

KIC 011758901

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})
011758901-01	OBS	No	1.216098	131.771779	63.6	1.568	7.8	8.9	8.22	5026	7.99	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011758901-01	OBS	FP	0.00	1	0	0	0	LPP_ALT—MOD_NONUNIQ_ALT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

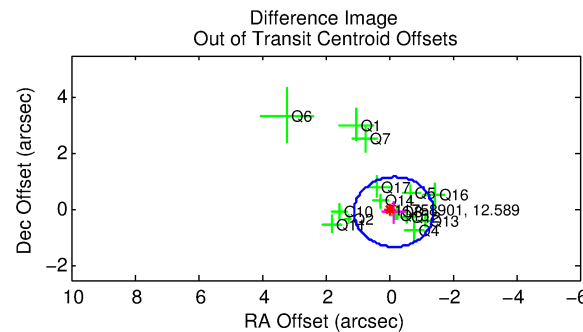
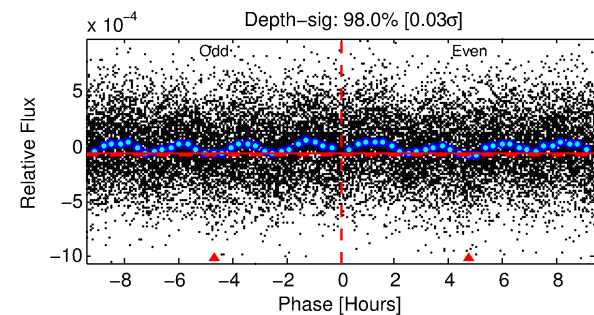
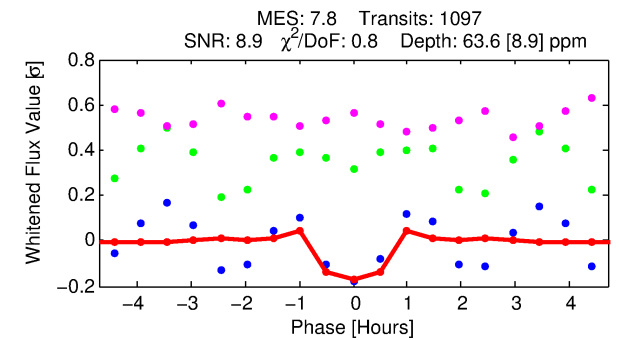
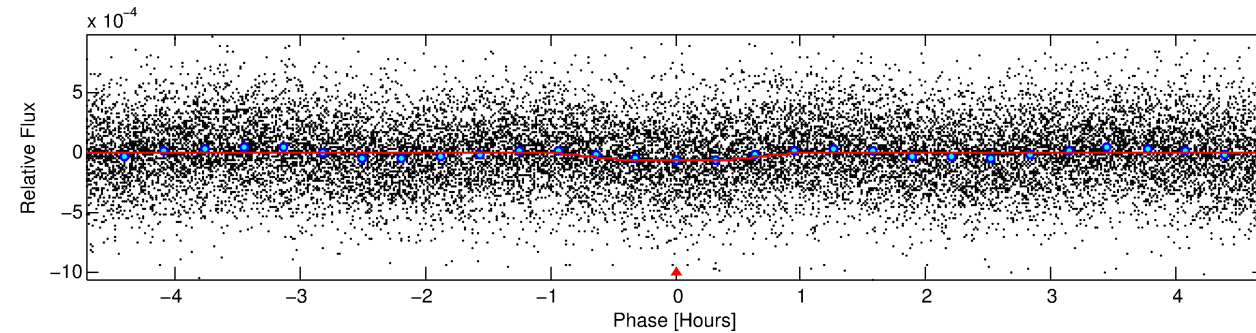
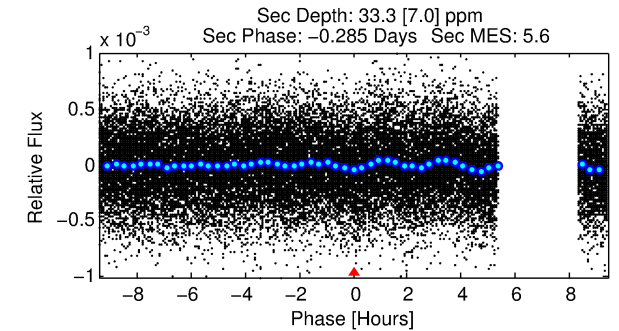
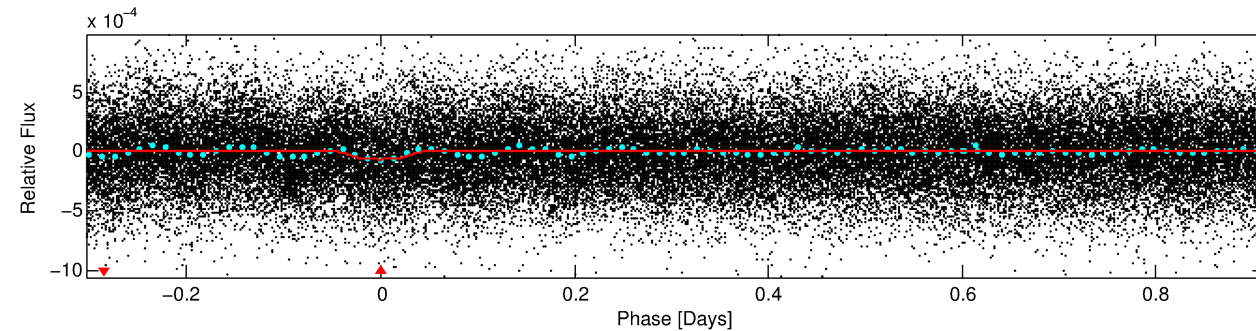
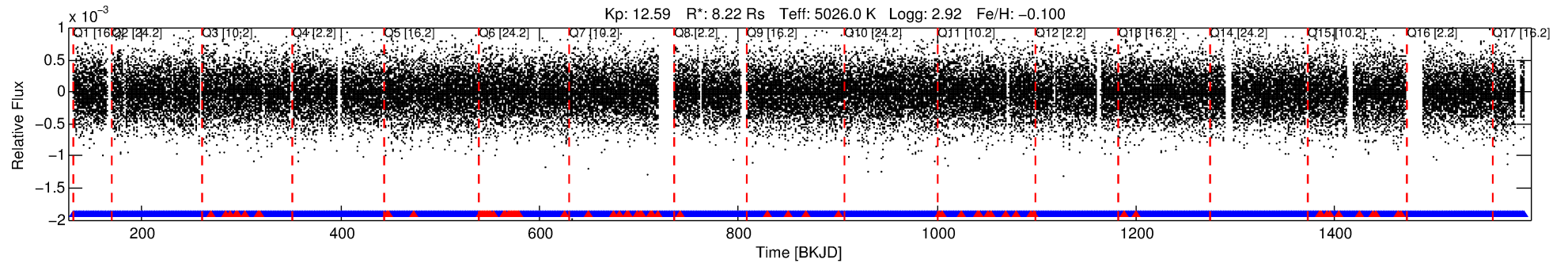
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011758901-01

No Significant Match Found

DV One-Page Summary

KIC: 11758901 Candidate: 1 of 1 Period: 1.216 d



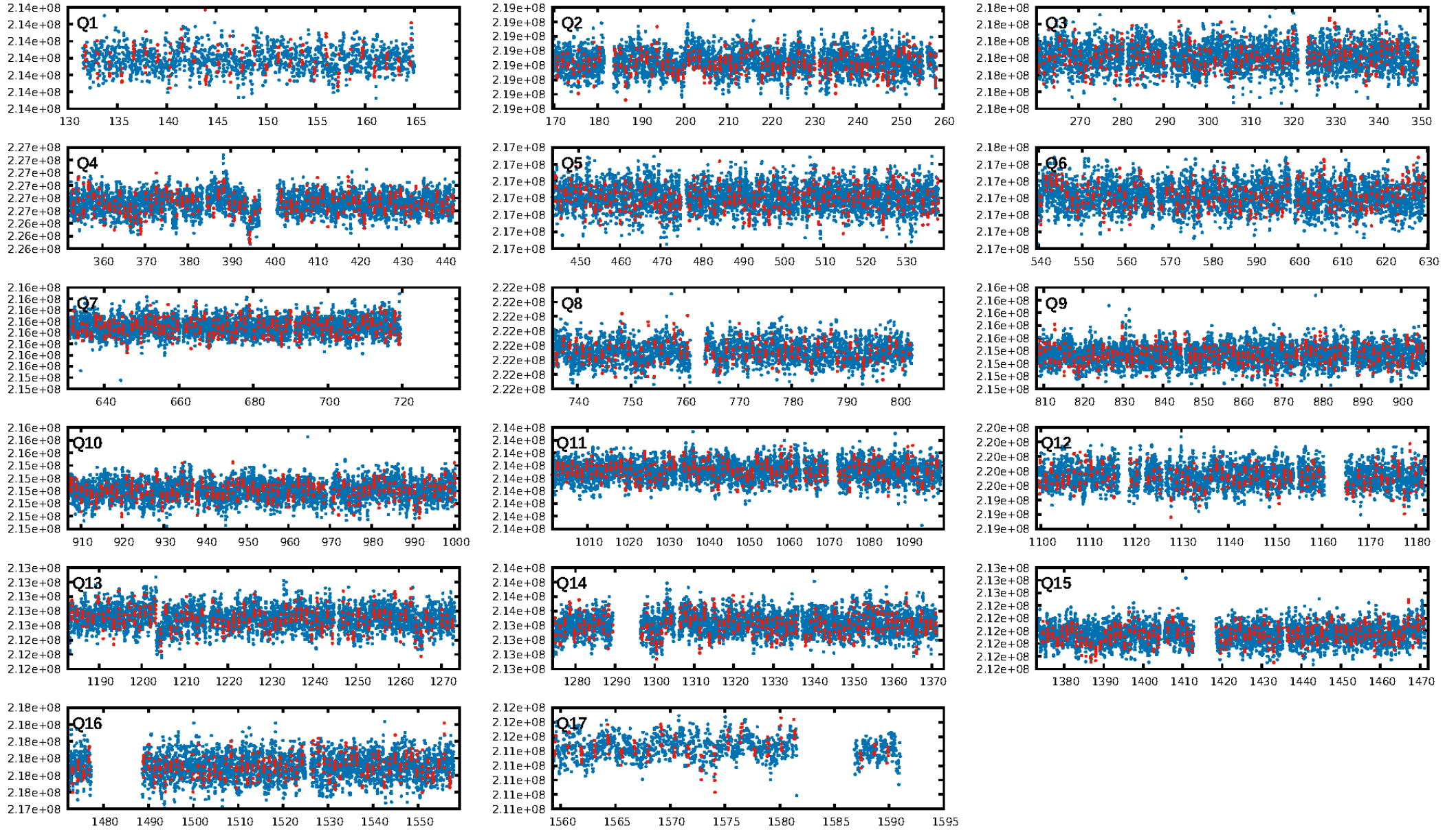
DV Fit Results:

Period = 1.21610 [0.00001] d
Epoch = 131.7718 [0.0017] BKJD
Rp/R* = 0.0089 [0.0042]
a/R* = 2.85 [4.82]
b = 0.90 [0.42]
Seff = N/A
Teq = N/A
Rp = 7.99 [5.10] Re
a = N/A
Ag = N/A
Teffp = N/A

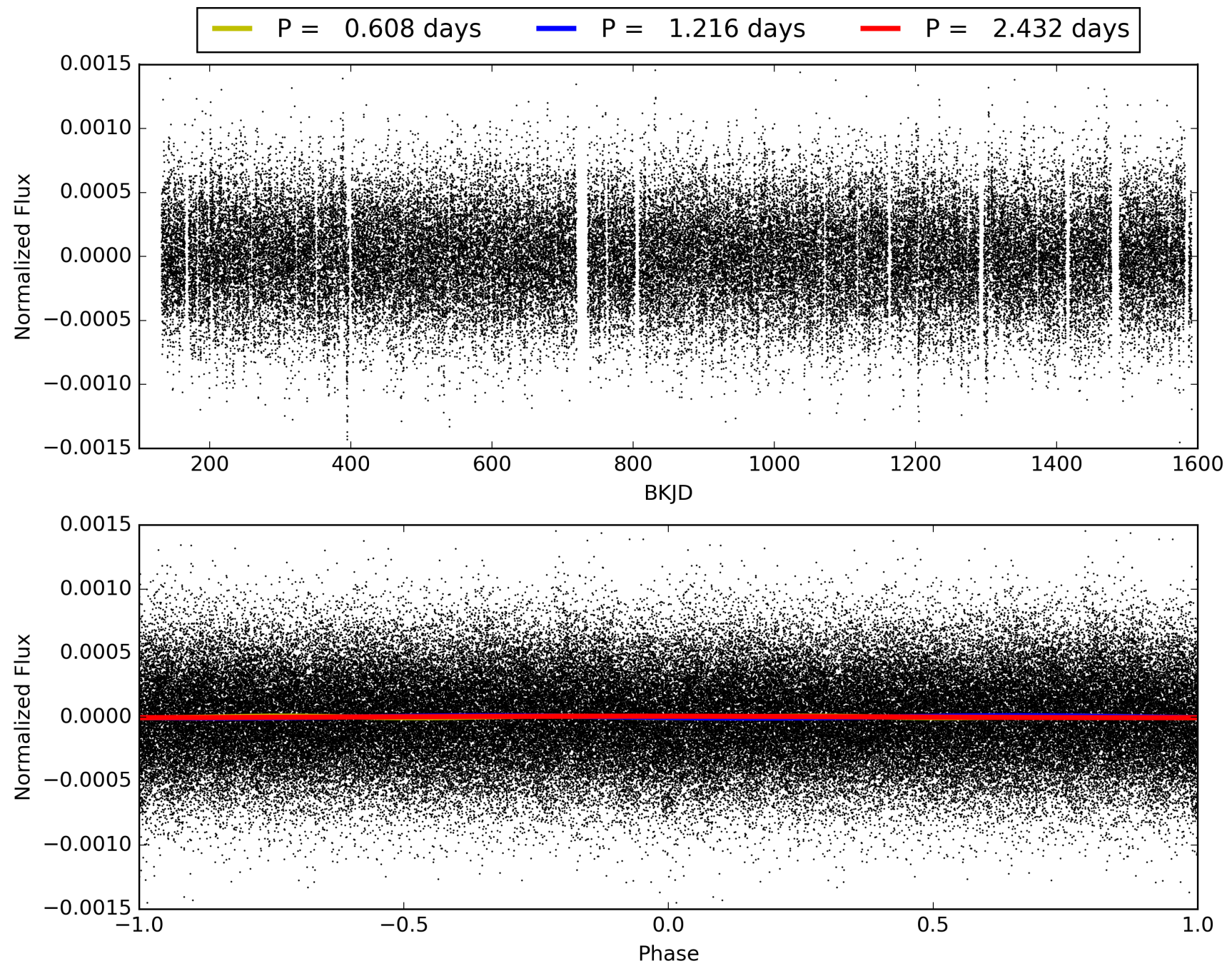
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.81e-13
RollingBand-fgt: 0.92 [968/1047]
GhostDiagnostic-chr: 0.8091
Centroid-sig: 42.2%
Centroid-so: 0.376 arcsec [0.95σ]
OotOffset-rm: 0.169 arcsec [0.41σ]
KicOffset-rm: 0.198 arcsec [0.69σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.93 [14/15]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 011758901-01, PDC Light Curves

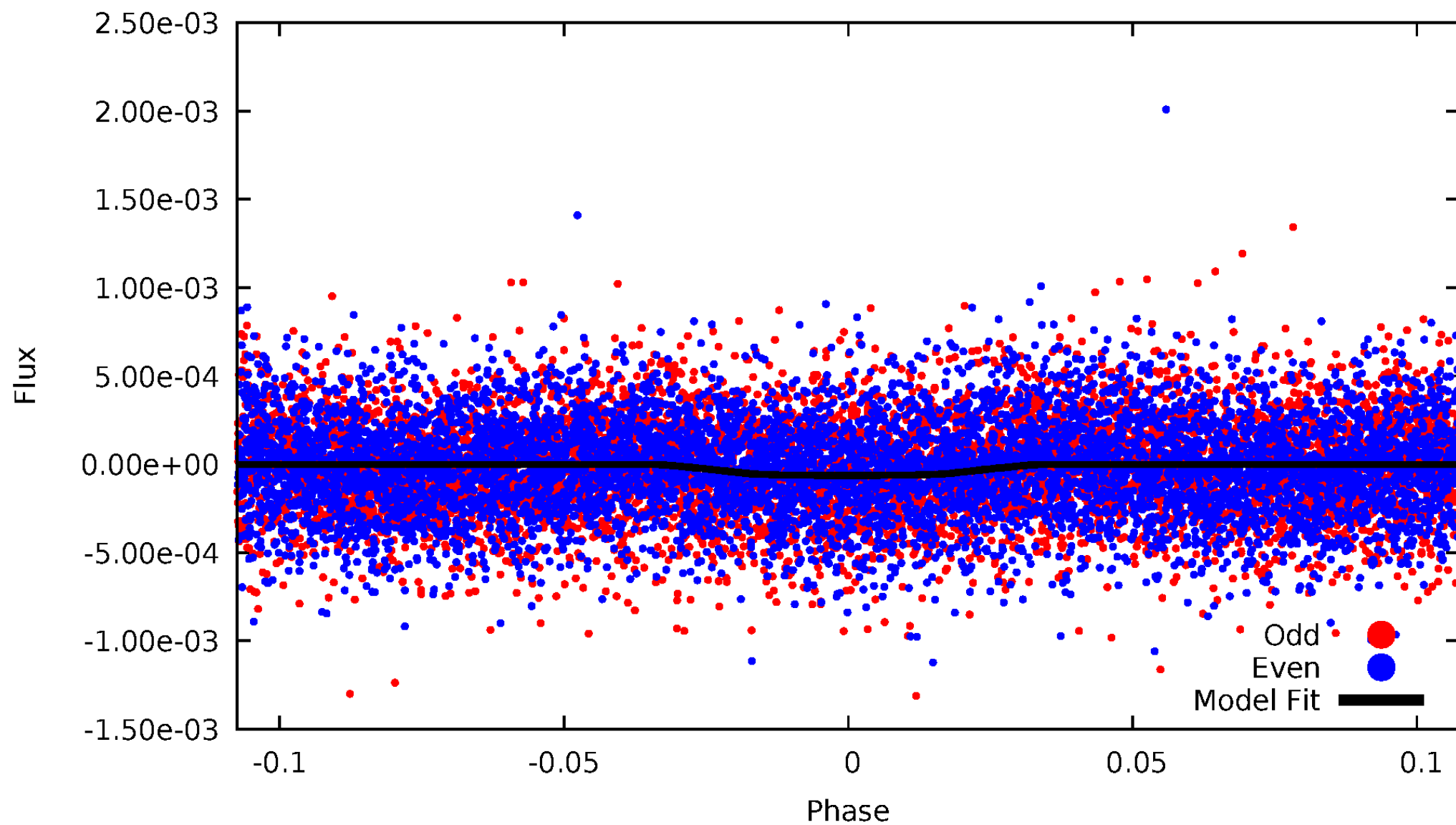


TCE 011758901-01



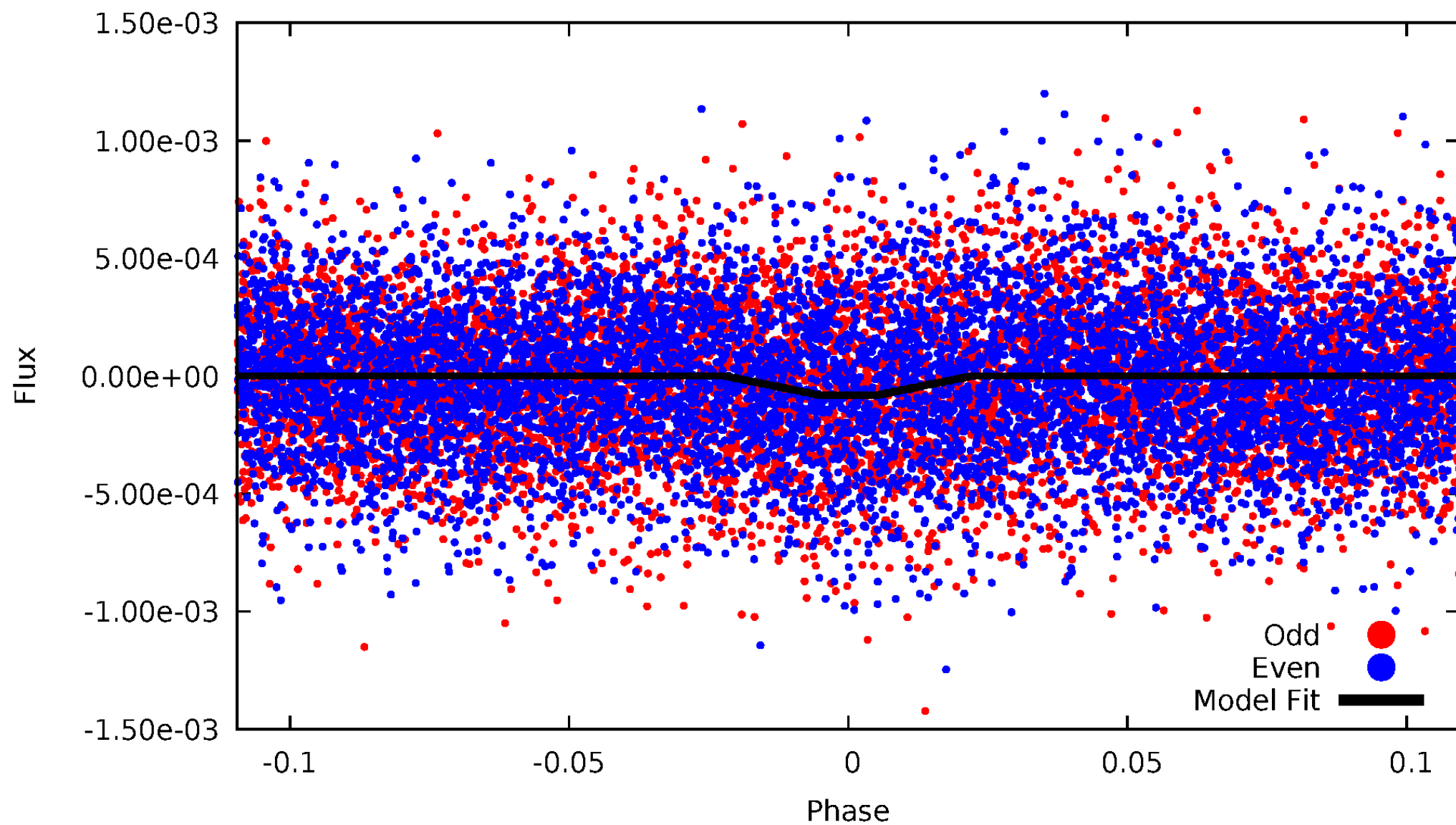
DV Odd/Even

TCE 011758901-01

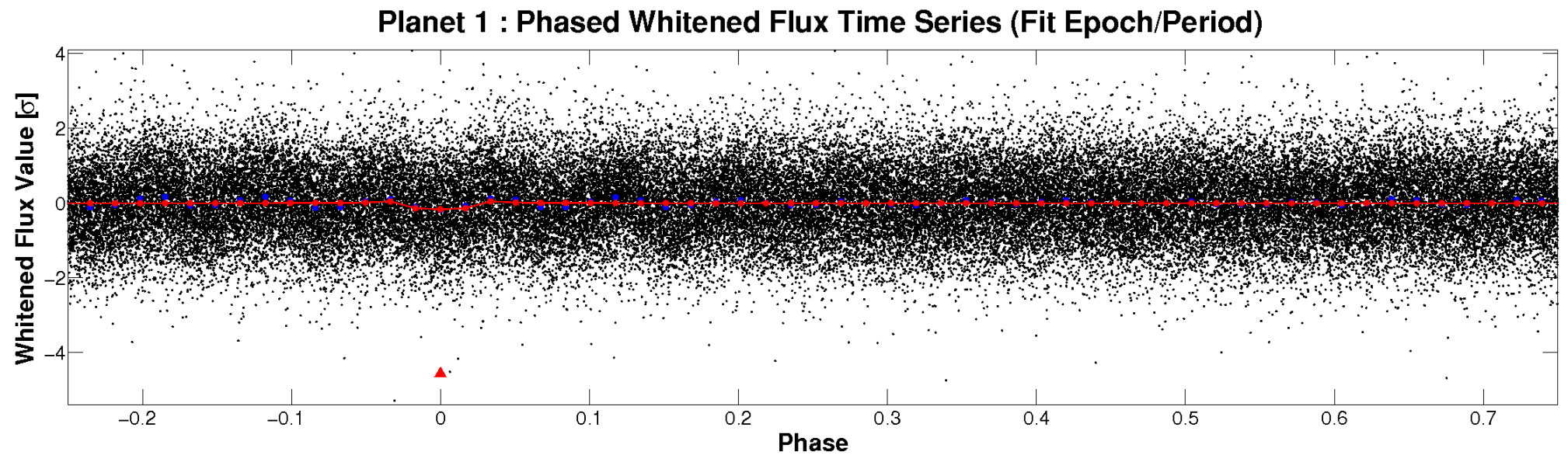
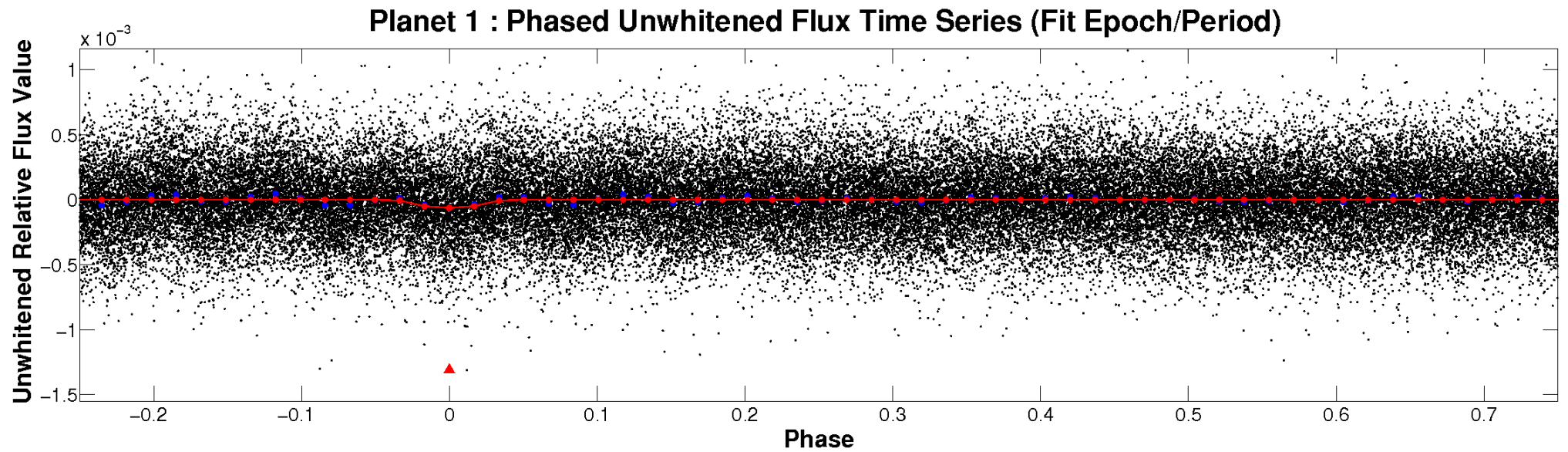


ALT Odd/Even

TCE 011758901-01

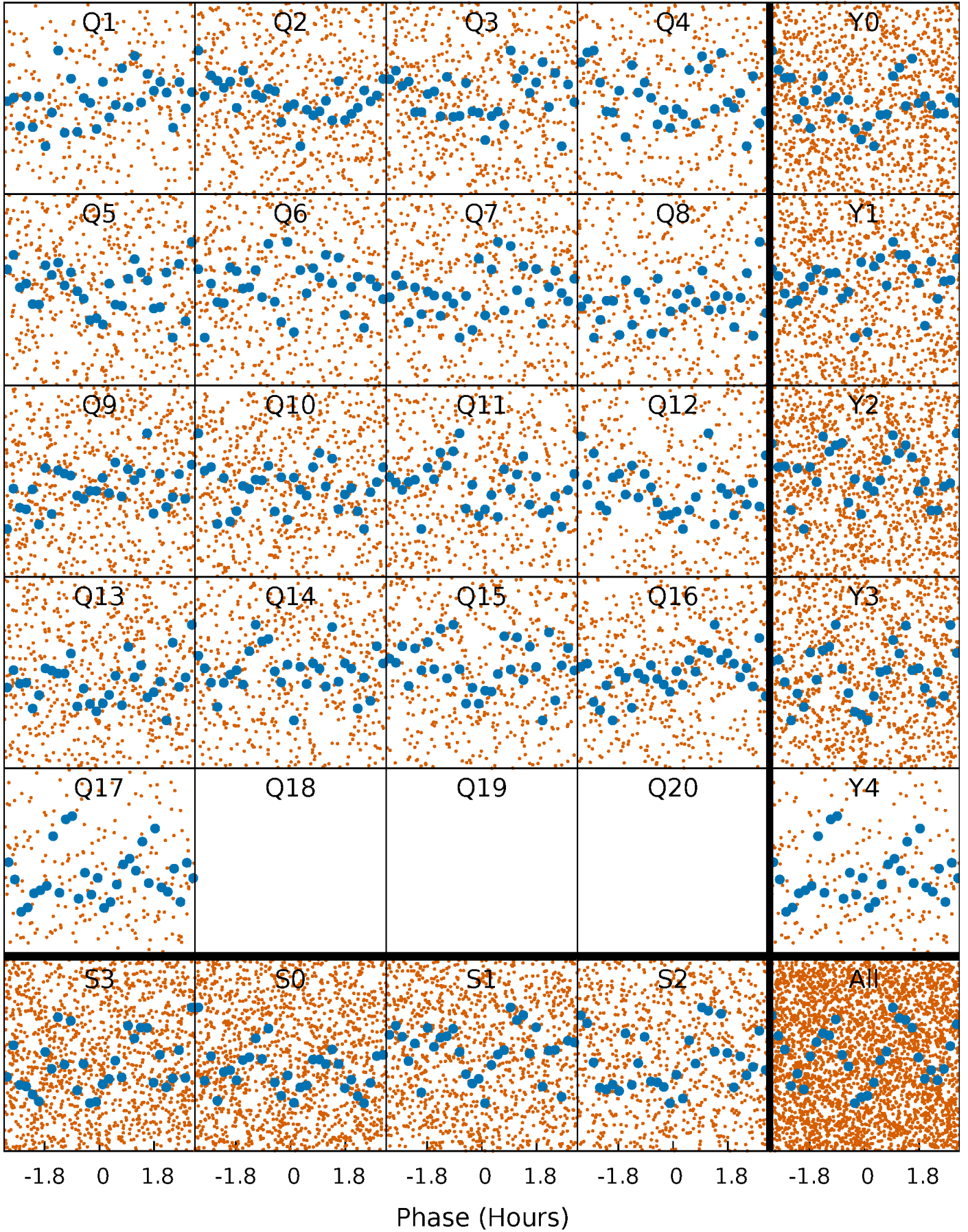


Non-Whitened Vs. Whitened Light Curve



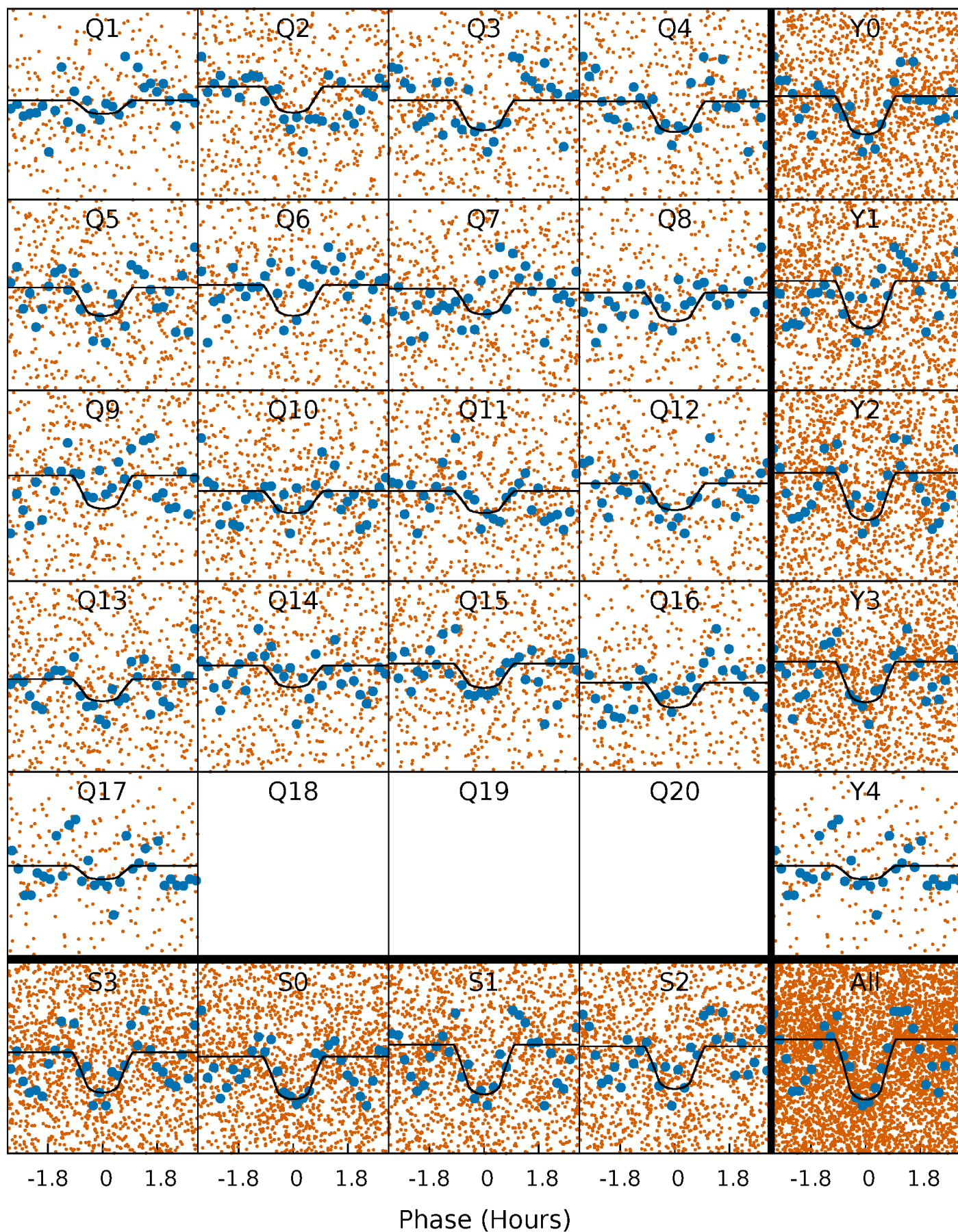
PDC Quarter-Phased Transit Curves

TCE 011758901-01 P= 1.216098 Days $T_0=131.771780$ (BKJD)



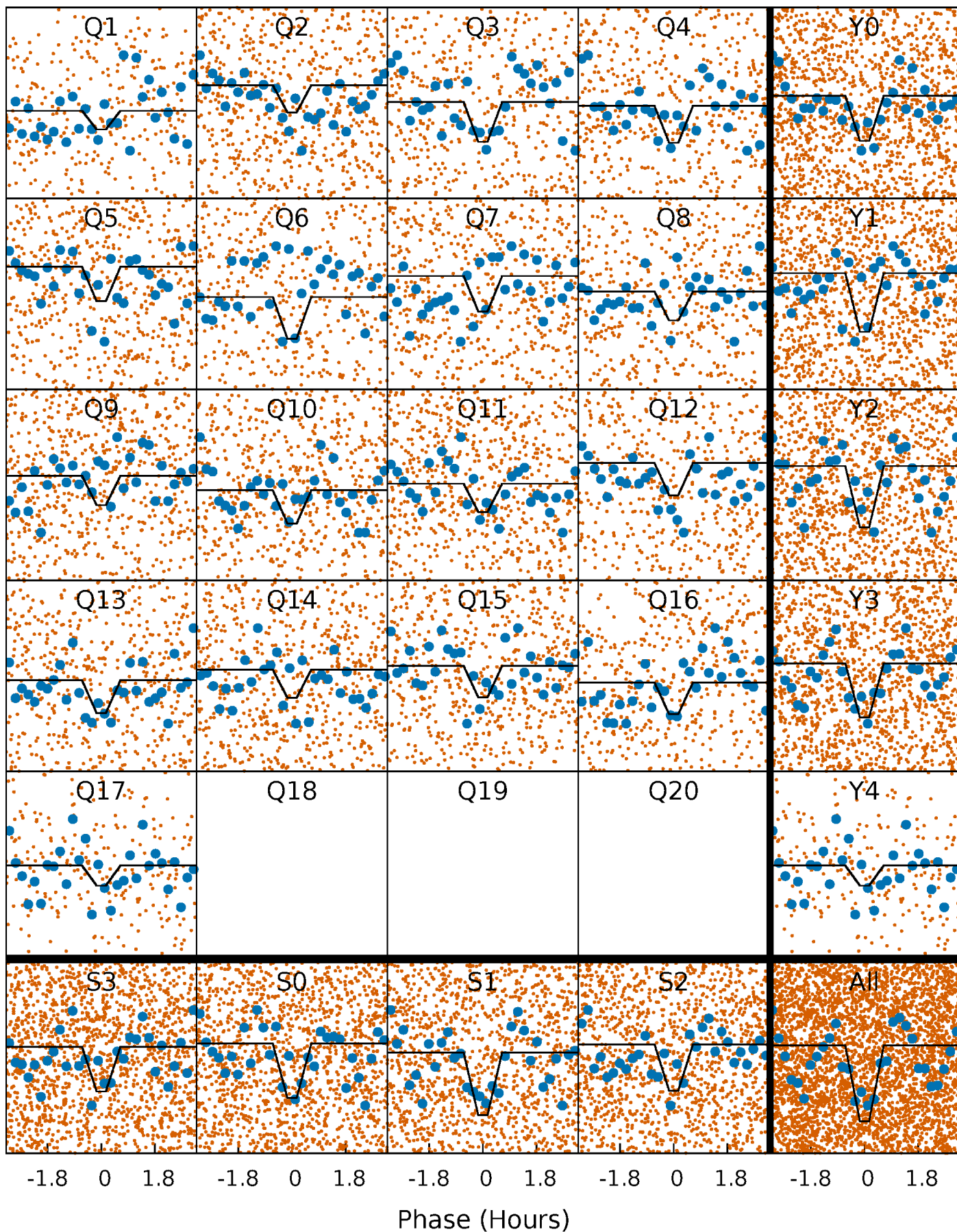
DV Quarter-Phased Transit Curves

TCE 011758901-01 P= 1.216098 Days $T_0=131.771780$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

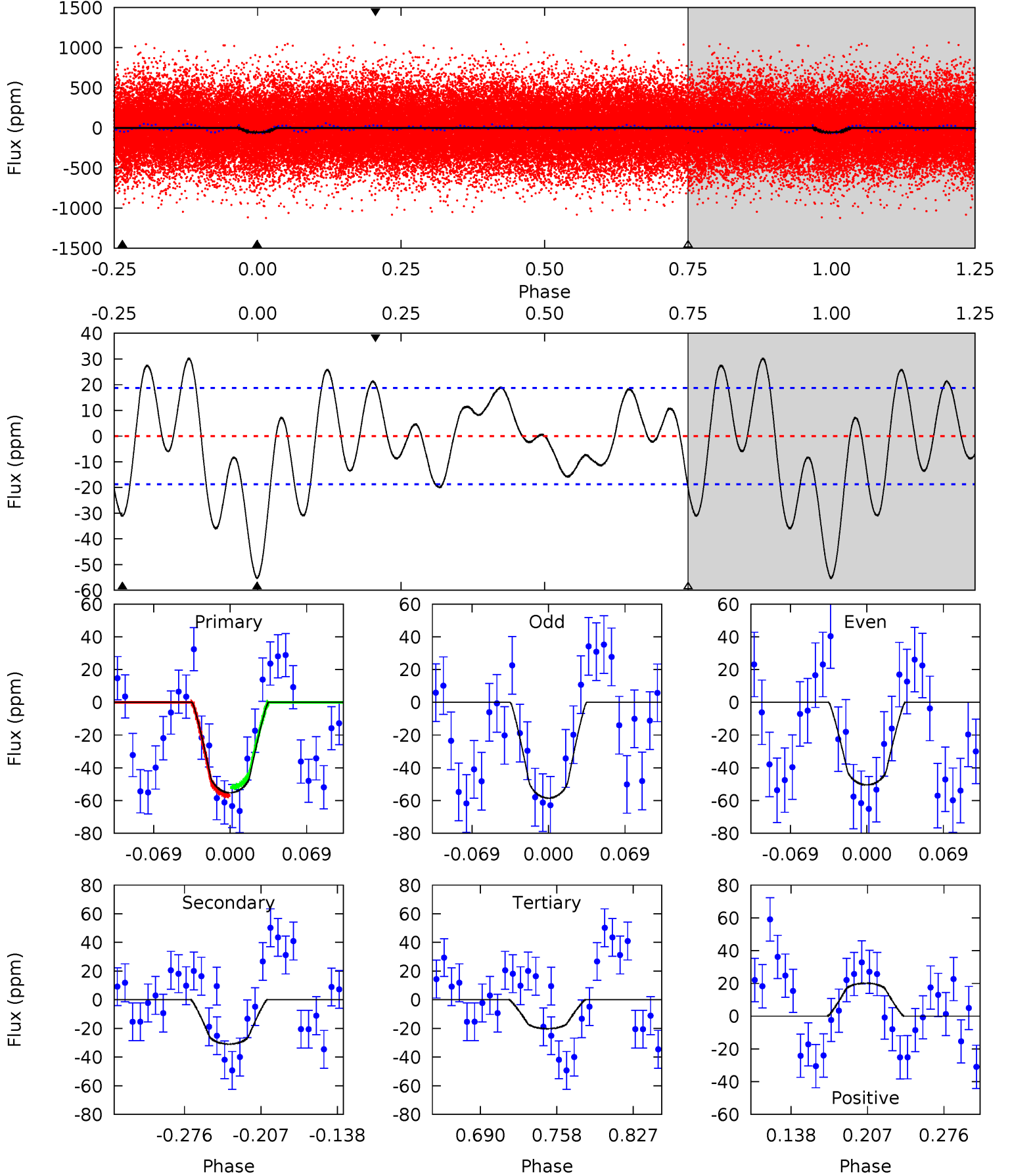
TCE 011758901-01 P= 1.216095 Days $T_0=131.771849$ (BKJD)



DV Model-Shift Uniqueness Test

011758901-01, P = 1.216098 Days, E = 130.555682 Days

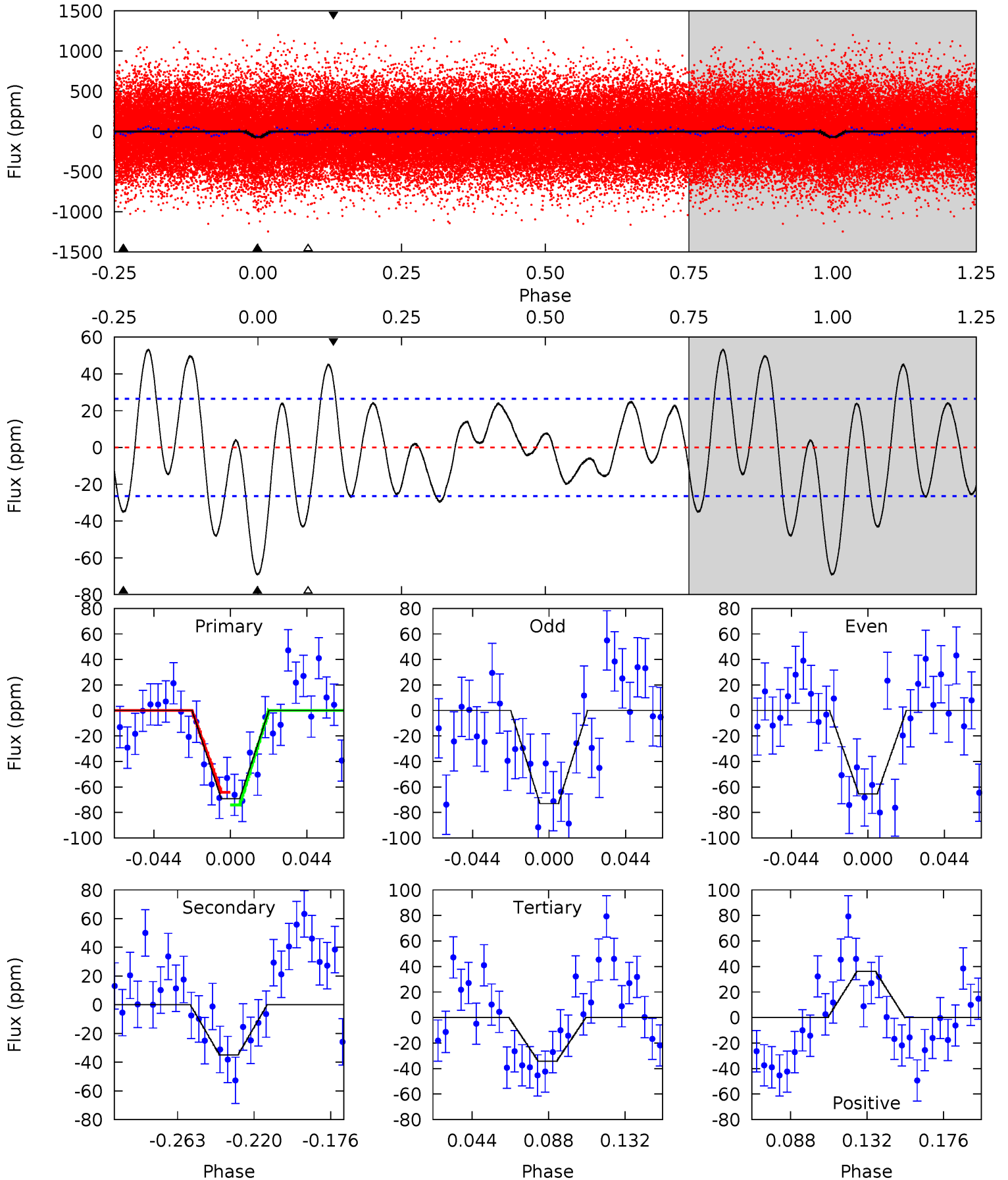
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	7.68	5.00	4.99	4.64	1.82	3.36	8.68	8.69	2.68	2.69	1.00	1.05	0.35	0.60



Alt Model-Shift Uniqueness Test

011758901-01, P = 1.216095 Days, E = 130.555754 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	6.25	6.12	6.47	4.73	2.02	3.66	6.25	5.90	0.13	-0.22	0.68	1.13	0.43	0.89



Stellar Parameters For KIC 011758901

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5026^{+86}_{-148}	$2.921^{+0.260}_{-0.140}$	$-0.100^{+0.200}_{-0.350}$	$8.222^{+1.766}_{-3.533}$	$2.057^{+0.659}_{-0.989}$	$0.005^{+0.010}_{-0.002}$
	+2%/-3%	+9%/-5%	+200%/-350%	+21%/-43%	+32%/-48%	+198%/-38%
Source	PHO1	FLK73	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 011758901-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-31 ± 4	$7.75^{+4.29}_{-3.68}$	5205^{+355}_{-468}	-3306^{+7969}_{-858}	$0.232^{+0.571}_{-0.136}$
Alt.	-35 ± 6	$7.99^{+4.22}_{-3.66}$	5204^{+353}_{-411}	-3257^{+7858}_{-848}	$0.244^{+0.516}_{-0.136}$

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

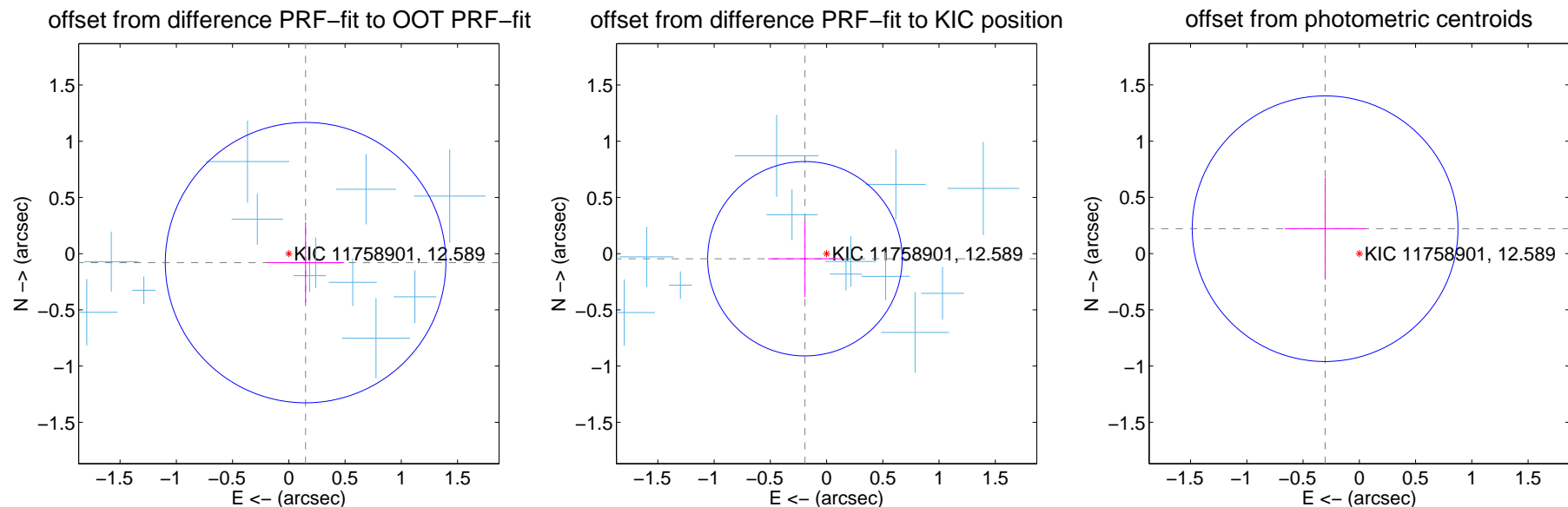
DV Centroid Data

Supplemental centroid analysis for 011758901-01. Kepler magnitude: 12.59. Transit SNR 8.94

There are 14 quarters with good PRF difference image offsets

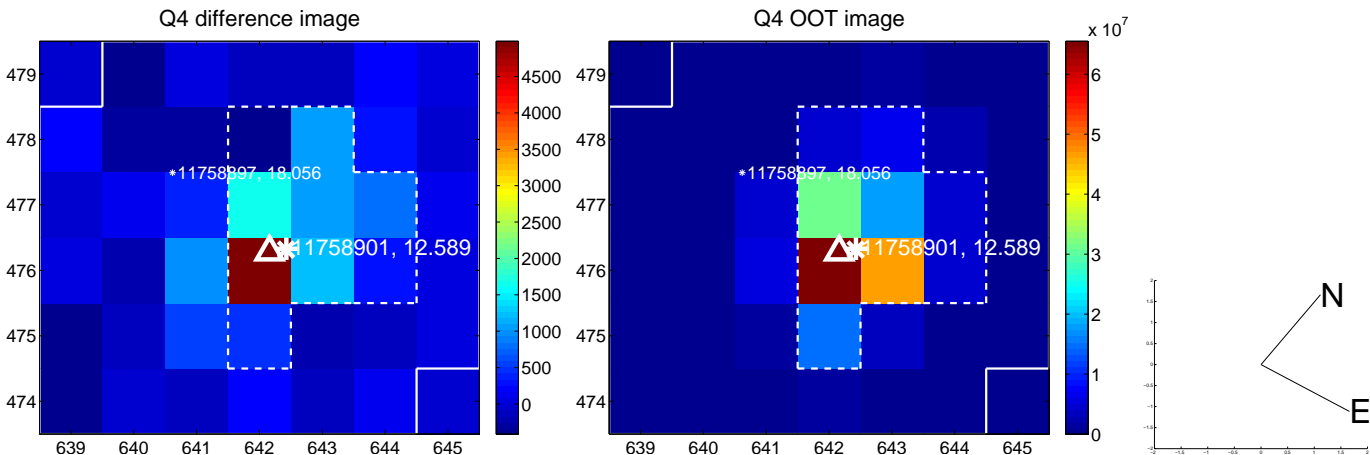
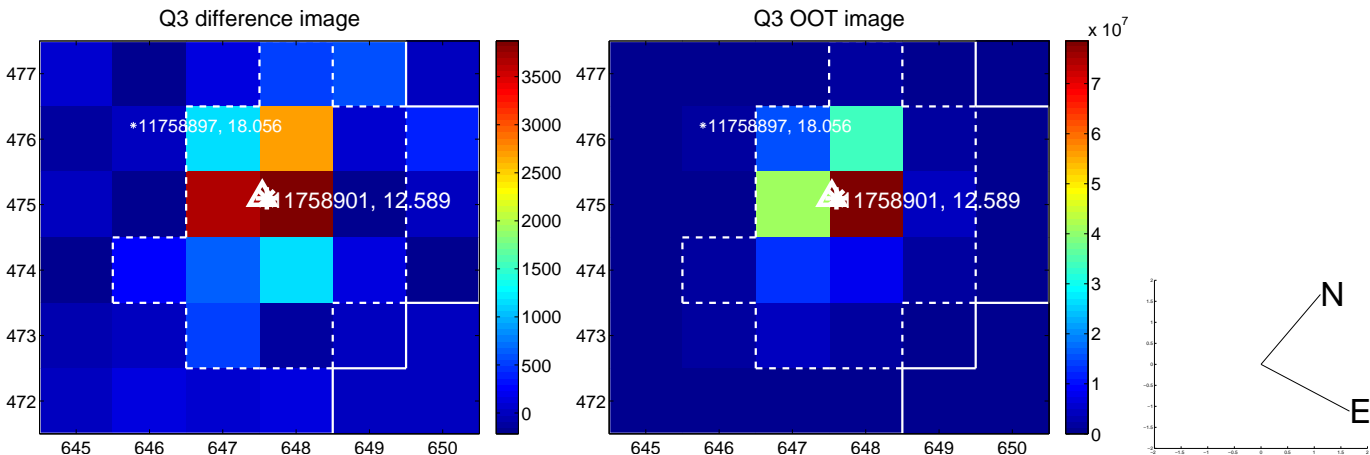
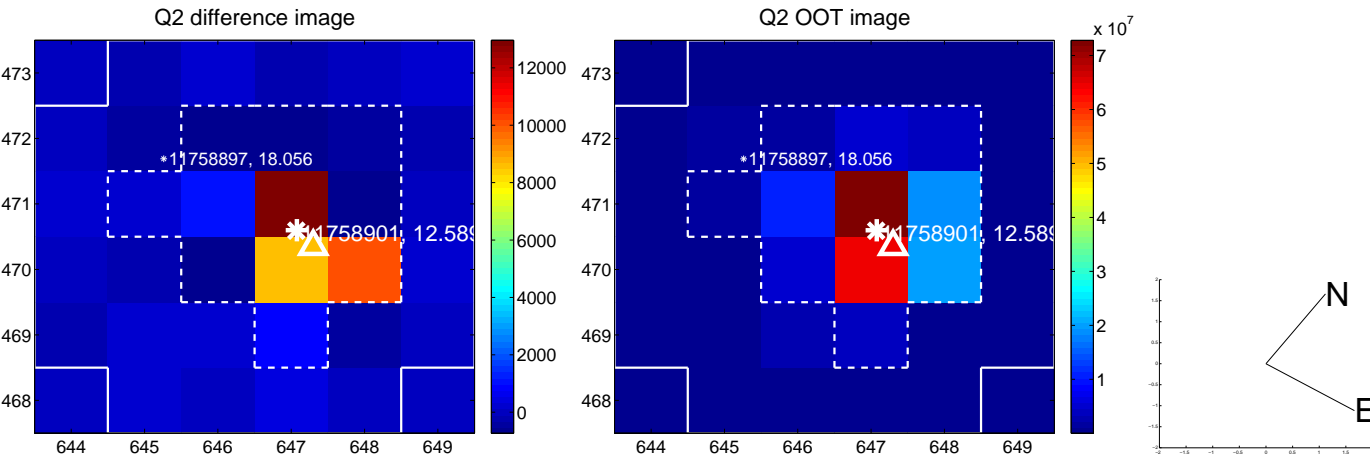
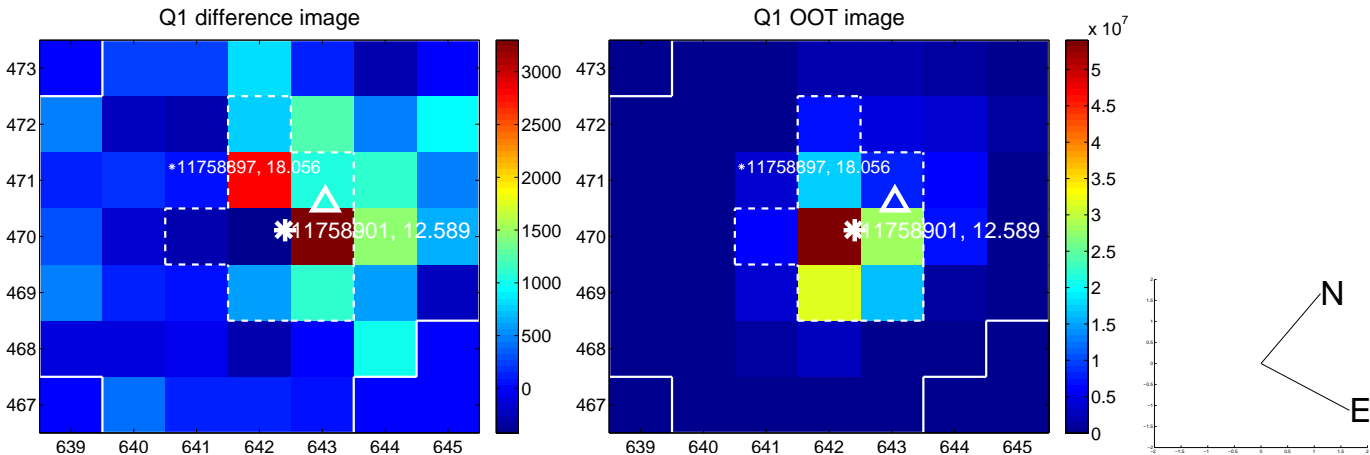
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.169 ± 0.416	0.41	-0.149 ± 0.341	-0.080 ± 0.360
PRF-fit source offset from KIC position	0.198 ± 0.288	0.69	0.193 ± 0.328	-0.045 ± 0.341
photometric centroid source offset	0.38 ± 0.39	0.95	0.30 ± 0.36	0.22 ± 0.45

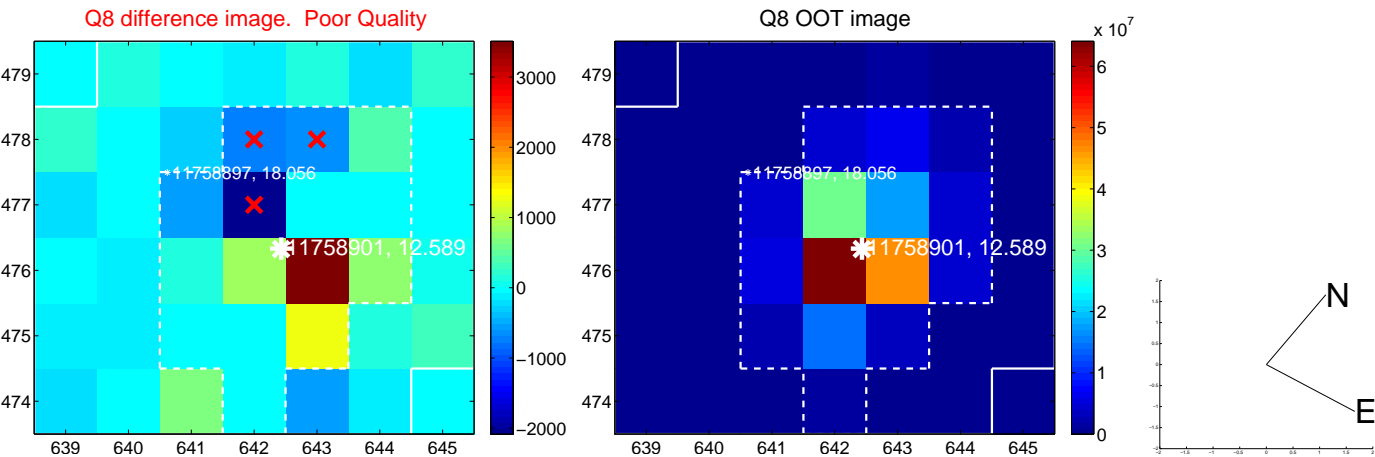
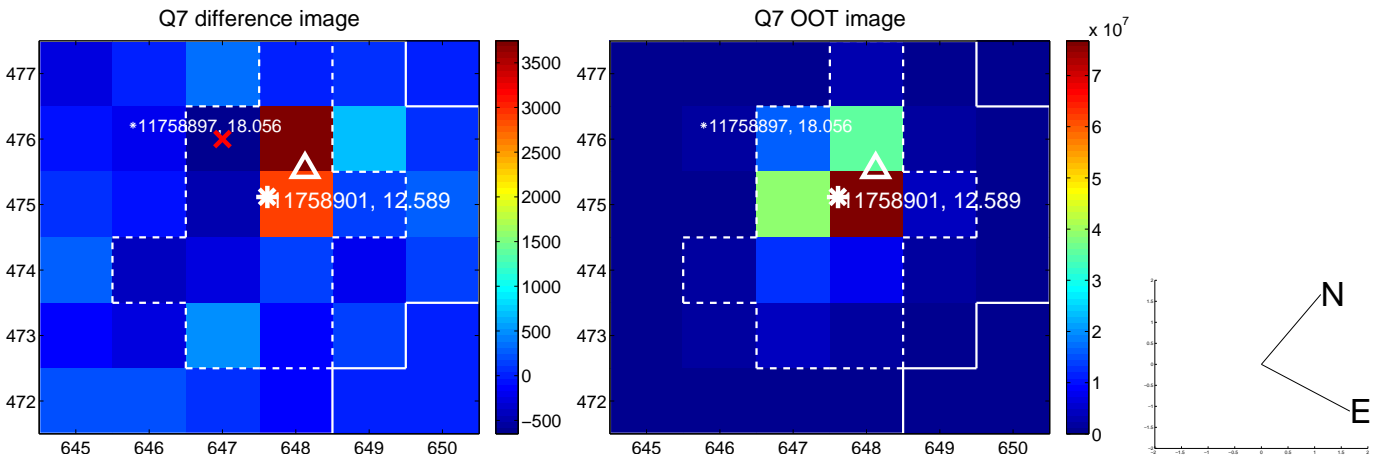
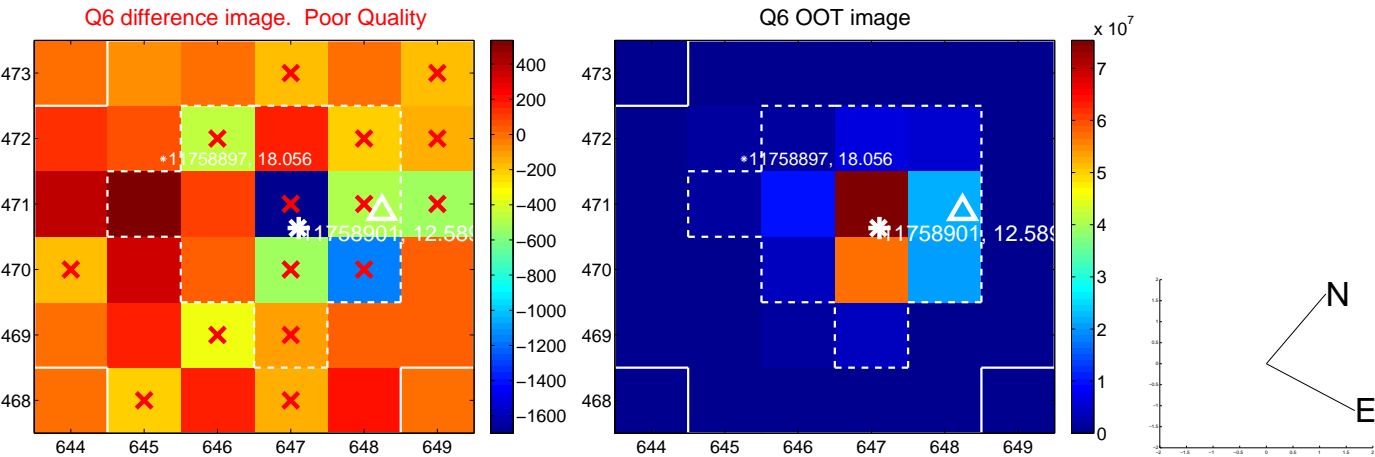
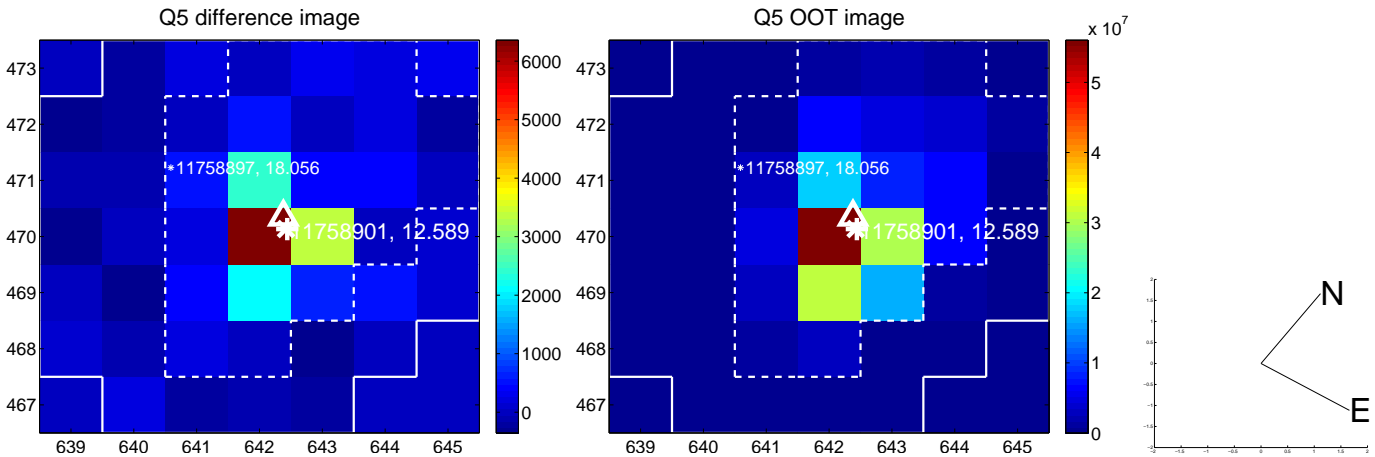


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

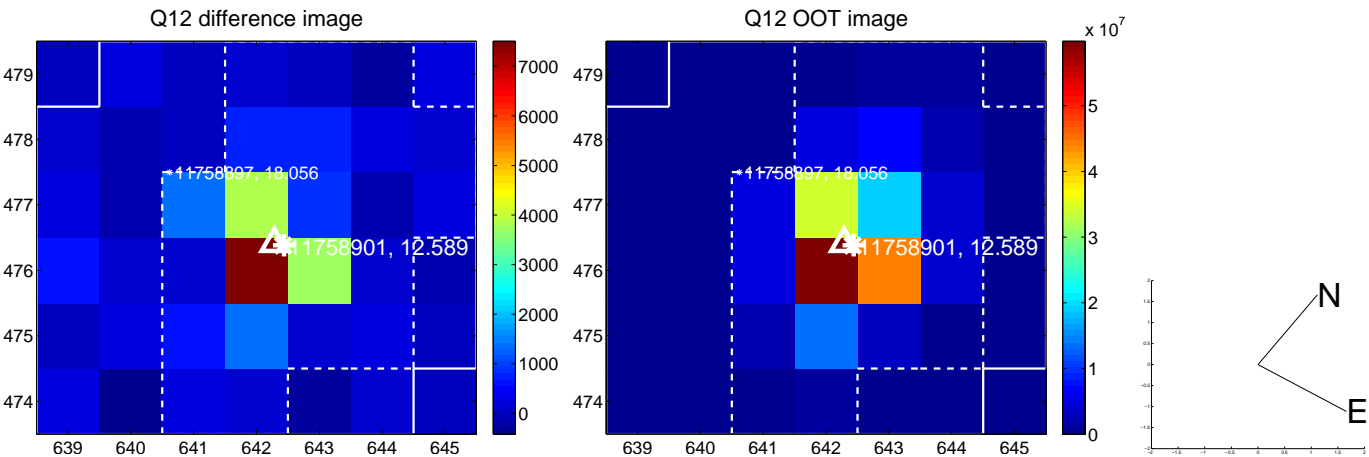
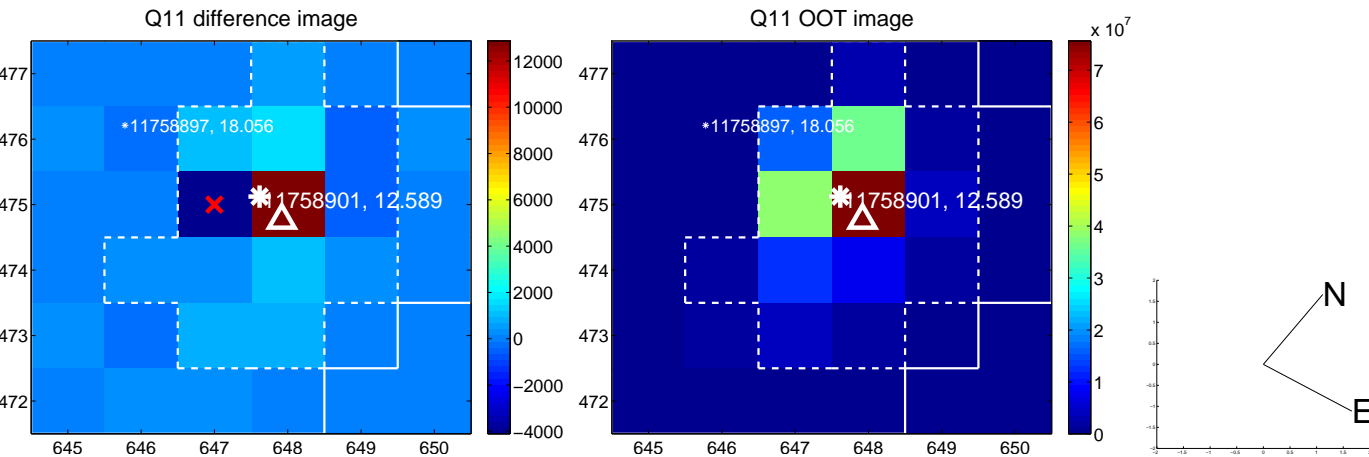
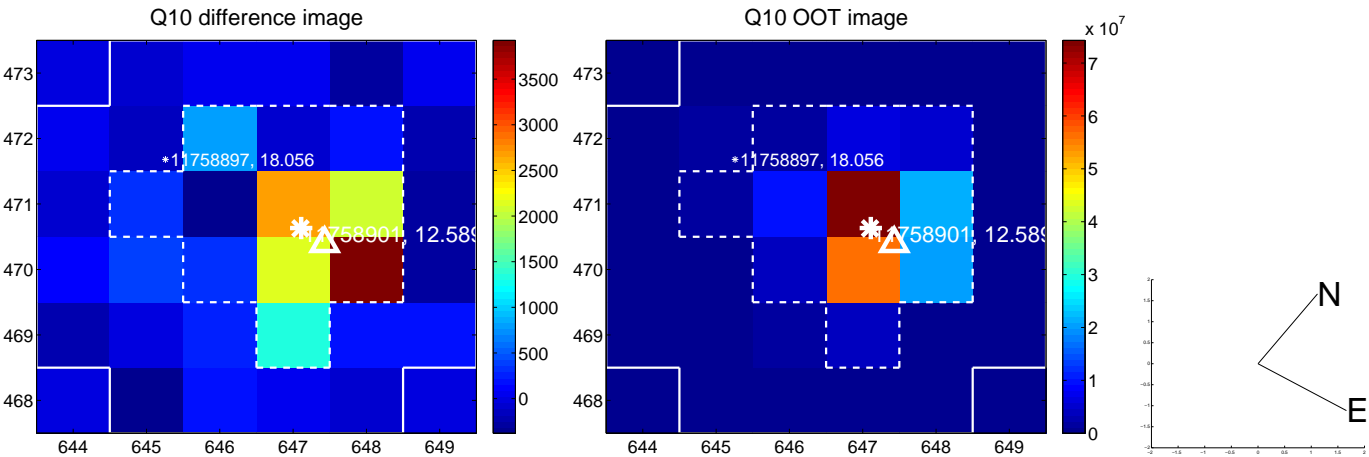
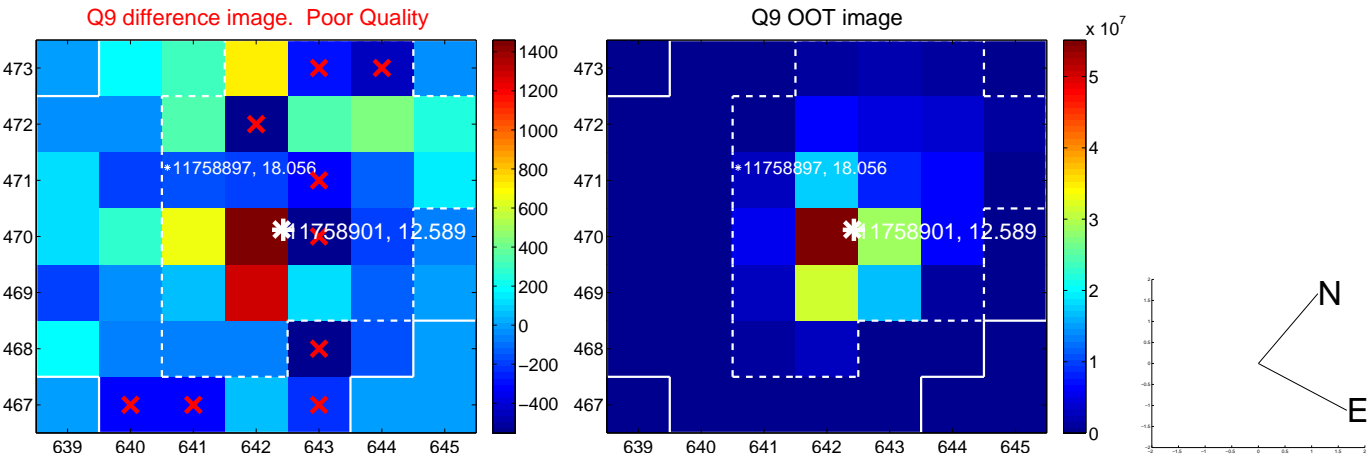
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



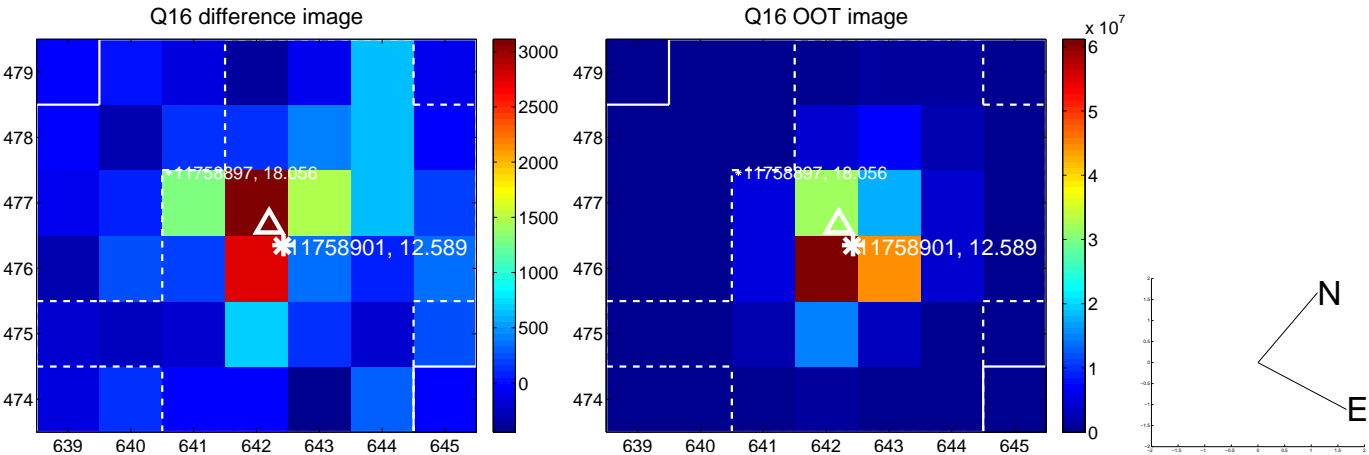
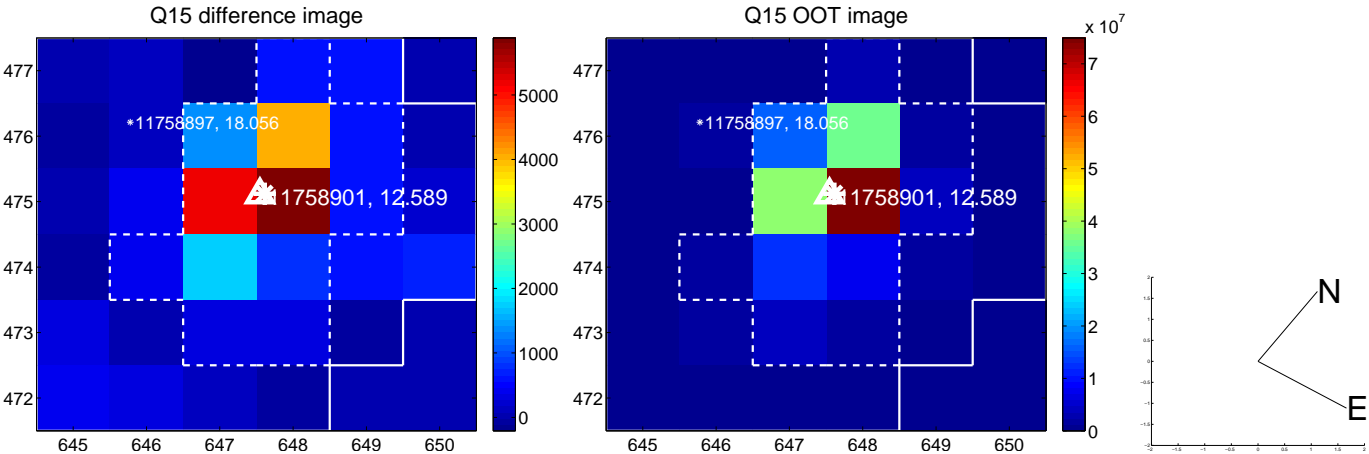
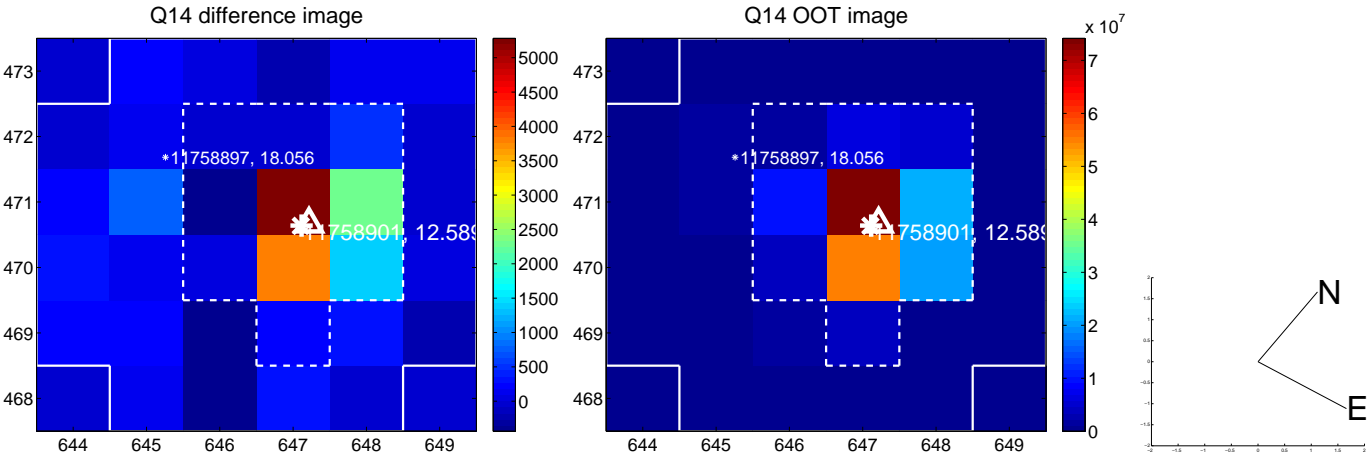
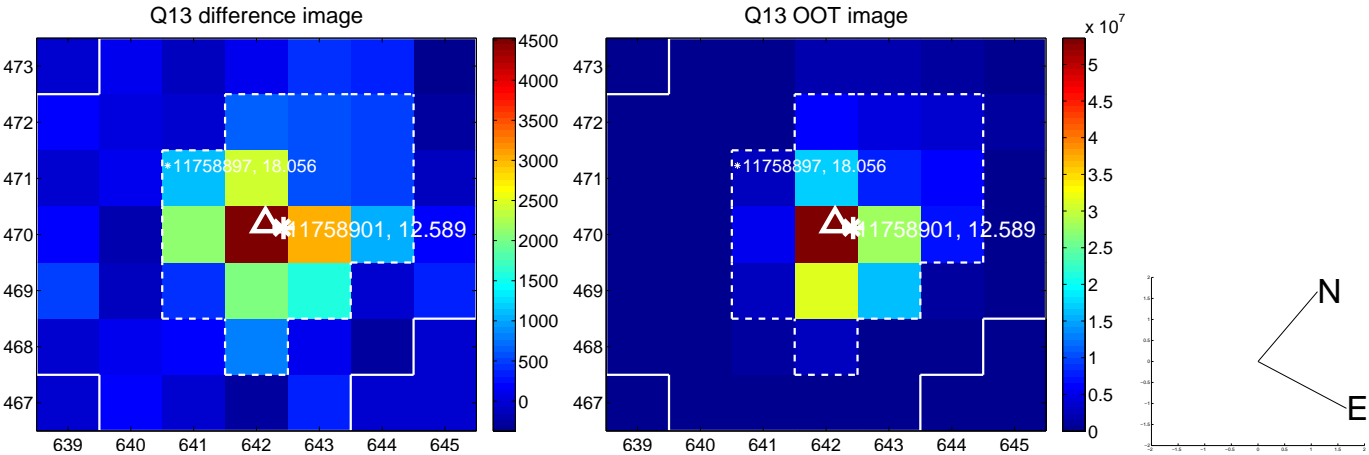
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



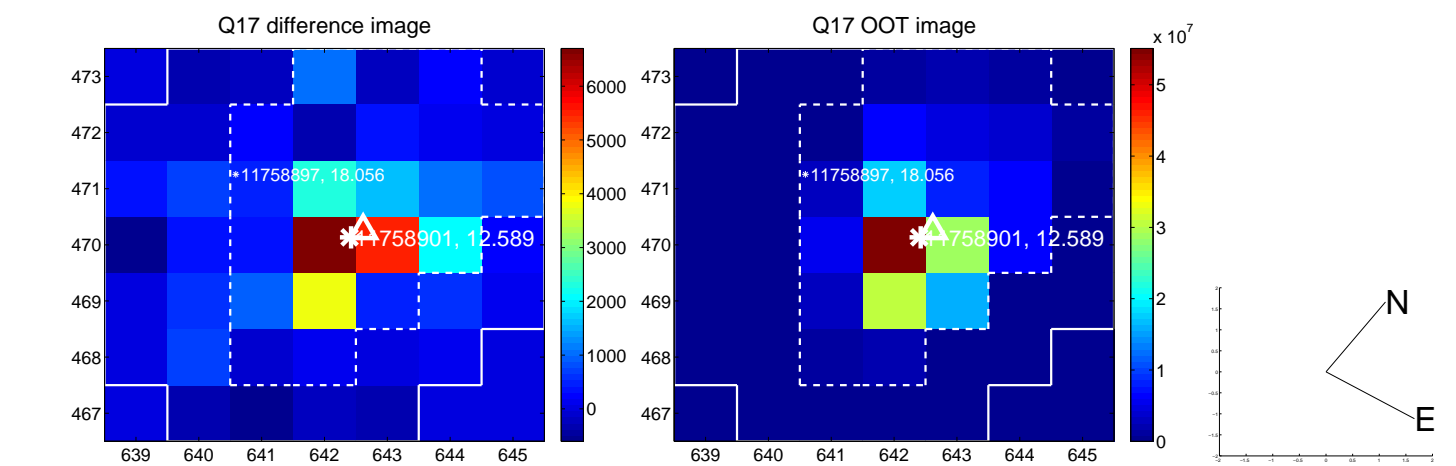
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



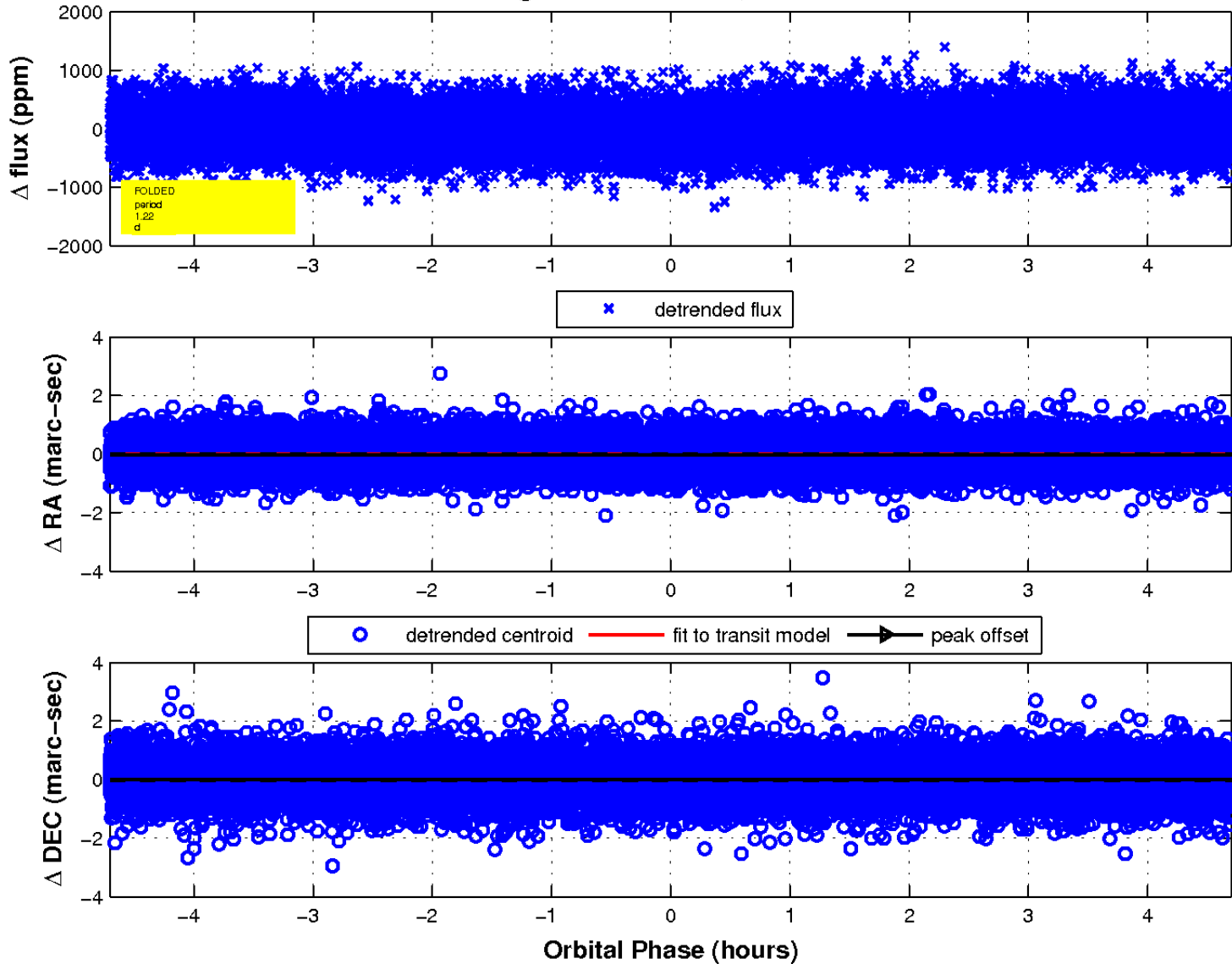
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

