

KIC 008046689

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})
008046689-01	OBS	3092.01	5.785384	137.098794	260.8	2.536	13.4	14.4	1.18	6555	2.42	511.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008046689-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET

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.

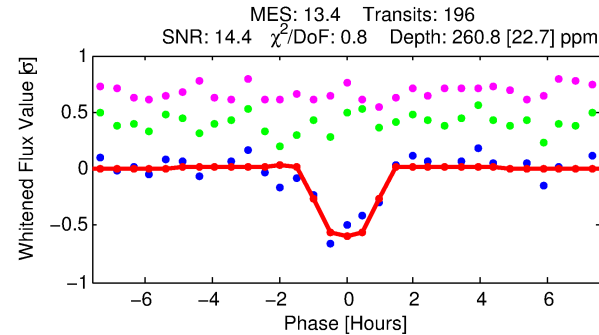
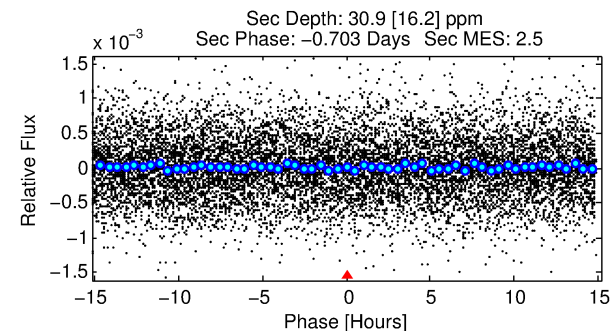
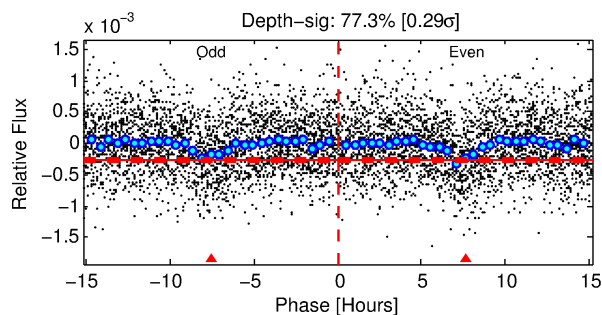
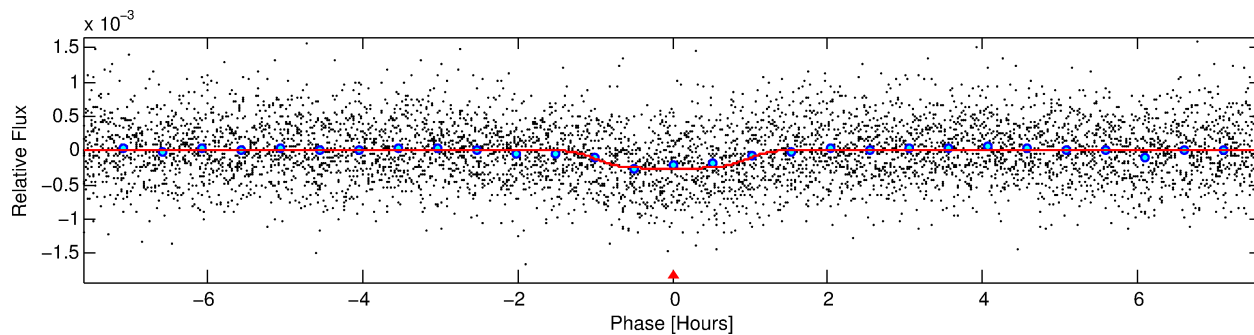
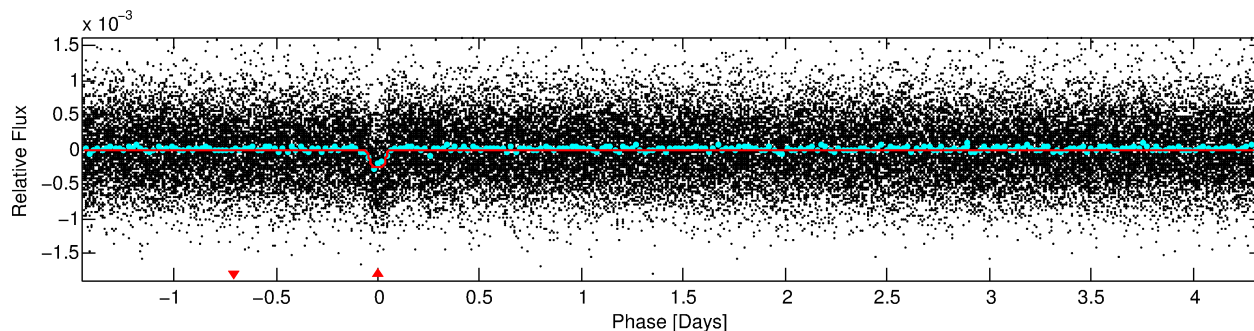
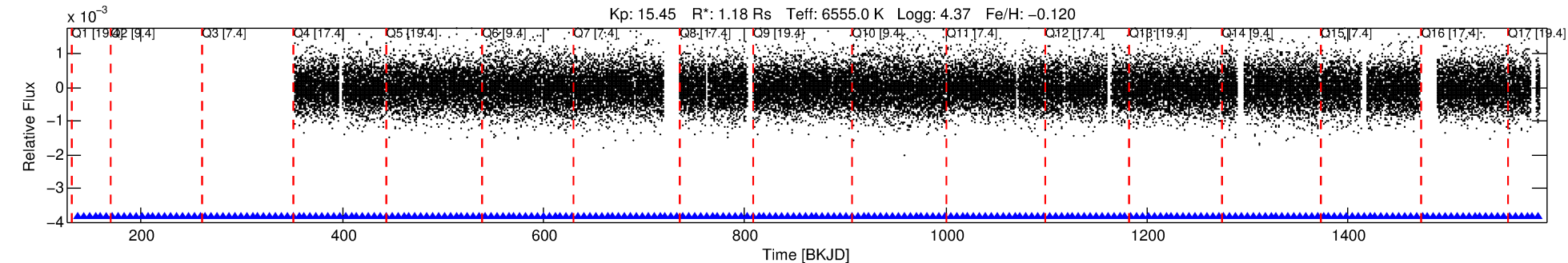
Ephemeris Match Information For 008046689-01

No Significant Match Found

DV One-Page Summary

KIC: 8046689 Candidate: 1 of 1 Period: 5.785 d
KOI: K03092.01 Corr: 0.918

Kp: 15.45 R*: 1.18 Rs Teff: 6555.0 K Logg: 4.37 Fe/H: -0.120



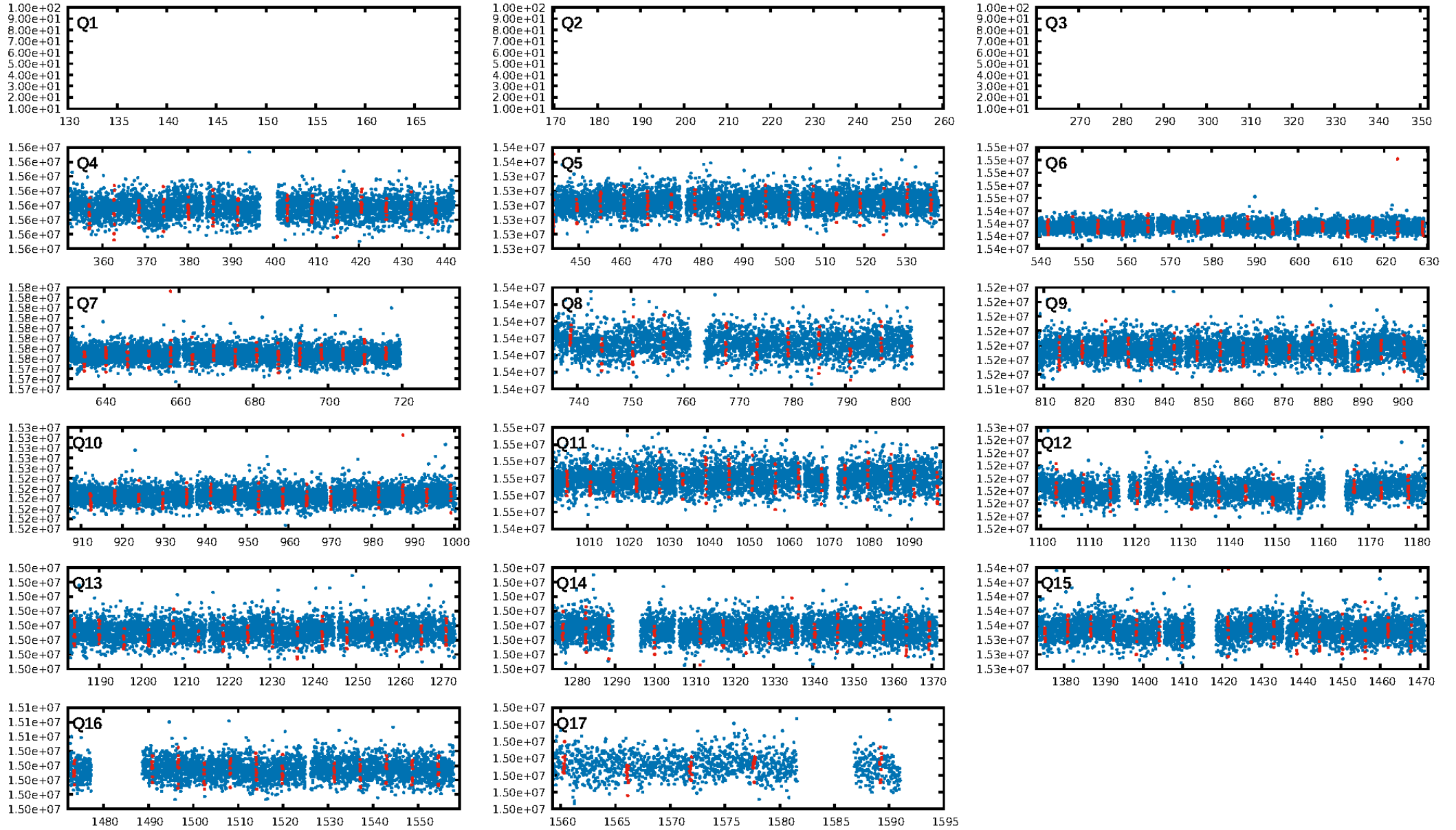
DV Fit Results:

Period = 5.78538 [0.00003] d
Epoch = 137.0988 [0.0042] BKJD
Rp/R* = 0.0188 [0.0017]
a/R* = 5.82 [2.42]
b = 0.96 [0.03]
Seff = 511.49 [206.68]
Teq = 1213 [122] K
Rp = 2.41 [0.78] Re
a = 0.0670 [0.0173] AU
Ag = 13.10 [8.77] [1.38σ]
Teff = 3567 [515] K [4.45σ]

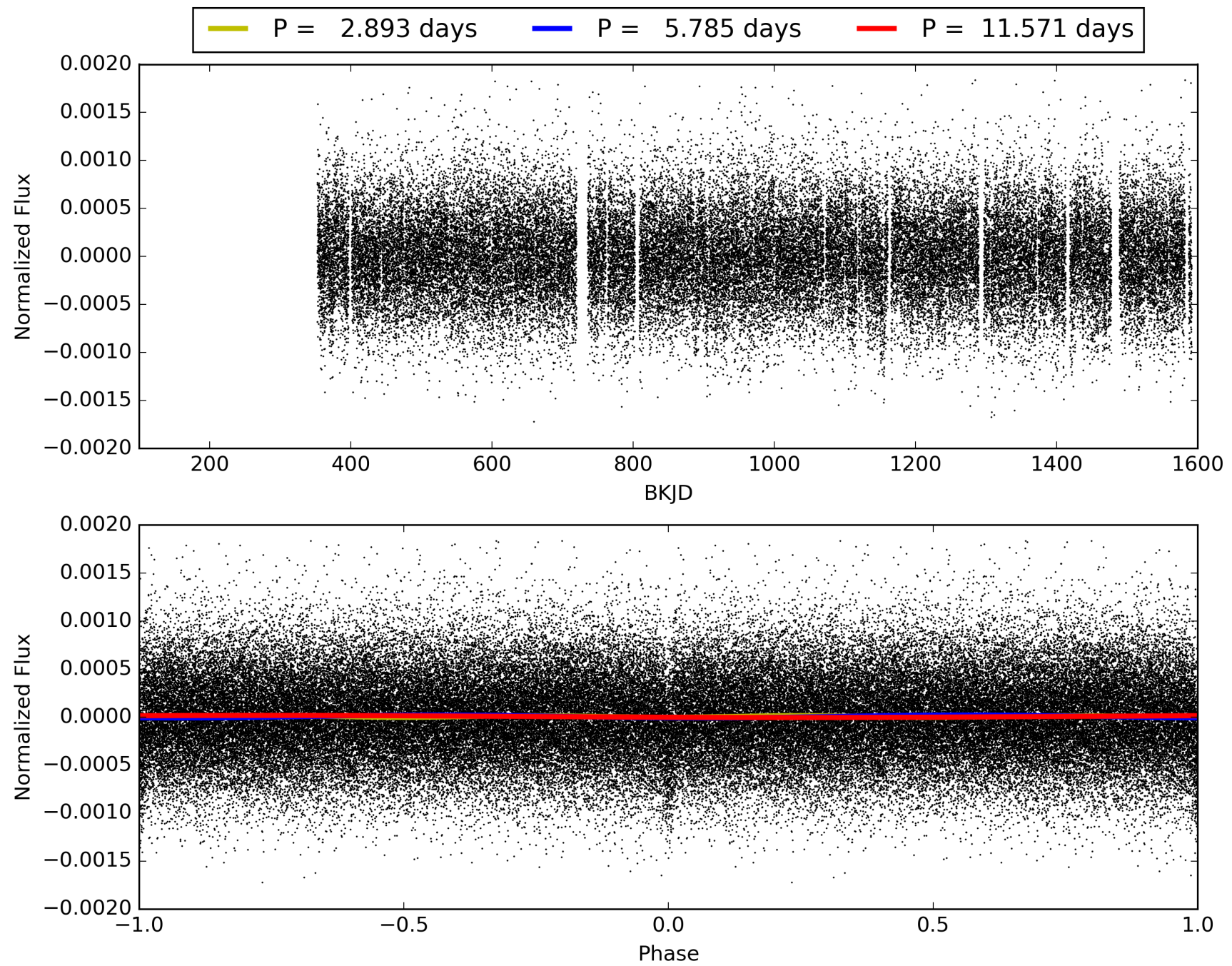
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.38e-40
RollingBand-fgt: 1.00 [191/191]
GhostDiagnostic-chr: -0.3503
Centroid-sig: 0.0%
Centroid-so: 236.399 arcsec [232.42σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [14/14]

TCE 008046689-01, PDC Light Curves

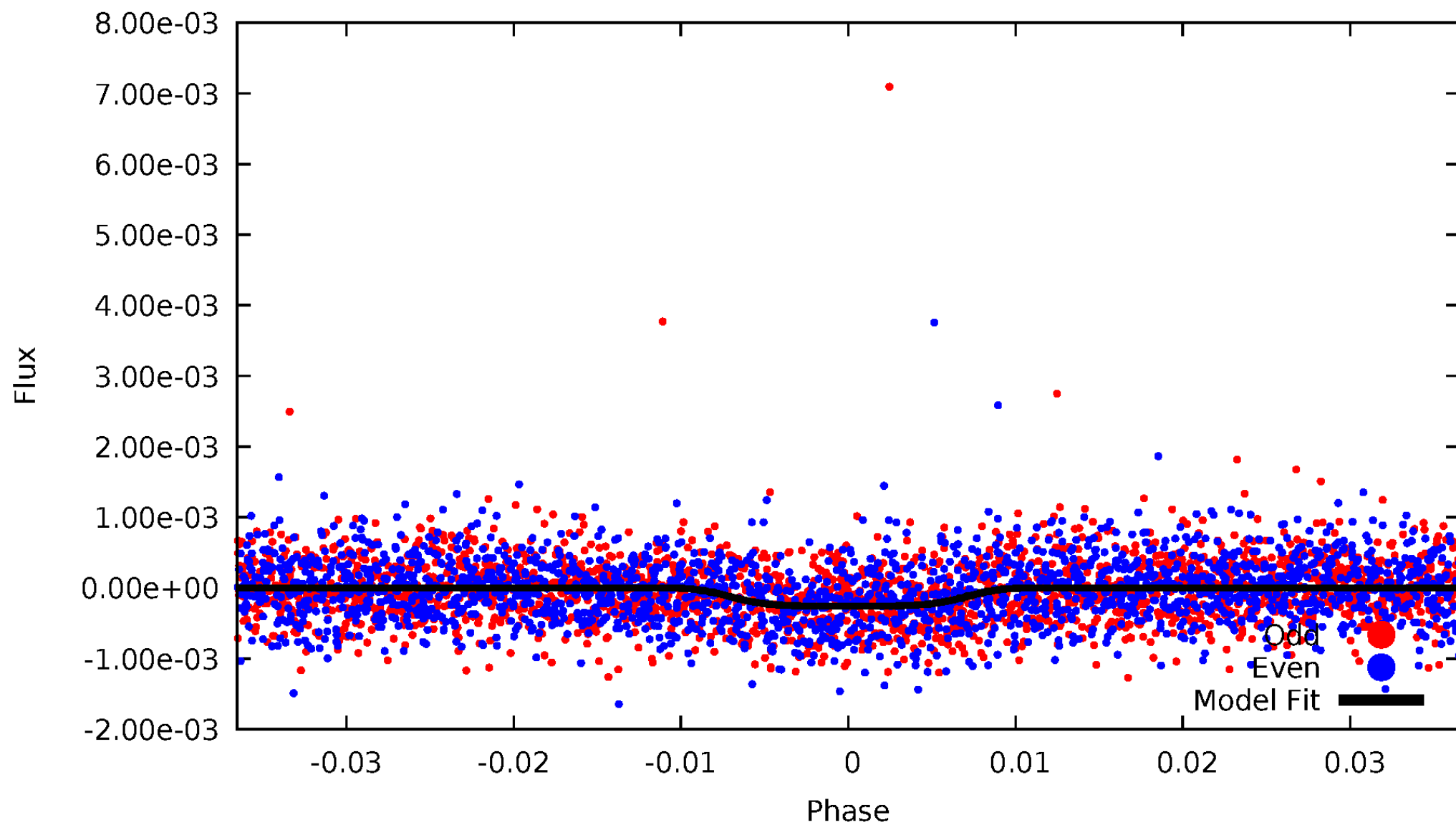


TCE 008046689-01



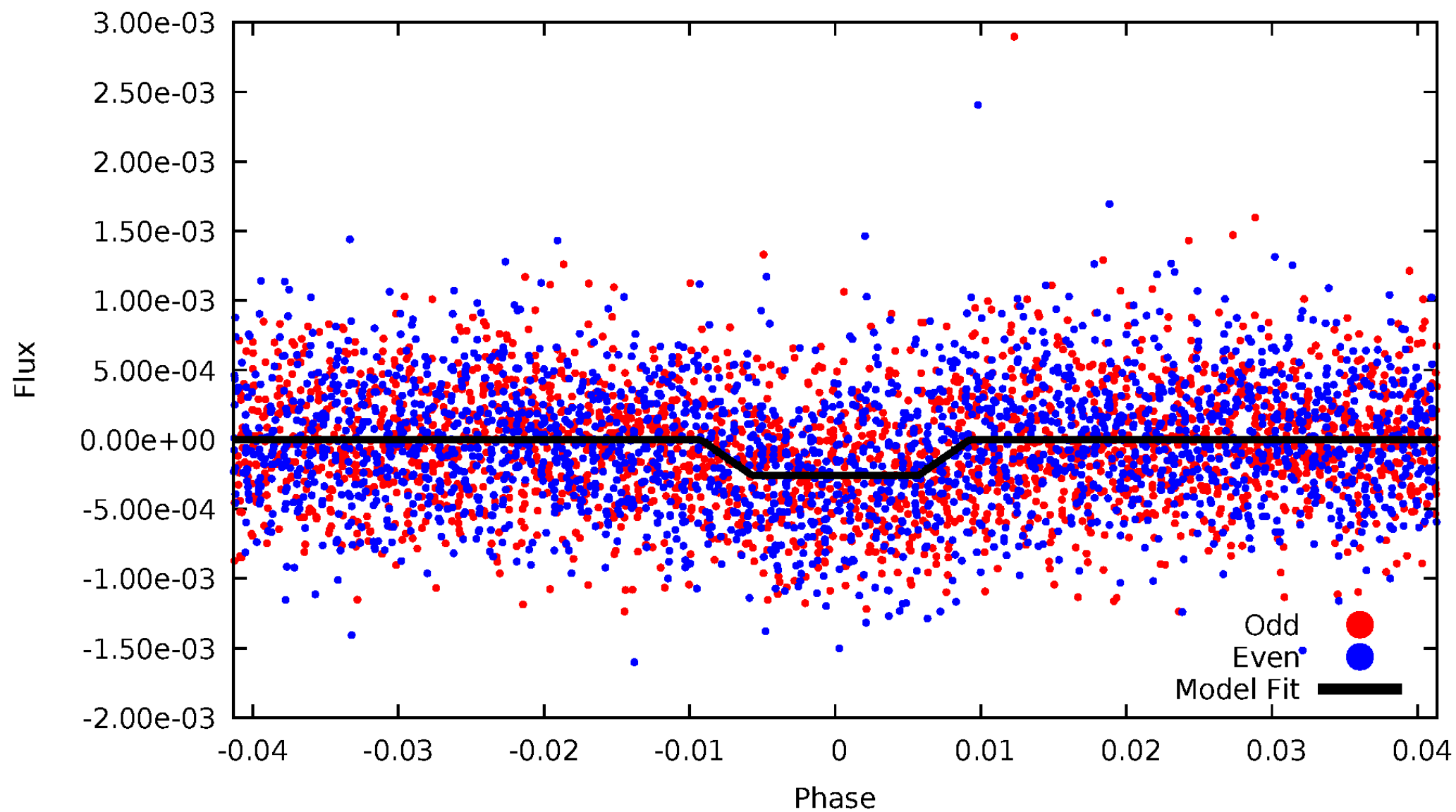
DV Odd/Even

TCE 008046689-01



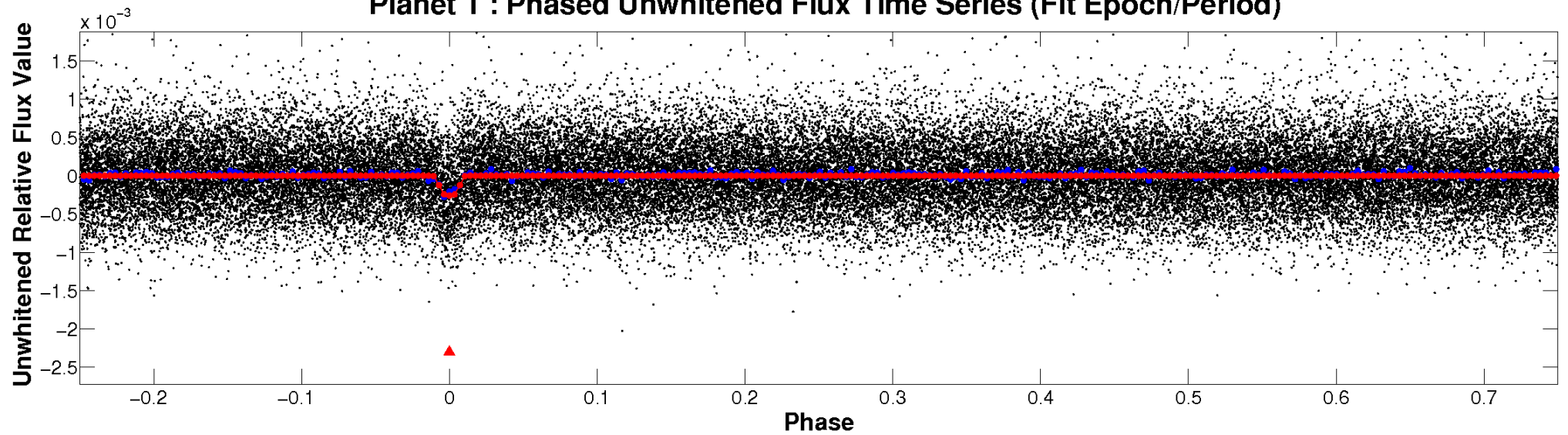
ALT Odd/Even

TCE 008046689-01

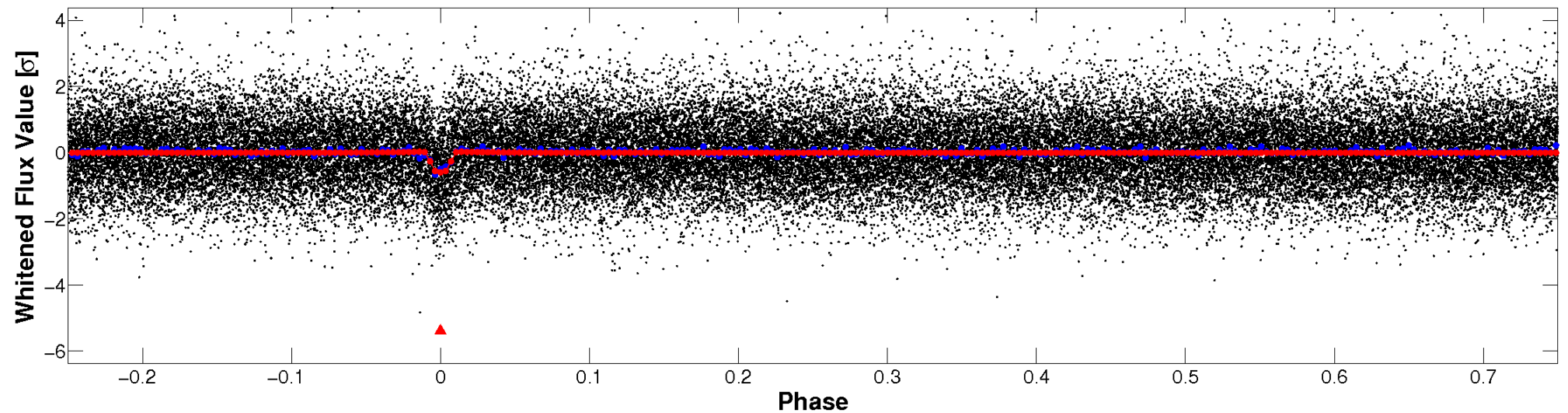


Non-Whitened Vs. Whitened Light Curve

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

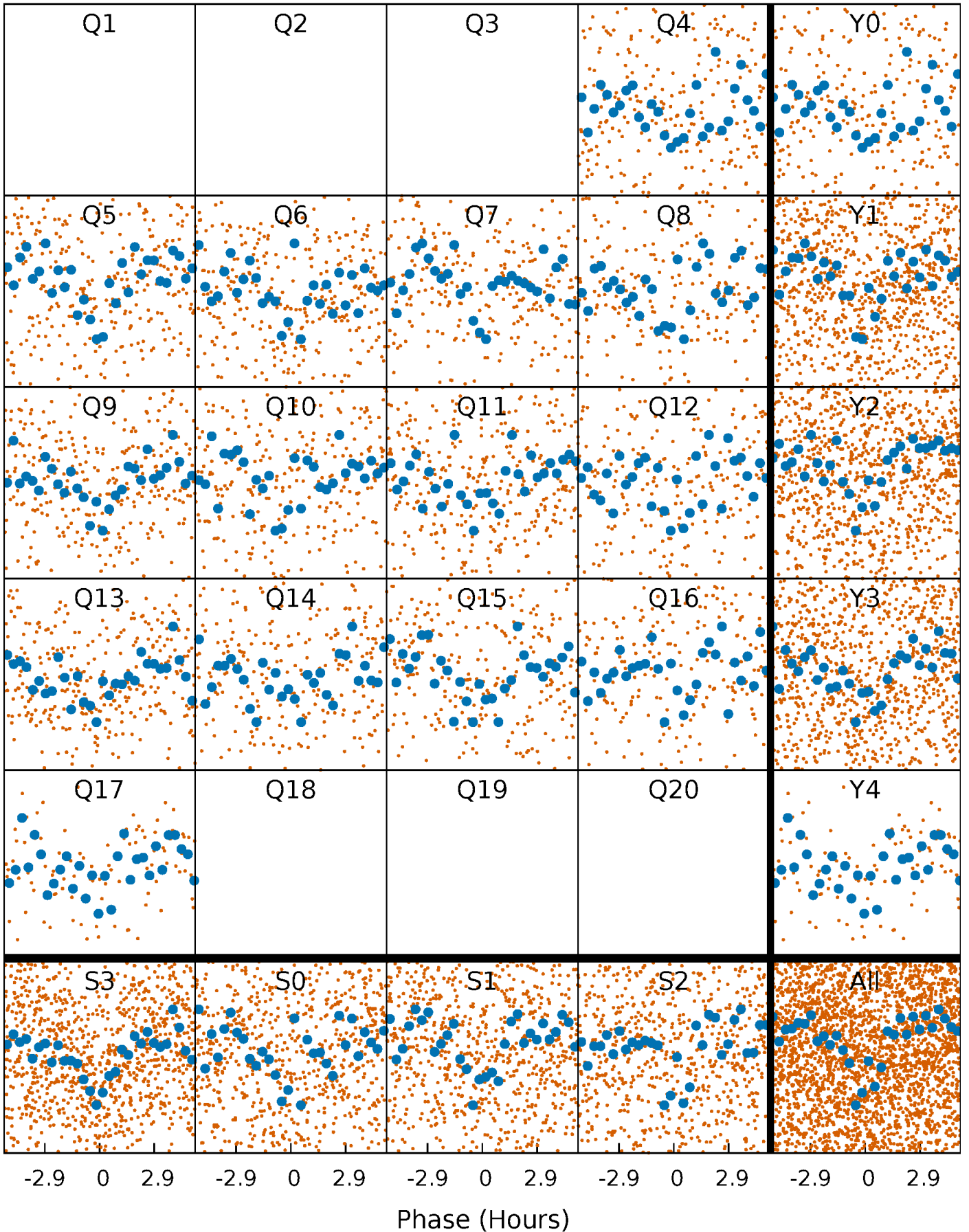


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



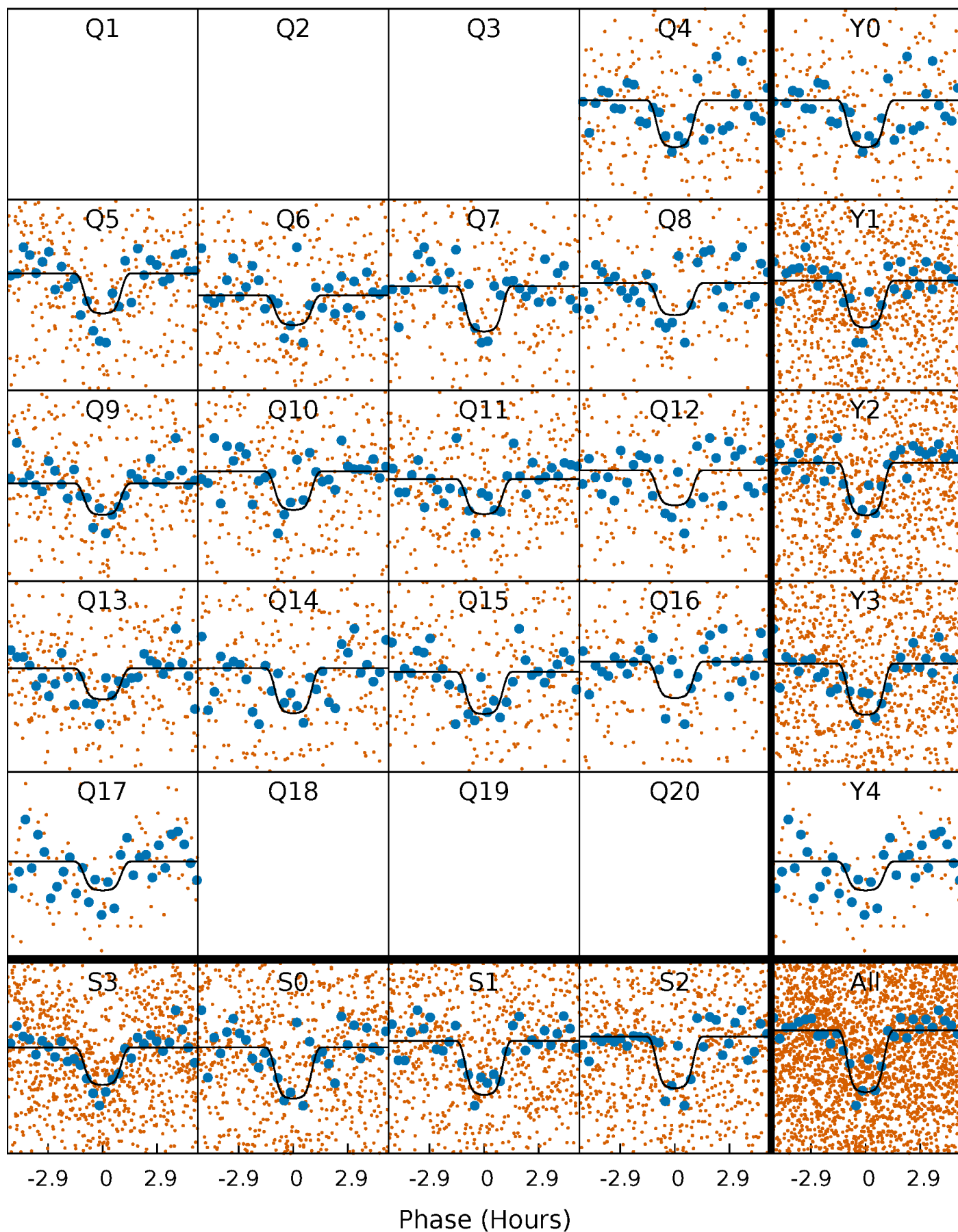
PDC Quarter-Phased Transit Curves

TCE 008046689-01 P= 5.785384 Days $T_0=137.098794$ (BKJD)



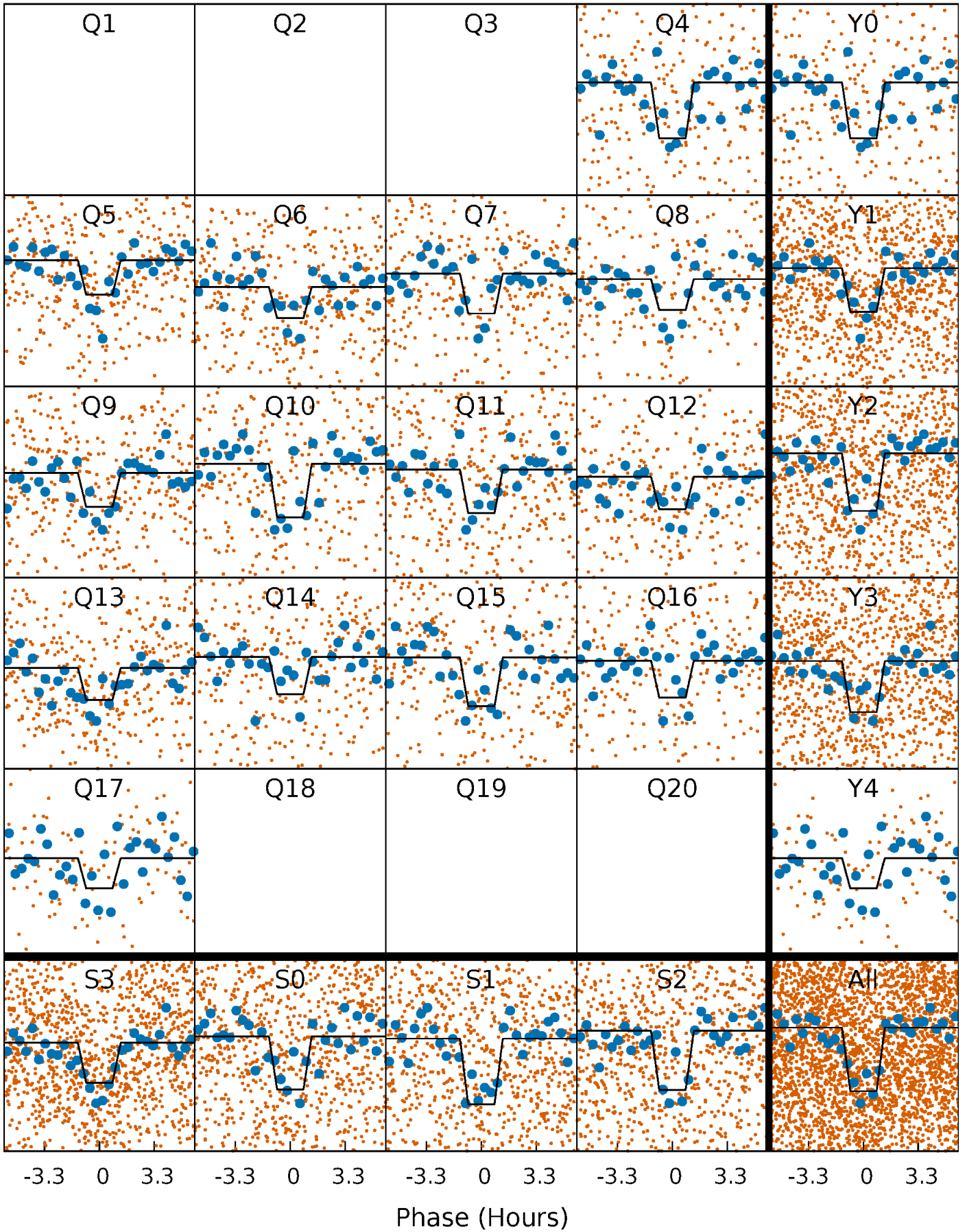
DV Quarter-Phased Transit Curves

TCE 008046689-01 P= 5.785384 Days $T_0=137.098794$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

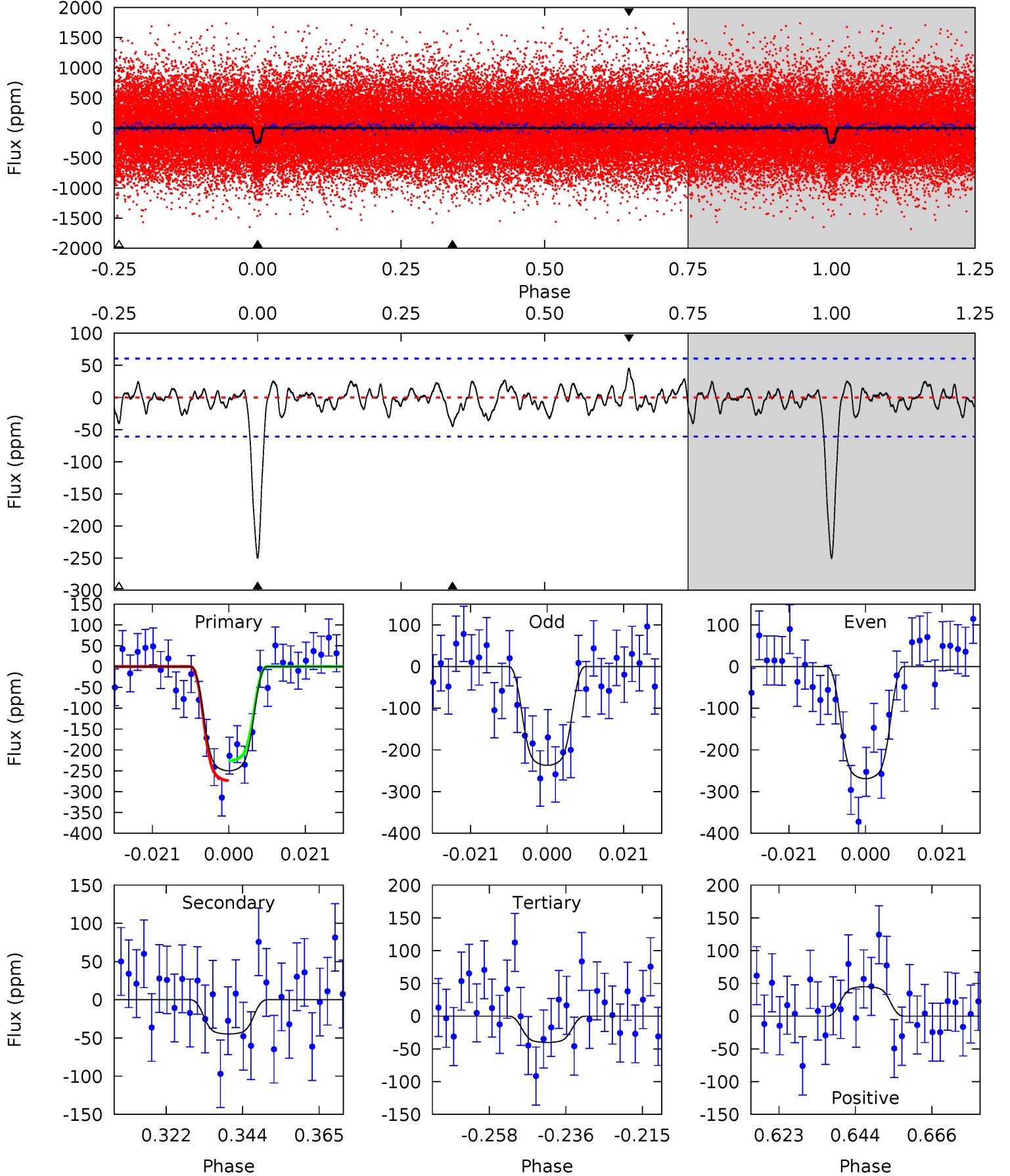
TCE 008046689-01 P= 5.785420 Days $T_0=137.091876$ (BKJD)



DV Model-Shift Uniqueness Test

008046689-01, P = 5.785384 Days, E = 137.098794 Days

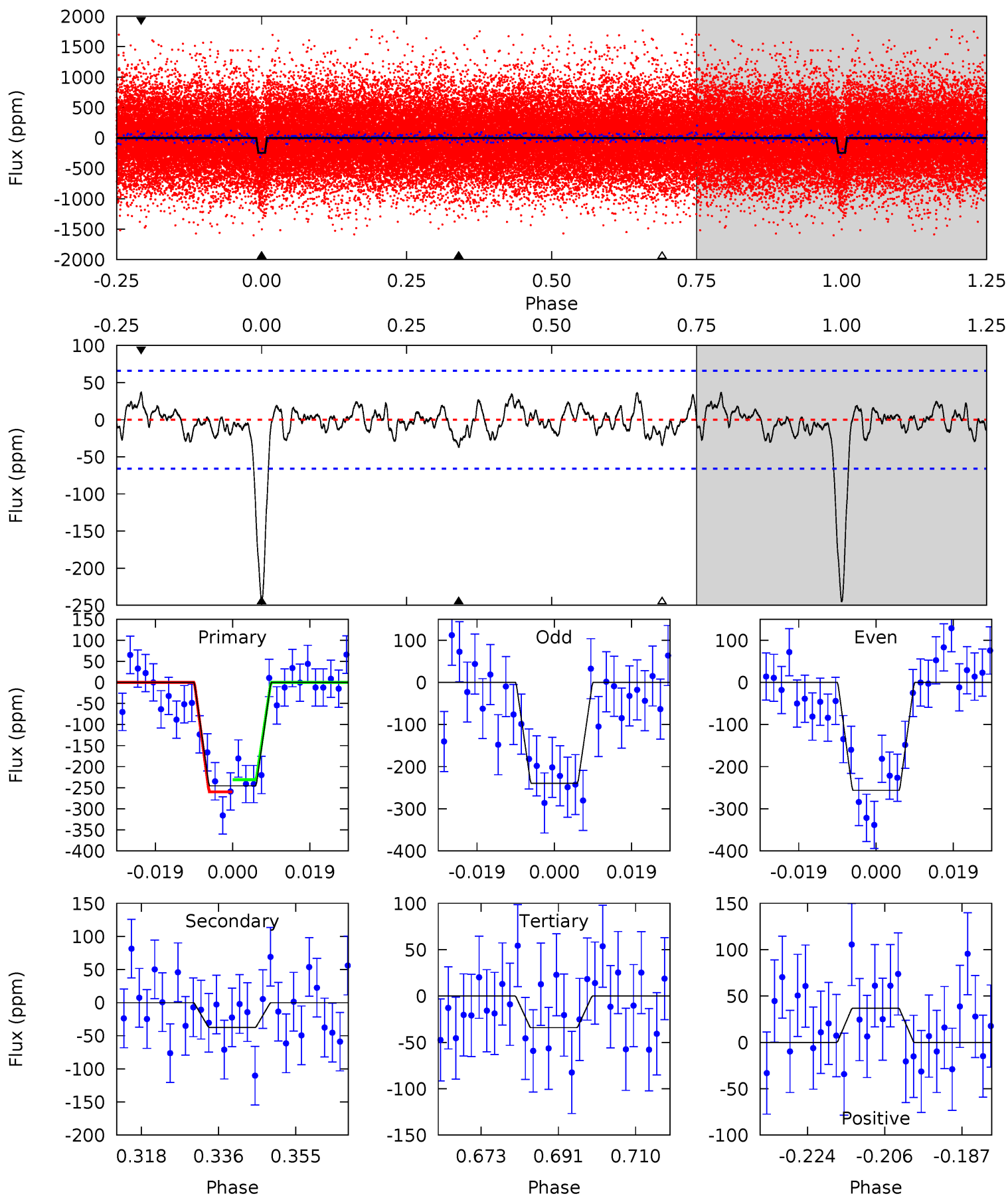
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.1	3.60	3.22	3.60	4.88	2.30	1.12	16.9	16.5	0.37	-0.01	1.29	0.96	0.15	1.91



Alt Model-Shift Uniqueness Test

008046689-01, P = 5.785420 Days, E = 137.091876 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.2	2.78	2.53	2.74	4.90	2.35	1.03	15.7	15.5	0.25	0.04	0.62	1.08	0.13	1.08



Stellar Parameters For KIC 008046689

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6555^{+162}_{-255}	$4.374^{+0.067}_{-0.202}$	$-0.120^{+0.250}_{-0.300}$	$1.178^{+0.366}_{-0.157}$	$1.200^{+0.170}_{-0.170}$	$1.033^{+0.360}_{-0.515}$
	+2%/-4%	+2%/-5%	+208%/-250%	+31%/-13%	+14%/-14%	+35%/-50%
Source	KIC0	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 008046689-01 / KOI 3092.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-45 ± 12	$2.49^{+0.42}_{-0.31}$	1723^{+120}_{-94}	4134^{+309}_{-278}	17^{+8}_{-6}
Alt.	-37 ± 13	$2.13^{+0.38}_{-0.30}$	1714^{+123}_{-84}	4237^{+377}_{-379}	19^{+11}_{-8}

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

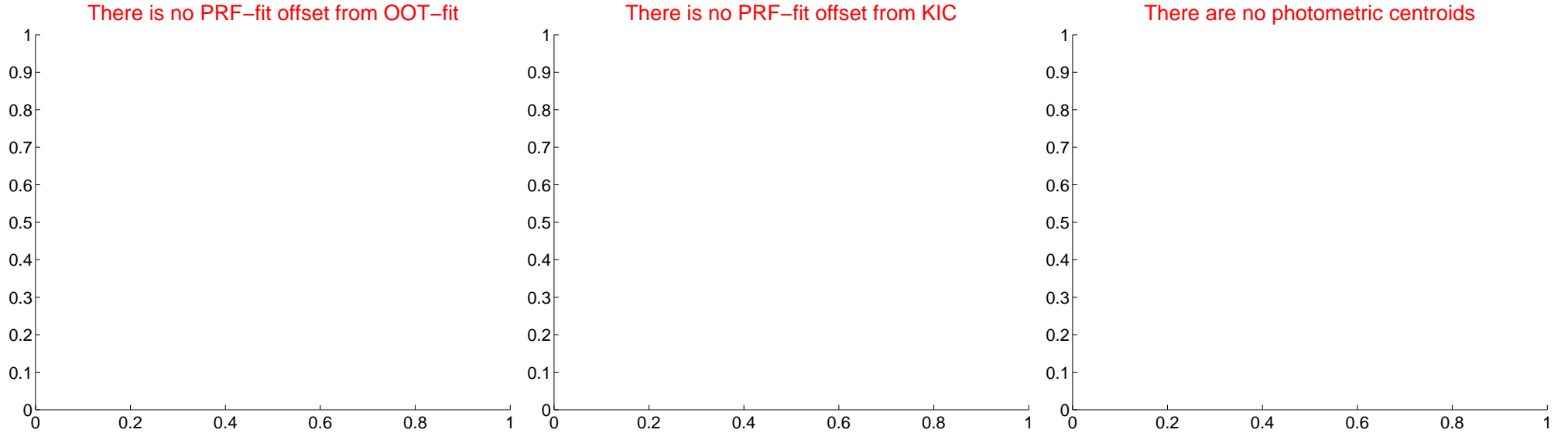
DV Centroid Data

Supplemental centroid analysis for 008046689-01. Kepler magnitude: 15.45. Transit SNR 14.42

There are 0 quarters with good PRF difference image offsets

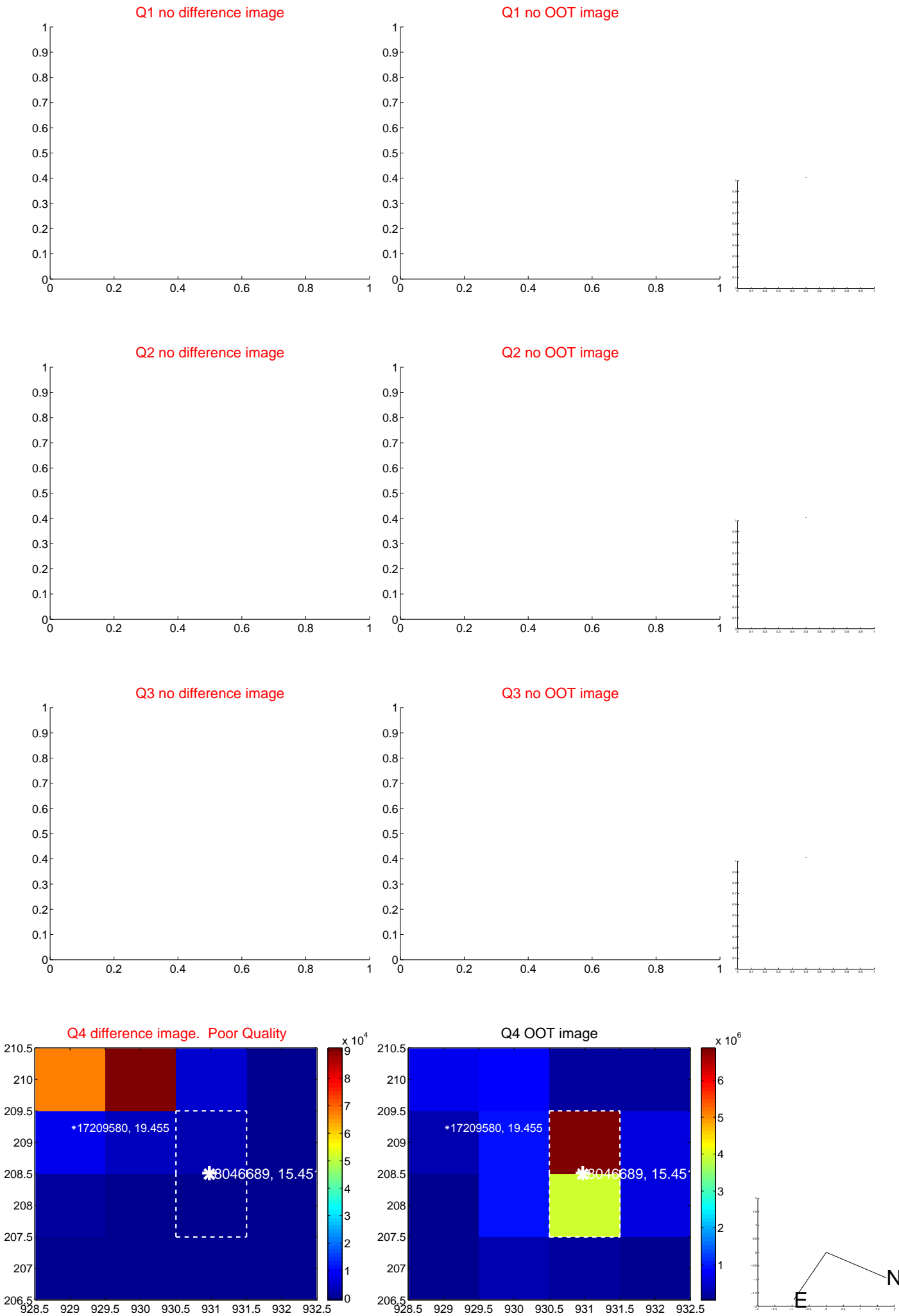
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

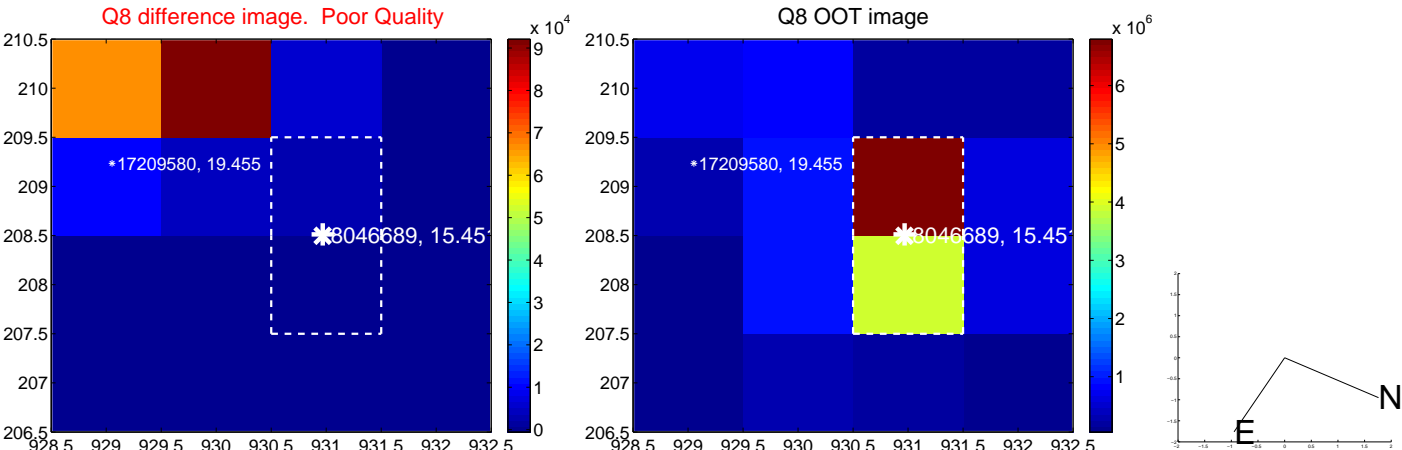
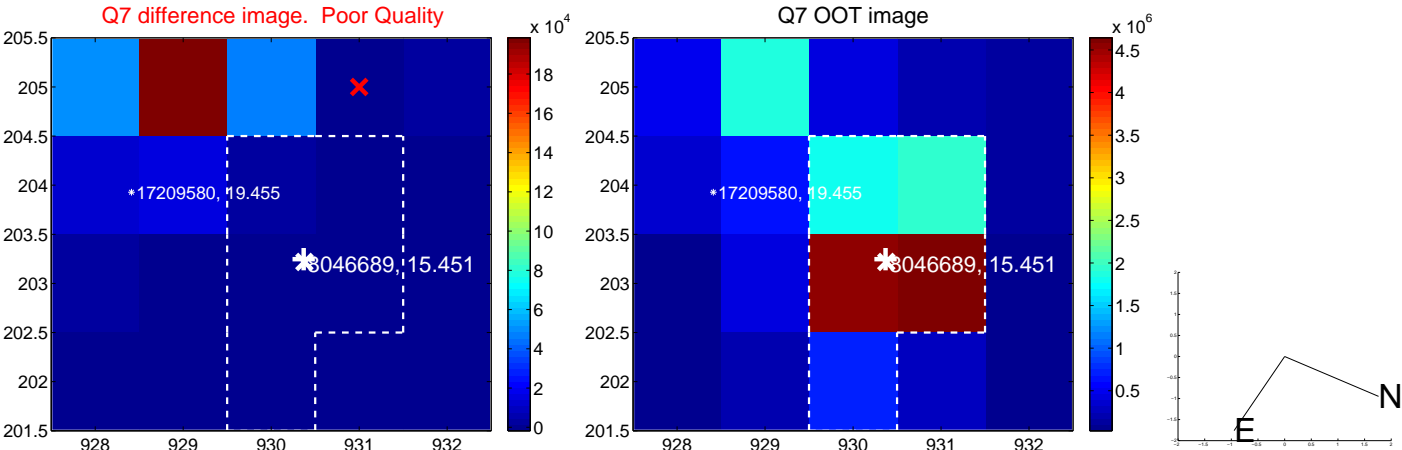
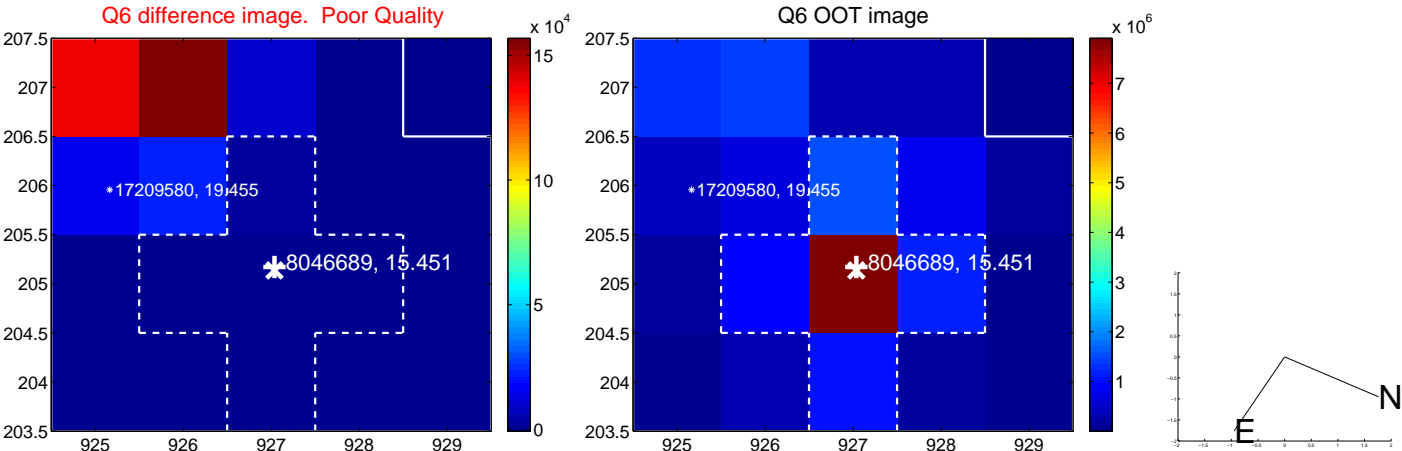
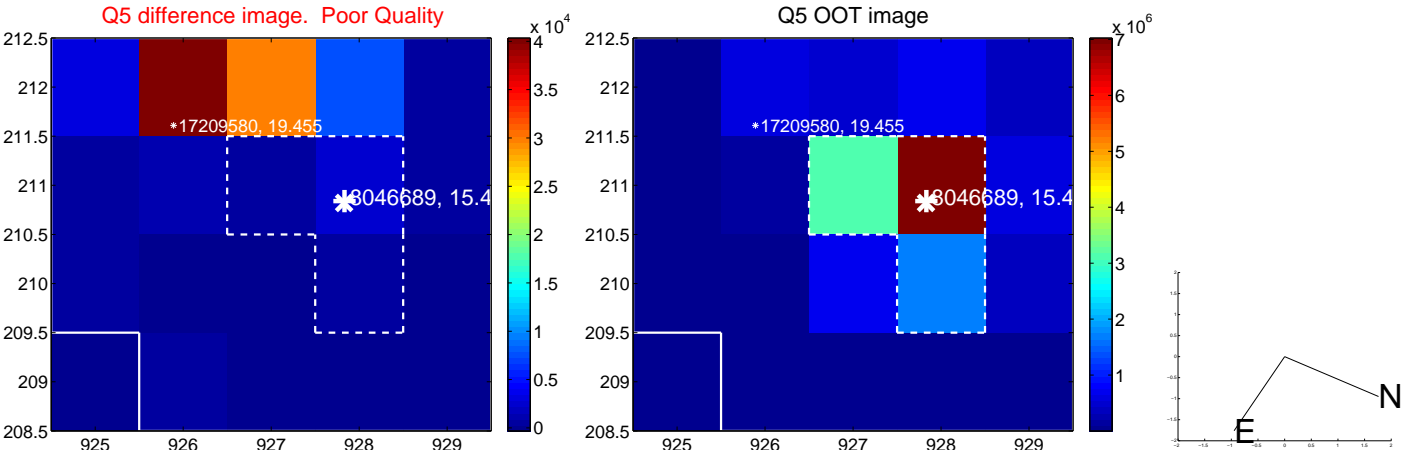


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

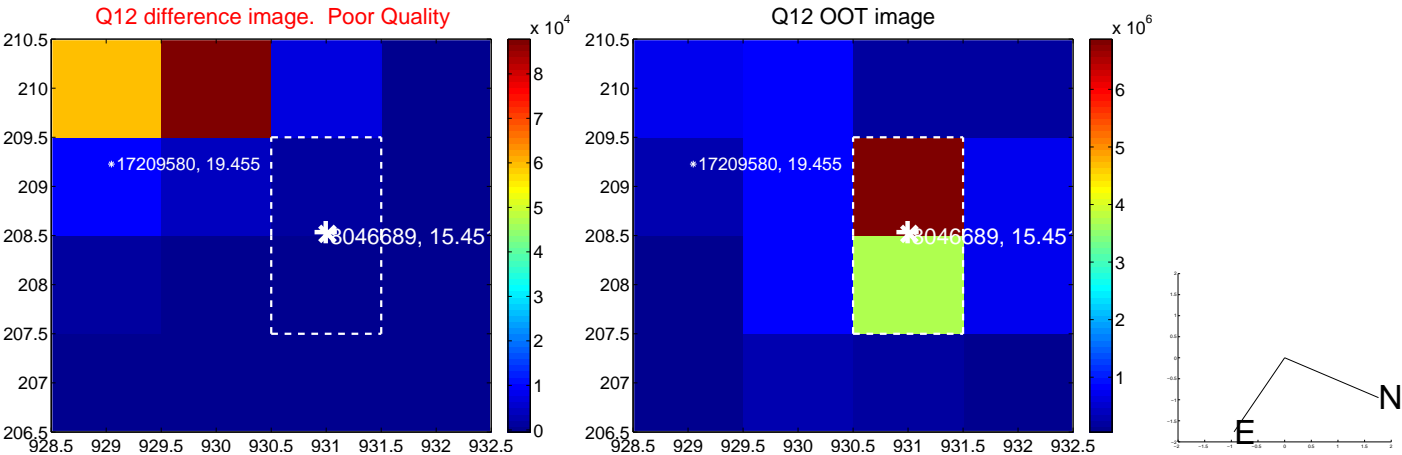
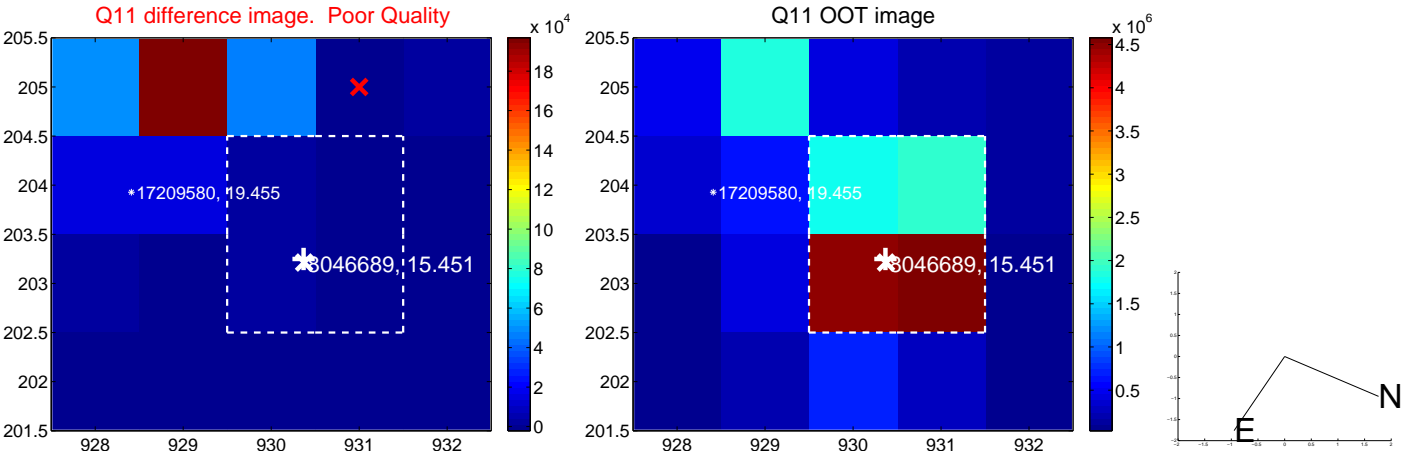
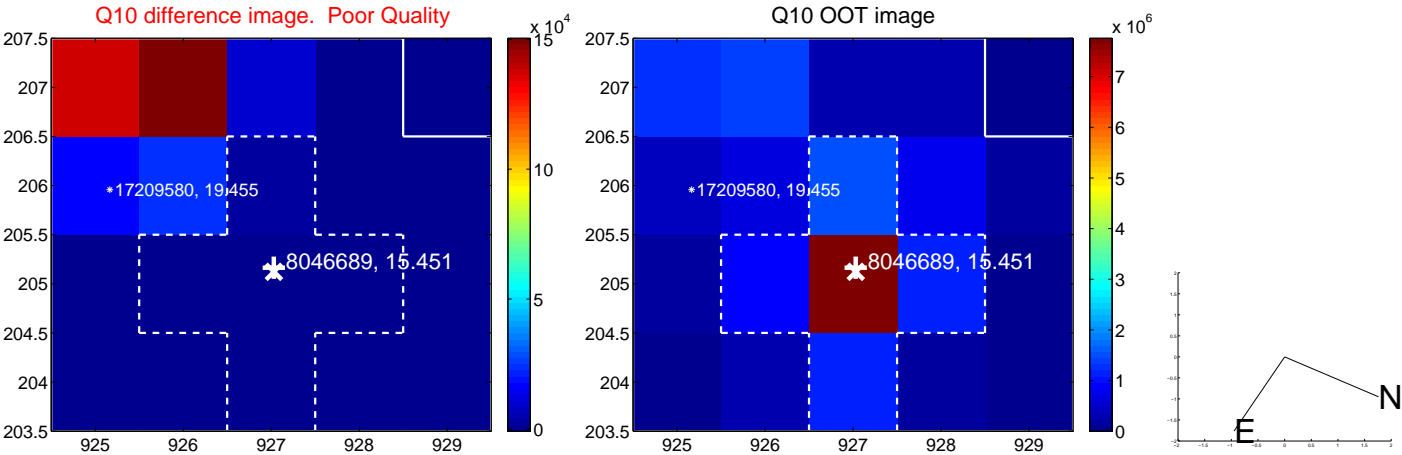
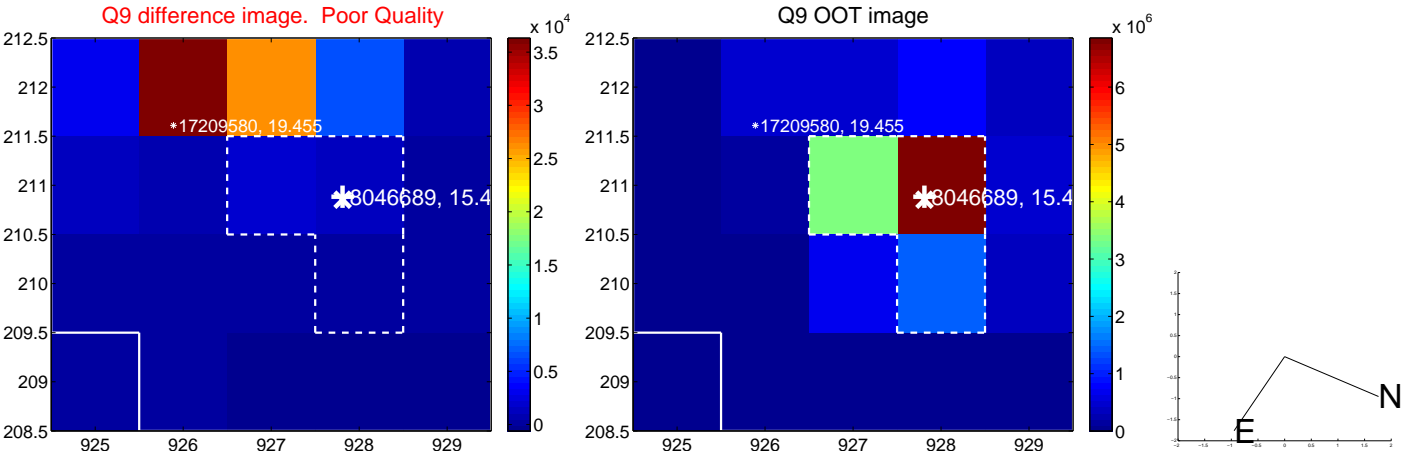
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



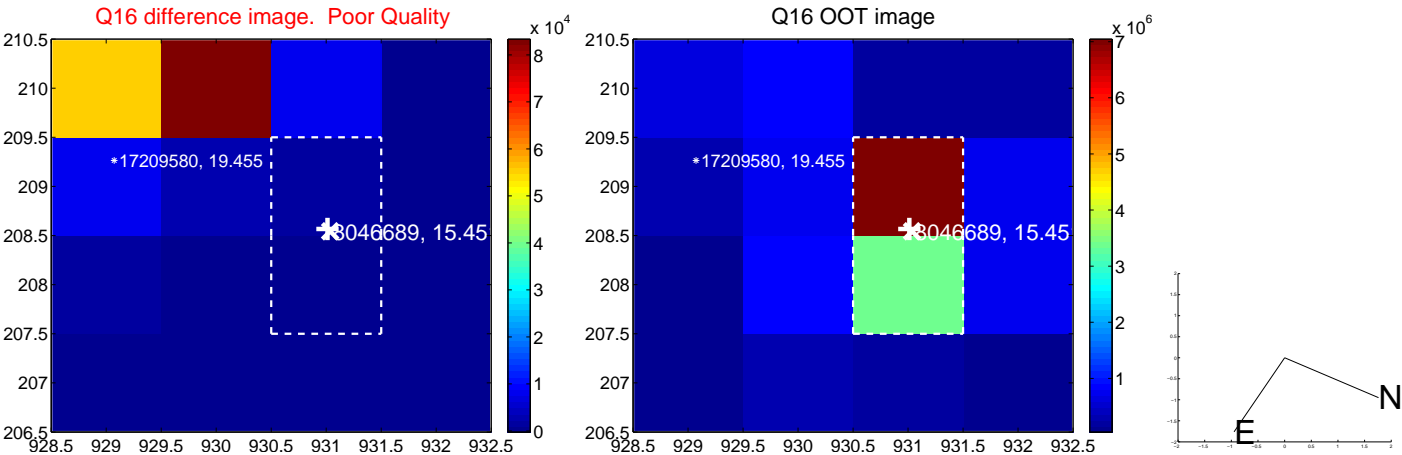
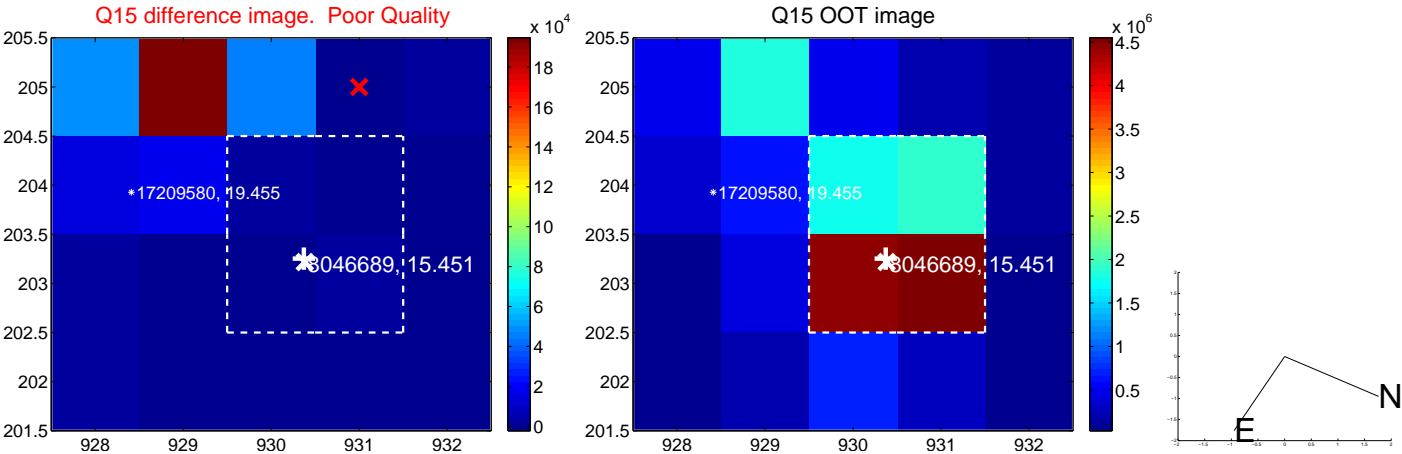
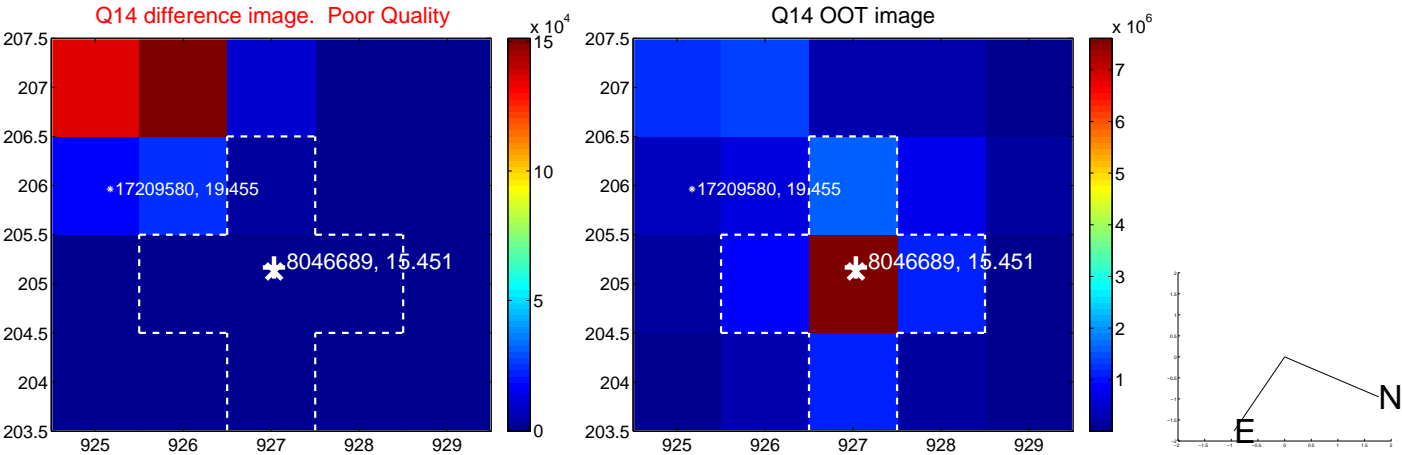
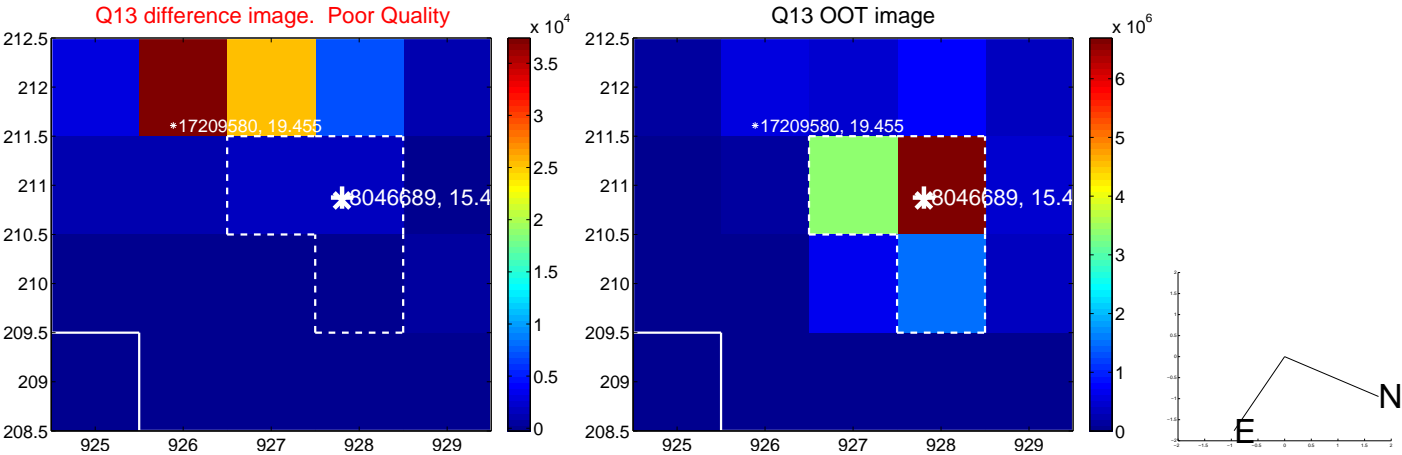
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



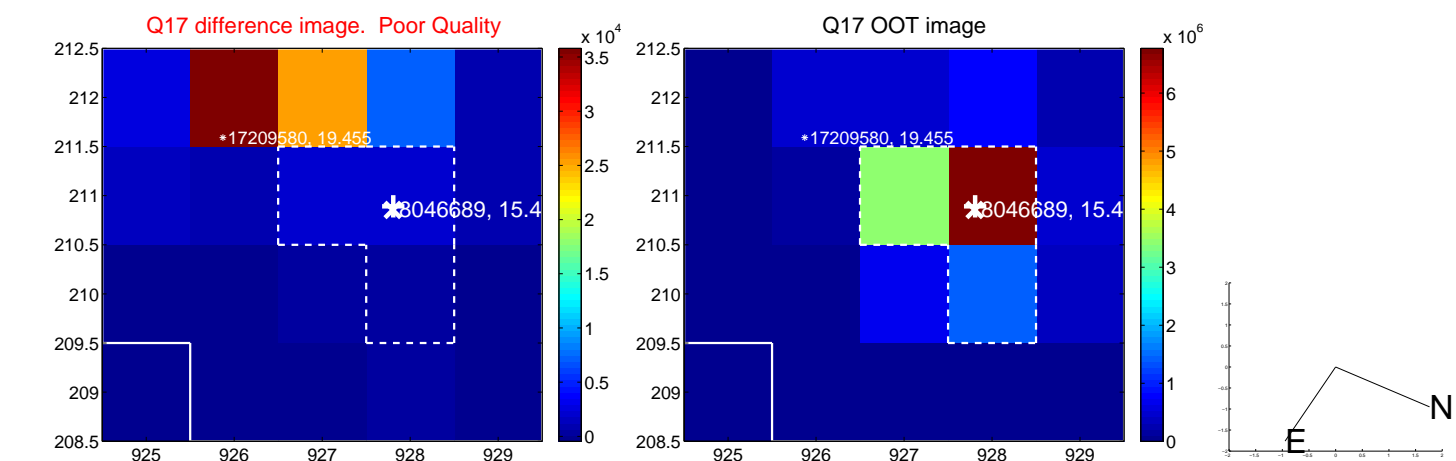
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



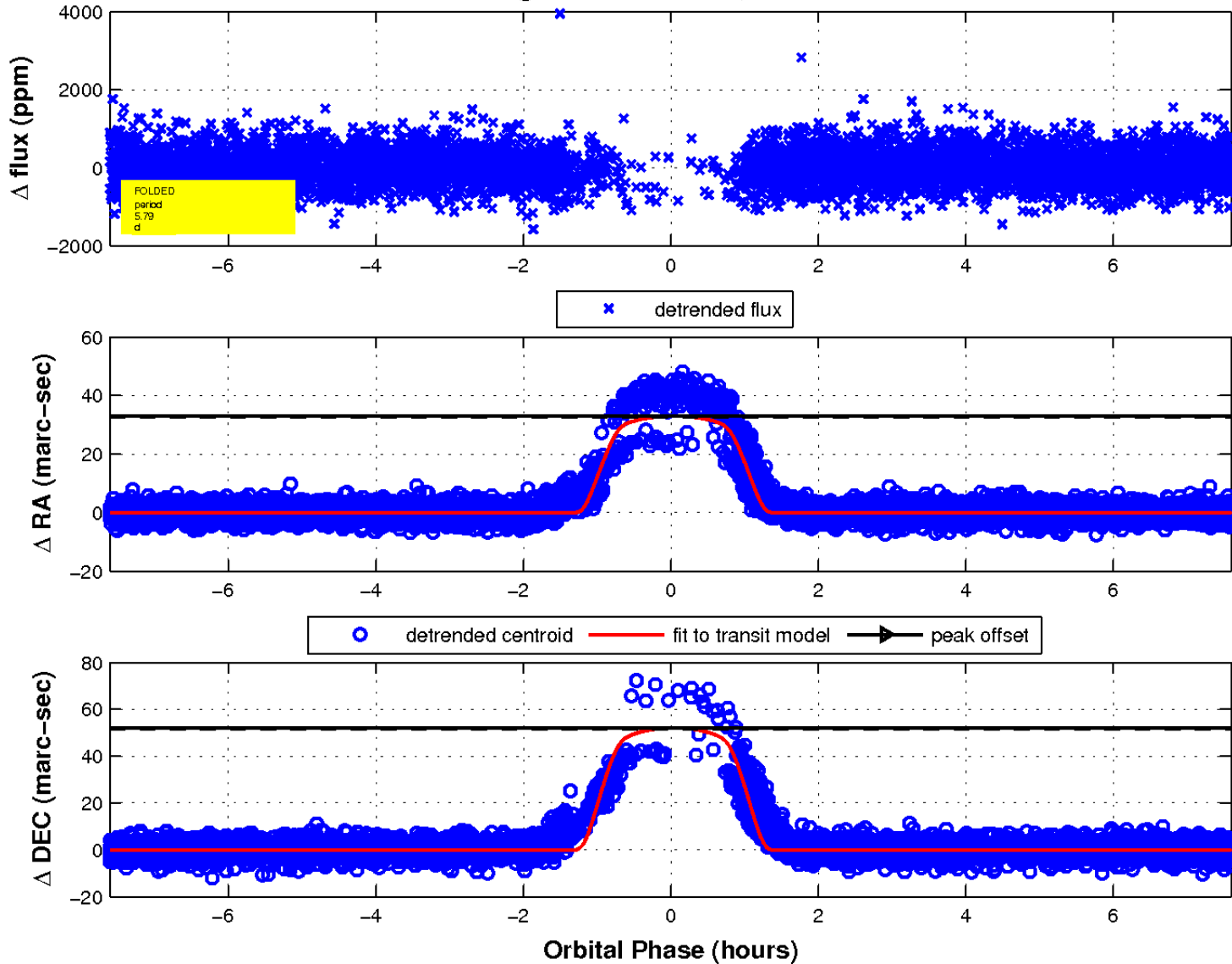
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

