

KIC 011091336

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})
011091336-01	OBS	No	1.190908	131.753006	0.2	0.949	9.1	0.0	0.41	3639	0.02	95.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011091336-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—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.

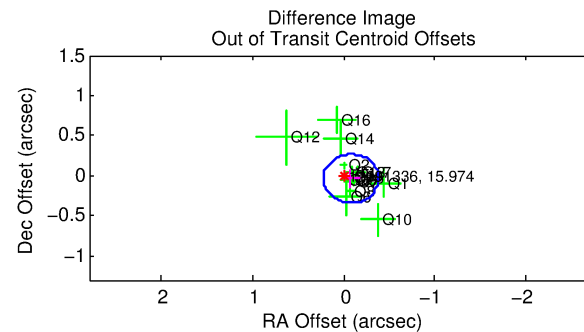
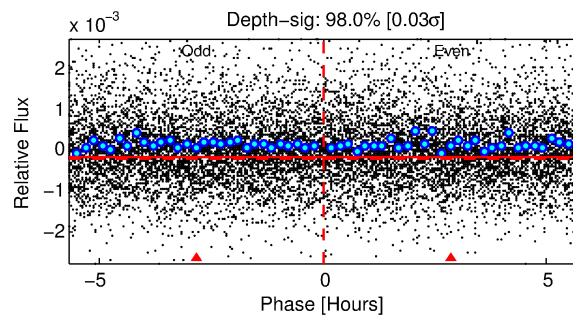
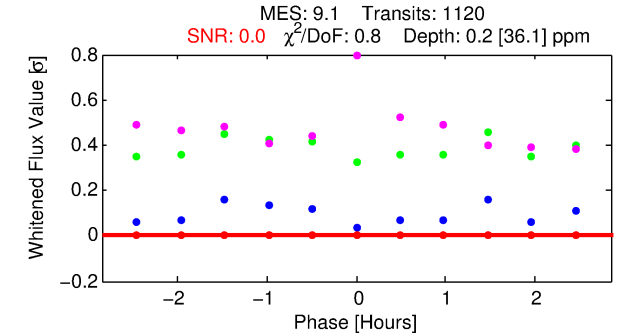
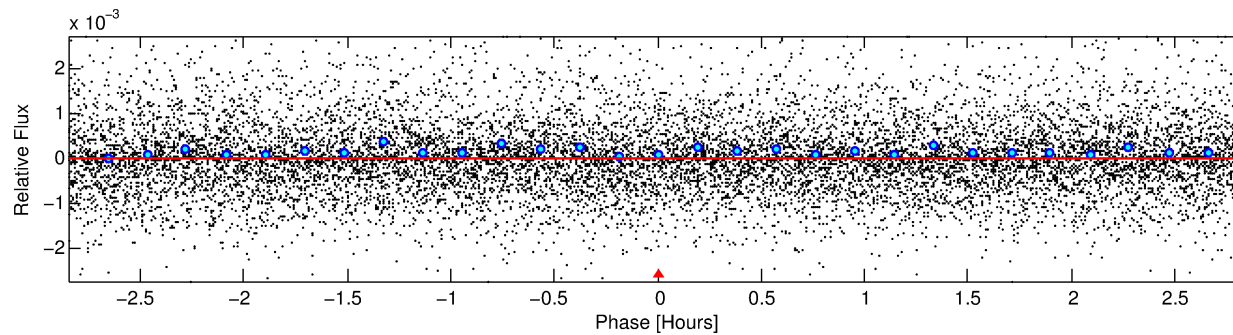
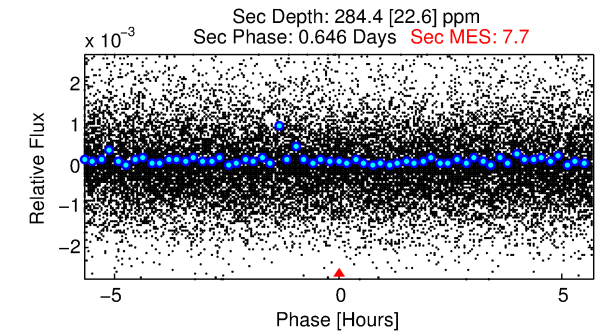
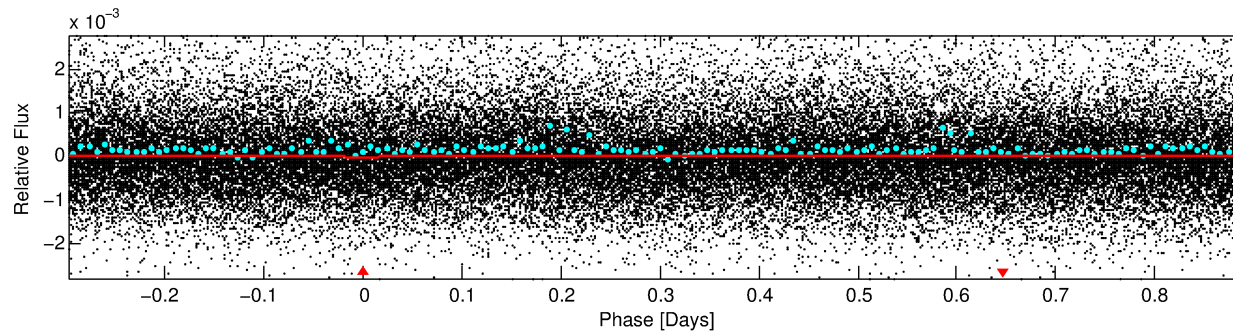
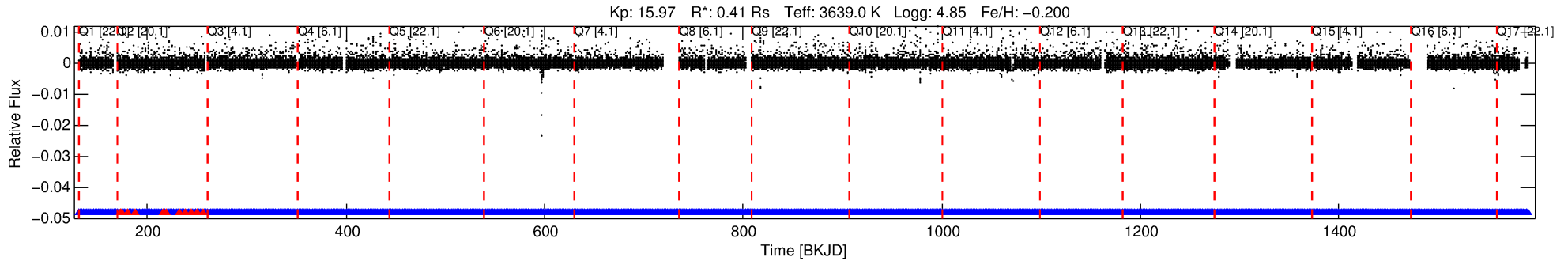
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011091336-01

No Significant Match Found

DV One-Page Summary

KIC: 11091336 Candidate: 1 of 1 Period: 1.191 d



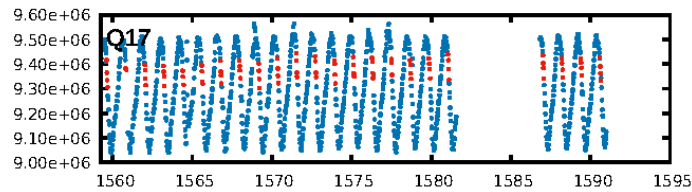
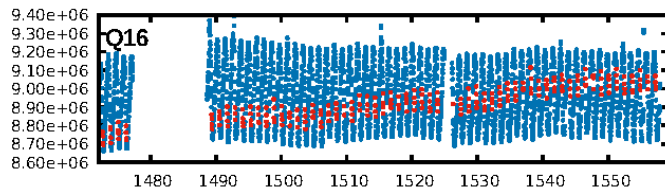
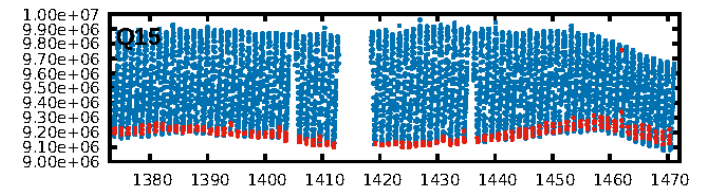
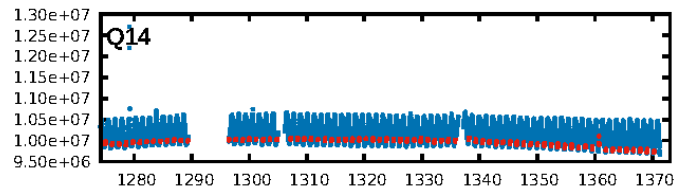
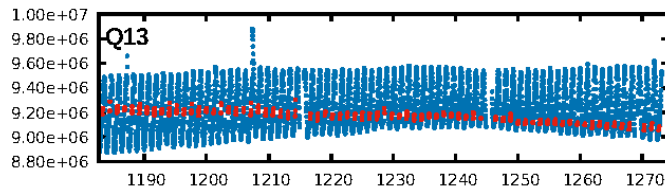
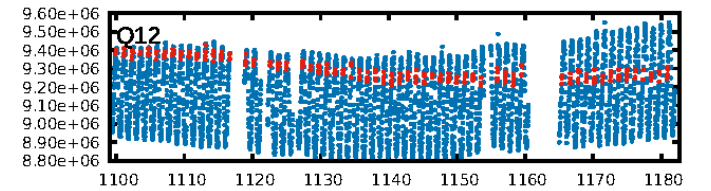
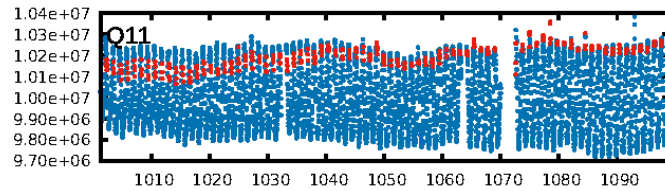
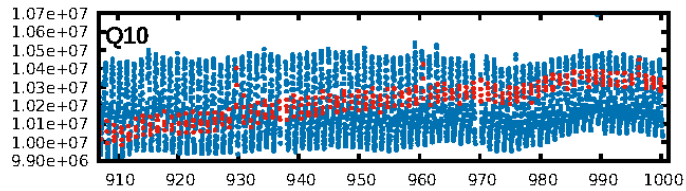
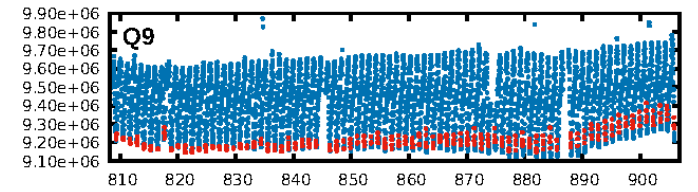
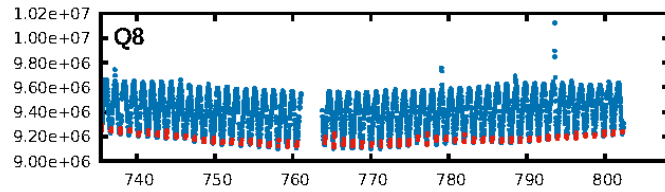
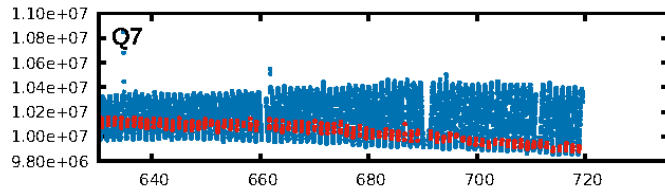
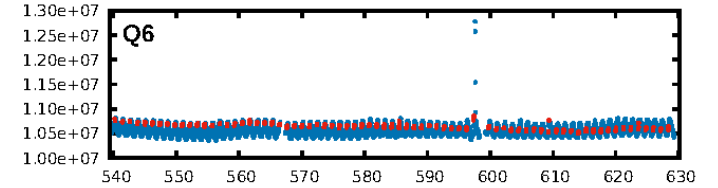
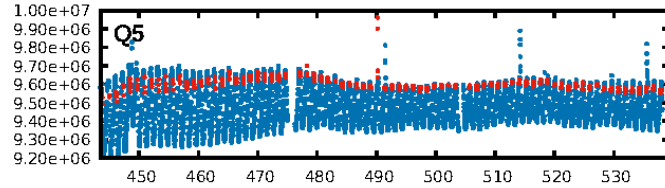
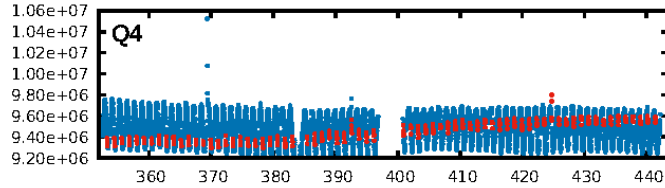
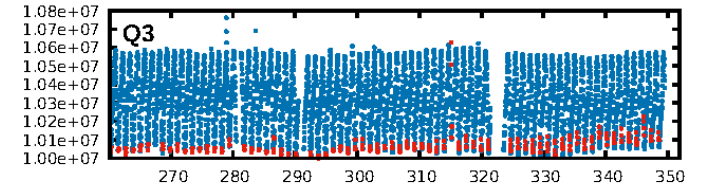
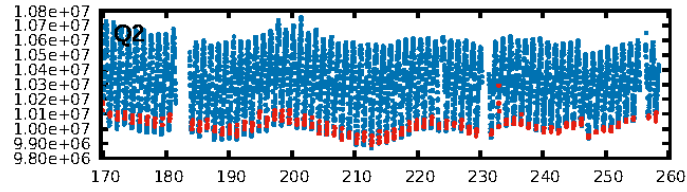
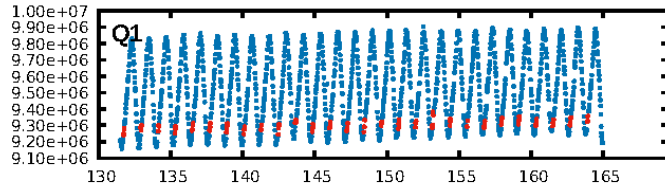
DV Fit Results:

Period = 1.19091 [0.01279] d
Epoch = 131.7530 [1.8347] BKJD
Rp/R* = 0.0005 [0.0522]
a/R* = 2.96 [466.38]
b = 0.96 [16.09]
Seff = 95.40 [8.94]
Teff = 797 [19] K
Rp = 0.02 [2.34] Re
a = 0.0167 [0.0010] AU
Ag = 75313.89 [14666648.54] [0.01]
Teffp = 20411 [993775] K [0.02]

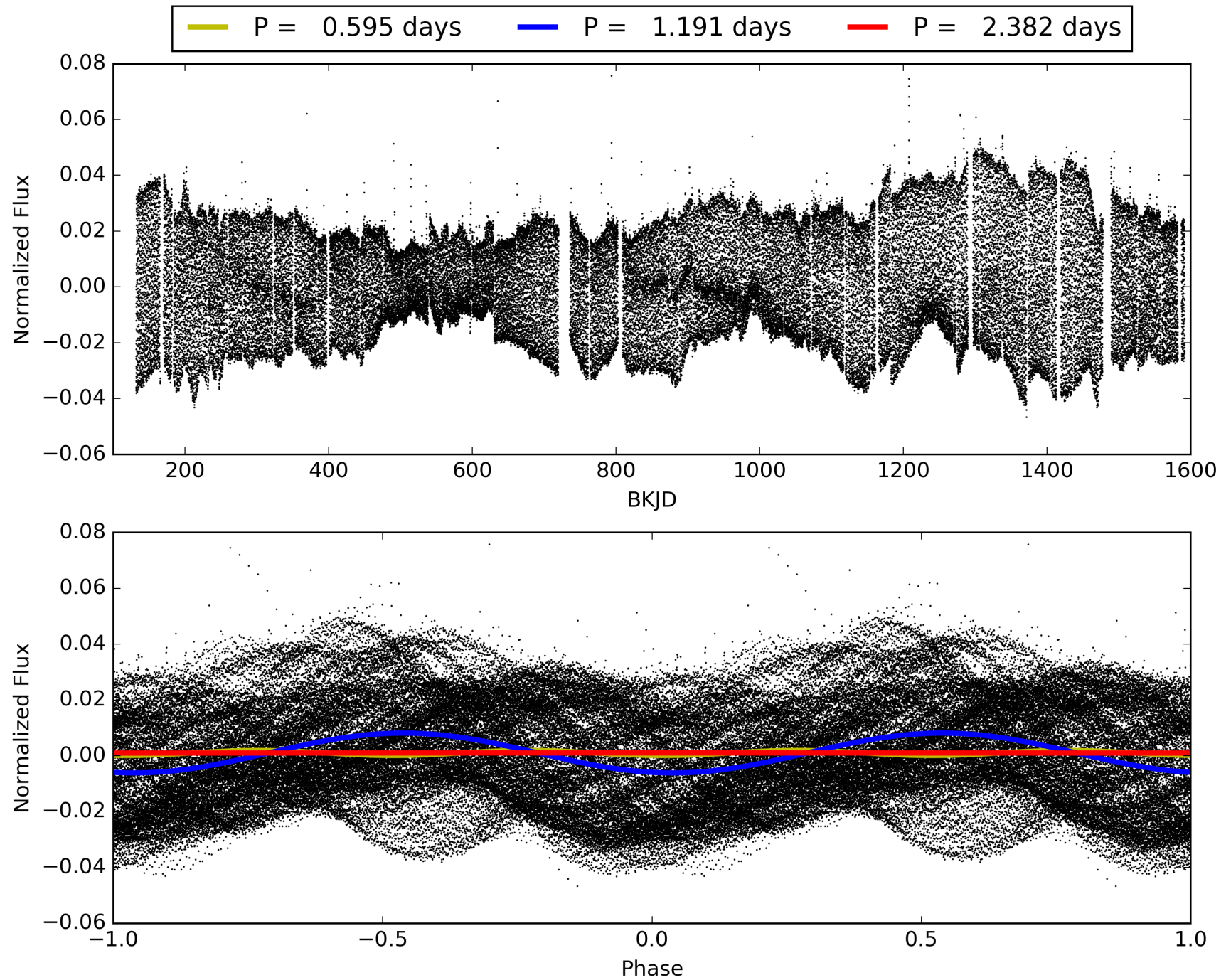
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.33e-13
RollingBand-fgt: 0.99 [1058/1069]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.090 arcsec [0.89 σ]
KicOffset-rm: 0.302 arcsec [2.68 σ]
OotOffset-st: 4/4/3/5 [16]
KicOffset-st: 4/4/3/5 [16]
DiffImageQuality-fgm: 0.69 [11/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 011091336-01, PDC Light Curves

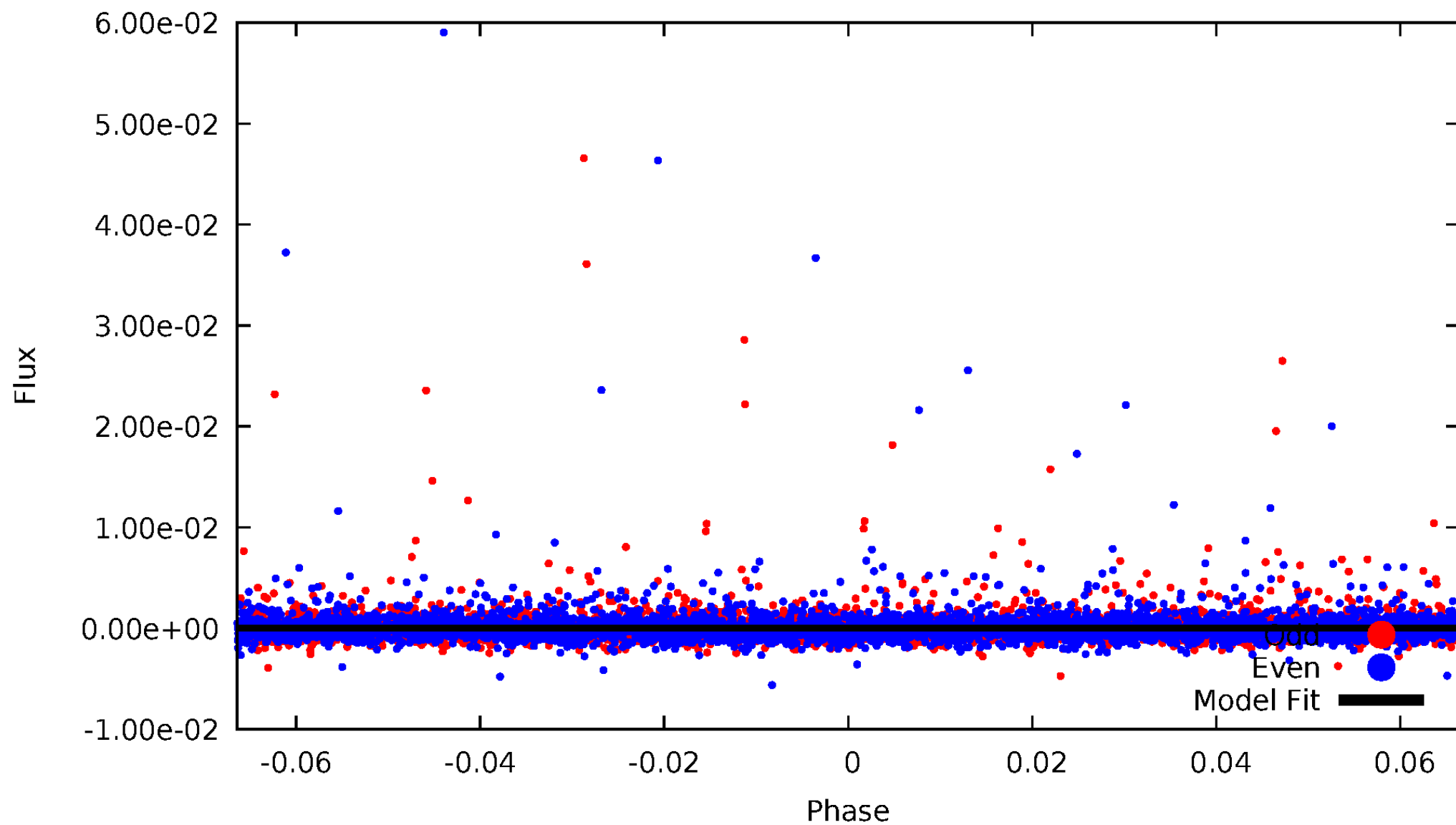


TCE 011091336-01



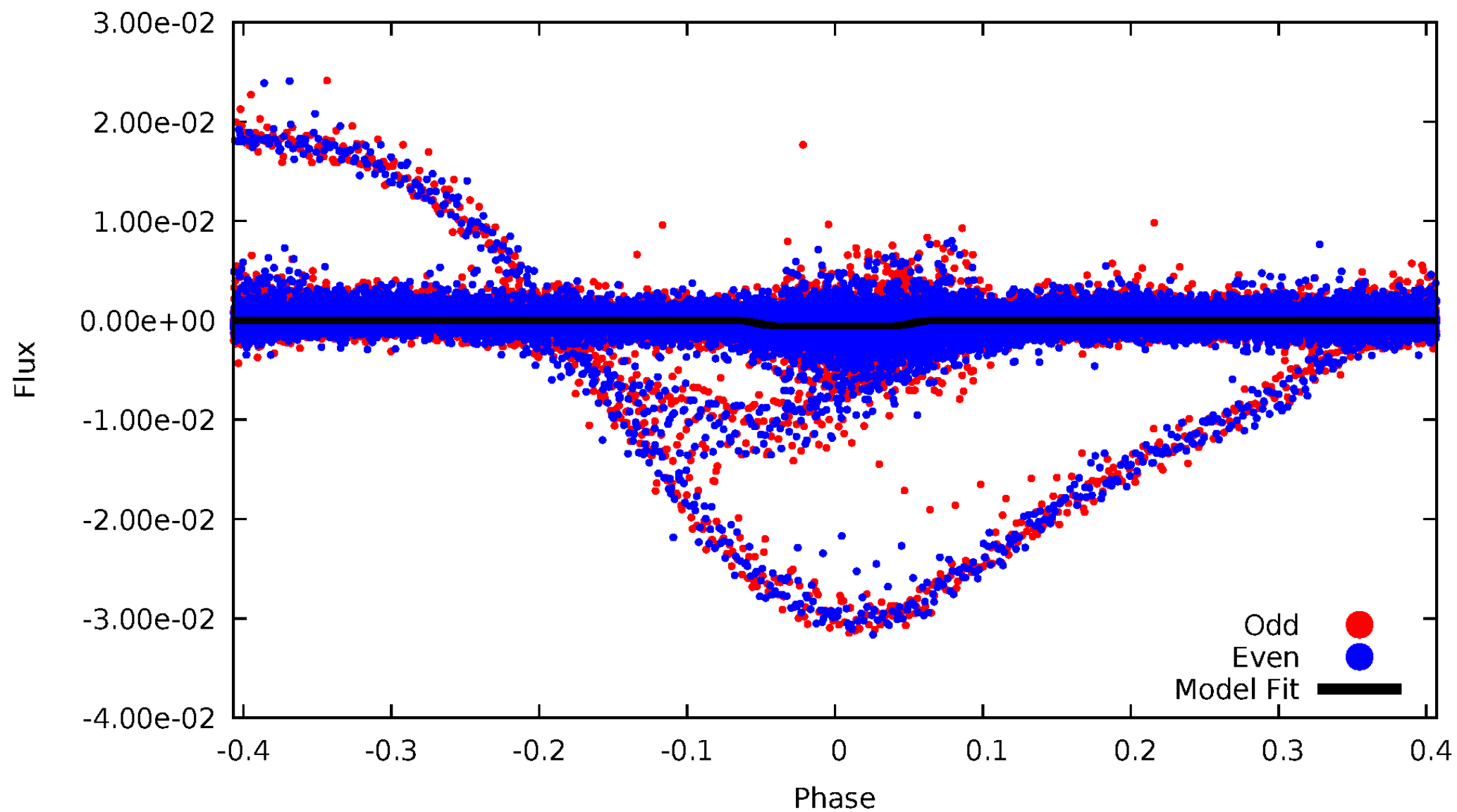
DV Odd/Even

TCE 011091336-01



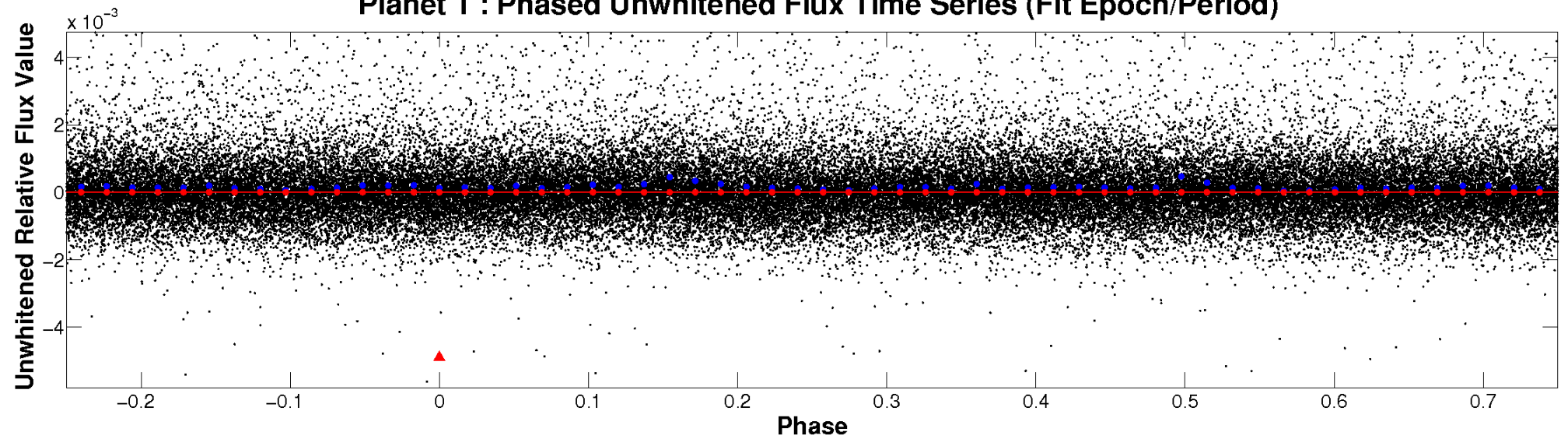
ALT Odd/Even

TCE 011091336-01

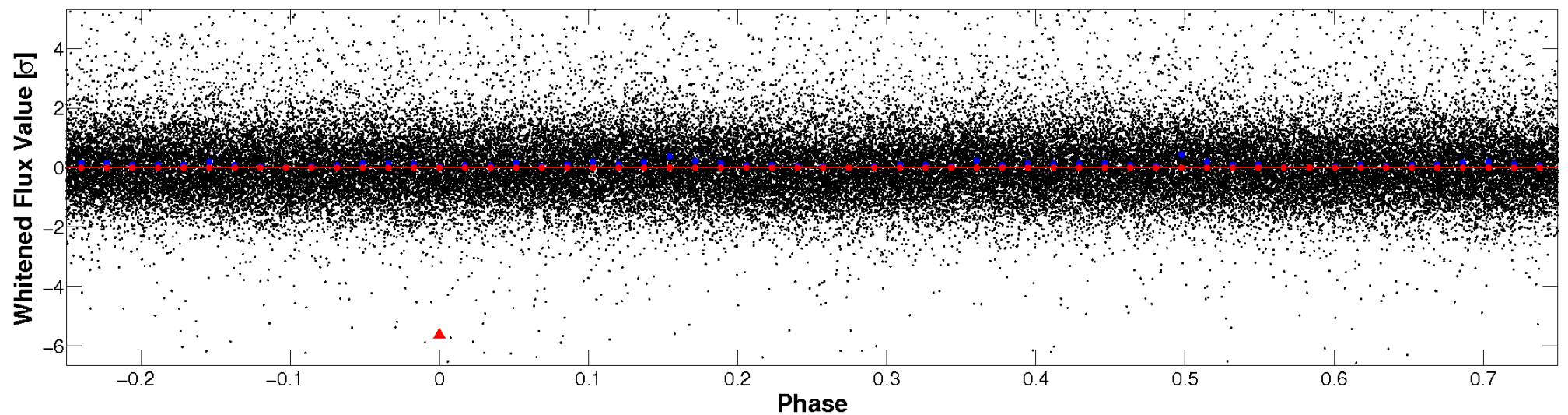


Non-Whitened Vs. Whitened Light Curve

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

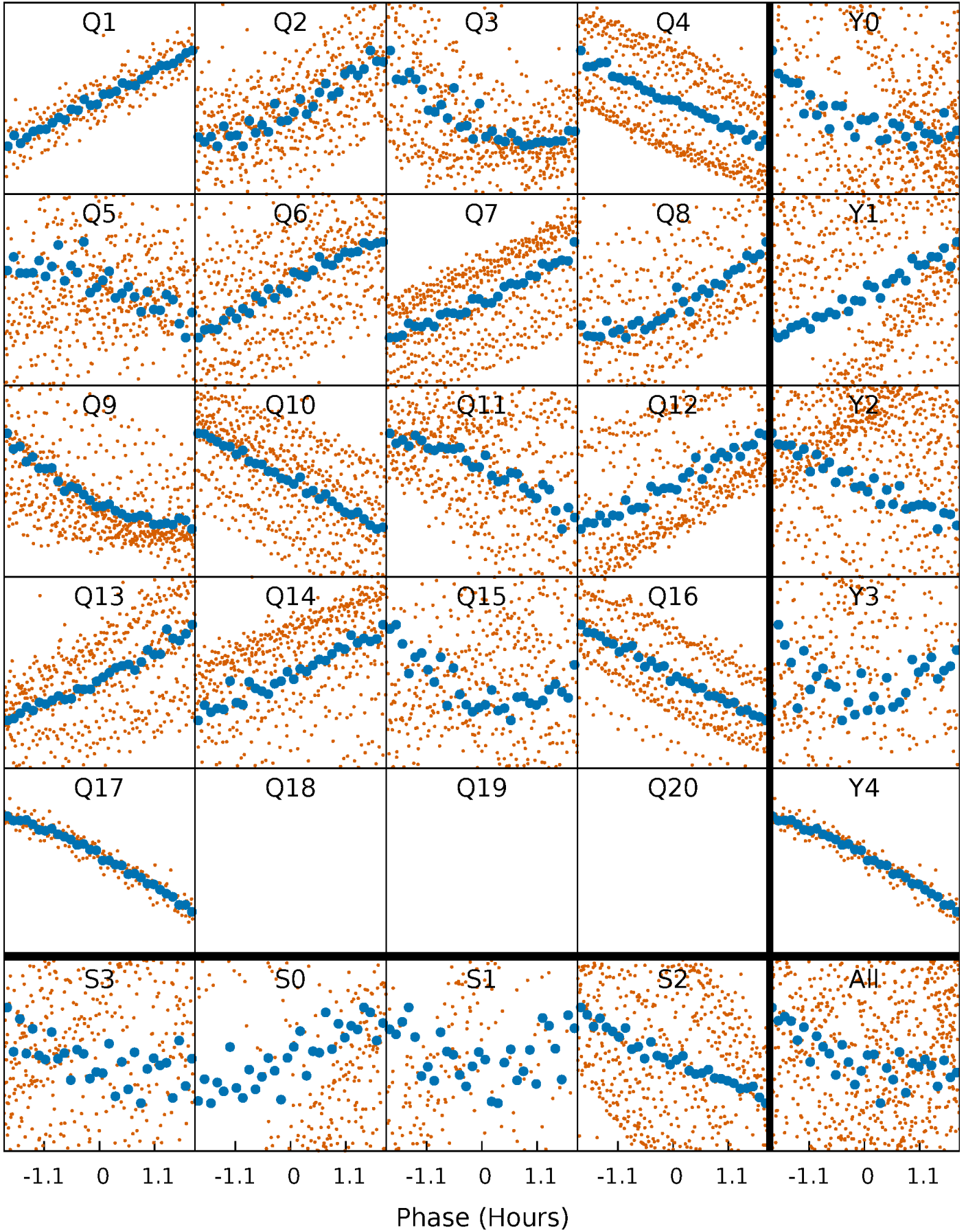


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



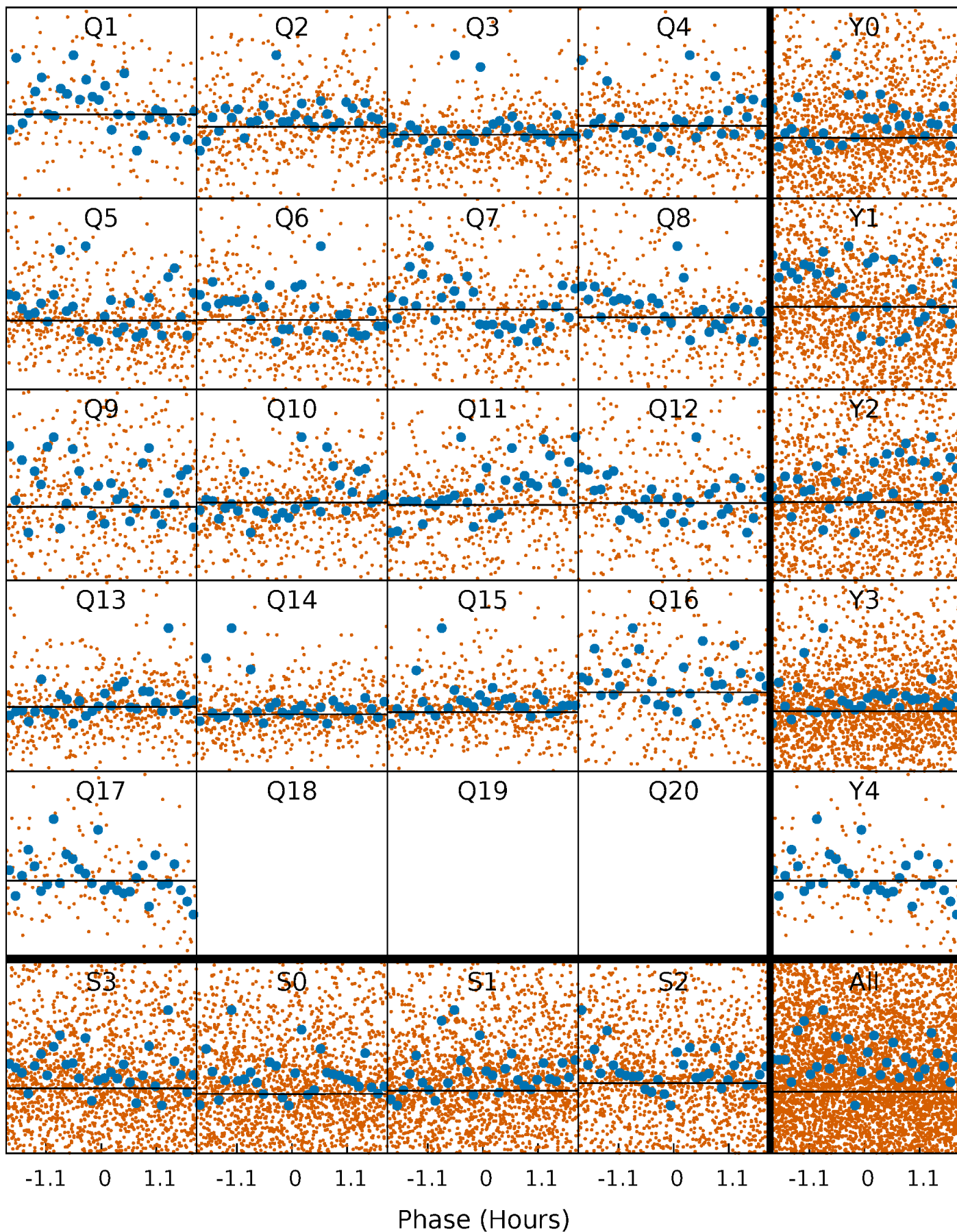
PDC Quarter-Phased Transit Curves

TCE 011091336-01 P= 1.190908 Days $T_0=131.753006$ (BKJD)



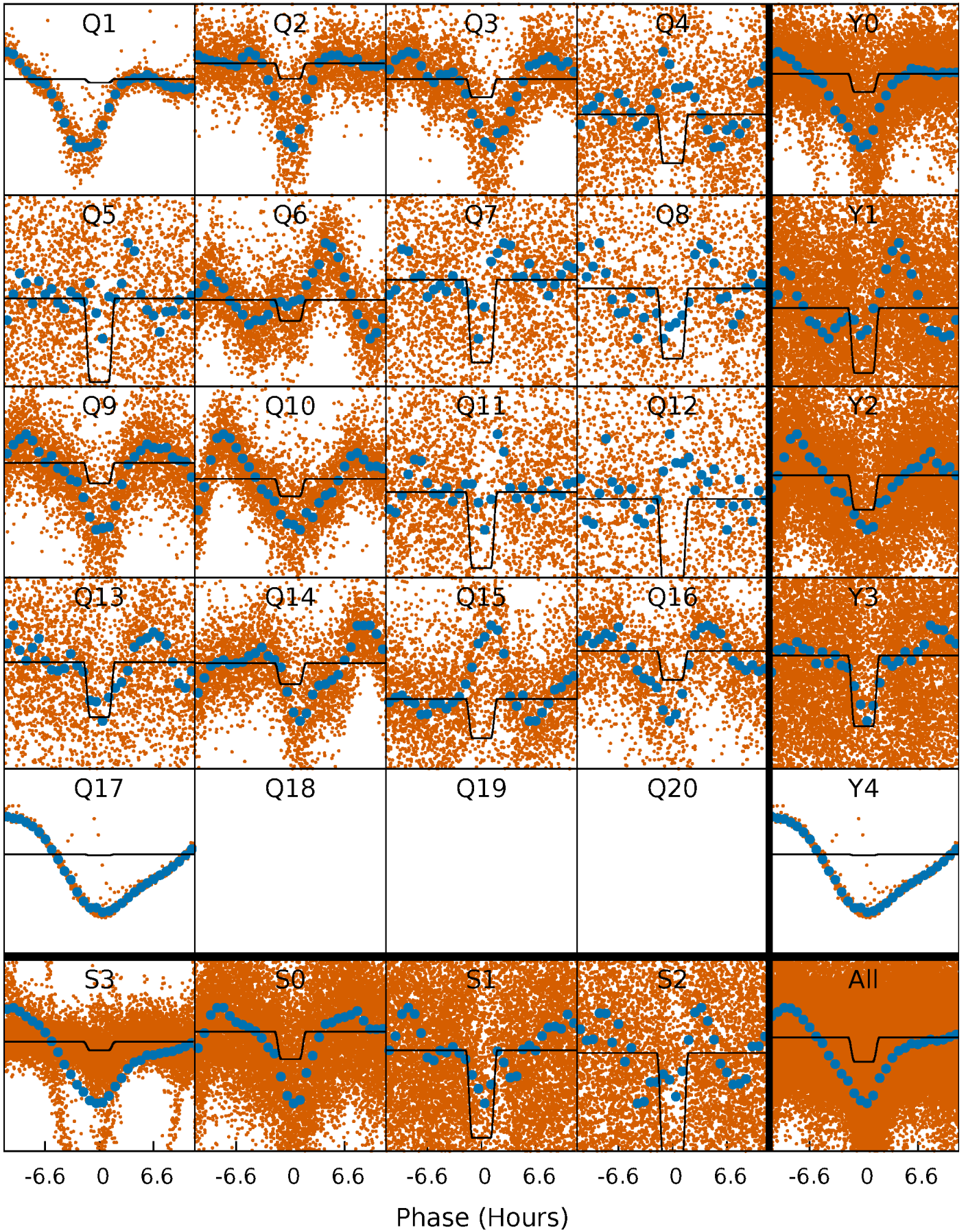
DV Quarter-Phased Transit Curves

TCE 011091336-01 P= 1.190908 Days $T_0=131.753006$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

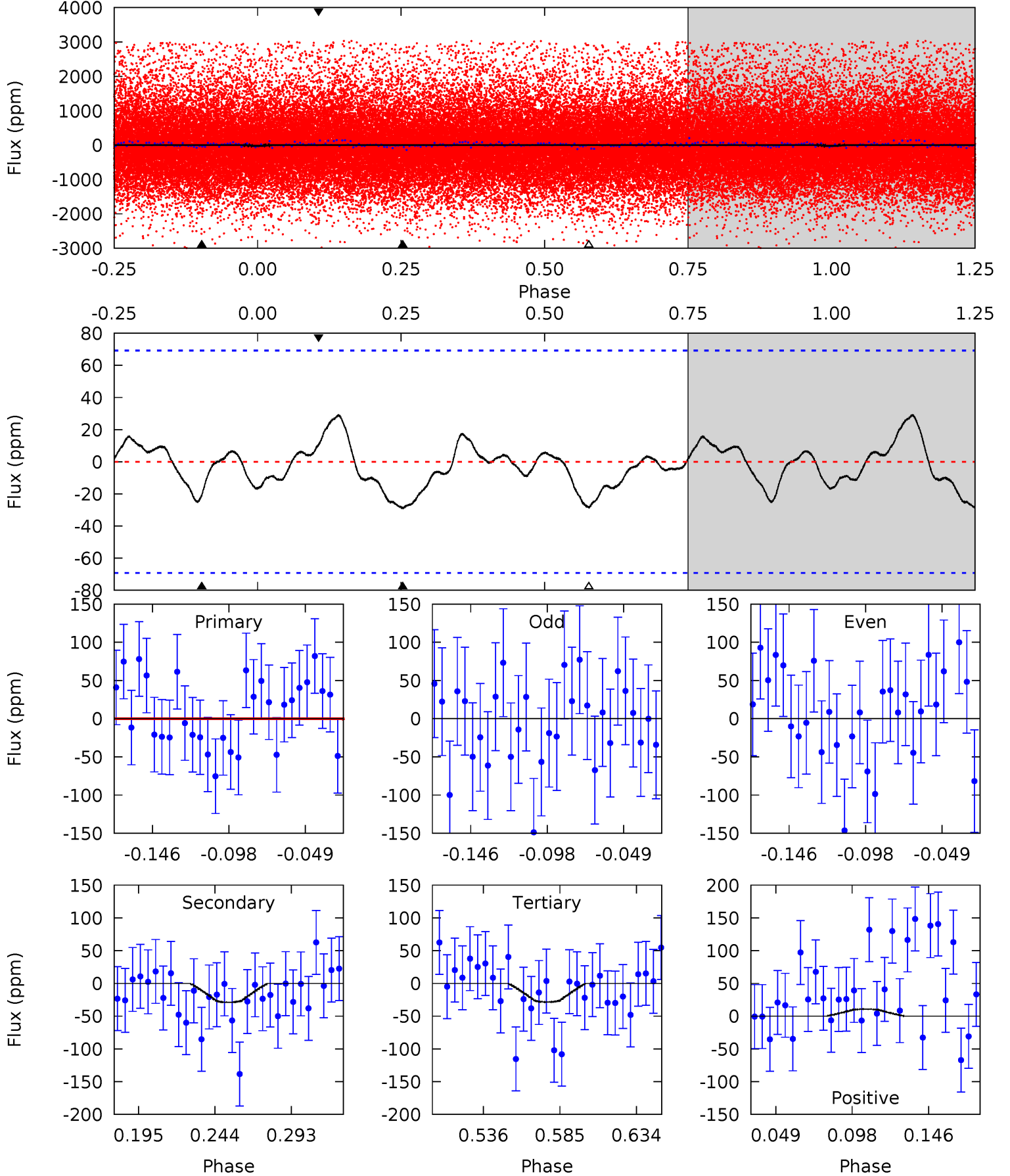
TCE 011091336-01 P= 1.191212 Days $T_0=131.638889$ (BKJD)



DV Model-Shift Uniqueness Test

011091336-01, P = 1.190908 Days, E = 130.562098 Days

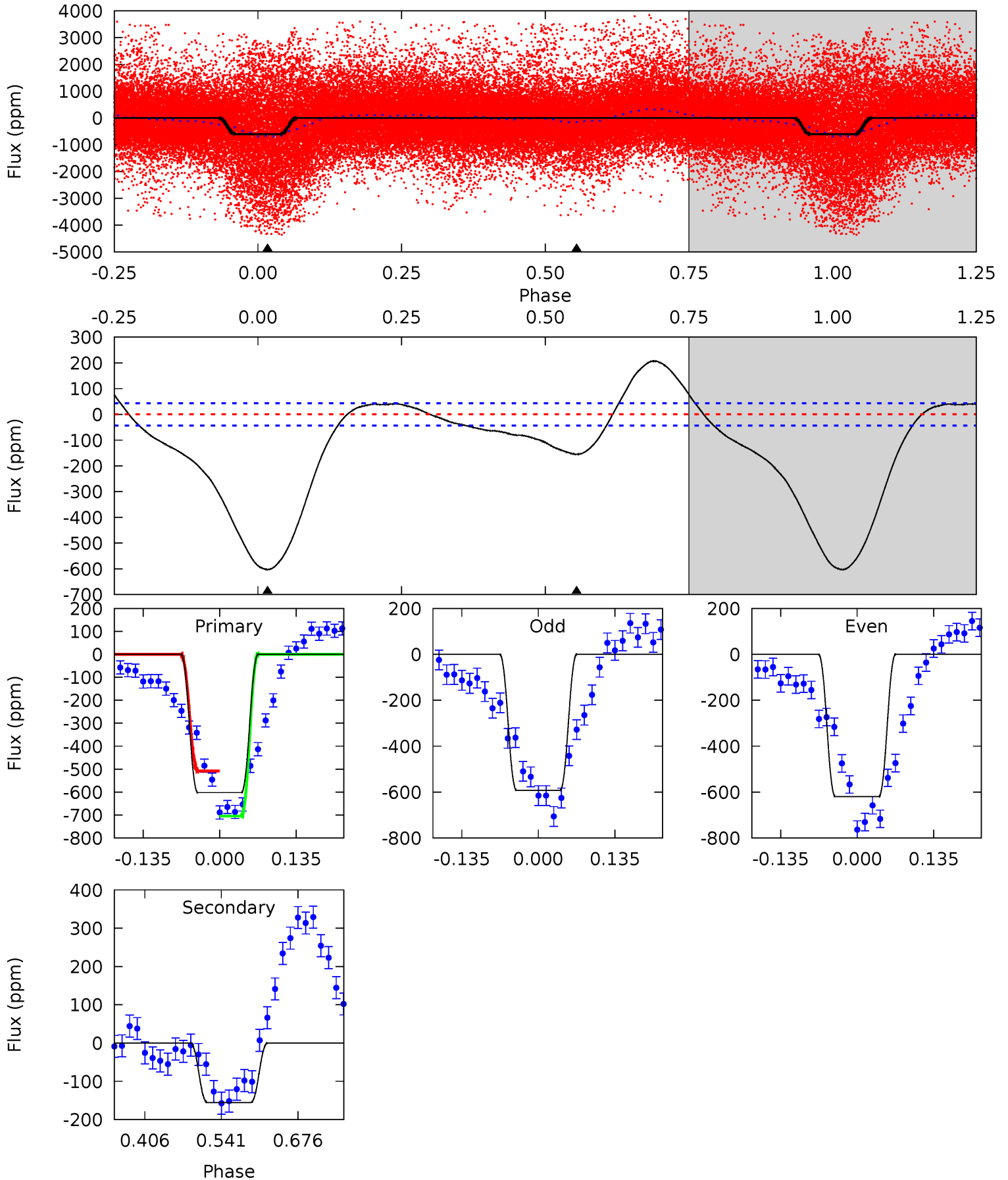
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.44	1.97	1.94	0.72	4.71	1.97	0.77	-0.50	0.72	0.03	1.25	1.60	-6.93	0.50	1.43



Alt Model-Shift Uniqueness Test

011091336-01, P = 1.191212 Days, E = 130.447677 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
62.8	16.2	0	0	4.50	1.49	8.76	62.8	62.8	16.2	16.2	1.43	2.73	0.26	10.2



Stellar Parameters For KIC 011091336

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3639^{+43}_{-51}	$4.850^{+0.033}_{-0.033}$	$-0.200^{+0.100}_{-0.100}$	$0.411^{+0.030}_{-0.033}$	$0.436^{+0.028}_{-0.037}$	$8.863^{+1.559}_{-1.327}$
	+1%/-1%	+1%/-1%	+50%/-50%	+7%/-8%	+6%/-8%	+18%/-15%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 011091336-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-29 ± 15	$1.68^{+1.75}_{-1.25}$	1112^{+23}_{-21}	2106^{+856}_{-3563}	$1.526^{+17.778}_{-1.248}$
Alt.	-155 ± 10	$2.09^{+1.78}_{-1.51}$	1112^{+21}_{-22}	2503^{+1118}_{-374}	$5.466^{+68.087}_{-3.884}$

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

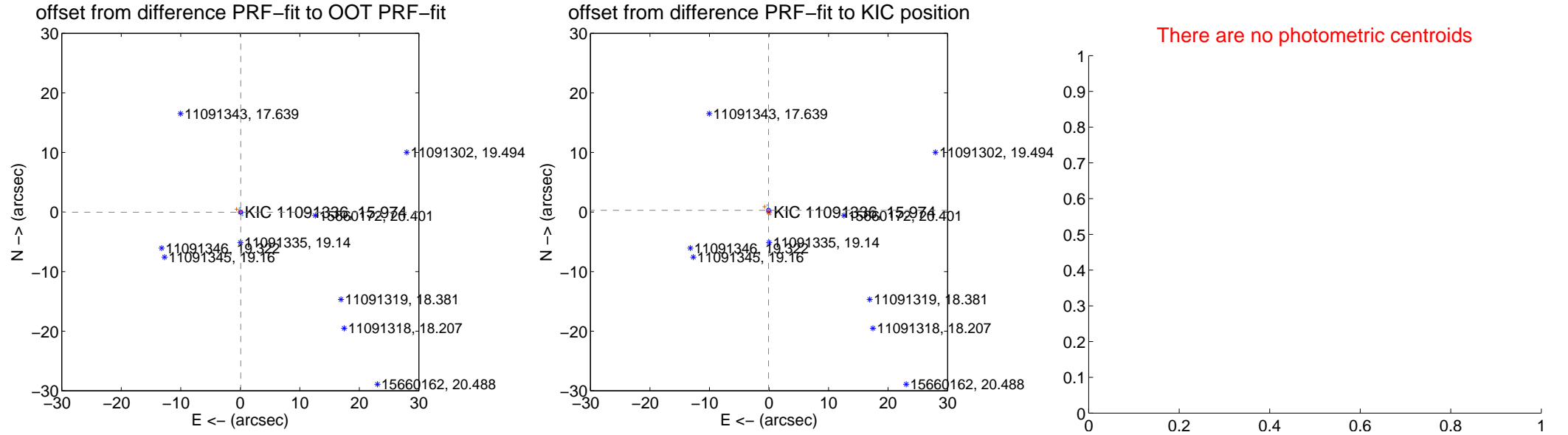
DV Centroid Data

Supplemental centroid analysis for 011091336-01. Kepler magnitude: 15.97. Transit SNR 0.01

There are 11 quarters with good PRF difference image offsets

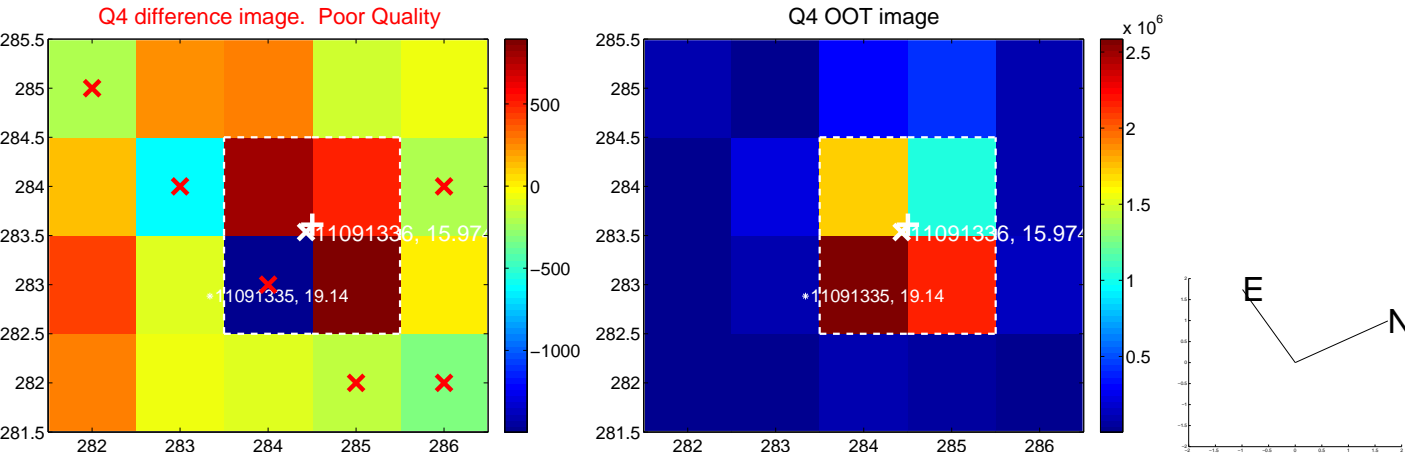
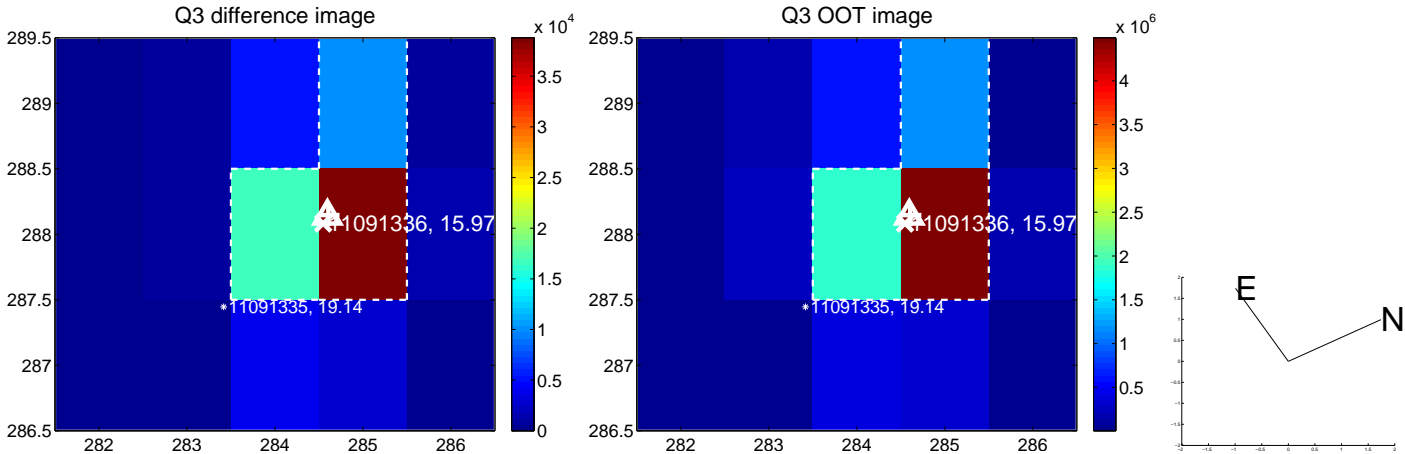
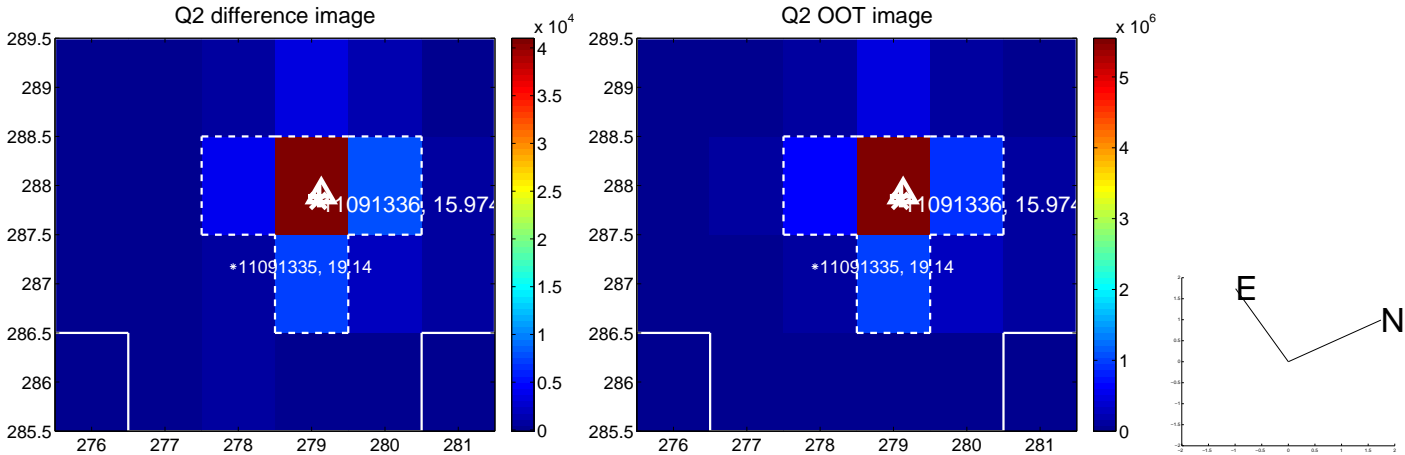
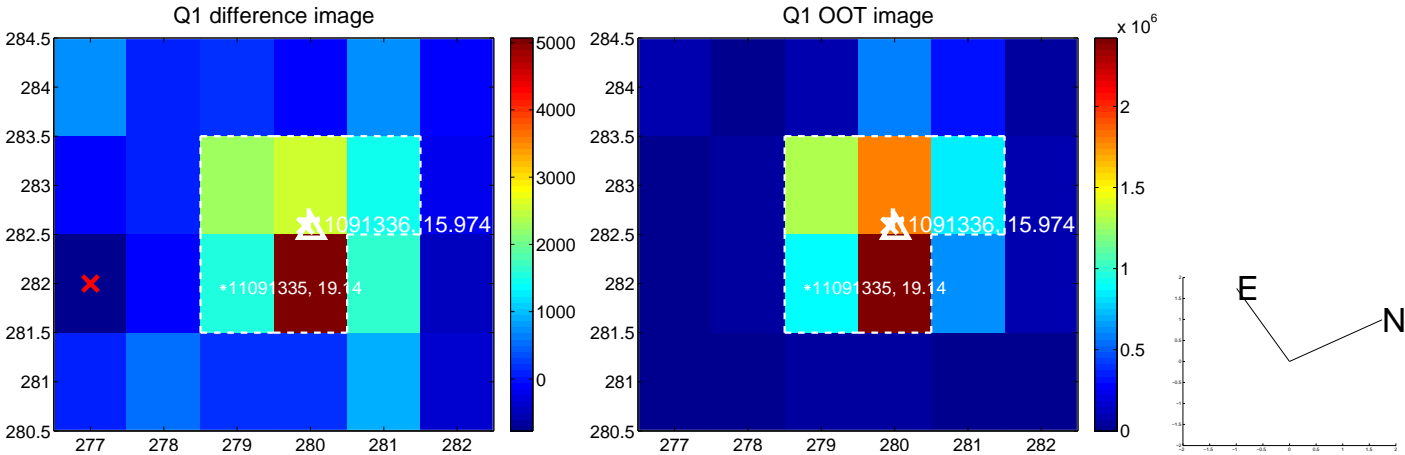
The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.090 ± 0.101	0.89	-0.082 ± 0.088	-0.037 ± 0.100
PRF-fit source offset from KIC position	0.302 ± 0.113	2.68	0.072 ± 0.085	0.293 ± 0.107
photometric centroid source offset	—	—	—	—

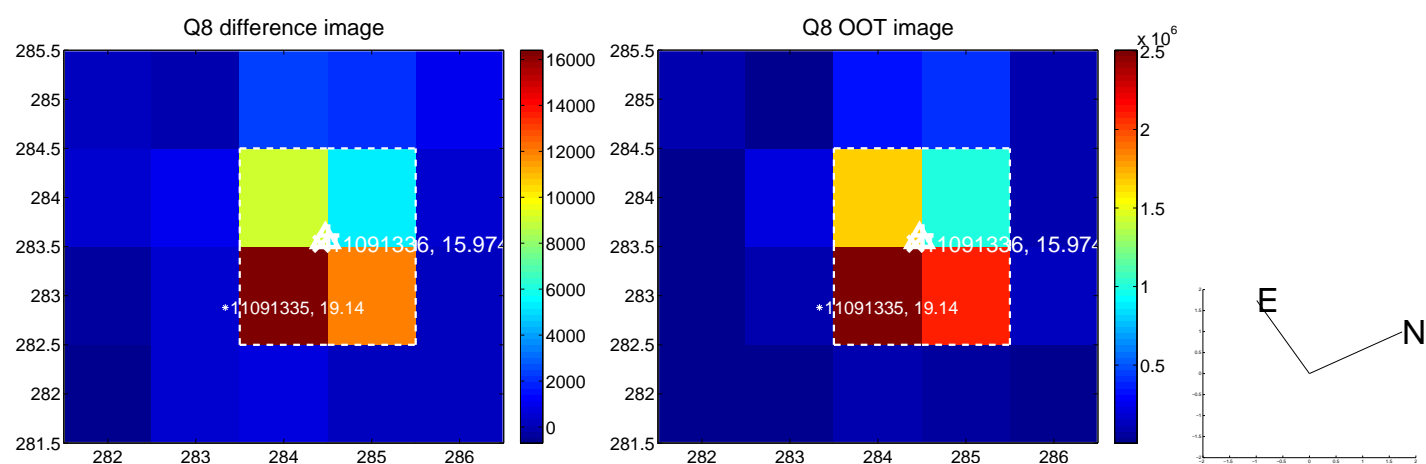
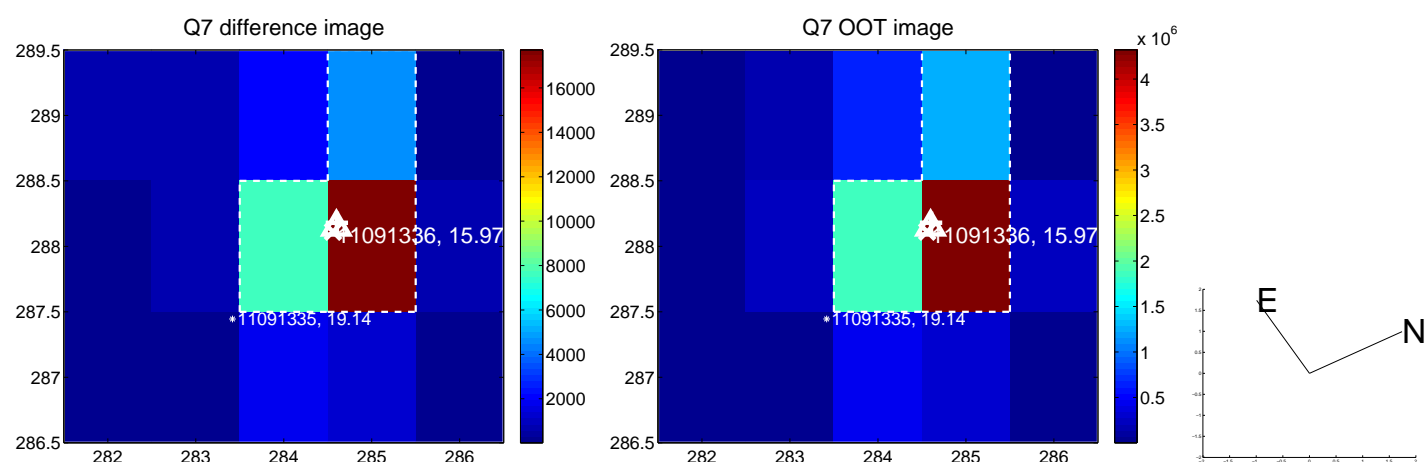
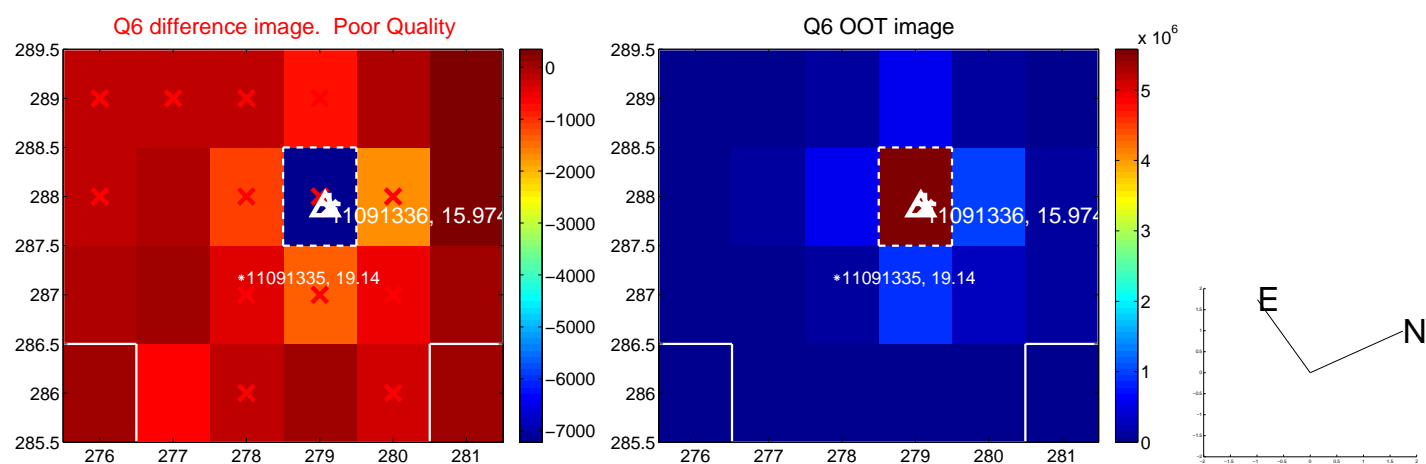
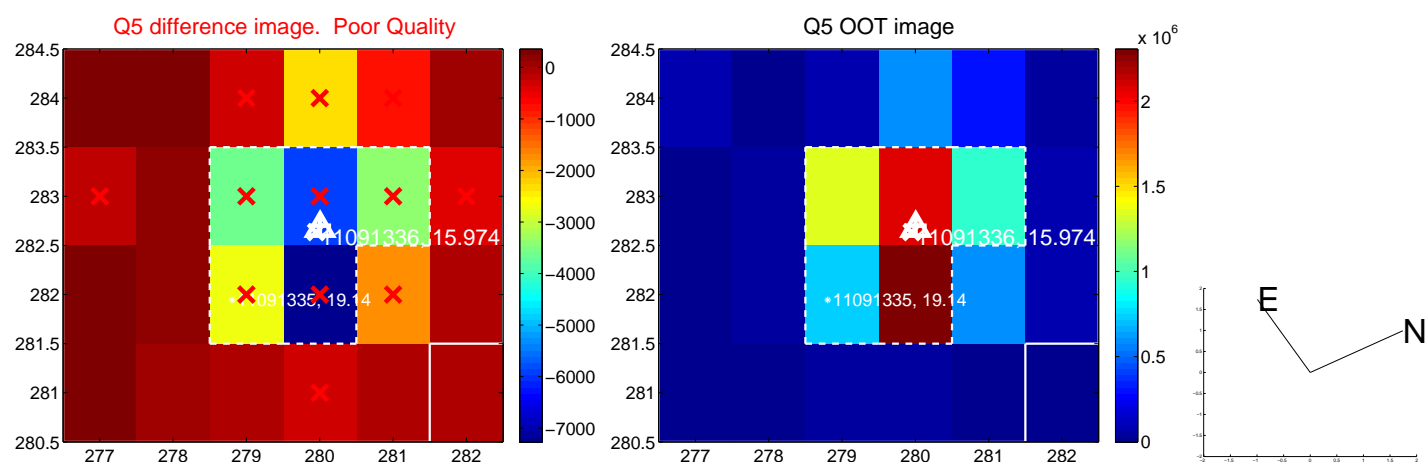


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

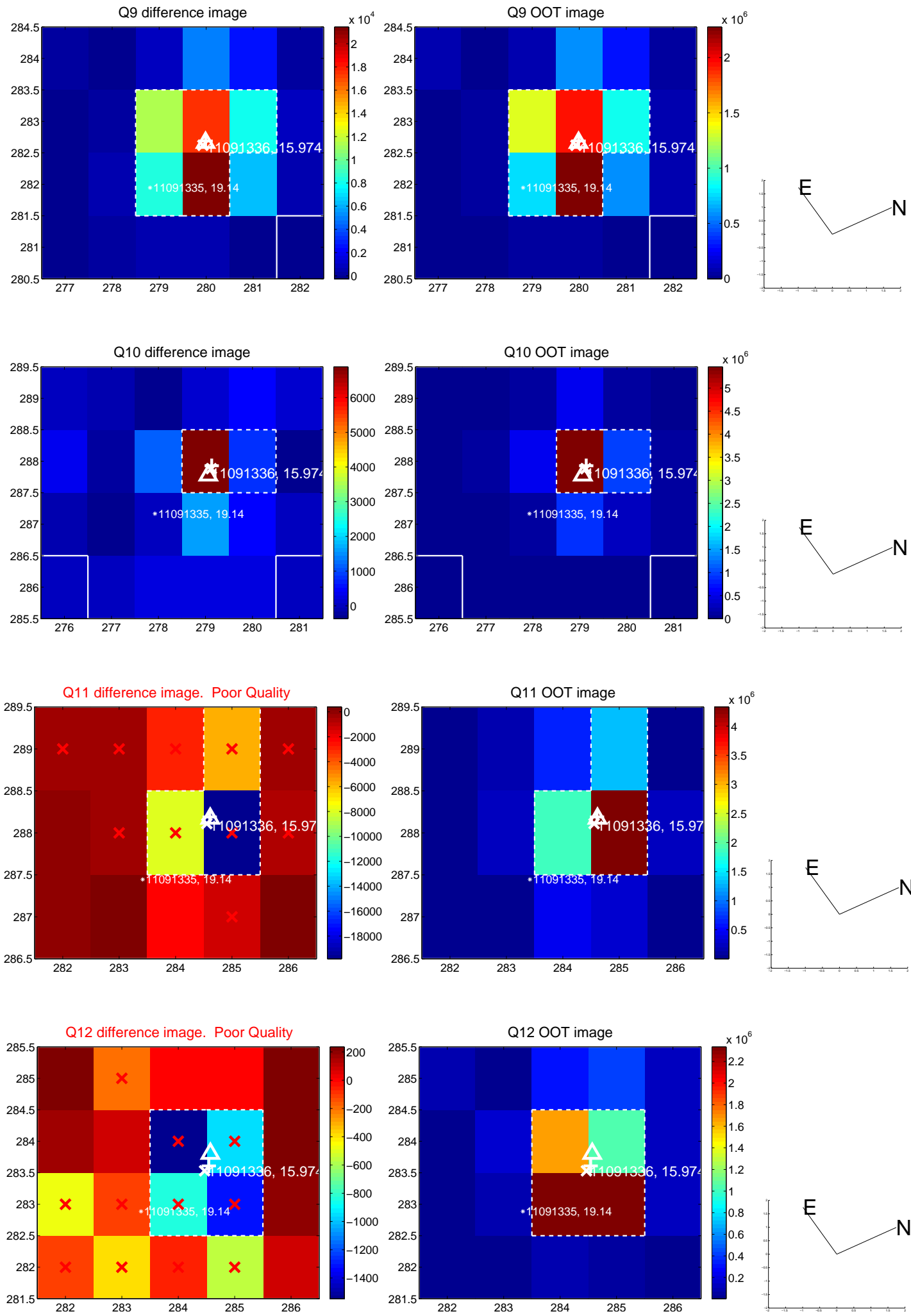
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



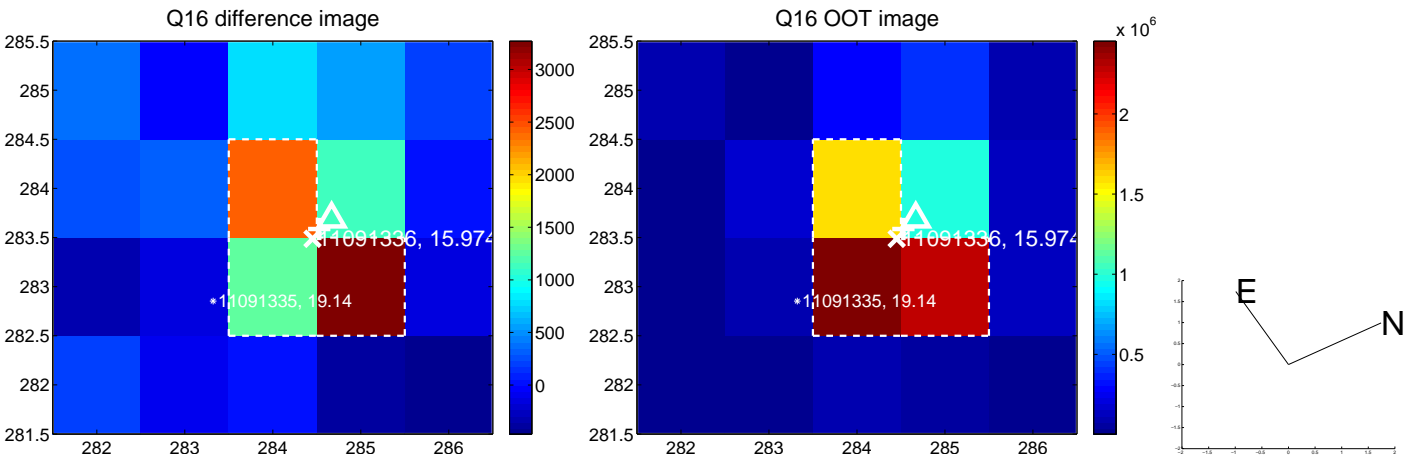
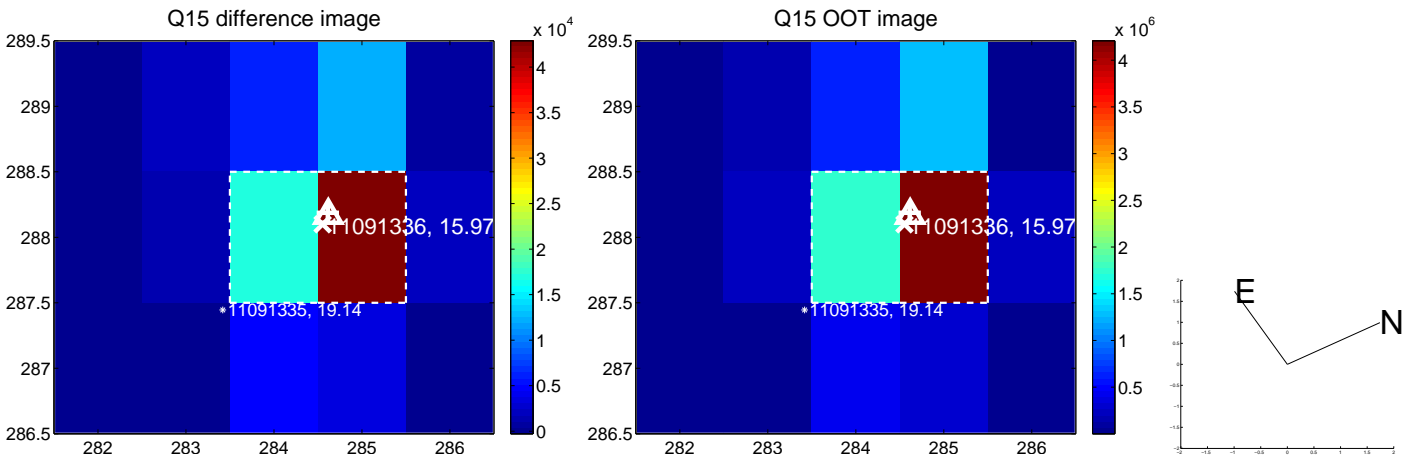
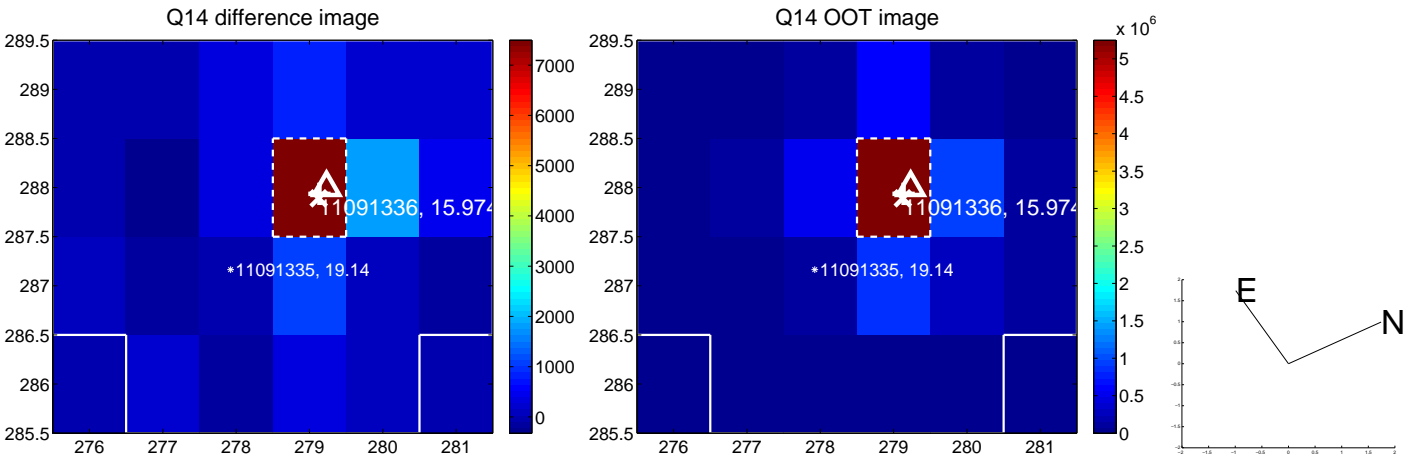
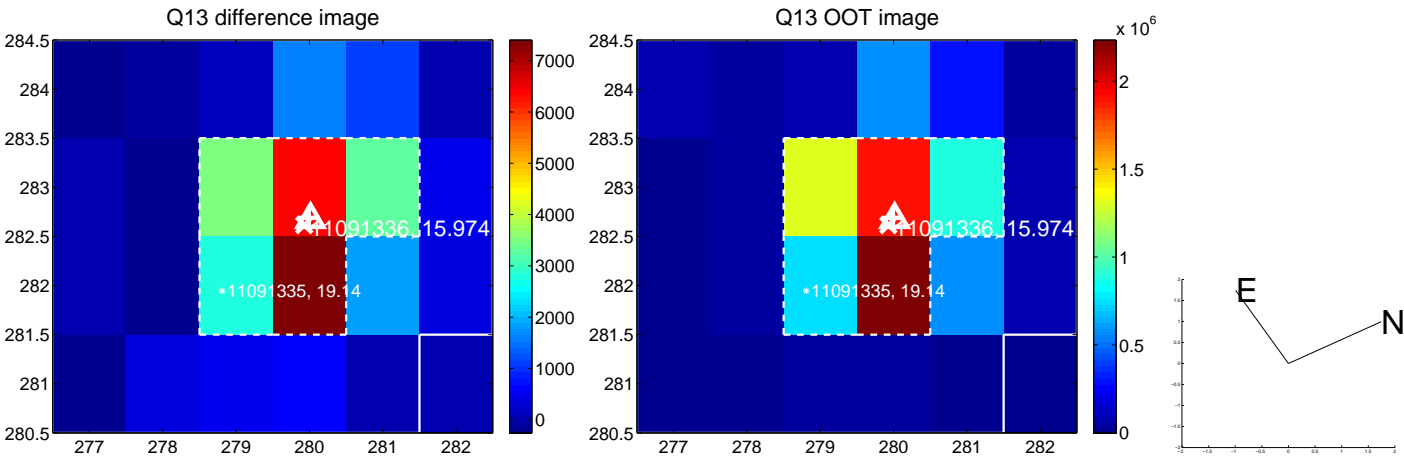
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



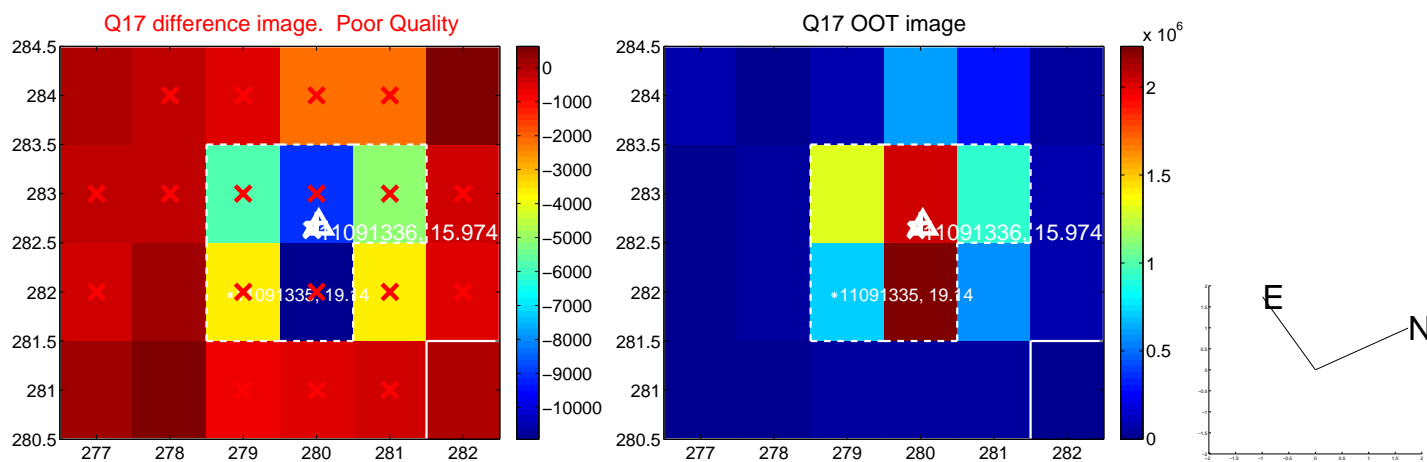
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.



UKIRT Image

Declination

