

KIC 011286311

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})
011286311-01	OBS	7432.01	13.153472	143.346048	105.0	10.589	8.4	9.1	1.01	5443	1.26	74.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011286311-01	OBS	PC	0.64	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.

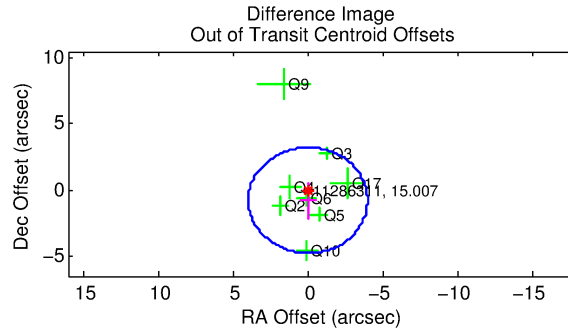
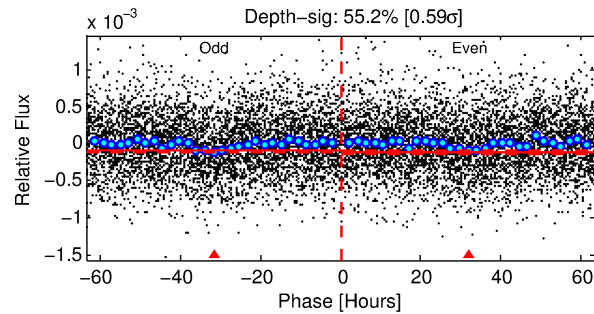
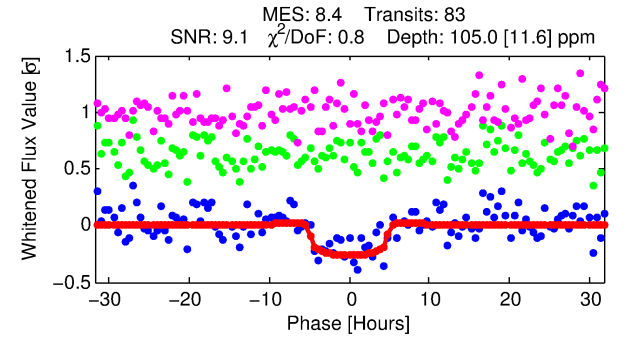
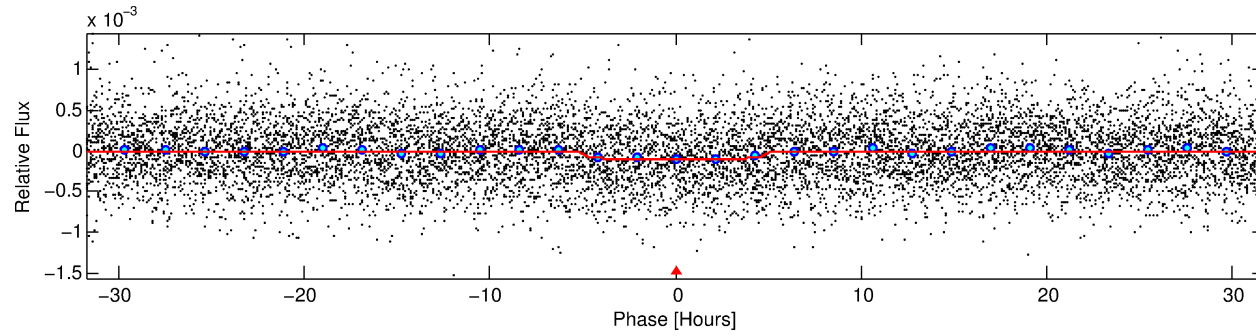
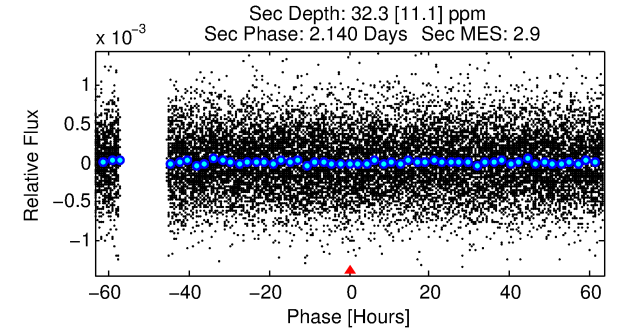
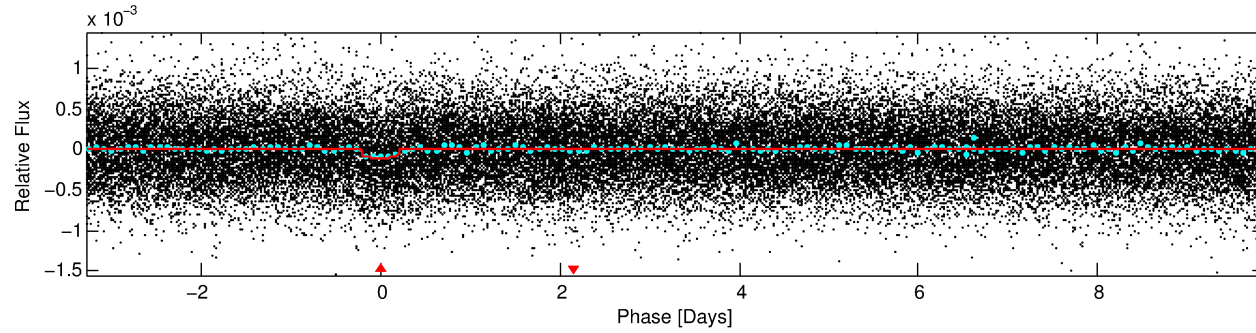
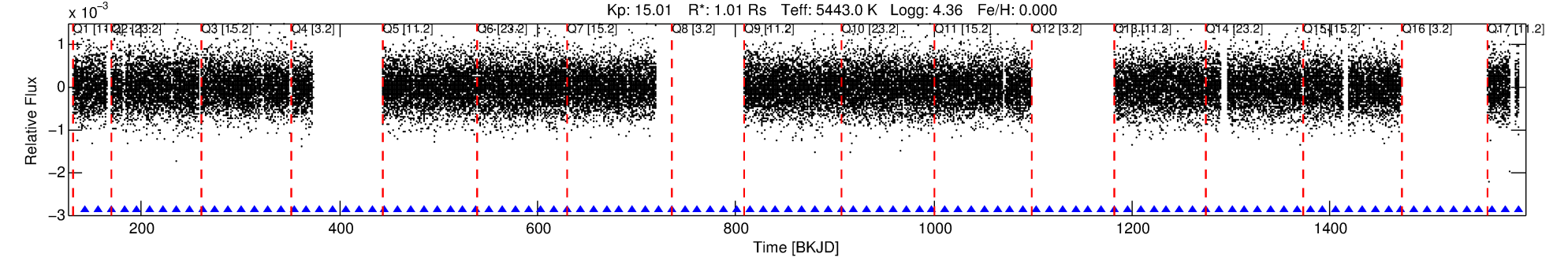
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011286311-01

No Significant Match Found

DV One-Page Summary

KIC: 11286311 Candidate: 1 of 1 Period: 13.153 d
KOI: K07432.01 Corr: 0.910



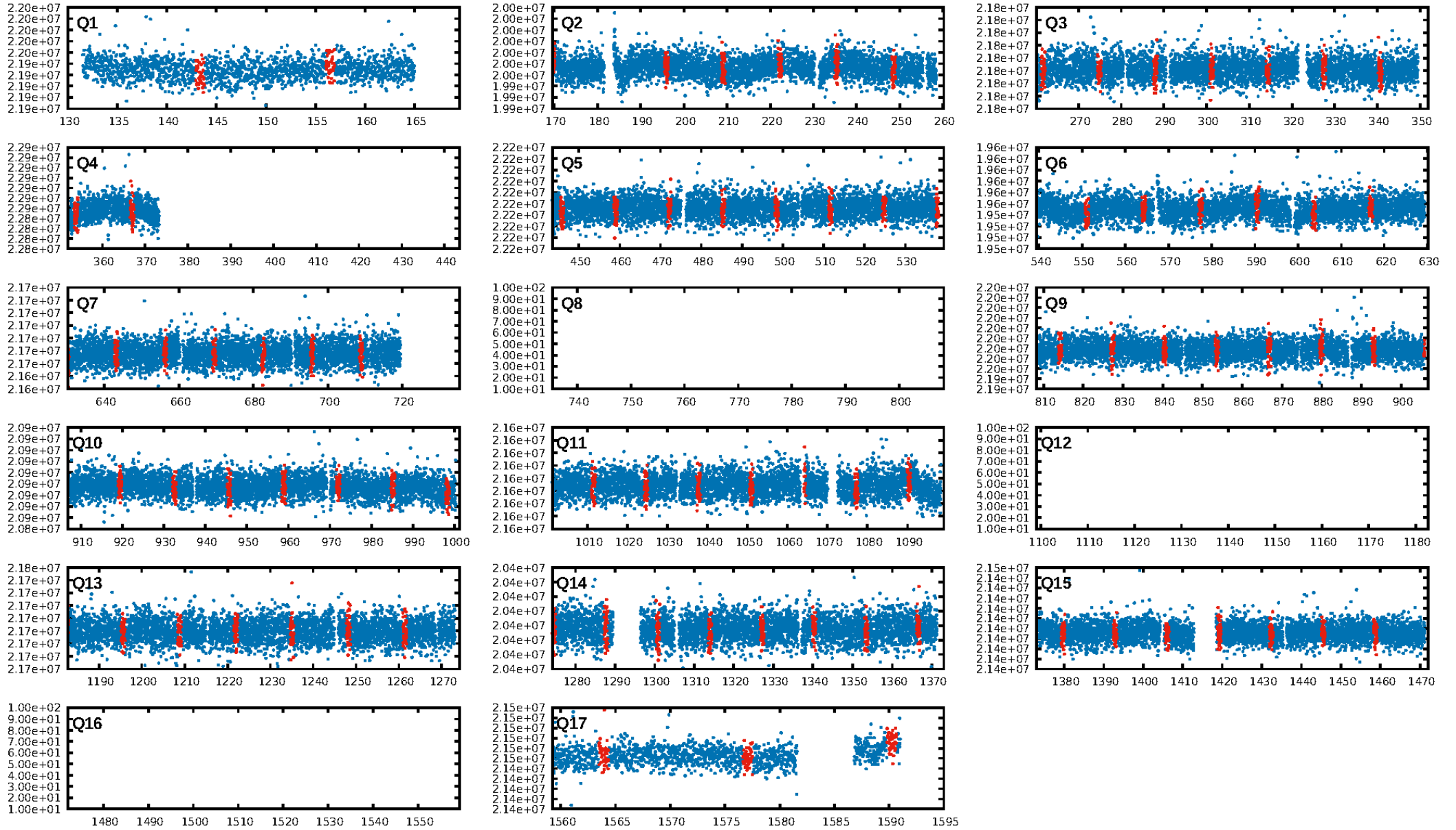
DV Fit Results:

Period = 13.15347 [0.00032] d
Epoch = 143.3460 [0.0196] BKJD
Rp/R* = 0.0114 [0.0026]
a/R* = 4.23 [4.04]
b = 0.91 [0.19]
Seff = 74.90 [30.13]
Teff = 750 [75] K
Rp = 1.26 [0.47] Re
a = 0.1033 [0.0266] AU
Ag = 119.85 [82.49] [1.44 σ]
Teffp = 3838 [560] K [5.46 σ]

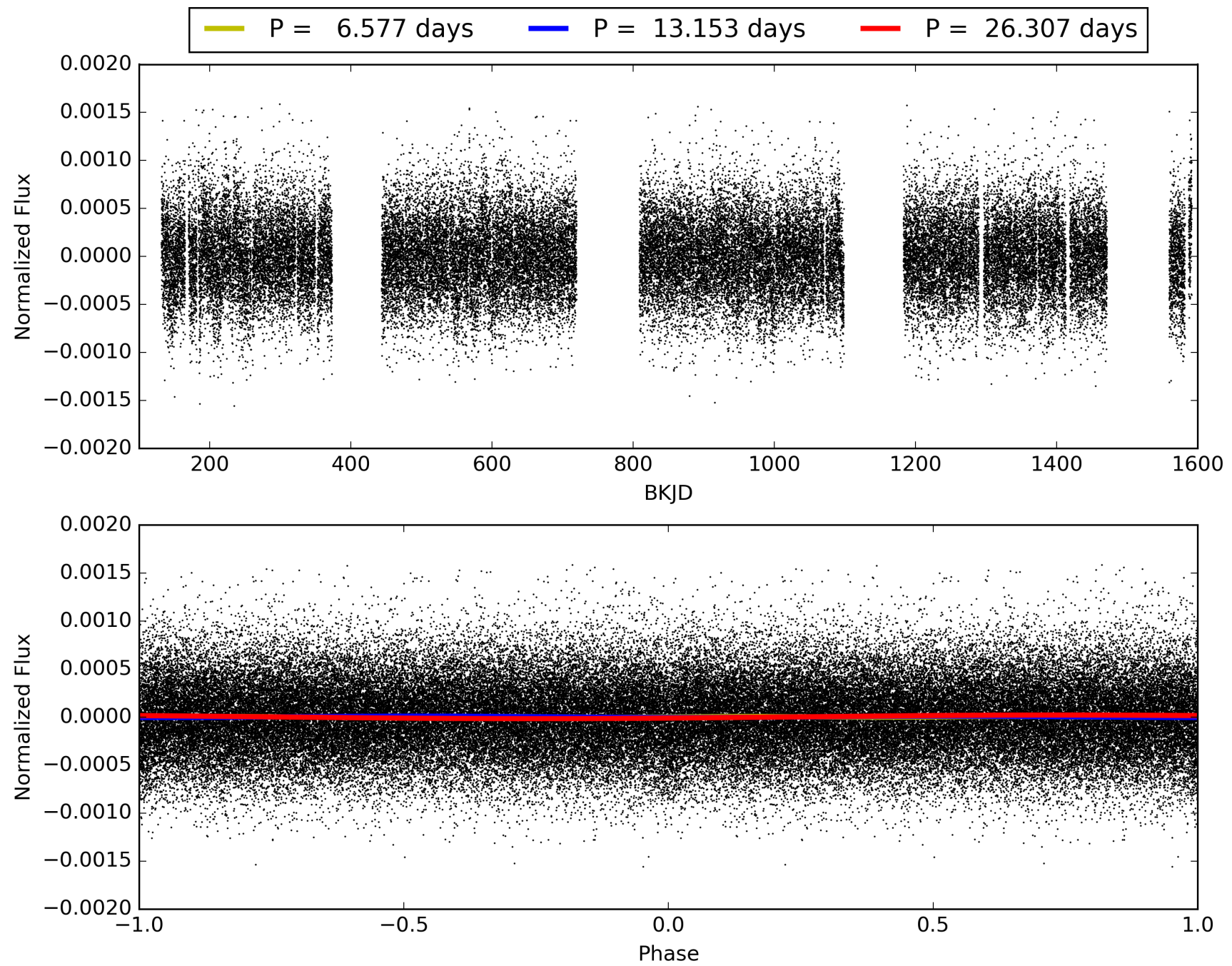
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 80.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.14e-16
RollingBand-fgt: 1.00 [76/76]
GhostDiagnostic-chr: 10.43
Centroid-sig: 45.2%
Centroid-so: 1.249 arcsec [0.78 σ]
OotOffset-rm: 0.780 arcsec [0.59 σ]
KicOffset-rm: 0.072 arcsec [0.07 σ]
OotOffset-st: 3/1/1/3 [8]
KicOffset-st: 3/1/1/3 [8]
DiffImageQuality-fgm: 0.62 [5/8]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011286311-01, PDC Light Curves

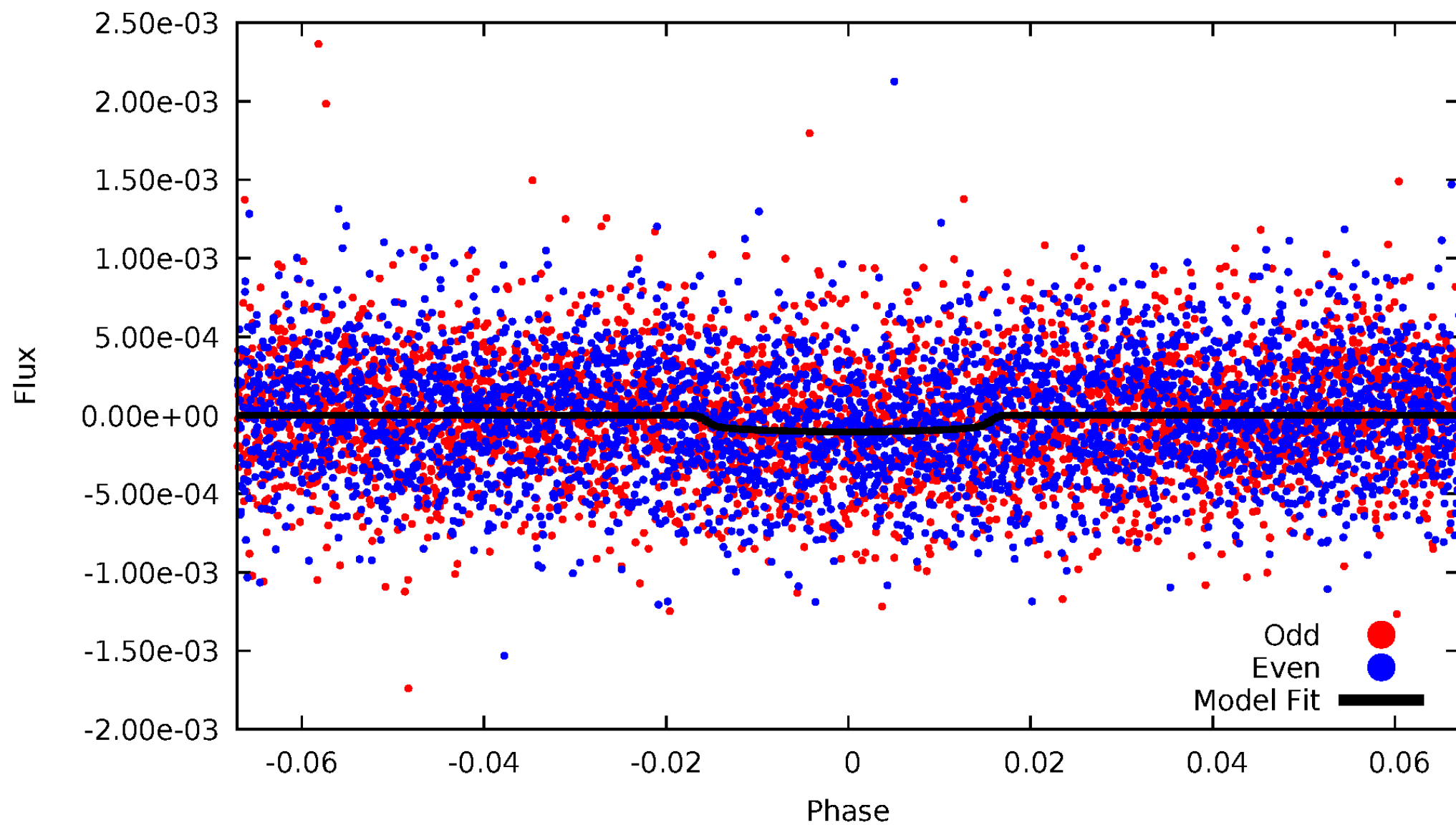


TCE 011286311-01



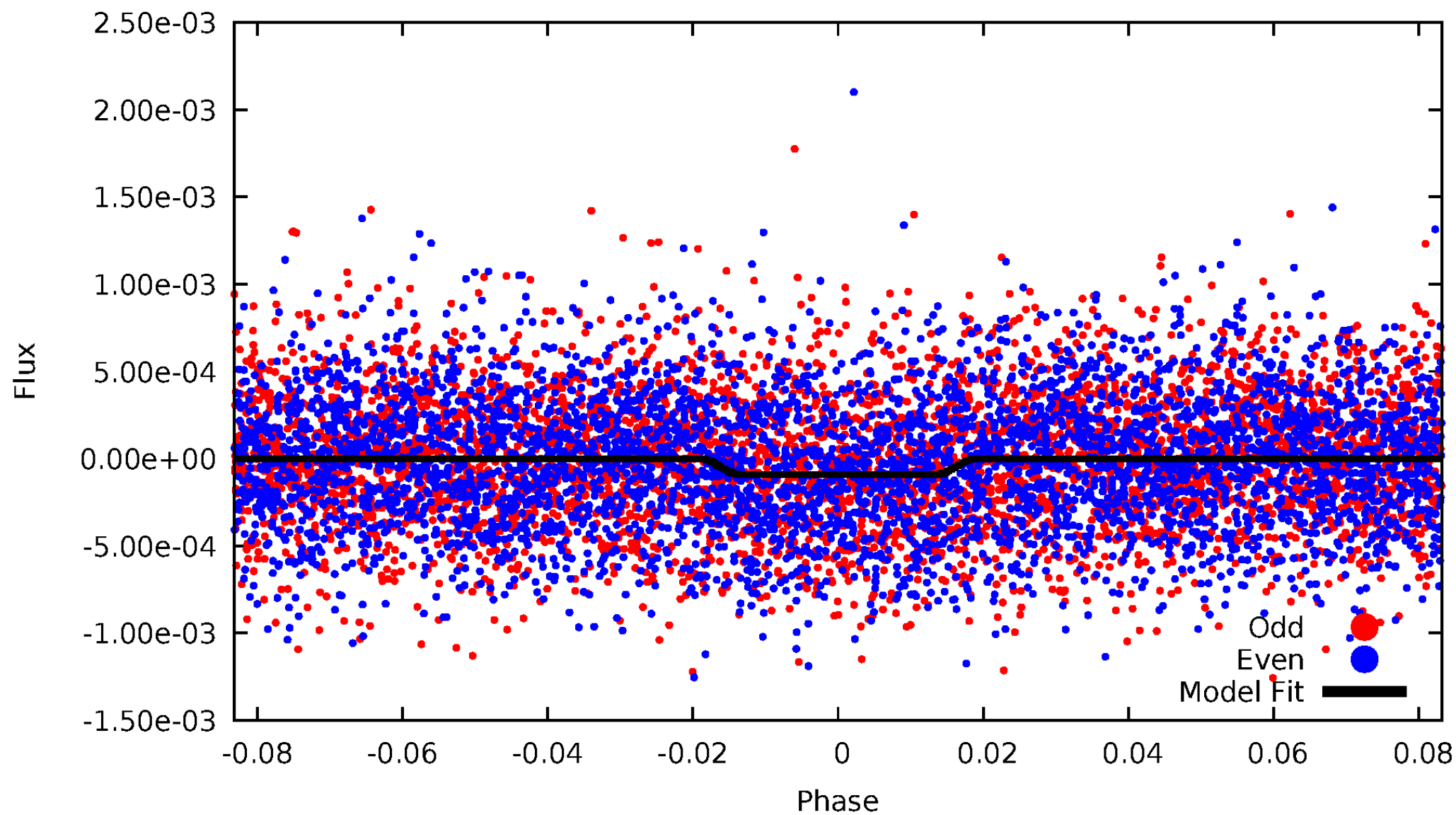
DV Odd/Even

TCE 011286311-01



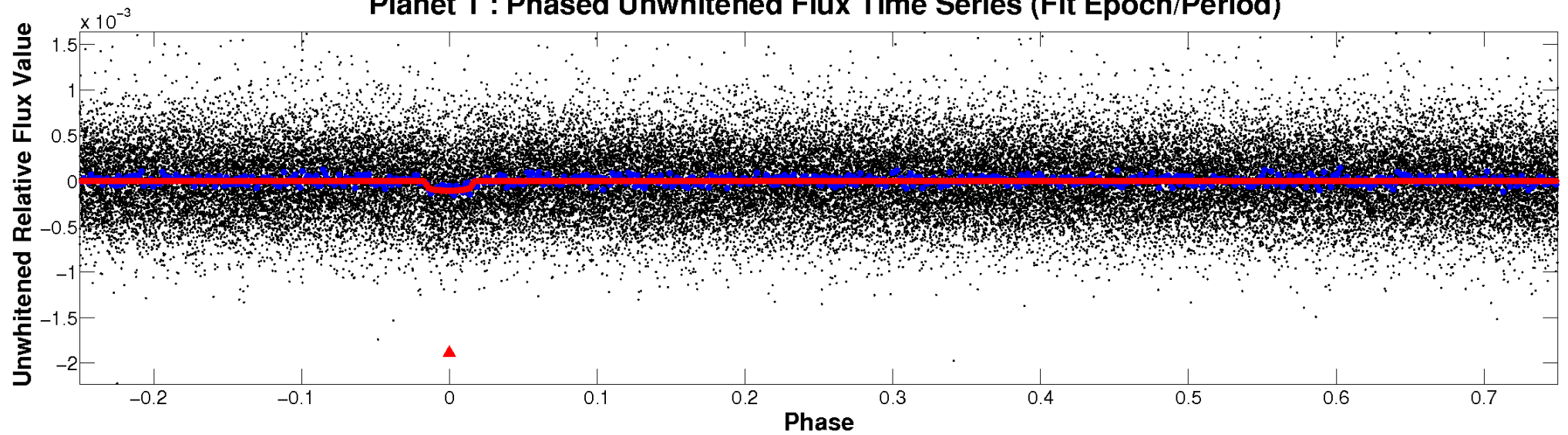
ALT Odd/Even

TCE 011286311-01

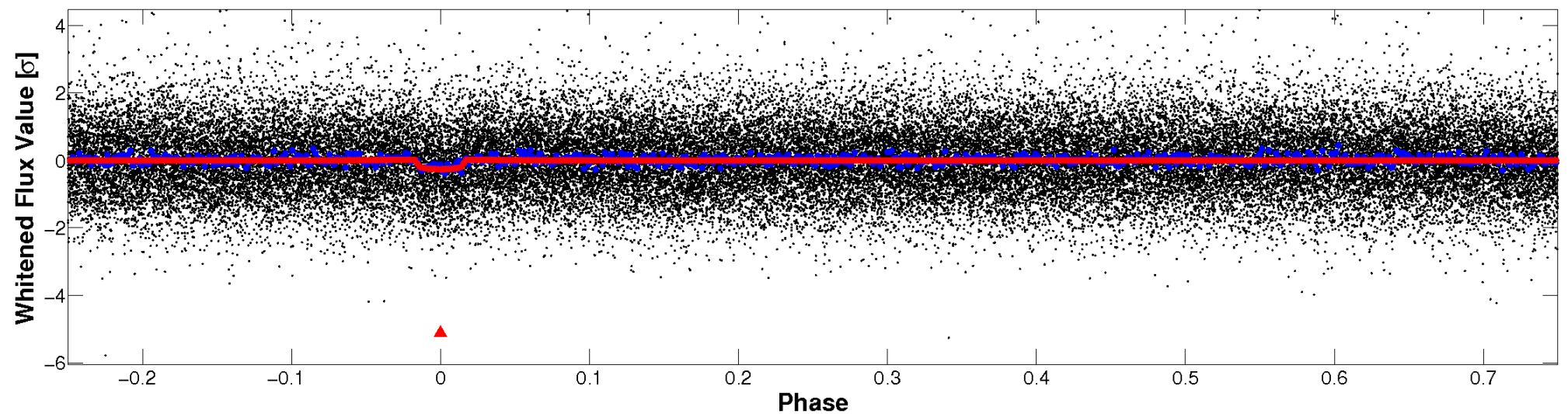


Non-Whitened Vs. Whitened Light Curve

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

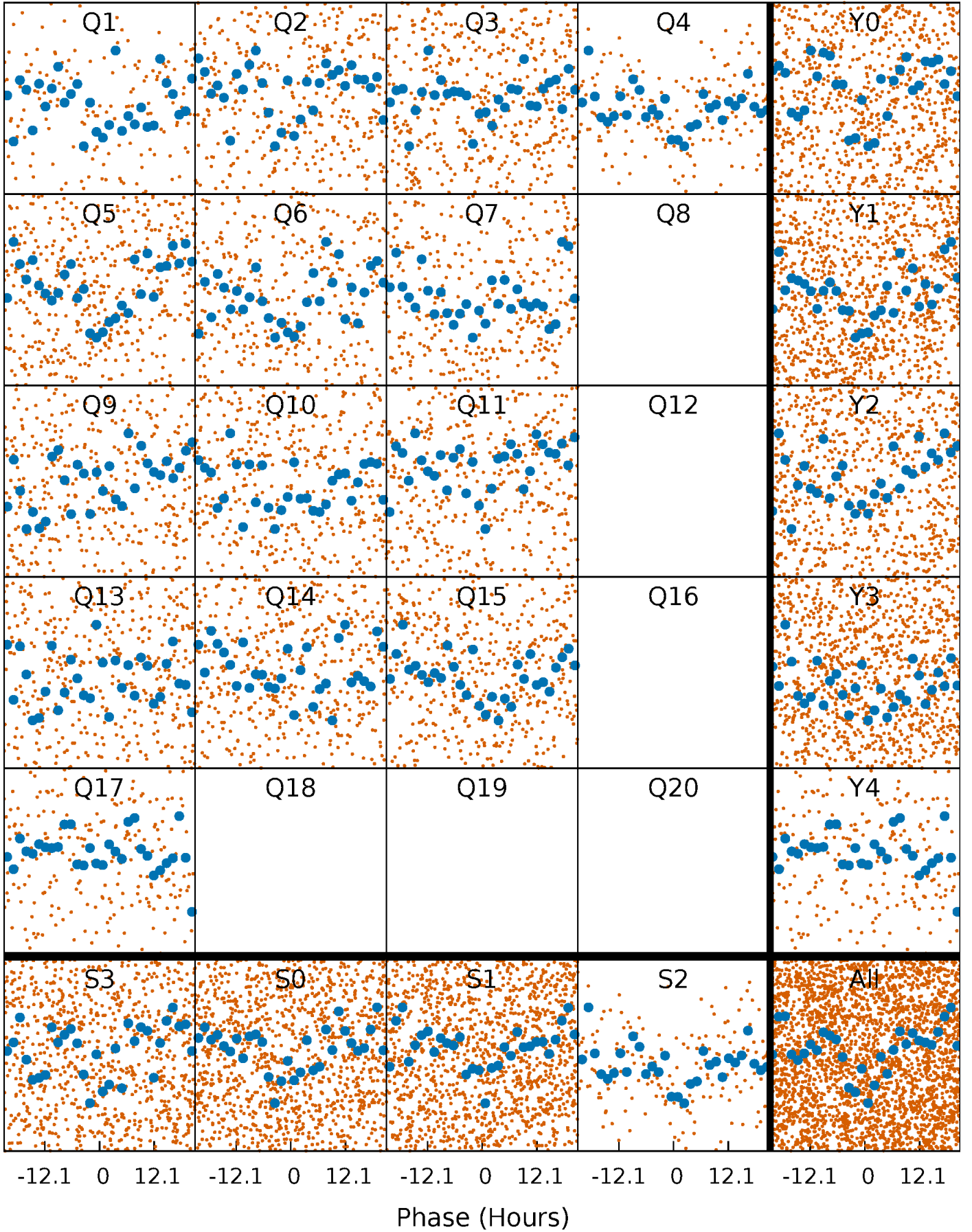


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



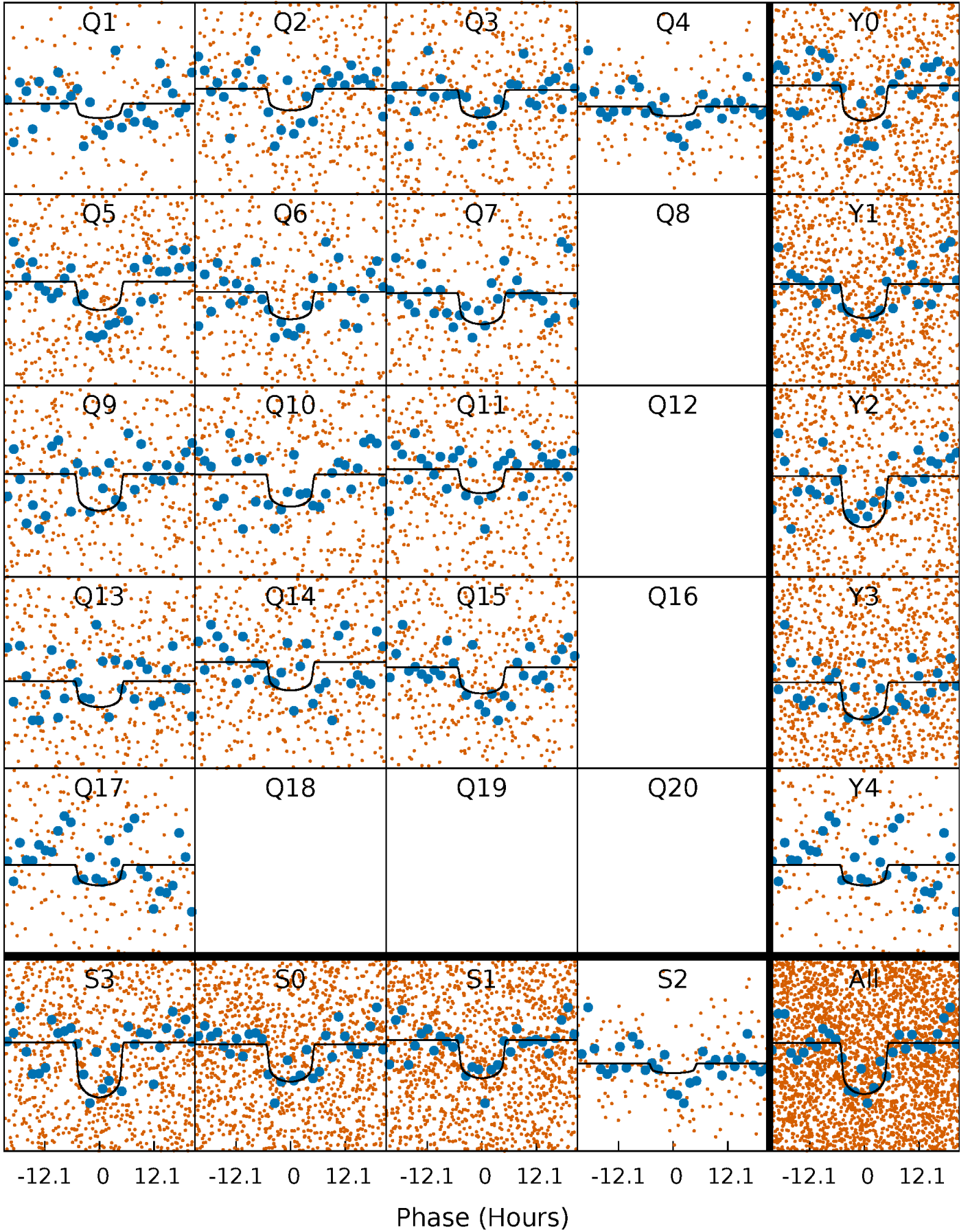
PDC Quarter-Phased Transit Curves

TCE 011286311-01 P= 13.153472 Days $T_0=143.346048$ (BKJD)



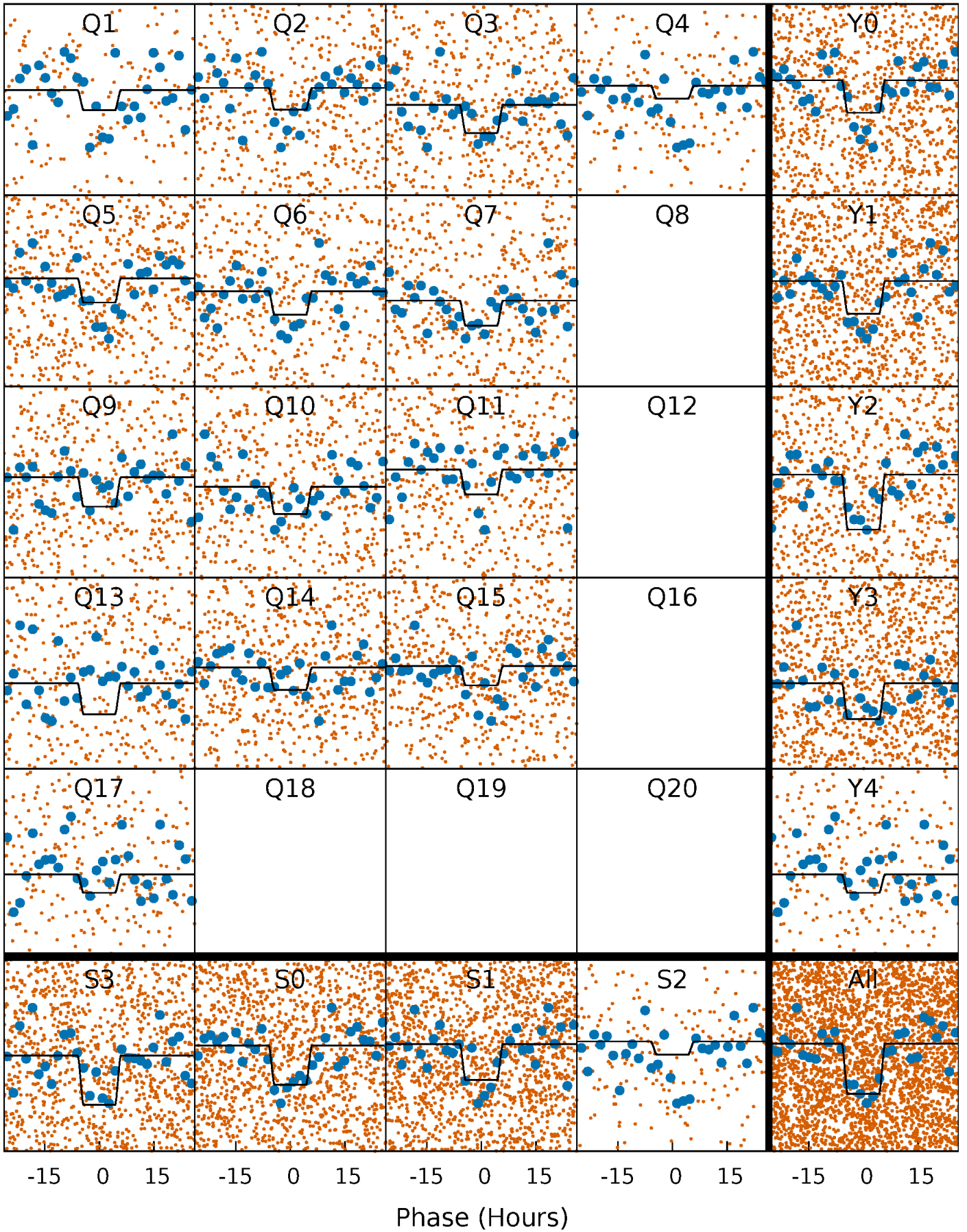
DV Quarter-Phased Transit Curves

TCE 011286311-01 $P = 13.153472$ Days $T_0 = 143.346048$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

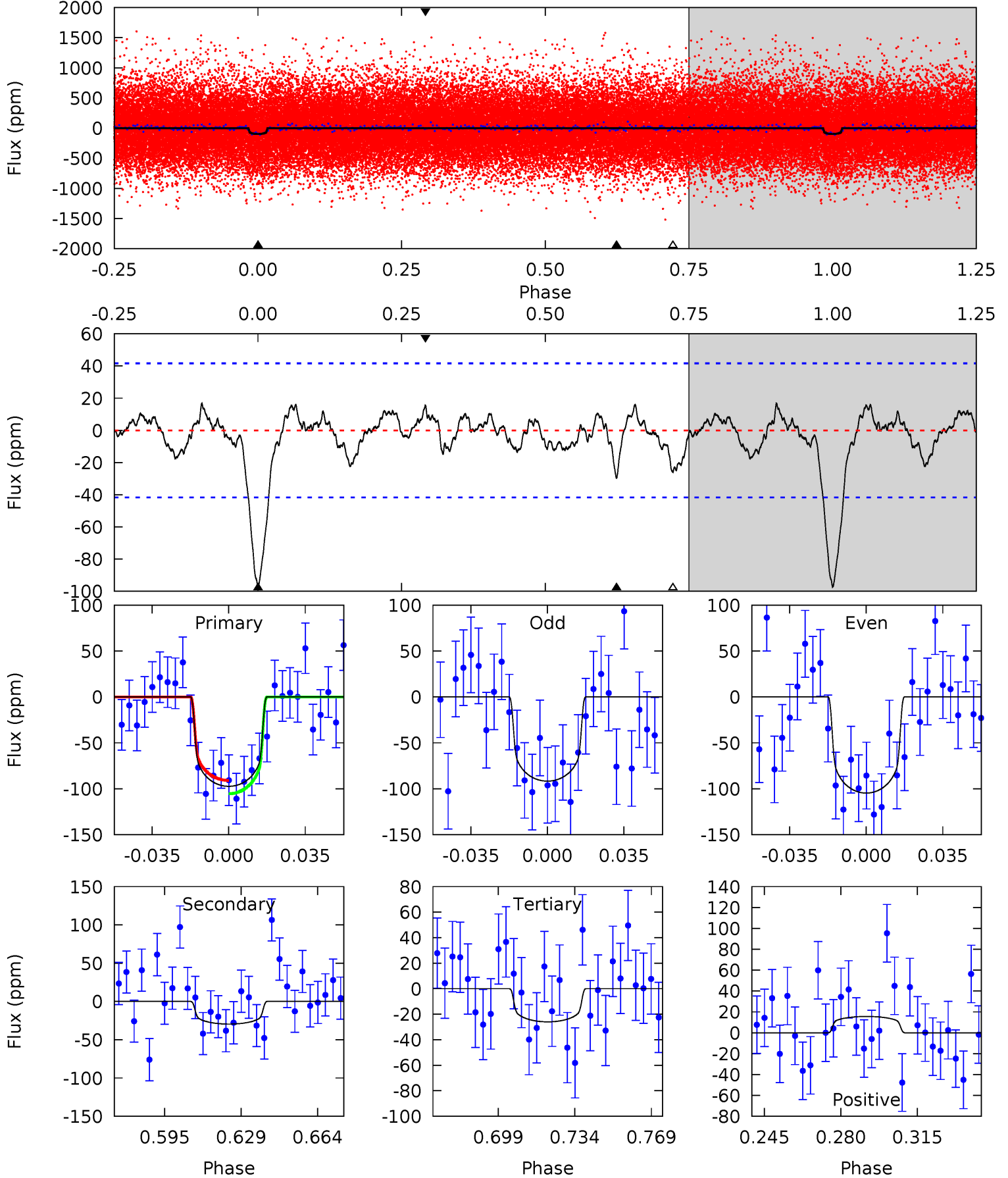
TCE 011286311-01 P= 13.154088 Days $T_0=143.317724$ (BKJD)



DV Model-Shift Uniqueness Test

011286311-01, P = 13.153472 Days, E = 130.192576 Days

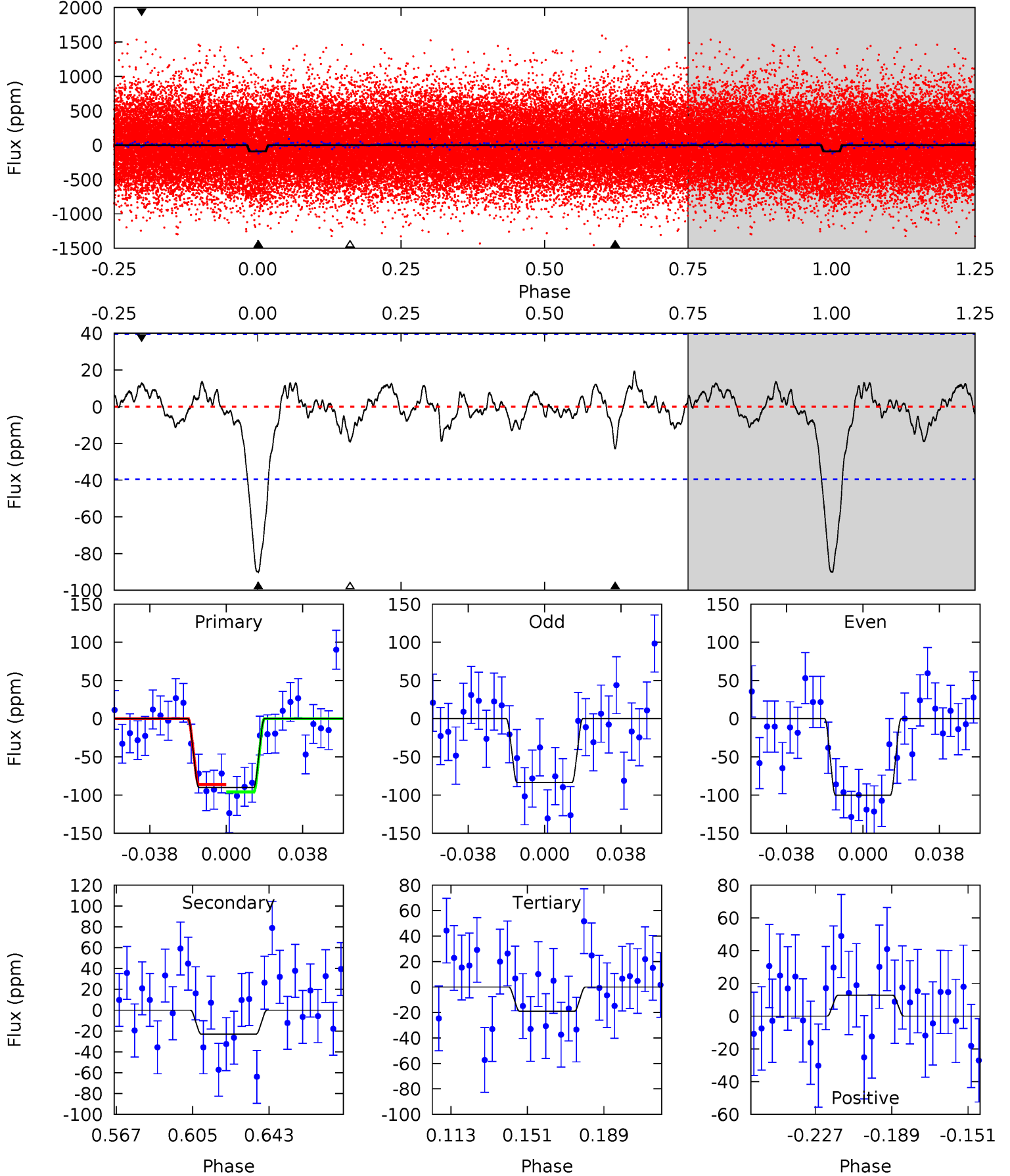
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	3.39	2.98	1.79	4.78	2.11	0.98	8.19	9.37	0.41	1.60	0.75	0.82	0.15	0.83



Alt Model-Shift Uniqueness Test

011286311-01, P = 13.154088 Days, E = 130.163636 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	2.77	2.29	1.54	4.76	2.08	0.79	8.56	9.31	0.48	1.23	0.99	0.91	0.18	0.58



Stellar Parameters For KIC 011286311

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5443^{+164}_{-164}	$4.360^{+0.175}_{-0.214}$	$0.000^{+0.300}_{-0.250}$	$1.008^{+0.300}_{-0.175}$	$0.848^{+0.110}_{-0.064}$	$1.165^{+0.972}_{-0.607}$
	+3%/-3%	+4%/-5%	+inf%/-inf%	+30%/-17%	+13%/-8%	+83%/-52%
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 011286311-01 / KOI 7432.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-30 ± 9	$1.30^{+0.40}_{-0.32}$	1054^{+95}_{-70}	4004^{+475}_{-368}	103^{+89}_{-48}
Alt.	-23 ± 8	$1.07^{+0.34}_{-0.32}$	1049^{+88}_{-67}	4108^{+606}_{-475}	116^{+145}_{-61}

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 $A_{obs} \gg 1.0$

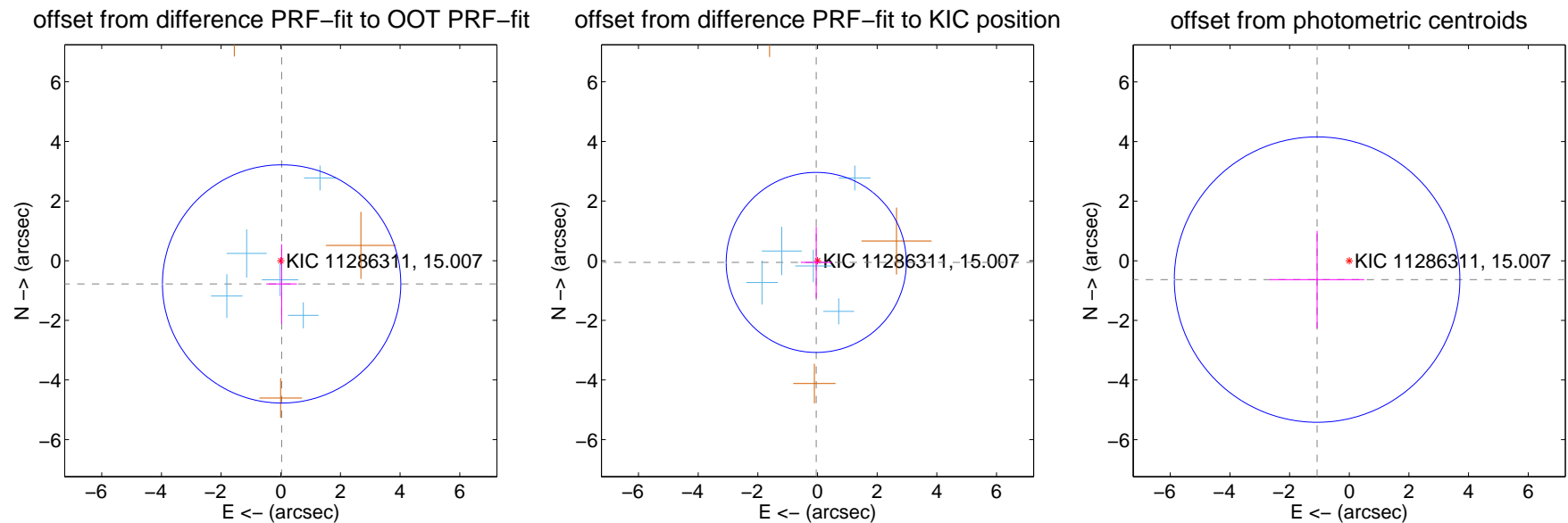
DV Centroid Data

Supplemental centroid analysis for 011286311-01. Kepler magnitude: 15.01. Transit SNR 9.08

There are 5 quarters with good PRF difference image offsets

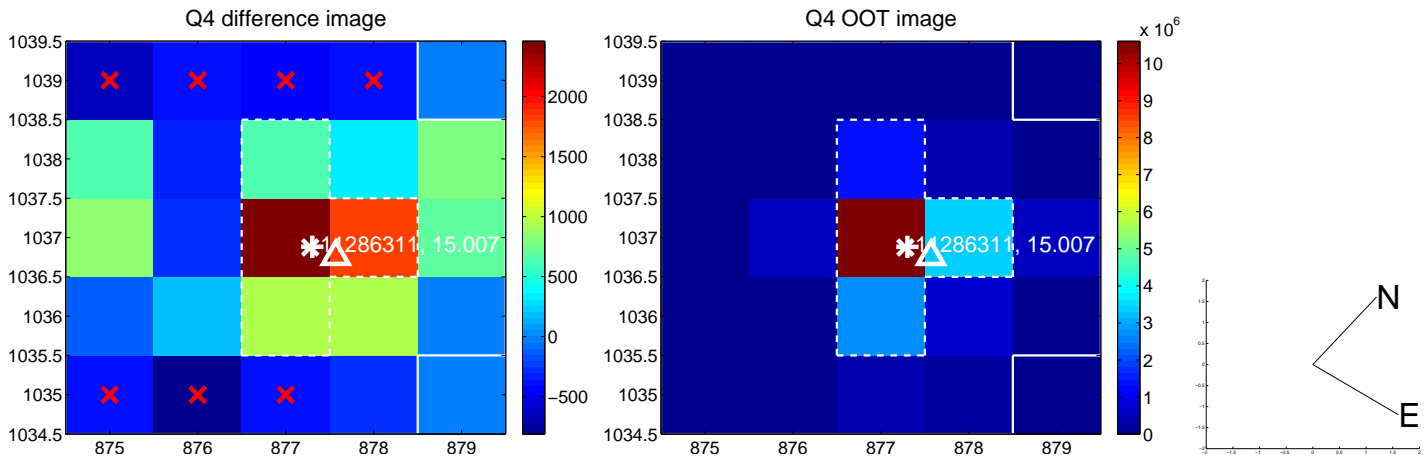
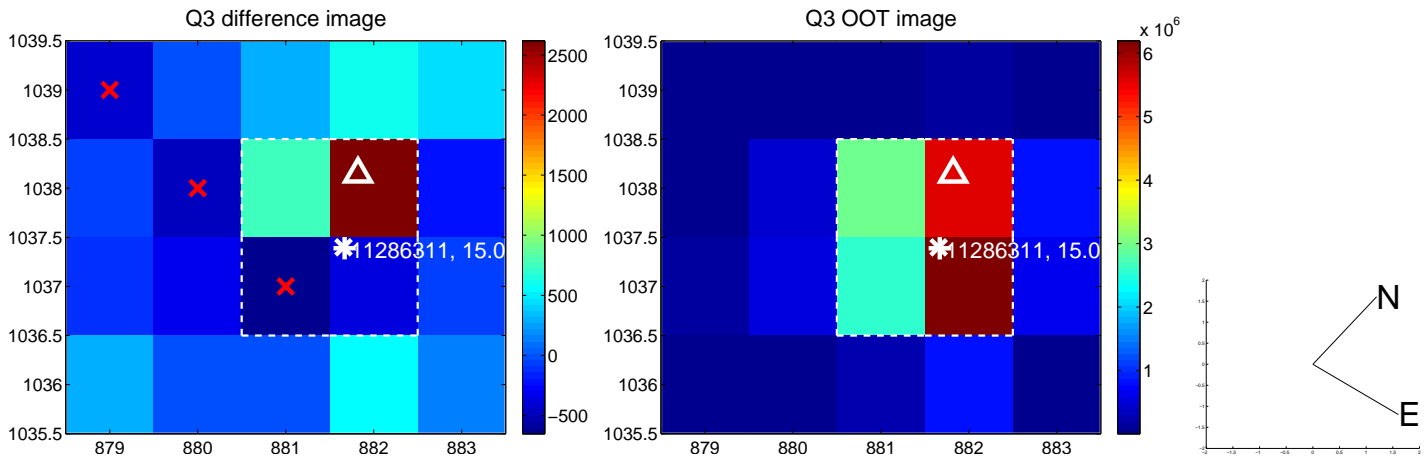
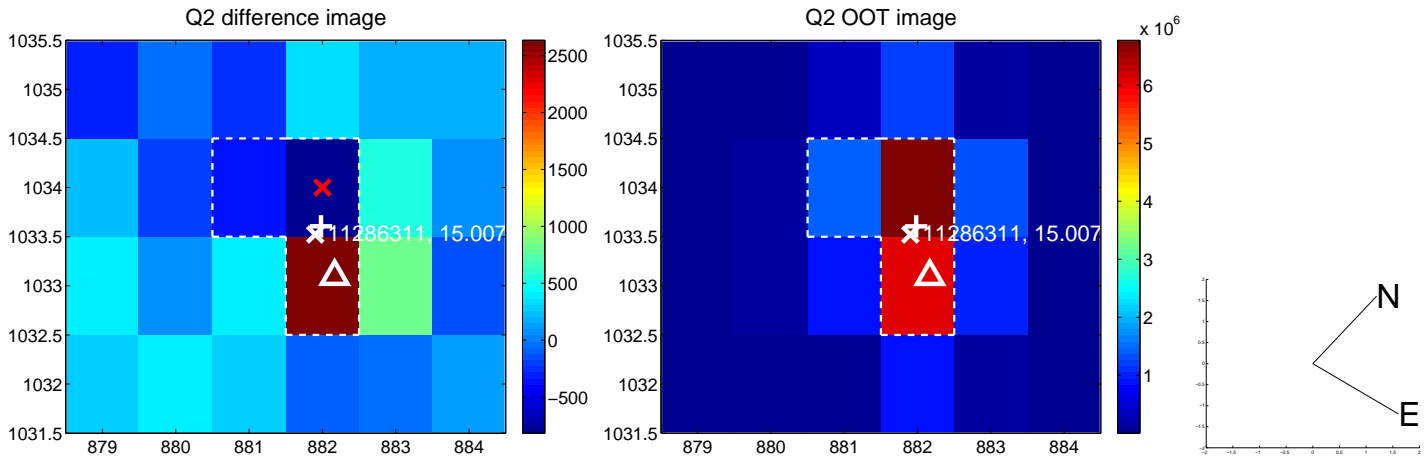
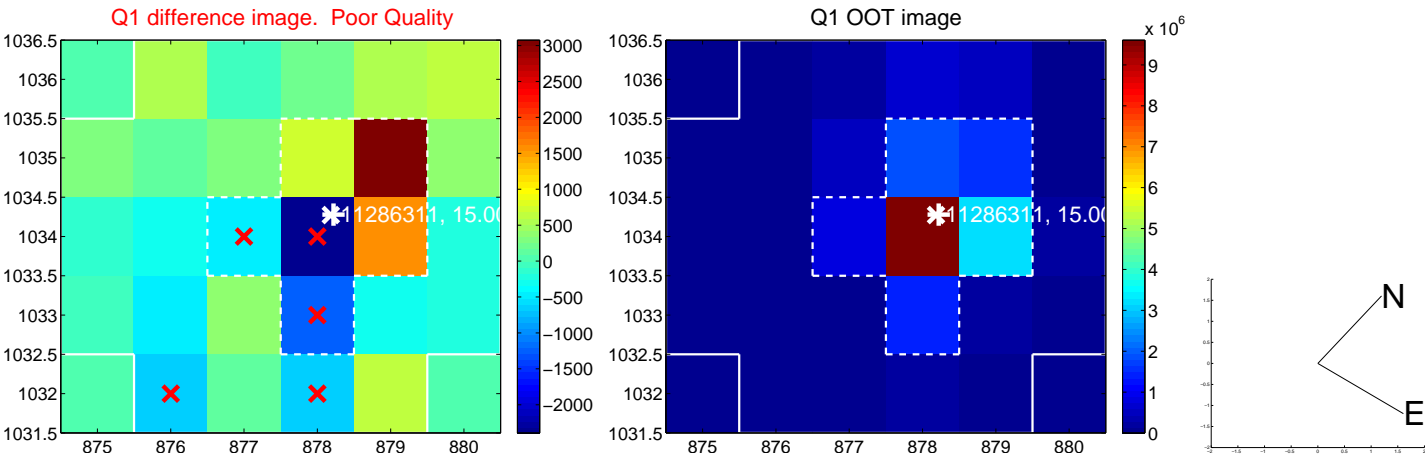
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.780 ± 1.331	0.59	-0.028 ± 0.513	-0.779 ± 1.332
PRF-fit source offset from KIC position	0.072 ± 1.006	0.07	0.042 ± 0.514	-0.058 ± 1.191
photometric centroid source offset	1.25 ± 1.60	0.78	1.08 ± 1.58	-0.63 ± 1.63

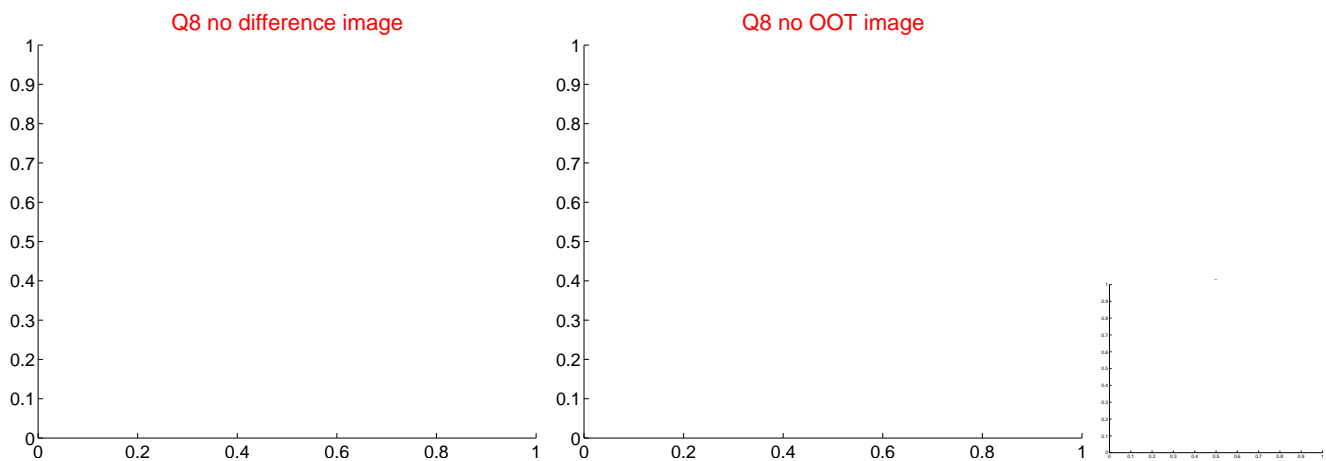
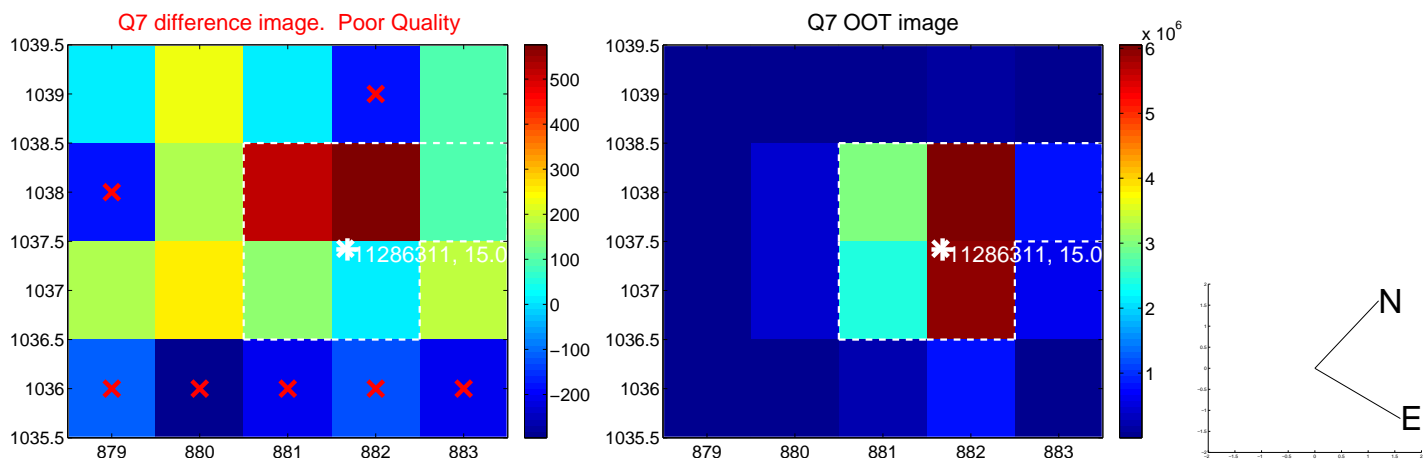
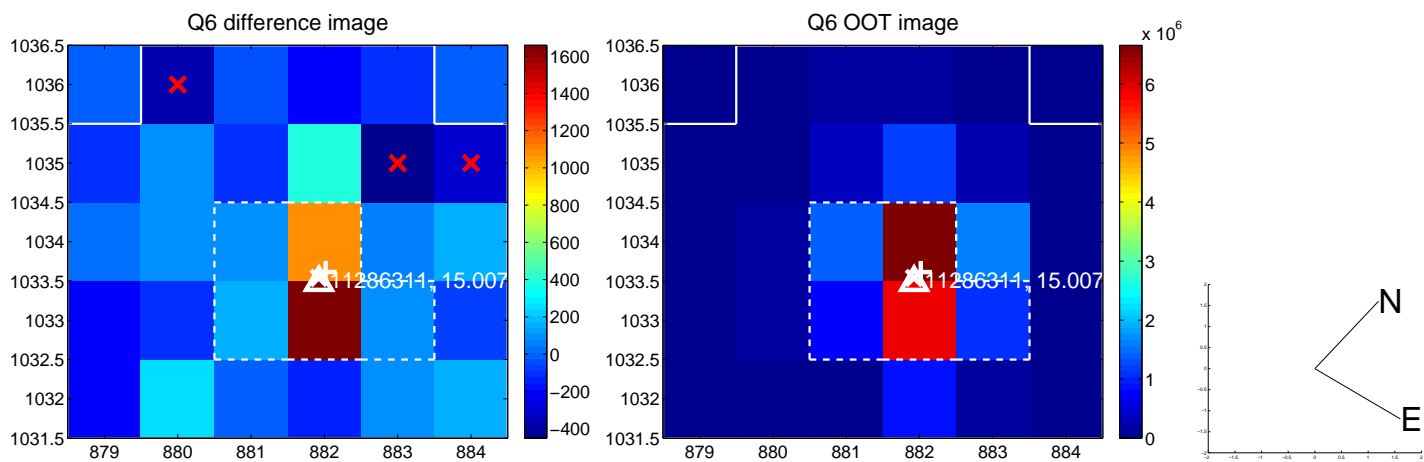
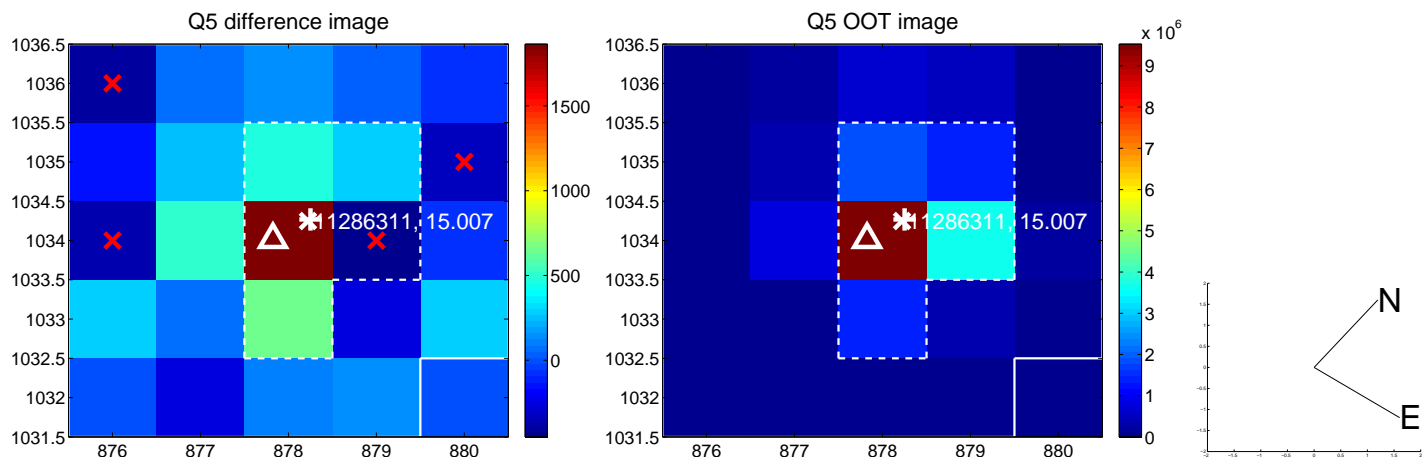


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

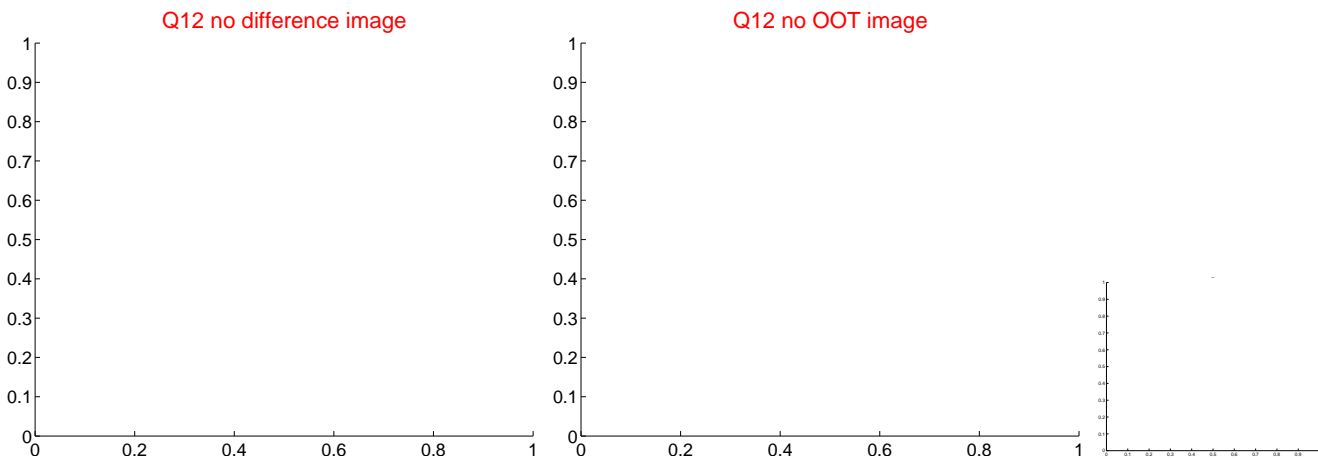
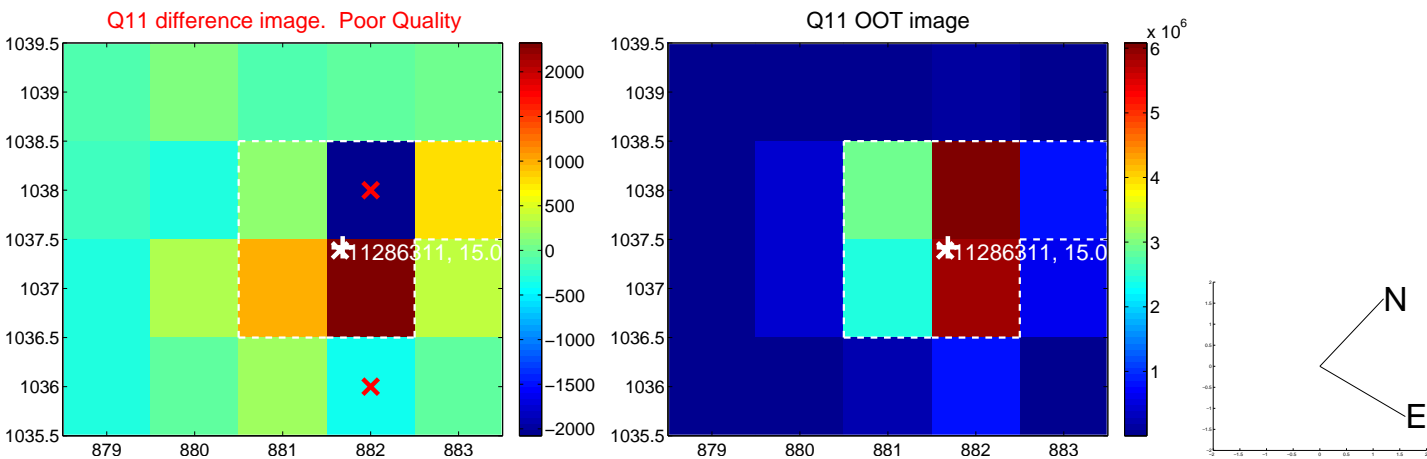
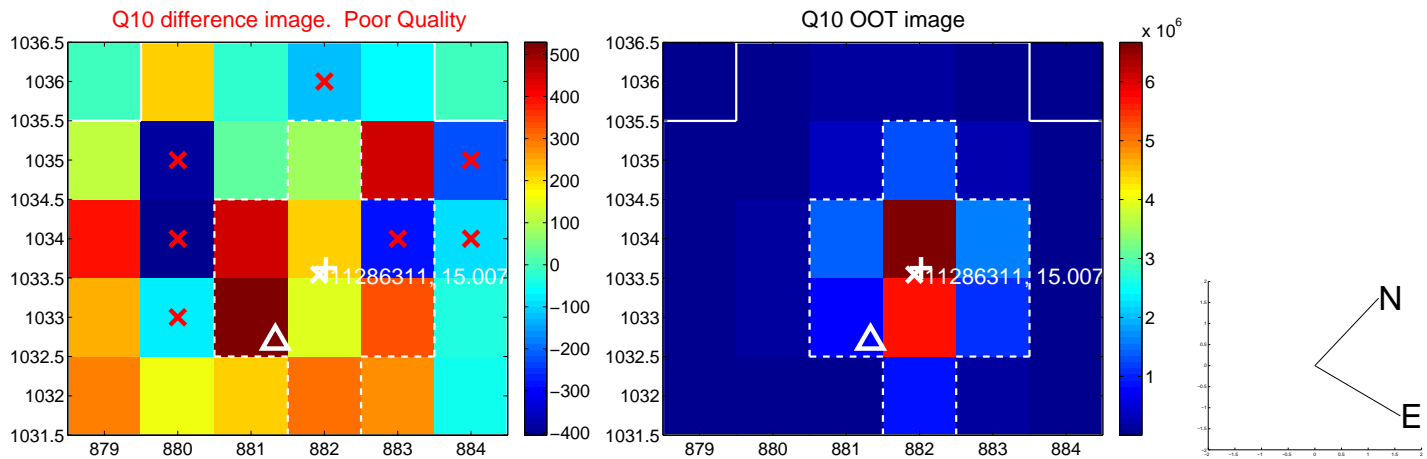
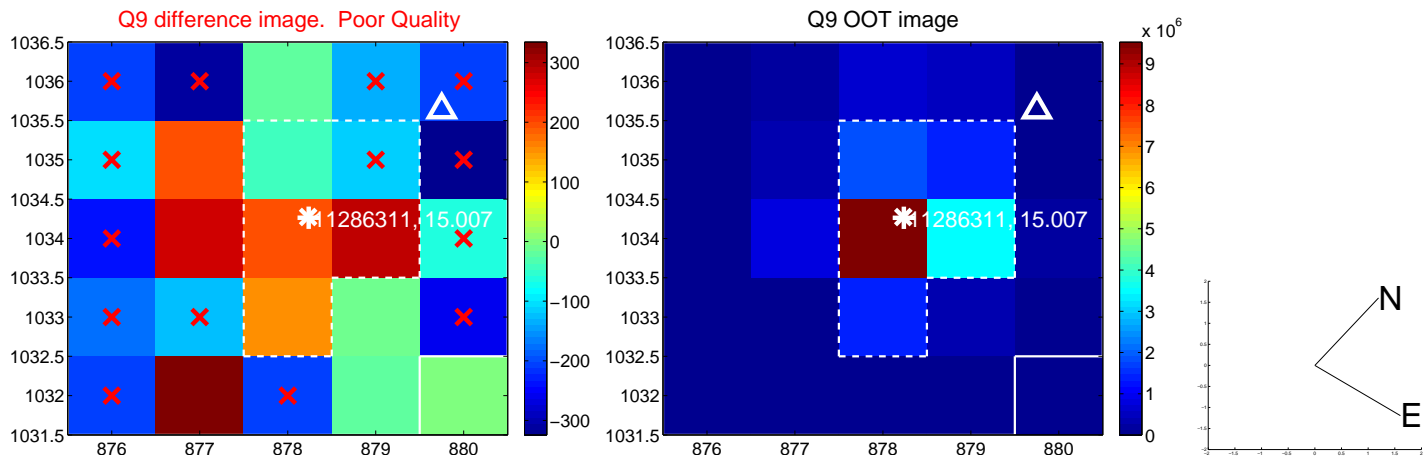
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



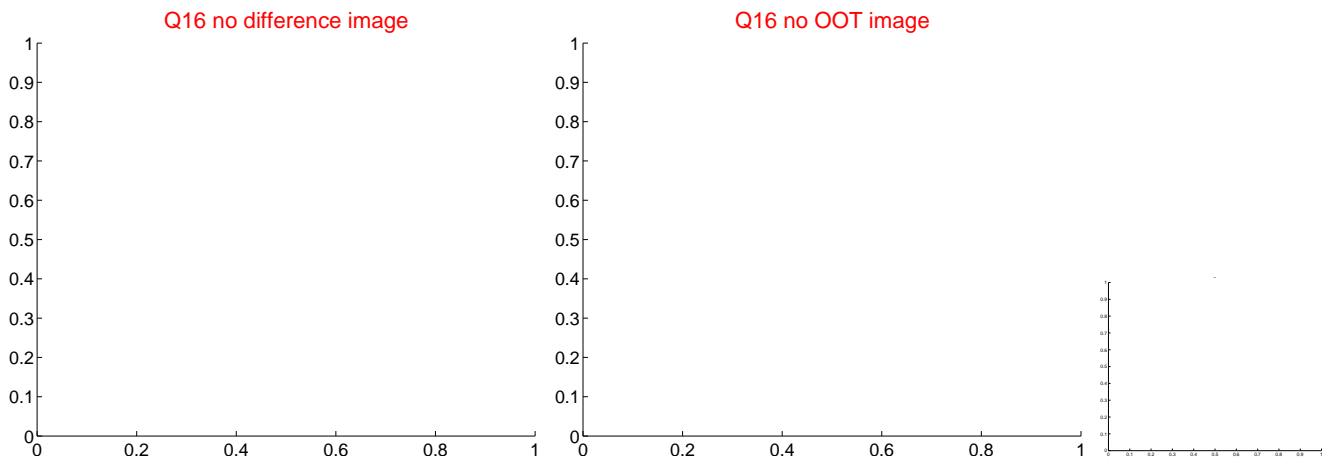
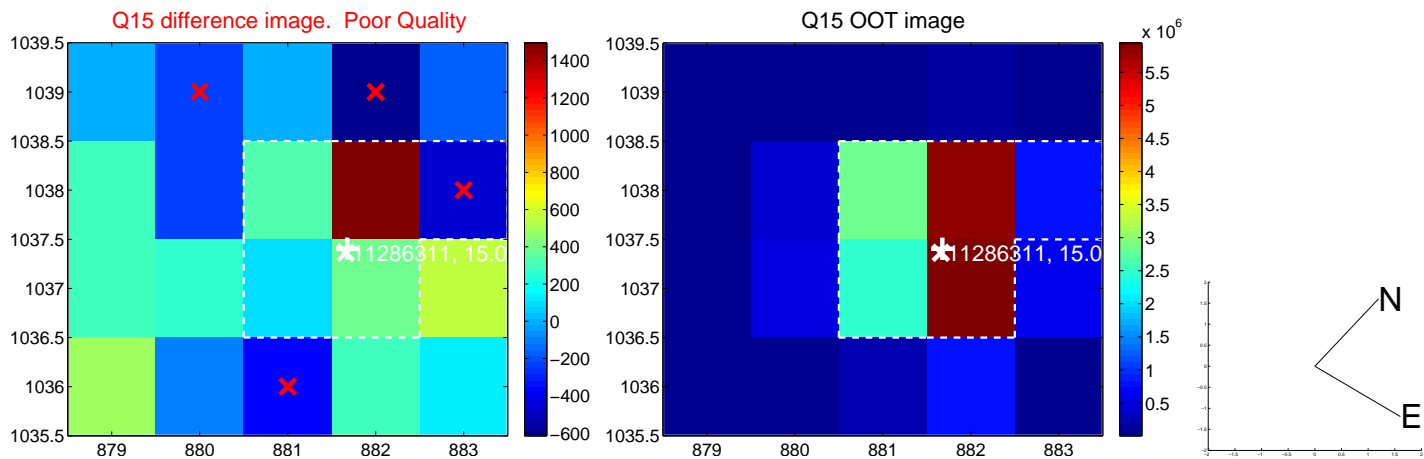
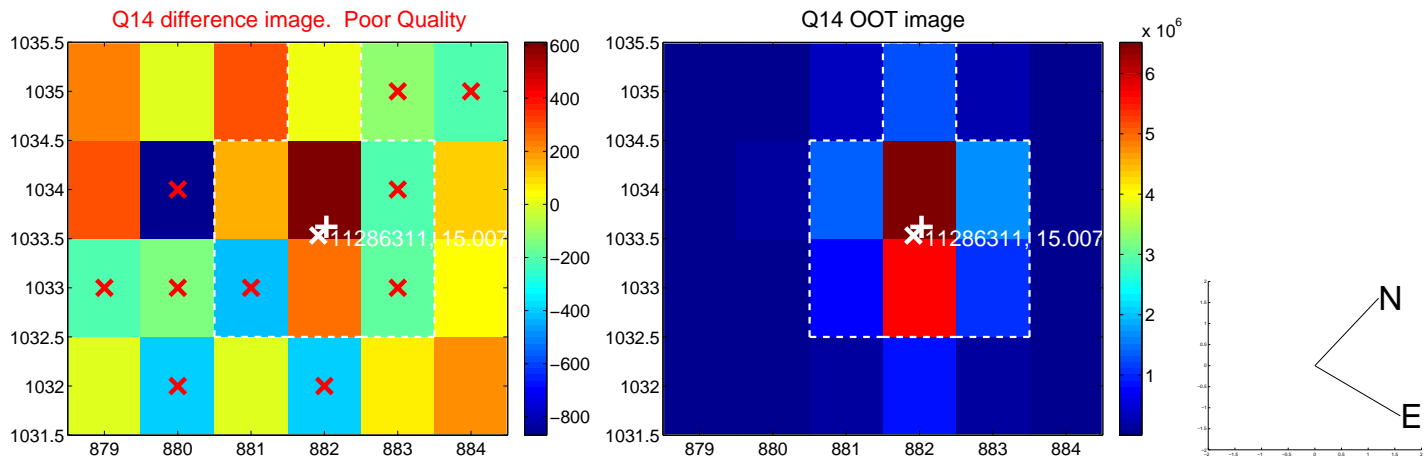
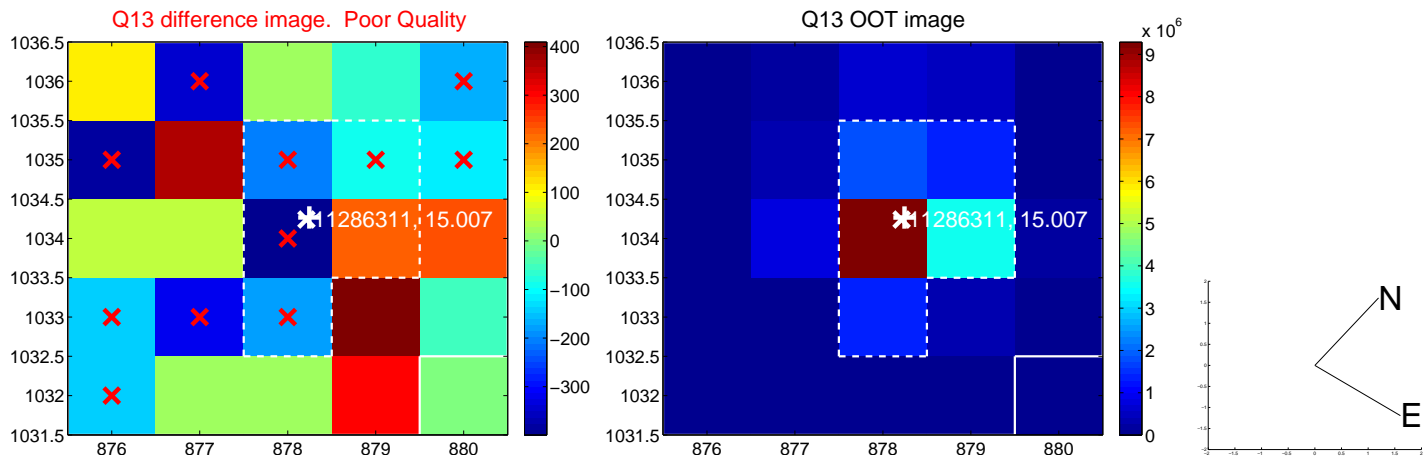
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



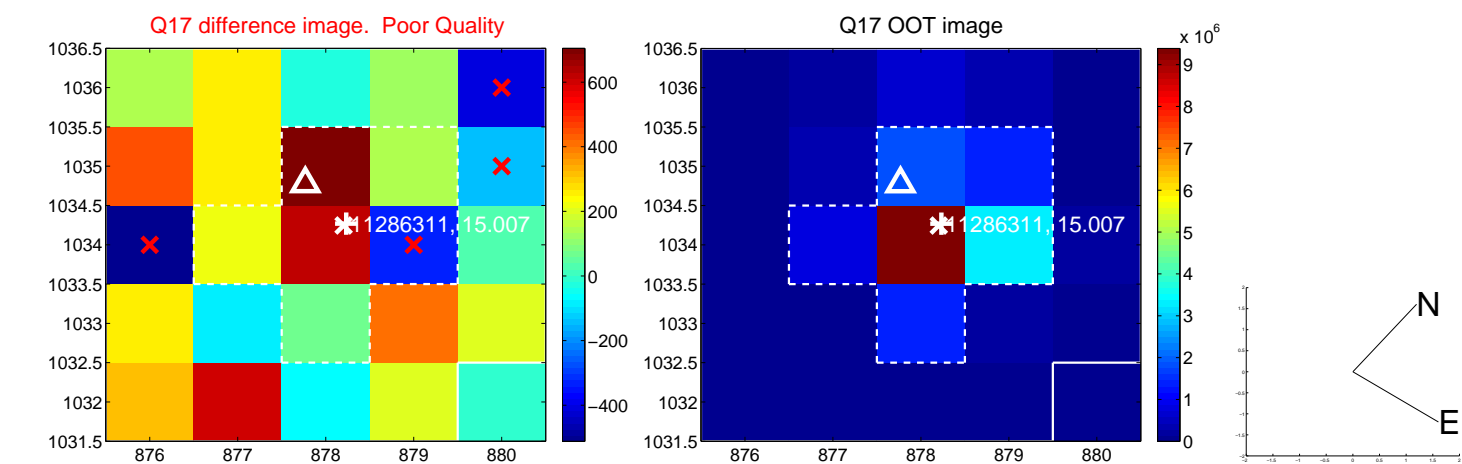
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



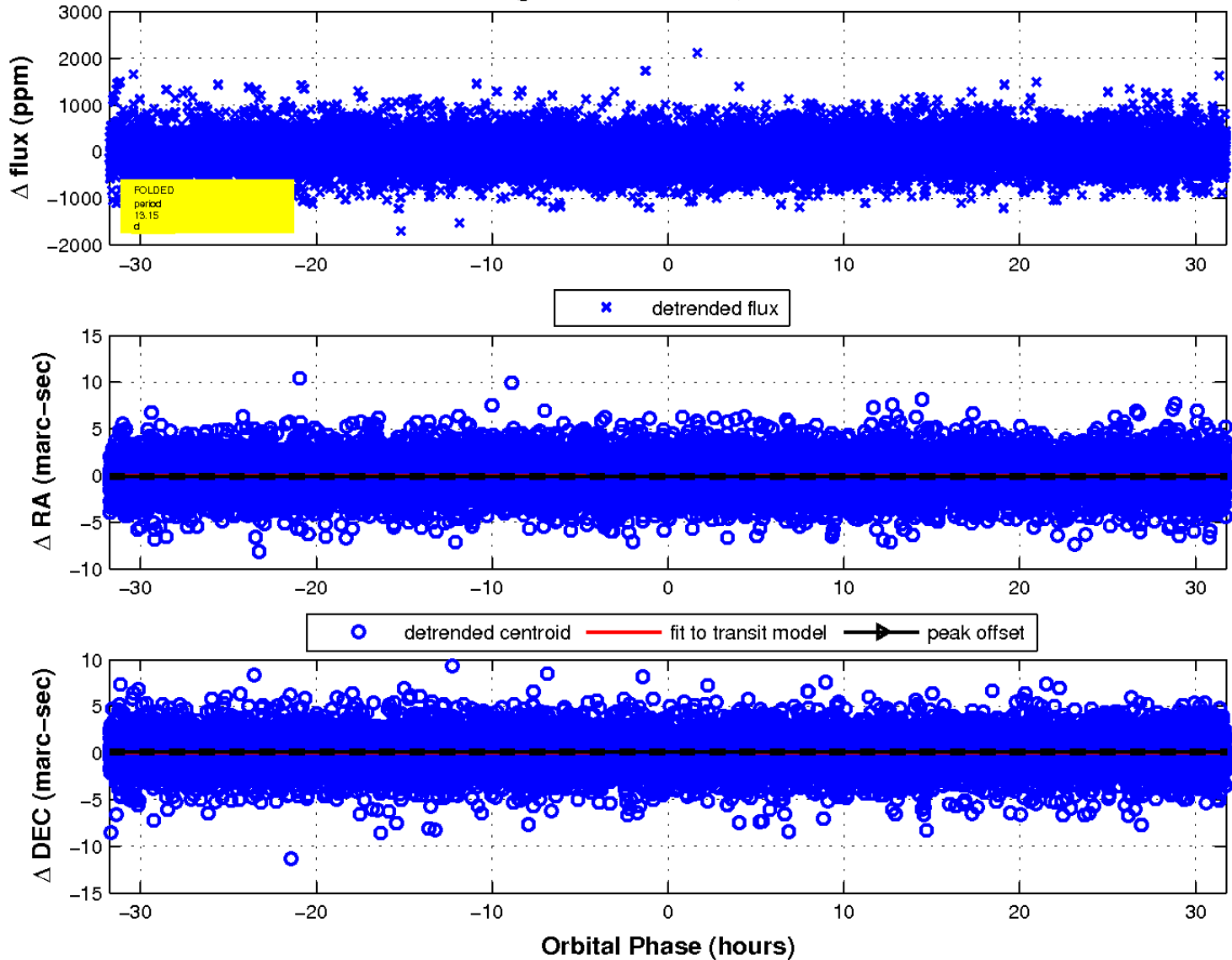
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

