

KIC 007211469

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})
007211469-01	OBS	1377.01	11.296930	134.568290	200.2	4.647	18.4	20.2	1.18	6096	1.90	160.47

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007211469-01	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.

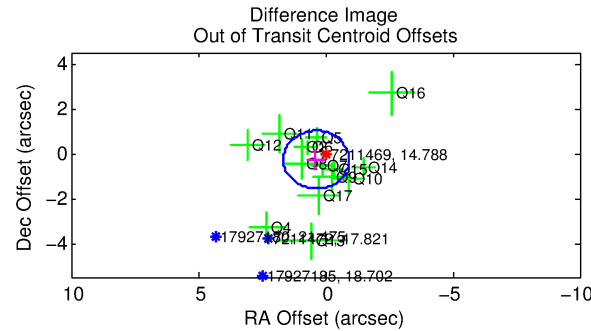
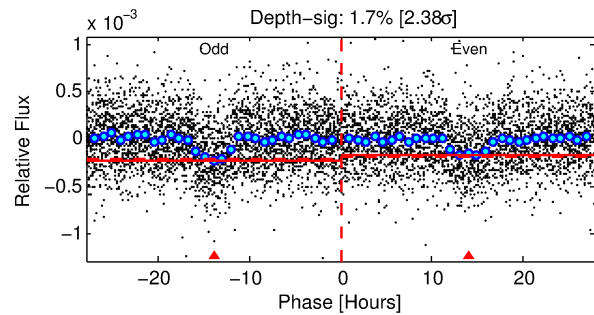
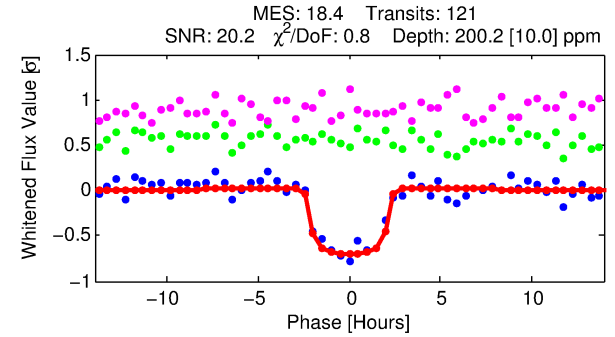
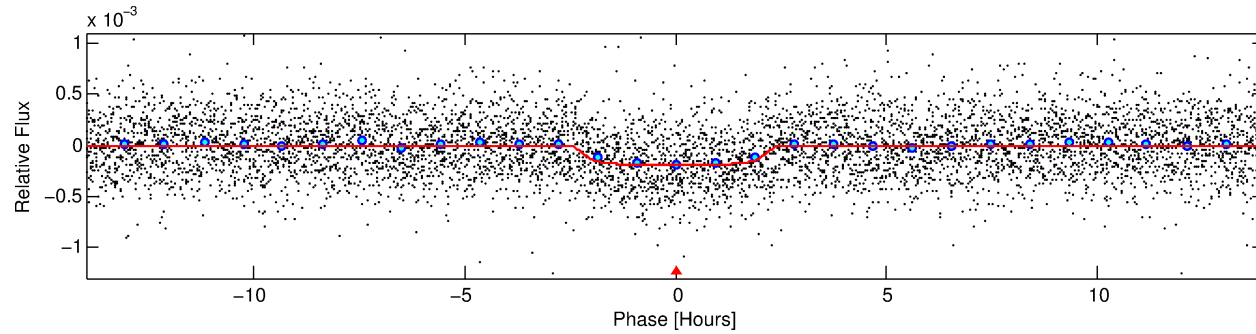
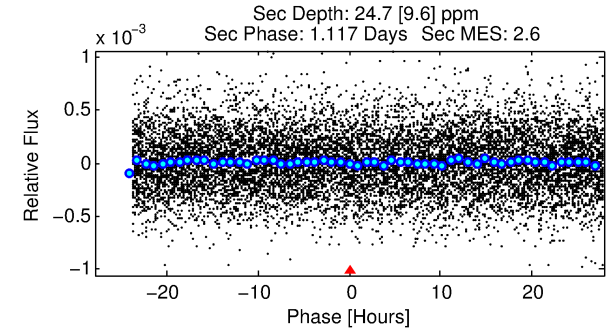
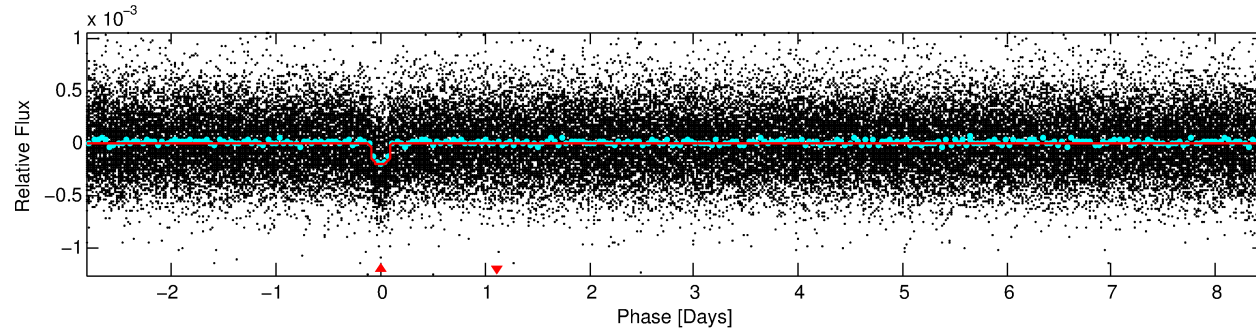
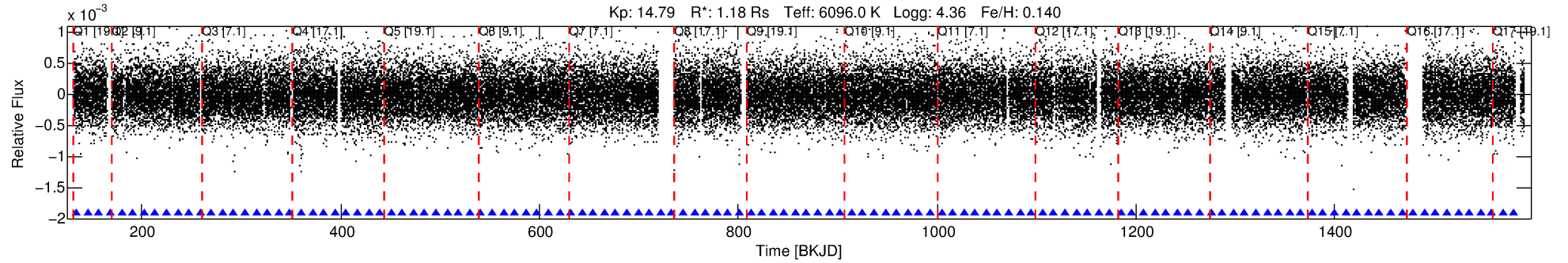
Ephemeris Match Information For 007211469-01

No Significant Match Found

DV One-Page Summary

KIC: 7211469 Candidate: 1 of 1 Period: 11.297 d

KOI: K01377.01 Corr: 0.990



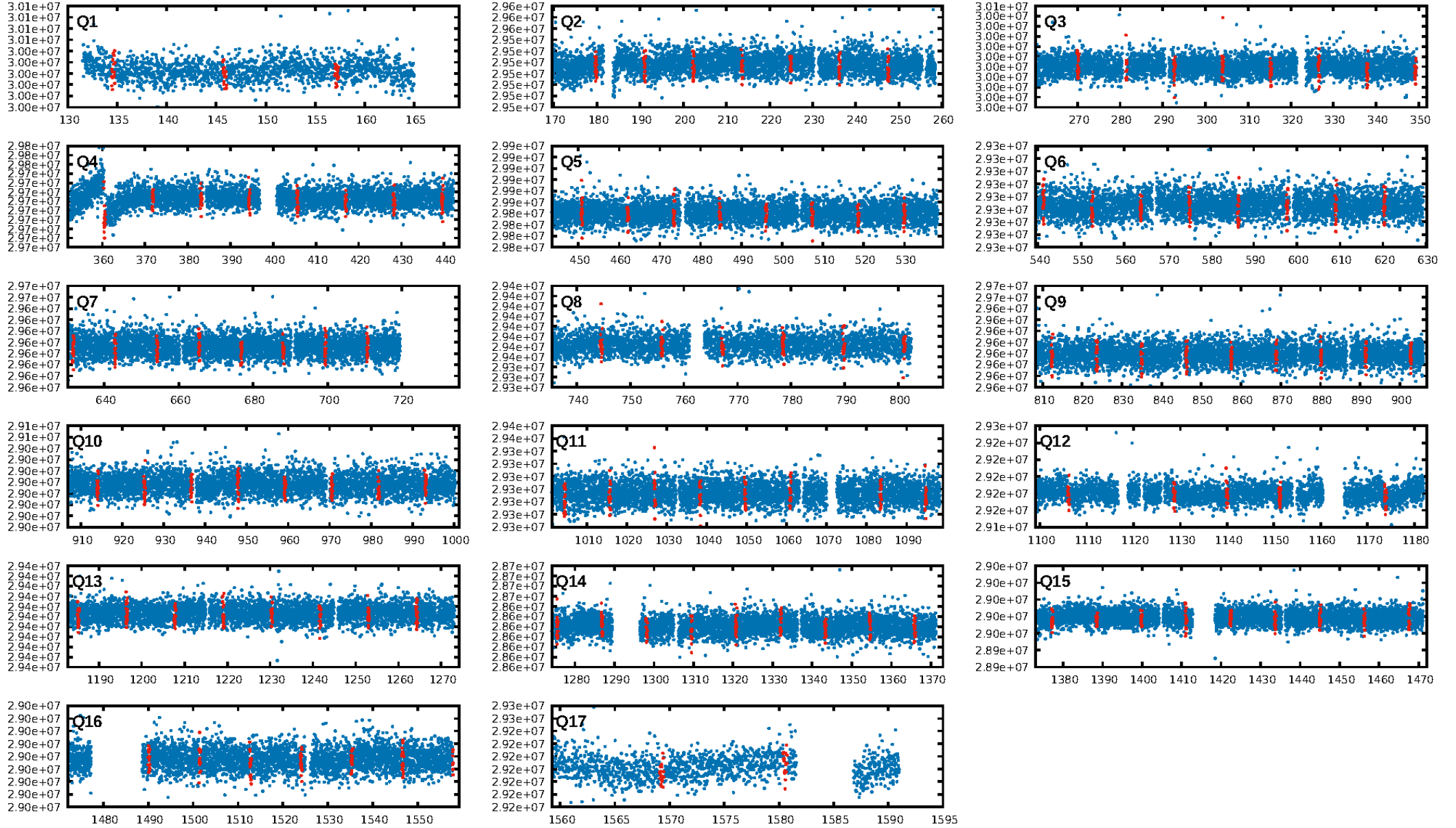
DV Fit Results:

Period = 11.29693 [0.00006] d
Epoch = 134.5683 [0.0046] BKJD
Rp/R* = 0.0148 [0.0044]
a/R* = 10.23 [15.11]
b = 0.85 [0.48]
Seff = 160.47 [34.78]
Teq = 908 [49] K
Rp = 1.90 [0.65] Re
a = 0.1033 [0.0145] AU
Ag = 40.34 [30.04] [1.31σ]
Teffp = 3536 [634] K [4.14σ]

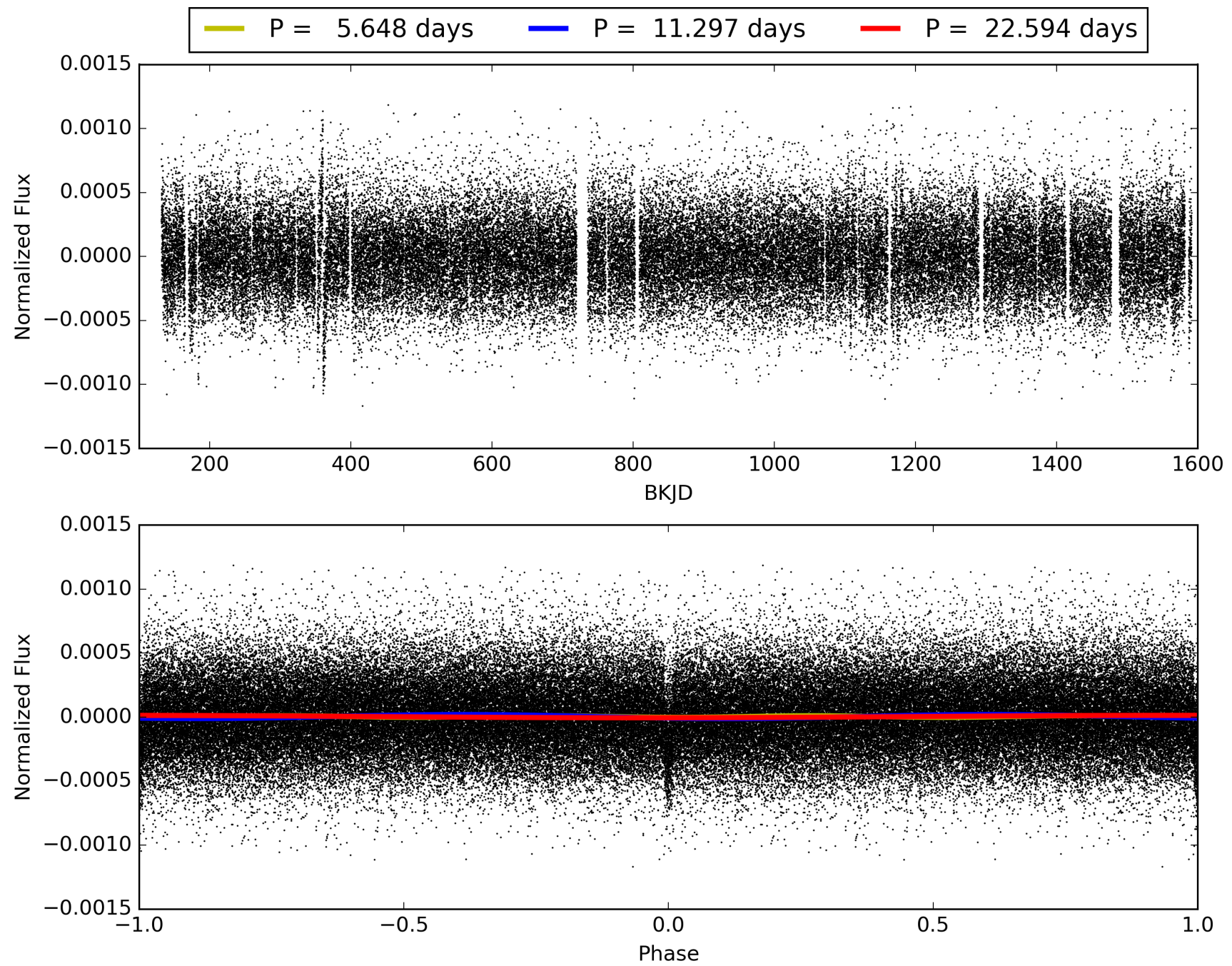
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.95e-75
RollingBand-fgt: 1.00 [116/116]
GhostDiagnostic-chr: 3.389
Centroid-sig: 2.5%
Centroid-so: 0.793 arcsec [1.16σ]
OotOffset-rm: 0.465 arcsec [1.08σ]
KicOffset-rm: 0.410 arcsec [0.97σ]
OotOffset-st: 4/3/4/4 [15]
KicOffset-st: 4/3/4/4 [15]
DiffImageQuality-fgm: 0.80 [12/15]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007211469-01, PDC Light Curves

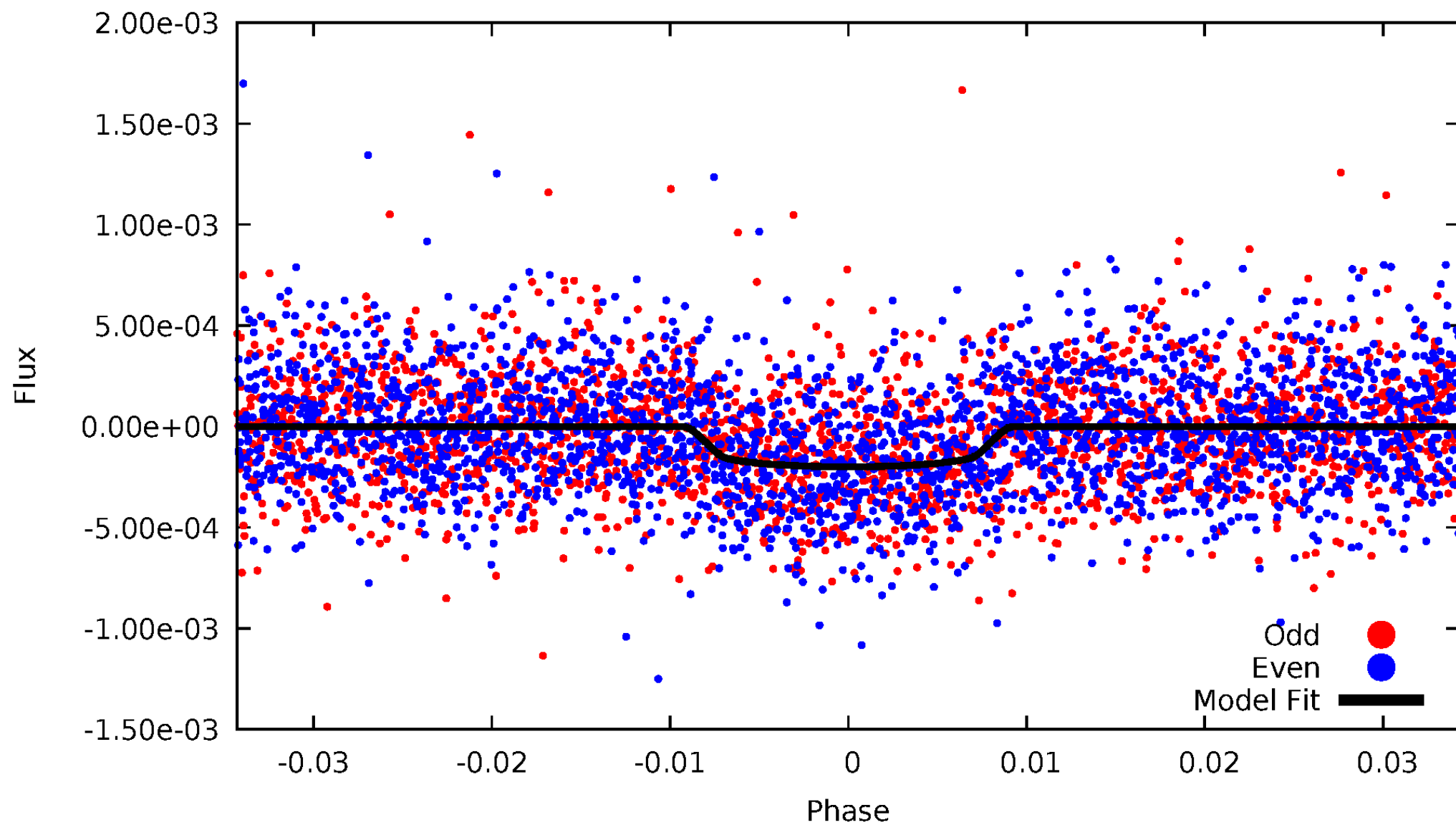


TCE 007211469-01



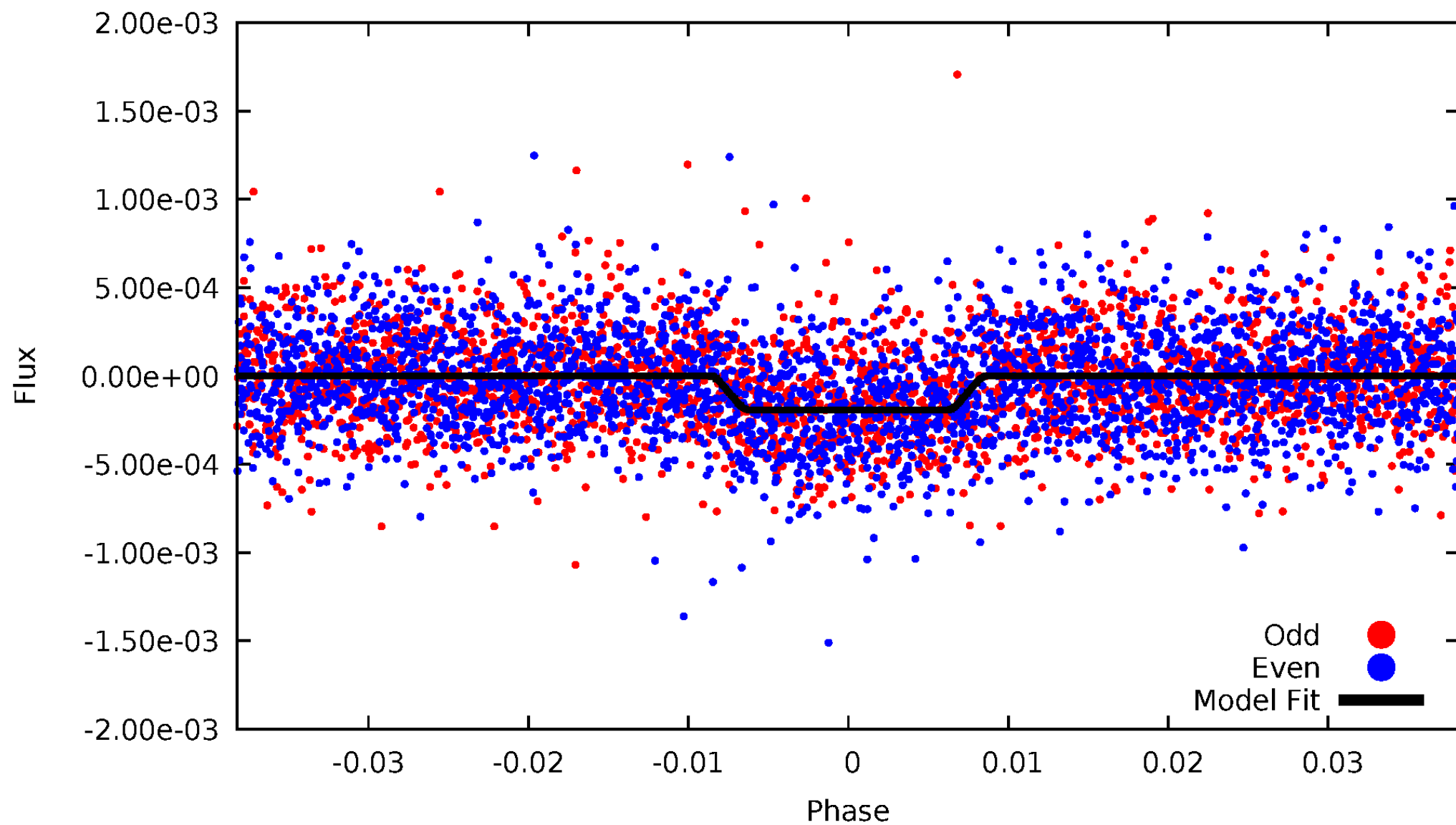
DV Odd/Even

TCE 007211469-01



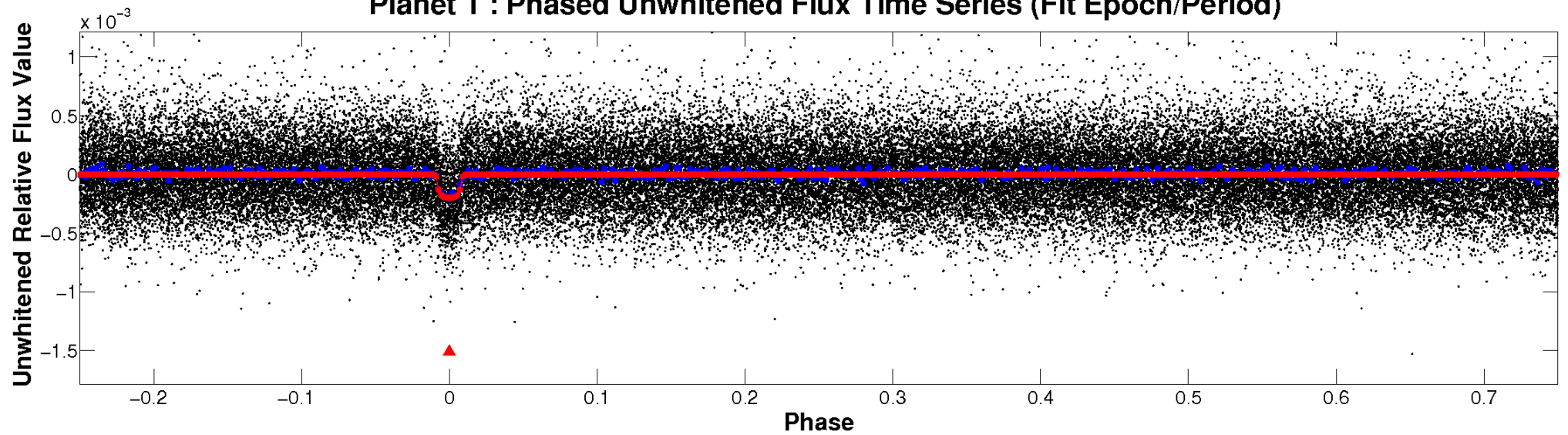
ALT Odd/Even

TCE 007211469-01

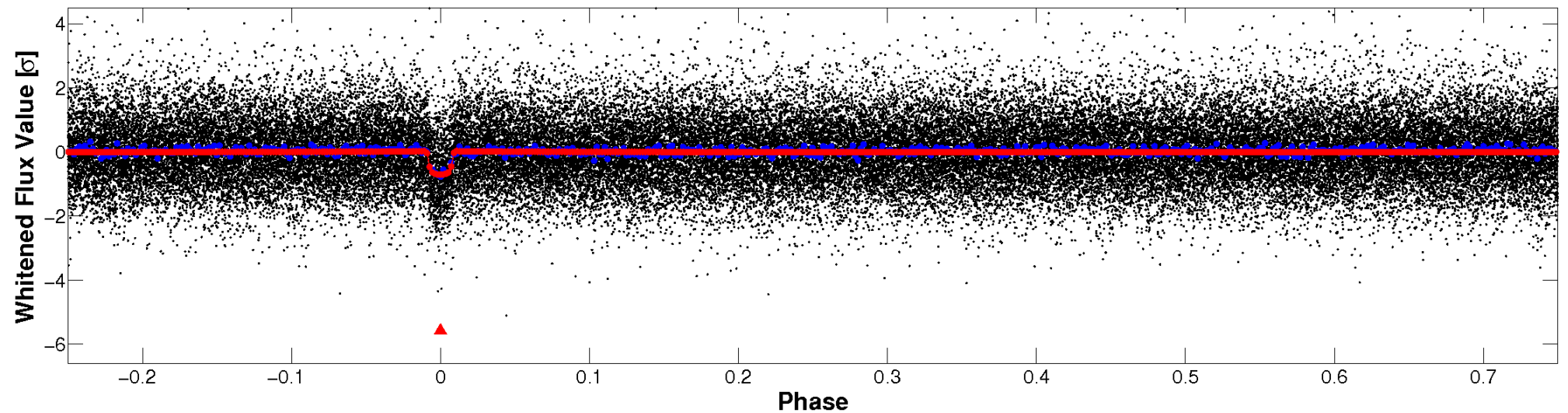


Non-Whitened Vs. Whitened Light Curve

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

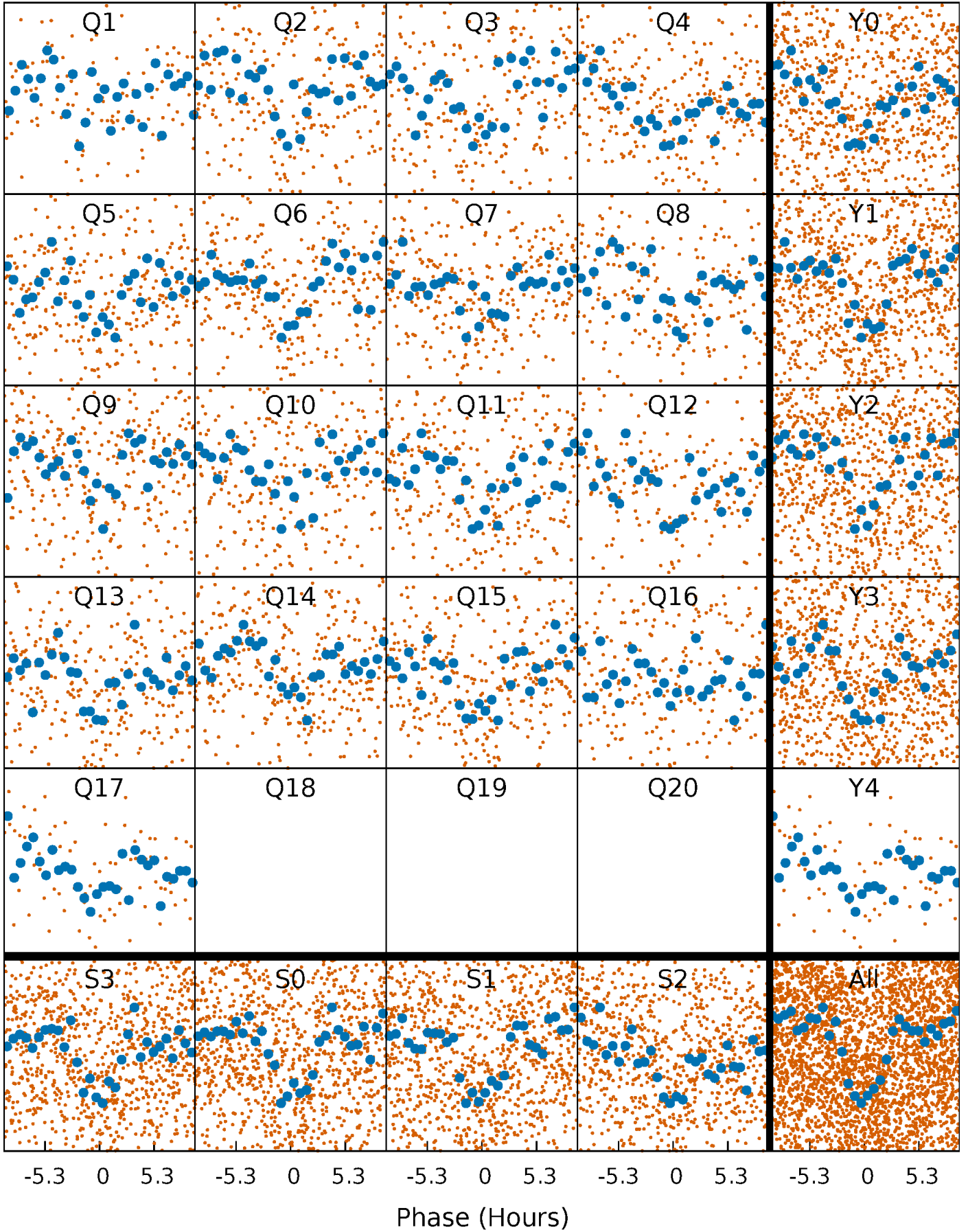


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



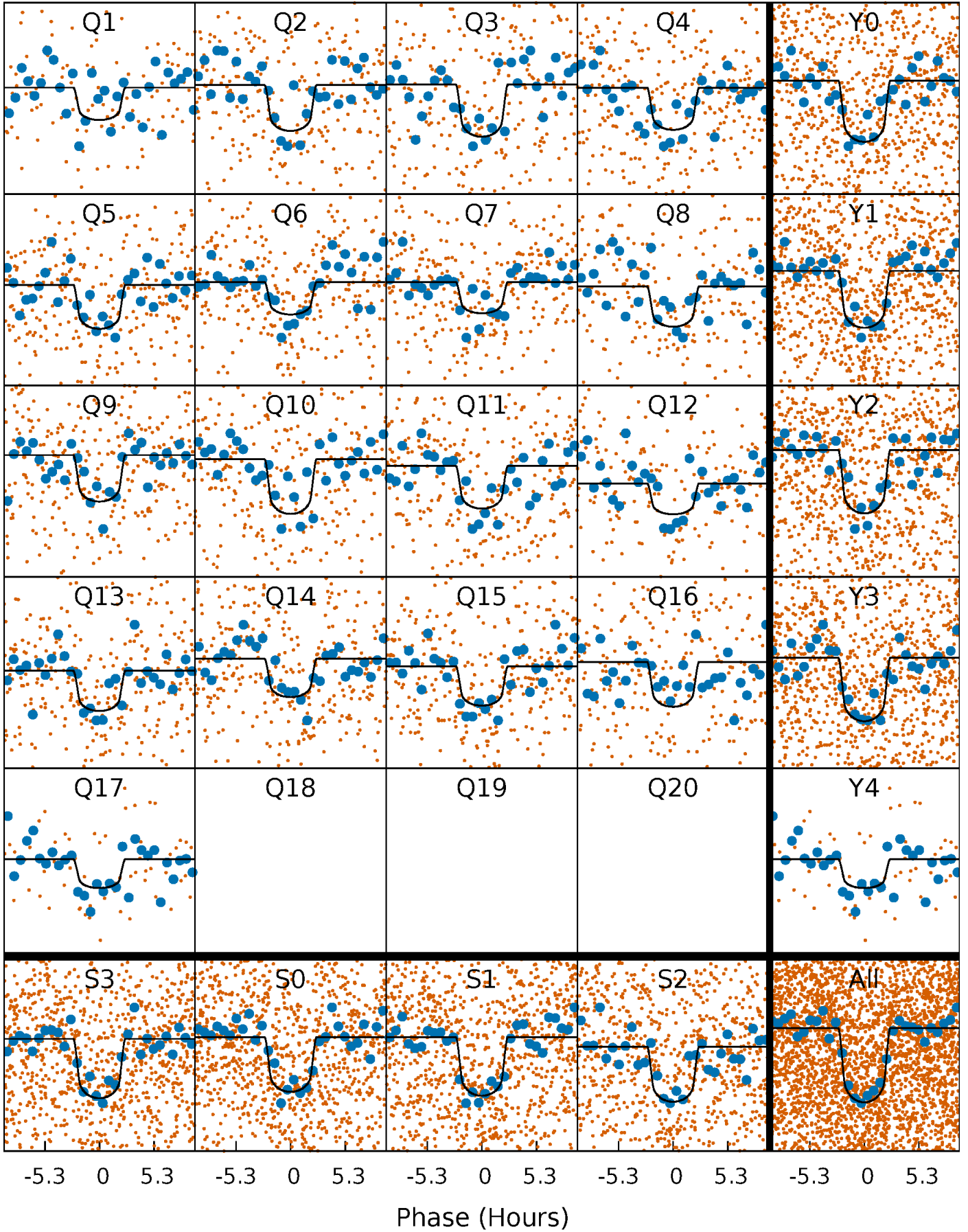
PDC Quarter-Phased Transit Curves

TCE 007211469-01 P= 11.296930 Days $T_0=134.568290$ (BKJD)



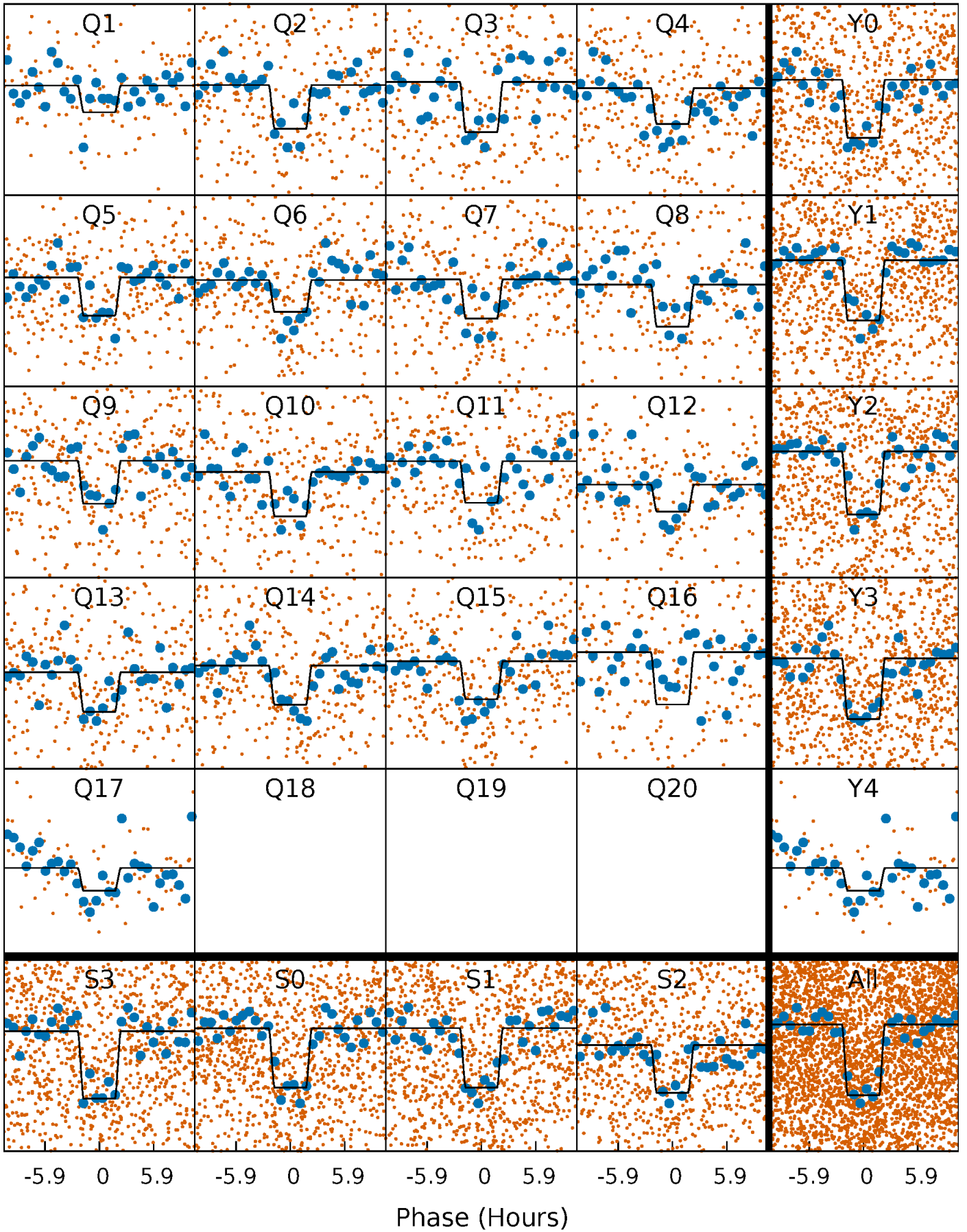
DV Quarter-Phased Transit Curves

TCE 007211469-01 P= 11.296930 Days $T_0=134.568290$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

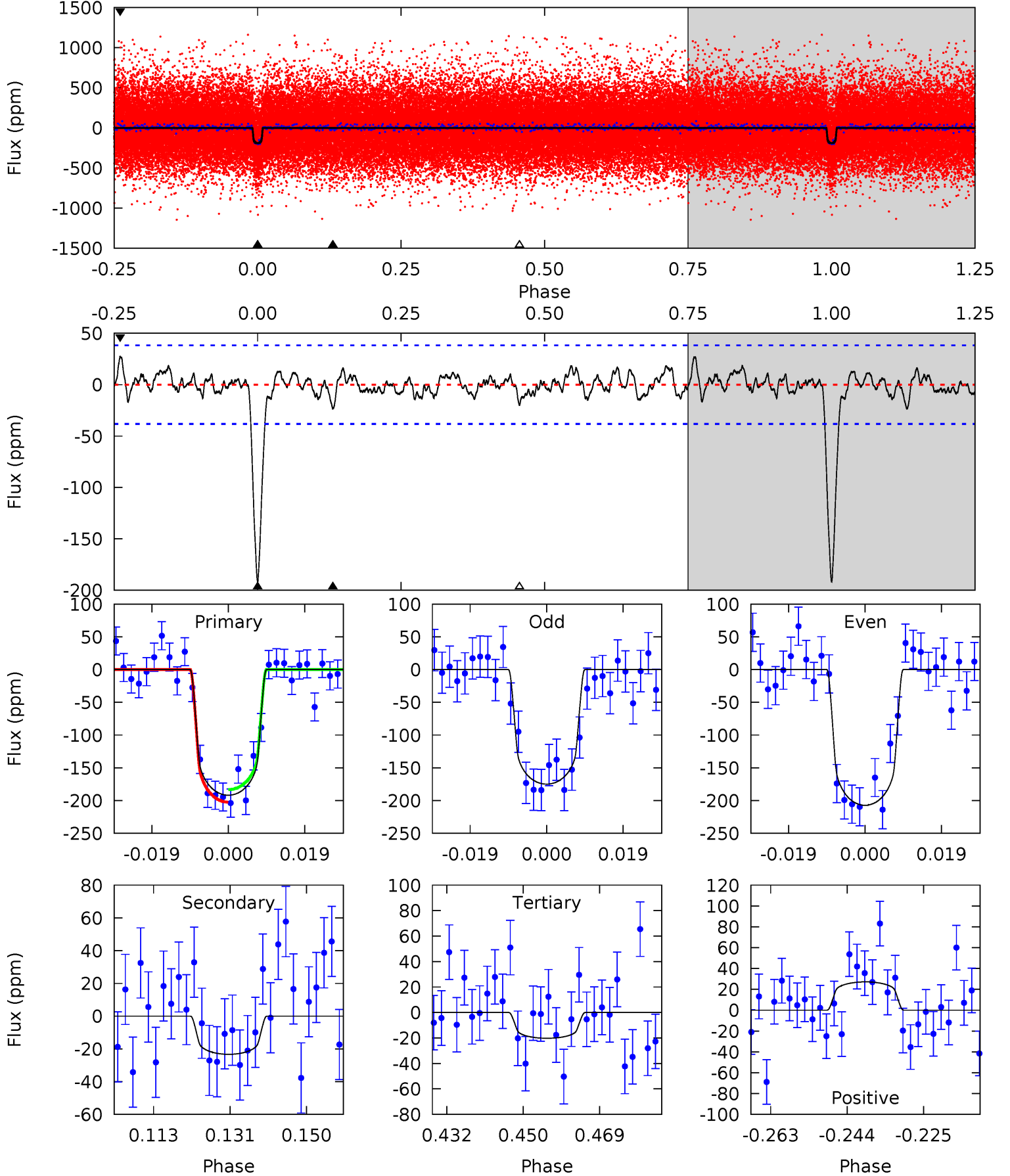
TCE 007211469-01 P= 11.297022 Days $T_0=134.562115$ (BKJD)



DV Model-Shift Uniqueness Test

007211469-01, P = 11.296930 Days, E = 123.271360 Days

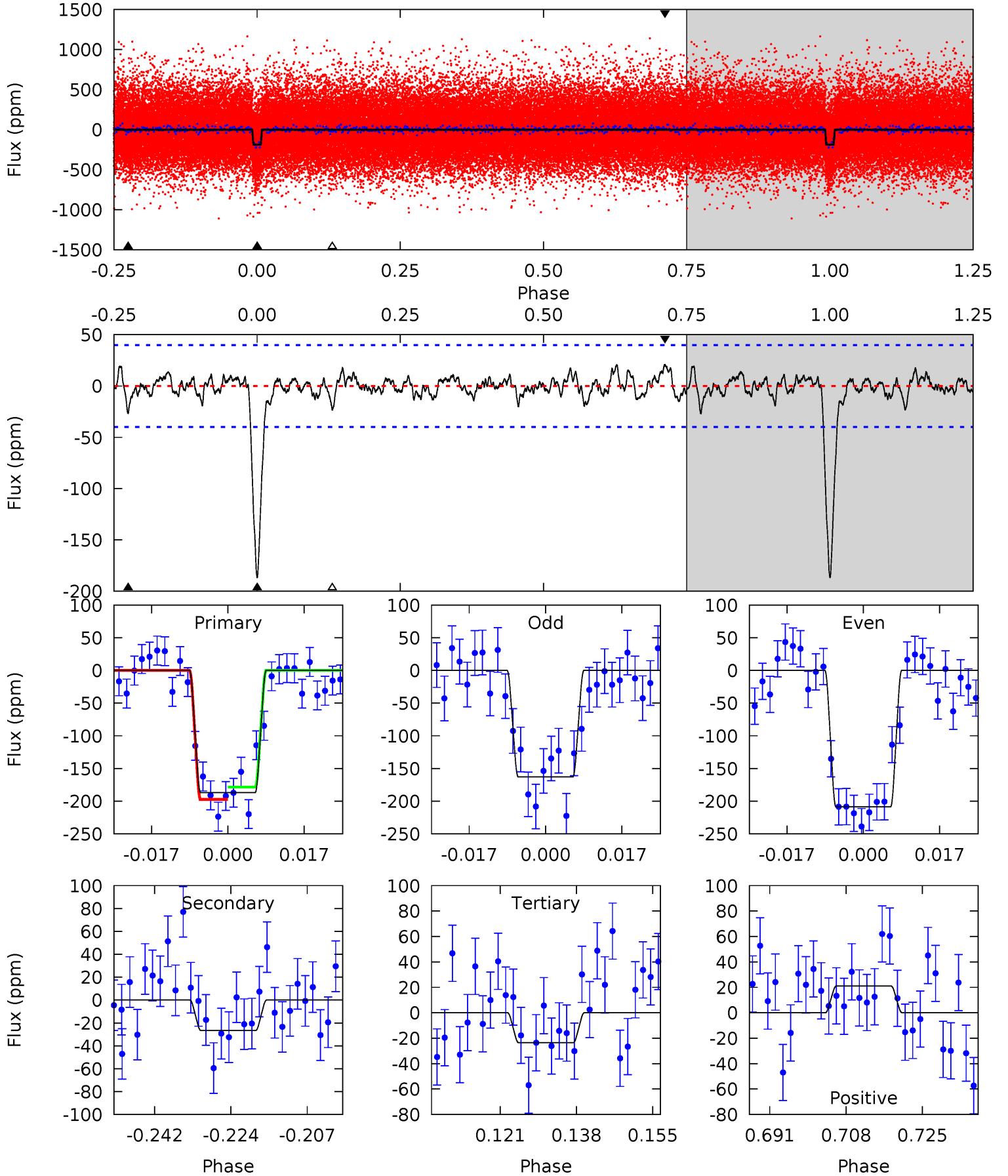
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.6	2.99	2.59	3.48	4.90	2.35	1.02	22.0	21.1	0.39	-0.49	2.07	1.05	0.12	1.22



Alt Model-Shift Uniqueness Test

007211469-01, P = 11.297022 Days, E = 123.265093 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.0	3.28	2.90	2.60	4.92	2.38	0.94	20.1	20.4	0.38	0.68	2.83	1.03	0.10	1.16



Stellar Parameters For KIC 007211469

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6096^{+79}_{-85}	$4.358^{+0.063}_{-0.117}$	$0.140^{+0.150}_{-0.150}$	$1.176^{+0.190}_{-0.102}$	$1.155^{+0.069}_{-0.083}$	$1.001^{+0.260}_{-0.347}$
	+1%/-1%	+1%/-3%	+107%/-107%	+16%/-9%	+6%/-7%	+26%/-35%
Source	SPE90	SPE90	SPE90	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007211469-01 / KOI 1377.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-23 ± 8	$1.91^{+0.65}_{-0.62}$	1275^{+52}_{-38}	3845^{+651}_{-416}	36^{+48}_{-18}
Alt.	-27 ± 8	$1.82^{+0.57}_{-0.57}$	1276^{+53}_{-39}	3993^{+635}_{-404}	45^{+57}_{-22}

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 $A_{obs} \gg 1.0$

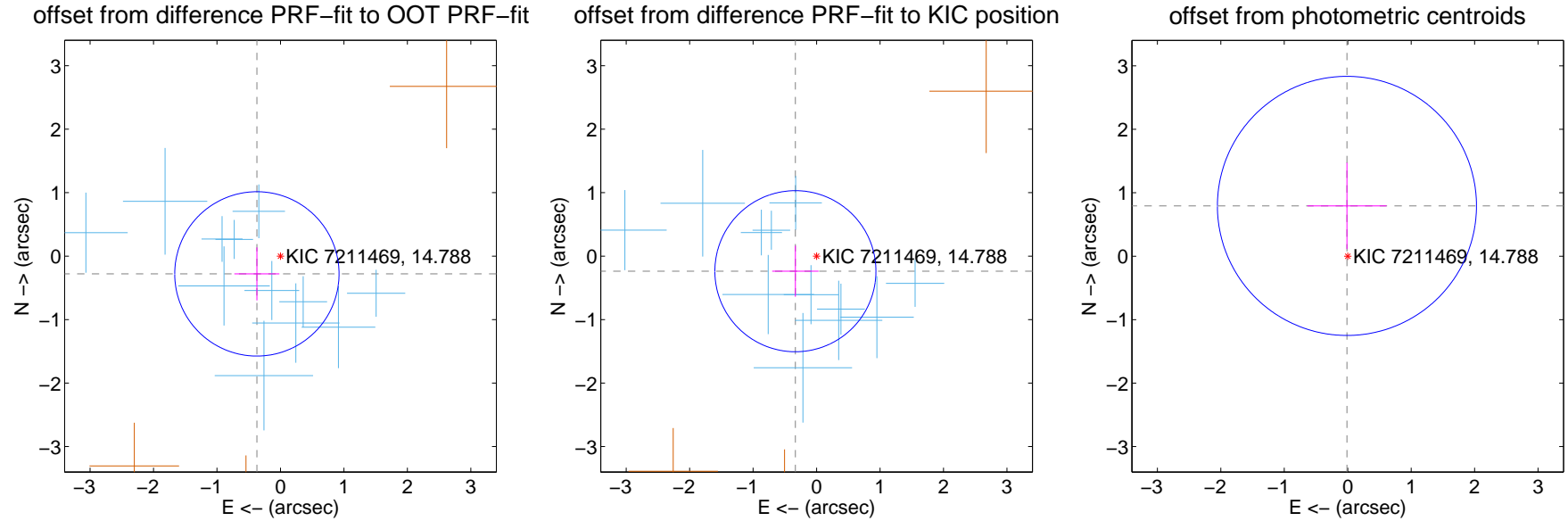
DV Centroid Data

Supplemental centroid analysis for 007211469-01. Kepler magnitude: 14.79. Transit SNR 20.18

There are 12 quarters with good PRF difference image offsets

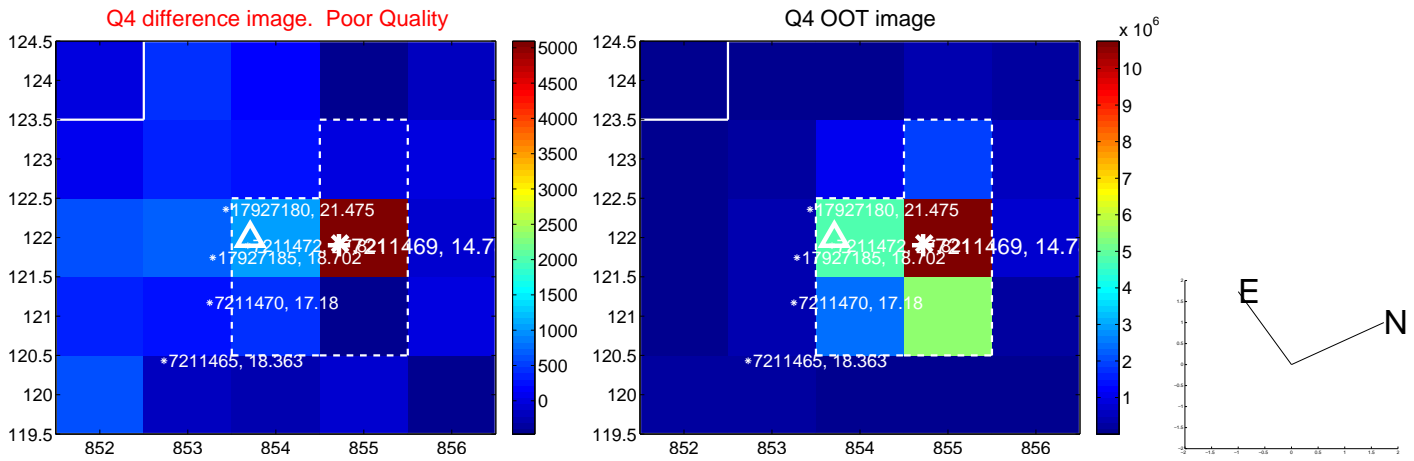
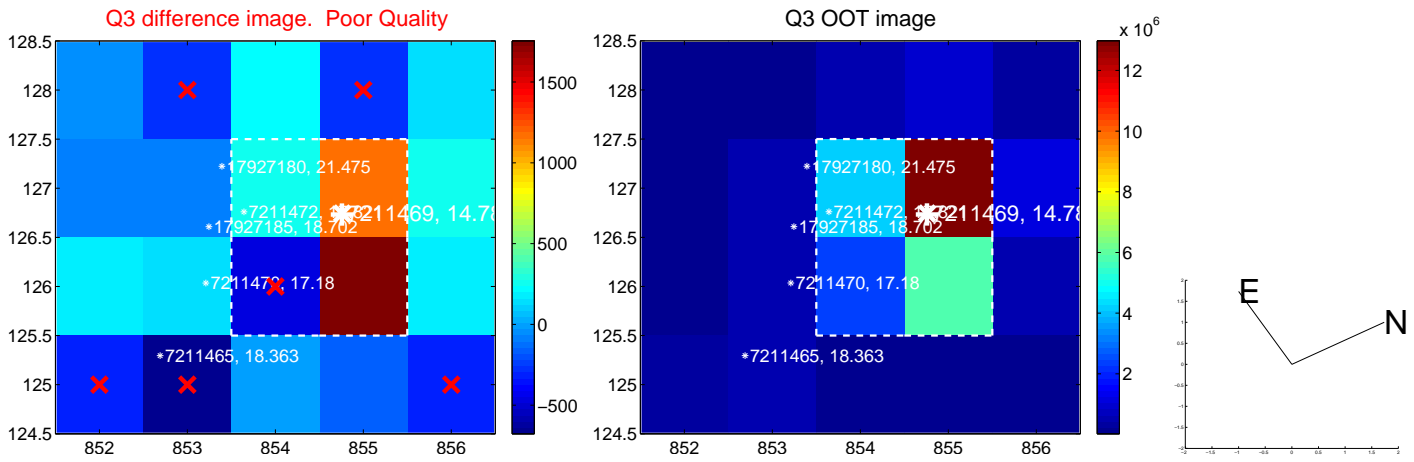
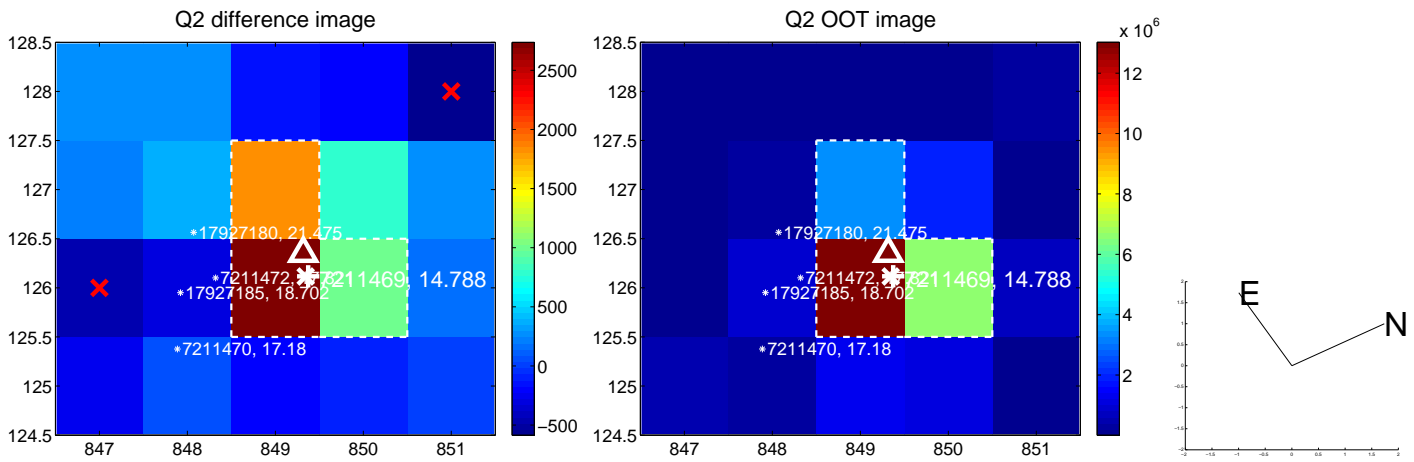
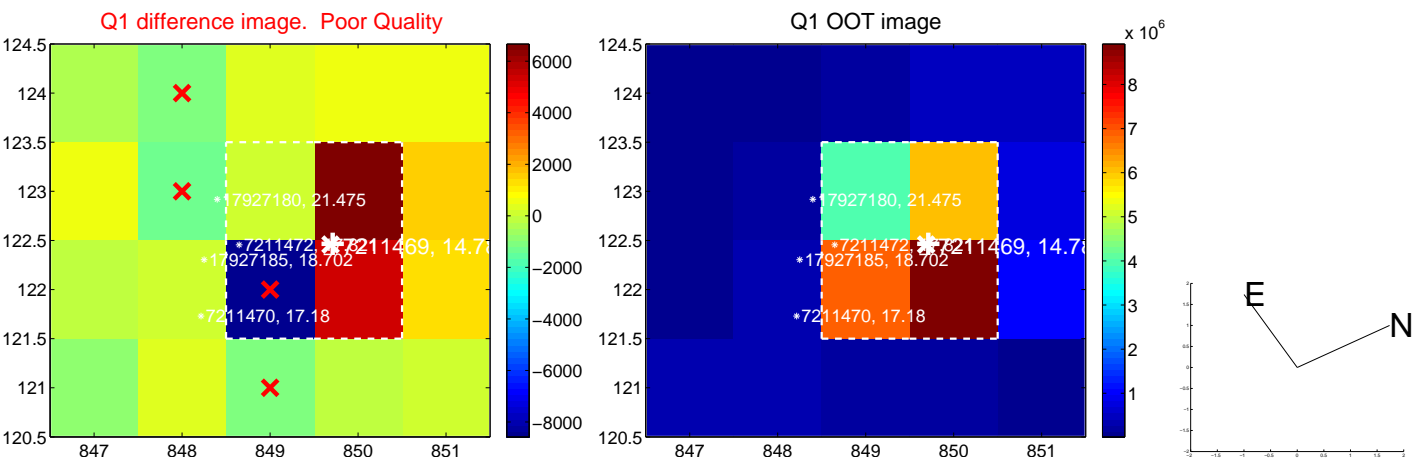
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.465 ± 0.432	1.08	0.372 ± 0.355	-0.280 ± 0.418
PRF-fit source offset from KIC position	0.410 ± 0.423	0.97	0.334 ± 0.365	-0.238 ± 0.402
photometric centroid source offset	0.79 ± 0.68	1.16	0.01 ± 0.62	0.79 ± 0.68

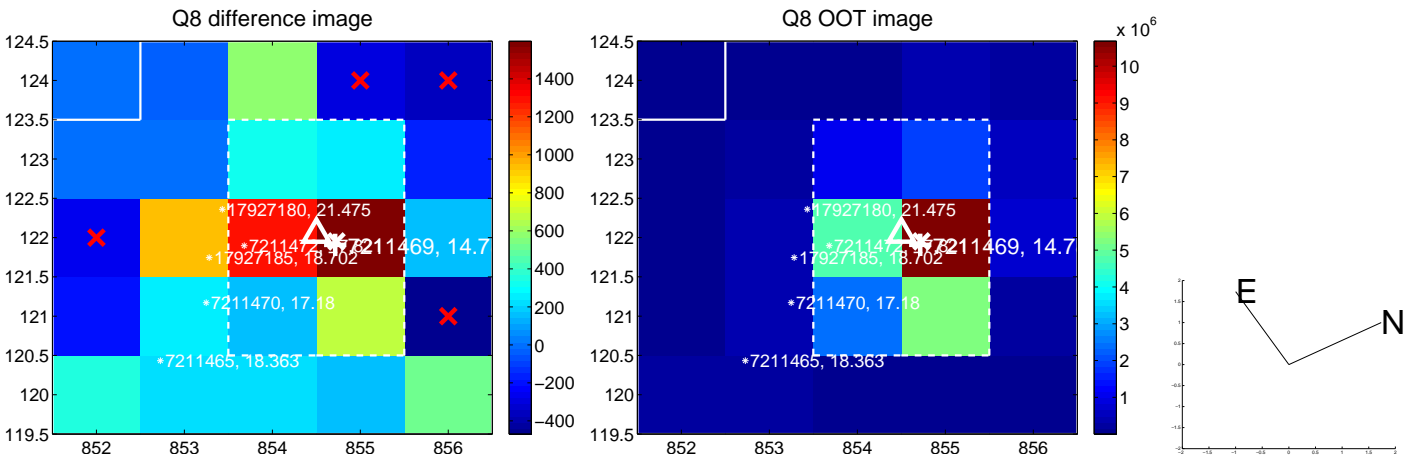
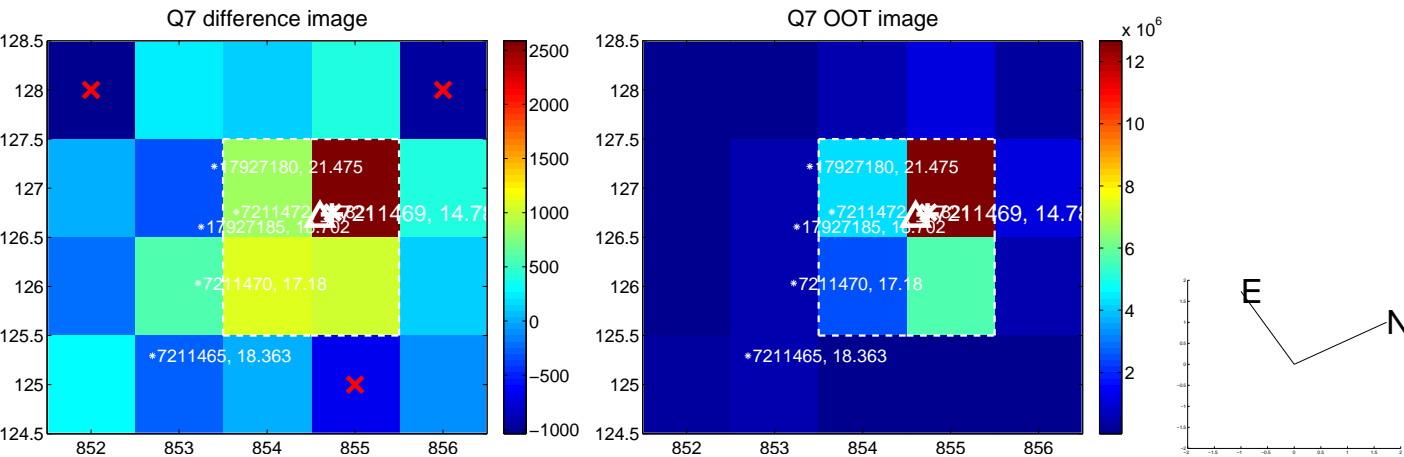
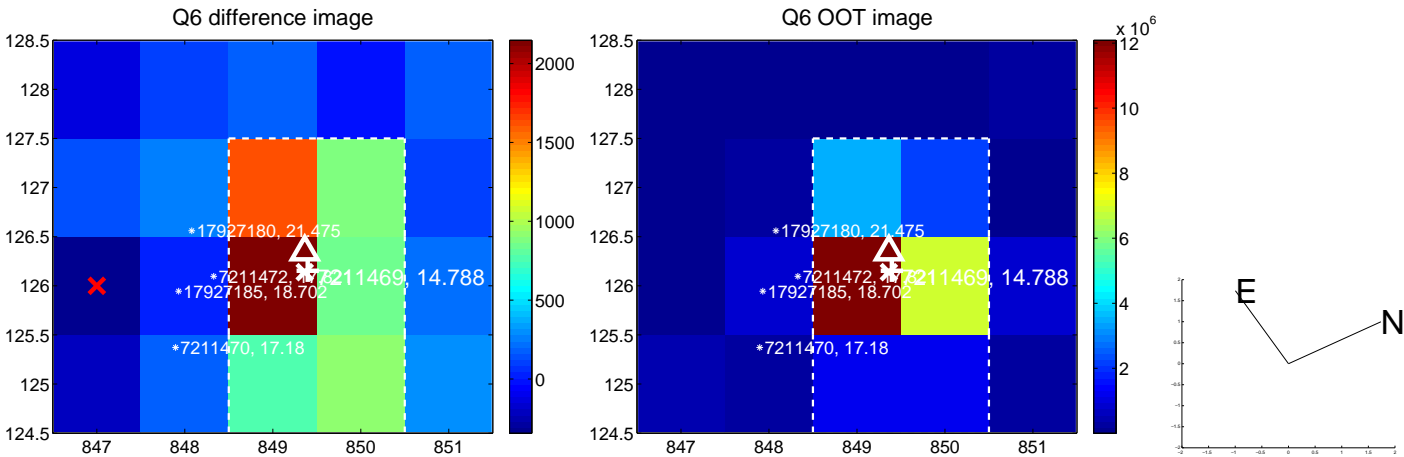
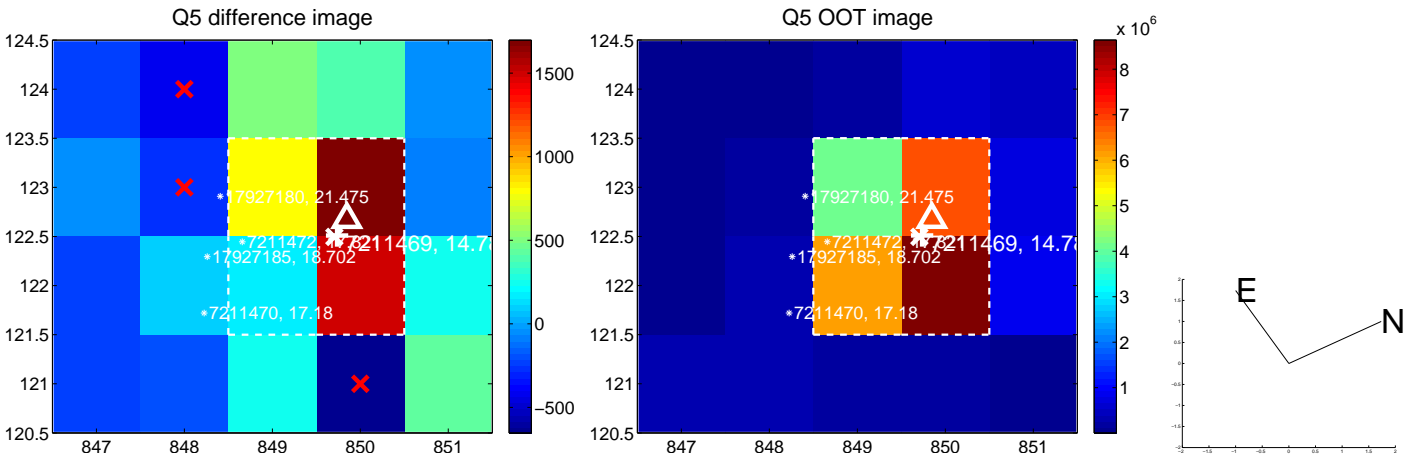


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

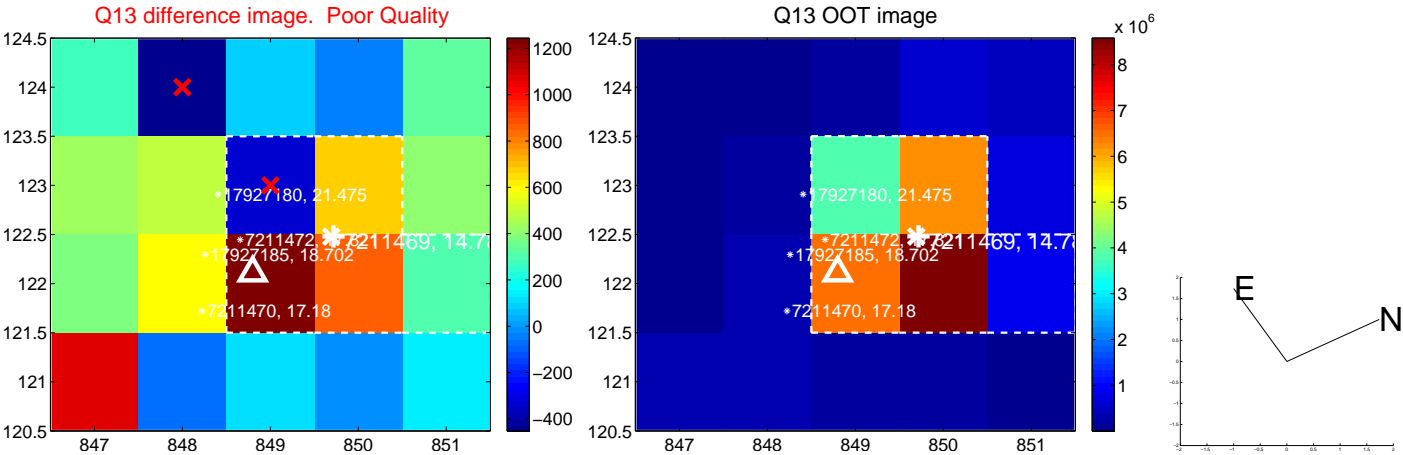
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



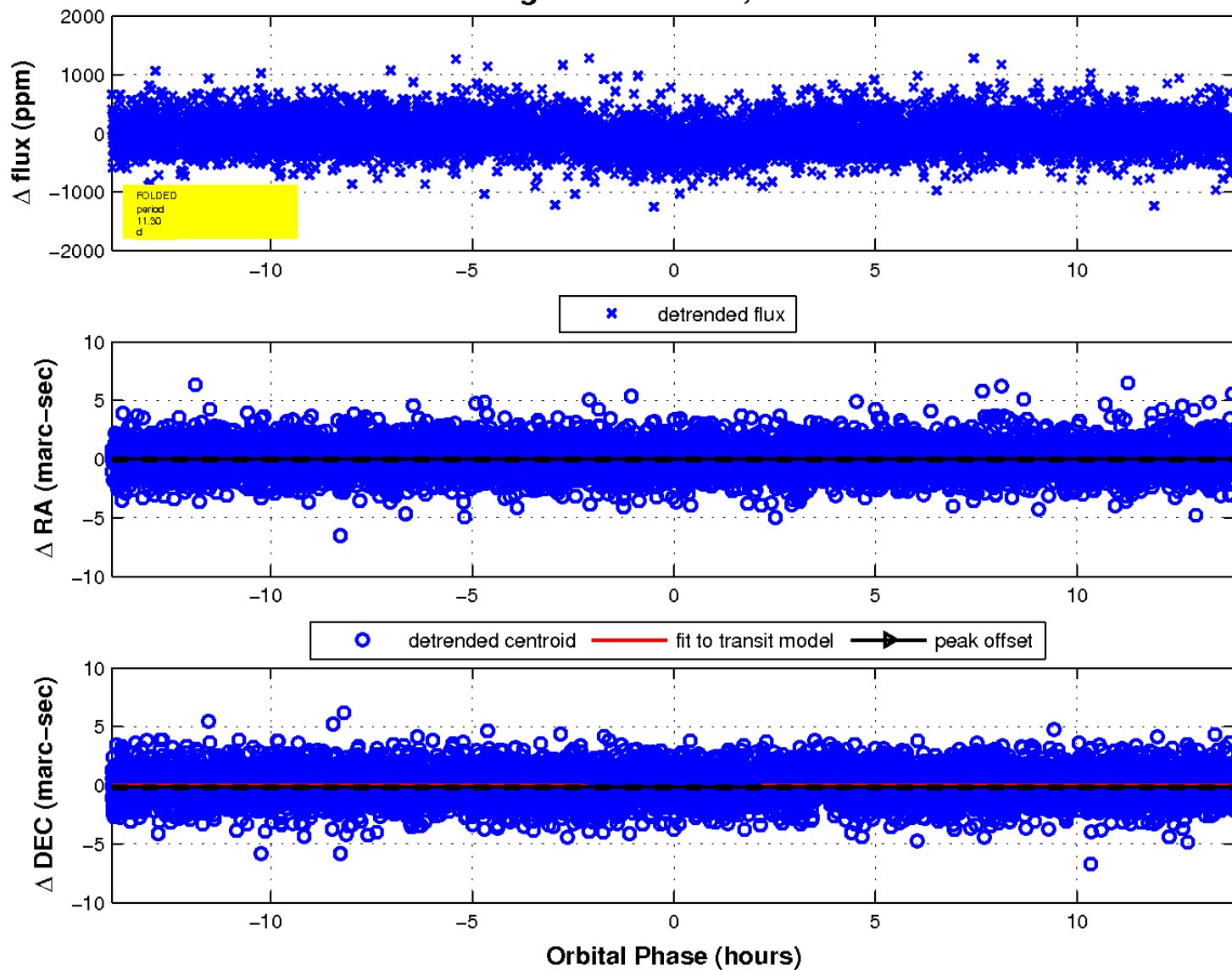
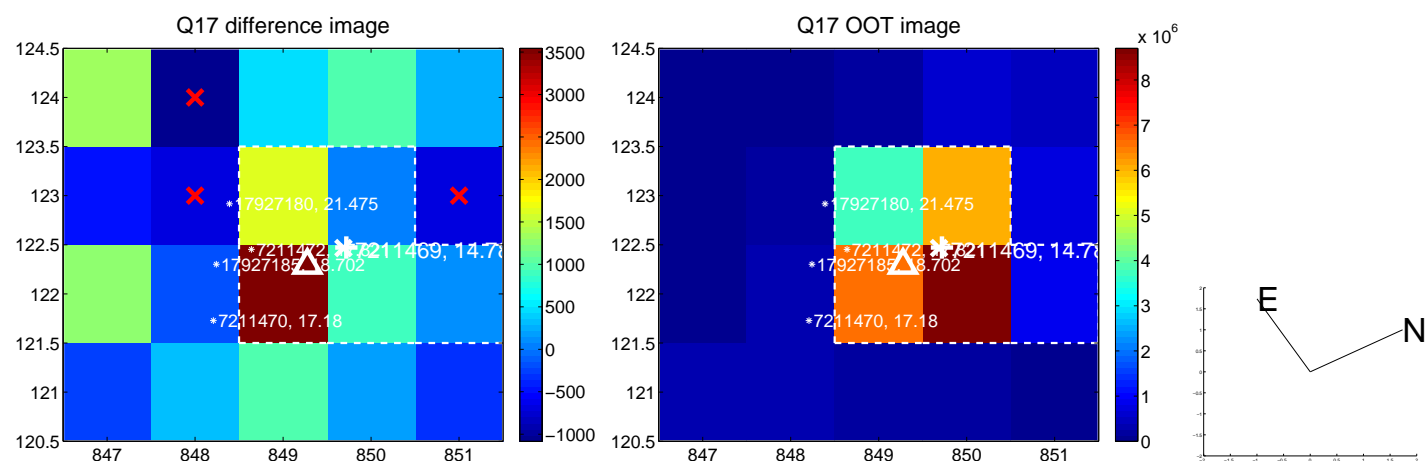
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

