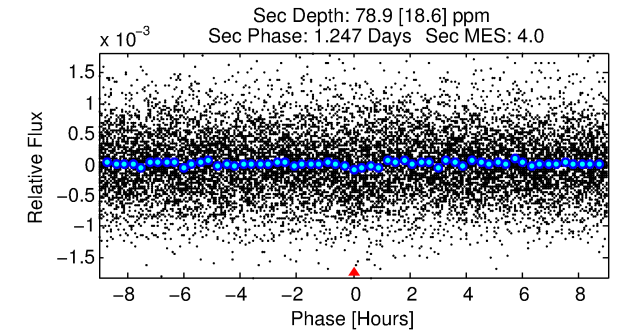
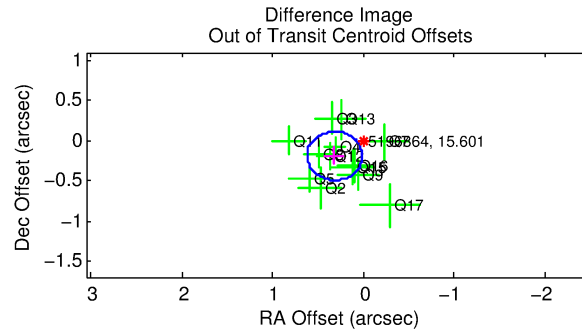
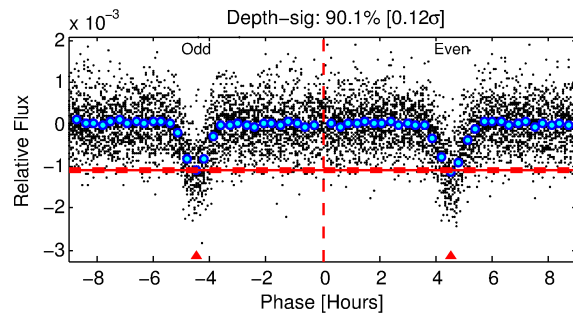
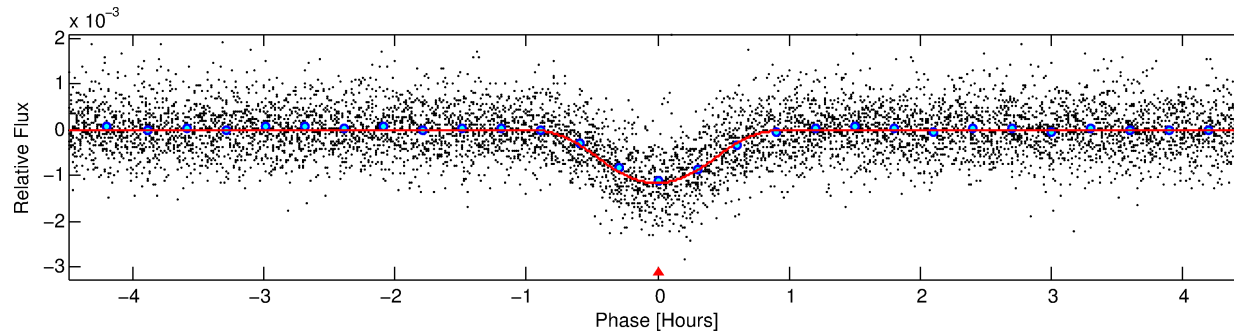
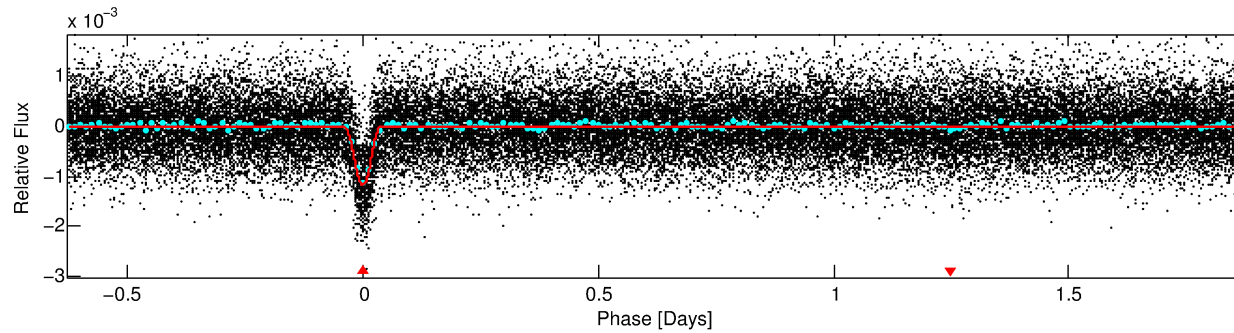
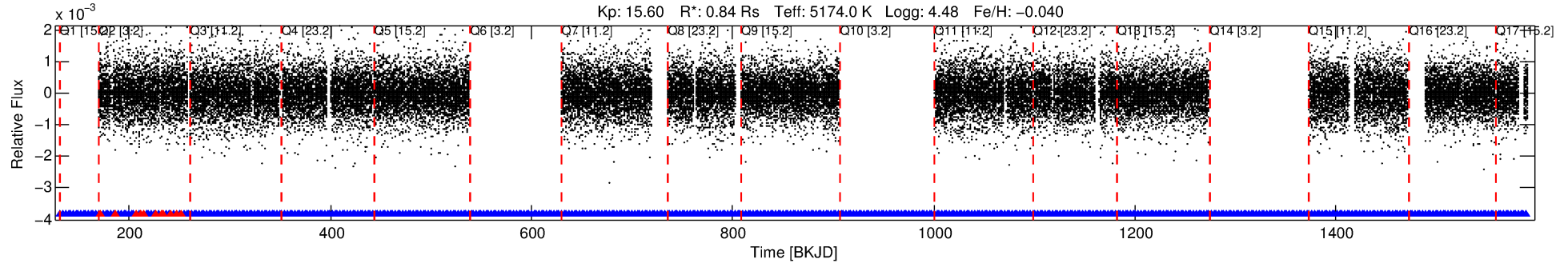
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005196864-01

No Significant Match Found

DV One-Page Summary

KIC: 5196864 Candidate: 1 of 1 Period: 2.503 d
KOI: K02695.01 Corr: 0.988



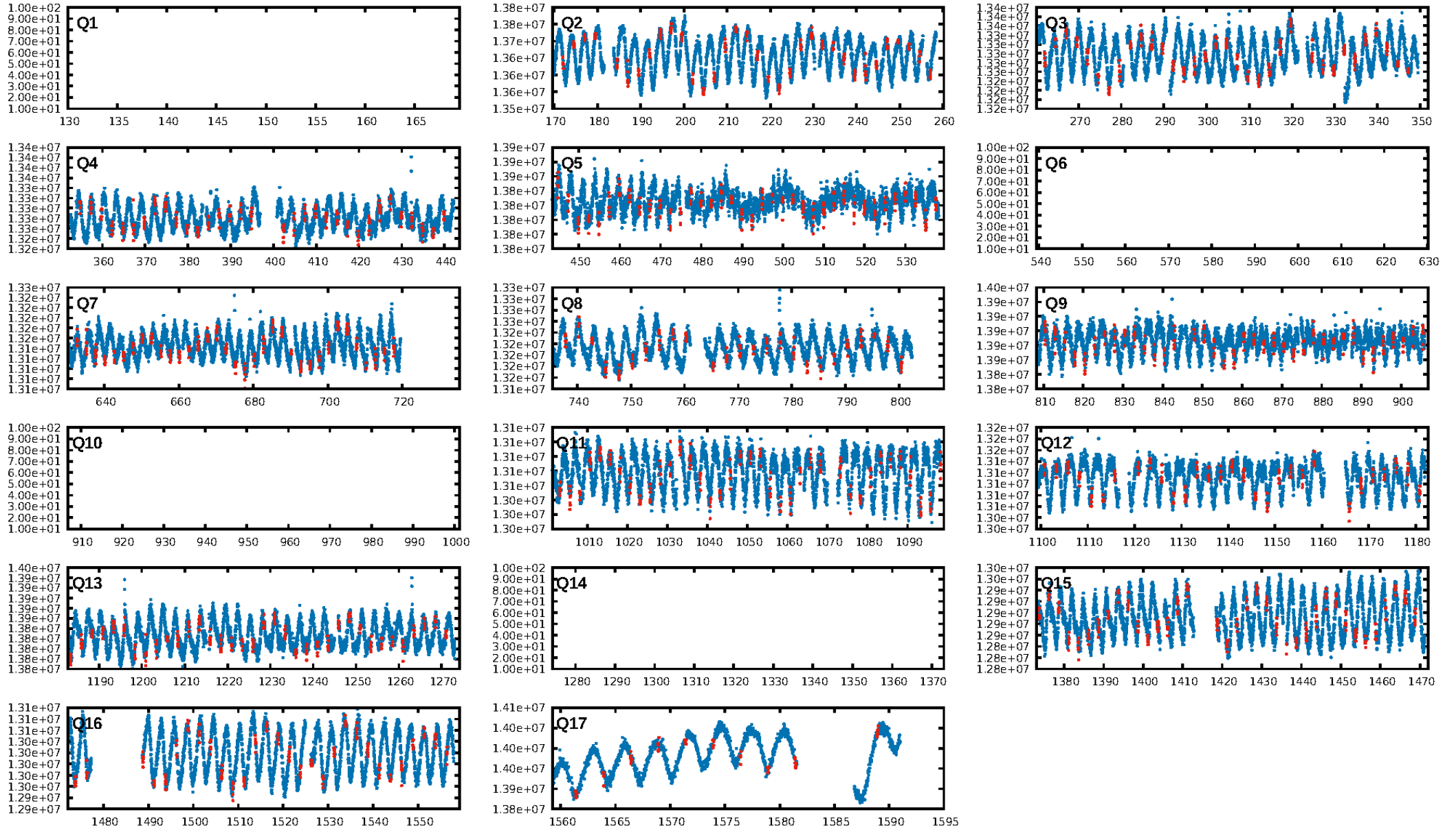
DV Fit Results:

Period = 2.50343 [0.00000] d
Epoch = 131.9458 [0.0004] BKJD
Rp/R* = 0.0514 [0.0366]
a/R* = 4.97 [1.19]
b = 0.98 [0.07]
Seff = 409.58 [92.45]
Teq = 1147 [65] K
Rp = 4.71 [3.41] Re
a = 0.0333 [0.0040] AU
Ag = 2.16 [3.15] [0.37 σ]
Teffp = 2151 [780] K [1.28 σ]

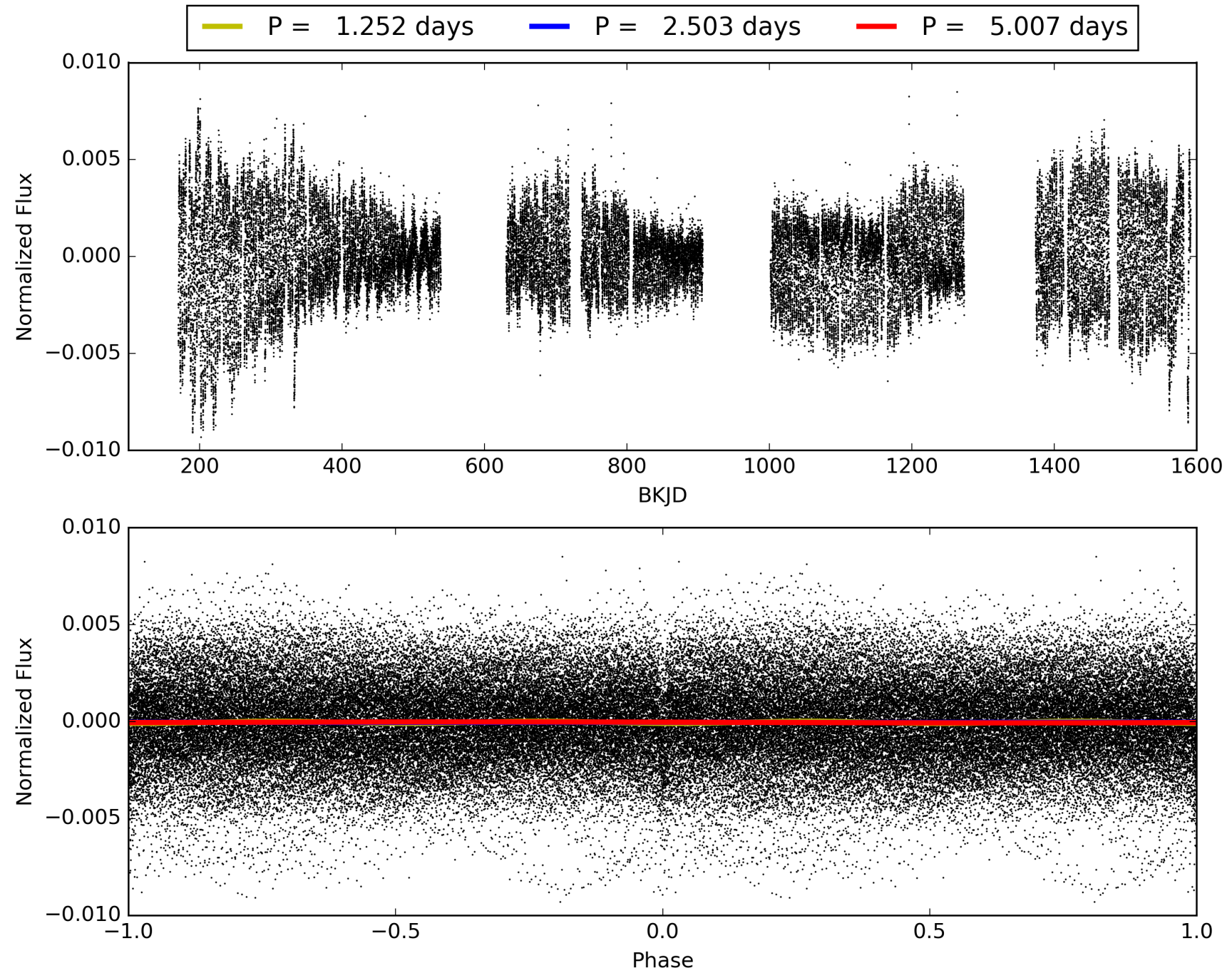
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.97 [395/406]
GhostDiagnostic-chr: 4.073
Centroid-sig: 53.2%
Centroid-so: 0.094 arcsec [0.37 σ]
OotOffset-rm: 0.369 arcsec [3.66 σ]
KicOffset-rm: 0.362 arcsec [3.53 σ]
OotOffset-st: 1/4/4/4 [13]
KicOffset-st: 1/4/4/4 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 005196864-01, PDC Light Curves

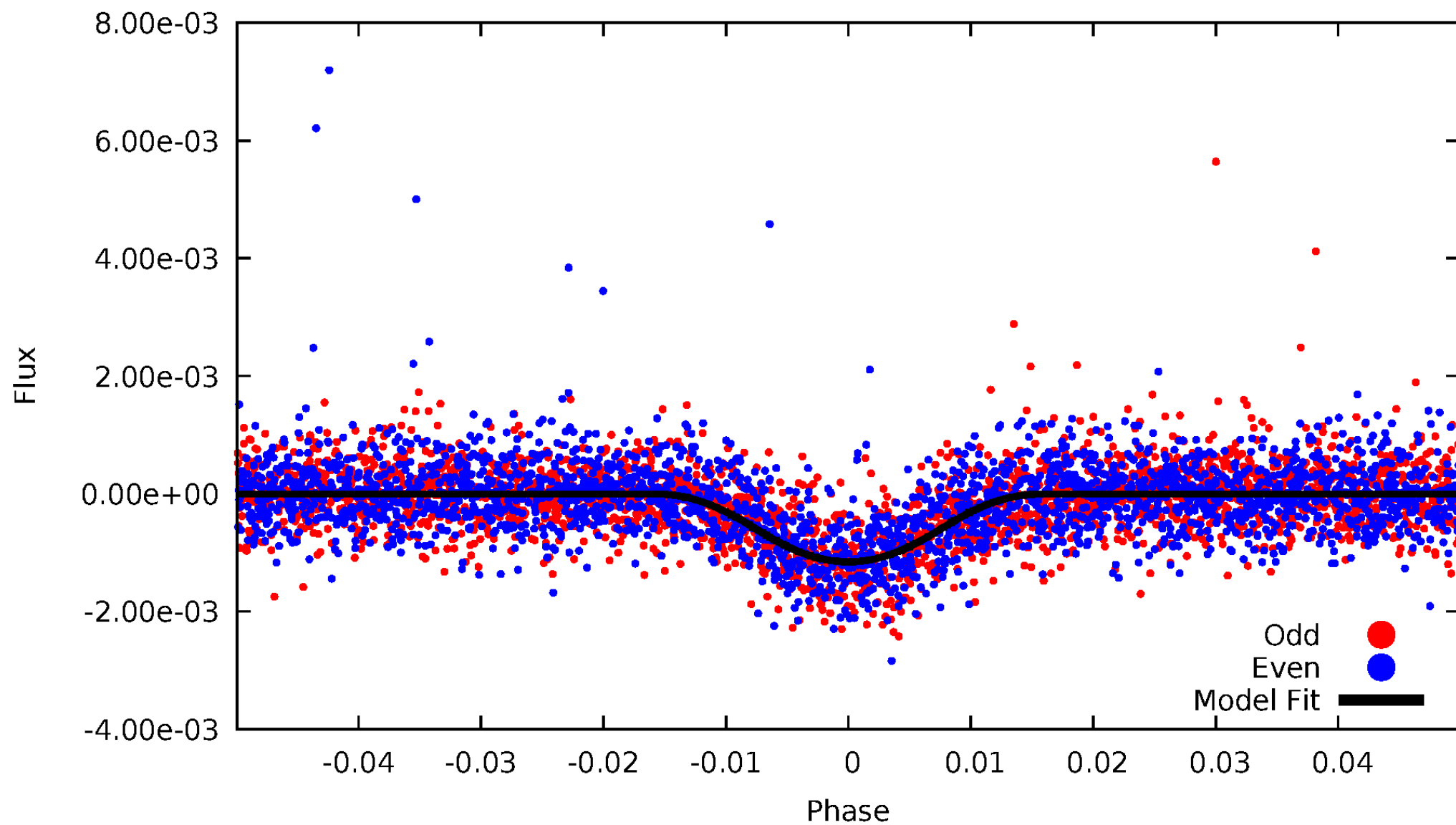


TCE 005196864-01



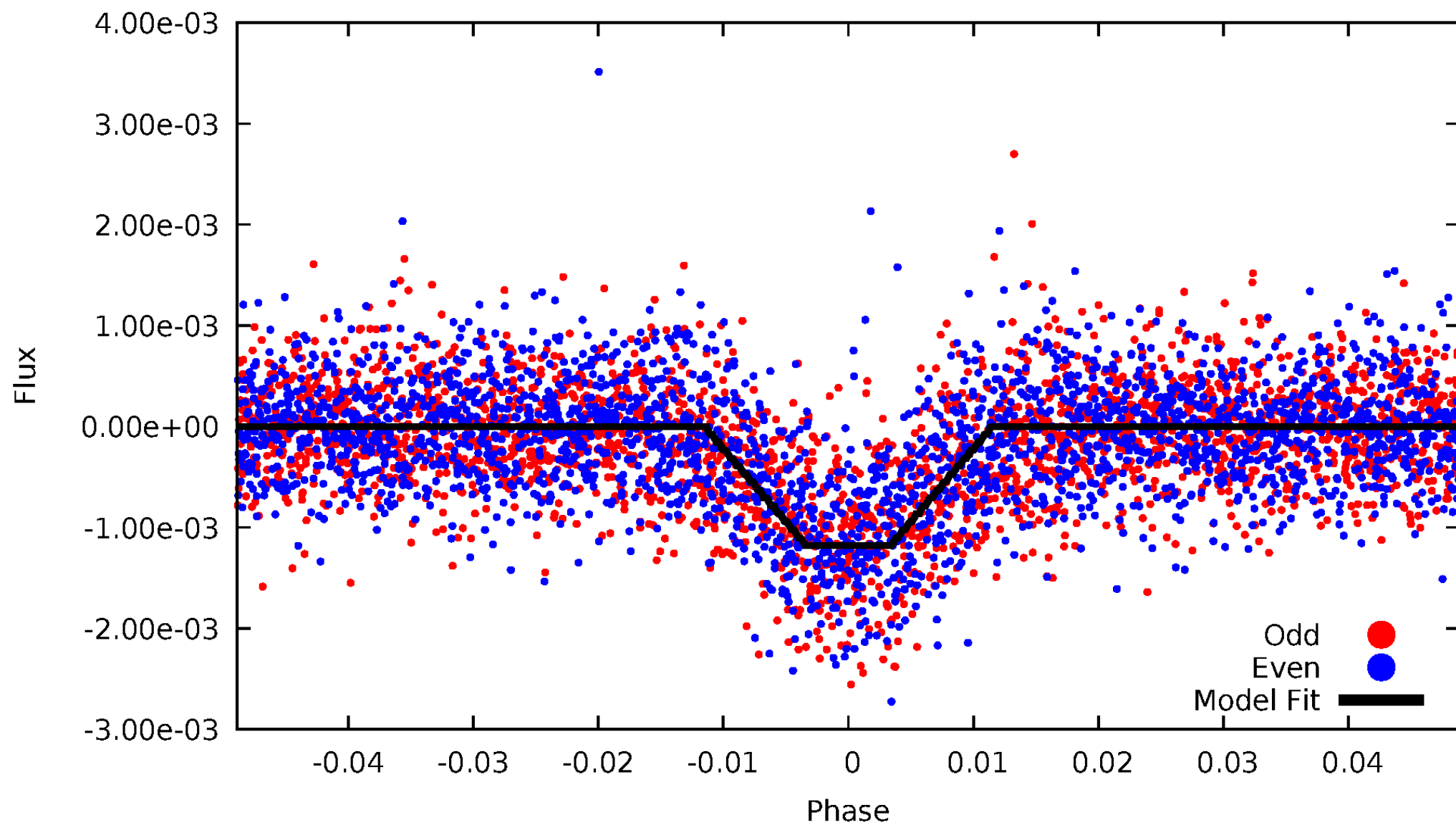
DV Odd/Even

TCE 005196864-01



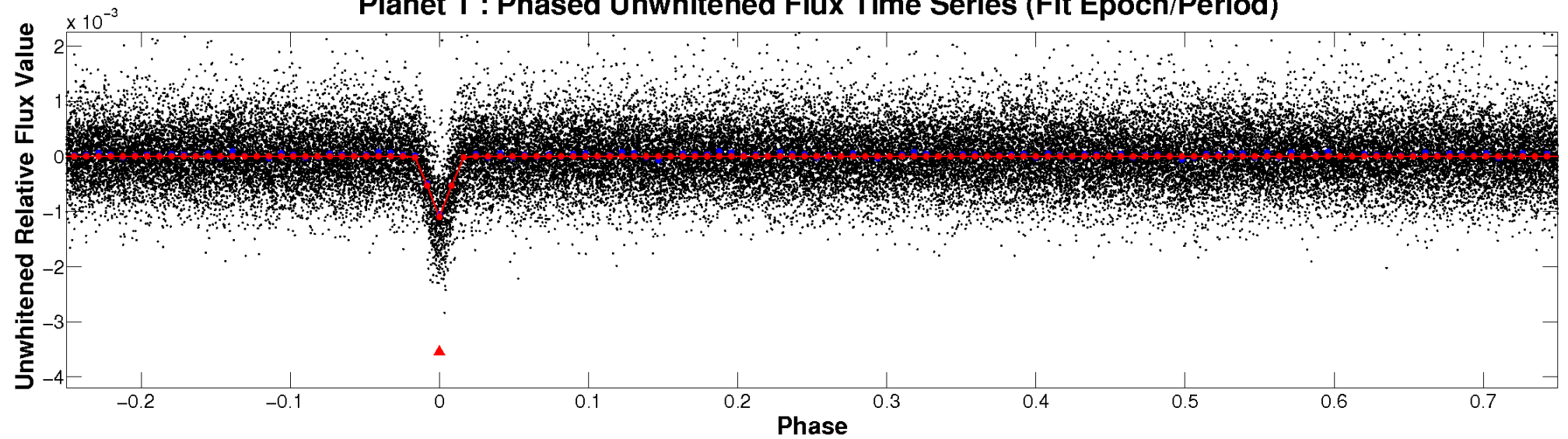
ALT Odd/Even

TCE 005196864-01

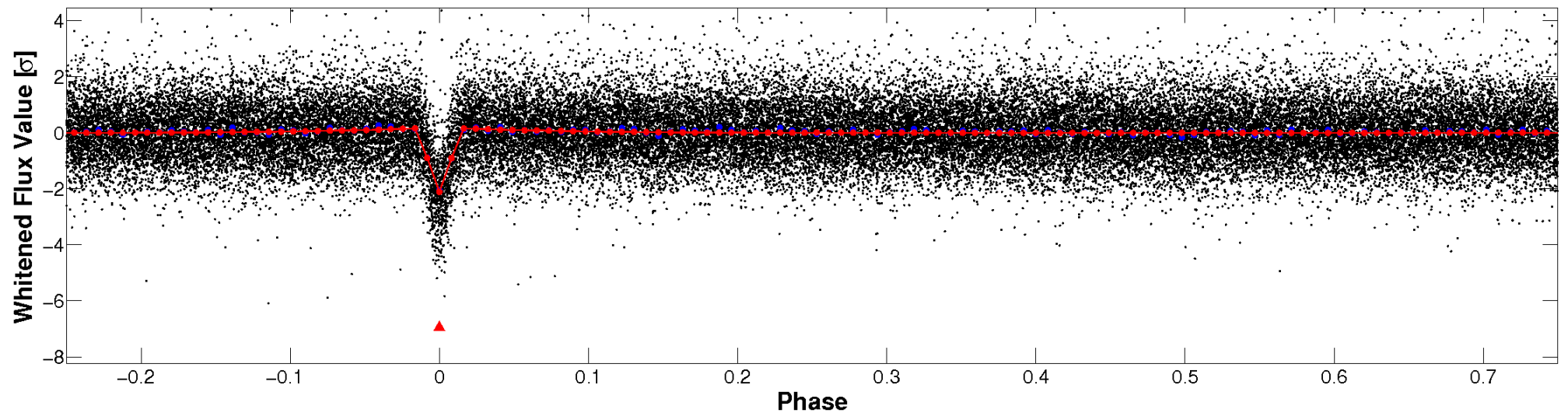


Non-Whitened Vs. Whitened Light Curve

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

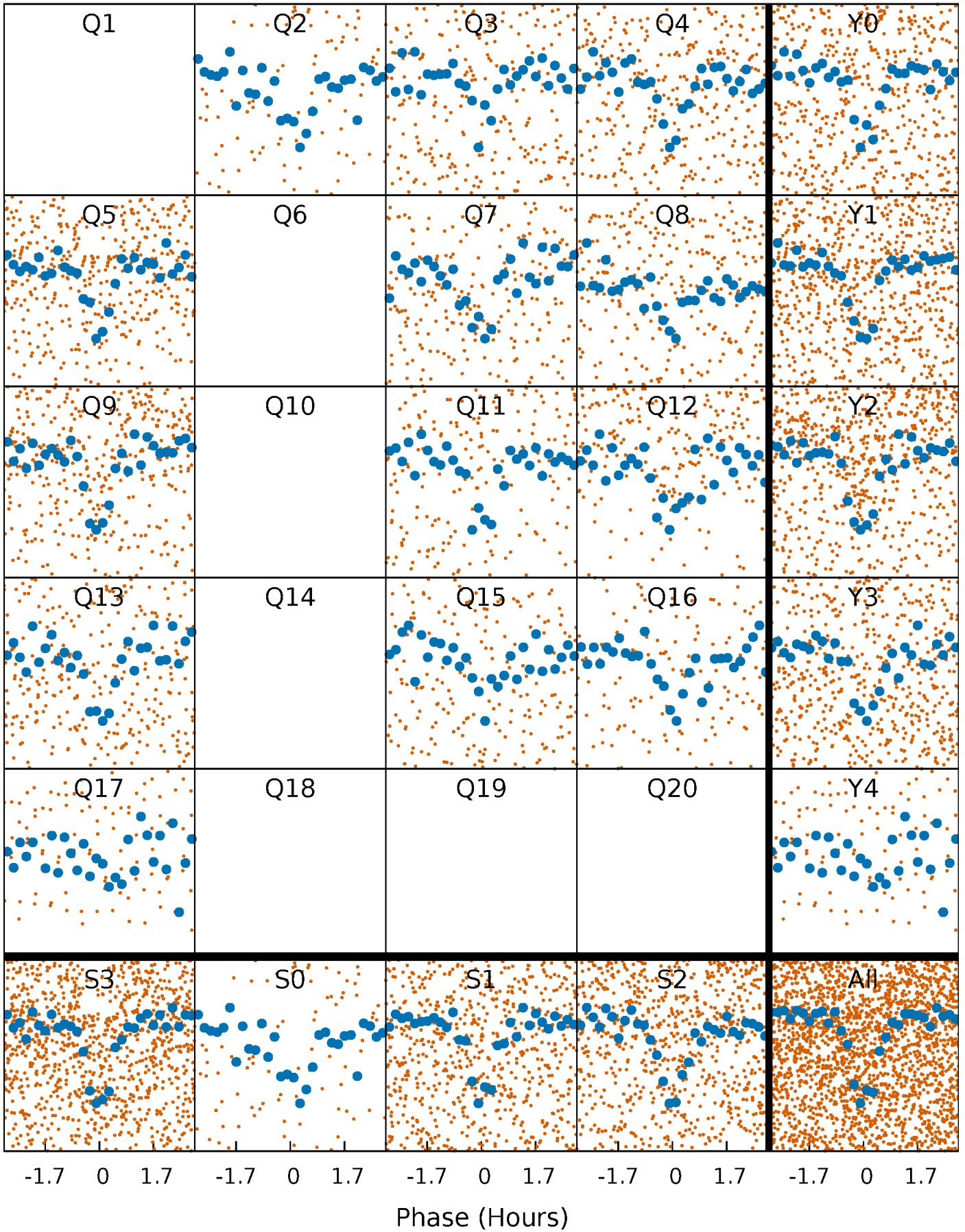


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



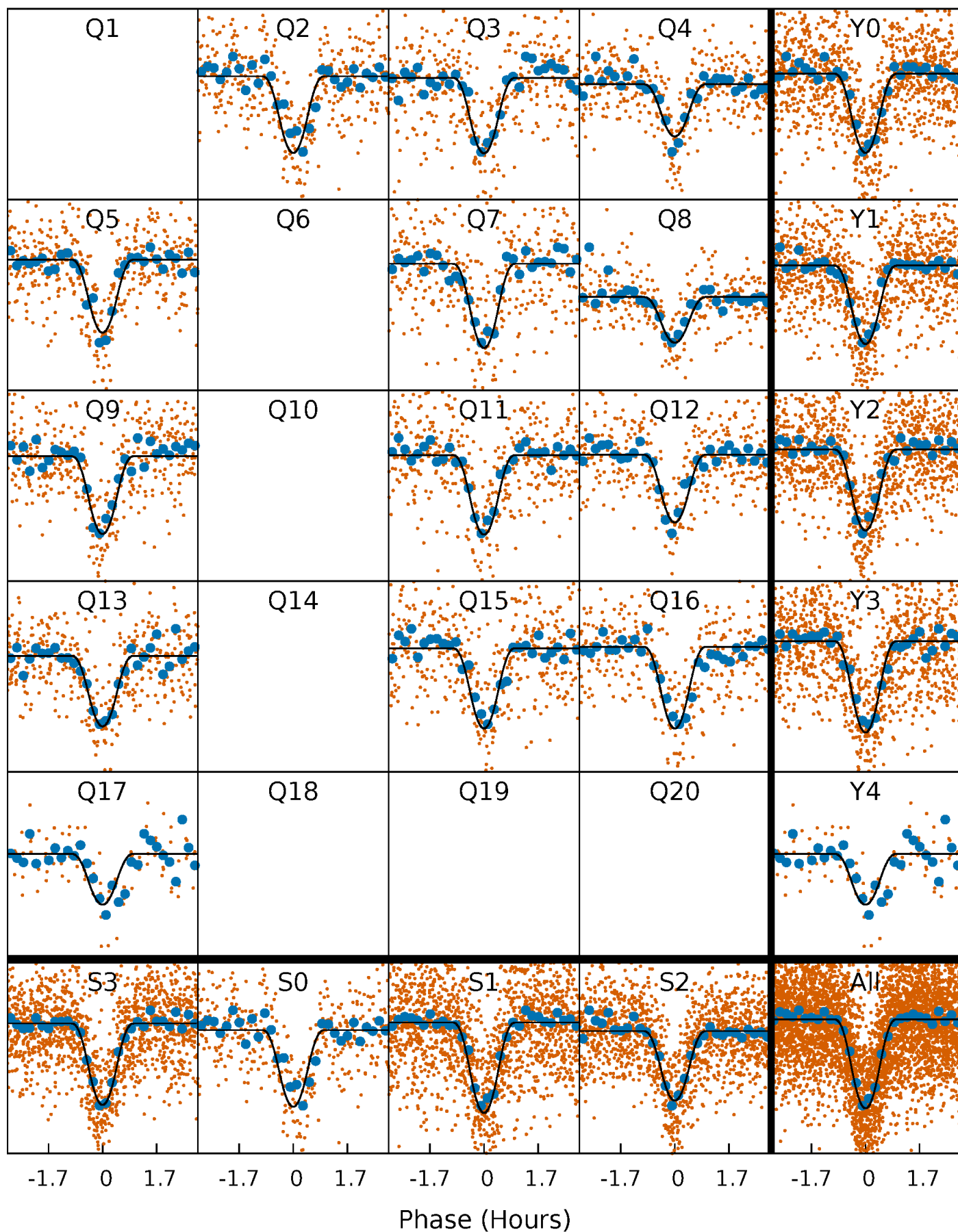
PDC Quarter-Phased Transit Curves

TCE 005196864-01 P= 2.503428 Days $T_0=131.945841$ (BKJD)



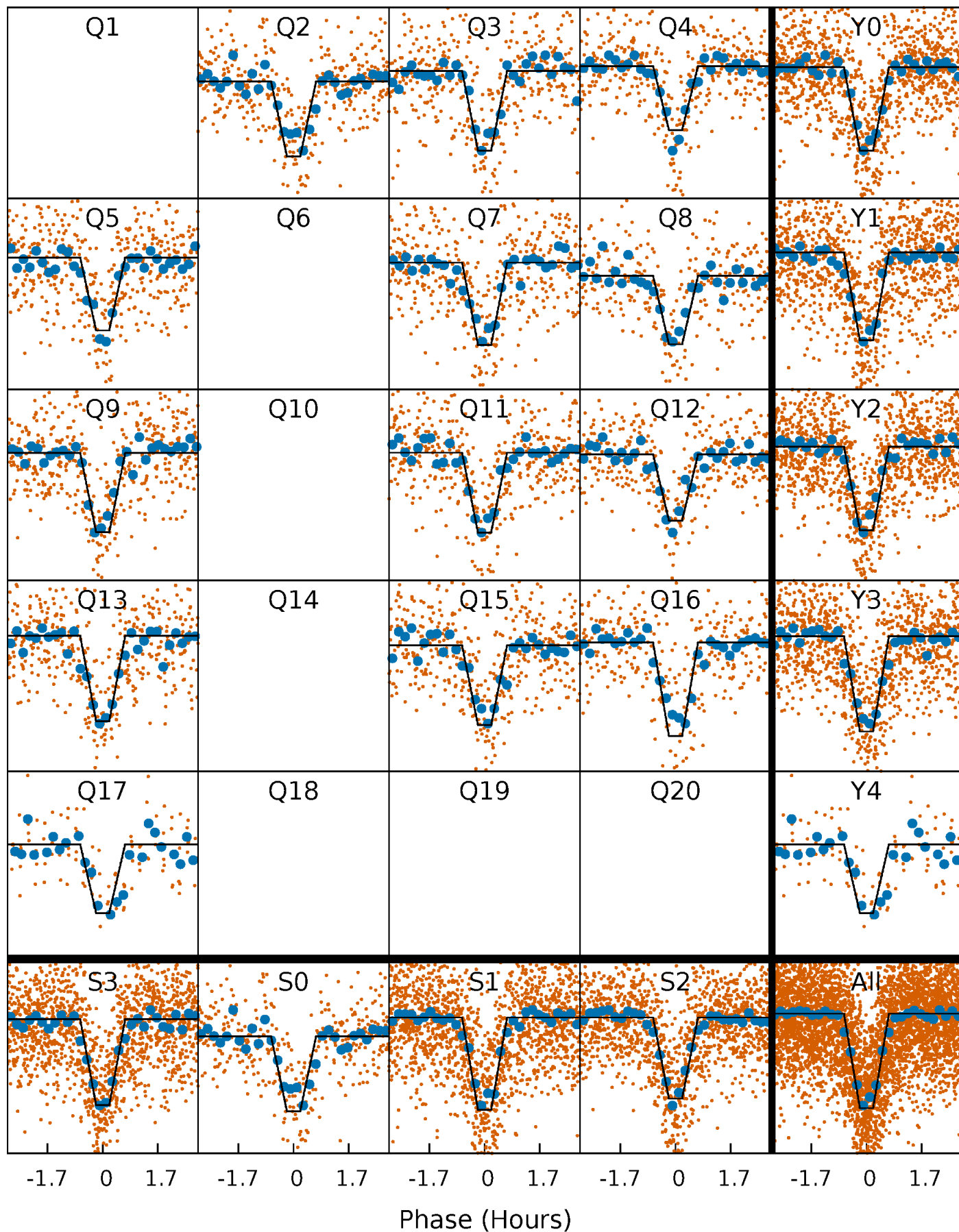
DV Quarter-Phased Transit Curves

TCE 005196864-01 P= 2.503428 Days $T_0=131.945841$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

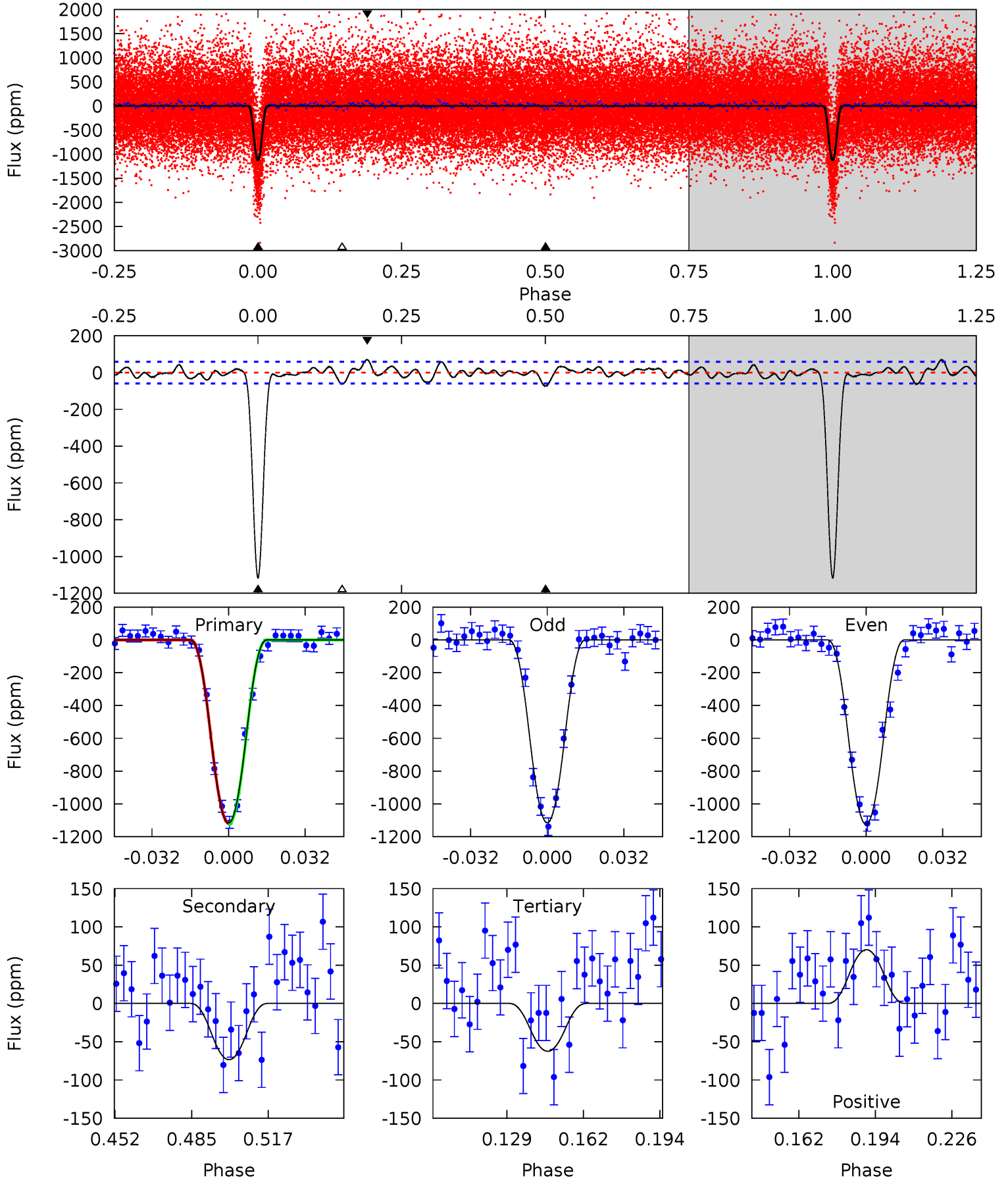
TCE 005196864-01 P= 2.503430 Days $T_0=131.945641$ (BKJD)



DV Model-Shift Uniqueness Test

005196864-01, P = 2.503428 Days, E = 131.945841 Days

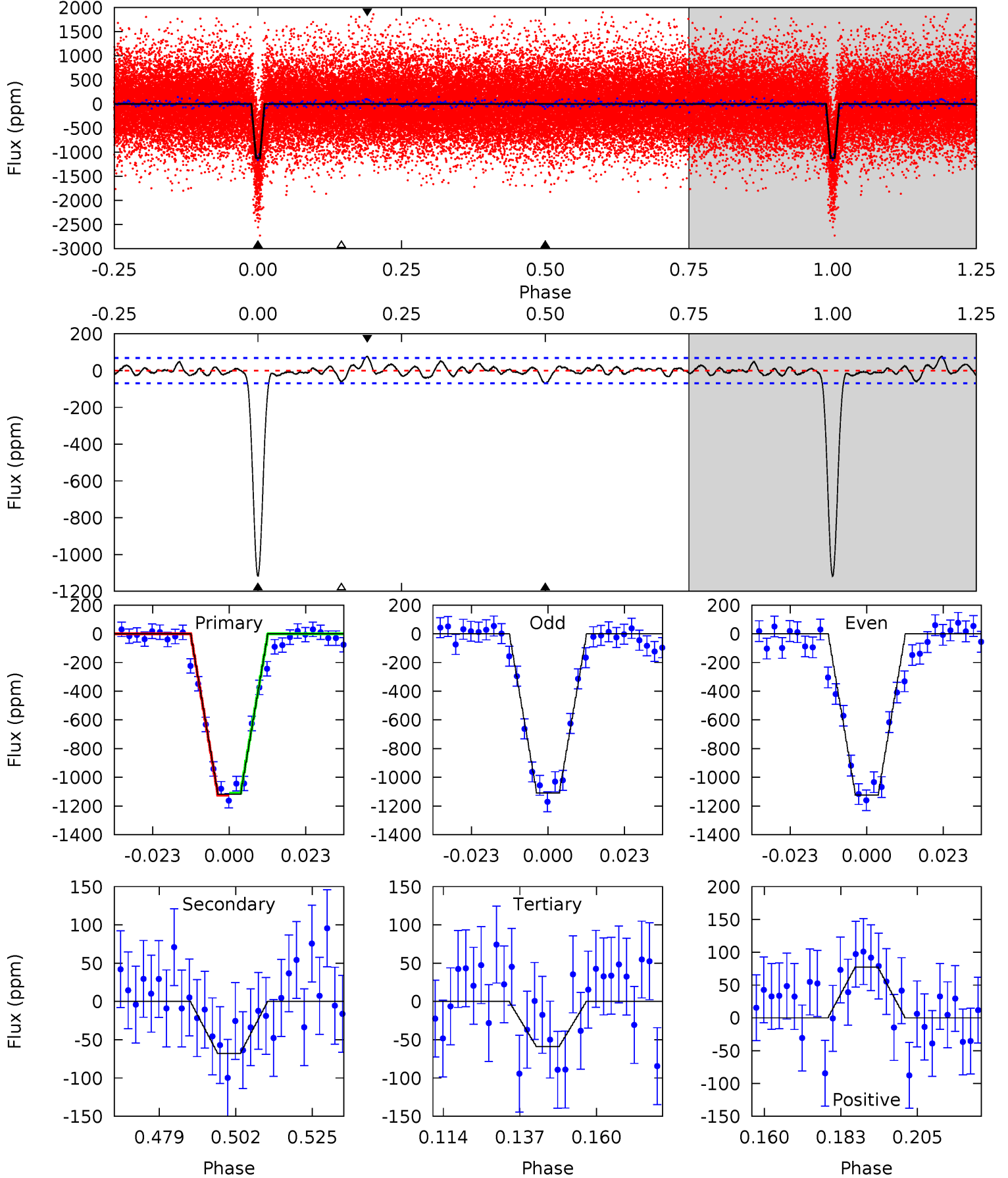
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
90.6	5.96	5.06	5.70	4.80	2.14	1.73	85.5	84.9	0.89	0.26	0.40	0.97	0.06	0.36



Alt Model-Shift Uniqueness Test

005196864-01, P = 2.503430 Days, E = 131.945641 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
79.1	4.81	4.18	5.48	4.87	2.28	1.40	74.9	73.6	0.63	-0.67	0.53	1.01	0.06	0.54



Stellar Parameters For KIC 005196864

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5174^{+169}_{-154}	$4.483^{+0.095}_{-0.105}$	$-0.040^{+0.300}_{-0.300}$	$0.840^{+0.112}_{-0.101}$	$0.782^{+0.107}_{-0.058}$	$1.858^{+0.790}_{-0.553}$
	+3%/-3%	+2%/-2%	+750%/-750%	+13%/-12%	+14%/-7%	+43%/-30%
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 005196864-01 / KOI 2695.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-73 ± 12	$4.99^{+3.45}_{-2.83}$	1613^{+77}_{-78}	2733^{+832}_{-470}	$1.802^{+8.143}_{-1.200}$
Alt.	-68 ± 14	$3.90^{+2.83}_{-2.46}$	1607^{+74}_{-76}	2901^{+1101}_{-512}	$2.736^{+17.303}_{-1.889}$

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 $A_{obs} \gg 1.0$

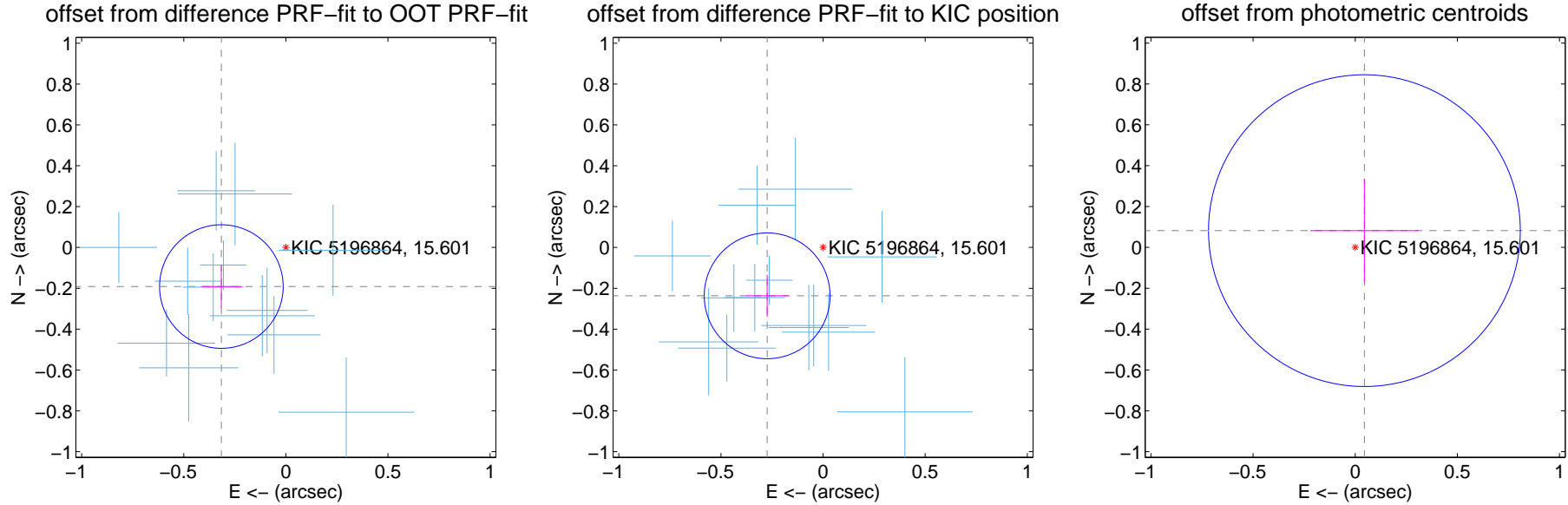
DV Centroid Data

Supplemental centroid analysis for 005196864-01. Kepler magnitude: 15.60. Transit SNR 51.46

There are 13 quarters with good PRF difference image offsets

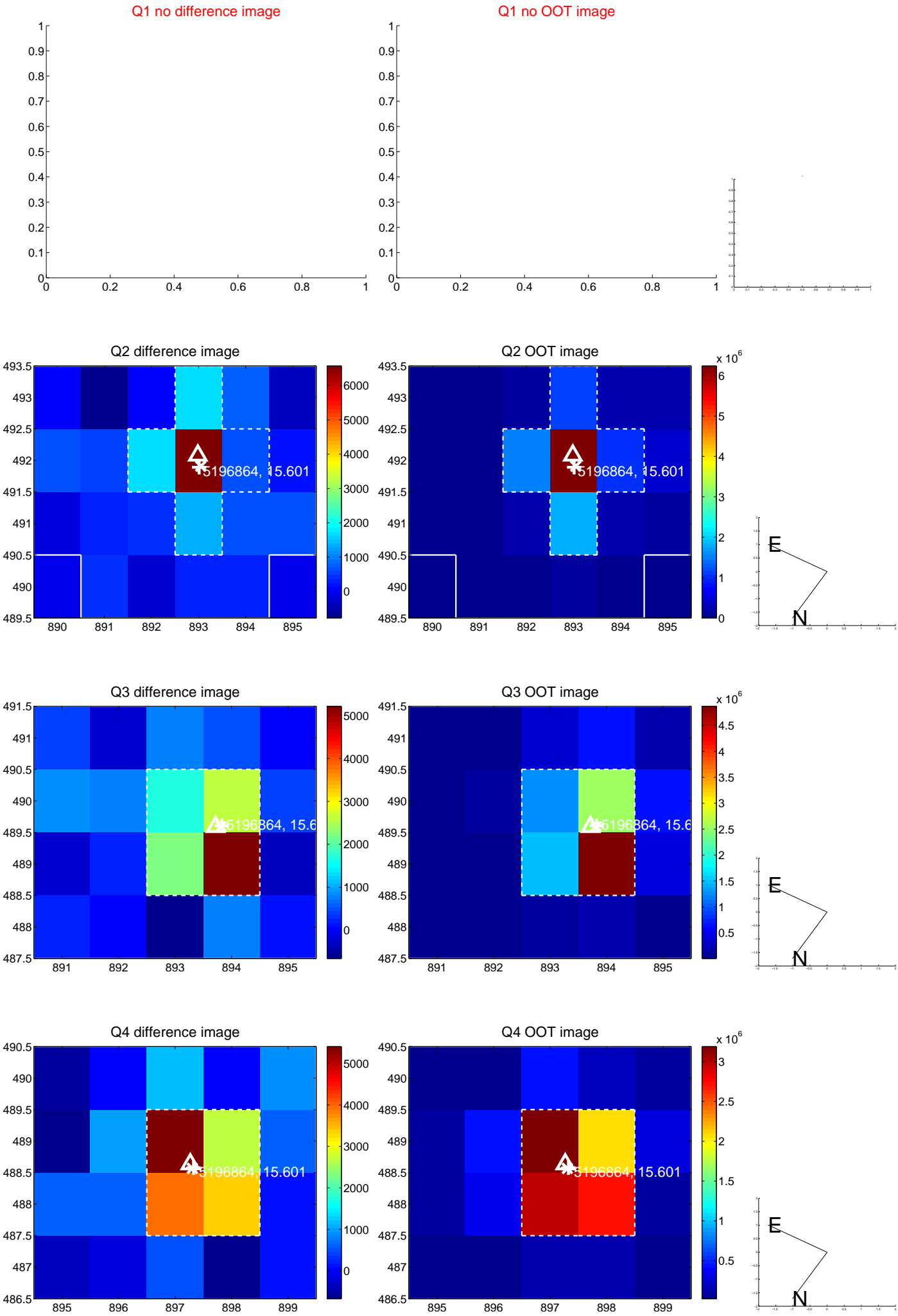
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.369 ± 0.101	3.66	0.316 ± 0.100	-0.191 ± 0.104
PRF-fit source offset from KIC position	0.362 ± 0.103	3.53	0.274 ± 0.103	-0.237 ± 0.103
photometric centroid source offset	0.09 ± 0.25	0.37	-0.05 ± 0.27	0.08 ± 0.25

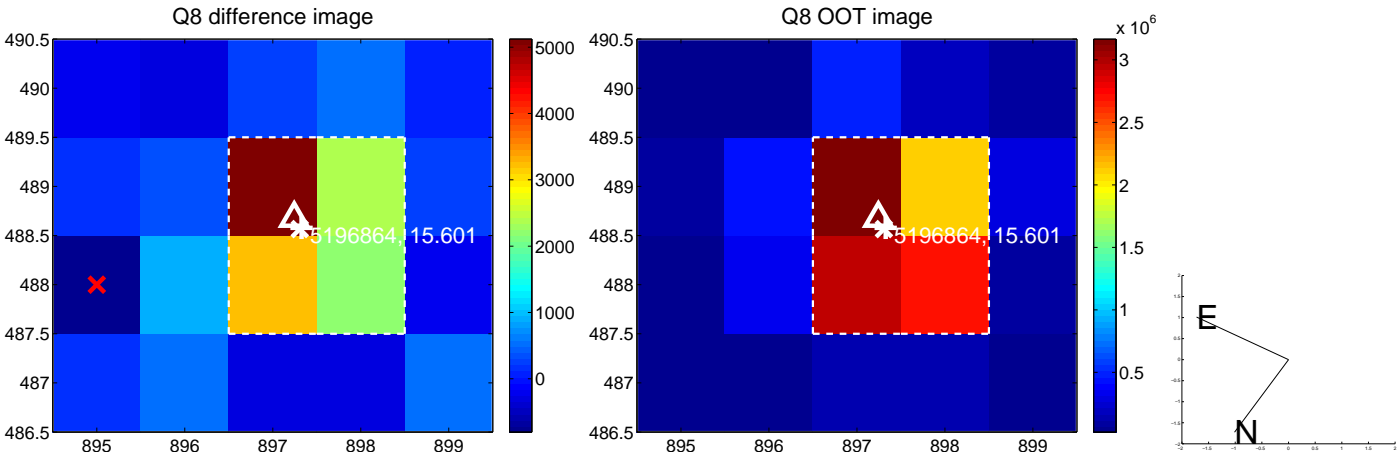
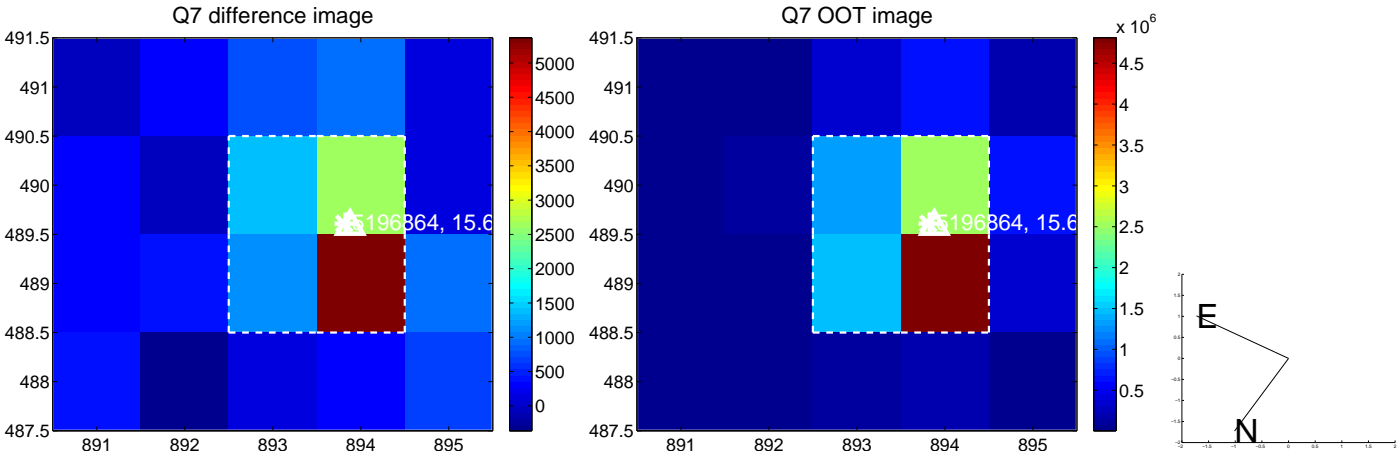
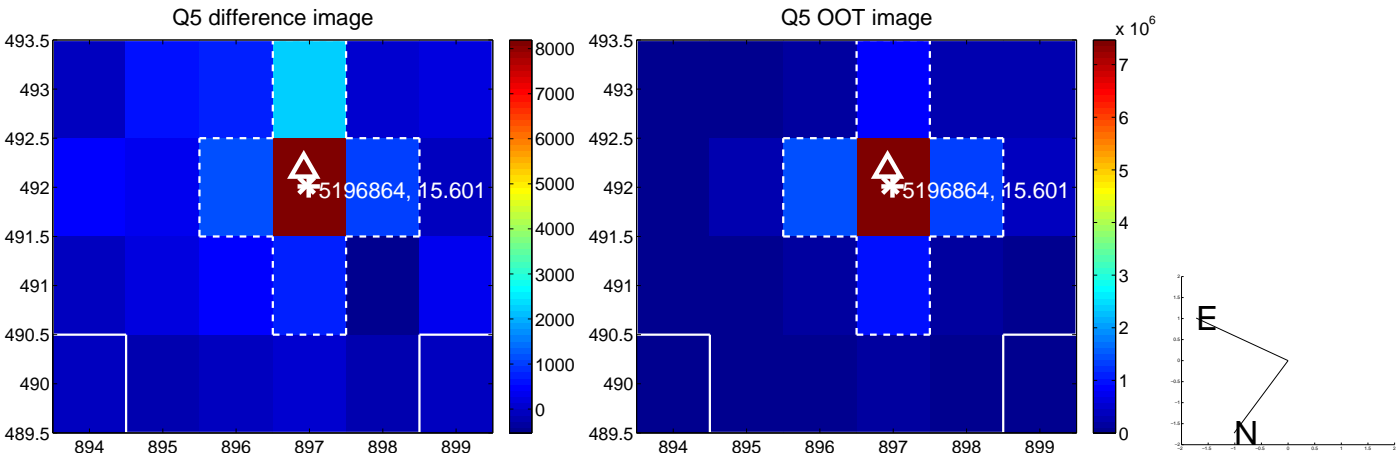


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

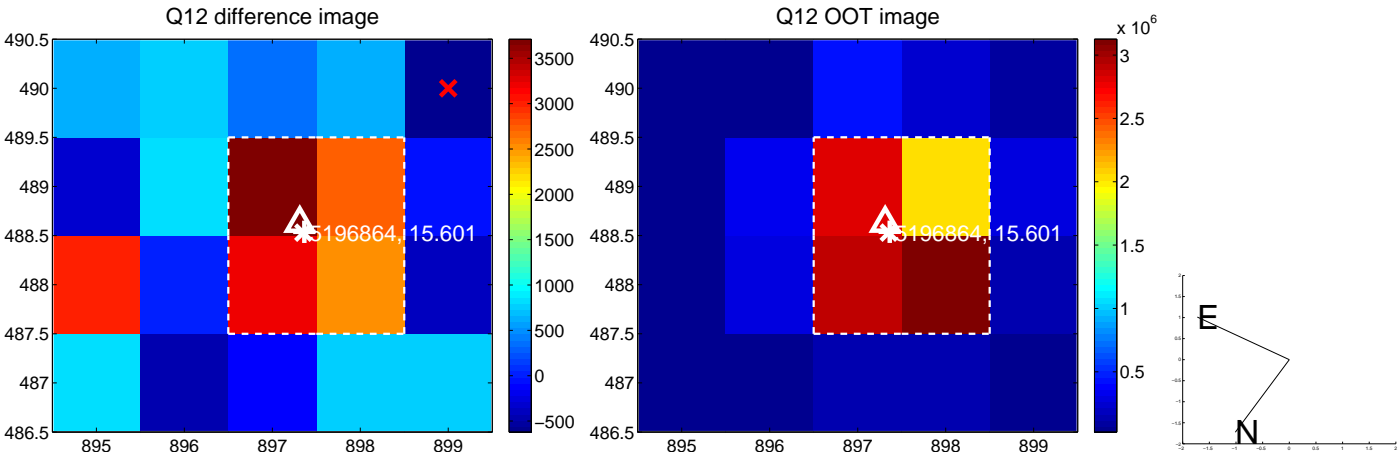
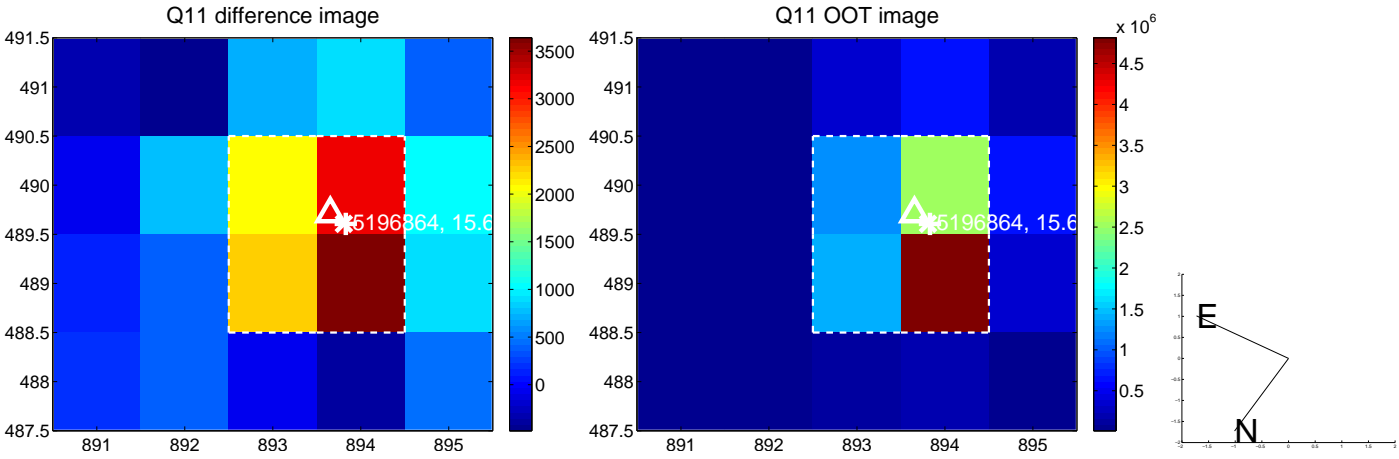
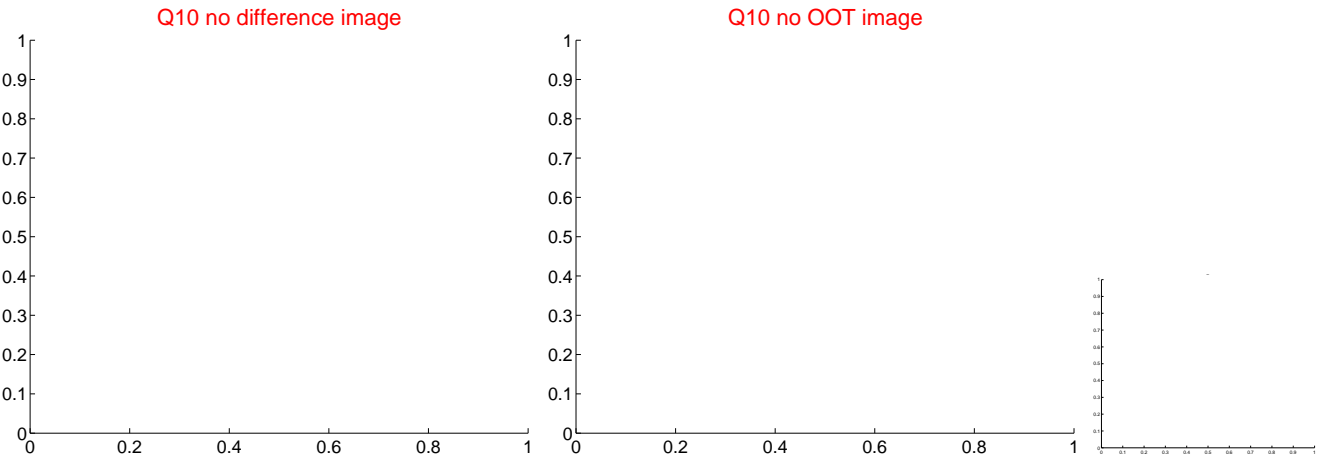
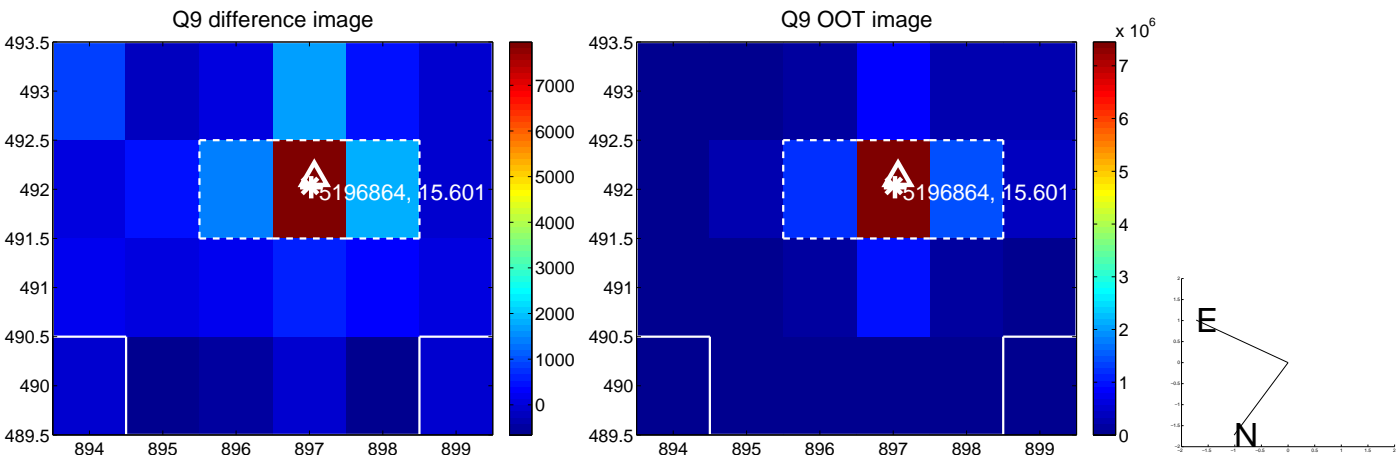
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



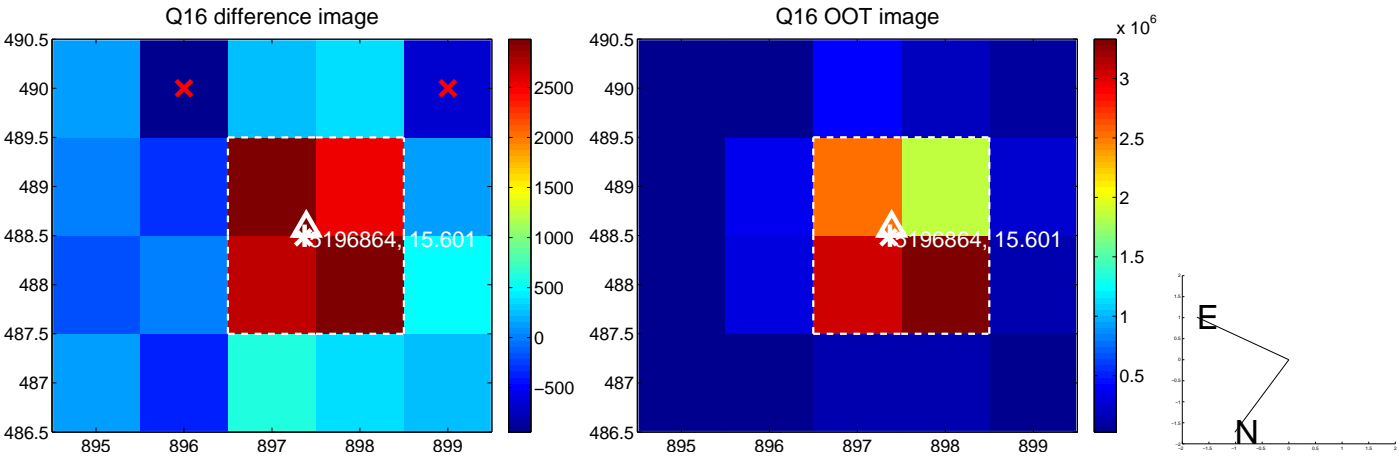
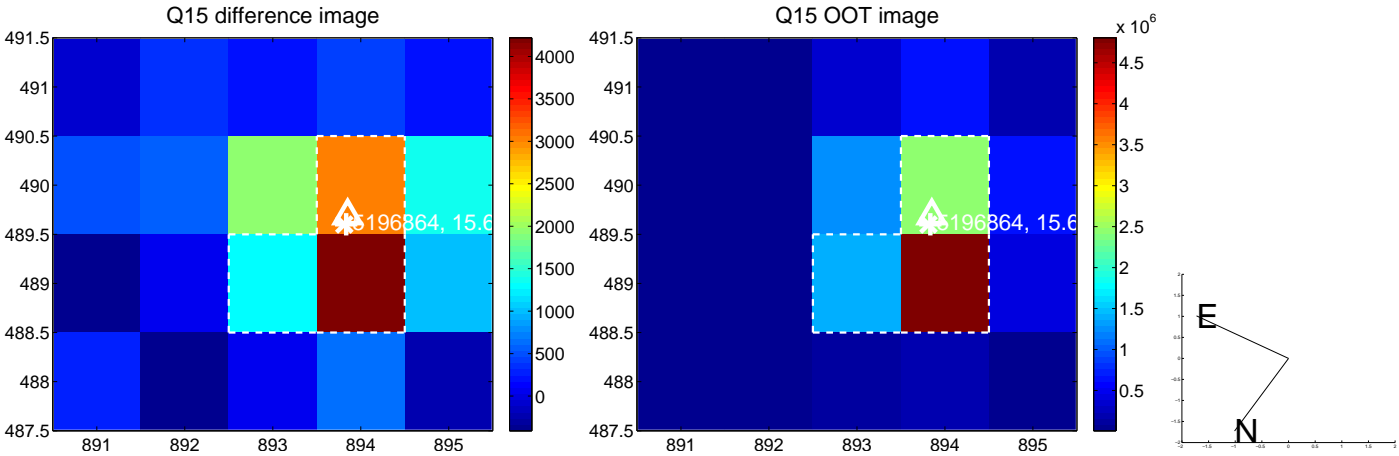
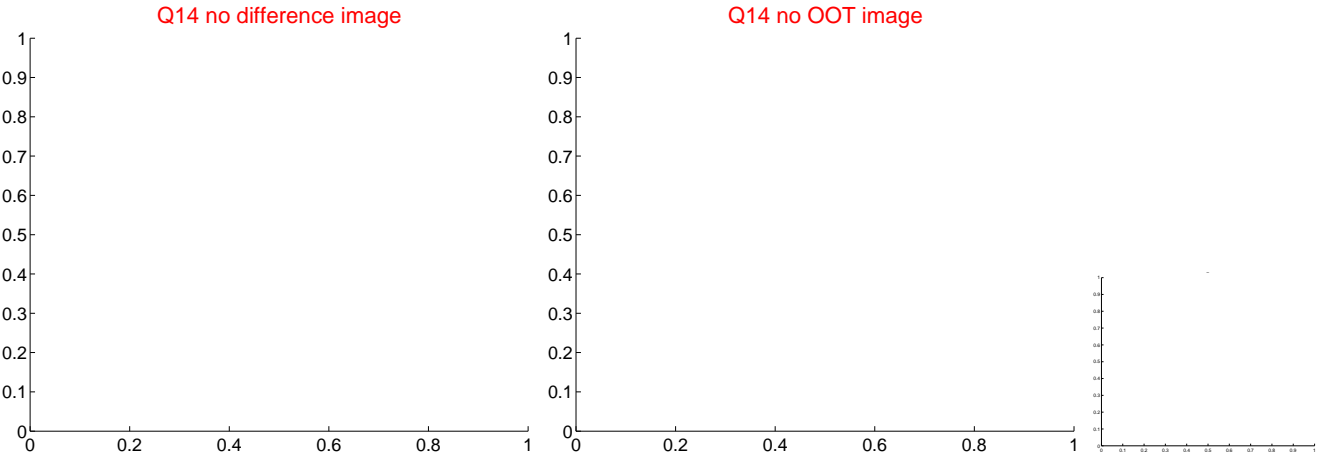
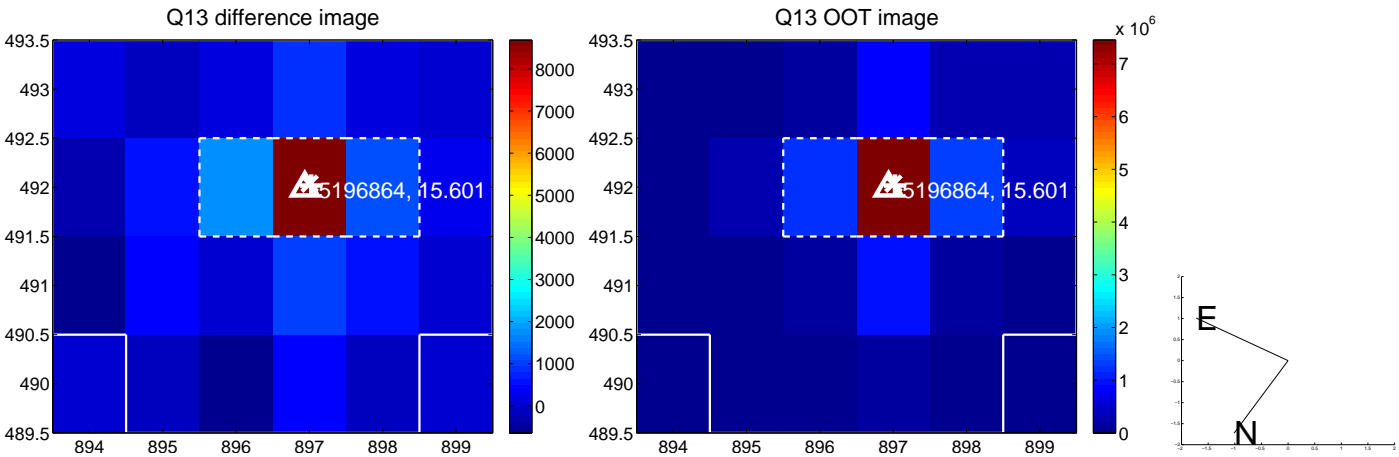
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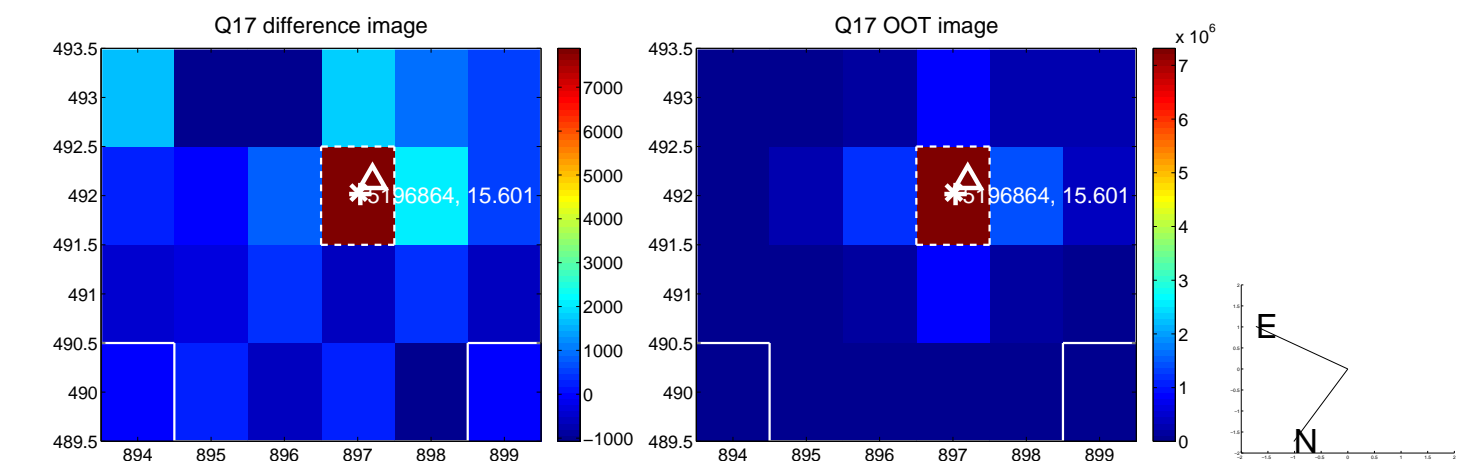
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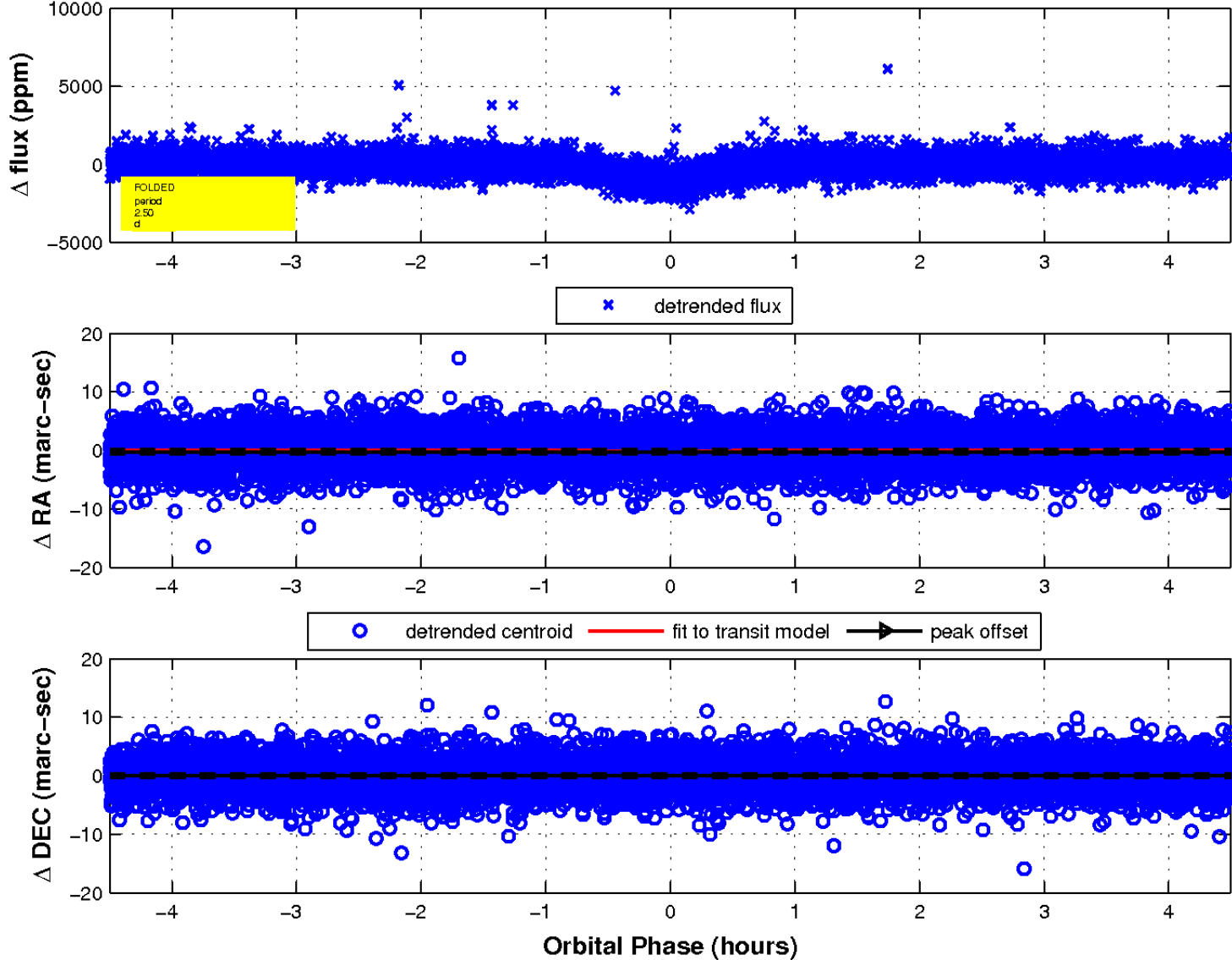
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

