

KIC 011393217

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})
011393217-01	OBS	No	0.654164	131.593078	39.0	3.167	9.8	1.4	0.69	4748	0.41	1289.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011393217-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_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.

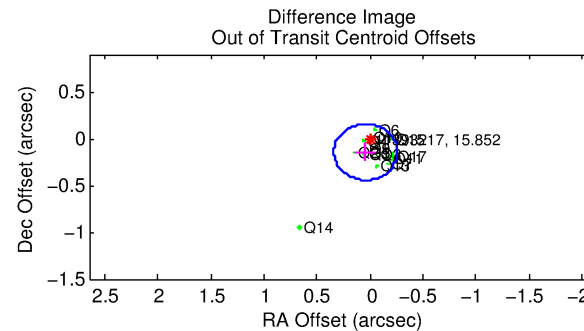
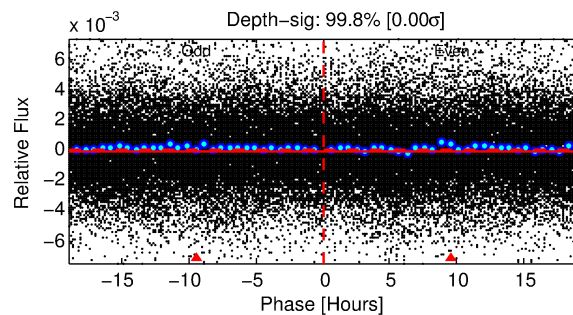
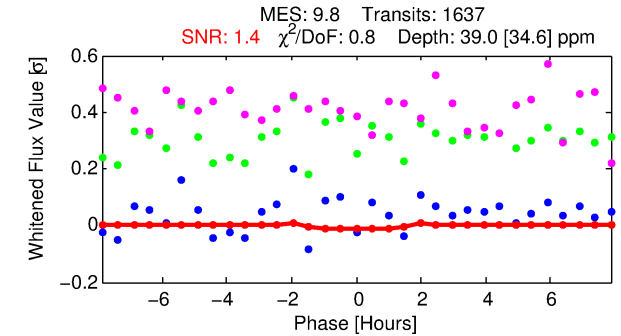
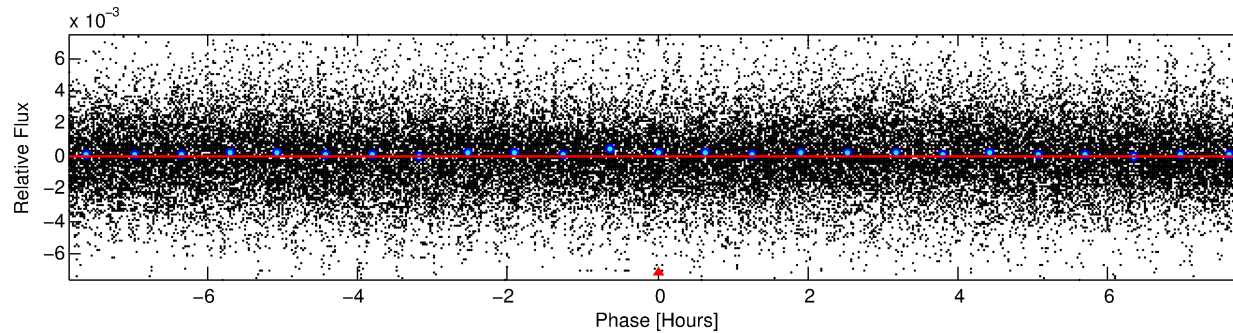
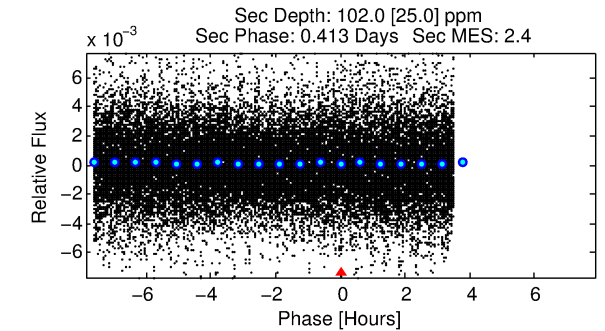
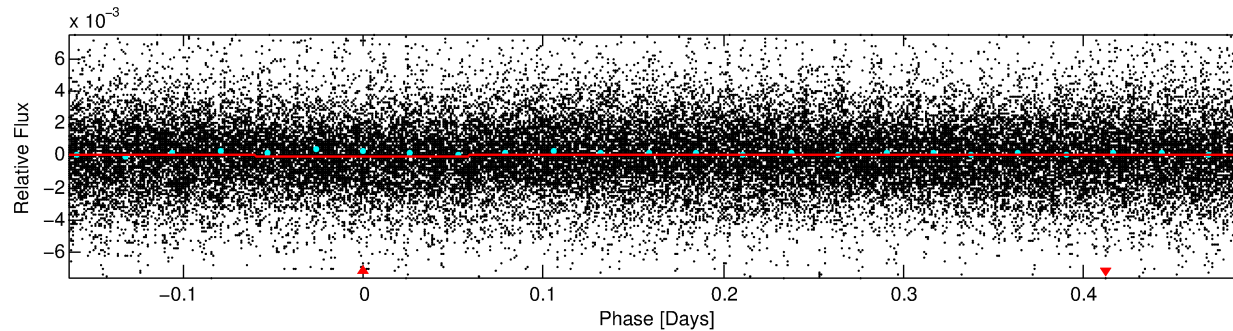
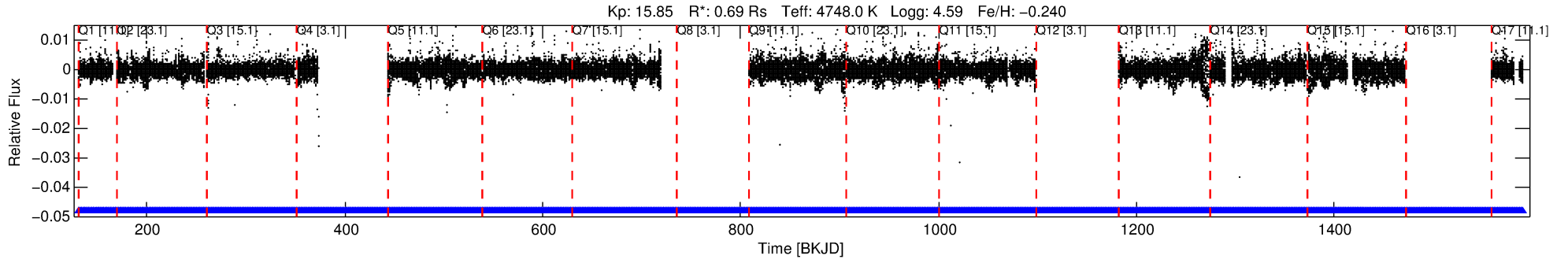
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011393217-01

No Significant Match Found

DV One-Page Summary

KIC: 11393217 Candidate: 1 of 1 Period: 0.654 d



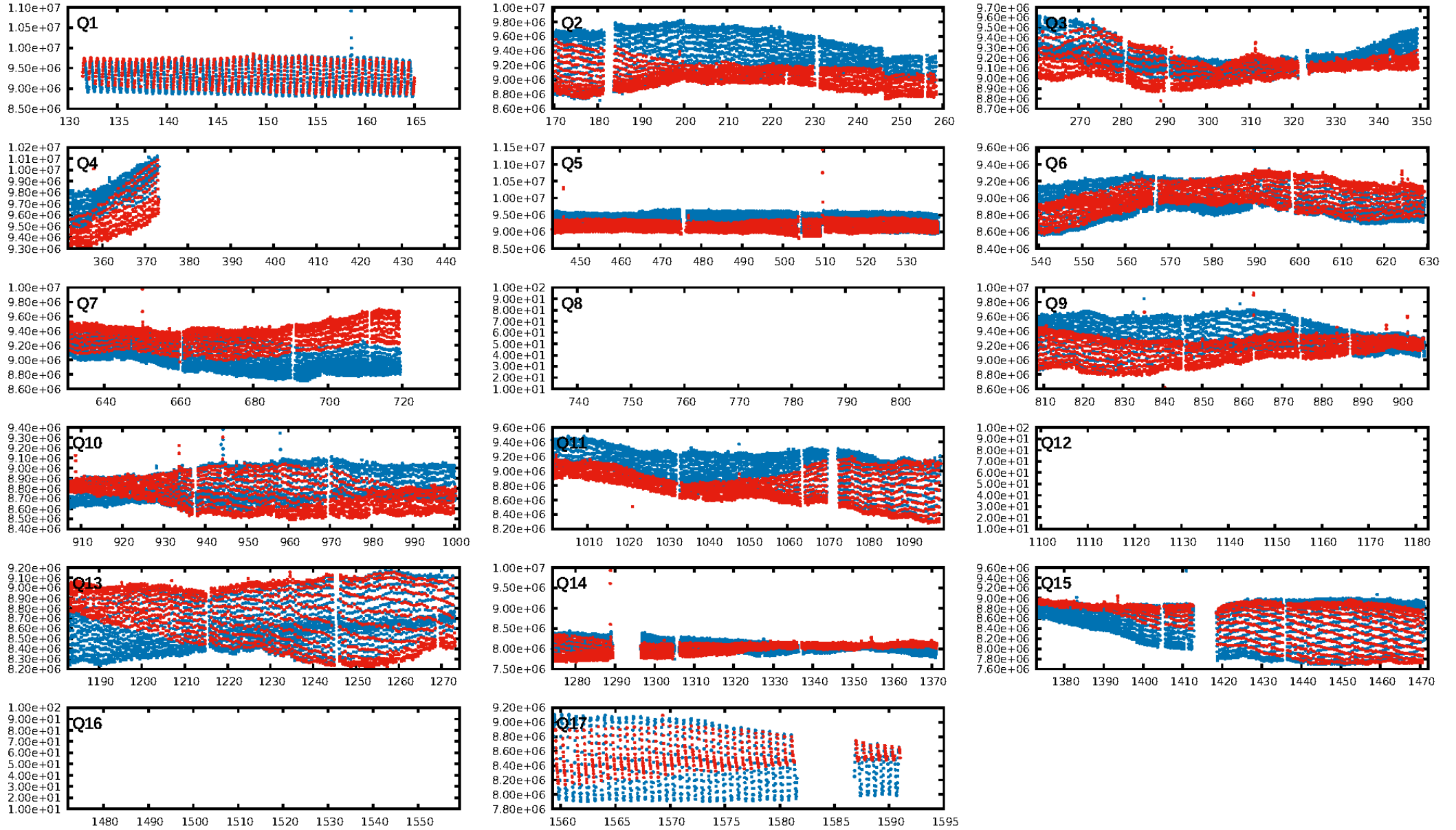
DV Fit Results:

Period = 0.65416 [0.00007] d
Epoch = 131.5931 [0.0133] BKJD
Rp/R* = 0.0055 [0.0217]
a/R* = 1.70 [14.03]
b = 0.03 [450.62]
Seff = 1289.48 [202.56]
Teff = 1528 [60] K
Rp = 0.41 [1.63] Re
a = 0.0129 [0.0009] AU
Ag = 54.78 [431.72] [0.12σ]
Teffp = 6427 [12664] K [0.39σ]

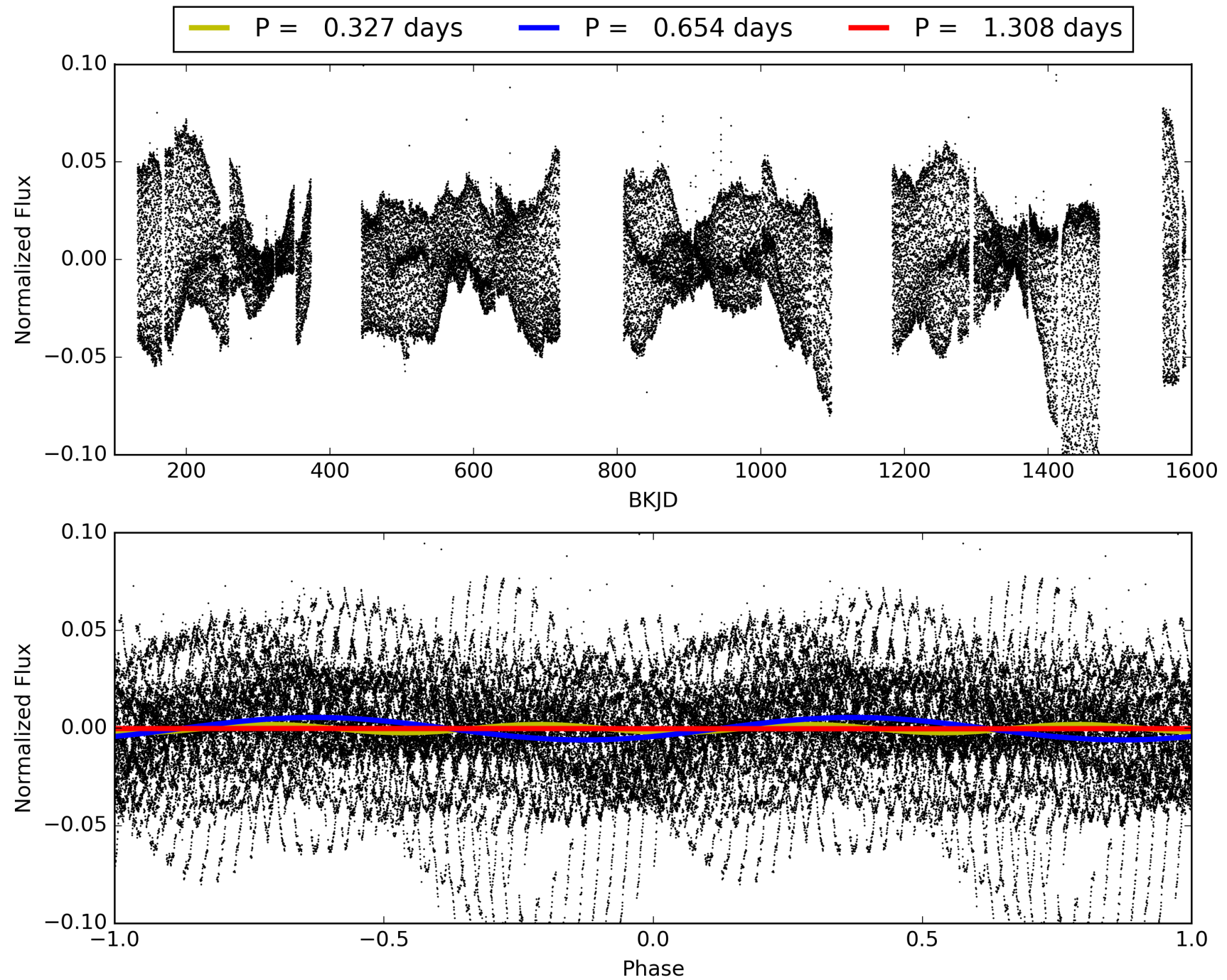
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.44e-22
RollingBand-fgt: 1.00 [1512/1512]
GhostDiagnostic-chr: 0.8613
Centroid-sig: N/A
Centroid-so: 5.450 arcsec [1.52σ]
OotOffset-rm: 0.151 arcsec [1.51σ]
KicOffset-rm: 0.121 arcsec [1.38σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011393217-01, PDC Light Curves

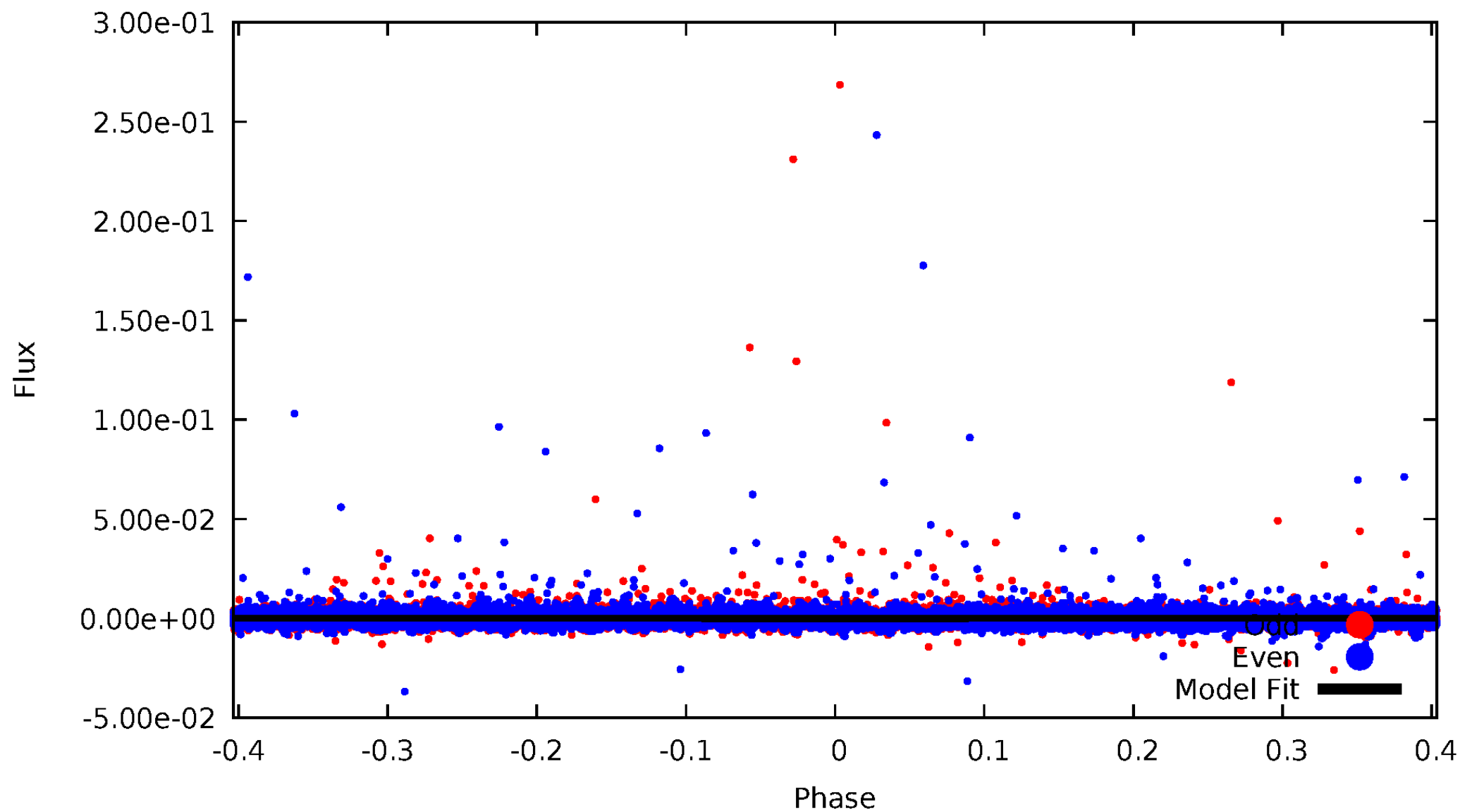


TCE 011393217-01



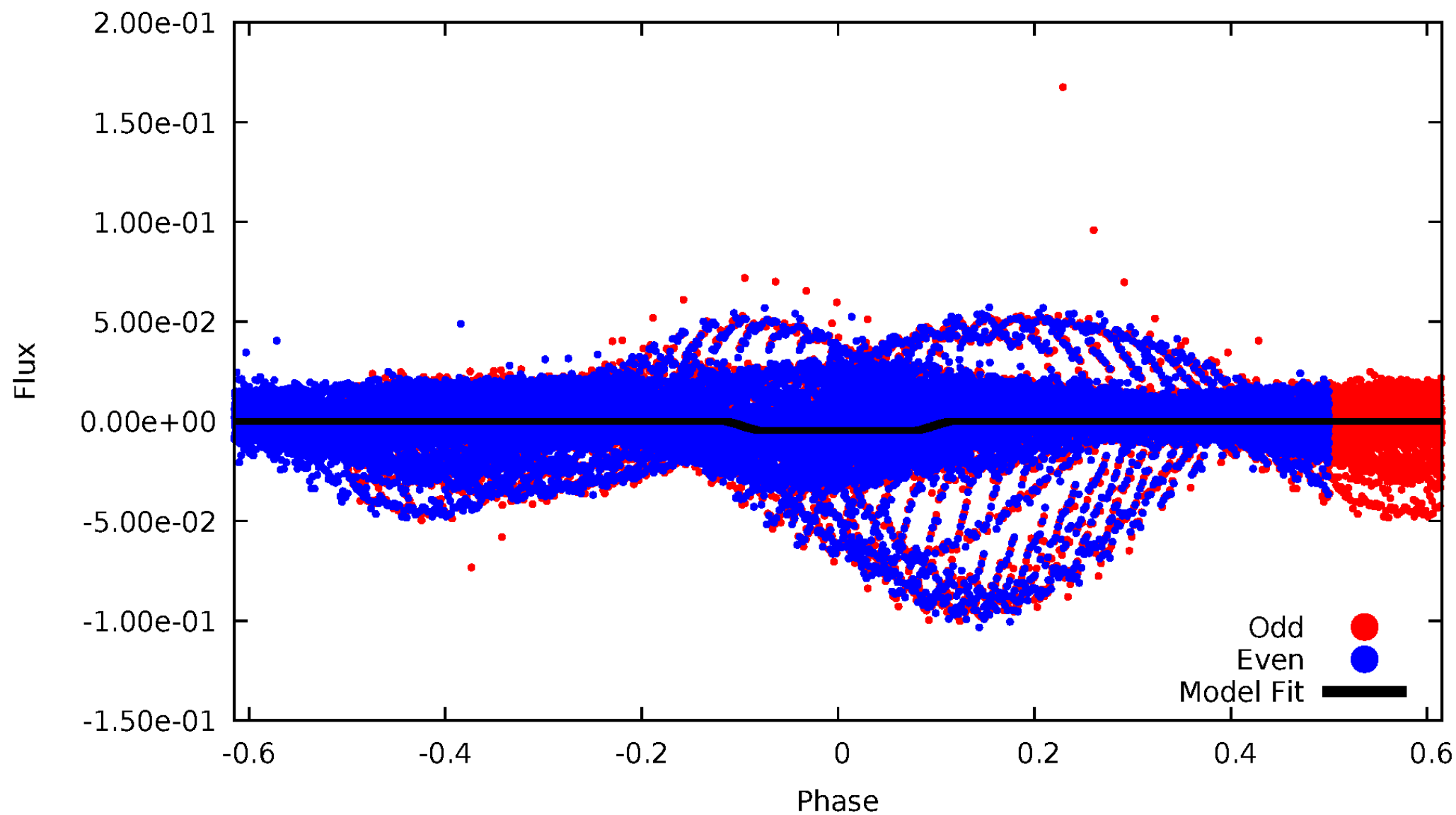
DV Odd/Even

TCE 011393217-01



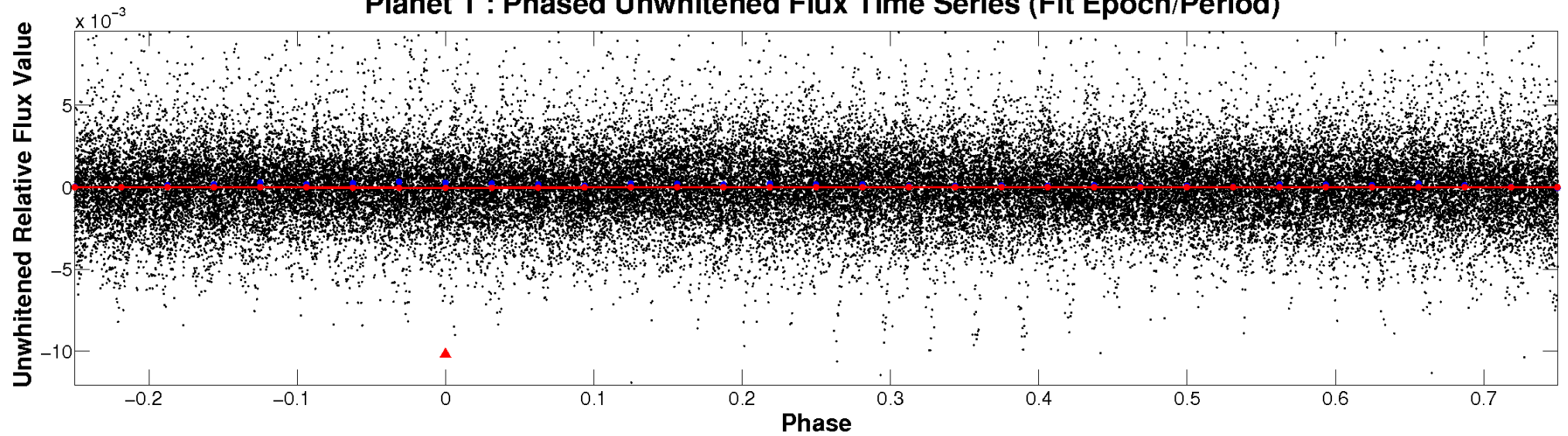
ALT Odd/Even

TCE 011393217-01

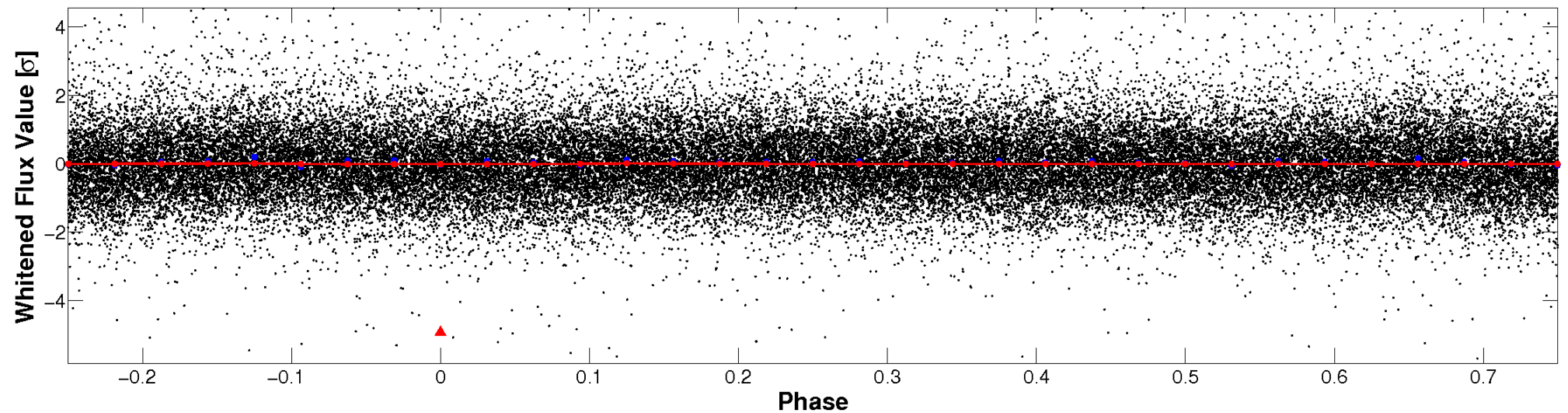


Non-Whitened Vs. Whitened Light Curve

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

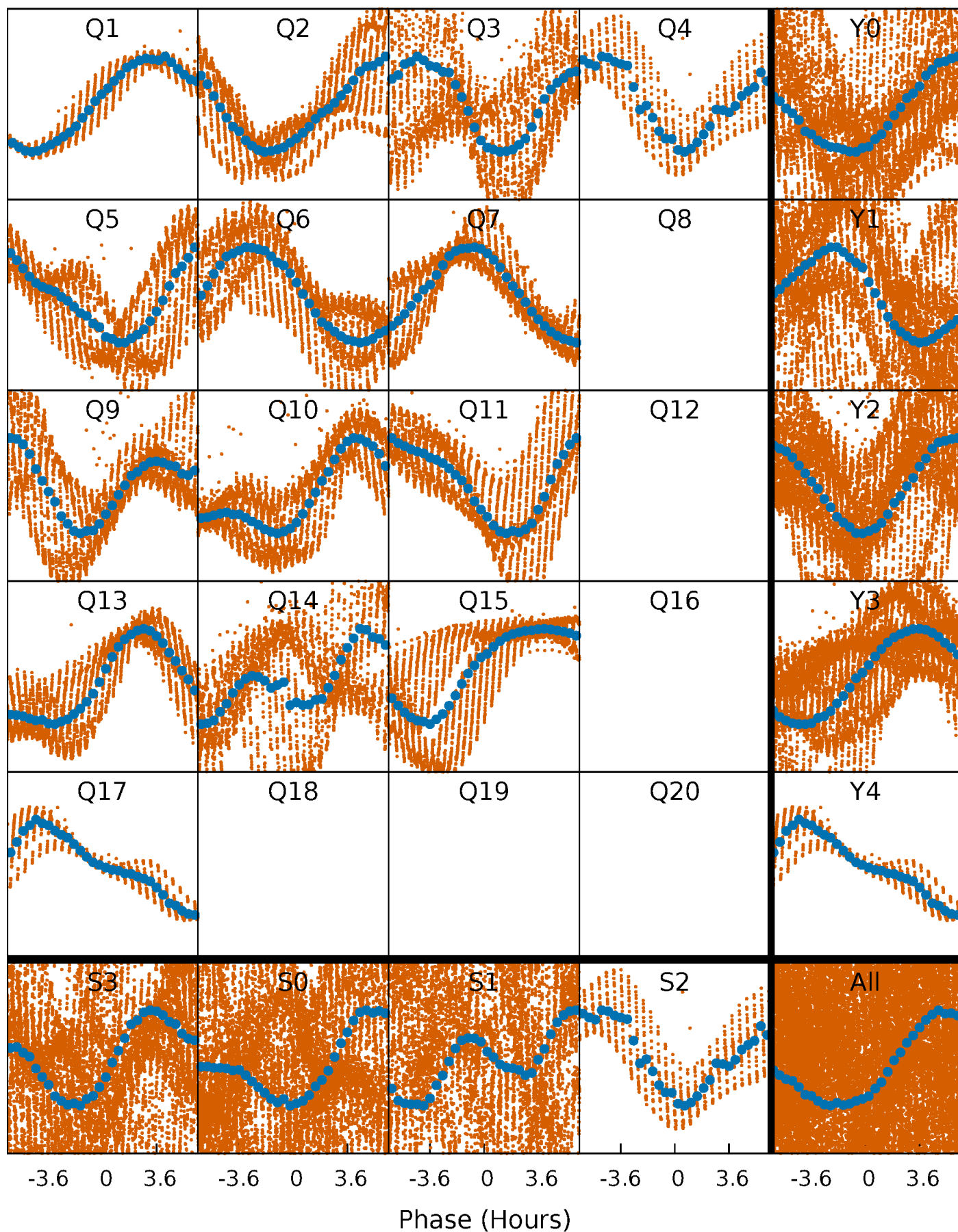


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



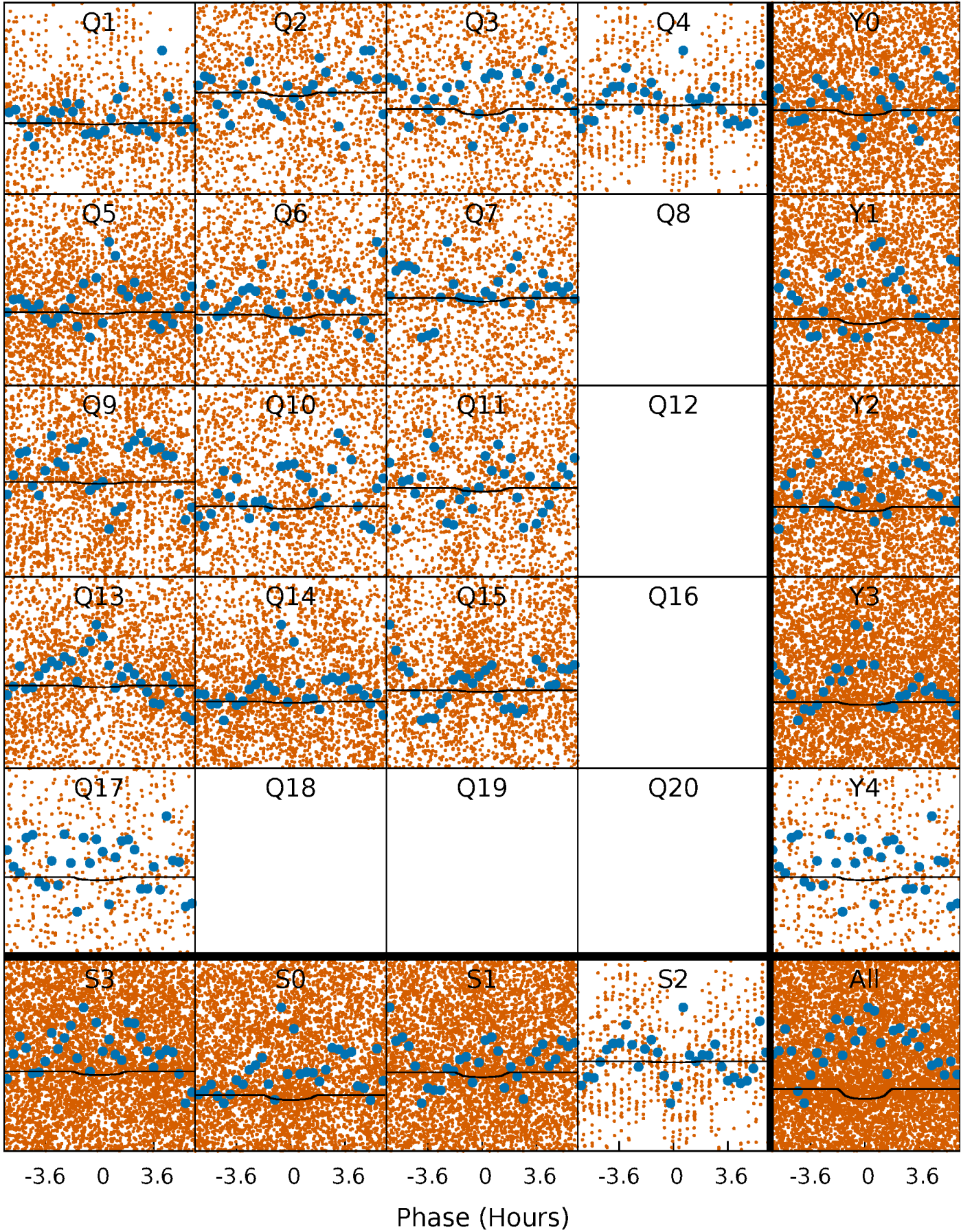
PDC Quarter-Phased Transit Curves

TCE 011393217-01 P= 0.654164 Days $T_0=131.593078$ (BKJD)



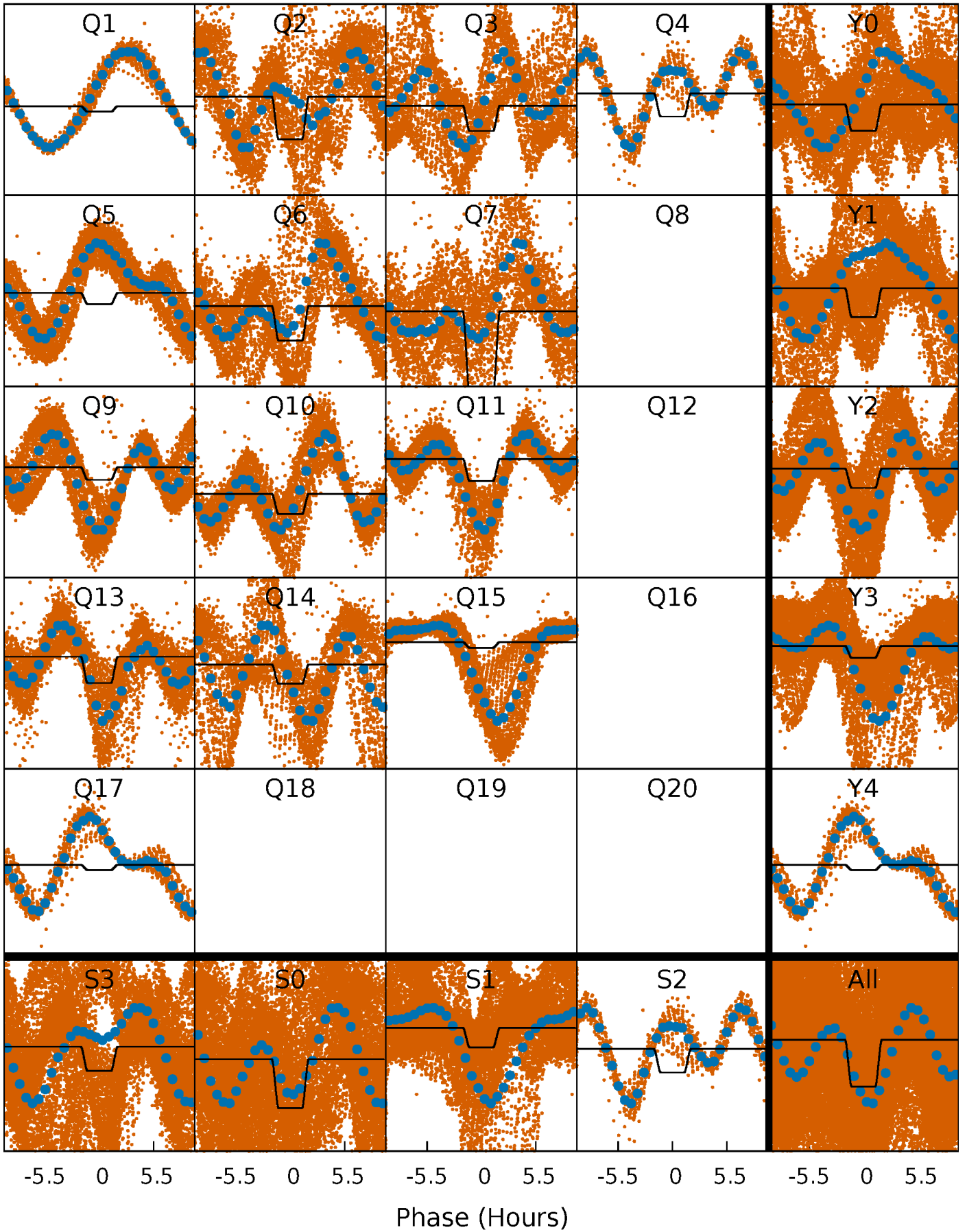
DV Quarter-Phased Transit Curves

TCE 011393217-01 P= 0.654164 Days $T_0=131.593078$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

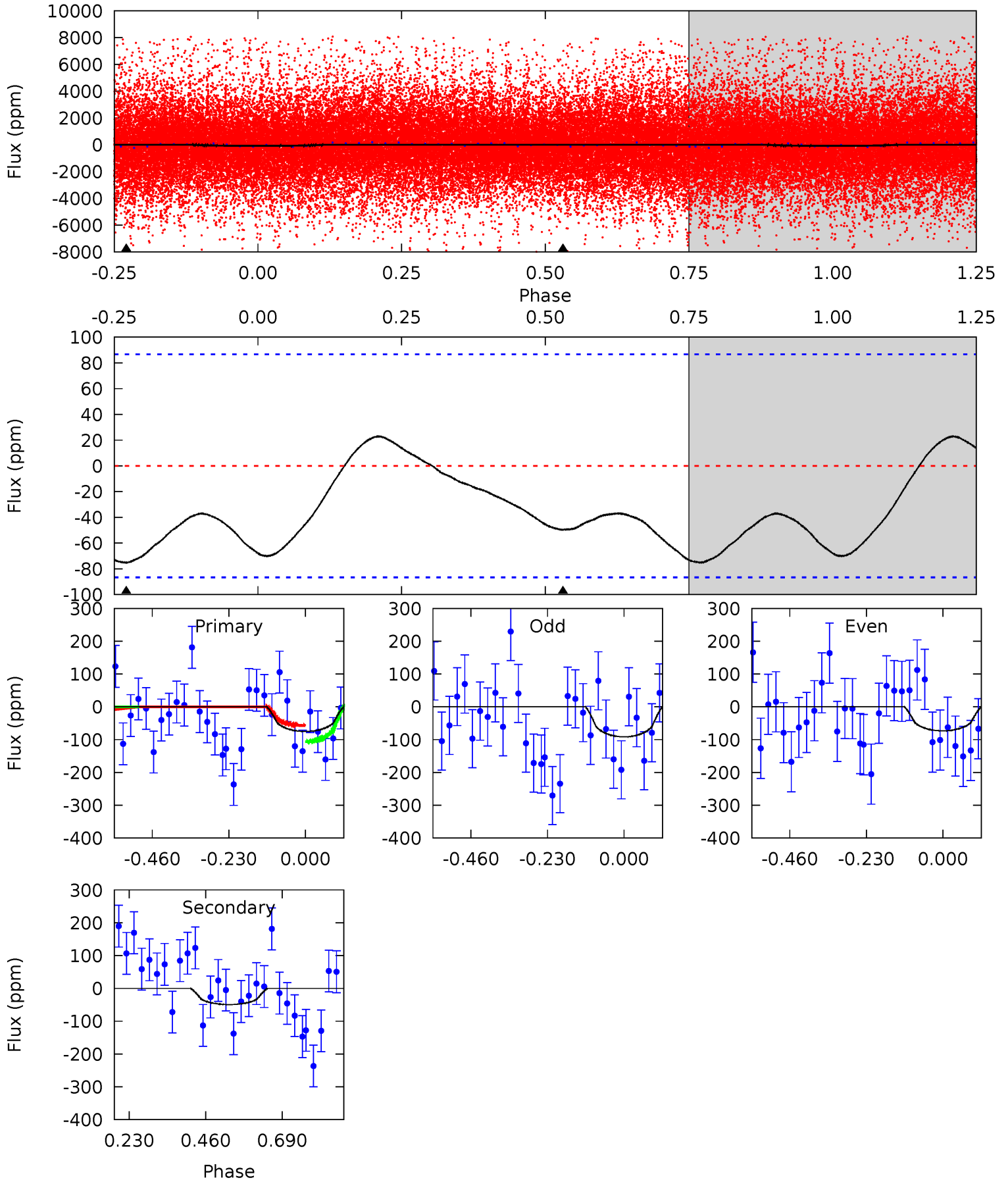
TCE 011393217-01 P= 0.654698 Days $T_0=131.594994$ (BKJD)



DV Model-Shift Uniqueness Test

011393217-01, P = 0.654164 Days, E = 130.938914 Days

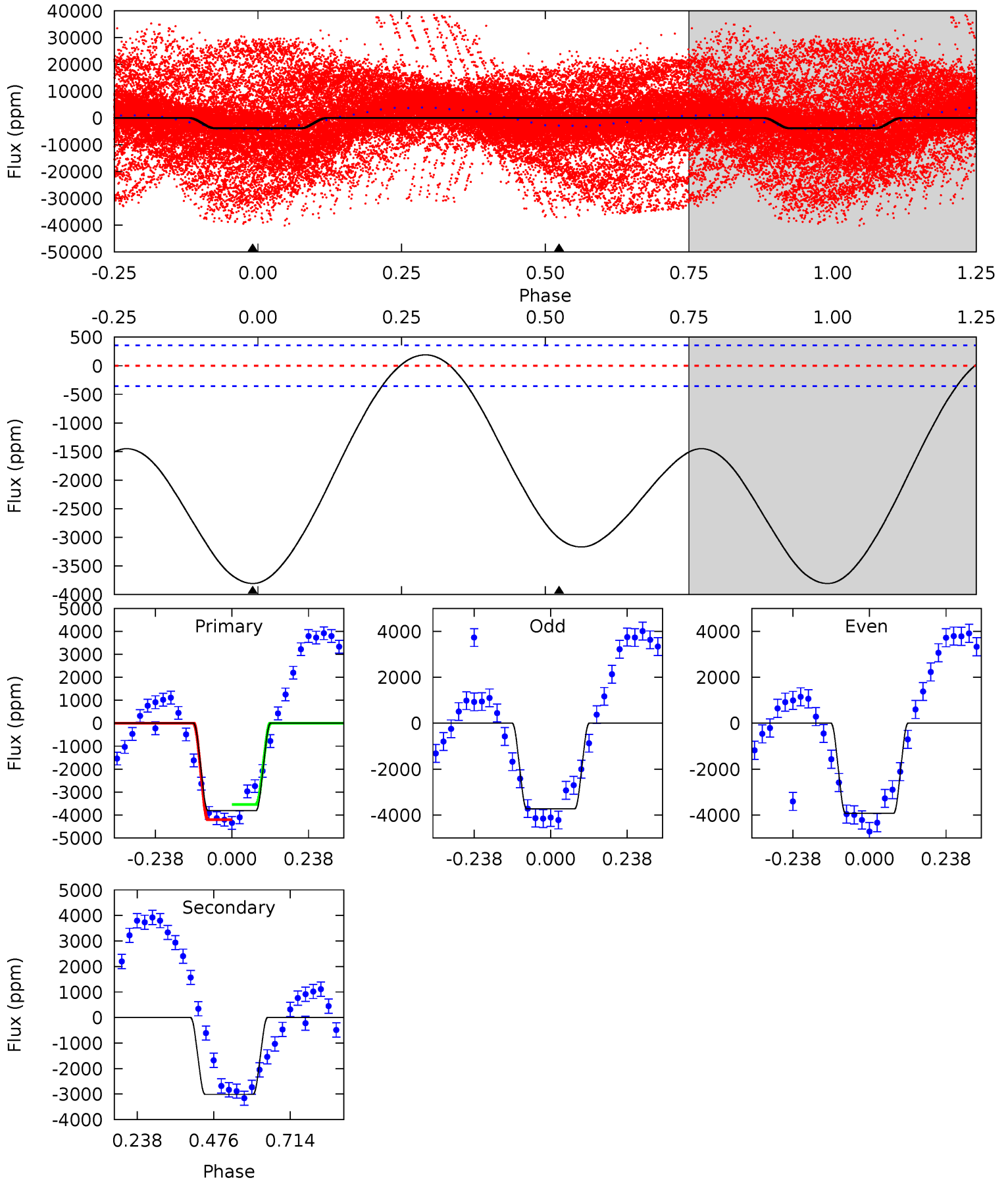
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.81	2.51	0	0	4.39	1.20	1.68	3.81	3.81	2.51	2.51	0.46	-15.7	0.23	1.27



Alt Model-Shift Uniqueness Test

011393217-01, P = 0.654698 Days, E = 130.940296 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.8	37.0	0	0	4.38	1.18	7.54	46.8	46.8	37.0	37.0	1.23	1.40	0.05	3.83



Stellar Parameters For KIC 011393217

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4748^{+142}_{-128}	$4.591^{+0.054}_{-0.032}$	$-0.240^{+0.300}_{-0.300}$	$0.688^{+0.055}_{-0.061}$	$0.674^{+0.081}_{-0.050}$	$2.916^{+0.724}_{-0.401}$
	+3%/-3%	+1%/-1%	+125%/-125%	+8%/-9%	+12%/-7%	+25%/-14%
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 011393217-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-50 ± 20	$1.23^{+1.36}_{-0.90}$	2133^{+68}_{-74}	3431^{+2265}_{-834}	$2.866^{+35.148}_{-2.207}$
Alt.	-3013 ± 81	$5.17^{+1.60}_{-1.63}$	2122^{+75}_{-69}	4343^{+701}_{-457}	11^{+11}_{-4}

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 $A_{obs} \gg 1.0$

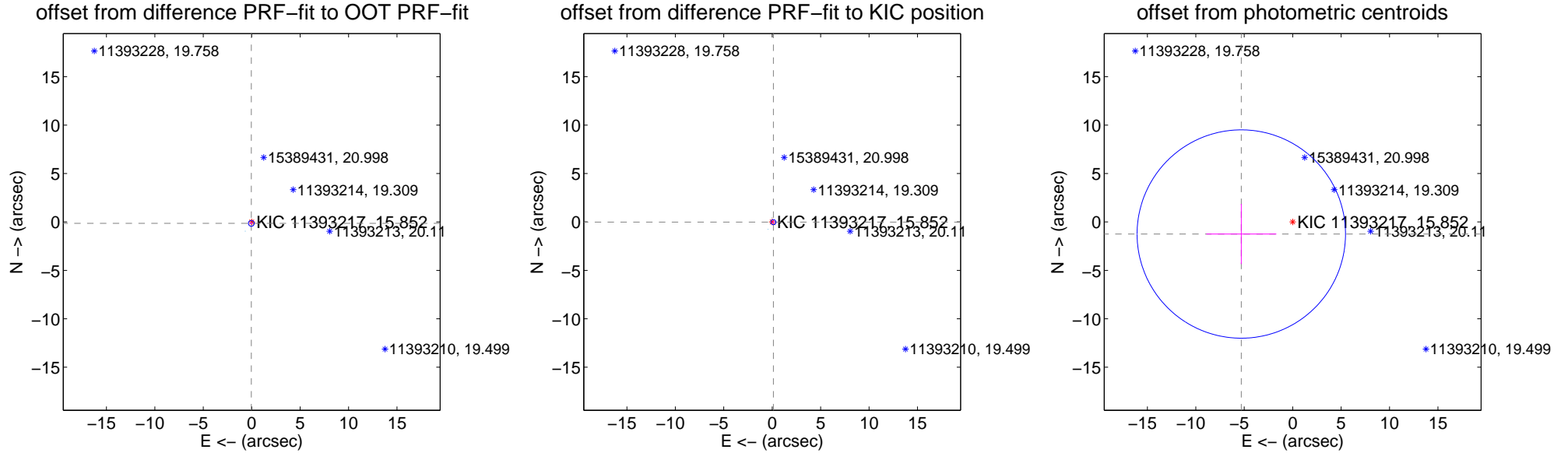
DV Centroid Data

Supplemental centroid analysis for 011393217-01. Kepler magnitude: 15.85. Transit SNR 1.41

There are 8 quarters with good PRF difference image offsets

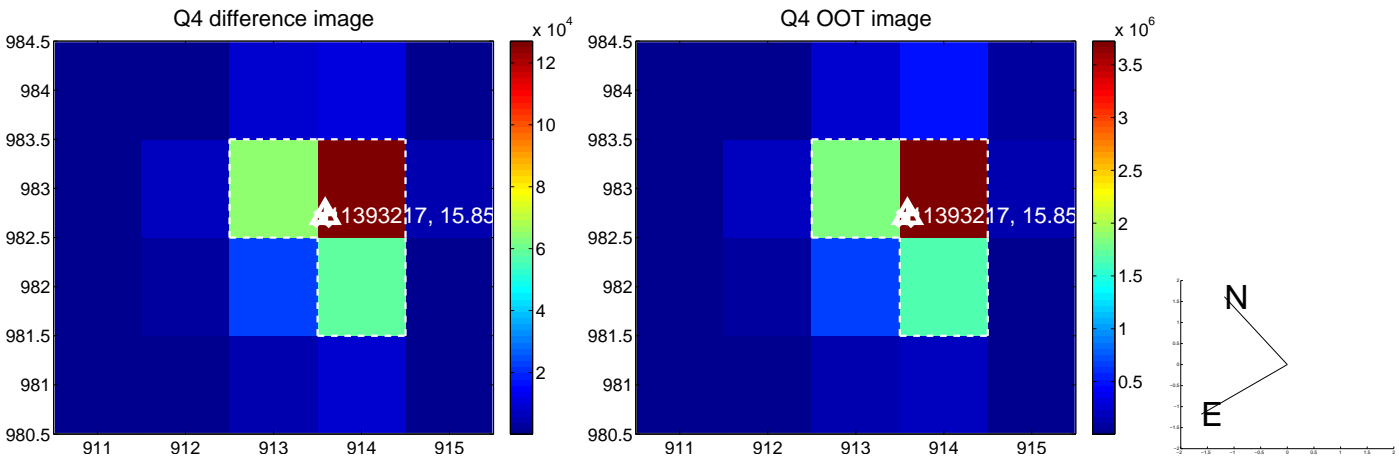
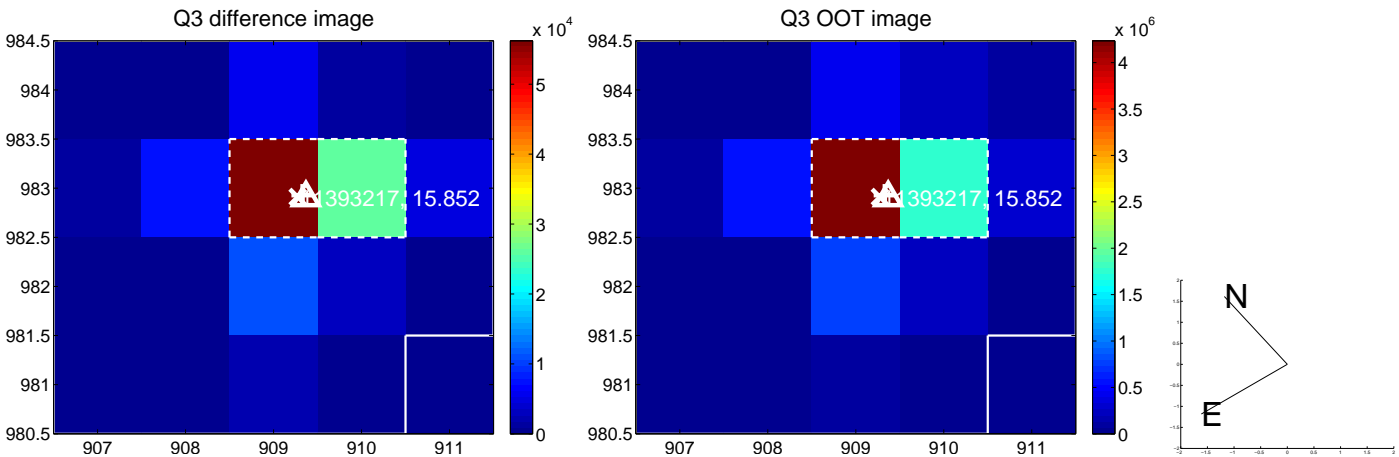
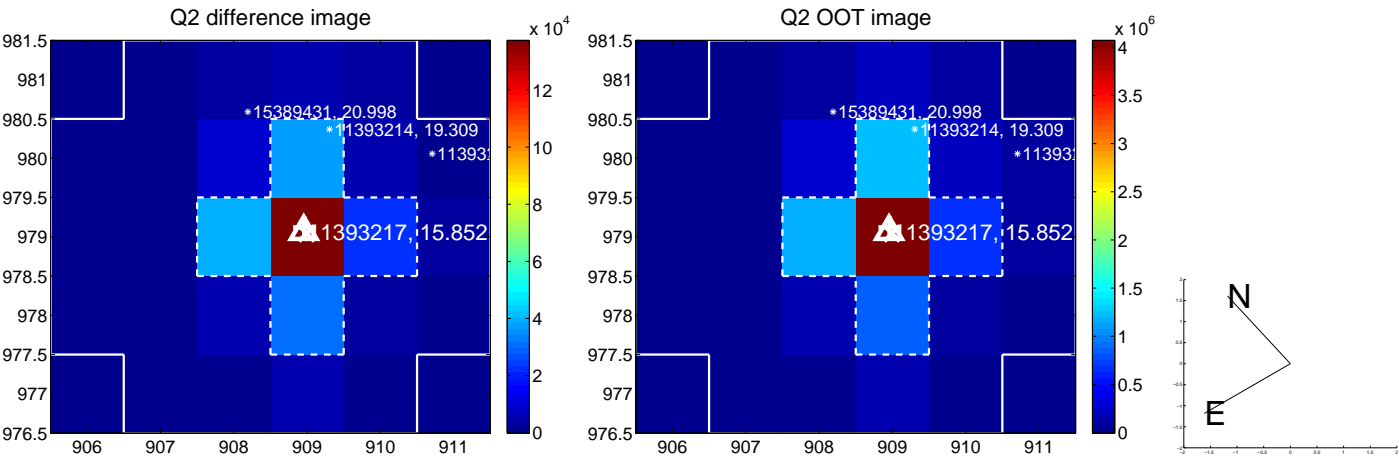
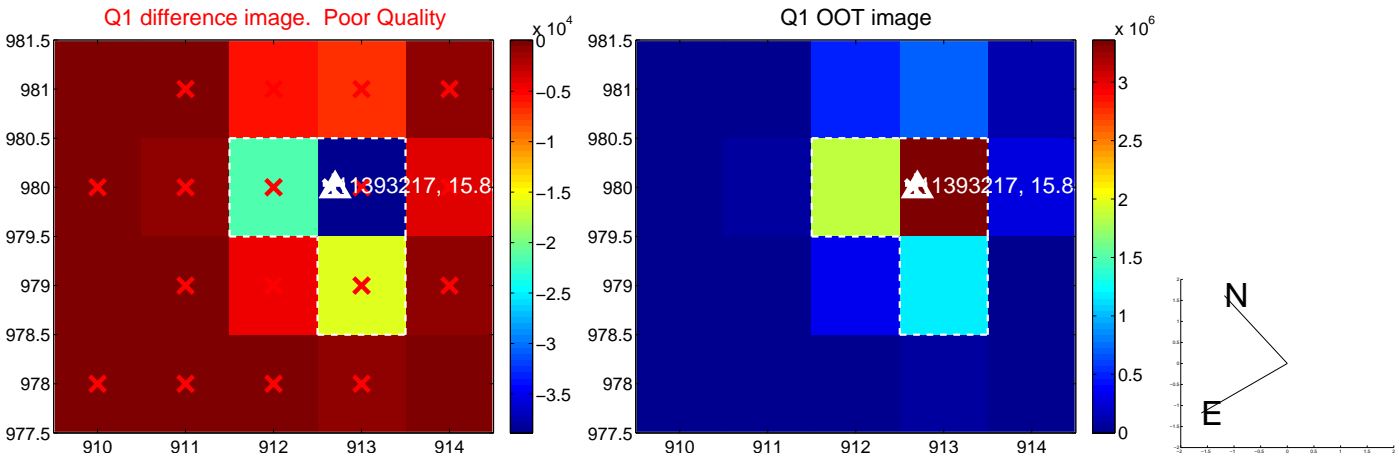
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.151 ± 0.100	1.51	0.043 ± 0.089	-0.145 ± 0.092
PRF-fit source offset from KIC position	0.121 ± 0.088	1.38	-0.120 ± 0.089	-0.017 ± 0.102
photometric centroid source offset	5.45 ± 3.59	1.52	5.31 ± 3.61	-1.25 ± 3.11

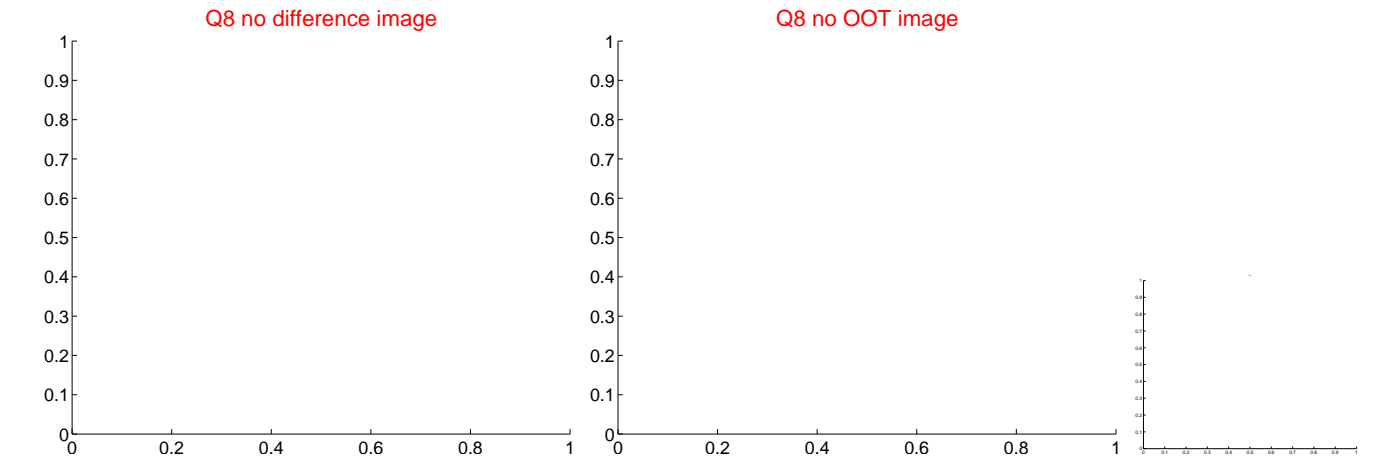
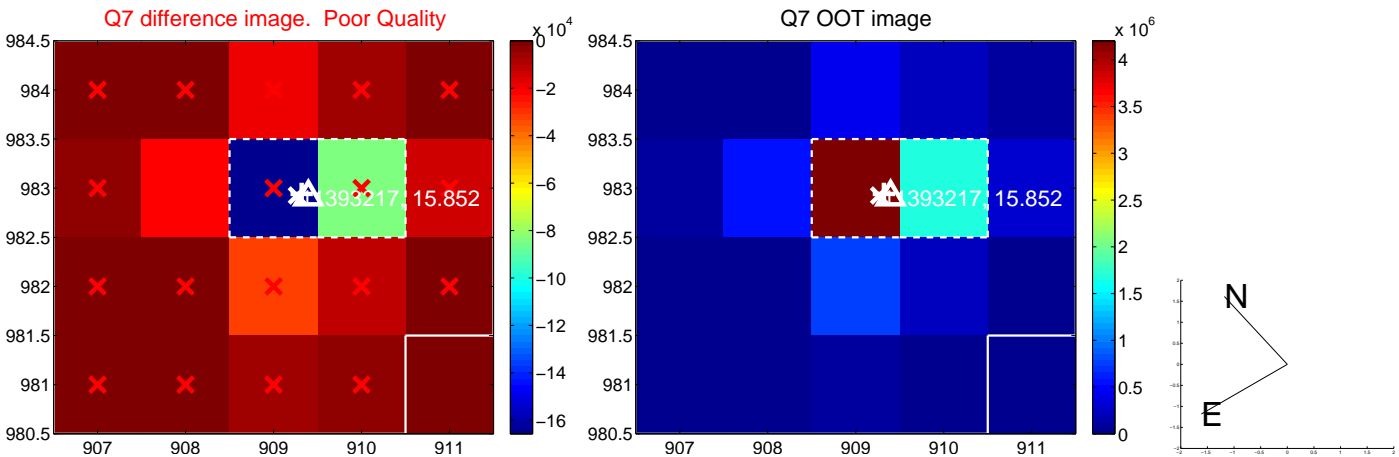
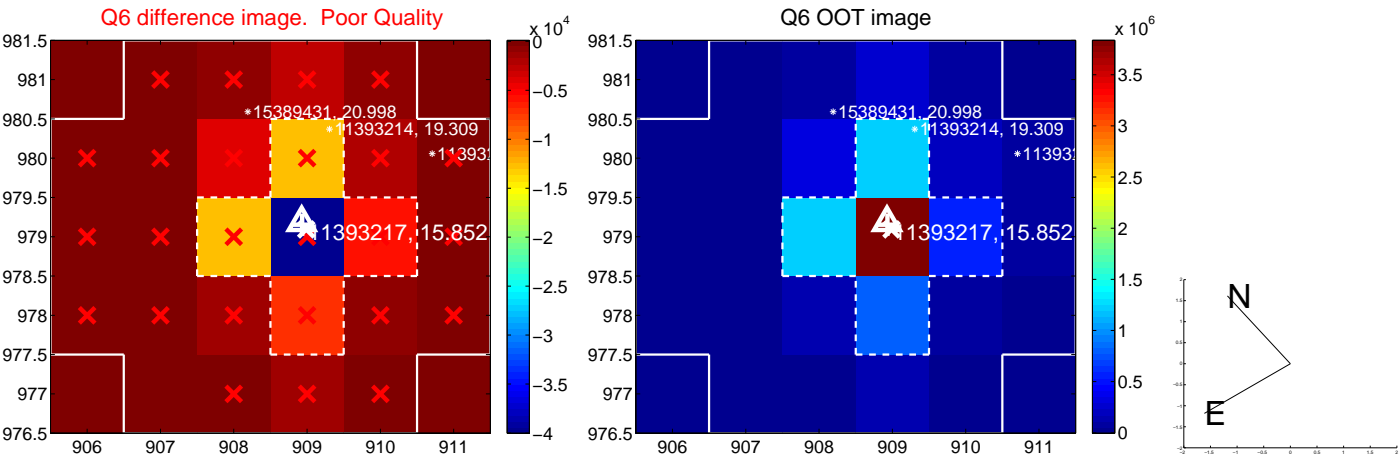
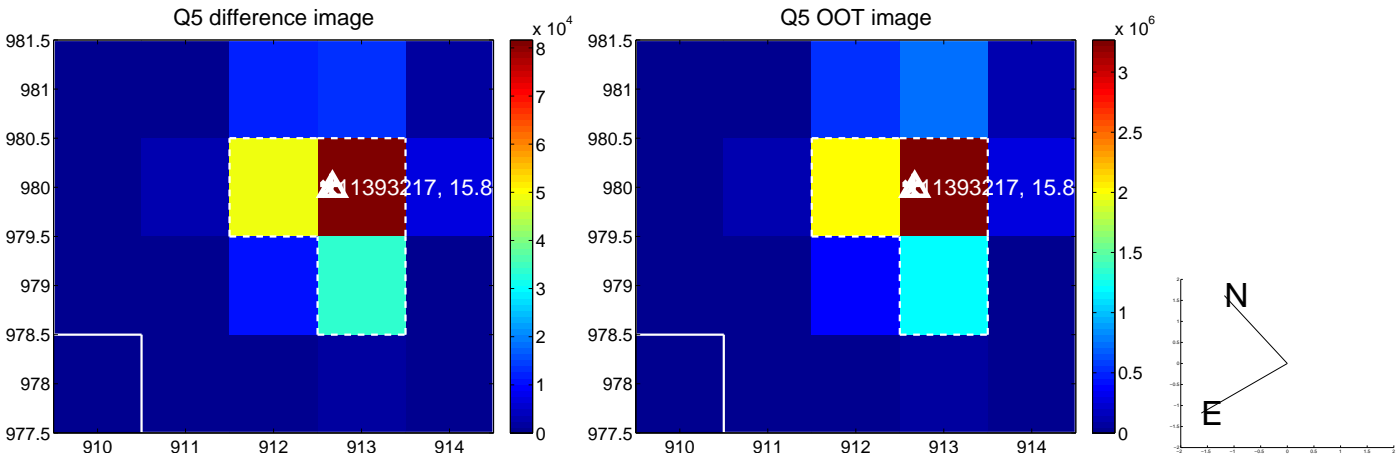


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

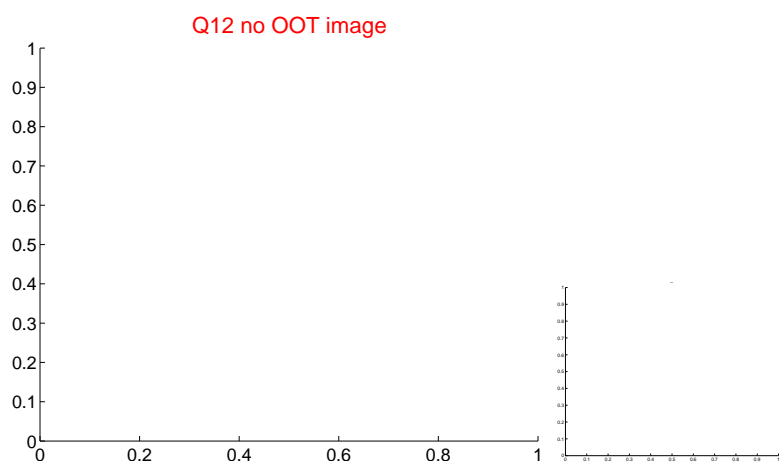
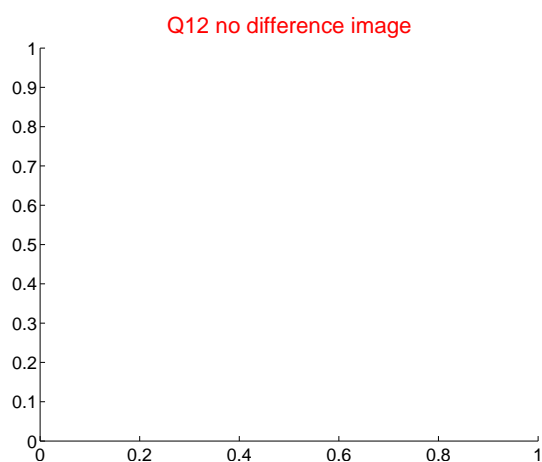
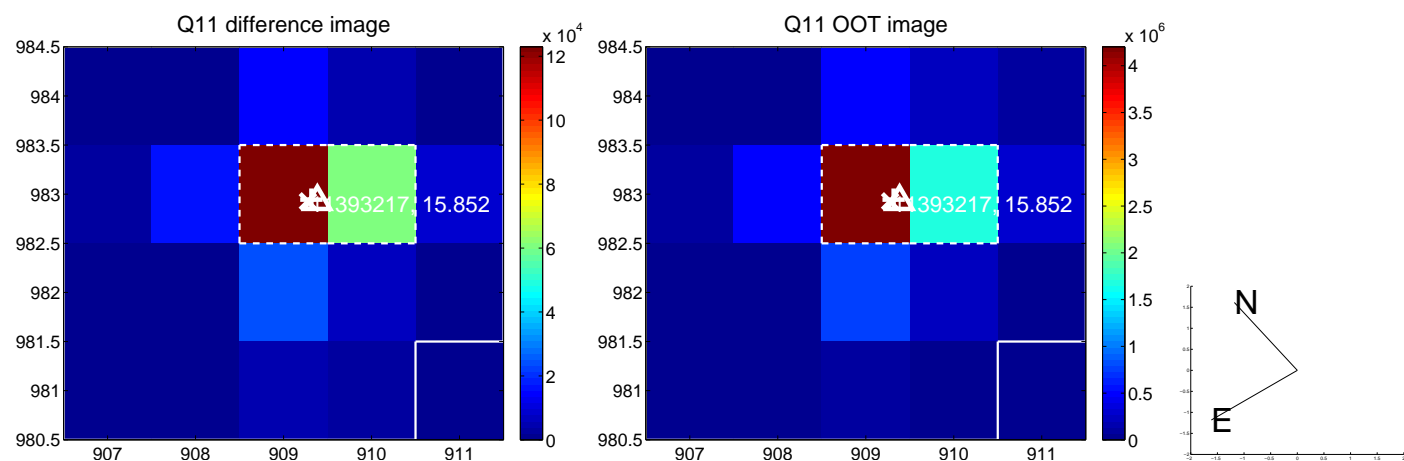
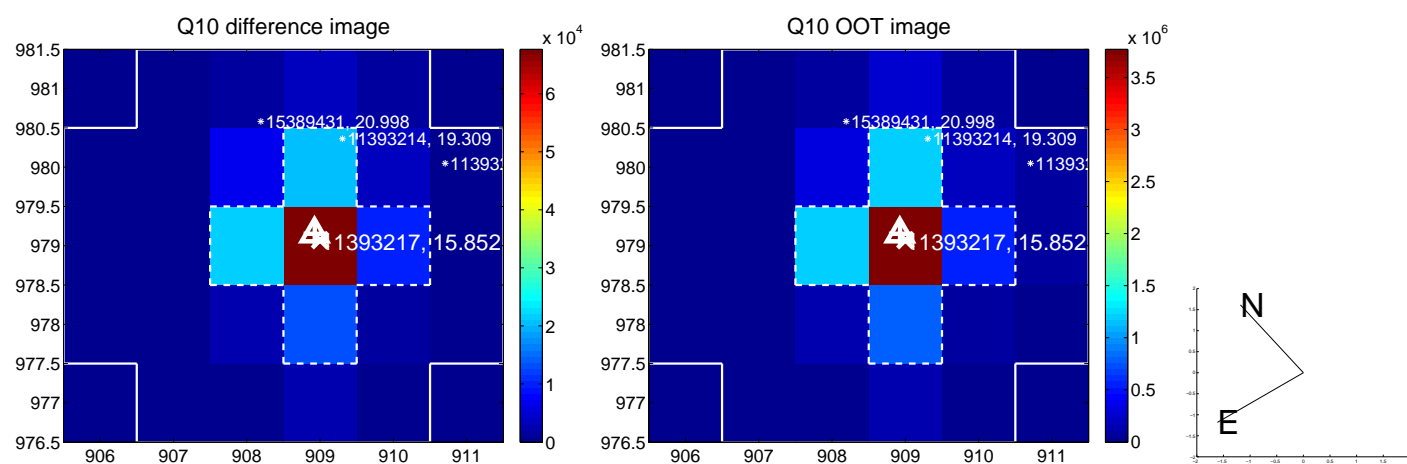
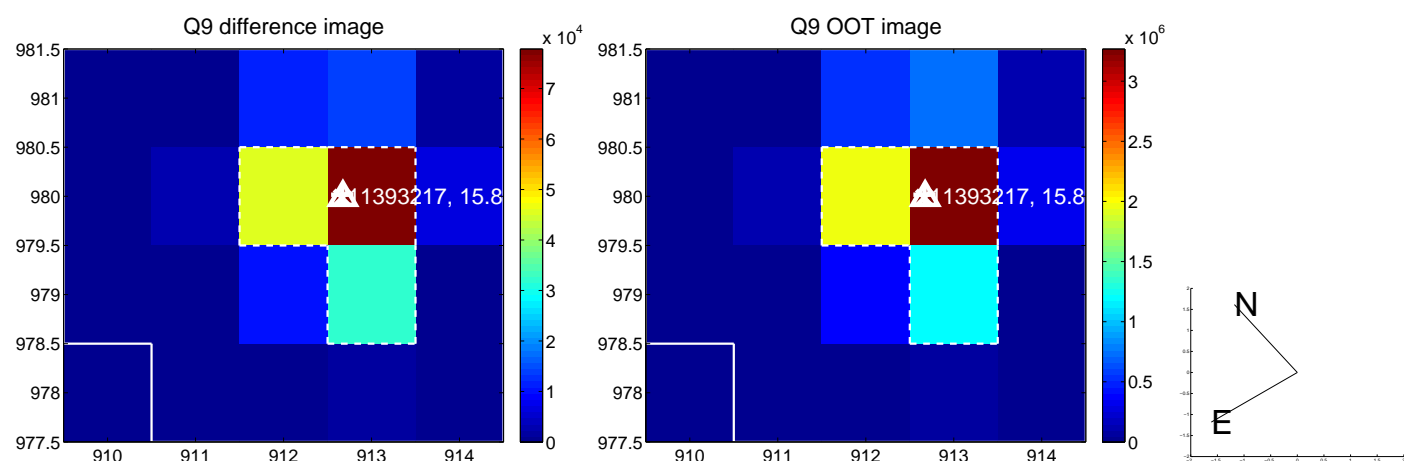
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



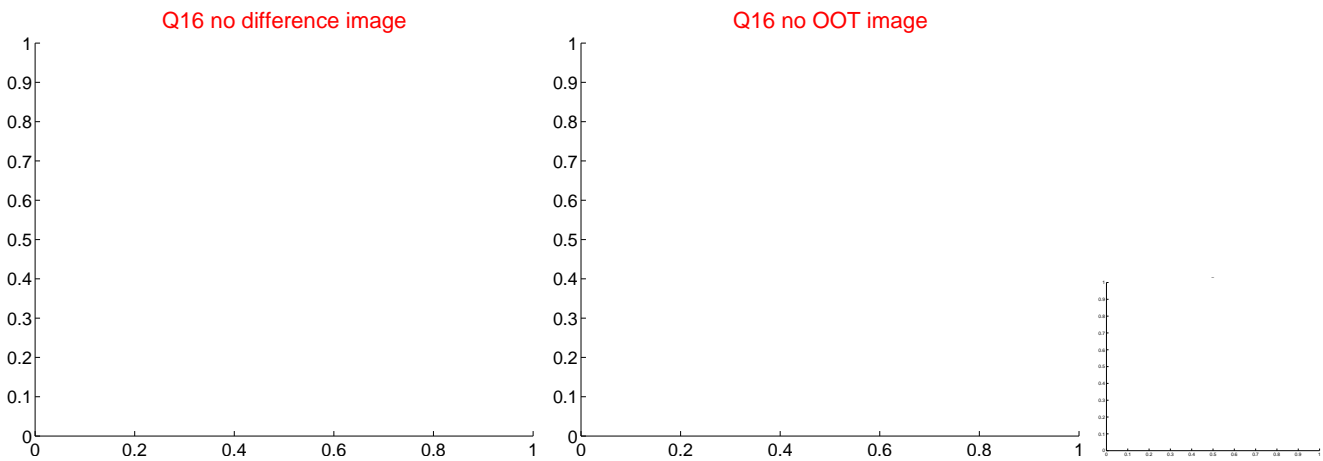
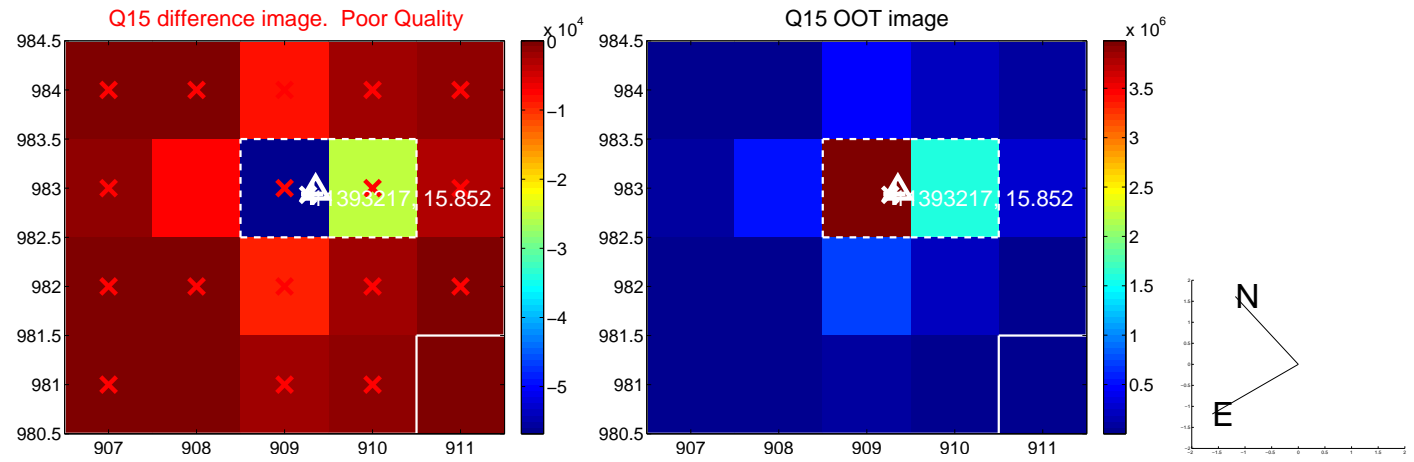
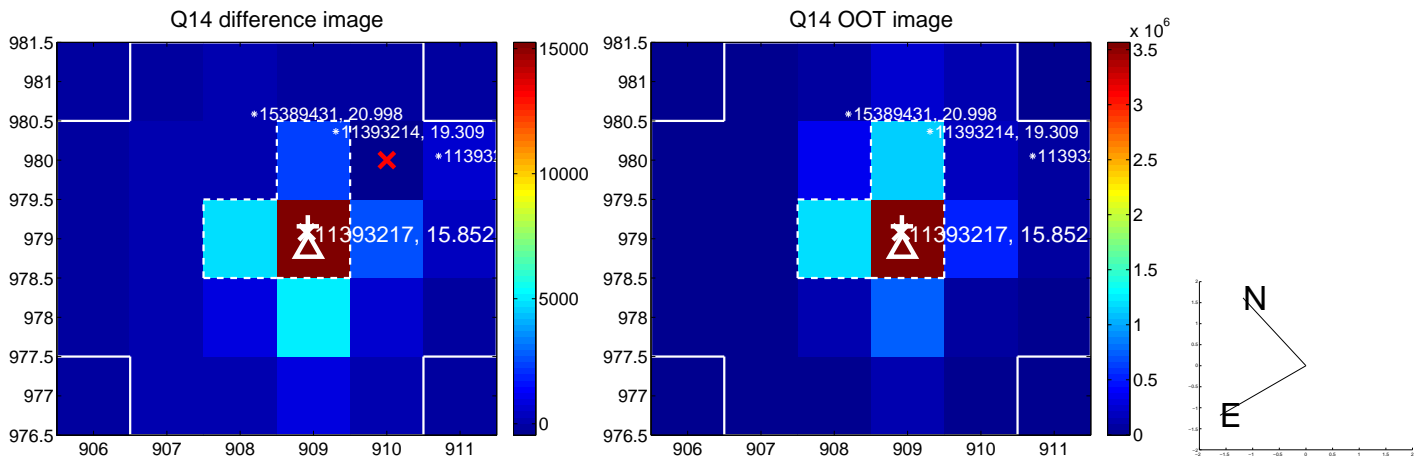
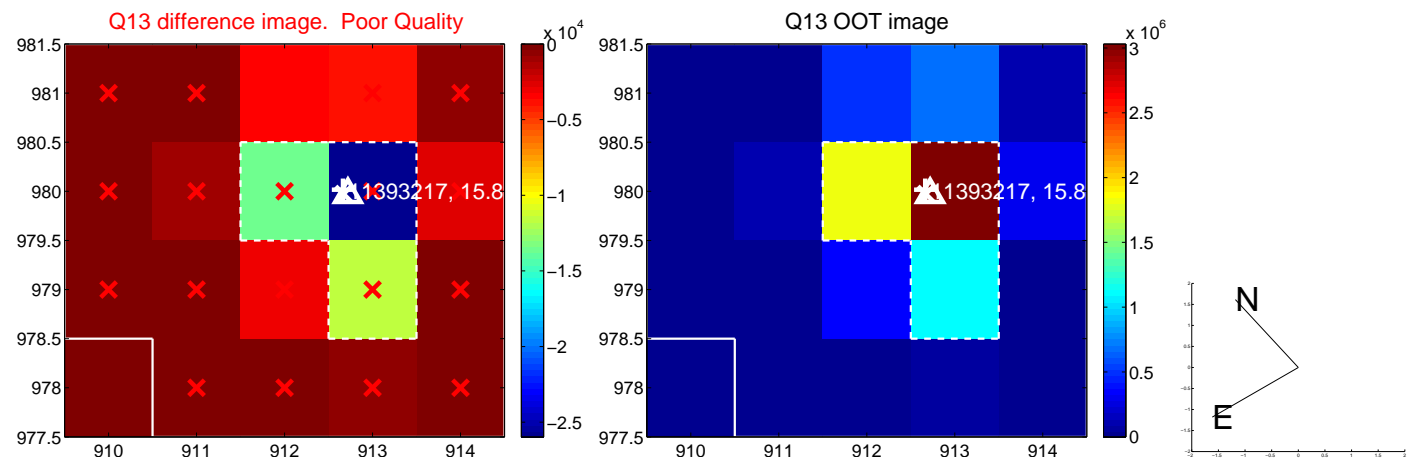
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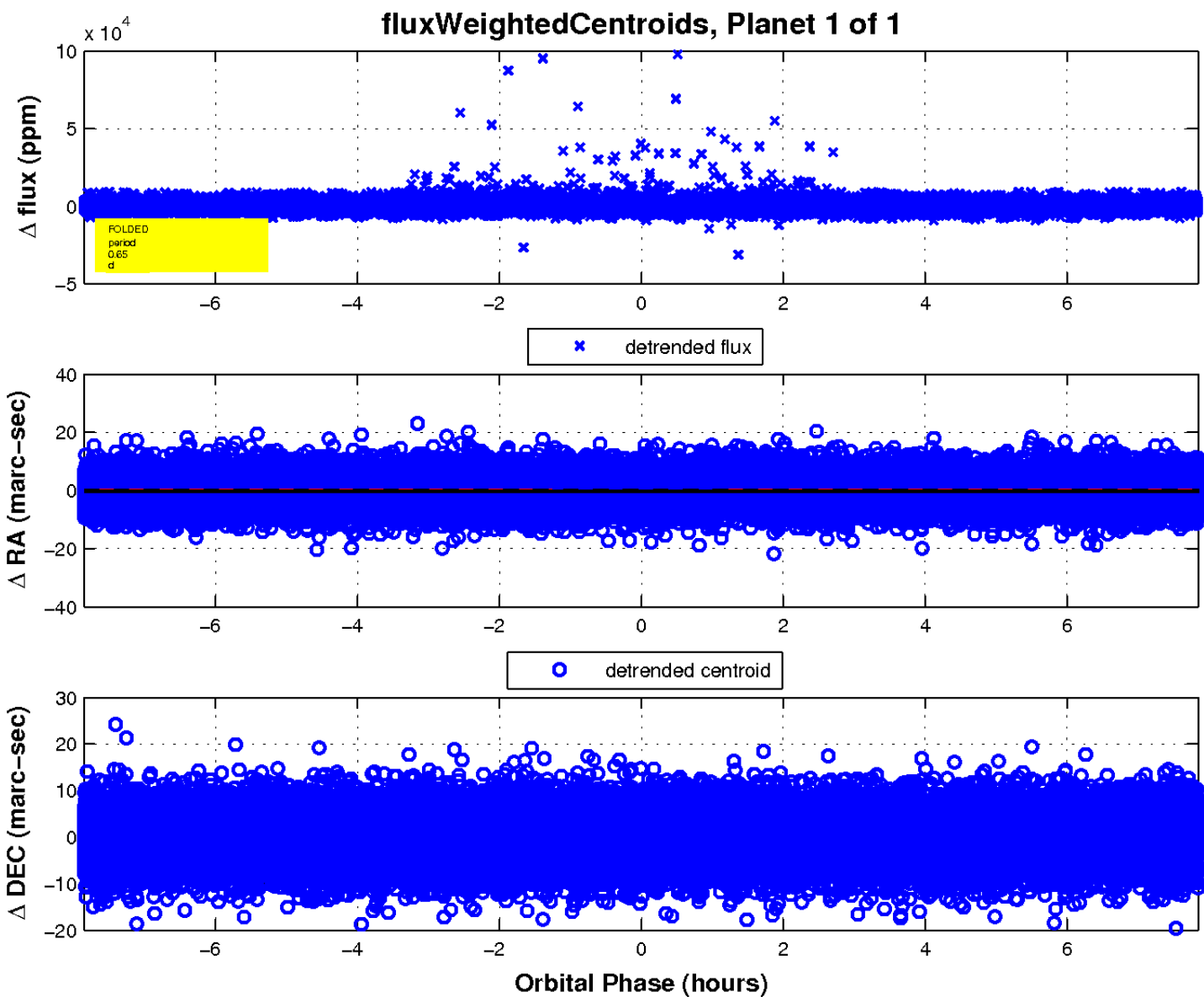
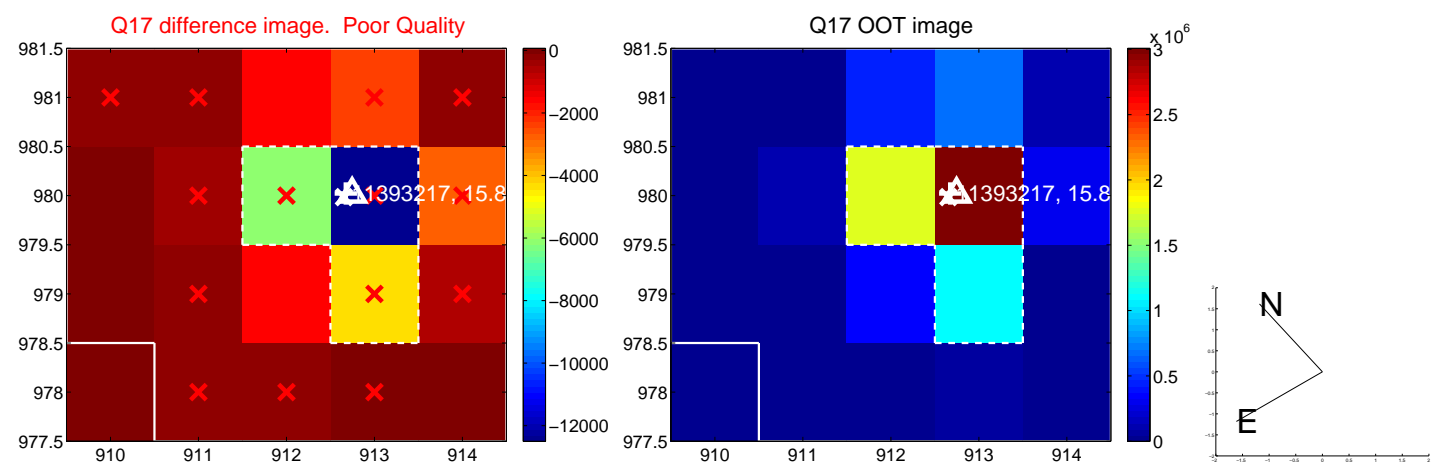
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UKIRT Image

Declination

