

KIC 011288492

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})
011288492-01	OBS	7434.01	5.704518	134.413170	118.7	1.177	8.2	7.8	0.83	5523	0.90	155.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011288492-01	OBS	PC	0.99	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.

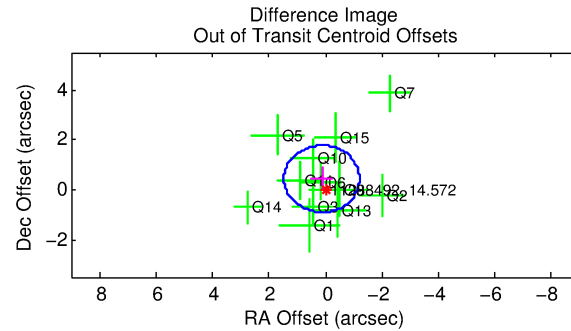
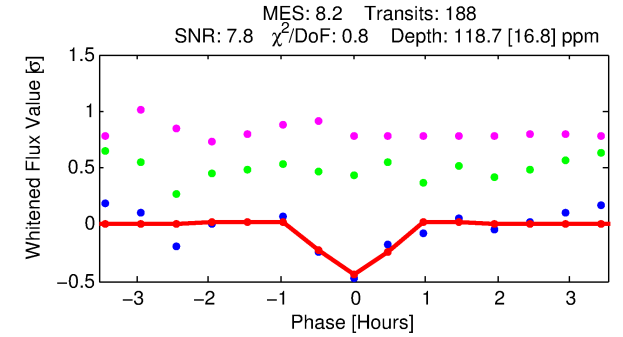
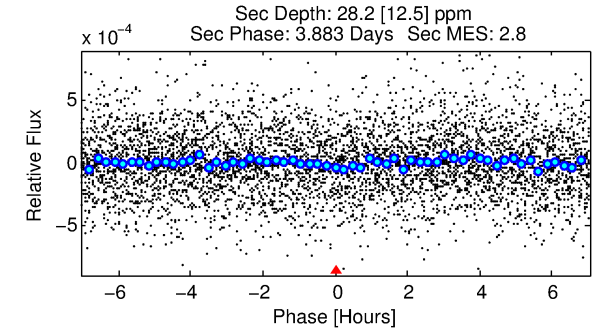
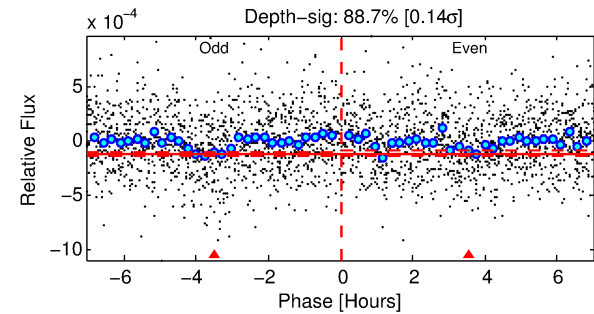
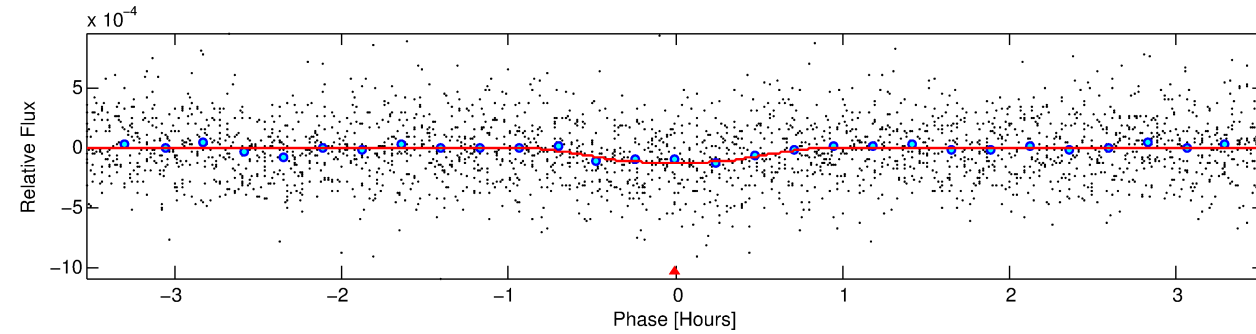
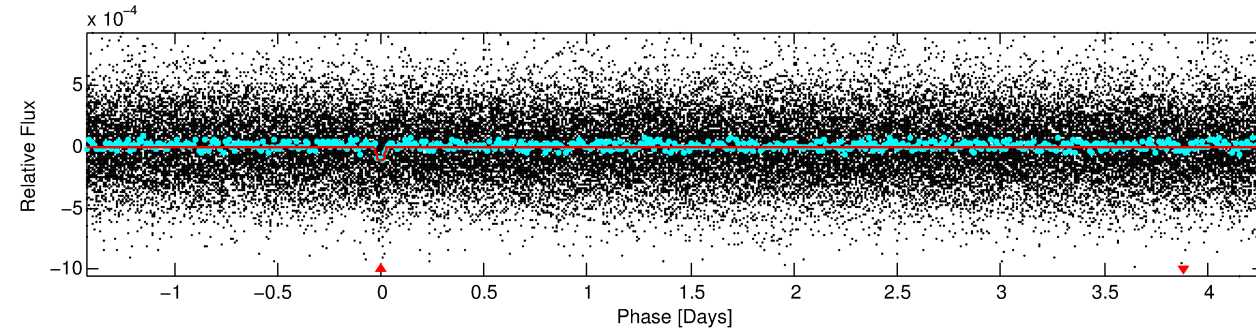
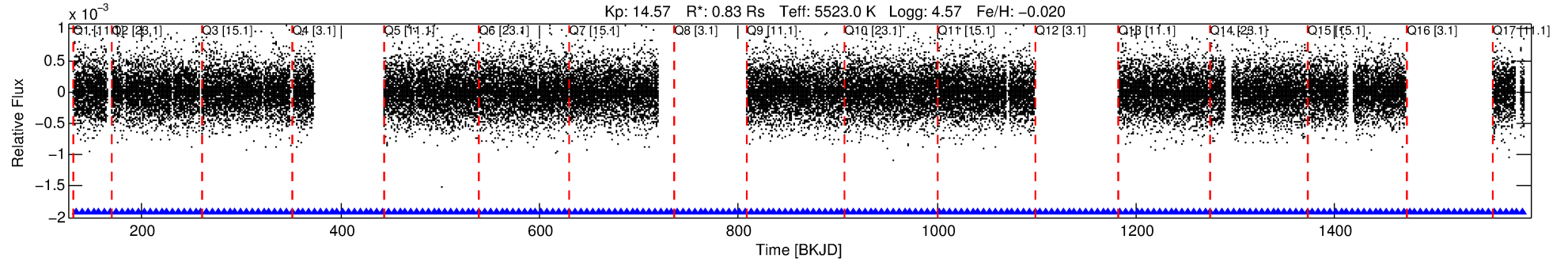
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011288492-01

No Significant Match Found

DV One-Page Summary

KIC: 11288492 Candidate: 1 of 1 Period: 5.705 d
KOI: K07434.01 Corr: 0.847



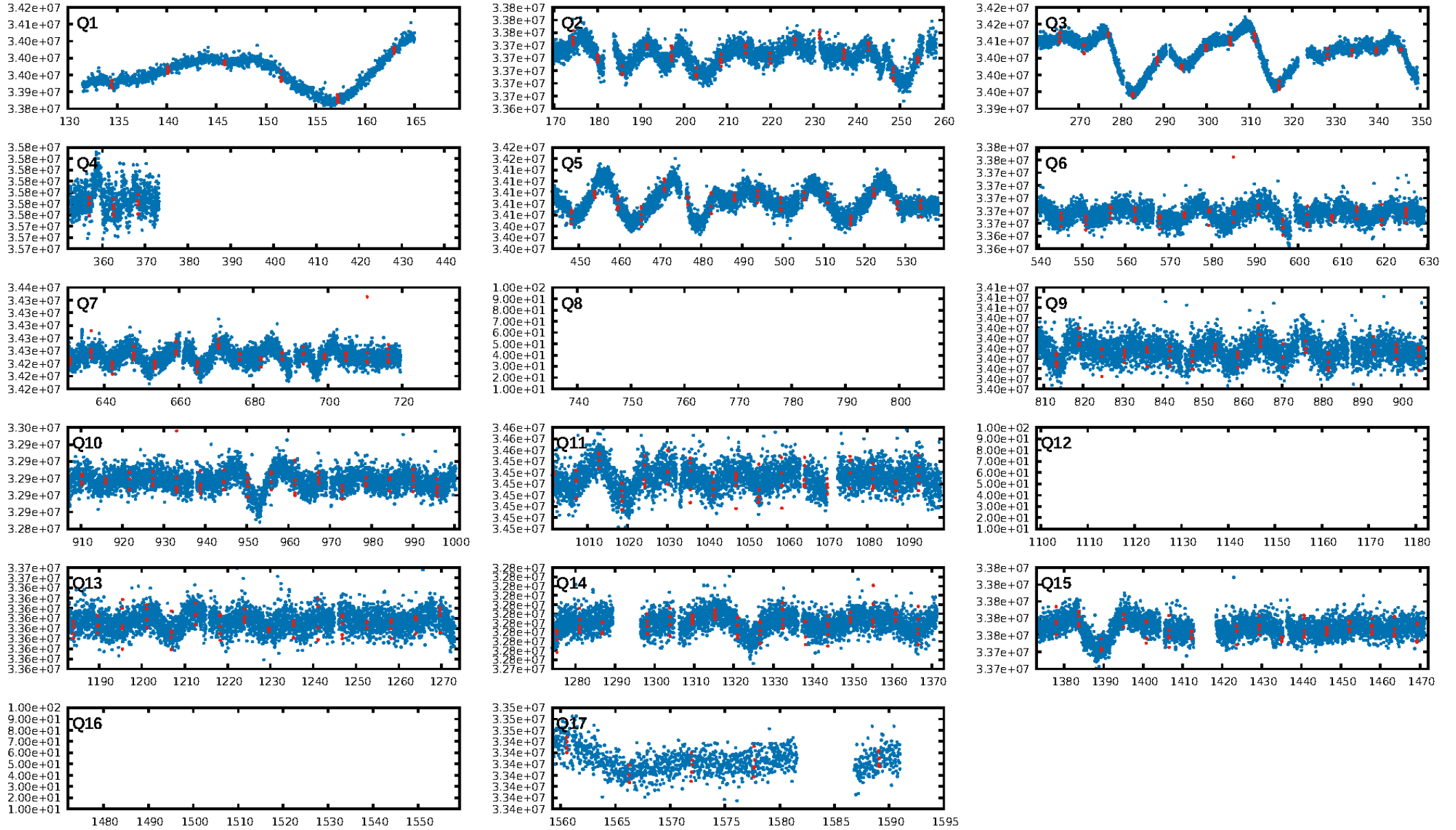
DV Fit Results:

Period = 5.70452 [0.00003] d
Epoch = 134.4132 [0.0039] BKJD
Rp/R* = 0.0099 [0.0290]
a/R* = 37.29 [446.25]
b = 0.07 [163.25]
Seff = 155.14 [44.93]
Teq = 900 [65] K
Rp = 0.90 [2.64] Re
a = 0.0610 [0.0110] AU
Ag = 71.70 [422.24] [0.17 σ]
Teff = 4049 [5956] K [0.53 σ]

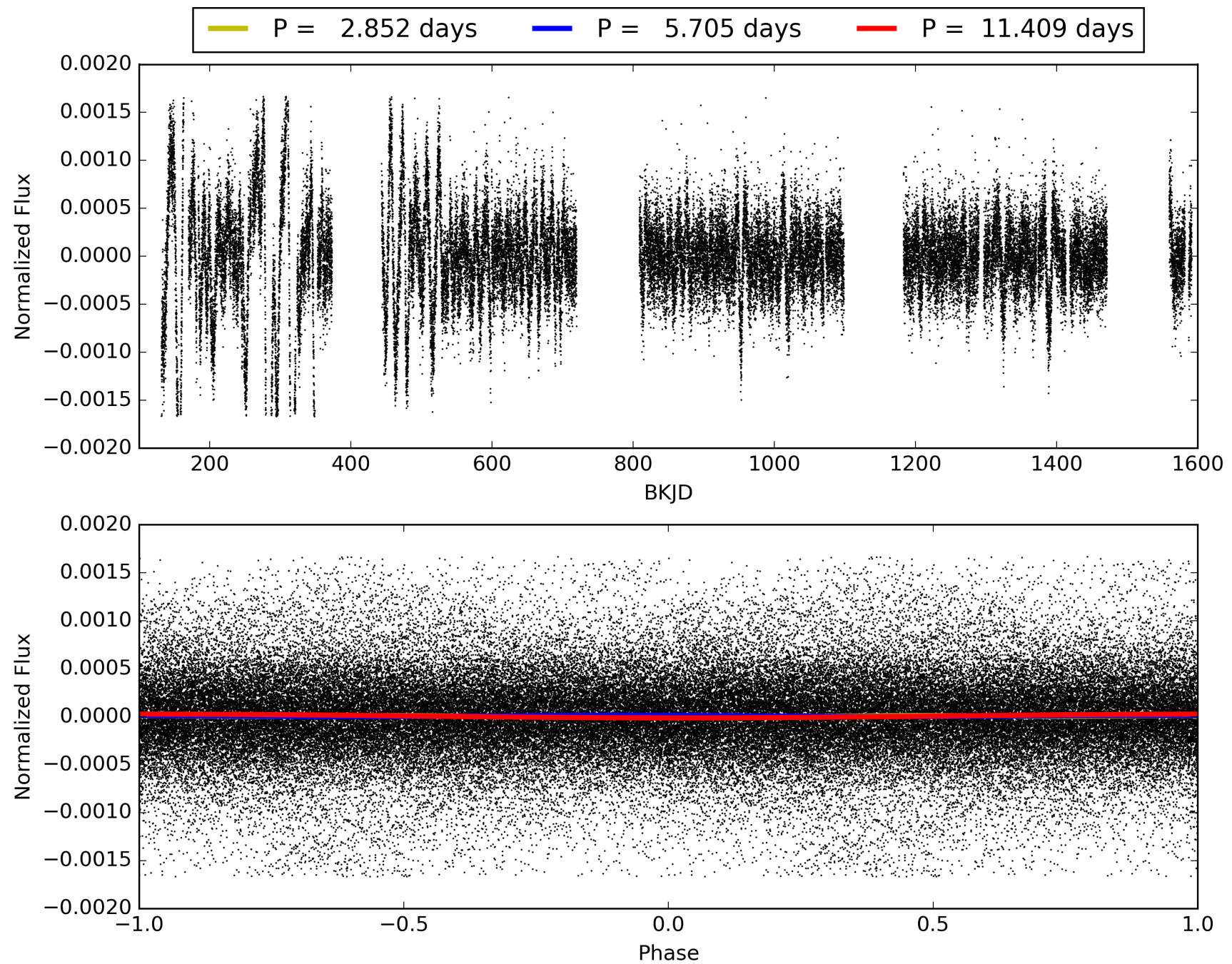
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.09e-16
RollingBand-fgt: 1.00 [174/174]
GhostDiagnostic-chr: 1.461
Centroid-sig: 0.2%
Centroid-so: 4.516 arcsec [2.91 σ]
OotOffset-rm: 0.453 arcsec [1.02 σ]
KicOffset-rm: 0.248 arcsec [0.58 σ]
OotOffset-st: 4/4/0/4 [12]
KicOffset-st: 4/4/0/4 [12]
DiffImageQuality-fgm: 0.83 [10/12]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011288492-01, PDC Light Curves

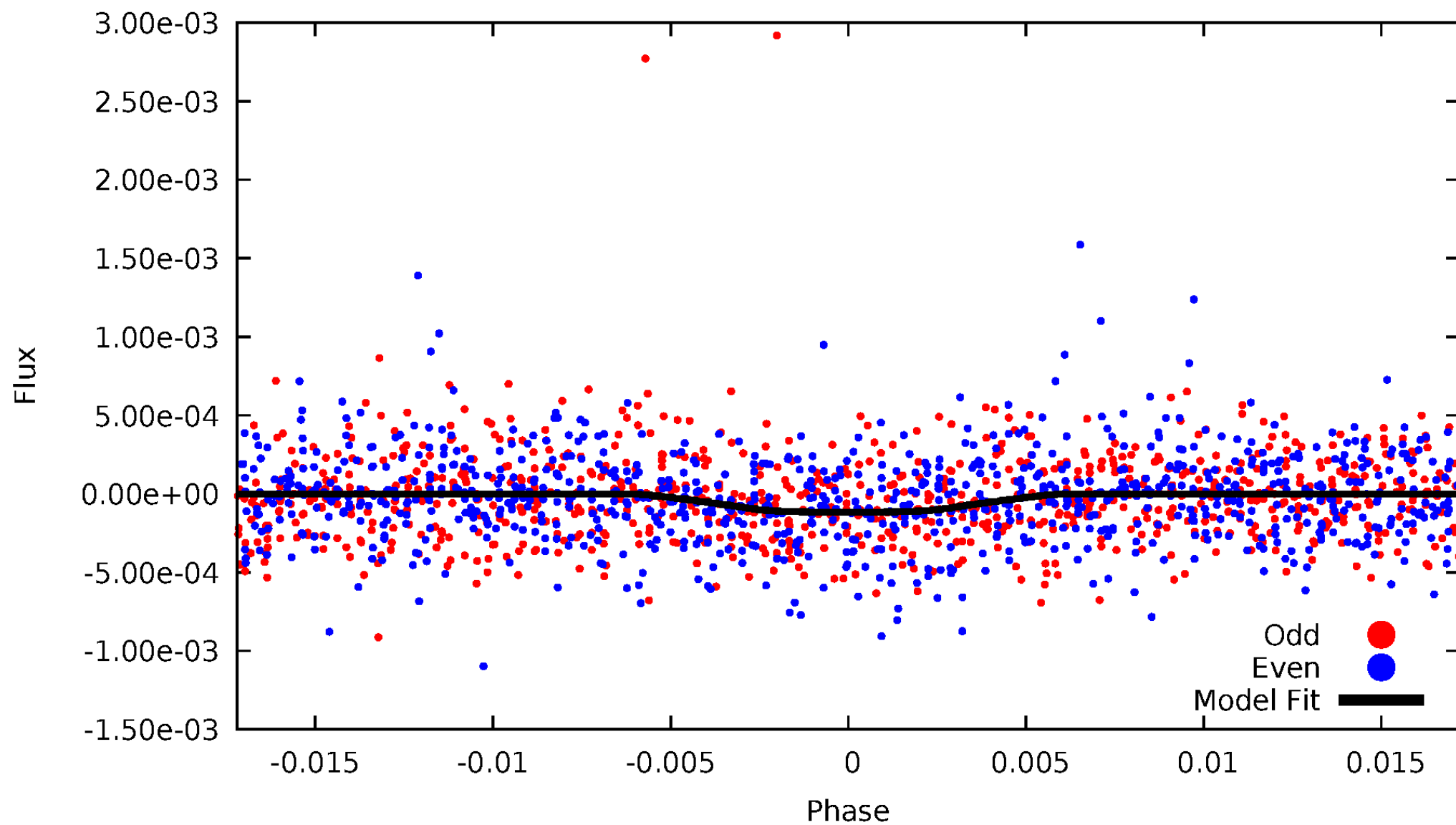


TCE 011288492-01



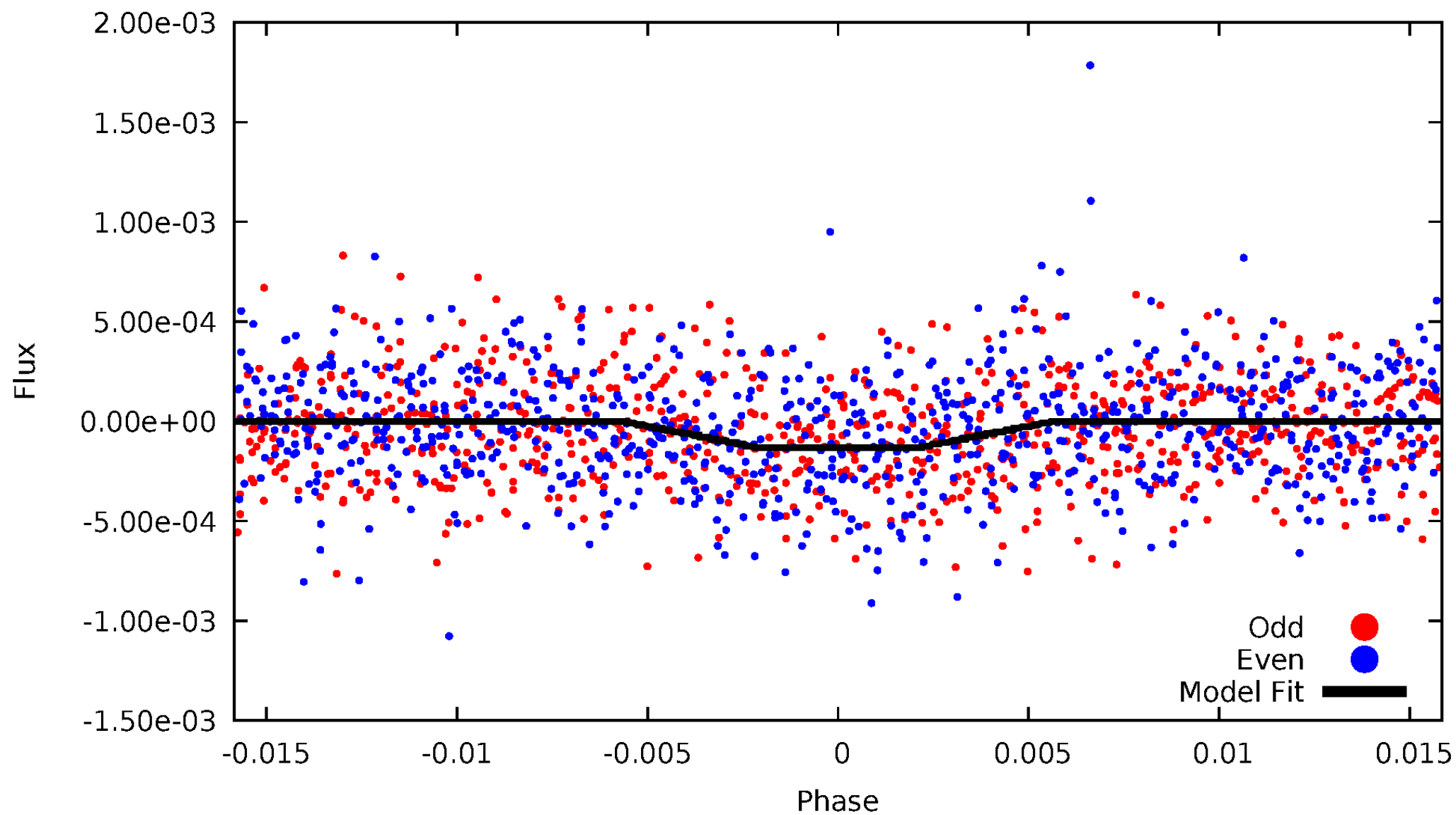
DV Odd/Even

TCE 011288492-01



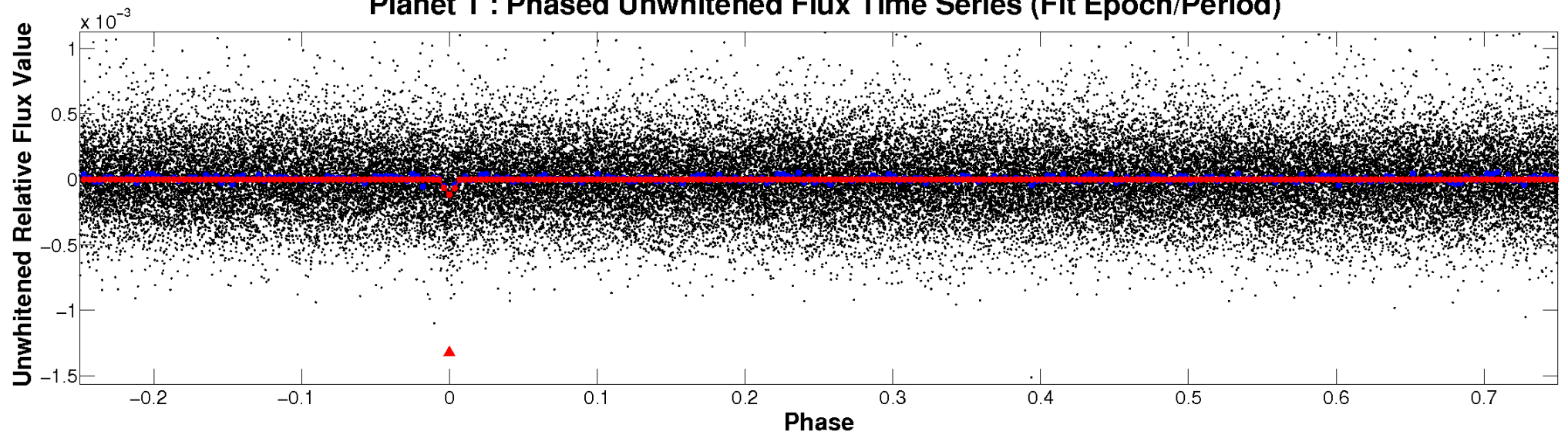
ALT Odd/Even

TCE 011288492-01

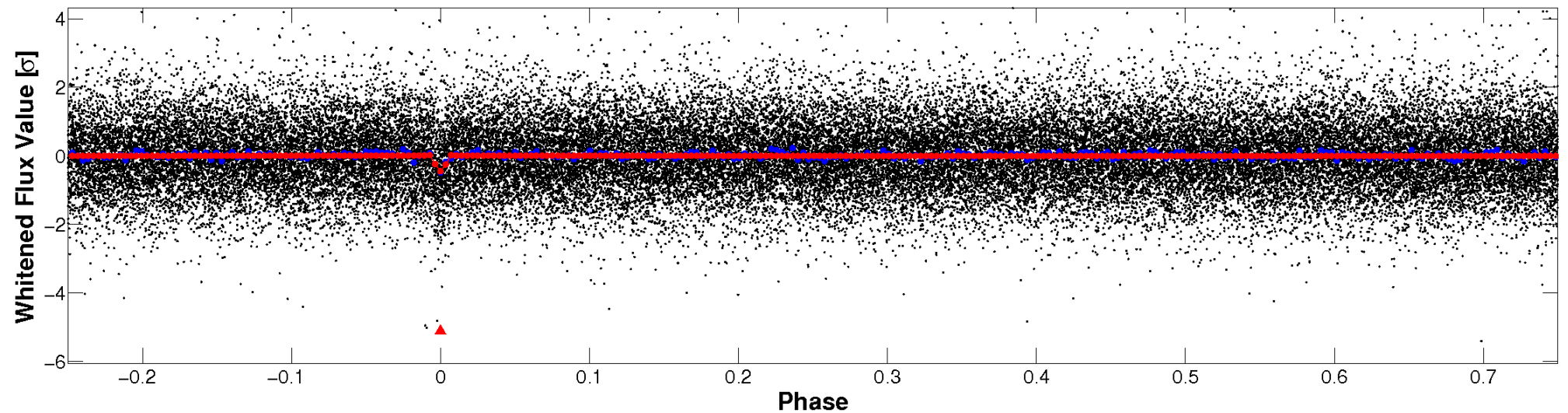


Non-Whitened Vs. Whitened Light Curve

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

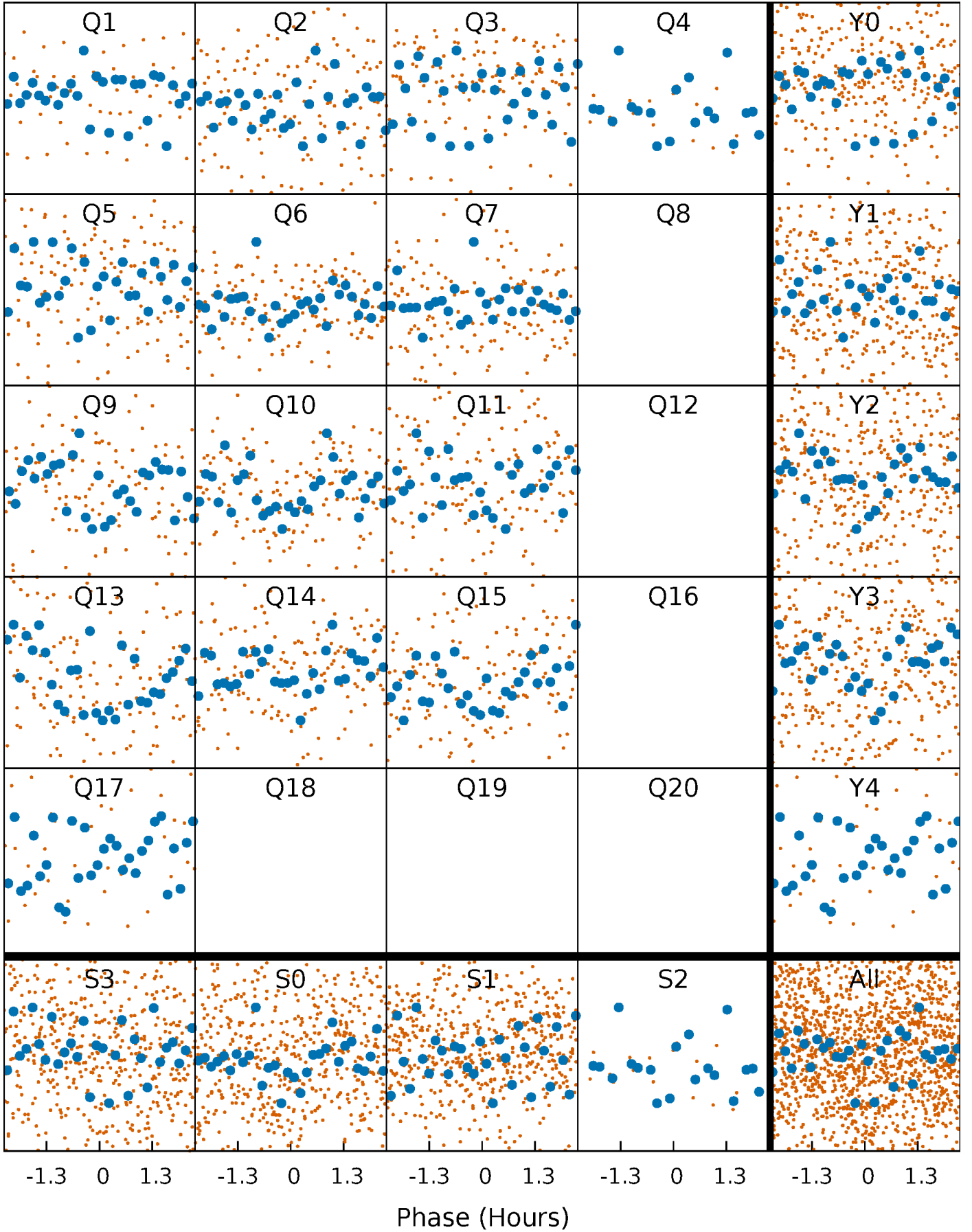


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



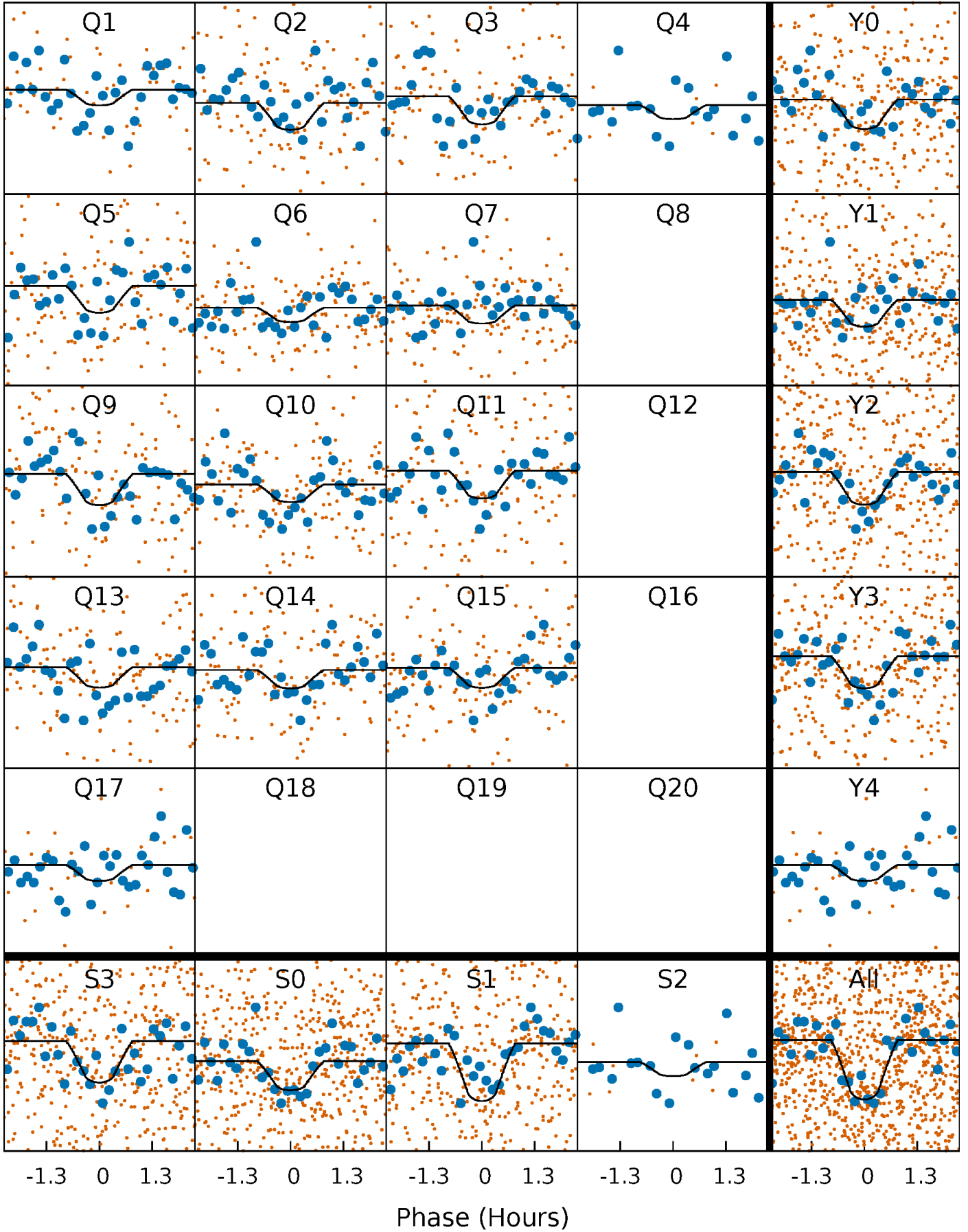
PDC Quarter-Phased Transit Curves

TCE 011288492-01 P= 5.704518 Days $T_0=134.413170$ (BKJD)



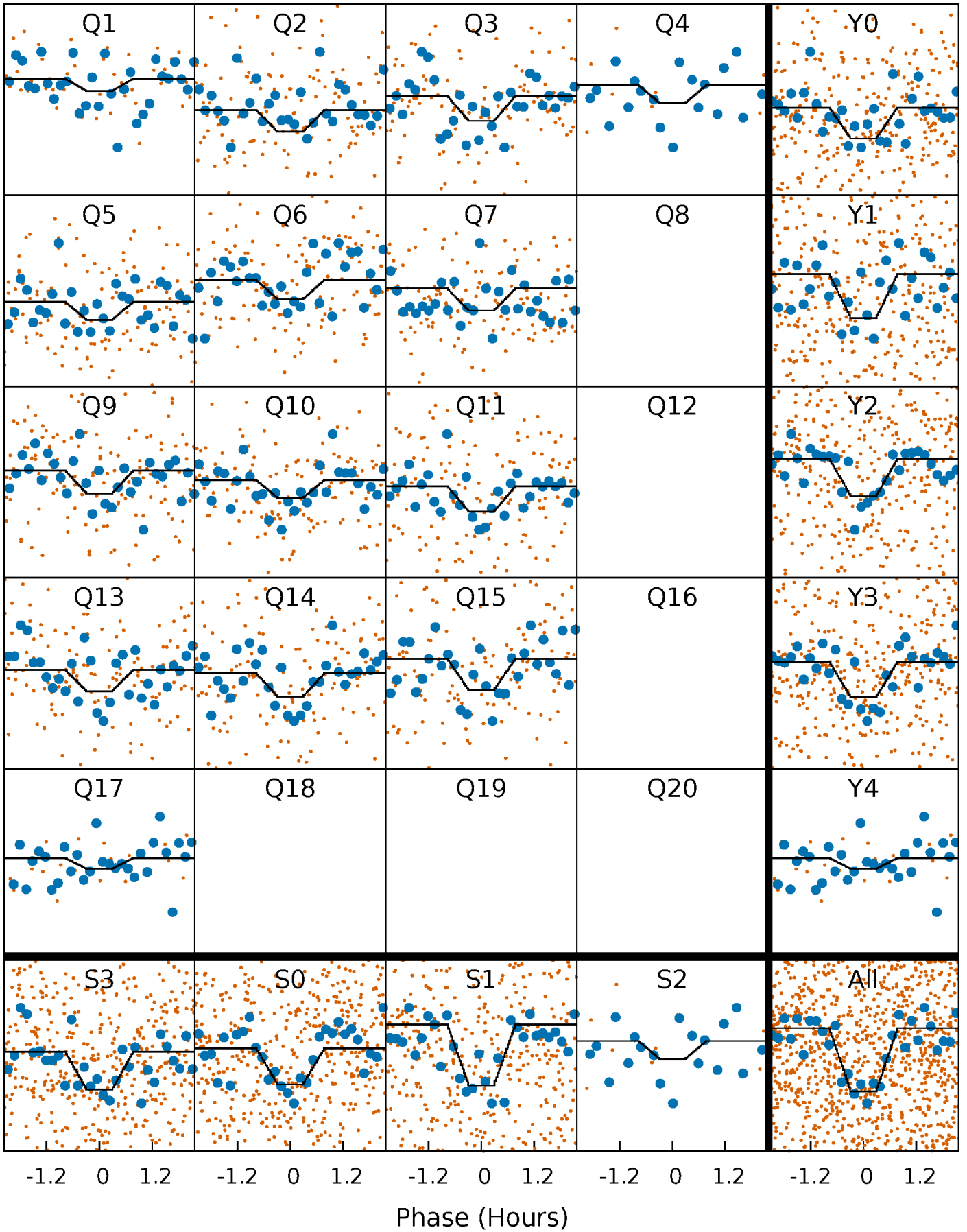
DV Quarter-Phased Transit Curves

TCE 011288492-01 P= 5.704518 Days $T_0=134.413170$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

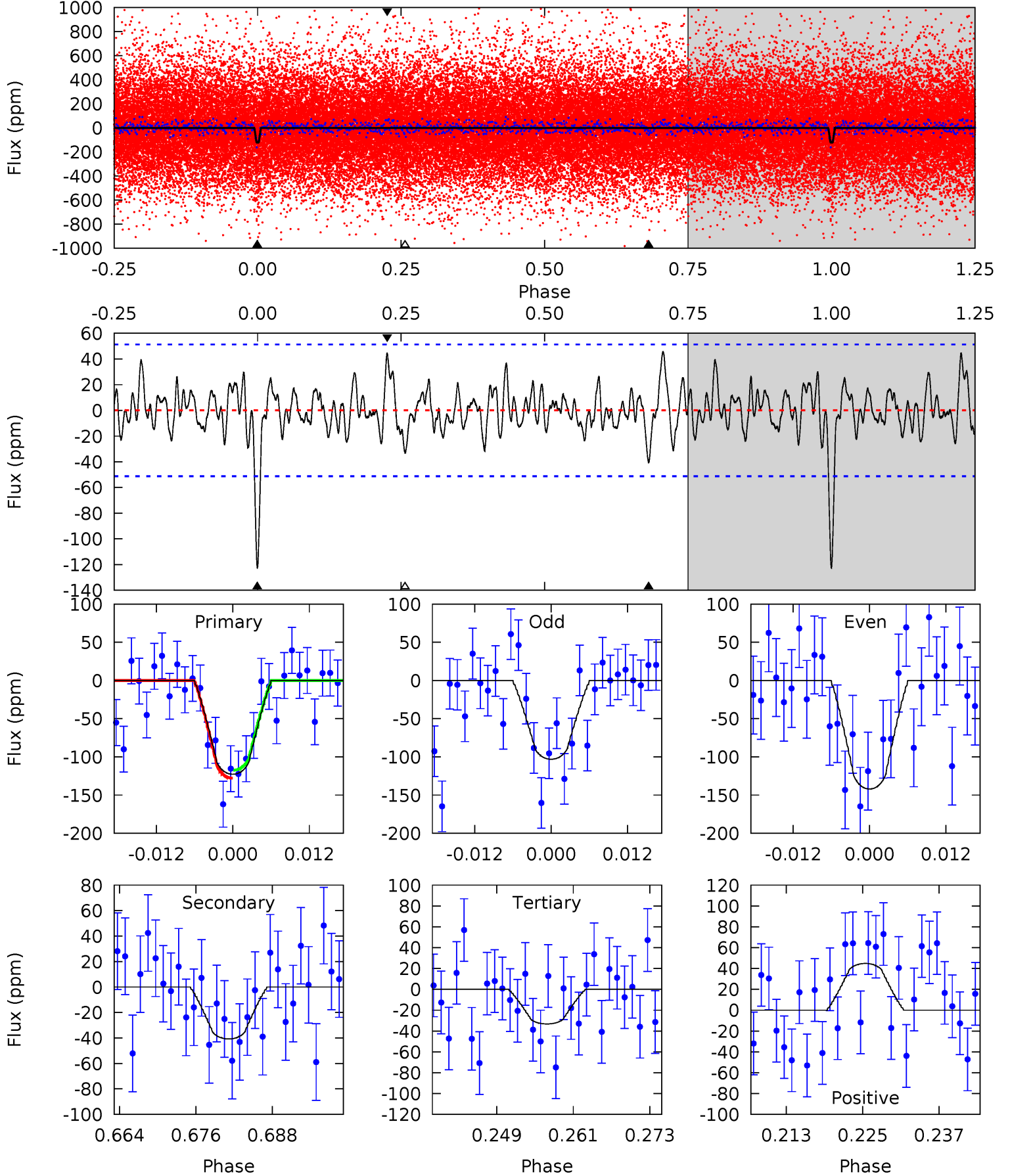
TCE 011288492-01 P= 5.704561 Days $T_0=134.406554$ (BKJD)



DV Model-Shift Uniqueness Test

011288492-01, P = 5.704518 Days, E = 128.708652 Days

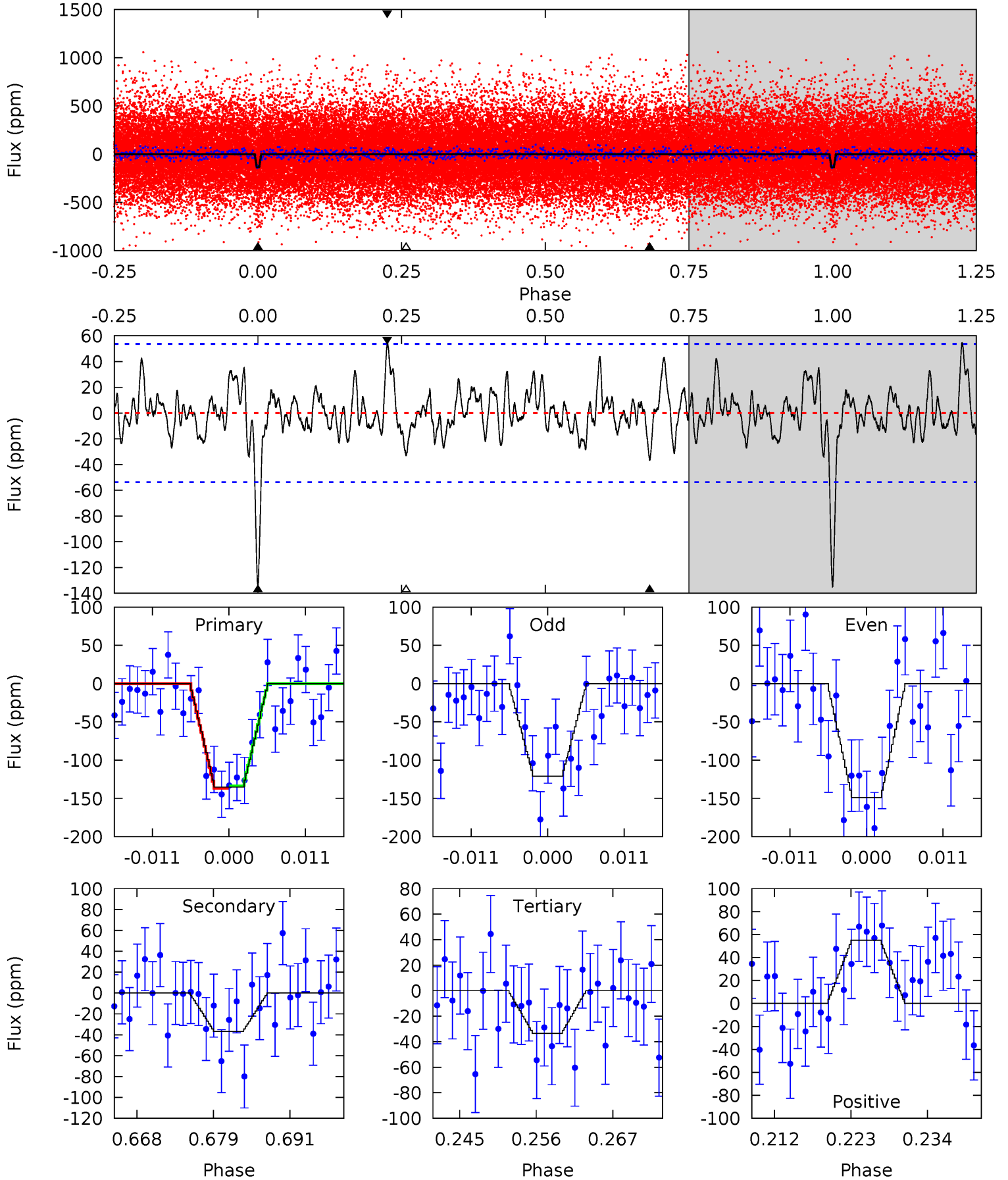
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	3.97	3.23	4.37	4.99	2.52	1.35	8.72	7.59	0.74	-0.40	1.91	1.02	0.27	0.51



Alt Model-Shift Uniqueness Test

011288492-01, P = 5.704561 Days, E = 128.701993 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	3.43	3.11	5.13	5.01	2.54	1.40	9.49	7.48	0.32	-1.69	1.30	1.02	0.29	0.14



Stellar Parameters For KIC 011288492

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5523^{+149}_{-166}	$4.566^{+0.034}_{-0.145}$	$-0.020^{+0.250}_{-0.300}$	$0.832^{+0.176}_{-0.070}$	$0.933^{+0.074}_{-0.111}$	$2.278^{+0.410}_{-0.890}$
	+3%/-3%	+1%/-3%	+1250%/-1500%	+21%/-8%	+8%/-12%	+18%/-39%
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 011288492-01 / KOI 7434.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-41 ± 10	$2.39^{+2.08}_{-1.55}$	1276^{+70}_{-51}	3272^{+1569}_{-557}	14^{+113}_{-10}
Alt.	-37 ± 11	$2.29^{+2.31}_{-1.57}$	1280^{+67}_{-51}	3266^{+1728}_{-613}	14^{+121}_{-10}

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

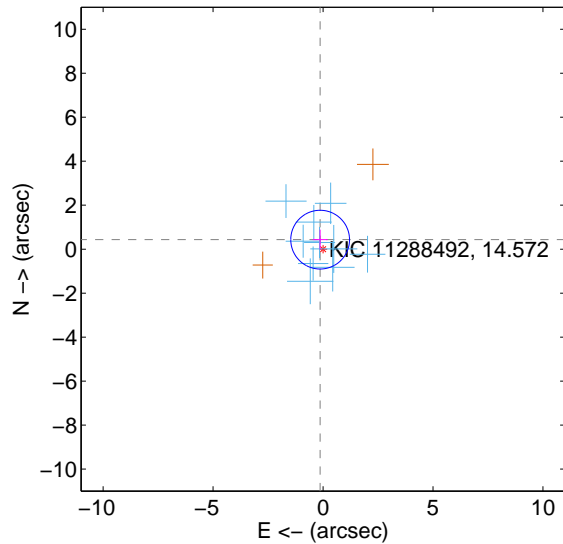
Supplemental centroid analysis for 011288492-01. Kepler magnitude: 14.57. Transit SNR 7.82

There are 10 quarters with good PRF difference image offsets

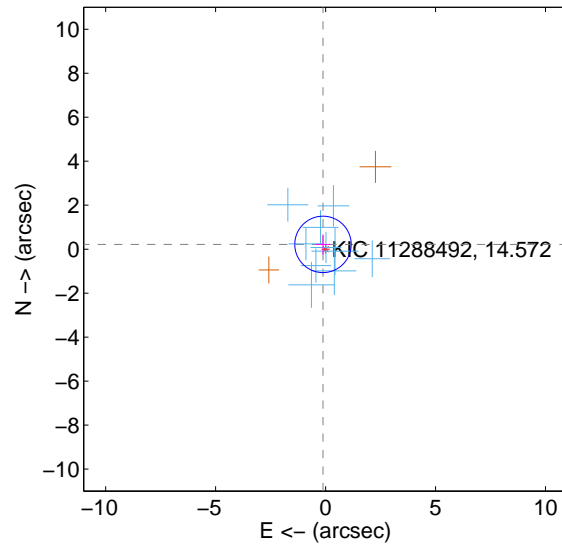
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.453 ± 0.445	1.02	0.132 ± 0.337	0.433 ± 0.454
PRF-fit source offset from KIC position	0.248 ± 0.427	0.58	0.118 ± 0.329	0.218 ± 0.452
photometric centroid source offset	4.52 ± 1.55	2.91	4.48 ± 1.55	0.56 ± 1.56

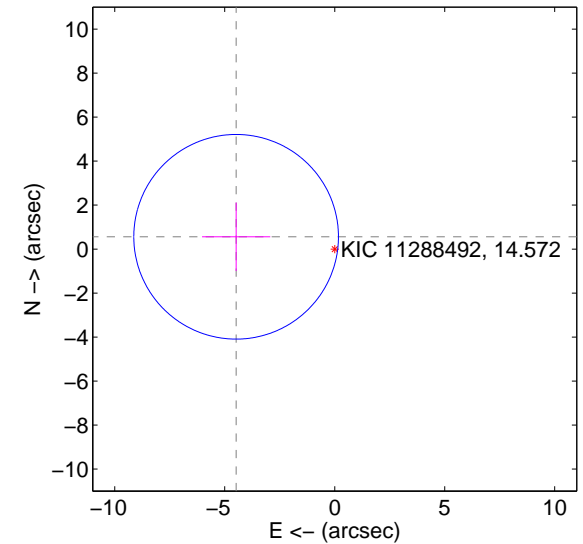
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

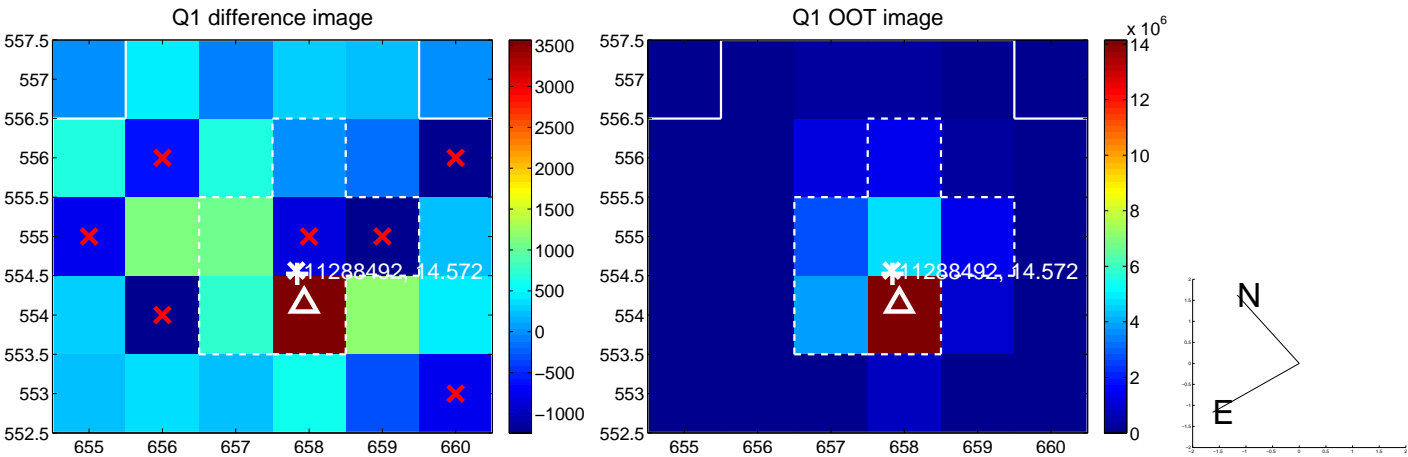


offset from photometric centroids

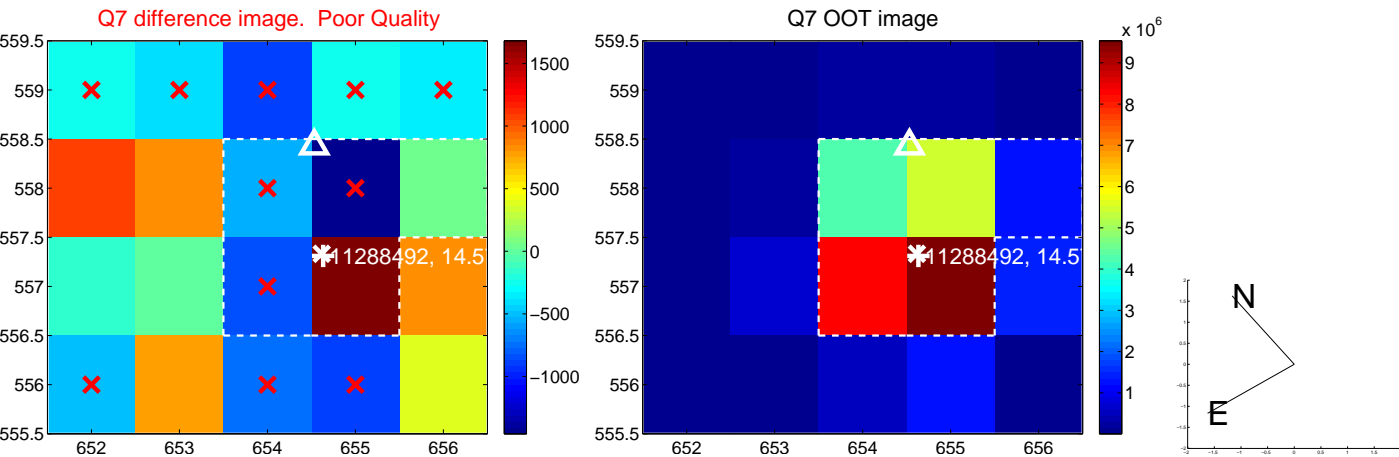
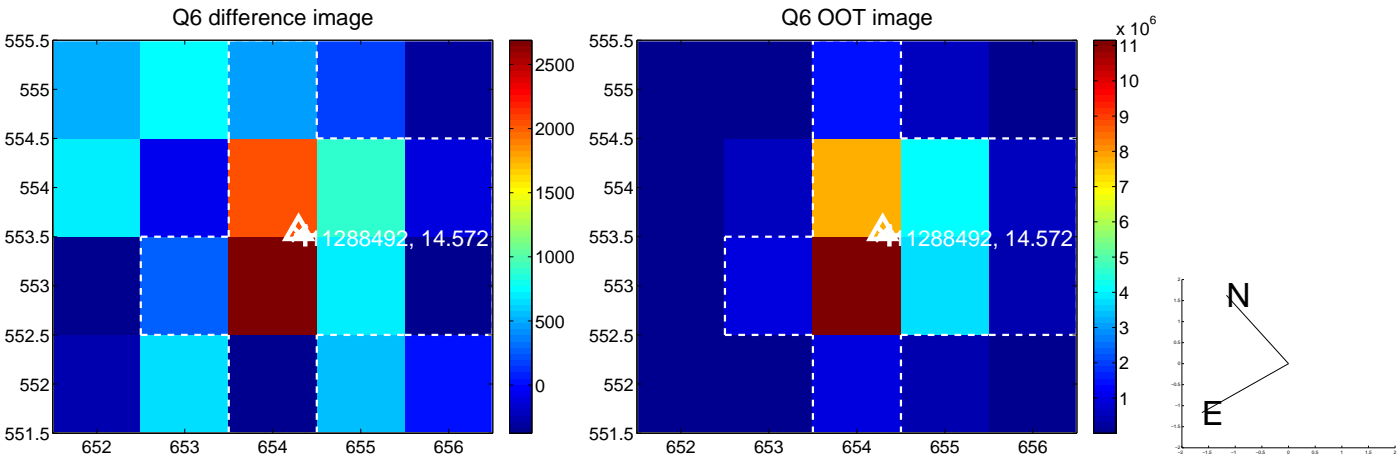
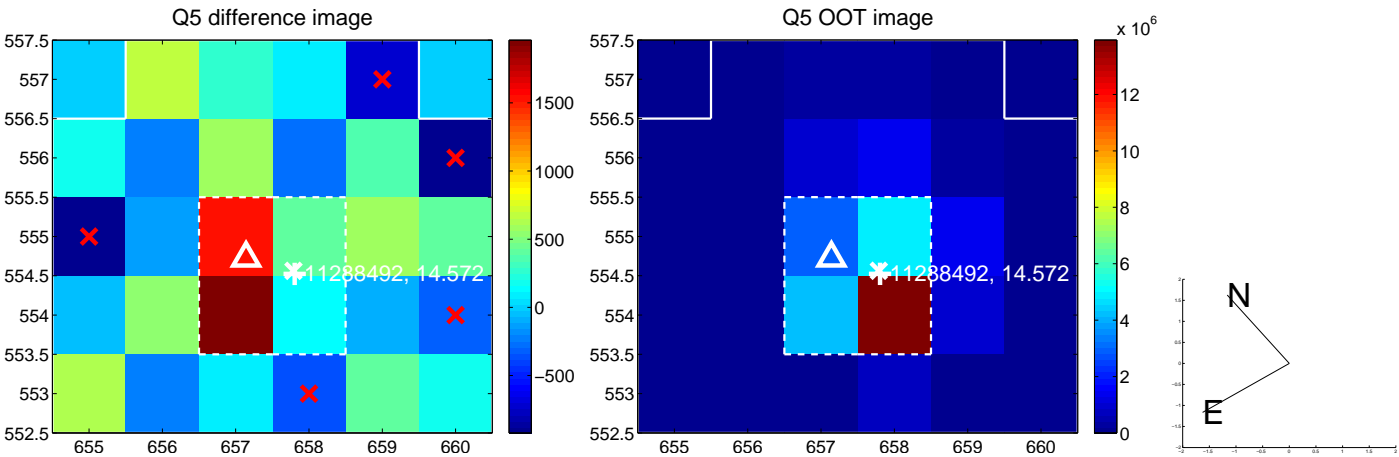


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

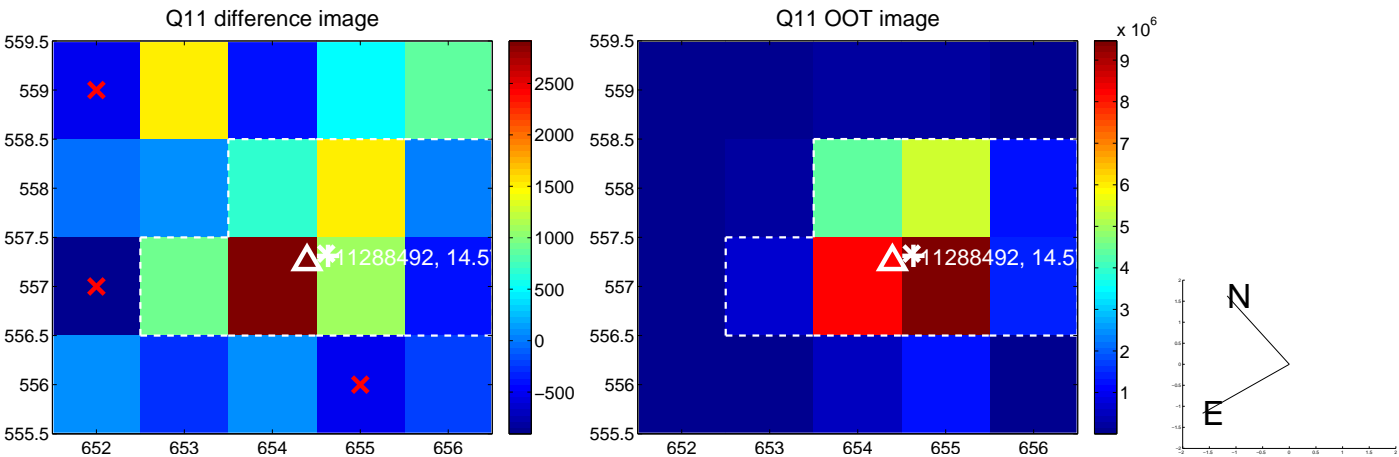
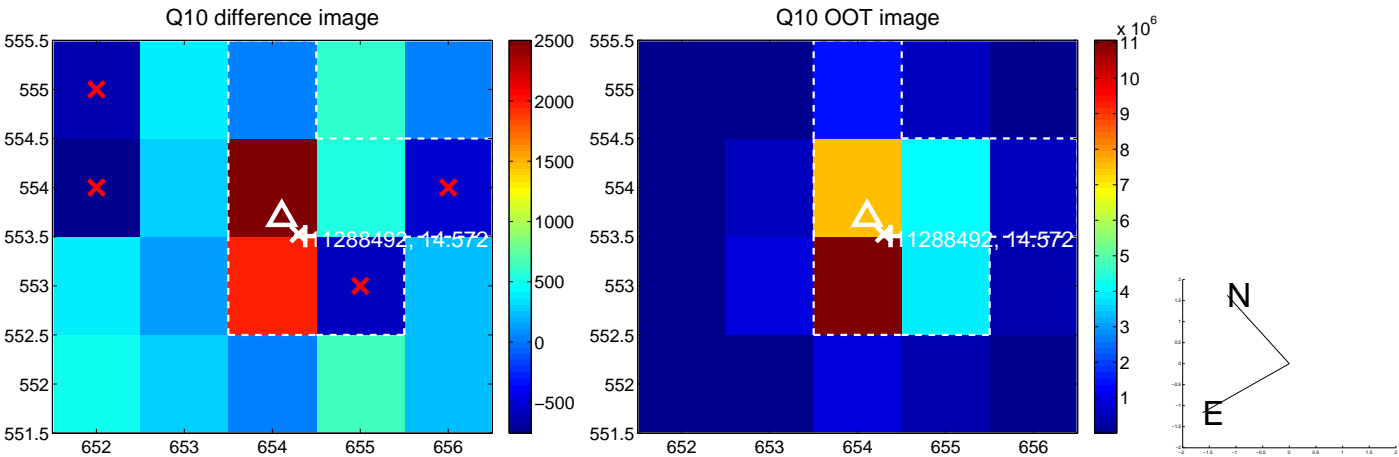
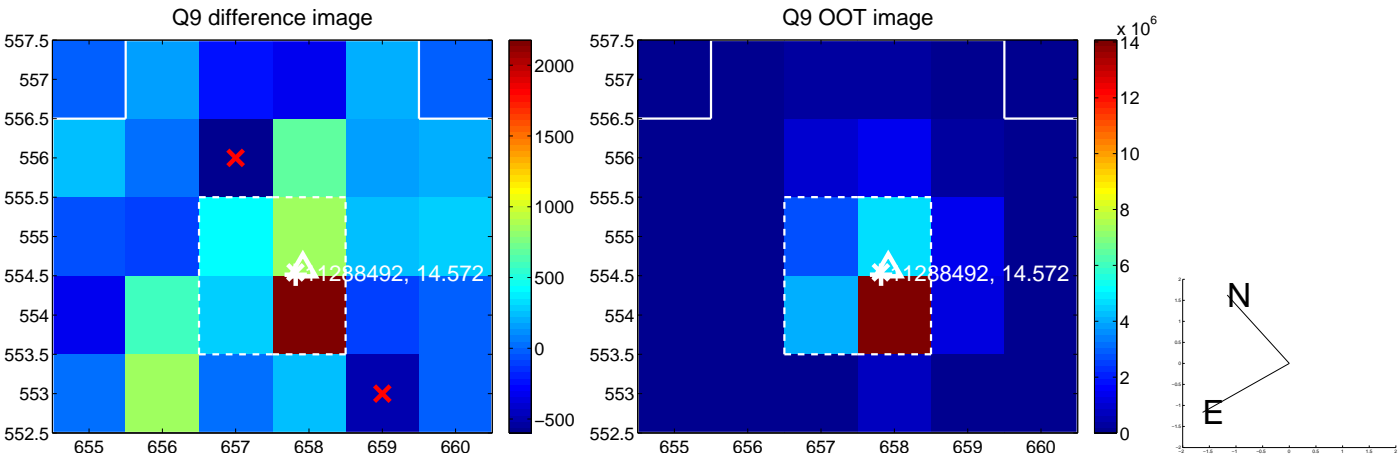
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



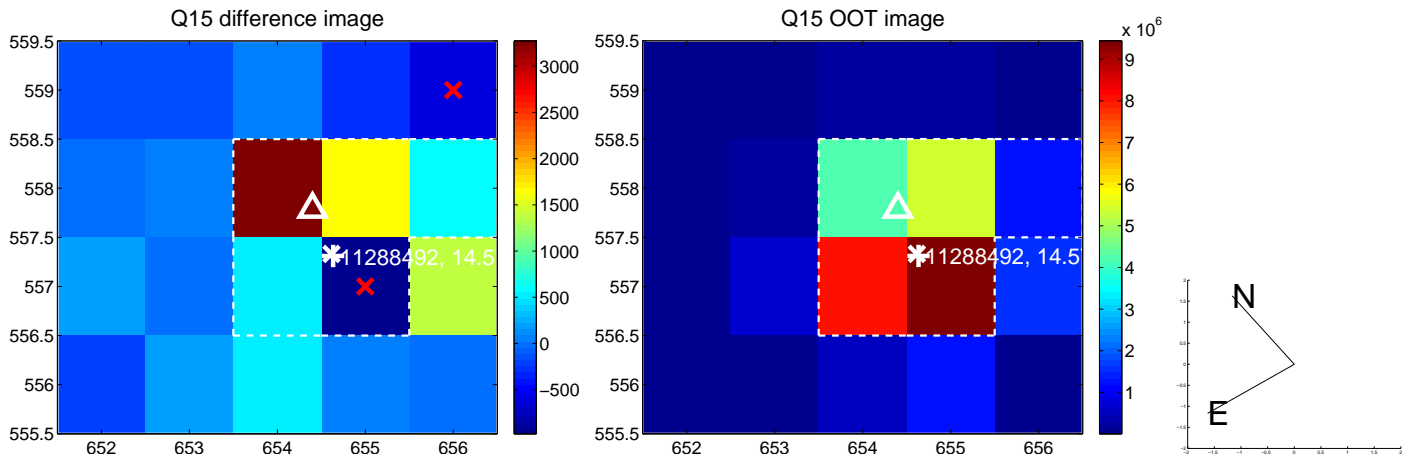
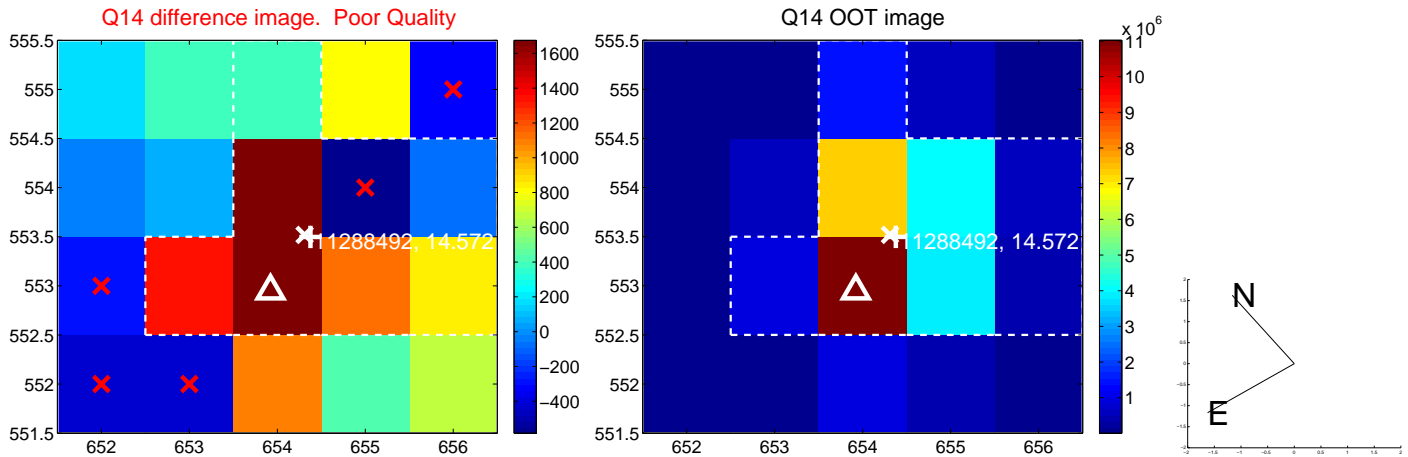
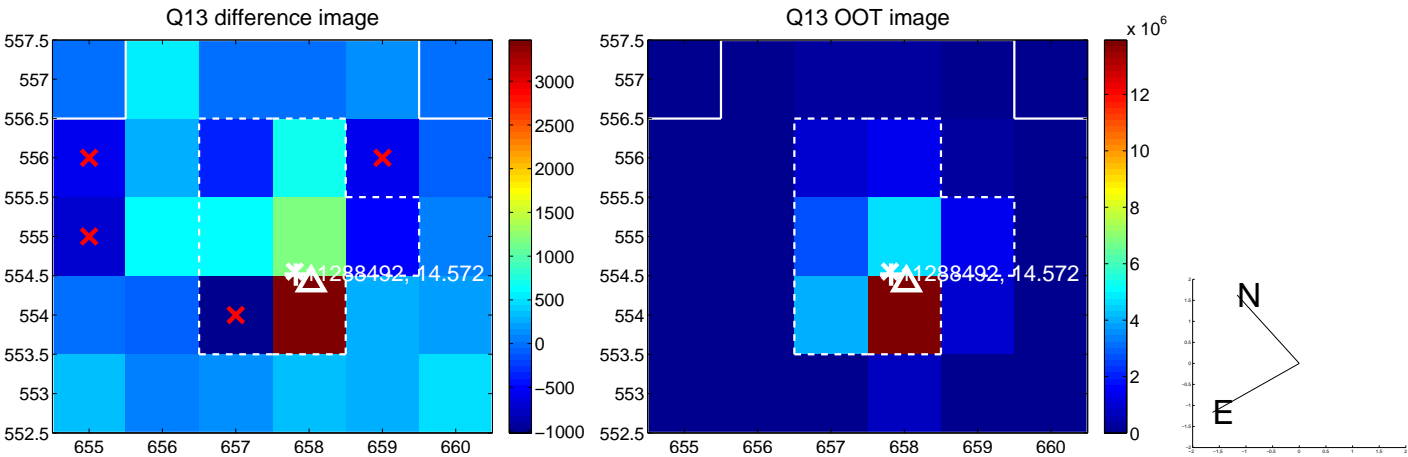
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



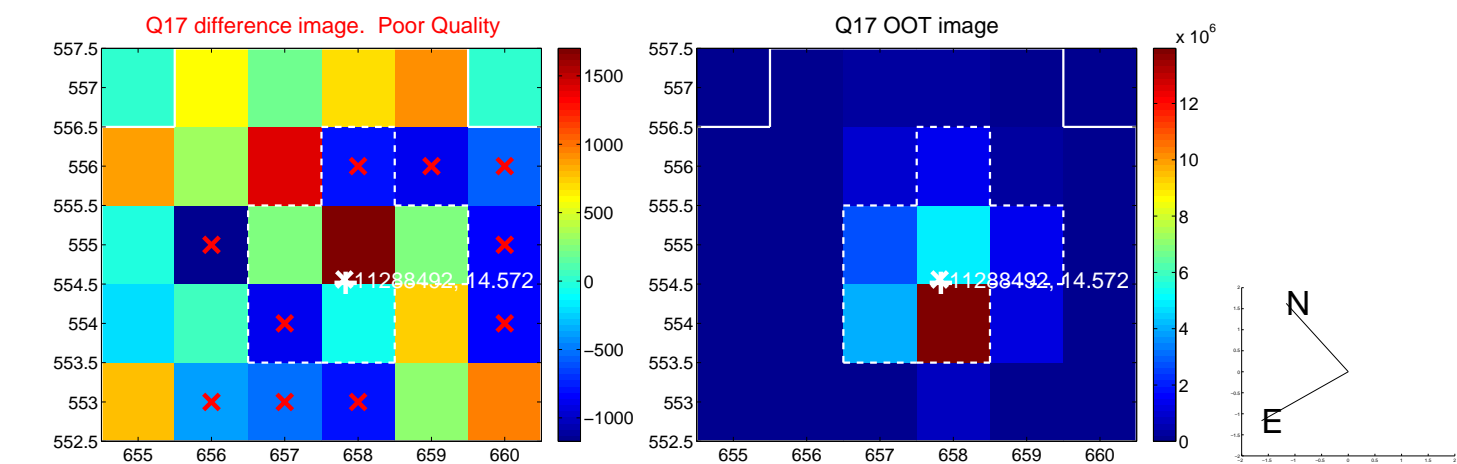
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



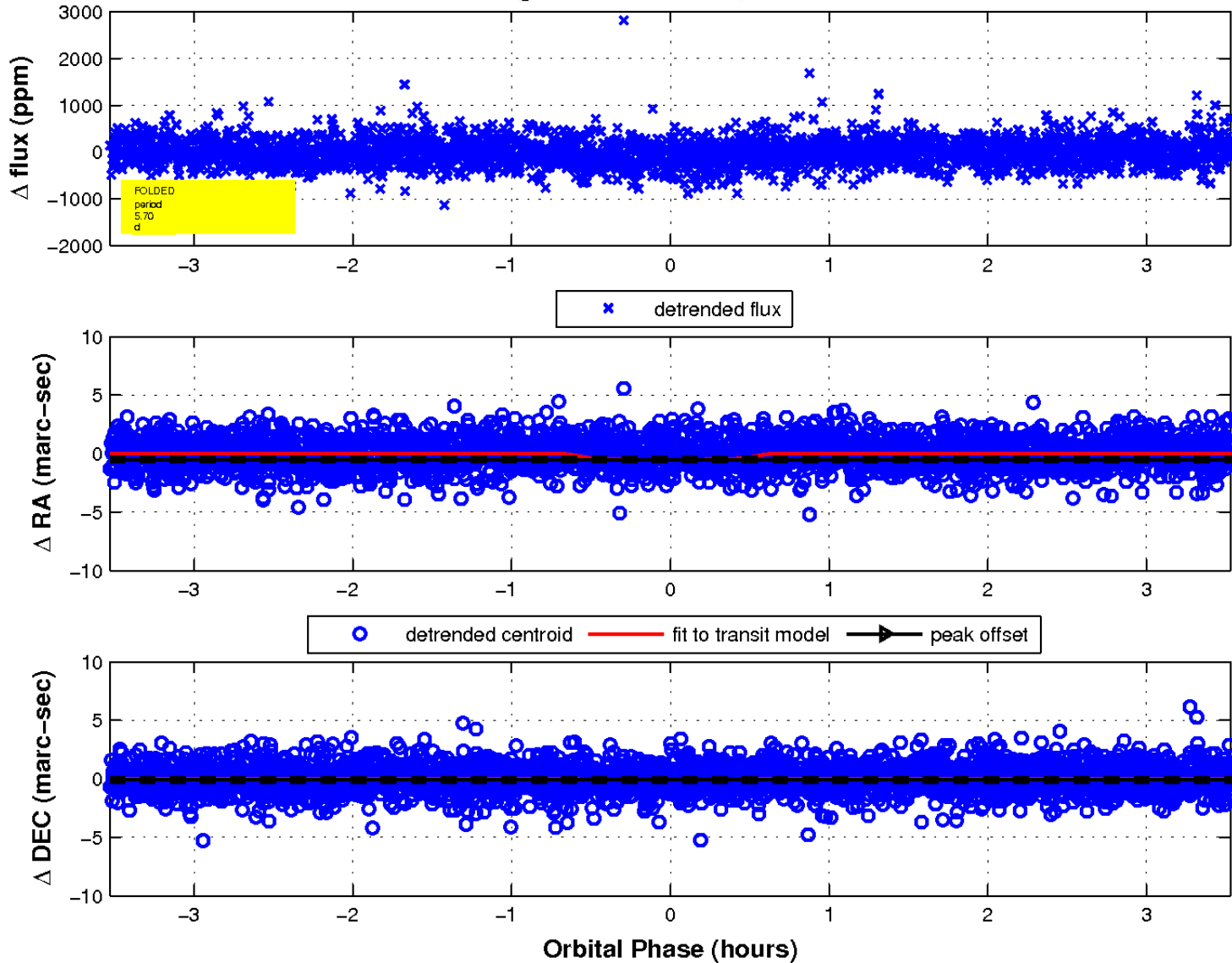
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

